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Date: February 14, 2009
Refer To: EP2009-0077

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

Subject: Submittal of the Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T, Consolidated Unit 21-016(a)-99, Technical Area 21

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area (MDA) T, Consolidated Unit 21-016(a)-99, Technical Area 21.

As stated in the Phase II Investigation Work Plan, dated February 15, 2007, the original rationale for the proposed vapor monitoring was to provide initial data on the distribution of vapor-phase contaminants within the subsurface. LANL's moving of boreholes 21-25262 and 21-25263 outside the fence for administrative purposes did not alter the ability of those boreholes to perform this function. As described in the TA-21 Subsurface Vapor Moisture Monitoring Plan for Tritium dated July 16, 2008 and our letter to you dated December 5, 2008, we are in the process of drilling and installing a deep well to define the extent of contaminants at MDA T and support the corrective measures evaluation process.

If you have any questions, please contact Bruce Wedgeworth at (505) 231-0108 (brucew@lanl.gov) or George Henckel at (505) 606-0960 (ghenckel@doeal.gov).

Sincerely,

Michael J. Graham, Associate Director
Environmental Programs
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Sincerely,

David R. Gregory, Project Director
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Los Alamos Site Office

30368

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Enclosures: 1) Two hard copies with electronic files - Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T, Consolidated Unit 21-016(a)-99, Technical Area 21 (LA-UR-09-0791)

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LA-UR-09-0791
February 2009
EP2009-0077

Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T, Consolidated Unit 21-016(a)-99, Technical Area 21, Fiscal Year 2008

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Prepared by the Environmental Programs Directorate

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LA-UR-09-0791
EP2009-0077

Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T, Consolidated Unit 21-016(a)-99, Technical Area 21, Fiscal Year 2008

February 2009

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EXECUTIVE SUMMARY

This periodic monitoring report summarizes the results of the quarterly pore-gas monitoring activities conducted at Material Disposal Area (MDA) T, Consolidated Unit 21-016(a)-99, within Technical Area 21 at Los Alamos National Laboratory (the Laboratory) during 2007–2008. The objectives of the pore-gas monitoring activities were to (1) confirm previously detected volatile organic compound (VOC) concentrations and tritium activities beneath MDA T and (2) collect additional vapor samples from the total depths of previously sampled boreholes at MDA T.

Three vapor-monitoring wells were sampled (21-603058, 21-603059, and 21-25264) for four quarters from October 2007 to September 2008. Two of these wells (21-603058 and 21-603059) were drilled just outside the MDA T nuclear facility boundary, approximately 35–40 ft away from borehole locations 21-25263 and 21-25262. Location 21-25264 is also located just outside the MDA T nuclear facility boundary, approximately 225 ft southeast of borehole 21-603058. The three vapor-monitoring wells were completed in October 2007 and four quarters of monitoring have been completed to date. Pore-gas data collected from these three wells are presented and evaluated in this report.

Based on the 2007–2008 quarterly monitoring activities at MDA T, a total of 36 VOCs plus tritium were detected in MDA T pore gas. Throughout the 2007–2008 monitoring period, methylene chloride, chloroform, carbon tetrachloride, and trichloroethene pore-gas concentrations were observed to increase with depth in wells 21-603058, 21-603059, and 21-25264. All other VOC concentrations either decreased with depth or remained consistently low. Tritium activities also decreased with depth or remained consistently low throughout the well column during the 2007–2008 monitoring period.

Based the 2007–2008 data at MDA T, the Laboratory is in the process of drilling and installing a deep well to define nature and extent of contaminants (hazardous and radioactive) at MDA T, which will support the corrective measures evaluation process.

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Appendixes

Appendix A Field Methods
Appendix B Analytical Suites and Results and Analytical Reports (on CD included with this document)
Appendix C Quality Assurance/Quality Control Program

Acronyms and Abbreviations

%R	percent recovery
%RSD	percent relative standard deviation
AOC	area of concern
bgs	below ground surface
CCV	continuing calibration verification
COC	chain of custody
COPC	chemical of potential concern
DER	duplicate error ratio
DP	Delta Prime
EPA	Environmental Protection Agency (U.S.)
EQL	estimated quantitation limit
FB	field blank
FD	field duplicate
H′	Henry's law constant
ICV	initial calibration verification
LANL	Los Alamos National Laboratory
LCS	laboratory control sample
MCL	maximum contaminant level
MDA	material disposal area
MDC	minimum detectable concentration
MS	matrix spike
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
PB	preparation blank
PCE	tetrachloroethene
QA	quality assurance
QC	quality control
RCL	regional screening level (EPA)
RFI	Resource Conservation and Recovery Act facility investigation
SCL	sample collection log
SL	screening level
SOW	statement of work
SWMU	solid waste management unit

TA	technical area
TCE	trichloroethene
TD	total depth
VOC	volatile organic compound

1.0 INTRODUCTION

This report presents the results of pore-gas monitoring activities conducted during 2007–2008 at Material Disposal Area (MDA) T, Consolidated Unit 21-016(a)-99, in Technical Area 21 (TA-21) at Los Alamos National Laboratory (LANL or the Laboratory). The objectives of the MDA T pore-gas monitoring activities were to (1) confirm previously detected volatile organic compounds (VOCs) concentrations and tritium activities beneath MDA T and (2) collect additional vapor samples from the total depths (TDs) of previously sampled boreholes at MDA T. In addition, this report also presents the results of the VOC vapor-phase partitioning to water screening analysis. This analysis was conducted for 2007–2008 VOC results to evaluate the potential for contamination of groundwater by VOCs in pore gas using groundwater cleanup levels provided in the March 1, 2005, Compliance Order on Consent (the Consent Order).

Between October 2007 and September 2008, four rounds of pore-gas sampling were completed at MDA T well locations 21-25264, 21-603058, and 21-603059. All pore-gas samples collected were submitted for off-site analysis of VOCs and tritium. First quarter analytical results (October 2007) were originally presented and evaluated in the MDA T Phase II investigation report (LANL 2008, 102182) but are represented in this report for completeness.

Completion of the pore-gas sampling activities fulfills the requirements outlined in the New Mexico Environment Department (NMED) MDA T Phase II investigation work plan approval with modifications letter, the MDA T vapor-monitoring plan, and the NMED MDA T vapor-monitoring plan approval with modifications letter, and all approved deviations (Goering 2007, 098861; LANL 2007, 098944; NMED 2007, 098946). Deviations from the MDA T vapor-monitoring plan and associated NMED correspondence are summarized in the MDA T Phase II investigation report and in section 4.2 of this report (LANL 2008, 102182; NMED 2008, 103430). Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to the NMED in accordance with U.S. Department of Energy policy.

1.1 Site Location and Description

MDA T is located within TA-21 on Delta Prime (DP) Mesa (Figure 1.1-1) and contains the following nuclear environmental site features: (1) four absorption beds (subsurface), (2) multiple buried shafts (subsurface), and (3) a former retrievable waste storage area (subsurface) (Figure 1.1-2). Current vegetation at MDA T includes grasses, chamisa bushes, and two young ponderosa pines. The top of the regional aquifer occurs approximately 1300 ft below MDA T, based on water-level information from regional well R-6 (Kleinfelder 2005, 091693). Refer to the MDA T investigation report (LANL 2006, 094151) for further details regarding MDA T features, operations, and historical investigation activities.

2.0 SCOPE OF ACTIVITIES

As directed by the approved MDA T vapor-monitoring plan (LANL 2007, 098944; NMED 2007, 098946), four rounds of pore-gas field-screening and sampling activities have been completed to date at MDA T. Monitoring was completed at well locations 21-603058, 21-603059, and 21-25264 in October 2007 (round 1); February 2008 (round 2); May 2008 (round 3); and September 2008 (round 4) (Figure 1.1-2). For each sampling round, pore-gas characterization samples were collected at each well from five separate sample ports installed at the following intervals: (1) borehole TD (sampling port 5), (2) base elevation of the nearby disposal unit (69–81 ft) (sampling port 1), and (3) depths correlated to the 2005–2006 sample port depths at locations 21-25262 and 21-25263 (sampling ports 2–4); field duplicate samples were collected at either sample port 1 or 5.

All samples were collected in accordance with the current version of the Environment and Remediation Support Services Standard Operating Procedure (SOP) 06.31, Sampling Sub-Atmospheric Air, and submitted to off-site analytical laboratories for the analysis of VOC using U.S. Environmental Protection Agency Method (EPA) TO-15 and for tritium analysis using EPA Method 906.0. Further discussion of the field methods used for pore-gas field screening and sample collection is presented in Appendix A. Evaluation of the analytical results from the 2007–2008 samples is presented in section 5 of this report.

3.0 REGULATORY CRITERIA

The Consent Order does not identify any cleanup standards, risk-based screening levels, risk-based cleanup goals, or other regulatory criteria for pore gas at MDA T. Therefore, an analysis was conducted to evaluate the potential for contamination of groundwater by VOCs in pore gas using groundwater cleanup levels provided in the Consent Order. The analysis evaluated the water concentration that would be in equilibrium with the maximum concentrations of VOCs detected at MDA T during the last four quarters of monitoring.

If the predicted groundwater concentration of a particular VOC in equilibrium with pore gas is less than the groundwater cleanup level, groundwater cleanup levels would not be exceeded. The results of the screening-level analysis for MDA T is presented in the subsection below.

3.1 VOC Vapor-Phase Partitioning to Water

VOC results obtained from MDA T pore-gas samples were screened to evaluate whether vapor-phase contamination beneath MDA T would exceed screening levels based on equilibrium partitioning with groundwater cleanup levels. The screening evaluation is based on groundwater cleanup levels contained in the Consent Order and on Henry's law constants (H′). If available, NMED's soil-screening level technical background document (2006, 092513) was the primary source for obtaining Henry's law constants for the MDA T evaluation. If Henry's law constants were not available through NMED, they were obtained from EPA's Superfund preliminary remediation goals website (http://www.epa.gov/region09/superfund/prg/). If a Henry's law constant was not available from either of these two sources, the Pennsylvania Department of Environmental Protection chemical and physical properties database (http://www.dep.state.pa.us/physicalproperties/Default.htm) was used to search additional Internet sources for an applicable value.

For each MDA T monitoring well (21-603058, 21-603059, and 21-25264), the maximum concentration reported for each VOC detected was compared with a pore-gas screening level based on the applicable groundwater cleanup level. All VOCs detected in pore gas that have available groundwater screening levels and Henry's law constants were screened in the evaluation.

Screening results for the 2007–2008 quarterly sampling (as presented in Tables 3.1-1, 3.1-2, and 3.1-3) indicate that 22 detected concentrations of methylene chloride exceeded the pore-gas screening level. A screening level could not be calculated for ethanol, ethyltoluene[4-], hexanone[2-], propanol[2-], or propylene because groundwater screening levels were not available for these chemicals. Although, there is also not a groundwater screening level available for n-heptane, the groundwater screening level for n-hexane was used as a surrogate based on structural similarity.

The maximum concentrations of methylene chloride in pore gas were 2000 µg/m^3 (well 21-603058), 920 µg/m^3 (well 21-603059), and 2500 µg/m^3 (well 21-25264). These maximum concentrations occurred in samples collected at the bottom depths (approximately 350–370 ft below ground surface [bgs]) in all three wells; the bottom depths are approximately 800 ft above the regional groundwater table. Seven

samples (860 µg/m^3 to 2000 µg/m^3) exceeded the pore-gas screening level in well 21-603058, 4 samples (680 µg/m^3 to 920 µg/m^3) exceeded the pore-gas screening level in well 21-603059, and 11 samples (590 µg/m^3 to 2500 µg/m^3) exceeded the pore-gas screening level in well 21-25264.

The closest regional and perched aquifer monitoring wells to MDA T are the regional well R-6 and the intermediate well R-6i. These wells are located downgradient of MDA T, approximately 1 mi east on the south rim of DP Canyon. The regional aquifer (within R-6) is approximately 1158 ft bgs and occurs in a fanglomerate unit; the intermediate perched water (within R-6i) is approximately 600 ft bgs and occurs in the Puye Formation.

4.0 MONITORING RESULTS

During the 2007–2008 MDA T pore-gas monitoring activities, a total of 74 pore-gas samples (58 characterization and 16 quality assurance/quality control [QA/QC]) were collected for VOC analysis, and 68 samples (58 characterization and 10 QA/QC) were collected for tritium analysis. A summary of all 2007–2008 pore-gas sampling depths and sample collection dates by well location is presented in Table 4.0-1. A summary of all 2007–2008 samples collected at MDA T monitoring wells 21-603058, 21-603059, and 21-25264, and their respective analyses is presented in Table 4.0-2. Field chain-of-custody forms and sample collection logs are provided in Appendix B. No investigation-derived waste was generated during execution of pore-gas monitoring activities at MDA T.

Evaluation of the 2007–2008 pore-gas analytical results is presented in section 5 of this report. The 2007–2008 pore-gas field-screening results and any deviations to the scope of activities as presented in the approved MDA T vapor-monitoring plan and associated NMED correspondence (LANL 2007, 098944; NMED 2007, 098946; NMED 2007, 095411; NMED 2008, 103430) are presented in the subsections below.

4.1 Field-Screening Results

Before each sampling event, field screening was performed in each well and targeted sampling interval to ensure percent carbon dioxide (%CO_2) and oxygen (%O_2) levels at each sample port had stabilized at values representative of subsurface pore-gas conditions. Table 4.1-1 presents a summary of all field-screening results collected during the four sample events at MDA T monitoring wells 21-603058, 21-603059, and 21-25264 by sample port and sampling round.

4.2 Deviations

Several deviations from the original scope of activities outlined in the approved MDA T vapor-monitoring plan and associated NMED correspondence occurred during the implementation of the 2007–2008 monitoring program at MDA T (LANL 2007, 098944; NMED 2007, 095411; NMED 2007, 098946; NMED 2008, 103430). Deviations included changes in the (1) proposed sampling locations, (2) sample depths, and (3) number of samples collected.

Based on 2005–2006 pore-gas results, NMED requested continued collection of pore-gas samples from open borehole locations 21-26262, 21-25263, and 21-25264 for four quarters to assess the potential impact the absorption bed complex has on subsurface vapor contamination beneath MDA T (NMED 2007, 095411). Two of these open boreholes (locations 21-26262 and 21-25263) are located within the nuclear facility boundary (Figure 1.1-2). Because of time constraints imposed by drilling inside the nuclear facility boundary, the Laboratory sought and received approval from NMED to move two of the requested pore-gas monitoring locations (21-26262 and 21-25263) (Goering 2007, 098861). As a result, borehole

locations 21-603058 and 21-603059 were drilled adjacent to borehole locations 21-26262 and 21-25263 but immediately outside the nuclear facility boundary, developed as permanent vapor-monitoring wells, and sampled for four quarters. The analytical results obtained from these wells effectively replace any additional data originally requested by NMED for borehole locations 21-26262 and 21-25263.

Pore-gas sampling port #2, installed at depth 112.5–117.5 ft bgs in monitoring well 21-603059, did not produce pore-gas vapor upon installation. Therefore, no analytical data could be collected at this depth during any sampling round. Because the Tshirege Member of the Bandelier Tuff is known for its high degree of welding variability in individual units, this failure is most likely caused by massive welded tuff localized at that depth interval, which does not allow for the extraction of subsurface vapor.

Pore-gas sampling port #2, installed at depth 160.5–165.5 ft bgs in monitoring well 21-603058, stopped producing pore-gas vapor after two quarters of monitoring had been completed. Therefore, no analytical data could be collected at this depth during the last two sampling rounds. It is possible that the failure of monitoring well 21-603058 port #2 is mechanical; however, several attempts have been made to physically clear the tubing (by vacuum and pressure surging) of any potential obstructions with no success. Another possibility is that the presence of massive welded tuff also occurs at the depth interval where monitoring well 21-603058 port #2 was installed, thus preventing extraction of subsurface vapor from the unit. Samples were successfully collected during the first two rounds from this port possibly because the bentonite seal for the port #2 sand interval may not have fully hydrated at the time of installation and only fully sealed at some time after completion of the second round of monitoring.

5.0 ANALYTICAL DATA RESULTS

Analytical results for VOCs in pore gas were produced from laboratory analyses of vapor collected in SUMMA canisters and analyzed for VOCs using EPA Method TO-15. Analytical results for tritium were produced from laboratory analysis of moisture extracted from silica gel columns and analyzed for tritium using EPA Method 906.0. All analytical data were subject to extensive QA, QC, and data validation reviews in accordance with Laboratory guidance and procedures (LANL 1996, 054609; LANL 2000, 071233). The QA/QC and data validation review for the 2007–2008 MDA T pore-gas data are presented in Appendix C. All validated analytical results from the 2007–2008 pore-gas sampling are presented on CD in Appendix B. A discussion of the 2007–2008 pore-gas analytical results is presented in the subsections below.

5.1 VOC Pore-Gas Results

Results of the 2007–2008 pore-gas sampling are summarized in Table 5.1-1. Pore-gas vertical trend plots for VOC results from samples collected during rounds 1–4 are presented, in order of collection date, in Figures 5.1-1 through 5.1-12.

As illustrated by Figures 5.1-1 through 5.1-12, the 2007–2008 MDA T pore-gas VOC concentrations show the following general trends.

- Chloroform, carbon tetrachloride, methylene chloride, and trichloroethene (TCE) concentrations generally increased with depth.
- Tetrachloroethene (PCE) concentrations decreased with depth.
- Propylene concentrations increased at intermediate depths and decreased to TD in wells 21-603058 and 21-603059. In well 21-25264, propylene concentrations showed no change in concentration with depth.

- Acetone, benzene, bromodichloromethane, bromoform, butanol[1-], butanone[2-], carbon disulfide, chlorodibromomethane, cyclohexane, dichlorobenzene[1,4-], dichlorodifluoromethane, dichloroethane[1,2-], dichloroethene[1,1-], dichloroethene[cis-1,2-], ethanol, ethylbenzene, ethyltoluene[4-], hexane, hexanone[2-], heptane[n-], methyl-2-pentanone[4-], propanol[2-], tetrahydrofuran, toluene, trichloro-1,2,2-trifluoroethane[1,1,2-], trichloroethane[1,1,1-], trichloroethane[1,1,2-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] showed no indicative trends. These VOCs were either detected at low concentrations (concentrations at or near the estimated quantitation limit [EQL]) and showed little to no change in concentrations with depth or were anomalous in their detections throughout the sampling column and/or sampling rounds.

Methylene chloride showed an increase in concentrations with depth in all three monitoring wells throughout the monitoring period as illustrated by Figure 5.1-13. Methylene chloride concentrations ranged from (well top to TD) 5 µg/m^3 to 2000 µg/m^3 (~350 ft bgs) in well 21-603058; 3 µg/m^3 to 920 µg/m^3 (~380 ft bgs) in well 21-603059; and 19 µg/m^3 to 2500 µg/m^3 (~350 ft bgs) in well 21-25264. Only the first quarter sampling results from well 21-603058 showed a partial decrease in methylene chloride concentrations: from 250 ft bgs to TD (~350 ft bgs). In the 2005–2006 tuff samples collected at TD from borehole locations 21-25263 (adjacent to well 21-603058) and 21-25264, methylene chloride was detected at low concentrations (range: 2.5 µg/kg at ~215 ft bgs to 2.7 µg/kg at ~340 ft bgs in borehole location 21-25263, and 2.8 µg/kg at ~325 ft bgs to 3.7 µg/kg at ~350 ft bgs in borehole location 21-25264) but was not detected in tuff at shallower depths (LANL 2008, 102182). Methylene chloride was not detected in any of the 2005–2006 tuff samples collected from borehole location 21-25262 (adjacent to well 21-603059).

Chloroform and carbon tetrachloride concentrations also showed a general increase with depth in well 21-25264 throughout the monitoring period as illustrated by Figures 5.1-14 and 5.1-15. For both chemicals, maximum reported concentrations for the monitoring period (1100 µg/m^3 for chloroform and 500 µg/m^3 for carbon tetrachloride) occurred in round 4 in samples collected at TD (350 ft bgs).

In wells 21-603058 and 21-603059, however, chloroform and carbon tetrachloride concentrations showed an overall decrease with depth. In well 21-603058, chloroform and carbon tetrachloride concentrations generally decreased from 250 ft bgs to TD (350 ft bgs) in rounds 1–3 but increased in round 4. In well 21-603059, carbon tetrachloride concentrations showed a decrease from 250 ft bgs to TD (380 ft bgs) in all sampling rounds. Chloroform concentrations in well 21-603059 decreased from 300 ft bgs to TD in rounds 1 and 4 but increased in rounds 2 and 3.

TCE concentrations in all three wells also showed similar trends with depth as chloroform and carbon tetrachloride; however, the concentrations are much more inconsistent (Figure 5.1-16). In wells 21-25264 and 21-603059, TCE concentrations increased only slightly with depth throughout the monitoring period, with TD concentrations only slightly higher than concentrations reported at top depth. TCE concentrations at the intermediate depths, however, are highly variable. In well 21-603058, TCE concentrations showed a general increase with depth to ~250 ft bgs followed by a general decrease to TD.

PCE is the only VOC that shows an overall decrease in concentrations with depth in all three wells throughout the monitoring period as illustrated by Figure 5.1-17. PCE concentrations ranged from (well top to TD) 650 to 60 µg/m^3 in well 21-603058, 1700 µg/m^3 to nondetect in well 21-603059, and 2700 to 31 µg/m^3 in well 21-25264.

5.2 Pore-Gas Tritium Results

Results of the 2007–2008 pore-gas sampling for tritium are summarized in Table 5.2-1 and presented in Figure 5.2-1.

Pore-gas tritium activities were substantially higher in the 2007–2008 samples collected from well 21-25264 than in the 2007–2008 samples collected from wells 21-603058 and 21-603059. The maximum tritium activity in samples from well 21-25264 (128,043 pCi/L) was from a sample collected at 150 ft bgs in May 2008. For all four sampling rounds, tritium activities from samples in well 21-25264 showed an increase to maximum values at approximately 150 ft bgs followed by a decrease to TD (Figure 5.2-1). During the 2005–2006 investigation, maximum tritium activities were reported in tuff samples collected at/near 150 ft bgs in Qbt 2. Neutron probe results obtained during the 2005–2006 investigation do not show a significant increase in moisture/porosity at this depth and there was no apparent positive correlation between soil moisture content and elevated tritium activities (LANL 2006, 094151, p. 54).

The maximum tritium activity detected in samples from well 21-603058 (16,975 pCi/L) was from a sample collected at 225 ft bgs during round 3. The activities of samples collected during the other sampling rounds were below 1100 pCi/L (Figure 5.2-1). The maximum tritium activity (at 225 ft bgs) was detected in a sample extracted from Qbt 1v (just above the Qbt 1v/Qbt 1g contact). Like for well 21-25264, maximum tritium activities observed during the 2005–2006 investigation were also reported in tuff samples collected at/near 225 ft bgs from borehole 21-25263. However, unlike well 21-25264, 2005–2006 neutron probe results showed an increase in moisture at this depth (just above the Qbt 1v/Qbt 1g contact) (LANL 2006, 094151, p. 53). Historically, the Qbt 1v/Qbt 1g contact has reported the most consistent and highest porosity values and increasing soil moisture content of all the lithologic intervals investigated at MDA T (LANL 2006, 094151).

Tritium pore-gas trends observed in well 21-603059 were similar to well 21-603058; however, the maximum tritium activity detected in samples from well 21-603059 (4278 pCi/L) was from a sample collected at TD (370 ft bgs) during round 3 (Figure 5.2-1). The activities of samples collected during the other sampling rounds were below 2100 pCi/L. The maximum tritium activity (at 370 ft bgs) in well 21-603058 correlates to the Cerro Toledo interval (Qct). As with well 21-603058, the maximum tritium activities reported in tuff samples collected during the 2005–2006 investigation were in samples collected in the Cerro Toledo at approximately 370 ft from borehole 21-25262 (LANL 2006, 094151).

6.0 SUMMARY

The objectives of the MDA T pore-gas monitoring activities were to (1) confirm previously detected VOC concentrations and tritium activities beneath MDA T and (2) collect additional vapor samples from the TDs of previously sampled boreholes at MDA T. Three wells were sampled (21-603058, 21-603059, and 21-25264) for four quarters in October 2007 (round 1), February 2008 (round 2), May 2008 (round 3), and September 2008 (round 4). Wells 21-603058 and 21-603059 were drilled just outside the nuclear facility boundary, approximately 35–40 ft away from borehole locations 21-25263 and 21-25262, respectively. Well 21-25264 is also located just outside the MDA T nuclear facility boundary, approximately 225 ft southeast of borehole 21-603058.

Results of the 2007–2008 monitoring activities identified a total of 37 chemicals of potential concern (36 VOCs plus tritium) in the pore gas beneath MDA T (Tables 5.1-1 and 5.2-1). Concentrations for 32 of the 36 VOCs detected in MDA T pore gas either decreased with depth, were consistently detected at or near the EQL, or their detections were anomalous throughout the sample column/rounds.

The four VOCs concentrations in MDA T pore gas—methylene chloride, chloroform, carbon tetrachloride, and TCE—generally increased with depth in wells 21-603058, 21-603059, and 21-25264. Methylene chloride showed an increase in concentrations to TD in all three wells. The concentrations for chloroform, carbon tetrachloride, and TCE are not as consistent as those for methylene chloride and were highly variable at intermediate depths; however concentrations were generally higher at TD than top depth.

Pore-gas tritium activities were substantially higher in samples collected from well 21-25264 than in samples collected from wells 21-603058 and 21-603059. Results of samples collected from well 21-25264 showed an increase to maximum values at approximately 150 ft bgs followed by a decrease to TD in all four sampling rounds. The maximum tritium activity detected in samples from well 21-603058 was from a sample collected at 225 ft bgs during round 2. The activities of samples collected during rounds 1, 3, and 4 were substantially lower. The maximum tritium activity detected in samples from well 21-603059 was from a sample collected at TD (~370 ft bgs) during round 3. Tritium activities in pore-gas samples collected during rounds 1, 2, and 4 were substantially lower. For all wells, the pore-gas tritium activities showed similar trends to tritium activities observed in tuff samples collected from borehole locations 21-25262, 21-25263, and 21-25264 during the 2005–2006 investigation.

VOCs in pore gas were also screened against screening levels, based on equilibrium partitioning of vapor with groundwater cleanup levels, to evaluate whether they could potentially contaminate groundwater. Methylene chloride was the only VOC detected at MDA T that exceeded the calculated pore-gas screening level.

Results of the 2007–2008 monitoring activities at MDA T indicate that VOC and tritium concentrations at wells 21-603058, 21-603059, and 21-25264 should continue to be monitored for an additional two quarters to assess whether chemical trends illustrate additional changes over a longer monitoring period. In addition, because of the general increasing trends observed at TD for several VOC pore-gas constituents (methylene chloride, chloroform, carbon tetrachloride, and TCE), the Laboratory proposes that a deeper pore-gas monitoring well be installed at MDA T to ascertain the extent of these constituents beneath MDA T. The Laboratory is in the process of drilling and installing a deep well to define nature and extent of contaminants (hazardous and radioactive) at MDA T, which will support the corrective measures evaluation process.

7.0 REFERENCES AND MAP DATA SOURCES

7.1 References

The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.

Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.

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NMED (New Mexico Environment Department), June 2006. "Technical Background Document for Development of Soil Screening Levels, Revision 4.0, Volume 1, Tier 1: Soil Screening Guidance Technical Background Document," New Mexico Environment Department, Hazardous Waste Bureau and Ground Water Quality Bureau Voluntary Remediation Program, Santa Fe, New Mexico. (NMED 2006, 092513)

NMED (New Mexico Environment Department), January 16, 2007. "Notice of Approval with Direction, Investigation Report for Material Disposal Area T, Consolidated Unit 21-016(a)-99, at Technical Area 21," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2007, 095411)

NMED (New Mexico Environment Department), October 31, 2007. "Approval with Modifications, Subsurface Vapor-Monitoring Plan for MDA T," New Mexico Environment Department letter to D. Gregory (DOE LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED HWB), Santa Fe, New Mexico. (NMED 2007, 098946)

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7.2 Map Data Sources

Data sources used in original figures created for this report are described below and identified by legend title.

Legend Item	Data Source
Disposal pit/impoundment	Waste Storage Features; Los Alamos National Laboratory, Environment and Remediation Support Services Division, GIS/Geotechnical Services Group, EP2007-0032; 1:2,500 Scale Data; 13 April 2007.
Disposal shaft	Waste Storage Features; Los Alamos National Laboratory, Environment and Remediation Support Services Division, GIS/Geotechnical Services Group, EP2007-0032; 1:2,500 Scale Data; 13 April 2007.
Elevation contour	Hypsography, 10, 20, & 100 Foot Contour Intervals; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991.
Fence	Security and Industrial Fences and Gates; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 October 2008.
LANL boundary	LANL Areas Used and Occupied; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Division; 19 September 2007.
Material disposal area	Materials Disposal Areas; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; ER2004-0221; 1:2,500 Scale Data; 23 April 2004.
Paved road	Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 October 2008.
Structure	Structures; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 October 2008.
TA boundary	Technical Area Boundaries; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Division; 19 September 2007.
Unpaved road	Dirt Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 October 2008.
Vapor monitoring well	Point Feature Locations of the Environmental Restoration Project Database; Los Alamos National Laboratory, Waste and Environmental Services Division; ER2008-0109; as published 9 October 2008.

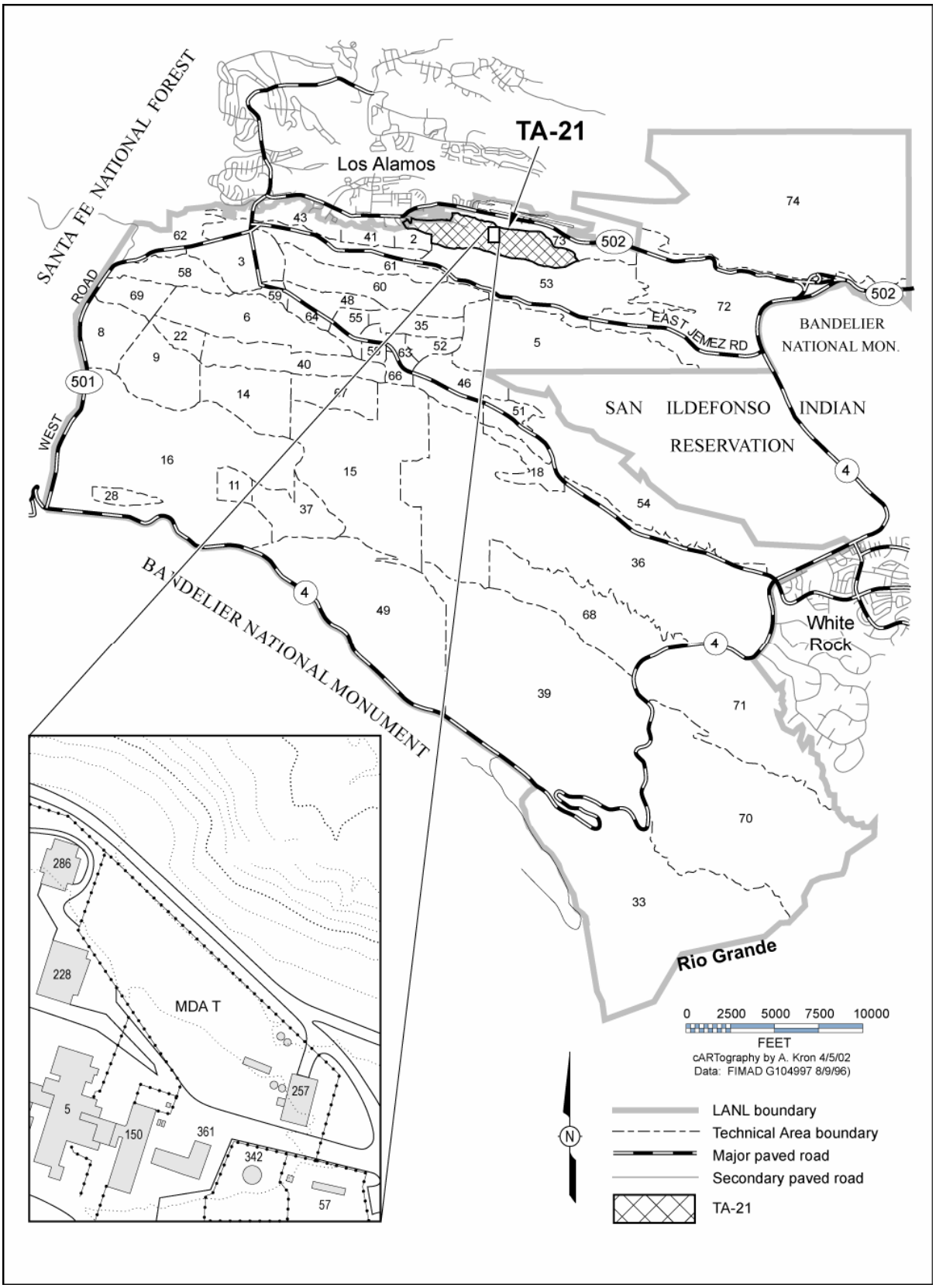


Figure 1.1-1 MDA T at TA-21

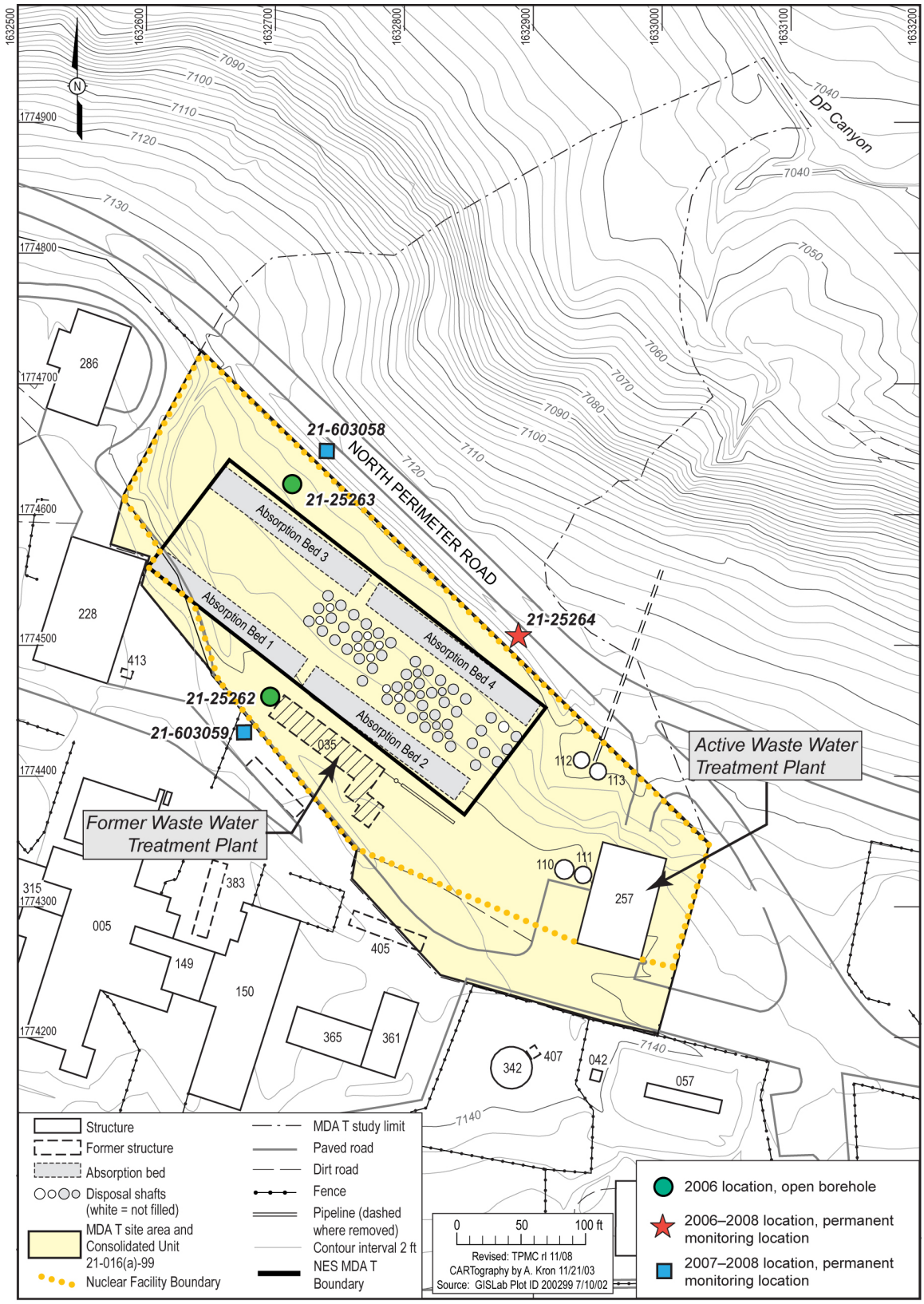


Figure 1.1-2 MDA T features, associated structures, and 2006–2008 pore-gas sampling locations

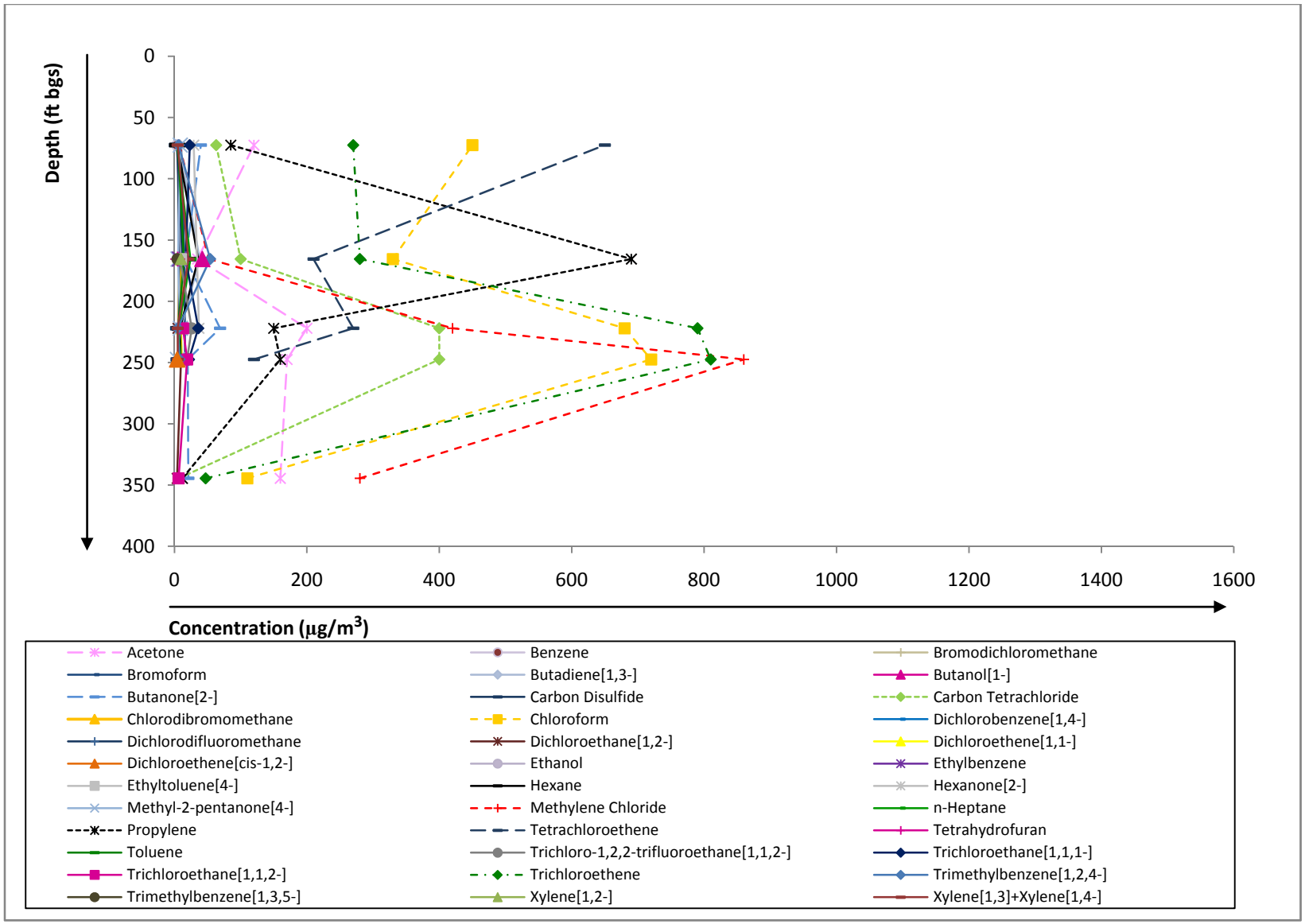


Figure 5.1-1 Vertical profile of detected VOCs in pore gas, monitoring well 21-603058, first quarter, October 2007

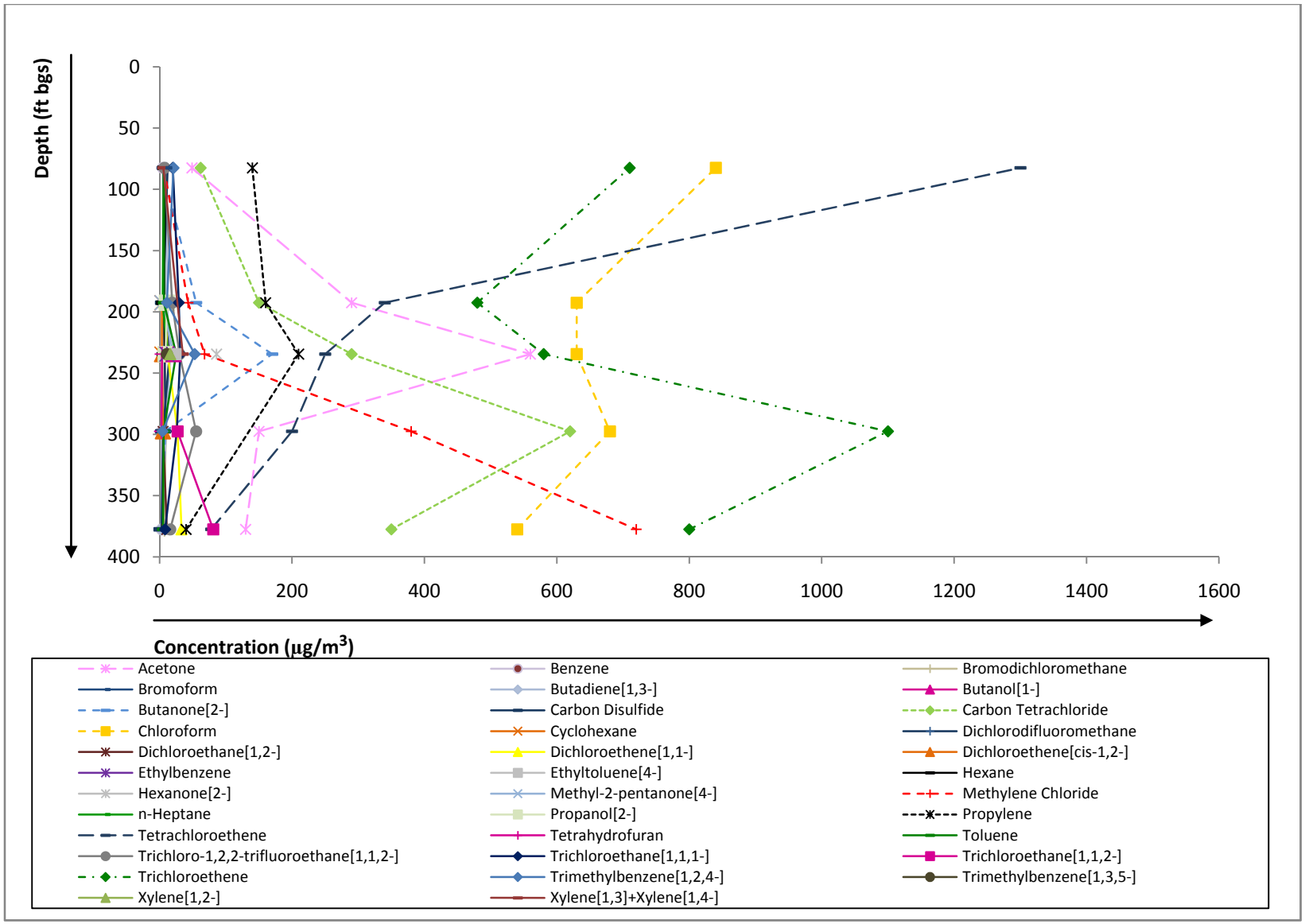


Figure 5.1-2 Vertical profile of detected VOCs in pore gas, monitoring well 21-603059, first quarter, November 2007

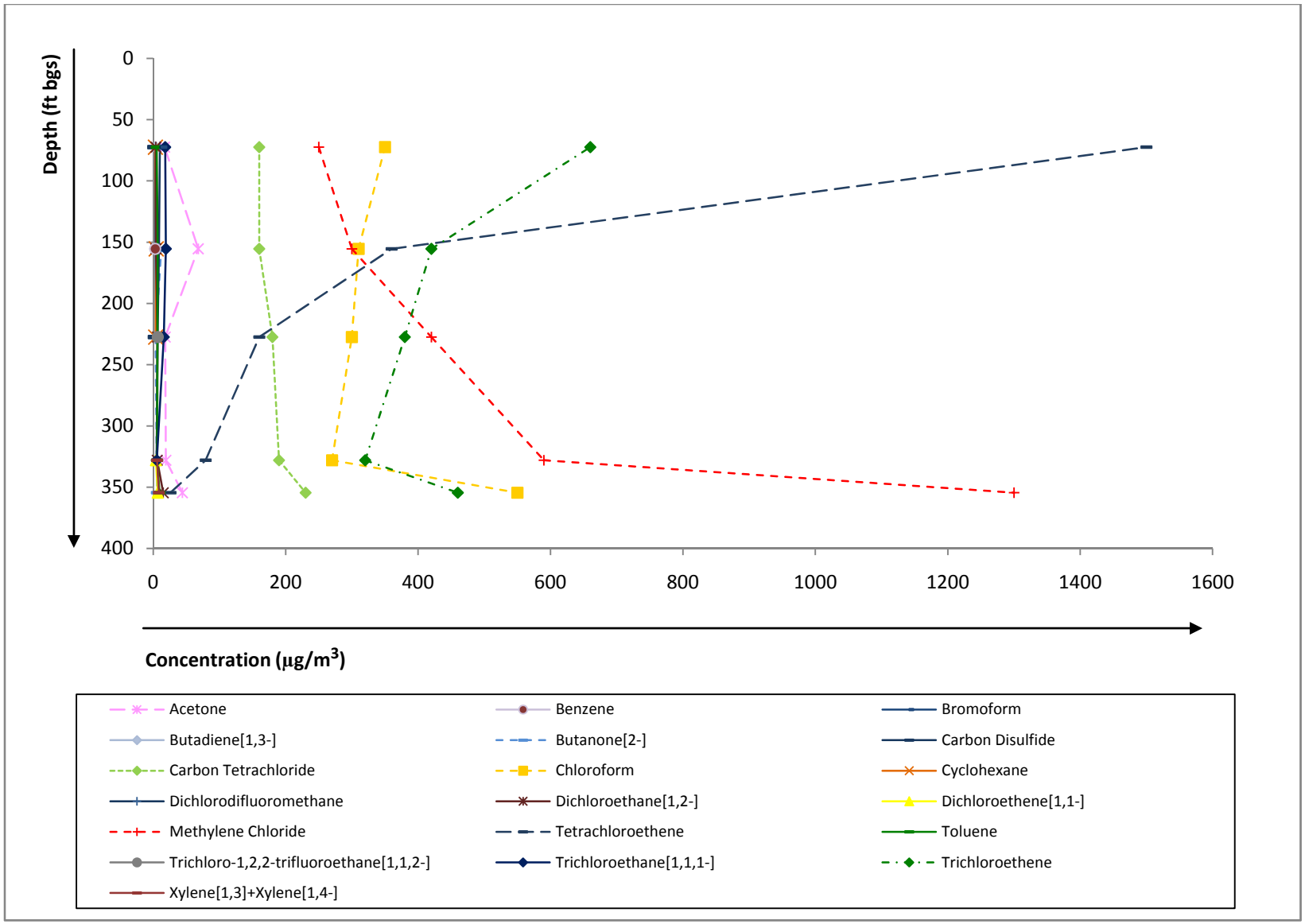


Figure 5.1-3 Vertical profile of detected VOCs in pore gas, monitoring well 21-25264, first quarter, October 2007

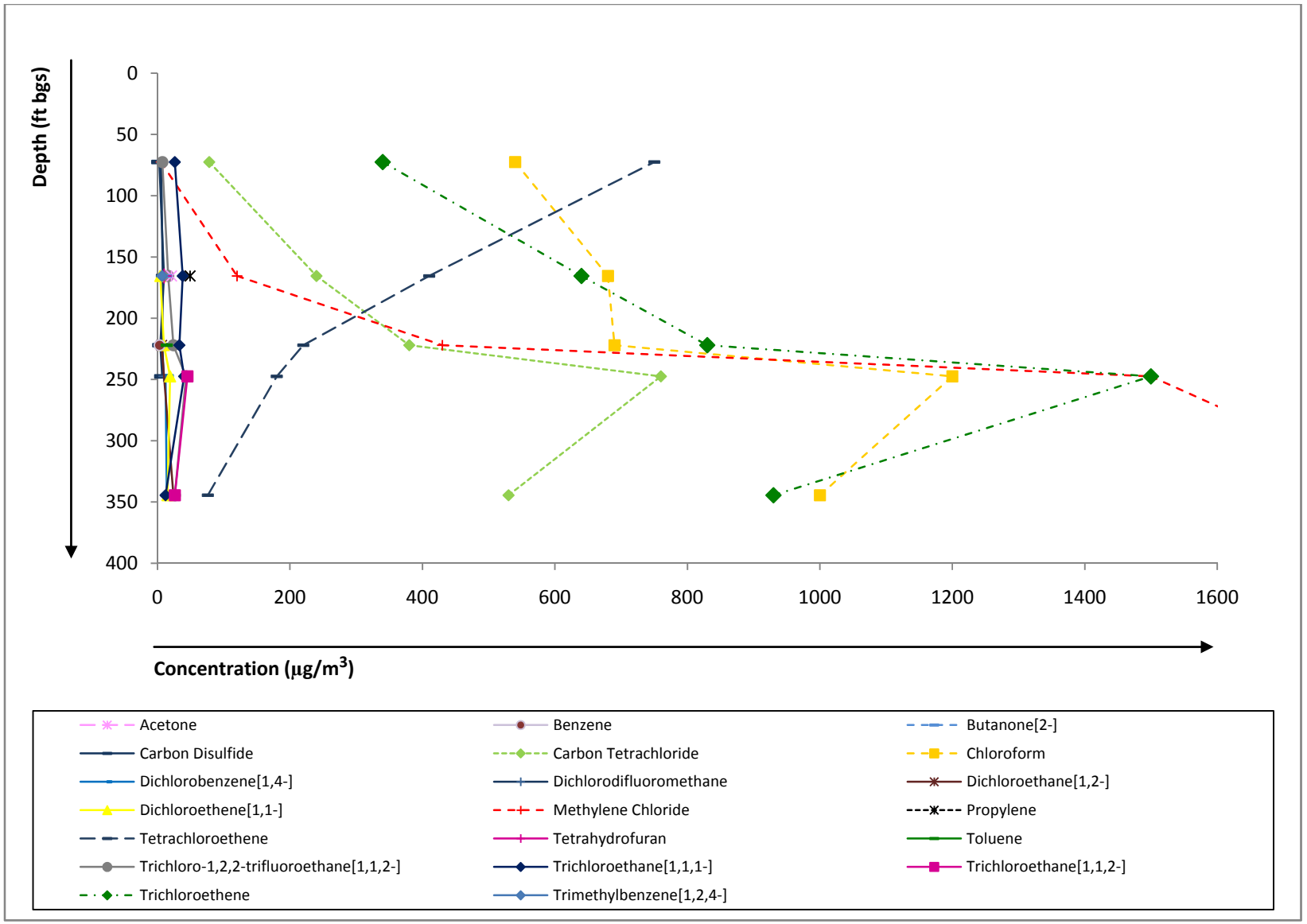


Figure 5.1-4 Vertical profile of detected VOCs in pore gas, monitoring well 21-603058, second quarter, February 2008

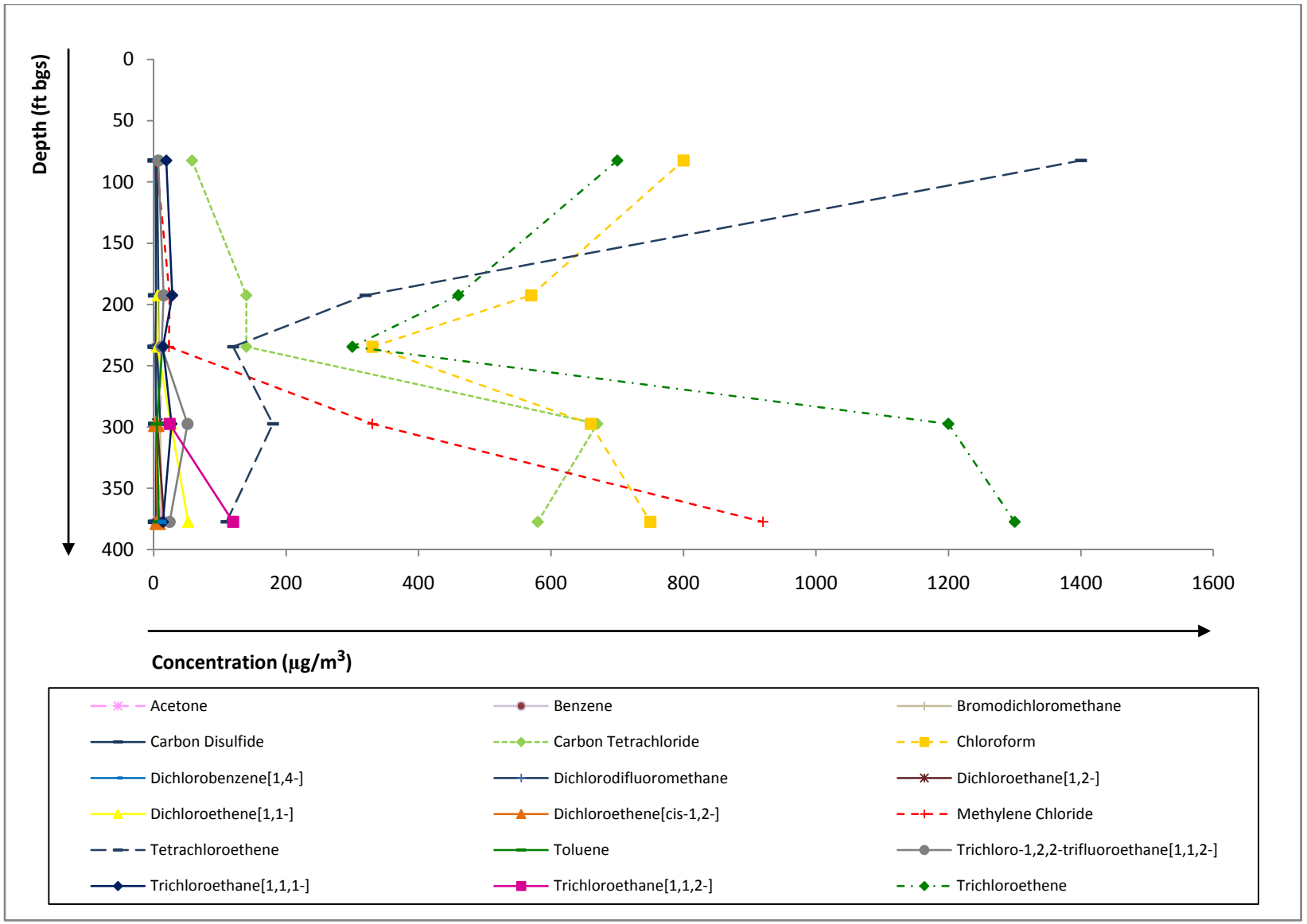


Figure 5.1-5 Vertical profile of detected VOCs in pore gas, monitoring well 21-603059, second quarter, February 2008

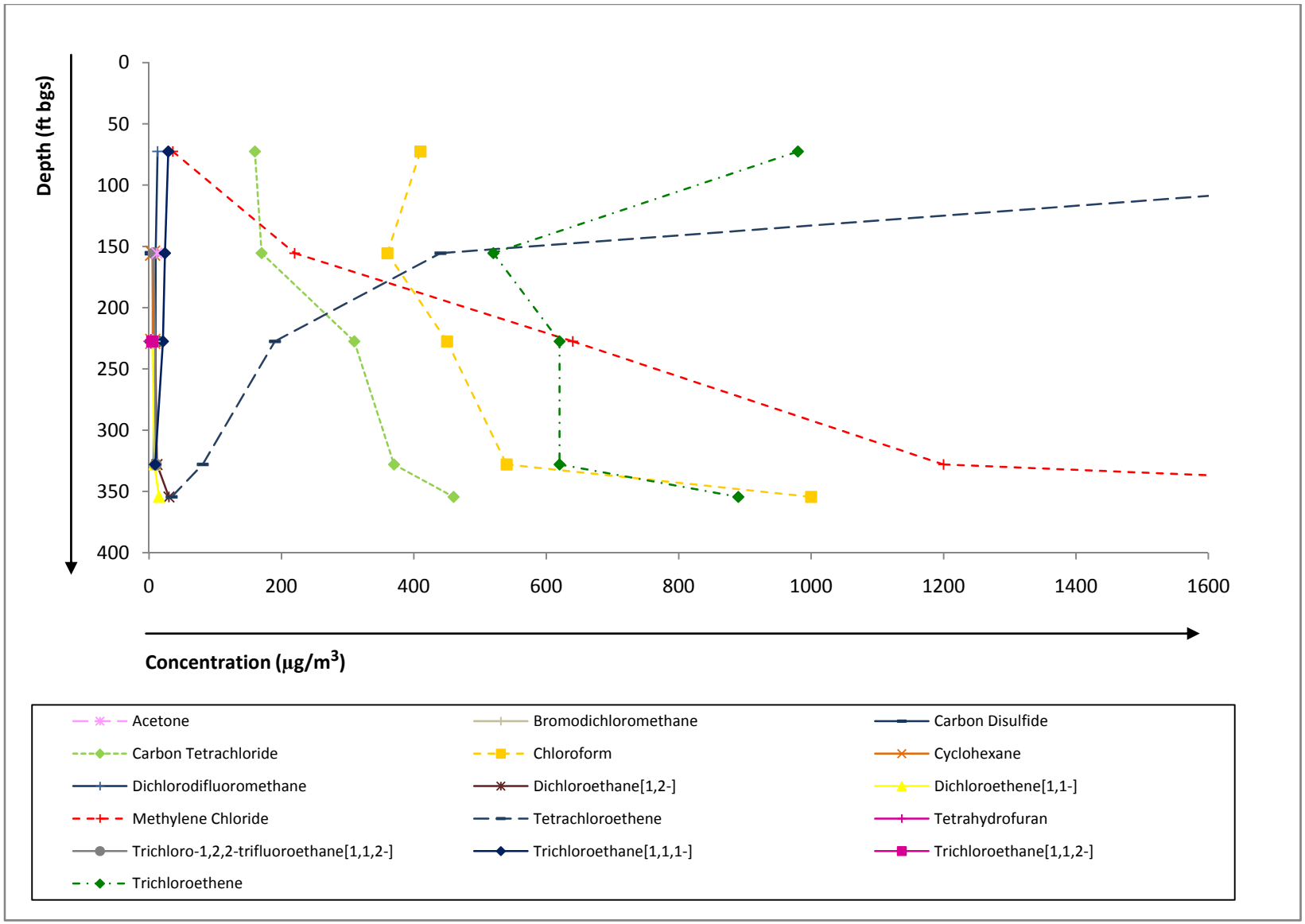


Figure 5.1-6 Vertical profile of detected VOCs in pore gas, monitoring well 21-25264, second quarter, February 2008

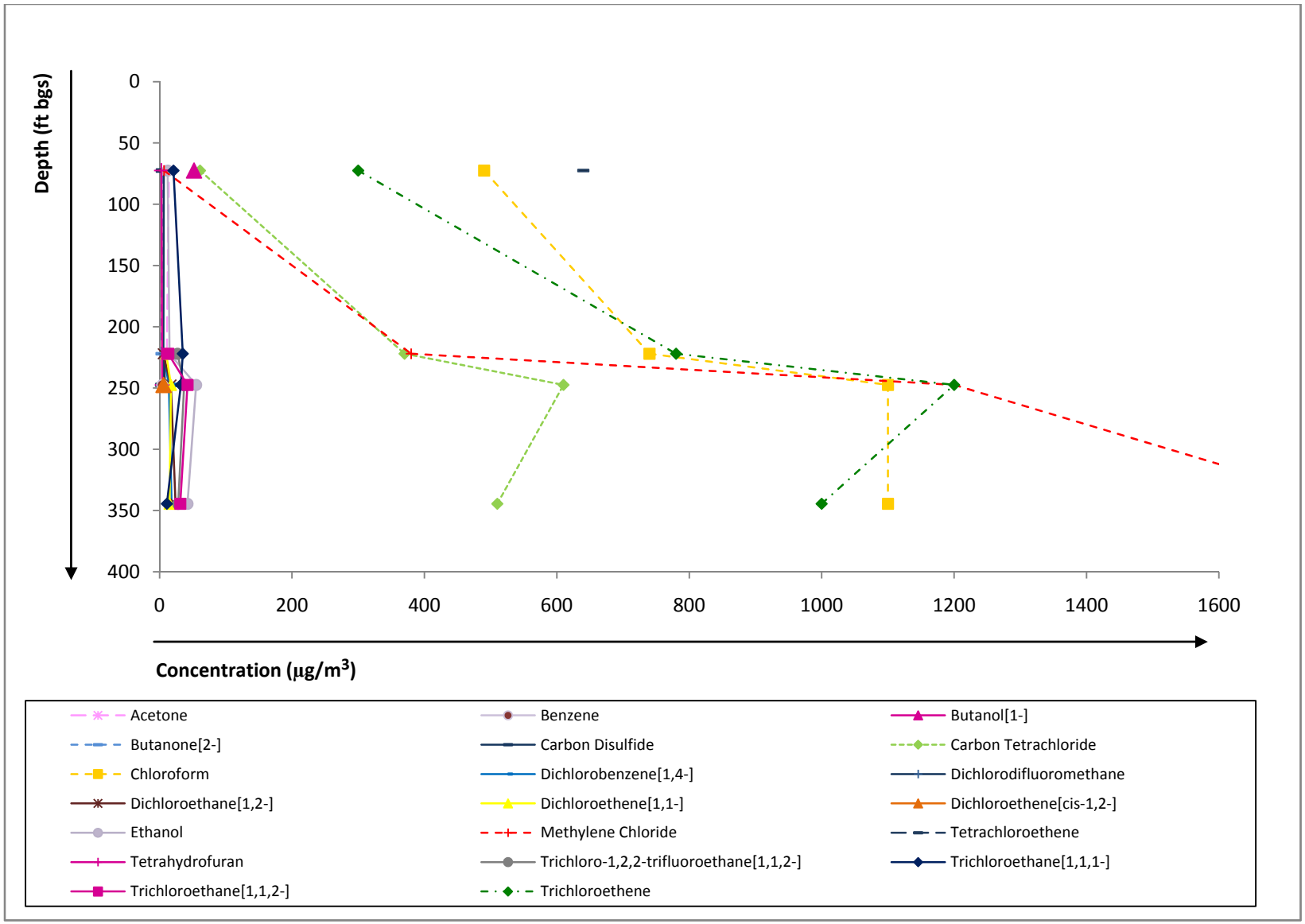


Figure 5.1-7 Vertical profile of detected VOCs in pore gas, monitoring well 21-603058, third quarter, May 2008

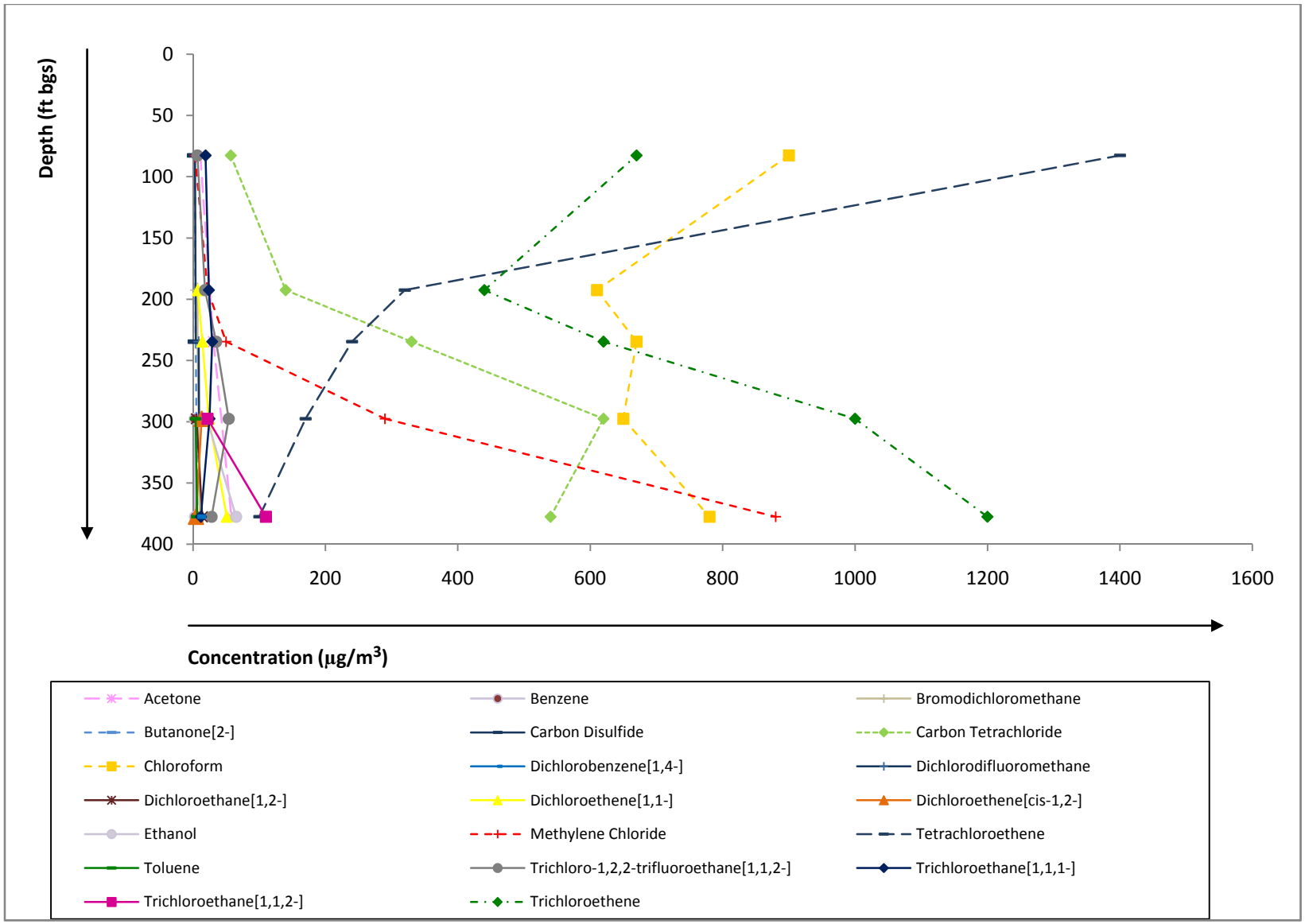


Figure 5.1-8 Vertical profile of detected VOCs in pore gas, monitoring well 21-603059, third quarter, May 2008

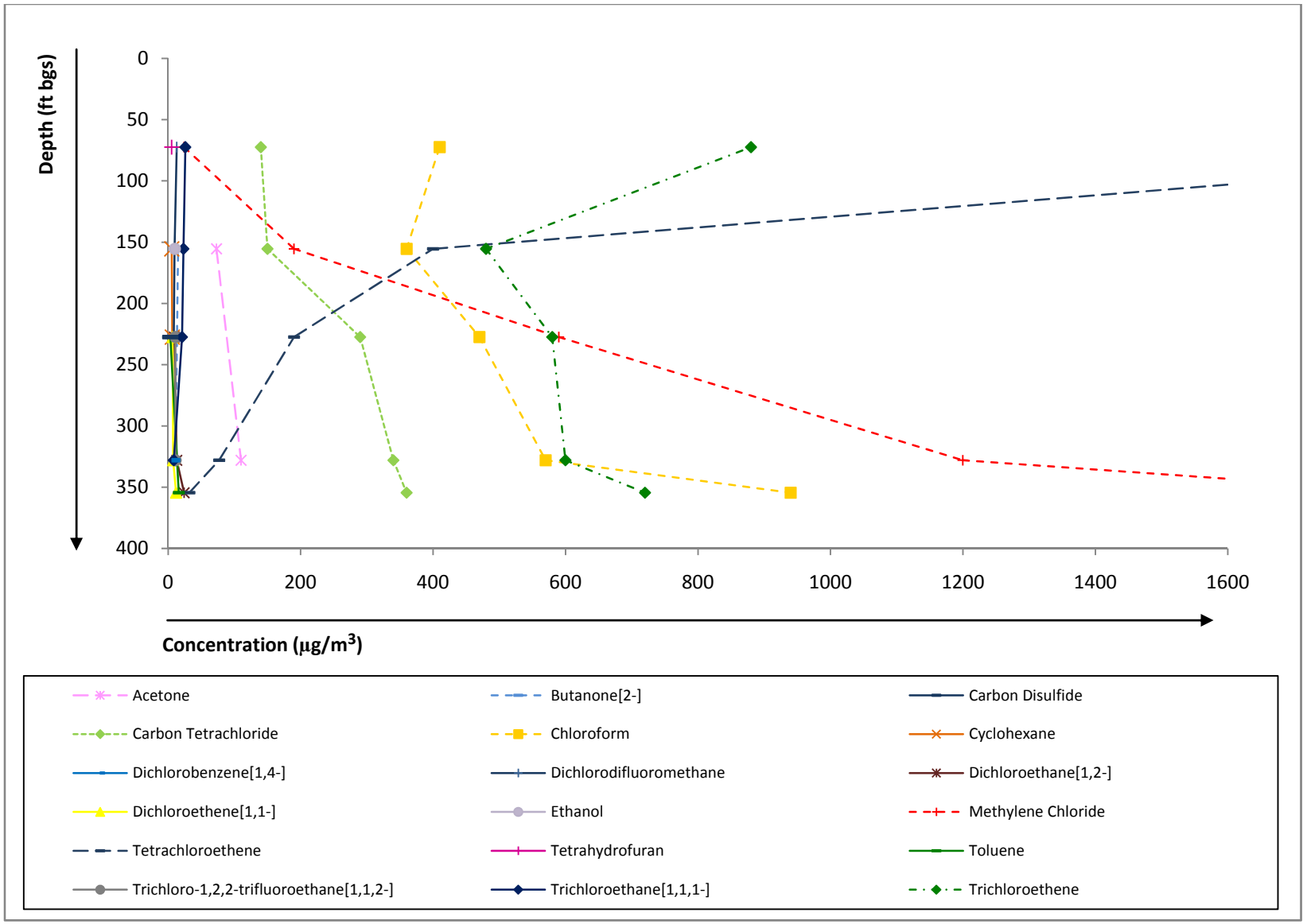


Figure 5.1-9 Vertical profile of detected VOCs in pore gas, monitoring well 21-25264, third quarter, May 2008

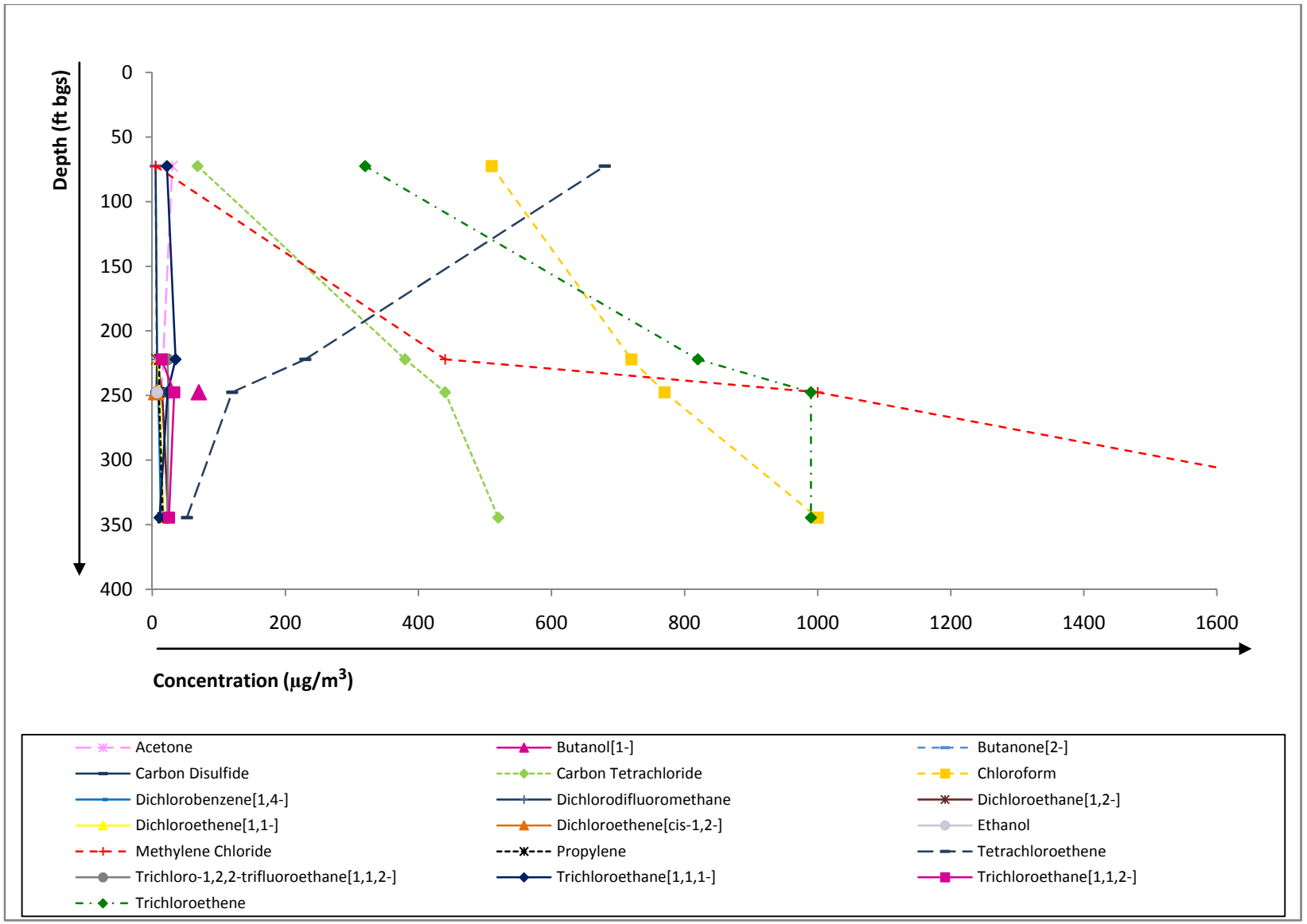


Figure 5.1-10 Vertical profile of detected VOCs in pore gas, monitoring well 21-603058, fourth quarter, September 2008

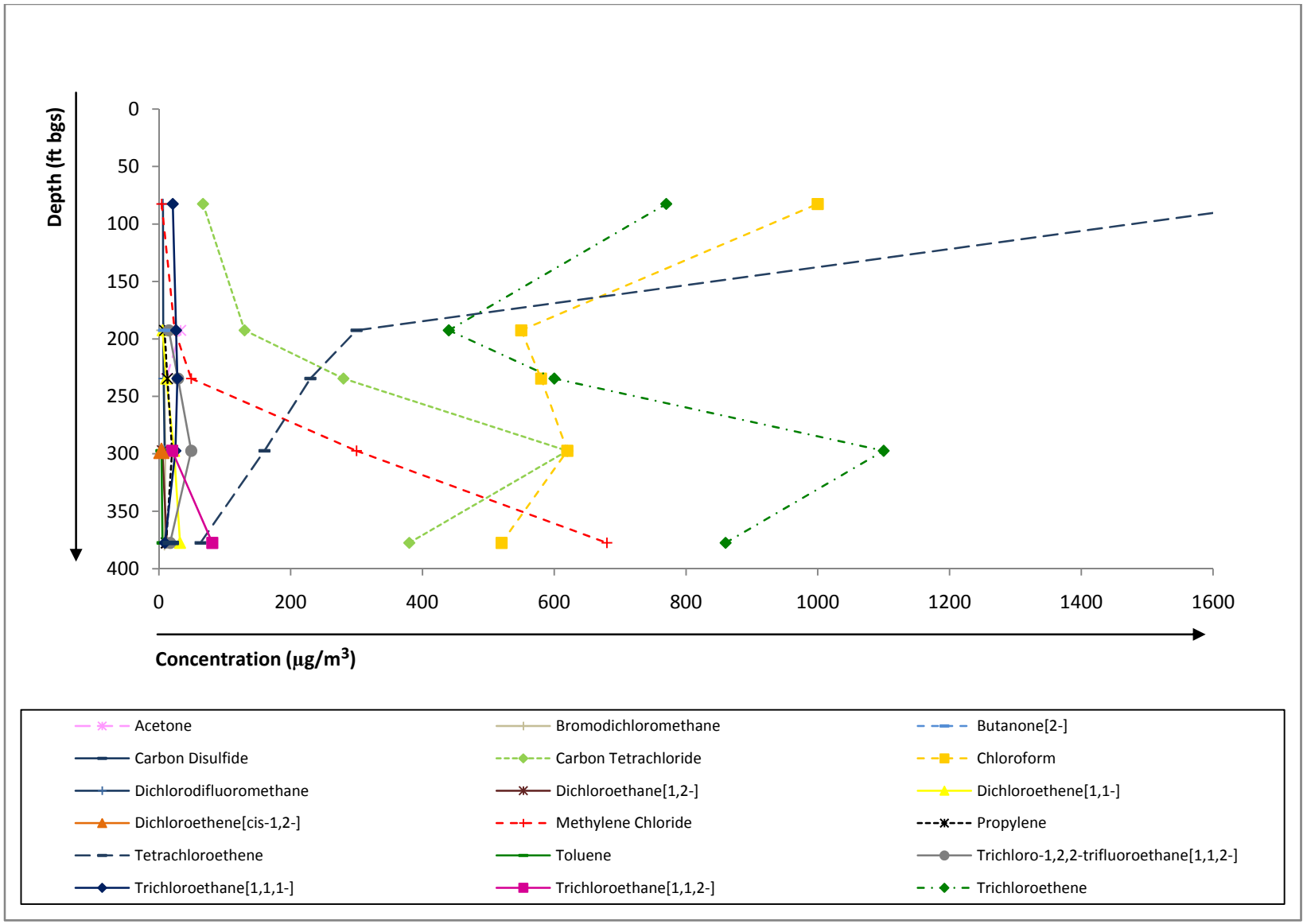


Figure 5.1-11 Vertical profile of detected VOCs in pore gas, monitoring well 21-603059, fourth quarter, September 2008

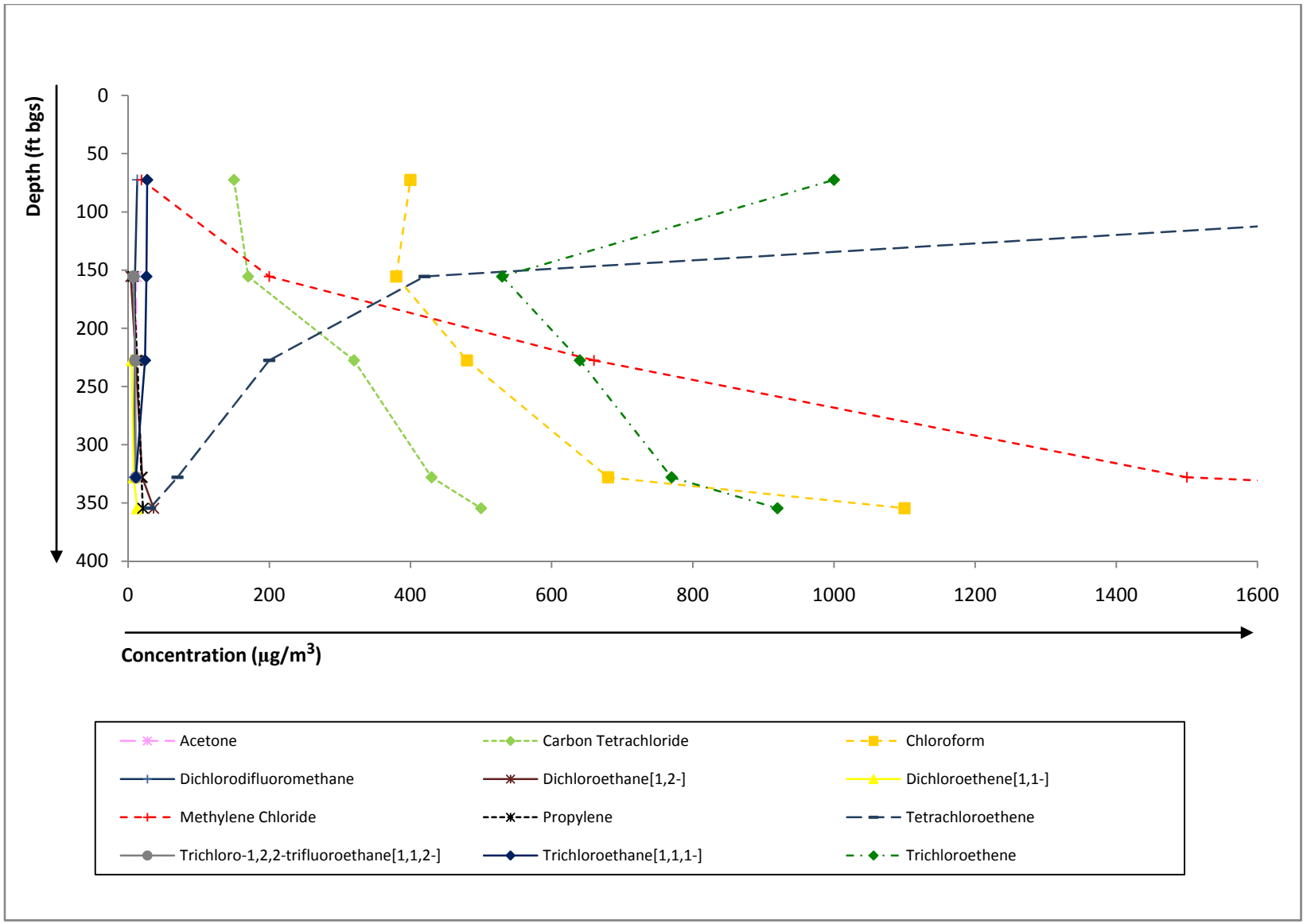


Figure 5.1-12 Vertical profile of detected VOCs in pore gas, monitoring well 21-25264, fourth quarter, September 2008

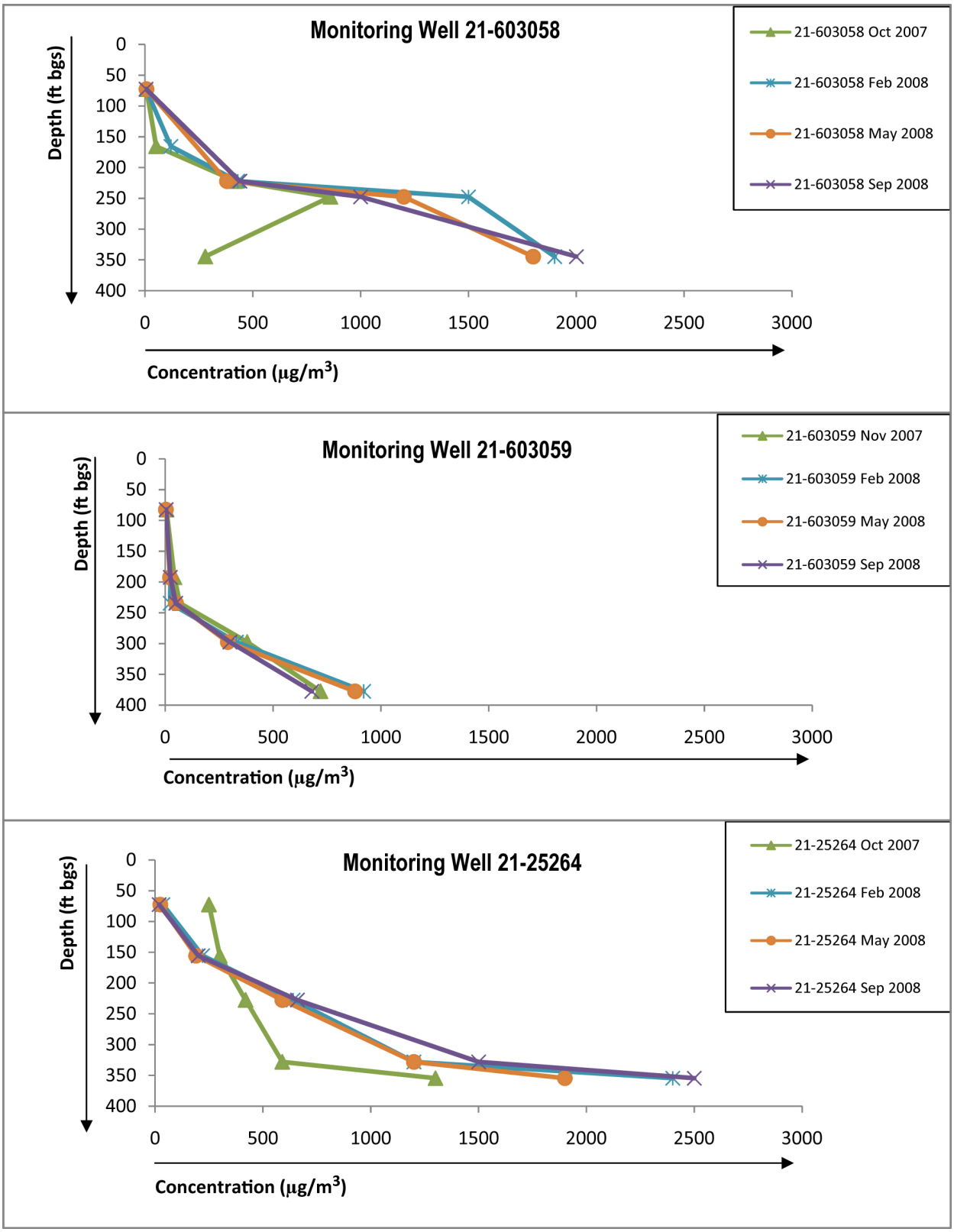


Figure 5.1-13 Vertical profile of methylene chloride in pore gas, monitoring wells 21-603058, 21-603059, and 21-25264, first through fourth quarters, October 2007–September 2008

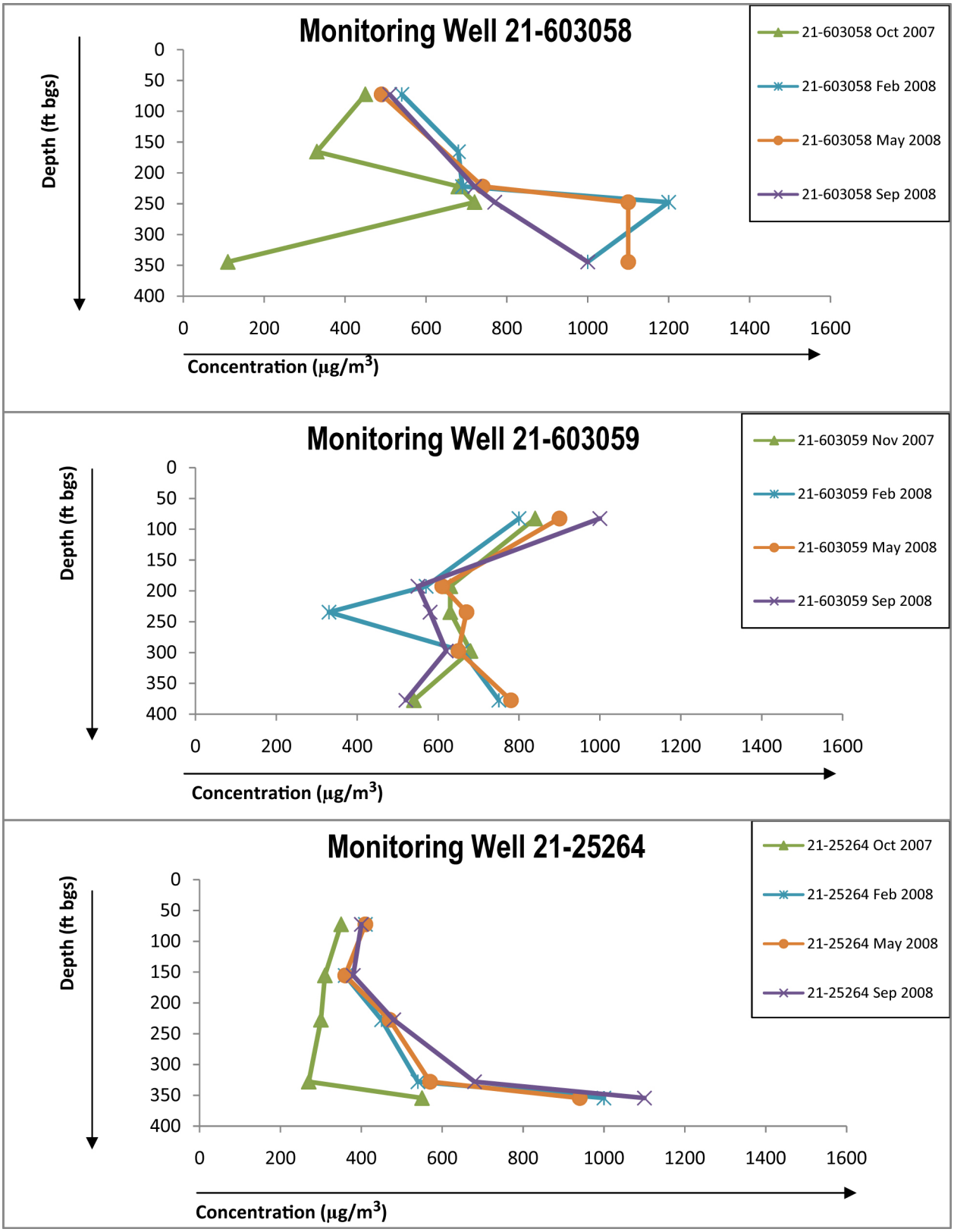


Figure 5.1-14 Vertical profile of chloroform in pore gas, monitoring wells 21-603058, 21-603059, and 21-25264, first through fourth quarters, October 2007–September 2008

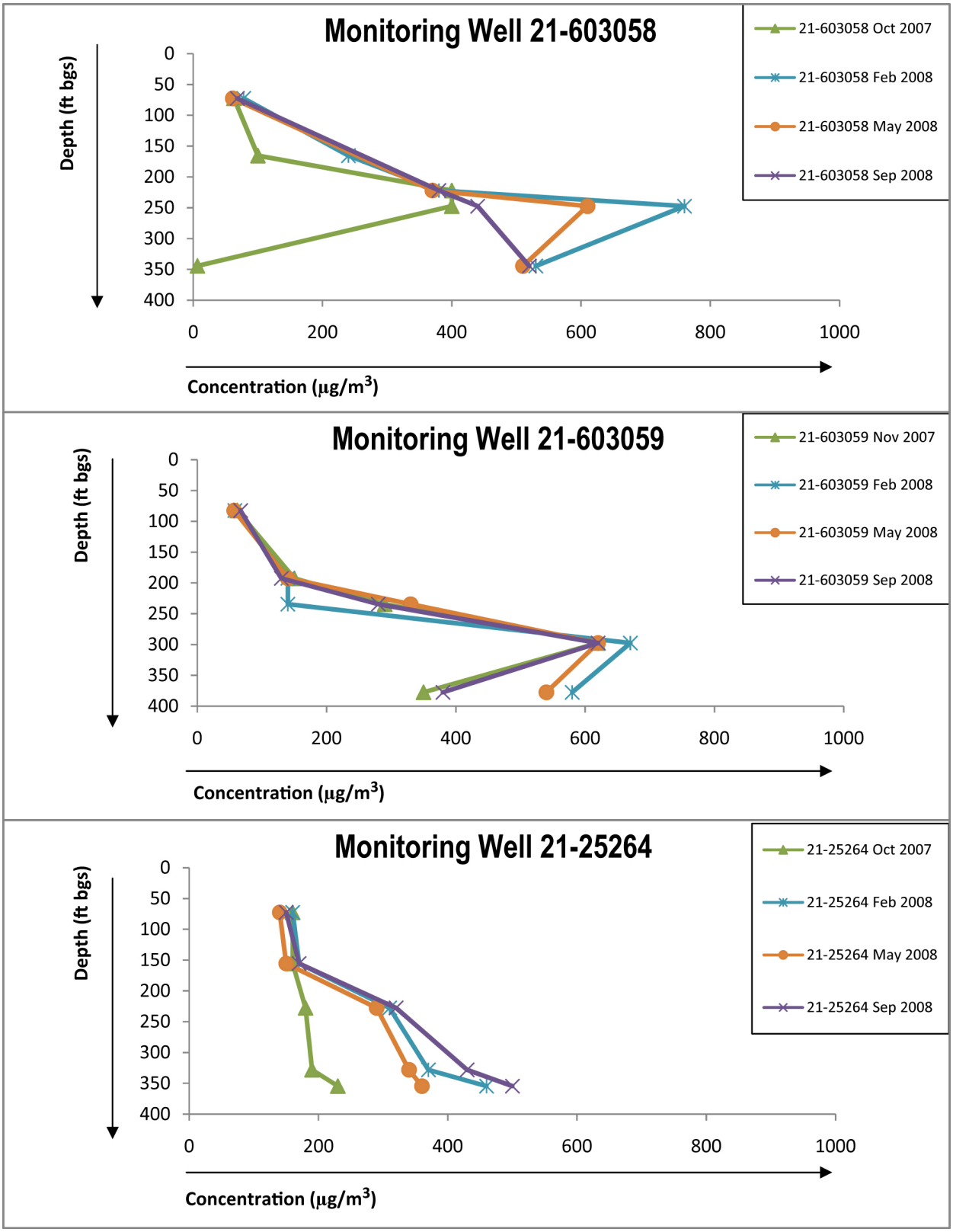


Figure 5.1-15 Vertical profile of carbon tetrachloride in pore gas, monitoring wells 21-603058, 21-603059, and 21-25264, first through fourth quarter, October 2007–September 2008

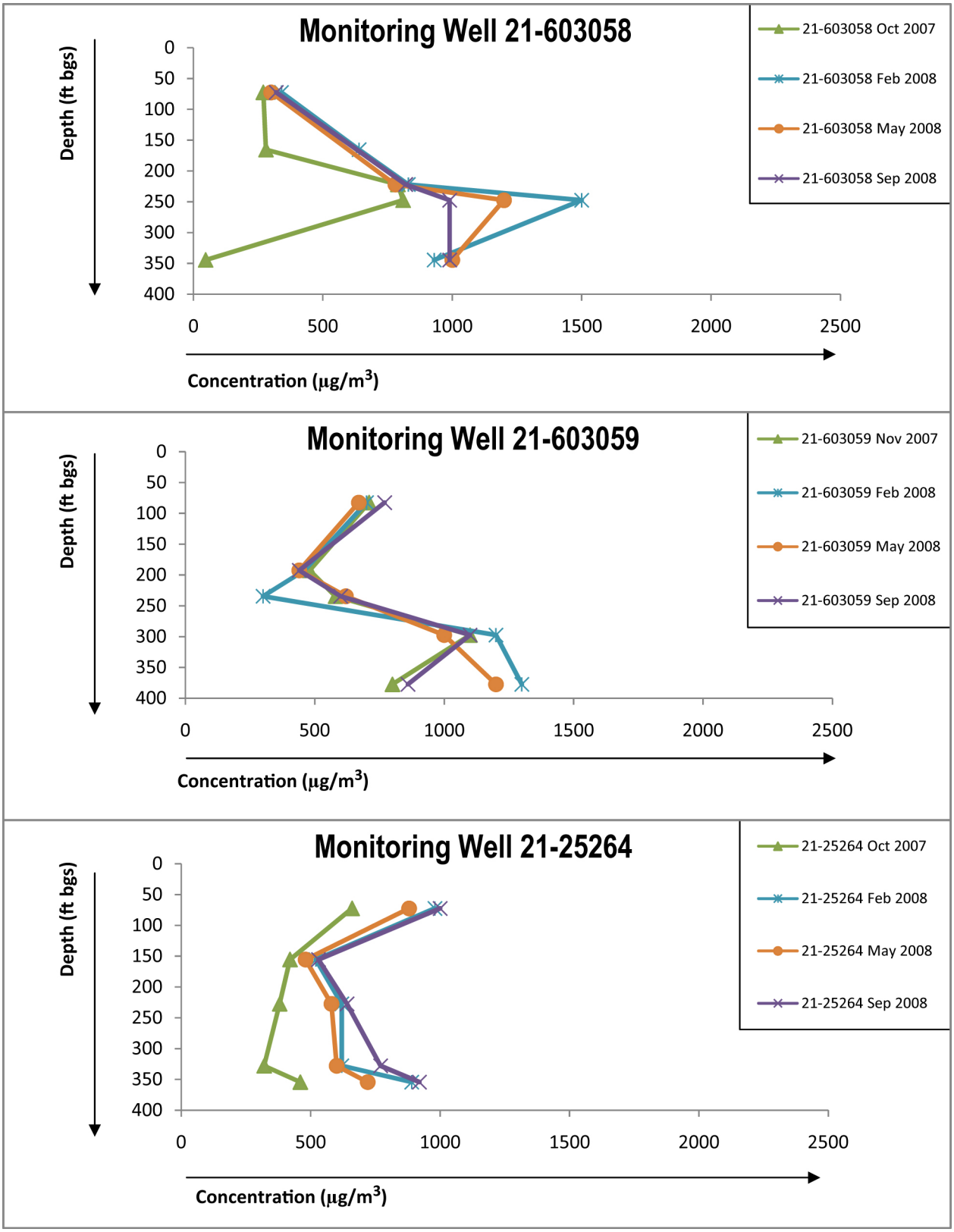


Figure 5.1-16 Vertical profile of TCE in pore gas, monitoring wells 21-603058, 21-603059, and 21-25264, first through fourth quarter, October 2007–September 2008

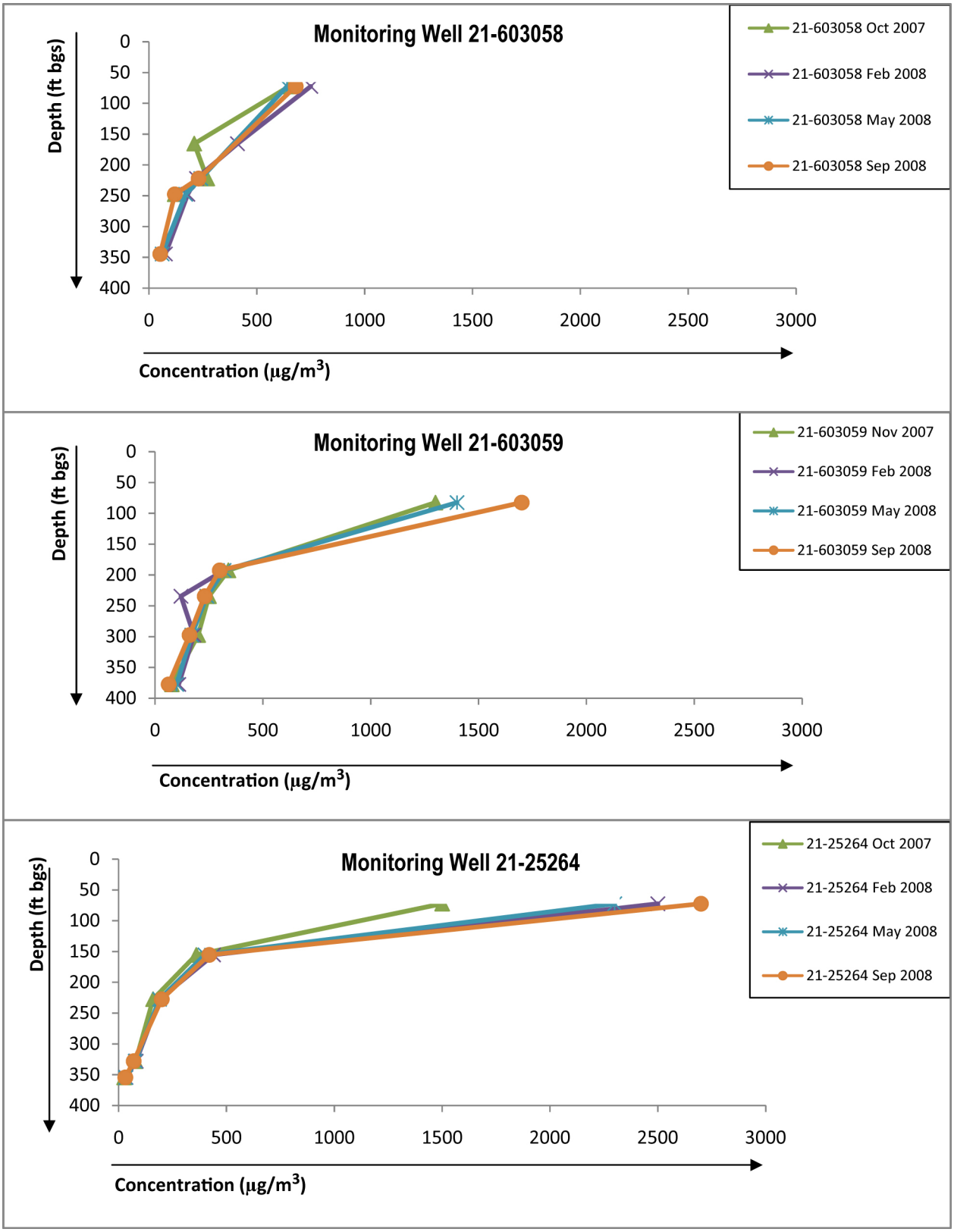


Figure 5.1-17 Vertical profile of PCE in pore gas, monitoring wells 21-603058, 21-603059, and 21-25264, first through fourth quarter, October 2007–September 2008

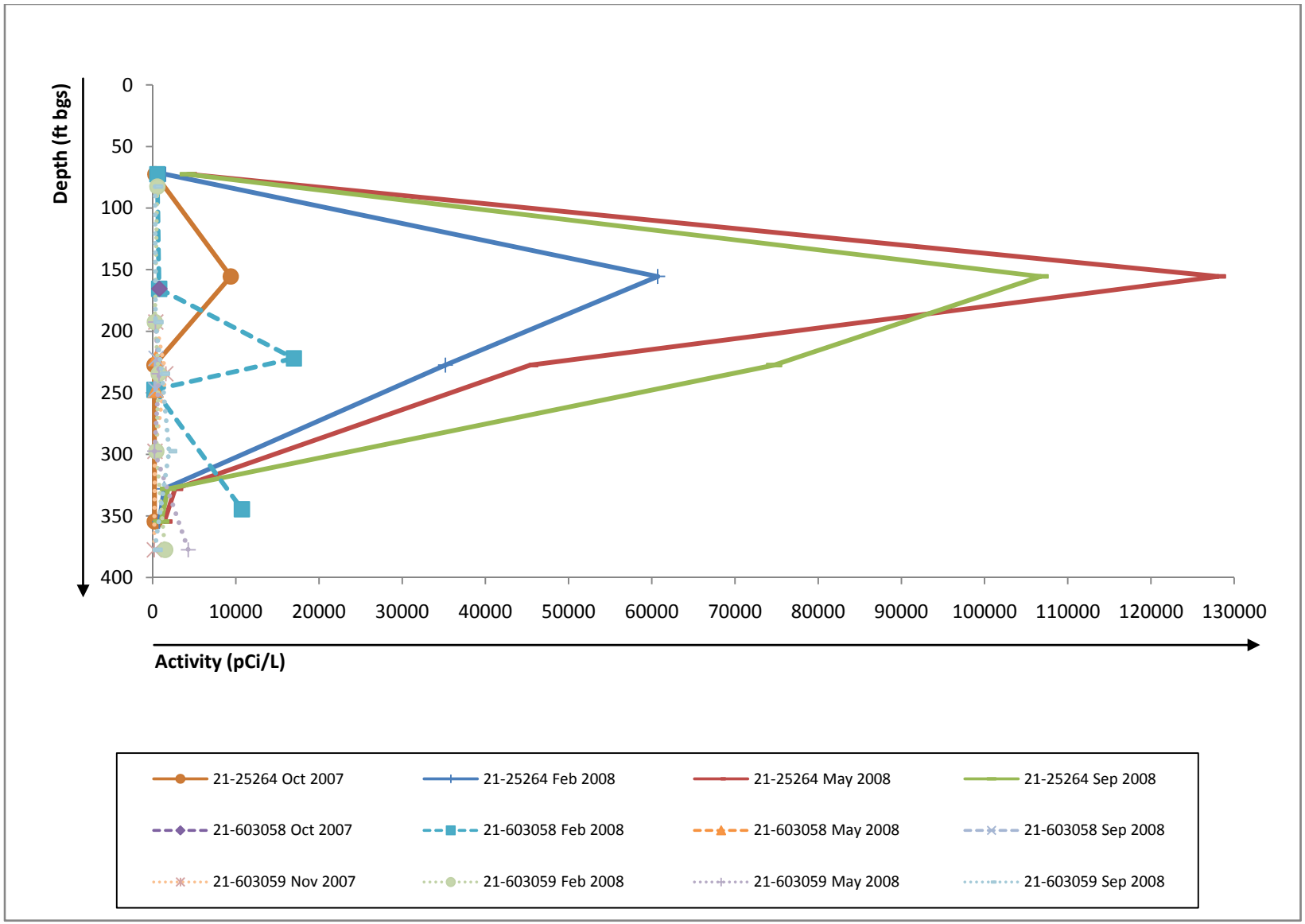


Figure 5.2-1 Vertical profile of tritium in pore gas, monitoring wells 21-603058, 21-603059, and 21-25264, first through fourth quarter, October 2007–September 2008

Table 3.1-1
Pore-Gas Screening for Well 21-603058 Based on Maximum Detected Concentrations

VOC	Maximum Detected Concentration ($\mu g/m^3$)	H' [a] (dimensionless)	Groundwater Screening Level[b] ($\mu g/L$)	Pore-Gas Screening Level[c] ($\mu g/m^3$)	Depth (ft bgs)
Acetone	200	0.0016	22000	35200	222
Benzene	8.4	0.228	5[d]	1140	165.5
Bromodichloromethane	6.6	0.0656	11	720	165.5
Bromoform	16	0.027	85	2300	247.5
Butanol[1-]	12	0.00036[e]	3700	1330	247.5
Butanone[2-]	69	0.0011	7100	7810	222
Carbon disulfide	12	1.2	1000	1200000	165.5
Carbon tetrachloride	12	1.25	5[d]	6250	344.5
Chlorodibromomethane	9.7	0.035	8	280	165.5
Chloroform	1200	0.15	100[f]	15000	247.5
Dichlorobenzene[1,4-]	18	0.0996	75[d]	7470	344.5
Dichlorodifluoromethane	9.4	4.1	390	1600000	247.5
Dichloroethane[1,2-]	24	0.04	5[d]	200	344.5
Dichloroethene[1,1-]	19	1.1	5[f]	5500	247.5
Dichloroethene[cis-1,2-]	6	0.167	70[d]	11700	247.5
Ethylbenzene	7.5	0.323	700[d]	226000	165.5
Heptane[n-]	24	88[g]	880[h]	77440000	165.5
Hexane	36	5	880	4400000	165.5
Methyl-2-pentanone[4-]	8.9	0.0057	2000	11400	222
Methylene chloride	200	0.09	5[d]	**450**[i]	344.5
Tetrachloroethene	750	0.754	5[d]	3770	72.5
Tetrahydrofuran	4.9	0.0099[j]	16[k]	160	165.5
Toluene	14	0.272	750[f]	204000	222
Trichloro-1,2,2-trifluoroethane[1,1,2-]	43	21.4	59000	1.26×10^9	247.5
Trichloroethane[1,1,1-]	40	0.705	60[f]	42300	247.5
Trichloroethane[1,1,2-]	45	0.0374	5[c]	187	247.5
Trichloroethene	1500	0.422	5[d]	2110	247.5

Table 3.1-1 (continued)

VOC	Maximum Detected Concentration (µg/m³)	*H'* [a] (dimensionless)	Groundwater Screening Level[b] (µg/L)	Pore-Gas Screening Level[c] (µg/m³)	Depth (ft bgs)
Xylene[1,2-]	9.9	0.213	620[f]	132000	165.5
Xylene[1,3-]+Xylene[1,4-]	21	0.3	620[f]	186000	165.5

Notes: Bolded values indicate pore-gas concentrations greater than the pore-gas screening level. Groundwater screening levels were not available for the following VOCs detected in MDA T pore gas at well 21-603058: ethanol, hexanone[2-], and propylene.

[a] Derived from NMED's soil-screening level technical background document unless otherwise footnoted (NMED 2006, 092513).

[b] EPA regional screening level (RSL) unless otherwise footnoted (http://www.epa.gov/region09/superfund/prg/).

[c] Pore-gas screening level is equal to product of *H'*, groundwater screening level, and 100 L/m³ conversion factor.

[d] EPA MCL.

[e] EPA preliminary remediation goal parameter value (http://www.epa.gov/region09/superfund/prg/).

[f] NMWQCC groundwater standard.

[g] Oak Ridge National Laboratory Risk Assessment Information System value for 25°C (http://www.dep.state.pa.us/physicalproperties/Default.htm).

[h] Hexane used as a surrogate, based on structural similarity.

[i] Seven samples between 860 and 2000 µg/m³ exceeded the pore-gas screening level.

[j] EPA Superfund Chemical Data Matrix value for 25°C (http://www.dep.state.pa.us/physicalproperties/Default.htm).

[k] EPA RSL not available. Former EPA Region 6 tap water screening level used (EPA 2007, 099314).

Table 3.1-2
Pore-Gas Screening for Well 21-603059 Based on Maximum Detected Concentrations

VOC	Maximum Detected Concentration (µg/m³)	*H'*[a] (dimensionless)	Groundwater Screening Level[b] (µg/L)	Pore-Gas Screening Level[c] (µg/m³)	Depth (ft bgs)
Acetone	560	0.0016	22000	35200	229.5
Benzene	8.2	0.228	5[d]	1140	229.5
Bromodichloromethane	12	0.0656	11	720	377
Bromoform	10	0.027	85	2300	82.5
Butanol[1-]	21	0.00036[e]	3700	1330	234.5
Butanone[2-]	170	0.0011	7100	7810	234.5
Carbon disulfide	18	1.2	1000	1200000	377.5
Carbon tetrachloride	670	1.25	5[d]	6250	297.5
Chloroform	1000	0.15	100[f]	15000	82.5
Cyclohexane	3.4	6.1[e]	13000	79300000	234.5
Dichlorobenzene[1,4-]	7.6	0.0996	75[d]	7470	377.5
Dichlorodifluoromethane	9.8	4.1	390	1600000	297.5
Dichloroethane[1,2-]	16	0.04	5[d]	200	377.5
Dichloroethene[1,1-]	52	1.1	5[f]	5500	377.5
Dichloroethene[cis-1,2-]	13	0.167	70[d]	11700	297.5
Ethylbenzene	11	0.323	700[d]	226000	234.5
Heptane[n-]	12	88[g]	880[h]	77440000	82.5
Hexane	8.5	5	880	4400000	82.5
Methyl-2-pentanone[4-]	21	0.0057	2000	11400	234.5
Methylene chloride	920	0.09	5[d]	**450**[i]	377.5
Tetrachloroethene	1700	0.754	5[d]	3770	82.5
Tetrahydrofuran	3.7	0.0099[j]	16[k]	160	234.5
Toluene	25	0.272	750[f]	204000	234.5
Trichloro-1,2,2-trifluoroethane[1,1,2-]	55	21.4	59000	1.26×10^9	297.5
Trichloroethane[1,1,1-]	31	0.705	6[f]	42300	234.5
Trichloroethane[1,1,2-]	120	0.0374	5[e]	187	377.5
Trichloroethene	1300	0.422	5[d]	2110	377.5
Trimethylbenzene[1,3,5-]	11	0.32	12	3840	234.5

Table 3.1-2 (continued)

VOC	Maximum Detected Concentration (µg/m³)	*H'*[a] (dimensionless)	Groundwater Screening Level[b] (µg/L)	Pore-Gas Screening Level[c] (µg/m³)	Depth (ft bgs)
Xylene[1,2-]	16	0.213	620[f]	132000	234.5
Xylene[1,3-]+Xylene[1,4-]	35	0.3	620[f]	186000	234.5

Notes: Bolded values indicate pore-gas concentrations greater than the pore-gas screening level. Groundwater screening levels were not available for the following VOCs detected in MDA T pore gas at well 21-603059: ethanol, ethyltoluene[4-], hexanone[2-], propanol[2-], and propylene.

[a] Derived from NMED's soil-screening level technical background document unless otherwise footnoted (NMED 2006, 092513).

[b] EPA RSL unless otherwise footnoted (http://www.epa.gov/region09/superfund/prg/).

[c] Pore-gas screening level is equal to product of *H'*, groundwater screening level, and 1000 L/m^3 conversion factor.

[d] EPA MCL.

[e] EPA preliminary remediation goal parameter value (http://www.epa.gov/region09/superfund/prg/).

[f] NMWQCC groundwater standard.

[g] Oak Ridge National Laboratory Risk Assessment Information System value for 25°C (http://www.dep.state.pa.us/physicalproperties/Default.htm).

[h] Hexane used as a surrogate, based on structural similarity.

[i] Four samples between 680 and 920 µg/m^3 exceeded the pore-gas screening level.

[j] EPA Superfund Chemical Data Matrix value for 25°C (http://www.dep.state.pa.us/physicalproperties/Default.htm).

[k] EPA RSL not available. Former EPA Region 6 tap water screening level used (EPA 2007, 099314).

Table 3.1-3
Pore-Gas Screening for Well 21-25264 Based on Maximum Detected Concentrations

VOC	Maximum Detected Concentration (µg/m³)	*H'*[a] (dimensionless)	Groundwater Screening Level[b] (µg/L)	Pore-Gas Screening Level[c] (µg/m³)	Depth (ft bgs)
Acetone	270	0.0016	22000	35200	327
Benzene	7.9	0.228	5[d]	1140	154
Bromodichloromethane	6	0.0656	11	720	225.5
Bromoform	12	0.027	85	2300	72.5
Butanone[2-]	22	0.0011	7100	7810	325
Carbon disulfide	8.4	1.2	1000	1200000	71
Carbon tetrachloride	500	1.25	5[d]	6250	349.5
Chloroform	1100	0.15	100[e]	15000	349.5
Cyclohexane	6.2	6.1[f]	13000	79300000	227.5
Dichlorobenzene[1,4-]	6	0.0996	75[d]	7470	328
Dichlorodifluoromethane	13	4.1	390	1600000	72.5
Dichloroethane[1,2-]	36	0.04	5[d]	200	349.5
Dichloroethene[1,1-]	17	1.1	5[e]	5500	327
Methylene chloride	2500	0.09	5[d]	**450**[g]	349.5
Tetrachloroethene	2700	0.754	5[d]	3770	72.5
Tetrahydrofuran	5.2	0.0099[h]	16[i]	160	72.5
Toluene	1900	0.272	750[e]	204000	154
Trichloro-1,2,2-trifluoroethane[1,1,2-]	11	21.4	59000	1.26×10^9	328
Trichloroethane[1,1,1-]	110	0.705	60[e]	42300	327
Trichloroethane[1,1,2-]	4.6	0.0374	5[e]	187	227.5
Trichloroethene	1000	0.422	5[d]	2110	72.5
Xylene[1,3-]+Xylene[1,4-]	9.5	0.3	620[e]	186000	327

Notes: Bolded values indicate pore-gas concentrations greater than the pore-gas screening level. Groundwater screening levels were not available for the following VOCs detected in MDA T pore gas at well 21-25264: ethanol and propylene.

[a] Derived from NMED's soil-screening level technical background document unless otherwise footnoted (NMED 2006, 092513).

[b] EPA RSL unless otherwise footnoted (http://www.epa.gov/region09/superfund/prg/).

[c] Pore-gas screening level is equal to product of *H'*, groundwater screening level, and 1000 L/m³ conversion factor.

[d] EPA MCL.

[e] NMWQCC groundwater standard.

[f] EPA preliminary remediation goal parameter value (http://www.epa.gov/region09/superfund/prg/).

[g] Eleven samples between 590 and 2500 µg/m³ exceeded the pore-gas screening level.

[h] EPA Superfund Chemical Data Matrix value for 25°C (http://www.dep.state.pa.us/physicalproperties/Default.htm).

[i] EPA RSL not available. Former EPA Region 6 tap water screening level used (EPA 2007, 099314).

Table 4.0-1
2007–2008 MDA T Pore-Gas Sampling Depths and Collection Dates

Location ID	Sample Interval	Sample Port	Begin Depth (ft bgs)	End Depth (ft bgs)	2007–2008 Round 1 Collection Date (Event ID 236)	2007–2008 Round 2 Collection Date (Event ID 340)	2007–2008 Round 3 Collection Date (Event ID 407)	2007–2008 Round 4 Collection Date (Event ID 487)
21-25264	1	n/a[a]	69	71	n/a	n/a	n/a	n/a
21-25264	n/a	1	67.5	72.5	10/19/2007	2/14/2008	5/7/2008	9/23/2008
21-25264	2	n/a	152	154	n/a	n/a	n/a	n/a
21-25264	n/a	2	150.5	155.5	10/19/2007	2/14/2008	5/7/2008	9/23/2008
21-25264	3	n/a	224	226	n/a	n/a	n/a	n/a
21-25264	n/a	3	222.5	227.5	10/19/2007	2/14/2008	5/7/2008	9/23/2008
21-25264	4	n/a	325	327	n/a	n/a	n/a	n/a
21-25264	n/a	4	323	328	10/19/2007	2/14/2008	5/7/2008	9/23/2008
21-25264	5	n/a	350	354	n/a	n/a	n/a	n/a
21-25264	n/a	5	349.5	354.5	10/19/2007	2/14/2008	5/7/2008	9/23/2008
21-603058	n/a	1	67.5	72.5	10/30/2007	2/13/2008	5/9/2008	9/24/2008
21-603058	n/a	2	160.5	165.5	10/30/2007	2/13/2008	—[b]	—
21-603058	n/a	3	217	222	10/30/2007	2/13/2008	5/8/2008	9/24/2008
21-603058	n/a	4	242.5	247.5	10/30/2007	2/13/2008	5/8/2008	9/24/2008
21-603058	n/a	5	339.5	344.5	10/30/2007	2/13/2008	5/8/2008	9/24/2008
21-603059	n/a	1	77.5	82.5	11/4/2007	2/6/2008	5/9/2008	9/25/2008
21-603059	n/a	2	112.5	117.5	—	—	—	—
21-603059	n/a	3	187.5	192.5	11/3/2007	2/8/2008	5/9/2008	9/25/2008
21-603059	n/a	4	229.5	234.5	11/3/2007	2/6/2008	5/9/2008	9/25/2008
21-603059	n/a	5	292.5	297.5	11/3/2007	2/6/2008	5/9/2008	9/25/2008
21-603059	n/a	6	372.5	377.5	11/3/2007	2/8/2008	5/9/2008	9/25/2008

Note: Event IDs refer to the SCL and COC packages provided in Appendix B.

[a] n/a = Not applicable.

[b] — = Sample not collected. See section 4.2 for further explanation.

Table 4.0-2
Summary of 2007–2008 Pore-Gas Samples Collected at MDA T

Sample ID	Location ID	Depth (ft)	Collection Date	Field QC Type	Tritium	VOCs
MD21-07-6813	21-25264	67.50–72.50	10/19/2007	n/a[a]	08-80	08-79
MD21-07-6814	21-25264	150.50–155.50	10/19/2007	n/a	08-80	08-79
MD21-07-6815	21-25264	222.50–227.50	10/19/2007	n/a	08-80	08-79
MD21-07-6816	21-25264	323.00–328.00	10/19/2007	n/a	08-80	08-79
MD21-07-6817	21-25264	349.50–354.50	10/19/2007	n/a	08-80	08-79
MD21-08-10517	21-25264	0.00–0.00	2/19/2008	Field Blank	—[b]	08-646
MD21-08-10511	21-25264	67.50–72.50	2/14/2008	n/a	08-631	08-630
MD21-08-10512	21-25264	150.50–155.50	2/14/2008	n/a	08-631	08-630
MD21-08-10513	21-25264	222.50–227.50	2/14/2008	n/a	08-631	08-630
MD21-08-10514	21-25264	323.00–328.00	2/14/2008	n/a	08-631	08-630
MD21-08-10515	21-25264	349.50–354.50	2/14/2008	n/a	08-631	08-630
MD21-08-10516	21-25264	349.50–354.50	2/14/2008	Field Duplicate	08-631	08-630
MD21-08-12247	21-25264	67.50–72.50	5/7/2008	n/a	08-1108	08-1107
MD21-08-12257	21-25264	67.50–72.50	5/7/2008	Field Duplicate	08-1108	—
MD21-08-12248	21-25264	150.50–155.50	5/7/2008	n/a	08-1108	08-1107
MD21-08-12249	21-25264	222.50–227.50	5/7/2008	n/a	08-1108	08-1107
MD21-08-12250	21-25264	323.00–328.00	5/7/2008	n/a	08-1108	08-1107
MD21-08-12251	21-25264	349.50–354.50	5/7/2008	n/a	08-1108	08-1107
MD21-08-14828	21-25264	67.50–72.50	9/23/2008	n/a	08-2021	08-2020
MD21-08-14829	21-25264	150.50–155.50	9/23/2008	n/a	08-2021	08-2020
MD21-08-14830	21-25264	222.50–227.50	9/23/2008	n/a	08-2021	08-2020
MD21-08-14831	21-25264	323.00–328.00	9/23/2008	n/a	08-2021	08-2020
MD21-08-14832	21-25264	349.50–354.50	9/23/2008	n/a	08-2021	08-2020
MD21-08-14833	21-25264	349.50–354.50	9/23/2008	Field Duplicate	08-2021	08-2020
MD21-07-6818	21-603058	0.00–0.00	10/30/2007	Field Blank	08-125	08-124
MD21-07-6807	21-603058	67.50–72.50	10/30/2007	n/a	08-99	08-98
MD21-07-6808	21-603058	160.50–165.50	10/30/2007	n/a	08-99	08-98
MD21-07-6809	21-603058	217.00–222.00	10/30/2007	n/a	08-99	08-98
MD21-07-6810	21-603058	242.50–247.50	10/30/2007	n/a	08-99	08-98
MD21-07-6811	21-603058	339.50–344.50	10/30/2007	n/a	08-99	08-98
MD21-07-6812	21-603058	339.50–344.50	10/30/2007	Field Duplicate	08-99	08-98
MD21-08-10504	21-603058	67.50–72.50	2/13/2008	n/a	08-624	08-623
MD21-08-10505	21-603058	160.50–165.50	2/13/2008	n/a	08-624	08-623
MD21-08-10506	21-603058	217.00–222.00	2/13/2008	n/a	08-624	08-623
MD21-08-10507	21-603058	242.50–247.50	2/13/2008	n/a	08-624	08-623
MD21-08-10508	21-603058	339.50–344.50	2/13/2008	n/a	08-624	08-623
MD21-08-12255	21-603058	0.00–0.00	5/8/2008	Field Blank	—	08-1147
MD21-08-12242	21-603058	67.50–72.50	5/9/2008	n/a	08-1114	08-1113

Table 4.0-2 (continued)

Sample ID	Location ID	Depth (ft)	Collection Date	Field QC Type	Tritium	VOCs
MD21-08-12244	21-603058	217.00–222.00	5/8/2008	n/a	08-1114	08-1113
MD21-08-12245	21-603058	242.50–247.50	5/8/2008	n/a	08-1114	08-1113
MD21-08-12246	21-603058	339.50–344.50	5/8/2008	n/a	08-1114	08-1113
MD21-08-12256	21-603058	339.50–344.50	5/8/2008	Field Duplicate	—	08-1113
MD21-08-14826	21-603058	0.00–0.00	9/24/2008	Field Blank	—	08-2020
MD21-08-14814	21-603058	217.00–222.00	9/24/2008	n/a	08-2021	08-2020
MD21-08-14815	21-603058	242.50–247.50	9/24/2008	n/a	08-2021	08-2020
MD21-08-14816	21-603058	339.50–344.50	9/24/2008	n/a	08-2021	08-2020
MD21-08-14813	21-603058	67.50–72.50	9/24/2008	n/a	08-2021	08-2020
MD21-08-8445	21-603059	0.00–0.00	11/3/2007	Field Blank	08-125	08-124
MD21-07-6804	21-603059	77.50–82.50	11/4/2007	n/a	08-125	08-124
MD21-07-6803	21-603059	187.50–192.50	11/3/2007	n/a	08-125	08-124
MD21-07-6801	21-603059	229.50–234.50	11/3/2007	n/a	08-125	08-124
MD21-07-6802	21-603059	292.50–297.50	11/3/2007	n/a	08-125	08-124
MD21-07-6800	21-603059	372.50–377.50	11/3/2007	n/a	08-125	08-124
MD21-07-6806	21-603059	372.50–377.50	11/3/2007	Field Duplicate	08-125	08-124
MD21-08-10525	21-603059	0.00–0.00	2/19/2008	Field Blank	—	08-646
MD21-08-10518	21-603059	77.50–82.50	2/6/2008	n/a	08-605	08-604
MD21-08-10524	21-603059	77.50–82.50	2/6/2008	Field Duplicate	08-605	08-604
MD21-08-10519	21-603059	187.50–192.50	2/8/2008	n/a	08-605	08-604
MD21-08-10520	21-603059	229.50–234.50	2/6/2008	n/a	08-605	08-604
MD21-08-10521	21-603059	292.50–297.50	2/6/2008	n/a	08-605	08-604
MD21-08-10522	21-603059	372.50–377.50	2/8/2008	n/a	08-605	08-604
MD21-08-12252	21-603059	0.00–0.00	5/9/2008	Field Blank	—	08-1147
MD21-08-12236	21-603059	77.50–82.50	5/9/2008	n/a	08-1114	08-1113
MD21-08-12237	21-603059	187.50–192.50	5/9/2008	n/a	08-1114	08-1113
MD21-08-12238	21-603059	229.50–234.50	5/9/2008	n/a	08-1114	08-1113
MD21-08-12239	21-603059	292.50–297.50	5/9/2008	n/a	08-1114	08-1113
MD21-08-12240	21-603059	372.50–377.50	5/9/2008	n/a	08-1114	08-1113
MD21-08-12253	21-603059	372.50–377.50	5/9/2008	Field Duplicate	08-1114	08-1113
MD21-08-14824	21-603059	0.00–0.00	9/25/2008	Field Blank	—	08-2020
MD21-08-14818	21-603059	77.50–82.50	9/25/2008	n/a	08-2021	08-2020
MD21-08-14819	21-603059	187.50–192.50	9/25/2008	n/a	08-2021	08-2020
MD21-08-14820	21-603059	229.50–234.50	9/25/2008	n/a	08-2021	08-2020
MD21-08-14821	21-603059	292.50–297.50	9/25/2008	n/a	08-2021	08-2020
MD21-08-14822	21-603059	372.50–377.50	9/25/2008	n/a	08-2021	08-2020
MD21-08-14825	21-603059	372.50–377.50	9/25/2008	Field Duplicate	08-2021	08-2020

Note: Numbers in analyte columns are request numbers.

[a] n/a = Not applicable.

[b] — = Sample not collected.

Table 4.1-1
Summary of 2007–2008 Pore Gas Field-Screening Results

Event ID	Collection Date	FY2008 Sampling Round	Location ID	Sample Port Number	Top Depth (ft bgs)	Bottom Depth (ft bgs)	%CO_2	%O_2
236	10/19/2007	1	21-25264	1	67.5	72.5	0.3	20.2
340	2/14/2008	2	21-25264	1	67.5	72.5	1.2	20.2
407	5/7/2008	3	21-25264	1	67.5	72.5	1	18.9
487	9/23/2008	4	21-25264	1	67.5	72.5	0.9	19.3
236	10/19/2007	1	21-25264	2	150.5	155.5	0.7	20.1
340	2/14/2008	2	21-25264	2	150.5	155.5	1.2	20.2
407	5/7/2008	3	21-25264	2	150.5	155.5	0.9	19
487	9/23/2008	4	21-25264	2	150.5	155.5	0.9	18.8
236	10/19/2007	1	21-25264	3	222.5	227.5	0.1	20.9
340	2/14/2008	2	21-25264	3	222.5	227.5	1.1	20.3
407	5/7/2008	3	21-25264	3	222.5	227.5	0.9	19.1
487	9/23/2008	4	21-25264	3	222.5	227.5	0.8	18.3
236	10/19/2007	1	21-25264	4	323	328	0	21.5
340	2/14/2008	2	21-25264	4	323	328	0.7	20.4
407	5/7/2008	3	21-25264	4	323	328	0.6	19.2
487	9/23/2008	4	21-25264	4	323	328	0.5	18.1
340	10/19/2007	1	21-25264	5	349.5	354.5	0.1	21.8
340	2/14/2008	2	21-25264	5	349.5	354.5	0.6	20.6
407	5/7/2008	3	21-25264	5	349.5	354.5	0.5	19.2
487	9/23/2008	4	21-25264	5	349.5	354.5	0.4	18
236	10/30/2007	1	21-603058	1	67.5	72.5	—*	—
340	2/13/2008	2	21-603058	1	67.5	72.5	1.7	19.9
407	5/8/2008	3	21-603058	1	67.5	72.5	1.4	18.7
487	9/24/2008	4	21-603058	1	67.5	72.5	1.1	19.4
236	10/30/2007	1	21-603058	2	160.5	165.5	—	—
340	2/13/2008	2	21-603058	2	160.5	165.5	0.7	20.2
236	10/30/2007	1	21-603058	3	217	222	—	—
340	2/13/2008	2	21-603058	3	217	222	1.3	20.4
407	5/8/2008	3	21-603058	3	217	222	0.2	19
487	9/24/2008	4	21-603058	3	217	222	0.7	18.1
236	10/30/2007	1	21-603058	4	242.5	247.5	—	—
340	2/13/2008	2	21-603058	4	242.5	247.5	1.3	20.5
407	5/8/2008	3	21-603058	4	242.5	247.5	0.9	18.5
487	9/24/2008	4	21-603058	4	242.5	247.5	0.3	17.9
236	10/30/2007	1	21-603058	5	339.5	344.5	—	—

Table 4.1-1 (continued)

Event ID	Collection Date	FY2008 Sampling Round	Location ID	Sample Port Number	Top Depth (ft bgs)	Bottom Depth (ft bgs)	$\%CO_2$	$\%O_2$
340	2/13/2008	2	21-603058	5	339.5	344.5	0.9	20.6
407	5/8/2008	3	21-603058	5	339.5	344.5	0.7	18.7
487	9/24/2008	4	21-603058	5	339.5	344.5	0.3	17.8
236	11/4/2007	1	21-603059	1	77.5	82.5	—	—
340	2/6/2008	2	21-603059	1	77.5	82.5	0.6	19.8
407	5/9/2008	3	21-603059	1	77.5	82.5	1	18.7
487	9/25/2008	4	21-603059	1	77.5	82.5	0.9	19.3
236	11/3/2007	1	21-603059	3	187.5	192.5	—	—
340	2/6/2008	2	21-603059	3	187.5	192.5	0.7	19.9
407	5/9/2008	3	21-603059	3	187.5	192.5	1	18.8
487	9/25/2008	4	21-603059	3	187.5	192.5	0.8	19.8
236	11/3/2007	1	21-603059	4	229.5	234.5	—	—
340	2/6/2008	2	21-603059	4	229.5	234.5	0.5	20.3
407	5/9/2008	3	21-603059	4	229.5	234.5	1	18.7
487	9/25/2008	4	21-603059	4	229.5	234.5	0.8	19.1
236	11/3/2007	1	21-603059	5	292.5	297.5	—	—
340	2/6/2008	2	21-603059	5	292.5	297.5	0.9	19.9
407	5/9/2008	3	21-603059	5	292.5	297.5	0.9	18.8
487	9/25/2008	4	21-603059	5	292.5	297.5	1	18.8
236	11/3/2007	1	21-603059	6	372.5	377.5	—	—
340	2/8/2008	2	21-603059	6	372.5	377.5	0.5	19.9
407	5/9/2008	3	21-603059	6	372.5	377.5	—	—
487	9/25/2008	4	21-603059	6	372.5	377.5	0.2	19.7

* — = Field-screening results not documented.

Table 5.1-1
Summary of VOCs Detected in 2007–2008 Pore-Gas Samples at MDA T

Sample ID	Location ID	Depth (ft)	Collection Date	Acetone	Benzene	Bromodichloromethane	Bromoform	Butanol[1-]	Butanone[2-]	Carbon Disulfide	Carbon Tetrachloride	Chlorodibromomethane	Chloroform	Cyclohexane	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dichloroethane[1,2-]	Dichloroethene[1,1-]	Dichloroethene[cis-1,2-]	Ethanol	Ethylbenzene	Ethyltoluene[4-]	Hexane	Hexanone[2-]	Methyl-2-pentanone[4-]	Methylene Chloride	n-Heptane	Propanol[2-]	Propylene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethane[1,1,1-]	Trichloroethane[1,1,2-]	Trichloroethene	Trimethylbenzene[1,3,5-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
MD21-07-6813	21-25264	67.50–72.50	10/19/2007	17	—*	—	12	—	—	3	160	—	350	3.2	—	10	3.8	—	—	—	—	—	—	—	—	250	—	—	—	1500	—	5.1	—	18	—	660	—	—	—
MD21-08-10511	21-25264	67.50–72.50	2/14/2008	—	—	—	—	—	—	—	160	—	410	—	—	13	—	—	—	—	—	—	—	—	—	36	—	—	—	2500	—	—	—	29	—	980	—	—	—
MD21-08-12247	21-25264	67.50–72.50	5/7/2008	—	—	—	—	—	—	—	140	—	410	—	—	13	—	—	—	—	—	—	—	—	—	24	—	—	—	2300	5.2	—	—	26	—	880	—	—	—
MD21-08-14828	21-25264	67.50–72.50	9/23/2008	—	—	—	—	—	—	—	150	—	400	—	—	13	—	—	—	—	—	—	—	—	—	19	—	—	—	2700	—	—	—	27	—	1000	—	—	—
MD21-07-6814	21-25264	150.50–155.50	10/19/2007	68	2.9	—	—	—	12	—	160	—	310	4.5	—	8.6	4	—	—	—	—	—	—	—	—	300	—	—	—	360	—	6.8	—	19	—	420	—	—	—
MD21-08-10512	21-25264	150.50–155.50	2/14/2008	12	—	—	—	—	—	5.7	170	—	360	5.4	—	10	—	—	—	—	—	—	—	—	—	220	—	—	—	440	—	—	7	24	—	520	—	—	—
MD21-08-12248	21-25264	150.50–155.50	5/7/2008	73	—	—	—	—	15	—	150	—	360	5.4	—	9.7	—	—	—	10	—	—	—	—	—	190	—	—	—	400	—	—	—	23	—	480	—	—	—
MD21-08-14829	21-25264	150.50–155.50	9/23/2008	11	—	—	—	—	—	—	170	—	380	—	—	9.8	3.8	—	—	—	—	—	—	—	—	200	—	—	6.9	420	—	—	7.7	26	—	530	—	—	—
MD21-07-6815	21-25264	222.50–227.50	10/19/2007	18	—	—	—	3.4	3.8	180	—	300	3.6	—	6.6	6.3	—	—	—	—	—	—	—	—	—	420	—	—	—	160	—	—	6.7(J)	16	—	380	—	—	—
MD21-08-10513	21-25264	222.50–227.50	2/14/2008	—	—	6	—	—	—	6	310	—	450	5.6	—	9.9	9.3	5	—	—	—	—	—	—	—	640	—	—	—	190	—	—	9	21	4.6(J)	620	—	—	—
MD21-08-12249	21-25264	222.50–227.50	5/7/2008	—	—	—	—	—	—	3.2	290	—	470	6.2	—	8.6	9.3	6.6	—	—	—	—	—	—	—	590	—	—	—	190	—	3.4	11	21	—	580	—	—	—
MD21-08-14830	21-25264	222.50–227.50	9/23/2008	12	—	—	—	—	—	—	320	—	480	—	—	9.8	11	5.2	—	—	—	—	—	—	—	660	—	—	13	200	—	—	10	24	—	640	—	—	—
MD21-07-6816	21-25264	323.00–328.00	10/19/2007	19	—	—	—	—	—	—	190	—	270	—	—	4.9	5.9	4	—	—	—	—	—	—	—	590	—	—	—	79	—	5.8	—	5.4	—	320	—	—	5.7
MD21-08-10514	21-25264	323.00–328.00	2/14/2008	—	—	—	—	—	—	—	370	—	540	—	—	7	12	8.3	—	—	—	—	—	—	—	1200	—	—	—	81	—	—	10	9.3	—	620	—	—	—
MD21-08-12250	21-25264	323.00–328.00	5/7/2008	110	—	—	—	—	11	—	340	—	570	—	6	—	13	7.6	—	—	—	—	—	—	—	1200	—	—	—	77	—	—	11	8.6	—	600	—	—	—
MD21-08-14831	21-25264	323.00–328.00	9/23/2008	—	—	—	—	—	—	—	430	—	680	—	—	8.1	20	8	—	—	—	—	—	—	—	1500	—	—	19	70	—	—	11	11	—	770	—	—	—
MD21-07-6817	21-25264	349.50–354.50	10/19/2007	44	—	—	—	—	5.6	—	230	—	550	—	—	—	15	6.8	—	—	—	—	—	—	—	1300	—	—	—	26	—	9.4	—	—	—	460	—	—	8.4
MD21-08-10515	21-25264	349.50–354.50	2/14/2008	—	—	—	—	—	—	—	460	—	1000	—	—	—	30	15	—	—	—	—	—	—	—	2400	—	—	—	34	—	—	—	—	—	890	—	—	—
MD21-08-12251	21-25264	349.50–354.50	5/7/2008	—	—	—	—	—	—	—	360	—	940	—	—	—	24	12	—	—	—	—	—	—	—	1900	—	—	—	32	—	16	—	—	—	720	—	—	—
MD21-08-14832	21-25264	349.50–354.50	9/23/2008	—	—	—	—	—	—	—	500	—	1100	—	—	—	36	13	—	—	—	—	—	—	—	2500	—	—	21	31	—	—	—	—	—	920	—	—	—
MD21-07-6807	21-603058	67.50–72.50	10/30/2007	120	3.9	—	10	—	40	3.8	63	—	450	—	—	5.1	—	—	—	—	—	—	4.3	29	8.7	7.2	3.9	—	85	650	—	5.7	—	23	—	270	—	—	4.9
MD21-08-10504	21-603058	67.50–72.50	2/13/2008	—	—	—	—	—	—	2.7	78	—	540	—	—	5.5	—	—	—	—	—	—	—	—	—	5.1	—	—	—	750	—	—	7.2	26	—	340	—	—	—
MD21-08-12242	21-603058	67.50–72.50	5/9/2008	—	—	—	—	52	—	6.3	61	—	490	—	—	—	—	—	—	12	—	—	—	—	—	6.8	—	—	—	640	2.7	—	—	21	—	300	—	—	—
MD21-08-14813	21-603058	67.50–72.50	9/24/2008	30	—	—	—	—	5	—	68	—	510	—	—	5	—	—	—	—	—	—	—	—	—	5.3	—	—	—	680	—	—	—	22	—	320	—	—	—
MD21-07-6808	21-603058	160.50–165.50	10/30/2007	35	8.4	—	—	42	17	12	100	9.7	330	—	—	6.9	—	—	—	—	7.5	—	36	—	5.5	52	24	—	690	210	4.9	14	8.5	17	—	280	—	9.9	21
MD21-08-10505	21-603058	160.50–165.50	2/13/2008	21	—	—	—	—	13	9.7	240	—	680	—	—	7.8	—	4.1	—	—	—	—	—	—	—	120	—	—	49	410	—	—	16	38	—	640	—	—	—
MD21-07-6809	21-603058	217.00–222.00	10/30/2007	200	4.9	6.4	—	—	69	5.7	400	—	680	—	6	6.8	5	9.7	—	—	—	—	8.3	37	8.9	420	6.4	—	150	270	—	5.8	26	36	13	790	—	—	4.8
MD21-08-10506	21-603058	217.00–222.00	2/13/2008	—	—	—	—	—	—	4.1	380	—	690	—	—	7.2	6	9.5	—	—	—	—	—	—	—	430	—	—	—	220	—	14	24	33	—	830	—	—	—
MD21-08-12244	21-603058	217.00–222.00	5/8/2008	—	—	—	—	—	—	—	370	—	740	—	5.5	6.5	5.4	9.9	—	15	—	—	—	—	—	380	—	—	—	240	—	—	27	35	13	780	—	—	—
MD21-08-14814	21-603058	217.00–222.00	9/24/2008	—	—	—	—	—	—	—	380	—	720	—	—	7.3	6.3	9.1	—	—	—	—	—	—	—	440	—	—	11	230	—	—	23	35	14	820	—	—	—
MD21-07-6810	21-603058	242.50–247.50	10/30/2007	170	6.4	—	16	—	20	6.2	400	7.3	720	—	10	5.5	9.8	11	4.1	—	—	—	9.4	—	4.5	860	6.3	—	160	120	—	9.6	19	22	19	810	—	—	5
MD21-08-10507	21-603058	242.50–247.50	2/13/2008	—	—	—	—	—	—	7.1	760	—	1200	—	12	9.4	—	19	—	—	—	—	—	—	—	1500	—	—	—	180	—	—	43	40	45	1500	—	—	—
MD21-08-12245	21-603058	242.50–247.50	5/8/2008	—	4.1	—	—	—	—	5.6	610	—	1100	—	14	8	17	17	6	55	—	—	—	—	—	1200	—	—	—	170	3.8	—	37	32	42	1200	—	—	—
MD21-08-14815	21-603058	242.50–247.50	9/24/2008	14	—	—	—	70	7	9.2	440	—	770	—	9.1(J)	6.2	15	11	5.7	7.3	—	—	—	—	—	1000	—	—	10	120	—	—	24	23	33	990	—	—	—

Table 5.1-1 (continued)

Sample ID	Location ID	Depth (ft)	Collection Date	Acetone	Benzene	Bromodichloromethane	Bromoform	Butanol[1-]	Butanone[2-]	Carbon Disulfide	Carbon Tetrachloride	Chlorodibromomethane	Chloroform	Cyclohexane	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dichloroethane[1,2-]	Dichloroethene[1,1-]	Dichloroethene[cis-1,2-]	Ethanol	Ethylbenzene	Ethyltoluene[4-]	Hexane	Hexanone[2-]	Methyl-2-pentanone[4-]	Methylene Chloride	n-Heptane	Propanol[2-]	Propylene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethane[1,1,1-]	Trichloroethane[1,1,2-]	Trichloroethene	Trimethylbenzene[1,3,5-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
MD21-07-6811	21-603058	339.50–344.50	10/30/2007	160	—	—	—	—	21	—	6.4	—	110	—	—	—	3.9	—	—	—	—	—	—	—	—	280	—	—	12	—	—	—	—	—	6.3	47	—	—	—
MD21-08-10508	21-603058	339.50–344.50	2/13/2008	—	—	—	—	—	—	—	530	—	1000	—	14	—	24	15	—	—	—	—	—	—	—	1900	—	—	—	76	—	—	26	12	26	930	—	—	—
MD21-08-12246	21-603058	339.50–344.50	5/8/2008	—	—	—	—	—	—	—	510	—	1100	—	18	—	24	15	—	42	—	—	—	—	—	1800	—	—	—	61	—	—	28	11	31	1000	—	—	—
MD21-08-14816	21-603058	339.50–344.50	9/24/2008	24	—	—	—	—	—	—	520	—	1000	—	13(J)	—	24	17	—	—	—	—	—	—	—	2000	—	—	16	52	—	—	23	11	25	990	—	—	—
MD21-07-6804	21-603059	77.50–82.50	11/4/2007	49	4.8	—	10	—	4.3	12	62	—	840	—	—	6	—	—	—	—	—	—	8.5	—	—	6.4	6.2	—	140	1300	—	6.6	7.2	20	—	710	—	—	5.6
MD21-08-10518	21-603059	77.50–82.50	2/6/2008	—	—	—	—	—	—	2.8	58	—	800	—	—	5.1	—	—	—	—	—	—	—	—	—	4.2	—	—	—	1400	—	—	6.9	19	—	700	—	—	—
MD21-08-12236	21-603059	77.50–82.50	5/9/2008	11	—	—	—	—	2.8	2.9	57	—	900	—	—	—	—	—	—	—	—	—	—	—	—	3.1	—	—	—	1400	—	—	6.6	19	—	670	—	—	—
MD21-08-14818	21-603059	77.50–82.50	9/25/2008	—	—	—	—	—	—	—	67	—	1000	—	—	6.2	—	—	—	—	—	—	—	—	—	4.3	—	—	—	1700	—	—	—	21	—	770	—	—	—
MD21-07-6803	21-603059	187.50–192.50	11/3/2007	290	5.5	6.4	—	—	55	5.1	150	—	630	3.4	—	7.4	—	7.4	—	—	—	—	6.8	—	3.6(J)	43	4.7	11	160	340	—	6.6	19	29	—	480	—	—	—
MD21-08-10519	21-603059	187.50–192.50	2/8/2008	—	—	7	—	—	—	3.5	140	—	570	—	—	7.1	—	6.2	—	—	—	—	—	—	—	24	—	—	—	320	—	—	15	28	—	460	—	—	—
MD21-08-12237	21-603059	187.50–192.50	5/9/2008	—	—	6.7	—	—	—	—	140	—	610	—	—	—	—	7.1	—	—	—	—	—	—	—	22	—	—	—	320	—	—	18	24	—	440	—	—	—
MD21-08-14819	21-603059	187.50–192.50	9/25/2008	—	—	7	—	—	8	—	130	—	550	—	—	6.5	—	5.5	—	—	—	—	—	—	—	24	—	—	8.4	300	—	—	15	26	—	440	—	—	—
MD21-07-6801	21-603059	229.50–234.50	11/3/2007	560	8.2	7.8	—	21	170	15	290	—	630	3.4	—	7.4	—	12	3.6	—	11	24	7.7	86	21	68	12	9	210	250	3.7	25	30	31	—	580	11	16	35
MD21-08-10520	21-603059	229.50–234.50	2/6/2008	11	2.9	—	—	—	—	2.7	140	—	330	—	—	4.8	—	5.7	—	—	—	—	—	—	—	23	—	—	—	120	—	13	12	14	—	300	—	—	—
MD21-08-12238	21-603059	229.50–234.50	5/9/2008	31	—	6.8	—	—	4	4	330	—	670	—	—	8.4	—	14	—	—	—	—	—	—	—	50	—	—	—	240	—	—	35	29	—	620	—	—	—
MD21-08-14820	21-603059	229.50–234.50	9/25/2008	—	—	—	—	—	—	—	280	—	580	—	—	7.1	—	11	—	—	—	—	—	—	—	49	—	—	13	230	—	—	29	28	—	600	—	—	—
MD21-07-6802	21-603059	292.50–297.50	11/3/2007	150	3.2	9.2	—	—	8.4	5.1	620	—	680	—	—	9.2	5.2	27	5	—	—	—	—	—	—	380	—	—	—	200	2.7	6	55	26	27	1100	—	—	—
MD21-08-10521	21-603059	292.50–297.50	2/6/2008	—	—	9.6	—	—	—	3.7	670	—	660	—	—	9.8	5.4	26	3.9	—	—	—	—	—	—	330	—	—	—	180	—	4.6	51	27	24	1200	—	—	—
MD21-08-12239	21-603059	292.50–297.50	5/9/2008	—	2.8	8.4	—	—	—	—	620	—	650	—	—	9	5.3	24	13	21	—	—	—	—	—	290	—	—	—	170	—	3.8	54	25	22	1000	—	—	—
MD21-08-14821	21-603059	292.50–297.50	9/25/2008	—	—	9.7	—	—	—	—	620	—	620	—	—	8.6	5.3	23	3.8	—	—	—	—	—	—	300	—	—	20	160	—	3.9	49	25	20	1100	—	—	—
MD21-07-6800	21-603059	372.50–377.50	11/3/2007	130	3.3	7.3	—	—	3.7	2.8	350	—	540	—	—	—	11	33	—	—	—	—	—	—	—	720	—	—	40	78	—	5.1	16	8.2	81	800	—	—	—
MD21-08-10522	21-603059	372.50–377.50	2/8/2008	9.4	3.4	12	—	—	—	3.4	580	—	750	—	7	—	16	52	5.9	—	—	—	—	—	—	920	—	—	—	110	—	7.9	24	14	120	1300	—	—	—
MD21-08-12240	21-603059	372.50–377.50	5/9/2008	58	3.2	10	—	—	6.6	—	540	—	780	—	7.6	—	14	51	4.4	65	—	—	—	—	—	880	—	—	—	100	—	6.2	28	12	110	1200	—	—	—
MD21-08-14822	21-603059	372.50–377.50	9/25/2008	—	—	8.4	—	—	—	18	380	—	520	—	—	—	12	32	—	—	—	—	—	—	—	680	—	—	11	63	—	5.4	17	9	81	860	—	—	—

Note: Results are in $\mu g/m^3$.

* — = Not detected.

Table 5.2-1
Summary of Tritium Results in 2007–2008 Pore-Gas Samples at MDA T

Sample ID	Location ID	Depth (ft)	Collection Date	Tritium (pCi/L)
MD21-08-10511	21-25264	67.50–72.50	2/14/2008	1541.74
MD21-08-12247	21-25264	67.50–72.50	5/7/2008	4353.51
MD21-08-14828	21-25264	67.50–72.50	9/23/2008	4218.93
MD21-07-6814	21-25264	150.50–155.50	10/19/2007	9385.24
MD21-08-10512	21-25264	150.50–155.50	2/14/2008	60699.9
MD21-08-12248	21-25264	150.50–155.50	5/7/2008	128043
MD21-08-14829	21-25264	150.50–155.50	9/23/2008	106724
MD21-08-10513	21-25264	222.50–227.50	2/14/2008	35183.9
MD21-08-12249	21-25264	222.50–227.50	5/7/2008	45383.1
MD21-08-14830	21-25264	222.50–227.50	9/23/2008	74687.2
MD21-08-10514	21-25264	323.00–328.00	2/14/2008	1397.55
MD21-08-12250	21-25264	323.00–328.00	5/7/2008	2688.04
MD21-08-14831	21-25264	323.00–328.00	9/23/2008	1843.05
MD21-08-10515	21-25264	349.50–354.50	2/14/2008	805.354
MD21-08-12251	21-25264	349.50–354.50	5/7/2008	1406.68
MD21-08-14832	21-25264	349.50–354.50	9/23/2008	1022.31
MD21-08-10504	21-603058	67.50–72.50	2/13/2008	563.806
MD21-07-6808	21-603058	160.50–165.50	10/30/2007	816.721
MD21-08-10505	21-603058	160.50–165.50	2/13/2008	779.214
MD21-08-10506	21-603058	217.00–222.00	2/13/2008	16974.6
MD21-08-12244	21-603058	217.00–222.00	5/8/2008	418.555
MD21-08-14814	21-603058	217.00–222.00	9/24/2008	504.074
MD21-08-12245	21-603058	242.50–247.50	5/8/2008	361.873
MD21-08-14815	21-603058	242.50–247.50	9/24/2008	651.794
MD21-08-10508	21-603058	339.50–344.50	2/13/2008	10722.1
MD21-08-10518	21-603059	77.50–82.50	2/6/2008	565.45
MD21-08-14818	21-603059	77.50–82.50	9/25/2008	300.31
MD21-08-12237	21-603059	187.50–192.50	5/9/2008	329.351
MD21-08-14819	21-603059	187.50–192.50	9/25/2008	349.081
MD21-07-6801	21-603059	229.50–234.50	11/3/2007	1585.58
MD21-08-10520	21-603059	229.50–234.50	2/6/2008	719.504
MD21-08-12238	21-603059	229.50–234.50	5/9/2008	768.824
MD21-08-14820	21-603059	229.50–234.50	9/25/2008	1113.67
MD21-08-10521	21-603059	292.50–297.50	2/6/2008	438.3
MD21-08-12239	21-603059	292.50–297.50	5/9/2008	227.726
MD21-08-14821	21-603059	292.50–297.50	9/25/2008	1979.88

Table 5.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Collection Date	Tritium (pCi/L)
MD21-08-10522	21-603059	372.50–377.50	2/8/2008	1496.79
MD21-08-12240	21-603059	372.50–377.50	5/9/2008	4277.97
MD21-08-14822	21-603059	372.50–377.50	9/25/2008	239.181

Appendix A

Field Methods

A-1.0 INTRODUCTION

This appendix summarizes the field methods implemented during the 2007–2008 pore-gas monitoring period at Material Disposal Area (MDA) T, Consolidated Unit 21-016(a)-99, in Technical Area 21 at Los Alamos National Laboratory (the Laboratory). All activities were conducted in accordance with the applicable standard operating procedures (SOPs), quality procedures (QPs), Laboratory implementation requirements, Laboratory procedural requirements and Laboratory implementation guidance. The Laboratory procedures may be found at the following URL: http://www.lanl.gov/environment/all/qa/adep.shtml.

The following sections provide a description of field methods used during the 2007–2008 pore-gas monitoring period at MDA T. Table A-1.0-1 provides a summary of the specific field methods followed, and Table A-1.0-2 lists the general procedures followed.

A-2.0 FIELD METHODS

All work was conducted in accordance with a site-specific health and safety plan and an integrated work document. Field activities conducted according to SOPs are discussed below.

A-2.1 Pore-Gas Field Screening and Sample Collection

All samples were collected in accordance with the current version of the Environment and Remediation Support Services SOP-5074, Sampling Sub-Atmospheric Air.

Before each sampling event, each sample port was purged and monitored with a Landtec GEM2000 instrument (or equivalent) until the percent carbon dioxide and oxygen levels stabilized at values representative of subsurface pore-gas conditions. In addition, the vapor sample tubing was purged of stagnant air as the air was drawn from the sampling interval through the line. To ensure that the sample collected was representative of the subsurface air at depth, every sampling activity included a purge cycle. Once purging and field screening were completed, vapor samples were collected using SUMMA canisters (for volatile organic compound [VOC] analysis) and silica gel columns (for tritium analysis), and the sample information was recorded on the appropriate sample collection log (SCL). Field-screening results were also recorded on the appropriate SCL and/or in the field logbook. Field chain-of-custody (COC) forms and SCLs are provided in Appendix B.

In addition to the characterization samples, two types of quality assurance/quality control (QA/QC) samples were collected and analyzed for VOCs using SUMMA canisters: a field duplicate (FD) sample and an equipment blank (FB) of ultrapure nitrogen. Silica gel column FD samples were also collected for tritium analysis. FD and FB samples were collected at a frequency greater than or equal to 10% per sampling event in accordance with SOP-01.05, Field Quality Control Samples. Table 4.0-2 summarizes all (2007–2008) QA/QC samples collected from MDA T monitoring wells 21-603058, 21-603059, and 21-25264, and their respective analyses.

All samples were submitted to the Sample Management Office (SMO) for processing and transport to off-site contract analytical laboratories.

Table A-1.0-1
Summary of Field Methods

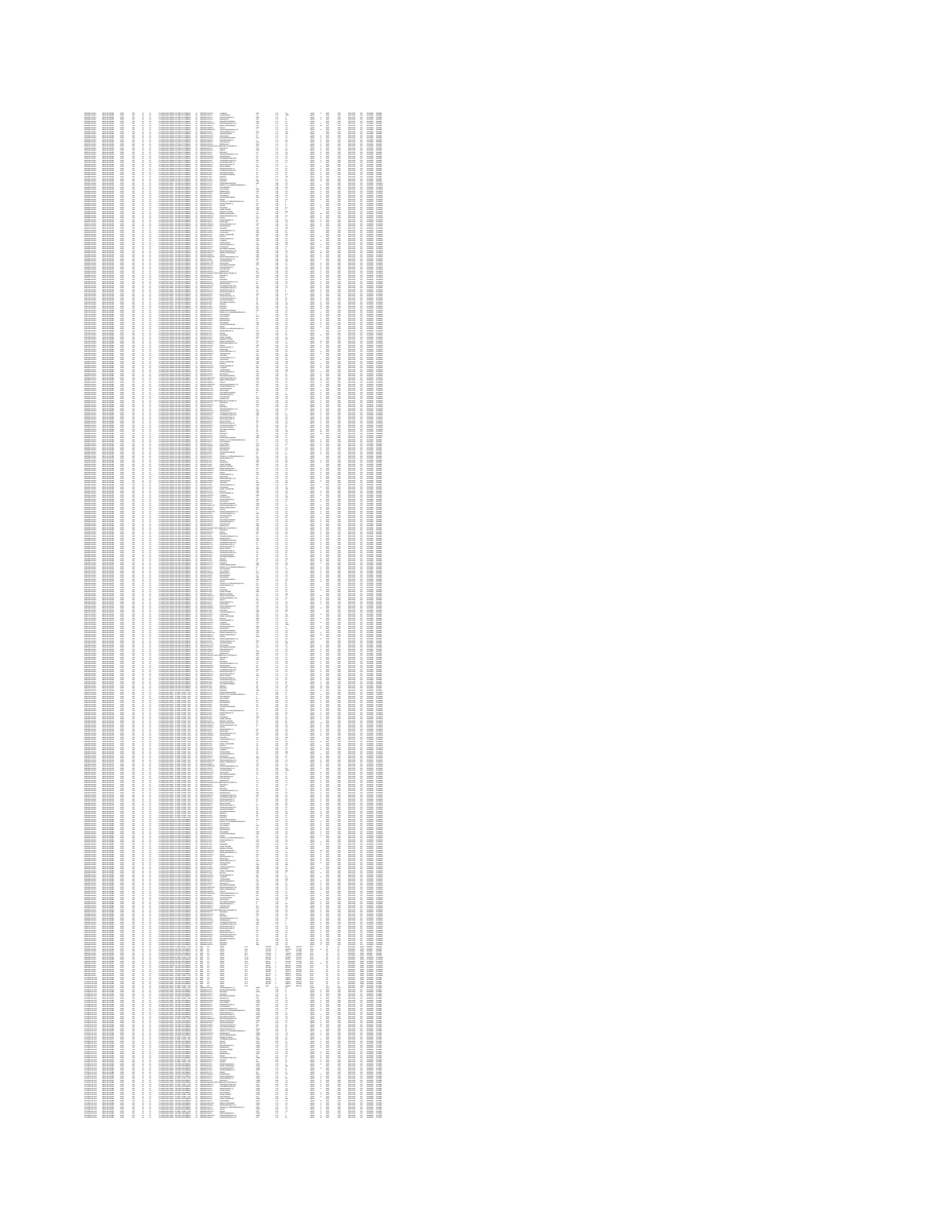
Method	Summary
General Instructions for Field Investigations	This general procedure provides an overview of instructions regarding activities to be performed before, during, and after field investigations. It is assumed that field investigations involve standard sampling equipment, personal protective equipment, waste management, and site-control equipment/materials. The procedure covers premobilization activities, mobilization to the site, documentation and sample collection activities, sample media evaluation, surveillance, and completion of lessons learned.
Sample Containers and Preservation	Specific requirements/processes for sample containers, preservation techniques, and holding times are based on the U.S. Environmental Protection Agency guidance for environmental sampling, preservation, and QA. Specific requirements are met for each sample and are printed in the sample collection logs provided by the SMO (size and type of container, preservatives, etc.). All samples are preserved by placing them in insulated containers with ice to maintain a temperature of 4°C.
Handling, Packaging, and Transporting Field Samples	Field team members seal and label samples before packing to ensure that the sample containers and the containers used for transport are free of external contamination. All environmental samples are collected, preserved, packaged, and transported to the SMO under COC. The SMO arranges for shipping of the samples to analytical laboratories. Any levels of radioactivity (i.e., action-level or limited-quantity ranges) are documented in sample collection logs submitted to the SMO.
Sample Control and Field Documentation	The collection, screening, and transport of samples are documented in standard forms generated by the SMO. These forms include sample collection logs, COC forms, sample container labels, and custody seals. Collection logs are completed at the time of sample collection and are signed by the sampler and a reviewer who verifies the logs for completeness and accuracy. Corresponding labels are initialed and applied to each sample container, and custody seals are placed around container lids or openings. COC forms are completed and signed to verify that the samples are not left unattended.
Field QC Samples	Field QC samples are collected as follows: Field duplicates are collected at a frequency of 10% at the same time as a regular sample and submitted for the same analyses. Equipment rinsate blanks, collected at a frequency of 10%, are taken by rinsing sampling equipment with deionized water, which is collected in a sample container and submitted for laboratory analyses. Trip blanks, required for all field events that include collecting samples for VOC analyses, are collected. Trip blanks are kept with the other sample containers during the sampling process and are submitted for laboratory analyses.
Sampling of Subatmospheric Air	Vapor sampling was performed on four monitoring wells in accordance with SOP-5074 and analyzed for VOCs and tritium. This SOP describes the process of sampling subatmospheric air from vapor ports in monitoring wells and boreholes. Procedure covers presampling activities, sampling to detect and quantify gaseous organic concentration in air, SUMMA sampling (a passive collection and containment system of laboratory-quality air samples), adsorbent column sampling, sampling through the packer system (a sampling system that uses inflatable bladders to seal off a desired interval in an open borehole, or at the end of drill casing, to obtain a sample from a discrete section), and postsampling activities.

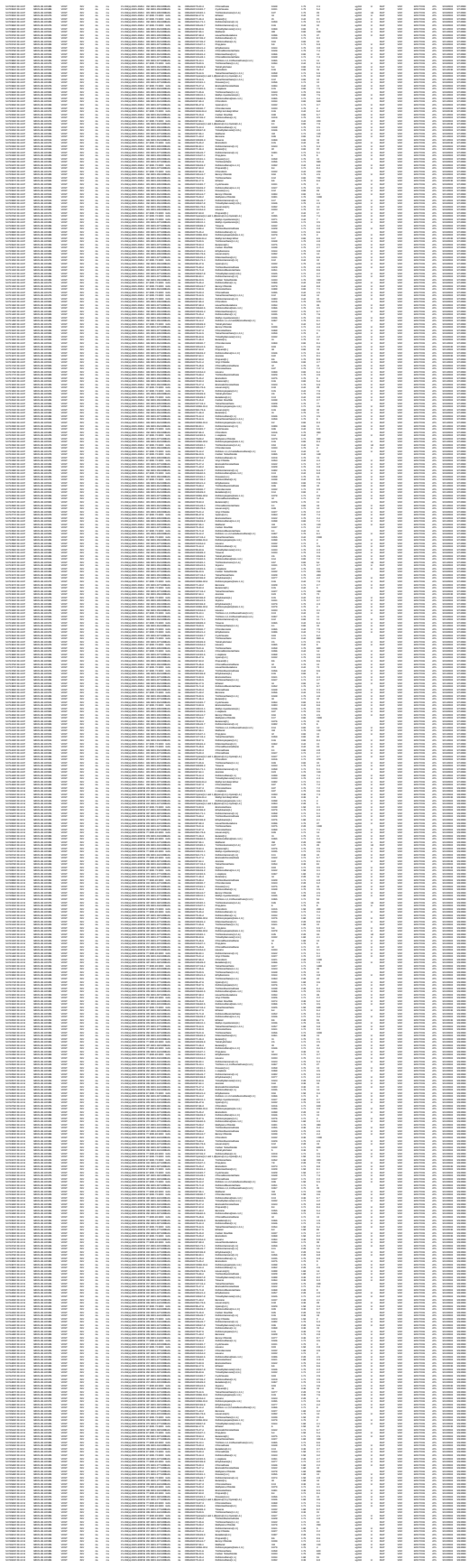
Table A-1.0-2
List of Applicable General Procedures for MDA T Periodic Pore-Gas Monitoring Activities

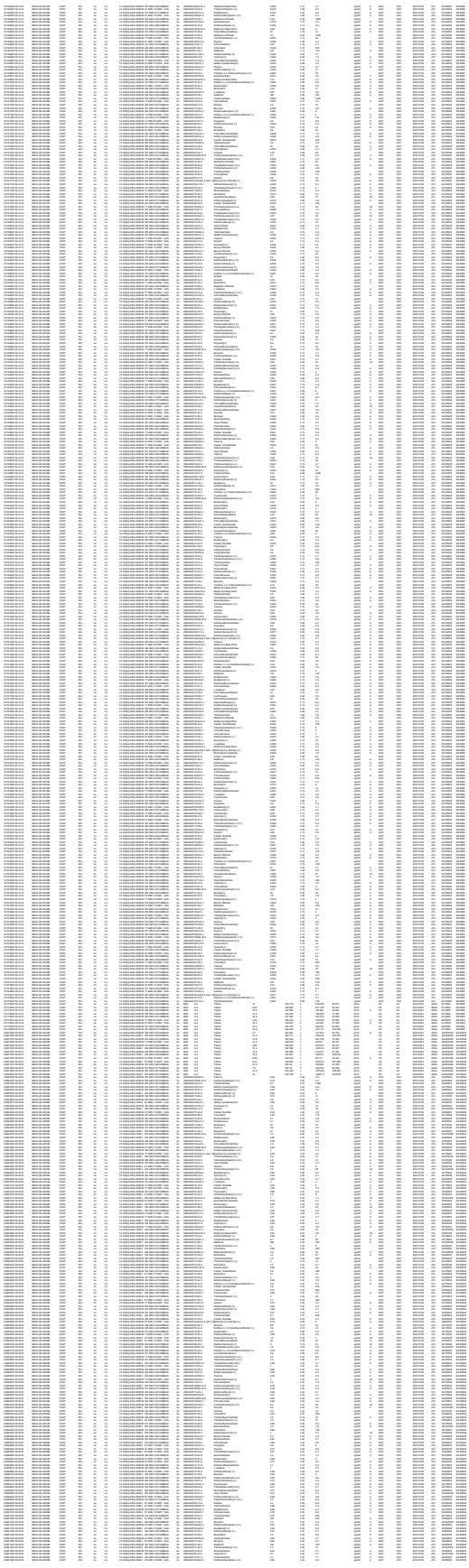
Document Number	Los Alamos National Laboratory Procedure Title
EP-ERSS-SOP-5055 R0	General Instructions for Field Investigations
P101-6 R0	Personal Protective Equipment
QP-5.7, R2 ICN3	Notebook Documentation for Environmental Restoration Technical Activities

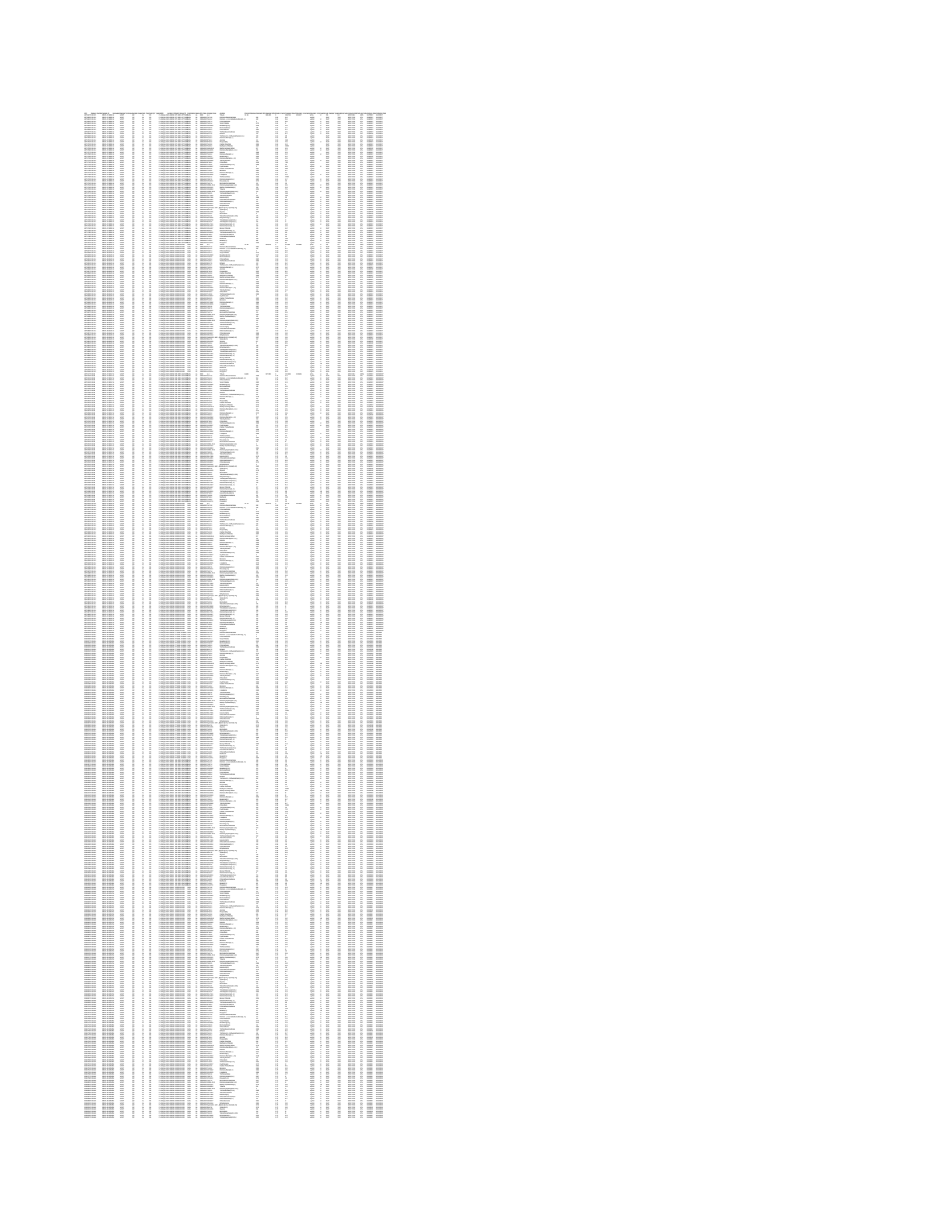
Appendix B

Analytical Suites and Results and Analytical Reports
(on CD included with this document)









SAMPLE COLLECTION LOG TRAVELER

EVENT # 407

DATE	REVIEWER	COMMENTS
5/21/08	S. MARCZAK	completed

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12236

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	YOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Part #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1\%$

$O_2 = 18.7\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)**

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12237

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1113	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:	Port #3	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.0\%$

$O_2 = 18.8\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12238

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1117	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.0\%$

$O_2 = 18.7\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dwyhoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12239

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	REV	↓
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 18.8\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12240

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	0/C
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dwykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12241

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Not collected PNOY
Ken Rich
5/13/08

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12242

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1115	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 1.4 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12243

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	ok
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	160.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	165.5 ft	SCREEN/PORT DESC:	Port #2	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS: Not collected PNOY Kenrad 5/13/08

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Duryea-Goff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1225	(Printed Name)	1225
(Signature)	5/1/08	(Signature)	5/9/08
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12244

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217.0 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222.0 Ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = ~~19.~~ 0.2 %

O_2 = ~~0.2~~ KR 5/8/08 19.0 %

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) D Wycoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12245

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$Co_2 = 0.9\%$

$O_2 = 18.5\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dal Zhu

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1225 5/9/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12246

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2: 0.7 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12247

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port 1	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1\%$

$O_2 = 18.9\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dave Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 1645
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12248

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1532	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:	Port #2	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.0\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1645 5/7/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 1745
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12249

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1535	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.1\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 4:45
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12250

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1537	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328.0 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.6 %

O_2 = 19.2 %

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Reid (Signature)	**Date/Time** 5/7/08 1645	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 4:45
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12251

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1540	SUB-MEDIA:	OTHER	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.5\ \%$

$O_2 = 19.2\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 4145
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12252

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA	NA	

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA KR 5/9/08 BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MO2L-08-12240 Field blank, pure nitrogen run through sample train. TO15 only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** David Wycoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/13/08 1545	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/13/08 1545
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12253

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12240 Field duplicate of H3 & TO15.

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/1/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12254

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

QC Not needed
not collected
Ken R
5/13/08

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12255

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		NA
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12246. Field blank, pure nitrogen run through sample train. TO15 only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** David Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/13/08 1545	(Printed Name)	5/13/08 1545
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12256

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		(NA)

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12246 Field duplicate of TO15 sample only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.7 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1225 5/9/08	(Printed Name)	1225 5/9/08
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12257

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/7/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	N	

SAMPLE DESC: QC Sample of MD21-08-12247 Field duplicate

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

~~CO_2 = 1% 0.9 %~~ $CO_2 = 1\%$

~~O_2 = 18.9 % 19.2 %~~ 5/7/08 $O_2 = 18.9\%$

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1645 5/7/08	(Printed Name)	5/7/08 4:45
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG TRAVELER

EVENT # 340

DATE	REVIEWER	COMMENTS
3/19/08	S. MARCZAK	completed

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10504

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0915	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

North of MDA T Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 1.7 % PID = 0.2 ppm

O_2 19.9 %

COLLECTED BY (PRINT) Bill Stone **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1145	(Printed Name)	2/13/08
(Signature) Kevin Read	2/13/08	(Signature)	11:45
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10505

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	160.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	165.5 ft	SCREEN/PORT DESC:		Port #2
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 0.7 (%) PID = 0.4 ppm

O_2 20.2 (%)

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature)	2/13/08	(Signature)	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10506

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0919	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222.0 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 1.3 % PID= 0.8 ppm

O_2 20.4 %

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Reif

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reif	1145	(Printed Name)	2/13/08
(Signature)	2/13/08	(Signature)	11:45
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10507

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0921	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.3\%$ PID = 1.0 ppm

$O_2 = 20.5\%$

COLLECTED BY (PRINT) Bill Stems **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	2/13/08	(Printed Name)	2/13/08
(Signature) Kevin Read	1145	(Signature)	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10508

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0923	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		II3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.9 ppm PID = 0.7 ppm

O_2 = 20.6 ppm

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature) [signature]	2/13/08	(Signature) [signature]	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10509

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		HI3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS: Not collected

LOCATION DESC: Ken Reid

FIELD SCREENING/MEASUREMENT RESULTS: 2/20/08

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10510

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS: Not collected

LOCATION DESC: Kevin Read

FIELD SCREENING/MEASUREMENT RESULTS: 2/20/08

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10511

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0927	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.2\ \%$

$CO_2 = 20.2\ \%$

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	2/14/08	(Printed Name)	2/14/08
(Signature) Kevin Read	1050	(Signature)	10:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10512

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:		port # 2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.2\ \%$

$CO_2 = 20.2\ \%$

COLLECTED BY (PRINT) Bill Stein **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K Reid	2/14/08	(Printed Name)	2/14/08
(Signature)	1050	(Signature)	10:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10513

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0940	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.1\ \%$

$CO_2 = 20.3\ \%$

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Read	2/14/08 1050	(Printed Name)	2/14/08 10:50
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10514

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VQST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328.0 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.7\%$

$CO_2 = 20.4\%$

~~COLLECTED BY (PRINT)~~ Phil Stein **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) K. Read (Signature)	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10515

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		Port # 5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port # 5

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.6\ \%$

$CO_2 = 20.6\%$

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Reid	2/14/08 1050	(Printed Name)	2/14/08 10:50
(Signature) [signature]		(Signature) [signature]	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10516

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-10515

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.6\%$

$CO_2 = 20.6\%$

COLLECTED BY (PRINT) ~~Bill Grant~~

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K Read	2/14/08 1050	(Printed Name)	2/14/08 10:50
(Signature) Kevin Read		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10517

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2008	MEDIA:	NA	NA
TIME COLLECTED (HH:MM)		1535	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VQST	
LOCATION ID:	21-25264	OK NA mgr 3/19/08	FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:
Field blank of ultra pure nitrogen run through sample train.

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Eric Stewart **REVIEWED BY (PRINT)** Kevin Rea

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Eric Stewart	2/19/08 15:56	(Printed Name)	2/19/08 15:56
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10518

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1555	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 Ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08–2/7/08, Summa collected 2/8/08 12:41

LOCATION DESC:

Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # 33942

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10519

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		12:34	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08 – 2/7/08; summa collected 2/8/08

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

Summa canister # 33943

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) ~~Bill Stelnicki~~	13:23	(Printed Name)	2/8/08
(Signature)	2/8/08	(Signature)	1:23
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10520

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1550	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium Column collected; summa collected 2/8/08 12:25

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # SC416

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	13:23 2/8/08	(Printed Name)	2/8/08 1:23
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10521

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1600	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08, Summa collected 2/8/08 12:17

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # 9945

COLLECTED BY (PRINT) Bill **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Bill (Signature)	**Date/Time** 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10522

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/8/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		10:42	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08; Summa collected 2/8/08 10:42

LOCATION DESC:

Port #6

FIELD SCREENING/MEASUREMENT RESULTS:

summa Canister #

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	13:23	(Printed Name)	2/8/08
(Signature)	2/8/08	(Signature)	1:23
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10523

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS: Not collected

LOCATION DESC: Ken Rea

FIELD SCREENING/MEASUREMENT RESULTS: 2/20/08

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10524

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1555	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of MD 21-08-10518

SAMPLE COMMENTS:

Duplicate from Port #1, Tritium column collected 2/6/08, Summa collected 2/8/08

LOCATION DESC:

12:42

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister #84

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	Date/Time 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10525

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		15:30	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	ok ~~HA~~ KR 2/19/08	FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:

Field blank of ultra pure nitrogen run through sample train

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 2/19/08 15:56	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/19/08 15:56
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG TRAVELER

EVENT # 236

DATE	REVIEWER	COMMENTS
11/14/07	S. MARCZAK	completed

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6725

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1130	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface Sample

SAMPLE COMMENTS:

Paired to Field Duplicate MD21-07-7022

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MADRID

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MM Sandoval	101507	(Printed Name)	10/15/07
(Signature) MM Sandoval	1045	(Signature)	11:20
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** Phasell MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6726

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	~~QBT 2~~ KR 10/14/07 OK
TIME COLLECTED (HH:MM)		1135	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK 10/14/07	FIELD PREP:	NA	
TOP DEPTH:	0	8.3 ~~12.5~~ KR ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	9.3 ~~13.5~~ KR ft 10/14/07	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

~~tuff weathered tuff~~ KR 10/14/07 Soil tuff interface

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Alex Morris

RELINQUISHED BY (Printed Name) M M Sandoval (Signature) M M	**Date/Time** 10/15/07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6727

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	Qbt 2
TIME COLLECTED (HH:MM)		1140	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	12.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	13.5 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	SAN	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: OK COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: Unweathered tuff

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MM Sandford	101507 1045	(Printed Name)	10/15/07 1020
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6728

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6729

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6730

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6731

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6732

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1540	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	HA
LOCATION ID:	21-603001	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	BH	Generic	FIELD PREP:	NA	↓
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface Soil

SAMPLE COMMENTS:

NA

LOCATION DESC:

DP Hillslope upper slope

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NOA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** M M Sandoval

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M M Sandoval	10-15-07 1045	(Printed Name)	10/16/08 1120
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6733

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	Qbt 3
TIME COLLECTED (HH:MM)		1550	SUB-MEDIA:	UA	ok
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	HA
LOCATION ID:	21-603001	ok	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	BH	Generic	FIELD PREP:	NA	ok
TOP DEPTH:	0	2.5 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	3.0 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S	R	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** MM SANDOVAL

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MM SANDOVAL	10-15-07 1045	(Printed Name)	10/15/07 1120
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6734

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	NA
TIME COLLECTED (HH:MM)		1620	SUB-MEDIA:	UA	UA
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	DC
LOCATION ID:	21-603001	21-01642	FIELD QC TYPE:	NA	FR
LOCATION TYPE:	BH	GENERIC	FIELD PREP:	NA	UF
TOP DEPTH:	0	OK	SAMPLE USAGE:	INV	QC
BOTTOM DEPTH:	0	OK	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S	W	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
		HNO3NO2				
1	.	~~AM-241+ISOPU~~	~~1 L POLY~~ 250 ML POLY	None SULFURIC ACID	YES	
1		~~Nitrate+Perchlorate~~	250 ML POLY	Ice	YES	

SAMPLE DESC: SW-846-6850

RINSATE AT MD21-07.

SAMPLE COMMENTS:

FIELD RINSATE OF HAND AUGER TOOL.

LOCATION DESC:

~~N.S.~~ PM 10-14-07

FIELD SCREENING/MEASUREMENT RESULTS:

NA

NOT COLLECTED

COLLECTED BY (PRINT) KEVIN REID **REVIEWED BY (PRINT)** ALEX MORA.

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6735

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603001		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6736

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603001		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6737

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603001		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6738

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603001		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6739

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603001		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6740

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		10:10	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	~~21-23266~~	21-01862	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.8 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:
Surface Sample

SAMPLE COMMENTS:
NA

LOCATION DESC:
NA

FIELD SCREENING/MEASUREMENT RESULTS:
PID = 0 ppm
RAD < MDA

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M M Sandy	101507	(Printed Name)	10/15/07
(Signature)	1045	(Signature)	1120
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6741

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		10:15	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	21-01862	SAMPLE TECH CODE:	HSA	
LOCATION ID:	~~21-25266~~ 21-1862 DM	21-01862	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	4.5	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Soil tuff interface

SAMPLE COMMENTS:

KR 10/14/07

Field duplicate ~~for~~ paired to MD21-07-6795

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

Rad < mDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) MM Sandoval (Signature) MM Sandoval	**Date/Time** 10/15/07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6742

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	Qbt 2
TIME COLLECTED (HH:MM)		10:25	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25266	21-01862	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	7.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	8.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ AIR 10.25.07	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

4pts

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD < MDA

COLLECTED BY (PRINT) Kenn Reed **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)		**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)		**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6743

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25266		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6744

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25266		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6745

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25266		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6746

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25266		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6747

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-13-07	MEDIA:	ALLH	oh
TIME COLLECTED (HH:MM)		1345	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	oh	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568	oh	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.5 ft	SCREEN/PORT DESC:	N/a	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: N/A COMPOSITE TIME INTERVAL: N/A WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: N/A

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

surface

SAMPLE COMMENTS:

Not collected

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

PID = ø

RAD = background

COLLECTED BY (PRINT) M. Magdalena Sandoval **REVIEWED BY (PRINT)**

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6748

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-13-07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1400	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	5.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA mms 10-18-07

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Left Collected

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0

RAD = background

COLLECTED BY (PRINT) M.M Sandoval **REVIEWED BY (PRINT)**

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6749

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10.13.07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1400	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	9.5 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10.0 Ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0

Rad = background

Not collected

COLLECTED BY (PRINT) M. M. SANDOVAL **REVIEWED BY (PRINT)**

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** Phasell MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6750

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6751

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6752

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6753

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02568		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6754

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/13/07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1600	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.8ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

surface

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID=

RAD= background

COLLECTED BY (PRINT) MM SANDOVAL **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6755

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-13-07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1605	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	6.0 ft	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	7.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Soil sample

SAMPLE COMMENTS:

ND

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Rad = bkg
PID = 0

COLLECTED BY (PRINT) M M SANDOVAL **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	Date/Time 10/5/07 1045	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 10/5/07 1045
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6756

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10.13.07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1615	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	~~mmm ft~~ 7.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10.13.07 ~~feet~~ 8.5 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Soil-tuff interface

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = Ø

RAD = bkg

COLLECTED BY (PRINT) MM SANDOVAL **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6757

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/13/07	MEDIA:	ALLH	Qbt 2
TIME COLLECTED (HH:MM)		1615	SUB-MEDIA:	UA	O/G
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	Blt	FIELD PREP:	NA	
TOP DEPTH:	0	11.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	12.0 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~ FM 10/25/07	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

ND

LOCATION DESC:

ND

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD = NDA

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** ALEX MOLD.

RELINQUISHED BY (Printed Name) ALEX MOLD (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6758

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6759

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6760

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01861		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6761

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10.13.07	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1510	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01860	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.8 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface sample

SAMPLE COMMENTS:

NA

LOCATION DESC:

N/A

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = bkg

PID = 0

COLLECTED BY (PRINT) M M Sandoval **REVIEWED BY (PRINT)** Ken Rea

RELINQUISHED BY (Printed Name) Alex Mora (Signature)	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10-15-07 1045 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6762

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10.13.07	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1525	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01860	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	7.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	8.5 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA ice in soil BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: duplicate paired with MD21-07-6798

SAMPLE COMMENTS: Soil tuff interface

LOCATION DESC: TA-21

FIELD SCREENING/MEASUREMENT RESULTS:

Rad: bkg

PID: 0

COLLECTED BY (PRINT) MM SANDOVAL **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) ALEX MONTOYA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10-15-07 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6763

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-12-07	MEDIA:	ALLH	Wt Obt 2
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	OK
LOCATION ID:	21-01860	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	OK
TOP DEPTH:	0	11.0 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	12.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S (SOIL 10/25/07)	R	EXCAVATED: YES (NO) NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES (NO) NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered Tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0

Rad = bkg

COLLECTED BY (PRINT) M M SANDOVAL **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Mark Morris	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name)	**Date/Time** 101507 1045
(Signature)		(Signature)	
RELINQUISHED BY (Printed Name)	**Date/Time**	**RECEIVED BY** (Printed Name)	**Date/Time**
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6764

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01860		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6765

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01860		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

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SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6766

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01860		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6767

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01860		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6768

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		0915	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	10/14/07 ~~OK~~ 21-25266	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.8 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface sample

SAMPLE COMMENTS:

NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

Rad < mDA

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 ~~1045~~ 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6769

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	~~ok~~ 21-25266	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	5.0 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5.7 Ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Soil tuff interface at 5.3ft

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD < MDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)		Date/Time 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)		Date/Time 101507 1045
RELINQUISHED BY (Printed Name) (Signature)		Date/Time	**RECEIVED BY** (Printed Name) (Signature)		Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6770

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	Qbt 2
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	21-25266	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	12.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	13.3 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ AM101507	R	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:
Unweathered tuff

SAMPLE COMMENTS:
NA

LOCATION DESC:
NA

FIELD SCREENING/MEASUREMENT RESULTS:
PID = 0
Rad < MDA

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)		**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)		**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6771

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	21-02568	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.8 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / ~~NO~~ / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:
Surface Soil

SAMPLE COMMENTS:

LOCATION DESC:
MD

FIELD SCREENING/MEASUREMENT RESULTS:
PID=0
RAD=NOA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MOLD

RELINQUISHED BY (Printed Name) ALEX MOLD (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 1015-07 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6772

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	21-02568	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	5.3 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6.1 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	X	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: Soil tuff interface

SAMPLE COMMENTS: N/A

LOCATION DESC: N/A

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD = NOA

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)		**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)		**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6773

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	Qbt 2
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	21-02568	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	9.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	10.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	~~S~~ AM 10-21-07	R	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

Rad = NDA

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** ALEX MONTOYA

RELINQUISHED BY (Printed Name) ALEX MONTOYA (Signature)		**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)		**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6774

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Not collected

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6775

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/13/07	MEDIA:	ALLH	ok
TIME COLLECTED (HH:MM)		1450	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02569	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.5 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface Soil

SAMPLE COMMENTS:

LOCATION DESC: MD MD

FIELD SCREENING/MEASUREMENT RESULTS:

Rad= bkg

PID = Ø

COLLECTED BY (PRINT) M.M. SANDOVAL **REVIEWED BY (PRINT)** Kendall

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MARK MORA	10-15-07 1045	(Printed Name)	10-15-07 1045
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6776

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10.13.07	MEDIA:	ALLH	oh
TIME COLLECTED (HH:MM)		1453	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02569	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	7.5	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	8.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Soil tuff interface

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Soil-tuff interface Rad = bkg

PID = 0

COLLECTED BY (PRINT) MM SANDOVAL **REVIEWED BY (PRINT)** Ken Rich

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6777

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/13/07	MEDIA:	ALLH	QbT 2
TIME COLLECTED (HH:MM)		1500	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	OK
LOCATION ID:	21-02569	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	OK
TOP DEPTH:	0	12.0 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	13.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	y	
1		Nitrate+Perchorate	250 ML POLY	Ice	y	

SAMPLE DESC: unweathered tuff

SAMPLE COMMENTS:

LOCATION DESC: NTA NTA

FIELD SCREENING/MEASUREMENT RESULTS:

TD
Rad = bkg
PID = 0

COLLECTED BY (PRINT) M M SANDOVAL **REVIEWED BY (PRINT)** Ken Rea

RELINQUISHED BY (Printed Name) ALEX MOTES (Signature)	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10-15-07 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6778

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02569		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6779

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02569		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6780

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	NA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02569		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6781

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-02569		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6782

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/07	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1510	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	21-25274	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface soil

SAMPLE COMMENTS:

Not collected

Ken Rea

10/14/07

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Ken Rea **REVIEWED BY (PRINT)**

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6783

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/07	MEDIA:	ALLH	OK ~~05-13~~ KR 10/14/07
TIME COLLECTED (HH:MM)		1510	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	21-25274	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	0.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface soil

SAMPLE COMMENTS:

NP

LOCATION DESC:

NP

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** MM SANDOVAL

RELINQUISHED BY (Printed Name) MM SANDOVAL (Signature)	**Date/Time** 10.15.07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6784

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/07	MEDIA:	ALLH	~~[illegible]~~ QBT2
TIME COLLECTED (HH:MM)		1520	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HA	
LOCATION ID:	21-25274	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	2.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	3.0 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	~~S~~	R	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** ______ **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

RA = NDA

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) M M SANDOVAL

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M M SANDOVAL (Signature) [signature]	10-15-07 1045	(Printed Name) (Signature) [signature]	10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6785

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		11:05 1430	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	HA
LOCATION ID:	21-25272	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	0.8 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:**

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface Soil

SAMPLE COMMENTS:

NA

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101587 ~~1045~~ 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6786

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		~~11:15~~ 1440	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	HA
LOCATION ID:	21-25272	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	2.5 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	3.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING: YES / (NO) / NA**

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Weathered tuff

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 ~~1045~~ 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6787

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	Q bt 2
TIME COLLECTED (HH:MM)		1450	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	HA
LOCATION ID:	21-25272	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	3.5 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	4.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MONTS

RELINQUISHED BY (Printed Name) ALEX MONTS (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6788

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25272		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6789

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25272		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6790

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25272		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6791

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-25272		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6792

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1605	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	NA
LOCATION ID:	21-01642	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	0.5 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING: YES / (NO) / NA**

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Surface soil

SAMPLE COMMENTS:

Paired with duplicate sample MD21-07-6797

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NOA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** MM Sandoval

RELINQUISHED BY (Printed Name) MM Sandoval (Signature)	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6793

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	Q673
TIME COLLECTED (HH:MM)		1615	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	NA
LOCATION ID:	21-01642	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	1.5 ft	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	0	2.0 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	~~S~~ AM10807	R	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: OK COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC:

Unweathered tuff

SAMPLE COMMENTS:

NTS

LOCATION DESC:

NTS

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** M M Sandoval

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) M M Sandoval	10-15-07	(Printed Name)	10/15/07
(Signature)	10.45	(Signature)	1120
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6794

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	ALLH	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01642		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None		
1		Nitrate+Perchorate	250 ML POLY	Ice		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6795

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	ALLH	okay
TIME COLLECTED (HH:MM)		1015	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-01862	OK	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	B/H	FIELD PREP:	NA	
TOP DEPTH:	0	4.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	6.5 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of MD21-07-6741

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD < MDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) MM Sandoval (Signature)	**Date/Time** 10 15 07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6796

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1605 1620	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	DC	OK
LOCATION ID:	~~21-01862~~	21-01642	FIELD QC TYPE:	FR	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	OK
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		NA
FIELD MATRIX:	W	OK	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	YES	
1		SW-846:6850	250 ML POLY	Ice	YES	

SAMPLE DESC: QC Sample of

MD21-07-6793

SAMPLE COMMENTS:

FIELD RINSATE OF HAND AUGER TOOL.

LOCATION DESC:

~~NA~~ DW 101407 NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) KEVIN REED. **REVIEWED BY (PRINT)** ALEX MORA.

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)		**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)		**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)		**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6797

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1605	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	HA
LOCATION ID:	~~21-02569~~	21-01642 OK KR 10/14/07	FIELD QC TYPE:	FD	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of MD21-07-6792, Location ID 21-01642

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD= NDA

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** MM Sandoval

RELINQUISHED BY (Printed Name) MM Sandoval (Signature) MM Sandoval	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** Phasell MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6798

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-13-07	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1525	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	21-25274	21-01860	FIELD QC TYPE:	FD	OK
LOCATION TYPE:	GENERIC	BK	FIELD PREP:	NA	OK
TOP DEPTH:	0	7.0 ft	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	8.5 ft	SCREEN/PORT DESC:		N/A
FIELD MATRIX:	S	OK	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: VERTICAL

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of MD21-07-6762

soil tuff interface

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

RAD = bkg

PID = 0 ppm

COLLECTED BY (PRINT) KEVIN REID **REVIEWED BY (PRINT)** ALEX MORA

RELINQUISHED BY (Printed Name) ALEX MORA (Signature)	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10-15-07 1045/2pf
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6799

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1145	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	DC	OK
LOCATION ID:	21-25272	21-603000	FIELD QC TYPE:	FR	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	OK
TOP DEPTH:	0	OK	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	OK	SCREEN/PORT DESC:		NA
FIELD MATRIX:	W	OK	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	YES	
1		SW-846:6850	250 ML POLY	Ice	YES	

SAMPLE DESC: QC Sample of

MD21-07-6797

SAMPLE COMMENTS:

SPOON RINSATE OF COLE BUCKET SAMPLER

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) KEVIN REID **REVIEWED BY (PRINT)** ALEX MOLZ.

RELINQUISHED BY (Printed Name) ALEX MOLZ (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6800

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	UA	/
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stevens **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	1025
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6801

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0858 ~~0907~~ KR 11/3/07	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft ~~292.5~~ KR 11/3/07	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	234.5 ft ~~297.5~~ KR 11/3/07	SCREEN/PORT DESC:		port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / ~~NO~~ / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / ~~NO~~ / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07 1025	(Printed Name)	11/3/07 10:25
(Signature) Kevin Read		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6802

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0907	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07 1025	(Printed Name)	11/3/07 10:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6803

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	11/03/2007		MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0854	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	187.5 FT	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	192.5 FT	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6804

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/04/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/4/07	(Printed Name)	11/4/07
(Signature) [signature]	9:50	(Signature) [signature]	9150
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6805

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Not collected 11:14 SJ

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6806

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/03/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	FD	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		port 6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / ~~NO~~ / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6800

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 11/3/07 1025	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/3/07 10:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6807

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OR
TIME COLLECTED (HH:MM)		16:02	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OR	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OR	FIELD PREP:	NA	
TOP DEPTH:	0	67.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5' ft	SCREEN/PORT DESC:		Vapor port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 34422

LOCATION DESC:

Port # 1

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) Maverick (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6808

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	on
TIME COLLECTED (HH:MM)		16:11	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	on	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	on	FIELD PREP:	NA	
TOP DEPTH:	0	160.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	163.5 ft	SCREEN/PORT DESC:		Vapor port #2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 14003

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6809

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		16:17	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	WCJ 217' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222' ft	SCREEN/PORT DESC:		Vapor port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vert.

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # F11

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stein **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stein	10/31/07	(Printed Name) Kevin Reid	10/31/07
(Signature)	8:50	(Signature)	8:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6810

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	Oc
TIME COLLECTED (HH:MM)		16:23	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	Oc	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	Oc	FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Vapor port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vert

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # TO1556

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY (Printed Name) [signature] (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6811

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		16:30	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	ok	FIELD PREP:	NA	
TOP DEPTH:	0	339.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		port #5 10/30/07
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: dark

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 34322

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stoney **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) (Signature)	**Date/Time** 10/31/07 8:51	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6812

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	"
TIME COLLECTED (HH:MM)		" 16:32	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	"	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	FD	
LOCATION TYPE:	BH	"	FIELD PREP:	NA	
TOP DEPTH:	0	339.5'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	344.5'	SCREEN/PORT DESC:	1615 10/30/07 NA	port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: West

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6811

SAMPLE COMMENTS: 35979

Summa Canister ~~34737~~ WCJ

LOCATION DESC:

Port #5 Duplicate

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) (Signature)	**Date/Time** 10/31/07 8:52	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6813

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0949	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Can #20940: Tritium column Final mass = 24.0 gms

LOCATION DESC:

Port#1 70ft

FIELD SCREENING/MEASUREMENT RESULTS:

O_2 = 20.2 %

CO_2 = 0.3 %

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Olsen	10/19/07	(Printed Name)	10/19/07
(Signature)	10:42	(Signature)	10:42
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6814

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0957	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:	Port #2	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister: # 4216 ; Final tritium column mass = 24.4 gms

LOCATION DESC:

Port #2 153 ft BGS

FIELD SCREENING/MEASUREMENT RESULTS:

O_2 = 20.1 %

CO_2 = 0.7 %

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stenger	10/19/07	(Printed Name)	10/19/07
(Signature) [signature]	10:42	(Signature) [signature]	10:42
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6815

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1005	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	ok	FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister = # 13863 Final tritium column mass = 26.5 gms

LOCATION DESC:

Port #3 225 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.1 %

O_2 = 20.9 %

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) ~~Brian~~ Stewart	10/19/07	(Printed Name)	10/19/07
(Signature) [signature]	10:42	(Signature) [signature]	10:42
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6816

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1012	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	323.0	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	328.0	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister # 434 Final tritium column mass = 29.2 gms

LOCATION DESC:

Port #4 325.5 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 21.5 %

O_2 = 0.0 %

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stone (Signature)	**Date/Time** 10/19/07 16:42	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/19/07 16:42
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6817

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1017	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VQST	
LOCATION ID:	21-25264	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	ok	FIELD PREP:	NA	
TOP DEPTH:	0	349.5	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister = 4175 final tritium column mass = 23.6 gms

LOCATION DESC:

Port #5 352 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

~~H2O = 2+~~ KR 10/19/07

CO_2 = 0.1 %

O_2 = 21.8 %

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) ~~Tim Stewart~~	10/19/07	(Printed Name)	10/19/07
(Signature)	10:42	(Signature)	10:42
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6818

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1635	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	OK
LOCATION ID:	21-25264	21-603058	FIELD QC TYPE:	~~FD~~ FB	FB
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / ~~NO~~ / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING: YES / (NO) / NA**

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	192 10/30 ~~N~~ Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6811
Nitrogen Field Blank of sample train.
Deionized water Blank of tritium column

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stern **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-7010

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-7011

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD QC TYPE:	TB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PART DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-7012

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED (MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ **COMPOSITE TIME INTERVAL:** _____ **WATER FLOWING: YES / NO / NA**

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** _____ **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Not Collected 11-14-07 A.M.

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-7022

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/14/2007	MEDIA:	ALLH	OK
TIME COLLECTED (HH:MM)		1130	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	HSA	
LOCATION ID:	21-603000		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		AM-241+ISOPU	1 L POLY	None	Y	
1		Nitrate+Perchorate	250 ML POLY	Ice	Y	

SAMPLE DESC: QC Sample of MD21-07-6725

SAMPLE COMMENTS: NA

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS:

PID = 0 ppm

RAD = NDA

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** ALEX M. ORTA

RELINQUISHED BY (Printed Name) MM Sandoval (Signature)	**Date/Time** 10-15-07 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/15/07 1120
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-08-7053

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10-14-2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1620	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	~~21-01642~~ MD21-08-7053	SAMPLE TECH CODE:	DC	OK
LOCATION ID:	21-25272	21-01642	FIELD QC TYPE:	FR	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	OK
TOP DEPTH:	0	OK	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	OK	SCREEN/PORT DESC:		NA
FIELD MATRIX:	W	OK	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)		
1		SW-846:6850	250 ML POLY	Ice		

SAMPLE DESC: QC Sample of

RINSATE AT MD-21-07-6793

SAMPLE COMMENTS:

RINSATE OF HAND AUGER TOOL

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) KEVIN REID **REVIEWED BY (PRINT)** ALEX MOREA

RELINQUISHED BY (Printed Name) ALEX MOREA (Signature)	**Date/Time** 101507 1045	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 101507 1045
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-08-7318

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:		
TIME COLLECTED (HH:MM)			SUB-MEDIA:		
PRS ID:			SAMPLE TECH CODE:		
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:		
TOP DEPTH:	0		SAMPLE USAGE:		
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS

SAMPLE DESC:

Rust

SAMPLE COMMENTS: created to make new locations, delete them

Collected 11-14-07 1.M

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-08-7319

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:		
TIME COLLECTED (HH:MM)			SUB-MEDIA:		
PRS ID:			SAMPLE TECH CODE:		
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:		
TOP DEPTH:	0		SAMPLE USAGE:		
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS

SAMPLE DESC:

SAMPLE COMMENTS: created to make new locations, delete them

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Not Collected 11-4-07 PM

COLLECTED BY (PRINT) _____ **REVIEWED BY (PRINT)** _____

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-08-8445

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	21-603059	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	Y
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-8800
Nitrogen Field Blank of Sample train
Deionized water Blank of tritium column

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stone **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	11/3/07 1025	(Printed Name)	11/3/07 10:25
(Signature) Kevin Reid		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLE..ION LOG TRAVELER

EVENT # 487

DATE	REVIEWER	COMMENTS
9/25/08	S. MARCZAK	completed

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14813

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: ~~ok~~ NA (KR 9/24/08) COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

~~CO_2 0.4%~~ KR 9/24/08

$CO_2 = 1.1\%$

$O_2 = 19.4\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [illegible]

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14814

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08
TIME COLLECTED (HH:MM)		1122
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603058	
LOCATION TYPE:	BH	
TOP DEPTH:	0	217 ft ~~160.5 ft~~ 9/24/08
BOTTOM DEPTH:	0	222 ft ~~165.5 ft~~ 9/24/08
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		Port 3
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.7\%$

$O_2 = 18.1\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT)

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14815

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1124	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft 217.0 ft bgs 9/29/08	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft 222.0 ft bgs 9/29/08	SCREEN/PORT DESC:		Port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.3\%$

$O_2 = 17.9\%$

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT)

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14816

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1126	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port 5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.3\%$

$O_2 = 17.8\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [illegible]

RELINQUISHED BY (Printed Name) Kevin Reed (Signature)	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14817

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS: Not collected PNO

LOCATION DESC: Kevin Reid 9/25/08

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** B. Stewart

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14818

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.3\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14819

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1002	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 19.8$

$CO_2 = 0.8\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stearns

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14820

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	o/c
TIME COLLECTED (HH:MM)		1004	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	o/c	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:	Port #4	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.8\ \%$

$O_2 = 19.1\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stennett

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14821

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08
TIME COLLECTED (HH:MM)		1006
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	
LOCATION TYPE:	BH	
TOP DEPTH:	0	292.5 ft
BOTTOM DEPTH:	0	297.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		port #5
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 1.0 %

O_2 = 18.8 %

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [signature]

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature) [signature]	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14822

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1008	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		port # 6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

port # 6

FIELD SCREENING/MEASUREMENT RESULTS:

$Co_2 = 0.2\%$

$O_2 = 19.7\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Eric Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14823

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS: Not collected PNO

LOCATION DESC: Kevin Read 9/25/08

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) K Read

REVIEWED BY (PRINT) B. Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14824

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14818

ultra pure nitrogen.

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1208	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14825

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1008	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: ~~grab~~ NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

# 1	PRIORITY	ORDER H3	CNTNR Silica Gel	PRESERVATIVE None	COLLECTED Y/N Y	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14822

~~Collected~~ KR 9/25/08

SAMPLE COMMENTS:

LOCATION DESC:

Port 6 FD

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Bill Stone

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Reed	1200	(Signature)	1200
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14826

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1126	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of MD21-08-14816

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14827

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS: Not collected QCR

Kevin Read 9/25/08

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) K Read **REVIEWED BY (PRINT)** B Stewart

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14828

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		16.20	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

$Co_2 = 0.9$

$O_2 = 19.3$

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** [redacted]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Reed	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14829

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1622	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VQST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	1505Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:		Port 2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 2

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 18.8\%$

$CO_2 = 0.9\%$

COLLECTED BY (PRINT) Kevin Red

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Red (Signature) Kevin Red	**Date/Time** 9/25/08 1250	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1250
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14830

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1624	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		port 3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.8\ \%$

$O_2 = 18.3\ \%$

COLLECTED BY (PRINT) K. Reed **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature)	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14831

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1626	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328 Ft	SCREEN/PORT DESC:		Port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.5\ \%$

$O_2 = 18.1\ \%$

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) Bin Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Read	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14832

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		per 9/25/08 09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1627	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		port 5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.4\ \%$

$O_2 = 18.0\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14833

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1628	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	OK	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	OK	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14832

SAMPLE COMMENTS:

LOCATION DESC:
Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.4\%$

$O_2 = 18.0\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [illegible]

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	Date/Time 9/25/08 1250	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14834

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):			MEDIA:	NA	
TIME COLLECTED (HH:MM)			SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: _____ COMPOSITE TIME INTERVAL: _____ WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: _____ BOREHOLE DIRECTION: _____

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS: Not collected QCR

Kevin Read 9/25/08

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) K Read **REVIEWED BY (PRINT)** B Stewart

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Thursday, September 25, 2008

REQUEST NUMBER: 08-2020

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-2020
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 9/25/2008
TURNAROUND/REPORT DUE: 10/16/2008
TURNAROUND REQ'D: 21 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-14813	GAS	9/24/2008		
		1	MD21-08-14814	GAS	9/24/2008		
		1	MD21-08-14815	GAS	9/24/2008		
		1	MD21-08-14816	GAS	9/24/2008		
		1	MD21-08-14818	GAS	9/25/2008		
		1	MD21-08-14819	GAS	9/25/2008		
		1	MD21-08-14820	GAS	9/25/2008		
		1	MD21-08-14821	GAS	9/25/2008		
		1	MD21-08-14822	GAS	9/25/2008		

Thursday, September 25, 2008

REQUEST NUMBER: 08-2020

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-14824	GAS	9/25/2008		
		1	MD21-08-14825	GAS	9/25/2008		
		1	MD21-08-14826	GAS	9/24/2008		
		1	MD21-08-14828	GAS	9/23/2008		
		1	MD21-08-14829	GAS	9/23/2008		
		1	MD21-08-14830	GAS	9/23/2008		
		1	MD21-08-14831	GAS	9/23/2008		
		1	MD21-08-14832	GAS	9/23/2008		
		1	MD21-08-14833	GAS	9/23/2008		

Final Page of REQUEST NUMBER 08-2020

Thursday, September 25, 2008

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2020C

REQUEST NUMBER: 08-2020

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 10/16/2008

TURNAROUND REQ'D: 21

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14829	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14818	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14813	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14816	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14828	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14819	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14830	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14831	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14814	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14832	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14815	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14821	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14822	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14824	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14825	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14833	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14826	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14813

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: ~~ok~~ NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

~~CO_2 0.4 %~~ KR 9/24/08

$CO_2 = 1.1\%$

$O_2 = 19.4\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) T.B. Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14814

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217 ft ~~160.5 ft~~ 9/24/08	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222 ft ~~165.5 ft~~ 9/24/08	SCREEN/PORT DESC:	Port 3	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: ~~NA~~ WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.7\%$

$O_2 = 18.1\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT)

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08 1200	(Printed Name)	9/25/08 1200
(Signature) Kevin Reed		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14815

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08
TIME COLLECTED (HH:MM)		1124
PRS ID:	21-016(a)-99	ok
LOCATION ID:	21-603058	↓
LOCATION TYPE:	BH	↓ lm 9/09/08
TOP DEPTH:	0	242.5 ft ~~217.0 ft~~
BOTTOM DEPTH:	0	247.5 ft ~~222.0 ft~~ T/244 ft
FIELD MATRIX:	GAS	
COMPOSITE TYPE:	NA	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	ok
SUB-MEDIA:	OTHER	↓
SAMPLE TECH CODE:	VOST	↓
FIELD QC TYPE:	NA	↓
FIELD PREP:	NA	↓
SAMPLE USAGE:	INV	↓
SCREEN/PORT DESC:		Port 4
EXCAVATED: YES / NO / (NA)		

COMPOSITE TIME INTERVAL: NA

WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA

BOREHOLE DECLINATION: NA

BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.3\%$

$O_2 = 17.9\%$

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT)

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14816

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1126	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port 5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.3\%$

$O_2 = 17.8\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [illegible] Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature)	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14818

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.3\ \%$

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14819

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08
TIME COLLECTED (HH:MM)		1002
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	↓
LOCATION TYPE:	BH	↓
TOP DEPTH:	0	187.5 ft
BOTTOM DEPTH:	0	192.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		port #3
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 19.8$

$Co_2 \leq 0.8\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Steiner

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14820

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08
TIME COLLECTED (HH:MM)		1004
PRS ID:	21-016(a)-99	ok
LOCATION ID:	21-603059	
LOCATION TYPE:	BH	
TOP DEPTH:	0	229.5 ft
BOTTOM DEPTH:	0	234.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	ok
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		Port #4
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.8 %

O_2 = 19.1 %

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stennett

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14821

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08
TIME COLLECTED (HH:MM)		1006
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	
LOCATION TYPE:	BH	
TOP DEPTH:	0	292.5 ft
BOTTOM DEPTH:	0	297.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		port #5
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 1.0 %

O_2 = 18.8 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)**

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14822

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08
TIME COLLECTED (HH:MM)		1008
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	↓
LOCATION TYPE:	BH	↓
TOP DEPTH:	0	372.5 ft
BOTTOM DEPTH:	0	377.5 ft
FIELD MATRIX:	GAS	↓

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	↓
SAMPLE TECH CODE:	VOST	↓
FIELD QC TYPE:	NA	↓
FIELD PREP:	NA	↓
SAMPLE USAGE:	INV	↓
SCREEN/PORT DESC:		Port # 6
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port # 6

FIELD SCREENING/MEASUREMENT RESULTS:

$Co_2 = 0.2\%$

$O_2 = 19.7\%$

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Eric Stennett

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14824

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08
TIME COLLECTED (HH:MM)		1000
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	
LOCATION TYPE:	BH	
TOP DEPTH:	0	
BOTTOM DEPTH:	0	
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	ok
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	FB	
FIELD PREP:	NA	
SAMPLE USAGE:	QC	
SCREEN/PORT DESC:		
EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14818

ultra pure nitrogen.

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14825

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1008	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: 1st 9/25/08 NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

# 1	PRIORITY	ORDER H3	CNTNR Silica Gel	PRESERVATIVE None	COLLECTED Y/N Y	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14822

~~Collected~~ KR 9/25/08

SAMPLE COMMENTS:

LOCATION DESC:

Port 6 FD

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Bill Stone

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08 1200	(Printed Name)	9/25/08 1200
(Signature) Kevin Reed		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14826

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1126	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA KR BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of MD21-08-14816

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Read	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14828

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008
TIME COLLECTED (HH:MM)		16.20
PRS ID:	21-016(a)-99	o/c
LOCATION ID:	21-25264	
LOCATION TYPE:	BH	
TOP DEPTH:	0	67.5 ft
BOTTOM DEPTH:	0	72.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		Port 1
EXCAVATED: YES / NO / NA		NO

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9$

$O_2 = 19.3$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [redacted]

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14829

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1622	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	1505Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:		Port 2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 2

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 18.8\%$

$CO_2 = 0.9\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14830

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1624	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		port 3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.8\ \%$

$O_2 = 18.3\ \%$

COLLECTED BY (PRINT) K. Reed **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08 1200	(Printed Name)	9/25/08 1200
(Signature) Kevin Reed		(Signature) Jay Lilly	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14831

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1624	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328 Ft	SCREEN/PORT DESC:		Port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.5\ \%$

$O_2 = 18.1\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Bin Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Read	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14832

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		Port 09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1627	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	0/a	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		port 5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.4\ \%$

$O_2 = 18.0\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08 1200	(Printed Name)	9/25/08 1200
(Signature) Kevin Reed		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14833

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1628	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	OK	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	OK	SCREEN/PORT DESC:	Port #5	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	Silica Gel	Non	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD 21-08-14832

SAMPLE COMMENTS:

LOCATION DESC:
Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.4\%$

$O_2 = 18.0\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stenf

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1250	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST.1943

Section I.

REQUEST NUMBER: 08-2020 VALIDATION DATE: 10/30/2008 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Mary Donivan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): VOC (TO-15)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. In the FB (MD21-08-14824) associated with samples -14818–14822 and -14825, acetone was detected. The associated results for samples -14819, -14820 and -14825 were detects ≤5X the FB concentration and, thus, were qualified U,V4d. All other associated sample results were NDs and, thus, were not qualified.
2. The ICAL curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, per client instructions.
3. The ICAL %RSDs were >30% for 1,4-dichlorobenzene and 1,2-dichlorobenzene. The 1,4-dichlorobenzene results for samples -14815, -14816 and -14825 were detects and, thus, were qualified J,V7a. The remaining associated sample results were NDs and, thus, were qualified UJ,V7a.
4. For both CCVs, the %Ds were >30% for methyl tert-butyl ether. For the CCV associated with samples -14813–14816 and -14818, the %D was >30% for chlorodifluoromethane. The associated sample results were NDs and, thus, were qualified UJ,V7c.

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Data Validation Cover Sheet

5. For the LCS associated samples -14819–14822, -14824–14826 and -14828–14833, the %Rs were < the laboratory LAL but ≥10% for 1,2,4-trichlorobenzene and hexachlorobutadiene. The associated sample results were NDs and, thus, were qualified UJ,V12a. For both LCSs, the %R was > the laboratory UAL for methyl tert-butyl ether. The associated sample results were NDs and, thus, were not qualified.
6. It should be noted that chlorodifluoromethane, methanol and n-butanol were not spiked into the LCS. No sample data were qualified as a result.
7. It should be noted that a few mass spectra for some analytes in some of the samples contained contamination from co-eluting target analytes. No sample data were qualified as a result, based on professional judgment.
8. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified, per client instructions.

Reviewed by: JEJ Level: 1 Date: 10/30/08

VALIDATOR'S SIGNATURE: Mary A Donovan DATE: 10/30/2008

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☒	☐	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☒	☐	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14813

Lab ID#: 0809614-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100619**	**Date of Collection:**	**9/24/08**
Dil. Factor:	**1.83**	**Date of Analysis:**	**10/6/08 10:41 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.92	1.0	4.5	5.0	
Freon 114	0.92	Not Detected	6.4	Not Detected	
Chloromethane	3.7	Not Detected	7.6	Not Detected	
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected	
1,3-Butadiene	0.92	Not Detected	2.0	Not Detected	
Bromomethane	0.92	Not Detected	3.6	Not Detected	
Chloroethane	0.92	Not Detected	2.4	Not Detected	
Freon 11	0.92	Not Detected	5.1	Not Detected	
Ethanol	3.7	Not Detected	6.9	Not Detected	
Freon 113	0.92	Not Detected	7.0	Not Detected	
1,1-Dichloroethene	0.92	Not Detected	3.6	Not Detected	
Acetone	3.7	12	8.7	30	
2-Propanol	3.7	Not Detected	9.0	Not Detected	
Carbon Disulfide	0.92	Not Detected	2.8	Not Detected	
Methylene Chloride	0.92	1.5	3.2	5.3	
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected	
Hexane	0.92	Not Detected	3.2	Not Detected	
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.92	1.7	2.7	5.0	
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected	
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected	
Chloroform	0.92	100	4.5	510	
1,1,1-Trichloroethane	0.92	4.0	5.0	22	
Cyclohexane	0.92	Not Detected	3.1	Not Detected	
Carbon Tetrachloride	0.92	11	5.8	68	
Benzene	0.92	Not Detected	2.9	Not Detected	
1,2-Dichloroethane	0.92	Not Detected	3.7	Not Detected	
Heptane	0.92	Not Detected	3.7	Not Detected	
Trichloroethene	0.92	60	4.9	320	
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected	
1,4-Dioxane	3.7	Not Detected	13	Not Detected	
Bromodichloromethane	0.92	Not Detected	6.1	Not Detected	
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected	
4-Methyl-2-pentanone	0.92	Not Detected	3.7	Not Detected	
Toluene	0.92	Not Detected	3.4	Not Detected	
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected	
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected	
Tetrachloroethene	0.92	100	6.2	680	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14813

Lab ID#: 0809614-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100619**	**Date of Collection: 9/24/08**	
Dil. Factor:	**1.83**	**Date of Analysis: 10/6/08 10:41 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.7	Not Detected	15	Not Detected	
Dibromochloromethane	0.92	Not Detected	7.8	Not Detected	
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected	
Chlorobenzene	0.92	Not Detected	4.2	Not Detected	
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected	
m,p-Xylene	0.92	Not Detected	4.0	Not Detected	
o-Xylene	0.92	Not Detected	4.0	Not Detected	
Styrene	0.92	Not Detected	3.9	Not Detected	
Bromoform	0.92	Not Detected	9.4	Not Detected	
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected	
4-Ethyltoluene	0.92	Not Detected	4.5	Not Detected	
1,3,5-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected	
1,2,4-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected	
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected	
1,4-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected	
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected	
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected	
Chlorodifluoromethane	3.7	Not Detected U J	13	Not Detected U J	UJ,V7c
Methanol	92	Not Detected	120	Not Detected	
n-Butanol	3.7	Not Detected	11	Not Detected	
Propylene	3.7	Not Detected	6.3	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	93	70-130

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0009 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14814

Lab ID#: 0809614-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100623**	**Date of Collection:**	**9/24/08**
Dil. Factor:	**1.96**	**Date of Analysis:**	**10/7/08 02:36 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.98	1.5	4.8	7.3	
Freon 114	0.98	Not Detected	6.8	Not Detected	
Chloromethane	3.9	Not Detected	8.1	Not Detected	
Vinyl Chloride	0.98	Not Detected	2.5	Not Detected	
1,3-Butadiene	0.98	Not Detected	2.2	Not Detected	
Bromomethane	0.98	Not Detected	3.8	Not Detected	
Chloroethane	0.98	Not Detected	2.6	Not Detected	
Freon 11	0.98	Not Detected	5.5	Not Detected	
Ethanol	3.9	Not Detected	7.4	Not Detected	
Freon 113	0.98	3.0	7.5	23	
1,1-Dichloroethene	0.98	2.3	3.9	9.1	
Acetone	3.9	Not Detected	9.3	Not Detected	
2-Propanol	3.9	Not Detected	9.6	Not Detected	
Carbon Disulfide	0.98	Not Detected	3.0	Not Detected	
Methylene Chloride	0.98	130	3.4	440	
Methyl tert-butyl ether	0.98	Not Detected	3.5	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected	
Hexane	0.98	Not Detected	3.4	Not Detected	
1,1-Dichloroethane	0.98	Not Detected	4.0	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.98	Not Detected	2.9	Not Detected	
cis-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected	
Tetrahydrofuran	0.98	Not Detected	2.9	Not Detected	
Chloroform	0.98	150	4.8	720	
1,1,1-Trichloroethane	0.98	6.4	5.3	35	
Cyclohexane	0.98	Not Detected	3.4	Not Detected	
Carbon Tetrachloride	0.98	61	6.2	380	
Benzene	0.98	Not Detected	3.1	Not Detected	
1,2-Dichloroethane	0.98	1.6	4.0	6.3	
Heptane	0.98	Not Detected	4.0	Not Detected	
Trichloroethene	0.98	150	5.3	820	
1,2-Dichloropropane	0.98	Not Detected	4.5	Not Detected	
1,4-Dioxane	3.9	Not Detected	14	Not Detected	
Bromodichloromethane	0.98	Not Detected	6.6	Not Detected	
cis-1,3-Dichloropropene	0.98	Not Detected	4.4	Not Detected	
4-Methyl-2-pentanone	0.98	Not Detected	4.0	Not Detected	
Toluene	0.98	Not Detected	3.7	Not Detected	
trans-1,3-Dichloropropene	0.98	Not Detected	4.4	Not Detected	
1,1,2-Trichloroethane	0.98	2.6	5.3	14	
Tetrachloroethene	0.98	34	6.6	230	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14814

Lab ID#: 0809614-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100623**	**Date of Collection:**	**9/24/08**
Dil. Factor:	**1.96**	**Date of Analysis:**	**10/7/08 02:36 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.9	Not Detected	16	Not Detected	
Dibromochloromethane	0.98	Not Detected	8.3	Not Detected	
1,2-Dibromoethane (EDB)	0.98	Not Detected	7.5	Not Detected	
Chlorobenzene	0.98	Not Detected	4.5	Not Detected	
Ethyl Benzene	0.98	Not Detected	4.2	Not Detected	
m,p-Xylene	0.98	Not Detected	4.2	Not Detected	
o-Xylene	0.98	Not Detected	4.2	Not Detected	
Styrene	0.98	Not Detected	4.2	Not Detected	
Bromoform	0.98	Not Detected	10	Not Detected	
1,1,2,2-Tetrachloroethane	0.98	Not Detected	6.7	Not Detected	
4-Ethyltoluene	0.98	Not Detected	4.8	Not Detected	
1,3,5-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected	
1,2,4-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected	
1,3-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected	
1,4-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.98	Not Detected	5.1	Not Detected	
1,2-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.9	Not Detected	29	Not Detected	
Hexachlorobutadiene	3.9	Not Detected	42	Not Detected	
Chlorodifluoromethane	3.9	Not Detected U J	14	Not Detected U J	UJ,V7c
Methanol	98	Not Detected	130	Not Detected	
n-Butanol	3.9	Not Detected	12	Not Detected	
Propylene	3.9	6.4	6.7	11	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	92	70-130

MAD
0045 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14815

Lab ID#: 0809614-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100624**	**Date of Collection:**	**9/24/08**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/7/08 03:17 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.96	1.2	4.7	6.2	
Freon 114	0.96	Not Detected	6.7	Not Detected	
Chloromethane	3.8	Not Detected	7.9	Not Detected	
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected	
Bromomethane	0.96	Not Detected	3.7	Not Detected	
Chloroethane	0.96	Not Detected	2.5	Not Detected	
Freon 11	0.96	Not Detected	5.4	Not Detected	
Ethanol	3.8	3.9	7.2	7.3	
Freon 113	0.96	3.2	7.3	24	
1,1-Dichloroethene	0.96	2.9	3.8	11	
Acetone	3.8	6.0	9.1	14	
2-Propanol	3.8	Not Detected	9.4	Not Detected	
Carbon Disulfide	0.96	3.0	3.0	9.2	
Methylene Chloride	0.96	290	3.3	1000	
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Hexane	0.96	Not Detected	3.4	Not Detected	
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.96	2.4	2.8	7.0	
cis-1,2-Dichloroethene	0.96	1.4	3.8	5.7	
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected	
Chloroform	0.96	160	4.7	770	
1,1,1-Trichloroethane	0.96	4.2	5.2	23	
Cyclohexane	0.96	Not Detected	3.3	Not Detected	
Carbon Tetrachloride	0.96	70	6.0	440	
Benzene	0.96	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.96	3.7	3.9	15	
Heptane	0.96	Not Detected	3.9	Not Detected	
Trichloroethene	0.96	180	5.1	990	
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected	
1,4-Dioxane	3.8	Not Detected	14	Not Detected	
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected	
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected	
Toluene	0.96	Not Detected	3.6	Not Detected	
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
1,1,2-Trichloroethane	0.96	6.0	5.2	33	
Tetrachloroethene	0.96	18	6.5	120	

MAD
0065 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14815

Lab ID#: 0809614-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100624**	**Date of Collection: 9/24/08**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/7/08 03:17 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.8	Not Detected	16	Not Detected	
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected	
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected	
Chlorobenzene	0.96	Not Detected	4.4	Not Detected	
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected	
m,p-Xylene	0.96	Not Detected	4.1	Not Detected	
o-Xylene	0.96	Not Detected	4.1	Not Detected	
Styrene	0.96	Not Detected	4.1	Not Detected	
Bromoform	0.96	Not Detected	9.9	Not Detected	
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected	
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected	
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	
1,4-Dichlorobenzene	0.96	1.5	5.7	9.1	J,V7a
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected	
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected	
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected	
Chlorodifluoromethane	3.8	Not Detected U J	14	Not Detected U J	UJ,V7c
Methanol	96	Not Detected	120	Not Detected	
n-Butanol	3.8	23	12	70	
Propylene	3.8	6.0	6.6	10	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	94	70-130

MAD
0066 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14816

Lab ID#: 0809614-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100626**	**Date of Collection: 9/24/08**	
Dil. Factor:	**3.74**	**Date of Analysis: 10/7/08 05:22 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	1.9	Not Detected	9.2	Not Detected	
Freon 114	1.9	Not Detected	13	Not Detected	
Chloromethane	7.5	Not Detected	15	Not Detected	
Vinyl Chloride	1.9	Not Detected	4.8	Not Detected	
1,3-Butadiene	1.9	Not Detected	4.1	Not Detected	
Bromomethane	1.9	Not Detected	7.3	Not Detected	
Chloroethane	1.9	Not Detected	4.9	Not Detected	
Freon 11	1.9	Not Detected	10	Not Detected	
Ethanol	7.5	Not Detected	14	Not Detected	
Freon 113	1.9	3.0	14	23	
1,1-Dichloroethene	1.9	4.2	7.4	17	
Acetone	7.5	10	18	24	
2-Propanol	7.5	Not Detected	18	Not Detected	
Carbon Disulfide	1.9	Not Detected	5.8	Not Detected	
Methylene Chloride	1.9	560	6.5	2000	
Methyl tert-butyl ether	1.9	Not Detected	6.7	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	1.9	Not Detected	7.4	Not Detected	
Hexane	1.9	Not Detected	6.6	Not Detected	
1,1-Dichloroethane	1.9	Not Detected	7.6	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	1.9	Not Detected	5.5	Not Detected	
cis-1,2-Dichloroethene	1.9	Not Detected	7.4	Not Detected	
Tetrahydrofuran	1.9	Not Detected	5.5	Not Detected	
Chloroform	1.9	210	9.1	1000	
1,1,1-Trichloroethane	1.9	2.0	10	11	
Cyclohexane	1.9	Not Detected	6.4	Not Detected	
Carbon Tetrachloride	1.9	83	12	520	
Benzene	1.9	Not Detected	6.0	Not Detected	
1,2-Dichloroethane	1.9	6.1	7.6	24	
Heptane	1.9	Not Detected	7.7	Not Detected	
Trichloroethene	1.9	180	10	990	
1,2-Dichloropropane	1.9	Not Detected	8.6	Not Detected	
1,4-Dioxane	7.5	Not Detected	27	Not Detected	
Bromodichloromethane	1.9	Not Detected	12	Not Detected	
cis-1,3-Dichloropropene	1.9	Not Detected	8.5	Not Detected	
4-Methyl-2-pentanone	1.9	Not Detected	7.7	Not Detected	
Toluene	1.9	Not Detected	7.0	Not Detected	
trans-1,3-Dichloropropene	1.9	Not Detected	8.5	Not Detected	
1,1,2-Trichloroethane	1.9	4.6	10	25	
Tetrachloroethene	1.9	7.7	13	52	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14816

Lab ID#: 0809614-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100626**	**Date of Collection: 9/24/08**	
Dil. Factor:	**3.74**	**Date of Analysis: 10/7/08 05:22 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	7.5	Not Detected	31	Not Detected	
Dibromochloromethane	1.9	Not Detected	16	Not Detected	
1,2-Dibromoethane (EDB)	1.9	Not Detected	14	Not Detected	
Chlorobenzene	1.9	Not Detected	8.6	Not Detected	
Ethyl Benzene	1.9	Not Detected	8.1	Not Detected	
m,p-Xylene	1.9	Not Detected	8.1	Not Detected	
o-Xylene	1.9	Not Detected	8.1	Not Detected	
Styrene	1.9	Not Detected	8.0	Not Detected	
Bromoform	1.9	Not Detected	19	Not Detected	
1,1,2,2-Tetrachloroethane	1.9	Not Detected	13	Not Detected	
4-Ethyltoluene	1.9	Not Detected	9.2	Not Detected	
1,3,5-Trimethylbenzene	1.9	Not Detected	9.2	Not Detected	
1,2,4-Trimethylbenzene	1.9	Not Detected	9.2	Not Detected	
1,3-Dichlorobenzene	1.9	Not Detected	11	Not Detected	
1,4-Dichlorobenzene	1.9	2.1	11	13	J,V7a
alpha-Chlorotoluene	1.9	Not Detected	9.7	Not Detected	
1,2-Dichlorobenzene	1.9	Not Detected	11	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	7.5	Not Detected	56	Not Detected	
Hexachlorobutadiene	7.5	Not Detected	80	Not Detected	
Chlorodifluoromethane	7.5	Not Detected U J	26	Not Detected U J	UJ,V7c
Methanol	190	Not Detected	240	Not Detected	
n-Butanol	7.5	Not Detected	23	Not Detected	
Propylene	7.5	9.2	13	16	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	115	70-130
4-Bromofluorobenzene	94	70-130

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0095 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14818

Lab ID#: 0809614-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100627**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/7/08 06:03 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.96	1.2	4.7	6.2	
Freon 114	0.96	Not Detected	6.7	Not Detected	
Chloromethane	3.8	Not Detected	7.9	Not Detected	
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected	
Bromomethane	0.96	Not Detected	3.7	Not Detected	
Chloroethane	0.96	Not Detected	2.5	Not Detected	
Freon 11	0.96	Not Detected	5.4	Not Detected	
Ethanol	3.8	Not Detected	7.2	Not Detected	
Freon 113	0.96	Not Detected	7.3	Not Detected	
1,1-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Acetone	3.8	Not Detected	9.1	Not Detected	
2-Propanol	3.8	Not Detected	9.4	Not Detected	
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected	
Methylene Chloride	0.96	1.2	3.3	4.3	
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Hexane	0.96	Not Detected	3.4	Not Detected	
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected	
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected	
Chloroform	0.96	210	4.7	1000	
1,1,1-Trichloroethane	0.96	3.9	5.2	21	
Cyclohexane	0.96	Not Detected	3.3	Not Detected	
Carbon Tetrachloride	0.96	11	6.0	67	
Benzene	0.96	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
Heptane	0.96	Not Detected	3.9	Not Detected	
Trichloroethene	0.96	140	5.1	770	
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected	
1,4-Dioxane	3.8	Not Detected	14	Not Detected	
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected	
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected	
Toluene	0.96	Not Detected	3.6	Not Detected	
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
1,1,2-Trichloroethane	0.96	Not Detected	5.2	Not Detected	
Tetrachloroethene	0.96	240	6.5	1700	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14818

Lab ID#: 0809614-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100627**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/7/08 06:03 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.8	Not Detected	16	Not Detected	
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected	
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected	
Chlorobenzene	0.96	Not Detected	4.4	Not Detected	
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected	
m,p-Xylene	0.96	Not Detected	4.1	Not Detected	
o-Xylene	0.96	Not Detected	4.1	Not Detected	
Styrene	0.96	Not Detected	4.1	Not Detected	
Bromoform	0.96	Not Detected	9.9	Not Detected	
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected	
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected	
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected	
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected	
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected	
Chlorodifluoromethane	3.8	Not Detected U J	14	Not Detected U J	UJ,V7c
Methanol	96	Not Detected	120	Not Detected	
n-Butanol	3.8	Not Detected	12	Not Detected	
Propylene	3.8	Not Detected	6.6	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	116	70-130
4-Bromofluorobenzene	88	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14819

Lab ID#: 0809614-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100908**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/9/08 02:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.96	1.3	4.7	6.5	
Freon 114	0.96	Not Detected	6.7	Not Detected	
Chloromethane	3.8	Not Detected	7.9	Not Detected	
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected	
Bromomethane	0.96	Not Detected	3.7	Not Detected	
Chloroethane	0.96	Not Detected	2.5	Not Detected	
Freon 11	0.96	Not Detected	5.4	Not Detected	
Ethanol	3.8	Not Detected	7.2	Not Detected	
Freon 113	0.96	2.0	7.3	15	
1,1-Dichloroethene	0.96	1.4	3.8	5.5	
Acetone	3.8	14	9.1	33	U,V4d
2-Propanol	3.8	Not Detected	9.4	Not Detected	
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected	
Methylene Chloride	0.96	6.8	3.3	24	
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Hexane	0.96	Not Detected	3.4	Not Detected	
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.96	2.7	2.8	8.0	
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected	
Chloroform	0.96	110	4.7	550	
1,1,1-Trichloroethane	0.96	4.7	5.2	26	
Cyclohexane	0.96	Not Detected	3.3	Not Detected	
Carbon Tetrachloride	0.96	21	6.0	130	
Benzene	0.96	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
Heptane	0.96	Not Detected	3.9	Not Detected	
Trichloroethene	0.96	82	5.1	440	
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected	
1,4-Dioxane	3.8	Not Detected	14	Not Detected	
Bromodichloromethane	0.96	1.0	6.4	7.0	
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected	
Toluene	0.96	Not Detected	3.6	Not Detected	
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
1,1,2-Trichloroethane	0.96	Not Detected	5.2	Not Detected	
Tetrachloroethene	0.96	44	6.5	300	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14819

Lab ID#: 0809614-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100908**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/9/08 02:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.8	Not Detected	16	Not Detected	
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected	
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected	
Chlorobenzene	0.96	Not Detected	4.4	Not Detected	
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected	
m,p-Xylene	0.96	Not Detected	4.1	Not Detected	
o-Xylene	0.96	Not Detected	4.1	Not Detected	
Styrene	0.96	Not Detected	4.1	Not Detected	
Bromoform	0.96	Not Detected	9.9	Not Detected	
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected	
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected	
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected	
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected	UJ,V12a
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected	UJ,V12a
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected	
Methanol	96	Not Detected	120	Not Detected	
n-Butanol	3.8	Not Detected	12	Not Detected	
Propylene	3.8	4.9	6.6	8.4	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	92	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14820

Lab ID#: 0809614-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100909**	**Date of Collection:**	**9/25/08**
Dil. Factor:	**2.01**	**Date of Analysis:**	**10/9/08 03:00 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	1.0	1.4	5.0	7.1	
Freon 114	1.0	Not Detected	7.0	Not Detected	
Chloromethane	4.0	Not Detected	8.3	Not Detected	
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected	
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected	
Bromomethane	1.0	Not Detected	3.9	Not Detected	
Chloroethane	1.0	Not Detected	2.6	Not Detected	
Freon 11	1.0	Not Detected	5.6	Not Detected	
Ethanol	4.0	Not Detected	7.6	Not Detected	
Freon 113	1.0	3.7	7.7	29	
1,1-Dichloroethene	1.0	2.8	4.0	11	
Acetone	4.0	4.6	9.5	11	U,V4d
2-Propanol	4.0	Not Detected	9.9	Not Detected	
Carbon Disulfide	1.0	Not Detected	3.1	Not Detected	
Methylene Chloride	1.0	14	3.5	49	
Methyl tert-butyl ether	1.0	Not Detected	3.6	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected	
Hexane	1.0	Not Detected	3.5	Not Detected	
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	1.0	Not Detected	3.0	Not Detected	
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected	
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected	
Chloroform	1.0	120	4.9	580	
1,1,1-Trichloroethane	1.0	5.2	5.5	28	
Cyclohexane	1.0	Not Detected	3.4	Not Detected	
Carbon Tetrachloride	1.0	45	6.3	280	
Benzene	1.0	Not Detected	3.2	Not Detected	
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected	
Heptane	1.0	Not Detected	4.1	Not Detected	
Trichloroethene	1.0	110	5.4	600	
1,2-Dichloropropane	1.0	Not Detected	4.6	Not Detected	
1,4-Dioxane	4.0	Not Detected	14	Not Detected	
Bromodichloromethane	1.0	Not Detected	6.7	Not Detected	
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected	
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected	
Toluene	1.0	Not Detected	3.8	Not Detected	
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected	
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected	
Tetrachloroethene	1.0	34	6.8	230	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14820

Lab ID#: 0809614-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100909**	**Date of Collection: 9/25/08**	
Dil. Factor:	**2.01**	**Date of Analysis: 10/9/08 03:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	4.0	Not Detected	16	Not Detected	
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected	
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.7	Not Detected	
Chlorobenzene	1.0	Not Detected	4.6	Not Detected	
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected	
m,p-Xylene	1.0	Not Detected	4.4	Not Detected	
o-Xylene	1.0	Not Detected	4.4	Not Detected	
Styrene	1.0	Not Detected	4.3	Not Detected	
Bromoform	1.0	Not Detected	10	Not Detected	
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected	
4-Ethyltoluene	1.0	Not Detected	4.9	Not Detected	
1,3,5-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected	
1,2,4-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected	
1,3-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected	
1,4-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected	UJ,V7a
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected	
1,2-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected	UJ,V12a
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected	UJ,V12a
Chlorodifluoromethane	4.0	Not Detected	14	Not Detected	
Methanol	100	Not Detected	130	Not Detected	
n-Butanol	4.0	Not Detected	12	Not Detected	
Propylene	4.0	7.7	6.9	13	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	95	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14821

Lab ID#: 0809614-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100910**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.87**	**Date of Analysis: 10/9/08 03:39 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.94	1.8	4.6	8.6	
Freon 114	0.94	Not Detected	6.5	Not Detected	
Chloromethane	3.7	Not Detected	7.7	Not Detected	
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.94	Not Detected	2.1	Not Detected	
Bromomethane	0.94	Not Detected	3.6	Not Detected	
Chloroethane	0.94	Not Detected	2.5	Not Detected	
Freon 11	0.94	Not Detected	5.2	Not Detected	
Ethanol	3.7	Not Detected	7.0	Not Detected	
Freon 113	0.94	6.4	7.2	49	
1,1-Dichloroethene	0.94	5.7	3.7	23	
Acetone	3.7	Not Detected	8.9	Not Detected	
2-Propanol	3.7	Not Detected	9.2	Not Detected	
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected	
Methylene Chloride	0.94	87	3.2	300	
Methyl tert-butyl ether	0.94	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected	
Hexane	0.94	Not Detected	3.3	Not Detected	
1,1-Dichloroethane	0.94	Not Detected	3.8	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.94	Not Detected	2.8	Not Detected	
cis-1,2-Dichloroethene	0.94	0.95	3.7	3.8	
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected	
Chloroform	0.94	130	4.6	620	
1,1,1-Trichloroethane	0.94	4.6	5.1	25	
Cyclohexane	0.94	Not Detected	3.2	Not Detected	
Carbon Tetrachloride	0.94	98	5.9	620	
Benzene	0.94	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.94	1.3	3.8	5.3	
Heptane	0.94	Not Detected	3.8	Not Detected	
Trichloroethene	0.94	200	5.0	1100	
1,2-Dichloropropane	0.94	Not Detected	4.3	Not Detected	
1,4-Dioxane	3.7	Not Detected	13	Not Detected	
Bromodichloromethane	0.94	1.4	6.3	9.7	
cis-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected	
4-Methyl-2-pentanone	0.94	Not Detected	3.8	Not Detected	
Toluene	0.94	1.0	3.5	3.9	
trans-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected	
1,1,2-Trichloroethane	0.94	3.7	5.1	20	
Tetrachloroethene	0.94	23	6.3	160	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14821

Lab ID#: 0809614-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100910**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.87**	**Date of Analysis: 10/9/08 03:39 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.7	Not Detected	15	Not Detected	
Dibromochloromethane	0.94	Not Detected	8.0	Not Detected	
1,2-Dibromoethane (EDB)	0.94	Not Detected	7.2	Not Detected	
Chlorobenzene	0.94	Not Detected	4.3	Not Detected	
Ethyl Benzene	0.94	Not Detected	4.0	Not Detected	
m,p-Xylene	0.94	Not Detected	4.1	Not Detected	
o-Xylene	0.94	Not Detected	4.1	Not Detected	
Styrene	0.94	Not Detected	4.0	Not Detected	
Bromoform	0.94	Not Detected	9.7	Not Detected	
1,1,2,2-Tetrachloroethane	0.94	Not Detected	6.4	Not Detected	
4-Ethyltoluene	0.94	Not Detected	4.6	Not Detected	
1,3,5-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected	
1,2,4-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected	
1,3-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	
1,4-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.94	Not Detected	4.8	Not Detected	
1,2-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.7	Not Detected	28	Not Detected	UJ,V12a
Hexachlorobutadiene	3.7	Not Detected	40	Not Detected	UJ,V12a
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected	
Methanol	94	Not Detected	120	Not Detected	
n-Butanol	3.7	Not Detected	11	Not Detected	
Propylene	3.7	12	6.4	20	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	93	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14822

Lab ID#: 0809614-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100913**	**Date of Collection:**	**9/25/08**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/9/08 05:43 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.96	Not Detected	4.7	Not Detected	
Freon 114	0.96	Not Detected	6.7	Not Detected	
Chloromethane	3.8	Not Detected	7.9	Not Detected	
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected	
Bromomethane	0.96	Not Detected	3.7	Not Detected	
Chloroethane	0.96	Not Detected	2.5	Not Detected	
Freon 11	0.96	Not Detected	5.4	Not Detected	
Ethanol	3.8	Not Detected	7.2	Not Detected	
Freon 113	0.96	2.2	7.3	17	
1,1-Dichloroethene	0.96	8.1	3.8	32	
Acetone	3.8	Not Detected	9.1	Not Detected	
2-Propanol	3.8	Not Detected	9.4	Not Detected	
Carbon Disulfide	0.96	5.6	3.0	18	
Methylene Chloride	0.96	190	3.3	680	
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Hexane	0.96	Not Detected	3.4	Not Detected	
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected	
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected	
Chloroform	0.96	110	4.7	520	
1,1,1-Trichloroethane	0.96	1.6	5.2	9.0	
Cyclohexane	0.96	Not Detected	3.3	Not Detected	
Carbon Tetrachloride	0.96	60	6.0	380	
Benzene	0.96	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.96	3.0	3.9	12	
Heptane	0.96	Not Detected	3.9	Not Detected	
Trichloroethene	0.96	160	5.1	860	
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected	
1,4-Dioxane	3.8	Not Detected	14	Not Detected	
Bromodichloromethane	0.96	1.3	6.4	8.4	
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected	
Toluene	0.96	1.4	3.6	5.4	
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
1,1,2-Trichloroethane	0.96	15	5.2	81	
Tetrachloroethene	0.96	9.2	6.5	63	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14822

Lab ID#: 0809614-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100913**	**Date of Collection:**	**9/25/08**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/9/08 05:43 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.8	Not Detected	16	Not Detected	
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected	
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected	
Chlorobenzene	0.96	Not Detected	4.4	Not Detected	
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected	
m,p-Xylene	0.96	Not Detected	4.1	Not Detected	
o-Xylene	0.96	Not Detected	4.1	Not Detected	
Styrene	0.96	Not Detected	4.1	Not Detected	
Bromoform	0.96	Not Detected	9.9	Not Detected	
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected	
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected	
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected	
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected	UJ,V12a
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected	UJ,V12a
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected	
Methanol	96	Not Detected	120	Not Detected	
n-Butanol	3.8	Not Detected	12	Not Detected	
Propylene	3.8	6.2	6.6	11	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14824

Lab ID#: 0809614-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100912**	**Date of Collection: 9/25/08**	
Dil. Factor:	**2.17**	**Date of Analysis: 10/9/08 04:59 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	1.1	Not Detected	5.4	Not Detected	
Freon 114	1.1	Not Detected	7.6	Not Detected	
Chloromethane	4.3	Not Detected	9.0	Not Detected	
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected	
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected	
Bromomethane	1.1	Not Detected	4.2	Not Detected	
Chloroethane	1.1	Not Detected	2.9	Not Detected	
Freon 11	1.1	Not Detected	6.1	Not Detected	
Ethanol	4.3	Not Detected	8.2	Not Detected	
Freon 113	1.1	Not Detected	8.3	Not Detected	
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected	
Acetone	4.3	7.2	10	17	
2-Propanol	4.3	Not Detected	11	Not Detected	
Carbon Disulfide	1.1	Not Detected	3.4	Not Detected	
Methylene Chloride	1.1	Not Detected	3.8	Not Detected	
Methyl tert-butyl ether	1.1	Not Detected	3.9	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected	
Hexane	1.1	Not Detected	3.8	Not Detected	
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.2	Not Detected	
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected	
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected	
Chloroform	1.1	Not Detected	5.3	Not Detected	
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected	
Cyclohexane	1.1	Not Detected	3.7	Not Detected	
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected	
Benzene	1.1	Not Detected	3.5	Not Detected	
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected	
Heptane	1.1	Not Detected	4.4	Not Detected	
Trichloroethene	1.1	Not Detected	5.8	Not Detected	
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected	
1,4-Dioxane	4.3	Not Detected	16	Not Detected	
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected	
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected	
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected	
Toluene	1.1	Not Detected	4.1	Not Detected	
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected	
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected	
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14824

Lab ID#: 0809614-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100912**	**Date of Collection: 9/25/08**	
Dil. Factor:	**2.17**	**Date of Analysis: 10/9/08 04:59 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	4.3	Not Detected	18	Not Detected	
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected	
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.3	Not Detected	
Chlorobenzene	1.1	Not Detected	5.0	Not Detected	
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected	
m,p-Xylene	1.1	Not Detected	4.7	Not Detected	
o-Xylene	1.1	Not Detected	4.7	Not Detected	
Styrene	1.1	Not Detected	4.6	Not Detected	
Bromoform	1.1	Not Detected	11	Not Detected	
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.4	Not Detected	
4-Ethyltoluene	1.1	Not Detected	5.3	Not Detected	
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected	
1,2,4-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected	
1,3-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected	
1,4-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected	UJ,V7a
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected	
1,2-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected	UJ,V12a
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected	UJ,V12a
Chlorodifluoromethane	4.3	Not Detected	15	Not Detected	
Methanol	110	Not Detected	140	Not Detected	
n-Butanol	4.3	Not Detected	13	Not Detected	
Propylene	4.3	Not Detected	7.5	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14825

Lab ID#: 0809614-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100914**	**Date of Collection:**	**9/25/08**
Dil. Factor:	**1.87**	**Date of Analysis:**	**10/9/08 06:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.94	Not Detected	4.6	Not Detected	
Freon 114	0.94	Not Detected	6.5	Not Detected	
Chloromethane	3.7	Not Detected	7.7	Not Detected	
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.94	Not Detected	2.1	Not Detected	
Bromomethane	0.94	Not Detected	3.6	Not Detected	
Chloroethane	0.94	Not Detected	2.5	Not Detected	
Freon 11	0.94	Not Detected	5.2	Not Detected	
Ethanol	3.7	Not Detected	7.0	Not Detected	
Freon 113	0.94	2.7	7.2	21	
1,1-Dichloroethene	0.94	10	3.7	41	
Acetone	3.7	19	8.9	44	U,V4d
2-Propanol	3.7	Not Detected	9.2	Not Detected	
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected	
Methylene Chloride	0.94	220	3.2	780	
Methyl tert-butyl ether	0.94	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected	
Hexane	0.94	Not Detected	3.3	Not Detected	
1,1-Dichloroethane	0.94	Not Detected	3.8	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.94	2.9	2.8	8.5	
cis-1,2-Dichloroethene	0.94	1.0	3.7	4.0	
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected	
Chloroform	0.94	130	4.6	650	
1,1,1-Trichloroethane	0.94	2.1	5.1	11	
Cyclohexane	0.94	Not Detected	3.2	Not Detected	
Carbon Tetrachloride	0.94	78	5.9	490	
Benzene	0.94	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.94	3.4	3.8	14	
Heptane	0.94	Not Detected	3.8	Not Detected	
Trichloroethene	0.94	190	5.0	1000	
1,2-Dichloropropane	0.94	Not Detected	4.3	Not Detected	
1,4-Dioxane	3.7	Not Detected	13	Not Detected	
Bromodichloromethane	0.94	1.5	6.3	10	
cis-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected	
4-Methyl-2-pentanone	0.94	Not Detected	3.8	Not Detected	
Toluene	0.94	1.4	3.5	5.1	
trans-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected	
1,1,2-Trichloroethane	0.94	17	5.1	93	
Tetrachloroethene	0.94	11	6.3	77	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14825

Lab ID#: 0809614-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100914**	**Date of Collection: 9/25/08**	
Dil. Factor:	**1.87**	**Date of Analysis: 10/9/08 06:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.7	Not Detected	15	Not Detected	
Dibromochloromethane	0.94	Not Detected	8.0	Not Detected	
1,2-Dibromoethane (EDB)	0.94	Not Detected	7.2	Not Detected	
Chlorobenzene	0.94	Not Detected	4.3	Not Detected	
Ethyl Benzene	0.94	Not Detected	4.0	Not Detected	
m,p-Xylene	0.94	Not Detected	4.1	Not Detected	
o-Xylene	0.94	Not Detected	4.1	Not Detected	
Styrene	0.94	Not Detected	4.0	Not Detected	
Bromoform	0.94	Not Detected	9.7	Not Detected	
1,1,2,2-Tetrachloroethane	0.94	Not Detected	6.4	Not Detected	
4-Ethyltoluene	0.94	Not Detected	4.6	Not Detected	
1,3,5-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected	
1,2,4-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected	
1,3-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	
1,4-Dichlorobenzene	0.94	0.93 J	5.6	5.6 J	J,V7a
alpha-Chlorotoluene	0.94	Not Detected	4.8	Not Detected	
1,2-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.7	Not Detected	28	Not Detected	UJ,V12a
Hexachlorobutadiene	3.7	Not Detected	40	Not Detected	UJ,V12a
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected	
Methanol	94	Not Detected	120	Not Detected	
n-Butanol	3.7	Not Detected	11	Not Detected	
Propylene	3.7	7.5	6.4	13	

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	95	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14826

Lab ID#: 0809614-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100915**	**Date of Collection:**	**9/24/08**
Dil. Factor:	**2.12**	**Date of Analysis:**	**10/9/08 07:01 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	1.1	Not Detected	5.2	Not Detected	
Freon 114	1.1	Not Detected	7.4	Not Detected	
Chloromethane	4.2	Not Detected	8.8	Not Detected	
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected	
1,3-Butadiene	1.1	Not Detected	2.3	Not Detected	
Bromomethane	1.1	Not Detected	4.1	Not Detected	
Chloroethane	1.1	Not Detected	2.8	Not Detected	
Freon 11	1.1	Not Detected	6.0	Not Detected	
Ethanol	4.2	Not Detected	8.0	Not Detected	
Freon 113	1.1	Not Detected	8.1	Not Detected	
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected	
Acetone	4.2	Not Detected	10	Not Detected	
2-Propanol	4.2	Not Detected	10	Not Detected	
Carbon Disulfide	1.1	Not Detected	3.3	Not Detected	
Methylene Chloride	1.1	Not Detected	3.7	Not Detected	
Methyl tert-butyl ether	1.1	Not Detected	3.8	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected	
Hexane	1.1	Not Detected	3.7	Not Detected	
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.1	Not Detected	
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected	
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected	
Chloroform	1.1	Not Detected	5.2	Not Detected	
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected	
Cyclohexane	1.1	Not Detected	3.6	Not Detected	
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected	
Benzene	1.1	Not Detected	3.4	Not Detected	
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected	
Heptane	1.1	Not Detected	4.3	Not Detected	
Trichloroethene	1.1	Not Detected	5.7	Not Detected	
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected	
1,4-Dioxane	4.2	Not Detected	15	Not Detected	
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected	
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected	
4-Methyl-2-pentanone	1.1	Not Detected	4.3	Not Detected	
Toluene	1.1	Not Detected	4.0	Not Detected	
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected	
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected	
Tetrachloroethene	1.1	Not Detected	7.2	Not Detected	

MAD
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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14826

Lab ID#: 0809614-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100915**	**Date of Collection: 9/24/08**	
Dil. Factor:	**2.12**	**Date of Analysis: 10/9/08 07:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	4.2	Not Detected	17	Not Detected	
Dibromochloromethane	1.1	Not Detected	9.0	Not Detected	
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.1	Not Detected	
Chlorobenzene	1.1	Not Detected	4.9	Not Detected	
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected	
m,p-Xylene	1.1	Not Detected	4.6	Not Detected	
o-Xylene	1.1	Not Detected	4.6	Not Detected	
Styrene	1.1	Not Detected	4.5	Not Detected	
Bromoform	1.1	Not Detected	11	Not Detected	
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected	
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected	
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected	
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected	
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected	
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected	UJ,V7a
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected	
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected	UJ,V12a
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected	UJ,V12a
Chlorodifluoromethane	4.2	Not Detected	15	Not Detected	
Methanol	110	Not Detected	140	Not Detected	
n-Butanol	4.2	Not Detected	13	Not Detected	
Propylene	4.2	Not Detected	7.3	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	92	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14828

Lab ID#: 0809614-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100917**	**Date of Collection: 9/23/08**	
Dil. Factor:	**2.33**	**Date of Analysis: 10/9/08 08:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	1.2	2.6	5.8	13	
Freon 114	1.2	Not Detected	8.1	Not Detected	
Chloromethane	4.7	Not Detected	9.6	Not Detected	
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected	
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected	
Bromomethane	1.2	Not Detected	4.5	Not Detected	
Chloroethane	1.2	Not Detected	3.1	Not Detected	
Freon 11	1.2	Not Detected	6.5	Not Detected	
Ethanol	4.7	Not Detected	8.8	Not Detected	
Freon 113	1.2	Not Detected	8.9	Not Detected	
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected	
Acetone	4.7	Not Detected	11	Not Detected	
2-Propanol	4.7	Not Detected	11	Not Detected	
Carbon Disulfide	1.2	Not Detected	3.6	Not Detected	
Methylene Chloride	1.2	5.6	4.0	19	
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected	
Hexane	1.2	Not Detected	4.1	Not Detected	
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	1.2	Not Detected	3.4	Not Detected	
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected	
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected	
Chloroform	1.2	82	5.7	400	
1,1,1-Trichloroethane	1.2	5.0	6.4	27	
Cyclohexane	1.2	Not Detected	4.0	Not Detected	
Carbon Tetrachloride	1.2	24	7.3	150	
Benzene	1.2	Not Detected	3.7	Not Detected	
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected	
Heptane	1.2	Not Detected	4.8	Not Detected	
Trichloroethene	1.2	190	6.3	1000	
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected	
1,4-Dioxane	4.7	Not Detected	17	Not Detected	
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected	
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected	
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected	
Toluene	1.2	Not Detected	4.4	Not Detected	
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected	
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected	
Tetrachloroethene	1.2	400	7.9	2700	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14828

Lab ID#: 0809614-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100917**	**Date of Collection: 9/23/08**	
Dil. Factor:	**2.33**	**Date of Analysis: 10/9/08 08:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	4.7	Not Detected	19	Not Detected	
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected	
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected	
Chlorobenzene	1.2	Not Detected	5.4	Not Detected	
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected	
m,p-Xylene	1.2	Not Detected	5.0	Not Detected	
o-Xylene	1.2	Not Detected	5.0	Not Detected	
Styrene	1.2	Not Detected	5.0	Not Detected	
Bromoform	1.2	Not Detected	12	Not Detected	
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected	
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected	
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected	
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected	
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected	
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected	UJ,V7a
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected	
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	4.7	Not Detected	34	Not Detected	UJ,V12a
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected	UJ,V12a
Chlorodifluoromethane	4.7	Not Detected	16	Not Detected	
Methanol	120	Not Detected	150	Not Detected	
n-Butanol	4.7	Not Detected	14	Not Detected	
Propylene	4.7	Not Detected	8.0	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	93	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14829

Lab ID#: 0809614-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100918**	**Date of Collection:**	**9/23/08**
Dil. Factor:	**1.87**	**Date of Analysis:**	**10/9/08 09:12 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.94	2.0	4.6	9.8	
Freon 114	0.94	Not Detected	6.5	Not Detected	
Chloromethane	3.7	Not Detected	7.7	Not Detected	
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.94	Not Detected	2.1	Not Detected	
Bromomethane	0.94	Not Detected	3.6	Not Detected	
Chloroethane	0.94	Not Detected	2.5	Not Detected	
Freon 11	0.94	Not Detected	5.2	Not Detected	
Ethanol	3.7	Not Detected	7.0	Not Detected	
Freon 113	0.94	1.0	7.2	7.7	
1,1-Dichloroethene	0.94	Not Detected	3.7	Not Detected	
Acetone	3.7	4.5	8.9	11	
2-Propanol	3.7	Not Detected	9.2	Not Detected	
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected	
Methylene Chloride	0.94	57	3.2	200	
Methyl tert-butyl ether	0.94	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected	
Hexane	0.94	Not Detected	3.3	Not Detected	
1,1-Dichloroethane	0.94	Not Detected	3.8	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.94	Not Detected	2.8	Not Detected	
cis-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected	
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected	
Chloroform	0.94	77	4.6	380	
1,1,1-Trichloroethane	0.94	4.7	5.1	26	
Cyclohexane	0.94	Not Detected	3.2	Not Detected	
Carbon Tetrachloride	0.94	27	5.9	170	
Benzene	0.94	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.94	0.94	3.8	3.8	
Heptane	0.94	Not Detected	3.8	Not Detected	
Trichloroethene	0.94	99	5.0	530	
1,2-Dichloropropane	0.94	Not Detected	4.3	Not Detected	
1,4-Dioxane	3.7	Not Detected	13	Not Detected	
Bromodichloromethane	0.94	Not Detected	6.3	Not Detected	
cis-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected	
4-Methyl-2-pentanone	0.94	Not Detected	3.8	Not Detected	
Toluene	0.94	Not Detected	3.5	Not Detected	
trans-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected	
1,1,2-Trichloroethane	0.94	Not Detected	5.1	Not Detected	
Tetrachloroethene	0.94	62	6.3	420	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14829

Lab ID#: 0809614-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100918**	**Date of Collection: 9/23/08**	
Dil. Factor:	**1.87**	**Date of Analysis: 10/9/08 09:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.7	Not Detected	15	Not Detected	
Dibromochloromethane	0.94	Not Detected	8.0	Not Detected	
1,2-Dibromoethane (EDB)	0.94	Not Detected	7.2	Not Detected	
Chlorobenzene	0.94	Not Detected	4.3	Not Detected	
Ethyl Benzene	0.94	Not Detected	4.0	Not Detected	
m,p-Xylene	0.94	Not Detected	4.1	Not Detected	
o-Xylene	0.94	Not Detected	4.1	Not Detected	
Styrene	0.94	Not Detected	4.0	Not Detected	
Bromoform	0.94	Not Detected	9.7	Not Detected	
1,1,2,2-Tetrachloroethane	0.94	Not Detected	6.4	Not Detected	
4-Ethyltoluene	0.94	Not Detected	4.6	Not Detected	
1,3,5-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected	
1,2,4-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected	
1,3-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	
1,4-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.94	Not Detected	4.8	Not Detected	
1,2-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.7	Not Detected	28	Not Detected	UJ,V12a
Hexachlorobutadiene	3.7	Not Detected	40	Not Detected	UJ,V12a
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected	
Methanol	94	Not Detected	120	Not Detected	
n-Butanol	3.7	Not Detected	11	Not Detected	
Propylene	3.7	4.0	6.4	6.9	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	94	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14830

Lab ID#: 0809614-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100919**	**Date of Collection:**	**9/23/08**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/9/08 09:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.96	2.0	4.7	9.8	
Freon 114	0.96	Not Detected	6.7	Not Detected	
Chloromethane	3.8	Not Detected	7.9	Not Detected	
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected	
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected	
Bromomethane	0.96	Not Detected	3.7	Not Detected	
Chloroethane	0.96	Not Detected	2.5	Not Detected	
Freon 11	0.96	Not Detected	5.4	Not Detected	
Ethanol	3.8	Not Detected	7.2	Not Detected	
Freon 113	0.96	1.4	7.3	10	
1,1-Dichloroethene	0.96	1.3	3.8	5.2	
Acetone	3.8	5.3	9.1	12	
2-Propanol	3.8	Not Detected	9.4	Not Detected	
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected	
Methylene Chloride	0.96	190	3.3	660	
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Hexane	0.96	Not Detected	3.4	Not Detected	
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected	
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected	
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected	
Chloroform	0.96	98	4.7	480	
1,1,1-Trichloroethane	0.96	4.3	5.2	24	
Cyclohexane	0.96	Not Detected	3.3	Not Detected	
Carbon Tetrachloride	0.96	52	6.0	320	
Benzene	0.96	Not Detected	3.0	Not Detected	
1,2-Dichloroethane	0.96	2.8	3.9	11	
Heptane	0.96	Not Detected	3.9	Not Detected	
Trichloroethene	0.96	120	5.1	640	
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected	
1,4-Dioxane	3.8	Not Detected	14	Not Detected	
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected	
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected	
Toluene	0.96	Not Detected	3.6	Not Detected	
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected	
1,1,2-Trichloroethane	0.96	Not Detected	5.2	Not Detected	
Tetrachloroethene	0.96	29	6.5	200	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14830

Lab ID#: 0809614-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100919**	**Date of Collection: 9/23/08**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/9/08 09:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.8	Not Detected	16	Not Detected	
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected	
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected	
Chlorobenzene	0.96	Not Detected	4.4	Not Detected	
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected	
m,p-Xylene	0.96	Not Detected	4.1	Not Detected	
o-Xylene	0.96	Not Detected	4.1	Not Detected	
Styrene	0.96	Not Detected	4.1	Not Detected	
Bromoform	0.96	Not Detected	9.9	Not Detected	
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected	
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected	
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected	
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected	
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected	UJ,V12a
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected	UJ,V12a
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected	
Methanol	96	Not Detected	120	Not Detected	
n-Butanol	3.8	Not Detected	12	Not Detected	
Propylene	3.8	7.5	6.6	13	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130

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0322 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14831

Lab ID#: 0809614-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100923**	**Date of Collection: 9/23/08**	
Dil. Factor:	**2.61**	**Date of Analysis: 10/10/08 12:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	1.3	1.6	6.4	8.1	
Freon 114	1.3	Not Detected	9.1	Not Detected	
Chloromethane	5.2	Not Detected	11	Not Detected	
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected	
1,3-Butadiene	1.3	Not Detected	2.9	Not Detected	
Bromomethane	1.3	Not Detected	5.1	Not Detected	
Chloroethane	1.3	Not Detected	3.4	Not Detected	
Freon 11	1.3	Not Detected	7.3	Not Detected	
Ethanol	5.2	Not Detected	9.8	Not Detected	
Freon 113	1.3	1.5	10	11	
1,1-Dichloroethene	1.3	2.0	5.2	8.0	
Acetone	5.2	Not Detected	12	Not Detected	
2-Propanol	5.2	Not Detected	13	Not Detected	
Carbon Disulfide	1.3	Not Detected	4.1	Not Detected	
Methylene Chloride	1.3	430	4.5	1500	
Methyl tert-butyl ether	1.3	Not Detected	4.7	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected	
Hexane	1.3	Not Detected	4.6	Not Detected	
1,1-Dichloroethane	1.3	Not Detected	5.3	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.8	Not Detected	
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected	
Tetrahydrofuran	1.3	Not Detected	3.8	Not Detected	
Chloroform	1.3	140	6.4	680	
1,1,1-Trichloroethane	1.3	2.0	7.1	11	
Cyclohexane	1.3	Not Detected	4.5	Not Detected	
Carbon Tetrachloride	1.3	69	8.2	430	
Benzene	1.3	Not Detected	4.2	Not Detected	
1,2-Dichloroethane	1.3	5.0	5.3	20	
Heptane	1.3	Not Detected	5.3	Not Detected	
Trichloroethene	1.3	140	7.0	770	
1,2-Dichloropropane	1.3	Not Detected	6.0	Not Detected	
1,4-Dioxane	5.2	Not Detected	19	Not Detected	
Bromodichloromethane	1.3	Not Detected	8.7	Not Detected	
cis-1,3-Dichloropropene	1.3	Not Detected	5.9	Not Detected	
4-Methyl-2-pentanone	1.3	Not Detected	5.3	Not Detected	
Toluene	1.3	Not Detected	4.9	Not Detected	
trans-1,3-Dichloropropene	1.3	Not Detected	5.9	Not Detected	
1,1,2-Trichloroethane	1.3	Not Detected	7.1	Not Detected	
Tetrachloroethene	1.3	10	8.8	70	

MAD
0342 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14831

Lab ID#: 0809614-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100923**	**Date of Collection: 9/23/08**	
Dil. Factor:	**2.61**	**Date of Analysis: 10/10/08 12:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	5.2	Not Detected	21	Not Detected	
Dibromochloromethane	1.3	Not Detected	11	Not Detected	
1,2-Dibromoethane (EDB)	1.3	Not Detected	10	Not Detected	
Chlorobenzene	1.3	Not Detected	6.0	Not Detected	
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected	
m,p-Xylene	1.3	Not Detected	5.7	Not Detected	
o-Xylene	1.3	Not Detected	5.7	Not Detected	
Styrene	1.3	Not Detected	5.6	Not Detected	
Bromoform	1.3	Not Detected	13	Not Detected	
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.0	Not Detected	
4-Ethyltoluene	1.3	Not Detected	6.4	Not Detected	
1,3,5-Trimethylbenzene	1.3	Not Detected	6.4	Not Detected	
1,2,4-Trimethylbenzene	1.3	Not Detected	6.4	Not Detected	
1,3-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected	
1,4-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected	UJ,V7a
alpha-Chlorotoluene	1.3	Not Detected	6.8	Not Detected	
1,2-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	5.2	Not Detected	39	Not Detected	UJ,V12a
Hexachlorobutadiene	5.2	Not Detected	56	Not Detected	UJ,V12a
Chlorodifluoromethane	5.2	Not Detected	18	Not Detected	
Methanol	130	Not Detected	170	Not Detected	
n-Butanol	5.2	Not Detected	16	Not Detected	
Propylene	5.2	11	9.0	19	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	94	70-130

MAD
0343 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14832

Lab ID#: 0809614-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100924**	**Date of Collection:**	**9/23/08**
Dil. Factor:	**4.02**	**Date of Analysis:**	**10/10/08 01:07 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	2.0	Not Detected	9.9	Not Detected	
Freon 114	2.0	Not Detected	14	Not Detected	
Chloromethane	8.0	Not Detected	17	Not Detected	
Vinyl Chloride	2.0	Not Detected	5.1	Not Detected	
1,3-Butadiene	2.0	Not Detected	4.4	Not Detected	
Bromomethane	2.0	Not Detected	7.8	Not Detected	
Chloroethane	2.0	Not Detected	5.3	Not Detected	
Freon 11	2.0	Not Detected	11	Not Detected	
Ethanol	8.0	Not Detected	15	Not Detected	
Freon 113	2.0	Not Detected	15	Not Detected	
1,1-Dichloroethene	2.0	3.2	8.0	13	
Acetone	8.0	Not Detected	19	Not Detected	
2-Propanol	8.0	Not Detected	20	Not Detected	
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected	
Methylene Chloride	2.0	720	7.0	2500	
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected	
Hexane	2.0	Not Detected	7.1	Not Detected	
1,1-Dichloroethane	2.0	Not Detected	8.1	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected	
cis-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected	
Tetrahydrofuran	2.0	Not Detected	5.9	Not Detected	
Chloroform	2.0	230	9.8	1100	
1,1,1-Trichloroethane	2.0	Not Detected	11	Not Detected	
Cyclohexane	2.0	Not Detected	6.9	Not Detected	
Carbon Tetrachloride	2.0	80	13	500	
Benzene	2.0	Not Detected	6.4	Not Detected	
1,2-Dichloroethane	2.0	8.8	8.1	36	
Heptane	2.0	Not Detected	8.2	Not Detected	
Trichloroethene	2.0	170	11	920	
1,2-Dichloropropane	2.0	Not Detected	9.3	Not Detected	
1,4-Dioxane	8.0	Not Detected	29	Not Detected	
Bromodichloromethane	2.0	Not Detected	13	Not Detected	
cis-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected	
4-Methyl-2-pentanone	2.0	Not Detected	8.2	Not Detected	
Toluene	2.0	Not Detected	7.6	Not Detected	
trans-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected	
1,1,2-Trichloroethane	2.0	Not Detected	11	Not Detected	
Tetrachloroethene	2.0	4.5	14	31	

MAD
0362 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14832

Lab ID#: 0809614-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100924**	**Date of Collection: 9/23/08**	
Dil. Factor:	**4.02**	**Date of Analysis: 10/10/08 01:07 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	8.0	Not Detected	33	Not Detected	
Dibromochloromethane	2.0	Not Detected	17	Not Detected	
1,2-Dibromoethane (EDB)	2.0	Not Detected	15	Not Detected	
Chlorobenzene	2.0	Not Detected	9.2	Not Detected	
Ethyl Benzene	2.0	Not Detected	8.7	Not Detected	
m,p-Xylene	2.0	Not Detected	8.7	Not Detected	
o-Xylene	2.0	Not Detected	8.7	Not Detected	
Styrene	2.0	Not Detected	8.6	Not Detected	
Bromoform	2.0	Not Detected	21	Not Detected	
1,1,2,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected	
4-Ethyltoluene	2.0	Not Detected	9.9	Not Detected	
1,3,5-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected	
1,2,4-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected	
1,3-Dichlorobenzene	2.0	Not Detected	12	Not Detected	
1,4-Dichlorobenzene	2.0	Not Detected	12	Not Detected	UJ,V7a
alpha-Chlorotoluene	2.0	Not Detected	10	Not Detected	
1,2-Dichlorobenzene	2.0	Not Detected	12	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	8.0	Not Detected	60	Not Detected	UJ,V12a
Hexachlorobutadiene	8.0	Not Detected	86	Not Detected	UJ,V12a
Chlorodifluoromethane	8.0	Not Detected	28	Not Detected	
Methanol	200	Not Detected	260	Not Detected	
n-Butanol	8.0	Not Detected	24	Not Detected	
Propylene	8.0	12	14	21	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	92	70-130

MAD
0363 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14833

Lab ID#: 0809614-18A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100925**	**Date of Collection: 9/23/08**	
Dil. Factor:	**4.02**	**Date of Analysis: 10/10/08 01:46 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	2.0	Not Detected	9.9	Not Detected	
Freon 114	2.0	Not Detected	14	Not Detected	
Chloromethane	8.0	Not Detected	17	Not Detected	
Vinyl Chloride	2.0	Not Detected	5.1	Not Detected	
1,3-Butadiene	2.0	Not Detected	4.4	Not Detected	
Bromomethane	2.0	Not Detected	7.8	Not Detected	
Chloroethane	2.0	Not Detected	5.3	Not Detected	
Freon 11	2.0	Not Detected	11	Not Detected	
Ethanol	8.0	Not Detected	15	Not Detected	
Freon 113	2.0	Not Detected	15	Not Detected	
1,1-Dichloroethene	2.0	3.0	8.0	12	
Acetone	8.0	Not Detected	19	Not Detected	
2-Propanol	8.0	Not Detected	20	Not Detected	
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected	
Methylene Chloride	2.0	690	7.0	2400	
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected	UJ,V7c
trans-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected	
Hexane	2.0	Not Detected	7.1	Not Detected	
1,1-Dichloroethane	2.0	Not Detected	8.1	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected	
cis-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected	
Tetrahydrofuran	2.0	Not Detected	5.9	Not Detected	
Chloroform	2.0	220	9.8	1100	
1,1,1-Trichloroethane	2.0	Not Detected	11	Not Detected	
Cyclohexane	2.0	Not Detected	6.9	Not Detected	
Carbon Tetrachloride	2.0	77	13	480	
Benzene	2.0	Not Detected	6.4	Not Detected	
1,2-Dichloroethane	2.0	8.1	8.1	33	
Heptane	2.0	Not Detected	8.2	Not Detected	
Trichloroethene	2.0	170	11	910	
1,2-Dichloropropane	2.0	Not Detected	9.3	Not Detected	
1,4-Dioxane	8.0	Not Detected	29	Not Detected	
Bromodichloromethane	2.0	Not Detected	13	Not Detected	
cis-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected	
4-Methyl-2-pentanone	2.0	Not Detected	8.2	Not Detected	
Toluene	2.0	Not Detected	7.6	Not Detected	
trans-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected	
1,1,2-Trichloroethane	2.0	Not Detected	11	Not Detected	
Tetrachloroethene	2.0	5.0	14	34	

MAD
0378 10/30/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14833

Lab ID#: 0809614-18A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100925**	**Date of Collection: 9/23/08**	
Dil. Factor:	**4.02**	**Date of Analysis: 10/10/08 01:46 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	8.0	Not Detected	33	Not Detected	
Dibromochloromethane	2.0	Not Detected	17	Not Detected	
1,2-Dibromoethane (EDB)	2.0	Not Detected	15	Not Detected	
Chlorobenzene	2.0	Not Detected	9.2	Not Detected	
Ethyl Benzene	2.0	Not Detected	8.7	Not Detected	
m,p-Xylene	2.0	Not Detected	8.7	Not Detected	
o-Xylene	2.0	Not Detected	8.7	Not Detected	
Styrene	2.0	Not Detected	8.6	Not Detected	
Bromoform	2.0	Not Detected	21	Not Detected	
1,1,2,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected	
4-Ethyltoluene	2.0	Not Detected	9.9	Not Detected	
1,3,5-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected	
1,2,4-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected	
1,3-Dichlorobenzene	2.0	Not Detected	12	Not Detected	
1,4-Dichlorobenzene	2.0	Not Detected	12	Not Detected	UJ,V7a
alpha-Chlorotoluene	2.0	Not Detected	10	Not Detected	
1,2-Dichlorobenzene	2.0	Not Detected	12	Not Detected	UJ,V7a
1,2,4-Trichlorobenzene	8.0	Not Detected	60	Not Detected	UJ,V12a
Hexachlorobutadiene	8.0	Not Detected	86	Not Detected	UJ,V12a
Chlorodifluoromethane	8.0	Not Detected	28	Not Detected	
Methanol	200	Not Detected	260	Not Detected	
n-Butanol	8.0	Not Detected	24	Not Detected	
Propylene	8.0	11	14	19	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	92	70-130

MAD
0379 10/30/08

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2020C

REQUEST NUMBER: 08-2020

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 10/16/2008
TURNAROUND REQ'D: 21

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14829	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14818	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14813	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14816	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14828	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14819	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14830	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14831	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14814	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14832	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14815	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14821	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14822	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14824	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14825	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14833	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14826	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	9/25/08	1400	Printed Name	Signature	9/26/08	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

0809614

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NOT PRESENT

FED EX
7209 7845 2706

Thursday, September 25, 2008

REQUEST NUMBER: 08-2020

0693

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-2020
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 9/25/2008
TURNAROUND/REPORT DUE: 10/16/2008
TURNAROUND REQ'D: 21 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-14813	GAS	9/24/2008		
		1	MD21-08-14814	GAS	9/24/2008		0809614
		1	MD21-08-14815	GAS	9/24/2008		
		1	MD21-08-14816	GAS	9/24/2008		
		1	MD21-08-14818	GAS	9/25/2008		
		1	MD21-08-14819	GAS	9/25/2008		
		1	MD21-08-14820	GAS	9/25/2008		
		1	MD21-08-14821	GAS	9/25/2008		
		1	MD21-08-14822	GAS	9/25/2008		

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	10A 1	MD21-08-14824	GAS	9/25/2008		
		11A 1	MD21-08-14825	GAS	9/25/2008		
		12A 1	MD21-08-14826	GAS	9/24/2008		
		13A 1	MD21-08-14828	GAS	9/23/2008		
		14A 1	MD21-08-14829	GAS	9/23/2008		
		15A 1	MD21-08-14830	GAS	9/23/2008		
		16A 1	MD21-08-14831	GAS	9/23/2008		
		17A 1	MD21-08-14832	GAS	9/23/2008		
		18A 1	MD21-08-14833	GAS	9/23/2008		

0809614

0694

Final Page of REQUEST NUMBER 08-2020

Request# : 08-2020

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0809614

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b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
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g. MDL Study (If Applicable)	--	--
h. Continuing Calibration Verification Data (Summary Sheet	576	625
i. Second Source LCS(Summary + Raw Data)	626	655
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k. Instrument Run Logs/Software Verification	656	659
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c. Sample Log-In Sheet	695	696
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5. Other Records (describe or list)		
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h. Canister Certification	--	--
i. Data Review Check Sheet	702	702

Comments:

Completed by:

Vera Belitsky — Vera Belitsky / Document Control — 10/13/08

(Signature) (Print Name & Title) (Date)

Request #: 08-2020

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0809614

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545
PHONE:	505-665-9966
FAX:	505-665-8855
DATE RECEIVED:	09/26/2008
DATE COMPLETED:	10/11/2008

BILL TO:	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
P.O. #	47247-001-07
PROJECT #	08-2020
CONTACT:	Brandon Dunmore

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-14813	Modified TO-15	8.0 "Hg	5 psi
01AA	MD21-08-14813 Lab Duplicate	Modified TO-15	8.0 "Hg	5 psi
02A	MD21-08-14814	Modified TO-15	9.5 "Hg	5 psi
03A	MD21-08-14815	Modified TO-15	9.0 "Hg	5 psi
04A	MD21-08-14816	Modified TO-15	8.5 "Hg	5 psi
05A	MD21-08-14818	Modified TO-15	9.0 "Hg	5 psi
06A	MD21-08-14819	Modified TO-15	9.0 "Hg	5 psi
07A	MD21-08-14820	Modified TO-15	10.0 "Hg	5 psi
08A	MD21-08-14821	Modified TO-15	8.5 "Hg	5 psi
09A	MD21-08-14822	Modified TO-15	9.0 "Hg	5 psi
09AA	MD21-08-14822 Lab Duplicate	Modified TO-15	9.0 "Hg	5 psi
10A	MD21-08-14824	Modified TO-15	11.5 "Hg	5 psi
11A	MD21-08-14825	Modified TO-15	8.5 "Hg	5 psi
12A	MD21-08-14826	Modified TO-15	11.0 "Hg	5 psi
13A	MD21-08-14828	Modified TO-15	7.0 "Hg	5 psi
14A	MD21-08-14829	Modified TO-15	8.5 "Hg	5 psi
15A	MD21-08-14830	Modified TO-15	9.0 "Hg	5 psi

Continued on next page

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0809614

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-2020
DATE RECEIVED:	09/26/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	10/11/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
16A	MD21-08-14831	Modified TO-15	9.5 "Hg	5 psi
17A	MD21-08-14832	Modified TO-15	10.0 "Hg	5 psi
18A	MD21-08-14833	Modified TO-15	10.0 "Hg	5 psi
19A	Lab Blank	Modified TO-15	NA	NA
19B	Lab Blank	Modified TO-15	NA	NA
20A	CCV	Modified TO-15	NA	NA
20B	CCV	Modified TO-15	NA	NA
21A	LCS	Modified TO-15	NA	NA
21B	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda A. Truman DATE: 10/11/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0809614

Eighteen 6 Liter Summa Canister samples were received on September 26, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

All Quality Control Limit failures and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

The daily calibration verification (CCV)/Laboratory Control Spike (LCS) analyzed on October 6 and 9,

2008 did not meet laboratory/project acceptance criteria for MTBE. Recovery for this compound was high, and no hits for this compound were detected in the associated samples. There is no impact on data quality.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-08-14813	0809614-01A	9/24/2008	9/26/2008	NA	12	10/ 6/2008	NA	Good
MD21-08-14813 Lab Dup	0809614-01AA	9/24/2008	9/26/2008	NA	12	10/ 6/2008	NA	Good
MD21-08-14814	0809614-02A	9/24/2008	9/26/2008	NA	13	10/ 7/2008	NA	Good
MD21-08-14815	0809614-03A	9/24/2008	9/26/2008	NA	13	10/ 7/2008	NA	Good
MD21-08-14816	0809614-04A	9/24/2008	9/26/2008	NA	13	10/ 7/2008	NA	Good
MD21-08-14818	0809614-05A	9/25/2008	9/26/2008	NA	12	10/ 7/2008	NA	Good
MD21-08-14819	0809614-06A	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14820	0809614-07A	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14821	0809614-08A	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14822	0809614-09A	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14822 Lab Dup	0809614-09AA	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14824	0809614-10A	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14825	0809614-11A	9/25/2008	9/26/2008	NA	14	10/ 9/2008	NA	Good
MD21-08-14826	0809614-12A	9/24/2008	9/26/2008	NA	15	10/ 9/2008	NA	Good
MD21-08-14828	0809614-13A	9/23/2008	9/26/2008	NA	16	10/ 9/2008	NA	Good
MD21-08-14829	0809614-14A	9/23/2008	9/26/2008	NA	16	10/ 9/2008	NA	Good
MD21-08-14830	0809614-15A	9/23/2008	9/26/2008	NA	16	10/ 9/2008	NA	Good
MD21-08-14831	0809614-16A	9/23/2008	9/26/2008	NA	17	10/10/2008	NA	Good
MD21-08-14832	0809614-17A	9/23/2008	9/26/2008	NA	17	10/10/2008	NA	Good
MD21-08-14833	0809614-18A	9/23/2008	9/26/2008	NA	17	10/10/2008	NA	Good
Lab Blank	0809614-19A	NA	NA	NA	NA	10/ 6/2008	NA	Good
Lab Blank	0809614-19B	NA	NA	NA	NA	10/ 9/2008	NA	Good
CCV	0809614-20A	NA	NA	NA	NA	10/ 6/2008	NA	Good
CCV	0809614-20B	NA	NA	NA	NA	10/ 9/2008	NA	Good
LCS	0809614-21A	NA	NA	NA	NA	10/ 6/2008	NA	Good
LCS	0809614-21B	NA	NA	NA	NA	10/ 9/2008	NA	Good

Sample Results and Raw Data

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14813

Lab ID#: 0809614-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.0	4.5	5.0
Acetone	3.7	12	8.7	30
Methylene Chloride	0.92	1.5	3.2	5.3
2-Butanone (Methyl Ethyl Ketone)	0.92	1.7	2.7	5.0
Chloroform	0.92	100	4.5	510
1,1,1-Trichloroethane	0.92	4.0	5.0	22
Carbon Tetrachloride	0.92	11	5.8	68
Trichloroethene	0.92	60	4.9	320
Tetrachloroethene	0.92	100	6.2	680

0007

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14813

Lab ID#: 0809614-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100619	Date of Collection:	9/24/08
Dil. Factor:	1.83	Date of Analysis:	10/6/08 10:41 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.0	4.5	5.0
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	3.7	Not Detected	7.6	Not Detected
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	0.92	Not Detected	2.0	Not Detected
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	Not Detected	6.9	Not Detected
Freon 113	0.92	Not Detected	7.0	Not Detected
1,1-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Acetone	3.7	12	8.7	30
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	0.92	Not Detected	2.8	Not Detected
Methylene Chloride	0.92	1.5	3.2	5.3
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Hexane	0.92	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	1.7	2.7	5.0
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.92	100	4.5	510
1,1,1-Trichloroethane	0.92	4.0	5.0	22
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	11	5.8	68
Benzene	0.92	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.92	Not Detected	3.7	Not Detected
Heptane	0.92	Not Detected	3.7	Not Detected
Trichloroethene	0.92	60	4.9	320
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	Not Detected	6.1	Not Detected
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	Not Detected	3.7	Not Detected
Toluene	0.92	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Tetrachloroethene	0.92	100	6.2	680

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14813

Lab ID#: 0809614-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100619	**Date of Collection:**	9/24/08
Dil. Factor:	1.83	**Date of Analysis:**	10/6/08 10:41 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected
Chlorobenzene	0.92	Not Detected	4.2	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
m,p-Xylene	0.92	Not Detected	4.0	Not Detected
o-Xylene	0.92	Not Detected	4.0	Not Detected
Styrene	0.92	Not Detected	3.9	Not Detected
Bromoform	0.92	Not Detected	9.4	Not Detected
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane	3.7	Not Detected U J	13	Not Detected U J
Methanol	92	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	Not Detected	6.3	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	93	70-130

0009

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100619.d
Lab Smp Id: 0809614-01A
Inj Date : 06-OCT-2008 22:41
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #5776
Misc Info : 8.0"Hg-5psi
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	357870	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	275463			28.56- 128.56	76.97
14.333	14.333 (1.000)	49	1469048			335.95- 435.95	410.50
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1111432	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	197845			0.00- 67.14	17.80
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1151993	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	574670			1.24- 101.24	49.88
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	727944	26.9286	26.929	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	302877			0.00- 97.37	41.61
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1021353	24.0060	24.006	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	144174			0.00- 63.85	14.12

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	781179			26.51- 126.51	76.48
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	551312	23.2574	23.257	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	782911			90.08- 190.08	142.01
23.291	23.291	(1.093)	176	524386			45.80- 145.80	95.12
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.786	5.729	(0.404)	85	48915	0.55291	1.012	80.00- 120.00	100.00
5.758	5.729	(0.402)	87	16452			0.00- 81.85	33.63
45 Acetone						CAS #: 67-64-1		
10.434	10.407	(0.728)	58	118605	6.84466	12.526	80.00- 120.00	100.00
10.434	10.407	(0.728)	43	550878			340.42- 440.42	464.46
54 Methylene Chloride						CAS #: 75-09-2		
11.402	11.430	(0.796)	49	44919	0.83642	1.531	80.00- 120.00	100.00
11.402	11.430	(0.796)	84	14035			0.00- 83.39	31.25
11.402	11.430	(0.796)	51	12978			0.00- 80.54	28.89
75 2-Butanone						CAS #: 78-93-3		
13.808	13.808	(0.963)	72	10487	0.92859	1.699	80.00- 120.00	100.00
13.808	13.808	(0.963)	43	99907			755.71- 855.71	952.65
13.808	13.808	(0.963)	57	9477			0.00- 97.16	90.37
82 Chloroform						CAS #: 67-66-3		
14.388	14.388	(1.004)	83	2840260	57.0954	104.48	80.00- 120.00	100.00
14.388	14.388	(1.004)	85	2026807			21.22- 121.22	71.36
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.775	14.748	(1.031)	97	112455	2.21404	4.052	80.00- 120.00	100.00
14.775	14.748	(1.031)	99	69374			13.65- 113.65	61.69
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.024	15.024	(1.048)	119	343257	5.91835	10.830	80.00- 120.00	100.00
15.024	15.024	(1.048)	117	363964			55.93- 155.93	106.03
101 Trichloroethene						CAS #: 79-01-6		
16.573	16.573	(1.029)	95	847841	32.7050	59.850	80.00- 120.00	100.00
16.573	16.573	(1.029)	130	862336			52.65- 152.65	101.71
16.573	16.573	(1.029)	97	547450			12.98- 112.98	64.57
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	1710067	54.9450	100.55	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	1500142			37.80- 137.80	87.72

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
120 Tetrachloroethene (continued)								
19.780	19.780	(0.929)	131	1497031			35.79- 135.79	87.54

Data File: /chem/msd7.i/06oct08.b/7100619.d
Report Date: 10-Oct-2008 20:48

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100619.d
Lab Smp Id: 0809614-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 8.0"Hg-5psi

Calibration Date: 06-OCT-2008
Calibration Time: 10:23

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	357870	-6.77
97 1,4-Difluorobenze	1202073	721244	1682902	1111432	-7.54
126 Chlorobenzene-d5	1260970	756582	1765358	1151993	-8.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100619.d
Report Date: 10-Oct-2008 20:48

Air Toxics Ltd.

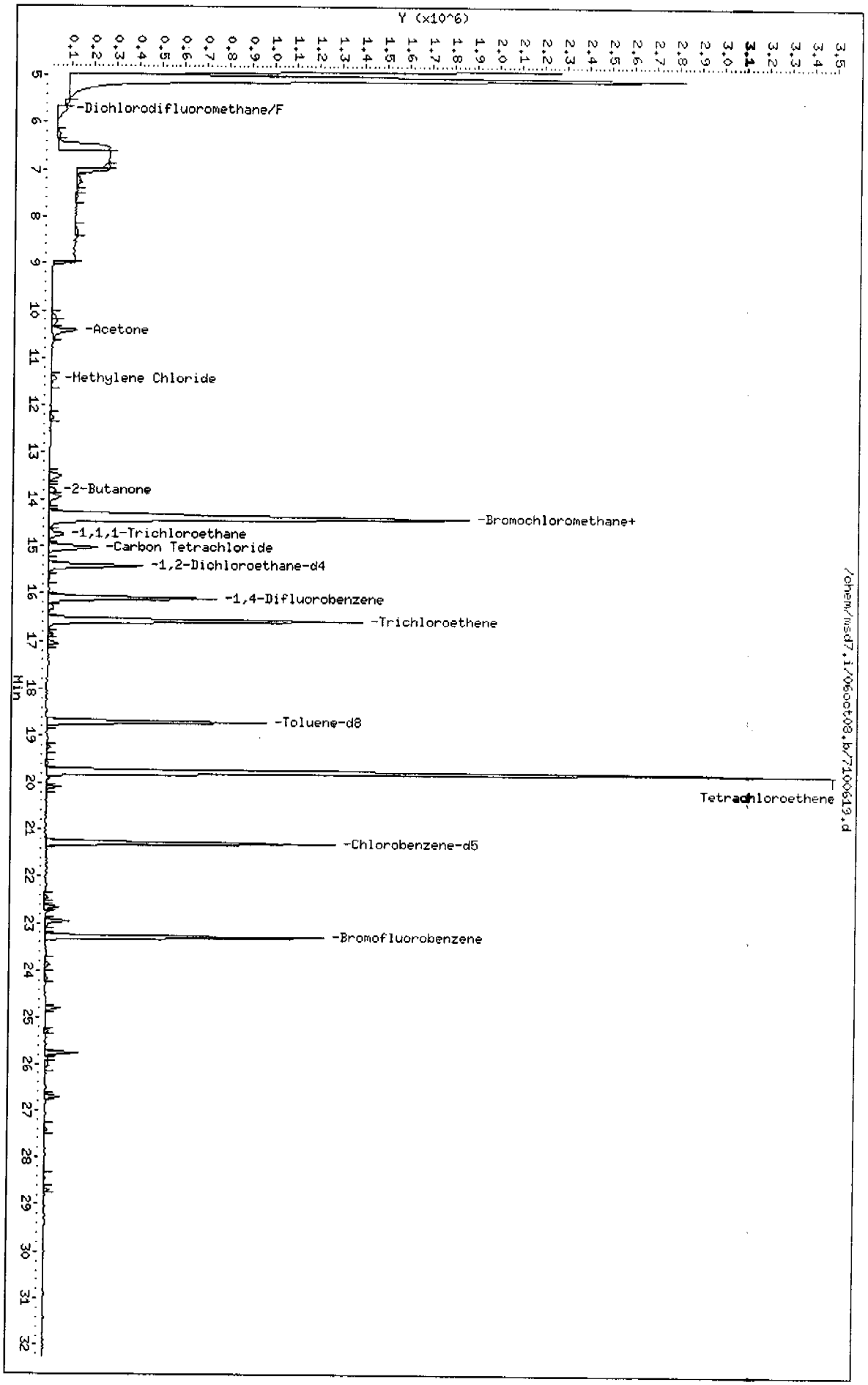
RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-01A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 8.0"Hg-5psi

Client SDG: 06oct08
Fraction: VOA

Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.929	107.71	70-130
$ 113 Toluene-d8	25.000	24.006	96.02	70-130
$ 137 Bromofluorobenzene	25.000	23.257	93.03	70-130



Data File: /chem/msd7.i/06oct08.b/7100619.d
Date : 06-OCT-2008 22:41
Client ID:
Sample Info: 200mL #5776
Column phase: RTx-624

Instrument: msd7.i
Operator: ra
Column diameter: 0.53

0015

Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

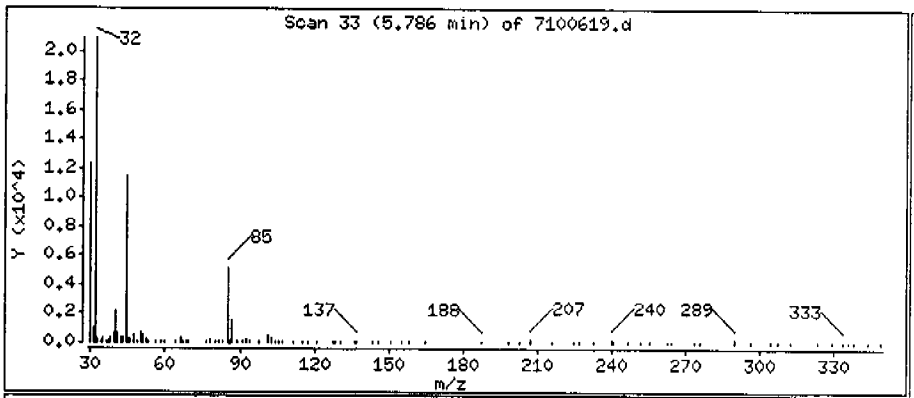
Operator: ra

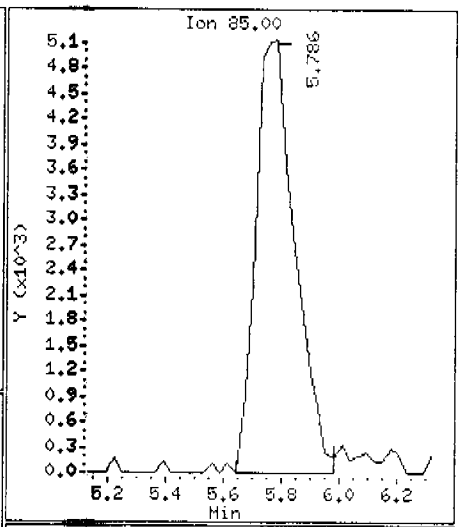
Column phase: RTx-624

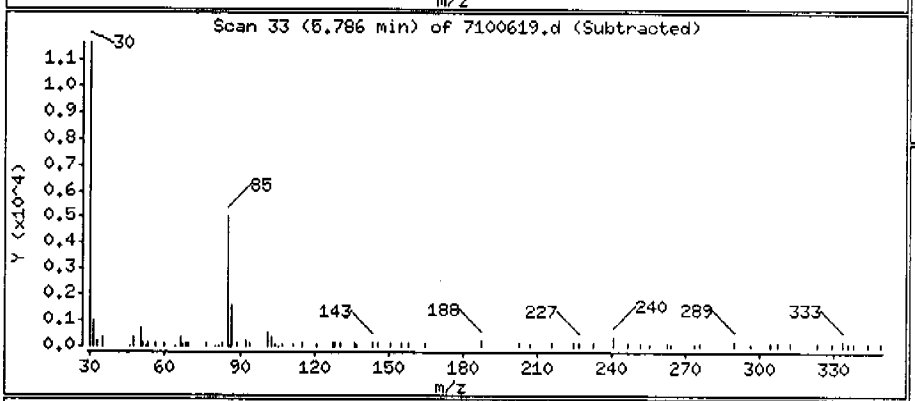
Column diameter: 0.53

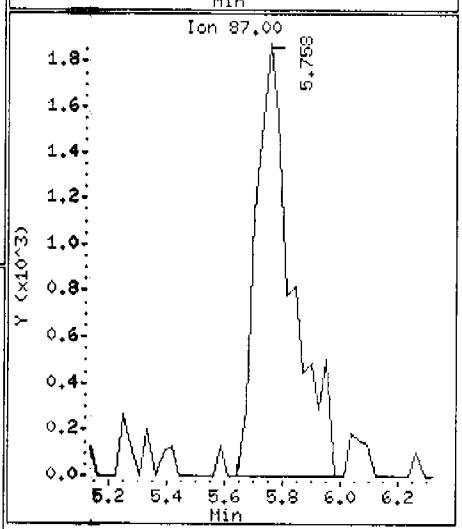
12 Dichlorodifluoromethane/Fr12

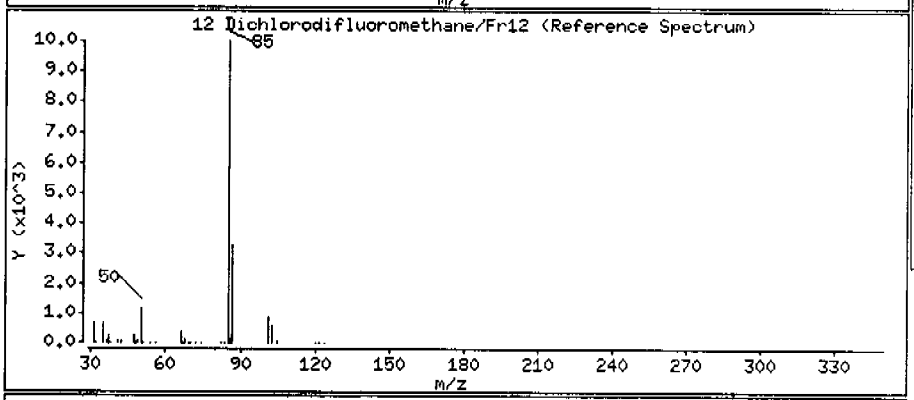
Concentration: 1.012 PPBV

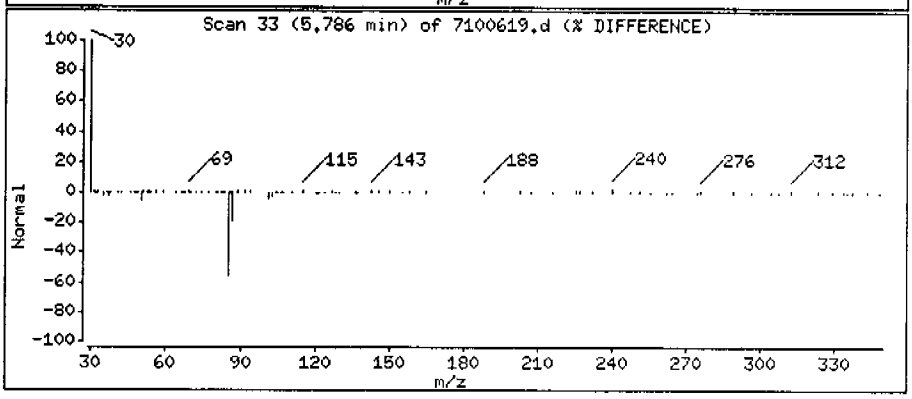












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

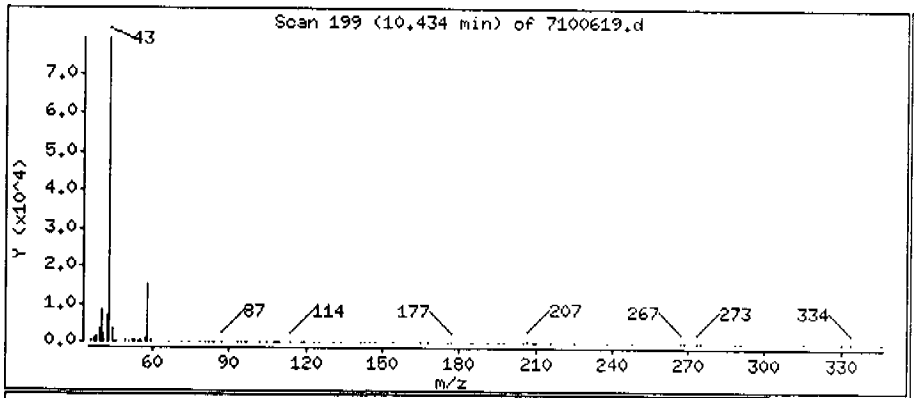
Operator: ra

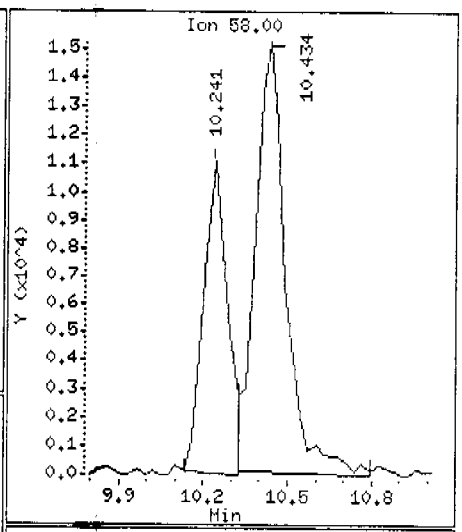
Column phase: RTx-624

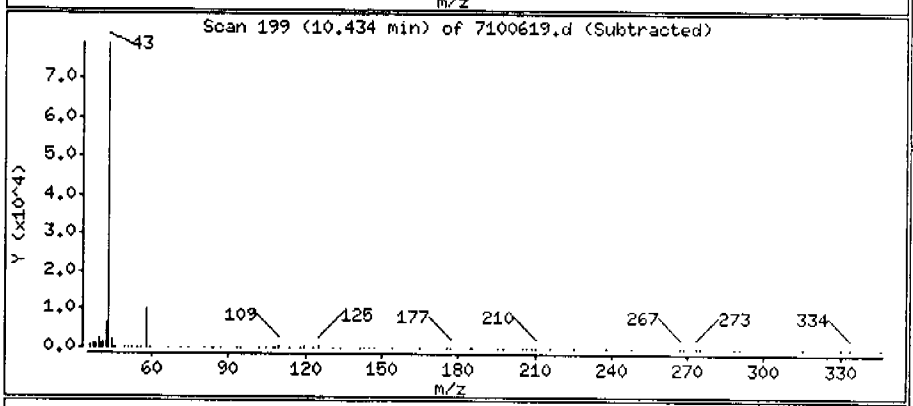
Column diameter: 0.53

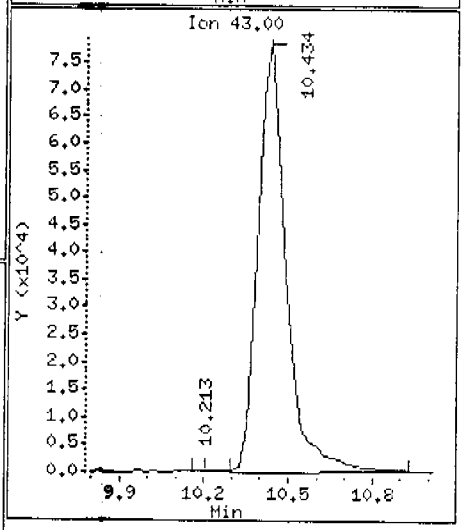
45 Acetone

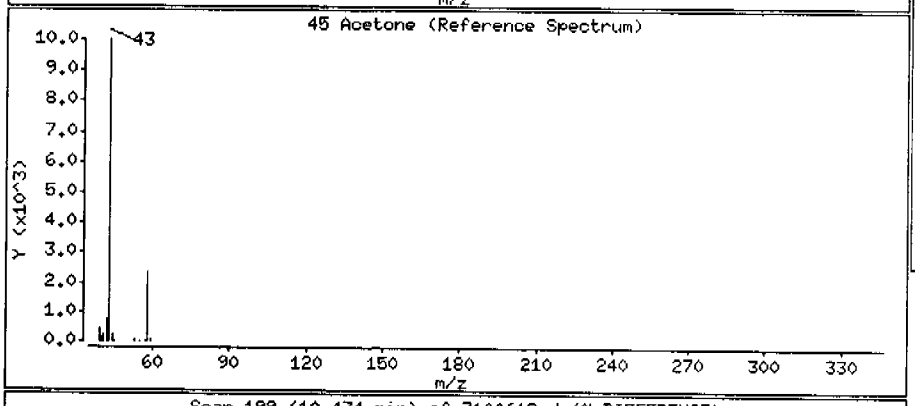
Concentration: 12.526 PPBV

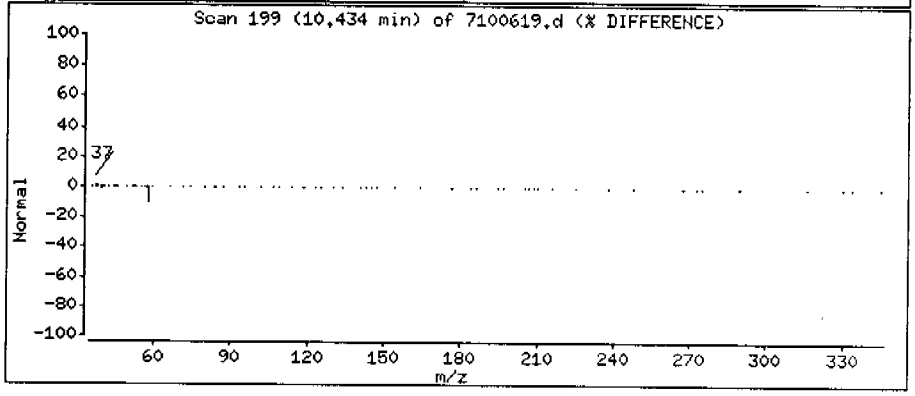












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

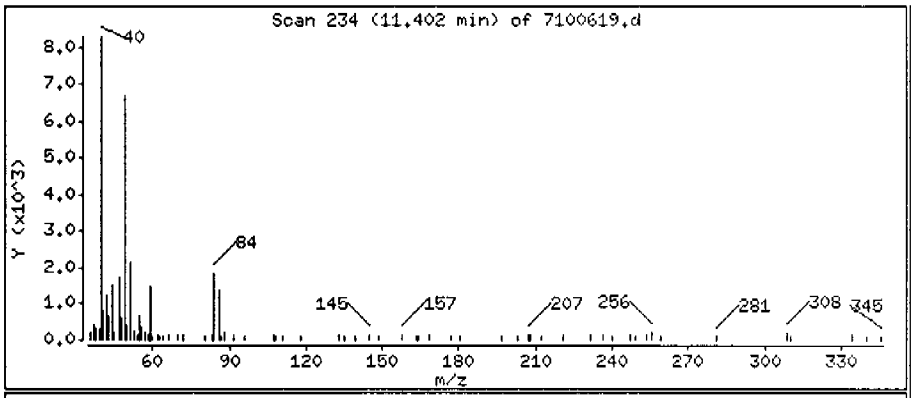
Operator: ra

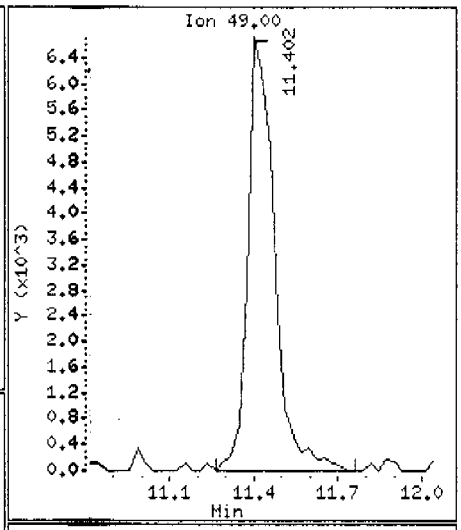
Column phase: RTx-624

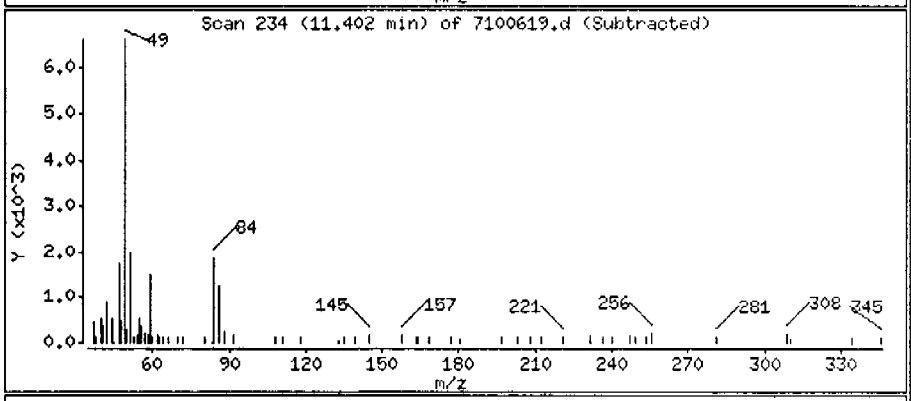
Column diameter: 0.53

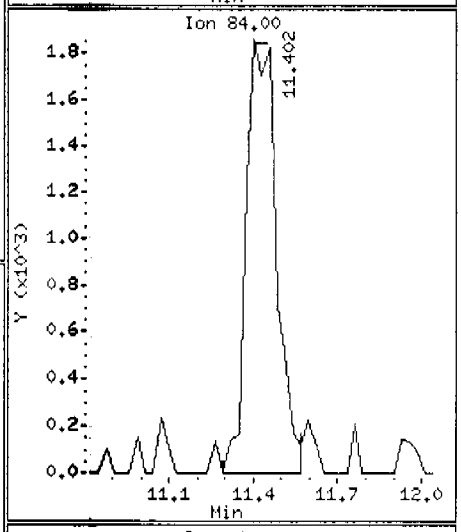
54 Methylene Chloride

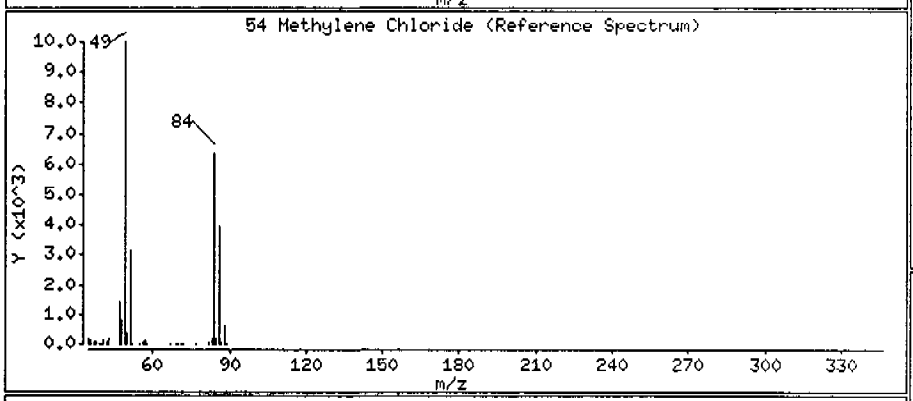
Concentration: 1.531 PPBV

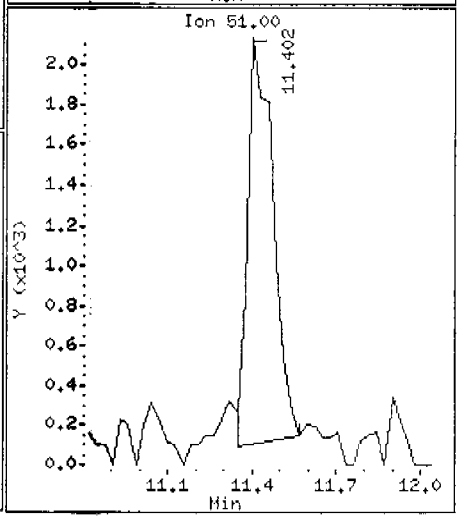


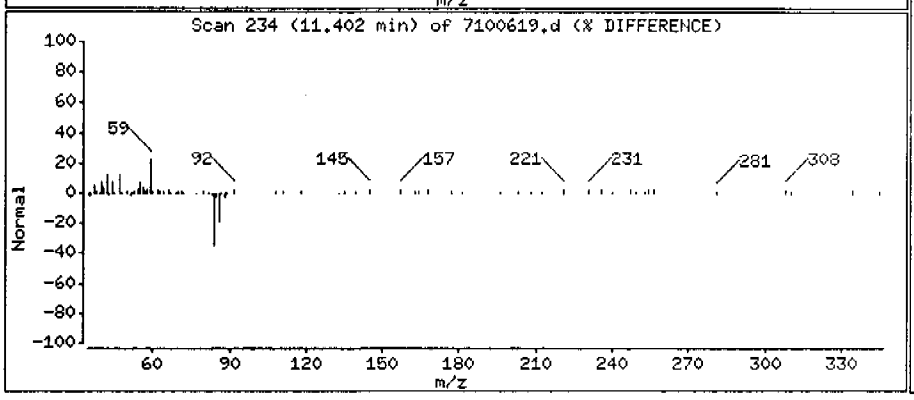












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

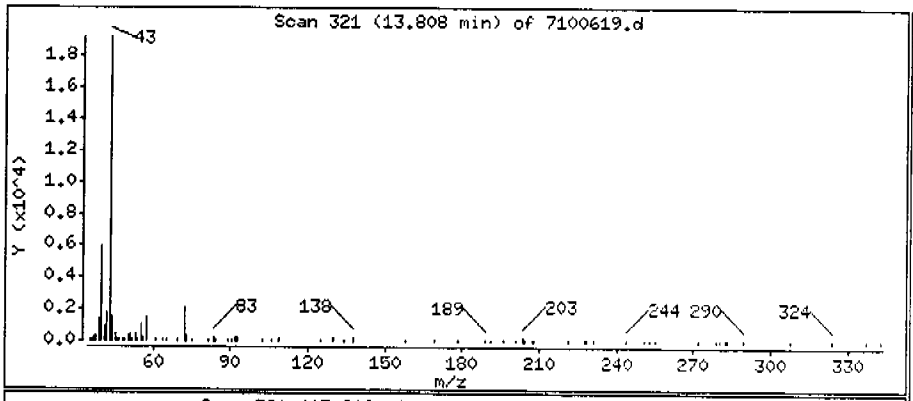
Operator: ra

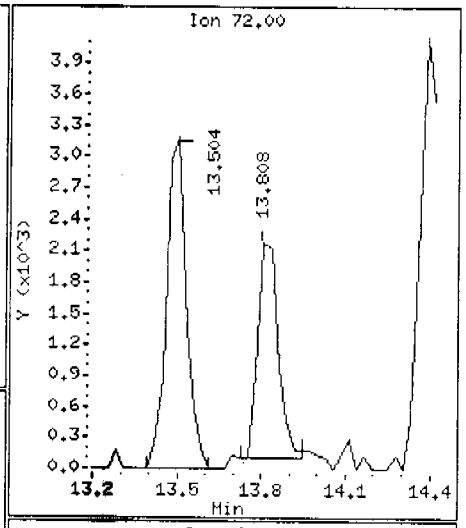
Column phase: RTx-624

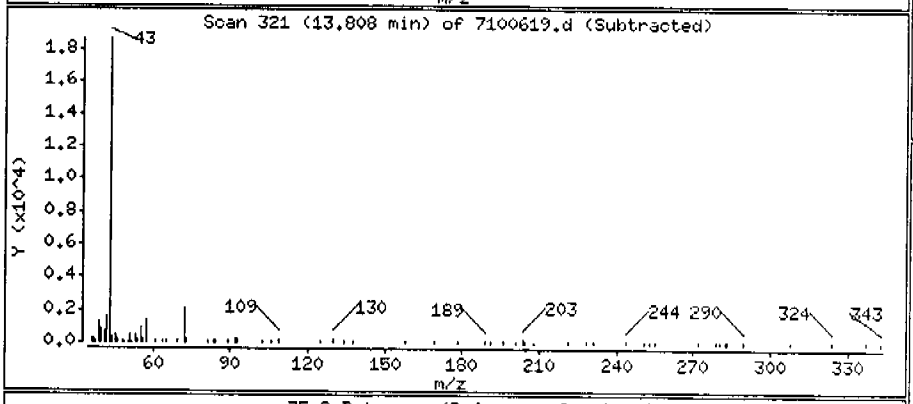
Column diameter: 0.53

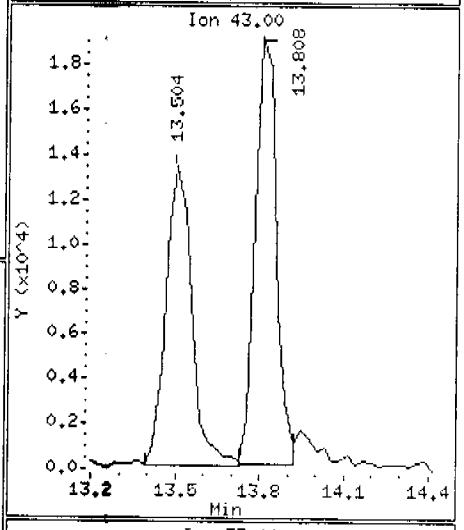
75 2-Butanone

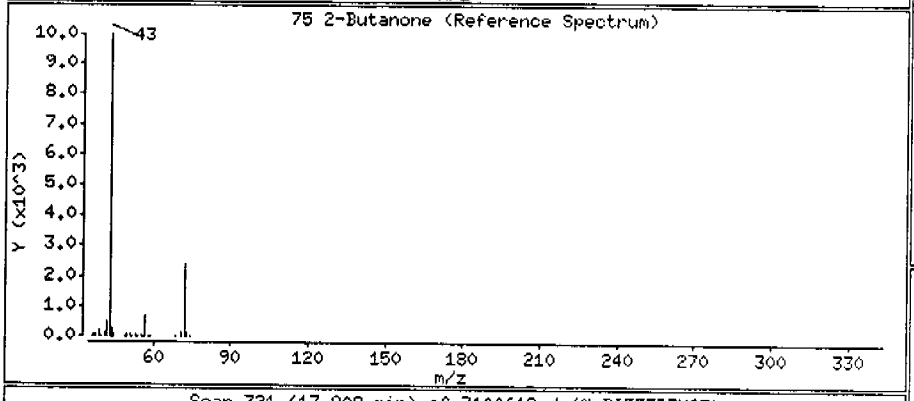
Concentration: 1.699 PPBV

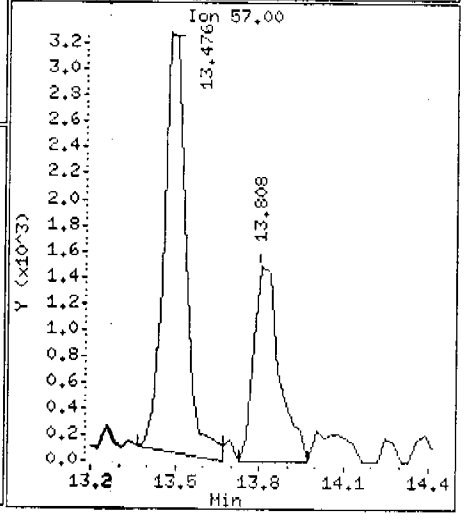


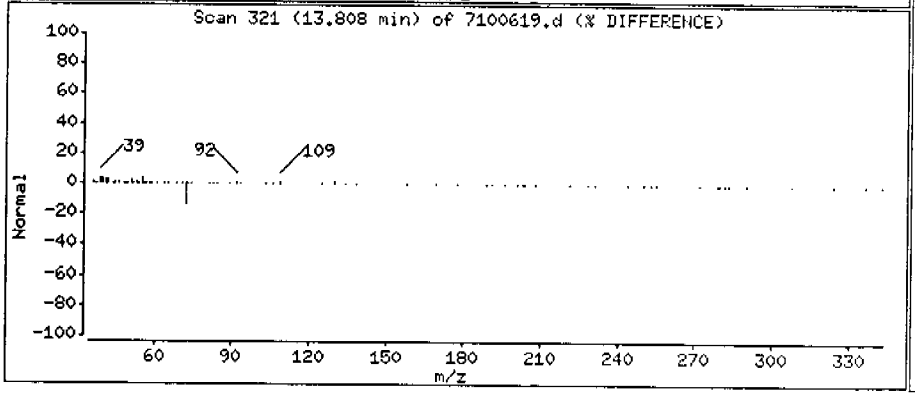












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Sample Info: 200mL #5776

Instrument: msd7.i

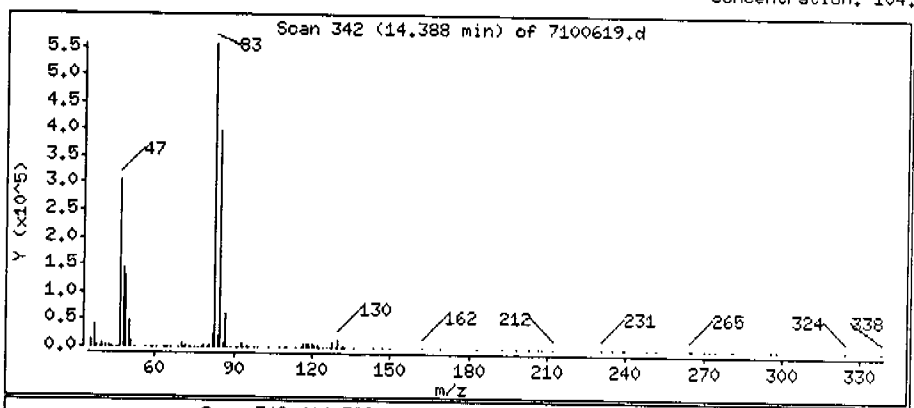
Operator: ra

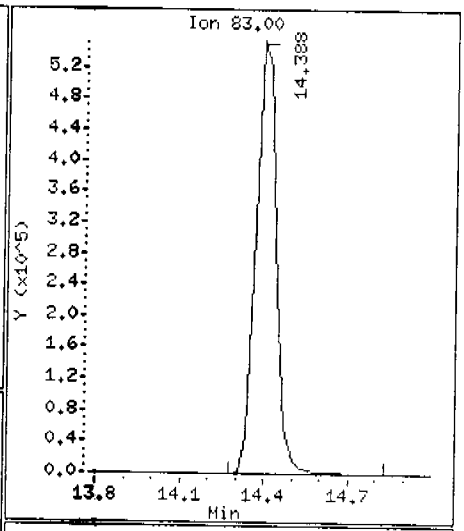
Column phase: RTx-624

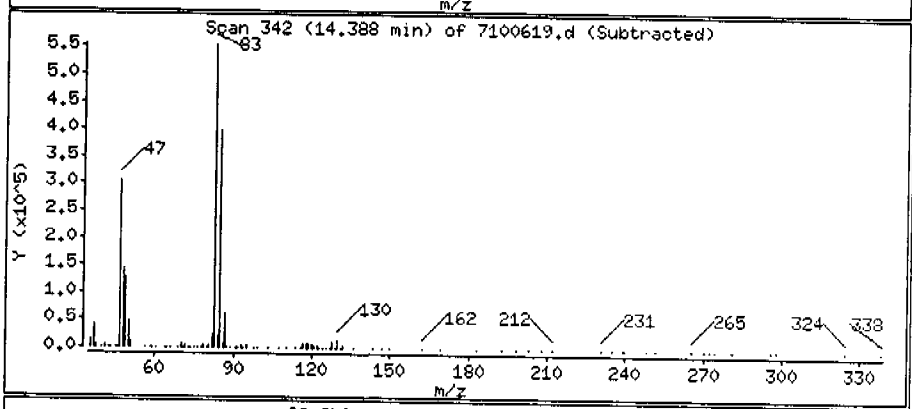
Column diameter: 0.53

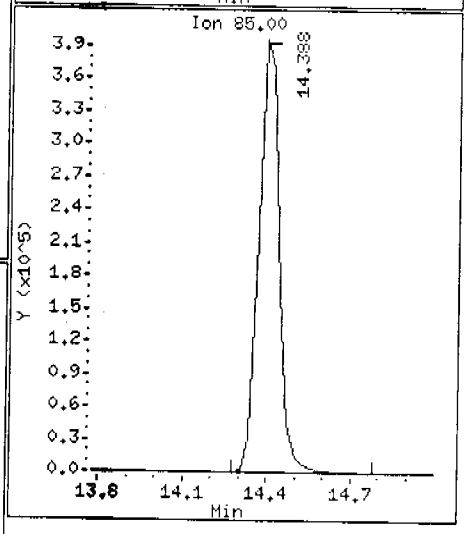
82 Chloroform

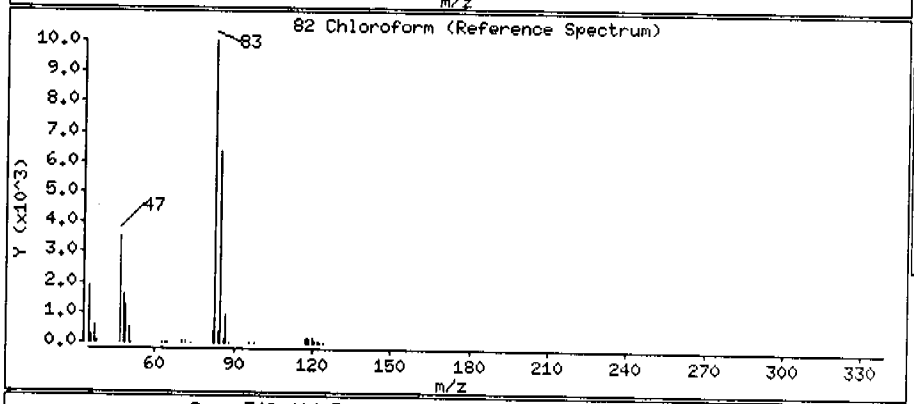
Concentration: 104.48 PPBV

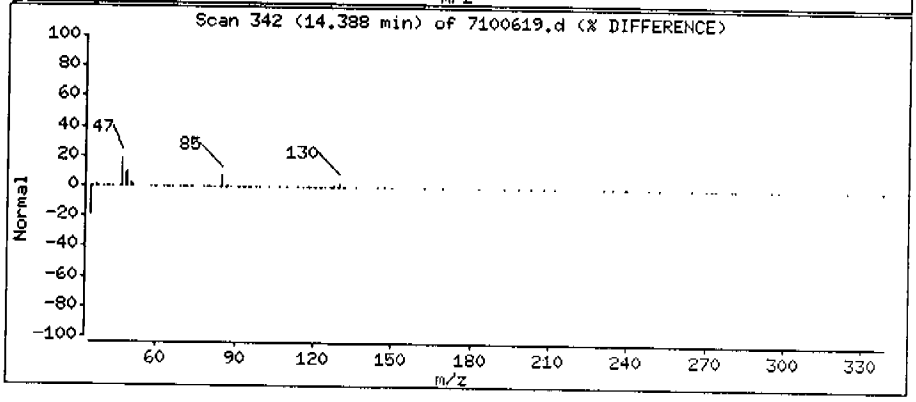












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Sample Info: 200mL #5776

Instrument: msd7.i

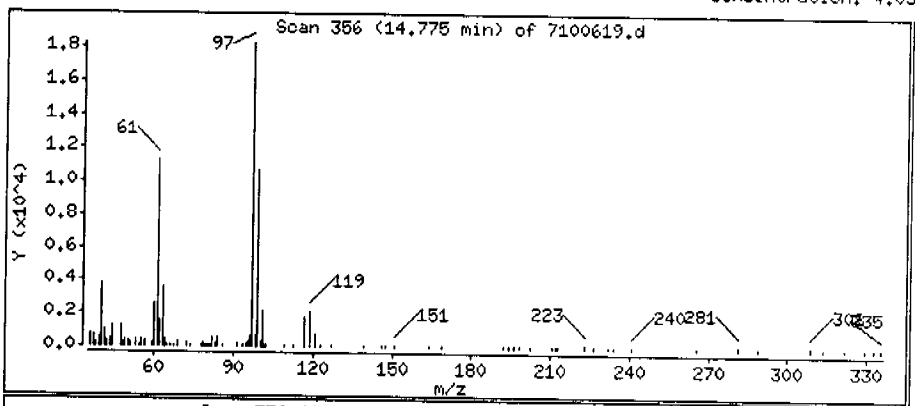
Operator: ra

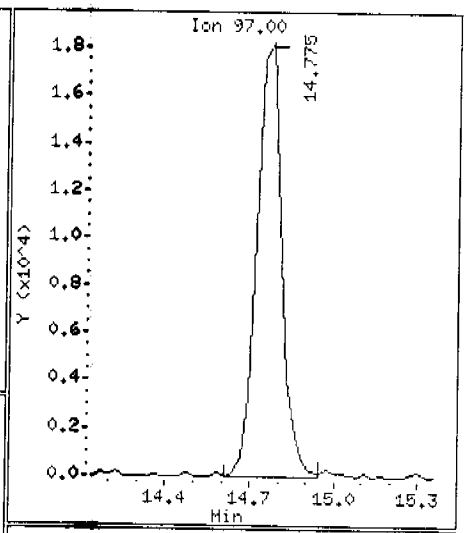
Column phase: RTx-624

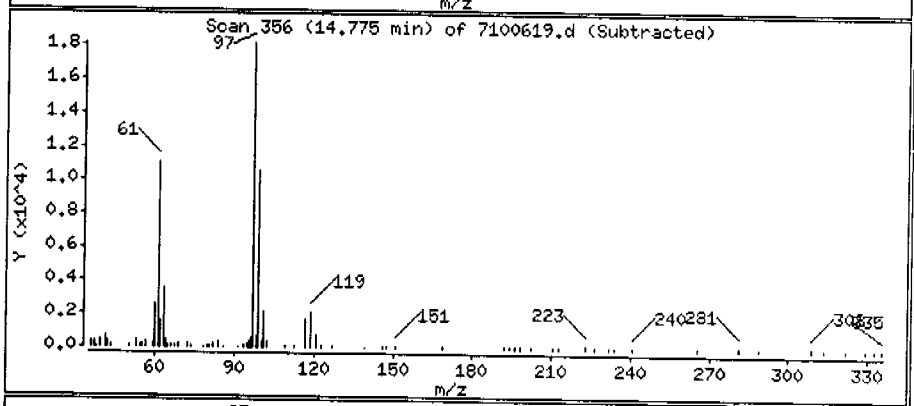
Column diameter: 0.53

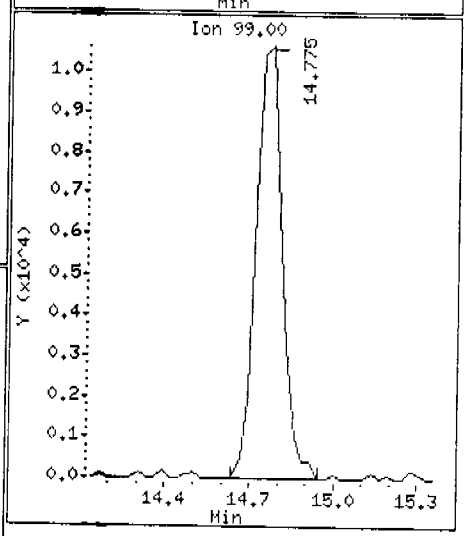
83 1,1,1-Trichloroethane

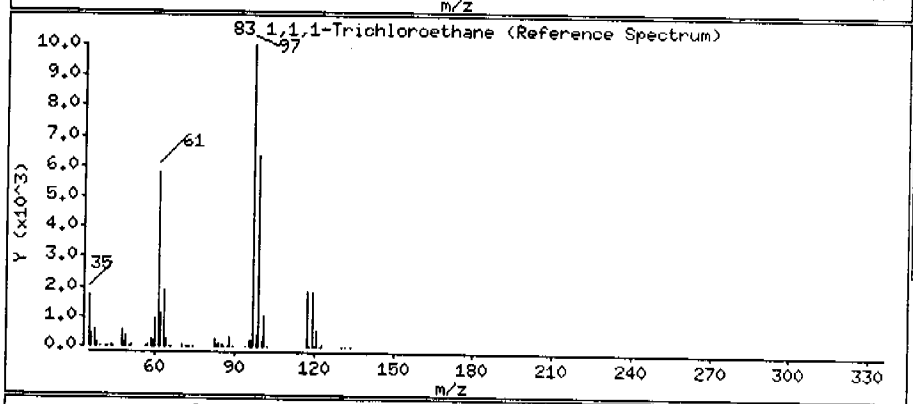
Concentration: 4.052 PPBV

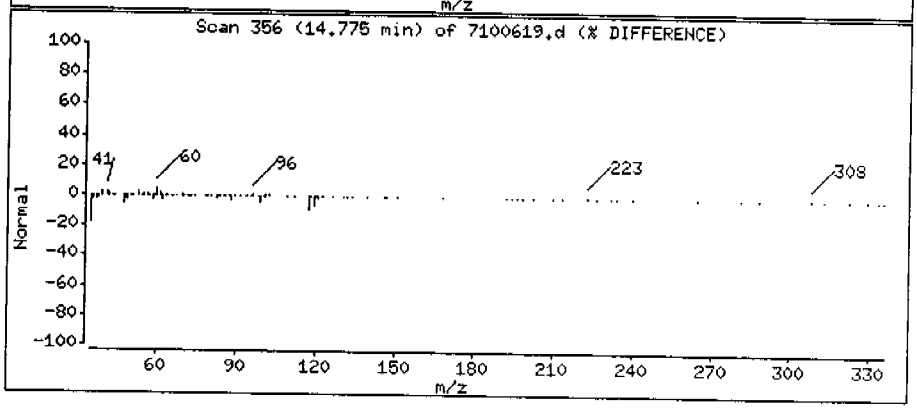












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

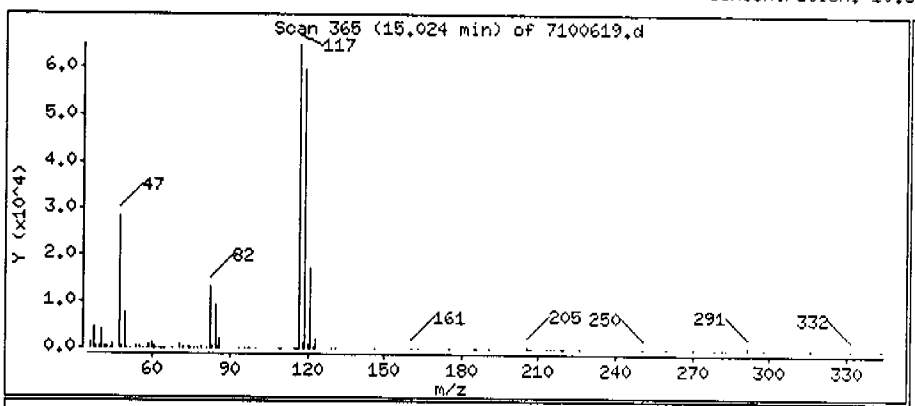
Operator: rs

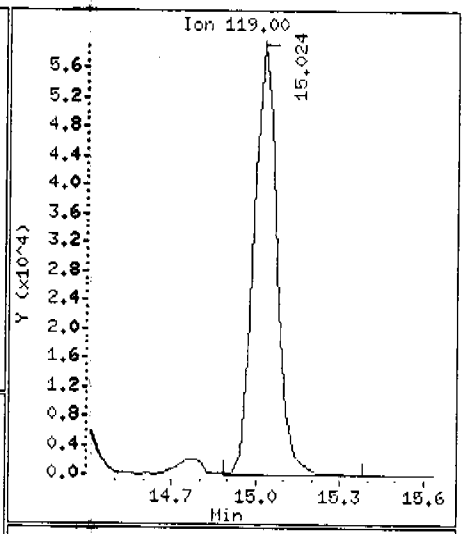
Column phase: RTx-624

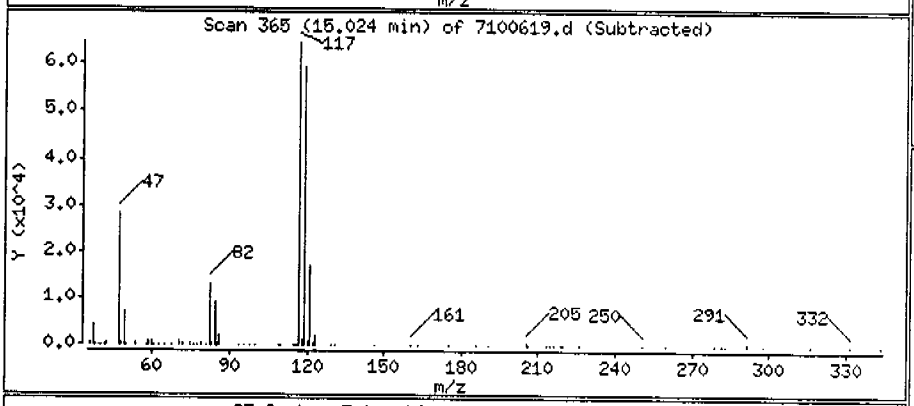
Column diameter: 0.53

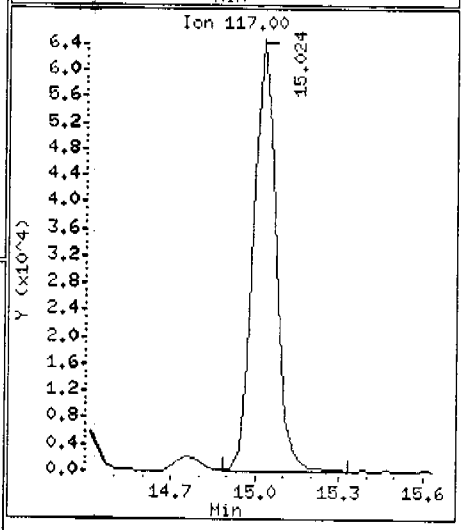
87 Carbon Tetrachloride

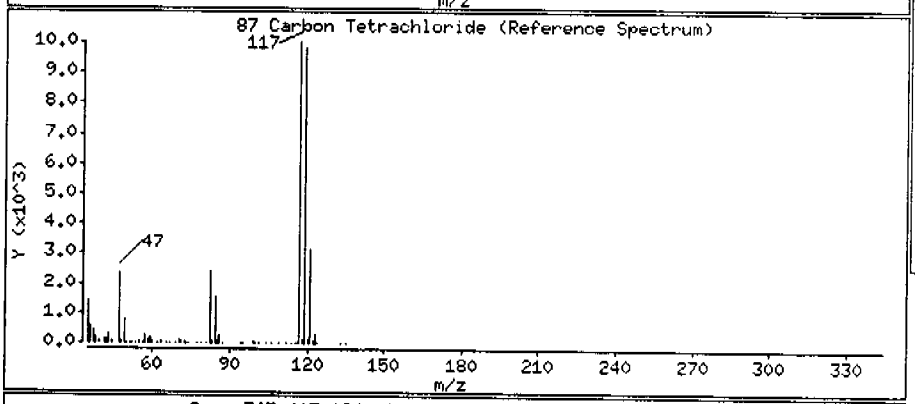
Concentration: 10.830 PPBV

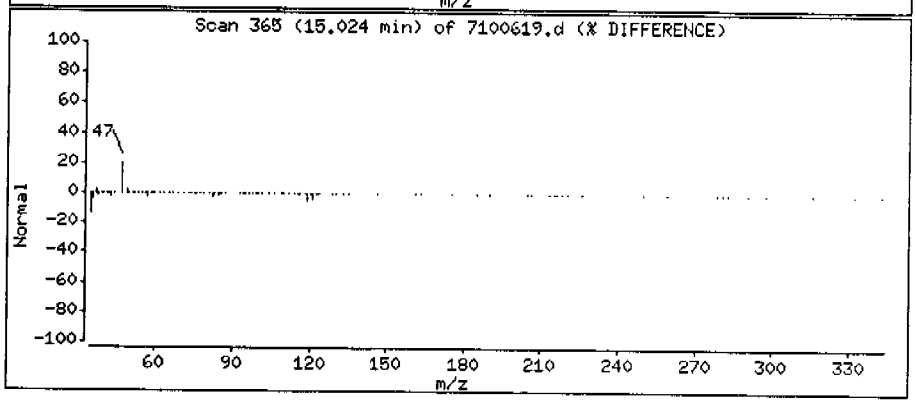












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

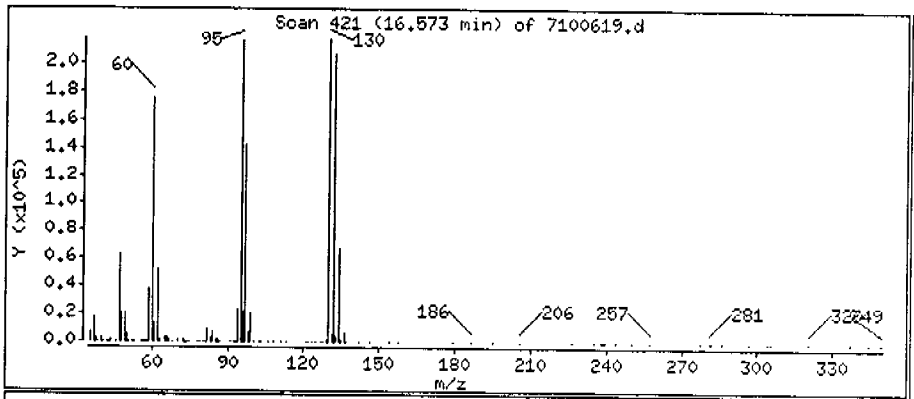
Operator: ra

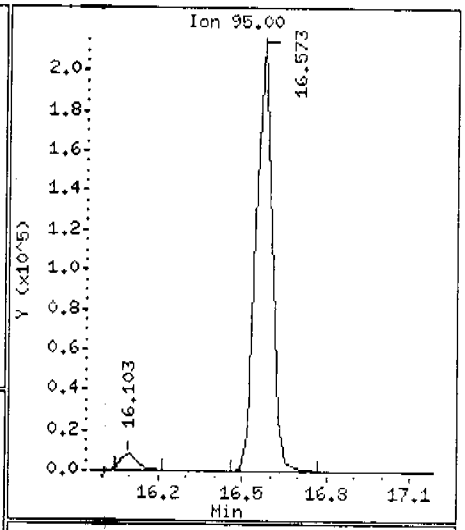
Column phase: RTx-624

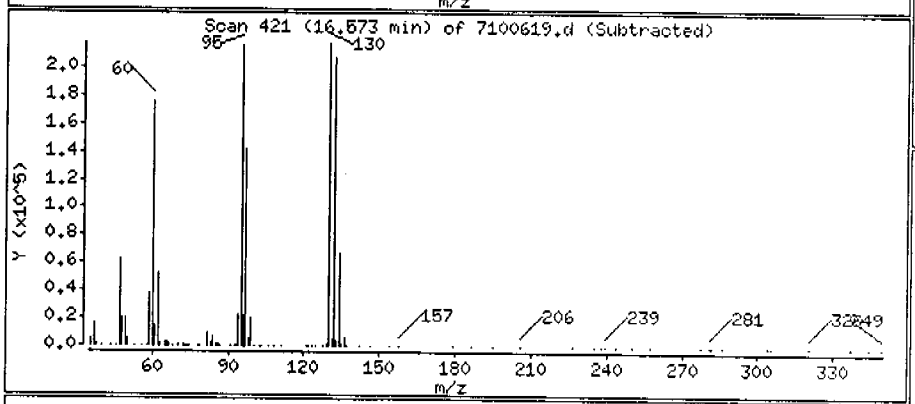
Column diameter: 0.53

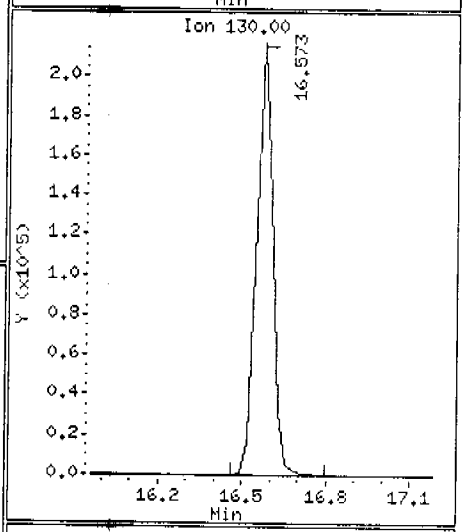
101 Trichloroethene

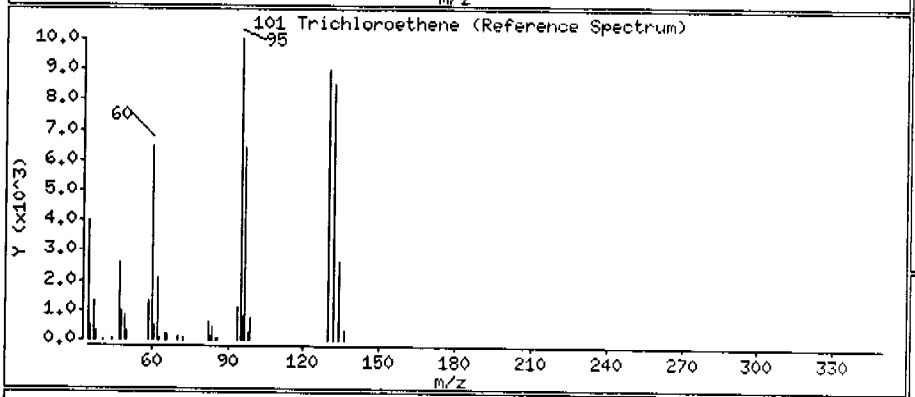
Concentration: 59.850 PPBV

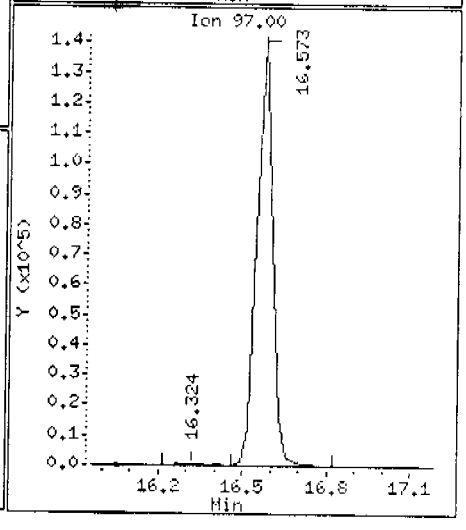


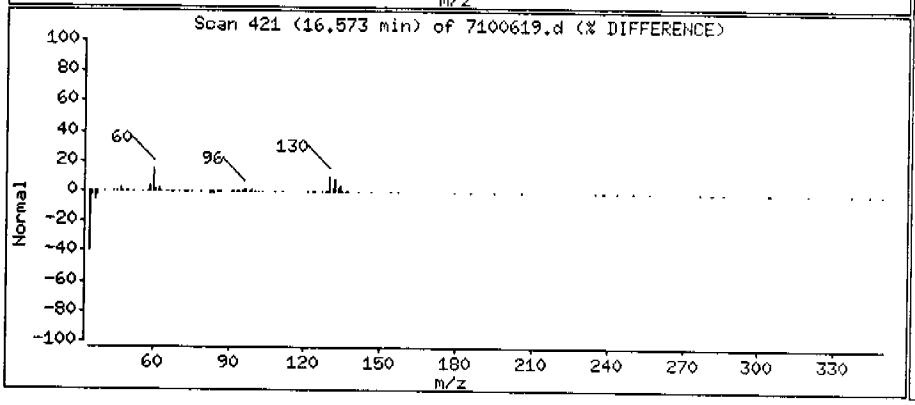












Data File: /chem/msd7.i/06oct08.b/7100619.d

Date : 06-OCT-2008 22:41

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

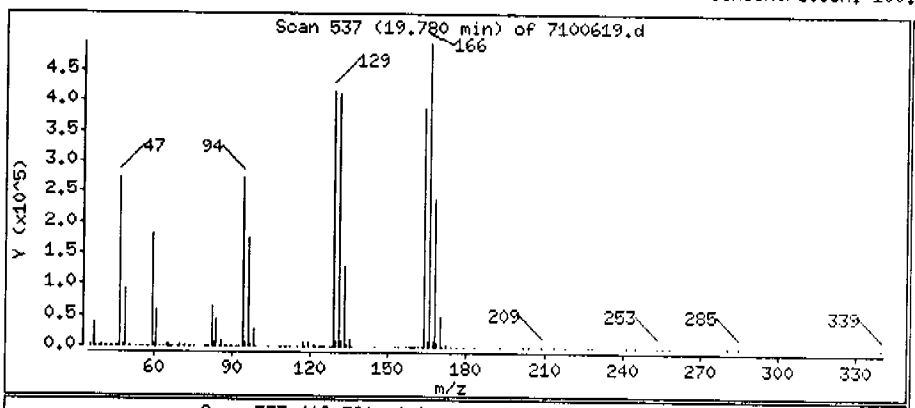
Operator: ra

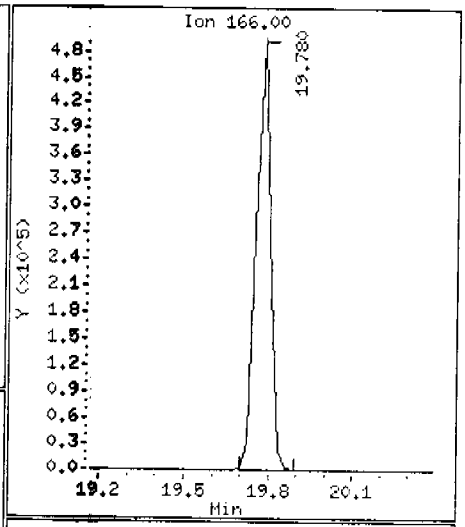
Column phase: RTx-624

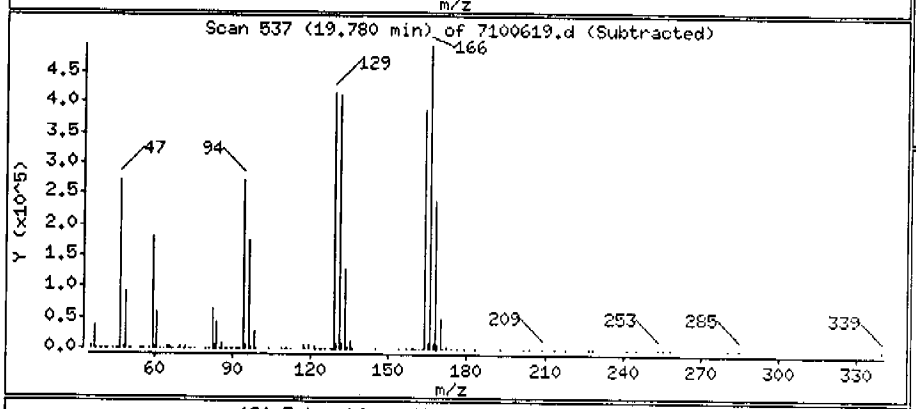
Column diameter: 0.53

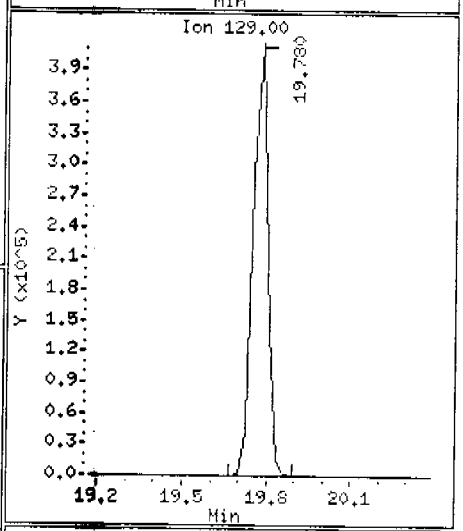
120 Tetrachloroethene

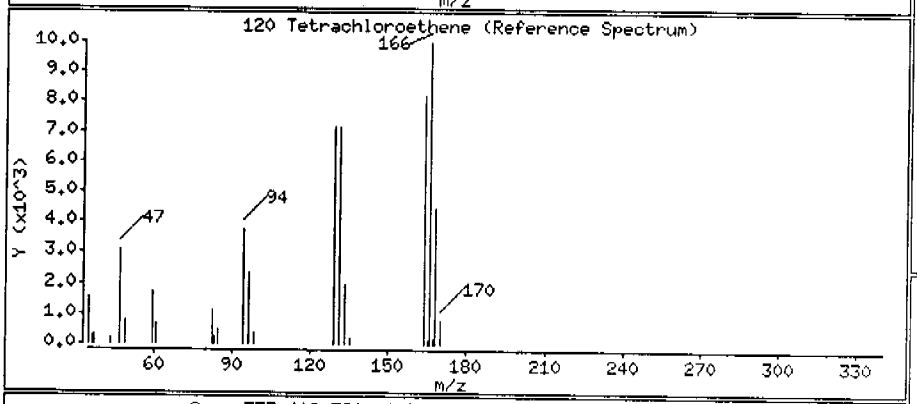
Concentration: 100.55 PPBV

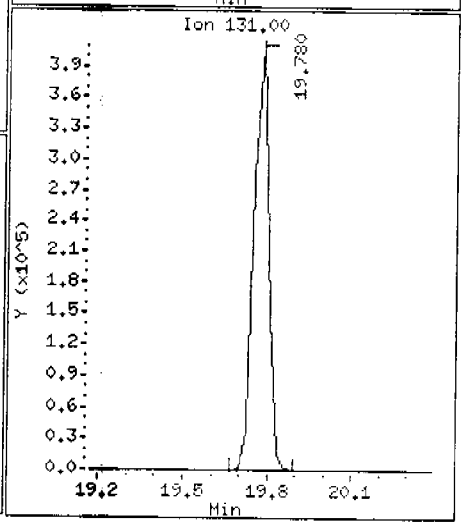


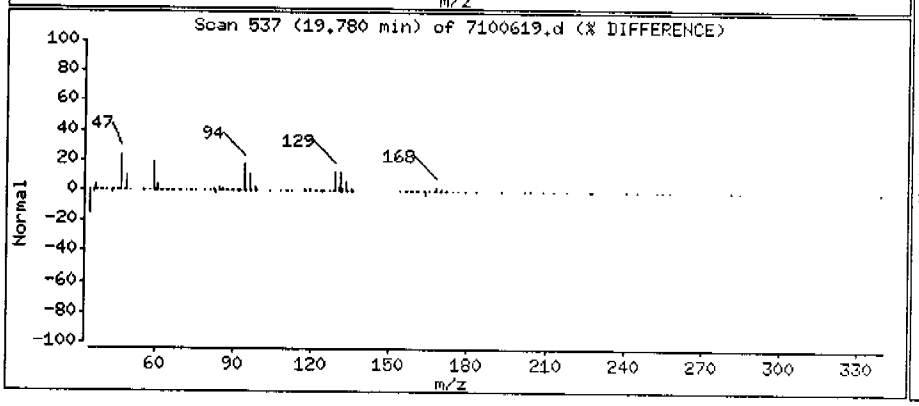












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14813 Lab Duplicate

Lab ID#: 0809614-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.1	4.5	5.3
Acetone	3.7	12	8.7	29
Methylene Chloride	0.92	1.4	3.2	5.0
2-Butanone (Methyl Ethyl Ketone)	0.92	2.0	2.7	6.0
Chloroform	0.92	100	4.5	500
1,1,1-Trichloroethane	0.92	4.0	5.0	22
Carbon Tetrachloride	0.92	11	5.8	68
Trichloroethene	0.92	59	4.9	320
Tetrachloroethene	0.92	100	6.2	690

0025

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14813 Lab Duplicate

Lab ID#: 0809614-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100620	**Date of Collection:**	9/24/08
Dil. Factor:	1.83	**Date of Analysis:**	10/6/08 11:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.1	4.5	5.3
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	3.7	Not Detected	7.6	Not Detected
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	0.92	Not Detected	2.0	Not Detected
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	Not Detected	6.9	Not Detected
Freon 113	0.92	Not Detected	7.0	Not Detected
1,1-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Acetone	3.7	12	8.7	29
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	0.92	Not Detected	2.8	Not Detected
Methylene Chloride	0.92	1.4	3.2	5.0
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Hexane	0.92	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	2.0	2.7	6.0
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.92	100	4.5	500
1,1,1-Trichloroethane	0.92	4.0	5.0	22
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	11	5.8	68
Benzene	0.92	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.92	Not Detected	3.7	Not Detected
Heptane	0.92	Not Detected	3.7	Not Detected
Trichloroethene	0.92	59	4.9	320
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	Not Detected	6.1	Not Detected
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	Not Detected	3.7	Not Detected
Toluene	0.92	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Tetrachloroethene	0.92	100	6.2	690

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14813 Lab Duplicate

Lab ID#: 0809614-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100620	**Date of Collection:**	9/24/08
Dil. Factor:	1.83	**Date of Analysis:**	10/6/08 11:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected
Chlorobenzene	0.92	Not Detected	4.2	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
m,p-Xylene	0.92	Not Detected	4.0	Not Detected
o-Xylene	0.92	Not Detected	4.0	Not Detected
Styrene	0.92	Not Detected	3.9	Not Detected
Bromoform	0.92	Not Detected	9.4	Not Detected
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane	3.7	Not Detected U J	13	Not Detected U J
Methanol	92	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	Not Detected	6.3	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	93	70-130

0027

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100620.d
Lab Smp Id: 0809614-01AA
Inj Date : 06-OCT-2008 23:51
Operator : dfm Inst ID: msd7.i
Smp Info : 200mL #5776
Misc Info : 8.0"Hg-5psi
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	360188	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	281072			28.56- 128.56	78.03
14.333	14.333 (1.000)	49	1487504			335.95- 435.95	412.98
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1096776	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	180658			0.00- 67.14	16.47
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1133658	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	575581			1.24- 101.24	50.77
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	721229	26.5085	26.508	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	302782			0.00- 97.37	41.98
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	999608	23.8088	23.809	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	139463			0.00- 63.85	13.95

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	774406			26.51- 126.51	77.47
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	542071	23.2374	23.237	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	775685			90.08- 190.08	143.10
23.291	23.291 (1.093)	176	515874			45.80- 145.80	95.17
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	51781	0.58154	1.064	80.00- 120.00	100.00
5.786	5.729 (0.404)	87	16827			0.00- 81.85	32.50
45 Acetone					CAS #: 67-64-1		
10.434	10.407 (0.728)	58	115368	6.61501	12.105	80.00- 120.00	100.00
10.434	10.407 (0.728)	43	562053			340.42- 440.42	487.18
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	42527	0.78679	1.440	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	15298			0.00- 83.39	35.97
11.402	11.430 (0.796)	51	17038			0.00- 80.54	40.06
75 2-Butanone					CAS #: 78-93-3		
13.808	13.808 (0.963)	72	12553	1.10437	2.021	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	112378			755.71- 855.71	895.19
13.808	13.808 (0.963)	57	8173			0.00- 97.16	65.11
82 Chloroform					CAS #: 67-66-3		
14.388	14.388 (1.004)	83	2819542	56.3142	103.05	80.00- 120.00	100.00
14.388	14.388 (1.004)	85	2033363			21.22- 121.22	72.12
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	111780	2.18659	4.001	80.00- 120.00	100.00
14.748	14.748 (1.029)	99	72005			13.65- 113.65	64.42
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	342873	5.87368	10.749	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	366650			55.93- 155.93	106.93
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	827490	32.3465	59.194	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	861626			52.65- 152.65	104.13
16.573	16.573 (1.029)	97	540029			12.98- 112.98	65.26
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	1696888	55.4033	101.39	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	1504592			37.80- 137.80	88.67

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
120 Tetrachloroethene (continued)								
19.780	19.780	(0.929)	131	1496803			35.79- 135.79	88.21

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100620.d
Lab Smp Id: 0809614-01AA
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 8.0"Hg-5psi

Calibration Date: 06-OCT-2008
Calibration Time: 10:23

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	360188	-6.17
97 1,4-Difluorobenze	1202073	721244	1682902	1096776	-8.76
126 Chlorobenzene-d5	1260970	756582	1765358	1133658	-10.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100620.d
Report Date: 10-Oct-2008 20:49

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-01AA
Level: LOW
Operator: dfm
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 8.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.508	106.03	70-130
$ 113 Toluene-d8	25.000	23.809	95.24	70-130
$ 137 Bromofluorobenzene	25.000	23.237	92.95	70-130

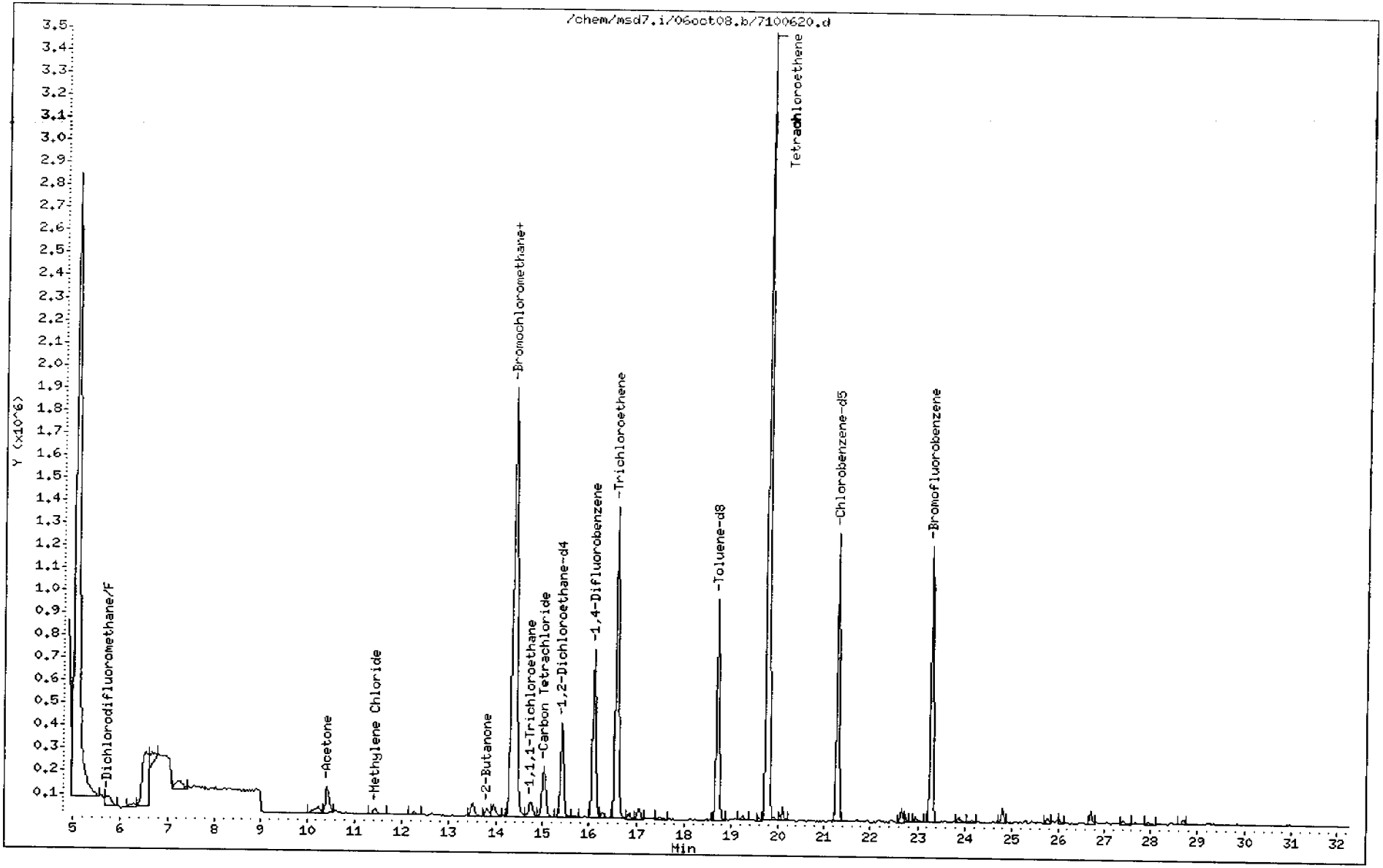
Data File: /chem/msd7.i/06oct08.b/7100620.d
Date : 06-OCT-2008 23:51
Client ID:
Sample Info: 200mL #5776

Column phase: RTx-624

Instrument: msd7.i

Operator: dfm
Column diameter: 0.53

0033



Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

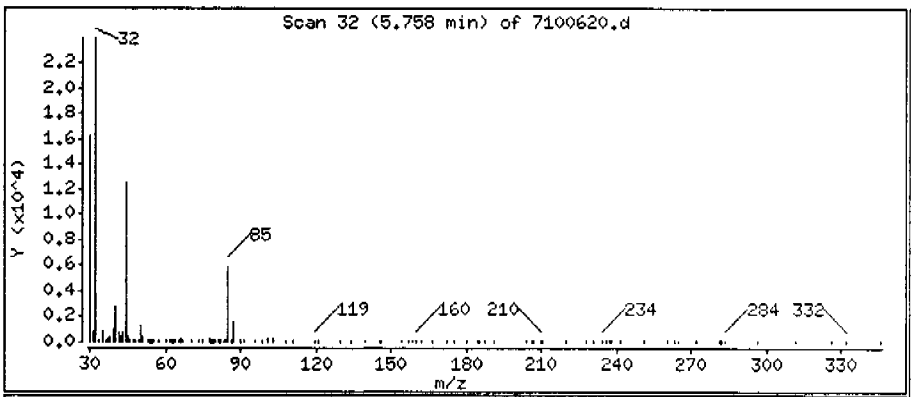
Operator: dfm

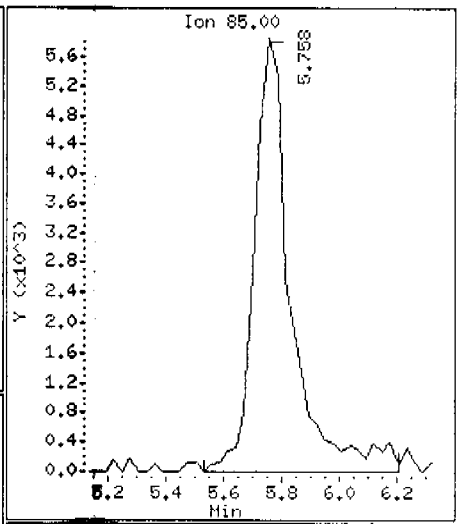
Column phase: RTx-624

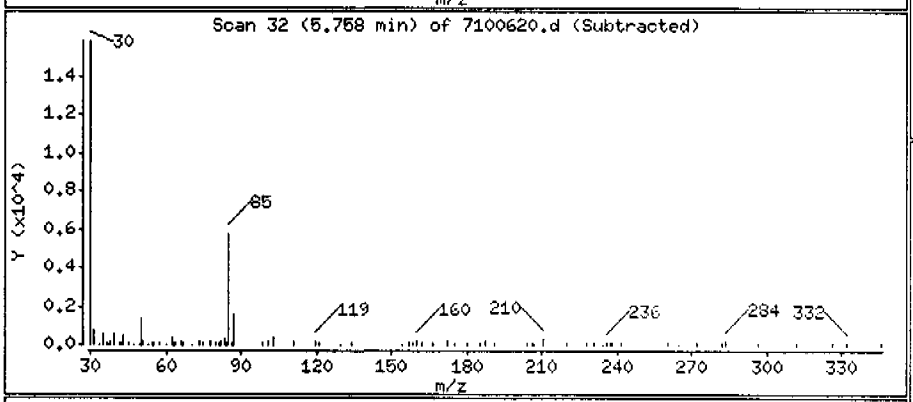
Column diameter: 0.53

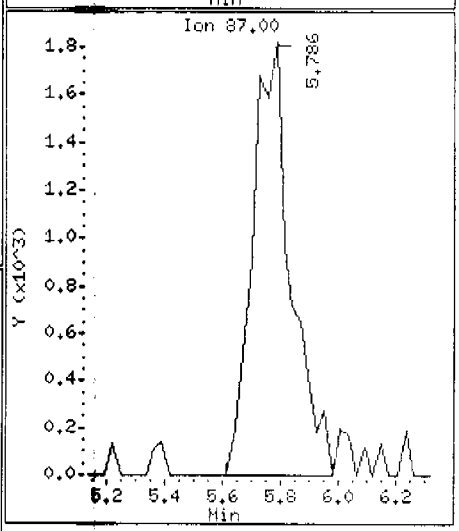
12 Dichlorodifluoromethane/Fr12

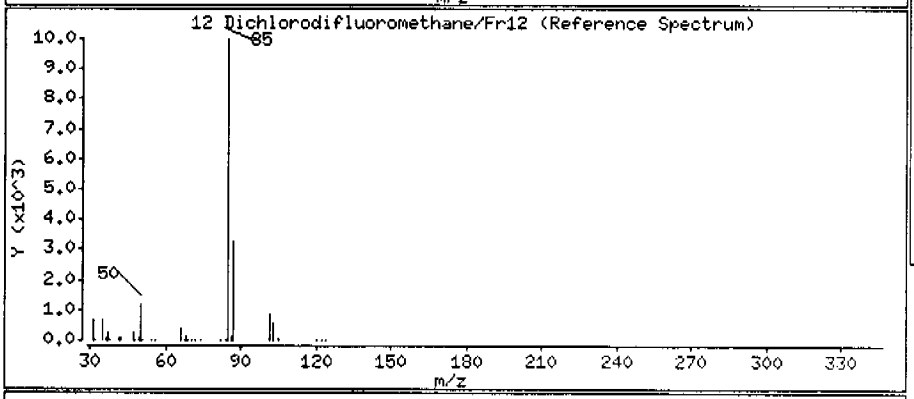
Concentration: 1.064 PPBV

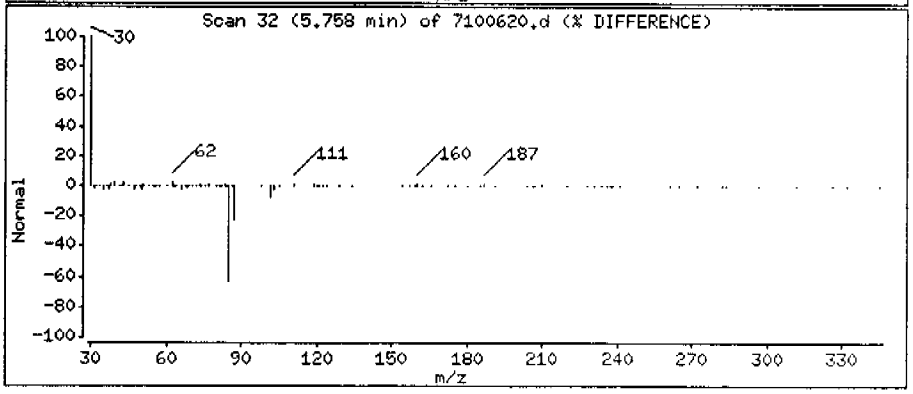












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

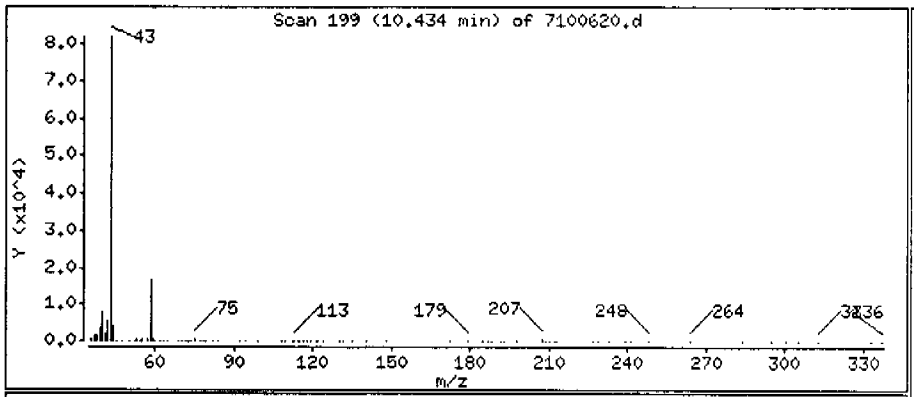
Operator: dfm

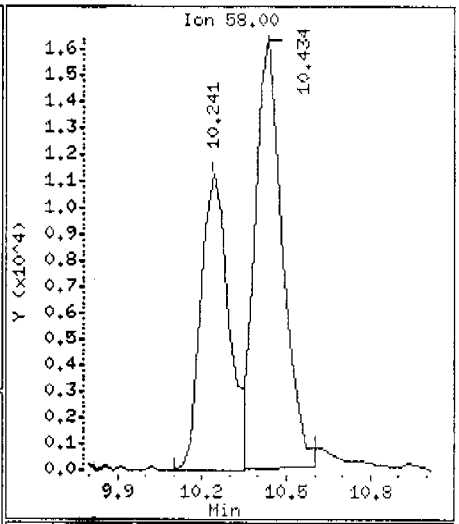
Column phase: RTx-624

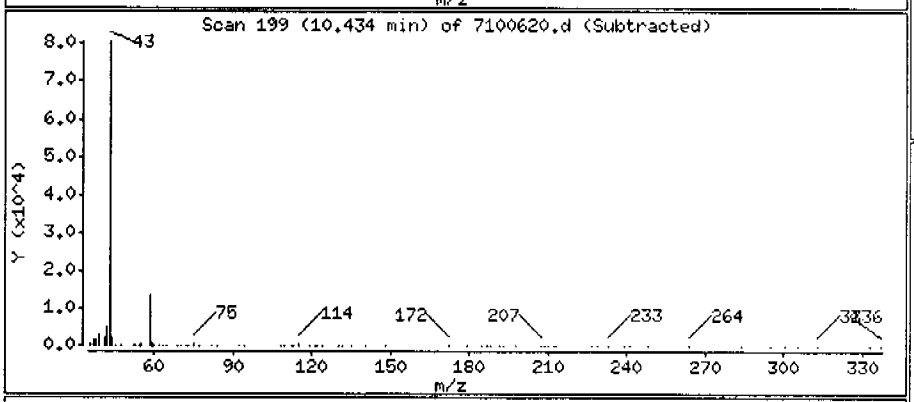
Column diameter: 0.53

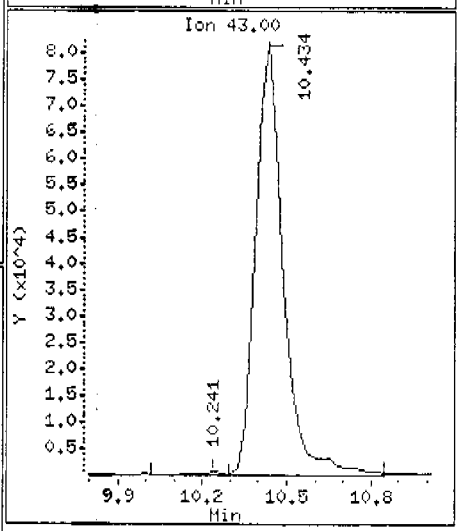
45 Acetone

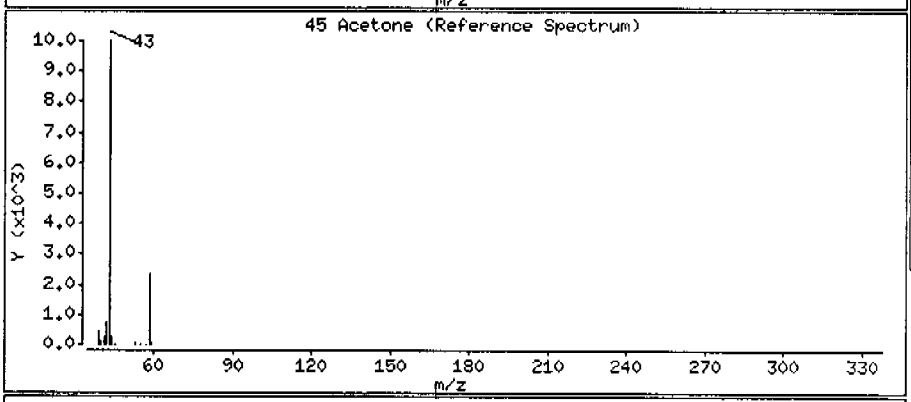
Concentration: 12.105 PPBV

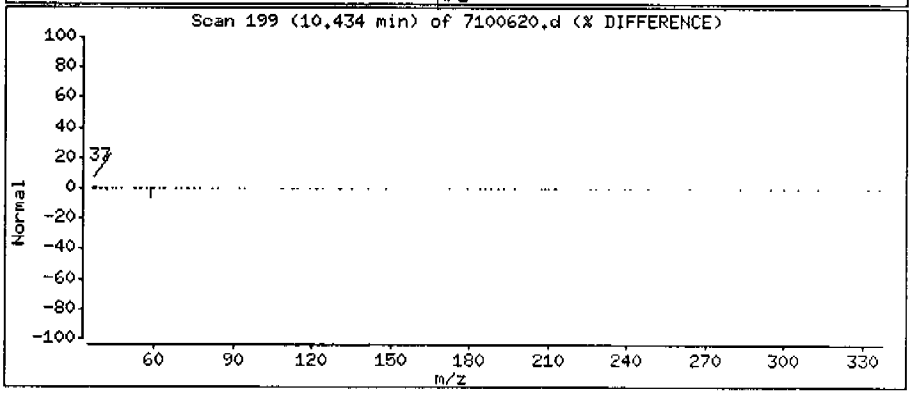












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

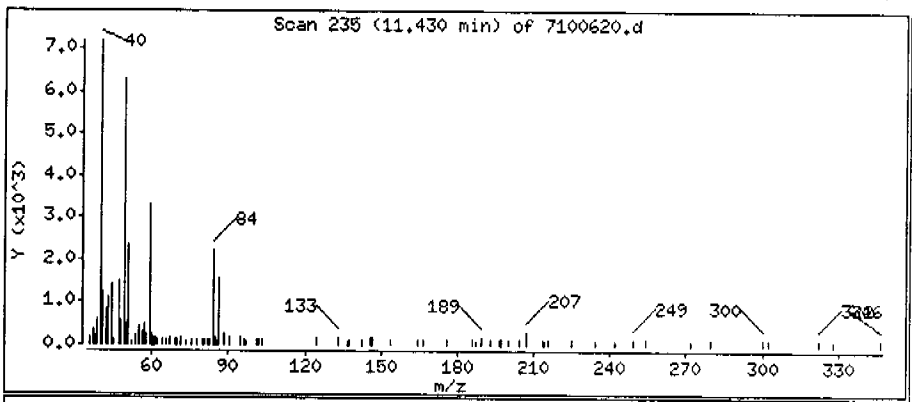
Operator: dfm

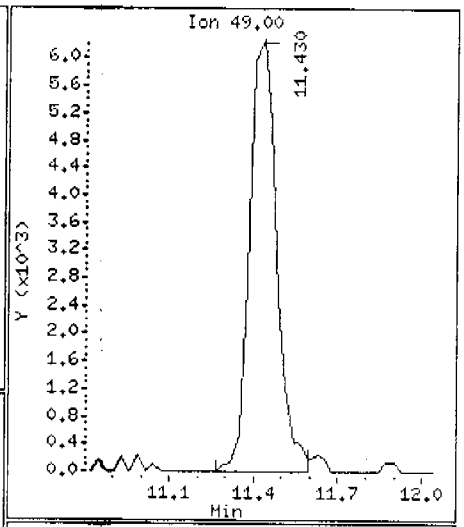
Column phase: RTx-624

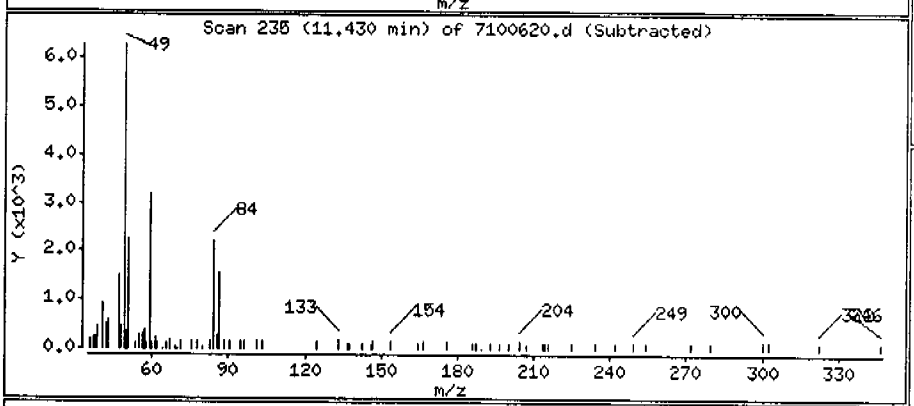
Column diameter: 0.53

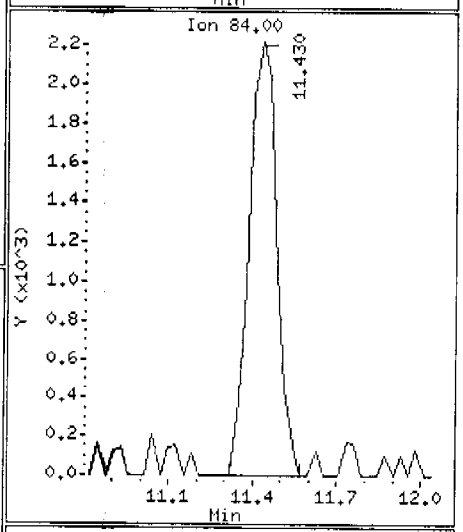
54 Methylene Chloride

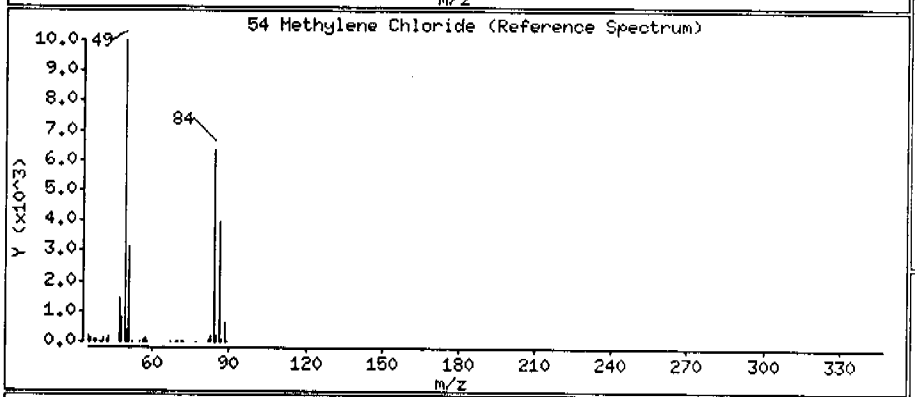
Concentration: 1.440 PPBV

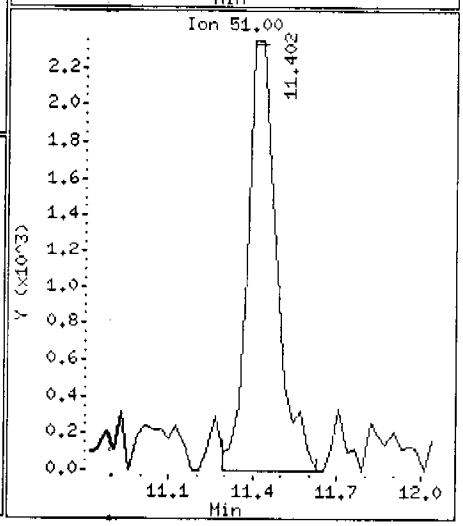


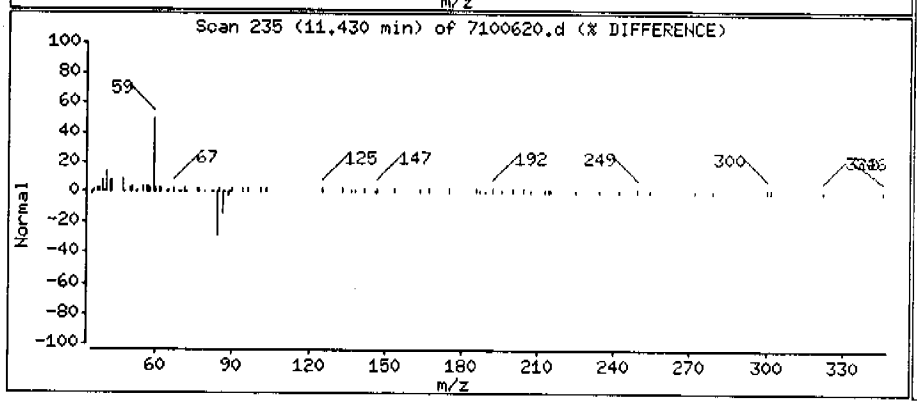












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

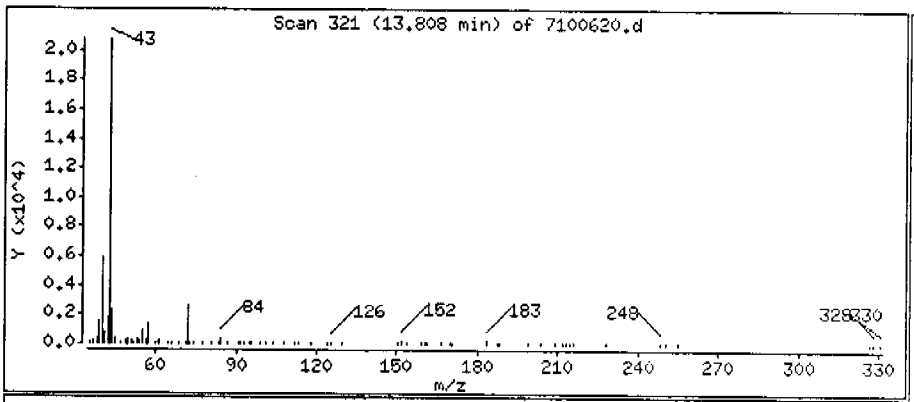
Operator: dfm

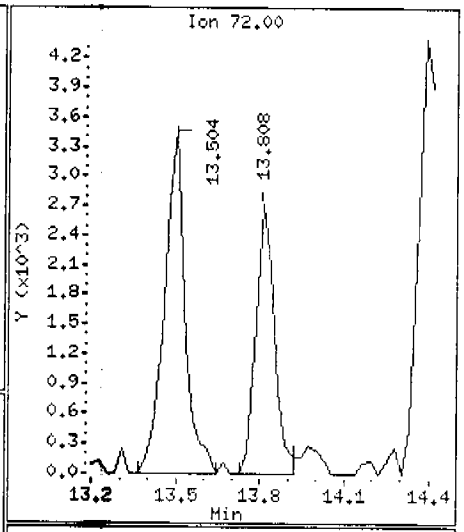
Column phase: RTx-624

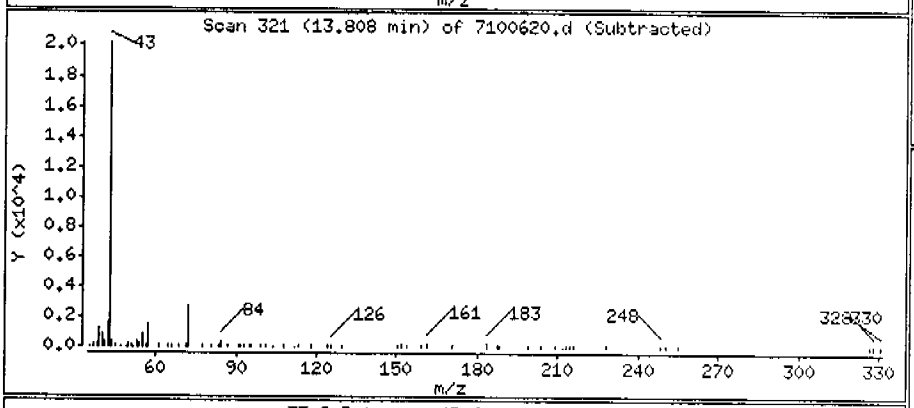
Column diameter: 0.53

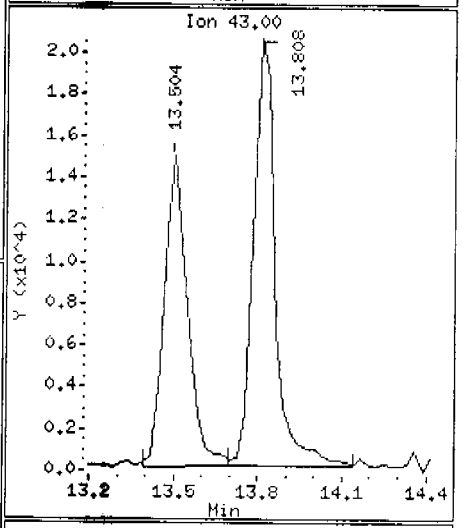
75 2-Butanone

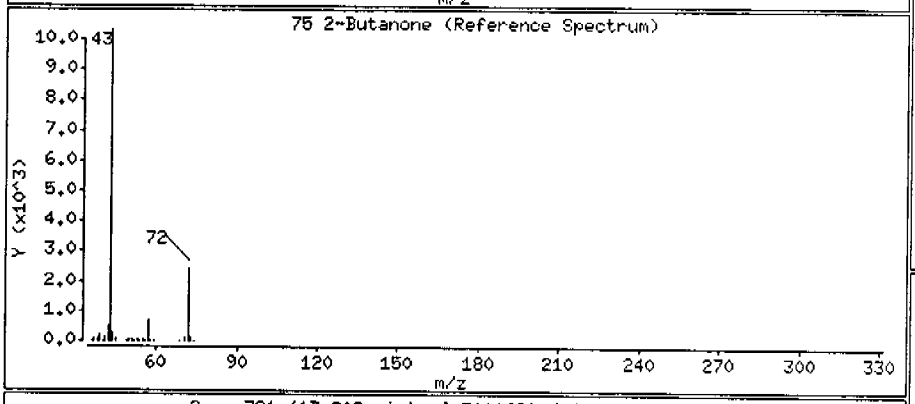
Concentration: 2.021 PPBV

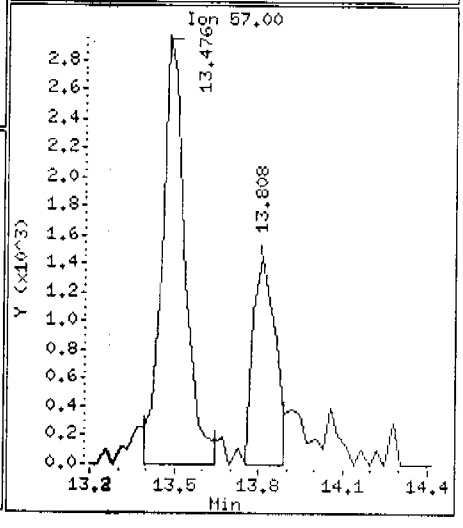


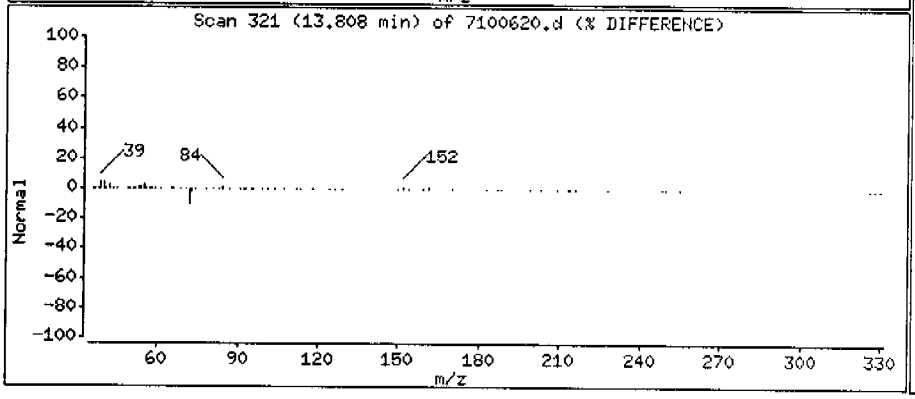












0037

Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

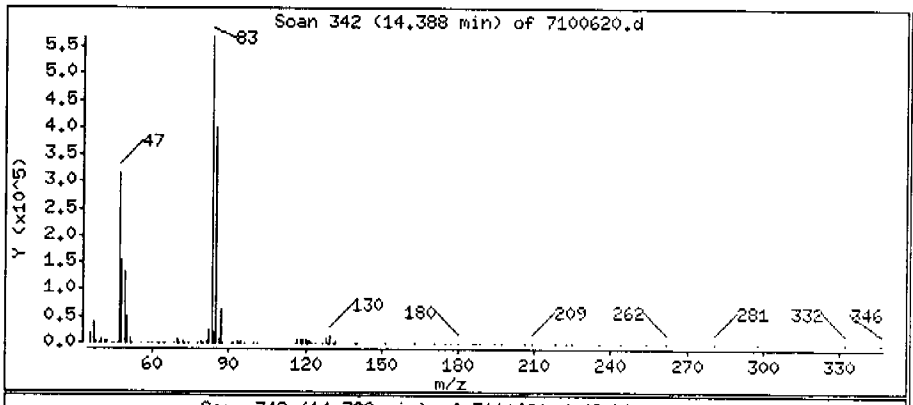
Operator: dfm

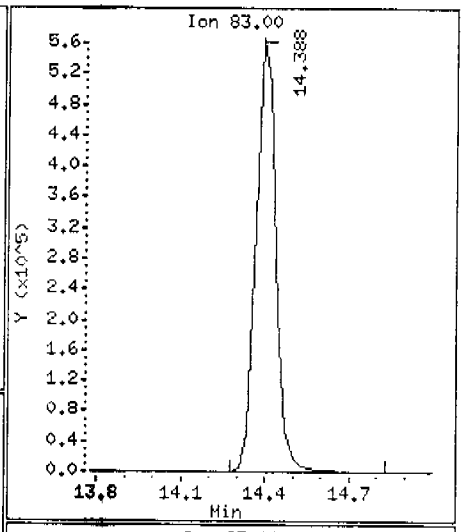
Column phase: RTx-624

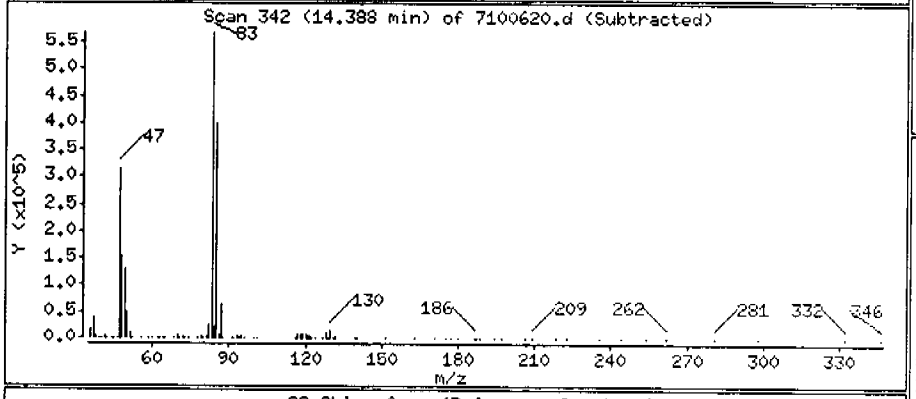
Column diameter: 0.53

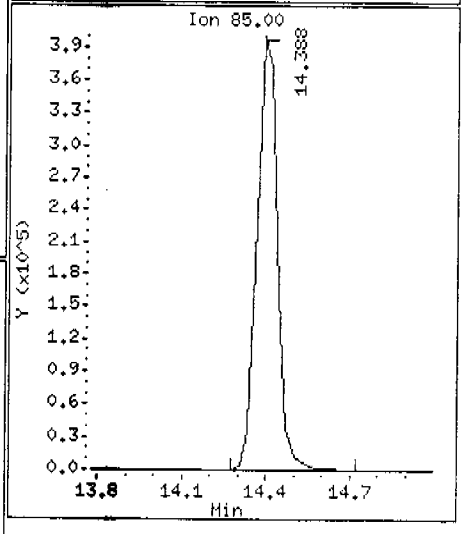
82 Chloroform

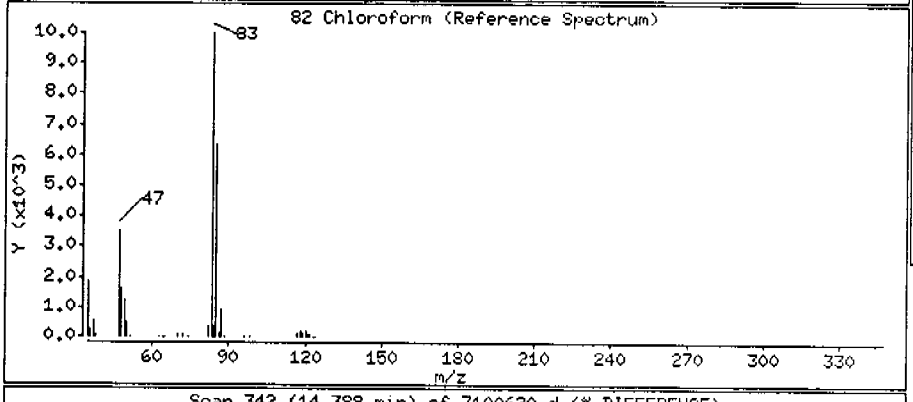
Concentration: 103.05 PPBV

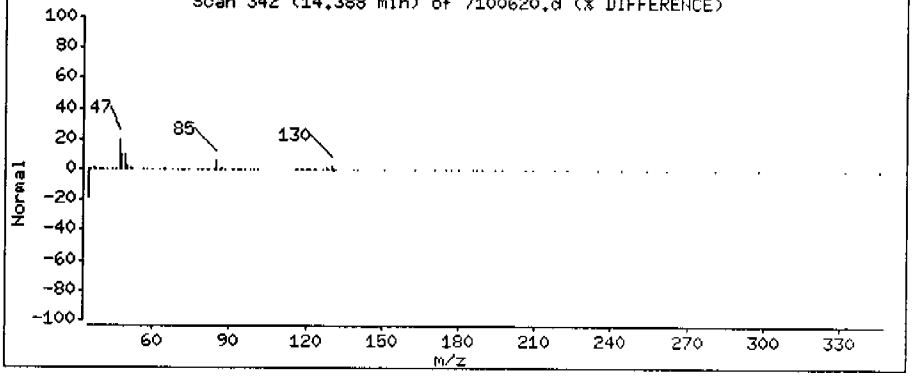












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

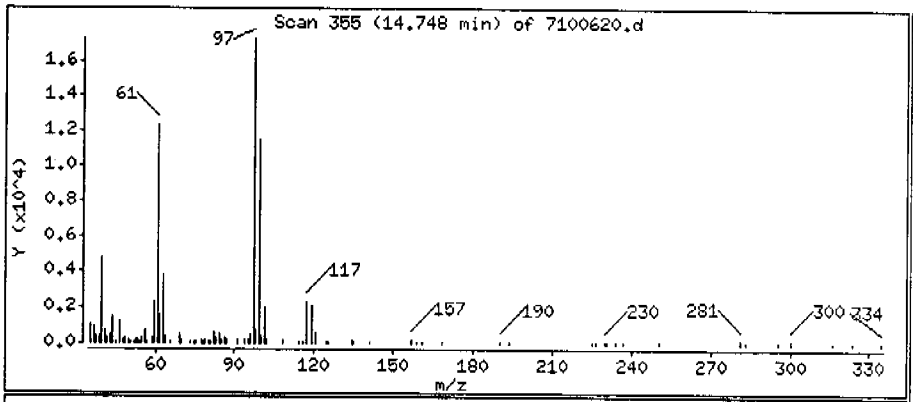
Operator: dfm

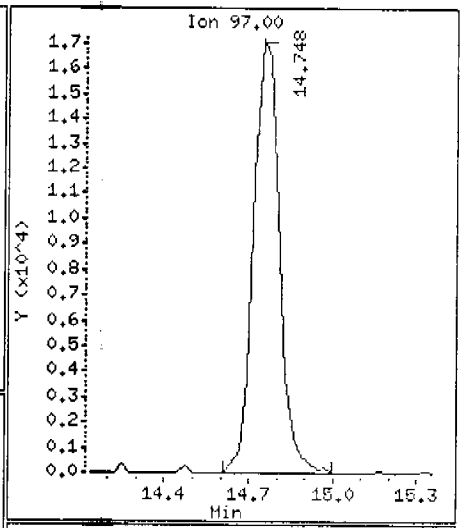
Column phase: RTx-624

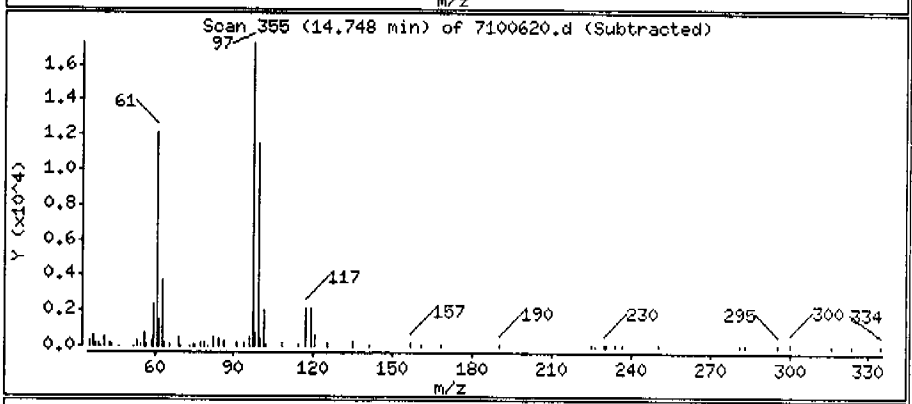
Column diameter: 0.53

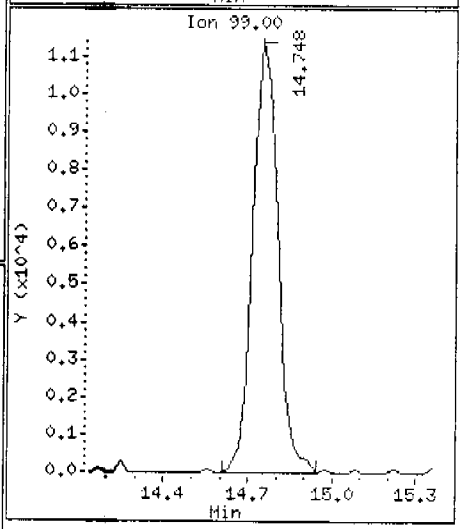
83 1,1,1-Trichloroethane

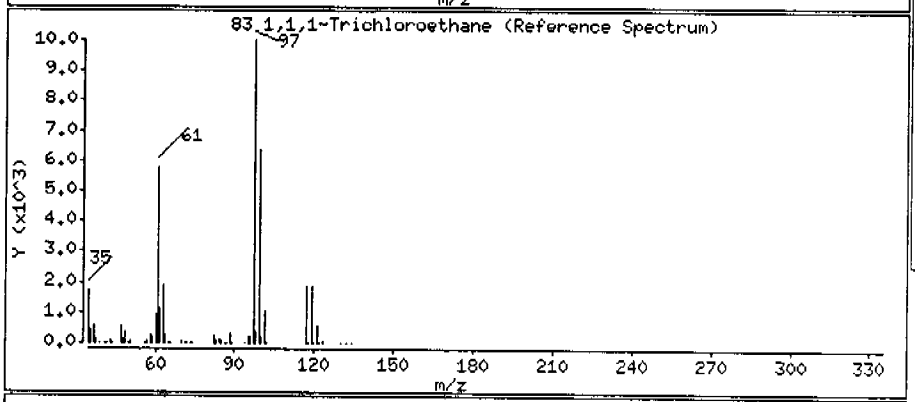
Concentration: 4.001 PPBV

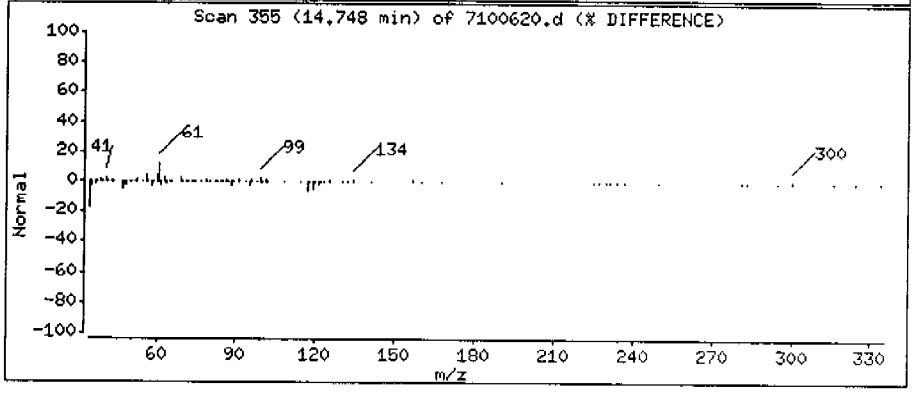












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

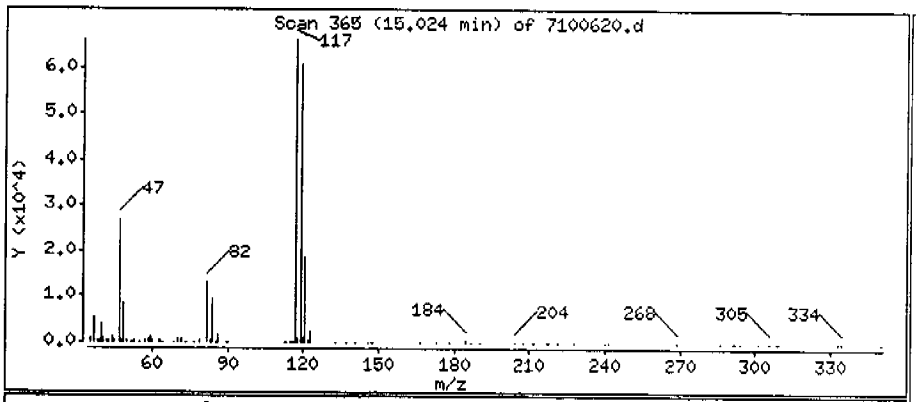
Operator: dfm

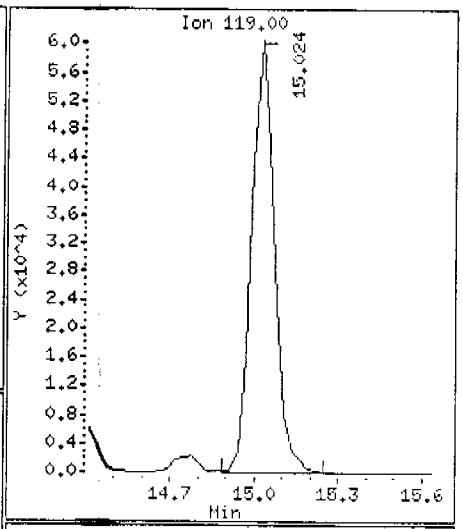
Column phase: RTx-624

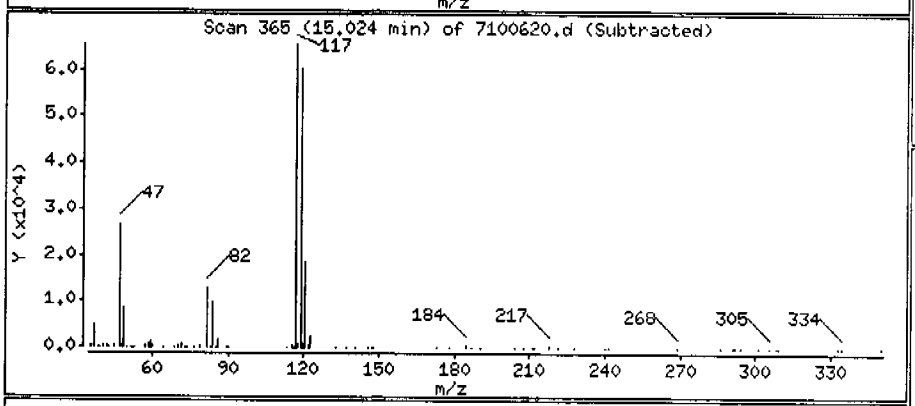
Column diameter: 0.53

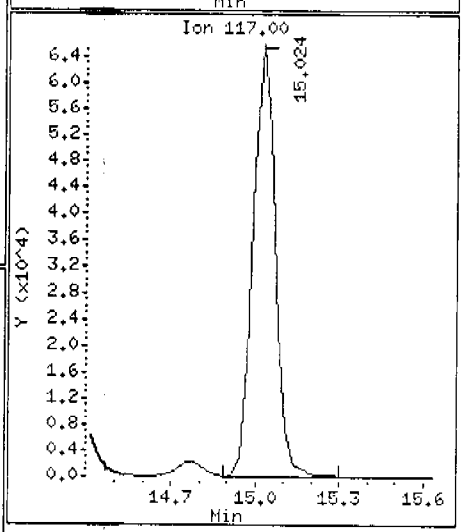
87 Carbon Tetrachloride

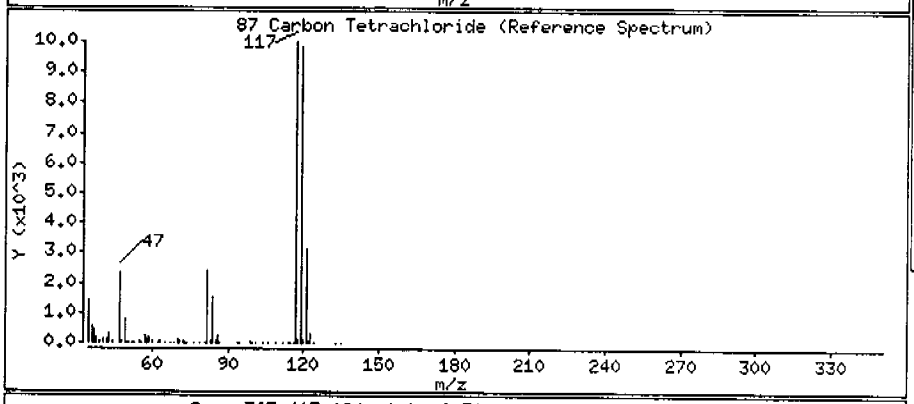
Concentration: 10.749 PPBV

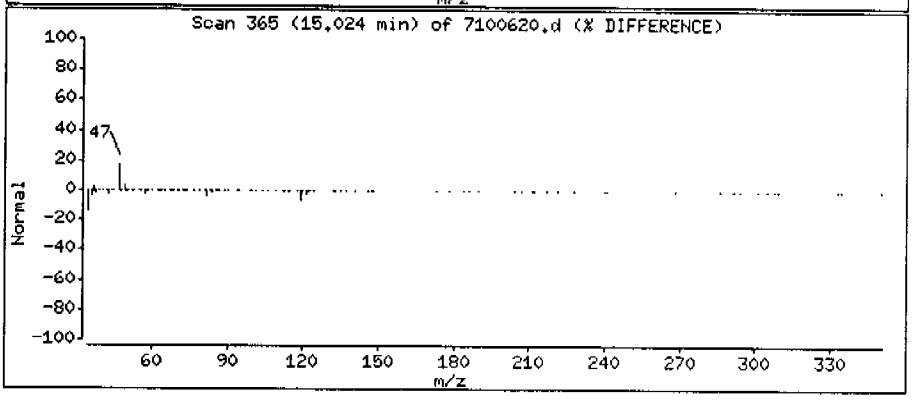












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

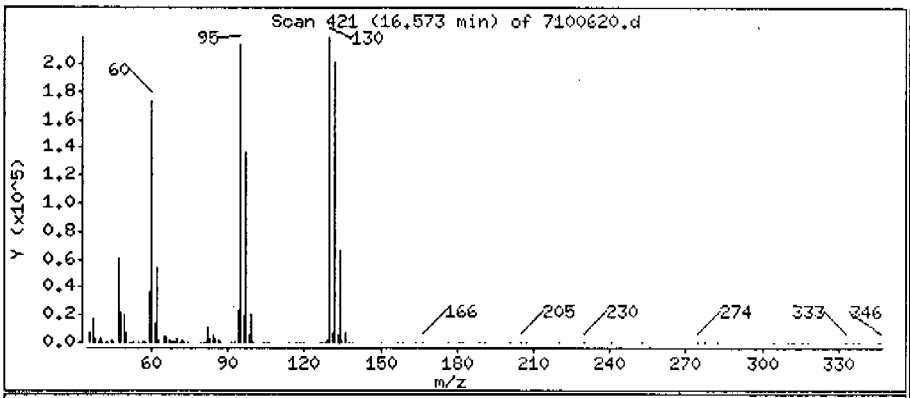
Operator: dfm

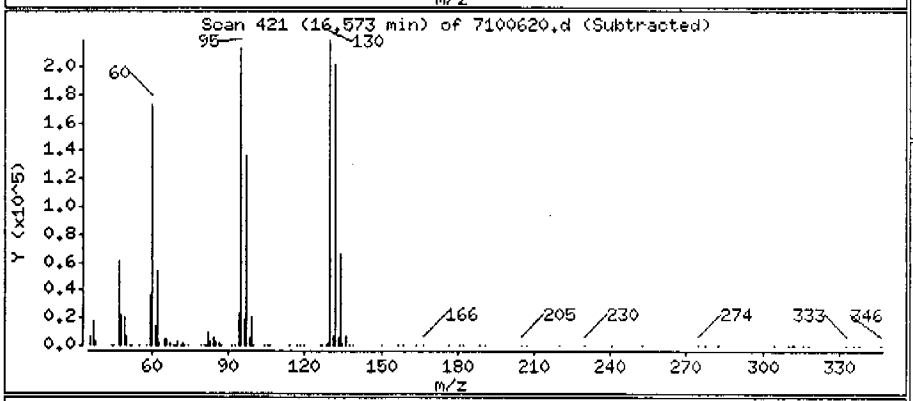
Column phase: RTx-624

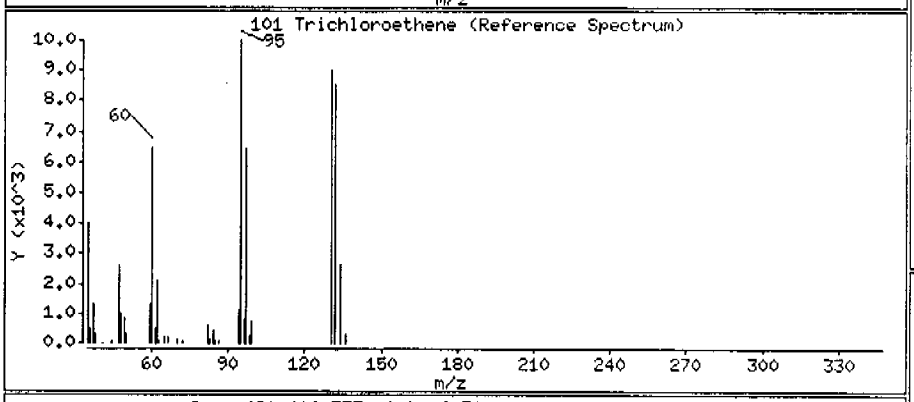
Column diameter: 0.53

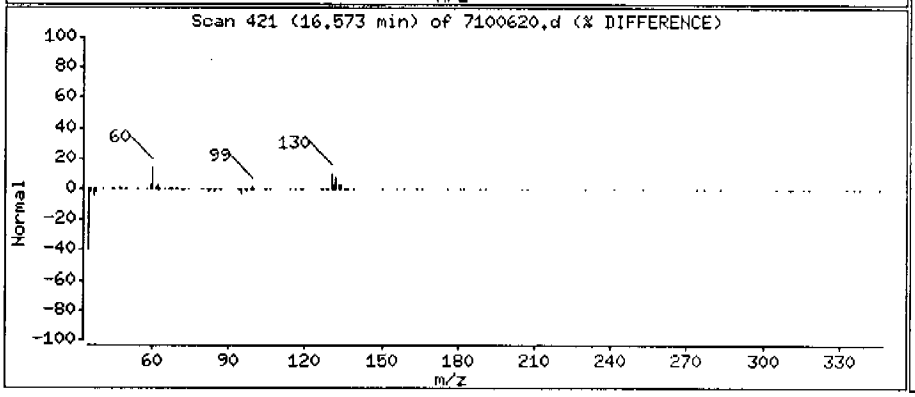
101 Trichloroethene

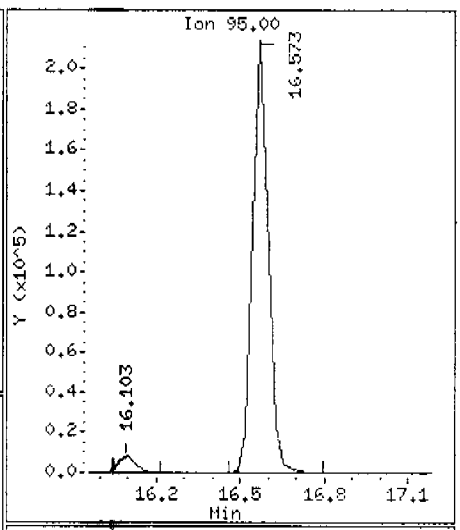
Concentration: 59.194 PPBV

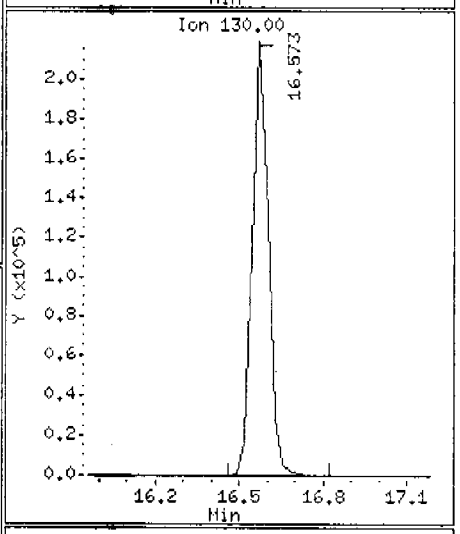


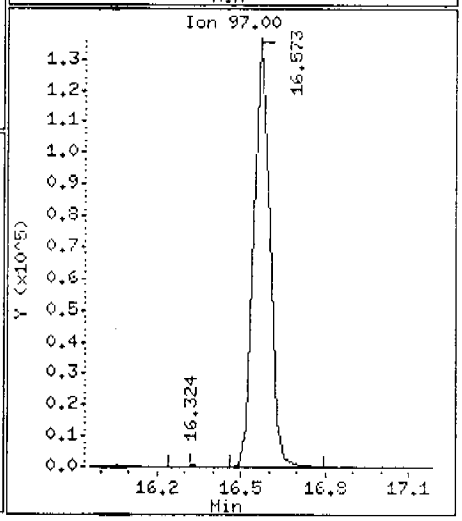












Data File: /chem/msd7.i/06oct08.b/7100620.d

Date : 06-OCT-2008 23:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5776

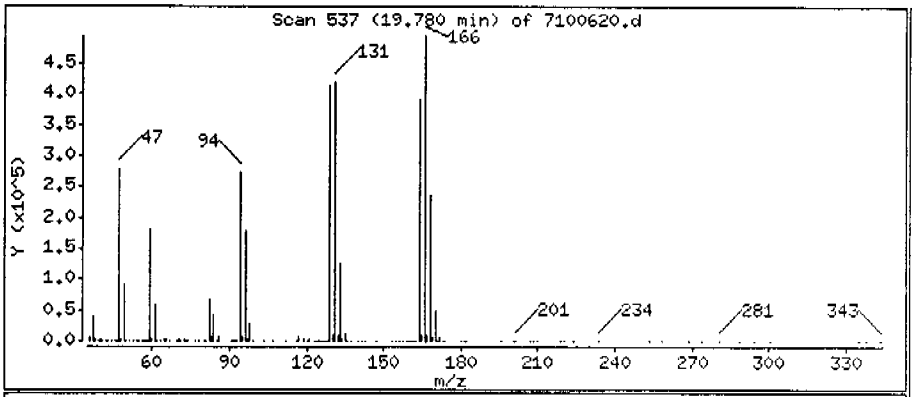
Operator: dfm

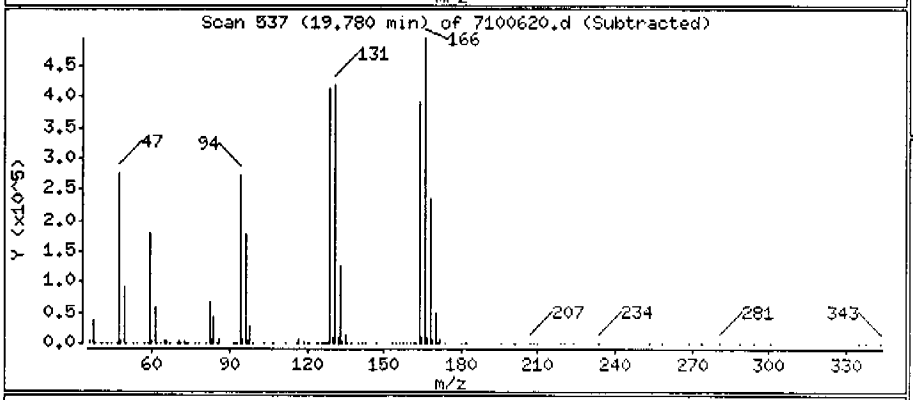
Column phase: RTx-624

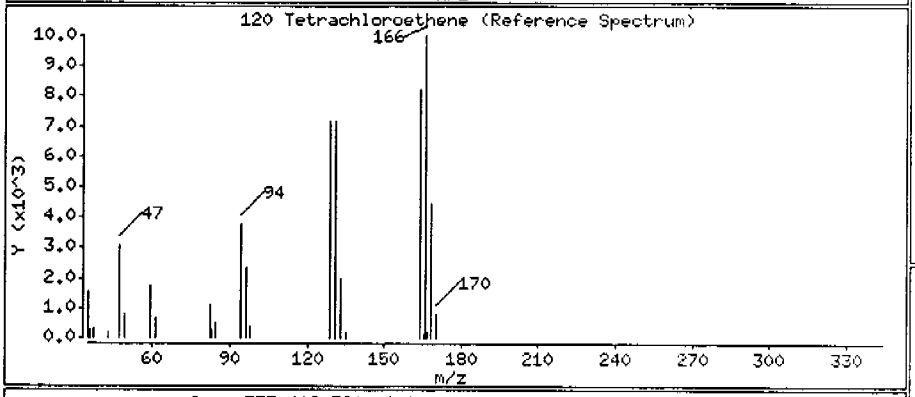
Column diameter: 0.53

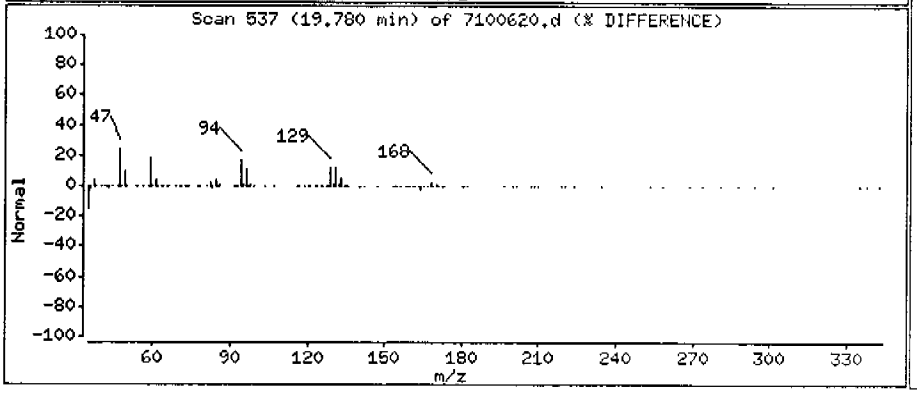
120 Tetrachloroethene

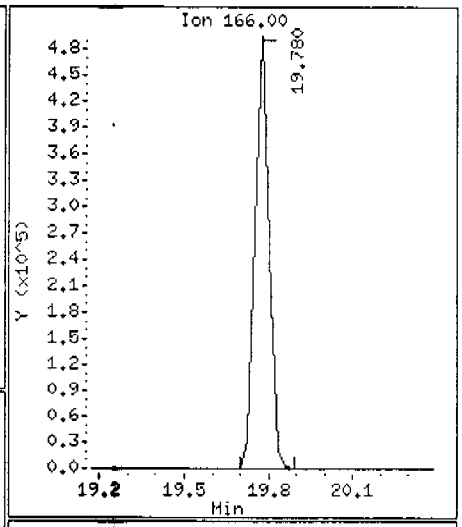
Concentration: 101.39 PPBV

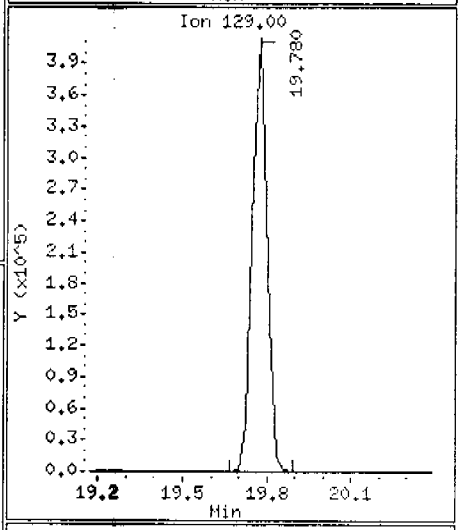


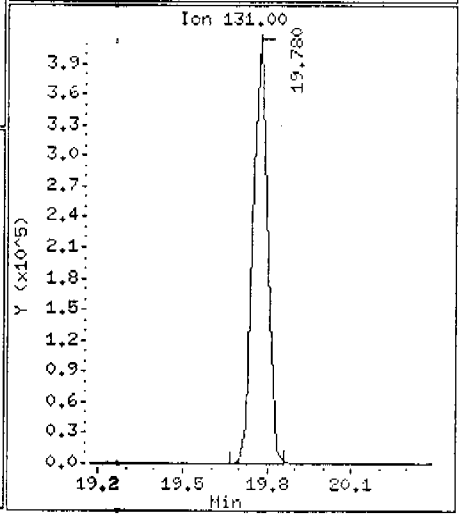












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14814

Lab ID#: 0809614-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.98	1.5	4.8	7.3
Freon 113	0.98	3.0	7.5	23
1,1-Dichloroethene	0.98	2.3	3.9	9.1
Methylene Chloride	0.98	130	3.4	440
Chloroform	0.98	150	4.8	720
1,1,1-Trichloroethane	0.98	6.4	5.3	35
Carbon Tetrachloride	0.98	61	6.2	380
1,2-Dichloroethane	0.98	1.6	4.0	6.3
Trichloroethene	0.98	150	5.3	820
1,1,2-Trichloroethane	0.98	2.6	5.3	14
Tetrachloroethene	0.98	34	6.6	230
Propylene	3.9	6.4	6.7	11

0043

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14814

Lab ID#: 0809614-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100623	**Date of Collection:**	9/24/08
Dil. Factor:	1.96	**Date of Analysis:**	10/7/08 02:36 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.98	1.5	4.8	7.3
Freon 114	0.98	Not Detected	6.8	Not Detected
Chloromethane	3.9	Not Detected	8.1	Not Detected
Vinyl Chloride	0.98	Not Detected	2.5	Not Detected
1,3-Butadiene	0.98	Not Detected	2.2	Not Detected
Bromomethane	0.98	Not Detected	3.8	Not Detected
Chloroethane	0.98	Not Detected	2.6	Not Detected
Freon 11	0.98	Not Detected	5.5	Not Detected
Ethanol	3.9	Not Detected	7.4	Not Detected
Freon 113	0.98	3.0	7.5	23
1,1-Dichloroethene	0.98	2.3	3.9	9.1
Acetone	3.9	Not Detected	9.3	Not Detected
2-Propanol	3.9	Not Detected	9.6	Not Detected
Carbon Disulfide	0.98	Not Detected	3.0	Not Detected
Methylene Chloride	0.98	130	3.4	440
Methyl tert-butyl ether	0.98	Not Detected	3.5	Not Detected
trans-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Hexane	0.98	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.98	Not Detected	4.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.98	Not Detected	2.9	Not Detected
cis-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Tetrahydrofuran	0.98	Not Detected	2.9	Not Detected
Chloroform	0.98	150	4.8	720
1,1,1-Trichloroethane	0.98	6.4	5.3	35
Cyclohexane	0.98	Not Detected	3.4	Not Detected
Carbon Tetrachloride	0.98	61	6.2	380
Benzene	0.98	Not Detected	3.1	Not Detected
1,2-Dichloroethane	0.98	1.6	4.0	6.3
Heptane	0.98	Not Detected	4.0	Not Detected
Trichloroethene	0.98	150	5.3	820
1,2-Dichloropropane	0.98	Not Detected	4.5	Not Detected
1,4-Dioxane	3.9	Not Detected	14	Not Detected
Bromodichloromethane	0.98	Not Detected	6.6	Not Detected
cis-1,3-Dichloropropene	0.98	Not Detected	4.4	Not Detected
4-Methyl-2-pentanone	0.98	Not Detected	4.0	Not Detected
Toluene	0.98	Not Detected	3.7	Not Detected
trans-1,3-Dichloropropene	0.98	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	0.98	2.6	5.3	14
Tetrachloroethene	0.98	34	6.6	230

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14814

Lab ID#: 0809614-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100623	Date of Collection:	9/24/08
Dil. Factor:	1.96	Date of Analysis:	10/7/08 02:36 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.9	Not Detected	16	Not Detected
Dibromochloromethane	0.98	Not Detected	8.3	Not Detected
1,2-Dibromoethane (EDB)	0.98	Not Detected	7.5	Not Detected
Chlorobenzene	0.98	Not Detected	4.5	Not Detected
Ethyl Benzene	0.98	Not Detected	4.2	Not Detected
m,p-Xylene	0.98	Not Detected	4.2	Not Detected
o-Xylene	0.98	Not Detected	4.2	Not Detected
Styrene	0.98	Not Detected	4.2	Not Detected
Bromoform	0.98	Not Detected	10	Not Detected
1,1,2,2-Tetrachloroethane	0.98	Not Detected	6.7	Not Detected
4-Ethyltoluene	0.98	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
1,2,4-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
1,3-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected
1,4-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected
alpha-Chlorotoluene	0.98	Not Detected	5.1	Not Detected
1,2-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected
1,2,4-Trichlorobenzene	3.9	Not Detected	29	Not Detected
Hexachlorobutadiene	3.9	Not Detected	42	Not Detected
Chlorodifluoromethane	3.9	Not Detected U J	14	Not Detected U J
Methanol	98	Not Detected	130	Not Detected
n-Butanol	3.9	Not Detected	12	Not Detected
Propylene	3.9	6.4	6.7	11

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	92	70-130

0045

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100623.d
Lab Smp Id: 0809614-02A
Inj Date : 07-OCT-2008 02:36
Operator : dfm Inst ID: msd7.i
Smp Info : 200mL #12003
Misc Info : 9.5"Hg-5psi
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.96000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	========	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.333	14.333 (1.000)	130	346344	25.0000			80.00- 120.00	100.00
14.333	14.333 (1.000)	128	276679				28.56- 128.56	79.89
14.333	14.333 (1.000)	49	1592591				335.95- 435.95	459.83
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.102	16.103 (1.000)	114	1058729	25.0000			80.00- 120.00	100.00
16.102	16.103 (1.000)	88	180678				0.00- 67.14	17.07
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1073737	25.0000			80.00- 120.00	100.00
21.301	21.301 (1.000)	82	552094				1.24- 101.24	51.42
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	703201	26.8790	26.879		80.00- 120.00	100.00
15.411	15.411 (1.075)	67	300682				0.00- 97.37	42.76
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	974280	24.0395	24.039		80.00- 120.00	100.00
18.702	18.702 (1.161)	70	136344				0.00- 63.85	13.99

Data File: /chem/msd7.i/06oct08.b/7100623.d
Report Date: 10-Oct-2008 20:51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	743225			26.51- 126.51	76.28
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	509439	23.0573	23.057	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	722308			90.08- 190.08	141.79
23.291	23.291 (1.093)	176	482115			45.80- 145.80	94.64
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	64795	0.75678	1.483	80.00- 120.00	100.00
5.758	5.729 (0.402)	87	19301			0.00- 81.85	29.79
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	53280	1.55956	3.057	80.00- 120.00	100.00
10.130	10.158 (0.707)	153	35011			12.79- 112.79	65.71
10.158	10.158 (0.709)	101	79585			98.93- 198.93	149.37
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.268	10.269 (0.716)	61	69545	1.17060	2.294	80.00- 120.00	100.00
10.268	10.269 (0.716)	96	24017			0.00- 84.73	34.53
10.268	10.269 (0.716)	98	16470			0.00- 71.80	23.68
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	3342225	64.3057	126.04	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	1089061			0.00- 83.39	32.58
11.430	11.430 (0.797)	51	963063			0.00- 80.54	28.82
82 Chloroform					CAS #: 67-66-3		
14.388	14.388 (1.004)	83	3608130	74.9450	146.89	80.00- 120.00	100.00
14.388	14.388 (1.004)	85	2562753			21.22- 121.22	71.03
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	160329	3.26164	6.393	80.00- 120.00	100.00
14.748	14.748 (1.029)	99	104957			13.65- 113.65	65.46
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	1738706	30.9760	60.713	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	1817854			55.93- 155.93	104.55
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.550	15.550 (0.966)	62	33804	0.79346	1.555	80.00- 120.00	100.00
15.550	15.550 (0.966)	64	11077			0.00- 82.49	32.77
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1925000	77.9523	152.79	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1942342			52.65- 152.65	100.90

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)								
16.573	16.573	(1.029)	97	1232583			12.98- 112.98	64.03
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.586	19.614	(0.920)	97	29589	1.33680	2.620	80.00- 120.00	100.00
19.614	19.614	(0.921)	99	19800			11.37- 111.37	66.92
19.586	19.614	(0.920)	83	22404			32.88- 132.88	75.72
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	505044	17.4099	34.123	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	450061			37.80- 137.80	89.11
19.780	19.780	(0.929)	131	441096			35.79- 135.79	87.34
11 Propylene						CAS #: 115-07-1		
5.617	5.589	(0.392)	41	96637	3.27232	6.414	80.00- 120.00	100.00
5.617	5.589	(0.392)	42	38453			16.57- 116.57	39.79
5.617	5.589	(0.392)	39	121448			28.60- 128.60	125.67

Data File: /chem/msd7.i/06oct08.b/7100623.d
Report Date: 10-Oct-2008 20:51

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100623.d
Lab Smp Id: 0809614-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 9.5"Hg-5psi

Calibration Date: 06-OCT-2008
Calibration Time: 10:23

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	346344	-9.77
97 1,4-Difluorobenze	1202073	721244	1682902	1058729	-11.92
126 Chlorobenzene-d5	1260970	756582	1765358	1073737	-14.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100623.d
Report Date: 10-Oct-2008 20:51

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-02A
Level: LOW
Operator: dfm
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 9.5"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.879	107.52	70-130
$ 113 Toluene-d8	25.000	24.039	96.16	70-130
$ 137 Bromofluorobenzene	25.000	23.057	92.23	70-130

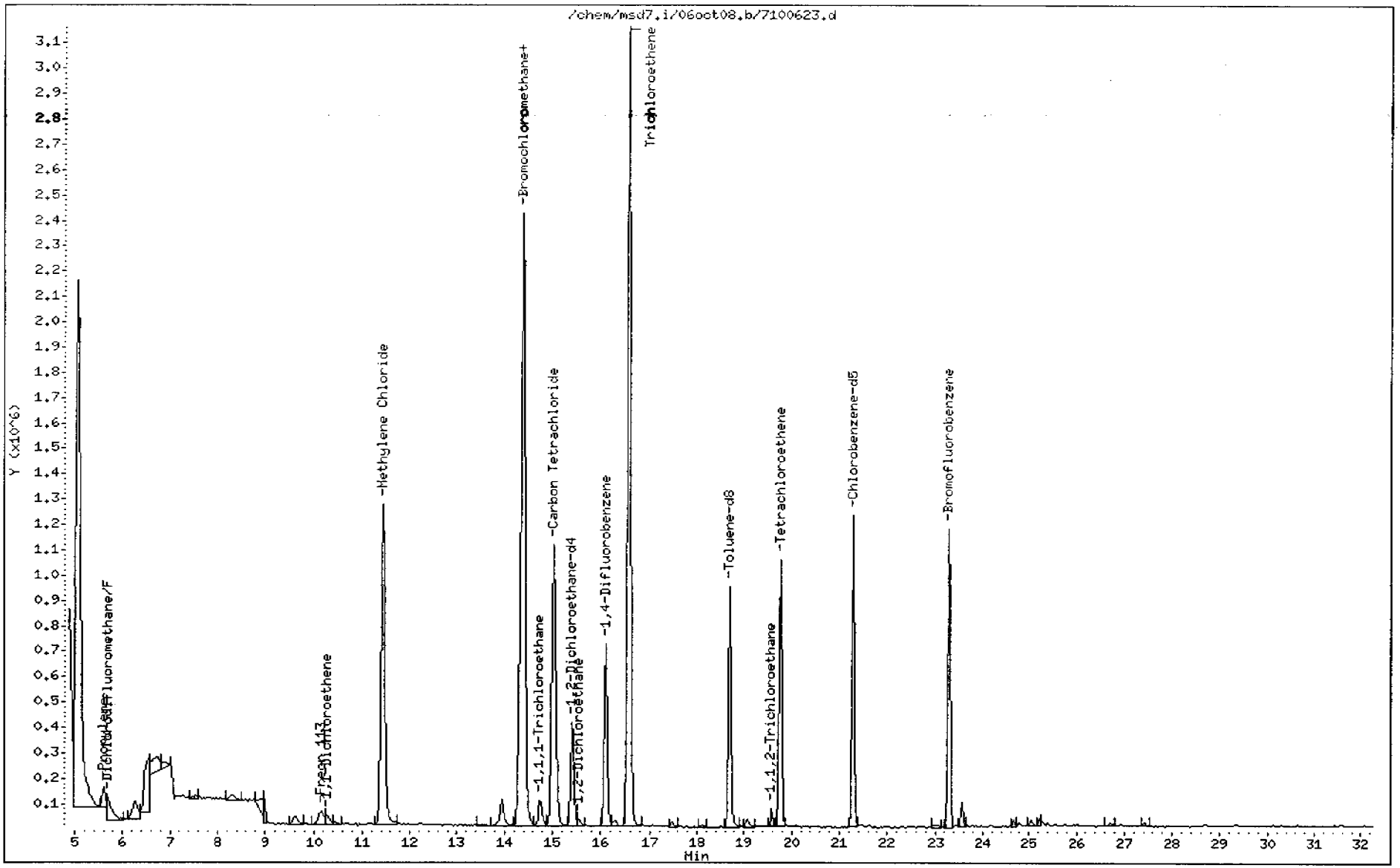
Data File: /chem/msd7.i/06oct08.b/7100623.d
Date : 07-OCT-2008 02:36
Client ID:
Sample Info: 200mL #12003

Column phase: RTx-624

Instrument: msd7.i

Operator: dfm
Column diameter: 0.53

0051



Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

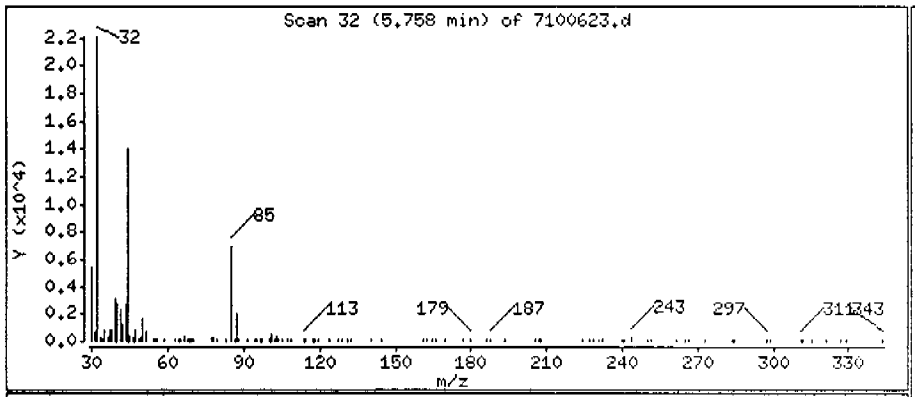
Operator: dfm

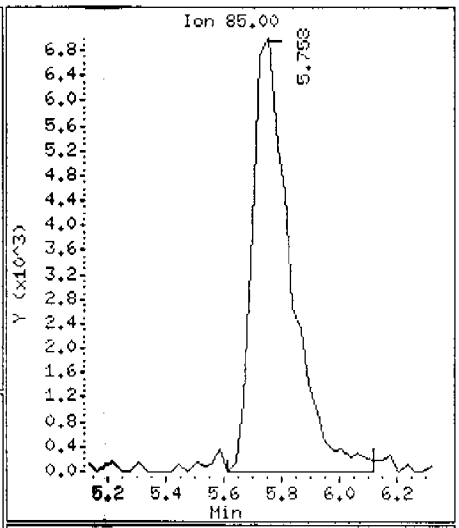
Column phase: RTx-624

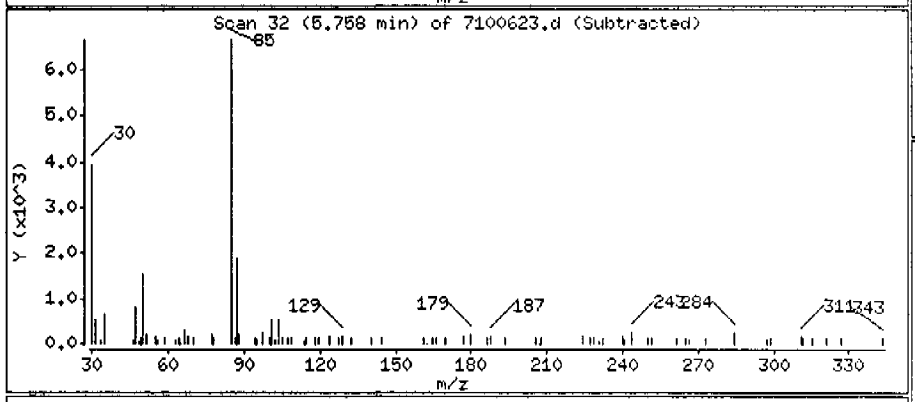
Column diameter: 0.53

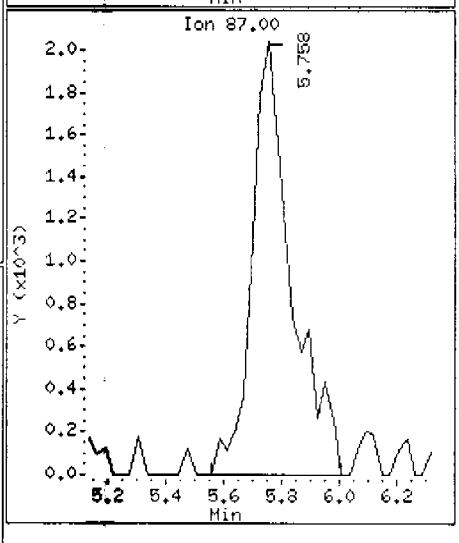
12 Dichlorodifluoromethane/Fr12

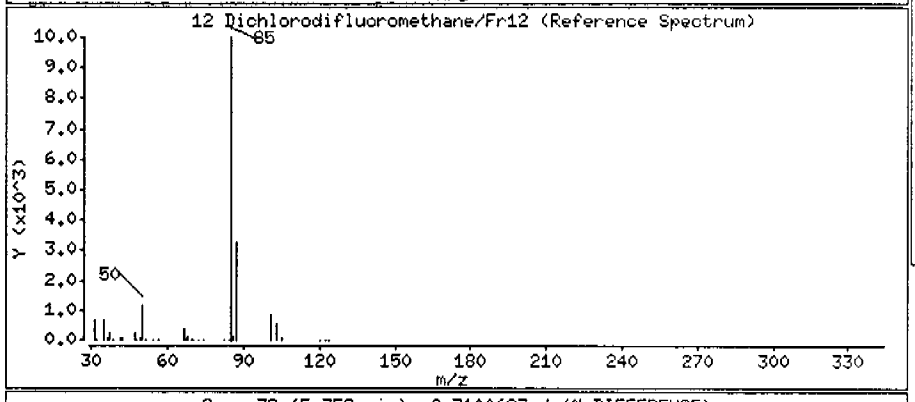
Concentration: 1.483 PPBV

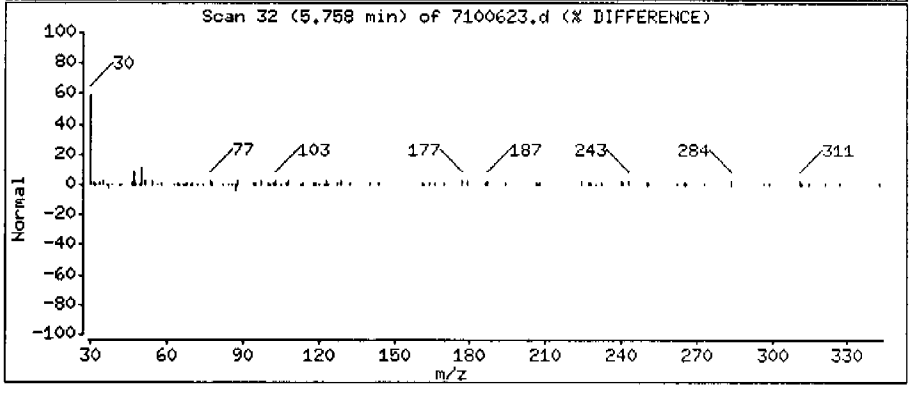












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

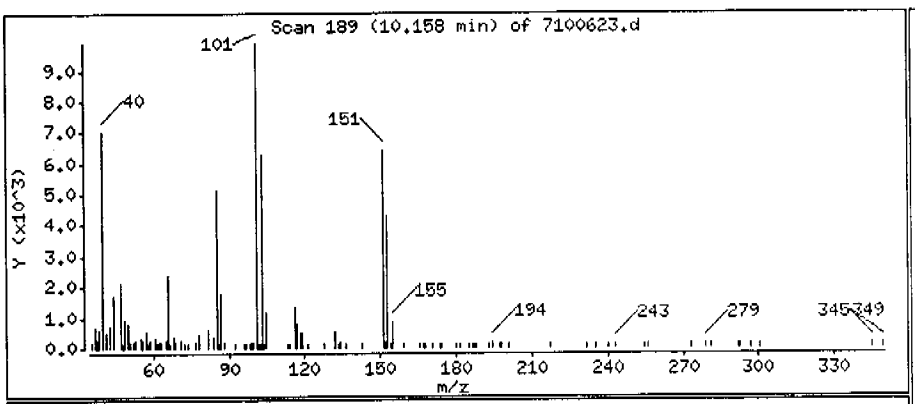
Operator: dfm

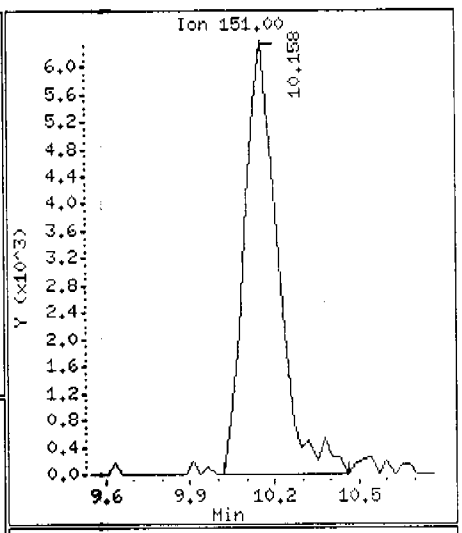
Column phase: RTx-624

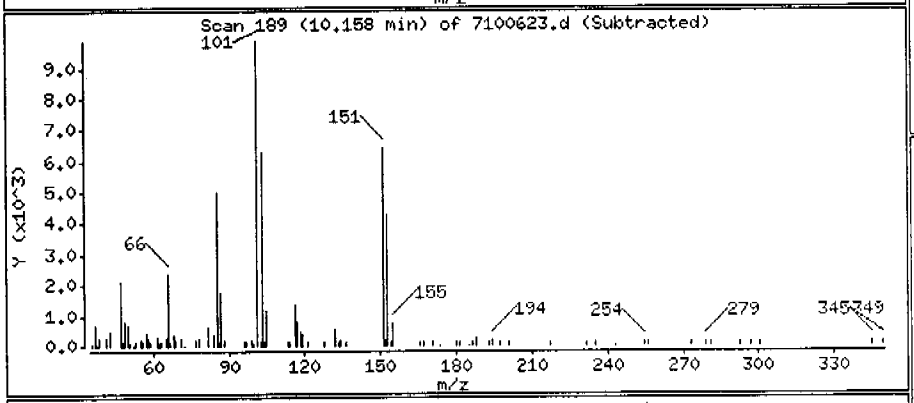
Column diameter: 0.53

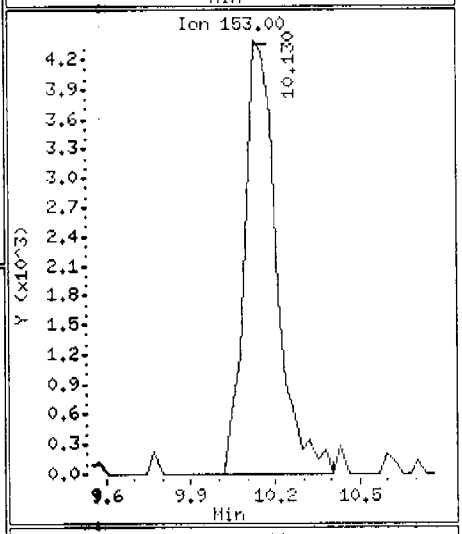
42 Freon 113

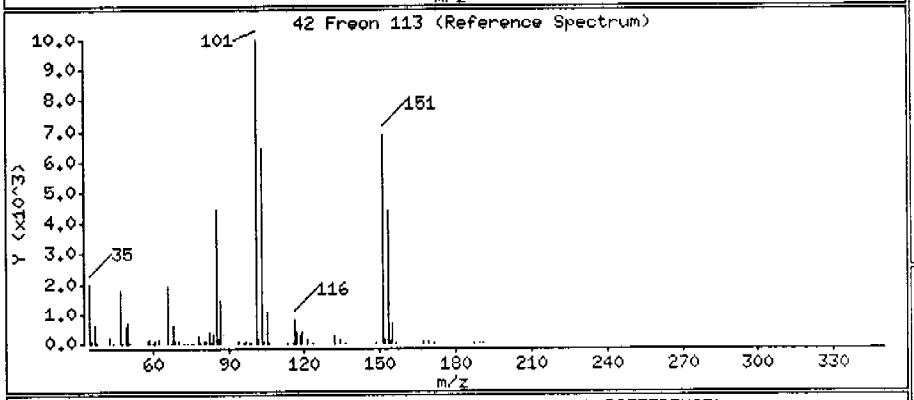
Concentration: 3.057 PPBV

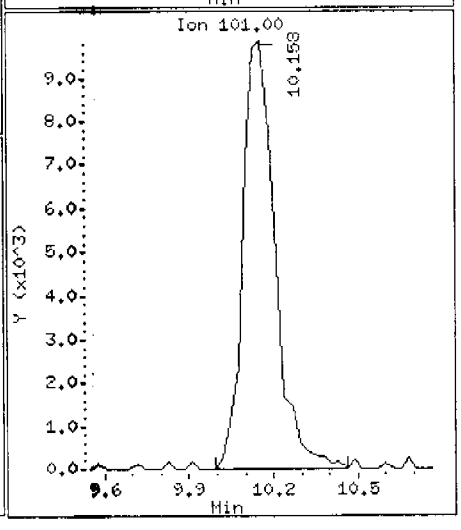


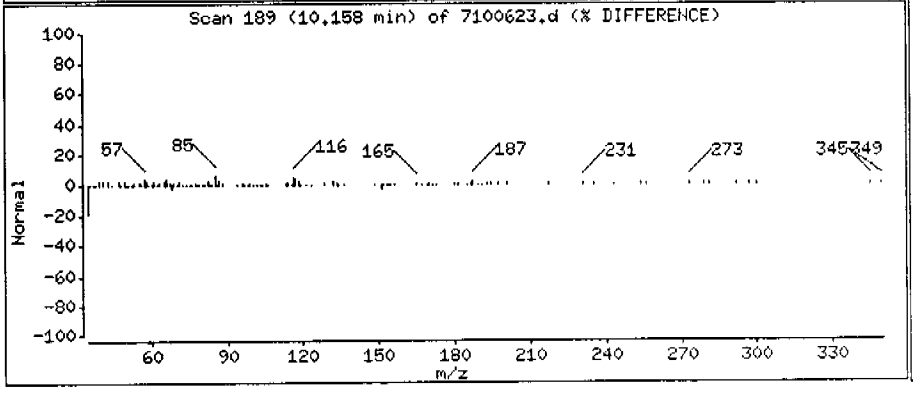












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

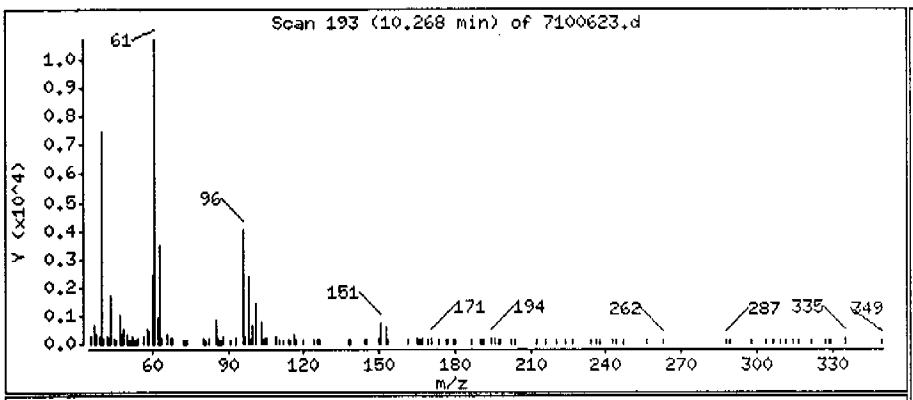
Operator: dfm

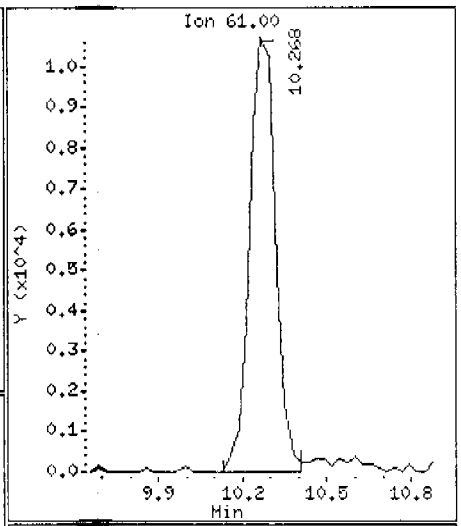
Column phase: RTx-624

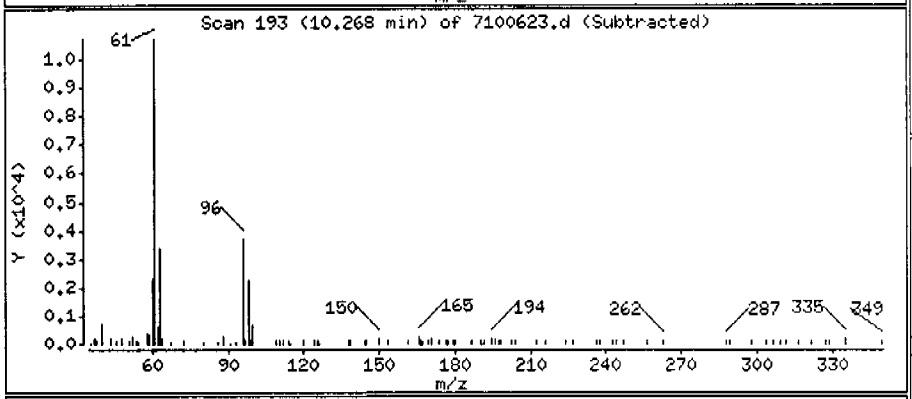
Column diameter: 0.53

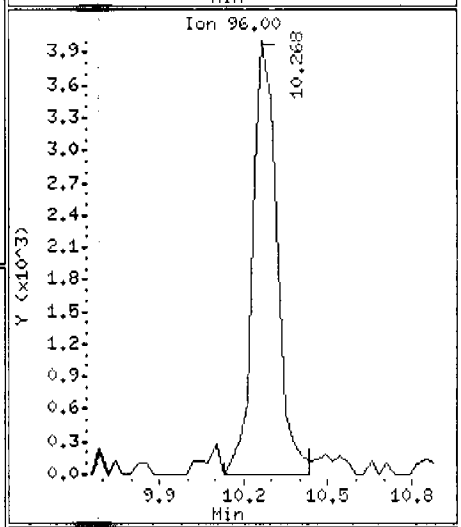
43 1,1-Dichloroethene

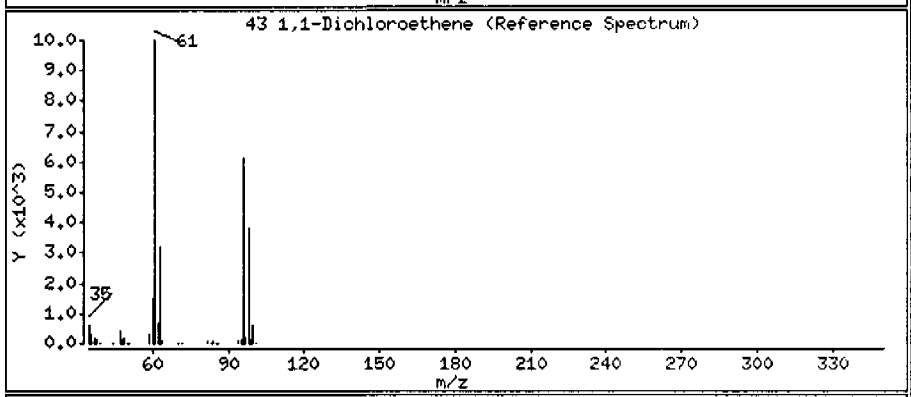
Concentration: 2.294 PPBV

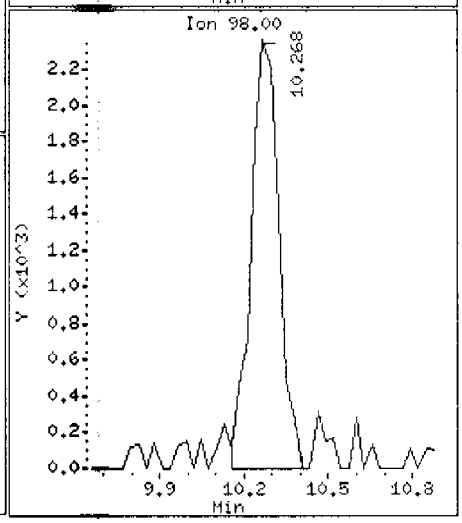


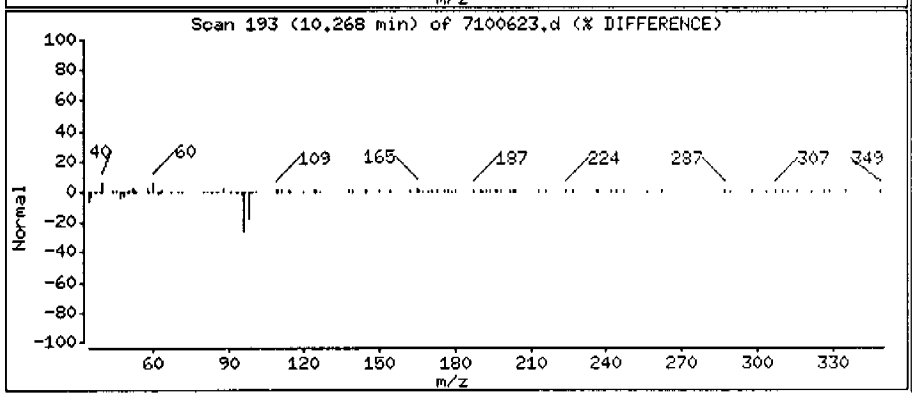












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

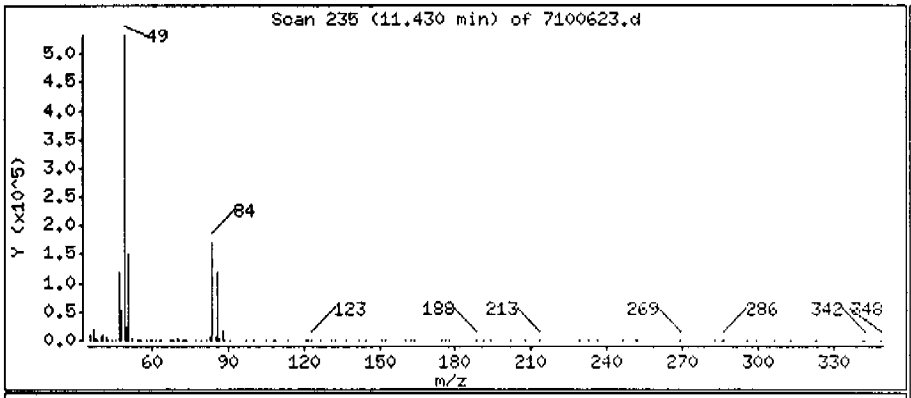
Operator: dfm

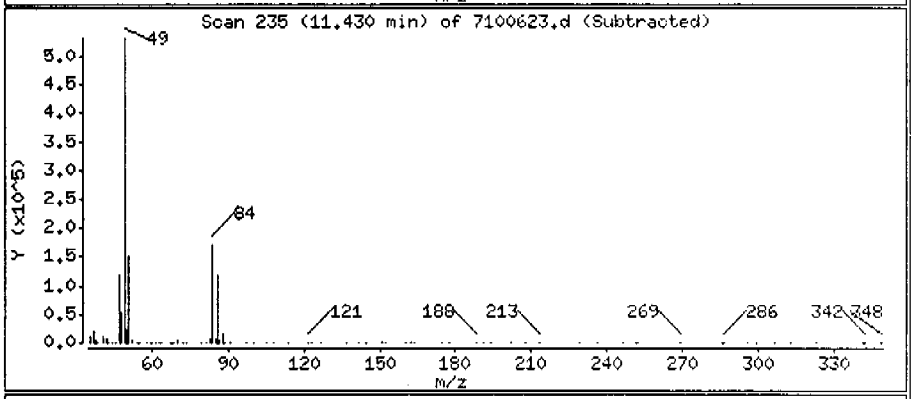
Column phase: RTx-624

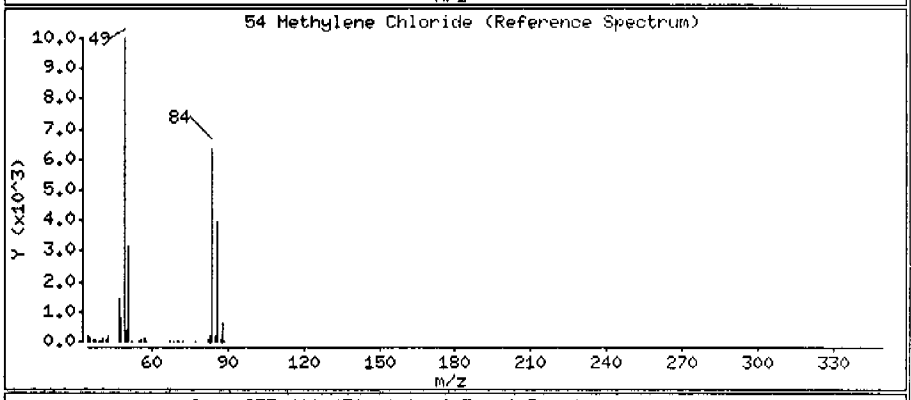
Column diameter: 0.53

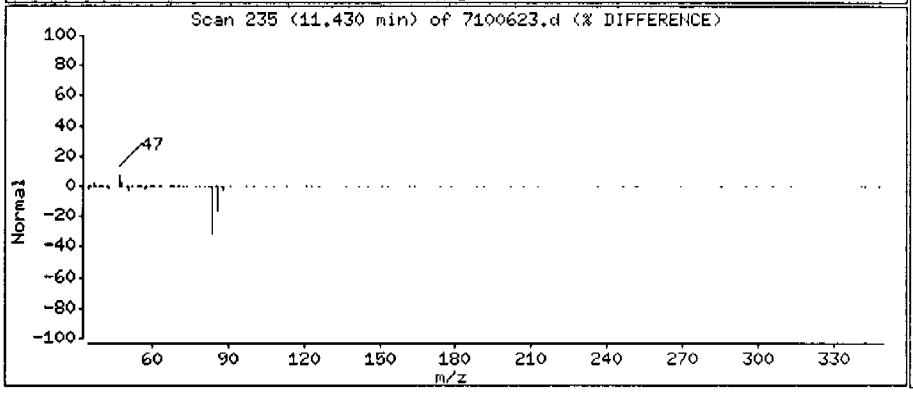
54 Methylene Chloride

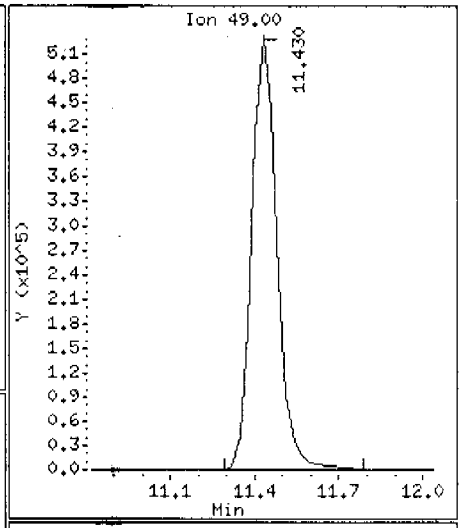
Concentration: 126.04 PPBV

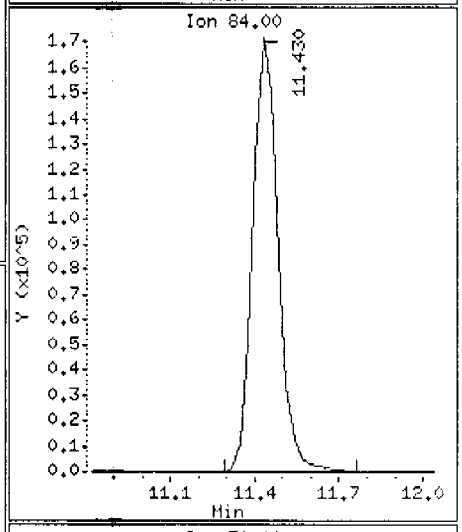


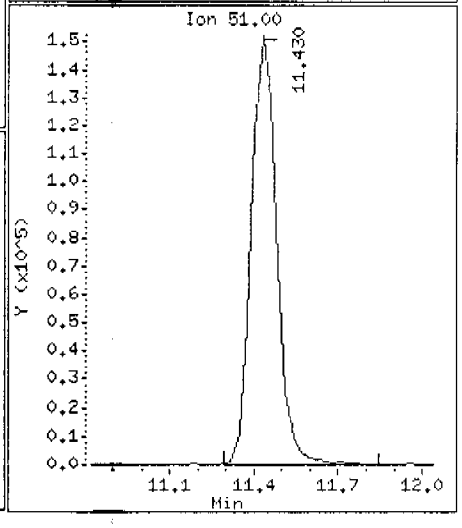












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

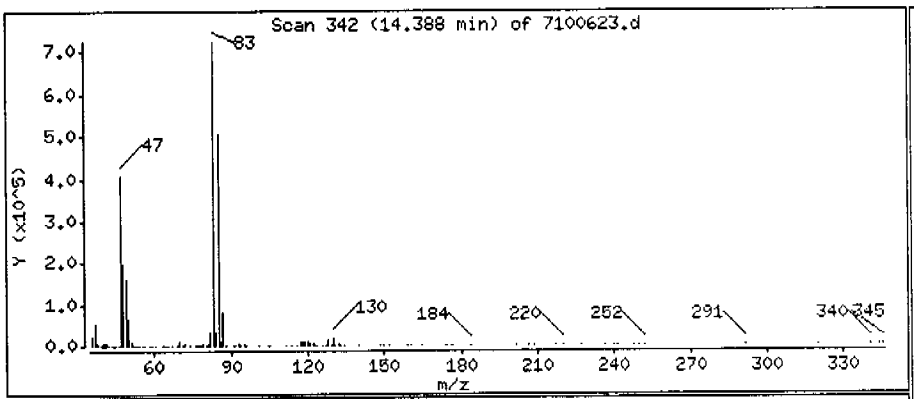
Operator: dfm

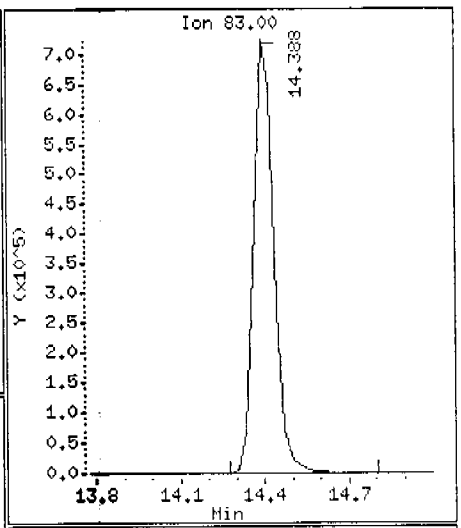
Column phase: RTx-624

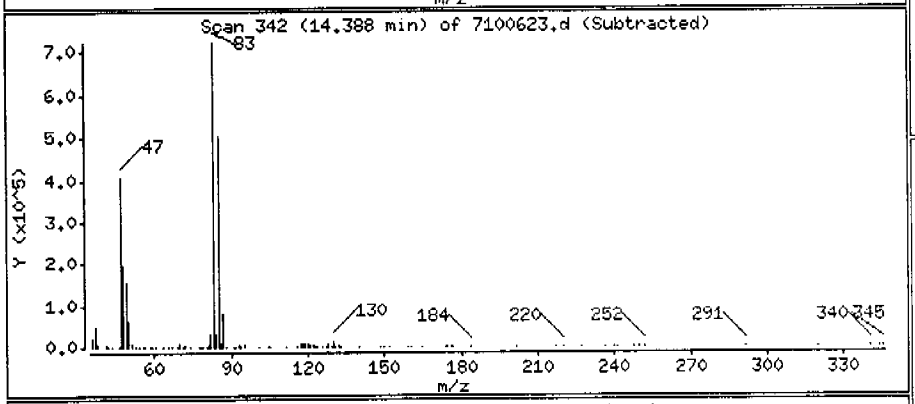
Column diameter: 0.53

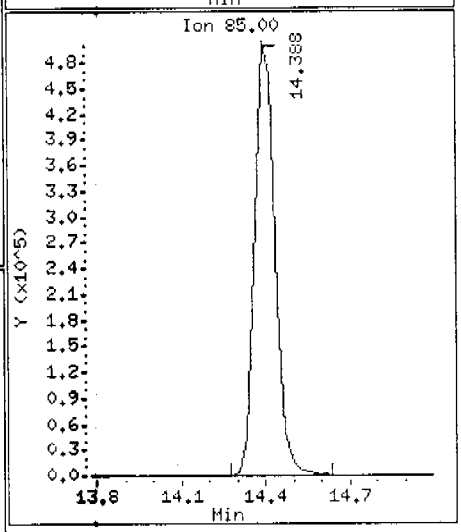
82 Chloroform

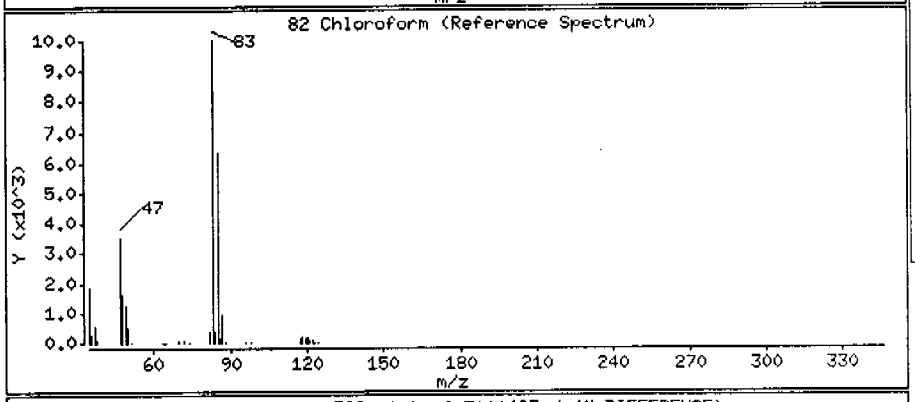
Concentration: 146.89 PPBV

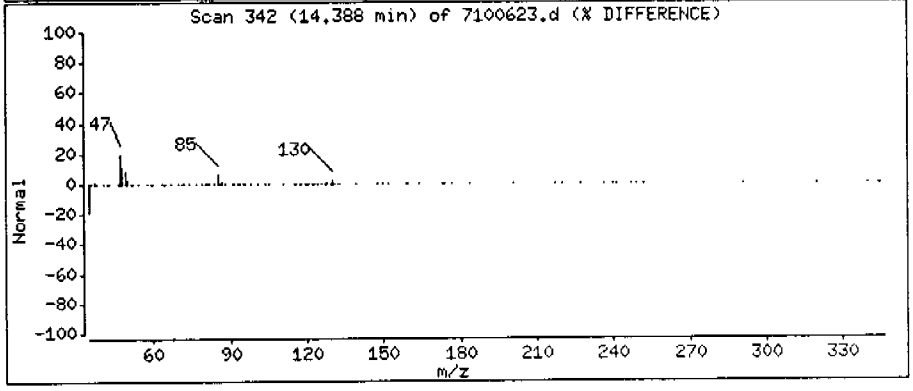












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

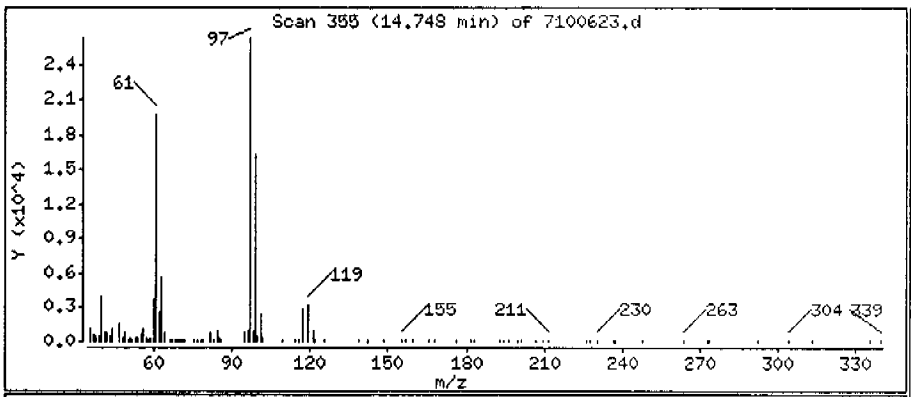
Operator: dfm

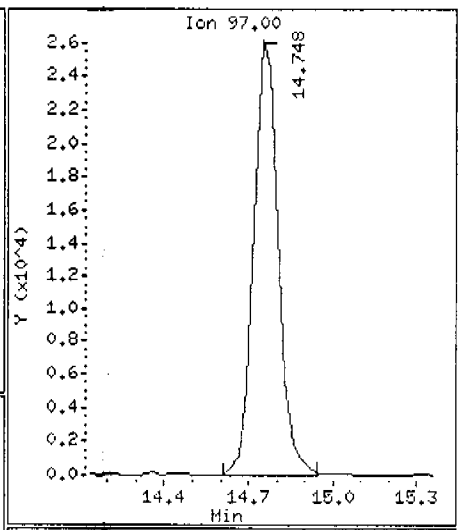
Column phase: RTx-624

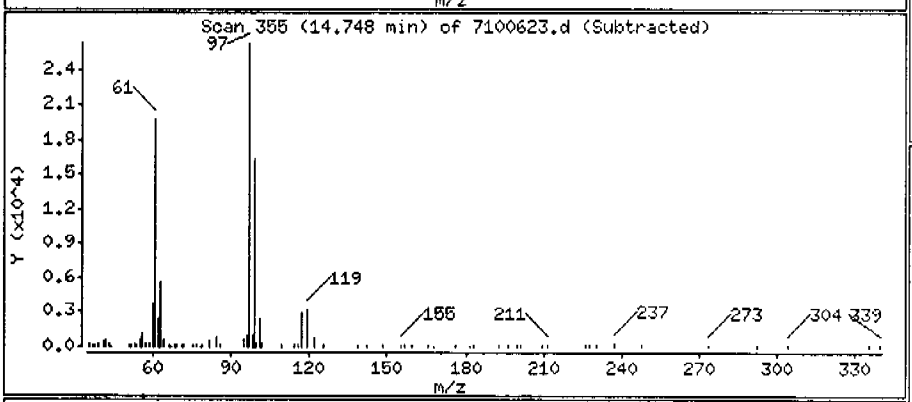
Column diameter: 0.53

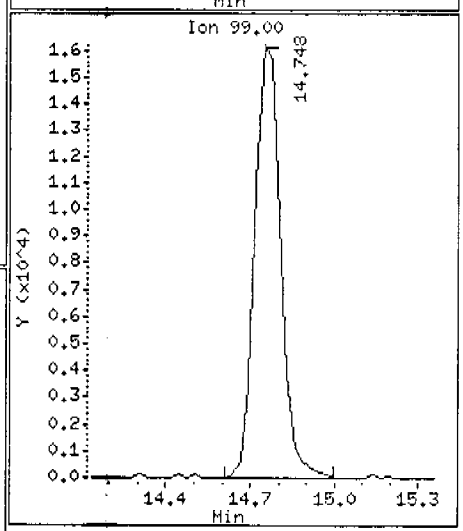
83 1,1,1-Trichloroethane

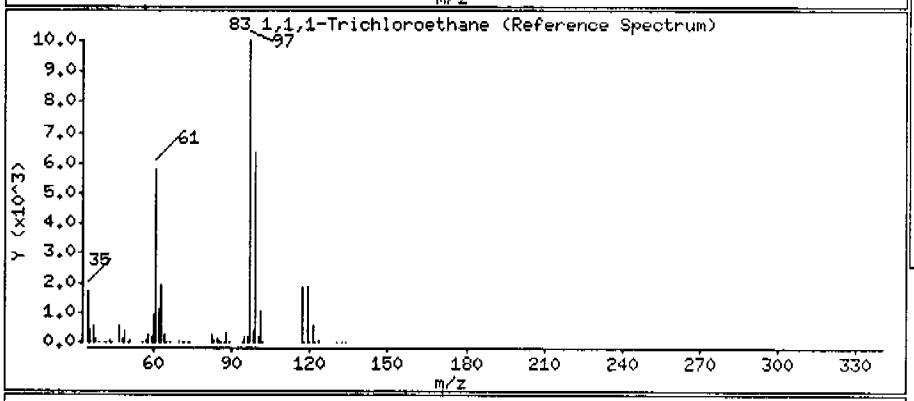
Concentration: 6.393 PPBV

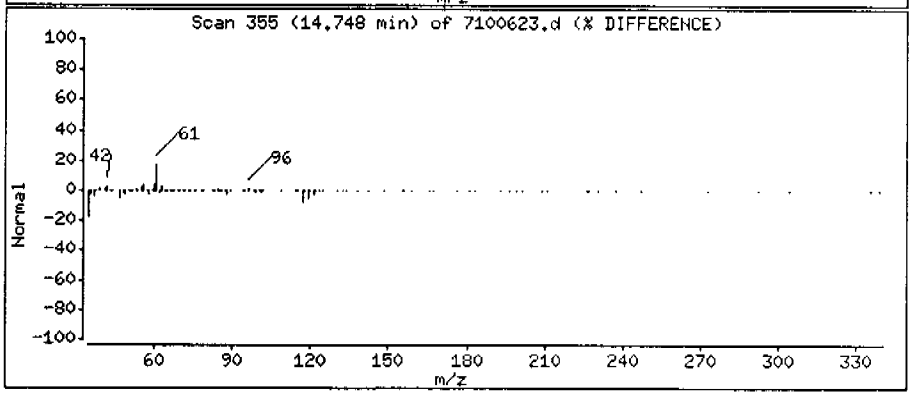












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

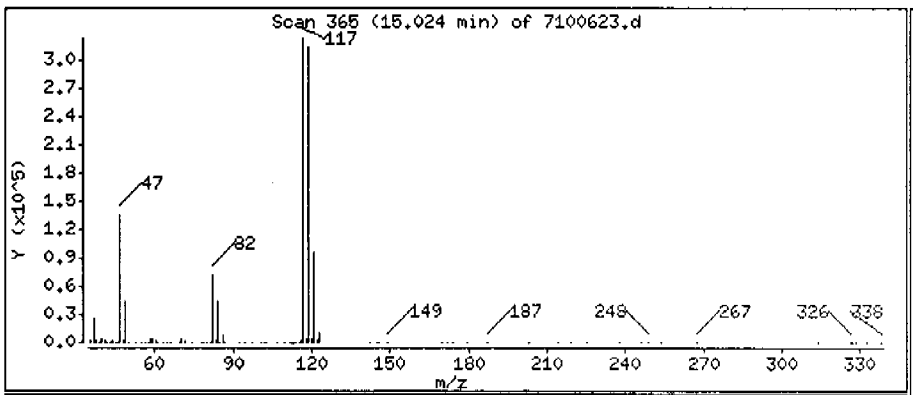
Operator: dfm

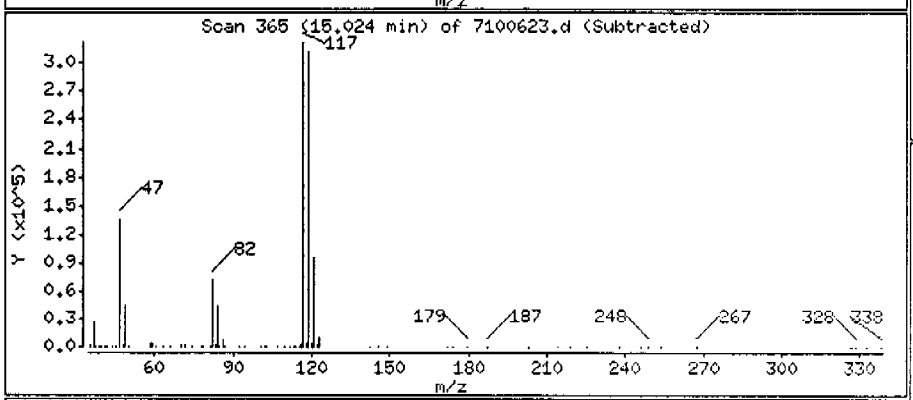
Column phase: RTx-624

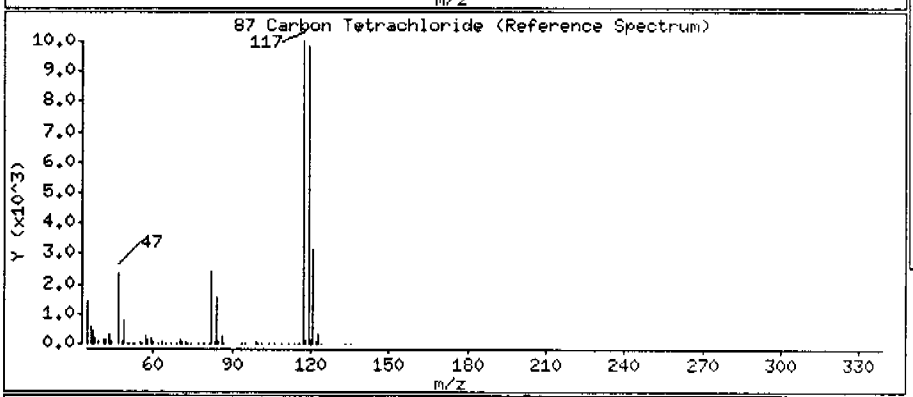
Column diameter: 0.53

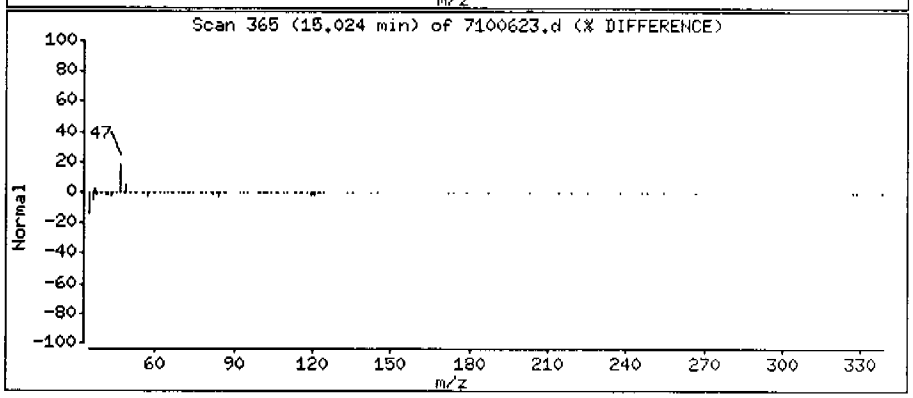
87 Carbon Tetrachloride

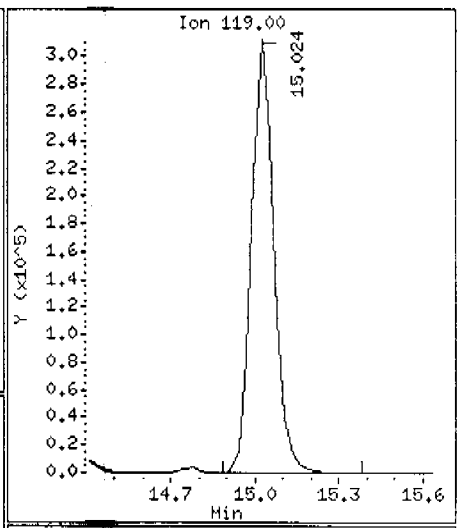
Concentration: 60.713 PPBV

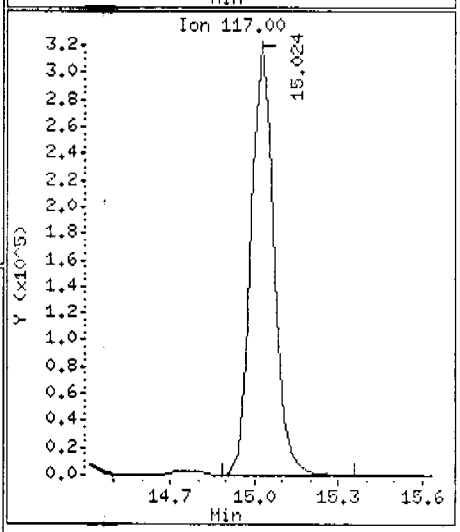












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

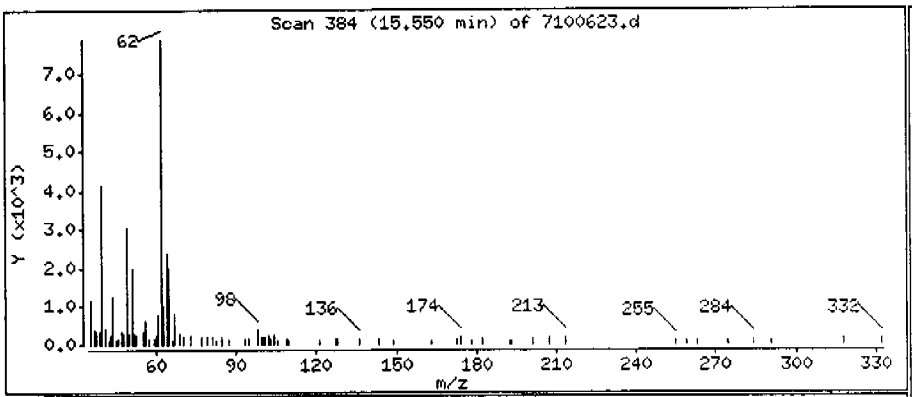
Operator: dfm

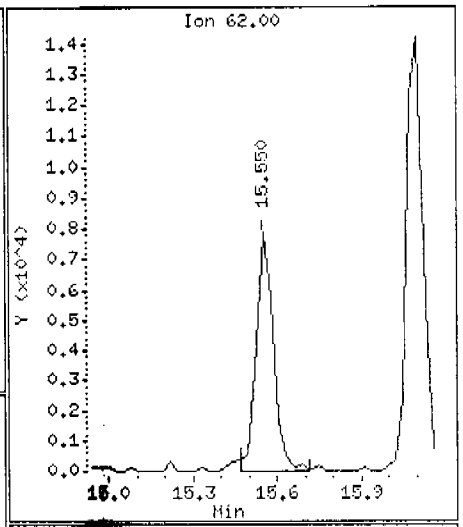
Column phase: RTx-624

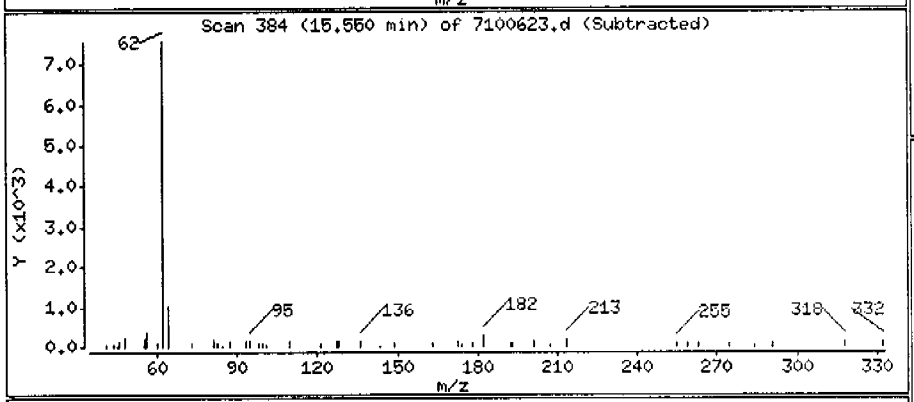
Column diameter: 0.53

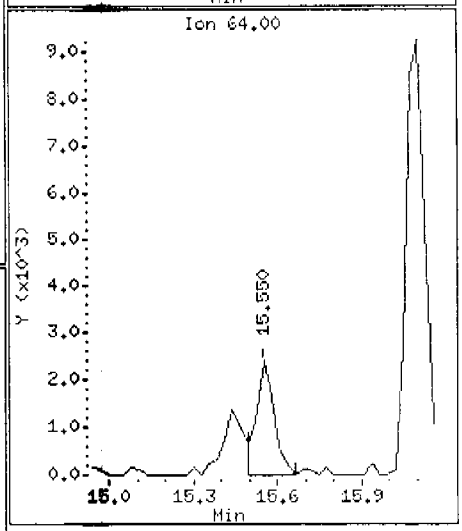
93 1,2-Dichloroethane

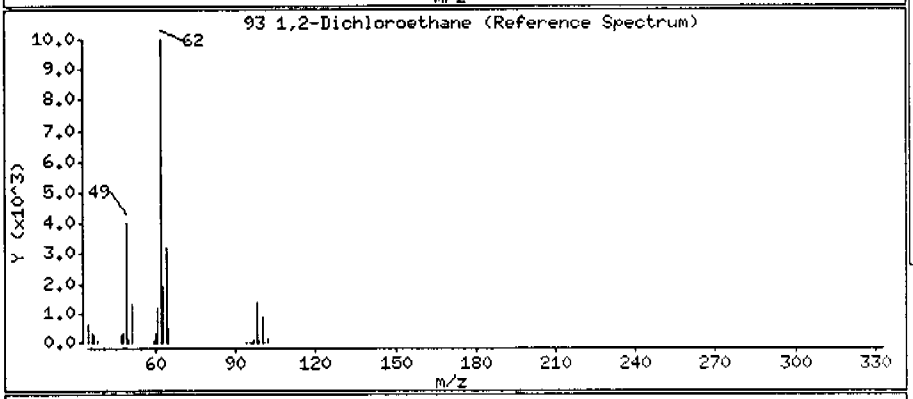
Concentration: 1.555 PPBV

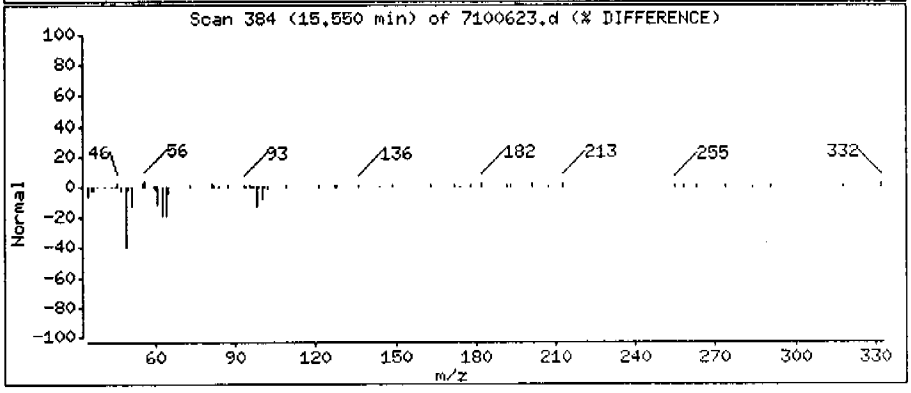












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

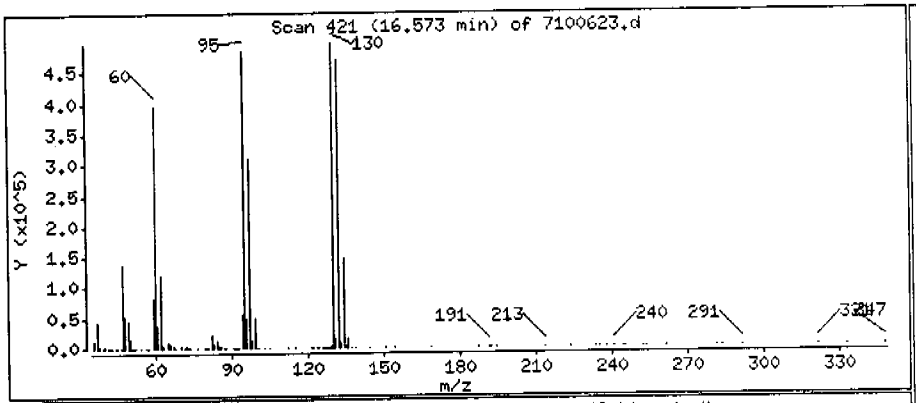
Operator: dfm

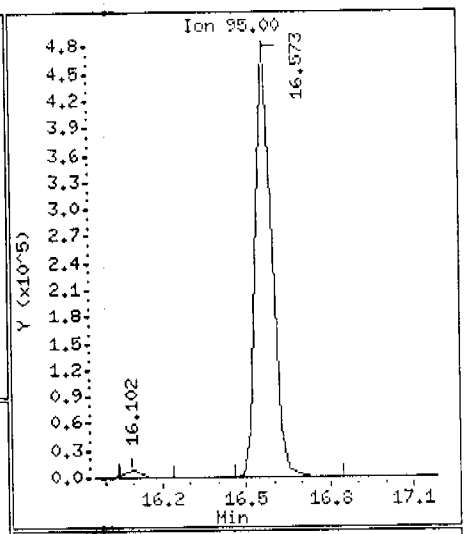
Column phase: RTx-624

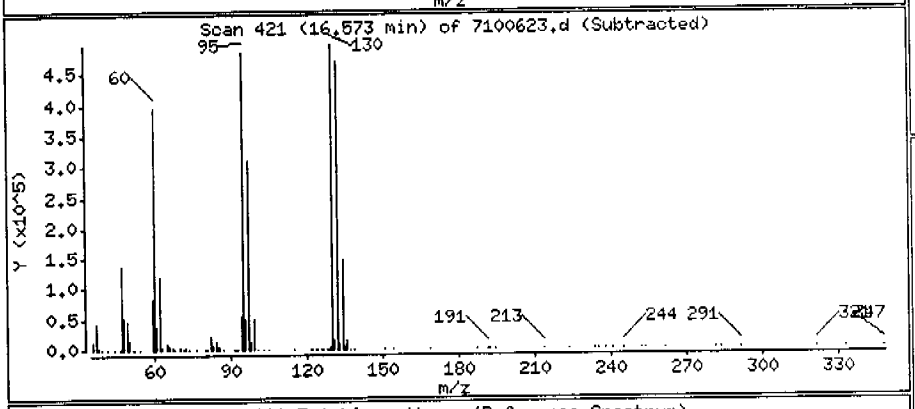
Column diameter: 0.53

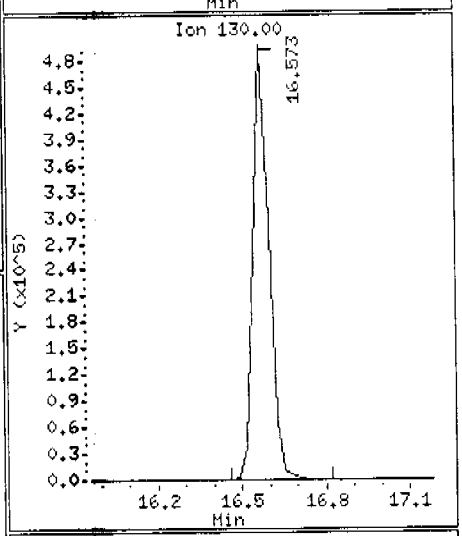
101 Trichloroethene

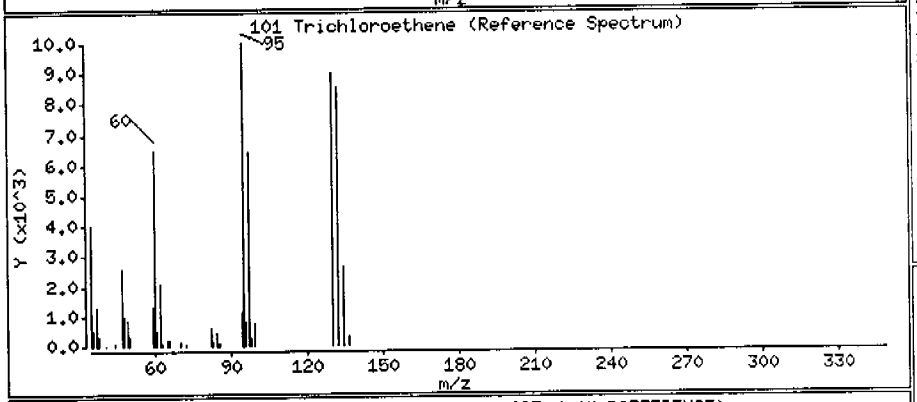
Concentration: 152.79 PPBV

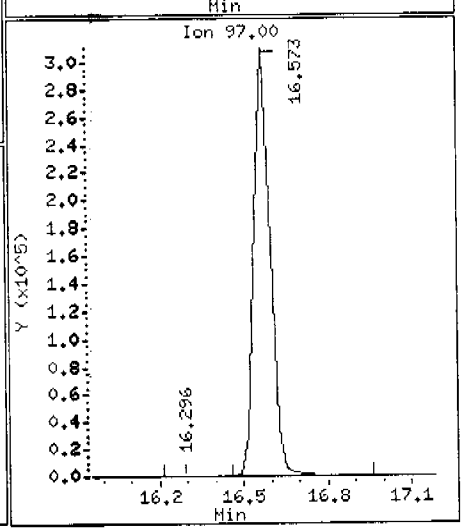


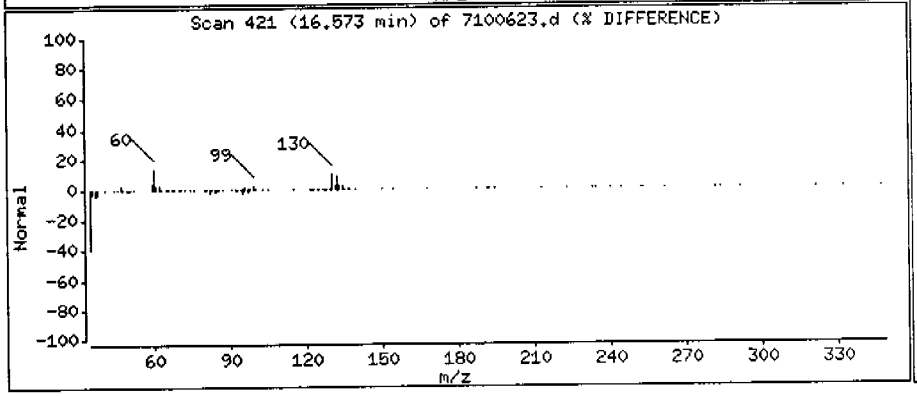












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Sample Info: 200mL #12003

Instrument: msd7.i

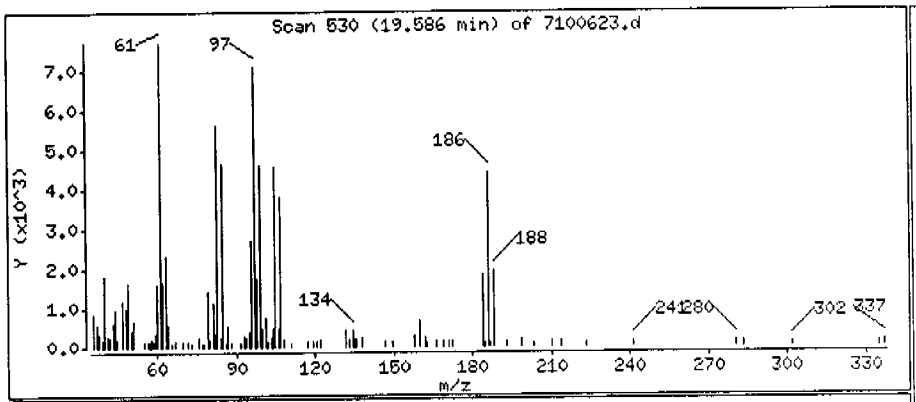
Operator: dfm

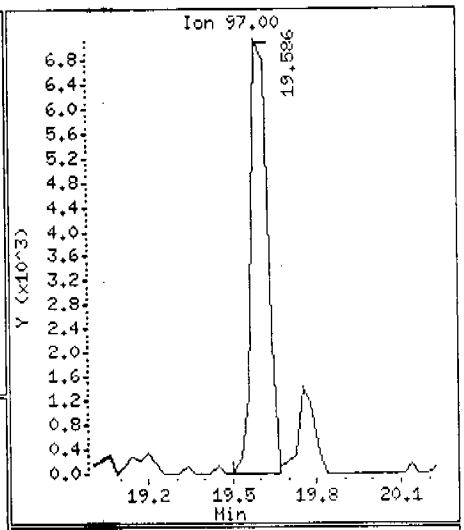
Column phase: RTx-624

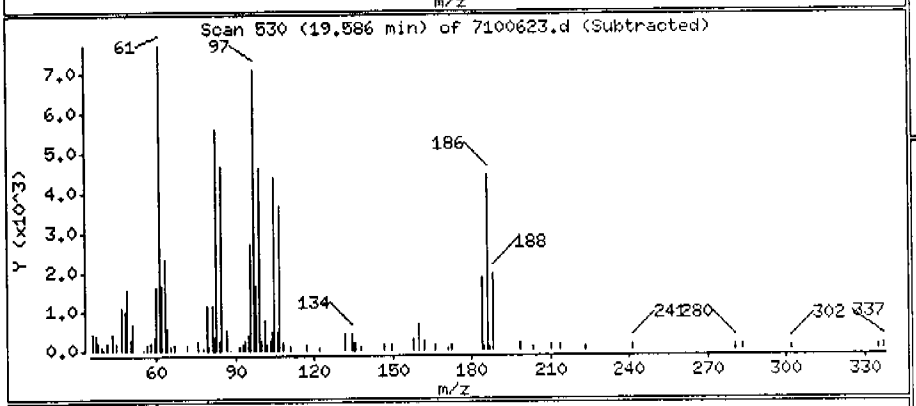
Column diameter: 0.53

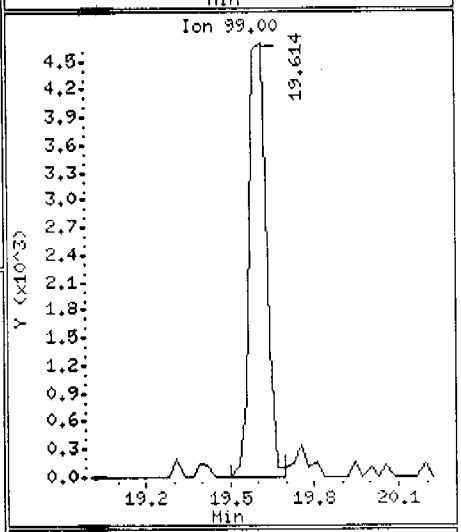
117 1,1,2-Trichloroethane

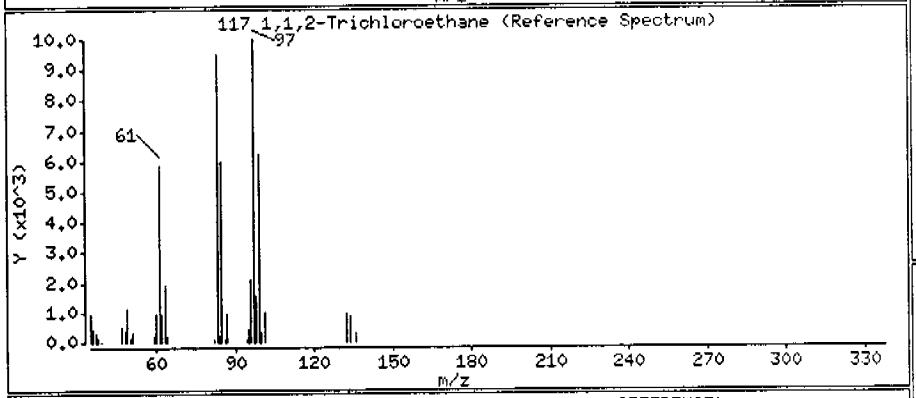
Concentration: 2.620 PPBV

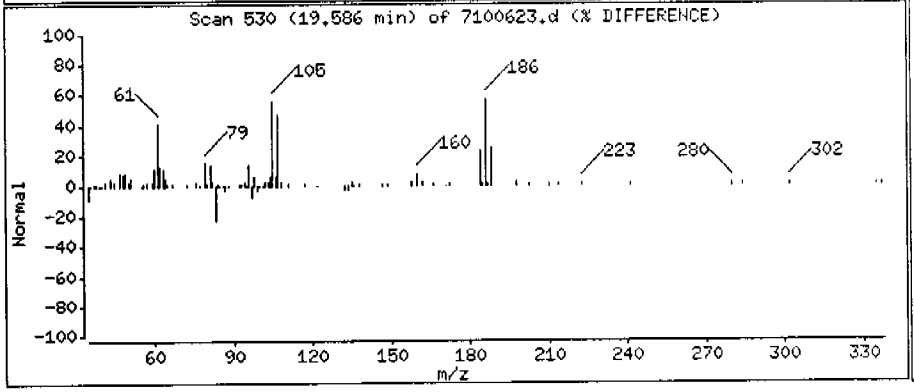


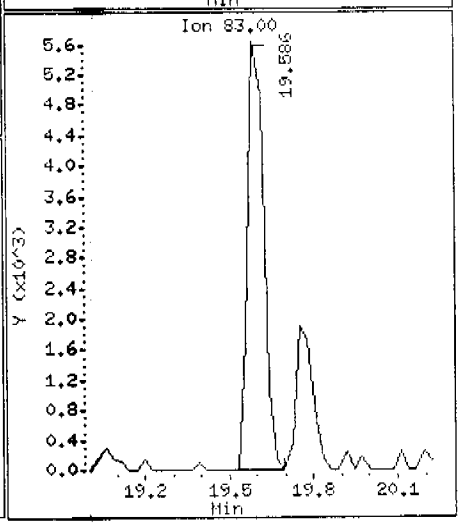












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

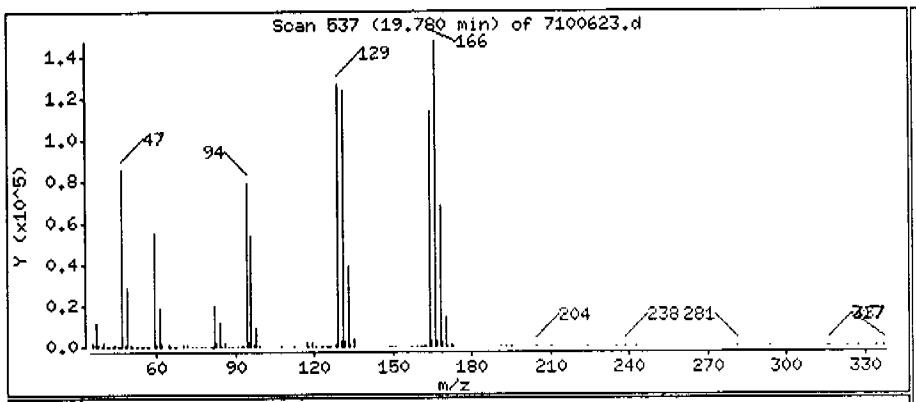
Operator: dfm

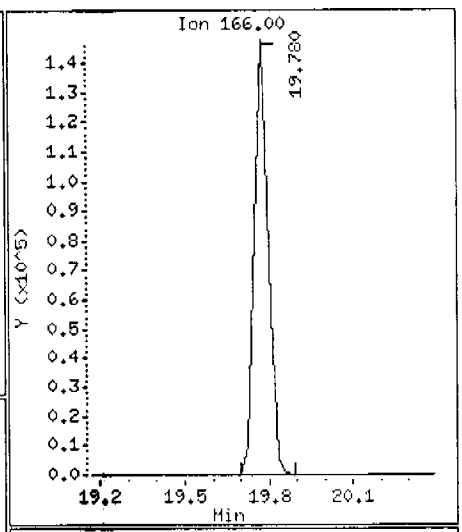
Column phase: RTx-624

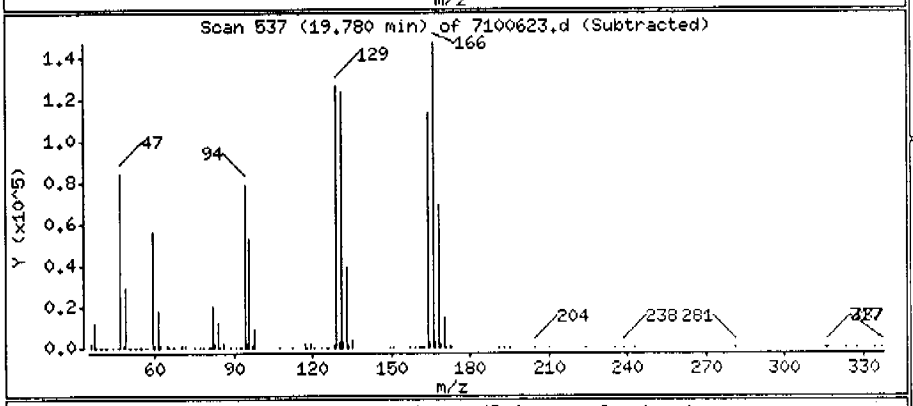
Column diameter: 0.53

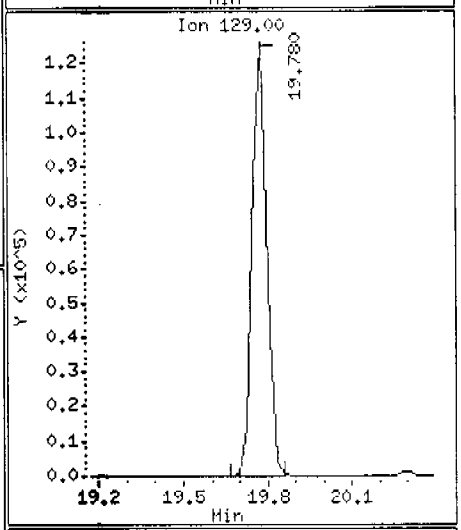
120 Tetrachloroethene

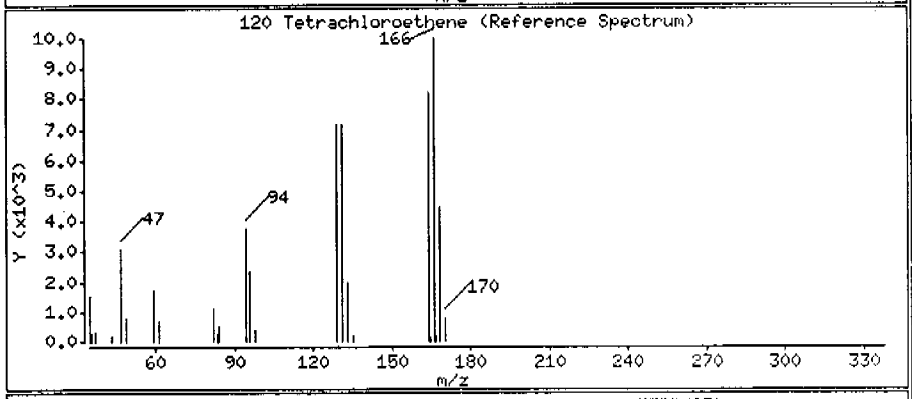
Concentration: 34.123 PPBV

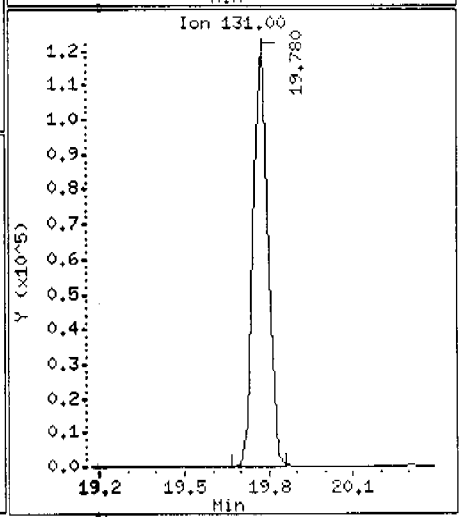


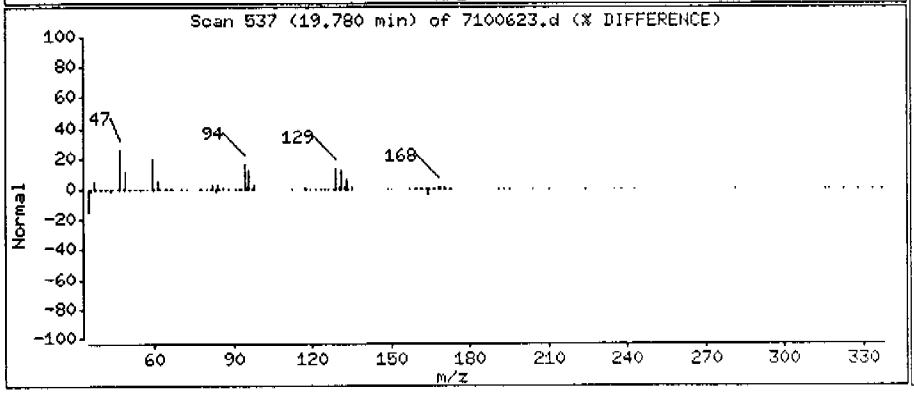












Data File: /chem/msd7.i/06oct08.b/7100623.d

Date : 07-OCT-2008 02:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12003

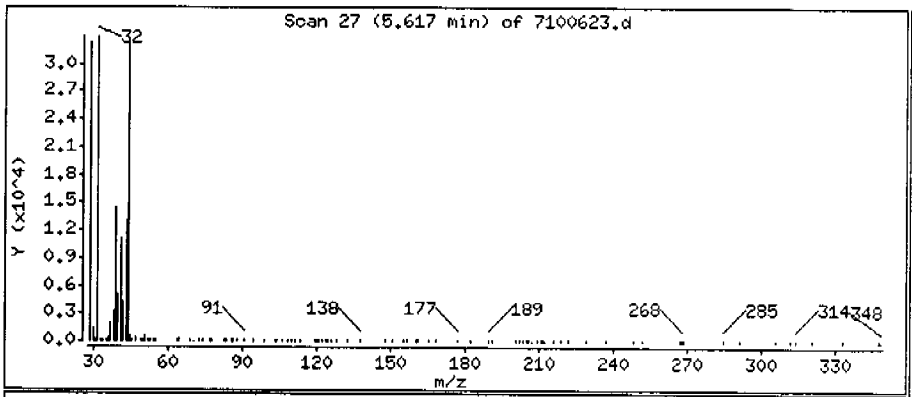
Operator: dfm

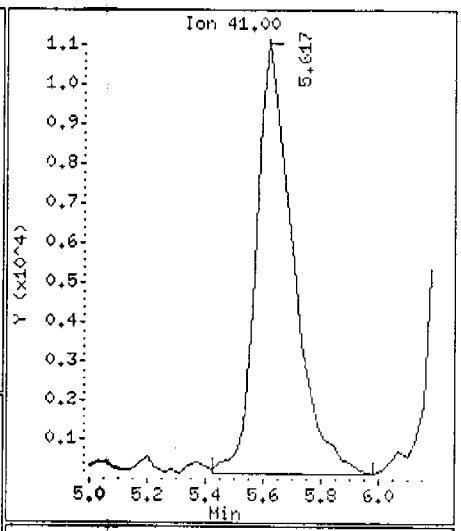
Column phase: RTx-624

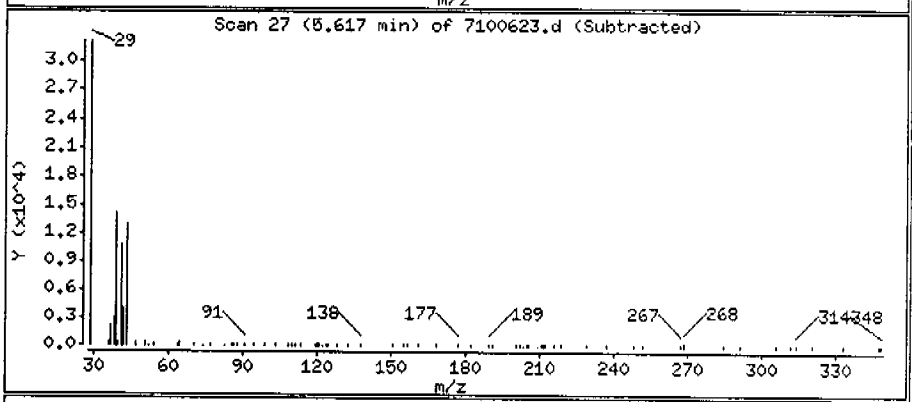
Column diameter: 0.53

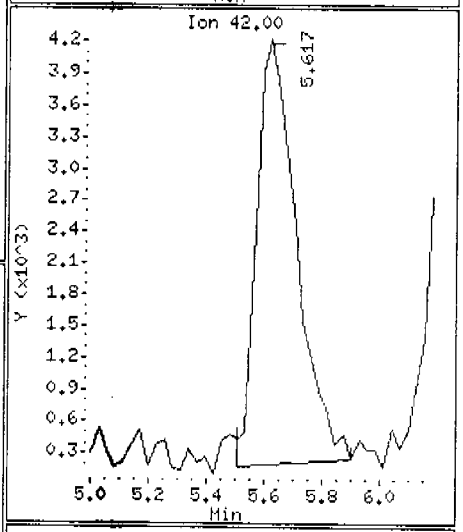
11 Propylene

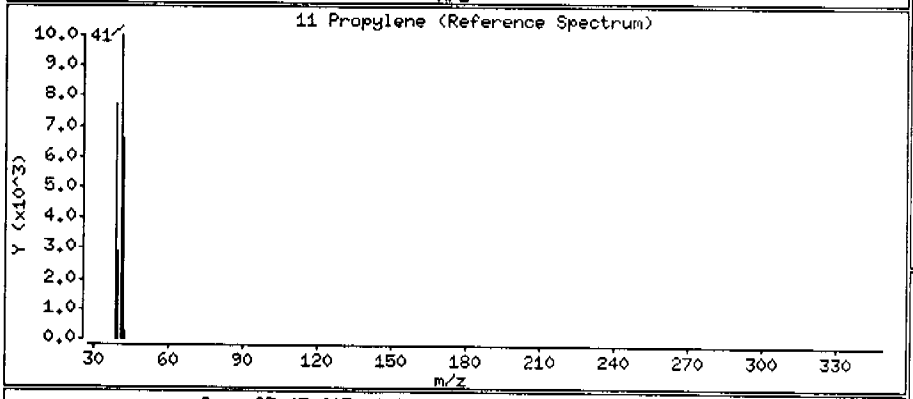
Concentration: 6.414 PPBV

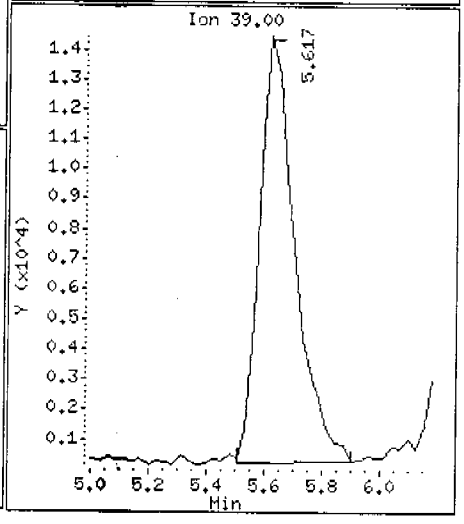


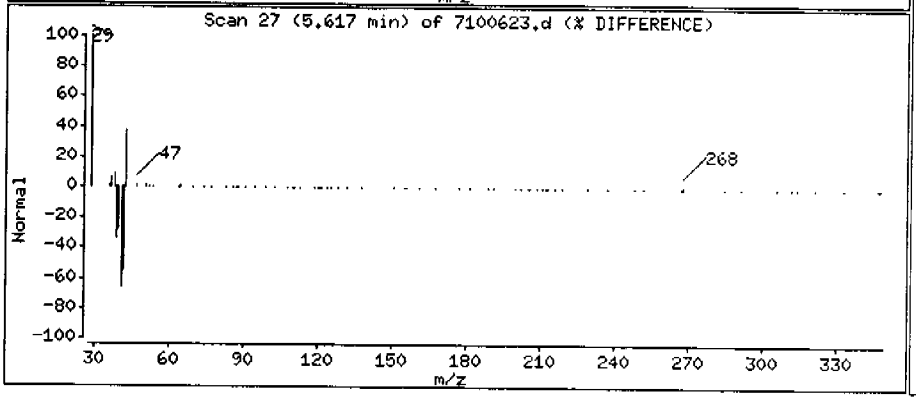












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14815

Lab ID#: 0809614-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	1.2	4.7	6.2
Ethanol	3.8	3.9	7.2	7.3
Freon 113	0.96	3.2	7.3	24
1,1-Dichloroethene	0.96	2.9	3.8	11
Acetone	3.8	6.0	9.1	14
Carbon Disulfide	0.96	3.0	3.0	9.2
Methylene Chloride	0.96	290	3.3	1000
2-Butanone (Methyl Ethyl Ketone)	0.96	2.4	2.8	7.0
cis-1,2-Dichloroethene	0.96	1.4	3.8	5.7
Chloroform	0.96	160	4.7	770
1,1,1-Trichloroethane	0.96	4.2	5.2	23
Carbon Tetrachloride	0.96	70	6.0	440
1,2-Dichloroethane	0.96	3.7	3.9	15
Trichloroethene	0.96	180	5.1	990
1,1,2-Trichloroethane	0.96	6.0	5.2	33
Tetrachloroethene	0.96	18	6.5	120
1,4-Dichlorobenzene	0.96	1.5	5.7	9.1
n-Butanol	3.8	23	12	70
Propylene	3.8	6.0	6.6	10

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14815

Lab ID#: 0809614-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100624	**Date of Collection:**	9/24/08
Dil. Factor:	1.91	**Date of Analysis:**	10/7/08 03:17 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	1.2	4.7	6.2
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	3.9	7.2	7.3
Freon 113	0.96	3.2	7.3	24
1,1-Dichloroethene	0.96	2.9	3.8	11
Acetone	3.8	6.0	9.1	14
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	3.0	3.0	9.2
Methylene Chloride	0.96	290	3.3	1000
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	2.4	2.8	7.0
cis-1,2-Dichloroethene	0.96	1.4	3.8	5.7
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	160	4.7	770
1,1,1-Trichloroethane	0.96	4.2	5.2	23
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	70	6.0	440
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	3.7	3.9	15
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	180	5.1	990
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	6.0	5.2	33
Tetrachloroethene	0.96	18	6.5	120

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14815

Lab ID#: 0809614-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100624	**Date of Collection:**	9/24/08
Dil. Factor:	1.91	**Date of Analysis:**	10/7/08 03:17 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.8	Not Detected	16	Not Detected
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected
Chlorobenzene	0.96	Not Detected	4.4	Not Detected
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	Not Detected	4.1	Not Detected
o-Xylene	0.96	Not Detected	4.1	Not Detected
Styrene	0.96	Not Detected	4.1	Not Detected
Bromoform	0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.96	1.5	5.7	9.1
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane	3.8	Not Detected U J	14	Not Detected U J
Methanol	96	Not Detected	120	Not Detected
n-Butanol	3.8	23	12	70
Propylene	3.8	6.0	6.6	10

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	94	70-130

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100624.d
Lab Smp Id: 0809614-03A
Inj Date : 07-OCT-2008 03:17
Operator : dfm
Inst ID: msd7.i
Smp Info : 200mL #9563
Misc Info : 9.0"Hg-5psi
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher
Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00
Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	350291	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	264089			28.56- 128.56	75.39
14.333	14.333 (1.000)	49	1707757			335.95- 435.95	487.53
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1037059	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	178242			0.00- 67.14	17.19
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1013759	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	515096			1.24- 101.24	50.81
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	707239	26.7288	26.729	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	287131			0.00- 97.37	40.60
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	941806	23.7238	23.724	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	128039			0.00- 63.85	13.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	721711			26.51- 126.51	76.63
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	489510	23.4661	23.466	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	708253			90.08- 190.08	144.69
23.291	23.291 (1.093)	176	466546			45.80- 145.80	95.31
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	56628	0.65394	1.249	80.00- 120.00	100.00
5.758	5.729 (0.402)	87	18228			0.00- 81.85	32.19
38 Ethanol					CAS #: 64-17-5		
9.411	9.411 (0.657)	45	29002	2.03282	3.883	80.00- 120.00	100.00
9.439	9.411 (0.659)	43	9156			0.00- 73.90	31.57
9.439	9.411 (0.659)	46	11957			0.00- 88.16	41.23
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	57346	1.65966	3.170	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	37231			12.79- 112.79	64.92
10.158	10.158 (0.709)	101	87953			98.93- 198.93	153.37
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	90347	1.50360	2.872	80.00- 120.00	100.00
10.296	10.269 (0.718)	96	29306			0.00- 84.73	32.44
10.296	10.269 (0.718)	98	19574			0.00- 71.80	21.67
45 Acetone					CAS #: 67-64-1		
10.434	10.407 (0.728)	58	53486	3.15345	6.023	80.00- 120.00	100.00
10.434	10.407 (0.728)	43	277945			340.42- 440.42	519.66
47 Carbon Disulfide					CAS #: 75-15-0		
10.849	10.822 (0.757)	76	113984	1.54476	2.950	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.458	11.430 (0.799)	49	8067882	153.480	293.15	80.00- 120.00	100.00
11.458	11.430 (0.799)	84	2590519			0.00- 83.39	32.11
11.458	11.430 (0.799)	51	2363955			0.00- 80.54	29.30
75 2-Butanone					CAS #: 78-93-3		
13.808	13.808 (0.963)	72	13751	1.24395	2.376	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	113485			755.71- 855.71	825.26
13.808	13.808 (0.963)	57	9481			0.00- 97.16	68.95
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.967)	61	35648	0.74823	1.429	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
76 cis-1,2-Dichloroethene (continued)							
13.863	13.863 (0.967)	96	13164			0.00- 94.65	36.93
13.835	13.863 (0.965)	98	7163			0.00- 78.47	20.09
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	4043164	83.0349	158.60	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	2853773			21.22- 121.22	70.58
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	110150	2.21558	4.232	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	74970			13.65- 113.65	68.06
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	2069075	36.4463	69.612	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	2184733			55.93- 155.93	105.59
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	80733	1.93459	3.695	80.00- 120.00	100.00
15.550	15.550 (0.966)	64	27972			0.00- 82.49	34.65
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	2336913	96.6099	184.52	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	2333759			52.65- 152.65	99.87
16.573	16.573 (1.029)	97	1480447			12.98- 112.98	63.35
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	65560	3.13718	5.992	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	38906			11.37- 111.37	59.35
19.614	19.614 (0.921)	83	53887			32.88- 132.88	82.20
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	263971	9.63798	18.408	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	235677			37.80- 137.80	89.28
19.780	19.780 (0.929)	131	232419			35.79- 135.79	88.05
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.227	25.227 (1.184)	146	51291	0.79583	1.520	80.00- 120.00	100.00
25.227	25.227 (1.184)	148	35383			13.30- 113.30	68.98
25.227	25.227 (1.184)	111	22082			0.00- 92.03	43.05
98 1-Butanol					CAS #: 71-36-3		
16.269	16.268 (1.010)	56	230970	12.0044	22.928	80.00- 120.00	100.00
16.269	16.268 (1.010)	41	207648			27.33- 127.33	89.90
16.269	16.268 (1.010)	43	155506			9.34- 109.34	67.33
11 Propylene					CAS #: 115-07-1		
5.617	5.589 (0.392)	41	94407	3.16078	6.037	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
11 Propylene (continued)								
5.617	5.589	(0.392)	42	39848			16.57- 116.57	42.21
5.617	5.589	(0.392)	39	131146			28.60- 128.60	138.92

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100624.d
Lab Smp Id: 0809614-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 9.0"Hg-5psi

Calibration Date: 06-OCT-2008
Calibration Time: 10:23

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	350291	-8.74
97 1,4-Difluorobenze	1202073	721244	1682902	1037059	-13.73
126 Chlorobenzene-d5	1260970	756582	1765358	1013759	-19.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100624.d
Report Date: 10-Oct-2008 20:53

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-03A
Level: LOW
Operator: dfm
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 9.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.729	106.92	70-130
$ 113 Toluene-d8	25.000	23.724	94.90	70-130
$ 137 Bromofluorobenzene	25.000	23.466	93.86	70-130

Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Sample Info: 200mL #9563

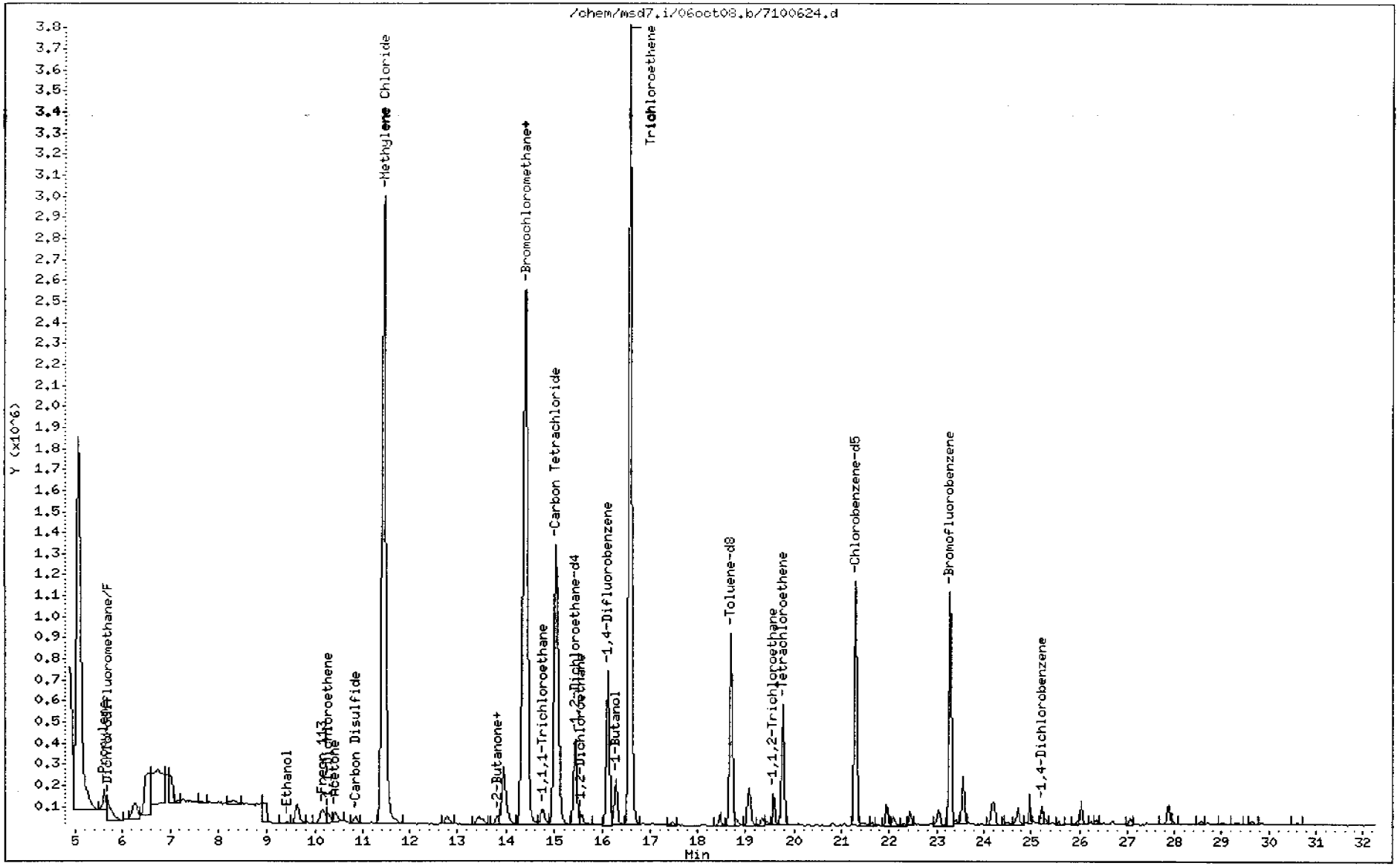
Column phase: RTx-624

Instrument: msd7.i

Operator: dPm

Column diameter: 0.53

0073



Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

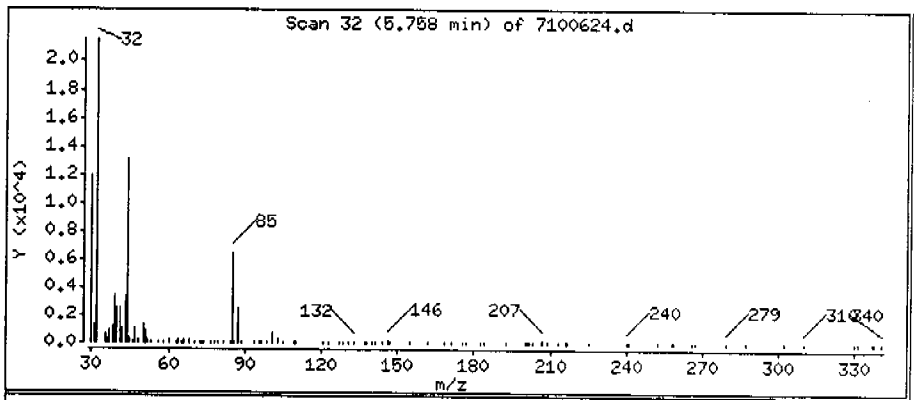
Operator: dfm

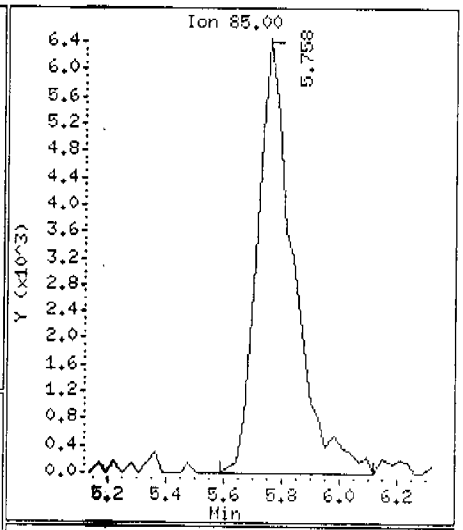
Column phase: RTx-624

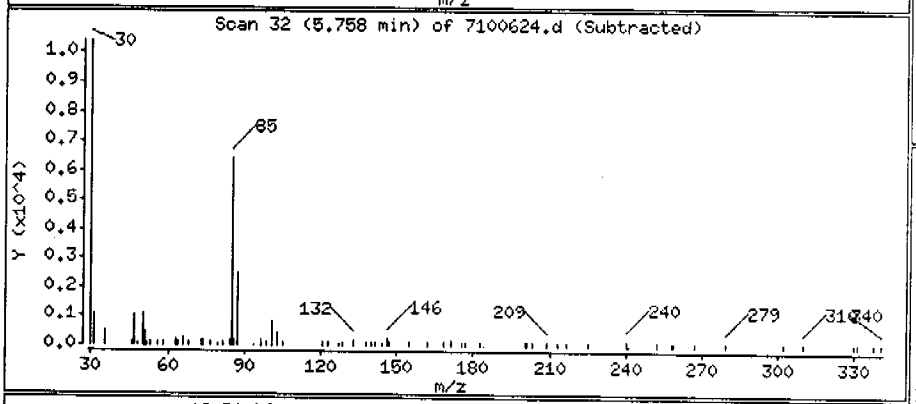
Column diameter: 0.53

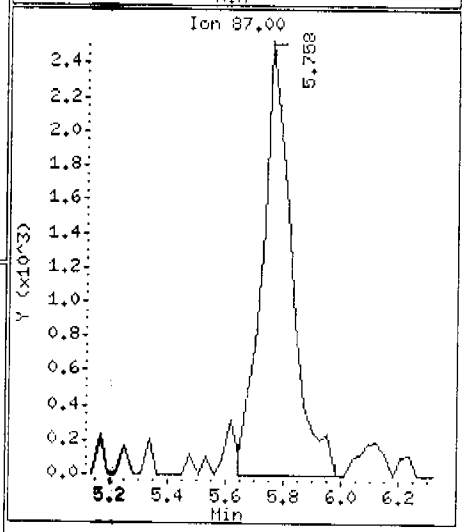
12 Dichlorodifluoromethane/Fr12

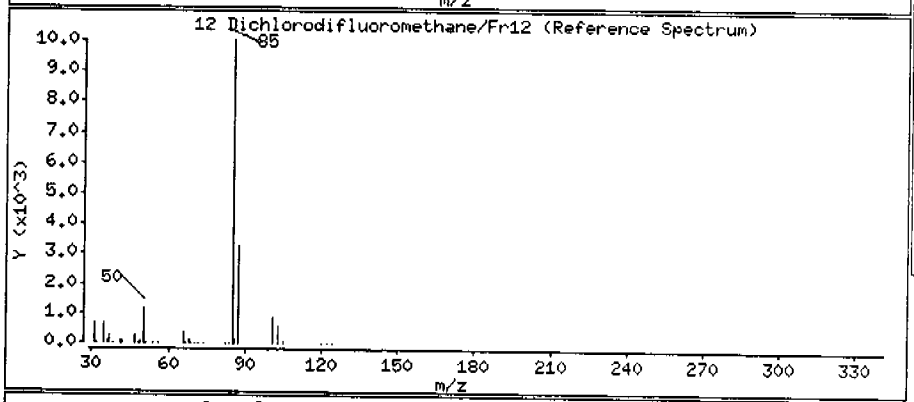
Concentration: 1.249 PPBV

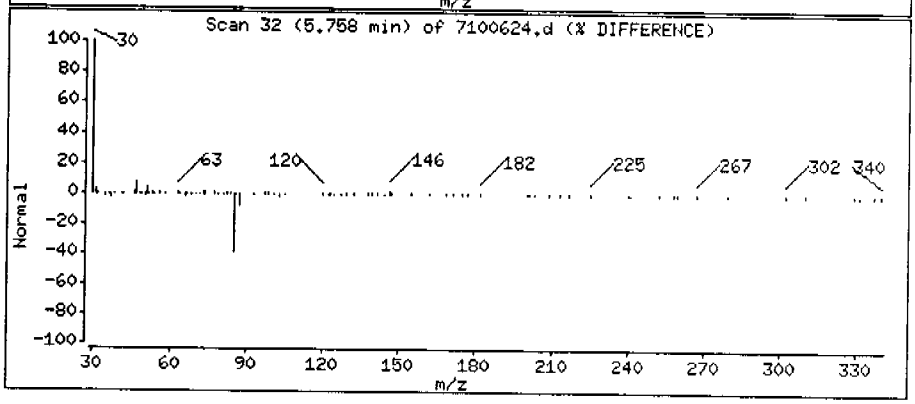












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

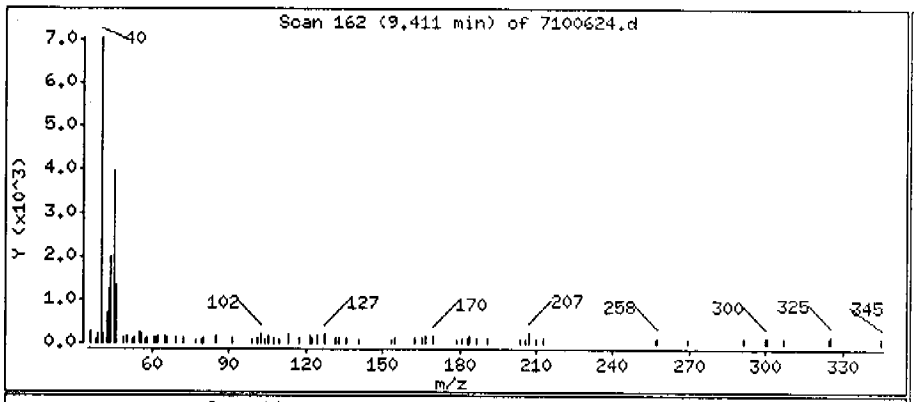
Operator: dfm

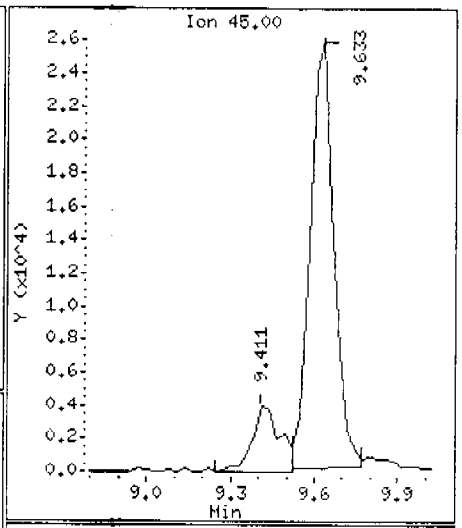
Column phase: RTx-624

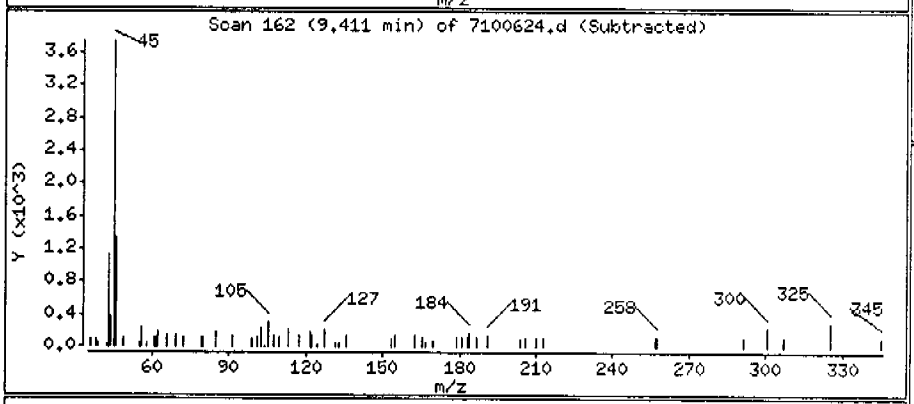
Column diameter: 0.53

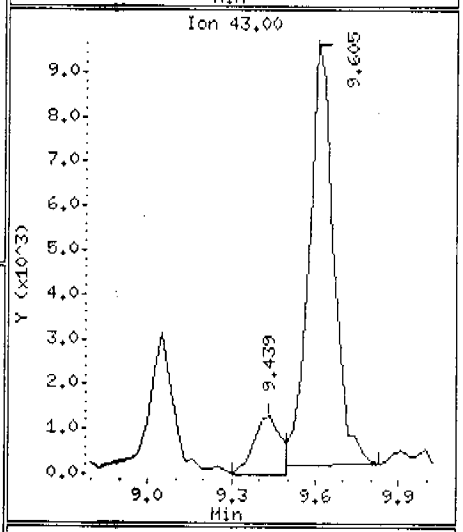
38 Ethanol

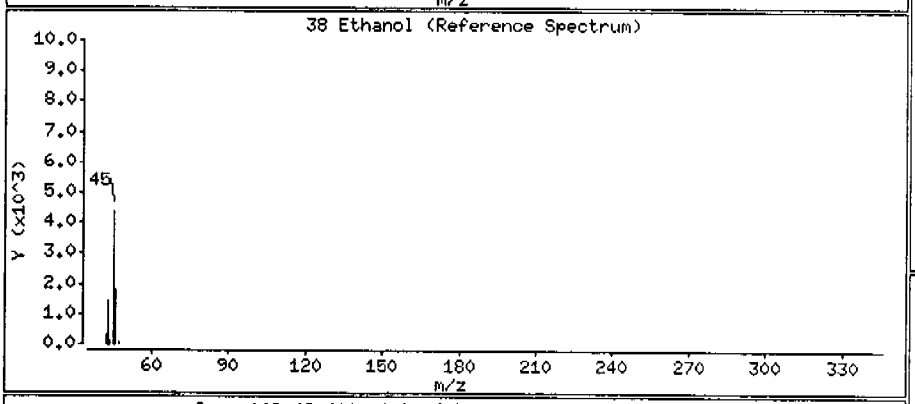
Concentration: 3.883 PPBV

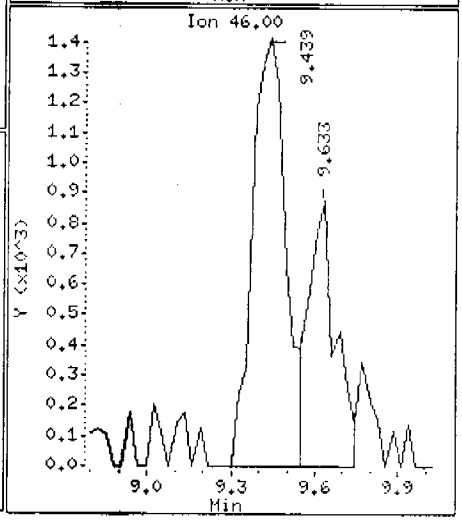


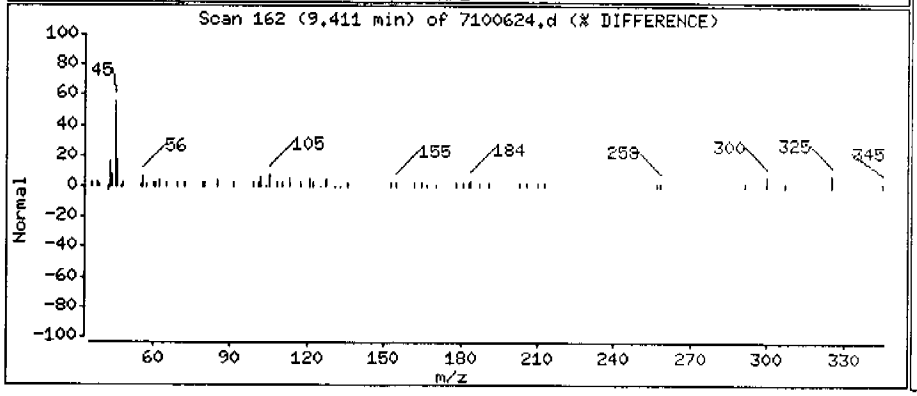












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Sample Info: 200mL #9563

Instrument: msd7.i

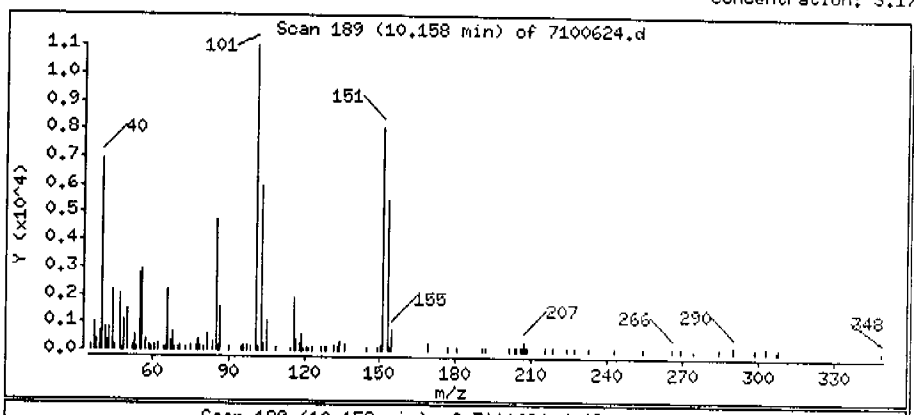
Operator: dfm

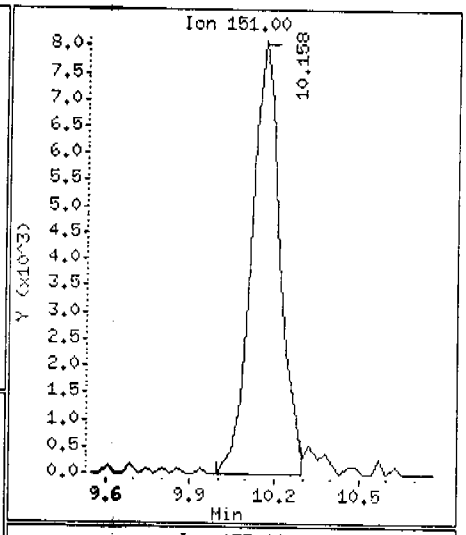
Column phase: RTx-624

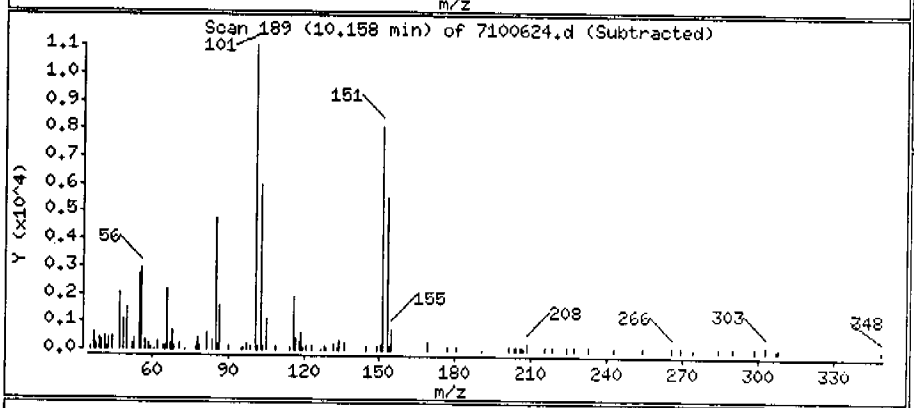
Column diameter: 0.53

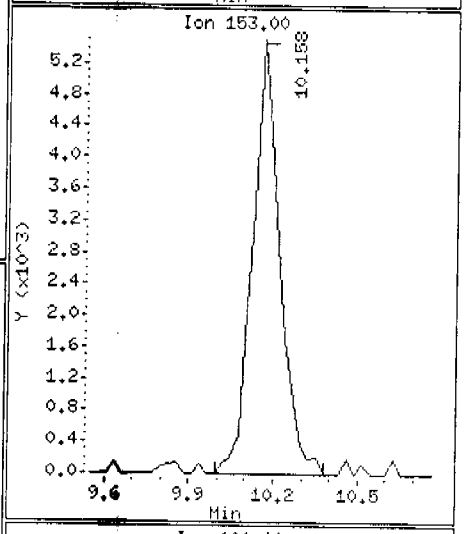
42 Freon 113

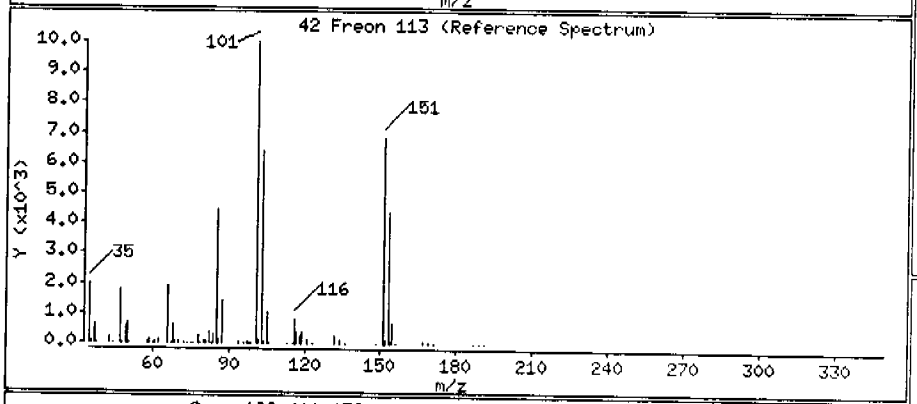
Concentration: 3.170 PPBV

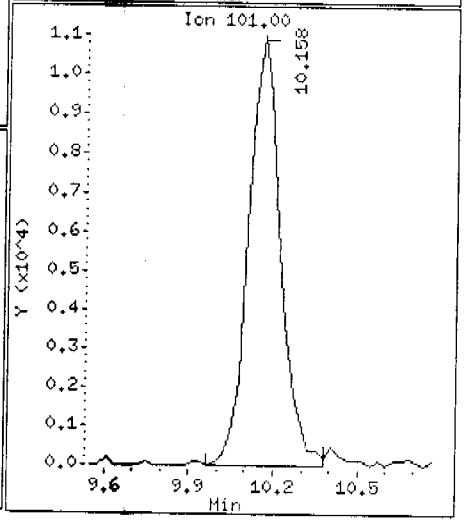


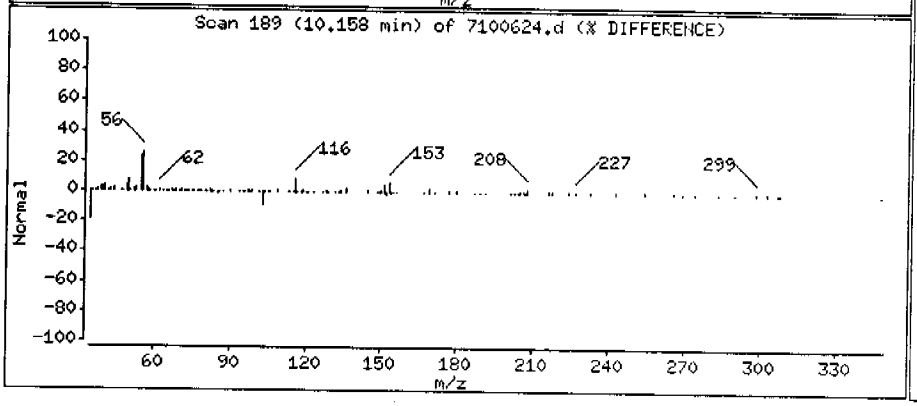












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

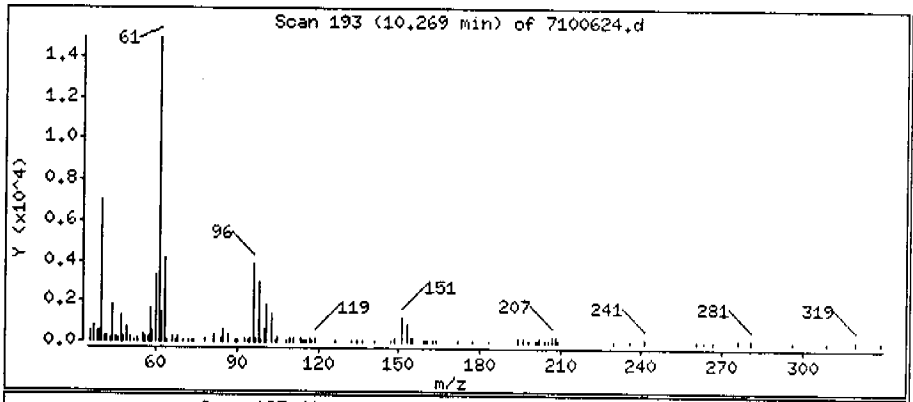
Operator: dfm

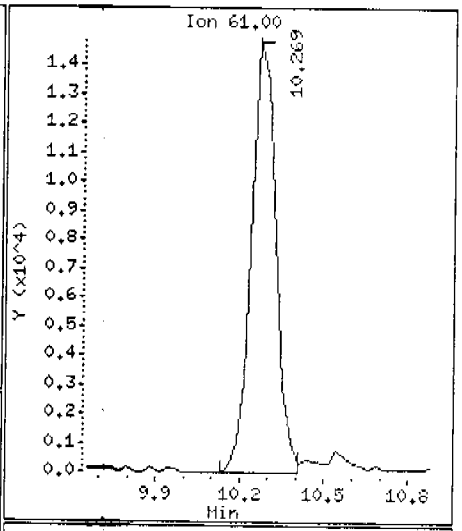
Column phase: RTx-624

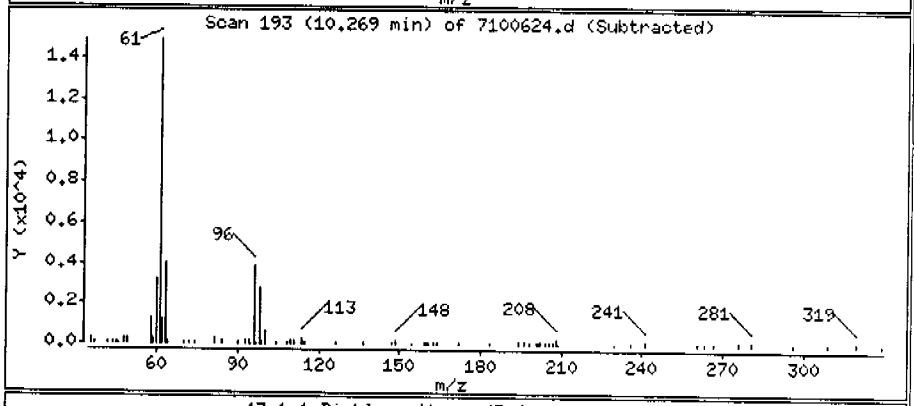
Column diameter: 0.53

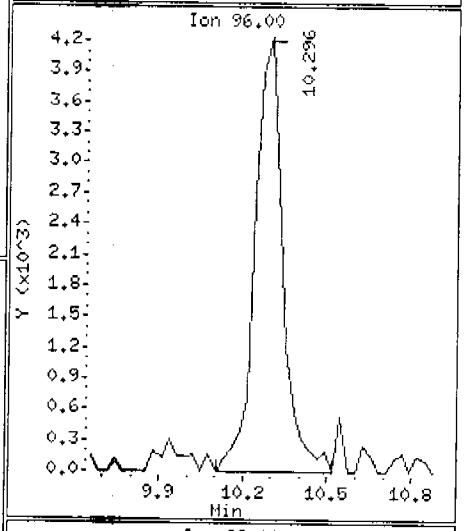
43 1,1-Dichloroethene

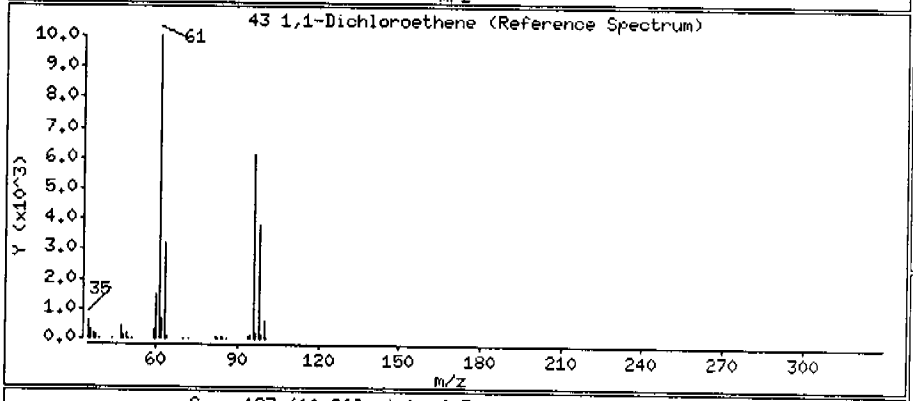
Concentration: 2.872 PPBV

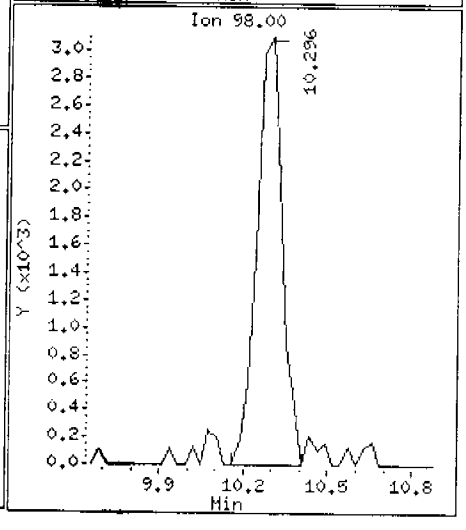


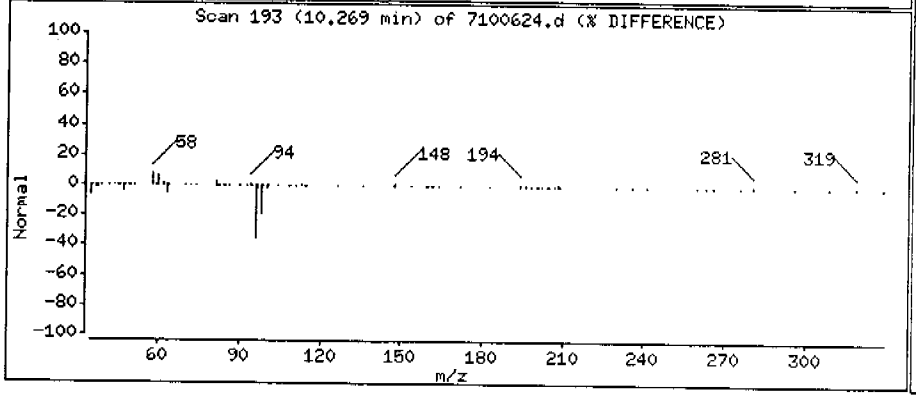












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

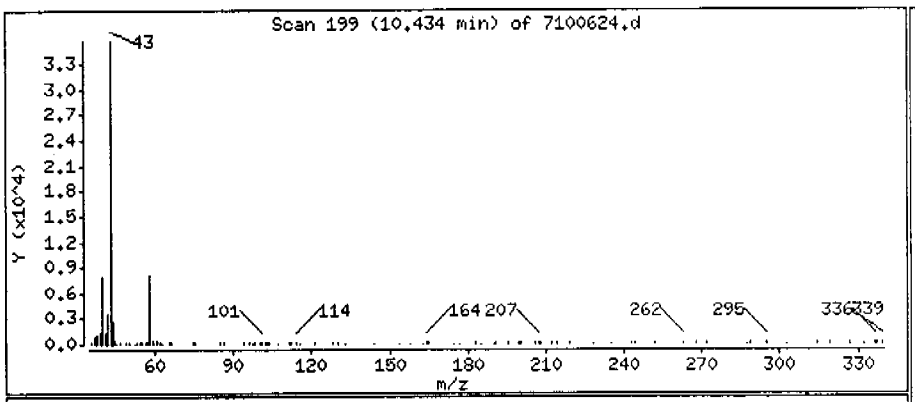
Operator: dfm

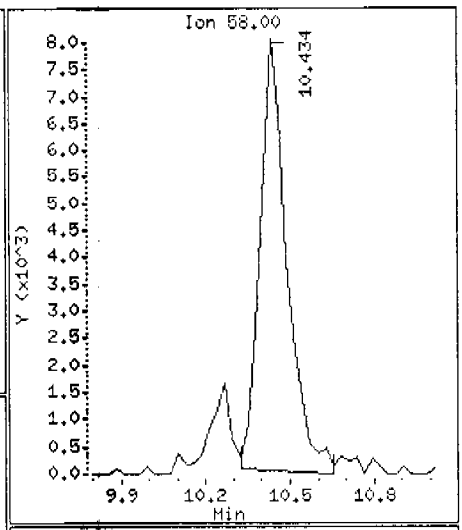
Column phase: RTx-624

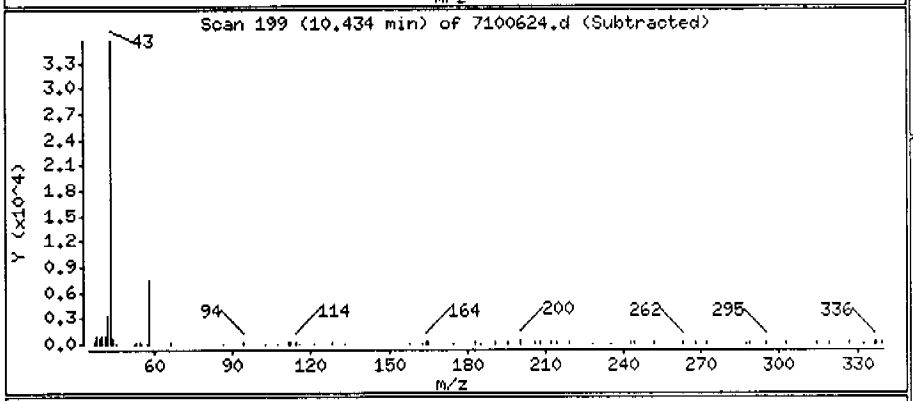
Column diameter: 0.53

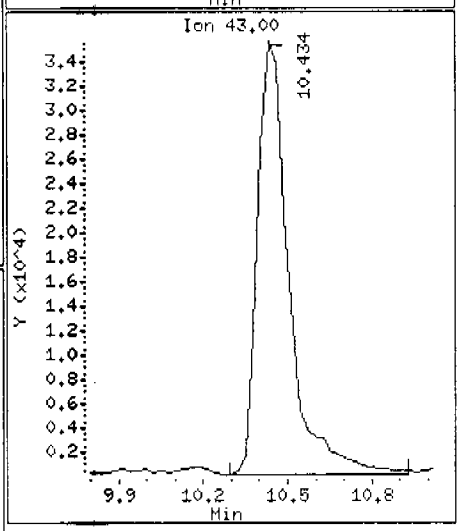
45 Acetone

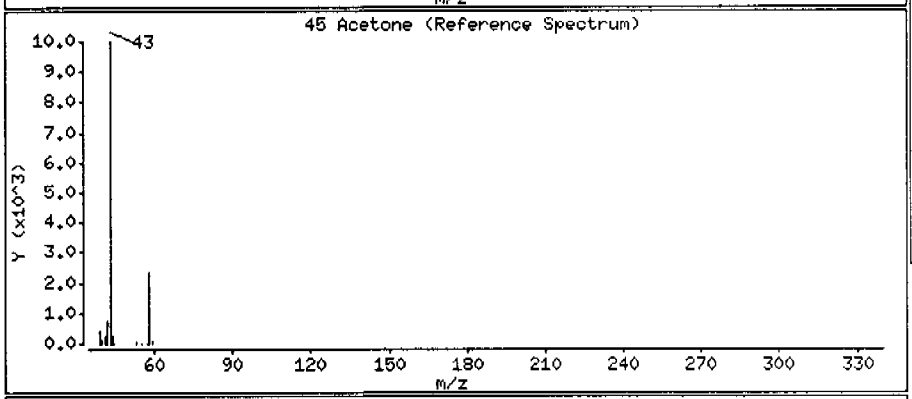
Concentration: 6.023 PPBV

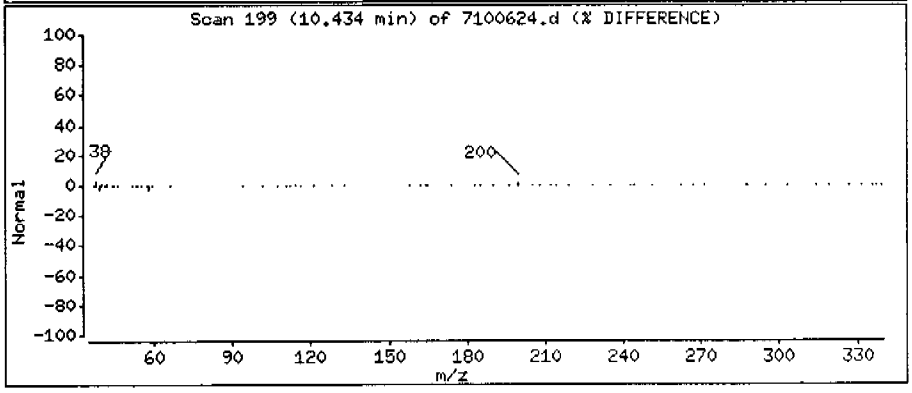












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

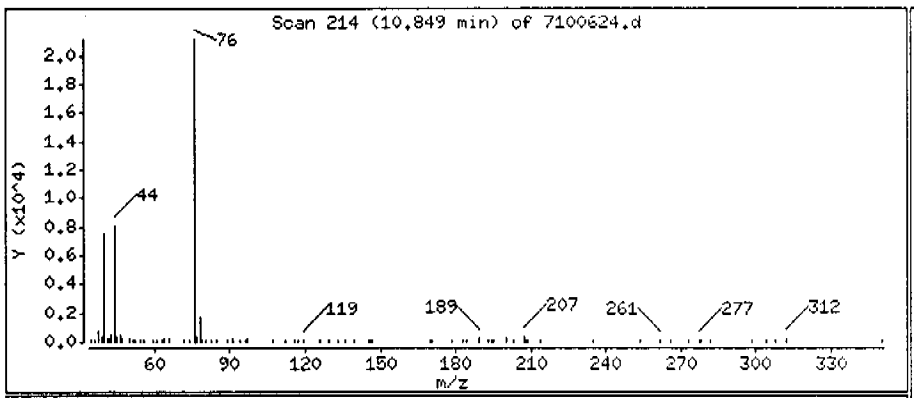
Operator: dfm

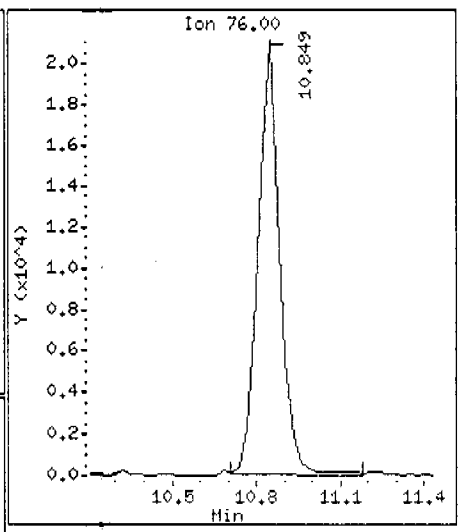
Column phase: RTx-624

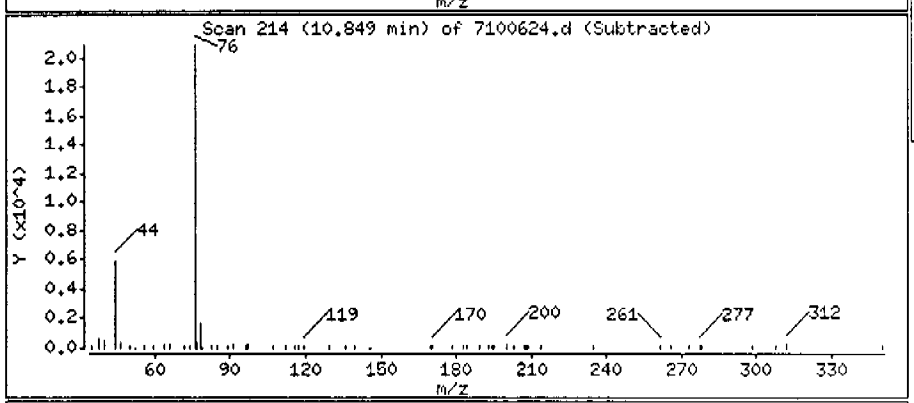
Column diameter: 0.53

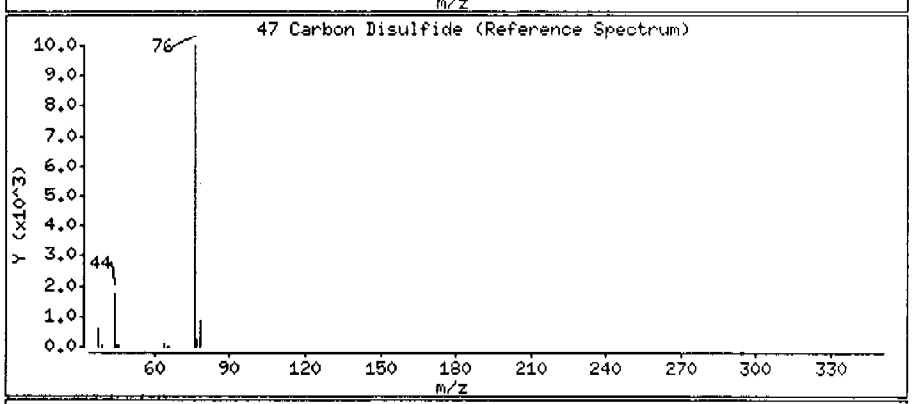
47 Carbon Disulfide

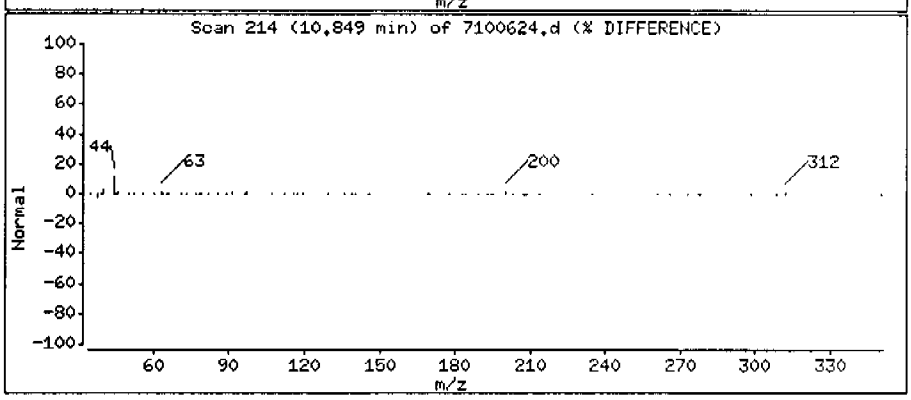
Concentration: 2.950 PPBV











Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Sample Info: 200mL #9563

Instrument: msd7.i

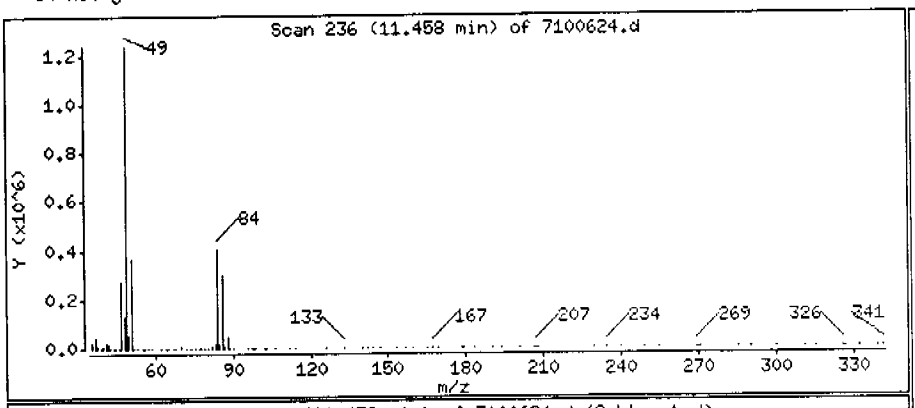
Operator: dfm

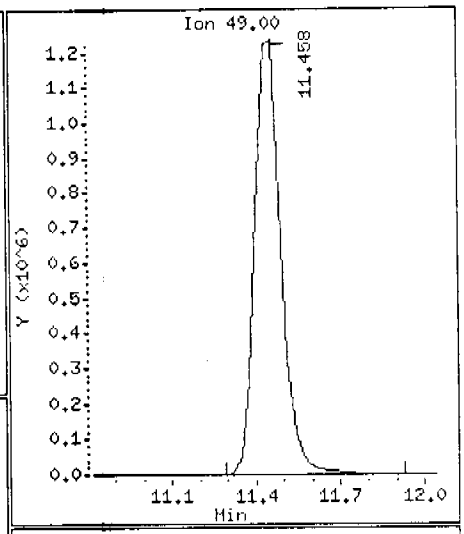
Column phase: RTx-624

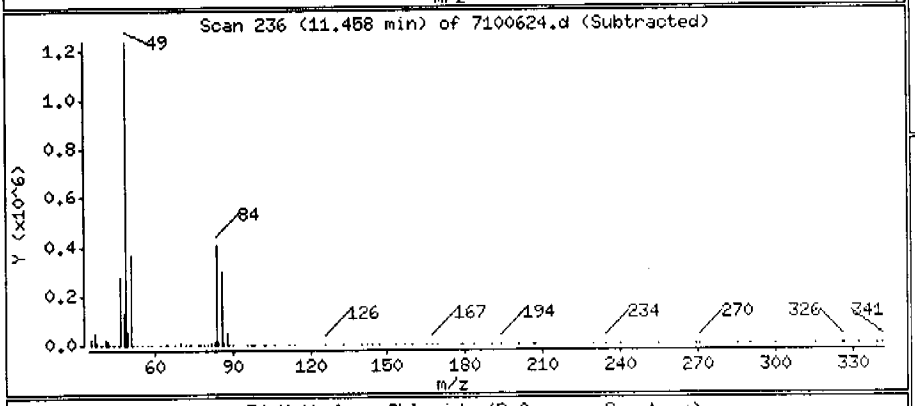
Column diameter: 0.53

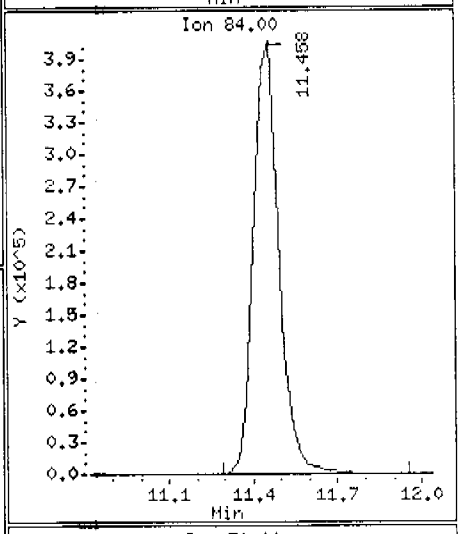
54 Methylene Chloride

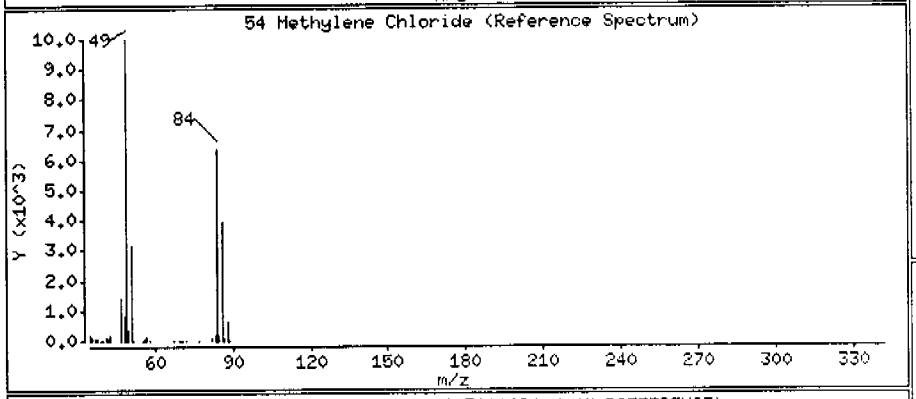
Concentration: 293.15 PPBV

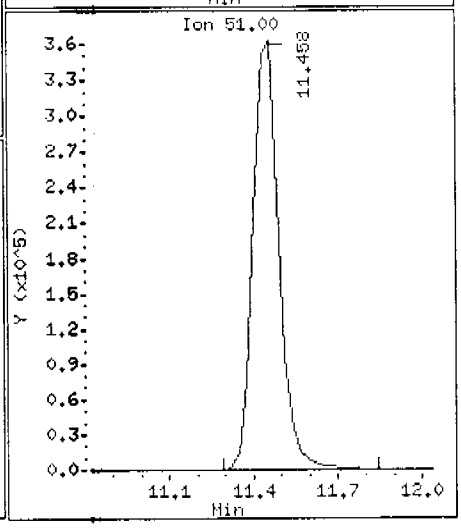


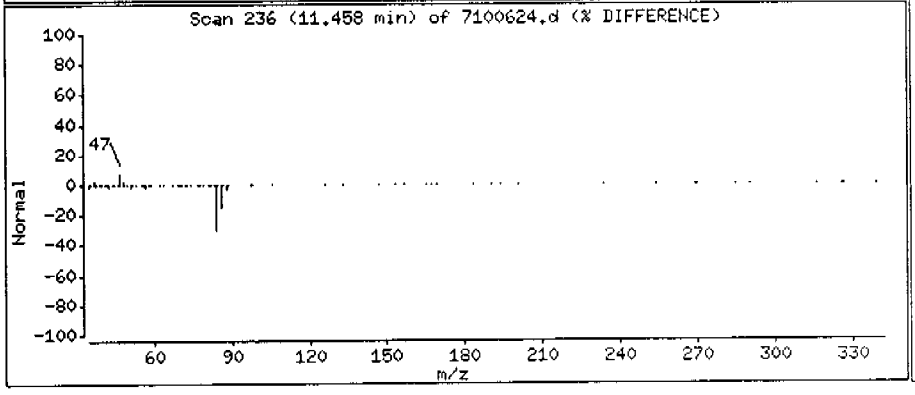












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

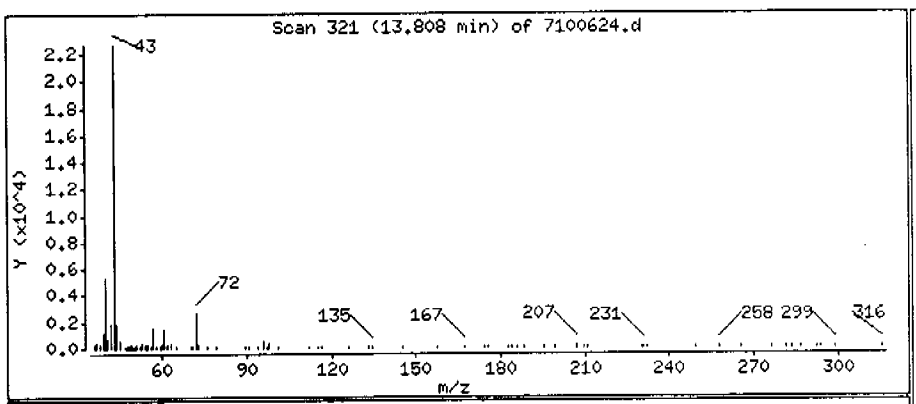
Operator: dfm

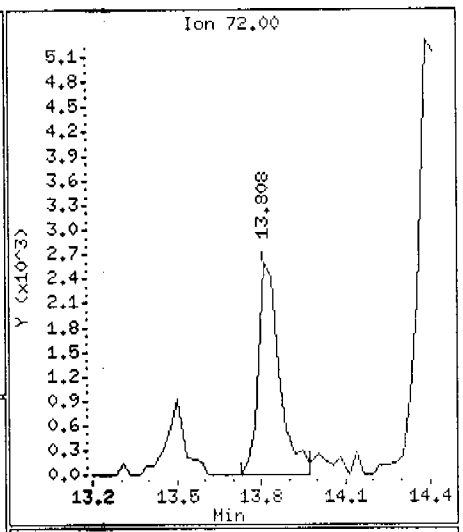
Column phase: RTx-624

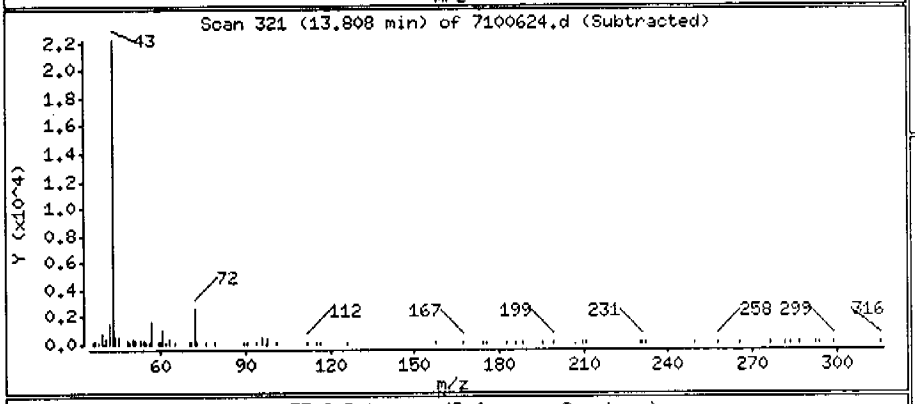
Column diameter: 0.53

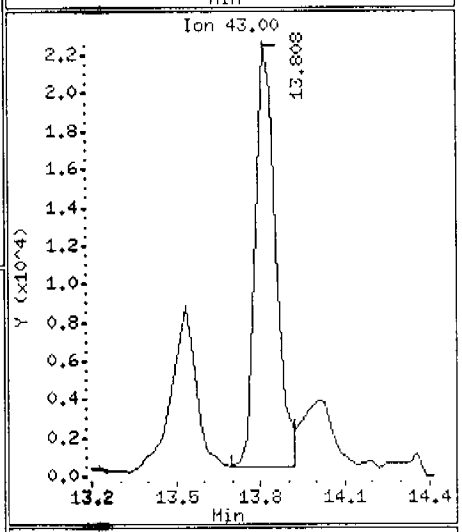
75 2-Butanone

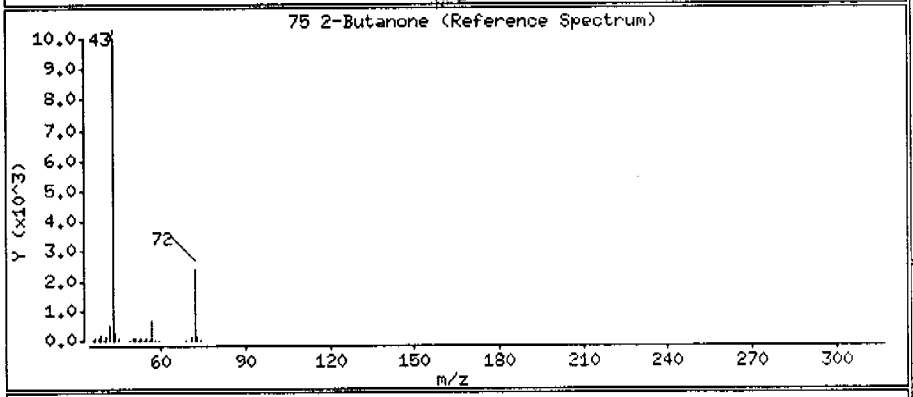
Concentration: 2.376 PPBV

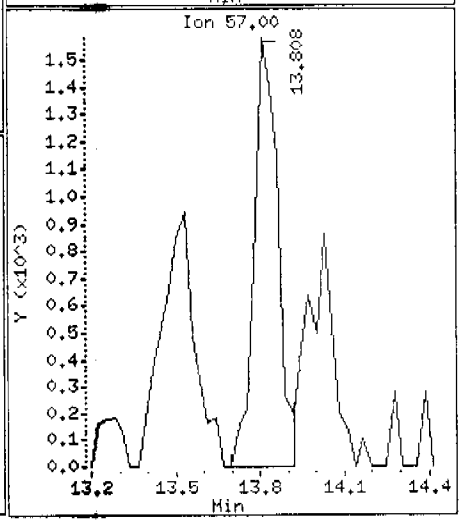


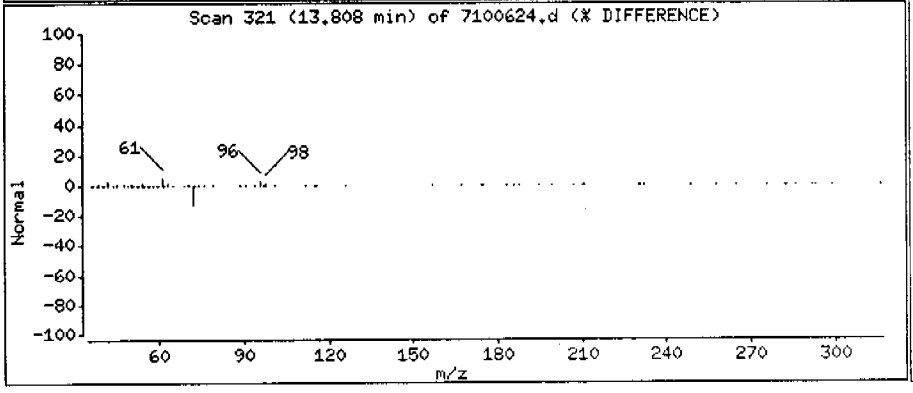












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

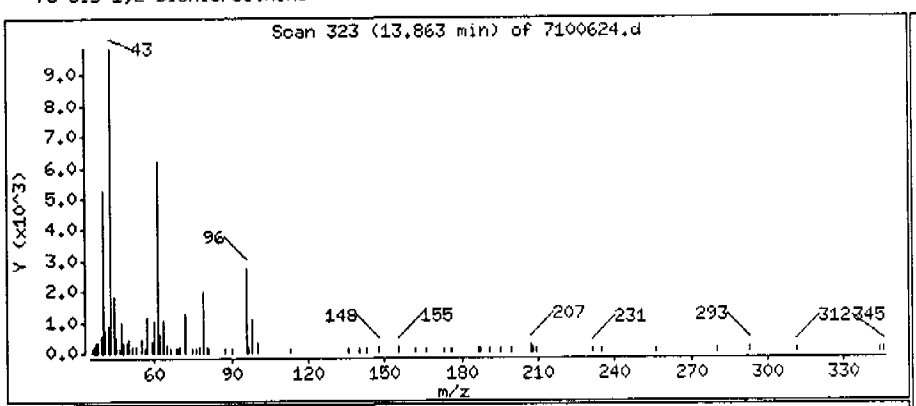
Operator: dfm

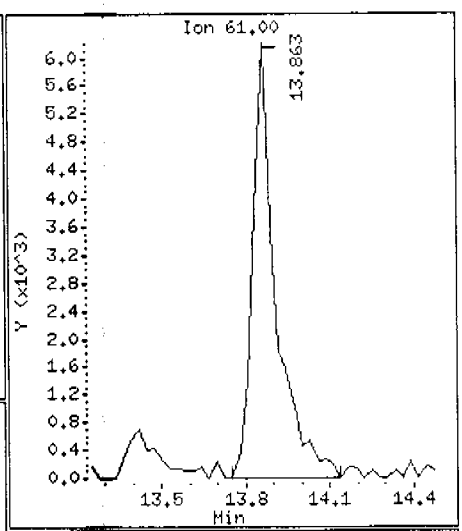
Column phase: RTx-624

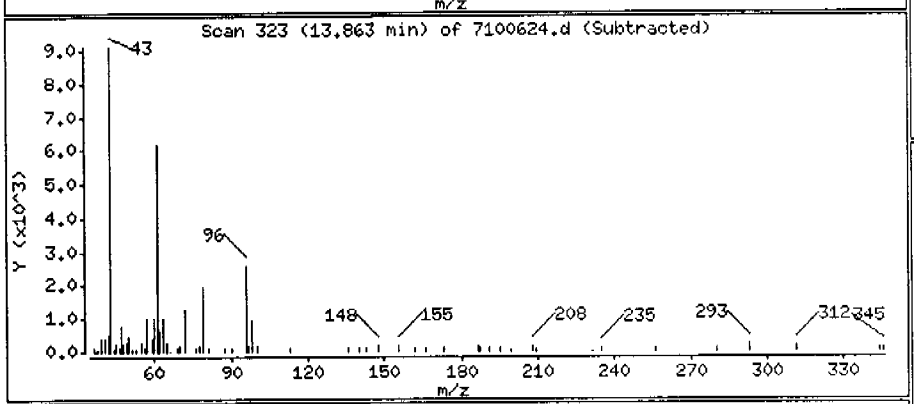
Column diameter: 0.53

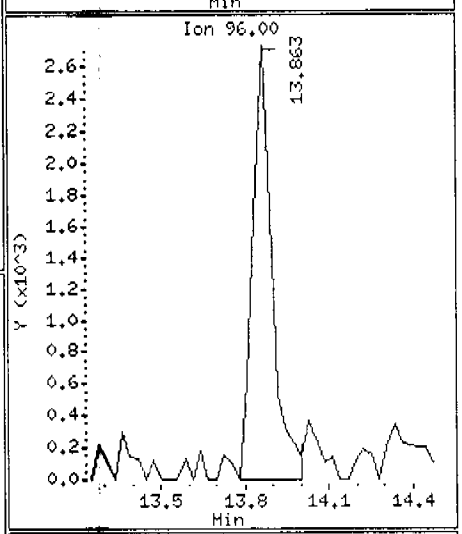
76 cis-1,2-Dichloroethene

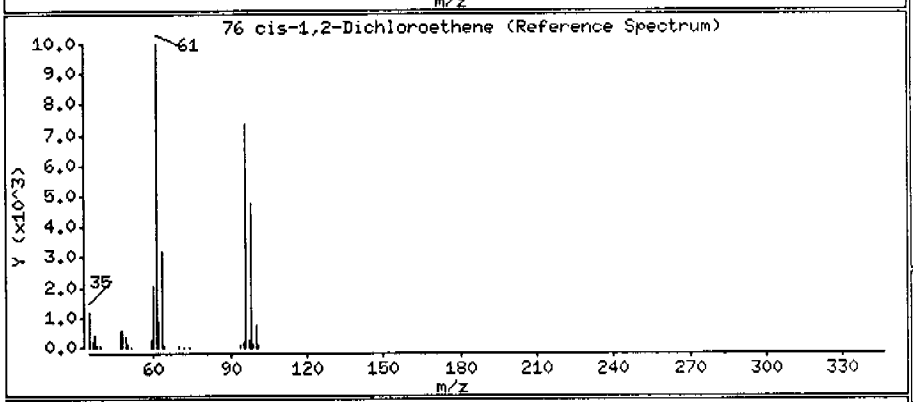
Concentration: 1.429 PPBV

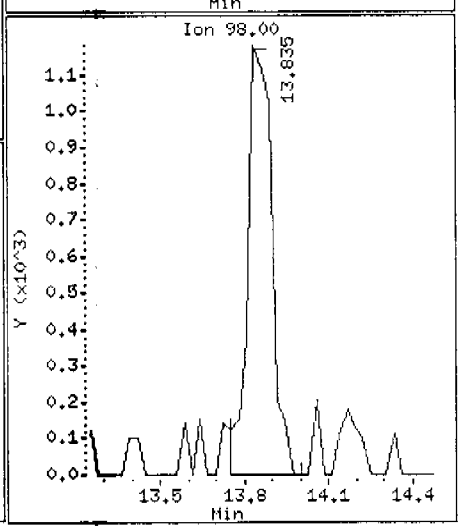


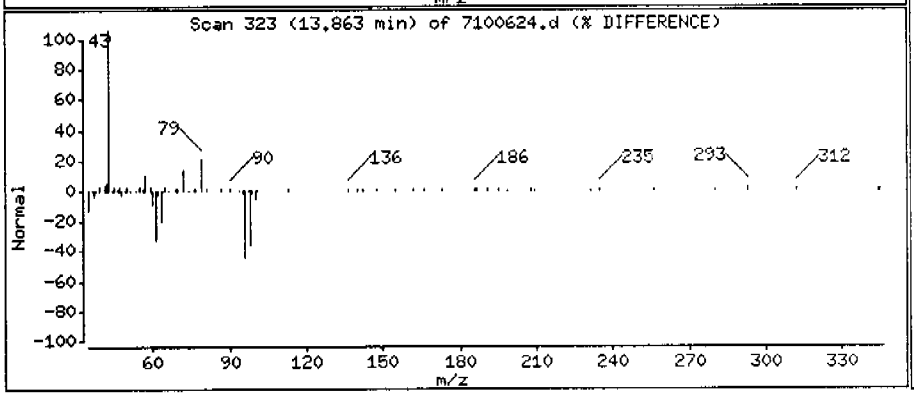












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

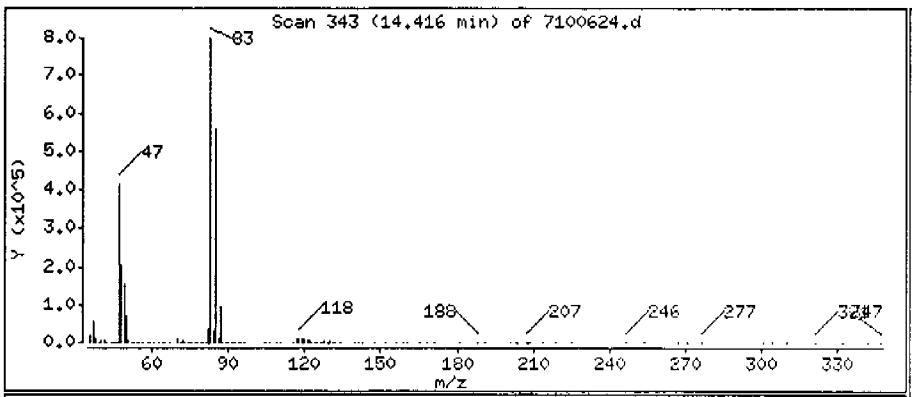
Operator: dfm

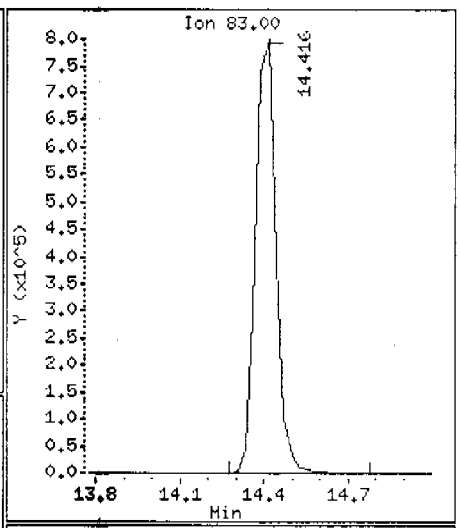
Column phase: RTx-624

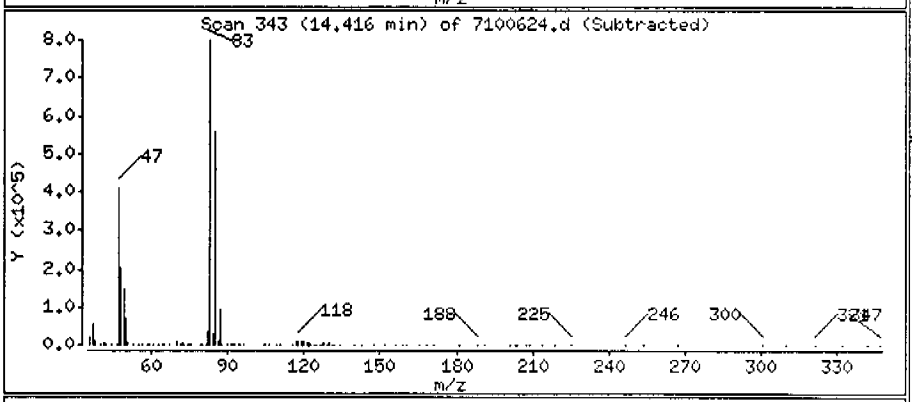
Column diameter: 0.53

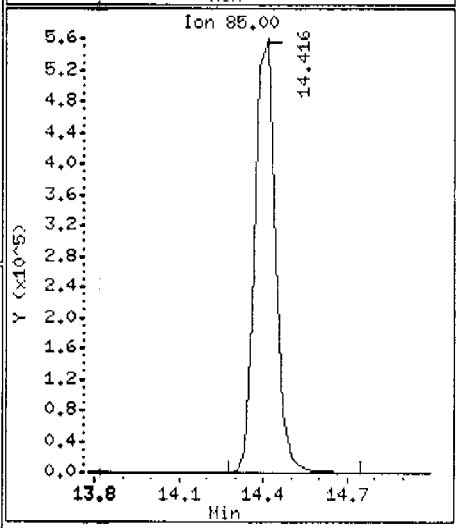
82 Chloroform

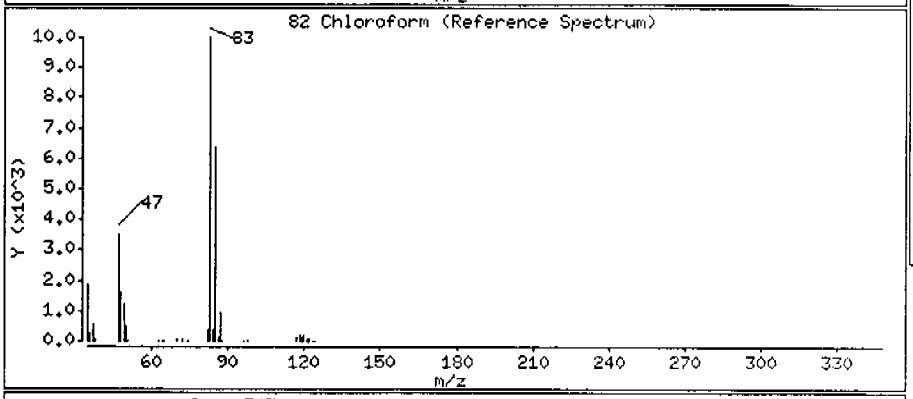
Concentration: 158.60 PPBV

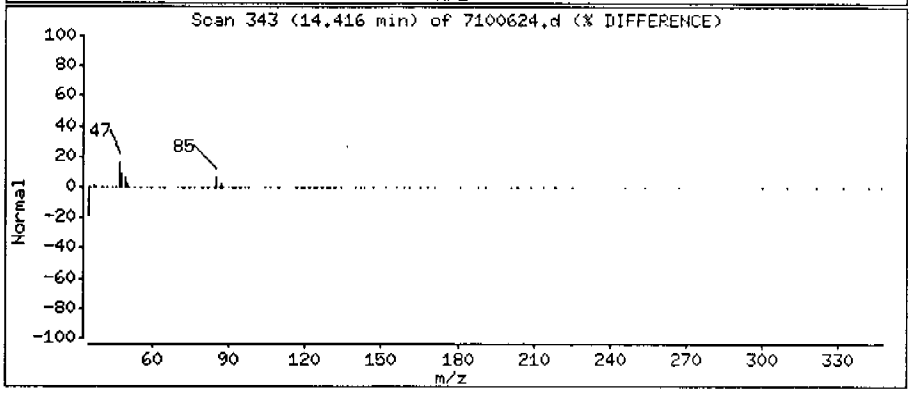












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

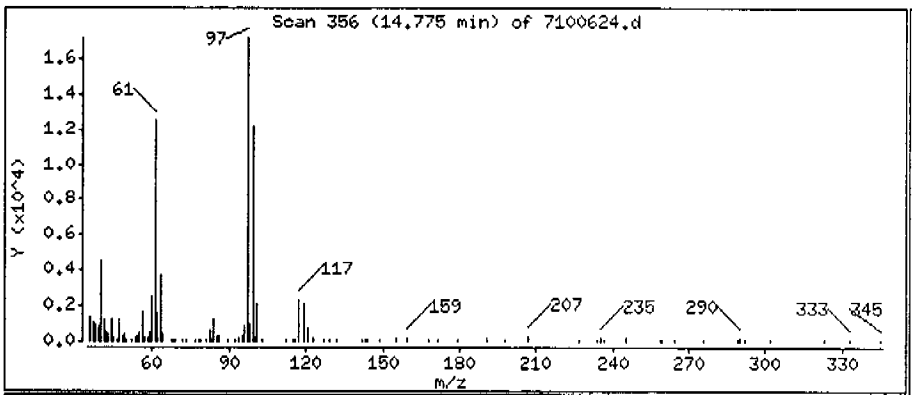
Operator: dfm

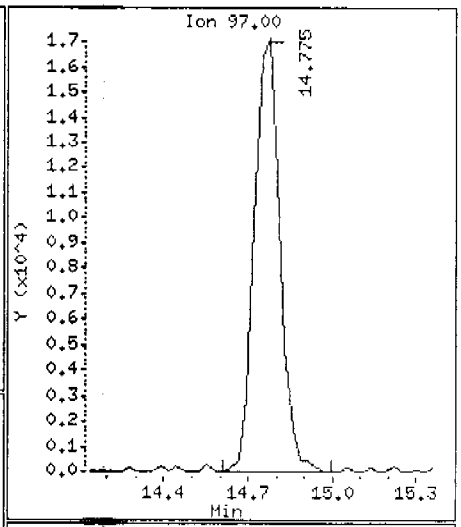
Column phase: RTx-624

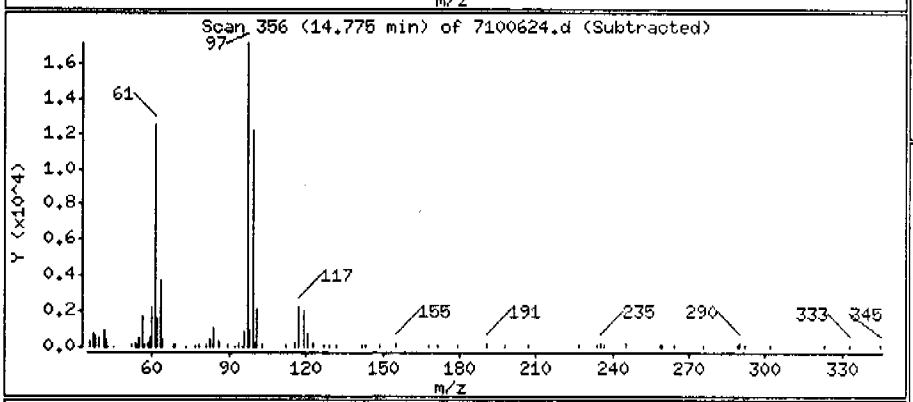
Column diameter: 0.53

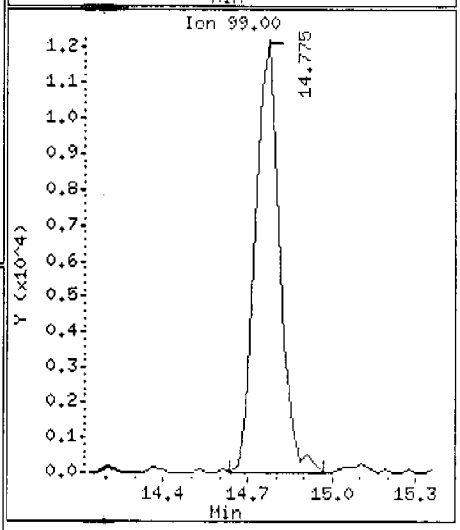
83 1,1,1-Trichloroethane

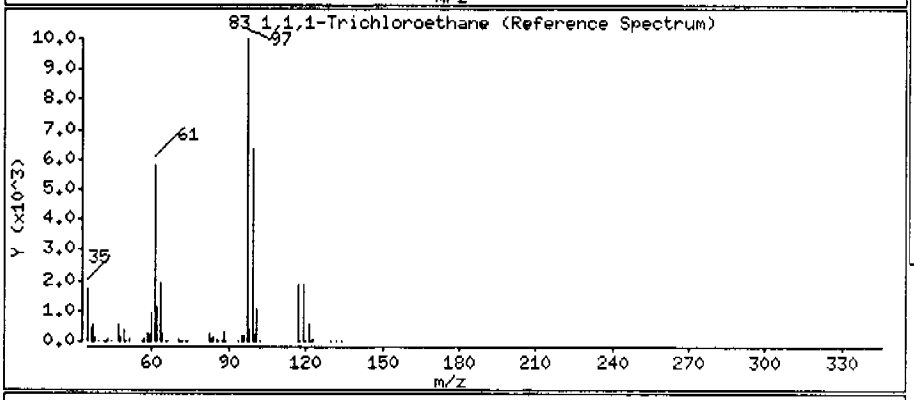
Concentration: 4.232 PPBV

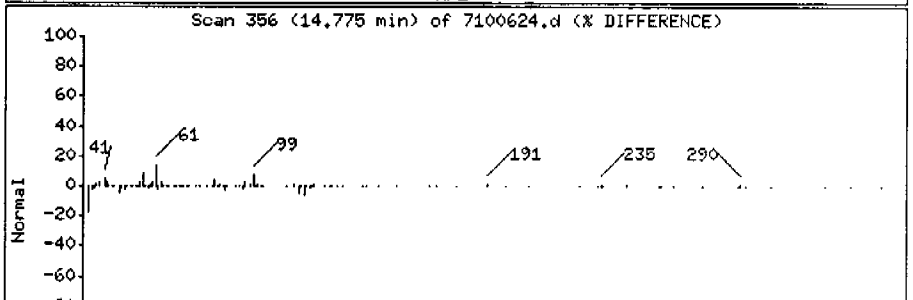












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

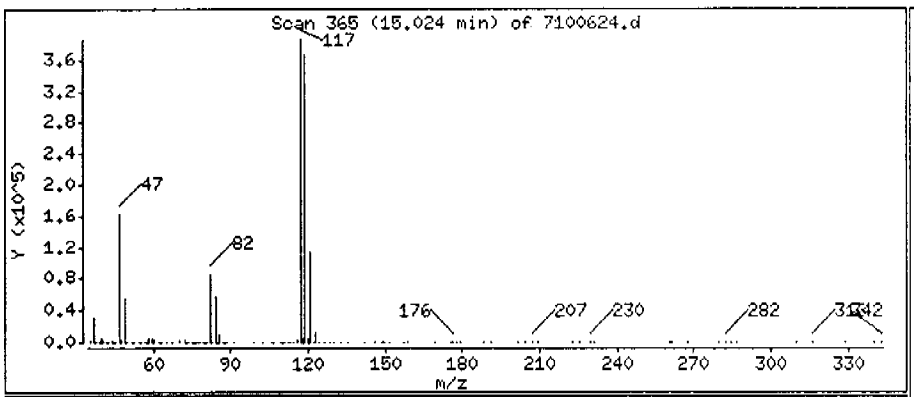
Operator: dfm

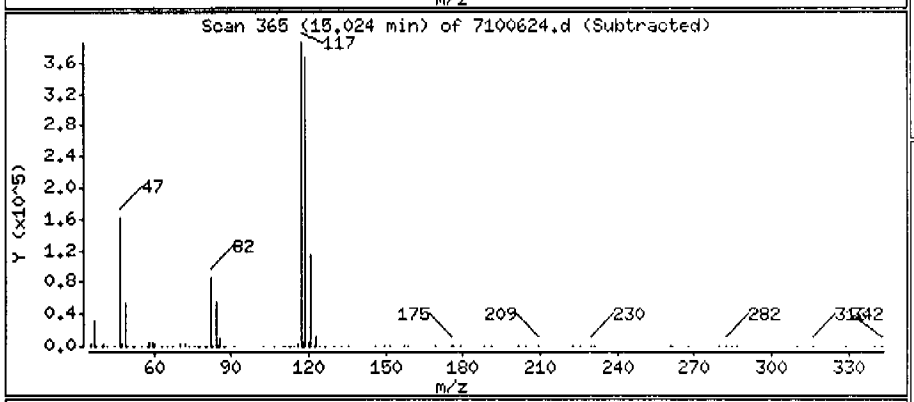
Column phase: RTx-624

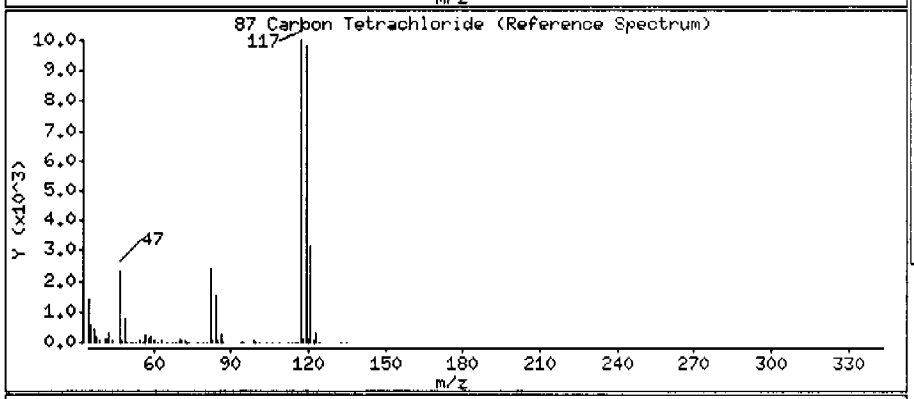
Column diameter: 0.53

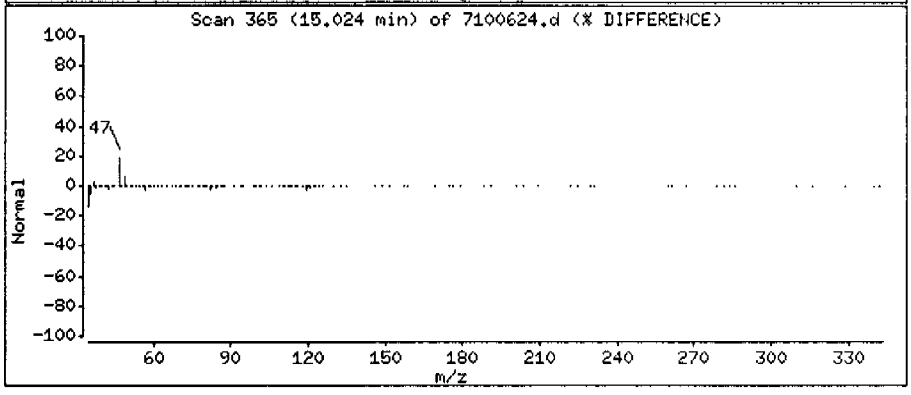
87 Carbon Tetrachloride

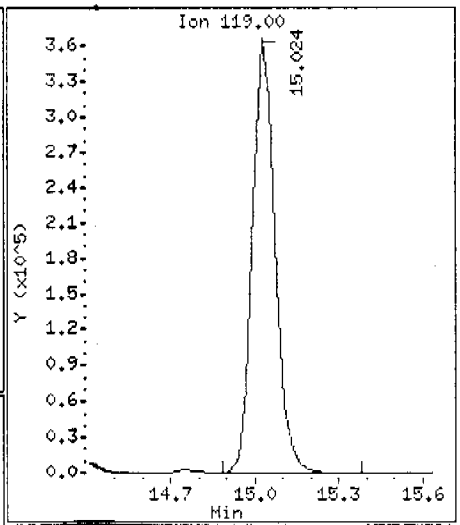
Concentration: 69.612 PPBV

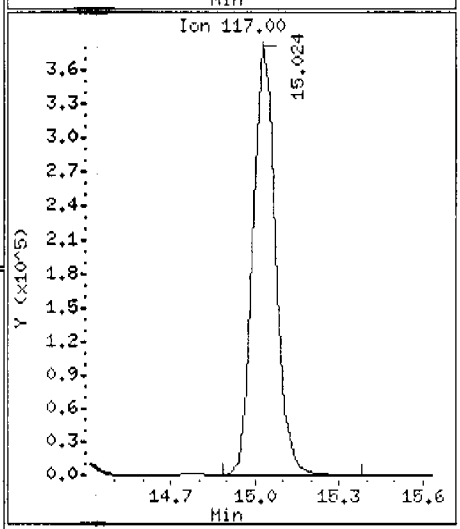












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

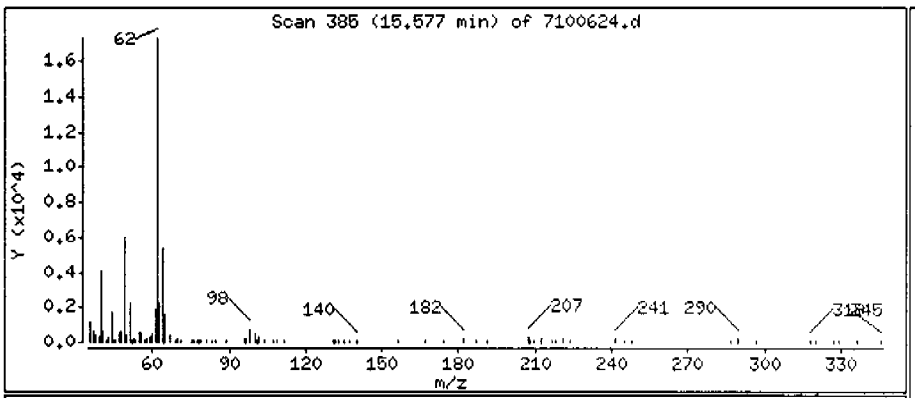
Operator: dfm

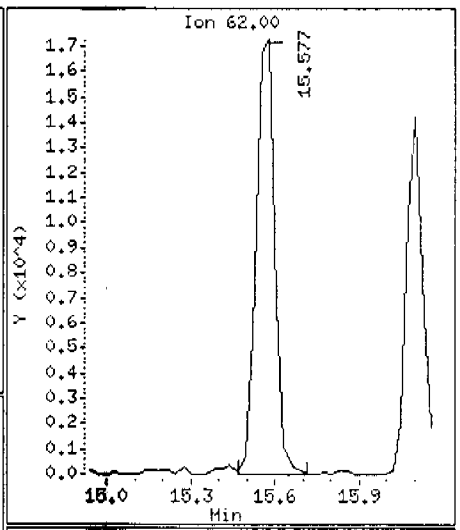
Column phase: RTx-624

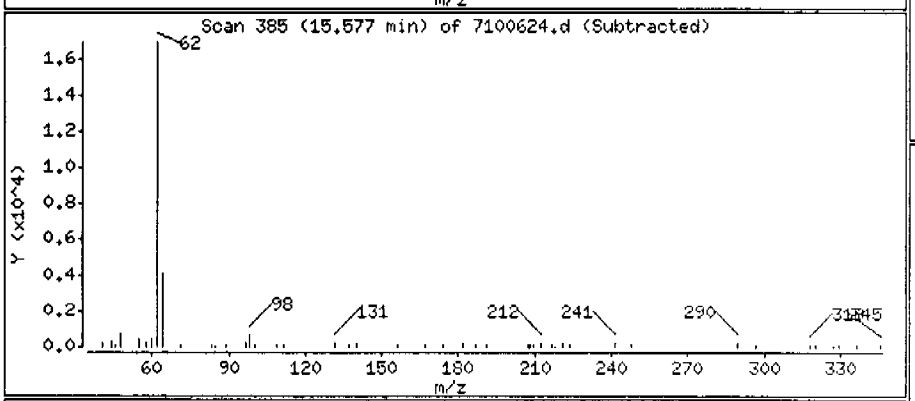
Column diameter: 0.53

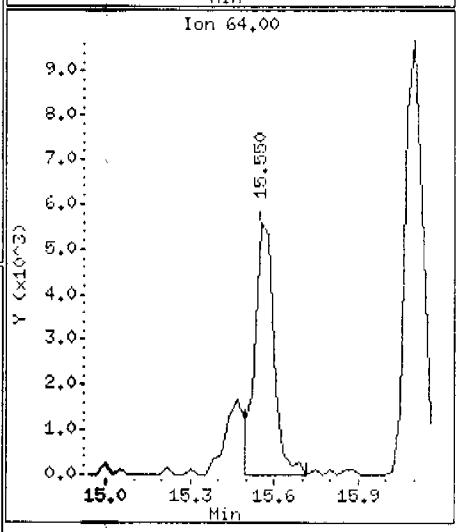
93 1,2-Dichloroethane

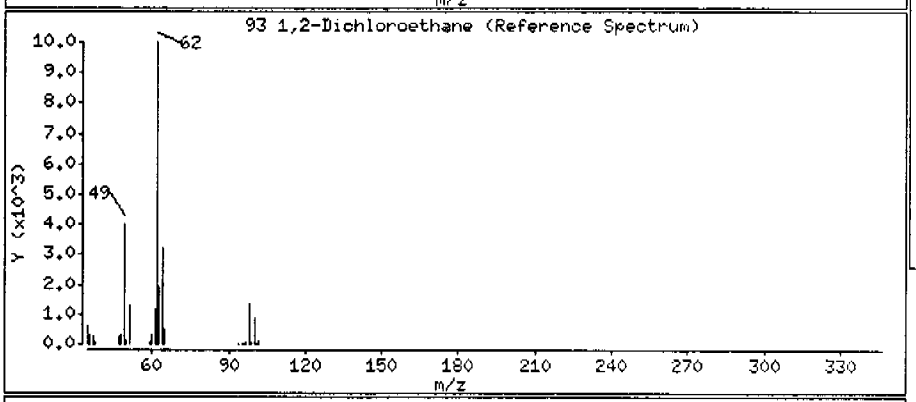
Concentration: 3.695 PPBV

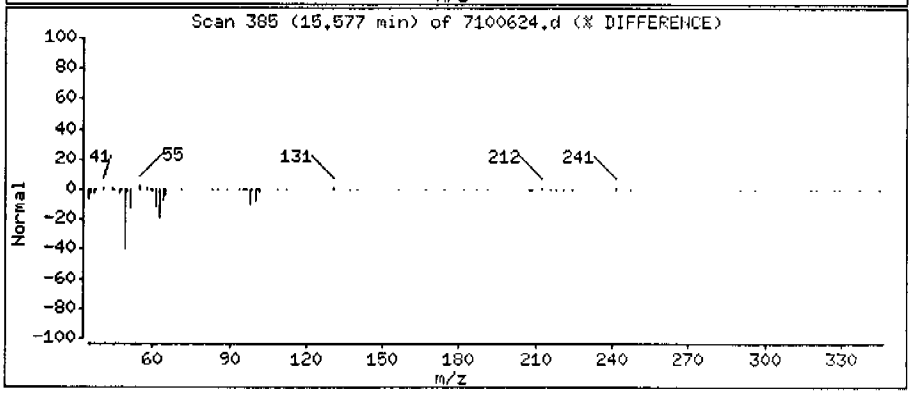












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

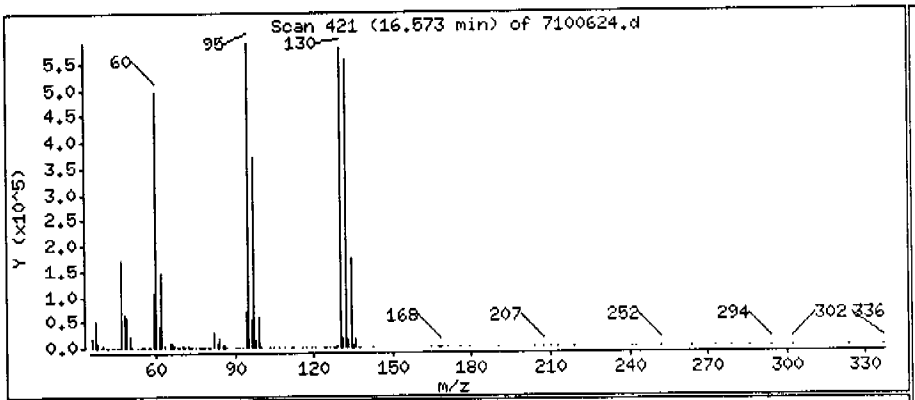
Operator: dfm

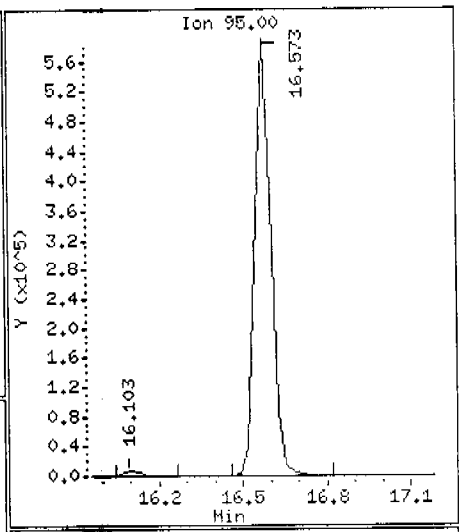
Column phase: RTx-624

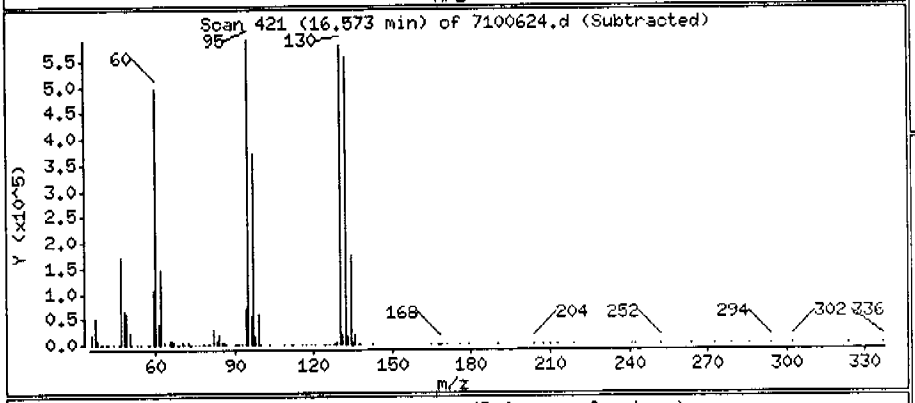
Column diameter: 0.53

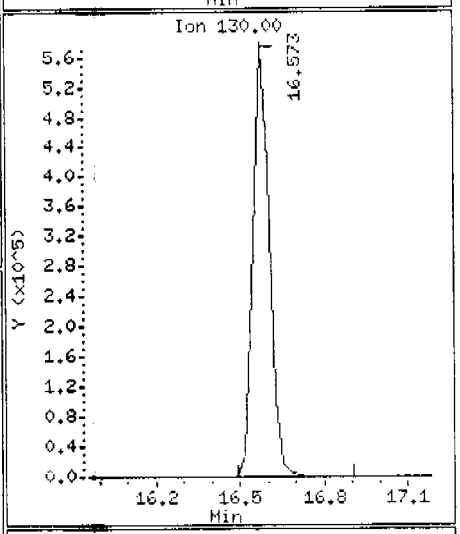
101 Trichloroethene

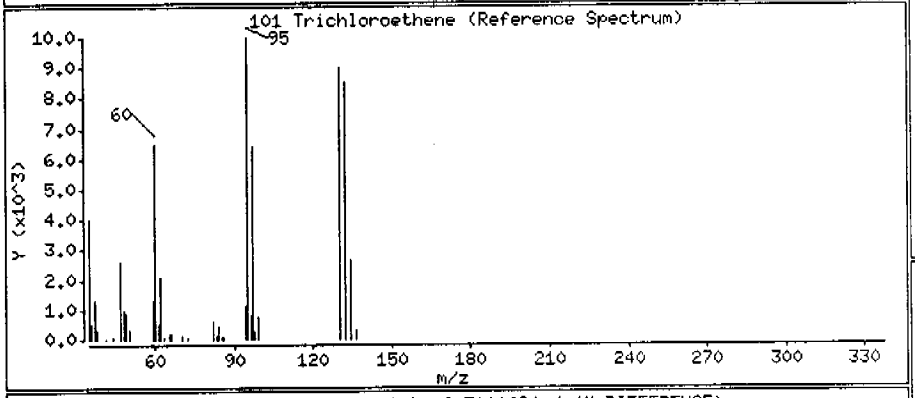
Concentration: 184.52 PPBV

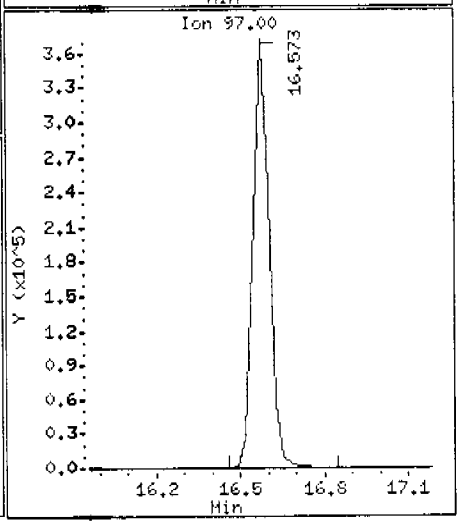


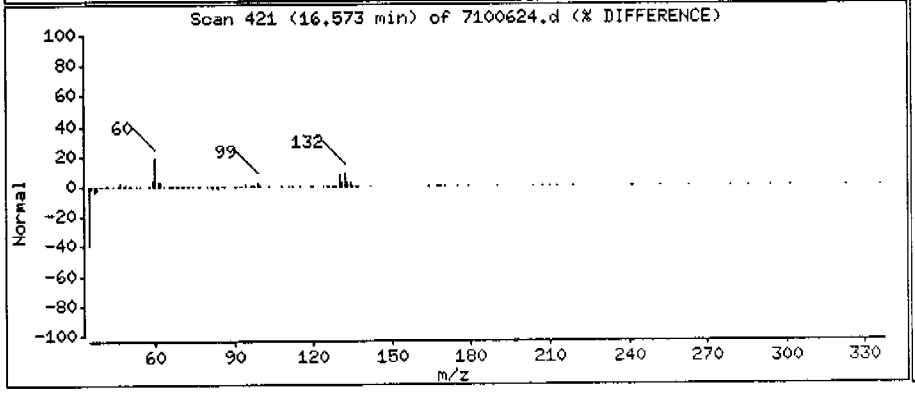












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

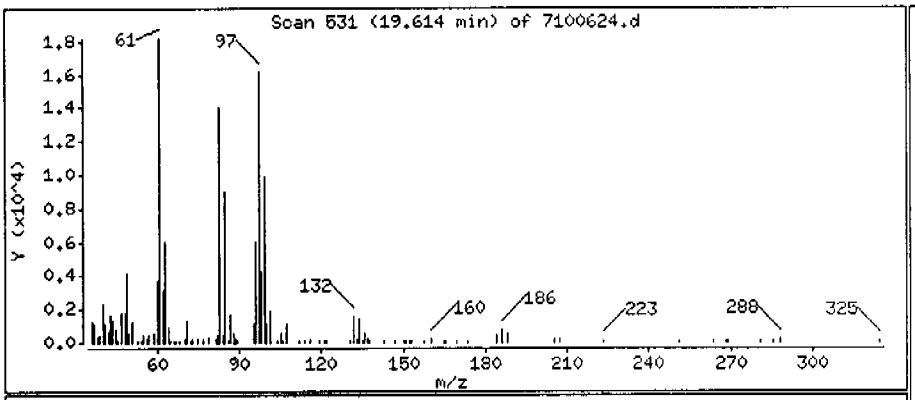
Operator: dfm

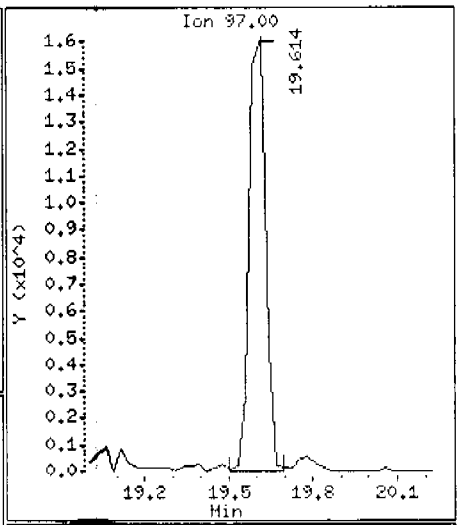
Column phase: RTx-624

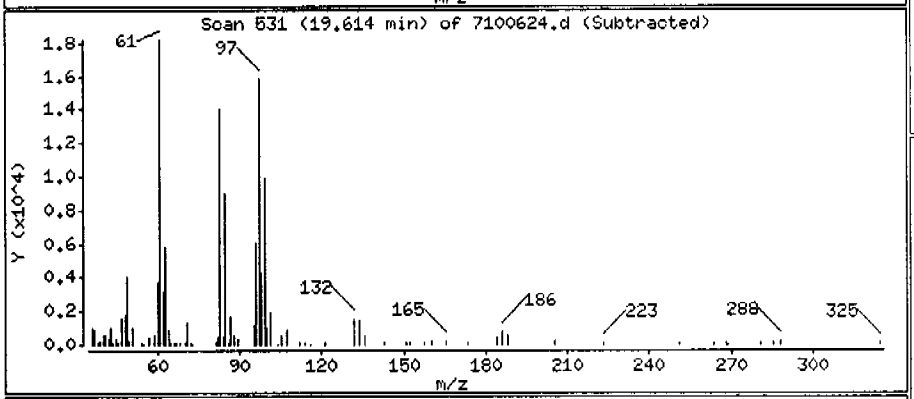
Column diameter: 0.53

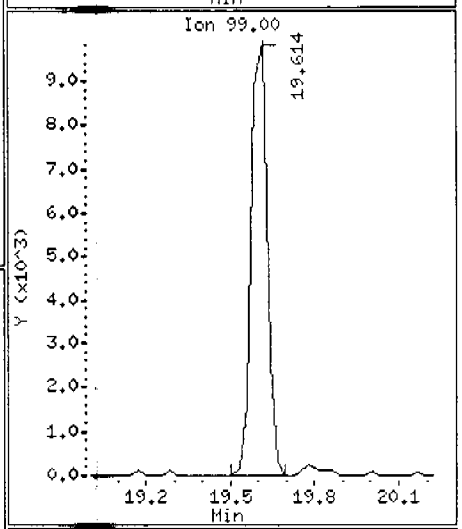
117 1,1,2-Trichloroethane

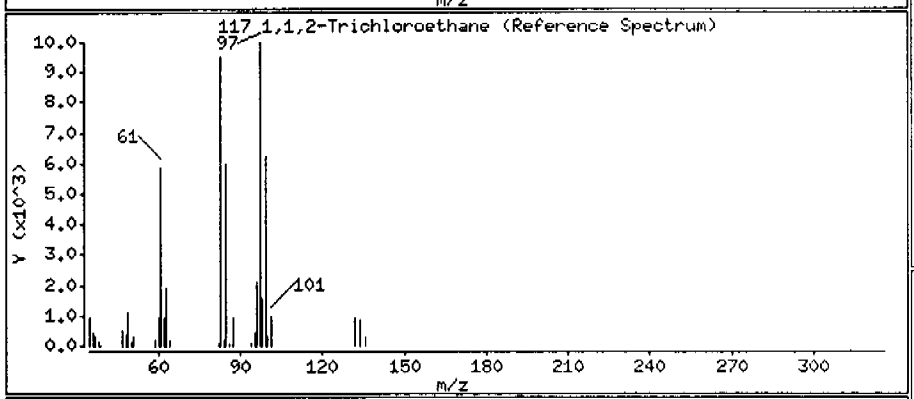
Concentration: 5.992 PPBV

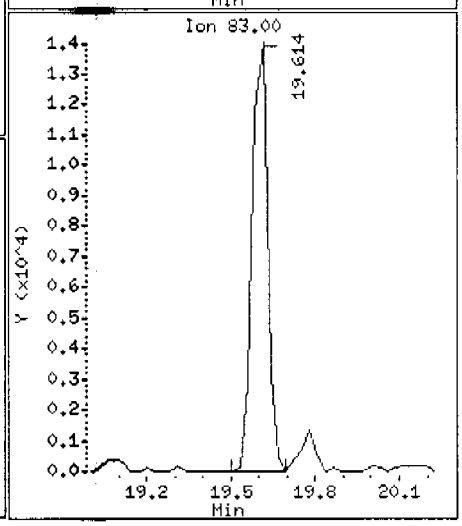


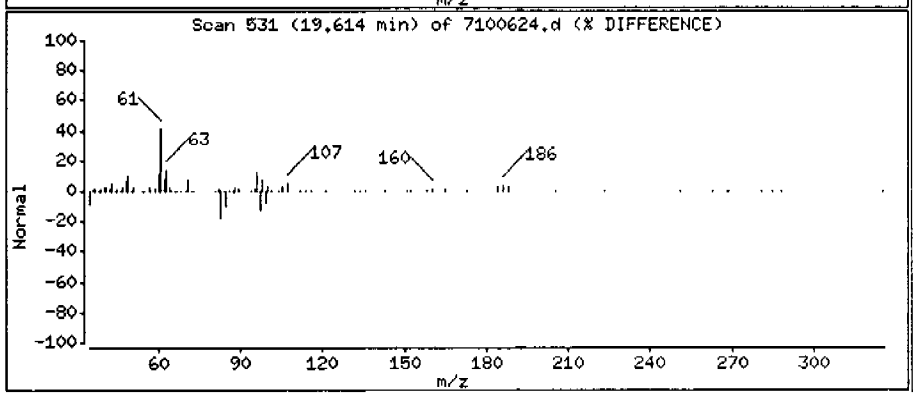












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Sample Info: 200mL #9563

Instrument: msd7.i

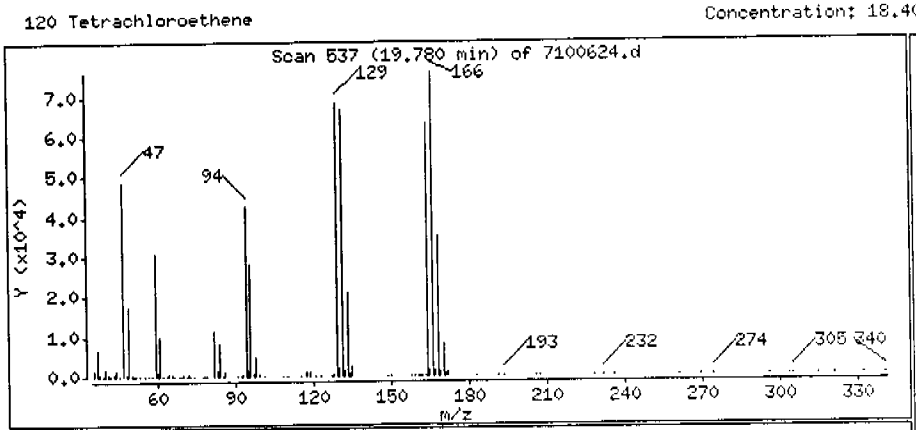
Operator: dfm

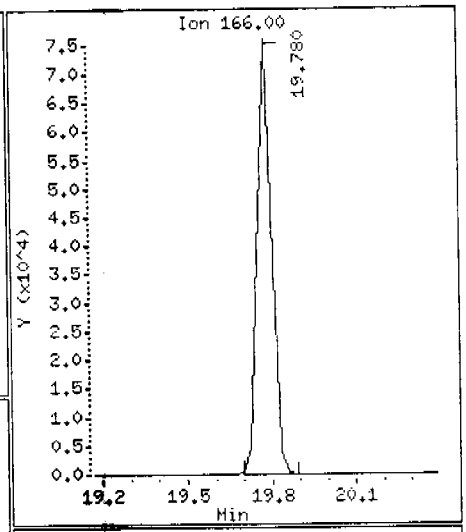
Column phase: RTx-624

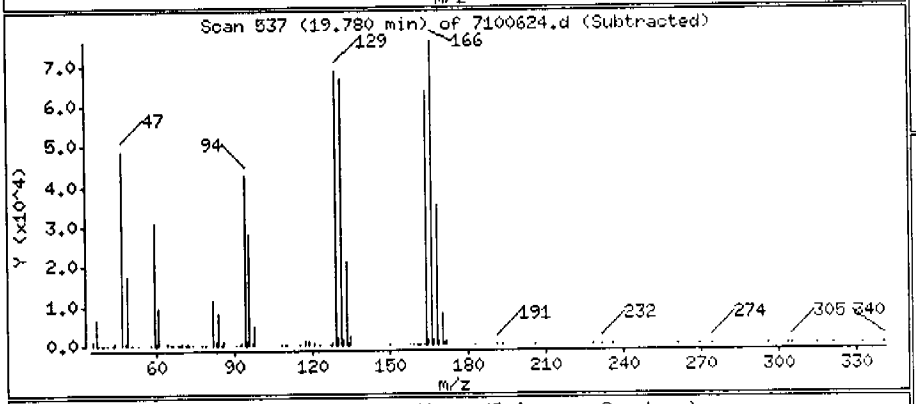
Column diameter: 0.53

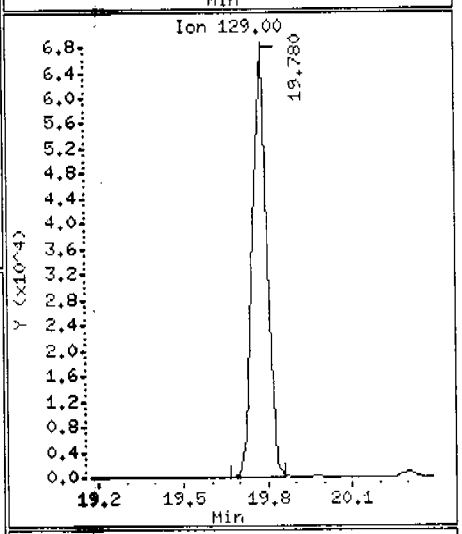
120 Tetrachloroethene

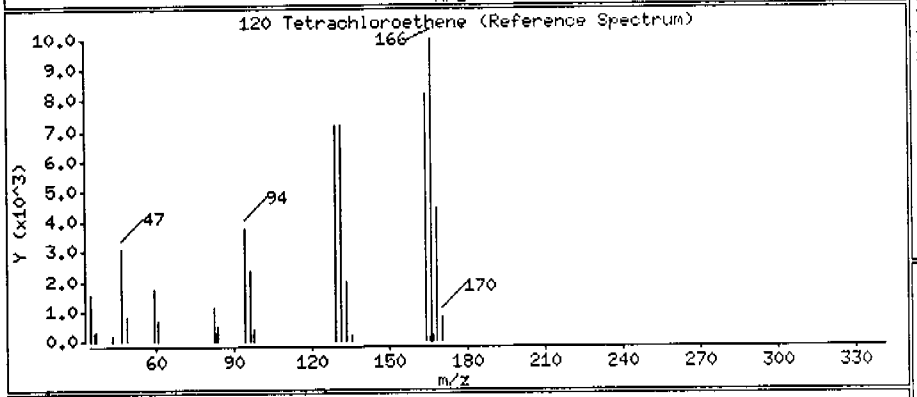
Concentration: 18.408 PPBV

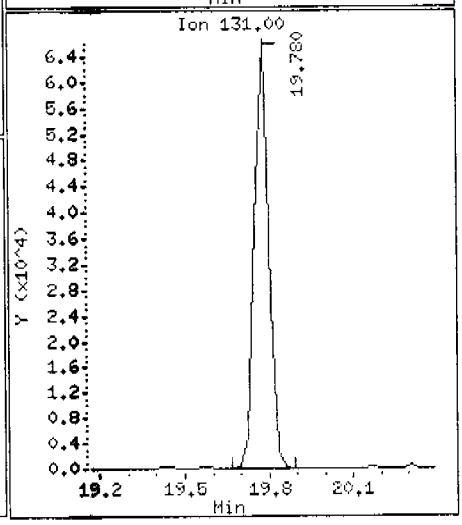


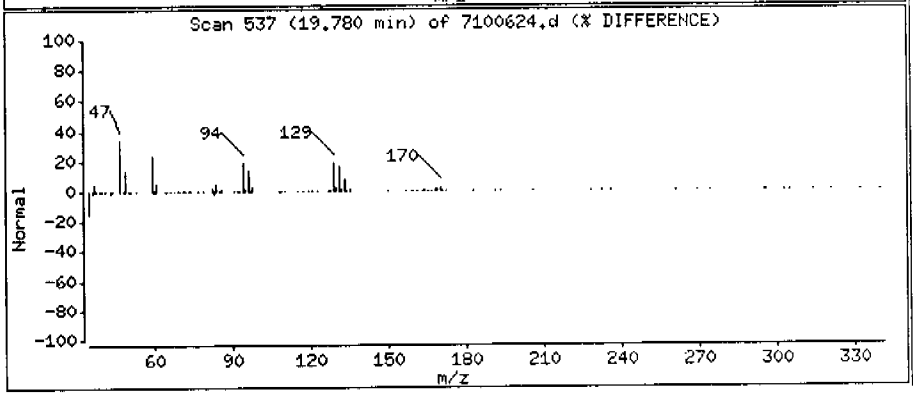












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

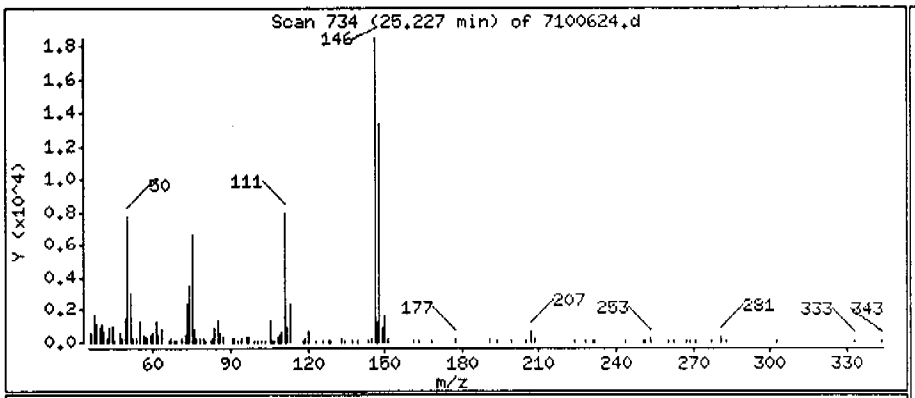
Operator: dfm

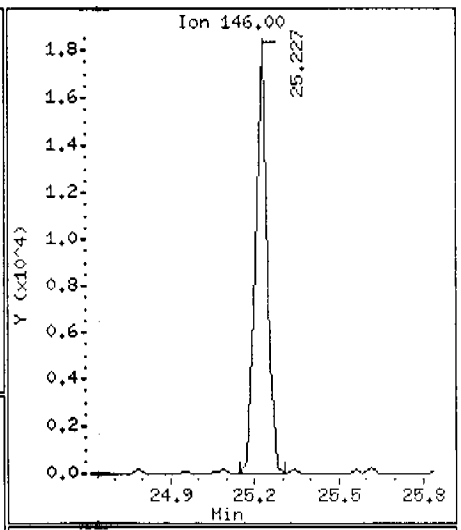
Column phase: RTx-624

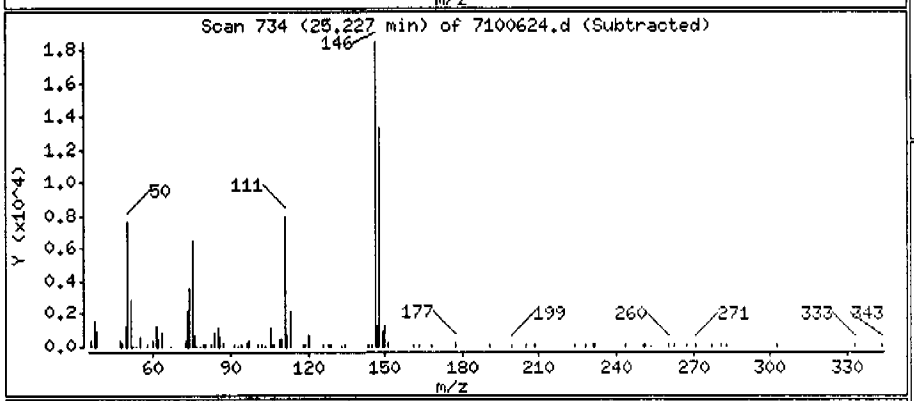
Column diameter: 0.53

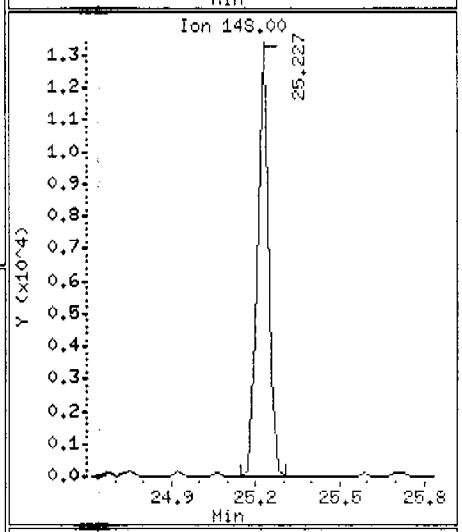
156 1,4-Dichlorobenzene

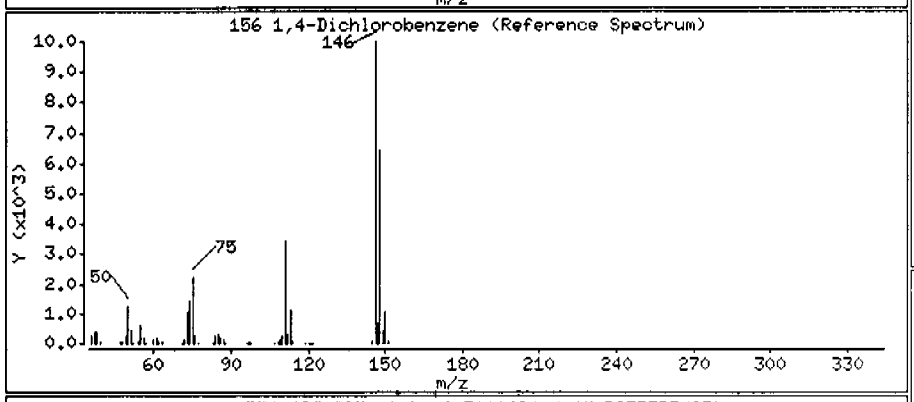
Concentration: 1.520 PPBV

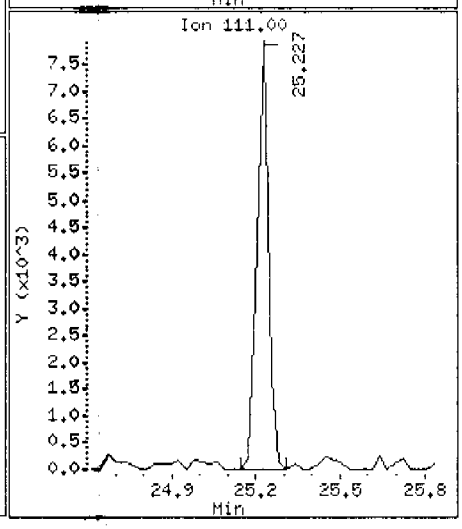


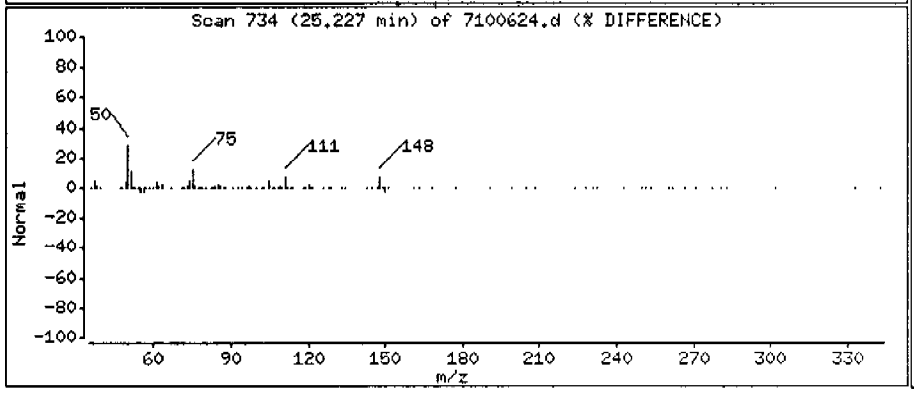












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

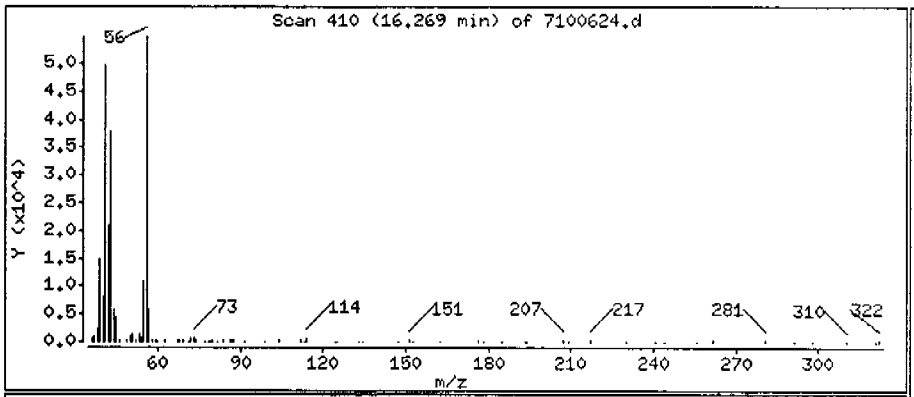
Operator: dfm

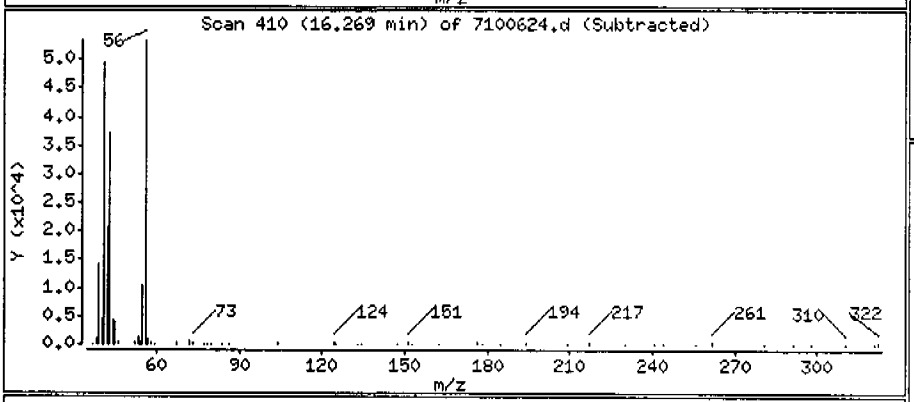
Column phase: RTx-624

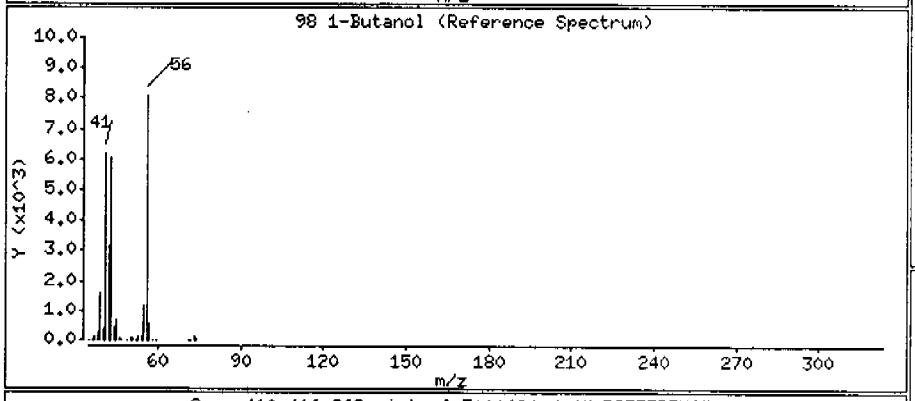
Column diameter: 0.53

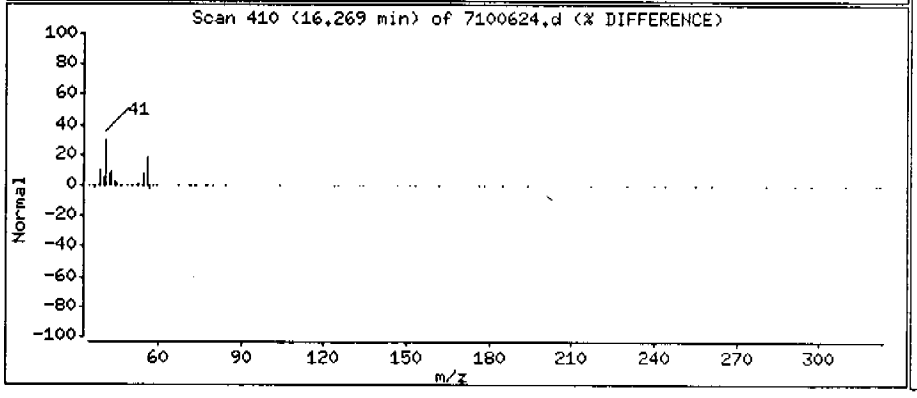
98 1-Butanol

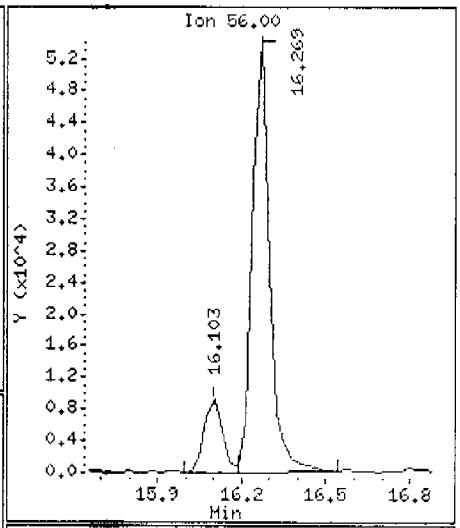
Concentration: 22.928 PPBV

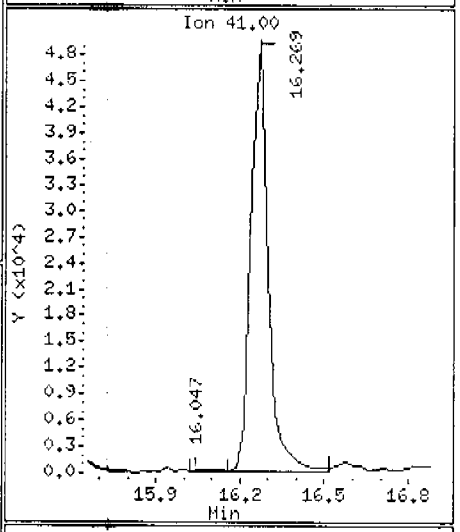


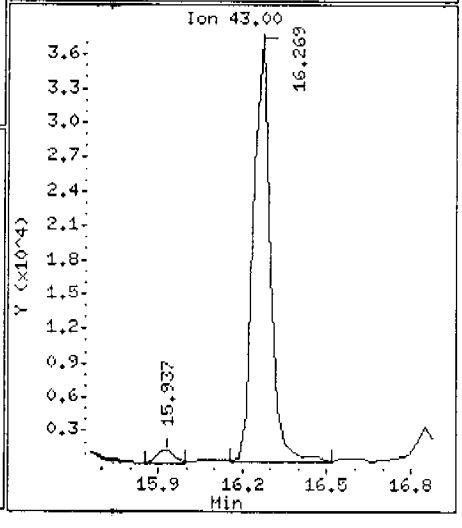












Data File: /chem/msd7.i/06oct08.b/7100624.d

Date : 07-OCT-2008 03:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL #9563

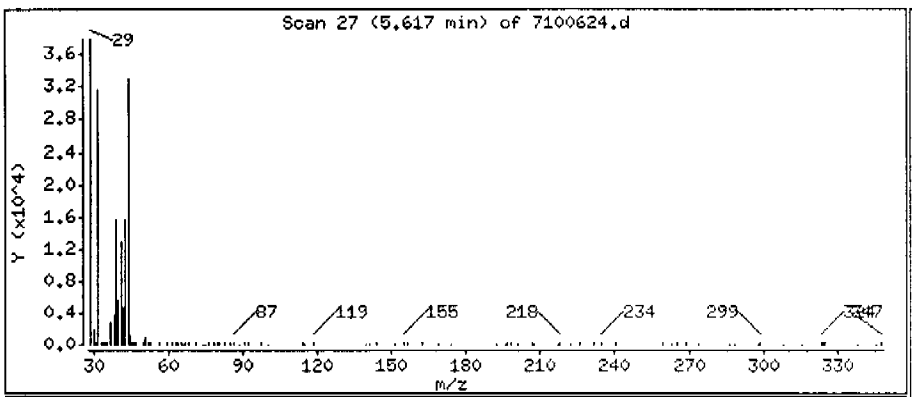
Operator: dfm

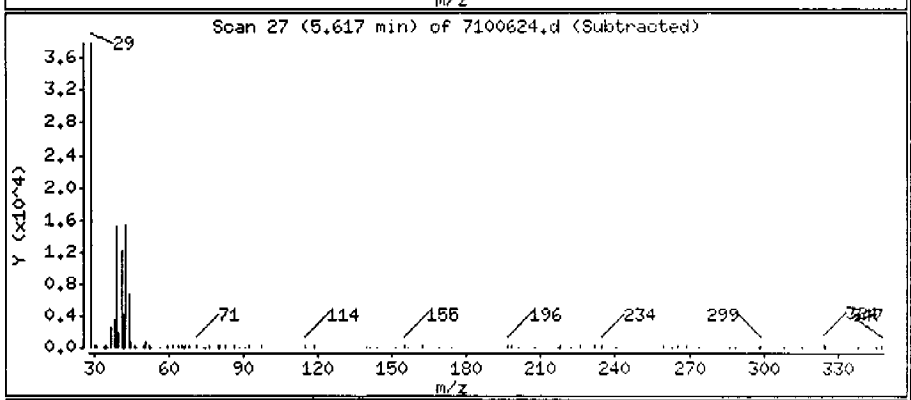
Column phase: RTx-624

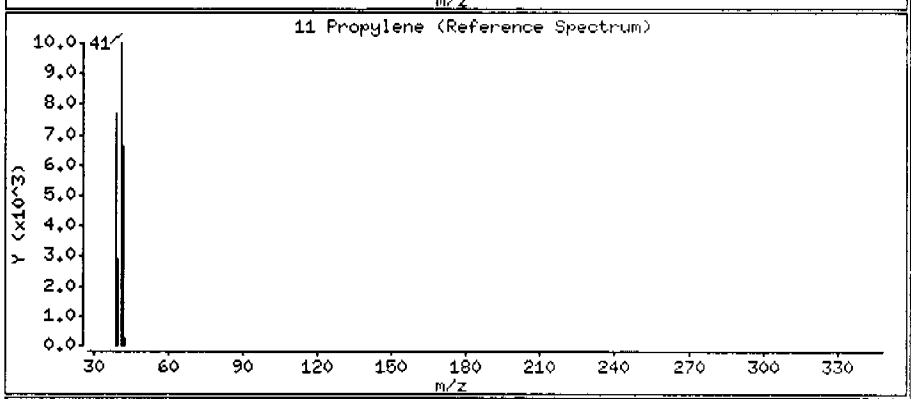
Column diameter: 0.53

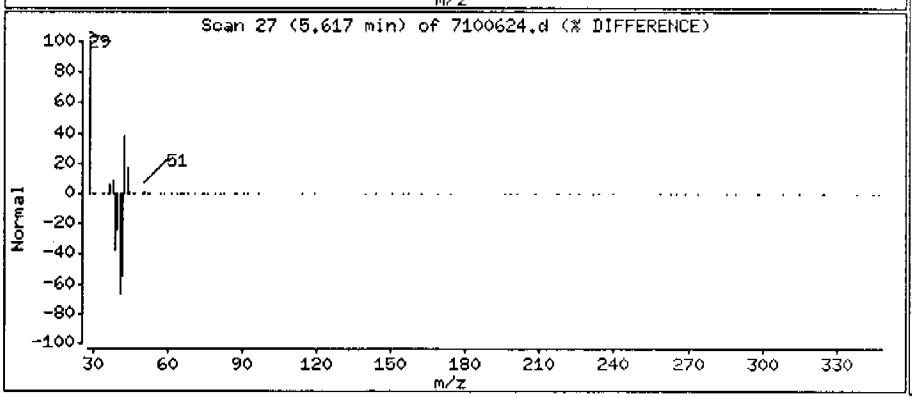
11 Propylene

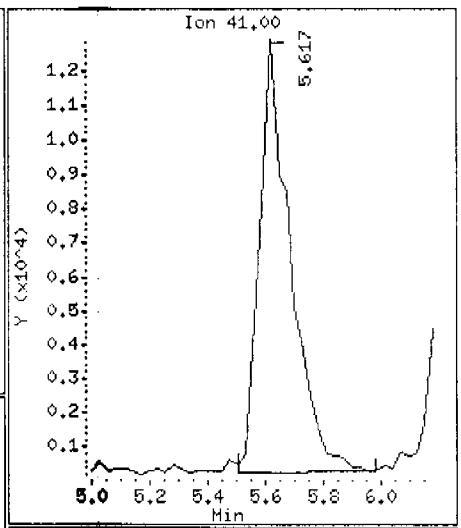
Concentration: 6.037 PPBV

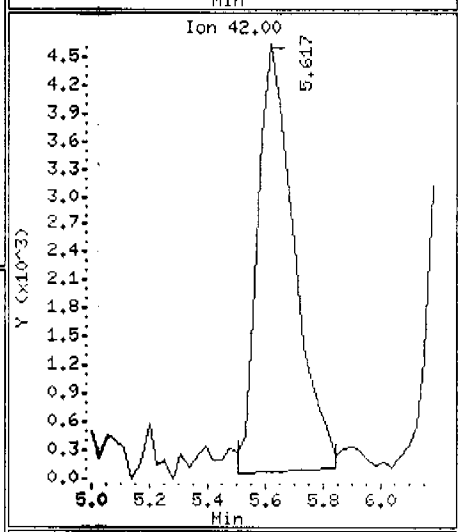


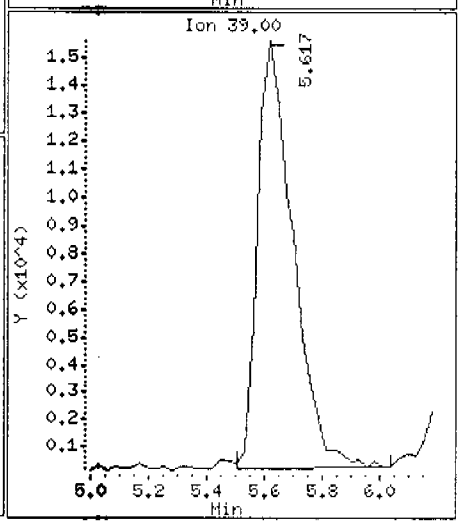












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14816

Lab ID#: 0809614-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	1.9	3.0	14	23
1,1-Dichloroethene	1.9	4.2	7.4	17
Acetone	7.5	10	18	24
Methylene Chloride	1.9	560	6.5	2000
Chloroform	1.9	210	9.1	1000
1,1,1-Trichloroethane	1.9	2.0	10	11
Carbon Tetrachloride	1.9	83	12	520
1,2-Dichloroethane	1.9	6.1	7.6	24
Trichloroethene	1.9	180	10	990
1,1,2-Trichloroethane	1.9	4.6	10	25
Tetrachloroethene	1.9	7.7	13	52
1,4-Dichlorobenzene	1.9	2.1	11	13
Propylene	7.5	9.2	13	16

0093

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14816

Lab ID#: 0809614-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100626	**Date of Collection:**	9/24/08
Dil. Factor:	3.74	**Date of Analysis:**	10/7/08 05:22 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.9	Not Detected	9.2	Not Detected
Freon 114	1.9	Not Detected	13	Not Detected
Chloromethane	7.5	Not Detected	15	Not Detected
Vinyl Chloride	1.9	Not Detected	4.8	Not Detected
1,3-Butadiene	1.9	Not Detected	4.1	Not Detected
Bromomethane	1.9	Not Detected	7.3	Not Detected
Chloroethane	1.9	Not Detected	4.9	Not Detected
Freon 11	1.9	Not Detected	10	Not Detected
Ethanol	7.5	Not Detected	14	Not Detected
Freon 113	1.9	3.0	14	23
1,1-Dichloroethene	1.9	4.2	7.4	17
Acetone	7.5	10	18	24
2-Propanol	7.5	Not Detected	18	Not Detected
Carbon Disulfide	1.9	Not Detected	5.8	Not Detected
Methylene Chloride	1.9	560	6.5	2000
Methyl tert-butyl ether	1.9	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.9	Not Detected	7.4	Not Detected
Hexane	1.9	Not Detected	6.6	Not Detected
1,1-Dichloroethane	1.9	Not Detected	7.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.9	Not Detected	5.5	Not Detected
cis-1,2-Dichloroethene	1.9	Not Detected	7.4	Not Detected
Tetrahydrofuran	1.9	Not Detected	5.5	Not Detected
Chloroform	1.9	210	9.1	1000
1,1,1-Trichloroethane	1.9	2.0	10	11
Cyclohexane	1.9	Not Detected	6.4	Not Detected
Carbon Tetrachloride	1.9	83	12	520
Benzene	1.9	Not Detected	6.0	Not Detected
1,2-Dichloroethane	1.9	6.1	7.6	24
Heptane	1.9	Not Detected	7.7	Not Detected
Trichloroethene	1.9	180	10	990
1,2-Dichloropropane	1.9	Not Detected	8.6	Not Detected
1,4-Dioxane	7.5	Not Detected	27	Not Detected
Bromodichloromethane	1.9	Not Detected	12	Not Detected
cis-1,3-Dichloropropene	1.9	Not Detected	8.5	Not Detected
4-Methyl-2-pentanone	1.9	Not Detected	7.7	Not Detected
Toluene	1.9	Not Detected	7.0	Not Detected
trans-1,3-Dichloropropene	1.9	Not Detected	8.5	Not Detected
1,1,2-Trichloroethane	1.9	4.6	10	25
Tetrachloroethene	1.9	7.7	13	52

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14816

Lab ID#: 0809614-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100626	**Date of Collection:**	9/24/08
Dil. Factor:	3.74	**Date of Analysis:**	10/7/08 05:22 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	7.5	Not Detected	31	Not Detected
Dibromochloromethane	1.9	Not Detected	16	Not Detected
1,2-Dibromoethane (EDB)	1.9	Not Detected	14	Not Detected
Chlorobenzene	1.9	Not Detected	8.6	Not Detected
Ethyl Benzene	1.9	Not Detected	8.1	Not Detected
m,p-Xylene	1.9	Not Detected	8.1	Not Detected
o-Xylene	1.9	Not Detected	8.1	Not Detected
Styrene	1.9	Not Detected	8.0	Not Detected
Bromoform	1.9	Not Detected	19	Not Detected
1,1,2,2-Tetrachloroethane	1.9	Not Detected	13	Not Detected
4-Ethyltoluene	1.9	Not Detected	9.2	Not Detected
1,3,5-Trimethylbenzene	1.9	Not Detected	9.2	Not Detected
1,2,4-Trimethylbenzene	1.9	Not Detected	9.2	Not Detected
1,3-Dichlorobenzene	1.9	Not Detected	11	Not Detected
1,4-Dichlorobenzene	1.9	2.1	11	13
alpha-Chlorotoluene	1.9	Not Detected	9.7	Not Detected
1,2-Dichlorobenzene	1.9	Not Detected	11	Not Detected
1,2,4-Trichlorobenzene	7.5	Not Detected	56	Not Detected
Hexachlorobutadiene	7.5	Not Detected	80	Not Detected
Chlorodifluoromethane	7.5	Not Detected U J	26	Not Detected U J
Methanol	190	Not Detected	240	Not Detected
n-Butanol	7.5	Not Detected	23	Not Detected
Propylene	7.5	9.2	13	16

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	115	70-130
4-Bromofluorobenzene	94	70-130

0095

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100626.d
Lab Smp Id: 0809614-04A
Inj Date : 07-OCT-2008 05:22
Operator : dfm Inst ID: msd7.i
Smp Info : 100mL #35972
Misc Info : 8.5"Hg-5psi
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 3.74000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	315597	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	249080			28.56- 128.56	78.92
14.333	14.333 (1.000)	49	1350597			335.95- 435.95	427.95
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.103 (1.000)	114	1019596	25.0000		80.00- 120.00	100.00
16.102	16.103 (1.000)	88	174462			0.00- 67.14	17.11
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	938469	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	476108			1.24- 101.24	50.73
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	686582	28.8006	28.800	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	283854			0.00- 97.37	41.34
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.701	18.702 (1.161)	98	877207	22.4750	22.475	80.00- 120.00	100.00
18.701	18.702 (1.161)	70	129450			0.00- 63.85	14.76

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.701	18.702 (1.161)	100	674151			26.51- 126.51	76.85
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	456633	23.6462	23.646	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	674987			90.08- 190.08	147.82
23.291	23.291 (1.093)	176	442372			45.80- 145.80	96.88
42 Freon 113					CAS #: 76-13-1		
10.185	10.158 (0.711)	151	25346	0.81418	3.045	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	16814			12.79- 112.79	66.34
10.130	10.158 (0.707)	101	42368			98.93- 198.93	167.16
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.268	10.269 (0.716)	61	60628	1.11993	4.188	80.00- 120.00	100.00
10.268	10.269 (0.716)	96	21307			0.00- 84.73	35.14
10.268	10.269 (0.716)	98	12879			0.00- 71.80	21.24
45 Acetone					CAS #: 67-64-1		
10.434	10.407 (0.728)	58	41141	2.69226	10.069	80.00- 120.00	100.00
10.434	10.407 (0.728)	43	204647			340.42- 440.42	497.42
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	7161333	151.211	565.53	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	2275113			0.00- 83.39	31.77
11.430	11.430 (0.797)	51	2093370			0.00- 80.54	29.23
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2495824	56.8918	212.78	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1783039			21.22- 121.22	71.44
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	24055	0.53704	2.008	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	15748			13.65- 113.65	65.47
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	1137015	22.2300	83.140	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	1199863			55.93- 155.93	105.53
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.549	15.550 (0.966)	62	66620	1.62375	6.073	80.00- 120.00	100.00
15.549	15.550 (0.966)	64	20793			0.00- 82.49	31.21
101 Trichloroethene					CAS #: 79-01-6		
16.572	16.573 (1.029)	95	1167328	49.0849	183.58	80.00- 120.00	100.00
16.572	16.573 (1.029)	130	1195577			52.65- 152.65	102.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)							
16.572	16.573 (1.029)	97	739324			12.98- 112.98	63.33
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	24062	1.24379	4.652	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	17366			11.37- 111.37	72.17
19.614	19.614 (0.921)	83	20564			32.88- 132.88	85.47
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	52225	2.05979	7.704	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	44242			37.80- 137.80	84.71
19.780	19.780 (0.929)	131	44084			35.79- 135.79	84.41
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.227	25.227 (1.184)	146	33480	0.56115	2.099	80.00- 120.00	100.00
25.227	25.227 (1.184)	148	20004			13.30- 113.30	59.75
25.227	25.227 (1.184)	111	13955			0.00- 92.03	41.68
11 Propylene					CAS #: 115-07-1		
5.617	5.589 (0.392)	41	66219	2.46076	9.203	80.00- 120.00	100.00
5.617	5.589 (0.392)	42	31672			16.57- 116.57	47.83
5.617	5.589 (0.392)	39	84814			28.60- 128.60	128.08

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100626.d
Lab Smp Id: 0809614-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 8.5"Hg-5psi

Calibration Date: 06-OCT-2008
Calibration Time: 10:23

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	315597	-17.78
97 1,4-Difluorobenze	1202073	721244	1682902	1019596	-15.18
126 Chlorobenzene-d5	1260970	756582	1765358	938469	-25.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100626.d
Report Date: 10-Oct-2008 20:54

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 8.5"Hg-5psi

Client SDG: 06oct08
Fraction: VOA

Operator: dfm
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	28.800	115.20	70-130
$ 113 Toluene-d8	25.000	22.475	89.90	70-130
$ 137 Bromofluorobenzene	25.000	23.646	94.58	70-130

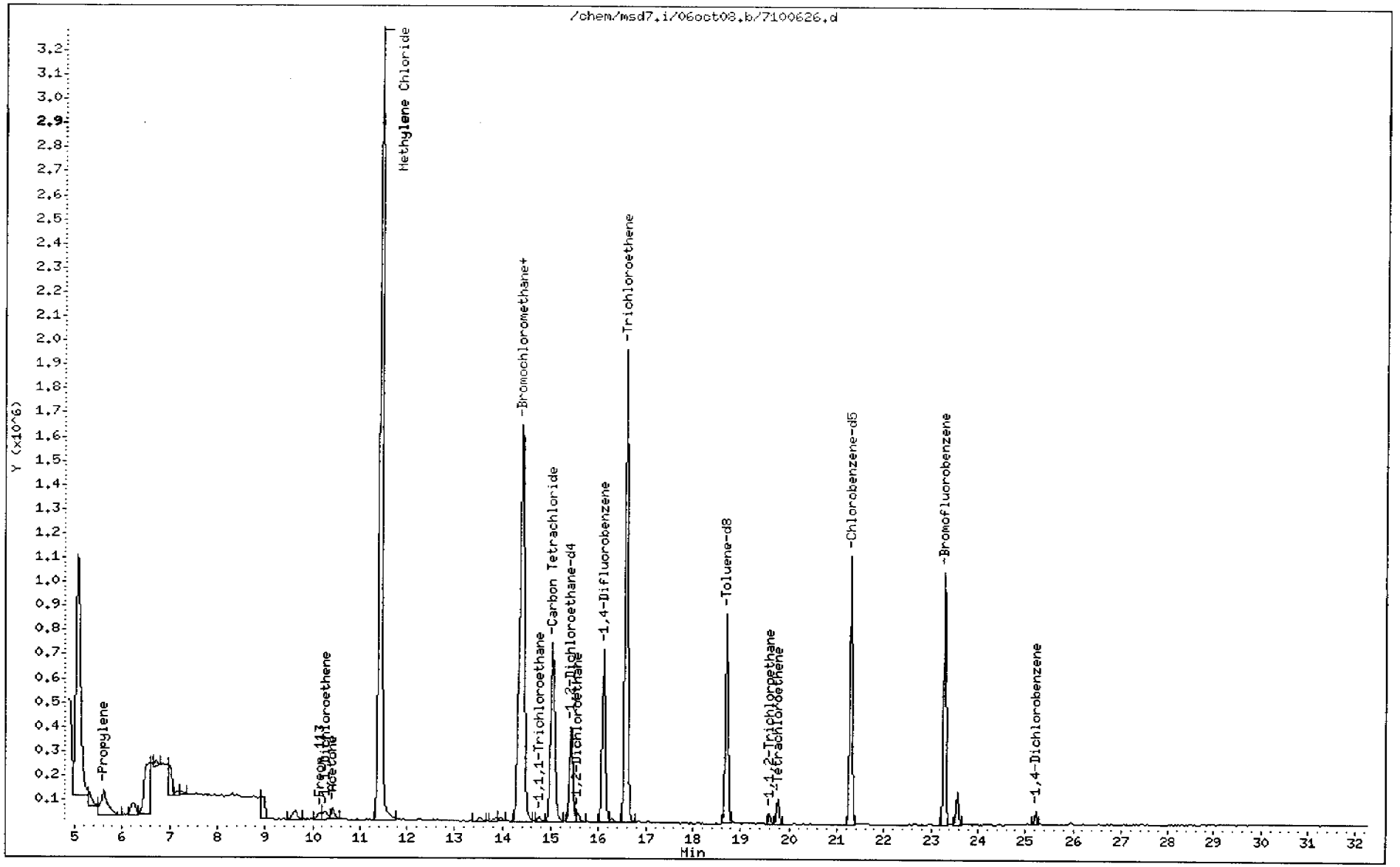
Data File: /chem/msd7.i/06oct08.b/7100626.d
Date : 07-OCT-2008 05:22
Client ID:
Sample Info: 100mL #35972

Column phase: RTx-624

Instrument: msd7.i

Operator: dfm
Column diameter: 0.53

0101



Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Sample Info: 100mL #35972

Instrument: msd7.i

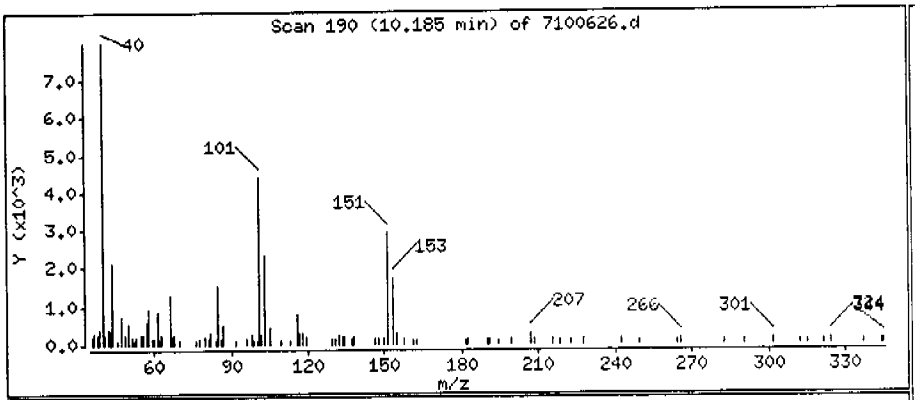
Operator: dfm

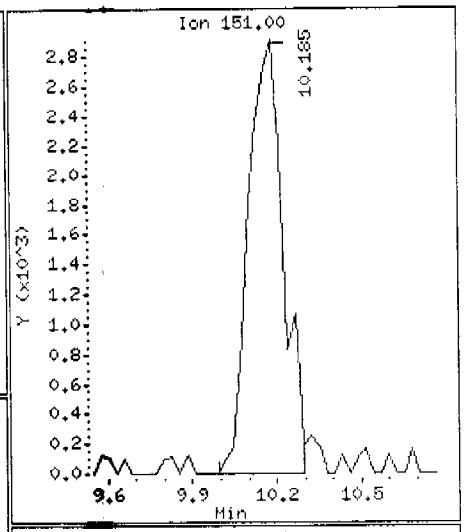
Column phase: RTx-624

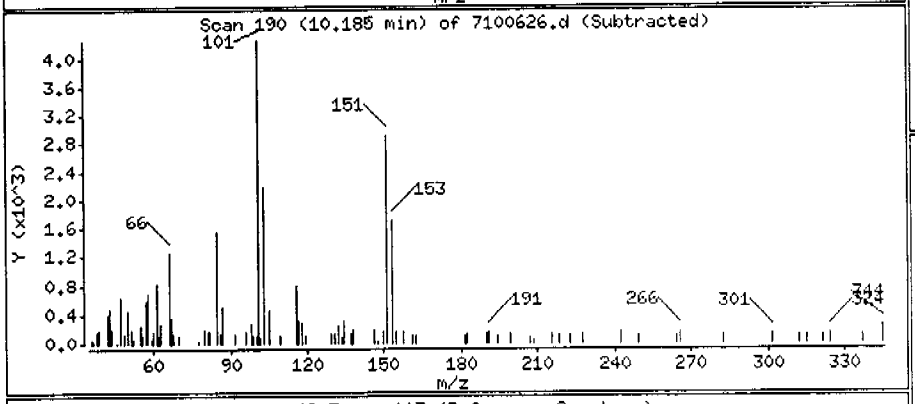
Column diameter: 0.53

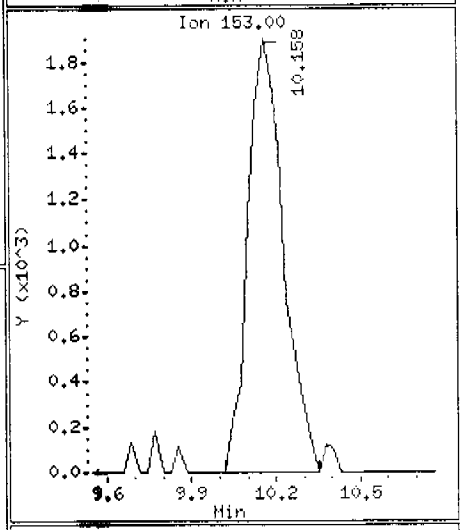
42 Freon 113

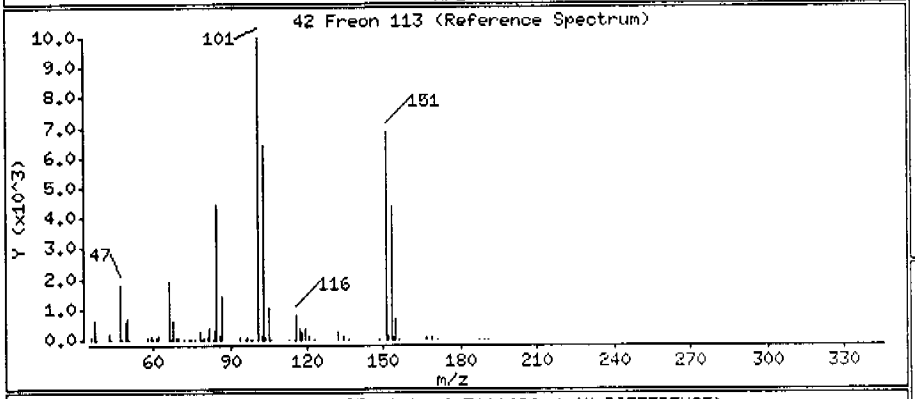
Concentration: 3.045 PPBV

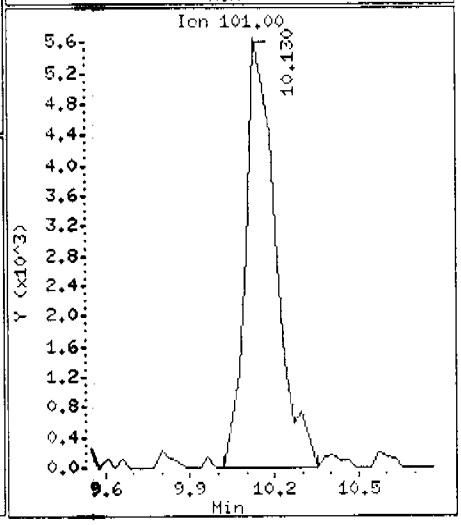


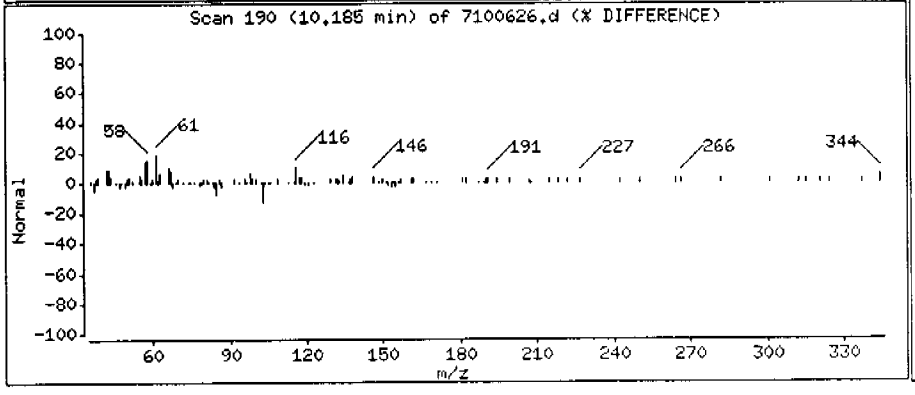












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

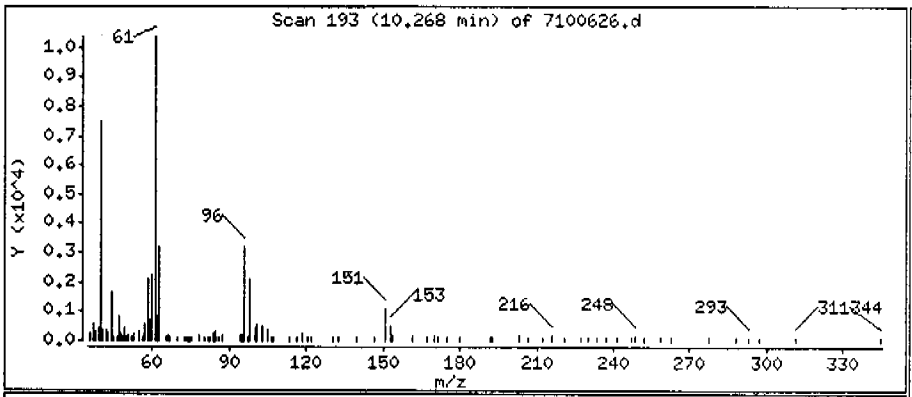
Operator: dfm

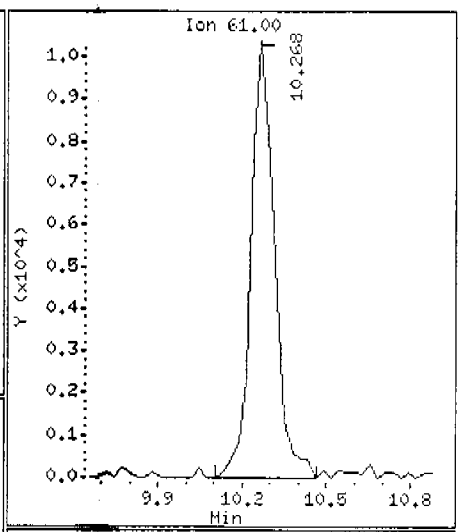
Column phase: RTx-624

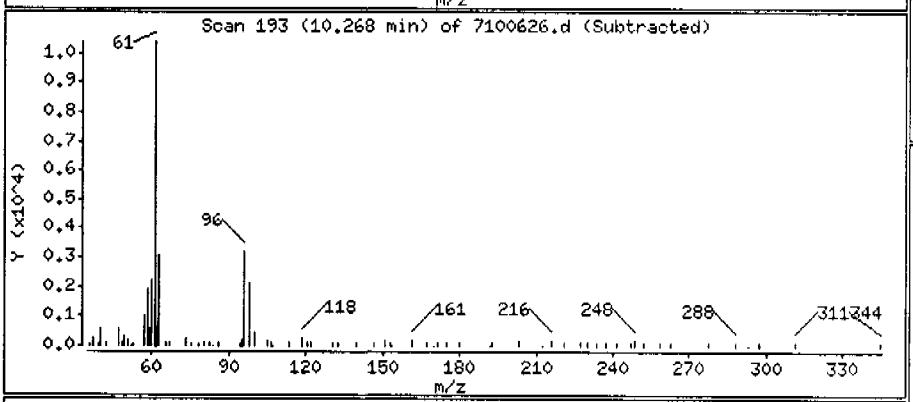
Column diameter: 0.53

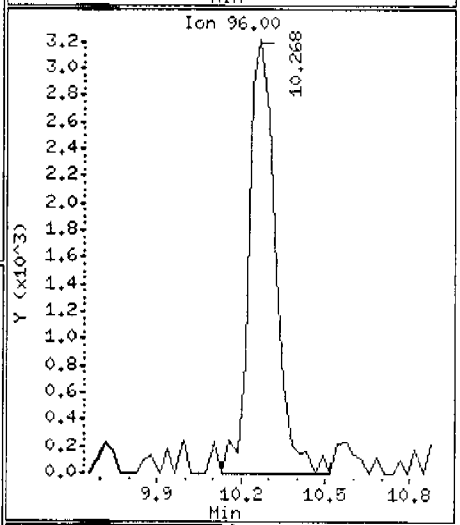
43 1,1-Dichloroethene

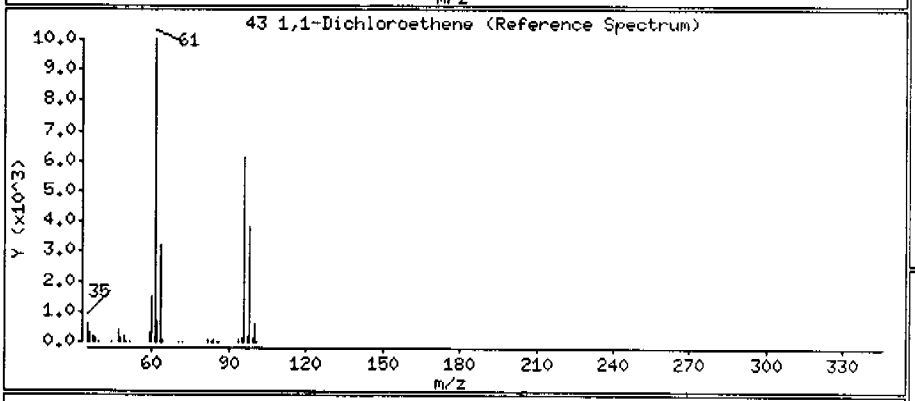
Concentration: 4.188 PPBV

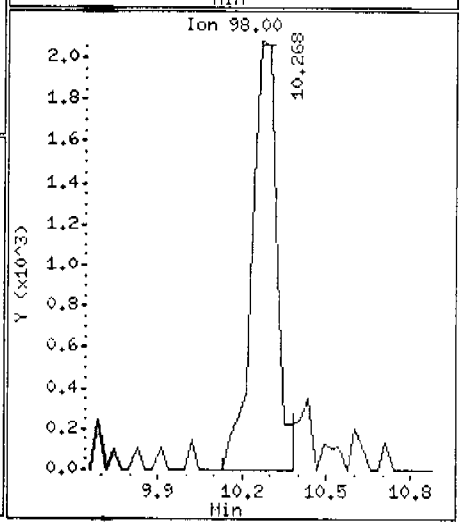


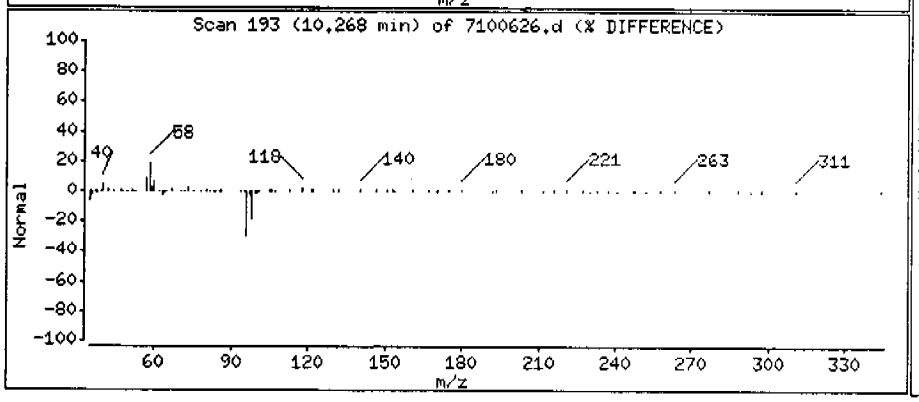












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

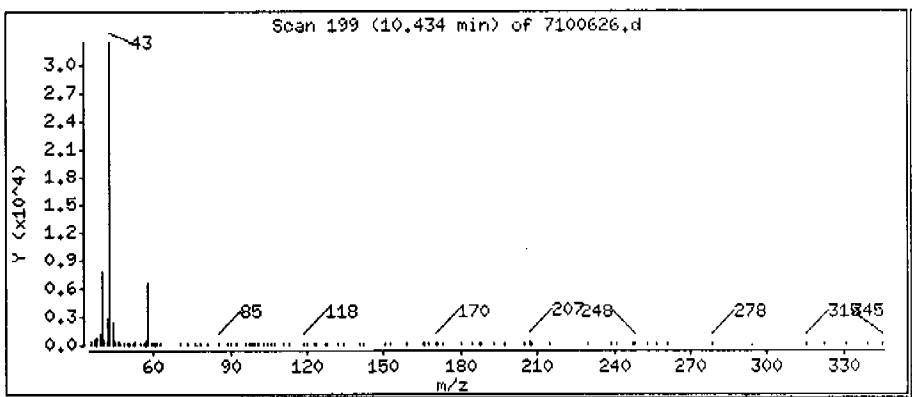
Operator: dfm

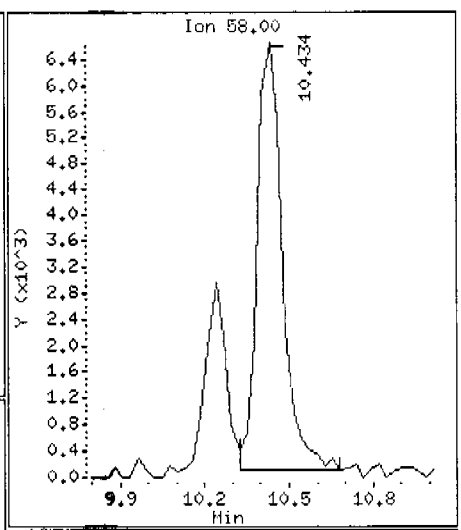
Column phase: RTx-624

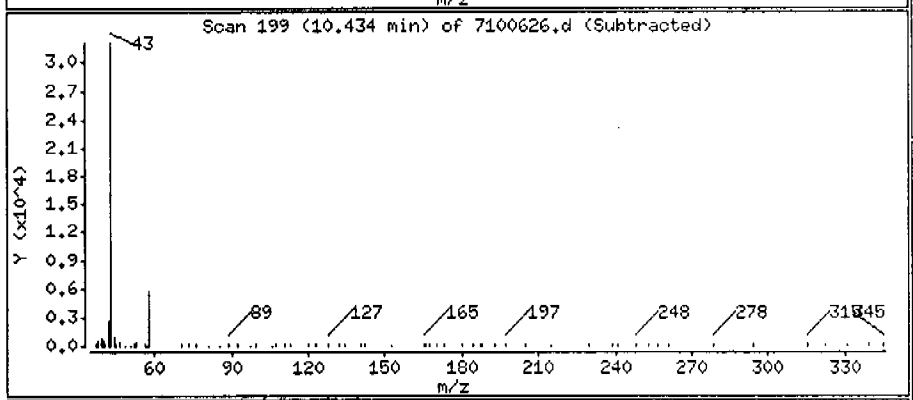
Column diameter: 0.53

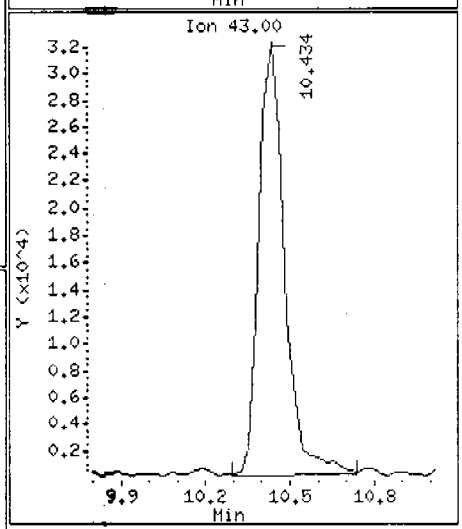
45 Acetone

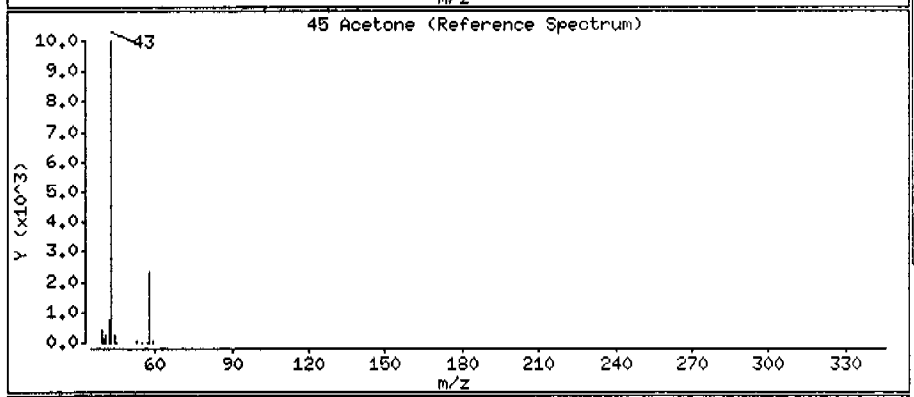
Concentration: 10.069 PPBV

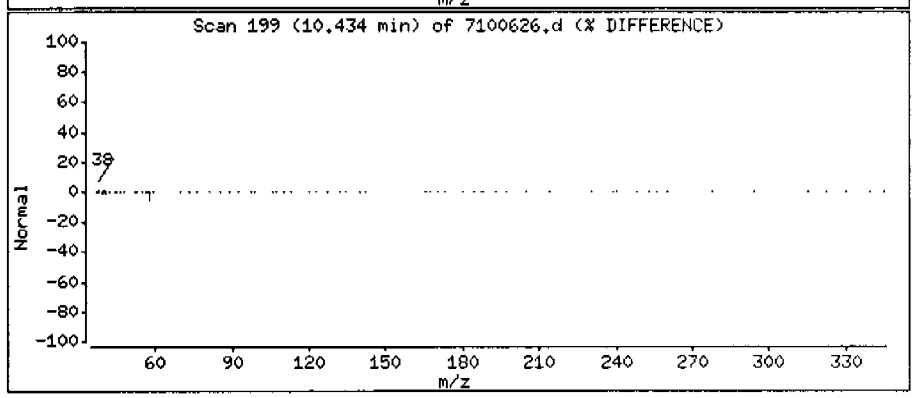












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

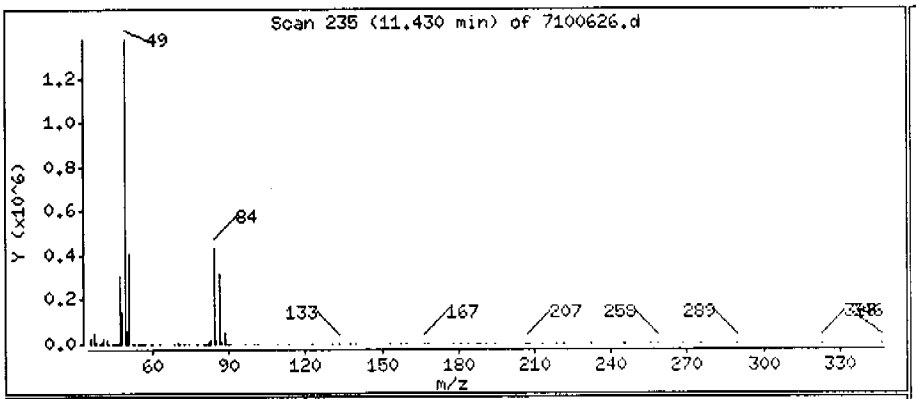
Operator: dfm

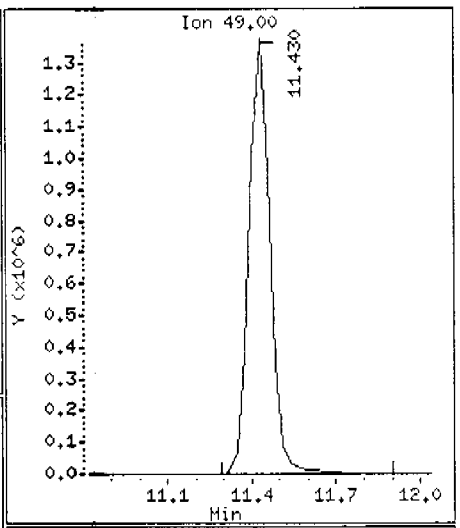
Column phase: RTx-624

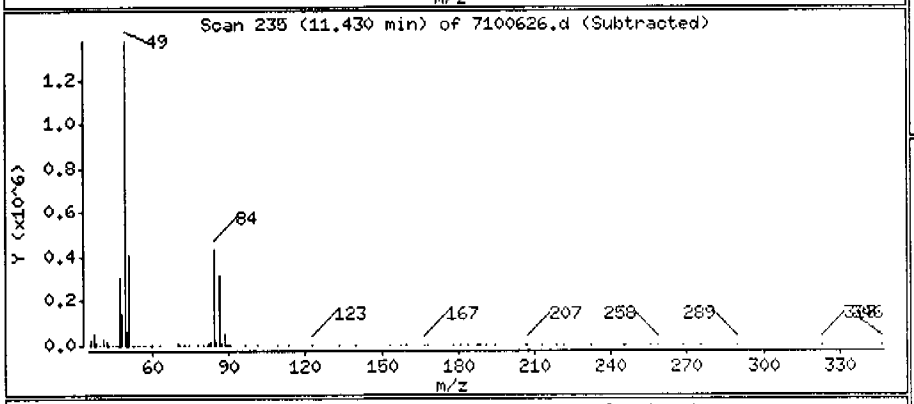
Column diameter: 0.53

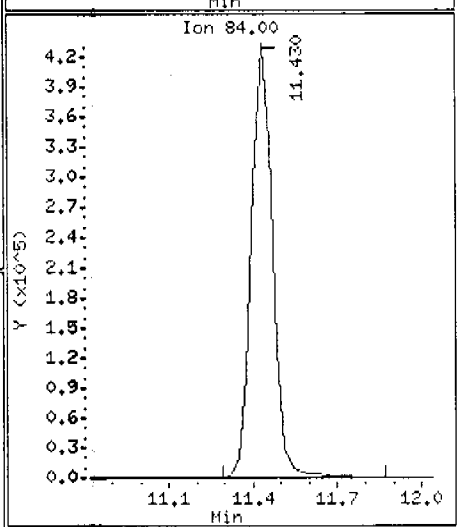
54 Methylene Chloride

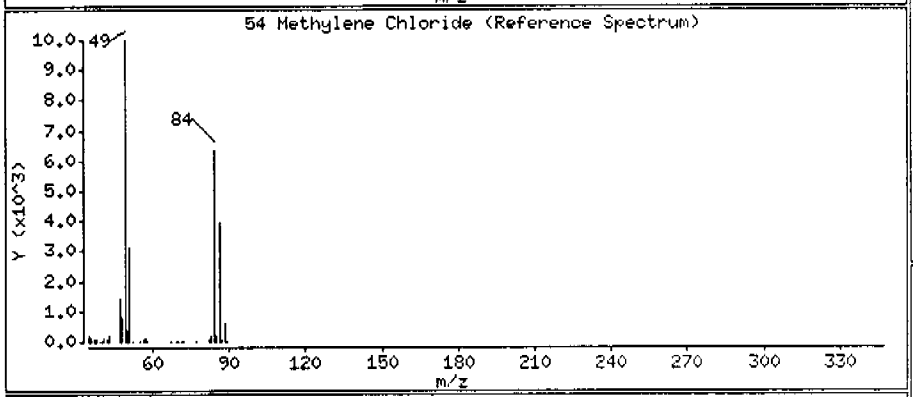
Concentration: 565.53 PPBV

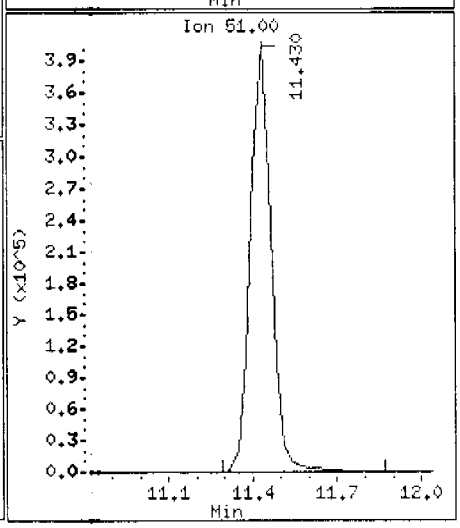


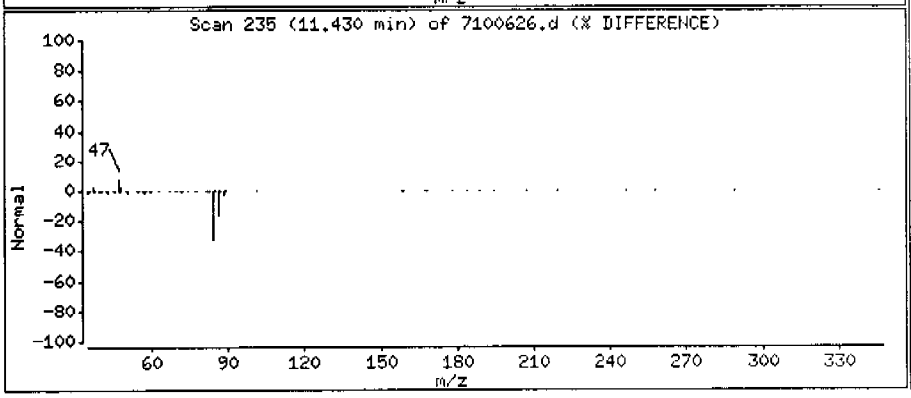












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

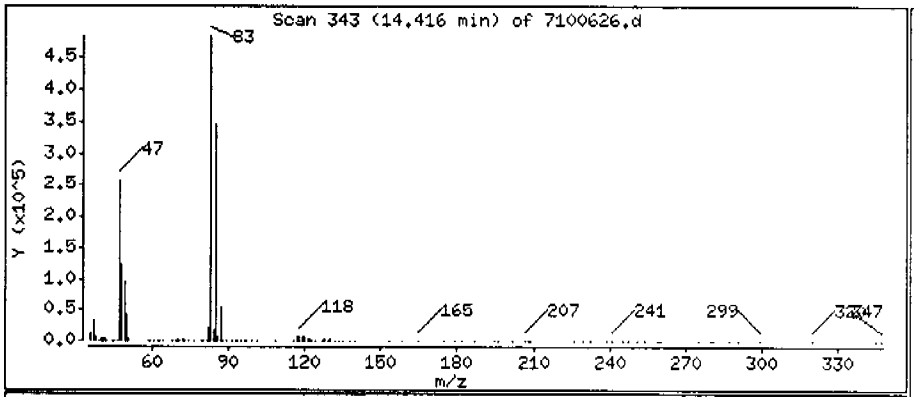
Operator: dfm

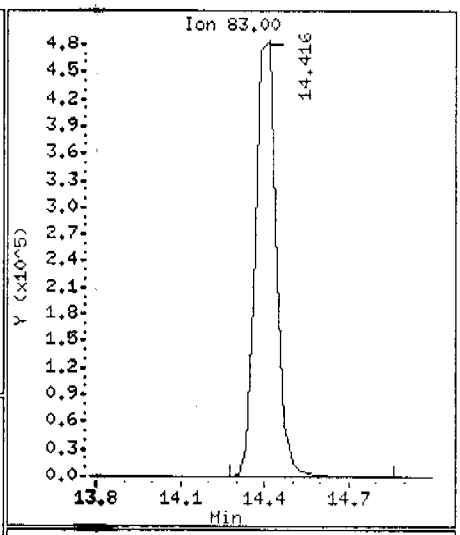
Column phase: RTx-624

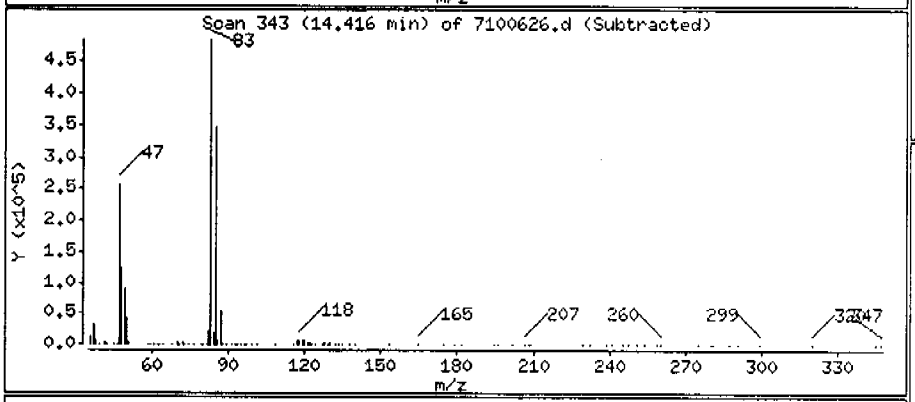
Column diameter: 0.53

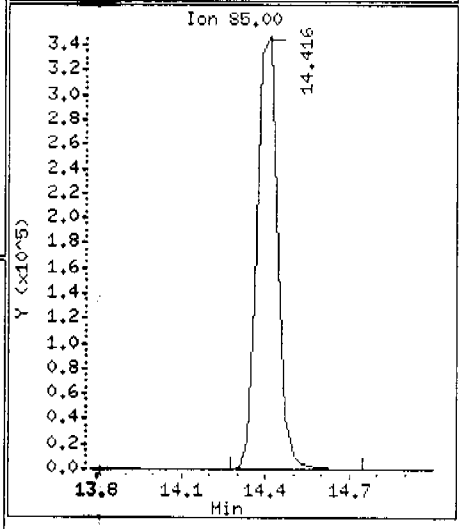
82 Chloroform

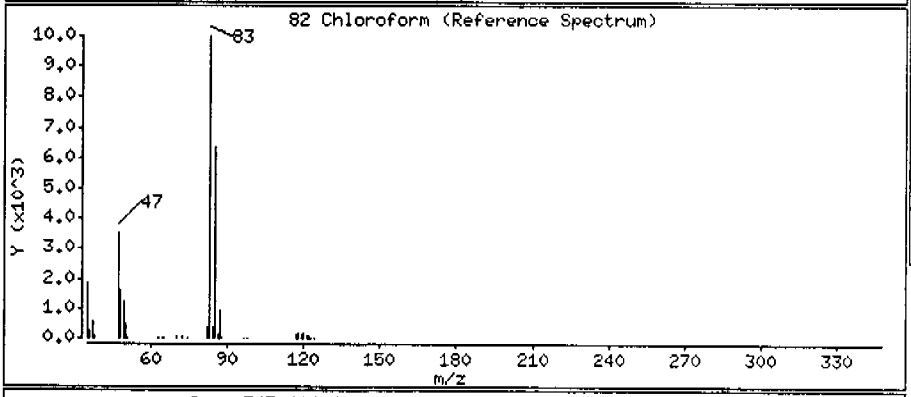
Concentration: 212.78 PPBV

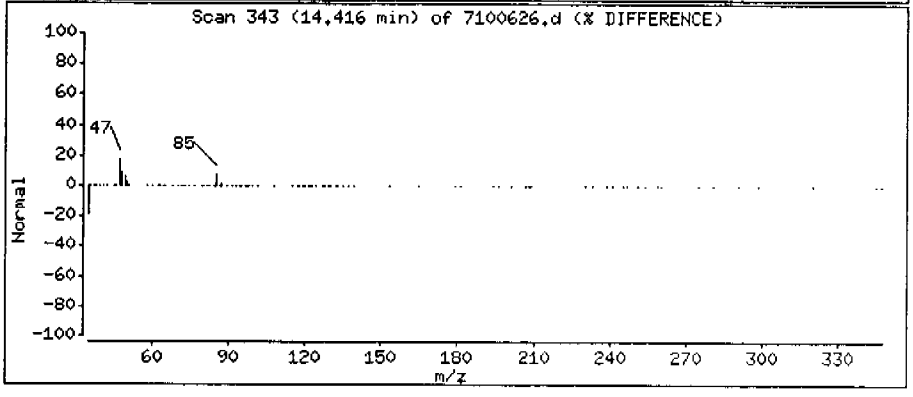












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

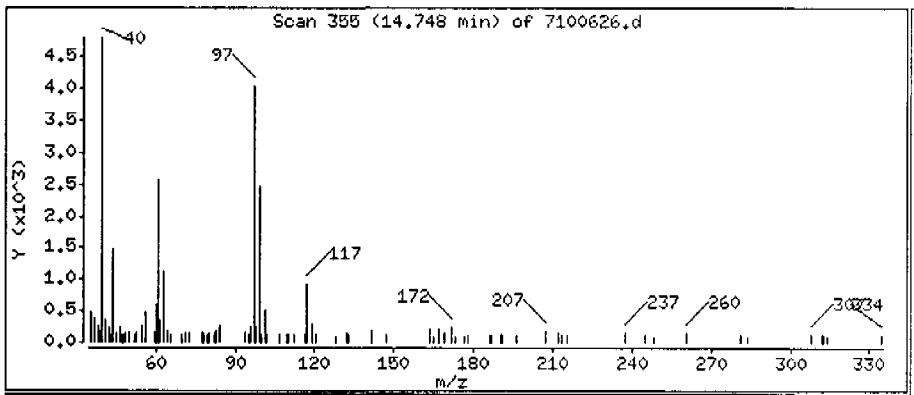
Operator: dfm

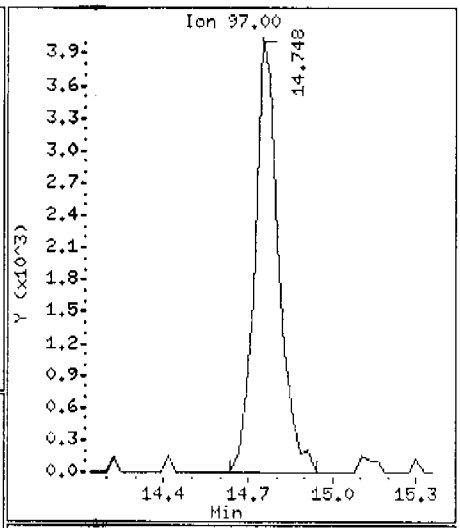
Column phase: RTx-624

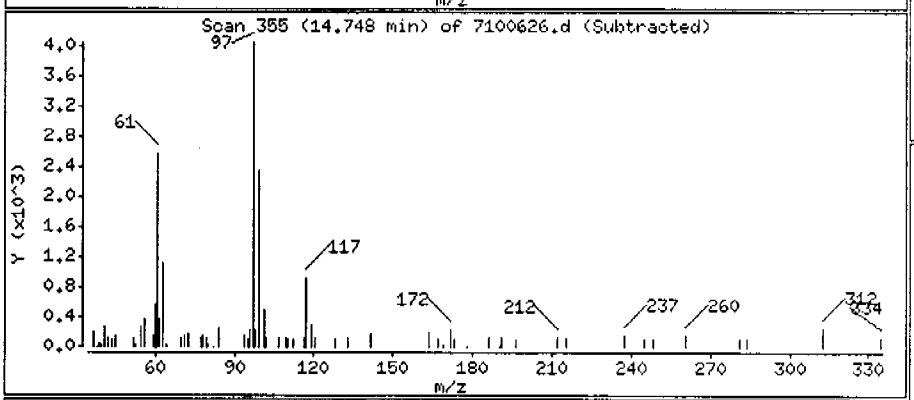
Column diameter: 0.53

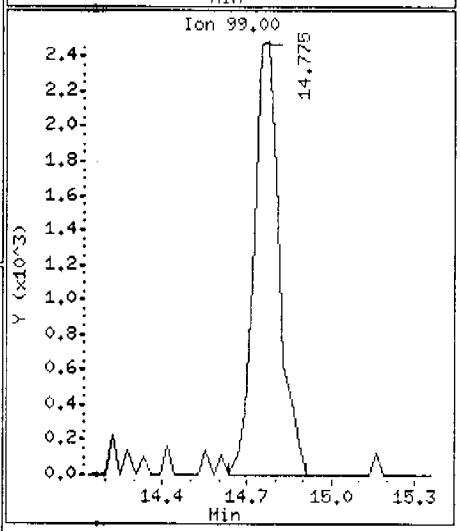
83 1,1,1-Trichloroethane

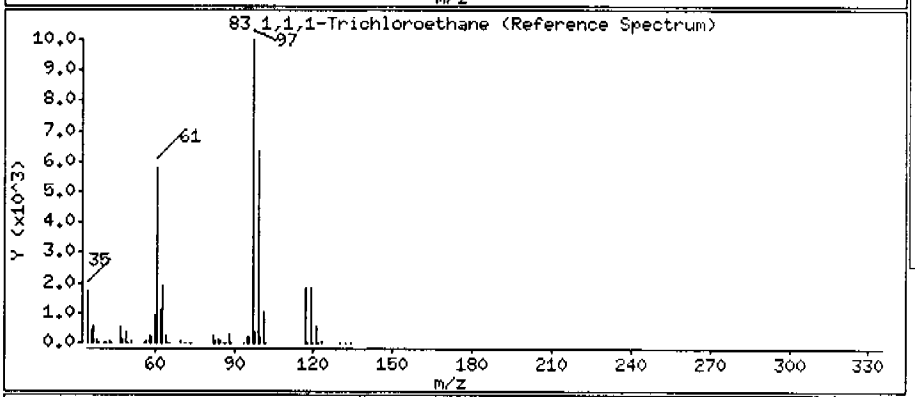
Concentration: 2.008 PPBV

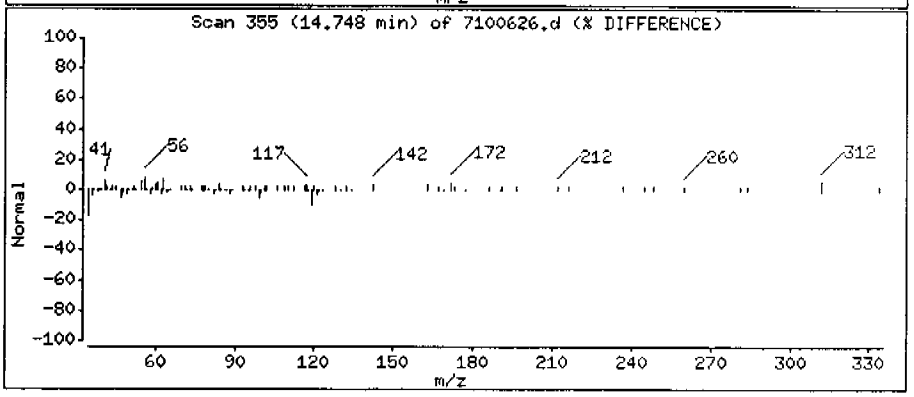












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

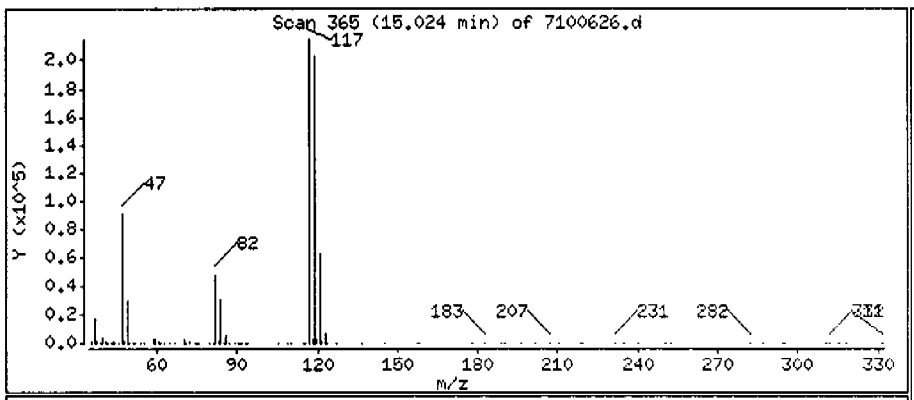
Operator: dfm

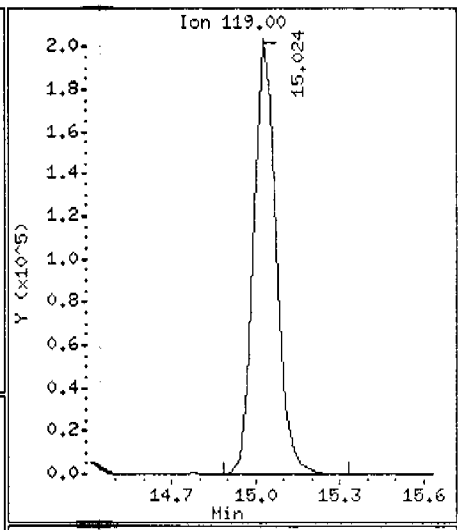
Column phase: RTx-624

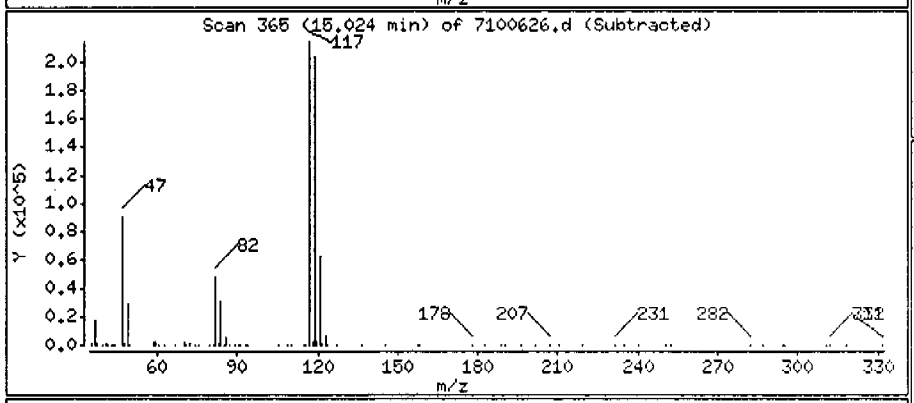
Column diameter: 0.53

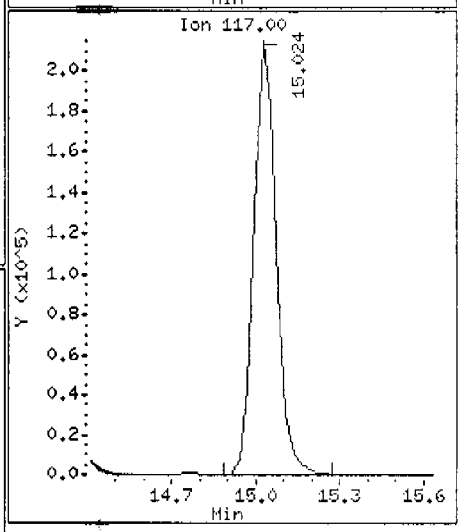
87 Carbon Tetrachloride

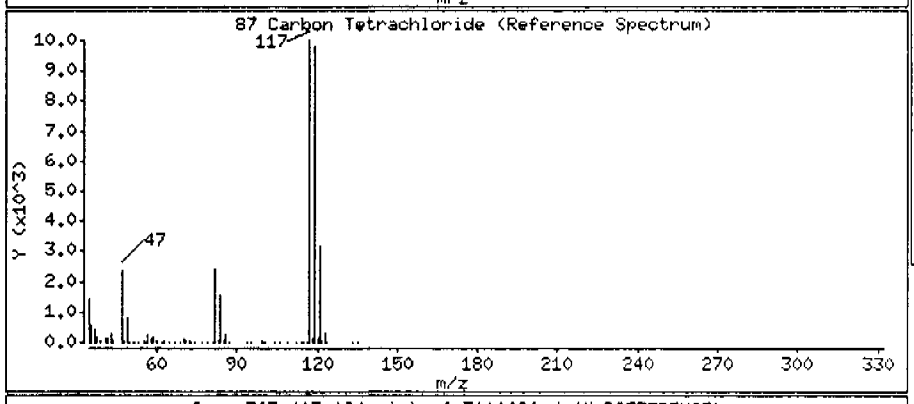
Concentration: 83.140 PPBV

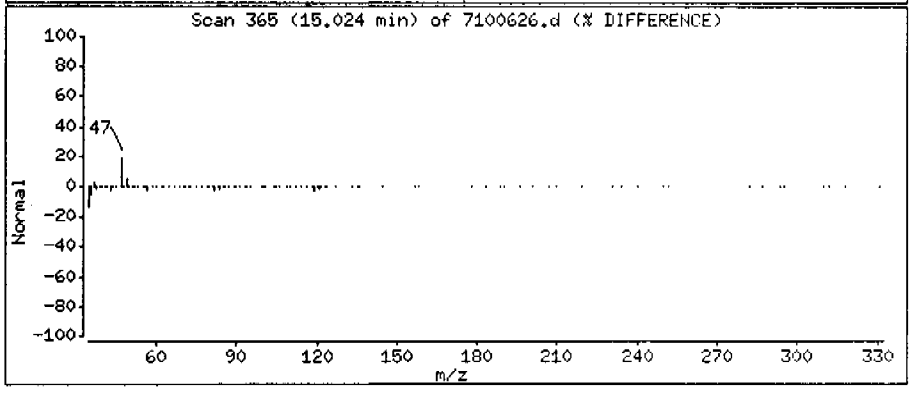












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

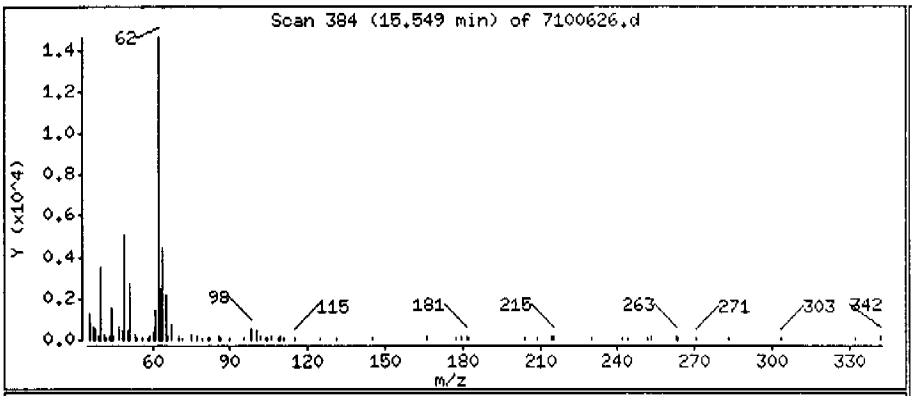
Operator: dfm

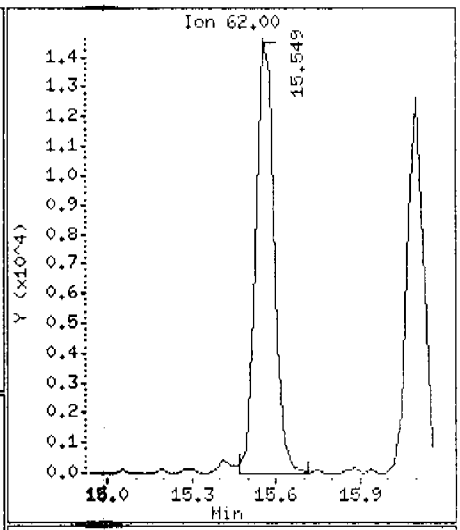
Column phase: RTx-624

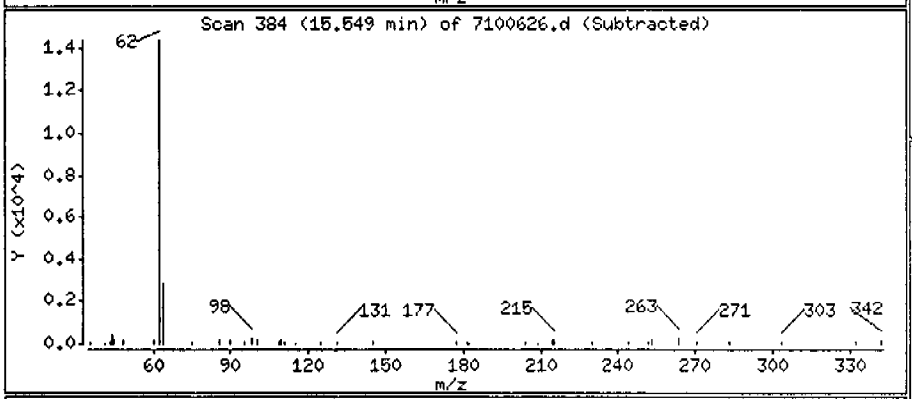
Column diameter: 0.53

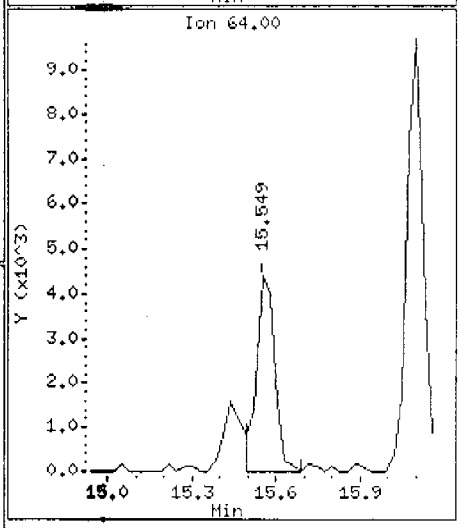
93 1,2-Dichloroethane

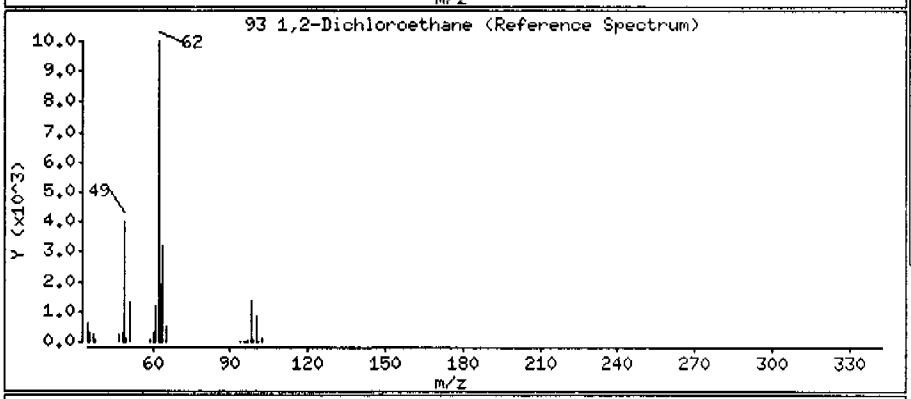
Concentration: 6.073 PPBV

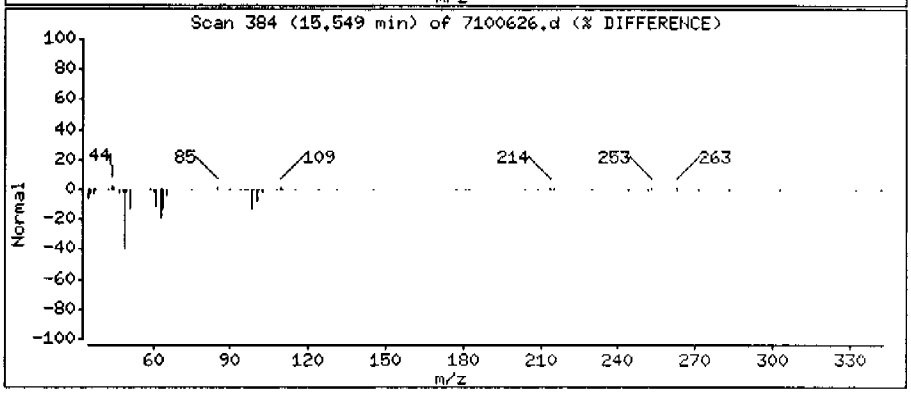












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

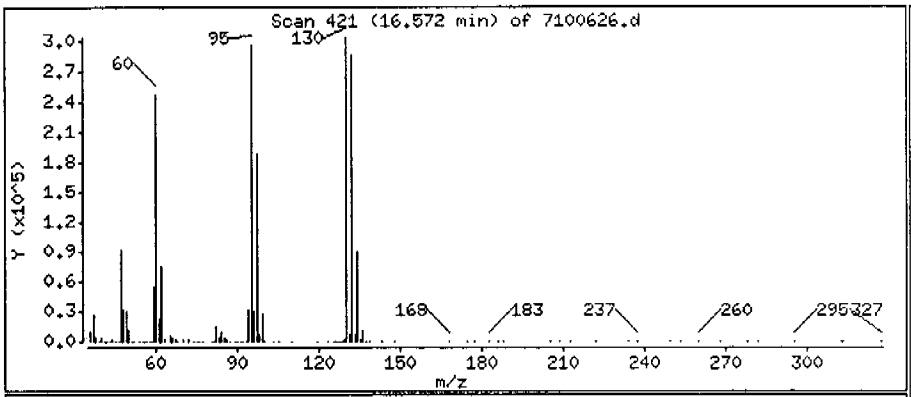
Operator: dfm

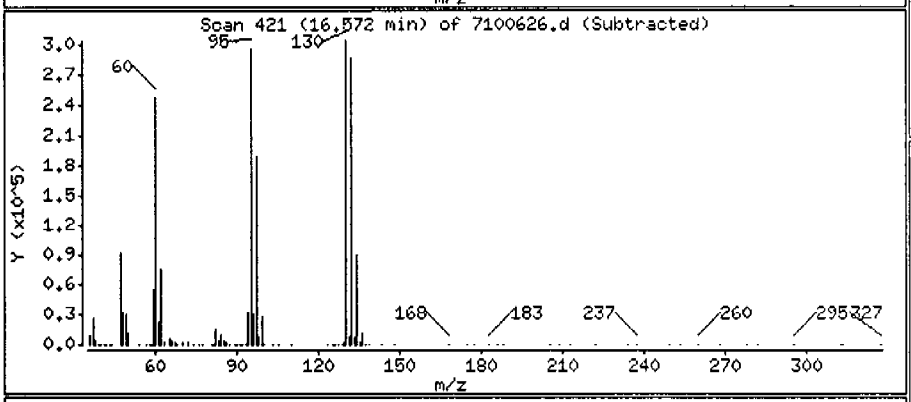
Column phase: RTx-624

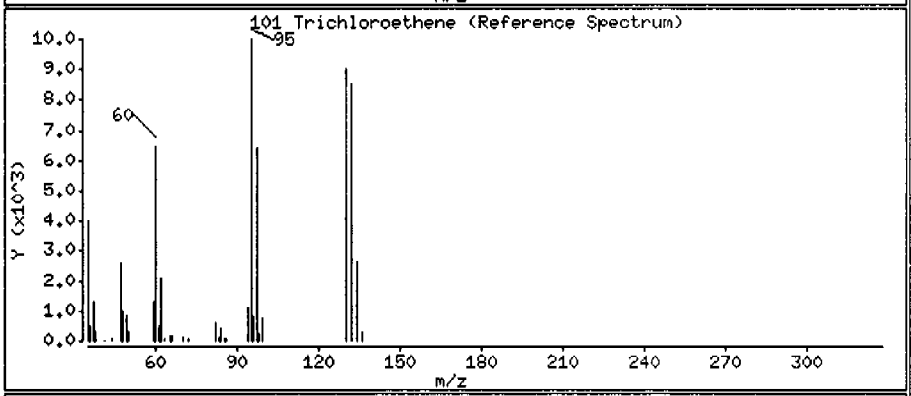
Column diameter: 0.53

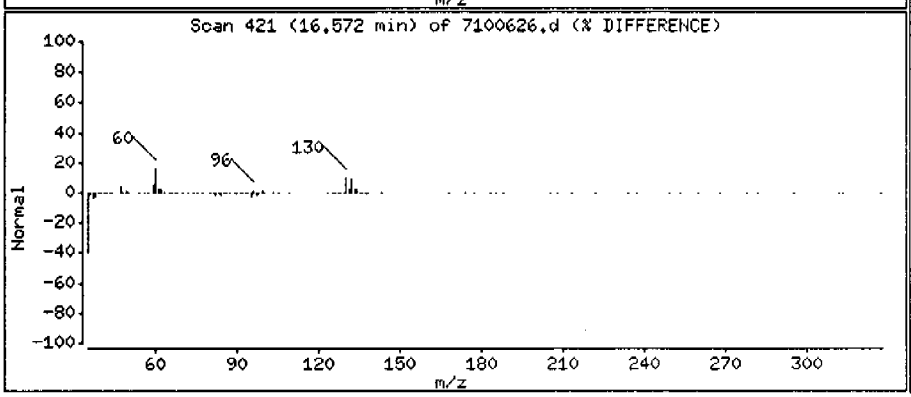
101 Trichloroethene

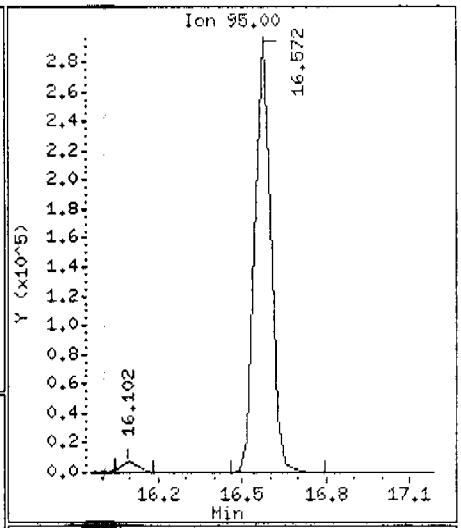
Concentration: 183.58 PPBV

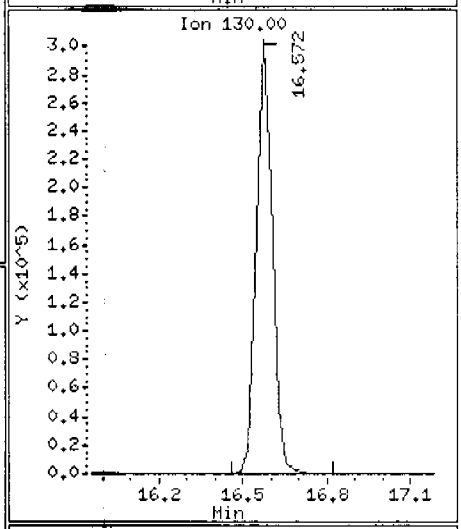


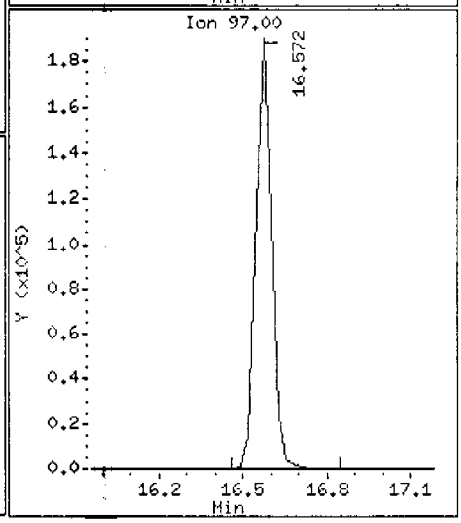












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

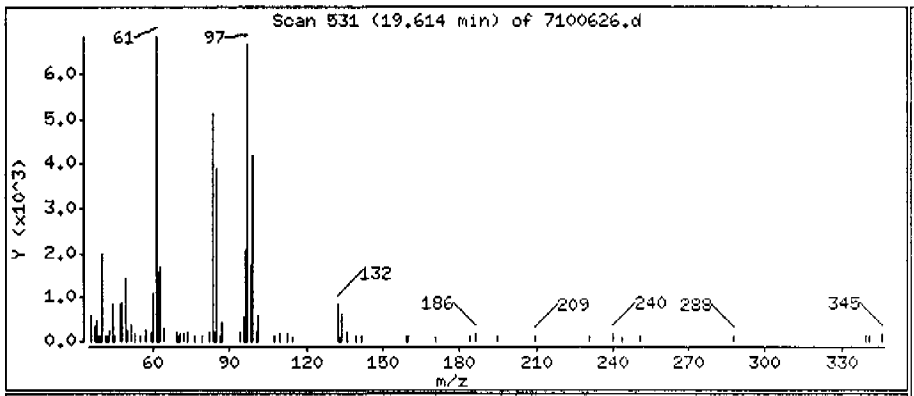
Operator: dfm

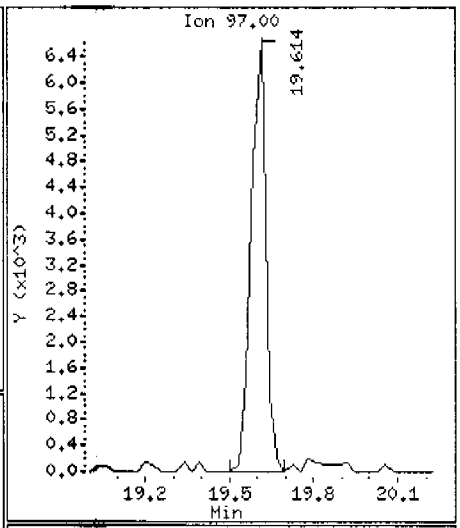
Column phase: RTx-624

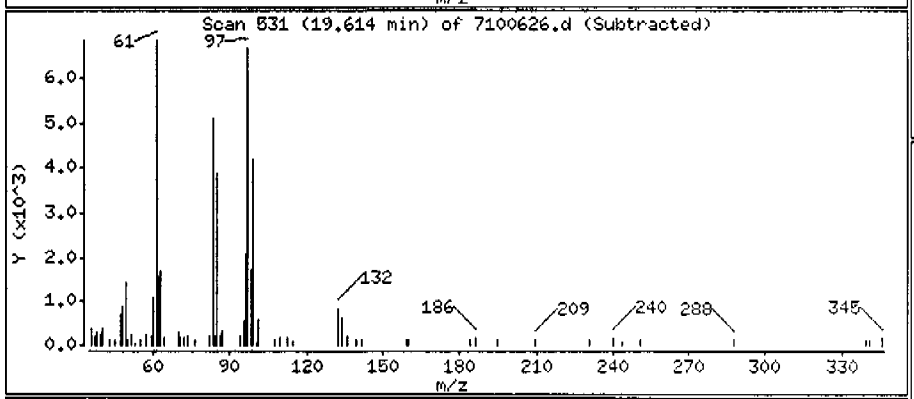
Column diameter: 0.53

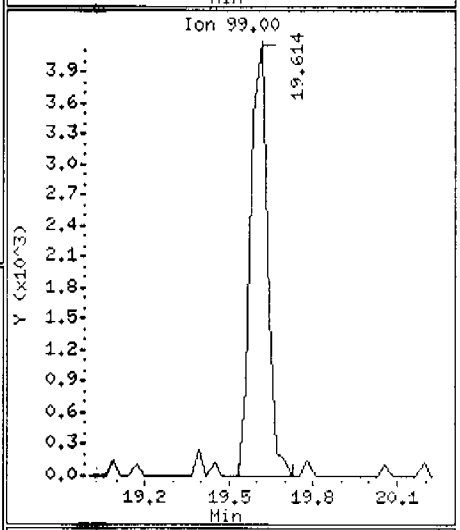
117 1,1,2-Trichloroethane

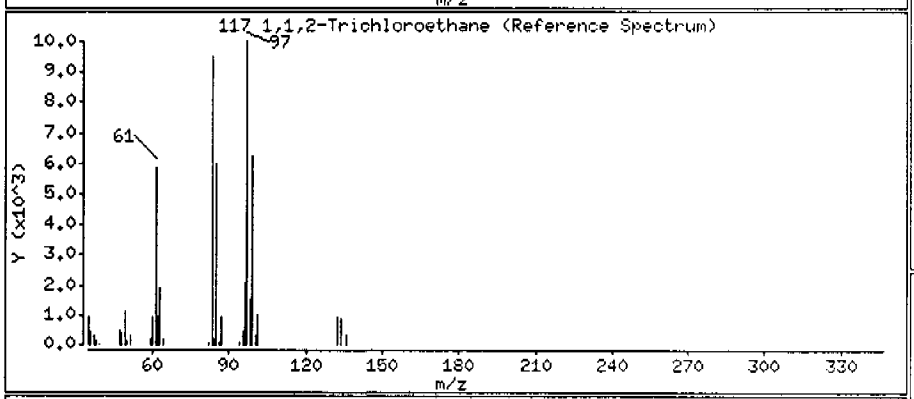
Concentration: 4.652 PPBV

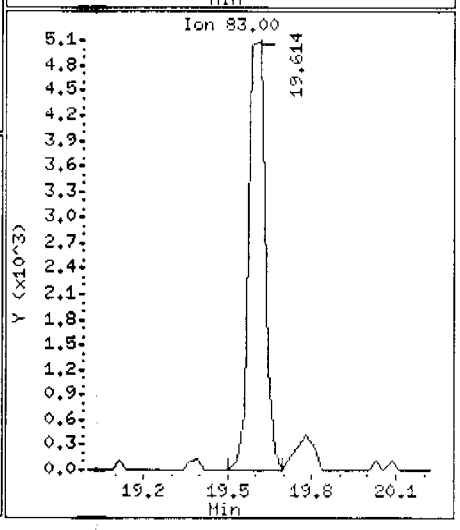


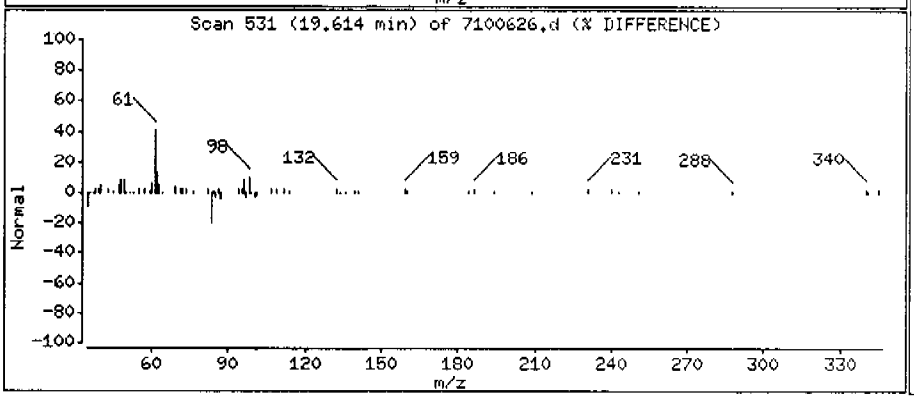












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

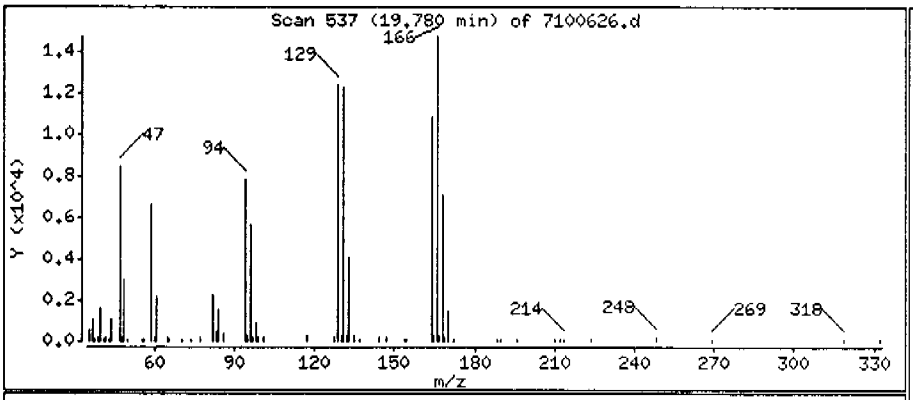
Operator: dfm

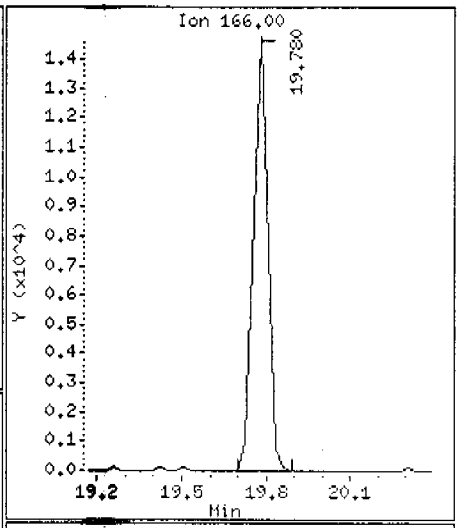
Column phase: RTx-624

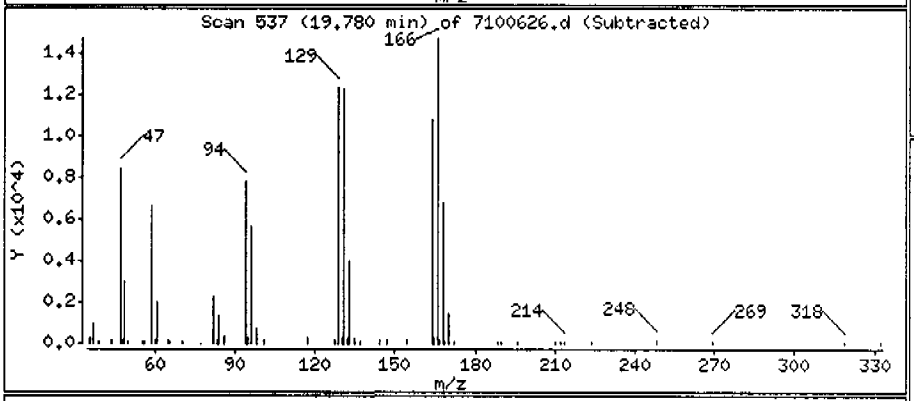
Column diameter: 0.53

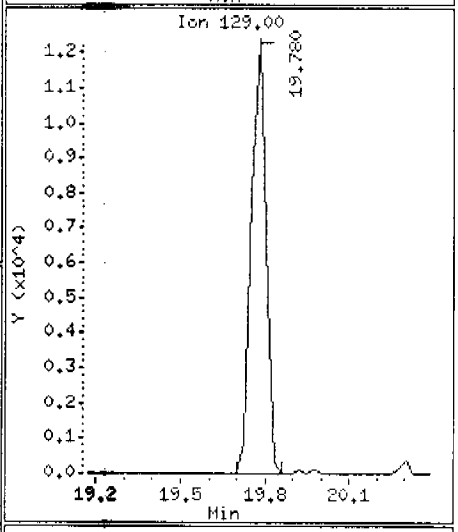
120 Tetrachloroethene

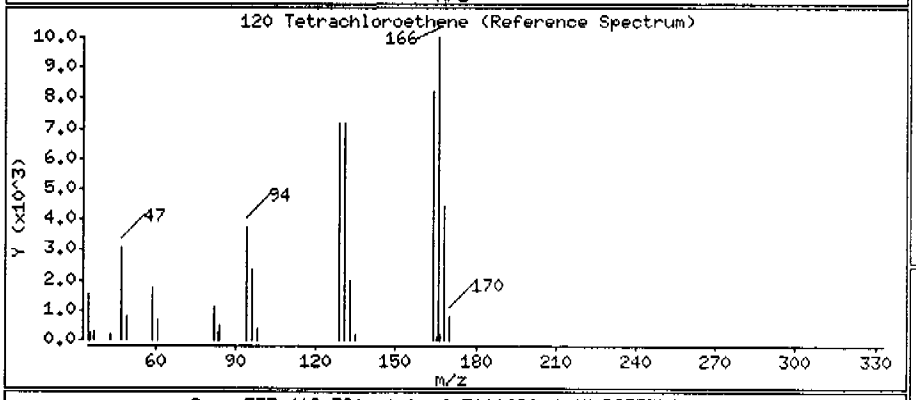
Concentration: 7.704 PPBV

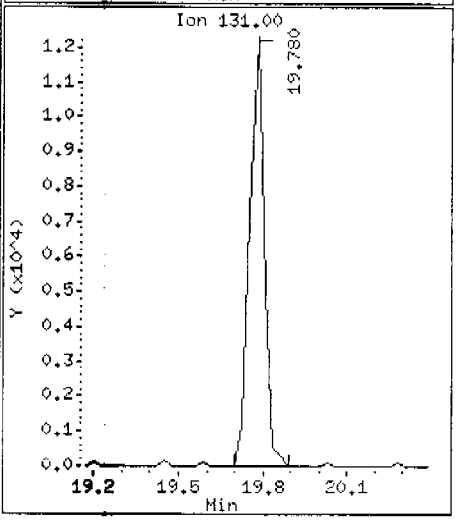


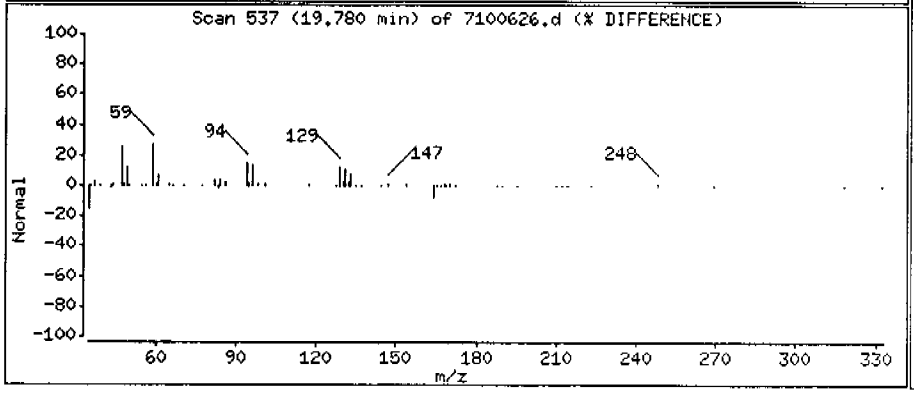












Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

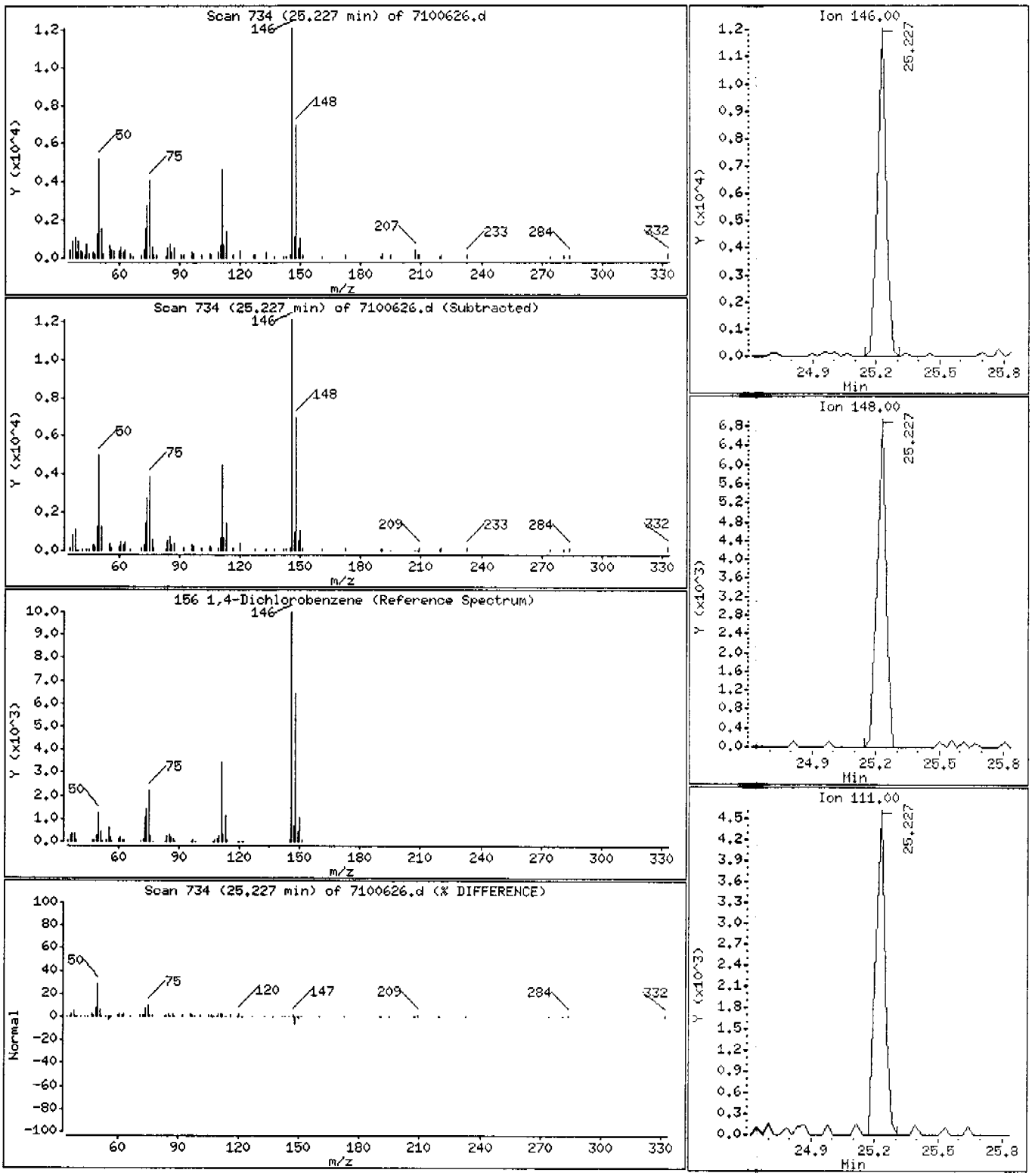
Operator: dfm

Column phase: RTx-624

Column diameter: 0.53

156 1,4-Dichlorobenzene

Concentration: 2.099 PPBV



Data File: /chem/msd7.i/06oct08.b/7100626.d

Date : 07-OCT-2008 05:22

Client ID:

Instrument: msd7.i

Sample Info: 100mL #35972

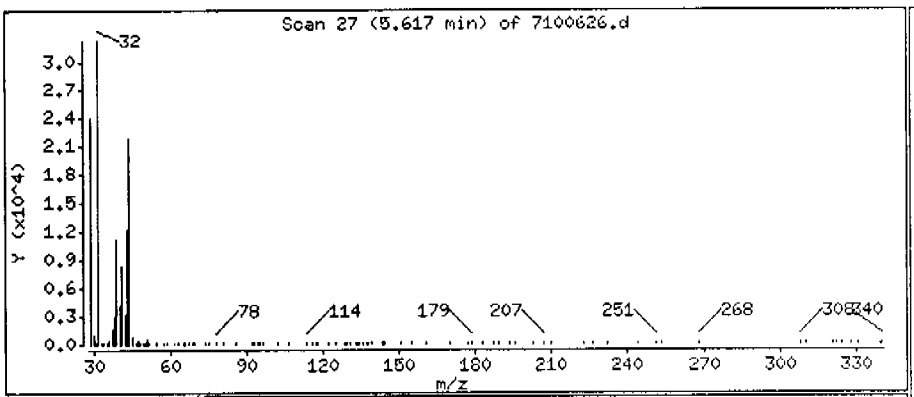
Operator: dfm

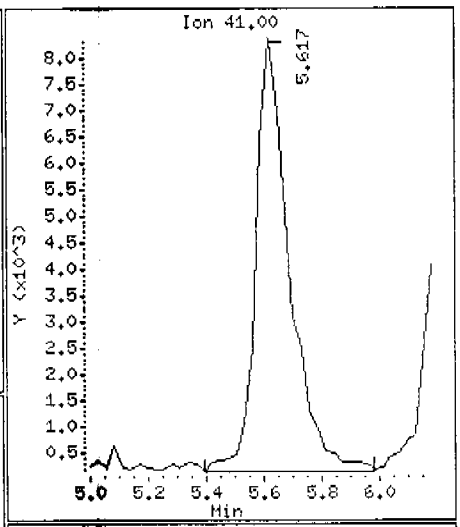
Column phase: RTx-624

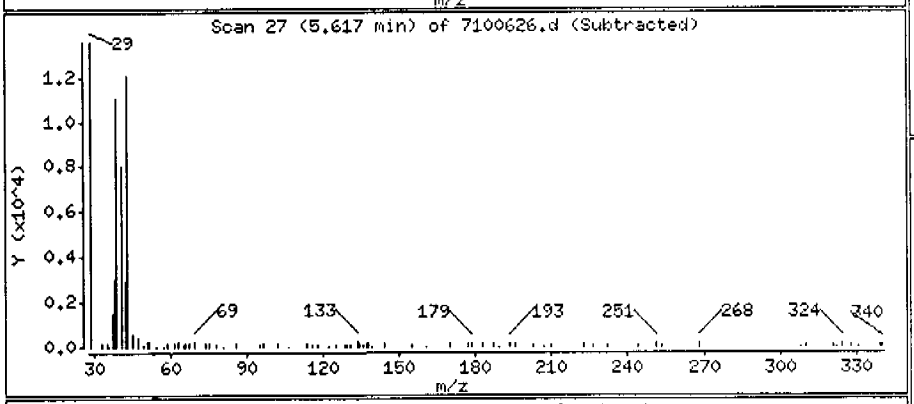
Column diameter: 0.53

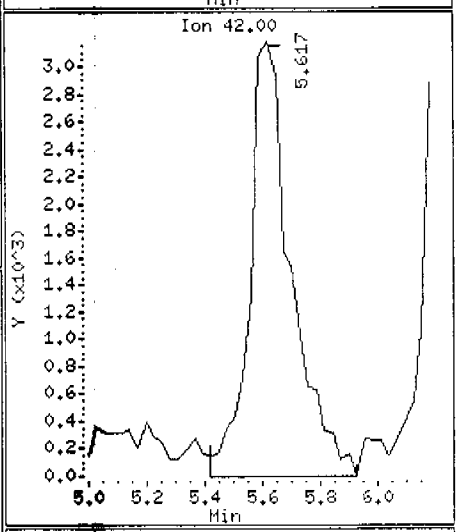
11 Propylene

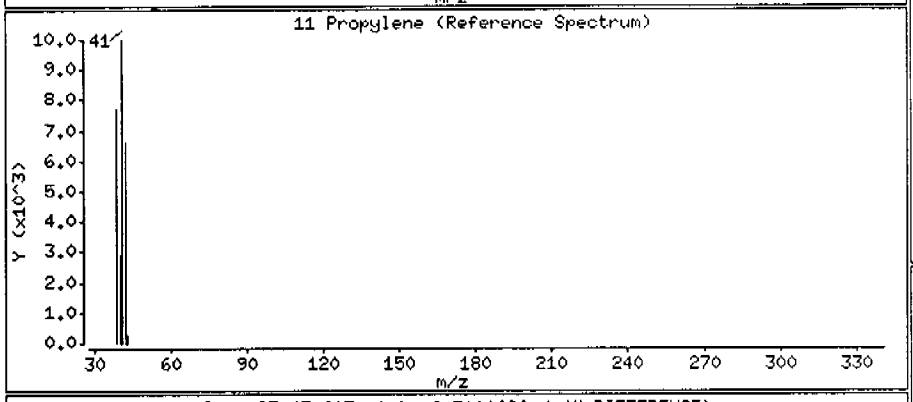
Concentration: 9.203 PPBV

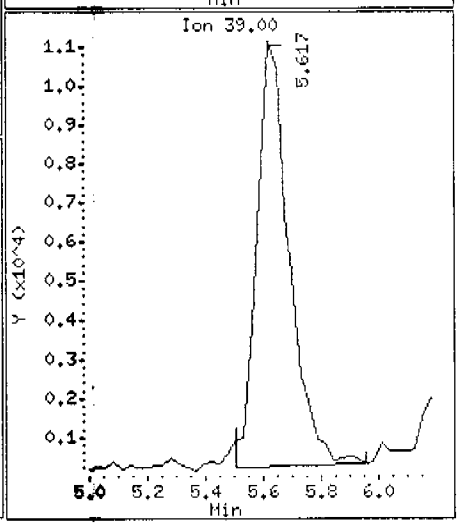


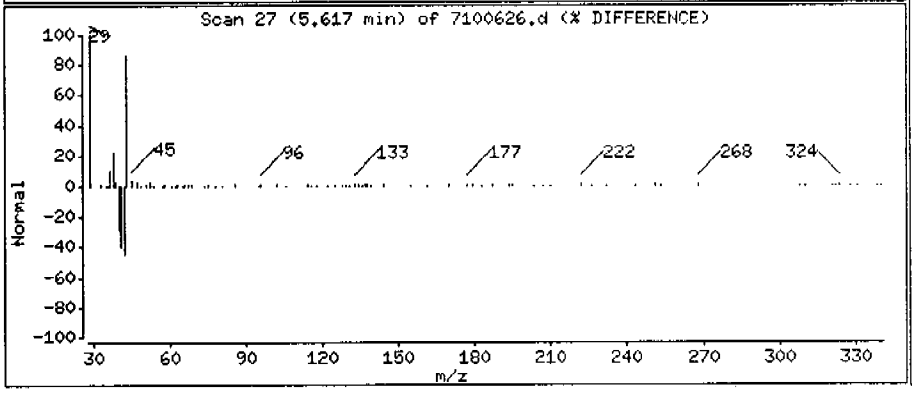












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14818

Lab ID#: 0809614-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	1.2	4.7	6.2
Methylene Chloride	0.96	1.2	3.3	4.3
Chloroform	0.96	210	4.7	1000
1,1,1-Trichloroethane	0.96	3.9	5.2	21
Carbon Tetrachloride	0.96	11	6.0	67
Trichloroethene	0.96	140	5.1	770
Tetrachloroethene	0.96	240	6.5	1700

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14818

Lab ID#: 0809614-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100627	**Date of Collection:**	9/25/08
Dil. Factor:	1.91	**Date of Analysis:**	10/7/08 06:03 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	1.2	4.7	6.2
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	Not Detected	7.2	Not Detected
Freon 113	0.96	Not Detected	7.3	Not Detected
1,1-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Acetone	3.8	Not Detected	9.1	Not Detected
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected
Methylene Chloride	0.96	1.2	3.3	4.3
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	210	4.7	1000
1,1,1-Trichloroethane	0.96	3.9	5.2	21
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	11	6.0	67
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	Not Detected	3.9	Not Detected
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	140	5.1	770
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	Not Detected	5.2	Not Detected
Tetrachloroethene	0.96	240	6.5	1700

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14818

Lab ID#: 0809614-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100627	Date of Collection:	9/25/08
Dil. Factor:	1.91	Date of Analysis:	10/7/08 06:03 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.8	Not Detected	16	Not Detected
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected
Chlorobenzene	0.96	Not Detected	4.4	Not Detected
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	Not Detected	4.1	Not Detected
o-Xylene	0.96	Not Detected	4.1	Not Detected
Styrene	0.96	Not Detected	4.1	Not Detected
Bromoform	0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane	3.8	Not Detected U J	14	Not Detected U J
Methanol	96	Not Detected	120	Not Detected
n-Butanol	3.8	Not Detected	12	Not Detected
Propylene	3.8	Not Detected	6.6	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	116	70-130
4-Bromofluorobenzene	88	70-130

0117

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100627.d
Lab Smp Id: 0809614-05A
Inj Date : 07-OCT-2008 06:03
Operator : dfm Inst ID: msd7.i
Smp Info : 200mL #33787
Misc Info : 9.0"Hg-5psi
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	305868	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	234239			28.56- 128.56	76.58
14.388	14.333 (1.000)	49	1706706			335.95- 435.95	557.99
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	988559	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	171708			0.00- 67.14	17.37
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	992531	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	503518			1.24- 101.24	50.73
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	671835	29.0784	29.078	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	294854			0.00- 97.37	43.89
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	860181	22.7307	22.731	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	121178			0.00- 63.85	14.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	676246			26.51- 126.51	78.62
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	450564	22.0610	22.061	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	663027			90.08- 190.08	147.15
23.291	23.291 (1.093)	176	434007			45.80- 145.80	96.33
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	49733	0.65773	1.256	80.00- 120.00	100.00
5.729	5.729 (0.400)	87	15501			0.00- 81.85	31.17
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.430 (0.799)	49	29936	0.65220	1.246	80.00- 120.00	100.00
11.457	11.430 (0.799)	84	10469			0.00- 83.39	34.97
11.430	11.430 (0.797)	51	9860			0.00- 80.54	32.94
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	4659177	109.583	209.30	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	3354525			21.22- 121.22	72.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	88379	2.03586	3.888	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	53125			13.65- 113.65	60.11
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	276435	5.57655	10.651	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	288546			55.93- 155.93	104.38
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1728460	74.9617	143.18	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1751300			52.65- 152.65	101.32
16.573	16.573 (1.029)	97	1109159			12.98- 112.98	64.17
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	3442004	128.361	245.17	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	3040152			37.80- 137.80	88.33
19.780	19.780 (0.929)	131	3056145			35.79- 135.79	88.79

Data File: /chem/msd7.i/06oct08.b/7100627.d
Report Date: 10-Oct-2008 20:56

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100627.d
Lab Smp Id: 0809614-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 9.0"Hg-5psi

Calibration Date: 06-OCT-2008
Calibration Time: 10:23

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	305868	-20.32
97 1,4-Difluorobenze	1202073	721244	1682902	988559	-17.76
126 Chlorobenzene-d5	1260970	756582	1765358	992531	-21.29

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100627.d
Report Date: 10-Oct-2008 20:56

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-05A
Level: LOW
Operator: dfm
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 9.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	29.078	116.31	70-130
$ 113 Toluene-d8	25.000	22.731	90.92	70-130
$ 137 Bromofluorobenzene	25.000	22.061	88.24	70-130

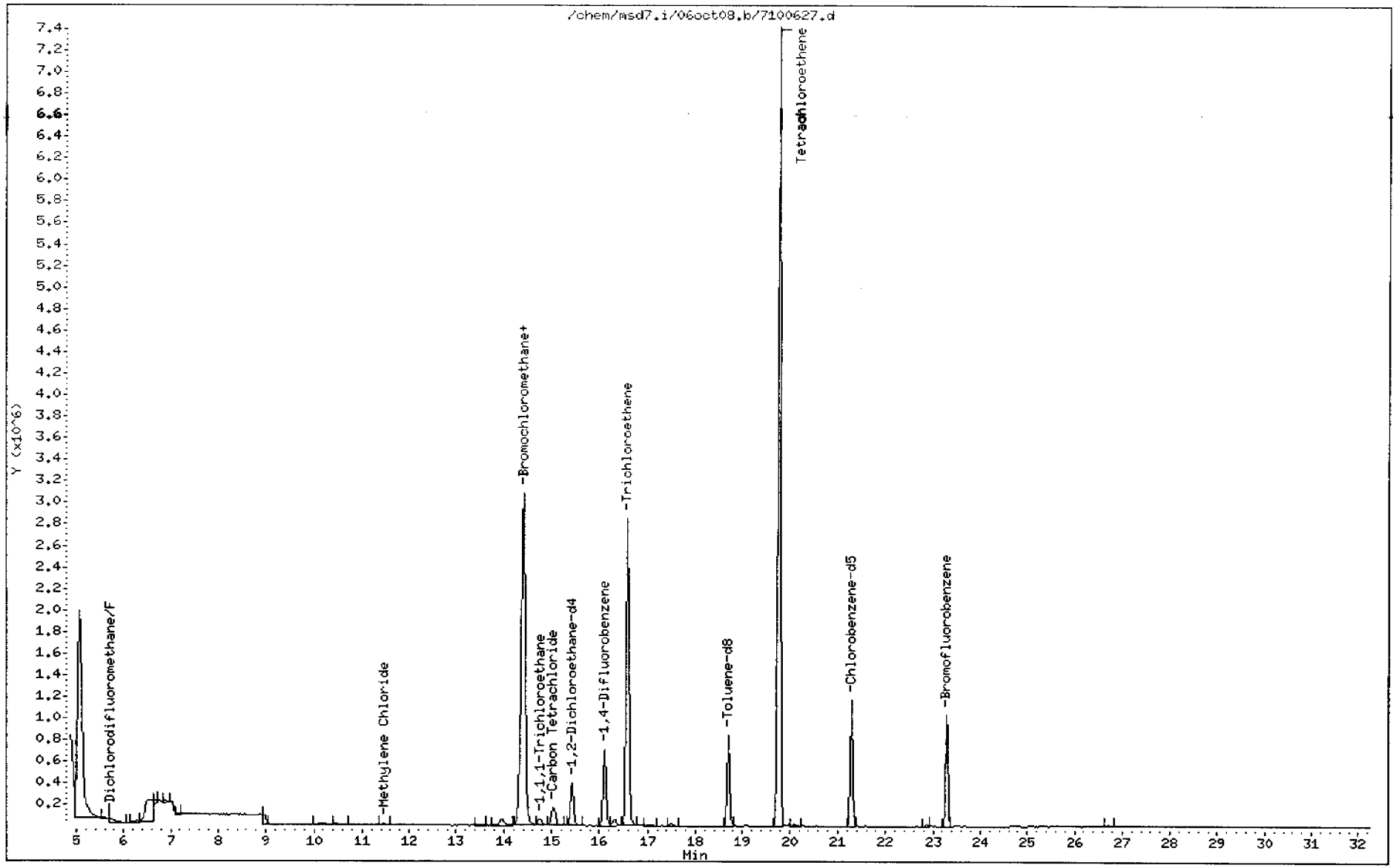
Data File: /chem/msd7.i/06oct08.b/7100627.d
Date : 07-OCT-2008 06:03
Client ID:
Sample Info: 200mL #33787

Column phase: RTx-624

Instrument: msd7.i

Operator: dfm
Column diameter: 0.53

0122



Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

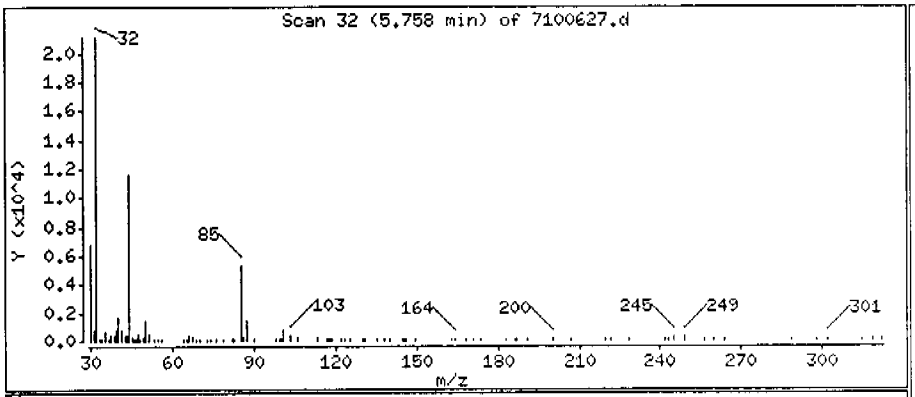
Operator: dfm

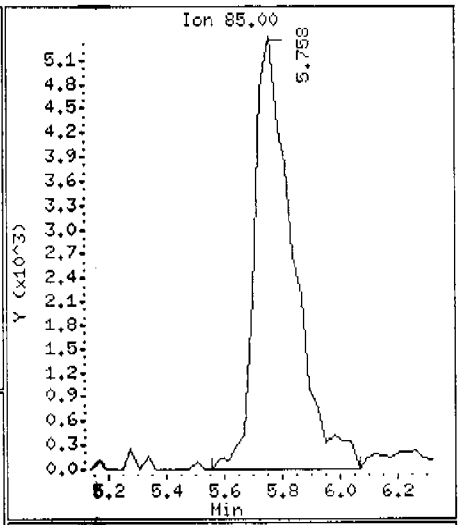
Column phase: RTx-624

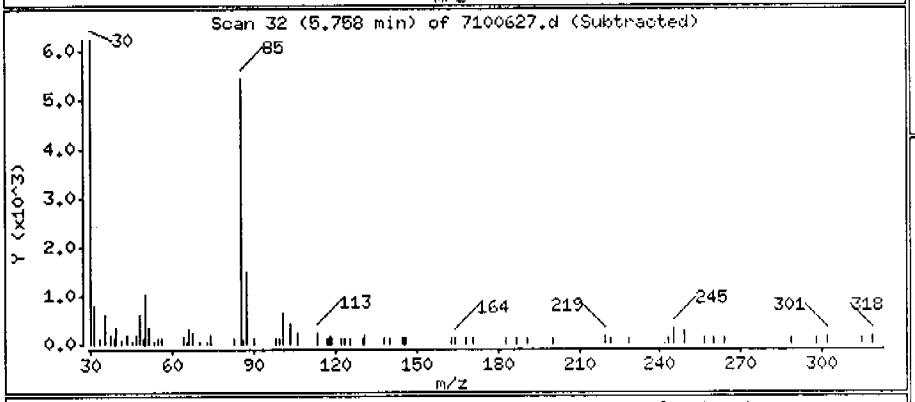
Column diameter: 0.53

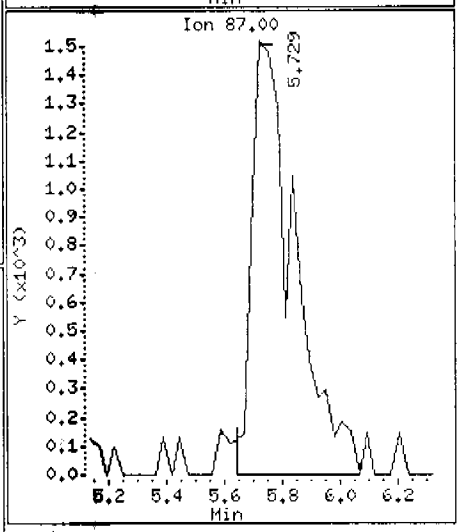
12 Dichlorodifluoromethane/Fr12

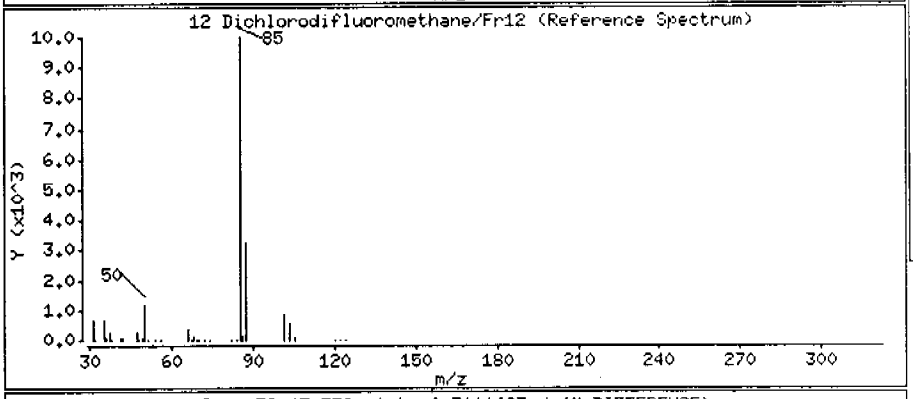
Concentration: 1.256 PPBV

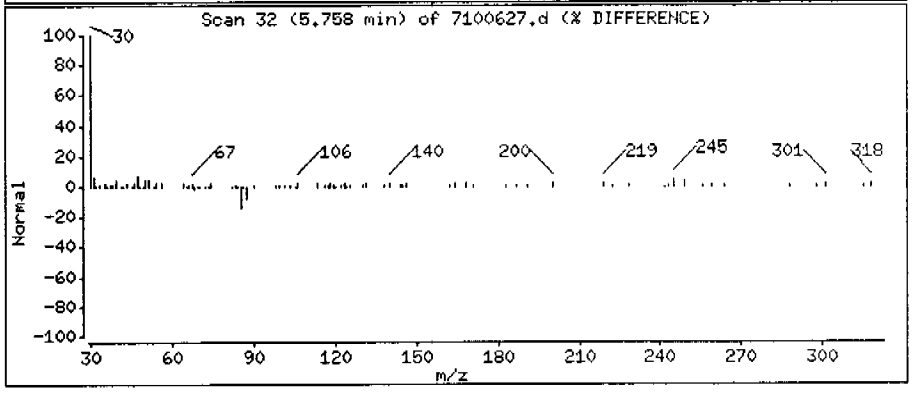












Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

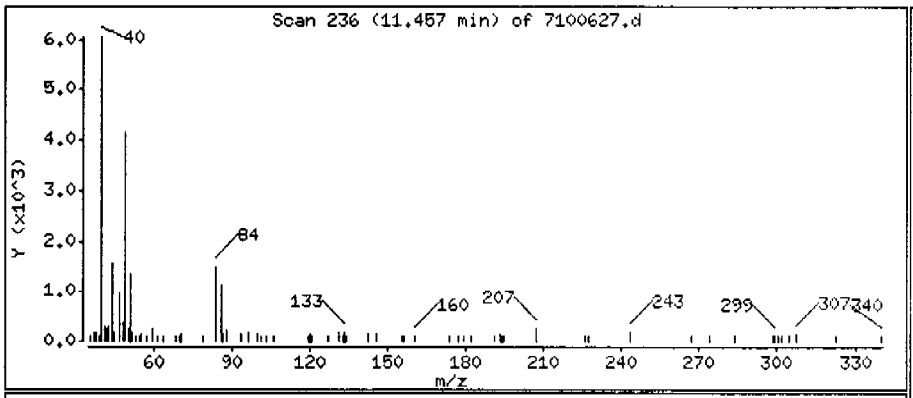
Operator: dfm

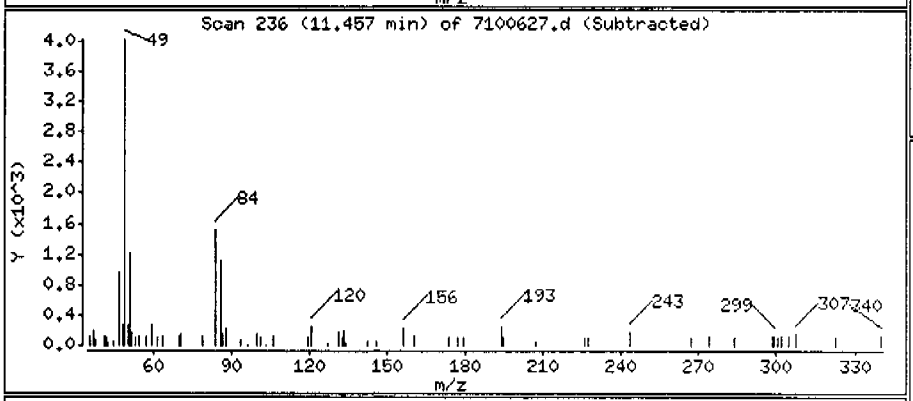
Column phase: RTx-624

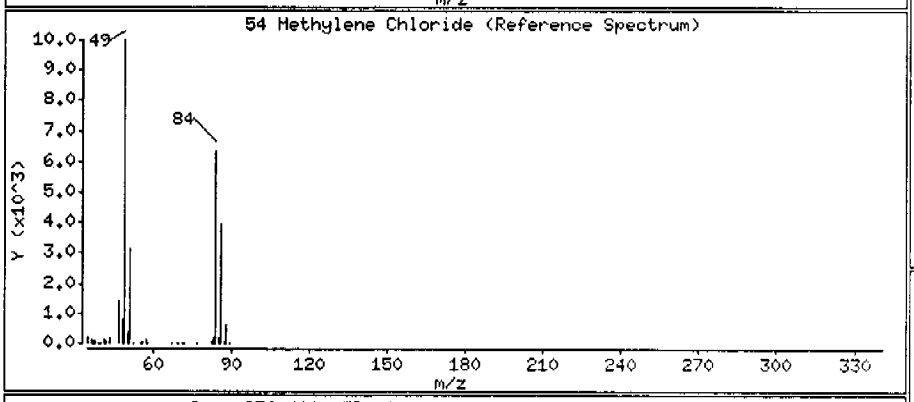
Column diameter: 0.53

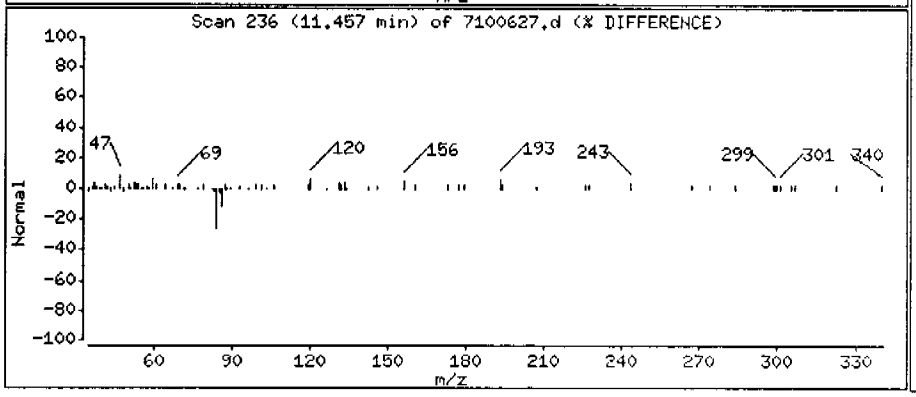
54 Methylene Chloride

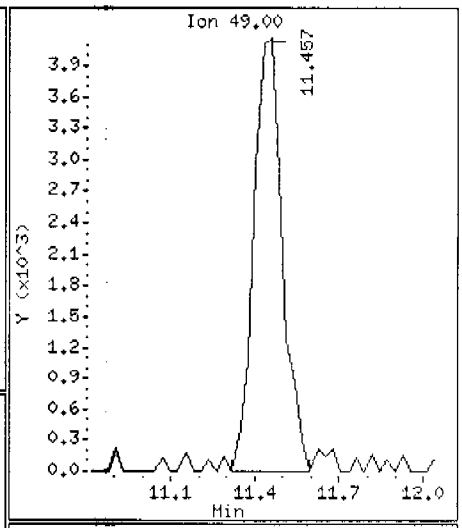
Concentration: 1.246 PPBV

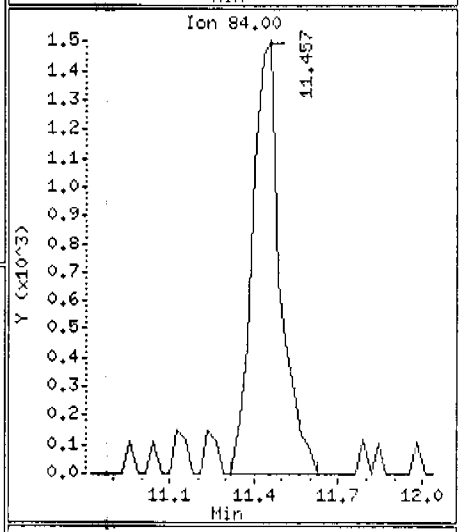


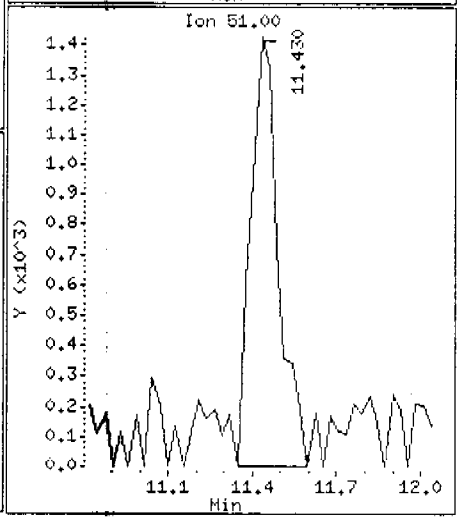












Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

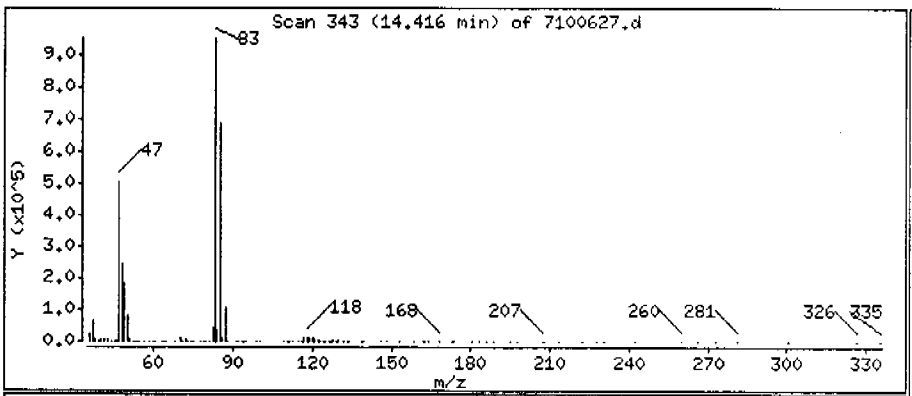
Operator: dfm

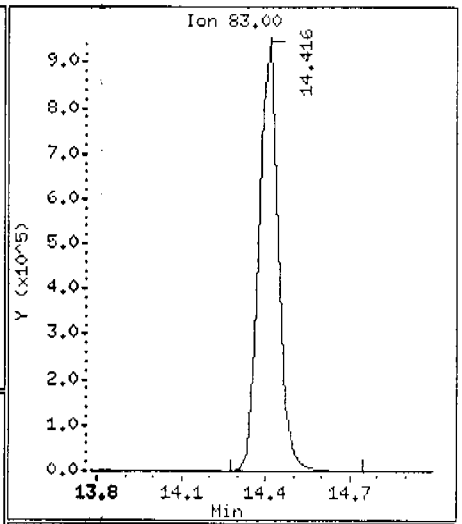
Column phase: RTx-624

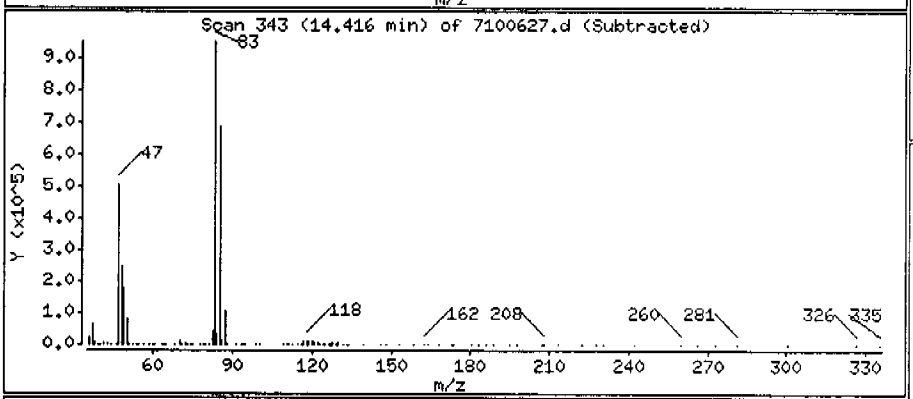
Column diameter: 0.53

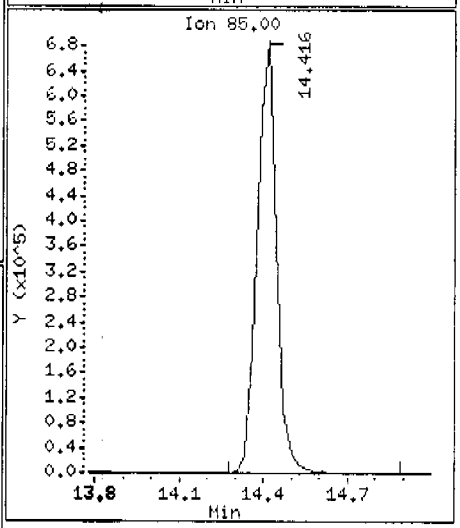
82 Chloroform

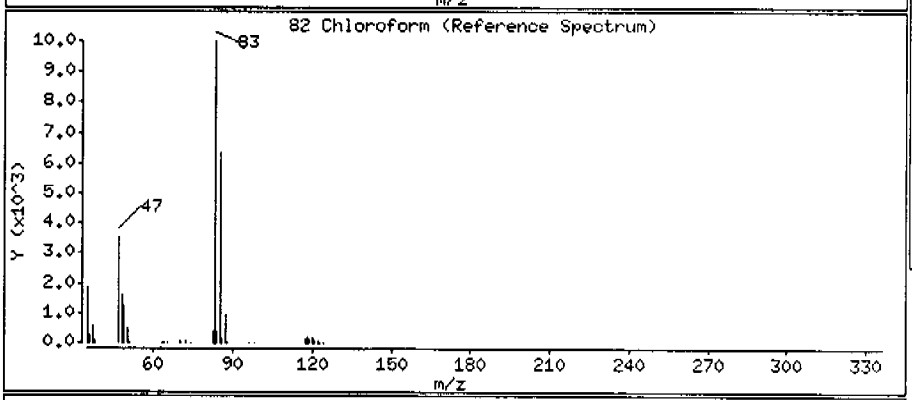
Concentration: 209.30 PPBV

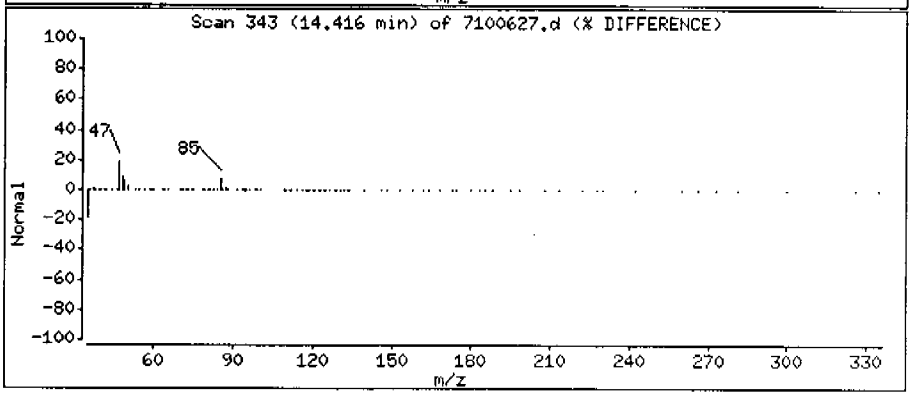












Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

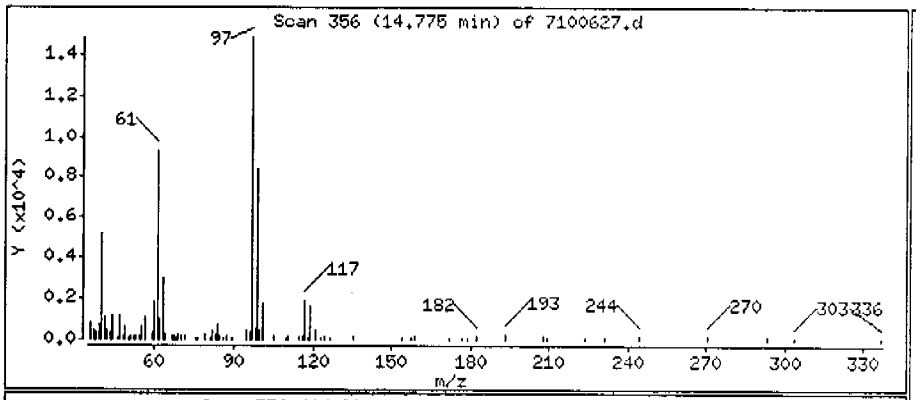
Operator: dfm

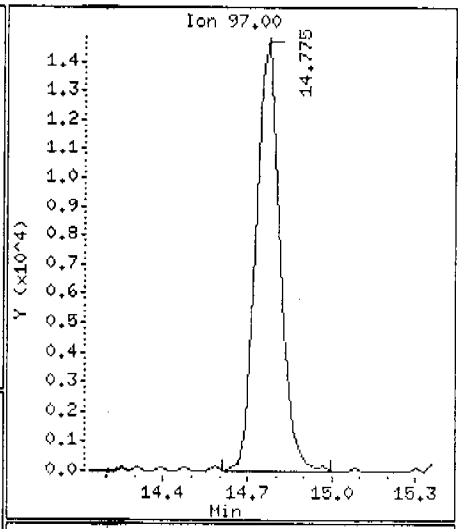
Column phase: RTx-624

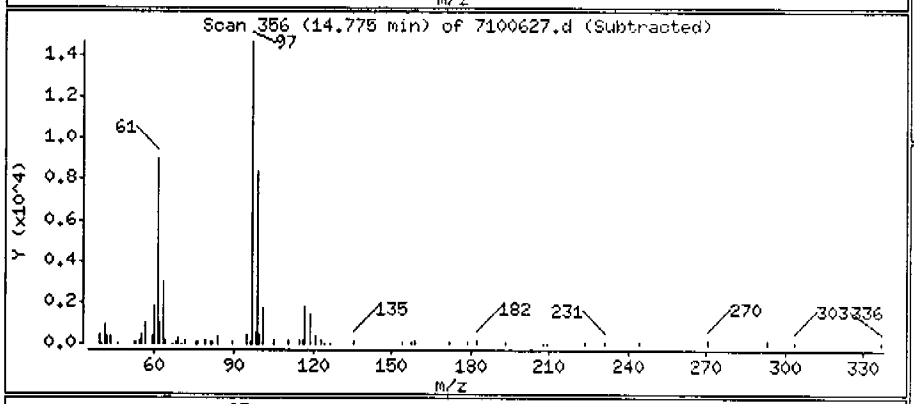
Column diameter: 0.53

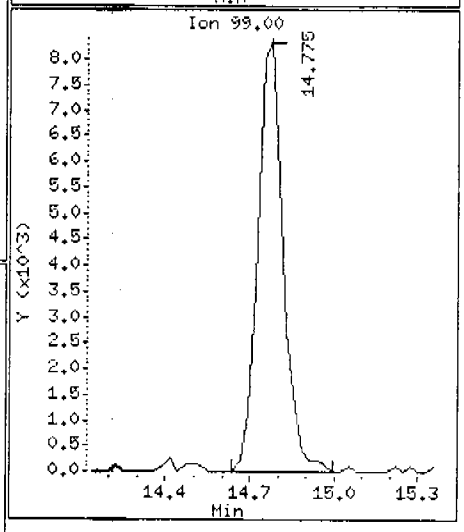
83 1,1,1-Trichloroethane

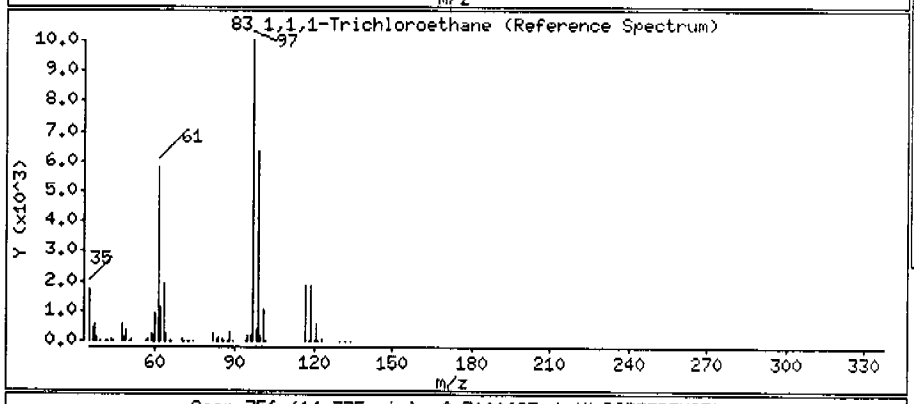
Concentration: 3.888 PPBV

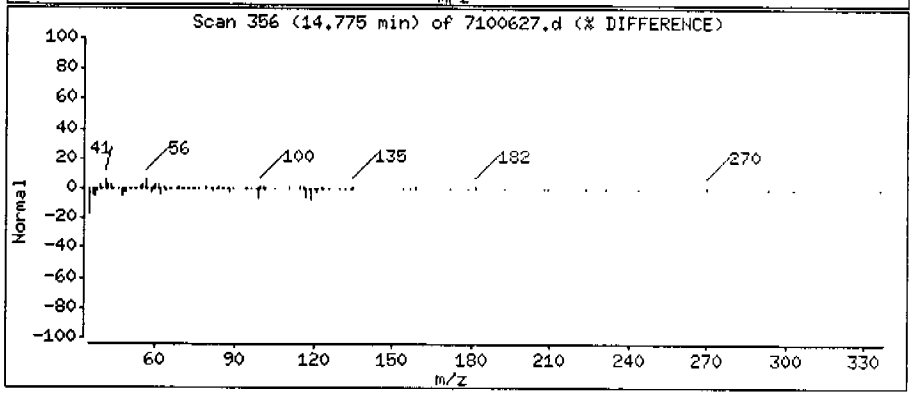












Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

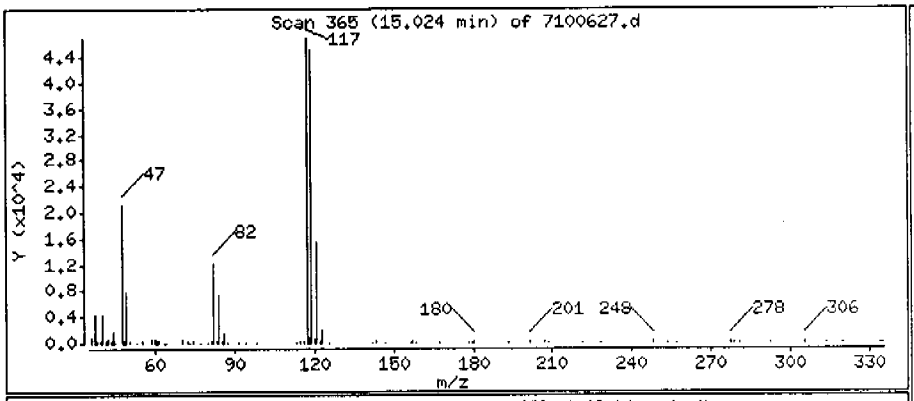
Operator: dfm

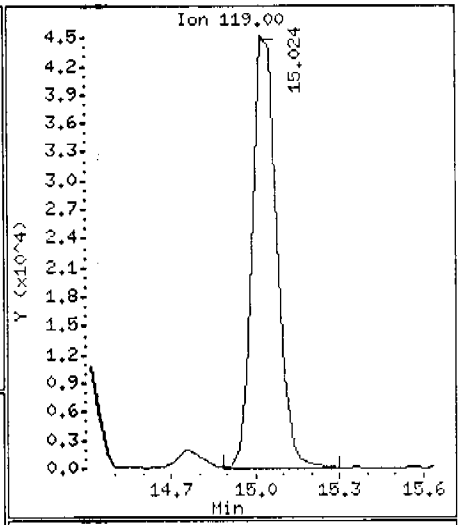
Column phase: RTx-624

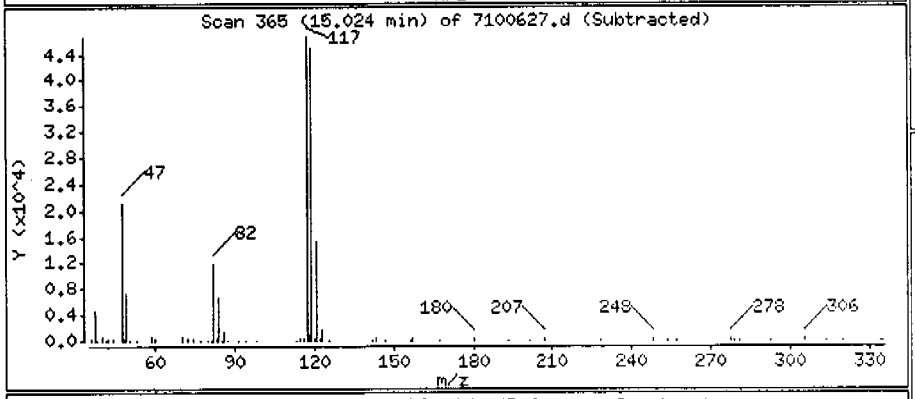
Column diameter: 0.53

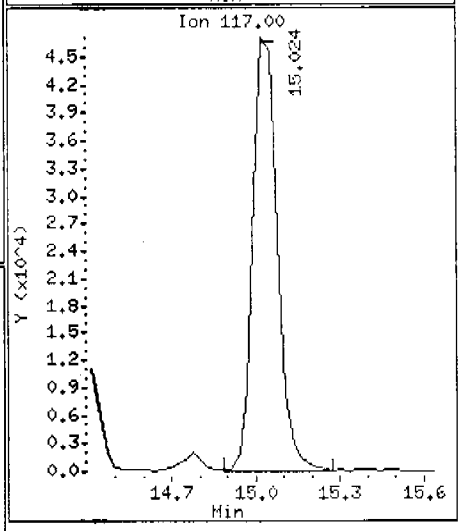
87 Carbon Tetrachloride

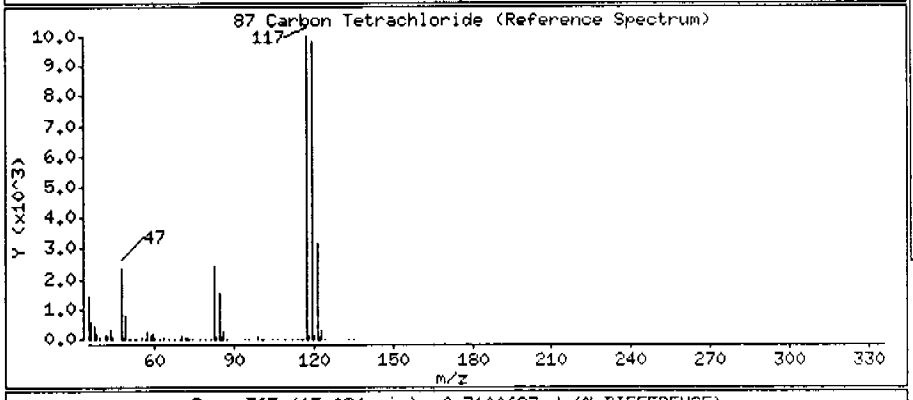
Concentration: 10.651 PPBV

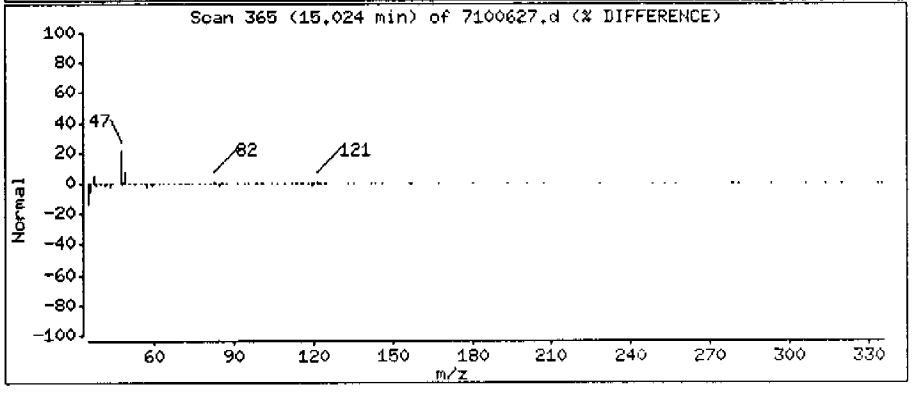












Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

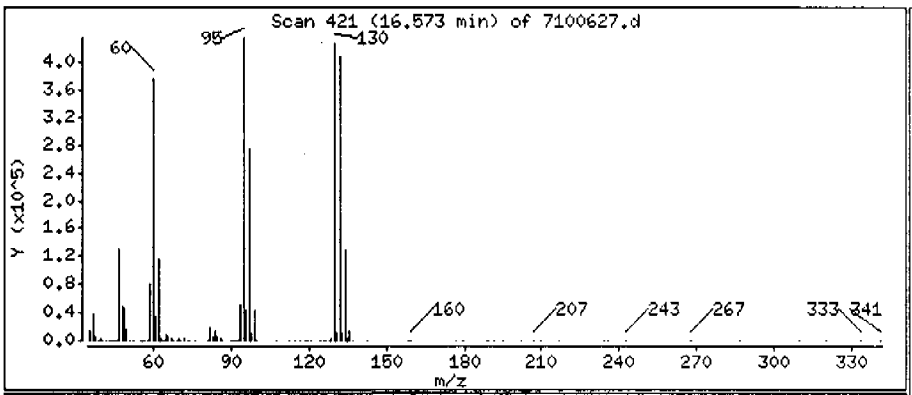
Operator: dfm

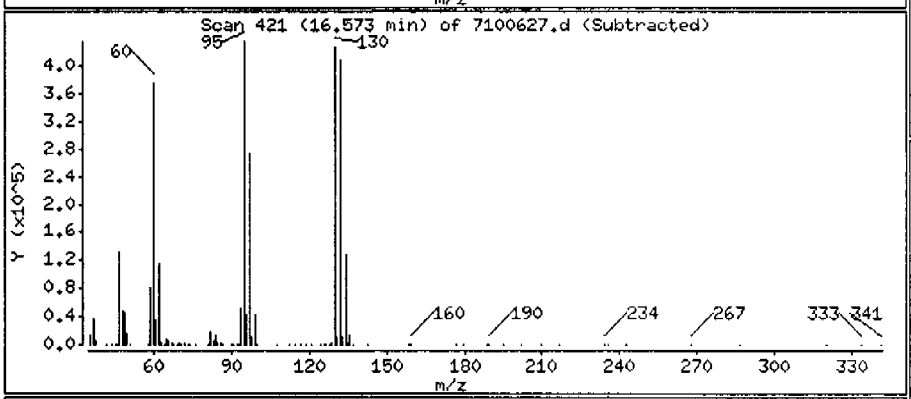
Column phase: RTx-624

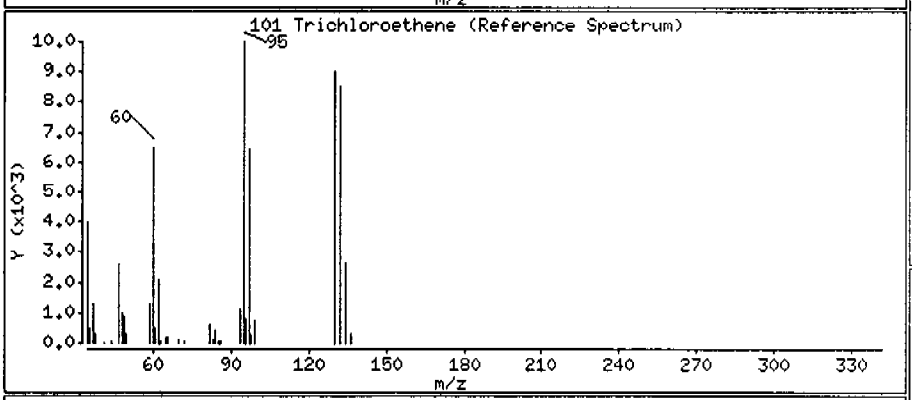
Column diameter: 0.53

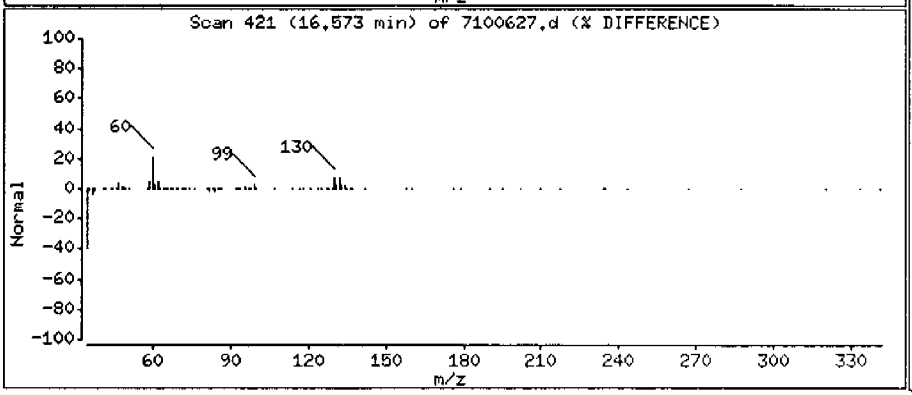
101 Trichloroethene

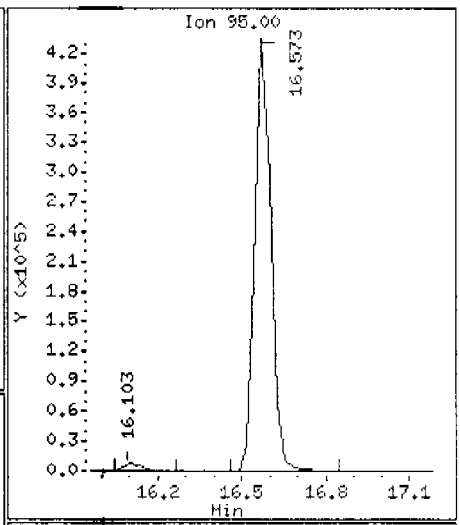
Concentration: 143.18 PPBV

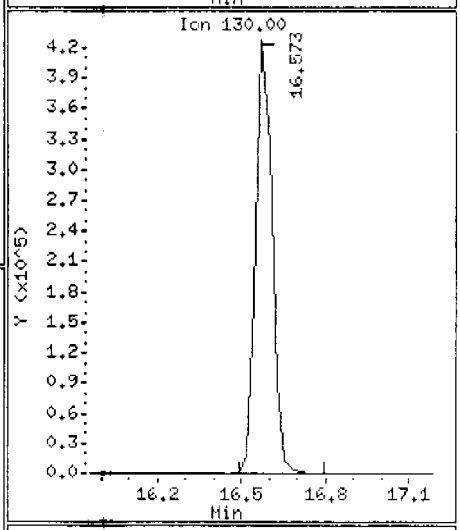


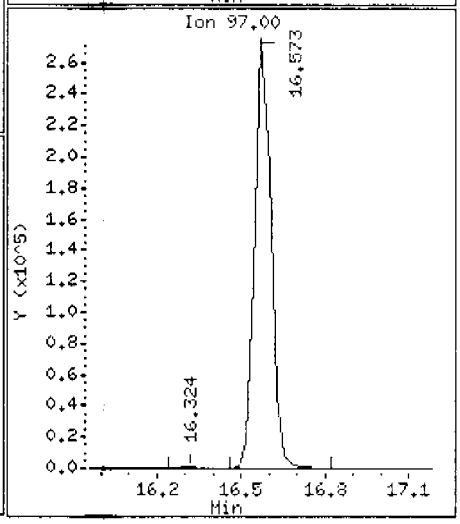












Data File: /chem/msd7.i/06oct08.b/7100627.d

Date : 07-OCT-2008 06:03

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33787

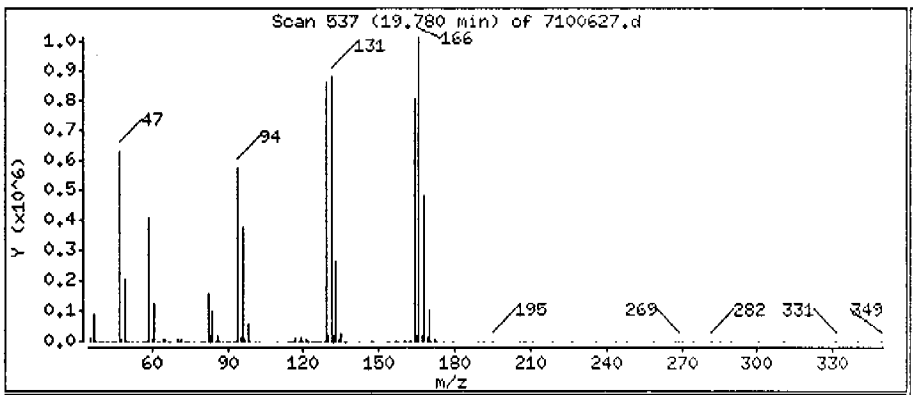
Operator: dfm

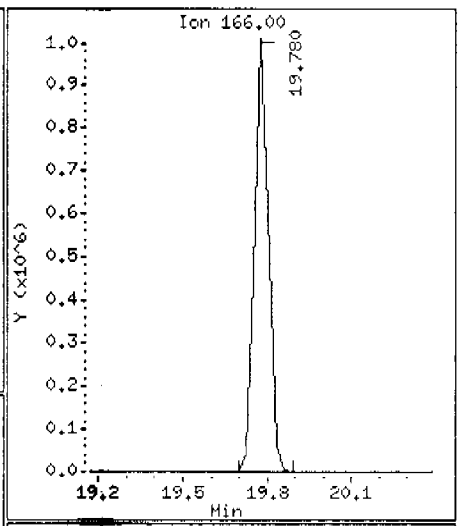
Column phase: RTx-624

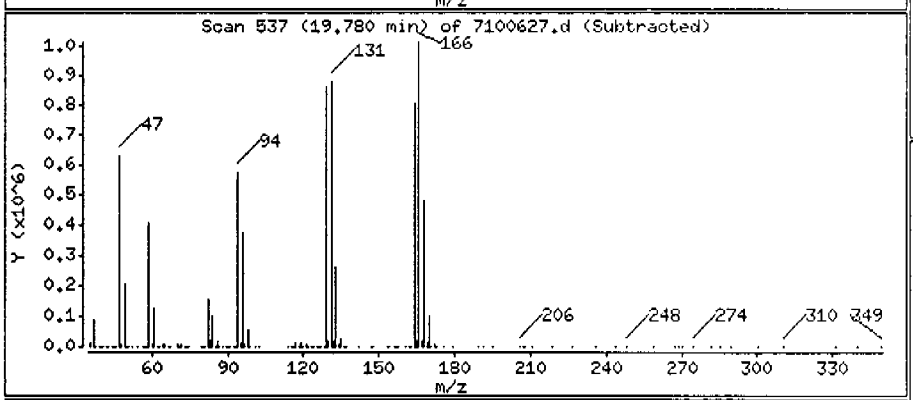
Column diameter: 0.53

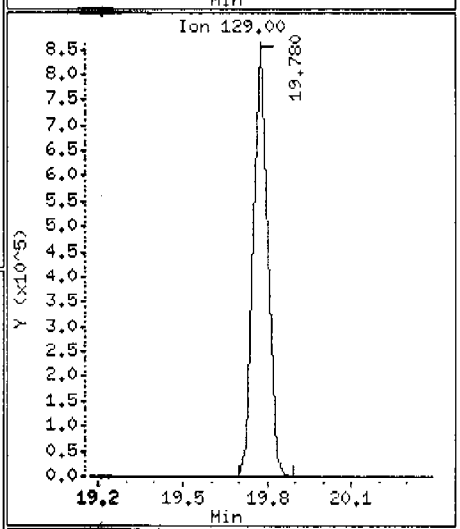
120 Tetrachloroethene

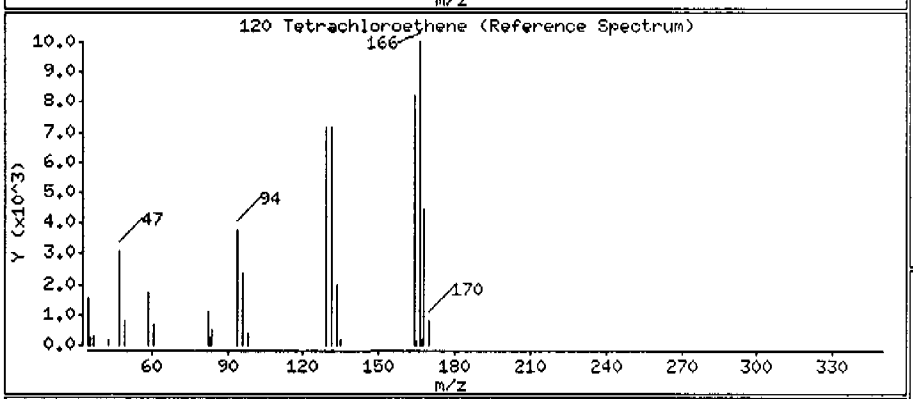
Concentration: 245.17 PPBV

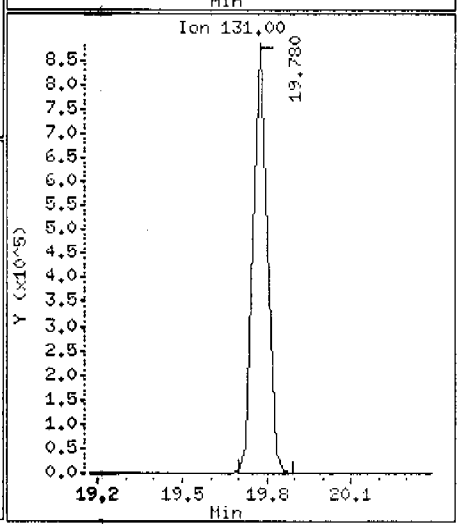


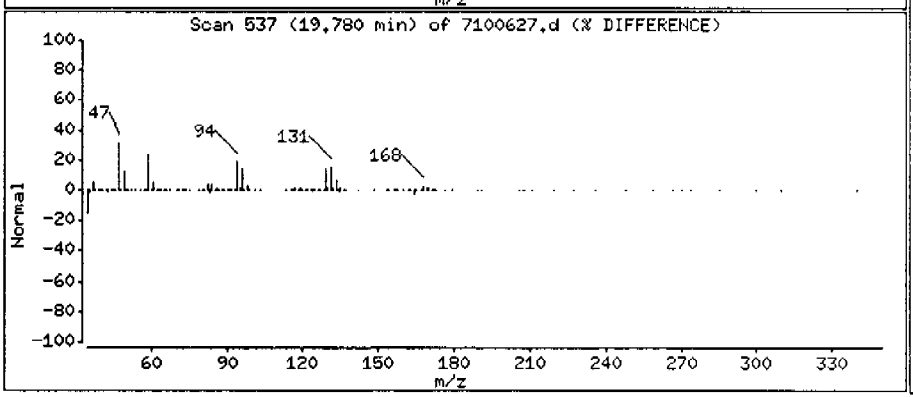












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14819

Lab ID#: 0809614-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	1.3	4.7	6.5
Freon 113	0.96	2.0	7.3	15
1,1-Dichloroethene	0.96	1.4	3.8	5.5
Acetone	3.8	14	9.1	33
Methylene Chloride	0.96	6.8	3.3	24
2-Butanone (Methyl Ethyl Ketone)	0.96	2.7	2.8	8.0
Chloroform	0.96	110	4.7	550
1,1,1-Trichloroethane	0.96	4.7	5.2	26
Carbon Tetrachloride	0.96	21	6.0	130
Trichloroethene	0.96	82	5.1	440
Bromodichloromethane	0.96	1.0	6.4	7.0
Tetrachloroethene	0.96	44	6.5	300
Propylene	3.8	4.9	6.6	8.4

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14819

Lab ID#: 0809614-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100908	**Date of Collection:**	9/25/08
Dil. Factor:	1.91	**Date of Analysis:**	10/9/08 02:15 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	1.3	4.7	6.5
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	Not Detected	7.2	Not Detected
Freon 113	0.96	2.0	7.3	15
1,1-Dichloroethene	0.96	1.4	3.8	5.5
Acetone	3.8	14	9.1	33
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected
Methylene Chloride	0.96	6.8	3.3	24
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	2.7	2.8	8.0
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	110	4.7	550
1,1,1-Trichloroethane	0.96	4.7	5.2	26
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	21	6.0	130
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	Not Detected	3.9	Not Detected
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	82	5.1	440
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	1.0	6.4	7.0
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	Not Detected	5.2	Not Detected
Tetrachloroethene	0.96	44	6.5	300

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14819

Lab ID#: 0809614-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100908	**Date of Collection:**	9/25/08
Dil. Factor:	1.91	**Date of Analysis:**	10/9/08 02:15 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.8	Not Detected	16	Not Detected
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected
Chlorobenzene	0.96	Not Detected	4.4	Not Detected
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	Not Detected	4.1	Not Detected
o-Xylene	0.96	Not Detected	4.1	Not Detected
Styrene	0.96	Not Detected	4.1	Not Detected
Bromoform	0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected
Methanol	96	Not Detected	120	Not Detected
n-Butanol	3.8	Not Detected	12	Not Detected
Propylene	3.8	4.9	6.6	8.4

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	92	70-130

0132

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100908.d
Lab Smp Id: 0809614-06A
Inj Date : 09-OCT-2008 14:15
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #5723
Misc Info : 9.0"Hg-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	357454	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	273159			28.92- 128.92	76.42
14.333	14.333 (1.000)	49	1422655			320.90- 420.90	398.00
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1097269	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	187205			0.00- 67.10	17.06
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1187422	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	595405			1.24- 101.24	50.14
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	631729	23.3966	23.396	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	275600			0.00- 97.37	43.63
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1056589	25.1547	25.155	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	145974			0.00- 63.85	13.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	815789			26.51- 126.51	77.21
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	559844	22.9126	22.913	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	838420			92.62- 192.62	149.76
23.291	23.291 (1.093)	176	547833			44.03- 144.03	97.85
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	60684	0.68674	1.312	80.00- 120.00	100.00
5.758	5.729 (0.402)	87	18796			0.00- 81.85	30.97
42 Freon 113					CAS #: 76-13-1		
10.130	10.158 (0.707)	151	37033	1.05030	2.006	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	24521			12.55- 112.55	66.21
10.158	10.158 (0.709)	101	59591			98.99- 198.99	160.91
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	44353	0.72336	1.382	80.00- 120.00	100.00
10.269	10.269 (0.716)	96	17079			0.00- 87.74	38.51
10.296	10.269 (0.718)	98	10363			0.00- 73.80	23.37
45 Acetone					CAS #: 67-64-1		
10.434	10.407 (0.728)	58	126165	7.28942	13.923	80.00- 120.00	100.00
10.434	10.407 (0.728)	43	543656			340.42- 440.42	430.91
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	192327	3.58543	6.848	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	64920			0.00- 84.42	33.76
11.430	11.430 (0.797)	51	57081			0.00- 80.54	29.68
75 2-Butanone					CAS #: 78-93-3		
13.808	13.808 (0.963)	72	16103	1.42753	2.726	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	125395			729.52- 829.52	778.70
13.835	13.808 (0.965)	57	6630			0.00- 97.16	41.18
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2937926	59.1274	112.93	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	2102903			21.17- 121.17	71.58
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	125521	2.47416	4.726	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	80552			13.83- 113.83	64.17
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	647756	11.1814	21.356	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride (continued)								
15.024	15.024	(1.048)	117	686575			55.68- 155.68	105.99
101 Trichloroethene						CAS #: 79-01-6		
16.573	16.573	(1.029)	95	1100225	42.9884	82.108	80.00- 120.00	100.00
16.573	16.573	(1.029)	130	1123756			52.48- 152.48	102.14
16.573	16.573	(1.029)	97	682588			14.44- 114.44	62.04
107 Bromodichloromethane						CAS #: 75-27-4		
17.485	17.485	(1.086)	83	25424	0.54862	1.048	80.00- 120.00	100.00
17.485	17.485	(1.086)	85	16883			20.68- 120.68	66.41
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	745274	23.2314	44.372	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	659414			35.87- 135.87	88.48
19.780	19.780	(0.929)	131	668792			35.33- 135.33	89.74
11 Propylene						CAS #: 115-07-1		
5.617	5.589	(0.392)	41	78422	2.57299	4.914	80.00- 120.00	100.00
5.617	5.589	(0.392)	42	41767			16.57- 116.57	53.26
5.645	5.589	(0.394)	39	97849			28.60- 128.60	124.77

Report Date: 11-Oct-2008 08:12

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100908.d
Lab Smp Id: 0809614-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"Hg-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	357454	-1.28
97 1,4-Difluorobenze	1146510	687906	1605114	1097269	-4.29
126 Chlorobenzene-d5	1241713	745028	1738398	1187422	-4.37

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 11-Oct-2008 08:12

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 09oct08
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0809614-06A
Level: LOW Operator: ra
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.396	93.59	70-130
$ 113 Toluene-d8	25.000	25.155	100.62	70-130
$ 137 Bromofluorobenzene	25.000	22.913	91.65	70-130

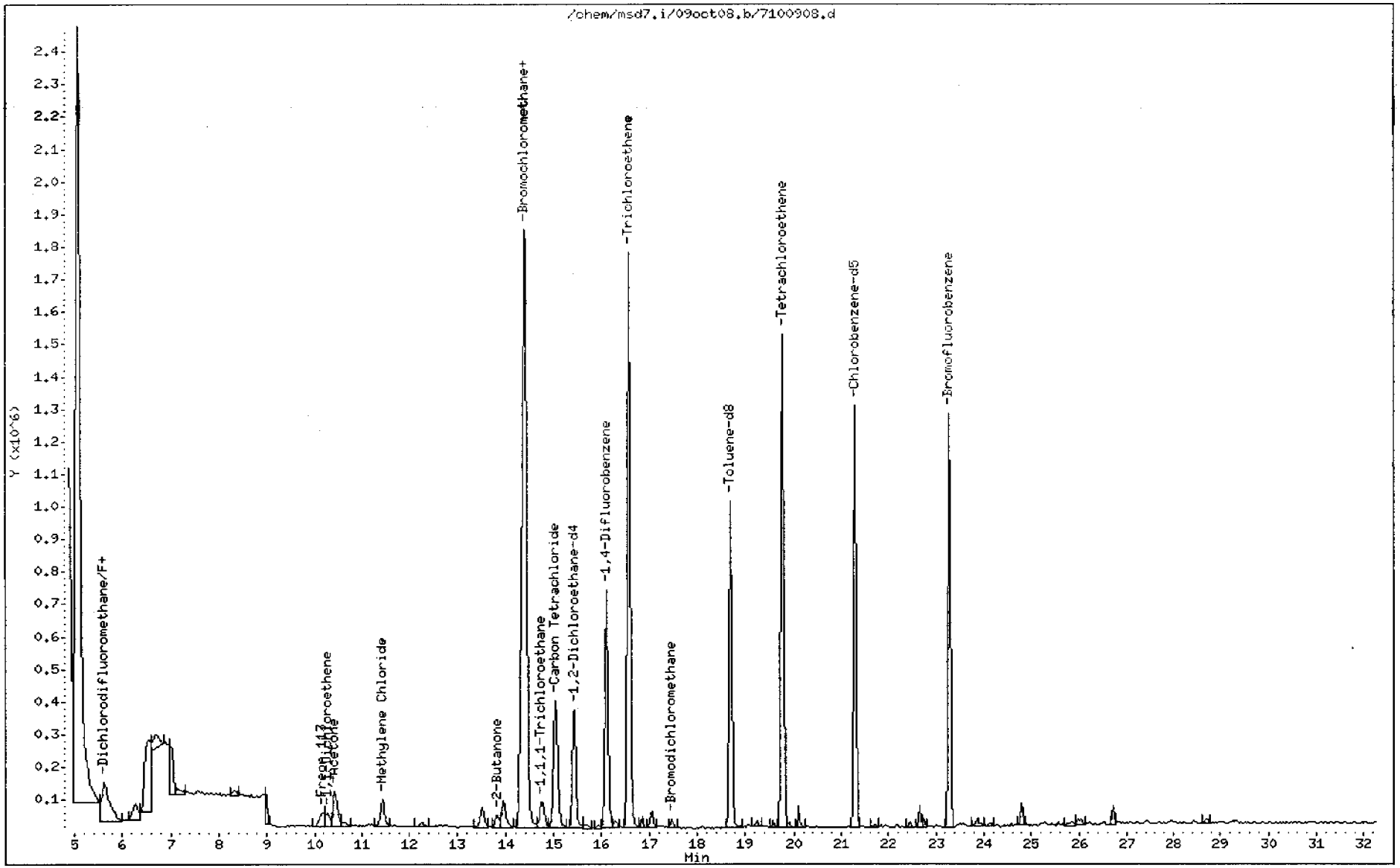
Data File: /chem/msd7.i/09oct08.b/7100908.d
Date : 09-OCT-2008 14:15
Client ID:
Sample Info: 200mL #5723

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0138



Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

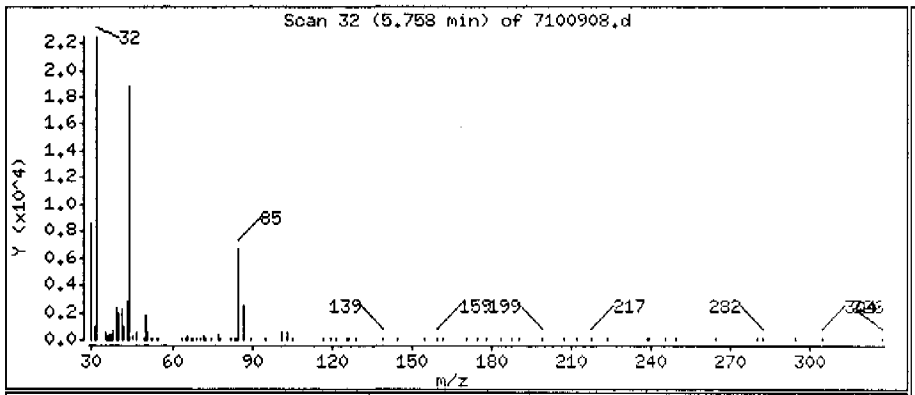
Operator: ra

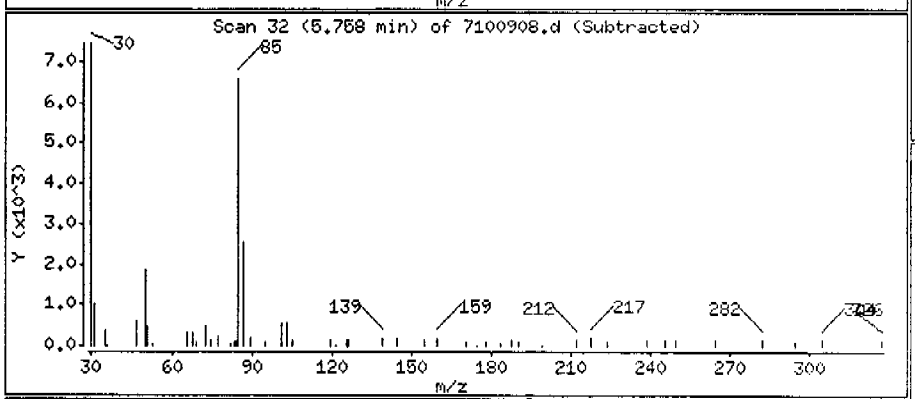
Column phase: RTx-624

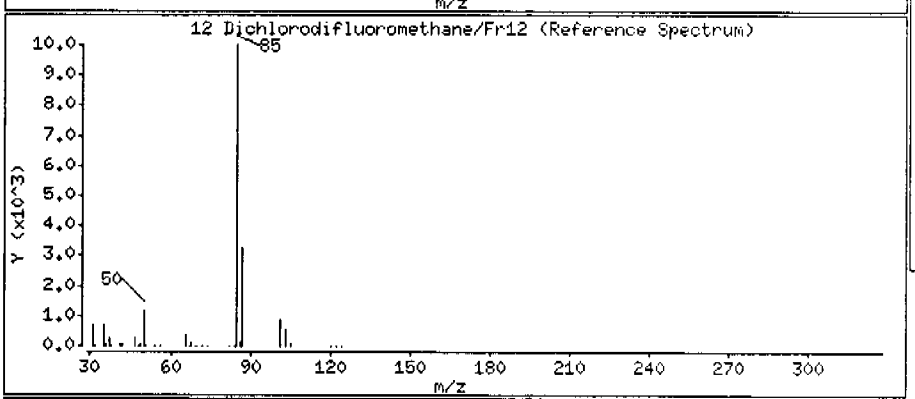
Column diameter: 0.53

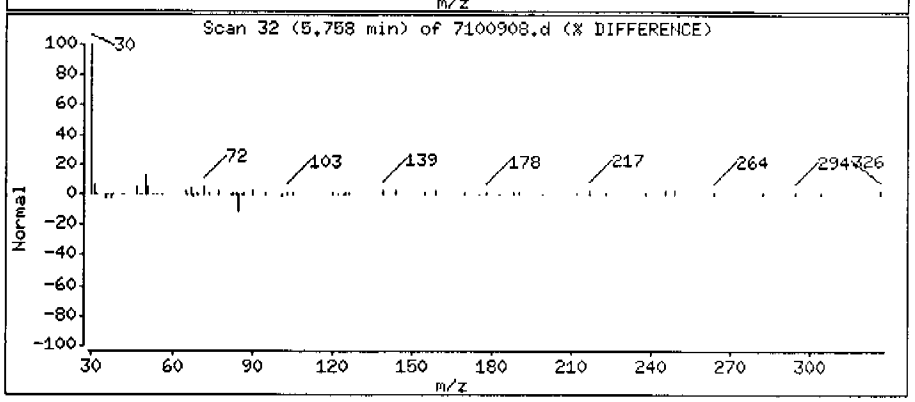
12 Dichlorodifluoromethane/Fr12

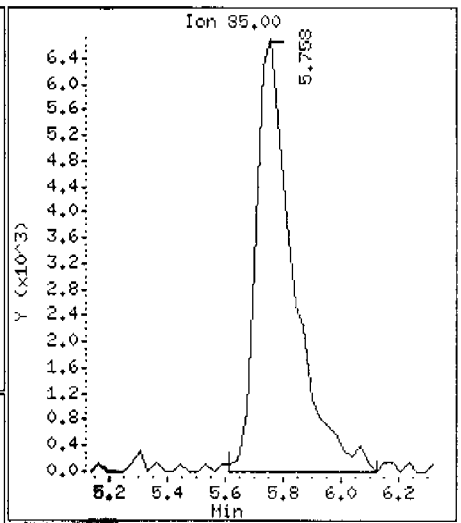
Concentration: 1.312 PPBV

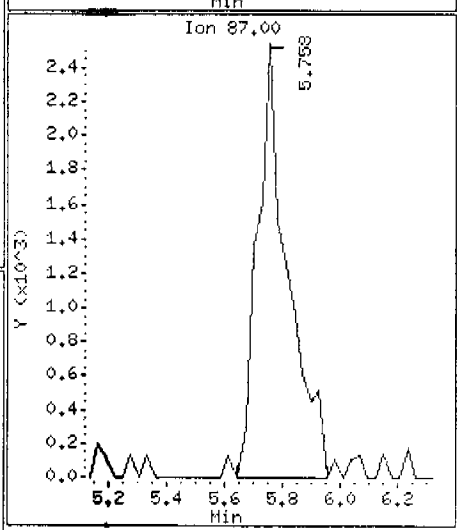












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

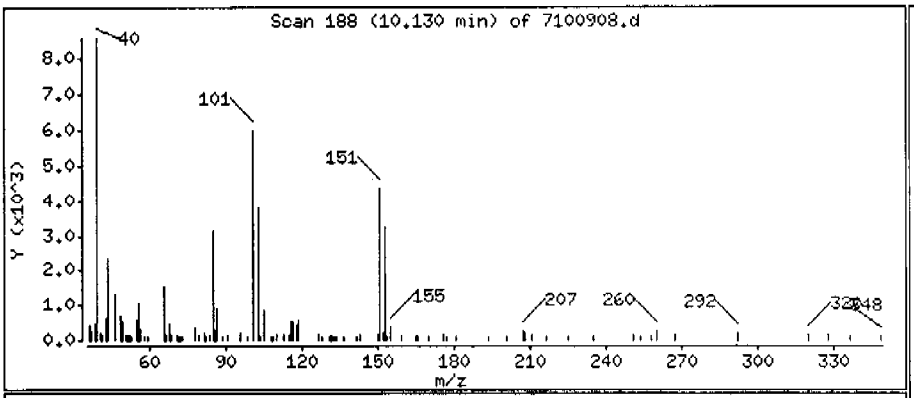
Operator: ra

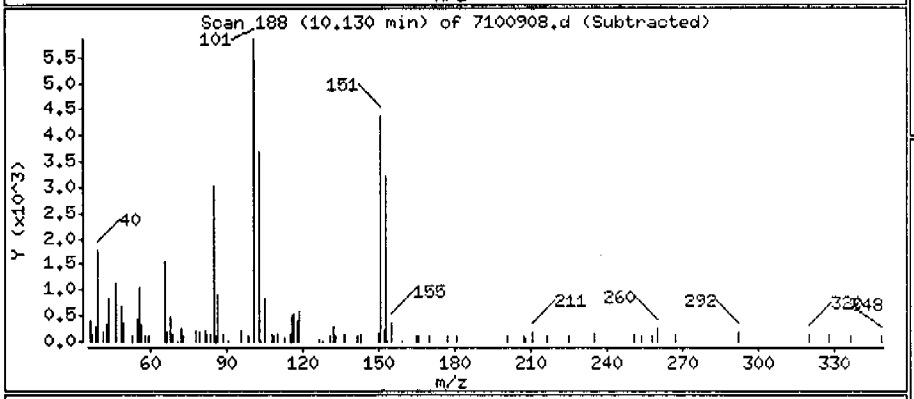
Column phase: RTx-624

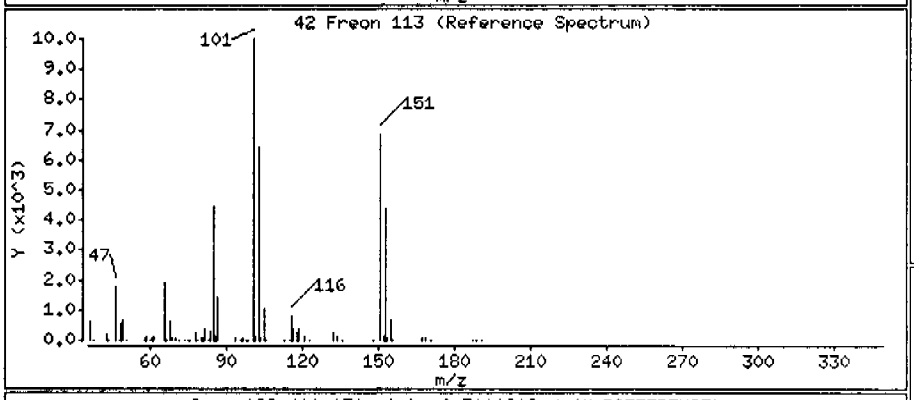
Column diameter: 0.53

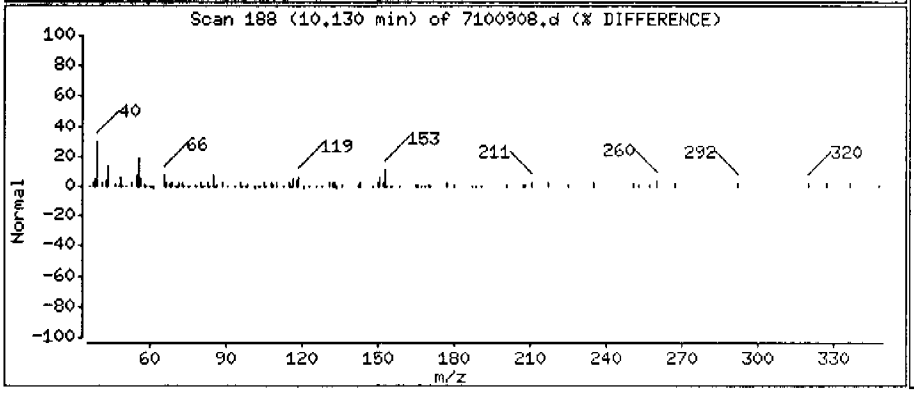
42 Freon 113

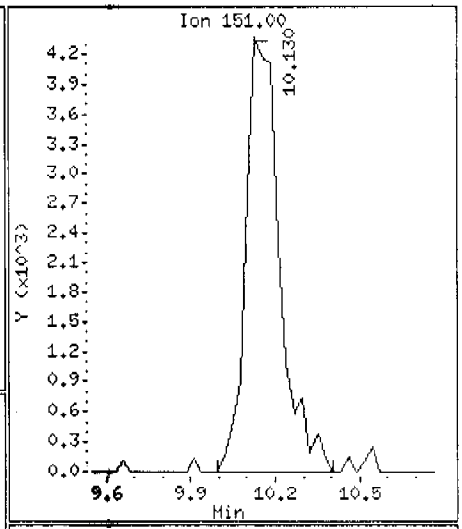
Concentration: 2.006 PPBV

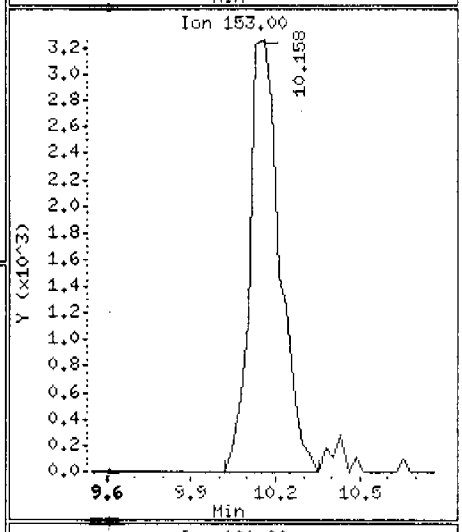


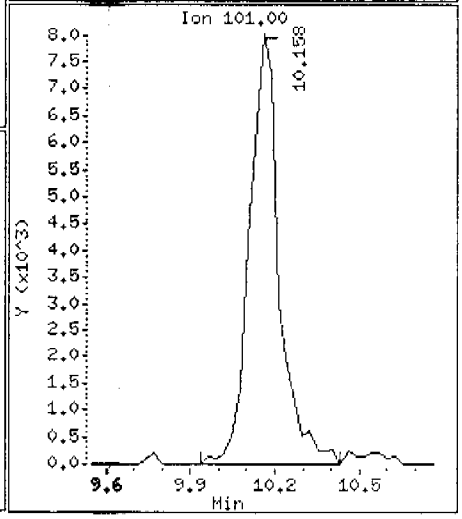












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

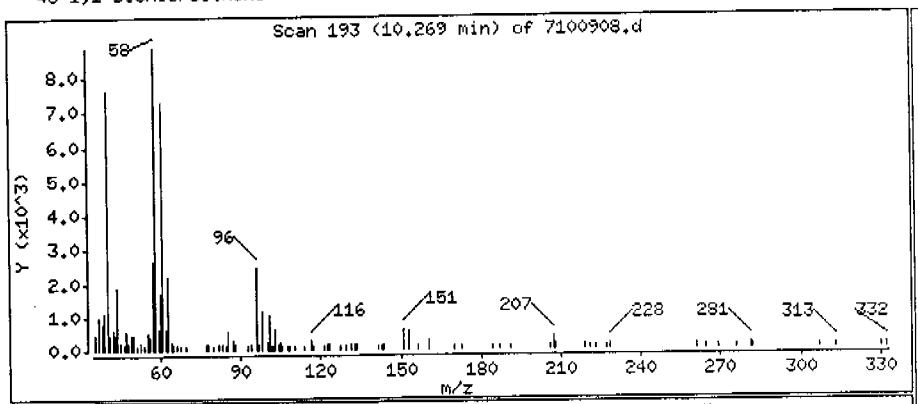
Operator: ra

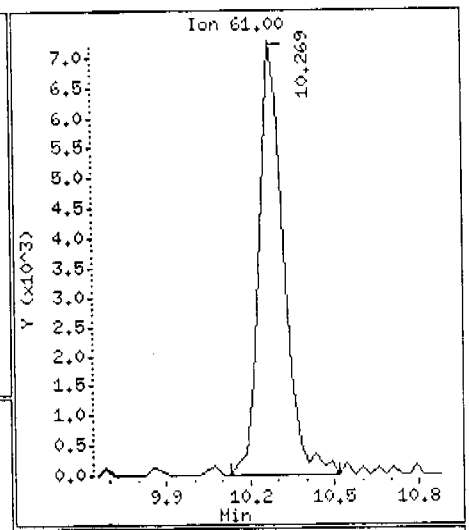
Column phase: RTx-624

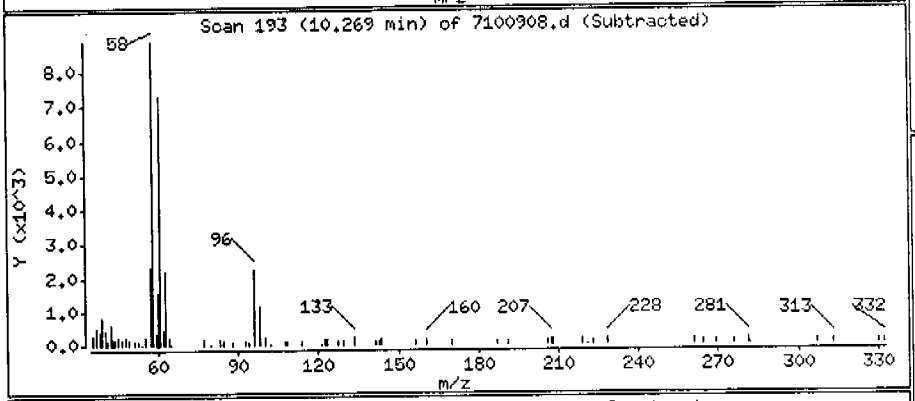
Column diameter: 0.53

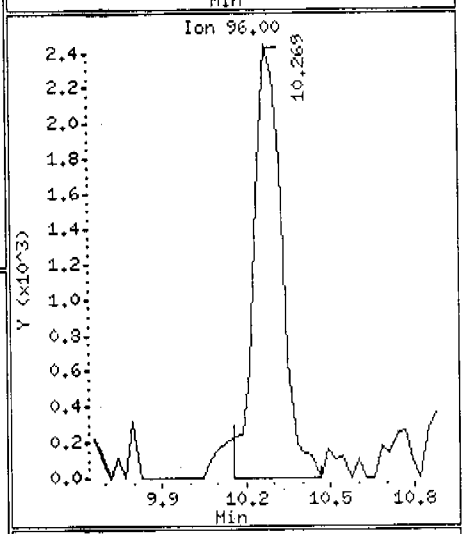
43 1,1-Dichloroethene

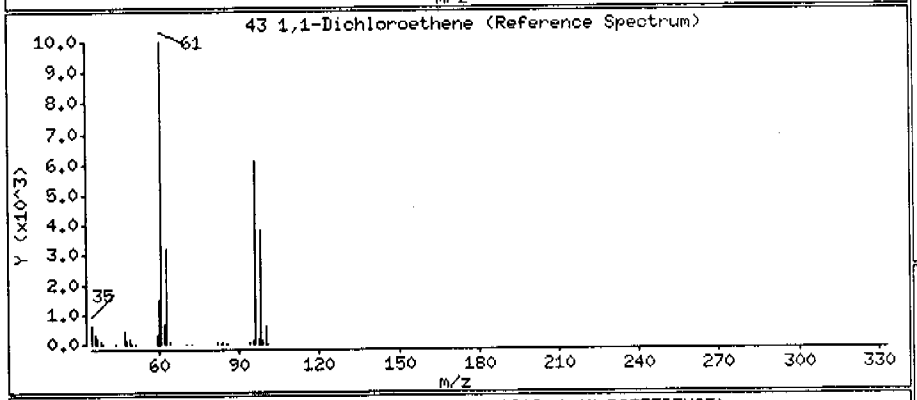
Concentration: 1.382 PPBV

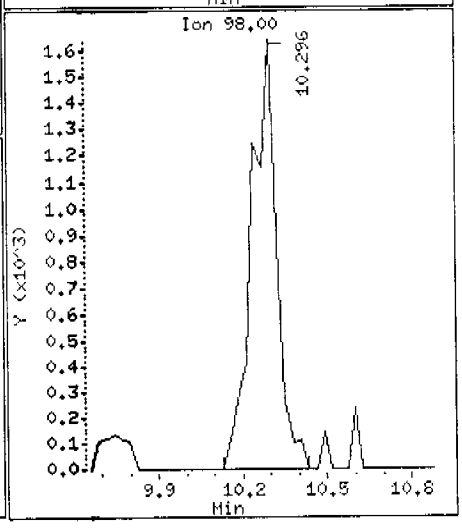


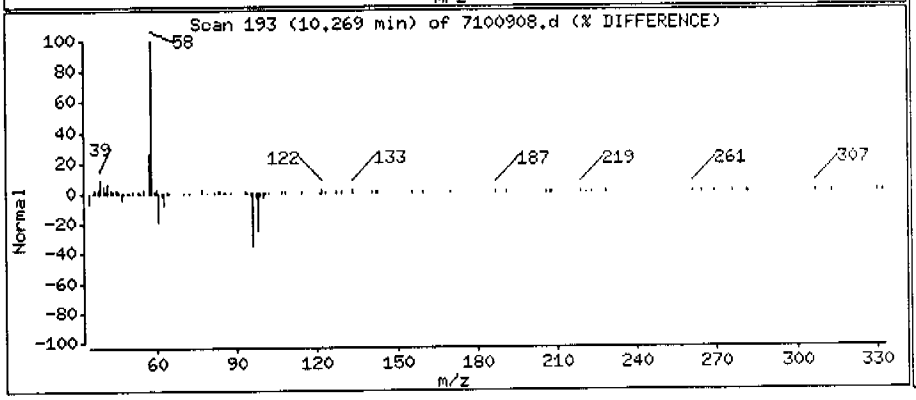












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

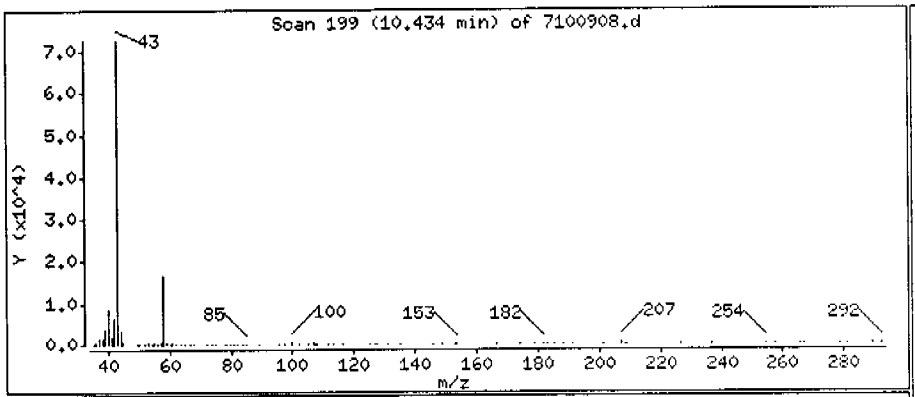
Operator: ra

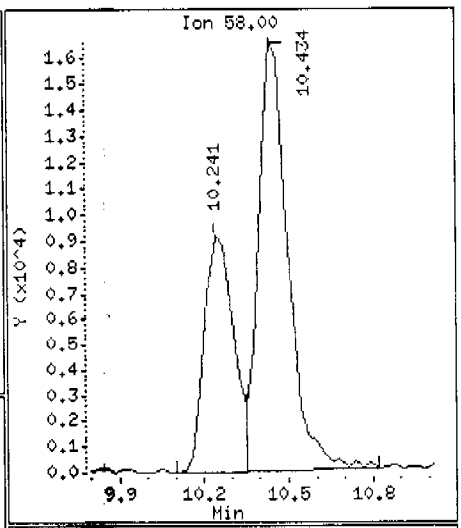
Column phase: RTx-624

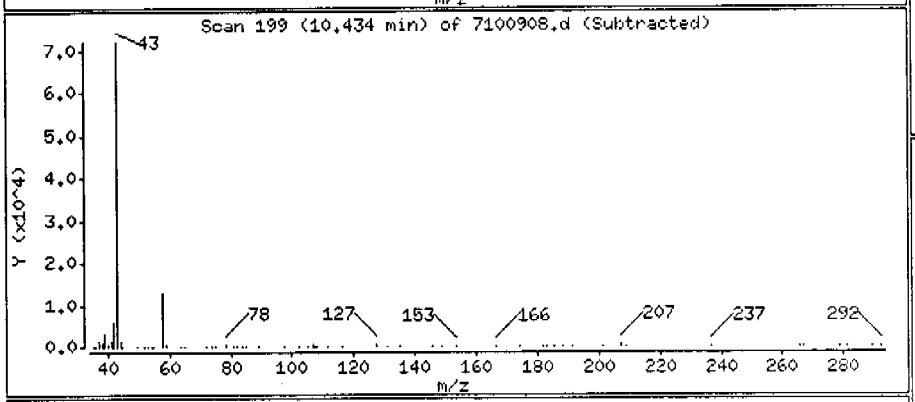
Column diameter: 0.53

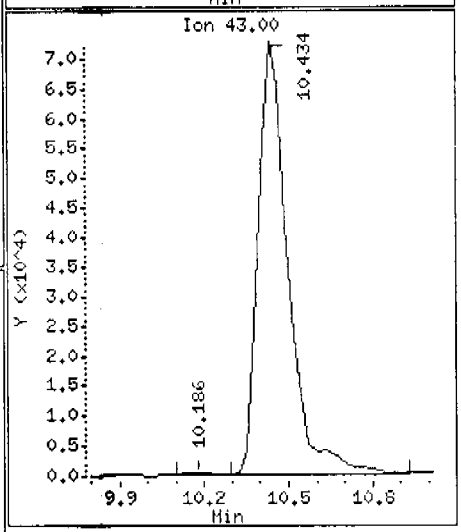
45 Acetone

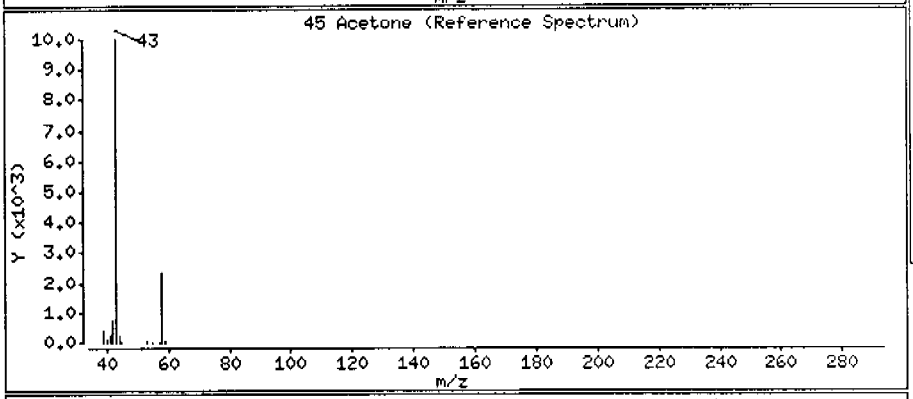
Concentration: 13.923 PPBV

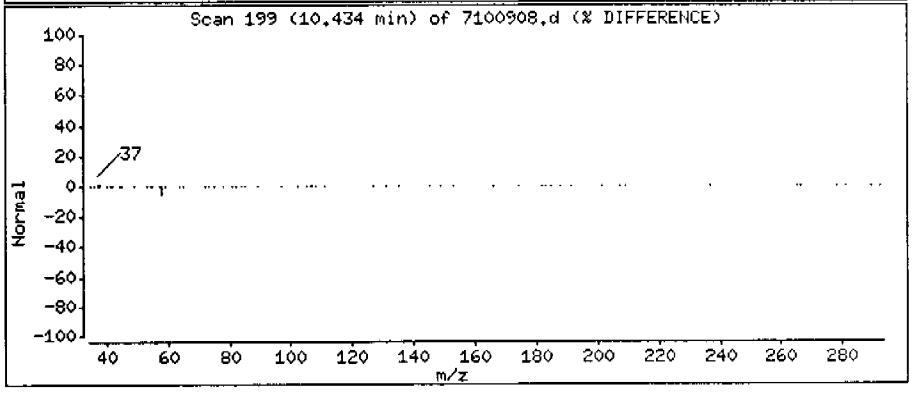












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

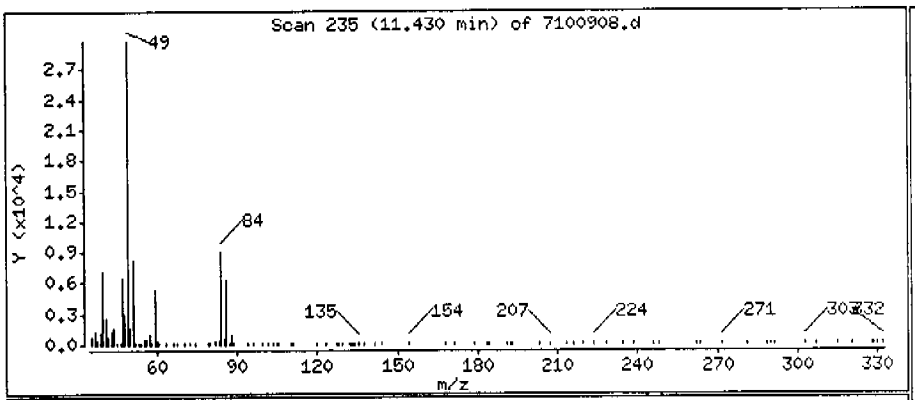
Operator: ra

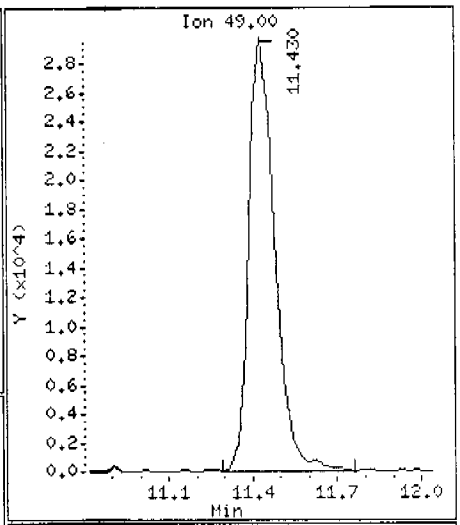
Column phase: RTx-624

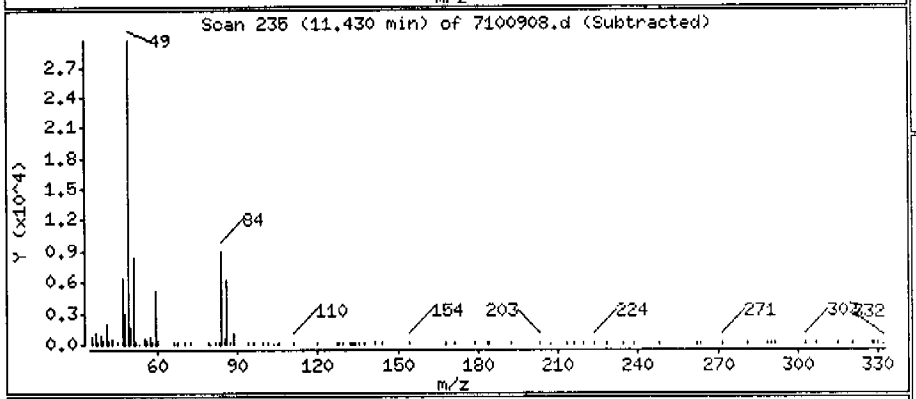
Column diameter: 0.53

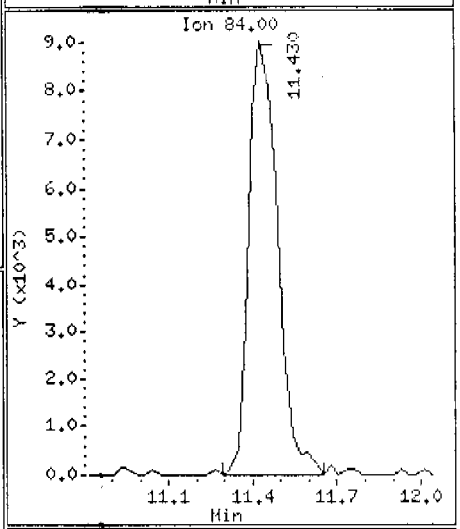
54 Methylene Chloride

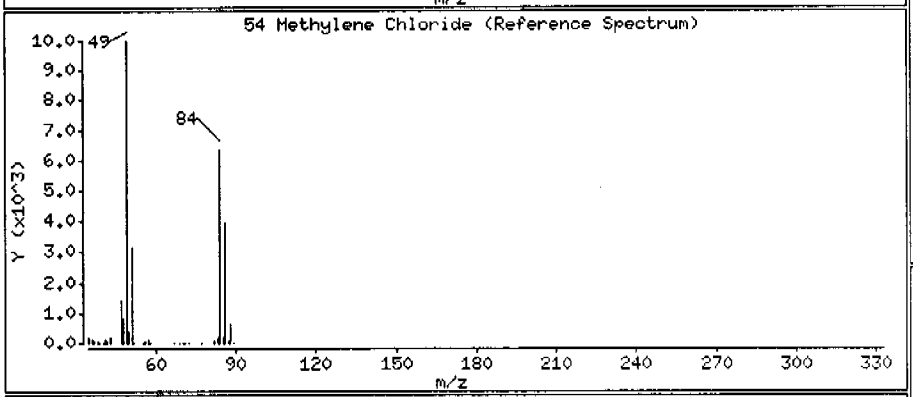
Concentration: 6.848 PPBV

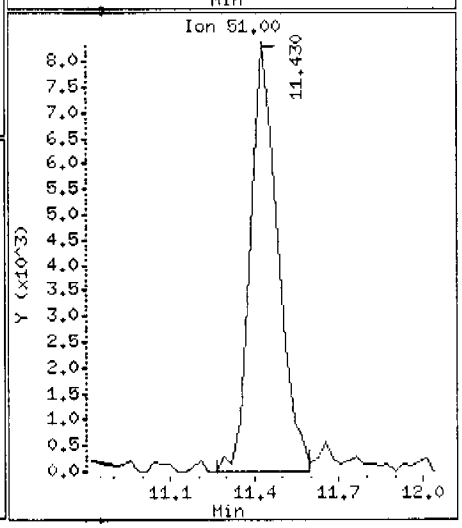


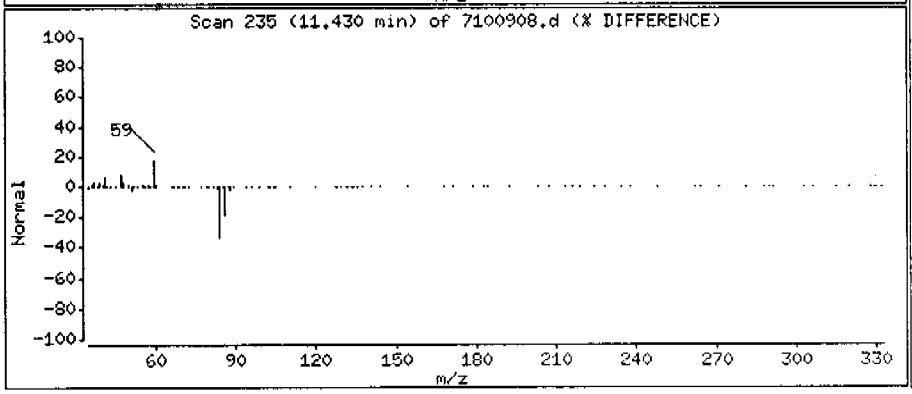












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Sample Info: 200mL #5723

Instrument: msd7.i

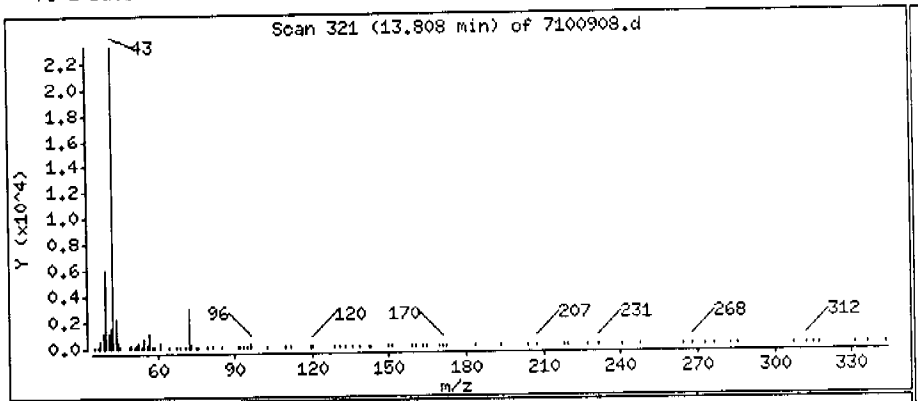
Operator: ra

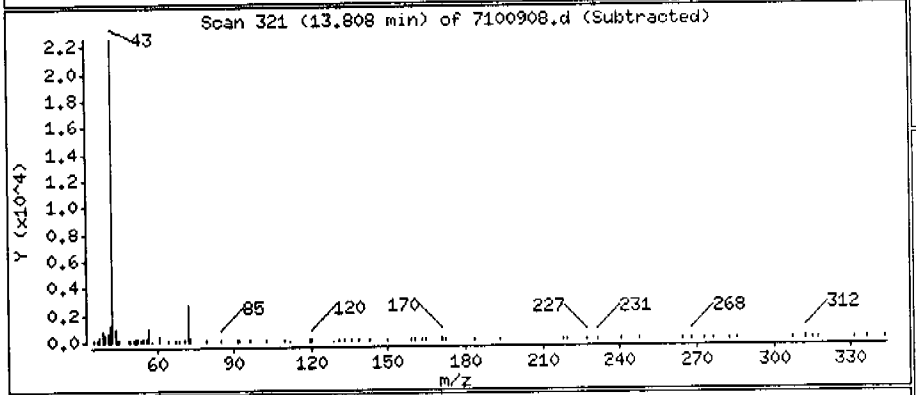
Column phase: RTx-624

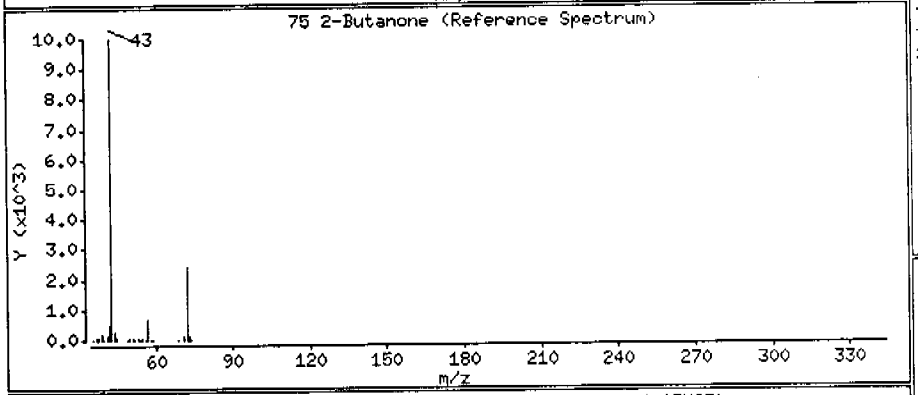
Column diameter: 0.53

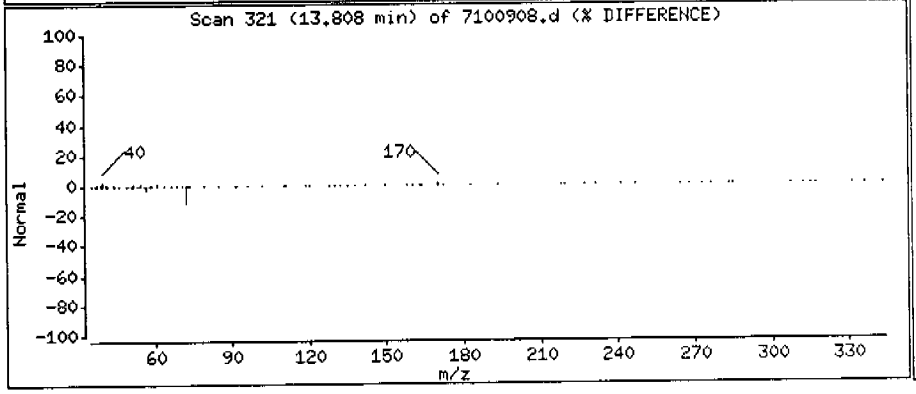
75 2-Butanone

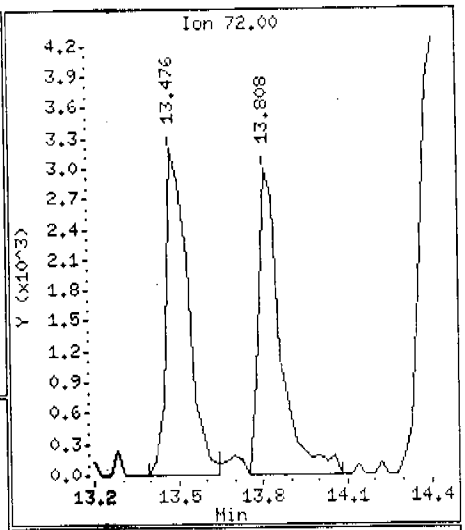
Concentration: 2.726 PPBV

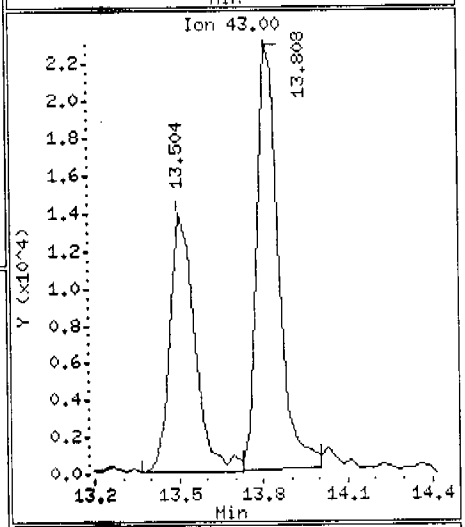


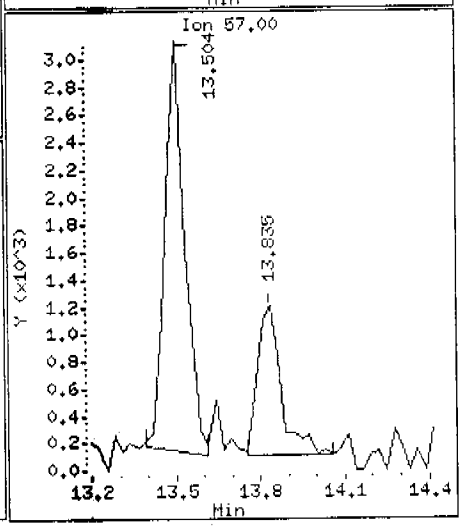












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

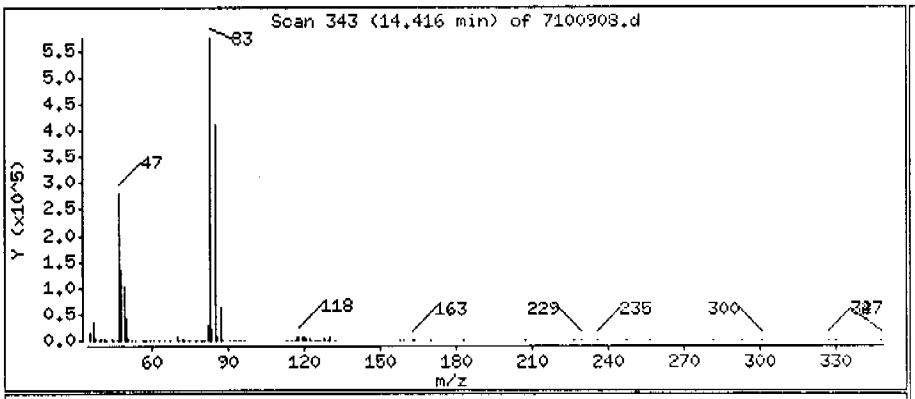
Operator: ra

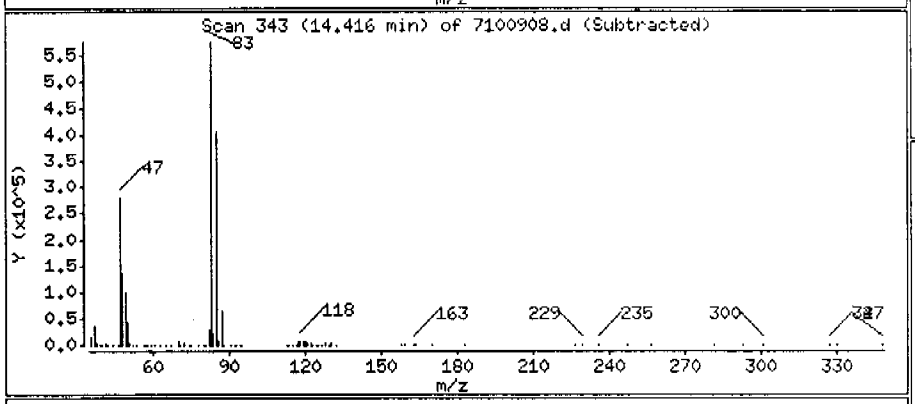
Column phase: RTx-624

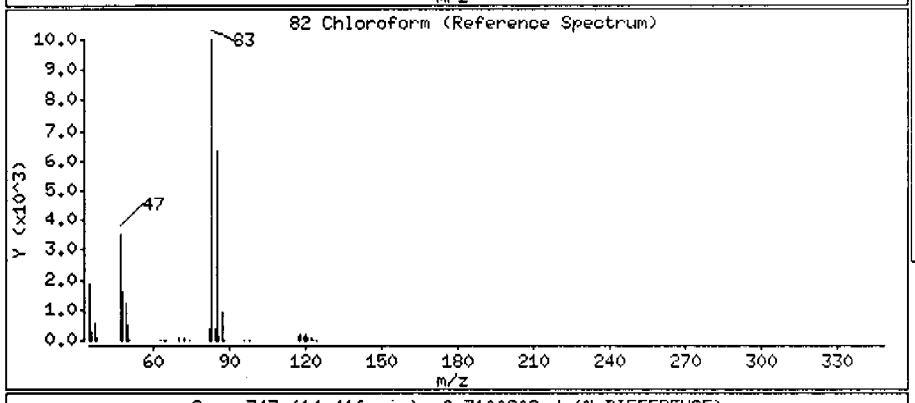
Column diameter: 0.53

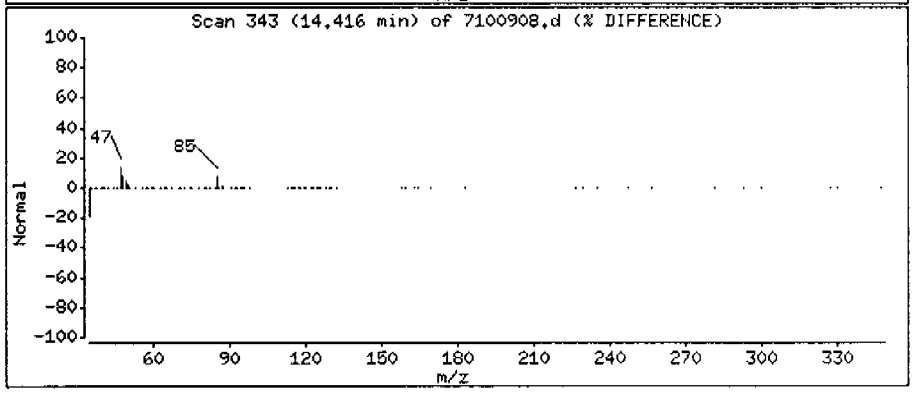
82 Chloroform

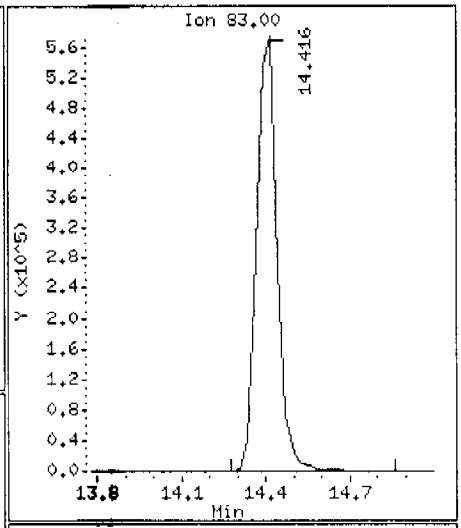
Concentration: 112.93 PPBV

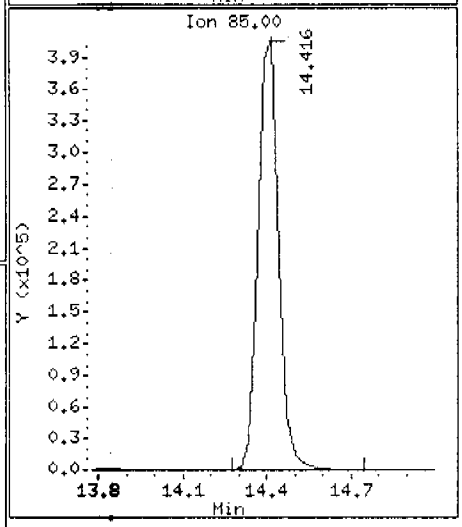












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Sample Info: 200mL #5723

Instrument: msd7.i

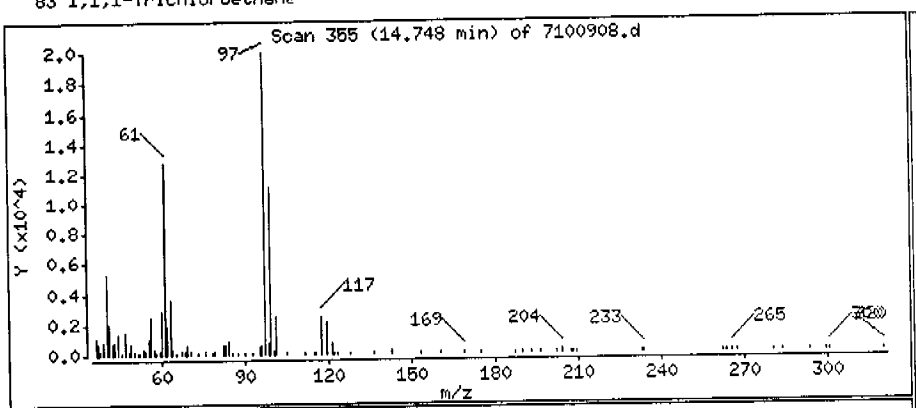
Operator: ra

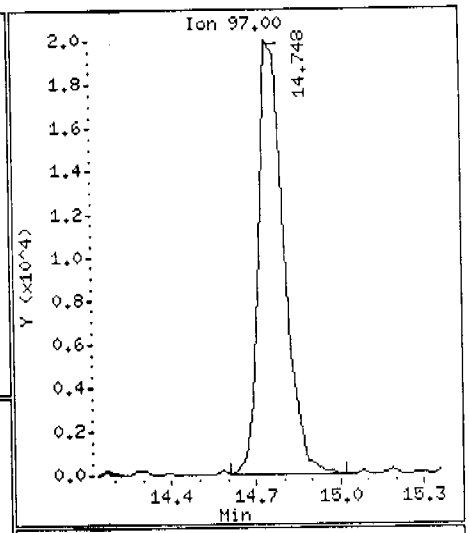
Column phase: RTx-624

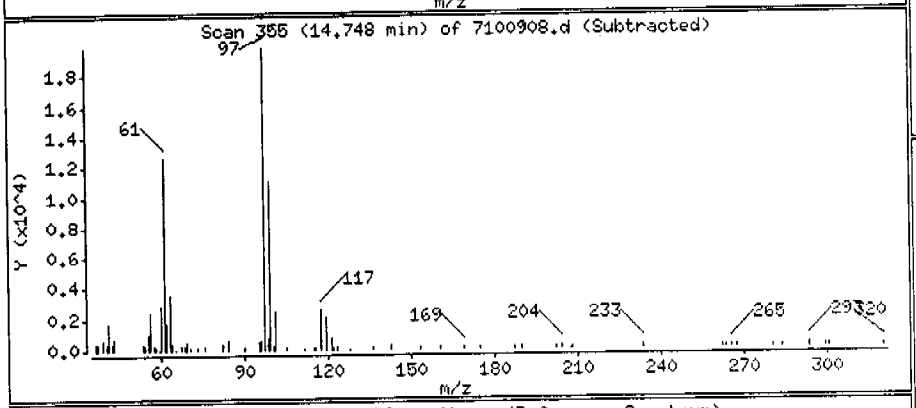
Column diameter: 0.53

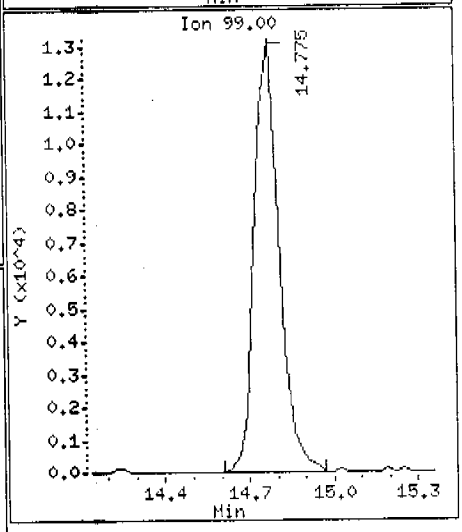
83 1,1,1-Trichloroethane

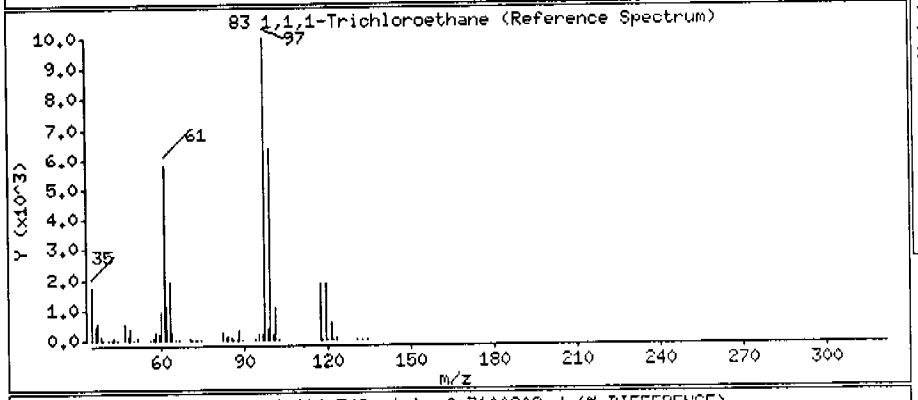
Concentration: 4.726 PPBV

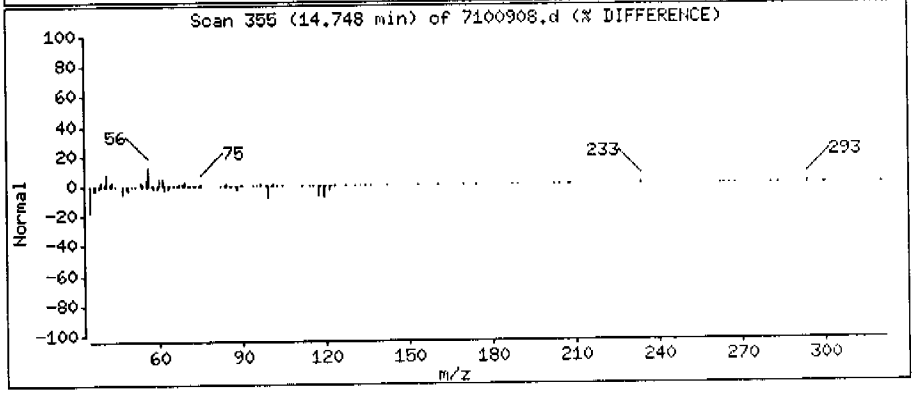












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

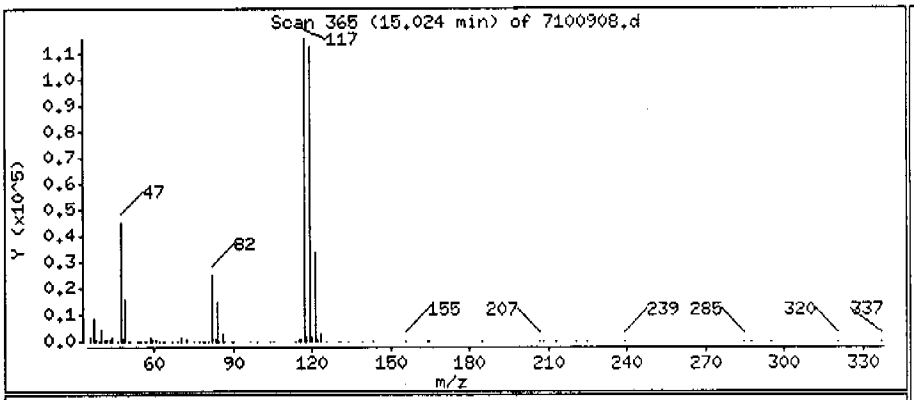
Operator: ra

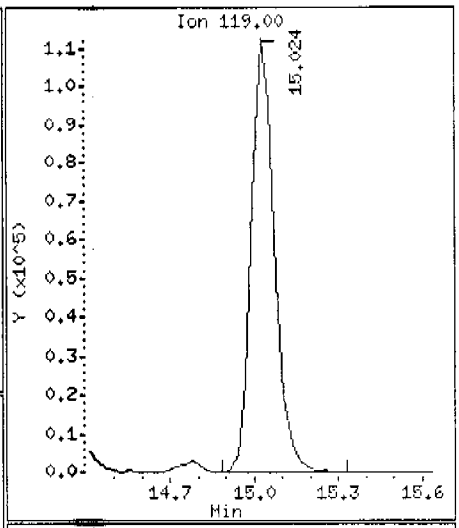
Column phase: RTx-624

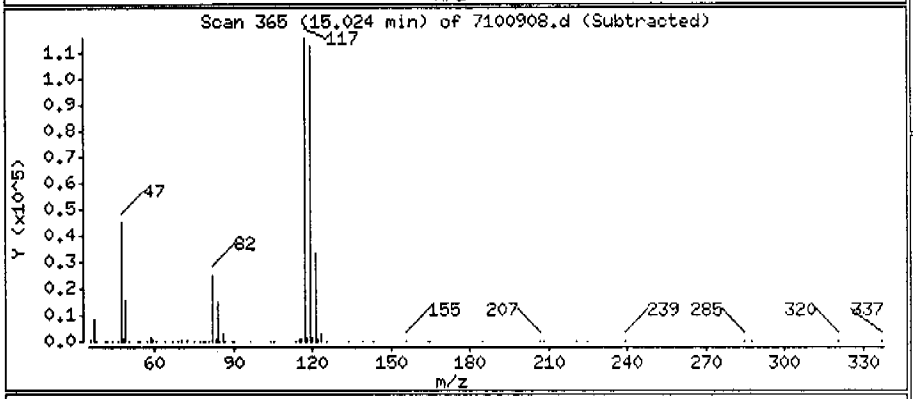
Column diameter: 0.53

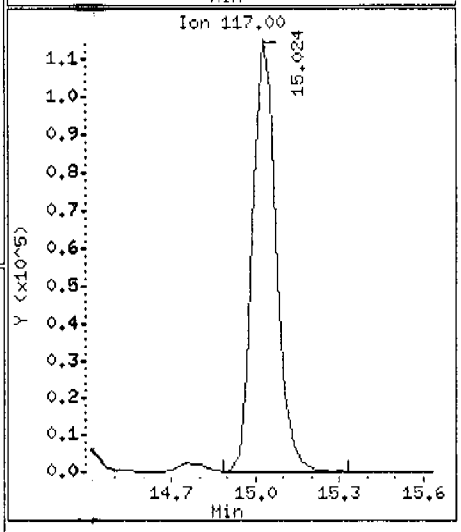
87 Carbon Tetrachloride

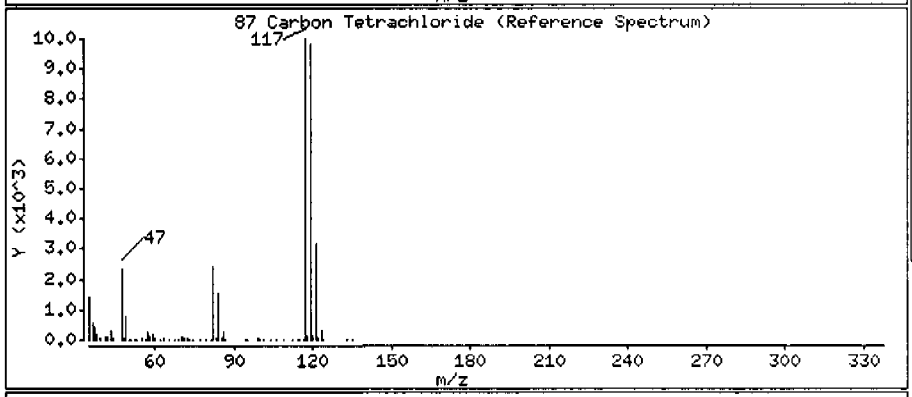
Concentration: 21.356 PPBV

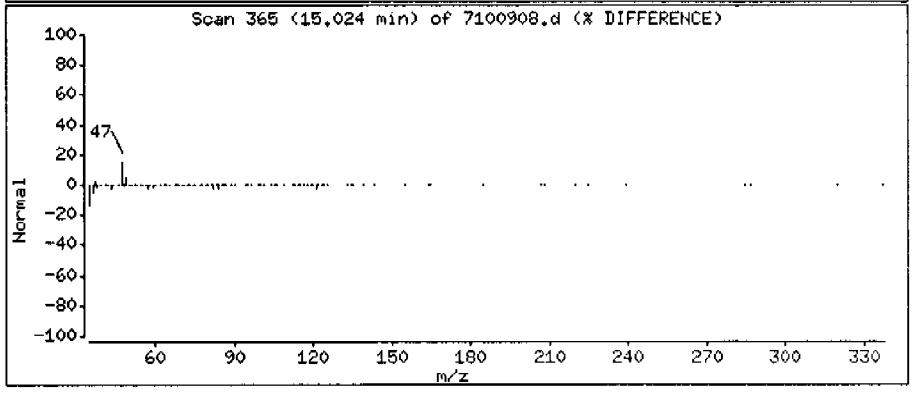












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Sample Info: 200mL #5723

Instrument: msd7.i

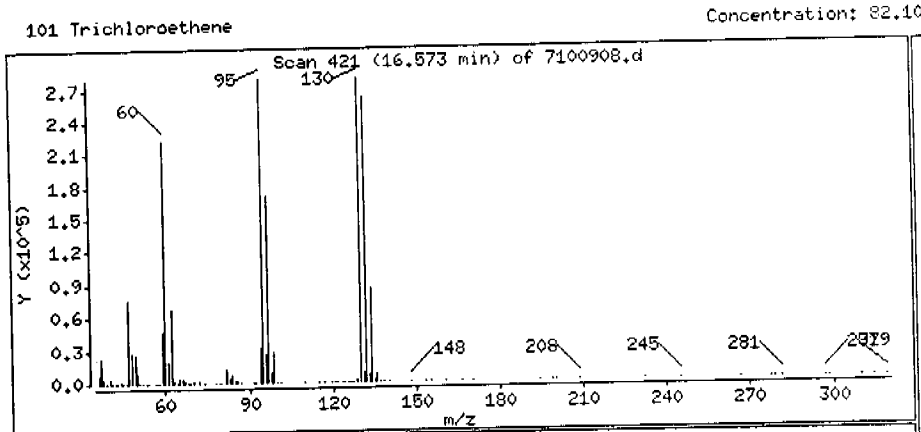
Operator: ra

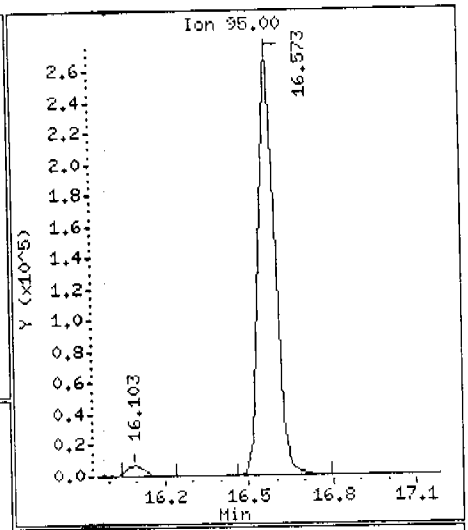
Column phase: RTx-624

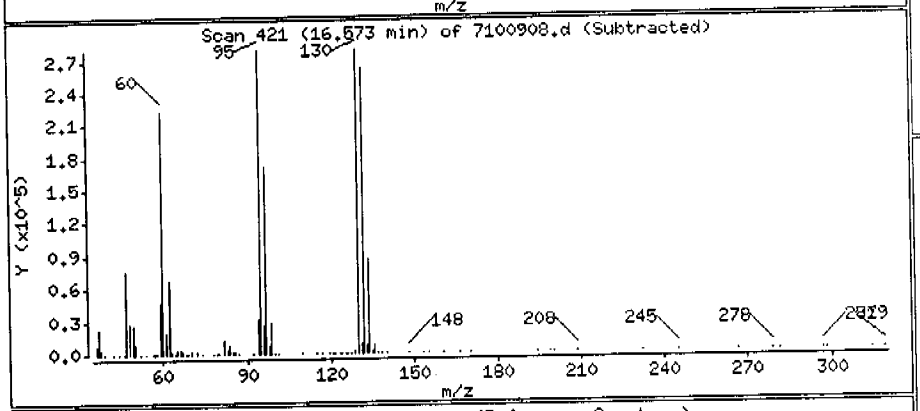
Column diameter: 0.53

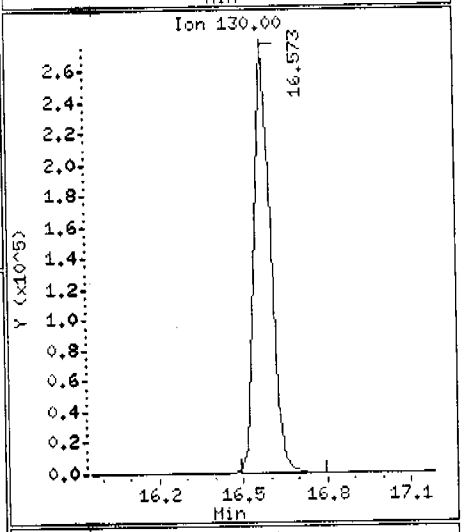
Concentration: 82.108 PPBV

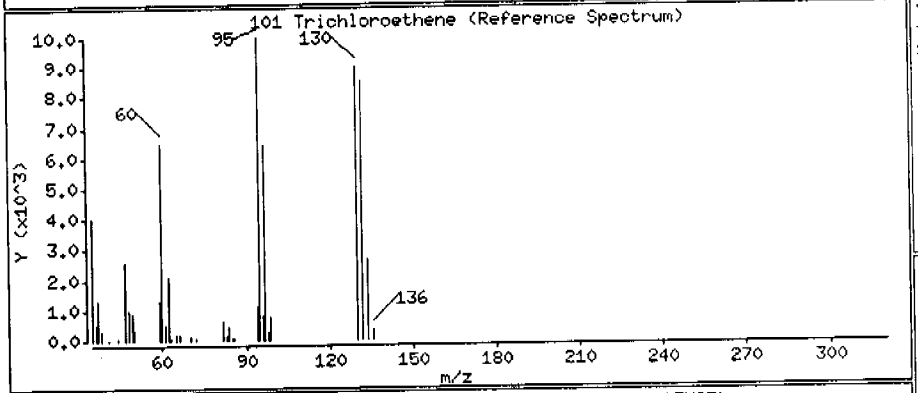
101 Trichloroethene

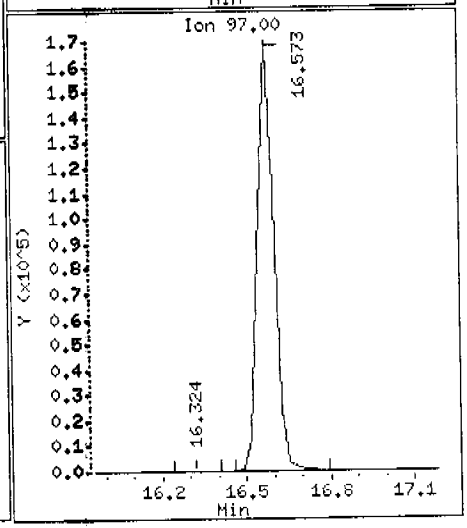


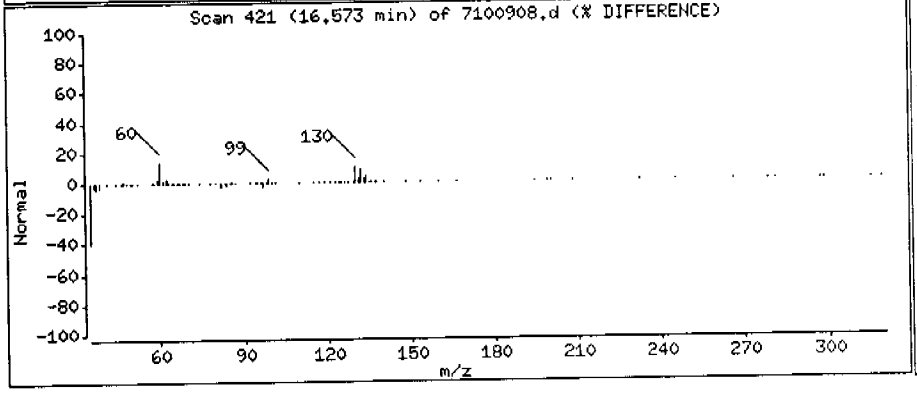












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Sample Info: 200mL #5723

Instrument: msd7.i

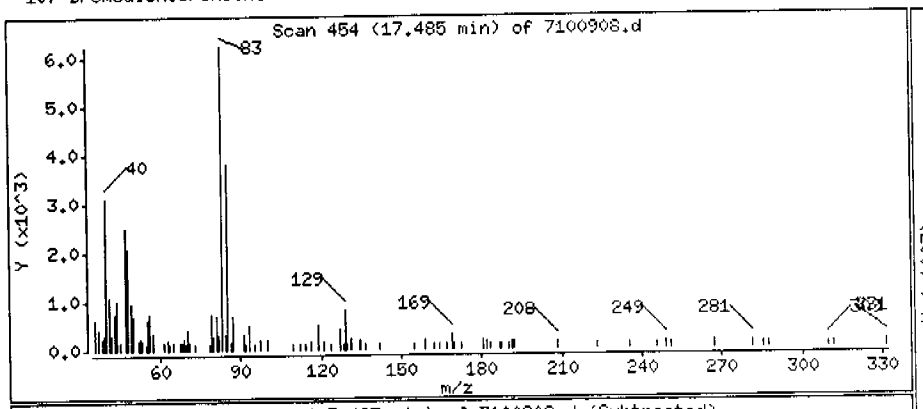
Operator: ra

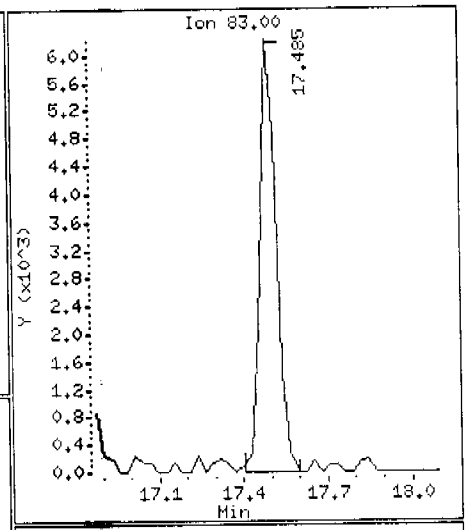
Column phase: RTx-624

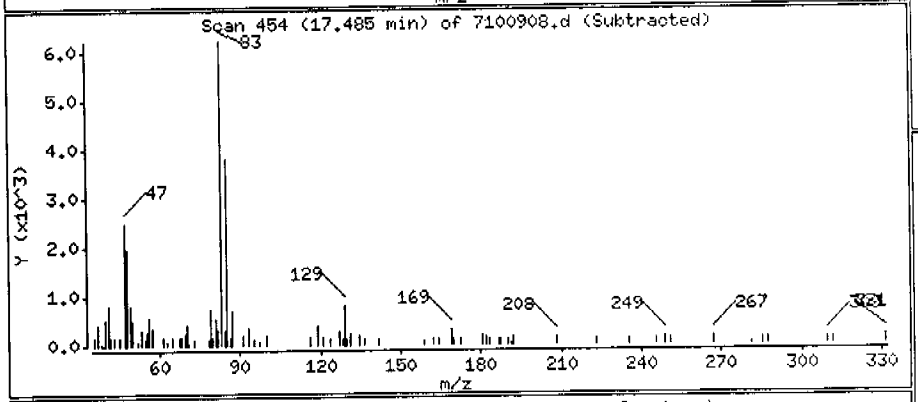
Column diameter: 0.53

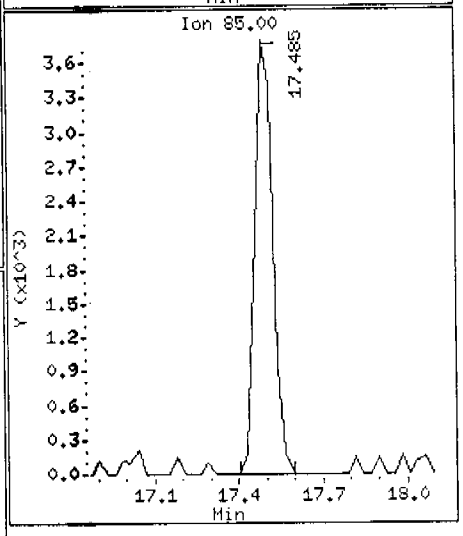
107 Bromodichloromethane

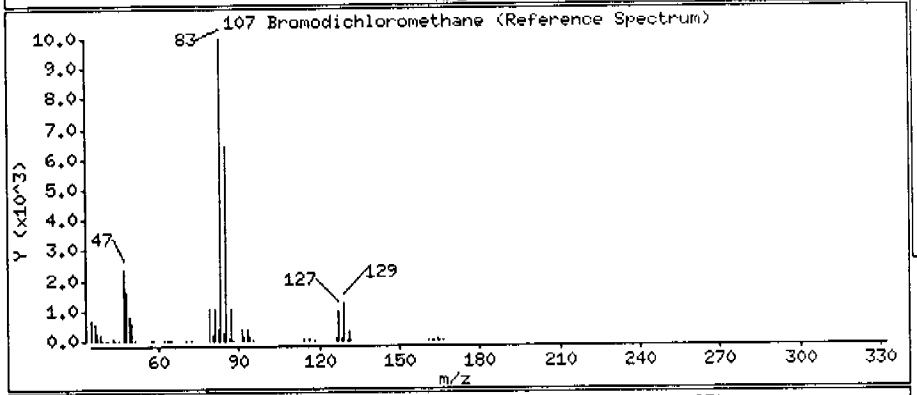
Concentration: 1.048 PPBV

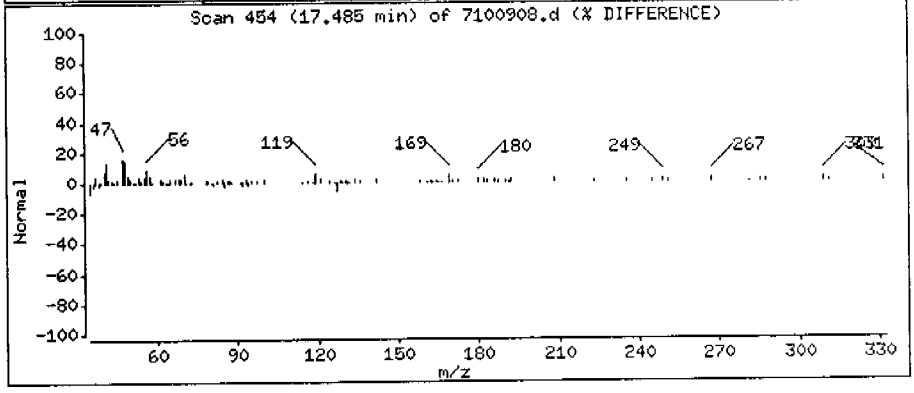












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

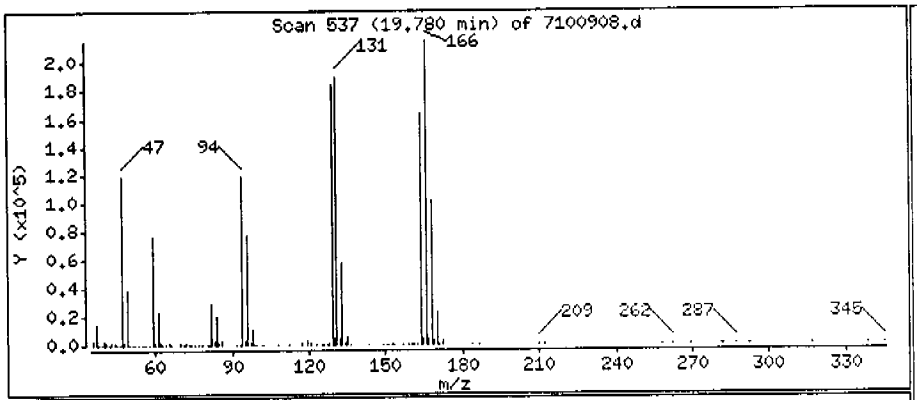
Operator: ra

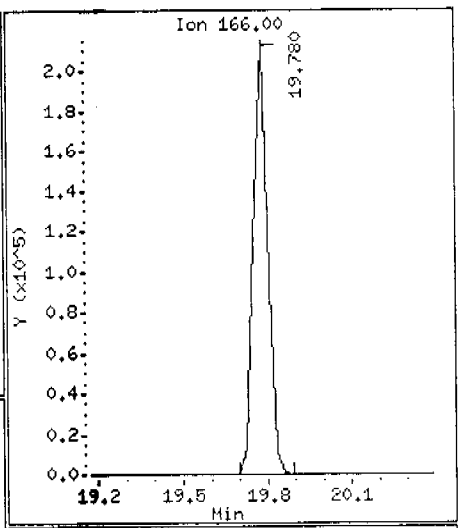
Column phase: RTx-624

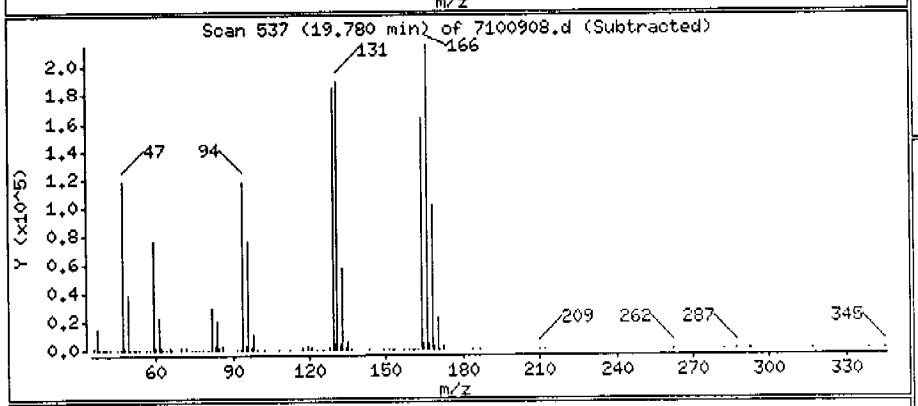
Column diameter: 0.53

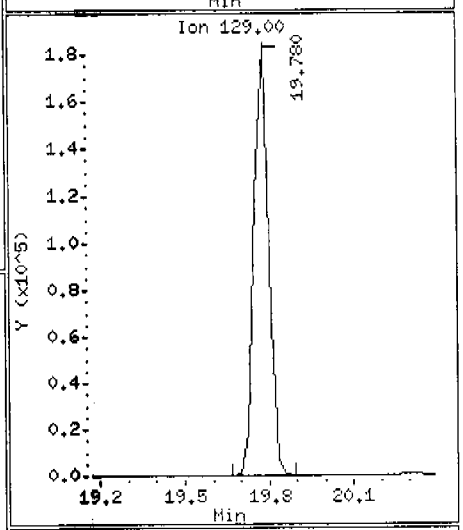
120 Tetrachloroethene

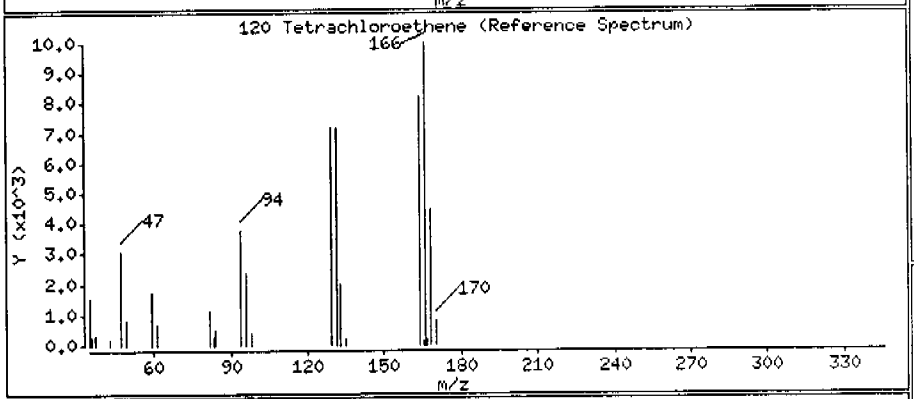
Concentration: 44.372 PPBV

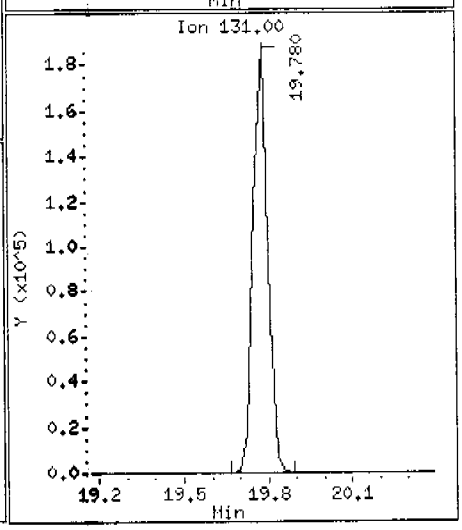


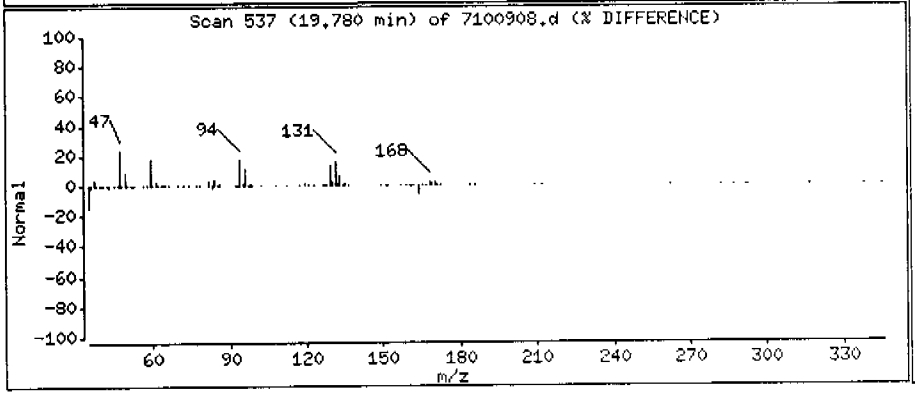












Data File: /chem/msd7.i/09oct08.b/7100908.d

Date : 09-OCT-2008 14:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5723

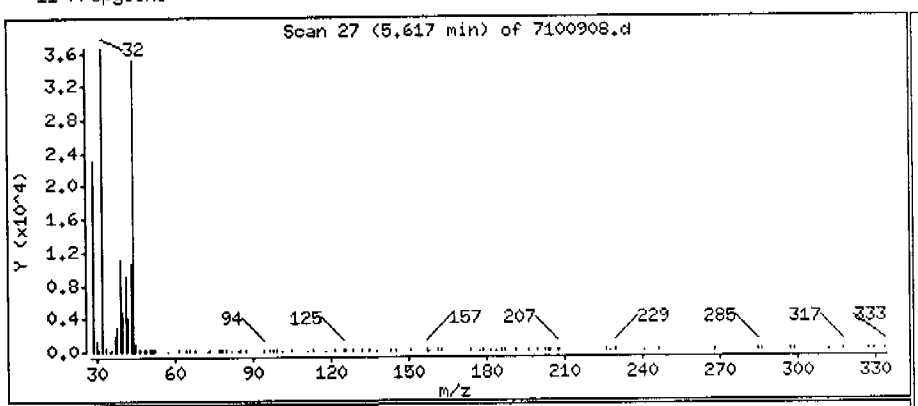
Operator: ra

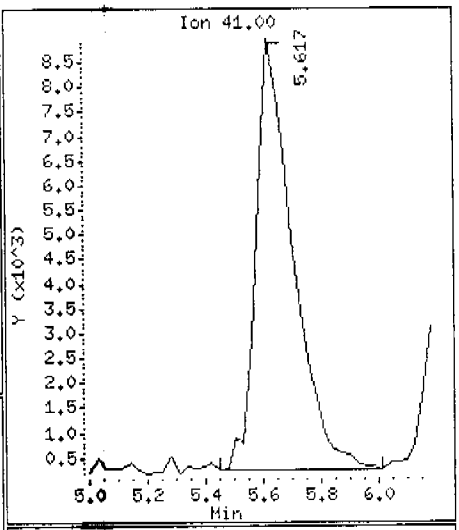
Column phase: RTx-624

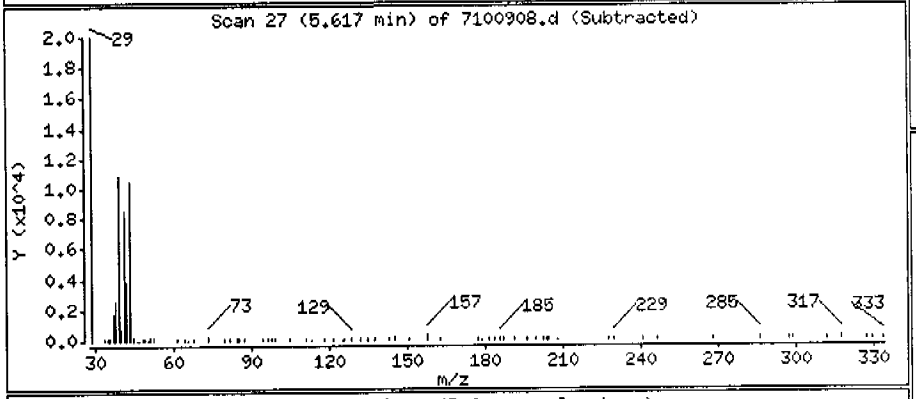
Column diameter: 0.53

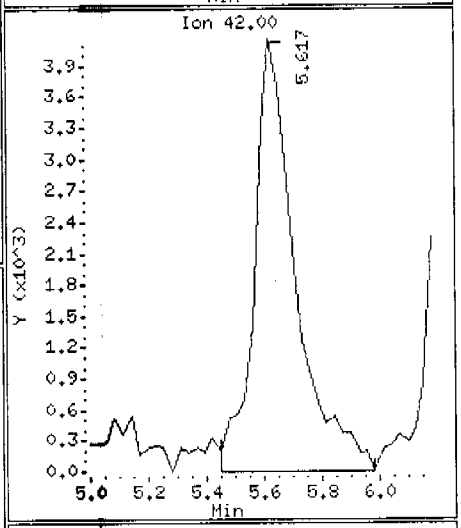
11 Propylene

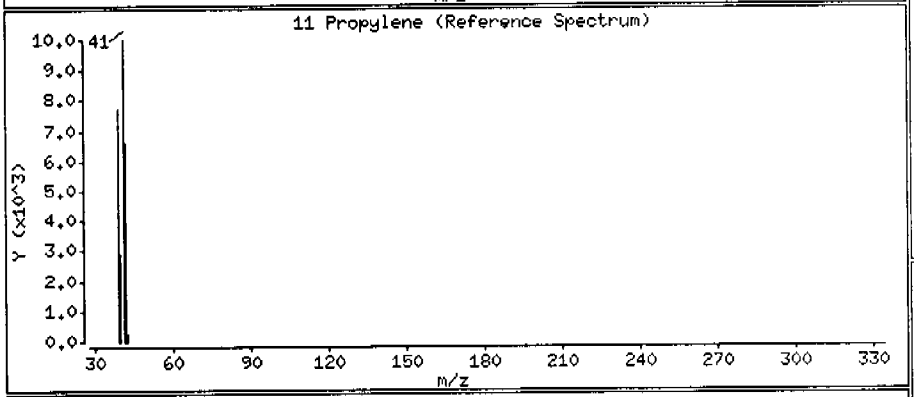
Concentration: 4.914 PPBV

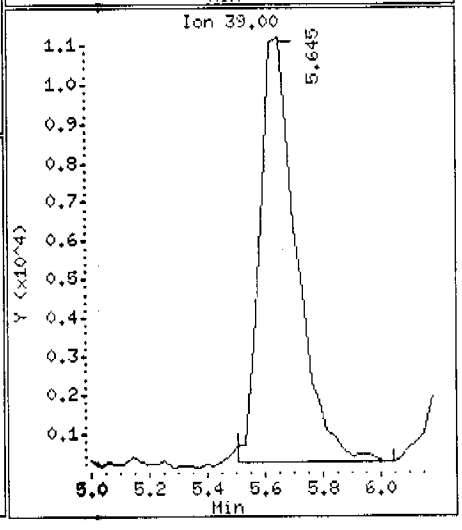


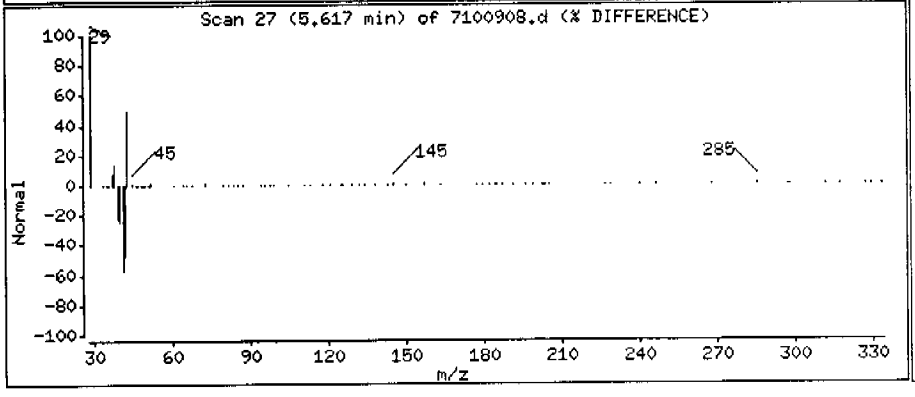












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14820

Lab ID#: 0809614-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.0	1.4	5.0	7.1
Freon 113	1.0	3.7	7.7	29
1,1-Dichloroethene	1.0	2.8	4.0	11
Acetone	4.0	4.6	9.5	11
Methylene Chloride	1.0	14	3.5	49
Chloroform	1.0	120	4.9	580
1,1,1-Trichloroethane	1.0	5.2	5.5	28
Carbon Tetrachloride	1.0	45	6.3	280
Trichloroethene	1.0	110	5.4	600
Tetrachloroethene	1.0	34	6.8	230
Propylene	4.0	7.7	6.9	13

0152

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14820

Lab ID#: 0809614-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100909	**Date of Collection:**	9/25/08
Dil. Factor:	2.01	**Date of Analysis:**	10/9/08 03:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.0	1.4	5.0	7.1
Freon 114	1.0	Not Detected	7.0	Not Detected
Chloromethane	4.0	Not Detected	8.3	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
Bromomethane	1.0	Not Detected	3.9	Not Detected
Chloroethane	1.0	Not Detected	2.6	Not Detected
Freon 11	1.0	Not Detected	5.6	Not Detected
Ethanol	4.0	Not Detected	7.6	Not Detected
Freon 113	1.0	3.7	7.7	29
1,1-Dichloroethene	1.0	2.8	4.0	11
Acetone	4.0	4.6	9.5	11
2-Propanol	4.0	Not Detected	9.9	Not Detected
Carbon Disulfide	1.0	Not Detected	3.1	Not Detected
Methylene Chloride	1.0	14	3.5	49
Methyl tert-butyl ether	1.0	Not Detected	3.6	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Hexane	1.0	Not Detected	3.5	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.0	Not Detected	3.0	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	120	4.9	580
1,1,1-Trichloroethane	1.0	5.2	5.5	28
Cyclohexane	1.0	Not Detected	3.4	Not Detected
Carbon Tetrachloride	1.0	45	6.3	280
Benzene	1.0	Not Detected	3.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
Heptane	1.0	Not Detected	4.1	Not Detected
Trichloroethene	1.0	110	5.4	600
1,2-Dichloropropane	1.0	Not Detected	4.6	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
Bromodichloromethane	1.0	Not Detected	6.7	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Tetrachloroethene	1.0	34	6.8	230

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14820

Lab ID#: 0809614-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100909	Date of Collection:	9/25/08
Dil. Factor:	2.01	Date of Analysis:	10/9/08 03:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	4.0	Not Detected	16	Not Detected
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.7	Not Detected
Chlorobenzene	1.0	Not Detected	4.6	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected
4-Ethyltoluene	1.0	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected
Chlorodifluoromethane	4.0	Not Detected	14	Not Detected
Methanol	100	Not Detected	130	Not Detected
n-Butanol	4.0	Not Detected	12	Not Detected
Propylene	4.0	7.7	6.9	13

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	95	70-130

0154

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100909.d
Lab Smp Id: 0809614-07A
Inj Date : 09-OCT-2008 15:00
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #34765
Misc Info : 10.0"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 2.01000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	359978	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	272185			28.92- 128.92	75.61
14.333	14.333 (1.000)	49	1435325			320.90- 420.90	398.73
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1088365	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	190244			0.00- 67.10	17.48
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1192562	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	600042			1.24- 101.24	50.32
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	641372	23.5872	23.587	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	283617			0.00- 97.37	44.22
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1052416	25.2603	25.260	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	145527			0.00- 63.85	13.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	825923			26.51- 126.51	78.48
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	582343	23.7307	23.731	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	820684			92.62- 192.62	140.93
23.291	23.291 (1.093)	176	546380			44.03- 144.03	93.82
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	63913	0.71821	1.444	80.00- 120.00	100.00
5.786	5.729 (0.404)	87	23099			0.00- 81.85	36.14
42 Freon 113					CAS #: 76-13-1		
10.186	10.158 (0.711)	151	66126	1.86226	3.743	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	41453			12.55- 112.55	62.69
10.158	10.158 (0.709)	101	100044			98.99- 198.99	151.29
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.296	10.269 (0.718)	61	87029	1.40941	2.833	80.00- 120.00	100.00
10.296	10.269 (0.718)	96	29679			0.00- 87.74	34.10
10.296	10.269 (0.718)	98	19360			0.00- 73.80	22.25
45 Acetone					CAS #: 67-64-1		
10.462	10.407 (0.730)	58	39626	2.27341	4.570	80.00- 120.00	100.00
10.462	10.407 (0.730)	43	163063			340.42- 440.42	411.50
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	378293	7.00283	14.076	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	126278			0.00- 84.42	33.38
11.430	11.430 (0.797)	51	107489			0.00- 80.54	28.41
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2979408	59.5418	119.68	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	2132448			21.17- 121.17	71.57
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	131762	2.57897	5.184	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	84544			13.83- 113.83	64.16
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	1314030	22.5235	45.272	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	1385600			55.68- 155.68	105.45
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1410106	55.5469	111.65	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1444204			52.48- 152.48	102.42

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)								
16.573	16.573	(1.029)	97	878535			14.44- 114.44	62.30
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	537295	16.6762	33.519	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	463818			35.87- 135.87	86.32
19.780	19.780	(0.929)	131	457465			35.33- 135.33	85.14
11 Propylene						CAS #: 115-07-1		
5.645	5.589	(0.394)	41	118259	3.85281	7.744	80.00- 120.00	100.00
5.645	5.589	(0.394)	42	55762			16.57- 116.57	47.15
5.617	5.589	(0.392)	39	150488			28.60- 128.60	127.25

Data File: /chem/msd7.i/09oct08.b/7100909.d
Report Date: 11-Oct-2008 08:13

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100909.d
Lab Smp Id: 0809614-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 10.0"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	359978	-0.58
97 1,4-Difluorobenze	1146510	687906	1605114	1088365	-5.07
126 Chlorobenzene-d5	1241713	745028	1738398	1192562	-3.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100909.d
Report Date: 11-Oct-2008 08:13

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-07A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 10.0"psi-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.587	94.35	70-130
$ 113 Toluene-d8	25.000	25.260	101.04	70-130
$ 137 Bromofluorobenzene	25.000	23.731	94.92	70-130

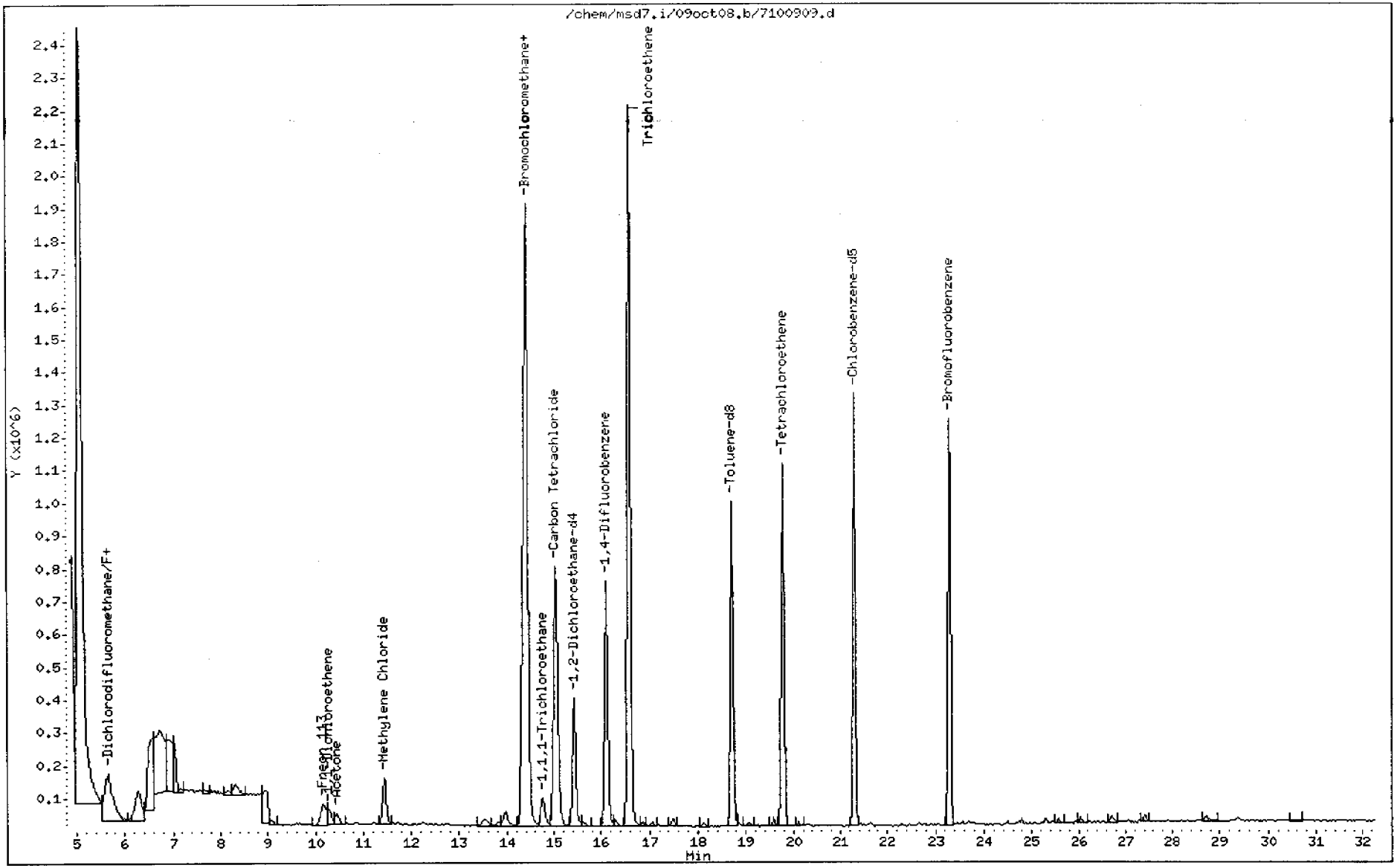
0160

Data File: /chem/msd7.i/09oct08.b/7100909.d
Date : 09-OCT-2008 15:00
Client ID:
Sample Info: 200mL #34765

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Sample Info: 200mL #34765

Instrument: msd7.i

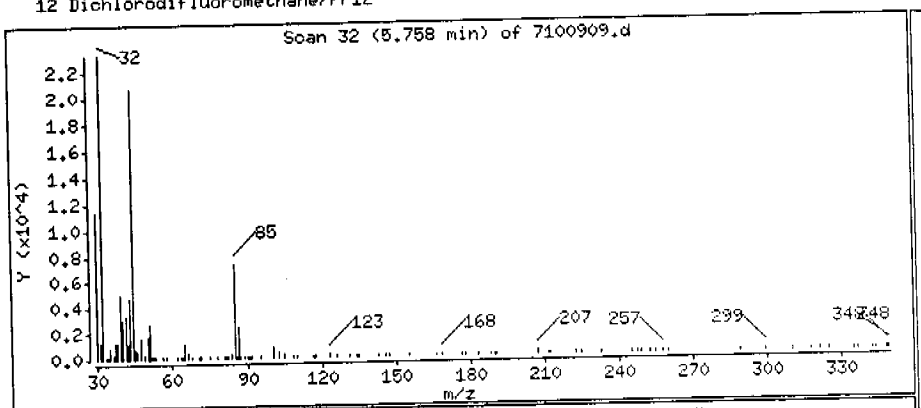
Operator: ra

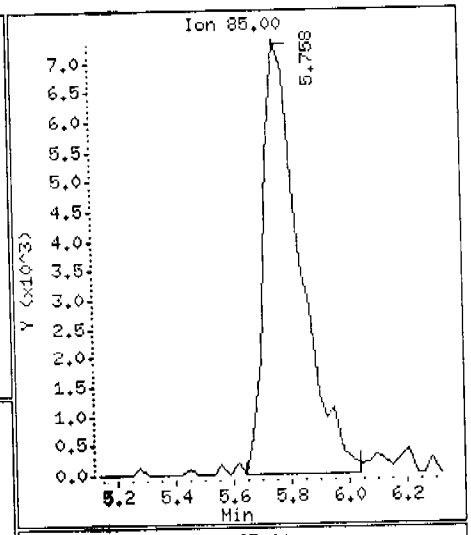
Column phase: RTx-624

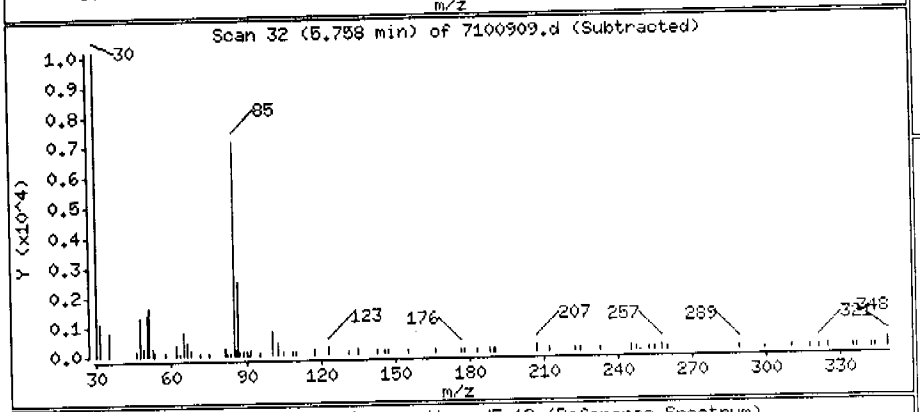
Column diameter: 0.53

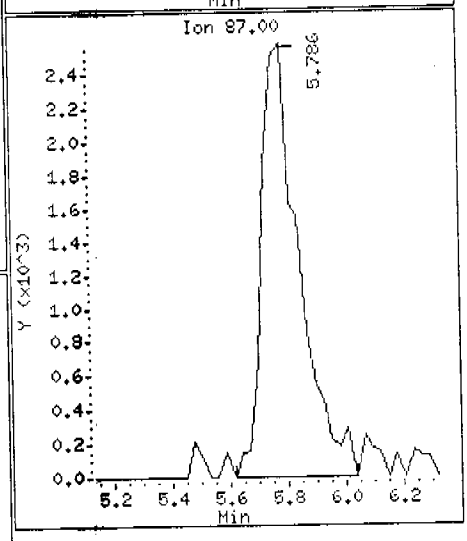
12 Dichlorodifluoromethane/Fr12

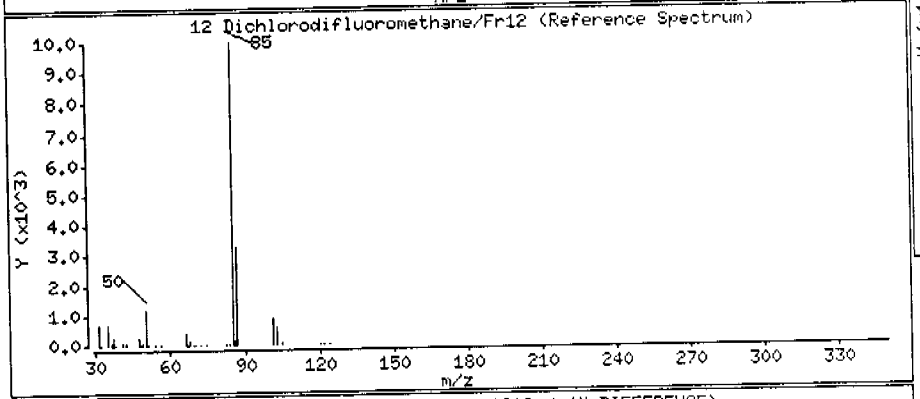
Concentration: 1.444 PPBV

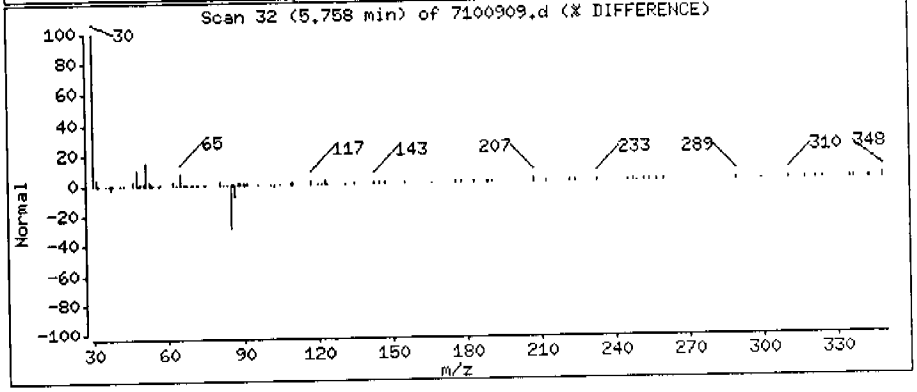












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34765

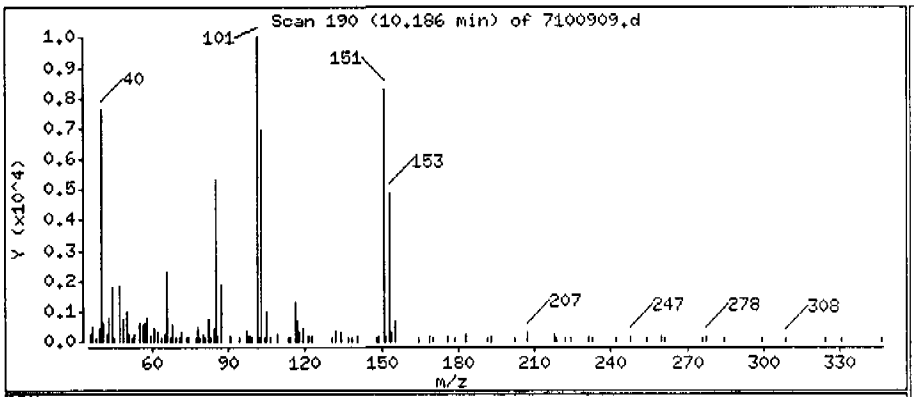
Operator: ra

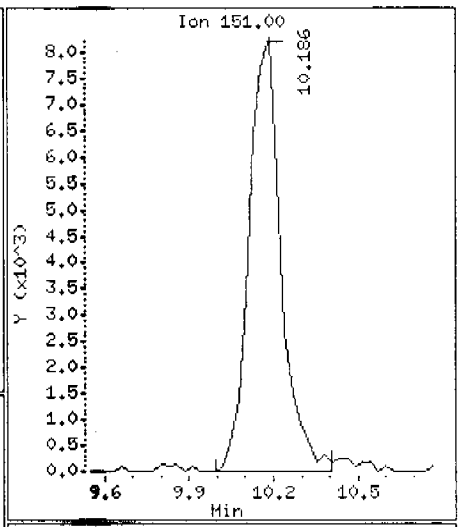
Column phase: RTx-624

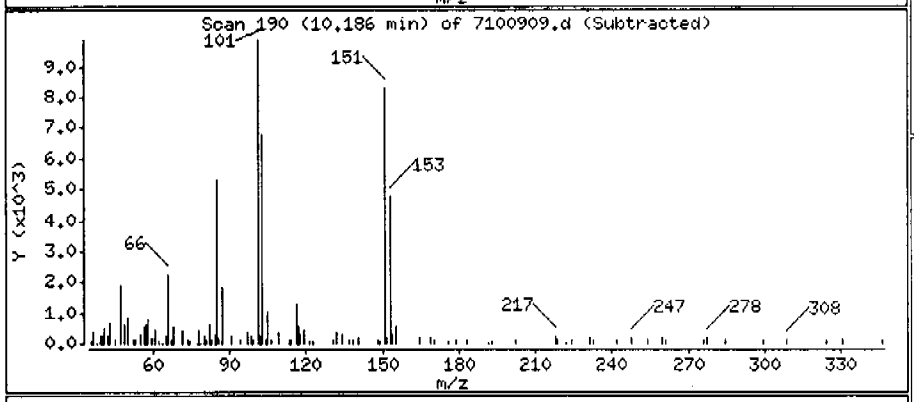
Column diameter: 0.53

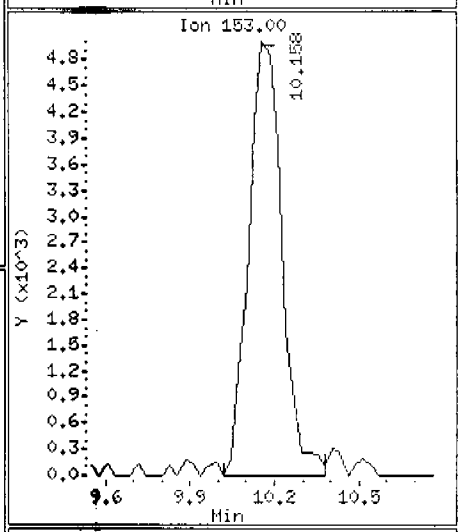
42 Freon 113

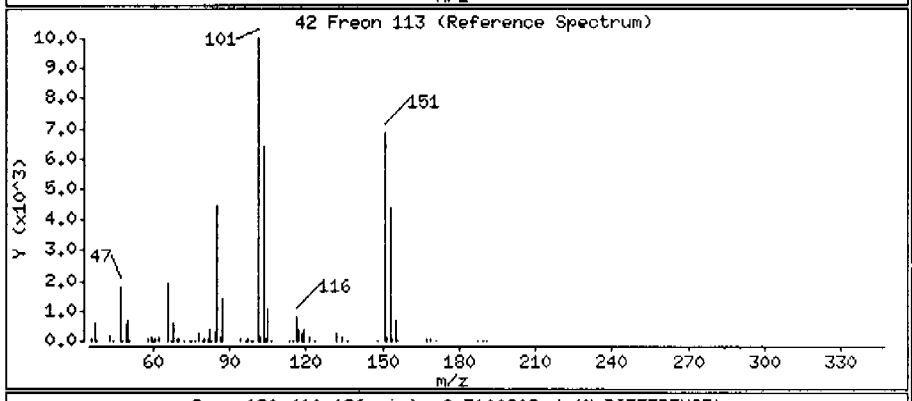
Concentration: 3.743 PPBV

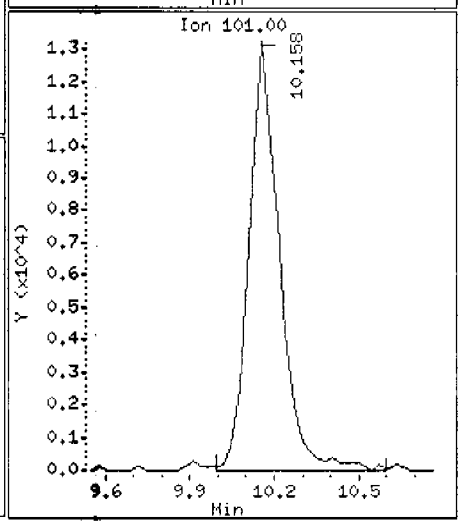


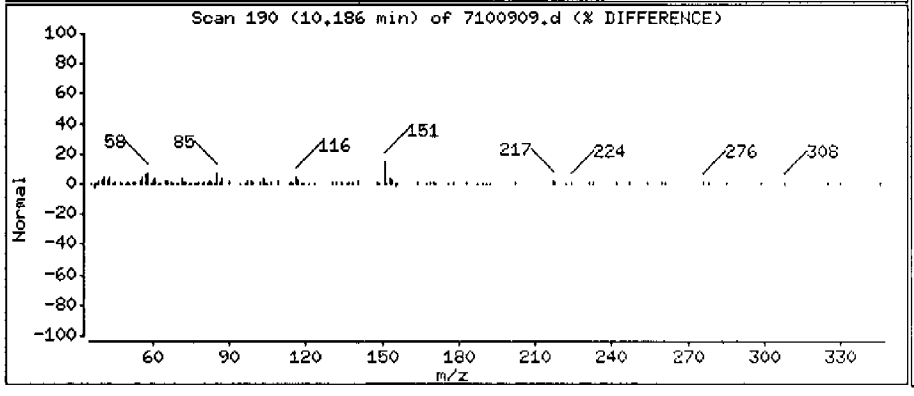












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34765

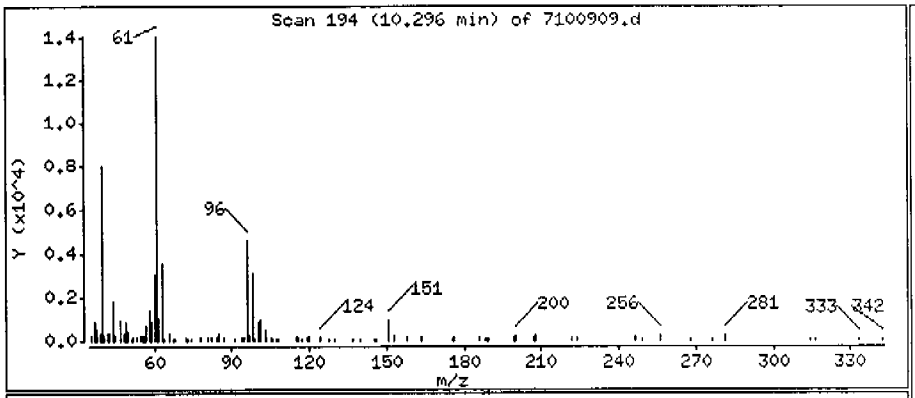
Operator: ra

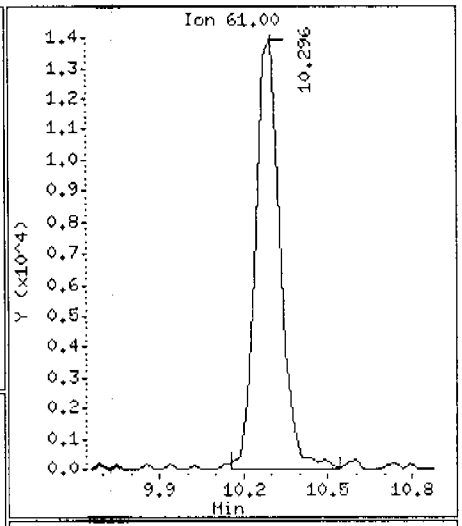
Column phase: RTx-624

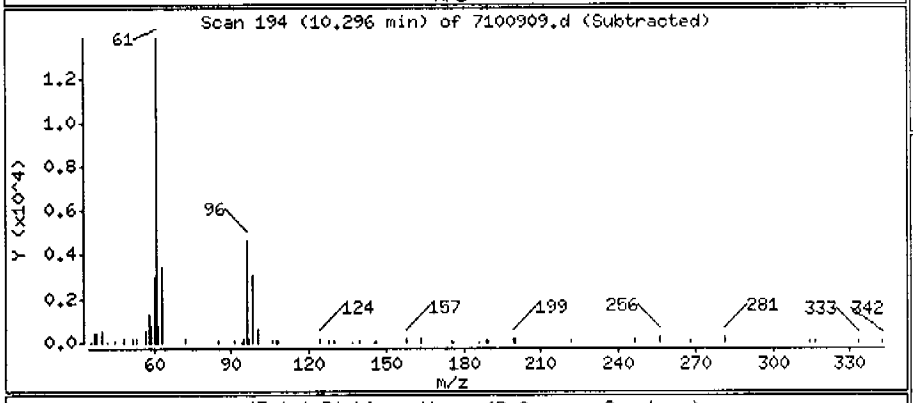
Column diameter: 0.53

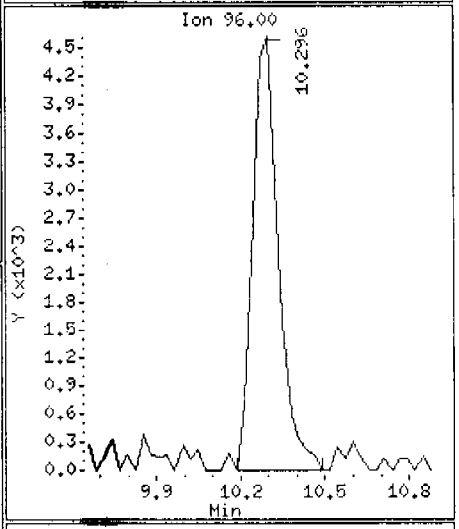
43 1,1-Dichloroethene

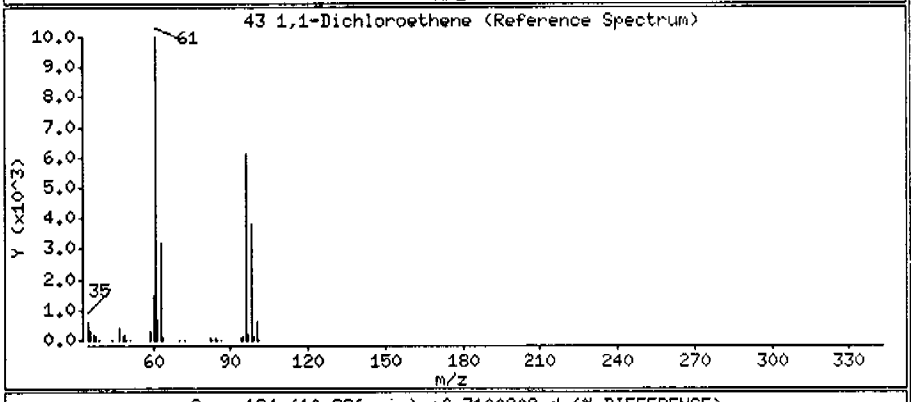
Concentration: 2.833 PPBV

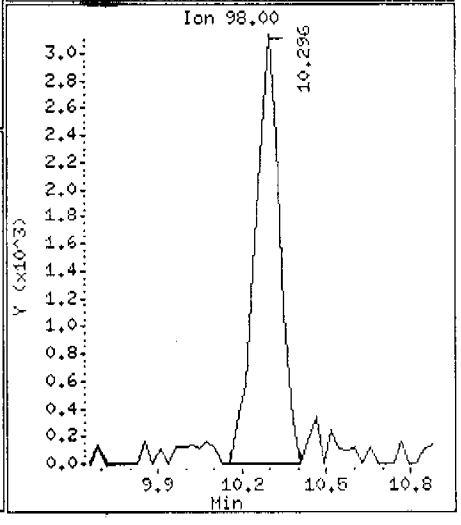


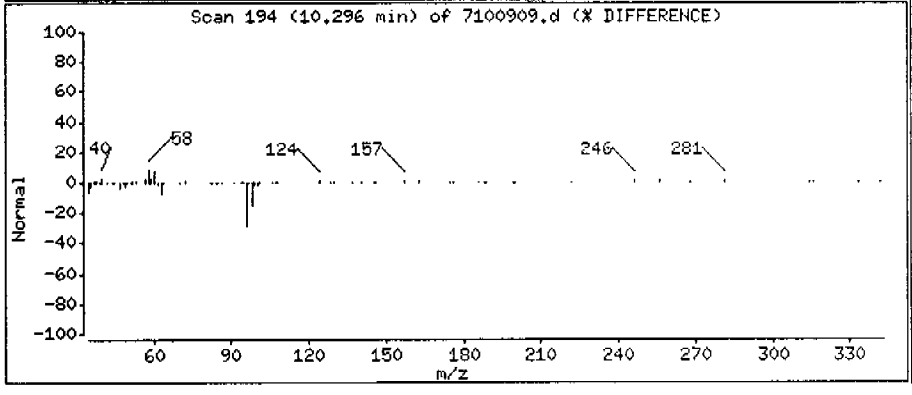












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Sample Info: 200mL #34765

Instrument: msd7.i

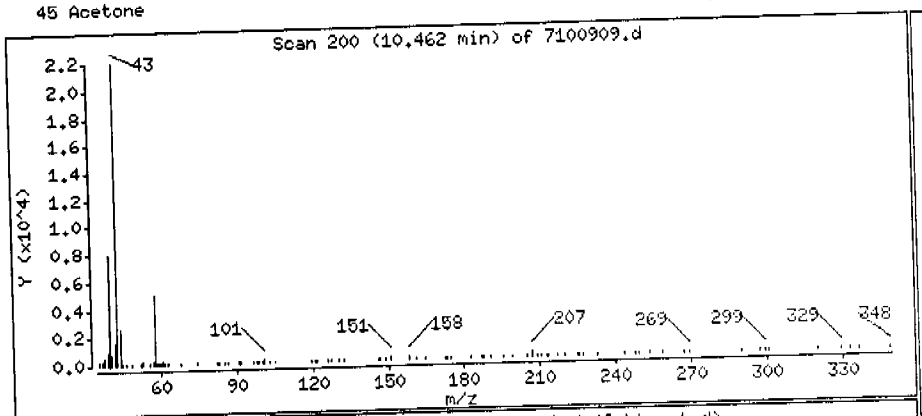
Operator: ra

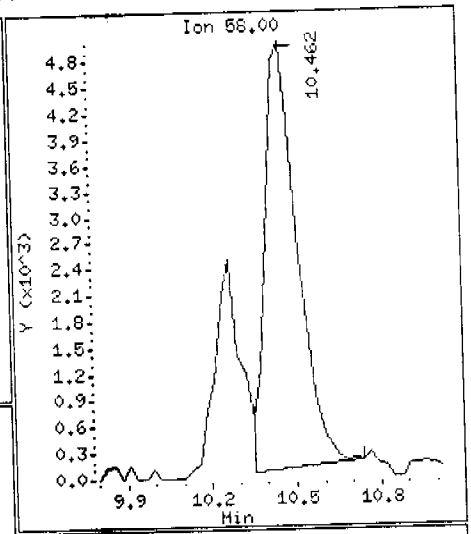
Column phase: RTx-624

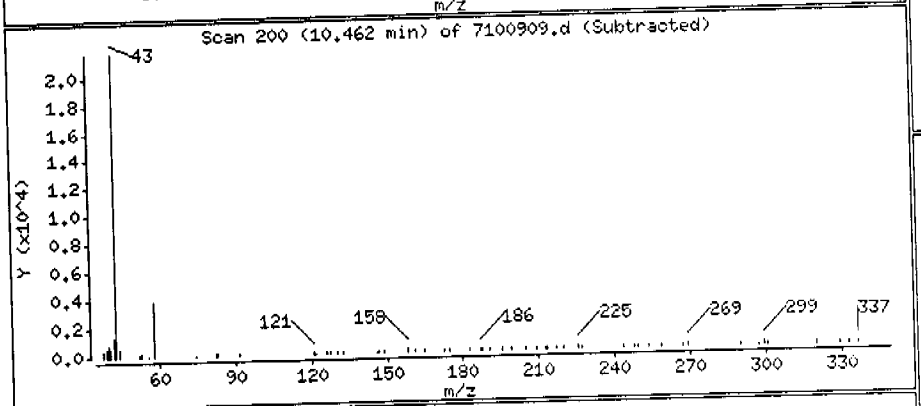
Column diameter: 0.53

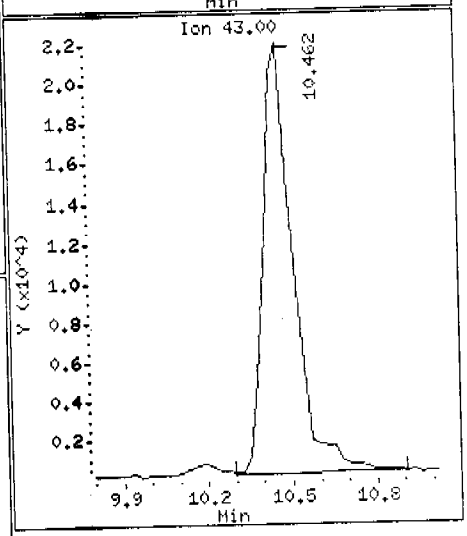
Concentration: 4.570 PPBV

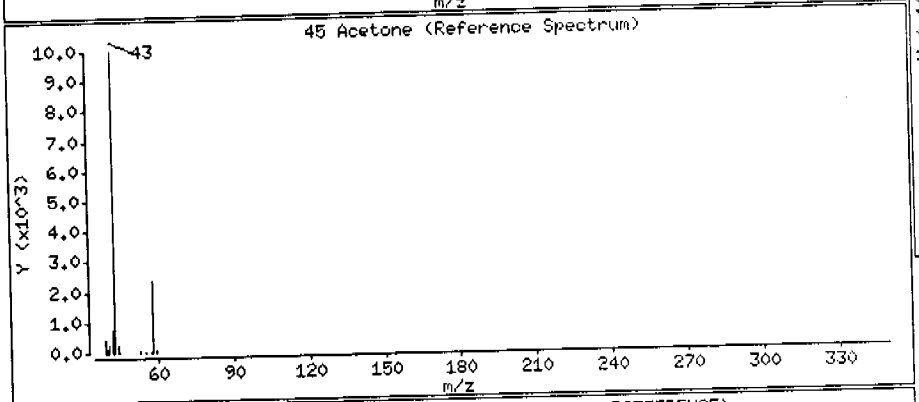
45 Acetone

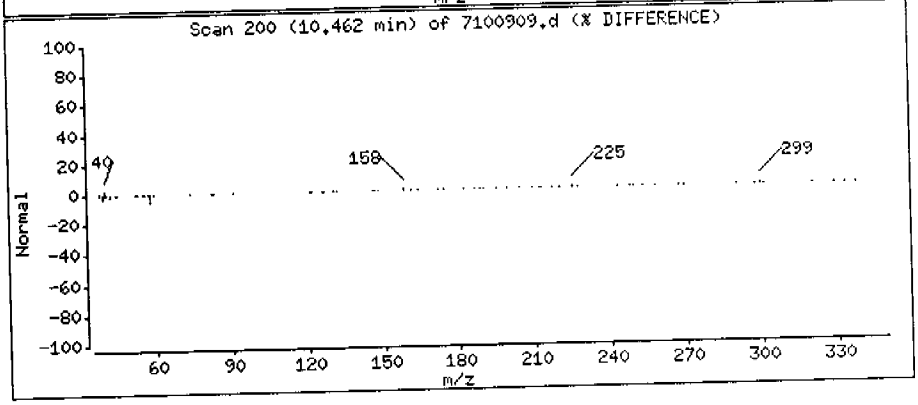












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34765

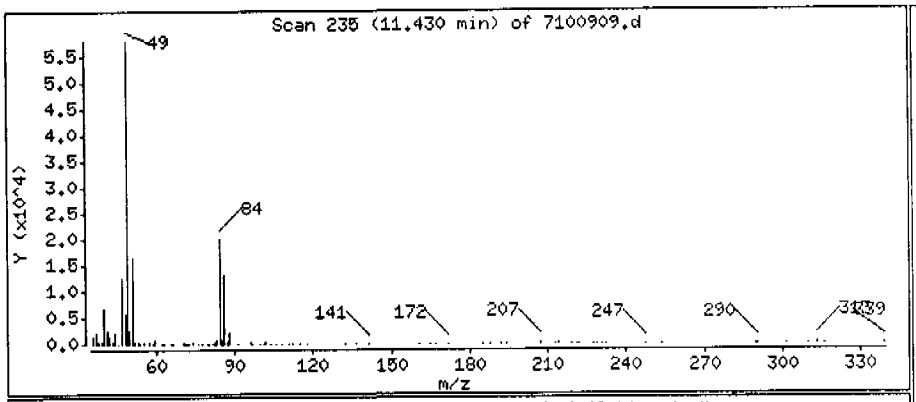
Operator: ra

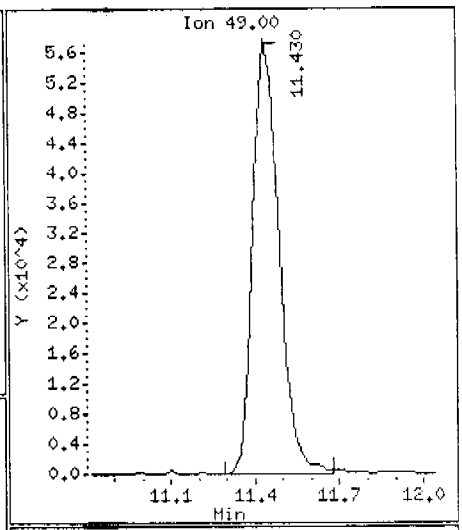
Column phase: RTx-624

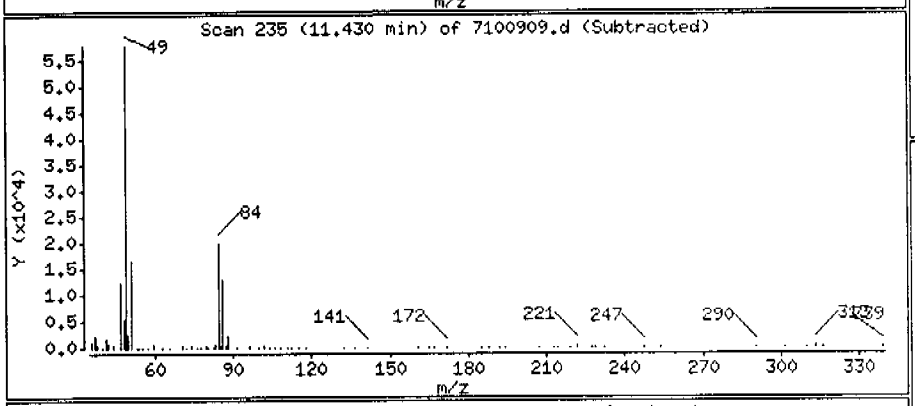
Column diameter: 0.53

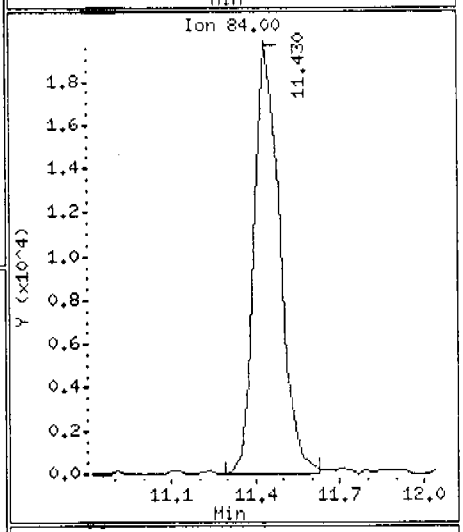
54 Methylene Chloride

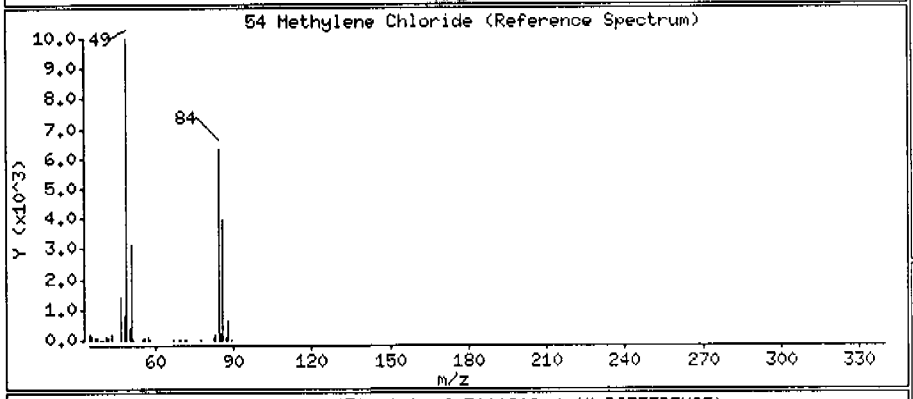
Concentration: 14.076 PPBV

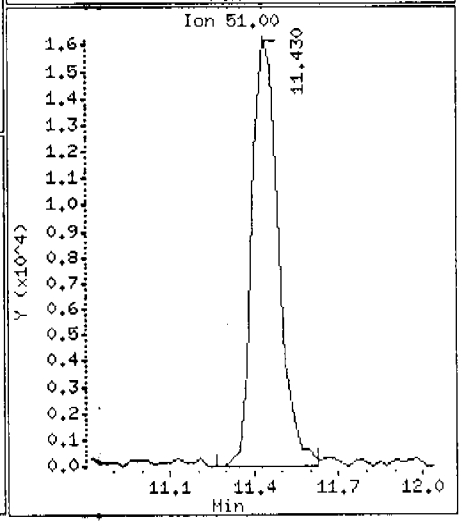


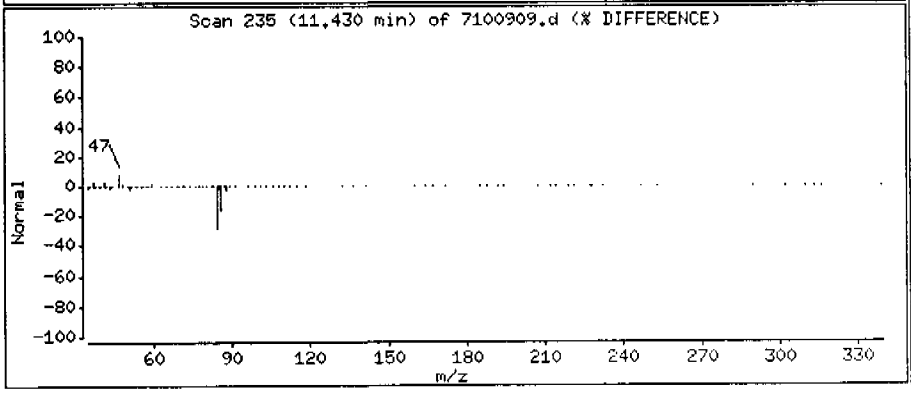












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34765

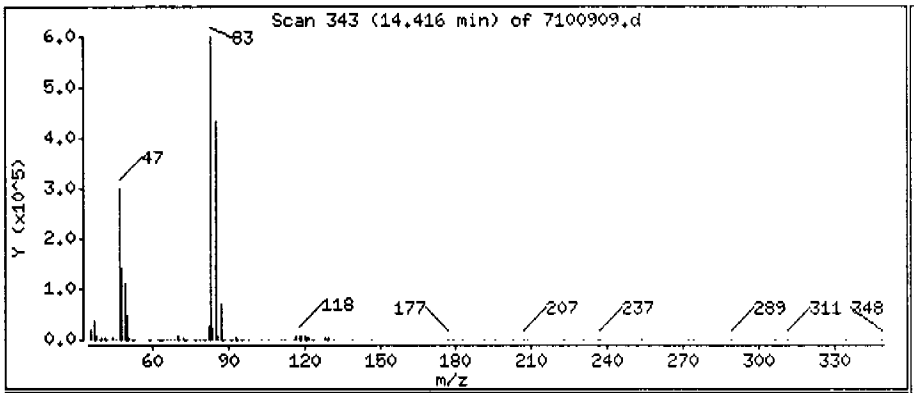
Operator: ra

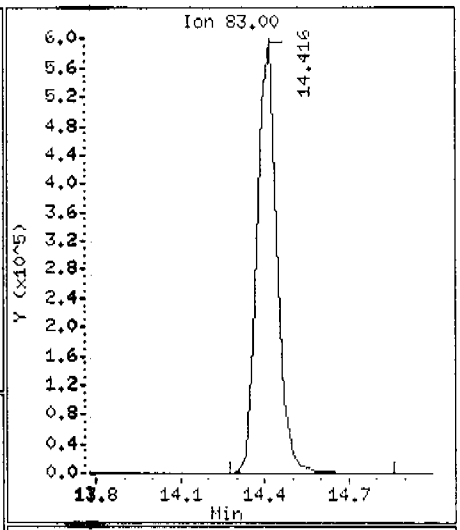
Column phase: RTx-624

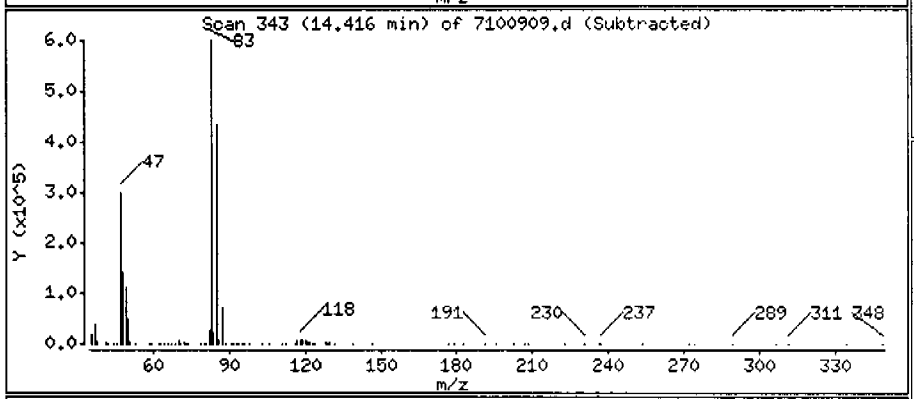
Column diameter: 0.53

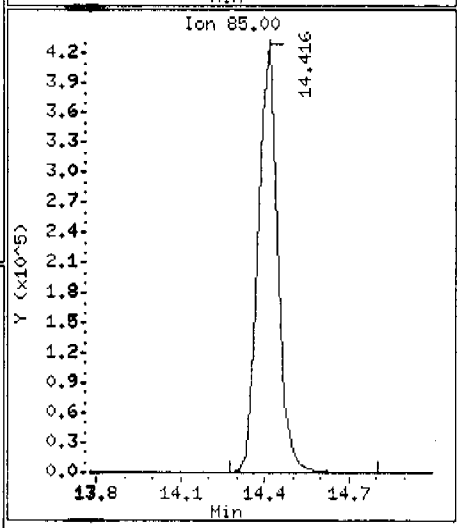
82 Chloroform

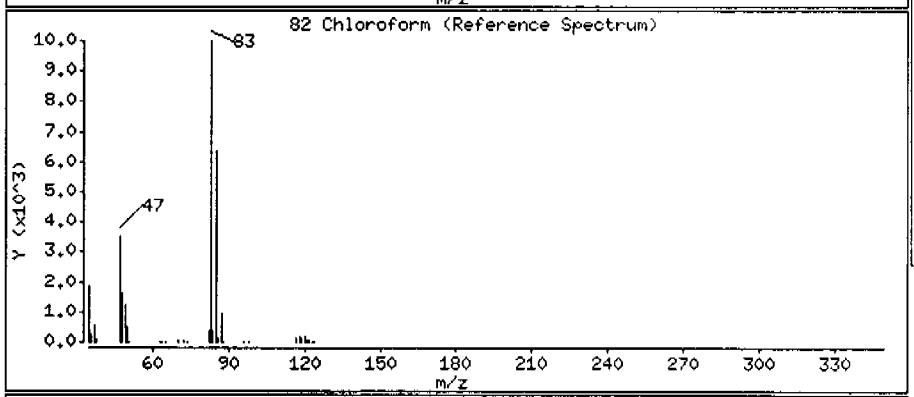
Concentration: 119.68 PPBV

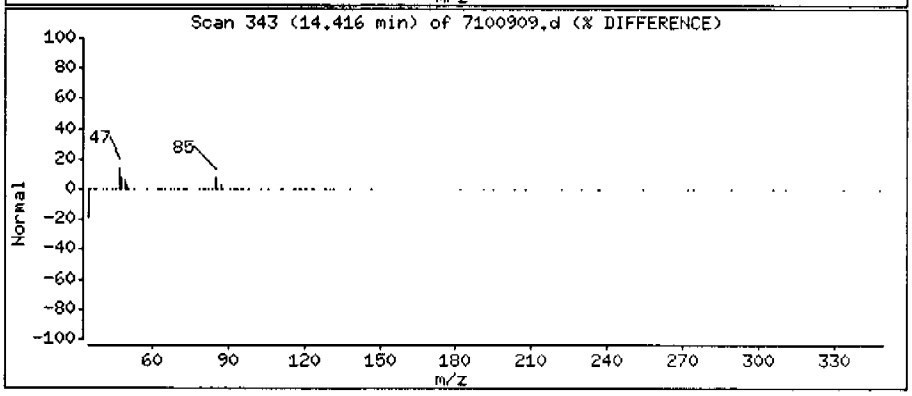












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34765

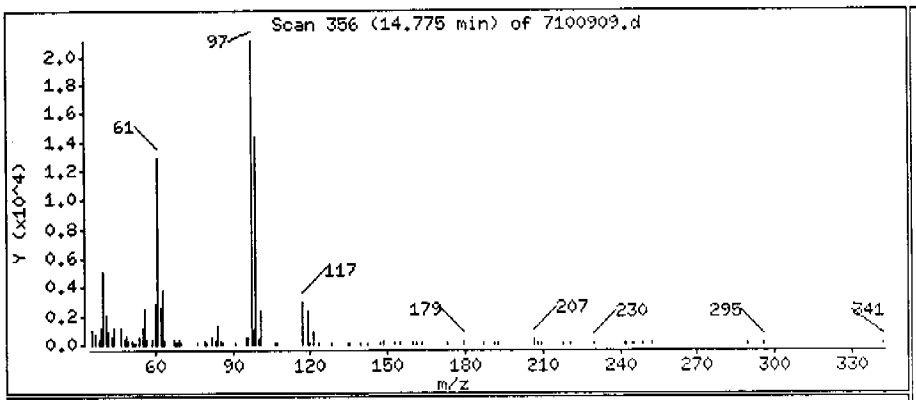
Operator: ra

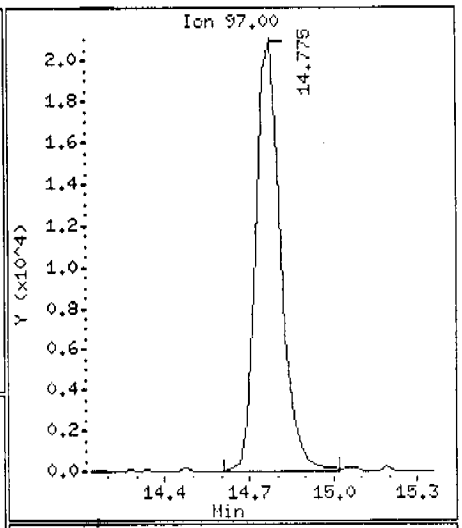
Column phase: RTx-624

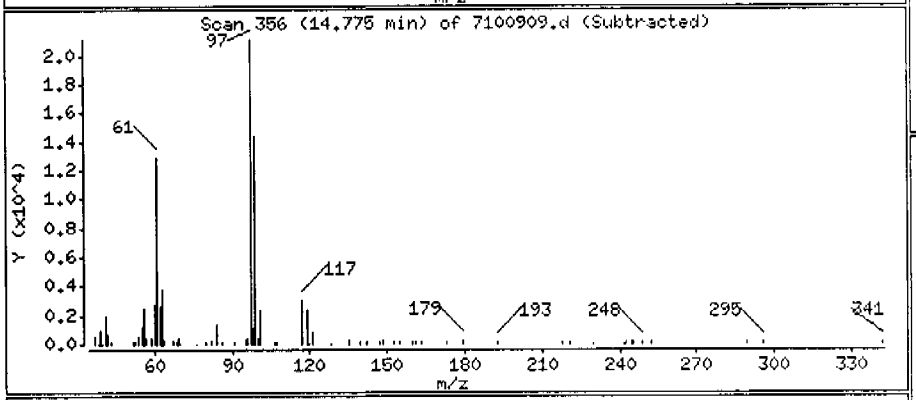
Column diameter: 0.53

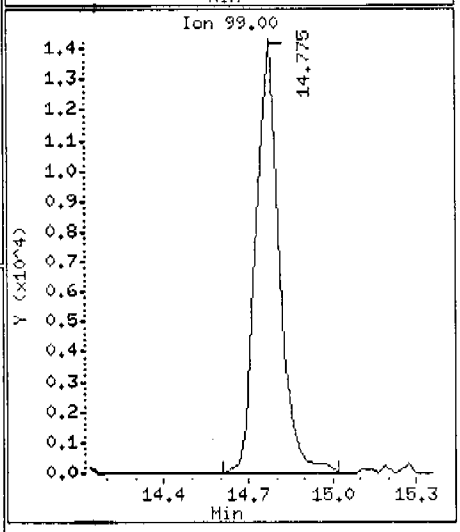
83 1,1,1-Trichloroethane

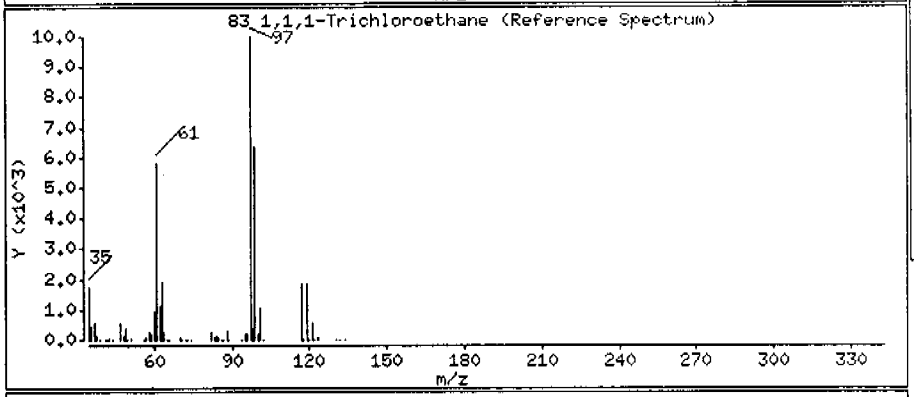
Concentration: 5.184 PPBV

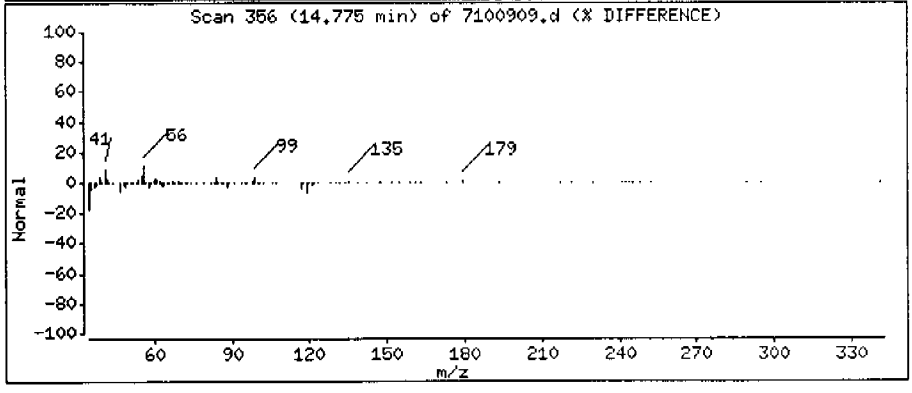












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Sample Info: 200mL #34765

Instrument: msd7.i

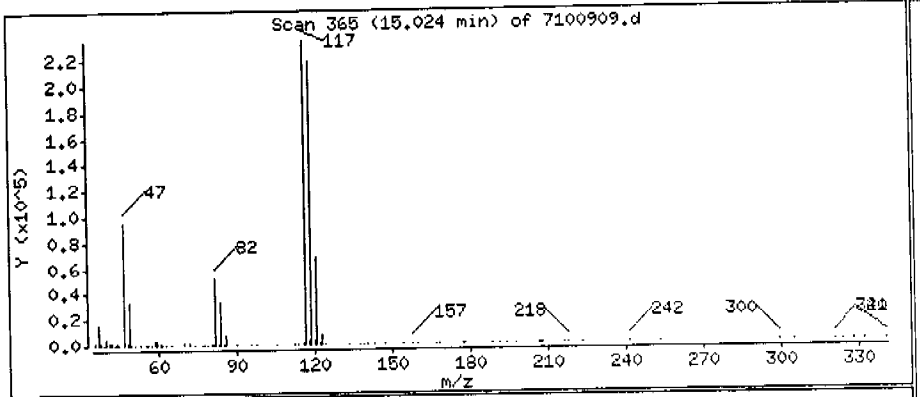
Operator: rs

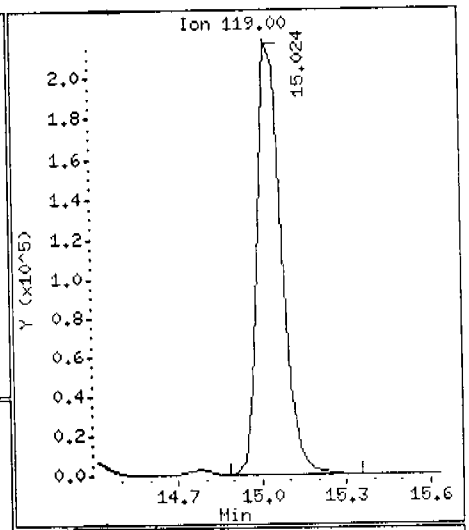
Column phase: RTx-624

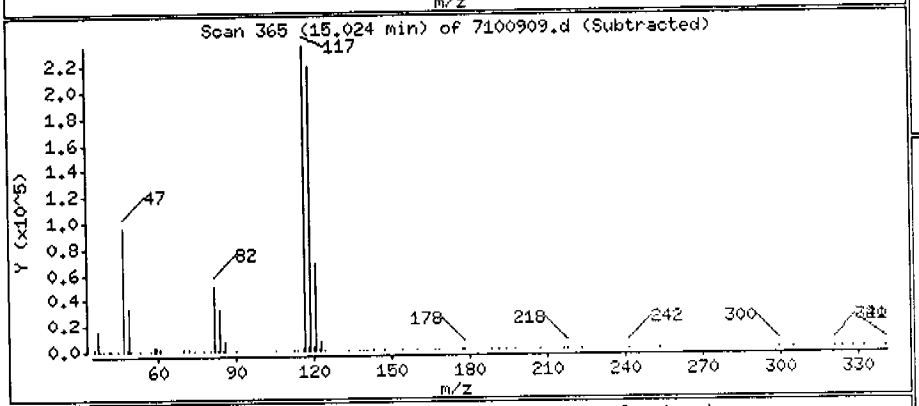
Column diameter: 0.53

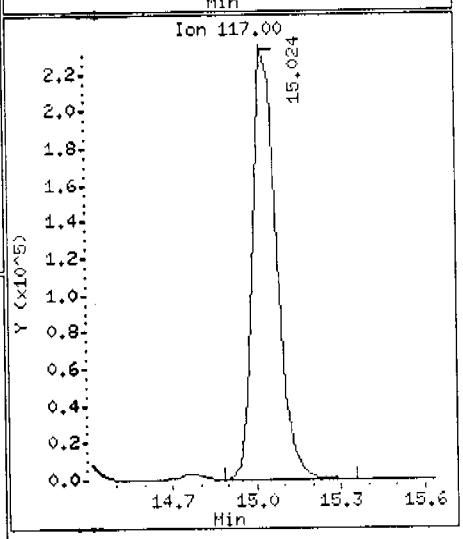
87 Carbon Tetrachloride

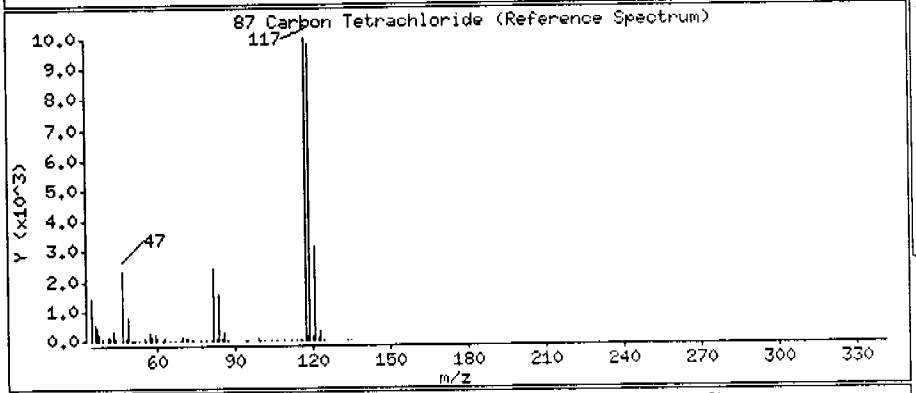
Concentration: 45.272 PPBV

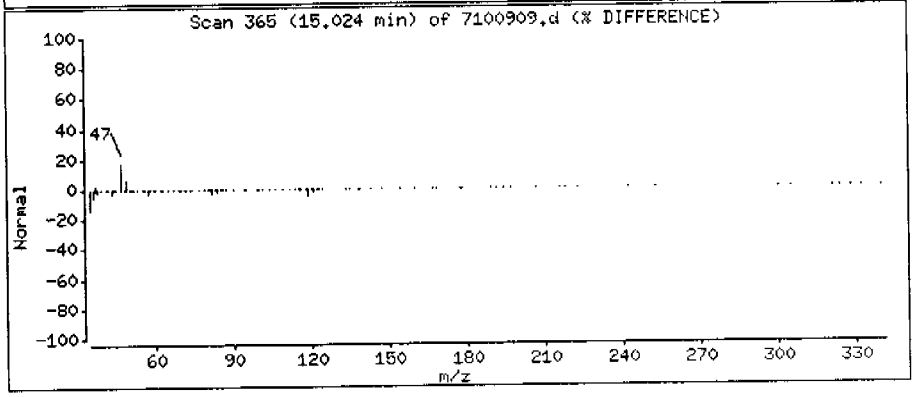












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34765

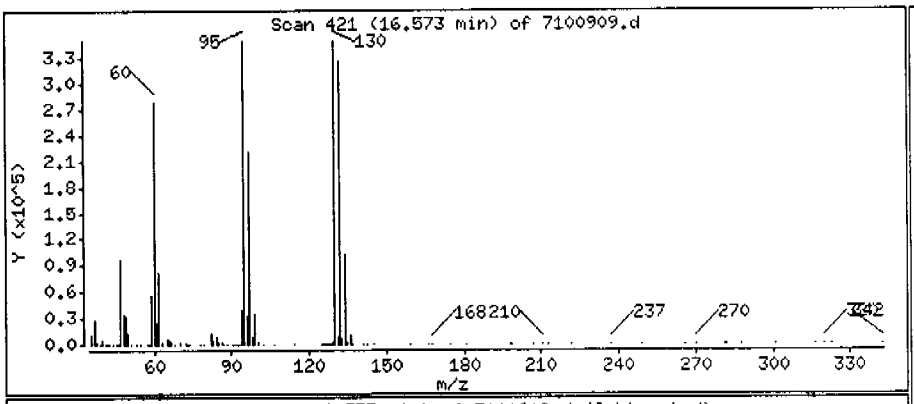
Operator: ra

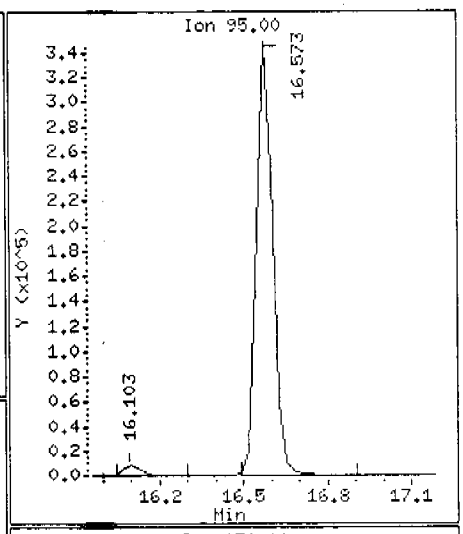
Column phase: RTx-624

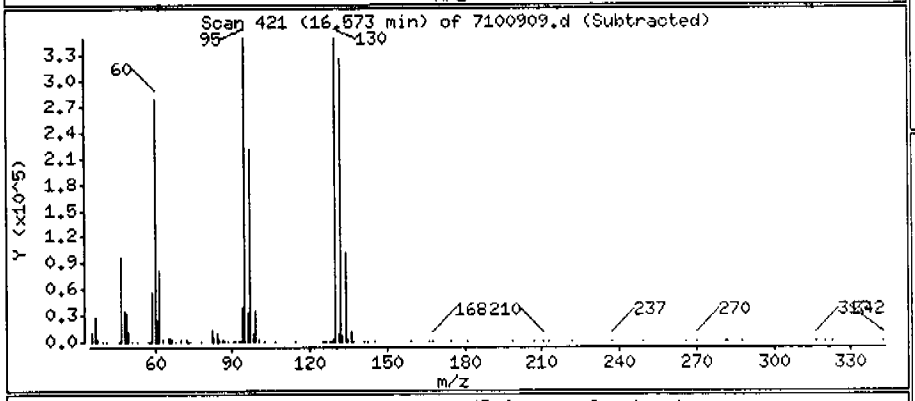
Column diameter: 0.53

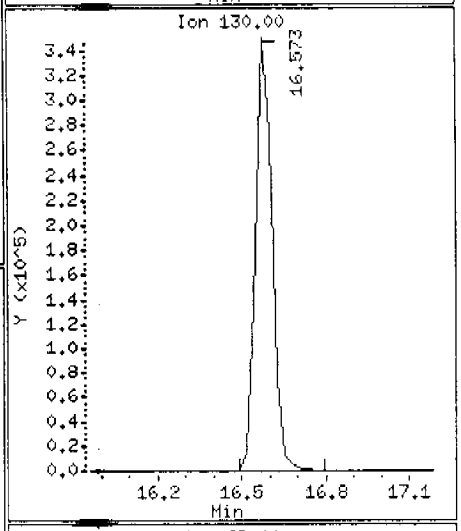
101 Trichloroethene

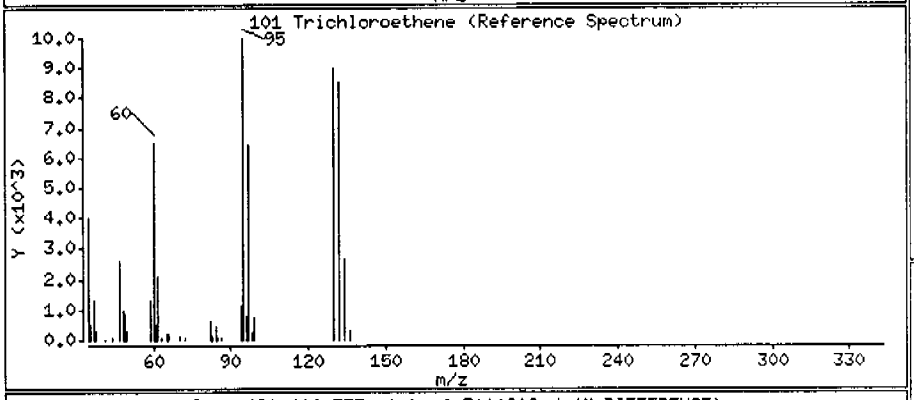
Concentration: 111.65 PPBV

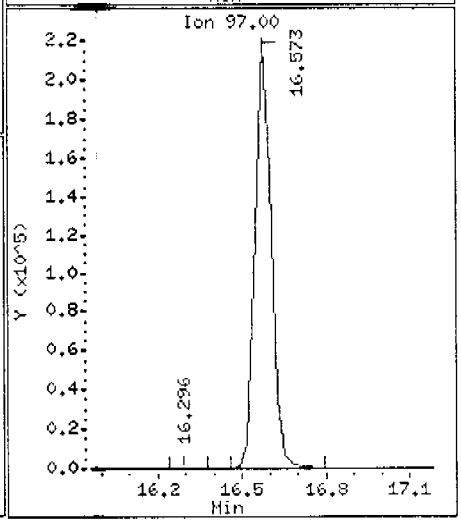


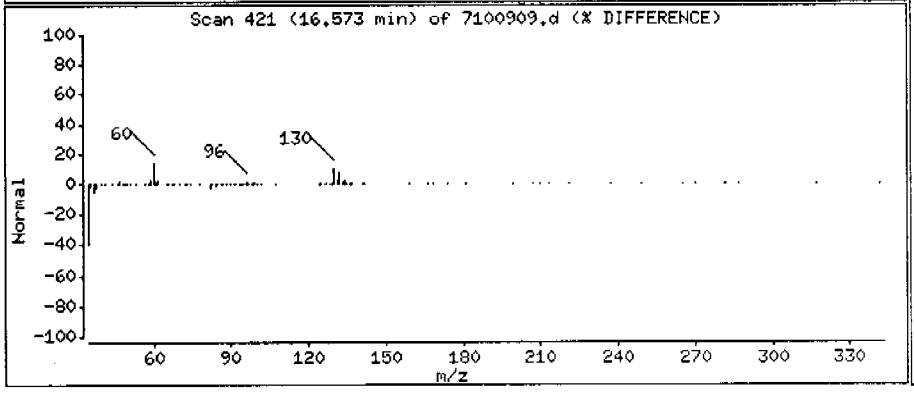












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Sample Info: 200mL #34765

Instrument: msd7.i

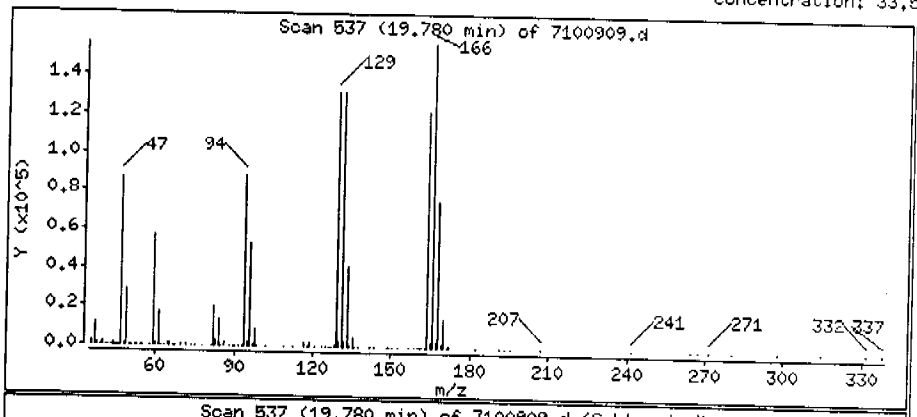
Operator: ra

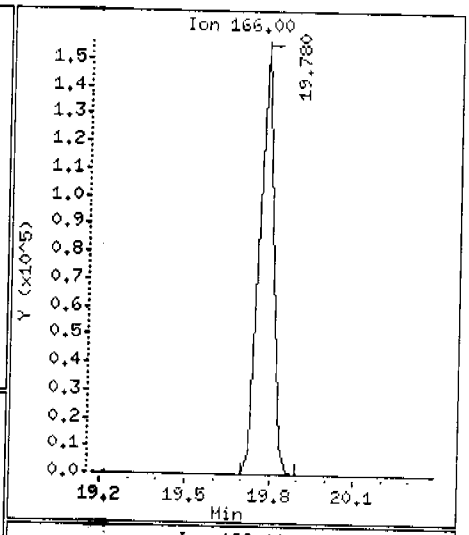
Column phase: RTx-624

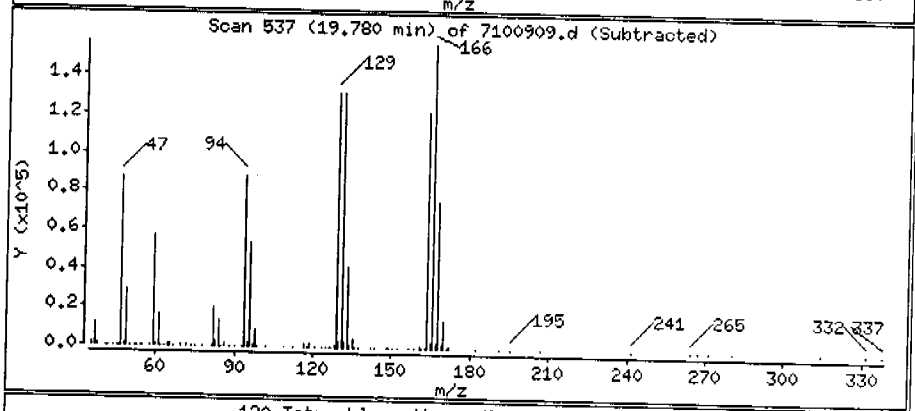
Column diameter: 0.53

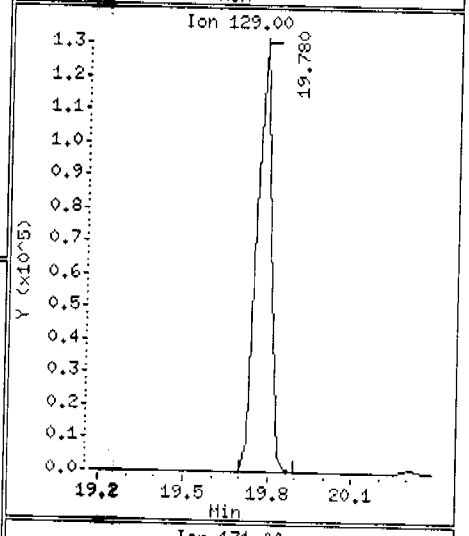
120 Tetrachloroethene

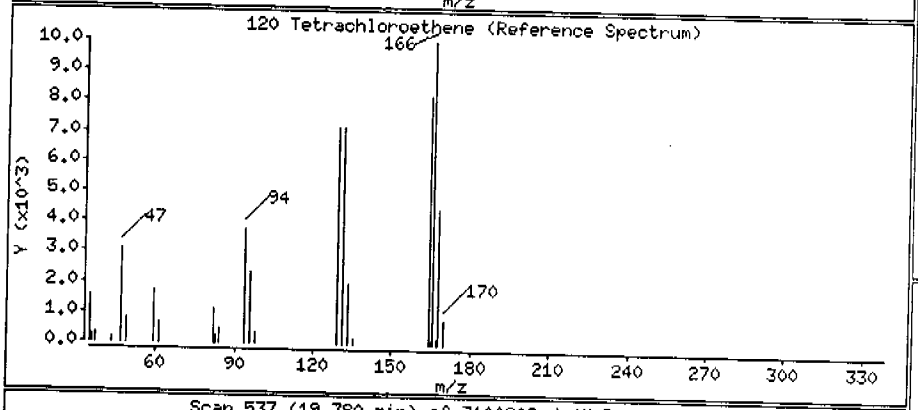
Concentration: 33.519 PPBV

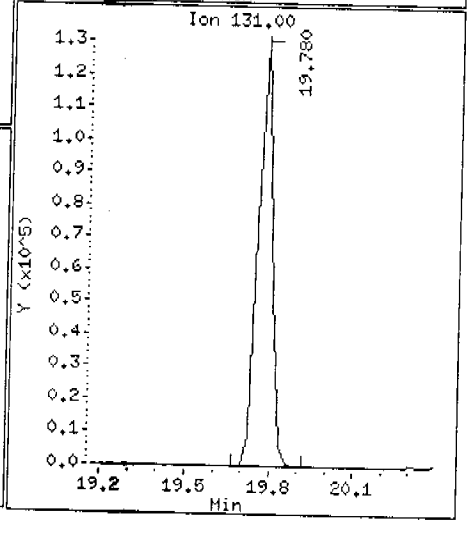


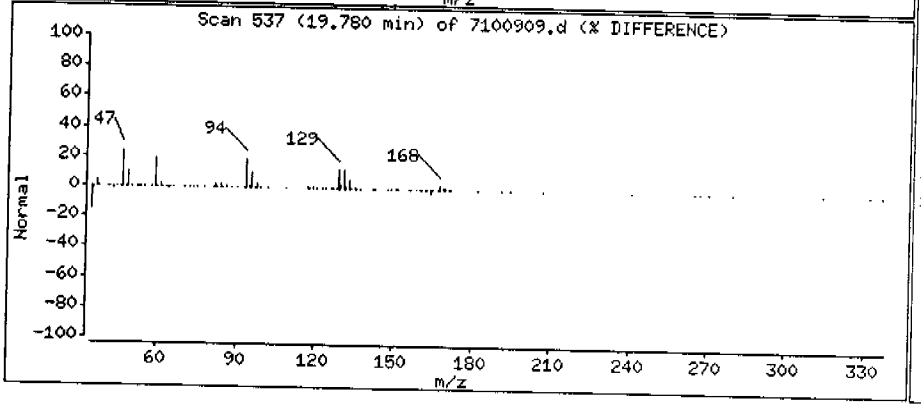












Data File: /chem/msd7.i/09oct08.b/7100909.d

Date : 09-OCT-2008 15:00

Client ID:

Sample Info: 200mL #34765

Instrument: msd7.i

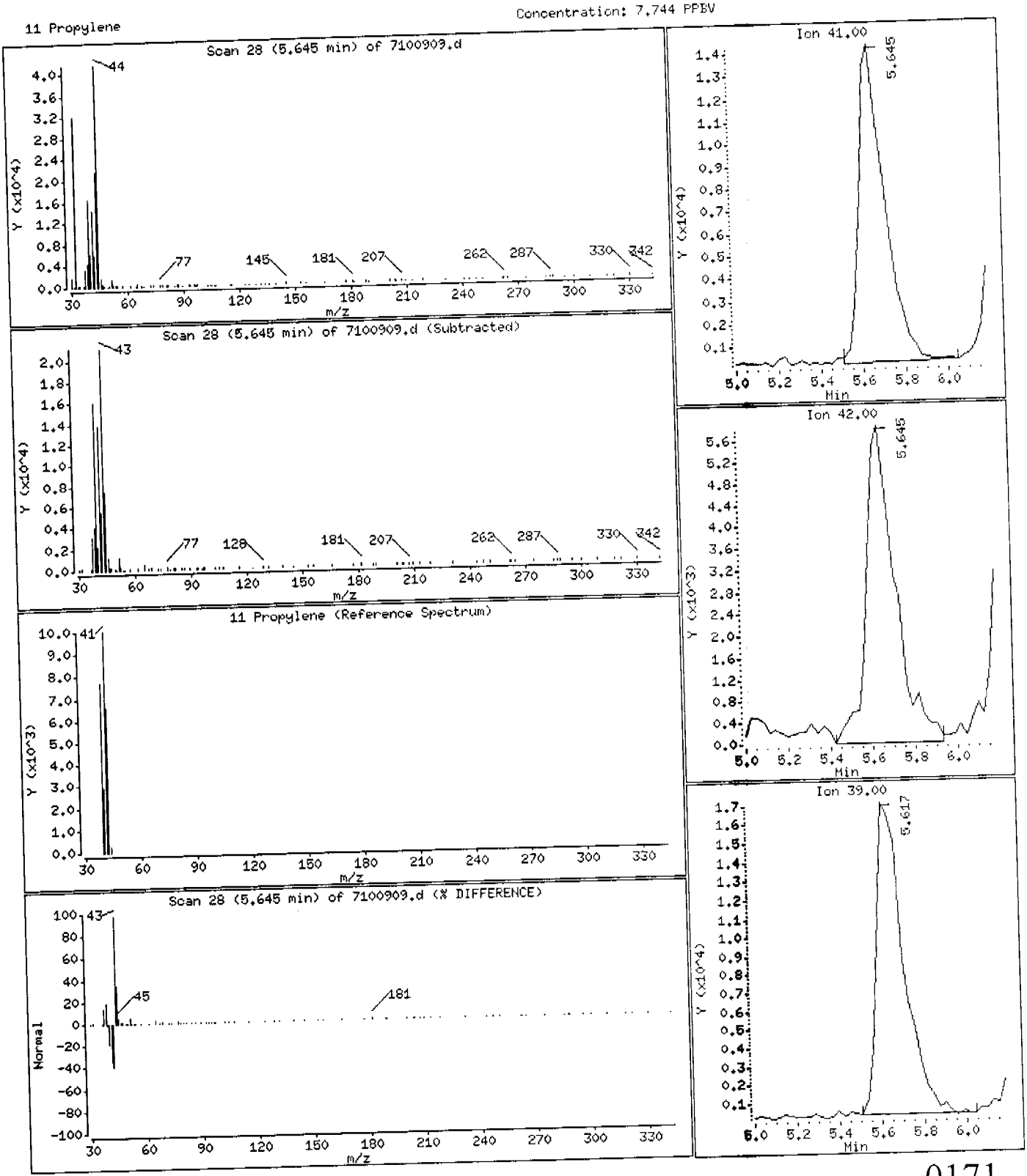
Operator: ra

Column phase: RTx-624

Column diameter: 0.53

Concentration: 7.744 PPBV

11 Propylene



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14821

Lab ID#: 0809614-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.94	1.8	4.6	8.6
Freon 113	0.94	6.4	7.2	49
1,1-Dichloroethene	0.94	5.7	3.7	23
Methylene Chloride	0.94	87	3.2	300
cis-1,2-Dichloroethene	0.94	0.95	3.7	3.8
Chloroform	0.94	130	4.6	620
1,1,1-Trichloroethane	0.94	4.6	5.1	25
Carbon Tetrachloride	0.94	98	5.9	620
1,2-Dichloroethane	0.94	1.3	3.8	5.3
Trichloroethene	0.94	200	5.0	1100
Bromodichloromethane	0.94	1.4	6.3	9.7
Toluene	0.94	1.0	3.5	3.9
1,1,2-Trichloroethane	0.94	3.7	5.1	20
Tetrachloroethene	0.94	23	6.3	160
Propylene	3.7	12	6.4	20

0172

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14821

Lab ID#: 0809614-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100910	**Date of Collection:**	9/25/08
Dil. Factor:	1.87	**Date of Analysis:**	10/9/08 03:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.94	1.8	4.6	8.6
Freon 114	0.94	Not Detected	6.5	Not Detected
Chloromethane	3.7	Not Detected	7.7	Not Detected
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected
1,3-Butadiene	0.94	Not Detected	2.1	Not Detected
Bromomethane	0.94	Not Detected	3.6	Not Detected
Chloroethane	0.94	Not Detected	2.5	Not Detected
Freon 11	0.94	Not Detected	5.2	Not Detected
Ethanol	3.7	Not Detected	7.0	Not Detected
Freon 113	0.94	6.4	7.2	49
1,1-Dichloroethene	0.94	5.7	3.7	23
Acetone	3.7	Not Detected	8.9	Not Detected
2-Propanol	3.7	Not Detected	9.2	Not Detected
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected
Methylene Chloride	0.94	87	3.2	300
Methyl tert-butyl ether	0.94	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected
Hexane	0.94	Not Detected	3.3	Not Detected
1,1-Dichloroethane	0.94	Not Detected	3.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.94	0.95	3.7	3.8
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected
Chloroform	0.94	130	4.6	620
1,1,1-Trichloroethane	0.94	4.6	5.1	25
Cyclohexane	0.94	Not Detected	3.2	Not Detected
Carbon Tetrachloride	0.94	98	5.9	620
Benzene	0.94	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.94	1.3	3.8	5.3
Heptane	0.94	Not Detected	3.8	Not Detected
Trichloroethene	0.94	200	5.0	1100
1,2-Dichloropropane	0.94	Not Detected	4.3	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.94	1.4	6.3	9.7
cis-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.94	Not Detected	3.8	Not Detected
Toluene	0.94	1.0	3.5	3.9
trans-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14821

Lab ID#: 0809614-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100910**	**Date of Collection:**	**9/25/08**
Dil. Factor:	**1.87**	**Date of Analysis:**	**10/9/08 03:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.94	Not Detected	8.0	Not Detected
1,2-Dibromoethane (EDB)	0.94	Not Detected	7.2	Not Detected
Chlorobenzene	0.94	Not Detected	4.3	Not Detected
Ethyl Benzene	0.94	Not Detected	4.0	Not Detected
m,p-Xylene	0.94	Not Detected	4.1	Not Detected
o-Xylene	0.94	Not Detected	4.1	Not Detected
Styrene	0.94	Not Detected	4.0	Not Detected
Bromoform	0.94	Not Detected	9.7	Not Detected
1,1,2,2-Tetrachloroethane	0.94	Not Detected	6.4	Not Detected
4-Ethyltoluene	0.94	Not Detected	4.6	Not Detected
1,3,5-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected
1,2,4-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected
1,3-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
1,4-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
alpha-Chlorotoluene	0.94	Not Detected	4.8	Not Detected
1,2-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	28	Not Detected
Hexachlorobutadiene	3.7	Not Detected	40	Not Detected
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected
Methanol	94	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	12	6.4	20

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	93	70-130

0174

Data File: /chem/msd7.i/09oct08.b/7100910.d
Report Date: 11-Oct-2008 08:18

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100910.d
Lab Smp Id: 0809614-08A
Inj Date : 09-OCT-2008 15:39
Operator : ra
Smp Info : 200mL #928
Misc Info : 8.5"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher
Cal Date : 27-AUG-2008 15:00
Als bottle: 1
Dil Factor: 1.87000
Integrator: HP RTE
Target Version: 3.50
Processing Host: eeyore

Inst ID: msd7.i
Quant Type: ISTD
Cal File: 7082709.d
Compound Sublist: Los2153.sub
Sample Matrix: AIR

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	14.333	14.333 (1.000)	130	341206	25.0000		80.00- 120.00	100.00
	14.333	14.333 (1.000)	128	264195			28.92- 128.92	77.43
	14.333	14.333 (1.000)	49	1469405			320.90- 420.90	430.65
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	16.103	16.103 (1.000)	114	1058225	25.0000		80.00- 120.00	100.00
	16.103	16.103 (1.000)	88	183073			0.00- 67.10	17.30
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	21.301	21.301 (1.000)	117	1139734	25.0000		80.00- 120.00	100.00
	21.301	21.301 (1.000)	82	583764			1.24- 101.24	51.22
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.439	15.411 (1.077)	65	623772	24.2020	24.202	80.00- 120.00	100.00
	15.439	15.411 (1.077)	67	268433			0.00- 97.37	43.03
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.702	18.702 (1.161)	98	1037683	25.6161	25.616	80.00- 120.00	100.00
	18.702	18.702 (1.161)	70	140527			0.00- 63.85	13.54

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	800395			26.51- 126.51	77.13
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	546206	23.2898	23.290	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	785692			92.62- 192.62	143.85
23.291	23.291 (1.093)	176	522392			44.03- 144.03	95.64
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	78960	0.93611	1.750	80.00- 120.00	100.00
5.729	5.729 (0.400)	87	26323			0.00- 81.85	33.34
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	114448	3.40045	6.359	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	74007			12.55- 112.55	64.67
10.158	10.158 (0.709)	101	169861			98.99- 198.99	148.42
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	179842	3.07272	5.746	80.00- 120.00	100.00
10.269	10.269 (0.716)	96	67693			0.00- 87.74	37.64
10.296	10.269 (0.718)	98	42417			0.00- 73.80	23.59
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	2383224	46.5446	87.038	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	797240			0.00- 84.42	33.45
11.430	11.430 (0.797)	51	683687			0.00- 80.54	28.69
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.967)	61	23515	0.50671	0.9475	80.00- 120.00	100.00
13.863	13.863 (0.967)	96	11867			0.00- 98.82	50.47
13.863	13.863 (0.967)	98	6867			0.00- 81.20	29.21
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	3234444	68.1948	127.52	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	2285798			21.17- 121.17	70.67
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	120260	2.48334	4.644	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	74885			13.83- 113.83	62.27
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	2910635	52.6353	98.428	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	3050058			55.68- 155.68	104.79
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	29816	0.70019	1.309	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 1,2-Dichloroethane (continued)							
15.577	15.550 (0.967)	64	8927			0.00- 82.49	29.94
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	2656646	107.631	201.27	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	2710779			52.48- 152.48	102.04
16.573	16.573 (1.029)	97	1700020			14.44- 114.44	63.99
107 Bromodichloromethane					CAS #: 75-27-4		
17.513	17.485 (1.088)	83	34736	0.77722	1.453	80.00- 120.00	100.00
17.485	17.485 (1.086)	85	27043			20.68- 120.68	77.85
114 Toluene					CAS #: 108-88-3		
18.840	18.812 (1.170)	91	35364	0.55367	1.035	80.00- 120.00	100.00
18.840	18.812 (1.170)	92	20251			12.04- 112.04	57.26
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	47065	2.00322	3.746	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	31265			10.80- 110.80	66.43
19.614	19.614 (0.921)	83	42143			33.27- 133.27	89.54
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	385320	12.5136	23.400	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	344230			35.87- 135.87	89.34
19.780	19.780 (0.929)	131	341226			35.33- 135.33	88.56
11 Propylene					CAS #: 115-07-1		
5.617	5.589 (0.392)	41	184373	6.33724	11.851	80.00- 120.00	100.00
5.617	5.589 (0.392)	42	75191			16.57- 116.57	40.78
5.617	5.589 (0.392)	39	267983			28.60- 128.60	145.35

Data File: /chem/msd7.i/09oct08.b/7100910.d
Report Date: 11-Oct-2008 08:18

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100910.d
Lab Smp Id: 0809614-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 8.5"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	341206	-5.77
97 1,4-Difluorobenze	1146510	687906	1605114	1058225	-7.70
126 Chlorobenzene-d5	1241713	745028	1738398	1139734	-8.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-08A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 8.5"psi-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.202	96.81	70-130
$ 113 Toluene-d8	25.000	25.616	102.46	70-130
$ 137 Bromofluorobenzene	25.000	23.290	93.16	70-130

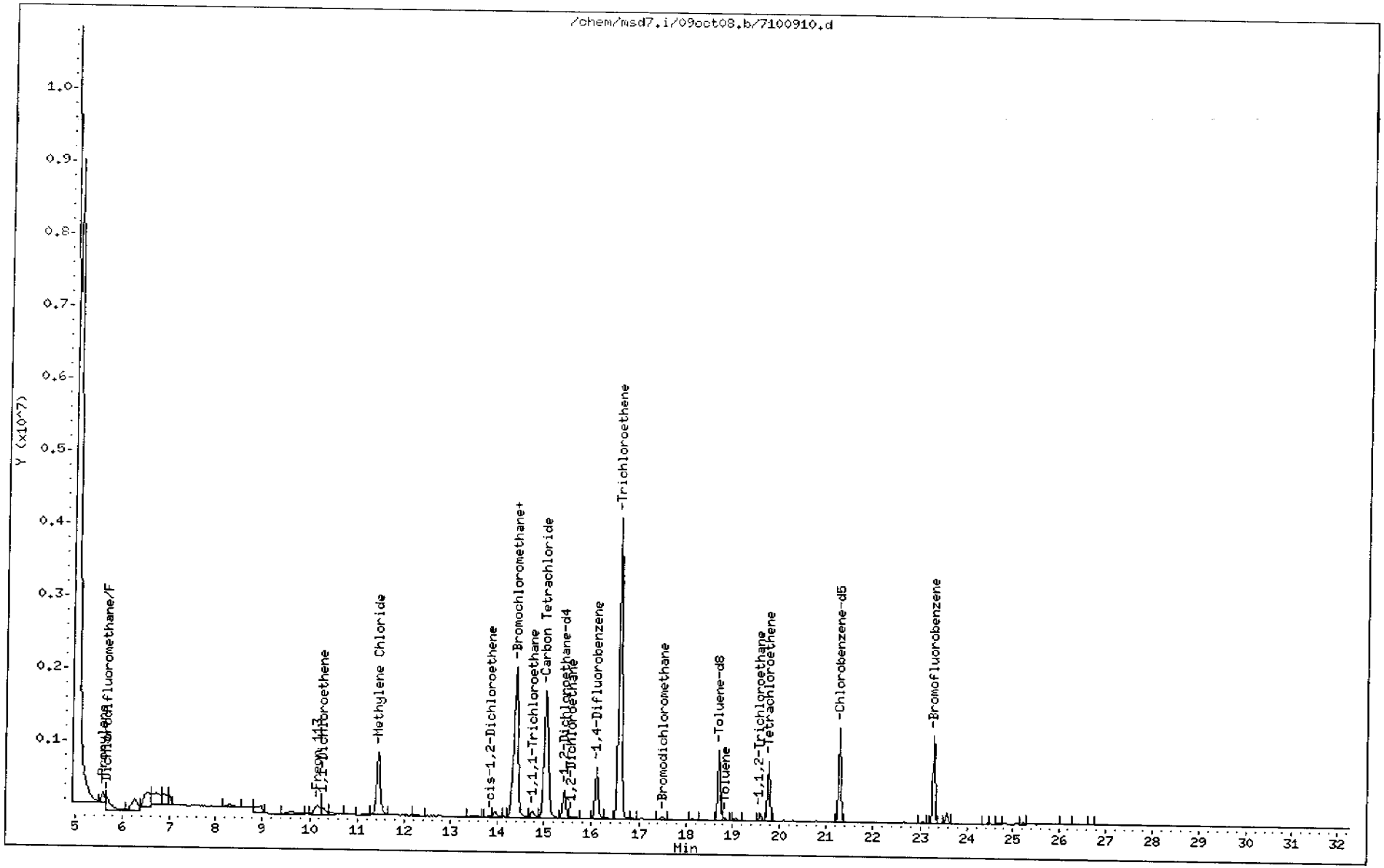
Data File: /chem/msd7.i/09oct08.b/7100910.d
Date : 09-OCT-2008 15:39
Client ID:
Sample Info: 200mL #928

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0180



Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

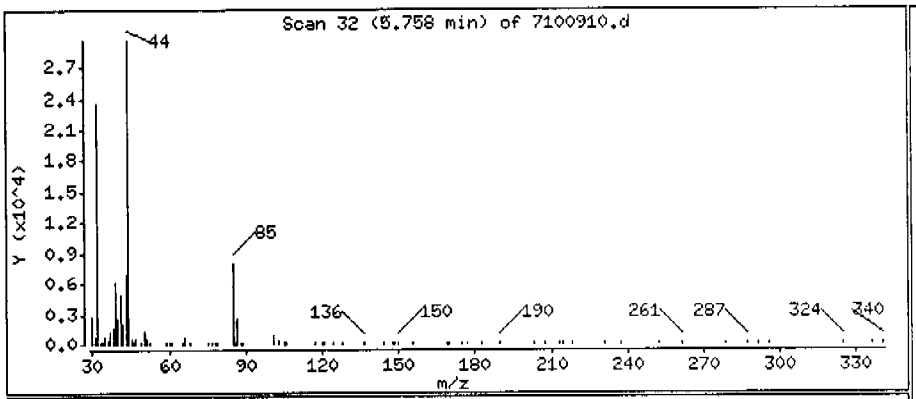
Operator: ra

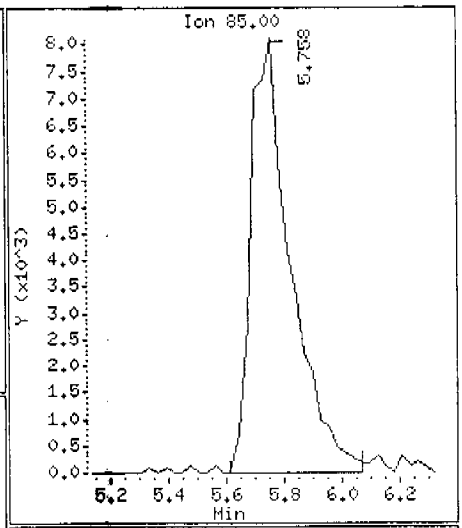
Column phase: RTx-624

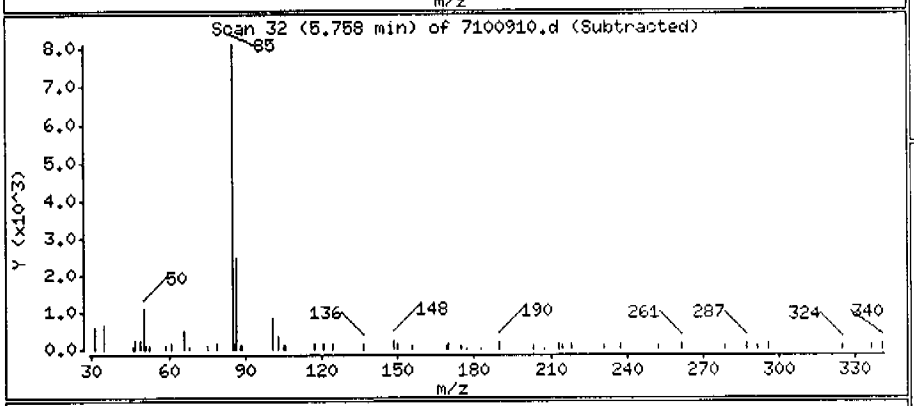
Column diameter: 0.53

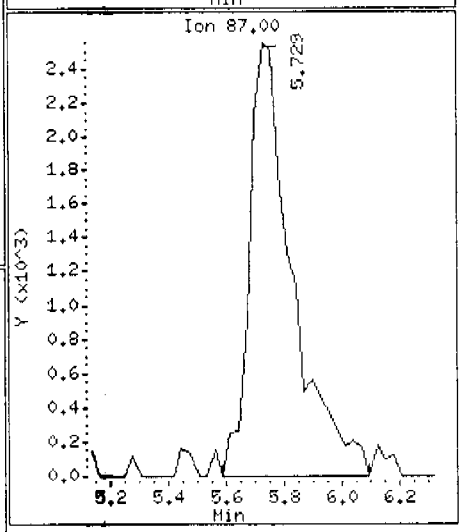
12 Dichlorodifluoromethane/Fr12

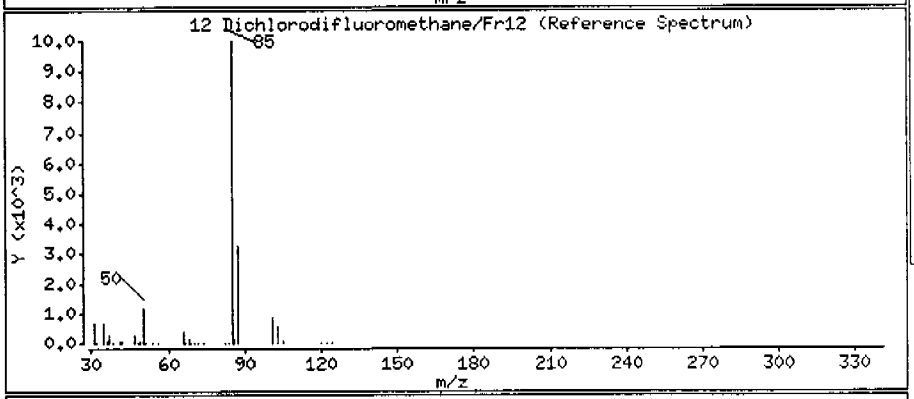
Concentration: 1.750 PPBV

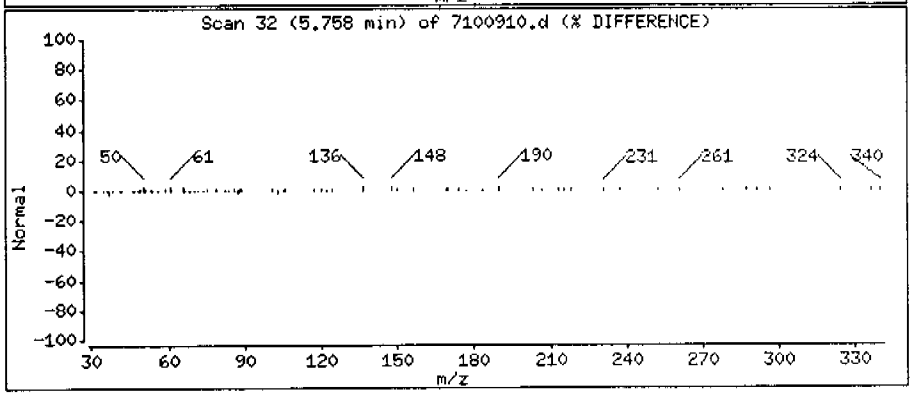












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

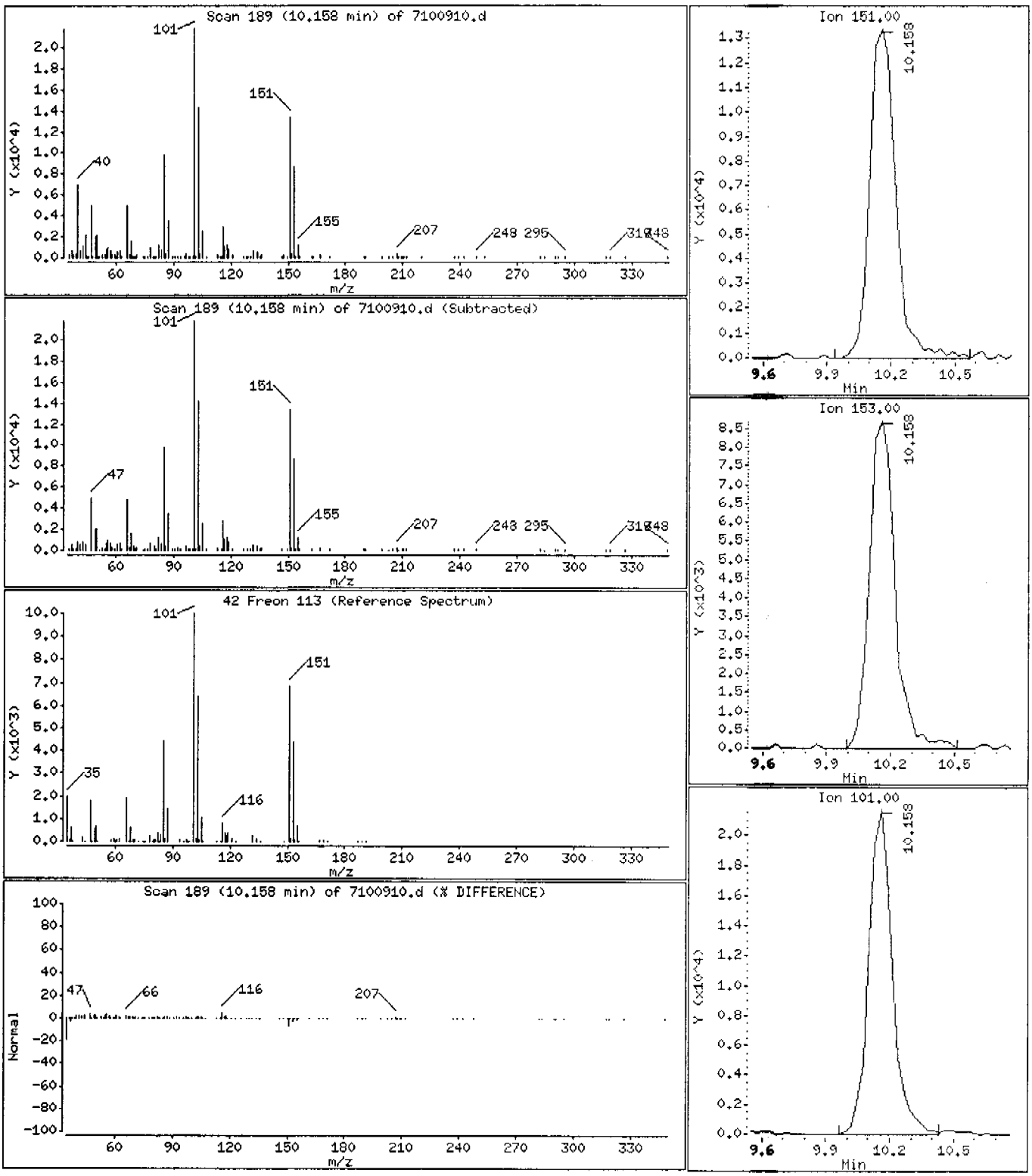
Operator: ra

Column phase: RTx-624

Column diameter: 0.53

42 Freon 113

Concentration: 6.359 PPBV



0182

Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

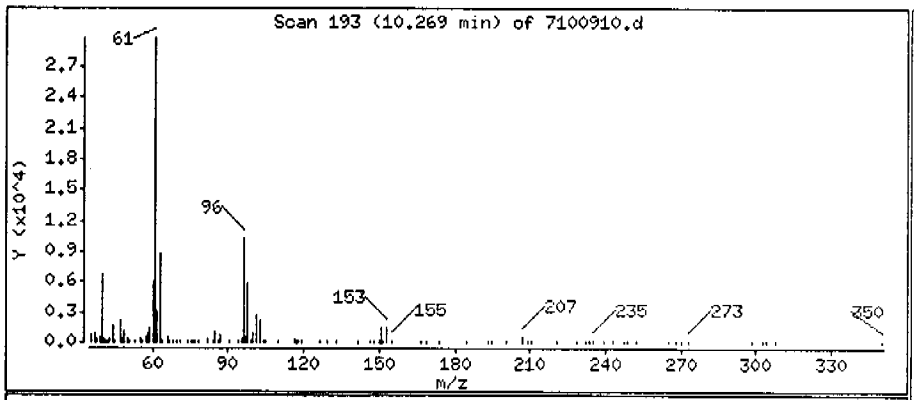
Operator: rs

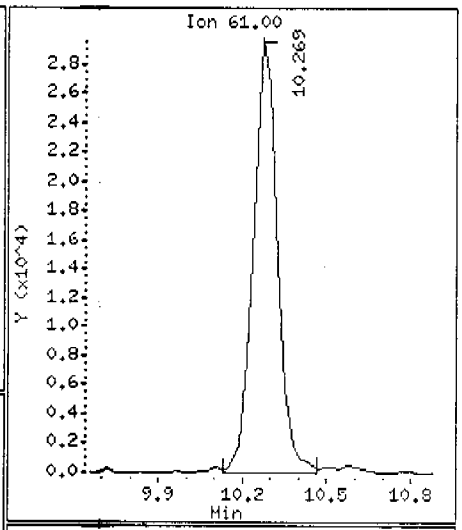
Column phase: RTx-624

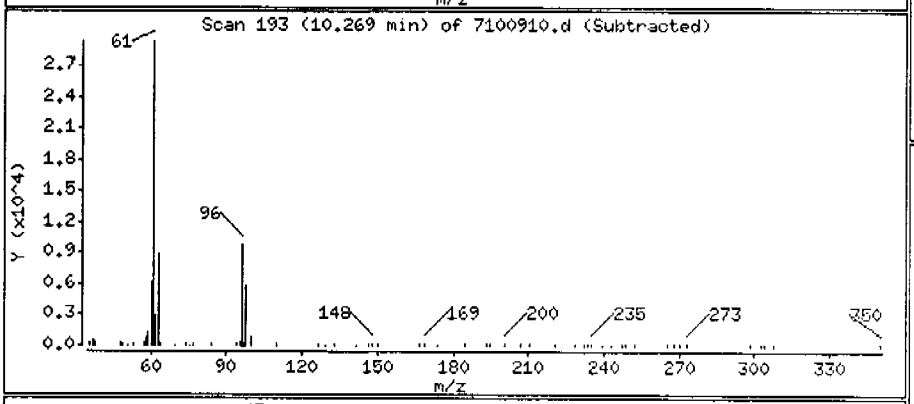
Column diameter: 0.53

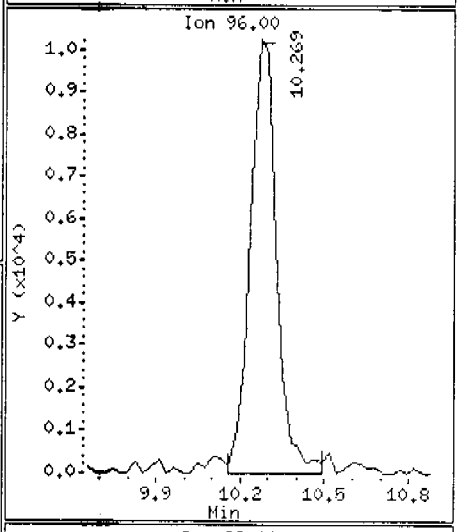
43 1,1-Dichloroethene

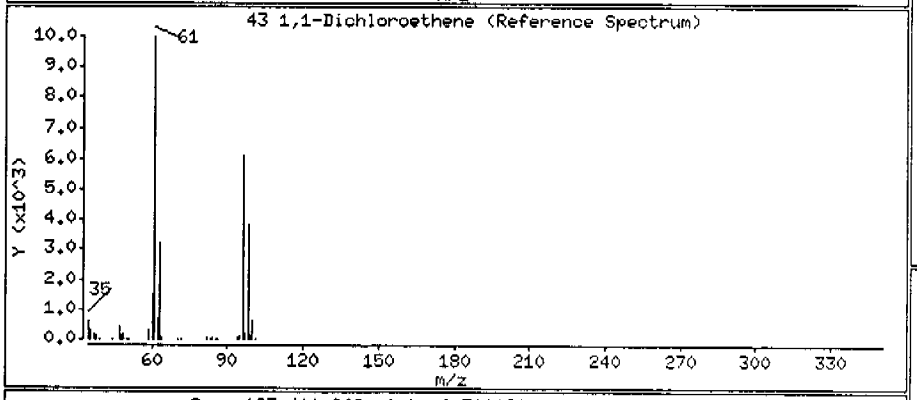
Concentration: 5.746 PPBV

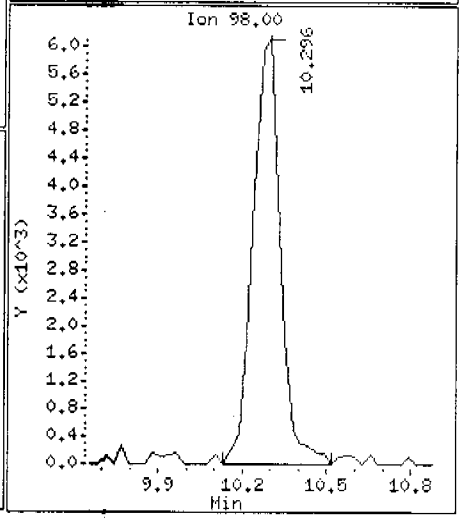


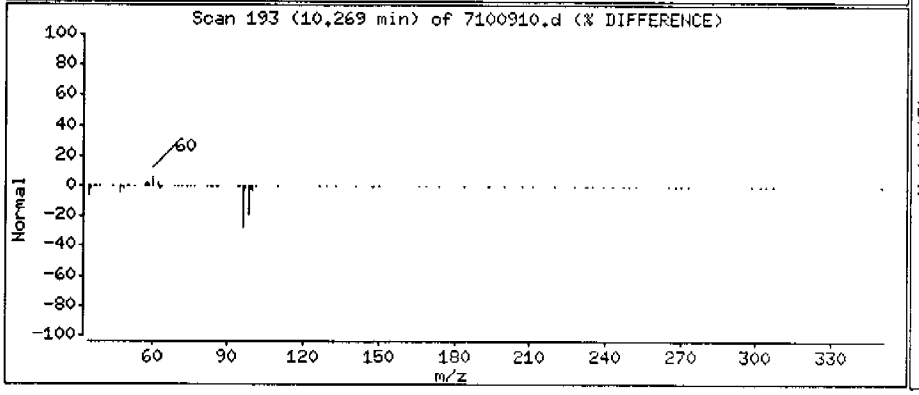












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

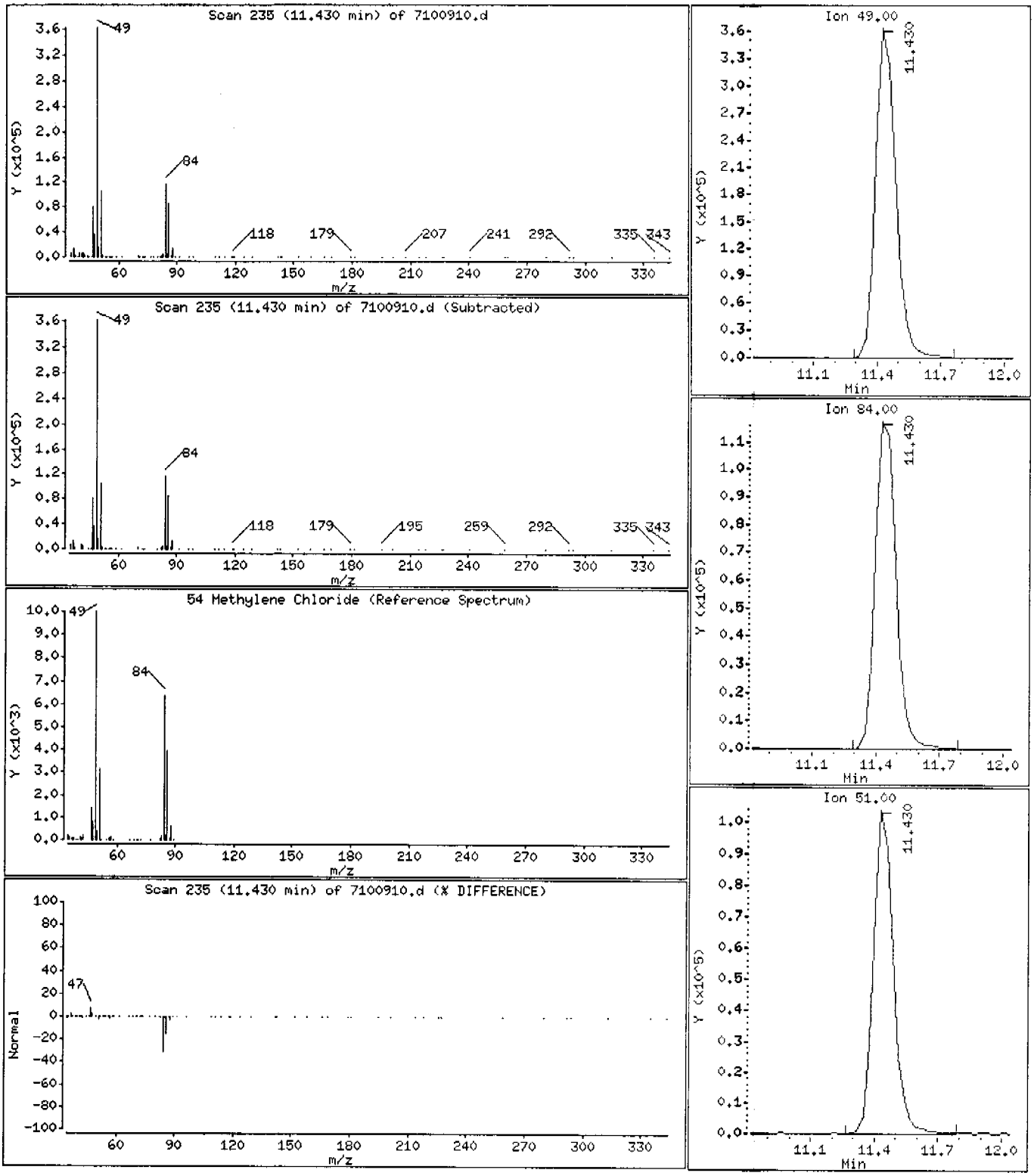
Operator: ra

Column phase: RTx-624

Column diameter: 0.53

54 Methylene Chloride

Concentration: 87.038 PPBV



Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

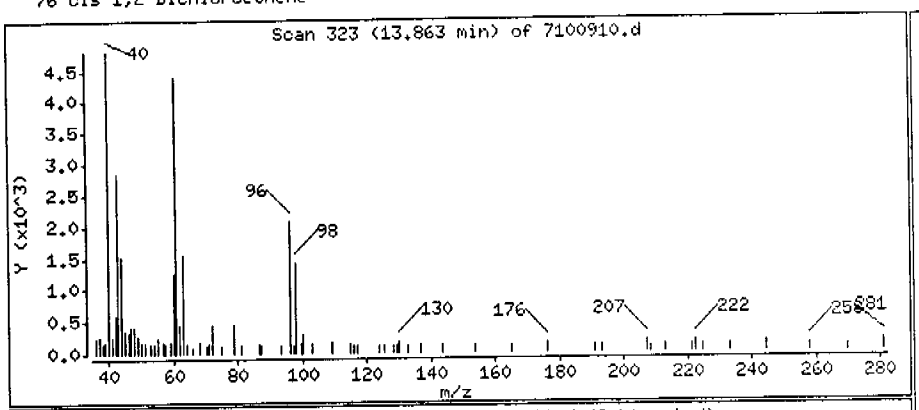
Operator: ra

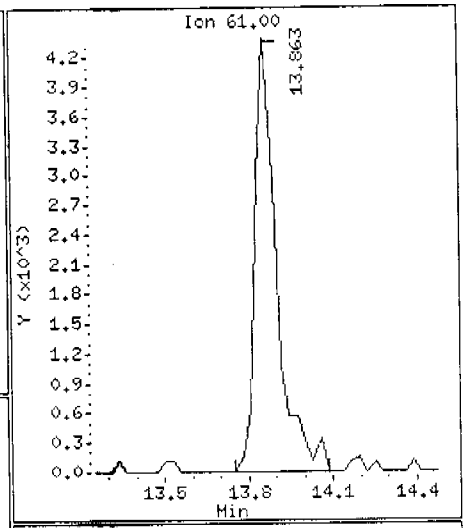
Column phase: RTx-624

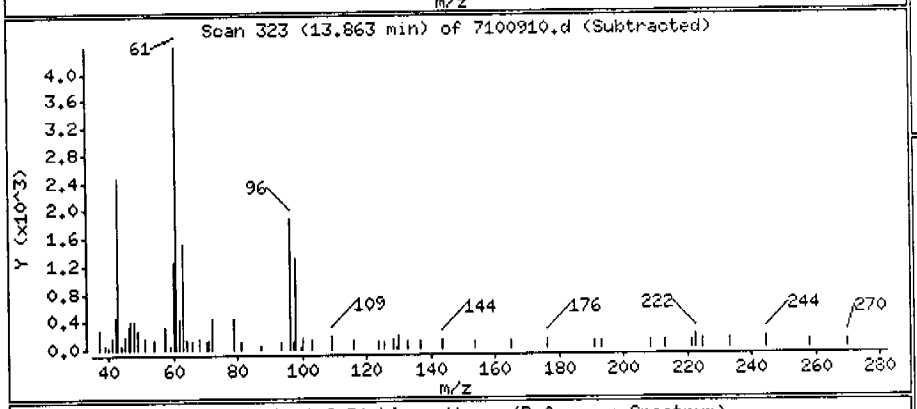
Column diameter: 0.53

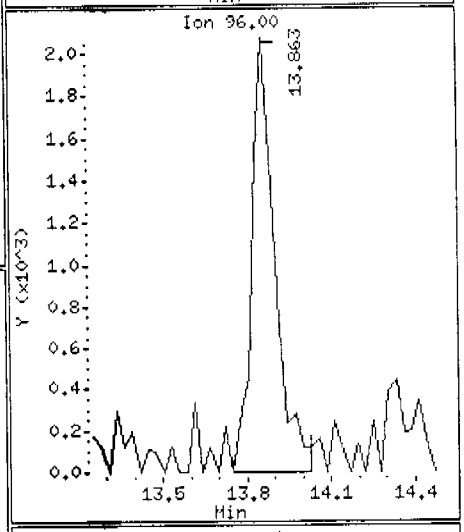
76 cis-1,2-Dichloroethene

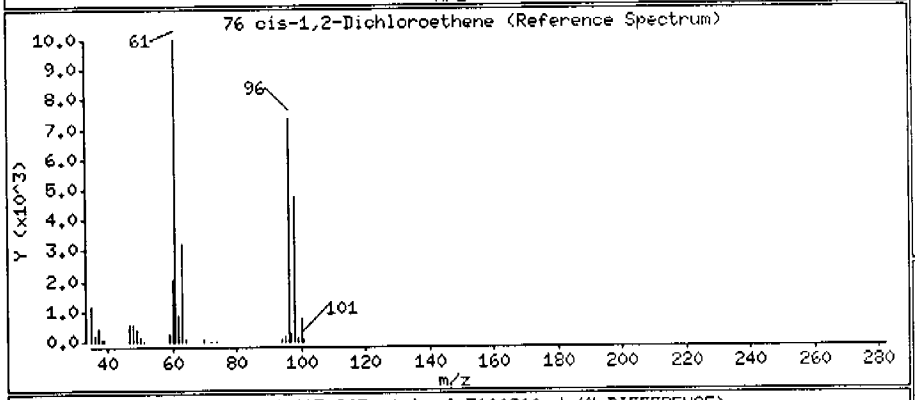
Concentration: 0.9475 PPBV

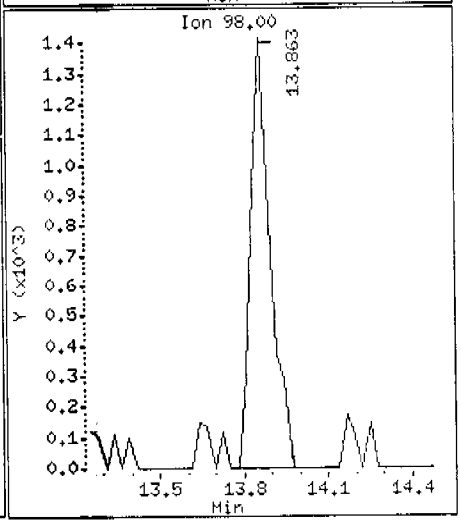


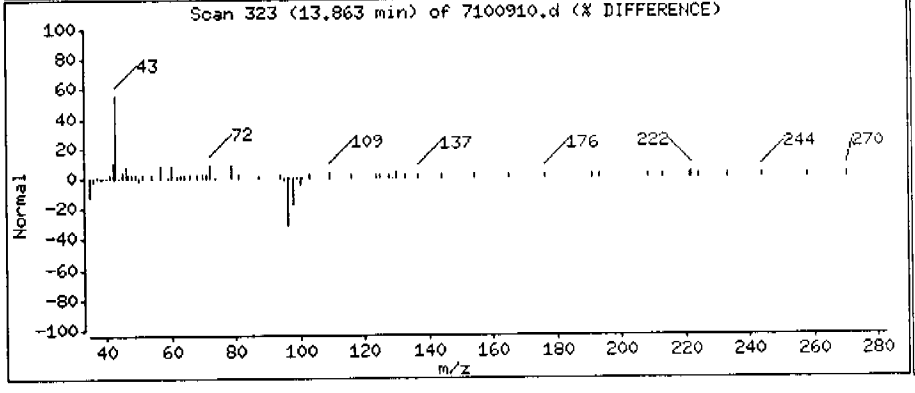












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Sample Info: 200mL #928

Instrument: msd7.i

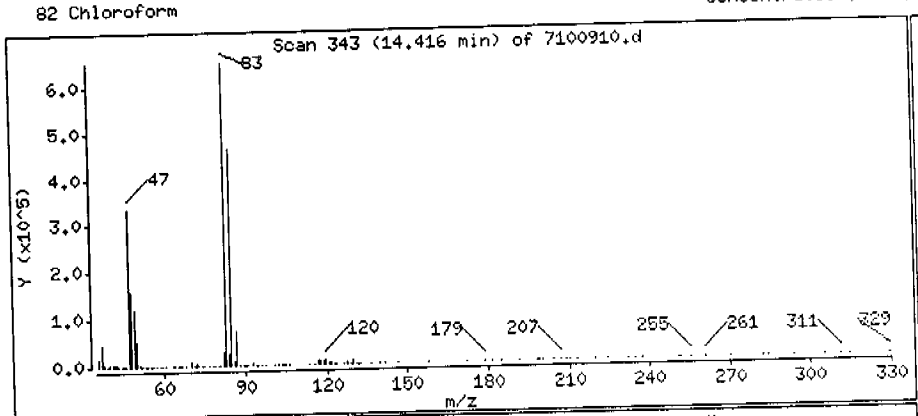
Operator: rs

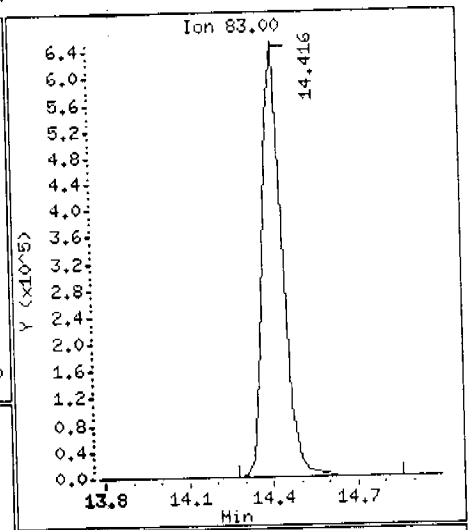
Column phase: RTx-624

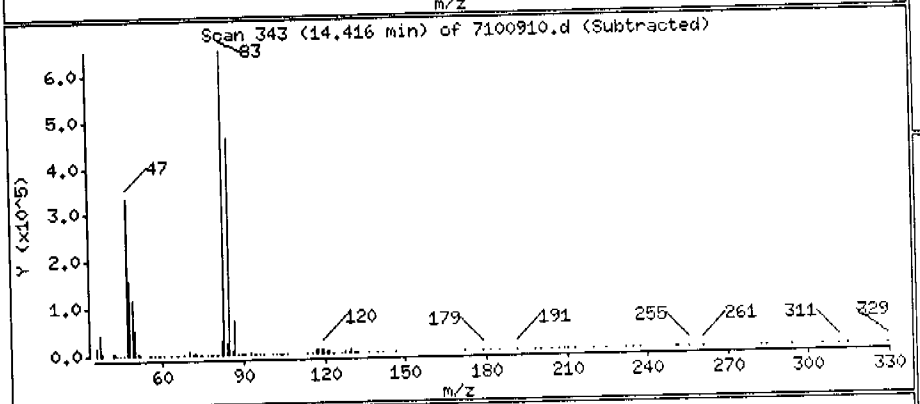
Column diameter: 0.53

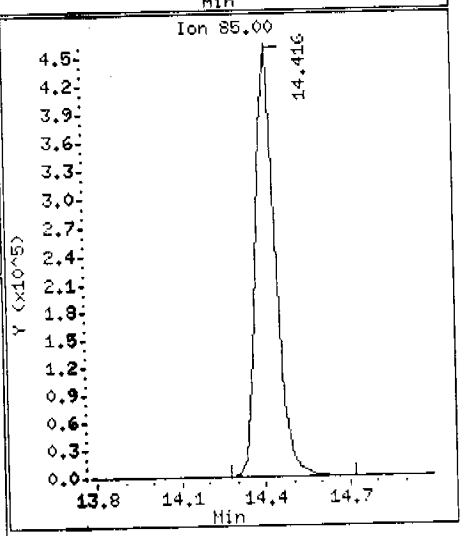
Concentration: 127.52 PPBV

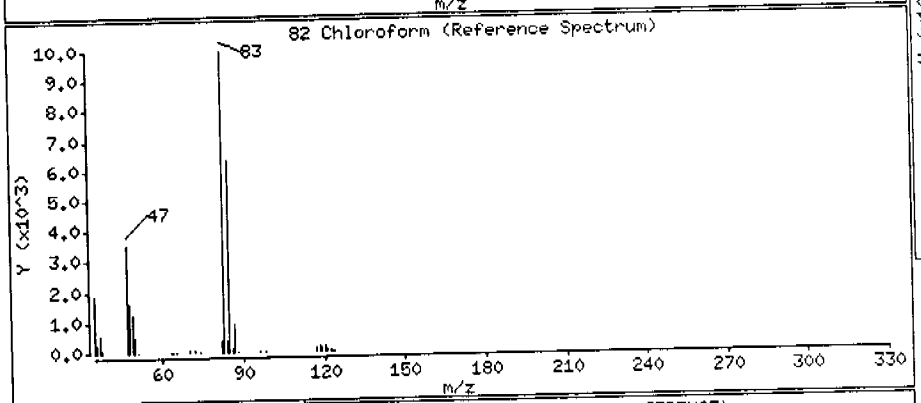
82 Chloroform

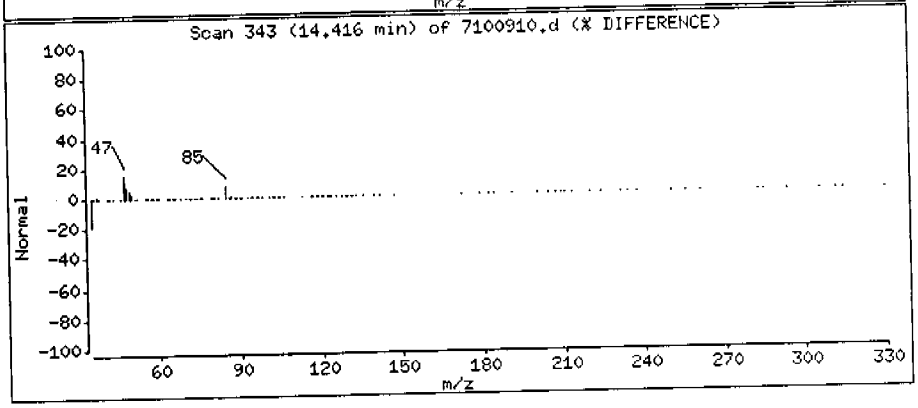












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

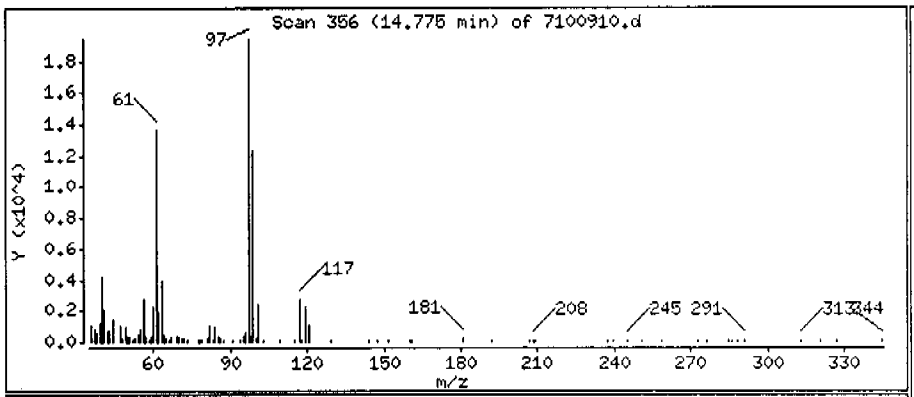
Operator: ra

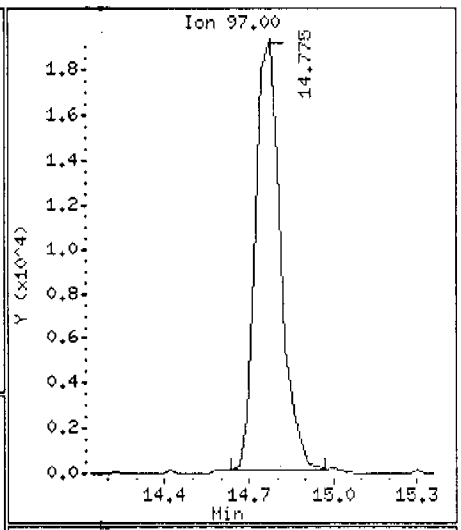
Column phase: RTx-624

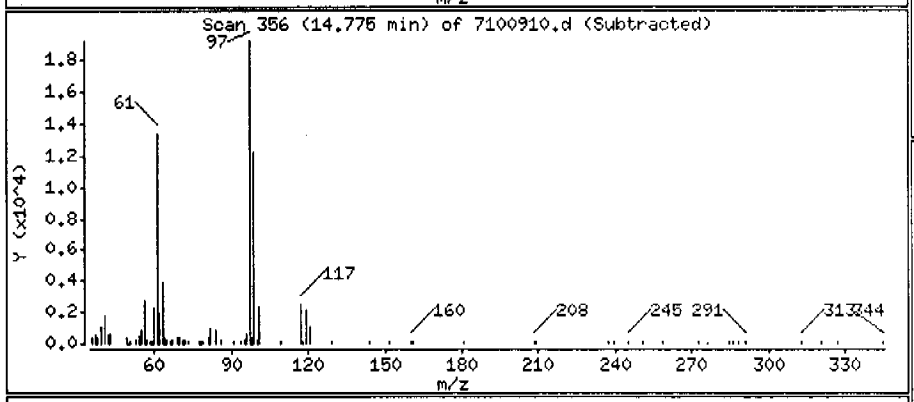
Column diameter: 0.53

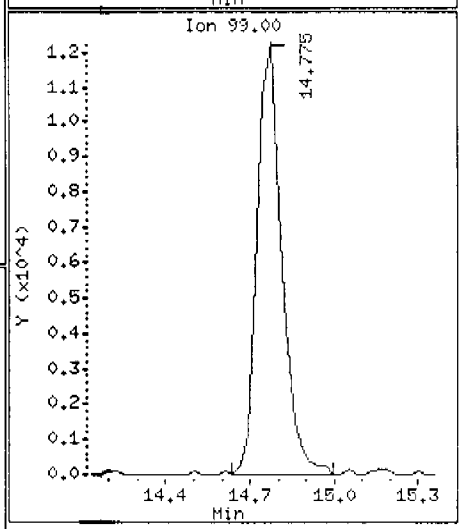
83 1,1,1-Trichloroethane

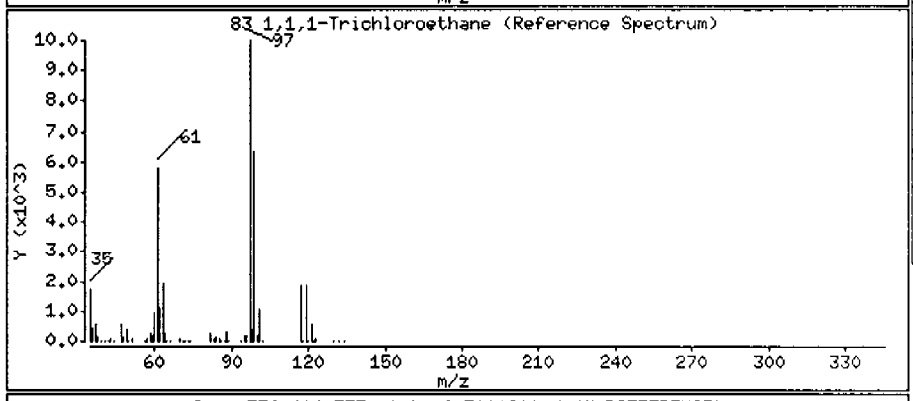
Concentration: 4.644 PPBV

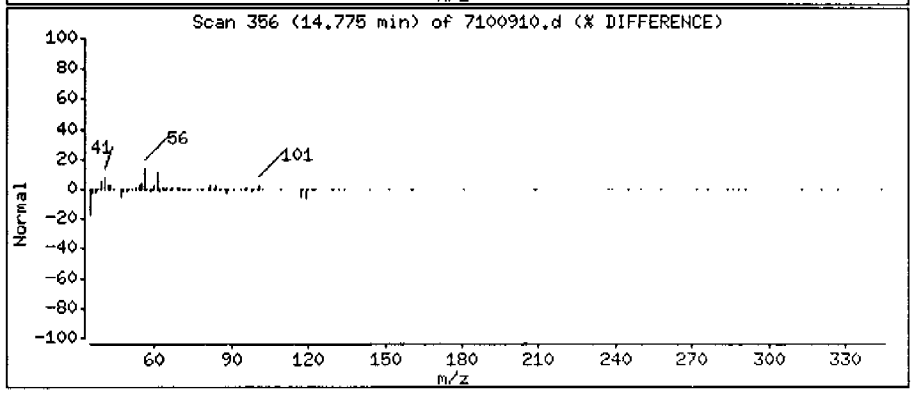












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

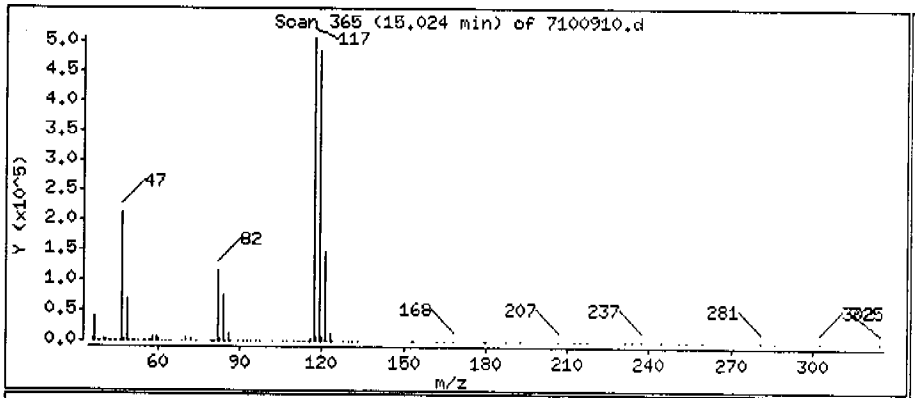
Operator: ra

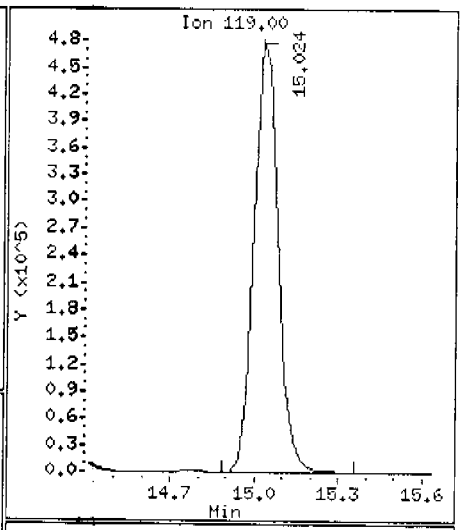
Column phase: RTx-624

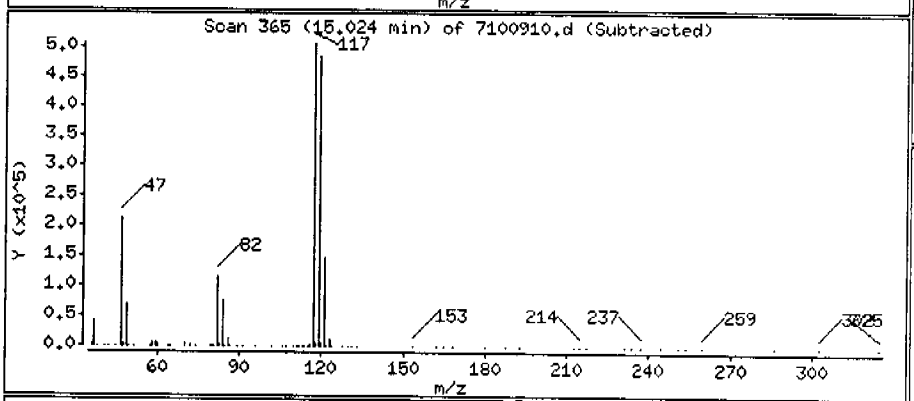
Column diameter: 0.53

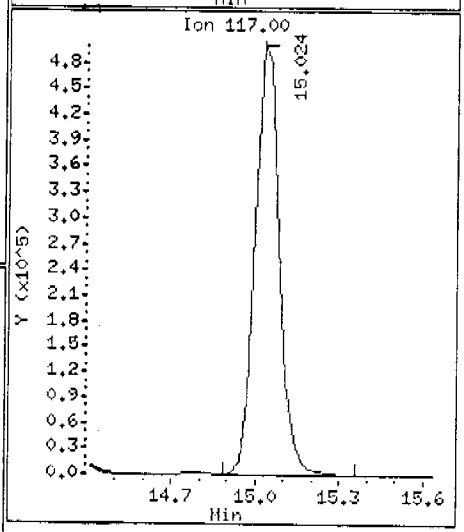
87 Carbon Tetrachloride

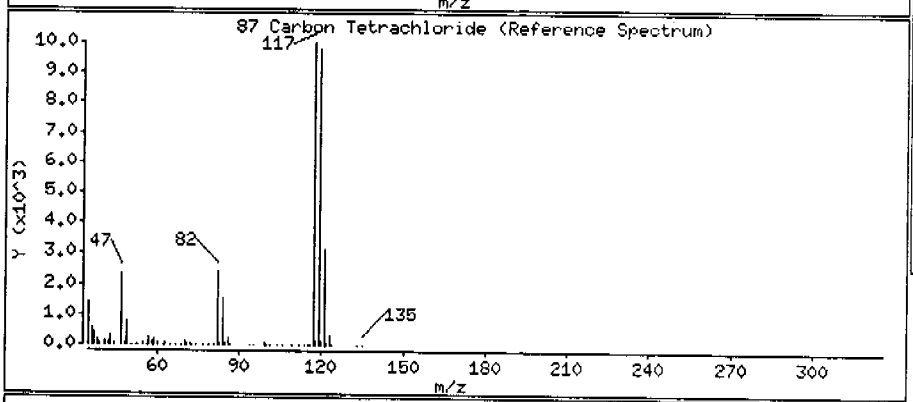
Concentration: 98.428 PPBV

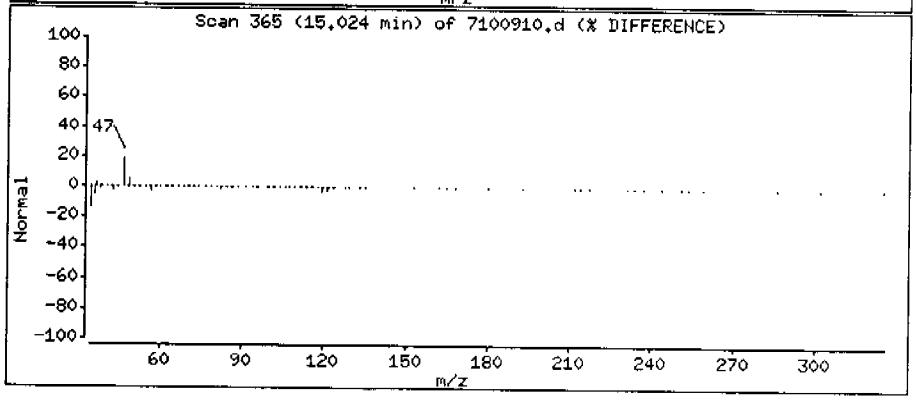












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Sample Info: 200mL #928

Instrument: msd7.i

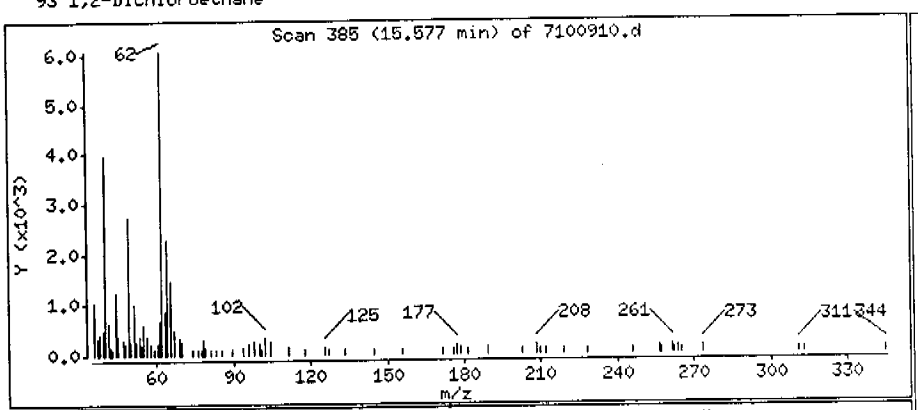
Operator: ra

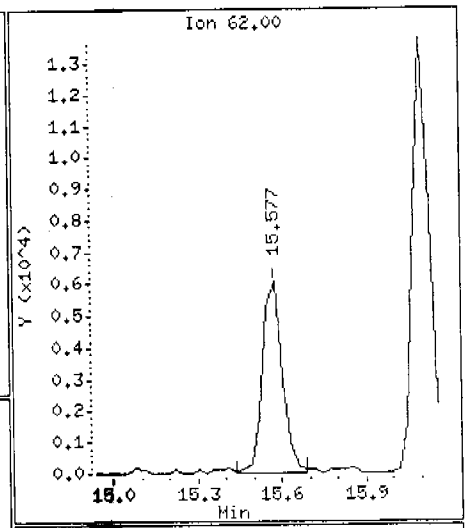
Column phase: RTx-624

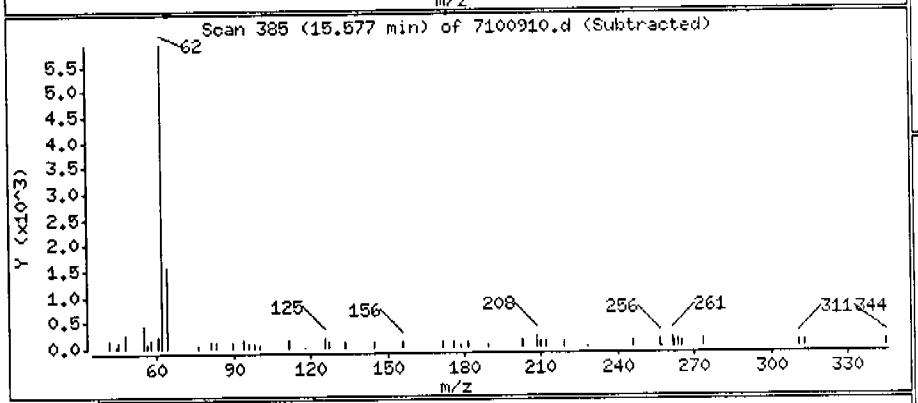
Column diameter: 0.53

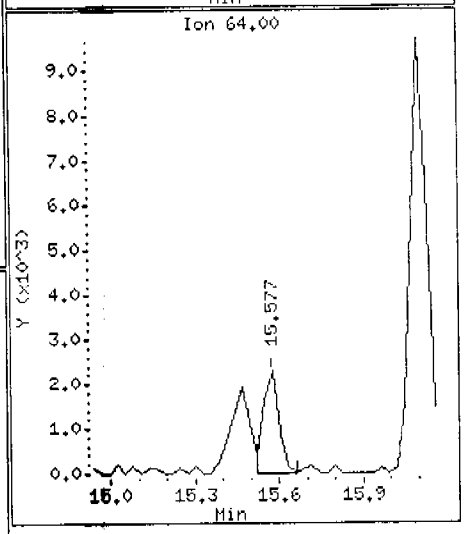
93 1,2-Dichloroethane

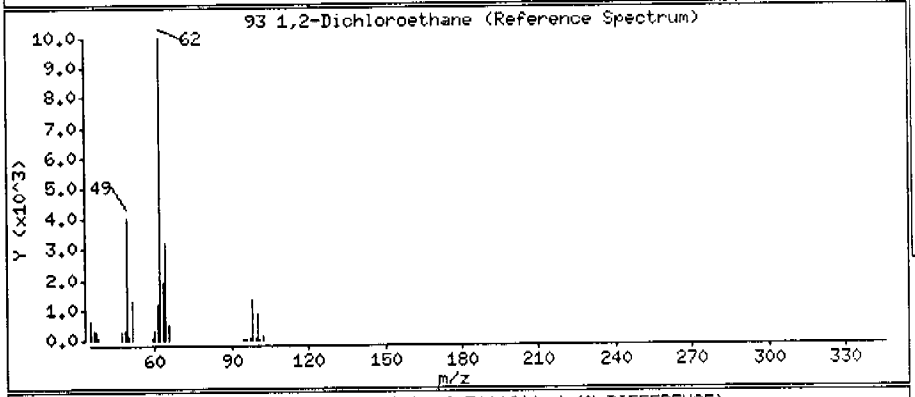
Concentration: 1.309 PPBV

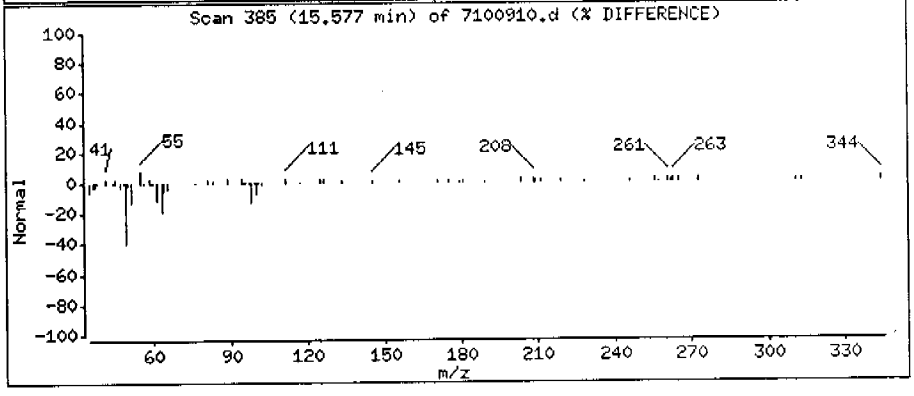












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

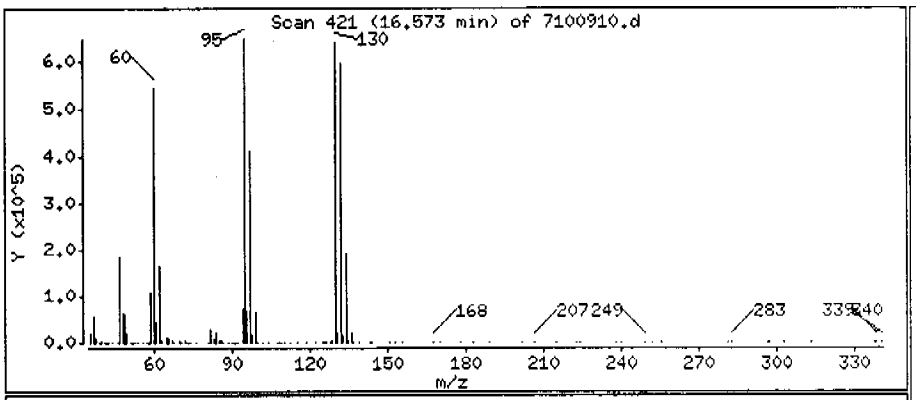
Operator: ra

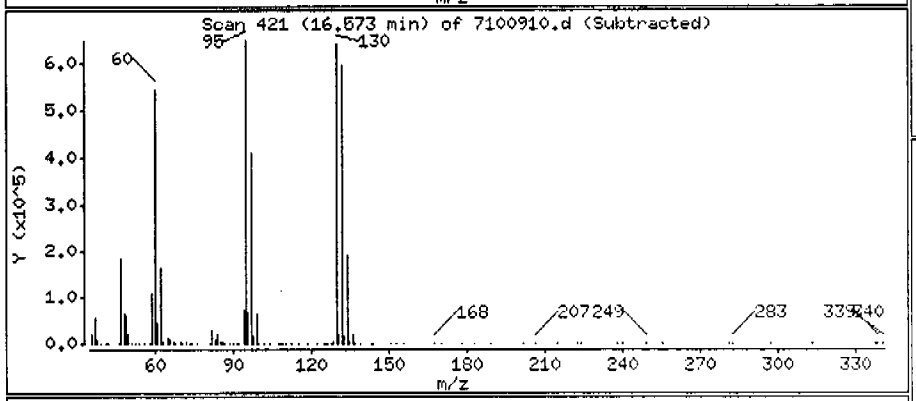
Column phase: RTx-624

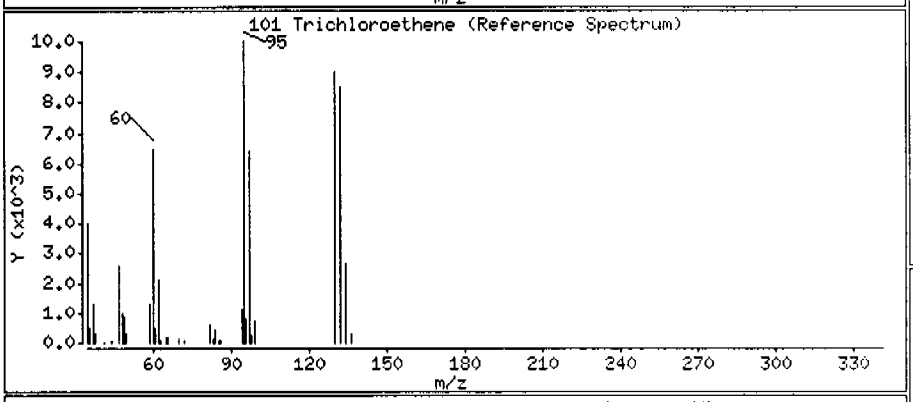
Column diameter: 0.53

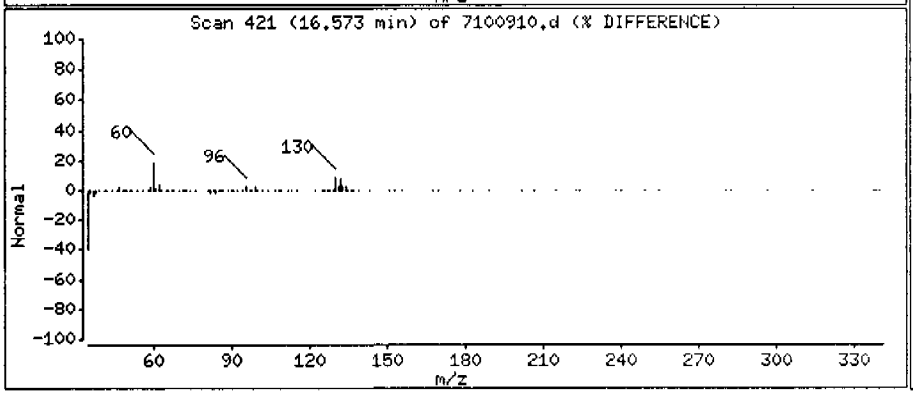
101 Trichloroethene

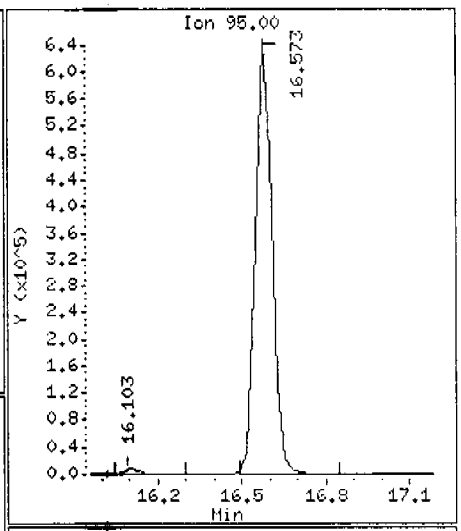
Concentration: 201.27 PPBV

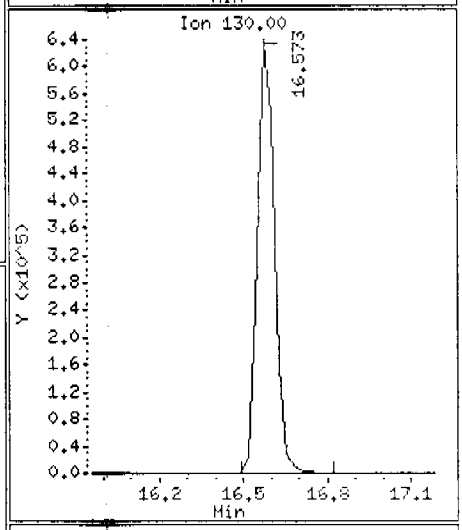


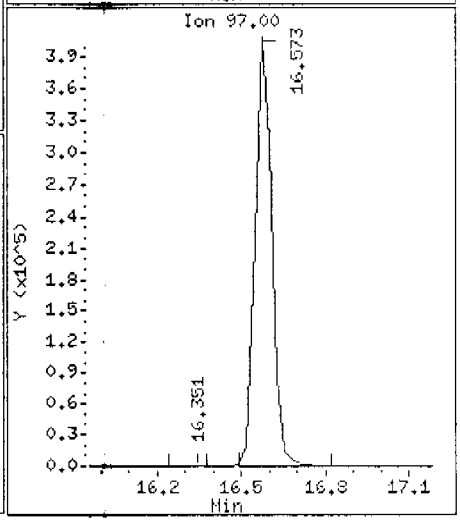












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

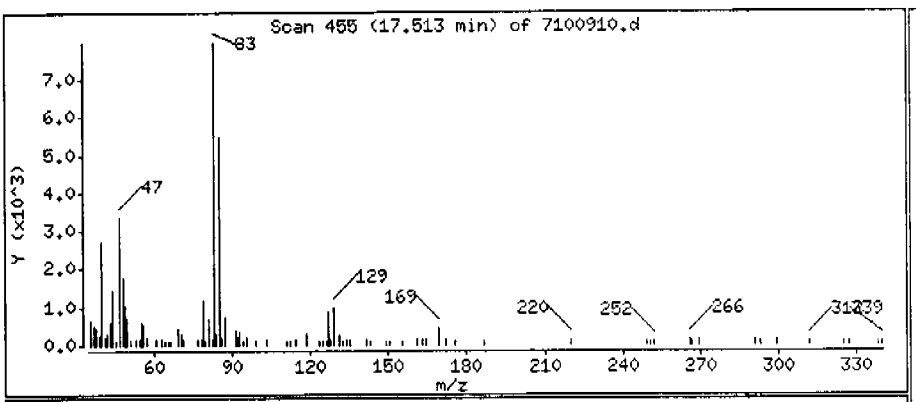
Operator: ra

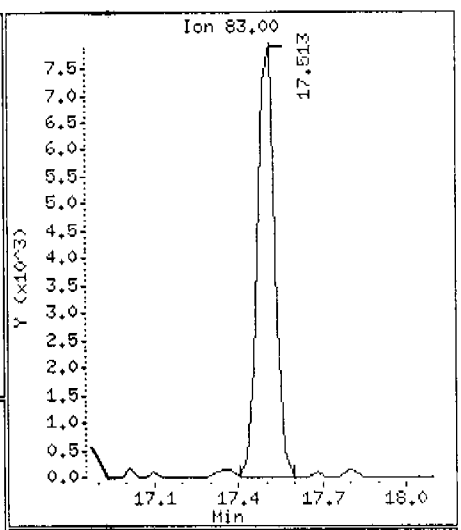
Column phase: RTx-624

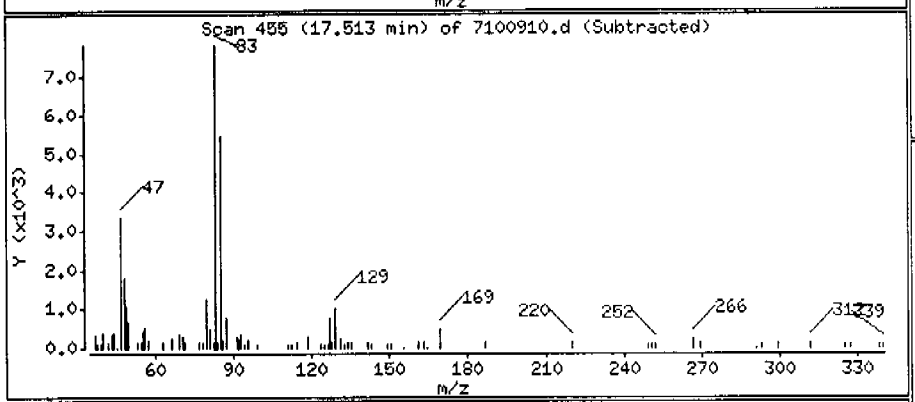
Column diameter: 0.53

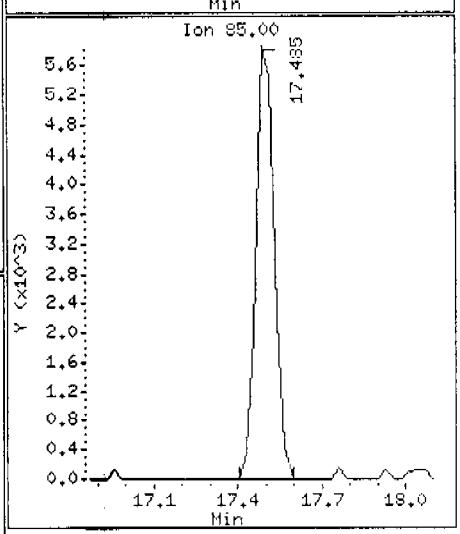
107 Bromodichloromethane

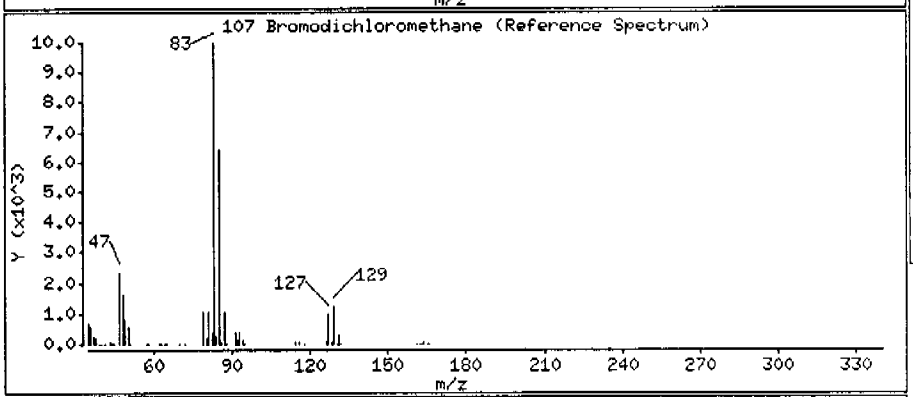
Concentration: 1.453 PPBV

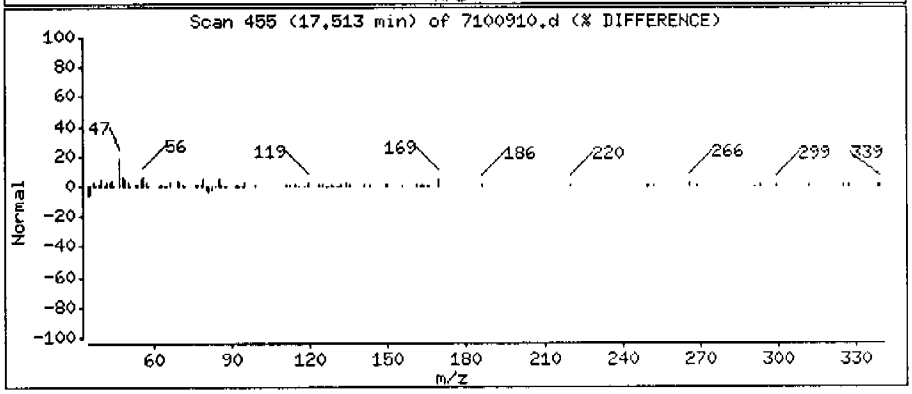












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

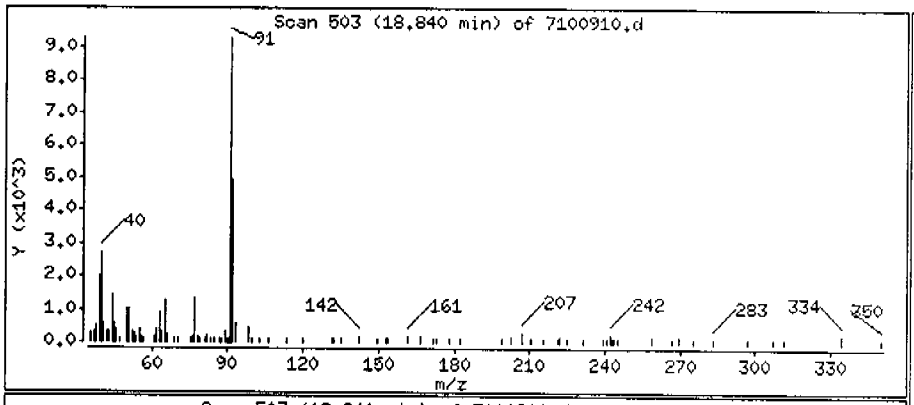
Operator: ra

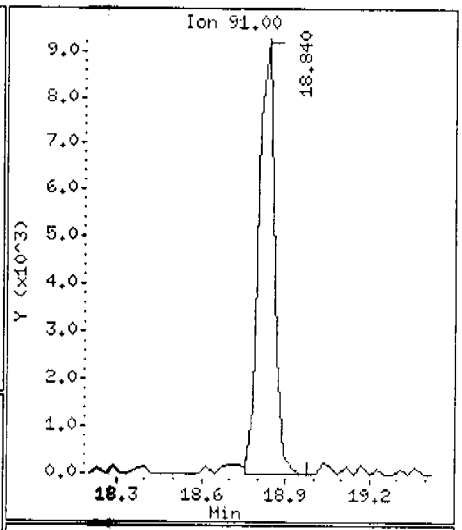
Column phase: RTx-624

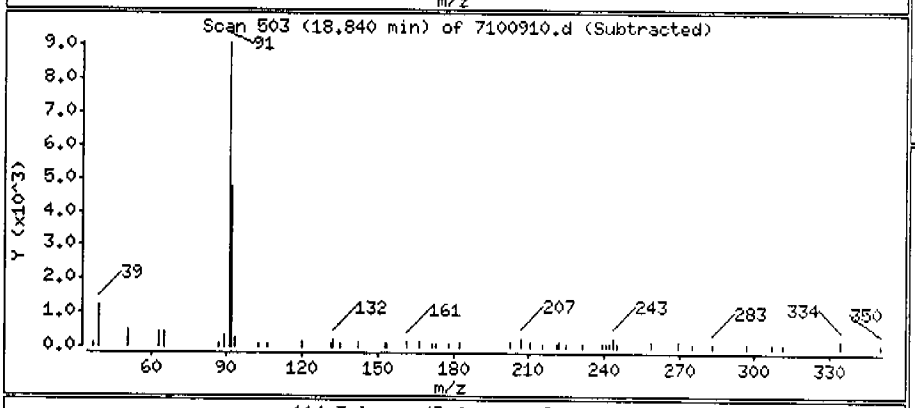
Column diameter: 0.53

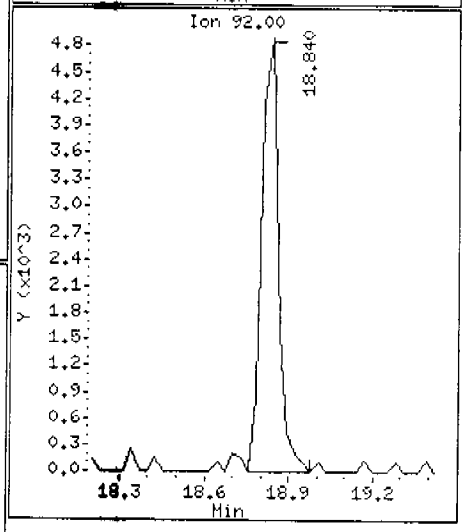
114 Toluene

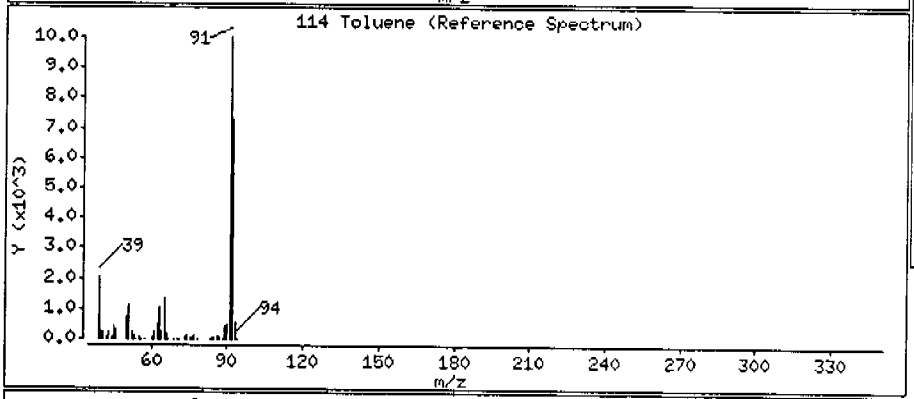
Concentration: 1.035 PPBV

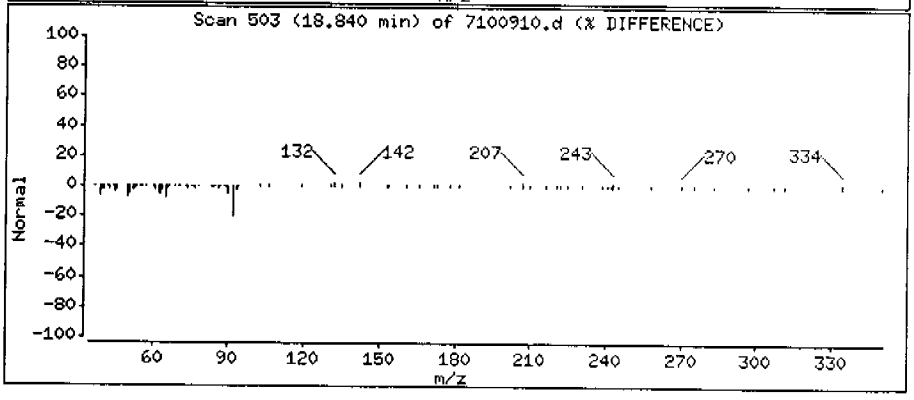












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Sample Info: 200mL #928

Instrument: msd7.i

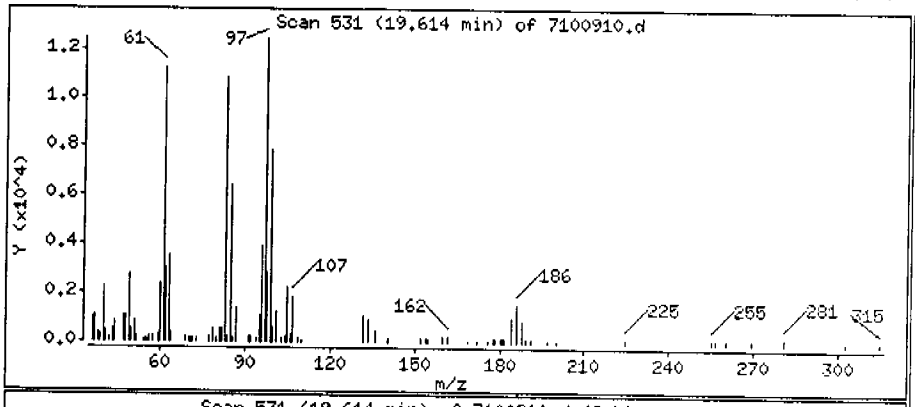
Operator: ra

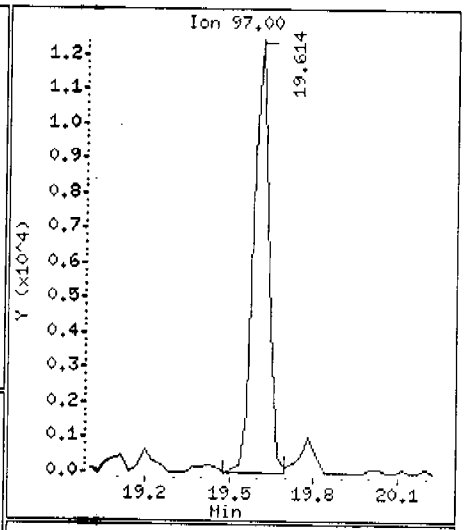
Column phase: RTx-624

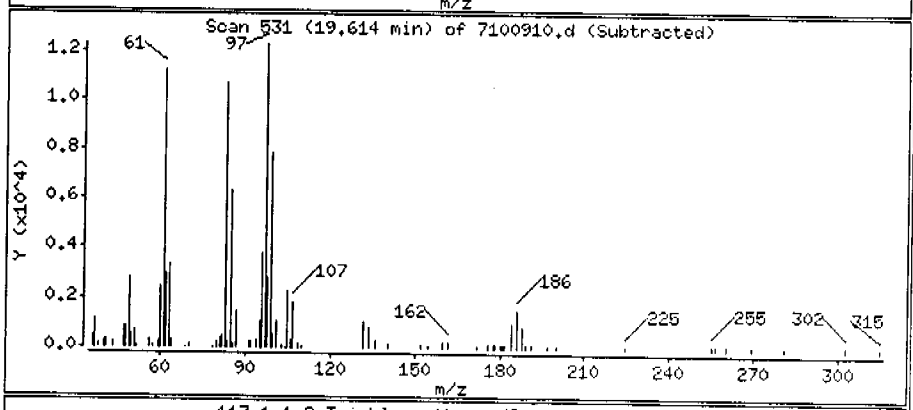
Column diameter: 0.53

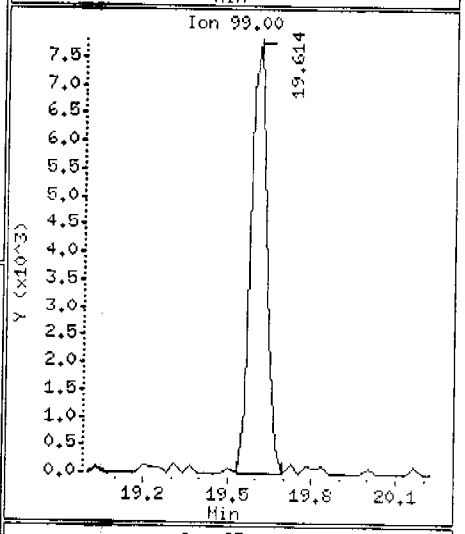
117 1,1,2-Trichloroethane

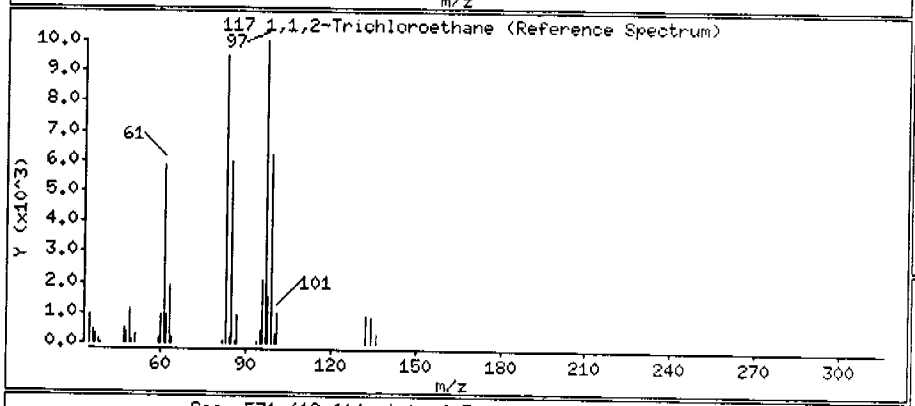
Concentration: 3.746 PPBV

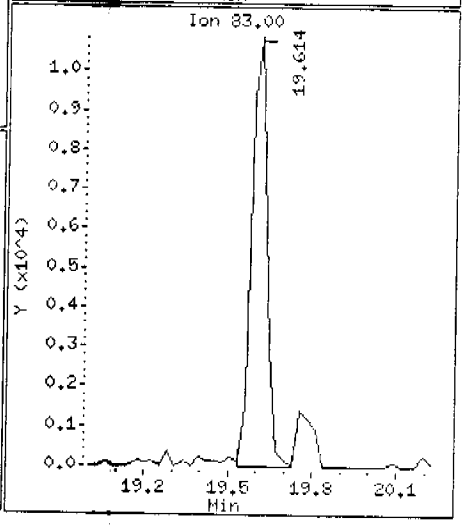


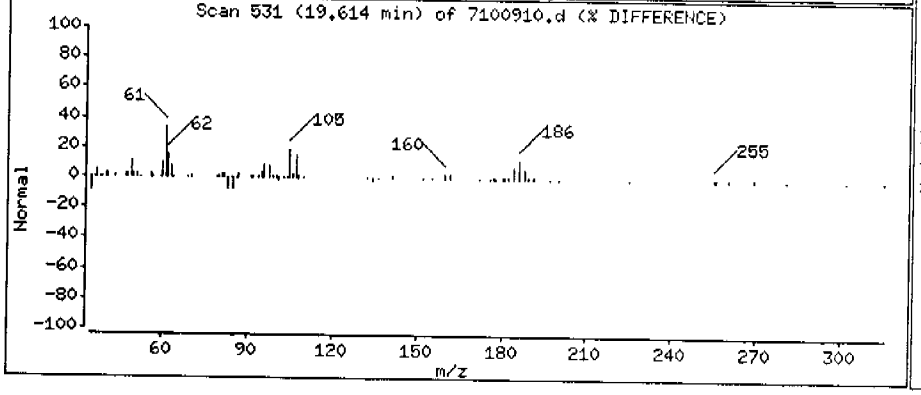












Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Sample Info: 200mL #928

Instrument: msd7.i

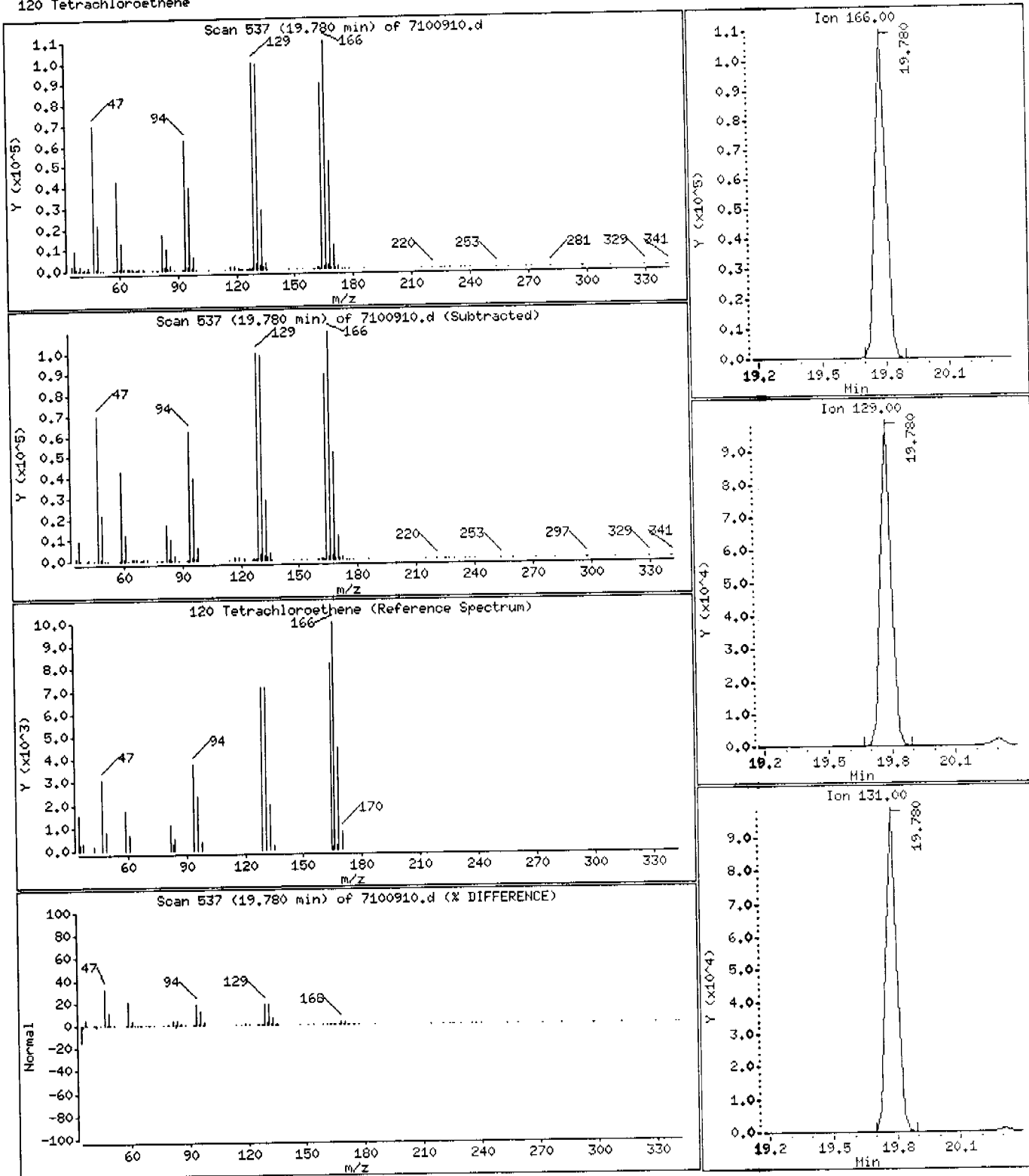
Operator: ra

Column phase: RTx-624

Column diameter: 0.53

Concentration: 23.400 PPBV

120 Tetrachloroethene



Data File: /chem/msd7.i/09oct08.b/7100910.d

Date : 09-OCT-2008 15:39

Client ID:

Instrument: msd7.i

Sample Info: 200mL #928

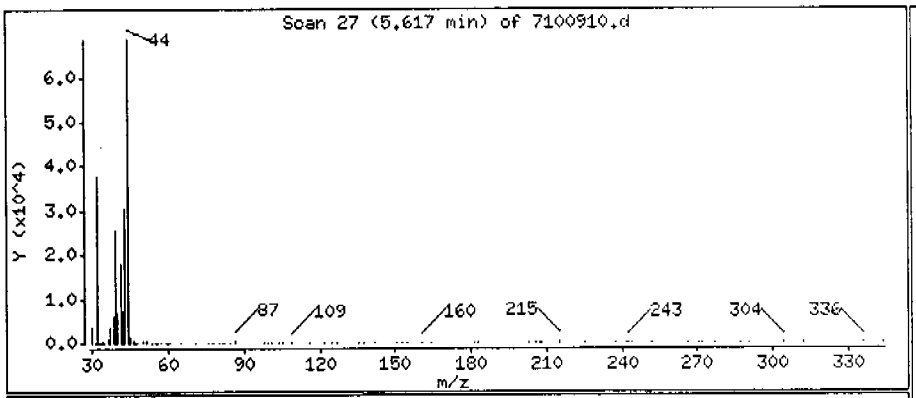
Operator: ra

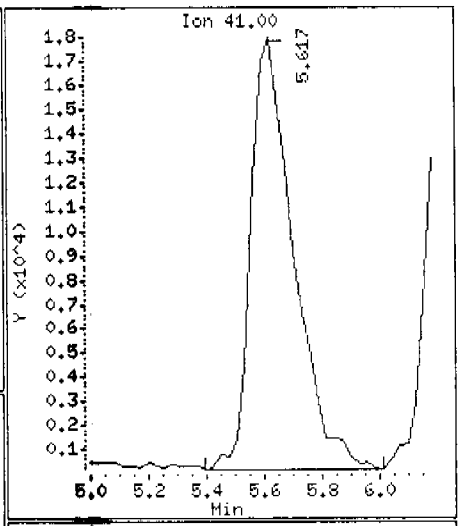
Column phase: RTx-624

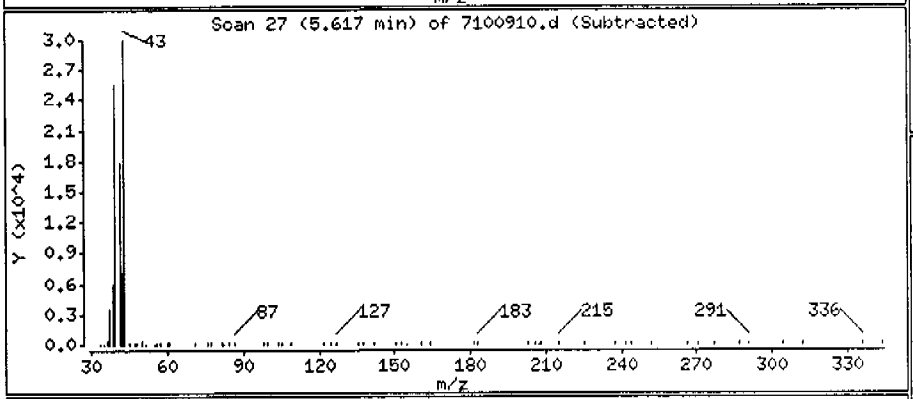
Column diameter: 0.53

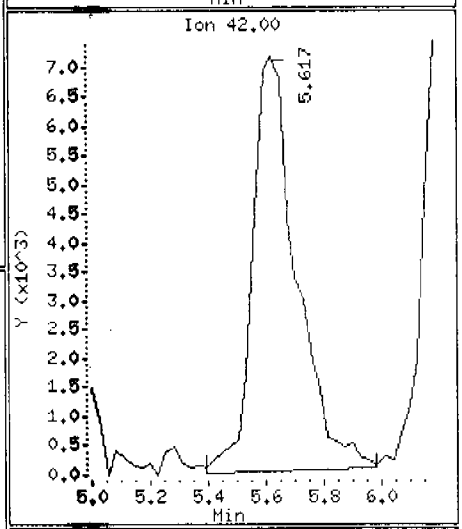
11 Propylene

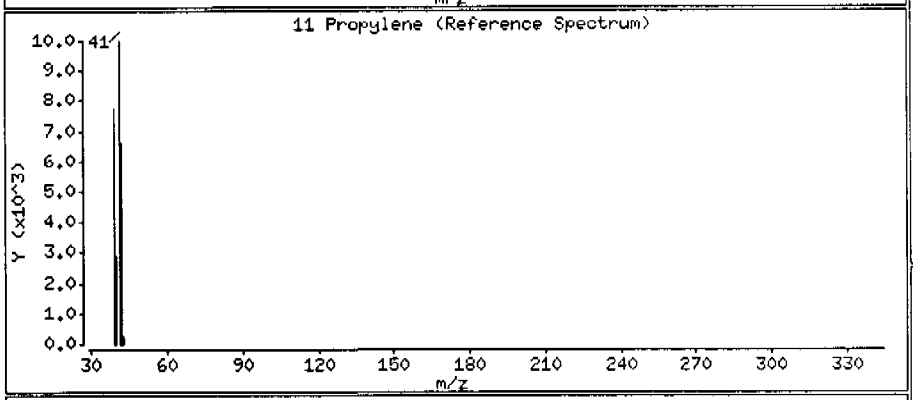
Concentration: 11.851 PPBV

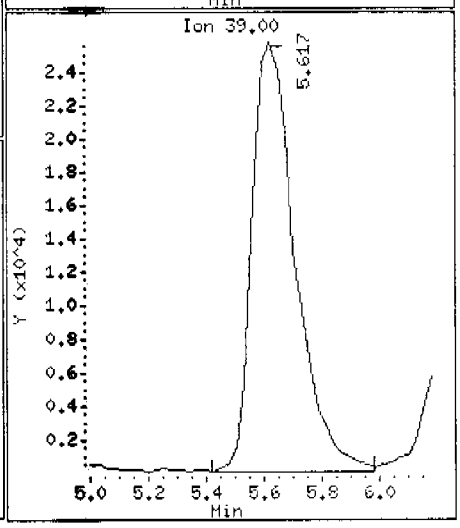


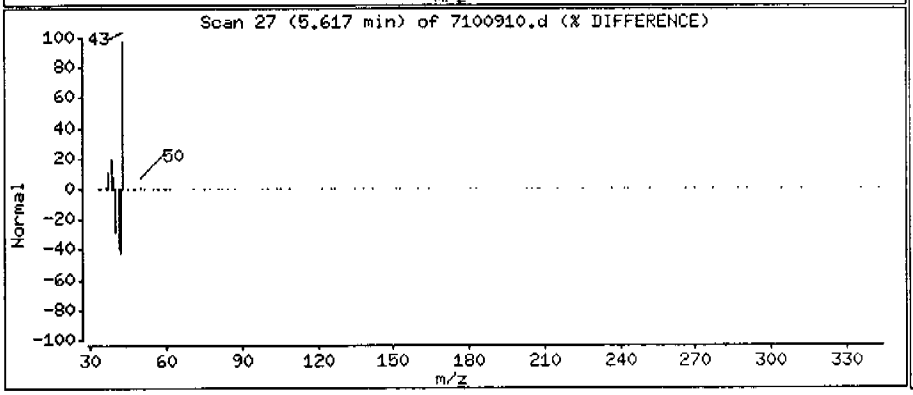












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14822

Lab ID#: 0809614-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	0.96	2.2	7.3	17
1,1-Dichloroethene	0.96	8.1	3.8	32
Carbon Disulfide	0.96	5.6	3.0	18
Methylene Chloride	0.96	190	3.3	680
Chloroform	0.96	110	4.7	520
1,1,1-Trichloroethane	0.96	1.6	5.2	9.0
Carbon Tetrachloride	0.96	60	6.0	380
1,2-Dichloroethane	0.96	3.0	3.9	12
Trichloroethene	0.96	160	5.1	860
Bromodichloromethane	0.96	1.3	6.4	8.4
Toluene	0.96	1.4	3.6	5.4
1,1,2-Trichloroethane	0.96	15	5.2	81
Tetrachloroethene	0.96	9.2	6.5	63
Propylene	3.8	6.2	6.6	11

0196

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14822

Lab ID#: 0809614-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100913	**Date of Collection:**	9/25/08
Dil. Factor:	1.91	**Date of Analysis:**	10/9/08 05:43 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	Not Detected	4.7	Not Detected
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	Not Detected	7.2	Not Detected
Freon 113	0.96	2.2	7.3	17
1,1-Dichloroethene	0.96	8.1	3.8	32
Acetone	3.8	Not Detected	9.1	Not Detected
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	5.6	3.0	18
Methylene Chloride	0.96	190	3.3	680
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	110	4.7	520
1,1,1-Trichloroethane	0.96	1.6	5.2	9.0
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	60	6.0	380
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	3.0	3.9	12
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	160	5.1	860
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	1.3	6.4	8.4
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	1.4	3.6	5.4
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	15	5.2	81
Tetrachloroethene	0.96	9.2	6.5	63

0197

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14822

Lab ID#: 0809614-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100913	**Date of Collection:**	9/25/08
Dil. Factor:	1.91	**Date of Analysis:**	10/9/08 05:43 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.8	Not Detected	16	Not Detected
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected
Chlorobenzene	0.96	Not Detected	4.4	Not Detected
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	Not Detected	4.1	Not Detected
o-Xylene	0.96	Not Detected	4.1	Not Detected
Styrene	0.96	Not Detected	4.1	Not Detected
Bromoform	0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected
Methanol	96	Not Detected	120	Not Detected
n-Butanol	3.8	Not Detected	12	Not Detected
Propylene	3.8	6.2	6.6	11

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

0198

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100913.d
Lab Smp Id: 0809614-09A
Inj Date : 09-OCT-2008 17:43
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #12017
Misc Info : 9.0"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	337080	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	257035			28.92- 128.92	76.25
14.333	14.333 (1.000)	49	1366490			320.90- 420.90	405.39
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1023345	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	169072			0.00- 67.10	16.52
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1080984	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	543976			1.24- 101.24	50.32
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	623838	24.5008	24.501	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	264739			0.00- 97.37	42.44
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	973312	24.8460	24.846	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	137453			0.00- 63.85	14.12

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	765059			26.51- 126.51	78.60
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	527387	23.7096	23.710	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	763861			92.62- 192.62	144.84
23.291	23.291	(1.093)	176	503645			44.03- 144.03	95.50
42 Freon 113						CAS #: 76-13-1		
10.158	10.158	(0.709)	151	38029	1.14374	2.184	80.00- 120.00	100.00
10.158	10.158	(0.709)	153	22648			12.55- 112.55	59.56
10.158	10.158	(0.709)	101	54632			98.99- 198.99	143.66
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.269	10.269	(0.716)	61	245734	4.24992	8.117	80.00- 120.00	100.00
10.296	10.269	(0.718)	96	86498			0.00- 87.74	35.20
10.269	10.269	(0.716)	98	51750			0.00- 73.80	21.06
47 Carbon Disulfide						CAS #: 75-15-0		
10.849	10.822	(0.757)	76	210024	2.95789	5.650	80.00- 120.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.430	11.430	(0.797)	49	5152415	101.859	194.55	80.00- 120.00	100.00
11.430	11.430	(0.797)	84	1712499			0.00- 84.42	33.24
11.430	11.430	(0.797)	51	1499084			0.00- 80.54	29.09
82 Chloroform						CAS #: 67-66-3		
14.416	14.388	(1.006)	83	2638893	56.3193	107.57	80.00- 120.00	100.00
14.416	14.388	(1.006)	85	1919663			21.17- 121.17	72.75
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.748	14.748	(1.029)	97	41378	0.86491	1.652	80.00- 120.00	100.00
14.775	14.748	(1.031)	99	26852			13.83- 113.83	64.90
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.024	15.024	(1.048)	119	1719189	31.4700	60.108	80.00- 120.00	100.00
15.024	15.024	(1.048)	117	1793257			55.68- 155.68	104.31
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.550	15.550	(0.966)	62	65357	1.58713	3.031	80.00- 120.00	100.00
15.550	15.550	(0.966)	64	21036			0.00- 82.49	32.19
101 Trichloroethene						CAS #: 79-01-6		
16.573	16.573	(1.029)	95	2000810	83.8236	160.10	80.00- 120.00	100.00
16.573	16.573	(1.029)	130	2032964			52.48- 152.48	101.61
16.573	16.573	(1.029)	97	1277652			14.44- 114.44	63.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
107 Bromodichloromethane					CAS #: 75-27-4		
17.485	17.485 (1.086)	83	28536	0.66026	1.261	80.00- 120.00	100.00
17.485	17.485 (1.086)	85	19184			20.68- 120.68	67.23
114 Toluene					CAS #: 108-88-3		
18.812	18.812 (1.168)	91	45906	0.74322	1.420	80.00- 120.00	100.00
18.812	18.812 (1.168)	92	27892			12.04- 112.04	60.76
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	173324	7.77811	14.856	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	106169			10.80- 110.80	61.25
19.614	19.614 (0.921)	83	141116			33.27- 133.27	81.42
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	141483	4.84451	9.253	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	131820			35.87- 135.87	93.17
19.780	19.780 (0.929)	131	131638			35.33- 135.33	93.04
11 Propylene					CAS #: 115-07-1		
5.617	5.589 (0.392)	41	93484	3.25255	6.212	80.00- 120.00	100.00
5.673	5.589 (0.396)	42	34139			16.57- 116.57	36.52
5.617	5.589 (0.392)	39	126078			28.60- 128.60	134.87

Report Date: 11-Oct-2008 08:30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100913.d
Lab Smp Id: 0809614-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	337080	-6.90
97 1,4-Difluorobenze	1146510	687906	1605114	1023345	-10.74
126 Chlorobenzene-d5	1241713	745028	1738398	1080984	-12.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100913.d
Report Date: 11-Oct-2008 08:30

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-09A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"psi-5psi

Client SDG: 09oct08
Fraction: VOA
Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.501	98.00	70-130
$ 113 Toluene-d8	25.000	24.846	99.38	70-130
$ 137 Bromofluorobenzene	25.000	23.710	94.84	70-130

Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Sample Info: 200mL #12017

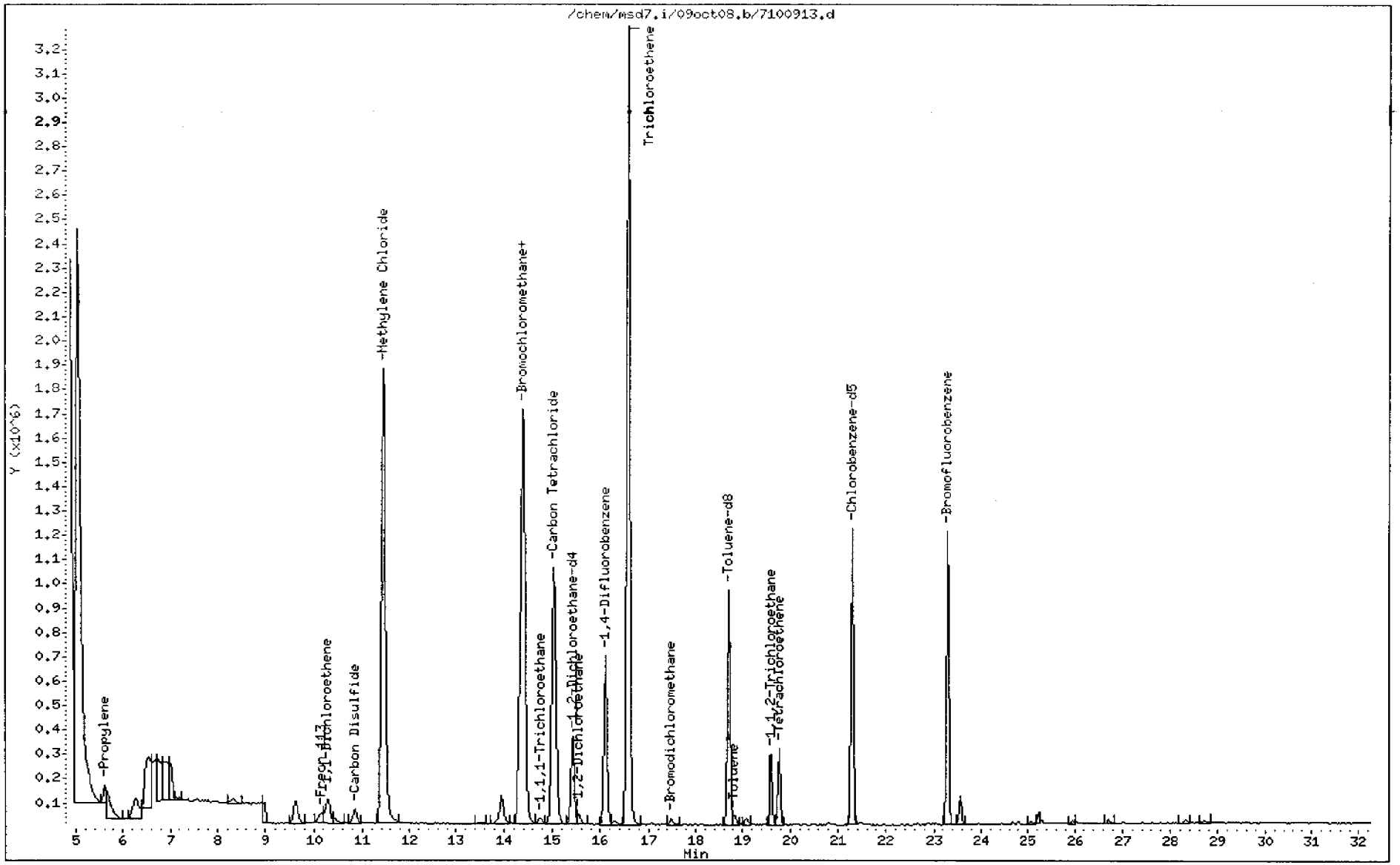
Column phase: RTx-624

Instrument: msd7.i

Operator: ra

Column diameter: 0.53

0204



Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

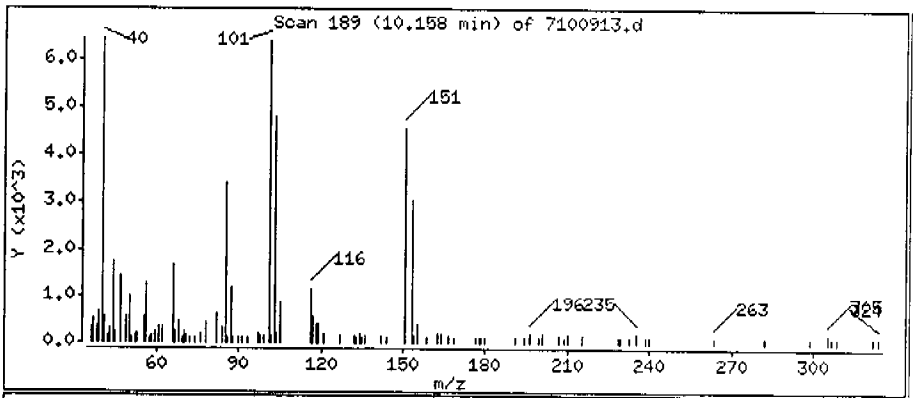
Operator: ra

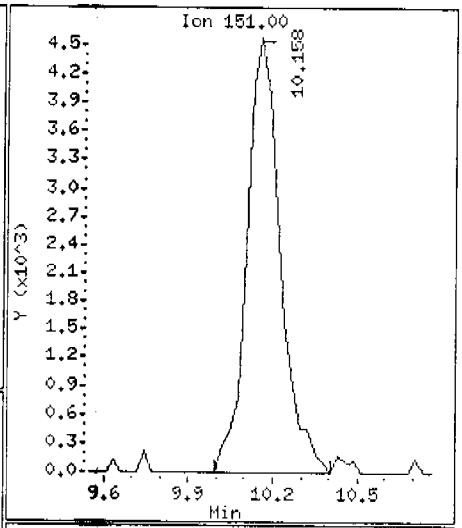
Column phase: RTx-624

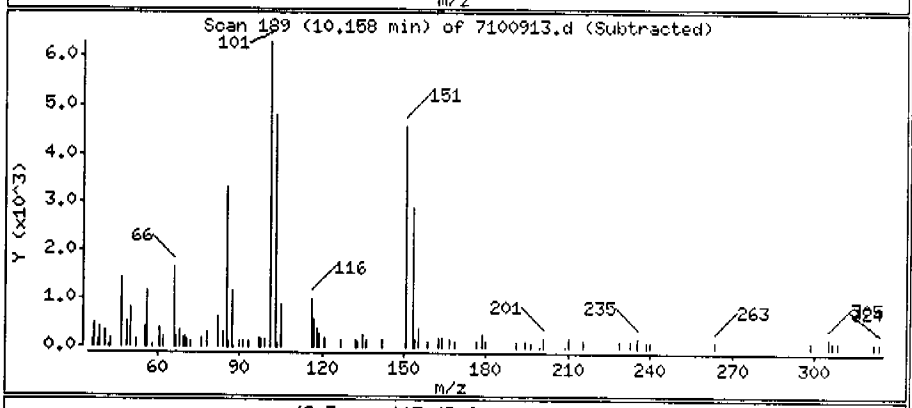
Column diameter: 0.53

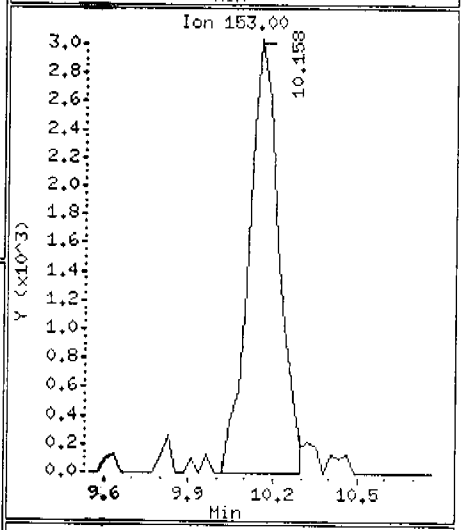
42 Freon 113

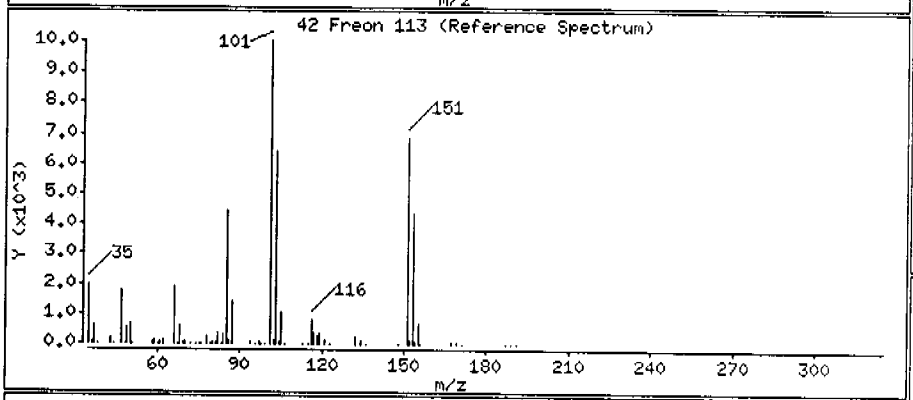
Concentration: 2.184 PPBV

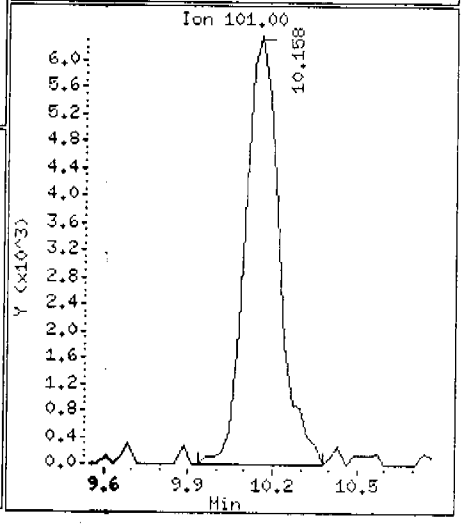


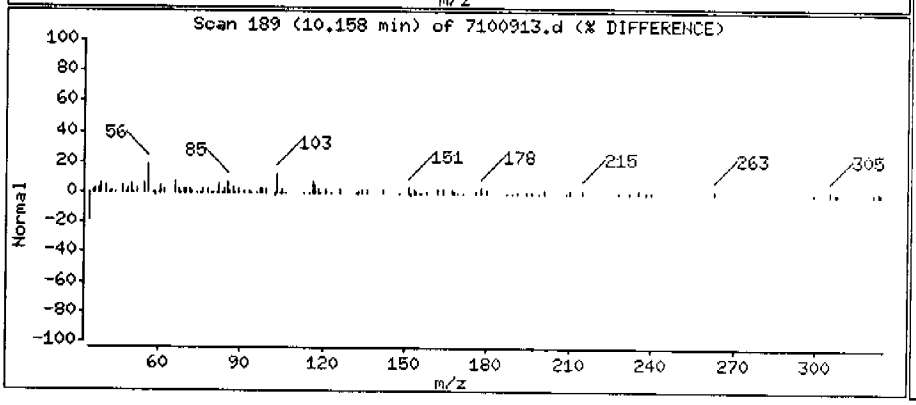












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Sample Info: 200mL #12017

Instrument: msd7.i

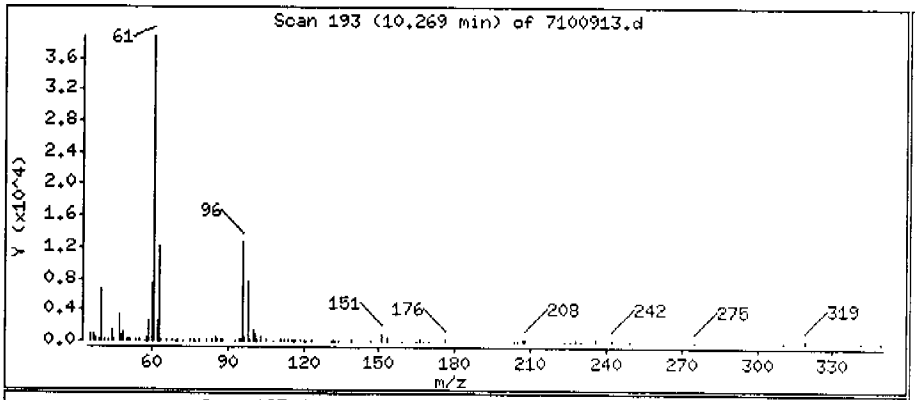
Operator: rs

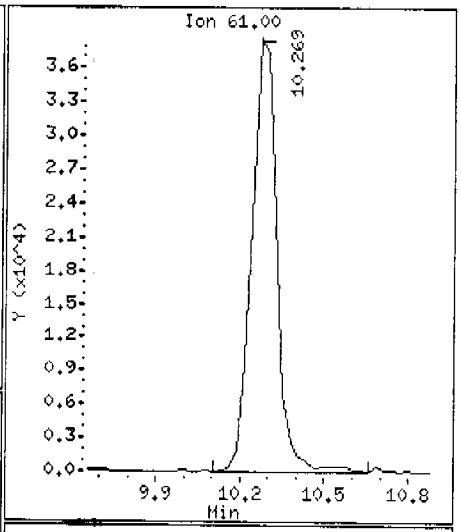
Column phase: RTx-624

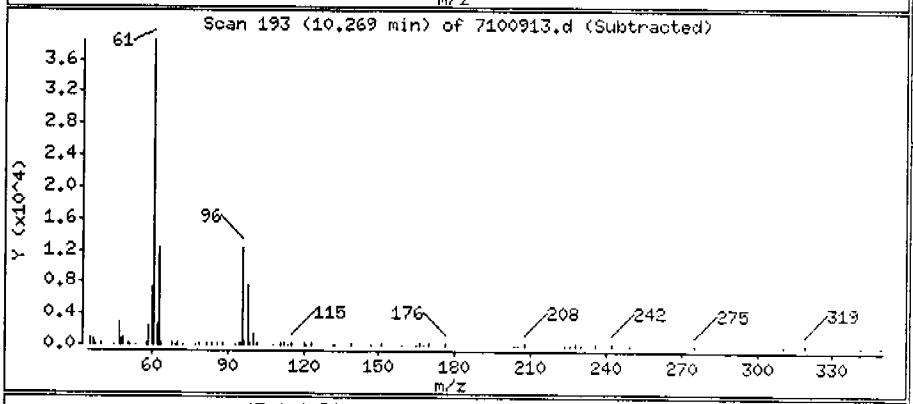
Column diameter: 0.53

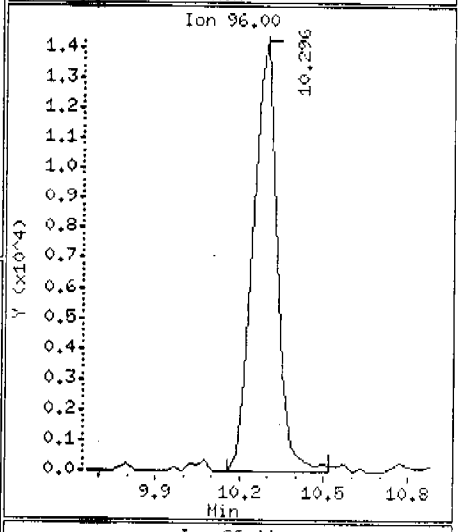
43 1,1-Dichloroethene

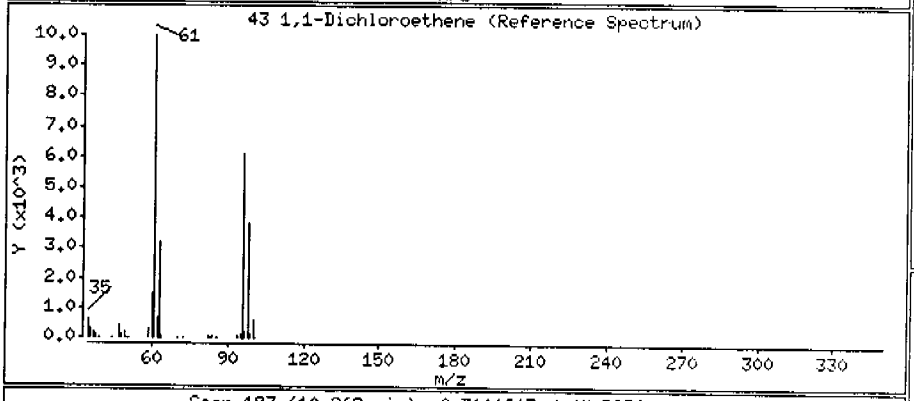
Concentration: 8.117 PPBV

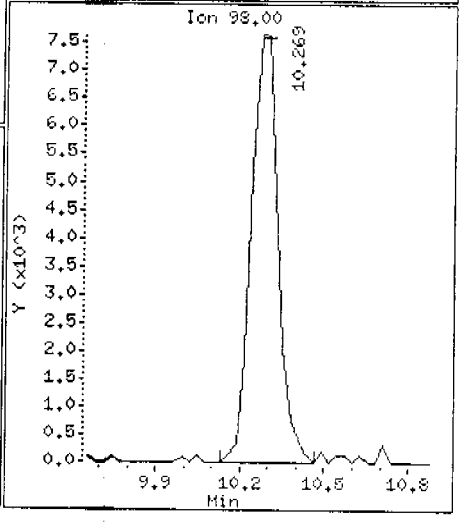


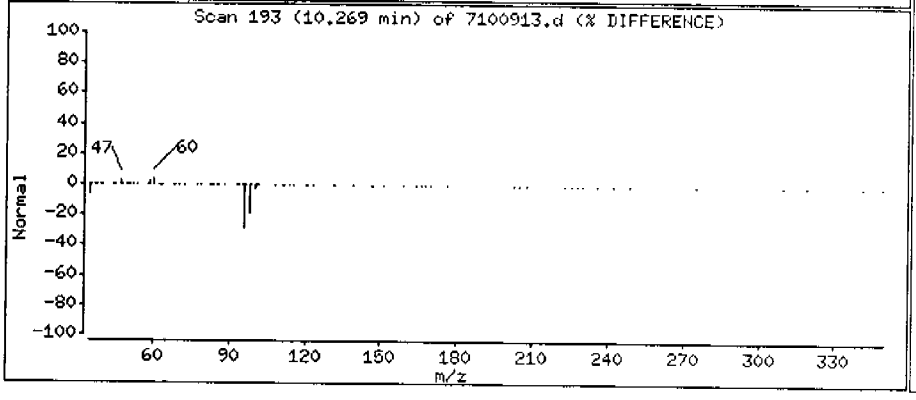












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

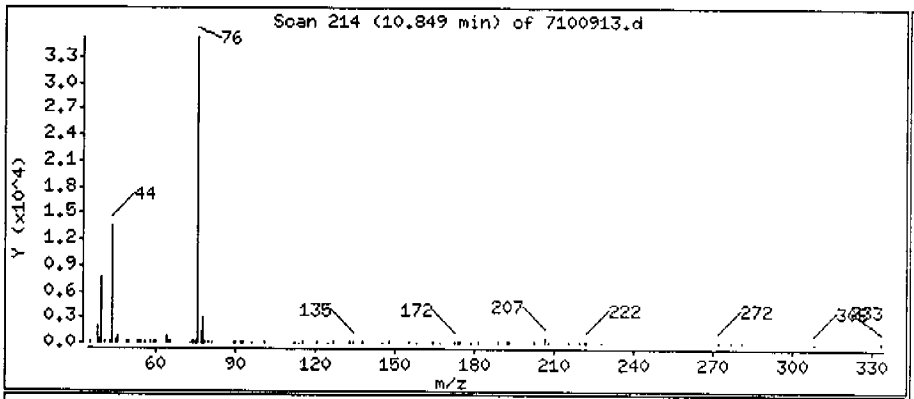
Operator: ra

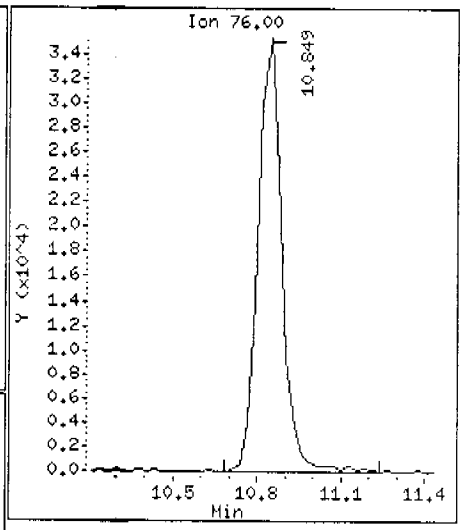
Column phase: RTx-624

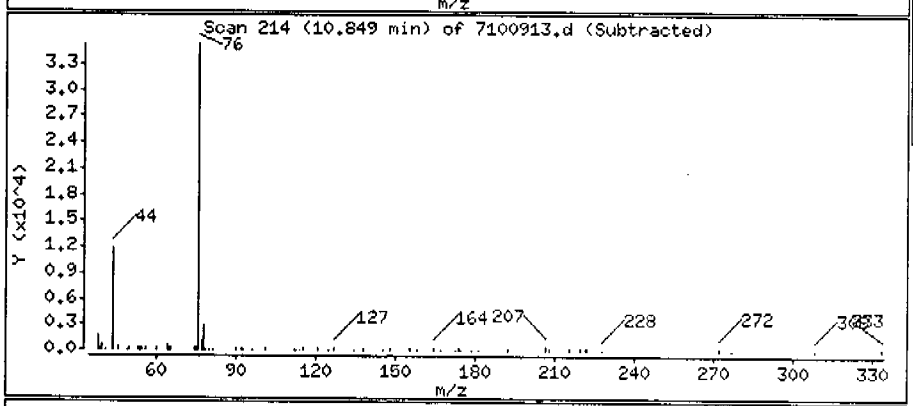
Column diameter: 0.53

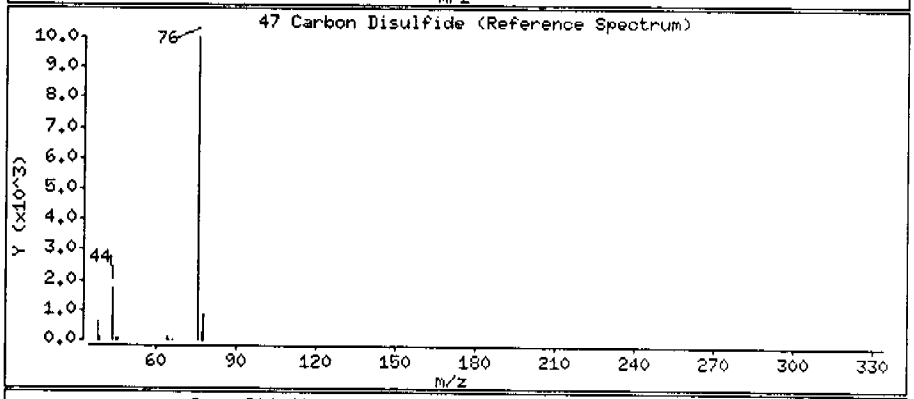
47 Carbon Disulfide

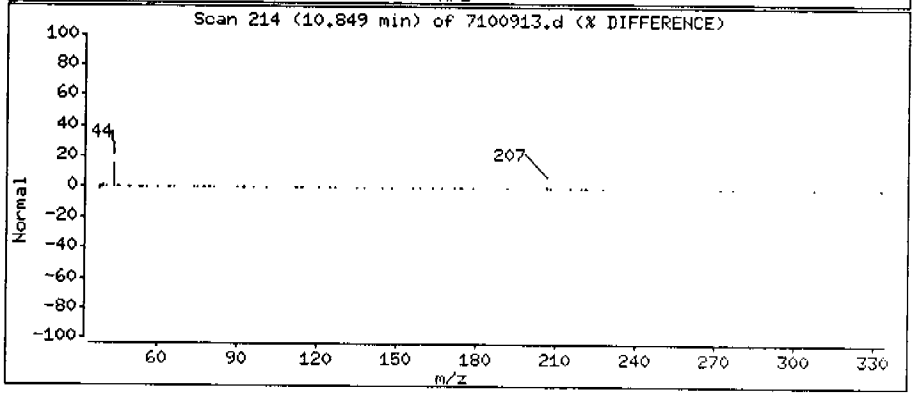
Concentration: 5.650 PPBV











Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

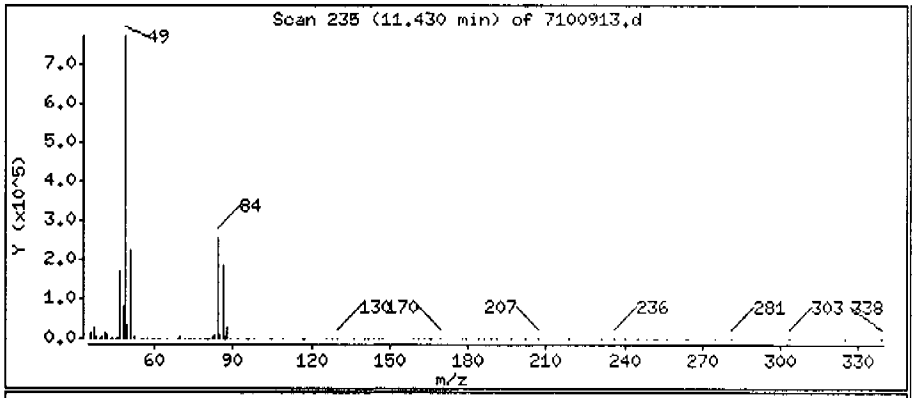
Operator: ra

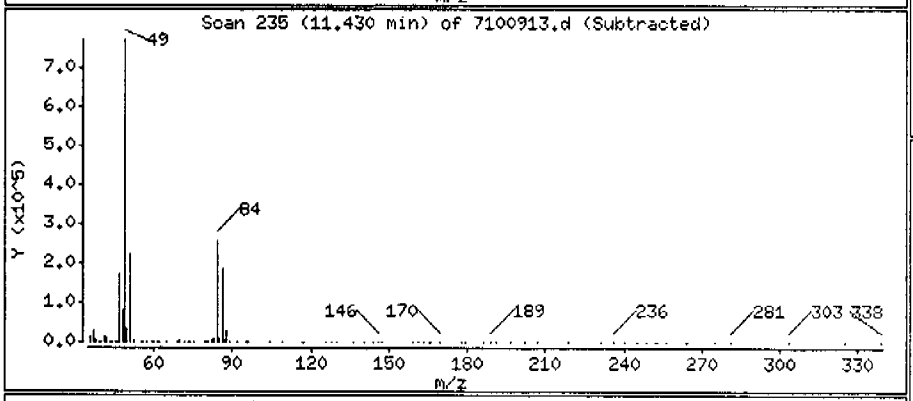
Column phase: RTx-624

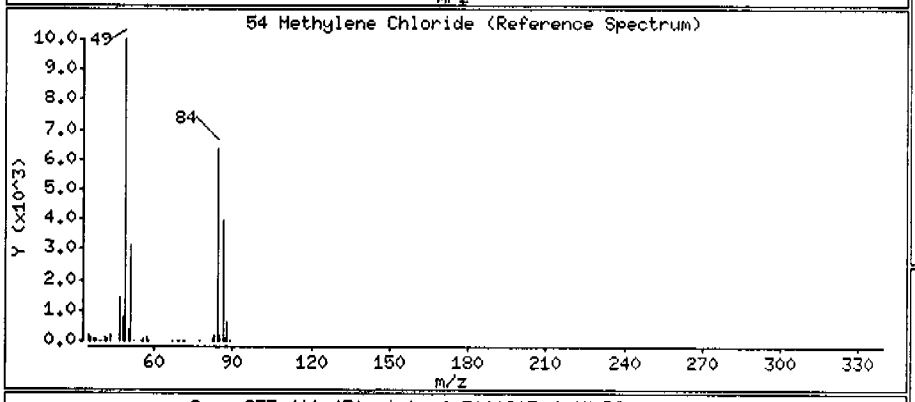
Column diameter: 0.53

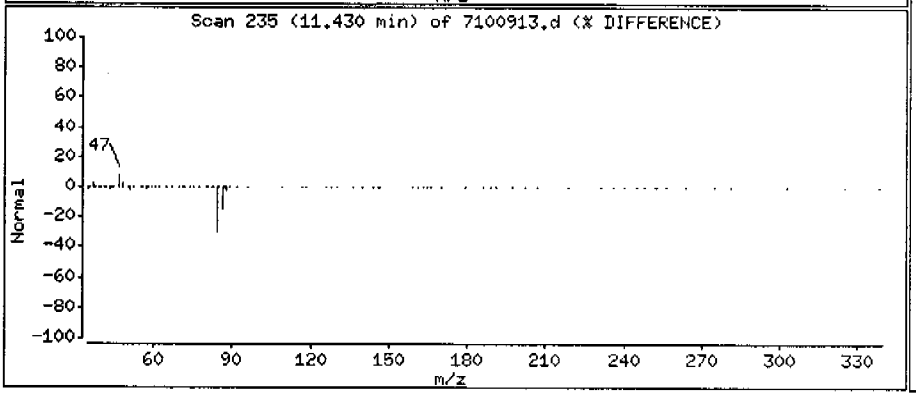
54 Methylene Chloride

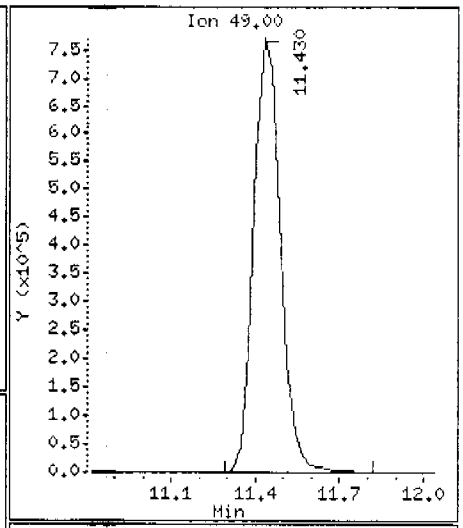
Concentration: 194.55 PPBV

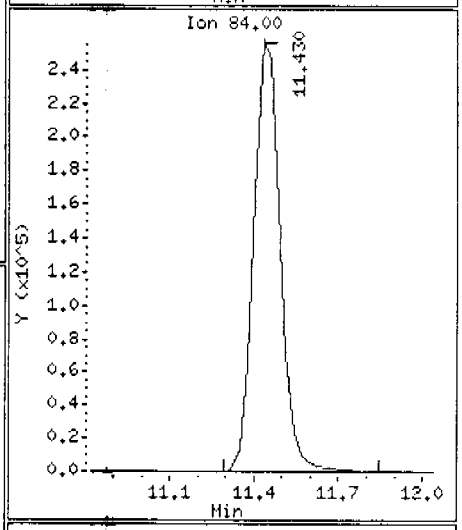


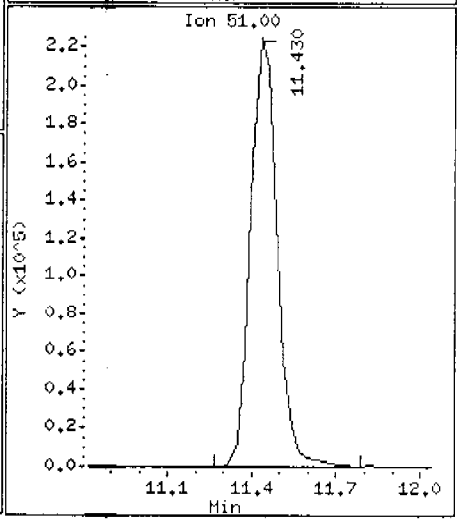












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

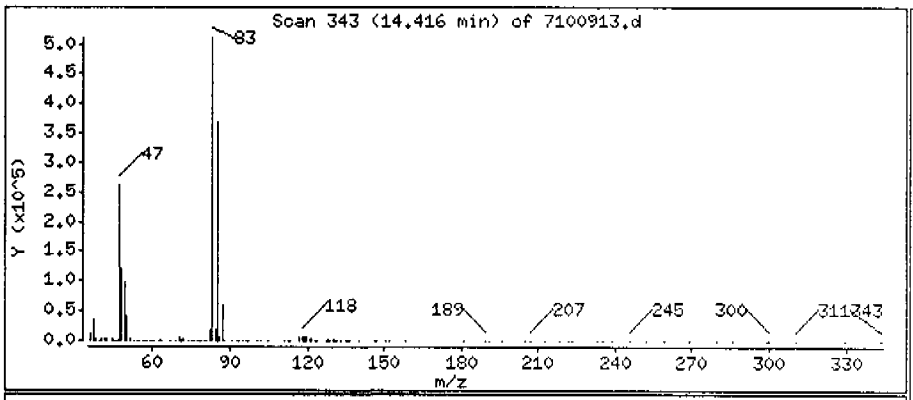
Operator: ra

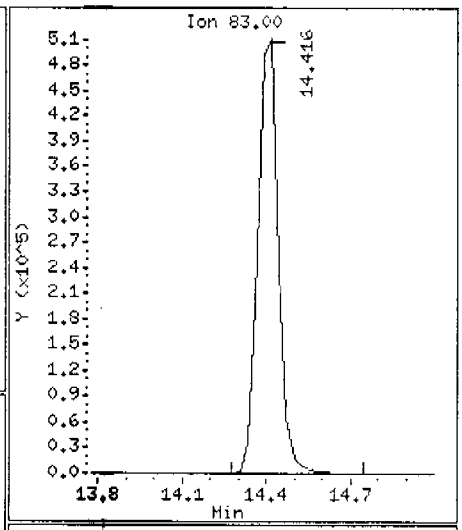
Column phase: RTx-624

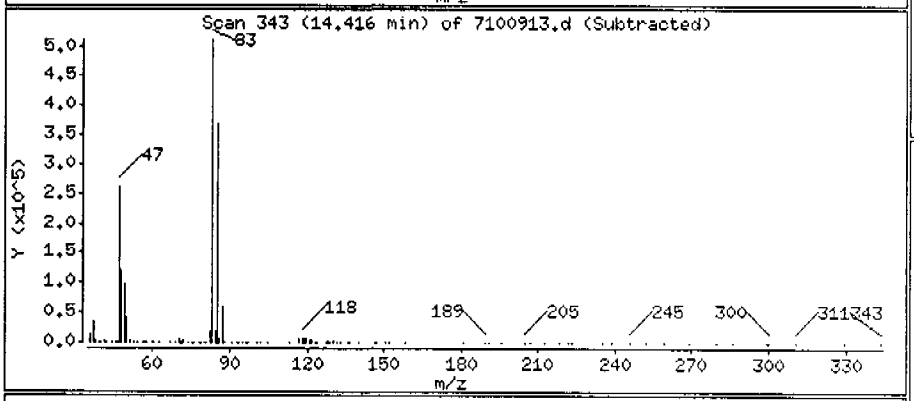
Column diameter: 0.53

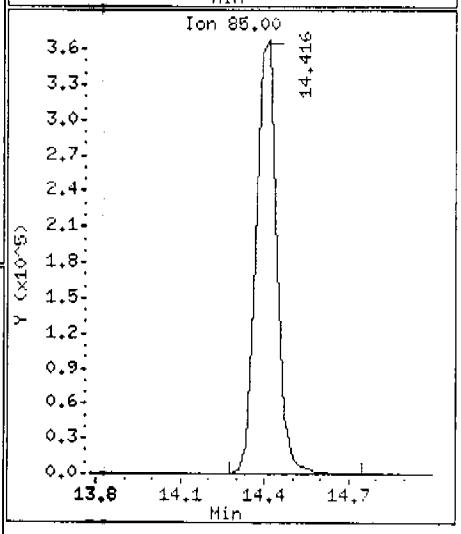
82 Chloroform

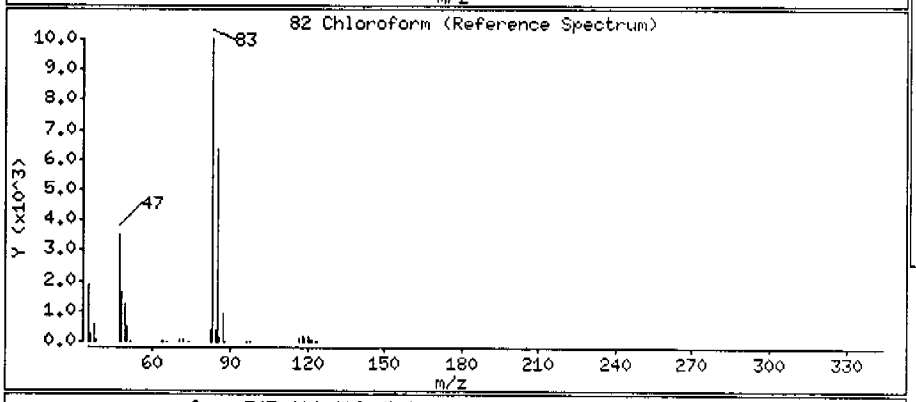
Concentration: 107.57 PPBV

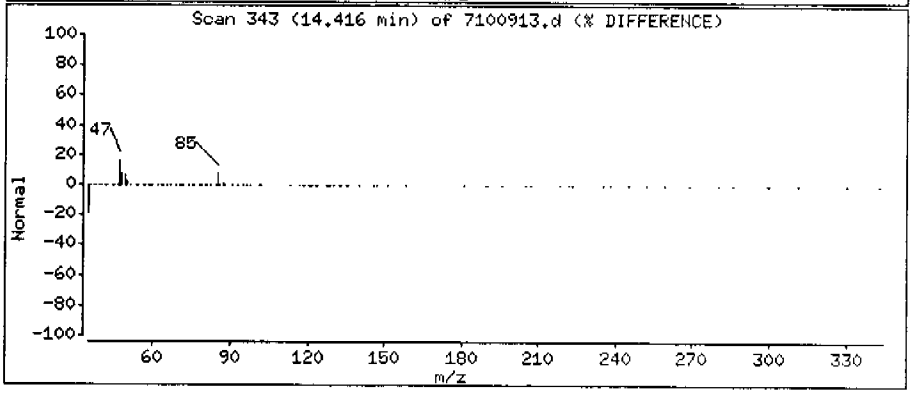












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

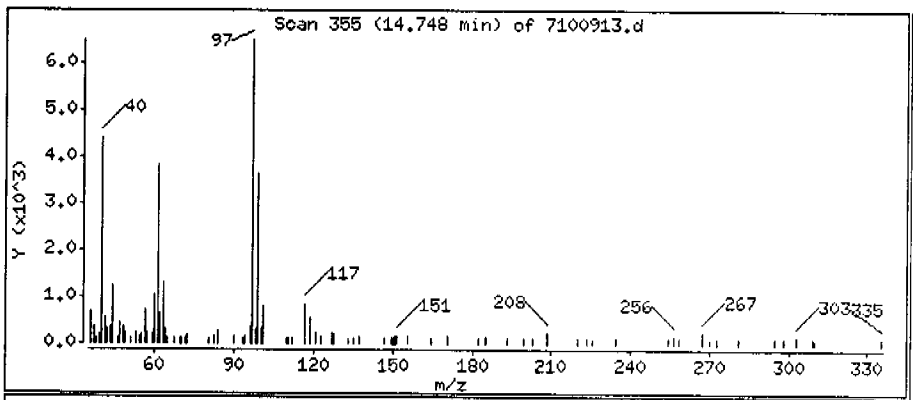
Operator: ra

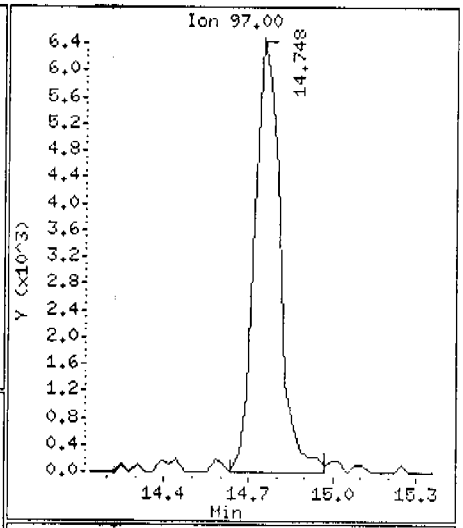
Column phase: RTx-624

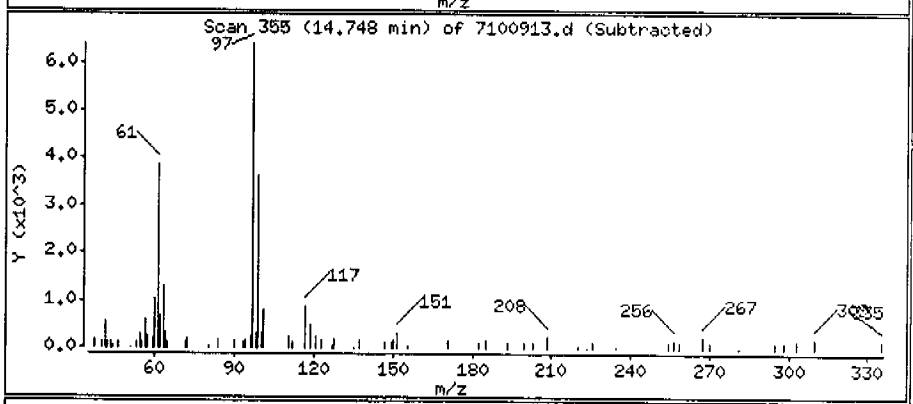
Column diameter: 0.53

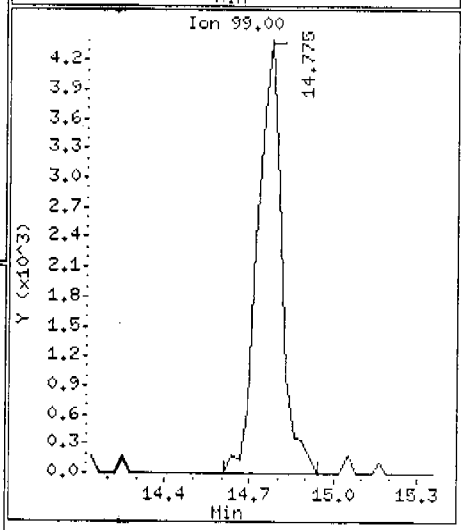
83 1,1,1-Trichloroethane

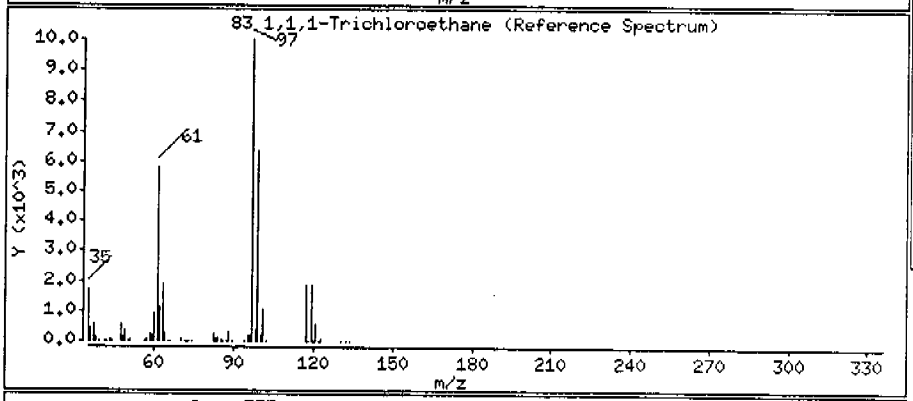
Concentration: 1.652 PPBV

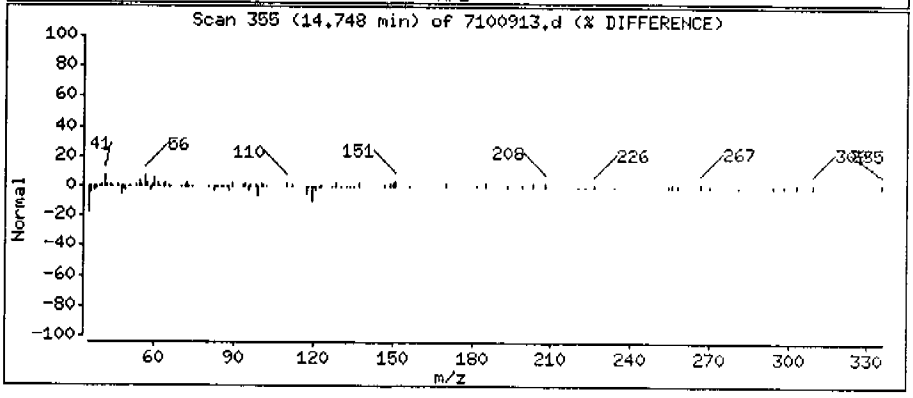












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

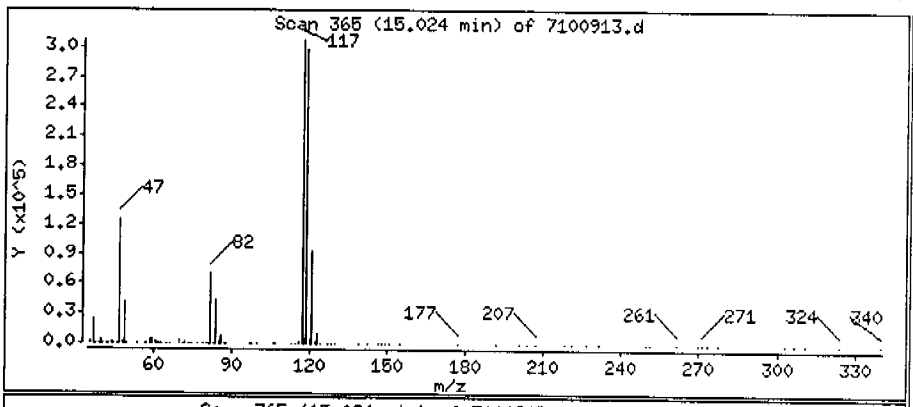
Operator: ra

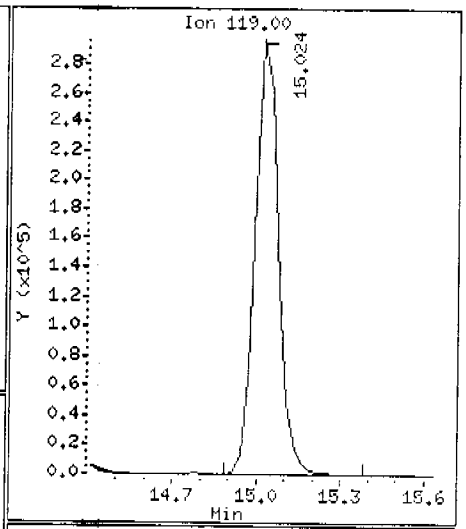
Column phase: RTx-624

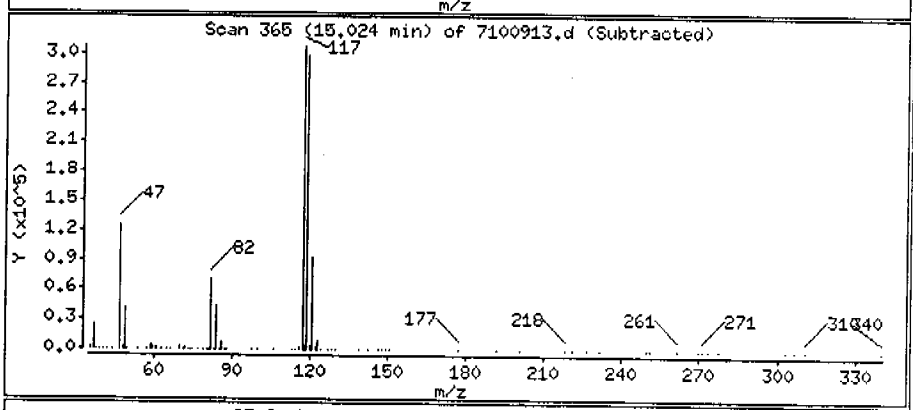
Column diameter: 0.53

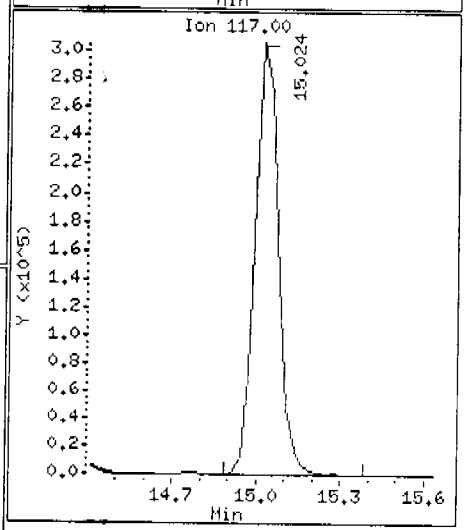
87 Carbon Tetrachloride

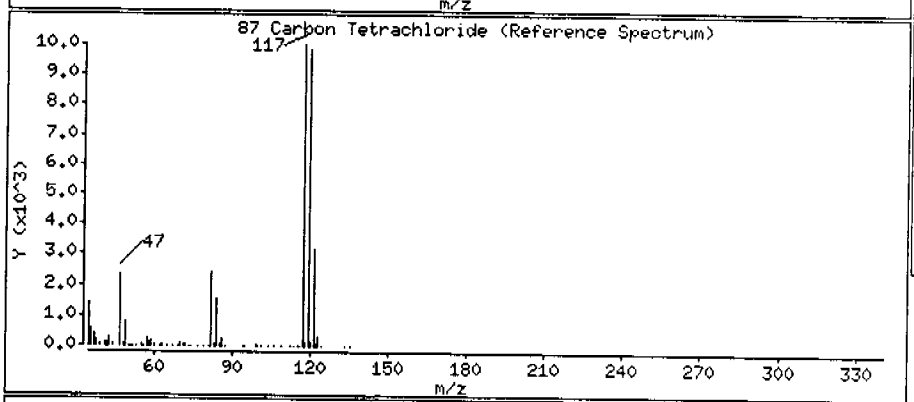
Concentration: 60.108 PPBV

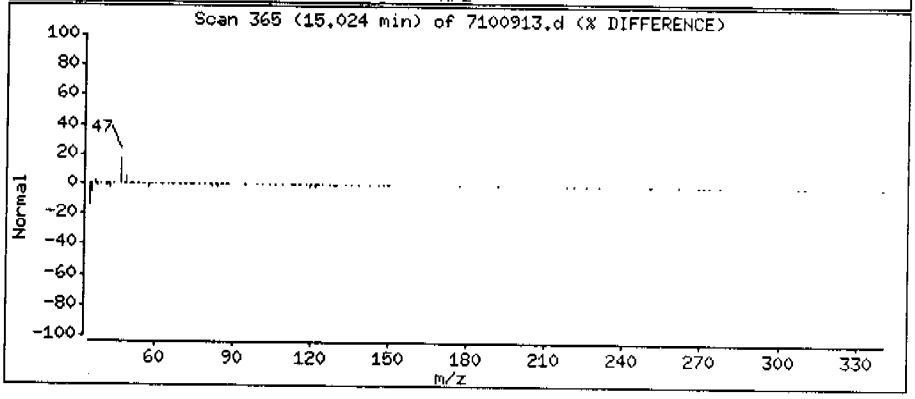












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

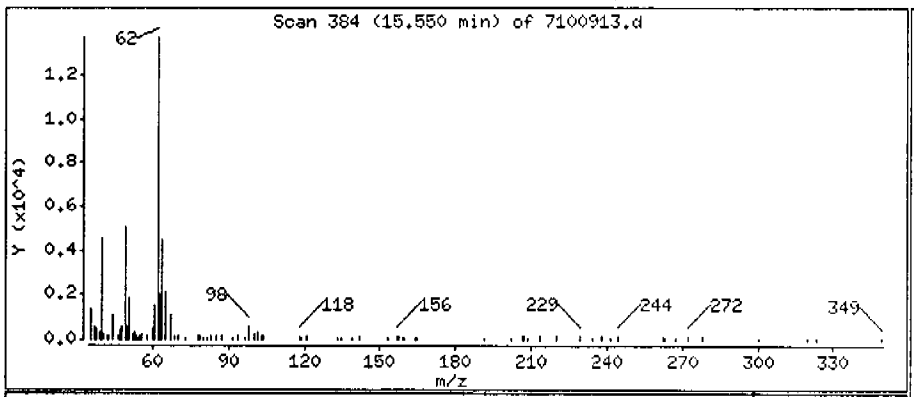
Operator: ra

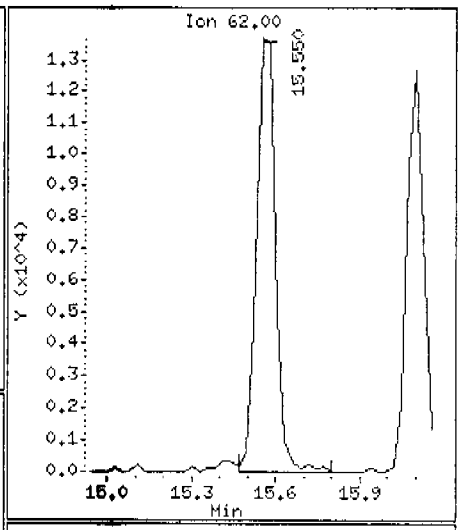
Column phase: RTx-624

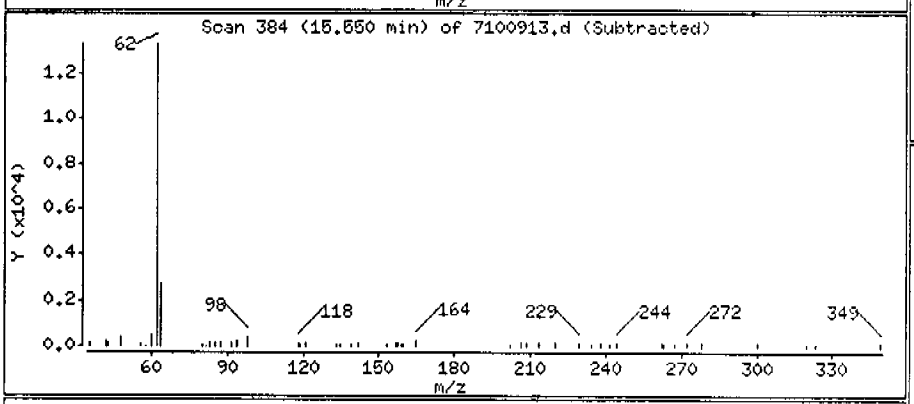
Column diameter: 0.53

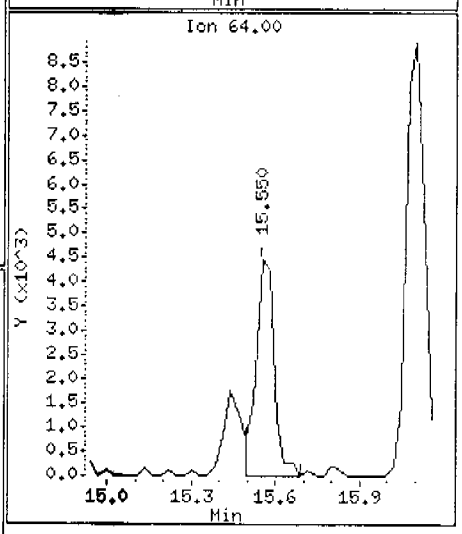
93 1,2-Dichloroethane

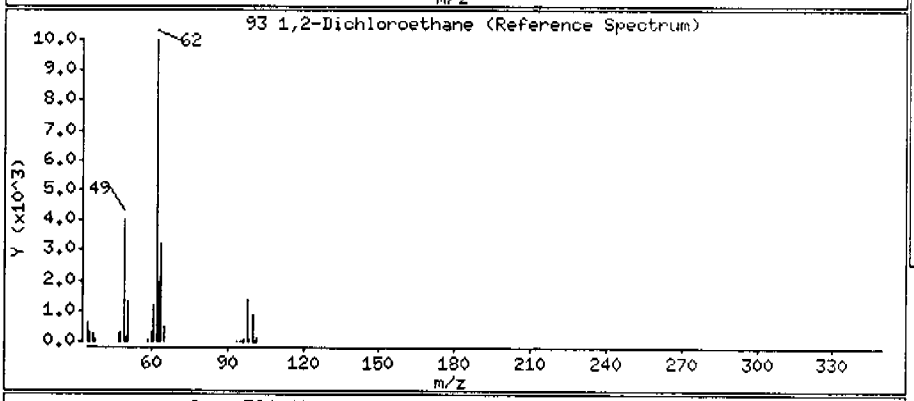
Concentration: 3.031 PPBV

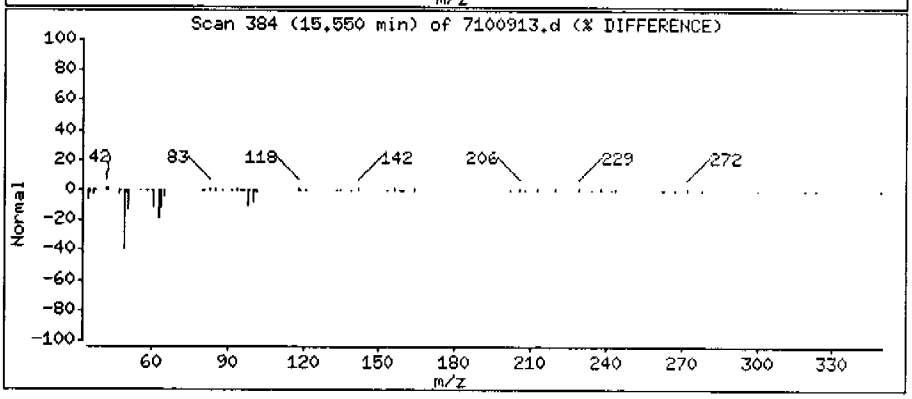












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

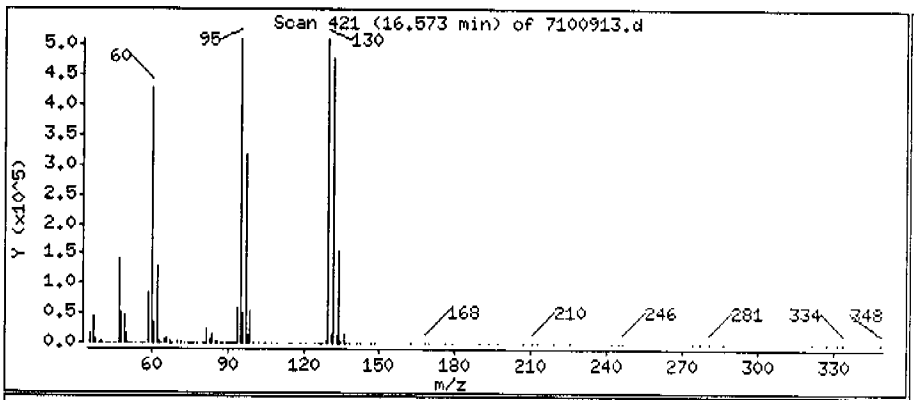
Operator: ra

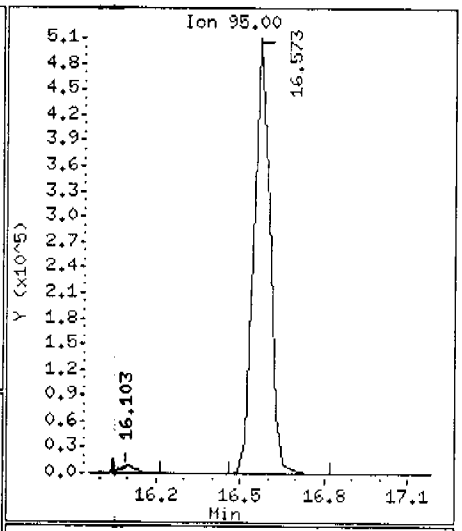
Column phase: RTx-624

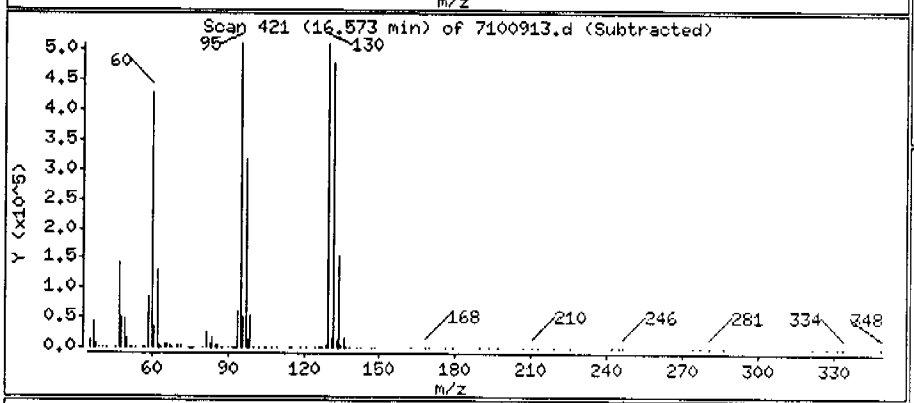
Column diameter: 0.53

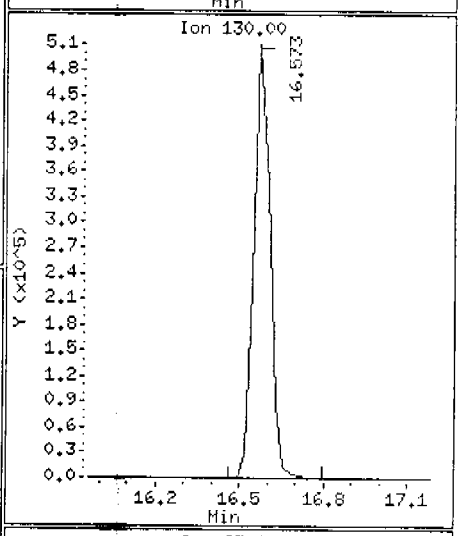
101 Trichloroethene

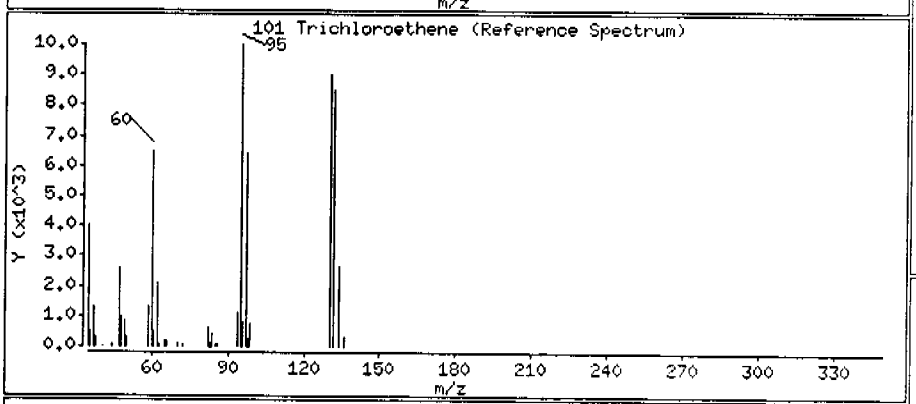
Concentration: 160.10 PPBV

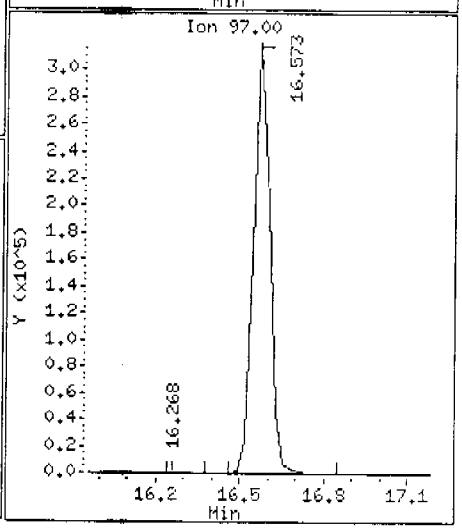


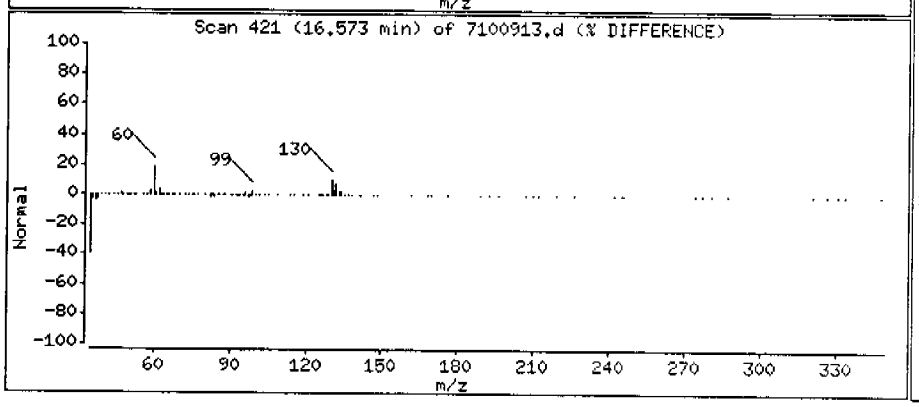












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Sample Info: 200mL #12017

Instrument: msd7.i

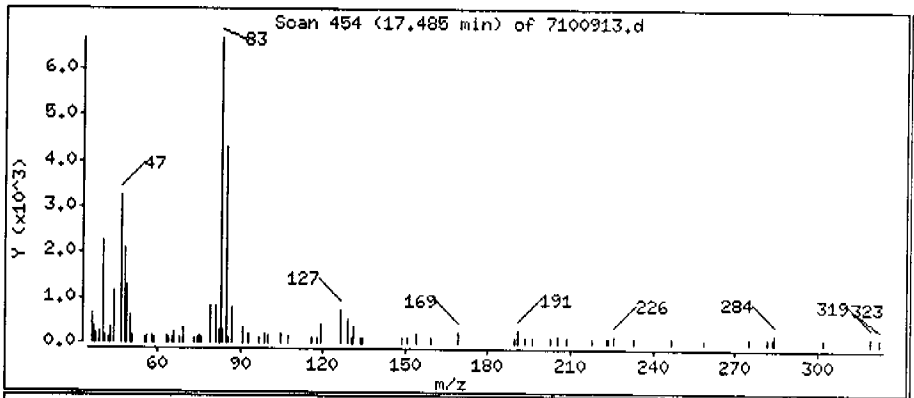
Operator: ra

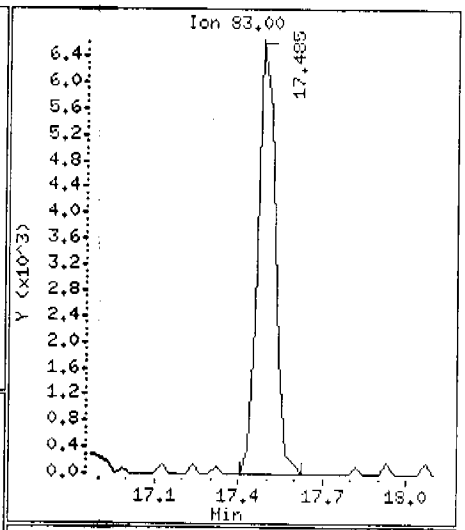
Column phase: RTx-624

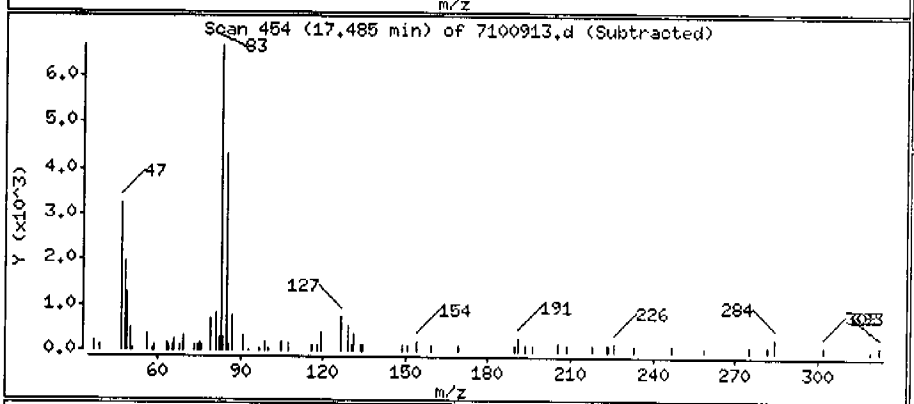
Column diameter: 0.53

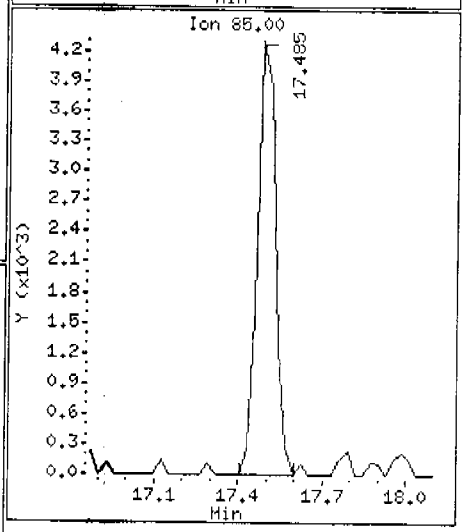
107 Bromodichloromethane

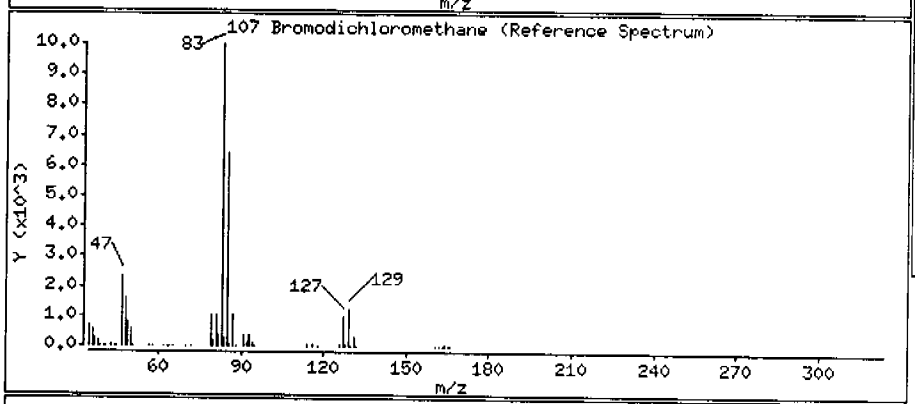
Concentration: 1.261 PPBV

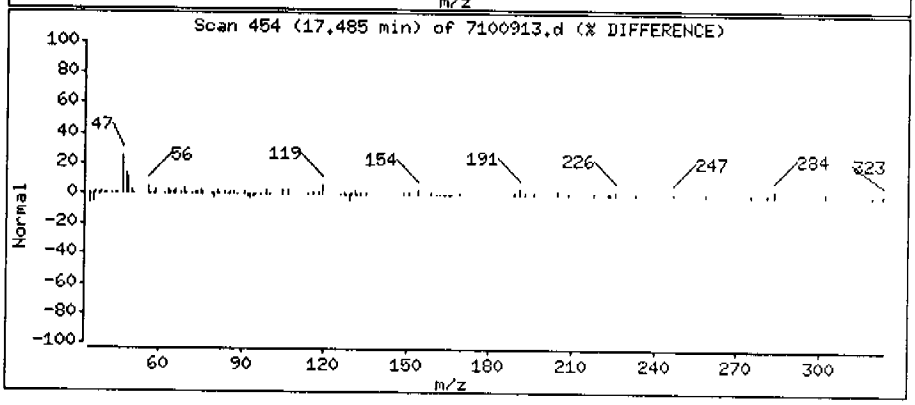












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

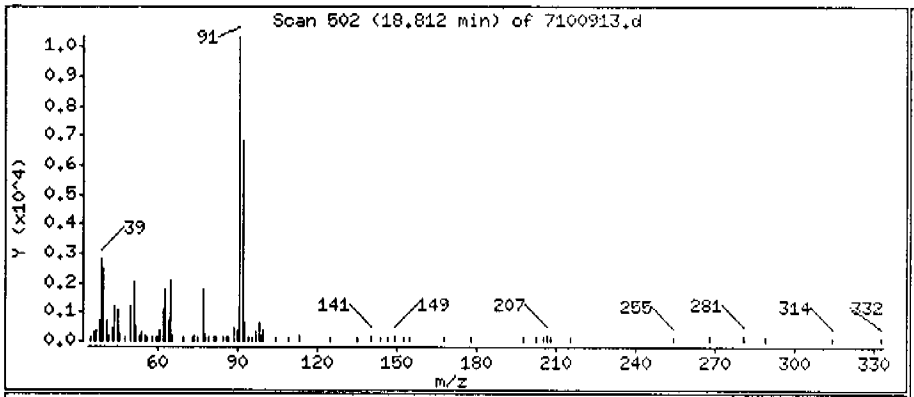
Operator: ra

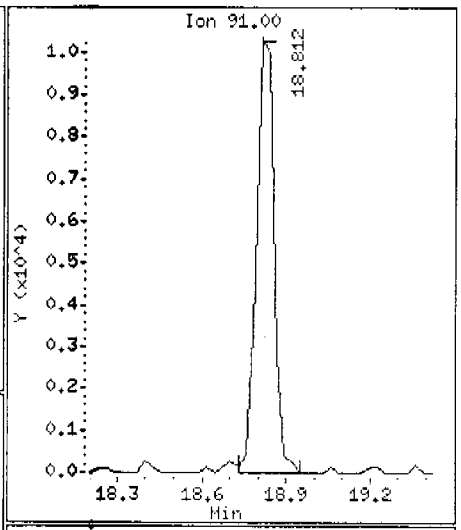
Column phase: RTx-624

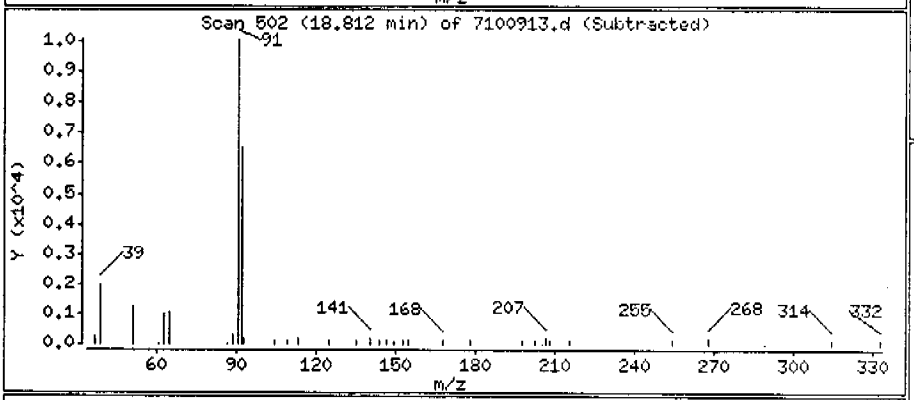
Column diameter: 0.53

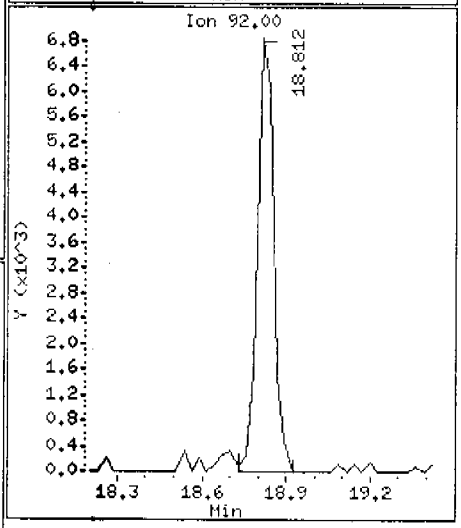
114 Toluene

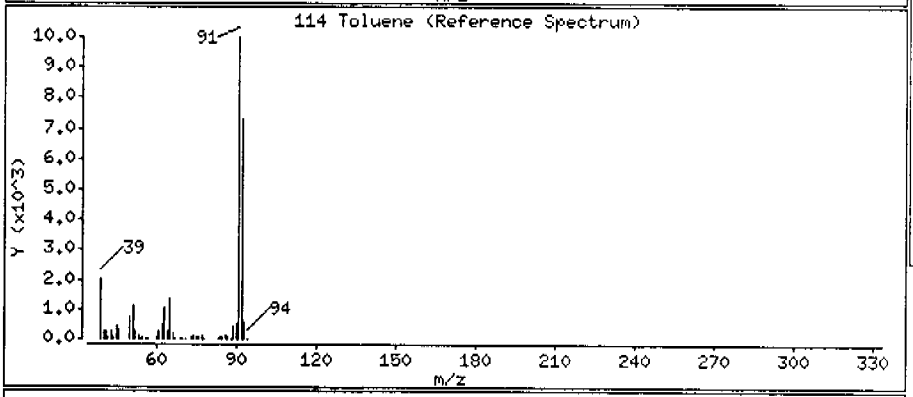
Concentration: 1.420 PPBV

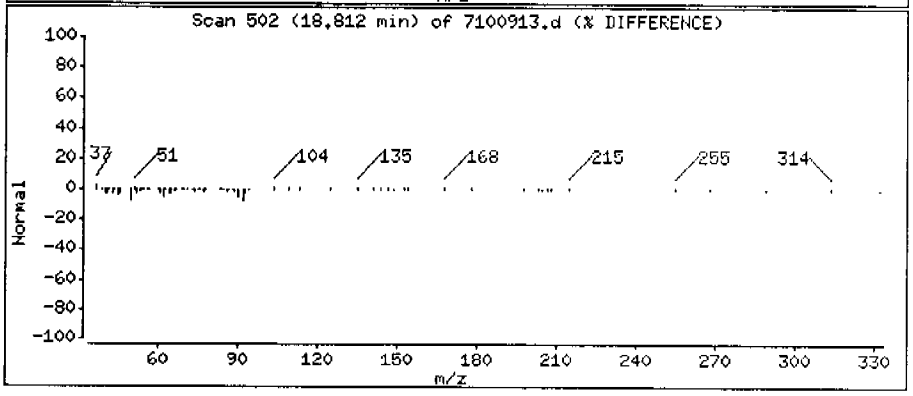












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

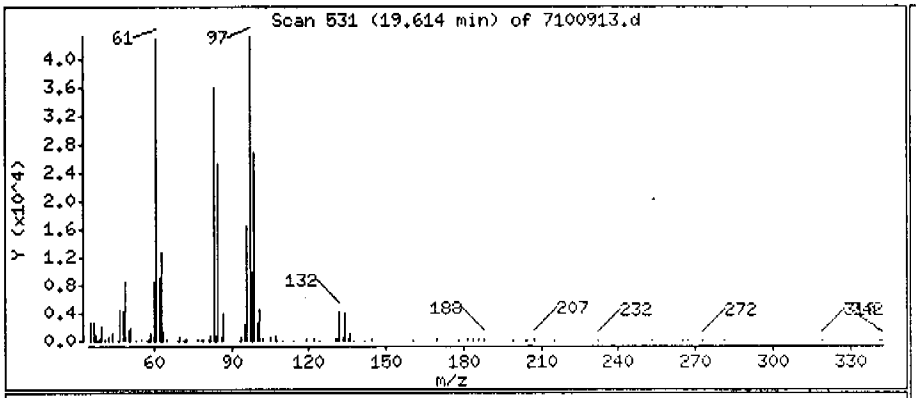
Operator: ra

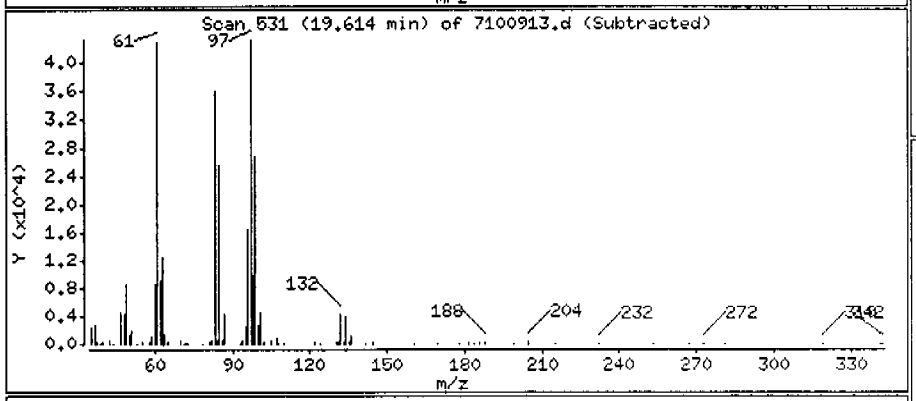
Column phase: RTx-624

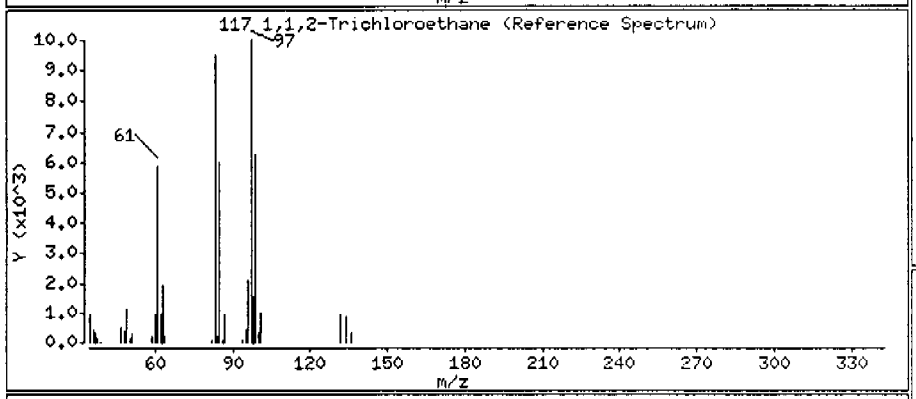
Column diameter: 0.53

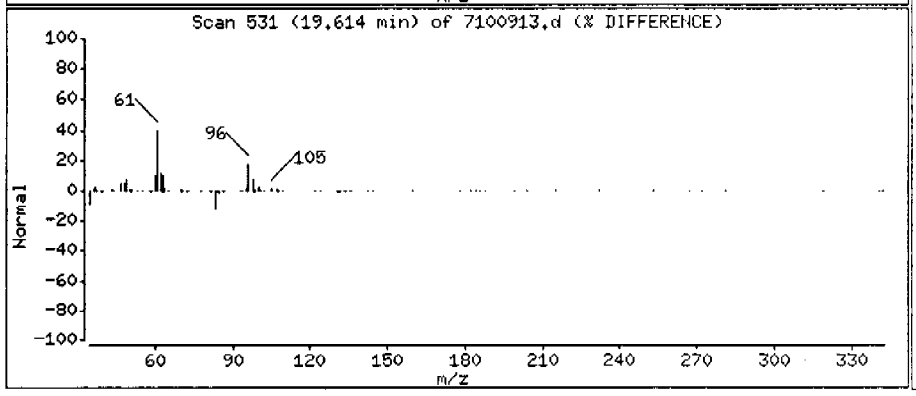
117 1,1,2-Trichloroethane

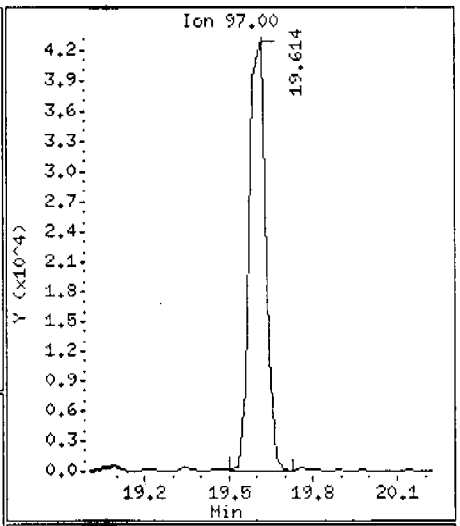
Concentration: 14.856 PPBV

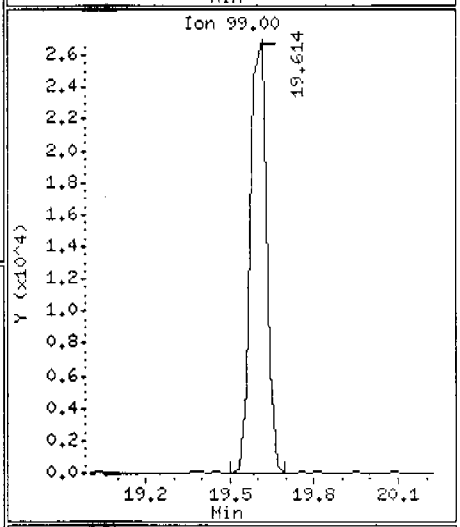


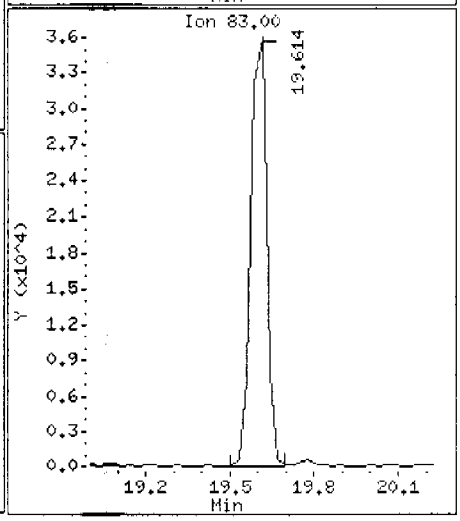












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

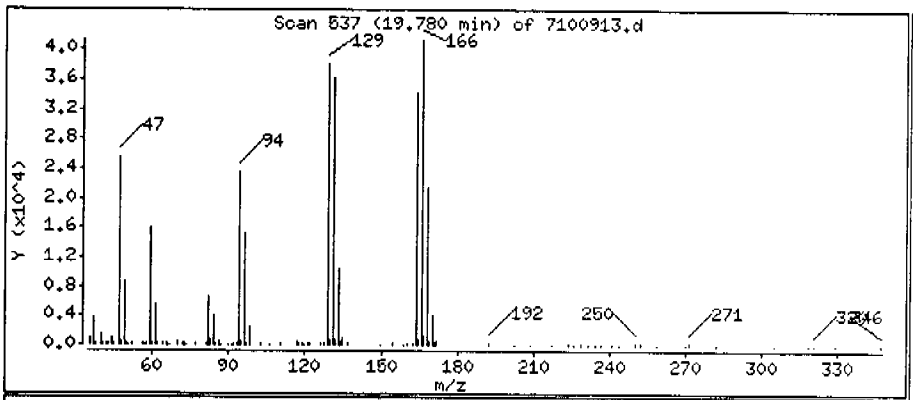
Operator: ra

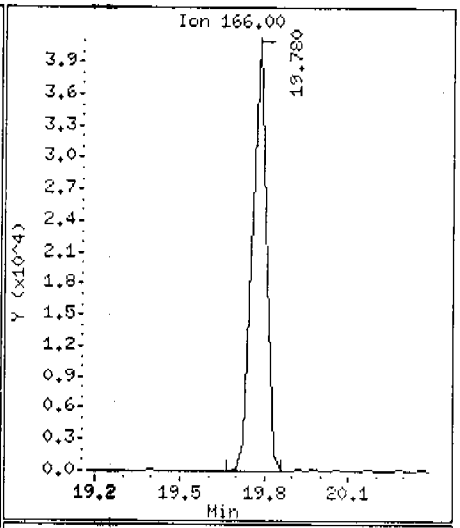
Column phase: RTx-624

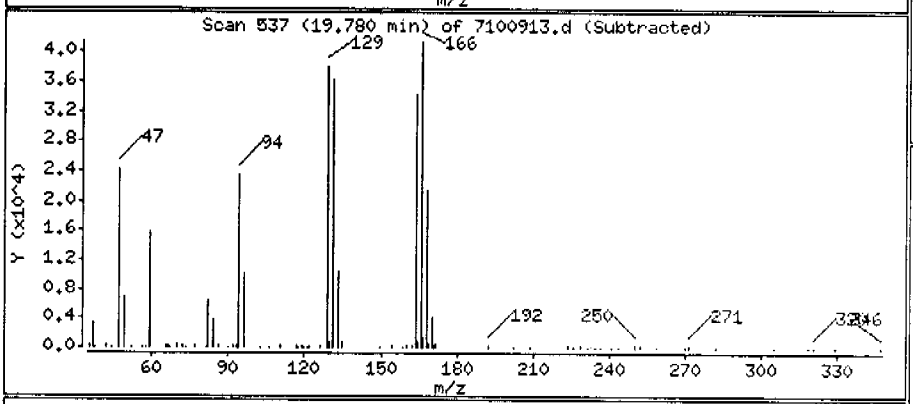
Column diameter: 0.53

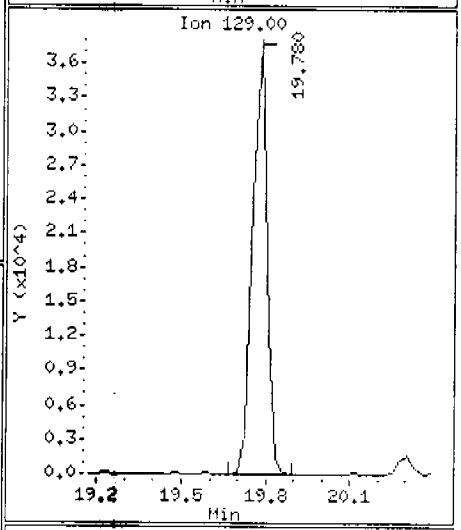
120 Tetrachloroethene

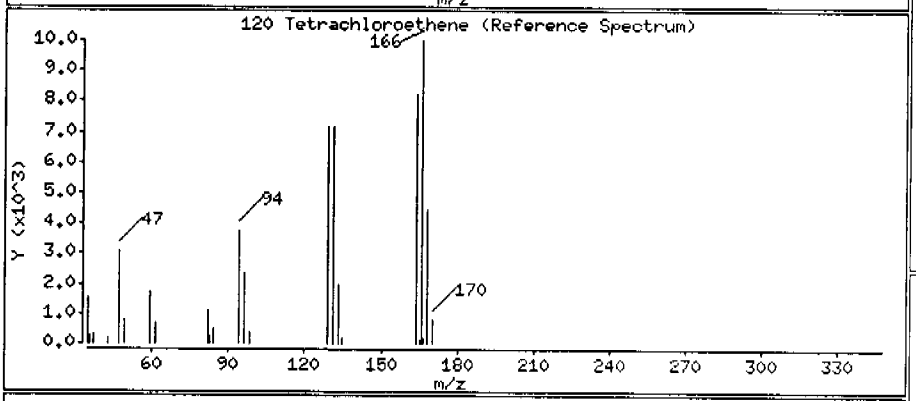
Concentration: 9.253 PPBV

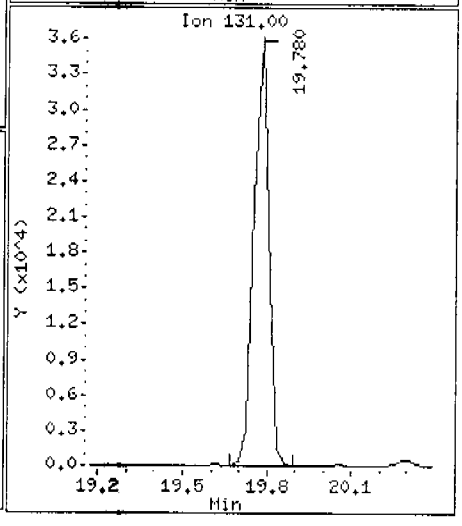


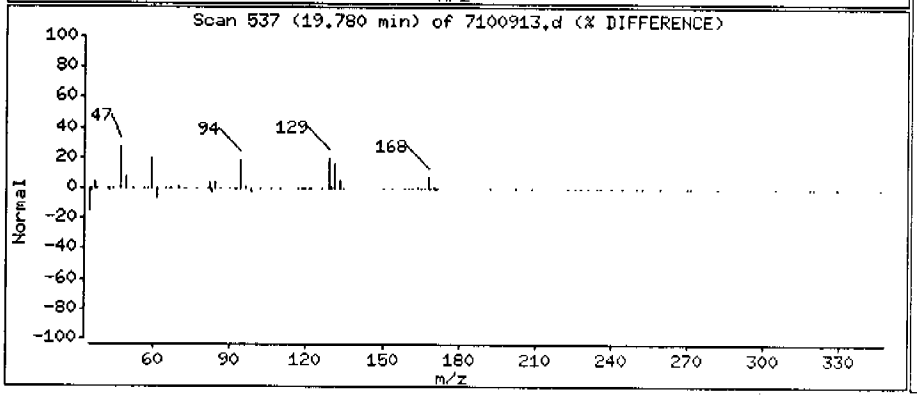












Data File: /chem/msd7.i/09oct08.b/7100913.d

Date : 09-OCT-2008 17:43

Client ID:

Instrument: msd7.i

Sample Info: 200mL #12017

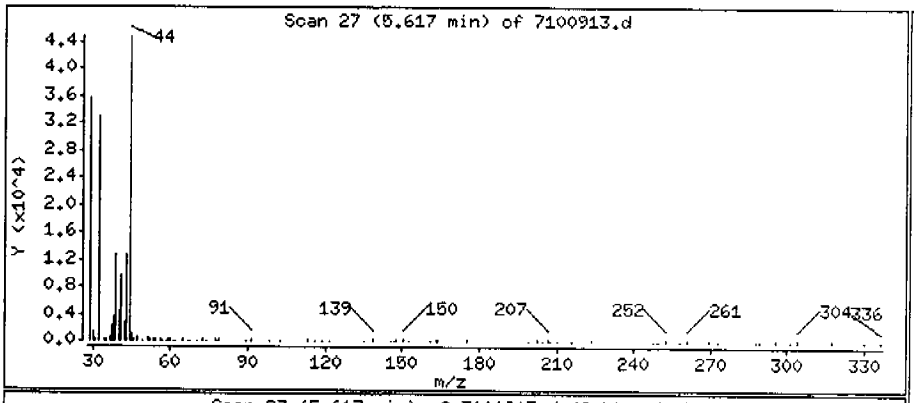
Operator: ra

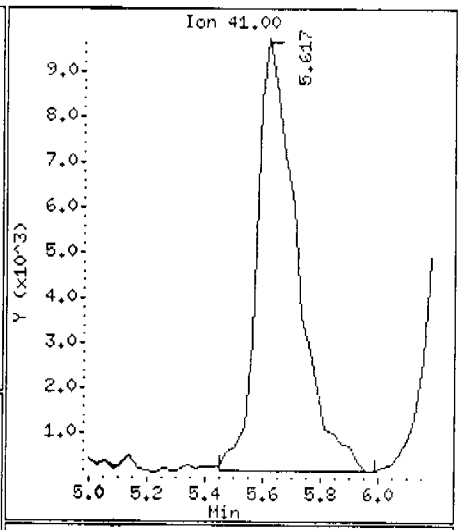
Column phase: RTx-624

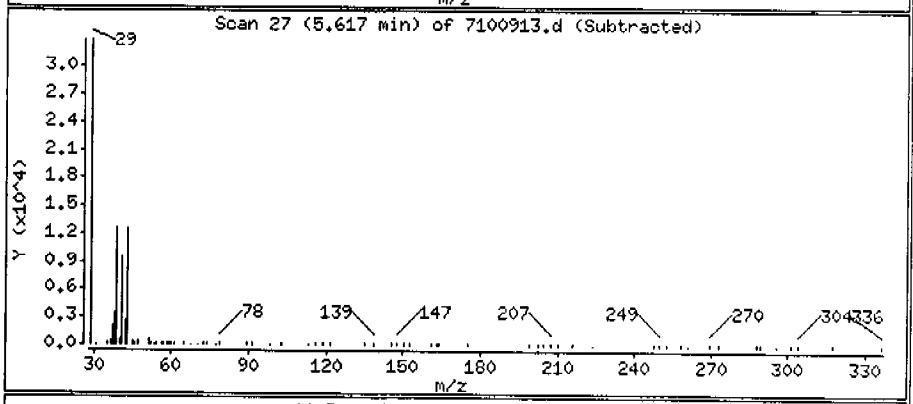
Column diameter: 0.53

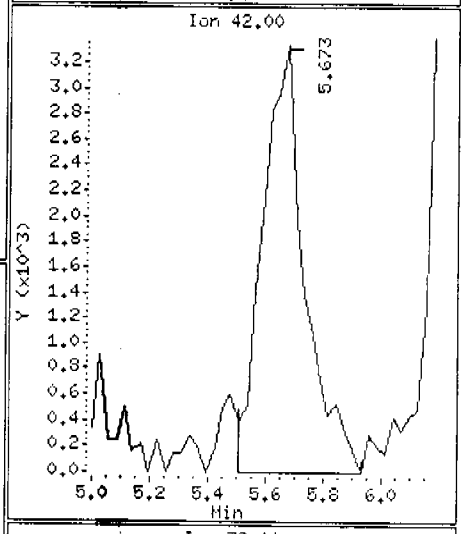
11 Propylene

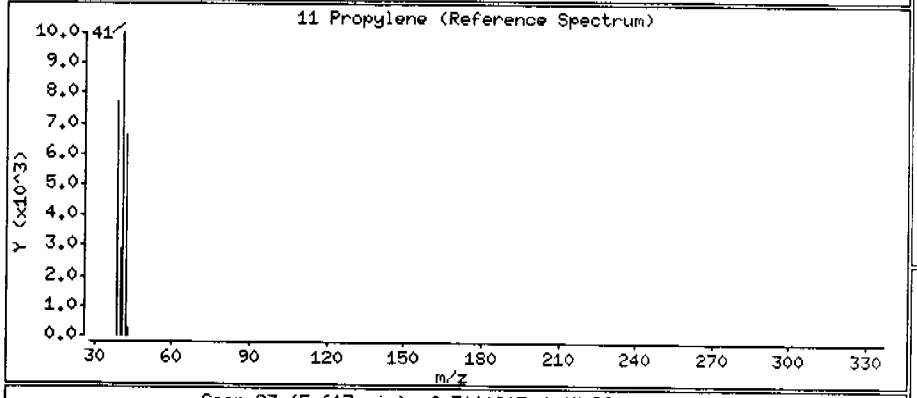
Concentration: 6.212 PPBV

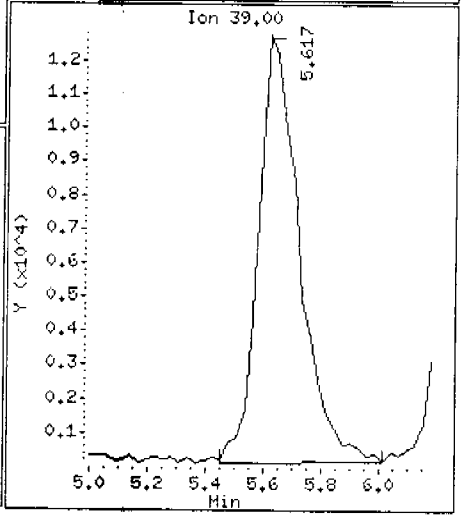


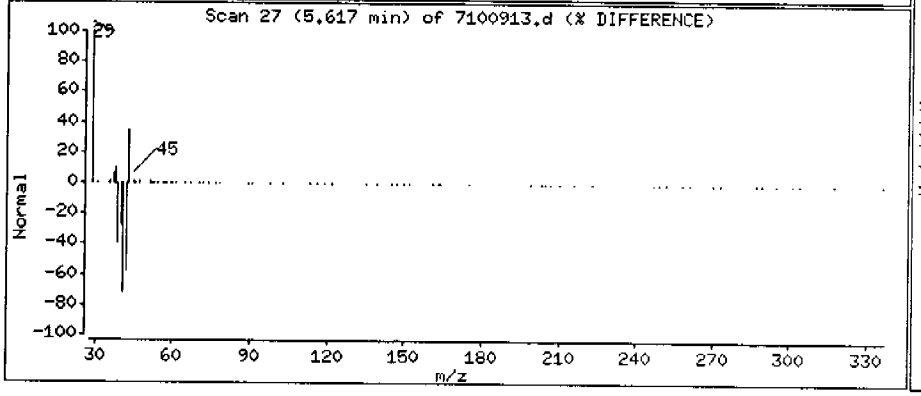












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14822 Lab Duplicate

Lab ID#: 0809614-09AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	1.3	2.1	9.8	16
1,1-Dichloroethene	1.3	8.3	5.0	33
Carbon Disulfide	1.3	6.0	4.0	19
Methylene Chloride	1.3	200	4.4	680
Chloroform	1.3	110	6.2	540
1,1,1-Trichloroethane	1.3	1.6	7.0	9.0
Carbon Tetrachloride	1.3	61	8.0	380
1,2-Dichloroethane	1.3	3.0	5.2	12
Trichloroethene	1.3	160	6.8	870
Bromodichloromethane	1.3	1.4	8.5	9.1
Toluene	1.3	1.3	4.8	5.1
1,1,2-Trichloroethane	1.3	14	7.0	79
Tetrachloroethene	1.3	9.4	8.6	64
Propylene	5.1	5.0 J	8.8	8.6 J

0219

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14822 Lab Duplicate

Lab ID#: 0809614-09AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100911	**Date of Collection:**	9/25/08
Dil. Factor:	2.55	**Date of Analysis:**	10/9/08 04:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.3	Not Detected	6.3	Not Detected
Freon 114	1.3	Not Detected	8.9	Not Detected
Chloromethane	5.1	Not Detected	10	Not Detected
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,3-Butadiene	1.3	Not Detected	2.8	Not Detected
Bromomethane	1.3	Not Detected	5.0	Not Detected
Chloroethane	1.3	Not Detected	3.4	Not Detected
Freon 11	1.3	Not Detected	7.2	Not Detected
Ethanol	5.1	Not Detected	9.6	Not Detected
Freon 113	1.3	2.1	9.8	16
1,1-Dichloroethene	1.3	8.3	5.0	33
Acetone	5.1	Not Detected	12	Not Detected
2-Propanol	5.1	Not Detected	12	Not Detected
Carbon Disulfide	1.3	6.0	4.0	19
Methylene Chloride	1.3	200	4.4	680
Methyl tert-butyl ether	1.3	Not Detected	4.6	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Hexane	1.3	Not Detected	4.5	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.8	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.8	Not Detected
Chloroform	1.3	110	6.2	540
1,1,1-Trichloroethane	1.3	1.6	7.0	9.0
Cyclohexane	1.3	Not Detected	4.4	Not Detected
Carbon Tetrachloride	1.3	61	8.0	380
Benzene	1.3	Not Detected	4.1	Not Detected
1,2-Dichloroethane	1.3	3.0	5.2	12
Heptane	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	160	6.8	870
1,2-Dichloropropane	1.3	Not Detected	5.9	Not Detected
1,4-Dioxane	5.1	Not Detected	18	Not Detected
Bromodichloromethane	1.3	1.4	8.5	9.1
cis-1,3-Dichloropropene	1.3	Not Detected	5.8	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.2	Not Detected
Toluene	1.3	1.3	4.8	5.1
trans-1,3-Dichloropropene	1.3	Not Detected	5.8	Not Detected
1,1,2-Trichloroethane	1.3	14	7.0	79
Tetrachloroethene	1.3	9.4	8.6	64

0220

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14822 Lab Duplicate

Lab ID#: 0809614-09AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100911	**Date of Collection:**	9/25/08
Dil. Factor:	2.55	**Date of Analysis:**	10/9/08 04:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	5.1	Not Detected	21	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	9.8	Not Detected
Chlorobenzene	1.3	Not Detected	5.9	Not Detected
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	Not Detected	5.5	Not Detected
o-Xylene	1.3	Not Detected	5.5	Not Detected
Styrene	1.3	Not Detected	5.4	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	8.8	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.3	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.7	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.7	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.6	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.7	Not Detected
1,2,4-Trichlorobenzene	5.1	Not Detected	38	Not Detected
Hexachlorobutadiene	5.1	Not Detected	54	Not Detected
Chlorodifluoromethane	5.1	Not Detected	18	Not Detected
Methanol	130	Not Detected	170	Not Detected
n-Butanol	5.1	Not Detected	15	Not Detected
Propylene	5.1	5.0 J	8.8	8.6 J

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	93	70-130

0221

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100911.d
Lab Smp Id: 0809614-09AA
Inj Date : 09-OCT-2008 16:18
Operator : ra Inst ID: msd7.i
Smp Info : 150mL #12017
Misc Info : 9.0"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 2.55000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	335474	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	263346			28.92- 128.92	78.50
14.333	14.333 (1.000)	49	1260564			320.90- 420.90	375.76
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1038442	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	182035			0.00- 67.10	17.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1102053	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	552151			1.24- 101.24	50.10
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	616452	24.3266	24.327	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	261798			0.00- 97.37	42.47
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	989678	24.8965	24.896	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	134964			0.00- 63.85	13.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	765996			26.51- 126.51	77.40
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	529378	23.3441	23.344	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	773590			92.62- 192.62	146.13
23.291	23.291 (1.093)	176	503698			44.03- 144.03	95.15
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	27549	0.83251	2.123	80.00- 120.00	100.00
10.130	10.158 (0.707)	153	19046			12.55- 112.55	69.13
10.158	10.158 (0.709)	101	44152			98.99- 198.99	160.27
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.268	10.269 (0.716)	61	186499	3.24091	8.264	80.00- 120.00	100.00
10.268	10.269 (0.716)	96	64120			0.00- 87.74	34.38
10.268	10.269 (0.716)	98	39310			0.00- 73.80	21.08
47 Carbon Disulfide					CAS #: 75-15-0		
10.849	10.822 (0.757)	76	165985	2.34886	5.990	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	3881460	77.1006	196.61	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	1301913			0.00- 84.42	33.54
11.430	11.430 (0.797)	51	1131089			0.00- 80.54	29.14
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2012358	43.1534	110.04	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1440576			21.17- 121.17	71.59
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	30840	0.64772	1.652	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	19012			13.83- 113.83	61.65
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	1292152	23.7663	60.604	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	1355972			55.68- 155.68	104.94
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	48743	1.16646	2.974	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	13545			0.00- 82.49	27.79
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1531823	63.2425	161.27	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1550613			52.48- 152.48	101.23
16.573	16.573 (1.029)	97	982537			14.44- 114.44	64.14

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
107 Bromodichloromethane						CAS #: 75-27-4		
17.513	17.485	(1.088)	83	23335	0.53207	1.357	80.00- 120.00	100.00
17.485	17.485	(1.086)	85	16636			20.68- 120.68	71.30
114 Toluene						CAS #: 108-88-3		
18.840	18.812	(1.170)	91	33035	0.52706	1.344	80.00- 120.00	100.00
18.840	18.812	(1.170)	92	21651			12.04- 112.04	65.54
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.614	19.614	(0.921)	97	128675	5.66404	14.443	80.00- 120.00	100.00
19.614	19.614	(0.921)	99	77153			10.80- 110.80	59.96
19.614	19.614	(0.921)	83	111089			33.27- 133.27	86.33
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	109396	3.67421	9.369	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	93987			35.87- 135.87	85.91
19.780	19.780	(0.929)	131	101089			35.33- 135.33	92.41
11 Propylene						CAS #: 115-07-1		
5.589	5.589	(0.390)	41	56395	1.97152	5.027	80.00- 120.00	100.00(a)
5.589	5.589	(0.390)	42	22048			16.57- 116.57	39.10
5.589	5.589	(0.390)	39	89923			28.60- 128.60	159.45

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msd7.i/09oct08.b/7100911.d
Report Date: 11-Oct-2008 08:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100911.d
Lab Smp Id: 0809614-09AA
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	335474	-7.35
97 1,4-Difluorobenze	1146510	687906	1605114	1038442	-9.43
126 Chlorobenzene-d5	1241713	745028	1738398	1102053	-11.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100911.d
Report Date: 11-Oct-2008 08:28

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 09oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-09AA
Level: LOW
Operator: ra
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"psi-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.327	97.31	70-130
$ 113 Toluene-d8	25.000	24.896	99.59	70-130
$ 137 Bromofluorobenzene	25.000	23.344	93.38	70-130

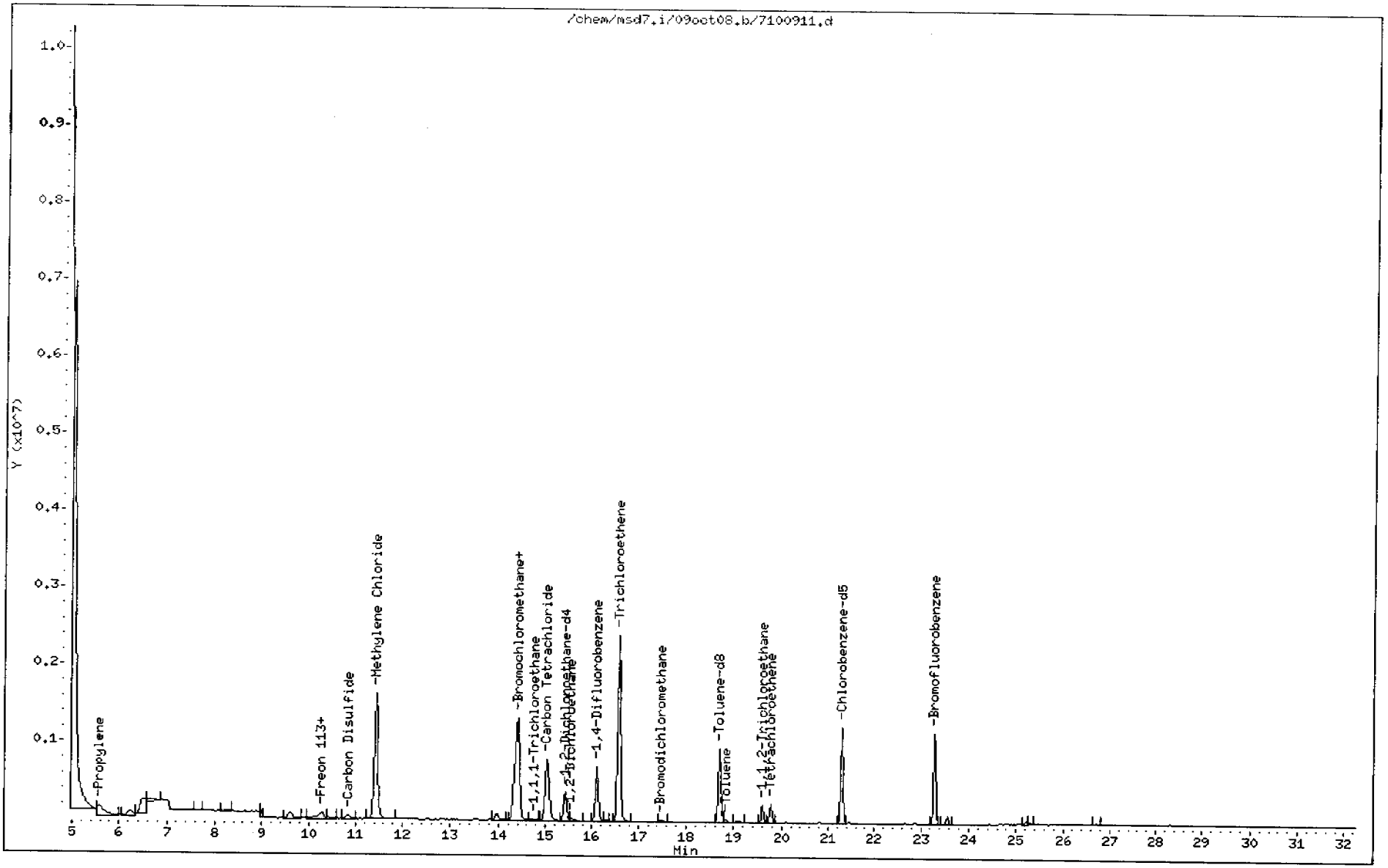
0227

Data File: /chem/msd7.i/09oct08.b/7100911.d
Date : 09-OCT-2008 16:18
Client ID:
Sample Info: 150mL #12017

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Sample Info: 150mL #12017

Instrument: msd7.i

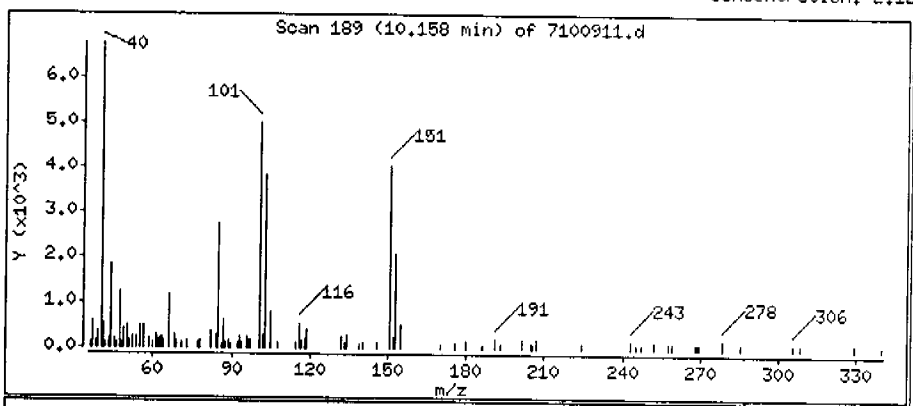
Operator: ra

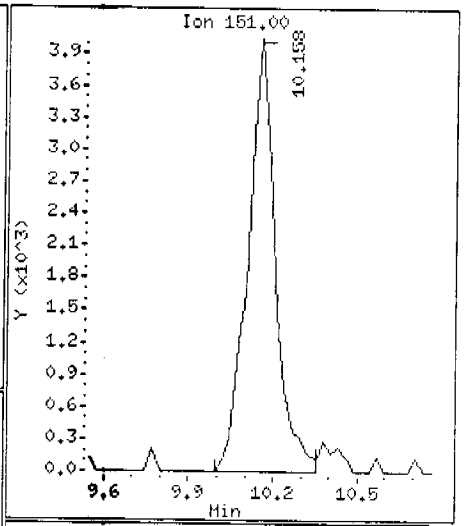
Column phase: RTx-624

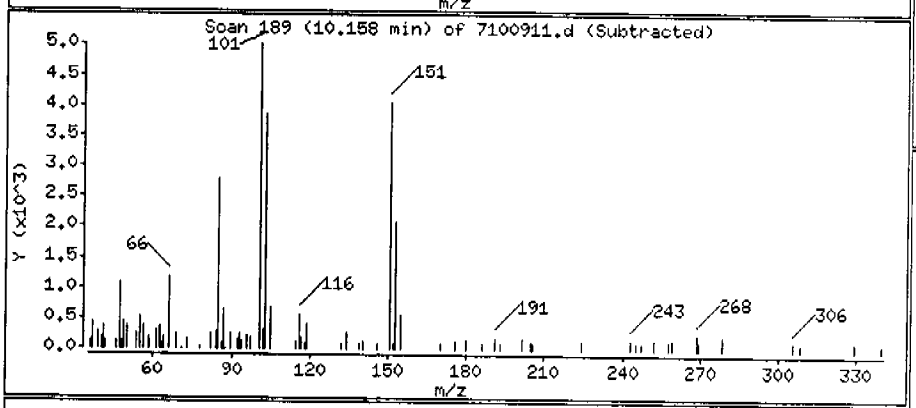
Column diameter: 0.53

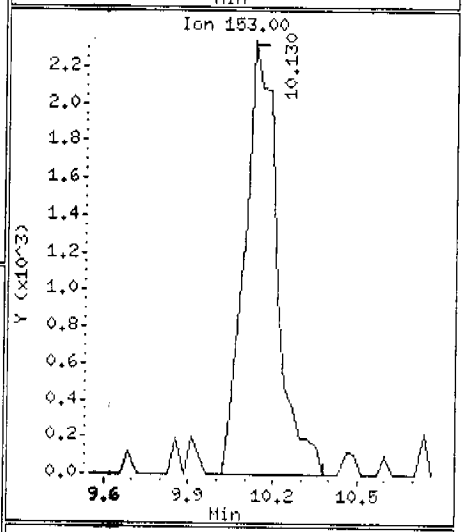
42 Freon 113

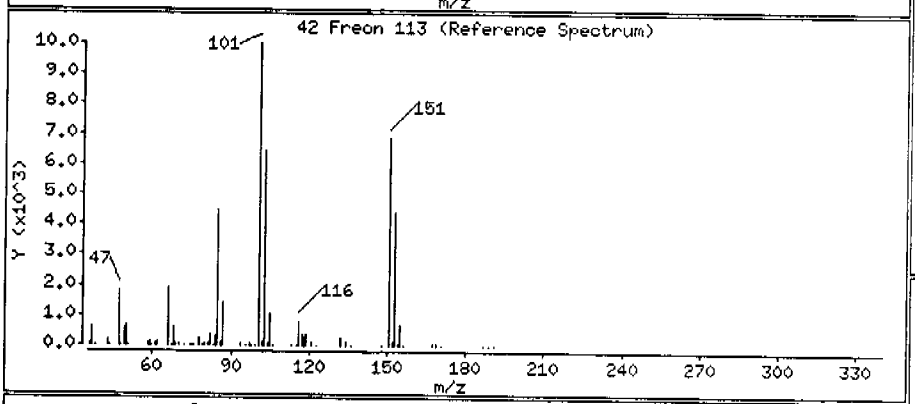
Concentration: 2.123 PPBV

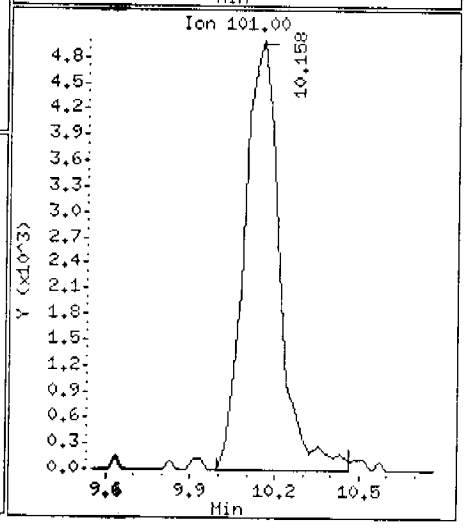


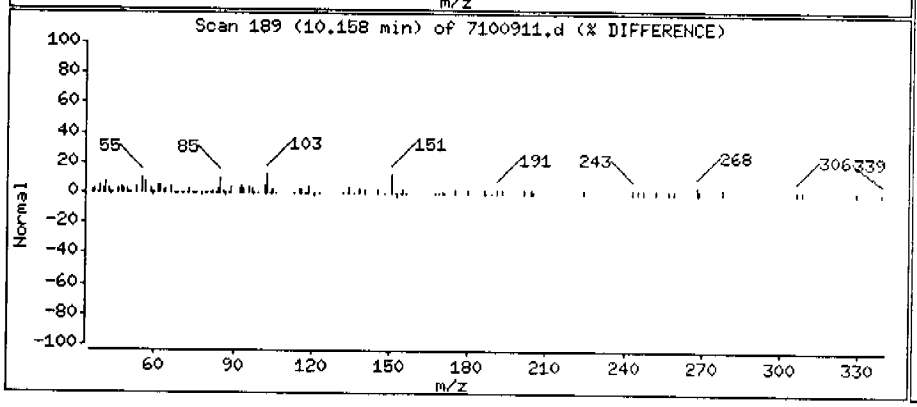












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Sample Info: 150mL #12017

Instrument: msd7.i

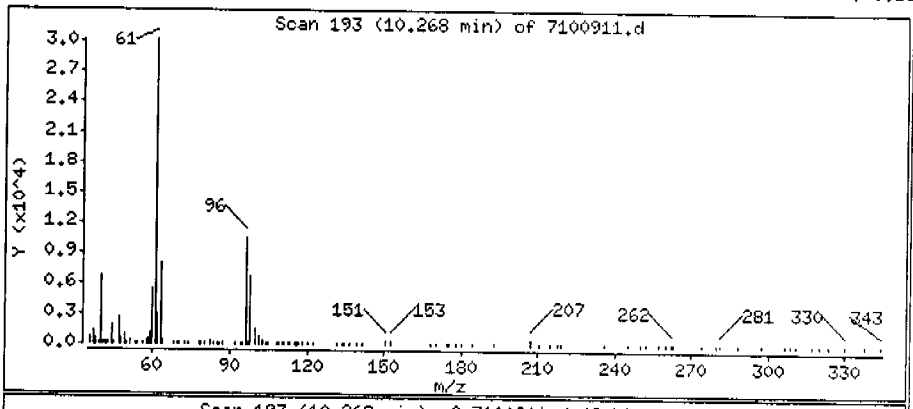
Operator: ra

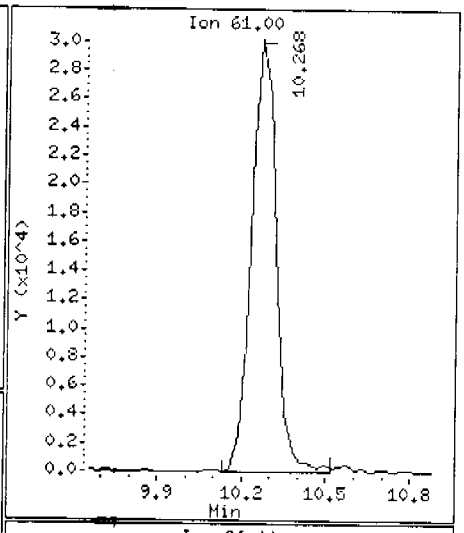
Column phase: RTx-624

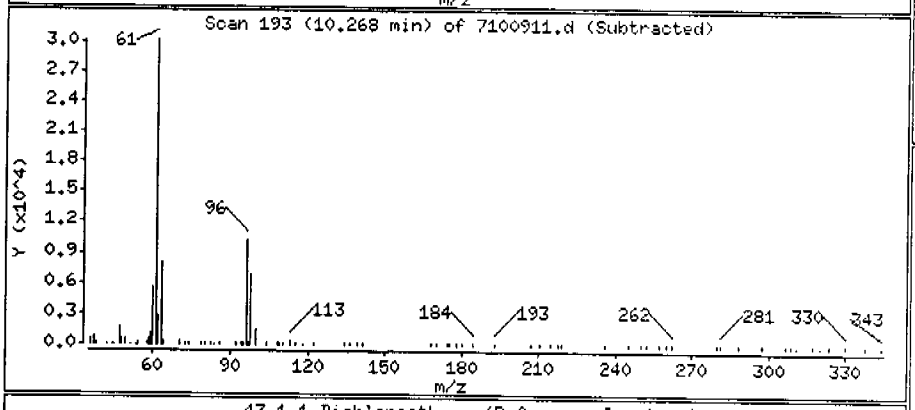
Column diameter: 0.53

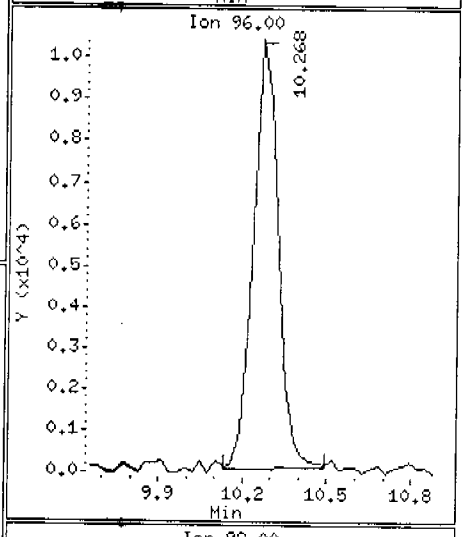
43 1,1-Dichloroethene

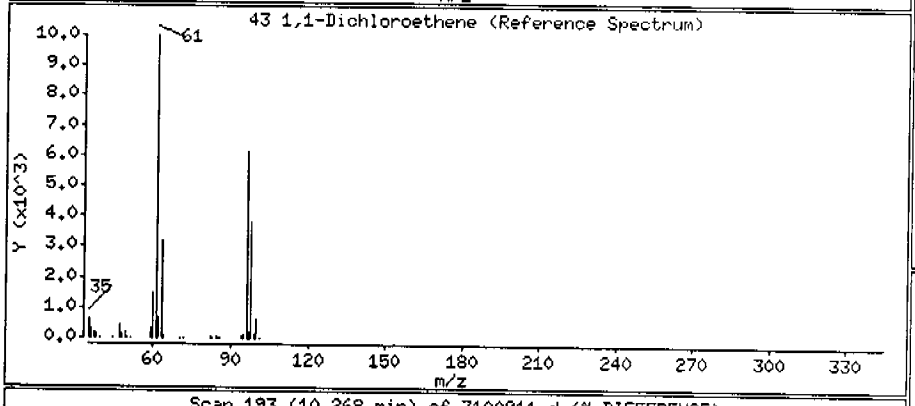
Concentration: 8.264 PPBV

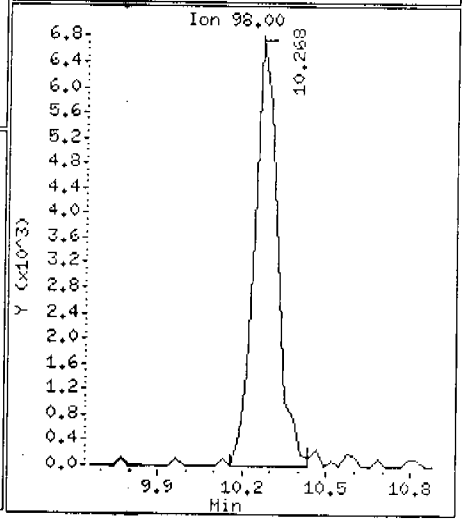


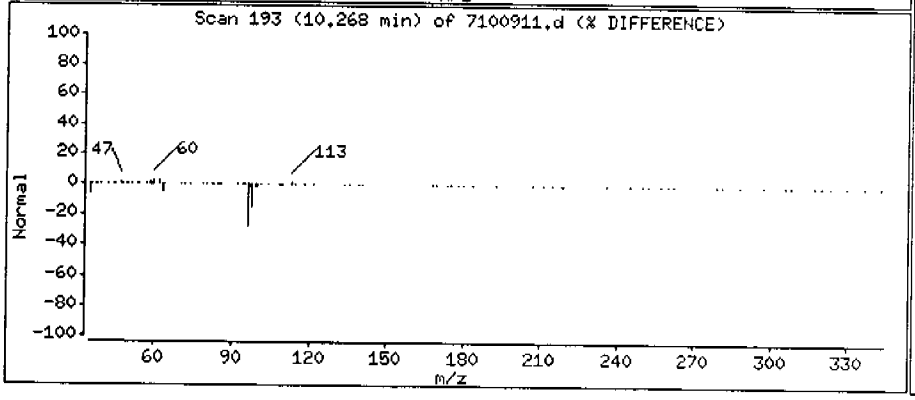












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

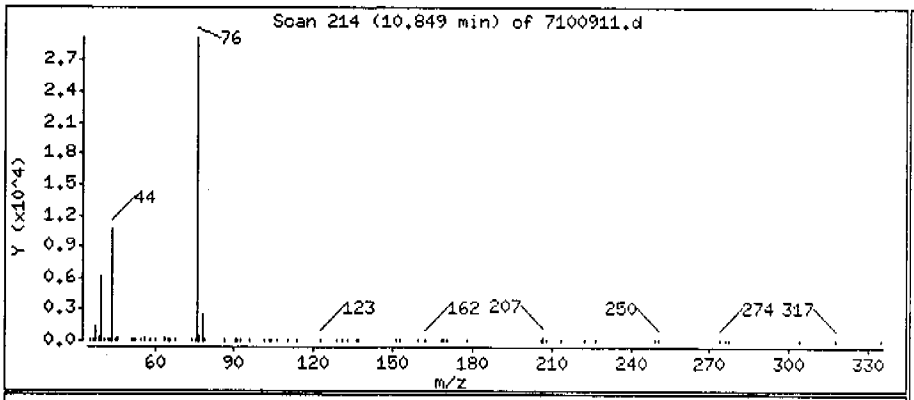
Operator: ra

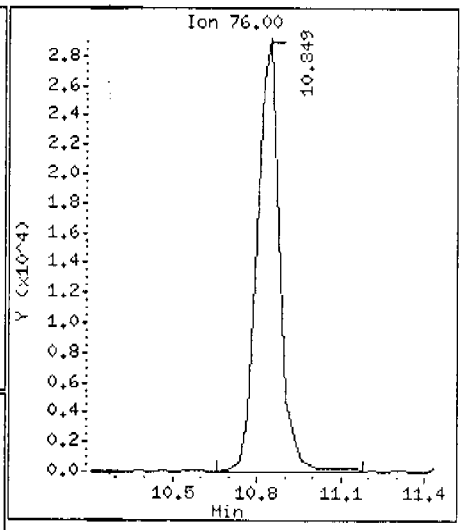
Column phase: RTx-624

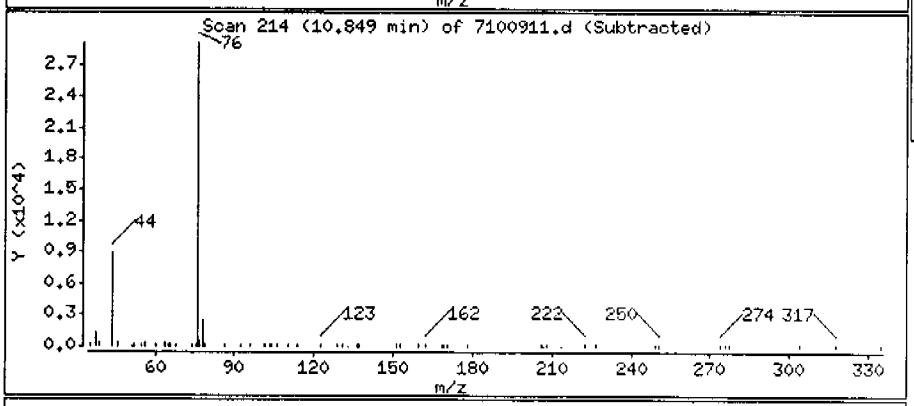
Column diameter: 0.53

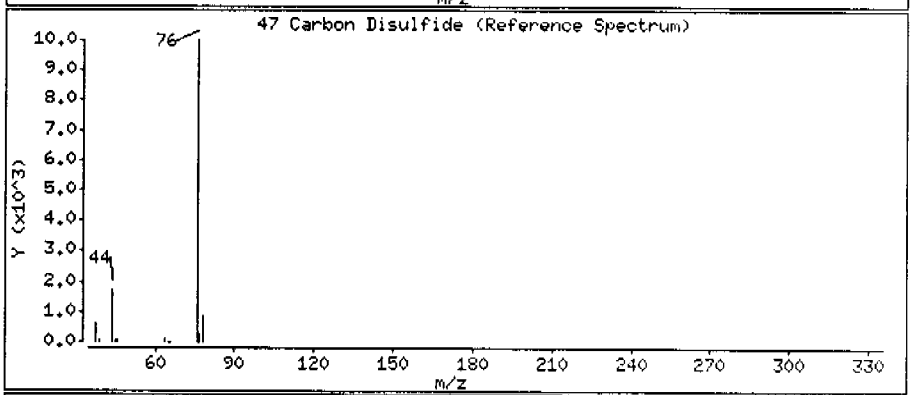
47 Carbon Disulfide

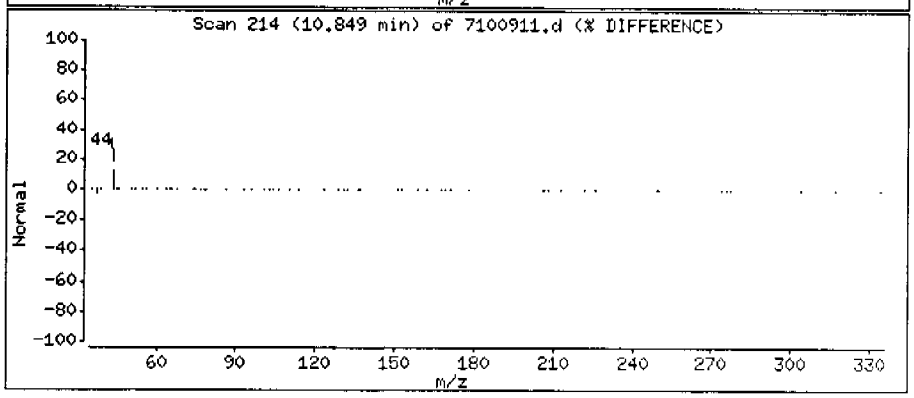
Concentration: 5.990 PPBV











Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

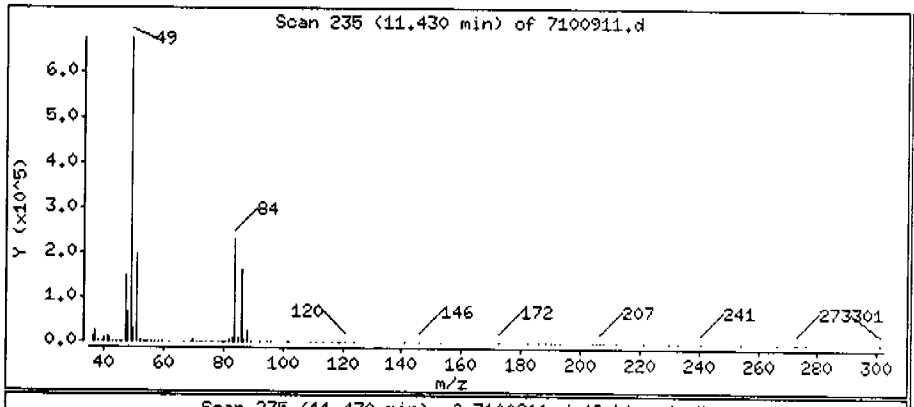
Operator: ra

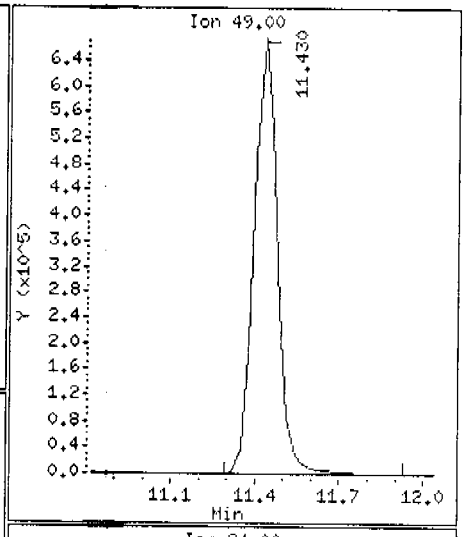
Column phase: RTx-624

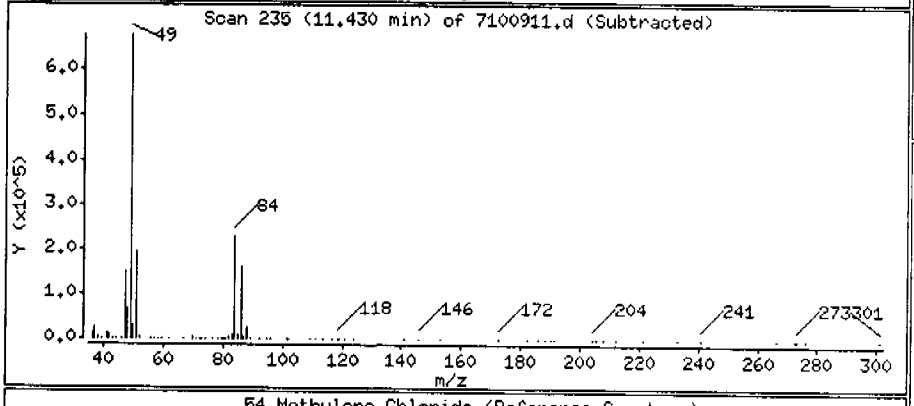
Column diameter: 0.53

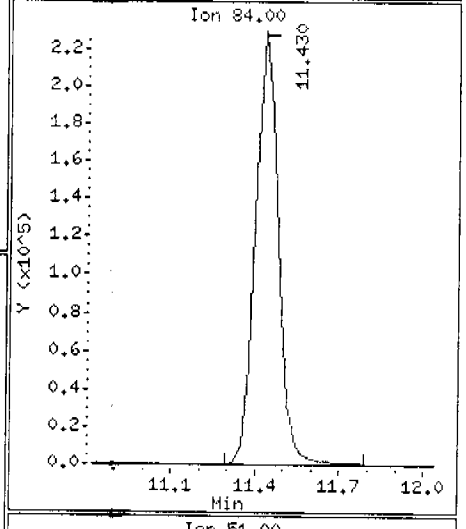
54 Methylene Chloride

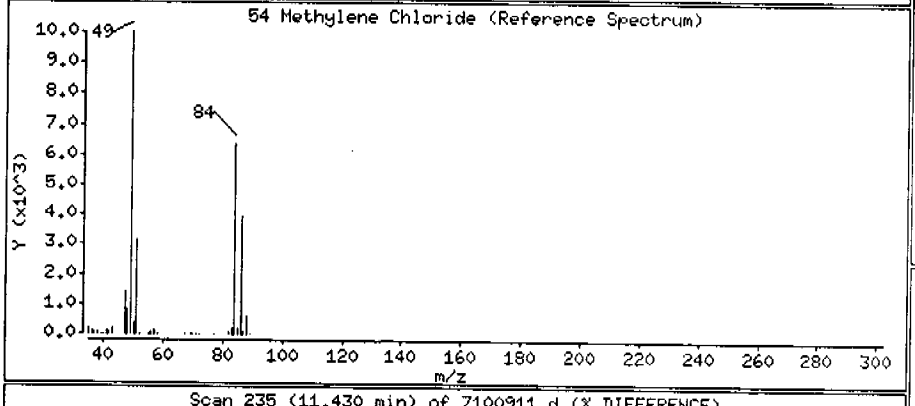
Concentration: 196.61 PPBV

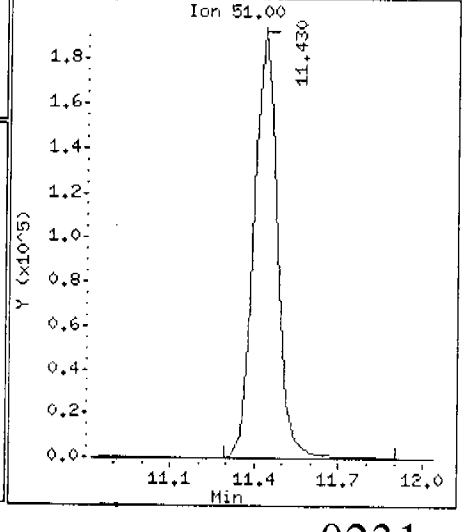


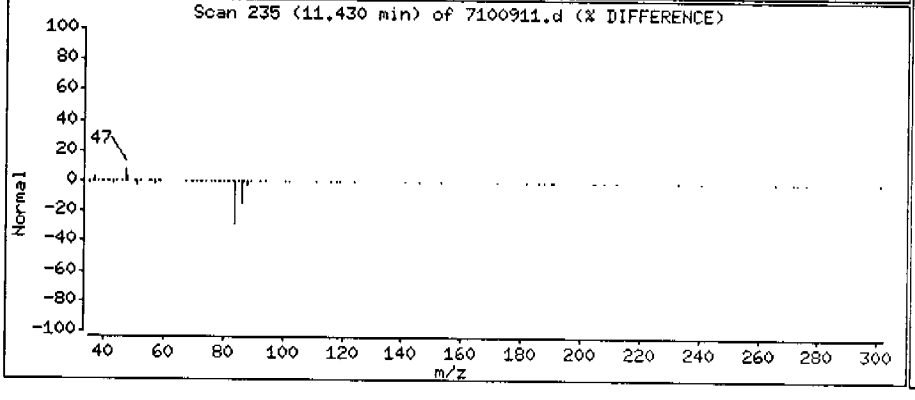












0231

Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

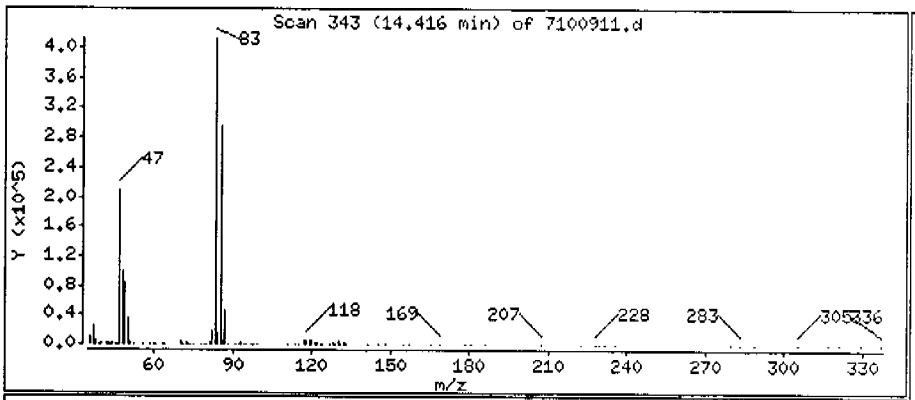
Operator: ra

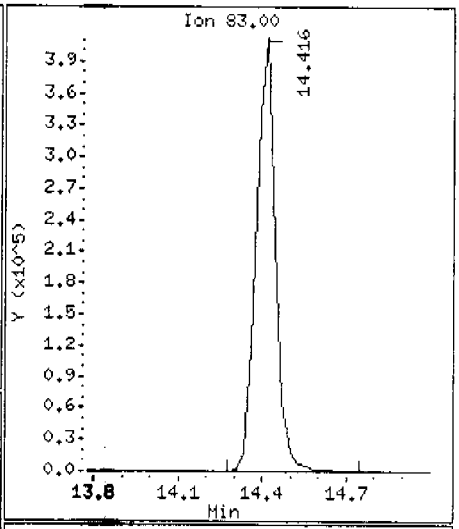
Column phase: RTx-624

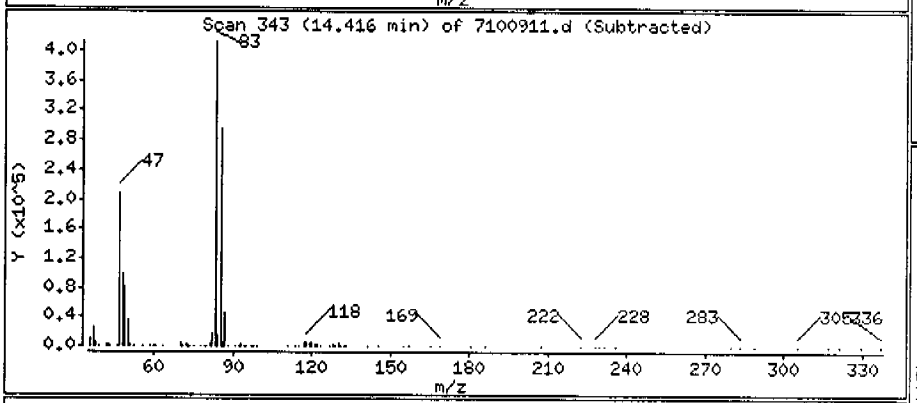
Column diameter: 0.53

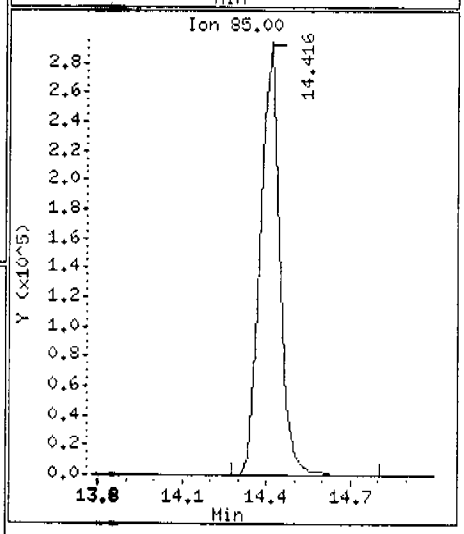
82 Chloroform

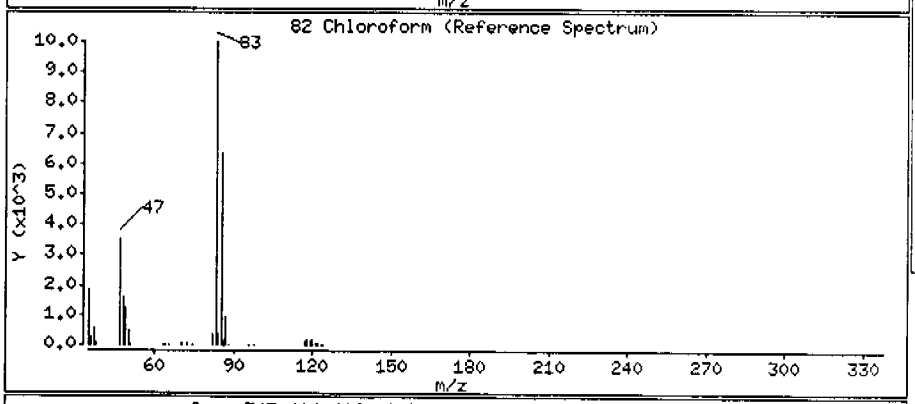
Concentration: 110.04 PPBV

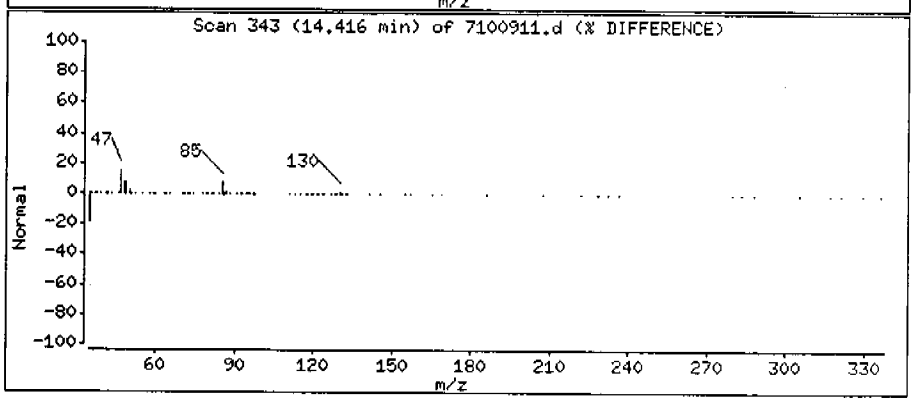












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

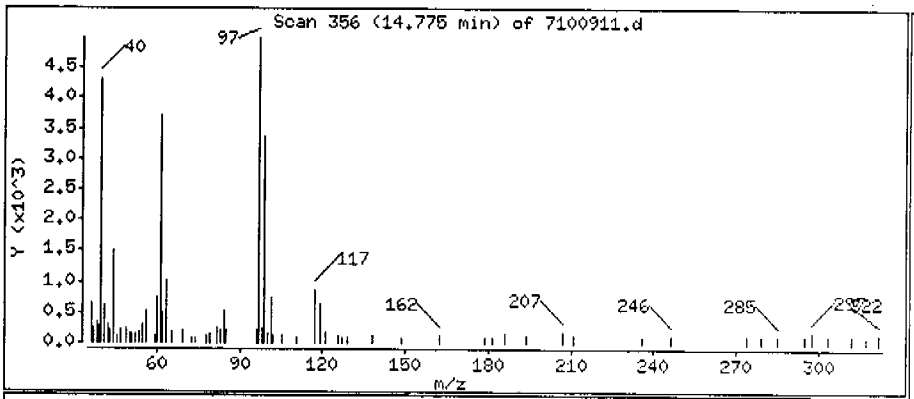
Operator: ra

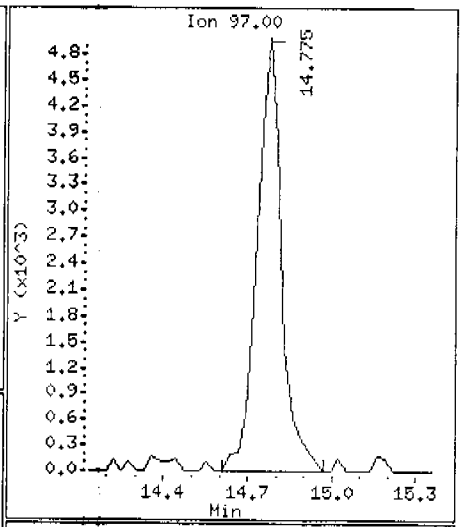
Column phase: RTx-624

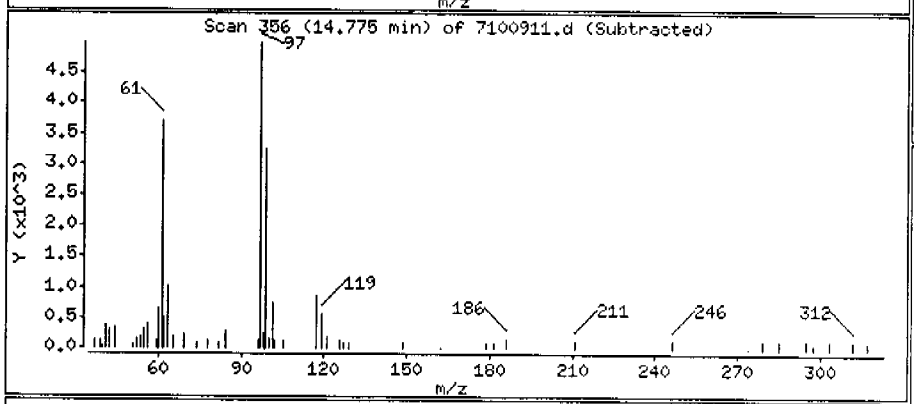
Column diameter: 0.53

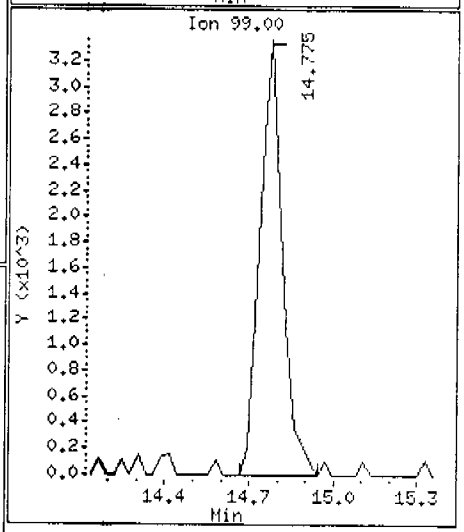
83 1,1,1-Trichloroethane

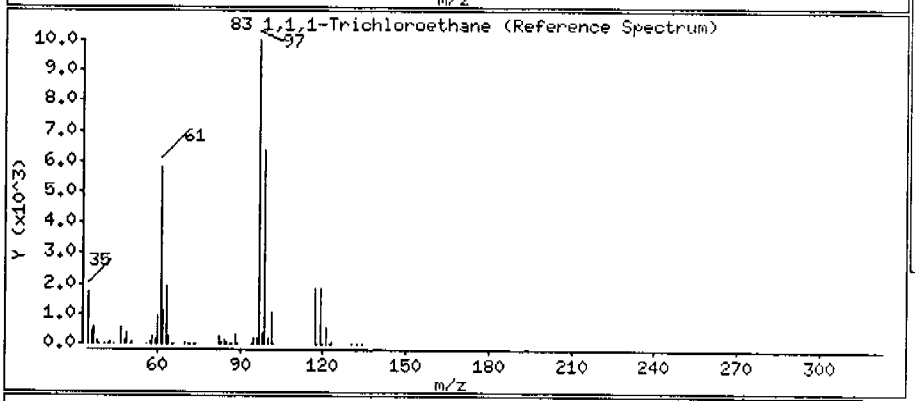
Concentration: 1.652 PPBV

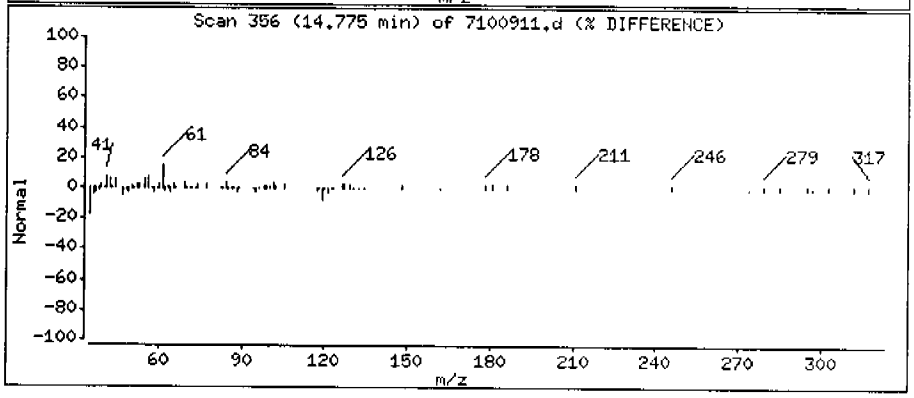












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

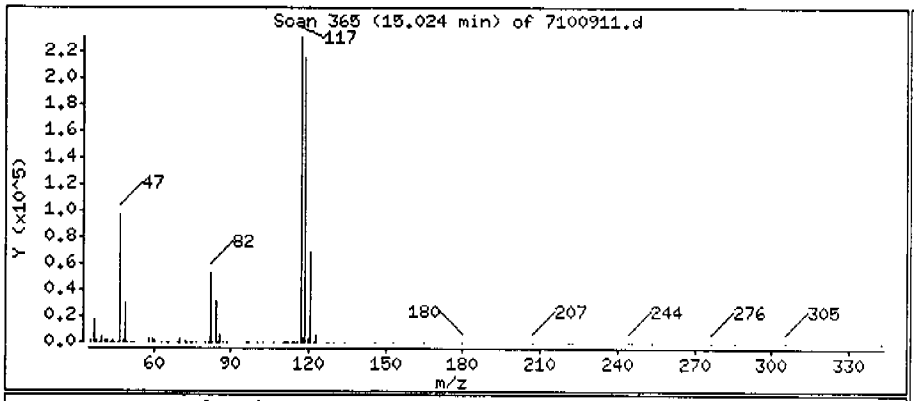
Operator: ra

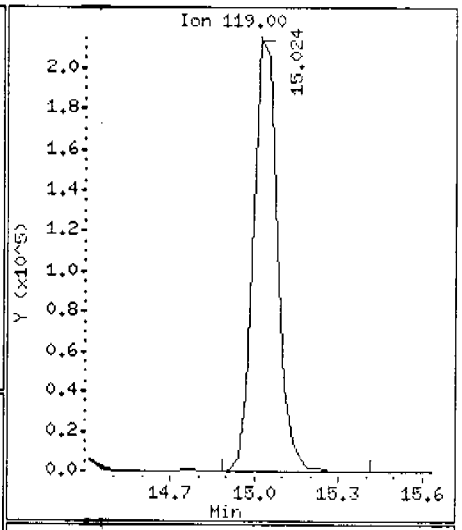
Column phase: RTx-624

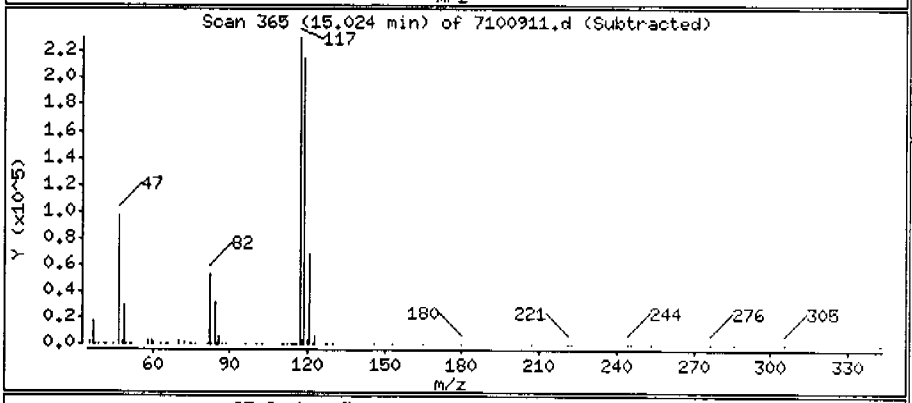
Column diameter: 0.53

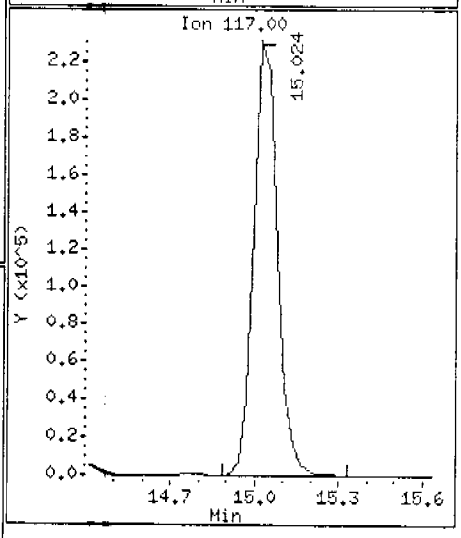
87 Carbon Tetrachloride

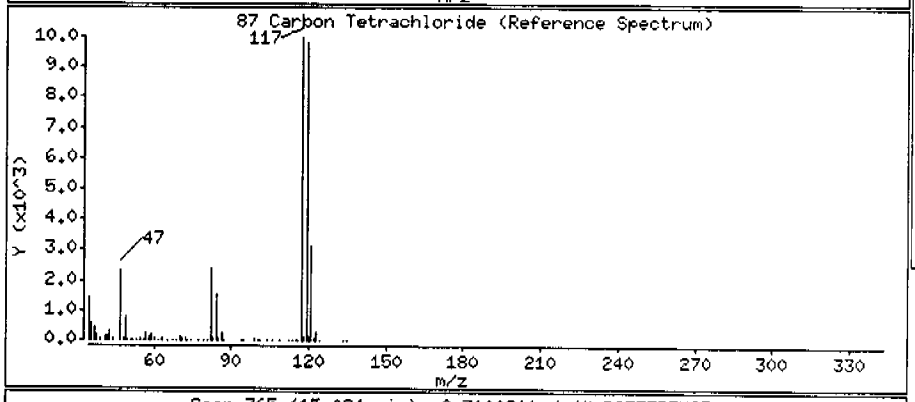
Concentration: 60.604 PPBV

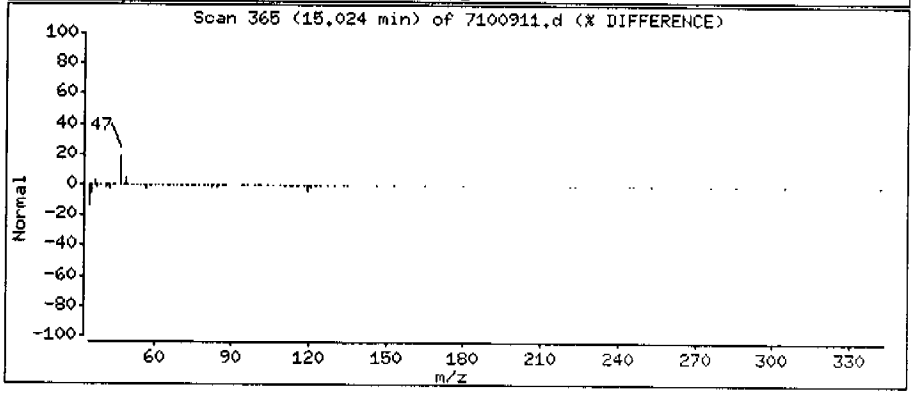












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

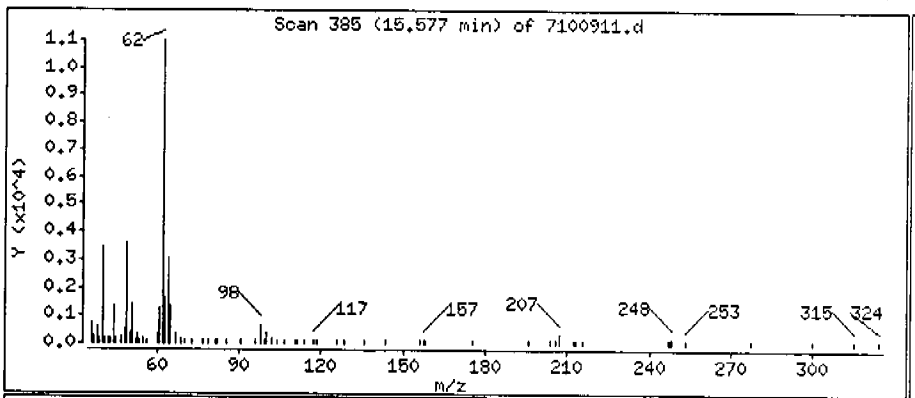
Operator: ra

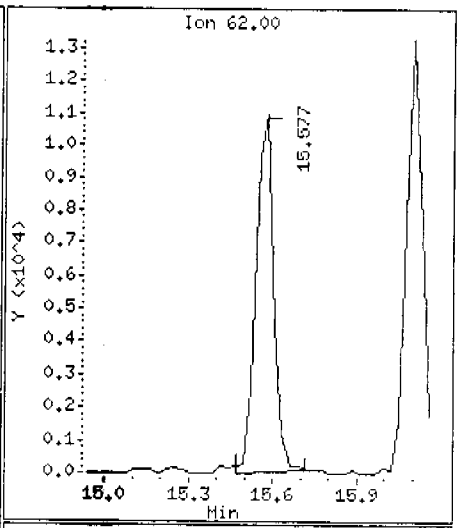
Column phase: RTx-624

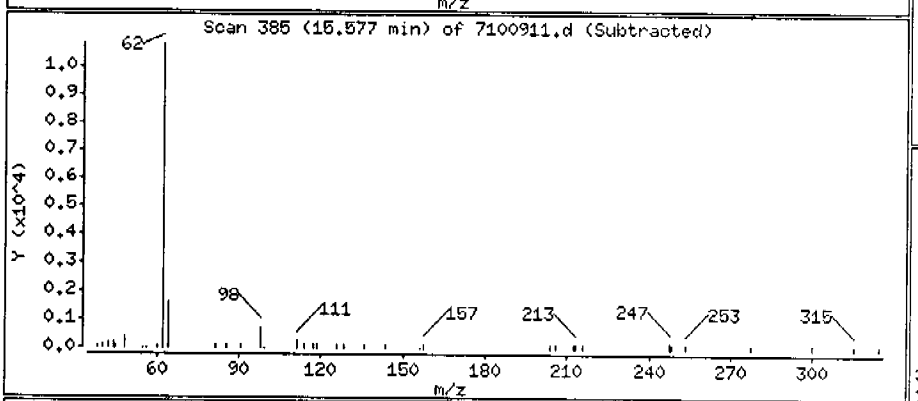
Column diameter: 0.53

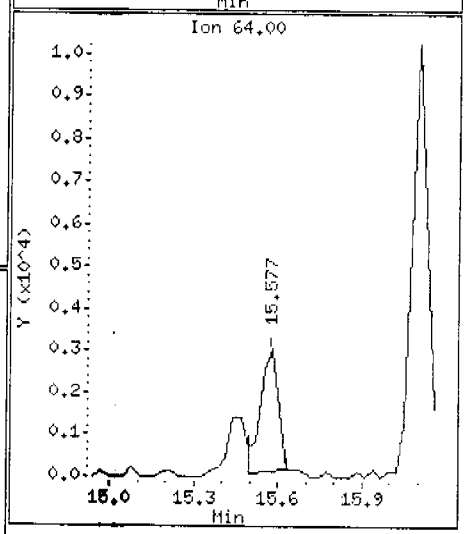
93 1,2-Dichloroethane

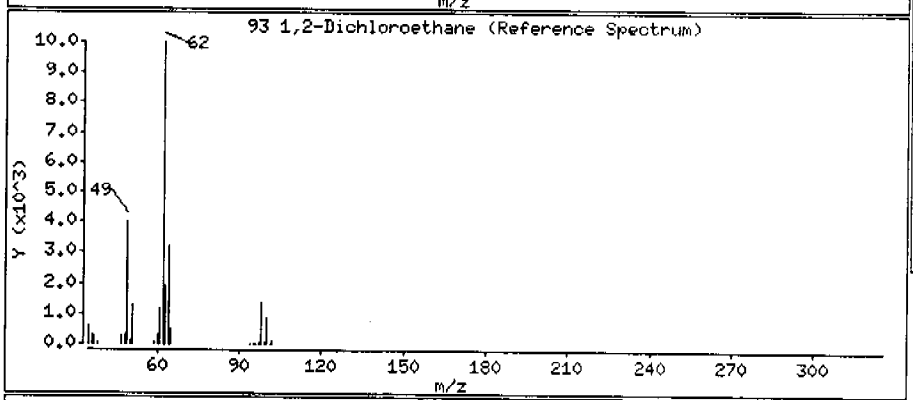
Concentration: 2.974 PPBV

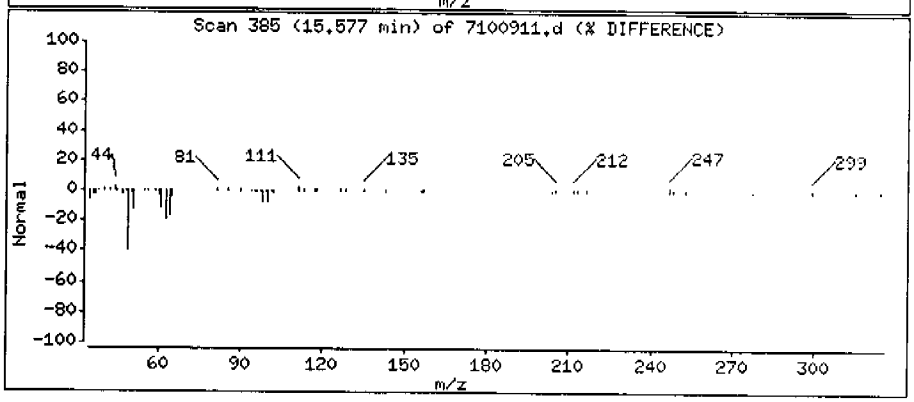












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

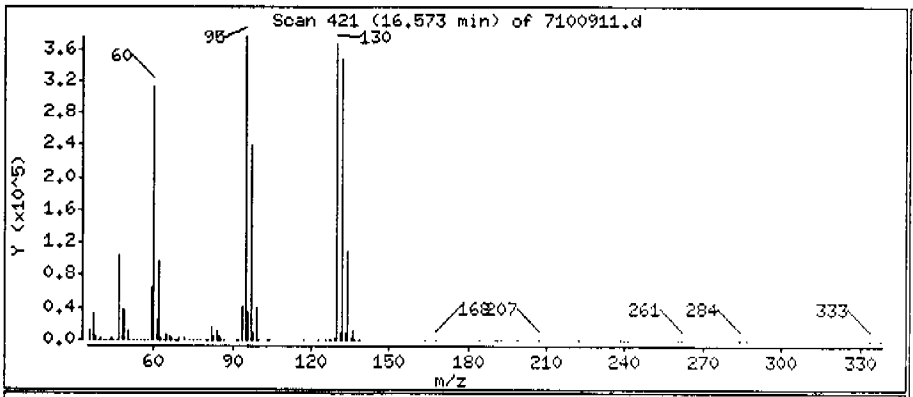
Operator: ra

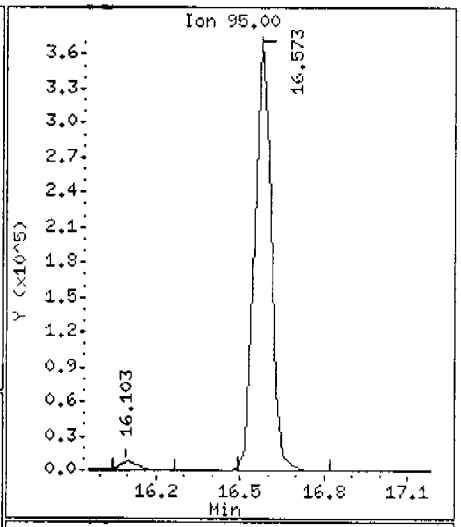
Column phase: RTx-624

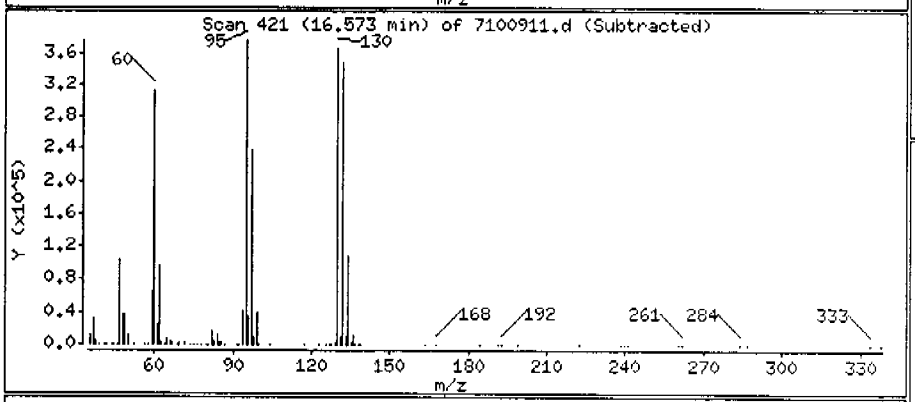
Column diameter: 0.53

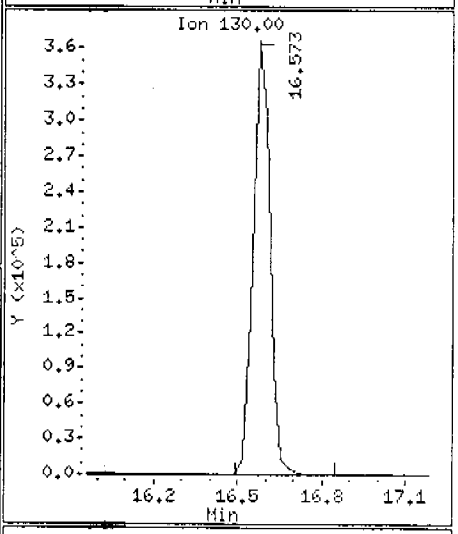
101 Trichloroethene

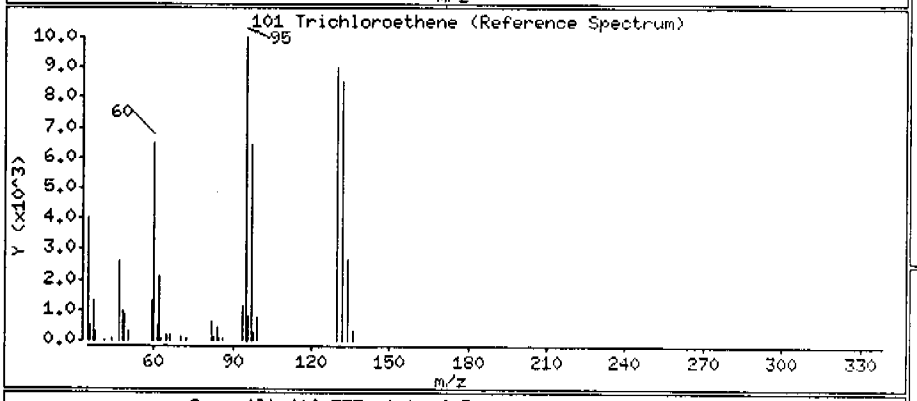
Concentration: 161.27 PPBV

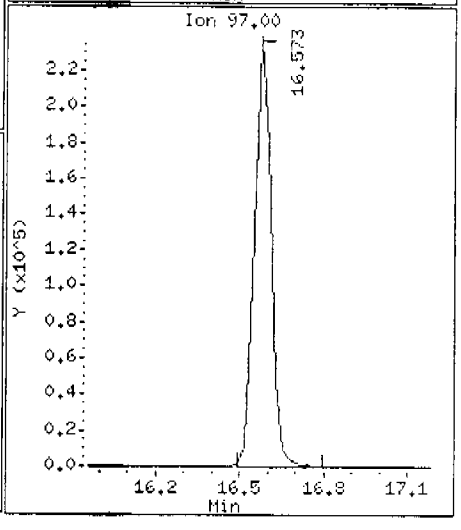


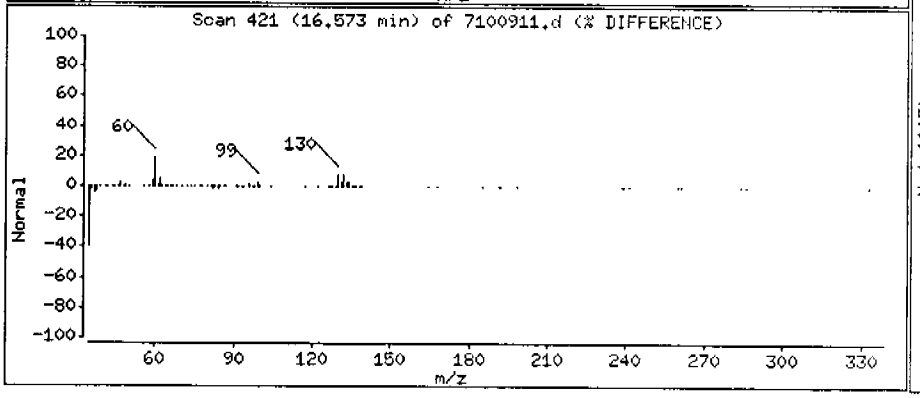












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Sample Info: 150mL #12017

Instrument: msd7.i

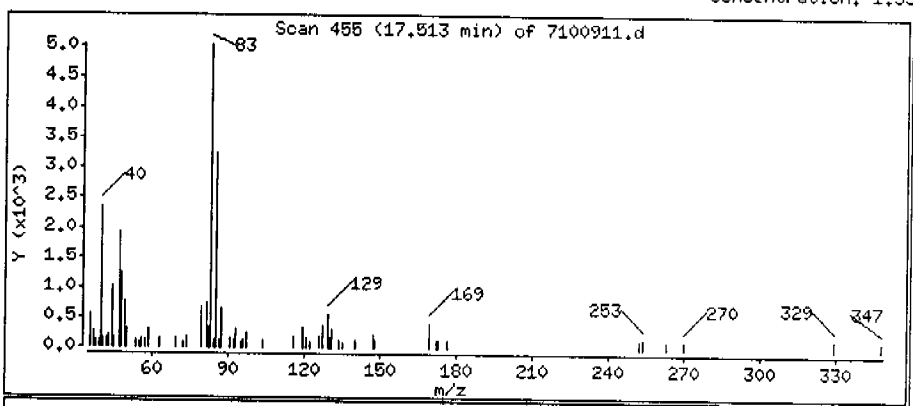
Operator: ra

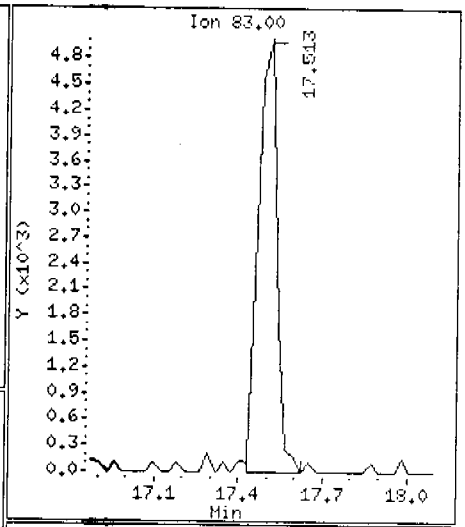
Column phase: RTx-624

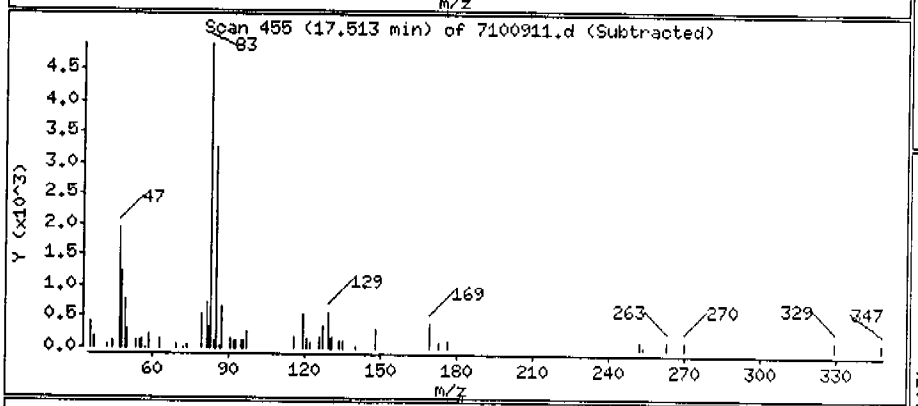
Column diameter: 0.53

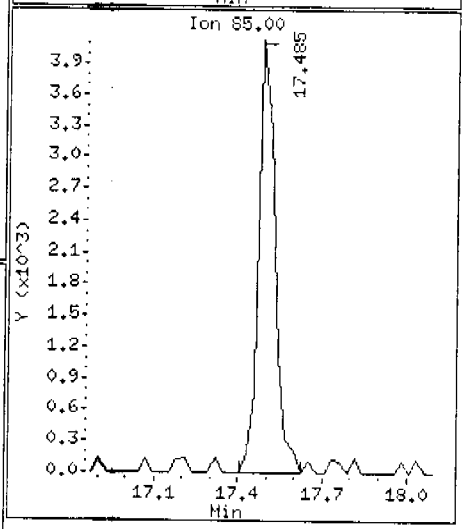
107 Bromodichloromethane

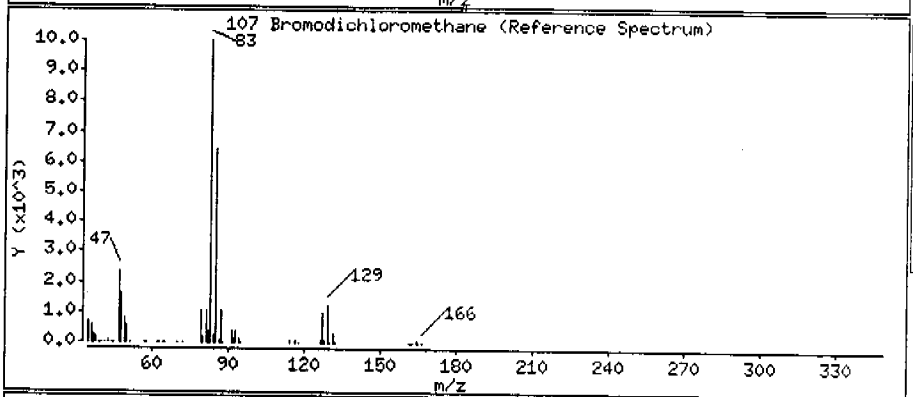
Concentration: 1.357 PPBV

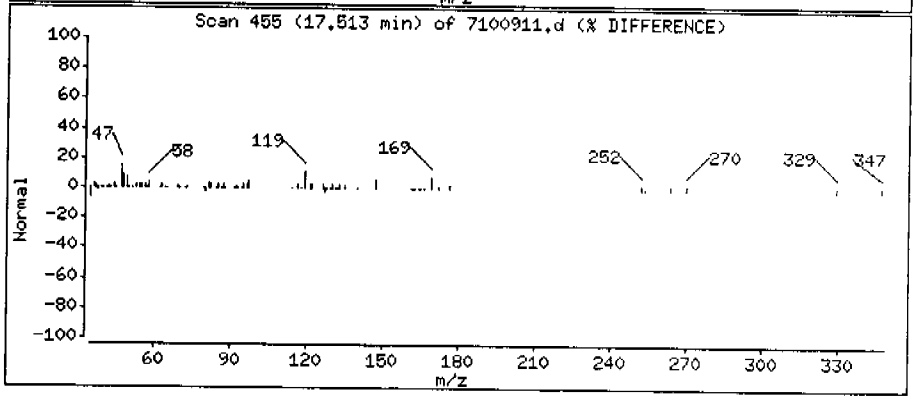












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

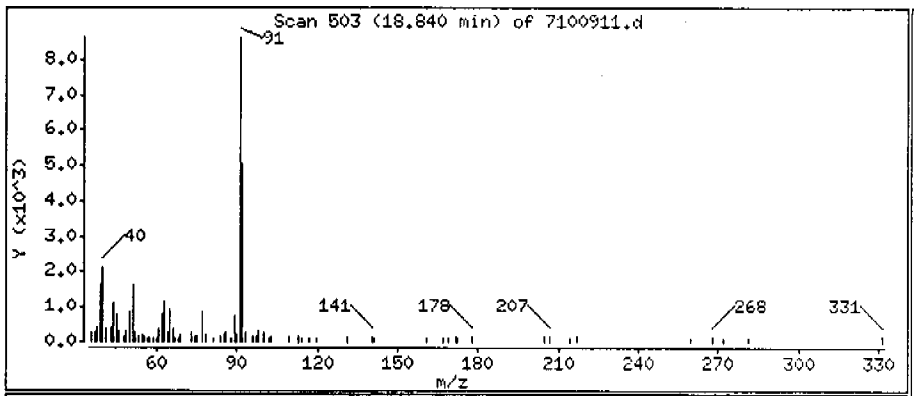
Operator: ra

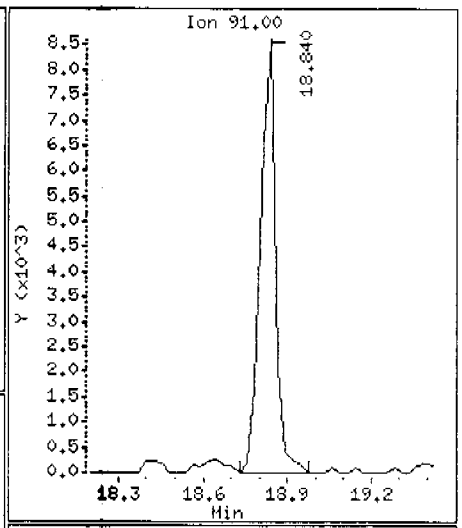
Column phase: RTx-624

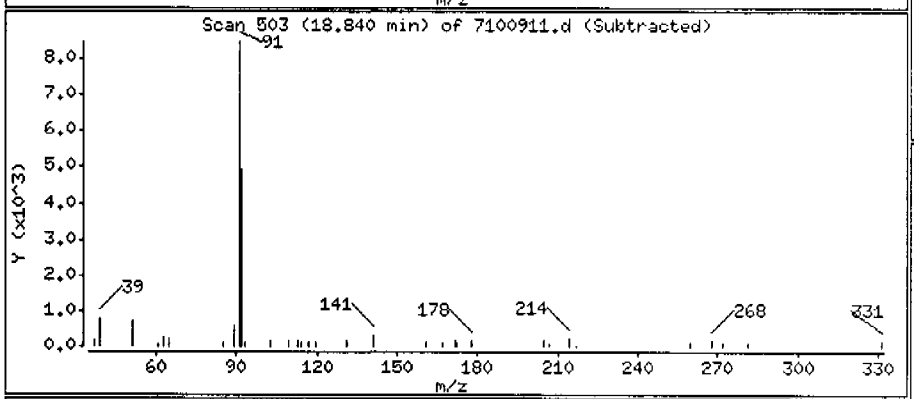
Column diameter: 0.53

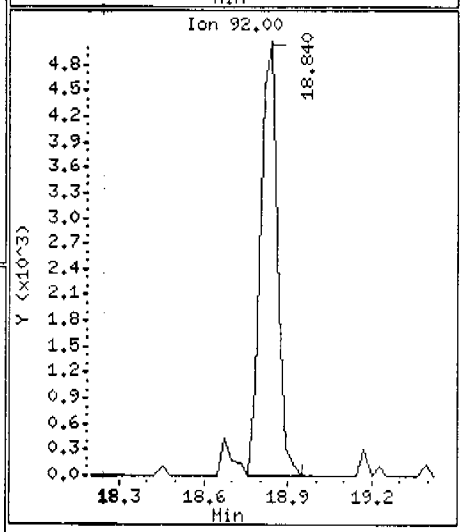
114 Toluene

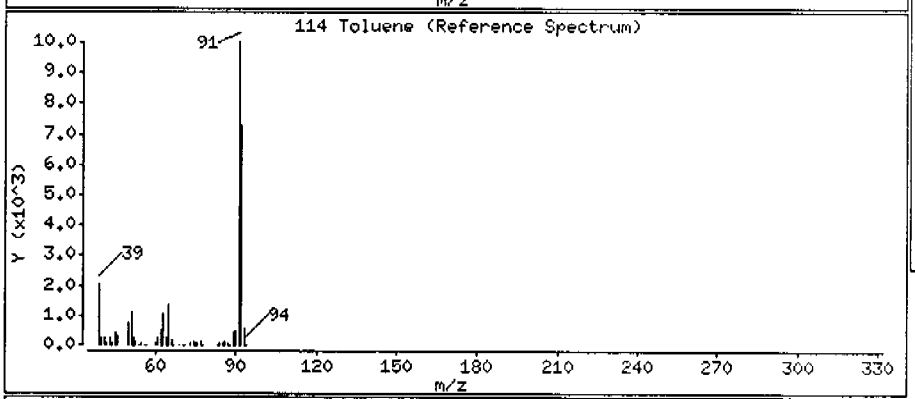
Concentration: 1.344 PPBV

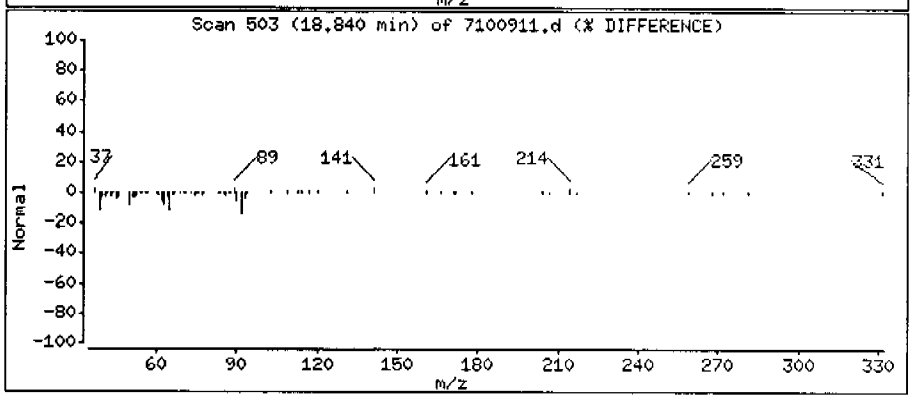












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

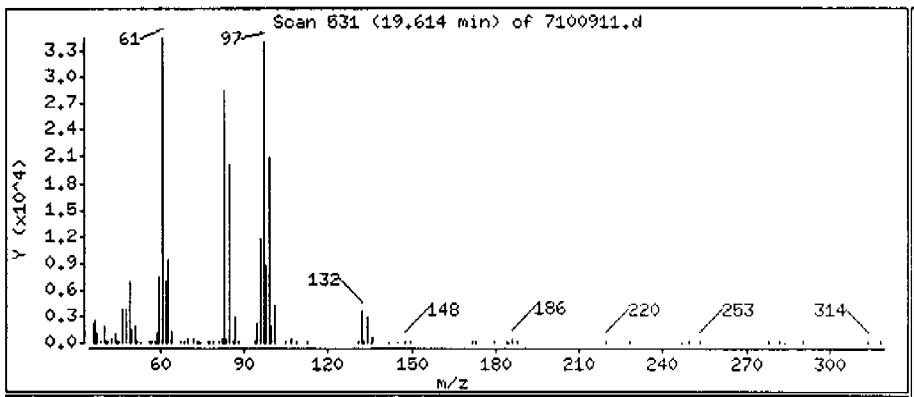
Operator: ra

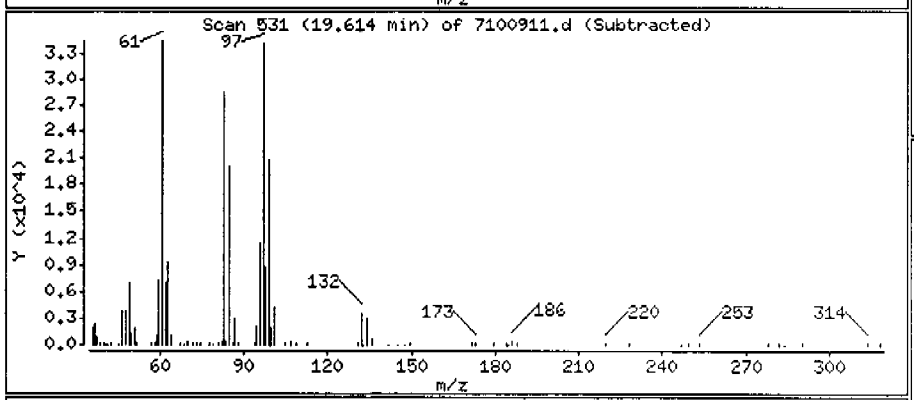
Column phase: RTx-624

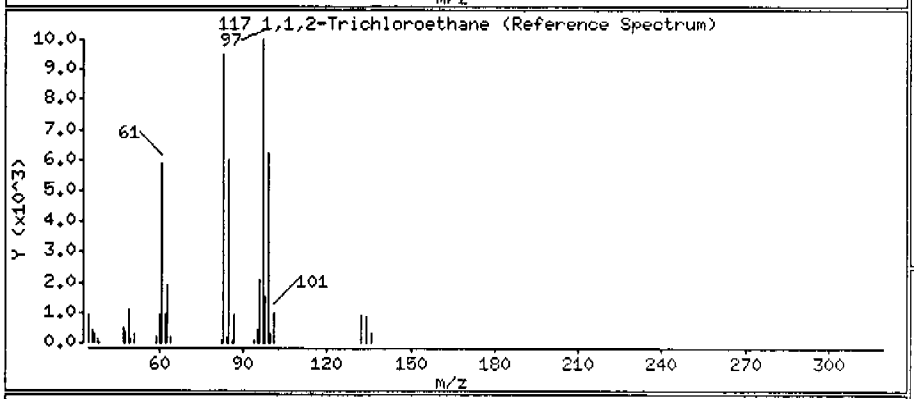
Column diameter: 0.53

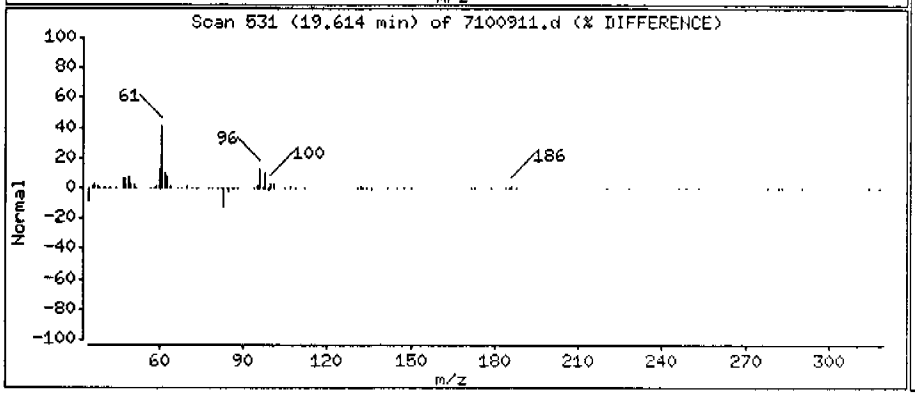
117 1,1,2-Trichloroethane

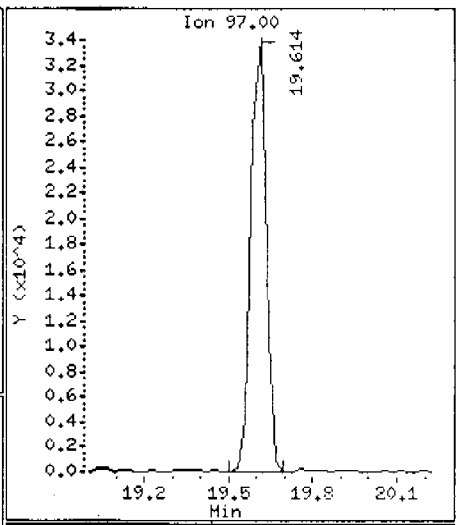
Concentration: 14.443 PPBV

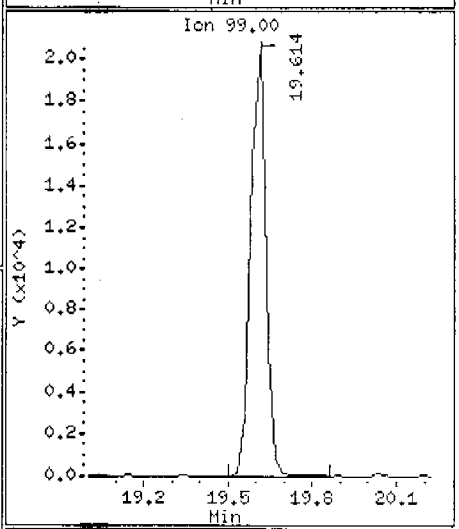


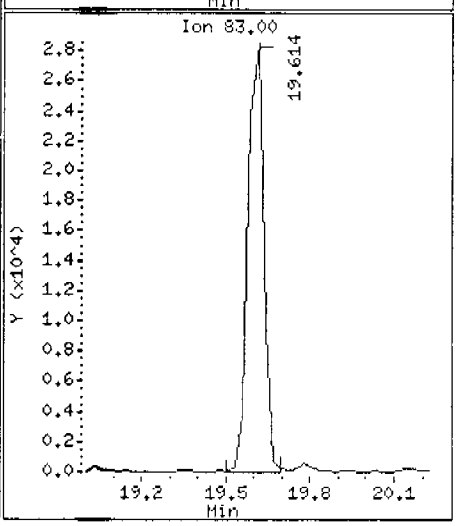












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

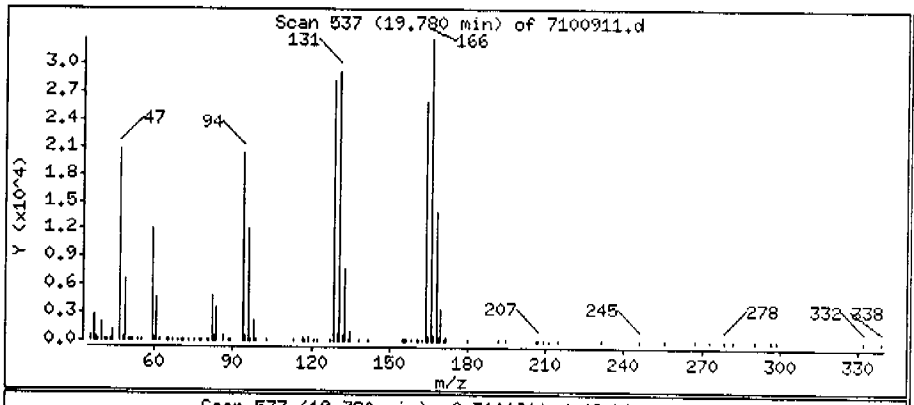
Operator: ra

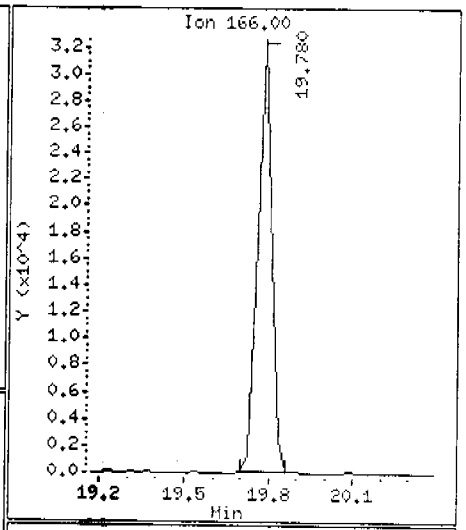
Column phase: RTx-624

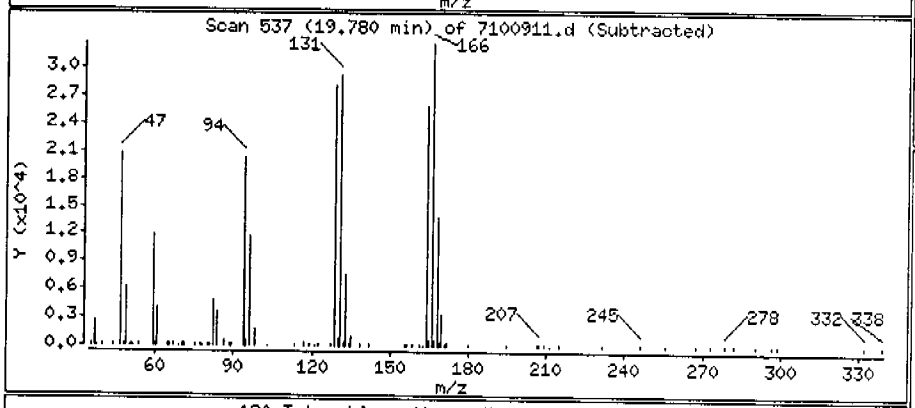
Column diameter: 0.53

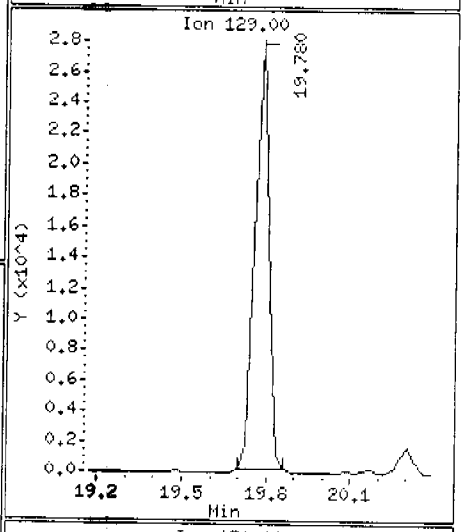
120 Tetrachloroethene

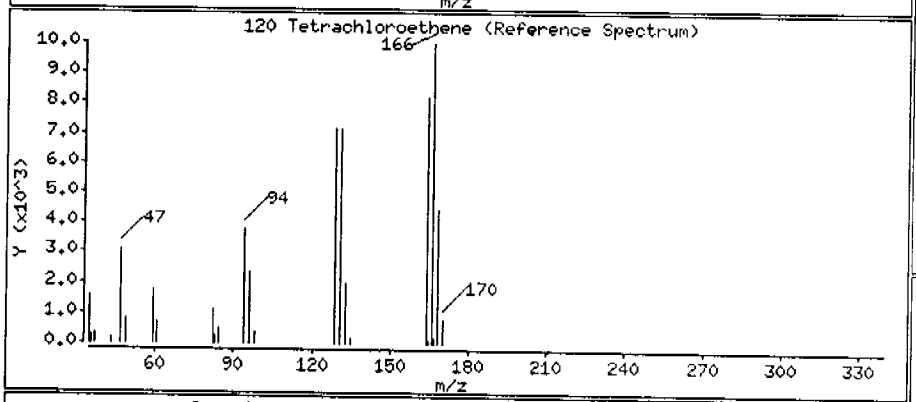
Concentration: 9.369 PPBV

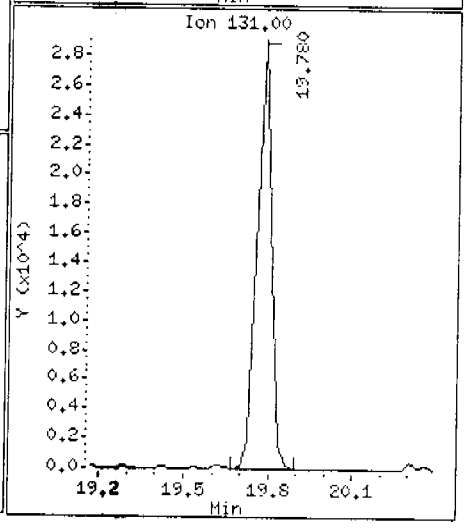


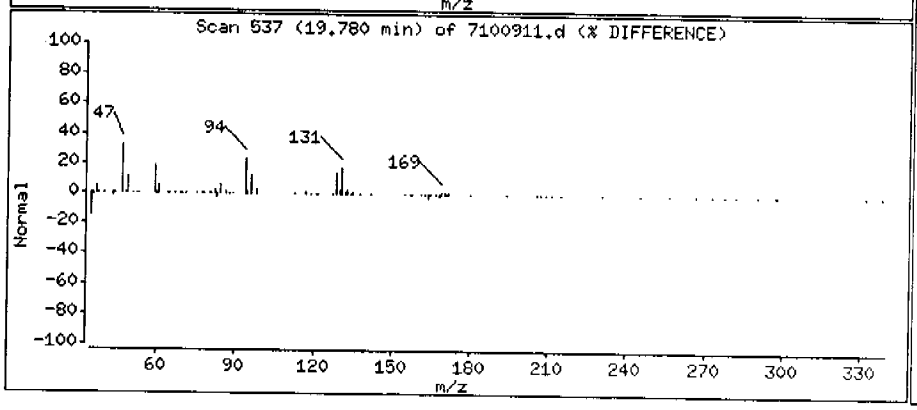












Data File: /chem/msd7.i/09oct08.b/7100911.d

Date : 09-OCT-2008 16:18

Client ID:

Instrument: msd7.i

Sample Info: 150mL #12017

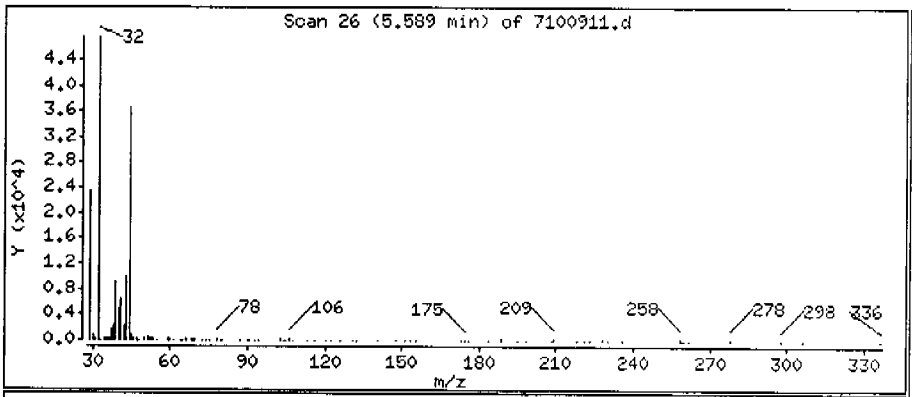
Operator: ra

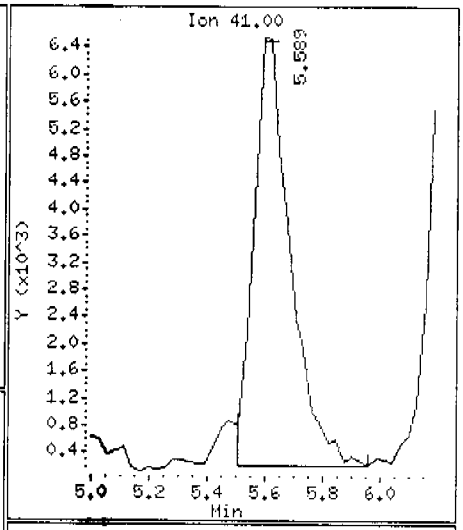
Column phase: RTx-624

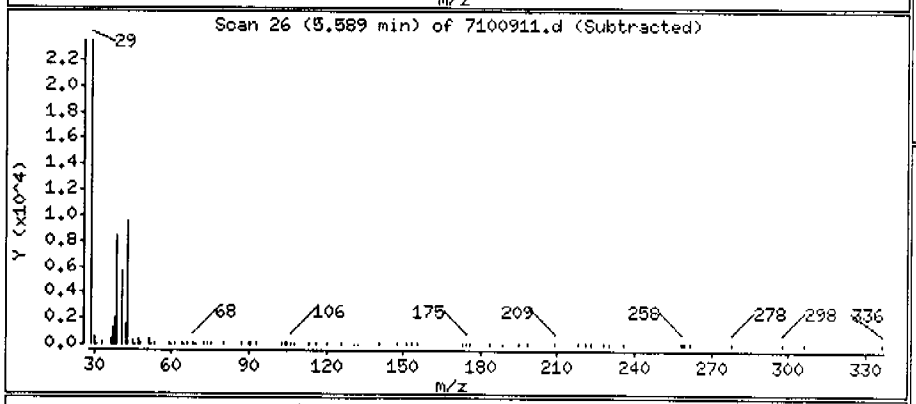
Column diameter: 0.53

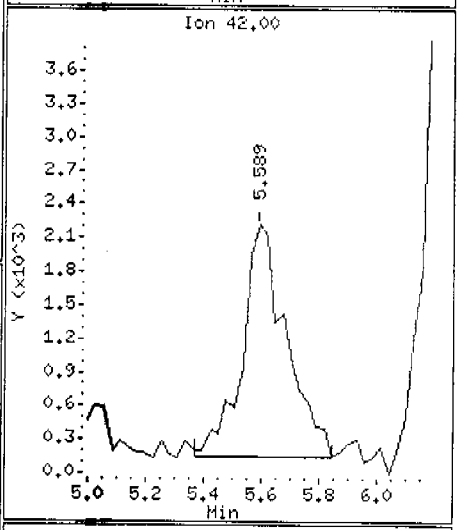
11 Propylene

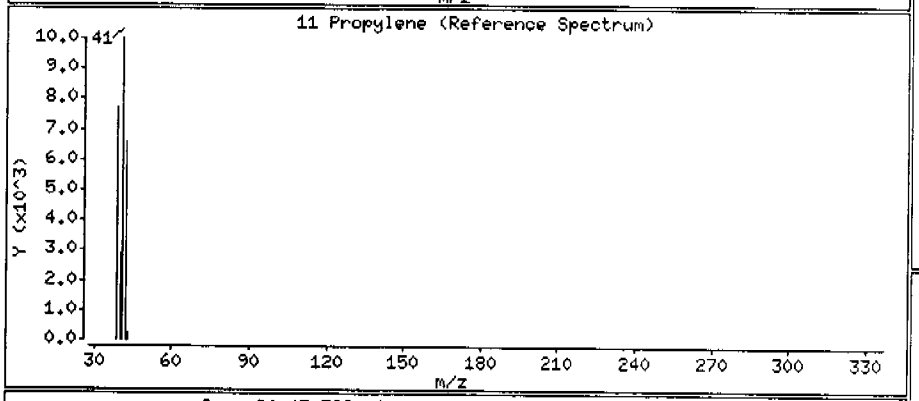
Concentration: 5.027 PPBV

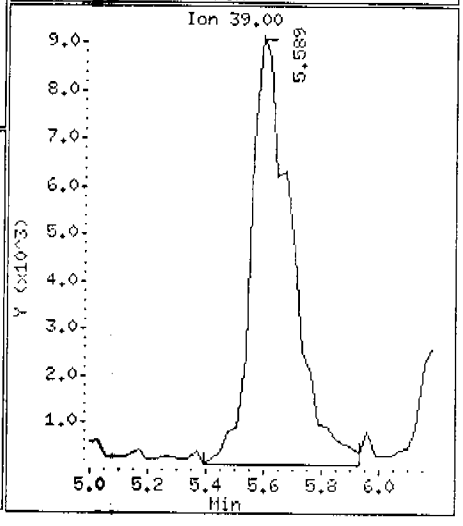


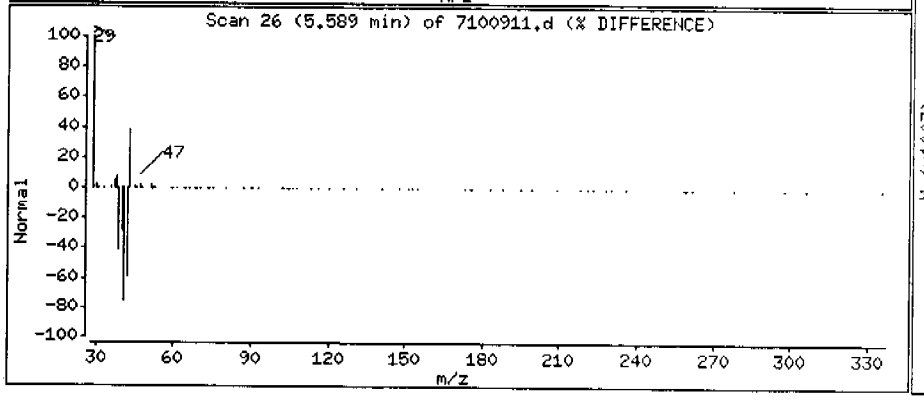












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14824

Lab ID#: 0809614-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Acetone	4.3	7.2	10	17

0242

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14824

Lab ID#: 0809614-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100912	**Date of Collection:**	9/25/08
Dil. Factor:	2.17	**Date of Analysis:**	10/9/08 04:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Chloromethane	4.3	Not Detected	9.0	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	1.1	Not Detected	4.2	Not Detected
Chloroethane	1.1	Not Detected	2.9	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Ethanol	4.3	Not Detected	8.2	Not Detected
Freon 113	1.1	Not Detected	8.3	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	4.3	7.2	10	17
2-Propanol	4.3	Not Detected	11	Not Detected
Carbon Disulfide	1.1	Not Detected	3.4	Not Detected
Methylene Chloride	1.1	Not Detected	3.8	Not Detected
Methyl tert-butyl ether	1.1	Not Detected	3.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.2	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14824

Lab ID#: 0809614-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100912	Date of Collection:	9/25/08
Dil. Factor:	2.17	Date of Analysis:	10/9/08 04:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	4.3	Not Detected	18	Not Detected
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.3	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.3	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Chlorodifluoromethane	4.3	Not Detected	15	Not Detected
Methanol	110	Not Detected	140	Not Detected
n-Butanol	4.3	Not Detected	13	Not Detected
Propylene	4.3	Not Detected	7.5	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100912.d
Lab Smp Id: 0809614-10A
Inj Date : 09-OCT-2008 16:59
Operator : ra
Inst ID: msd7.i
Smp Info : 200mL #5751
Misc Info : 11.5"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher
Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00
Cal File: 7082709.d
Als bottle: 1
Dil Factor: 2.17000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	14.333	14.333 (1.000)	130	334229	25.0000		80.00- 120.00	100.00
	14.333	14.333 (1.000)	128	259460			28.92- 128.92	77.63
	14.333	14.333 (1.000)	49	855188			320.90- 420.90	255.87
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	16.103	16.103 (1.000)	114	1012223	25.0000		80.00- 120.00	100.00
	16.103	16.103 (1.000)	88	170991			0.00- 67.10	16.89
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	21.301	21.301 (1.000)	117	1086459	25.0000		80.00- 120.00	100.00
	21.301	21.301 (1.000)	82	545379			1.24- 101.24	50.20
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.411	15.411 (1.075)	65	622279	24.6480	24.648	80.00- 120.00	100.00
	15.439	15.411 (1.077)	67	263460			0.00- 97.37	42.34
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.702	18.702 (1.161)	98	953951	24.6193	24.619	80.00- 120.00	100.00
	18.702	18.702 (1.161)	70	130908			0.00- 63.85	13.72

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	730509			26.51- 126.51	76.58
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	533184	23.8494	23.849	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	755274			92.62- 192.62	141.65
23.291	23.291	(1.093)	176	498932			44.03- 144.03	93.58
45 Acetone						CAS #: 67-64-1		
10.434	10.407	(0.728)	58	53323	3.29492	7.150	80.00- 120.00	100.00
10.434	10.407	(0.728)	43	233924			340.42- 440.42	438.69

Data File: /chem/msd7.i/09oct08.b/7100912.d
Report Date: 11-Oct-2008 08:29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100912.d
Lab Smp Id: 0809614-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 11.5"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	334229	-7.69
97 1,4-Difluorobenze	1146510	687906	1605114	1012223	-11.71
126 Chlorobenzene-d5	1241713	745028	1738398	1086459	-12.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100912.d
Report Date: 11-Oct-2008 08:29

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-10A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 11.5"psi-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.648	98.59	70-130
$ 113 Toluene-d8	25.000	24.619	98.48	70-130
$ 137 Bromofluorobenzene	25.000	23.849	95.40	70-130

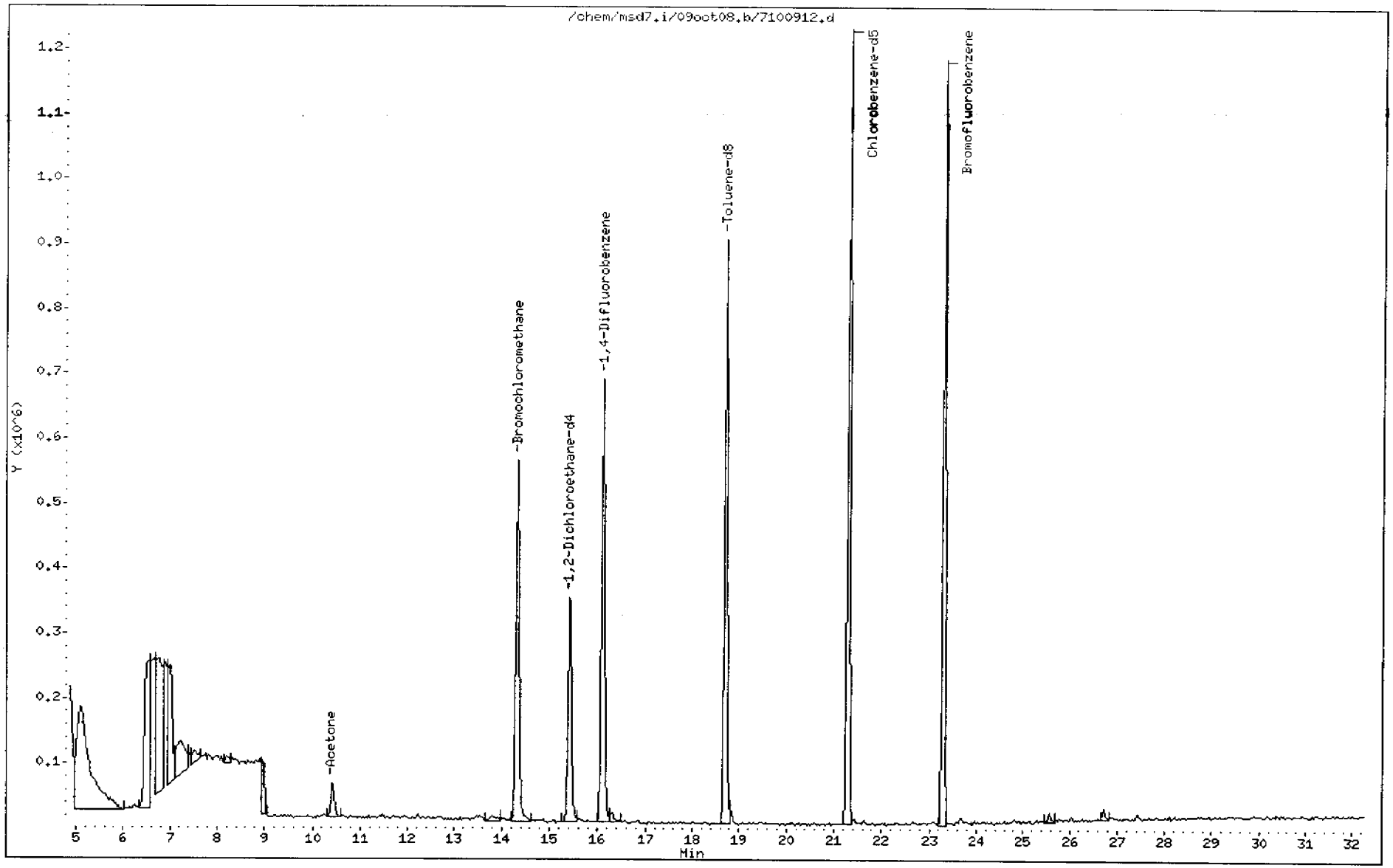
Data File: /chem/msd7.i/09oct08.b/7100912.d
Date : 09-OCT-2008 16:59
Client ID:
Sample Info: 200mL #5751

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0249



Data File: /chem/msd7.i/09oct08.b/7100912.d

Date : 09-OCT-2008 16:59

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5751

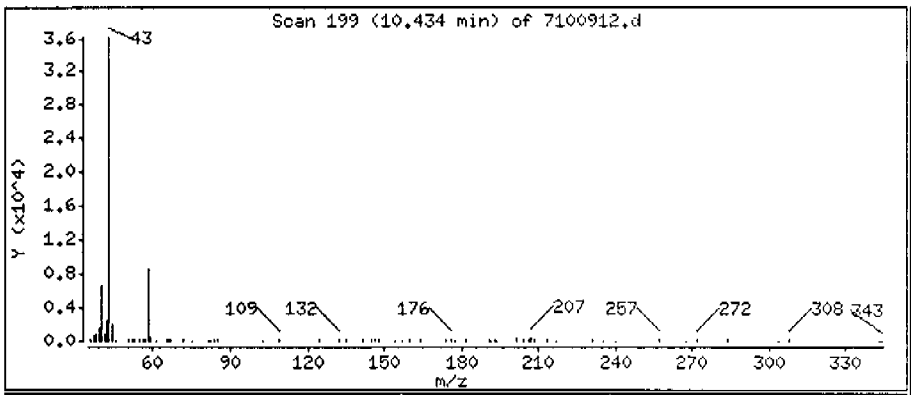
Operator: ra

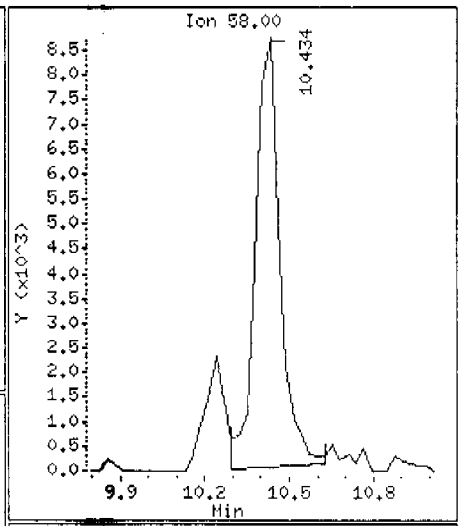
Column phase: RTx-624

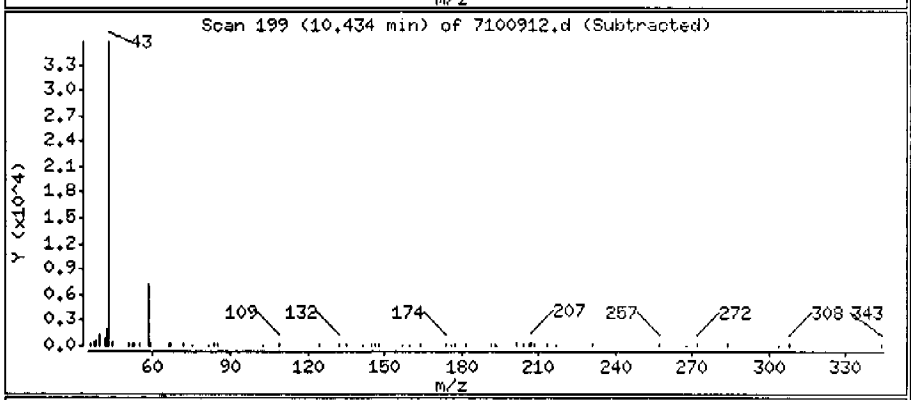
Column diameter: 0.53

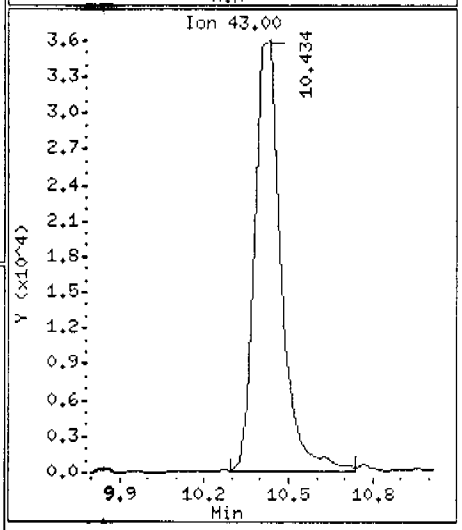
45 Acetone

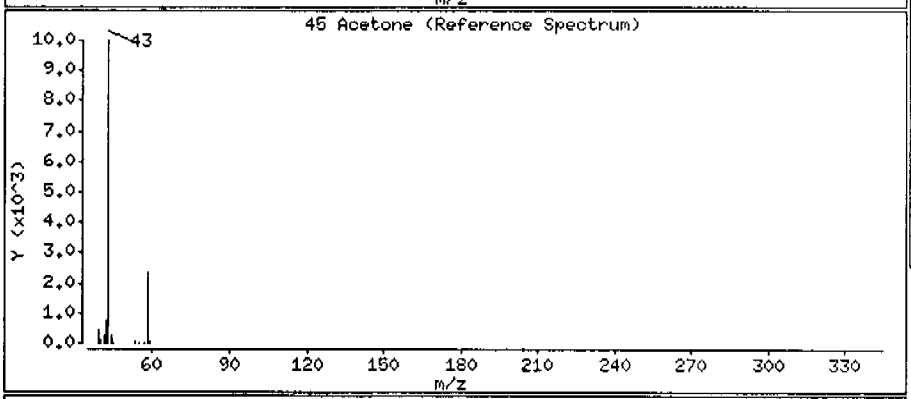
Concentration: 7.150 PPBV

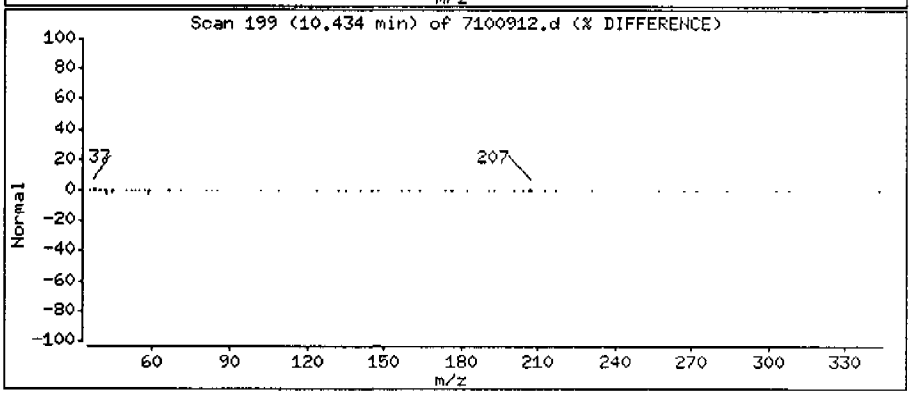












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14825

Lab ID#: 0809614-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	0.94	2.7	7.2	21
1,1-Dichloroethene	0.94	10	3.7	41
Acetone	3.7	19	8.9	44
Methylene Chloride	0.94	220	3.2	780
2-Butanone (Methyl Ethyl Ketone)	0.94	2.9	2.8	8.5
cis-1,2-Dichloroethene	0.94	1.0	3.7	4.0
Chloroform	0.94	130	4.6	650
1,1,1-Trichloroethane	0.94	2.1	5.1	11
Carbon Tetrachloride	0.94	78	5.9	490
1,2-Dichloroethane	0.94	3.4	3.8	14
Trichloroethene	0.94	190	5.0	1000
Bromodichloromethane	0.94	1.5	6.3	10
Toluene	0.94	1.4	3.5	5.1
1,1,2-Trichloroethane	0.94	17	5.1	93
Tetrachloroethene	0.94	11	6.3	77
1,4-Dichlorobenzene	0.94	0.93 J	5.6	5.6 J
Propylene	3.7	7.5	6.4	13

0251

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14825

Lab ID#: 0809614-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100914	**Date of Collection:**	9/25/08
Dil. Factor:	1.87	**Date of Analysis:**	10/9/08 06:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.94	Not Detected	4.6	Not Detected
Freon 114	0.94	Not Detected	6.5	Not Detected
Chloromethane	3.7	Not Detected	7.7	Not Detected
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected
1,3-Butadiene	0.94	Not Detected	2.1	Not Detected
Bromomethane	0.94	Not Detected	3.6	Not Detected
Chloroethane	0.94	Not Detected	2.5	Not Detected
Freon 11	0.94	Not Detected	5.2	Not Detected
Ethanol	3.7	Not Detected	7.0	Not Detected
Freon 113	0.94	2.7	7.2	21
1,1-Dichloroethene	0.94	10	3.7	41
Acetone	3.7	19	8.9	44
2-Propanol	3.7	Not Detected	9.2	Not Detected
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected
Methylene Chloride	0.94	220	3.2	780
Methyl tert-butyl ether	0.94	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected
Hexane	0.94	Not Detected	3.3	Not Detected
1,1-Dichloroethane	0.94	Not Detected	3.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	2.9	2.8	8.5
cis-1,2-Dichloroethene	0.94	1.0	3.7	4.0
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected
Chloroform	0.94	130	4.6	650
1,1,1-Trichloroethane	0.94	2.1	5.1	11
Cyclohexane	0.94	Not Detected	3.2	Not Detected
Carbon Tetrachloride	0.94	78	5.9	490
Benzene	0.94	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.94	3.4	3.8	14
Heptane	0.94	Not Detected	3.8	Not Detected
Trichloroethene	0.94	190	5.0	1000
1,2-Dichloropropane	0.94	Not Detected	4.3	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.94	1.5	6.3	10
cis-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.94	Not Detected	3.8	Not Detected
Toluene	0.94	1.4	3.5	5.1
trans-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.94	17	5.1	93
Tetrachloroethene	0.94	11	6.3	77

0252

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14825

Lab ID#: 0809614-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100914	**Date of Collection:**	9/25/08
Dil. Factor:	1.87	**Date of Analysis:**	10/9/08 06:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.94	Not Detected	8.0	Not Detected
1,2-Dibromoethane (EDB)	0.94	Not Detected	7.2	Not Detected
Chlorobenzene	0.94	Not Detected	4.3	Not Detected
Ethyl Benzene	0.94	Not Detected	4.0	Not Detected
m,p-Xylene	0.94	Not Detected	4.1	Not Detected
o-Xylene	0.94	Not Detected	4.1	Not Detected
Styrene	0.94	Not Detected	4.0	Not Detected
Bromoform	0.94	Not Detected	9.7	Not Detected
1,1,2,2-Tetrachloroethane	0.94	Not Detected	6.4	Not Detected
4-Ethyltoluene	0.94	Not Detected	4.6	Not Detected
1,3,5-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected
1,2,4-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected
1,3-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
1,4-Dichlorobenzene	0.94	0.93 J	5.6	5.6 J
alpha-Chlorotoluene	0.94	Not Detected	4.8	Not Detected
1,2-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	28	Not Detected
Hexachlorobutadiene	3.7	Not Detected	40	Not Detected
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected
Methanol	94	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	7.5	6.4	13

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	95	70-130

0253

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100914.d
Lab Smp Id: 0809614-11A
Inj Date : 09-OCT-2008 18:22
Operator : ra
Inst ID: msd7.i
Smp Info : 200mL #5625
Misc Info : 8.5"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher
Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00
Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.87000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	14.361	14.333 (1.000)	130	323330	25.0000		80.00- 120.00	100.00
	14.361	14.333 (1.000)	128	256115			28.92- 128.92	79.21
	14.333	14.333 (1.000)	49	1444018			320.90- 420.90	446.61
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	16.103	16.103 (1.000)	114	1012314	25.0000		80.00- 120.00	100.00
	16.103	16.103 (1.000)	88	171801			0.00- 67.10	16.97
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	21.301	21.301 (1.000)	117	1109180	25.0000		80.00- 120.00	100.00
	21.301	21.301 (1.000)	82	553543			1.24- 101.24	49.91
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.439	15.411 (1.075)	65	612632	25.0839	25.084	80.00- 120.00	100.00
	15.439	15.411 (1.075)	67	268096			0.00- 97.37	43.76
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.702	18.702 (1.161)	98	979335	25.2721	25.272	80.00- 120.00	100.00
	18.702	18.702 (1.161)	70	139266			0.00- 63.85	14.22

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	744414			26.51- 126.51	76.01
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	542439	23.7663	23.766	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	779645			92.62- 192.62	143.73
23.291	23.291 (1.093)	176	507760			44.03- 144.03	93.61
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.707)	151	46625	1.46190	2.734	80.00- 120.00	100.00
10.186	10.158 (0.709)	153	28268			12.55- 112.55	60.63
10.186	10.158 (0.709)	101	69458			98.99- 198.99	148.97
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.296	10.269 (0.717)	61	308042	5.55409	10.386	80.00- 120.00	100.00
10.296	10.269 (0.717)	96	108417			0.00- 87.74	35.20
10.296	10.269 (0.717)	98	67675			0.00- 73.80	21.97
45 Acetone					CAS #: 67-64-1		
10.462	10.407 (0.729)	58	156168	9.97517	18.654	80.00- 120.00	100.00
10.462	10.407 (0.729)	43	689210			340.42- 440.42	441.33
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.430 (0.798)	49	5863081	120.837	225.96	80.00- 120.00	100.00
11.457	11.430 (0.798)	84	1931961			0.00- 84.42	32.95
11.457	11.430 (0.798)	51	1709151			0.00- 80.54	29.15
75 2-Butanone					CAS #: 78-93-3		
13.835	13.808 (0.963)	72	15712	1.53987	2.880	80.00- 120.00	100.00
13.835	13.808 (0.963)	43	133408			729.52- 829.52	849.07
13.835	13.808 (0.963)	57	8852			0.00- 97.16	56.34
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.965)	61	23660	0.53802	1.006	80.00- 120.00	100.00
13.863	13.863 (0.965)	96	11968			0.00- 98.82	50.58
13.863	13.863 (0.965)	98	6727			0.00- 81.20	28.43
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.004)	83	3182402	70.8072	132.41	80.00- 120.00	100.00
14.416	14.388 (1.004)	85	2277482			21.17- 121.17	71.56
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.029)	97	51078	1.11306	2.081	80.00- 120.00	100.00
14.775	14.748 (1.029)	99	35340			13.83- 113.83	69.19
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.052	15.024 (1.048)	119	2193787	41.8654	78.288	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride (continued)								
15.052	15.024	(1.048)	117	2301916			55.68- 155.68	104.93
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.577	15.550	(0.967)	62	73727	1.80989	3.384	80.00- 120.00	100.00
15.577	15.550	(0.967)	64	22210			0.00- 82.49	30.13
101 Trichloroethene						CAS #: 79-01-6		
16.573	16.573	(1.029)	95	2442422	103.440	193.43	80.00- 120.00	100.00
16.573	16.573	(1.029)	130	2493652			52.48- 152.48	102.10
16.573	16.573	(1.029)	97	1572420			14.44- 114.44	64.38
107 Bromodichloromethane						CAS #: 75-27-4		
17.513	17.485	(1.088)	83	35228	0.82397	1.541	80.00- 120.00	100.00
17.485	17.485	(1.086)	85	26585			20.68- 120.68	75.47
114 Toluene						CAS #: 108-88-3		
18.840	18.812	(1.170)	91	44593	0.72983	1.365	80.00- 120.00	100.00
18.840	18.812	(1.170)	92	26301			12.04- 112.04	58.98
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.614	19.614	(0.921)	97	208742	9.12941	17.072	80.00- 120.00	100.00
19.614	19.614	(0.921)	99	123129			10.80- 110.80	58.99
19.614	19.614	(0.921)	83	173187			33.27- 133.27	82.97
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	182471	6.08915	11.387	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	160289			35.87- 135.87	87.84
19.780	19.780	(0.929)	131	164050			35.33- 135.33	89.90
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.227	25.227	(1.184)	146	34920	0.49521	0.9260	80.00- 120.00	100.00(a)
25.227	25.227	(1.184)	148	22580			13.30- 113.30	64.66
25.227	25.227	(1.184)	111	15977			0.00- 92.03	45.76
11 Propylene						CAS #: 115-07-1		
5.645	5.589	(0.393)	41	110059	3.99208	7.465	80.00- 120.00	100.00
5.673	5.589	(0.395)	42	41825			16.57- 116.57	38.00
5.673	5.589	(0.395)	39	159360			28.60- 128.60	144.79

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Report Date: 11-Oct-2008 08:32

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100914.d
Lab Smp Id: 0809614-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 8.5"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	323330	-10.70
97 1,4-Difluorobenze	1146510	687906	1605114	1012314	-11.70
126 Chlorobenzene-d5	1241713	745028	1738398	1109180	-10.67

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.36	0.19
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100914.d
Report Date: 11-Oct-2008 08:32

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 09oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-11A
Level: LOW
Operator: ra
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 8.5"psi-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.084	100.34	70-130
$ 113 Toluene-d8	25.000	25.272	101.09	70-130
$ 137 Bromofluorobenzene	25.000	23.766	95.07	70-130

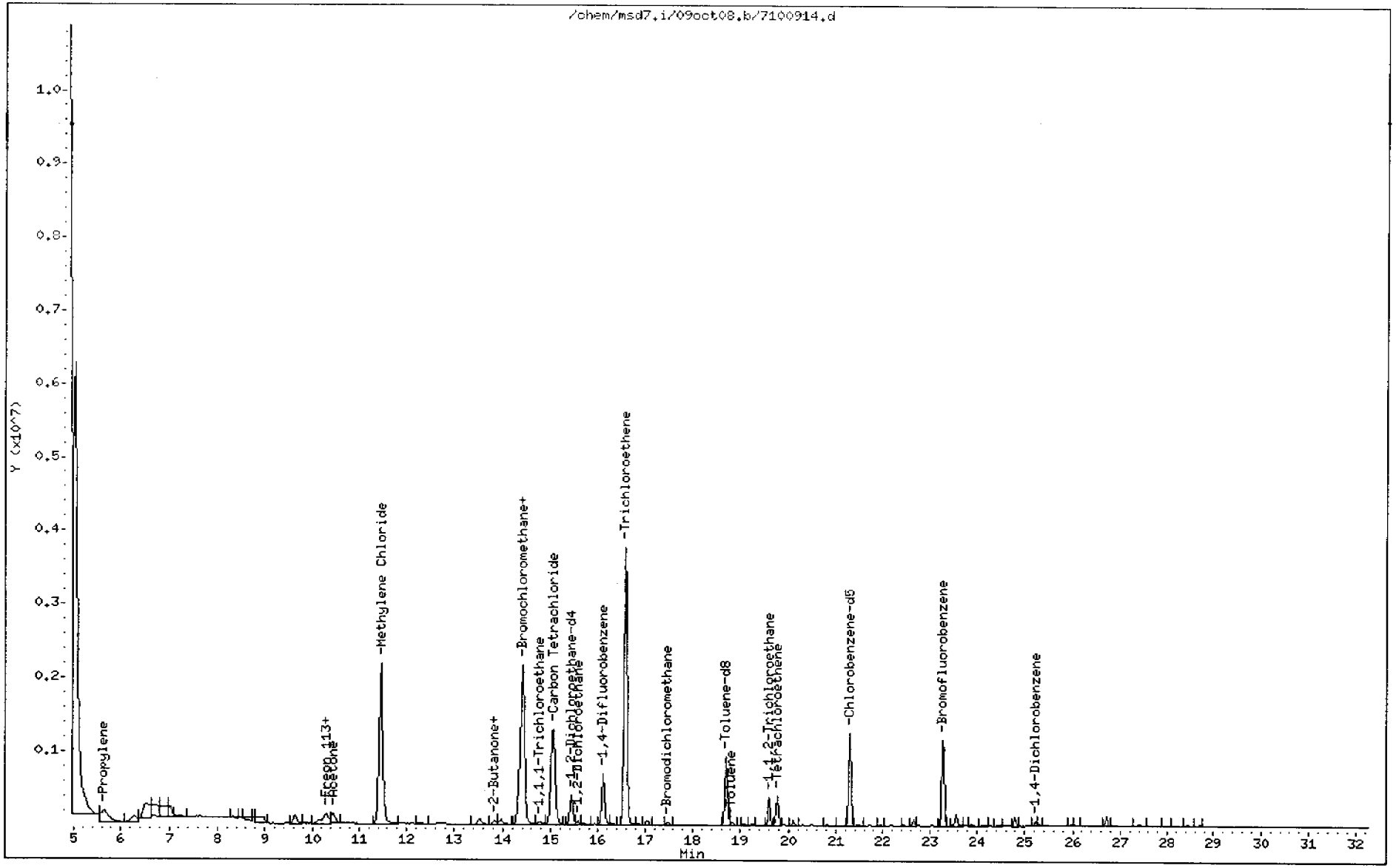
Data File: /chem/msd7.i/09oct08.b/7100914.d
Date : 09-OCT-2008 18:22
Client ID:
Sample Info: 200mL #5625

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0259



Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

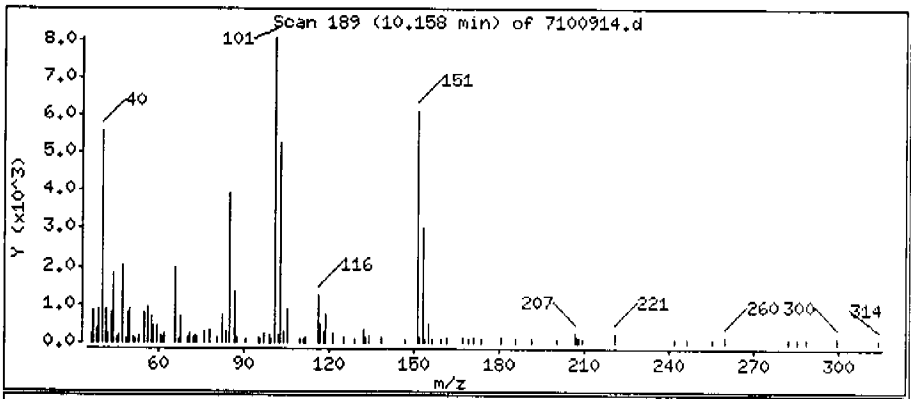
Operator: ra

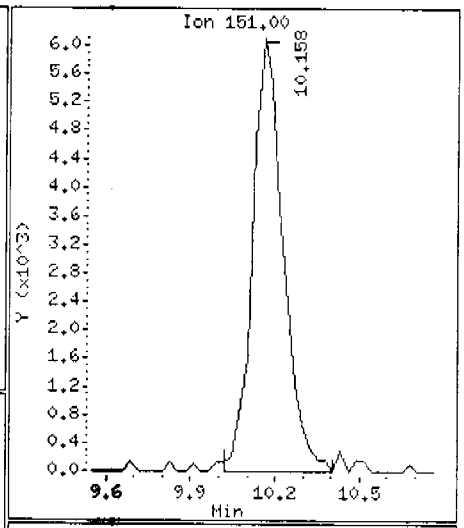
Column phase: RTx-624

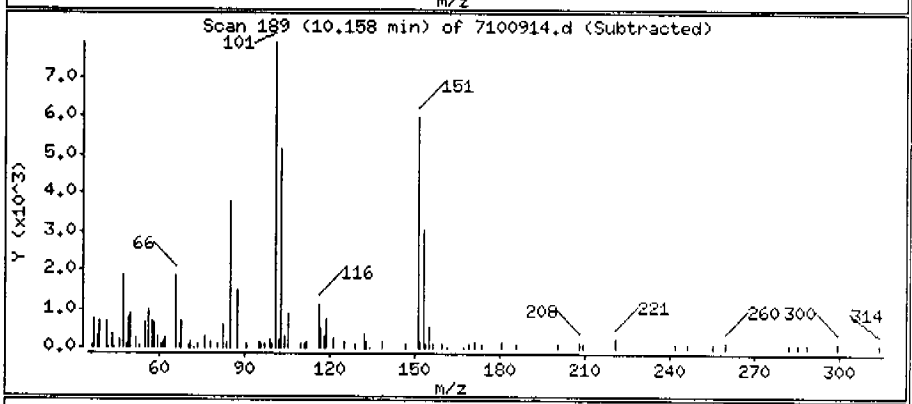
Column diameter: 0.53

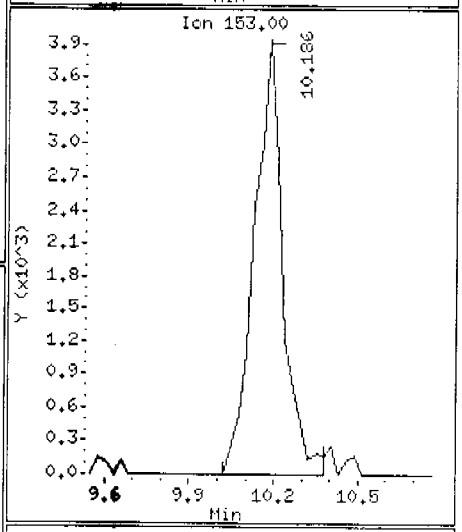
42 Freon 113

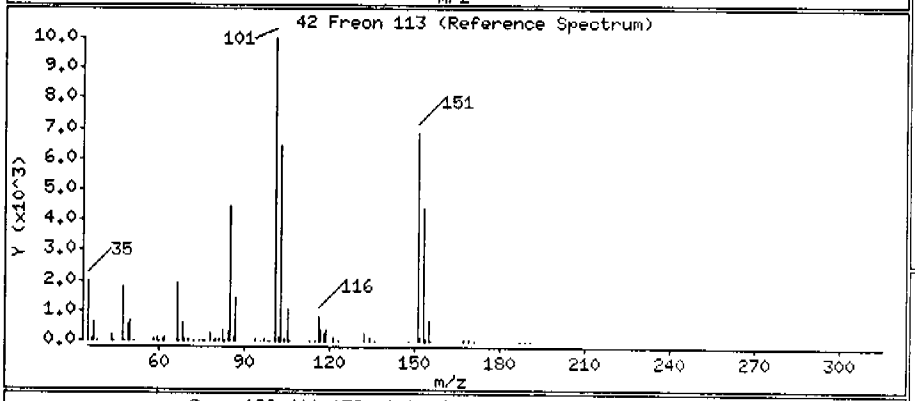
Concentration: 2.734 PPBV

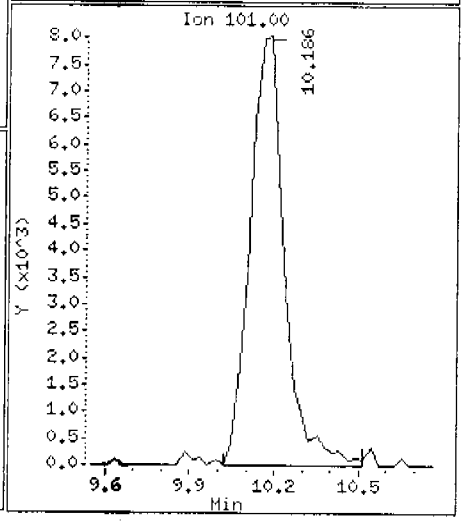


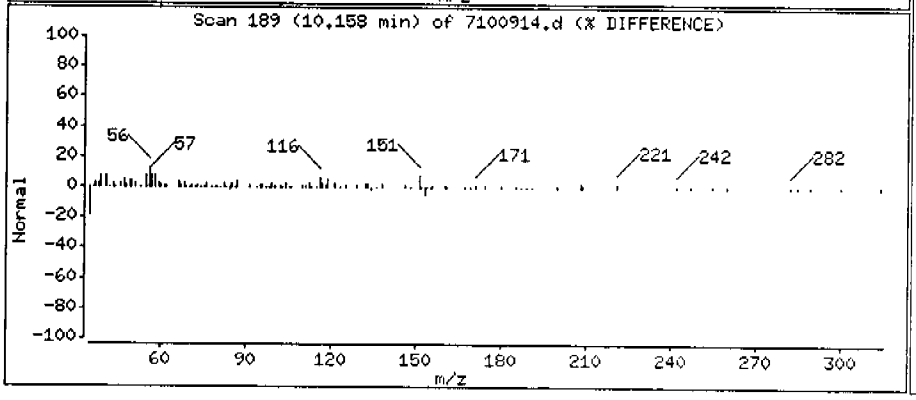












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

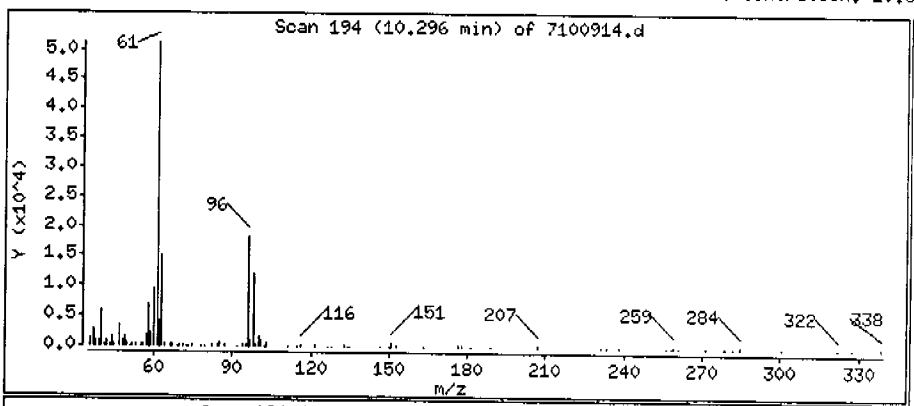
Operator: ra

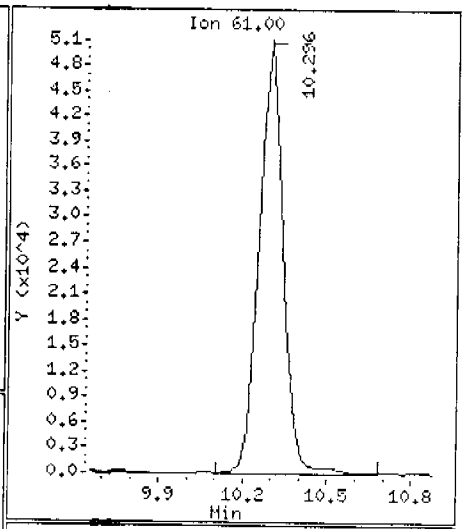
Column phase: RTx-624

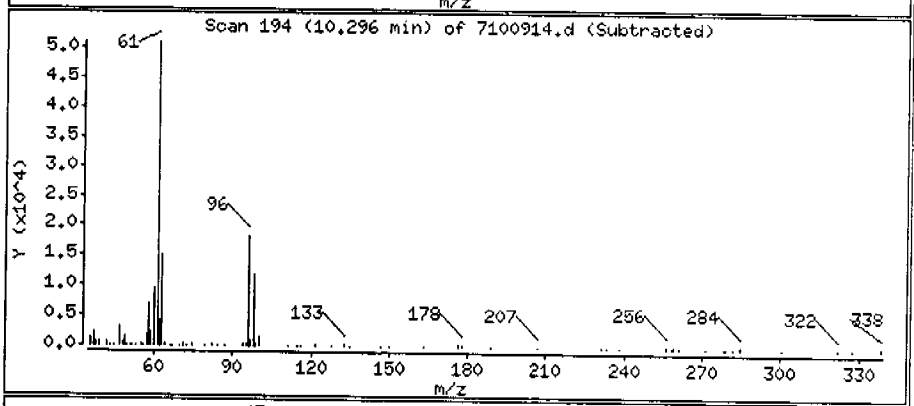
Column diameter: 0.53

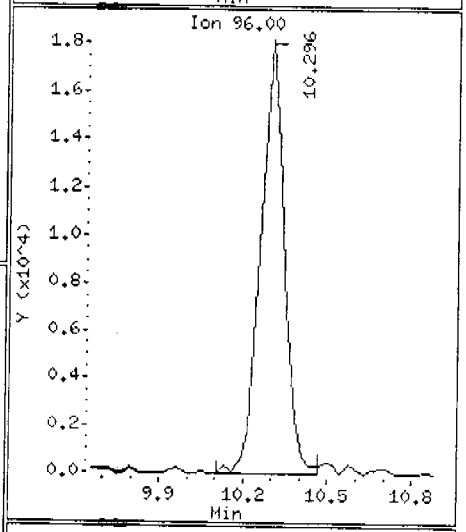
43 1,1-Dichloroethene

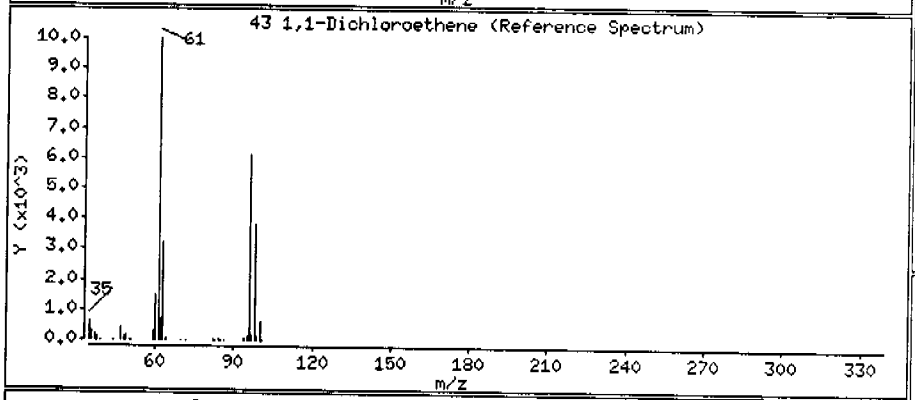
Concentration: 10.386 PPBV

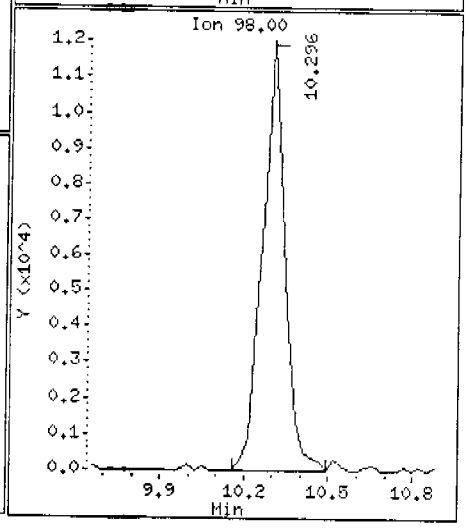


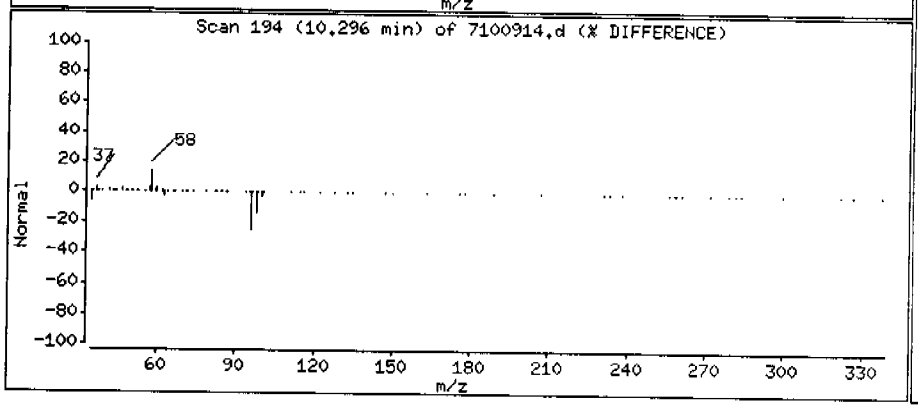












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

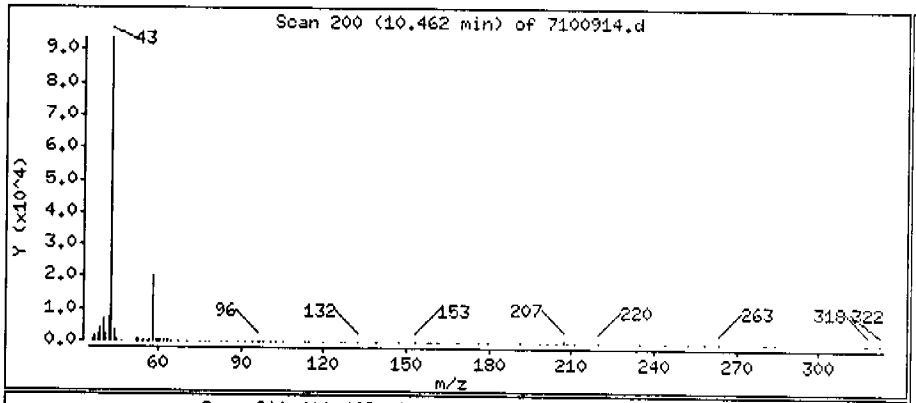
Operator: ra

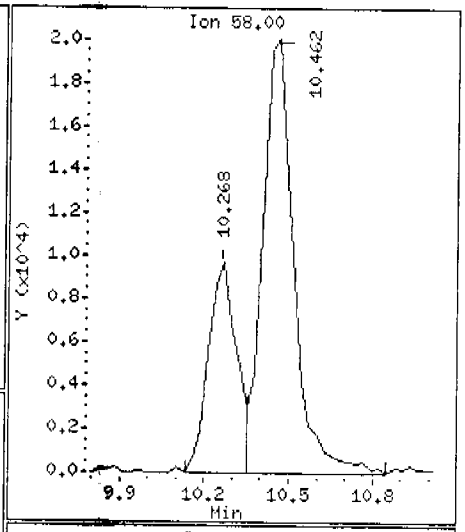
Column phase: RTx-624

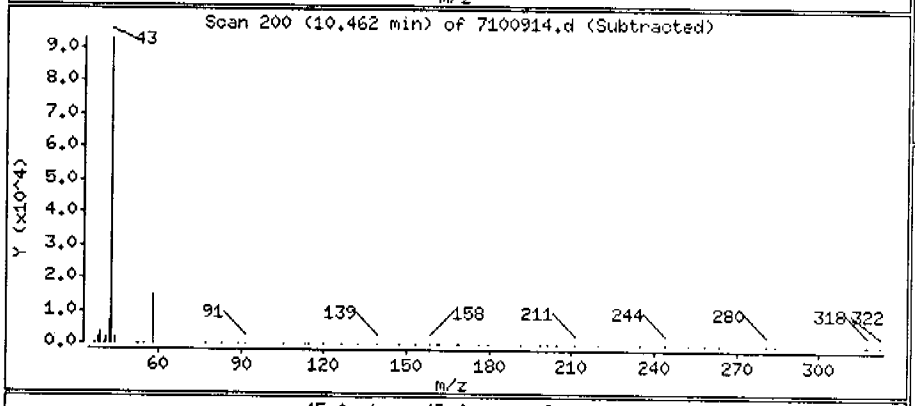
Column diameter: 0.53

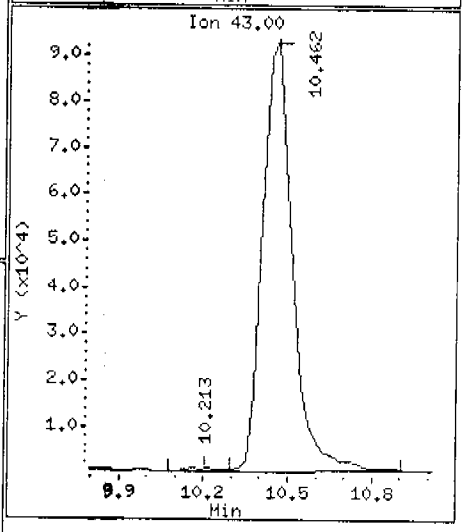
45 Acetone

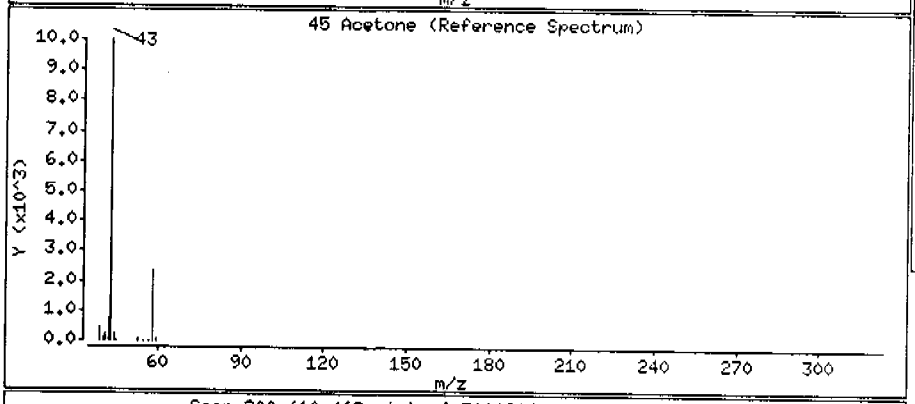
Concentration: 18.654 PPBV

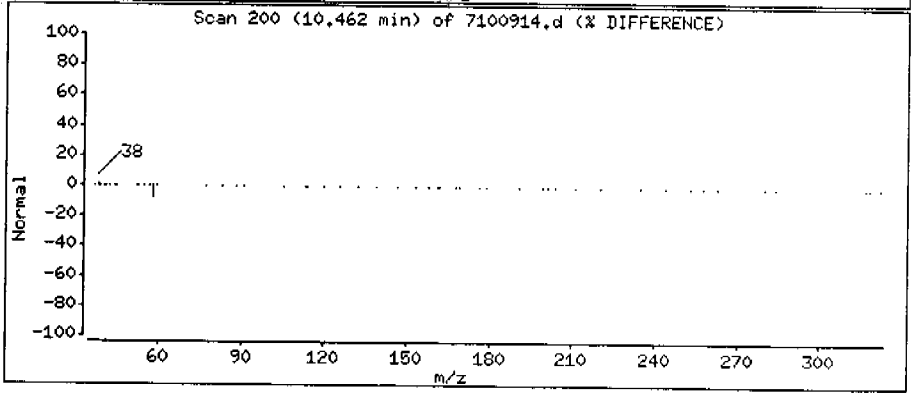












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

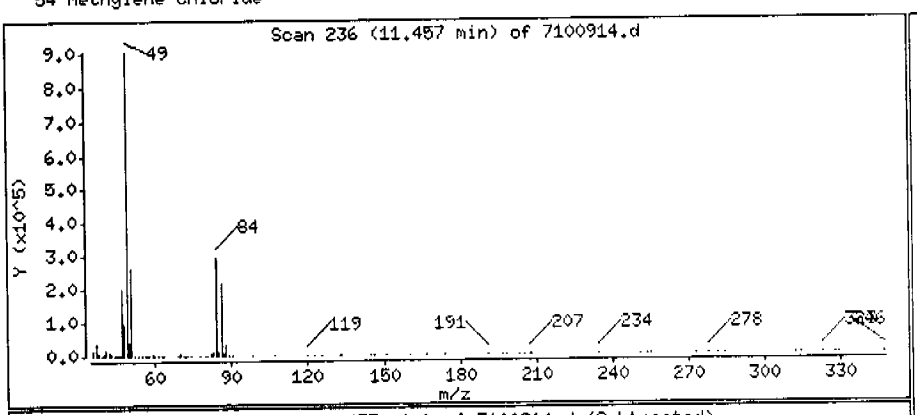
Operator: ra

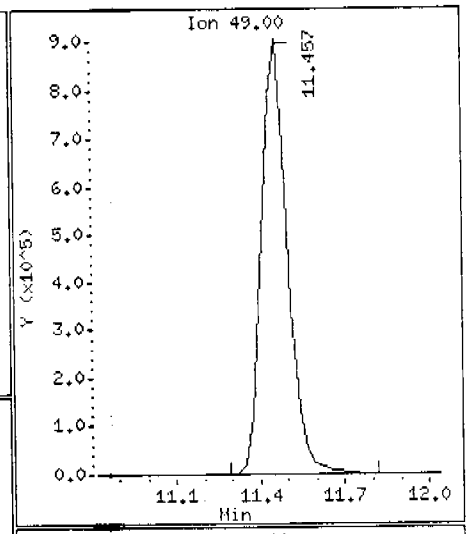
Column phase: RTx-624

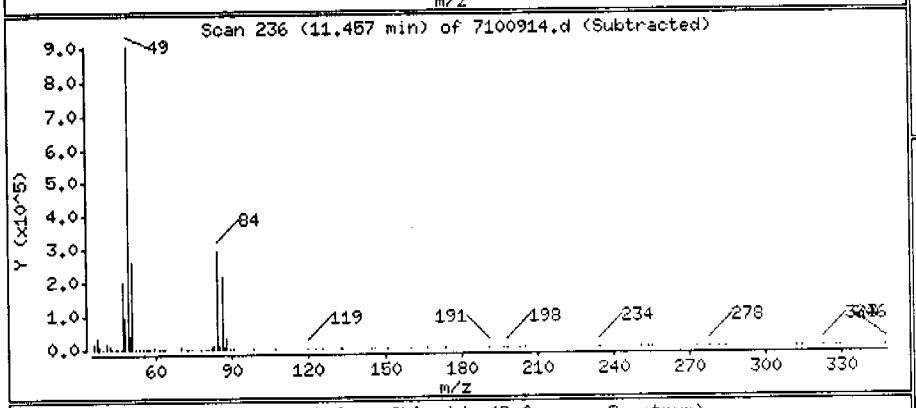
Column diameter: 0.53

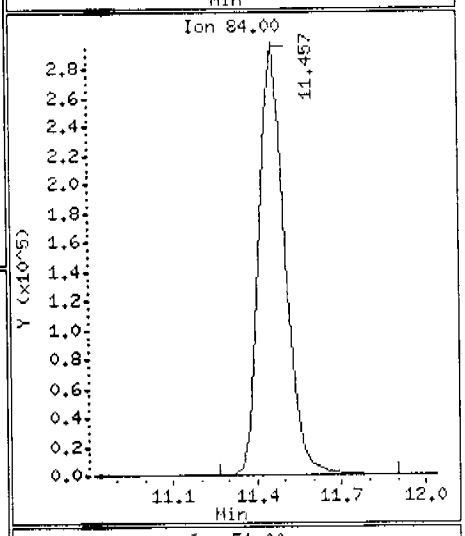
54 Methylene Chloride

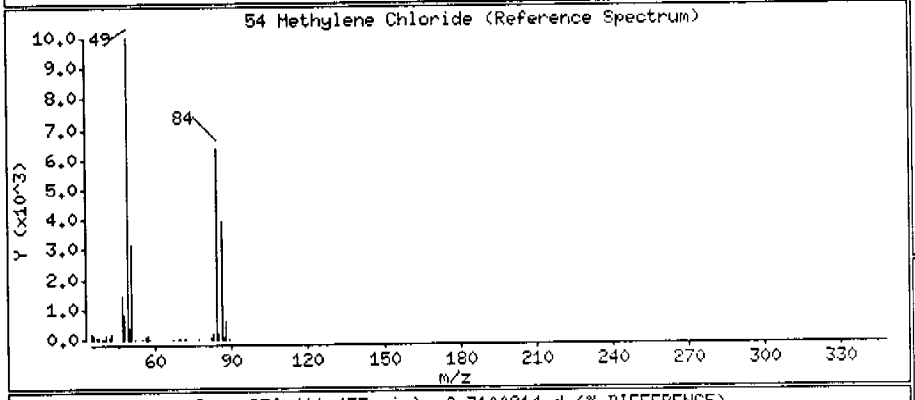
Concentration: 225.96 PPBV

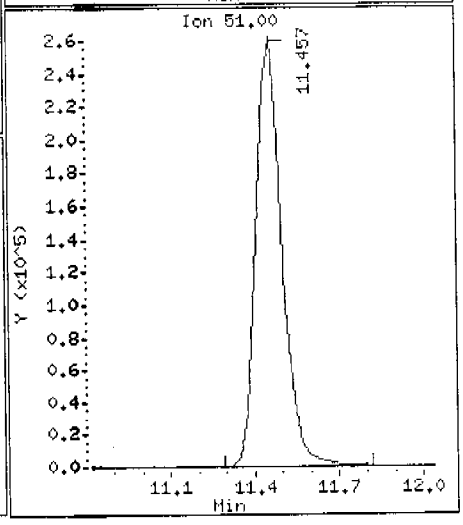


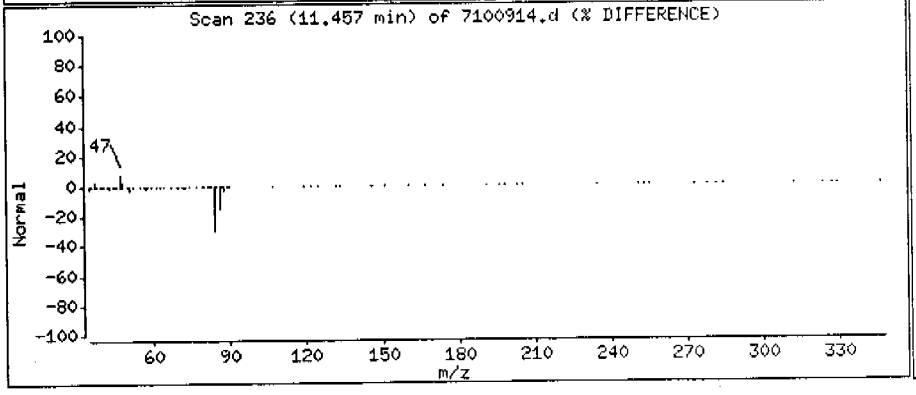












0263

Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

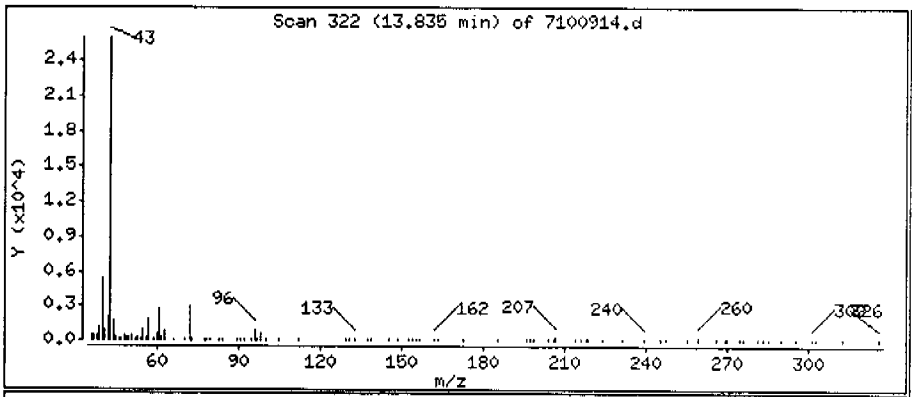
Operator: ra

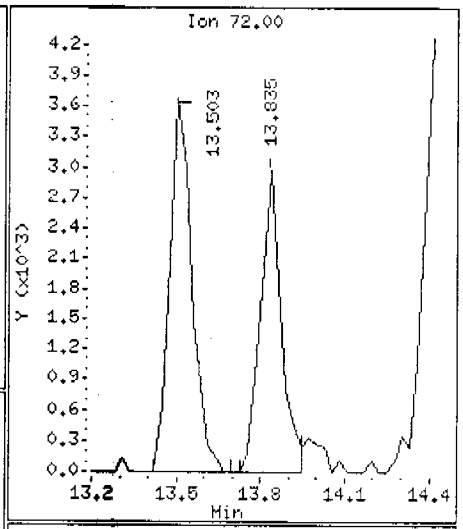
Column phase: RTx-624

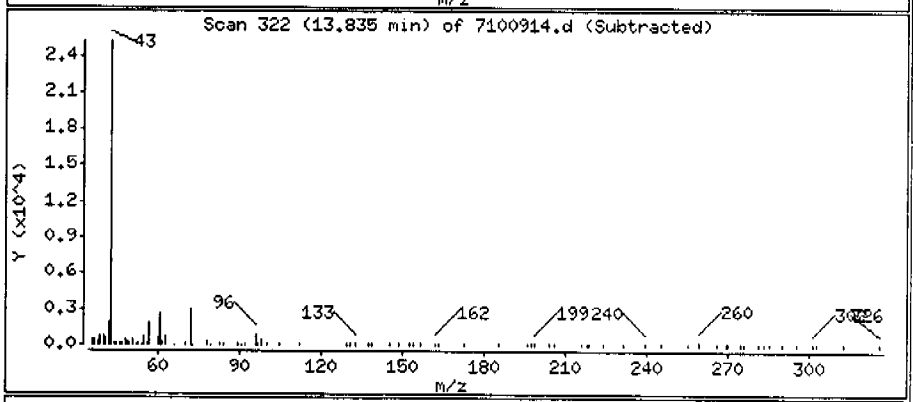
Column diameter: 0.53

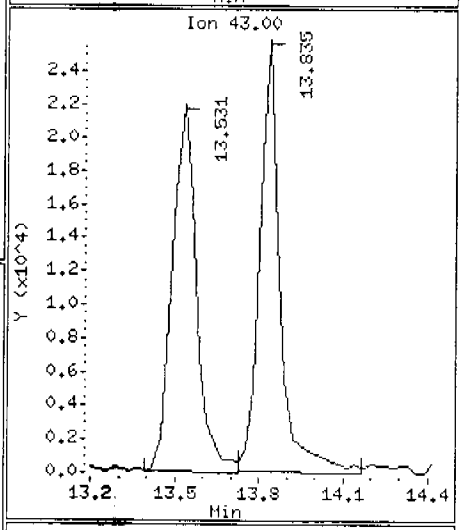
75 2-Butanone

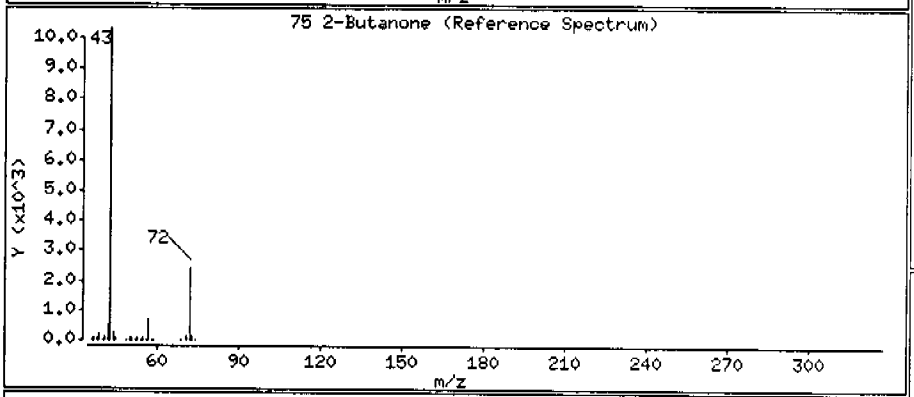
Concentration: 2.880 PPBV

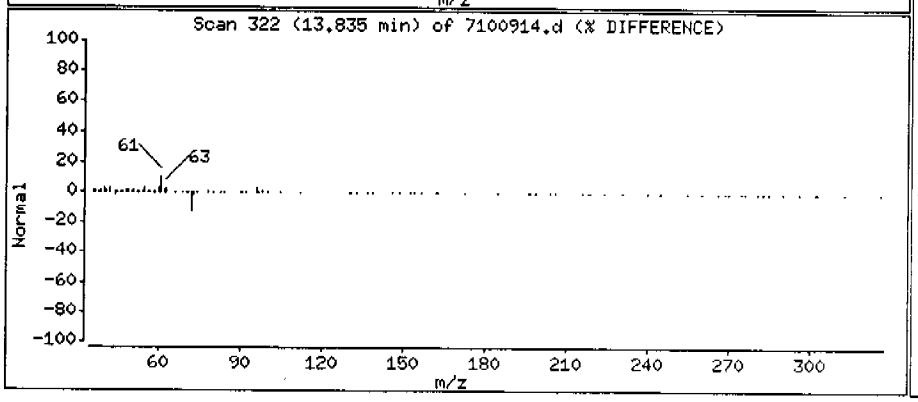


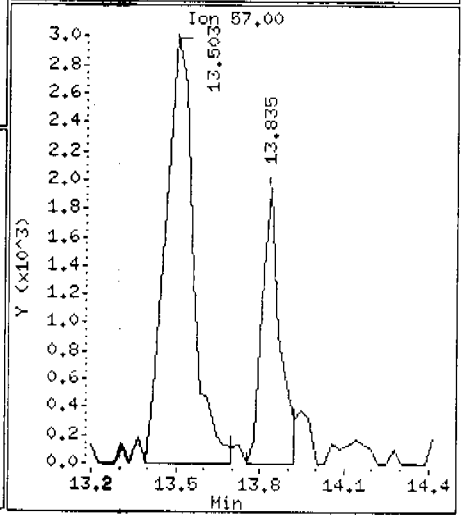












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

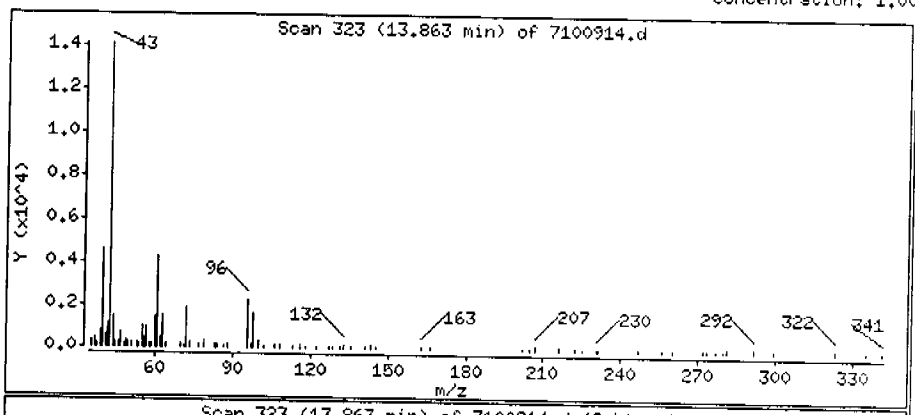
Operator: ra

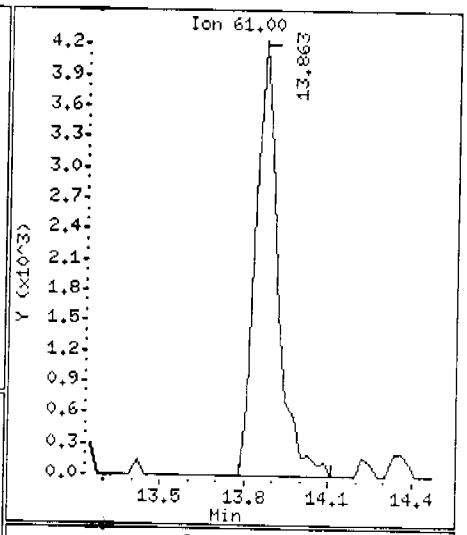
Column phase: RTx-624

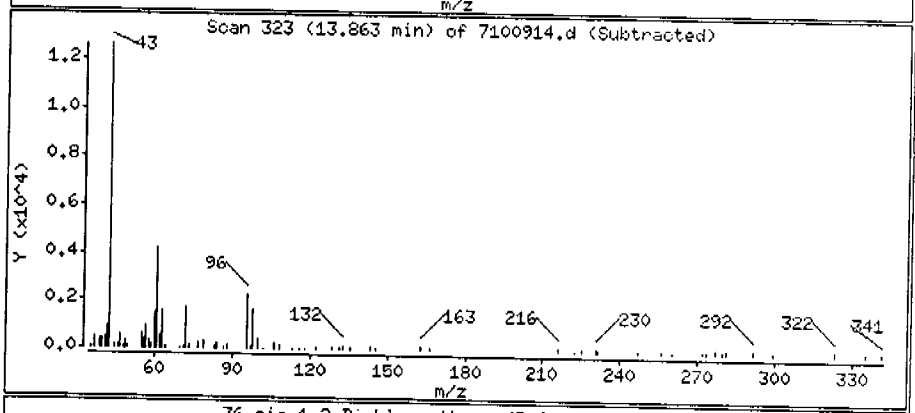
Column diameter: 0.53

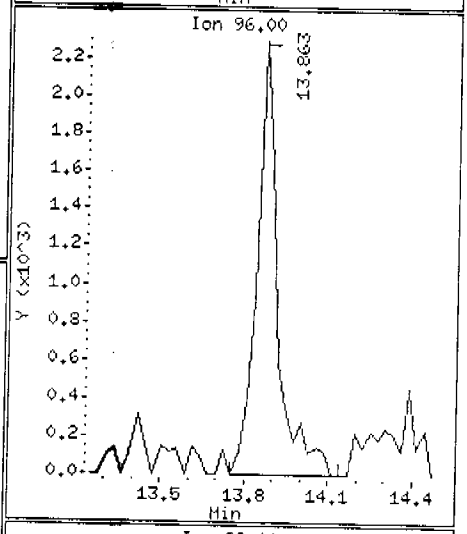
76 cis-1,2-Dichloroethene

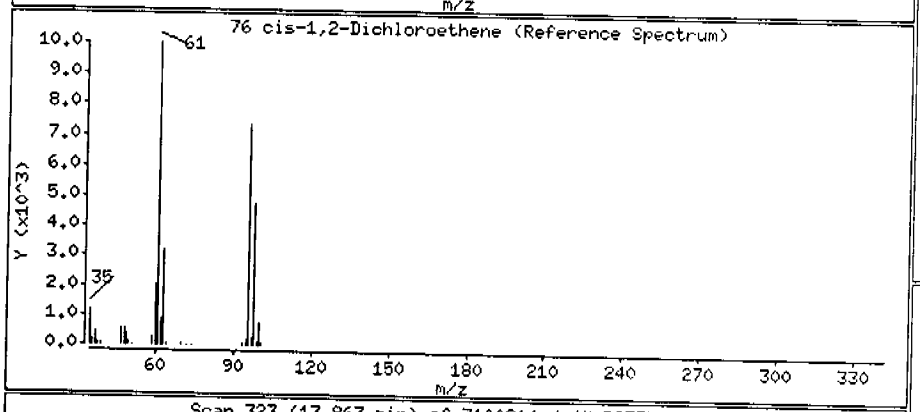
Concentration: 1.006 PPBV

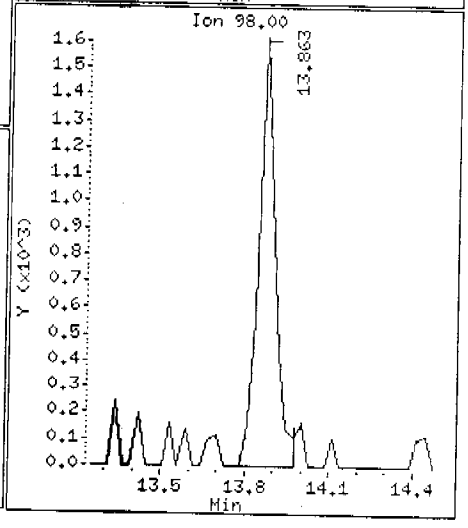


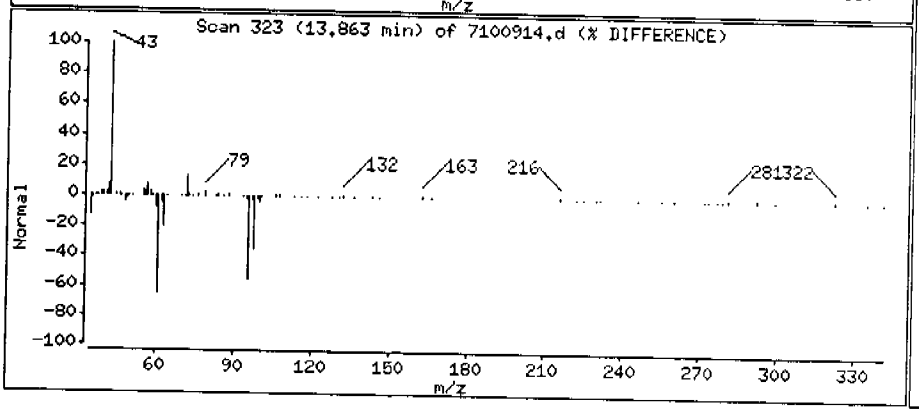












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

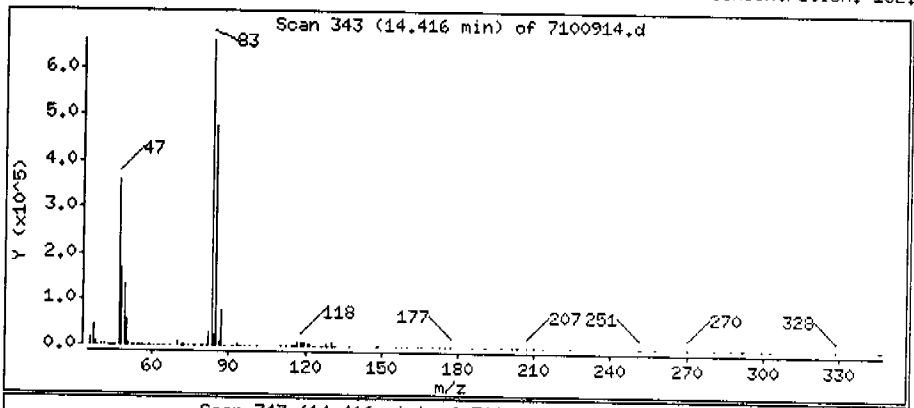
Operator: ra

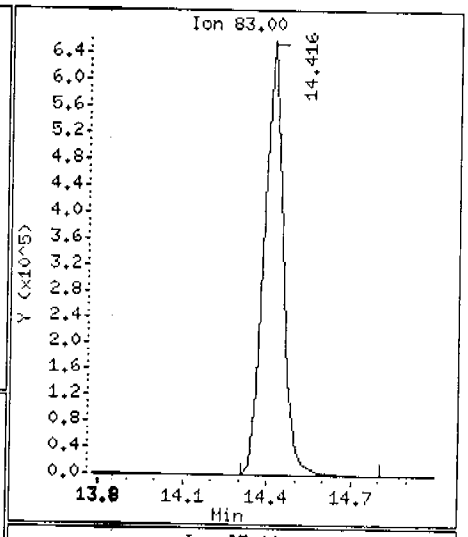
Column phase: RTx-624

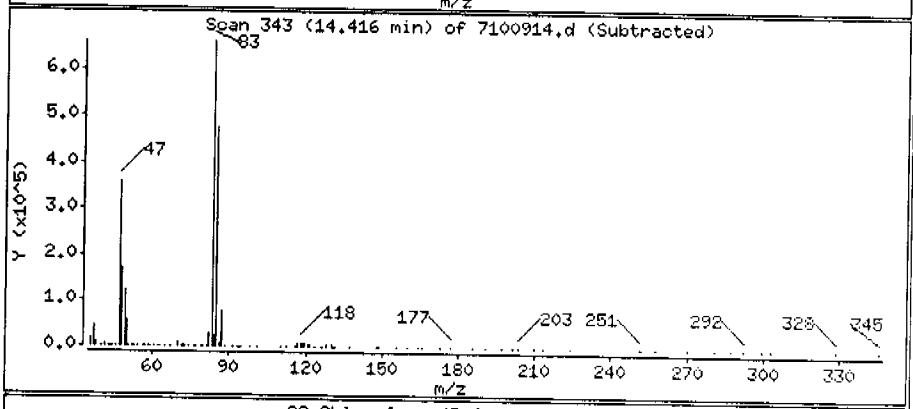
Column diameter: 0.53

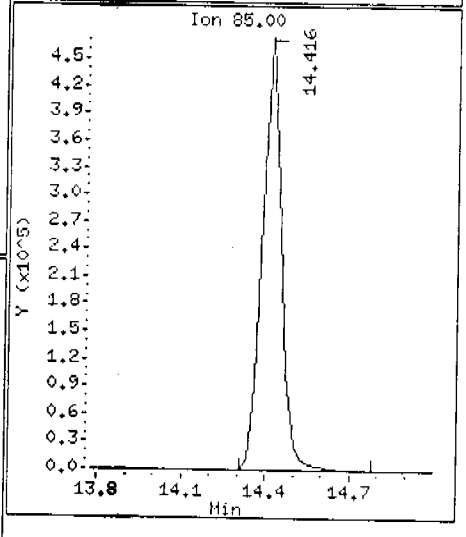
82 Chloroform

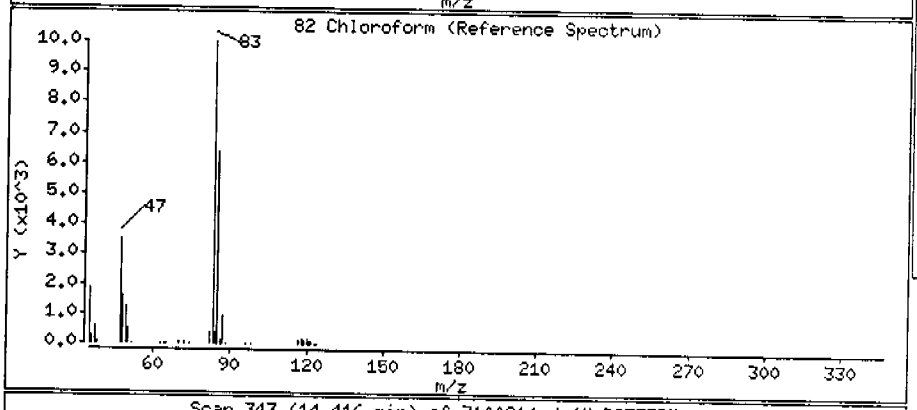
Concentration: 132.41 PPBV

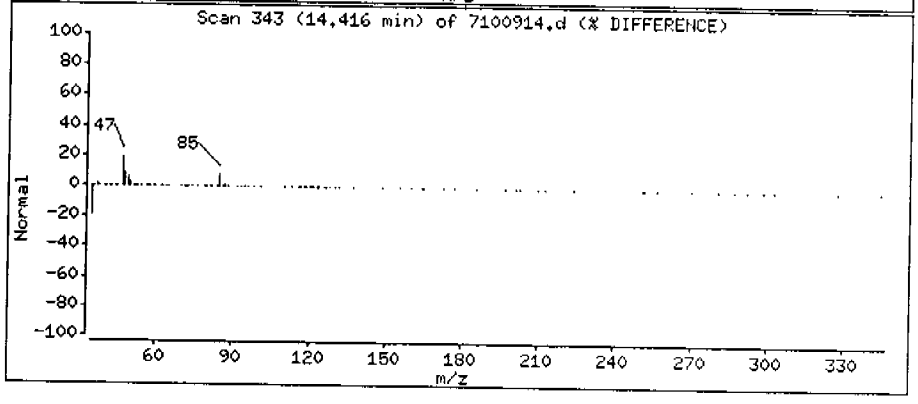












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

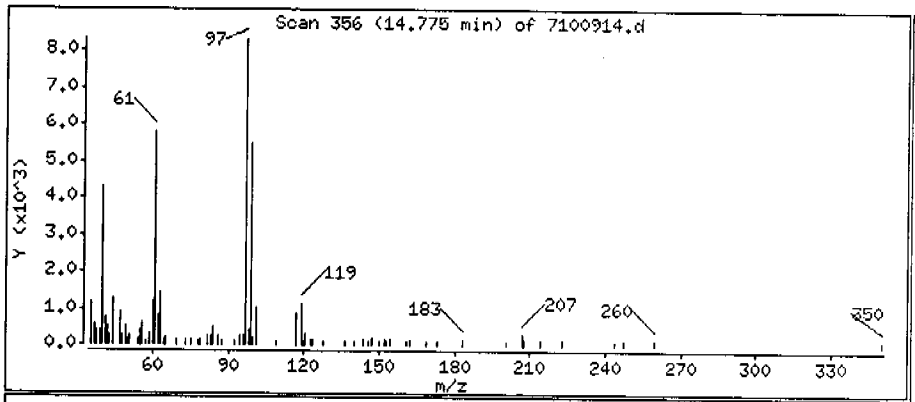
Operator: ra

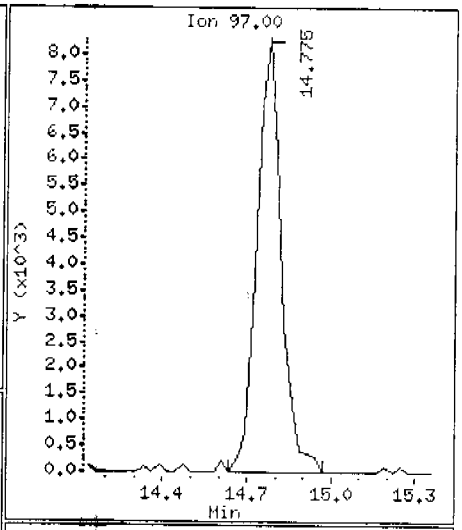
Column phase: RTx-624

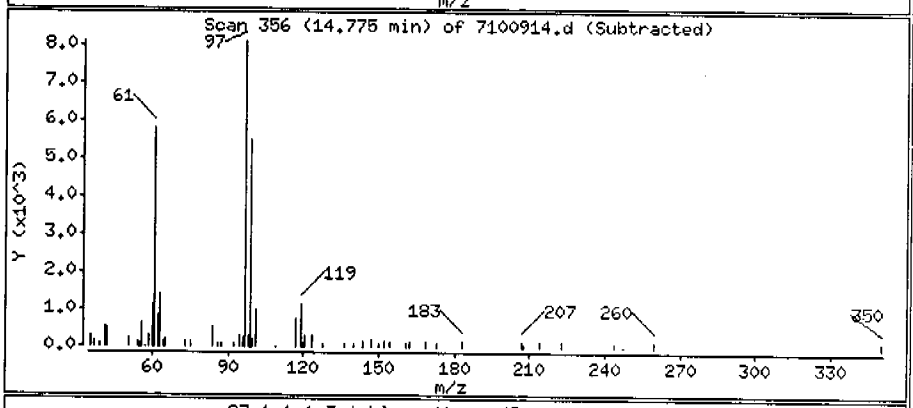
Column diameter: 0.53

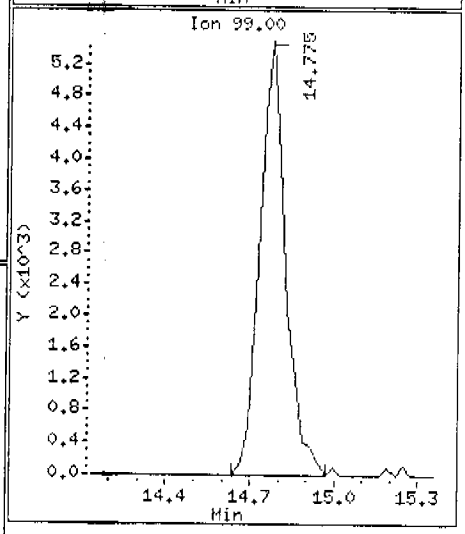
83 1,1,1-Trichloroethane

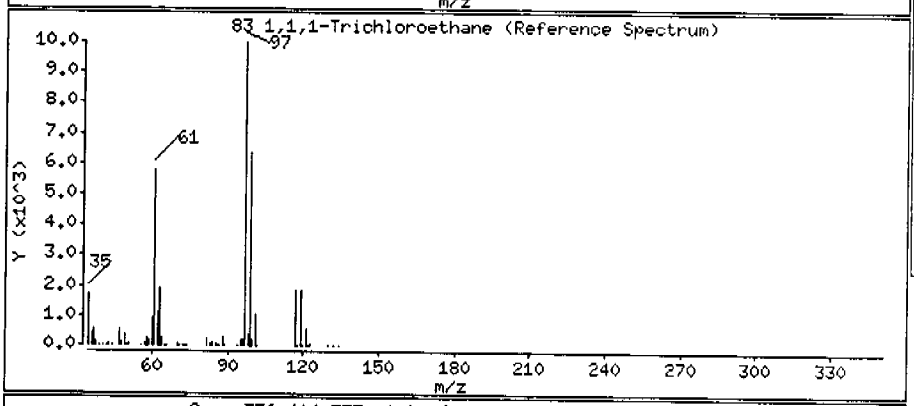
Concentration: 2.081 PPBV

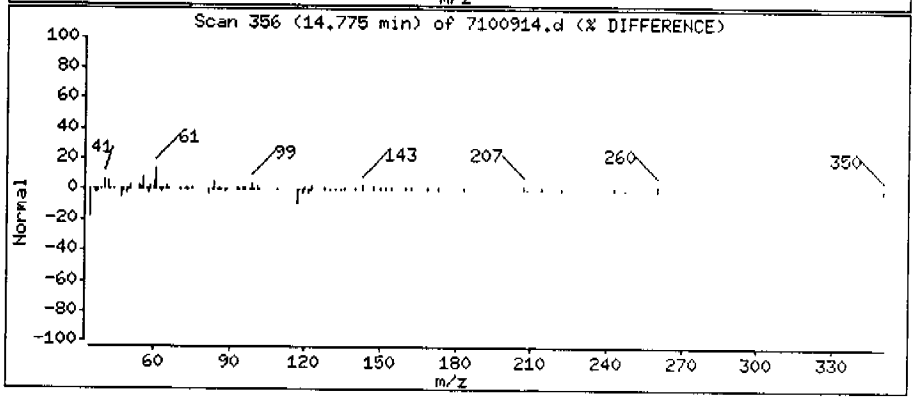












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

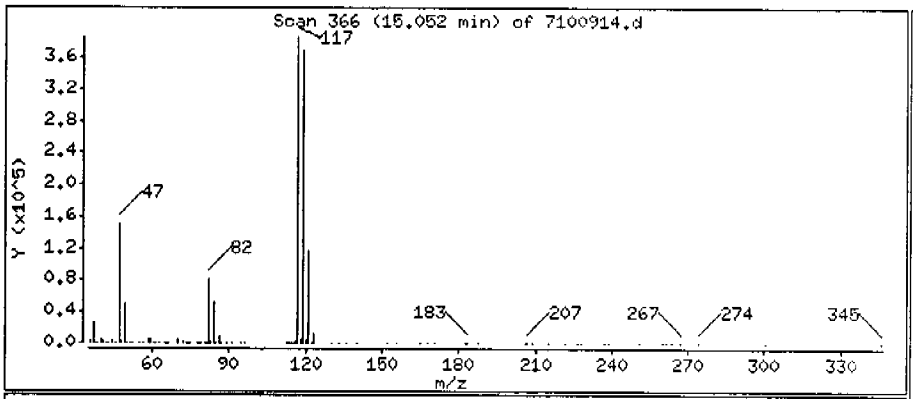
Operator: ra

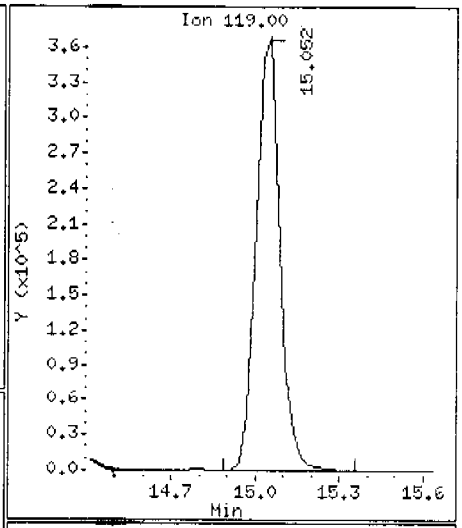
Column phase: RTx-624

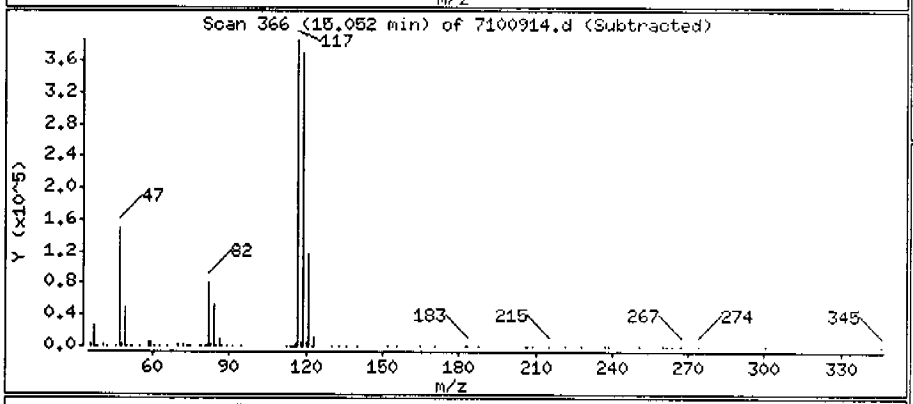
Column diameter: 0.53

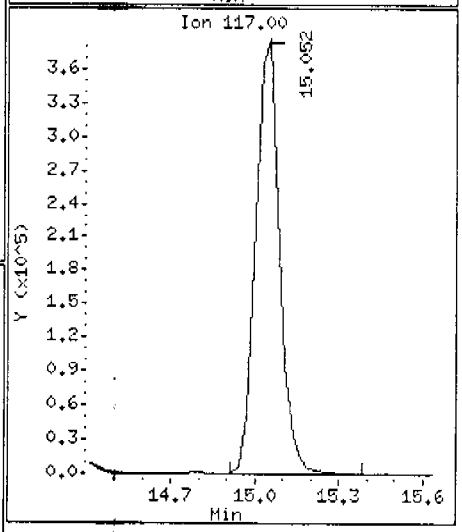
87 Carbon Tetrachloride

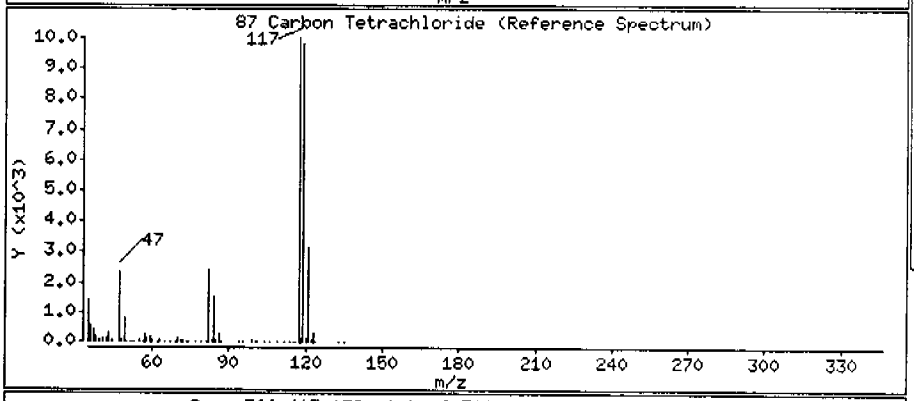
Concentration: 78.288 PPBV

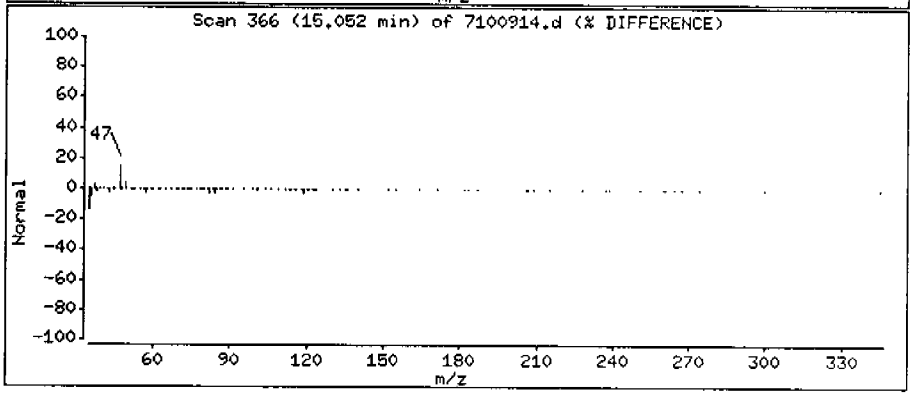












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

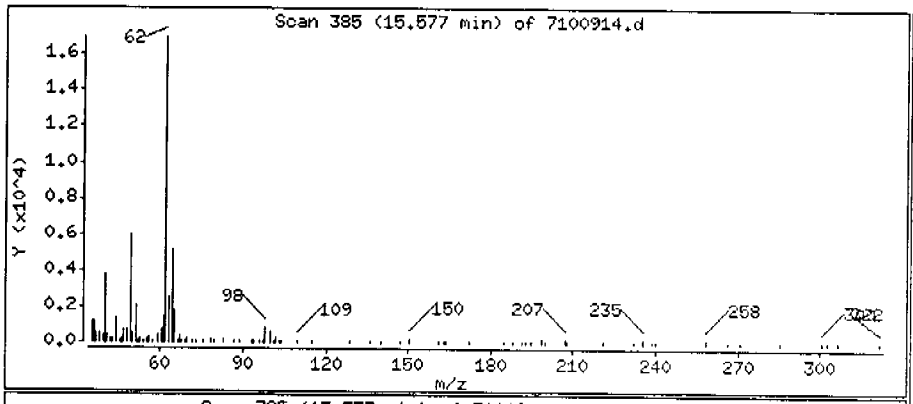
Operator: ra

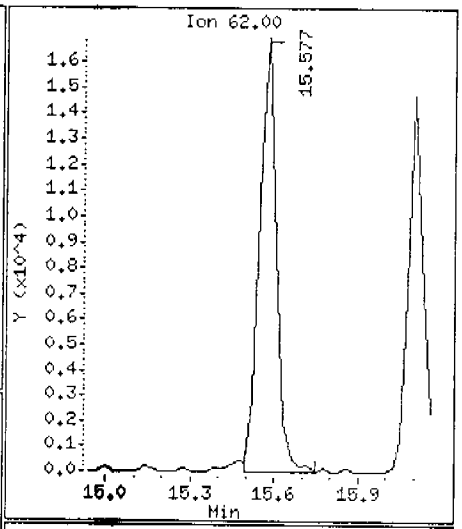
Column phase: RTx-624

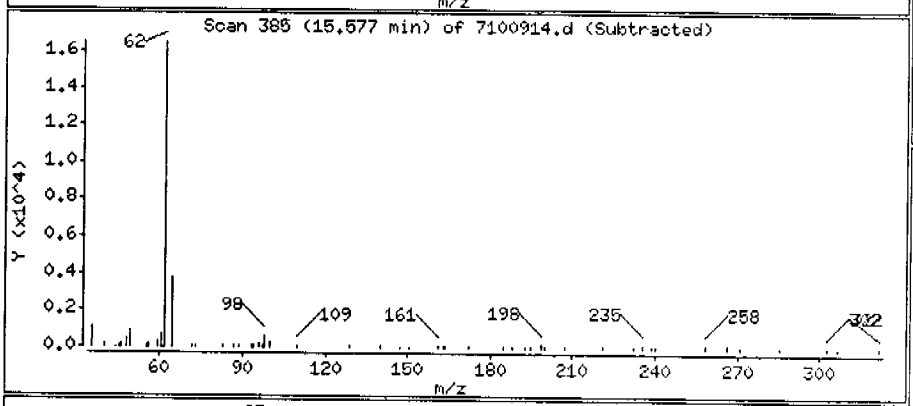
Column diameter: 0.53

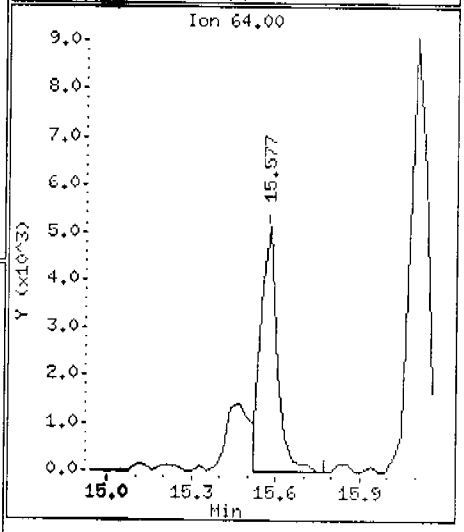
93 1,2-Dichloroethane

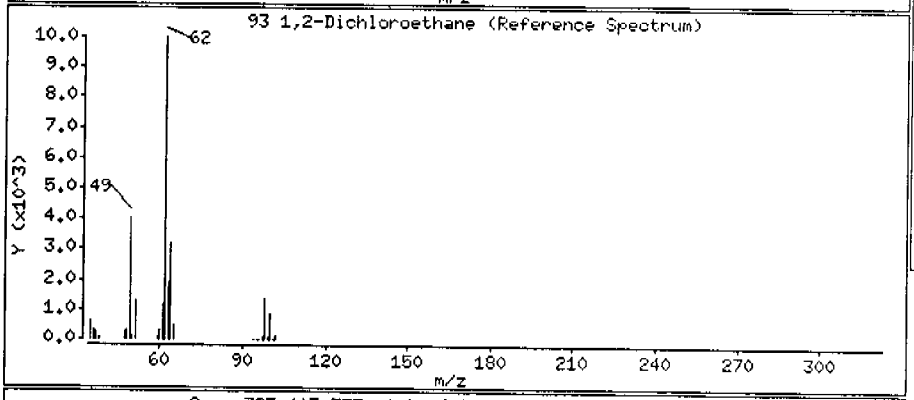
Concentration: 3.384 PPBV

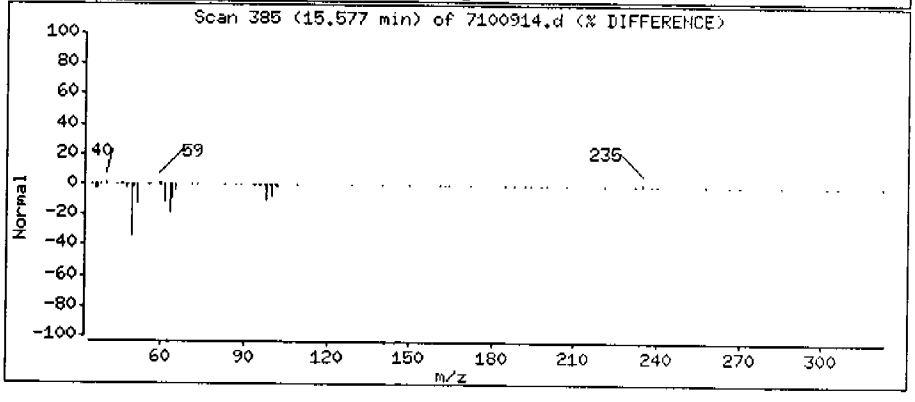












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

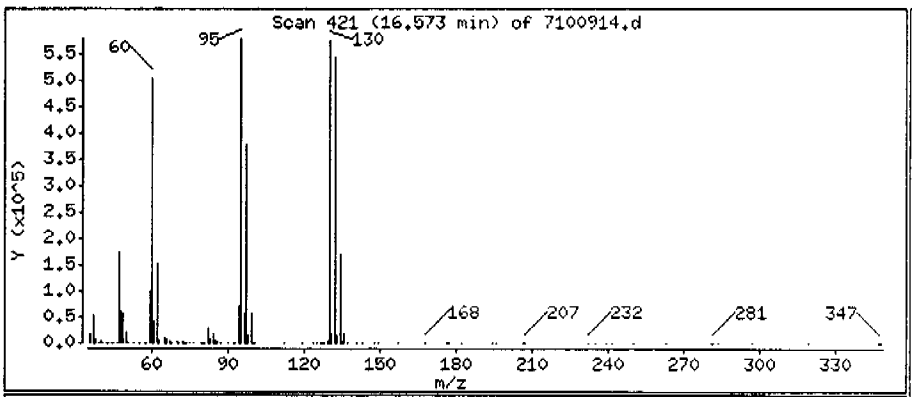
Operator: ra

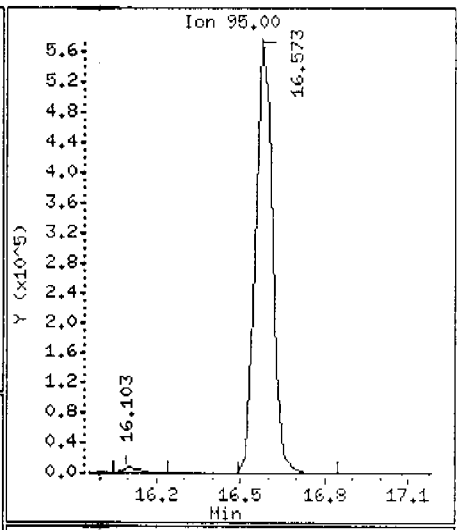
Column phase: RTx-624

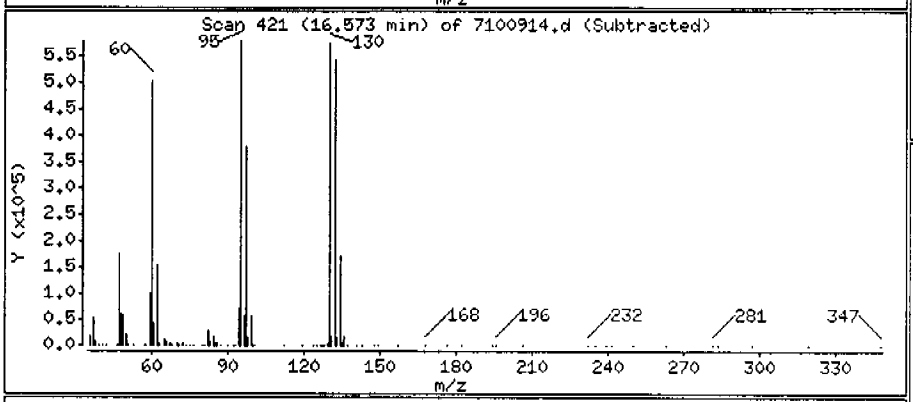
Column diameter: 0.53

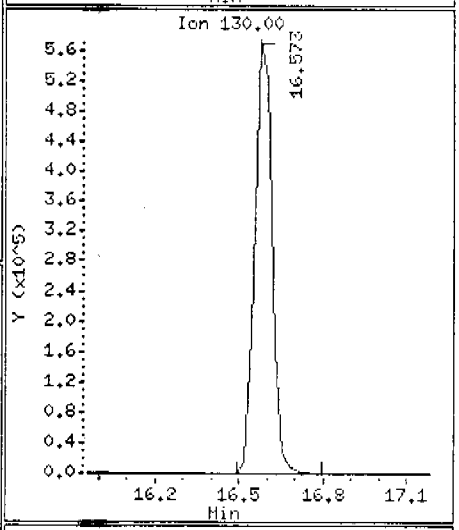
101 Trichloroethene

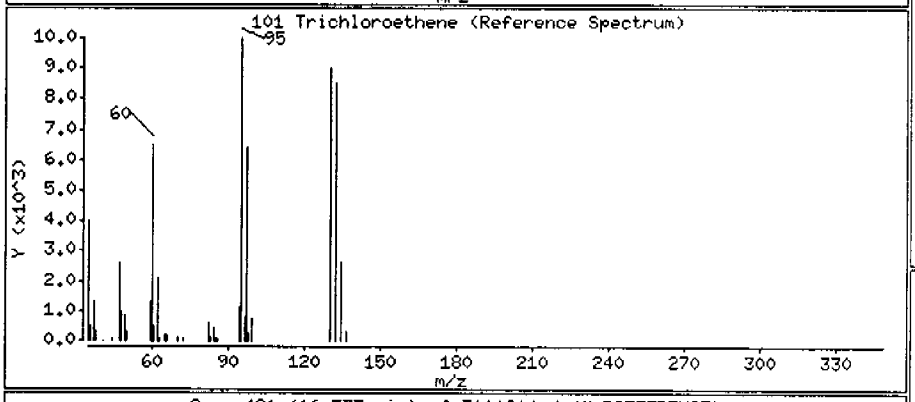
Concentration: 193.43 PPBV

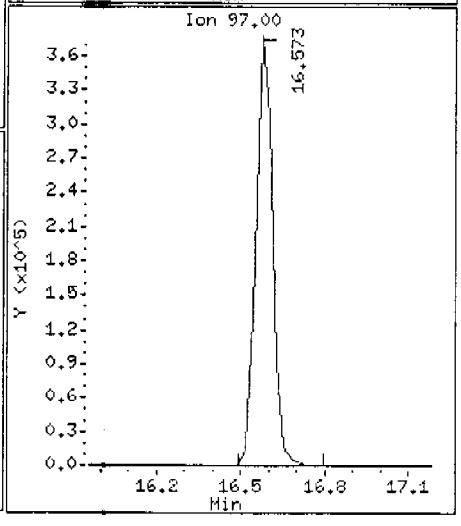


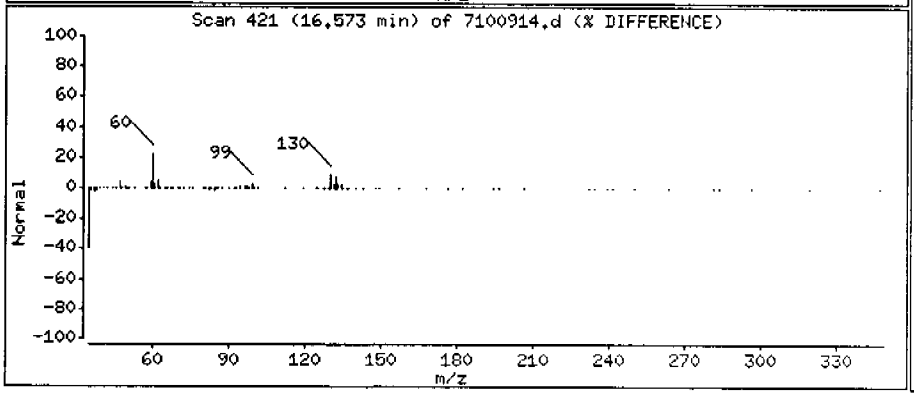












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

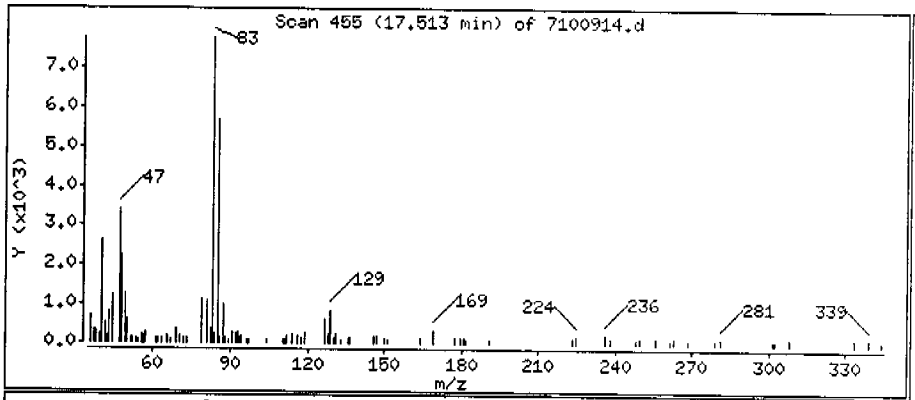
Operator: ra

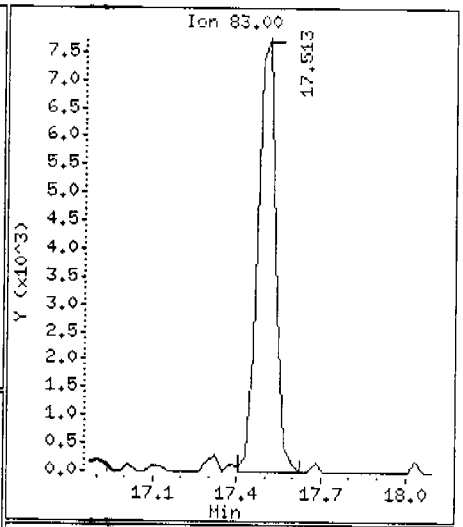
Column phase: RTx-624

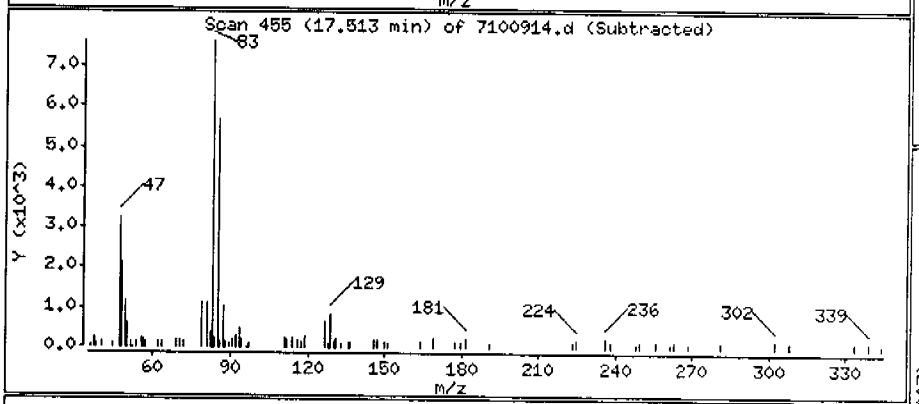
Column diameter: 0.53

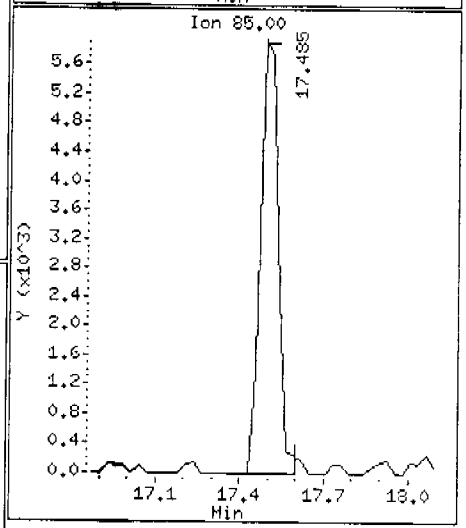
107 Bromodichloromethane

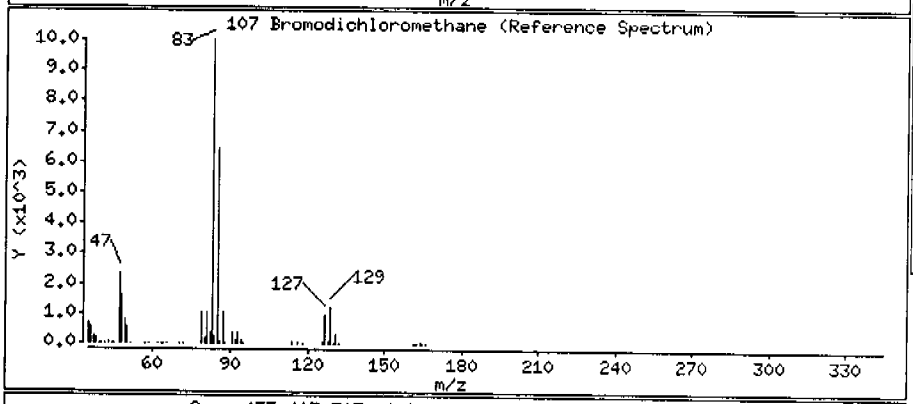
Concentration: 1.541 PPBV

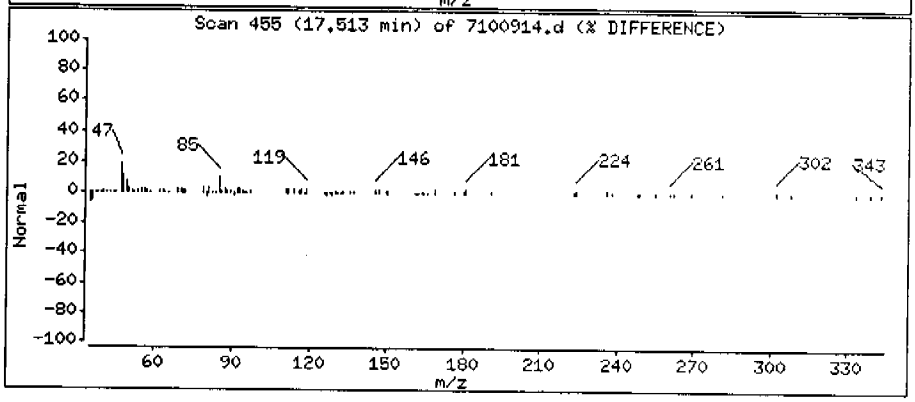












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

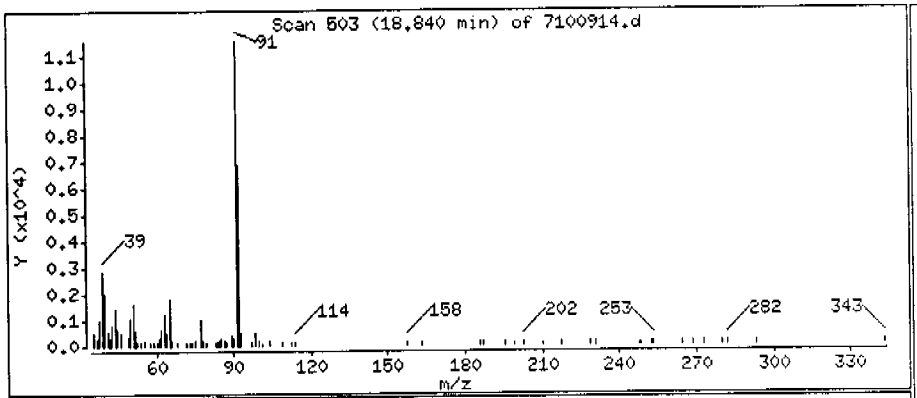
Operator: ra

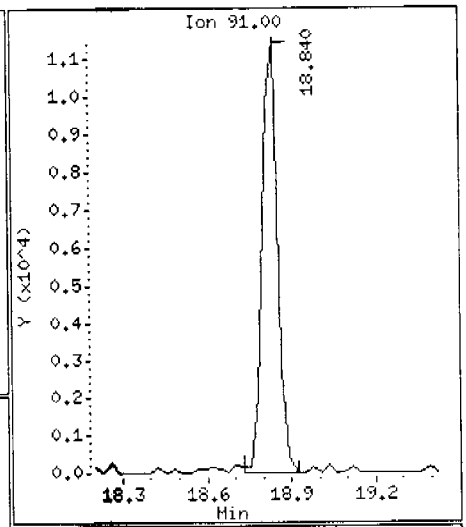
Column phase: RTx-624

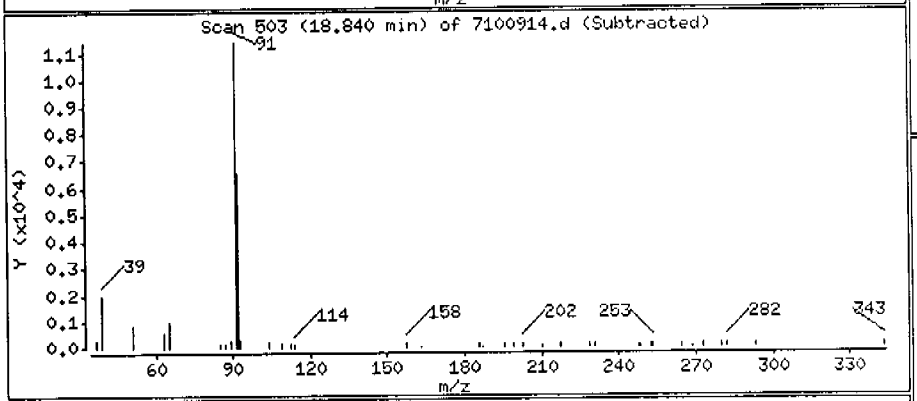
Column diameter: 0.53

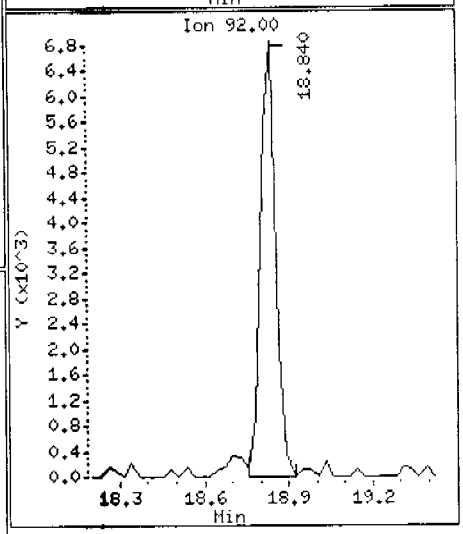
114 Toluene

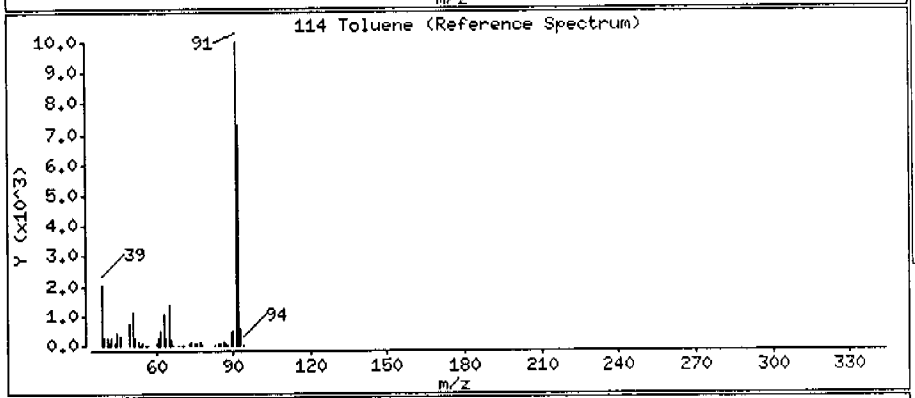
Concentration: 1.365 PPBV

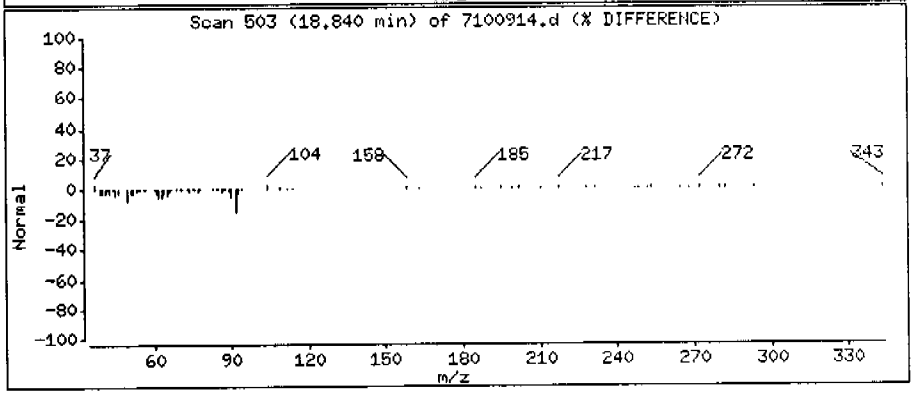












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

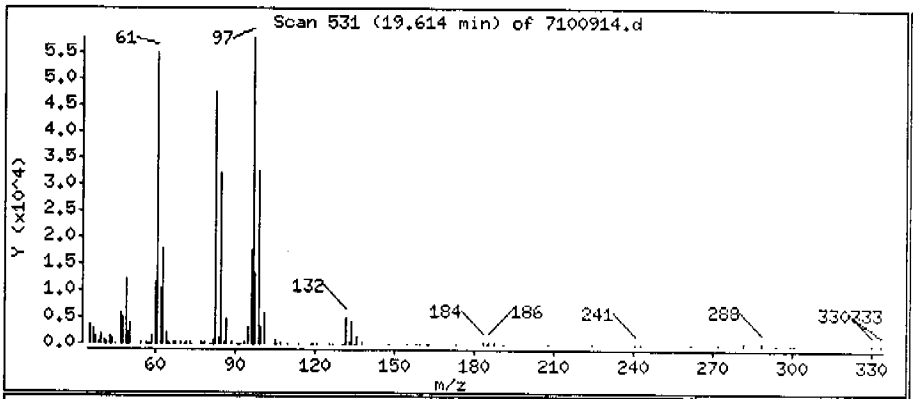
Operator: rs

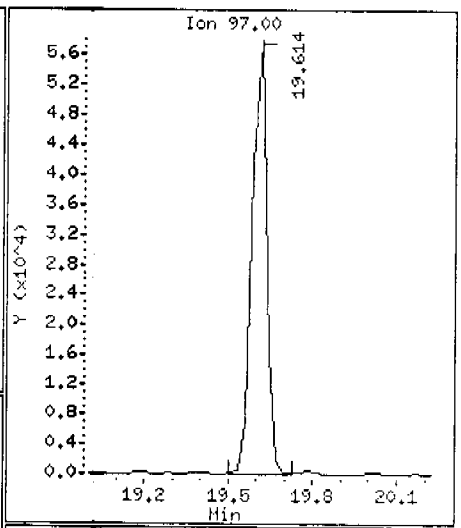
Column phase: RTx-624

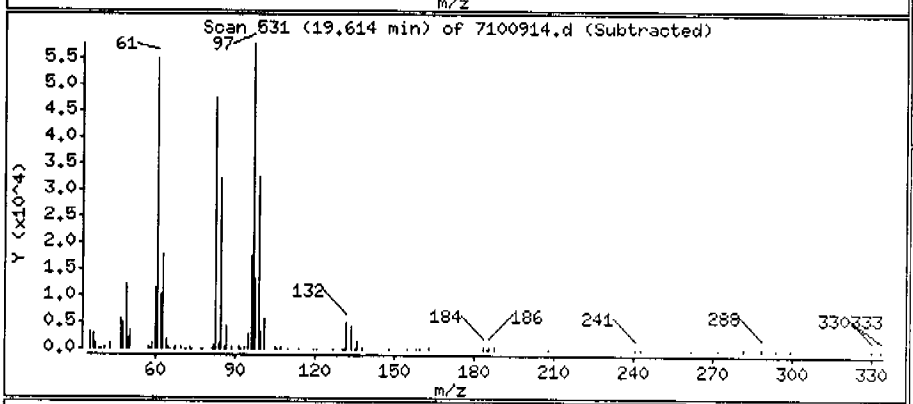
Column diameter: 0.53

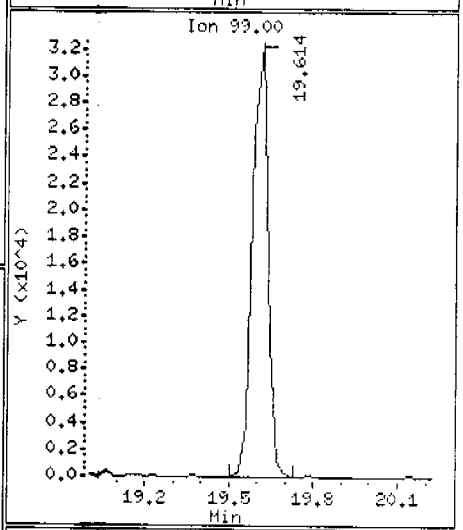
117 1,1,2-Trichloroethane

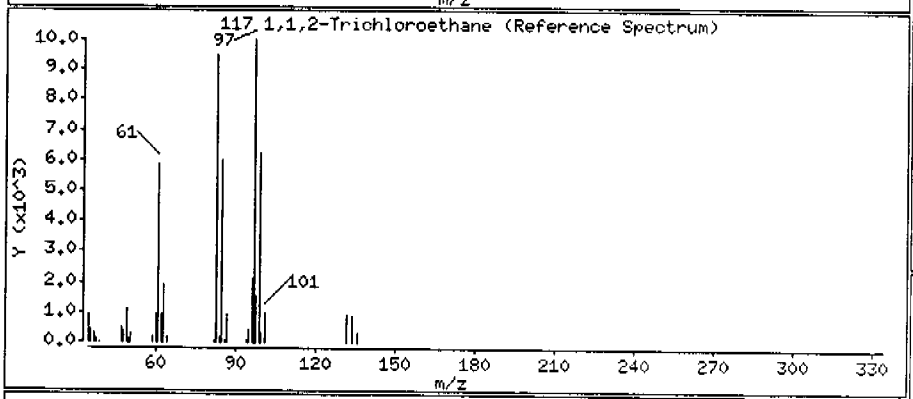
Concentration: 17.072 PPBV

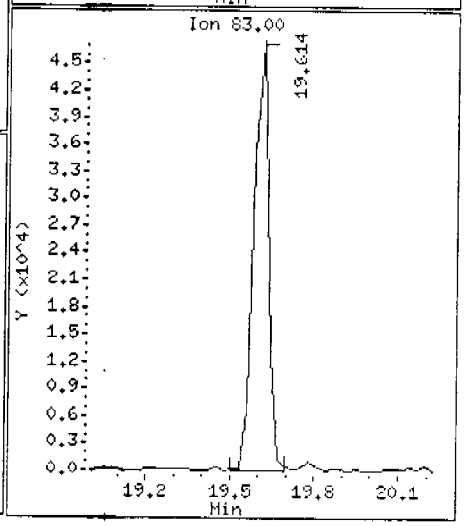


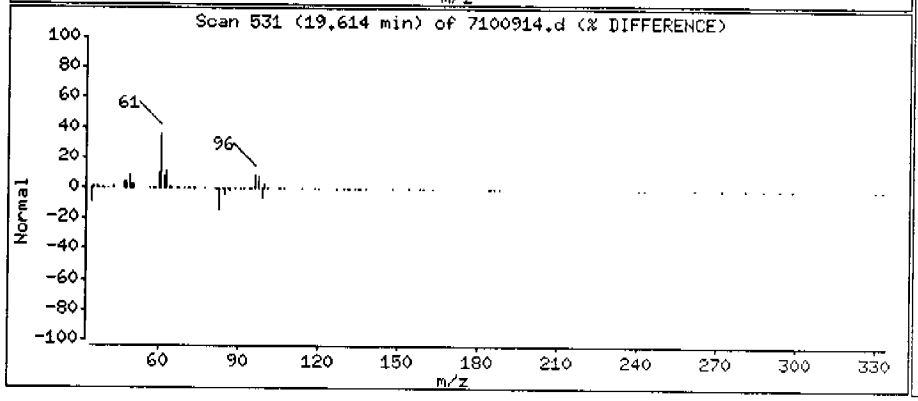












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

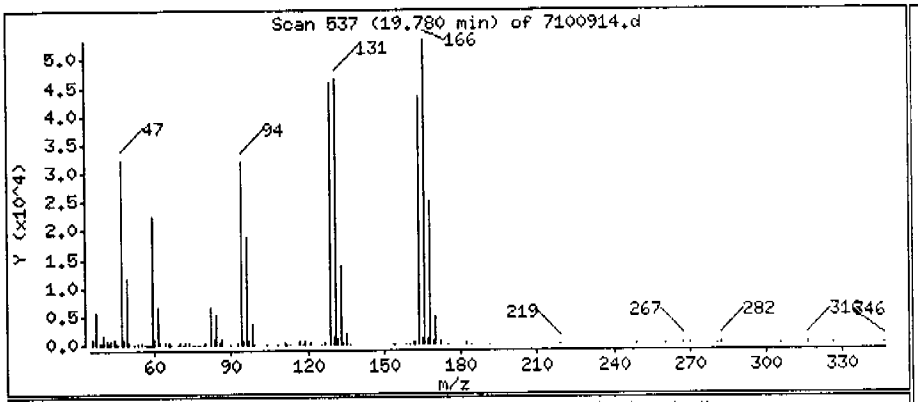
Operator: ra

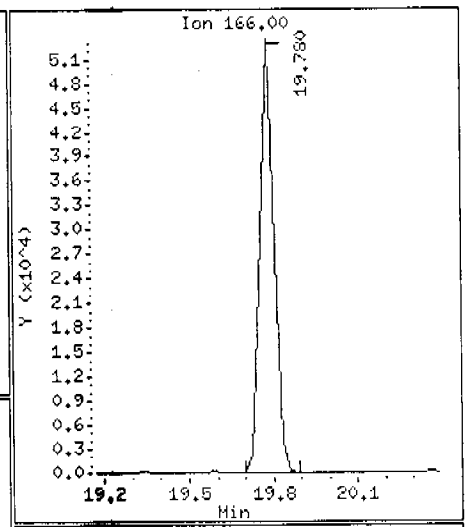
Column phase: RTx-624

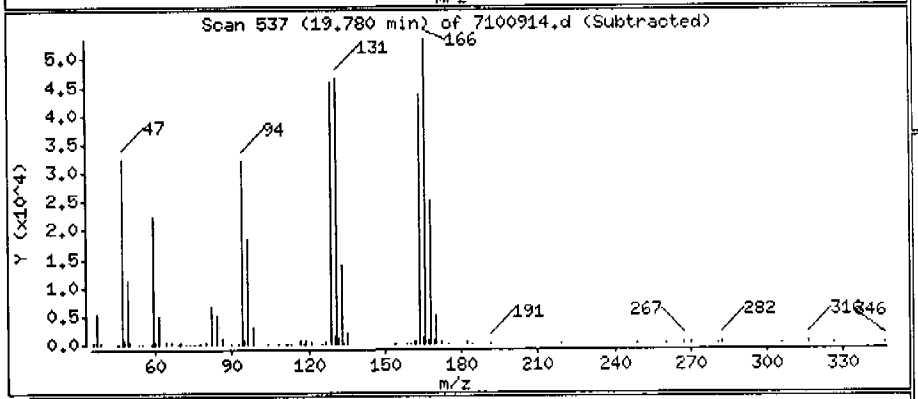
Column diameter: 0.53

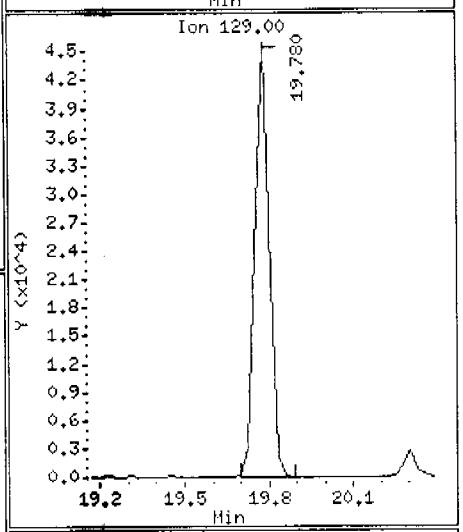
120 Tetrachloroethene

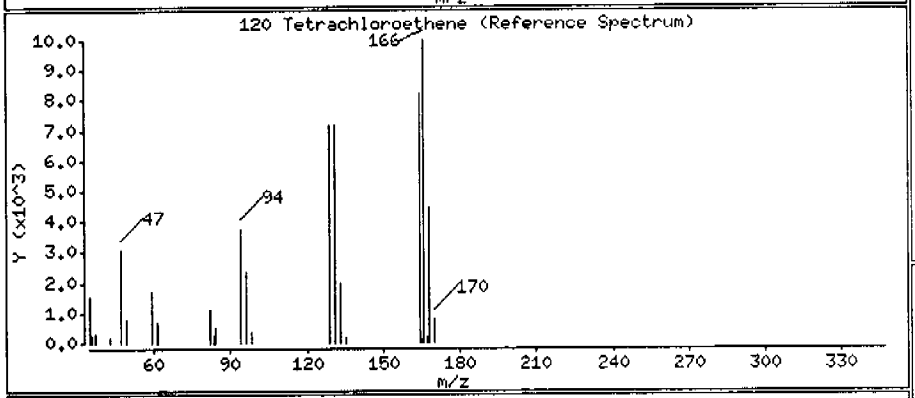
Concentration: 11.387 PPBV

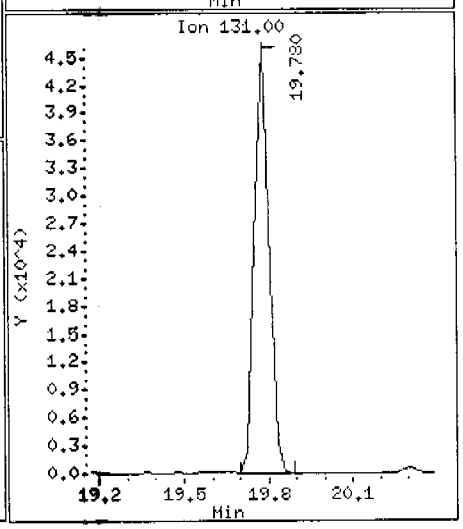


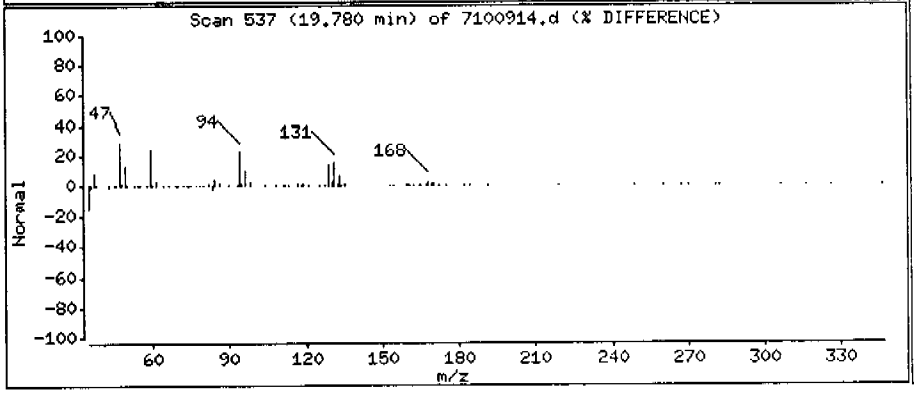












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Instrument: msd7.i

Sample Info: 200mL #5625

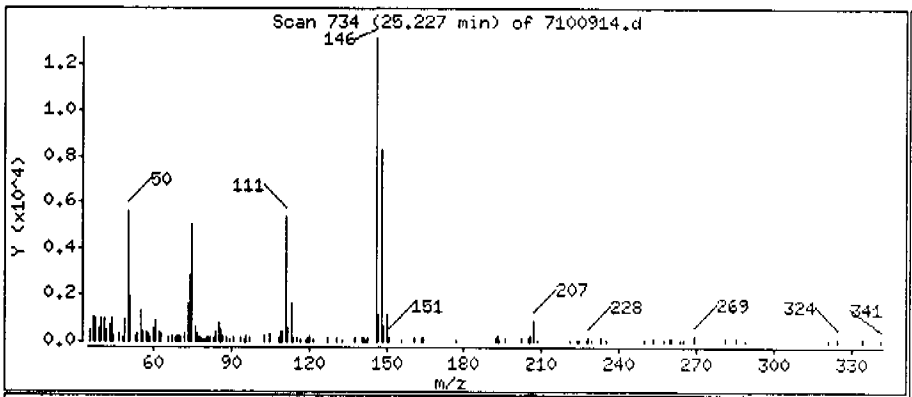
Operator: ra

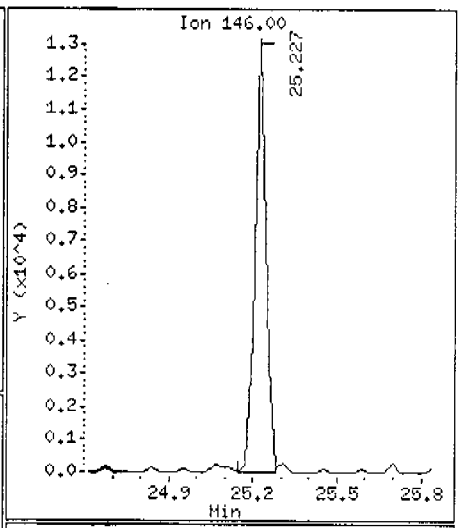
Column phase: RTx-624

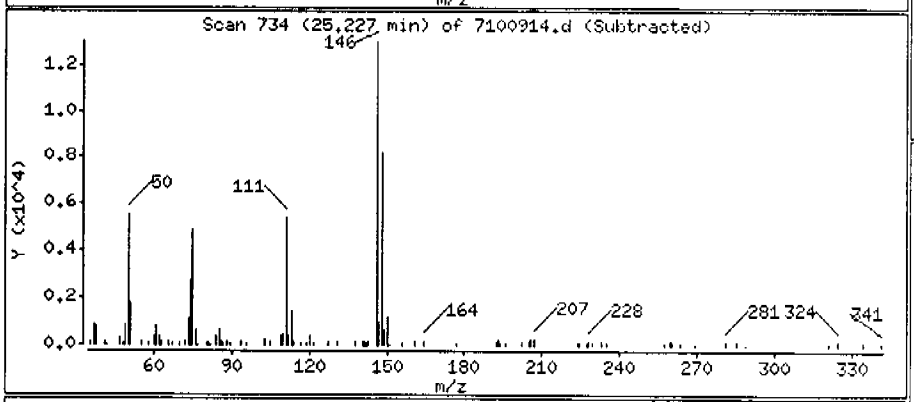
Column diameter: 0.53

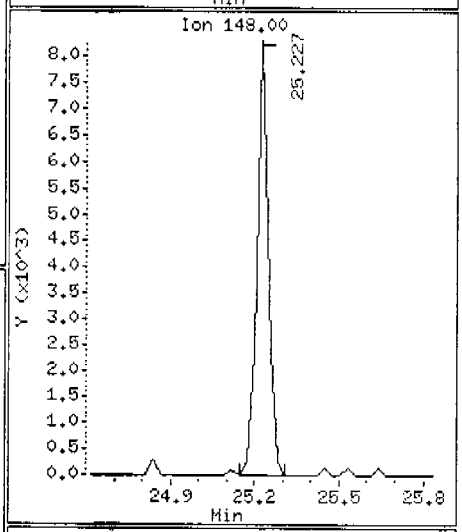
156 1,4-Dichlorobenzene

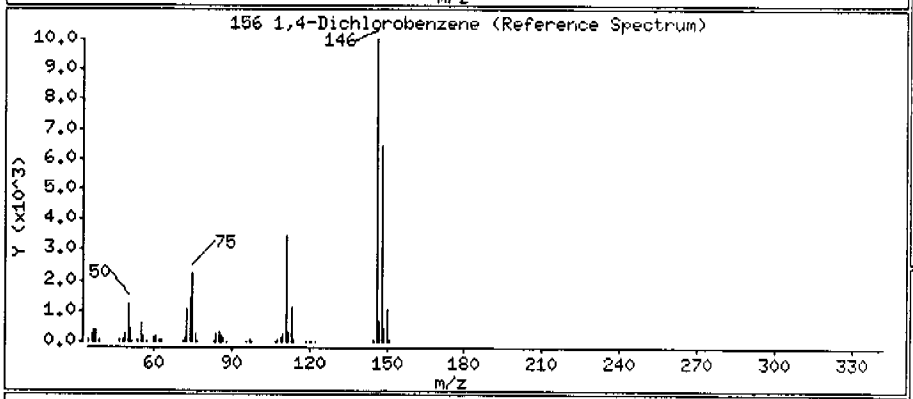
Concentration: 0.9260 PPBV

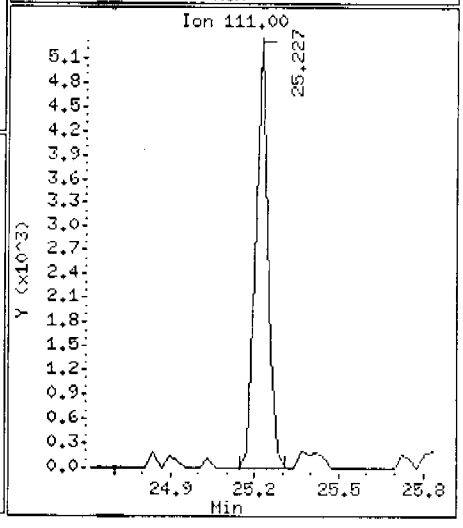


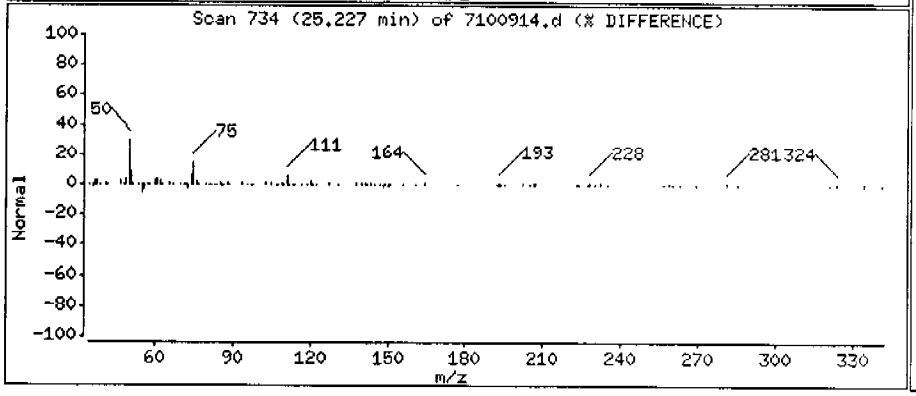












Data File: /chem/msd7.i/09oct08.b/7100914.d

Date : 09-OCT-2008 18:22

Client ID:

Sample Info: 200mL #5625

Instrument: msd7.i

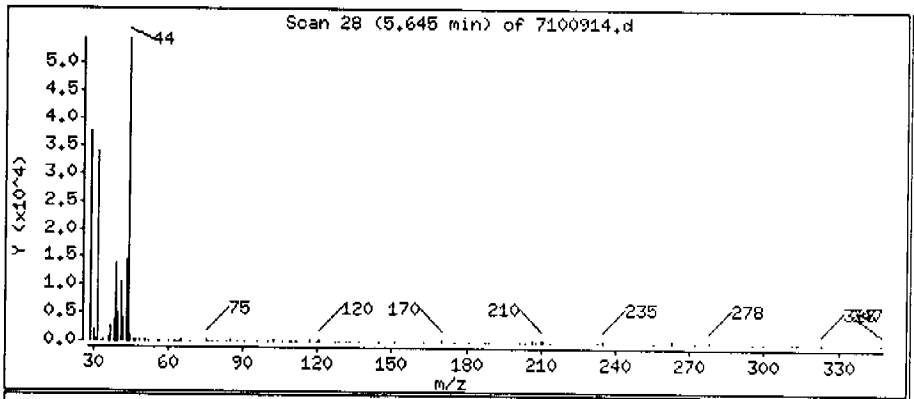
Operator: ra

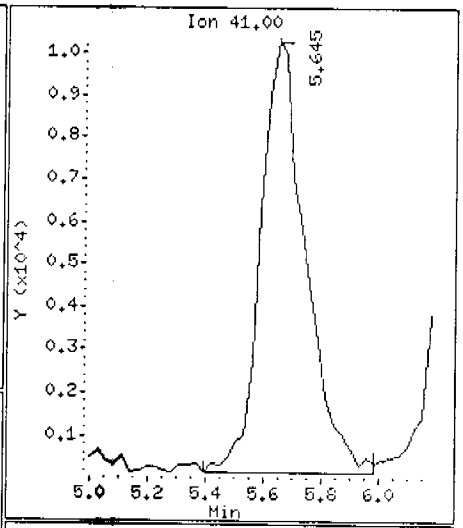
Column phase: RTx-624

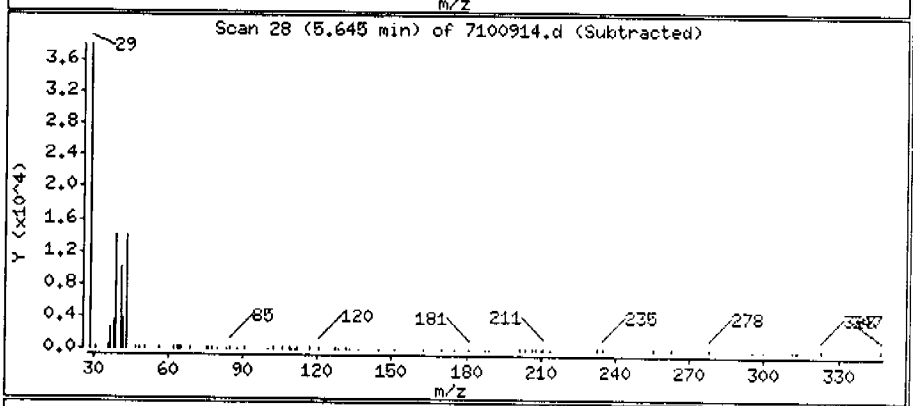
Column diameter: 0.53

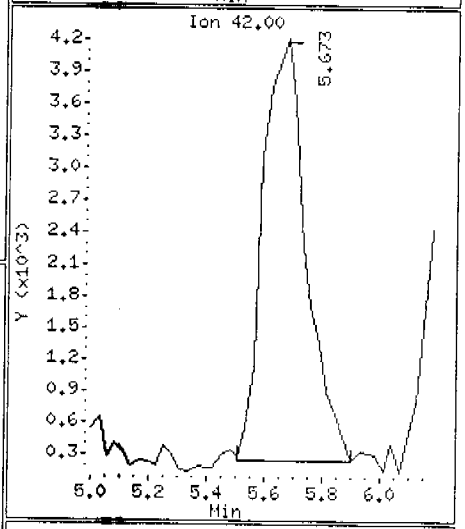
11 Propylene

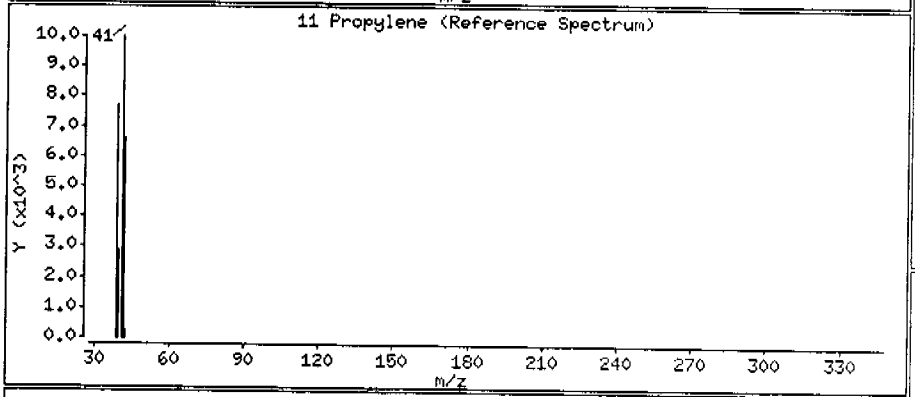
Concentration: 7.465 PPBV

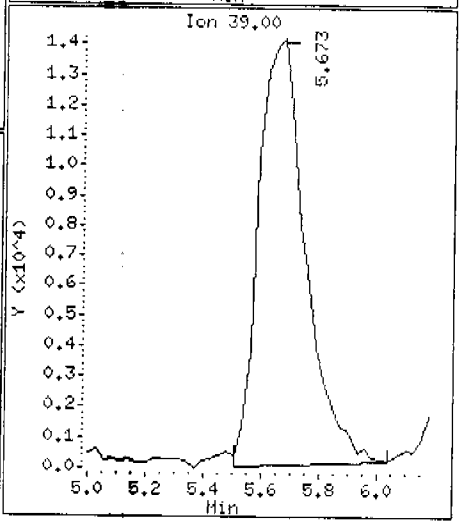


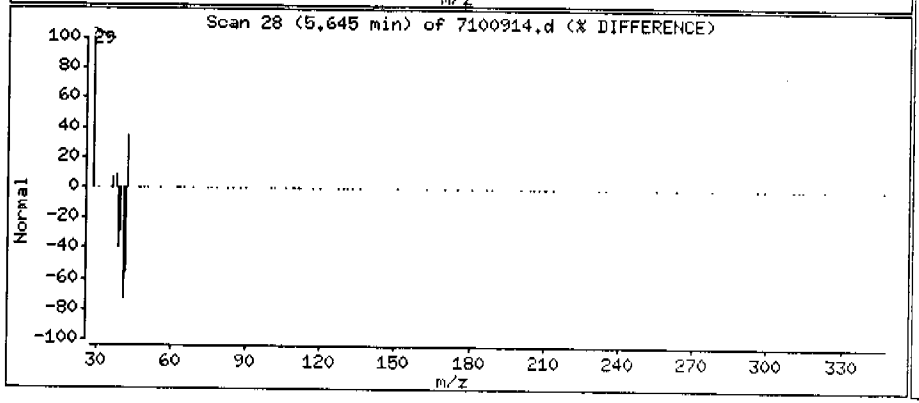












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14826

Lab ID#: 0809614-12A

No Detections Were Found.

0277

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14826

Lab ID#: 0809614-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100915	Date of Collection:	9/24/08
Dil. Factor:	2.12	Date of Analysis:	10/9/08 07:01 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	Not Detected	5.2	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Chloromethane	4.2	Not Detected	8.8	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,3-Butadiene	1.1	Not Detected	2.3	Not Detected
Bromomethane	1.1	Not Detected	4.1	Not Detected
Chloroethane	1.1	Not Detected	2.8	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Ethanol	4.2	Not Detected	8.0	Not Detected
Freon 113	1.1	Not Detected	8.1	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Acetone	4.2	Not Detected	10	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
Carbon Disulfide	1.1	Not Detected	3.3	Not Detected
Methylene Chloride	1.1	Not Detected	3.7	Not Detected
Methyl tert-butyl ether	1.1	Not Detected	3.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Hexane	1.1	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.1	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Chloroform	1.1	Not Detected	5.2	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Cyclohexane	1.1	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Heptane	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.3	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Tetrachloroethene	1.1	Not Detected	7.2	Not Detected

0278

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14826

Lab ID#: 0809614-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100915	Date of Collection:	9/24/08
Dil. Factor:	2.12	Date of Analysis:	10/9/08 07:01 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	4.2	Not Detected	17	Not Detected
Dibromochloromethane	1.1	Not Detected	9.0	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.1	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Chlorodifluoromethane	4.2	Not Detected	15	Not Detected
Methanol	110	Not Detected	140	Not Detected
n-Butanol	4.2	Not Detected	13	Not Detected
Propylene	4.2	Not Detected	7.3	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	92	70-130

0279

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100915.d
Lab Smp Id: 0809614-12A
Inj Date : 09-OCT-2008 19:01
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #12080
Misc Info : 11"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 2.12000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.361	14.333 (1.000)	130	312700	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	250666			28.92- 128.92	80.16
14.333	14.333 (1.000)	49	841842			320.90- 420.90	269.22
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.103 (1.000)	114	991043	25.0000		80.00- 120.00	100.00
16.102	16.103 (1.000)	88	172065			0.00- 67.10	17.36
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1073233	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	542156			1.24- 101.24	50.52
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.075)	65	611426	25.8856	25.886	80.00- 120.00	100.00
15.439	15.411 (1.075)	67	264174			0.00- 97.37	43.21
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.701	18.702 (1.161)	98	930687	24.5322	24.532	80.00- 120.00	100.00
18.701	18.702 (1.161)	70	131046			0.00- 63.85	14.08

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.701	18.702	(1.161)	100	720689			26.51- 126.51	77.44
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	510545	23.1182	23.118	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	726540			92.62- 192.62	142.31
23.291	23.291	(1.093)	176	489199			44.03- 144.03	95.82

Data File: /chem/msd7.i/09oct08.b/7100915.d
Report Date: 11-Oct-2008 08:33

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100915.d
Lab Smp Id: 0809614-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 11"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	312700	-13.64
97 1,4-Difluorobenze	1146510	687906	1605114	991043	-13.56
126 Chlorobenzene-d5	1241713	745028	1738398	1073233	-13.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.36	0.19
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100915.d
Report Date: 11-Oct-2008 08:33

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-12A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 11"psi-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.886	103.54	70-130
$ 113 Toluene-d8	25.000	24.532	98.13	70-130
$ 137 Bromofluorobenzene	25.000	23.118	92.47	70-130

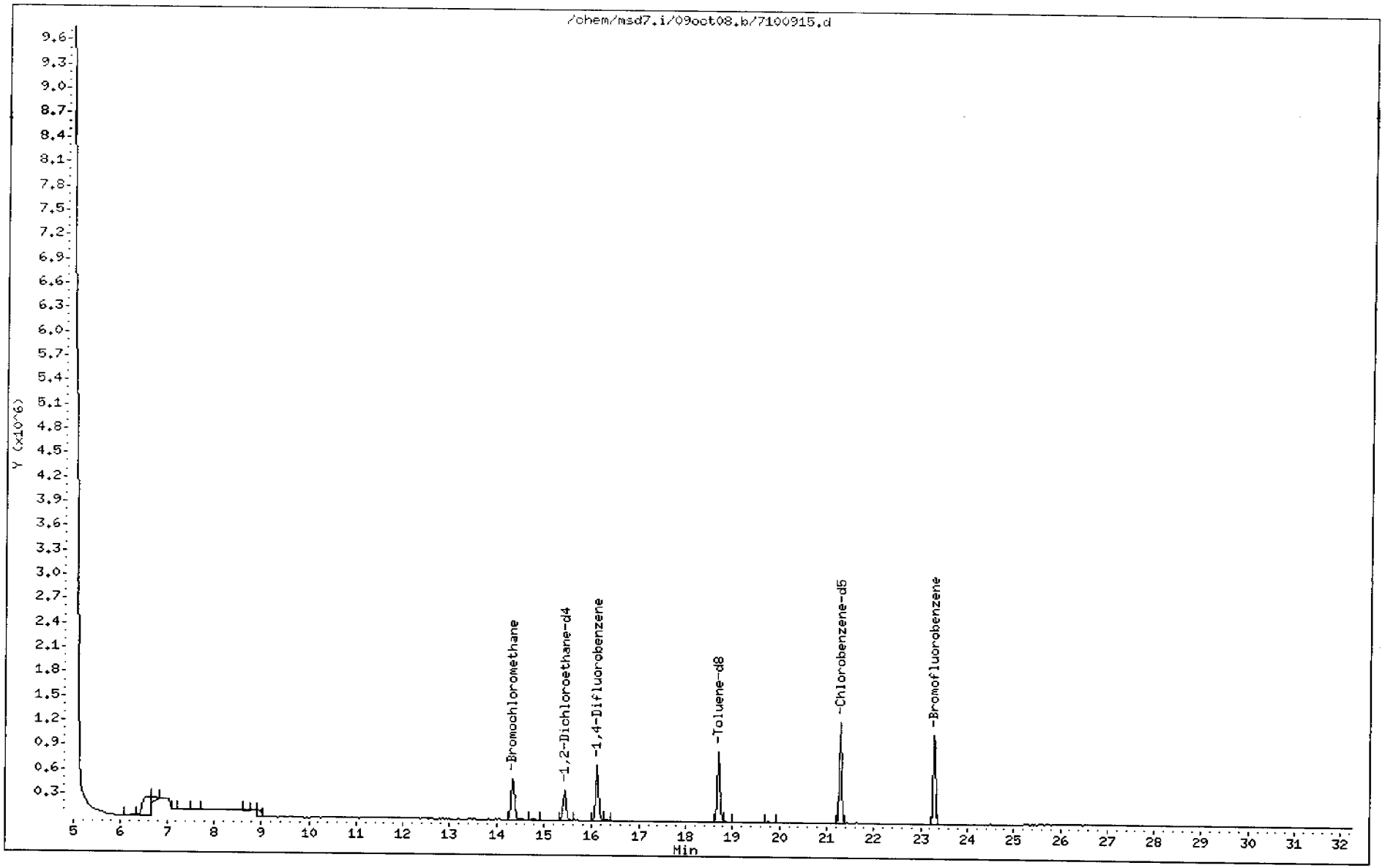
Data File: /chem/msd7.i/09oct08.b/7100915.d
Date : 09-OCT-2008 19:01
Client ID:
Sample Info: 200mL #12080

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0284



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14828

Lab ID#: 0809614-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.2	2.6	5.8	13
Methylene Chloride	1.2	5.6	4.0	19
Chloroform	1.2	82	5.7	400
1,1,1-Trichloroethane	1.2	5.0	6.4	27
Carbon Tetrachloride	1.2	24	7.3	150
Trichloroethene	1.2	190	6.3	1000
Tetrachloroethene	1.2	400	7.9	2700

0285

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14828

Lab ID#: 0809614-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100917	**Date of Collection:**	9/23/08
Dil. Factor:	2.33	**Date of Analysis:**	10/9/08 08:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.2	2.6	5.8	13
Freon 114	1.2	Not Detected	8.1	Not Detected
Chloromethane	4.7	Not Detected	9.6	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	1.2	Not Detected	4.5	Not Detected
Chloroethane	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	Not Detected	6.5	Not Detected
Ethanol	4.7	Not Detected	8.8	Not Detected
Freon 113	1.2	Not Detected	8.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Acetone	4.7	Not Detected	11	Not Detected
2-Propanol	4.7	Not Detected	11	Not Detected
Carbon Disulfide	1.2	Not Detected	3.6	Not Detected
Methylene Chloride	1.2	5.6	4.0	19
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.2	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Chloroform	1.2	82	5.7	400
1,1,1-Trichloroethane	1.2	5.0	6.4	27
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Carbon Tetrachloride	1.2	24	7.3	150
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	190	6.3	1000
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	400	7.9	2700

0286

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14828

Lab ID#: 0809614-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100917	**Date of Collection:**	9/23/08
Dil. Factor:	2.33	**Date of Analysis:**	10/9/08 08:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	4.7	Not Detected	19	Not Detected
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	34	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected
Chlorodifluoromethane	4.7	Not Detected	16	Not Detected
Methanol	120	Not Detected	150	Not Detected
n-Butanol	4.7	Not Detected	14	Not Detected
Propylene	4.7	Not Detected	8.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	93	70-130

0287

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100917.d
Lab Smp Id: 0809614-13A
Inj Date : 09-OCT-2008 20:33
Operator : ra Inst ID: msd7.i
Smp Info : 150mL #9942
Misc Info : 7"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 2.33000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	312404	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	249850			28.92- 128.92	79.98
14.333	14.333 (1.000)	49	1121075			320.90- 420.90	358.85
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	972198	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	169322			0.00- 67.10	17.42
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1048257	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	534891			1.24- 101.24	51.03
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	607447	25.7415	25.741	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	268504			0.00- 97.37	44.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	940372	25.2680	25.268	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	131815			0.00- 63.85	14.02

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	709660			26.51- 126.51	75.47
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	503798	23.3562	23.356	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	753533			92.62- 192.62	149.57
23.291	23.291	(1.093)	176	489481			44.03- 144.03	97.16
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.758	5.729	(0.402)	85	86322	1.11774	2.604	80.00- 120.00	100.00
5.758	5.729	(0.402)	87	28041			0.00- 81.85	32.48
54 Methylene Chloride						CAS #: 75-09-2		
11.430	11.430	(0.797)	49	112864	2.40747	5.609	80.00- 120.00	100.00
11.430	11.430	(0.797)	84	36624			0.00- 84.42	32.45
11.402	11.430	(0.796)	51	33548			0.00- 80.54	29.72
82 Chloroform						CAS #: 67-66-3		
14.388	14.388	(1.004)	83	1529406	35.2188	82.060	80.00- 120.00	100.00
14.388	14.388	(1.004)	85	1086114			21.17- 121.17	71.02
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.775	14.748	(1.031)	97	95117	2.14523	4.998	80.00- 120.00	100.00
14.775	14.748	(1.031)	99	58279			13.83- 113.83	61.27
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.024	15.024	(1.048)	119	517716	10.2254	23.825	80.00- 120.00	100.00
15.024	15.024	(1.048)	117	542442			55.68- 155.68	104.78
101 Trichloroethene						CAS #: 79-01-6		
16.573	16.573	(1.029)	95	1870828	82.5015	192.23	80.00- 120.00	100.00
16.573	16.573	(1.029)	130	1902003			52.48- 152.48	101.67
16.573	16.573	(1.029)	97	1188703			14.44- 114.44	63.54
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	4812860	169.942	395.96	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	4182075			35.87- 135.87	86.89
19.780	19.780	(0.929)	131	4209453			35.33- 135.33	87.46

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100917.d
Lab Smp Id: 0809614-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 7"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	312404	-13.72
97 1,4-Difluorobenze	1146510	687906	1605114	972198	-15.20
126 Chlorobenzene-d5	1241713	745028	1738398	1048257	-15.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100917.d
Report Date: 11-Oct-2008 09:33

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-13A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 7"psi-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: ra
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.741	102.97	70-130
$ 113 Toluene-d8	25.000	25.268	101.07	70-130
$ 137 Bromofluorobenzene	25.000	23.356	93.42	70-130

Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Sample Info: 150mL #9942

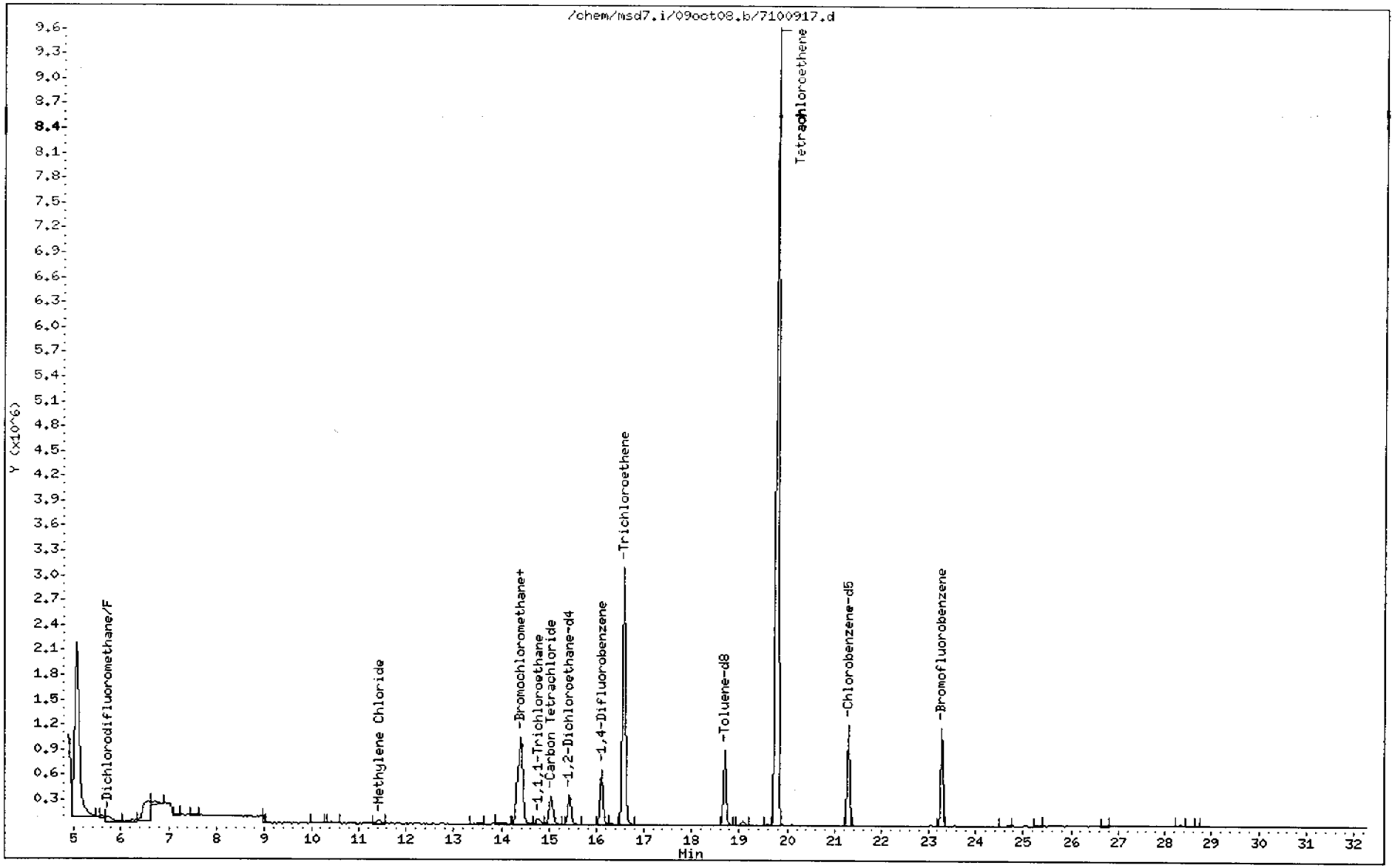
Column phase: RTx-624

Instrument: msd7.i

Operator: ra

Column diameter: 0.53

0292



Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Instrument: msd7.i

Sample Info: 150mL #9942

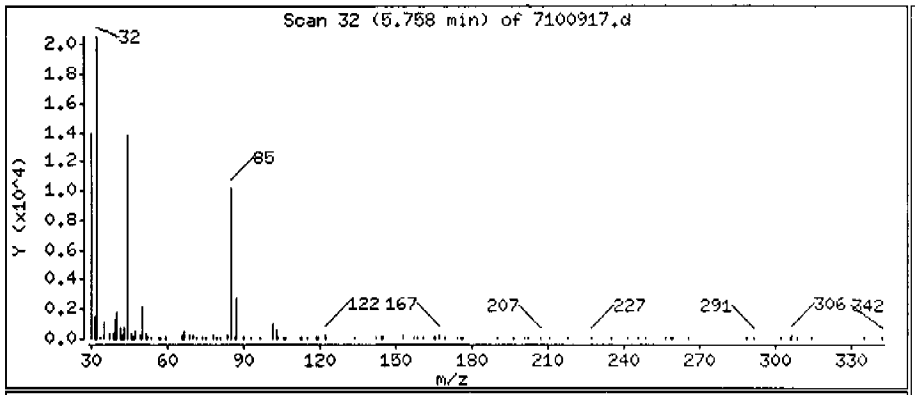
Operator: ra

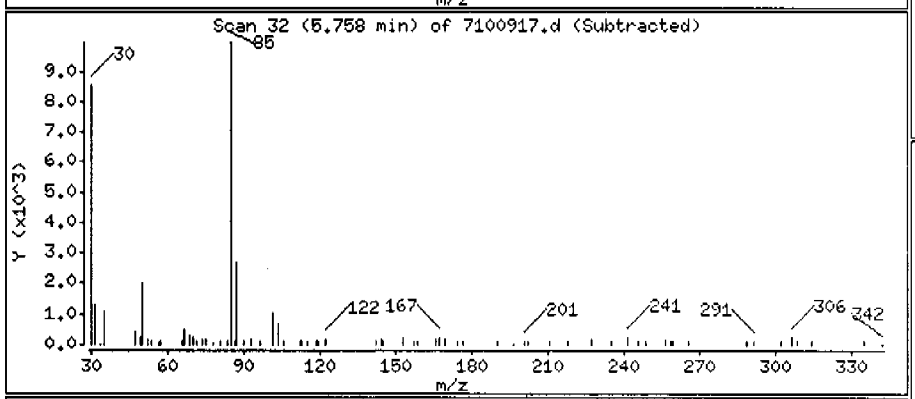
Column phase: RTx-624

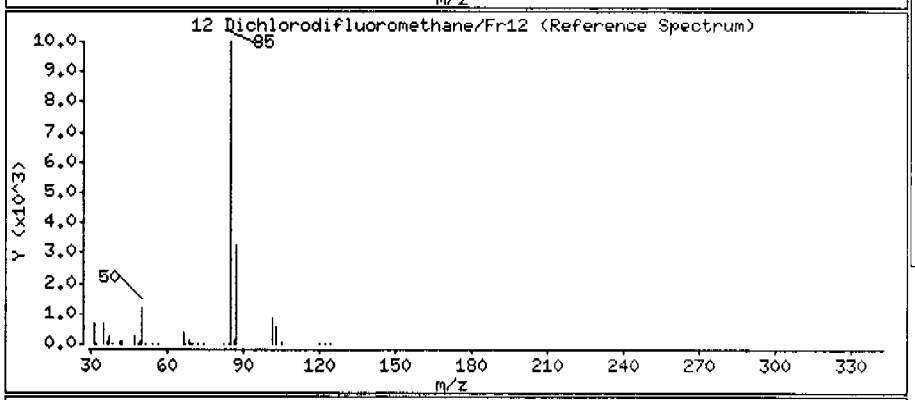
Column diameter: 0.53

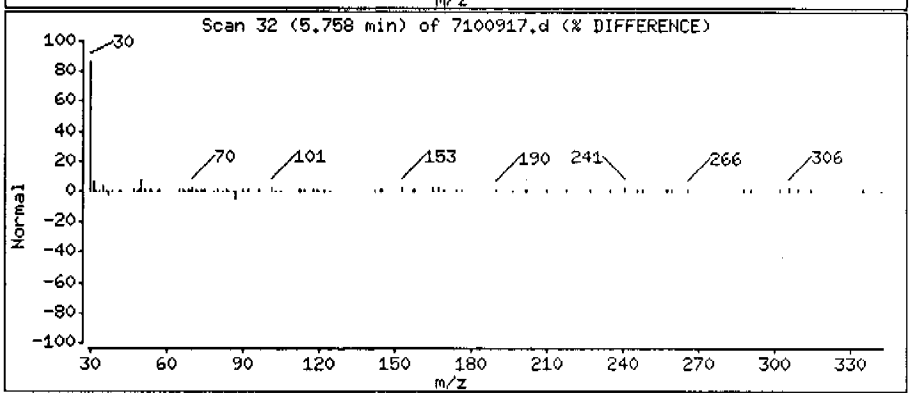
12 Dichlorodifluoromethane/Fr12

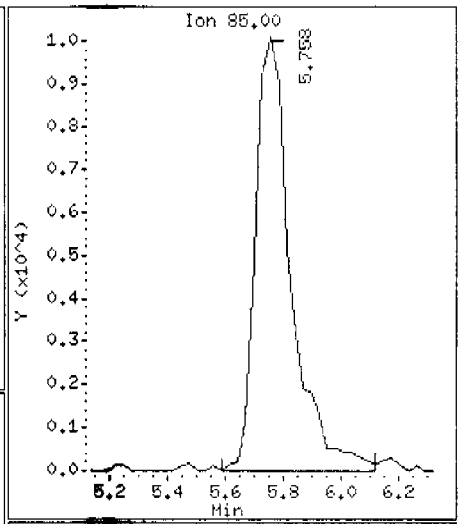
Concentration: 2.604 PPBV

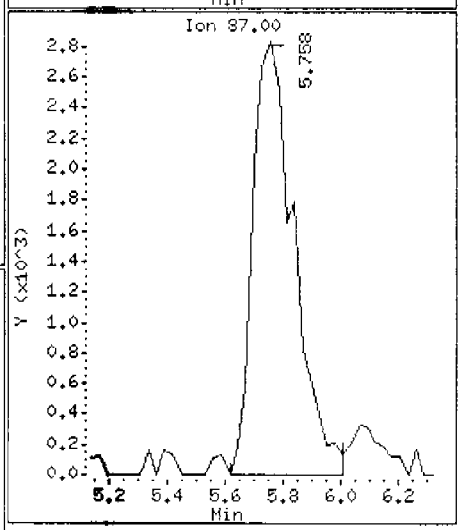












Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Instrument: msd7.i

Sample Info: 150mL #9942

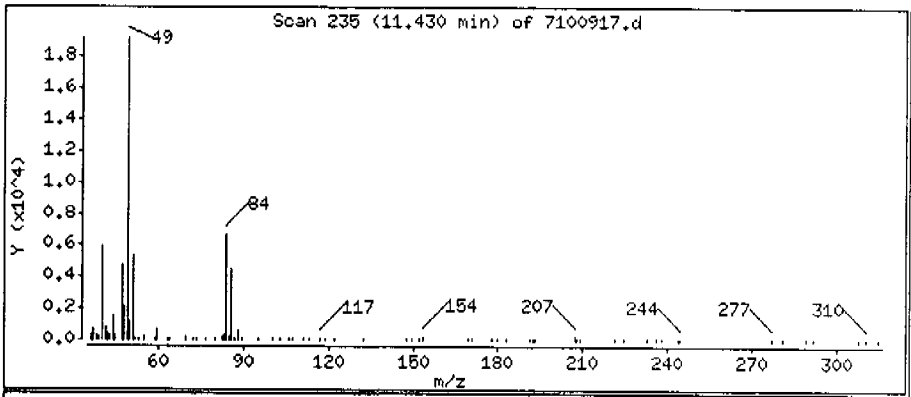
Operator: ra

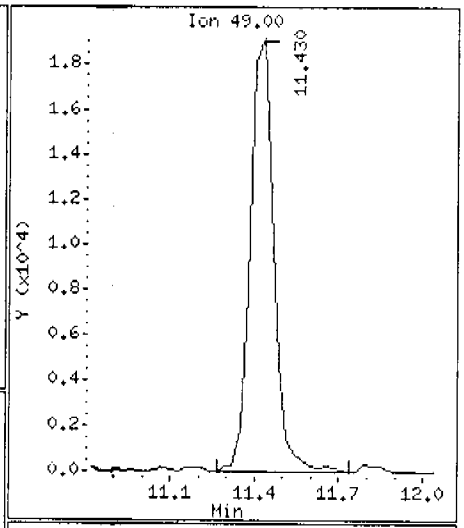
Column phase: RTx-624

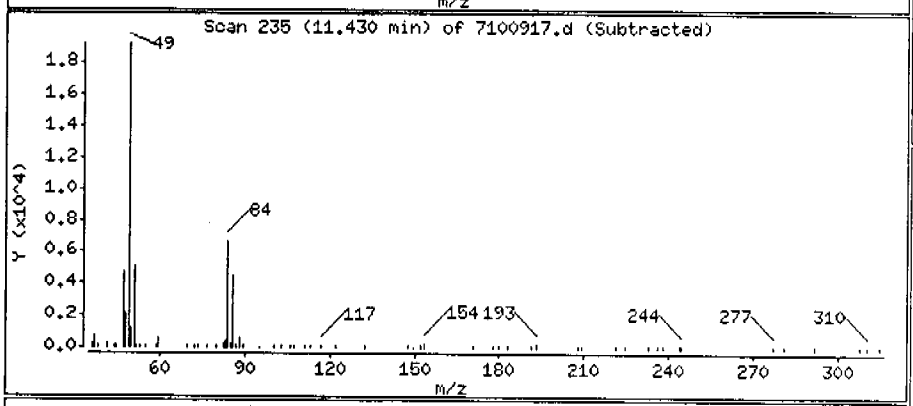
Column diameter: 0.53

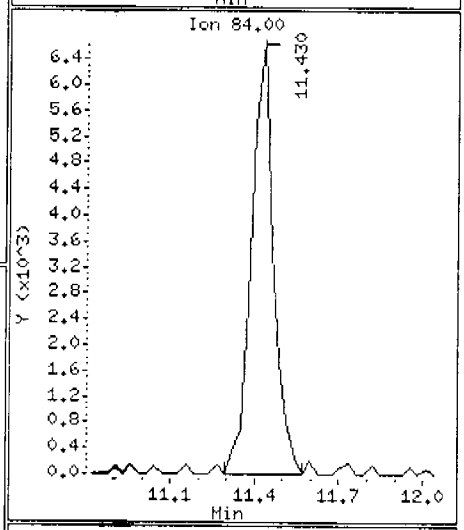
54 Methylene Chloride

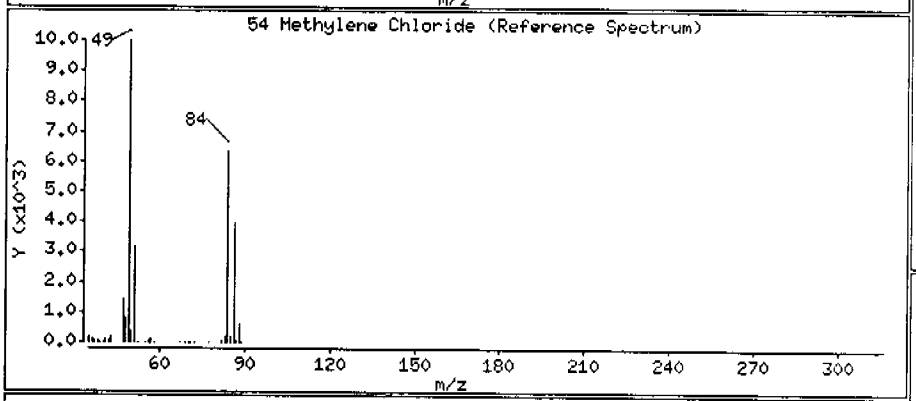
Concentration: 5.609 PPBV

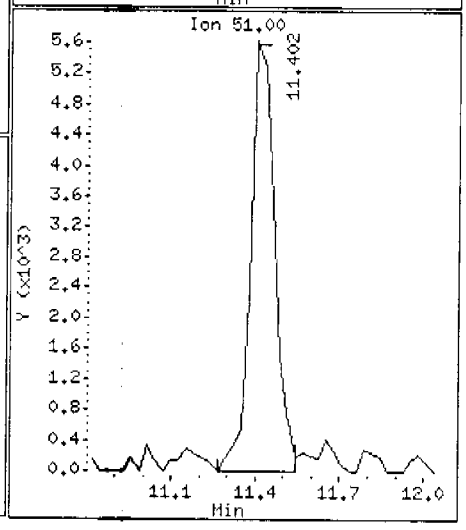


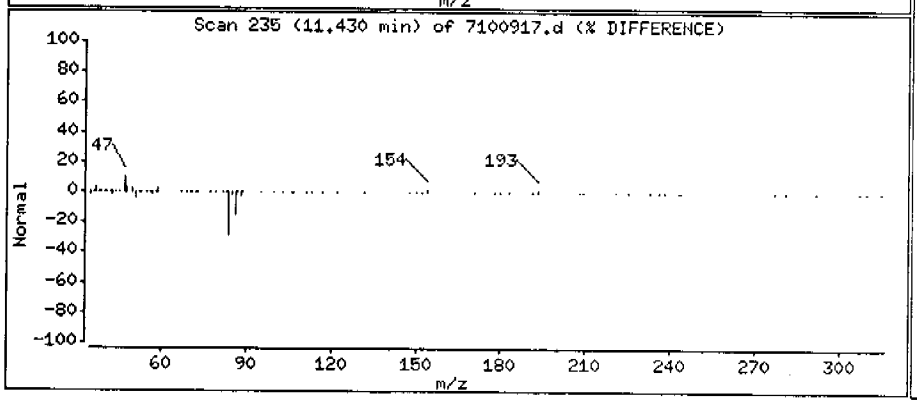












Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Instrument: msd7.i

Sample Info: 150mL #9942

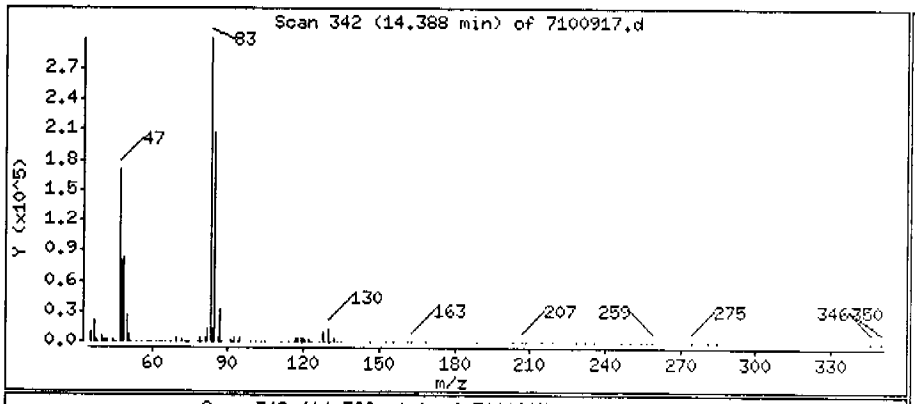
Operator: ra

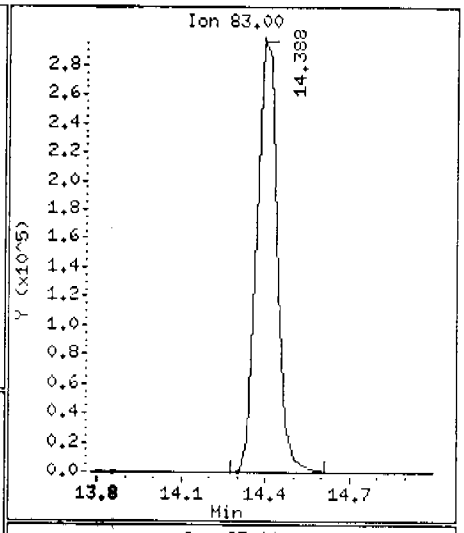
Column phase: RTx-624

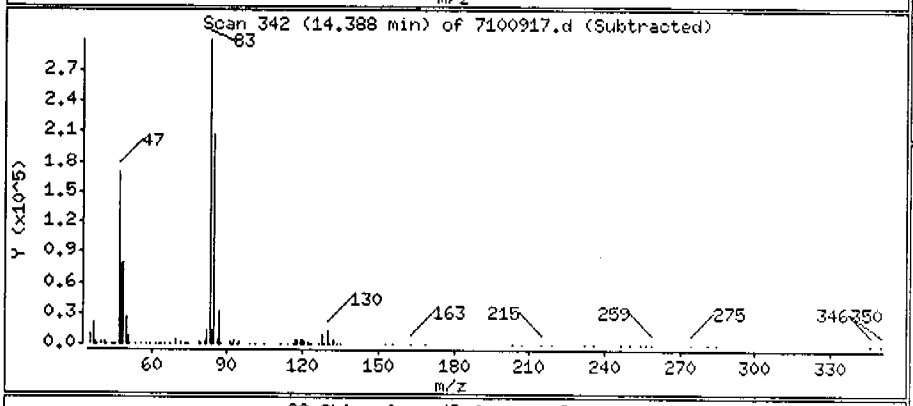
Column diameter: 0.53

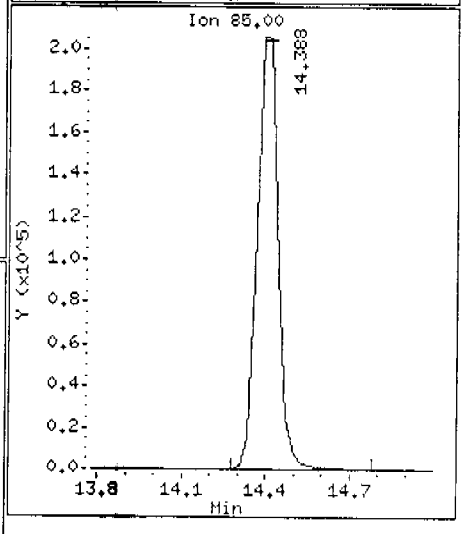
82 Chloroform

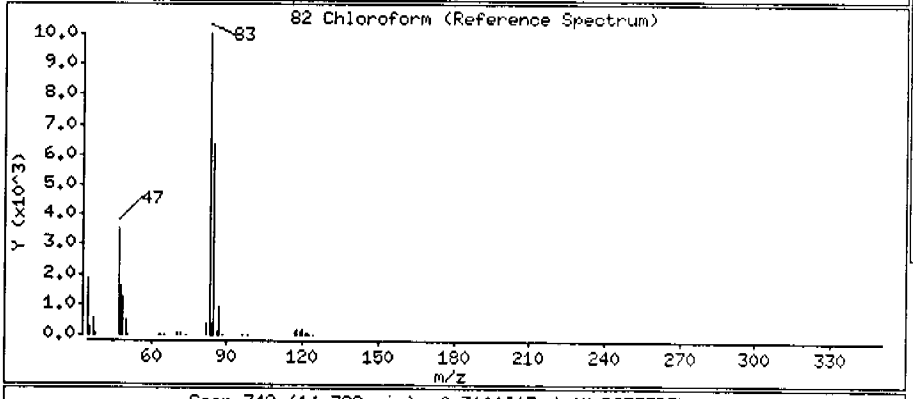
Concentration: 82.060 PPBV

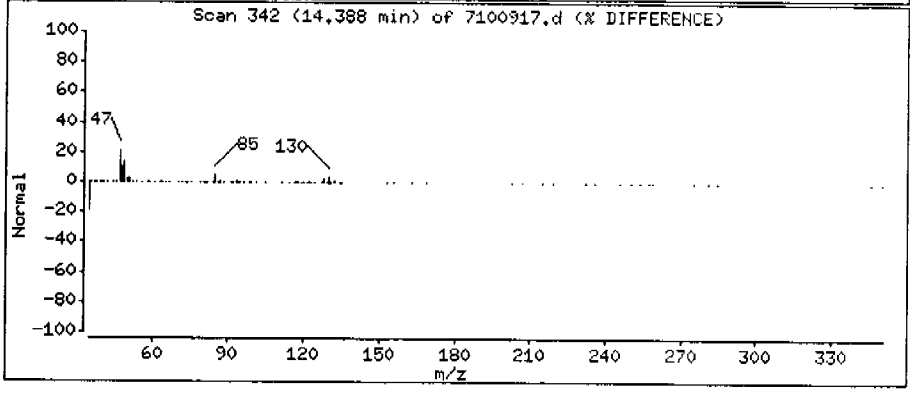












Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Sample Info: 150mL #9942

Instrument: msd7.i

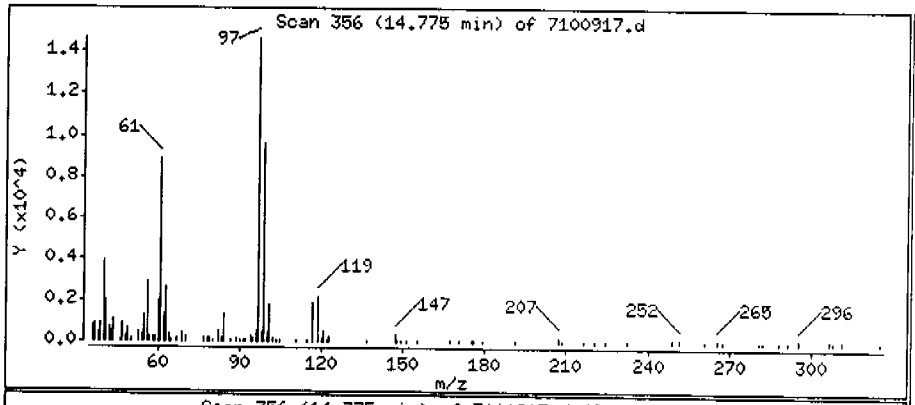
Operator: ra

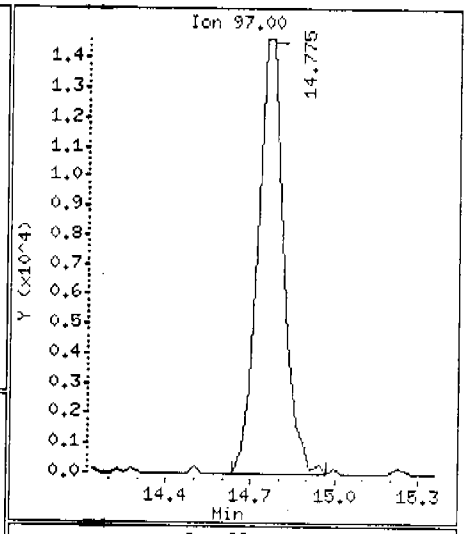
Column phase: RTx-624

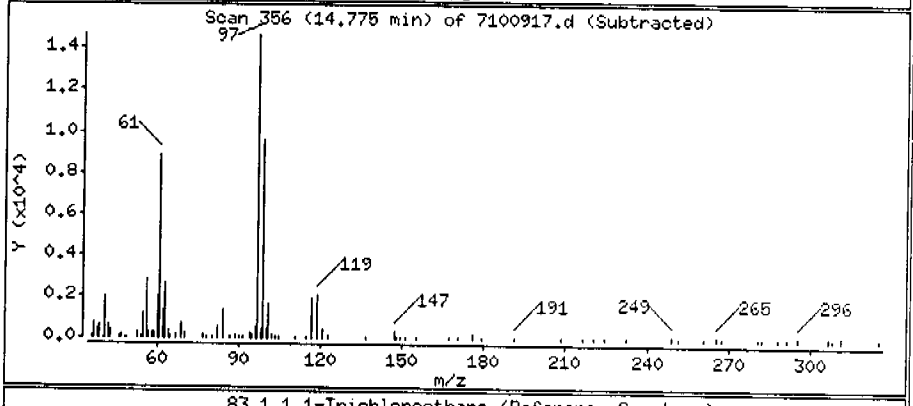
Column diameter: 0.53

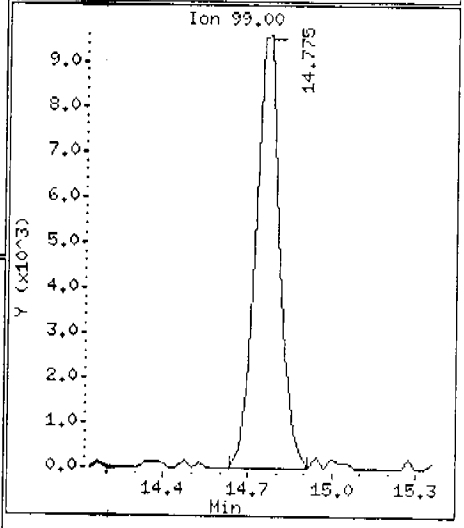
83 1,1,1-Trichloroethane

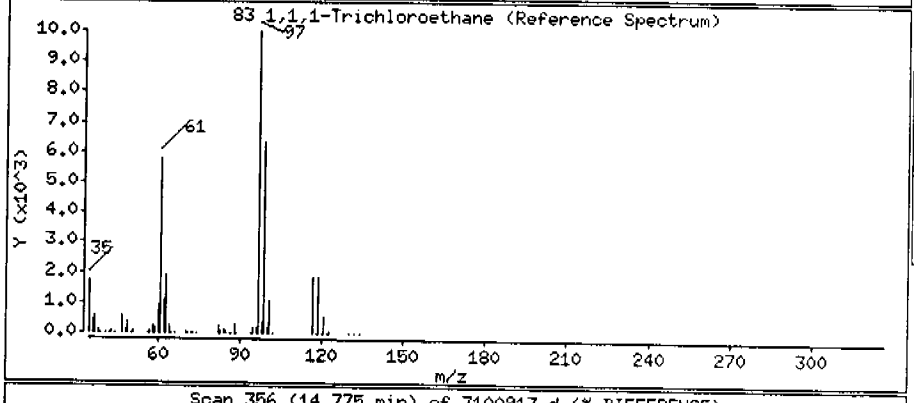
Concentration: 4.998 PPBV

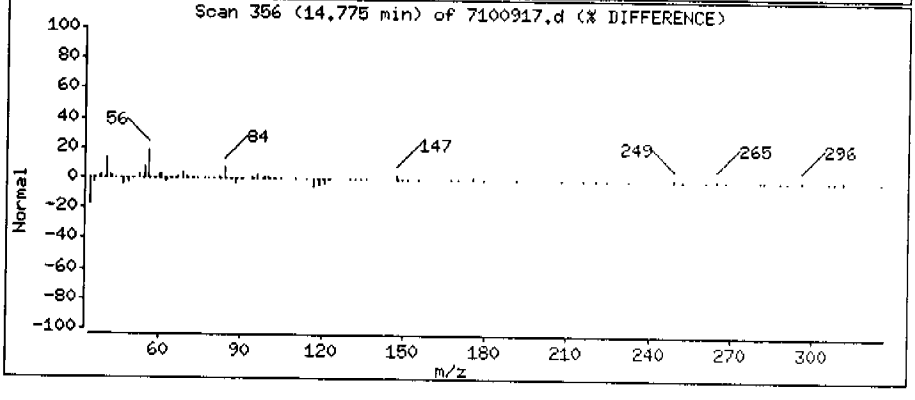












Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Instrument: msd7.i

Sample Info: 150mL #9942

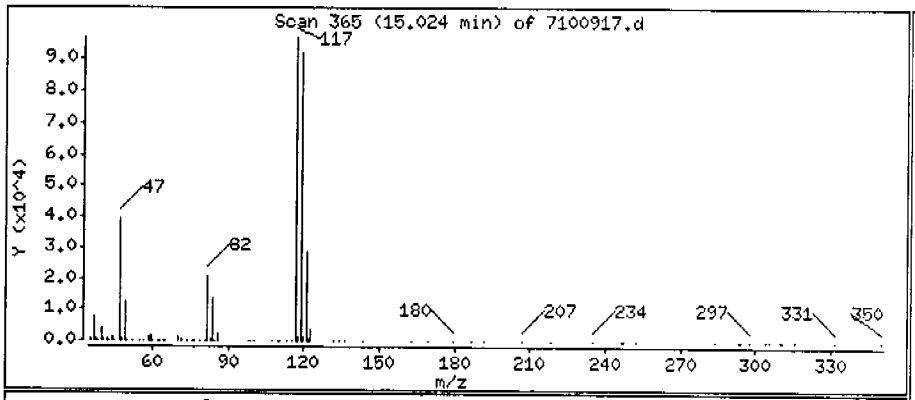
Operator: ra

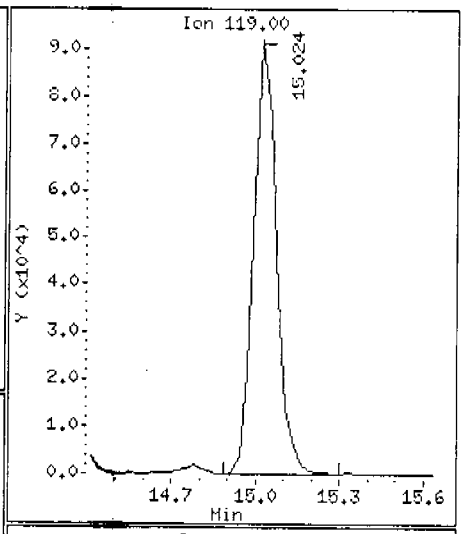
Column phase: RTx-624

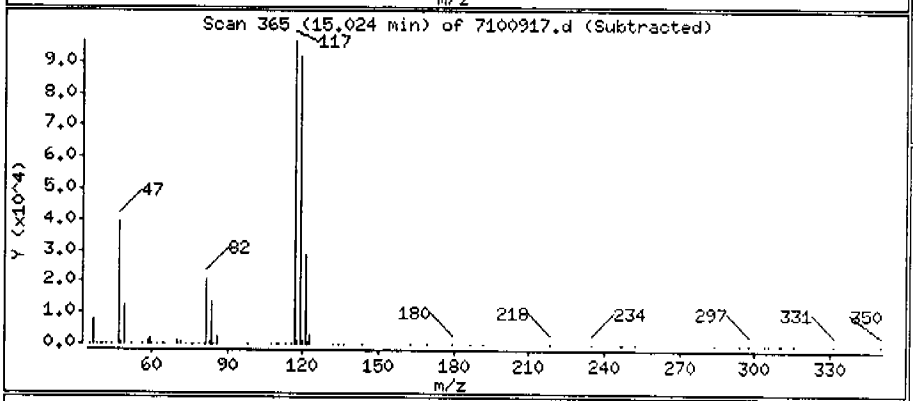
Column diameter: 0.53

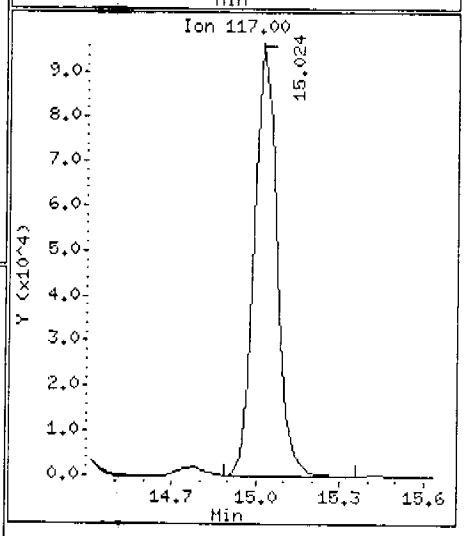
87 Carbon Tetrachloride

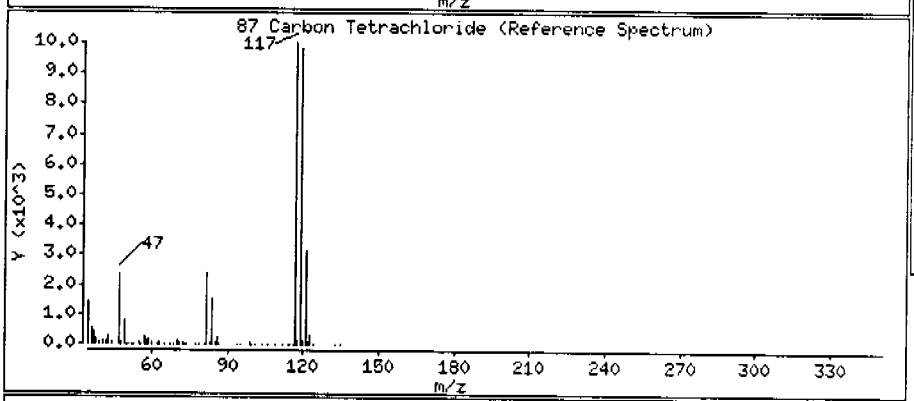
Concentration: 23.825 PPBV

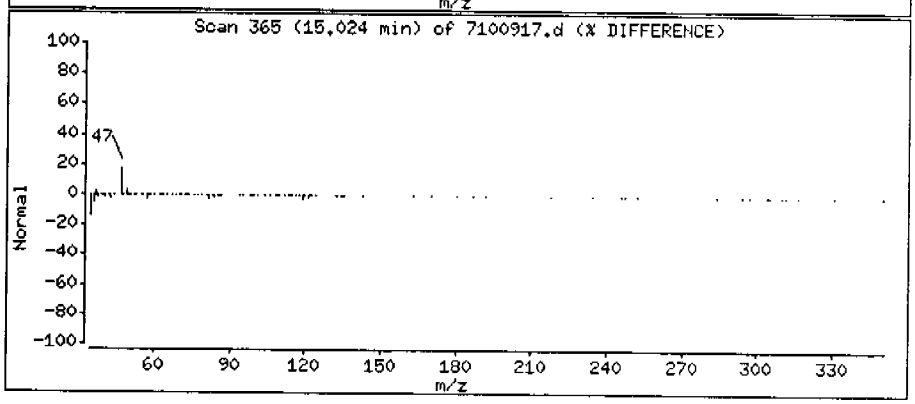












Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Instrument: msd7.i

Sample Info: 150mL #9942

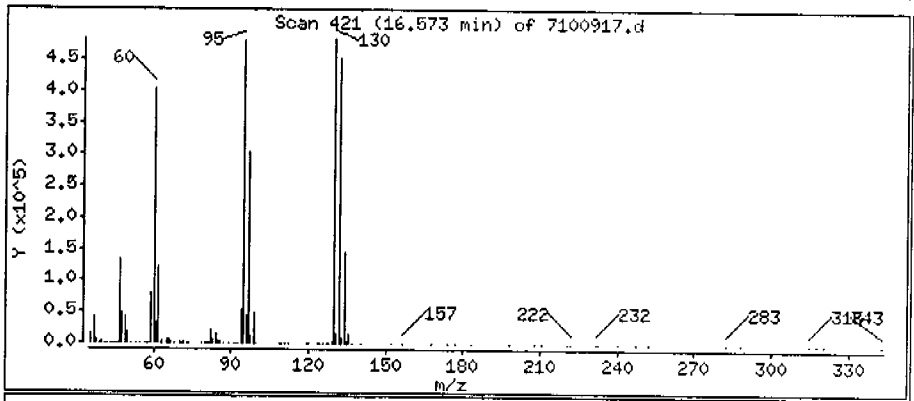
Operator: ra

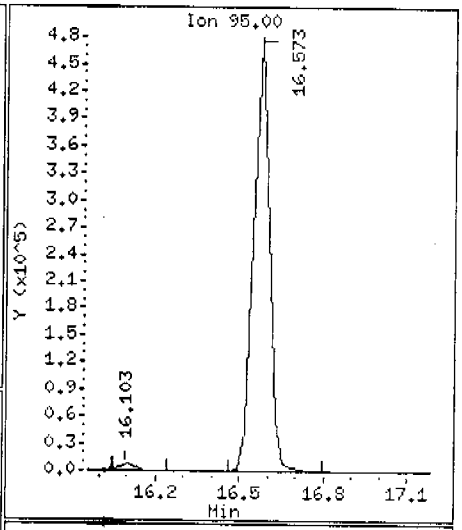
Column phase: RTx-624

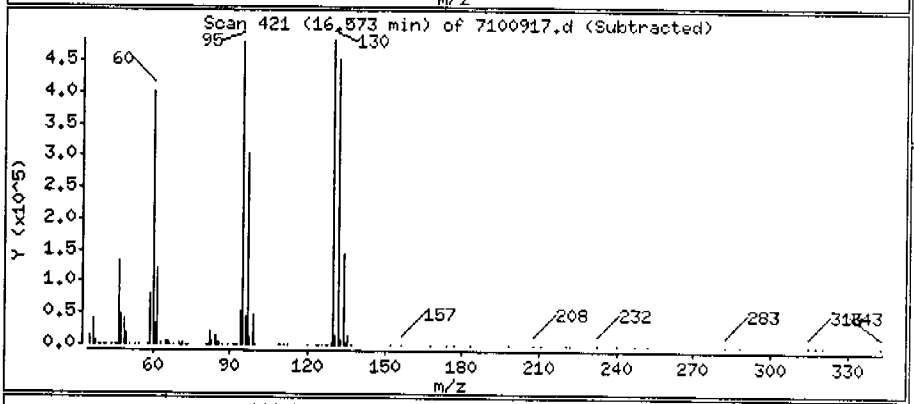
Column diameter: 0.53

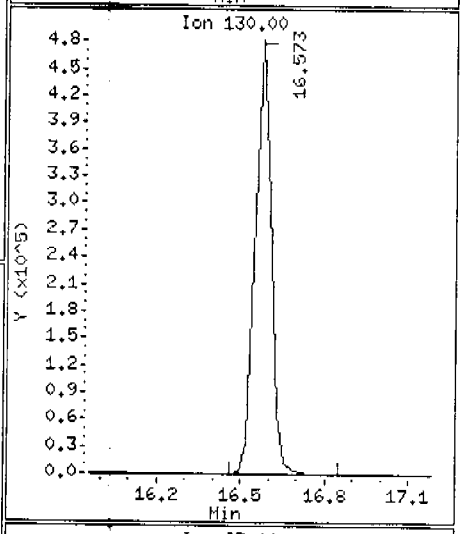
101 Trichloroethene

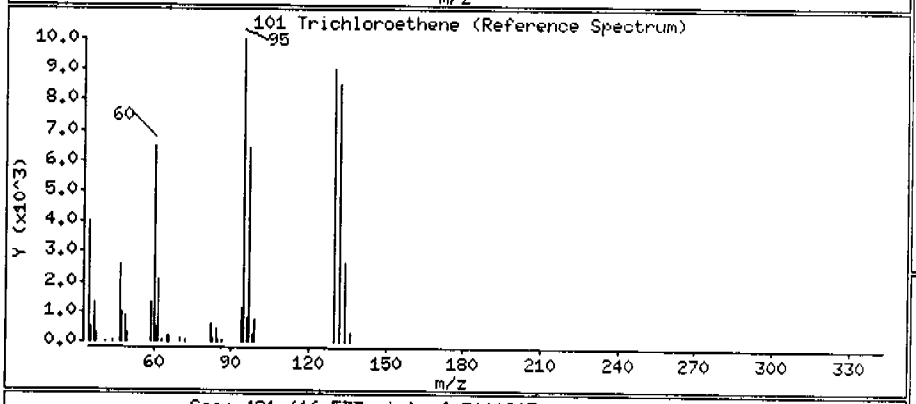
Concentration: 192.23 PPBV

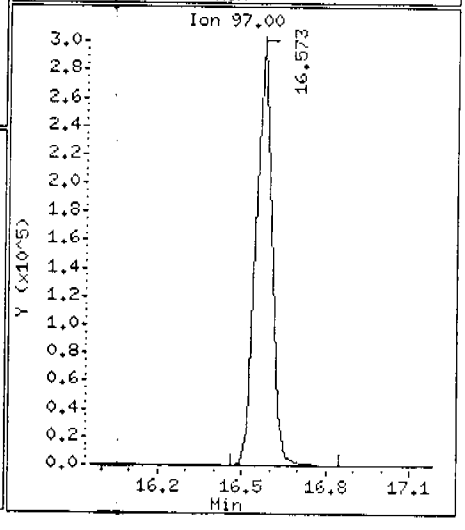


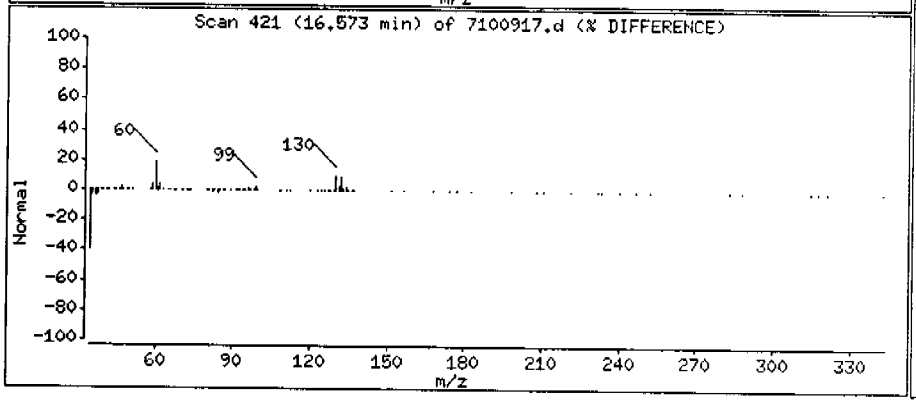












Data File: /chem/msd7.i/09oct08.b/7100917.d

Date : 09-OCT-2008 20:33

Client ID:

Instrument: msd7.i

Sample Info: 150mL #9942

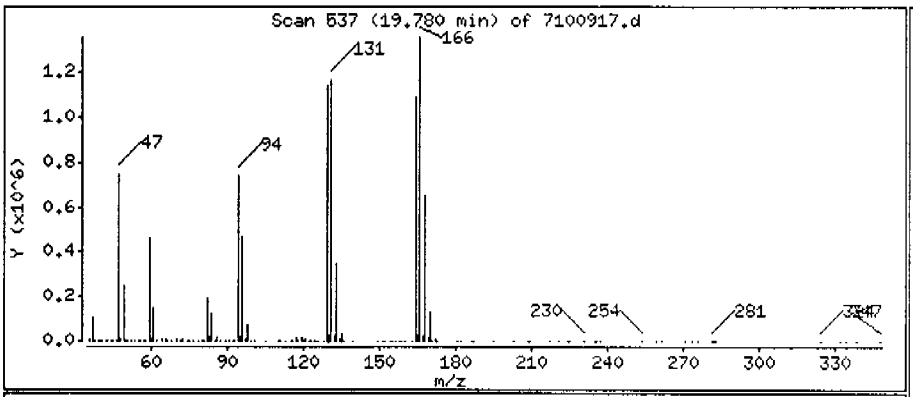
Operator: ra

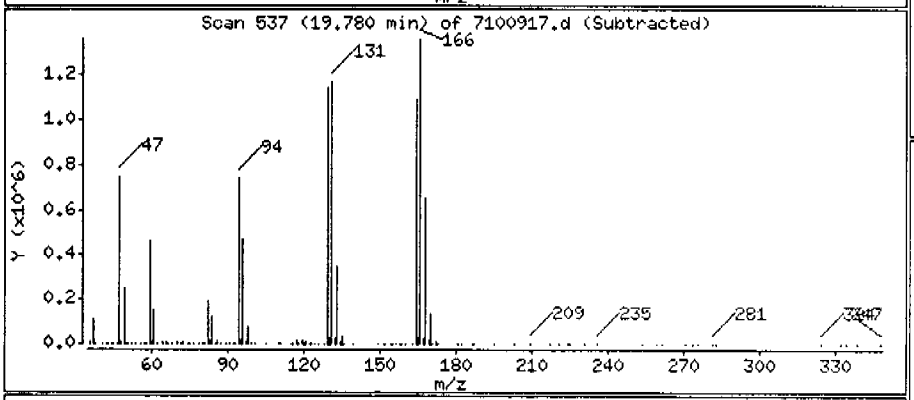
Column phase: RTx-624

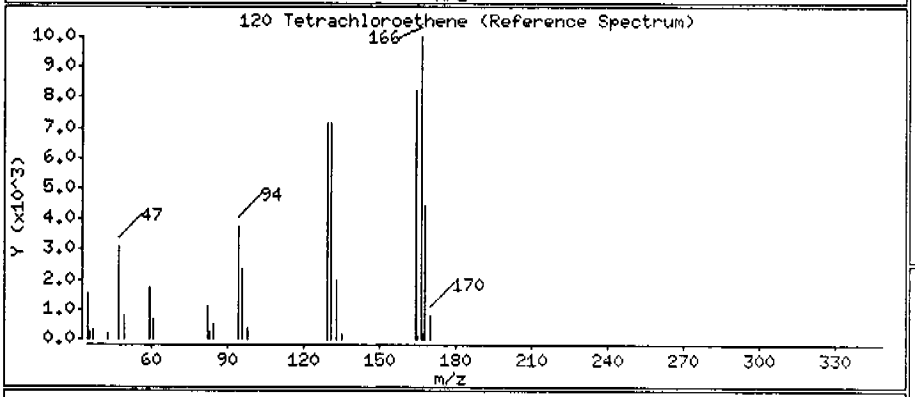
Column diameter: 0.53

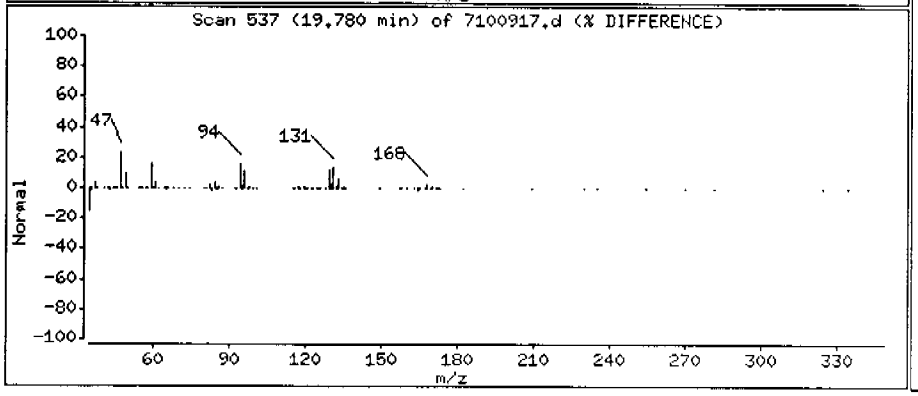
120 Tetrachloroethene

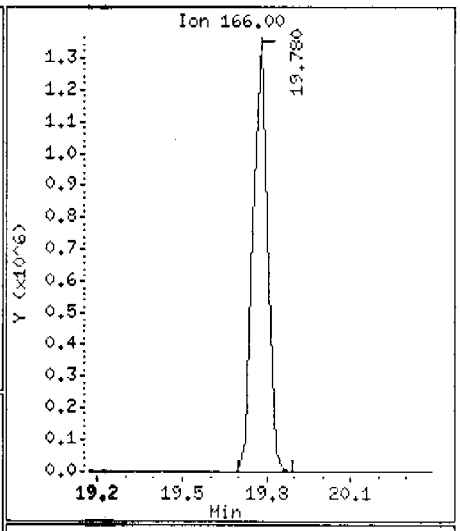
Concentration: 395.96 PPBV

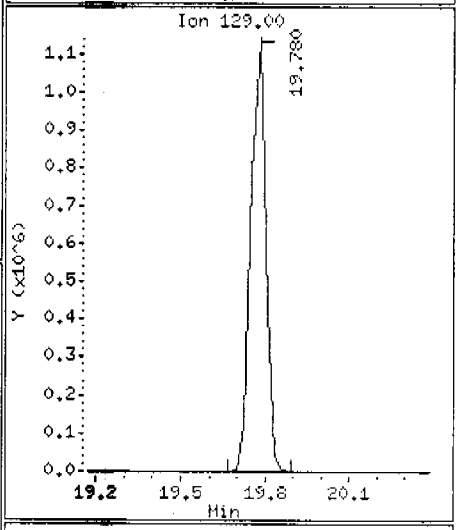


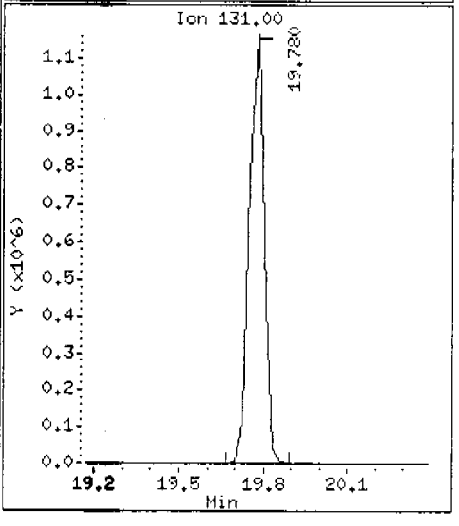












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14829

Lab ID#: 0809614-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.94	2.0	4.6	9.8
Freon 113	0.94	1.0	7.2	7.7
Acetone	3.7	4.5	8.9	11
Methylene Chloride	0.94	57	3.2	200
Chloroform	0.94	77	4.6	380
1,1,1-Trichloroethane	0.94	4.7	5.1	26
Carbon Tetrachloride	0.94	27	5.9	170
1,2-Dichloroethane	0.94	0.94	3.8	3.8
Trichloroethene	0.94	99	5.0	530
Tetrachloroethene	0.94	62	6.3	420
Propylene	3.7	4.0	6.4	6.9

0300

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14829

Lab ID#: 0809614-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100918	Date of Collection:	9/23/08
Dil. Factor:	1.87	Date of Analysis:	10/9/08 09:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.94	2.0	4.6	9.8
Freon 114	0.94	Not Detected	6.5	Not Detected
Chloromethane	3.7	Not Detected	7.7	Not Detected
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected
1,3-Butadiene	0.94	Not Detected	2.1	Not Detected
Bromomethane	0.94	Not Detected	3.6	Not Detected
Chloroethane	0.94	Not Detected	2.5	Not Detected
Freon 11	0.94	Not Detected	5.2	Not Detected
Ethanol	3.7	Not Detected	7.0	Not Detected
Freon 113	0.94	1.0	7.2	7.7
1,1-Dichloroethene	0.94	Not Detected	3.7	Not Detected
Acetone	3.7	4.5	8.9	11
2-Propanol	3.7	Not Detected	9.2	Not Detected
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected
Methylene Chloride	0.94	57	3.2	200
Methyl tert-butyl ether	0.94	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected
Hexane	0.94	Not Detected	3.3	Not Detected
1,1-Dichloroethane	0.94	Not Detected	3.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected
Chloroform	0.94	77	4.6	380
1,1,1-Trichloroethane	0.94	4.7	5.1	26
Cyclohexane	0.94	Not Detected	3.2	Not Detected
Carbon Tetrachloride	0.94	27	5.9	170
Benzene	0.94	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.94	0.94	3.8	3.8
Heptane	0.94	Not Detected	3.8	Not Detected
Trichloroethene	0.94	99	5.0	530
1,2-Dichloropropane	0.94	Not Detected	4.3	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.94	Not Detected	6.3	Not Detected
cis-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.94	Not Detected	3.8	Not Detected
Toluene	0.94	Not Detected	3.5	Not Detected
trans-1,3-Dichloropropene	0.94	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.94	Not Detected	5.1	Not Detected
Tetrachloroethene	0.94	62	6.3	420

0301

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14829

Lab ID#: 0809614-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100918	Date of Collection:	9/23/08
Dil. Factor:	1.87	Date of Analysis:	10/9/08 09:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.94	Not Detected	8.0	Not Detected
1,2-Dibromoethane (EDB)	0.94	Not Detected	7.2	Not Detected
Chlorobenzene	0.94	Not Detected	4.3	Not Detected
Ethyl Benzene	0.94	Not Detected	4.0	Not Detected
m,p-Xylene	0.94	Not Detected	4.1	Not Detected
o-Xylene	0.94	Not Detected	4.1	Not Detected
Styrene	0.94	Not Detected	4.0	Not Detected
Bromoform	0.94	Not Detected	9.7	Not Detected
1,1,2,2-Tetrachloroethane	0.94	Not Detected	6.4	Not Detected
4-Ethyltoluene	0.94	Not Detected	4.6	Not Detected
1,3,5-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected
1,2,4-Trimethylbenzene	0.94	Not Detected	4.6	Not Detected
1,3-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
1,4-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
alpha-Chlorotoluene	0.94	Not Detected	4.8	Not Detected
1,2-Dichlorobenzene	0.94	Not Detected	5.6	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	28	Not Detected
Hexachlorobutadiene	3.7	Not Detected	40	Not Detected
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected
Methanol	94	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	4.0	6.4	6.9

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	94	70-130

0302

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100918.d
Lab Smp Id: 0809614-14A
Inj Date : 09-OCT-2008 21:12
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #4376
Misc Info : 8.5"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.87000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	311007	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	247086			28.92- 128.92	79.45
14.333	14.333 (1.000)	49	1163559			320.90- 420.90	374.13
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.103 (1.000)	114	961120	25.0000		80.00- 120.00	100.00
16.102	16.103 (1.000)	88	158273			0.00- 67.10	16.47
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1031302	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	525937			1.24- 101.24	51.00
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	615404	26.1958	26.196	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	255677			0.00- 97.37	42.55
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	910126	24.7372	24.737	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	128728			0.00- 63.85	14.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	702577			26.51- 126.51	77.20
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	497928	23.4636	23.464	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	745066			92.62- 192.62	149.63
23.291	23.291 (1.093)	176	476385			44.03- 144.03	95.67
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	81138	1.05534	1.973	80.00- 120.00	100.00
5.786	5.729 (0.404)	87	23889			0.00- 81.85	29.44
42 Freon 113					CAS #: 76-13-1		
10.186	10.158 (0.711)	151	16560	0.53980	1.009	80.00- 120.00	100.00
10.186	10.158 (0.711)	153	9078			12.55- 112.55	54.82
10.186	10.158 (0.711)	101	25191			98.99- 198.99	152.12
45 Acetone					CAS #: 67-64-1		
10.434	10.407 (0.728)	58	36434	2.41942	4.524	80.00- 120.00	100.00
10.462	10.407 (0.730)	43	187785			340.42- 440.42	515.41
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	1430402	30.6485	57.313	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	460929			0.00- 84.42	32.22
11.430	11.430 (0.797)	51	409189			0.00- 80.54	28.61
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	1783738	41.2600	77.156	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1263988			21.17- 121.17	70.86
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	111153	2.51816	4.709	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	67491			13.83- 113.83	60.72
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	734626	14.5748	27.255	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	777891			55.68- 155.68	105.89
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.550	15.550 (0.966)	62	19484	0.50378	0.9421	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	5552			0.00- 82.49	28.50
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1192683	53.2023	99.488	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1230085			52.48- 152.48	103.14
16.573	16.573 (1.029)	97	762103			14.44- 114.44	63.90

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	924869	33.1939	62.073	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	803770			35.87- 135.87	86.91
19.780	19.780	(0.929)	131	817872			35.33- 135.33	88.43
11 Propylene						CAS #: 115-07-1		
5.645	5.589	(0.394)	41	57184	2.15637	4.032	80.00- 120.00	100.00
5.645	5.589	(0.394)	42	28445			16.57- 116.57	49.74
5.645	5.589	(0.394)	39	92978			28.60- 128.60	162.59

Data File: /chem/msd7.i/09oct08.b/7100918.d
Report Date: 11-Oct-2008 08:43

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100918.d
Lab Smp Id: 0809614-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 8.5"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	311007	-14.11
97 1,4-Difluorobenze	1146510	687906	1605114	961120	-16.17
126 Chlorobenzene-d5	1241713	745028	1738398	1031302	-16.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 09oct08
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0809614-14A
Level: LOW
Operator: ra
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 8.5"psi-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.196	104.78	70-130
$ 113 Toluene-d8	25.000	24.737	98.95	70-130
$ 137 Bromofluorobenzene	25.000	23.464	93.85	70-130

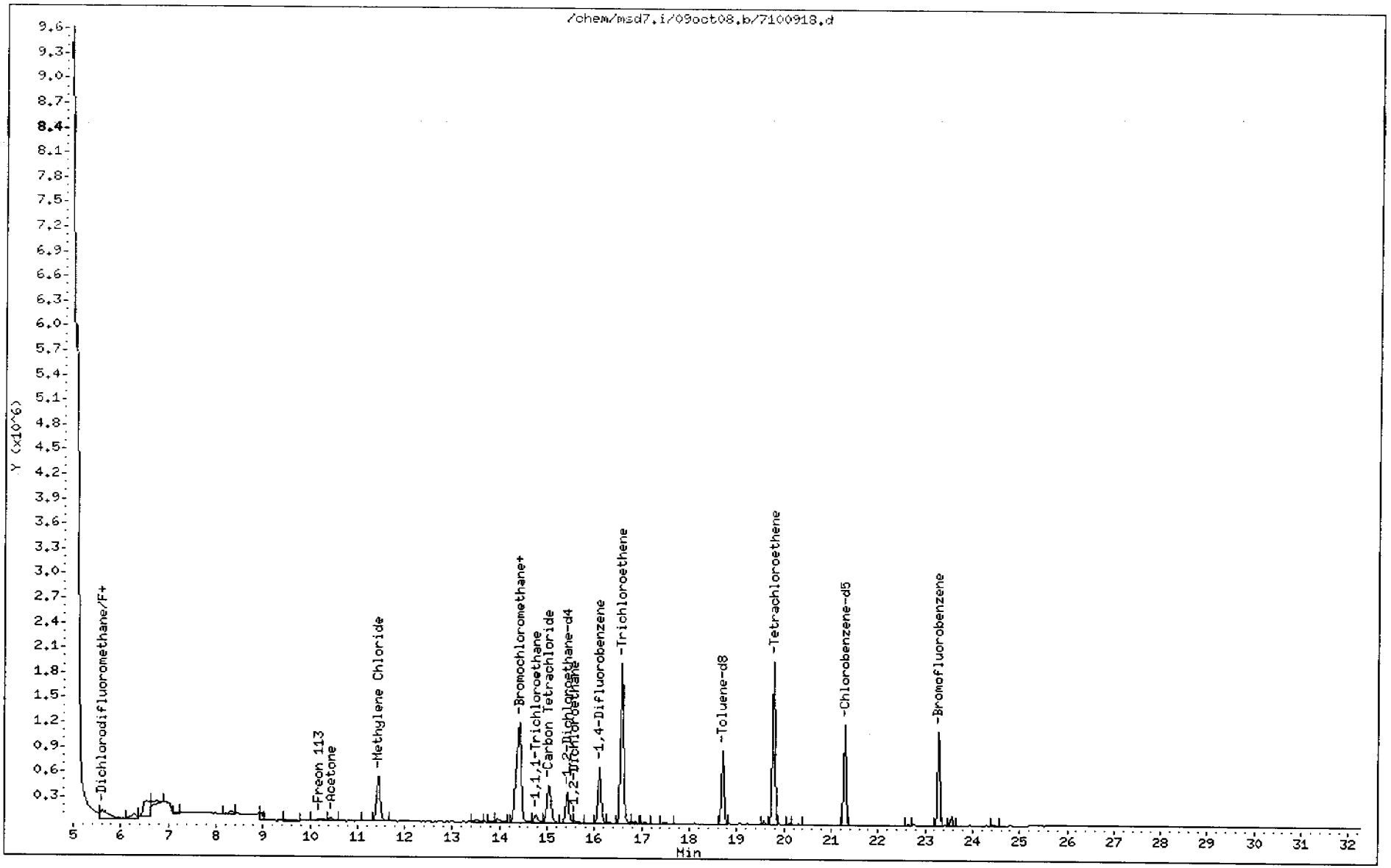
Data File: /chem/msd7.i/09oct08.b/7100918.d
Date : 09-OCT-2008 21:12
Client ID:
Sample Info: 200mL #4376

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0308



Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

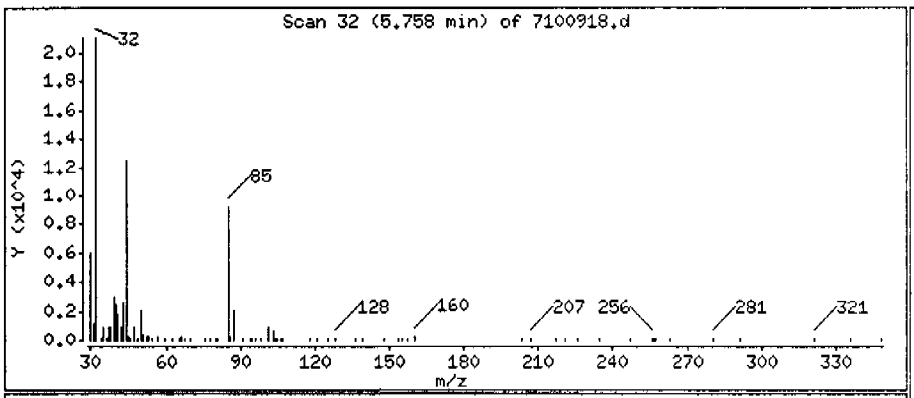
Operator: ra

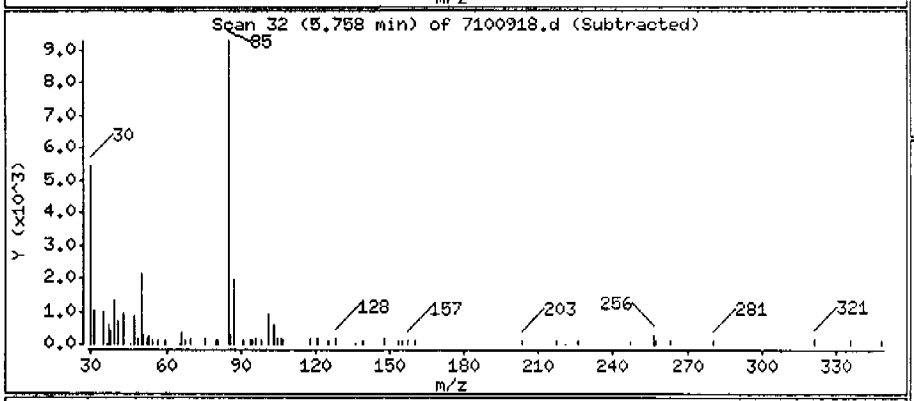
Column phase: RTx-624

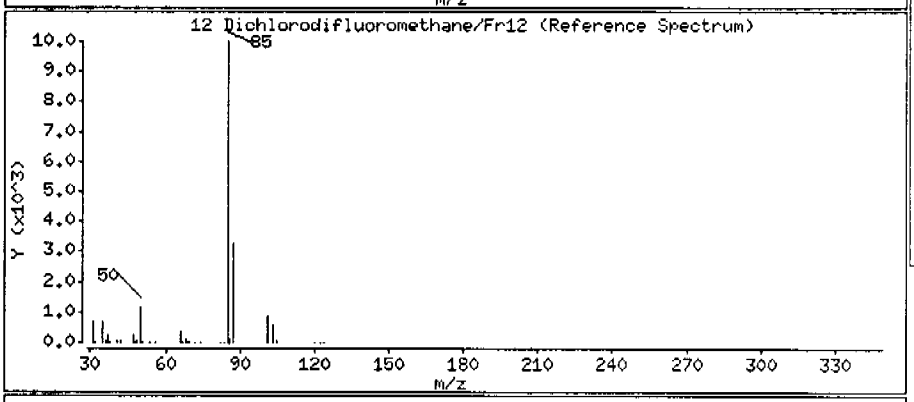
Column diameter: 0.53

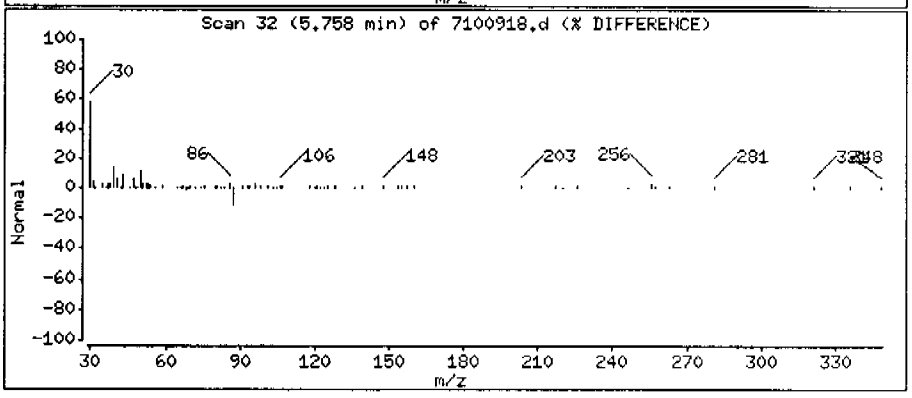
12 Dichlorodifluoromethane/Fr12

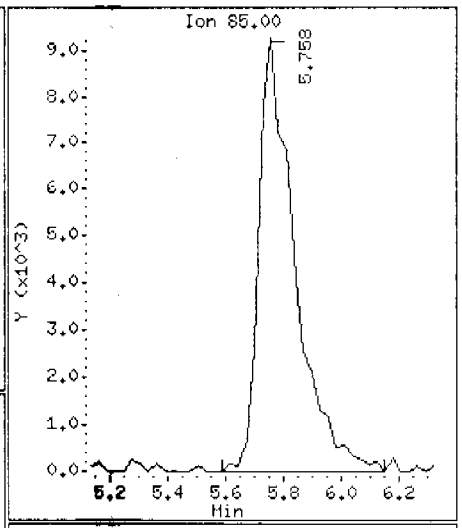
Concentration: 1.973 PPBV

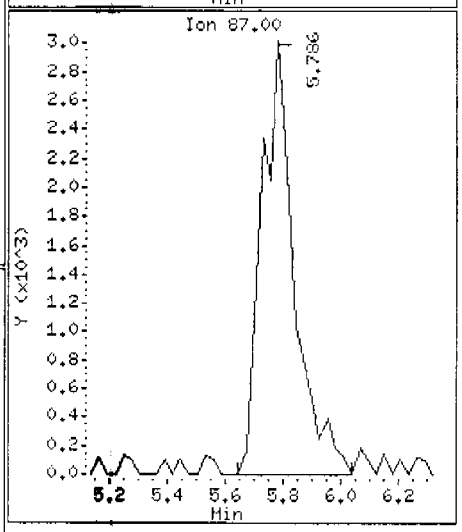












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

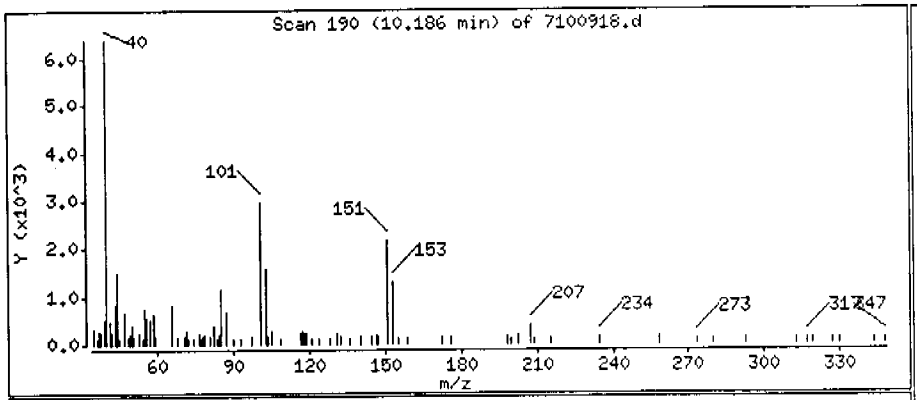
Operator: ra

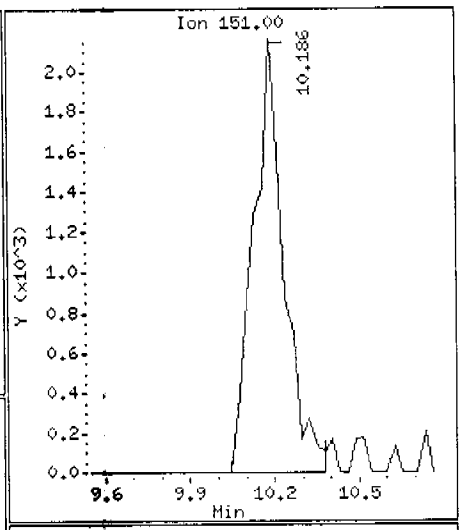
Column phase: RTx-624

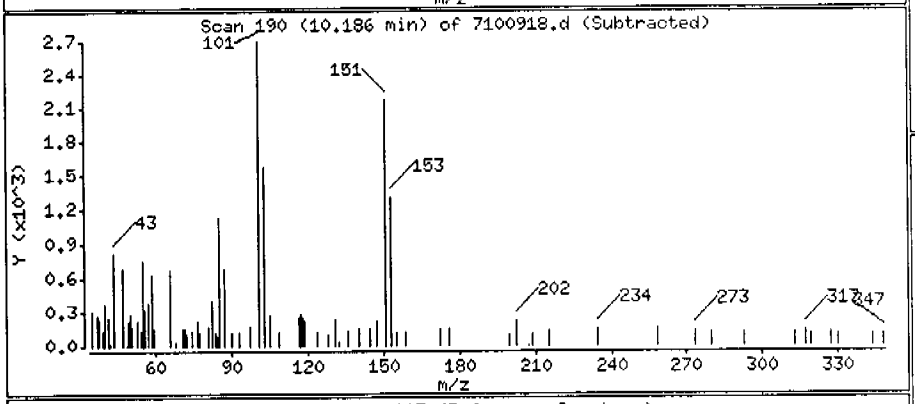
Column diameter: 0.53

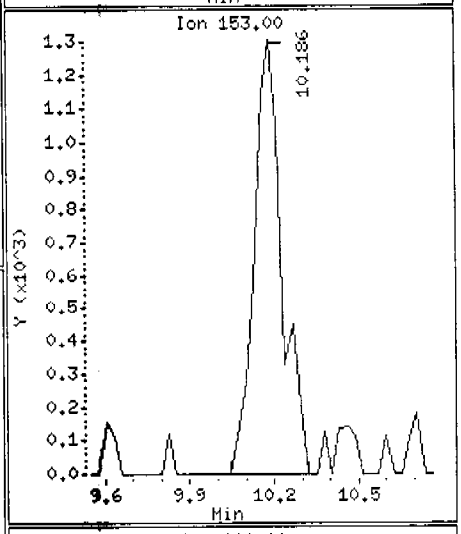
42 Freon 113

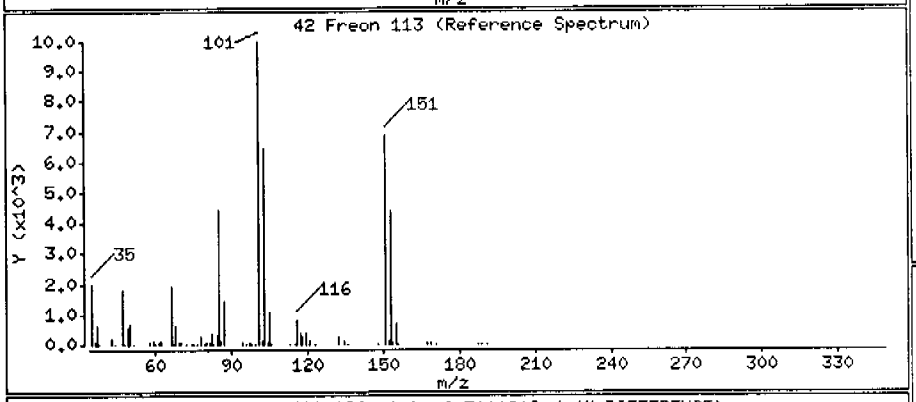
Concentration: 1.009 PPBV

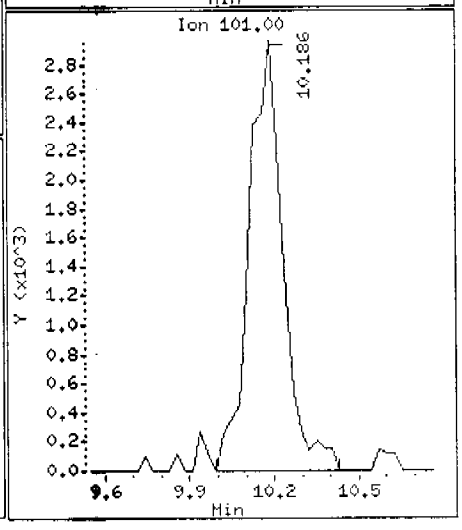


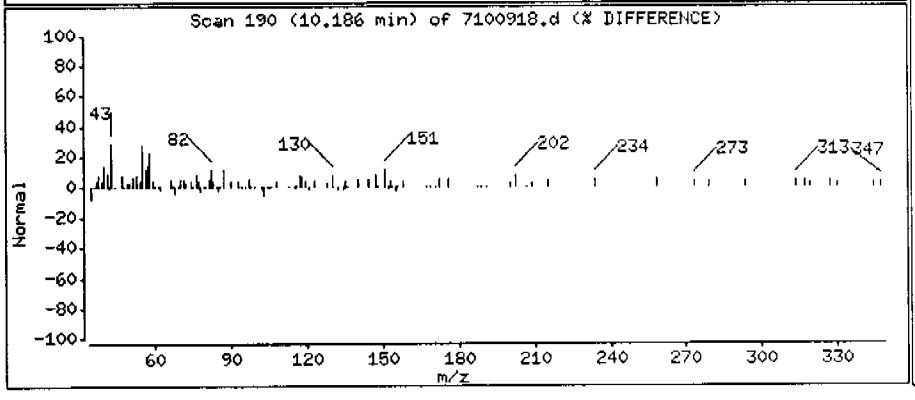












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

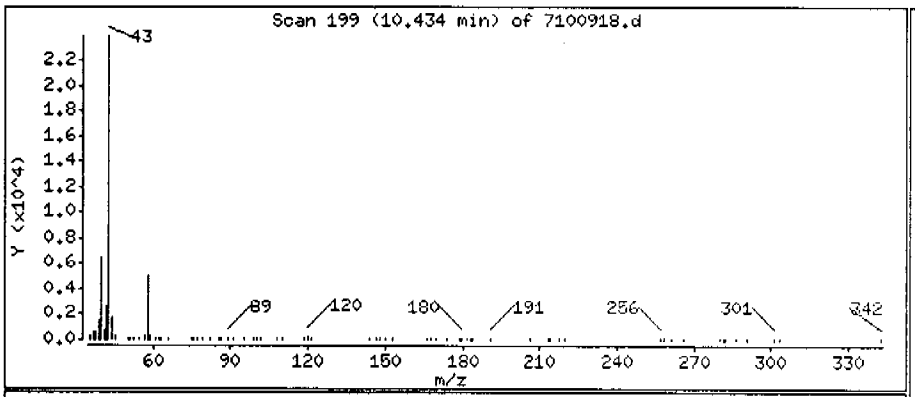
Operator: ra

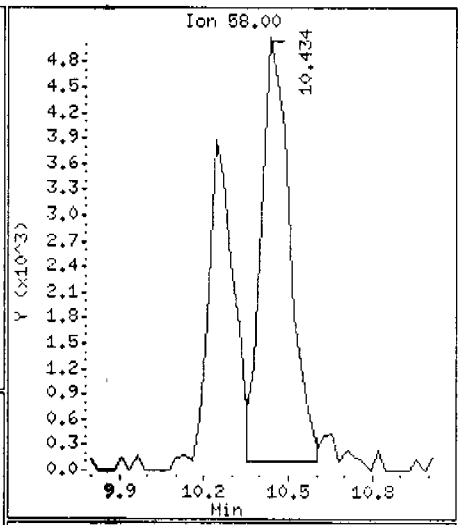
Column phase: RTx-624

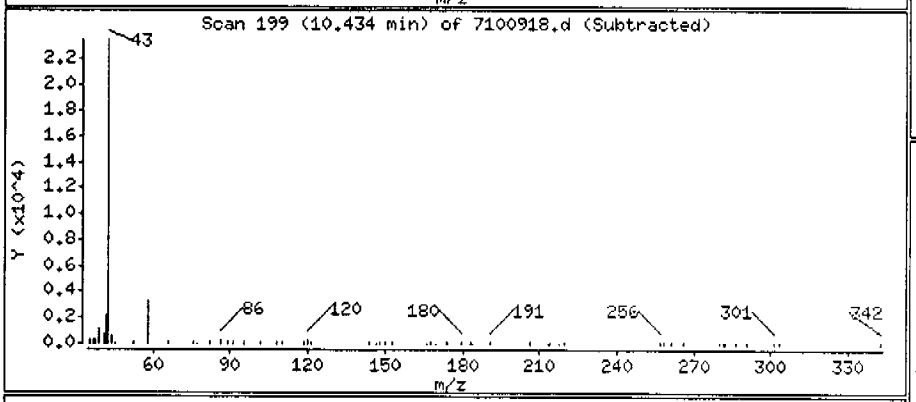
Column diameter: 0.53

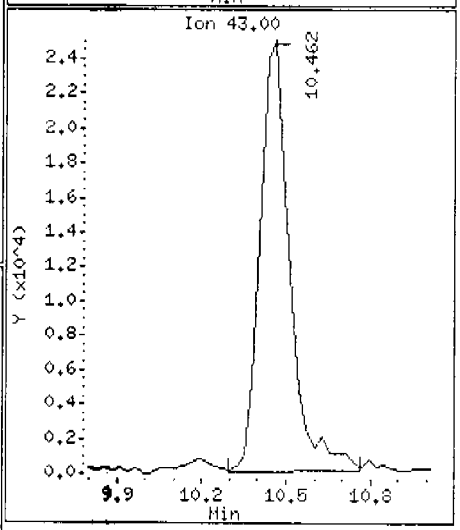
45 Acetone

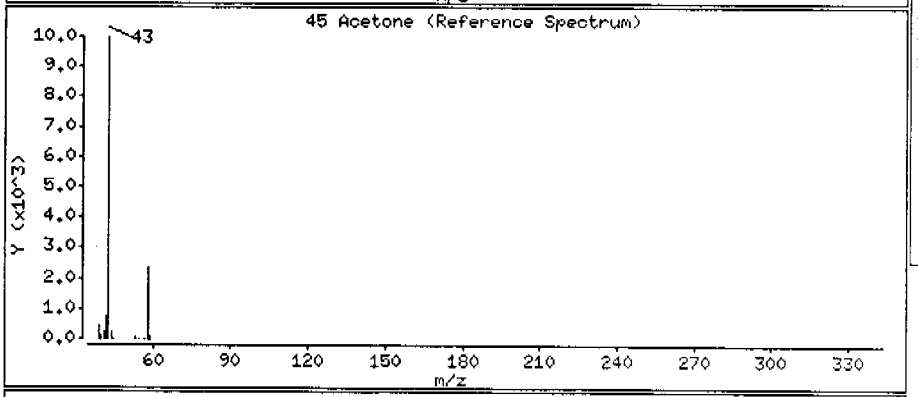
Concentration: 4.524 PPBV

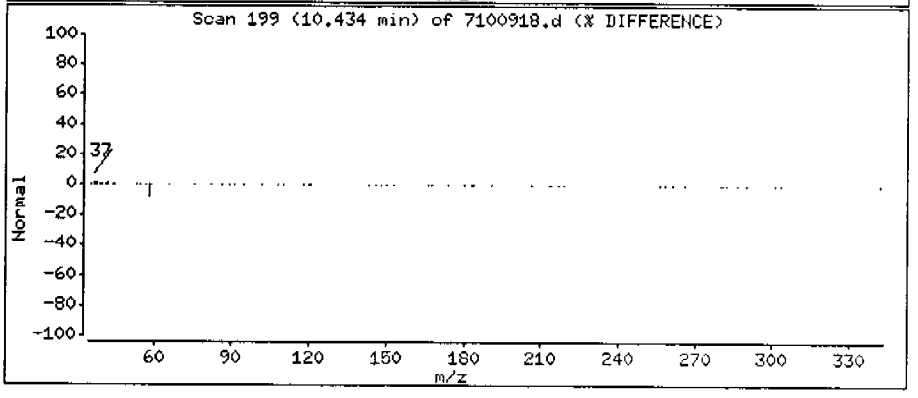












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

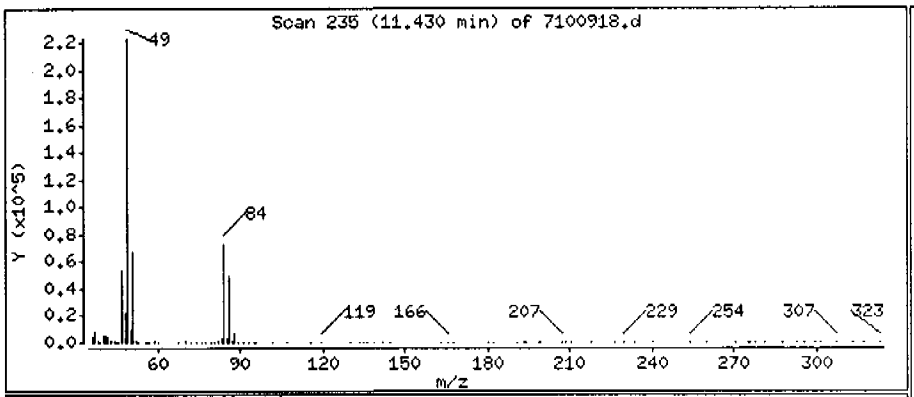
Operator: ra

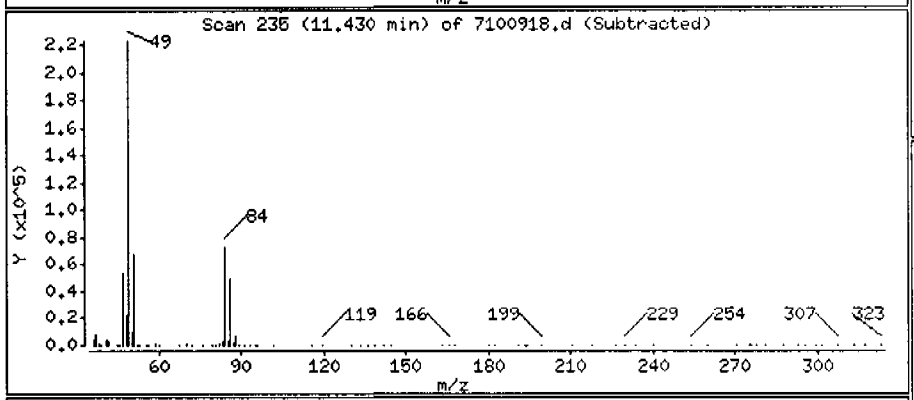
Column phase: RTx-624

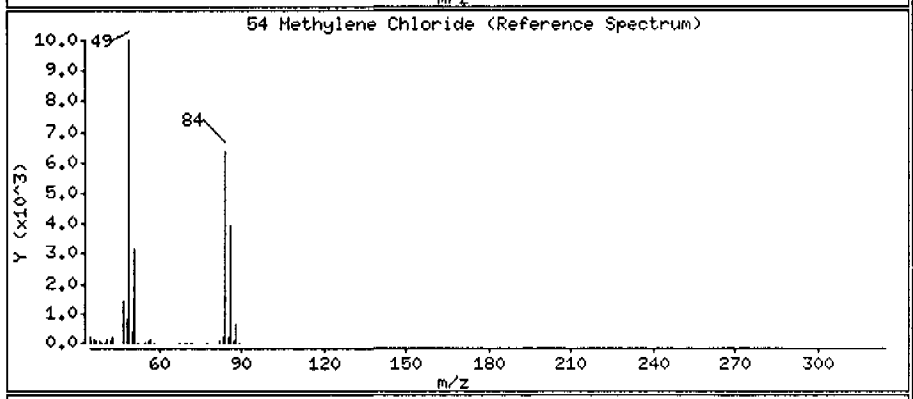
Column diameter: 0.53

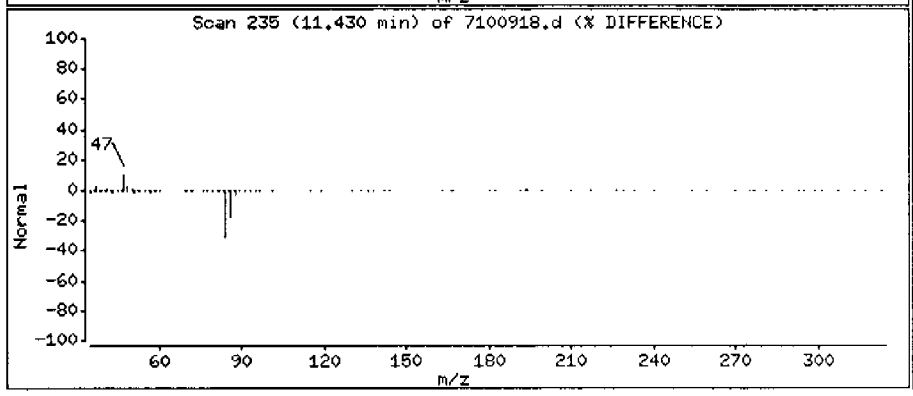
54 Methylene Chloride

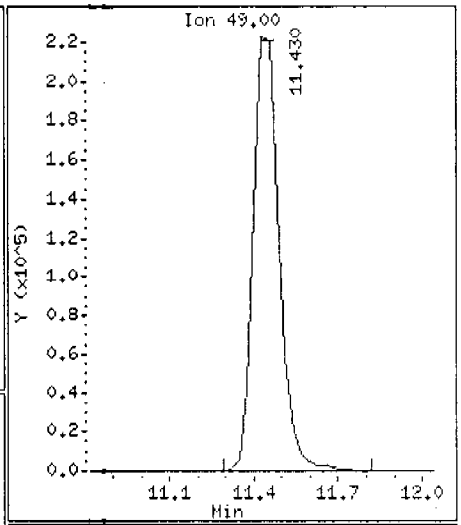
Concentration: 57.313 PPBV

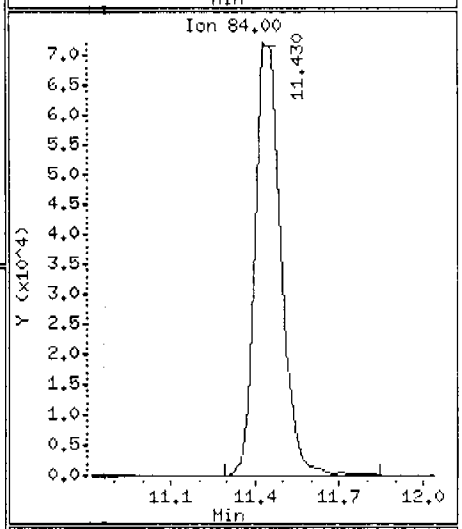


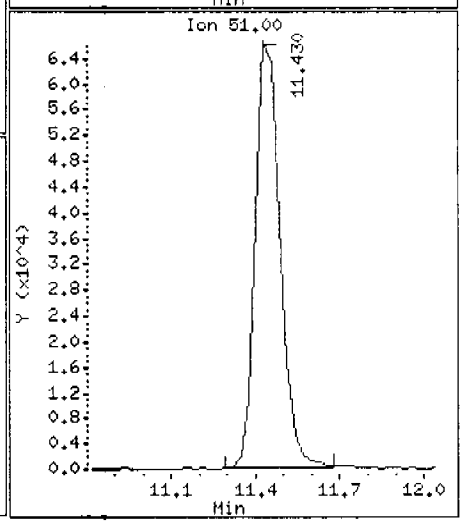












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

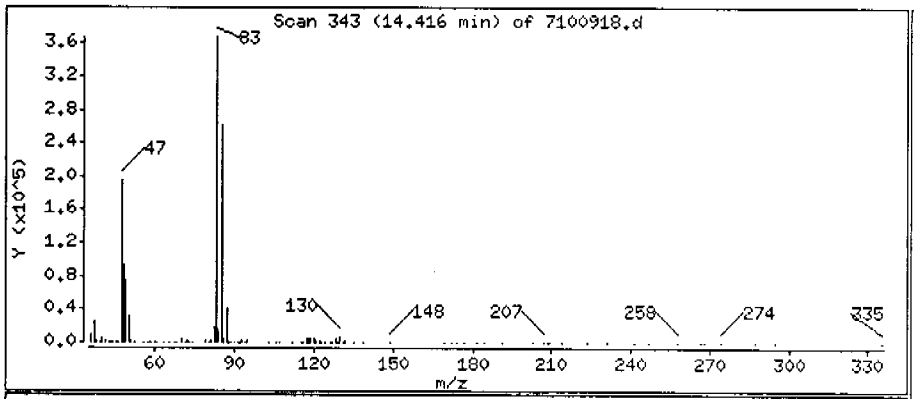
Operator: ra

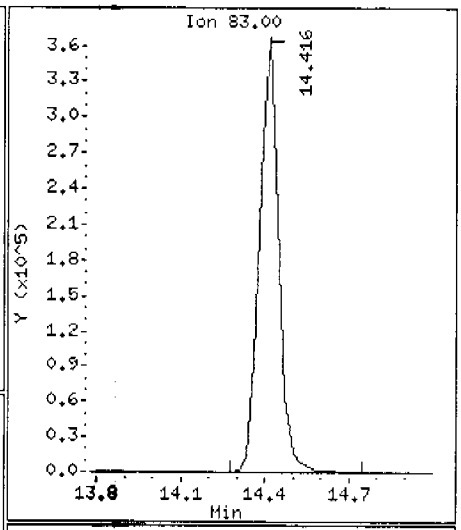
Column phase: RTx-624

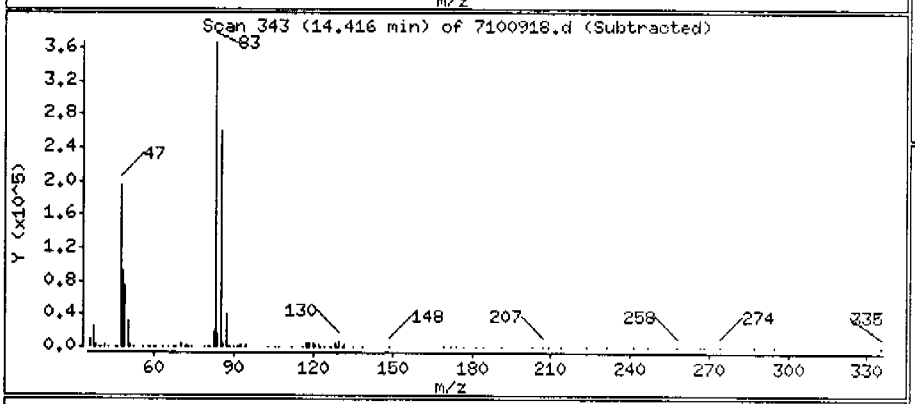
Column diameter: 0.53

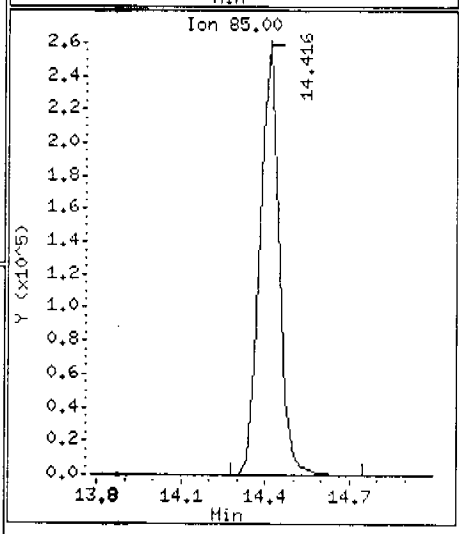
82 Chloroform

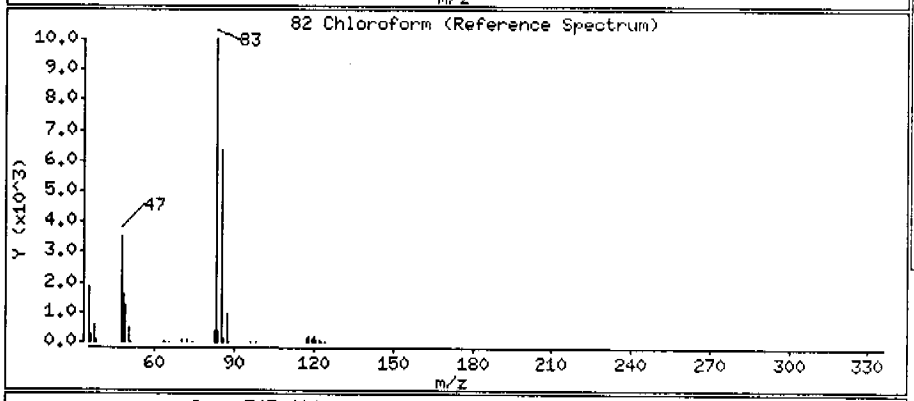
Concentration: 77.156 PPBV

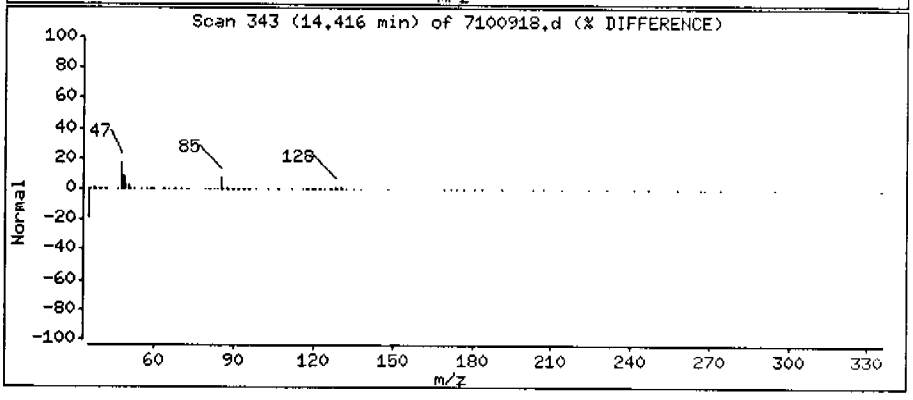












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

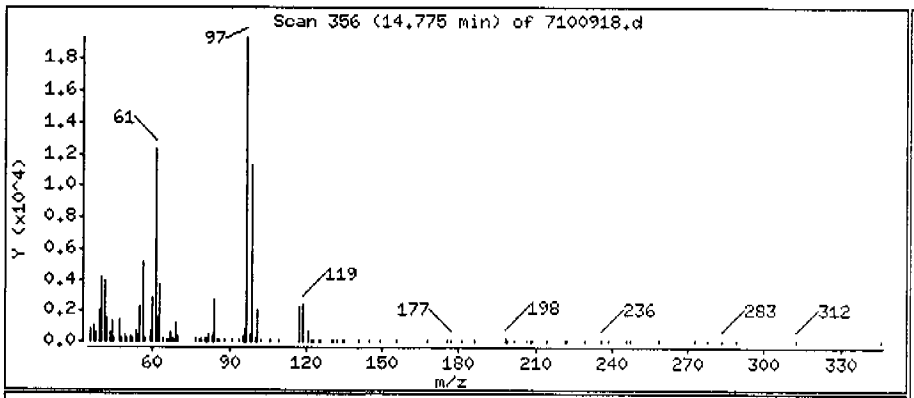
Operator: ra

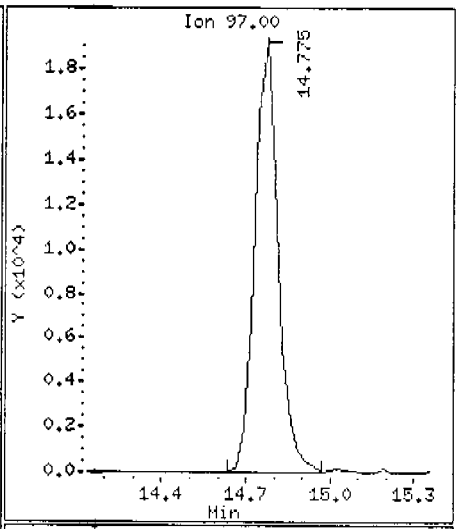
Column phase: RTx-624

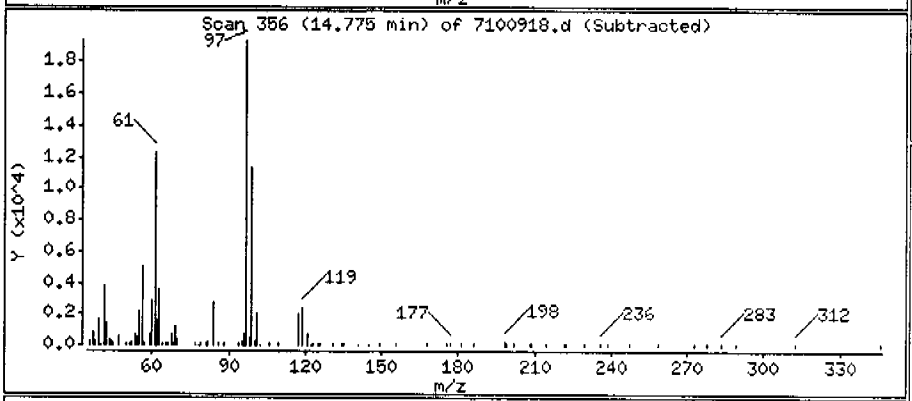
Column diameter: 0.53

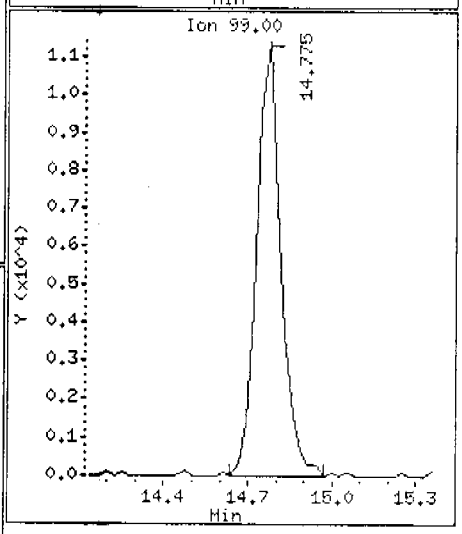
83 1,1,1-Trichloroethane

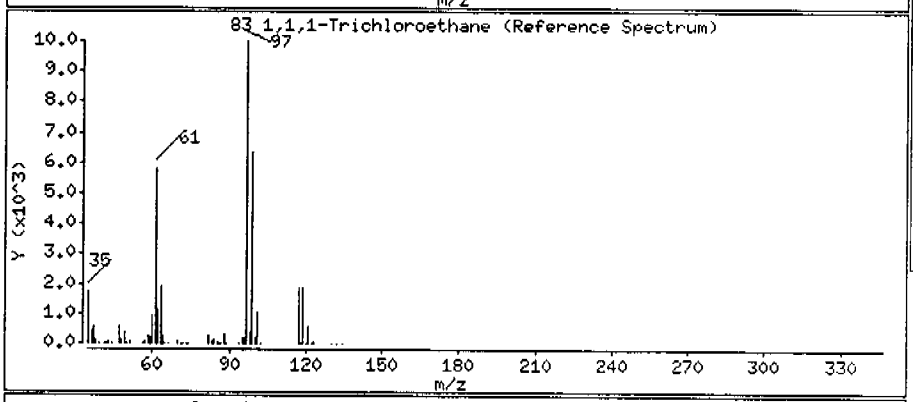
Concentration: 4.709 PPBV

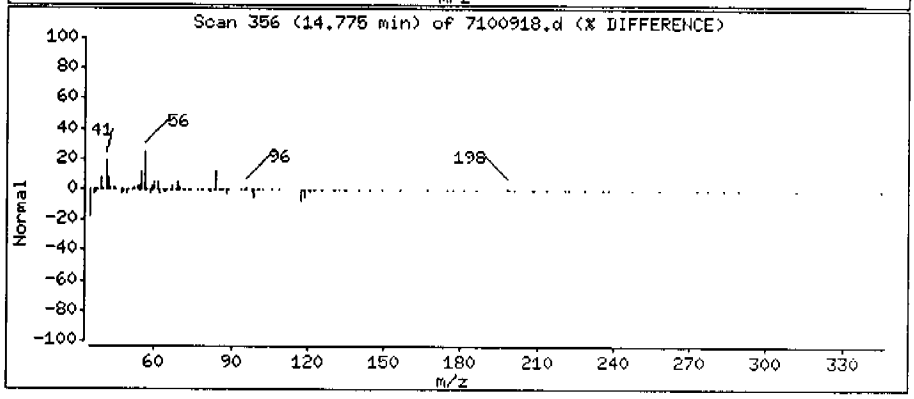












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

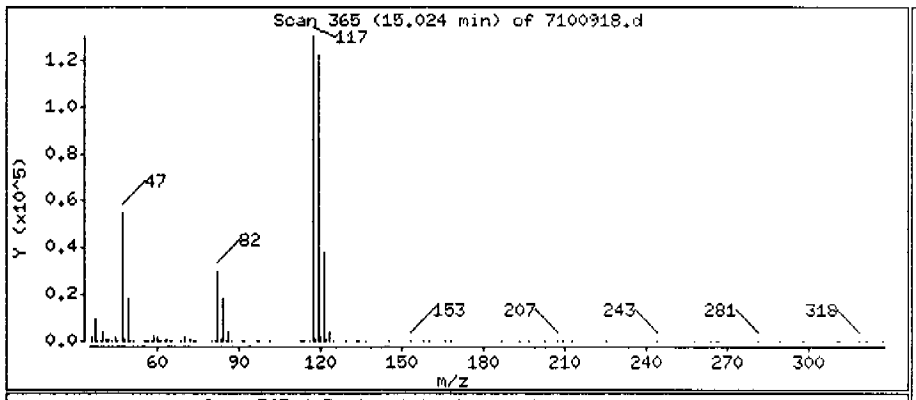
Operator: ra

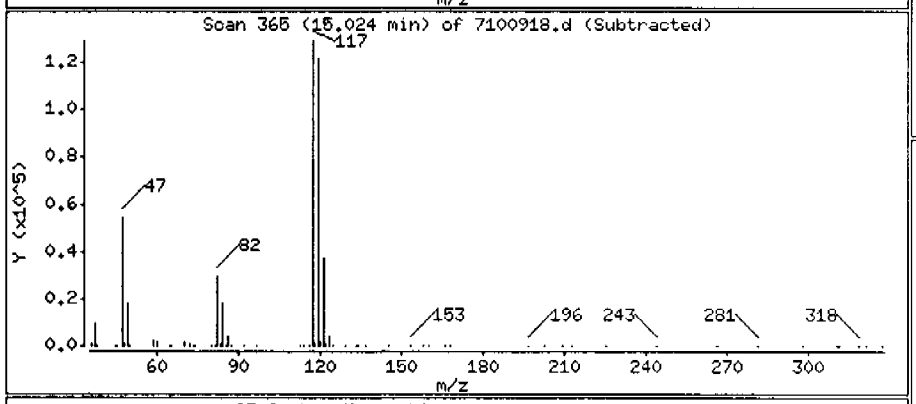
Column phase: RTx-624

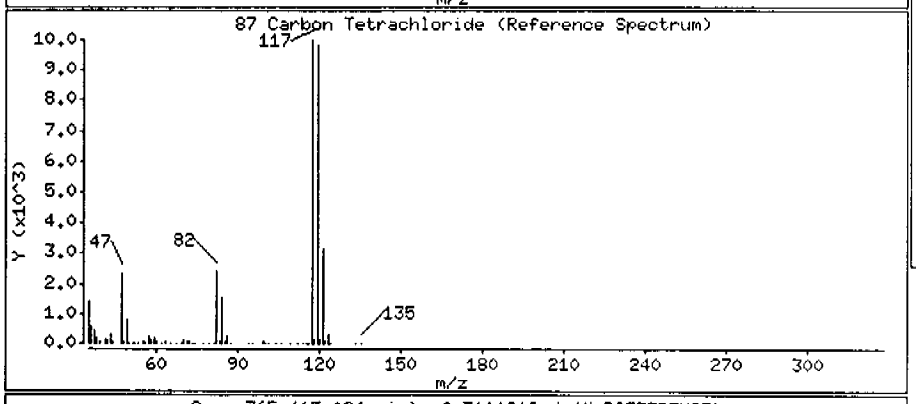
Column diameter: 0.53

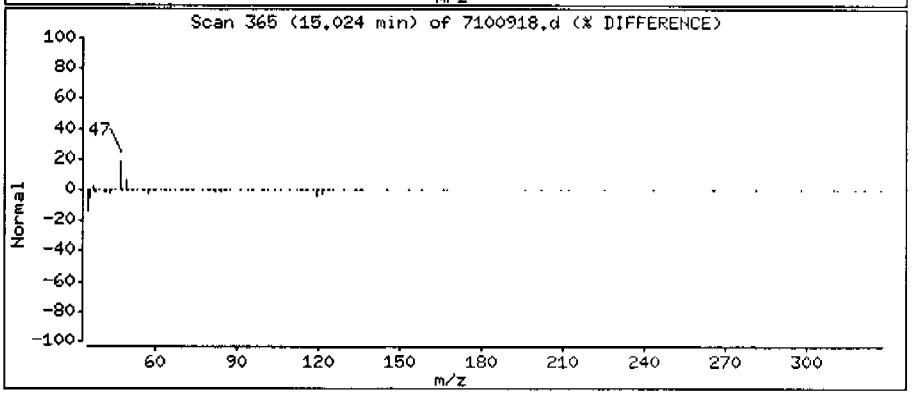
87 Carbon Tetrachloride

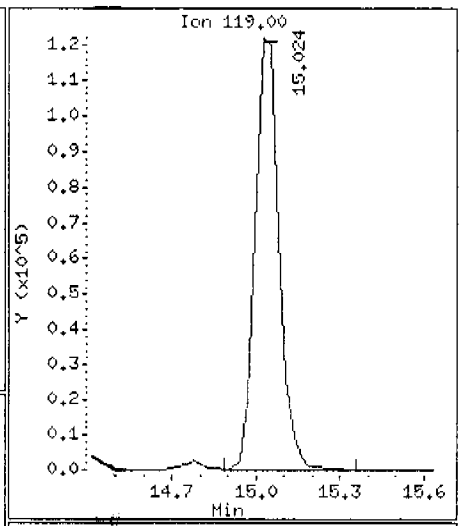
Concentration: 27.255 PPBV

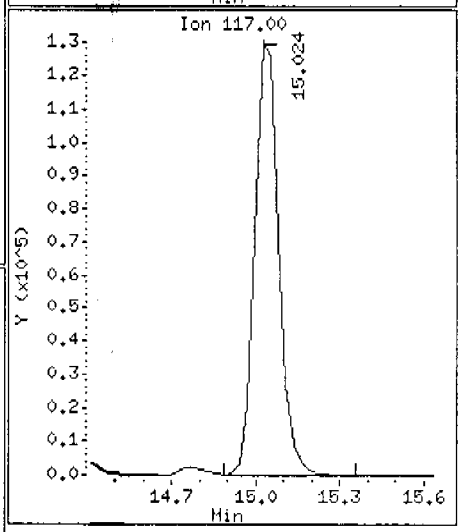












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

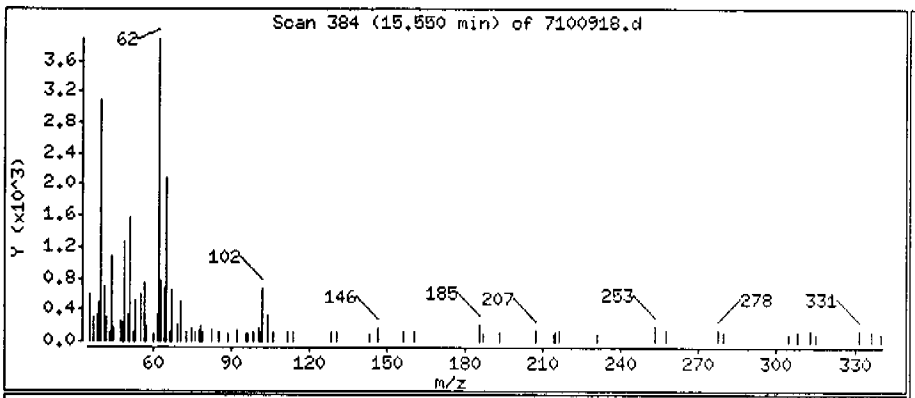
Operator: ra

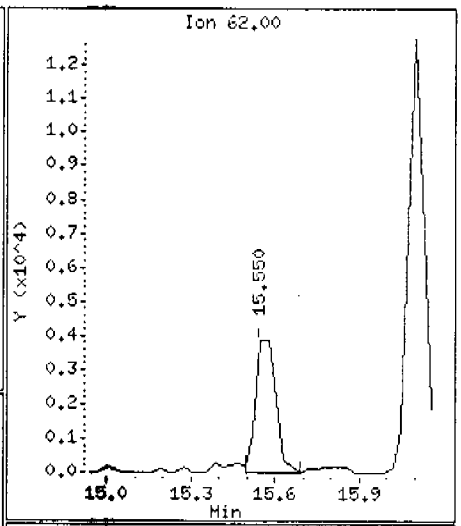
Column phase: RTx-624

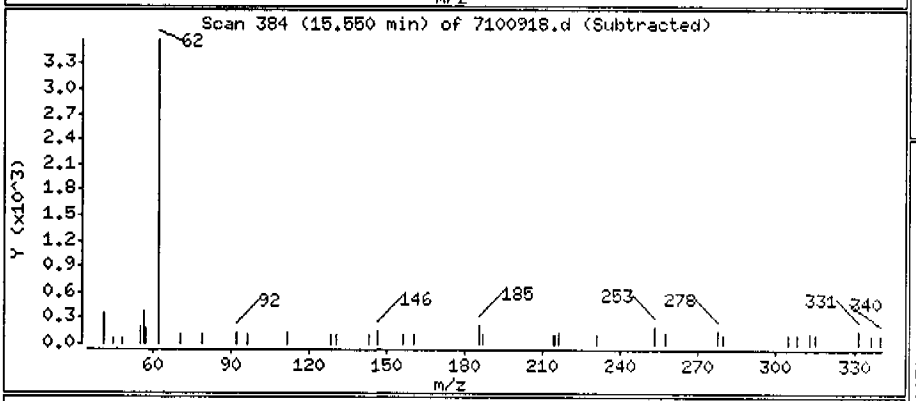
Column diameter: 0.53

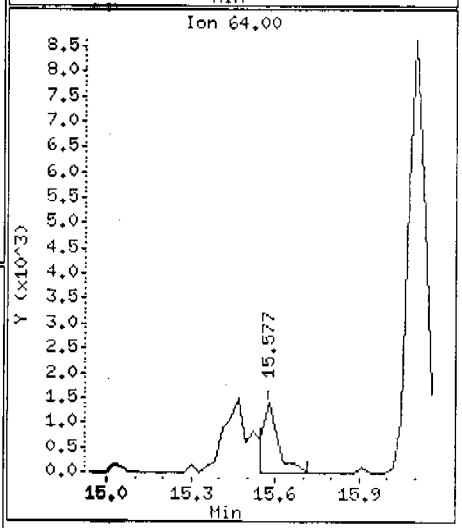
93 1,2-Dichloroethane

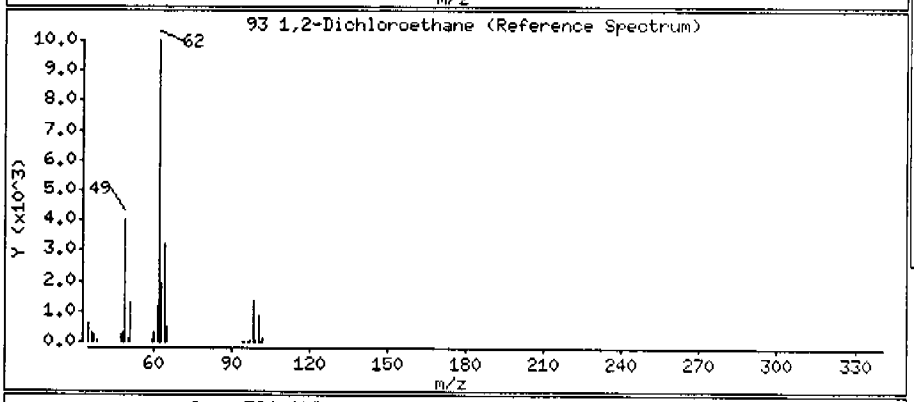
Concentration: 0.9421 PPBV

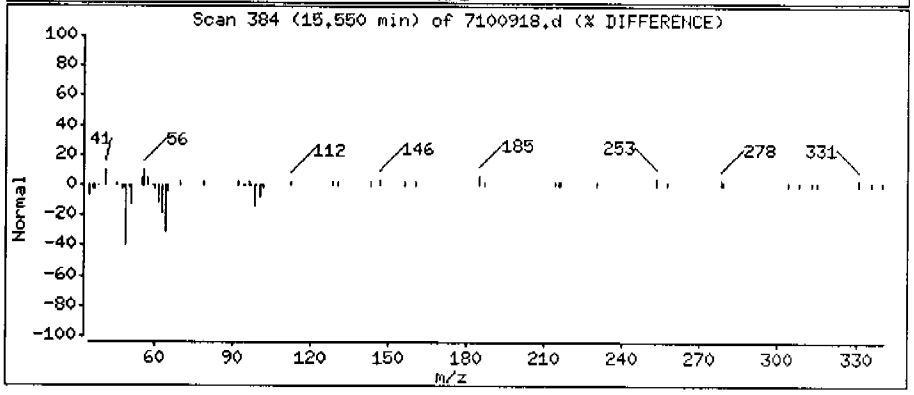












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

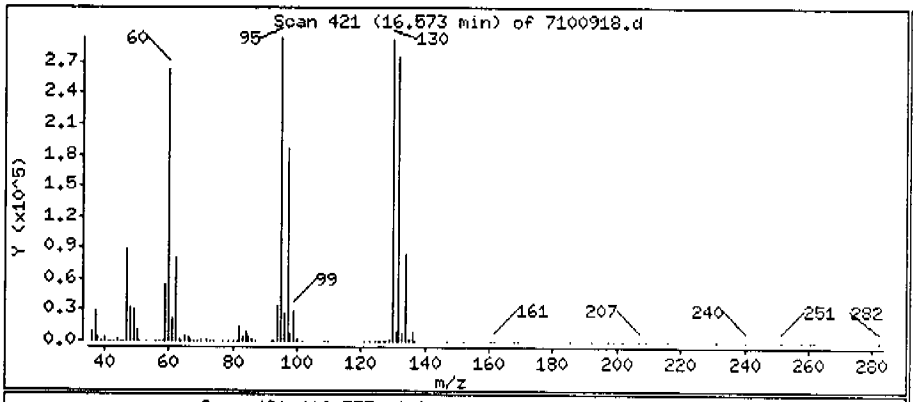
Operator: ra

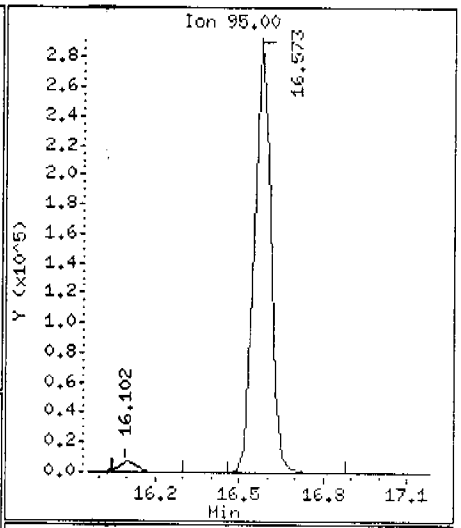
Column phase: RTx-624

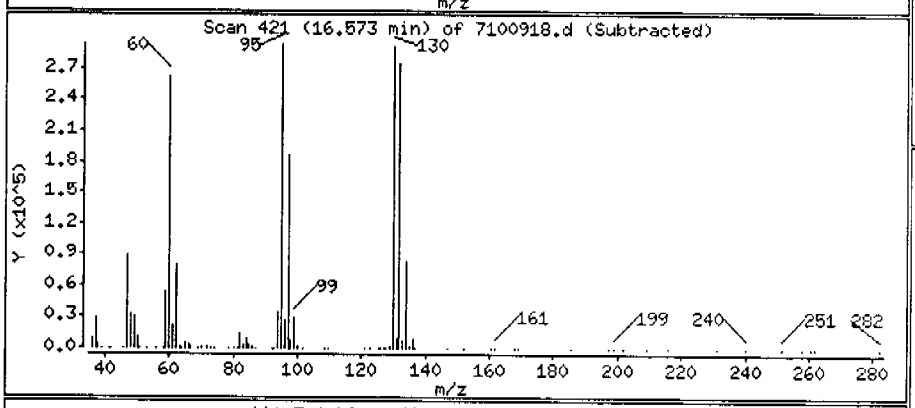
Column diameter: 0.53

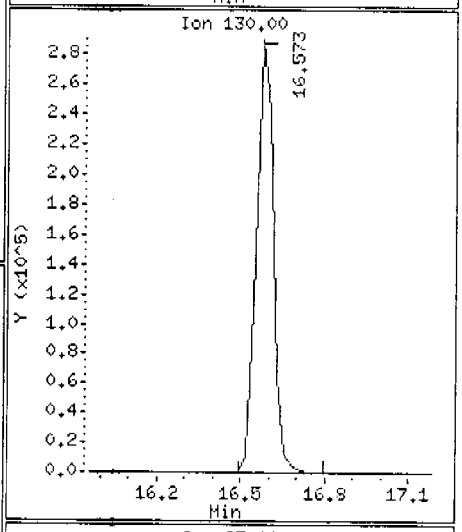
101 Trichloroethene

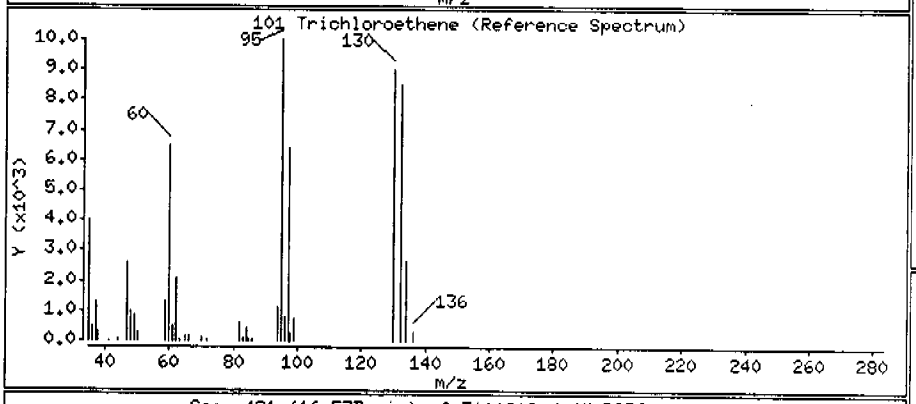
Concentration: 99.488 PPBV

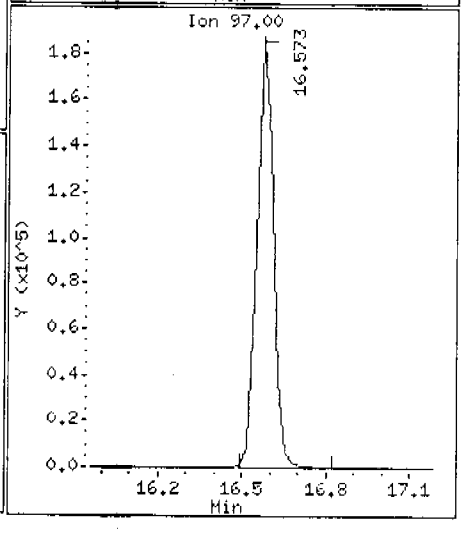


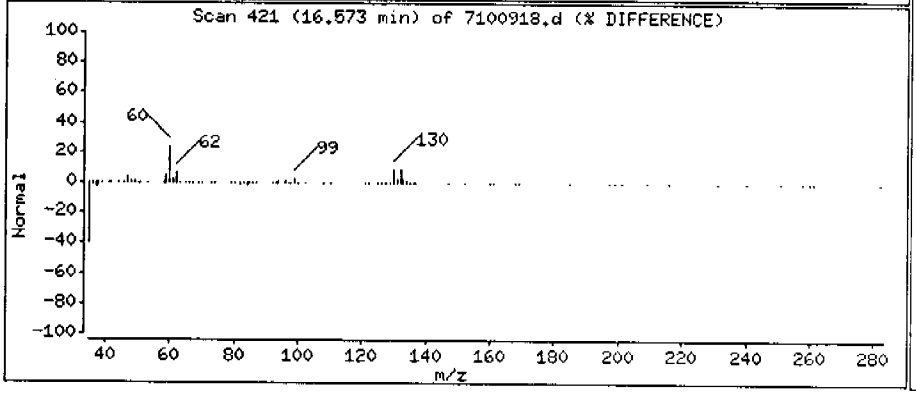












Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

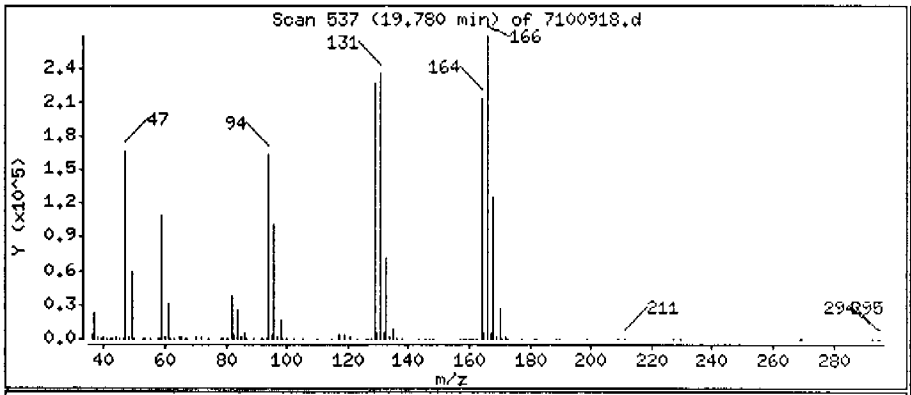
Operator: ra

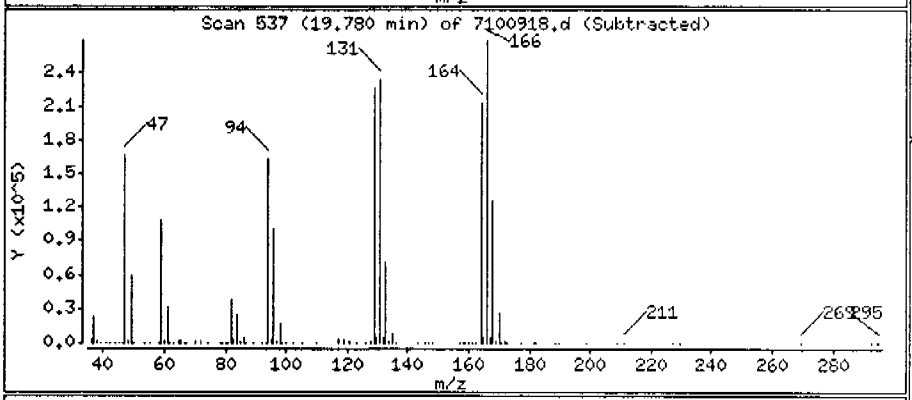
Column phase: RTx-624

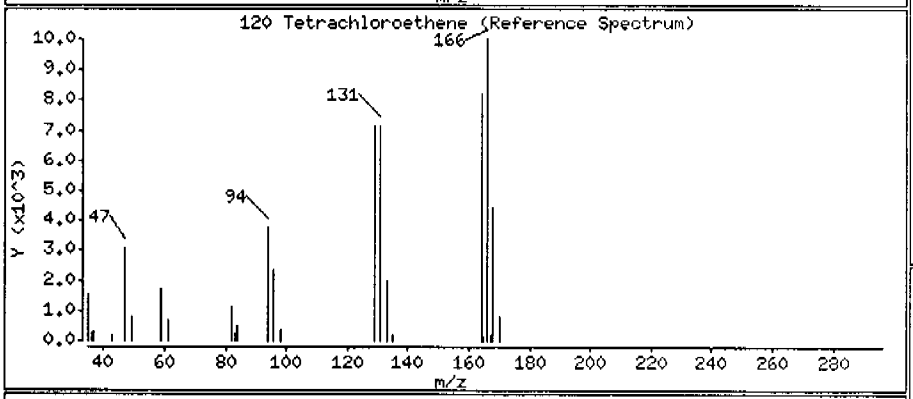
Column diameter: 0.53

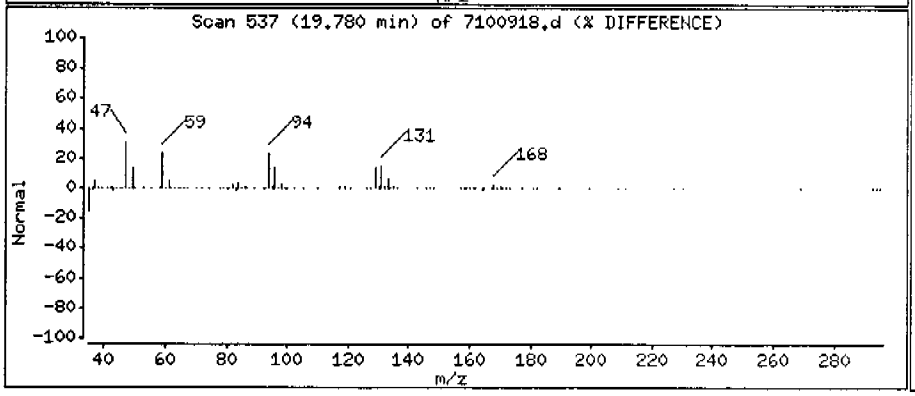
120 Tetrachloroethene

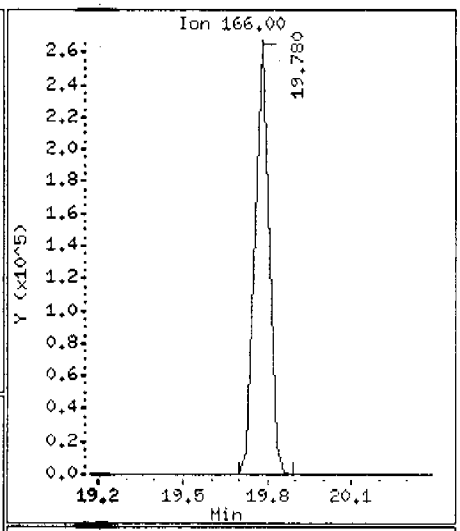
Concentration: 62.073 PPBV

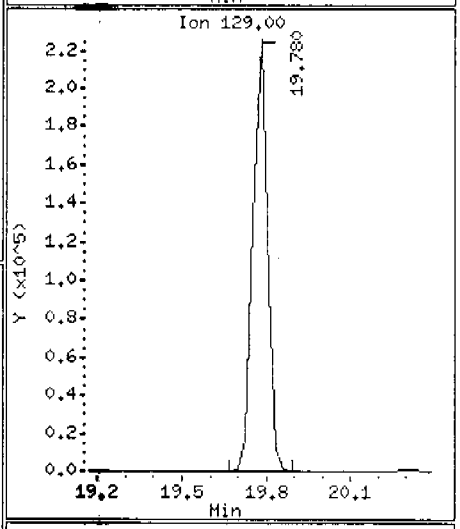


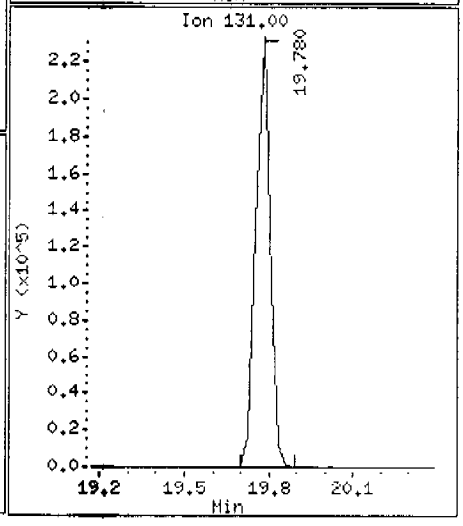












0318

Data File: /chem/msd7.i/09oct08.b/7100918.d

Date : 09-OCT-2008 21:12

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4376

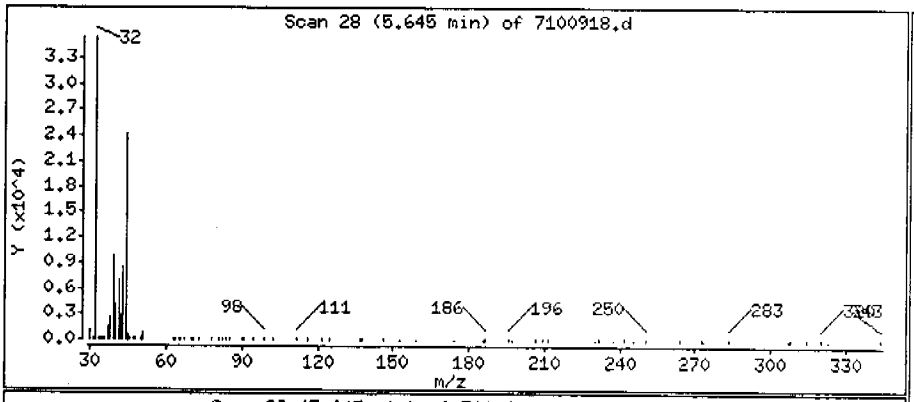
Operator: rs

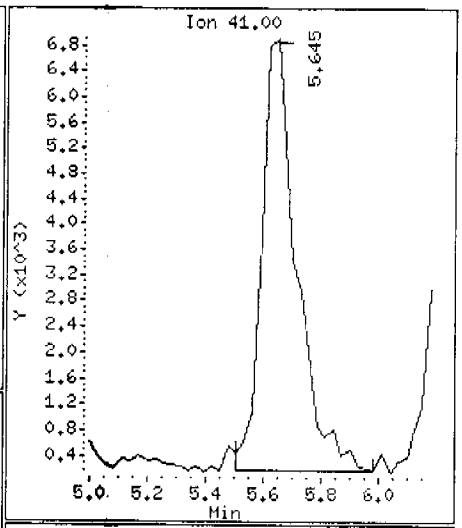
Column phase: RTx-624

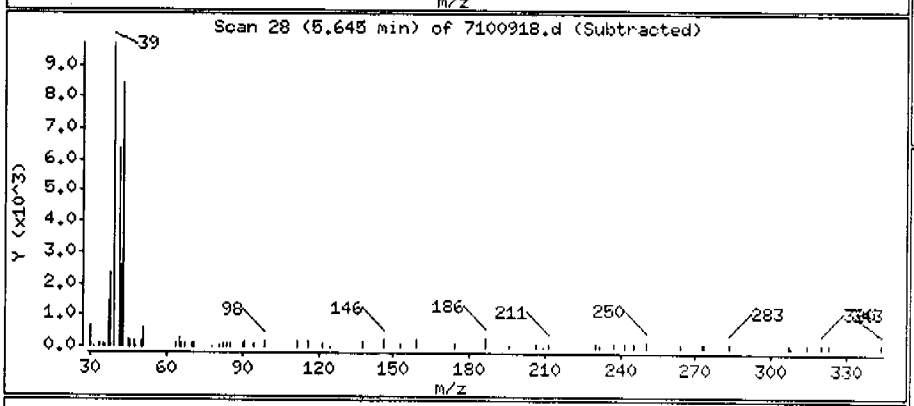
Column diameter: 0.53

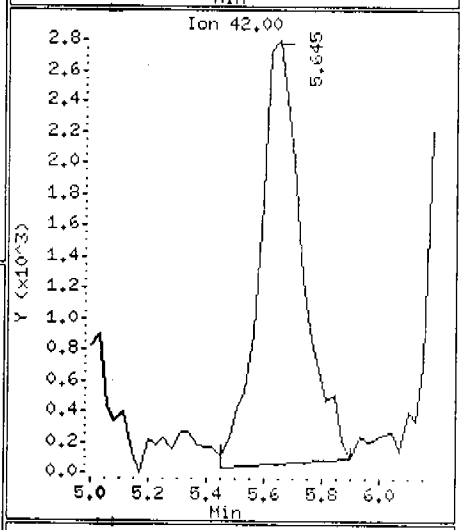
11 Propylene

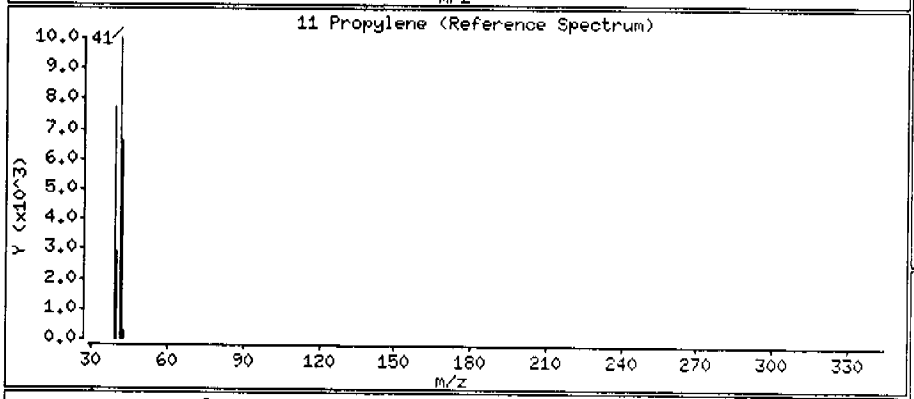
Concentration: 4.032 PPBV

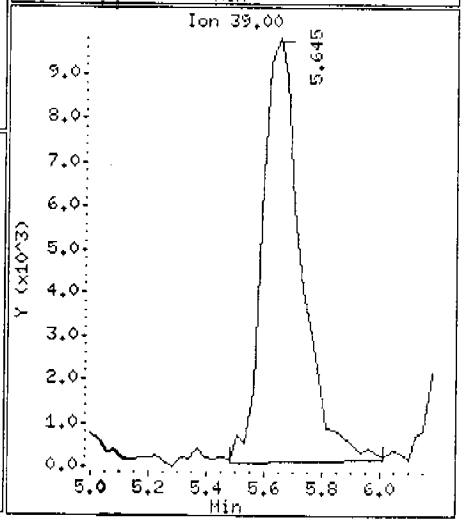


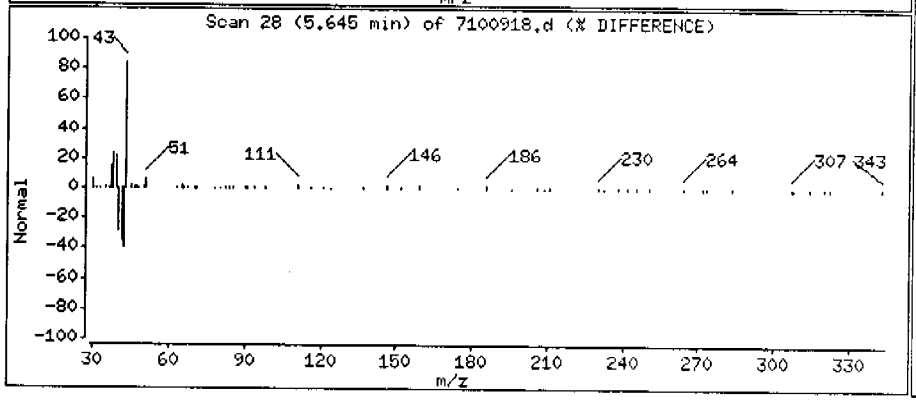












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14830

Lab ID#: 0809614-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	2.0	4.7	9.8
Freon 113	0.96	1.4	7.3	10
1,1-Dichloroethene	0.96	1.3	3.8	5.2
Acetone	3.8	5.3	9.1	12
Methylene Chloride	0.96	190	3.3	660
Chloroform	0.96	98	4.7	480
1,1,1-Trichloroethane	0.96	4.3	5.2	24
Carbon Tetrachloride	0.96	52	6.0	320
1,2-Dichloroethane	0.96	2.8	3.9	11
Trichloroethene	0.96	120	5.1	640
Tetrachloroethene	0.96	29	6.5	200
Propylene	3.8	7.5	6.6	13

0320

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14830

Lab ID#: 0809614-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100919	**Date of Collection:**	9/23/08
Dil. Factor:	1.91	**Date of Analysis:**	10/9/08 09:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	2.0	4.7	9.8
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	Not Detected	7.2	Not Detected
Freon 113	0.96	1.4	7.3	10
1,1-Dichloroethene	0.96	1.3	3.8	5.2
Acetone	3.8	5.3	9.1	12
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected
Methylene Chloride	0.96	190	3.3	660
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	98	4.7	480
1,1,1-Trichloroethane	0.96	4.3	5.2	24
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	52	6.0	320
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	2.8	3.9	11
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	120	5.1	640
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	Not Detected	5.2	Not Detected
Tetrachloroethene	0.96	29	6.5	200

0321

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14830

Lab ID#: 0809614-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100919**	**Date of Collection:**	**9/23/08**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/9/08 09:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.8	Not Detected	16	Not Detected
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected
Chlorobenzene	0.96	Not Detected	4.4	Not Detected
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	Not Detected	4.1	Not Detected
o-Xylene	0.96	Not Detected	4.1	Not Detected
Styrene	0.96	Not Detected	4.1	Not Detected
Bromoform	0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected
Methanol	96	Not Detected	120	Not Detected
n-Butanol	3.8	Not Detected	12	Not Detected
Propylene	3.8	7.5	6.6	13

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130

0322

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100919.d
Lab Smp Id: 0809614-15A
Inj Date : 09-OCT-2008 21:51
Operator : ra Inst ID: msd7.i
Smp Info : 200mL #33961
Misc Info : 9.0"psi-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.361	14.333 (1.000)	130	316285	25.0000		80.00- 120.00	100.00
14.361	14.333 (1.000)	128	244251			28.92- 128.92	77.23
14.333	14.333 (1.000)	49	1248926			320.90- 420.90	394.87
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	966657	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	169500			0.00- 67.10	17.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1035907	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	541527			1.24- 101.24	52.28
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.075)	65	610891	25.5698	25.570	80.00- 120.00	100.00
15.439	15.411 (1.075)	67	257002			0.00- 97.37	42.07
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	935103	25.2705	25.270	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	130256			0.00- 63.85	13.93

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	716694			26.51- 126.51	76.64
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	509518	23.9030	23.903	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	747487			92.62- 192.62	146.70
23.291	23.291 (1.093)	176	488439			44.03- 144.03	95.86
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.401)	85	81353	1.04048	1.987	80.00- 120.00	100.00
5.758	5.729 (0.401)	87	27618			0.00- 81.85	33.95
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.707)	151	22350	0.71638	1.368	80.00- 120.00	100.00
10.158	10.158 (0.707)	153	13181			12.55- 112.55	58.98
10.130	10.158 (0.705)	101	35003			98.99- 198.99	156.61
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.715)	61	37503	0.69125	1.320	80.00- 120.00	100.00
10.296	10.269 (0.717)	96	10605			0.00- 87.74	28.28
10.269	10.269 (0.715)	98	7853			0.00- 73.80	20.94
45 Acetone					CAS #: 67-64-1		
10.462	10.407 (0.729)	58	42236	2.75790	5.268	80.00- 120.00	100.00
10.462	10.407 (0.729)	43	207223			340.42- 440.42	490.63
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.430 (0.798)	49	4745896	99.9910	190.98	80.00- 120.00	100.00
11.457	11.430 (0.798)	84	1539027			0.00- 84.42	32.43
11.457	11.430 (0.798)	51	1357512			0.00- 80.54	28.60
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.004)	83	2253852	51.2643	97.915	80.00- 120.00	100.00
14.416	14.388 (1.004)	85	1616746			21.17- 121.17	71.73
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.029)	97	101468	2.26039	4.317	80.00- 120.00	100.00
14.775	14.748 (1.029)	99	66030			13.83- 113.83	65.07
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.052	15.024 (1.048)	119	1382855	26.9777	51.527	80.00- 120.00	100.00
15.052	15.024 (1.048)	117	1422810			55.68- 155.68	102.89
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	56347	1.44857	2.767	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	18220			0.00- 82.49	32.34

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1417413	62.8647	120.07	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1442660			52.48- 152.48	101.78
16.573	16.573 (1.029)	97	920283			14.44- 114.44	64.93
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	421576	15.0633	28.771	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	372770			35.87- 135.87	88.42
19.780	19.780 (0.929)	131	360661			35.33- 135.33	85.55
11 Propylene					CAS #: 115-07-1		
5.617	5.589 (0.391)	41	106442	3.94688	7.538	80.00- 120.00	100.00
5.645	5.589 (0.393)	42	40966			16.57- 116.57	38.49
5.617	5.589 (0.391)	39	149049			28.60- 128.60	140.03

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100919.d
Lab Smp Id: 0809614-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"psi-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	316285	-12.65
97 1,4-Difluorobenze	1146510	687906	1605114	966657	-15.69
126 Chlorobenzene-d5	1241713	745028	1738398	1035907	-16.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.36	0.19
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 11-Oct-2008 08:53

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 09oct08
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0809614-15A
Level: LOW Operator: ra
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.0"psi-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.570	102.28	70-130
$ 113 Toluene-d8	25.000	25.270	101.08	70-130
$ 137 Bromofluorobenzene	25.000	23.903	95.61	70-130

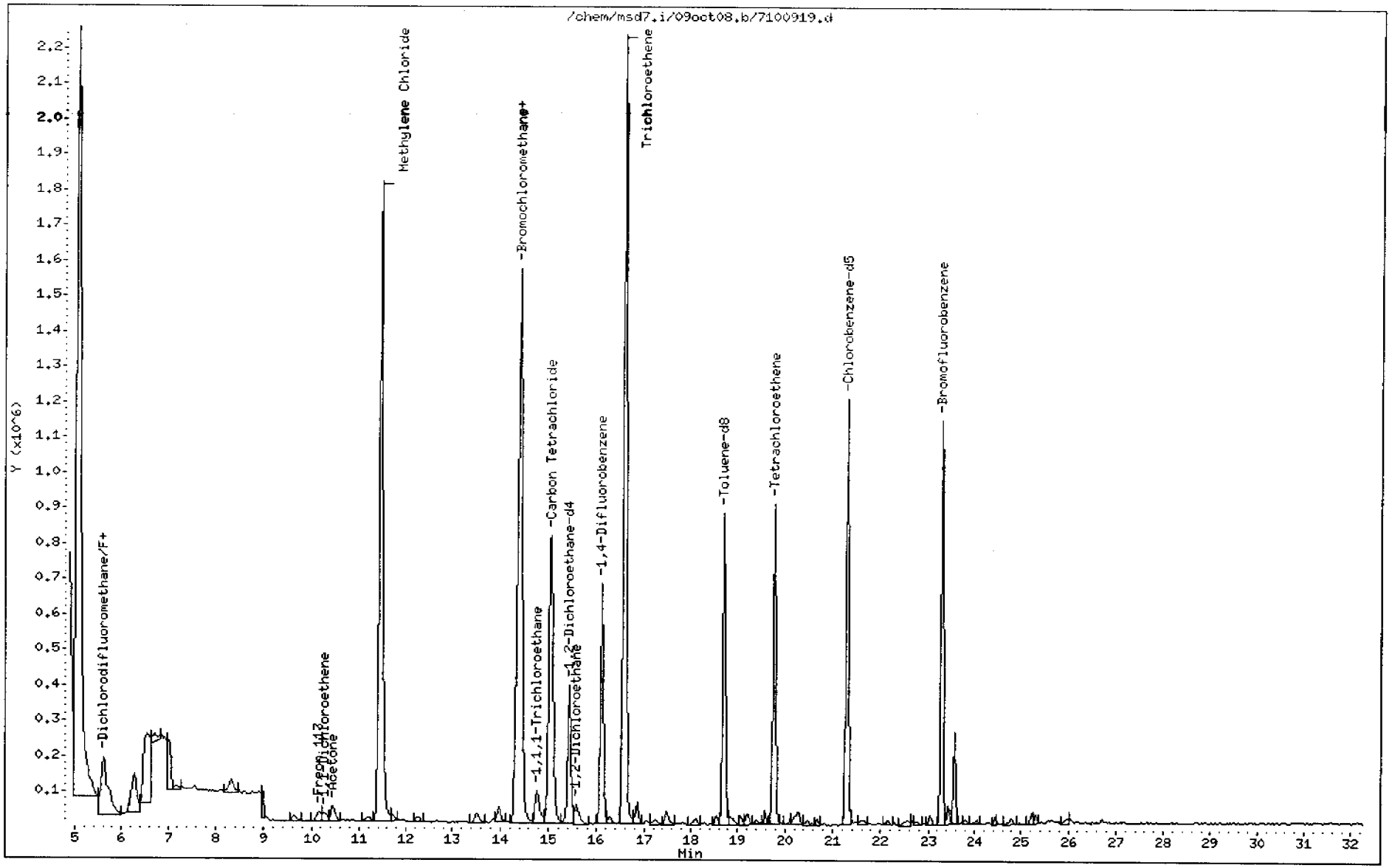
Data File: /chem/msd7.i/09oct08.b/7100919.d
Date : 09-OCT-2008 21:51
Client ID:
Sample Info: 200mL #33961

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0328



Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

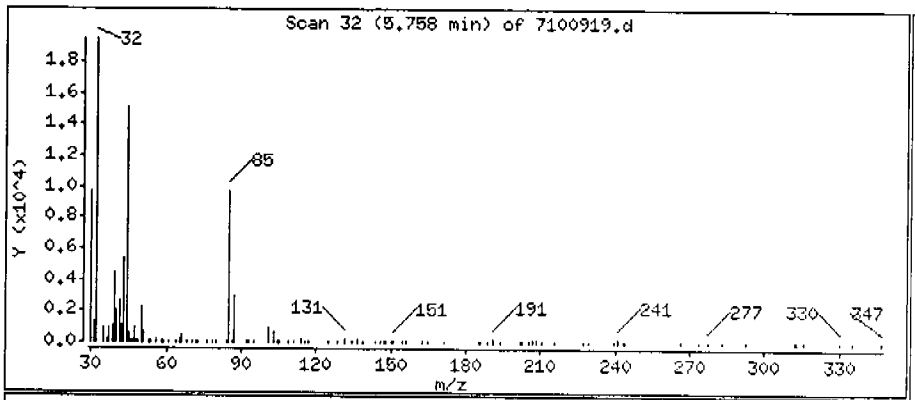
Operator: ra

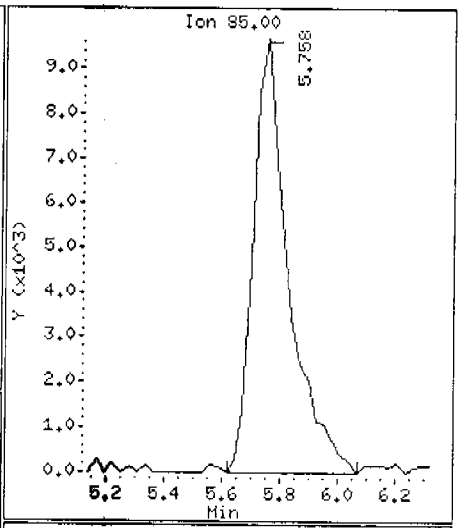
Column phase: RTx-624

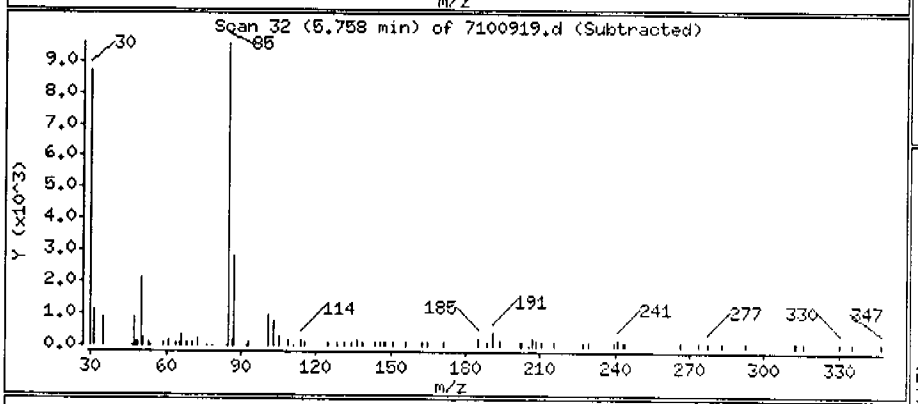
Column diameter: 0.53

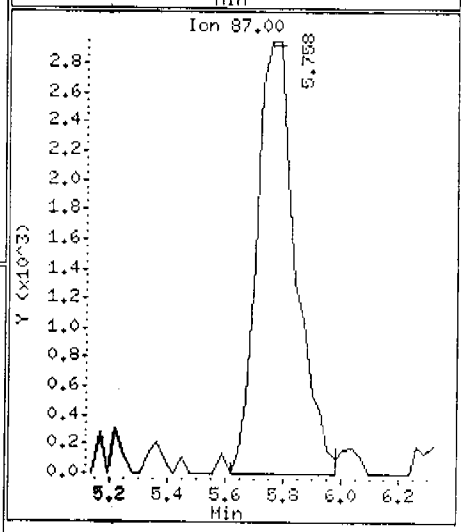
12 Dichlorodifluoromethane/Fr12

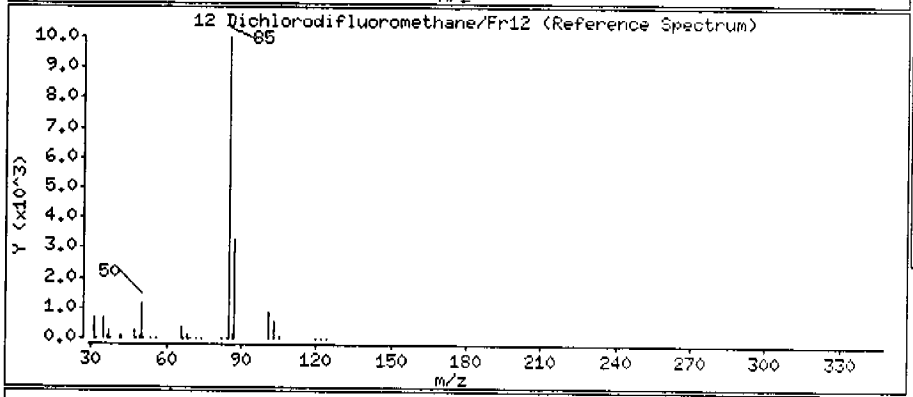
Concentration: 1.987 PPBV

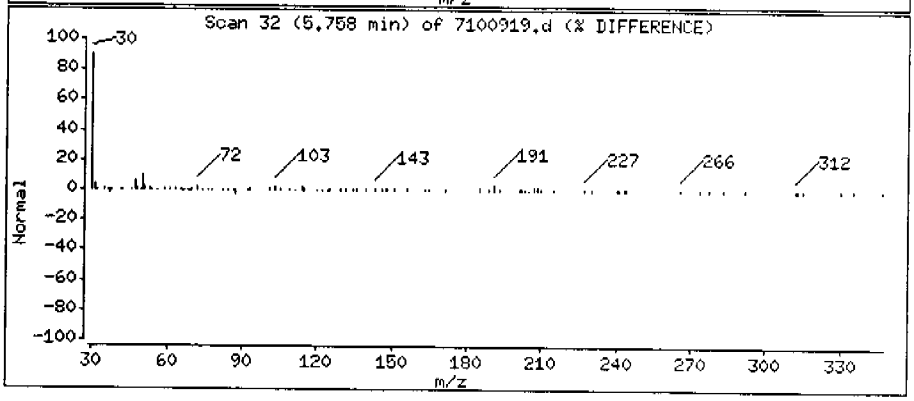












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Sample Info: 200mL #33961

Instrument: msd7.i

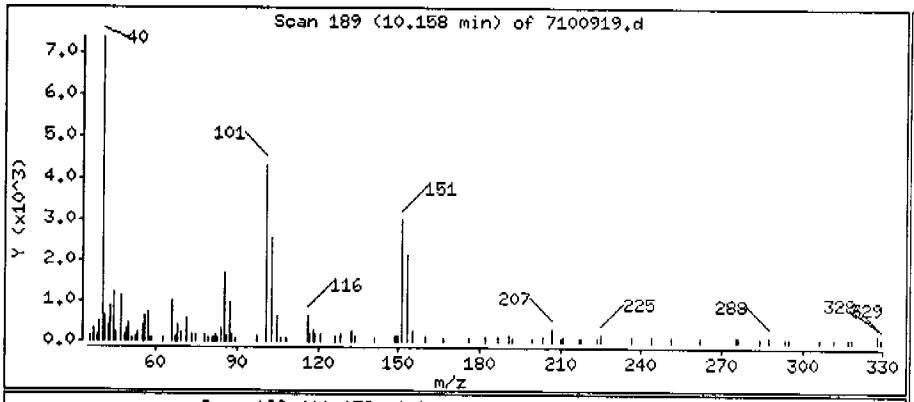
Operator: ra

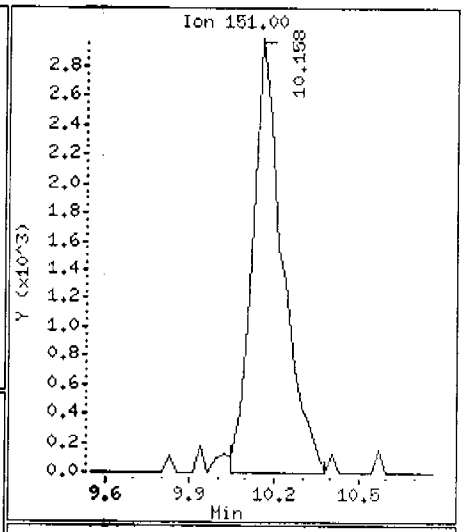
Column phase: RTx-624

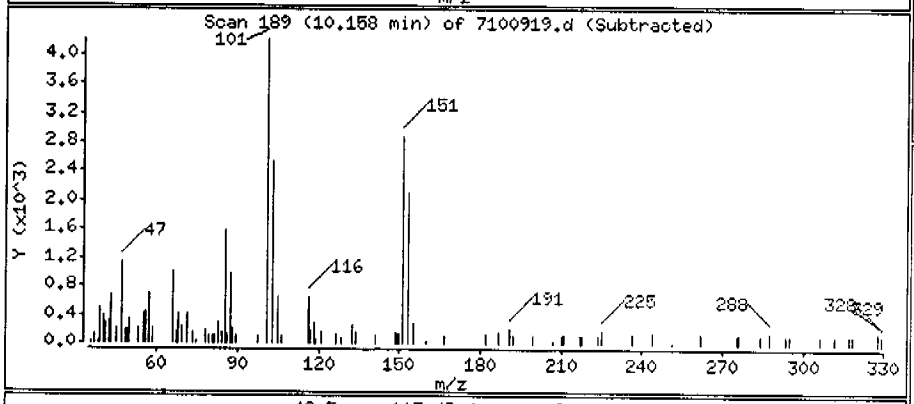
Column diameter: 0.53

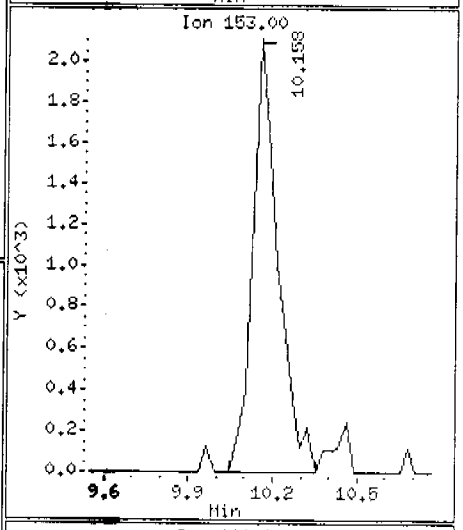
42 Freon 113

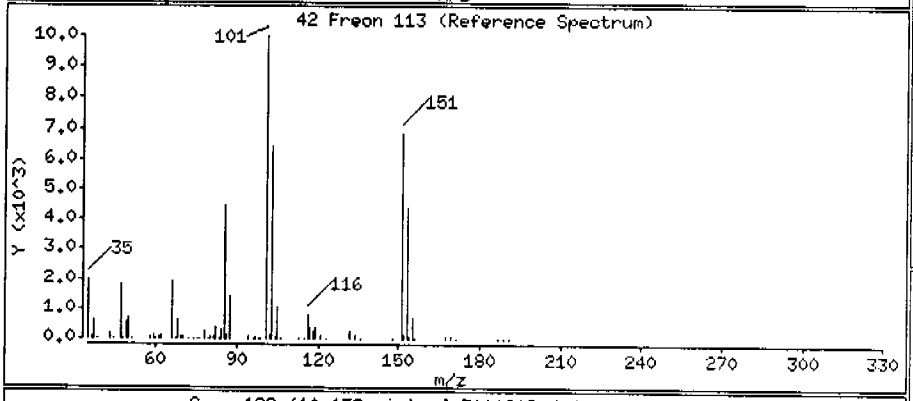
Concentration: 1.368 PPBV

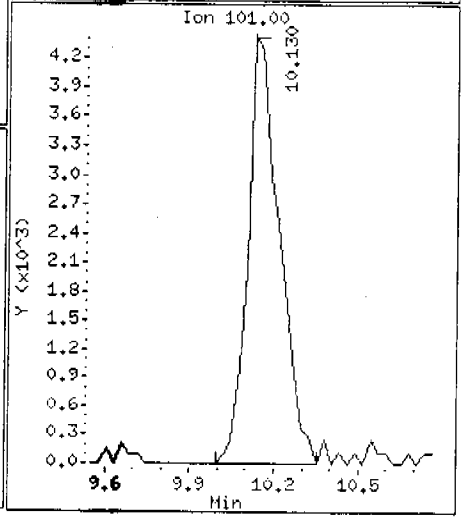


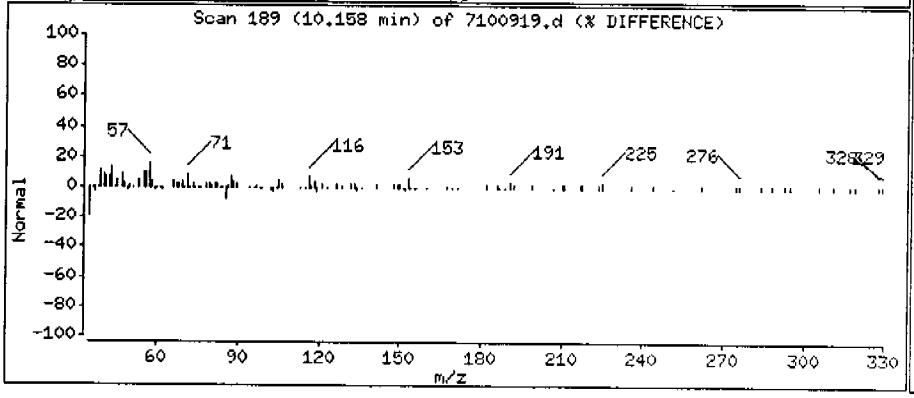












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

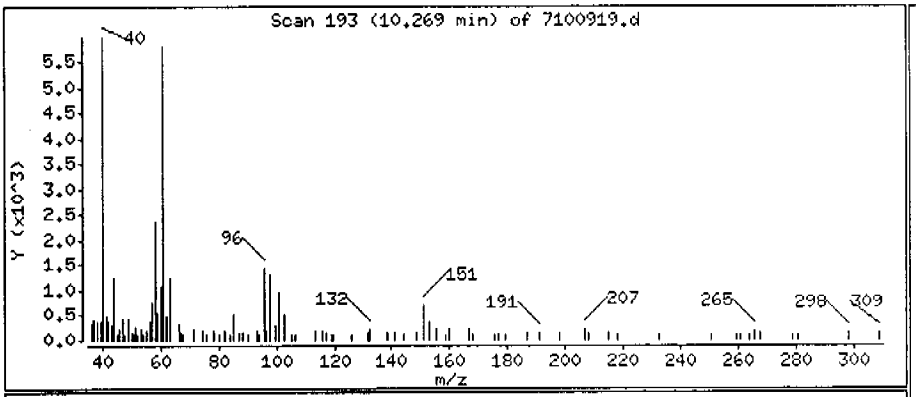
Operator: ra

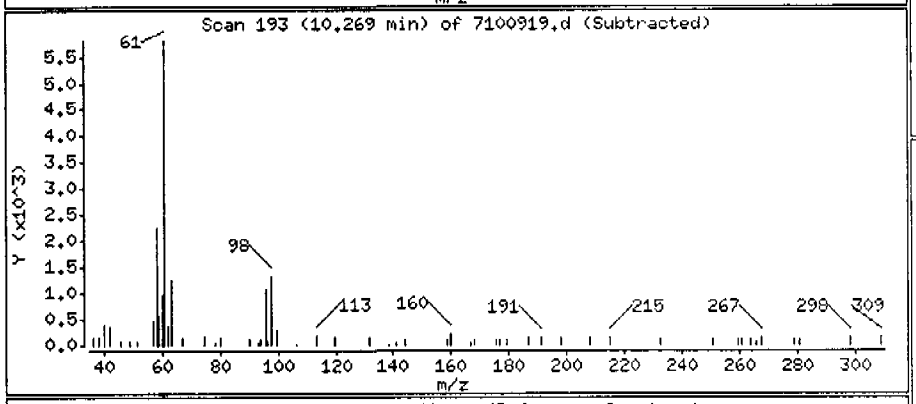
Column phase: RTx-624

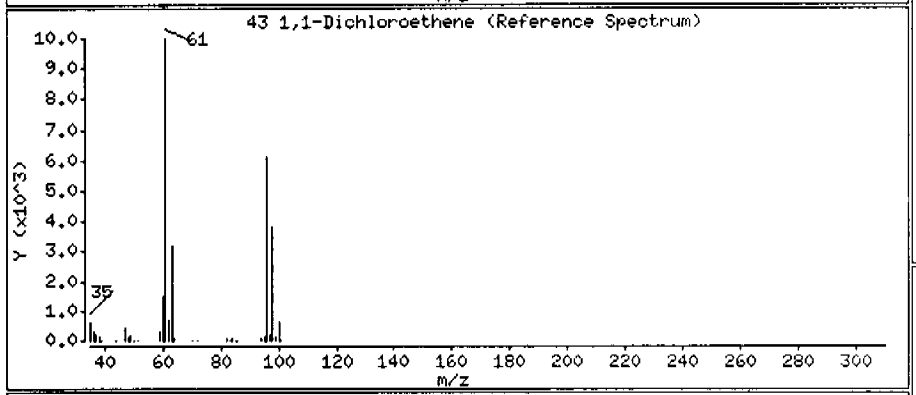
Column diameter: 0.53

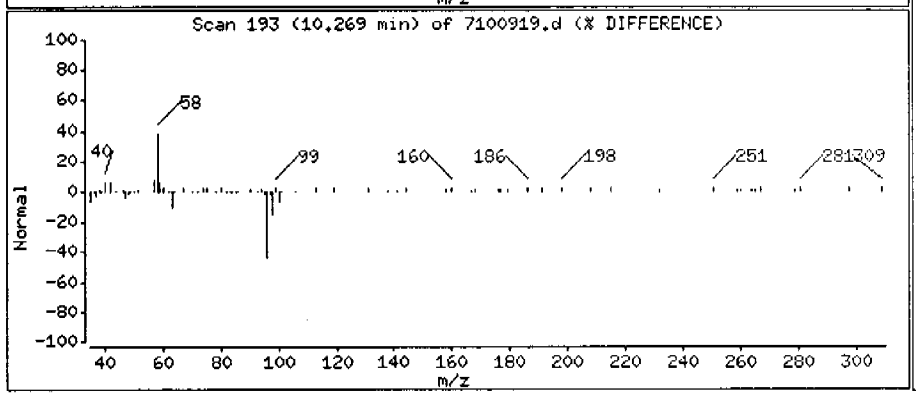
43 1,1-Dichloroethene

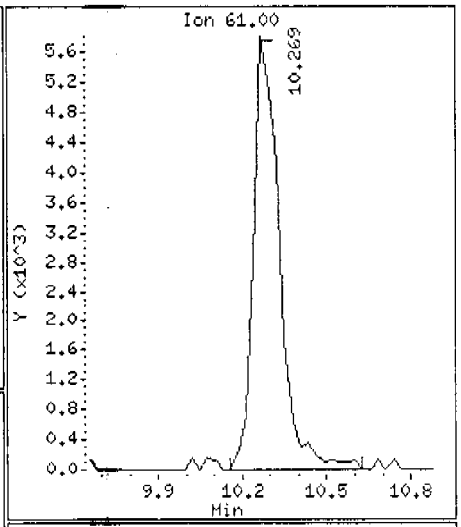
Concentration: 1.320 PPBV

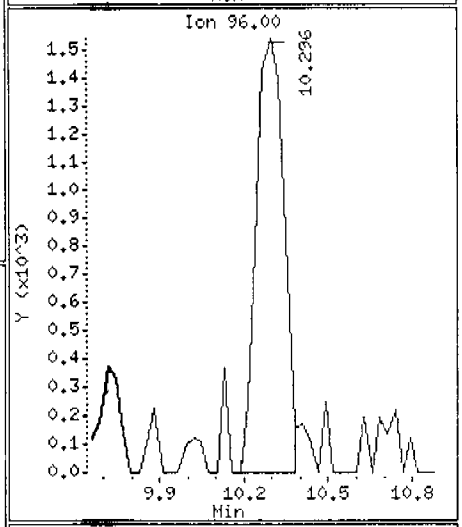


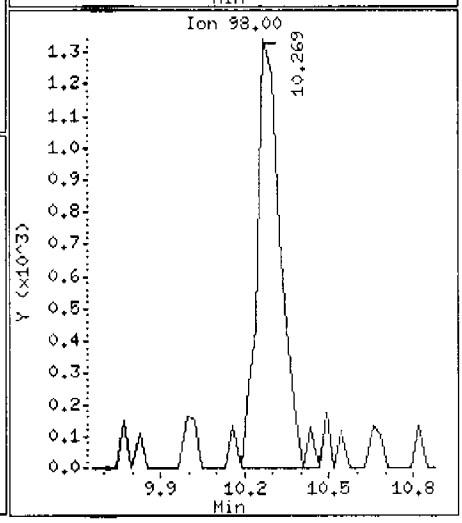












0331

Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

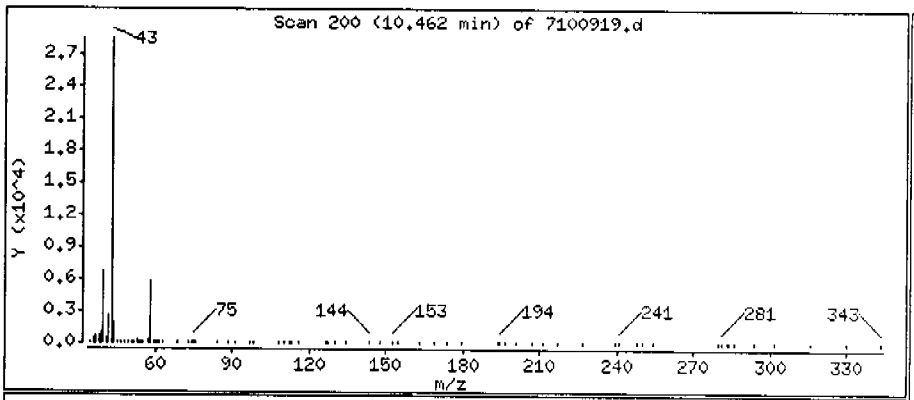
Operator: na

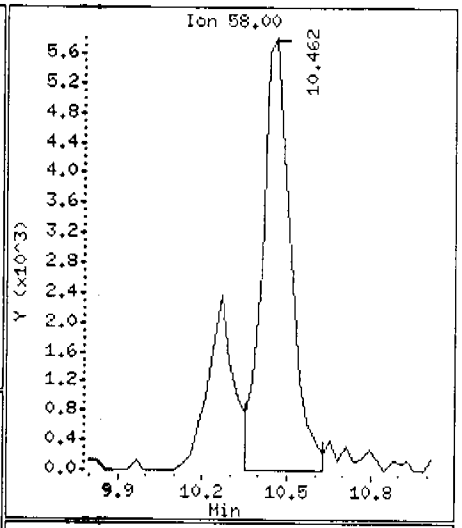
Column phase: RTx-624

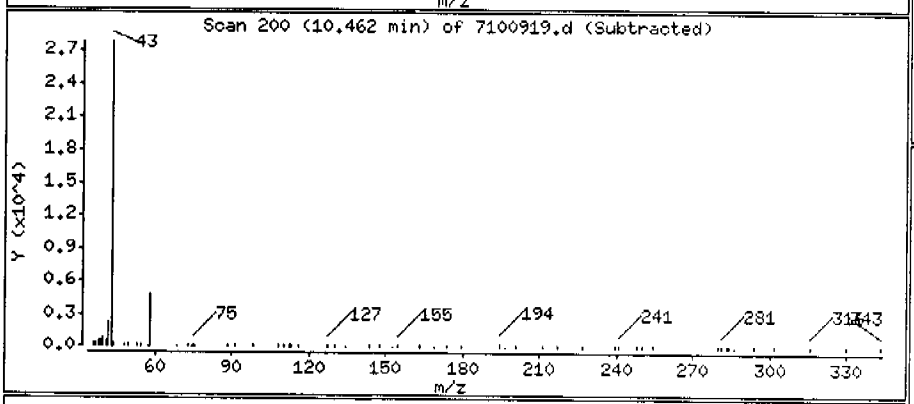
Column diameter: 0.53

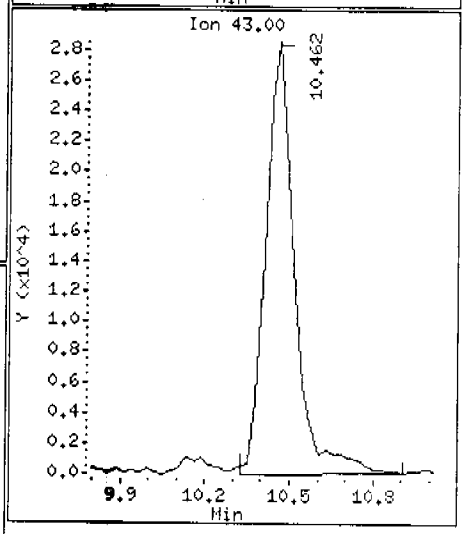
45 Acetone

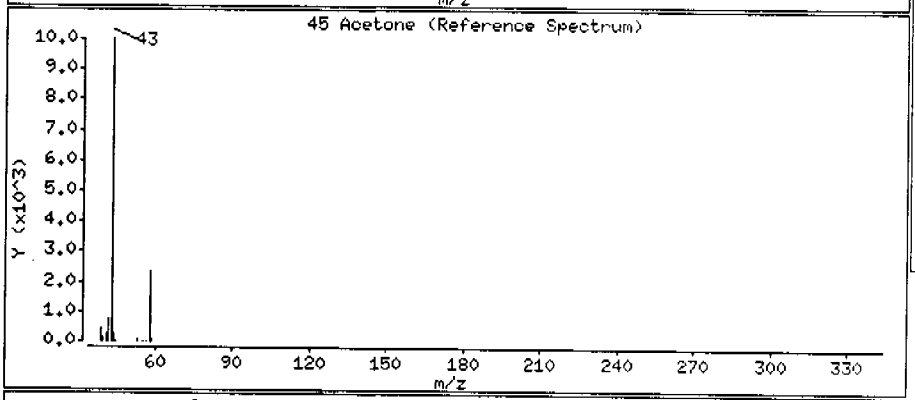
Concentration: 5.268 PPBV

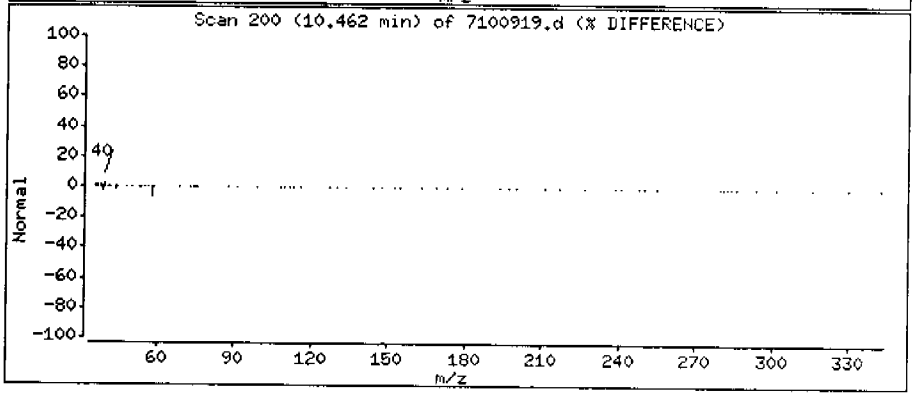












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

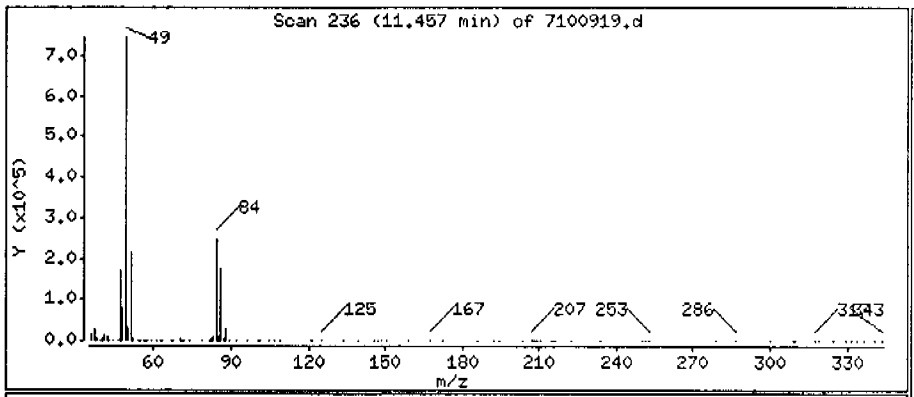
Operator: ra

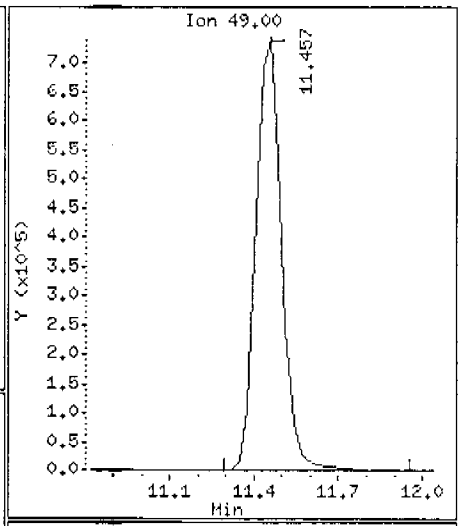
Column phase: RTx-624

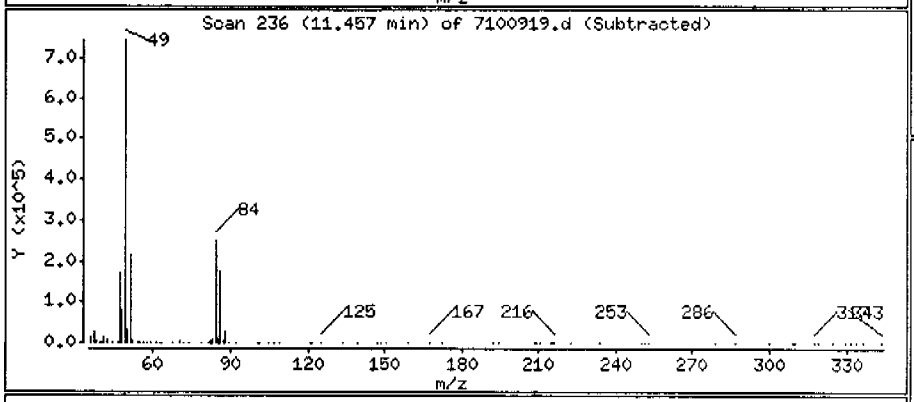
Column diameter: 0.53

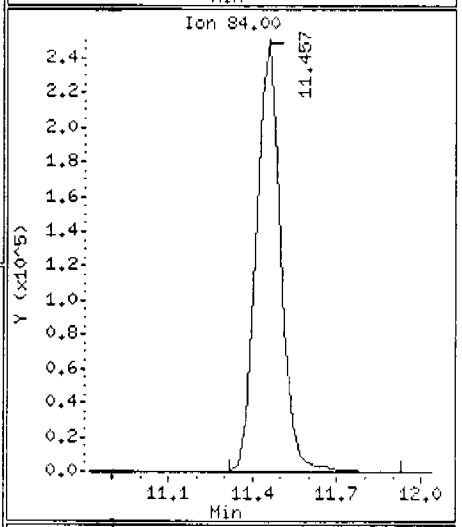
54 Methylene Chloride

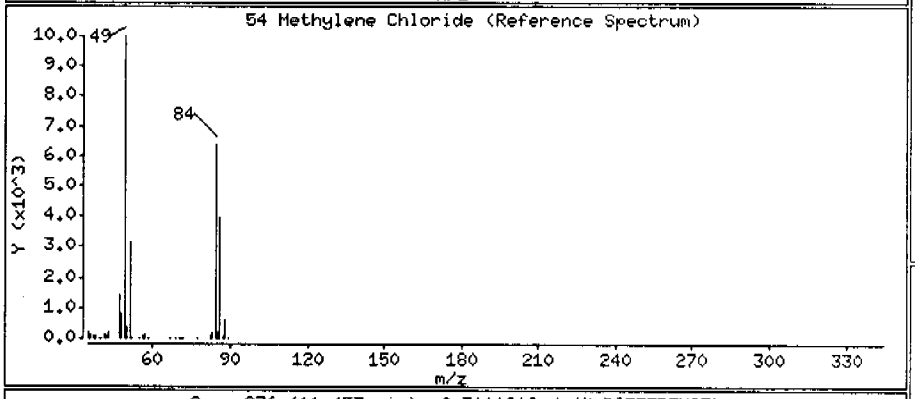
Concentration: 190.98 PPBV

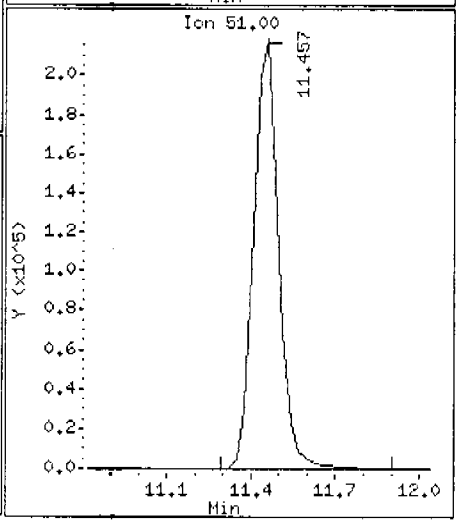


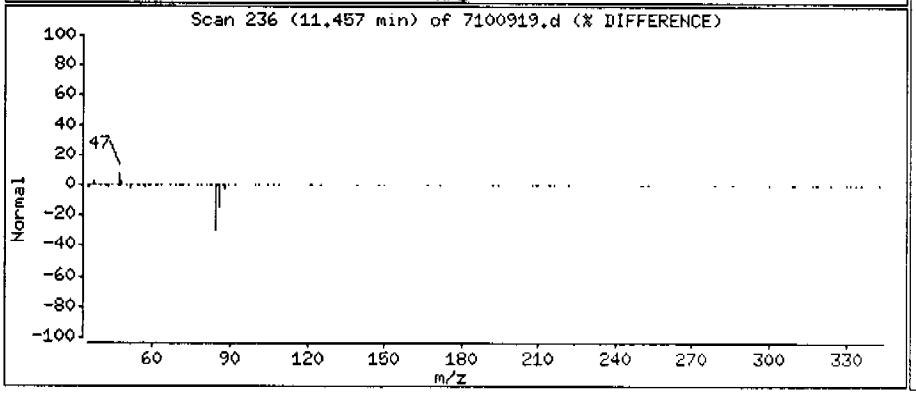












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

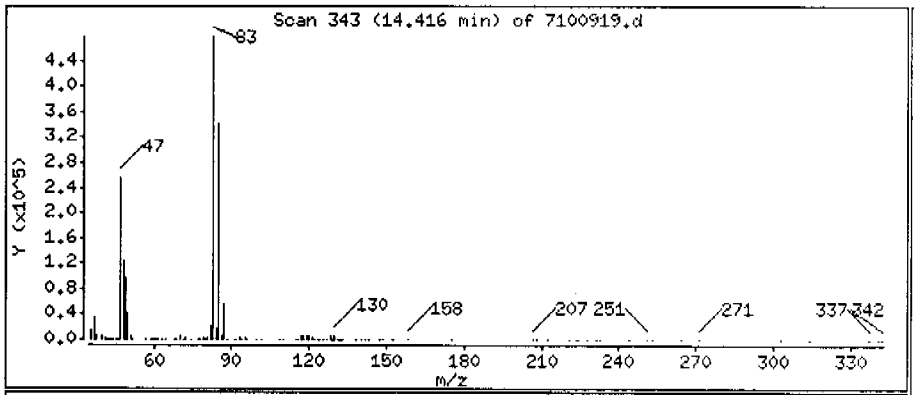
Operator: ra

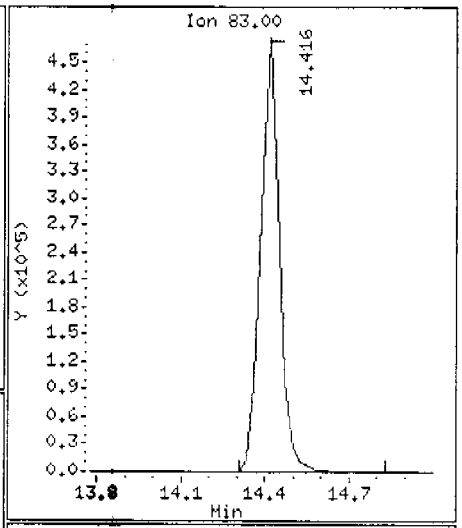
Column phase: RTx-624

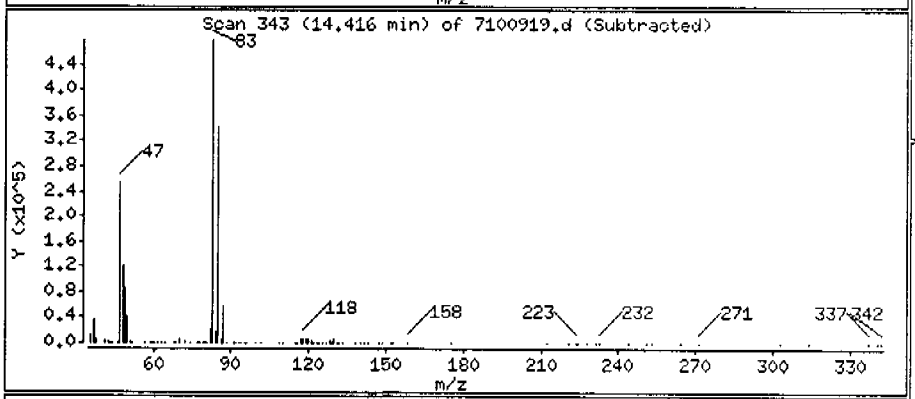
Column diameter: 0.53

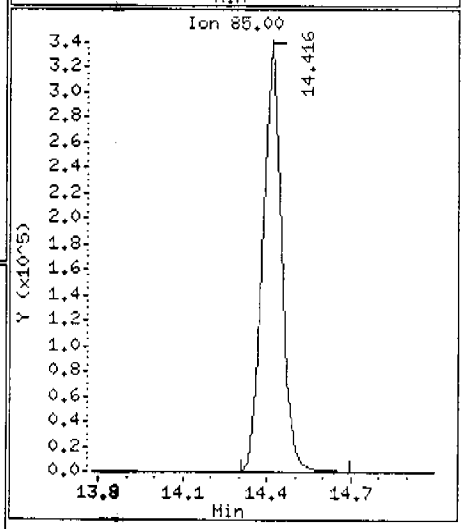
82 Chloroform

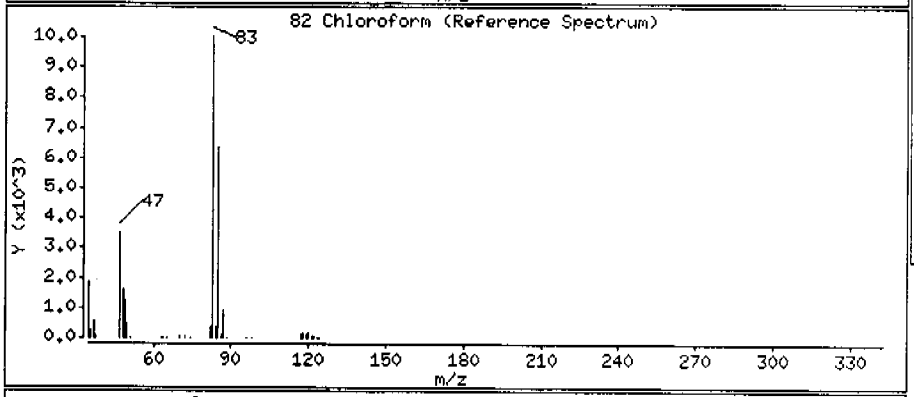
Concentration: 97.915 PPBV

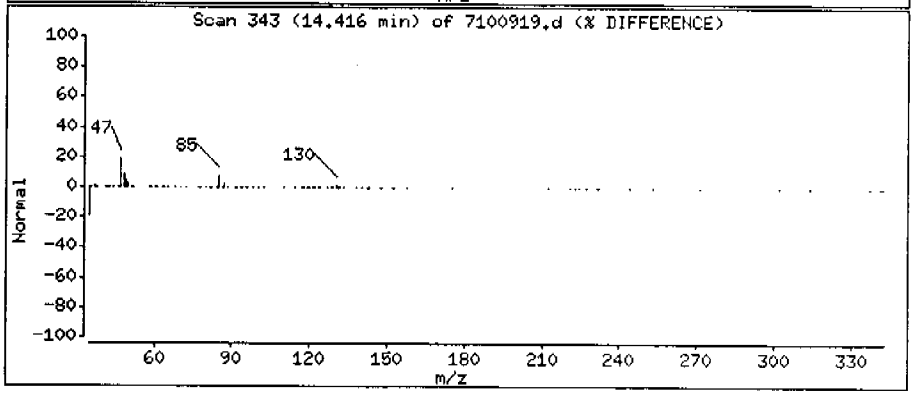












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

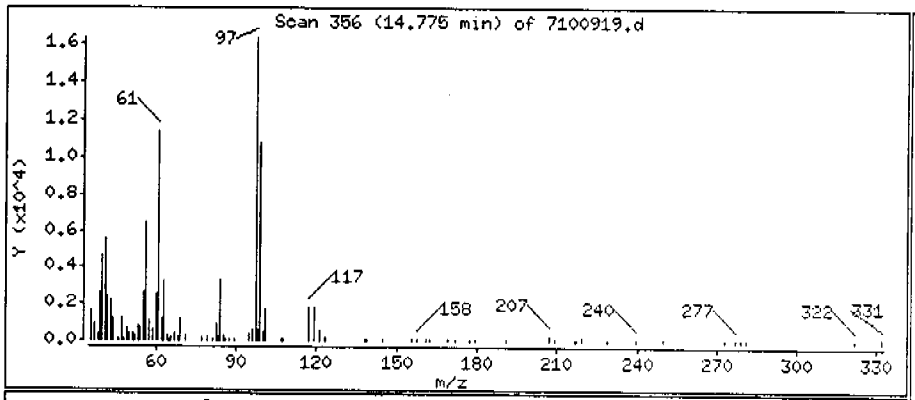
Operator: ra

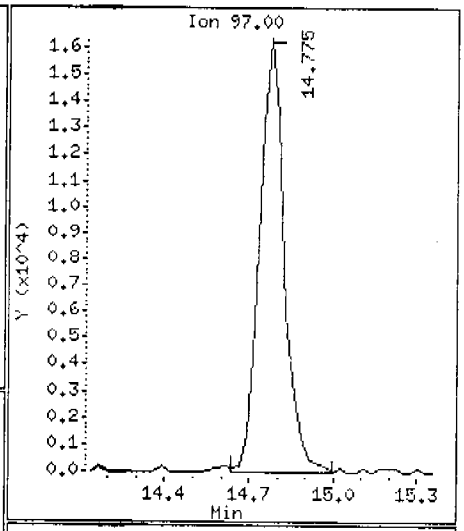
Column phase: RTx-624

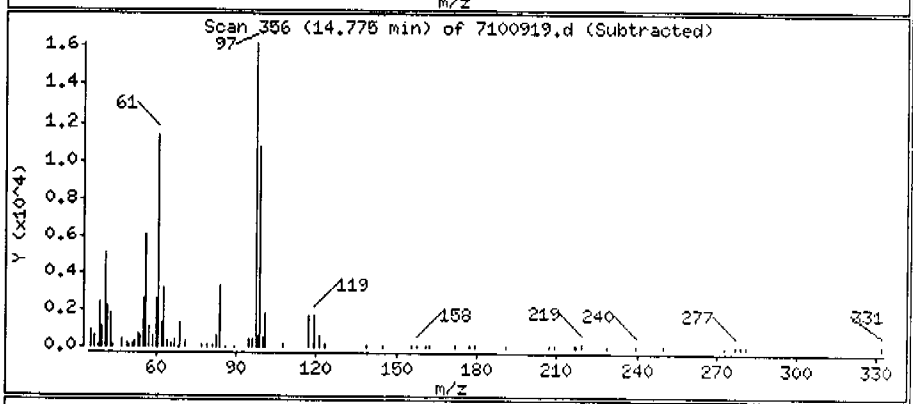
Column diameter: 0.53

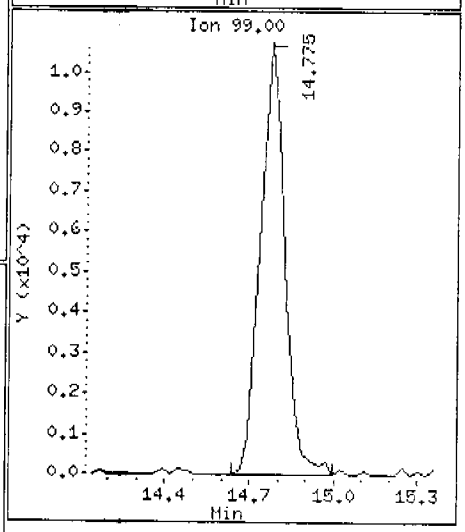
83 1,1,1-Trichloroethane

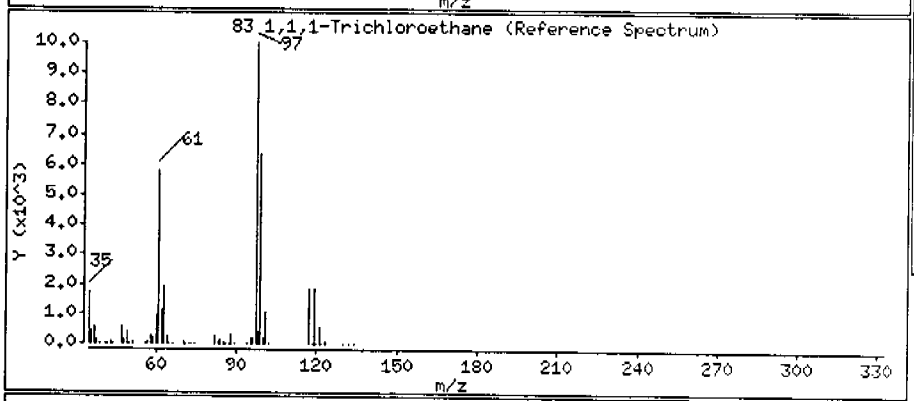
Concentration: 4.317 PPBV

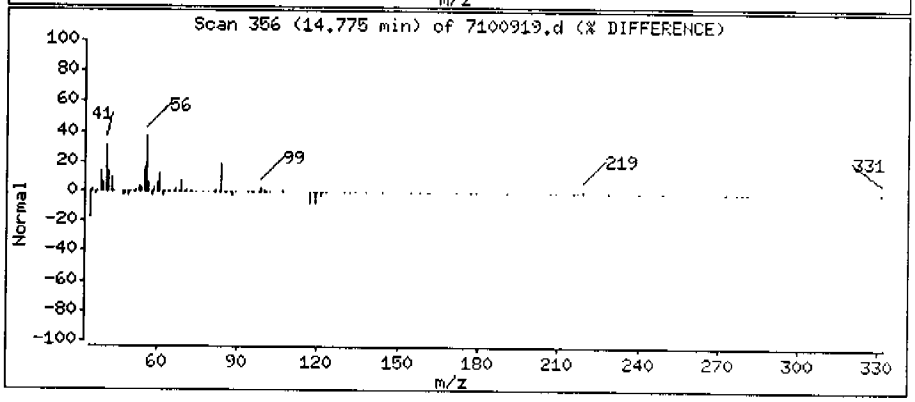












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

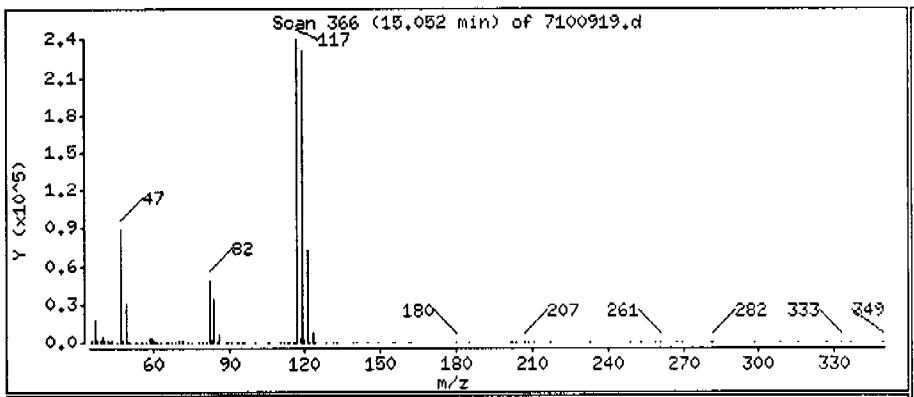
Operator: ra

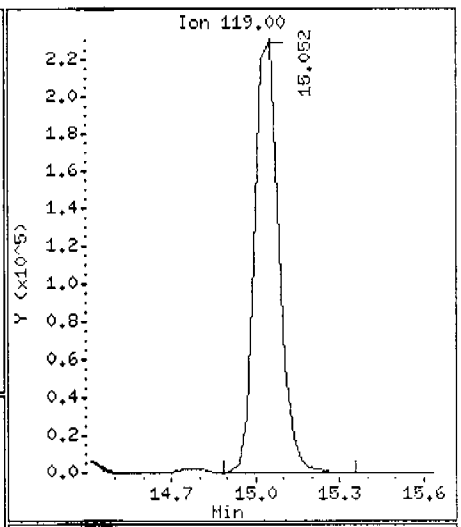
Column phase: RTx-624

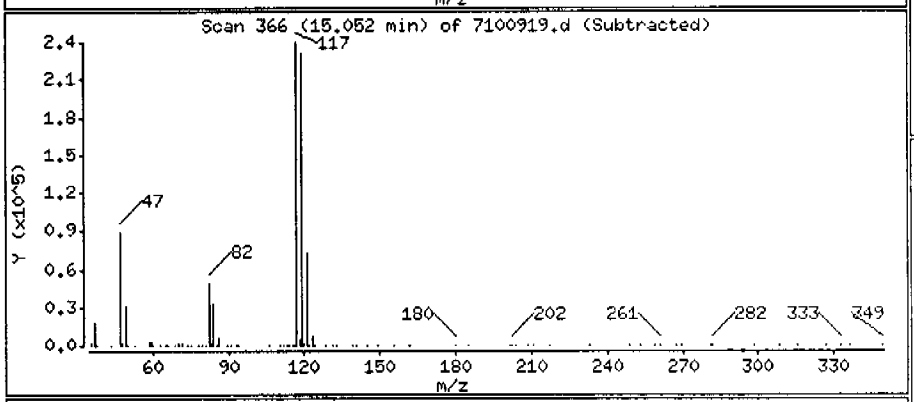
Column diameter: 0.53

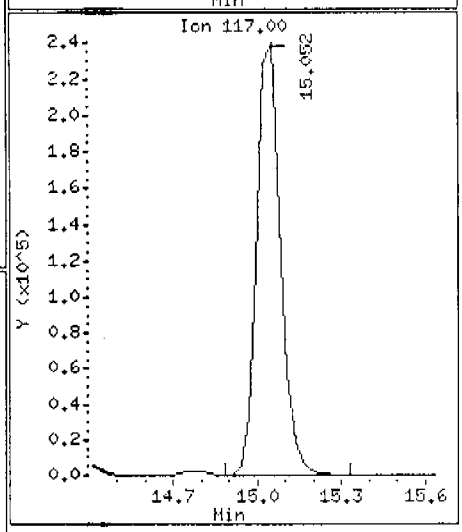
87 Carbon Tetrachloride

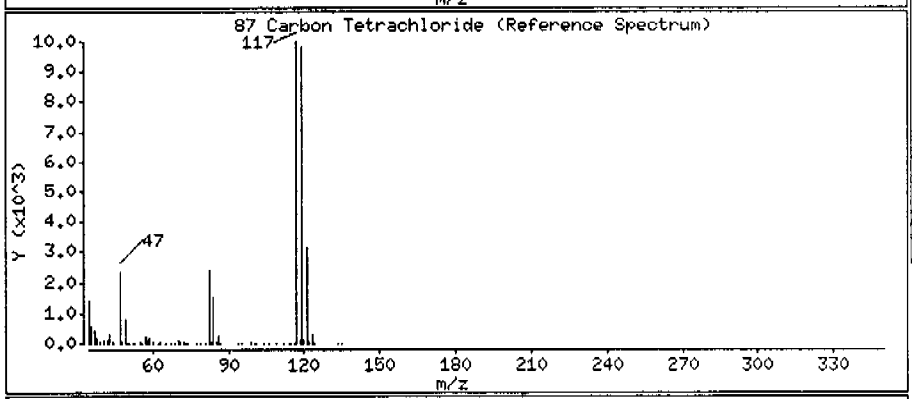
Concentration: 51.527 PPBV

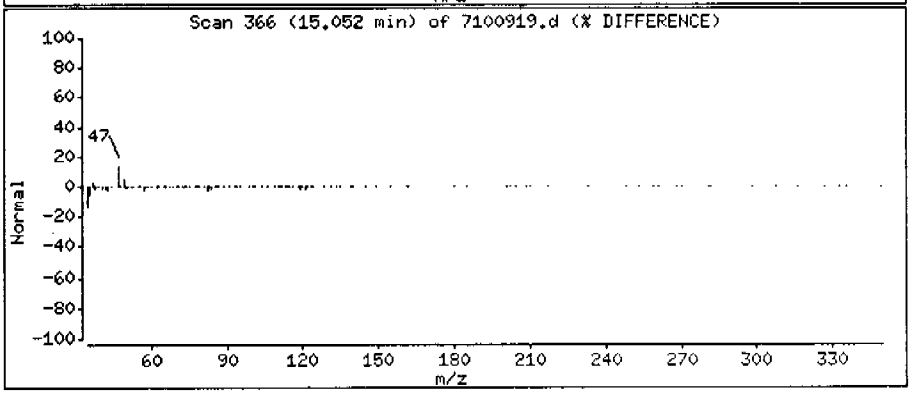












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

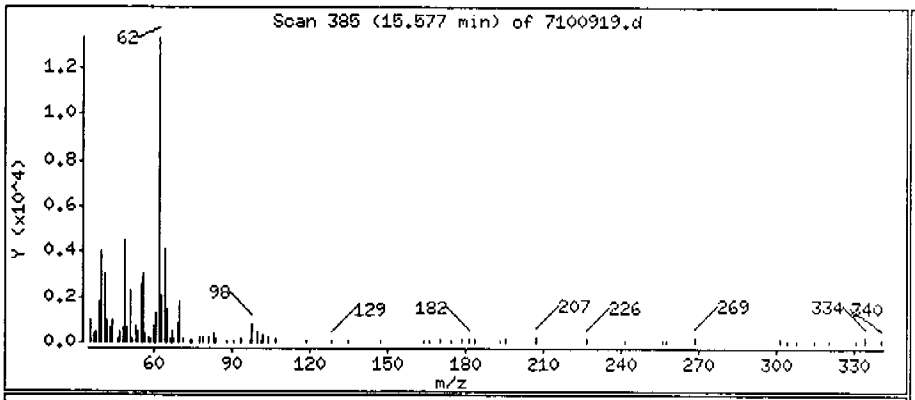
Operator: ra

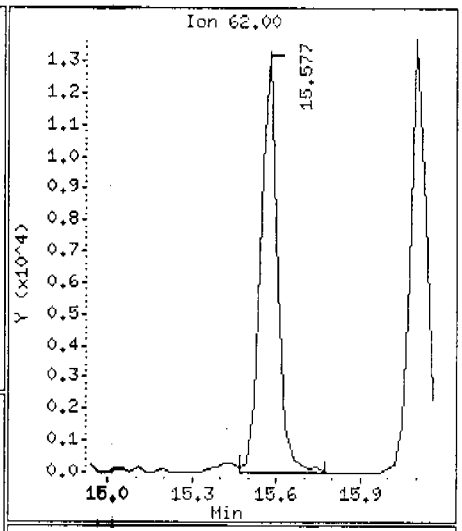
Column phase: RTx-624

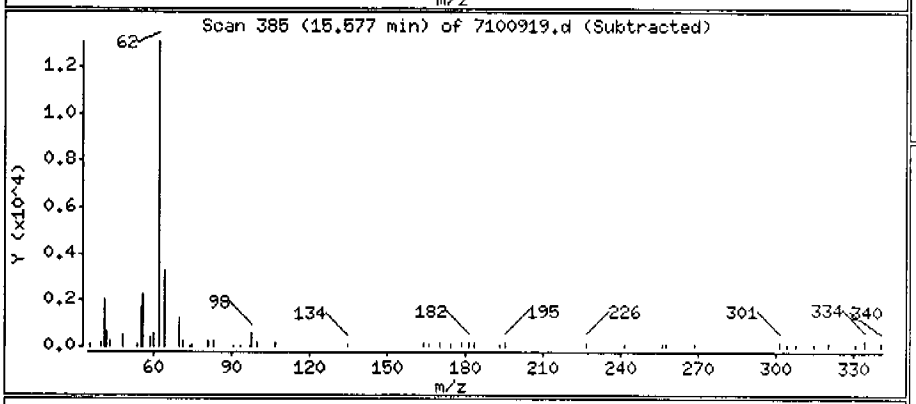
Column diameter: 0.53

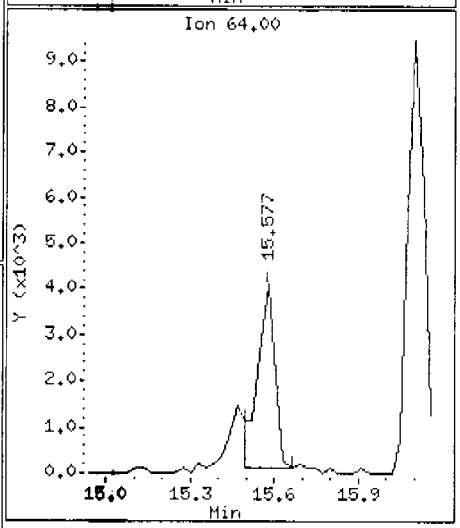
93 1,2-Dichloroethane

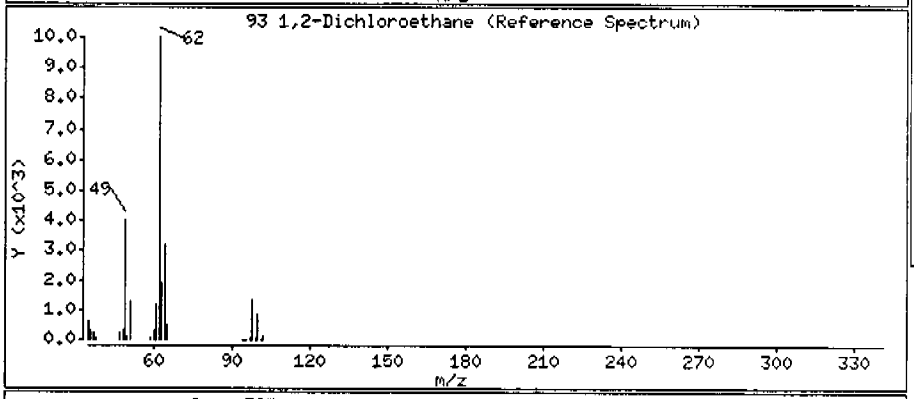
Concentration: 2.767 PPBV

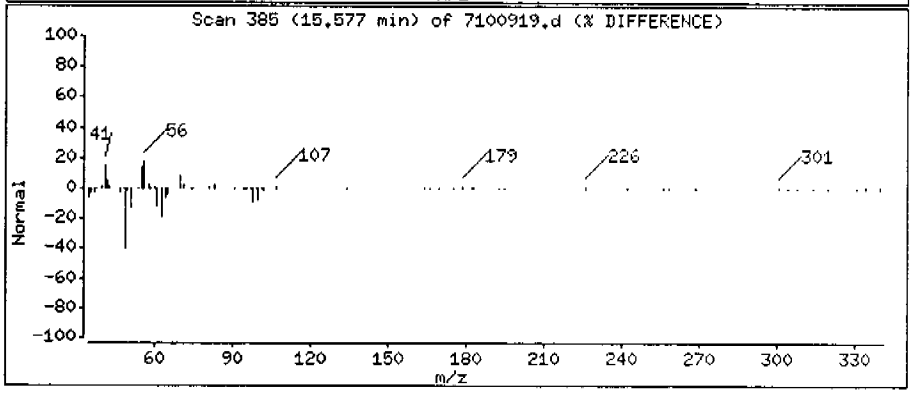












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

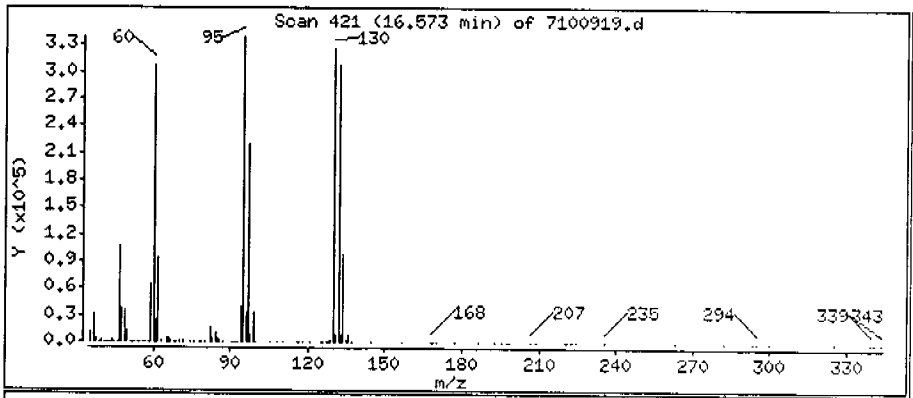
Operator: ra

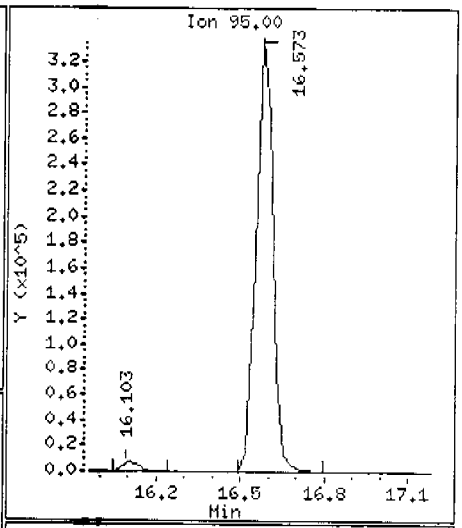
Column phase: RTx-624

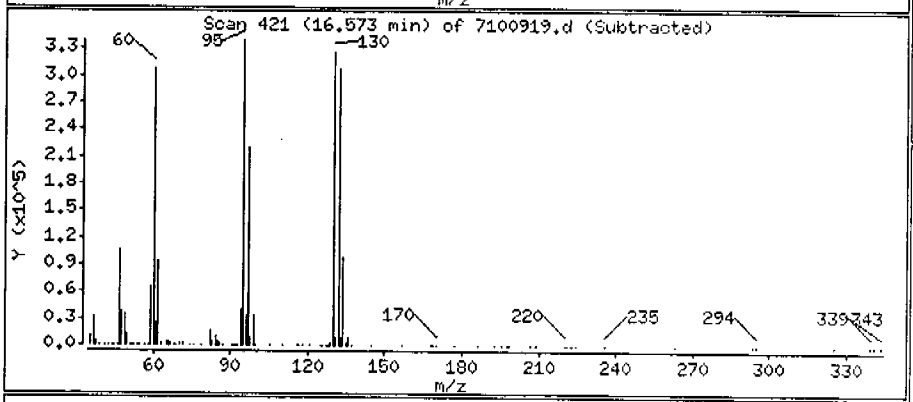
Column diameter: 0.53

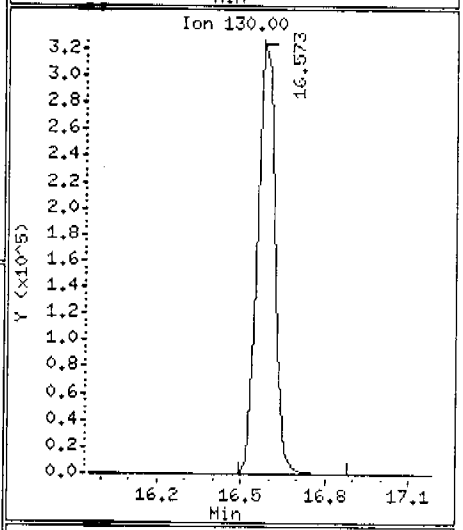
101 Trichloroethene

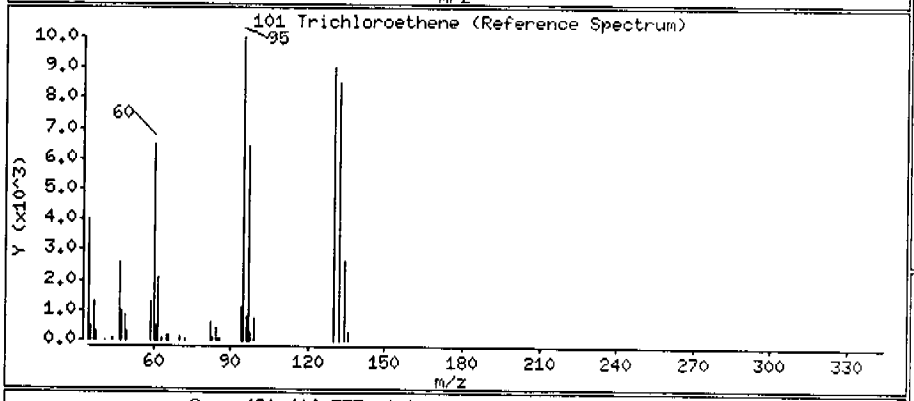
Concentration: 120.07 PPBV

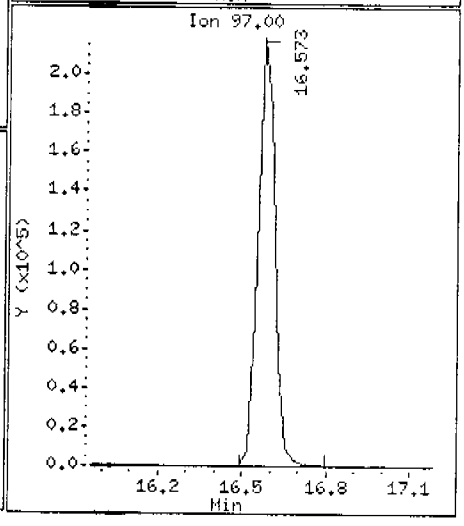


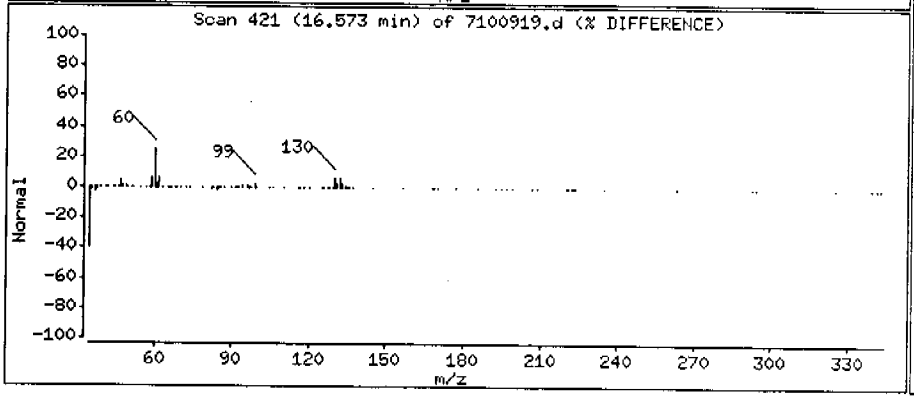












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

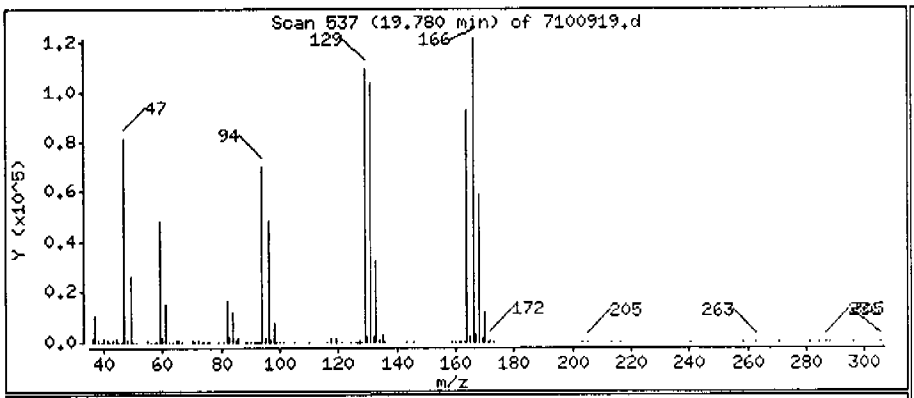
Operator: ra

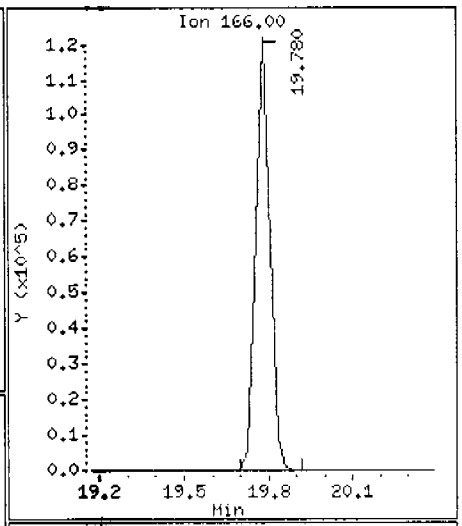
Column phase: RTx-624

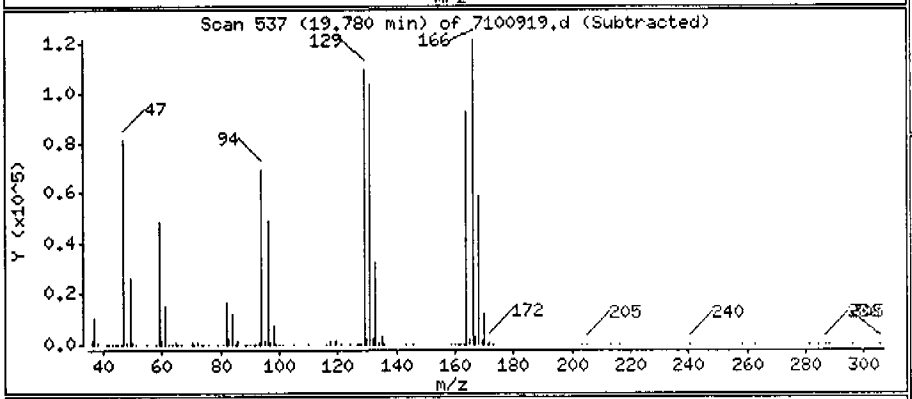
Column diameter: 0.53

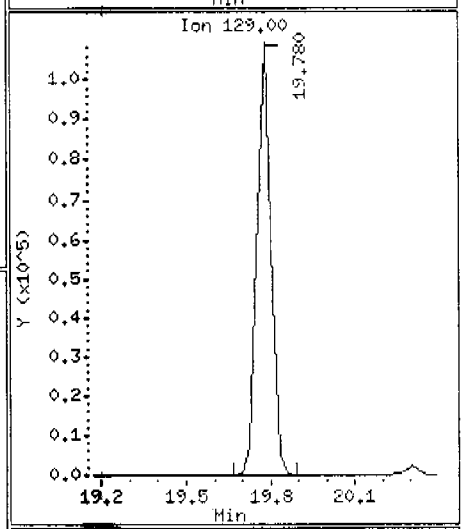
120 Tetrachloroethene

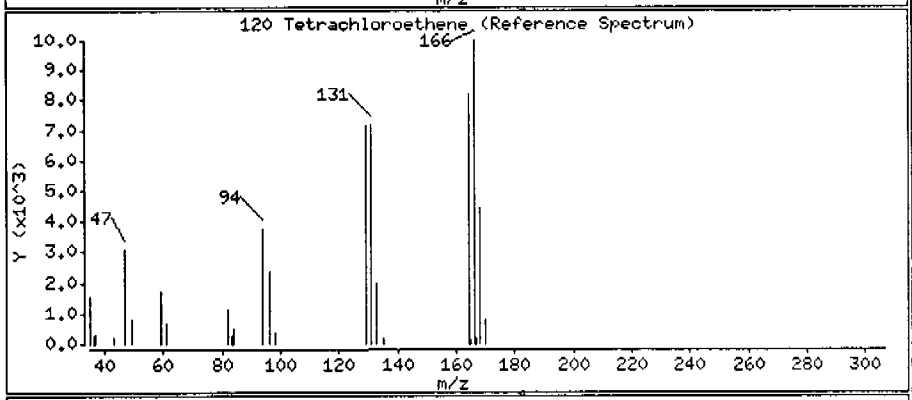
Concentration: 28.771 PPBV

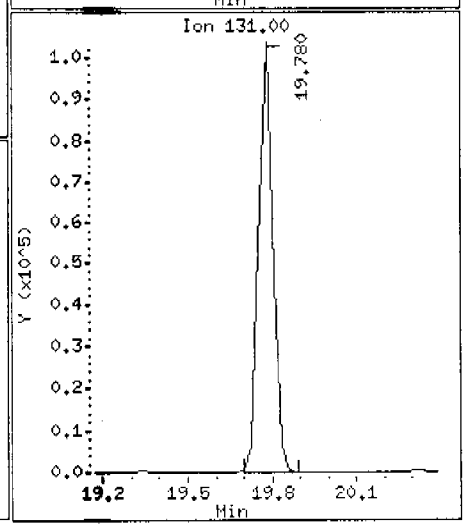


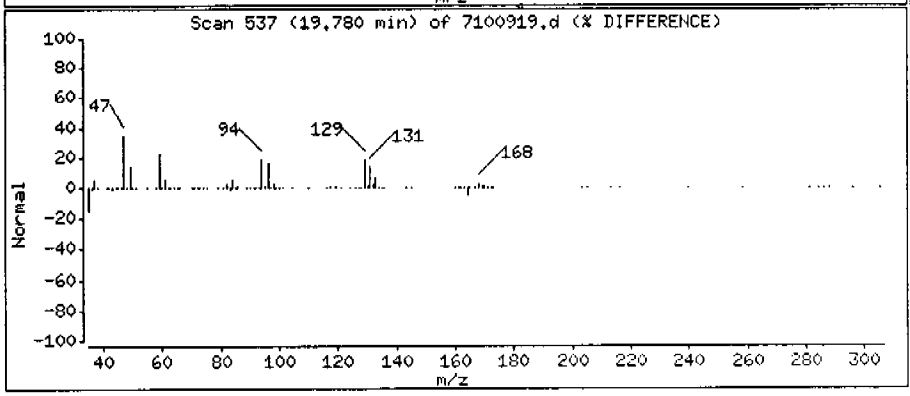












Data File: /chem/msd7.i/09oct08.b/7100919.d

Date : 09-OCT-2008 21:51

Client ID:

Instrument: msd7.i

Sample Info: 200mL #33961

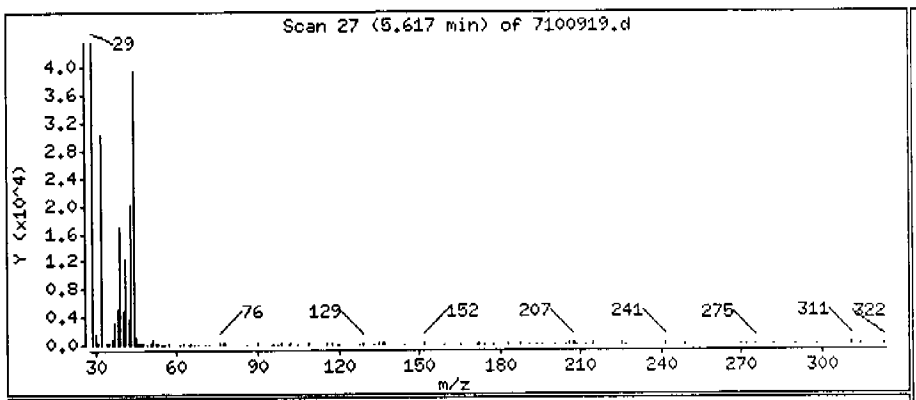
Operator: ra

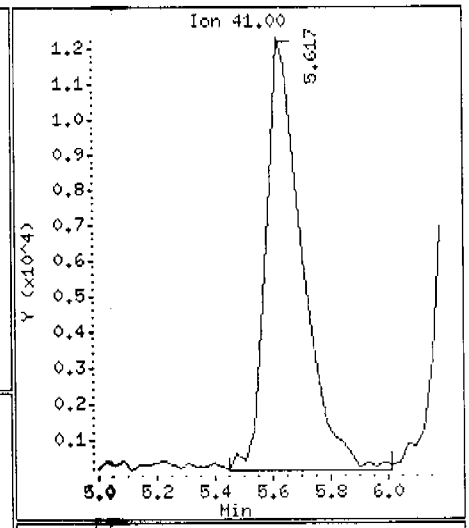
Column phase: RTx-624

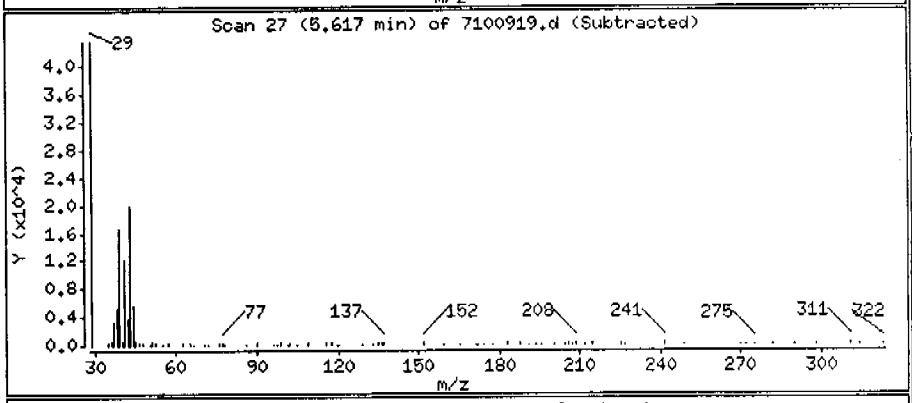
Column diameter: 0.53

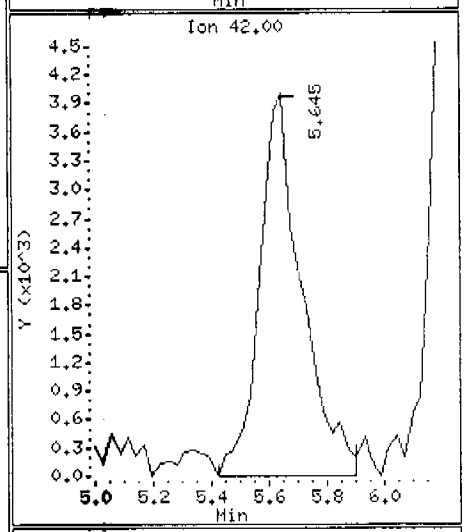
11 Propylene

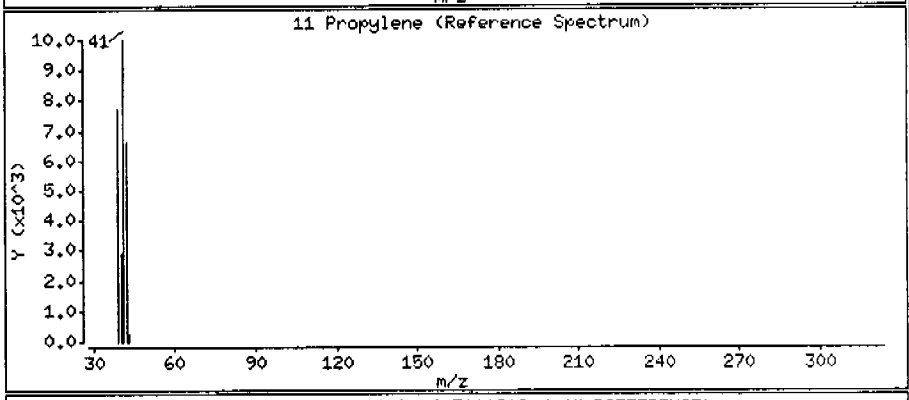
Concentration: 7.538 PPBV

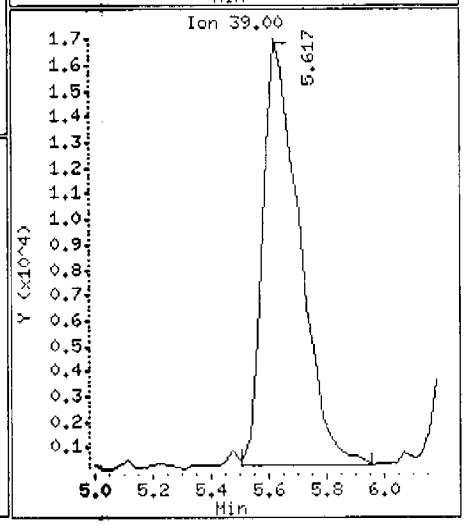


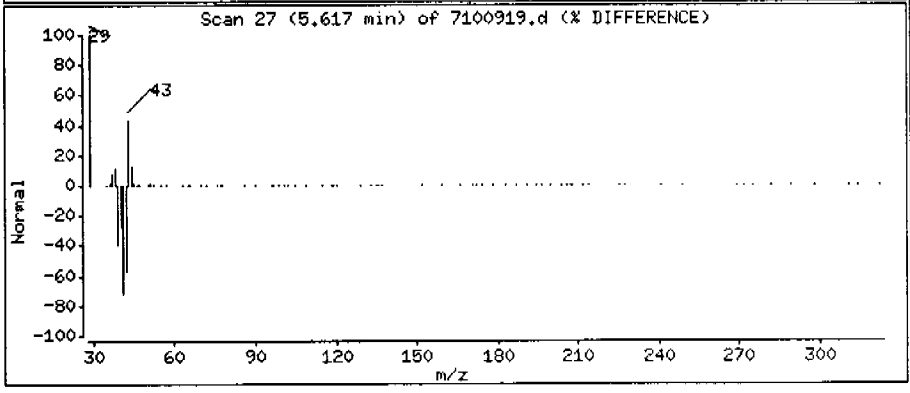












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14831

Lab ID#: 0809614-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.3	1.6	6.4	8.1
Freon 113	1.3	1.5	10	11
1,1-Dichloroethene	1.3	2.0	5.2	8.0
Methylene Chloride	1.3	430	4.5	1500
Chloroform	1.3	140	6.4	680
1,1,1-Trichloroethane	1.3	2.0	7.1	11
Carbon Tetrachloride	1.3	69	8.2	430
1,2-Dichloroethane	1.3	5.0	5.3	20
Trichloroethene	1.3	140	7.0	770
Tetrachloroethene	1.3	10	8.8	70
Propylene	5.2	11	9.0	19

0341

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14831

Lab ID#: 0809614-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100923	**Date of Collection:**	9/23/08
Dil. Factor:	2.61	**Date of Analysis:**	10/10/08 12:28 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.3	1.6	6.4	8.1
Freon 114	1.3	Not Detected	9.1	Not Detected
Chloromethane	5.2	Not Detected	11	Not Detected
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,3-Butadiene	1.3	Not Detected	2.9	Not Detected
Bromomethane	1.3	Not Detected	5.1	Not Detected
Chloroethane	1.3	Not Detected	3.4	Not Detected
Freon 11	1.3	Not Detected	7.3	Not Detected
Ethanol	5.2	Not Detected	9.8	Not Detected
Freon 113	1.3	1.5	10	11
1,1-Dichloroethene	1.3	2.0	5.2	8.0
Acetone	5.2	Not Detected	12	Not Detected
2-Propanol	5.2	Not Detected	13	Not Detected
Carbon Disulfide	1.3	Not Detected	4.1	Not Detected
Methylene Chloride	1.3	430	4.5	1500
Methyl tert-butyl ether	1.3	Not Detected	4.7	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Hexane	1.3	Not Detected	4.6	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.8	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.8	Not Detected
Chloroform	1.3	140	6.4	680
1,1,1-Trichloroethane	1.3	2.0	7.1	11
Cyclohexane	1.3	Not Detected	4.5	Not Detected
Carbon Tetrachloride	1.3	69	8.2	430
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	5.0	5.3	20
Heptane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	140	7.0	770
1,2-Dichloropropane	1.3	Not Detected	6.0	Not Detected
1,4-Dioxane	5.2	Not Detected	19	Not Detected
Bromodichloromethane	1.3	Not Detected	8.7	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	5.9	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.3	Not Detected
Toluene	1.3	Not Detected	4.9	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	5.9	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.1	Not Detected
Tetrachloroethene	1.3	10	8.8	70

0342

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14831

Lab ID#: 0809614-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100923	Date of Collection:	9/23/08
Dil. Factor:	2.61	Date of Analysis:	10/10/08 12:28 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	5.2	Not Detected	21	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	10	Not Detected
Chlorobenzene	1.3	Not Detected	6.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
Styrene	1.3	Not Detected	5.6	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.0	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.4	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.4	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.4	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.8	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
1,2,4-Trichlorobenzene	5.2	Not Detected	39	Not Detected
Hexachlorobutadiene	5.2	Not Detected	56	Not Detected
Chlorodifluoromethane	5.2	Not Detected	18	Not Detected
Methanol	130	Not Detected	170	Not Detected
n-Butanol	5.2	Not Detected	16	Not Detected
Propylene	5.2	11	9.0	19

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100923.d
Lab Smp Id: 0809614-16A
Inj Date : 10-OCT-2008 00:28
Operator : dfm Inst ID: msd7.i
Smp Info : 150mL #33788
Misc Info : 9.5"Hg-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 2.61000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	306599	25.0000		80.00- 120.00	100.00
14.361	14.333 (1.000)	128	236450			28.92- 128.92	77.12
14.333	14.333 (1.000)	49	1225284			320.90- 420.90	399.64
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	928333	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	163519			0.00- 67.10	17.61
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	996306	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	507598			1.24- 101.24	50.95
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	609446	26.3152	26.315	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	261044			0.00- 97.37	42.83
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	884997	24.9037	24.904	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	123688			0.00- 63.85	13.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	674879			26.51- 126.51	76.26
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	479867	23.4068	23.407	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	730869			92.62- 192.62	152.31
23.291	23.291 (1.093)	176	463373			44.03- 144.03	96.56
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.402)	85	47778	0.63037	1.645	80.00- 120.00	100.00
5.758	5.729 (0.402)	87	16612			0.00- 81.85	34.77
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	17130	0.56641	1.478	80.00- 120.00	100.00
10.186	10.158 (0.711)	153	12792			12.55- 112.55	74.68
10.158	10.158 (0.709)	101	28629			98.99- 198.99	167.12
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.296	10.269 (0.718)	61	40637	0.77268	2.017	80.00- 120.00	100.00
10.296	10.269 (0.718)	96	15952			0.00- 87.74	39.26
10.296	10.269 (0.718)	98	11004			0.00- 73.80	27.08
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.430 (0.799)	49	7574276	164.624	429.67	80.00- 120.00	100.00
11.457	11.430 (0.799)	84	2438631			0.00- 84.42	32.20
11.457	11.430 (0.799)	51	2188176			0.00- 80.54	28.89
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2271655	53.3016	139.12	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1622264			21.17- 121.17	71.41
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	34288	0.78796	2.056	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	20376			13.83- 113.83	59.43
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.052	15.024 (1.050)	119	1315354	26.4715	69.090	80.00- 120.00	100.00
15.052	15.024 (1.050)	117	1368990			55.68- 155.68	104.08
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	71492	1.91379	4.995	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	21987			0.00- 82.49	30.76
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1186835	54.8112	143.06	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1193567			52.48- 152.48	100.57

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)								
16.573	16.573	(1.029)	97	755482			14.44- 114.44	63.66
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	105683	3.92624	10.247	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	93790			35.87- 135.87	88.75
19.780	19.780	(0.929)	131	100190			35.33- 135.33	94.80
11 Propylene						CAS #: 115-07-1		
5.617	5.589	(0.392)	41	110047	4.20947	10.987	80.00- 120.00	100.00
5.617	5.589	(0.392)	42	41103			16.57- 116.57	37.35
5.617	5.589	(0.392)	39	170708			28.60- 128.60	155.12

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100923.d
Lab Smp Id: 0809614-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.5"Hg-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	306599	-15.32
97 1,4-Difluorobenze	1146510	687906	1605114	928333	-19.03
126 Chlorobenzene-d5	1241713	745028	1738398	996306	-19.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 11-Oct-2008 08:44

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 09oct08
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0809614-16A
Level: LOW Operator: dfm
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 9.5"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.315	105.26	70-130
$ 113 Toluene-d8	25.000	24.904	99.61	70-130
$ 137 Bromofluorobenzene	25.000	23.407	93.63	70-130

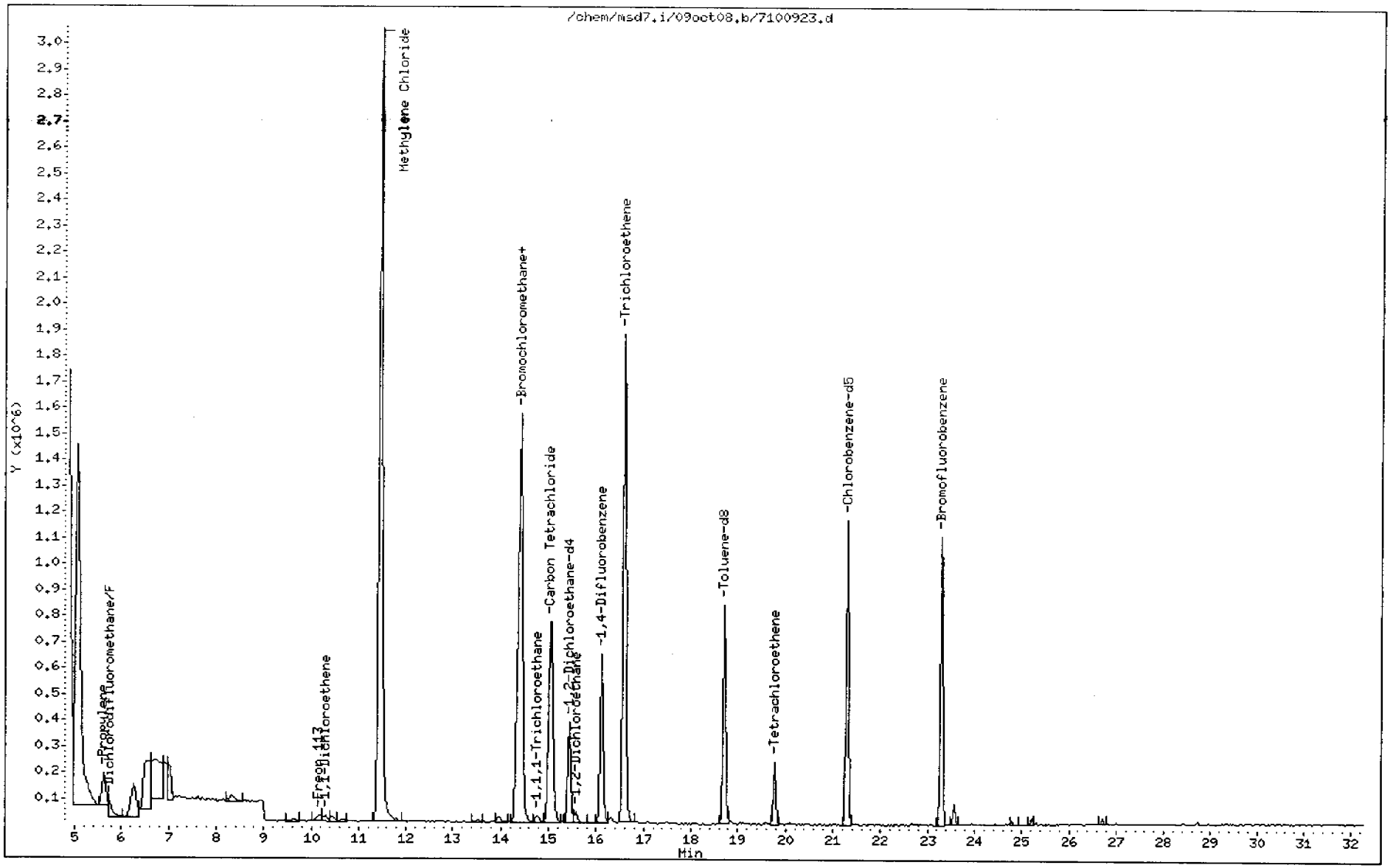
Data File: /chem/msd7.i/09oct08.b/7100923.d
Date : 10-OCT-2008 00:28
Client ID:
Sample Info: 150mL #33788

Column phase: RTx-624

Instrument: msd7.i

Operator: dfm
Column diameter: 0.53

0349



Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

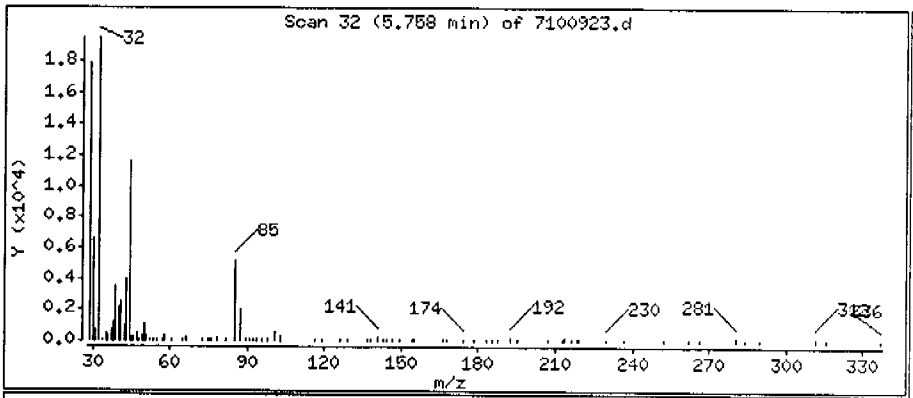
Operator: dfm

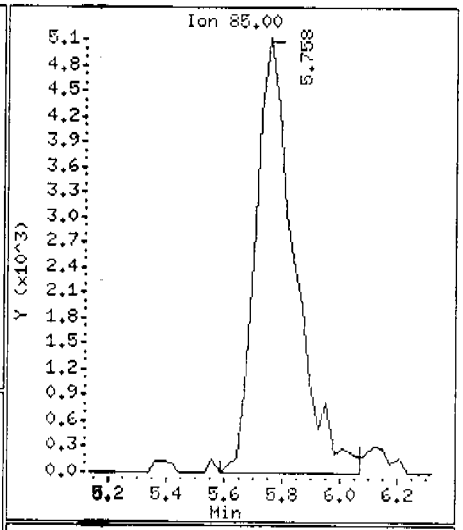
Column phase: RTx-624

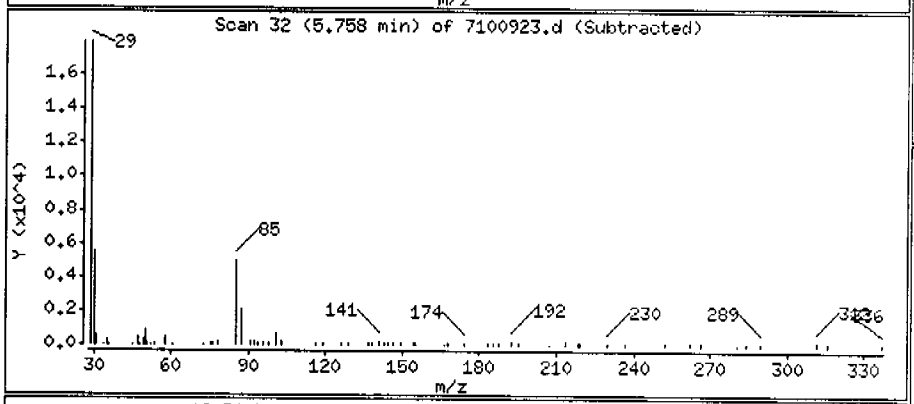
Column diameter: 0.53

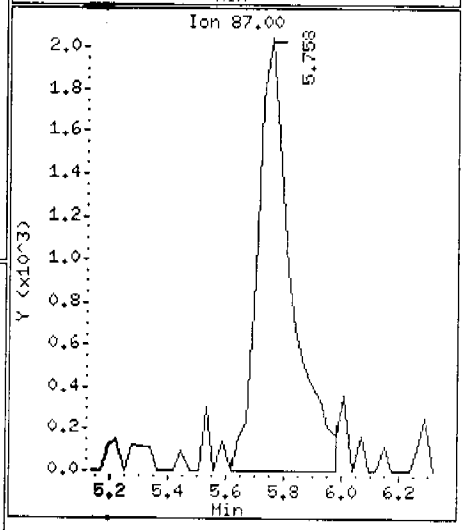
12 Dichlorodifluoromethane/Fr12

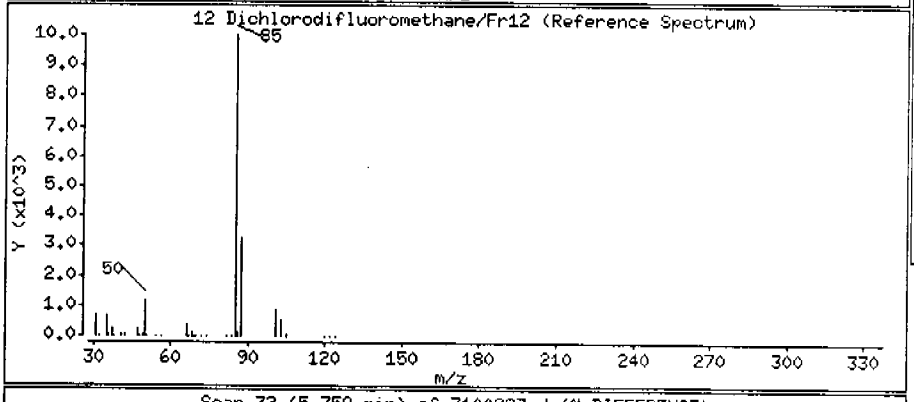
Concentration: 1.645 PPBV

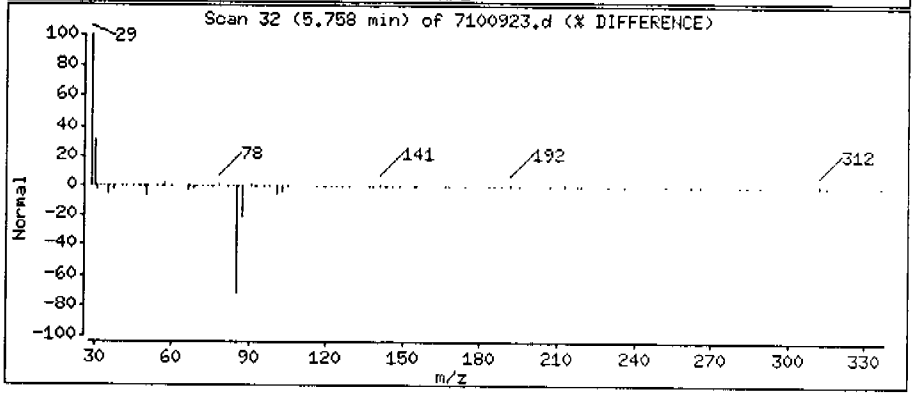












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

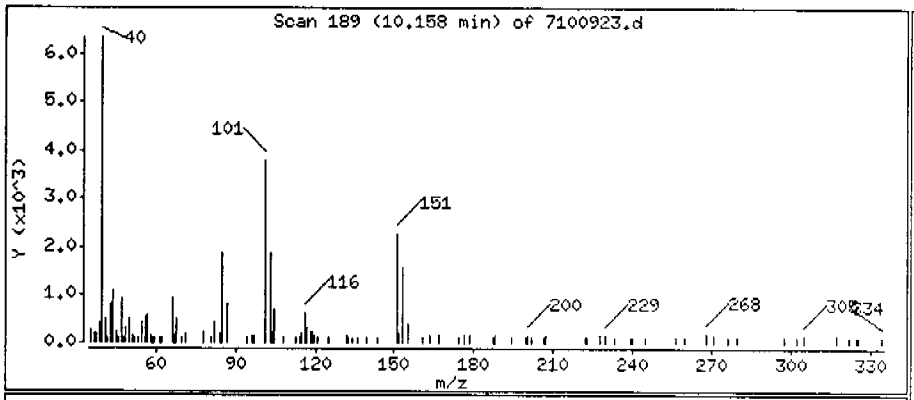
Operator: dfm

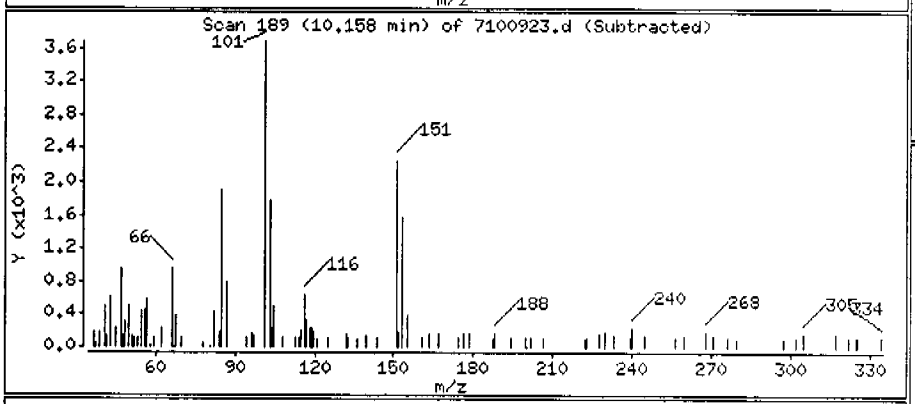
Column phase: RTx-624

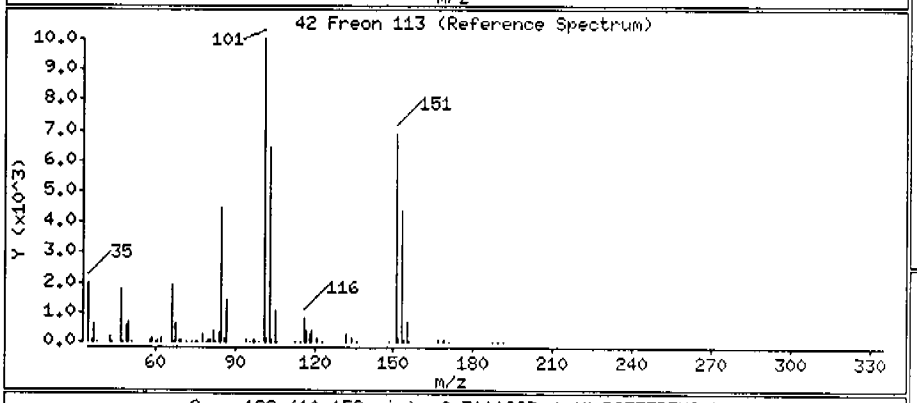
Column diameter: 0.53

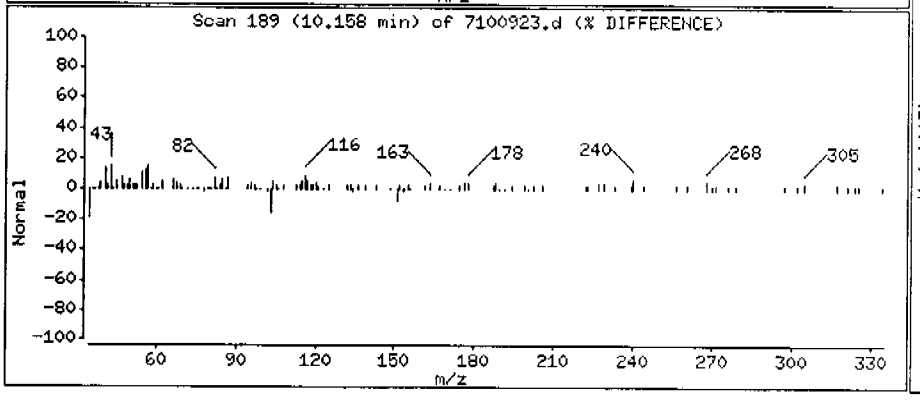
42 Freon 113

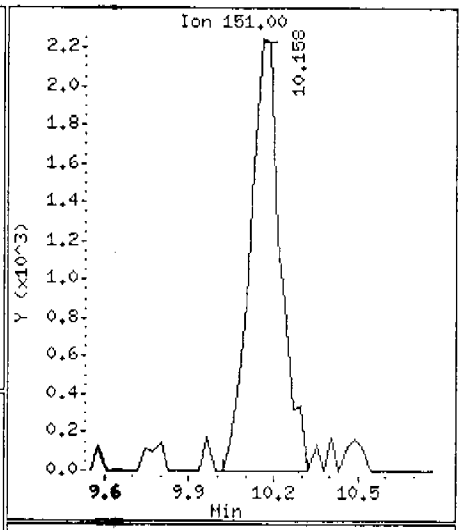
Concentration: 1.478 PPBV

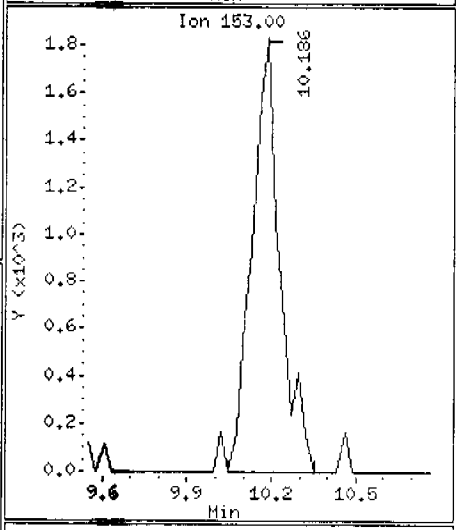


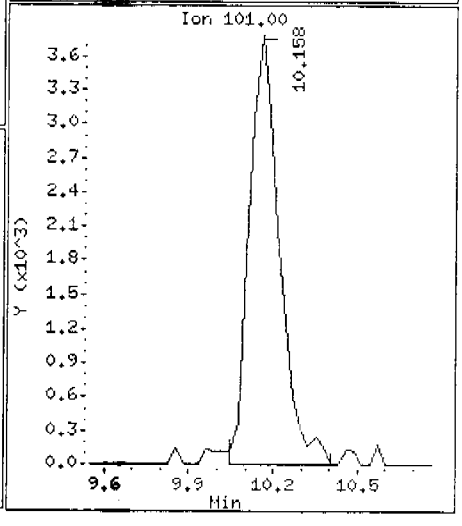












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

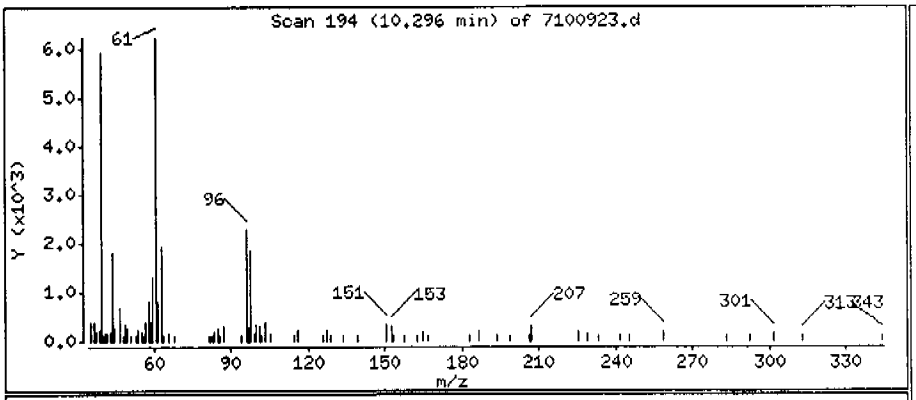
Operator: dfm

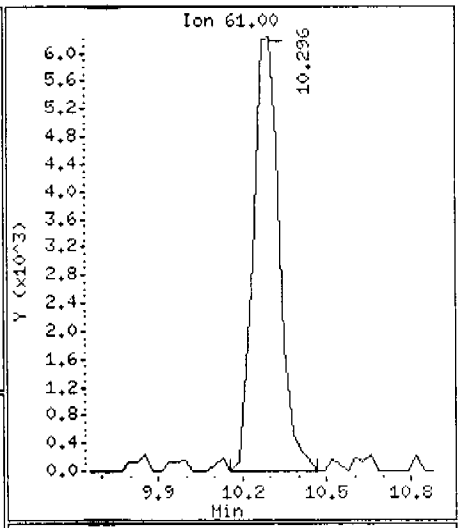
Column phase: RTx-624

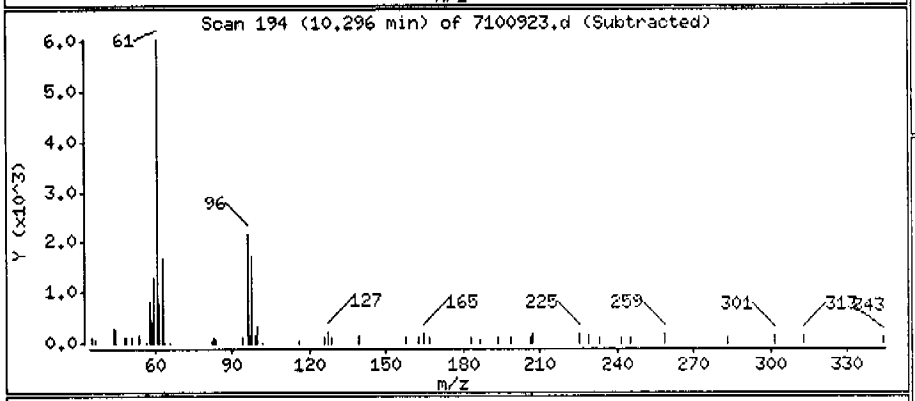
Column diameter: 0.53

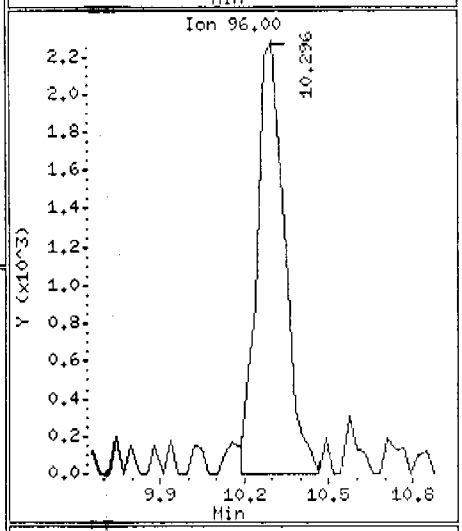
43 1,1-Dichloroethene

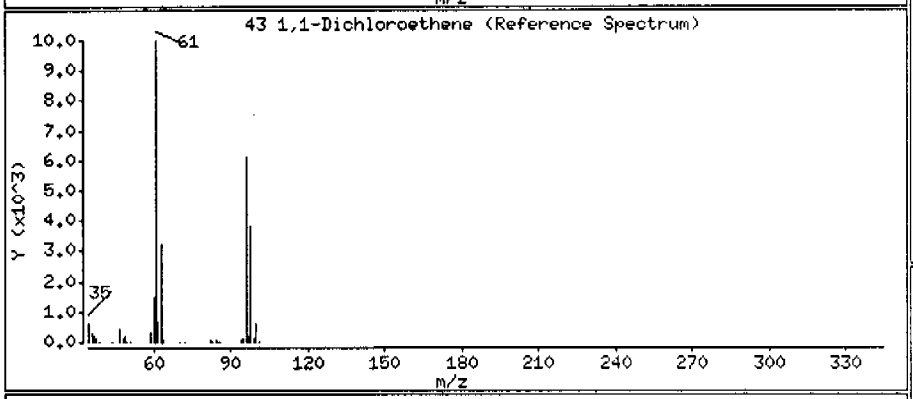
Concentration: 2.017 PPBV

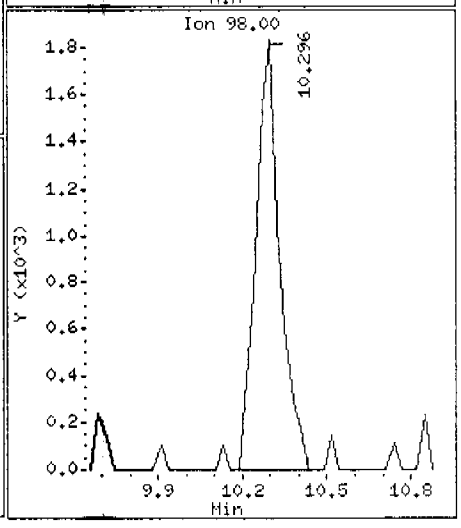


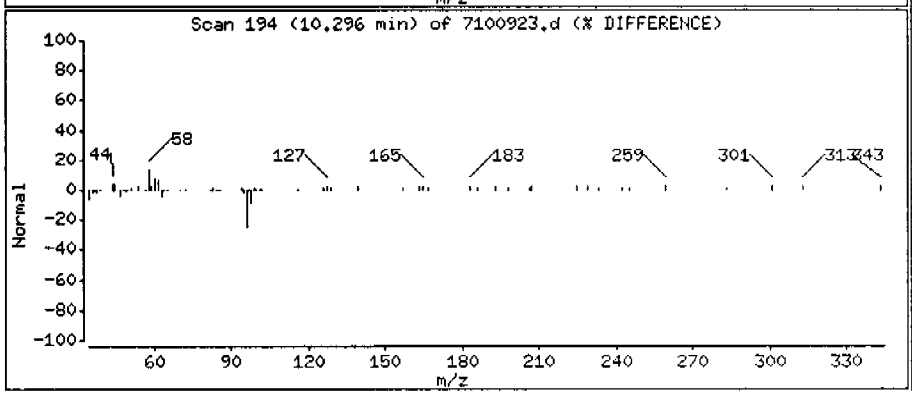












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

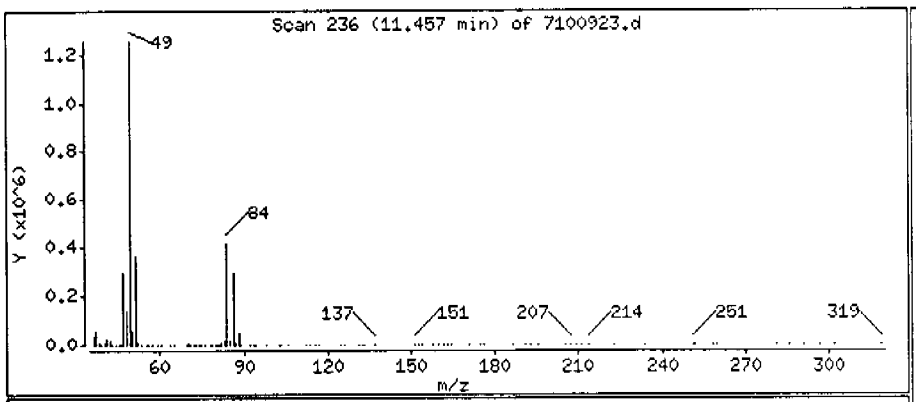
Operator: dfm

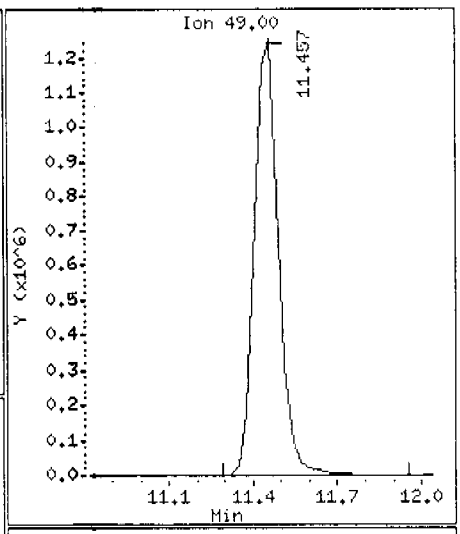
Column phase: RTx-624

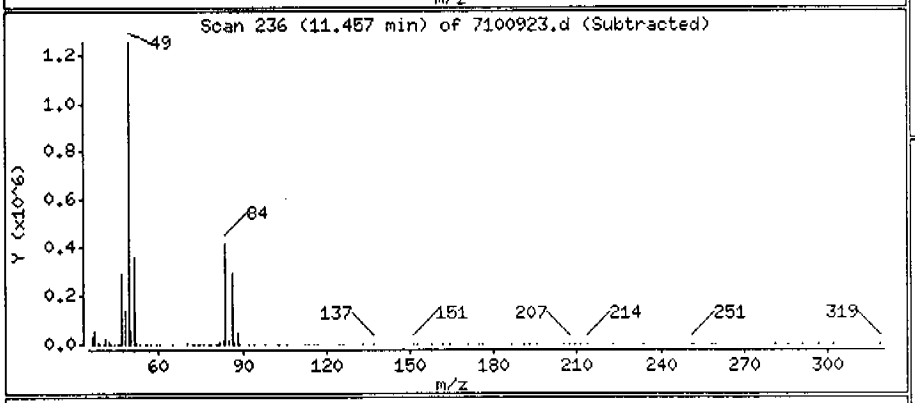
Column diameter: 0.53

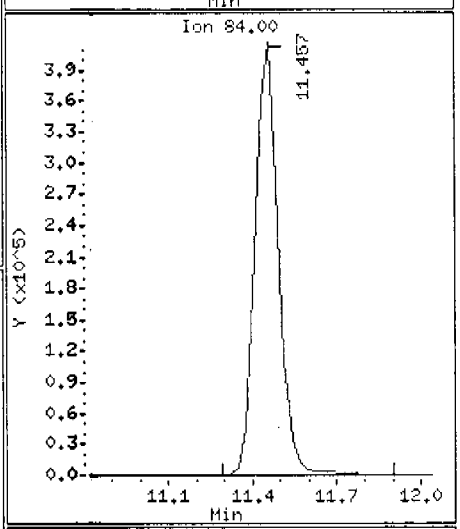
54 Methylene Chloride

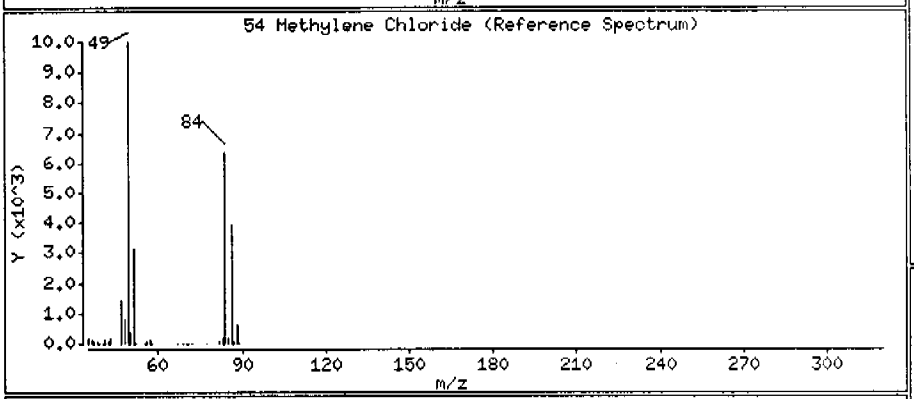
Concentration: 429.67 PPBV

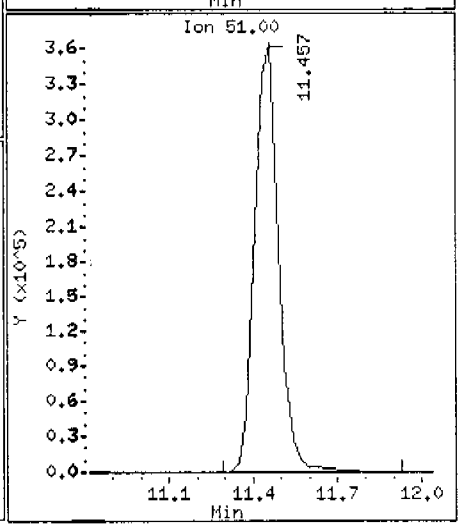


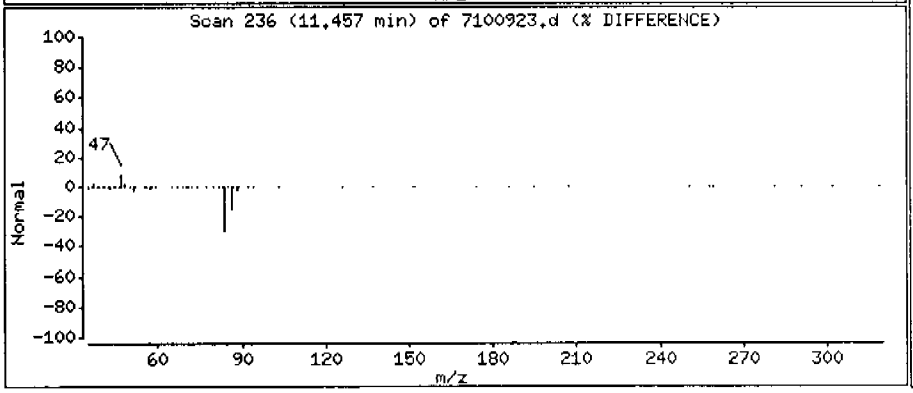












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

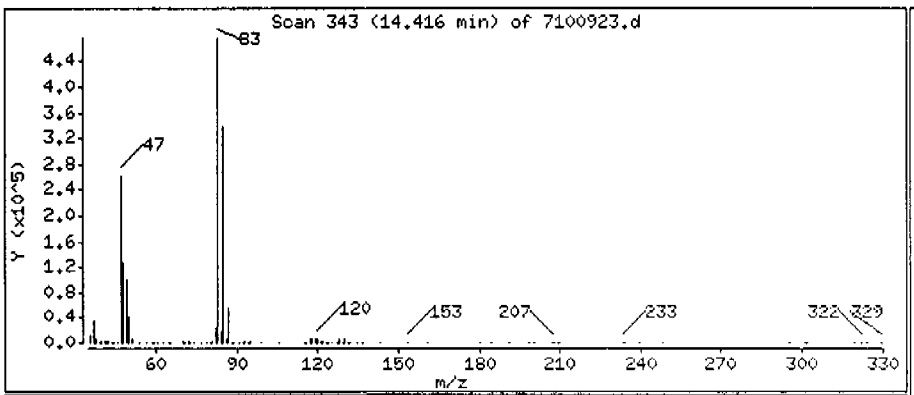
Operator: dfm

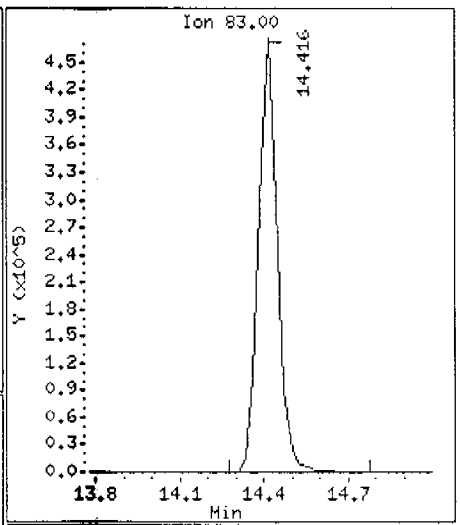
Column phase: RTx-624

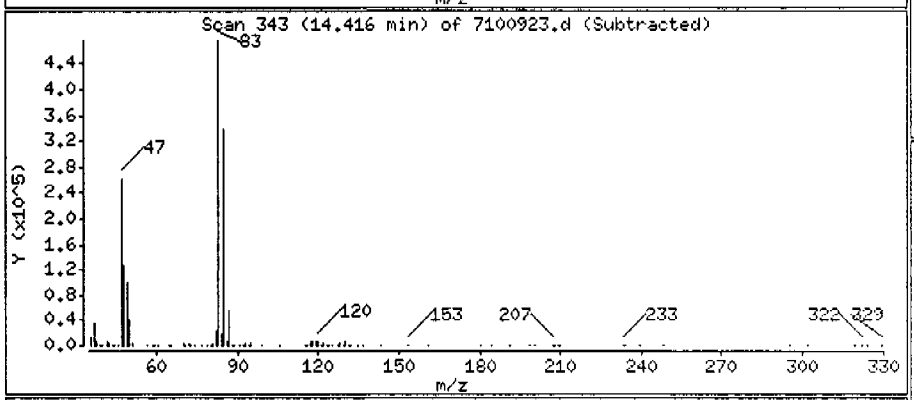
Column diameter: 0.53

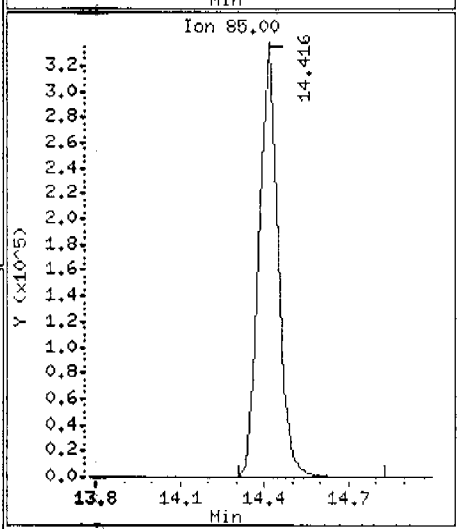
82 Chloroform

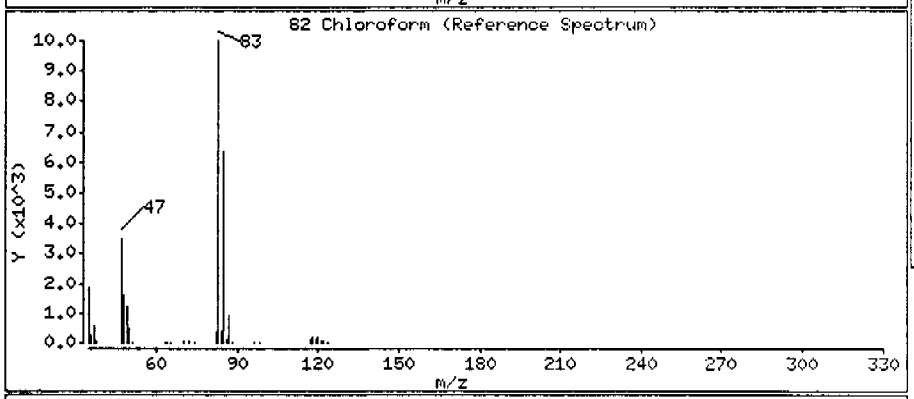
Concentration: 139.12 PPBV

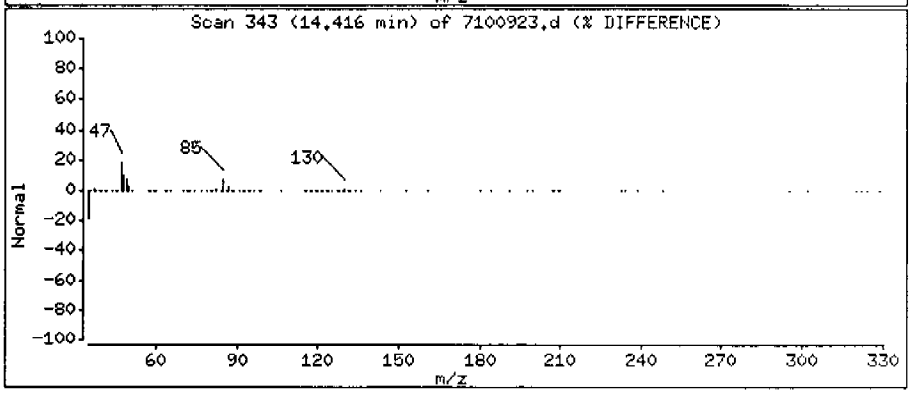












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

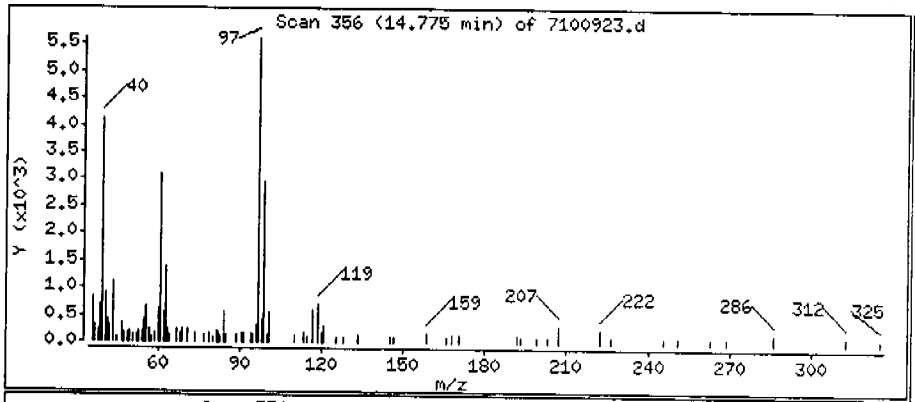
Operator: dfm

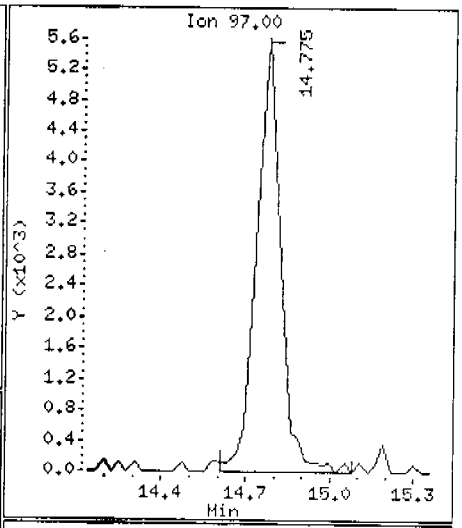
Column phase: RTx-624

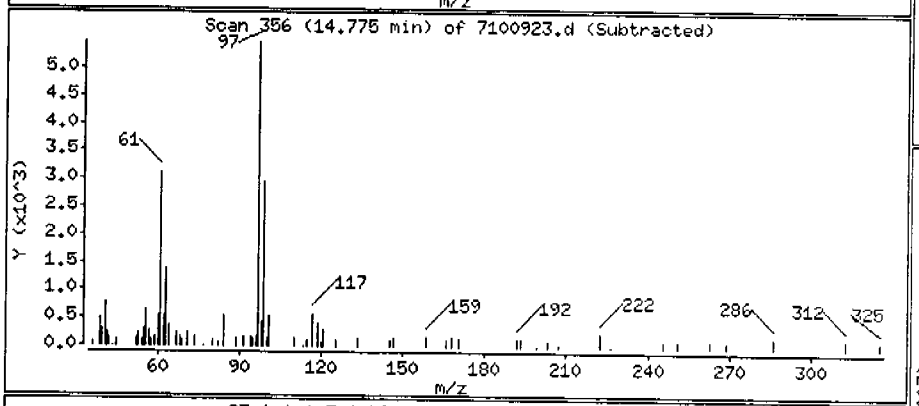
Column diameter: 0.53

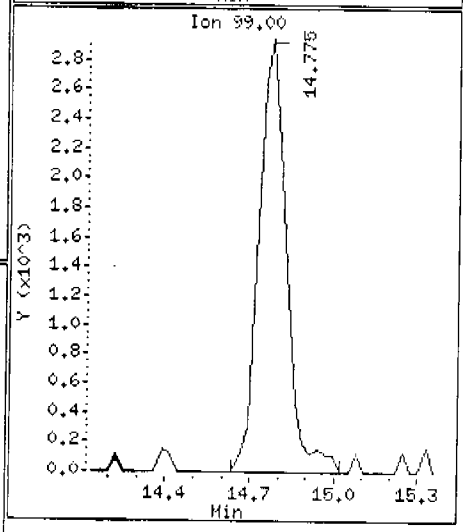
83 1,1,1-Trichloroethane

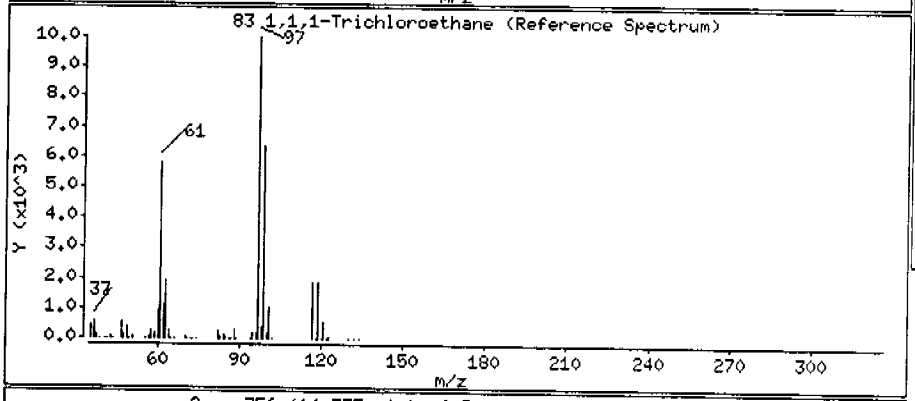
Concentration: 2.056 PPBV

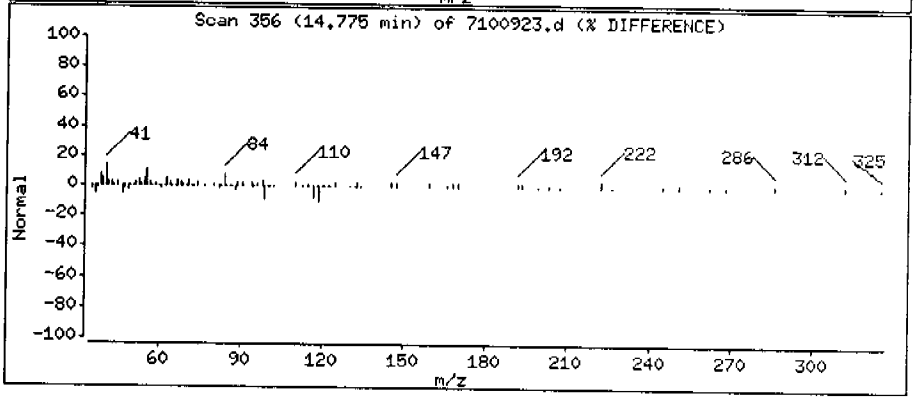












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

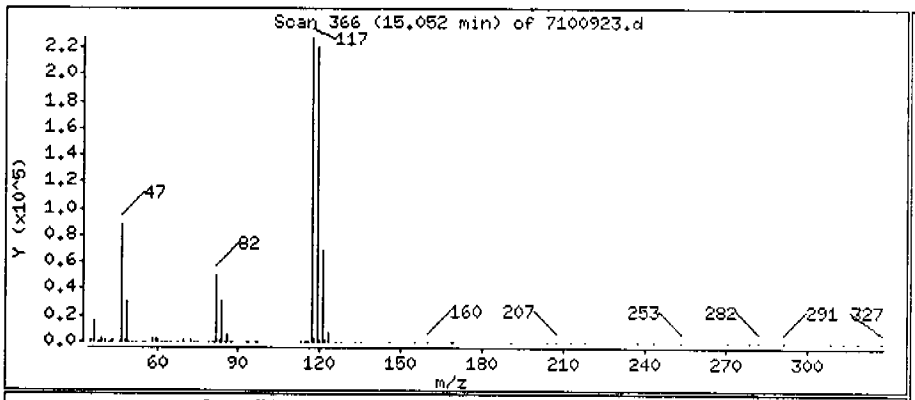
Operator: dfm

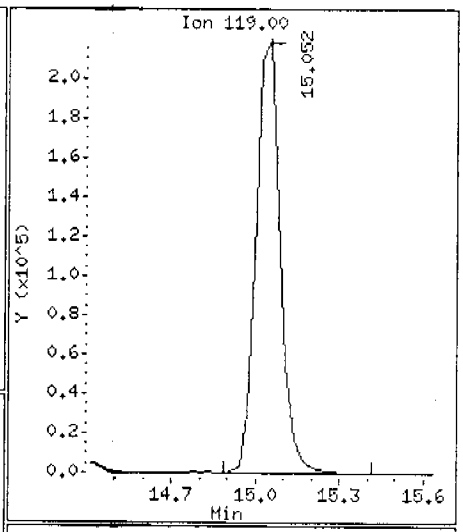
Column phase: RTx-624

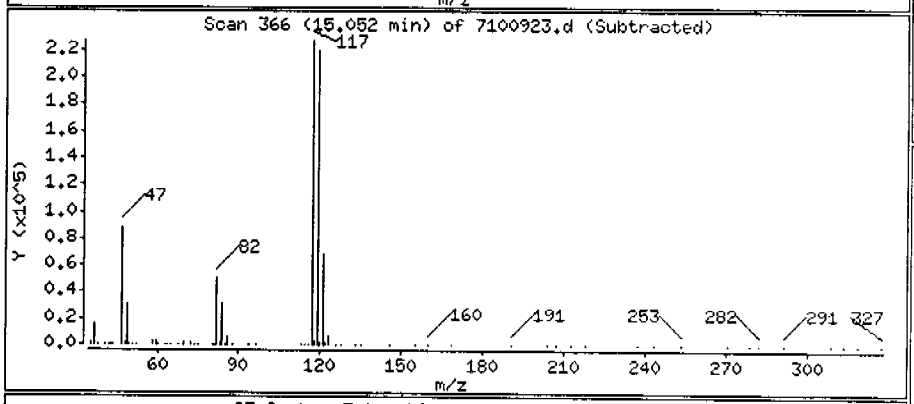
Column diameter: 0.53

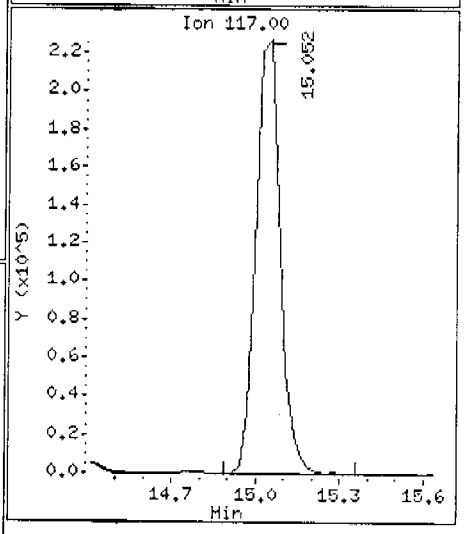
87 Carbon Tetrachloride

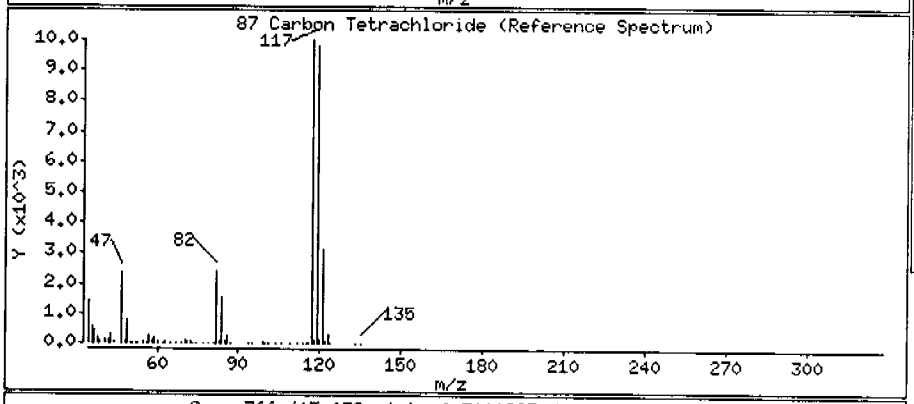
Concentration: 69.090 PPBV

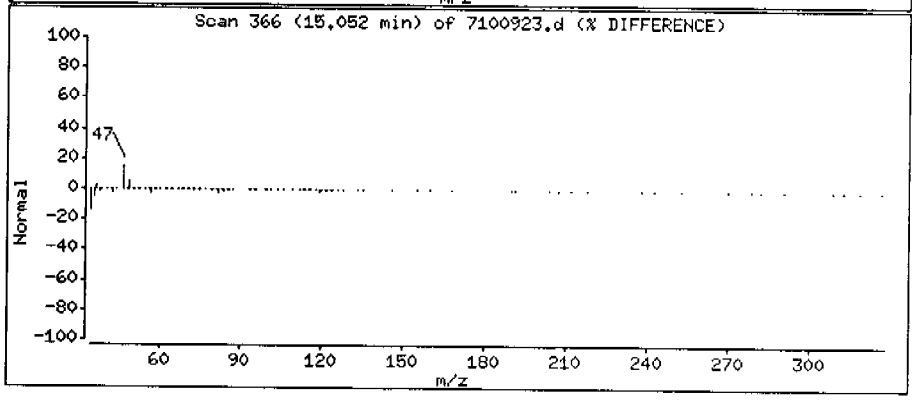












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

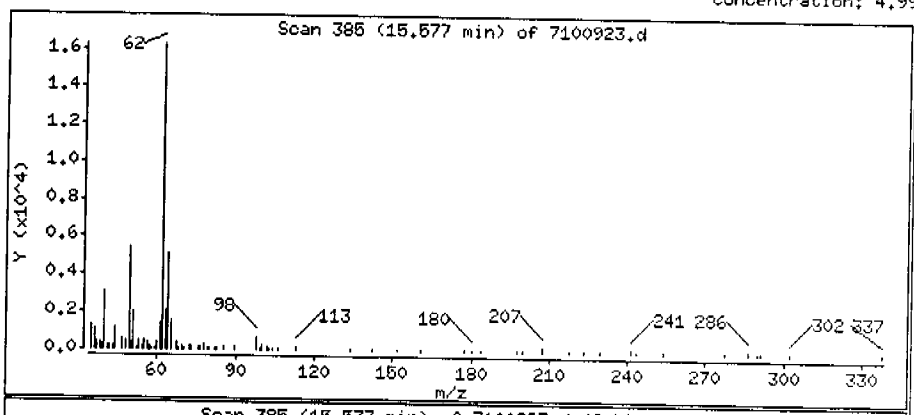
Operator: dfm

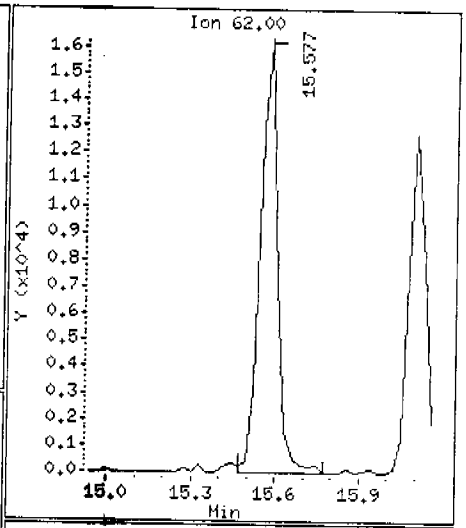
Column phase: RTx-624

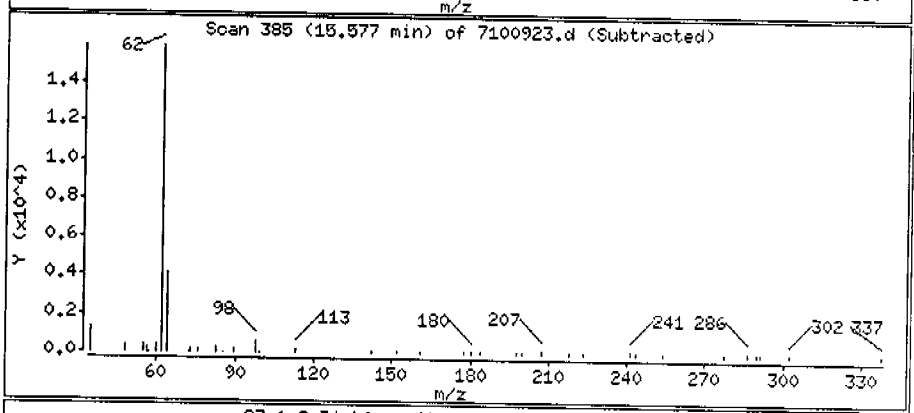
Column diameter: 0.53

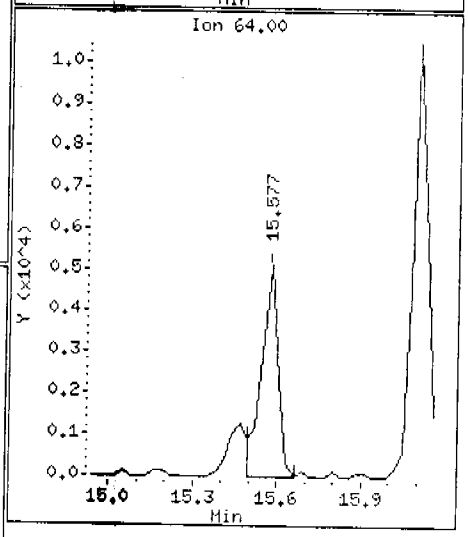
93 1,2-Dichloroethane

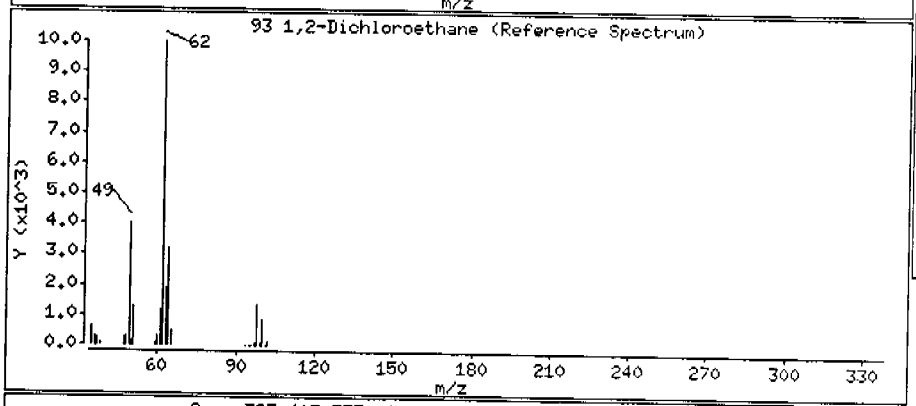
Concentration: 4.995 PPBV

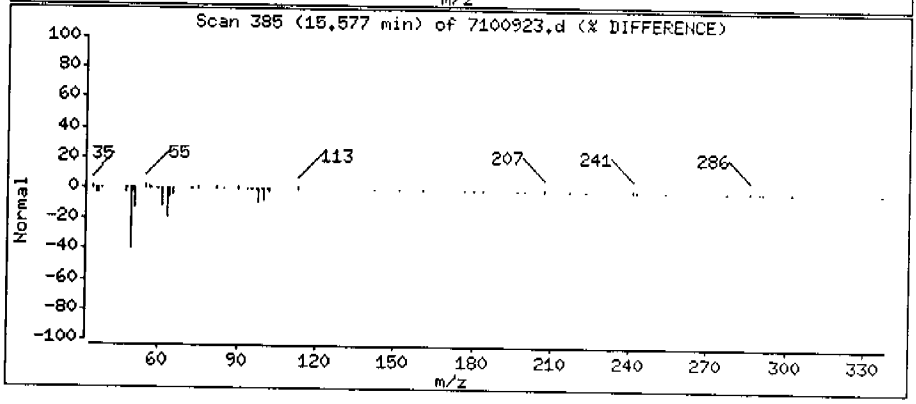












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

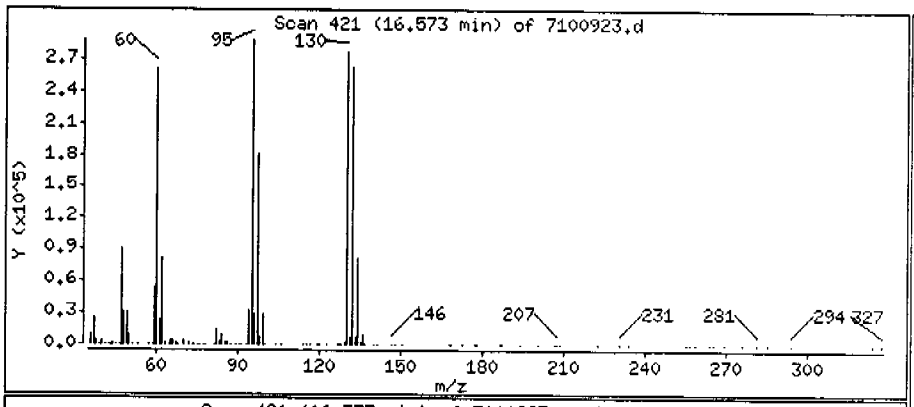
Operator: dfm

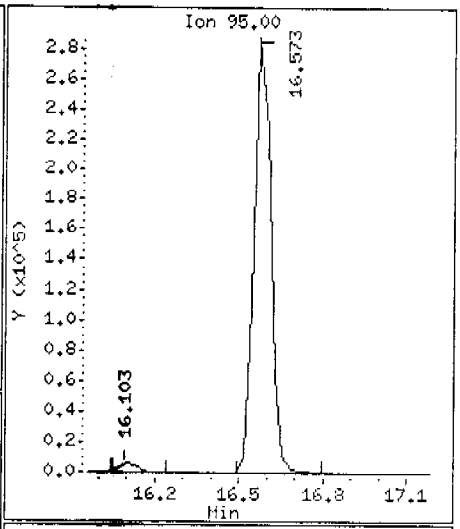
Column phase: RTx-624

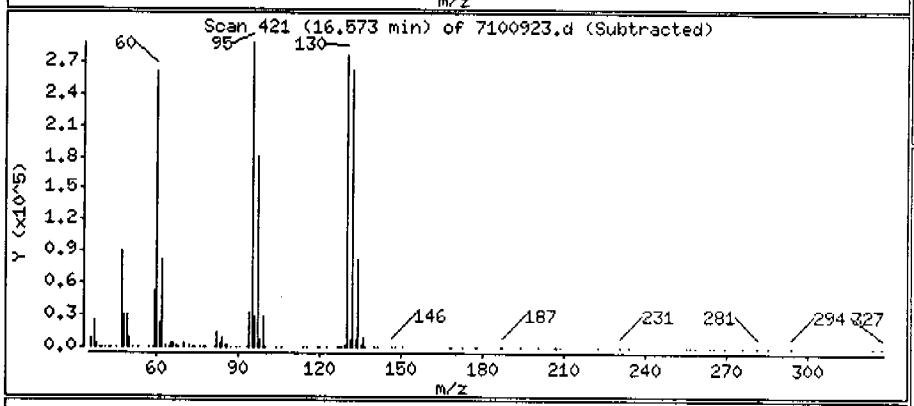
Column diameter: 0.53

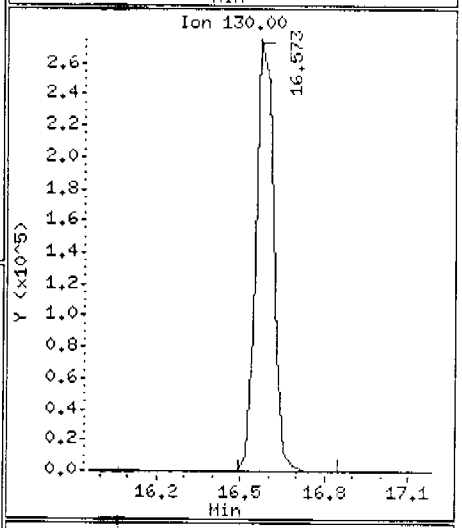
101 Trichloroethene

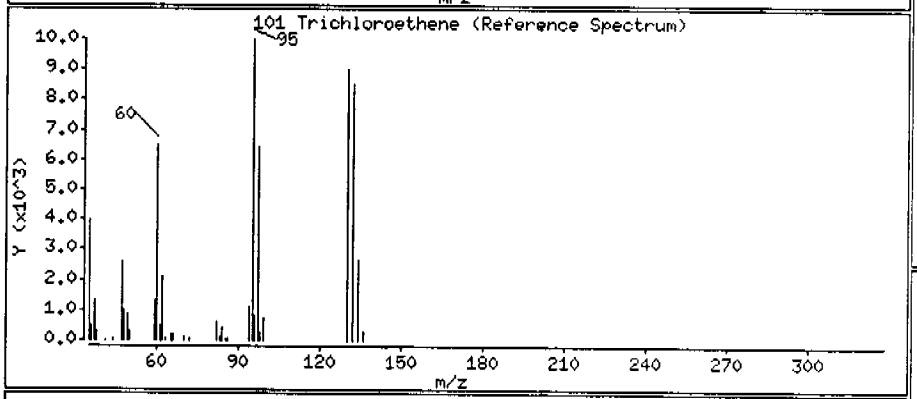
Concentration: 143.06 PPBV

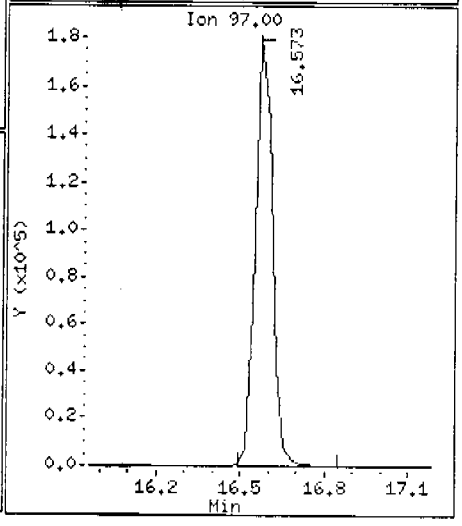


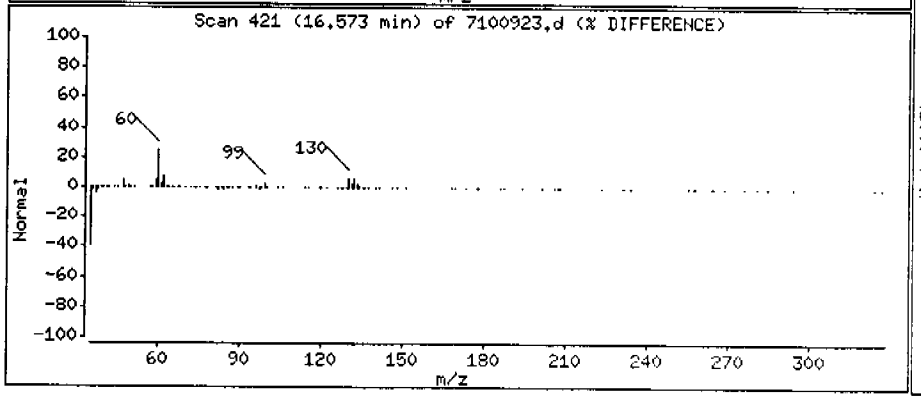












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

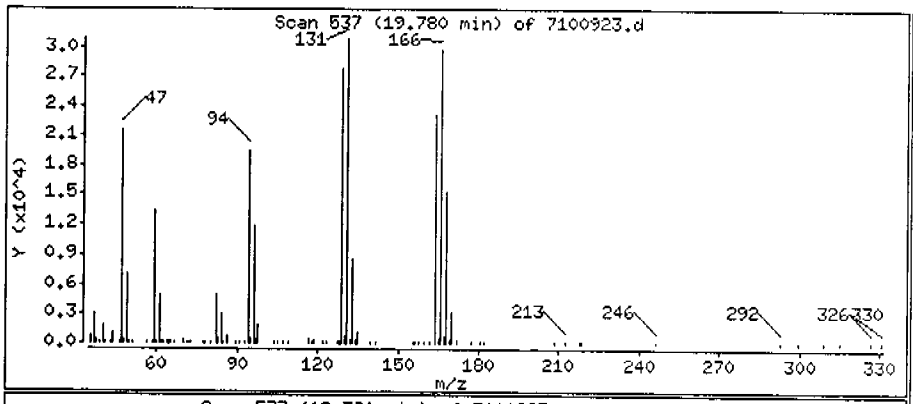
Operator: dfm

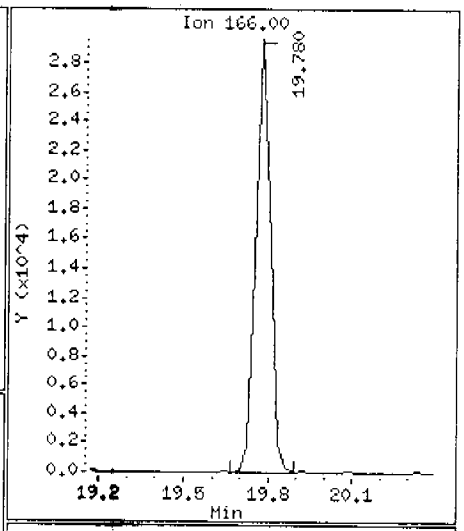
Column phase: RTx-624

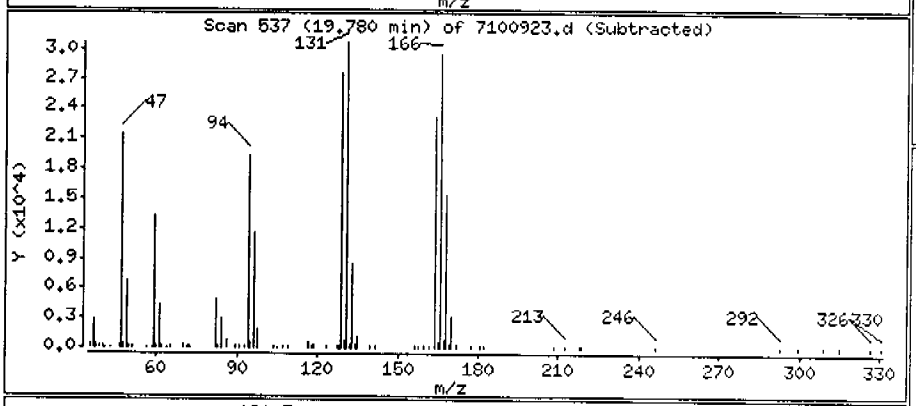
Column diameter: 0.53

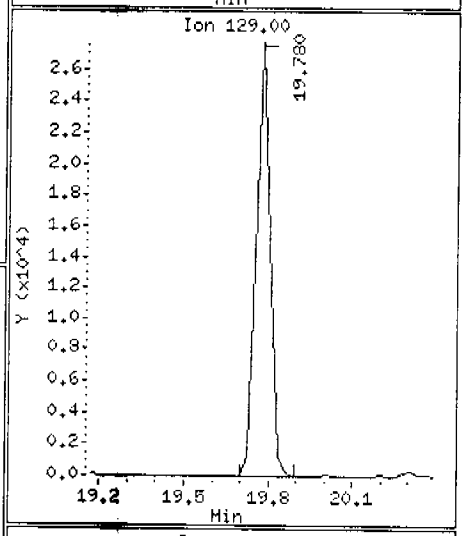
120 Tetrachloroethene

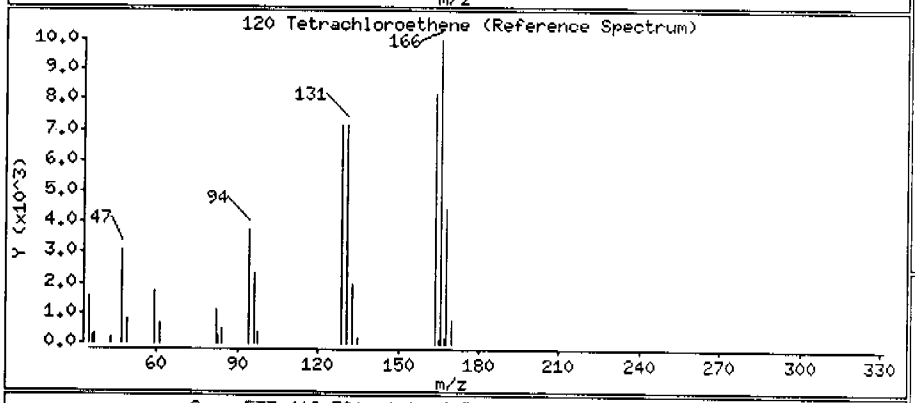
Concentration: 10.247 PPBV

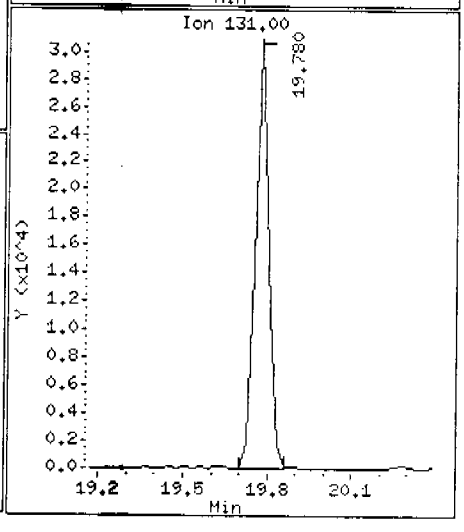


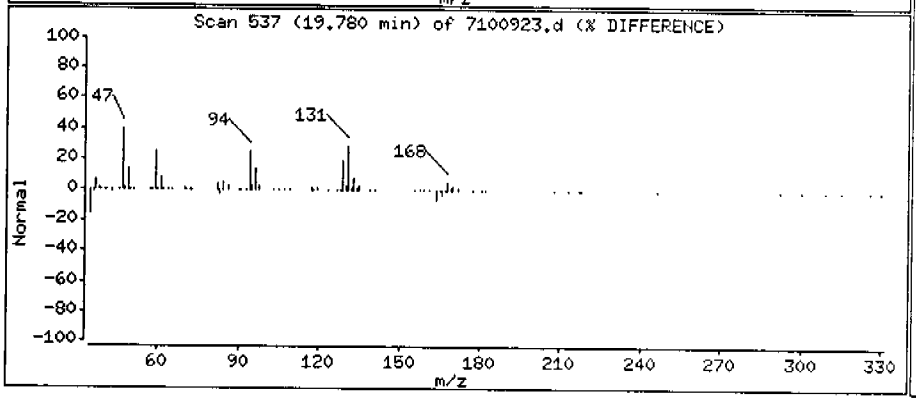












Data File: /chem/msd7.i/09oct08.b/7100923.d

Date : 10-OCT-2008 00:28

Client ID:

Instrument: msd7.i

Sample Info: 150mL #33788

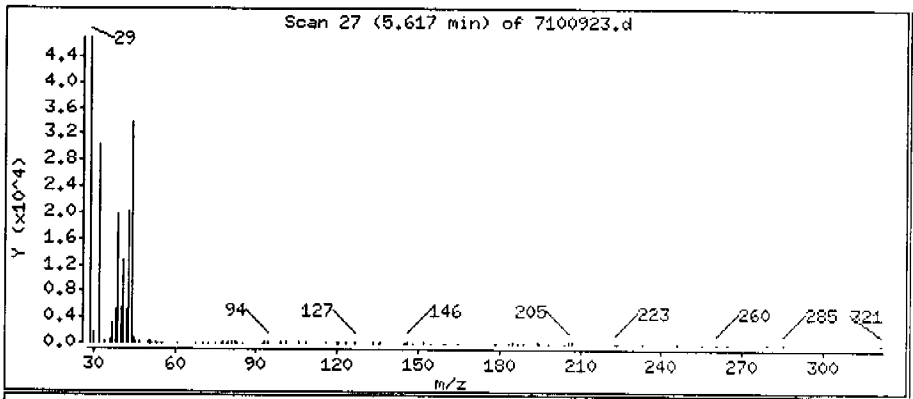
Operator: dfm

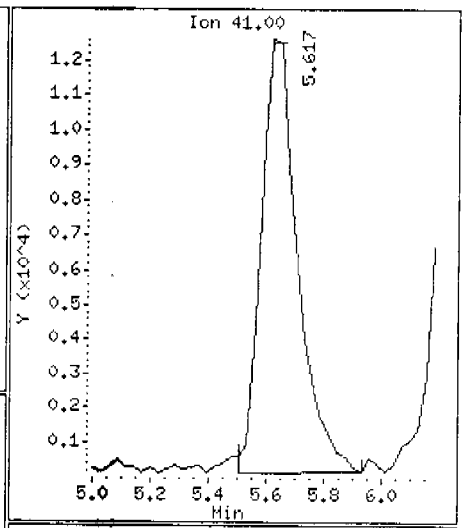
Column phase: RTx-624

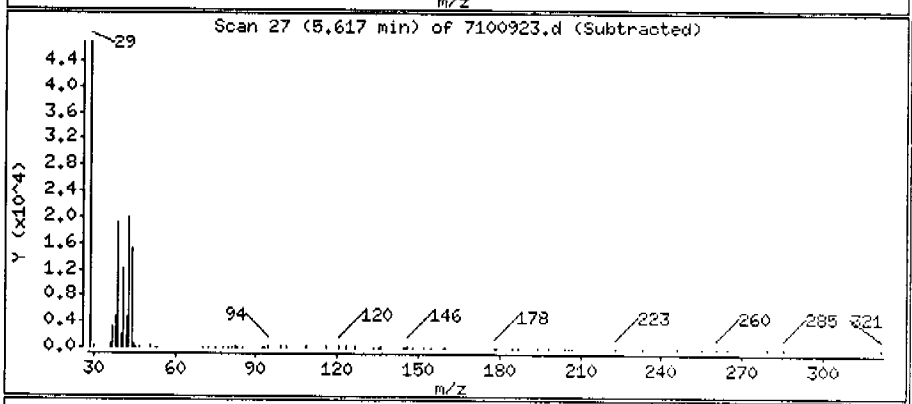
Column diameter: 0.53

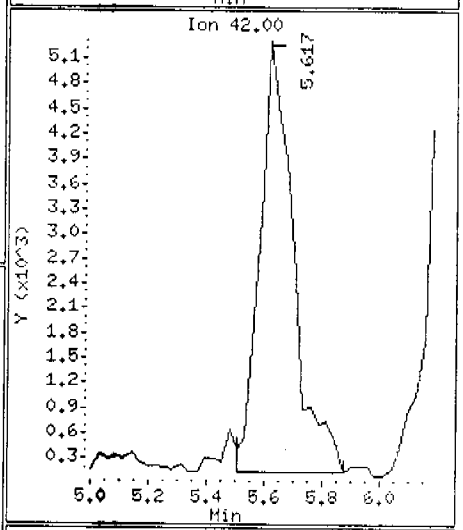
11 Propylene

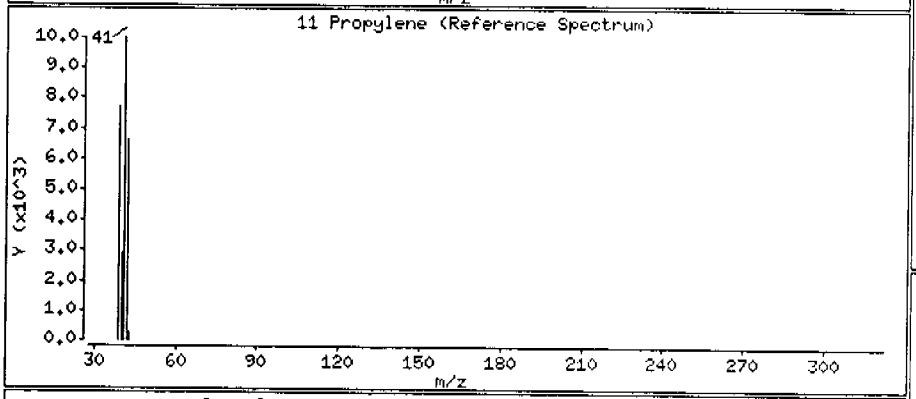
Concentration: 10.987 PPBV

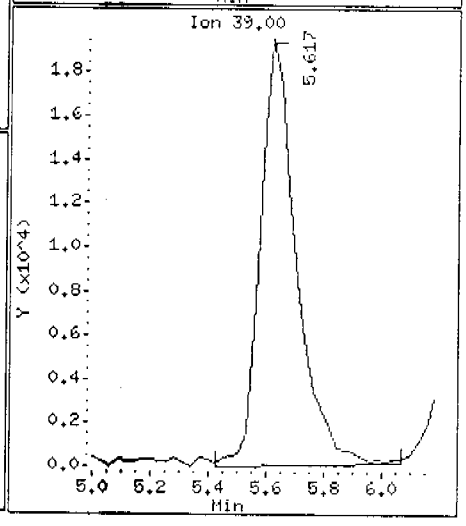


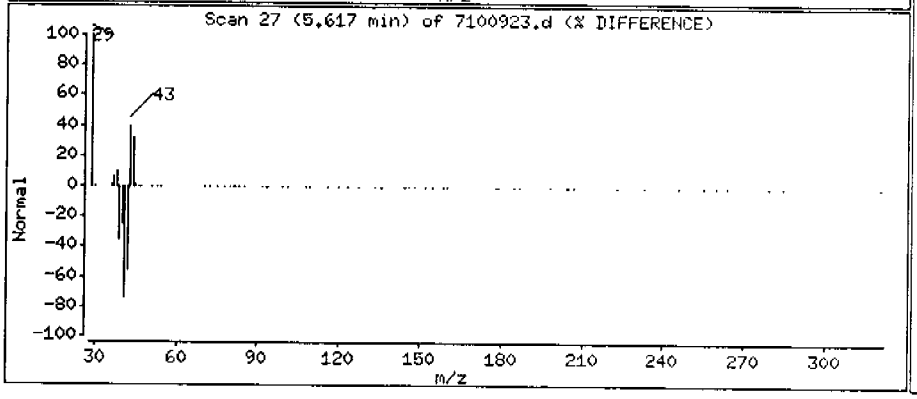












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14832

Lab ID#: 0809614-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	2.0	3.2	8.0	13
Methylene Chloride	2.0	720	7.0	2500
Chloroform	2.0	230	9.8	1100
Carbon Tetrachloride	2.0	80	13	500
1,2-Dichloroethane	2.0	8.8	8.1	36
Trichloroethene	2.0	170	11	920
Tetrachloroethene	2.0	4.5	14	31
Propylene	8.0	12	14	21

0361

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14832

Lab ID#: 0809614-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100924	**Date of Collection:**	9/23/08
Dil. Factor:	4.02	**Date of Analysis:**	10/10/08 01:07 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	2.0	Not Detected	9.9	Not Detected
Freon 114	2.0	Not Detected	14	Not Detected
Chloromethane	8.0	Not Detected	17	Not Detected
Vinyl Chloride	2.0	Not Detected	5.1	Not Detected
1,3-Butadiene	2.0	Not Detected	4.4	Not Detected
Bromomethane	2.0	Not Detected	7.8	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	2.0	Not Detected	11	Not Detected
Ethanol	8.0	Not Detected	15	Not Detected
Freon 113	2.0	Not Detected	15	Not Detected
1,1-Dichloroethene	2.0	3.2	8.0	13
Acetone	8.0	Not Detected	19	Not Detected
2-Propanol	8.0	Not Detected	20	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	2.0	720	7.0	2500
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected
Hexane	2.0	Not Detected	7.1	Not Detected
1,1-Dichloroethane	2.0	Not Detected	8.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected
Tetrahydrofuran	2.0	Not Detected	5.9	Not Detected
Chloroform	2.0	230	9.8	1100
1,1,1-Trichloroethane	2.0	Not Detected	11	Not Detected
Cyclohexane	2.0	Not Detected	6.9	Not Detected
Carbon Tetrachloride	2.0	80	13	500
Benzene	2.0	Not Detected	6.4	Not Detected
1,2-Dichloroethane	2.0	8.8	8.1	36
Heptane	2.0	Not Detected	8.2	Not Detected
Trichloroethene	2.0	170	11	920
1,2-Dichloropropane	2.0	Not Detected	9.3	Not Detected
1,4-Dioxane	8.0	Not Detected	29	Not Detected
Bromodichloromethane	2.0	Not Detected	13	Not Detected
cis-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected
4-Methyl-2-pentanone	2.0	Not Detected	8.2	Not Detected
Toluene	2.0	Not Detected	7.6	Not Detected
trans-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected
1,1,2-Trichloroethane	2.0	Not Detected	11	Not Detected
Tetrachloroethene	2.0	4.5	14	31

0362

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14832

Lab ID#: 0809614-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100924**	**Date of Collection:**	**9/23/08**
Dil. Factor:	**4.02**	**Date of Analysis:**	**10/10/08 01:07 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	8.0	Not Detected	33	Not Detected
Dibromochloromethane	2.0	Not Detected	17	Not Detected
1,2-Dibromoethane (EDB)	2.0	Not Detected	15	Not Detected
Chlorobenzene	2.0	Not Detected	9.2	Not Detected
Ethyl Benzene	2.0	Not Detected	8.7	Not Detected
m,p-Xylene	2.0	Not Detected	8.7	Not Detected
o-Xylene	2.0	Not Detected	8.7	Not Detected
Styrene	2.0	Not Detected	8.6	Not Detected
Bromoform	2.0	Not Detected	21	Not Detected
1,1,2,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
4-Ethyltoluene	2.0	Not Detected	9.9	Not Detected
1,3,5-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected
1,2,4-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected
1,3-Dichlorobenzene	2.0	Not Detected	12	Not Detected
1,4-Dichlorobenzene	2.0	Not Detected	12	Not Detected
alpha-Chlorotoluene	2.0	Not Detected	10	Not Detected
1,2-Dichlorobenzene	2.0	Not Detected	12	Not Detected
1,2,4-Trichlorobenzene	8.0	Not Detected	60	Not Detected
Hexachlorobutadiene	8.0	Not Detected	86	Not Detected
Chlorodifluoromethane	8.0	Not Detected	28	Not Detected
Methanol	200	Not Detected	260	Not Detected
n-Butanol	8.0	Not Detected	24	Not Detected
Propylene	8.0	12	14	21

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	92	70-130

0363

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100924.d
Lab Smp Id: 0809614-17A
Inj Date : 10-OCT-2008 01:07
Operator : dfm Inst ID: msd7.i
Smp Info : 100mL #3788
Misc Info : 10"Hg-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 4.02000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	288586	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	231153			28.92- 128.92	80.10
14.333	14.333 (1.000)	49	1229647			320.90- 420.90	426.09
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.103 (1.000)	114	905081	25.0000		80.00- 120.00	100.00
16.102	16.103 (1.000)	88	159397			0.00- 67.10	17.61
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	976988	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	498257			1.24- 101.24	51.00
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	599183	27.4869	27.487	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	245430			0.00- 97.37	40.96
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.701	18.702 (1.161)	98	838978	24.2153	24.215	80.00- 120.00	100.00
18.701	18.702 (1.161)	70	120507			0.00- 63.85	14.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.701	18.702 (1.161)	100	659185			26.51- 126.51	78.57
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	461731	22.9675	22.967	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	683053			92.62- 192.62	147.93
23.291	23.291 (1.093)	176	444857			44.03- 144.03	96.35
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.268	10.269 (0.716)	61	39473	0.79740	3.206	80.00- 120.00	100.00
10.268	10.269 (0.716)	96	15660			0.00- 87.74	39.67
10.268	10.269 (0.716)	98	11234			0.00- 73.80	28.46
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	7804684	180.219	724.48	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	2509021			0.00- 84.42	32.15
11.430	11.430 (0.797)	51	2261956			0.00- 80.54	28.98
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2295461	57.2220	230.03	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1648728			21.17- 121.17	71.83
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	928157	19.8451	79.777	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	980996			55.68- 155.68	105.69
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	79766	2.19014	8.804	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	27340			0.00- 82.49	34.28
101 Trichloroethene					CAS #: 79-01-6		
16.572	16.573 (1.029)	95	902368	42.7444	171.83	80.00- 120.00	100.00
16.572	16.573 (1.029)	130	944785			52.48- 152.48	104.70
16.572	16.573 (1.029)	97	582088			14.44- 114.44	64.51
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	29679	1.12441	4.520	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	24729			35.87- 135.87	83.32
19.780	19.780 (0.929)	131	25780			35.33- 135.33	86.86
11 Propylene					CAS #: 115-07-1		
5.588	5.589 (0.390)	41	74846	3.04168	12.228	80.00- 120.00	100.00
5.617	5.589 (0.392)	42	25774			16.57- 116.57	34.44
5.588	5.589 (0.390)	39	109026			28.60- 128.60	145.67

Report Date: 11-Oct-2008 08:45

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100924.d
Lab Smp Id: 0809614-17A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 10"Hg-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	288586	-20.30
97 1,4-Difluorobenze	1146510	687906	1605114	905081	-21.06
126 Chlorobenzene-d5	1241713	745028	1738398	976988	-21.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100924.d
Report Date: 11-Oct-2008 08:45

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-17A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 10"Hg-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: dfm
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.487	109.95	70-130
$ 113 Toluene-d8	25.000	24.215	96.86	70-130
$ 137 Bromofluorobenzene	25.000	22.967	91.87	70-130

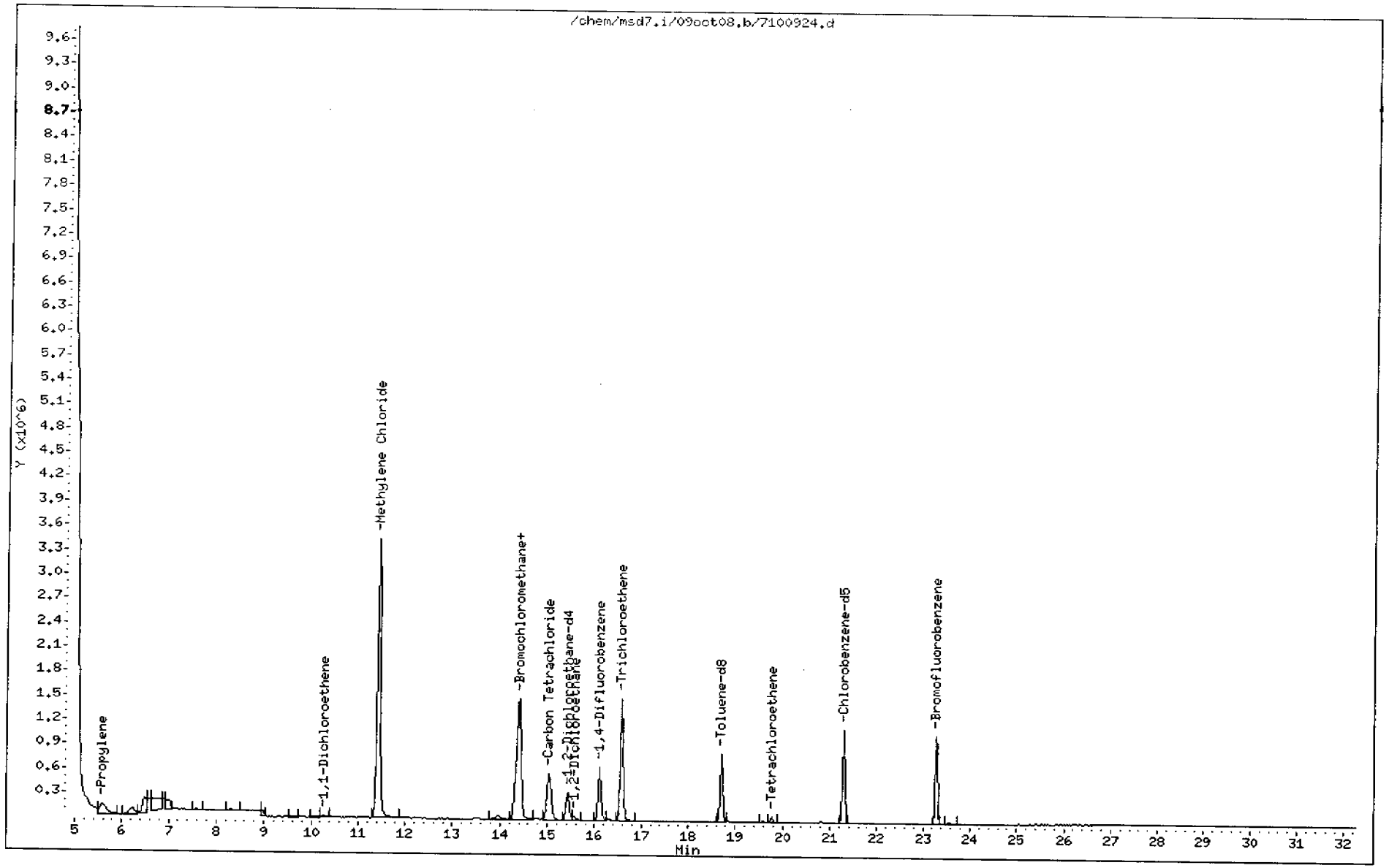
0368

Data File: /chem/msd7.i/09oct08.b/7100924.d
Date : 10-OCT-2008 01:07
Client ID:
Sample Info: 100mL #3788

Instrument: msd7.i

Operator: dfm
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

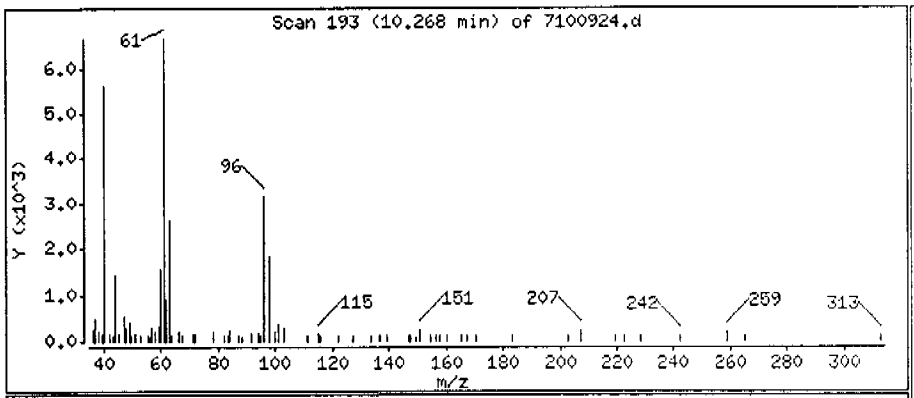
Operator: dfm

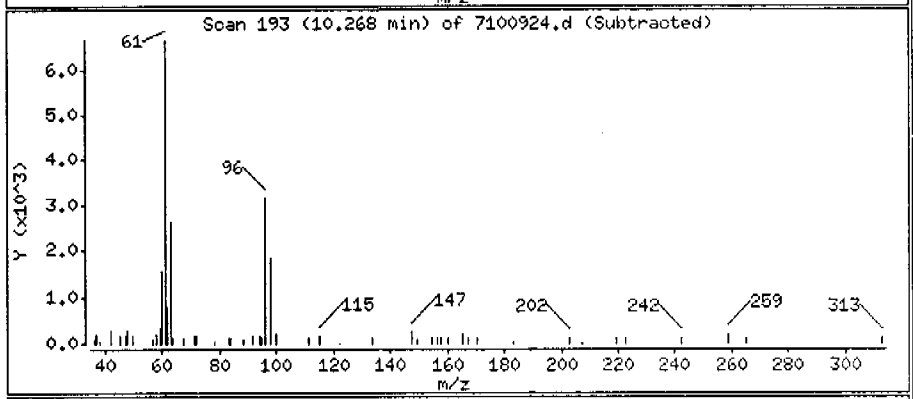
Column phase: RTx-624

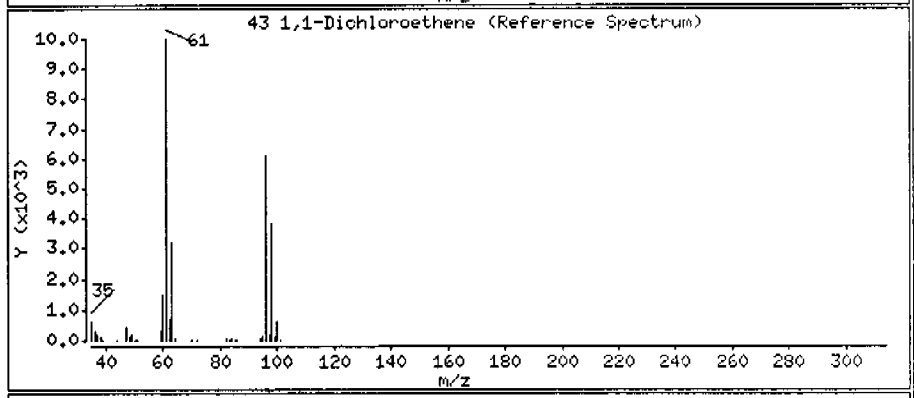
Column diameter: 0.53

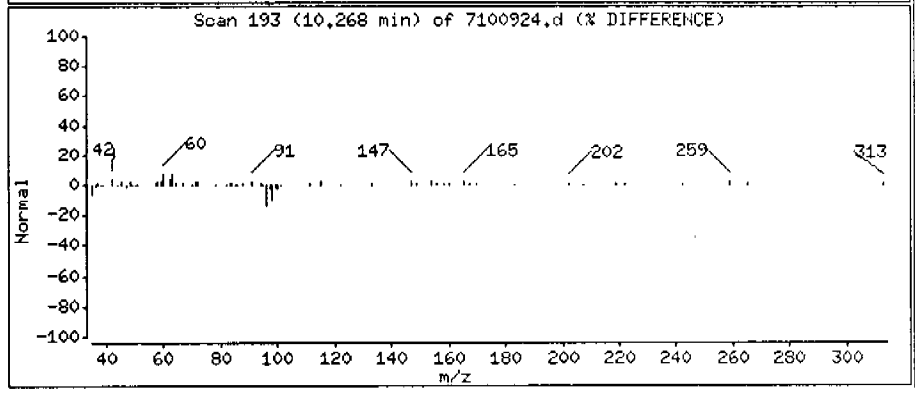
43 1,1-Dichloroethene

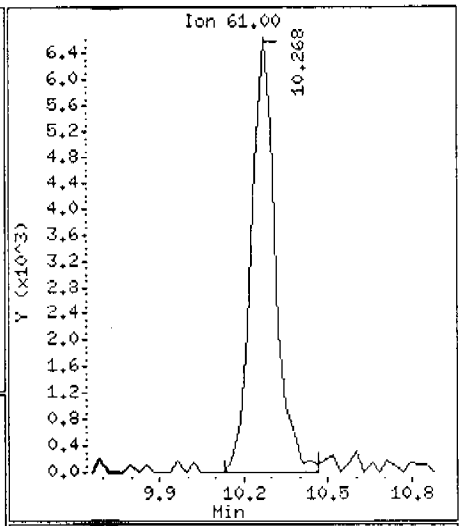
Concentration: 3.206 PPBV

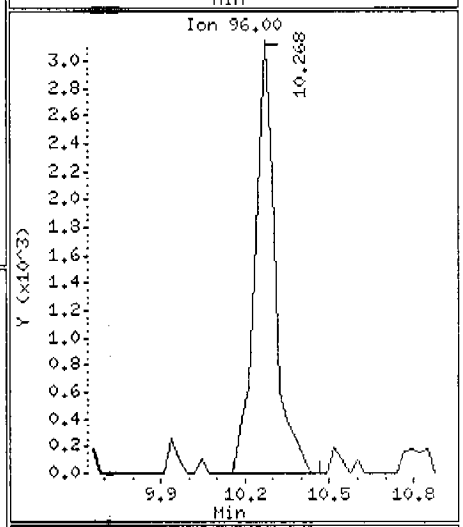


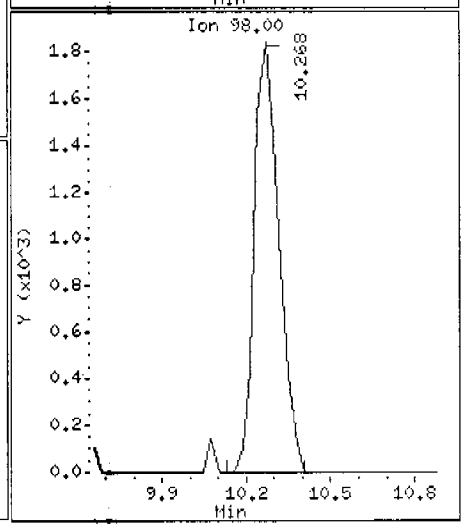












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

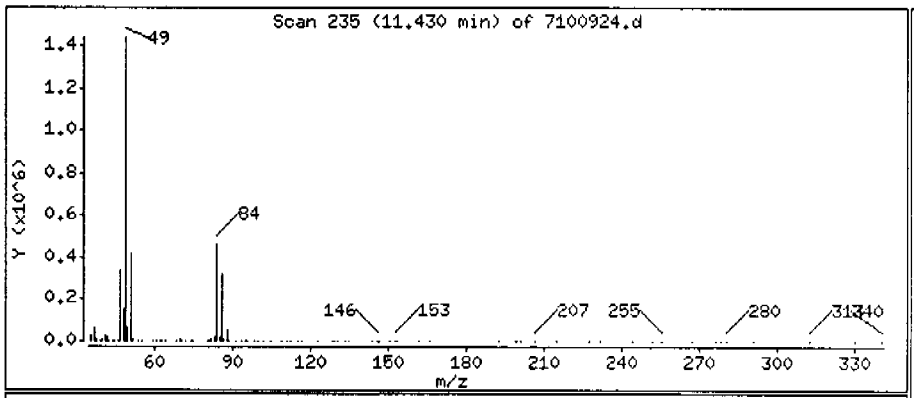
Operator: dfm

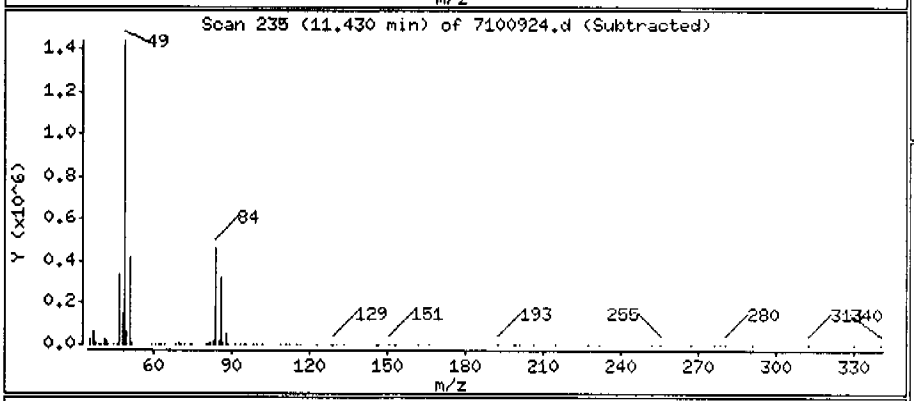
Column phase: RTx-624

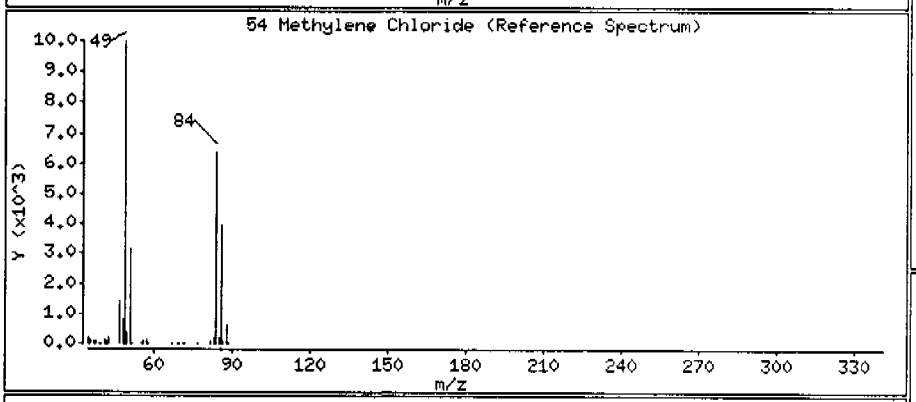
Column diameter: 0.53

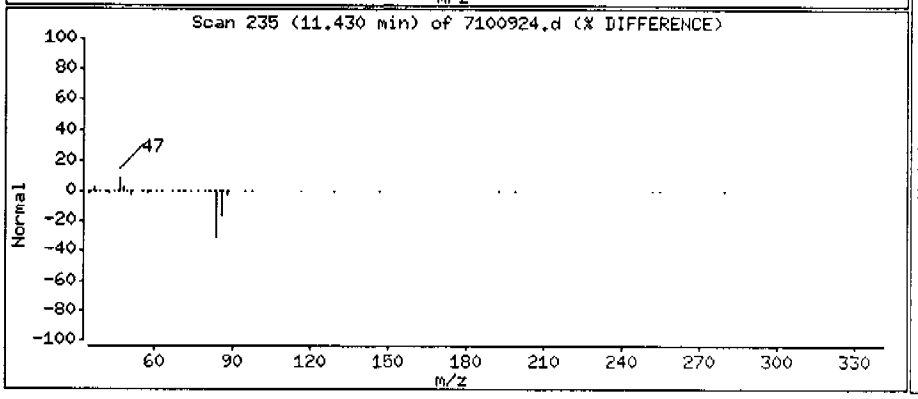
54 Methylene Chloride

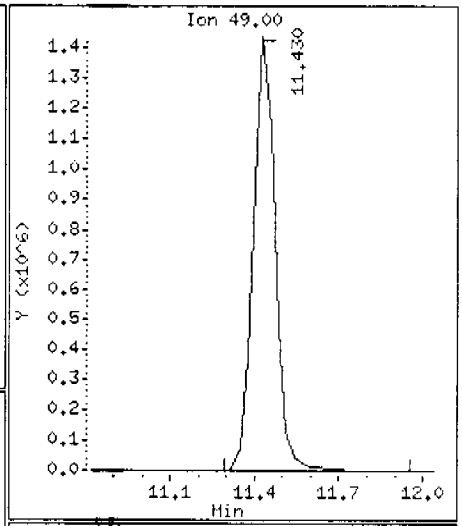
Concentration: 724.48 PPBV

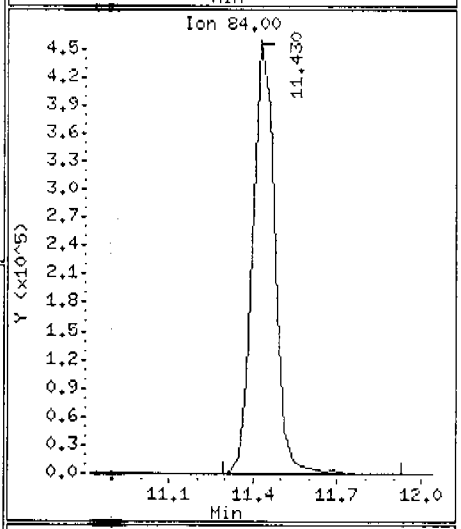


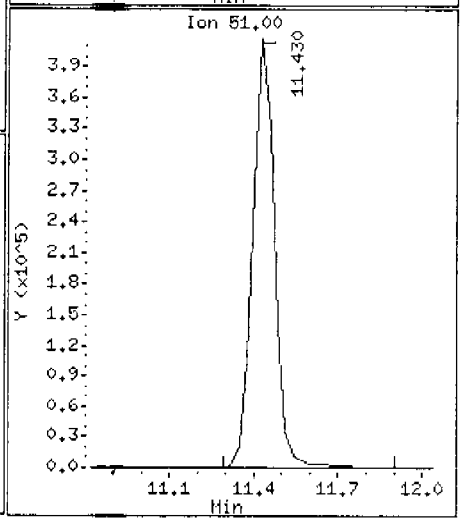












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Sample Info: 100mL #3788

Instrument: msd7.i

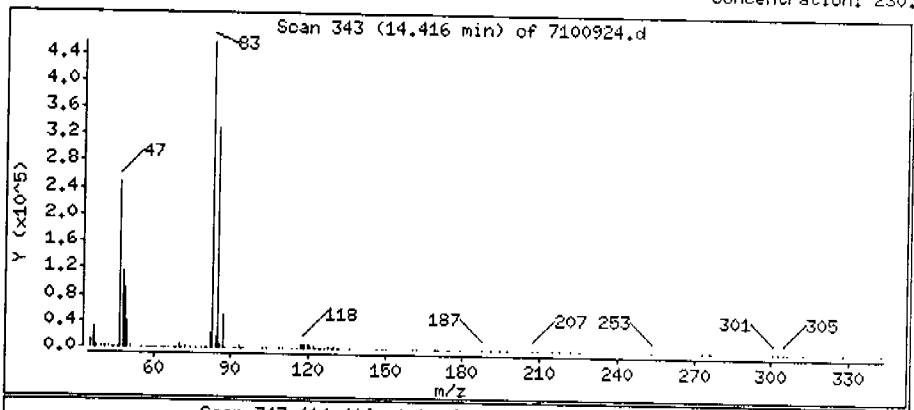
Operator: dfm

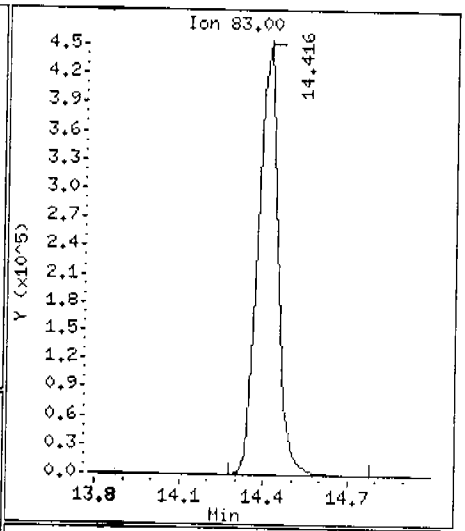
Column phase: RTx-624

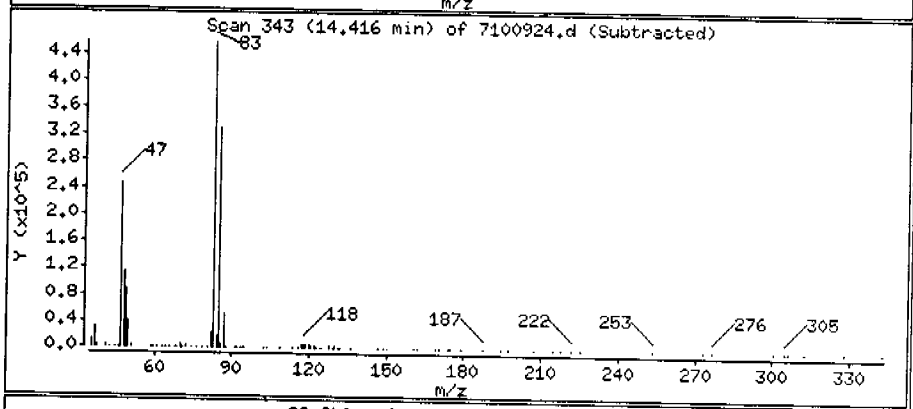
Column diameter: 0.53

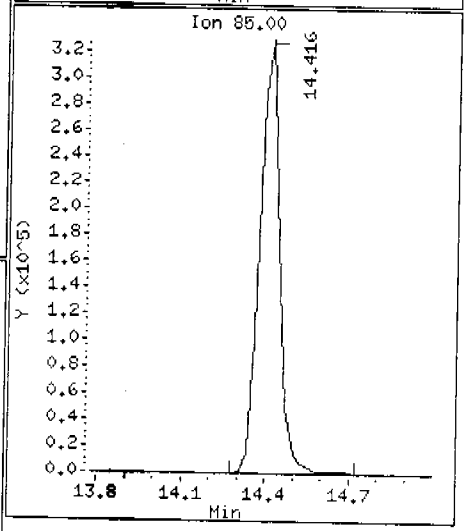
82 Chloroform

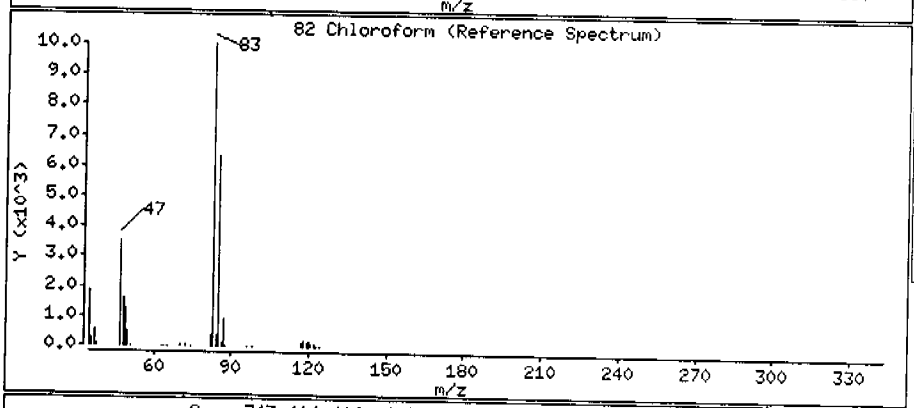
Concentration: 230.03 PPBV

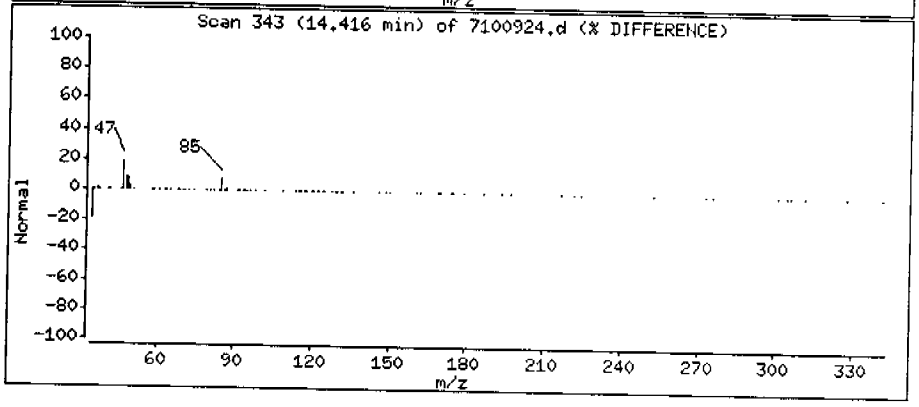












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

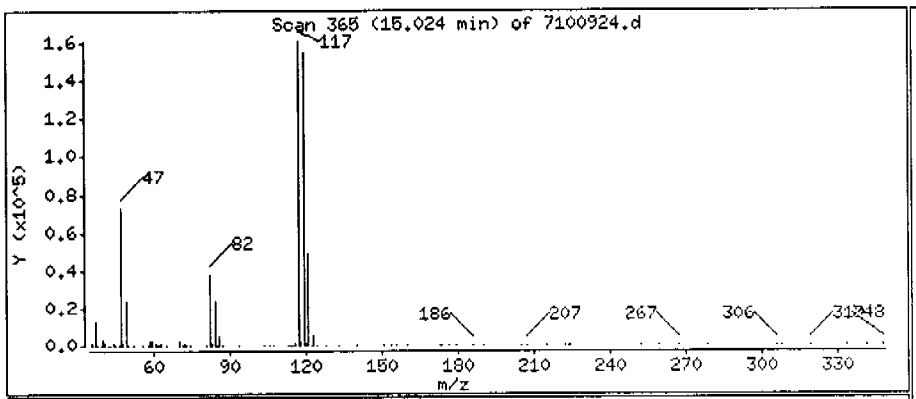
Operator: dfm

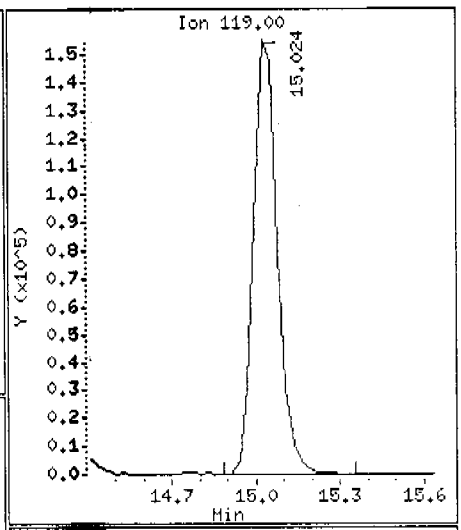
Column phase: RTx-624

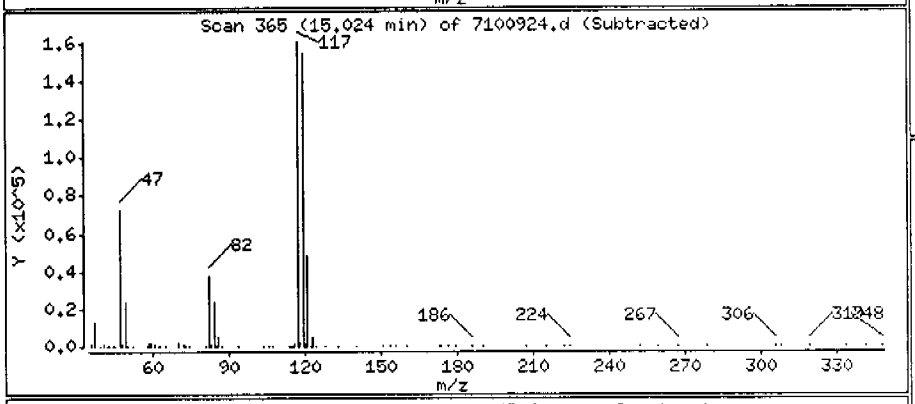
Column diameter: 0.53

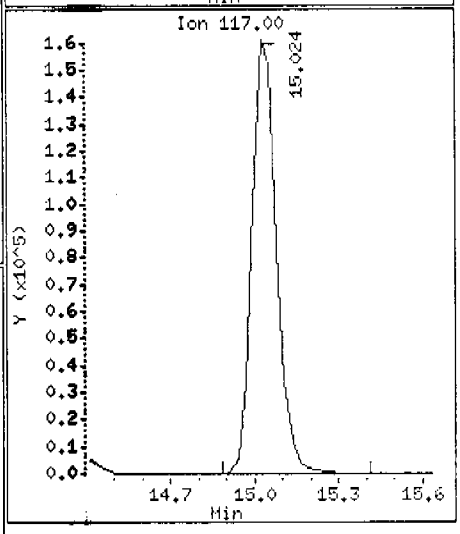
87 Carbon Tetrachloride

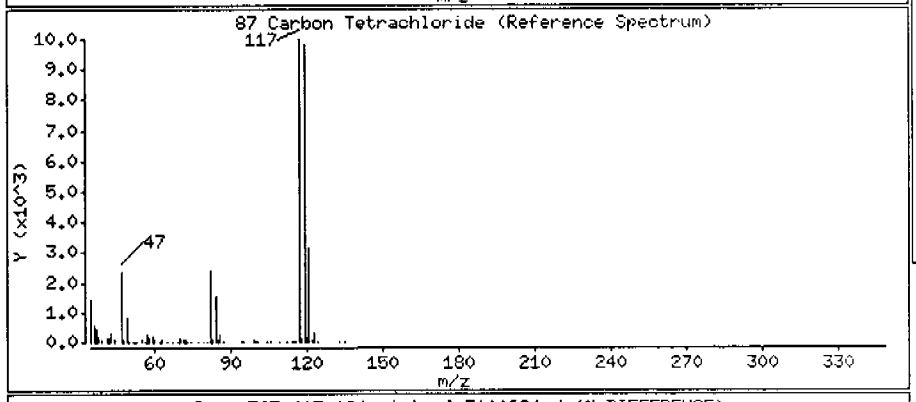
Concentration: 79.777 PPBV

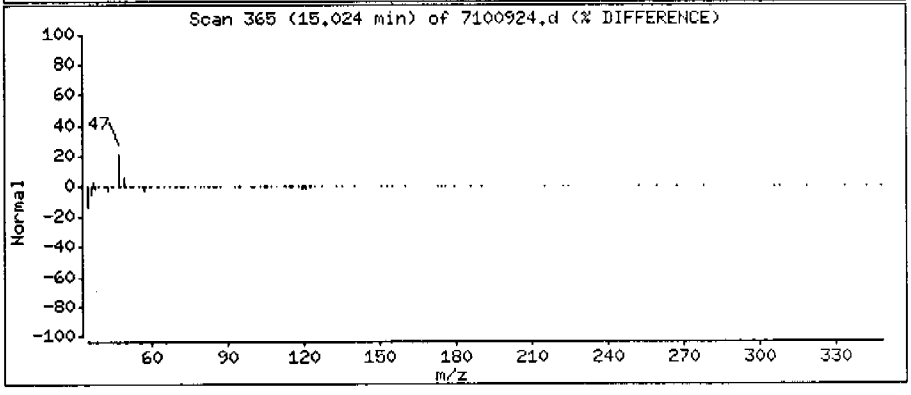












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

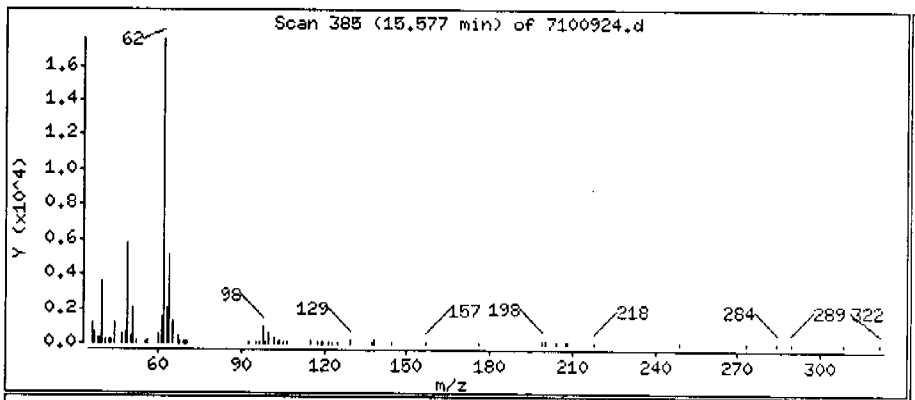
Operator: dfm

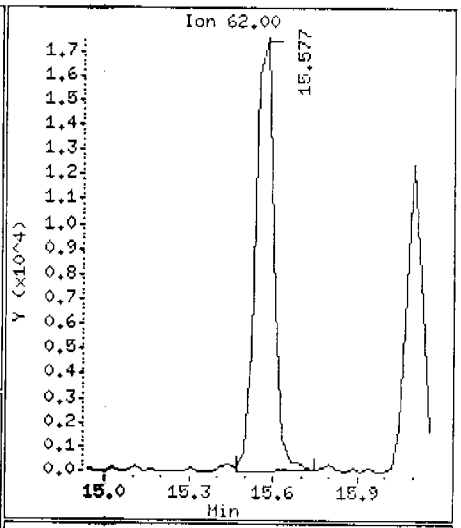
Column phase: RTx-624

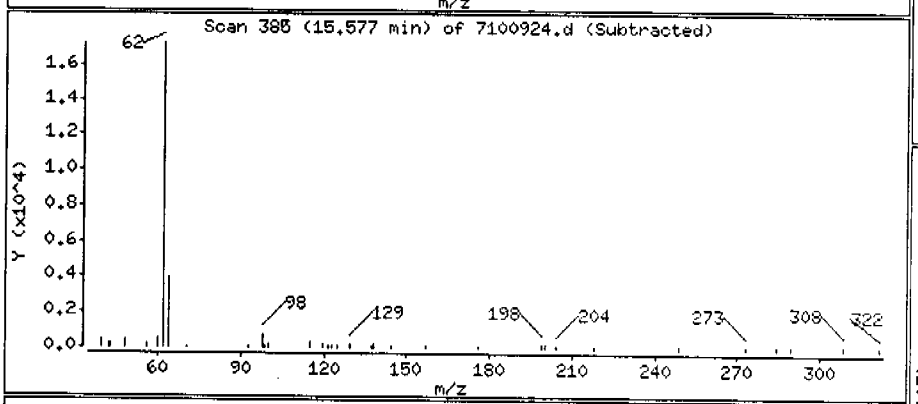
Column diameter: 0.53

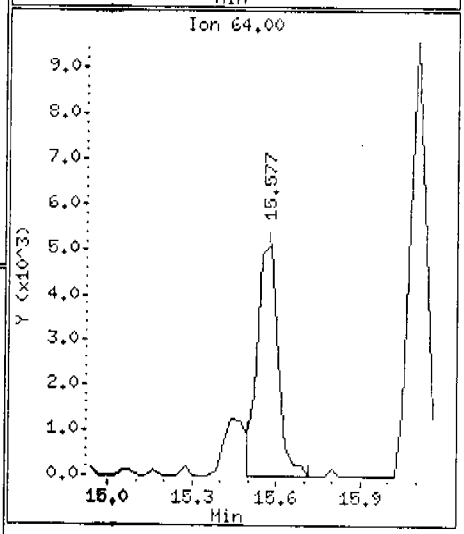
93 1,2-Dichloroethane

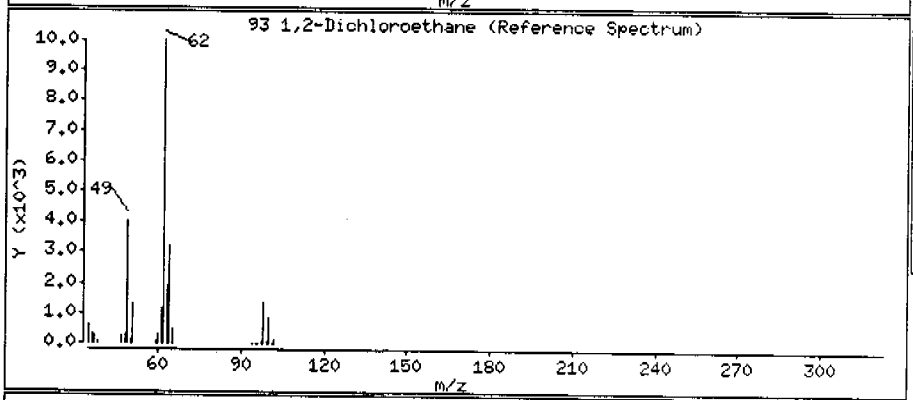
Concentration: 8.804 PPBV

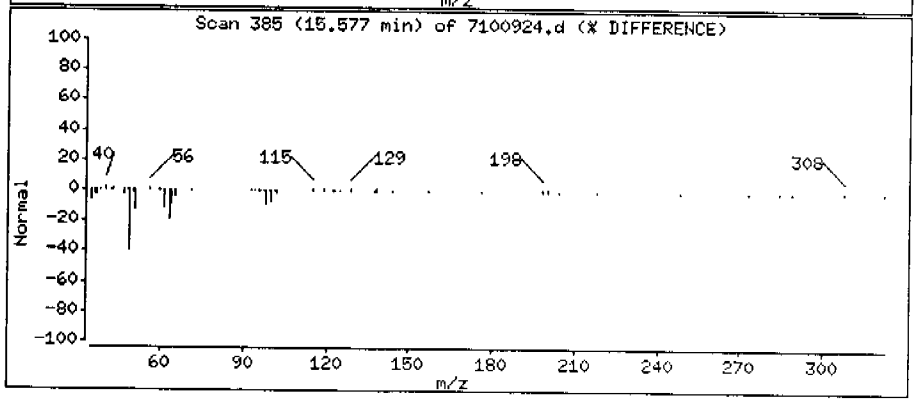












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

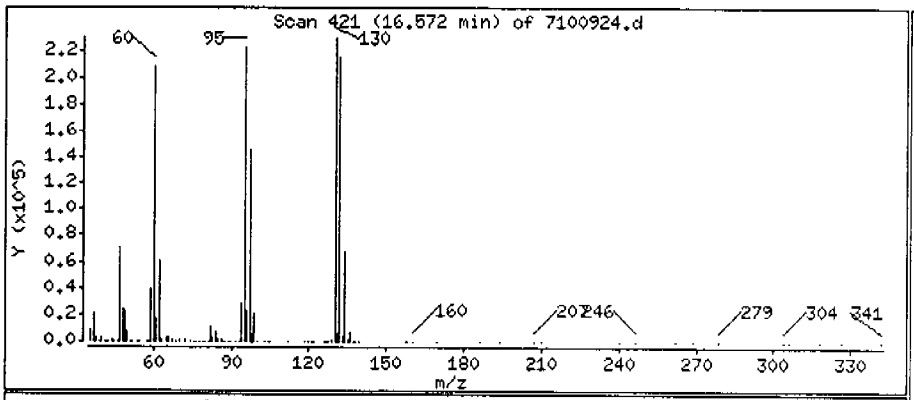
Operator: dfm

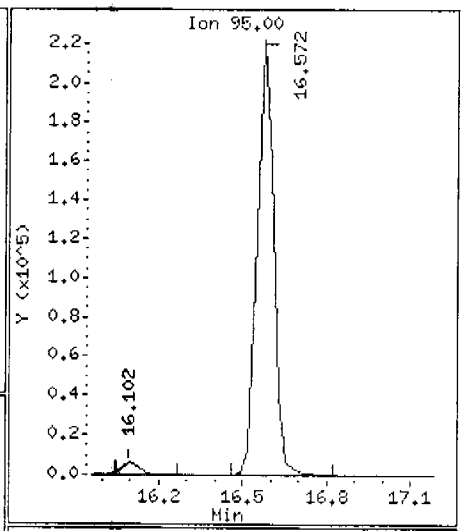
Column phase: RTx-624

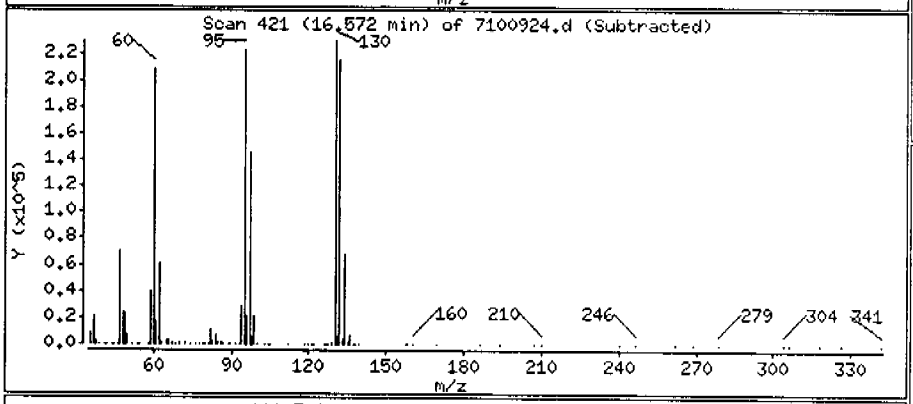
Column diameter: 0.53

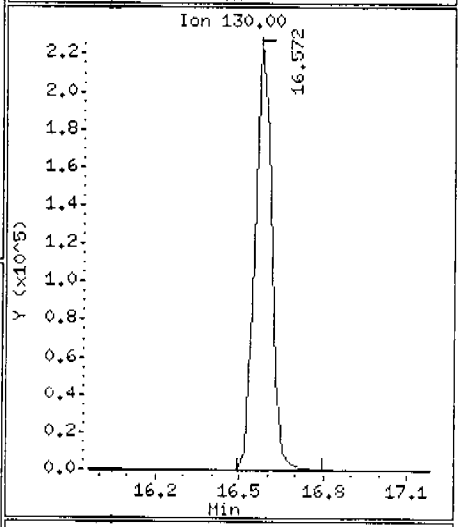
101 Trichloroethene

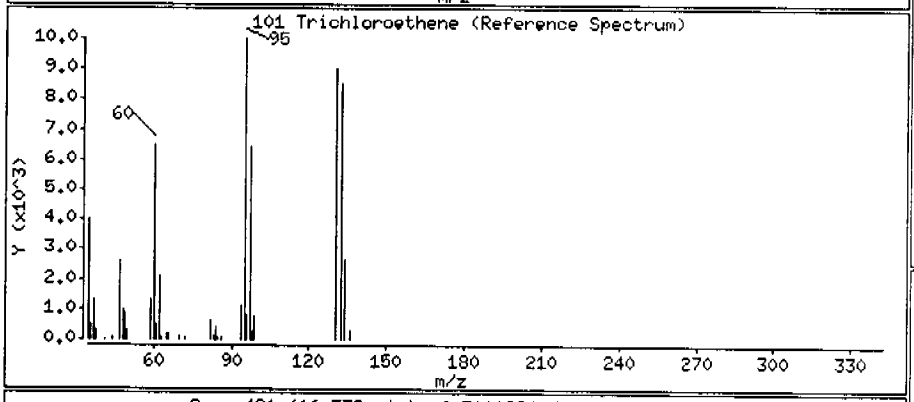
Concentration: 171.83 PPBV

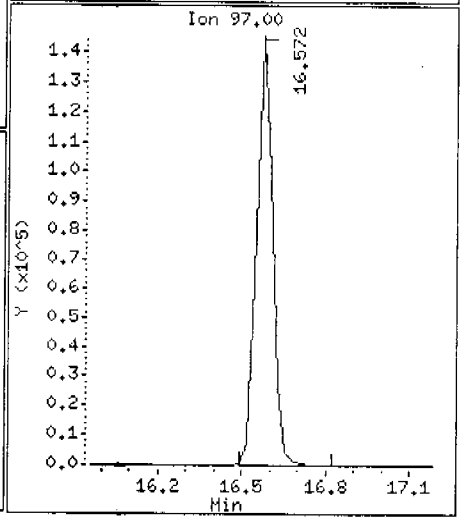


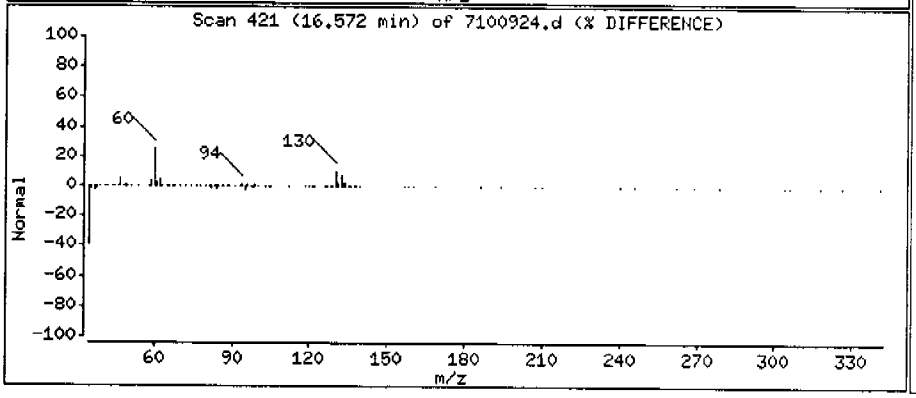












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

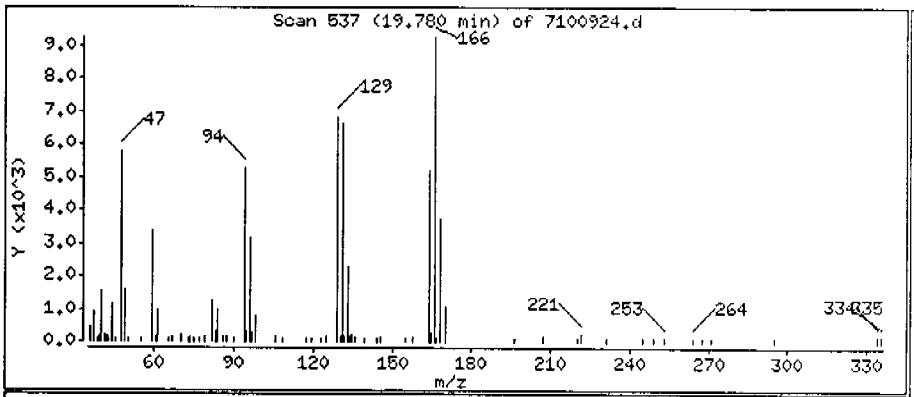
Operator: dfm

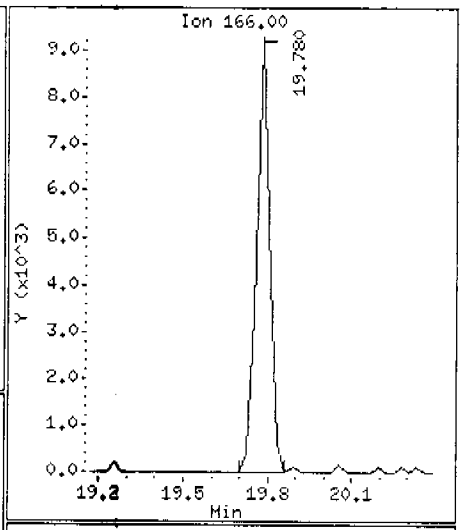
Column phase: RTx-624

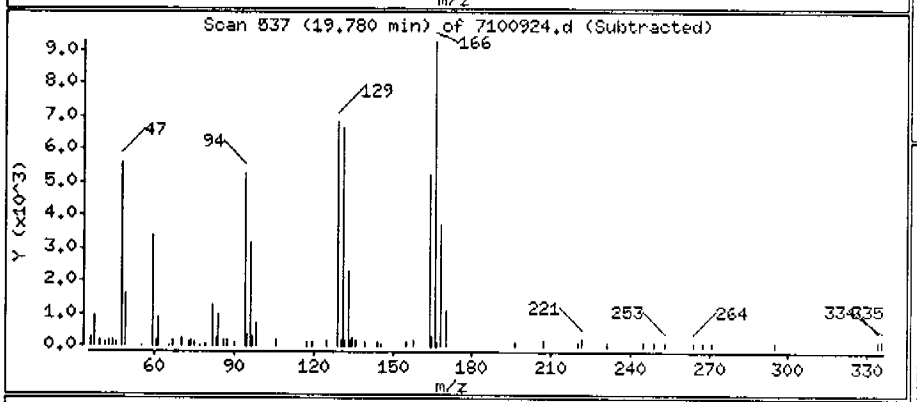
Column diameter: 0.53

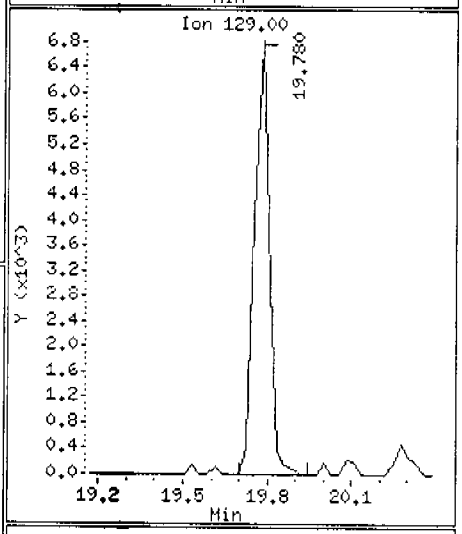
120 Tetrachloroethene

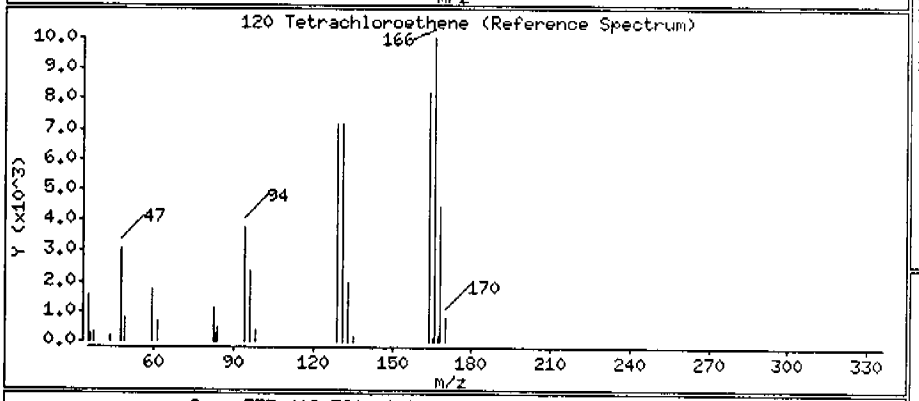
Concentration: 4.520 PPBV

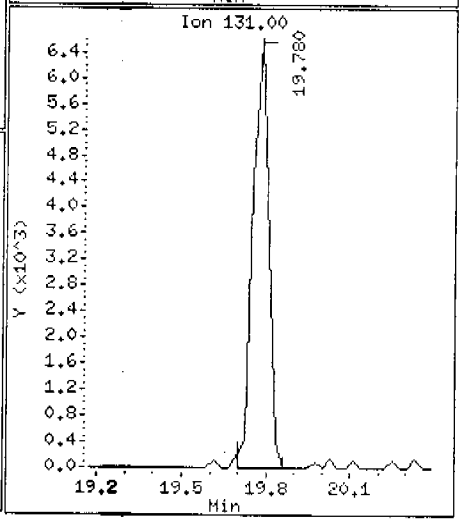


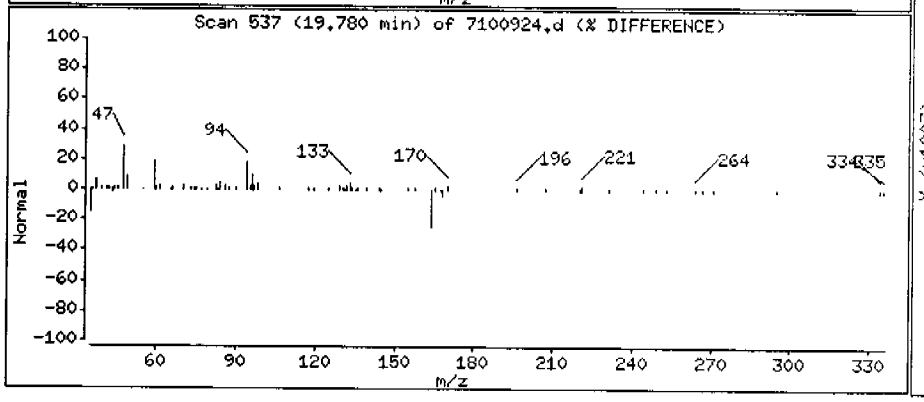












Data File: /chem/msd7.i/09oct08.b/7100924.d

Date : 10-OCT-2008 01:07

Client ID:

Instrument: msd7.i

Sample Info: 100mL #3788

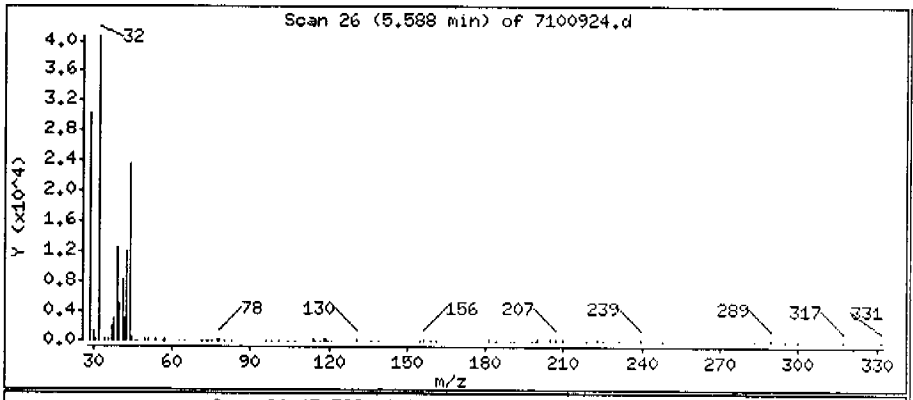
Operator: dfm

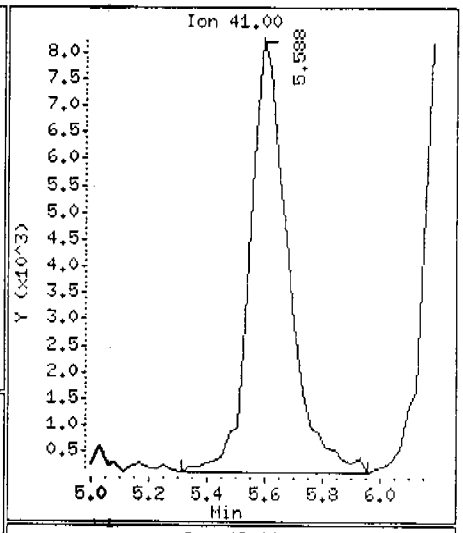
Column phase: RTx-624

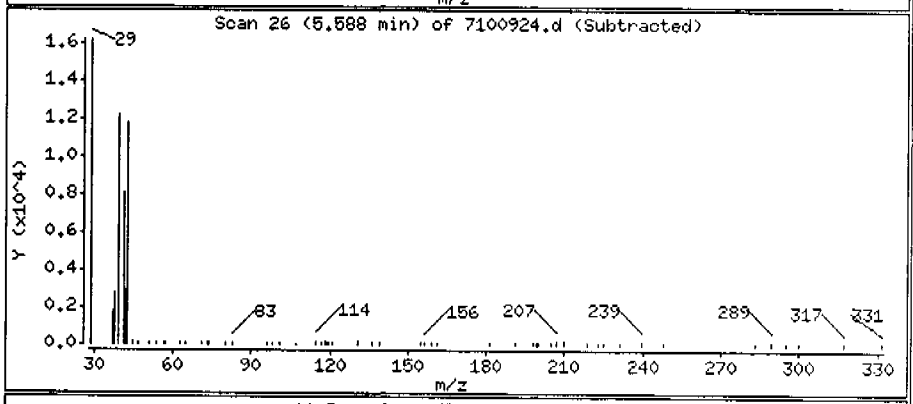
Column diameter: 0.53

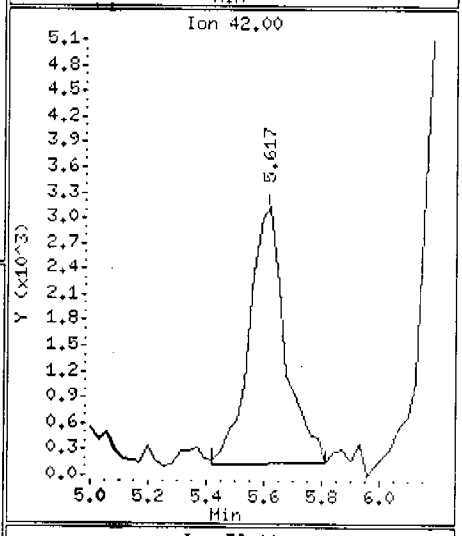
11 Propylene

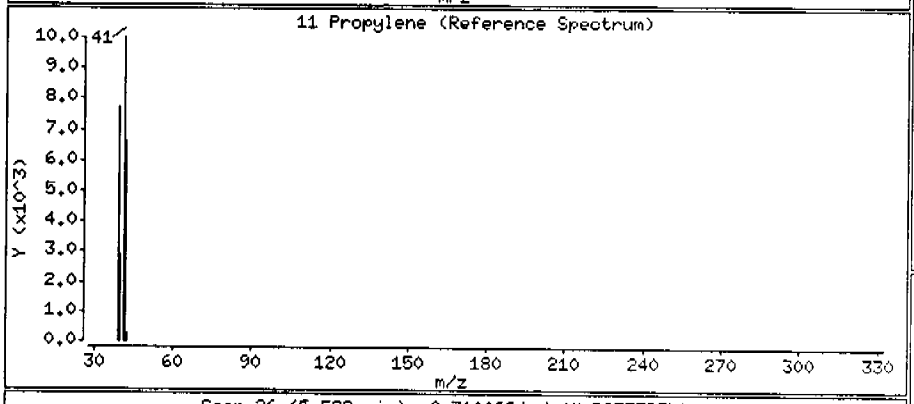
Concentration: 12.228 PPBV

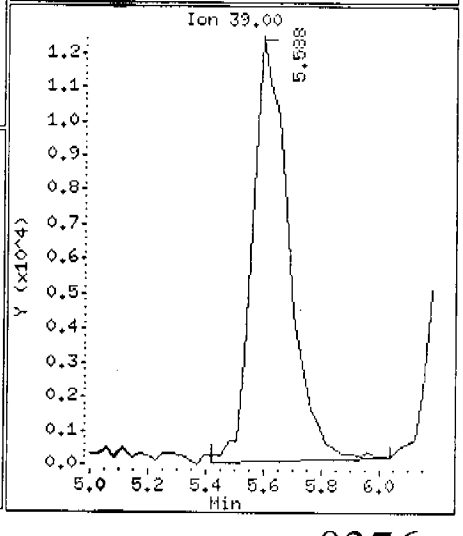


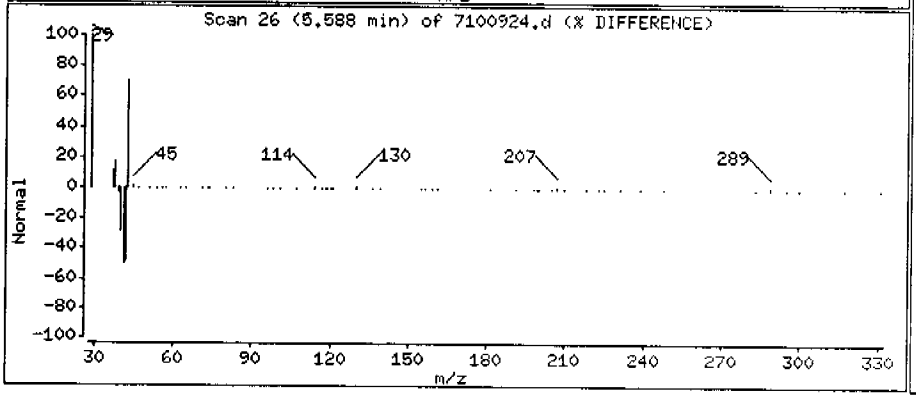












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-14833

Lab ID#: 0809614-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	2.0	3.0	8.0	12
Methylene Chloride	2.0	690	7.0	2400
Chloroform	2.0	220	9.8	1100
Carbon Tetrachloride	2.0	77	13	480
1,2-Dichloroethane	2.0	8.1	8.1	33
Trichloroethene	2.0	170	11	910
Tetrachloroethene	2.0	5.0	14	34
Propylene	8.0	11	14	19

0377

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14833

Lab ID#: 0809614-18A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100925	**Date of Collection:**	9/23/08
Dil. Factor:	4.02	**Date of Analysis:**	10/10/08 01:46 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	2.0	Not Detected	9.9	Not Detected
Freon 114	2.0	Not Detected	14	Not Detected
Chloromethane	8.0	Not Detected	17	Not Detected
Vinyl Chloride	2.0	Not Detected	5.1	Not Detected
1,3-Butadiene	2.0	Not Detected	4.4	Not Detected
Bromomethane	2.0	Not Detected	7.8	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	2.0	Not Detected	11	Not Detected
Ethanol	8.0	Not Detected	15	Not Detected
Freon 113	2.0	Not Detected	15	Not Detected
1,1-Dichloroethene	2.0	3.0	8.0	12
Acetone	8.0	Not Detected	19	Not Detected
2-Propanol	8.0	Not Detected	20	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	2.0	690	7.0	2400
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected
Hexane	2.0	Not Detected	7.1	Not Detected
1,1-Dichloroethane	2.0	Not Detected	8.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected
Tetrahydrofuran	2.0	Not Detected	5.9	Not Detected
Chloroform	2.0	220	9.8	1100
1,1,1-Trichloroethane	2.0	Not Detected	11	Not Detected
Cyclohexane	2.0	Not Detected	6.9	Not Detected
Carbon Tetrachloride	2.0	77	13	480
Benzene	2.0	Not Detected	6.4	Not Detected
1,2-Dichloroethane	2.0	8.1	8.1	33
Heptane	2.0	Not Detected	8.2	Not Detected
Trichloroethene	2.0	170	11	910
1,2-Dichloropropane	2.0	Not Detected	9.3	Not Detected
1,4-Dioxane	8.0	Not Detected	29	Not Detected
Bromodichloromethane	2.0	Not Detected	13	Not Detected
cis-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected
4-Methyl-2-pentanone	2.0	Not Detected	8.2	Not Detected
Toluene	2.0	Not Detected	7.6	Not Detected
trans-1,3-Dichloropropene	2.0	Not Detected	9.1	Not Detected
1,1,2-Trichloroethane	2.0	Not Detected	11	Not Detected
Tetrachloroethene	2.0	5.0	14	34

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-14833

Lab ID#: 0809614-18A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100925	Date of Collection:	9/23/08
Dil. Factor:	4.02	Date of Analysis:	10/10/08 01:46 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	8.0	Not Detected	33	Not Detected
Dibromochloromethane	2.0	Not Detected	17	Not Detected
1,2-Dibromoethane (EDB)	2.0	Not Detected	15	Not Detected
Chlorobenzene	2.0	Not Detected	9.2	Not Detected
Ethyl Benzene	2.0	Not Detected	8.7	Not Detected
m,p-Xylene	2.0	Not Detected	8.7	Not Detected
o-Xylene	2.0	Not Detected	8.7	Not Detected
Styrene	2.0	Not Detected	8.6	Not Detected
Bromoform	2.0	Not Detected	21	Not Detected
1,1,2,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
4-Ethyltoluene	2.0	Not Detected	9.9	Not Detected
1,3,5-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected
1,2,4-Trimethylbenzene	2.0	Not Detected	9.9	Not Detected
1,3-Dichlorobenzene	2.0	Not Detected	12	Not Detected
1,4-Dichlorobenzene	2.0	Not Detected	12	Not Detected
alpha-Chlorotoluene	2.0	Not Detected	10	Not Detected
1,2-Dichlorobenzene	2.0	Not Detected	12	Not Detected
1,2,4-Trichlorobenzene	8.0	Not Detected	60	Not Detected
Hexachlorobutadiene	8.0	Not Detected	86	Not Detected
Chlorodifluoromethane	8.0	Not Detected	28	Not Detected
Methanol	200	Not Detected	260	Not Detected
n-Butanol	8.0	Not Detected	24	Not Detected
Propylene	8.0	11	14	19

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	92	70-130

0379

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100925.d
Lab Smp Id: 0809614-18A
Inj Date : 10-OCT-2008 01:46
Operator : dfm Inst ID: msd7.i
Smp Info : 100mL #14000
Misc Info : 10"Hg-5psi
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1
Dil Factor: 4.02000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	284810	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	223077			28.92- 128.92	78.32
14.333	14.333 (1.000)	49	1192998			320.90- 420.90	418.87
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.103 (1.000)	114	899192	25.0000		80.00- 120.00	100.00
16.102	16.103 (1.000)	88	149115			0.00- 67.10	16.58
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	947376	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	478750			1.24- 101.24	50.53
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	596569	27.7298	27.730	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	240853			0.00- 97.37	40.37
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	841914	24.4592	24.459	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	121312			0.00- 63.85	14.41

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	647102			26.51- 126.51	76.86
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	448996	23.0321	23.032	80.00- 120.00	100.00
23.264	23.291 (1.092)	95	684068			92.62- 192.62	152.35
23.291	23.291 (1.093)	176	444781			44.03- 144.03	99.06
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.268	10.269 (0.716)	61	36147	0.73989	2.974	80.00- 120.00	100.00
10.296	10.269 (0.718)	96	13812			0.00- 87.74	38.21
10.268	10.269 (0.716)	98	8424			0.00- 73.80	23.31
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	7301840	170.844	686.79	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	2302254			0.00- 84.42	31.53
11.430	11.430 (0.797)	51	2129578			0.00- 80.54	29.16
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2188617	55.2819	222.23	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1579231			21.17- 121.17	72.16
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.052	15.024 (1.050)	119	882845	19.1265	76.888	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	931981			55.68- 155.68	105.57
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	72614	2.00683	8.067	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	25535			0.00- 82.49	35.17
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	887684	42.3242	170.14	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	894958			52.48- 152.48	100.82
16.573	16.573 (1.029)	97	572107			14.44- 114.44	64.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	31960	1.24867	5.020	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	28277			35.87- 135.87	88.48
19.780	19.780 (0.929)	131	26580			35.33- 135.33	83.17
11 Propylene					CAS #: 115-07-1		
5.617	5.589 (0.392)	41	67382	2.77465	11.154	80.00- 120.00	100.00
5.589	5.589 (0.390)	42	25546			16.57- 116.57	37.91
5.617	5.589 (0.392)	39	99988			28.60- 128.60	148.39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100925.d
Lab Smp Id: 0809614-18A
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 10"Hg-5psi

Calibration Date: 09-OCT-2008
Calibration Time: 10:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	284810	-21.34
97 1,4-Difluorobenze	1146510	687906	1605114	899192	-21.57
126 Chlorobenzene-d5	1241713	745028	1738398	947376	-23.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/09oct08.b/7100925.d
Report Date: 11-Oct-2008 08:46

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0809614-18A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 10"Hg-5psi

Client SDG: 09oct08
Fraction: VOA

Operator: dfm
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.730	110.92	70-130
$ 113 Toluene-d8	25.000	24.459	97.84	70-130
$ 137 Bromofluorobenzene	25.000	23.032	92.13	70-130

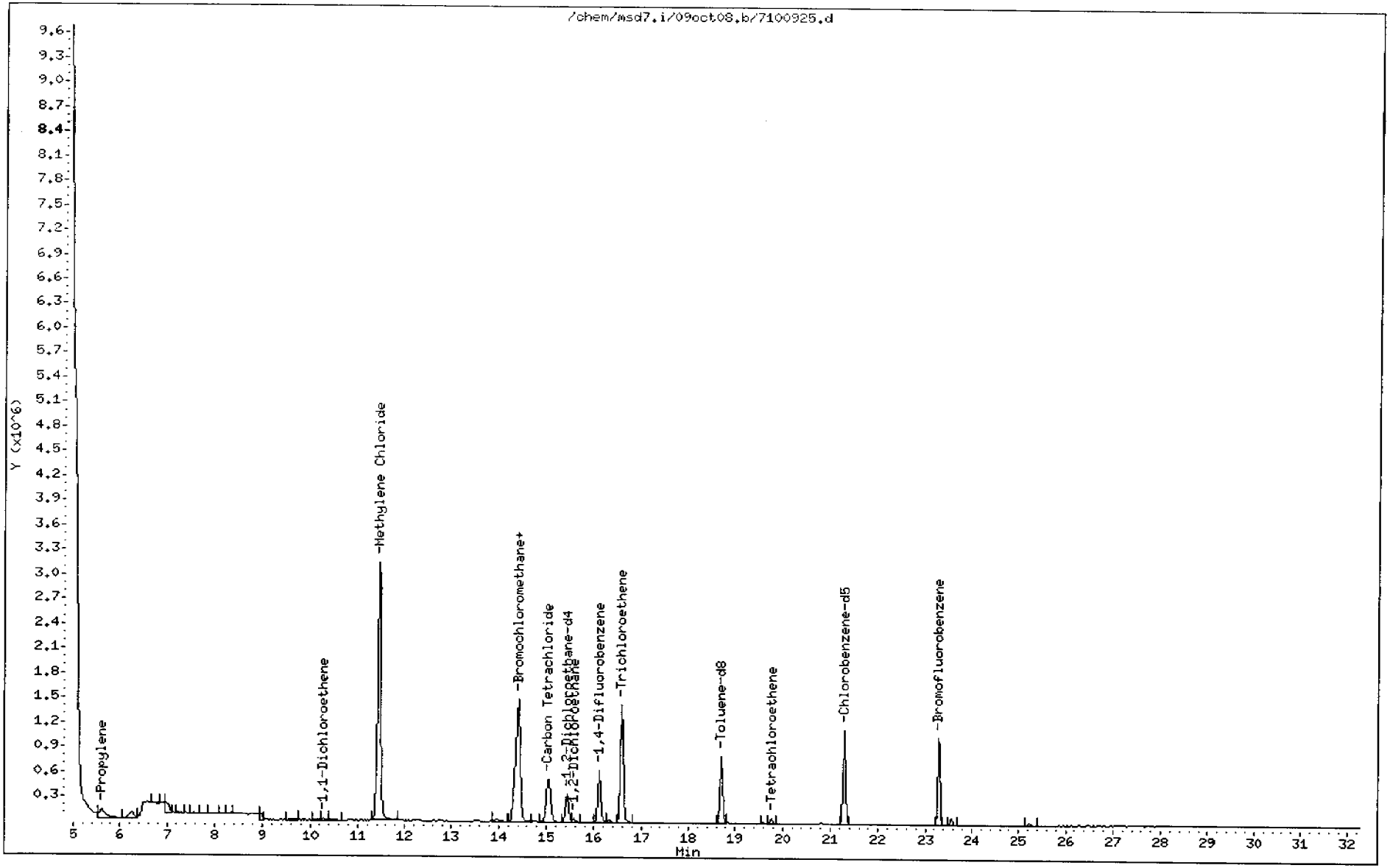
Data File: /chem/msd7.i/09oct08.b/7100925.d
Date : 10-OCT-2008 01:46
Client ID:
Sample Info: 100mL #14000

Column phase: RTx-624

Instrument: msd7.i

Operator: dPm
Column diameter: 0.53

0384



Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Sample Info: 100mL #14000

Instrument: msd7.i

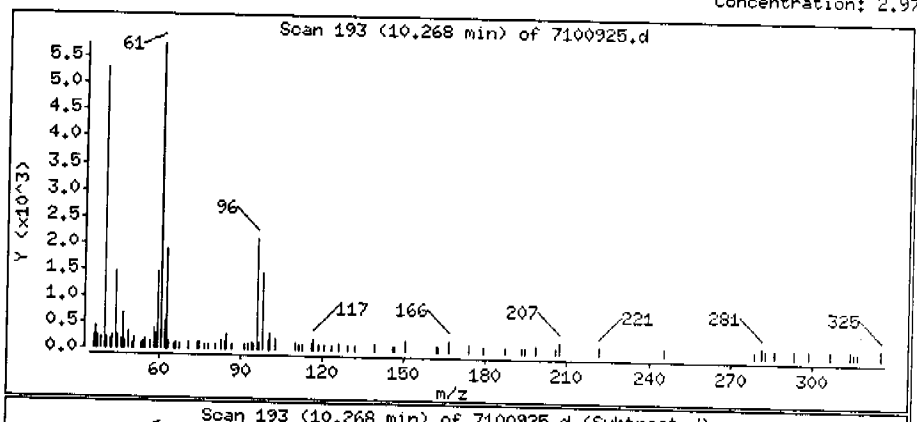
Operator: dfm

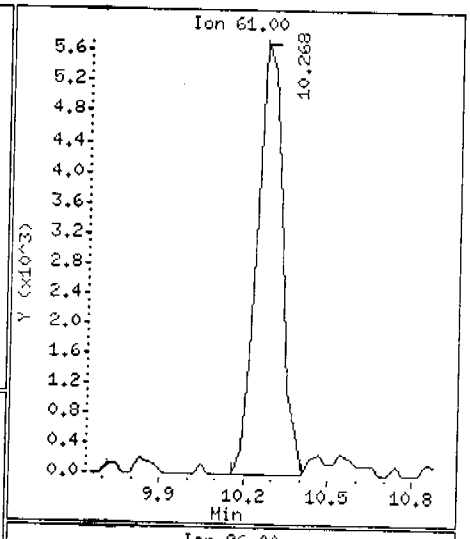
Column phase: RTx-624

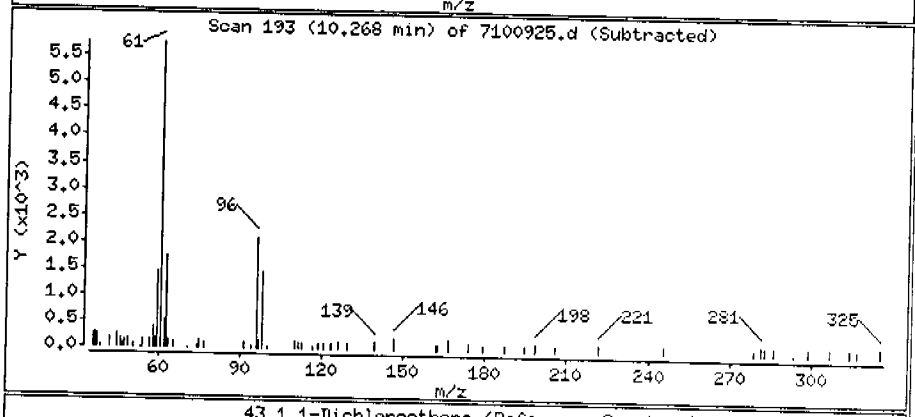
Column diameter: 0.53

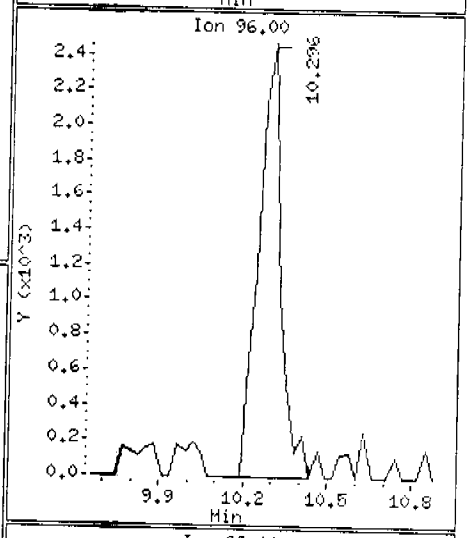
43 1,1-Dichloroethene

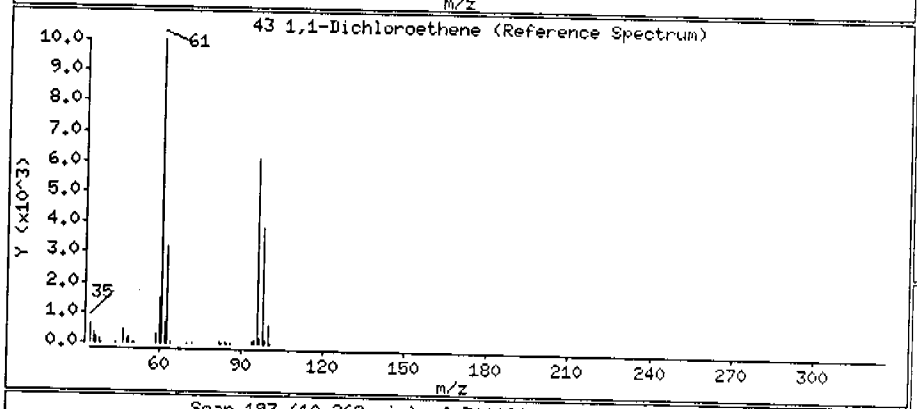
Concentration: 2.974 PPBV

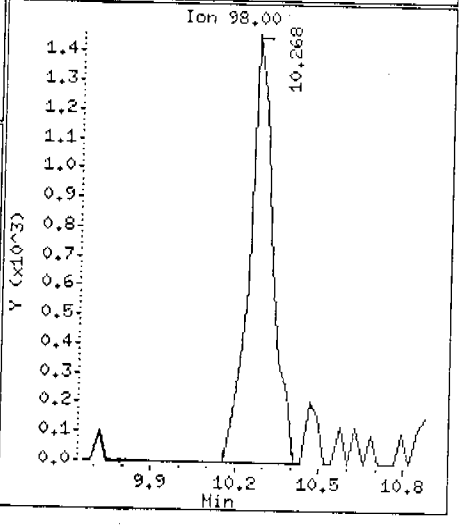


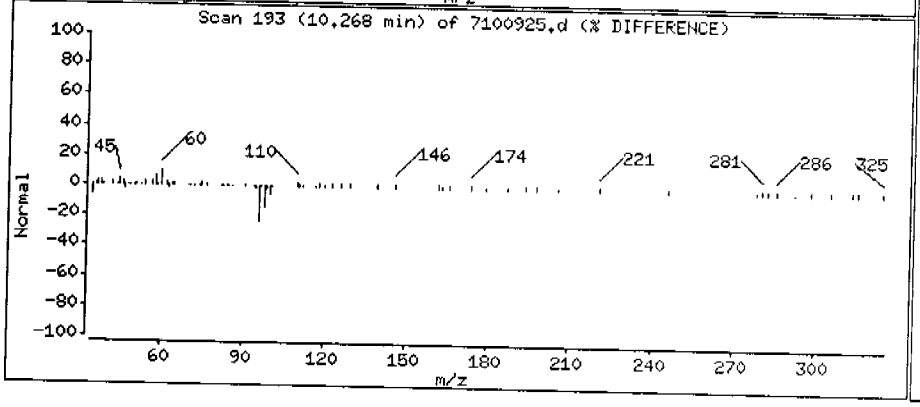












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Instrument: msd7.i

Sample Info: 100mL #14000

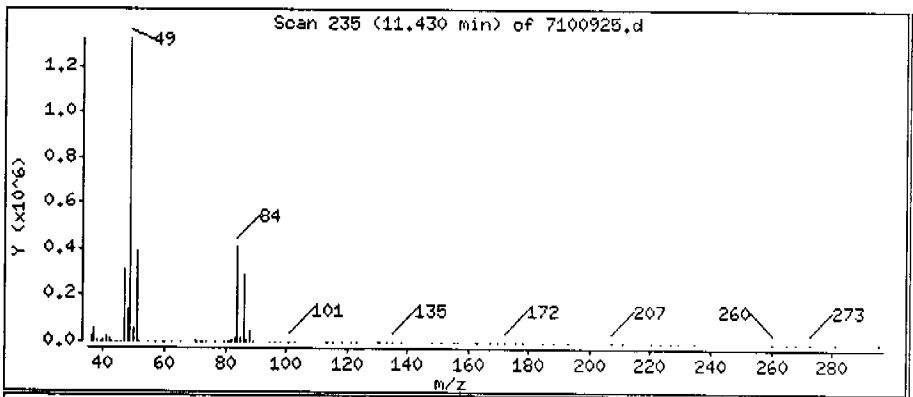
Operator: dfm

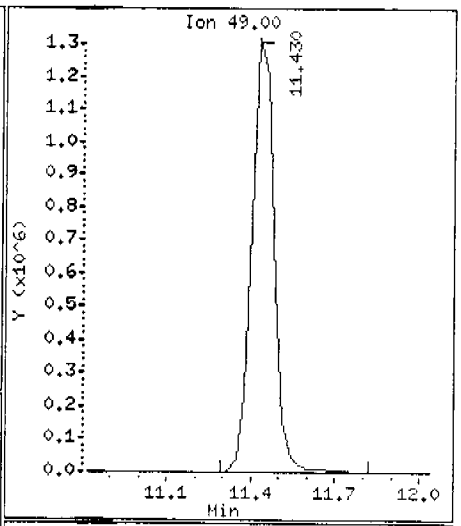
Column phase: RTx-624

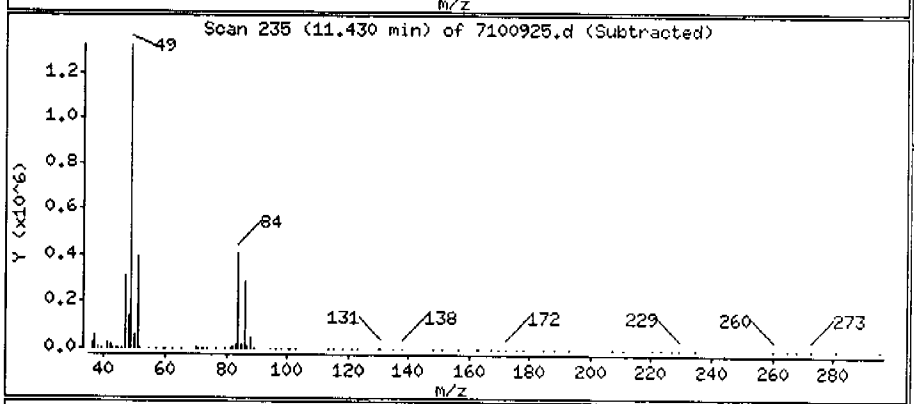
Column diameter: 0.53

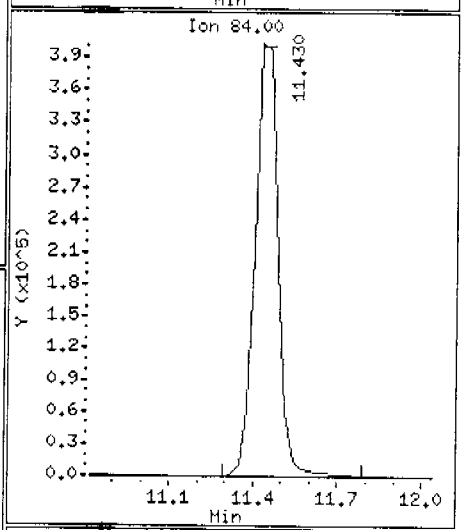
54 Methylene Chloride

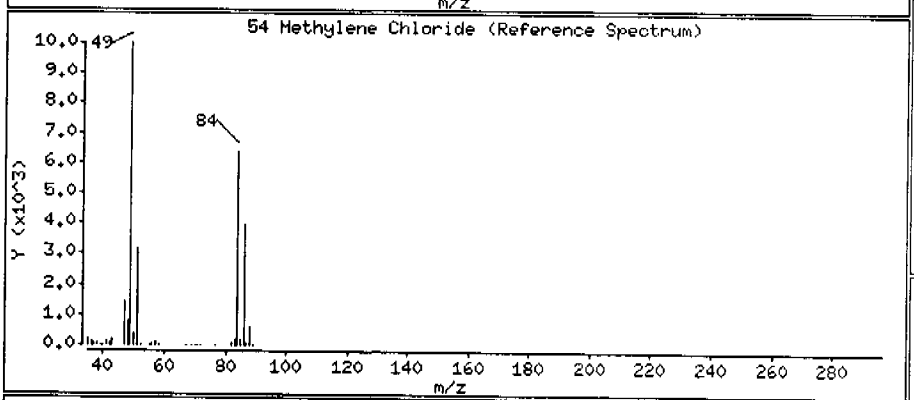
Concentration: 686.79 PPBV

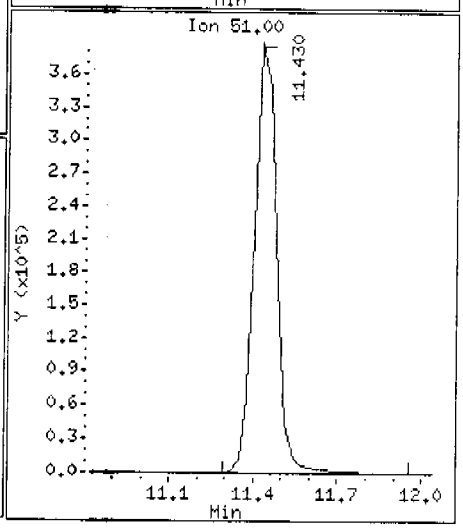


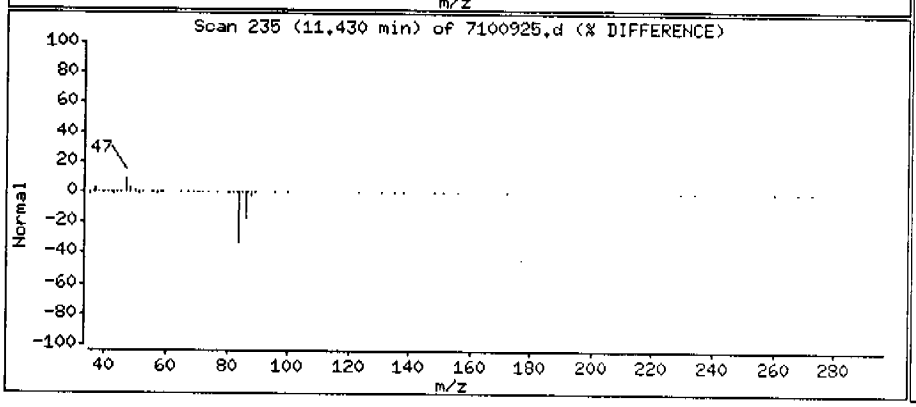












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Instrument: msd7.i

Sample Info: 100mL #14000

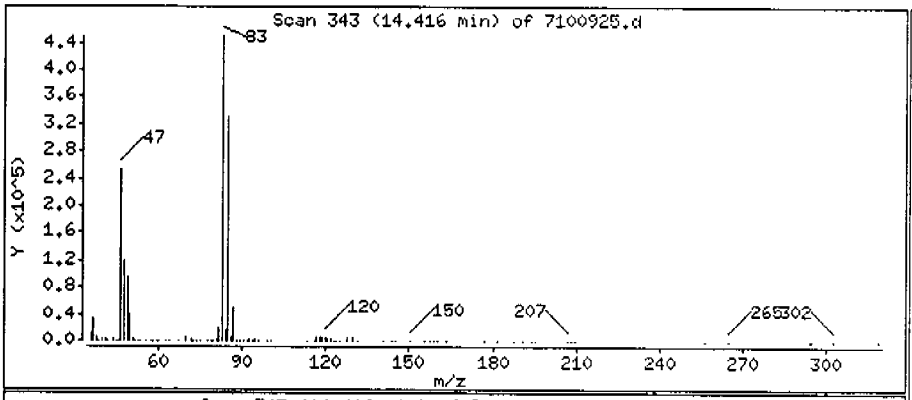
Operator: dfm

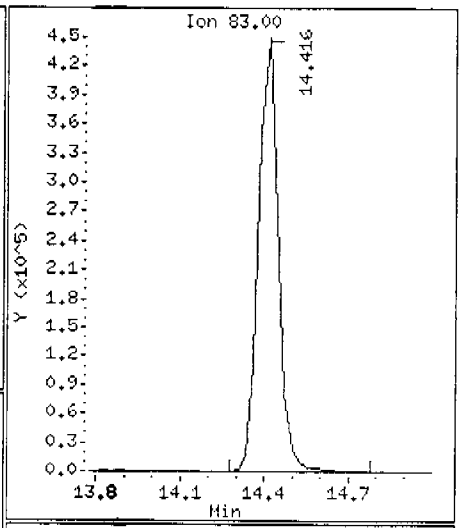
Column phase: RTx-624

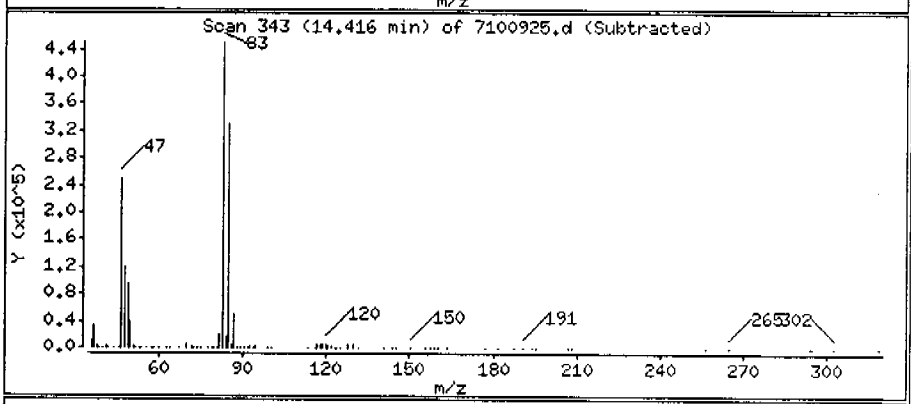
Column diameter: 0.53

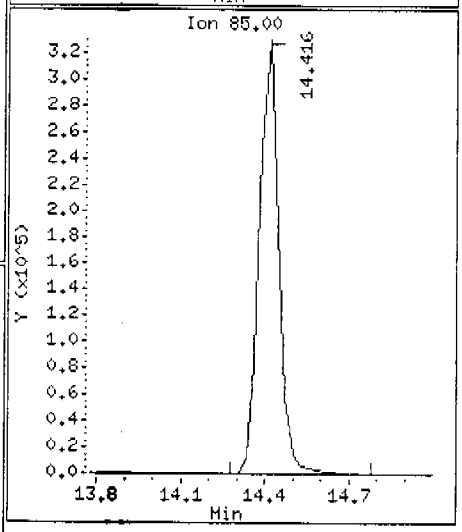
82 Chloroform

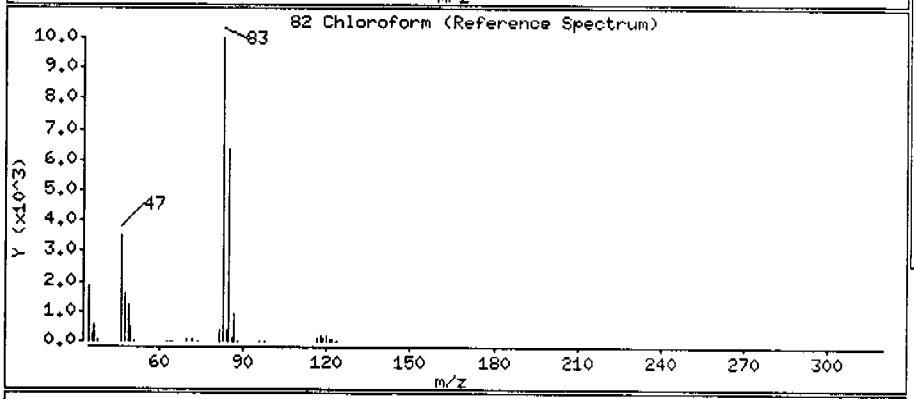
Concentration: 222.23 PPBV

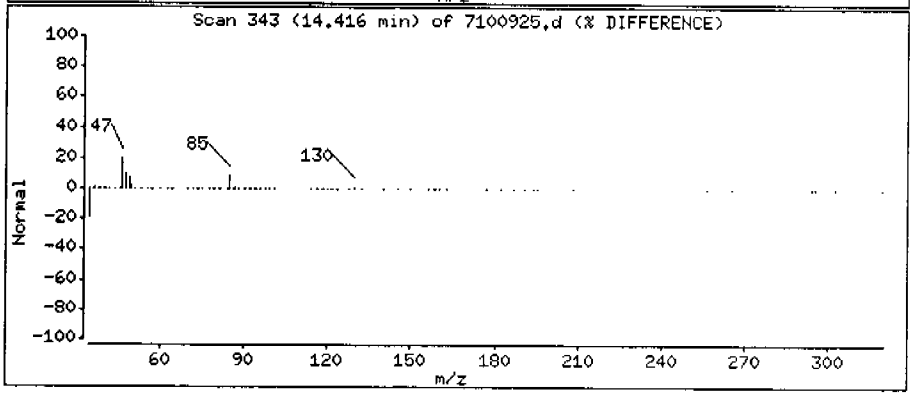












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Sample Info: 100mL #14000

Instrument: msd7.i

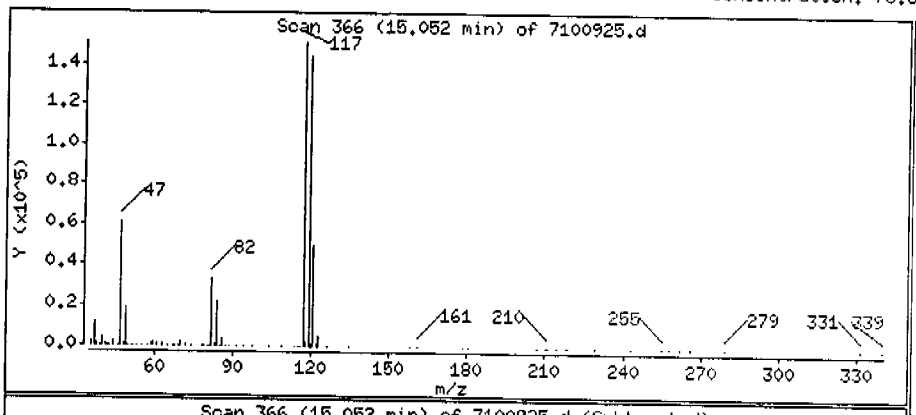
Operator: dfm

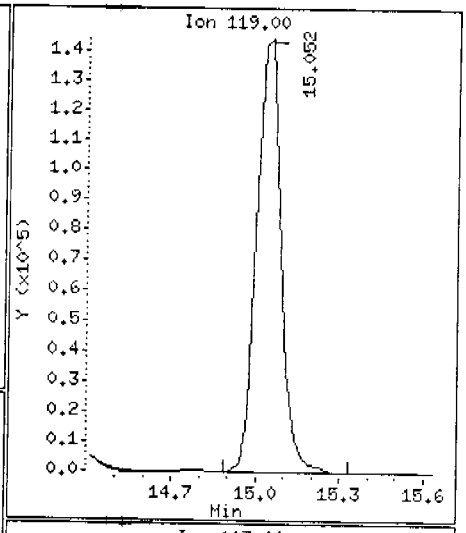
Column phase: RTx-624

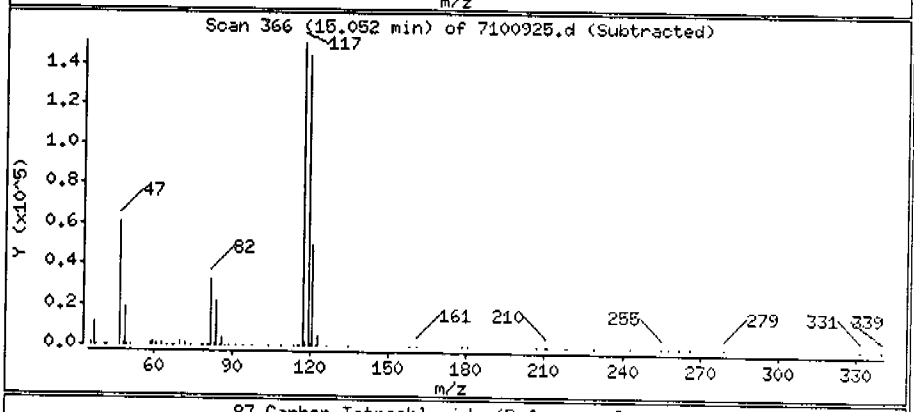
Column diameter: 0.53

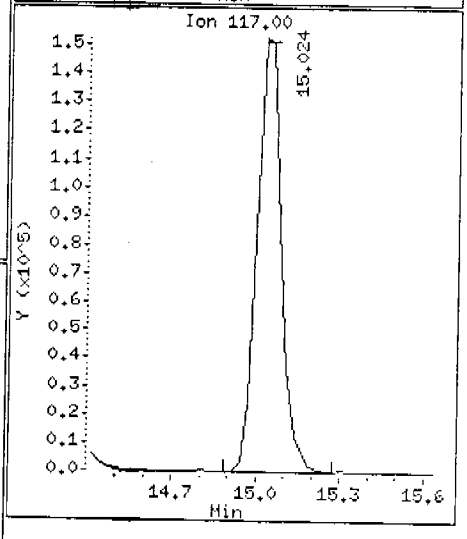
87 Carbon Tetrachloride

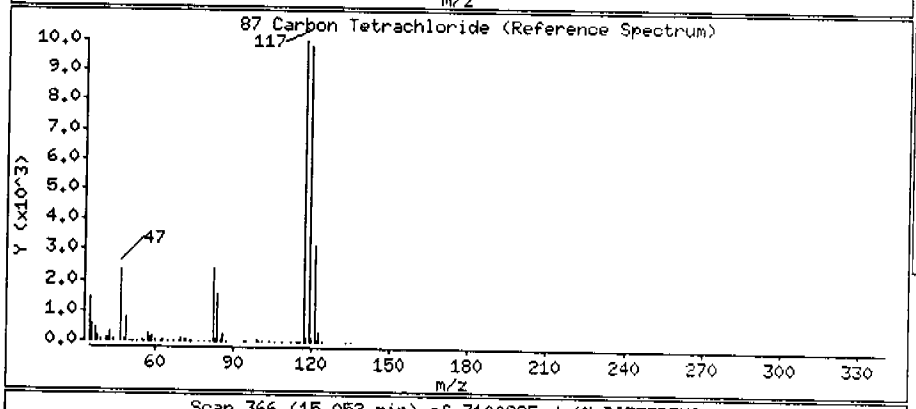
Concentration: 76.888 PPBV

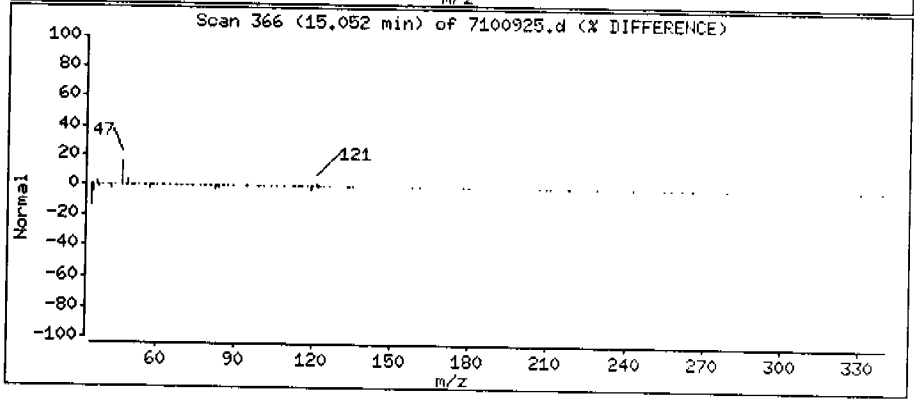












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Instrument: msd7.i

Sample Info: 100mL #14000

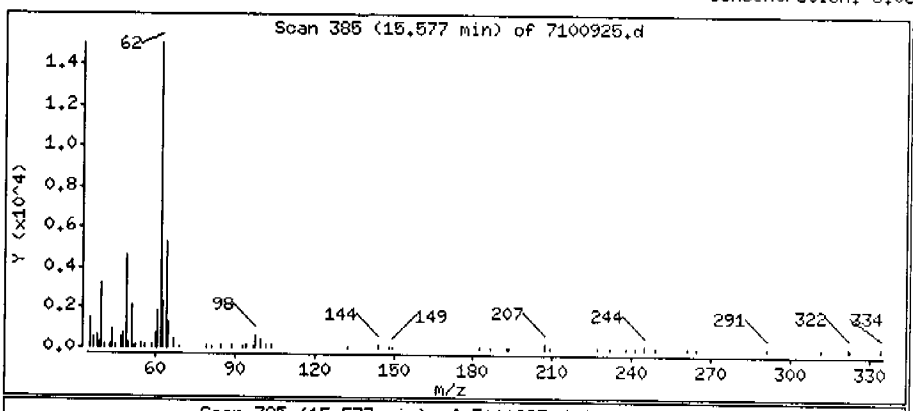
Operator: dfm

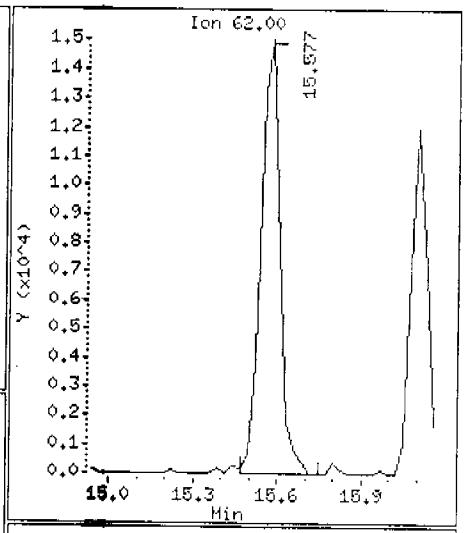
Column phase: RTx-624

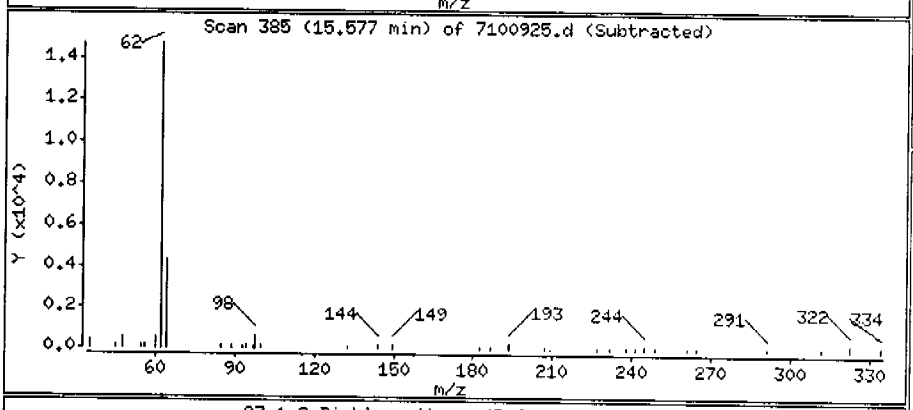
Column diameter: 0.53

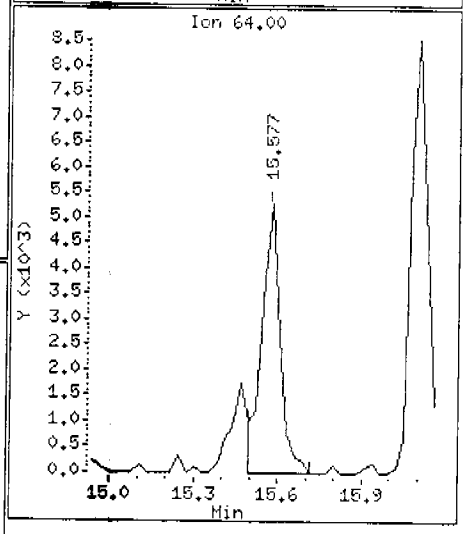
93 1,2-Dichloroethane

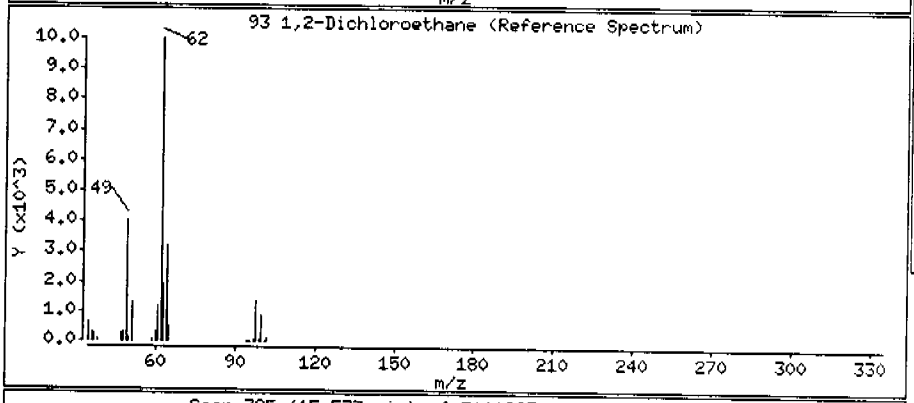
Concentration: 8.067 PPBV

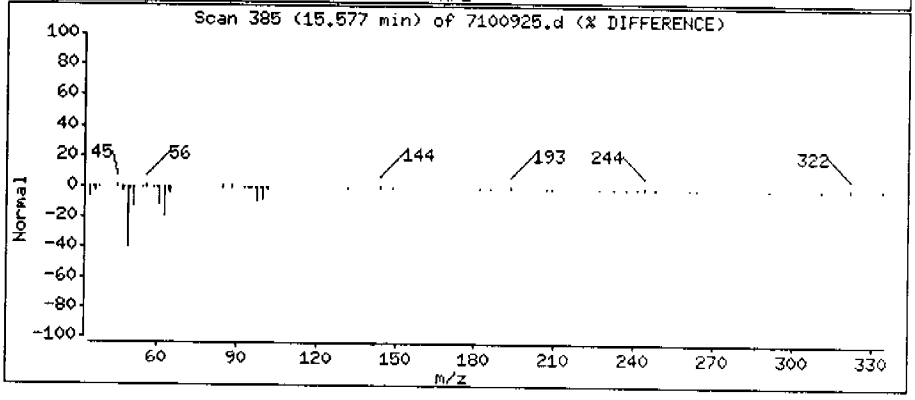












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Sample Info: 100mL #14000

Instrument: msd7.i

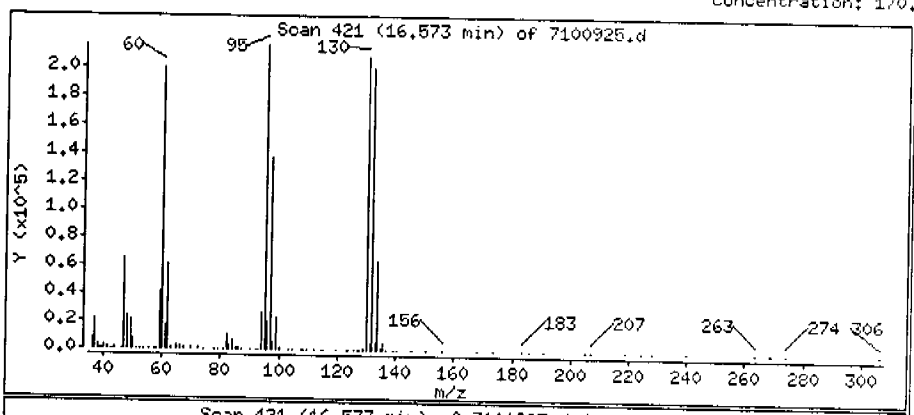
Operator: dfm

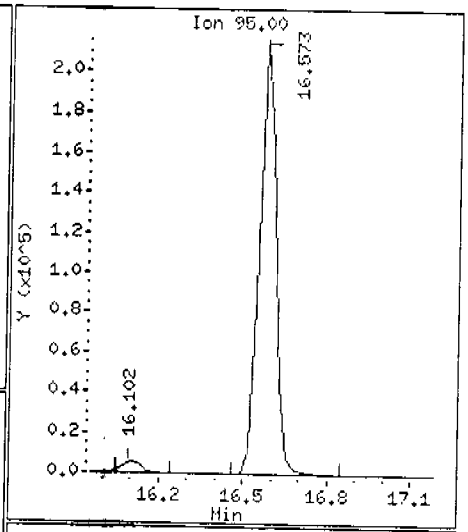
Column phase: RTx-624

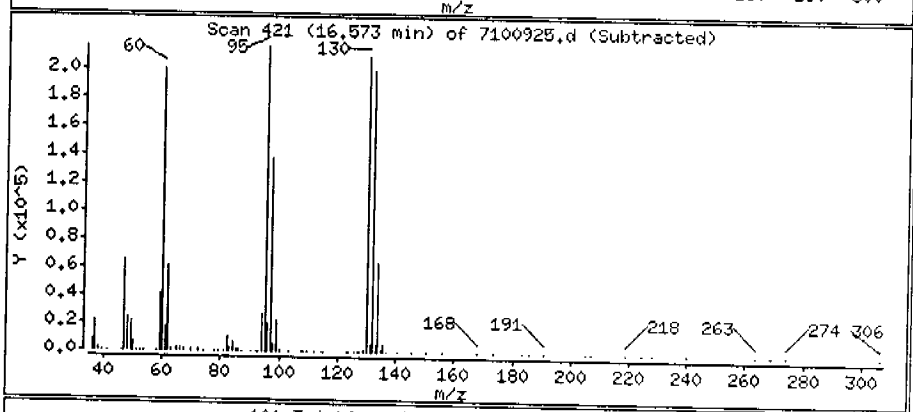
Column diameter: 0.53

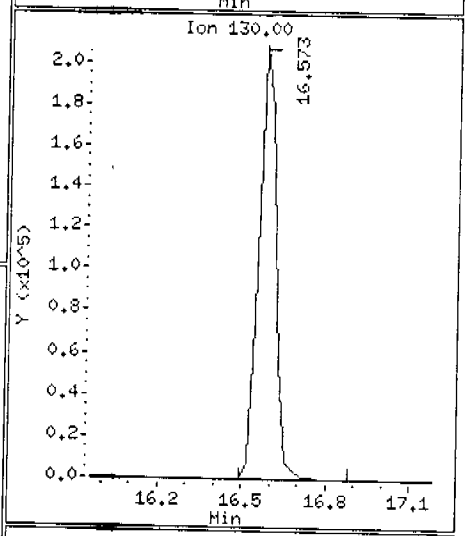
101 Trichloroethene

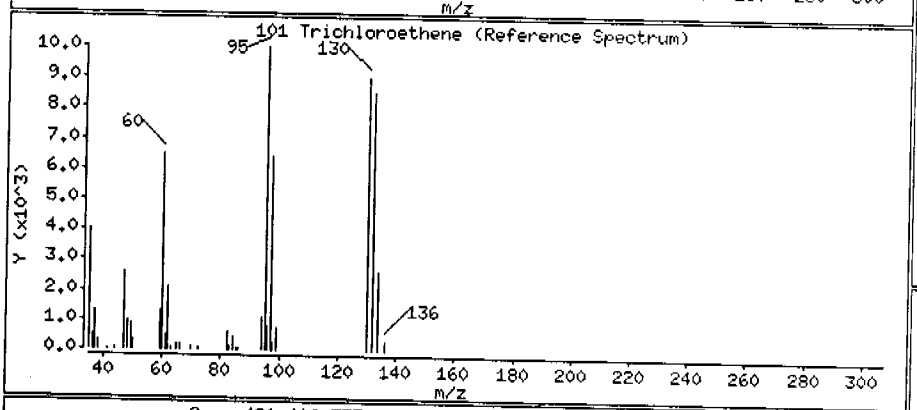
Concentration: 170.14 PPBV

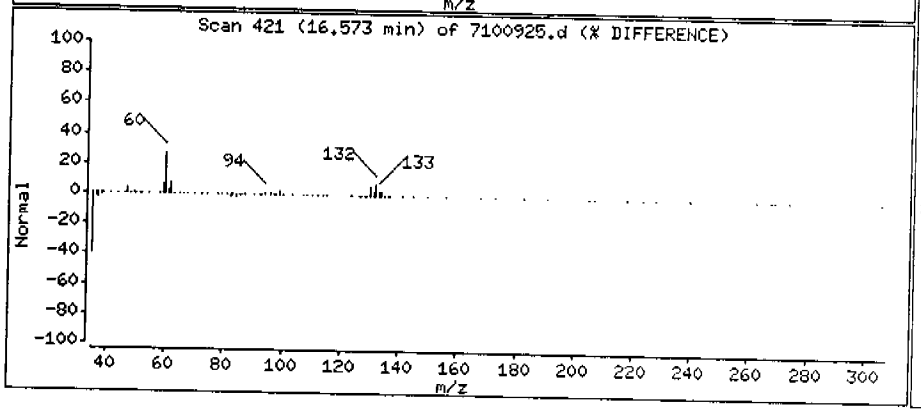


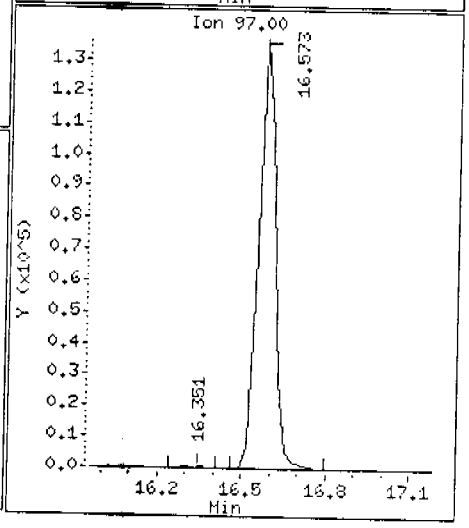












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Instrument: msd7.i

Sample Info: 100mL #14000

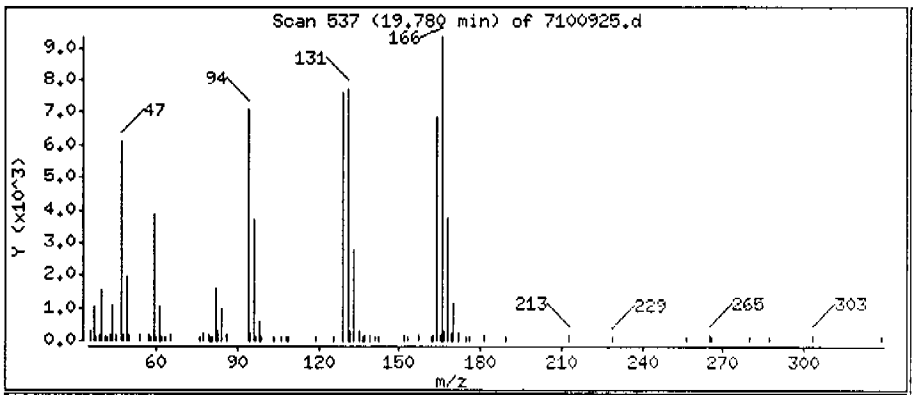
Operator: dfm

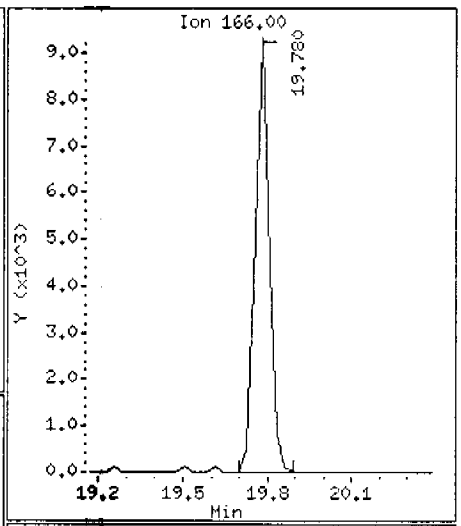
Column phase: RTx-624

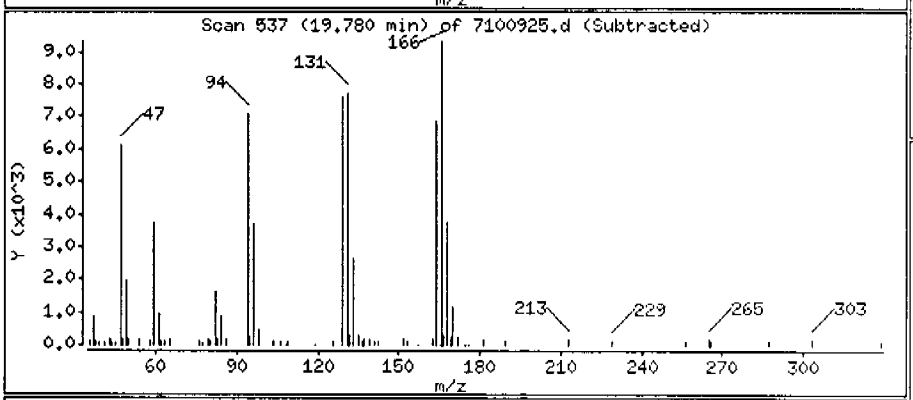
Column diameter: 0.53

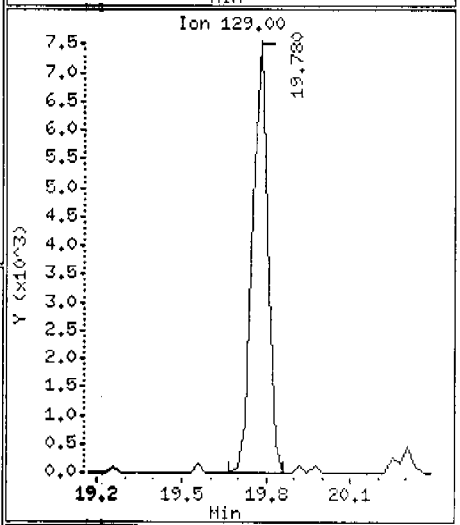
120 Tetrachloroethene

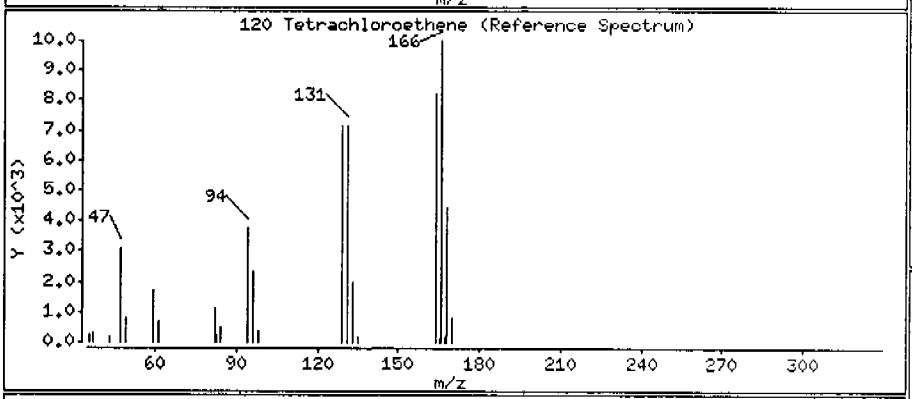
Concentration: 5.020 PPBV

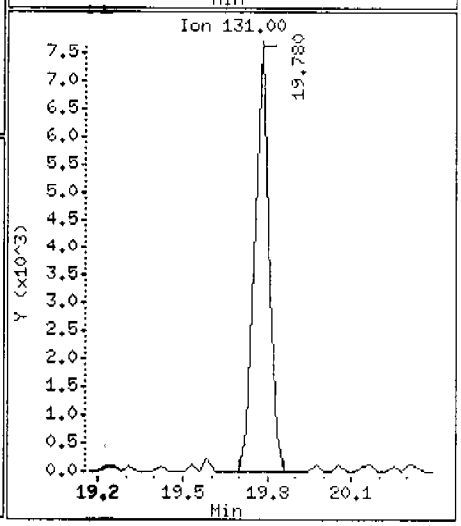


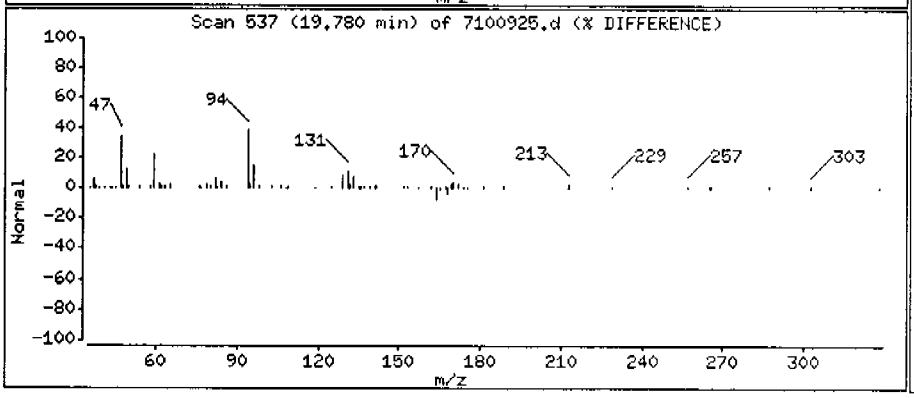












Data File: /chem/msd7.i/09oct08.b/7100925.d

Date : 10-OCT-2008 01:46

Client ID:

Instrument: msd7.i

Sample Info: 100mL #14000

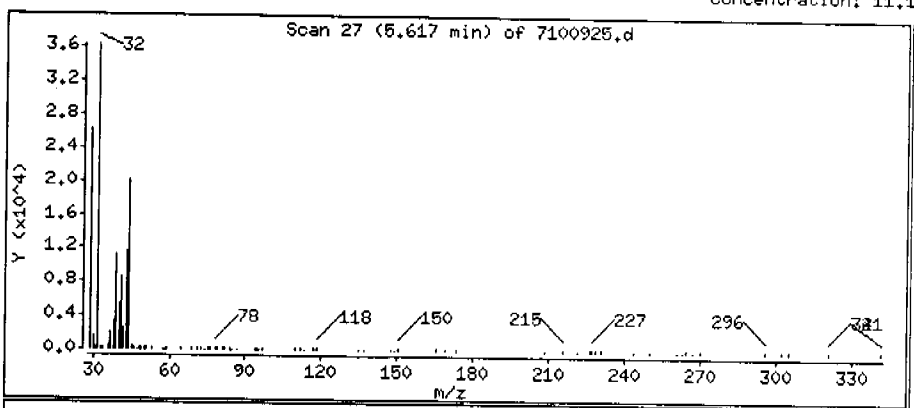
Operator: dfm

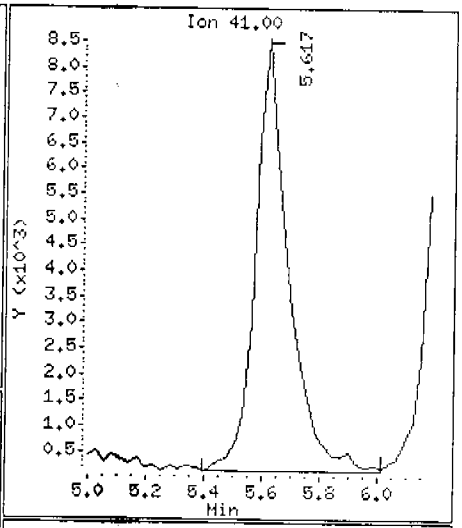
Column phase: RTx-624

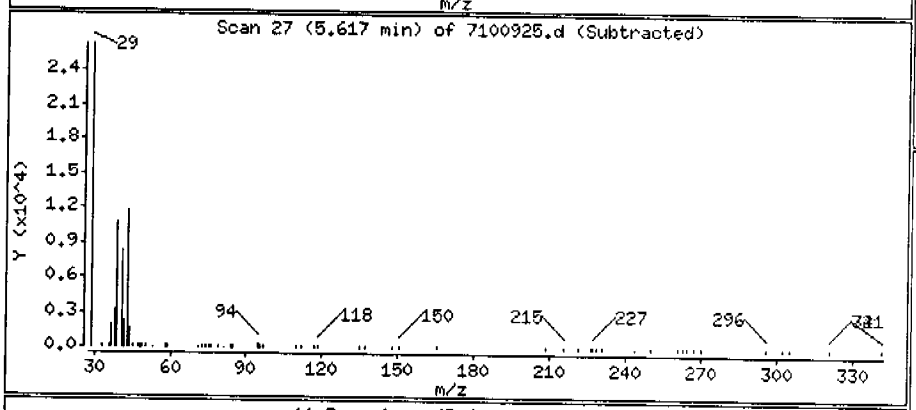
Column diameter: 0.53

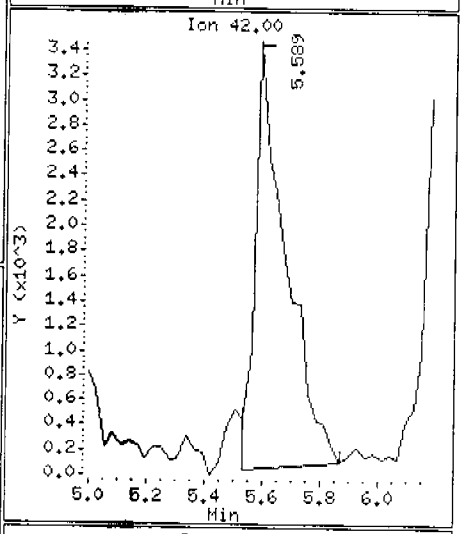
11 Propylene

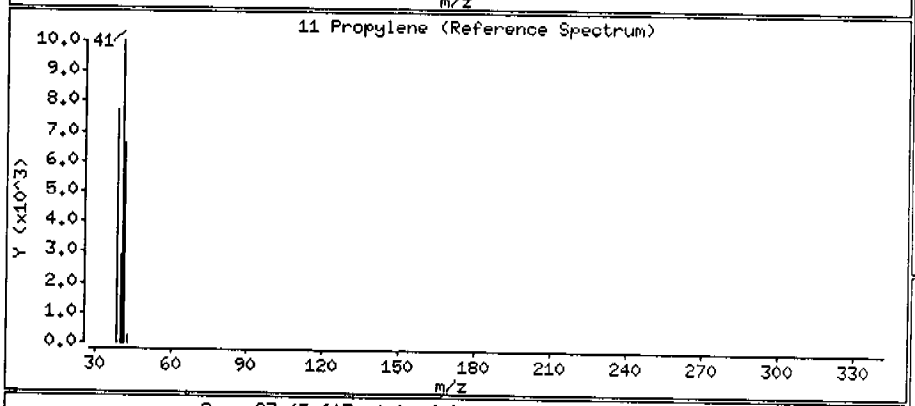
Concentration: 11.154 PPBV

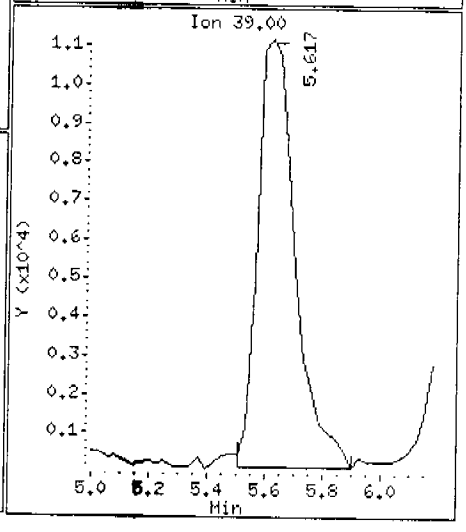


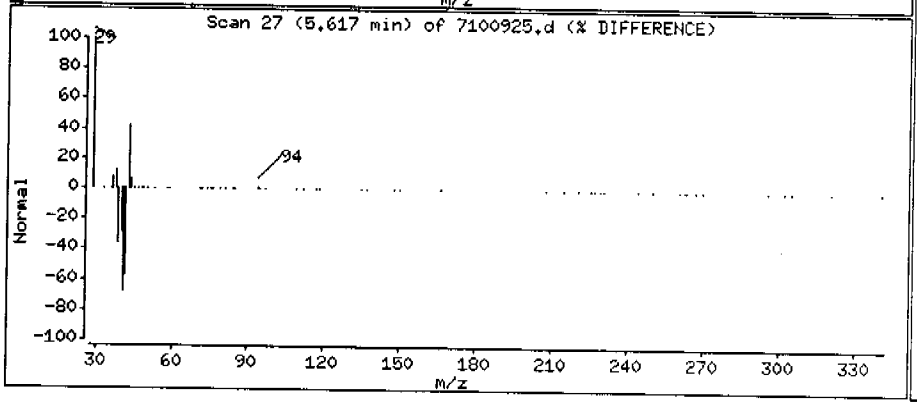












QC Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809614-19A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100607	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/6/08 02:01 PM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

0394

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809614-19A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100607**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/6/08 02:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected U J	7.1	Not Detected U J
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100607.d
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Inj Date : 06-OCT-2008 14:01
Operator : smd
Inst ID: msd7.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 13:30 sdisher
Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00
Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	14.333	14.333 (1.000)	130	378958	25.0000		80.00- 120.00	100.00
	14.333	14.333 (1.000)	128	300284			28.56- 128.56	79.24
	14.333	14.333 (1.000)	49	997540			335.95- 435.95	263.23
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	16.103	16.103 (1.000)	114	1186903	25.0000		80.00- 120.00	100.00
	16.103	16.103 (1.000)	88	213290			0.00- 67.14	17.97
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	21.301	21.301 (1.000)	117	1145450	25.0000		80.00- 120.00	100.00
	21.301	21.301 (1.000)	82	573099			1.24- 101.24	50.03
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.411	15.411 (1.075)	65	692594	24.1952	24.195	80.00- 120.00	100.00
	15.411	15.411 (1.075)	67	301191			0.00- 97.37	43.49
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.702	18.702 (1.161)	98	1069910	23.5482	23.548	80.00- 120.00	100.00
	18.702	18.702 (1.161)	70	151931			0.00- 63.85	14.20

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	830369			26.51- 126.51	77.61
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	554612	23.5302	23.530	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	786162			90.08- 190.08	141.75
23.291	23.291	(1.093)	176	534990			45.80- 145.80	96.46

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100607.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: Humid

Calibration Date: 06-OCT-2008
Calibration Time: 10:23
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	378958	-1.28
97 1,4-Difluorobenze	1202073	721244	1682902	1186903	-1.26
126 Chlorobenzene-d5	1260970	756582	1765358	1145450	-9.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08a.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: Humid

Client SDG: 06oct08
Fraction: VOA
Client Smp ID: Lab Blank
Operator: smd
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.195	96.78	70-130
$ 113 Toluene-d8	25.000	23.548	94.19	70-130
$ 137 Bromofluorobenzene	25.000	23.530	94.12	70-130

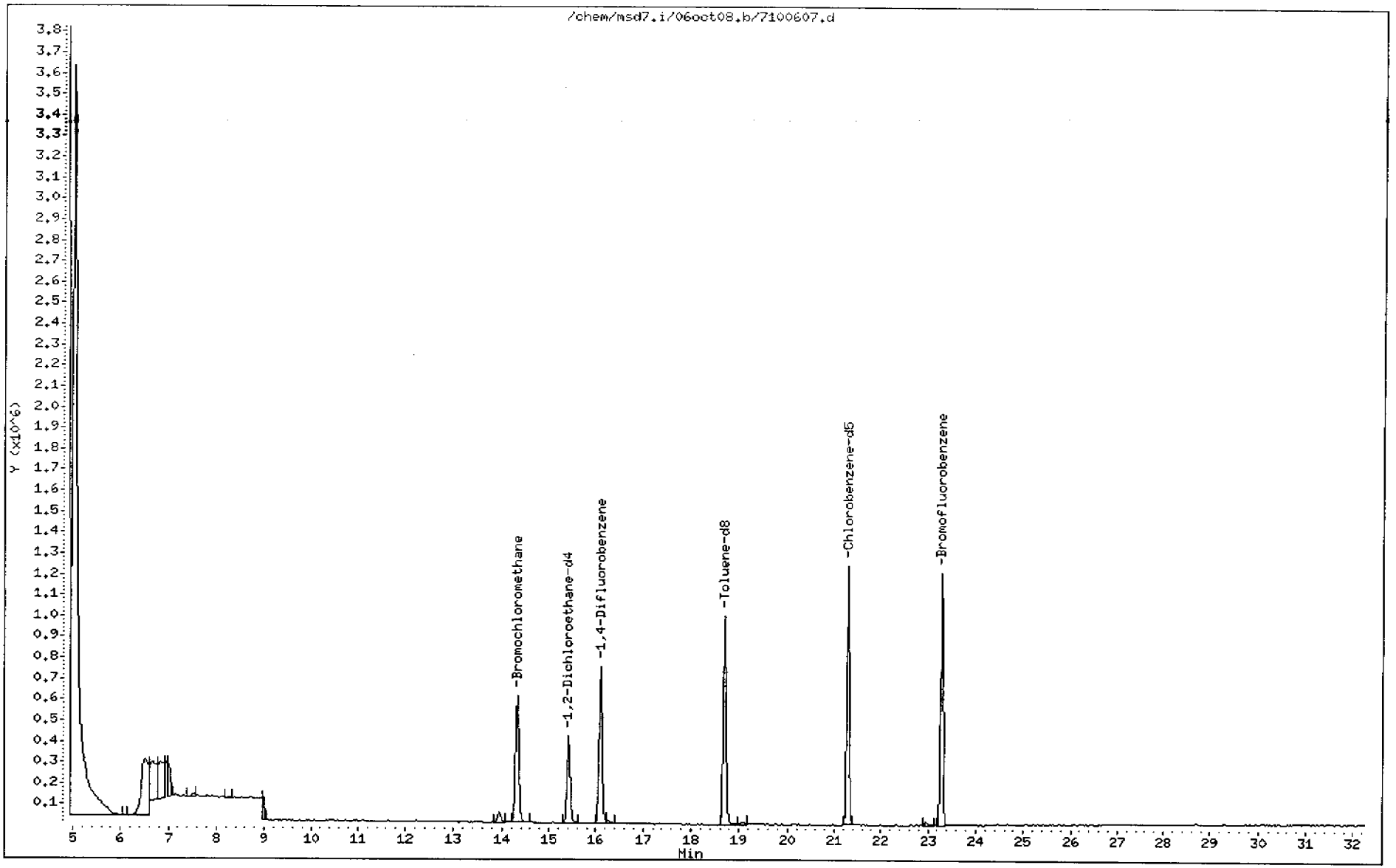
Data File: /chem/msd7.i/06oct08.b/7100607.d
Date : 06-OCT-2008 14:01
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msd7.i

Operator: smd
Column diameter: 0.53

0400



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809614-19B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100906	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/9/08 12:22 PM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809614-19B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100906**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/9/08 12:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	94	70-130

0402

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100906.d
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Inj Date : 09-OCT-2008 12:22
Operator : smd
Inst ID: msd7.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 13:18 sdisher
Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00
Cal File: 7082709.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	366013	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	279584			28.92- 128.92	76.39
14.333	14.333 (1.000)	49	945877			320.90- 420.90	258.43
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.103 (1.000)	114	1127261	25.0000		80.00- 120.00	100.00
16.102	16.103 (1.000)	88	190875			0.00- 67.10	16.93
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1202405	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	615472			1.24- 101.24	51.19
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	620580	22.4462	22.446	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	268602			0.00- 97.37	43.28
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1091343	25.2908	25.291	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	151040			0.00- 63.85	13.84

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	853855			26.51- 126.51	78.24
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.291	23.291	(1.093)	174	580346	23.4558	23.456	80.00- 120.00	100.00
23.264	23.291	(1.092)	95	839313			92.62- 192.62	144.62
23.291	23.291	(1.093)	176	553160			44.03- 144.03	95.32

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100906.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: Humid

Calibration Date: 09-OCT-2008
Calibration Time: 10:35
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	366013	1.09
97 1,4-Difluorobenze	1146510	687906	1605114	1127261	-1.68
126 Chlorobenzene-d5	1241713	745028	1738398	1202405	-3.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08a.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: Humid

Client SDG: 09oct08
Fraction: VOA
Client Smp ID: Lab Blank
Operator: smd
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.446	89.78	70-130
$ 113 Toluene-d8	25.000	25.291	101.16	70-130
$ 137 Bromofluorobenzene	25.000	23.456	93.82	70-130

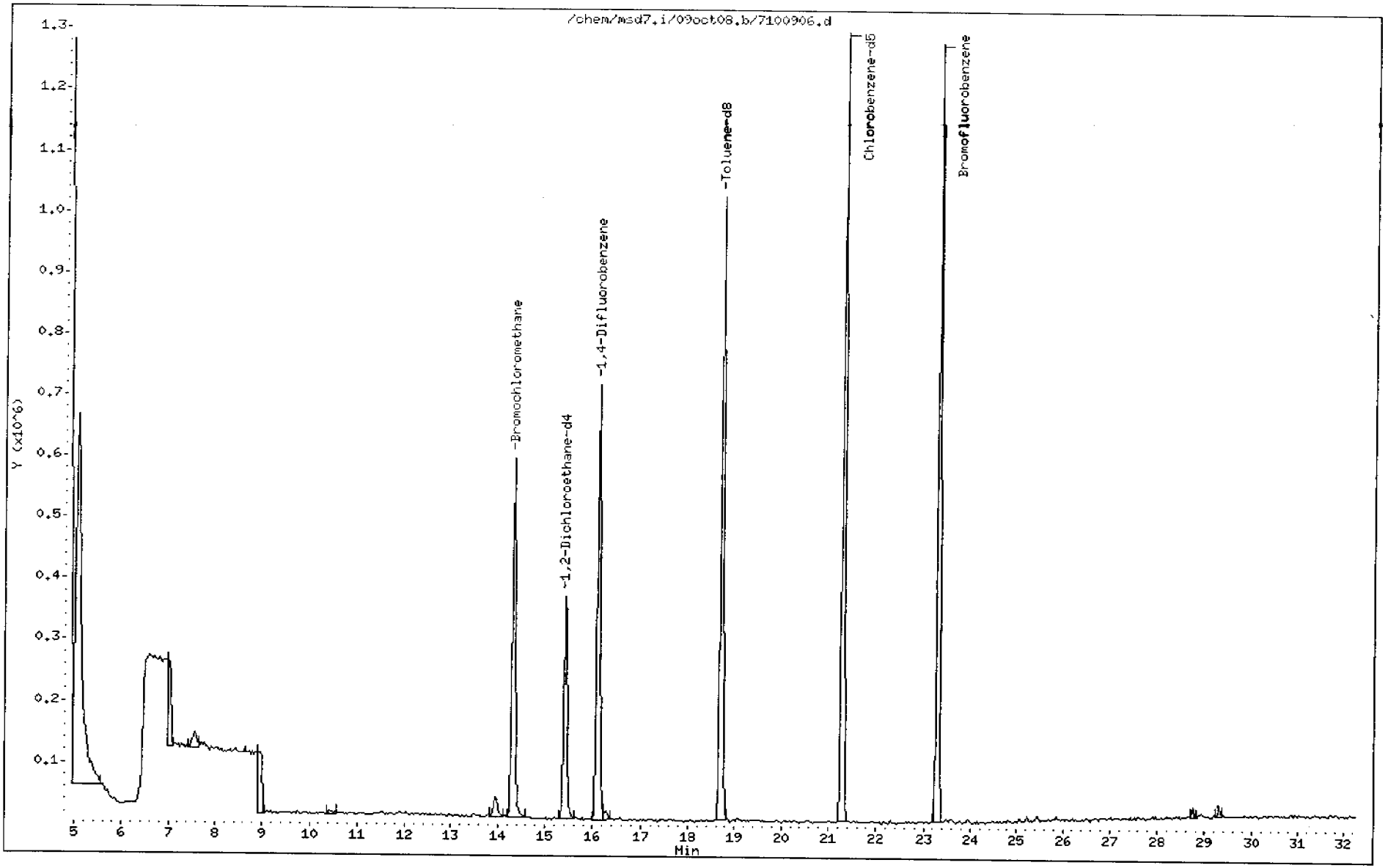
Data File: /chem/msd7.i/09oct08.b/7100906.d
Date : 09-OCT-2008 12:22
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msd7.i

Operator: smd
Column diameter: 0.53

0407



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0809614

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-14813	108		96		93				0
02	MD21-08-14813 Lab Duplicate	106		95		93				0
03	MD21-08-14814	108		96		92				0
04	MD21-08-14815	107		95		94				0
05	MD21-08-14816	115		90		94				0
06	MD21-08-14818	116		91		88				0
07	MD21-08-14819	94		101		92				0
08	MD21-08-14820	94		101		95				0
09	MD21-08-14821	97		102		93				0
10	MD21-08-14822	98		99		95				0
11	MD21-08-14822 Lab Duplicate	97		100		93				0
12	MD21-08-14824	98		98		95				0
13	MD21-08-14825	100		101		95				0
14	MD21-08-14826	104		98		92				0
15	MD21-08-14828	103		101		93				0
16	MD21-08-14829	105		99		94				0
17	MD21-08-14830	102		101		96				0
18	MD21-08-14831	105		100		94				0
19	MD21-08-14832	110		97		92				0
20	MD21-08-14833	111		98		92				0
21	Lab Blank	97		94		94				0
22	Lab Blank	90		101		94				0
23	CCV	105		101		99				0
24	CCV	96		104		96				0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0809614

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY	#		#		#		#	TOTAL OUT
01	LCS	102		103		98				0
02	LCS	94		106		92				0
03										0
04										0
05										0
06										0
07										0
08										0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
Lab File ID: 7100603.d
Instrument ID: msd7.i

SDG No: 0809614
Date Analyzed: 10/06/2008
Time Analyzed: 10:23 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1260970		21.3		1202073		16.1		383857		14.33	
	UPPER LIMIT	1765358		21.63		1682902		16.43		537400		14.66	
	LOWER LIMIT	756582		20.97		721244		15.77		230314		14.00	
	CLIENT SAMPLE NO												
01	MD21-08-14813	1151993		21.3		1111432		16.1		357870		14.33	
02	MD21-08-14813 Lab Duplicate	1133658		21.3		1096776		16.1		360188		14.33	
03	MD21-08-14814	1073737		21.3		1058729		16.1		346344		14.33	
04	MD21-08-14815	1013759		21.3		1037059		16.1		350291		14.33	
05	MD21-08-14816	938469		21.3		1019596		16.1		315597		14.33	
06	MD21-08-14818	992531		21.3		988559		16.1		305868		14.33	
07	Lab Blank	1145450		21.3		1186903		16.1		378958		14.33	
08	CCV	1260970		21.3		1202073		16.1		383857		14.33	
09	LCS	1254340		21.3		1219444		16.1		382513		14.33	
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

Lab File ID: 7100904.d

Instrument ID: msd7.i

SDG No: 0809614

Date Analyzed: 10/09/2008

Time Analyzed: 10:35 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1241713		21.3		1146510		16.1		362080		14.33	
	UPPER LIMIT	1738398		21.63		1605114		16.43		506912		14.66	
	LOWER LIMIT	745028		20.97		687906		15.77		217248		14.00	
	CLIENT SAMPLE NO												
01	MD21-08-14819	1187422		21.3		1097269		16.1		357454		14.33	
02	MD21-08-14820	1192562		21.3		1088365		16.1		359978		14.33	
03	MD21-08-14821	1139734		21.3		1058225		16.1		341206		14.33	
04	MD21-08-14822	1080984		21.3		1023345		16.1		337080		14.33	
05	MD21-08-14822 Lab Duplicate	1102053		21.3		1038442		16.1		335474		14.33	
06	MD21-08-14824	1086459		21.3		1012223		16.1		334229		14.33	
07	MD21-08-14825	1109180		21.3		1012314		16.1		323330		14.36	
08	MD21-08-14826	1073233		21.3		991043		16.1		312700		14.36	
09	MD21-08-14828	1048257		21.3		972198		16.1		312404		14.33	
10	MD21-08-14829	1031302		21.3		961120		16.1		311007		14.33	
11	MD21-08-14830	1035907		21.3		966657		16.1		316285		14.36	
12	MD21-08-14831	996306		21.3		928333		16.1		306599		14.33	
13	MD21-08-14832	976988		21.3		905081		16.1		288586		14.33	
14	MD21-08-14833	947376		21.3		899192		16.1		284810		14.33	
15	Lab Blank	1202405		21.3		1127261		16.1		366013		14.33	
16	CCV	1241713		21.3		1146510		16.1		362080		14.33	
17	LCS	1295451		21.3		1164377		16.1		359837		14.33	
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: 7100620.d & 7100619.d
Lab Sample ID: 01A & 01AA
Dilution: 1.83 & 1.83
Client Sample ID: &
Date Analyzed: 10/6/08 & 10/6/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	4.052		4.001		1.3
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	ND	U	ND	U	0
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	ND	U	ND	U	0
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	ND	U	ND	U	0
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	ND	U	ND	U	0
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.699		2.021		17
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	12.526		12.105		3.4
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	ND	U	ND	U	0
75-27-4	Bromodichloromethane	ND	U	ND	U	0
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	ND	U	ND	U	0
56-23-5	Carbon Tetrachloride	10.83		10.749		0.75
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	104.48		103.05		1.4
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	ND	U	ND	U	0
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	1.012		1.064		5.0
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

0412

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 7100620.d & 7100619.d

Lab Sample ID: 01A & 01AA

Dilution: 1.83 & 1.83

Client Sample ID: &

Date Analyzed: 10/6/08 & 10/6/08

		Original		Duplicate		
CAS Number	Compound	Amount	Flags	Amount	Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	1.531		1.44		6.1
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	ND	U	ND	U	0
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	100.55		101.39		0.83
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	ND	U	ND	U	0
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	59.85		59.194		1.1
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: 7100911.d & 7100913.d
Lab Sample ID: 09A & 09AA
Dilution: 2.55 & 1.91
Client Sample ID: &
Date Analyzed: 10/9/08 & 10/9/08

		Original		Duplicate		
CAS Number	Compound	Amount	Flags	Amount	Flags	RPD
71-55-6	1,1,1-Trichloroethane	1.652		1.652		0
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	14.856		14.443		2.8
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	8.117		8.264		1.8
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	3.031		2.974		1.9
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	ND	U	ND	U	0
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	U	ND	U	0
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	ND	U	ND	U	0
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	ND	U	ND	U	0
75-27-4	Bromodichloromethane	1.261		1.357		7.3
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	5.65		5.99		5.8
56-23-5	Carbon Tetrachloride	60.108		60.604		0.82
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	107.57		110.04		2.3
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	2.184		2.123		2.8
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	ND	U	ND	U	0
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

0414

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 7100911.d & 7100913.d

Lab Sample ID: 09A & 09AA

Dilution: 2.55 & 1.91

Client Sample ID: &

Date Analyzed: 10/9/08 & 10/9/08

		Original		Duplicate		
CAS Number	Compound	Amount	Flags	Amount	Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	194.55		196.61		1.0
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	6.212		5.027		21
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	9.253		9.369		1.2
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	1.42		1.344		5.5
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	160.1		161.27		0.73
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd7.i/7-04aug.b/7080417.d
Level 2: /chem/msd7.i/7-04aug.b/7080428.d
Level 3: /chem/msd7.i/7-27aug.b/7082703.d
Level 4: /chem/msd7.i/7-27aug.b/7082709.d
Level 5: /chem/msd7.i/7-27aug.b/7082704.d
Level 6: /chem/msd7.i/7-04aug.b/7080422.d
Level 7: /chem/msd7.i/7-24aug.b/7082406.d

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 143a	+++++	+++++	0.88017	0.82629	0.86091	+++++	0.76502	0.83310	6.069
6 Freon142b	+++++	+++++	4.21145	4.24181	4.25911	+++++	3.70524	4.10440	6.501
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD	
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Freon 13	+++++	+++++	0.48641	0.31941	1.00349	+++++	0.49083	0.57503	51.575	<-
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Propylene	+++++	+++++	2.19262	2.23902	2.17851	2.00040	2.04782	2.13167	4.790	
12 Dichlorodifluoromethane/Fr12	+++++	6.44420	5.88265	6.51455	6.35593	5.95538	5.92846	6.18020	4.661	
13 Freon 134a	+++++	+++++	1.52644	1.74452	1.67899	+++++	1.54048	1.62261	6.564	
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Freon 152a	+++++	+++++	1.21653	1.15273	1.17381	+++++	1.13241	1.16887	3.079	
16 Freon 114	+++++	2.67109	3.20836	3.73314	3.71570	3.35195	3.12839	3.30144	12.089	
17 Freon 22	+++++	+++++	8.33007	7.88520	5.99139	+++++	7.17623	7.34572	13.889	

Air Toxics Ltd.

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Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
18 Chloromethane	+++++	+++++	2.69342	2.80779	2.76539	2.49825	2.37904	2.62878	6.970
19 Butane	+++++	+++++	0.60199	0.51031	0.52314	0.48244	0.49508	0.52259	8.987
20 Vinyl Chloride	+++++	2.84070	2.43912	2.74874	2.70679	2.47461	2.44188	2.60864	6.806
21 Isobutane	+++++	+++++	4.76777	+++++	5.21766	+++++	4.59151	4.85898	6.645
22 1,3-Butadiene	3.07827	2.50909	2.13182	2.46328	2.44813	2.27444	2.29032	2.45648	12.388
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Bromomethane	+++++	1.65502	1.48634	1.64395	1.66079	1.56514	1.65434	1.61093	4.391
26 Methanol	+++++	+++++	1.02149	0.68670	0.64641	+++++	0.53087	0.72137	29.209
27 Chloroethane	+++++	1.17686	1.00901	1.27678	1.32046	1.23670	1.25845	1.21304	9.118

Air Toxics Ltd.

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Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Isopentane	+++++	+++++	3.19072	3.79577	3.74601	3.44666	3.46416	3.52866	6.995
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	5.55899	6.00168	6.62076	6.65211	6.03426	5.97756	6.14089	6.861
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	3.88046	3.67911	3.82505	+++++	3.51203	3.72416	4.429
35 1-Pentene	+++++	+++++	3.33203	+++++	3.62105	+++++	3.34047	3.43118	4.794
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Pentane	+++++	+++++	5.92373	+++++	6.38466	+++++	5.81002	6.03947	5.039

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Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
38 Ethanol	+++++	+++++	0.81489	1.06894	1.12946	1.05175	1.02602	1.01821	11.772
39 Ethyl Ether	+++++	+++++	0.91407	+++++	1.05443	+++++	0.98830	0.98560	7.124
40 Freon123a	+++++	+++++	1.63015	1.59430	1.69092	+++++	1.70170	1.65427	3.077
41 Freon123	+++++	+++++	2.76182	2.61309	2.74428	+++++	2.51430	2.65837	4.392
42 Freon 113	+++++	2.17422	2.32912	2.67442	2.67902	2.48304	2.45627	2.46602	7.969
43 1,1-Dichloroethene	+++++	3.71758	4.12034	4.75990	4.69611	4.26746	4.16876	4.28836	9.076
44 Acrolein	+++++	+++++	0.93715	+++++	1.06016	+++++	1.01385	1.00372	6.190
45 Acetone	+++++	+++++	0.98204	1.27858	1.31756	1.22380	1.25053	1.21050	10.934
46 2-Propanol	+++++	+++++	3.63489	5.41720	5.72030	5.42588	5.48443	5.13654	16.517
47 Carbon Disulfide	+++++	4.85063	4.75665	5.55895	5.65190	5.34391	5.43490	5.26616	7.112

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Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
48 Ethyl acrylate	+++++	+++++	0.07064	+++++	0.07908	+++++	0.07375	0.07449	5.732
49 Iodomethane	+++++	+++++	4.38787	+++++	5.62696	+++++	4.77412	4.92965	12.861
50 Methyl Methacrylate	+++++	+++++	1.05258	+++++	1.27650	+++++	1.14093	1.15667	9.751
51 3-Chloropropene	+++++	+++++	0.68080	0.87850	0.92152	0.88937	0.91704	0.85745	11.710
52 Acetonitrile	+++++	+++++	1.55415	+++++	1.53359	+++++	1.11739	1.40171	17.582
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methylene Chloride	+++++	3.99100	3.45856	3.91944	3.90793	3.61192	3.62085	3.75162	5.747
55 Cyclopentene	+++++	+++++	3.34037	3.61362	3.90612	+++++	3.64230	3.62560	6.379
56 Cyclopentane	+++++	+++++	1.15716	+++++	1.30129	+++++	1.20939	1.22261	5.968
57 tert-Butyl-Alcohol	+++++	+++++	3.07734	2.97292	2.85988	2.53173	2.23675	2.73572	12.649

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Air Toxics Ltd.

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Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 MTBE	+++++	3.07887	2.15050	3.31308	3.49863	3.32369	3.24019	3.10083	18.640
61 trans-1,2-Dichloroethene	+++++	1.52441	1.68788	1.92825	1.97818	1.83083	1.83676	1.79772	9.274
62 Acrylonitrile	+++++	+++++	2.19721	+++++	2.42902	+++++	2.40472	2.34365	5.436
63 2-Pentanone	+++++	+++++	1.92231	+++++	2.44502	+++++	2.20696	2.19143	11.942
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 Hexane	+++++	3.71589	3.58824	4.62297	4.66035	4.29014	4.22724	4.18414	10.725
66 1-Hexene	+++++	+++++	2.04670	+++++	2.34617	+++++	2.12791	2.17359	7.125
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

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Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
68 Isopropyl ether	+++++	+++++	8.62606	9.01530	10.06615	+++++	9.04680	9.18858	6.699
69 Vinyl Acetate	+++++	+++++	0.33816	0.42098	0.45185	0.42411	0.42131	0.41128	10.424
70 1,1-Dichloroethane	+++++	3.86824	4.22443	5.10109	5.01091	4.57455	4.41707	4.53271	10.364
71 1-Propanol	+++++	+++++	0.50243	0.46037	0.55769	+++++	0.52858	0.51227	8.064
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	5.39185	4.51484	5.44279	+++++	7.31547	5.66624	20.809
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.85878	0.65059	0.79097	0.83935	0.79226	0.80167	0.78894	9.269
76 cis-1,2-Dichloroethene	+++++	3.36521	3.10649	3.71052	3.67310	3.32215	3.22397	3.40024	7.149
77 Ethyl Acetate	+++++	+++++	0.30397	0.36287	0.37928	+++++	0.35729	0.35085	9.297

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Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
78 2,2-Dichloropropane	+++++	+++++	2.19973	2.07841	2.97094	+++++	2.94370	2.54820	18.646
79 Methyl Acrylate	+++++	+++++	4.57133	+++++	5.73374	+++++	5.35272	5.21927	11.354
80 Tetrahydrofuran	+++++	2.55617	2.26577	3.06861	3.10789	2.87007	2.84496	2.78558	11.549
82 Chloroform	4.11136	3.00053	3.30209	3.61683	3.65732	3.36155	3.27628	3.47514	10.280
83 1,1,1-Trichloroethane	+++++	2.96274	3.28947	3.95807	3.95442	3.60934	3.51515	3.54820	10.897
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Cyclohexane	+++++	1.87460	1.62089	1.99435	2.01507	1.85399	1.82537	1.86405	7.610
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Carbon Tetrachloride	+++++	3.81705	3.62554	4.42844	4.41424	4.04578	3.97895	4.05167	7.924
88 1,1-Dichloropropene	+++++	+++++	0.21644	0.21672	0.24487	+++++	0.22983	0.22696	5.937

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Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 2,2,4-Trimethylpentane	+++++	9.33403	8.48561	10.91164	11.06159	10.12131	9.91373	9.97132	9.736
91 Benzene	1.60244	1.13033	1.24426	1.50237	1.46411	1.31767	1.26708	1.36118	12.236
92 tert-amyl-Methyl Ether	+++++	+++++	3.18203	2.59770	2.92134	+++++	3.72587	3.10674	15.353
93 1,2-Dichloroethane	+++++	0.86778	0.97133	1.15895	1.11094	0.98938	0.93763	1.00600	10.859
94 Heptane	+++++	0.37846	0.37490	0.50597	0.49172	0.45727	0.43263	0.44016	12.611
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Heptanone	+++++	+++++	2.26682	3.02389	3.83622	+++++	3.54319	3.16753	21.721
98 1-Butanol	+++++	+++++	0.40718	0.39867	0.51224	+++++	0.53720	0.46382	15.338
99 Isobutanol	+++++	+++++	0.08485	0.06151	0.06605	+++++	0.06235	0.06869	15.945
100 trans-1,4-dichloro-2-butene	+++++	+++++	0.21303	+++++	0.21391	+++++	0.21056	0.21250	0.816

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
101 Trichloroethene	+++++	0.56041	0.45910	0.66953	0.66089	0.58822		
	0.56057						0.58312	13.272
102 Methyl Cyclohexane	+++++	1.98916	1.97288	2.49406	2.52706	2.37536		
	2.36816						2.28778	10.747
103 Alphamethylstyrene	+++++	+++++	1.24574	+++++	1.29791	+++++		
	1.18203						1.24190	4.673
104 1,2-Dichloropropane	+++++	0.59770	0.55378	0.75318	0.72511	0.65099		
	0.62010						0.65014	11.750
105 Dibromomethane	+++++	+++++	0.52104	+++++	0.56637	+++++		
	0.50902						0.53214	5.684
106 1,4-Dioxane	+++++	+++++	0.25617	0.36069	0.36984	0.34009		
	0.33636						0.33263	13.518
107 Bromodichloromethane	+++++	0.91660	0.92987	1.21751	1.19137	1.07259		
	1.00711						1.05584	12.160
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
110 cis-1,3-Dichloropropene	+++++	0.56844	0.60679	0.87275	0.87614	0.79712		
	0.77283						0.74901	17.630

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
	200.000 Level 7							
111 4-Methyl-2-pentanone	+++++	0.46669	0.41813	0.69309	0.68755	0.62653		
	0.58873						0.58012	19.751
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
114 Toluene	+++++	1.44328	1.36036	1.67884	1.64006	1.48961		
	1.44148						1.50894	8.244
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
116 trans-1,3-Dichloropropene	+++++	0.67588	0.67980	0.92925	0.91876	0.83511		
	0.81625						0.80917	13.723
117 1,1,2-Trichloroethane	+++++	0.46524	0.46950	0.57145	0.56002	0.51887		
	0.50703						0.51535	8.607
118 1,3-Dichloropropane	+++++	+++++	0.65717	0.68216	0.76395	+++++		
	0.73548						0.70969	6.867
119 Butyl Acetate	+++++	+++++	0.55410	0.62104	0.77840	+++++		
	0.73586						0.67235	15.335
120 Tetrachloroethene	+++++	0.65847	0.62470	0.73308	0.72326	0.66740		
	0.64562						0.67542	6.428
121 2-Hexanone	+++++	+++++	0.54188	0.88905	0.88542	0.81015		
	0.78474						0.78225	18.148

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
122 Dibromochloromethane	+++++	0.88742	0.92809	1.24574	1.21826	1.11626	1.07848	1.07904	13.624
123 1,2-Dibromoethane	1.12920	0.86669	0.79930	1.08381	1.05157	0.96891	0.92734	0.97526	12.304
124 Nonane	+++++	+++++	2.17472	+++++	2.15514	+++++	1.75514	2.02833	11.674
125 1,1,1,2-Tetrachloroethane	+++++	+++++	0.70271	0.72046	0.75159	+++++	0.65563	0.70760	5.668
127 Chlorobenzene	+++++	1.38584	1.16015	1.37261	1.31771	1.22233	1.20780	1.27774	7.348
128 Ethyl Benzene	+++++	0.72346	0.61169	0.76024	0.74483	0.67305	0.66760	0.69681	8.042
129 m,p-Xylene	+++++	0.94019	0.78817	0.95822	0.94010	0.87014	0.85257	0.89156	7.412
130 o-Xylene	+++++	0.92578	0.69199	0.88549	0.87281	0.79511	0.77740	0.82476	10.423
131 Styrene	1.15361	1.11265	0.99939	1.45621	1.45304	1.33469	1.28207	1.25595	13.892
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
133 Bromoform	+++++	0.93512	0.72863	1.04640	1.03270	0.93957		
	0.89801						0.93007	12.333
134 Cumene	2.79720	2.63592	1.88511	2.54654	2.51498	2.30321		
	2.20288						2.41226	12.669
135 Cyclohexanone	+++++	+++++	0.75458	0.89759	1.01107	+++++		
	0.95172						0.90374	12.139
136 Bromobenzene	+++++	+++++	0.72338	0.76236	0.73857	+++++		
	0.65388						0.71955	6.480
138 1,2,3-Trichloropropane	+++++	+++++	0.41379	0.39002	0.39614	+++++		
	0.34201						0.38549	7.961
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 1,1,2,2-Tetrachloroethane	+++++	1.63490	1.17312	1.32493	1.28268	1.16077		
	1.09156						1.27799	15.217
141 2-Chlorotoluene	+++++	+++++	0.58385	0.62308	0.62063	+++++		
	0.55513						0.59567	5.447
142 Propylbenzene	+++++	4.12288	2.58363	3.12910	3.03693	2.75916		
	2.39706						3.00479	20.373
143 4-Chlorotoluene	+++++	+++++	0.60197	0.64415	0.61246	+++++		
	0.52926						0.59696	8.135

0429

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++	4.06215	2.34864	2.89857	2.89537	2.64930	2.42082	2.87914	21.660
146 Diisobutyl Ketone	+++++	+++++	1.72994	2.10588	2.04561	+++++	1.64829	1.88243	12.061
147 1,3,5-Trimethylbenzene	2.94896	3.21786	1.95081	2.22497	2.20607	2.01321	1.92794	2.35569	21.914
148 tert-Butylbenzene	+++++	+++++	1.85376	1.92760	1.80950	+++++	1.62442	1.80382	7.159
149 sec-Butylbenzene	+++++	+++++	2.75950	2.96309	2.77281	+++++	2.42410	2.72988	8.208
150 1,2,4-Trimethylbenzene	2.88099	3.24498	1.80703	2.20246	2.18085	2.01350	1.92698	2.32240	23.021
151 bis(2-chloroethyl)ether	+++++	+++++	1.50192	+++++	1.35437	+++++	1.26292	1.37307	8.783
152 D-Limonene	+++++	+++++	0.85900	1.02002	1.06110	+++++	+++++	0.98004	10.899
153 p-Cymene	+++++	+++++	2.57327	2.76566	2.48840	+++++	2.19627	2.50590	9.449

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD	
154 1,2,3-Trimethylbenzene	+++++	+++++	0.87562	0.97445	0.87822	+++++	0.81381	0.88552	7.491	
155 1,3-Dichlorobenzene	+++++	2.37474	1.25006	1.43935	1.42519	1.32193	1.27671	1.51467	28.277	
156 1,4-Dichlorobenzene	+++++	2.58797	1.24563	1.49190	1.49531	1.38007	1.33536	1.58937	31.359	<-
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 Butylbenzene	+++++	+++++	0.63048	0.64837	0.56555	+++++	0.53042	0.59370	9.296	
159 alpha-Chlorotoluene	+++++	3.38635	1.74871	2.27833	2.36871	2.16899	2.01415	2.32754	24.179	
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
161 1,2-Dichlorobenzene	+++++	2.58031	1.21435	1.40297	1.41703	1.30382	1.26137	1.52997	34.025	<-
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	0.77337	0.77398	0.66467	+++++	0.65960	0.71790	8.975	
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 1,2,4-Trichlorobenzene	+++++	+++++	0.64988	0.48171	0.72774	0.75994	0.79973	0.68380	18.376
166 Hexachlorobutadiene	+++++	+++++	0.62338	0.46888	0.60048	0.58016	0.58073	0.57073	10.447
167 Naphthalene	+++++	+++++	1.30311	0.93889	1.58400	1.69190	1.82565	1.46871	24.040
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Pentachloroethane	+++++	+++++	0.52623	0.59794	0.57302	+++++	0.51778	0.55374	6.896

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-27aug.b/t14q804c.m
Cal Date : 27-Aug-2008 15:17 rallen
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
204 Propylene Oxide	+++++	+++++	0.17087	0.14734	0.11860	+++++		
	+++++						0.14560	17.979
$ 90 1,2-Dichloroethane-d4	1.81900	1.90902	1.95735	1.86465	1.88205	1.86171		
	1.92515						1.88842	2.433
$ 113 Toluene-d8	0.90355	0.91803	0.92296	0.98737	0.98977	0.97230		
	1.00506						0.95700	4.282
$ 137 Bromofluorobenzene	0.50497	0.51282	0.50665	0.50883	0.51164	0.52469		
	0.53142						0.51443	1.921

Calibration History

Method : /chem/msd7.i/7-27aug.b/t14q804c.m
Start Cal Date: 04-AUG-2008 16:14
End Cal Date : 27-AUG-2008 15:00

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.30000		
04-AUG-2008 16:14	AFCEElow	/chem/msd7.i/7-**04**aug.b/7080417.d
Cal Level: 2 , Cal Amount: 0.50000		
05-AUG-2008 11:41	AT08low	/chem/msd7.i/7-**04**aug.b/7080428.d
Cal Level: 3 , Cal Amount: 2.00000		
27-AUG-2008 09:46	sp2c	/chem/msd7.i/7-**27**aug.b/7082703.d
24-AUG-2008 11:28	sp19b	/chem/msd7.i/7-**24**aug.b/7082404.d
05-AUG-2008 14:27	sp37a	/chem/msd7.i/7-**05**aug.b/7080503.d
04-AUG-2008 18:01	AT08mdl	/chem/msd7.i/7-**04**aug.b/7080419.d
Cal Level: 4 , Cal Amount: 25.00000		
27-AUG-2008 15:00	sp2c	/chem/msd7.i/7-**27**aug.b/7082709.d
05-AUG-2008 15:06	sp37a	/chem/msd7.i/7-**05**aug.b/7080504.d
04-AUG-2008 18:40	AT08mdl	/chem/msd7.i/7-**04**aug.b/7080420.d
Cal Level: 5 , Cal Amount: 50.00000		
27-AUG-2008 10:42	sp2c	/chem/msd7.i/7-**27**aug.b/7082704.d
24-AUG-2008 12:12	sp19b	/chem/msd7.i/7-**24**aug.b/7082405.d
05-AUG-2008 15:45	sp37a	/chem/msd7.i/7-**05**aug.b/7080505.d
04-AUG-2008 19:20	AT08mdl	/chem/msd7.i/7-**04**aug.b/7080421.d
Cal Level: 6 , Cal Amount: 100.00000		
04-AUG-2008 20:01	AT08mdl	/chem/msd7.i/7-**04**aug.b/7080422.d

Cal Level: 7 , Cal Amount: 200.00000		
24-AUG-2008 13:03	sp19b	/chem/msd7.i/7-**24**aug.b/7082406.d
05-AUG-2008 16:24	sp37a	/chem/msd7.i/7-**05**aug.b/7080506.d
04-AUG-2008 20:58	AT08mdl	/chem/msd7.i/7-**04**aug.b/7080423.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
27-AUG-2008 10:42	sp2c	/chem/msd7.i/7-**27**aug.b/7082704.d

@ Air Toxics Ltd. **MSD-7** Logbook #: 1706

0436

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	34.25
75	30.0 – 60.0% of mass 95	51.28
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.44
173	Less than 2.0% of mass 174	(0.73)[1]
174	50.0 – 100% of mass 95	71.98
175	5.0 – 9.0% of mass 174	(6.89)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	(95.48)[1]
177	5.0 – 9.0% of mass 176	(6.55)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 8-4-08
BFB Injection Time: 1503
BFB File ID: 7080415
Tekmar Purge Flow: 20ml/min
Vacuum: 2.7×10^{-5}

IS/S Std.#: 1612-59		Exp. Date: 10-3-08
BCM	465852	
1,4-DFB	1452055	
CB-d5	1558716	

Verified CCV IS vs ICAL mid-point (- 40%D) RA / initials

Verify 176/174 m/z Ratio: 907776/950784 x 100 = 95.47658 **NOAH Cart #:** N/A **File #:** N/A

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1437194)}{(1452055)} \times \frac{(25.)}{(0.957)} = 25.85594$ (~~0.98477~~ RA 8-5-08)

Reported Result 25.8456 RA 8-5-08

File ID:	7080421a
Compound:	TO1-d8
Initials:	RA

Method: T1498041a

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Loaded by Init.	Date Analyzed	Time Analyzed	Reviewed by Init.	Comments
1	✓	7080415	BFB Tune Check	1476-434	5psig	2uL	1.00	RA	8-4-08	1503	RA/CT	
2	X	16	ICAL level 1 (200 ppbv)	1612-91	0.3ppbv	0.3mL		RA		1526	RA/CT	Wrong method
3	✓	17	ICAL level 2 (200 ppbv)	1612-91	0.5ppbv 8-4-08 CT	0.5mL 8-4-08 CT		RA		1614		
4	X	18	ICAL level 2 (200 ppbv) 8-4-08 CT		0.5ppbv	0.5mL		RA		1722		
5	✓	19	ICAL level 3 (200 ppbv)		2.0ppbv	2.0mL				1801		
6	✓	20	ICAL Level 4 (200 ppbv)		25ppbv	25mL				1840		
7	✓	21	ICAL level 5 (200 ppbv)		50ppbv	50mL				1920		

Signature 8/4/08 Date

@ Air Toxics Ltd. **MSD-7** Logbook #: 1706

8	✓	70804 22	ICAL Level 6 (200 ppbv)	1612-91	100ppbv	100mL	1.00	DM	8/4/08	2001	RA/ C.T.	
9	✓	-23	↓ 7 ↓	↓	200ppbv	200mL	↓	↓	8/4/08	2058	RA/ C.T.	
10	✓	-24	System Blank	33668	Humid	200mL	1.00	C.T	8/5/08	905	RA/CT	
11	X	25	ICAL level 2 (200 ppbv)	1612-91	0.5ppbv	0.5mL	1.00	RA	8/5/08	944	RA/CT	Bad Load.
12	X	26	LCS-1 (100ppbv)	1612-76A	50ppbv	100mL	1.00	RA	8/5/08	1022	RA/ CT	Curve not finished
13	✓	27	System Blank	336668	Humid	200mL	1.00	RA	8/5/08	1103	RA/ C.T.	
14	✓	28	ICAL level 2 (200 ppbv)	1612-91	0.5ppbv	0.5mL	1.00	RA	8/5/08	1141	RA/CT	
15	✓	29	LCS-1 (100ppbv)	1612-76A	50ppbv	100mL	1.00	RA	8/5/08	1227	RA/	ICAL LCS
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												8-5-08 C.T.

0437

Comments: Flow Controller # AA99123141 Actual 24.5 mL/min

Nist Flow meter #503623372 Exp 1-29-09 Nominal 23.6 mL/min

C Taylor
Signature

8-5-08
Date

@ Air Toxics Ltd.

MSD-7

Logbook #: 1706

0438

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	35.35
75	30.0 – 60.0% of mass 95	51.73
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.64
173	Less than 2.0% of mass 174	(0.65)[1]
174	50.0 – 100% of mass 95	72.52
175	5.0 – 9.0% of mass 174	(7.07)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.04)[1]
177	5.0 – 9.0% of mass 176	(6.32)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 8-5-08
BFB Injection Time: 1320
BFB File ID: 7080501
Tekmar Purge Flow: 20 ml/min
Vacuum: 2.5×10^{-5}

IS/S Std.#: 1612-59	Exp. Date: 10-3-08
BCM	453639
1,4-DFB	1424755
CB-d5	1550730

Verified CCV IS vs ICAL mid-point (- 40%D) initials

Verify 176/174 m/z Ratio: 887104 / 923776 x 100 = 96.03021

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1417628)}{(1424755)} \times \frac{(25.0)}{(0.95700)} = 25.993$

Reported Result 25.992

File ID:	7080507
Compound:	Tol-d8
Initials:	

Method: T14Q804a
T14BMeOH804a

	Use	File # (8-5-08)	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Loaded by Init.	Date Analyzed	Time Analyzed	Reviewed by Init.	Comments
1	✓	X 7080501	BFB Tune Check	1476-434	50 ng	2 uL	1.00	RA	8-5-08	1320	RA	
2	✓	02	System Blank	336668	Humid	200mL	1.00	RA	8-5-08	1346	RA	
3	✓	03	ICAL level 3	1612-96	1/2 200ppbv	2.0mL	1.00	RA		1427	RA	
4	✓	04	ICAL level 4	1612-99	8 (1/48) ppbv	8mL	1.00	RA		1506	RA	
5	✓	05	ICAL level 5	1612-99	50/200 ppbv	50mL	1.00	RA		1545		sp37a CCV
6	✓	06	ICAL level 7	1612-99	200/1200 ppbv	200mL	1.00	RA		1624		
17	✓	07	CCV-1 (200ppbv)	1612-91	50 ppbv	50mL				1758		6 out

Signature

8/5/08
Date

@ Air Toxics Ltd.

MSD-7

Logbook #: 1706

0439

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	32.95
75	30.0 – 60.0% of mass 95	48.03
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.58
173	Less than 2.0% of mass 174	(0.74)[1]
174	50.0 – 100% of mass 95	72.16
175	5.0 – 9.0% of mass 174	(6.93)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.77)[1]
177	5.0 – 9.0% of mass 176	(6.49)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 8-24-08
BFB Injection Time: 0856
BFB File ID: 7082401
Tekmar Purge Flow: 15.6mL/min
Vacuum: 2.6×10^{-5}

IS/S Std.#:	1612-59	Exp. Date: 10-3-08
BCM	379391	
1,4-DFB	1237836	
CB-d5	1280879	

Verified CCV IS vs ICAL mid-point (- 40%D) MR (initials)

Verify 176/174 m/z Ratio: 712128 / 735936 ×100 = 96.76 ✓

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 1216650\ )}{(\ 1237836\ )} \times \frac{(\ 25\ )}{(\ 0.95700\ )} = 25.676$

File ID:	7082403
Compound:	Toluene-d8
Initials:	MR

MR 8-24-08

Reported Result 25.676 ✓

Method: ~~TI4g804a~~ TI4g8046

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Loaded by Init.	Date Analyzed	Time Analyzed	Reviewed by Init.	Comments
1	✓	7082401	BFB Tune Check	1476-434	50ng	2µL	1.00	MR	8-24-08	0856	MR/C.T.	
2	X	7082402	CCV-1 50ppbv (200ppbv)	1612-93	50ppbv	50mL	1.00	MR	8-24-08	0950	MR/↓	1612-94 Wrong method
3	✓	7082403	CCV-1 50ppbv (200ppbv)	1612-94	50ppbv	↓	↓	↓	↓	1019	MR/C.T.	Napth↑
4	—	~~7082404~~	~~CCVsp 50ppbv (200ppbv)~~	~~1541-242~~	~~50ppbv~~	~~50mL~~	~~1.00~~	~~MR~~	~~8-24-08~~			
5	✓	7082404	ICAL Level 3	1541-242	2.0 ppbv	2.0mL	1.00	MR	8-24-08	1128	MR/C.T.	sp196 ATSpecial
6	✓	↓ 05	↓ Level 5	↓	50 ppbv	50mL	↓	↓	↓	1212	↓/C.T.	TI4g8046
7	✓	↓ 06	↓ Level 7	↓	200 ppbv	200mL	↓	↓	↓	1303	↓/C.T.	

Signature

8-24-08
Date

@ Air Toxics Ltd. MR 8-24-08

MSD-7

Logbook #: 1706

8	7082407	LCS-1 50ppbv (100ppbv)	1612-76A	50ppbv	100mL	1.00	MR	8-24-08	1355	MR	1,2,4-TCB↑, Naph↑
9	7082405	Lab Blank	3366e	Humid	200mL	1.00	MR	8-24-08			
10											
11											
12											
13											
14											
15											
16											
17											
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28											
29											
30											
31											

0440

Comments:

MR 8-24-08

Signature

8-24-08
Date

@ Air Toxics Ltd.

MSD-7

Logbook #: 1706

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	35.65
75	30.0 – 60.0% of mass 95	52.32
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.69
173	Less than 2.0% of mass 174	(0.73)[1]
174	50.0 – 100% of mass 95	66.83
175	5.0 – 9.0% of mass 174	(7.31)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	(96.03)[1]
177	5.0 – 9.0% of mass 176	(6.73)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

Verify 176/174 m/z Ratio: 493760/514176 x 100 = 96.03

BFB Injection Date: 8-27-08
BFB Injection Time: 0813
BFB File ID: 7082701
Tekmar Purge Flow: 15.9mL/min
Vacuum: 2.7 x 10^{-5}

IS/S Std.#:	1612-59	Exp. Date: 10-3-08
BCM	312734	
1,4-DFB	994459	
CB-d5	1074720	

Verified CCV IS vs ICAL mid-point (- 40%D) RA (initials)

0441

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 987300\ )}{(\ 994459\ )} \times \frac{(\ 25\ )}{(\ 0.95700\ )} =$ 25.935

File ID:	7082702
Compound:	TOL-d8
Initials:	RA

Reported Result 25.935

Method: ~~TH4g8040~~ RA 8-27-08 TH4g804c

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Loaded by Init.	Date Analyzed	Time Analyzed	Reviewed by Init.	Comments
1	✓	7082701	BFB Tune Check	1476-476	50psig	2uL	1.00	RA	8-27-08	0813	RA/CT	
2	✓	02	CCV-1 (200ppbv)	1612-94	50ppbv	50mL				0832	RA/CT	∅ out
3	✓	03	ICAL level 3	1541-251	2ppbv	20mL				0946	RA/CT	
4	✓	04 Ex 1-21-08	ICAL level 5		50ppbv	50mL				1042	RA/CT	~~Split CCV~~ 582CCCV
5	X	05	ICAL level 7		200ppbv	200mL				1129	RA/CT	Not used
6	✓	06	CCVsp (200ppbv)	1612-99	50ppbv	50mL				1225	RA/CT	
7	X	07	ICAL level 6	1541-251	100ppbv	100mL				1316	RA/CT	Not used

RCM
Signature

8-27-08
Date

@ Air Toxics Ltd.

MSD-7

Logbook #: 1706

8	✓	7082708	LCS-1 (100ppbv)	1612-76A	25ppbv	50mL	1.00	RA	8-27-08	1357	SJM		0442
9	✓	09	ICAL level 4	1541-251	25ppbv	25mL				1500	RA / C.T.		
10		10	Lab Blank	33668	Humid	200mL							
11													
12													
13													
14													
15													
16													
17													
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19													
20													
21													
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24													
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28													
29													
30													
31													

RA 8-27-08

Comments:

RA
Signature

8-27-08
Date

Initial Calibration Narrative

A seven point initial calibration was analyzed on MSD-7 on 8-5-08.

As noted on the accompanying analytical run log(s), Level 2 was re-analyzed due to an anomalous unacceptable linearity for 4-Ethyltoluene, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, alpha-Chlorotoluene, 1,2-Dichlorobenzene.

The following compounds used 0.3 ppbv as the lowest calibration concentration: Chloroform, Benzene, Styrene, 1,3-Butadiene, 1,2-Dibromoethane, Cumene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, .

Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080429.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 05-AUG-2008 12:27
Operator : ra Inst ID: msd7.i
Smp Info : 100mL #1612-76A
Misc Info : 50 ppbv (100 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:14 sscott Quant Type: ISTD
Cal Date : 04-AUG-2008 20:58 Cal File: 7080423.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	****** ********	****	********	*******	*******	**********	*****
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	459876	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	357064			27.26- 127.26	77.64
14.347	14.347 (1.000)	49	1602531			253.14- 353.14	348.47
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1464149	25.0000		50.00- 150.00	100.00
16.089	16.117 (1.000)	88	249389			0.00- 67.42	17.03
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1546866	25.0000		50.00- 150.00	100.00
21.315	21.315 (1.000)	82	786737			1.03- 101.03	50.86
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.425	15.426 (1.075)	65	853369	24.5662	24.566	50.00- 150.00	100.00
15.425	15.426 (1.075)	67	437016			0.00- 97.37	51.21
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1424045	25.4077	25.408	50.00- 150.00	100.00
18.716	18.716 (1.161)	70	191733			0.00- 63.85	13.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.161)	100	1090633			26.51- 126.51	76.59
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	807058	25.3551	25.355	50.00- 150.00	100.00
23.278	23.278 (1.092)	95	1086092			89.41- 189.41	134.57
23.278	23.278 (1.092)	176	763214			45.98- 145.98	94.57
11 Propylene					CAS #: 115-07-1		
5.638	5.638 (0.393)	41	1989645	50.7405	50.740	50.00- 150.00	100.00
5.610	5.638 (0.391)	42	1320971			16.57- 116.57	66.39
5.638	5.638 (0.393)	39	1550089			28.60- 128.60	77.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.776 (0.401)	85	5398566	47.4871	47.487	50.00- 150.00	100.00
5.748	5.776 (0.401)	87	1728049			0.00- 81.85	32.01
16 Freon 114					CAS #: 76-14-2		
6.218	6.274 (0.433)	135	3114245	51.2801	51.280	50.00- 150.00	100.00
6.218	6.274 (0.433)	137	996625			0.00- 84.02	32.00
18 Chloromethane					CAS #: 74-87-3		
6.550	6.578 (0.457)	50	2283535	47.2229	47.223	50.00- 150.00	100.00
6.550	6.578 (0.457)	52	723994			0.00- 81.05	31.70
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.480)	62	2292246	47.7690	47.769	50.00- 150.00	100.00
6.854	6.882 (0.478)	64	668106			0.00- 84.96	29.15
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.965 (0.484)	54	2036008	45.0573	45.057	50.00- 150.00	100.00
6.937	6.965 (0.484)	39	2135886			46.88- 146.88	104.91
25 Bromomethane					CAS #: 74-83-9		
8.015	8.016 (0.559)	94	1442291	48.6716	48.672	50.00- 150.00	100.00
8.015	8.016 (0.559)	96	1298119			41.33- 141.33	90.00
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.582)	64	1105673	49.5506	49.551	50.00- 150.00	100.00
8.347	8.347 (0.582)	49	424479			0.00- 94.43	38.39
8.347	8.347 (0.582)	66	326325			0.00- 79.28	29.51
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.956 (0.624)	101	5535785	49.0057	49.006	50.00- 150.00	100.00
8.955	8.956 (0.624)	103	3516539			15.68- 115.68	63.52

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.426	9.453 (0.657)	45	910031	48.5866	48.586	50.00- 150.00	100.00
9.426	9.453 (0.657)	43	205356			0.00- 73.90	22.57
9.426	9.453 (0.657)	46	345043			0.00- 88.16	37.92
42 Freon 113					CAS #: 76-13-1		
10.172	10.200 (0.709)	151	2482581	54.7277	54.728	50.00- 150.00	100.00
10.172	10.200 (0.709)	153	1578658			16.40- 116.40	63.59
10.172	10.200 (0.709)	101	3726002			100.01- 200.01	150.09
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.283	10.310 (0.717)	61	4351119	55.1581	55.158	50.00- 150.00	100.00
10.310	10.310 (0.719)	96	1624522			0.00- 86.92	37.34
10.310	10.310 (0.719)	98	1004819			0.00- 74.85	23.09
45 Acetone					CAS #: 67-64-1		
10.421	10.449 (0.726)	58	1140508	51.2191	51.219	50.00- 150.00	100.00
10.421	10.449 (0.726)	43	4449365			340.42- 440.42	390.12
46 2-Propanol					CAS #: 67-63-0		
10.642	10.642 (0.742)	45	4925474	52.1287	52.129	50.00- 150.00	100.00
10.642	10.642 (0.742)	43	1140141			0.00- 76.39	23.15
10.614	10.642 (0.740)	59	155196			0.00- 53.62	3.15
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.757)	76	4831077	49.8712	49.871	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.112	11.112 (0.775)	76	799668	50.6994	50.699	50.00- 150.00	100.00
11.112	11.112 (0.775)	41	3465866			377.54- 477.54	433.41
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.472 (0.798)	49	3593829	52.0761	52.076	50.00- 150.00	100.00
11.444	11.472 (0.798)	84	1381474			0.00- 86.35	38.44
11.444	11.472 (0.798)	51	1076921			0.00- 80.54	29.97
60 MTBE					CAS #: 1634-04-4		
11.776	11.776 (0.821)	73	2828379	49.5860	49.586	50.00- 150.00	100.00
11.776	11.776 (0.821)	57	924348			0.00- 84.58	32.68
11.776	11.776 (0.821)	41	977587			0.00- 86.33	34.56
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.886	11.886 (0.828)	96	1671333	50.5406	50.541	50.00- 150.00	100.00
11.886	11.886 (0.828)	61	3820020			183.94- 283.94	228.56
11.886	11.886 (0.828)	98	1034942			13.50- 113.50	61.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.246	12.246 (0.854)	57	3958091	51.4256	51.426	50.00- 150.00	100.00
12.246	12.246 (0.854)	43	2638875			20.34- 120.34	66.67
12.246	12.246 (0.854)	86	401925			0.00- 61.25	10.15
69 Vinyl Acetate					CAS #: 108-05-4		
12.743	12.716 (0.888)	86	384617	50.8377	50.838	50.00- 150.00	100.00
12.716	12.716 (0.886)	43	7404092			1872.40-1972.40	1925.06
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.771	12.771 (0.890)	63	4409157	52.8806	52.881	50.00- 150.00	100.00
12.771	12.771 (0.890)	65	1292532			0.00- 81.43	29.31
75 2-Butanone					CAS #: 78-93-3		
13.822	13.822 (0.963)	72	736615	50.7572	50.757	50.00- 150.00	100.00
13.822	13.822 (0.963)	43	5101362			602.07- 702.07	692.54
13.822	13.822 (0.963)	57	387955			0.00- 97.16	52.67
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.877	13.877 (0.967)	61	3174685	50.7563	50.756	50.00- 150.00	100.00
13.877	13.877 (0.967)	96	1539100			0.00- 97.05	48.48
13.877	13.877 (0.967)	98	949623			0.00- 80.30	29.91
80 Tetrahydrofuran					CAS #: 109-99-9		
14.319	14.320 (0.998)	42	2643354	51.5868	51.587	50.00- 150.00	100.00
14.319	14.320 (0.998)	71	666374			0.00- 76.49	25.21
14.319	14.320 (0.998)	72	690318			0.00- 78.71	26.12
82 Chloroform					CAS #: 67-66-3		
14.402	14.403 (1.004)	83	3166707	49.5376	49.538	50.00- 150.00	100.00
14.402	14.403 (1.004)	85	2271993			20.65- 120.65	71.75
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.762	14.762 (1.029)	97	3381219	51.8041	51.804	50.00- 150.00	100.00
14.762	14.762 (1.029)	99	2145123			14.99- 114.99	63.44
85 Cyclohexane					CAS #: 110-82-7		
14.790	14.790 (1.031)	84	1663602	48.5168	48.517	50.00- 150.00	100.00
14.790	14.790 (1.031)	56	3353797			145.33- 245.33	201.60
14.790	14.790 (1.031)	41	2068210			73.65- 173.65	124.32
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.038	15.039 (1.048)	119	3745972	50.2609	50.261	50.00- 150.00	100.00
15.038	15.039 (1.048)	117	3912325			55.00- 155.00	104.44
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	9354574	51.0001	51.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.370	15.370 (1.071)	56	3106209			0.00- 82.54	33.21
15.370	15.370 (1.071)	41	2759884			0.00- 80.37	29.50
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	3866415	48.5007	48.501	50.00- 150.00	100.00
15.453	15.453 (0.959)	77	849635			0.00- 71.75	21.97
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.564	15.564 (0.966)	62	2977082	50.5297	50.530	50.00- 150.00	100.00
15.564	15.564 (0.966)	64	904649			0.00- 82.49	30.39
94 Heptane					CAS #: 142-82-5		
15.647	15.647 (0.971)	71	1333044	51.7119	51.712	50.00- 150.00	100.00
15.647	15.647 (0.971)	43	3708107			238.48- 338.48	278.17
15.647	15.647 (0.971)	57	1919811			102.27- 202.27	144.02
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.029)	95	1738250	50.8991	50.899	50.00- 150.00	100.00
16.587	16.587 (1.029)	130	1714979			54.15- 154.15	98.66
16.587	16.587 (1.029)	97	1078306			16.17- 116.17	62.03
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.057	17.057 (1.058)	63	1875300	49.2511	49.251	50.00- 150.00	100.00
17.057	17.057 (1.058)	62	1349951			21.69- 121.69	71.99
17.057	17.057 (1.058)	41	1516440			32.68- 132.68	80.86
106 1,4-Dioxane					CAS #: 123-91-1		
17.195	17.195 (1.067)	88	1004663	51.5722	51.572	50.00- 150.00	100.00
17.195	17.195 (1.067)	58	974619			48.37- 148.37	97.01
17.195	17.195 (1.067)	57	349868			0.00- 86.44	34.82
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.086)	83	3129237	50.6051	50.605	50.00- 150.00	100.00
17.499	17.499 (1.086)	85	2227484			20.11- 120.11	71.18
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.134)	75	2300754	52.4489	52.449	50.00- 150.00	100.00
18.273	18.273 (1.134)	77	705743			0.00- 85.03	30.67
18.273	18.273 (1.134)	39	2131217			43.00- 143.00	92.63
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.146)	58	1878403	55.2870	55.287	50.00- 150.00	100.00
18.467	18.467 (1.146)	43	5490590			244.73- 344.73	292.30
18.467	18.467 (1.146)	85	585581			0.00- 81.51	31.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.168)	91	4507526	51.0060	51.006	50.00- 150.00	100.00
18.826	18.826 (1.168)	92	2799657			10.54- 110.54	62.11
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	2530233	50.5365	50.536	50.00- 150.00	100.00
19.269	19.269 (0.904)	77	775804			0.00- 80.88	30.66
19.269	19.269 (0.904)	39	2103298			33.61- 133.61	83.13
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.601	19.601 (0.920)	97	1567144	49.1463	49.146	50.00- 150.00	100.00
19.601	19.601 (0.920)	99	966208			12.31- 112.31	61.65
19.601	19.601 (0.920)	83	1331967			34.26- 134.26	84.99
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	2079493	49.7587	49.759	50.00- 150.00	100.00
19.766	19.794 (0.927)	129	1744406			35.18- 135.18	83.89
19.766	19.794 (0.927)	131	1746180			33.48- 133.48	83.97
121 2-Hexanone					CAS #: 591-78-6		
19.905	19.905 (0.934)	58	2575539	53.2122	53.212	50.00- 150.00	100.00
19.905	19.905 (0.934)	43	5459032			161.51- 261.51	211.96
19.905	19.905 (0.934)	100	344471			0.00- 63.21	13.37
122 Dibromochloromethane					CAS #: 124-48-1		
20.292	20.292 (0.952)	129	3428534	51.3520	51.352	50.00- 150.00	100.00
20.292	20.292 (0.952)	127	2687686			29.59- 129.59	78.39
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	2921754	48.4184	48.418	50.00- 150.00	100.00
20.568	20.568 (0.965)	109	2706353			39.77- 139.77	92.63
127 Chlorobenzene					CAS #: 108-90-7		
21.342	21.343 (1.001)	112	3748452	47.4130	47.413	50.00- 150.00	100.00
21.342	21.343 (1.001)	114	1188635			0.00- 83.15	31.71
21.342	21.343 (1.001)	77	2316680			21.80- 121.80	61.80
128 Ethyl Benzene					CAS #: 100-41-4		
21.425	21.426 (1.005)	106	2100083	48.7089	48.709	50.00- 150.00	100.00
21.425	21.426 (1.005)	91	6367071			261.34- 361.34	303.18
129 m,p-Xylene					CAS #: 108-38-3		
21.647	21.619 (1.016)	106	2588504	46.9228	46.923	50.00- 150.00	100.00
21.619	21.619 (1.014)	91	5202624			147.02- 247.02	200.99
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	2471120	48.4231	48.423	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.338	22.338	(1.048)	91	5145743			158.66- 258.66	208.24
131 Styrene						CAS #: 100-42-5		
22.365	22.366	(1.049)	104	3995320	51.4122	51.412	50.00- 150.00	100.00
22.365	22.366	(1.049)	78	2083207			10.48- 110.48	52.14
133 Bromoform						CAS #: 75-25-2		
22.780	22.780	(1.069)	173	2902556	50.4372	50.437	50.00- 150.00	100.00
22.780	22.780	(1.069)	171	1508240			2.34- 102.34	51.96
134 Cumene						CAS #: 98-82-8		
22.918	22.919	(1.075)	105	7303861	48.9345	48.934	50.00- 150.00	100.00
22.918	22.919	(1.075)	120	1983345			0.00- 77.95	27.15
22.891	22.919	(1.074)	51	1143556			0.00- 67.08	15.66
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.499	23.499	(1.102)	83	3670241	46.4145	46.414	50.00- 150.00	100.00
23.499	23.499	(1.102)	85	2596074			21.97- 121.97	70.73
142 Propylbenzene						CAS #: 103-65-1		
23.582	23.582	(1.106)	91	8852660	47.6153	47.615	50.00- 150.00	100.00
23.582	23.582	(1.106)	120	2155649			0.00- 73.91	24.35
23.582	23.582	(1.106)	105	347854			0.00- 54.14	3.93
145 4-Ethyltoluene						CAS #: 622-96-8		
23.776	23.776	(1.115)	105	8308384	46.6381	46.638	50.00- 150.00	100.00
23.776	23.776	(1.115)	120	2700704			0.00- 82.75	32.51
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.859	23.859	(1.119)	105	6208016	42.5915	42.591	50.00- 150.00	100.00
23.859	23.859	(1.119)	120	3140035			1.24- 101.24	50.58
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.494	24.495	(1.149)	105	6155801	42.8386	42.838	50.00- 150.00	100.00
24.494	24.495	(1.149)	120	2948338			0.00- 97.02	47.90
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.075	25.075	(1.176)	146	4052627	43.2421	43.242	50.00- 150.00	100.00
25.075	25.075	(1.176)	148	2566457			12.07- 112.07	63.33
25.075	25.075	(1.176)	111	1791568			0.00- 94.74	44.21
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.241	25.213	(1.184)	146	4181416	42.5192	42.519	50.00- 150.00	100.00
25.241	25.213	(1.184)	148	2646032			13.30- 113.30	63.28
25.213	25.213	(1.183)	111	1755827			0.00- 92.03	41.99

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene						CAS #: 100-44-7		
25.435	25.435	(1.193)	91	6777693	47.0621	47.062	50.00- 150.00	100.00
25.435	25.435	(1.193)	126	1376906			0.00- 69.83	20.32
161 1,2-Dichlorobenzene						CAS #: 95-50-1		
25.877	25.877	(1.214)	146	4010261	42.3619	42.362	50.00- 150.00	100.00
25.877	25.877	(1.214)	148	2505568			12.84- 112.84	62.48
25.877	25.877	(1.214)	111	1785264			0.00- 95.15	44.52
165 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
28.752	28.753	(1.349)	180	2239207	52.9241	52.924	50.00- 150.00	100.00
28.752	28.753	(1.349)	182	2109678			44.64- 144.64	94.22
166 Hexachlorobutadiene						CAS #: 87-68-3		
28.946	28.946	(1.358)	225	1748655	49.5181	49.518	50.00- 150.00	100.00
28.946	28.946	(1.358)	223	1118890			13.71- 113.71	63.99
29 Isopentane						CAS #: 78-78-4		
8.347	8.347	(0.582)	43	3101213	47.7772	47.777	50.00- 150.00	100.00
8.347	8.347	(0.582)	57	2034529			17.61- 117.61	65.60
19 Butane						CAS #: 106-97-8		
6.771	6.827	(0.472)	58	444675	46.2571	46.257	50.00- 150.00	100.00
6.771	6.827	(0.472)	43	3869689			787.53- 887.53	870.23
102 Methyl Cyclohexane						CAS #: 108-87-2		
16.863	16.863	(1.175)	83	2176774	51.7247	51.725	50.00- 150.00	100.00
16.863	16.863	(1.175)	98	976990			0.00- 97.34	44.88
16.863	16.863	(1.175)	55	3086449			95.79- 195.79	141.79
167 Naphthalene						CAS #: 91-20-3		
29.305	29.306	(1.375)	128	4886183	53.7677	53.768	50.00- 150.00	100.00
29.305	29.306	(1.375)	127	602268			0.00- 62.37	12.33
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.444	11.444	(0.798)	59	2176656	43.2531	43.253	50.00- 150.00	100.00
11.444	11.444	(0.798)	41	529916			0.00- 74.69	24.35
11.444	11.444	(0.798)	57	219470			0.00- 61.62	10.08

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080429.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 50 ppbv (100 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	459876	-1.28
97 1,4-Difluorobenze	1452055	871233	2032877	1464149	0.83
126 Chlorobenzene-d5	1558716	935230	2182202	1546866	-0.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-04aug.b/7080429.d
Report Date: 05-Aug-2008 12:44

Air Toxics Ltd.

RECOVERY REPORT

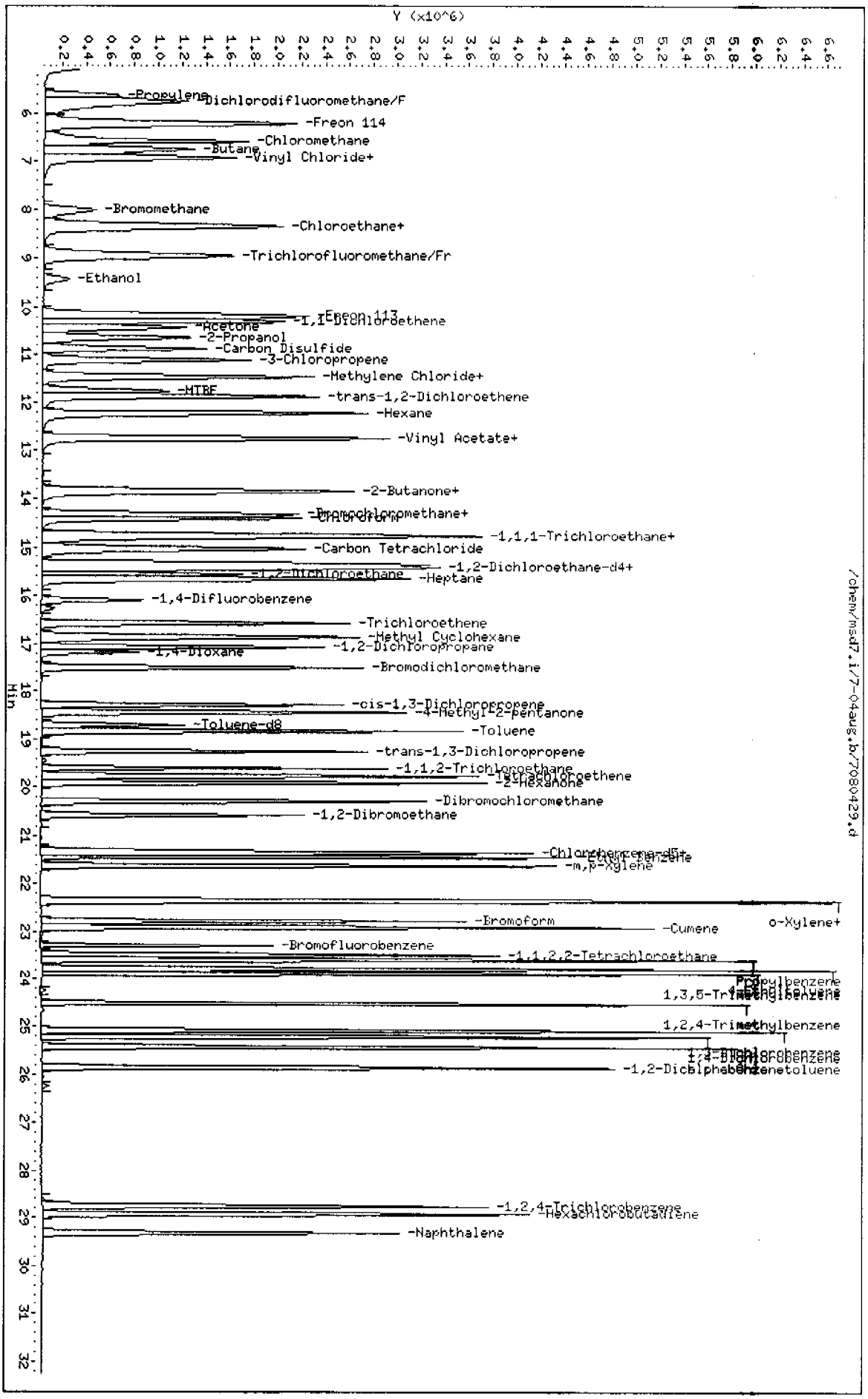
Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 50 ppbv (100 ppbv)

Client SDG: 7-04aug
Fraction: VOA
Client Smp ID: LCS-1
Operator: ra
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	47.487	94.97	70-130
16 Freon 114	50.000	51.280	102.56	70-130
18 Chloromethane	50.000	47.223	94.45	70-130
20 Vinyl Chloride	50.000	47.769	95.54	70-130
22 1,3-Butadiene	50.000	45.057	90.11	60-140
25 Bromomethane	50.000	48.672	97.34	70-130
27 Chloroethane	50.000	49.551	99.10	70-130
31 Trichlorofluoromet	50.000	49.006	98.01	70-130
38 Ethanol	50.000	48.586	97.17	60-140
42 Freon 113	50.000	54.728	109.46	70-130
43 1,1-Dichloroethene	50.000	55.158	110.32	70-130
45 Acetone	50.000	51.219	102.44	60-140
47 Carbon Disulfide	50.000	49.871	99.74	60-140
46 2-Propanol	50.000	52.129	104.26	60-140
54 Methylene Chloride	50.000	52.076	104.15	70-130
60 MTBE	50.000	49.586	99.17	60-140
61 trans-1,2-Dichloro	50.000	50.541	101.08	60-140
65 Hexane	50.000	51.426	102.85	60-140
69 Vinyl Acetate	50.000	50.838	101.68	60-140
70 1,1-Dichloroethane	50.000	52.881	105.76	70-130
76 cis-1,2-Dichloroet	50.000	50.756	101.51	70-130
75 2-Butanone	50.000	50.757	101.51	60-140
80 Tetrahydrofuran	50.000	51.587	103.17	60-140
82 Chloroform	50.000	49.538	99.08	70-130
85 Cyclohexane	50.000	48.517	97.03	60-140
83 1,1,1-Trichloroeth	50.000	51.804	103.61	70-130
87 Carbon Tetrachlori	50.000	50.261	100.52	70-130
91 Benzene	50.000	48.501	97.00	70-130
93 1,2-Dichloroethane	50.000	50.530	101.06	70-130
94 Heptane	50.000	51.712	103.42	60-140
101 Trichloroethene	50.000	50.899	101.80	70-130
104 1,2-Dichloropropan	50.000	49.251	98.50	70-130
106 1,4-Dioxane	50.000	51.572	103.14	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	50.605	101.21	60-140
110 cis-1,3-Dichloropr	50.000	52.449	104.90	70-130
111 4-Methyl-2-pentano	50.000	55.287	110.57	60-140
114 Toluene	50.000	51.006	102.01	70-130
116 trans-1,3-Dichloro	50.000	50.536	101.07	70-130
117 1,1,2-Trichloroeth	50.000	49.146	98.29	70-130
120 Tetrachloroethene	50.000	49.759	99.52	70-130
121 2-Hexanone	50.000	53.212	106.42	60-140
122 Dibromochlorometha	50.000	51.352	102.70	60-140
123 1,2-Dibromoethane	50.000	48.418	96.84	70-130
127 Chlorobenzene	50.000	47.413	94.83	70-130
128 Ethyl Benzene	50.000	48.709	97.42	70-130
129 m,p-Xylene	50.000	46.923	93.85	70-130
130 o-Xylene	50.000	48.423	96.85	70-130
131 Styrene	50.000	51.412	102.82	70-130
133 Bromoform	50.000	50.437	100.87	60-140
140 1,1,2,2-Tetrachlor	50.000	46.414	92.83	70-130
145 4-Ethyltoluene	50.000	46.638	93.28	60-140
147 1,3,5-Trimethylben	50.000	42.591	85.18	70-130
150 1,2,4-Trimethylben	50.000	42.838	85.68	70-130
155 1,3-Dichlorobenzen	50.000	43.242	86.48	70-130
156 1,4-Dichlorobenzen	50.000	42.519	85.04	70-130
159 alpha-Chlorotoluen	50.000	47.062	94.12	70-130
161 1,2-Dichlorobenzen	50.000	42.362	84.72	70-130
165 1,2,4-Trichloroben	50.000	52.924	105.85	70-130
166 Hexachlorobutadien	50.000	49.518	99.04	70-130
142 Propylbenzene	50.000	47.615	95.23	60-140
134 Cumene	50.000	48.934	97.87	60-140
51 3-Chloropropene	50.000	50.699	101.40	60-140
89 2,2,4-Trimethylpen	50.000	51.000	102.00	60-140
29 Isopentane	50.000	47.777	95.55	70-130
19 Butane	50.000	46.257	92.51	70-130
102 Methyl Cyclohexane	50.000	51.725	103.45	70-130
11 Propylene	50.000	50.740	101.48	60-140
167 Naphthalene	50.000	53.768	107.54	60-140
57 tert-Butyl-Alcohol	50.000	43.253	86.51	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.566	98.26	70-130
$ 113 Toluene-d8	25.000	25.408	101.63	70-130
$ 137 Bromofluorobenzene	25.000	25.355	101.42	70-130



Data File: /chem/msd7.i/7-04aug.b/7080429.d
Date : 05-AUG-2008 12:27
Client ID: LCS-1
Sample Info: 100mL #1612-76A
Column phase: RTx-624

Instrument: msd7.i
Operator: ra
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080417.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 04-AUG-2008 16:14
Operator : ra
Inst ID: msd7.i
Smp Info : .3mL #1612-91
Misc Info : 0.3ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:05 sscott
Quant Type: ISTD
Cal Date : 04-AUG-2008 16:14
Cal File: 7080417.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	433089	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	330394			27.26- 127.26	76.29
14.347	14.347 (1.000)	49	1027958			253.14- 353.14	237.35
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1404890	25.0000		50.00- 150.00	100.00
16.117	16.117 (1.000)	88	246568			0.00- 67.42	17.55
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1348669	25.0000		50.00- 150.00	100.00
21.315	21.315 (1.000)	82	691177			1.03- 101.03	51.25
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.425	15.425 (1.075)	65	787789	25.0000	24.081	50.00- 150.00	100.00
15.425	15.425 (1.075)	67	341342			0.00- 97.37	43.33
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1269385	25.0000	23.604	50.00- 150.00	100.00
18.716	18.716 (1.161)	70	170795			0.00- 63.85	13.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.161)	100	966689			26.51- 126.51	76.15
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	681042	25.0000	24.540	50.00- 150.00	100.00
23.278	23.278 (1.092)	95	938508			89.41- 189.41	137.80
23.278	23.278 (1.092)	176	644445			45.98- 145.98	94.63
22 1,3-Butadiene					CAS #: 106-99-0		
6.909	6.909 (0.482)	54	15998	0.30000	0.3759	50.00- 150.00	100.00
6.937	6.937 (0.484)	39	12890			46.88- 146.88	80.57
82 Chloroform					CAS #: 67-66-3		
14.402	14.402 (1.004)	83	21367	0.30000	0.3549	50.00- 150.00	100.00(a)
14.430	14.430 (1.006)	85	13472			20.65- 120.65	63.05
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	27015	0.30000	0.3532	50.00- 150.00	100.00(a)
15.453	15.453 (0.959)	77	4985			0.00- 71.75	18.45
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	18275	0.30000	0.3474	50.00- 150.00	100.00
20.568	20.568 (0.965)	109	14917			39.77- 139.77	81.63
131 Styrene					CAS #: 100-42-5		
22.365	22.365 (1.049)	104	18670	0.30000	0.2756	50.00- 150.00	100.00(a)
22.365	22.365 (1.049)	78	16051			10.48- 110.48	85.97
134 Cumene					CAS #: 98-82-8		
22.918	22.918 (1.075)	105	45270	0.30000	0.3479	50.00- 150.00	100.00(a)
22.918	22.918 (1.075)	120	12356			0.00- 77.95	27.29
22.891	22.891 (1.074)	51	8915			0.00- 67.08	19.69
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.858	23.858 (1.119)	105	47726	0.30000	0.3756	50.00- 150.00	100.00
23.858	23.858 (1.119)	120	27079			1.24- 101.24	56.74
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.494	24.494 (1.149)	105	46626	0.30000	0.3722	50.00- 150.00	100.00
24.494	24.494 (1.149)	120	19601			0.00- 97.02	42.04

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080417.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 0.3ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	433089	-7.03
97 1,4-Difluorobenze	1452055	871233	2032877	1404890	-3.25
126 Chlorobenzene-d5	1558716	935230	2182202	1348669	-13.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

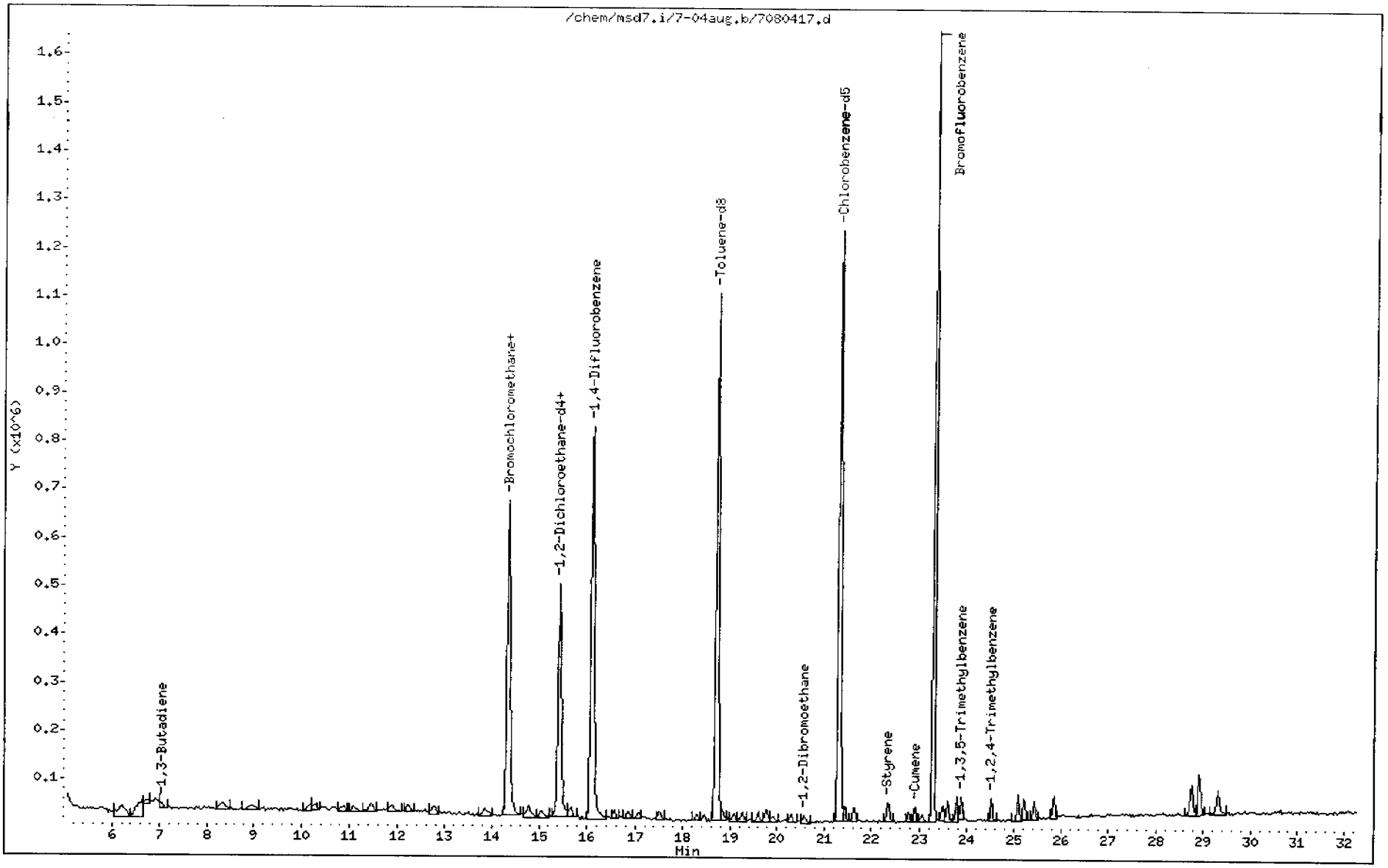
Data File: /chem/msd7.i/7-04aug.b/7080417.d
Date : 04-AUG-2008 16:14
Client ID: Level 1
Sample Info: .3mL #1612-91

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0461



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080428.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 05-AUG-2008 11:41
Operator : ra
Inst ID: msd7.i
Smp Info : 0.5mL #1612-91
Misc Info : 0.5 ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:05 sscott
Quant Type: ISTD
Cal Date : 05-AUG-2008 11:41
Cal File: 7080428.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08low.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	414194	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	327564			27.26- 127.26	79.08
14.347	14.347 (1.000)	49	1023783			253.14- 353.14	247.17
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1387738	25.0000		50.00- 150.00	100.00
16.117	16.117 (1.000)	88	234454			0.00- 67.42	16.89
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1370148	25.0000		50.00- 150.00	100.00
21.315	21.315 (1.000)	82	720513			1.03- 101.03	52.59
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.425	15.425 (1.075)	65	790705	25.0000	25.273	50.00- 150.00	100.00
15.425	15.425 (1.075)	67	347697			0.00- 97.37	43.97
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1273981	25.0000	23.982	50.00- 150.00	100.00
18.716	18.716 (1.161)	70	174994			0.00- 63.85	13.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.161)	100	972555			26.51- 126.51	76.34
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	702634	25.0000	24.922	50.00- 150.00	100.00
23.278	23.278 (1.092)	95	998376			89.41- 189.41	142.09
23.278	23.278 (1.092)	176	683775			45.98- 145.98	97.32
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.720	5.720 (0.399)	85	53383	0.50000	0.5214	50.00- 150.00	100.00
5.776	5.776 (0.403)	87	18449			0.00- 81.85	34.56
16 Freon 114					CAS #: 76-14-2		
6.191	6.191 (0.431)	135	22127	0.50000	0.4045	50.00- 150.00	100.00(a)
6.191	6.191 (0.431)	137	9392			0.00- 84.02	42.45
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.478)	62	23532	0.50000	0.5445	50.00- 150.00	100.00
6.909	6.909 (0.482)	64	11491			0.00- 84.96	48.83
22 1,3-Butadiene					CAS #: 106-99-0		
6.909	6.909 (0.482)	54	20785	0.50000	0.5107	50.00- 150.00	100.00
6.882	6.882 (0.480)	39	17802			46.88- 146.88	85.65
25 Bromomethane					CAS #: 74-83-9		
7.988	7.988 (0.557)	94	13710	0.50000	0.5137	50.00- 150.00	100.00
8.015	8.015 (0.559)	96	12634			41.33- 141.33	92.15
27 Chloroethane					CAS #: 75-00-3		
8.320	8.320 (0.580)	64	9749	0.50000	0.4851	50.00- 150.00	100.00(a)
8.320	8.320 (0.580)	49	4884			0.00- 94.43	50.10
8.320	8.320 (0.580)	66	2201			0.00- 79.28	22.58
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.928	8.928 (0.622)	101	46050	0.50000	0.4526	50.00- 150.00	100.00(a)
8.928	8.928 (0.622)	103	33799			15.68- 115.68	73.40
42 Freon 113					CAS #: 76-13-1		
10.172	10.172 (0.709)	151	18011	0.50000	0.4408	50.00- 150.00	100.00(a)
10.172	10.172 (0.709)	153	14370			16.40- 116.40	79.78
10.144	10.144 (0.707)	101	29568			100.01- 200.01	164.17
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.283	10.283 (0.717)	61	30796	0.50000	0.4334	50.00- 150.00	100.00(a)
10.283	10.283 (0.717)	96	12283			0.00- 86.92	39.89
10.283	10.283 (0.717)	98	8855			0.00- 74.85	28.75

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide						CAS #: 75-15-0		
10.863	10.863	(0.757)	76	40182	0.50000	0.4605	50.00- 150.00	100.00(a)
54 Methylene Chloride						CAS #: 75-09-2		
11.444	11.444	(0.798)	49	33061	0.50000	0.5319	50.00- 150.00	100.00
11.444	11.444	(0.798)	84	11238			0.00- 86.35	33.99
11.444	11.444	(0.798)	51	9733			0.00- 80.54	29.44
60 MTBE						CAS #: 1634-04-4		
11.776	11.776	(0.821)	73	25505	0.50000	0.4964	50.00- 150.00	100.00(a)
11.720	11.720	(0.817)	57	9406			0.00- 84.58	36.88
11.748	11.748	(0.819)	41	10150			0.00- 86.33	39.80
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.886	11.886	(0.828)	96	12628	0.50000	0.4240	50.00- 150.00	100.00(a)
11.886	11.886	(0.828)	61	32705			183.94- 283.94	258.99
11.886	11.886	(0.828)	98	8605			13.50- 113.50	68.14
65 Hexane						CAS #: 110-54-3		
12.246	12.246	(0.854)	57	30782	0.50000	0.4440	50.00- 150.00	100.00(a)
12.246	12.246	(0.854)	43	25329			20.34- 120.34	82.29
12.246	12.246	(0.854)	86	4514			0.00- 61.25	14.66
70 1,1-Dichloroethane						CAS #: 75-34-3		
12.771	12.771	(0.890)	63	32044	0.50000	0.4267	50.00- 150.00	100.00(a)
12.771	12.771	(0.890)	65	13516			0.00- 81.43	42.18
75 2-Butanone						CAS #: 78-93-3		
13.849	13.849	(0.965)	72	7114	0.50000	0.5443	50.00- 150.00	100.00
13.822	13.822	(0.963)	43	33456			602.07- 702.07	470.28
13.849	13.849	(0.965)	57	2664			0.00- 97.16	37.45
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.877	13.877	(0.967)	61	27877	0.50000	0.4948	50.00- 150.00	100.00(a)
13.877	13.877	(0.967)	96	13187			0.00- 97.05	47.30
13.877	13.877	(0.967)	98	9039			0.00- 80.30	32.42
80 Tetrahydrofuran						CAS #: 109-99-9		
14.319	14.319	(0.998)	42	21175	0.50000	0.4588	50.00- 150.00	100.00(a)
14.319	14.319	(0.998)	71	6490			0.00- 76.49	30.65
14.319	14.319	(0.998)	72	6752			0.00- 78.71	31.89
82 Chloroform						CAS #: 67-66-3		
14.430	14.430	(1.006)	83	24856	0.50000	0.4317	50.00- 150.00	100.00(a)
14.430	14.430	(1.006)	85	18761			20.65- 120.65	75.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.762	14.762 (1.029)	97	24543	0.50000	0.4175	50.00- 150.00	100.00(a)
14.762	14.762 (1.029)	99	17003			14.99- 114.99	69.28
85 Cyclohexane					CAS #: 110-82-7		
14.817	14.817 (1.033)	84	15529	0.50000	0.5028	50.00- 150.00	100.00
14.789	14.789 (1.031)	56	29107			145.33- 245.33	187.44
14.789	14.789 (1.031)	41	19747			73.65- 173.65	127.16
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.038	15.038 (1.048)	119	31620	0.50000	0.4710	50.00- 150.00	100.00(a)
15.038	15.038 (1.048)	117	32355			55.00- 155.00	102.32
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	31372	0.50000	0.4152	50.00- 150.00	100.00(a)
15.453	15.453 (0.959)	77	7650			0.00- 71.75	24.38
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	77322	0.50000	0.4680	50.00- 150.00	100.00(a)
15.370	15.370 (1.071)	56	24610			0.00- 82.54	31.83
15.370	15.370 (1.071)	41	25011			0.00- 80.37	32.35
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.564	15.564 (0.966)	62	24085	0.50000	0.4313	50.00- 150.00	100.00(a)
15.564	15.564 (0.966)	64	10134			0.00- 82.49	42.08
94 Heptane					CAS #: 142-82-5		
15.647	15.647 (0.971)	71	10504	0.50000	0.4299	50.00- 150.00	100.00(a)
15.647	15.647 (0.971)	43	32829			238.48- 338.48	312.54
15.674	15.674 (0.973)	57	18341			102.27- 202.27	174.61
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.029)	95	15554	0.50000	0.4805	50.00- 150.00	100.00(a)
16.587	16.587 (1.029)	130	16470			54.15- 154.15	105.89
16.587	16.587 (1.029)	97	10534			16.17- 116.17	67.73
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.084	17.084 (1.060)	63	16589	0.50000	0.4597	50.00- 150.00	100.00(a)
17.084	17.084 (1.060)	62	11588			21.69- 121.69	69.85
17.057	17.057 (1.058)	41	12411			32.68- 132.68	74.81
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.086)	83	25440	0.50000	0.4341	50.00- 150.00	100.00(a)
17.499	17.499 (1.086)	85	17952			20.11- 120.11	70.57
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.134)	75	15777	0.50000	0.3795	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
18.273	18.273 (1.134)	77	7608			0.00- 85.03	48.22
18.273	18.273 (1.134)	39	15167			43.00- 143.00	96.13
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.146)	58	12953	0.50000	0.4022	50.00- 150.00	100.00(a)
18.467	18.467 (1.146)	43	38968			244.73- 344.73	300.84
18.467	18.467 (1.146)	85	4590			0.00- 81.51	35.44
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.168)	91	40058	0.50000	0.4782	50.00- 150.00	100.00(a)
18.826	18.826 (1.168)	92	22424			10.54- 110.54	55.98
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	18521	0.50000	0.4176	50.00- 150.00	100.00(a)
19.269	19.269 (0.904)	77	5388			0.00- 80.88	29.09
19.269	19.269 (0.904)	39	16302			33.61- 133.61	88.02
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.600	19.600 (0.920)	97	12749	0.50000	0.4514	50.00- 150.00	100.00(a)
19.600	19.600 (0.920)	99	7027			12.31- 112.31	55.12
19.600	19.600 (0.920)	83	11599			34.26- 134.26	90.98
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	18044	0.50000	0.4874	50.00- 150.00	100.00(a)
19.794	19.794 (0.929)	129	16088			35.18- 135.18	89.16
19.766	19.766 (0.927)	131	15002			33.48- 133.48	83.14
122 Dibromochloromethane					CAS #: 124-48-1		
20.319	20.319 (0.953)	129	24318	0.50000	0.4112	50.00- 150.00	100.00(a)
20.319	20.319 (0.953)	127	21485			29.59- 129.59	88.35
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	23750	0.50000	0.4443	50.00- 150.00	100.00(a)
20.568	20.568 (0.965)	109	21810			39.77- 139.77	91.83
127 Chlorobenzene					CAS #: 108-90-7		
21.370	21.370 (1.003)	112	37976	0.50000	0.5423	50.00- 150.00	100.00
21.342	21.342 (1.001)	114	13530			0.00- 83.15	35.63
21.342	21.342 (1.001)	77	38336			21.80- 121.80	100.95
128 Ethyl Benzene					CAS #: 100-41-4		
21.453	21.453 (1.006)	106	19825	0.50000	0.5191	50.00- 150.00	100.00
21.425	21.425 (1.005)	91	63267			261.34- 361.34	319.13
129 m,p-Xylene					CAS #: 108-38-3		
21.647	21.647 (1.016)	106	25764	0.50000	0.5273	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.647	21.647 (1.016)	91	51369			147.02- 247.02	199.38
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	25369	0.50000	0.5612	50.00- 150.00	100.00
22.338	22.338 (1.048)	91	53028			158.66- 258.66	209.03
131 Styrene					CAS #: 100-42-5		
22.365	22.365 (1.049)	104	30490	0.50000	0.4430	50.00- 150.00	100.00(a)
22.365	22.365 (1.049)	78	20165			10.48- 110.48	66.14
133 Bromoform					CAS #: 75-25-2		
22.780	22.780 (1.069)	173	25625	0.50000	0.5027	50.00- 150.00	100.00
22.780	22.780 (1.069)	171	13207			2.34- 102.34	51.54
134 Cumene					CAS #: 98-82-8		
22.918	22.918 (1.075)	105	72232	0.50000	0.5464	50.00- 150.00	100.00
22.918	22.918 (1.075)	120	21341			0.00- 77.95	29.55
22.891	22.891 (1.074)	51	13892			0.00- 67.08	19.23
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.499	23.499 (1.102)	83	44801	0.50000	0.6396	50.00- 150.00	100.00
23.499	23.499 (1.102)	85	34427			21.97- 121.97	76.84
142 Propylbenzene					CAS #: 103-65-1		
23.582	23.582 (1.106)	91	112979	0.50000	0.6860	50.00- 150.00	100.00
23.610	23.610 (1.108)	120	26899			0.00- 73.91	23.81
23.582	23.582 (1.106)	105	6106			0.00- 54.14	5.40
145 4-Ethyltoluene					CAS #: 622-96-8		
23.776	23.776 (1.115)	105	111315	0.50000	0.7054	50.00- 150.00	100.00
23.776	23.776 (1.115)	120	37320			0.00- 82.75	33.53
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.858	23.858 (1.119)	105	88179	0.50000	0.6830	50.00- 150.00	100.00
23.858	23.858 (1.119)	120	45457			1.24- 101.24	51.55
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.494	24.494 (1.149)	105	88922	0.50000	0.6986	50.00- 150.00	100.00
24.494	24.494 (1.149)	120	44706			0.00- 97.02	50.28
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.075	25.075 (1.176)	146	65075	0.50000	0.7839	50.00- 150.00	100.00
25.075	25.075 (1.176)	148	40049			12.07- 112.07	61.54
25.075	25.075 (1.176)	111	31088			0.00- 94.74	47.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.241	25.241 (1.184)	146	70918	0.50000	0.8141	50.00- 150.00	100.00
25.241	25.241 (1.184)	148	46453			13.30- 113.30	65.50
25.213	25.213 (1.183)	111	30181			0.00- 92.03	42.56
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.435	25.435 (1.193)	91	92796	0.50000	0.7274	50.00- 150.00	100.00
25.435	25.435 (1.193)	126	17613			0.00- 69.83	18.98
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.877	25.877 (1.214)	146	70708	0.50000	0.8432	50.00- 150.00	100.00
25.877	25.877 (1.214)	148	45587			12.84- 112.84	64.47
25.877	25.877 (1.214)	111	32665			0.00- 95.15	46.20
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.863	16.863 (1.175)	83	16478	0.50000	0.4347	50.00- 150.00	100.00(a)
16.863	16.863 (1.175)	98	9285			0.00- 97.34	56.35
16.863	16.863 (1.175)	55	25771			95.79- 195.79	156.40

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080428.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 0.5 ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	414194	-11.09
97 1,4-Difluorobenze	1452055	871233	2032877	1387738	-4.43
126 Chlorobenzene-d5	1558716	935230	2182202	1370148	-12.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

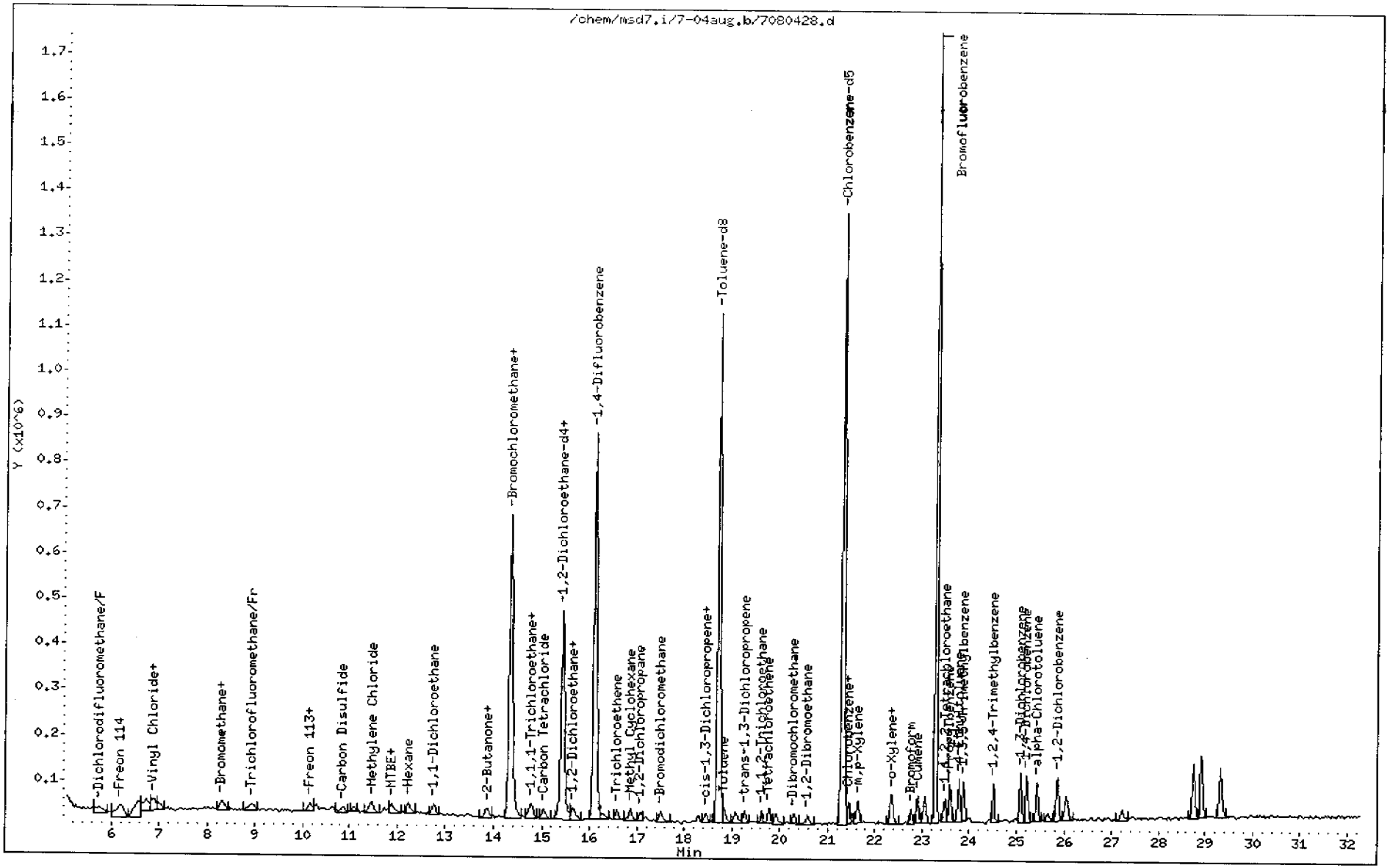
Data File: /chem/msd7.i/7-04aug.b/7080428.d
Date : 05-AUG-2008 11:41
Client ID: Level 2
Sample Info: 0.5mL #1612-91

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0470



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-27aug.b/7082703.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 27-AUG-2008 09:46
Operator : ra
Inst ID: msd7.i
Smp Info : 2.0mL #1541-251
Misc Info : 2.0ppbv (200ppbv)
Comment :
Method : /chem/msd7.i/7-27aug.b/t14q804c.m
Meth Date : 27-Aug-2008 15:46 ctaylor
Quant Type: ISTD
Cal Date : 27-AUG-2008 09:46
Cal File: 7082703.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp2c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
81 Bromochloromethane						CAS #: 74-97-5		
* 14.320	14.320	(1.000)	130	289326	25.0000		50.00- 150.00	100.00
14.320	14.320	(1.000)	128	223256			26.80- 126.80	77.16
14.320	14.320	(1.000)	49	651945			216.97- 316.97	225.33
97 1,4-Difluorobenzene						CAS #: 540-36-3		
* 16.089	16.089	(1.000)	114	942559	25.0000		50.00- 150.00	100.00
16.089	16.089	(1.000)	88	161553			0.00- 67.09	17.14
126 Chlorobenzene-d5						CAS #: 3114-55-4		
* 21.315	21.315	(1.000)	117	933321	25.0000		50.00- 150.00	100.00
21.287	21.287	(1.000)	82	472994			1.24- 101.24	50.68
204 Propylene Oxide						CAS #: 75-56-9		
9.840	9.840	(0.687)	58	3955	2.00000	2.347	50.00- 150.00	100.00
9.840	9.840	(0.687)	43	6367			77.34- 177.34	160.99
10.283	10.283	(0.718)	57	2442			0.00- 80.14	61.74
152 D-Limonene						CAS #: 5989-27-5		
24.882	24.882	(1.167)	68	64138	2.00000	1.753	50.00- 150.00	100.00(a)

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
152 D-Limonene (continued)								
24.882	24.882	(1.167)	93	50183			23.79- 123.79	78.24

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msd7.i/7-27aug.b/7082703.d
Report Date: 27-Aug-2008 15:46

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7082703.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-27aug.b/t14q804c.m
Misc Info: 2.0ppbv (200ppbv)

Calibration Date: 27-AUG-2008
Calibration Time: 08:32
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312734	187640	437828	289326	-7.48
97 1,4-Difluorobenze	994459	596675	1392243	942559	-5.22
126 Chlorobenzene-d5	1074720	644832	1504608	933321	-13.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.32	-0.19
97 1,4-Difluorobenze	16.09	15.76	16.42	16.09	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

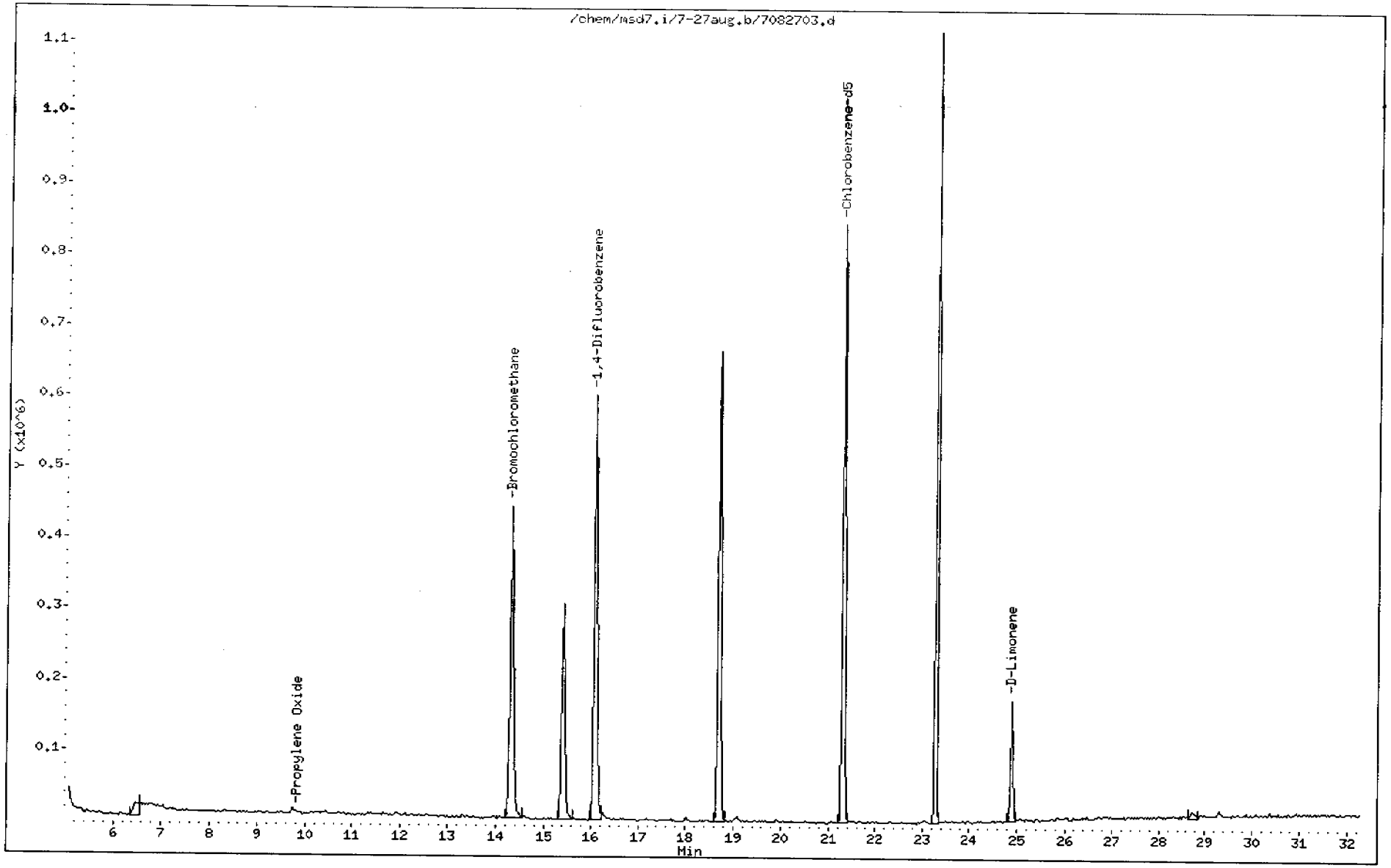
Data File: /chem/msd7.i/7-27aug.b/7082703.d
Date : 27-AUG-2008 09:46
Client ID: Level 3
Sample Info: 2.0mL #1541-251

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0474



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-24aug.b/7082404.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 24-AUG-2008 11:28
Operator : smd
Inst ID: msd7.i
Smp Info : 2.0mL #1541-242
Misc Info : 2.0ppbv (200ppbv)
Comment :
Method : /chem/msd7.i/7-24aug.b/t14q804b.m
Meth Date : 25-Aug-2008 07:18 sdisher
Quant Type: ISTD
Cal Date : 24-AUG-2008 11:28
Cal File: 7082404.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp19b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.320 (1.000)	130	364935	25.0000		80.00- 120.00	100.00
14.347	14.320 (1.000)	128	285384			29.17- 129.17	78.20
14.319	14.320 (1.000)	49	890979			294.76- 394.76	244.15
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.089	16.089 (1.000)	114	1159438	25.0000		80.00- 120.00	100.00
16.089	16.089 (1.000)	88	202862			0.00- 66.97	17.50
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1170907	25.0000		80.00- 120.00	100.00
21.287	21.315 (1.000)	82	592822			1.08- 101.08	50.63
21 Isobutane					CAS #: 75-28-5		
6.301	6.246 (0.439)	43	139194	2.00000	2.000	80.00- 120.00	100.00
6.301	6.246 (0.439)	42	49883			0.00- 84.88	35.84
6.329	6.246 (0.441)	58	4079			0.00- 52.64	2.93
35 1-Pentene					CAS #: 109-67-1		
8.900	8.928 (0.620)	55	97278	2.00000	2.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
35 1-Pentene (continued)							
8.928	8.928 (0.622)	42	119212			73.58- 173.58	122.55
0.000	8.928 (0.000)	0	0			0.00- 50.00	0.00
37 Pentane					CAS #: 109-66-0		
9.038	9.038 (0.630)	43	172942	2.00000	2.000	80.00- 120.00	100.00
9.066	9.038 (0.632)	57	27171			0.00- 64.92	15.71
9.038	9.038 (0.630)	72	11140			0.00- 56.13	6.44
39 Ethyl Ether					CAS #: 60-29-7		
9.619	9.619 (0.670)	74	26686	2.00000	2.000	80.00- 120.00	100.00
9.619	9.619 (0.670)	59	53374			158.16- 258.16	200.01
0.000	9.619 (0.000)	31	0			0.00- 50.00	0.00
44 Acrolein					CAS #: 107-02-8		
10.117	10.117 (0.705)	55	27360	2.00000	2.000	80.00- 120.00	100.00
10.117	10.117 (0.705)	56	34629			80.85- 180.85	126.57
48 Ethyl acrylate					CAS #: 140-88-5		
16.642	16.642 (0.781)	99	6617	2.00000	2.000	80.00- 120.00	100.00
16.642	16.642 (0.781)	45	17792			192.66- 292.66	268.88
16.642	16.642 (0.781)	55	140817			2365.59-2465.59	2128.11
49 Iodomethane					CAS #: 74-88-4		
10.753	10.725 (0.749)	142	128103	2.00000	2.000	80.00- 120.00	100.00
10.753	10.725 (0.749)	127	60331			0.00- 97.52	47.10
50 Methyl Methacrylate					CAS #: 80-62-6		
17.057	17.057 (0.800)	41	98598	2.00000	2.000	80.00- 120.00	100.00
17.057	17.057 (0.800)	69	43540			0.00- 93.65	44.16
17.057	17.057 (0.800)	100	16740			0.00- 67.48	16.98
52 Acetonitrile					CAS #: 75-05-8		
11.195	11.195 (0.780)	40	45373	2.00000	2.000	80.00- 120.00	100.00
11.167	11.195 (0.778)	41	78235			130.28- 230.28	172.43
11.195	11.195 (0.780)	38	11269			0.00- 74.99	24.84
56 Cyclopentane					CAS #: 287-92-3		
11.416	11.416 (0.796)	70	33783	2.00000	2.000	80.00- 120.00	100.00
11.416	11.416 (0.796)	55	73798			168.23- 268.23	218.45
0.000	11.416 (0.000)	0	0			0.00- 50.00	0.00
62 Acrylonitrile					CAS #: 107-13-1		
11.969	11.969 (0.834)	52	64147	2.00000	2.000	80.00- 120.00	100.00
11.969	11.969 (0.834)	53	75338			69.80- 169.80	117.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
63 2-Pentanone					CAS #: 107-87-9		
16.863	16.836 (0.791)	43	180068	2.00000	2.000	80.00- 120.00	100.00
16.863	16.836 (0.791)	58	13483			0.00- 57.02	7.49
16.863	16.836 (0.791)	86	20460			0.00- 60.89	11.36
66 1-Hexene					CAS #: 592-41-6		
12.107	12.108 (0.844)	55	59753	2.00000	2.000	80.00- 120.00	100.00
12.107	12.108 (0.844)	41	102239			115.90- 215.90	171.10
12.107	12.108 (0.844)	84	14249			0.00- 73.54	23.85
79 Methyl Acrylate					CAS #: 96-33-3		
13.932	13.932 (0.971)	55	133459	2.00000	2.000	80.00- 120.00	100.00
13.932	13.932 (0.971)	85	14697			0.00- 60.78	11.01
13.932	13.932 (0.971)	58	12178			0.00- 58.73	9.12
100 trans-1,4-dichloro-2-butene					CAS #: 110-57-6		
23.582	23.582 (1.106)	75	19955	2.00000	2.000	80.00- 120.00	100.00
23.582	23.582 (1.106)	89	10504			4.51- 104.51	52.64
23.582	23.582 (1.106)	53	28314			86.78- 186.78	141.89
103 Alphamethylstyrene					CAS #: 98-83-9		
24.246	24.246 (1.137)	118	116692	2.00000	2.000	80.00- 120.00	100.00
24.246	24.246 (1.137)	103	64651			4.10- 104.10	55.40
105 Dibromomethane					CAS #: 74-95-3		
17.306	17.306 (0.812)	174	48807	2.00000	2.000	80.00- 120.00	100.00
17.306	17.306 (0.812)	93	58929			70.54- 170.54	120.74
17.306	17.306 (0.812)	95	47289			47.14- 147.14	96.89
124 Nonane					CAS #: 111-84-2		
21.425	21.425 (1.005)	43	203712	2.00000	2.000	80.00- 120.00	100.00
21.425	21.425 (1.005)	57	170251			33.50- 133.50	83.57
21.425	21.425 (1.005)	85	43153			0.00- 71.27	21.18
151 bis(2-chloroethyl)ether					CAS #: 111-44-4		
24.854	24.854 (1.166)	93	140689	2.00000	2.000	80.00- 120.00	100.00
24.854	24.854 (1.166)	95	45310			0.00- 82.01	32.21

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

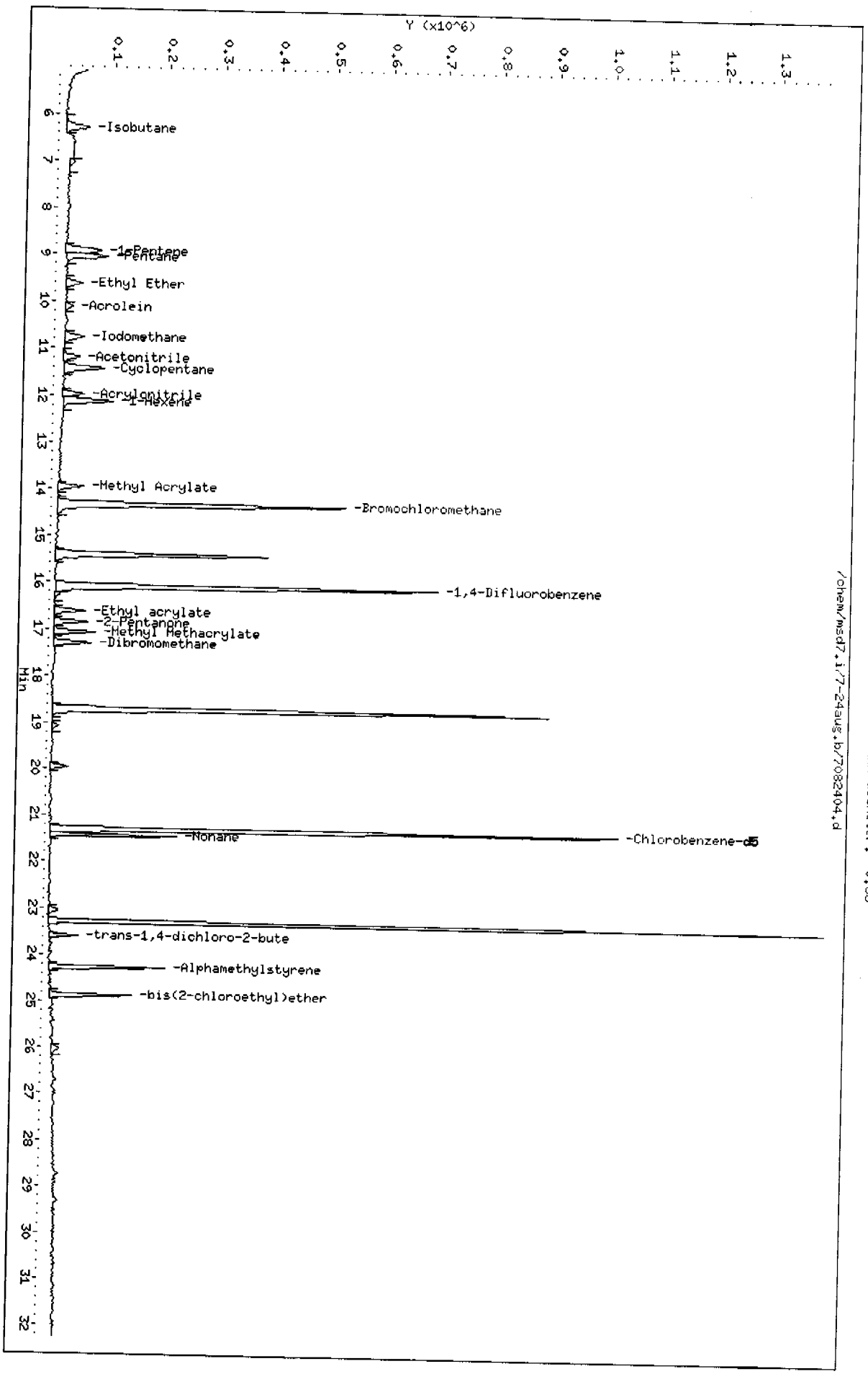
Instrument ID: msd7.i
Lab File ID: 7082404.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/7-24aug.b/t14q804b.m
Misc Info: 2.0ppbv (200ppbv)

Calibration Date: 24-AUG-2008
Calibration Time: 10:19
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	379391	227635	531147	364935	-3.81
97 1,4-Difluorobenze	1237836	742702	1732970	1159438	-6.33
126 Chlorobenzene-d5	1280879	768527	1793231	1170907	-8.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.32	13.99	14.65	14.35	0.19
97 1,4-Difluorobenze	16.09	15.76	16.42	16.09	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.


Data File: /chem/msd7.i/7-24aug.b/7082404.d
Date : 24-AUG-2008 11:28
Client ID:
Sample Info: 2.0mL #1541-242
Column phase: RTx-624
Instrument: msd7.i
Operator: smd
Column diameter: 0.53
Y (x10^6)
Min
-Isobutane
-1-Pentene
-Pentane
-Ethyl Ether
-Acrolein
-Iodomethane
-Acetonitrile
-Cyclopentane
-Acrylonitrile
-1-Hexene
-Methyl Acrylate
-Bromochloromethane
-1,4-Difluorobenzene
-Ethyl acrylate
-2-Pentanone
-Methyl Methacrylate
-Dibromomethane
-Nonane
-Chlorobenzene-d5
-trans-1,4-dichloro-2-bute
-Alphamethylstyrene
-bis(2-chloroethyl)ether
/chem/msd7.i/7-24aug.b/7082404.d

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05aug.b/7080503.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 05-AUG-2008 14:27
Operator : ra Inst ID: msd7.i
Smp Info : 2mL #1612-99
Misc Info : 2/12 ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-05aug.b/t14q804a.m
Meth Date : 05-Aug-2008 17:38 sruth Quant Type: ISTD
Cal Date : 05-AUG-2008 14:27 Cal File: 7080503.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp37a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	410277	25.0000		50.00- 150.00	100.00
14.333	14.333 (1.000)	128	314795			26.90- 126.90	76.73
14.333	14.333 (1.000)	49	997133			252.05- 352.05	243.04
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.102	16.102 (1.000)	114	1340229	25.0000		50.00- 150.00	100.00
16.102	16.102 (1.000)	88	235724			0.00- 67.42	17.59
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1286337	25.0000		50.00- 150.00	100.00
21.301	21.301 (1.000)	82	658070			1.24- 101.24	51.16
96 2-Heptanone					CAS #: 110-43-0		
22.462	22.462 (1.567)	58	74402	2.00000	2.000	50.00- 150.00	100.00
22.462	22.462 (1.567)	43	143085			142.31- 242.31	192.31
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.038	24.038 (1.129)	57	178023	2.00000	2.000	50.00- 150.00	100.00
24.038	24.038 (1.129)	85	105978			9.53- 109.53	59.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
146 Diisobutyl Ketone (continued)							
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
99 Isobutanol					CAS #: 78-83-1		
15.107	15.107 (1.054)	59	2785	2.00000	2.000	50.00- 150.00	100.00
15.079	15.079 (1.052)	41	32758			1126.23-1226.23	1176.23
15.079	15.079 (1.052)	43	39694			1375.28-1475.28	1425.28
98 1-Butanol					CAS #: 71-36-3		
16.268	16.268 (1.010)	56	43657	2.00000	2.000	50.00- 150.00	100.00
16.268	16.268 (1.010)	41	32295			23.97- 123.97	73.97
16.268	16.268 (1.010)	43	24851			6.92- 106.92	56.92
71 1-Propanol					CAS #: 71-23-8		
12.785	12.785 (0.892)	42	16491	2.00000	2.000	50.00- 150.00	100.00
12.646	12.646 (0.882)	59	40623			196.33- 296.33	246.33
12.646	12.646 (0.882)	41	57618			299.39- 399.39	349.39
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.310	13.310 (0.929)	59	176972	2.00000	2.000	50.00- 150.00	100.00
13.310	13.310 (0.929)	87	47956			0.00- 77.10	27.10
13.310	13.310 (0.929)	41	35957			0.00- 70.32	20.32
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.494	15.494 (1.081)	73	104441	2.00000	2.000	50.00- 150.00	100.00
15.522	15.522 (1.083)	87	26937			0.00- 75.79	25.79
15.467	15.467 (1.079)	55	46996			0.00- 95.00	45.00
68 Isopropyl ether					CAS #: 108-20-3		
12.646	12.646 (0.882)	45	283126	2.00000	2.000	50.00- 150.00	100.00
12.646	12.646 (0.882)	87	40840			0.00- 64.42	14.42
12.646	12.646 (0.882)	59	40623			0.00- 64.35	14.35
119 Butyl Acetate					CAS #: 123-86-4		
20.001	20.001 (1.242)	56	59410	2.00000	2.000	50.00- 150.00	100.00
20.029	20.029 (1.244)	73	15689			0.00- 76.41	26.41
20.029	20.029 (1.244)	43	152542			206.76- 306.76	256.76
77 Ethyl Acetate					CAS #: 141-78-6		
13.808	13.808 (0.963)	70	9977	2.00000	2.000	50.00- 150.00	100.00
13.808	13.808 (0.963)	45	20563			156.10- 256.10	206.10
13.808	13.808 (0.963)	61	34076			291.55- 391.55	341.55
135 Cyclohexanone					CAS #: 108-94-1		
23.236	23.236 (1.091)	55	77652	2.00000	2.000	50.00- 150.00	100.00
23.236	23.236 (1.091)	98	19876			0.00- 75.60	25.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)							
23.236	23.236 (1.091)	42	52546			17.67- 117.67	67.67
5 Freon 143a					CAS #: 420-46-2		
5.335	5.335 (0.372)	65	28889	2.00000	2.000	50.00- 150.00	100.00
5.420	5.420 (0.378)	69	146450			0.00- 50.00	506.94
5.363	5.363 (0.374)	64	5852			0.00- 70.26	20.26
6 Freon142b					CAS #: 75-68-3		
6.321	6.321 (0.441)	65	138229	2.00000	2.000	50.00- 150.00	100.00
6.321	6.321 (0.441)	45	47996			0.00- 84.72	34.72
9 Freon 13					CAS #: 75-72-9		
5.279	5.279 (0.368)	85	15965	2.00000	2.000	50.00- 150.00	100.00
5.222	5.222 (0.364)	87	9046			6.66- 106.66	56.66
5.420	5.420 (0.378)	69	146450			867.32- 967.32	917.32
13 Freon 134a					CAS #: 811-97-2		
5.476	5.476 (0.382)	83	50101	2.00000	2.000	50.00- 150.00	100.00
5.420	5.420 (0.378)	69	146450			242.31- 342.31	292.31
5.476	5.476 (0.382)	63	10861			0.00- 71.68	21.68
15 Freon 152a					CAS #: 75-37-6		
5.645	5.645 (0.394)	65	39929	2.00000	2.000	50.00- 150.00	100.00
5.786	5.786 (0.404)	51	256695			592.88- 692.88	642.88
5.673	5.673 (0.396)	47	31281			28.34- 128.34	78.34
17 Freon 22					CAS #: 75-45-6		
5.786	5.786 (0.404)	51	273411	2.00000	2.000	50.00- 150.00	100.00
5.814	5.814 (0.406)	67	20638			0.00- 57.55	7.55
5.814	5.814 (0.406)	85	1559			0.00- 50.57	0.57
26 Methanol					CAS #: 67-56-1		
7.532	7.532 (0.525)	31	201166	12.0000	12.000	50.00- 150.00	100.00(a)
7.532	7.532 (0.525)	32	680804			288.43- 388.43	338.43
41 Freon123					CAS #: 306-83-2		
9.909	9.909 (0.691)	83	90649	2.00000	2.000	50.00- 150.00	100.00
9.937	9.937 (0.693)	133	23368			0.00- 75.78	25.78
9.909	9.909 (0.691)	85	64895			21.59- 121.59	71.59
40 Freon123a					CAS #: 354-23-4		
9.771	9.771 (0.682)	117	53505	2.00000	2.000	50.00- 150.00	100.00
9.743	9.743 (0.680)	67	82729			104.62- 204.62	154.62
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.622)	67	127365	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
34 Dichlorofluoromethane/Fr21 (continued)							
8.940	8.940 (0.624)	69	36239			0.00- 78.45	28.45
8.912	8.912 (0.622)	35	12649			0.00- 59.93	9.93
136 Bromobenzene					CAS #: 108-86-1		
23.568	23.568 (1.106)	156	74441	2.00000	2.000	50.00- 150.00	100.00
23.568	23.568 (1.106)	158	74060			49.49- 149.49	99.49
23.568	23.568 (1.106)	77	161765			167.31- 267.31	217.31
158 Butylbenzene					CAS #: 104-51-8		
25.642	25.642 (1.204)	134	64881	2.00000	2.000	50.00- 150.00	100.00
25.642	25.642 (1.204)	91	251841			338.16- 438.16	388.16
25.642	25.642 (1.204)	92	138624			163.66- 263.66	213.66
149 sec-Butylbenzene					CAS #: 135-98-8		
24.757	24.757 (1.162)	105	283972	2.00000	2.000	50.00- 150.00	100.00
24.757	24.757 (1.162)	134	54242			0.00- 69.10	19.10
24.757	24.757 (1.162)	91	46053			0.00- 66.22	16.22
148 tert-Butylbenzene					CAS #: 98-06-6		
24.397	24.397 (1.145)	119	190765	2.00000	2.000	50.00- 150.00	100.00
24.397	24.397 (1.145)	134	43577			0.00- 72.84	22.84
24.397	24.397 (1.145)	91	133023			19.73- 119.73	69.73
141 2-Chlorotoluene					CAS #: 95-49-8		
23.844	23.844 (1.119)	126	60082	2.00000	2.000	50.00- 150.00	100.00
23.844	23.844 (1.119)	91	180311			250.11- 350.11	300.11
23.844	23.844 (1.119)	65	23005			0.00- 88.29	38.29
143 4-Chlorotoluene					CAS #: 106-43-4		
24.010	24.010 (1.127)	126	61947	2.00000	2.000	50.00- 150.00	100.00
24.010	24.010 (1.127)	91	190904			258.17- 358.17	308.17
24.010	24.010 (1.127)	63	34547			5.77- 105.77	55.77
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.218	27.218 (1.278)	157	79585	2.00000	2.000	50.00- 150.00	100.00
27.218	27.218 (1.278)	75	102380			78.64- 178.64	128.64
27.245	27.245 (1.279)	155	66504			33.56- 133.56	83.56
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.918	19.918 (1.237)	76	70461	2.00000	2.000	50.00- 150.00	100.00
19.918	19.918 (1.237)	41	82077			66.49- 166.49	116.49
19.946	19.946 (1.239)	78	23451			0.00- 83.28	33.28
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.835	13.835 (0.965)	77	72200	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.808	13.808 (0.963)	79	23009			0.00- 81.87	31.87
13.835	13.835 (0.965)	97	11676			0.00- 66.17	16.17
153 p-Cymene					CAS #: 99-87-6		
24.978	24.978 (1.173)	119	264807	2.00000	2.000	50.00- 150.00	100.00
24.978	24.978 (1.173)	134	64412			0.00- 74.32	24.32
24.978	24.978 (1.173)	91	65328			0.00- 74.67	24.67
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.466	21.466 (1.008)	131	72314	2.00000	2.000	50.00- 150.00	100.00
21.466	21.466 (1.008)	117	53320			23.73- 123.73	73.73
21.466	21.466 (1.008)	95	29397			0.00- 90.65	40.65
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.623	23.623 (1.109)	110	42582	2.00000	2.000	50.00- 150.00	100.00
23.623	23.623 (1.109)	75	116613			223.86- 323.86	273.86
23.623	23.623 (1.109)	61	40932			46.13- 146.13	96.13
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.227	25.227 (1.184)	120	90107	2.00000	2.000	50.00- 150.00	100.00
25.227	25.227 (1.184)	105	214194			187.71- 287.71	237.71
25.227	25.227 (1.184)	77	29087			0.00- 82.28	32.28
201 Pentachloroethane					CAS #: 76-01-7		
24.563	24.563 (1.153)	167	54153	2.00000	2.000	50.00- 150.00	100.00
24.536	24.536 (1.152)	117	70442			80.08- 180.08	130.08
24.563	24.563 (1.153)	169	27597			0.96- 100.96	50.96
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.052	15.052 (0.935)	110	23206	2.00000	2.000	50.00- 150.00	100.00
15.052	15.052 (0.935)	75	65386			231.76- 331.76	281.76
55 Cyclopentene					CAS #: 142-29-0		
11.209	11.209 (0.782)	67	109638	2.00000	2.000	50.00- 150.00	100.00
11.209	11.209 (0.782)	68	42715			0.00- 88.96	38.96
11.209	11.209 (0.782)	53	34942			0.00- 81.87	31.87

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080503.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-05aug.b/t14q804a.m
Misc Info: 2/12 ppbv (200 ppbv)

Calibration Date: 05-AUG-2008
Calibration Time: 15:45
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	433524	260114	606934	410277	-5.36
97 1,4-Difluorobenze	1378748	827249	1930247	1340229	-2.79
126 Chlorobenzene-d5	1402863	841718	1964008	1286337	-8.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

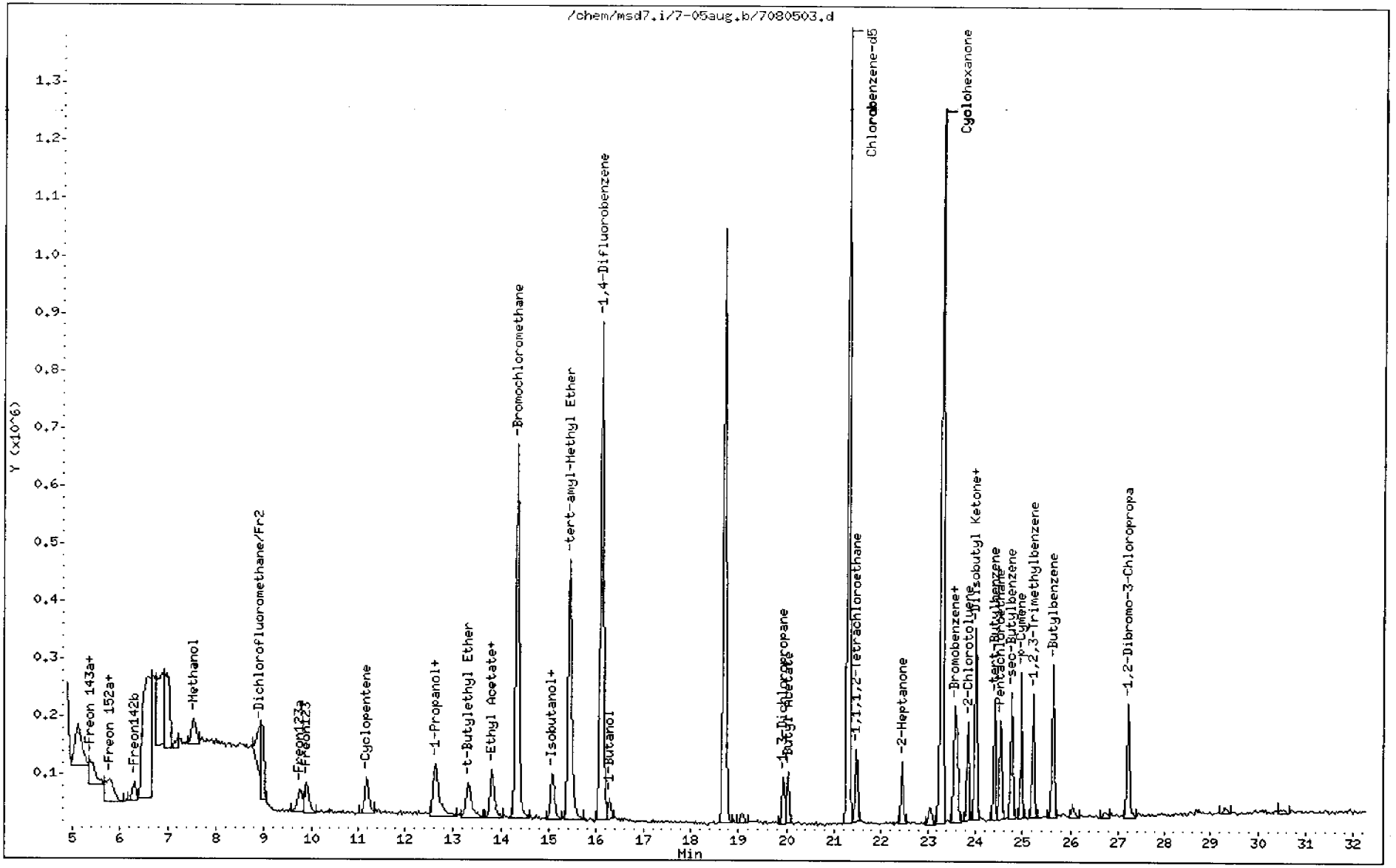
Data File: /chem/msd7.i/7-05aug.b/7080503.d
Date : 05-AUG-2008 14:27
Client ID: Level 3
Sample Info: 2mL #1612-99

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

Column phase: RTx-624

0486



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080419.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 04-AUG-2008 18:01
Operator : dfm
Inst ID: msd7.i
Smp Info : 2.0mL #1612-91
Misc Info : 2.0ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:06 sscott
Quant Type: ISTD
Cal Date : 04-AUG-2008 18:01
Cal File: 7080419.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08mdl.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	435701	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	343827			27.26- 127.26	78.91
14.347	14.347 (1.000)	49	1087247			253.14- 353.14	249.54
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1406833	25.0000		50.00- 150.00	100.00
16.117	16.117 (1.000)	88	247527			0.00- 67.42	17.59
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1448488	25.0000		50.00- 150.00	100.00
21.315	21.315 (1.000)	82	722905			1.03- 101.03	49.91
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.425	15.425 (1.075)	65	852819	25.0000	25.912	50.00- 150.00	100.00
15.425	15.425 (1.075)	67	365071			0.00- 97.37	42.81
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1298444	25.0000	24.110	50.00- 150.00	100.00
18.716	18.716 (1.161)	70	179284			0.00- 63.85	13.81

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.716	18.716	(1.161)	100	994638			26.51- 126.51	76.60
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.278	23.278	(1.092)	174	733873	25.0000	24.622	50.00- 150.00	100.00
23.278	23.278	(1.092)	95	1018938			89.41- 189.41	138.84
23.278	23.278	(1.092)	176	688441			45.98- 145.98	93.81
11 Propylene						CAS #: 115-07-1		
5.610	5.610	(0.391)	41	76426	2.00000	2.057	50.00- 150.00	100.00
5.638	5.638	(0.393)	42	47928			16.57- 116.57	62.71
5.610	5.610	(0.391)	39	56467			28.60- 128.60	73.88
12 Dichlorodifluoromethane/Frl2						CAS #: 75-71-8		
5.776	5.776	(0.403)	85	205046	2.00000	1.904	50.00- 150.00	100.00
5.748	5.748	(0.401)	87	63577			0.00- 81.85	31.01
16 Freon 114						CAS #: 76-14-2		
6.218	6.218	(0.433)	135	111831	2.00000	1.944	50.00- 150.00	100.00
6.218	6.218	(0.433)	137	38208			0.00- 84.02	34.17
18 Chloromethane						CAS #: 74-87-3		
6.550	6.550	(0.457)	50	93882	2.00000	2.049	50.00- 150.00	100.00
6.578	6.578	(0.458)	52	28485			0.00- 81.05	30.34
20 Vinyl Chloride						CAS #: 75-01-4		
6.882	6.882	(0.480)	62	85018	2.00000	1.870	50.00- 150.00	100.00
6.854	6.854	(0.478)	64	32559			0.00- 84.96	38.30
22 1,3-Butadiene						CAS #: 106-99-0		
6.909	6.909	(0.482)	54	74307	2.00000	1.736	50.00- 150.00	100.00
6.909	6.909	(0.482)	39	79142			46.88- 146.88	106.51
25 Bromomethane						CAS #: 74-83-9		
8.015	8.015	(0.559)	94	51808	2.00000	1.845	50.00- 150.00	100.00
8.015	8.015	(0.559)	96	46362			41.33- 141.33	89.49
27 Chloroethane						CAS #: 75-00-3		
8.347	8.347	(0.582)	64	35170	2.00000	1.664	50.00- 150.00	100.00
8.292	8.292	(0.578)	49	19006			0.00- 94.43	54.04
8.320	8.320	(0.580)	66	14386			0.00- 79.28	40.90
31 Trichlorofluoromethane/Frl1						CAS #: 75-69-4		
8.928	8.928	(0.622)	101	209195	2.00000	1.955	50.00- 150.00	100.00
8.928	8.928	(0.622)	103	132958			15.68- 115.68	63.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.426	9.426 (0.657)	45	28404	2.00000	1.601	50.00- 150.00	100.00(a)
9.398	9.398 (0.655)	43	8666			0.00- 73.90	30.51
9.426	9.426 (0.657)	46	10763			0.00- 88.16	37.89
42 Freon 113					CAS #: 76-13-1		
10.144	10.144 (0.707)	151	81184	2.00000	1.889	50.00- 150.00	100.00
10.172	10.172 (0.709)	153	52324			16.40- 116.40	64.45
10.172	10.172 (0.709)	101	116848			100.01- 200.01	143.93
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.719)	61	143619	2.00000	1.922	50.00- 150.00	100.00
10.283	10.283 (0.717)	96	50906			0.00- 86.92	35.45
10.310	10.310 (0.719)	98	37704			0.00- 74.85	26.25
45 Acetone					CAS #: 67-64-1		
10.421	10.421 (0.726)	58	34230	2.00000	1.622	50.00- 150.00	100.00(a)
10.421	10.421 (0.726)	43	136857			340.42- 440.42	399.82
46 2-Propanol					CAS #: 67-63-0		
10.642	10.642 (0.742)	45	126698	2.00000	1.415	50.00- 150.00	100.00(a)
10.642	10.642 (0.742)	43	41114			0.00- 76.39	32.45
10.642	10.642 (0.742)	59	5832			0.00- 53.62	4.60
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.757)	76	165798	2.00000	1.806	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.112	11.112 (0.775)	76	23730	2.00000	1.588	50.00- 150.00	100.00
11.112	11.112 (0.775)	41	94743			377.54- 477.54	399.25
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.798)	49	120552	2.00000	1.844	50.00- 150.00	100.00
11.444	11.444 (0.798)	84	40741			0.00- 86.35	33.80
11.444	11.444 (0.798)	51	38544			0.00- 80.54	31.97
60 MTBE					CAS #: 1634-04-4		
11.776	11.776 (0.821)	73	74958	2.00000	1.387	50.00- 150.00	100.00
11.748	11.748 (0.819)	57	27891			0.00- 84.58	37.21
11.748	11.748 (0.819)	41	29037			0.00- 86.33	38.74
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.886	11.886 (0.828)	96	58833	2.00000	1.878	50.00- 150.00	100.00
11.886	11.886 (0.828)	61	131011			183.94- 283.94	222.68
11.886	11.886 (0.828)	98	36026			13.50- 113.50	61.23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.246	12.246 (0.854)	57	125072	2.00000	1.715	50.00- 150.00	100.00
12.246	12.246 (0.854)	43	86055			20.34- 120.34	68.80
12.246	12.246 (0.854)	86	13924			0.00- 61.25	11.13
69 Vinyl Acetate					CAS #: 108-05-4		
12.743	12.743 (0.888)	86	11787	2.00000	1.644	50.00- 150.00	100.00(a)
12.743	12.743 (0.888)	43	218605			1872.40-1972.40	1854.63
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.771	12.771 (0.890)	63	147247	2.00000	1.864	50.00- 150.00	100.00
12.771	12.771 (0.890)	65	41013			0.00- 81.43	27.85
75 2-Butanone					CAS #: 78-93-3		
13.822	13.822 (0.963)	72	22677	2.00000	1.649	50.00- 150.00	100.00
13.822	13.822 (0.963)	43	147635			602.07- 702.07	651.03
13.822	13.822 (0.963)	57	9967			0.00- 97.16	43.95
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.877	13.877 (0.967)	61	108280	2.00000	1.827	50.00- 150.00	100.00
13.877	13.877 (0.967)	96	48495			0.00- 97.05	44.79
13.877	13.877 (0.967)	98	31443			0.00- 80.30	29.04
80 Tetrahydrofuran					CAS #: 109-99-9		
14.319	14.319 (0.998)	42	78976	2.00000	1.627	50.00- 150.00	100.00
14.319	14.319 (0.998)	71	22134			0.00- 76.49	28.03
14.319	14.319 (0.998)	72	25727			0.00- 78.71	32.58
82 Chloroform					CAS #: 67-66-3		
14.402	14.402 (1.004)	83	115098	2.00000	1.900	50.00- 150.00	100.00
14.430	14.430 (1.006)	85	79895			20.65- 120.65	69.41
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.790	14.790 (1.031)	97	114658	2.00000	1.854	50.00- 150.00	100.00
14.790	14.790 (1.031)	99	74717			14.99- 114.99	65.17
85 Cyclohexane					CAS #: 110-82-7		
14.790	14.790 (1.031)	84	56498	2.00000	1.739	50.00- 150.00	100.00
14.790	14.790 (1.031)	56	115585			145.33- 245.33	204.58
14.790	14.790 (1.031)	41	74020			73.65- 173.65	131.01
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.038	15.038 (1.048)	119	126372	2.00000	1.790	50.00- 150.00	100.00
15.038	15.038 (1.048)	117	132839			55.00- 155.00	105.12
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	140037	2.00000	1.828	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.453	15.453 (0.959)	77	29815			0.00- 71.75	21.29
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	295775	2.00000	1.702	50.00- 150.00	100.00
15.370	15.370 (1.071)	56	95095			0.00- 82.54	32.15
15.370	15.370 (1.071)	41	90440			0.00- 80.37	30.58
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.591	15.591 (0.967)	62	109320	2.00000	1.931	50.00- 150.00	100.00
15.564	15.564 (0.966)	64	32168			0.00- 82.49	29.43
94 Heptane					CAS #: 142-82-5		
15.647	15.647 (0.971)	71	42194	2.00000	1.703	50.00- 150.00	100.00
15.674	15.674 (0.973)	43	120634			238.48- 338.48	285.90
15.674	15.674 (0.973)	57	60707			102.27- 202.27	143.88
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.029)	95	51670	2.00000	1.575	50.00- 150.00	100.00
16.587	16.587 (1.029)	130	58594			54.15- 154.15	113.40
16.587	16.587 (1.029)	97	37881			16.17- 116.17	73.31
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.057	17.057 (1.058)	63	62326	2.00000	1.704	50.00- 150.00	100.00
17.057	17.057 (1.058)	62	45858			21.69- 121.69	73.58
17.057	17.057 (1.058)	41	59619			32.68- 132.68	95.66
106 1,4-Dioxane					CAS #: 123-91-1		
17.195	17.195 (1.067)	88	28831	2.00000	1.540	50.00- 150.00	100.00(a)
17.195	17.195 (1.067)	58	28208			48.37- 148.37	97.84
17.167	17.167 (1.065)	57	11365			0.00- 86.44	39.42
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.086)	83	104654	2.00000	1.761	50.00- 150.00	100.00
17.499	17.499 (1.086)	85	72718			20.11- 120.11	69.48
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.134)	75	68292	2.00000	1.620	50.00- 150.00	100.00
18.273	18.273 (1.134)	77	21728			0.00- 85.03	31.82
18.273	18.273 (1.134)	39	63056			43.00- 143.00	92.33
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.146)	58	47059	2.00000	1.442	50.00- 150.00	100.00
18.467	18.467 (1.146)	43	142388			244.73- 344.73	302.57
18.467	18.467 (1.146)	85	14119			0.00- 81.51	30.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.168)	91	153104	2.00000	1.803	50.00- 150.00	100.00
18.826	18.826 (1.168)	92	91087			10.54- 110.54	59.49
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	78775	2.00000	1.680	50.00- 150.00	100.00
19.269	19.269 (0.904)	77	25253			0.00- 80.88	32.06
19.269	19.269 (0.904)	39	65923			33.61- 133.61	83.69
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.601	19.601 (0.920)	97	54405	2.00000	1.822	50.00- 150.00	100.00
19.601	19.601 (0.920)	99	38525			12.31- 112.31	70.82
19.601	19.601 (0.920)	83	44401			34.26- 134.26	81.61
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	72390	2.00000	1.850	50.00- 150.00	100.00
19.794	19.794 (0.929)	129	59400			35.18- 135.18	82.06
19.766	19.766 (0.927)	131	59702			33.48- 133.48	82.47
121 2-Hexanone					CAS #: 591-78-6		
19.905	19.905 (0.934)	58	62793	2.00000	1.385	50.00- 150.00	100.00(a)
19.905	19.905 (0.934)	43	131193			161.51- 261.51	208.93
19.932	19.932 (0.935)	100	7815			0.00- 63.21	12.45
122 Dibromochloromethane					CAS #: 124-48-1		
20.319	20.319 (0.953)	129	107546	2.00000	1.720	50.00- 150.00	100.00
20.319	20.319 (0.953)	127	81918			29.59- 129.59	76.17
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	92622	2.00000	1.639	50.00- 150.00	100.00
20.568	20.568 (0.965)	109	82494			39.77- 139.77	89.07
127 Chlorobenzene					CAS #: 108-90-7		
21.370	21.370 (1.003)	112	134437	2.00000	1.816	50.00- 150.00	100.00
21.370	21.370 (1.003)	114	45617			0.00- 83.15	33.93
21.342	21.342 (1.001)	77	97547			21.80- 121.80	72.56
128 Ethyl Benzene					CAS #: 100-41-4		
21.453	21.453 (1.006)	106	70882	2.00000	1.756	50.00- 150.00	100.00
21.425	21.425 (1.005)	91	220433			261.34- 361.34	310.99
129 m,p-Xylene					CAS #: 108-38-3		
21.647	21.647 (1.016)	106	91332	2.00000	1.768	50.00- 150.00	100.00
21.647	21.647 (1.016)	91	178201			147.02- 247.02	195.11
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	80187	2.00000	1.678	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.338	22.338 (1.048)	91	163645			158.66- 258.66	204.08
131 Styrene					CAS #: 100-42-5		
22.365	22.365 (1.049)	104	115808	2.00000	1.591	50.00- 150.00	100.00
22.365	22.365 (1.049)	78	65573			10.48- 110.48	56.62
133 Bromoform					CAS #: 75-25-2		
22.780	22.780 (1.069)	173	84433	2.00000	1.567	50.00- 150.00	100.00
22.780	22.780 (1.069)	171	46032			2.34- 102.34	54.52
134 Cumene					CAS #: 98-82-8		
22.918	22.918 (1.075)	105	218445	2.00000	1.563	50.00- 150.00	100.00
22.918	22.918 (1.075)	120	61960			0.00- 77.95	28.36
22.891	22.891 (1.074)	51	35534			0.00- 67.08	16.27
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.499	23.499 (1.102)	83	135940	2.00000	1.836	50.00- 150.00	100.00
23.499	23.499 (1.102)	85	94468			21.97- 121.97	69.49
142 Propylbenzene					CAS #: 103-65-1		
23.582	23.582 (1.106)	91	299389	2.00000	1.720	50.00- 150.00	100.00
23.582	23.582 (1.106)	120	68237			0.00- 73.91	22.79
23.582	23.582 (1.106)	105	10578			0.00- 54.14	3.53
145 4-Ethyltoluene					CAS #: 622-96-8		
23.776	23.776 (1.115)	105	272158	2.00000	1.631	50.00- 150.00	100.00
23.776	23.776 (1.115)	120	89431			0.00- 82.75	32.86
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.859	23.859 (1.119)	105	226058	2.00000	1.656	50.00- 150.00	100.00
23.859	23.859 (1.119)	120	107394			1.24- 101.24	47.51
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.494	24.494 (1.149)	105	209397	2.00000	1.556	50.00- 150.00	100.00
24.494	24.494 (1.149)	120	99488			0.00- 97.02	47.51
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.075	25.075 (1.176)	146	144856	2.00000	1.651	50.00- 150.00	100.00
25.075	25.075 (1.176)	148	86628			12.07- 112.07	59.80
25.075	25.075 (1.176)	111	64450			0.00- 94.74	44.49
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.241	25.241 (1.184)	146	144342	2.00000	1.567	50.00- 150.00	100.00
25.241	25.241 (1.184)	148	91532			13.30- 113.30	63.41
25.213	25.213 (1.183)	111	59148			0.00- 92.03	40.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.435	25.435 (1.193)	91	202639	2.00000	1.503	50.00- 150.00	100.00
25.435	25.435 (1.193)	126	39102			0.00- 69.83	19.30
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.877	25.877 (1.214)	146	140718	2.00000	1.587	50.00- 150.00	100.00
25.877	25.877 (1.214)	148	87233			12.84- 112.84	61.99
25.877	25.877 (1.214)	111	62796			0.00- 95.15	44.63
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.753	28.753 (1.349)	180	75307	2.00000	1.901	50.00- 150.00	100.00(a)
28.753	28.753 (1.349)	182	71903			44.64- 144.64	95.48
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.946	28.946 (1.358)	225	72237	2.00000	2.184	50.00- 150.00	100.00
28.946	28.946 (1.358)	223	47668			13.71- 113.71	65.99
167 Naphthalene					CAS #: 91-20-3		
29.305	29.305 (1.375)	128	151003	2.00000	1.774	50.00- 150.00	100.00(a)
29.305	29.305 (1.375)	127	18800			0.00- 62.37	12.45
29 Isopentane					CAS #: 78-78-4		
8.320	8.320 (0.580)	43	111216	2.00000	1.808	50.00- 150.00	100.00(a)
8.320	8.320 (0.580)	57	80122			17.61- 117.61	72.04
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.470)	58	20983	2.00000	2.304	50.00- 150.00	100.00
6.744	6.744 (0.470)	43	148988			787.53- 887.53	710.04
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.863	16.863 (1.175)	83	68767	2.00000	1.725	50.00- 150.00	100.00
16.863	16.863 (1.175)	98	30019			0.00- 97.34	43.65
16.863	16.863 (1.175)	55	101268			95.79- 195.79	147.26
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.444	11.444 (0.798)	59	107264	2.00000	2.250	50.00- 150.00	100.00
11.444	11.444 (0.798)	41	26486			0.00- 74.69	24.69
11.472	11.472 (0.800)	57	12464			0.00- 61.62	11.62

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

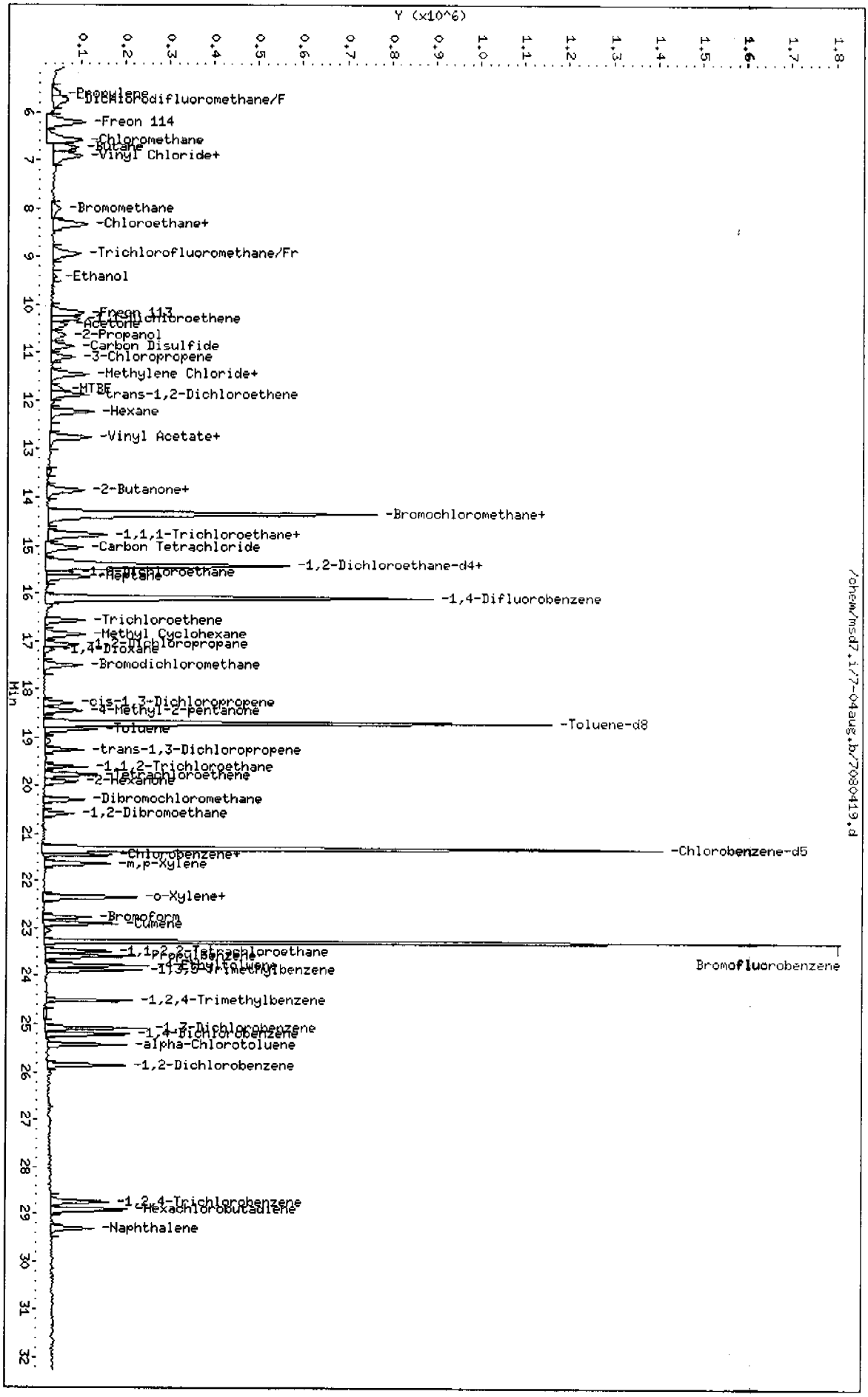
Instrument ID: msd7.i
Lab File ID: 7080419.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 2.0ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	435701	-6.47
97 1,4-Difluorobenze	1452055	871233	2032877	1406833	-3.11
126 Chlorobenzene-d5	1558716	935230	2182202	1448488	-7.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/7-04aug.b/7080419.d
Date : 04-AUG-2008 13:01
Client ID: Level 3
Sample Info: 2.0mL #1612-91
Column phase: RTx-624

Instrument: msd7.i
Operator: dfm
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-27aug.b/7082709.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 27-AUG-2008 15:00
Operator : ra Inst ID: msd7.i
Smp Info : 25mL #1541-251
Misc Info : 25ppbv (200ppbv)
Comment :
Method : /chem/msd7.i/7-27aug.b/tl4q804c.m
Meth Date : 27-Aug-2008 15:46 ctaylor Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp2c.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane					CAS #: 74-97-5			
14.347	14.347 (1.000)	130	294911	25.0000		50.00- 150.00		100.00
14.319	14.319 (1.000)	128	221428			26.80- 126.80		75.08
14.319	14.319 (1.000)	49	651051			216.97- 316.97		220.76
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
16.089	16.089 (1.000)	114	898554	25.0000		50.00- 150.00		100.00
16.089	16.089 (1.000)	88	152579			0.00- 67.09		16.98
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
21.315	21.315 (1.000)	117	896931	25.0000		50.00- 150.00		100.00
21.287	21.287 (1.000)	82	458134			1.24- 101.24		51.08
204 Propylene Oxide					CAS #: 75-56-9			
9.868	9.868 (0.688)	58	43452	25.0000	25.298	50.00- 150.00		100.00
9.840	9.840 (0.686)	43	49924			77.34- 177.34		114.89
9.868	9.868 (0.688)	57	5912			0.00- 80.14		13.61
152 D-Limonene					CAS #: 5989-27-5			
24.882	24.882 (1.167)	68	914888	25.0000	26.020	50.00- 150.00		100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
152 D-Limonene (continued)								
24.882	24.882	(1.167)	93	648025			23.79- 123.79	70.83

Data File: /chem/msd7.i/7-27aug.b/7082709.d
Report Date: 27-Aug-2008 15:46

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7082709.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-27aug.b/t14q804c.m
Misc Info: 25ppbv (200ppbv)

Calibration Date: 27-AUG-2008
Calibration Time: 08:32
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312734	187640	437828	294911	-5.70
97 1,4-Difluorobenze	994459	596675	1392243	898554	-9.64
126 Chlorobenzene-d5	1074720	644832	1504608	896931	-16.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.09	15.76	16.42	16.09	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

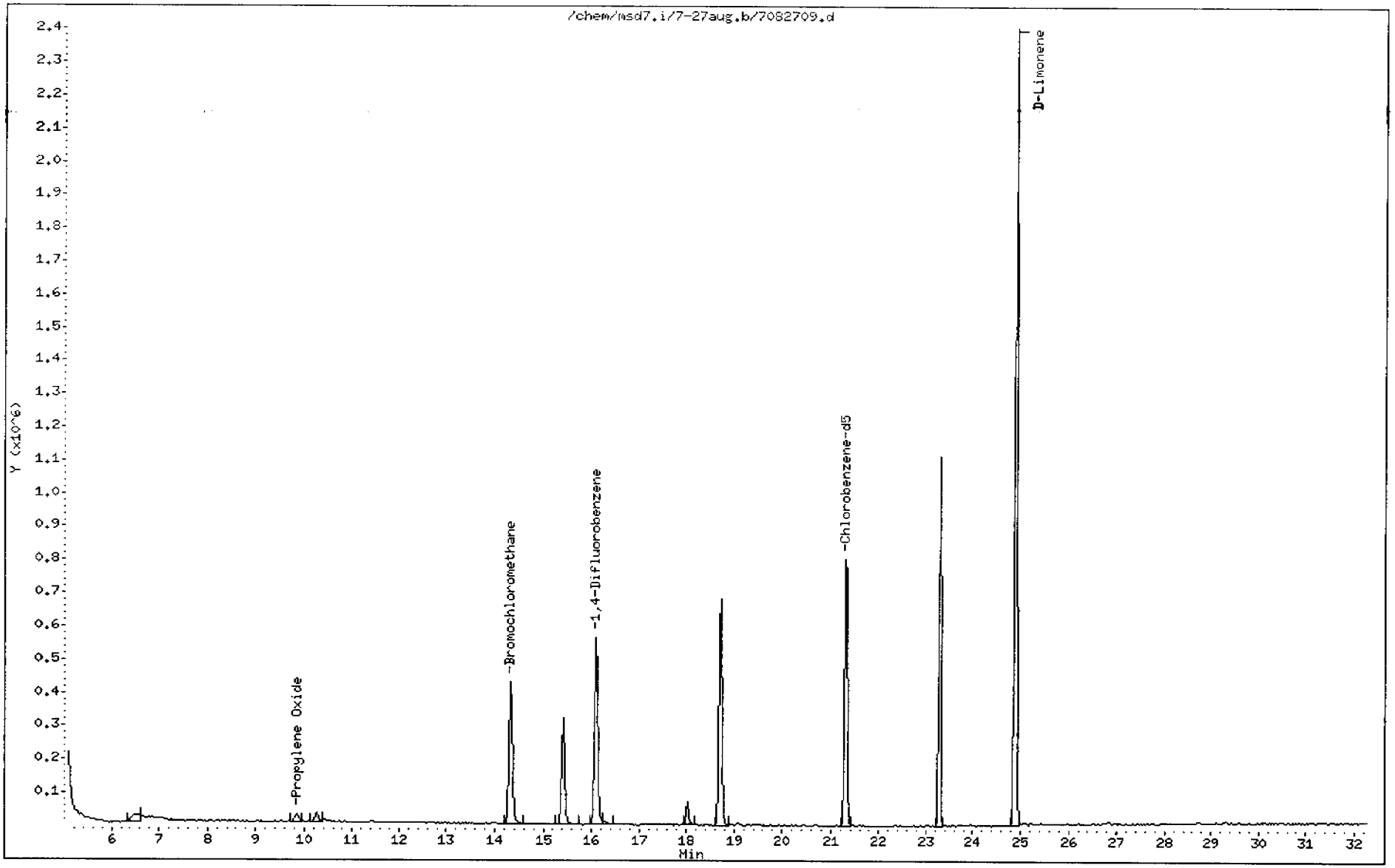
Data File: /chem/msd7.i/7-27aug.b/7082709.d
Date : 27-AUG-2008 15:00
Client ID: Level 4
Sample Info: 25mL #1541-251

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0500



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05aug.b/7080504.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 05-AUG-2008 15:06
Operator : ra
Inst ID: msd7.i
Smp Info : 8mL #1612-99
Misc Info : 8/48 ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-05aug.b/t14q804a.m
Meth Date : 05-Aug-2008 17:38 sruth
Quant Type: ISTD
Cal Date : 05-AUG-2008 15:06
Cal File: 7080504.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp37a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	426310	25.0000		50.00- 150.00	100.00
14.333	14.333 (1.000)	128	329211			27.35- 127.35	77.22
14.333	14.333 (1.000)	49	1023307			243.65- 343.65	240.04
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1354142	25.0000		50.00- 150.00	100.00
16.103	16.103 (1.000)	88	228662			0.00- 67.37	16.89
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1285484	25.0000		50.00- 150.00	100.00
21.301	21.301 (1.000)	82	648982			1.17- 101.17	50.49
96 2-Heptanone					CAS #: 110-43-0		
22.462	22.462 (1.567)	58	412516	8.00000	9.145	50.00- 150.00	100.00
22.462	22.462 (1.567)	43	750752			137.15- 237.15	181.99
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.010	24.010 (1.127)	57	866265	8.00000	8.784	50.00- 150.00	100.00
24.038	24.038 (1.129)	85	482905			7.64- 107.64	55.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
146 Diisobutyl Ketone (continued)							
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
99 Isobutanol					CAS #: 78-83-1		
15.080	15.080 (1.052)	59	8391	8.00000	6.724	50.00- 150.00	100.00
15.080	15.080 (1.052)	41	163141			1510.23-1610.23	1944.24
15.080	15.080 (1.052)	43	196288			1832.27-1932.27	2339.27
98 1-Butanol					CAS #: 71-36-3		
16.269	16.269 (1.010)	56	172753	8.00000	7.916	50.00- 150.00	100.00
16.269	16.269 (1.010)	41	136099			26.38- 126.38	78.78
16.269	16.269 (1.010)	43	104686			8.76- 108.76	60.60
71 1-Propanol					CAS #: 71-23-8		
12.785	12.785 (0.892)	42	62803	8.00000	7.650	50.00- 150.00	100.00
12.785	12.785 (0.892)	59	62387			122.84- 222.84	99.34
12.646	12.646 (0.882)	41	235764			312.40- 412.40	375.40
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.310	13.310 (0.929)	59	615911	8.00000	7.292	50.00- 150.00	100.00
13.310	13.310 (0.929)	87	150940			0.00- 75.80	24.51
13.310	13.310 (0.929)	41	119770			0.00- 69.88	19.45
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.494	15.494 (1.081)	73	354376	8.00000	7.191	50.00- 150.00	100.00
15.494	15.494 (1.081)	87	90815			0.00- 75.71	25.63
15.494	15.494 (1.081)	55	161090			0.00- 95.23	45.46
68 Isopropyl ether					CAS #: 108-20-3		
12.646	12.646 (0.882)	45	1229860	8.00000	8.176	50.00- 150.00	100.00
12.646	12.646 (0.882)	87	172612			0.00- 64.23	14.04
12.646	12.646 (0.882)	59	109701			0.00- 61.63	8.92
119 Butyl Acetate					CAS #: 123-86-4		
20.029	20.029 (1.244)	56	269114	8.00000	8.456	50.00- 150.00	100.00
20.029	20.029 (1.244)	73	64568			0.00- 75.20	23.99
20.029	20.029 (1.244)	43	742467			216.33- 316.33	275.89
77 Ethyl Acetate					CAS #: 141-78-6		
13.808	13.808 (0.963)	70	49502	8.00000	8.706	50.00- 150.00	100.00
13.808	13.808 (0.963)	45	108919			163.07- 263.07	220.03
13.808	13.808 (0.963)	61	135767			257.91- 357.91	274.27
135 Cyclohexanone					CAS #: 108-94-1		
23.236	23.236 (1.091)	55	369227	8.00000	8.692	50.00- 150.00	100.00
23.236	23.236 (1.091)	98	88451			0.00- 74.78	23.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)							
23.236	23.236 (1.091)	42	267843			20.11- 120.11	72.54
5 Freon 143a					CAS #: 420-46-2		
5.335	5.335 (0.372)	65	112722	8.00000	7.747	50.00- 150.00	100.00
5.392	5.392 (0.376)	69	551238			439.02- 539.02	489.02
5.307	5.307 (0.370)	64	35550			0.00- 75.90	31.54
6 Freon142b					CAS #: 75-68-3		
6.321	6.321 (0.441)	65	578665	8.00000	8.029	50.00- 150.00	100.00
6.321	6.321 (0.441)	45	172697			0.00- 82.28	29.84
9 Freon 13					CAS #: 75-72-9		
5.251	5.251 (0.366)	85	43573	8.00000	6.342	50.00- 150.00	100.00
5.194	5.194 (0.362)	87	17410			0.00- 98.31	39.96
5.392	5.392 (0.376)	69	551238			1041.20-1141.20	1265.09
13 Freon 134a					CAS #: 811-97-2		
5.476	5.476 (0.382)	83	237986	8.00000	8.533	50.00- 150.00	100.00
5.392	5.392 (0.376)	69	551238			211.97- 311.97	231.63
5.448	5.448 (0.380)	63	37939			0.00- 68.81	15.94
15 Freon 152a					CAS #: 75-37-6		
5.701	5.701 (0.398)	65	157254	8.00000	7.784	50.00- 150.00	100.00
5.814	5.814 (0.406)	51	1072472			612.44- 712.44	682.00
5.701	5.701 (0.398)	47	121682			27.86- 127.86	77.38
17 Freon 22					CAS #: 75-45-6		
5.814	5.814 (0.406)	51	1075692	8.00000	7.780	50.00- 150.00	100.00
5.814	5.814 (0.406)	67	79352			0.00- 57.46	7.38
5.814	5.814 (0.406)	85	9791			0.00- 50.74	0.91
26 Methanol					CAS #: 67-56-1		
7.560	7.560 (0.527)	31	562075	48.0000	38.592	50.00- 150.00	100.00(a)
7.560	7.560 (0.527)	32	1039069			211.65- 311.65	184.86
41 Freon123					CAS #: 306-83-2		
9.937	9.937 (0.693)	83	356475	8.00000	7.779	50.00- 150.00	100.00
9.909	9.909 (0.691)	133	80816			0.00- 74.22	22.67
9.909	9.909 (0.691)	85	249793			20.83- 120.83	70.07
40 Freon123a					CAS #: 354-23-4		
9.771	9.771 (0.682)	117	217493	8.00000	7.911	50.00- 150.00	100.00
9.771	9.771 (0.682)	67	305321			97.50- 197.50	140.38
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.622)	67	501901	8.00000	7.787	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
34 Dichlorofluoromethane/Fr21 (continued)							
8.912	8.912 (0.622)	69	144681			0.00- 78.64	28.83
8.912	8.912 (0.622)	35	41144			0.00- 59.06	8.20
136 Bromobenzene					CAS #: 108-86-1		
23.568	23.568 (1.106)	156	313600	8.00000	8.210	50.00- 150.00	100.00
23.568	23.568 (1.106)	158	293802			46.59- 146.59	93.69
23.568	23.568 (1.106)	77	656430			163.31- 263.31	209.32
158 Butylbenzene					CAS #: 104-51-8		
25.642	25.642 (1.204)	134	266709	8.00000	8.112	50.00- 150.00	100.00
25.642	25.642 (1.204)	91	1080283			346.60- 446.60	405.04
25.642	25.642 (1.204)	92	578264			165.24- 265.24	216.81
149 sec-Butylbenzene					CAS #: 135-98-8		
24.757	24.757 (1.162)	105	1218882	8.00000	8.285	50.00- 150.00	100.00
24.757	24.757 (1.162)	134	229676			0.00- 68.97	18.84
24.757	24.757 (1.162)	91	201217			0.00- 66.36	16.51
148 tert-Butylbenzene					CAS #: 98-06-6		
24.397	24.397 (1.145)	119	792927	8.00000	8.156	50.00- 150.00	100.00
24.397	24.397 (1.145)	134	169568			0.00- 72.11	21.39
24.397	24.397 (1.145)	91	557764			20.04- 120.04	70.34
141 2-Chlorotoluene					CAS #: 95-49-8		
23.844	23.844 (1.119)	126	256307	8.00000	8.260	50.00- 150.00	100.00
23.844	23.844 (1.119)	91	771936			250.64- 350.64	301.18
23.844	23.844 (1.119)	65	102046			0.00- 89.05	39.81
143 4-Chlorotoluene					CAS #: 106-43-4		
24.010	24.010 (1.127)	126	264975	8.00000	8.271	50.00- 150.00	100.00
24.010	24.010 (1.127)	91	791200			253.38- 353.38	298.59
24.010	24.010 (1.127)	63	141252			4.54- 104.54	53.31
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.245	27.245 (1.279)	157	318382	8.00000	8.003	50.00- 150.00	100.00
27.218	27.218 (1.278)	75	366181			71.83- 171.83	115.01
27.245	27.245 (1.279)	155	248402			30.79- 130.79	78.02
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.918	19.918 (1.237)	76	295598	8.00000	8.149	50.00- 150.00	100.00
19.918	19.918 (1.237)	41	331456			64.31- 164.31	112.13
19.918	19.918 (1.237)	78	89581			0.00- 81.79	30.31
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.835	13.835 (0.965)	77	283535	8.00000	7.773	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.835	13.835 (0.965)	79	98045			0.00- 83.22	34.58
13.835	13.835 (0.965)	97	46644			0.00- 66.31	16.45
153 p-Cymene					CAS #: 99-87-6		
24.978	24.978 (1.173)	119	1137667	8.00000	8.288	50.00- 150.00	100.00
24.978	24.978 (1.173)	134	263092			0.00- 73.72	23.13
24.978	24.978 (1.173)	91	295375			0.00- 75.32	25.96
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.467	21.467 (1.008)	131	296363	8.00000	8.100	50.00- 150.00	100.00
21.467	21.467 (1.008)	117	197133			20.13- 120.13	66.52
21.467	21.467 (1.008)	95	118875			0.00- 90.38	40.11
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.623	23.623 (1.109)	110	160438	8.00000	7.763	50.00- 150.00	100.00
23.623	23.623 (1.109)	75	507584			245.11- 345.11	316.37
23.623	23.623 (1.109)	61	172197			51.73- 151.73	107.33
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.227	25.227 (1.184)	120	400845	8.00000	8.427	50.00- 150.00	100.00
25.227	25.227 (1.184)	105	887602			179.57- 279.57	221.43
25.227	25.227 (1.184)	77	115556			0.00- 80.55	28.83
201 Pentachloroethane					CAS #: 76-01-7		
24.563	24.563 (1.153)	167	245966	8.00000	8.510	50.00- 150.00	100.00
24.536	24.536 (1.152)	117	314287			78.93- 178.93	127.78
24.563	24.563 (1.153)	169	111715			0.00- 98.19	45.42
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.052	15.052 (0.935)	110	93909	8.00000	8.005	50.00- 150.00	100.00
15.052	15.052 (0.935)	75	273143			236.31- 336.31	290.86
55 Cyclopentene					CAS #: 142-29-0		
11.209	11.209 (0.782)	67	492967	8.00000	8.314	50.00- 150.00	100.00
11.209	11.209 (0.782)	68	187428			0.00- 88.49	38.02
11.209	11.209 (0.782)	53	168129			0.00- 82.99	34.11

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080504.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-05aug.b/t14q804a.m
Misc Info: 8/48 ppbv (200 ppbv)

Calibration Date: 05-AUG-2008
Calibration Time: 15:45
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	433524	260114	606934	426310	-1.66
97 1,4-Difluorobenze	1378748	827249	1930247	1354142	-1.78
126 Chlorobenzene-d5	1402863	841718	1964008	1285484	-8.37

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-05aug.b/7080504.d

Date : 05-AUG-2008 15:06

Client ID: Level 4

Sample Info: 8mL #1612-99

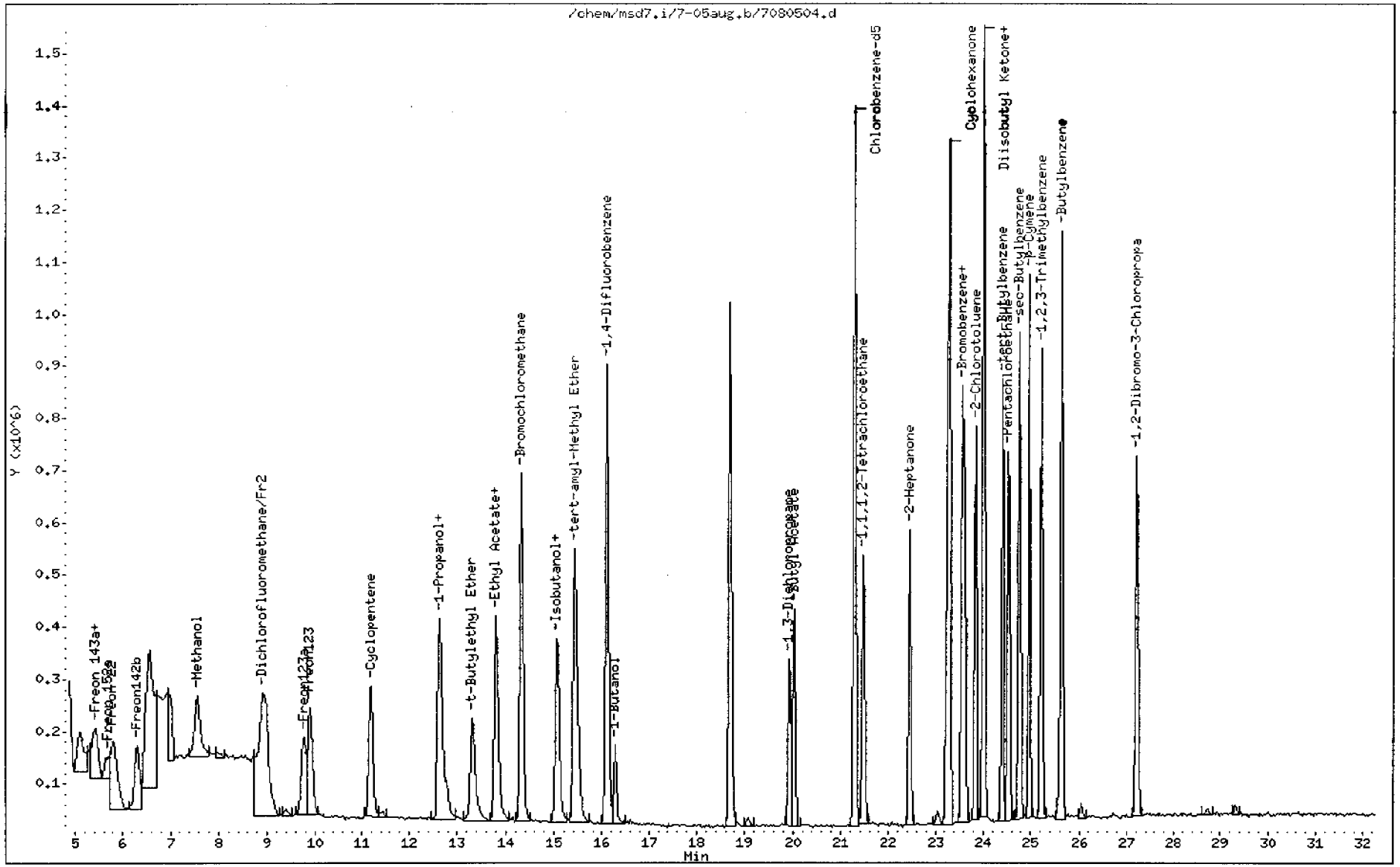
Column phase: RTx-624

Instrument: msd7.i

Operator: ra

Column diameter: 0.53

0507



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080420.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 04-AUG-2008 18:40
Operator : dfm Inst ID: msd7.i
Smp Info : 25mL #1612-91
Misc Info : 25ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:06 sscott Quant Type: ISTD
Cal Date : 04-AUG-2008 18:40 Cal File: 7080420.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	473443	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	352920			27.26- 127.26	74.54
14.347	14.347 (1.000)	49	1375138			253.14- 353.14	290.45
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1425500	25.0000		50.00- 150.00	100.00
16.117	16.117 (1.000)	88	244886			0.00- 67.42	17.18
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1534014	25.0000		50.00- 150.00	100.00
21.315	21.315 (1.000)	82	781109			1.03- 101.03	50.92
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.425	15.425 (1.075)	65	882805	25.0000	24.685	50.00- 150.00	100.00
15.425	15.425 (1.075)	67	420420			0.00- 97.37	47.62
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1407495	25.0000	25.793	50.00- 150.00	100.00
18.716	18.716 (1.161)	70	196828			0.00- 63.85	13.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.161)	100	1064273			26.51- 126.51	75.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	780546	25.0000	24.728	50.00- 150.00	100.00
23.278	23.278 (1.092)	95	1093521			89.41- 189.41	140.10
23.278	23.278 (1.092)	176	775439			45.98- 145.98	99.35
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.391)	41	1060049	25.0000	26.259	50.00- 150.00	100.00
5.637	5.637 (0.393)	42	703339			16.57- 116.57	66.35
5.610	5.610 (0.391)	39	836468			28.60- 128.60	78.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.401)	85	3084268	25.0000	26.352	50.00- 150.00	100.00
5.776	5.776 (0.403)	87	949018			0.00- 81.85	30.77
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.433)	135	1767430	25.0000	28.269	50.00- 150.00	100.00
6.218	6.218 (0.433)	137	541235			0.00- 84.02	30.62
18 Chloromethane					CAS #: 74-87-3		
6.550	6.550 (0.457)	50	1329327	25.0000	26.702	50.00- 150.00	100.00
6.550	6.550 (0.457)	52	410126			0.00- 81.05	30.85
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.480)	62	1301372	25.0000	26.343	50.00- 150.00	100.00
6.882	6.882 (0.480)	64	380611			0.00- 84.96	29.25
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.484)	54	1166225	25.0000	25.069	50.00- 150.00	100.00
6.937	6.937 (0.484)	39	1195076			46.88- 146.88	102.47
25 Bromomethane					CAS #: 74-83-9		
8.015	8.015 (0.559)	94	778317	25.0000	25.512	50.00- 150.00	100.00
8.015	8.015 (0.559)	96	702096			41.33- 141.33	90.21
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.582)	64	604484	25.0000	26.314	50.00- 150.00	100.00
8.347	8.347 (0.582)	49	238798			0.00- 94.43	39.50
8.347	8.347 (0.582)	66	164357			0.00- 79.28	27.19
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.955 (0.624)	101	3134551	25.0000	26.954	50.00- 150.00	100.00
8.955	8.955 (0.624)	103	2025989			15.68- 115.68	64.63

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.398	9.398 (0.655)	45	506084	25.0000	26.246	50.00- 150.00	100.00
9.425	9.425 (0.657)	43	114107			0.00- 73.90	22.55
9.425	9.425 (0.657)	46	199554			0.00- 88.16	39.43
42 Freon 113					CAS #: 76-13-1		
10.172	10.172 (0.709)	151	1266184	25.0000	27.113	50.00- 150.00	100.00
10.172	10.172 (0.709)	153	786352			16.40- 116.40	62.10
10.172	10.172 (0.709)	101	1862441			100.01- 200.01	147.09
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.283	10.283 (0.717)	61	2253539	25.0000	27.749	50.00- 150.00	100.00
10.310	10.310 (0.719)	96	798317			0.00- 86.92	35.43
10.310	10.310 (0.719)	98	501009			0.00- 74.85	22.23
45 Acetone					CAS #: 67-64-1		
10.448	10.448 (0.728)	58	605336	25.0000	26.406	50.00- 150.00	100.00
10.448	10.448 (0.728)	43	2392435			340.42- 440.42	395.22
46 2-Propanol					CAS #: 67-63-0		
10.642	10.642 (0.742)	45	2564737	25.0000	26.366	50.00- 150.00	100.00
10.642	10.642 (0.742)	43	637584			0.00- 76.39	24.86
10.642	10.642 (0.742)	59	86836			0.00- 53.62	3.39
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.757)	76	2631844	25.0000	26.390	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.112	11.112 (0.775)	76	415920	25.0000	25.614	50.00- 150.00	100.00
11.112	11.112 (0.775)	41	1831577			377.54- 477.54	440.37
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.798)	49	1855631	25.0000	26.118	50.00- 150.00	100.00
11.444	11.444 (0.798)	84	685710			0.00- 86.35	36.95
11.444	11.444 (0.798)	51	567043			0.00- 80.54	30.56
60 MTBE					CAS #: 1634-04-4		
11.776	11.776 (0.821)	73	1568554	25.0000	26.711	50.00- 150.00	100.00
11.776	11.776 (0.821)	57	524675			0.00- 84.58	33.45
11.776	11.776 (0.821)	41	555758			0.00- 86.33	35.43
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.886	11.886 (0.828)	96	912918	25.0000	26.815	50.00- 150.00	100.00
11.886	11.886 (0.828)	61	2145286			183.94- 283.94	234.99
11.886	11.886 (0.828)	98	570732			13.50- 113.50	62.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.246	12.246 (0.854)	57	2188711	25.0000	27.622	50.00- 150.00	100.00
12.246	12.246 (0.854)	43	1471200			20.34- 120.34	67.22
12.246	12.246 (0.854)	86	219521			0.00- 61.25	10.03
69 Vinyl Acetate					CAS #: 108-05-4		
12.743	12.743 (0.888)	86	199312	25.0000	25.590	50.00- 150.00	100.00
12.743	12.743 (0.888)	43	4022941			1872.40-1972.40	2018.41
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.771	12.771 (0.890)	63	2415074	25.0000	28.135	50.00- 150.00	100.00
12.771	12.771 (0.890)	65	694503			0.00- 81.43	28.76
75 2-Butanone					CAS #: 78-93-3		
13.822	13.822 (0.963)	72	374480	25.0000	25.064	50.00- 150.00	100.00
13.822	13.822 (0.963)	43	2765951			602.07- 702.07	738.61
13.822	13.822 (0.963)	57	197410			0.00- 97.16	52.72
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.877	13.877 (0.967)	61	1756719	25.0000	27.281	50.00- 150.00	100.00
13.877	13.877 (0.967)	96	818176			0.00- 97.05	46.57
13.877	13.877 (0.967)	98	504787			0.00- 80.30	28.73
80 Tetrahydrofuran					CAS #: 109-99-9		
14.319	14.319 (0.998)	42	1452812	25.0000	27.540	50.00- 150.00	100.00
14.319	14.319 (0.998)	71	352220			0.00- 76.49	24.24
14.347	14.347 (1.000)	72	372818			0.00- 78.71	25.66
82 Chloroform					CAS #: 67-66-3		
14.430	14.430 (1.006)	83	1712363	25.0000	26.019	50.00- 150.00	100.00
14.430	14.430 (1.006)	85	1252189			20.65- 120.65	73.13
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.789	14.789 (1.031)	97	1873922	25.0000	27.888	50.00- 150.00	100.00
14.789	14.789 (1.031)	99	1181223			14.99- 114.99	63.03
85 Cyclohexane					CAS #: 110-82-7		
14.789	14.789 (1.031)	84	944212	25.0000	26.748	50.00- 150.00	100.00
14.789	14.789 (1.031)	56	1862985			145.33- 245.33	197.31
14.789	14.789 (1.031)	41	1150408			73.65- 173.65	121.84
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.038	15.038 (1.048)	119	2096615	25.0000	27.325	50.00- 150.00	100.00
15.038	15.038 (1.048)	117	2241740			55.00- 155.00	106.92
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	2141622	25.0000	27.593	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.453	15.453 (0.959)	77	475679			0.00- 71.75	22.21
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	5166040	25.0000	27.358	50.00- 150.00	100.00
15.370	15.370 (1.071)	56	1711990			0.00- 82.54	33.14
15.370	15.370 (1.071)	41	1550426			0.00- 80.37	30.01
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.564	15.564 (0.966)	62	1652083	25.0000	28.801	50.00- 150.00	100.00
15.564	15.564 (0.966)	64	506309			0.00- 82.49	30.65
94 Heptane					CAS #: 142-82-5		
15.674	15.674 (0.973)	71	721266	25.0000	28.738	50.00- 150.00	100.00
15.674	15.674 (0.973)	43	2052385			238.48- 338.48	284.55
15.674	15.674 (0.973)	57	1091655			102.27- 202.27	151.35
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.029)	95	954412	25.0000	28.704	50.00- 150.00	100.00
16.587	16.587 (1.029)	130	957176			54.15- 154.15	100.29
16.587	16.587 (1.029)	97	603803			16.17- 116.17	63.26
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.057	17.057 (1.058)	63	1073661	25.0000	28.962	50.00- 150.00	100.00
17.057	17.057 (1.058)	62	773675			21.69- 121.69	72.06
17.057	17.057 (1.058)	41	870310			32.68- 132.68	81.06
106 1,4-Dioxane					CAS #: 123-91-1		
17.195	17.195 (1.067)	88	514160	25.0000	27.109	50.00- 150.00	100.00
17.195	17.195 (1.067)	58	527273			48.37- 148.37	102.55
17.195	17.195 (1.067)	57	181938			0.00- 86.44	35.39
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.086)	83	1735564	25.0000	28.828	50.00- 150.00	100.00
17.499	17.499 (1.086)	85	1225558			20.11- 120.11	70.61
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.134)	75	1244108	25.0000	29.130	50.00- 150.00	100.00
18.273	18.273 (1.134)	77	400397			0.00- 85.03	32.18
18.273	18.273 (1.134)	39	1167788			43.00- 143.00	93.87
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.146)	58	988005	25.0000	29.868	50.00- 150.00	100.00
18.467	18.467 (1.146)	43	2902386			244.73- 344.73	293.76
18.467	18.467 (1.146)	85	298616			0.00- 81.51	30.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.168)	91	2393184	25.0000	27.815	50.00- 150.00	100.00
18.826	18.826 (1.168)	92	1477330			10.54- 110.54	61.73
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	1425479	25.0000	28.710	50.00- 150.00	100.00
19.269	19.269 (0.904)	77	443190			0.00- 80.88	31.09
19.269	19.269 (0.904)	39	1189712			33.61- 133.61	83.46
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.600	19.600 (0.920)	97	876619	25.0000	27.721	50.00- 150.00	100.00
19.600	19.600 (0.920)	99	555241			12.31- 112.31	63.34
19.600	19.600 (0.920)	83	724446			34.26- 134.26	82.64
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	1124559	25.0000	27.134	50.00- 150.00	100.00
19.794	19.794 (0.929)	129	969134			35.18- 135.18	86.18
19.794	19.794 (0.929)	131	953548			33.48- 133.48	84.79
121 2-Hexanone					CAS #: 591-78-6		
19.905	19.905 (0.934)	58	1363812	25.0000	28.413	50.00- 150.00	100.00
19.905	19.905 (0.934)	43	2904837			161.51- 261.51	212.99
19.905	19.905 (0.934)	100	183528			0.00- 63.21	13.46
122 Dibromochloromethane					CAS #: 124-48-1		
20.319	20.319 (0.953)	129	1910985	25.0000	28.862	50.00- 150.00	100.00
20.319	20.319 (0.953)	127	1469691			29.59- 129.59	76.91
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	1662573	25.0000	27.782	50.00- 150.00	100.00
20.568	20.568 (0.965)	109	1529256			39.77- 139.77	91.98
127 Chlorobenzene					CAS #: 108-90-7		
21.370	21.370 (1.003)	112	2105598	25.0000	26.856	50.00- 150.00	100.00
21.370	21.370 (1.003)	114	675763			0.00- 83.15	32.09
21.342	21.342 (1.001)	77	1304963			21.80- 121.80	61.98
128 Ethyl Benzene					CAS #: 100-41-4		
21.453	21.453 (1.006)	106	1166220	25.0000	27.276	50.00- 150.00	100.00
21.453	21.453 (1.006)	91	3600856			261.34- 361.34	308.76
129 m,p-Xylene					CAS #: 108-38-3		
21.646	21.646 (1.016)	106	1469925	25.0000	26.869	50.00- 150.00	100.00
21.646	21.646 (1.016)	91	2922245			147.02- 247.02	198.80
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	1358356	25.0000	26.841	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.338	22.338 (1.048)	91	2867306			158.66- 258.66	211.09
131 Styrene					CAS #: 100-42-5		
22.365	22.365 (1.049)	104	2233840	25.0000	28.986	50.00- 150.00	100.00
22.365	22.365 (1.049)	78	1153607			10.48- 110.48	51.64
133 Bromoform					CAS #: 75-25-2		
22.780	22.780 (1.069)	173	1605197	25.0000	28.127	50.00- 150.00	100.00
22.780	22.780 (1.069)	171	834375			2.34- 102.34	51.98
134 Cumene					CAS #: 98-82-8		
22.918	22.918 (1.075)	105	3906428	25.0000	26.392	50.00- 150.00	100.00
22.918	22.918 (1.075)	120	1085614			0.00- 77.95	27.79
22.891	22.891 (1.074)	51	631012			0.00- 67.08	16.15
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.499	23.499 (1.102)	83	2032459	25.0000	25.918	50.00- 150.00	100.00
23.499	23.499 (1.102)	85	1445894			21.97- 121.97	71.14
142 Propylbenzene					CAS #: 103-65-1		
23.582	23.582 (1.106)	91	4800090	25.0000	26.034	50.00- 150.00	100.00
23.582	23.582 (1.106)	120	1141124			0.00- 73.91	23.77
23.582	23.582 (1.106)	105	178481			0.00- 54.14	3.72
145 4-Ethyltoluene					CAS #: 622-96-8		
23.776	23.776 (1.115)	105	4446443	25.0000	25.169	50.00- 150.00	100.00
23.776	23.776 (1.115)	120	1432168			0.00- 82.75	32.21
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.858	23.858 (1.119)	105	3413130	25.0000	23.613	50.00- 150.00	100.00
23.858	23.858 (1.119)	120	1720086			1.24- 101.24	50.40
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.494	24.494 (1.149)	105	3378598	25.0000	23.709	50.00- 150.00	100.00
24.494	24.494 (1.149)	120	1594644			0.00- 97.02	47.20
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.075	25.075 (1.176)	146	2207986	25.0000	23.757	50.00- 150.00	100.00
25.075	25.075 (1.176)	148	1374657			12.07- 112.07	62.26
25.075	25.075 (1.176)	111	979910			0.00- 94.74	44.38
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.241	25.241 (1.184)	146	2288597	25.0000	23.467	50.00- 150.00	100.00
25.241	25.241 (1.184)	148	1420258			13.30- 113.30	62.06
25.213	25.213 (1.183)	111	965353			0.00- 92.03	42.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.434	25.434 (1.193)	91	3494996	25.0000	24.471	50.00- 150.00	100.00
25.434	25.434 (1.193)	126	700943			0.00- 69.83	20.06
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.877	25.877 (1.214)	146	2152170	25.0000	22.925	50.00- 150.00	100.00
25.877	25.877 (1.214)	148	1346004			12.84- 112.84	62.54
25.877	25.877 (1.214)	111	983752			0.00- 95.15	45.71
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.752	28.752 (1.349)	180	738948	25.0000	17.611	50.00- 150.00	100.00
28.752	28.752 (1.349)	182	705765			44.64- 144.64	95.51
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.946	28.946 (1.358)	225	719262	25.0000	20.538	50.00- 150.00	100.00
28.946	28.946 (1.358)	223	455408			13.71- 113.71	63.32
167 Naphthalene					CAS #: 91-20-3		
29.305	29.305 (1.375)	128	1440272	25.0000	15.982	50.00- 150.00	100.00
29.305	29.305 (1.375)	127	178520			0.00- 62.37	12.39
29 Isopentane					CAS #: 78-78-4		
8.347	8.347 (0.582)	43	1797079	25.0000	26.892	50.00- 150.00	100.00
8.347	8.347 (0.582)	57	1165194			17.61- 117.61	64.84
19 Butane					CAS #: 106-97-8		
6.743	6.743 (0.470)	58	241605	25.0000	24.413	50.00- 150.00	100.00
6.743	6.743 (0.470)	43	2199824			787.53- 887.53	910.50
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.863	16.863 (1.175)	83	1180793	25.0000	27.254	50.00- 150.00	100.00
16.863	16.863 (1.175)	98	550350			0.00- 97.34	46.61
16.863	16.863 (1.175)	55	1707011			95.79- 195.79	144.56
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.472	11.472 (0.800)	59	1407508	25.0000	27.168	50.00- 150.00	100.00
11.444	11.444 (0.798)	41	343948			0.00- 74.69	24.44
11.444	11.444 (0.798)	57	145359			0.00- 61.62	10.33

Report Date: 05-Aug-2008 12:06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

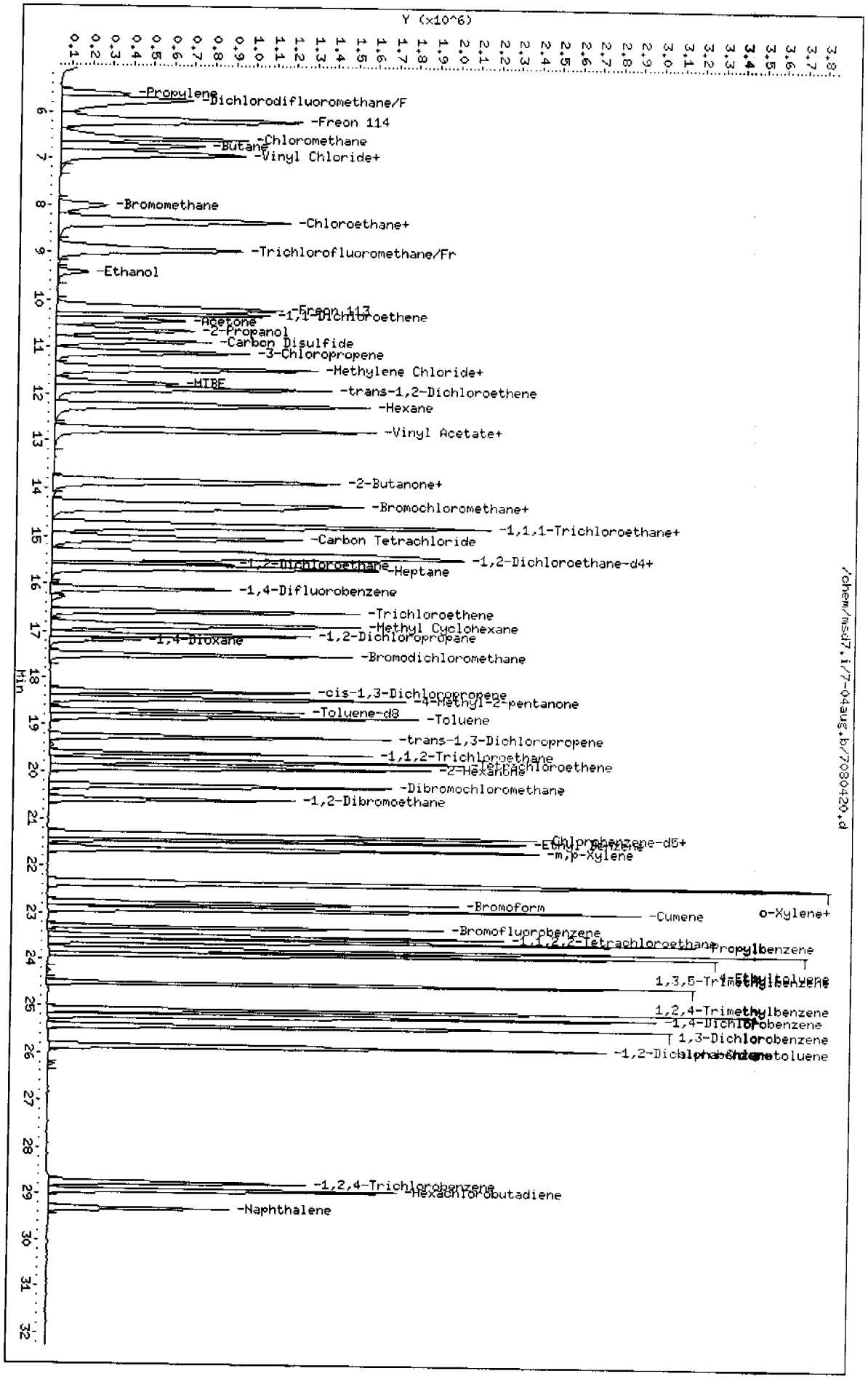
Instrument ID: msd7.i
Lab File ID: 7080420.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 25ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	473443	1.63
97 1,4-Difluorobenze	1452055	871233	2032877	1425500	-1.83
126 Chlorobenzene-d5	1558716	935230	2182202	1534014	-1.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/7-04aug.b/7080420.d
Date : 04-AUG-2008 18:40
Client ID: Level 4
Sample Info: 25mL #1612-91

Column phase: RTX-624

Instrument: msd7.i

Operator: dfm

Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-27aug.b/7082704.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 27-AUG-2008 10:42
Operator : ra Inst ID: msd7.i
Smp Info : 50mL #1541-251
Misc Info : 50ppbv (200ppbv)
Comment :
Method : /chem/msd7.i/7-27aug.b/t14q804c.m
Meth Date : 27-Aug-2008 15:17 rallen Quant Type: ISTD
Cal Date : 27-AUG-2008 10:42 Cal File: 7082704.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp2c.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.320	14.347 (1.000)	130	289482	25.0000		50.00- 150.00	100.00
14.320	14.347 (1.000)	128	221286			26.80- 126.80	76.44
14.320	14.347 (1.000)	49	653837			216.97- 316.97	225.86
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.089	16.089 (1.000)	114	931362	25.0000		50.00- 150.00	100.00
16.089	16.089 (1.000)	88	153562			0.00- 67.09	16.49
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	918470	25.0000		50.00- 150.00	100.00
21.287	21.315 (1.000)	82	470387			1.24- 101.24	51.21
204 Propylene Oxide					CAS #: 75-56-9		
9.840	9.868 (0.687)	58	68666	50.0000	40.972	50.00- 150.00	100.00
9.840	9.868 (0.687)	43	72878			77.34- 177.34	106.13
9.840	9.868 (0.687)	57	10352			0.00- 80.14	15.08
152 D-Limonene					CAS #: 5989-27-5		
24.882	24.882 (1.167)	68	1949177	50.0000	55.263	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
152 D-Limonene (continued)							
24.882	24.882 (1.167)	93	1409073			23.79- 123.79	72.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7082704.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-27aug.b/t14q804c.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 27-AUG-2008
Calibration Time: 10:42
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	289482	173689	405275	289482	0.00
97 1,4-Difluorobenze	931362	558817	1303907	931362	0.00
126 Chlorobenzene-d5	918470	551082	1285858	918470	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.32	13.99	14.65	14.32	0.00
97 1,4-Difluorobenze	16.09	15.76	16.42	16.09	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

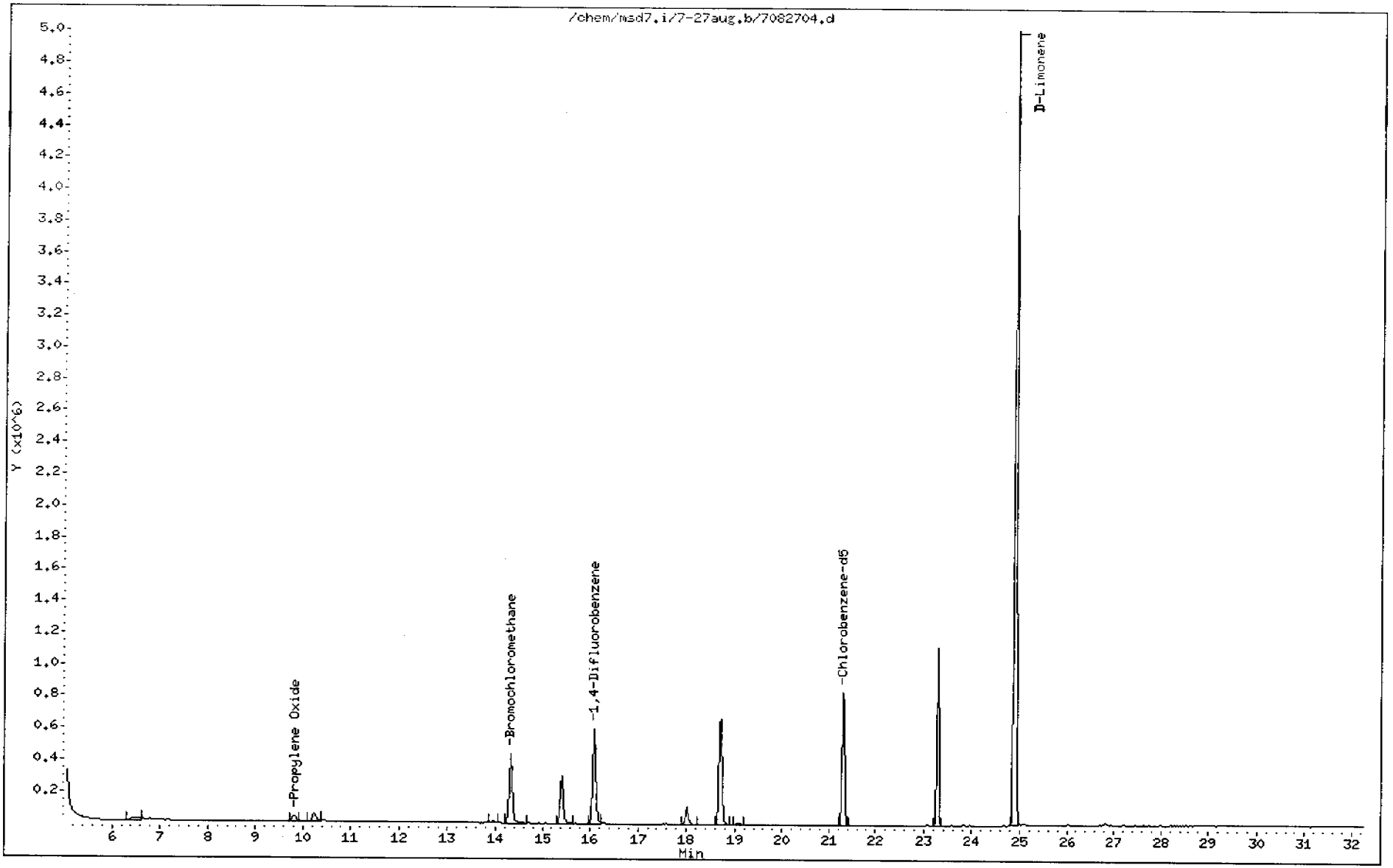
Data File: /chem/msd7.i/7-27aug.b/7082704.d
Date : 27-AUG-2008 10:42
Client ID: Level 5
Sample Info: 50mL #1541-251

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0521



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-24aug.b/7082405.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 24-AUG-2008 12:12
Operator : smd
Inst ID: msd7.i
Smp Info : 50mL #1541-242
Misc Info : 50ppbv (200ppbv)
Comment :
Method : /chem/msd7.i/7-24aug.b/t14q804b.m
Meth Date : 24-Aug-2008 13:23 sdisher
Quant Type: ISTD
Cal Date : 24-AUG-2008 12:12
Cal File: 7082405.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp19b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	355343	25.0000		80.00- 120.00	100.00
14.347	14.347 (1.000)	128	276867			27.92- 127.92	77.92
14.320	14.320 (1.000)	49	885570			199.22- 299.22	249.22
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.089	16.089 (1.000)	114	1128857	25.0000		80.00- 120.00	100.00
16.089	16.089 (1.000)	88	193689			0.00- 67.16	17.16
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1170645	25.0000		80.00- 120.00	100.00
21.287	21.287 (1.000)	82	595554			1.08- 101.08	50.87
21 Isobutane					CAS #: 75-28-5		
6.246	6.246 (0.435)	43	3708115	50.0000	52.253	80.00- 120.00	100.00
6.246	6.246 (0.435)	42	1257649			0.00- 84.88	33.92
6.246	6.246 (0.435)	58	86805			0.00- 52.64	2.34
35 1-Pentene					CAS #: 109-67-1		
8.928	8.928 (0.622)	55	2573430	50.0000	52.078	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
35 1-Pentene (continued)							
8.928	8.928 (0.622)	42	3206875			73.58- 173.58	124.61
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
37 Pentane					CAS #: 109-66-0		
9.038	9.038 (0.630)	43	4537489	50.0000	51.872	80.00- 120.00	100.00
9.038	9.038 (0.630)	57	640954			0.00- 64.92	14.13
9.038	9.038 (0.630)	72	263938			0.00- 56.13	5.82
39 Ethyl Ether					CAS #: 60-29-7		
9.619	9.619 (0.670)	74	749366	50.0000	53.565	80.00- 120.00	100.00
9.619	9.619 (0.670)	59	1620926			158.16- 258.16	216.31
0.000	1.000 (0.000)	31	0			0.00- 50.00	0.00
44 Acrolein					CAS #: 107-02-8		
10.117	10.117 (0.705)	55	753441	50.0000	53.079	80.00- 120.00	100.00
10.117	10.117 (0.705)	56	1018172			80.85- 180.85	135.14
48 Ethyl acrylate					CAS #: 140-88-5		
16.642	16.642 (0.781)	99	185156	50.0000	52.820	80.00- 120.00	100.00
16.614	16.614 (0.779)	45	449301			192.66- 292.66	242.66
16.614	16.614 (0.779)	55	4472619			2365.59-2465.59	2415.59
49 Iodomethane					CAS #: 74-88-4		
10.725	10.725 (0.748)	142	3999000	50.0000	56.186	80.00- 120.00	100.00
10.725	10.725 (0.748)	127	1903442			0.00- 97.35	47.60
50 Methyl Methacrylate					CAS #: 80-62-6		
17.057	17.057 (0.800)	41	2988656	50.0000	54.807	80.00- 120.00	100.00
17.057	17.057 (0.800)	69	1289283			0.00- 93.65	43.14
17.057	17.057 (0.800)	100	537305			0.00- 67.48	17.98
52 Acetonitrile					CAS #: 75-05-8		
11.195	11.195 (0.780)	40	1089904	50.0000	49.667	80.00- 120.00	100.00
11.195	11.195 (0.780)	41	2050558			130.28- 230.28	188.14
11.195	11.195 (0.780)	38	273971			0.00- 74.99	25.14
56 Cyclopentane					CAS #: 287-92-3		
11.416	11.416 (0.796)	70	924807	50.0000	52.931	80.00- 120.00	100.00
11.416	11.416 (0.796)	55	2033316			169.16- 269.16	219.86
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
62 Acrylonitrile					CAS #: 107-13-1		
11.969	11.969 (0.834)	52	1726271	50.0000	52.505	80.00- 120.00	100.00
11.969	11.969 (0.834)	53	2108661			69.80- 169.80	122.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
63 2-Pentanone					CAS #: 107-87-9		
16.836	16.836 (0.790)	43	5724510	50.0000	55.984	80.00- 120.00	100.00
16.836	16.836 (0.790)	58	375045			0.00- 57.02	6.55
16.863	16.863 (0.791)	86	596684			0.00- 60.89	10.42
66 1-Hexene					CAS #: 592-41-6		
12.108	12.108 (0.844)	55	1667391	50.0000	53.409	80.00- 120.00	100.00
12.108	12.108 (0.844)	41	2679517			115.90- 215.90	160.70
12.108	12.108 (0.844)	84	387376			0.00- 73.54	23.23
79 Methyl Acrylate					CAS #: 96-33-3		
13.932	13.932 (0.971)	55	4074891	50.0000	55.640	80.00- 120.00	100.00
13.932	13.932 (0.971)	85	434215			0.00- 60.83	10.66
13.932	13.932 (0.971)	58	348813			0.00- 58.84	8.56
100 trans-1,4-dichloro-2-butene					CAS #: 110-57-6		
23.582	23.582 (1.106)	75	500818	50.0000	50.103	80.00- 120.00	100.00
23.582	23.582 (1.106)	89	277812			4.06- 104.06	55.47
23.582	23.582 (1.106)	53	681270			88.96- 188.96	136.03
103 Alphamethylstyrene					CAS #: 98-83-9		
24.246	24.246 (1.137)	118	3038795	50.0000	51.026	80.00- 120.00	100.00
24.246	24.246 (1.137)	103	1604617			4.10- 104.10	52.80
105 Dibromomethane					CAS #: 74-95-3		
17.306	17.306 (0.812)	174	1326045	50.0000	52.084	80.00- 120.00	100.00
17.306	17.306 (0.812)	93	1595886			70.54- 170.54	120.35
17.306	17.306 (0.812)	95	1291410			47.14- 147.14	97.39
124 Nonane					CAS #: 111-84-2		
21.425	21.425 (1.005)	43	5045805	50.0000	49.774	80.00- 120.00	100.00
21.425	21.425 (1.005)	57	4150754			32.92- 132.92	82.26
21.425	21.425 (1.005)	85	1034220			0.00- 70.84	20.50
151 bis(2-chloroethyl)ether					CAS #: 111-44-4		
24.854	24.854 (1.166)	93	3170966	50.0000	47.417	80.00- 120.00	100.00
24.854	24.854 (1.166)	95	1005773			0.00- 81.96	31.72

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

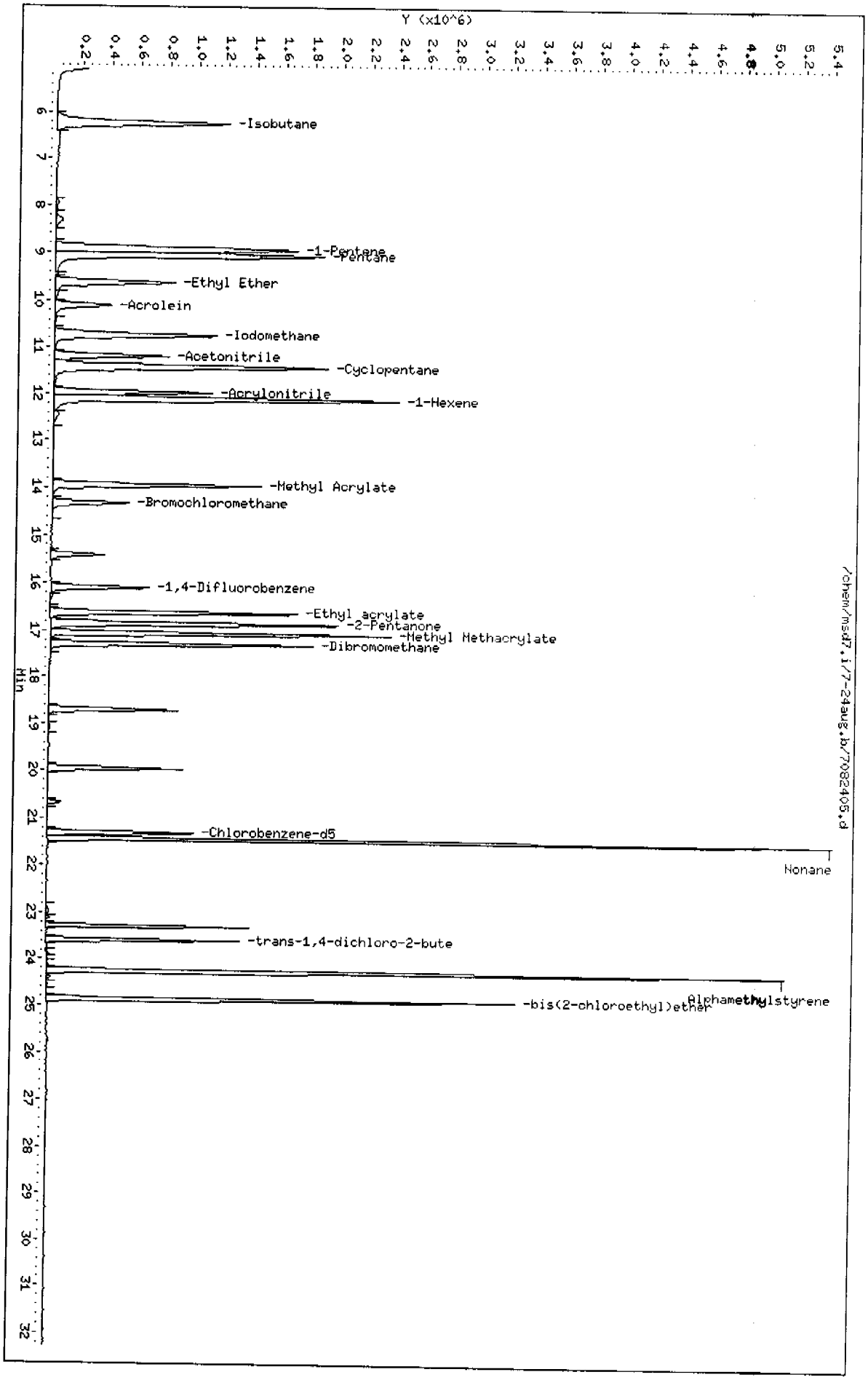
Instrument ID: msd7.i
Lab File ID: 7082405.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/7-24aug.b/t14q804b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 24-AUG-2008
Calibration Time: 12:12
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355343	213206	497480	355343	0.00
97 1,4-Difluorobenze	1128857	677314	1580400	1128857	0.00
126 Chlorobenzene-d5	1170645	702387	1638903	1170645	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.09	15.76	16.42	16.09	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.


Data File: /chem/msd7.i/7-24aug.b/7082405.d
Date : 24-AUG-2008 12:12
Client ID: Level 5
Sample Info: 50mL #1541-242
Column phase: RTx-624
Instrument: msd7.i
Operator: smd
Column diameter: 0.53
Y (x10^6)
Min
-Isobutane
-1-Pentene
-Pentane
-Ethyl Ether
-Acrolein
-Iodomethane
-Acetonitrile
-Cyclopentane
-Acrylonitrile
-1-Hexene
-Methyl Acrylate
-Bromochloromethane
-1,4-Difluorobenzene
-Ethyl acrylate
-2-Pentanone
-Methyl Methacrylate
-Dibromomethane
-Chlorobenzene-d5
Nonane
-trans-1,4-dichloro-2-bute
-bis(2-chloroethyl)ether
Alphamethylstyrene
/chem/msd7.i/7-24aug.b/7082405.d

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05aug.b/7080505.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 05-AUG-2008 15:45
Operator : ra
Inst ID: msd7.i
Smp Info : 50mL #1612-99
Misc Info : 50/300 ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-05aug.b/t14q804a.m
Meth Date : 05-Aug-2008 17:38 sruth
Quant Type: ISTD
Cal Date : 05-AUG-2008 15:45
Cal File: 7080505.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp37a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	433524	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	343295			29.19- 129.19	79.19
14.333	14.333 (1.000)	49	1063263			195.26- 295.26	245.26
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1378748	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	235471			0.00- 67.08	17.08
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1402863	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	736678			1.44- 101.44	52.51
96 2-Heptanone					CAS #: 110-43-0		
22.462	22.462 (1.567)	58	3326187	50.0000	63.048	80.00- 120.00	100.00
22.462	22.462 (1.567)	43	5950065			134.40- 234.40	178.89
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.010	24.010 (1.127)	57	5739413	50.0000	52.171	80.00- 120.00	100.00
24.038	24.038 (1.129)	85	3224555			6.18- 106.18	56.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
146 Diisobutyl Ketone (continued)							
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
99 Isobutanol					CAS #: 78-83-1		
15.080	15.080 (1.052)	59	57268	50.0000	46.643	80.00- 120.00	100.00
15.080	15.080 (1.052)	41	1285494			1738.39-1838.39	2244.70
15.080	15.080 (1.052)	43	1661858			2172.15-2272.15	2901.90
98 1-Butanol					CAS #: 71-36-3		
16.269	16.269 (1.010)	56	1412513	50.0000	58.294	80.00- 120.00	100.00
16.269	16.269 (1.010)	41	1119312			27.33- 127.33	79.24
16.269	16.269 (1.010)	43	854616			9.34- 109.34	60.50
71 1-Propanol					CAS #: 71-23-8		
12.785	12.785 (0.892)	42	483542	50.0000	55.017	80.00- 120.00	100.00
12.785	12.785 (0.892)	59	523025			101.28- 201.28	108.17
12.646	12.646 (0.882)	41	1676044			307.14- 407.14	346.62
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.310	13.310 (0.929)	59	4719161	50.0000	53.189	80.00- 120.00	100.00
13.338	13.338 (0.931)	87	1253774			0.00- 76.06	26.57
13.310	13.310 (0.929)	41	924785			0.00- 69.79	19.60
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.494	15.494 (1.081)	73	2532942	50.0000	50.362	80.00- 120.00	100.00
15.494	15.494 (1.081)	87	624357			0.00- 75.36	24.65
15.494	15.494 (1.081)	55	1028512			0.00- 93.69	40.61
68 Isopropyl ether					CAS #: 108-20-3		
12.646	12.646 (0.882)	45	8727833	50.0000	54.495	80.00- 120.00	100.00
12.646	12.646 (0.882)	87	1238637			0.00- 64.22	14.19
12.646	12.646 (0.882)	59	783057			0.00- 60.75	8.97
119 Butyl Acetate					CAS #: 123-86-4		
20.029	20.029 (1.244)	56	2146422	50.0000	59.768	80.00- 120.00	100.00
20.029	20.029 (1.244)	73	498489			0.00- 73.22	23.22
20.029	20.029 (1.244)	43	5807195			220.55- 320.55	270.55
77 Ethyl Acetate					CAS #: 141-78-6		
13.808	13.808 (0.963)	70	328857	50.0000	54.384	80.00- 120.00	100.00
13.808	13.808 (0.963)	45	766166			169.70- 269.70	232.98
13.808	13.808 (0.963)	61	1131690			269.98- 369.98	344.13
135 Cyclohexanone					CAS #: 108-94-1		
23.236	23.236 (1.091)	55	2836788	50.0000	56.946	80.00- 120.00	100.00
23.236	23.236 (1.091)	98	698662			0.00- 74.73	24.63

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)							
23.236	23.236 (1.091)	42	2080682			21.19- 121.19	73.35
5 Freon 143a					CAS #: 420-46-2		
5.279	5.279 (0.368)	65	746449	50.0000	50.299	80.00- 120.00	100.00
5.251	5.251 (0.366)	69	5349932			439.02- 539.02	716.72
5.279	5.279 (0.368)	64	189246			0.00- 75.72	25.35
6 Freon142b					CAS #: 75-68-3		
6.293	6.293 (0.439)	65	3692852	50.0000	50.255	80.00- 120.00	100.00
6.293	6.293 (0.439)	45	1128009			0.00- 81.70	30.55
9 Freon 13					CAS #: 75-72-9		
5.223	5.223 (0.364)	85	870074	50.0000	83.194	80.00- 120.00	100.00
5.223	5.223 (0.364)	87	273596			0.00- 92.69	31.45
5.251	5.251 (0.366)	69	5349932			882.43- 982.43	614.88
13 Freon 134a					CAS #: 811-97-2		
5.420	5.420 (0.378)	83	1455769	50.0000	50.879	80.00- 120.00	100.00
5.251	5.251 (0.366)	69	5349932			247.14- 347.14	367.50
5.420	5.420 (0.378)	63	250727			0.00- 68.28	17.22
15 Freon 152a					CAS #: 75-37-6		
5.645	5.645 (0.394)	65	1017752	50.0000	49.695	80.00- 120.00	100.00
5.645	5.645 (0.394)	51	1923580			454.63- 554.63	189.00
5.645	5.645 (0.394)	47	770199			27.13- 127.13	75.68
17 Freon 22					CAS #: 75-45-6		
5.786	5.786 (0.404)	51	5194827	50.0000	40.470	80.00- 120.00	100.00
5.786	5.786 (0.404)	67	453980			0.00- 57.89	8.74
5.786	5.786 (0.404)	85	36473			0.00- 50.73	0.70
26 Methanol					CAS #: 67-56-1		
7.560	7.560 (0.527)	31	3362831	300.000	247.08	80.00- 120.00	100.00
7.560	7.560 (0.527)	32	2231874			16.37- 116.37	66.37
41 Freon123					CAS #: 306-83-2		
9.909	9.909 (0.691)	83	2379420	50.0000	50.700	80.00- 120.00	100.00
9.937	9.937 (0.693)	133	526466			0.00- 73.53	22.13
9.909	9.909 (0.691)	85	1751203			21.75- 121.75	73.60
40 Freon123a					CAS #: 354-23-4		
9.771	9.771 (0.682)	117	1466113	50.0000	51.601	80.00- 120.00	100.00
9.771	9.771 (0.682)	67	2043153			94.79- 194.79	139.36
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.622)	67	3316498	50.0000	50.398	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
34 Dichlorofluoromethane/Fr21 (continued)							
8.912	8.912 (0.622)	69	957957			0.00- 78.72	28.88
8.912	8.912 (0.622)	35	277168			0.00- 58.83	8.36
136 Bromobenzene					CAS #: 108-86-1		
23.568	23.568 (1.106)	156	2072213	50.0000	49.806	80.00- 120.00	100.00
23.568	23.568 (1.106)	158	1964017			44.78- 144.78	94.78
23.568	23.568 (1.106)	77	4390680			162.84- 262.84	211.88
158 Butylbenzene					CAS #: 104-51-8		
25.642	25.642 (1.204)	134	1586778	50.0000	45.995	80.00- 120.00	100.00
25.642	25.642 (1.204)	91	6524218			361.16- 461.16	411.16
25.642	25.642 (1.204)	92	3589005			168.89- 268.89	226.18
149 sec-Butylbenzene					CAS #: 135-98-8		
24.757	24.757 (1.162)	105	7779734	50.0000	48.958	80.00- 120.00	100.00
24.757	24.757 (1.162)	134	1464325			0.00- 68.82	16.82
24.757	24.757 (1.162)	91	1254965			0.00- 66.29	16.13
148 tert-Butylbenzene					CAS #: 98-06-6		
24.397	24.397 (1.145)	119	5076961	50.0000	48.548	80.00- 120.00	100.00
24.397	24.397 (1.145)	134	1090303			0.00- 71.48	21.48
24.397	24.397 (1.145)	91	3506245			19.71- 119.71	69.06
141 2-Chlorotoluene					CAS #: 95-49-8		
23.844	23.844 (1.119)	126	1741317	50.0000	50.939	80.00- 120.00	100.00
23.844	23.844 (1.119)	91	5085213			242.03- 342.03	292.03
23.844	23.844 (1.119)	65	641567			0.00- 88.32	36.84
143 4-Chlorotoluene					CAS #: 106-43-4		
24.010	24.010 (1.127)	126	1718391	50.0000	49.430	80.00- 120.00	100.00
24.010	24.010 (1.127)	91	5082977			245.80- 345.80	295.80
24.010	24.010 (1.127)	63	941235			4.62- 104.62	54.77
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.245	27.245 (1.279)	157	1864868	50.0000	45.072	80.00- 120.00	100.00
27.218	27.218 (1.278)	75	2162708			65.97- 165.97	115.97
27.245	27.245 (1.279)	155	1487193			30.44- 130.44	79.75
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.946	19.946 (1.239)	76	2106578	50.0000	54.482	80.00- 120.00	100.00
19.918	19.918 (1.237)	41	2498321			68.60- 168.60	118.60
19.946	19.946 (1.239)	78	649534			0.00- 81.47	30.83
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.835	13.835 (0.965)	77	2575949	50.0000	61.476	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.835	13.835 (0.965)	79	861935			0.00- 83.46	33.46
13.835	13.835 (0.965)	97	440753			0.00- 66.58	17.11
153 p-Cymene					CAS #: 99-87-6		
24.978	24.978 (1.173)	119	6981782	50.0000	47.687	80.00- 120.00	100.00
24.978	24.978 (1.173)	134	1672526			0.00- 73.80	23.96
24.978	24.978 (1.173)	91	1760457			0.00- 75.28	25.22
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.467	21.467 (1.008)	131	2108765	50.0000	51.840	80.00- 120.00	100.00
21.467	21.467 (1.008)	117	1440191			19.52- 119.52	68.30
21.467	21.467 (1.008)	95	786825			0.00- 89.36	37.31
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.623	23.623 (1.109)	110	1111471	50.0000	49.520	80.00- 120.00	100.00
23.623	23.623 (1.109)	75	3260192			243.32- 343.32	293.32
23.623	23.623 (1.109)	61	1136667			51.91- 151.91	102.27
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.227	25.227 (1.184)	120	2464049	50.0000	48.284	80.00- 120.00	100.00
25.227	25.227 (1.184)	105	5505089			173.42- 273.42	223.42
25.227	25.227 (1.184)	77	706992			0.00- 79.93	28.69
201 Pentachloroethane					CAS #: 76-01-7		
24.563	24.563 (1.153)	167	1607738	50.0000	50.644	80.00- 120.00	100.00
24.536	24.536 (1.152)	117	1988769			77.19- 177.19	123.70
24.563	24.563 (1.153)	169	750082			0.00- 97.68	46.65
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.052	15.052 (0.935)	110	675232	50.0000	54.173	80.00- 120.00	100.00
15.052	15.052 (0.935)	75	1971728			238.21- 338.21	292.01
55 Cyclopentene					CAS #: 142-29-0		
11.209	11.209 (0.782)	67	3386797	50.0000	53.951	80.00- 120.00	100.00
11.209	11.209 (0.782)	68	1291416			0.00- 88.37	38.13
11.209	11.209 (0.782)	53	1136258			0.00- 83.18	33.55

Data File: /chem/msd7.i/7-05aug.b/7080505.d
Report Date: 05-Aug-2008 17:38

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080505.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-05aug.b/t14q804a.m
Misc Info: 50/300 ppbv (200 ppbv)

Calibration Date: 05-AUG-2008
Calibration Time: 15:45
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	433524	260114	606934	433524	0.00
97 1,4-Difluorobenze	1378748	827249	1930247	1378748	0.00
126 Chlorobenzene-d5	1402863	841718	1964008	1402863	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

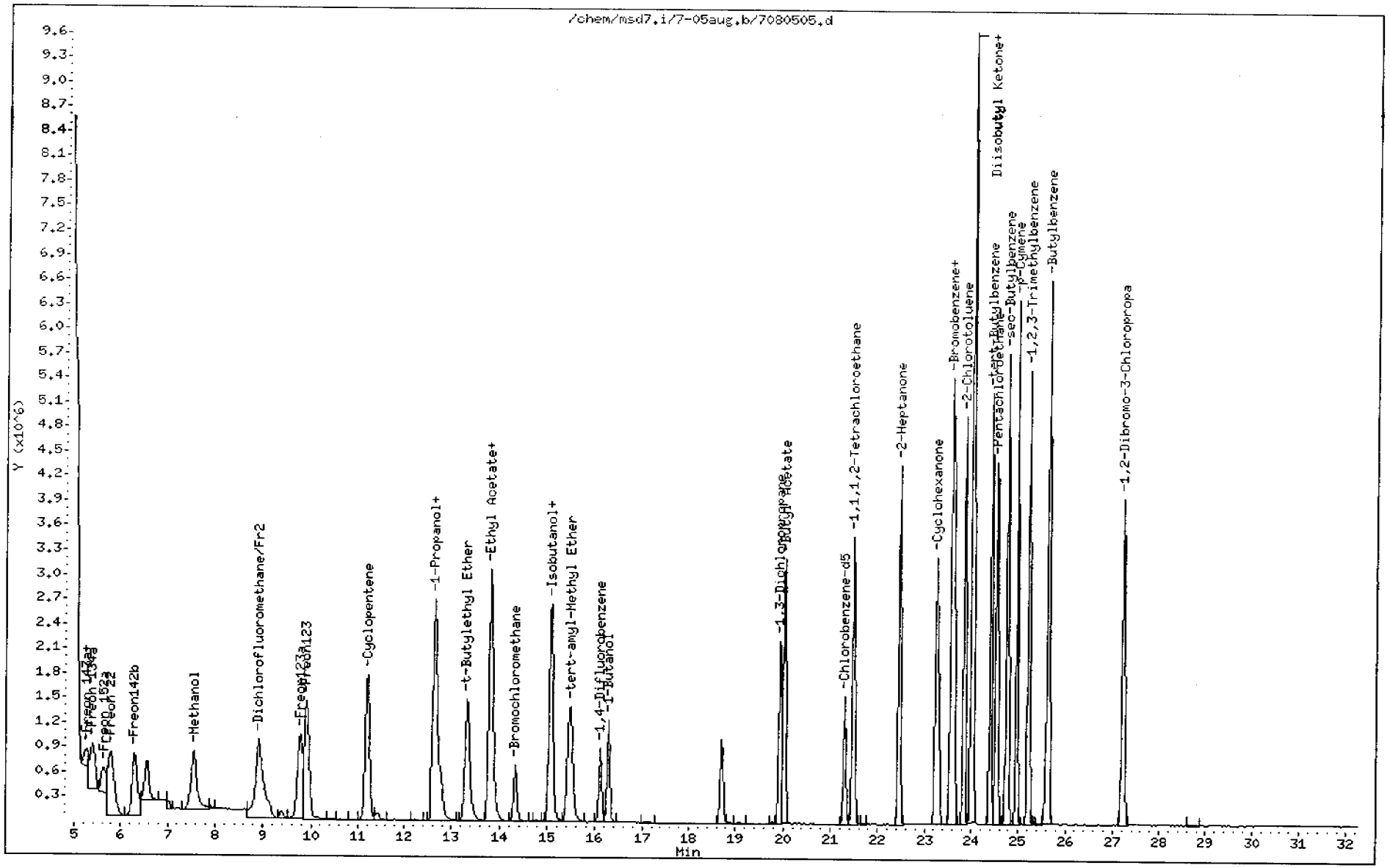
Data File: /chem/msd7.i/7-05aug.b/7080505.d
Date : 05-AUG-2008 15:45
Client ID: Level 5
Sample Info: 50mL #1612-99

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0533



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080421.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 04-AUG-2008 19:20
Operator : dfm
Inst ID: msd7.i
Smp Info : 50mL #1612-91
Misc Info : 50ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:06 sscott
Quant Type: ISTD
Cal Date : 04-AUG-2008 19:20
Cal File: 7080421.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08mdl.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.347	14.347 (1.000)	130	465852	25.0000		80.00- 120.00		100.00
14.347	14.347 (1.000)	128	363564			28.04- 128.04		78.04
14.319	14.319 (1.000)	49	1625576			298.95- 398.95		348.95
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1452055	25.0000		80.00- 120.00		100.00
16.089	16.089 (1.000)	88	259268			0.00- 67.86		17.86
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1558716	25.0000		80.00- 120.00		100.00
21.315	21.315 (1.000)	82	793396			1.03- 101.03		50.90
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.425	15.425 (1.075)	65	876759	25.0000	24.916	80.00- 120.00		100.00
15.425	15.425 (1.075)	67	438008			0.00- 97.37		49.96
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1437194	25.0000	25.856	80.00- 120.00		100.00
18.716	18.716 (1.161)	70	205284			0.00- 63.85		14.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.161)	100	1099150			26.51- 126.51	76.48
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	797501	25.0000	24.864	80.00- 120.00	100.00
23.278	23.278 (1.092)	95	1119249			90.34- 190.34	140.34
23.278	23.278 (1.092)	176	761270			45.46- 145.46	95.46
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.391)	41	2029726	50.0000	51.099	80.00- 120.00	100.00
5.582	5.582 (0.389)	42	1395248			16.57- 116.57	68.74
5.582	5.582 (0.389)	39	1653234			28.60- 128.60	81.45
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.720	5.720 (0.399)	85	5921850	50.0000	51.422	80.00- 120.00	100.00
5.720	5.720 (0.399)	87	1873576			0.00- 81.85	31.64
16 Freon 114					CAS #: 76-14-2		
6.190	6.190 (0.431)	135	3461930	50.0000	56.274	80.00- 120.00	100.00
6.190	6.190 (0.431)	137	1072796			0.00- 80.99	30.99
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.455)	50	2576522	50.0000	52.598	80.00- 120.00	100.00
6.522	6.522 (0.455)	52	794479			0.00- 81.05	30.84
20 Vinyl Chloride					CAS #: 75-01-4		
6.826	6.826 (0.476)	62	2521926	50.0000	51.881	80.00- 120.00	100.00
6.826	6.826 (0.476)	64	723649			0.00- 84.96	28.69
22 1,3-Butadiene					CAS #: 106-99-0		
6.909	6.909 (0.482)	54	2280936	50.0000	49.830	80.00- 120.00	100.00
6.909	6.909 (0.482)	39	2369163			46.88- 146.88	103.87
25 Bromomethane					CAS #: 74-83-9		
7.988	7.988 (0.557)	94	1547366	50.0000	51.548	80.00- 120.00	100.00
7.988	7.988 (0.557)	96	1411570			41.22- 141.22	91.22
27 Chloroethane					CAS #: 75-00-3		
8.319	8.319 (0.580)	64	1230281	50.0000	54.428	80.00- 120.00	100.00
8.319	8.319 (0.580)	49	480004			0.00- 94.43	39.02
8.319	8.319 (0.580)	66	354998			0.00- 79.28	28.86
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.928	8.928 (0.622)	101	6197799	50.0000	54.162	80.00- 120.00	100.00
8.928	8.928 (0.622)	103	3924602			13.32- 113.32	63.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.398	9.398 (0.655)	45	1052323	50.0000	55.463	80.00- 120.00	100.00
9.398	9.398 (0.655)	43	224872			0.00- 73.90	21.37
9.398	9.398 (0.655)	46	394559			0.00- 88.16	37.49
42 Freon 113					CAS #: 76-13-1		
10.172	10.172 (0.709)	151	2496055	50.0000	54.319	80.00- 120.00	100.00
10.172	10.172 (0.709)	153	1585782			13.53- 113.53	63.53
10.172	10.172 (0.709)	101	3696668			98.10- 198.10	148.10
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.283	10.283 (0.717)	61	4375385	50.0000	54.754	80.00- 120.00	100.00
10.283	10.283 (0.717)	96	1589354			0.00- 86.32	36.32
10.283	10.283 (0.717)	98	1011639			0.00- 73.12	23.12
45 Acetone					CAS #: 67-64-1		
10.421	10.421 (0.726)	58	1227579	50.0000	54.422	80.00- 120.00	100.00
10.421	10.421 (0.726)	43	4704286			340.42- 440.42	383.22
46 2-Propanol					CAS #: 67-63-0		
10.614	10.614 (0.740)	45	5329623	50.0000	55.682	80.00- 120.00	100.00
10.614	10.614 (0.740)	43	1285593			0.00- 76.39	24.12
10.614	10.614 (0.740)	59	171349			0.00- 53.62	3.22
47 Carbon Disulfide					CAS #: 75-15-0		
10.836	10.836 (0.755)	76	5265899	50.0000	53.662	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.112	11.112 (0.775)	76	858585	50.0000	53.736	80.00- 120.00	100.00
11.112	11.112 (0.775)	41	3805694			377.54- 477.54	443.25
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.798)	49	3641034	50.0000	52.083	80.00- 120.00	100.00
11.444	11.444 (0.798)	84	1390875			0.00- 88.20	38.20
11.444	11.444 (0.798)	51	1115521			0.00- 80.54	30.64
60 MTBE					CAS #: 1634-04-4		
11.776	11.776 (0.821)	73	3259687	50.0000	56.414	80.00- 120.00	100.00
11.776	11.776 (0.821)	57	1063707			0.00- 82.63	32.63
11.748	11.748 (0.819)	41	1100251			0.00- 86.33	33.75
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.886	11.886 (0.828)	96	1843076	50.0000	55.019	80.00- 120.00	100.00
11.859	11.859 (0.827)	61	4228309			179.42- 279.42	229.42
11.886	11.886 (0.828)	98	1165873			13.50- 113.50	63.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.246	12.246 (0.854)	57	4342066	50.0000	55.691	80.00- 120.00	100.00
12.218	12.218 (0.852)	43	2917091			20.34- 120.34	67.18
12.246	12.246 (0.854)	86	437096			0.00- 61.25	10.07
69 Vinyl Acetate					CAS #: 108-05-4		
12.716	12.716 (0.886)	86	420991	50.0000	54.932	80.00- 120.00	100.00
12.716	12.716 (0.886)	43	8128203			1872.40-1972.40	1930.73
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.771	12.771 (0.890)	63	4668689	50.0000	55.275	80.00- 120.00	100.00
12.771	12.771 (0.890)	65	1361526			0.00- 79.16	29.16
75 2-Butanone					CAS #: 78-93-3		
13.822	13.822 (0.963)	72	782029	50.0000	53.195	80.00- 120.00	100.00
13.822	13.822 (0.963)	43	5539080			658.30- 758.30	708.30
13.822	13.822 (0.963)	57	394108			0.00- 97.16	50.40
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.849	13.849 (0.965)	61	3422246	50.0000	54.012	80.00- 120.00	100.00
13.877	13.877 (0.967)	96	1621561			0.00- 97.38	47.38
13.877	13.877 (0.967)	98	1024878			0.00- 79.95	29.95
80 Tetrahydrofuran					CAS #: 109-99-9		
14.319	14.319 (0.998)	42	2895635	50.0000	55.785	80.00- 120.00	100.00
14.319	14.319 (0.998)	71	699502			0.00- 74.16	24.16
14.319	14.319 (0.998)	72	768324			0.00- 78.71	26.53
82 Chloroform					CAS #: 67-66-3		
14.402	14.402 (1.004)	83	3407537	50.0000	52.621	80.00- 120.00	100.00
14.402	14.402 (1.004)	85	2449005			21.87- 121.87	71.87
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.762	14.762 (1.029)	97	3684349	50.0000	55.724	80.00- 120.00	100.00
14.762	14.762 (1.029)	99	2345687			13.67- 113.67	63.67
85 Cyclohexane					CAS #: 110-82-7		
14.789	14.789 (1.031)	84	1877450	50.0000	54.051	80.00- 120.00	100.00
14.789	14.789 (1.031)	56	3653311			144.59- 244.59	194.59
14.789	14.789 (1.031)	41	2267820			70.79- 170.79	120.79
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.038	15.038 (1.048)	119	4112761	50.0000	54.474	80.00- 120.00	100.00
15.038	15.038 (1.048)	117	4334879			55.40- 155.40	105.40
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	4251933	50.0000	53.781	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.453	15.453 (0.959)	77	936467			0.00- 71.75	22.02
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	10306124	50.0000	55.467	80.00- 120.00	100.00
15.370	15.370 (1.071)	56	3363867			0.00- 82.54	32.64
15.370	15.370 (1.071)	41	3031668			0.00- 80.37	29.42
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.564	15.564 (0.966)	62	3226291	50.0000	55.216	80.00- 120.00	100.00
15.564	15.564 (0.966)	64	979075			0.00- 82.49	30.35
94 Heptane					CAS #: 142-82-5		
15.647	15.647 (0.971)	71	1428007	50.0000	55.857	80.00- 120.00	100.00
15.647	15.647 (0.971)	43	4064296			238.48- 338.48	284.61
15.647	15.647 (0.971)	57	2110818			102.27- 202.27	147.62
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.029)	95	1919311	50.0000	56.669	80.00- 120.00	100.00
16.587	16.587 (1.029)	130	1914330			49.74- 149.74	99.74
16.587	16.587 (1.029)	97	1205245			12.80- 112.80	62.80
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.057	17.057 (1.058)	63	2105812	50.0000	55.766	80.00- 120.00	100.00
17.057	17.057 (1.058)	62	1502066			21.33- 121.33	71.33
17.057	17.057 (1.058)	41	1710522			31.23- 131.23	81.23
106 1,4-Dioxane					CAS #: 123-91-1		
17.195	17.195 (1.067)	88	1074058	50.0000	55.594	80.00- 120.00	100.00
17.195	17.195 (1.067)	58	1045889			47.38- 147.38	97.38
17.195	17.195 (1.067)	57	387635			0.00- 86.44	36.09
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.086)	83	3459882	50.0000	56.418	80.00- 120.00	100.00
17.499	17.499 (1.086)	85	2422169			20.01- 120.01	70.01
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.134)	75	2544394	50.0000	58.486	80.00- 120.00	100.00
18.273	18.273 (1.134)	77	800011			0.00- 81.44	31.44
18.273	18.273 (1.134)	39	2338375			41.90- 141.90	91.90
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.146)	58	1996734	50.0000	59.259	80.00- 120.00	100.00
18.467	18.467 (1.146)	43	5782384			244.73- 344.73	289.59
18.467	18.467 (1.146)	85	605198			0.00- 81.51	30.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.168)	91	4762927	50.0000	54.345	80.00- 120.00	100.00
18.826	18.826 (1.168)	92	2984781			12.67- 112.67	62.67
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	2864179	50.0000	56.772	80.00- 120.00	100.00
19.269	19.269 (0.904)	77	886670			0.00- 80.96	30.96
19.269	19.269 (0.904)	39	2341104			31.74- 131.74	81.74
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.600	19.600 (0.920)	97	1745834	50.0000	54.334	80.00- 120.00	100.00
19.600	19.600 (0.920)	99	1079194			11.82- 111.82	61.82
19.600	19.600 (0.920)	83	1467274			34.04- 134.04	84.04
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	2254708	50.0000	53.541	80.00- 120.00	100.00
19.766	19.766 (0.927)	129	1905588			34.52- 134.52	84.52
19.766	19.766 (0.927)	131	1896115			34.10- 134.10	84.10
121 2-Hexanone					CAS #: 591-78-6		
19.905	19.905 (0.934)	58	2760237	50.0000	56.595	80.00- 120.00	100.00
19.905	19.905 (0.934)	43	5847002			161.83- 261.83	211.83
19.905	19.905 (0.934)	100	364765			0.00- 63.21	13.21
122 Dibromochloromethane					CAS #: 124-48-1		
20.292	20.292 (0.952)	129	3797834	50.0000	56.451	80.00- 120.00	100.00
20.292	20.292 (0.952)	127	2991102			29.59- 129.59	78.76
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	3278208	50.0000	53.912	80.00- 120.00	100.00
20.568	20.568 (0.965)	109	3025574			42.29- 142.29	92.29
127 Chlorobenzene					CAS #: 108-90-7		
21.342	21.342 (1.001)	112	4107857	50.0000	51.564	80.00- 120.00	100.00
21.342	21.342 (1.001)	114	1313527			0.00- 81.98	31.98
21.342	21.342 (1.001)	77	2588255			13.01- 113.01	63.01
128 Ethyl Benzene					CAS #: 100-41-4		
21.425	21.425 (1.005)	106	2321951	50.0000	53.445	80.00- 120.00	100.00
21.425	21.425 (1.005)	91	7134303			261.34- 361.34	307.25
129 m,p-Xylene					CAS #: 108-38-3		
21.647	21.647 (1.016)	106	2930694	50.0000	52.722	80.00- 120.00	100.00
21.619	21.619 (1.014)	91	5766455			147.02- 247.02	196.76
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	2720927	50.0000	52.913	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.338	22.338 (1.048)	91	5702694			159.59- 259.59	209.59
131 Styrene					CAS #: 100-42-5		
22.365	22.365 (1.049)	104	4529765	50.0000	57.846	80.00- 120.00	100.00
22.365	22.365 (1.049)	78	2341082			1.68- 101.68	51.68
133 Bromoform					CAS #: 75-25-2		
22.780	22.780 (1.069)	173	3219369	50.0000	55.517	80.00- 120.00	100.00
22.780	22.780 (1.069)	171	1669314			1.85- 101.85	51.85
134 Cumene					CAS #: 98-82-8		
22.918	22.918 (1.075)	105	7840274	50.0000	52.129	80.00- 120.00	100.00
22.918	22.918 (1.075)	120	2143669			0.00- 77.95	27.34
22.891	22.891 (1.074)	51	1252360			0.00- 67.08	15.97
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.499	23.499 (1.102)	83	3998676	50.0000	50.183	80.00- 120.00	100.00
23.499	23.499 (1.102)	85	2844630			21.14- 121.14	71.14
142 Propylbenzene					CAS #: 103-65-1		
23.582	23.582 (1.106)	91	9467420	50.0000	50.535	80.00- 120.00	100.00
23.582	23.582 (1.106)	120	2305691			0.00- 73.91	24.35
23.582	23.582 (1.106)	105	382837			0.00- 54.14	4.04
145 4-Ethyltoluene					CAS #: 622-96-8		
23.776	23.776 (1.115)	105	9026124	50.0000	50.282	80.00- 120.00	100.00
23.776	23.776 (1.115)	120	2939207			0.00- 82.56	32.56
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.858	23.858 (1.119)	105	6877266	50.0000	46.824	80.00- 120.00	100.00
23.858	23.858 (1.119)	120	3444103			1.24- 101.24	50.08
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.494	24.494 (1.149)	105	6798662	50.0000	46.953	80.00- 120.00	100.00
24.494	24.494 (1.149)	120	3240587			0.00- 97.02	47.67
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.075	25.075 (1.176)	146	4442937	50.0000	47.046	80.00- 120.00	100.00
25.075	25.075 (1.176)	148	2828948			12.07- 112.07	63.67
25.075	25.075 (1.176)	111	1947264			0.00- 94.74	43.83
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.241	25.241 (1.184)	146	4661535	50.0000	47.041	80.00- 120.00	100.00
25.241	25.241 (1.184)	148	2928052			13.30- 113.30	62.81
25.213	25.213 (1.183)	111	1980938			0.00- 92.03	42.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.434	25.434 (1.193)	91	7384296	50.0000	50.884	80.00- 120.00	100.00
25.434	25.434 (1.193)	126	1488773			0.00- 69.83	20.16
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.877	25.877 (1.214)	146	4417484	50.0000	46.309	80.00- 120.00	100.00
25.877	25.877 (1.214)	148	2765625			12.61- 112.61	62.61
25.877	25.877 (1.214)	111	1965085			0.00- 94.48	44.48
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.752	28.752 (1.349)	180	2268683	50.0000	53.213	80.00- 120.00	100.00
28.752	28.752 (1.349)	182	2112237			43.10- 143.10	93.10
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.946	28.946 (1.358)	225	1871940	50.0000	52.606	80.00- 120.00	100.00
28.946	28.946 (1.358)	223	1162116			13.71- 113.71	62.08
167 Naphthalene					CAS #: 91-20-3		
29.305	29.305 (1.375)	128	4938011	50.0000	53.925	80.00- 120.00	100.00
29.305	29.305 (1.375)	127	609569			0.00- 62.37	12.34
29 Isopentane					CAS #: 78-78-4		
8.319	8.319 (0.580)	43	3490171	50.0000	53.080	80.00- 120.00	100.00
8.319	8.319 (0.580)	57	2328313			17.61- 117.61	66.71
19 Butane					CAS #: 106-97-8		
6.743	6.743 (0.470)	58	487409	50.0000	50.052	80.00- 120.00	100.00
6.743	6.743 (0.470)	43	4221513			787.53- 887.53	866.11
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.863	16.863 (1.175)	83	2354469	50.0000	55.229	80.00- 120.00	100.00
16.863	16.863 (1.175)	98	1060444			0.00- 97.34	45.04
16.863	16.863 (1.175)	55	3338362			95.79- 195.79	141.79
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.444	11.444 (0.798)	59	2664561	50.0000	52.269	80.00- 120.00	100.00
11.444	11.444 (0.798)	41	636768			0.00- 74.69	23.90
11.444	11.444 (0.798)	57	274041			0.00- 61.62	10.28

Data File: /chem/msd7.i/7-04aug.b/7080421.d
Report Date: 05-Aug-2008 12:06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

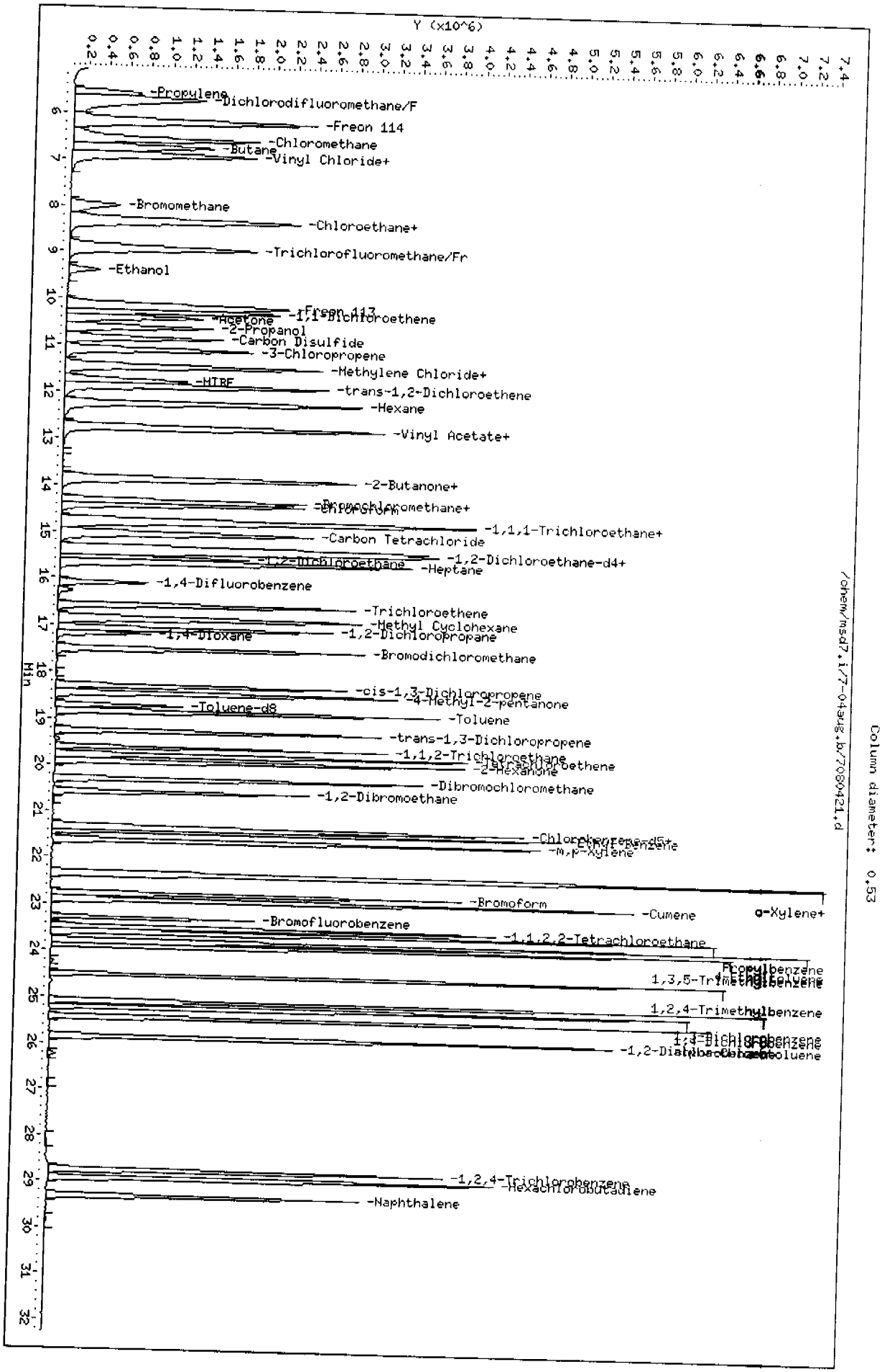
Instrument ID: msd7.i
Lab File ID: 7080421.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 50ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	465852	0.00
97 1,4-Difluorobenze	1452055	871233	2032877	1452055	0.00
126 Chlorobenzene-d5	1558716	935230	2182202	1558716	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.


Data File: /chem/msd7.i/7-04aug.b/7080421.d
Date : 04-AUG-2008 19:20
Client ID: Level 5
Sample Info: 50mL #1612-91
Column phase: RTx-624
Operator: dfm
Instrument: msd7.i
Column diameter: 0.53
/chem/msd7.i/7-04aug.b/7080421.d
Y (x10^6)
Min
-Propylene
-Dichlorodifluoromethane/F
-Freon 114
-Chloromethane
-Butane
-Vinyl Chloride+
-Bromomethane
-Chloroethane+
-Trichlorofluoromethane/Fr
-Ethanol
-Freon 113
-Acetone
-1,1-Dichloroethene
-2-Propanol
-Carbon Disulfide
-3-Chloropropene
-Methylene Chloride+
-MTBE
-trans-1,2-Dichloroethene
-Hexane
-Vinyl Acetate+
-2-Butanone+
-Bromochloromethane+
-Chloroform
-1,1,1-Trichloroethane+
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane
-Heptane
-1,4-Difluorobenzene
-Trichloroethene
-Methyl Cyclohexane
-1,4-Dioxane
-1,2-Dichloropropane
-Bromodichloromethane
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Tetrachloroethene
-2-Hexanone
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-Ethyl Benzene
-m,p-Xylene
-Bromoform
-Cumene
o-Xylene+
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
Propylbenzene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,2-Dichlorobenzene
-1,2-Dibromo-3-Chloropropane
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene

Page 1

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080422.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 04-AUG-2008 20:01
Operator : dfm
Inst ID: msd7.i
Smp Info : 100mL #1612-91
Misc Info : 100ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:06 sscott
Quant Type: ISTD
Cal Date : 04-AUG-2008 20:01
Cal File: 7080422.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	465153	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	356812			27.26- 127.26	76.71
14.347	14.347 (1.000)	49	2071583			253.14- 353.14	445.36
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.089	16.089 (1.000)	114	1470786	25.0000		50.00- 150.00	100.00
16.117	16.117 (1.000)	88	256928			0.00- 67.42	17.47
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1565448	25.0000		50.00- 150.00	100.00
21.315	21.315 (1.000)	82	792771			1.03- 101.03	50.64
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.425	15.425 (1.075)	65	865981	25.0000	24.646	50.00- 150.00	100.00
15.425	15.425 (1.075)	67	489534			0.00- 97.37	56.53
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.163)	98	1430050	25.0000	25.400	50.00- 150.00	100.00
18.716	18.716 (1.163)	70	197486			0.00- 63.85	13.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.163)	100	1113607			26.51- 126.51	77.87
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	821379	25.0000	25.499	50.00- 150.00	100.00
23.278	23.278 (1.092)	95	1127820			89.41- 189.41	137.31
23.278	23.278 (1.092)	176	782960			45.98- 145.98	95.32
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.391)	41	3721961	100.000	93.842	50.00- 150.00	100.00
5.610	5.610 (0.391)	42	2548883			16.57- 116.57	68.48
5.610	5.610 (0.391)	39	2983936			28.60- 128.60	80.17
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.401)	85	11080657	100.000	96.362	50.00- 150.00	100.00
5.748	5.748 (0.401)	87	3467019			0.00- 81.85	31.29
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.433)	135	6236685	100.000	101.53	50.00- 150.00	100.00
6.218	6.218 (0.433)	137	1988797			0.00- 84.02	31.89
18 Chloromethane					CAS #: 74-87-3		
6.550	6.550 (0.457)	50	4648282	100.000	95.035	50.00- 150.00	100.00
6.550	6.550 (0.457)	52	1494819			0.00- 81.05	32.16
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.478)	62	4604282	100.000	94.862	50.00- 150.00	100.00
6.854	6.854 (0.478)	64	1367931			0.00- 84.96	29.71
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.484)	54	4231848	100.000	92.589	50.00- 150.00	100.00
6.937	6.937 (0.484)	39	4324123			46.88- 146.88	102.18
25 Bromomethane					CAS #: 74-83-9		
8.015	8.015 (0.559)	94	2912125	100.000	97.158	50.00- 150.00	100.00
7.988	7.988 (0.557)	96	2725578			41.33- 141.33	93.59
27 Chloroethane					CAS #: 75-00-3		
8.319	8.319 (0.580)	64	2301015	100.000	101.95	50.00- 150.00	100.00
8.319	8.319 (0.580)	49	909195			0.00- 94.43	39.51
8.319	8.319 (0.580)	66	617776			0.00- 79.28	26.85
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.928	8.928 (0.622)	101	11227410	100.000	98.264	50.00- 150.00	100.00
8.928	8.928 (0.622)	103	7125927			15.68- 115.68	63.47

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.398	9.398 (0.655)	45	1956895	100.000	103.29	50.00- 150.00	100.00
9.425	9.425 (0.657)	43	414319			0.00- 73.90	21.17
9.425	9.425 (0.657)	46	740330			0.00- 88.16	37.83
42 Freon 113					CAS #: 76-13-1		
10.172	10.172 (0.709)	151	4619980	100.000	100.69	50.00- 150.00	100.00
10.172	10.172 (0.709)	153	2871429			16.40- 116.40	62.15
10.172	10.172 (0.709)	101	6780612			100.01- 200.01	146.77
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.283	10.283 (0.717)	61	7940090	100.000	99.513	50.00- 150.00	100.00
10.283	10.283 (0.717)	96	2978014			0.00- 86.92	37.51
10.283	10.283 (0.717)	98	1896043			0.00- 74.85	23.88
45 Acetone					CAS #: 67-64-1		
10.421	10.421 (0.726)	58	2277014	100.000	101.10	50.00- 150.00	100.00
10.421	10.421 (0.726)	43	8730637			340.42- 440.42	383.42
46 2-Propanol					CAS #: 67-63-0		
10.614	10.614 (0.740)	45	10095451	100.000	105.63	50.00- 150.00	100.00
10.614	10.614 (0.740)	43	2433926			0.00- 76.39	24.11
10.614	10.614 (0.740)	59	332724			0.00- 53.62	3.30
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.757)	76	9942947	100.000	101.48	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.112	11.112 (0.775)	76	1654771	100.000	103.72	50.00- 150.00	100.00
11.112	11.112 (0.775)	41	7070831			377.54- 477.54	427.30
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.798)	49	6720378	100.000	96.276	50.00- 150.00	100.00
11.444	11.444 (0.798)	84	2606726			0.00- 86.35	38.79
11.444	11.444 (0.798)	51	2021390			0.00- 80.54	30.08
60 MTBE					CAS #: 1634-04-4		
11.776	11.776 (0.821)	73	6184106	100.000	107.19	50.00- 150.00	100.00
11.776	11.776 (0.821)	57	2024765			0.00- 84.58	32.74
11.776	11.776 (0.821)	41	2097384			0.00- 86.33	33.92
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.886	11.886 (0.828)	96	3406464	100.000	101.84	50.00- 150.00	100.00
11.886	11.886 (0.828)	61	7617924			183.94- 283.94	223.63
11.886	11.886 (0.828)	98	2123507			13.50- 113.50	62.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.218	12.218 (0.852)	57	7982293	100.000	102.53	50.00- 150.00	100.00
12.218	12.218 (0.852)	43	5285394			20.34- 120.34	66.21
12.246	12.246 (0.854)	86	826306			0.00- 61.25	10.35
69 Vinyl Acetate					CAS #: 108-05-4		
12.716	12.716 (0.886)	86	789108	100.000	103.12	50.00- 150.00	100.00
12.716	12.716 (0.886)	43	14881140			1872.40-1972.40	1885.82
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.771	12.771 (0.890)	63	8511459	100.000	100.92	50.00- 150.00	100.00
12.771	12.771 (0.890)	65	2486334			0.00- 81.43	29.21
75 2-Butanone					CAS #: 78-93-3		
13.822	13.822 (0.963)	72	1474080	100.000	100.42	50.00- 150.00	100.00
13.822	13.822 (0.963)	43	10202168			602.07- 702.07	692.10
13.822	13.822 (0.963)	57	755705			0.00- 97.16	51.27
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.849	13.849 (0.965)	61	6181238	100.000	97.703	50.00- 150.00	100.00
13.877	13.877 (0.967)	96	3042173			0.00- 97.05	49.22
13.877	13.877 (0.967)	98	1939152			0.00- 80.30	31.37
80 Tetrahydrofuran					CAS #: 109-99-9		
14.319	14.319 (0.998)	42	5340091	100.000	103.03	50.00- 150.00	100.00
14.319	14.319 (0.998)	71	1355917			0.00- 76.49	25.39
14.319	14.319 (0.998)	72	1436706			0.00- 78.71	26.90
82 Chloroform					CAS #: 67-66-3		
14.402	14.402 (1.004)	83	6254539	100.000	96.731	50.00- 150.00	100.00
14.402	14.402 (1.004)	85	4438611			20.65- 120.65	70.97
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.762	14.762 (1.029)	97	6715588	100.000	101.72	50.00- 150.00	100.00
14.762	14.762 (1.029)	99	4285011			14.99- 114.99	63.81
85 Cyclohexane					CAS #: 110-82-7		
14.789	14.789 (1.031)	84	3449550	100.000	99.460	50.00- 150.00	100.00
14.789	14.789 (1.031)	56	6648639			145.33- 245.33	192.74
14.789	14.789 (1.031)	41	4050961			73.65- 173.65	117.43
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.038	15.038 (1.048)	119	7527631	100.000	99.855	50.00- 150.00	100.00
15.038	15.038 (1.048)	117	7919911			55.00- 155.00	105.21
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.960)	78	7752056	100.000	96.804	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.453	15.453 (0.960)	77	1716440			0.00- 71.75	22.14
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	18831831	100.000	101.50	50.00- 150.00	100.00
15.370	15.370 (1.071)	56	6201921			0.00- 82.54	32.93
15.370	15.370 (1.071)	41	5552659			0.00- 80.37	29.49
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.564	15.564 (0.967)	62	5820656	100.000	98.348	50.00- 150.00	100.00
15.564	15.564 (0.967)	64	1744717			0.00- 82.49	29.97
94 Heptane					CAS #: 142-82-5		
15.647	15.647 (0.972)	71	2690164	100.000	103.89	50.00- 150.00	100.00
15.647	15.647 (0.972)	43	7392525			238.48- 338.48	274.80
15.647	15.647 (0.972)	57	3865615			102.27- 202.27	143.69
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.031)	95	3460579	100.000	100.87	50.00- 150.00	100.00
16.587	16.587 (1.031)	130	3509888			54.15- 154.15	101.42
16.587	16.587 (1.031)	97	2205736			16.17- 116.17	63.74
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.057	17.057 (1.060)	63	3829857	100.000	100.13	50.00- 150.00	100.00
17.057	17.057 (1.060)	62	2743986			21.69- 121.69	71.65
17.057	17.057 (1.060)	41	3088961			32.68- 132.68	80.65
106 1,4-Dioxane					CAS #: 123-91-1		
17.195	17.195 (1.069)	88	2000777	100.000	102.24	50.00- 150.00	100.00
17.195	17.195 (1.069)	58	1915038			48.37- 148.37	95.71
17.195	17.195 (1.069)	57	697653			0.00- 86.44	34.87
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.088)	83	6310182	100.000	101.58	50.00- 150.00	100.00
17.499	17.499 (1.088)	85	4410582			20.11- 120.11	69.90
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.136)	75	4689564	100.000	106.42	50.00- 150.00	100.00
18.273	18.273 (1.136)	77	1476125			0.00- 85.03	31.48
18.273	18.273 (1.136)	39	4256551			43.00- 143.00	90.77
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.148)	58	3685992	100.000	108.00	50.00- 150.00	100.00
18.467	18.467 (1.148)	43	10574143			244.73- 344.73	286.87
18.467	18.467 (1.148)	85	1163280			0.00- 81.51	31.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.170)	91	8763577	100.000	98.719	50.00- 150.00	100.00
18.826	18.826 (1.170)	92	5508277			10.54- 110.54	62.85
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	5229268	100.000	103.20	50.00- 150.00	100.00
19.269	19.269 (0.904)	77	1632077			0.00- 80.88	31.21
19.269	19.269 (0.904)	39	4243425			33.61- 133.61	81.15
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.600	19.600 (0.920)	97	3249080	100.000	100.68	50.00- 150.00	100.00
19.600	19.600 (0.920)	99	1964974			12.31- 112.31	60.48
19.600	19.600 (0.920)	83	2665009			34.26- 134.26	82.02
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	4179107	100.000	98.812	50.00- 150.00	100.00
19.766	19.766 (0.927)	129	3510011			35.18- 135.18	83.99
19.766	19.766 (0.927)	131	3464634			33.48- 133.48	82.90
121 2-Hexanone					CAS #: 591-78-6		
19.905	19.905 (0.934)	58	5072983	100.000	103.57	50.00- 150.00	100.00
19.905	19.905 (0.934)	43	10768630			161.51- 261.51	212.27
19.905	19.905 (0.934)	100	695316			0.00- 63.21	13.71
122 Dibromochloromethane					CAS #: 124-48-1		
20.292	20.292 (0.952)	129	6989815	100.000	103.45	50.00- 150.00	100.00
20.292	20.292 (0.952)	127	5435814			29.59- 129.59	77.77
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	6067120	100.000	99.349	50.00- 150.00	100.00
20.568	20.568 (0.965)	109	5569291			39.77- 139.77	91.79
127 Chlorobenzene					CAS #: 108-90-7		
21.370	21.370 (1.003)	112	7654002	100.000	95.664	50.00- 150.00	100.00
21.370	21.370 (1.003)	114	2458853			0.00- 83.15	32.13
21.342	21.342 (1.001)	77	4633202			21.80- 121.80	60.53
128 Ethyl Benzene					CAS #: 100-41-4		
21.453	21.453 (1.006)	106	4214487	100.000	96.590	50.00- 150.00	100.00
21.425	21.425 (1.005)	91	13089471			261.34- 361.34	310.58
129 m,p-Xylene					CAS #: 108-38-3		
21.647	21.647 (1.016)	106	5448627	100.000	97.597	50.00- 150.00	100.00
21.647	21.647 (1.016)	91	10626737			147.02- 247.02	195.04
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	4978811	100.000	96.405	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.338	22.338	(1.048)	91	10432707			158.66- 258.66	209.54
131 Styrene						CAS #: 100-42-5		
22.365	22.365	(1.049)	104	8357521	100.000	106.27	50.00- 150.00	100.00
22.365	22.365	(1.049)	78	4247645			10.48- 110.48	50.82
133 Bromoform						CAS #: 75-25-2		
22.780	22.780	(1.069)	173	5883409	100.000	101.02	50.00- 150.00	100.00
22.780	22.780	(1.069)	171	3047893			2.34- 102.34	51.80
134 Cumene						CAS #: 98-82-8		
22.918	22.918	(1.075)	105	14422232	100.000	95.479	50.00- 150.00	100.00
22.918	22.918	(1.075)	120	3947615			0.00- 77.95	27.37
22.891	22.891	(1.074)	51	2189392			0.00- 67.08	15.18
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.499	23.499	(1.102)	83	7268503	100.000	90.828	50.00- 150.00	100.00
23.499	23.499	(1.102)	85	5175912			21.97- 121.97	71.21
142 Propylbenzene						CAS #: 103-65-1		
23.582	23.582	(1.106)	91	17277257	100.000	91.825	50.00- 150.00	100.00
23.582	23.582	(1.106)	120	4284640			0.00- 73.91	24.80
23.582	23.582	(1.106)	105	692660			0.00- 54.14	4.01
145 4-Ethyltoluene						CAS #: 622-96-8		
23.776	23.776	(1.115)	105	16589372	100.000	92.017	50.00- 150.00	100.00
23.776	23.776	(1.115)	120	5406559			0.00- 82.75	32.59
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.858	23.858	(1.119)	105	12606289	100.000	85.462	50.00- 150.00	100.00
23.858	23.858	(1.119)	120	6450623			1.24- 101.24	51.17
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.494	24.494	(1.149)	105	12608140	100.000	86.699	50.00- 150.00	100.00
24.494	24.494	(1.149)	120	5983380			0.00- 97.02	47.46
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.075	25.075	(1.176)	146	8277680	100.000	87.276	50.00- 150.00	100.00
25.075	25.075	(1.176)	148	5220209			12.07- 112.07	63.06
25.075	25.075	(1.176)	111	3578147			0.00- 94.74	43.23
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.241	25.241	(1.184)	146	8641683	100.000	86.831	50.00- 150.00	100.00
25.241	25.241	(1.184)	148	5418018			13.30- 113.30	62.70
25.213	25.213	(1.183)	111	3626161			0.00- 92.03	41.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.434	25.434 (1.193)	91	13581789	100.000	93.188	50.00- 150.00	100.00
25.434	25.434 (1.193)	126	2802132			0.00- 69.83	20.63
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.877	25.877 (1.214)	146	8164269	100.000	85.219	50.00- 150.00	100.00
25.877	25.877 (1.214)	148	5108906			12.84- 112.84	62.58
25.877	25.877 (1.214)	111	3653111			0.00- 95.15	44.75
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.752	28.752 (1.349)	180	4758562	100.000	111.13	50.00- 150.00	100.00
28.752	28.752 (1.349)	182	4496148			44.64- 144.64	94.49
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.946	28.946 (1.358)	225	3632871	100.000	101.65	50.00- 150.00	100.00
28.946	28.946 (1.358)	223	2304633			13.71- 113.71	63.44
167 Naphthalene					CAS #: 91-20-3		
29.305	29.305 (1.375)	128	10594311	100.000	115.20	50.00- 150.00	100.00
29.305	29.305 (1.375)	127	1300704			0.00- 62.37	12.28
29 Isopentane					CAS #: 78-78-4		
8.319	8.319 (0.580)	43	6412890	100.000	97.676	50.00- 150.00	100.00
8.319	8.319 (0.580)	57	4287500			17.61- 117.61	66.86
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.472)	58	897639	100.000	92.317	50.00- 150.00	100.00
6.771	6.771 (0.472)	43	7750858			787.53- 887.53	863.47
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.863	16.863 (1.175)	83	4419631	100.000	103.83	50.00- 150.00	100.00
16.863	16.863 (1.175)	98	1990015			0.00- 97.34	45.03
16.863	16.863 (1.175)	55	6141129			95.79- 195.79	136.95
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.444	11.444 (0.798)	59	4710567	100.000	92.543	50.00- 150.00	100.00
11.444	11.444 (0.798)	41	1114212			0.00- 74.69	23.65
11.444	11.444 (0.798)	57	492653			0.00- 61.62	10.46

Data File: /chem/msd7.i/7-04aug.b/7080422.d
Report Date: 05-Aug-2008 12:06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

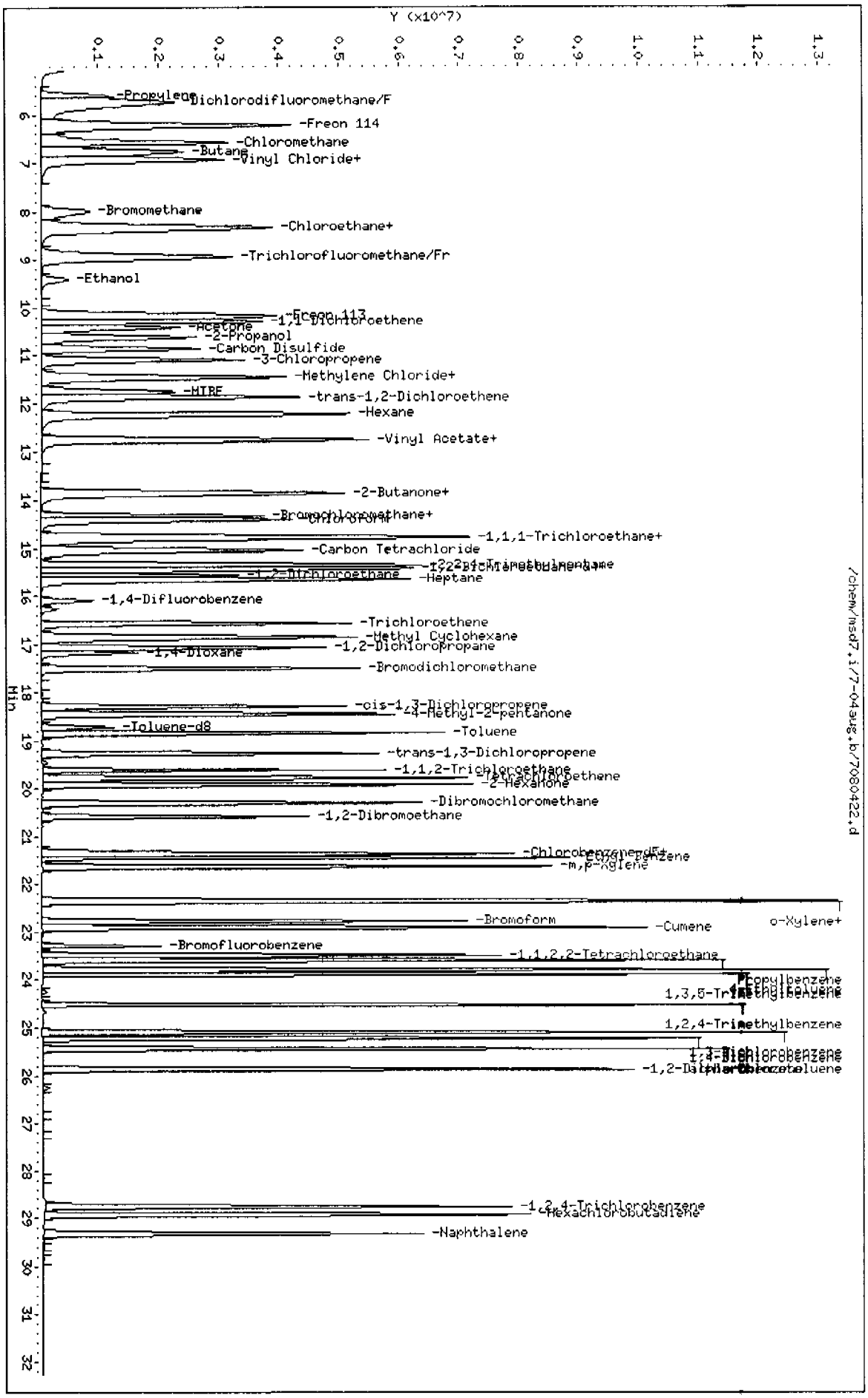
Instrument ID: msd7.i
Lab File ID: 7080422.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 100ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	465153	-0.15
97 1,4-Difluorobenze	1452055	871233	2032877	1470786	1.29
126 Chlorobenzene-d5	1558716	935230	2182202	1565448	0.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.09	-0.17
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/7-04aug.b/7080422.d
Date : 04-AUG-2008 20:01
Client ID: Level 6
Sample Info: 100mL #1612-91
Column phase: RTx-624

Instrument: msd7.i
Operator: dfm
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-24aug.b/7082406.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 24-AUG-2008 13:03
Operator : smd
Inst ID: msd7.i
Smp Info : 200mL #1541-242
Misc Info : 200ppbv (200ppbv)
Comment :
Method : /chem/msd7.i/7-24aug.b/t14q804b.m
Meth Date : 24-Aug-2008 13:23 sdisher
Quant Type: ISTD
Cal Date : 24-AUG-2008 13:03
Cal File: 7082406.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp19b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	375624	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	297138			27.57- 127.57	79.11
14.320	14.320 (1.000)	49	932673			227.21- 327.21	248.30
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.089	16.089 (1.000)	114	1147040	25.0000		50.00- 150.00	100.00
16.089	16.089 (1.000)	88	199058			0.00- 67.24	17.35
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1247511	25.0000		50.00- 150.00	100.00
21.287	21.287 (1.000)	82	629499			1.08- 101.08	50.46
21 Isobutane					CAS #: 75-28-5		
6.274	6.274 (0.437)	43	13797445	200.000	188.99	50.00- 150.00	100.00
6.274	6.274 (0.437)	42	4683828			0.00- 84.88	33.95
6.274	6.274 (0.437)	58	306659			0.00- 52.64	2.22
35 1-Pentene					CAS #: 109-67-1		
8.900	8.900 (0.620)	55	10038079	200.000	194.71	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
35 1-Pentene (continued)							
8.900	8.900 (0.620)	42	13136540			73.58- 173.58	130.87
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
37 Pentane					CAS #: 109-66-0		
9.038	9.038 (0.630)	43	17459062	200.000	192.40	50.00- 150.00	100.00
9.038	9.038 (0.630)	57	2479974			0.00- 64.92	14.20
9.038	9.038 (0.630)	72	1028846			0.00- 56.13	5.89
39 Ethyl Ether					CAS #: 60-29-7		
9.619	9.619 (0.670)	74	2969829	200.000	200.55	50.00- 150.00	100.00
9.619	9.619 (0.670)	59	6317368			158.16- 258.16	212.72
0.000	1.000 (0.000)	31	0			0.00- 50.00	0.00
44 Acrolein					CAS #: 107-02-8		
10.117	10.117 (0.705)	55	3046608	200.000	202.02	50.00- 150.00	100.00(A)
10.117	10.117 (0.705)	56	4078770			80.85- 180.85	133.88
48 Ethyl acrylate					CAS #: 140-88-5		
16.614	16.614 (0.779)	99	736076	200.000	198.02	50.00- 150.00	100.00
16.614	16.614 (0.779)	45	1727448			205.77- 305.77	234.68
16.614	16.614 (0.779)	55	17328980			2221.85-2321.85	2354.24
49 Iodomethane					CAS #: 74-88-4		
10.753	10.753 (0.749)	142	14346195	200.000	193.69	50.00- 150.00	100.00
10.753	10.753 (0.749)	127	6867217			0.00- 97.52	47.87
50 Methyl Methacrylate					CAS #: 80-62-6		
17.057	17.057 (0.800)	41	11386594	200.000	197.28	50.00- 150.00	100.00
17.057	17.057 (0.800)	69	4965987			0.00- 93.65	43.61
17.057	17.057 (0.800)	100	2041893			0.00- 67.48	17.93
52 Acetonitrile					CAS #: 75-05-8		
11.195	11.195 (0.780)	40	3357734	200.000	159.43	50.00- 150.00	100.00
11.195	11.195 (0.780)	41	6623152			130.28- 230.28	197.25
11.195	11.195 (0.780)	38	864755			0.00- 74.99	25.75
56 Cyclopentane					CAS #: 287-92-3		
11.416	11.416 (0.796)	70	3634207	200.000	197.84	50.00- 150.00	100.00
11.416	11.416 (0.796)	55	7863880			168.23- 268.23	216.39
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
62 Acrylonitrile					CAS #: 107-13-1		
11.969	11.969 (0.834)	52	7226174	200.000	205.21	50.00- 150.00	100.00(A)
11.969	11.969 (0.834)	53	8558119			69.80- 169.80	118.43

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
63 2-Pentanone					CAS #: 107-87-9		
16.836	16.836 (0.790)	43	22025667	200.000	201.42	50.00- 150.00	100.00(A)
16.836	16.836 (0.790)	58	1470791			0.00- 57.02	6.68
16.836	16.836 (0.790)	86	2325828			0.00- 60.89	10.56
66 1-Hexene					CAS #: 592-41-6		
12.108	12.108 (0.844)	55	6394354	200.000	195.80	50.00- 150.00	100.00
12.080	12.080 (0.842)	41	10046162			115.90- 215.90	157.11
12.108	12.108 (0.844)	84	1507025			0.00- 73.54	23.57
79 Methyl Acrylate					CAS #: 96-33-3		
13.932	13.932 (0.971)	55	16084893	200.000	205.11	50.00- 150.00	100.00(A)
13.932	13.932 (0.971)	85	1718567			0.00- 60.78	10.68
13.932	13.932 (0.971)	58	1366773			0.00- 58.73	8.50
100 trans-1,4-dichloro-2-butene					CAS #: 110-57-6		
23.582	23.582 (1.106)	75	2101430	200.000	198.18	50.00- 150.00	100.00
23.582	23.582 (1.106)	89	1164316			4.51- 104.51	55.41
23.582	23.582 (1.106)	53	2782833			86.78- 186.78	132.43
103 Alphamethylstyrene					CAS #: 98-83-9		
24.246	24.246 (1.137)	118	11796748	200.000	190.36	50.00- 150.00	100.00
24.246	24.246 (1.137)	103	6116202			4.10- 104.10	51.85
105 Dibromomethane					CAS #: 74-95-3		
17.306	17.306 (0.812)	174	5080088	200.000	191.31	50.00- 150.00	100.00
17.306	17.306 (0.812)	93	5956714			70.54- 170.54	117.26
17.306	17.306 (0.812)	95	4848747			47.14- 147.14	95.45
124 Nonane					CAS #: 111-84-2		
21.425	21.425 (1.005)	43	17516421	200.000	173.06	50.00- 150.00	100.00
21.425	21.425 (1.005)	57	14832299			33.50- 133.50	84.68
21.425	21.425 (1.005)	85	3874136			0.00- 71.27	22.12
151 bis(2-chloroethyl)ether					CAS #: 111-44-4		
24.854	24.854 (1.166)	93	12604071	200.000	183.96	50.00- 150.00	100.00
24.854	24.854 (1.166)	95	4047568			0.00- 82.01	32.11

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7082406.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/7-24aug.b/t14q804b.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 24-AUG-2008
Calibration Time: 12:12
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355343	213206	497480	375624	5.71
97 1,4-Difluorobenze	1128857	677314	1580400	1147040	1.61
126 Chlorobenzene-d5	1170645	702387	1638903	1247511	6.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.09	15.76	16.42	16.09	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

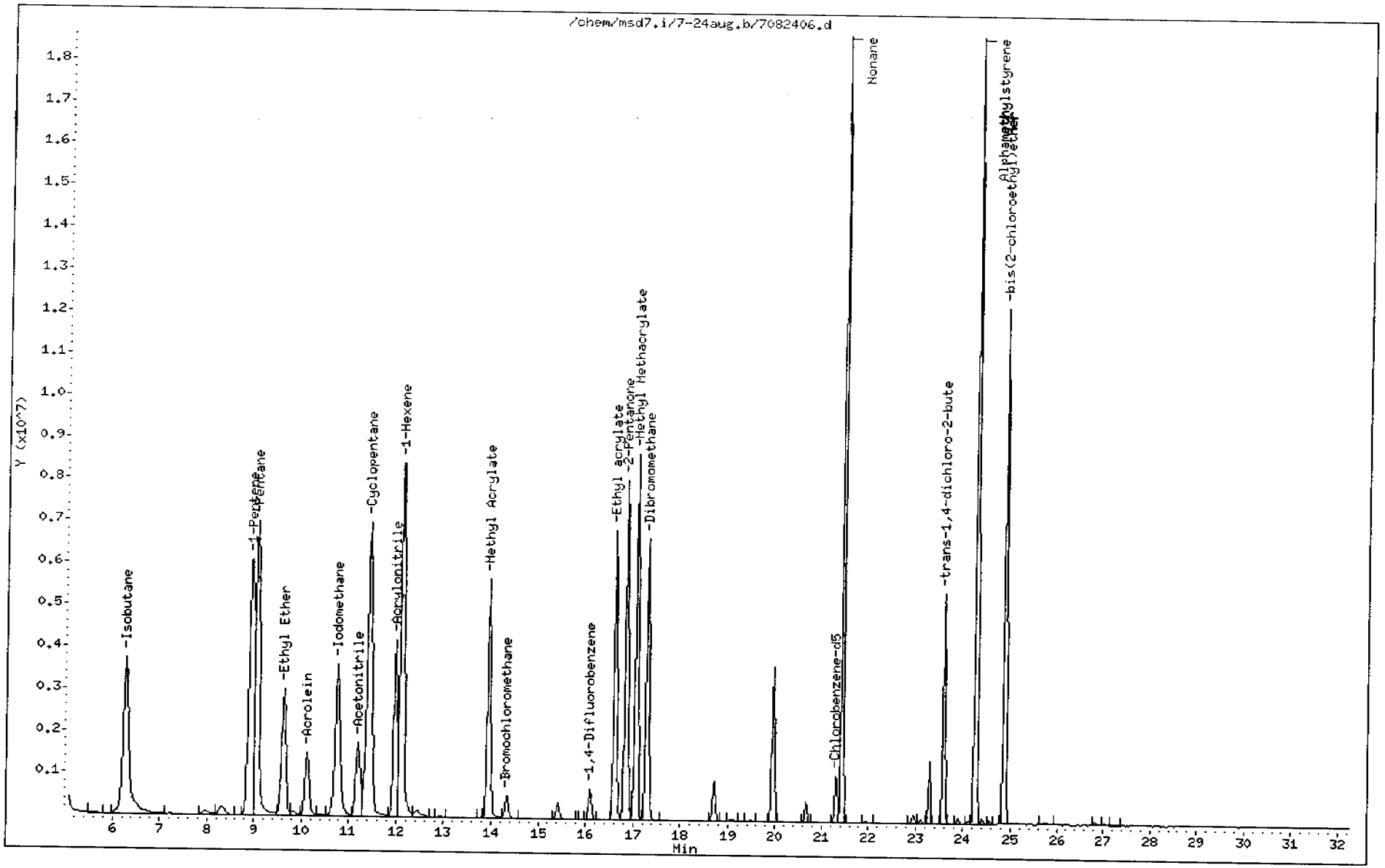
Data File: /chem/msd7.i/7-24aug.b/7082406.d
Date : 24-AUG-2008 13:03
Client ID: Level 7
Sample Info: 200mL #1541-242

Column phase: RTx-624

Instrument: msd7.i

Operator: smd
Column diameter: 0.53

0558



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05aug.b/7080506.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 05-AUG-2008 16:24
Operator : ra
Inst ID: msd7.i
Smp Info : 200mL #1612-99
Misc Info : 200/1200 ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-05aug.b/t14q804a.m
Meth Date : 05-Aug-2008 17:38 sruth
Quant Type: ISTD
Cal Date : 05-AUG-2008 16:24
Cal File: 7080506.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp37a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane					CAS #: 74-97-5			
14.333	14.333 (1.000)	130	459673	25.0000		50.00- 150.00		100.00
14.333	14.333 (1.000)	128	355949			27.54- 127.54		77.44
14.333	14.333 (1.000)	49	1110740			226.37- 326.37		241.64
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
16.103	16.103 (1.000)	114	1422235	25.0000		50.00- 150.00		100.00
16.103	16.103 (1.000)	88	254302			0.00- 67.24		17.88
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
21.301	21.301 (1.000)	117	1497175	25.0000		50.00- 150.00		100.00
21.301	21.301 (1.000)	82	765412			1.44- 101.44		51.12
96 2-Heptanone					CAS #: 110-43-0			
22.462	22.462 (1.567)	58	13029670	200.000	223.72	50.00- 150.00		100.00(A)
22.462	22.462 (1.567)	43	22871981			134.40- 234.40		175.54
146 Diisobutyl Ketone					CAS #: 108-83-8			
24.038	24.038 (1.129)	57	19742184	200.000	175.12	50.00- 150.00		100.00
24.038	24.038 (1.129)	85	11902098			7.15- 107.15		60.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
146 Diisobutyl Ketone (continued)							
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
99 Isobutanol					CAS #: 78-83-1		
15.080	15.080 (1.052)	59	229300	200.000	181.55	50.00- 150.00	100.00
15.080	15.080 (1.052)	41	5048049			1738.39-1838.39	2201.50
15.080	15.080 (1.052)	43	6778876			2172.15-2272.15	2956.33
98 1-Butanol					CAS #: 71-36-3		
16.269	16.269 (1.010)	56	6112238	200.000	231.64	50.00- 150.00	100.00(A)
16.269	16.269 (1.010)	41	4624260			27.33- 127.33	75.66
16.269	16.269 (1.010)	43	3640257			9.34- 109.34	59.56
71 1-Propanol					CAS #: 71-23-8		
12.785	12.785 (0.892)	42	1943797	200.000	206.37	50.00- 150.00	100.00(A)
12.785	12.785 (0.892)	59	2078733			101.28- 201.28	106.94
12.647	12.647 (0.882)	41	6483051			307.14- 407.14	333.53
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.310	13.310 (0.929)	59	26901782	200.000	258.21	50.00- 150.00	100.00(A)
13.338	13.338 (0.931)	87	7208487			0.00- 76.06	26.80
13.310	13.310 (0.929)	41	5026704			0.00- 69.79	18.69
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.494	15.494 (1.081)	73	13701471	200.000	239.86	50.00- 150.00	100.00(A)
15.494	15.494 (1.081)	87	3344100			0.00- 75.36	24.41
15.494	15.494 (1.081)	55	5162368			0.00- 93.69	37.68
68 Isopropyl ether					CAS #: 108-20-3		
12.647	12.647 (0.882)	45	33268571	200.000	196.91	50.00- 150.00	100.00
12.647	12.647 (0.882)	87	4959347			0.00- 64.22	14.91
12.647	12.647 (0.882)	59	3091889			0.00- 60.75	9.29
119 Butyl Acetate					CAS #: 123-86-4		
20.029	20.029 (1.244)	56	8372476	200.000	218.89	50.00- 150.00	100.00(A)
20.029	20.029 (1.244)	73	1925926			0.00- 74.54	23.00
20.001	20.001 (1.242)	43	22017970			217.74- 317.74	262.98
77 Ethyl Acetate					CAS #: 141-78-6		
13.808	13.808 (0.963)	70	1313908	200.000	203.67	50.00- 150.00	100.00(A)
13.808	13.808 (0.963)	45	2933603			169.70- 269.70	223.27
13.808	13.808 (0.963)	61	4478348			269.98- 369.98	340.84
135 Cyclohexanone					CAS #: 108-94-1		
23.236	23.236 (1.091)	55	11399153	200.000	210.62	50.00- 150.00	100.00(A)
23.236	23.236 (1.091)	98	2955033			0.00- 75.03	25.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)							
23.236	23.236 (1.091)	42	8200921			21.37- 121.37	71.94
5 Freon 143a					CAS #: 420-46-2		
5.307	5.307 (0.370)	65	2813266	200.000	183.66	50.00- 150.00	100.00
5.392	5.392 (0.376)	69	16089793			439.02- 539.02	571.93
5.335	5.335 (0.372)	64	815998			0.00- 76.54	29.01
6 Freon142b					CAS #: 75-68-3		
6.293	6.293 (0.439)	65	13625586	200.000	180.55	50.00- 150.00	100.00
6.293	6.293 (0.439)	45	4124805			0.00- 81.70	30.27
9 Freon 13					CAS #: 75-72-9		
5.223	5.223 (0.364)	85	1804983	200.000	170.71	50.00- 150.00	100.00
5.223	5.223 (0.364)	87	557903			0.00- 89.74	30.91
5.392	5.392 (0.376)	69	16149266			873.00- 973.00	894.70
13 Freon 134a					CAS #: 811-97-2		
5.420	5.420 (0.378)	83	5664926	200.000	189.88	50.00- 150.00	100.00
5.392	5.392 (0.376)	69	16089793			243.86- 343.86	284.02
5.420	5.420 (0.378)	63	1032350			0.00- 68.27	18.22
15 Freon 152a					CAS #: 75-37-6		
5.673	5.673 (0.396)	65	4164317	200.000	193.76	50.00- 150.00	100.00
5.786	5.786 (0.404)	51	26302870			486.38- 586.38	631.63
5.673	5.673 (0.396)	47	2977642			25.73- 125.73	71.50
17 Freon 22					CAS #: 75-45-6		
5.786	5.786 (0.404)	51	26389766	200.000	195.38	50.00- 150.00	100.00
5.814	5.814 (0.406)	67	1790661			0.00- 57.89	6.79
5.814	5.814 (0.406)	85	129431			0.00- 50.73	0.49
26 Methanol					CAS #: 67-56-1		
7.532	7.532 (0.525)	31	11713260	1200.00	883.10	50.00- 150.00	100.00
7.532	7.532 (0.525)	32	7778538			146.55- 246.55	66.41
41 Freon123					CAS #: 306-83-2		
9.937	9.937 (0.693)	83	9246036	200.000	189.16	50.00- 150.00	100.00
9.937	9.937 (0.693)	133	2202560			0.00- 73.53	23.82
9.937	9.937 (0.693)	85	6909012			21.75- 121.75	74.72
40 Freon123a					CAS #: 354-23-4		
9.771	9.771 (0.682)	117	6257802	200.000	205.73	50.00- 150.00	100.00(A)
9.771	9.771 (0.682)	67	8194194			94.79- 194.79	130.94
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.622)	67	12915094	200.000	188.61	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
34 Dichlorofluoromethane/Fr21 (continued)							
8.912	8.912 (0.622)	69	3808099			0.00- 78.72	29.49
8.912	8.912 (0.622)	35	1013872			0.00- 58.83	7.85
136 Bromobenzene					CAS #: 108-86-1		
23.568	23.568 (1.106)	156	7831744	200.000	181.75	50.00- 150.00	100.00
23.568	23.568 (1.106)	158	7514445			45.98- 145.98	95.95
23.568	23.568 (1.106)	77	15773094			162.84- 262.84	201.40
158 Butylbenzene					CAS #: 104-51-8		
25.642	25.642 (1.204)	134	6353004	200.000	178.68	50.00- 150.00	100.00
25.642	25.642 (1.204)	91	25200370			351.45- 451.45	396.67
25.642	25.642 (1.204)	92	13956945			168.89- 268.89	219.69
149 sec-Butylbenzene					CAS #: 135-98-8		
24.757	24.757 (1.162)	105	29034431	200.000	177.60	50.00- 150.00	100.00
24.757	24.757 (1.162)	134	5591537			0.00- 68.92	19.26
24.757	24.757 (1.162)	91	4814499			0.00- 66.29	16.58
148 tert-Butylbenzene					CAS #: 98-06-6		
24.398	24.398 (1.145)	119	19456314	200.000	180.11	50.00- 150.00	100.00
24.398	24.398 (1.145)	134	4254963			0.00- 71.90	21.87
24.398	24.398 (1.145)	91	13166484			19.71- 119.71	67.67
141 2-Chlorotoluene					CAS #: 95-49-8		
23.845	23.845 (1.119)	126	6648983	200.000	186.39	50.00- 150.00	100.00
23.845	23.845 (1.119)	91	19157720			247.77- 347.77	288.13
23.845	23.845 (1.119)	65	2292548			0.00- 88.32	34.48
143 4-Chlorotoluene					CAS #: 106-43-4		
24.010	24.010 (1.127)	126	6339144	200.000	177.32	50.00- 150.00	100.00
24.010	24.010 (1.127)	91	18007324			250.86- 350.86	284.07
24.010	24.010 (1.127)	63	3127943			4.62- 104.62	49.34
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.245	27.245 (1.279)	157	7900294	200.000	183.76	50.00- 150.00	100.00
27.218	27.218 (1.278)	75	8585781			69.88- 169.88	108.68
27.245	27.245 (1.279)	155	6238112			30.44- 130.44	78.96
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.918	19.918 (1.237)	76	8368228	200.000	207.27	50.00- 150.00	100.00(A)
19.918	19.918 (1.237)	41	9559282			65.74- 165.74	114.23
19.918	19.918 (1.237)	78	2649751			0.00- 81.47	31.66
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.835	13.835 (0.965)	77	10825127	200.000	231.04	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.835	13.835 (0.965)	79	3751193			0.00- 83.30	34.65
13.835	13.835 (0.965)	97	1847623			0.00- 66.58	17.07
153 p-Cymene					CAS #: 99-87-6		
24.978	24.978 (1.173)	119	26305556	200.000	175.29	50.00- 150.00	100.00
24.978	24.978 (1.173)	134	6566549			0.00- 73.80	24.96
24.978	24.978 (1.173)	91	6679396			0.00- 75.28	25.39
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.467	21.467 (1.008)	131	7852705	200.000	185.31	50.00- 150.00	100.00
21.467	21.467 (1.008)	117	5407284			19.52- 119.52	68.86
21.467	21.467 (1.008)	95	2988532			0.00- 89.36	38.06
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.623	23.623 (1.109)	110	4096361	200.000	177.44	50.00- 150.00	100.00
23.623	23.623 (1.109)	75	11859889			244.52- 344.52	289.52
23.623	23.623 (1.109)	61	4061876			51.91- 151.91	99.16
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.227	25.227 (1.184)	120	9747316	200.000	183.80	50.00- 150.00	100.00
25.227	25.227 (1.184)	105	21467131			177.52- 277.52	220.24
25.227	25.227 (1.184)	77	2626127			0.00- 79.93	26.94
201 Pentachloroethane					CAS #: 76-01-7		
24.563	24.563 (1.153)	167	6201715	200.000	187.01	50.00- 150.00	100.00
24.536	24.536 (1.152)	117	7354297			75.04- 175.04	118.58
24.563	24.563 (1.153)	169	2952042			0.00- 97.66	47.60
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.052	15.052 (0.935)	110	2614945	200.000	202.52	50.00- 150.00	100.00(A)
15.052	15.052 (0.935)	75	7490685			237.77- 337.77	286.46
55 Cyclopentene					CAS #: 142-29-0		
11.209	11.209 (0.782)	67	13394148	200.000	200.92	50.00- 150.00	100.00(A)
11.209	11.209 (0.782)	68	5132358			0.00- 88.36	38.32
11.209	11.209 (0.782)	53	4376484			0.00- 83.05	32.67

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msd7.i/7-05aug.b/7080506.d
Report Date: 05-Aug-2008 17:38

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7080506.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ra
Method File: /chem/msd7.i/7-05aug.b/t14q804a.m
Misc Info: 200/1200 ppbv (200 ppbv)

Calibration Date: 05-AUG-2008
Calibration Time: 15:45
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	433524	260114	606934	459673	6.03
97 1,4-Difluorobenze	1378748	827249	1930247	1422235	3.15
126 Chlorobenzene-d5	1402863	841718	1964008	1497175	6.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

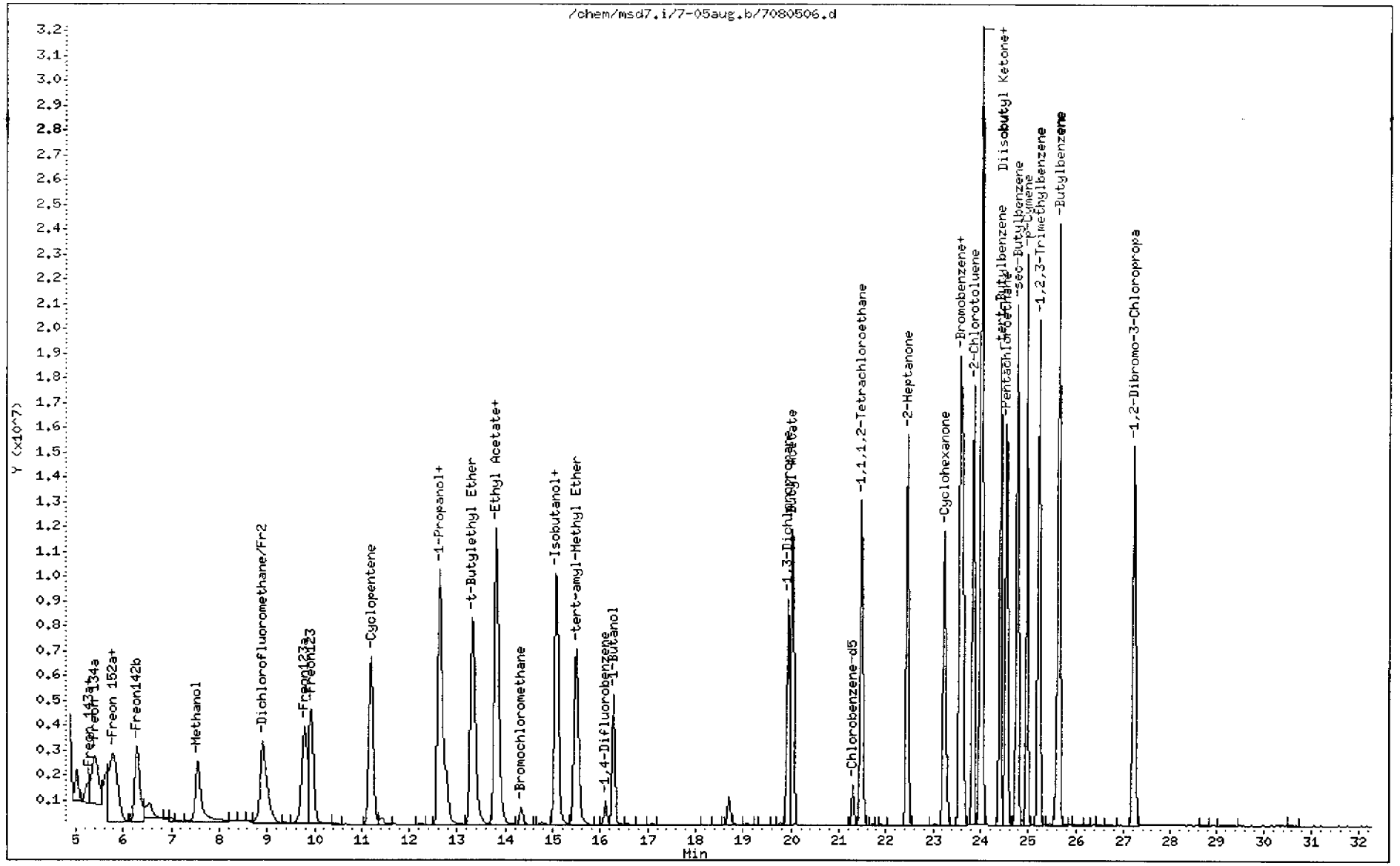
Data File: /chem/msd7.i/7-05aug.b/7080506.d
Date : 05-AUG-2008 16:24
Client ID: Level 7
Sample Info: 200mL #1612-99

Column phase: RTx-624

Instrument: msd7.i

Operator: ra
Column diameter: 0.53

0565



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04aug.b/7080423.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 04-AUG-2008 20:58
Operator : dfm
Inst ID: msd7.i
Smp Info : 200mL #1612-91
Misc Info : 200ppbv (200 ppbv)
Comment :
Method : /chem/msd7.i/7-04aug.b/t14q804a.m
Meth Date : 05-Aug-2008 12:06 sscott
Quant Type: ISTD
Cal Date : 04-AUG-2008 20:58
Cal File: 7080423.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.347	14.347 (1.000)	130	463826	25.0000		50.00- 150.00	100.00
14.347	14.347 (1.000)	128	365359			27.26- 127.26	78.77
14.403	14.403 (1.000)	49	3004304			253.14- 353.14	647.72
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.117	16.117 (1.000)	114	1512070	25.0000		50.00- 150.00	100.00
16.089	16.089 (1.000)	88	267613			0.00- 67.42	17.70
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.315	21.315 (1.000)	117	1575928	25.0000		50.00- 150.00	100.00
21.287	21.287 (1.000)	82	811549			1.03- 101.03	51.50
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.426	15.426 (1.075)	65	892935	25.0000	25.486	50.00- 150.00	100.00
15.426	15.426 (1.075)	67	576760			0.00- 97.37	64.59
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.716	18.716 (1.161)	98	1519725	25.0000	26.255	50.00- 150.00	100.00
18.716	18.716 (1.161)	70	192949			0.00- 63.85	12.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.716	18.716 (1.161)	100	1167741			26.51- 126.51	76.84
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.278	23.278 (1.092)	174	837476	25.0000	25.826	50.00- 150.00	100.00
23.278	23.278 (1.092)	95	1169480			89.41- 189.41	139.64
23.278	23.278 (1.092)	176	791403			45.98- 145.98	94.50
11 Propylene					CAS #: 115-07-1		
5.638	5.638 (0.393)	41	7598651	200.000	192.13	50.00- 150.00	100.00
5.638	5.638 (0.393)	42	5238635			16.57- 116.57	68.94
5.638	5.638 (0.393)	39	5961921			28.60- 128.60	78.46
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.776 (0.403)	85	21998177	200.000	191.85	50.00- 150.00	100.00
5.776	5.776 (0.403)	87	6962253			0.00- 81.85	31.65
16 Freon 114					CAS #: 76-14-2		
6.274	6.274 (0.437)	135	11608236	200.000	189.52	50.00- 150.00	100.00
6.274	6.274 (0.437)	137	3866260			0.00- 84.02	33.31
18 Chloromethane					CAS #: 74-87-3		
6.578	6.578 (0.458)	50	8827699	200.000	181.00	50.00- 150.00	100.00
6.578	6.578 (0.458)	52	3040222			0.00- 81.05	34.44
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.480)	62	9060873	200.000	187.22	50.00- 150.00	100.00
6.882	6.882 (0.480)	64	2685950			0.00- 84.96	29.64
22 1,3-Butadiene					CAS #: 106-99-0		
6.965	6.965 (0.485)	54	8498477	200.000	186.47	50.00- 150.00	100.00
6.965	6.965 (0.485)	39	8581964			46.88- 146.88	100.98
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.559)	94	6138589	200.000	205.39	50.00- 150.00	100.00(A)
8.016	8.016 (0.559)	96	5660746			41.33- 141.33	92.22
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.582)	64	4669626	200.000	207.49	50.00- 150.00	100.00(A)
8.347	8.347 (0.582)	49	1821856			0.00- 94.43	39.02
8.347	8.347 (0.582)	66	1369634			0.00- 79.28	29.33
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.624)	101	22180375	200.000	194.68	50.00- 150.00	100.00
8.956	8.956 (0.624)	103	14134552			15.68- 115.68	63.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.659)	45	3807172	200.000	201.53	50.00- 150.00	100.00(A)
9.453	9.453 (0.659)	43	804439			0.00- 73.90	21.13
9.453	9.453 (0.659)	46	1462360			0.00- 88.16	38.41
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.711)	151	9114239	200.000	199.21	50.00- 150.00	100.00
10.200	10.200 (0.711)	153	5759109			16.40- 116.40	63.19
10.200	10.200 (0.711)	101	13326181			100.01- 200.01	146.21
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.719)	61	15468628	200.000	194.42	50.00- 150.00	100.00
10.310	10.310 (0.719)	96	6013895			0.00- 86.92	38.88
10.310	10.310 (0.719)	98	3786099			0.00- 74.85	24.48
45 Acetone					CAS #: 67-64-1		
10.449	10.449 (0.728)	58	4640225	200.000	206.61	50.00- 150.00	100.00(A)
10.449	10.449 (0.728)	43	17447702			340.42- 440.42	376.01
46 2-Propanol					CAS #: 67-63-0		
10.642	10.642 (0.742)	45	20350573	200.000	213.54	50.00- 150.00	100.00(A)
10.642	10.642 (0.742)	43	4597890			0.00- 76.39	22.59
10.642	10.642 (0.742)	59	687182			0.00- 53.62	3.38
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.757)	76	20166785	200.000	206.41	50.00- 150.00	100.00(A)
51 3-Chloropropene					CAS #: 107-05-1		
11.112	11.112 (0.775)	76	3402759	200.000	213.90	50.00- 150.00	100.00(A)
11.112	11.112 (0.775)	41	14123228			377.54- 477.54	415.05
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.800)	49	13435544	200.000	193.03	50.00- 150.00	100.00
11.472	11.472 (0.800)	84	5342205			0.00- 86.35	39.76
11.472	11.472 (0.800)	51	4100692			0.00- 80.54	30.52
60 MTBE					CAS #: 1634-04-4		
11.776	11.776 (0.821)	73	12023073	200.000	208.99	50.00- 150.00	100.00(A)
11.776	11.776 (0.821)	57	3908627			0.00- 84.58	32.51
11.776	11.776 (0.821)	41	3977750			0.00- 86.33	33.08
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.886	11.886 (0.828)	96	6815512	200.000	204.34	50.00- 150.00	100.00(A)
11.886	11.886 (0.828)	61	14809612			183.94- 283.94	217.29
11.886	11.886 (0.828)	98	4304944			13.50- 113.50	63.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.246	12.246 (0.854)	57	15685632	200.000	202.06	50.00- 150.00	100.00(A)
12.246	12.246 (0.854)	43	10301147			20.34- 120.34	65.67
12.246	12.246 (0.854)	86	1637369			0.00- 61.25	10.44
69 Vinyl Acetate					CAS #: 108-05-4		
12.716	12.716 (0.886)	86	1563321	200.000	204.88	50.00- 150.00	100.00(A)
12.716	12.716 (0.886)	43	28802011			1872.40-1972.40	1842.36
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.771	12.771 (0.890)	63	16390022	200.000	194.90	50.00- 150.00	100.00
12.771	12.771 (0.890)	65	4855765			0.00- 81.43	29.63
75 2-Butanone					CAS #: 78-93-3		
13.822	13.822 (0.963)	72	2974698	200.000	203.23	50.00- 150.00	100.00(A)
13.822	13.822 (0.963)	43	19881115			602.07- 702.07	668.34
13.822	13.822 (0.963)	57	1498602			0.00- 97.16	50.38
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.877	13.877 (0.967)	61	11962898	200.000	189.63	50.00- 150.00	100.00
13.877	13.877 (0.967)	96	6069338			0.00- 97.05	50.73
13.877	13.877 (0.967)	98	3830222			0.00- 80.30	32.02
80 Tetrahydrofuran					CAS #: 109-99-9		
14.320	14.320 (0.998)	42	10556537	200.000	204.26	50.00- 150.00	100.00(A)
14.320	14.320 (0.998)	71	2726523			0.00- 76.49	25.83
14.320	14.320 (0.998)	72	2874959			0.00- 78.71	27.23
82 Chloroform					CAS #: 67-66-3		
14.403	14.403 (1.004)	83	12156978	200.000	188.56	50.00- 150.00	100.00
14.403	14.403 (1.004)	85	8684862			20.65- 120.65	71.44
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.762	14.762 (1.029)	97	13043338	200.000	198.14	50.00- 150.00	100.00
14.762	14.762 (1.029)	99	8283600			14.99- 114.99	63.51
85 Cyclohexane					CAS #: 110-82-7		
14.790	14.790 (1.031)	84	6773242	200.000	195.85	50.00- 150.00	100.00
14.790	14.790 (1.031)	56	12817598			145.33- 245.33	189.24
14.790	14.790 (1.031)	41	7692472			73.65- 173.65	113.57
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.039	15.039 (1.048)	119	14764330	200.000	196.41	50.00- 150.00	100.00
15.039	15.039 (1.048)	117	15567648			55.00- 155.00	105.44
91 Benzene					CAS #: 71-43-2		
15.453	15.453 (0.959)	78	15327257	200.000	186.17	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.453	15.453 (0.959)	77	3353194			0.00- 71.75	21.88
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.370	15.370 (1.071)	57	36785972	200.000	198.84	50.00- 150.00	100.00
15.370	15.370 (1.071)	56	12164136			0.00- 82.54	33.07
15.370	15.370 (1.071)	41	10722516			0.00- 80.37	29.15
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.564	15.564 (0.966)	62	11342078	200.000	186.41	50.00- 150.00	100.00
15.564	15.564 (0.966)	64	3374810			0.00- 82.49	29.75
94 Heptane					CAS #: 142-82-5		
15.647	15.647 (0.971)	71	5233337	200.000	196.58	50.00- 150.00	100.00
15.647	15.647 (0.971)	43	14195777			238.48- 338.48	271.26
15.647	15.647 (0.971)	57	7510706			102.27- 202.27	143.52
101 Trichloroethene					CAS #: 79-01-6		
16.587	16.587 (1.029)	95	6780914	200.000	192.26	50.00- 150.00	100.00
16.587	16.587 (1.029)	130	7058753			54.15- 154.15	104.10
16.587	16.587 (1.029)	97	4319340			16.17- 116.17	63.70
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.057	17.057 (1.058)	63	7501067	200.000	190.76	50.00- 150.00	100.00
17.057	17.057 (1.058)	62	5381508			21.69- 121.69	71.74
17.057	17.057 (1.058)	41	5937716			32.68- 132.68	79.16
106 1,4-Dioxane					CAS #: 123-91-1		
17.195	17.195 (1.067)	88	4068797	200.000	202.24	50.00- 150.00	100.00(A)
17.195	17.195 (1.067)	58	3855826			48.37- 148.37	94.77
17.195	17.195 (1.067)	57	1368738			0.00- 86.44	33.64
107 Bromodichloromethane					CAS #: 75-27-4		
17.499	17.499 (1.086)	83	12182591	200.000	190.77	50.00- 150.00	100.00
17.499	17.499 (1.086)	85	8490091			20.11- 120.11	69.69
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.273	18.273 (1.134)	75	9348576	200.000	206.36	50.00- 150.00	100.00(A)
18.273	18.273 (1.134)	77	2903409			0.00- 85.03	31.06
18.273	18.273 (1.134)	39	8149599			43.00- 143.00	87.17
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.467	18.467 (1.146)	58	7121641	200.000	202.97	50.00- 150.00	100.00(A)
18.439	18.439 (1.144)	43	20630348			244.73- 344.73	289.69
18.467	18.467 (1.146)	85	2292346			0.00- 81.51	32.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.826	18.826 (1.168)	91	17436932	200.000	191.06	50.00- 150.00	100.00
18.826	18.826 (1.168)	92	10910008			10.54- 110.54	62.57
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.269	19.269 (0.904)	75	10290824	200.000	201.75	50.00- 150.00	100.00(A)
19.269	19.269 (0.904)	77	3239154			0.00- 80.88	31.48
19.241	19.241 (0.903)	39	8249703			33.61- 133.61	80.17
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.601	19.601 (0.920)	97	6392332	200.000	196.77	50.00- 150.00	100.00
19.601	19.601 (0.920)	99	3915419			12.31- 112.31	61.25
19.601	19.601 (0.920)	83	5274984			34.26- 134.26	82.52
120 Tetrachloroethene					CAS #: 127-18-4		
19.794	19.794 (0.929)	166	8139654	200.000	191.18	50.00- 150.00	100.00
19.767	19.767 (0.927)	129	6791722			35.18- 135.18	83.44
19.767	19.767 (0.927)	131	6825368			33.48- 133.48	83.85
121 2-Hexanone					CAS #: 591-78-6		
19.905	19.905 (0.934)	58	9893502	200.000	200.64	50.00- 150.00	100.00(A)
19.905	19.905 (0.934)	43	20689800			161.51- 261.51	209.13
19.905	19.905 (0.934)	100	1388740			0.00- 63.21	14.04
122 Dibromochloromethane					CAS #: 124-48-1		
20.292	20.292 (0.952)	129	13596853	200.000	199.90	50.00- 150.00	100.00
20.292	20.292 (0.952)	127	10627167			29.59- 129.59	78.16
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.568	20.568 (0.965)	107	11691376	200.000	190.17	50.00- 150.00	100.00
20.568	20.568 (0.965)	109	10908129			39.77- 139.77	93.30
127 Chlorobenzene					CAS #: 108-90-7		
21.343	21.343 (1.001)	112	15227249	200.000	189.05	50.00- 150.00	100.00
21.343	21.343 (1.001)	114	4847768			0.00- 83.15	31.84
21.343	21.343 (1.001)	77	8827311			21.80- 121.80	57.97
128 Ethyl Benzene					CAS #: 100-41-4		
21.426	21.426 (1.005)	106	8416765	200.000	191.62	50.00- 150.00	100.00
21.426	21.426 (1.005)	91	25073867			261.34- 361.34	297.90
129 m,p-Xylene					CAS #: 108-38-3		
21.619	21.619 (1.014)	106	10748669	200.000	191.25	50.00- 150.00	100.00
21.619	21.619 (1.014)	91	20645130			147.02- 247.02	192.07
130 o-Xylene					CAS #: 95-47-6		
22.338	22.338 (1.048)	106	9800990	200.000	188.51	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.338	22.338 (1.048)	91	19451500			158.66- 258.66	198.46
131 Styrene					CAS #: 100-42-5		
22.366	22.366 (1.049)	104	16163614	200.000	204.16	50.00- 150.00	100.00(A)
22.366	22.366 (1.049)	78	7860997			10.48- 110.48	48.63
133 Bromoform					CAS #: 75-25-2		
22.780	22.780 (1.069)	173	11321654	200.000	193.11	50.00- 150.00	100.00
22.780	22.780 (1.069)	171	5850130			2.34- 102.34	51.67
134 Cumene					CAS #: 98-82-8		
22.919	22.919 (1.075)	105	27772582	200.000	182.64	50.00- 150.00	100.00
22.919	22.919 (1.075)	120	7750322			0.00- 77.95	27.91
22.891	22.891 (1.074)	51	4076043			0.00- 67.08	14.68
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.499	23.499 (1.102)	83	13761751	200.000	170.82	50.00- 150.00	100.00
23.499	23.499 (1.102)	85	9761579			21.97- 121.97	70.93
142 Propylbenzene					CAS #: 103-65-1		
23.582	23.582 (1.106)	91	30220733	200.000	159.55	50.00- 150.00	100.00
23.582	23.582 (1.106)	120	8375167			0.00- 73.91	27.71
23.582	23.582 (1.106)	105	1359222			0.00- 54.14	4.50
145 4-Ethyltoluene					CAS #: 622-96-8		
23.776	23.776 (1.115)	105	30520357	200.000	168.16	50.00- 150.00	100.00
23.776	23.776 (1.115)	120	10776353			0.00- 82.75	35.31
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.859	23.859 (1.119)	105	24306322	200.000	163.68	50.00- 150.00	100.00
23.859	23.859 (1.119)	120	12551703			1.24- 101.24	51.64
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.495	24.495 (1.149)	105	24294247	200.000	165.95	50.00- 150.00	100.00
24.495	24.495 (1.149)	120	11793603			0.00- 97.02	48.54
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.075	25.075 (1.176)	146	16096021	200.000	168.58	50.00- 150.00	100.00
25.075	25.075 (1.176)	148	10191458			12.07- 112.07	63.32
25.075	25.075 (1.176)	111	6984242			0.00- 94.74	43.39
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.213	25.213 (1.183)	146	16835463	200.000	168.04	50.00- 150.00	100.00
25.241	25.241 (1.184)	148	10640539			13.30- 113.30	63.20
25.213	25.213 (1.183)	111	6976342			0.00- 92.03	41.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.435	25.435 (1.193)	91	25393264	200.000	173.07	50.00- 150.00	100.00
25.435	25.435 (1.193)	126	5503191			0.00- 69.83	21.67
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.877	25.877 (1.214)	146	15902683	200.000	164.89	50.00- 150.00	100.00
25.877	25.877 (1.214)	148	9993526			12.84- 112.84	62.84
25.877	25.877 (1.214)	111	7113565			0.00- 95.15	44.73
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.753	28.753 (1.349)	180	10082555	200.000	233.91	50.00- 150.00	100.00(A)
28.753	28.753 (1.349)	182	9667910			44.64- 144.64	95.89
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.946	28.946 (1.358)	225	7321513	200.000	203.50	50.00- 150.00	100.00(A)
28.946	28.946 (1.358)	223	4588229			13.71- 113.71	62.67
167 Naphthalene					CAS #: 91-20-3		
29.306	29.306 (1.375)	128	23016692	200.000	248.60	50.00- 150.00	100.00(A)
29.306	29.306 (1.375)	127	2875408			0.00- 62.37	12.49
29 Isopentane					CAS #: 78-78-4		
8.347	8.347 (0.582)	43	12854146	200.000	196.34	50.00- 150.00	100.00
8.347	8.347 (0.582)	57	8493219			17.61- 117.61	66.07
19 Butane					CAS #: 106-97-8		
6.827	6.827 (0.476)	58	1837052	200.000	189.47	50.00- 150.00	100.00
6.827	6.827 (0.476)	43	15662375			787.53- 887.53	852.58
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.863	16.863 (1.175)	83	8787318	200.000	207.03	50.00- 150.00	100.00(A)
16.863	16.863 (1.175)	98	4033932			0.00- 97.34	45.91
16.863	16.863 (1.175)	55	11963738			95.79- 195.79	136.15
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.444	11.444 (0.798)	59	8299708	200.000	163.52	50.00- 150.00	100.00
11.444	11.444 (0.798)	41	1922990			0.00- 74.69	23.17
11.444	11.444 (0.798)	57	876788			0.00- 61.62	10.56

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msd7.i/7-04aug.b/7080423.d
Report Date: 05-Aug-2008 12:06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

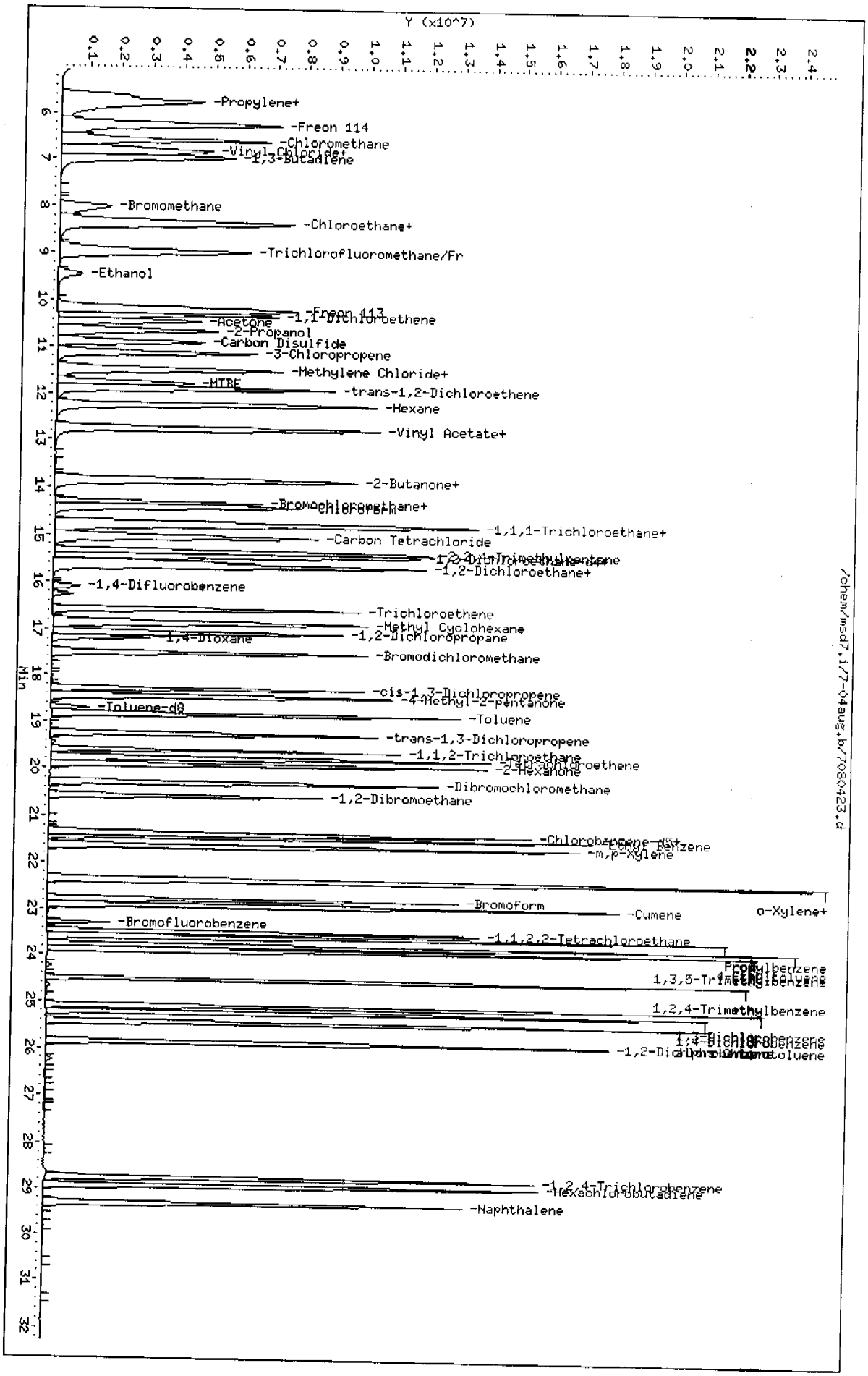
Instrument ID: msd7.i
Lab File ID: 7080423.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msd7.i/7-04aug.b/t14q804a.m
Misc Info: 200ppbv (200 ppbv)

Calibration Date: 04-AUG-2008
Calibration Time: 19:20
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	465852	279511	652193	463826	-0.43
97 1,4-Difluorobenze	1452055	871233	2032877	1512070	4.13
126 Chlorobenzene-d5	1558716	935230	2182202	1575928	1.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.35	14.02	14.68	14.35	0.00
97 1,4-Difluorobenze	16.12	15.79	16.45	16.12	0.00
126 Chlorobenzene-d5	21.31	20.98	21.64	21.31	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.


Y (x10^7)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4
Min
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
-Propylene+
-Freon 114
-Chloromethane
-Vinyl Chloride+
-1,3-Butadiene
-Bromomethane
-Chloroethane+
-Trichlorofluoromethane/Fr
-Ethanol
-Freon 113
-Acetone
-1,1-Dichloroethene
-2-Propanol
-Carbon Disulfide
-3-Chloropropene
-Methylene Chloride+
-MTBE
-trans-1,2-Dichloroethene
-Hexane
-Vinyl Acetate+
-2-Butanone+
-Bromochloromethane+
Chloroform
-1,1,1-Trichloroethane+
-Carbon Tetrachloride
-1,2-Dichloroethane+
-1,4-Difluorobenzene
-Trichloroethene
-Methyl Cyclohexane
-1,4-Dioxane
-1,2-Dichloropropane
-Bromodichloromethane
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Tetrachloroethene
-2-Hexanone
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5
Ethyl Benzene
-m,p-Xylene
-Bromoform
-Cumene
o-Xylene+
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
Propylbenzene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
-1,2-Dichlorobenzene-d4
Chlorotoluene
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
Data File: /chem/msd7.i/7-04aug.b/7080423.d
Date : 04-AUG-2008 20:58
Client ID: Level 7
Sample Info: 200ML #1612-91
Column phase: RTX-624
/chem/msd7.i/7-04aug.b/7080423.d
Instrument: msd7.i
Operator: dfm
Column diameter: 0.53
Page 1

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809614-20A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100603	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	10/6/08 10:23 AM

Compound	%Recovery
Freon 12	88
Freon 114	93
Chloromethane	96
Vinyl Chloride	89
1,3-Butadiene	88
Bromomethane	78
Chloroethane	86
Freon 11	92
Ethanol	99
Freon 113	89
1,1-Dichloroethene	93
Acetone	91
2-Propanol	101
Carbon Disulfide	86
Methylene Chloride	95
Methyl tert-butyl ether	138 Q
trans-1,2-Dichloroethene	88
Hexane	93
1,1-Dichloroethane	93
2-Butanone (Methyl Ethyl Ketone)	89
cis-1,2-Dichloroethene	96
Tetrahydrofuran	108
Chloroform	91
1,1,1-Trichloroethane	96
Cyclohexane	91
Carbon Tetrachloride	95
Benzene	90
1,2-Dichloroethane	100
Heptane	98
Trichloroethene	97
1,2-Dichloropropane	99
1,4-Dioxane	94
Bromodichloromethane	97
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	107
Toluene	92
trans-1,3-Dichloropropene	100
1,1,2-Trichloroethane	96
Tetrachloroethene	92

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809614-20A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100603	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/6/08 10:23 AM	

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	99
1,2-Dibromoethane (EDB)	97
Chlorobenzene	93
Ethyl Benzene	93
m,p-Xylene	93
o-Xylene	94
Styrene	101
Bromoform	97
1,1,2,2-Tetrachloroethane	90
4-Ethyltoluene	84
1,3,5-Trimethylbenzene	85
1,2,4-Trimethylbenzene	84
1,3-Dichlorobenzene	84
1,4-Dichlorobenzene	83
alpha-Chlorotoluene	87
1,2-Dichlorobenzene	83
1,2,4-Trichlorobenzene	103
Hexachlorobutadiene	94
Chlorodifluoromethane	68 Q
Methanol	97
n-Butanol	108
Propylene	94

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	99	70-130

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Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 06-OCT-2008 10:23
Lab File ID: 7100603.d Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Analysis Type: AIR Init. Cal. Times: 16:14 15:00
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd7.i/06oct08.b/t14q804c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 90 1,2-Dichloroethane-d4	1.88842	1.98853	0.010	-5.30112	30.00000	Averaged	
$ 113 Toluene-d8	0.95700	0.96757	0.010	-1.10405	30.00000	Averaged	
$ 137 Bromofluorobenzene	0.51443	0.51056	0.010	0.75204	30.00000	Averaged	
11 Propylene	2.13167	1.99422	0.010	6.44819	30.00000	Averaged	
12 Dichlorodifluoromethane/Frl	6.18020	5.46135	0.010	11.63145	30.00000	Averaged	
16 Freon 114	3.30144	3.07309	0.010	6.91673	30.00000	Averaged	
18 Chloromethane	2.62878	2.53781	0.010	3.46058	30.00000	Averaged	
20 Vinyl Chloride	2.60864	2.32634	0.010	10.82178	30.00000	Averaged	
22 1,3-Butadiene	2.45648	2.17297	0.010	11.54136	30.00000	Averaged	
25 Bromomethane	1.61093	1.25800	0.010	21.90834	30.00000	Averaged	
27 Chloroethane	1.21304	1.04861	0.010	13.55570	30.00000	Averaged	
31 Trichlorofluoromethane/Fr11	6.14089	5.63819	0.010	8.18608	30.00000	Averaged	
38 Ethanol	1.01821	1.01015	0.010	0.79150	30.00000	Averaged	
42 Freon 113	2.46602	2.19519	0.010	10.98241	30.00000	Averaged	
43 1,1-Dichloroethene	4.28836	3.97603	0.010	7.28307	30.00000	Averaged	
45 Acetone	1.21050	1.10686	0.010	8.56214	30.00000	Averaged	
46 2-Propanol	5.13654	5.20135	0.010	-1.26173	30.00000	Averaged	
47 Carbon Disulfide	5.26616	4.51926	0.010	14.18288	30.00000	Averaged	
51 3-Chloropropene	0.85745	0.74054	0.010	13.63427	30.00000	Averaged	
54 Methylene Chloride	3.75162	3.57507	0.010	4.70587	30.00000	Averaged	
60 MTBE	3.10083	4.29559	0.010	-38.53030	30.00000	Averaged	<-
61 trans-1,2-Dichloroethene	1.79772	1.58703	0.010	11.71967	30.00000	Averaged	
65 Hexane	4.18414	3.90889	0.010	6.57834	30.00000	Averaged	
69 Vinyl Acetate	0.41128	0.35175	0.010	14.47623	30.00000	Averaged	
70 1,1-Dichloroethane	4.53271	4.23083	0.010	6.66013	30.00000	Averaged	
75 2-Butanone	0.78894	0.70327	0.010	10.85887	30.00000	Averaged	
76 cis-1,2-Dichloroethene	3.40024	3.25996	0.010	4.12551	30.00000	Averaged	
80 Tetrahydrofuran	2.78558	3.00739	0.010	-7.96292	30.00000	Averaged	
82 Chloroform	3.47514	3.16587	0.010	8.89926	30.00000	Averaged	
83 1,1,1-Trichloroethane	3.54820	3.42185	0.010	3.56088	30.00000	Averaged	
85 Cyclohexane	1.86405	1.70280	0.010	8.65018	30.00000	Averaged	
87 Carbon Tetrachloride	4.05167	3.83308	0.010	5.39499	30.00000	Averaged	
89 2,2,4-Trimethylpentane	9.97132	10.18380	0.010	-2.13093	30.00000	Averaged	
91 Benzene	1.36118	1.22925	0.010	9.69191	30.00000	Averaged	
93 1,2-Dichloroethane	1.00600	1.01004	0.010	-0.40159	30.00000	Averaged	

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 06-OCT-2008 10:23
Lab File ID: 7100603.d Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Analysis Type: AIR Init. Cal. Times: 16:14 15:00
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd7.i/06oct08.b/t14q804c.m

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94	Heptane	0.44016	0.43281	0.010	1.66998	30.00000	Averaged
101	Trichloroethene	0.58312	0.56331	0.010	3.39698	30.00000	Averaged
104	1,2-Dichloropropane	0.65014	0.64568	0.010	0.68728	30.00000	Averaged
106	1,4-Dioxane	0.33263	0.31134	0.010	6.39900	30.00000	Averaged
107	Bromodichloromethane	1.05584	1.02935	0.010	2.50900	30.00000	Averaged
110	cis-1,3-Dichloropropene	0.74901	0.74845	0.010	0.07431	30.00000	Averaged
111	4-Methyl-2-pentanone	0.58012	0.61949	0.010	-6.78635	30.00000	Averaged
114	Toluene	1.50894	1.38257	0.010	8.37466	30.00000	Averaged
116	trans-1,3-Dichloropropene	0.80917	0.80649	0.010	0.33175	30.00000	Averaged
117	1,1,2-Trichloroethane	0.51535	0.49751	0.010	3.46254	30.00000	Averaged
120	Tetrachloroethene	0.67542	0.62350	0.010	7.68726	30.00000	Averaged
121	2-Hexanone	0.78225	0.83982	0.010	-7.36052	30.00000	Averaged
122	Dibromochloromethane	1.07904	1.07301	0.010	0.55940	30.00000	Averaged
123	1,2-Dibromoethane	0.97526	0.94468	0.010	3.13593	30.00000	Averaged
127	Chlorobenzene	1.27774	1.18559	0.010	7.21194	30.00000	Averaged
128	Ethyl Benzene	0.69681	0.64968	0.010	6.76407	30.00000	Averaged
129	m,p-Xylene	0.89156	0.82650	0.010	7.29817	30.00000	Averaged
130	o-Xylene	0.82476	0.77156	0.010	6.45025	30.00000	Averaged
131	Styrene	1.25595	1.26714	0.010	-0.89058	30.00000	Averaged
133	Bromoform	0.93007	0.90119	0.010	3.10542	30.00000	Averaged
134	Cumene	2.41226	2.23138	0.010	7.49866	30.00000	Averaged
140	1,1,2,2-Tetrachloroethane	1.27799	1.15499	0.010	9.62489	30.00000	Averaged
142	Propylbenzene	3.00479	2.69285	0.010	10.38151	30.00000	Averaged
145	4-Ethyltoluene	2.87914	2.41752	0.010	16.03337	30.00000	Averaged
147	1,3,5-Trimethylbenzene	2.35569	1.99744	0.010	15.20769	30.00000	Averaged
150	1,2,4-Trimethylbenzene	2.32240	1.95616	0.010	15.76979	30.00000	Averaged
155	1,3-Dichlorobenzene	1.51467	1.27281	0.010	15.96728	30.00000	Averaged
156	1,4-Dichlorobenzene	1.58937	1.32604	0.010	16.56829	30.00000	Averaged
159	alpha-Chlorotoluene	2.32754	2.03338	0.010	12.63837	30.00000	Averaged
161	1,2-Dichlorobenzene	1.52997	1.26975	0.010	17.00828	30.00000	Averaged
165	1,2,4-Trichlorobenzene	0.68380	0.70330	0.010	-2.85154	30.00000	Averaged
166	Hexachlorobutadiene	0.57073	0.53575	0.010	6.12783	30.00000	Averaged
29	Isopentane	3.52866	3.38470	0.010	4.07994	30.00000	Averaged
19	Butane	0.52259	0.45714	0.010	12.52438	30.00000	Averaged
102	Methyl Cyclohexane	2.28778	2.18365	0.010	4.55143	30.00000	Averaged
167	Naphthalene	1.46871	1.57042	0.010	-6.92536	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 06-OCT-2008 10:23
Lab File ID: 7100603.d Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Analysis Type: AIR Init. Cal. Times: 16:14 15:00
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd7.i/06oct08.b/t14q804c.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
57 tert-Butyl-Alcohol	2.73572	3.78959	0.010	-38.52232	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100603.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 06-OCT-2008 10:23
Operator : smd Inst ID: msd7.i
Smp Info : 100mL #1612-156A
Misc Info : 50ppbv(100ppbv)
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 12:13 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	383857	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	301569			28.56- 128.56	78.56
14.333	14.333 (1.000)	49	1481496			335.95- 435.95	385.95
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1202073	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	206027			0.00- 67.14	17.14
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1260970	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	634370			1.24- 101.24	50.31
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	763310	25.0000	26.325	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	377490			0.00- 97.37	49.45
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1163090	25.0000	25.276	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	157064			0.00- 63.85	13.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	900120			26.51- 126.51	77.39
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	643803	25.0000	24.812	80.00- 120.00	100.00
23.264	23.264 (1.092)	95	901829			90.08- 190.08	140.08
23.291	23.291 (1.093)	176	616789			45.80- 145.80	95.80
11 Propylene					CAS #: 115-07-1		
5.589	5.589 (0.390)	41	1530989	50.0000	46.776	80.00- 120.00	100.00
5.589	5.589 (0.390)	42	1049059			16.57- 116.57	68.52
5.589	5.589 (0.390)	39	1237921			28.60- 128.60	80.86
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.400)	85	4192754	50.0000	44.184	80.00- 120.00	100.00
5.729	5.729 (0.400)	87	1318438			0.00- 81.85	31.45
16 Freon 114					CAS #: 76-14-2		
6.152	6.152 (0.429)	135	2359253	50.0000	46.542	80.00- 120.00	100.00
6.152	6.152 (0.429)	137	739571			0.00- 81.35	31.35
18 Chloromethane					CAS #: 74-87-3		
6.490	6.490 (0.453)	50	1948310	50.0000	48.270	80.00- 120.00	100.00
6.490	6.490 (0.453)	52	606202			0.00- 81.05	31.11
20 Vinyl Chloride					CAS #: 75-01-4		
6.828	6.828 (0.476)	62	1785962	50.0000	44.589	80.00- 120.00	100.00
6.828	6.828 (0.476)	64	511931			0.00- 84.96	28.66
22 1,3-Butadiene					CAS #: 106-99-0		
6.884	6.884 (0.480)	54	1668219	50.0000	44.229	80.00- 120.00	100.00
6.884	6.884 (0.480)	39	1844396			46.88- 146.88	110.56
25 Bromomethane					CAS #: 74-83-9		
7.982	7.982 (0.557)	94	965786	50.0000	39.046	80.00- 120.00	100.00
7.982	7.982 (0.557)	96	901311			43.32- 143.32	93.32
27 Chloroethane					CAS #: 75-00-3		
8.320	8.320 (0.580)	64	805031	50.0000	43.222	80.00- 120.00	100.00
8.320	8.320 (0.580)	49	369271			0.00- 94.43	45.87
8.292	8.292 (0.579)	66	234102			0.00- 79.28	29.08
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.912	8.912 (0.622)	101	4328520	50.0000	45.907	80.00- 120.00	100.00
8.912	8.912 (0.622)	103	2768450			13.96- 113.96	63.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.411	9.411 (0.657)	45	775510	50.0000	49.604	80.00- 120.00	100.00
9.411	9.411 (0.657)	43	170785			0.00- 73.90	22.02
9.411	9.411 (0.657)	46	285532			0.00- 88.16	36.82
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	1685276	50.0000	44.509	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	1058203			12.79- 112.79	62.79
10.158	10.158 (0.709)	101	2509877			98.93- 198.93	148.93
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	3052457	50.0000	46.358	80.00- 120.00	100.00
10.269	10.269 (0.716)	96	1060102			0.00- 84.73	34.73
10.269	10.269 (0.716)	98	665473			0.00- 71.80	21.80
45 Acetone					CAS #: 67-64-1		
10.407	10.407 (0.726)	58	849750	50.0000	45.719	80.00- 120.00	100.00
10.407	10.407 (0.726)	43	3660114			340.42- 440.42	430.73
46 2-Propanol					CAS #: 67-63-0		
10.600	10.600 (0.740)	45	3993148	50.0000	50.631	80.00- 120.00	100.00
10.600	10.600 (0.740)	43	1066755			0.00- 76.39	26.71
10.600	10.600 (0.740)	59	108366			0.00- 53.62	2.71
47 Carbon Disulfide					CAS #: 75-15-0		
10.822	10.822 (0.755)	76	3469501	50.0000	42.908	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.098	11.098 (0.774)	76	568522	50.0000	43.183	80.00- 120.00	100.00
11.098	11.098 (0.774)	41	2916835			377.54- 477.54	513.06
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	2744632	50.0000	47.647	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	916349			0.00- 83.39	33.39
11.430	11.430 (0.797)	51	820853			0.00- 80.54	29.91
60 MTBE					CAS #: 1634-04-4		
11.762	11.762 (0.821)	73	3297781	50.0000	69.265	80.00- 120.00	100.00
11.762	11.762 (0.821)	57	1136428			0.00- 84.46	34.46
11.762	11.762 (0.821)	41	1325013			0.00- 86.33	40.18
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.872	11.872 (0.828)	96	1218387	50.0000	44.140	80.00- 120.00	100.00
11.872	11.872 (0.828)	61	2934792			190.88- 290.88	240.88
11.872	11.872 (0.828)	98	768319			13.50- 113.50	63.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.232	12.232 (0.853)	57	3000911	50.0000	46.711	80.00- 120.00	100.00
12.232	12.232 (0.853)	43	2189274			20.34- 120.34	72.95
12.232	12.232 (0.853)	86	272967			0.00- 61.25	9.10
69 Vinyl Acetate					CAS #: 108-05-4		
12.729	12.729 (0.888)	86	270040	50.0000	42.762	80.00- 120.00	100.00
12.702	12.702 (0.886)	43	6160185			1872.40-1972.40	2281.21
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.757	12.757 (0.890)	63	3248067	50.0000	46.670	80.00- 120.00	100.00
12.757	12.757 (0.890)	65	931072			0.00- 78.67	28.67
75 2-Butanone					CAS #: 78-93-3		
13.808	13.808 (0.963)	72	539908	50.0000	44.570	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	4350097			755.71- 855.71	805.71
13.808	13.808 (0.963)	57	308730			0.00- 97.16	57.18
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.967)	61	2502720	50.0000	47.937	80.00- 120.00	100.00
13.863	13.863 (0.967)	96	1117376			0.00- 94.65	44.65
13.863	13.863 (0.967)	98	712574			0.00- 78.47	28.47
80 Tetrahydrofuran					CAS #: 109-99-9		
14.305	14.305 (0.998)	42	2308818	50.0000	53.981	80.00- 120.00	100.00
14.305	14.305 (0.998)	71	493235			0.00- 71.36	21.36
14.305	14.305 (0.998)	72	516677			0.00- 78.71	22.38
82 Chloroform					CAS #: 67-66-3		
14.388	14.388 (1.004)	83	2430486	50.0000	45.550	80.00- 120.00	100.00
14.388	14.388 (1.004)	85	1730934			21.22- 121.22	71.22
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	2627004	50.0000	48.220	80.00- 120.00	100.00
14.748	14.748 (1.029)	99	1671976			13.65- 113.65	63.65
85 Cyclohexane					CAS #: 110-82-7		
14.775	14.775 (1.031)	84	1307266	50.0000	45.675	80.00- 120.00	100.00
14.775	14.775 (1.031)	56	2727357			158.63- 258.63	208.63
14.775	14.775 (1.031)	41	1809019			88.38- 188.38	138.38
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	2942709	50.0000	47.302	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	3117133			55.93- 155.93	105.93
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.356	15.356 (1.071)	57	7818246	50.0000	51.065	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.356	15.356 (1.071)	56	2599495			0.00- 82.54	33.25
15.356	15.356 (1.071)	41	2531154			0.00- 80.37	32.37
91 Benzene					CAS #: 71-43-2		
15.439	15.439 (0.959)	78	2955306	50.0000	45.154	80.00- 120.00	100.00
15.439	15.439 (0.959)	77	643687			0.00- 71.75	21.78
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.550	15.550 (0.966)	62	2428286	50.0000	50.201	80.00- 120.00	100.00
15.550	15.550 (0.966)	64	717415			0.00- 82.49	29.54
94 Heptane					CAS #: 142-82-5		
15.660	15.660 (0.973)	71	1040533	50.0000	49.165	80.00- 120.00	100.00
15.633	15.633 (0.971)	43	3320929			238.48- 338.48	319.16
15.660	15.660 (0.973)	57	1570439			102.27- 202.27	150.93
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1354281	50.0000	48.302	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1390202			52.65- 152.65	102.65
16.573	16.573 (1.029)	97	852986			12.98- 112.98	62.98
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.043	17.043 (1.058)	63	1552298	50.0000	49.656	80.00- 120.00	100.00
17.043	17.043 (1.058)	62	1125258			22.49- 122.49	72.49
17.043	17.043 (1.058)	41	1417589			41.32- 141.32	91.32
106 1,4-Dioxane					CAS #: 123-91-1		
17.181	17.181 (1.067)	88	748516	50.0000	46.800	80.00- 120.00	100.00
17.181	17.181 (1.067)	58	802664			57.23- 157.23	107.23
17.181	17.181 (1.067)	57	294232			0.00- 86.44	39.31
107 Bromodichloromethane					CAS #: 75-27-4		
17.485	17.485 (1.086)	83	2474712	50.0000	48.746	80.00- 120.00	100.00
17.485	17.485 (1.086)	85	1758161			21.05- 121.05	71.05
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.287	18.287 (1.136)	75	1799394	50.0000	49.963	80.00- 120.00	100.00
18.287	18.287 (1.136)	77	566477			0.00- 81.48	31.48
18.259	18.259 (1.134)	39	1915342			56.44- 156.44	106.44
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.453	18.453 (1.146)	58	1489350	50.0000	53.393	80.00- 120.00	100.00
18.453	18.453 (1.146)	43	4796257			244.73- 344.73	322.04
18.453	18.453 (1.146)	85	422023			0.00- 81.51	28.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.812	18.812 (1.168)	91	3323901	50.0000	45.813	80.00- 120.00	100.00
18.812	18.812 (1.168)	92	2081368			12.62- 112.62	62.62
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.255	19.255 (0.904)	75	2033920	50.0000	49.834	80.00- 120.00	100.00
19.255	19.255 (0.904)	77	625393			0.00- 80.75	30.75
19.255	19.255 (0.904)	39	1936189			45.19- 145.19	95.19
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	1254688	50.0000	48.269	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	769976			11.37- 111.37	61.37
19.586	19.586 (0.920)	83	1039901			32.88- 132.88	82.88
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	1572432	50.0000	46.156	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	1380671			37.80- 137.80	87.80
19.780	19.780 (0.929)	131	1349036			35.79- 135.79	85.79
121 2-Hexanone					CAS #: 591-78-6		
19.918	19.918 (0.935)	58	2117988	50.0000	53.680	80.00- 120.00	100.00
19.891	19.891 (0.934)	43	4875668			180.20- 280.20	230.20
19.918	19.918 (0.935)	100	255248			0.00- 63.21	12.05
122 Dibromochloromethane					CAS #: 124-48-1		
20.305	20.305 (0.953)	129	2706057	50.0000	49.720	80.00- 120.00	100.00
20.305	20.305 (0.953)	127	2135751			29.59- 129.59	78.92
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.554	20.554 (0.965)	107	2382419	50.0000	48.432	80.00- 120.00	100.00
20.554	20.554 (0.965)	109	2214405			42.95- 142.95	92.95
127 Chlorobenzene					CAS #: 108-90-7		
21.356	21.356 (1.003)	112	2989984	50.0000	46.394	80.00- 120.00	100.00
21.356	21.356 (1.003)	114	958208			0.00- 82.05	32.05
21.356	21.356 (1.003)	77	2220935			24.28- 124.28	74.28
128 Ethyl Benzene					CAS #: 100-41-4		
21.439	21.439 (1.006)	106	1638452	50.0000	46.618	80.00- 120.00	100.00
21.439	21.439 (1.006)	91	5002084			261.34- 361.34	305.29
129 m,p-Xylene					CAS #: 108-38-3		
21.632	21.632 (1.016)	106	2084373	50.0000	46.351	80.00- 120.00	100.00
21.632	21.632 (1.016)	91	4072954			147.02- 247.02	195.40
130 o-Xylene					CAS #: 95-47-6		
22.324	22.324 (1.048)	106	1945836	50.0000	46.775	80.00- 120.00	100.00

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.324	22.324	(1.048)	91	4026222			156.91- 256.91	206.91
131 Styrene						CAS #: 100-42-5		
22.351	22.351	(1.049)	104	3195640	50.0000	50.445	80.00- 120.00	100.00
22.351	22.351	(1.049)	78	1671059			2.29- 102.29	52.29
133 Bromoform						CAS #: 75-25-2		
22.766	22.766	(1.069)	173	2272748	50.0000	48.447	80.00- 120.00	100.00
22.766	22.766	(1.069)	171	1163396			1.19- 101.19	51.19
134 Cumene						CAS #: 98-82-8		
22.904	22.904	(1.075)	105	5627395	50.0000	46.251	80.00- 120.00	100.00
22.904	22.904	(1.075)	120	1563469			0.00- 77.95	27.78
22.904	22.904	(1.075)	51	1010210			0.00- 67.08	17.95
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.485	23.485	(1.103)	83	2912809	50.0000	45.188	80.00- 120.00	100.00
23.485	23.485	(1.103)	85	2064152			20.86- 120.86	70.86
142 Propylbenzene						CAS #: 103-65-1		
23.596	23.596	(1.108)	91	6791206	50.0000	44.809	80.00- 120.00	100.00
23.596	23.596	(1.108)	120	1674471			0.00- 73.91	24.66
23.596	23.596	(1.108)	105	249759			0.00- 54.14	3.68
145 4-Ethyltoluene						CAS #: 622-96-8		
23.761	23.761	(1.116)	105	6096838	50.0000	41.983	80.00- 120.00	100.00
23.761	23.761	(1.116)	120	1950302			0.00- 81.99	31.99
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.872	23.872	(1.121)	105	5037428	50.0000	42.396	80.00- 120.00	100.00
23.872	23.872	(1.121)	120	2597407			1.24- 101.24	51.56
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.508	24.508	(1.151)	105	4933321	50.0000	42.115	80.00- 120.00	100.00
24.508	24.508	(1.151)	120	2353830			0.00- 97.02	47.71
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.061	25.061	(1.177)	146	3209962	50.0000	42.016	80.00- 120.00	100.00
25.089	25.089	(1.178)	148	2043118			12.07- 112.07	63.65
25.061	25.061	(1.177)	111	1397649			0.00- 94.74	43.54
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.227	25.227	(1.184)	146	3344195	50.0000	41.716	80.00- 120.00	100.00
25.227	25.227	(1.184)	148	2102792			13.30- 113.30	62.88
25.227	25.227	(1.184)	111	1407817			0.00- 92.03	42.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.420	25.420 (1.193)	91	5128059	50.0000	43.681	80.00- 120.00	100.00
25.420	25.420 (1.193)	126	1047265			0.00- 69.83	20.42
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.863	25.863 (1.214)	146	3202239	50.0000	41.496	80.00- 120.00	100.00
25.863	25.863 (1.214)	148	2009516			12.75- 112.75	62.75
25.863	25.863 (1.214)	111	1434193			0.00- 94.79	44.79
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.738	28.738 (1.349)	180	1773674	50.0000	51.426	80.00- 120.00	100.00
28.738	28.738 (1.349)	182	1669707			44.14- 144.14	94.14
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.932	28.932 (1.358)	225	1351136	50.0000	46.936	80.00- 120.00	100.00
28.932	28.932 (1.358)	223	867743			13.71- 113.71	64.22
29 Isopentane					CAS #: 78-78-4		
8.320	8.320 (0.580)	43	2598478	50.0000	47.960	80.00- 120.00	100.00
8.320	8.320 (0.580)	57	1595770			17.61- 117.61	61.41
19 Butane					CAS #: 106-97-8		
6.715	6.715 (0.468)	58	350954	50.0000	43.738	80.00- 120.00	100.00
6.715	6.715 (0.468)	43	3388709			787.53- 887.53	965.57
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.849	16.849 (1.176)	83	1676422	50.0000	47.724	80.00- 120.00	100.00
16.849	16.849 (1.176)	98	769812			0.00- 97.34	45.92
16.849	16.849 (1.176)	55	2600772			95.79- 195.79	155.14
167 Naphthalene					CAS #: 91-20-3		
29.291	29.291 (1.375)	128	3960510	50.0000	53.463	80.00- 120.00	100.00
29.291	29.291 (1.375)	127	480622			0.00- 62.37	12.14
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.430	11.430 (0.797)	59	2909320	50.0000	69.261	80.00- 120.00	100.00
11.430	11.430 (0.797)	41	743728			0.00- 74.69	25.56
11.430	11.430 (0.797)	57	323614			0.00- 61.62	11.12

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

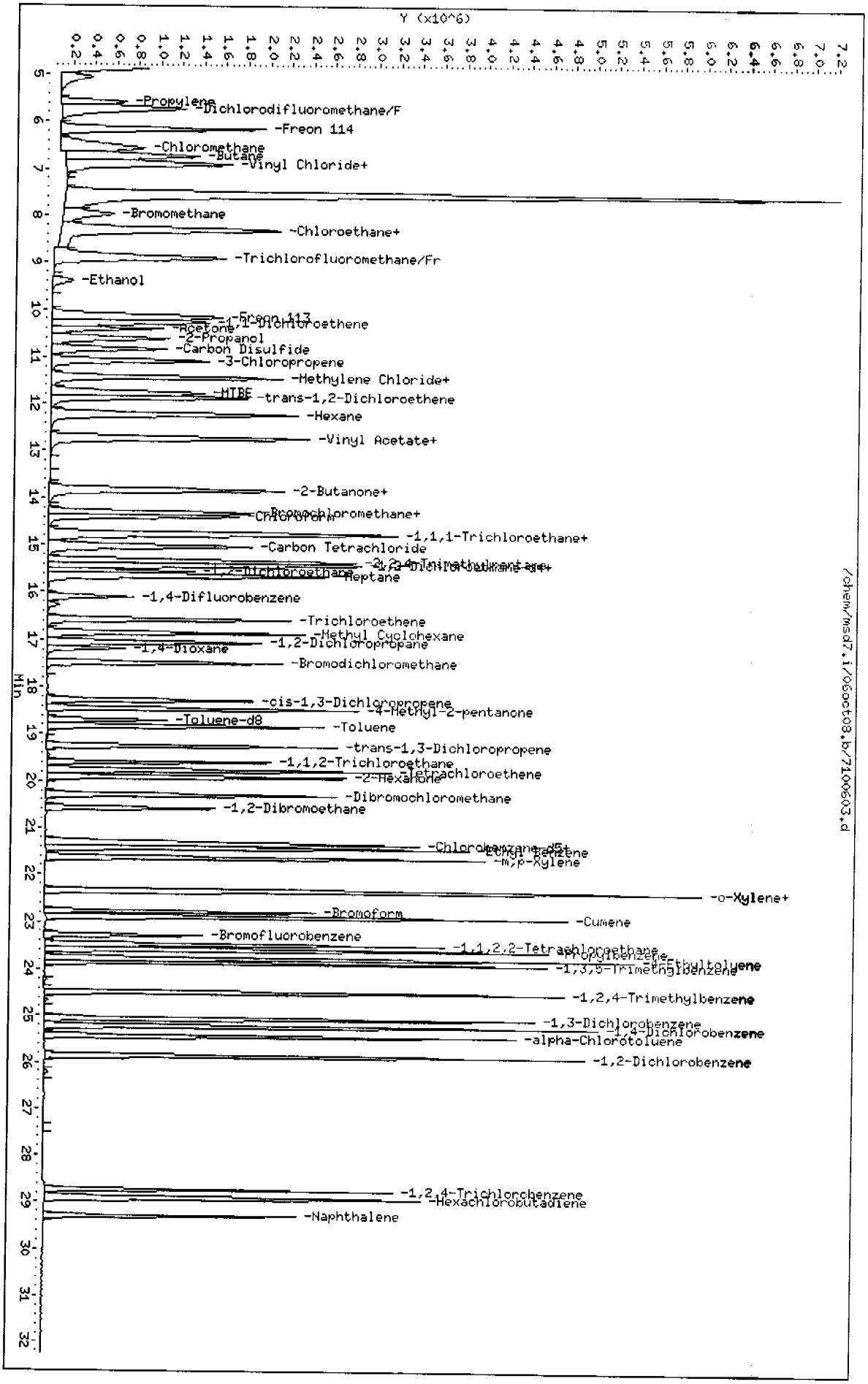
Instrument ID: msd7.i
Lab File ID: 7100603.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 06-OCT-2008
Calibration Time: 11:18
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	388033	232820	543246	383857	-1.08
97 1,4-Difluorobenze	1201522	720913	1682131	1202073	0.05
126 Chlorobenzene-d5	1206774	724064	1689484	1260970	4.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/06oct08.b/7100603.d
Date : 06-OCT-2008 10:23
Client ID: CCV-1
Sample Info: 100mL #1612-156A
Column phase: RTx-624

/chem/msd7.i/06oct08.b/7100603.d

Instrument: msd7.i
Operator: smd
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809614-20B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100904	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	10/9/08 10:35 AM

Compound	%Recovery
Freon 12	85
Freon 114	92
Chloromethane	92
Vinyl Chloride	87
1,3-Butadiene	89
Bromomethane	76
Chloroethane	86
Freon 11	87
Ethanol	90
Freon 113	85
1,1-Dichloroethene	83
Acetone	88
2-Propanol	96
Carbon Disulfide	83
Methylene Chloride	88
Methyl tert-butyl ether	137 Q
trans-1,2-Dichloroethene	88
Hexane	89
1,1-Dichloroethane	87
2-Butanone (Methyl Ethyl Ketone)	91
cis-1,2-Dichloroethene	88
Tetrahydrofuran	106
Chloroform	90
1,1,1-Trichloroethane	95
Cyclohexane	92
Carbon Tetrachloride	92
Benzene	91
1,2-Dichloroethane	99
Heptane	98
Trichloroethene	95
1,2-Dichloropropane	92
1,4-Dioxane	93
Bromodichloromethane	97
cis-1,3-Dichloropropene	101
4-Methyl-2-pentanone	109
Toluene	92
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	93
Tetrachloroethene	89

0591

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809614-20B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100904**	**Date of Collection:**	NA
Dil. Factor:	**1.00**	**Date of Analysis:**	10/9/08 10:35 AM

Compound	%Recovery
2-Hexanone	104
Dibromochloromethane	96
1,2-Dibromoethane (EDB)	93
Chlorobenzene	88
Ethyl Benzene	91
m,p-Xylene	90
o-Xylene	92
Styrene	97
Bromoform	92
1,1,2,2-Tetrachloroethane	87
4-Ethyltoluene	81
1,3,5-Trimethylbenzene	82
1,2,4-Trimethylbenzene	80
1,3-Dichlorobenzene	80
1,4-Dichlorobenzene	79
alpha-Chlorotoluene	84
1,2-Dichlorobenzene	78
1,2,4-Trichlorobenzene	84
Hexachlorobutadiene	74
Chlorodifluoromethane	79
Methanol	116
n-Butanol	121
Propylene	90

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	96	70-130

Data File: /chem/msd7.i/09oct08.b/7100904.d
Report Date: 09-Oct-2008 12:09

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7100904.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/09oct08.b/t14q804c.m

Injection Date: 09-OCT-2008 10:35
Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Init. Cal. Times: 16:14 15:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 90 1,2-Dichloroethane-d4	1.88842	1.80818	0.010	4.24901	30.00000	Averaged	
$ 113 Toluene-d8	0.95700	0.99705	0.010	-4.18449	30.00000	Averaged	
$ 137 Bromofluorobenzene	0.51443	0.49674	0.010	3.43814	30.00000	Averaged	
11 Propylene	2.13167	1.91535	0.010	10.14787	30.00000	Averaged	
12 Dichlorodifluoromethane/Frl	6.18020	5.25349	0.010	14.99477	30.00000	Averaged	
16 Freon 114	3.30144	3.04787	0.010	7.68061	30.00000	Averaged	
18 Chloromethane	2.62878	2.42624	0.010	7.70480	30.00000	Averaged	
20 Vinyl Chloride	2.60864	2.27809	0.010	12.67113	30.00000	Averaged	
22 1,3-Butadiene	2.45648	2.18330	0.010	11.12062	30.00000	Averaged	
25 Bromomethane	1.61093	1.21989	0.010	24.27390	30.00000	Averaged	
27 Chloroethane	1.21304	1.04633	0.010	13.74329	30.00000	Averaged	
31 Trichlorofluoromethane/Frll	6.14089	5.33844	0.010	13.06739	30.00000	Averaged	
38 Ethanol	1.01821	0.91845	0.010	9.79750	30.00000	Averaged	
42 Freon 113	2.46602	2.10835	0.010	14.50364	30.00000	Averaged	
43 1,1-Dichloroethene	4.28836	3.54310	0.010	17.37868	30.00000	Averaged	
45 Acetone	1.21050	1.06339	0.010	12.15295	30.00000	Averaged	
46 2-Propanol	5.13654	4.95777	0.010	3.48037	30.00000	Averaged	
47 Carbon Disulfide	5.26616	4.37914	0.010	16.84375	30.00000	Averaged	
51 3-Chloropropene	0.85745	0.72050	0.010	15.97151	30.00000	Averaged	
54 Methylene Chloride	3.75162	3.28635	0.010	12.40171	30.00000	Averaged	
60 MTBE	3.10083	4.23656	0.010	-36.62675	30.00000	Averaged	<-
61 trans-1,2-Dichloroethene	1.79772	1.58377	0.010	11.90129	30.00000	Averaged	
65 Hexane	4.18414	3.72966	0.010	10.86193	30.00000	Averaged	
69 Vinyl Acetate	0.41128	0.36046	0.010	12.36697	30.00000	Averaged	
70 1,1-Dichloroethane	4.53271	3.92636	0.010	13.37722	30.00000	Averaged	
75 2-Butanone	0.78894	0.72110	0.010	8.59794	30.00000	Averaged	
76 cis-1,2-Dichloroethene	3.40024	2.98489	0.010	12.21526	30.00000	Averaged	
80 Tetrahydrofuran	2.78558	2.94271	0.010	-5.64085	30.00000	Averaged	
82 Chloroform	3.47514	3.12655	0.010	10.03075	30.00000	Averaged	
83 1,1,1-Trichloroethane	3.54820	3.35747	0.010	5.37540	30.00000	Averaged	
85 Cyclohexane	1.86405	1.72055	0.010	7.69817	30.00000	Averaged	
87 Carbon Tetrachloride	4.05167	3.74617	0.010	7.54008	30.00000	Averaged	
89 2,2,4-Trimethylpentane	9.97132	9.72329	0.010	2.48745	30.00000	Averaged	
91 Benzene	1.36118	1.23410	0.010	9.33554	30.00000	Averaged	
93 1,2-Dichloroethane	1.00600	0.99293	0.010	1.29889	30.00000	Averaged	

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7100904.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/09oct08.b/t14q804c.m

Injection Date: 09-OCT-2008 10:35
Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Init. Cal. Times: 16:14 15:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.44016	0.43134	0.010	2.00357	30.00000	Averaged
101 Trichloroethene	0.58312	0.55603	0.010	4.64516	30.00000	Averaged
104 1,2-Dichloropropane	0.65014	0.59703	0.010	8.16965	30.00000	Averaged
106 1,4-Dioxane	0.33263	0.30932	0.010	7.00835	30.00000	Averaged
107 Bromodichloromethane	1.05584	1.02254	0.010	3.15418	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.74901	0.75908	0.010	-1.34454	30.00000	Averaged
111 4-Methyl-2-pentanone	0.58012	0.63436	0.010	-9.34926	30.00000	Averaged
114 Toluene	1.50894	1.38237	0.010	8.38791	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.80917	0.77275	0.010	4.50198	30.00000	Averaged
117 1,1,2-Trichloroethane	0.51535	0.48176	0.010	6.51839	30.00000	Averaged
120 Tetrachloroethene	0.67542	0.60358	0.010	10.63639	30.00000	Averaged
121 2-Hexanone	0.78225	0.81782	0.010	-4.54793	30.00000	Averaged
122 Dibromochloromethane	1.07904	1.03685	0.010	3.91010	30.00000	Averaged
123 1,2-Dibromoethane	0.97526	0.90623	0.010	7.07854	30.00000	Averaged
127 Chlorobenzene	1.27774	1.12865	0.010	11.66778	30.00000	Averaged
128 Ethyl Benzene	0.69681	0.63523	0.010	8.83830	30.00000	Averaged
129 m,p-Xylene	0.89156	0.79805	0.010	10.48838	30.00000	Averaged
130 o-Xylene	0.82476	0.75617	0.010	8.31659	30.00000	Averaged
131 Styrene	1.25595	1.22412	0.010	2.53464	30.00000	Averaged
133 Bromoform	0.93007	0.85184	0.010	8.41191	30.00000	Averaged
134 Cumene	2.41226	2.14597	0.010	11.03906	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.27799	1.11231	0.010	12.96423	30.00000	Averaged
142 Propylbenzene	3.00479	2.60017	0.010	13.46587	30.00000	Averaged
145 4-Ethyltoluene	2.87914	2.32348	0.010	19.29965	30.00000	Averaged
147 1,3,5-Trimethylbenzene	2.35569	1.94547	0.010	17.41375	30.00000	Averaged
150 1,2,4-Trimethylbenzene	2.32240	1.87055	0.010	19.45612	30.00000	Averaged
155 1,3-Dichlorobenzene	1.51467	1.20771	0.010	20.26536	30.00000	Averaged
156 1,4-Dichlorobenzene	1.58937	1.26016	0.010	20.71367	30.00000	Averaged
159 alpha-Chlorotoluene	2.32754	1.94466	0.010	16.44985	30.00000	Averaged
161 1,2-Dichlorobenzene	1.52997	1.19214	0.010	22.08134	30.00000	Averaged
165 1,2,4-Trichlorobenzene	0.68380	0.57182	0.010	16.37572	30.00000	Averaged
166 Hexachlorobutadiene	0.57073	0.41968	0.010	26.46635	30.00000	Averaged
29 Isopentane	3.52866	3.26018	0.010	7.60866	30.00000	Averaged
19 Butane	0.52259	0.46606	0.010	10.81834	30.00000	Averaged
102 Methyl Cyclohexane	2.28778	2.24624	0.010	1.81567	30.00000	Averaged
167 Naphthalene	1.46871	1.17246	0.010	20.17048	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7100904.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/09oct08.b/t14q804c.m

Injection Date: 09-OCT-2008 10:35
Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Init. Cal. Times: 16:14 15:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
57 tert-Butyl-Alcohol	2.73572	3.51667	0.010	-28.54634	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100904.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 09-OCT-2008 10:35
Operator : smd Inst ID: msd7.i
Smp Info : 100mL #1612-156A
Misc Info : 50ppbv(100ppbv)
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 12:09 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	362080	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	285757			28.92- 128.92	78.92
14.333	14.333 (1.000)	49	1342969			320.90- 420.90	370.90
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1146510	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	196107			0.00- 67.10	17.10
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1241713	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	614934			1.24- 101.24	49.52
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	654706	25.0000	23.938	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	325207			0.00- 97.37	49.67
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1143128	25.0000	26.046	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	148807			0.00- 63.85	13.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	869561			26.51- 126.51	76.07
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	616813	25.0000	24.140	80.00- 120.00	100.00
23.264	23.264 (1.092)	95	879693			92.62- 192.62	142.62
23.291	23.291 (1.093)	176	579999			44.03- 144.03	94.03
11 Propylene					CAS #: 115-07-1		
5.589	5.589 (0.390)	41	1387022	50.0000	44.926	80.00- 120.00	100.00
5.589	5.589 (0.390)	42	946253			16.57- 116.57	68.22
5.589	5.589 (0.390)	39	1141162			28.60- 128.60	82.27
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.400)	85	3804367	50.0000	42.503	80.00- 120.00	100.00
5.729	5.729 (0.400)	87	1194418			0.00- 81.85	31.40
16 Freon 114					CAS #: 76-14-2		
6.152	6.152 (0.429)	135	2207145	50.0000	46.160	80.00- 120.00	100.00
6.180	6.180 (0.431)	137	689100			0.00- 81.22	31.22
18 Chloromethane					CAS #: 74-87-3		
6.490	6.490 (0.453)	50	1756983	50.0000	46.148	80.00- 120.00	100.00
6.490	6.490 (0.453)	52	547473			0.00- 81.05	31.16
20 Vinyl Chloride					CAS #: 75-01-4		
6.828	6.828 (0.476)	62	1649705	50.0000	43.664	80.00- 120.00	100.00
6.828	6.828 (0.476)	64	472742			0.00- 84.96	28.66
22 1,3-Butadiene					CAS #: 106-99-0		
6.912	6.912 (0.482)	54	1581062	50.0000	44.440	80.00- 120.00	100.00
6.912	6.912 (0.482)	39	1654153			46.88- 146.88	104.62
25 Bromomethane					CAS #: 74-83-9		
7.982	7.982 (0.557)	94	883399	50.0000	37.863	80.00- 120.00	100.00
7.982	7.982 (0.557)	96	812799			42.01- 142.01	92.01
27 Chloroethane					CAS #: 75-00-3		
8.320	8.320 (0.580)	64	757712	50.0000	43.128	80.00- 120.00	100.00
8.320	8.320 (0.580)	49	332365			0.00- 94.43	43.86
8.320	8.320 (0.580)	66	212342			0.00- 79.28	26.02
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.912	8.912 (0.622)	101	3865883	50.0000	43.466	80.00- 120.00	100.00
8.912	8.912 (0.622)	103	2430223			12.86- 112.86	62.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.411	9.411 (0.657)	45	665108	50.0000	45.101	80.00- 120.00	100.00
9.411	9.411 (0.657)	43	154794			0.00- 73.90	23.27
9.411	9.411 (0.657)	46	257268			0.00- 88.16	38.68
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	1526785	50.0000	42.748	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	954973			12.55- 112.55	62.55
10.158	10.158 (0.709)	101	2274713			98.99- 198.99	148.99
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	2565770	50.0000	41.311	80.00- 120.00	100.00
10.269	10.269 (0.716)	96	968350			0.00- 87.74	37.74
10.269	10.269 (0.716)	98	610703			0.00- 73.80	23.80
45 Acetone					CAS #: 67-64-1		
10.407	10.407 (0.726)	58	770065	50.0000	43.924	80.00- 120.00	100.00
10.407	10.407 (0.726)	43	3199336			340.42- 440.42	415.46
46 2-Propanol					CAS #: 67-63-0		
10.600	10.600 (0.740)	45	3590218	50.0000	48.260	80.00- 120.00	100.00
10.600	10.600 (0.740)	43	925005			0.00- 76.39	25.76
10.628	10.628 (0.742)	59	95416			0.00- 53.62	2.66
47 Carbon Disulfide					CAS #: 75-15-0		
10.822	10.822 (0.755)	76	3171196	50.0000	41.578	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.098	11.098 (0.774)	76	521756	50.0000	42.014	80.00- 120.00	100.00
11.098	11.098 (0.774)	41	2561916			377.54- 477.54	491.02
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	2379845	50.0000	43.799	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	819240			0.00- 84.42	34.42
11.430	11.430 (0.797)	51	728077			0.00- 80.54	30.59
60 MTBE					CAS #: 1634-04-4		
11.762	11.762 (0.821)	73	3067947	50.0000	68.313	80.00- 120.00	100.00
11.762	11.762 (0.821)	57	1006368			0.00- 82.80	32.80
11.762	11.762 (0.821)	41	1211692			0.00- 86.33	39.50
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.872	11.872 (0.828)	96	1146901	50.0000	44.049	80.00- 120.00	100.00
11.872	11.872 (0.828)	61	2486098			166.77- 266.77	216.77
11.872	11.872 (0.828)	98	705692			13.50- 113.50	61.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.232	12.232 (0.853)	57	2700871	50.0000	44.569	80.00- 120.00	100.00
12.232	12.232 (0.853)	43	2016020			20.34- 120.34	74.64
12.232	12.232 (0.853)	86	269847			0.00- 61.25	9.99
69 Vinyl Acetate					CAS #: 108-05-4		
12.729	12.729 (0.888)	86	261032	50.0000	43.822	80.00- 120.00	100.00
12.702	12.702 (0.886)	43	5769784			1872.40-1972.40	2210.37
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.757	12.757 (0.890)	63	2843315	50.0000	43.311	80.00- 120.00	100.00
12.757	12.757 (0.890)	65	823627			0.00- 78.97	28.97
75 2-Butanone					CAS #: 78-93-3		
13.808	13.808 (0.963)	72	522195	50.0000	45.701	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	4070600			729.52- 829.52	779.52
13.808	13.808 (0.963)	57	263092			0.00- 97.16	50.38
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.967)	61	2161540	50.0000	43.892	80.00- 120.00	100.00
13.863	13.863 (0.967)	96	1055296			0.00- 98.82	48.82
13.863	13.863 (0.967)	98	674492			0.00- 81.20	31.20
80 Tetrahydrofuran					CAS #: 109-99-9		
14.305	14.305 (0.998)	42	2130993	50.0000	52.820	80.00- 120.00	100.00
14.305	14.305 (0.998)	71	475881			0.00- 72.33	22.33
14.305	14.305 (0.998)	72	503352			0.00- 78.71	23.62
82 Chloroform					CAS #: 67-66-3		
14.388	14.388 (1.004)	83	2264125	50.0000	44.985	80.00- 120.00	100.00
14.388	14.388 (1.004)	85	1611428			21.17- 121.17	71.17
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	2431345	50.0000	47.312	80.00- 120.00	100.00
14.748	14.748 (1.029)	99	1552045			13.83- 113.83	63.83
85 Cyclohexane					CAS #: 110-82-7		
14.775	14.775 (1.031)	84	1245953	50.0000	46.151	80.00- 120.00	100.00
14.775	14.775 (1.031)	56	2635799			161.55- 261.55	211.55
14.775	14.775 (1.031)	41	1695579			86.09- 186.09	136.09
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	2712825	50.0000	46.230	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	2866878			55.68- 155.68	105.68
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.356	15.356 (1.071)	57	7041215	50.0000	48.756	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.356	15.356 (1.071)	56	2452773			0.00- 82.54	34.83
15.356	15.356 (1.071)	41	2343704			0.00- 80.37	33.29
91 Benzene					CAS #: 71-43-2		
15.439	15.439 (0.959)	78	2829827	50.0000	45.332	80.00- 120.00	100.00
15.439	15.439 (0.959)	77	615677			0.00- 71.75	21.76
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.550	15.550 (0.966)	62	2276818	50.0000	49.350	80.00- 120.00	100.00
15.550	15.550 (0.966)	64	671899			0.00- 82.49	29.51
94 Heptane					CAS #: 142-82-5		
15.660	15.660 (0.973)	71	989070	50.0000	48.998	80.00- 120.00	100.00
15.633	15.633 (0.971)	43	3040772			238.48- 338.48	307.44
15.660	15.660 (0.973)	57	1409507			102.27- 202.27	142.51
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1274993	50.0000	47.677	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1306591			52.48- 152.48	102.48
16.573	16.573 (1.029)	97	821596			14.44- 114.44	64.44
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.043	17.043 (1.058)	63	1369000	50.0000	45.915	80.00- 120.00	100.00
17.043	17.043 (1.058)	62	1068118			28.02- 128.02	78.02
17.043	17.043 (1.058)	41	1302322			45.13- 145.13	95.13
106 1,4-Dioxane					CAS #: 123-91-1		
17.181	17.181 (1.067)	88	709270	50.0000	46.496	80.00- 120.00	100.00
17.181	17.181 (1.067)	58	776518			59.48- 159.48	109.48
17.181	17.181 (1.067)	57	257506			0.00- 86.44	36.31
107 Bromodichloromethane					CAS #: 75-27-4		
17.485	17.485 (1.086)	83	2344704	50.0000	48.423	80.00- 120.00	100.00
17.485	17.485 (1.086)	85	1657167			20.68- 120.68	70.68
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.287	18.287 (1.136)	75	1740590	50.0000	50.672	80.00- 120.00	100.00
18.287	18.287 (1.136)	77	528369			0.00- 80.36	30.36
18.259	18.259 (1.134)	39	1797247			53.26- 153.26	103.26
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.453	18.453 (1.146)	58	1454601	50.0000	54.675	80.00- 120.00	100.00
18.453	18.453 (1.146)	43	4475780			244.73- 344.73	307.70
18.453	18.453 (1.146)	85	411077			0.00- 81.51	28.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.812	18.812 (1.168)	91	3169803	50.0000	45.806	80.00- 120.00	100.00
18.812	18.812 (1.168)	92	1966683			12.04- 112.04	62.04
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.255	19.255 (0.904)	75	1919057	50.0000	47.749	80.00- 120.00	100.00
19.255	19.255 (0.904)	77	600101			0.00- 81.27	31.27
19.255	19.255 (0.904)	39	1774212			42.45- 142.45	92.45
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	1196417	50.0000	46.741	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	727428			10.80- 110.80	60.80
19.586	19.586 (0.920)	83	996206			33.27- 133.27	83.27
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	1498951	50.0000	44.682	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	1287214			35.87- 135.87	85.87
19.780	19.780 (0.929)	131	1278989			35.33- 135.33	85.33
121 2-Hexanone					CAS #: 591-78-6		
19.918	19.918 (0.935)	58	2031004	50.0000	52.274	80.00- 120.00	100.00
19.918	19.918 (0.935)	43	4552733			174.16- 274.16	224.16
19.918	19.918 (0.935)	100	249654			0.00- 63.21	12.29
122 Dibromochloromethane					CAS #: 124-48-1		
20.305	20.305 (0.953)	129	2574942	50.0000	48.045	80.00- 120.00	100.00
20.305	20.305 (0.953)	127	2024527			29.59- 129.59	78.62
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.582	20.582 (0.966)	107	2250546	50.0000	46.461	80.00- 120.00	100.00
20.582	20.582 (0.966)	109	2087627			42.76- 142.76	92.76
127 Chlorobenzene					CAS #: 108-90-7		
21.356	21.356 (1.003)	112	2802931	50.0000	44.166	80.00- 120.00	100.00
21.356	21.356 (1.003)	114	900118			0.00- 82.11	32.11
21.356	21.356 (1.003)	77	2115799			25.49- 125.49	75.49
128 Ethyl Benzene					CAS #: 100-41-4		
21.439	21.439 (1.006)	106	1577536	50.0000	45.581	80.00- 120.00	100.00
21.439	21.439 (1.006)	91	4764426			261.34- 361.34	302.02
129 m,p-Xylene					CAS #: 108-38-3		
21.633	21.633 (1.016)	106	1981906	50.0000	44.756	80.00- 120.00	100.00
21.633	21.633 (1.016)	91	3886885			147.02- 247.02	196.12
130 o-Xylene					CAS #: 95-47-6		
22.324	22.324 (1.048)	106	1877893	50.0000	45.842	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.324	22.324 (1.048)	91	3876693			156.44- 256.44	206.44
131 Styrene					CAS #: 100-42-5		
22.351	22.351 (1.049)	104	3040003	50.0000	48.733	80.00- 120.00	100.00
22.351	22.351 (1.049)	78	1547047			0.89- 100.89	50.89
133 Bromoform					CAS #: 75-25-2		
22.766	22.766 (1.069)	173	2115472	50.0000	45.794	80.00- 120.00	100.00
22.766	22.766 (1.069)	171	1098548			1.93- 101.93	51.93
134 Cumene					CAS #: 98-82-8		
22.904	22.904 (1.075)	105	5329362	50.0000	44.480	80.00- 120.00	100.00
22.904	22.904 (1.075)	120	1490190			0.00- 77.95	27.96
22.904	22.904 (1.075)	51	943493			0.00- 67.08	17.70
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.485	23.485 (1.103)	83	2762342	50.0000	43.518	80.00- 120.00	100.00
23.485	23.485 (1.103)	85	1973164			21.43- 121.43	71.43
142 Propylbenzene					CAS #: 103-65-1		
23.596	23.596 (1.108)	91	6457333	50.0000	43.267	80.00- 120.00	100.00
23.596	23.596 (1.108)	120	1576859			0.00- 73.91	24.42
23.596	23.596 (1.108)	105	243464			0.00- 54.14	3.77
145 4-Ethyltoluene					CAS #: 622-96-8		
23.762	23.762 (1.116)	105	5770186	50.0000	40.350	80.00- 120.00	100.00
23.762	23.762 (1.116)	120	1850743			0.00- 82.07	32.07
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.872	23.872 (1.121)	105	4831440	50.0000	41.293	80.00- 120.00	100.00
23.872	23.872 (1.121)	120	2422937			1.24- 101.24	50.15
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.508	24.508 (1.151)	105	4645372	50.0000	40.272	80.00- 120.00	100.00
24.508	24.508 (1.151)	120	2246186			0.00- 97.02	46.35
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.089	25.089 (1.178)	146	2999266	50.0000	39.867	80.00- 120.00	100.00
25.089	25.089 (1.178)	148	1898438			12.07- 112.07	63.30
25.061	25.061 (1.177)	111	1317338			0.00- 94.74	43.92
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.227	25.227 (1.184)	146	3129502	50.0000	39.643	80.00- 120.00	100.00
25.227	25.227 (1.184)	148	1967153			13.30- 113.30	62.86
25.227	25.227 (1.184)	111	1321334			0.00- 92.03	42.22

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	======	========	====	========	=======	=======	============	=====
159 alpha-Chlorotoluene						CAS #: 100-44-7		
25.420	25.420	(1.193)	91	4829431	50.0000	41.775	80.00- 120.00	100.00
25.420	25.420	(1.193)	126	979430			0.00- 69.83	20.28
161 1,2-Dichlorobenzene						CAS #: 95-50-1		
25.863	25.863	(1.214)	146	2960581	50.0000	38.959	80.00- 120.00	100.00
25.863	25.863	(1.214)	148	1867856			13.09- 113.09	63.09
25.863	25.863	(1.214)	111	1338874			0.00- 95.22	45.22
165 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
28.738	28.738	(1.349)	180	1420077	50.0000	41.812	80.00- 120.00	100.00
28.738	28.738	(1.349)	182	1367259			46.28- 146.28	96.28
166 Hexachlorobutadiene						CAS #: 87-68-3		
28.932	28.932	(1.358)	225	1042233	50.0000	36.767	80.00- 120.00	100.00
28.932	28.932	(1.358)	223	642532			13.71- 113.71	61.65
29 Isopentane						CAS #: 78-78-4		
8.320	8.320	(0.580)	43	2360891	50.0000	46.196	80.00- 120.00	100.00
8.320	8.320	(0.580)	57	1368888			17.61- 117.61	57.98
19 Butane						CAS #: 106-97-8		
6.715	6.715	(0.468)	58	337500	50.0000	44.591	80.00- 120.00	100.00
6.715	6.715	(0.468)	43	3088304			787.53- 887.53	915.05
102 Methyl Cyclohexane						CAS #: 108-87-2		
16.849	16.849	(1.176)	83	1626639	50.0000	49.092	80.00- 120.00	100.00
16.849	16.849	(1.176)	98	728458			0.00- 97.34	44.78
16.849	16.849	(1.176)	55	2362257			95.79- 195.79	145.22
167 Naphthalene						CAS #: 91-20-3		
29.291	29.291	(1.375)	128	2911725	50.0000	39.915	80.00- 120.00	100.00
29.291	29.291	(1.375)	127	347905			0.00- 62.37	11.95
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.430	11.430	(0.797)	59	2546634	50.0000	64.273	80.00- 120.00	100.00
11.430	11.430	(0.797)	41	680889			0.00- 74.69	26.74
11.430	11.430	(0.797)	57	267757			0.00- 61.62	10.51

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100904.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 09-OCT-2008
Calibration Time: 09:50
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	334429	200657	468201	362080	8.27
97 1,4-Difluorobenze	1068870	641322	1496418	1146510	7.26
126 Chlorobenzene-d5	1109504	665702	1553306	1241713	11.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

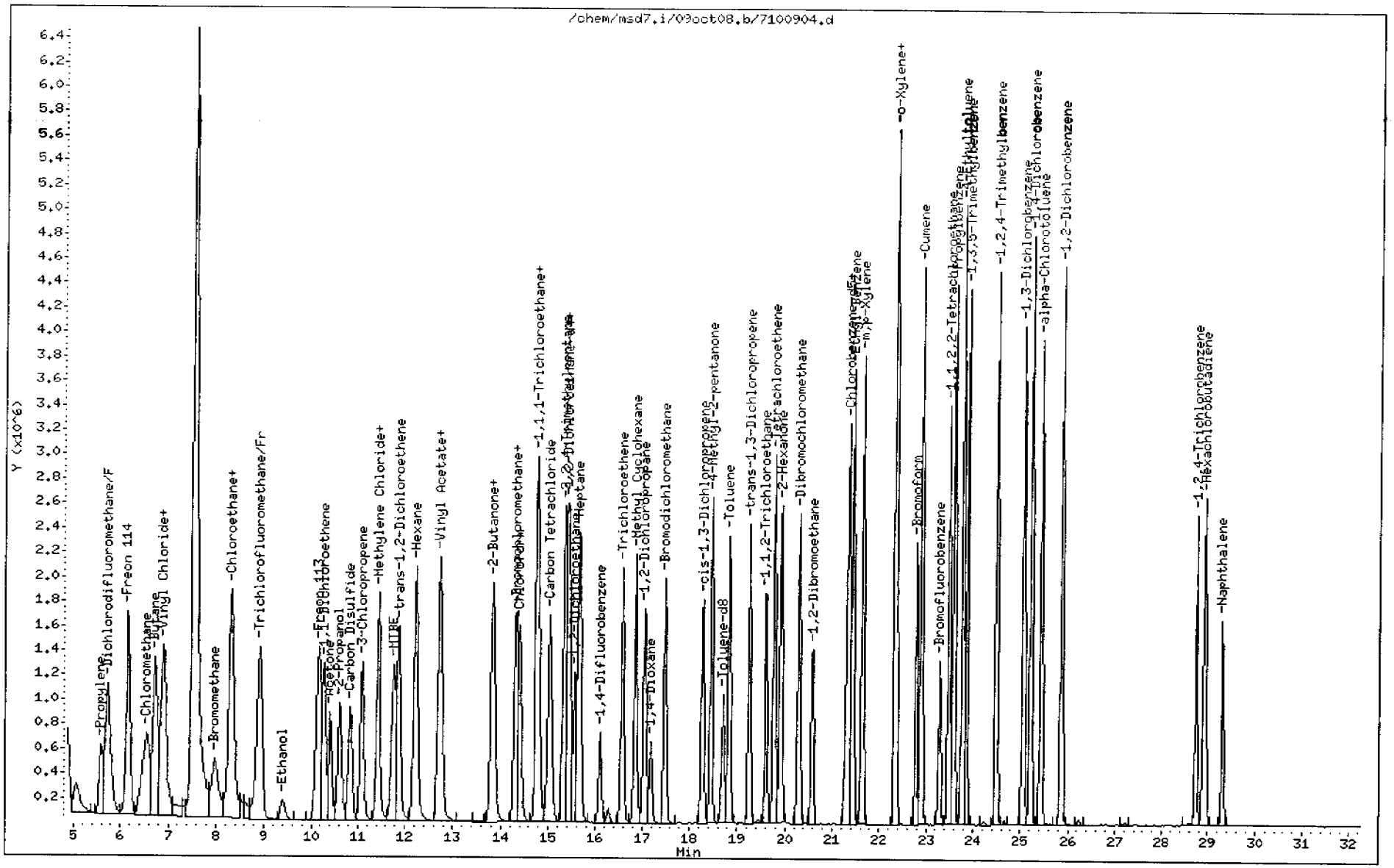
0605

Data File: /chem/msd7.i/09oct08.b/7100904.d
Date : 09-OCT-2008 10:35
Client ID: CCV-1
Sample Info: 100mL #1612-156A

Instrument: msd7.i

Operator: smd
Column diameter: 0.53

Column phase: RTx-624



Report Date: 06-Oct-2008 11:35

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7100604.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd7.i/06oct08.b/t14q804c.m

Injection Date: 06-OCT-2008 11:18
Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Init. Cal. Times: 16:14 15:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 90 1,2-Dichloroethane-d4	1.88842	1.88373	0.010	0.24853	30.00000	Averaged	
$ 113 Toluene-d8	0.95700	0.88631	0.010	7.38696	30.00000	Averaged	
$ 137 Bromofluorobenzene	0.51443	0.52173	0.010	-1.41909	30.00000	Averaged	
96 2-Heptanone	3.16753	3.54172	0.010	-11.81323	40.00000	Averaged	
146 Diisobutyl Ketone	1.88243	2.10297	0.010	-11.71593	40.00000	Averaged	
99 Isobutanol	0.06869	0.05666	0.010	17.51062	40.00000	Averaged	
98 1-Butanol	0.46382	0.49945	0.010	-7.68006	40.00000	Averaged	
71 1-Propanol	0.51227	0.48814	0.010	4.70999	40.00000	Averaged	
73 t-Butylethyl Ether	5.66624	6.82411	0.010	-20.43458	40.00000	Averaged	
92 tert-amyl-Methyl Ether	3.10674	3.45250	0.010	-11.12966	40.00000	Averaged	
68 Isopropyl ether	9.18858	9.31113	0.010	-1.33371	40.00000	Averaged	
119 Butyl Acetate	0.67235	0.75524	0.010	-12.32813	40.00000	Averaged	
77 Ethyl Acetate	0.35085	0.32620	0.010	7.02749	40.00000	Averaged	
135 Cyclohexanone	0.90374	1.02394	0.010	-13.29962	40.00000	Averaged	
5 Freon 143a	0.83310	0.78344	0.010	5.96033	40.00000	Averaged	
6 Freon142b	4.10440	4.11310	0.010	-0.21193	40.00000	Averaged	
9 Freon 13	0.57503	1.00294	0.010	-74.41376	40.00000	Averaged	<-
13 Freon 134a	1.62261	1.46098	0.010	9.96073	40.00000	Averaged	
15 Freon 152a	1.16887	1.04151	0.010	10.89567	40.00000	Averaged	
17 Freon 22	7.34572	5.03636	0.010	31.43821	40.00000	Averaged	
41 Freon123	2.65837	2.24238	0.010	15.64818	40.00000	Averaged	
40 Freon123a	1.65427	1.55291	0.010	6.12688	40.00000	Averaged	
34 Dichlorofluoromethane/Fr21	3.72416	3.24375	0.010	12.89982	40.00000	Averaged	
136 Bromobenzene	0.71955	0.61484	0.010	14.55232	40.00000	Averaged	
158 Butylbenzene	0.59370	0.49571	0.010	16.50591	40.00000	Averaged	
149 sec-Butylbenzene	2.72988	2.42972	0.010	10.99508	40.00000	Averaged	
148 tert-Butylbenzene	1.80382	1.57837	0.010	12.49855	40.00000	Averaged	
141 2-Chlorotoluene	0.59567	0.53742	0.010	9.77971	40.00000	Averaged	
143 4-Chlorotoluene	0.59696	0.52409	0.010	12.20653	40.00000	Averaged	
162 1,2-Dibromo-3-Chloropropane	0.71790	0.59590	0.010	16.99435	40.00000	Averaged	
118 1,3-Dichloropropane	0.70969	0.63671	0.010	10.28376	40.00000	Averaged	
78 2,2-Dichloropropane	2.54820	2.73553	0.010	-7.35150	40.00000	Averaged	
153 p-Cymene	2.50590	2.17721	0.010	13.11647	40.00000	Averaged	
125 1,1,1,2-Tetrachloroethane	0.70760	0.63656	0.010	10.03979	40.00000	Averaged	
138 1,2,3-Trichloropropane	0.38549	0.32782	0.010	14.96108	40.00000	Averaged	

0606

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7100604.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd7.i/06oct08.b/t14q804c.m

Injection Date: 06-OCT-2008 11:18
Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Init. Cal. Times: 16:14 15:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
154 1,2,3-Trimethylbenzene	0.88552	0.77738	0.010	12.21223	40.00000	Averaged
201 Pentachloroethane	0.55374	0.49951	0.010	9.79345	40.00000	Averaged
88 1,1-Dichloropropene	0.22696	0.20640	0.010	9.05833	40.00000	Averaged
55 Cyclopentene	3.62560	3.08576	0.010	14.86986	40.00000	Averaged
26 Methanol	0.72137	0.69997	0.010	2.96649	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100604.d
Lab Smp Id: CCV Client Smp ID: CCVsp
Inj Date : 06-OCT-2008 11:18
Operator : smd Inst ID: msd7.i
Smp Info : 100mL #1612-149A
Misc Info : 50ppbv(100ppbv)
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 11:35 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp37aCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane					CAS #: 74-97-5			
14.333	14.333 (1.000)	130	388033	25.0000		80.00- 120.00		100.00
14.333	14.333 (1.000)	128	300354			27.40- 127.40		77.40
14.305	14.305 (1.000)	49	1033202			216.27- 316.27		266.27
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
16.102	16.102 (1.000)	114	1201522	25.0000		80.00- 120.00		100.00
16.102	16.102 (1.000)	88	217161			0.00- 68.07		18.07
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
21.301	21.301 (1.000)	117	1206774	25.0000		80.00- 120.00		100.00
21.301	21.301 (1.000)	82	607971			1.24- 101.24		50.38
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
15.411	15.411 (1.075)	65	730948	25.0000	24.938	80.00- 120.00		100.00
15.411	15.411 (1.075)	67	331376			0.00- 97.37		45.34
$ 113 Toluene-d8					CAS #: 2037-26-5			
18.702	18.702 (1.161)	98	1064922	25.0000	23.153	80.00- 120.00		100.00
18.702	18.702 (1.161)	70	145172			0.00- 63.85		13.63

0608

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	808968			26.51- 126.51	75.97
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	629611	25.0000	25.355	80.00- 120.00	100.00
23.264	23.264 (1.092)	95	896841			92.44- 192.44	142.44
23.291	23.291 (1.093)	176	623283			48.99- 148.99	98.99
96 2-Heptanone					CAS #: 110-43-0		
22.462	22.462 (1.567)	58	2748606	50.0000	55.907	80.00- 120.00	100.00
22.434	22.434 (1.565)	43	9418437			134.40- 234.40	197.13
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.010	24.010 (1.127)	57	5075627	50.0000	55.858	80.00- 120.00	100.00
24.010	24.010 (1.127)	85	2678284			2.77- 102.77	52.77
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
99 Isobutanol					CAS #: 78-83-1		
15.079	15.079 (1.052)	59	43974	50.0000	41.245	80.00- 120.00	100.00
15.079	15.079 (1.052)	41	1149096			1738.39-1838.39	2613.13
15.079	15.079 (1.052)	43	1490724			2172.15-2272.15	3390.01
98 1-Butanol					CAS #: 71-36-3		
16.268	16.268 (1.010)	56	1200190	50.0000	53.840	80.00- 120.00	100.00
16.241	16.241 (1.009)	41	1018652			27.33- 127.33	84.87
16.241	16.241 (1.009)	43	774957			9.34- 109.34	64.57
71 1-Propanol					CAS #: 71-23-8		
12.757	12.757 (0.890)	42	378829	50.0000	47.645	80.00- 120.00	100.00
12.757	12.757 (0.890)	59	406778			101.28- 201.28	107.38
12.619	12.619 (0.880)	41	1423844			307.14- 407.14	375.85
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.310	13.310 (0.929)	59	5295958	50.0000	60.217	80.00- 120.00	100.00
13.310	13.310 (0.929)	87	1344634			0.00- 76.06	25.39
13.310	13.310 (0.929)	41	1115605			0.00- 69.79	21.07
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.467	15.467 (1.079)	73	2679371	50.0000	55.565	80.00- 120.00	100.00
15.467	15.467 (1.079)	87	647277			0.00- 75.36	24.16
15.467	15.467 (1.079)	55	1159196			0.00- 93.69	43.26
68 Isopropyl ether					CAS #: 108-20-3		
12.619	12.619 (0.880)	45	7226049	50.0000	50.667	80.00- 120.00	100.00
12.646	12.646 (0.882)	87	930309			0.00- 64.22	12.87
12.619	12.619 (0.880)	59	580342			0.00- 60.75	8.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
119 Butyl Acetate					CAS #: 123-86-4		
20.001	20.001 (1.242)	56	1814869	50.0000	56.164	80.00- 120.00	100.00
20.001	20.001 (1.242)	73	403248			0.00- 72.22	22.22
20.001	20.001 (1.242)	43	5277289			240.78- 340.78	290.78
77 Ethyl Acetate					CAS #: 141-78-6		
13.808	13.808 (0.963)	70	253151	50.0000	46.486	80.00- 120.00	100.00
13.780	13.780 (0.961)	45	671123			169.70- 269.70	265.11
13.808	13.808 (0.963)	61	925979			269.98- 369.98	365.78
135 Cyclohexanone					CAS #: 108-94-1		
23.208	23.208 (1.090)	55	2471317	50.0000	56.650	80.00- 120.00	100.00
23.236	23.236 (1.091)	98	571865			0.00- 75.03	23.14
23.208	23.208 (1.090)	42	1901132			21.37- 121.37	76.93
5 Freon 143a					CAS #: 420-46-2		
5.279	5.279 (0.368)	65	608002	50.0000	47.020	80.00- 120.00	100.00
5.222	5.222 (0.364)	69	3359770			439.02- 539.02	552.59
5.279	5.279 (0.368)	64	170296			0.00- 76.54	28.01
6 Freon142b					CAS #: 75-68-3		
6.293	6.293 (0.439)	65	3192039	50.0000	50.106	80.00- 120.00	100.00
6.293	6.293 (0.439)	45	1064917			0.00- 81.70	33.36
9 Freon 13					CAS #: 75-72-9		
5.166	5.166 (0.360)	85	778347	50.0000	87.207	80.00- 120.00	100.00
5.194	5.194 (0.362)	87	244519			0.00- 89.74	31.42
5.222	5.222 (0.364)	69	4560744			873.00- 973.00	585.95
13 Freon 134a					CAS #: 811-97-2		
5.420	5.420 (0.378)	83	1133820	50.0000	45.020	80.00- 120.00	100.00
5.222	5.222 (0.364)	69	4560744			243.86- 343.86	402.25
5.391	5.391 (0.376)	63	183517			0.00- 68.27	16.19
15 Freon 152a					CAS #: 75-37-6		
5.617	5.617 (0.392)	65	808283	50.0000	44.552	80.00- 120.00	100.00
5.617	5.617 (0.392)	51	2270972			486.38- 586.38	280.96
5.617	5.617 (0.392)	47	664033			25.73- 125.73	82.15
17 Freon 22					CAS #: 75-45-6		
5.786	5.786 (0.404)	51	3908548	50.0000	34.281	80.00- 120.00	100.00
5.786	5.786 (0.404)	67	373720			0.00- 57.89	9.56
5.758	5.758 (0.402)	85	32173			0.00- 50.73	0.82
41 Freon123					CAS #: 306-83-2		
9.909	9.909 (0.691)	83	1740238	50.0000	42.176	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)								
9.909	9.909	(0.691)	133	395387			0.00- 73.53	22.72
9.909	9.909	(0.691)	85	1346047			21.75- 121.75	77.35
40 Freon123a						CAS #: 354-23-4		
9.743	9.743	(0.680)	117	1205163	50.0000	46.936	80.00- 120.00	100.00
9.743	9.743	(0.680)	67	1601129			94.79- 194.79	132.86
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.883	8.883	(0.620)	67	2517365	50.0000	43.550	80.00- 120.00	100.00
8.883	8.883	(0.620)	69	738501			0.00- 78.72	29.34
8.883	8.883	(0.620)	35	254944			0.00- 58.83	10.13
136 Bromobenzene						CAS #: 108-86-1		
23.568	23.568	(1.106)	156	1483934	50.0000	42.724	80.00- 120.00	100.00
23.568	23.568	(1.106)	158	1422310			45.85- 145.85	95.85
23.568	23.568	(1.106)	77	3216017			162.84- 262.84	216.72
158 Butylbenzene						CAS #: 104-51-8		
25.642	25.642	(1.204)	134	1196414	50.0000	41.747	80.00- 120.00	100.00
25.642	25.642	(1.204)	91	4950608			363.79- 463.79	413.79
25.642	25.642	(1.204)	92	2708645			168.89- 268.89	226.40
149 sec-Butylbenzene						CAS #: 135-98-8		
24.757	24.757	(1.162)	105	5864254	50.0000	44.502	80.00- 120.00	100.00
24.757	24.757	(1.162)	134	1089005			0.00- 68.57	18.57
24.757	24.757	(1.162)	91	960475			0.00- 66.29	16.38
148 tert-Butylbenzene						CAS #: 98-06-6		
24.397	24.397	(1.145)	119	3809468	50.0000	43.751	80.00- 120.00	100.00
24.397	24.397	(1.145)	134	827232			0.00- 71.72	21.72
24.397	24.397	(1.145)	91	2634696			19.71- 119.71	69.16
141 2-Chlorotoluene						CAS #: 95-49-8		
23.844	23.844	(1.119)	126	1297080	50.0000	45.110	80.00- 120.00	100.00
23.817	23.817	(1.118)	91	3663539			232.45- 332.45	282.45
23.817	23.817	(1.118)	65	479286			0.00- 88.32	36.95
143 4-Chlorotoluene						CAS #: 106-43-4		
24.010	24.010	(1.127)	126	1264921	50.0000	43.897	80.00- 120.00	100.00
24.010	24.010	(1.127)	91	3680572			240.97- 340.97	290.97
24.010	24.010	(1.127)	63	689726			4.62- 104.62	54.53
162 1,2-Dibromo-3-Chloropropane						CAS #: 96-12-8		
27.218	27.218	(1.278)	157	1438236	50.0000	41.503	80.00- 120.00	100.00
27.218	27.218	(1.278)	75	1673783			66.38- 166.38	116.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 1,2-Dibromo-3-Chloropropane (continued)							
27.218	27.218 (1.278)	155	1126475			30.44- 130.44	78.32
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.918	19.918 (1.237)	76	1530037	50.0000	44.858	80.00- 120.00	100.00
19.918	19.918 (1.237)	41	2109290			87.86- 187.86	137.86
19.918	19.918 (1.237)	78	478784			0.00- 81.47	31.29
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.808	13.808 (0.963)	77	2122950	50.0000	53.676	80.00- 120.00	100.00
13.808	13.808 (0.963)	79	698540			0.00- 62.90	32.90
13.808	13.808 (0.963)	97	349587			0.00- 66.58	16.47
153 p-Cymene					CAS #: 99-87-6		
24.978	24.978 (1.173)	119	5254809	50.0000	43.442	80.00- 120.00	100.00
24.978	24.978 (1.173)	134	1290437			0.00- 73.80	24.56
24.978	24.978 (1.173)	91	1322471			0.00- 75.28	25.17
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.466	21.466 (1.008)	131	1536358	50.0000	44.980	80.00- 120.00	100.00
21.466	21.466 (1.008)	117	1070471			19.52- 119.52	69.68
21.466	21.466 (1.008)	95	579397			0.00- 89.36	37.71
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.623	23.623 (1.109)	110	791204	50.0000	42.519	80.00- 120.00	100.00
23.623	23.623 (1.109)	75	2403061			253.72- 353.72	303.72
23.596	23.596 (1.108)	61	865204			51.91- 151.91	109.35
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.227	25.227 (1.184)	120	1876249	50.0000	43.894	80.00- 120.00	100.00
25.227	25.227 (1.184)	105	4136250			170.45- 270.45	220.45
25.227	25.227 (1.184)	77	533620			0.00- 79.93	28.44
201 Pentachloroethane					CAS #: 76-01-7		
24.536	24.536 (1.152)	167	1205601	50.0000	45.103	80.00- 120.00	100.00
24.536	24.536 (1.152)	117	1493912			75.04- 175.04	123.91
24.536	24.536 (1.152)	169	566127			0.00- 97.66	46.96
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.052	15.052 (0.935)	110	495998	50.0000	45.471	80.00- 120.00	100.00
15.052	15.052 (0.935)	75	1443345			237.77- 337.77	291.00
55 Cyclopentene					CAS #: 142-29-0		
11.181	11.181 (0.780)	67	2394750	50.0000	42.555	80.00- 120.00	100.00
11.181	11.181 (0.780)	68	911330			0.00- 88.36	38.06
11.181	11.181 (0.780)	53	845772			0.00- 83.05	35.32

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
26 Methanol						CAS #: 67-56-1		
7.532	7.532	(0.525)	31	3259339	300.000	291.10	80.00- 120.00	100.00
7.532	7.532	(0.525)	32	2329874			21.48- 121.48	71.48

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

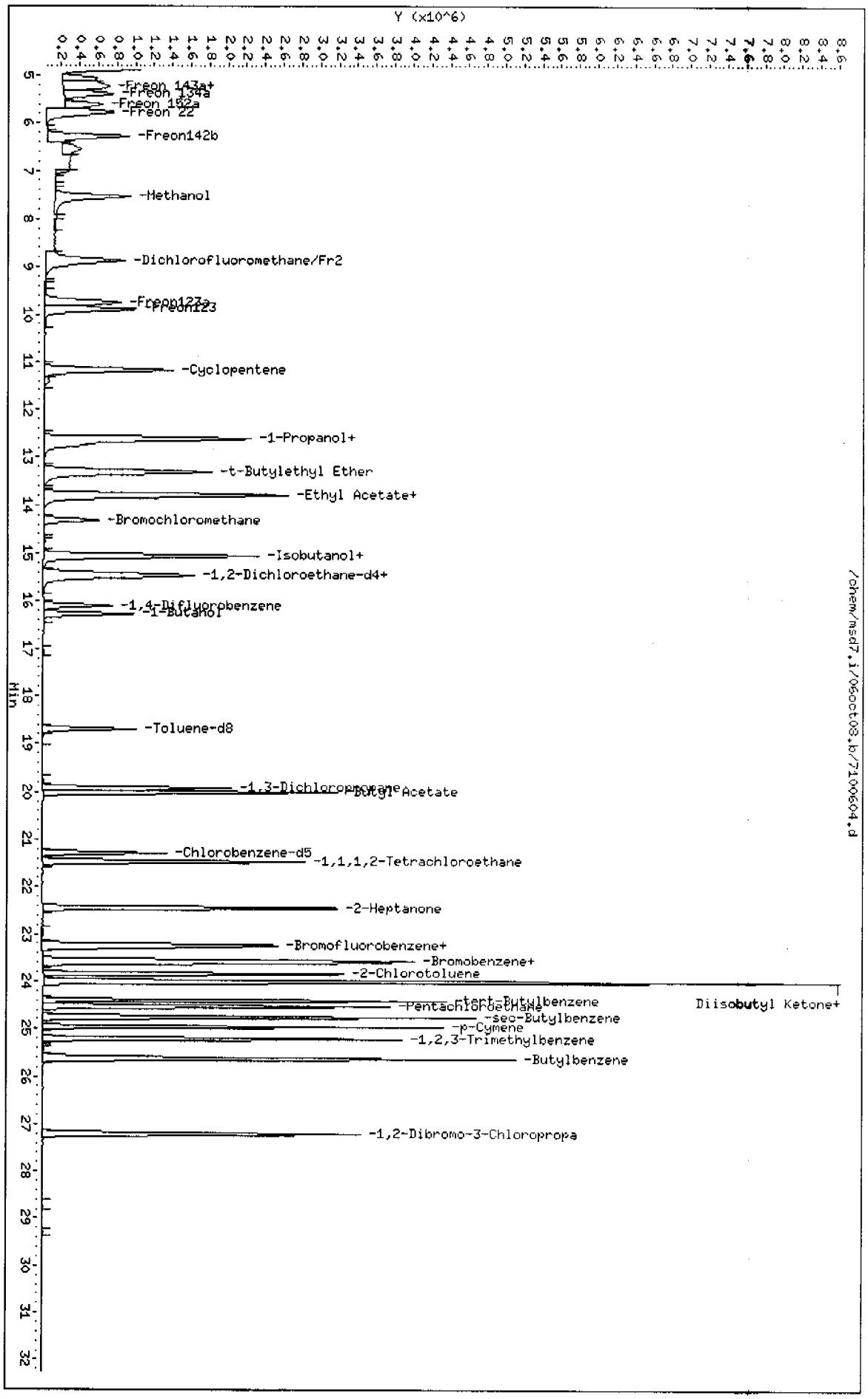
Instrument ID: msd7.i
Lab File ID: 7100604.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 06-OCT-2008
Calibration Time: 10:23
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	388033	1.09
97 1,4-Difluorobenze	1202073	721244	1682902	1201522	-0.05
126 Chlorobenzene-d5	1260970	756582	1765358	1206774	-4.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/06oct08.b/7100604.d
Date : 06-OCT-2008 11:18
Client ID: CCVsp
Sample Info: 100mL #1612-149A
Column phase: RTx-624

Instrument: msd7.i
Operator: smd
Column diameter: 0.53

Report Date: 09-Oct-2008 12:09

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 09-OCT-2008 09:50
Lab File ID: 7100903.d Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Analysis Type: AIR Init. Cal. Times: 16:14 15:00
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd7.i/09oct08.b/t14q804c.m

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$	90 1,2-Dichloroethane-d4	1.88842	1.83327	0.010	2.92035	30.00000	Averaged	
$	113 Toluene-d8	0.95700	0.93828	0.010	1.95650	30.00000	Averaged	
$	137 Bromofluorobenzene	0.51443	0.51979	0.010	-1.04095	30.00000	Averaged	
	96 2-Heptanone	3.16753	4.08597	0.010	-28.99536	40.00000	Averaged	
	146 Diisobutyl Ketone	1.88243	2.06643	0.010	-9.77439	40.00000	Averaged	
	99 Isobutanol	0.06869	0.06053	0.010	11.88493	40.00000	Averaged	
	98 1-Butanol	0.46382	0.56107	0.010	-20.96704	40.00000	Averaged	
	71 1-Propanol	0.51227	0.52905	0.010	-3.27564	40.00000	Averaged	
	73 t-Butylethyl Ether	5.66624	7.10973	0.010	-25.47529	40.00000	Averaged	
	92 tert-amyl-Methyl Ether	3.10674	3.85396	0.010	-24.05163	40.00000	Averaged	
	68 Isopropyl ether	9.18858	10.24058	0.010	-11.44898	40.00000	Averaged	
	119 Butyl Acetate	0.67235	0.84671	0.010	-25.93249	40.00000	Averaged	
	77 Ethyl Acetate	0.35085	0.37535	0.010	-6.98189	40.00000	Averaged	
	135 Cyclohexanone	0.90374	1.03797	0.010	-14.85248	40.00000	Averaged	
	5 Freon 143a	0.83310	0.84242	0.010	-1.11908	40.00000	Averaged	
	6 Freon142b	4.10440	4.36189	0.010	-6.27348	40.00000	Averaged	
	9 Freon 13	0.57503	1.26482	0.010	-120	40.00000	Averaged	<-
	13 Freon 134a	1.62261	1.70509	0.010	-5.08360	40.00000	Averaged	
	15 Freon 152a	1.16887	1.06401	0.010	8.97109	40.00000	Averaged	
	17 Freon 22	7.34572	5.82177	0.010	20.74611	40.00000	Averaged	
	41 Freon123	2.65837	2.45734	0.010	7.56220	40.00000	Averaged	
	40 Freon123a	1.65427	1.73107	0.010	-4.64284	40.00000	Averaged	
	34 Dichlorofluoromethane/Fr21	3.72416	3.37563	0.010	9.35877	40.00000	Averaged	
	136 Bromobenzene	0.71955	0.57866	0.010	19.57932	40.00000	Averaged	
	158 Butylbenzene	0.59370	0.41774	0.010	29.63865	40.00000	Averaged	
	149 sec-Butylbenzene	2.72988	2.19196	0.010	19.70460	40.00000	Averaged	
	148 tert-Butylbenzene	1.80382	1.42769	0.010	20.85179	40.00000	Averaged	
	141 2-Chlorotoluene	0.59567	0.49150	0.010	17.48845	40.00000	Averaged	
	143 4-Chlorotoluene	0.59696	0.48469	0.010	18.80719	40.00000	Averaged	
	162 1,2-Dibromo-3-Chloropropane	0.71790	0.42830	0.010	40.33962	40.00000	Averaged	<-
	118 1,3-Dichloropropane	0.70969	0.65497	0.010	7.71081	40.00000	Averaged	
	78 2,2-Dichloropropane	2.54820	2.83425	0.010	-11.22583	40.00000	Averaged	
	153 p-Cymene	2.50590	1.89983	0.010	24.18577	40.00000	Averaged	
	125 1,1,1,2-Tetrachloroethane	0.70760	0.60343	0.010	14.72175	40.00000	Averaged	
	138 1,2,3-Trichloropropane	0.38549	0.31478	0.010	18.34359	40.00000	Averaged	

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Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 09-OCT-2008 09:50
Lab File ID: 7100903.d Init. Cal. Date(s): 04-AUG-2008 27-AUG-2008
Analysis Type: AIR Init. Cal. Times: 16:14 15:00
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd7.i/09oct08.b/tl4q804c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
154 1,2,3-Trimethylbenzene	0.88552	0.66294	0.010	25.13553	40.00000	Averaged
201 Pentachloroethane	0.55374	0.44853	0.010	19.00137	40.00000	Averaged
88 1,1-Dichloropropene	0.22696	0.20029	0.010	11.75258	40.00000	Averaged
55 Cyclopentene	3.62560	2.84130	0.010	21.63244	40.00000	Averaged
26 Methanol	0.72137	0.83692	0.010	-16.01764	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100903.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 09-OCT-2008 09:50
Operator : smd
Inst ID: msd7.i
Smp Info : 50mL #1541-268
Misc Info : 50ppbv(200ppbv)
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 12:09 sdisher
Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00
Cal File: 7082709.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp37aCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	334429	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	260725			27.96- 127.96	77.96
14.305	14.305 (1.000)	49	904707			220.52- 320.52	270.52
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1068870	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	179352			0.00- 66.78	16.78
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1109504	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	560981			1.24- 101.24	50.56
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	613099	25.0000	24.270	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	277532			0.00- 97.37	45.27
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1002900	25.0000	24.511	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	132009			0.00- 63.85	13.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	768082			26.51- 126.51	76.59
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.291	23.291 (1.093)	174	576704	25.0000	25.260	80.00- 120.00	100.00
23.264	23.264 (1.092)	95	843151			96.20- 196.20	146.20
23.291	23.291 (1.093)	176	560073			47.12- 147.12	97.12
96 2-Heptanone					CAS #: 110-43-0		
22.462	22.462 (1.567)	58	2732931	50.0000	64.498	80.00- 120.00	100.00
22.434	22.434 (1.565)	43	5197857			134.40- 234.40	190.19
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.010	24.010 (1.127)	57	4585414	50.0000	54.887	80.00- 120.00	100.00
24.010	24.010 (1.127)	85	2536934			5.33- 105.33	55.33
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
99 Isobutanol					CAS #: 78-83-1		
15.080	15.080 (1.052)	59	40484	50.0000	44.058	80.00- 120.00	100.00
15.080	15.080 (1.052)	41	1099986			1738.39-1838.39	2717.09
15.080	15.080 (1.052)	43	1439426			2172.15-2272.15	3555.54
98 1-Butanol					CAS #: 71-36-3		
16.268	16.268 (1.010)	56	1199430	50.0000	60.484	80.00- 120.00	100.00
16.241	16.241 (1.009)	41	1002293			27.33- 127.33	83.56
16.241	16.241 (1.009)	43	750252			9.34- 109.34	62.55
71 1-Propanol					CAS #: 71-23-8		
12.757	12.757 (0.890)	42	353858	50.0000	51.638	80.00- 120.00	100.00
12.757	12.757 (0.890)	59	379919			101.28- 201.28	107.36
12.619	12.619 (0.880)	41	1354681			307.14- 407.14	382.83
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.310	13.310 (0.929)	59	4755397	50.0000	62.738	80.00- 120.00	100.00
13.310	13.310 (0.929)	87	1289388			0.00- 76.06	27.11
13.310	13.310 (0.929)	41	1036004			0.00- 69.79	21.79
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.467	15.467 (1.079)	73	2577749	50.0000	62.026	80.00- 120.00	100.00
15.467	15.467 (1.079)	87	607711			0.00- 75.36	23.58
15.467	15.467 (1.079)	55	1055486			0.00- 93.69	40.95
68 Isopropyl ether					CAS #: 108-20-3		
12.619	12.619 (0.880)	45	6849492	50.0000	55.724	80.00- 120.00	100.00
12.619	12.619 (0.880)	87	882470			0.00- 64.22	12.88
12.646	12.646 (0.882)	59	523308			0.00- 60.75	7.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
119 Butyl Acetate					CAS #: 123-86-4		
20.001	20.001 (1.242)	56	1810038	50.0000	62.966	80.00- 120.00	100.00
20.001	20.001 (1.242)	73	383653			0.00- 71.20	21.20
20.001	20.001 (1.242)	43	5073870			230.32- 330.32	280.32
77 Ethyl Acetate					CAS #: 141-78-6		
13.780	13.780 (0.961)	70	251056	50.0000	53.491	80.00- 120.00	100.00
13.780	13.780 (0.961)	45	633240			169.70- 269.70	252.23
13.808	13.808 (0.963)	61	812751			269.98- 369.98	323.73
135 Cyclohexanone					CAS #: 108-94-1		
23.208	23.208 (1.090)	55	2303262	50.0000	57.426	80.00- 120.00	100.00
23.236	23.236 (1.091)	98	542310			0.00- 75.03	23.55
23.208	23.208 (1.090)	42	1789480			21.37- 121.37	77.69
5 Freon 143a					CAS #: 420-46-2		
5.251	5.251 (0.366)	65	563459	50.0000	50.560	80.00- 120.00	100.00
5.194	5.194 (0.362)	69	3681393			439.02- 539.02	653.36
5.251	5.251 (0.366)	64	164845			0.00- 76.54	29.26
6 Freon142b					CAS #: 75-68-3		
6.293	6.293 (0.439)	65	2917487	50.0000	53.137	80.00- 120.00	100.00
6.293	6.293 (0.439)	45	1024303			0.00- 81.70	35.11
9 Freon 13					CAS #: 75-72-9		
5.166	5.166 (0.360)	85	845988	50.0000	109.98	80.00- 120.00	100.00
5.166	5.166 (0.360)	87	271376			0.00- 89.74	32.08
5.194	5.194 (0.362)	69	4766785			873.00- 973.00	563.46
13 Freon 134a					CAS #: 811-97-2		
5.391	5.391 (0.376)	83	1140466	50.0000	52.542	80.00- 120.00	100.00
5.391	5.391 (0.376)	69	1267479			243.86- 343.86	111.14
5.391	5.391 (0.376)	63	153350			0.00- 68.27	13.45
15 Freon 152a					CAS #: 75-37-6		
5.617	5.617 (0.392)	65	711671	50.0000	45.514	80.00- 120.00	100.00
5.617	5.617 (0.392)	51	2004525			486.38- 586.38	281.66
5.617	5.617 (0.392)	47	659187			25.73- 125.73	92.63
17 Freon 22					CAS #: 75-45-6		
5.758	5.758 (0.402)	51	3893939	50.0000	39.627	80.00- 120.00	100.00
5.786	5.786 (0.404)	67	352912			0.00- 57.89	9.06
5.758	5.758 (0.402)	85	31337			0.00- 50.73	0.80
41 Freon123					CAS #: 306-83-2		
9.881	9.881 (0.689)	83	1643611	50.0000	46.219	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)							
9.909	9.909 (0.691)	133	391839			0.00- 73.53	23.84
9.881	9.881 (0.689)	85	1270783			21.75- 121.75	77.32
40 Freon123a					CAS #: 354-23-4		
9.743	9.743 (0.680)	117	1157842	50.0000	52.321	80.00- 120.00	100.00
9.743	9.743 (0.680)	67	1372575			94.79- 194.79	118.55
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.855	8.855 (0.618)	67	2257814	50.0000	45.321	80.00- 120.00	100.00
8.855	8.855 (0.618)	69	726024			0.00- 78.72	32.16
8.855	8.855 (0.618)	35	243805			0.00- 58.83	10.80
136 Bromobenzene					CAS #: 108-86-1		
23.568	23.568 (1.106)	156	1284059	50.0000	40.210	80.00- 120.00	100.00
23.568	23.568 (1.106)	158	1234986			46.18- 146.18	96.18
23.568	23.568 (1.106)	77	2781938			162.84- 262.84	216.65
158 Butylbenzene					CAS #: 104-51-8		
25.642	25.642 (1.204)	134	926964	50.0000	35.181	80.00- 120.00	100.00
25.642	25.642 (1.204)	91	3740521			353.52- 453.52	403.52
25.642	25.642 (1.204)	92	2031238			168.89- 268.89	219.13
149 sec-Butylbenzene					CAS #: 135-98-8		
24.757	24.757 (1.162)	105	4863986	50.0000	40.148	80.00- 120.00	100.00
24.757	24.757 (1.162)	134	898492			0.00- 68.47	18.47
24.757	24.757 (1.162)	91	797370			0.00- 66.29	16.39
148 tert-Butylbenzene					CAS #: 98-06-6		
24.397	24.397 (1.145)	119	3168058	50.0000	39.574	80.00- 120.00	100.00
24.397	24.397 (1.145)	134	686350			0.00- 71.66	21.66
24.397	24.397 (1.145)	91	2193853			19.71- 119.71	69.25
141 2-Chlorotoluene					CAS #: 95-49-8		
23.844	23.844 (1.119)	126	1090637	50.0000	41.256	80.00- 120.00	100.00
23.844	23.844 (1.119)	91	3167268			240.41- 340.41	290.41
23.817	23.817 (1.118)	65	373498			0.00- 88.32	34.25
143 4-Chlorotoluene					CAS #: 106-43-4		
24.010	24.010 (1.127)	126	1075528	50.0000	40.596	80.00- 120.00	100.00
24.010	24.010 (1.127)	91	3167839			244.54- 344.54	294.54
24.010	24.010 (1.127)	63	552418			4.62- 104.62	51.36
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.218	27.218 (1.278)	157	950411	50.0000	29.830	80.00- 120.00	100.00
27.218	27.218 (1.278)	75	1144162			70.39- 170.39	120.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
162 1,2-Dibromo-3-Chloropropane (continued)							
27.218	27.218 (1.278)	155	743142			30.44- 130.44	78.19
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.918	19.918 (1.237)	76	1400151	50.0000	46.144	80.00- 120.00	100.00
19.918	19.918 (1.237)	41	1909970			86.41- 186.41	136.41
19.918	19.918 (1.237)	78	443681			0.00- 81.47	31.69
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.808	13.808 (0.963)	77	1895713	50.0000	55.613	80.00- 120.00	100.00
13.808	13.808 (0.963)	79	619705			0.00- 82.69	32.69
13.808	13.808 (0.963)	97	312995			0.00- 66.58	16.51
153 p-Cymene					CAS #: 99-87-6		
24.978	24.978 (1.173)	119	4215733	50.0000	37.907	80.00- 120.00	100.00
24.978	24.978 (1.173)	134	1017172			0.00- 73.80	24.13
24.978	24.978 (1.173)	91	1044927			0.00- 75.28	24.79
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.467	21.467 (1.008)	131	1339008	50.0000	42.639	80.00- 120.00	100.00
21.467	21.467 (1.008)	117	939755			19.52- 119.52	70.18
21.467	21.467 (1.008)	95	519640			0.00- 89.36	38.81
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.623	23.623 (1.109)	110	698496	50.0000	40.828	80.00- 120.00	100.00
23.623	23.623 (1.109)	75	2076313			247.25- 347.25	297.25
23.596	23.596 (1.108)	61	698231			51.91- 151.91	99.96
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.227	25.227 (1.184)	120	1471076	50.0000	37.432	80.00- 120.00	100.00
25.227	25.227 (1.184)	105	3258816			171.53- 271.53	221.53
25.227	25.227 (1.184)	77	418127			0.00- 79.93	28.42
201 Pentachloroethane					CAS #: 76-01-7		
24.536	24.536 (1.152)	167	995282	50.0000	40.499	80.00- 120.00	100.00
24.536	24.536 (1.152)	117	1271648			75.04- 175.04	127.77
24.536	24.536 (1.152)	169	470614			0.00- 97.66	47.28
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.052	15.052 (0.935)	110	428166	50.0000	44.124	80.00- 120.00	100.00
15.052	15.052 (0.935)	75	1257882			237.77- 337.77	293.78
55 Cyclopentene					CAS #: 142-29-0		
11.181	11.181 (0.780)	67	1900424	50.0000	39.184	80.00- 120.00	100.00
11.181	11.181 (0.780)	68	769125			0.00- 88.36	40.47
11.181	11.181 (0.780)	53	696041			0.00- 83.05	36.63

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
26 Methanol						CAS #: 67-56-1		
7.532	7.532	(0.525)	31	3358668	300.000	348.05	80.00- 120.00	100.00
7.532	7.532	(0.525)	32	2367433			20.49- 120.49	70.49

Data File: /chem/msd7.i/09oct08.b/7100903.d
Report Date: 09-Oct-2008 12:09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

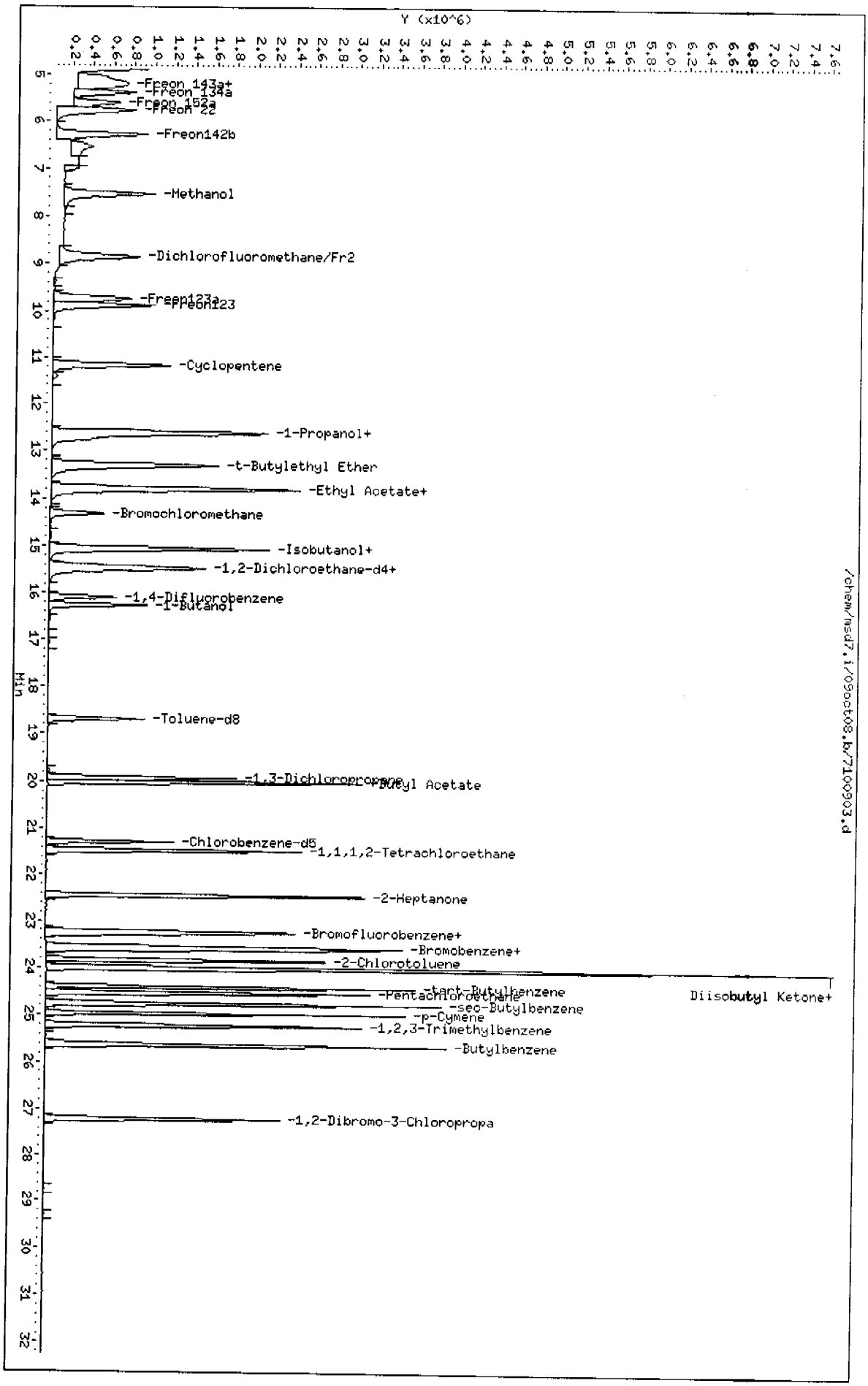
Instrument ID: msd7.i
Lab File ID: 7100903.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 09-OCT-2008
Calibration Time: 10:35
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	334429	-7.64
97 1,4-Difluorobenze	1146510	687906	1605114	1068870	-6.77
126 Chlorobenzene-d5	1241713	745028	1738398	1109504	-10.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/09oct08.b/7100903.d
Date : 09-OCT-2008 09:50
Client ID: CCVsp
Sample Info: 50mL #1541-268
Column phase: RTx-624

Instrument: msd7.i
Operator: smd
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809614-21A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100605	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/6/08 11:57 AM	

Compound	%Recovery
Freon 12	86
Freon 114	93
Chloromethane	96
Vinyl Chloride	89
1,3-Butadiene	89
Bromomethane	80
Chloroethane	90
Freon 11	91
Ethanol	104
Freon 113	102
1,1-Dichloroethene	105
Acetone	100
2-Propanol	106
Carbon Disulfide	90
Methylene Chloride	105
Methyl tert-butyl ether	141 Q
trans-1,2-Dichloroethene	93
Hexane	99
1,1-Dichloroethane	99
2-Butanone (Methyl Ethyl Ketone)	93
cis-1,2-Dichloroethene	98
Tetrahydrofuran	110
Chloroform	95
1,1,1-Trichloroethane	98
Cyclohexane	93
Carbon Tetrachloride	94
Benzene	92
1,2-Dichloroethane	100
Heptane	99
Trichloroethene	96
1,2-Dichloropropane	98
1,4-Dioxane	93
Bromodichloromethane	96
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	111
Toluene	97
trans-1,3-Dichloropropene	100
1,1,2-Trichloroethane	96
Tetrachloroethene	96

0626

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809614-21A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100605	**Date of Collection:** NA	
Dil. Factor:	1.00	**Date of Analysis:** 10/6/08 11:57 AM	

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	101
1,2-Dibromoethane (EDB)	95
Chlorobenzene	94
Ethyl Benzene	93
m,p-Xylene	93
o-Xylene	96
Styrene	100
Bromoform	99
1,1,2,2-Tetrachloroethane	94
4-Ethyltoluene	85
1,3,5-Trimethylbenzene	85
1,2,4-Trimethylbenzene	83
1,3-Dichlorobenzene	84
1,4-Dichlorobenzene	82
alpha-Chlorotoluene	89
1,2-Dichlorobenzene	81
1,2,4-Trichlorobenzene	90
Hexachlorobutadiene	84
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	100

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	98	70-130

Data File: /chem/msd7.i/06oct08.b/7100605.d
Report Date: 06-Oct-2008 12:17

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 50ppbv(200ppbv)

Client SDG: 06oct08
Fraction: VOA
Client Smp ID: LCS-1
Operator: smd
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	42.914	85.83	70-130
16 Freon 114	50.000	46.612	93.22	70-130
18 Chloromethane	50.000	47.865	95.73	70-130
20 Vinyl Chloride	50.000	44.711	89.42	70-130
22 1,3-Butadiene	50.000	44.463	88.93	60-140
25 Bromomethane	50.000	39.818	79.64	70-130
27 Chloroethane	50.000	44.808	89.62	70-130
31 Trichlorofluoromet	50.000	45.349	90.70	70-130
38 Ethanol	50.000	52.211	104.42	60-140
42 Freon 113	50.000	51.269	102.54	70-130
43 1,1-Dichloroethene	50.000	52.509	105.02	70-130
45 Acetone	50.000	49.973	99.95	60-140
47 Carbon Disulfide	50.000	44.986	89.97	60-140
46 2-Propanol	50.000	53.106	106.21	60-140
54 Methylene Chloride	50.000	52.482	104.96	70-130
60 MTBE	50.000	70.436	140.87*	60-140
61 trans-1,2-Dichloro	50.000	46.306	92.61	60-140
65 Hexane	50.000	49.368	98.74	60-140
69 Vinyl Acetate	50.000	45.738	91.48	60-140
70 1,1-Dichloroethane	50.000	49.749	99.50	70-130
76 cis-1,2-Dichloroet	50.000	49.199	98.40	70-130
75 2-Butanone	50.000	46.566	93.13	60-140
80 Tetrahydrofuran	50.000	54.892	109.78	60-140
82 Chloroform	50.000	47.330	94.66	70-130
85 Cyclohexane	50.000	46.732	93.46	60-140
83 1,1,1-Trichloroeth	50.000	48.803	97.61	70-130
87 Carbon Tetrachlori	50.000	47.163	94.33	70-130
91 Benzene	50.000	45.858	91.72	70-130
93 1,2-Dichloroethane	50.000	49.952	99.90	70-130
94 Heptane	50.000	49.614	99.23	60-140
101 Trichloroethene	50.000	47.849	95.70	70-130
104 1,2-Dichloropropan	50.000	49.267	98.53	70-130
106 1,4-Dioxane	50.000	46.614	93.23	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	48.283	96.57	60-140
110 cis-1,3-Dichloropr	50.000	48.825	97.65	70-130
111 4-Methyl-2-pentano	50.000	55.310	110.62	60-140
114 Toluene	50.000	48.406	96.81	70-130
116 trans-1,3-Dichloro	50.000	50.085	100.17	70-130
117 1,1,2-Trichloroeth	50.000	48.206	96.41	70-130
120 Tetrachloroethene	50.000	47.921	95.84	70-130
121 2-Hexanone	50.000	53.451	106.90	60-140
122 Dibromochlorometha	50.000	50.677	101.35	60-140
123 1,2-Dibromoethane	50.000	47.413	94.83	70-130
127 Chlorobenzene	50.000	46.823	93.65	70-130
128 Ethyl Benzene	50.000	46.467	92.93	70-130
129 m,p-Xylene	50.000	46.683	93.37	70-130
130 o-Xylene	50.000	48.041	96.08	70-130
131 Styrene	50.000	50.178	100.36	70-130
133 Bromoform	50.000	49.402	98.80	60-140
140 1,1,2,2-Tetrachlor	50.000	46.823	93.65	70-130
145 4-Ethyltoluene	50.000	42.331	84.66	60-140
147 1,3,5-Trimethylben	50.000	42.554	85.11	70-130
150 1,2,4-Trimethylben	50.000	41.384	82.77	70-130
155 1,3-Dichlorobenzen	50.000	41.809	83.62	70-130
156 1,4-Dichlorobenzen	50.000	41.017	82.03	70-130
159 alpha-Chlorotoluen	50.000	44.607	89.21	70-130
161 1,2-Dichlorobenzen	50.000	40.562	81.12	70-130
165 1,2,4-Trichloroben	50.000	44.886	89.77	70-130
166 Hexachlorobutadien	50.000	41.787	83.57	70-130
142 Propylbenzene	50.000	46.191	92.38	60-140
134 Cumene	50.000	47.656	95.31	60-140
51 3-Chloropropene	50.000	47.110	94.22	60-140
89 2,2,4-Trimethylpen	50.000	52.310	104.62	60-140
29 Isopentane	50.000	49.121	98.24	70-130
19 Butane	50.000	46.462	92.92	70-130
102 Methyl Cyclohexane	50.000	49.681	99.36	70-130
11 Propylene	50.000	50.174	100.35	60-140
167 Naphthalene	50.000	49.108	98.22	60-140
57 tert-Butyl-Alcohol	50.000	75.368	150.74*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.527	102.11	70-130
$ 113 Toluene-d8	25.000	25.870	103.48	70-130
$ 137 Bromofluorobenzene	25.000	24.621	98.48	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/06oct08.b/7100605.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 06-OCT-2008 11:57
Operator : smd Inst ID: msd7.i
Smp Info : 50mL #1612-123
Misc Info : 50ppbv(200ppbv)
Comment :
Method : /chem/msd7.i/06oct08.b/t14q804c.m
Meth Date : 06-Oct-2008 12:13 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	382513	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	304615			28.56- 128.56	79.64
14.333	14.333 (1.000)	49	1466191			335.95- 435.95	383.30
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1219444	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	212129			0.00- 67.14	17.40
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1254340	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	643309			1.24- 101.24	51.29
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.439	15.411 (1.077)	65	737586	25.5275	25.527	80.00- 120.00	100.00
15.439	15.411 (1.077)	67	375362			0.00- 97.37	50.89
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1207609	25.8697	25.870	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	156062			0.00- 63.85	12.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.702	18.702 (1.161)	100	912529			26.51- 126.51	75.56
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.292	23.291 (1.093)	174	635484	24.6208	24.621	80.00- 120.00	100.00
23.264	23.264 (1.092)	95	914263			90.08- 190.08	143.87
23.292	23.291 (1.093)	176	623951			45.80- 145.80	98.19
11 Propylene					CAS #: 115-07-1		
5.589	5.589 (0.390)	41	1636471	50.1743	50.174	80.00- 120.00	100.00
5.589	5.589 (0.390)	42	1114165			16.57- 116.57	68.08
5.589	5.589 (0.390)	39	1305226			28.60- 128.60	79.76
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.730	5.729 (0.400)	85	4057967	42.9141	42.914	80.00- 120.00	100.00
5.730	5.729 (0.400)	87	1293703			0.00- 81.85	31.88
16 Freon 114					CAS #: 76-14-2		
6.152	6.152 (0.429)	135	2354537	46.6118	46.612	80.00- 120.00	100.00
6.180	6.152 (0.431)	137	752671			0.00- 81.35	31.97
18 Chloromethane					CAS #: 74-87-3		
6.490	6.490 (0.453)	50	1925230	47.8655	47.865	80.00- 120.00	100.00
6.490	6.490 (0.453)	52	589137			0.00- 81.05	30.60
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.828 (0.478)	62	1784580	44.7112	44.711	80.00- 120.00	100.00
6.856	6.828 (0.478)	64	522544			0.00- 84.96	29.28
22 1,3-Butadiene					CAS #: 106-99-0		
6.912	6.884 (0.482)	54	1671147	44.4626	44.463	80.00- 120.00	100.00
6.912	6.884 (0.482)	39	1845058			46.88- 146.88	110.41
25 Bromomethane					CAS #: 74-83-9		
8.011	7.982 (0.559)	94	981439	39.8181	39.818	80.00- 120.00	100.00
8.011	7.982 (0.559)	96	903481			43.32- 143.32	92.06
27 Chloroethane					CAS #: 75-00-3		
8.320	8.320 (0.580)	64	831649	44.8082	44.808	80.00- 120.00	100.00
8.320	8.320 (0.580)	49	375702			0.00- 94.43	45.18
8.320	8.292 (0.580)	66	234433			0.00- 79.28	28.19
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.940	8.912 (0.624)	101	4260925	45.3488	45.349	80.00- 120.00	100.00
8.940	8.912 (0.624)	103	2679788			13.96- 113.96	62.89

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.412	9.411 (0.657)	45	813404	52.2109	52.211	80.00- 120.00	100.00
9.412	9.411 (0.657)	43	189957			0.00- 73.90	23.35
9.412	9.411 (0.657)	46	313154			0.00- 88.16	38.50
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	1934456	51.2692	51.269	80.00- 120.00	100.00
10.186	10.158 (0.711)	153	1201074			12.79- 112.79	62.09
10.158	10.158 (0.709)	101	2859504			98.93- 198.93	147.82
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	3445352	52.5093	52.509	80.00- 120.00	100.00
10.269	10.269 (0.716)	96	1212043			0.00- 84.73	35.18
10.296	10.269 (0.718)	98	774285			0.00- 71.80	22.47
45 Acetone					CAS #: 67-64-1		
10.435	10.407 (0.728)	58	925560	49.9727	49.973	80.00- 120.00	100.00
10.435	10.407 (0.728)	43	3932185			340.42- 440.42	424.84
46 2-Propanol					CAS #: 67-63-0		
10.628	10.600 (0.742)	45	4173695	53.1060	53.106	80.00- 120.00	100.00
10.628	10.600 (0.742)	43	1038104			0.00- 76.39	24.87
10.628	10.600 (0.742)	59	130141			0.00- 53.62	3.12
47 Carbon Disulfide					CAS #: 75-15-0		
10.849	10.822 (0.757)	76	3624746	44.9860	44.986	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.098	11.098 (0.774)	76	618055	47.1102	47.110	80.00- 120.00	100.00
11.098	11.098 (0.774)	41	3004389			377.54- 477.54	486.10
54 Methylene Chloride					CAS #: 75-09-2		
11.430	11.430 (0.797)	49	3012542	52.4818	52.482	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	1017677			0.00- 83.39	33.78
11.430	11.430 (0.797)	51	903517			0.00- 80.54	29.99
60 MTBE					CAS #: 1634-04-4		
11.762	11.762 (0.821)	73	3341789	70.4361	70.436	80.00- 120.00	100.00(R)
11.762	11.762 (0.821)	57	1158052			0.00- 84.46	34.65
11.762	11.762 (0.821)	41	1328959			0.00- 86.33	39.77
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.872	11.872 (0.828)	96	1273710	46.3066	46.306	80.00- 120.00	100.00
11.872	11.872 (0.828)	61	3008916			190.88- 290.88	236.23
11.872	11.872 (0.828)	98	800691			13.50- 113.50	62.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.232	12.232 (0.853)	57	3160486	49.3676	49.368	80.00- 120.00	100.00
12.232	12.232 (0.853)	43	2279542			20.34- 120.34	72.13
12.232	12.232 (0.853)	86	297994			0.00- 61.25	9.43
69 Vinyl Acetate					CAS #: 108-05-4		
12.729	12.729 (0.888)	86	287821	45.7377	45.738	80.00- 120.00	100.00
12.729	12.702 (0.888)	43	6325254			1872.40-1972.40	2197.63
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.757	12.757 (0.890)	63	3450247	49.7491	49.749	80.00- 120.00	100.00
12.757	12.757 (0.890)	65	1013838			0.00- 78.67	29.38
75 2-Butanone					CAS #: 78-93-3		
13.835	13.808 (0.965)	72	562109	46.5663	46.566	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	4497798			755.71- 855.71	800.16
13.808	13.808 (0.963)	57	306354			0.00- 97.16	54.50
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.967)	61	2559591	49.1988	49.199	80.00- 120.00	100.00
13.863	13.863 (0.967)	96	1175731			0.00- 94.65	45.93
13.863	13.863 (0.967)	98	741750			0.00- 78.47	28.98
80 Tetrahydrofuran					CAS #: 109-99-9		
14.333	14.305 (1.000)	42	2339533	54.8918	54.892	80.00- 120.00	100.00
14.333	14.305 (1.000)	71	514401			0.00- 71.36	21.99
14.333	14.305 (1.000)	72	555642			0.00- 78.71	23.75
82 Chloroform					CAS #: 67-66-3		
14.416	14.388 (1.006)	83	2516616	47.3303	47.330	80.00- 120.00	100.00
14.416	14.388 (1.006)	85	1770119			21.22- 121.22	70.34
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.775	14.748 (1.031)	97	2649486	48.8031	48.803	80.00- 120.00	100.00
14.775	14.748 (1.031)	99	1673791			13.65- 113.65	63.17
85 Cyclohexane					CAS #: 110-82-7		
14.775	14.775 (1.031)	84	1332827	46.7316	46.732	80.00- 120.00	100.00
14.775	14.775 (1.031)	56	2789142			158.63- 258.63	209.27
14.775	14.775 (1.031)	41	1860334			88.38- 188.38	139.58
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	2923762	47.1631	47.163	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	3102103			55.93- 155.93	106.10
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.356	15.356 (1.071)	57	7980700	52.3097	52.310	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.356	15.356 (1.071)	56	2638194			0.00- 82.54	33.06
15.356	15.356 (1.071)	41	2562952			0.00- 80.37	32.11
91 Benzene					CAS #: 71-43-2		
15.439	15.439 (0.959)	78	3044782	45.8585	45.858	80.00- 120.00	100.00
15.439	15.439 (0.959)	77	655893			0.00- 71.75	21.54
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.577	15.550 (0.967)	62	2451179	49.9522	49.952	80.00- 120.00	100.00
15.577	15.550 (0.967)	64	735661			0.00- 82.49	30.01
94 Heptane					CAS #: 142-82-5		
15.660	15.660 (0.973)	71	1065202	49.6137	49.614	80.00- 120.00	100.00
15.660	15.633 (0.973)	43	3431359			238.48- 338.48	322.13
15.660	15.660 (0.973)	57	1613100			102.27- 202.27	151.44
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1360993	47.8494	47.849	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1406380			52.65- 152.65	103.33
16.573	16.573 (1.029)	97	856201			12.98- 112.98	62.91
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.070	17.043 (1.060)	63	1562381	49.2670	49.267	80.00- 120.00	100.00
17.070	17.043 (1.060)	62	1119028			22.49- 122.49	71.62
17.070	17.043 (1.060)	41	1419135			41.32- 141.32	90.63
106 1,4-Dioxane					CAS #: 123-91-1		
17.181	17.181 (1.067)	88	756313	46.6144	46.614	80.00- 120.00	100.00
17.181	17.181 (1.067)	58	807155			57.23- 157.23	106.72
17.181	17.181 (1.067)	57	289121			0.00- 86.44	38.23
107 Bromodichloromethane					CAS #: 75-27-4		
17.485	17.485 (1.086)	83	2486675	48.2834	48.283	80.00- 120.00	100.00
17.513	17.485 (1.088)	85	1755572			21.05- 121.05	70.60
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.287	18.287 (1.136)	75	1783843	48.8255	48.825	80.00- 120.00	100.00
18.287	18.287 (1.136)	77	553076			0.00- 81.48	31.00
18.287	18.259 (1.136)	39	1900680			56.44- 156.44	106.55
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.453	18.453 (1.146)	58	1565122	55.3103	55.310	80.00- 120.00	100.00
18.453	18.453 (1.146)	43	4945483			244.73- 344.73	315.98
18.453	18.453 (1.146)	85	441854			0.00- 81.51	28.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.840	18.812 (1.170)	91	3562831	48.4063	48.406	80.00- 120.00	100.00
18.840	18.812 (1.170)	92	2213475			12.62- 112.62	62.13
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.255	19.255 (0.904)	75	2033426	50.0854	50.085	80.00- 120.00	100.00
19.255	19.255 (0.904)	77	622994			0.00- 80.75	30.64
19.255	19.255 (0.904)	39	1901243			45.19- 145.19	93.50
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.614	19.614 (0.921)	97	1246468	48.2060	48.206	80.00- 120.00	100.00
19.614	19.614 (0.921)	99	778188			11.37- 111.37	62.43
19.614	19.586 (0.921)	83	1069658			32.88- 132.88	85.82
120 Tetrachloroethene					CAS #: 127-18-4		
19.780	19.780 (0.929)	166	1623961	47.9209	47.921	80.00- 120.00	100.00
19.780	19.780 (0.929)	129	1380535			37.80- 137.80	85.01
19.780	19.780 (0.929)	131	1395296			35.79- 135.79	85.92
121 2-Hexanone					CAS #: 591-78-6		
19.918	19.918 (0.935)	58	2097868	53.4514	53.451	80.00- 120.00	100.00
19.918	19.891 (0.935)	43	4820726			180.20- 280.20	229.79
19.918	19.918 (0.935)	100	243473			0.00- 63.21	11.61
122 Dibromochloromethane					CAS #: 124-48-1		
20.305	20.305 (0.953)	129	2743630	50.6771	50.677	80.00- 120.00	100.00
20.305	20.305 (0.953)	127	2120533			29.59- 129.59	77.29
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.582	20.554 (0.966)	107	2320046	47.4134	47.413	80.00- 120.00	100.00
20.582	20.554 (0.966)	109	2145456			42.95- 142.95	92.47
127 Chlorobenzene					CAS #: 108-90-7		
21.356	21.356 (1.003)	112	3001791	46.8234	46.823	80.00- 120.00	100.00
21.356	21.356 (1.003)	114	940822			0.00- 82.05	31.34
21.356	21.356 (1.003)	77	2263197			24.28- 124.28	75.39
128 Ethyl Benzene					CAS #: 100-41-4		
21.439	21.439 (1.006)	106	1624550	46.4667	46.467	80.00- 120.00	100.00
21.439	21.439 (1.006)	91	5021245			261.34- 361.34	309.09
129 m,p-Xylene					CAS #: 108-38-3		
21.633	21.632 (1.016)	106	2088269	46.6830	46.683	80.00- 120.00	100.00
21.633	21.632 (1.016)	91	4042284			147.02- 247.02	193.57
130 o-Xylene					CAS #: 95-47-6		
22.324	22.324 (1.048)	106	1987994	48.0409	48.041	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.324	22.324 (1.048)	91	4050617			156.91- 256.91	203.75
131 Styrene					CAS #: 100-42-5		
22.379	22.351 (1.051)	104	3162027	50.1785	50.178	80.00- 120.00	100.00
22.351	22.351 (1.049)	78	1628281			2.29- 102.29	51.49
133 Bromoform					CAS #: 75-25-2		
22.794	22.766 (1.070)	173	2305371	49.4025	49.402	80.00- 120.00	100.00
22.794	22.766 (1.070)	171	1190715			1.19- 101.19	51.65
134 Cumene					CAS #: 98-82-8		
22.904	22.904 (1.075)	105	5767939	47.6564	47.656	80.00- 120.00	100.00
22.904	22.904 (1.075)	120	1618946			0.00- 77.95	28.07
22.904	22.904 (1.075)	51	1036168			0.00- 67.08	17.96
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.485	23.485 (1.103)	83	3002381	46.8233	46.823	80.00- 120.00	100.00
23.485	23.485 (1.103)	85	2110860			20.86- 120.86	70.31
142 Propylbenzene					CAS #: 103-65-1		
23.596	23.596 (1.108)	91	6963762	46.1907	46.191	80.00- 120.00	100.00
23.596	23.596 (1.108)	120	1685739			0.00- 73.91	24.21
23.596	23.596 (1.108)	105	255469			0.00- 54.14	3.67
145 4-Ethyltoluene					CAS #: 622-96-8		
23.762	23.761 (1.116)	105	6115059	42.3314	42.331	80.00- 120.00	100.00
23.762	23.761 (1.116)	120	1957998			0.00- 81.99	32.02
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.872	23.872 (1.121)	105	5029559	42.5537	42.554	80.00- 120.00	100.00
23.872	23.872 (1.121)	120	2556711			1.24- 101.24	50.83
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.508	24.508 (1.151)	105	4822207	41.3841	41.384	80.00- 120.00	100.00
24.508	24.508 (1.151)	120	2303290			0.00- 97.02	47.76
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.089	25.061 (1.178)	146	3177331	41.8091	41.809	80.00- 120.00	100.00
25.089	25.089 (1.178)	148	1993014			12.07- 112.07	62.73
25.061	25.061 (1.177)	111	1400154			0.00- 94.74	44.07
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.227	25.227 (1.184)	146	3270882	41.0170	41.017	80.00- 120.00	100.00
25.227	25.227 (1.184)	148	2072878			13.30- 113.30	63.37
25.227	25.227 (1.184)	111	1352778			0.00- 92.03	41.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.421	25.420 (1.193)	91	5209225	44.6067	44.607	80.00- 120.00	100.00
25.421	25.420 (1.193)	126	1081165			0.00- 69.83	20.75
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.863	25.863 (1.214)	146	3113752	40.5625	40.562	80.00- 120.00	100.00
25.863	25.863 (1.214)	148	1957570			12.75- 112.75	62.87
25.863	25.863 (1.214)	111	1422426			0.00- 94.79	45.68
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.738	28.738 (1.349)	180	1539988	44.8863	44.886	80.00- 120.00	100.00
28.738	28.738 (1.349)	182	1430695			44.14- 144.14	92.90
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.932	28.932 (1.358)	225	1196581	41.7868	41.787	80.00- 120.00	100.00
28.932	28.932 (1.358)	223	744146			13.71- 113.71	62.19
29 Isopentane					CAS #: 78-78-4		
8.320	8.320 (0.580)	43	2652076	49.1213	49.121	80.00- 120.00	100.00
8.320	8.320 (0.580)	57	1593904			17.61- 117.61	60.10
19 Butane					CAS #: 106-97-8		
6.715	6.715 (0.468)	58	371505	46.4617	46.462	80.00- 120.00	100.00
6.715	6.715 (0.468)	43	3464051			787.53- 887.53	932.44
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.849	16.849 (1.176)	83	1739055	49.6813	49.681	80.00- 120.00	100.00
16.849	16.849 (1.176)	98	789368			0.00- 97.34	45.39
16.849	16.849 (1.176)	55	2664375			95.79- 195.79	153.21
167 Naphthalene					CAS #: 91-20-3		
29.291	29.291 (1.375)	128	3618813	49.1083	49.108	80.00- 120.00	100.00
29.291	29.291 (1.375)	127	440642			0.00- 62.37	12.18
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.458	11.430 (0.799)	59	3154738	75.3676	75.368	80.00- 120.00	100.00(R)
11.458	11.430 (0.799)	41	788648			0.00- 74.69	25.00
11.458	11.430 (0.799)	57	328556			0.00- 61.62	10.41

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/msd7.i/06oct08.b/7100605.d
Report Date: 06-Oct-2008 12:17

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7100605.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/06oct08.b/t14q804c.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 06-OCT-2008
Calibration Time: 10:23
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	383857	230314	537400	382513	-0.35
97 1,4-Difluorobenze	1202073	721244	1682902	1219444	1.45
126 Chlorobenzene-d5	1260970	756582	1765358	1254340	-0.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

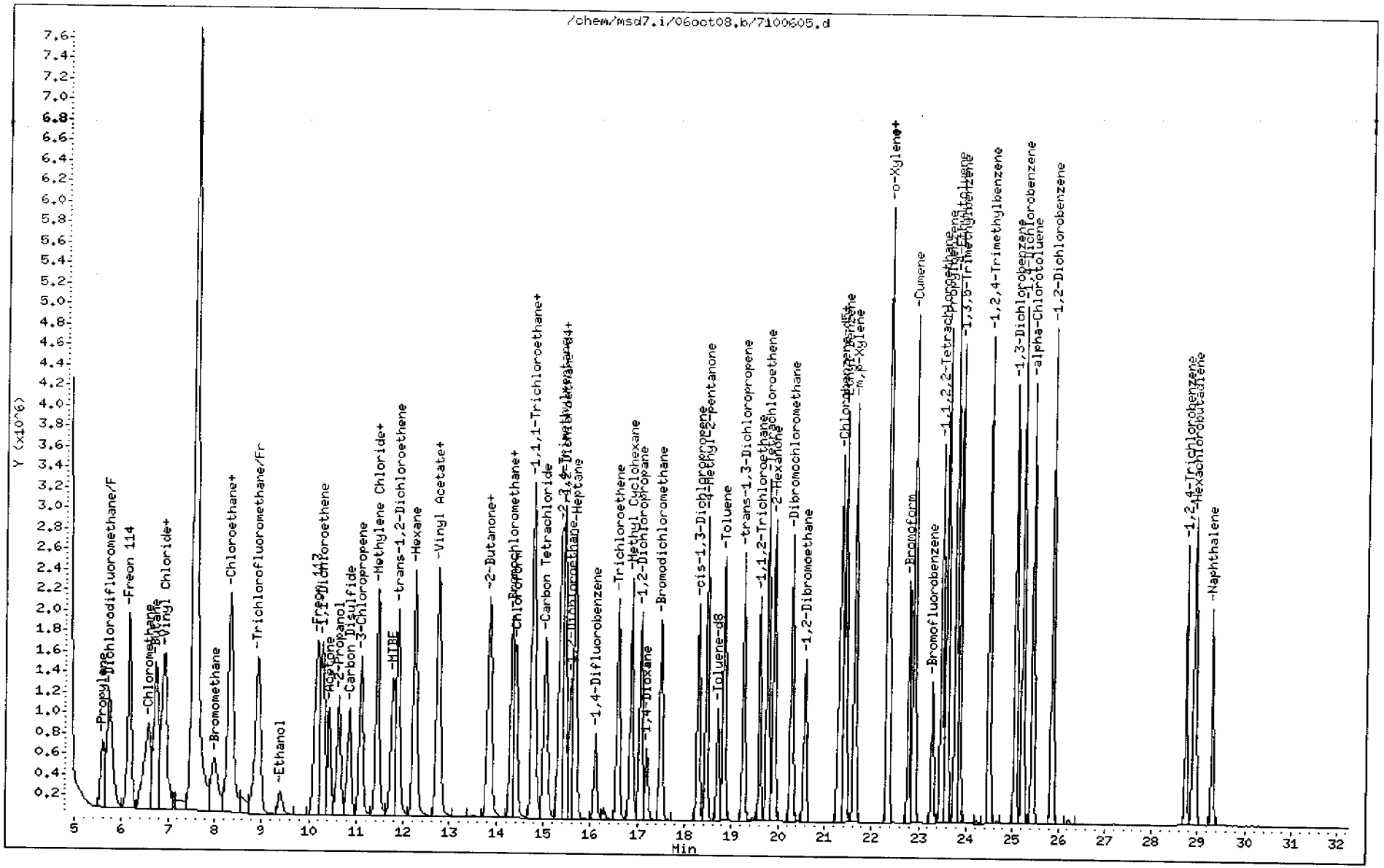
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/06oct08.b/7100605.d
Date : 06-OCT-2008 11:57
Client ID: LCS-1
Sample Info: 50mL #1612-123

Instrument: msd7.i

Operator: smd
Column phase: RTx-624
Column diameter: 0.53

0640



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809614-21B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7100905**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/9/08 11:22 AM**	

Compound	%Recovery
Freon 12	90
Freon 114	99
Chloromethane	99
Vinyl Chloride	97
1,3-Butadiene	96
Bromomethane	79
Chloroethane	96
Freon 11	94
Ethanol	110
Freon 113	108
1,1-Dichloroethene	102
Acetone	108
2-Propanol	110
Carbon Disulfide	96
Methylene Chloride	106
Methyl tert-butyl ether	157 Q
trans-1,2-Dichloroethene	97
Hexane	98
1,1-Dichloroethane	98
2-Butanone (Methyl Ethyl Ketone)	98
cis-1,2-Dichloroethene	95
Tetrahydrofuran	112
Chloroform	98
1,1,1-Trichloroethane	101
Cyclohexane	99
Carbon Tetrachloride	98
Benzene	96
1,2-Dichloroethane	102
Heptane	101
Trichloroethene	100
1,2-Dichloropropane	95
1,4-Dioxane	97
Bromodichloromethane	98
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	118
Toluene	103
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	96
Tetrachloroethene	92

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809614-21B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7100905	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	10/9/08 11:22 AM

Compound	%Recovery
2-Hexanone	105
Dibromochloromethane	100
1,2-Dibromoethane (EDB)	93
Chlorobenzene	92
Ethyl Benzene	92
m,p-Xylene	91
o-Xylene	94
Styrene	97
Bromoform	96
1,1,2,2-Tetrachloroethane	90
4-Ethyltoluene	82
1,3,5-Trimethylbenzene	81
1,2,4-Trimethylbenzene	79
1,3-Dichlorobenzene	79
1,4-Dichlorobenzene	78
alpha-Chlorotoluene	84
1,2-Dichlorobenzene	75
1,2,4-Trichlorobenzene	64 Q
Hexachlorobutadiene	56 Q
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	105

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	92	70-130

0642

Data File: /chem/msd7.i/09oct08.b/7100905.d
Report Date: 09-Oct-2008 11:48

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 50ppbv(100ppbv)

Client SDG: 09oct08
Fraction: VOA
Client Smp ID: LCS-1
Operator: smd
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	45.262	90.52	70-130
16 Freon 114	50.000	49.368	98.74	70-130
18 Chloromethane	50.000	49.301	98.60	70-130
20 Vinyl Chloride	50.000	48.744	97.49	70-130
22 1,3-Butadiene	50.000	48.105	96.21	60-140
25 Bromomethane	50.000	39.747	79.49	70-130
27 Chloroethane	50.000	48.211	96.42	70-130
31 Trichlorofluoromet	50.000	47.120	94.24	70-130
38 Ethanol	50.000	55.069	110.14	60-140
42 Freon 113	50.000	53.935	107.87	70-130
43 1,1-Dichloroethene	50.000	51.231	102.46	70-130
45 Acetone	50.000	54.010	108.02	60-140
47 Carbon Disulfide	50.000	48.049	96.10	60-140
46 2-Propanol	50.000	54.862	109.72	60-140
54 Methylene Chloride	50.000	53.144	106.29	70-130
60 MTBE	50.000	78.583	157.17*	60-140
61 trans-1,2-Dichloro	50.000	48.625	97.25	60-140
65 Hexane	50.000	48.958	97.92	60-140
69 Vinyl Acetate	50.000	48.113	96.23	60-140
70 1,1-Dichloroethane	50.000	49.005	98.01	70-130
76 cis-1,2-Dichloroet	50.000	47.537	95.07	70-130
75 2-Butanone	50.000	49.031	98.06	60-140
80 Tetrahydrofuran	50.000	55.942	111.88	60-140
82 Chloroform	50.000	49.000	98.00	70-130
85 Cyclohexane	50.000	49.575	99.15	60-140
83 1,1,1-Trichloroeth	50.000	50.450	100.90	70-130
87 Carbon Tetrachlori	50.000	48.806	97.61	70-130
91 Benzene	50.000	48.296	96.59	70-130
93 1,2-Dichloroethane	50.000	51.222	102.44	70-130
94 Heptane	50.000	50.665	101.33	60-140
101 Trichloroethene	50.000	49.902	99.80	70-130
104 1,2-Dichloropropan	50.000	47.589	95.18	70-130
106 1,4-Dioxane	50.000	48.616	97.23	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	48.871	97.74	60-140
110 cis-1,3-Dichloropr	50.000	53.296	106.59	70-130
111 4-Methyl-2-pentano	50.000	58.891	117.78	60-140
114 Toluene	50.000	51.410	102.82	70-130
116 trans-1,3-Dichloro	50.000	48.971	97.94	70-130
117 1,1,2-Trichloroeth	50.000	47.773	95.55	70-130
120 Tetrachloroethene	50.000	46.049	92.10	70-130
121 2-Hexanone	50.000	52.749	105.50	60-140
122 Dibromochlorometha	50.000	50.062	100.12	60-140
123 1,2-Dibromoethane	50.000	46.434	92.87	70-130
127 Chlorobenzene	50.000	45.917	91.83	70-130
128 Ethyl Benzene	50.000	46.071	92.14	70-130
129 m,p-Xylene	50.000	45.413	90.83	70-130
130 o-Xylene	50.000	47.199	94.40	70-130
131 Styrene	50.000	48.695	97.39	70-130
133 Bromoform	50.000	47.806	95.61	60-140
140 1,1,2,2-Tetrachlor	50.000	44.818	89.64	70-130
145 4-Ethyltoluene	50.000	41.180	82.36	60-140
147 1,3,5-Trimethylben	50.000	40.315	80.63	70-130
150 1,2,4-Trimethylben	50.000	39.344	78.69	70-130
155 1,3-Dichlorobenzen	50.000	39.732	79.46	70-130
156 1,4-Dichlorobenzen	50.000	38.782	77.56	70-130
159 alpha-Chlorotoluen	50.000	42.259	84.52	70-130
161 1,2-Dichlorobenzen	50.000	37.622	75.25	70-130
165 1,2,4-Trichloroben	50.000	31.986	63.97*	70-130
166 Hexachlorobutadien	50.000	28.256	56.51*	70-130
142 Propylbenzene	50.000	44.673	89.35	60-140
134 Cumene	50.000	46.376	92.75	60-140
51 3-Chloropropene	50.000	49.830	99.66	60-140
89 2,2,4-Trimethylpen	50.000	51.803	103.61	60-140
29 Isopentane	50.000	50.032	100.06	70-130
19 Butane	50.000	48.573	97.15	70-130
102 Methyl Cyclohexane	50.000	52.115	104.23	70-130
11 Propylene	50.000	52.726	105.45	60-140
167 Naphthalene	50.000	31.237	62.47	60-140
57 tert-Butyl-Alcohol	50.000	83.144	166.29*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.565	94.26	70-130
$ 113 Toluene-d8	25.000	26.578	106.31	70-130
$ 137 Bromofluorobenzene	25.000	22.998	91.99	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/09oct08.b/7100905.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 09-OCT-2008 11:22
Operator : smd Inst ID: msd7.i
Smp Info : 100mL #1612-123A
Misc Info : 50ppbv(100ppbv)
Comment :
Method : /chem/msd7.i/09oct08.b/t14q804c.m
Meth Date : 09-Oct-2008 10:56 sdisher Quant Type: ISTD
Cal Date : 27-AUG-2008 15:00 Cal File: 7082709.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.333	14.333 (1.000)	130	359837	25.0000		80.00- 120.00	100.00
14.333	14.333 (1.000)	128	298397			28.92- 128.92	82.93
14.333	14.333 (1.000)	49	1359122			320.90- 420.90	377.70
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.103	16.103 (1.000)	114	1164377	25.0000		80.00- 120.00	100.00
16.103	16.103 (1.000)	88	202675			0.00- 67.10	17.41
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.301	21.301 (1.000)	117	1295451	25.0000		80.00- 120.00	100.00
21.301	21.301 (1.000)	82	647672			1.24- 101.24	50.00
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.411	15.411 (1.075)	65	640512	23.5648	23.565	80.00- 120.00	100.00
15.411	15.411 (1.075)	67	317485			0.00- 97.37	49.57
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.702	18.702 (1.161)	98	1184662	26.5783	26.578	80.00- 120.00	100.00
18.702	18.702 (1.161)	70	151358			0.00- 63.85	12.78

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.702	18.702	(1.161)	100	904621			26.51- 126.51	76.36
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.292	23.291	(1.093)	174	613068	22.9986	22.998	80.00- 120.00	100.00
23.264	23.264	(1.092)	95	913624			92.62- 192.62	149.02
23.292	23.291	(1.093)	176	616787			44.03- 144.03	100.61
11 Propylene						CAS #: 115-07-1		
5.589	5.589	(0.390)	41	1617758	52.7263	52.726	80.00- 120.00	100.00
5.589	5.589	(0.390)	42	1115614			16.57- 116.57	68.96
5.589	5.589	(0.390)	39	1315136			28.60- 128.60	81.29
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.730	5.729	(0.400)	85	4026227	45.2616	45.262	80.00- 120.00	100.00
5.730	5.729	(0.400)	87	1290591			0.00- 81.85	32.05
16 Freon 114						CAS #: 76-14-2		
6.152	6.152	(0.429)	135	2345942	49.3683	49.368	80.00- 120.00	100.00
6.152	6.180	(0.429)	137	738104			0.00- 81.22	31.46
18 Chloromethane						CAS #: 74-87-3		
6.462	6.490	(0.451)	50	1865427	49.3013	49.301	80.00- 120.00	100.00
6.462	6.490	(0.451)	52	572301			0.00- 81.05	30.68
20 Vinyl Chloride						CAS #: 75-01-4		
6.828	6.828	(0.476)	62	1830207	48.7439	48.744	80.00- 120.00	100.00
6.828	6.828	(0.476)	64	516357			0.00- 84.96	28.21
22 1,3-Butadiene						CAS #: 106-99-0		
6.884	6.912	(0.480)	54	1700863	48.1050	48.105	80.00- 120.00	100.00
6.884	6.912	(0.480)	39	1798827			46.88- 146.88	105.76
25 Bromomethane						CAS #: 74-83-9		
7.982	7.982	(0.557)	94	921614	39.7472	39.747	80.00- 120.00	100.00
7.982	7.982	(0.557)	96	848875			42.01- 142.01	92.11
27 Chloroethane						CAS #: 75-00-3		
8.320	8.320	(0.580)	64	841760	48.2110	48.211	80.00- 120.00	100.00
8.320	8.320	(0.580)	49	368515			0.00- 94.43	43.78
8.292	8.320	(0.579)	66	245967			0.00- 79.28	29.22
31 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.912	8.912	(0.622)	101	4164888	47.1201	47.120	80.00- 120.00	100.00
8.912	8.912	(0.622)	103	2652601			12.86- 112.86	63.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.412	9.411 (0.657)	45	807076	55.0693	55.069	80.00- 120.00	100.00
9.384	9.411 (0.655)	43	175466			0.00- 73.90	21.74
9.412	9.411 (0.657)	46	304132			0.00- 88.16	37.68
42 Freon 113					CAS #: 76-13-1		
10.158	10.158 (0.709)	151	1914393	53.9349	53.935	80.00- 120.00	100.00
10.158	10.158 (0.709)	153	1197619			12.55- 112.55	62.56
10.158	10.158 (0.709)	101	2853555			98.99- 198.99	149.06
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.269	10.269 (0.716)	61	3162205	51.2310	51.231	80.00- 120.00	100.00
10.269	10.269 (0.716)	96	1217276			0.00- 87.74	38.49
10.269	10.269 (0.716)	98	779798			0.00- 73.80	24.66
45 Acetone					CAS #: 67-64-1		
10.407	10.407 (0.726)	58	941035	54.0100	54.010	80.00- 120.00	100.00
10.407	10.407 (0.726)	43	3816210			340.42- 440.42	405.53
46 2-Propanol					CAS #: 67-63-0		
10.600	10.600 (0.740)	45	4056116	54.8623	54.862	80.00- 120.00	100.00
10.600	10.600 (0.740)	43	1041280			0.00- 76.39	25.67
10.600	10.628 (0.740)	59	120921			0.00- 53.62	2.98
47 Carbon Disulfide					CAS #: 75-15-0		
10.822	10.822 (0.755)	76	3642039	48.0491	48.049	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.098	11.098 (0.774)	76	614981	49.8298	49.830	80.00- 120.00	100.00
11.098	11.098 (0.774)	41	2950622			377.54- 477.54	479.79
54 Methylene Chloride					CAS #: 75-09-2		
11.402	11.430 (0.796)	49	2869706	53.1439	53.144	80.00- 120.00	100.00
11.430	11.430 (0.797)	84	1030186			0.00- 84.42	35.90
11.402	11.430 (0.796)	51	866715			0.00- 80.54	30.20
60 MTBE					CAS #: 1634-04-4		
11.762	11.762 (0.821)	73	3507311	78.5834	78.583	80.00- 120.00	100.00(R)
11.762	11.762 (0.821)	57	1140649			0.00- 82.80	32.52
11.762	11.762 (0.821)	41	1320555			0.00- 86.33	37.65
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.872	11.872 (0.828)	96	1258202	48.6253	48.625	80.00- 120.00	100.00
11.872	11.872 (0.828)	61	2780450			166.77- 266.77	220.99
11.872	11.872 (0.828)	98	790206			13.50- 113.50	62.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.232	12.232 (0.853)	57	2948441	48.9577	48.958	80.00- 120.00	100.00
12.232	12.232 (0.853)	43	2188229			20.34- 120.34	74.22
12.232	12.232 (0.853)	86	304890			0.00- 61.25	10.34
69 Vinyl Acetate					CAS #: 108-05-4		
12.702	12.729 (0.886)	86	284820	48.1130	48.113	80.00- 120.00	100.00
12.702	12.702 (0.886)	43	6134727			1872.40-1972.40	2153.90
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.757	12.757 (0.890)	63	3197169	49.0051	49.005	80.00- 120.00	100.00
12.757	12.757 (0.890)	65	905018			0.00- 78.97	28.31
75 2-Butanone					CAS #: 78-93-3		
13.808	13.808 (0.963)	72	556777	49.0313	49.031	80.00- 120.00	100.00
13.808	13.808 (0.963)	43	4372972			729.52- 829.52	785.41
13.808	13.808 (0.963)	57	283425			0.00- 97.16	50.90
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.863	13.863 (0.967)	61	2326543	47.5374	47.537	80.00- 120.00	100.00
13.863	13.863 (0.967)	96	1166385			0.00- 98.82	50.13
13.863	13.863 (0.967)	98	742868			0.00- 81.20	31.93
80 Tetrahydrofuran					CAS #: 109-99-9		
14.305	14.305 (0.998)	42	2242943	55.9418	55.942	80.00- 120.00	100.00
14.305	14.305 (0.998)	71	496693			0.00- 72.33	22.14
14.305	14.305 (0.998)	72	540372			0.00- 78.71	24.09
82 Chloroform					CAS #: 67-66-3		
14.388	14.388 (1.004)	83	2450952	49.0001	49.000	80.00- 120.00	100.00
14.388	14.388 (1.004)	85	1780408			21.17- 121.17	72.64
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.748	14.748 (1.029)	97	2576554	50.4505	50.450	80.00- 120.00	100.00
14.748	14.748 (1.029)	99	1630919			13.83- 113.83	63.30
85 Cyclohexane					CAS #: 110-82-7		
14.775	14.775 (1.031)	84	1330109	49.5752	49.575	80.00- 120.00	100.00
14.775	14.775 (1.031)	56	2754395			161.55- 261.55	207.08
14.775	14.775 (1.031)	41	1791995			86.09- 186.09	134.73
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.024	15.024 (1.048)	119	2846281	48.8066	48.806	80.00- 120.00	100.00
15.024	15.024 (1.048)	117	3000621			55.68- 155.68	105.42
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.356	15.356 (1.071)	57	7434916	51.8033	51.803	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.356	15.356 (1.071)	56	2619515			0.00- 82.54	35.23
15.356	15.356 (1.071)	41	2452336			0.00- 80.37	32.98
91 Benzene					CAS #: 71-43-2		
15.439	15.439 (0.959)	78	3061805	48.2958	48.296	80.00- 120.00	100.00
15.439	15.439 (0.959)	77	660209			0.00- 71.75	21.56
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.550	15.550 (0.966)	62	2399983	51.2220	51.222	80.00- 120.00	100.00
15.550	15.550 (0.966)	64	724737			0.00- 82.49	30.20
94 Heptane					CAS #: 142-82-5		
15.660	15.660 (0.973)	71	1038646	50.6646	50.665	80.00- 120.00	100.00
15.633	15.633 (0.971)	43	3276508			238.48- 338.48	315.46
15.633	15.660 (0.971)	57	1520839			102.27- 202.27	146.43
101 Trichloroethene					CAS #: 79-01-6		
16.573	16.573 (1.029)	95	1355291	49.9024	49.902	80.00- 120.00	100.00
16.573	16.573 (1.029)	130	1373041			52.48- 152.48	101.31
16.573	16.573 (1.029)	97	852032			14.44- 114.44	62.87
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.043	17.043 (1.058)	63	1441009	47.5887	47.589	80.00- 120.00	100.00
17.043	17.043 (1.058)	62	1133076			28.02- 128.02	78.63
17.043	17.043 (1.058)	41	1366564			45.13- 145.13	94.83
106 1,4-Dioxane					CAS #: 123-91-1		
17.181	17.181 (1.067)	88	753173	48.6162	48.616	80.00- 120.00	100.00
17.181	17.181 (1.067)	58	800498			59.48- 159.48	106.28
17.181	17.181 (1.067)	57	273392			0.00- 86.44	36.30
107 Bromodichloromethane					CAS #: 75-27-4		
17.485	17.485 (1.086)	83	2403290	48.8712	48.871	80.00- 120.00	100.00
17.485	17.485 (1.086)	85	1710911			20.68- 120.68	71.19
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.287	18.287 (1.136)	75	1859233	53.2957	53.296	80.00- 120.00	100.00
18.287	18.287 (1.136)	77	571241			0.00- 80.36	30.72
18.259	18.259 (1.134)	39	1869364			53.26- 153.26	100.54
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.453	18.453 (1.146)	58	1591199	58.8912	58.891	80.00- 120.00	100.00
18.453	18.453 (1.146)	43	4834122			244.73- 344.73	303.80
18.453	18.453 (1.146)	85	450094			0.00- 81.51	28.29

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.812	18.812	(1.168)	91	3613081	51.4106	51.410	80.00- 120.00	100.00
18.812	18.812	(1.168)	92	2249448			12.04- 112.04	62.26
116 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
19.255	19.255	(0.904)	75	2053334	48.9707	48.971	80.00- 120.00	100.00
19.255	19.255	(0.904)	77	651772			0.00- 81.27	31.74
19.255	19.255	(0.904)	39	1879570			42.45- 142.45	91.54
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.614	19.614	(0.921)	97	1275755	47.7728	47.773	80.00- 120.00	100.00
19.614	19.614	(0.921)	99	789536			10.80- 110.80	61.89
19.587	19.586	(0.920)	83	1088550			33.27- 133.27	85.33
120 Tetrachloroethene						CAS #: 127-18-4		
19.780	19.780	(0.929)	166	1611678	46.0492	46.049	80.00- 120.00	100.00
19.780	19.780	(0.929)	129	1407761			35.87- 135.87	87.35
19.780	19.780	(0.929)	131	1376658			35.33- 135.33	85.42
121 2-Hexanone						CAS #: 591-78-6		
19.918	19.918	(0.935)	58	2138147	52.7488	52.749	80.00- 120.00	100.00
19.891	19.918	(0.934)	43	4801920			174.16- 274.16	224.58
19.918	19.918	(0.935)	100	257543			0.00- 63.21	12.05
122 Dibromochloromethane						CAS #: 124-48-1		
20.305	20.305	(0.953)	129	2799182	50.0624	50.062	80.00- 120.00	100.00
20.305	20.305	(0.953)	127	2167214			29.59- 129.59	77.42
123 1,2-Dibromoethane						CAS #: 106-93-4		
20.554	20.582	(0.965)	107	2346615	46.4344	46.434	80.00- 120.00	100.00
20.554	20.582	(0.965)	109	2149070			42.76- 142.76	91.58
127 Chlorobenzene						CAS #: 108-90-7		
21.356	21.356	(1.003)	112	3040183	45.9173	45.917	80.00- 120.00	100.00
21.356	21.356	(1.003)	114	954883			0.00- 82.11	31.41
21.356	21.356	(1.003)	77	2275275			25.49- 125.49	74.84
128 Ethyl Benzene						CAS #: 100-41-4		
21.439	21.439	(1.006)	106	1663509	46.0711	46.071	80.00- 120.00	100.00
21.439	21.439	(1.006)	91	5091583			261.34- 361.34	306.07
129 m,p-Xylene						CAS #: 108-38-3		
21.633	21.633	(1.016)	106	2098056	45.4134	45.413	80.00- 120.00	100.00
21.633	21.633	(1.016)	91	4121426			147.02- 247.02	196.44
130 o-Xylene						CAS #: 95-47-6		
22.324	22.324	(1.048)	106	2017186	47.1994	47.199	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.324	22.324	(1.048)	91	4179495			156.44- 256.44	207.19
131 Styrene						CAS #: 100-42-5		
22.351	22.351	(1.049)	104	3169094	48.6947	48.695	80.00- 120.00	100.00
22.351	22.351	(1.049)	78	1629464			0.89- 100.89	51.42
133 Bromoform						CAS #: 75-25-2		
22.766	22.766	(1.069)	173	2303981	47.8058	47.806	80.00- 120.00	100.00
22.766	22.766	(1.069)	171	1185721			1.93- 101.93	51.46
134 Cumene						CAS #: 98-82-8		
22.904	22.904	(1.075)	105	5796962	46.3762	46.376	80.00- 120.00	100.00
22.904	22.904	(1.075)	120	1612878			0.00- 77.95	27.82
22.904	22.904	(1.075)	51	1000659			0.00- 67.08	17.26
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.485	23.485	(1.103)	83	2967982	44.8179	44.818	80.00- 120.00	100.00
23.485	23.485	(1.103)	85	2138339			21.43- 121.43	72.05
142 Propylbenzene						CAS #: 103-65-1		
23.596	23.596	(1.108)	91	6955707	44.6731	44.673	80.00- 120.00	100.00
23.596	23.596	(1.108)	120	1674469			0.00- 73.91	24.07
23.596	23.596	(1.108)	105	264152			0.00- 54.14	3.80
145 4-Ethyltoluene						CAS #: 622-96-8		
23.762	23.762	(1.116)	105	6143660	41.1797	41.180	80.00- 120.00	100.00
23.762	23.762	(1.116)	120	1948556			0.00- 82.07	31.72
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.872	23.872	(1.121)	105	4921108	40.3148	40.315	80.00- 120.00	100.00
23.872	23.872	(1.121)	120	2517084			1.24- 101.24	51.15
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.508	24.508	(1.151)	105	4734706	39.3437	39.344	80.00- 120.00	100.00
24.508	24.508	(1.151)	120	2285885			0.00- 97.02	48.28
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.061	25.089	(1.177)	146	3118418	39.7317	39.732	80.00- 120.00	100.00
25.089	25.089	(1.178)	148	1935945			12.07- 112.07	62.08
25.061	25.061	(1.177)	111	1371885			0.00- 94.74	43.99
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.227	25.227	(1.184)	146	3194044	38.7824	38.782	80.00- 120.00	100.00
25.227	25.227	(1.184)	148	2011403			13.30- 113.30	62.97
25.227	25.227	(1.184)	111	1335611			0.00- 92.03	41.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.421	25.420 (1.193)	91	5096799	42.2590	42.259	80.00- 120.00	100.00
25.421	25.420 (1.193)	126	1035917			0.00- 69.83	20.32
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.863	25.863 (1.214)	146	2982729	37.6226	37.622	80.00- 120.00	100.00
25.863	25.863 (1.214)	148	1874207			13.09- 113.09	62.84
25.863	25.863 (1.214)	111	1333880			0.00- 95.22	44.72
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.738	28.738 (1.349)	180	1133352	31.9857	31.986	80.00- 120.00	100.00(R)
28.738	28.738 (1.349)	182	1079418			46.28- 146.28	95.24
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.932	28.932 (1.358)	225	835646	28.2562	28.256	80.00- 120.00	100.00(R)
28.932	28.932 (1.358)	223	527533			13.71- 113.71	63.13
29 Isopentane					CAS #: 78-78-4		
8.292	8.320 (0.579)	43	2541135	50.0325	50.032	80.00- 120.00	100.00
8.292	8.320 (0.579)	57	1532679			17.61- 117.61	60.31
19 Butane					CAS #: 106-97-8		
6.715	6.715 (0.468)	58	365365	48.5733	48.573	80.00- 120.00	100.00
6.715	6.715 (0.468)	43	3369093			787.53- 887.53	922.12
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.849	16.849 (1.176)	83	1716089	52.1146	52.115	80.00- 120.00	100.00
16.849	16.849 (1.176)	98	792421			0.00- 97.34	46.18
16.849	16.849 (1.176)	55	2472014			95.79- 195.79	144.05
167 Naphthalene					CAS #: 91-20-3		
29.291	29.291 (1.375)	128	2377310	31.2370	31.237	80.00- 120.00	100.00
29.291	29.291 (1.375)	127	291580			0.00- 62.37	12.27
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.430	11.430 (0.797)	59	3273923	83.1439	83.144	80.00- 120.00	100.00(R)
11.430	11.430 (0.797)	41	833555			0.00- 74.69	25.46
11.430	11.430 (0.797)	57	340570			0.00- 61.62	10.40

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

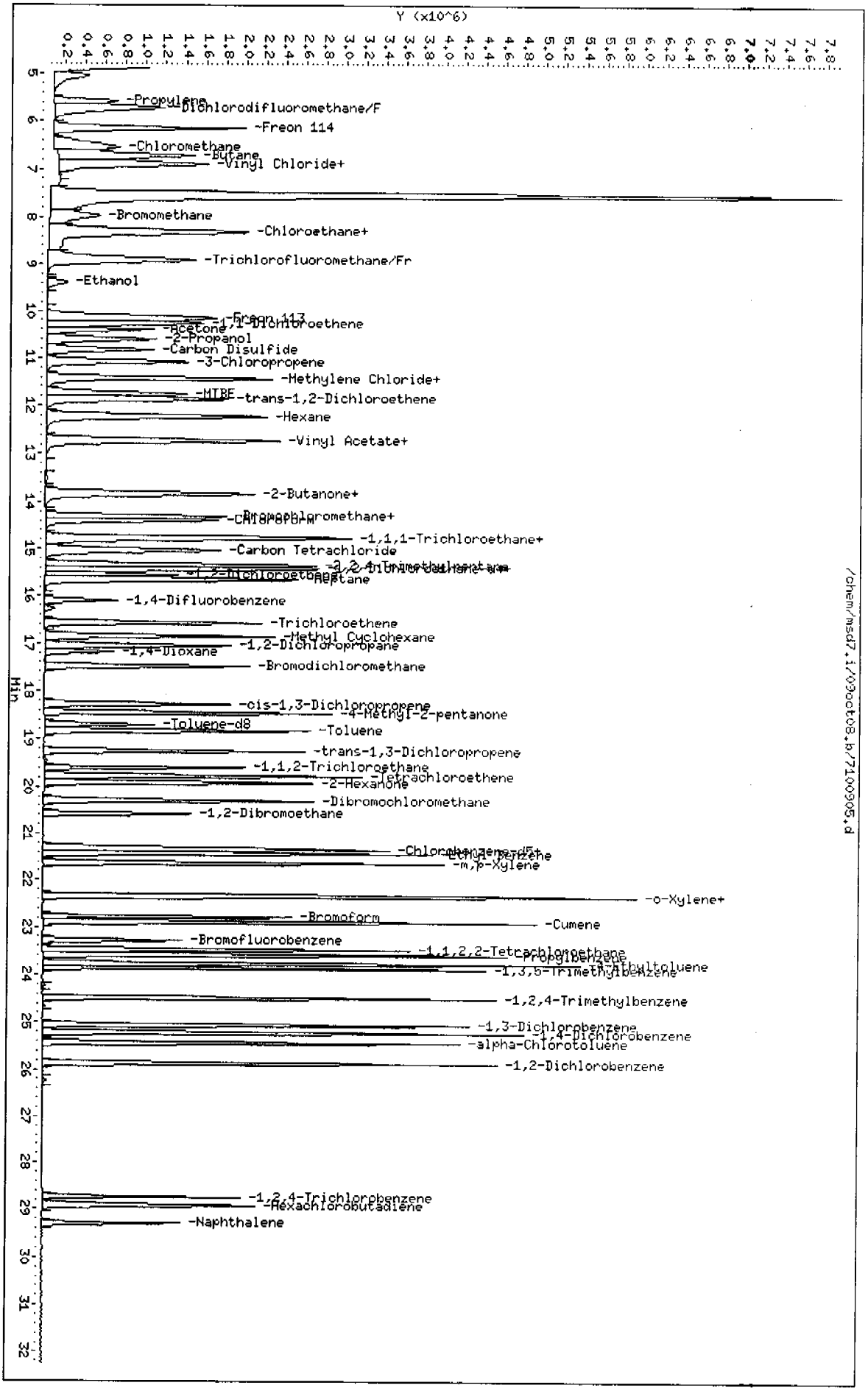
Instrument ID: msd7.i
Lab File ID: 7100905.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: smd
Method File: /chem/msd7.i/09oct08.b/t14q804c.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 09-OCT-2008
Calibration Time: 10:35
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	362080	217248	506912	359837	-0.62
97 1,4-Difluorobenze	1146510	687906	1605114	1164377	1.56
126 Chlorobenzene-d5	1241713	745028	1738398	1295451	4.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.33	14.00	14.66	14.33	0.00
97 1,4-Difluorobenze	16.10	15.77	16.43	16.10	0.00
126 Chlorobenzene-d5	21.30	20.97	21.63	21.30	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd7.i/09oct08.b/7100905.d
Date : 09-OCT-2008 11:22
Client ID: LCS-1
Sample Info: 100mL #1612-123A
Column phase: RTx-624

Instrument: msd7.i
Operator: smd
Column diameter: 0.53

/chem/msd7.i/09oct08.b/7100905.d

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MSD-7

Logbook #: 1706

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	39.83
75	30.0 – 60.0% of mass 95	53.32
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.60
173	Less than 2.0% of mass 174	(0.63)[1]
174	50.0 – 100% of mass 95	67.44
175	5.0 – 9.0% of mass 174	(6.96)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	(96.46)[1]
177	5.0 – 9.0% of mass 176	(6.41)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10-6-08
BFB Injection Time: 0910
BFB File ID: 7100601
Tekmar Purge Flow: —
Vacuum: $3.0*10^{-5}$

IS/S Std.#:	1612-151	Exp. Date: 12-11-08
BCM	383857	
1,4-DFB	1202073	
CB-d5	1260970	

Verified CCV IS vs ICAL mid-point (- 40%D) HR initials

0656

Verify 176/174 m/z Ratio: 850368/881600*100 = 96.46

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 1163090\ )}{(\ 1202073\ )} \times \frac{(\ 25.00\ )}{(\ 0.95700\ )} =$ 25.276

File ID:	7100603
Compound:	Toluene-d8
Initials:	HR

Reported Result 25.276

Method: T14QMeOH 804a

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Loaded by Init.	Date Analyzed	Time Analyzed	Reviewed by Init.	Comments
1	✓	7100601	BFB Tune Check	1476-435	50ng	2µL	1.00	HR	10-6-08	0910	HR/CT	
2	✓	02	Sensitivity Check	1612-156A	0.5ppbv	1.0mL				0937	HR/CT	
3	✓	03	CCV-1 50ppb(100ppbv)	↓	50ppbv	100mL				1023	HR/CT	MTBET < 40%
4	✓	04	CCVsp ↓	1612-149A		↓				1118	HR/CT	Aerojet sp37a No Fr-13
5	✓	05	LCS-1 50ppbv (200ppbv)	1612-123	↓	50mL				1157	HR/CT	
6	✓	06	Gas Std	154-256	2500ppbv	5.0mL				1251	RA	
7	✓	07	Lab Blank	33668	Humid-	200mL	↓	↓	↓	1401	RA/CT	

Ram
Signature

10-6-08
Date

MSD-7

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Logbook #: 1706

8	✓	71000608	0809517-01A	5358	7"Hg-5psi	200mL	1.75	RA	10-6-08	1440	RA/LO		
9	✓	09	-01AA							1519	RA/		
10	✓	10	0809443-01A	5C17	5"Hg-15psi	200mL	2.42			1559	RA/		
11	✓	11	-02A	9524	4.5"Hg-15psi	200mL	2.38			1638	RA/		
12	✓	12	-02AA							1720	RA/		
13	✓	13	0809522A-01A	13847	7"Hg-5psi	200mL	1.75			1800	RA/		
14	✓	14	0809512-05A	34500	3"Hg-5psi	3.0mL	99.3			1839	RA/		
15	✓	15	0809540-04A	34766	6.5"Hg-5psi	5.0mL	68.4			1918	RA/		
16	X	16	0809684-01A	24403	8"Hg-15psi	10mL	55.2			1957	RA/	—	rr @ 200mL
17	✓	17	-01A			200mL	2.76			2103	RA/LO		
18	✓	18	-02A	2110	10.5"Hg-15psi	50mL	1,244	RA 10-6-08		2142	RA/		100X
19	✓	19	0809665-01A	~~5776~~ 5776	8"Hg-5psi	200mL	1.83	DM	10/6/08	2241	DM/		ID 5776
20	✓	20	0809614-01AA	5776	8.0"Hg+5psi	200mL	1.83	DM	~~10/7/08~~	2351	DM/		ID 5776
21	✓	21	0809665A-01A	SC65	0.5"Hg+15psi	200mL	2.05	DM	10/7/08	0030	DM/		Dat = 10/7/08
22	✓	22	-02A	9461				DM		0110	DM/		
23	✓	23	0809614-05A	12003	9.5"Hg+5psi	200mL	1.96	DM		0236	DM/		
24	✓	24	-03A	9563	9.0"Hg+5psi	200mL	1.91	DM		0317	DM/		
25	X	25	-04A	35972	8.5"Hg+5psi		1.87	DM		0437	DM		rr 100mL
26	✓	26	-04A			100mL	3.74	DM		0522	DM/LO		
27	✓	27	-05A	33787	9.0"Hg+5psi	200mL	1.91	DM		0603	LO		
28													
29													
30													
31													

Comments: MR 10-7-08

Signature

10-7-08
Date

@ Air Toxics Ltd.

MSD-7

Logbook #: 1706

0658

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	39.71
75	30.0 – 60.0% of mass 95	52.42
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.38
173	Less than 2.0% of mass 174	(0.65)[1]
174	50.0 – 100% of mass 95	70.44
175	5.0 – 9.0% of mass 174	(7.26)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	**(100.86)[1]**
177	5.0 – 9.0% of mass 176	(6.08)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 10-9-08

BFB Injection Time: 0819

BFB File ID: 7100901

Tekmar Purge Flow: NA

Vacuum: 3.0×10^{-5}

IS/S Std.#:	1612-151	Exp. Date: 12-11-08
BCM	362080	
1,4-DFB	1146510	
CB-d5	1241713	

Verified CCV IS vs ICAL mid-point (- 40%D) MR (initials)

Verify 176/174 m/z Ratio: 574656 / 569726 * 100 = 100.86

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 1143128\ )}{(\ 1143\ 6510\ )} \times \frac{(\ 25.00\ )}{(\ 0.95700\ )} = 26.046$

Reported Result 26.046

MR 10-9-08

File ID:	7100904
Compound:	Toluene-d8
Initials:	MR

Method: T14g/MeOH804a

Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Loaded by Init.	Date Analyzed	Time Analyzed	Reviewed by Init.	Comments
1 ✓	7100901	BFB Tune Check	1476-47	50ng	2µL	1.00	MR	10-9-08	0819	MR/CT	Apex+1 Scan 80
2 X	02	CCV-1 (100ppbv)	1612-156A	50ppbv	100mL				0857	MR/CT	MTBE ↑ > 40%
3 ✓	03	CCVsp (200ppbv)	1541-268		50mL				0950	MR/CT	No Freon 13! MJ 08/08
4 ✓	04	CCV-1 (100ppbv)	1612-156A		100mL				1035	MR/CT	MTBE ↑ < 40%
5 ✓	05	LCS-1 (100ppbv)	1612-123A		↓				1122	MR/CT	MTBE > 150% dry ice
6 ✓	06	Lab Blank	33668	Humid	200mL				1222	MR/CT	
7 ✓	07	0810109-01A	33901	04"Hg-5psi	200mL	1.30			1323	MR/CT	

Signature

10-9-08
Date

@ Air Toxics Ltd. **MSD-7** Logbook #: 1706

8	✓	7100908	0809614-06A	5723	9.0"Hg-5psi	200mL	1.91	KA2	10-9-08	1415	C.T		0659
9	✓	09	-07A	34765	10"Hg-5psi	200mL	2.01	RA		1500	RA/LD		
10	✓	10	-08A	928	8.5"Hg-5psi	200mL	1.87			1539	RA		
11	✓	11	-09AA	12017	9"Hg-5psi	~~150mL~~ ~~200mL~~ RA 10-9-08	1.91			1618	RA		DF = 2.55
12	✓	12	-10A	5751	11.5"Hg-5psi	200mL	2.17			1659	RA		
13	✓	13	-09A	12017	9"Hg-5psi	200mL	1.91			1743	RA		
14	✓	14	-11A	5625	8.5"Hg-5psi	200mL	1.87			1822	RA		
15	✓	15	-12A	12080	11"Hg-5psi	200mL	2.12			1901	RA		
16	X	16	-13A	9942	7"Hg-5psi	200mL	1.75			1940	RA		"E" PCE
17	✓	17	-13A	↓	↓	150mL	2.33			2033	RA		
18	✓	18	-14A	43726	8.5"Hg-5psi	200mL	1.87			2112	RA		
19	✓	19	-15A	33961	9"Hg-5psi	200mL	1.91			2151	RA		
20	X	20	-16A	33788	9.5"Hg-5psi	200mL	1.96	↓		2231	DM		"E" Methylene Chloride 150mL
21	X	21	-17A	03788	10.0"Hg-5psi	200mL	2.01	DM		2310	DM		↓ 100mL
22	X	22	-18A	14000	↓		↓			2349	DM DM		"E" methylene chloride 100mL
23	✓	23	-16A	33788	9.5"Hg-5psi	150mL	2.61		10/10/08	0028	DM		
24	✓	24	-17A	03788	10.0"Hg-5psi	100mL	4.02			0107	DM		
25	✓	25	-18A	14000	↓	↓	↓			0146	DM		
26	✓	26	0809693-01A	35173	13.0"Hg-5psi	200mL	2.36			0224	DM		
27	✓	27	-02A	25265	11.5"Hg	↓	2.17			0303	DM		
28	✓	28	-03A	02240	12.5"Hg	50mL	~~5.30~~ 2.50			0341	DM		DF = 9.20 Dilute NT
29	✓	29	-04A	33969	14.0"Hg	200mL	2.61			0445	DM		
30	✓	30	-04AA	↓	↓		↓			0533	DM		
31	✓	31	-05A	35133	11.5"Hg		2.17			0612	LD		
	✓	32	-06A	34031	13.5"Hg		2.44			0659	LD		

Comments:

Laura Dermyer
Signature

10/10/08
Date

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-04aug.b/7080415.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 04-AUG-2008 15:03
Operator : ra
Inst ID: msd7.i
Smp Info : 2uL #1476-434; BFB Tune Check; BFB Tune Check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-04aug.b/bfb105.m
Meth Date : 04-Aug-2008 14:54
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.134	8.232	-0.098	95	1321072			100.00- 100.00	100.00
8.134	8.232	-0.098	50	452466			15.00- 40.00	34.25
8.134	8.232	-0.098	75	677407			30.00- 60.00	51.28
8.134	8.232	-0.098	96	85041			5.00- 9.00	6.44
8.134	8.232	-0.098	173	6951			0.00- 2.00	0.73
8.134	8.232	-0.098	174	950842			50.00- 100.00	71.98
8.134	8.232	-0.098	175	65506			5.00- 9.00	6.89
8.134	8.232	-0.098	176	907819			95.00- 101.00	95.48
8.134	8.232	-0.098	177	59447			5.00- 9.00	6.55

Data File: /var/chem/msd7.i/7-04aug.b/7080415.d

Date : 04-AUG-2008 15:03

Client ID: BFB

Instrument: msd7.i

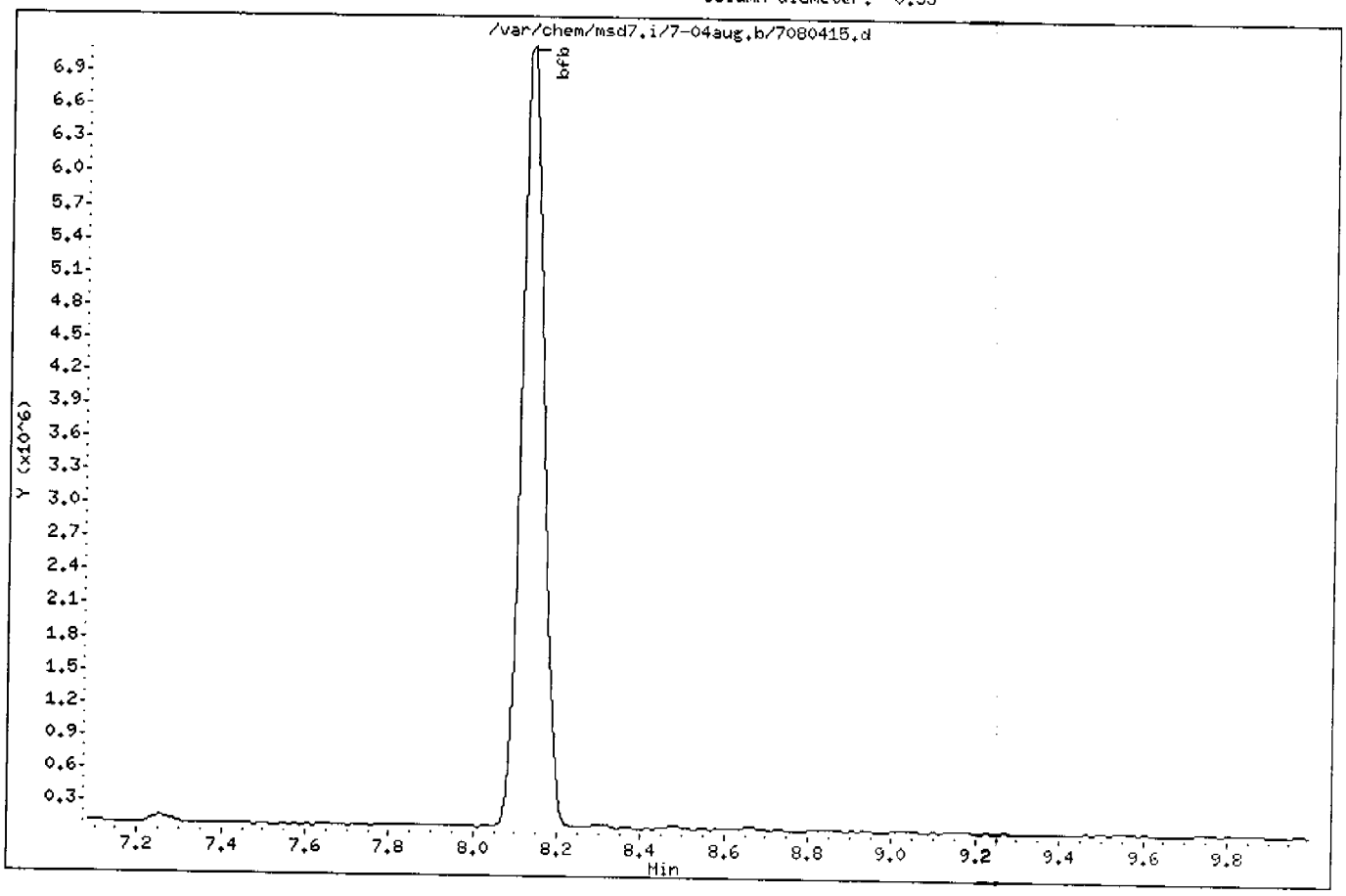
Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-04aug.b/7080415.d

Date : 04-AUG-2008 15:03

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

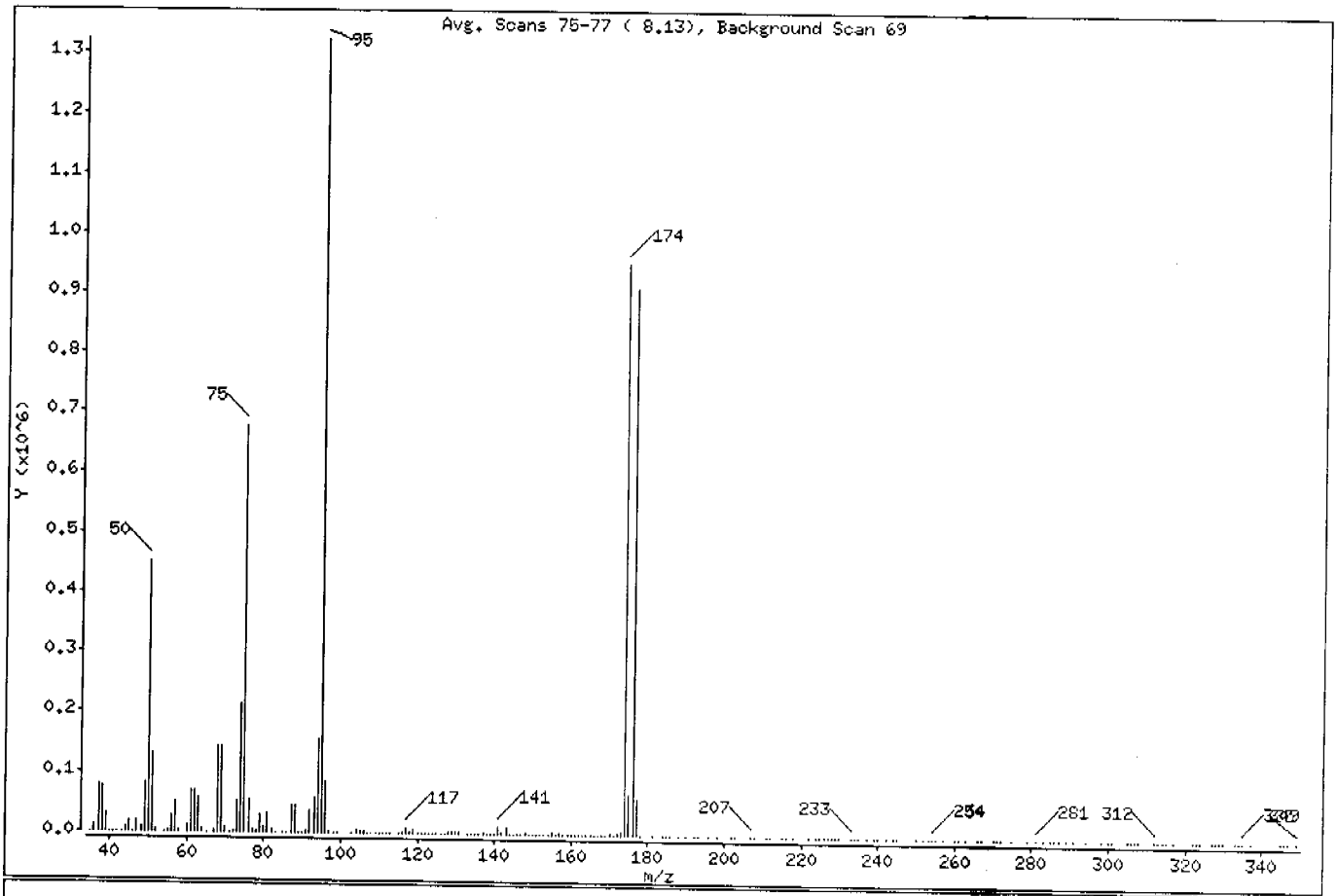
Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	34.25
75	30.00 - 60.00% of mass 95	51.28
96	5.00 - 9.00% of mass 95	6.44
173	Less than 2.00% of mass 174	0.53 (**0.73**)
174	50.00 - 100.00% of mass 95	71.98
175	5.00 - 9.00% of mass 174	4.96 (**6.89**)
176	95.00 - 101.00% of mass 174	68.72 (**95.48**)
177	5.00 - 9.00% of mass 176	4.50 (**6.55**)

Data File: /var/chem/msd7.i/7-04aug.b/7080415.d

Date : 04-AUG-2008 15:03

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

Data File: 7080415.d

Spectrum: Avg. Scans 75-77 (8.13), Background Scan 69

Location of Maximum: 95.00

Number of points: 222

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	164	95.00	1320960	156.00	232	242.00	78
36.00	13051	96.00	85040	157.00	1607	244.00	81
37.00	79136	97.00	2362	158.00	323	245.00	144
38.00	74608	98.00	51	159.00	1385	250.00	194
39.00	30888	99.00	52	160.00	178	252.00	88
40.00	571	103.00	202	161.00	1476	253.00	140
41.00	398	104.00	5481	162.00	420	254.00	336
42.00	133	105.00	1784	163.00	677	255.00	27
43.00	1002	106.00	4505	164.00	193	257.00	230
44.00	9267	107.00	1217	165.00	140	260.00	270
45.00	16976	108.00	163	166.00	69	261.00	66
46.00	1044	109.00	527	167.00	342	263.00	156
47.00	19520	110.00	753	168.00	800	266.00	72
48.00	9428	111.00	1142	169.00	608	267.00	184
49.00	80856	112.00	781	170.00	1686	270.00	60
50.00	452416	113.00	499	171.00	1195	271.00	265
51.00	131200	115.00	1342	172.00	1771	272.00	254
52.00	5082	116.00	4166	173.00	6951	275.00	52
54.00	23	117.00	7602	174.00	950784	279.00	76
55.00	4495	118.00	3836	175.00	65504	281.00	642
56.00	26360	119.00	5922	176.00	907776	283.00	240
57.00	52072	120.00	135	177.00	59440	285.00	257
58.00	2260	121.00	10	178.00	1380	286.00	74
60.00	12386	122.00	115	181.00	188	287.00	53
61.00	70048	123.00	52	184.00	65	289.00	109
62.00	69968	124.00	942	185.00	67	291.00	51
63.00	58376	125.00	451	186.00	156	294.00	87
64.00	4592	126.00	566	188.00	71	298.00	158
65.00	736	127.00	175	190.00	114	300.00	56
67.00	2720	128.00	3868	192.00	481	301.00	94
68.00	143872	129.00	1931	193.00	185	305.00	193
69.00	141248	130.00	3855	196.00	146	306.00	164
70.00	9807	131.00	1829	198.00	83	307.00	60
71.00	429	133.00	790	202.00	340	308.00	89
72.00	4282	134.00	450	203.00	119	312.00	267

Data File: /var/chem/msd7.i/7-04aug.b/7080415.d

Date : 04-AUG-2008 15:03

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

Data File: 7080415.d

Spectrum: Avg. Scans 75-77 (8.13), Background Scan 69

Location of Maximum: 95.00

Number of points: 222

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	50712	135.00	1310	207.00	1171	313.00	57
74.00	212416	136.00	447	208.00	103	314.00	59
75.00	677376	137.00	2346	211.00	295	315.00	163
76.00	55472	138.00	329	212.00	52	317.00	54
77.00	5257	139.00	594	215.00	54	322.00	62
78.00	3697	140.00	1325	216.00	186	323.00	114
79.00	30088	141.00	11903	218.00	237	324.00	51
80.00	7879	142.00	1699	222.00	99	327.00	160
81.00	32848	143.00	11355	224.00	179	328.00	55
82.00	6771	144.00	607	225.00	210	329.00	133
83.00	892	145.00	1114	226.00	135	330.00	66
85.00	316	146.00	1132	227.00	180	333.00	69
86.00	1383	147.00	431	228.00	129	334.00	211
87.00	46008	148.00	2663	229.00	120	335.00	282
88.00	44696	149.00	486	230.00	123	337.00	71
89.00	1261	150.00	1210	233.00	342	345.00	65
90.00	239	151.00	17	234.00	71	346.00	63
91.00	2640	152.00	591	235.00	68	347.00	65
92.00	35208	153.00	557	237.00	53	349.00	54
93.00	58144	154.00	777	239.00	65		
94.00	154176	155.00	2242	240.00	73		

Air Toxics Ltd.

Data file : /chem/msd7.i/7-05aug.b/7080501.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 05-AUG-2008 13:20
Operator : ra
Inst ID: msd7.i
Smp Info : 2uL #1476-434; BFB Tune Check; BFB Tune Check
Misc Info : 50ng
Comment :
Method : /chem/msd7.i/7-05aug.b/bfb105.m
Meth Date : 05-Aug-2008 13:13 ctaylor
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.134	8.232	-0.098	95	1273770			100.00- 100.00	100.00
8.134	8.232	-0.098	50	450230			15.00- 40.00	35.35
8.134	8.232	-0.098	75	658919			30.00- 60.00	51.73
8.134	8.232	-0.098	96	84594			5.00- 9.00	6.64
8.134	8.232	-0.098	173	5961			0.00- 2.00	0.65
8.134	8.232	-0.098	174	923783			50.00- 100.00	72.52
8.134	8.232	-0.098	175	65271			5.00- 9.00	7.07
8.134	8.232	-0.098	176	887157			95.00- 101.00	96.04
8.134	8.232	-0.098	177	56030			5.00- 9.00	6.32

Data File: /chem/msd7.i/7-05aug.b/7080501.d

Date : 05-AUG-2008 13:20

Client ID: BFB

Instrument: msd7.i

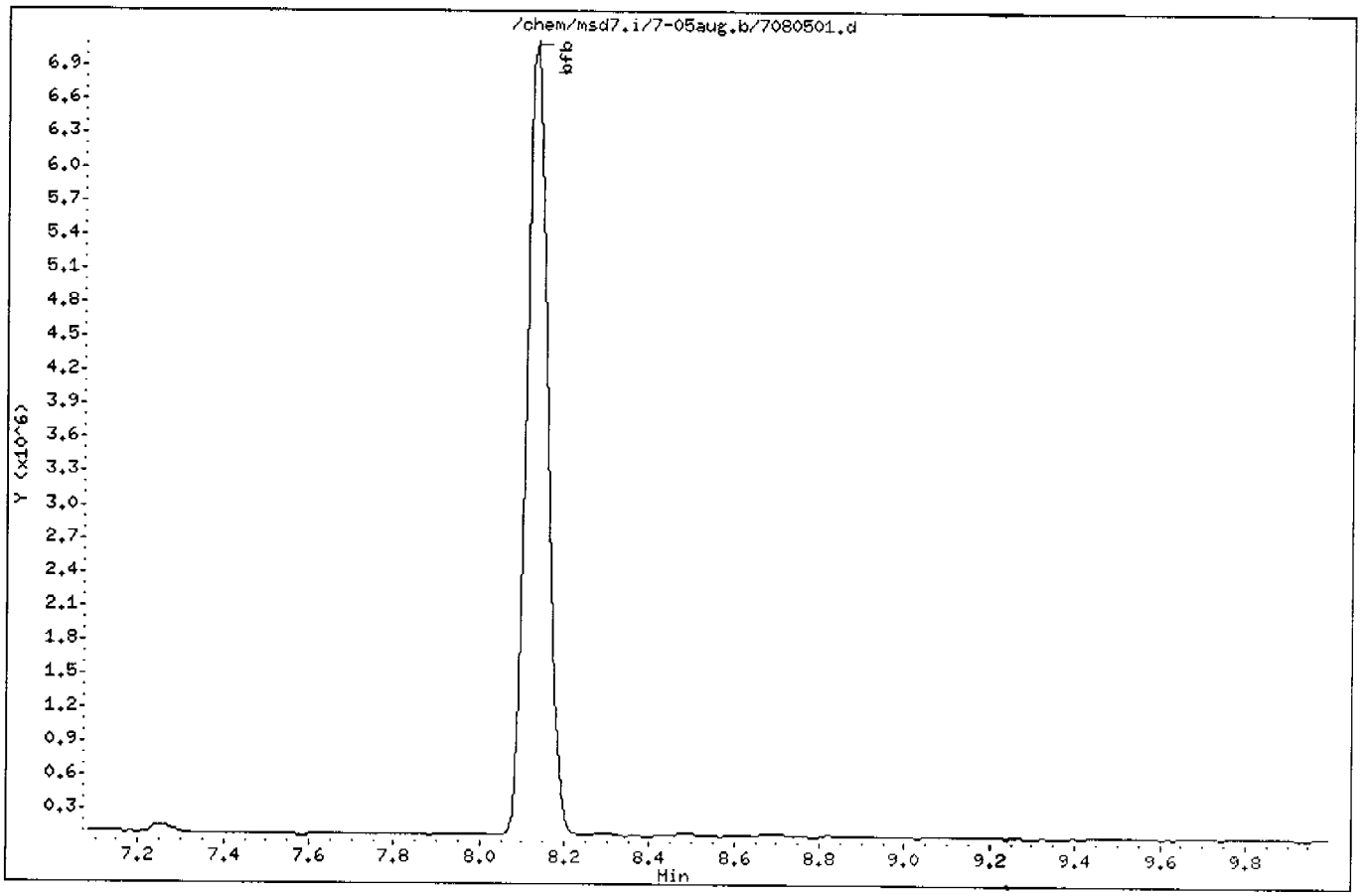
Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53



Data File: /chem/msd7.i/7-05aug.b/7080501.d

Date : 05-AUG-2008 13:20

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

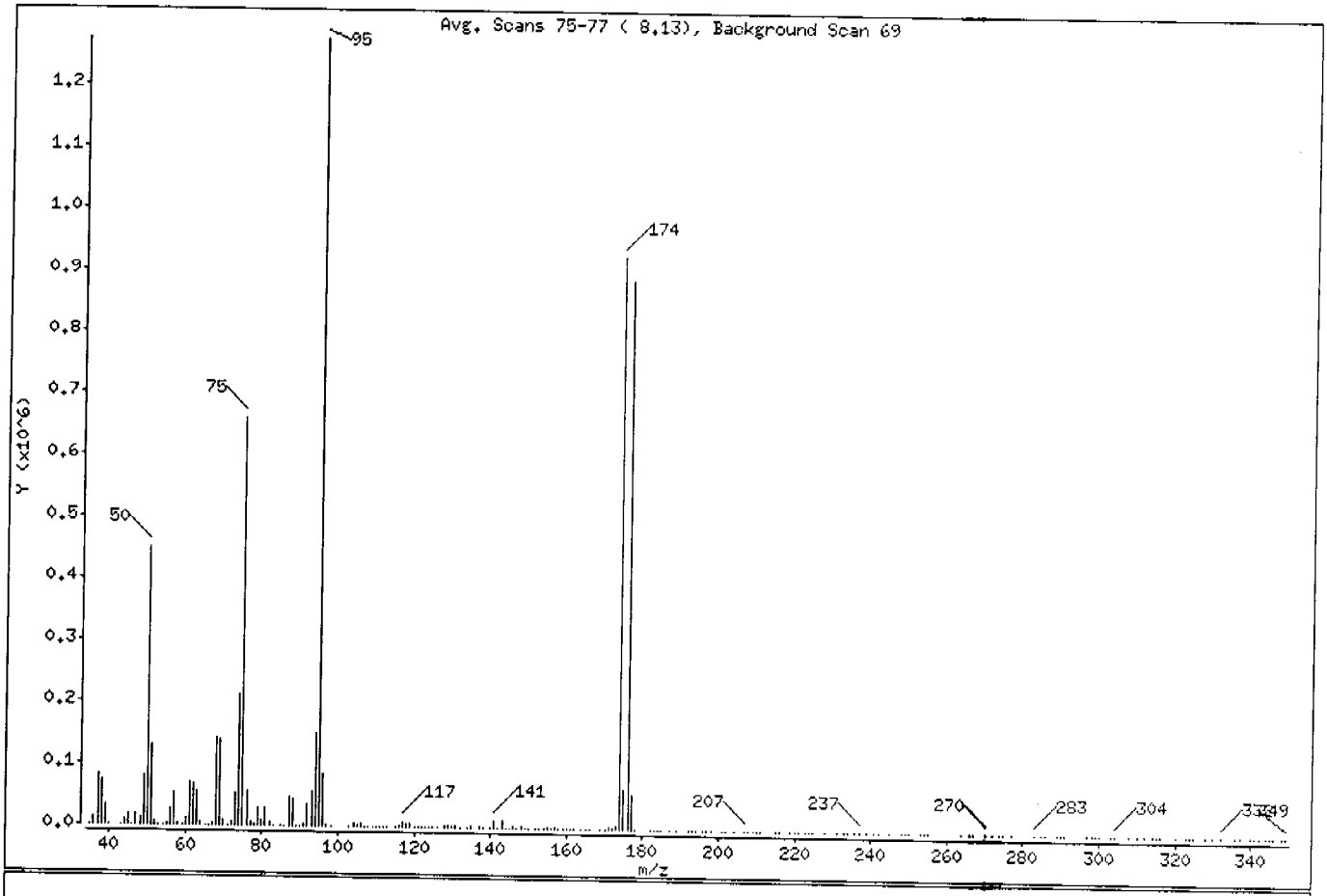
Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	35.35
75	30.00 - 60.00% of mass 95	51.73
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.47 (0.65)
174	50.00 - 100.00% of mass 95	72.52
175	5.00 - 9.00% of mass 174	5.12 (7.07)
176	95.00 - 101.00% of mass 174	69.65 (96.04)
177	5.00 - 9.00% of mass 176	4.40 (6.32)

Data File: /chem/msd7.i/7-05aug.b/7080501.d

Date : 05-AUG-2008 13:20

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

Data File: 7080501.d
Spectrum: Avg. Scans 75-77 (8.13), Background Scan 69
Location of Maximum: 95.00
Number of points: 215

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	81	92.00	34832	156.00	599	239.00	**79**
36.00	12960	93.00	55528	157.00	1472	241.00	**217**
37.00	81608	94.00	149760	158.00	177	242.00	**57**
38.00	72128	95.00	1273344	159.00	1176	245.00	**53**
39.00	31576	96.00	84592	160.00	153	248.00	**51**
40.00	1155	97.00	1928	161.00	1184	249.00	**126**
43.00	660	98.00	109	162.00	304	250.00	**73**
44.00	8210	103.00	585	164.00	9	253.00	**40**
45.00	17128	104.00	5126	165.00	231	254.00	**78**
46.00	1274	105.00	1756	166.00	322	255.00	**143**
47.00	18672	106.00	4971	169.00	792	264.00	**91**
48.00	10297	107.00	977	170.00	1024	266.00	**236**
49.00	79320	108.00	530	171.00	1601	267.00	**181**
50.00	450176	109.00	202	172.00	1799	270.00	**364**
51.00	128456	110.00	378	173.00	5961	272.00	**122**
52.00	4744	111.00	862	174.00	923776	274.00	**221**
53.00	226	112.00	407	175.00	65264	275.00	**120**
54.00	10	113.00	743	176.00	887104	277.00	**63**
55.00	3791	115.00	857	177.00	56024	283.00	**499**
56.00	25824	116.00	3399	178.00	1356	285.00	**128**
57.00	52248	117.00	8398	182.00	133	286.00	**63**
58.00	1822	118.00	4415	183.00	182	289.00	**84**
59.00	180	119.00	6427	184.00	209	290.00	**70**
60.00	12517	120.00	260	185.00	161	291.00	**121**
61.00	69912	121.00	186	187.00	154	297.00	**79**
62.00	68296	122.00	493	189.00	42	298.00	**75**
63.00	55264	123.00	595	192.00	150	299.00	**69**
64.00	4431	124.00	814	193.00	500	300.00	**63**
65.00	497	125.00	114	194.00	192	303.00	**76**
66.00	172	126.00	981	196.00	288	304.00	**216**
67.00	3062	128.00	4199	197.00	185	308.00	**135**
68.00	141504	129.00	1801	198.00	89	310.00	**149**
69.00	138240	130.00	4269	201.00	77	312.00	**121**
70.00	9742	131.00	1529	202.00	204	314.00	**71**
71.00	379	132.00	633	204.00	447	315.00	**62**

Data File: /chem/msd7.i/7-05aug.b/7080501.d

Date : 05-AUG-2008 13:20

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

Data File: 7080501.d

Spectrum: Avg. Scans 75-77 (8.13), Background Scan 69

Location of Maximum: 95.00

Number of points: 215

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	4771	134.00	174	207.00	1213	316.00	86
73.00	52064	135.00	1690	208.00	482	320.00	54
74.00	210752	137.00	2153	209.00	315	323.00	66
75.00	658880	138.00	52	210.00	363	324.00	69
76.00	54312	140.00	762	211.00	30	325.00	125
77.00	5088	141.00	12086	215.00	52	328.00	66
78.00	2159	142.00	1371	216.00	73	330.00	155
79.00	28376	143.00	11809	219.00	93	332.00	242
80.00	8487	144.00	830	220.00	150	336.00	79
81.00	30544	145.00	701	221.00	173	337.00	53
82.00	5751	146.00	1862	223.00	150	340.00	63
83.00	732	147.00	656	224.00	78	341.00	97
85.00	363	148.00	2574	225.00	59	342.00	32
86.00	476	149.00	1241	228.00	114	344.00	233
87.00	48016	150.00	1326	231.00	175	345.00	15
88.00	42528	152.00	697	233.00	258	346.00	87
89.00	329	153.00	821	234.00	141	348.00	57
90.00	304	154.00	423	236.00	86	349.00	84
91.00	2671	155.00	2735	237.00	339		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-24aug.b/7082401.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 24-AUG-2008 08:56
Operator : smd Inst ID: msd7.i
Smp Info : 2uL #1476-434;BFB Tune Check;BFB Tune Check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-24aug.b/bfb105.m
Meth Date : 24-Aug-2008 08:47 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.190	8.232	-0.042	95	1019897			100.00- 100.00	100.00
8.190	8.232	-0.042	50	336052			15.00- 40.00	32.95
8.190	8.232	-0.042	75	489809			30.00- 60.00	48.03
8.190	8.232	-0.042	96	67083			5.00- 9.00	6.58
8.190	8.232	-0.042	173	5428			0.00- 1.99	0.74
8.190	8.232	-0.042	174	735954			50.01- 100.00	72.16
8.190	8.232	-0.042	175	50981			5.00- 9.00	6.93
8.190	8.232	-0.042	176	712161			95.01- 100.99	96.77
8.190	8.232	-0.042	177	46250			5.00- 9.00	6.49

Data File: /chem/msd7.i/7-24aug.b/7082401.d

Date : 24-AUG-2008 08:56

Client ID: BFB

Instrument: msd7.i

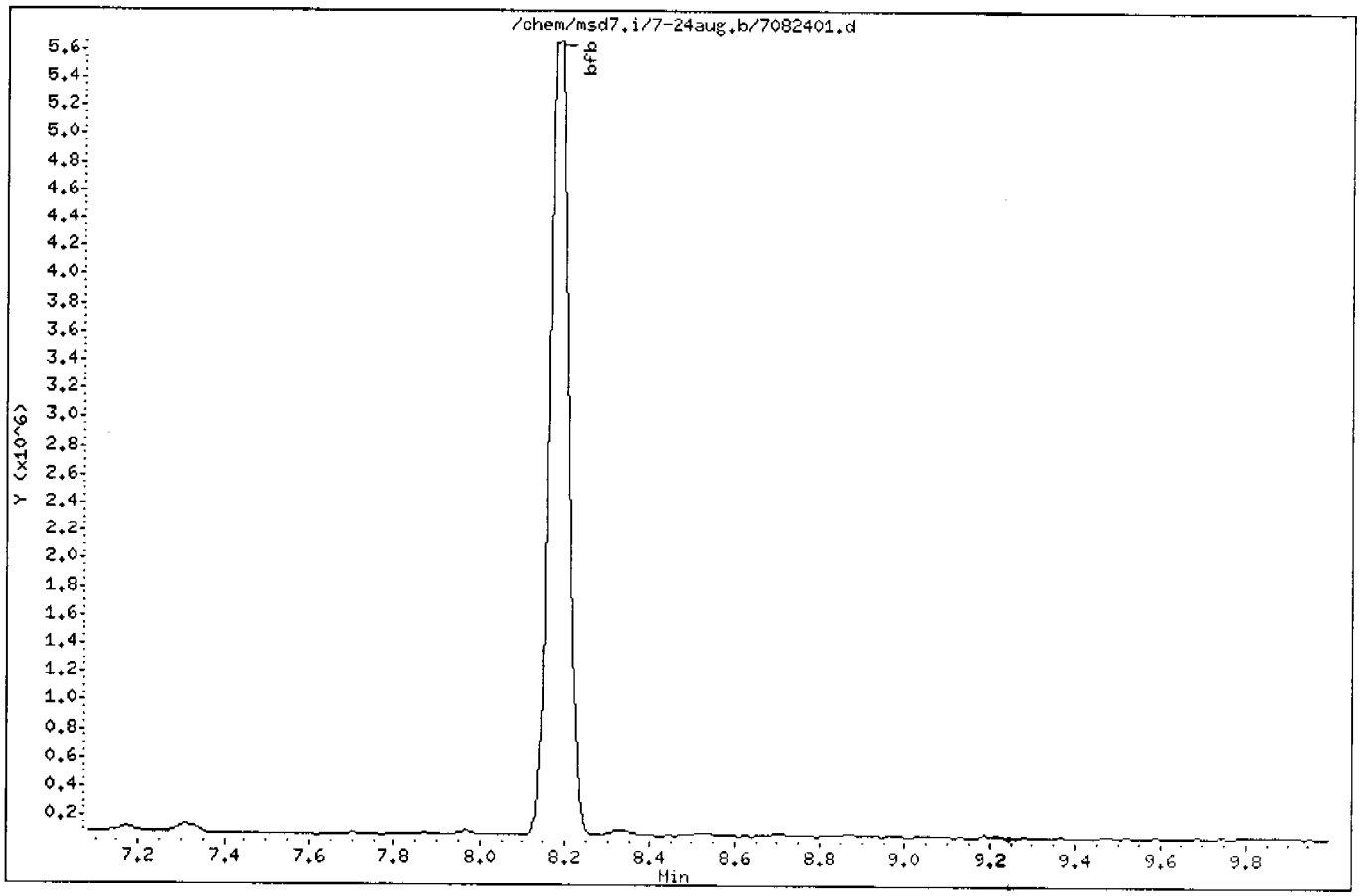
Sample Info: 2uL #1476-434;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53



Data File: /chem/msd7.i/7-24aug.b/7082401.d

Date : 24-AUG-2008 08:56

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434;BFB Tune Check;BFB Tune Check

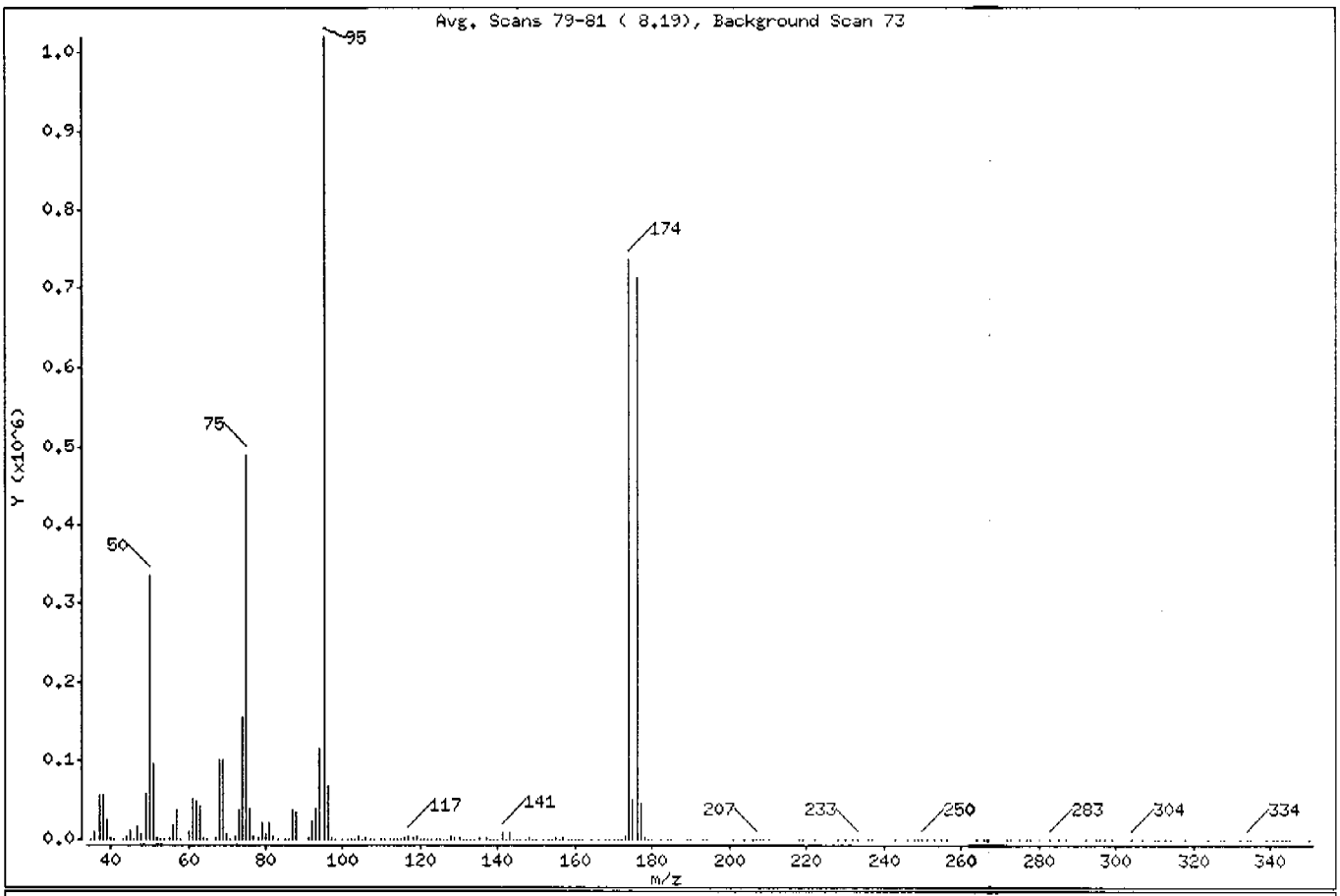
Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	32.95
75	30.00 - 60.00% of mass 95	48.03
96	5.00 - 9.00% of mass 95	6.58
173	Less than 1.99% of mass 174	0.53 (0.74)
174	50.01 - 100.00% of mass 95	72.16
175	5.00 - 9.00% of mass 174	5.00 (6.93)
176	95.01 - 100.99% of mass 174	69.83 (96.77)
177	5.00 - 9.00% of mass 176	4.53 (6.49)

Data File: /chem/msd7.i/7-24aug.b/7082401.d

Date : 24-AUG-2008 08:56

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

Data File: 7082401.d

Spectrum: Avg. Scans 79-81 (8.19), Background Scan 73

Location of Maximum: 95.00

Number of points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	57	92.00	24264	146.00	998	233.00	**145**
36.00	8542	93.00	40296	147.00	404	236.00	**59**
37.00	57232	94.00	114784	148.00	1850	237.00	**143**
38.00	56072	95.00	1019840	149.00	614	243.00	**65**
39.00	24712	96.00	67080	150.00	1059	246.00	**93**
40.00	1466	97.00	1677	152.00	604	248.00	**61**
41.00	20	98.00	217	153.00	696	249.00	**16**
43.00	556	100.00	97	154.00	427	250.00	**264**
44.00	5270	101.00	157	155.00	1626	251.00	**43**
45.00	12829	102.00	55	156.00	64	253.00	**211**
46.00	643	103.00	596	157.00	1330	255.00	**94**
47.00	16081	104.00	3991	158.00	287	256.00	**179**
48.00	7216	105.00	1012	159.00	816	264.00	**83**
49.00	59256	106.00	3043	160.00	54	266.00	**64**
50.00	336000	107.00	1057	161.00	954	267.00	**90**
51.00	96392	108.00	150	162.00	138	272.00	**70**
52.00	3434	110.00	496	164.00	230	273.00	**56**
53.00	34	111.00	600	166.00	102	275.00	**53**
54.00	145	112.00	801	168.00	164	277.00	**89**
55.00	2957	113.00	314	169.00	391	278.00	**64**
56.00	17800	114.00	97	170.00	915	280.00	**95**
57.00	38424	115.00	566	171.00	1102	283.00	**457**
58.00	938	116.00	2909	172.00	1109	285.00	**54**
60.00	8667	117.00	5300	173.00	5428	287.00	**55**
61.00	52240	118.00	3093	174.00	735936	292.00	**52**
62.00	49928	119.00	5044	175.00	50976	295.00	**60**
63.00	41592	120.00	70	176.00	712128	296.00	**52**
64.00	3121	121.00	170	177.00	46248	297.00	**50**
65.00	626	122.00	389	178.00	1574	299.00	**50**
67.00	2192	123.00	30	179.00	262	304.00	**175**
68.00	101840	124.00	324	180.00	195	307.00	**58**
69.00	101752	125.00	57	182.00	64	310.00	**64**
70.00	6507	126.00	327	184.00	56	311.00	**56**
71.00	169	127.00	405	185.00	225	313.00	**117**
72.00	3820	128.00	3846	189.00	75	314.00	**71**

Data File: /chem/msd7.i/7-24aug.b/7082401.d

Date : 24-AUG-2008 08:56

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-434;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

Data File: 7082401.d

Spectrum: Avg. Scans 79-81 (8.19), Background Scan 73

Location of Maximum: 95.00

Number of points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	36360	129.00	1328	190.00	182	318.00	**128**
74.00	153600	130.00	3047	193.00	3	324.00	**59**
75.00	489792	131.00	880	194.00	92	327.00	**64**
76.00	39416	132.00	443	201.00	172	328.00	**132**
77.00	3977	133.00	208	204.00	63	332.00	**222**
78.00	2920	134.00	381	206.00	83	334.00	**363**
79.00	20624	135.00	1441	207.00	636	335.00	**170**
80.00	6553	137.00	1452	208.00	61	339.00	**54**
81.00	21104	138.00	251	209.00	103	341.00	**114**
82.00	4317	139.00	421	210.00	68	342.00	**114**
83.00	429	140.00	523	218.00	67	343.00	**205**
85.00	213	141.00	8808	219.00	96	344.00	**197**
86.00	815	142.00	1166	222.00	114	345.00	**234**
87.00	37640	143.00	8563	228.00	52	350.00	**77**
88.00	36120	144.00	542	230.00	65		
91.00	3098	145.00	847	232.00	106		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-27aug.b/7082701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 27-AUG-2008 08:13
Operator : ra Inst ID: msd7.i
Smp Info : 2uL #1476-476; BFB Tune Check; BFB Tune Check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-27aug.b/bfb105.m
Meth Date : 27-Aug-2008 08:04 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.176	8.232	-0.056	95	769421			100.00- 100.00	100.00
8.176	8.232	-0.056	50	274309			15.00- 40.00	35.65
8.176	8.232	-0.056	75	402550			30.00- 60.00	52.32
8.176	8.232	-0.056	96	51505			5.00- 9.00	6.69
8.176	8.232	-0.056	173	3766			0.00- 1.99	0.73
8.176	8.232	-0.056	174	514189			50.01- 100.00	66.83
8.176	8.232	-0.056	175	37573			5.00- 9.00	7.31
8.176	8.232	-0.056	176	493781			95.01- 100.99	96.03
8.176	8.232	-0.056	177	33252			5.00- 9.00	6.73

Data File: /var/chem/msd7.i/7-27aug.b/7082701.d

Date : 27-AUG-2008 08:13

Client ID: BFB

Instrument: msd7.i

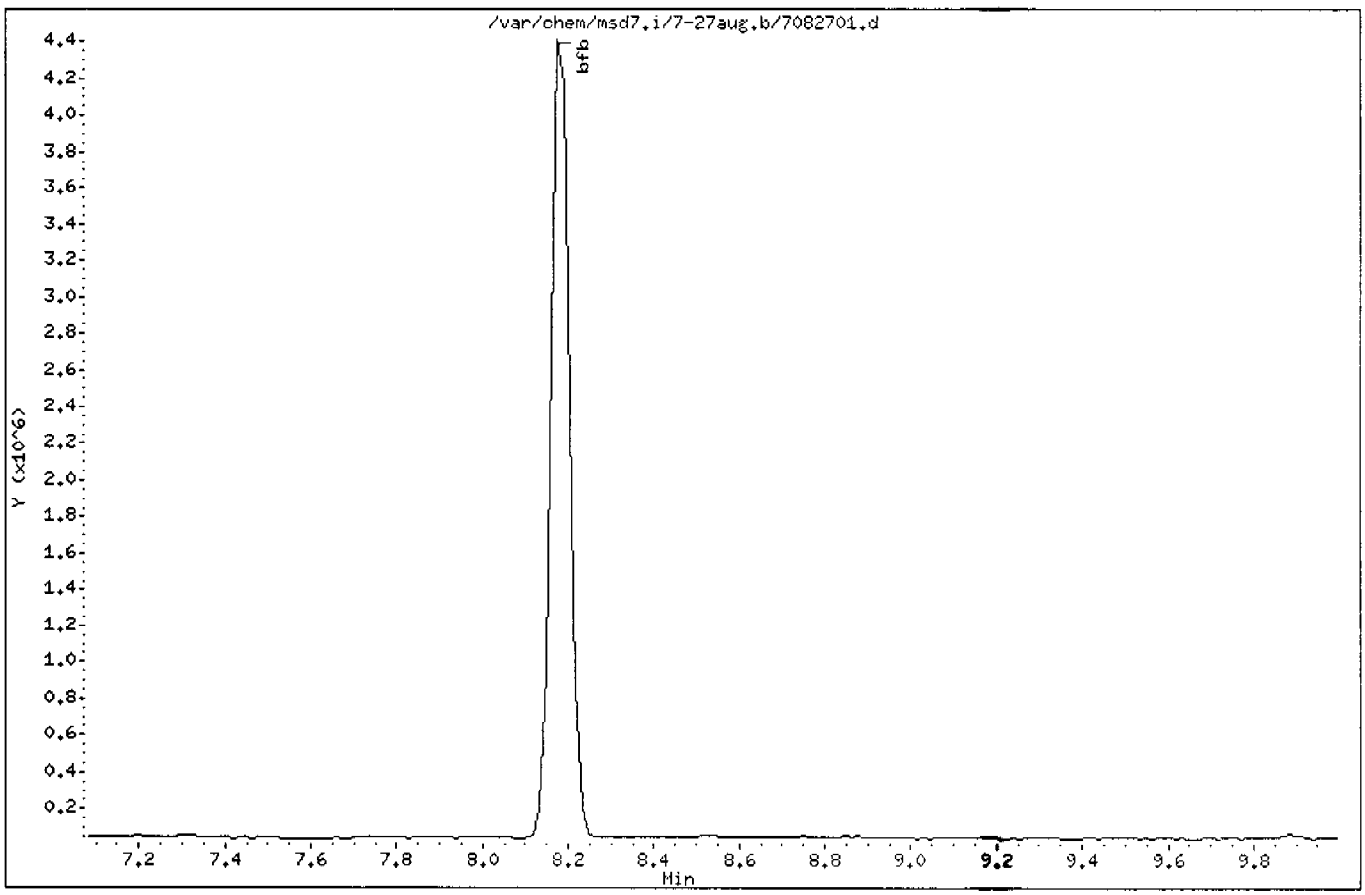
Sample Info: 2uL #1476-476; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-27aug.b/7082701.d

Date : 27-AUG-2008 08:13

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-476; BFB Tune Check; BFB Tune Check

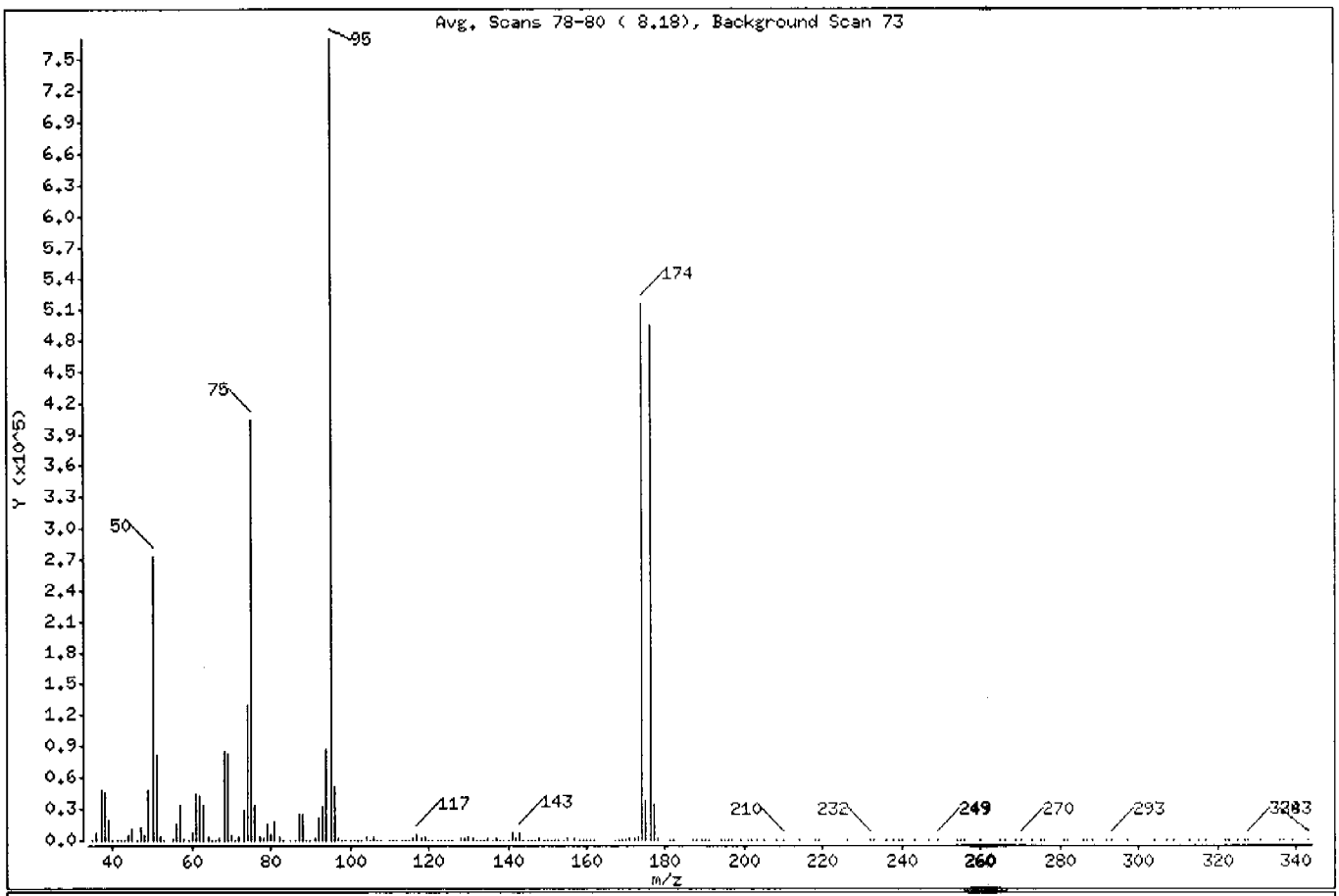
Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	35.65
75	30.00 - 60.00% of mass 95	52.32
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	0.49 (**0**.73)
174	50.01 - 100.00% of mass 95	66.83
175	5.00 - 9.00% of mass 174	4.88 (**7**.31)
176	95.01 - 100.99% of mass 174	64.18 (**96**.03)
177	5.00 - 9.00% of mass 176	4.32 (**6**.73)

Data File: /var/chem/msd7.i/7-27aug.b/7082701.d

Date : 27-AUG-2008 08:13

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-476; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

Data File: 7082701.d

Spectrum: Avg. Scans 78-80 (8.18), Background Scan 73

Location of Maximum: 95.00

Number of points: 201

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	118	88.00	24000	141.00	6270	214.00	**53**
36.00	7591	89.00	58	142.00	903	218.00	**143**
37.00	47384	90.00	99	143.00	7237	219.00	**322**
38.00	46856	91.00	1721	144.00	685	226.00	**68**
39.00	19352	92.00	21128	145.00	624	232.00	**330**
40.00	400	93.00	32320	146.00	872	233.00	**78**
41.00	375	94.00	86104	147.00	218	236.00	**112**
42.00	223	95.00	769408	148.00	1755	238.00	**51**
43.00	384	96.00	51504	149.00	535	239.00	**60**
44.00	4465	97.00	1249	150.00	790	240.00	**70**
45.00	11126	98.00	135	151.00	302	243.00	**86**
46.00	302	99.00	69	152.00	434	247.00	**87**
47.00	12213	100.00	74	153.00	748	249.00	**329**
48.00	5759	101.00	67	154.00	460	254.00	**258**
49.00	48024	102.00	60	155.00	1598	255.00	**53**
50.00	274304	103.00	261	157.00	1319	256.00	**77**
51.00	80856	104.00	3181	158.00	228	260.00	**37**
52.00	3507	105.00	479	159.00	631	265.00	**243**
53.00	25	106.00	2697	160.00	208	266.00	**148**
55.00	2446	107.00	501	161.00	591	269.00	**287**
56.00	15112	108.00	150	162.00	41	270.00	**370**
57.00	33824	110.00	372	167.00	379	273.00	**98**
58.00	1243	111.00	318	168.00	398	275.00	**81**
59.00	159	112.00	388	169.00	489	276.00	**57**
60.00	6710	113.00	273	170.00	396	281.00	**27**
61.00	43824	114.00	66	171.00	914	282.00	**104**
62.00	42088	115.00	720	172.00	930	286.00	**63**
63.00	34256	116.00	2601	173.00	3766	287.00	**50**
64.00	3040	117.00	4559	174.00	514176	288.00	**58**
65.00	495	118.00	2354	175.00	37568	292.00	**57**
66.00	32	119.00	3674	176.00	493760	293.00	**69**
67.00	1824	120.00	229	177.00	33248	297.00	**59**
68.00	85584	121.00	167	178.00	1004	304.00	**64**
69.00	82472	122.00	181	181.00	191	307.00	**63**
70.00	5560	123.00	487	182.00	126	309.00	**53**

Data File: /var/chem/msd7.i/7-27aug.b/7082701.d

Date : 27-AUG-2008 08:13

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-476; BFB Tune Check; BFB Tune Check

Volume Injected (uL): 2.0

Operator: ra

Column phase:

Column diameter: 0.53

Data File: 7082701.d
Spectrum: Avg. Scans 78-80 (8.18), Background Scan 73
Location of Maximum: 95.00
Number of points: 201

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	11	124.00	370	187.00	54	313.00	52
72.00	3543	125.00	131	188.00	51	315.00	56
73.00	28800	126.00	662	189.00	95	317.00	51
74.00	129704	128.00	2596	190.00	53	322.00	60
75.00	402496	129.00	1247	191.00	73	323.00	57
76.00	32928	130.00	2676	194.00	58	325.00	56
77.00	3270	131.00	1205	195.00	76	327.00	101
78.00	2020	132.00	302	196.00	95	328.00	122
79.00	16736	133.00	117	197.00	113	331.00	90
80.00	4721	134.00	58	199.00	52	336.00	62
81.00	16840	135.00	957	201.00	123	337.00	66
82.00	4417	136.00	382	202.00	51	339.00	53
83.00	669	137.00	917	203.00	59	343.00	60
85.00	326	138.00	149	205.00	54		
86.00	423	139.00	352	208.00	78		
87.00	24896	140.00	510	210.00	137		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/06oct08.b/7100601.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 06-OCT-2008 09:10
Operator : smd Inst ID: msd7.i
Smp Info : 2uL #1476-435;BFB Tune Check;BFB Tune Check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/06oct08.b/bfb105.m
Meth Date : 06-Oct-2008 09:01 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.176	8.232	-0.056	95	1307206			100.00- 100.00	100.00
8.176	8.232	-0.056	50	520706			15.00- 40.00	39.83
8.176	8.232	-0.056	75	696938			30.00- 60.00	53.32
8.176	8.232	-0.056	96	86297			5.00- 9.00	6.60
8.176	8.232	-0.056	173	5528			0.00- 1.99	0.63
8.176	8.232	-0.056	174	881645			50.01- 100.00	67.44
8.176	8.232	-0.056	175	61321			5.00- 9.00	6.96
8.176	8.232	-0.056	176	850410			95.01- 100.99	96.46
8.176	8.232	-0.056	177	54497			5.00- 9.00	6.41

Data File: /var/chem/msd7.i/06oct08.b/7100601.d

Date : 06-OCT-2008 09:10

Client ID: BFB

Instrument: msd7.i

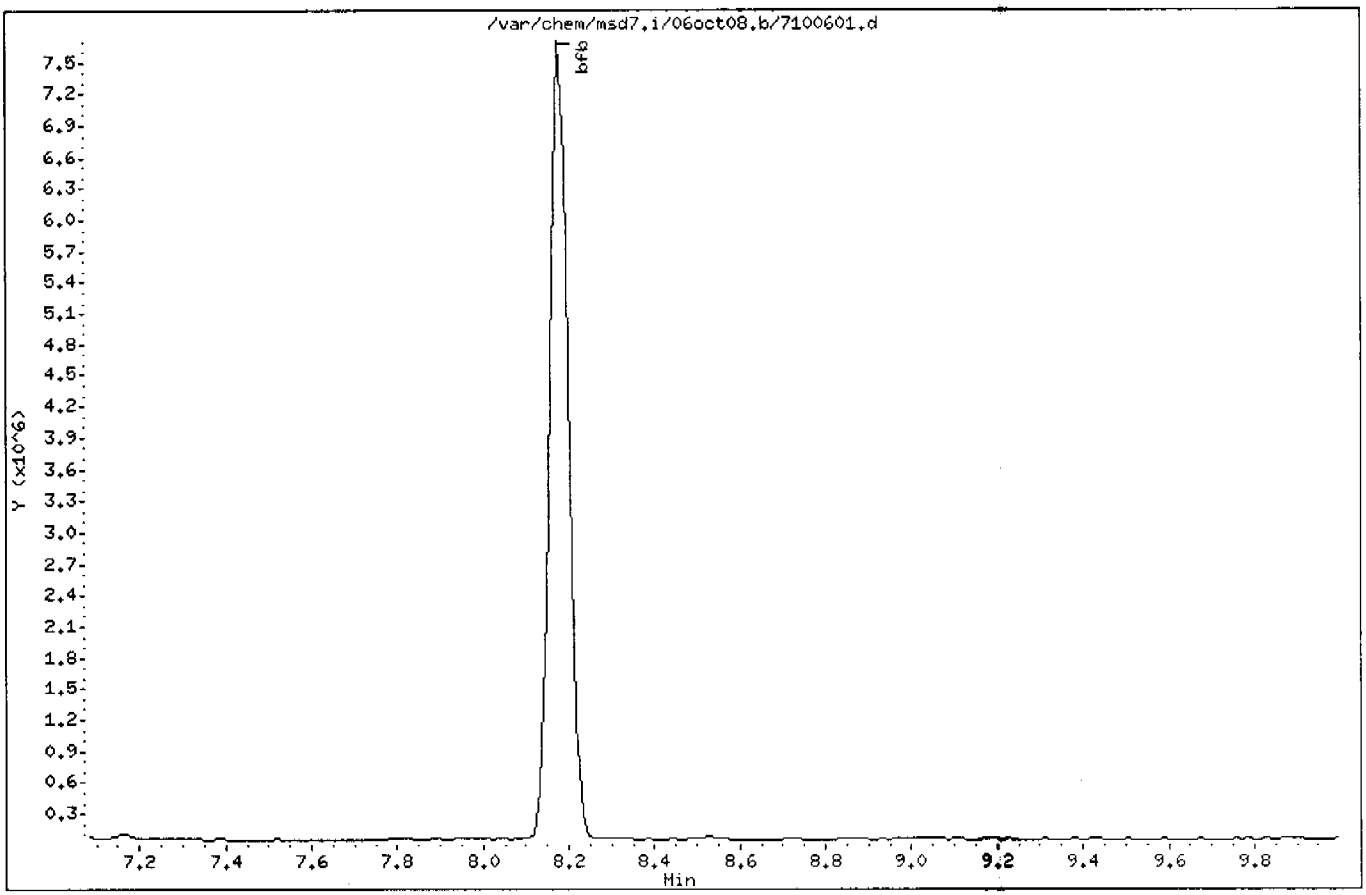
Sample Info: 2uL #1476-435;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/06oct08.b/7100601.d

Date : 06-OCT-2008 09:10

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-435;BFB Tune Check;BFB Tune Check

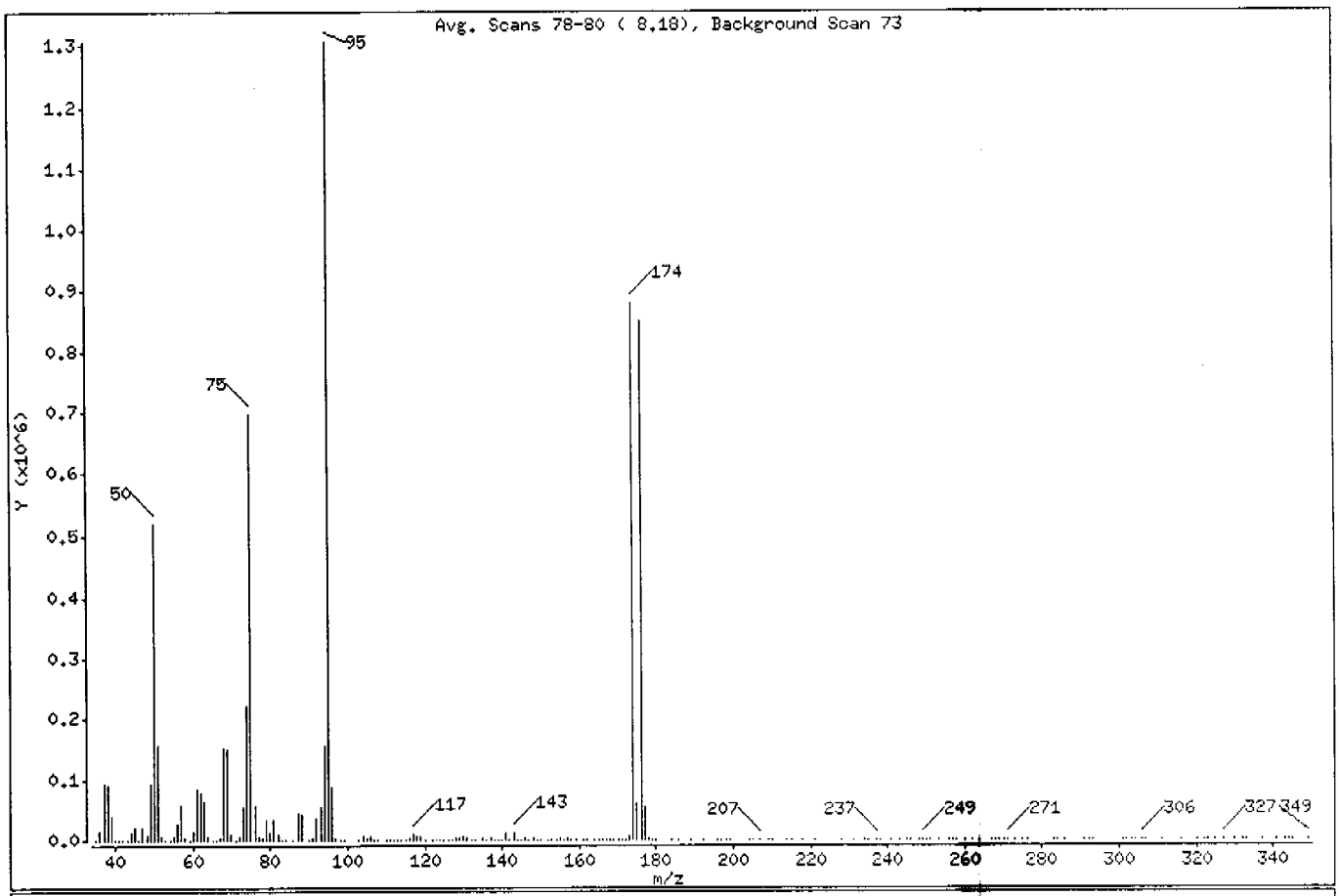
Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	39.83
75	30.00 - 60.00% of mass 95	53.32
96	5.00 - 9.00% of mass 95	6.60
173	Less than 1.99% of mass 174	0.42 (0.63)
174	50.01 - 100.00% of mass 95	67.44
175	5.00 - 9.00% of mass 174	4.69 (6.96)
176	95.01 - 100.99% of mass 174	65.06 (96.46)
177	5.00 - 9.00% of mass 176	4.17 (6.41)

Data File: /var/chem/msd7.i/06oct08.b/7100601.d

Date : 06-OCT-2008 09:10

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-435;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

Data File: 7100601.d

Spectrum: Avg. Scans 78-80 (8,18), Background Scan 73

Location of Maximum: 95.00

Number of points: 209

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	50	90.00	219	149.00	828	243.00	127
36.00	14221	91.00	3996	150.00	1321	245.00	82
37.00	91752	92.00	35928	152.00	572	246.00	51
38.00	89464	93.00	54520	153.00	685	248.00	70
39.00	37672	94.00	155904	154.00	680	249.00	438
40.00	738	95.00	1307136	155.00	2127	250.00	86
41.00	589	96.00	86296	156.00	546	251.00	55
42.00	563	97.00	2322	157.00	2117	253.00	195
43.00	991	98.00	176	158.00	327	256.00	78
44.00	11415	99.00	121	159.00	1173	257.00	50
45.00	20856	103.00	437	161.00	1221	258.00	61
46.00	1081	104.00	5343	162.00	202	260.00	320
47.00	22224	105.00	1899	164.00	88	262.00	93
48.00	9657	106.00	4801	165.00	143	264.00	86
49.00	94408	107.00	997	166.00	267	267.00	58
50.00	520704	108.00	25	167.00	328	268.00	56
51.00	154816	110.00	637	168.00	438	269.00	357
52.00	6075	111.00	848	169.00	461	270.00	381
53.00	246	112.00	731	170.00	857	271.00	181
54.00	393	113.00	1060	171.00	1277	273.00	117
55.00	5530	114.00	64	172.00	1182	275.00	51
56.00	27992	115.00	826	173.00	5528	276.00	56
57.00	58064	116.00	4118	174.00	881600	283.00	82
58.00	2068	117.00	8932	175.00	61320	284.00	50
59.00	170	118.00	5035	176.00	850368	286.00	73
60.00	14148	119.00	6439	177.00	54496	291.00	62
61.00	83848	120.00	104	178.00	1709	292.00	66
62.00	78424	122.00	381	179.00	413	293.00	8
63.00	62120	123.00	116	180.00	60	301.00	68
64.00	4706	124.00	873	184.00	50	302.00	125
65.00	850	125.00	404	186.00	89	303.00	60
66.00	623	126.00	535	189.00	215	304.00	50
67.00	3391	127.00	511	192.00	376	306.00	145
68.00	153664	128.00	4072	196.00	71	307.00	82
69.00	151296	129.00	1915	197.00	63	311.00	56

Data File: /var/chem/msd7.i/06oct08.b/7100601.d

Date : 06-OCT-2008 09:10

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-435;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

Data File: 7100601.d

Spectrum: Avg. Scans 78-80 (8.18), Background Scan 73

Location of Maximum: 95.00

Number of points: 209

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	9814	130.00	4624	198.00	87	316.00	62
71.00	262	131.00	1971	199.00	56	320.00	78
72.00	5444	132.00	157	204.00	120	322.00	99
73.00	53008	133.00	221	205.00	102	323.00	68
74.00	222784	135.00	1623	207.00	584	325.00	56
75.00	696896	136.00	239	209.00	64	327.00	337
76.00	56704	137.00	1536	210.00	294	330.00	65
77.00	5416	138.00	198	214.00	60	332.00	82
78.00	2792	139.00	641	215.00	53	333.00	118
79.00	32160	140.00	1273	218.00	137	337.00	72
80.00	10573	141.00	11202	221.00	125	341.00	57
81.00	32592	142.00	1478	228.00	119	343.00	78
82.00	8236	143.00	12178	231.00	92	344.00	195
83.00	804	144.00	683	234.00	84	345.00	121
84.00	50	145.00	819	235.00	69	349.00	58
86.00	1083	146.00	1951	237.00	309		
87.00	44480	147.00	635	238.00	60		
88.00	41464	148.00	2877	241.00	62		

Data File: /chem/msd7.i/09oct08.b/7100901.d
Report Date: 09-Oct-2008 08:13

Air Toxics Ltd.

Data file : /chem/msd7.i/09oct08.b/7100901.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 09-OCT-2008 08:19
Operator : smd Inst ID: msd7.i
Smp Info : 2uL #1476-479;BFB Tune Check;BFB Tune Check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/09oct08.b/bfb105.m
Meth Date : 09-Oct-2008 08:10 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.176	8.232	-0.056	95	808832			100.00- 100.00	100.00
8.176	8.232	-0.056	50	321152			15.00- 40.00	39.71
8.176	8.232	-0.056	75	424000			30.00- 60.00	52.42
8.176	8.232	-0.056	96	51576			5.00- 9.00	6.38
8.176	8.232	-0.056	173	3700			0.00- 1.99	0.65
8.176	8.232	-0.056	174	569728			50.01- 100.00	70.44
8.176	8.232	-0.056	175	41360			5.00- 9.00	7.26
8.176	8.232	-0.056	176	574656			95.01- 100.99	100.86
8.176	8.232	-0.056	177	34912			5.00- 9.00	6.08

Data File: /chem/msd7.i/09oct08.b/7100901.d

Date : 09-OCT-2008 08:19

Client ID: BFB

Instrument: msd7.i

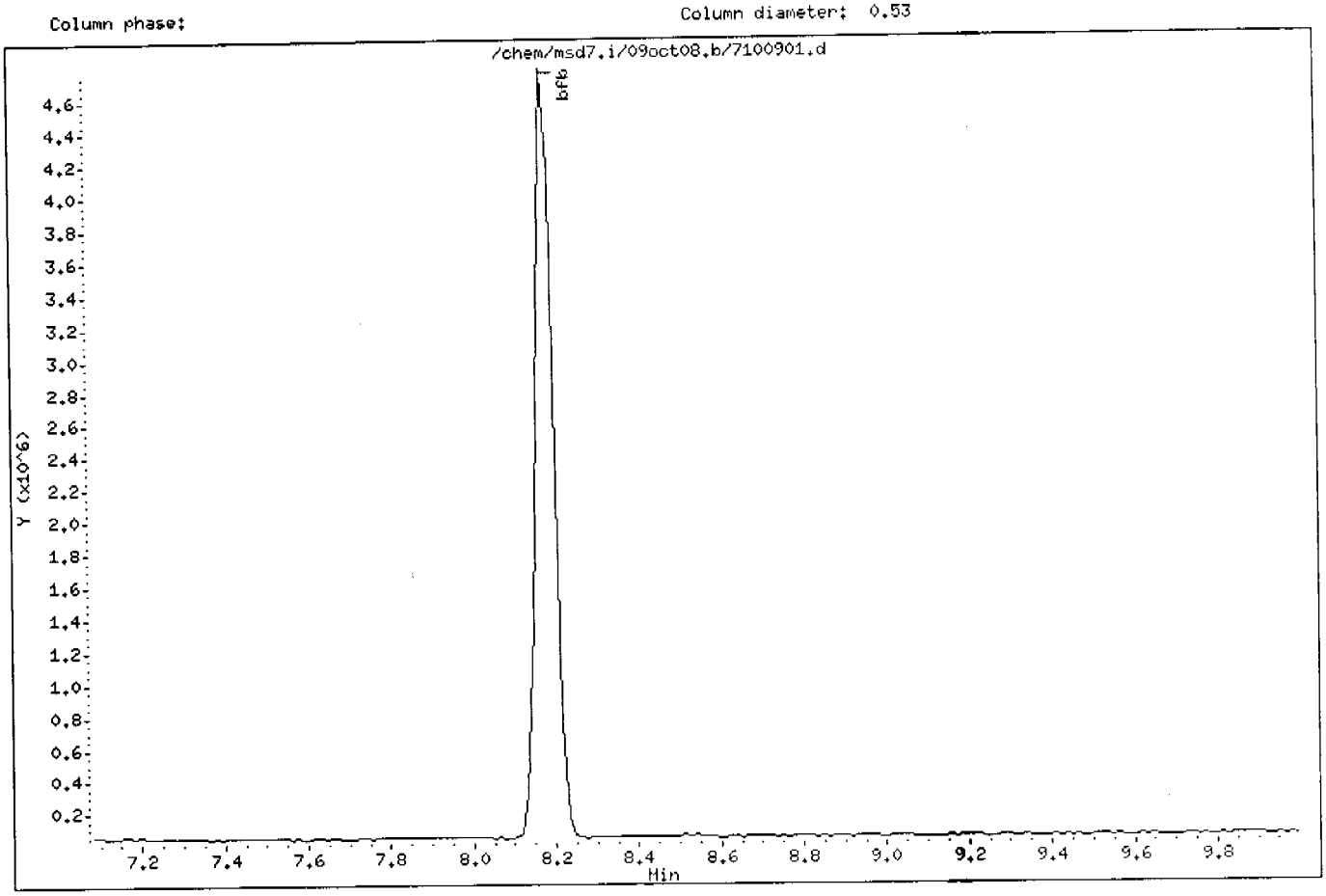
Sample Info: 2uL #1476-479;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53



Data File: /chem/msd7.i/09oct08.b/7100901.d

Date : 09-OCT-2008 08:19

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-479;BFB Tune Check;BFB Tune Check

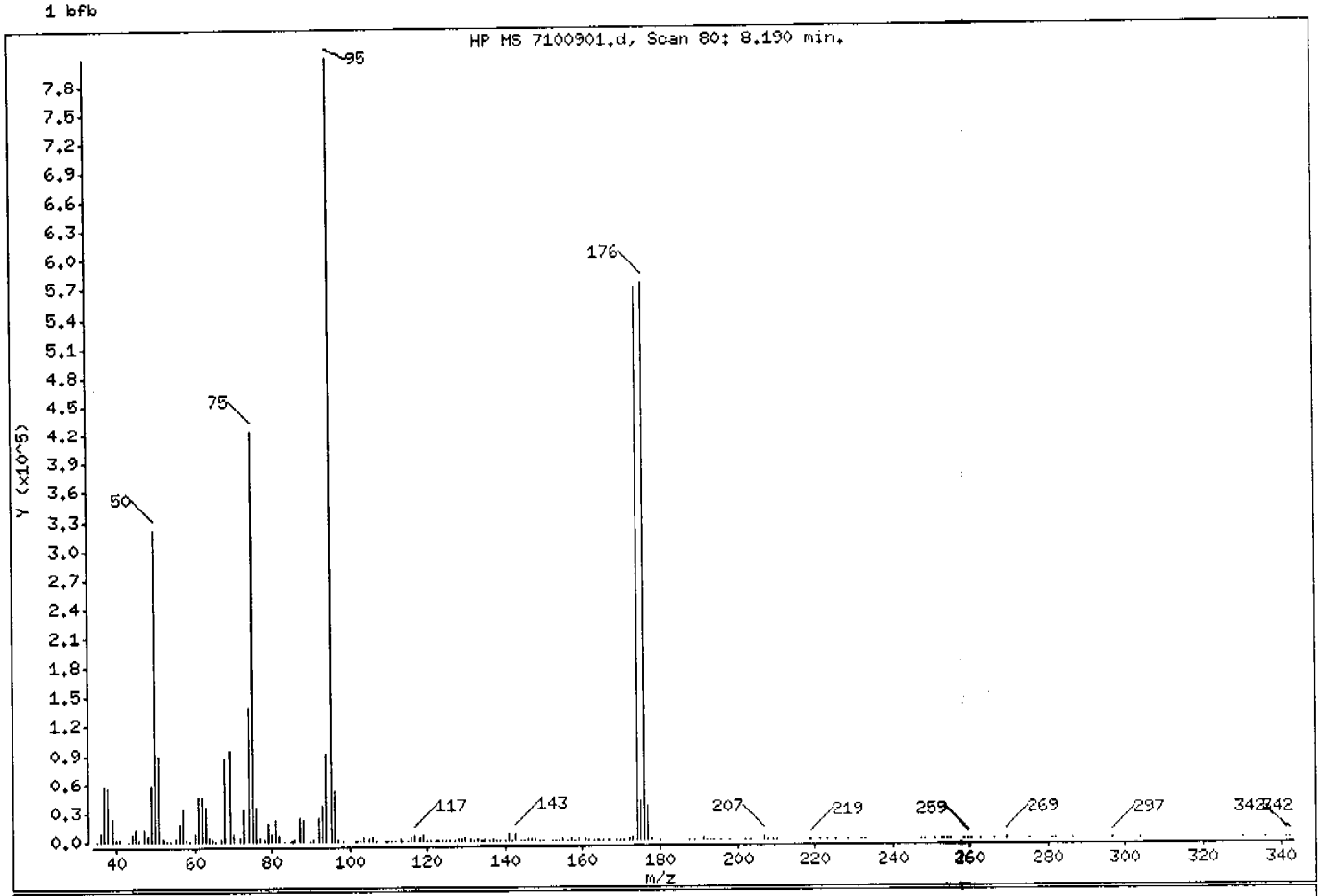
Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	39.71
75	30.00 - 60.00% of mass 95	52.42
96	5.00 - 9.00% of mass 95	6.38
173	Less than 1.99% of mass 174	0.46 (0.65)
174	50.01 - 100.00% of mass 95	70.44
175	5.00 - 9.00% of mass 174	5.11 (7.26)
176	95.01 - 100.99% of mass 174	71.05 (100.86)
177	5.00 - 9.00% of mass 176	4.32 (6.08)

Data File: /chem/msd7.i/09oct08.b/7100901.d

Date : 09-OCT-2008 08:19

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-479;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

Data File: 7100901.d

Spectrum: HP MS 7100901.d, Scan 80: 8.190 min.

Location of Maximum: 95.00

Number of points: 187

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.20	162	84.90	192	133.10	957	187.70	177
36.00	9241	85.40	323	133.70	172	188.80	155
37.00	58160	86.00	1007	134.40	631	191.10	974
38.00	56040	87.00	24032	134.90	1825	192.10	689
39.00	24720	87.90	22800	135.90	496	192.90	226
39.90	2408	89.80	163	137.00	1111	193.20	254
40.90	952	90.90	2050	137.70	170	194.10	321
43.10	629	92.00	24312	138.90	492	195.50	156
44.00	8156	93.00	37480	139.90	727	198.00	184
45.00	13509	94.00	90768	140.90	6955	201.80	155
45.90	1178	95.00	808832	142.00	719	203.40	196
47.00	13879	96.00	51576	142.90	7705	207.00	4427
47.90	5618	97.00	1177	144.00	671	208.00	889
49.00	57736	98.20	368	144.80	687	209.00	793
50.00	321152	101.50	212	145.90	1057	209.90	280
51.00	89216	102.10	196	146.80	1107	218.40	248
52.00	4302	102.90	824	147.90	2003	219.20	304
53.20	558	103.90	3875	149.00	581	221.30	173
54.00	159	105.10	1441	149.80	422	223.00	249
55.10	3575	105.90	3791	152.10	636	225.10	184
56.00	19272	107.00	772	153.00	860	228.40	165
57.00	34208	109.00	375	153.90	675	232.20	202
58.00	1794	109.50	273	155.00	2058	232.90	274
59.00	344	109.80	274	156.10	360	247.30	260
60.00	7953	110.80	832	156.90	1168	248.10	219
61.00	45736	111.90	753	157.90	240	251.00	202
62.00	47264	113.00	1005	158.80	1035	252.80	181
63.00	35464	113.70	305	160.90	961	253.10	222
64.00	3005	114.90	883	161.50	308	254.10	361
64.90	1093	116.00	3292	162.90	187	254.80	276
65.70	364	116.90	6268	163.90	247	258.50	168
67.00	1843	117.90	2898	164.50	152	259.60	721
68.00	87344	118.90	4759	165.00	410	260.10	206
69.00	94944	120.00	159	166.50	370	262.40	392
70.00	6512	121.00	238	167.20	255	266.10	304

Data File: /chem/msd7.i/09oct08.b/7100901.d

Date : 09-OCT-2008 08:19

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1476-479;BFB Tune Check;BFB Tune Check

Volume Injected (uL): 2.0

Operator: smd

Column phase:

Column diameter: 0.53

Data File: 7100901.d

Spectrum: HP MS 7100901.d, Scan 80: 8.190 min.

Location of Maximum: 95.00

Number of points: 187

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3680	122.00	233	168.60	185	269.20	953
73.00	33608	122.60	158	169.50	492	274.90	270
74.00	138624	123.10	237	170.40	850	281.00	806
75.00	424000	123.90	829	170.80	890	281.90	622
76.00	34672	124.90	367	171.80	1908	286.50	519
77.00	3871	125.90	474	172.90	3700	296.70	380
78.00	2318	126.90	344	174.00	569728	303.70	227
78.90	19416	128.00	2502	174.90	41360	330.20	156
80.00	7273	128.90	1231	176.00	574656	336.20	196
80.90	22576	129.90	3139	177.00	34912	341.70	202
81.90	4738	130.90	1668	177.90	1172	342.30	221
83.00	514	131.90	171	179.90	370		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0809614
# of pages (Including Cover): 1

10/13/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies.
In order to expedite analysis and reporting, please review the attached information for accuracy.
Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2020C

REQUEST NUMBER: 08-2020

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 10/16/2008

TURNAROUND REQ'D: 21

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14829	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14818	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14813	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14816	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14828	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14819	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14830	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14831	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14814	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14832	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14815	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14821	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14822	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14824	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14825	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14833	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-14826	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]	[signature]	9/25/08	1400	[signature]	[signature]	9/26/08	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

0809614

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT? Y N/A

FED EX

7209 7845 2766

0692

Thursday, September 25, 2008

REQUEST NUMBER: 08-2020

0693

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-2020
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 9/25/2008
TURNAROUND/REPORT DUE: 10/16/2008
TURNAROUND REQ'D: 21 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A 1	MD21-08-14813	GAS	9/24/2008		
		02A 1	MD21-08-14814	GAS	9/24/2008		0809614
		03A 1	MD21-08-14815	GAS	9/24/2008		
		04A 1	MD21-08-14816	GAS	9/24/2008		
		05A 1	MD21-08-14818	GAS	9/25/2008		
		06A 1	MD21-08-14819	GAS	9/25/2008		
		07A 1	MD21-08-14820	GAS	9/25/2008		
		08A 1	MD21-08-14821	GAS	9/25/2008		
		09A 1	MD21-08-14822	GAS	9/25/2008		

Thursday, September 25, 2008

REQUEST NUMBER: 08-2020

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	10A 1	MD21-08-14824	GAS	9/25/2008		
		11A 1	MD21-08-14825	GAS	9/25/2008		
		12A 1	MD21-08-14826	GAS	9/24/2008		
		13A 1	MD21-08-14828	GAS	9/23/2008		
		14A 1	MD21-08-14829	GAS	9/23/2008		
		15A 1	MD21-08-14830	GAS	9/23/2008		
		16A 1	MD21-08-14831	GAS	9/23/2008		
		17A 1	MD21-08-14832	GAS	9/23/2008		
		18A 1	MD21-08-14833	GAS	9/23/2008		

0809614

Final Page of REQUEST NUMBER 08-2020

4690

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0809614

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: TB

Date Promised: 10/10/08
Date Completed: 10/11/08
Date Received: 9/26/08
PO#: 47247-001-07
Project#: 08-2020

Total $: $ 5,400.00
Logged By: EF

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-14813	Modified TO-15	9/24/2008	8.0 "Hg	$205.00
01AA	MD21-08-14813 Lab Duplicate	Modified TO-15	9/24/2008	8.0 "Hg	$0.00
02A	MD21-08-14814	Modified TO-15	9/24/2008	9.5 "Hg	$205.00
03A	MD21-08-14815	Modified TO-15	9/24/2008	9.0 "Hg	$205.00
04A	MD21-08-14816	Modified TO-15	9/24/2008	8.5 "Hg	$205.00
05A	MD21-08-14818	Modified TO-15	9/25/2008	9.0 "Hg	$205.00
06A	MD21-08-14819	Modified TO-15	9/25/2008	9.0 "Hg	$205.00
07A	MD21-08-14820	Modified TO-15	9/25/2008	10.0 "Hg	$205.00
08A	MD21-08-14821	Modified TO-15	9/25/2008	8.5 "Hg	$205.00
09A	MD21-08-14822	Modified TO-15	9/25/2008	9.0 "Hg	$205.00
09AA	MD21-08-14822 Lab Duplicate	Modified TO-15	9/25/2008	9.0 "Hg	$0.00
10A	MD21-08-14824	Modified TO-15	9/25/2008	11.5 "Hg	$205.00
11A	MD21-08-14825	Modified TO-15	9/25/2008	8.5 "Hg	$205.00
12A	MD21-08-14826	Modified TO-15	9/24/2008	11.0 "Hg	$205.00
13A	MD21-08-14828	Modified TO-15	9/23/2008	7.0 "Hg	$205.00
14A	MD21-08-14829	Modified TO-15	9/23/2008	8.5 "Hg	$205.00
15A	MD21-08-14830	Modified TO-15	9/23/2008	9.0 "Hg	$205.00
16A	MD21-08-14831	Modified TO-15	9/23/2008	9.5 "Hg	$205.00
17A	MD21-08-14832	Modified TO-15	9/23/2008	10.0 "Hg	$205.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Sales Rep: TB

Phone

505-665-9966

Fax

505-665-8855

Date Promised: 10/10/08
Date Completed: 10/11/08
Date Received: 9/26/08
PO#: 47247-001-07
Project#: 08-2020

Total $: $ 5,400.00
Logged By: EF

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
18A	MD21-08-14833	Modified TO-15	9/23/2008	10.0 "Hg	$205.00
19A	Lab Blank	Modified TO-15	NA	NA	$0.00
19B	Lab Blank	Modified TO-15	NA	NA	$0.00
20A	CCV	Modified TO-15	NA	NA	$0.00
20B	CCV	Modified TO-15	NA	NA	$0.00
21A	LCS	Modified TO-15	NA	NA	$0.00
21B	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (18) @ $60.00 each., Shipment 61001	$1,080.00
CVP (18) @ $20.00 each.	$360.00
Client Specific EDD (18) @ $5.00 each.	$90.00
eCVP (18) @ $10.00 each.	$180.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\ \textbf{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} - [(\text{Initial Pressure ("Hg)})\ (14.7\ \text{psi} / 30\ \text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \textbf{psi} + \text{Final Pressure (psi)}}{14.7\ \textbf{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0809614

A_1	A_2	R	T	M	Q	
☑	☑	☐	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
		☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
		☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	NA	NA	☐	☑	☐	Corrective Action issued - #
☑	☑	☐	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — *CIRCLE (YES / NO)*

☑	☑	☐	☐	☐	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☑	☑	☐	☐	☐	☐	Hold time is met for all samples 10/e
		☐	☐	☐	☐	Appropriate data qualifier flags are applied
		☐	☐	☐	☐	Manual integrations for samples and QC are properly documented
☑	☑	☐	☐		☐	Samples analyzed within the project or method specific clock 24hr
		☑	☐			Retention times have been verified
☑	☑	☐	☐		☐	Appropriate ICAL(s) included
		☐	☐	☐	☐	At least one result per sample is verified against the target quant sheets/raw data

☑	0	☐	☐		☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	0	☑	☐			Correct amount of sample analyzed (i.e. sample not over-diluted)
		☑	☐			Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
		NA	☐			TICs resemble reference spectra
			☐			TICs between duplicate samples are consistent
☑	NA	☐	☐	NA	☐	Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)
☑	0	☑	☐			Data for multiple analyses of sample(s) has been evaluated for comparability of results
		☐		☑		Special units for all samples in the final report are correctly calculated
		☐	☐	☑		Manually entered results checked (i.e. TPH/NMOC)
☑	☑	☐				Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)
		☐				Chain of Custody scanned correctly
				☐		Verify sample id's vs. chain of custody
☑	☑	☑				Samples pressurized w/ appropriate gas (N_2 or He) ☐ Other (i.e. Tedlar bag, cartridge, sorbent)
☑	☑	☑				Final pressure consistent with canister size (6L vs. 1L) 5psi
☑	☑	☑				Verify receipt pressures
☑	☑	☑				Verify canister ID #'s
	NA			☑		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
		☐	☐	☑	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: *(to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)*

A/R: MTBE ↑ in CCV for MSD-7; 10-6-08. Samples 01A/AA - 05A.; Freon 22 ↓ in CCV MTBE ↑ in CCV & LCS on 10/9. Samples 06A-18A. CCVs from multiple files Dup on 09A.

M/Q:

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1: 10-7-08	R: 10-10-08	10/14/08	
A_2: 10/10/08	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Rev. 07/28/08

Note (2): Management reviewer and reporting reviewer must be separate individuals.

0702

Not Applicable

Page 1 of 1
Page 1 of 1

Wednesday, May 14, 2008

REQUEST NUMBER: 08-1147

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630.

These Samples are on:
LANL Request Number:08-1147
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/14/2008
TURNAROUND/REPORT DUE: 6/13/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-12252	GAS	5/9/2008		
		1	MD21-08-12255	GAS	5/8/2008		

Final Page of REQUEST NUMBER 08-1147

Wednesday, May 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1147C

REQUEST NUMBER: 08-1147

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/13/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12252	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12255	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12252

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA	NA	

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA KR 5/9/08 BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12240 Field blank, pure nitrogen run through sample train. TO15 only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** David Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/13/08 1545	(Printed Name)	5/13/08 1545
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12255

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12246. Field blank, pure nitrogen run through sample train. TO15 only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Rud **REVIEWED BY (PRINT)** David Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Rud	5/13/08	(Printed Name)	5/13/08
(Signature)	1545	(Signature)	1545
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-1147 VALIDATION DATE: 6/17/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Jessica Jorvig ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): TO-15 VOC

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The initial calibration (ICAL) curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. The ICAL %RSD for 1,2,4-trichlorobenzene was >30%. All associated sample results were NDs and, thus, were qualified UJ,V7a.
3. The LCS percent recoveries for 1,2,4-trichlorobenzene and hexachlorobutadiene were < the laboratory's LALs but ≥10%. All associated sample results were NDs and, thus, were qualified UJ,V12a.
4. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.
5. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos
NATIONAL LABORATORY

Reviewed By: ETM **Level:** 1 **Date:** 6/17/08

VALIDATOR'S SIGNATURE: _____ DATE: 6/17/08

Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☐	☒	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☒	☐	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12252

Lab ID#: 0805347-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1052807	**Date of Collection:**	5/9/08
Dil. Factor:	1.75	**Date of Analysis:**	5/28/08 01:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	Not Detected	8.3	Not Detected
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected

JEJ
6/17/08

0007

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12252

Lab ID#: 0805347-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052807**	**Date of Collection:**	**5/9/08**
Dil. Factor:	**1.75**	**Date of Analysis:**	**5/28/08 01:47 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.5	Not Detected	14	Not Detected	
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected	
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected	
Chlorobenzene	0.88	Not Detected	4.0	Not Detected	
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected	
m,p-Xylene	0.88	Not Detected	3.8	Not Detected	
o-Xylene	0.88	Not Detected	3.8	Not Detected	
Styrene	0.88	Not Detected	3.7	Not Detected	
Bromoform	0.88	Not Detected	9.0	Not Detected	
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected	
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected	
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected	
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected	UJ,V7a
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected	UJ,V12a
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected	
Methanol	88	Not Detected	110	Not Detected	
n-Butanol	3.5	Not Detected	11	Not Detected	
Propylene	3.5	Not Detected	6.0	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	96	70-130

JEJ
6/17/08

0008

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12255

Lab ID#: 0805347-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1052809	**Date of Collection:**	5/8/08
Dil. Factor:	1.79	**Date of Analysis:**	5/28/08 03:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	3.6	11	8.5	26
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	Not Detected	2.8	Not Detected
Methylene Chloride	0.90	Not Detected	3.1	Not Detected
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	1.8	2.6	5.2
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	Not Detected	4.4	Not Detected
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	Not Detected	5.6	Not Detected
Benzene	0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	2.0	4.8	11
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected

JEJ
6/17/08

0015

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12255

Lab ID#: 0805347-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052809**	**Date of Collection:**	**5/8/08**
Dil. Factor:	**1.79**	**Date of Analysis:**	**5/28/08 03:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.6	Not Detected	15	Not Detected	
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected	
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected	
Chlorobenzene	0.90	Not Detected	4.1	Not Detected	
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected	
m,p-Xylene	0.90	Not Detected	3.9	Not Detected	
o-Xylene	0.90	Not Detected	3.9	Not Detected	
Styrene	0.90	Not Detected	3.8	Not Detected	
Bromoform	0.90	Not Detected	9.2	Not Detected	
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected	
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected	
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected	
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected	
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected	
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected	
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected	
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected	
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected	UJ,V7a
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected	UJ,V12a
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected	
Methanol	90	Not Detected	120	Not Detected	
n-Butanol	3.6	Not Detected	11	Not Detected	
Propylene	3.6	Not Detected	6.2	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	100	70-130

JEJ
6/17/08

0016

Page 1 of 1

Page 1 of 1

0805347

Wednesday, May 14, 2008

REQUEST NUMBER: 08-1147

0217

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-1147
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/14/2008
TURNAROUND/REPORT DUE: 6/13/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPATO15	01A	1	MD21-08-12252	GAS	5/9/2008		
		02A	1	MD21-08-12255	GAS	5/8/2008		

Final Page of REQUEST NUMBER 08-1147

0805347

Wednesday, May 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1147C

REQUEST NUMBER: 08-1147

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/13/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12252	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12255	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	5/14/08	1400	[illegible]	ATL	05-15-08	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT? Y N NONE TEMP 0.0
Fed Ex

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Request # 08-1147

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0805347

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	6/2/08
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0805347

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-1147
DATE RECEIVED:	05/15/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	05/29/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-12252	Modified TO-15	7.0 "Hg	5 psi
02A	MD21-08-12255	Modified TO-15	7.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda A. Frumarx DATE: 05/29/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0805347

Two 6 Liter Summa Canister samples were received on May 15, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

0002

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-08-12252	0805347-01A	5/ 9/2008	5/15/2008	NA	19	5/28/2008	NA	Good
MD21-08-12255	0805347-02A	5/ 8/2008	5/15/2008	NA	20	5/28/2008	NA	Good
Lab Blank	0805347-03A	NA	NA	NA	NA	5/28/2008	NA	Good
CCV	0805347-04A	NA	NA	NA	NA	5/28/2008	NA	Good
LCS	0805347-05A	NA	NA	NA	NA	5/28/2008	NA	Good

Sample Results and Raw Data

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12252

Lab ID#: 0805347-01A

No Detections Were Found.

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12252

Lab ID#: 0805347-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052807 Date of Collection: 5/9/08
Dil. Factor: 0.75 Date of Analysis: 5/28/08 01:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	Not Detected	8.3	Not Detected
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12252

Lab ID#: 0805347-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052807 Date of Collection: 5/9/08
Dil. Factor: 1.75 Date of Analysis: 5/28/08 01:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	96	70-130

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AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-28may.b/1052807.d
Lab Smp Id: 0805347-01A
Inj Date : 28-MAY-2008 13:47
Operator : sjr Inst ID: msd1.i
Smp Info : 100mL #33928
Misc Info : 7.0"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-28may.b/t14q519b.m
Meth Date : 28-May-2008 15:56 sruth Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	271916	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	211789			25.73- 125.73	77.89
14.255	14.255 (1.000)	49	493597			134.03- 234.03	181.53
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1402579	25.0000		80.00- 120.00	100.00
15.720	15.748 (1.000)	88	215003			0.00- 65.05	15.33
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1536763	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	884744			8.42- 108.42	57.57
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	429292	23.6576	23.658	80.00- 120.00	100.00
15.140	15.140 (1.062)	67	222339			6.04- 106.04	51.79
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1533209	24.1255	24.125	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	161901			0.00- 60.35	10.56

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.960	(1.140)	100	999003			15.45- 115.45	65.16
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.527	21.527	(1.076)	174	789693	24.0150	24.015	80.00- 120.00	100.00
21.499	21.527	(1.075)	95	1263101			106.65- 206.65	159.95
21.527	21.527	(1.076)	176	757282			46.13- 146.13	95.90

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052807.d
Lab Smp Id: 0805347-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 7.0"Hg -> 5psi

Calibration Date: 28-MAY-2008
Calibration Time: 08:50

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295803	177482	414124	271916	-8.08
95 1,4-Difluorobenze	1549116	929470	2168762	1402579	-9.46
123 Chlorobenzene-d5	1677167	1006300	2348034	1536763	-8.37

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.01	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-28may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805347-01A
Level: LOW
Operator: sjr
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 7.0"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.658	94.63	70-130
$ 111 Toluene-d8	25.000	24.125	96.50	70-130
$ 136 Bromofluorobenzene	25.000	24.015	96.06	70-130

Data File: /chem/msd1.i/1-28may.b/1052807.d
Date : 28-MAY-2008 13:47
Client ID:
Sample Info: 100mL #33928

Column phase: RTx-624

Instrument: msd1.i

Operator: sjr
Column diameter: 0.53

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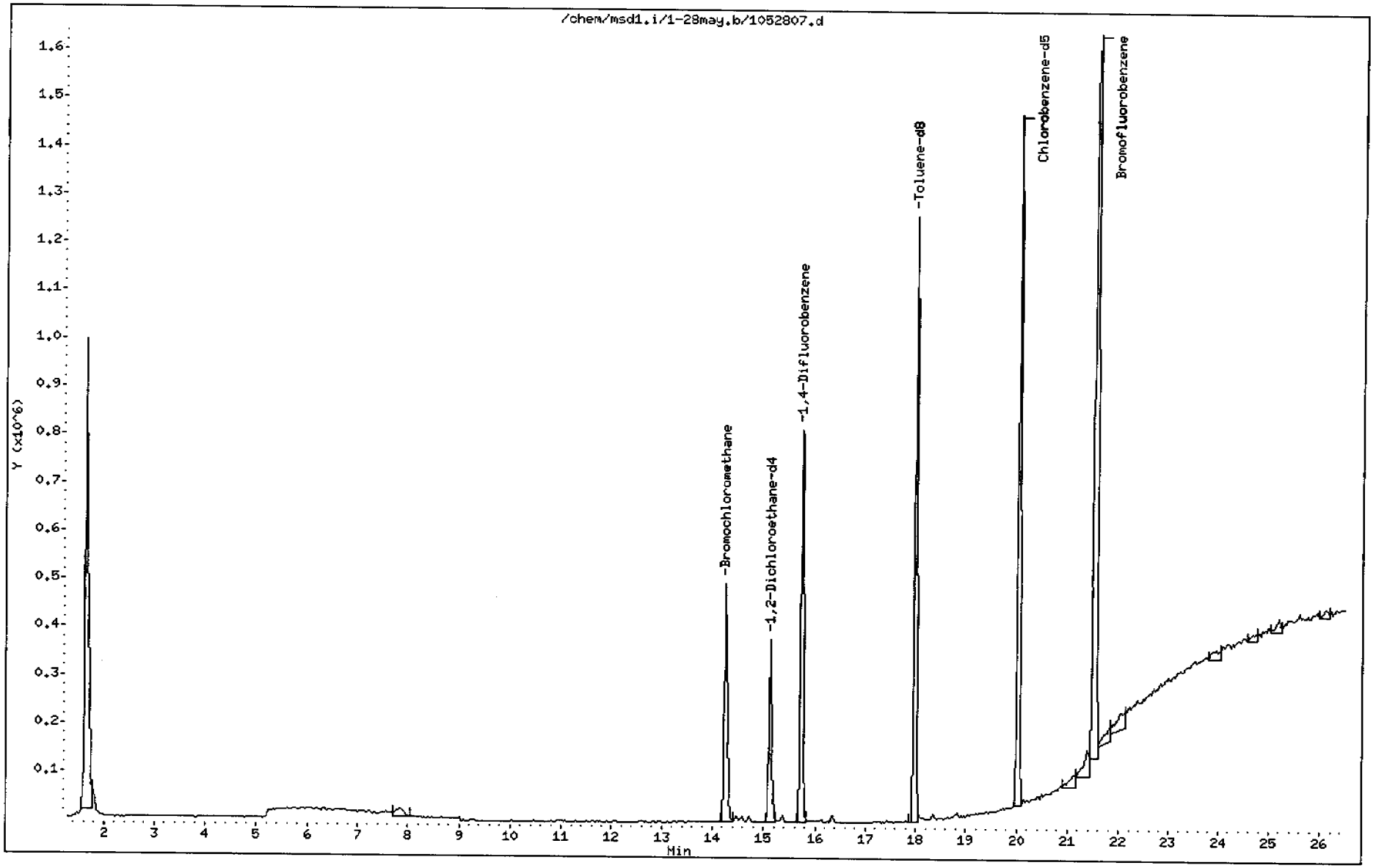

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12255

Lab ID#: 0805347-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Acetone	3.6	11	8.5	26
2-Butanone (Methyl Ethyl Ketone)	0.90	1.8	2.6	5.2
Trichloroethene	0.90	2.0	4.8	11

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12255

Lab ID#: 0805347-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052809 Date of Collection: 5/8/08
Dil. Factor: 3.79 Date of Analysis: 5/28/08 03:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	3.6	11	8.5	26
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	Not Detected	2.8	Not Detected
Methylene Chloride	0.90	Not Detected	3.1	Not Detected
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	1.8	2.6	5.2
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	Not Detected	4.4	Not Detected
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	Not Detected	5.6	Not Detected
Benzene	0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	2.0	4.8	11
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12255

Lab ID#: 0805347-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	052809	Date of Collection: 5/8/08
Dil. Factor:	1.79	Date of Analysis: 5/28/08 03:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	Not Detected	6.2	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	100	70-130

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-28may.b/1052809.d
Lab Smp Id: 0805347-02A
Inj Date : 28-MAY-2008 15:54
Operator : kr Inst ID: msd1.i
Smp Info : 100mL #5574
Misc Info : 7.5"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-28may.b/t14q519b.m
Meth Date : 28-May-2008 15:56 sruth Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	271545	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	209690			25.73- 125.73	77.22
14.255	14.255 (1.000)	49	507945			134.03- 234.03	187.06
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1397216	25.0000		80.00- 120.00	100.00
15.720	15.748 (1.000)	88	219485			0.00- 65.05	15.71
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1519068	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	888812			8.42- 108.42	58.51
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	422232	23.3003	23.300	80.00- 120.00	100.00
15.140	15.140 (1.062)	67	223643			6.04- 106.04	52.97
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1501182	23.7122	23.712	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	154164			0.00- 60.35	10.27

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.960	(1.140)	100	997508			15.45- 115.45	66.45
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.527	21.527	(1.076)	174	813455	25.0258	25.026	80.00- 120.00	100.00
21.499	21.527	(1.075)	95	1276116			106.65- 206.65	156.88
21.527	21.527	(1.076)	176	783212			46.13- 146.13	96.28
45 Acetone						CAS #: 67-64-1		
10.909	10.882	(0.765)	58	58055	6.18487	11.071	80.00- 120.00	100.00
10.909	10.882	(0.765)	43	170017			275.34- 375.34	292.85
75 2-Butanone						CAS #: 78-93-3		
13.951	13.923	(0.979)	72	9564	0.97767	1.750	80.00- 120.00	100.00
13.951	13.923	(0.979)	43	48958			436.57- 536.57	511.90
13.951	13.923	(0.979)	57	2994			0.00- 90.57	31.31
97 Trichloroethene						CAS #: 79-01-6		
16.107	16.107	(1.023)	95	33427	1.14655	2.052	80.00- 120.00	100.00
16.135	16.107	(1.025)	130	30829			45.83- 145.83	92.23
16.107	16.107	(1.023)	97	20513			14.17- 114.17	61.37

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052809.d
Lab Smp Id: 0805347-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 7.5"Hg -> 5psi

Calibration Date: 28-MAY-2008
Calibration Time: 08:50

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295803	177482	414124	271545	-8.20
95 1,4-Difluorobenze	1549116	929470	2168762	1397216	-9.81
123 Chlorobenzene-d5	1677167	1006300	2348034	1519068	-9.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.01	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-28may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805347-02A
Level: LOW
Operator: kr
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 7.5"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.300	93.20	70-130
$ 111 Toluene-d8	25.000	23.712	94.85	70-130
$ 136 Bromofluorobenzene	25.000	25.026	100.10	70-130

Data File: /chem/msd1.i/1-28may.b/1052809.d

Date : 28-MAY-2008 15:54

Client ID:

Sample Info: 100mL #5574

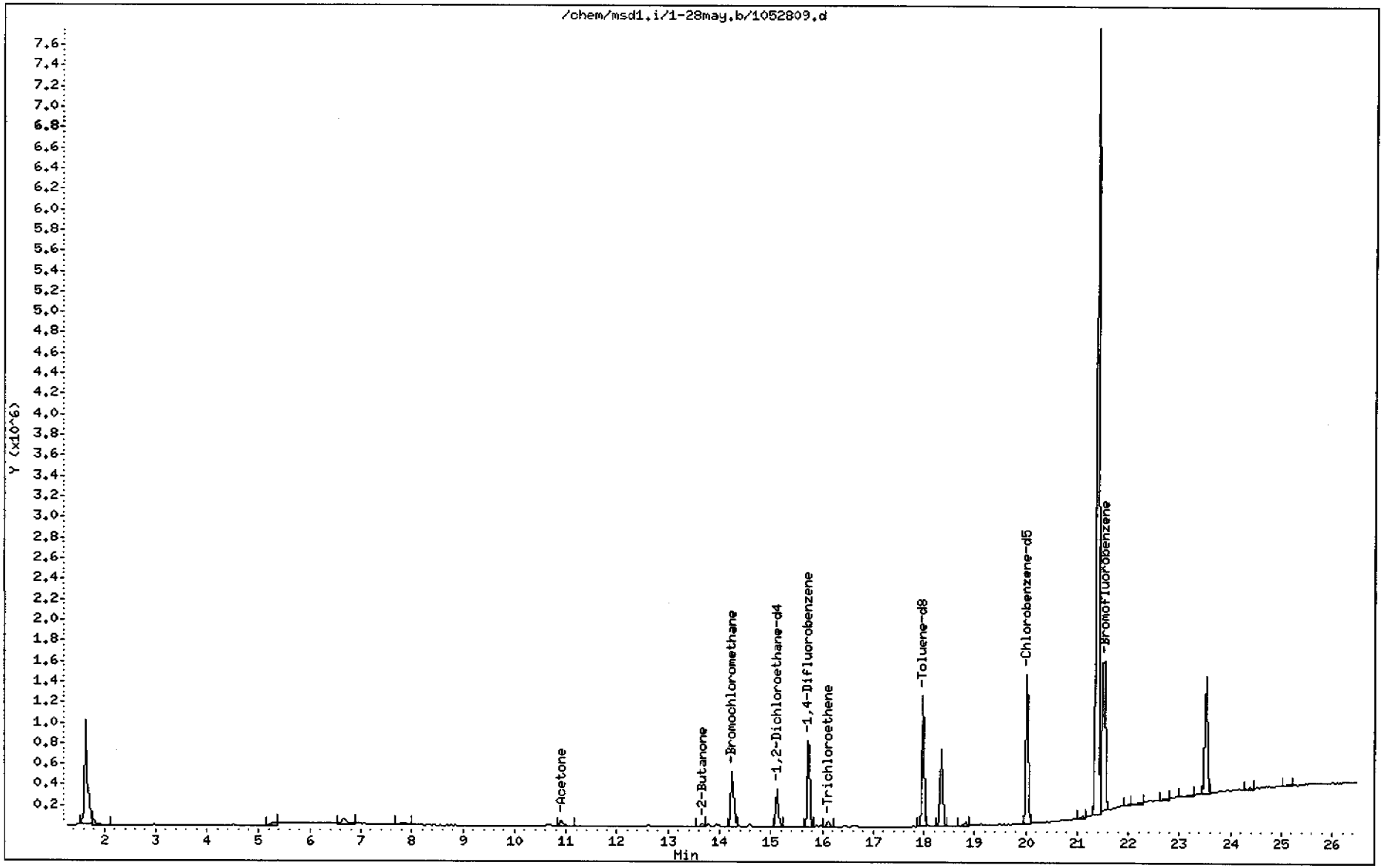
Column phase: RTx-624

Instrument: msd1.i

Operator: kr

Column diameter: 0.53

0021



Data File: /chem/msd1.i/1-28may.b/1052809.d

Date : 28-MAY-2008 15:54

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5574

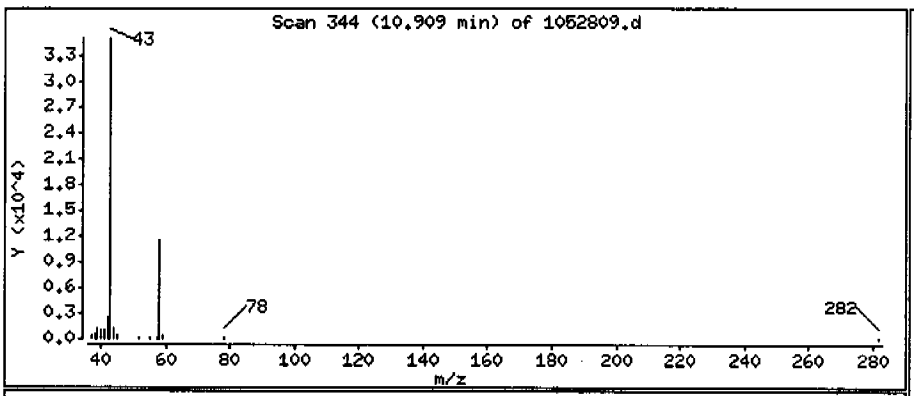
Operator: kr

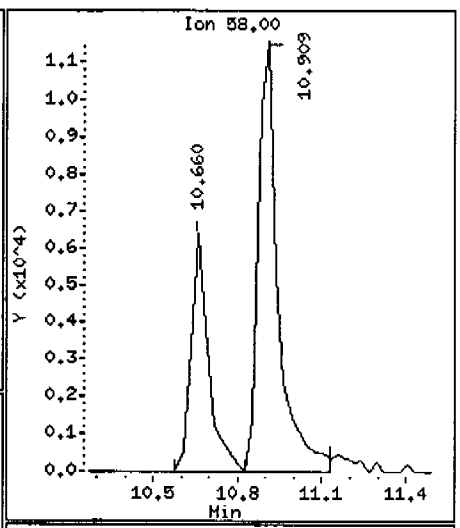
Column phase: RTx-624

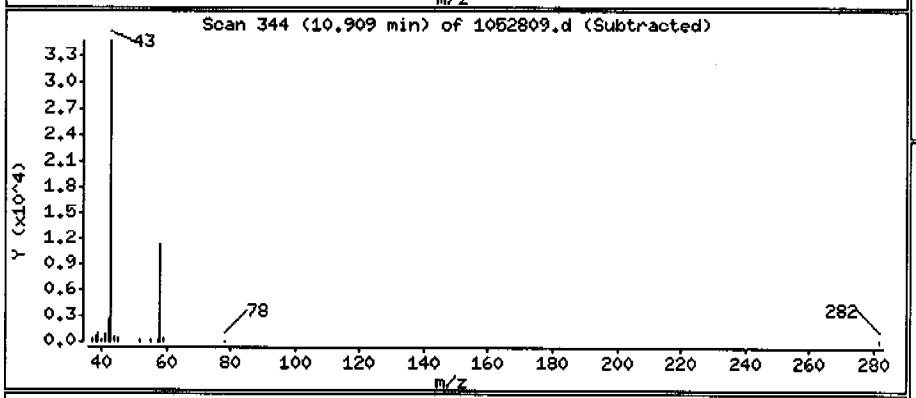
Column diameter: 0.53

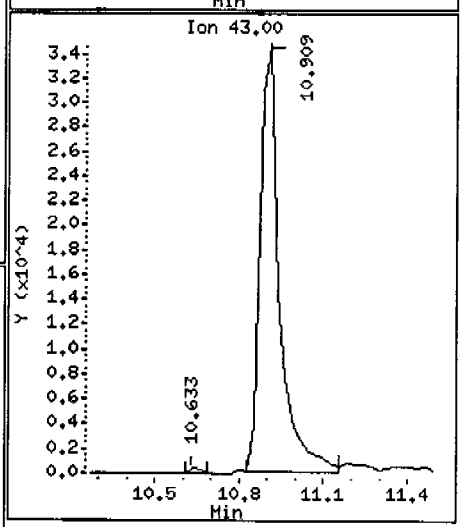
45 Acetone

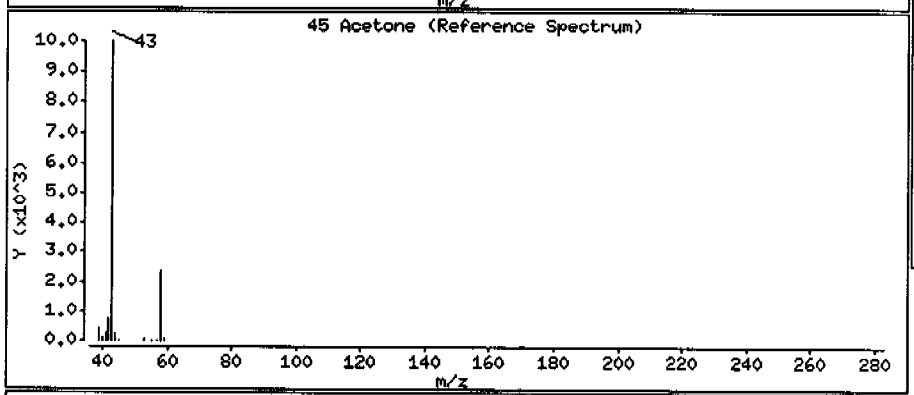
Concentration: 11.071 PPBV

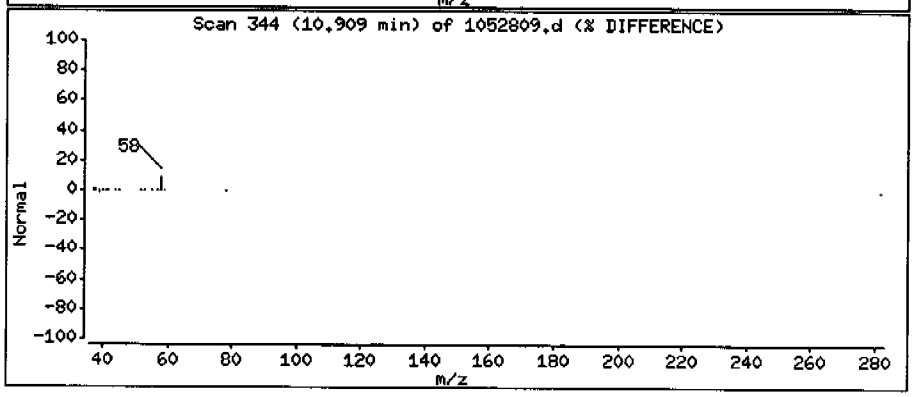












Data File: /chem/msd1.i/1-28may.b/1052809.d

Date : 28-MAY-2008 15:54

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5574

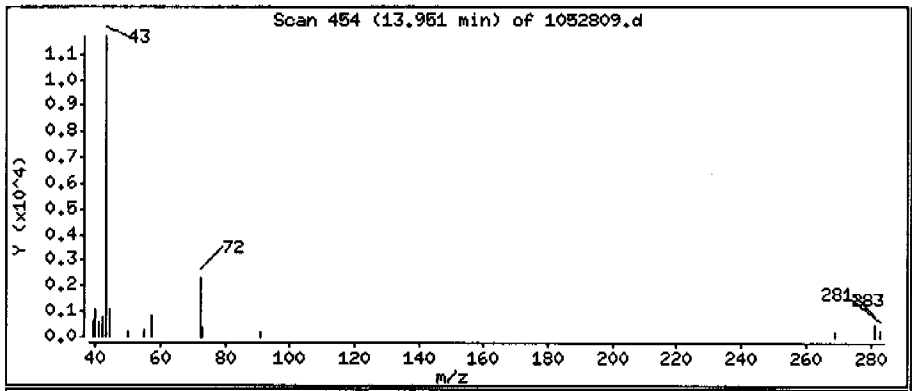
Operator: kr

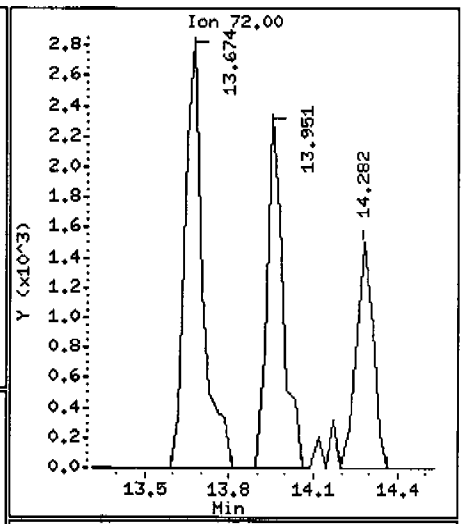
Column phase: RTx-624

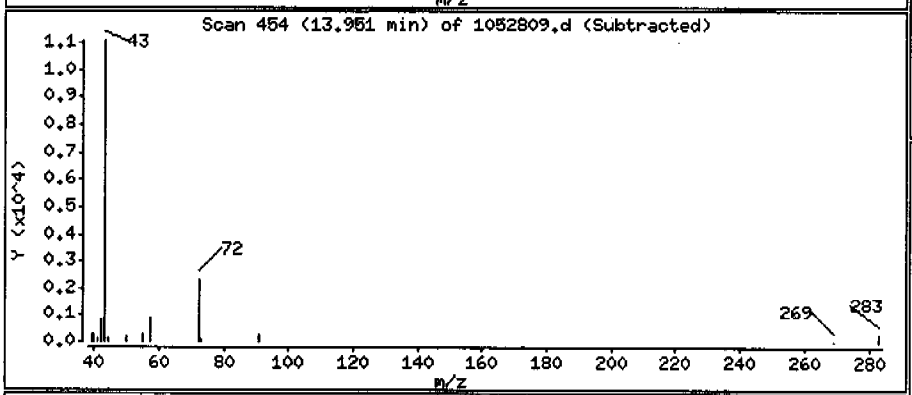
Column diameter: 0.53

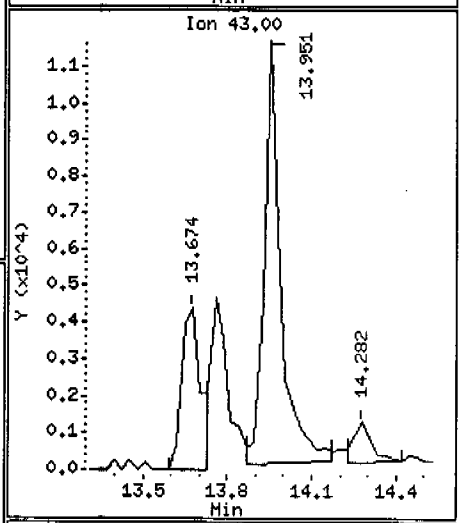
75 2-Butanone

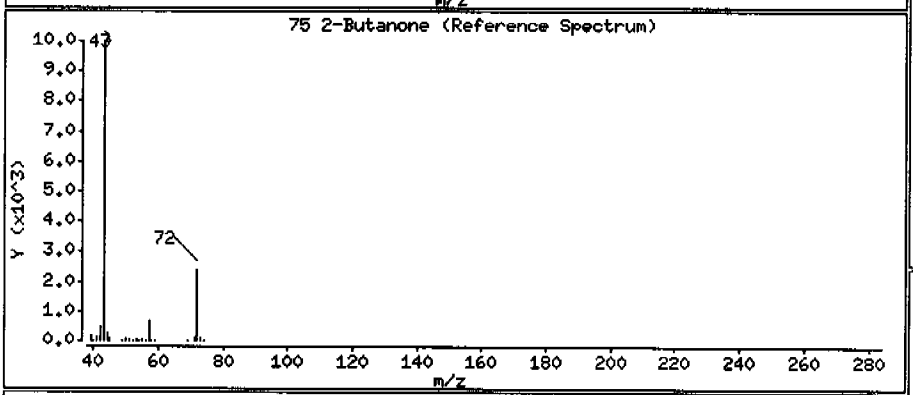
Concentration: 1.750 PPBV

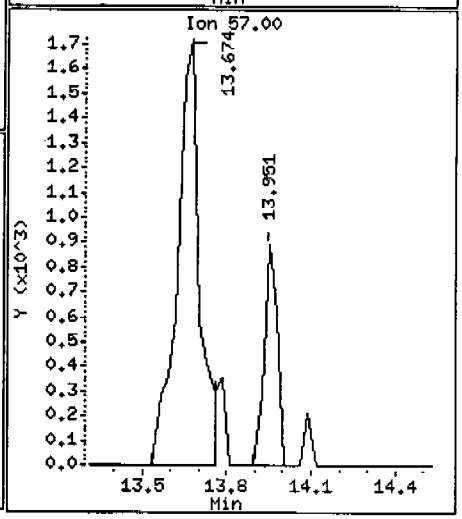


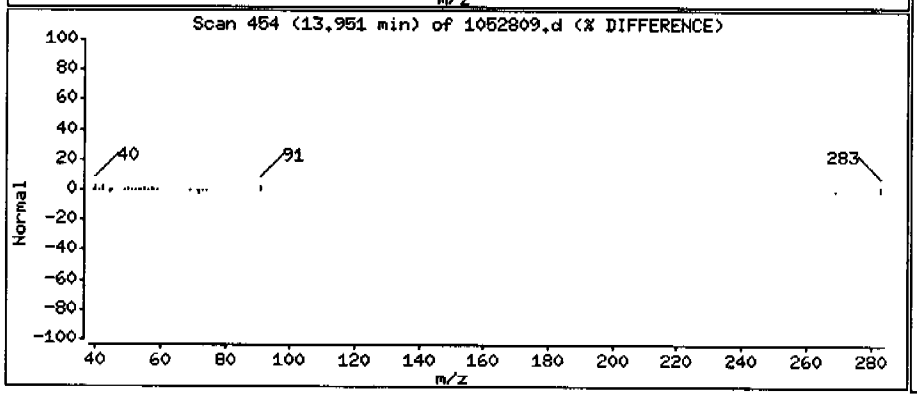












Data File: /chem/msd1.i/1-28may.b/1052809.d

Date : 28-MAY-2008 15:54

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5574

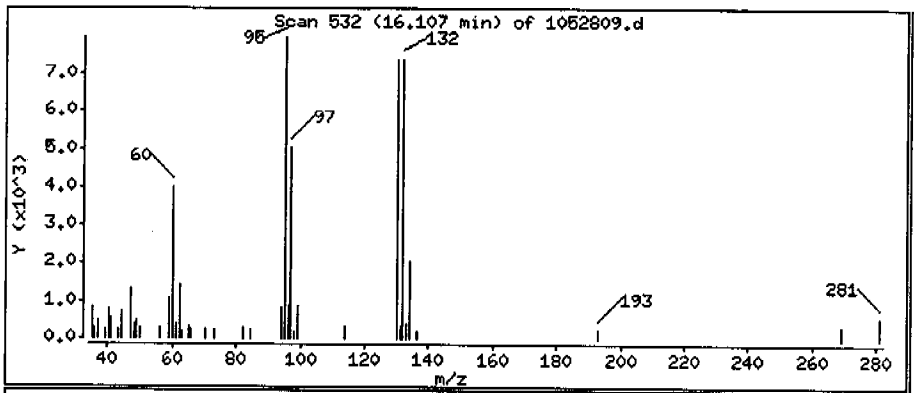
Operator: kr

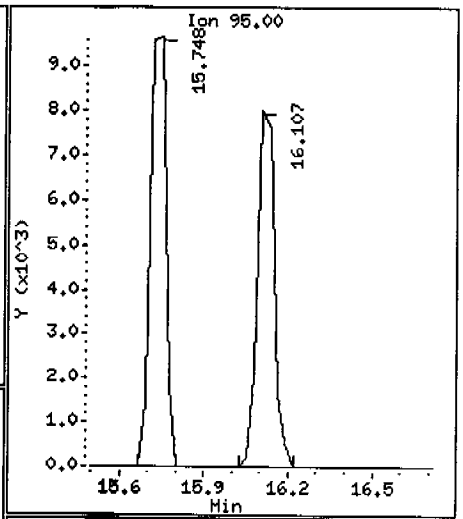
Column phase: RTx-624

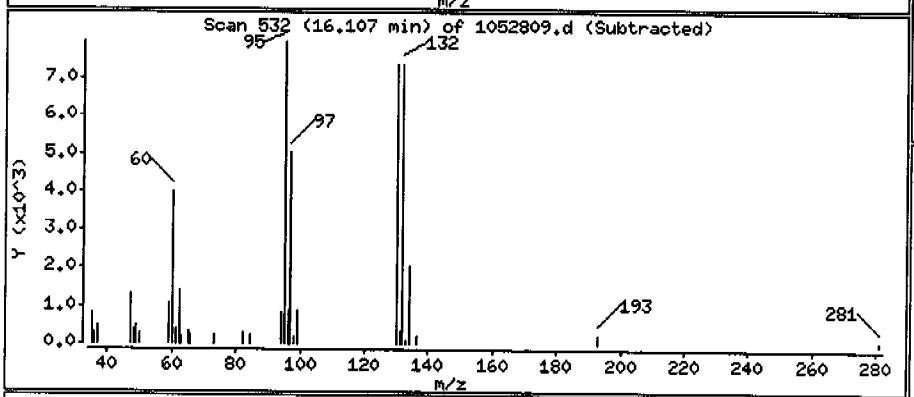
Column diameter: 0.53

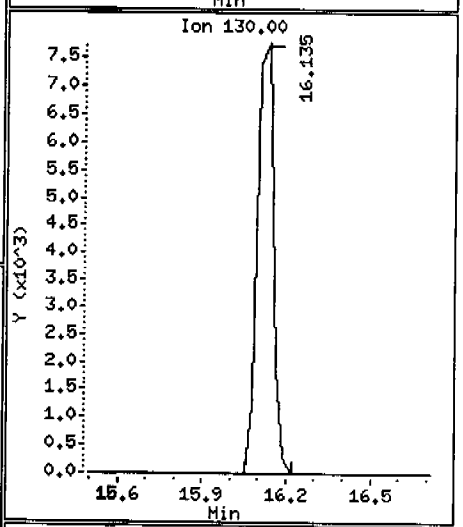
97 Trichloroethene

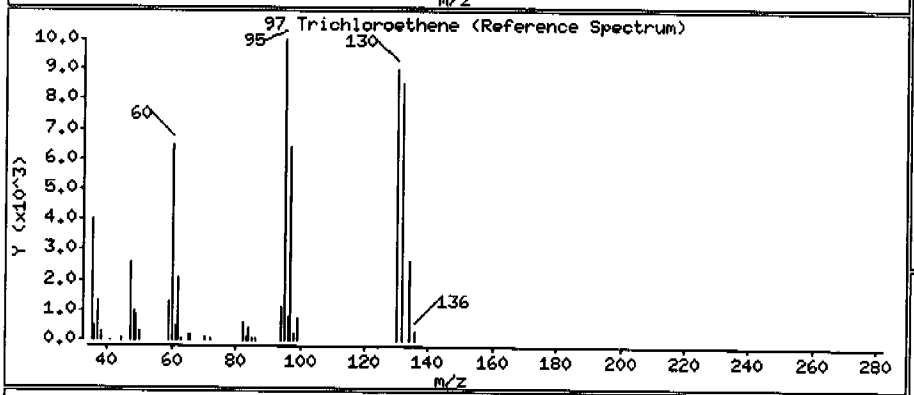
Concentration: 2.052 PPBV

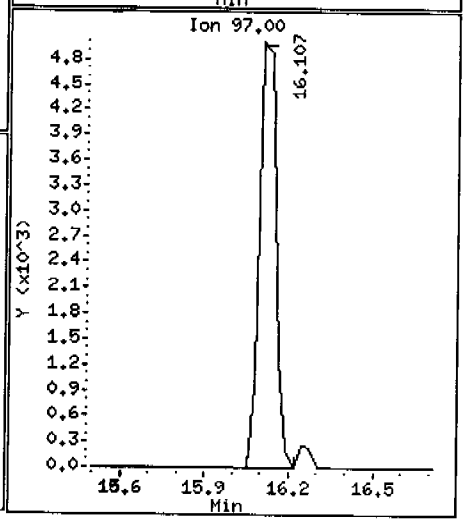


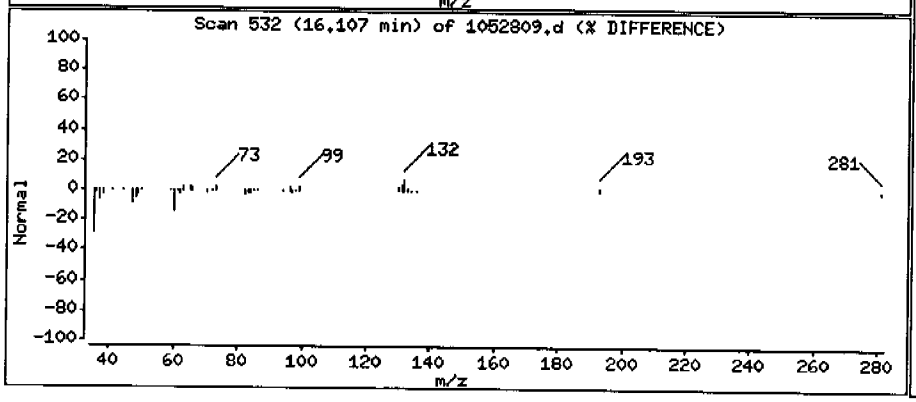












QC Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805347-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052805 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/28/08 11:27 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

0026

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805347-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052805 | Date Collection: NA
Dil. Factor: 1.00 | Date Analysis: 5/28/08 11:27 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	96	70-130

0027

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-28may.b/1052805.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 28-MAY-2008 11:27
Operator : sjr Inst ID: msd1.i
Smp Info : 100mL #12009
Misc Info : humid
Comment :
Method : /chem/msd1.i/1-28may.b/t14q519b.m
Meth Date : 28-May-2008 10:49 sruth Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	****	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	266193	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	210230			25.73- 125.73	78.98
14.255	14.255 (1.000)	49	499075			134.03- 234.03	187.49
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1382540	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	218314			0.00- 65.05	15.79
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1529151	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	883541			8.42- 108.42	57.78
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.060)	65	421332	23.7181	23.718	80.00- 120.00	100.00
15.140	15.140 (1.060)	67	225114			6.04- 106.04	53.43
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1526236	24.3638	24.364	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	159551			0.00- 60.35	10.45

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.960	(1.140)	100	1001931			15.45- 115.45	65.65
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.527	21.527	(1.076)	174	785524	24.0072	24.007	80.00- 120.00	100.00
21.499	21.499	(1.075)	95	1251327			106.65- 206.65	159.30
21.527	21.527	(1.076)	176	749068			46.13- 146.13	95.36

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052805.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: humid

Calibration Date: 28-MAY-2008
Calibration Time: 08:50
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295803	177482	414124	266193	-10.01
95 1,4-Difluorobenze	1549116	929470	2168762	1382540	-10.75
123 Chlorobenzene-d5	1677167	1006300	2348034	1529151	-8.83

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.01	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08a.sub
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: humid

Client SDG: 1-28may
Fraction: VOA
Client Smp ID: Lab blank
Operator: sjr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.718	94.87	70-130
$ 111 Toluene-d8	25.000	24.364	97.46	70-130
$ 136 Bromofluorobenzene	25.000	24.007	96.03	70-130

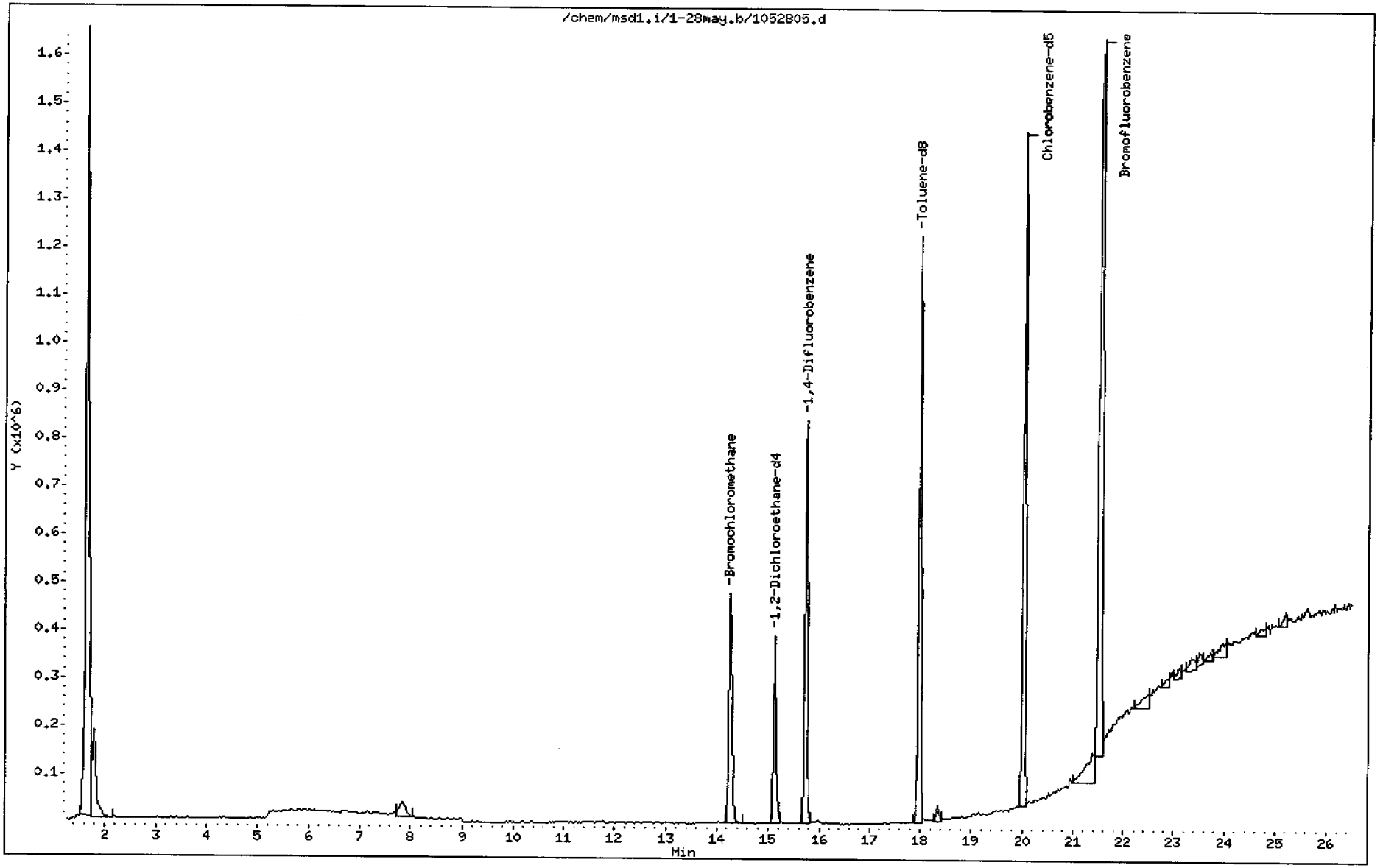
Data File: /chem/msd1.i/1-28may.b/1052805.d
Date : 28-MAY-2008 11:27
Client ID: Lab blank
Sample Info: 100mL #12009

Column phase: RTx-624

Instrument: msd1.i

Operator: sjr
Column diameter: 0.53

0032



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0805347

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-12252	95		96		96				0
02	MD21-08-12255	93		95		100				0
03	Lab Blank	95		97		96				0
04	CCV	98		97		101				0
05	LCS	101		96		98				0
06										0
07										0
08										0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0805347
Lab File ID: 1052802.d
Date Analyzed: 05/28/2008
Instrument ID: msd1.i
Time Analyzed: 08:50 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1677167		20.01		1549116		15.75		295803		14.25	
	UPPER LIMIT	2348034		20.34		2168762		16.08		414124		14.58	
	LOWER LIMIT	1006300		19.68		929470		15.42		177482		13.92	
	CLIENT SAMPLE NO												
01	MD21-08-12252	1536763		20.01		1402579		15.75		271916		14.25	
02	MD21-08-12255	1519068		20.01		1397216		15.75		271545		14.25	
03	Lab Blank	1529151		20.01		1382540		15.75		266193		14.28	
04	CCV	1677167		20.01		1549116		15.75		295803		14.25	
05	LCS	1616982		20.01		1533203		15.75		283144		14.25	
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

0034

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd1.i/1-19may.b/1051909.d
Level 2: /chem/msd1.i/1-19may.b/1051910.d
Level 3: /chem/msd1.i/1-20may.b/1052003.d
Level 4: /chem/msd1.i/1-20may.b/1052004.d
Level 5: /chem/msd1.i/1-20may.b/1052005.d
Level 6: /chem/msd1.i/1-19may.b/1051914.d
Level 7: /chem/msd1.i/1-20may.b/1052006.d

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
5 Propanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
6 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
7 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

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Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 134a	+++++	+++++	0.39502	0.51678	0.54032	+++++		
	0.50460						0.48918	13.185
10 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
12 Propylene	+++++	+++++	0.47660	0.61884	0.57927	0.54317		
	0.54203						0.55198	9.532
13 Freon 152a	+++++	+++++	0.42915	0.45655	0.49989	+++++		
	0.46749						0.46327	6.316
14 Dichlorodifluoromethane/Fr12	+++++	2.76445	2.56056	3.08773	2.88870	2.66106		
	2.57318						2.75595	7.407
15 Freon 22	+++++	+++++	1.57175	1.66807	1.82209	+++++		
	1.64886						1.67769	6.251
16 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
17 Freon 114	+++++	1.67479	1.85622	2.11076	1.98776	1.85882		
	1.83153						1.88665	7.864

0036

Air Toxics Ltd.

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Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Freon142b	+++++	+++++	1.86827	2.02749	2.34963	+++++	2.20151	2.11173	9.897
20 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Chloromethane	+++++	+++++	1.32370	1.28062	1.19541	1.08998	1.04846	1.18763	9.974
22 Butane	+++++	+++++	0.28531	0.26677	0.25435	0.24865	0.24540	0.26009	6.261
23 Vinyl Chloride	+++++	1.40040	1.33114	1.40070	1.29633	1.19330	1.17018	1.29868	7.656
24 1,3-Butadiene	1.07219	0.82498	0.92650	1.08488	1.04723	0.98161	0.97512	0.98750	9.295
25 Methanol	+++++	+++++	+++++	0.47297	0.37349	+++++	0.34473	0.39706	16.947
26 Bromomethane	+++++	0.64699	0.70798	1.05658	0.97995	0.94078	0.92846	0.87679	18.464
27 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0037

Air Toxics Ltd.

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Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
28 Chloroethane	+++++	0.69436	0.62757	0.76111	0.73861	0.69198	0.69490	0.70142	6.559
29 Isopentane	+++++	+++++	1.92863	2.08393	1.94263	1.81472	1.77712	1.90941	6.328
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Dichlorofluoromethane/Fr21	+++++	+++++	1.56207	2.00145	2.25122	+++++	2.14319	1.98948	15.217
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Trichlorofluoromethane/Fr11	+++++	3.13047	3.40834	3.96475	3.78912	3.51201	3.47684	3.54692	8.287
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

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Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
38 Ethanol	+++++	+++++	0.38421	0.63314	0.60136	0.59487		
	0.59545						0.56181	17.892
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
40 Freon123a	+++++	+++++	0.68867	0.87467	1.03875	+++++		
	0.97964						0.89543	17.158
41 Freon123	+++++	+++++	0.11866	0.15944	0.17069	+++++		
	0.15936						0.15204	15.047
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 Freon 113	+++++	1.61886	1.84175	2.07949	1.99742	1.82451		
	1.77363						1.85594	8.826
44 1,1-Dichloroethene	+++++	2.52247	2.72244	2.76486	2.59686	2.42907		
	2.40242						2.57302	5.819
45 Acetone	+++++	+++++	0.95878	0.91952	0.84744	0.79608		
	0.79911						0.86419	8.417
46 2-Propanol	+++++	+++++	2.95124	3.32862	3.16023	2.96512		
	2.87019						3.05508	6.100
47 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

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Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
48 Carbon Disulfide	+++++	3.88997	4.48868	4.41919	4.30785	4.11812		
	4.20486						4.23812	5.139
49 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 3-Chloropropene	+++++	+++++	0.26074	0.46224	0.48804	0.51548		
	0.56295						0.45789	25.410
51 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
52 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	2.84309	2.06493	2.24438	2.13865	2.02826		
	2.05386						2.22886	13.950
55 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
57 tert-Butyl-Alcohol	+++++	2.10710	2.23142	1.54313	1.37872	1.29071		
	1.11309						1.61070	28.316

Air Toxics Ltd.

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Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
58 MTBE	+++++	1.58958	1.79640	1.61914	1.58732	1.51484		
	1.43384						1.59019	7.624
59 trans-1,2-Dichloroethene	+++++	1.29068	1.63241	1.85903	1.73674	1.62346		
	1.61519						1.62625	11.640
60 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
61 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
62 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
63 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
64 Hexane	+++++	3.37081	3.67373	4.24604	3.89581	3.66800		
	3.64719						3.75026	7.858
65 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
66 Isopropyl ether	+++++	+++++	4.87970	6.40561	7.72550	+++++		
	7.32426						6.58377	19.187
67 Vinyl Acetate	+++++	+++++	0.29695	0.46584	0.44422	0.44900		
	0.44138						0.41948	16.485

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Origin : Disabled
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Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
68 1,1-Dichloroethane	+++++	1.75260	2.53662	3.52968	3.44103	3.27162	3.29010	2.97028	23.317
69 1-Propanol	+++++	+++++	0.22633	0.27762	0.38253	+++++	0.38819	0.31867	25.055
70 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 t-Butylethyl Ether	+++++	+++++	2.22274	2.31716	3.28286	+++++	3.22375	2.76163	20.624
73 Ethyl Acetate	+++++	+++++	0.50093	0.67245	0.78161	+++++	0.73805	0.67326	18.319
74 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.58480	0.84693	1.06157	1.00648	0.95843	0.94556	0.90063	18.915
76 cis-1,2-Dichloroethene	+++++	2.29431	2.61123	3.03838	2.84276	2.65971	2.62725	2.67894	9.319
77 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

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Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
78 Tetrahydrofuran	+++++	5.32871	3.38325	3.26689	3.03132	2.88497		
	2.86177						3.45948	27.140
80 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
81 Chloroform	2.82358	2.94294	3.53490	4.14634	3.92525	3.68711		
	3.69444						3.53636	13.811
82 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.48036	3.34569	4.27254	4.17807	4.00699		
	3.98011						3.71062	18.442
84 Cyclohexane	+++++	2.85065	3.03398	3.43515	3.26161	3.03393		
	2.93852						3.09231	7.012
85 Carbon Tetrachloride	+++++	2.71658	3.23630	3.82273	3.70316	3.53518		
	3.57832						3.43205	11.716
86 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
88 2,2,4-Trimethylpentane	+++++	10.92851	12.93967	14.71781	14.05371	13.35507		
	13.21090						13.20094	9.751

Air Toxics Ltd.

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Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 Benzene	1.25002	1.12107	1.25694	1.44995	1.33426	1.25893	1.23347	1.27209	7.906
92 tert-amyl-Methyl Ether	+++++	+++++	2.60942	2.87079	3.64481	+++++	3.40377	3.13220	15.179
93 1,2-Dichloroethane	+++++	0.40543	0.51308	0.59794	0.56970	0.53307	0.53709	0.52605	12.599
94 Heptane	+++++	0.42177	0.49542	0.55513	0.51782	0.48829	0.48344	0.49365	8.907
96 1-Butanol	+++++	+++++	0.23773	0.28110	0.35735	+++++	0.40288	0.31976	23.225
97 Trichloroethene	+++++	0.45421	0.51077	0.58874	0.55312	0.51595	0.50714	0.52165	8.743
98 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Methyl Cyclohexane	+++++	3.55011	4.32249	4.90187	4.72646	4.45199	4.49252	4.40757	10.630
100 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

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Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
101 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
102 1,2-Dichloropropane	+++++	0.45112	0.49902	0.56198	0.53570	0.50061		
	0.49442						0.50714	7.499
103 1,4-Dioxane	+++++	+++++	0.31799	0.35126	0.33375	0.31787		
	0.31593						0.32736	4.633
104 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
106 Bromodichloromethane	+++++	0.61951	0.77315	0.93355	0.88905	0.84498		
	0.84512						0.81756	13.540
107 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
108 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
109 cis-1,3-Dichloropropene	+++++	0.60933	0.65684	0.81227	0.75956	0.72582		
	0.72776						0.71526	10.135
110 4-Methyl-2-pentanone	+++++	0.39745	0.48036	0.57623	0.55319	0.52727		
	0.52783						0.51039	12.519

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Toluene	+++++	1.50227	1.69705	1.94518	1.84039	1.76420	1.74905	1.74969	8.502
115 trans-1,3-Dichloropropene	+++++	0.50679	0.62987	0.76860	0.72015	0.69673	0.70700	0.67152	13.738
116 1,1,2-Trichloroethane	+++++	0.46020	0.51818	0.59324	0.55551	0.52891	0.51839	0.52907	8.365
117 Tetrachloroethene	+++++	0.52486	0.60092	0.70022	0.65380	0.61198	0.58559	0.61290	9.773
118 2-Hexanone	+++++	+++++	0.61995	0.76220	0.74022	0.71772	0.73731	0.71548	7.782
119 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 Butyl Acetate	+++++	+++++	0.45293	0.62604	0.73986	+++++	0.74821	0.64176	21.452
121 Dibromochloromethane	+++++	0.56459	0.66364	0.86143	0.81295	0.78587	0.78654	0.74584	14.777

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
122 1,2-Dibromoethane	0.58968	0.62112	0.78288	0.92554	0.87052	0.83417		
	0.82999						0.77913	16.258
124 Chlorobenzene	+++++	1.15566	1.40879	1.56541	1.48184	1.41137		
	1.43123						1.40905	9.754
125 Ethyl Benzene	+++++	0.59553	0.76582	0.89271	0.82520	0.78406		
	0.77255						0.77264	12.777
126 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
127 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 m,p-Xylene	+++++	0.71446	0.96248	1.10917	1.05199	1.00895		
	1.01236						0.97657	14.077
129 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
130 o-Xylene	+++++	0.78477	0.92259	1.04099	0.99310	0.94121		
	0.91430						0.93283	9.317
131 Styrene	1.70444	1.41504	1.34627	1.69419	1.62119	1.58626		
	1.58488						1.56461	8.672
132 2-Heptanone	+++++	+++++	3.98060	5.27499	5.84891	+++++		
	6.33019						5.35867	18.940

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
133 Bromoform	+++++	0.56104	0.62556	0.78733	0.75836	0.74649		
	0.73511						0.70231	12.615
134 Cumene	2.06386	2.32437	2.72684	3.07090	2.98904	2.87199		
	2.00096						2.57828	17.216
135 Cyclohexanone	+++++	+++++	0.54565	0.72187	0.73917	+++++		
	0.84775						0.71361	17.526
137 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
138 1,1,2,2-Tetrachloroethane	+++++	1.55756	1.26692	1.39263	1.34655	1.34371		
	1.36012						1.37791	7.057
139 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 Propylbenzene	+++++	2.85361	3.22399	3.71288	3.66000	3.14296		
	2.15886						3.12538	18.375
141 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
142 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
143 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
144 4-Ethyltoluene	+++++	2.35997	2.79036	3.25444	3.17066	2.96751	2.08121	2.77069	16.752
145 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 1,3,5-Trimethylbenzene	2.23613	2.30798	2.69550	2.88655	2.89747	2.95994	2.54405	2.64680	11.066
147 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 Diisobutyl Ketone	+++++	+++++	1.35451	1.77171	1.66745	+++++	1.61775	1.60285	11.078
149 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1,2,4-Trimethylbenzene	1.81442	1.93820	2.05281	2.26768	2.28440	2.31093	1.99608	2.09493	9.289
153 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
154 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
155 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
156 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
157 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
158 1,3-Dichlorobenzene	+++++	1.28691	1.23898	1.29574	1.30169	1.32496		
	1.34048						1.29813	2.703
159 1,4-Dichlorobenzene	+++++	1.07031	1.23957	1.32627	1.33085	1.37109		
	1.38582						1.28732	9.159
160 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
162 alpha-Chlorotoluene	+++++	1.94310	1.67554	1.89206	1.95161	2.05487		
	1.86172						1.89648	6.684
163 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
164 1,2-Dichlorobenzene	+++++	1.24572	1.07556	1.05860	1.10101	1.14649			
	1.18133						1.13478	6.239	
165 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
166 Aniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
167 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
168 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
169 1,2,4-Trichlorobenzene	+++++	+++++	0.44166	0.30629	0.37792	0.53955			
	0.73748						0.48058	34.804	<-
170 Hexachlorobutadiene	+++++	+++++	0.32642	0.23481	0.27318	0.36414			
	0.45054						0.32982	25.366	
171 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
172 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
173 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
174 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
175 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.58394	1.61384	1.63102	1.62794	1.65054	1.74923		
	1.82195						1.66835	5.108
$ 111 Toluene-d8	1.13996	1.13438	1.13329	1.12752	1.12411	1.14096		
	1.12910						1.13276	0.556
$ 136 Bromofluorobenzene	0.52476	0.52571	0.52552	0.53095	0.53961	0.54616		
	0.55190						0.53494	2.060

0052

Calibration History

Method : /chem/msd1.i/1-20may.b/t14q519b.m
Start Cal Date: 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.25000		
19-MAY-2008 13:23	AFCEElow	/chem/msd1.i/1-19may.b/1051909.d
Cal Level: 2 , Cal Amount: 0.50000		
19-MAY-2008 13:56	AT08low	/chem/msd1.i/1-19may.b/1051910.d
Cal Level: 3 , Cal Amount: 2.00000		
20-MAY-2008 09:45	sp22a	/chem/msd1.i/1-20may.b/1052003.d
19-MAY-2008 14:29	AT08mdl	/chem/msd1.i/1-19may.b/1051911.d
Cal Level: 4 , Cal Amount: 25.00000		
20-MAY-2008 10:26	sp22a	/chem/msd1.i/1-20may.b/1052004.d
19-MAY-2008 19:59	AT08mdl	/chem/msd1.i/1-19may.b/1051917.d
Cal Level: 5 , Cal Amount: 50.00000		
20-MAY-2008 10:59	sp22a	/chem/msd1.i/1-20may.b/1052005.d
19-MAY-2008 15:47	AT08mdl	/chem/msd1.i/1-19may.b/1051913.d
Cal Level: 6 , Cal Amount: 100.00000		
19-MAY-2008 16:26	AT08mdl	/chem/msd1.i/1-19may.b/1051914.d
Cal Level: 7 , Cal Amount: 200.00000		
20-MAY-2008 11:33	sp22a	/chem/msd1.i/1-20may.b/1052006.d
19-MAY-2008 16:59	AT08mdl	/chem/msd1.i/1-19may.b/1051915.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
20-MAY-2008 12:26	AT08	/chem/msd1.i/1-20may.b/1052007.d
Ccal Level: 5 , Ccal Amount: 50.000		
20-MAY-2008 10:59	sp22aCCV	/chem/msd1.i/1-20may.b/1052005a.d

Initial Calibration Narrative

A seven point initial calibration was analyzed on MSD-1 on 05/19/2008. As noted on the accompanying analytical run logs, the following point calibration level 4 was re-analyzed due to:

a. anomalous unacceptable linearity for several compounds

The following compounds used 0.25 ppbv as the lowest calibration concentration:

Chloroform, Benzene, Cumene, 1,3-Butadiene, 1,2-Dibromoethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, and Styrene.

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.52
75	30.0 – 60.0% of mass 95	42.28
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.48
173	Less than 2.0% of mass 174	(0.79)[1]
174	Greater than 50.0% of mass 95	64.73
175	5.0 – 9.0% of mass 174	(7.17)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(95.67)[1]
177	5.0 – 9.0% of mass 176	(6.44)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 5/19/08
BFB Injection Time: 1304
BFB File ID: 1051908
Tekmar Purge Flow: NA
Vacuum: 1.1-5

IS/S Std.#:	1541-144	Exp. Date: 8/2/08
BCM	312143	
1,4-DFB	1618588	
CB-d5	1862744	

Verified CCV IS vs ICAL mid-point (- 40%D) KR (initials)

Verify 176/174 m/z Ratio: 873397/912971 x 100 = 95.665

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 1819475\ )}{(\ 1618588\ )} \times \frac{(\ 25.0\ )}{(\ 1.13276\ )} =$ 24.809

Reported Result 24.809

File ID:	1051913
Compound:	Tol-d8
Initials:	KR

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	IS	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	1051908	BFB Tune Check	1976225	50ng	2uL	1.00	5/19/08	1304	KR	
2	✓	09	ICAL Level 1 (5ppbv)	1541-167	0.25ppbv	5mL			1323	KR	KR 5/19/08 1541-139 + 1541-144
3	✓	10	2 (5ppbv)		0.5ppbv	10mL			1356	KR	
4	✓	11	3 (5ppbv)	↓	20ppbv	40mL			1429	KR	
5	✓	12	4 (20ppbv)	1102-3	25ppbv	12.5mL			1514	KR	
6	✓	13	5 (20ppbv)		50ppbv	25mL			1547	KR	
7	✓	14	6 (20ppbv)		100ppbv	50mL			1626	KR	
8	✓	15	7 (20ppbv)	↓	200ppbv	100mL			1659	KR	
9	✓	16	System Blank	12009	Humid	100mL	↓	↓	1735	KR	

Signature

5/19/08
Date

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

0057

10	✓	1051917	ICAL Level 4	1612-3	25ppbv	12.5mL	1.00	5/19/08	1959	KR	
11	✓	18	LCS (200ppbv)	1541-138	50ppbv	25mL	1.00	↓	2033	KR	ICAL LCS 2-out
12	✓	19	System Blank	12009	Humidified	1000mL	1.00	↓	2201	KR	
13	✓	20	LCSD (200ppbv)	1541-139	50ppbv	25mL	1.00	↓	CB SIM 5/20/08 2243	CB	
14	✓	21	Lab Blank	12009	Humidified	100mL	1.00	↓	2327	CB	
15	✓	22	080515I -01A	31641	15"Hg-15psi	100mL	2.13	5/20/08	0016	CB	
16	✓	23	↓ -02A	35649	20"Hg-15psi	↓	2.16	↓	0057	CB	
17	✓	24	080515S -01AA	1424	12.0"Hg-15psi	50mL	6.74	↓	0141	CB	RL@ 20mL
18	✓	25	↓ -02A	1425	11.5"Hg-15psi	100mL	3.28	↓	0227	CB	
19	✓	26	-01A	1424	12.0"Hg-15psi	20mL	16.8	↓	0318	CB	
20	✓	27	-03A	SC82	12.0"Hg-15psi	7mL	48.1	↓	0410	CB	
21	X	28	-04A	1440	11.5"Hg-15psi	2mL	164	↓	0448	CB	
22	✓	29	-04A	↓	↓	65mL CB SIM 5/20/08 65.6	↓	↓	0526	CB	DF = 54.7
23											
24											
25											
26											
27											
28			FO 5/20/08								
29											
30											
31											
32											

Comments:

Flow Controller : AA01143049

NIST Flow Meter : 200-7744 exp 8/27/08

Actual	Nominal
12.5mL/min	11.5mL/min

Signature

5/20/08
Date

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.99
75	30.0 – 60.0% of mass 95	42.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.53
173	Less than 2.0% of mass 174	(0.77)[1]
174	Greater than 50.0% of mass 95	62.16
175	5.0 – 9.0% of mass 174	(6.88)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	(95.54)[1]
177	5.0 – 9.0% of mass 176	(6.18)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 5/20/08
BFB Injection Time: 0753
BFB File ID: 1052001
Tekmar Purge Flow: NA
Vacuum: NA

IS/S Std.#: 1541 - 144	Exp. Date: 8/2/08
BCM	325915
1,4-DFB	1718149
CB-d5	1889046

Verified CCV IS vs ICAL mid-point (- 40%D) LO (initials)

Verify 176/174 m/z Ratio: 935173/978830 x 100 = 95.540

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 535014\ )}{(\ 325915\ )} \times \frac{(\ 25.00\ )}{(\ 1.066835\ )} = 24.59878$

Reported Result 24.599

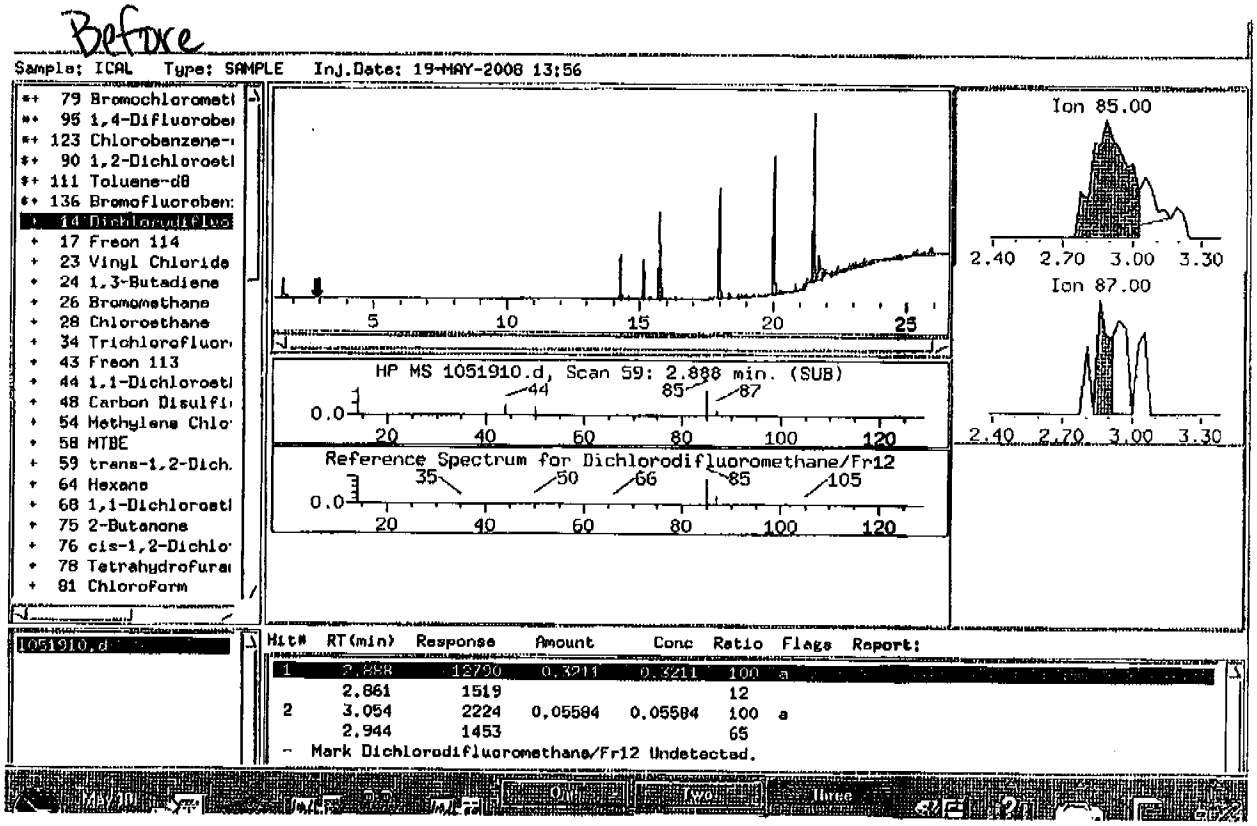
File ID:	1052007
Compound:	1,2-DCA-d4
Initials:	LO

	ISTD	File#	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	1052001	BFB Tune Check	1416 215	50psig	2uL	1.00	5/20/08	0753	LO/KR	
2	✓	02	System Blank	12009	Humid	100mL			0826	LO	
3	✓	03	CAL Level 3 (200ppbv)	1541-142	20psig	1.0mL			0945	LO/KR	Sp22a H4:59pb
4	✓	04	Level 4 (300ppbv)	↓	8.0psig	4.0mL			1026	LO/KR	↓
5	✓	05	Level 5 (500ppbv)	↓	5psig	25mL			1059	LO/KR	Sp22a CCV
6	✓	06	Level 7 (1000ppbv)	↓	20psig	100mL			1133	LO/KR	↓
7	✓	07	CCV-1 #1642-3	200ppbv	50psig	25mL			1226	LO/KR	
8	✓	08	LCS-1 #1541-135	↓	↓	↓			1302	LO/KR	1 out
9	✓	09	Lab Blank	12009	Humid	100mL	↓	↓	1347	LO/KR	

Laura Oseroff
Signature

5/20/08
Date

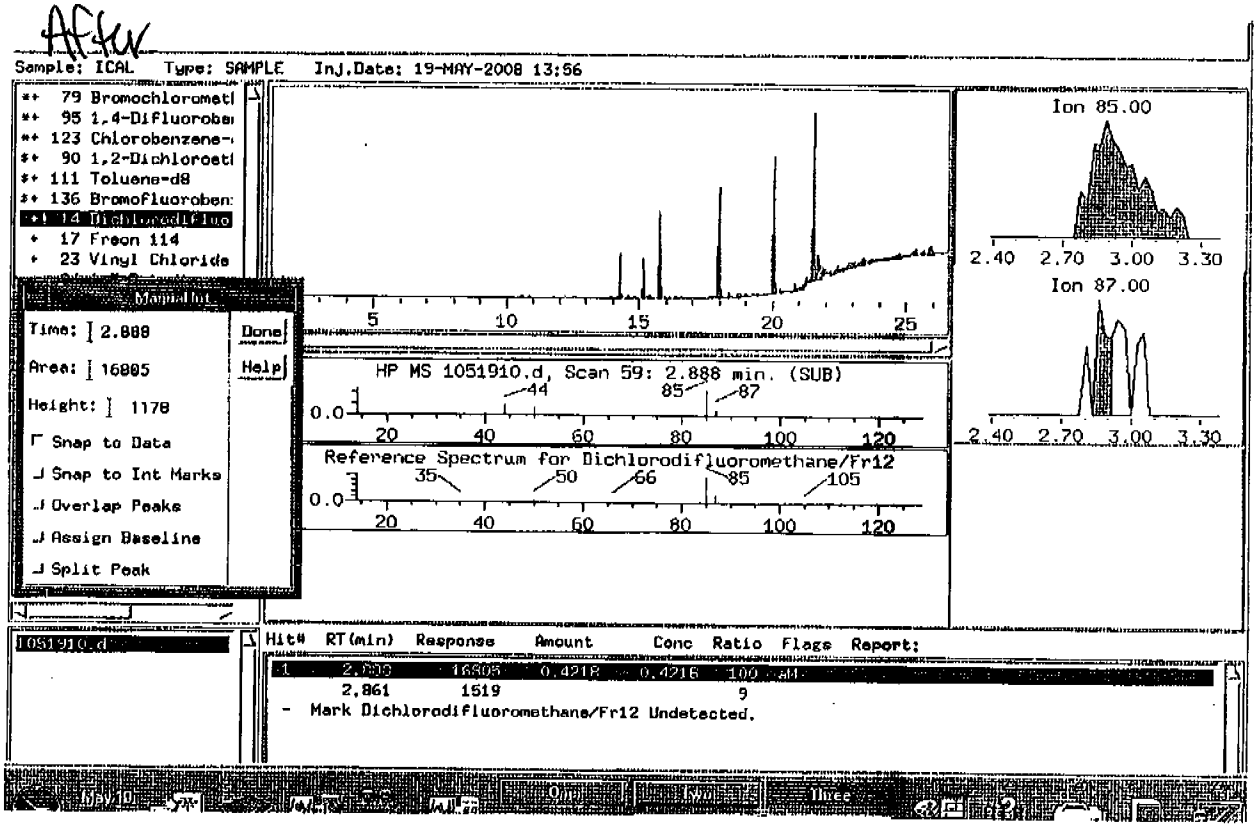
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 13:56
79 Bromochlorometl
95 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroetl
111 Toluene-d8
136 Bromofluoroben
14 Dichlorodifluo
17 Freon 114
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluor
43 Freon 113
44 1,1-Dichloroetl
48 Carbon Disulfi
54 Methylene Chlo
58 MTBE
59 trans-1,2-Dich.
64 Hexane
68 1,1-Dichloroetl
75 2-Butanone
76 cis-1,2-Dichlo
78 Tetrahydrofura
81 Chloroform
Ion 85.00
Ion 87.00
HP MS 1051910.d, Scan 59: 2.888 min. (SUB)
Reference Spectrum for Dichlorodifluoromethane/Fr12
1051910.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.888 12790 0.3211 0.3211 100 a
2.861 1519 12
2 3.054 2224 0.05584 0.05584 100 a
2.944 1453 65
- Mark Dichlorodifluoromethane/Fr12 Undetected.

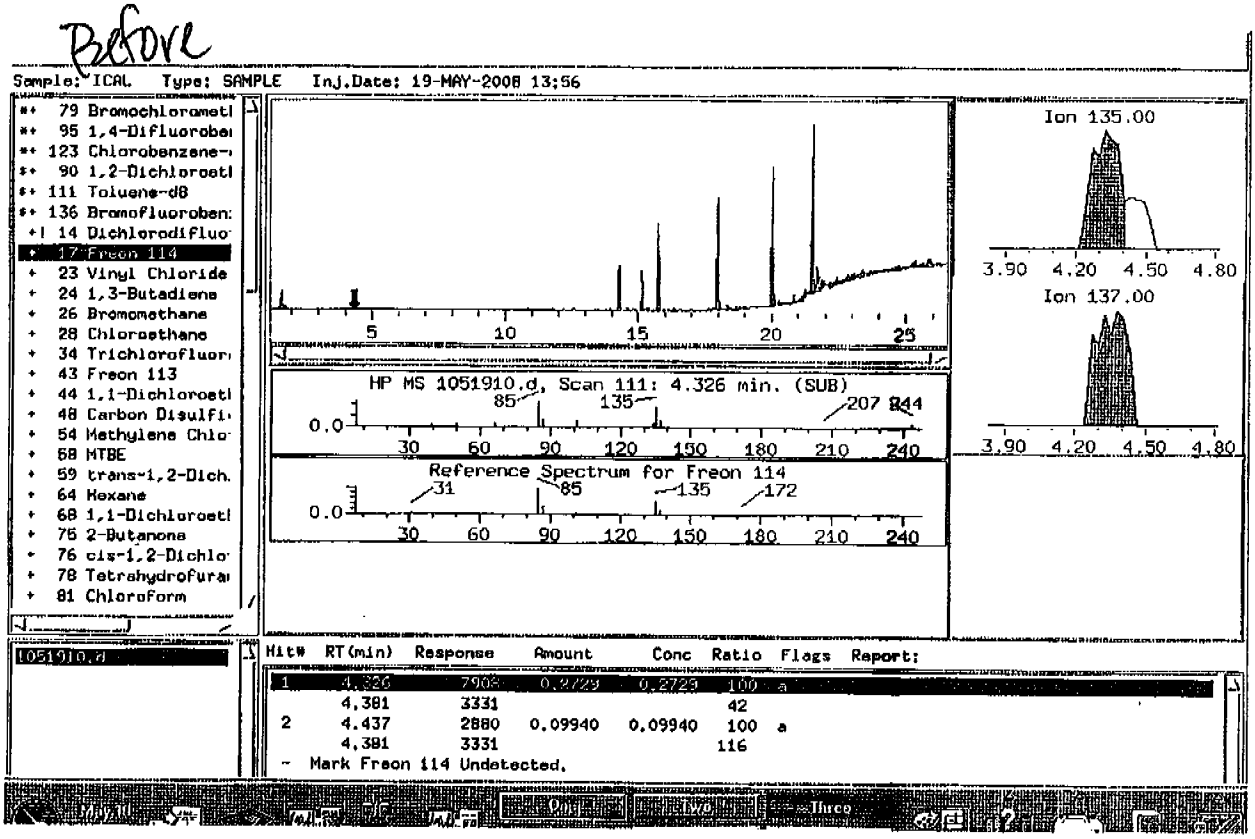
Term A

Date / Initial	5/19/08 SO / WK
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



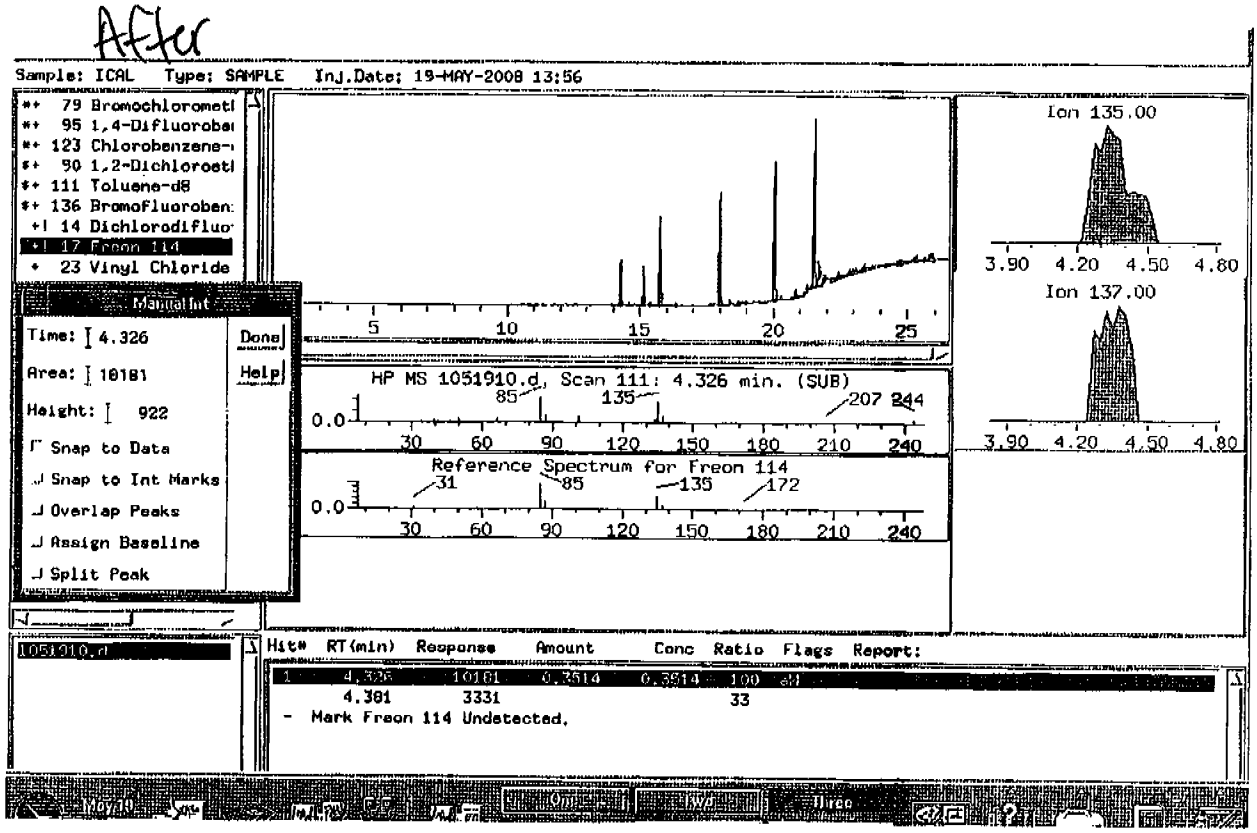
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 13:56
79 Bromochlorometl
95 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroetl
111 Toluene-d8
136 Bromofluoroben
14 Dichlorodifluo
17 Freon 114
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluor
43 Freon 113
44 1,1-Dichloroetl
48 Carbon Disulfi
54 Methylene Chlo
58 MTBE
59 trans-1,2-Dich
64 Hexane
68 1,1-Dichloroetl
76 2-Butanone
76 cis-1,2-Dichlo
78 Tetrahydrofura
81 Chloroform
5 10 15 20 25
HP MS 1051910.d, Scan 111: 4.326 min. (SUB)
85 135 207 244
0.0
30 60 90 120 150 180 210 240
Reference Spectrum for Freon 114
31 85 135 172
0.0
30 60 90 120 150 180 210 240
Ion 135.00
3.90 4.20 4.50 4.80
Ion 137.00
3.90 4.20 4.50 4.80
1051910.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 4.326 7903 0.2725 0.2725 100 a
4.381 3331 42
2 4.437 2880 0.09940 0.09940 100 a
4.381 3331 116
~ Mark Freon 114 Undetected.
One
Two
Three

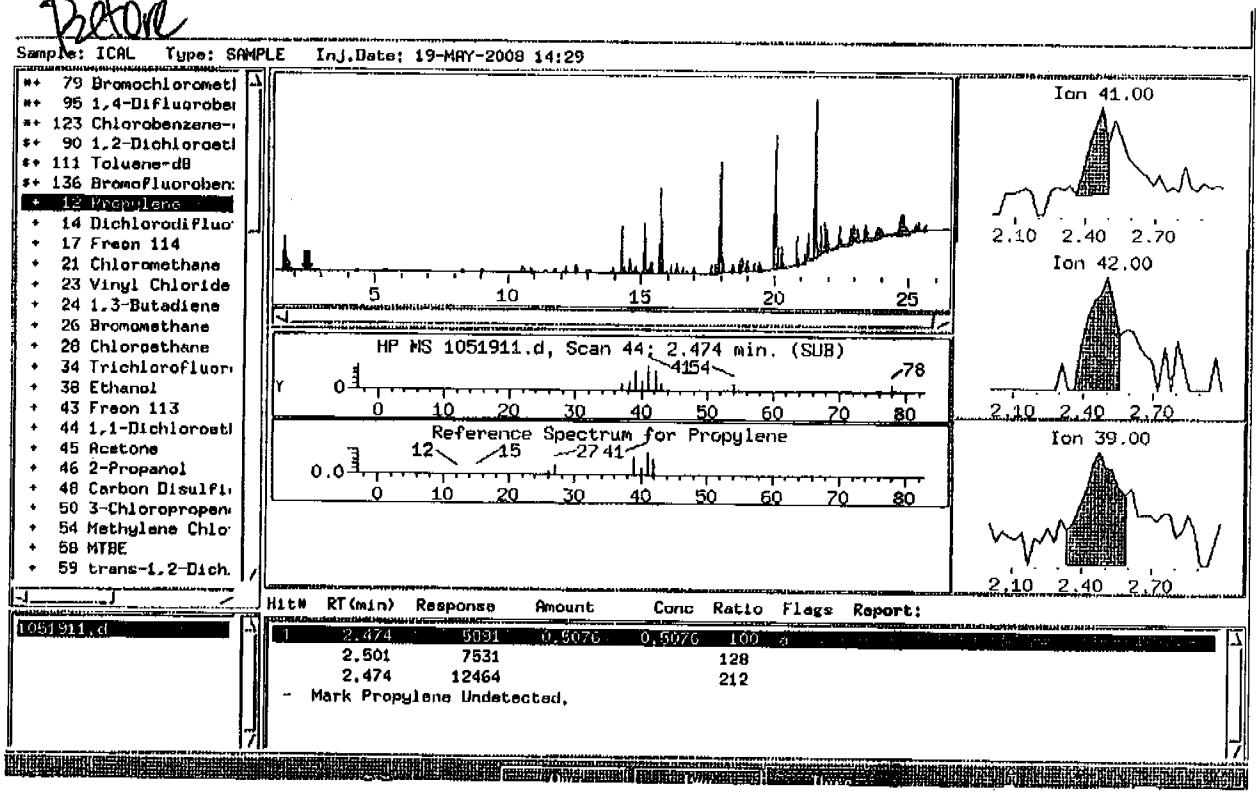
Form A

Date / Initial	5/19/08 SO
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



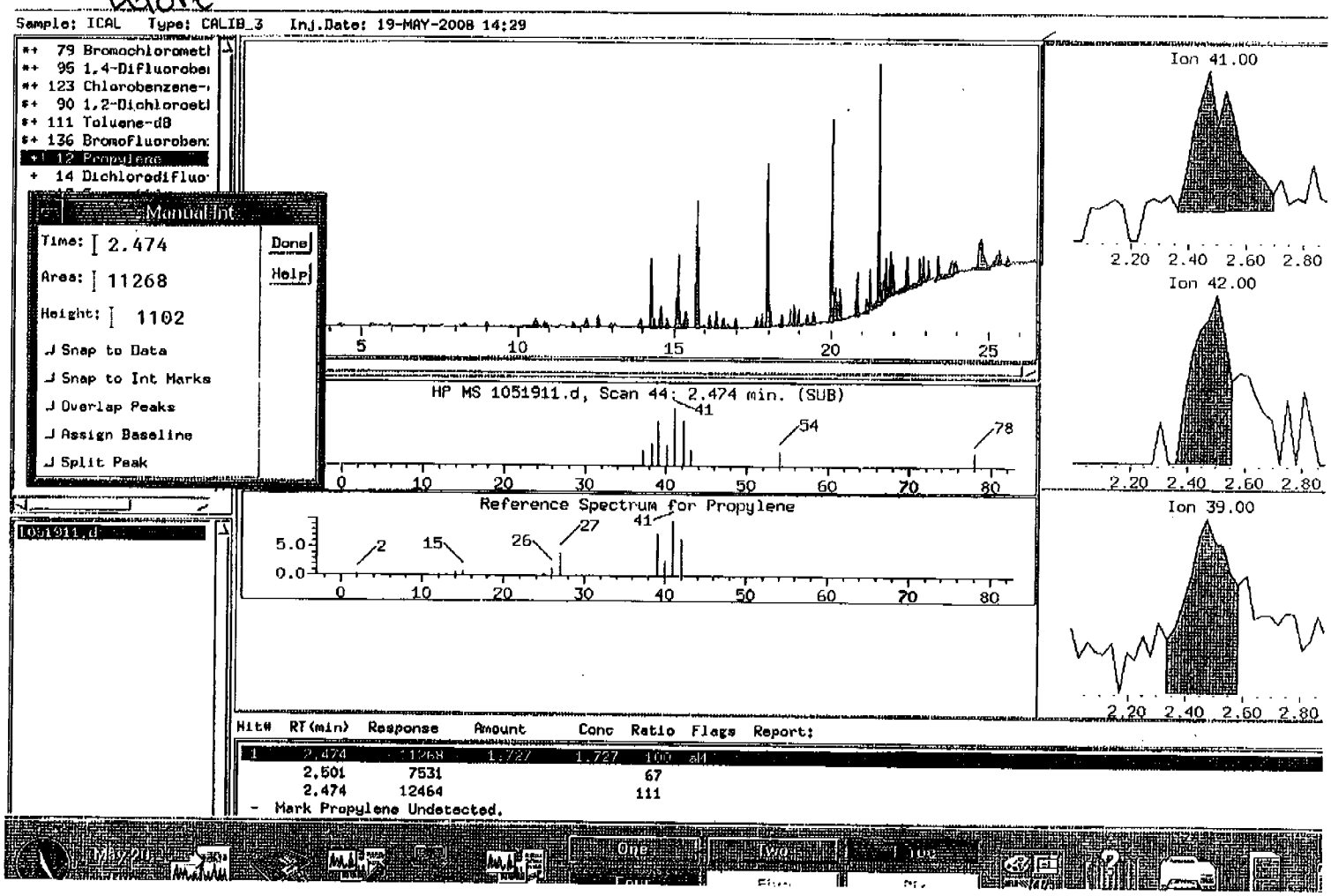
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 14:29
79 Bromochloromethane
95 1,4-Difluorobenzene
123 Chlorobenzene-d5
90 1,2-Dichloroethane-d4
111 Toluene-d8
136 Bromofluorobenzene
12 Propylene
14 Dichlorodifluoromethane
17 Freon 114
21 Chloromethane
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluoromethane
38 Ethanol
43 Freon 113
44 1,1-Dichloroethene
45 Acetone
46 2-Propanol
48 Carbon Disulfide
50 3-Chloropropene
54 Methylene Chloride
58 MTBE
59 trans-1,2-Dichloroethene
5 10 15 20 25
HP MS 1051911.d, Scan 44: 2.474 min. (SUB)
41 54 78
0 10 20 30 40 50 60 70 80
Reference Spectrum for Propylene
12 15 27 41
0.0
0 10 20 30 40 50 60 70 80
Ion 41.00
2.10 2.40 2.70
Ion 42.00
2.10 2.40 2.70
Ion 39.00
2.10 2.40 2.70
1051911.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.474 5091 0.5076 0.5076 100 a
2.501 7531 128
2.474 12464 212
- Mark Propylene Undetected.

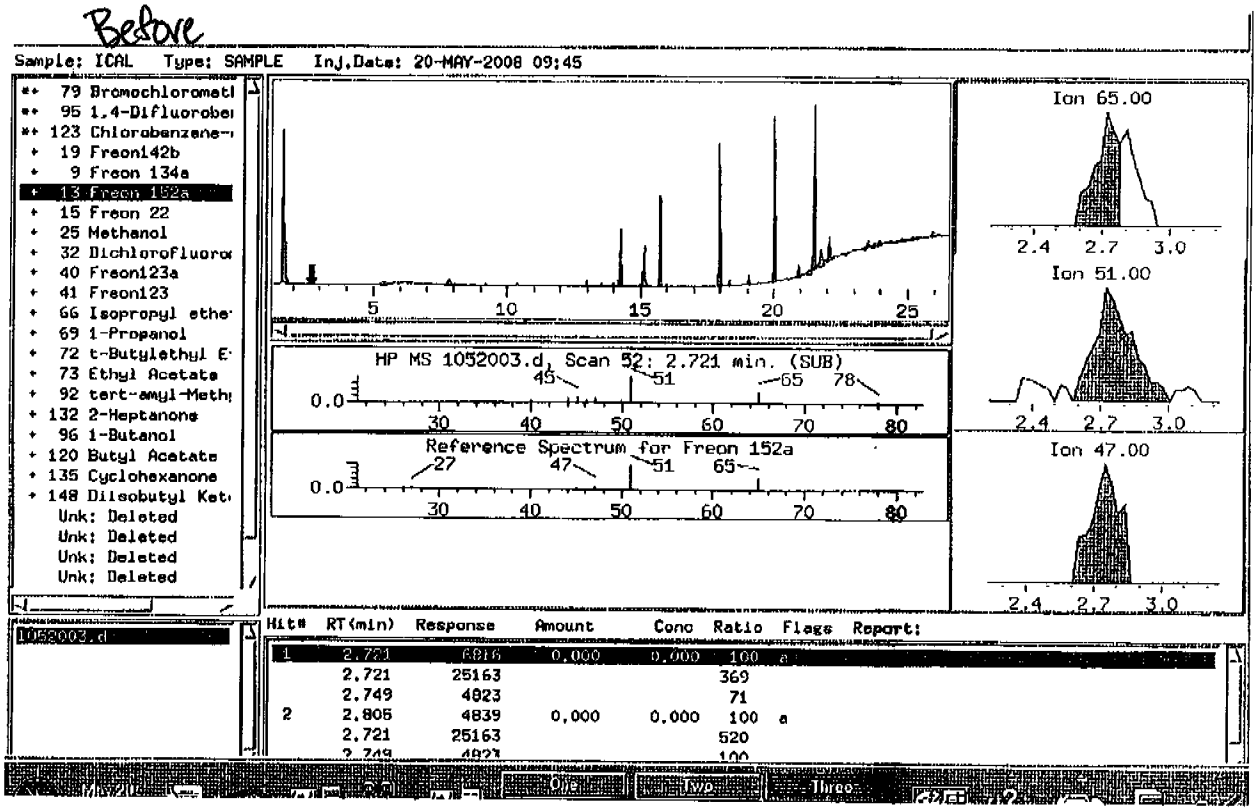
Team A

Date / Initial	5/20/08 SB/NE
Poor Integration	✓
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

Before

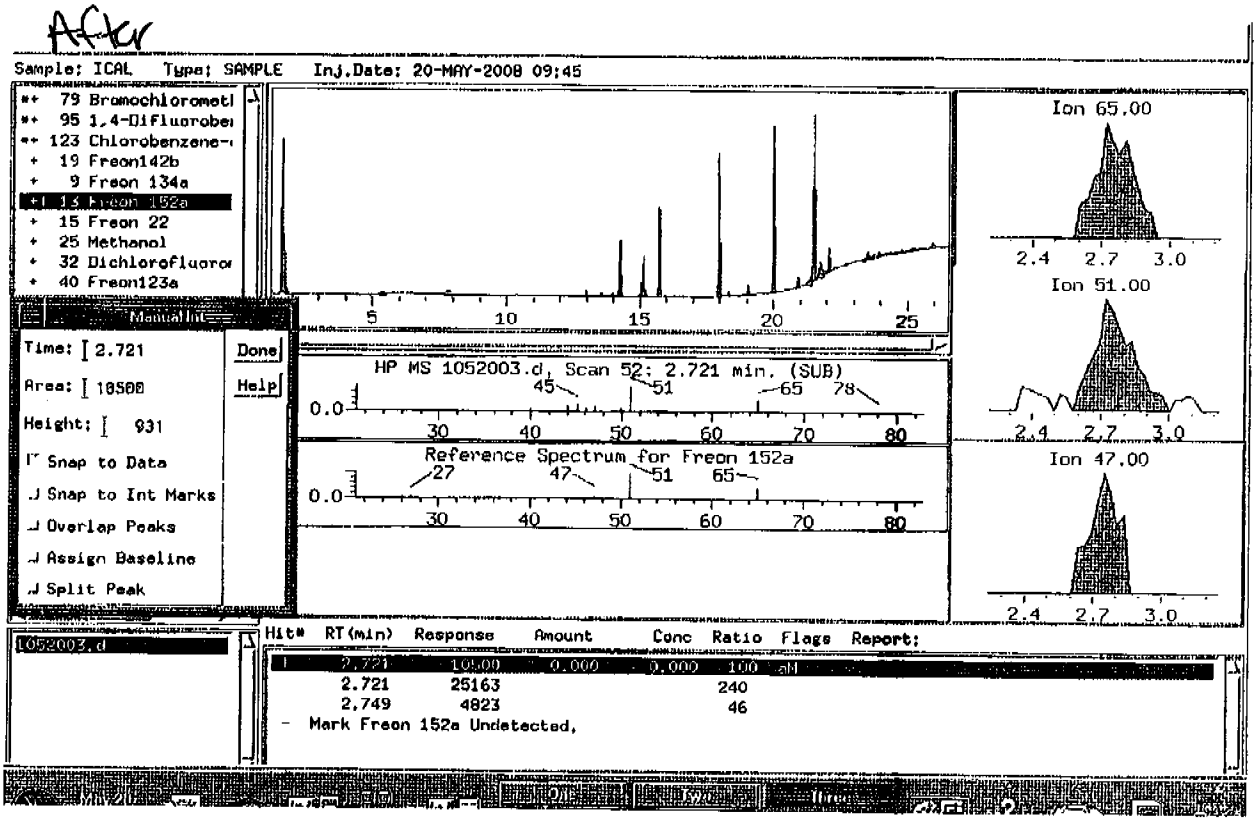


Before


Sample: ICAL Type: SAMPLE Inj.Date: 20-MAY-2008 09:45
79 Bromochloromet
95 1,4-Difluorobe
123 Chlorobenzene-
19 Freon142b
9 Freon 134a
13 Freon 152a
15 Freon 22
25 Methanol
32 Dichlorofluora
40 Freon123a
41 Freon123
66 Isopropyl ethe
69 1-Propanol
72 t-Butylethyl E
73 Ethyl Acetate
92 tert-amyl-Meth
132 2-Heptanone
96 1-Butanol
120 Butyl Acetate
135 Cyclohexanone
148 Diisobutyl Ket
Unk: Deleted
Unk: Deleted
Unk: Deleted
Unk: Deleted
HP MS 1052003.d, Scan 52: 2.721 min. (SUB)
Reference Spectrum for Freon 152a
Ion 65.00
Ion 51.00
Ion 47.00
1052003.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.721 6816 0.000 0.000 100 a
2.721 25163 369
2.749 4823 71
2 2.805 4839 0.000 0.000 100 a
2.721 25163 520
2.749 4823 100

Date / Initial	5/20/08 LS
Poor Integration	
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051918.d
Lab Smp Id: LCS
Client Smp ID: LCS
Inj Date : 19-MAY-2008 20:33
Operator : kr
Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv-->50ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:40 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:59
Cal File: 1051915.d
Als bottle: 1
QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	313340	25.0000		80.00- 120.00	100.00
14.280	14.280 (1.000)	128	248742			28.03- 128.03	79.38
14.252	14.252 (1.000)	49	585074			135.66- 235.66	186.72
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1657292	25.0000		80.00- 120.00	100.00
15.745	15.745 (1.000)	88	259633			0.00- 65.87	15.67
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1876684	25.0000		80.00- 120.00	100.00
20.031	20.031 (1.000)	82	1105000			8.51- 108.51	58.88
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	519273	24.8332	24.833	80.00- 120.00	100.00
15.137	15.137 (1.060)	67	316980			6.04- 106.04	61.04
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1864621	24.8309	24.831	80.00- 120.00	100.00
17.957	17.985 (1.140)	70	194952			0.00- 60.35	10.46

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.985	17.985	(1.142)	100	1233113			15.45- 115.45	66.13
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.524	21.524	(1.075)	174	1000370	24.9116	24.912	80.00- 120.00	100.00
21.524	21.524	(1.075)	95	1606794			109.07- 209.07	160.62
21.524	21.524	(1.075)	176	960897			45.29- 145.29	96.05
12 Propylene						CAS #: 115-07-1		
2.474	2.501	(0.173)	41	361686	52.2798	52.280	80.00- 120.00	100.00
2.474	2.501	(0.173)	42	249788			16.91- 116.91	69.06
2.474	2.501	(0.173)	39	286870			37.15- 137.15	79.31
14 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
2.888	2.888	(0.202)	85	1721292	49.8320	49.832	80.00- 120.00	100.00
2.888	2.888	(0.202)	87	552532			0.00- 75.39	32.10
17 Freon 114						CAS #: 76-14-2		
4.326	4.326	(0.303)	135	1165246	49.2778	49.278	80.00- 120.00	100.00
4.326	4.326	(0.303)	137	364298			0.00- 81.00	31.26
21 Chloromethane						CAS #: 74-87-3		
4.630	4.658	(0.324)	50	716400	48.1279	48.128	80.00- 120.00	100.00
4.658	4.658	(0.326)	52	223683			0.00- 80.15	31.22
23 Vinyl Chloride						CAS #: 75-01-4		
5.626	5.625	(0.394)	62	780672	47.9614	47.961	80.00- 120.00	100.00
5.626	5.625	(0.394)	64	241296			0.00- 77.57	30.91
24 1,3-Butadiene						CAS #: 106-99-0		
5.902	5.902	(0.413)	54	604592	48.8483	48.848	80.00- 120.00	100.00
5.902	5.902	(0.413)	39	579427			37.41- 137.41	95.84
26 Bromomethane						CAS #: 74-83-9		
7.533	7.561	(0.528)	94	602107	54.7901	54.790	80.00- 120.00	100.00
7.561	7.561	(0.529)	96	562668			45.16- 145.16	93.45
28 Chloroethane						CAS #: 75-00-3		
8.114	8.114	(0.568)	64	445250	50.6465	50.646	80.00- 120.00	100.00
8.114	8.114	(0.568)	49	132653			0.00- 79.23	29.79
8.114	8.114	(0.568)	66	139382			0.00- 81.66	31.30
34 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.999	8.999	(0.630)	101	2279610	51.2783	51.278	80.00- 120.00	100.00
8.999	8.999	(0.630)	103	1457179			14.65- 114.65	63.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	388109	55.1178	55.118	80.00- 120.00	100.00
10.132	10.132 (0.710)	43	79956			0.00- 75.81	20.60
10.132	10.132 (0.710)	46	157062			0.00- 92.85	40.47
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	1332755	57.2941	57.294	80.00- 120.00	100.00
10.575	10.575 (0.741)	153	853663			13.04- 113.04	64.05
10.575	10.575 (0.741)	101	1787104			81.57- 181.57	134.09
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.520	10.519 (0.737)	61	1749919	54.2624	54.262	80.00- 120.00	100.00
10.520	10.519 (0.737)	96	927125			3.17- 103.17	52.98
10.520	10.519 (0.737)	98	588603			0.00- 83.87	33.64
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	534712	49.3670	49.367	80.00- 120.00	100.00
10.879	10.879 (0.762)	43	1756874			275.34- 375.34	328.56
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	2015633	52.6396	52.640	80.00- 120.00	100.00
11.321	11.321 (0.793)	43	368593			0.00- 68.18	18.29
11.321	11.321 (0.793)	59	75754			0.00- 53.79	3.76
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	2642105	49.7395	49.740	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.460	11.459 (0.802)	76	301286	52.4979	52.498	80.00- 120.00	100.00
11.432	11.432 (0.801)	41	1128655			303.82- 403.82	374.61
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	1413978	50.6156	50.616	80.00- 120.00	100.00
11.764	11.764 (0.824)	84	900413			13.28- 113.28	63.68
11.764	11.764 (0.824)	51	426975			0.00- 79.96	30.20
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	1064411	53.4054	53.405	80.00- 120.00	100.00
12.151	12.151 (0.851)	57	313341			0.00- 79.16	29.44
12.151	12.151 (0.851)	41	326431			0.00- 78.25	30.67
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.179	12.178 (0.853)	96	1083622	53.1636	53.164	80.00- 120.00	100.00
12.179	12.178 (0.853)	61	1721562			110.88- 210.88	158.87
12.179	12.178 (0.853)	98	689966			13.20- 113.20	63.67

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane						CAS #: 110-54-3		
12.566	12.565	(0.880)	57	2477435	52.7066	52.706	80.00- 120.00	100.00
12.566	12.565	(0.880)	43	1599393			16.42- 116.42	64.56
12.566	12.565	(0.880)	86	363284			0.00- 64.88	14.66
67 Vinyl Acetate						CAS #: 108-05-4		
13.063	13.063	(0.915)	86	300333	57.1238	57.124	80.00- 120.00	100.00
13.063	13.063	(0.915)	43	3625557			1256.82-1356.82	1207.18
68 1,1-Dichloroethane						CAS #: 75-34-3		
12.980	12.980	(0.909)	63	2197941	59.0396	59.040	80.00- 120.00	100.00
12.980	12.980	(0.909)	65	663372			0.00- 80.16	30.18
75 2-Butanone						CAS #: 78-93-3		
13.948	13.948	(0.977)	72	632518	56.0338	56.034	80.00- 120.00	100.00
13.920	13.920	(0.975)	43	3092928			435.93- 535.93	488.99
13.948	13.948	(0.977)	57	232921			0.00- 90.57	36.82
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.893	13.893	(0.973)	61	1760877	52.4433	52.443	80.00- 120.00	100.00
13.920	13.893	(0.975)	96	1261861			19.25- 119.25	71.66
13.920	13.920	(0.975)	98	789712			0.00- 93.96	44.85
78 Tetrahydrofuran						CAS #: 109-99-9		
14.252	14.252	(0.998)	42	1888094	43.5448	43.545	80.00- 120.00	100.00
14.252	14.252	(0.998)	71	597716			0.00- 81.61	31.66
14.252	14.252	(0.998)	72	646572			0.00- 82.78	34.24
81 Chloroform						CAS #: 67-66-3		
14.363	14.363	(1.006)	83	2469792	55.7221	55.722	80.00- 120.00	100.00
14.363	14.363	(1.006)	85	1540225			12.37- 112.37	62.36
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.584	14.584	(1.021)	97	2647521	56.9268	56.927	80.00- 120.00	100.00
14.584	14.584	(1.021)	99	1686565			14.06- 114.06	63.70
84 Cyclohexane						CAS #: 110-82-7		
14.584	14.584	(1.021)	84	2032971	52.4533	52.453	80.00- 120.00	100.00
14.584	14.556	(1.021)	56	2711905			84.82- 184.82	133.40
14.556	14.556	(1.019)	41	1418803			20.21- 120.21	69.79
85 Carbon Tetrachloride						CAS #: 56-23-5		
14.778	14.777	(1.035)	119	2361367	54.8952	54.895	80.00- 120.00	100.00
14.778	14.777	(1.035)	117	2416721			53.26- 153.26	102.34
88 2,2,4-Trimethylpentane						CAS #: 540-84-1		
15.109	15.109	(1.058)	57	8689832	52.5207	52.521	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.109	15.109 (1.058)	56	2801437			0.00- 83.07	32.24
15.109	15.109 (1.058)	41	2057418			0.00- 74.24	23.68
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	4423828	52.4591	52.459	80.00- 120.00	100.00
15.137	15.137 (0.961)	77	1011117			0.00- 73.68	22.86
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.247 (0.968)	62	1879235	53.8883	53.888	80.00- 120.00	100.00
15.248	15.247 (0.968)	64	590235			0.00- 83.51	31.41
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	1708186	52.1988	52.199	80.00- 120.00	100.00
15.358	15.358 (0.975)	43	3554954			162.65- 262.65	208.11
15.358	15.358 (0.975)	57	1836841			57.85- 157.85	107.53
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	1820181	52.6349	52.635	80.00- 120.00	100.00
16.132	16.132 (1.025)	130	1729947			46.07- 146.07	95.04
16.132	16.132 (1.025)	97	1165406			14.51- 114.51	64.03
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	1705705	50.7359	50.736	80.00- 120.00	100.00
16.575	16.575 (1.053)	62	1231671			20.20- 120.20	72.21
16.575	16.575 (1.053)	41	1022038			9.24- 109.24	59.92
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	1107908	51.0525	51.052	80.00- 120.00	100.00
16.713	16.713 (1.061)	58	897220			29.44- 129.44	80.98
16.713	16.713 (1.061)	57	275160			0.00- 75.70	24.84
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	2903702	53.5765	53.576	80.00- 120.00	100.00
16.962	16.962 (1.077)	85	1775830			10.80- 110.80	61.16
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	2469354	52.0784	52.078	80.00- 120.00	100.00
17.625	17.625 (1.119)	77	783931			0.00- 81.44	31.75
17.625	17.625 (1.119)	39	1370071			6.33- 106.33	55.48
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	1833284	54.1840	54.184	80.00- 120.00	100.00
17.791	17.791 (1.130)	43	4707682			210.27- 310.27	256.79
17.791	17.791 (1.130)	85	709086			0.00- 89.24	38.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	6289543	54.2250	54.225	80.00- 120.00	100.00
18.068	18.068 (1.147)	92	3798827			9.85- 109.85	60.40
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	2666771	52.9023	52.902	80.00- 120.00	100.00
18.427	18.427 (0.920)	77	838040			0.00- 81.66	31.43
18.427	18.427 (0.920)	39	1417987			3.26- 103.26	53.17
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	2078823	52.3422	52.342	80.00- 120.00	100.00
18.704	18.704 (0.934)	99	1291138			11.98- 111.98	62.11
18.704	18.704 (0.934)	83	1703756			32.85- 132.85	81.96
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	2464213	53.5600	53.560	80.00- 120.00	100.00
18.814	18.814 (0.939)	129	1906224			27.08- 127.08	77.36
18.814	18.814 (0.939)	131	1810246			23.86- 123.86	73.46
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	2772388	51.6184	51.618	80.00- 120.00	100.00
18.953	18.952 (0.946)	43	5035879			130.91- 230.91	181.64
18.980	18.980 (0.948)	100	537134			0.00- 69.73	19.37
121 Dibromochloromethane					CAS #: 124-48-1		
19.229	19.257 (0.960)	129	3027670	54.0772	54.077	80.00- 120.00	100.00
19.229	19.229 (0.960)	127	2345313			26.10- 126.10	77.46
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	3123591	53.4065	53.406	80.00- 120.00	100.00
19.450	19.450 (0.971)	109	2949619			44.88- 144.88	94.43
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.058 (1.001)	112	5467368	51.6894	51.689	80.00- 120.00	100.00
20.059	20.058 (1.001)	114	1723425			0.00- 81.48	31.52
20.059	20.058 (1.001)	77	3575053			13.99- 113.99	65.39
125 Ethyl Benzene					CAS #: 100-41-4		
20.142	20.141 (1.006)	106	3030608	52.2515	52.251	80.00- 120.00	100.00
20.142	20.141 (1.006)	91	9672587			273.94- 373.94	319.16
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	3861221	52.6709	52.671	80.00- 120.00	100.00
20.280	20.280 (1.012)	91	7703725			157.95- 257.95	199.52
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	3647367	52.0867	52.087	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	7665336			160.61- 260.61	210.16
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	5916078	50.3705	50.370	80.00- 120.00	100.00
20.833	20.833	(1.040)	78	2771804			0.00- 96.92	46.85
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	2834466	53.7638	53.764	80.00- 120.00	100.00
21.137	21.137	(1.055)	171	1468996			2.38- 102.38	51.83
134 Cumene						CAS #: 98-82-8		
21.248	21.247	(1.061)	105	11218800	57.9649	57.965	80.00- 120.00	100.00
21.248	21.247	(1.061)	120	2813345			0.00- 75.80	25.08
21.248	21.247	(1.061)	51	1147030			0.00- 60.85	10.22
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	4961519	47.9669	47.967	80.00- 120.00	100.00
21.662	21.662	(1.081)	85	3071844			12.08- 112.08	61.91
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	13665464	58.2465	58.246	80.00- 120.00	100.00
21.745	21.745	(1.086)	120	2913506			0.00- 73.27	21.32
21.745	21.745	(1.086)	105	480736			0.00- 55.00	3.52
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	11705669	56.2804	56.280	80.00- 120.00	100.00
21.883	21.883	(1.092)	120	3325749			0.00- 78.07	28.41
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	10343947	52.0611	52.061	80.00- 120.00	100.00
21.939	21.966	(1.095)	120	4693859			0.00- 94.49	45.38
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	8182890	52.0338	52.034	80.00- 120.00	100.00
22.409	22.409	(1.119)	120	3600190			0.00- 95.48	44.00
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.824	22.823	(1.139)	146	4654714	47.7667	47.767	80.00- 120.00	100.00
22.824	22.823	(1.139)	148	2895602			12.15- 112.15	62.21
22.824	22.823	(1.139)	111	1976428			0.00- 91.58	42.46
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	4690356	48.5365	48.536	80.00- 120.00	100.00
22.934	22.934	(1.145)	148	2949614			16.32- 116.32	62.89
22.934	22.934	(1.145)	111	1913556			0.00- 90.95	40.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	6954687	48.8514	48.851	80.00- 120.00	100.00
23.100	23.100 (1.153)	126	1372069			0.00- 69.46	19.73
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	3847656	45.1681	45.168	80.00- 120.00	100.00
23.404	23.404 (1.168)	148	2418956			12.70- 112.70	62.87
23.404	23.404 (1.168)	111	1691598			0.00- 93.70	43.96
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	1225425	33.9680	33.968	80.00- 120.00	100.00(R)
25.257	25.257 (1.261)	182	1158340			42.88- 142.88	94.53
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.339 (1.265)	225	913020	36.8768	36.877	80.00- 120.00	100.00
25.340	25.339 (1.265)	223	574742			14.77- 114.77	62.95
29 Isopentane					CAS #: 78-78-4		
8.308	8.307 (0.582)	43	1183830	49.4669	49.467	80.00- 120.00	100.00
8.308	8.307 (0.582)	57	812622			18.54- 118.54	68.64
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	158299	48.5592	48.559	80.00- 120.00	100.00
5.460	5.487 (0.382)	43	1206407			703.05- 803.05	762.11
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.353 (1.145)	83	2964186	53.6575	53.657	80.00- 120.00	100.00
16.354	16.353 (1.145)	98	1431426			0.00- 97.88	48.29
16.354	16.353 (1.145)	55	2743689			45.40- 145.40	92.56
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	931581	46.1457	46.146	80.00- 120.00	100.00
12.068	12.068 (0.845)	41	183276			0.00- 67.50	19.67
12.068	12.068 (0.845)	57	96263			0.00- 63.77	10.33

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051918.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->50ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	313340	0.67
95 1,4-Difluorobenze	1618588	971153	2266023	1657292	2.39
123 Chlorobenzene-d5	1862744	1117646	2607842	1876684	0.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 20-May-2008 11:41

Air Toxics Ltd.

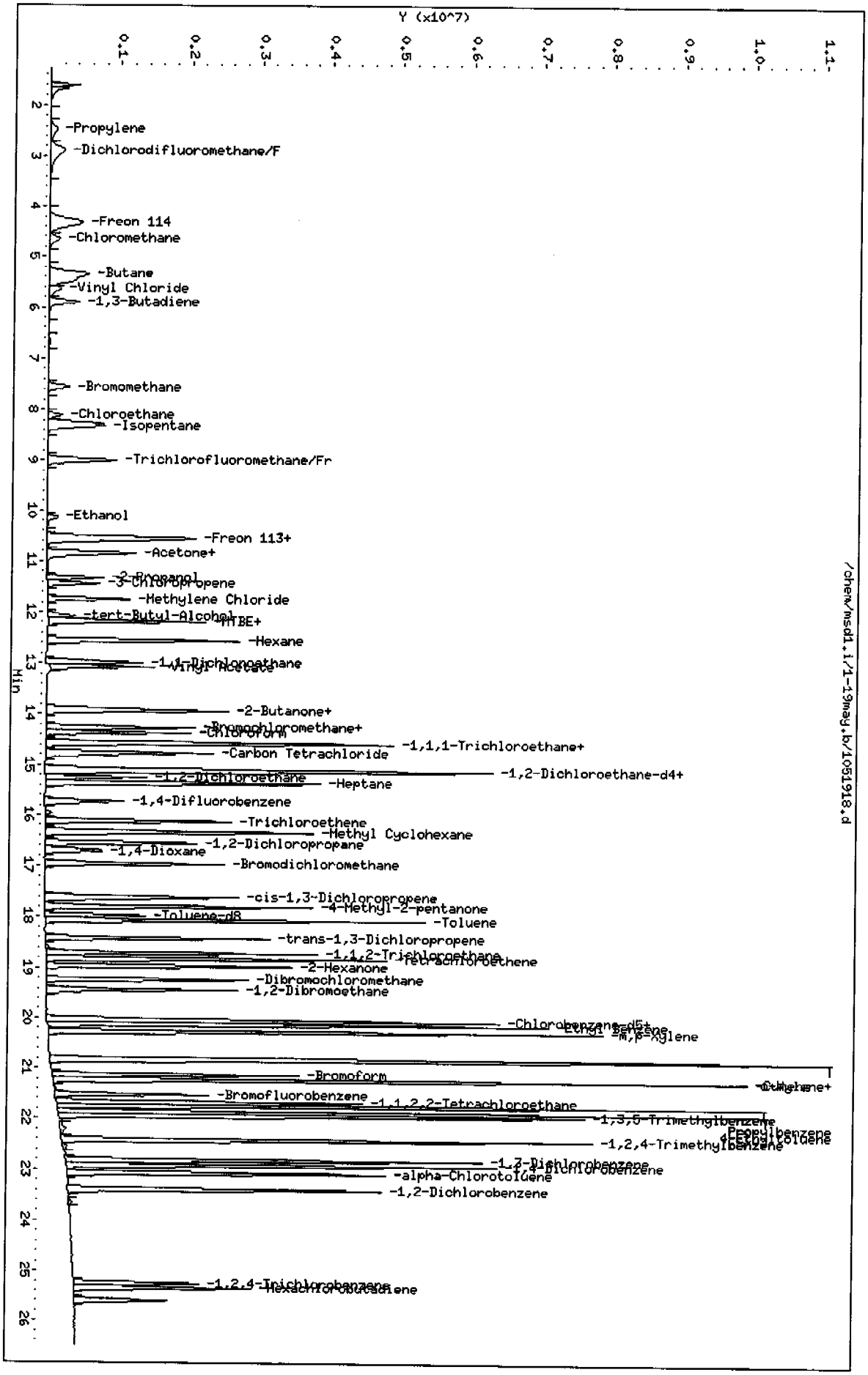
RECOVERY REPORT

Client Name:
Client SDG: 1-19may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: kr
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: AT08.sub
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	52.280	104.56	60-140
14 Dichlorodifluorome	50.000	49.832	99.66	70-130
17 Freon 114	50.000	49.278	98.56	70-130
21 Chloromethane	50.000	48.128	96.26	70-130
23 Vinyl Chloride	50.000	47.961	95.92	70-130
24 1,3-Butadiene	50.000	48.848	97.70	60-140
26 Bromomethane	50.000	54.790	109.58	70-130
28 Chloroethane	50.000	50.646	101.29	70-130
34 Trichlorofluoromet	50.000	51.278	102.56	70-130
38 Ethanol	50.000	55.118	110.24	60-140
43 Freon 113	50.000	57.294	114.59	70-130
44 1,1-Dichloroethene	50.000	54.262	108.52	70-130
45 Acetone	50.000	49.367	98.73	60-140
48 Carbon Disulfide	50.000	49.740	99.48	60-140
46 2-Propanol	50.000	52.640	105.28	60-140
54 Methylene Chloride	50.000	50.616	101.23	70-130
58 MTBE	50.000	53.405	106.81	60-140
59 trans-1,2-Dichloro	50.000	53.164	106.33	60-140
64 Hexane	50.000	52.706	105.41	60-140
67 Vinyl Acetate	50.000	57.124	114.25	60-140
68 1,1-Dichloroethane	50.000	59.040	118.08	70-130
76 cis-1,2-Dichloroet	50.000	52.443	104.89	70-130
75 2-Butanone	50.000	56.034	112.07	60-140
78 Tetrahydrofuran	50.000	43.545	87.09	60-140
81 Chloroform	50.000	55.722	111.44	70-130
84 Cyclohexane	50.000	52.453	104.91	60-140
83 1,1,1-Trichloroeth	50.000	56.927	113.85	70-130
85 Carbon Tetrachlori	50.000	54.895	109.79	70-130
91 Benzene	50.000	52.459	104.92	70-130
93 1,2-Dichloroethane	50.000	53.888	107.78	70-130
94 Heptane	50.000	52.199	104.40	60-140
97 Trichloroethene	50.000	52.635	105.27	70-130
102 1,2-Dichloropropan	50.000	50.736	101.47	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	51.052	102.10	60-140
106 Bromodichlorometha	50.000	53.576	107.15	60-140
109 cis-1,3-Dichloropr	50.000	52.078	104.16	70-130
110 4-Methyl-2-pentano	50.000	54.184	108.37	60-140
114 Toluene	50.000	54.225	108.45	70-130
115 trans-1,3-Dichloro	50.000	52.902	105.80	70-130
116 1,1,2-Trichloroeth	50.000	52.342	104.68	70-130
117 Tetrachloroethene	50.000	53.560	107.12	70-130
118 2-Hexanone	50.000	51.618	103.24	60-140
121 Dibromochlorometha	50.000	54.077	108.15	60-140
122 1,2-Dibromoethane	50.000	53.406	106.81	70-130
124 Chlorobenzene	50.000	51.689	103.38	70-130
125 Ethyl Benzene	50.000	52.251	104.50	70-130
128 m,p-Xylene	50.000	52.671	105.34	70-130
130 o-Xylene	50.000	52.087	104.17	70-130
131 Styrene	50.000	50.370	100.74	70-130
133 Bromoform	50.000	53.764	107.53	60-140
138 1,1,2,2-Tetrachlor	50.000	47.967	95.93	70-130
144 4-Ethyltoluene	50.000	56.280	112.56	60-140
146 1,3,5-Trimethylben	50.000	52.061	104.12	70-130
152 1,2,4-Trimethylben	50.000	52.034	104.07	70-130
158 1,3-Dichlorobenzen	50.000	47.767	95.53	70-130
159 1,4-Dichlorobenzen	50.000	48.536	97.07	70-130
162 alpha-Chlorotoluen	50.000	48.851	97.70	70-130
164 1,2-Dichlorobenzen	50.000	45.168	90.34	70-130
169 1,2,4-Trichloroben	50.000	33.968	67.94*	70-130
170 Hexachlorobutadien	50.000	36.877	73.75	70-130
140 Propylbenzene	50.000	58.246	116.49	60-140
134 Cumene	50.000	57.965	115.93	60-140
50 3-Chloropropene	50.000	52.498	105.00	60-140
88 2,2,4-Trimethylpen	50.000	52.521	105.04	60-140
29 Isopentane	50.000	49.467	98.93	70-130
22 Butane	50.000	48.559	97.12	70-130
99 Methyl Cyclohexane	50.000	53.657	107.31	70-130
57 tert-Butyl-Alcohol	50.000	46.146	92.29	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.833	99.33	70-130
$ 111 Toluene-d8	25.000	24.831	99.32	70-130
$ 136 Bromofluorobenzene	25.000	24.912	99.65	70-130



Data File: /chem/msd1.i/1-19may.b/1051918.d
Date : 19-MAY-2008 20:33
Client ID: LCS
Sample Info: 25mL #1541-138
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051909.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 19-MAY-2008 13:23
Operator : lo
Inst ID: msd1.i
Smp Info : 5.0mL #1541-167
Misc Info : 5ppbv ->0.25ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 13:23
Cal File: 1051909.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
**	======= ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	316548	25.0000		50.00- 150.00		100.00
14.280	14.280 (1.000)	128	243697			26.99- 126.99		76.99
14.252	14.252 (1.000)	49	583201			134.24- 234.24		184.24
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1595090	25.0000		50.00- 150.00		100.00
15.745	15.745 (1.000)	88	258069			0.00- 66.18		16.18
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1814026	25.0000		50.00- 150.00		100.00
20.031	20.031 (1.000)	82	1064226			8.67- 108.67		58.67
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	501394	25.0000	25.000	50.00- 150.00		100.00
15.137	15.137 (1.060)	67	256177			1.09- 101.09		51.09
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1818335	25.0000	25.000	50.00- 150.00		100.00
17.985	17.985 (1.142)	70	187819			0.00- 60.33		10.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1180495			14.92- 114.92	64.92
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	951928	25.0000	25.000	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1516671			109.33- 209.33	159.33
21.524	21.524 (1.075)	176	910867			45.69- 145.69	95.69
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	3394	0.25000	0.2500	50.00- 150.00	100.00
5.874	5.874 (0.411)	39	2969			37.48- 137.48	87.48
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	8938	0.25000	0.2500	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	6086			18.09- 118.09	68.09
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	19939	0.25000	0.2500	50.00- 150.00	100.00
15.137	15.137 (0.961)	77	5108			0.00- 75.62	25.62
131 Styrene					CAS #: 100-42-5		
20.860	20.860 (1.041)	104	30919	0.25000	0.2500	50.00- 150.00	100.00
20.833	20.833 (1.040)	78	14065			0.00- 95.49	45.49
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	37439	0.25000	0.2500	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	11094			0.00- 79.63	29.63
21.247	21.247 (1.061)	51	4793			0.00- 62.80	12.80
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	10697	0.25000	0.2500	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	10320			46.48- 146.48	96.48
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	32914	0.25000	0.2500	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	17731			3.87- 103.87	53.87
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	40564	0.25000	0.2500	50.00- 150.00	100.00
21.939	21.939 (1.095)	120	17175			0.00- 92.34	42.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051909.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->0.25ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 13:23
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	316548	189929	443167	316548	0.00
95 1,4-Difluorobenze	1595090	957054	2233126	1595090	0.00
123 Chlorobenzene-d5	1814026	1088416	2539636	1814026	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

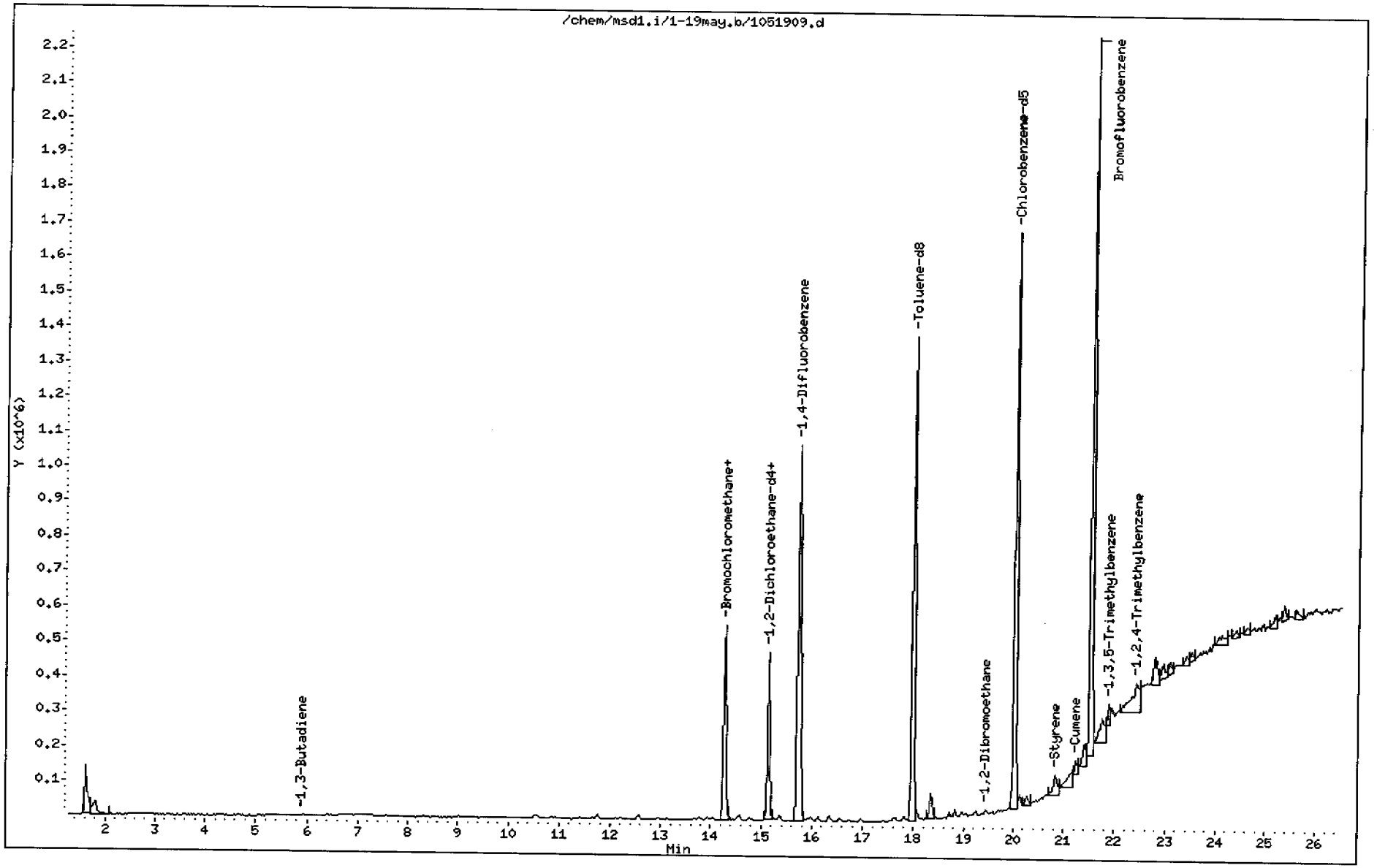
Data File: /chem/msd1.i/1-19may.b/1051909.d
Date : 19-MAY-2008 13:23
Client ID: Level 1
Sample Info: 5.0mL #1541-167

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0083



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051910.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 19-MAY-2008 13:56
Operator : lo
Inst ID: msd1.i
Smp Info : 10mL #1541-167
Misc Info : 5ppbv ->0.5ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 13:56
Cal File: 1051910.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08low.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	******* ********	****	********		*******	*******	**********	*****
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	303948	25.0000			50.00- 150.00	100.00
14.280	14.280 (1.000)	128	235042				27.16- 127.16	77.33
14.252	14.252 (1.000)	49	553447				133.16- 233.16	182.09
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1572292	25.0000			50.00- 150.00	100.00
15.745	15.745 (1.000)	88	256139				0.00- 66.23	16.29
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1814856	25.0000			50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1057184				8.46- 108.46	58.25
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	490524	25.0000	25.234		50.00- 150.00	100.00
15.137	15.137 (1.060)	67	247224				0.75- 100.75	50.40
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1783580	25.0000	24.939		50.00- 150.00	100.00
17.985	17.985 (1.142)	70	184946				0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1174395			15.38- 115.38	65.84
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	954080	25.0000	25.022	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1520994			109.37- 209.37	159.42
21.524	21.524 (1.075)	176	913795			45.73- 145.73	95.78
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	16805	0.50000	0.5000	50.00- 150.00	100.00(M)
2.861	2.861 (0.200)	87	1519			0.00- 59.04	9.04
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	10181	0.50000	0.5000	50.00- 150.00	100.00(M)
4.381	4.381 (0.307)	137	3331			0.00- 82.72	32.72
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	8513	0.50000	0.5000	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	2524			0.00- 79.65	29.65
24 1,3-Butadiene					CAS #: 106-99-0		
5.930	5.930 (0.415)	54	5015	0.50000	0.4348	50.00- 150.00	100.00(a)
5.930	5.930 (0.415)	39	2579			19.45- 119.45	51.43
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	3933	0.50000	0.5000	50.00- 150.00	100.00
7.561	7.561 (0.529)	96	5710			95.18- 195.18	145.18
28 Chloroethane					CAS #: 75-00-3		
8.142	8.142 (0.570)	64	4221	0.50000	0.5000	50.00- 150.00	100.00
0.000	1.000 (0.000)	49	0			0.00- 50.00	0.00
0.000	1.000 (0.000)	66	0			0.00- 50.00	0.00
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	19030	0.50000	0.5000	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	13373			20.27- 120.27	70.27
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	9841	0.50000	0.5000	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	6923			20.35- 120.35	70.35
10.575	10.575 (0.741)	101	13023			82.33- 182.33	132.33
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	15334	0.50000	0.5000	50.00- 150.00	100.00
10.547	10.547 (0.739)	96	10304			17.20- 117.20	67.20
10.547	10.547 (0.739)	98	4478			0.00- 79.20	29.20

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	23647	0.50000	0.5000	50.00- 150.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.764	11.764	(0.824)	49	17283	0.50000	0.5000	50.00- 150.00	100.00
11.764	11.764	(0.824)	84	9038			2.29- 102.29	52.29
11.764	11.764	(0.824)	51	4791			0.00- 77.72	27.72
58 MTBE						CAS #: 1634-04-4		
12.178	12.178	(0.853)	73	9663	0.50000	0.5000	50.00- 150.00	100.00
12.178	12.178	(0.853)	57	2083			0.00- 71.56	21.56
12.151	12.151	(0.851)	41	2524			0.00- 76.12	26.12
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.206	12.206	(0.855)	96	7846	0.50000	0.5000	50.00- 150.00	100.00
12.206	12.206	(0.855)	61	13640			123.85- 223.85	173.85
12.206	12.206	(0.855)	98	4840			11.69- 111.69	61.69
64 Hexane						CAS #: 110-54-3		
12.566	12.566	(0.880)	57	20491	0.50000	0.5000	50.00- 150.00	100.00
12.566	12.566	(0.880)	43	14912			22.77- 122.77	72.77
12.566	12.566	(0.880)	86	2979			0.00- 64.54	14.54
68 1,1-Dichloroethane						CAS #: 75-34-3		
12.980	12.980	(0.909)	63	10654	0.50000	0.5000	50.00- 150.00	100.00
12.980	12.980	(0.909)	65	3505			0.00- 82.90	32.90
75 2-Butanone						CAS #: 78-93-3		
13.948	13.948	(0.977)	72	3555	0.50000	0.5000	50.00- 150.00	100.00
13.948	13.948	(0.977)	43	22469			582.04- 682.04	632.04
13.976	13.976	(0.979)	57	1581			0.00- 94.47	44.47
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.920	13.920	(0.975)	61	13947	0.50000	0.5000	50.00- 150.00	100.00
13.920	13.920	(0.975)	96	10152			22.79- 122.79	72.79
13.920	13.920	(0.975)	98	5739			0.00- 91.15	41.15
78 Tetrahydrofuran						CAS #: 109-99-9		
14.280	14.280	(1.000)	42	32393	0.50000	0.5000	50.00- 150.00	100.00
14.280	14.280	(1.000)	71	9751			0.00- 80.10	30.10
14.280	14.280	(1.000)	72	9413			0.00- 79.06	29.06
81 Chloroform						CAS #: 67-66-3		
14.363	14.363	(1.006)	83	17890	0.50000	0.5103	50.00- 150.00	100.00
14.363	14.363	(1.006)	85	10909			14.53- 114.53	60.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	15078	0.50000	0.5000	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	7175			0.00- 97.59	47.59
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	17329	0.50000	0.5000	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	20367			67.53- 167.53	117.53
14.584	14.584 (1.021)	41	15870			41.58- 141.58	91.58
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	16514	0.50000	0.5000	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	15571			44.29- 144.29	94.29
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	35253	0.50000	0.4728	50.00- 150.00	100.00(a)
15.137	15.137 (0.961)	77	8563			0.00- 74.95	24.29
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	66434	0.50000	0.5000	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	23566			0.00- 85.47	35.47
15.109	15.109 (1.058)	41	16773			0.00- 75.25	25.25
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	12749	0.50000	0.5000	50.00- 150.00	100.00
15.275	15.275 (0.970)	64	4776			0.00- 87.46	37.46
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	13263	0.50000	0.5000	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	30245			178.04- 278.04	228.04
15.358	15.358 (0.975)	57	13983			55.43- 155.43	105.43
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	14283	0.50000	0.5000	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	12656			38.61- 138.61	88.61
16.132	16.132 (1.025)	97	9182			14.29- 114.29	64.29
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	14186	0.50000	0.5000	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	9549			17.31- 117.31	67.31
16.575	16.575 (1.053)	41	8942			13.03- 113.03	63.03
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	19481	0.50000	0.5000	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	12266			12.96- 112.96	62.96
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	19161	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
109 cis-1,3-Dichloropropene (continued)							
17.625	17.625 (1.119)	77	7196			0.00- 87.56	37.56
17.625	17.625 (1.119)	39	9350			0.00- 98.80	48.80
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	12498	0.50000	0.5000	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	33327			216.66- 316.66	266.66
17.819	17.819 (1.132)	85	5761			0.00- 96.10	46.10
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	47240	0.50000	0.5000	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	30199			13.93- 113.93	63.93
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	18395	0.50000	0.5000	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	8532			0.00- 96.38	46.38
18.427	18.427 (0.920)	39	10430			6.70- 106.70	56.70
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	16704	0.50000	0.5000	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	9584			7.38- 107.38	57.38
18.704	18.704 (0.934)	83	12543			25.09- 125.09	75.09
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	19051	0.50000	0.5000	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	14224			24.66- 124.66	74.66
18.814	18.814 (0.939)	131	13457			20.64- 120.64	70.64
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	20493	0.50000	0.5000	50.00- 150.00	100.00
19.257	19.257 (0.961)	127	14911			22.76- 122.76	72.76
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	22545	0.50000	0.5130	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	24662			52.93- 152.93	109.39
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	41947	0.50000	0.5000	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	14285			0.00- 84.05	34.05
20.059	20.059 (1.001)	77	41302			48.46- 148.46	98.46
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	21616	0.50000	0.5000	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	72567			285.71- 385.71	335.71
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	25933	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
128 m,p-Xylene (continued)							
20.280	20.280 (1.012)	91	61636			187.67- 287.67	237.67
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	28485	0.50000	0.5000	50.00- 150.00	100.00
20.805	20.805 (1.039)	91	61432			165.66- 265.66	215.66
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	51362	0.50000	0.4536	50.00- 150.00	100.00(a)
20.833	20.833 (1.040)	78	24656			0.00- 96.75	48.00
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	20364	0.50000	0.5000	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	8842			0.00- 93.42	43.42
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	84368	0.50000	0.5297	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	20564			0.00- 77.00	24.37
21.247	21.247 (1.061)	51	8944			0.00- 61.70	10.60
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.690	21.690 (1.083)	83	56535	0.50000	0.5000	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	32888			8.17- 108.17	58.17
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	103578	0.50000	0.5000	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	26850			0.00- 75.92	25.92
21.745	21.745 (1.086)	105	10347			0.00- 59.99	9.99
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	85660	0.50000	0.5000	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	25692			0.00- 79.99	29.99
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.966	21.966 (1.097)	105	83773	0.50000	0.5079	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	36740			0.00- 93.10	43.86
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	70351	0.50000	0.5165	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	29165			0.00- 97.66	41.46
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	46711	0.50000	0.5000	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	28503			11.02- 111.02	61.02
22.823	22.823 (1.139)	111	17470			0.00- 87.40	37.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	38849	0.50000	0.5000	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	30572			28.69- 128.69	78.69
22.934	22.934 (1.145)	111	16551			0.00- 92.60	42.60
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	70529	0.50000	0.5000	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	12871			0.00- 68.25	18.25
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	45216	0.50000	0.5000	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	27214			10.19- 110.19	60.19
23.404	23.404 (1.168)	111	19685			0.00- 93.54	43.54
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	30459	0.50000		0.00- 50.00	100.00(a)
25.257	25.257 (1.261)	182	27093			38.95- 138.95	88.95
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	19054	0.50000		0.00- 50.00	100.00(a)
25.340	25.340 (1.265)	223	13056			18.52- 118.52	68.52
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	21581	0.50000	0.5000	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	10737			0.00- 99.75	49.75
16.354	16.354 (1.145)	55	23108			57.08- 157.08	107.08
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.095	12.095 (0.847)	59	12809	0.50000	0.5000	50.00- 150.00	100.00
12.095	12.095 (0.847)	41	1828			0.00- 64.27	14.27
12.178	12.178 (0.853)	57	2083			0.00- 66.26	16.26

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051910.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->0.5ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 13:56
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	303948	182369	425527	303948	0.00
95 1,4-Difluorobenze	1572292	943375	2201209	1572292	0.00
123 Chlorobenzene-d5	1814856	1088914	2540798	1814856	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

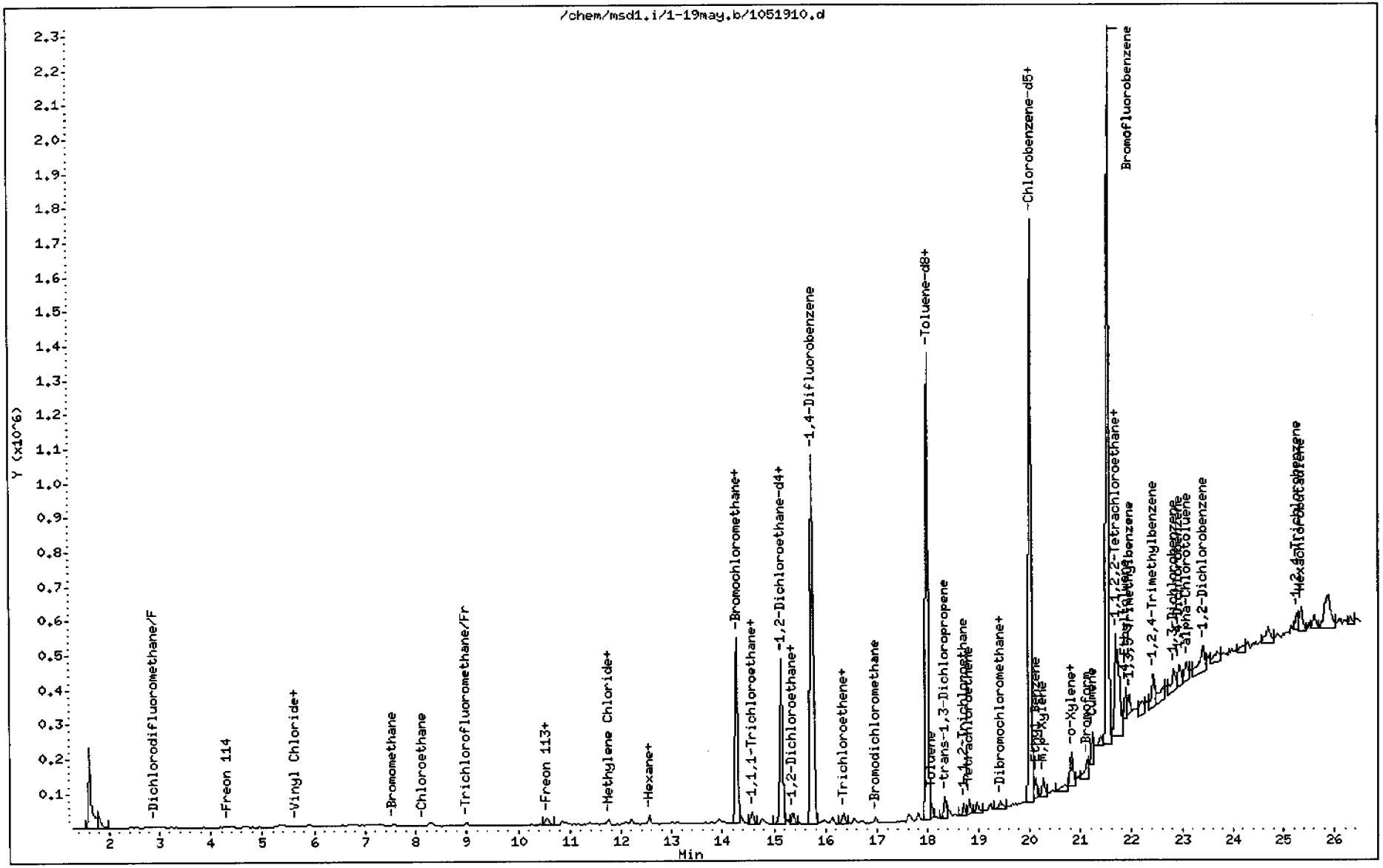
0092

Data File: /chem/msd1.i/1-19may.b/1051910.d
Date : 19-MAY-2008 13:56
Client ID: Level 2
Sample Info: 10mL #1541-167

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052003.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 20-MAY-2008 09:45
Operator : lo
Inst ID: msd1.i
Smp Info : 1.0mL #1541-142
Misc Info : 200ppbv ->2.0ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 09:45
Cal File: 1052003.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	305805	25.0000		50.00- 150.00	100.00
14.255	14.255 (1.000)	128	242476			28.24- 128.24	79.29
14.255	14.255 (1.000)	49	566293			133.94- 233.94	185.18
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1590850	25.0000		50.00- 150.00	100.00
15.720	15.720 (1.000)	88	249808			0.00- 65.99	15.70
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1798258	25.0000		50.00- 150.00	100.00
20.006	20.006 (1.000)	82	1053360			8.42- 108.42	58.58
19 Freon142b					CAS #: 75-68-3		
4.608	4.608 (0.323)	65	45706	2.00000	1.769	50.00- 150.00	100.00(a)
4.608	4.608 (0.323)	45	11963			0.00- 75.41	26.17
9 Freon 134a					CAS #: 811-97-2		
2.383	2.383 (0.167)	83	9664	2.00000	1.615	50.00- 150.00	100.00(a)
2.439	2.439 (0.171)	69	8503			32.58- 132.58	87.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
0.000	1.000 (0.000)	63	0			0.00- 58.36	0.00
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.191)	65	10499	2.00000	1.853	50.00- 150.00	100.00(aM)
2.721	2.721 (0.191)	51	25163			172.46- 272.46	239.67
2.749	2.749 (0.193)	47	4823			0.63- 100.63	45.94
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	38452	2.00000	1.874	50.00- 150.00	100.00(a)
3.425	3.425 (0.240)	67	5690			0.00- 65.39	14.80
0.000	1.000 (0.000)	85	0			0.00- 51.20	0.00
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.548)	31	141222	12.0000	29.076	50.00- 150.00	100.00(a)
7.818	7.818 (0.548)	32	216708			64.72- 164.72	153.45
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.167	9.167 (0.643)	67	38215	2.00000	1.570	50.00- 150.00	100.00(a)
9.167	9.167 (0.643)	69	10866			0.00- 79.81	28.43
9.167	9.167 (0.643)	35	2302			0.00- 55.10	6.02
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.728)	117	16848	2.00000	1.538	50.00- 150.00	100.00(a)
10.356	10.356 (0.726)	67	25452			96.88- 196.88	151.07
41 Freon123					CAS #: 306-83-2		
10.550	10.550 (0.740)	83	2903	2.00000	1.561	50.00- 150.00	100.00(a)
0.000	1.000 (0.000)	133	0			0.00- 73.50	0.00
10.550	10.550 (0.740)	85	1547			10.10- 110.10	53.29
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.911)	45	119379	2.00000	1.482	50.00- 150.00	100.00(a)
13.011	13.011 (0.913)	87	25714			0.00- 71.33	21.54
13.011	13.011 (0.913)	59	12255			0.00- 60.24	10.27
69 1-Propanol					CAS #: 71-23-8		
13.232	13.232 (0.928)	42	5537	2.00000	1.420	50.00- 150.00	100.00(a)
13.232	13.232 (0.928)	59	4215			47.04- 147.04	76.12
13.232	13.232 (0.928)	41	3418			14.12- 114.12	61.73
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.536	13.536 (0.950)	59	54378	2.00000	1.610	50.00- 150.00	100.00(a)
13.536	13.536 (0.950)	87	19755			0.00- 86.33	36.33
13.536	13.536 (0.950)	41	13615			0.00- 70.48	25.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.978	13.978 (0.981)	45	12255	2.00000	1.488	50.00- 150.00	100.00(a)
13.978	13.978 (0.981)	61	10459			36.81- 136.81	85.34
13.978	13.978 (0.981)	43	80613			616.84- 716.84	657.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.222	15.222 (1.068)	73	63838	2.00000	1.666	50.00- 150.00	100.00(a)
15.222	15.222 (1.068)	87	15654			0.00- 73.95	24.52
15.222	15.222 (1.068)	55	20268			0.00- 80.63	31.75
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.467)	58	97383	2.00000	1.486	50.00- 150.00	100.00(a)
20.918	20.918 (1.467)	43	138911			99.63- 199.63	142.64
96 1-Butanol					CAS #: 71-36-3		
15.969	15.969 (1.014)	56	30255	2.00000	1.487	50.00- 150.00	100.00(a)
15.969	15.969 (1.014)	41	23114			20.92- 120.92	76.40
15.969	15.969 (1.014)	43	16994			4.89- 104.89	56.17
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	57644	2.00000	1.412	50.00- 150.00	100.00(a)
19.066	19.066 (1.211)	73	25792			0.00- 87.23	44.74
19.066	19.066 (1.211)	43	136176			180.18- 280.18	236.24
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.073)	55	78497	2.00000	1.529	50.00- 150.00	100.00(a)
21.471	21.471 (1.073)	98	32591			0.00- 90.24	41.52
21.471	21.471 (1.073)	42	55499			17.74- 117.74	70.70
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.104)	57	194861	2.00000	1.690	50.00- 150.00	100.00(a)
22.080	22.080 (1.104)	85	153236			28.61- 128.61	78.64
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052003.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->2.0ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	305805	-2.01
95 1,4-Difluorobenze	1622087	973252	2270922	1590850	-1.93
123 Chlorobenzene-d5	1805786	1083472	2528100	1798258	-0.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.25	-0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

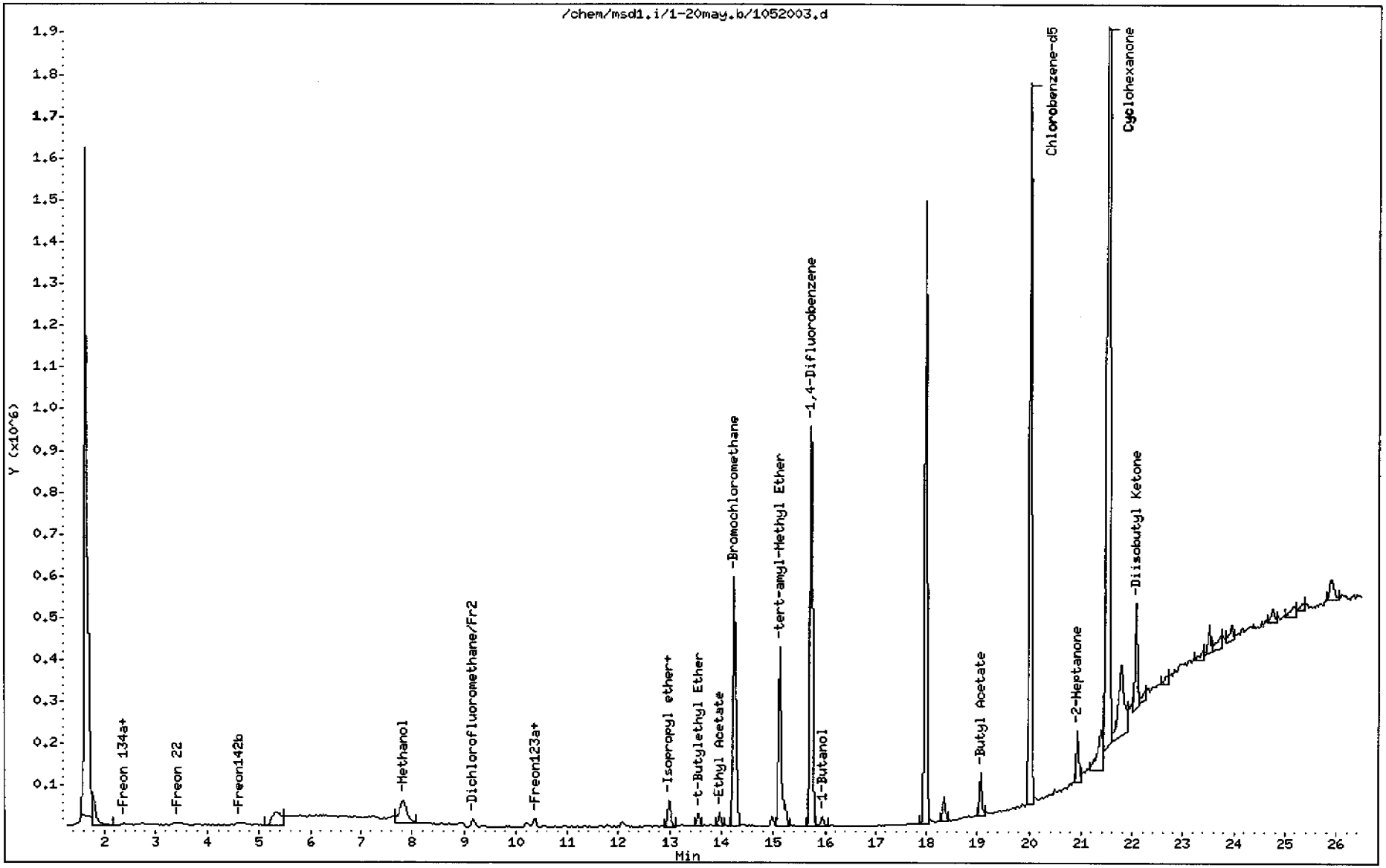
Data File: /chem/msd1.i/1-20may.b/1052003.d
Date : 20-MAY-2008 09:45
Client ID: Level 3
Sample Info: 1.0mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0097



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051911.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 19-MAY-2008 14:29
Operator : lo Inst ID: msd1.i
Smp Info : 40mL #1541-167
Misc Info : 5ppbv ->2.0ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover Quant Type: ISTD
Cal Date : 19-MAY-2008 14:29 Cal File: 1051911.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	======= ========	====	========	=======	========	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	295507	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	222617			26.55- 126.55	75.33
14.252	14.252 (1.000)	49	542213			133.27- 233.27	183.49
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1523302	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	239685			0.00- 66.07	15.73
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1736378	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1018299			8.52- 108.52	58.65
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	481977	25.0000	25.333	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	251948			1.26- 101.26	52.27
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1726349	25.0000	24.943	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	178478			0.00- 60.35	10.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1116896			15.15- 115.15	64.70
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	912499	25.0000	25.009	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1438409			108.79- 208.79	157.63
21.524	21.524 (1.075)	176	860584			45.26- 145.26	94.31
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	11267	2.00000	2.000	50.00- 150.00	100.00(M)
2.501	2.501 (0.175)	42	7531			16.84- 116.84	66.84
2.474	2.474 (0.173)	39	12464			60.62- 160.62	110.62
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	60533	2.00000	1.923	50.00- 150.00	100.00
2.861	2.861 (0.200)	87	12609			0.00- 64.93	20.83
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	43882	2.00000	2.103	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	8882			0.00- 76.48	20.24
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	31293	2.00000	2.000	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	8280			0.00- 76.46	26.46
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	31469	2.00000	1.949	50.00- 150.00	100.00
5.598	5.598 (0.392)	64	4746			0.00- 72.37	15.08
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	21903	2.00000	1.969	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	20719			27.83- 127.83	94.59
26 Bromomethane					CAS #: 74-83-9		
7.561	7.561 (0.529)	94	16737	2.00000	2.090	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	16641			72.30- 172.30	99.43
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	14836	2.00000	1.899	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	4268			0.00- 78.77	28.77
8.142	8.142 (0.570)	66	5234			0.00- 85.28	35.28
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	80575	2.00000	2.085	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	54803			19.14- 119.14	68.01

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.215	10.215	(0.715)	45	9083	2.00000	2.000	50.00- 150.00	100.00
10.188	10.188	(0.713)	43	3886			0.00- 92.78	42.78
10.243	10.243	(0.717)	46	4591			0.54- 100.54	50.54
43 Freon 113						CAS #: 76-13-1		
10.575	10.575	(0.741)	151	43540	2.00000	2.129	50.00- 150.00	100.00
10.575	10.575	(0.741)	153	27015			16.20- 116.20	62.05
10.575	10.575	(0.741)	101	60679			85.85- 185.85	139.36
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.519	10.519	(0.737)	61	64360	2.00000	2.076	50.00- 150.00	100.00
10.519	10.519	(0.737)	96	36282			11.79- 111.79	56.37
10.519	10.519	(0.737)	98	19405			0.00- 79.68	30.15
45 Acetone						CAS #: 67-64-1		
10.907	10.907	(0.764)	58	22666	2.00000	2.000	50.00- 150.00	100.00
10.907	10.907	(0.764)	43	73341			273.57- 373.57	323.57
46 2-Propanol						CAS #: 67-63-0		
11.349	11.349	(0.795)	45	69769	2.00000	2.000	50.00- 150.00	100.00
11.349	11.349	(0.795)	43	12855			0.00- 68.43	18.43
11.349	11.349	(0.795)	59	2725			0.00- 53.91	3.91
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	106115	2.00000	2.143	50.00- 150.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.460	11.460	(0.802)	76	6164	2.00000	2.000	50.00- 150.00	100.00
11.460	11.460	(0.802)	41	19762			270.60- 370.60	320.60
54 Methylene Chloride						CAS #: 75-09-2		
11.764	11.764	(0.824)	49	48816	2.00000	1.683	50.00- 150.00	100.00
11.764	11.764	(0.824)	84	30499			7.39- 107.39	62.48
11.764	11.764	(0.824)	51	15797			0.00- 80.04	32.36
58 MTBE						CAS #: 1634-04-4		
12.178	12.178	(0.853)	73	42468	2.00000	2.122	50.00- 150.00	100.00
12.178	12.178	(0.853)	57	12729			0.00- 75.76	29.97
12.178	12.178	(0.853)	41	12694			0.00- 78.01	29.89
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.178	(0.853)	96	38591	2.00000	2.234	50.00- 150.00	100.00
12.178	12.178	(0.853)	61	62386			117.75- 217.75	161.66
12.178	12.178	(0.853)	98	24528			12.62- 112.62	63.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	86849	2.00000	2.086	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	58532			20.08- 120.08	67.40
12.566	12.566 (0.880)	86	14149			0.00- 65.41	16.29
67 Vinyl Acetate					CAS #: 108-05-4		
13.091	13.091 (0.917)	86	7020	2.00000	2.000	50.00- 150.00	100.00
13.091	13.091 (0.917)	43	99958			1373.90-1473.90	1423.90
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	59967	2.00000	2.366	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	19246			0.00- 82.50	32.09
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	20022	2.00000	2.366	50.00- 150.00	100.00
13.948	13.948 (0.977)	43	99342			514.10- 614.10	496.16
13.948	13.948 (0.977)	57	9409			0.00- 95.73	46.99
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.920	13.920 (0.975)	61	61731	2.00000	2.129	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	47334			24.73- 124.73	76.68
13.920	13.920 (0.975)	98	28085			0.00- 93.32	45.50
78 Tetrahydrofuran					CAS #: 109-99-9		
14.280	14.280 (1.000)	42	79982	2.00000	1.553	50.00- 150.00	100.00
14.280	14.280 (1.000)	71	25276			0.00- 80.85	31.60
14.280	14.280 (1.000)	72	27955			0.00- 82.01	34.95
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	83567	2.00000	2.280	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	54778			14.87- 114.87	65.55
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	79094	2.00000	2.297	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	51528			6.37- 106.37	65.15
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	71725	2.00000	2.062	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	95068			75.04- 175.04	132.55
14.584	14.584 (1.021)	41	51636			31.79- 131.79	71.99
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	76508	2.00000	2.175	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	80519			49.77- 149.77	105.24
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	153176	2.00000	2.079	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	36177			0.00- 74.51	23.62
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	305901	2.00000	2.168	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	103028			0.00- 84.58	33.68
15.109	15.109 (1.058)	41	77250			0.00- 75.25	25.25
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	62526	2.00000	2.234	50.00- 150.00	100.00
15.248	15.248 (0.968)	64	22369			0.00- 86.62	35.78
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	60374	2.00000	2.160	50.00- 150.00	100.00
15.386	15.386 (0.977)	43	123577			166.36- 266.36	204.69
15.386	15.386 (0.977)	57	64045			55.75- 155.75	106.08
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	62244	2.00000	2.117	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	56845			39.97- 139.97	91.33
16.132	16.132 (1.025)	97	37619			12.36- 112.36	60.44
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	60813	2.00000	2.101	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	41579			17.84- 117.84	68.37
16.575	16.575 (1.053)	41	37810			12.60- 112.60	62.17
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	38752	2.00000	2.000	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	32752			34.52- 134.52	84.52
16.713	16.713 (1.061)	57	10790			0.00- 77.84	27.84
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	94219	2.00000	2.221	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	55747			11.07- 111.07	59.17
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	80045	2.00000	2.075	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	28431			0.00- 86.54	35.52
17.625	17.625 (1.119)	39	45932			3.09- 103.09	57.38
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	58539	2.00000	2.189	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	153936			214.81- 314.81	262.96
17.819	17.819 (1.132)	85	21961			0.00- 91.81	37.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	206809	2.00000	2.122	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	129436			13.26- 113.26	62.59
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	87496	2.00000	2.216	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	30362			0.00- 90.54	34.70
18.427	18.427 (0.920)	39	47683			5.60- 105.60	54.50
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	71980	2.00000	2.118	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	44345			9.49- 109.49	61.61
18.704	18.704 (0.934)	83	61670			30.38- 130.38	85.68
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	83474	2.00000	2.135	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	67167			27.56- 127.56	80.46
18.814	18.814 (0.939)	131	64772			24.12- 124.12	77.60
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	86118	2.00000	2.000	50.00- 150.00	100.00
18.980	18.980 (0.948)	43	159846			135.61- 235.61	185.61
18.980	18.980 (0.948)	100	17227			0.00- 70.00	20.00
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	92186	2.00000	2.161	50.00- 150.00	100.00
19.257	19.257 (0.961)	127	70449			24.59- 124.59	76.42
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	108750	2.00000	2.356	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	99604			49.15- 149.15	91.59
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	195695	2.00000	2.197	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	60539			0.00- 82.50	30.94
20.059	20.059 (1.001)	77	134057			33.48- 133.48	68.50
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	106380	2.00000	2.250	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	335328			275.46- 375.46	315.22
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	133698	2.00000	2.296	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	267110			168.73- 268.73	199.79
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	128157	2.00000	2.161	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	264646			161.08- 261.08	206.50
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	187011	2.00000	1.809	50.00- 150.00	100.00
20.833	20.833	(1.040)	78	89417			0.00- 97.10	47.81
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	86896	2.00000	2.109	50.00- 150.00	100.00
21.137	21.137	(1.055)	171	43414			0.00- 96.69	49.96
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	378786	2.00000	2.299	50.00- 150.00	100.00
21.247	21.247	(1.061)	120	94563			0.00- 76.32	24.96
21.247	21.247	(1.061)	51	40632			0.00- 61.38	10.73
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	175988	2.00000	1.794	50.00- 150.00	100.00
21.690	21.690	(1.083)	85	108133			9.81- 109.81	61.44
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	447845	2.00000	2.122	50.00- 150.00	100.00
21.745	21.745	(1.086)	120	102869			0.00- 74.45	22.97
21.745	21.745	(1.086)	105	17261			0.00- 56.92	3.85
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	387610	2.00000	2.167	50.00- 150.00	100.00
21.883	21.883	(1.092)	120	113624			0.00- 79.65	29.31
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	374432	2.00000	2.234	50.00- 150.00	100.00
21.966	21.966	(1.097)	120	169145			0.00- 93.79	45.17
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	285157	2.00000	2.122	50.00- 150.00	100.00
22.409	22.409	(1.119)	120	129650			0.00- 96.93	45.47
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.823	(1.139)	146	172107	2.00000	1.962	50.00- 150.00	100.00
22.823	22.823	(1.139)	148	107766			11.82- 111.82	62.62
22.823	22.823	(1.139)	111	75195			0.00- 90.55	43.69
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	172189	2.00000	2.146	50.00- 150.00	100.00
22.934	22.934	(1.145)	148	110661			21.48- 121.48	64.27
22.934	22.934	(1.145)	111	70681			0.00- 91.83	41.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	232749	2.00000	1.852	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	48507			0.00- 69.55	20.84
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	149406	2.00000	1.853	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	90856			10.50- 110.50	60.81
23.404	23.404 (1.168)	111	63781			0.00- 93.11	42.69
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	61351	2.00000	2.000	50.00- 150.00	100.00
25.257	25.257 (1.261)	182	59539			43.00- 143.00	97.05
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	45343	2.00000	2.000	50.00- 150.00	100.00
25.340	25.340 (1.265)	223	29988			17.33- 117.33	66.14
22 Butane					CAS #: 106-97-8		
5.487	5.487 (0.384)	58	6745	2.00000	2.000	50.00- 150.00	100.00
5.487	5.487 (0.384)	43	45698			627.51- 727.51	677.51
29 Isopentane					CAS #: 78-78-4		
8.308	8.308 (0.582)	43	45594	2.00000	2.000	50.00- 150.00	100.00
8.280	8.280 (0.580)	57	29918			15.62- 115.62	65.62
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	102186	2.00000	2.196	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	46943			0.00- 97.85	45.94
16.354	16.354 (1.145)	55	95083			50.06- 150.06	93.05
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	52752	2.00000	2.057	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	10936			0.00- 67.50	20.73
12.068	12.068 (0.845)	57	5954			0.00- 63.77	11.29

QC Flag Legend

M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051911.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->2.0ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 14:29
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295507	177304	413710	295507	0.00
95 1,4-Difluorobenze	1523302	913981	2132623	1523302	0.00
123 Chlorobenzene-d5	1736378	1041827	2430929	1736378	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

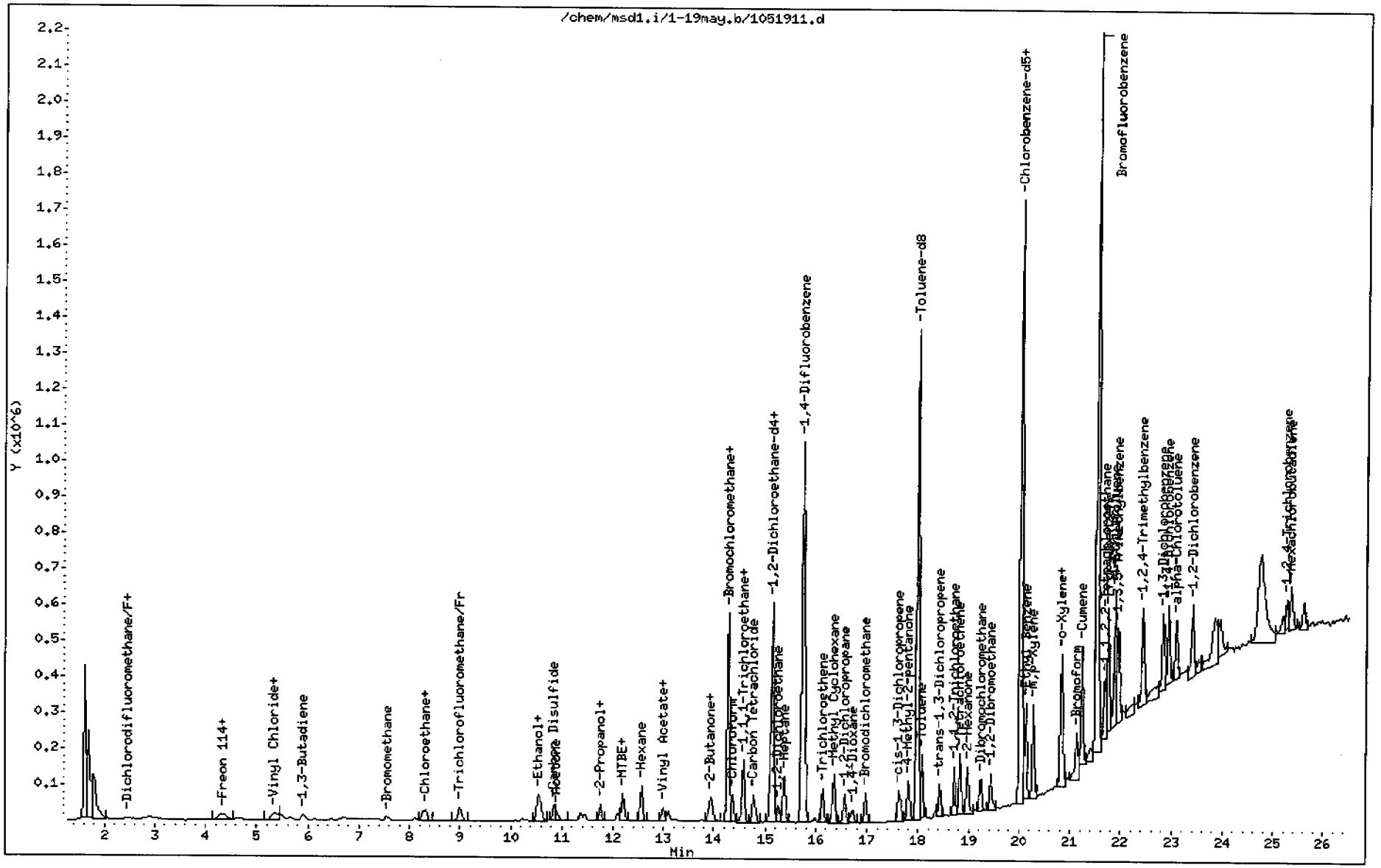
Data File: /chem/msd1.i/1-19may.b/1051911.d
Date : 19-MAY-2008 14:29
Client ID: Level 3
Sample Info: 40mL #1541-167

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0107



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052004.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 20-MAY-2008 10:26
Operator : lo
Inst ID: msd1.i
Smp Info : 4.0mL #1541-142
Misc Info : 200ppbv ->8.0ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 10:26
Cal File: 1052004.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	305060	25.0000		50.00- 150.00	100.00
14.255	14.255 (1.000)	128	235622			28.24- 128.24	77.24
14.255	14.255 (1.000)	49	573065			133.94- 233.94	187.85
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1596621	25.0000		50.00- 150.00	100.00
15.748	15.748 (1.000)	88	262145			0.00- 65.99	16.42
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1797015	25.0000		50.00- 150.00	100.00
20.006	20.006 (1.000)	82	1048456			8.42- 108.42	58.34
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	197922	8.00000	7.681	50.00- 150.00	100.00
4.608	4.608 (0.323)	45	50295			0.00- 75.41	25.41
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	50448	8.00000	8.451	50.00- 150.00	100.00
2.411	2.411 (0.169)	69	41279			32.58- 132.58	81.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.383	2.383 (0.167)	63	1954			0.00- 58.36	3.87
13 Freon 152a					CAS #: 75-37-6		
2.749	2.749 (0.192)	65	44568	8.00000	7.884	50.00- 150.00	100.00
2.749	2.749 (0.192)	51	99489			172.46- 272.46	223.23
2.749	2.749 (0.192)	47	23768			0.63- 100.63	53.33
15 Freon 22					CAS #: 75-45-6		
3.453	3.453 (0.242)	51	162836	8.00000	7.954	50.00- 150.00	100.00
3.397	3.397 (0.238)	67	25231			0.00- 65.39	15.49
3.425	3.425 (0.240)	85	1635			0.00- 51.20	1.00
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	277023	48.0000	57.176	50.00- 150.00	100.00
7.818	7.818 (0.547)	32	306961			64.72- 164.72	110.81
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	195380	8.00000	8.048	50.00- 150.00	100.00
9.195	9.195 (0.644)	69	60054			0.00- 79.81	30.74
9.167	9.167 (0.642)	35	8872			0.00- 55.10	4.54
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	85385	8.00000	7.814	50.00- 150.00	100.00
10.356	10.356 (0.725)	67	124934			96.88- 196.88	146.32
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	15564	8.00000	8.389	50.00- 150.00	100.00
10.577	10.577 (0.741)	133	3966			0.00- 73.50	25.48
10.577	10.577 (0.741)	85	9690			10.10- 110.10	62.26
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	625311	8.00000	7.784	50.00- 150.00	100.00
13.011	13.011 (0.911)	87	133541			0.00- 71.33	21.36
12.983	12.983 (0.909)	59	63610			0.00- 60.24	10.17
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	27101	8.00000	6.969	50.00- 150.00	100.00
13.204	13.204 (0.924)	59	29313			47.04- 147.04	108.16
13.204	13.204 (0.924)	41	17747			14.12- 114.12	65.48
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.564	13.564 (0.950)	59	226199	8.00000	6.712	50.00- 150.00	100.00
13.564	13.564 (0.950)	87	82654			0.00- 86.33	36.54
13.564	13.564 (0.950)	41	42822			0.00- 70.48	18.93

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.978	13.978 (0.979)	45	65644	8.00000	7.990	50.00- 150.00	100.00
13.978	13.978 (0.979)	61	56382			36.81- 136.81	85.89
13.978	13.978 (0.979)	43	426844			616.84- 716.84	650.24
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.066)	73	280244	8.00000	7.332	50.00- 150.00	100.00
15.223	15.223 (1.066)	87	66481			0.00- 73.95	23.72
15.223	15.223 (1.066)	55	87749			0.00- 80.63	31.31
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	514940	8.00000	7.875	50.00- 150.00	100.00
20.918	20.918 (1.465)	43	788192			99.63- 199.63	153.06
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	143620	8.00000	7.033	50.00- 150.00	100.00
15.941	15.941 (1.012)	41	97914			20.92- 120.92	68.18
15.941	15.941 (1.012)	43	75011			4.89- 104.89	52.23
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	319857	8.00000	7.804	50.00- 150.00	100.00
19.066	19.066 (1.211)	73	107017			0.00- 87.23	33.46
19.066	19.066 (1.211)	43	707211			180.18- 280.18	221.10
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.073)	55	415106	8.00000	8.092	50.00- 150.00	100.00
21.471	21.471 (1.073)	98	164669			0.00- 90.24	39.67
21.471	21.471 (1.073)	42	277966			17.74- 117.74	66.96
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.104)	57	1018811	8.00000	8.843	50.00- 150.00	100.00
22.080	22.080 (1.104)	85	801537			28.61- 128.61	78.67
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052004.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->8.0ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	305060	-2.25
95 1,4-Difluorobenze	1622087	973252	2270922	1596621	-1.57
123 Chlorobenzene-d5	1805786	1083472	2528100	1797015	-0.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

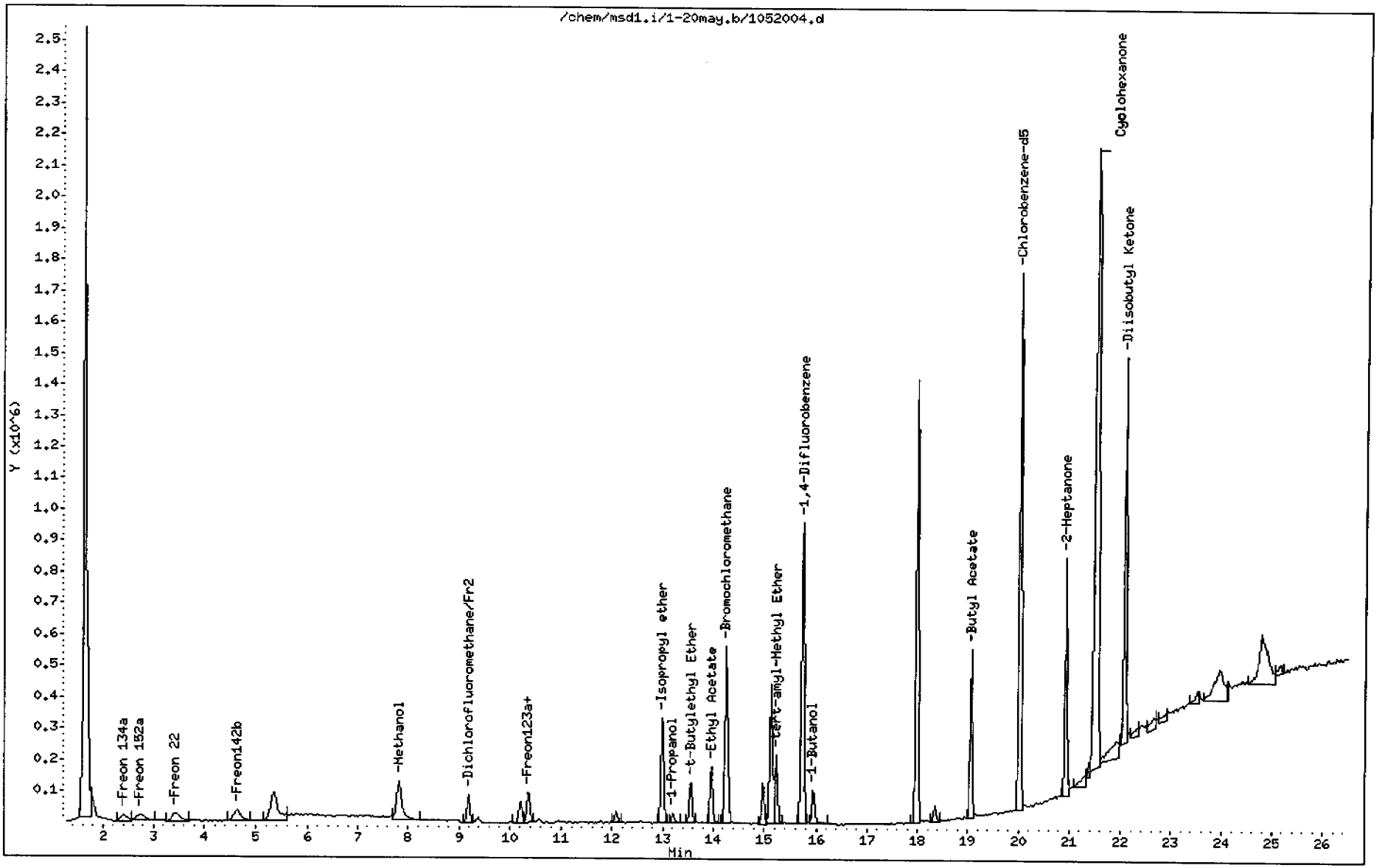
Data File: /chem/msd1.i/1-20may.b/1052004.d
Date : 20-MAY-2008 10:26
Client ID: Level 4
Sample Info: 4.0mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0112



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051917.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 19-MAY-2008 19:59
Operator : kr
Inst ID: msd1.i
Smp Info : 12.5mL #1612-3
Misc Info : 200ppbv-->25ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 19:59
Cal File: 1051917.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08mdl.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.280	14.280 (1.000)	130	327508	25.0000		50.00- 150.00	100.00
	14.280	14.280 (1.000)	128	252074			26.65- 126.65	76.97
	14.252	14.252 (1.000)	49	587687			132.31- 232.31	179.44
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.745	15.745 (1.000)	114	1675761	25.0000		50.00- 150.00	100.00
	15.745	15.745 (1.000)	88	263792			0.00- 65.99	15.74
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.031	20.031 (1.000)	117	1902736	25.0000		50.00- 150.00	100.00
	20.003	20.003 (1.000)	82	1105221			8.41- 108.41	58.09
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.137	15.137 (1.060)	65	533164	25.0000	25.213	50.00- 150.00	100.00
	15.137	15.137 (1.060)	67	297184			2.38- 102.38	55.74
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.985	17.985 (1.142)	98	1889458	25.0000	24.862	50.00- 150.00	100.00
	17.957	17.957 (1.140)	70	188629			0.00- 60.26	9.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1241685			15.30- 115.30	65.72
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1010267	25.0000	25.200	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1607932			108.88- 208.88	159.16
21.524	21.524 (1.075)	176	959869			45.20- 145.20	95.01
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	202674	25.0000	28.246	50.00- 150.00	100.00
2.474	2.474 (0.173)	42	135814			16.93- 116.93	67.01
2.474	2.474 (0.173)	39	150989			42.56- 142.56	74.50
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.861	2.861 (0.200)	85	1011256	25.0000	27.527	50.00- 150.00	100.00
2.888	2.888 (0.202)	87	330163			0.00- 70.84	32.65
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	691291	25.0000	28.060	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	218202			0.00- 78.17	31.56
21 Chloromethane					CAS #: 74-87-3		
4.630	4.630 (0.324)	50	419413	25.0000	24.586	50.00- 150.00	100.00
4.630	4.630 (0.324)	52	132144			0.00- 78.98	31.51
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	458741	25.0000	25.423	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	142750			0.00- 75.28	31.12
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	355307	25.0000	27.757	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	343702			32.56- 132.56	96.73
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	346039	25.0000	32.860	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	328687			63.20- 163.20	94.99
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	249268	25.0000	27.404	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	72558			0.00- 78.94	29.11
8.114	8.114 (0.568)	66	78984			0.00- 83.48	31.69
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	1298487	25.0000	28.310	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	832680			17.47- 117.47	64.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.160	10.160 (0.711)	45	207357	25.0000	31.117	50.00- 150.00	100.00
10.132	10.132 (0.710)	43	38882			0.00- 80.77	18.75
10.132	10.132 (0.710)	46	83062			0.00- 95.30	40.06
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	681049	25.0000	28.151	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	423703			14.87- 114.87	62.21
10.575	10.575 (0.741)	101	908470			85.03- 185.03	133.39
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	905515	25.0000	25.889	50.00- 150.00	100.00
10.519	10.519 (0.737)	96	483019			8.97- 108.97	53.34
10.519	10.519 (0.737)	98	313058			0.00- 81.31	34.57
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	301151	25.0000	24.478	50.00- 150.00	100.00
10.879	10.879 (0.762)	43	948251			269.22- 369.22	314.88
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	1090150	25.0000	26.502	50.00- 150.00	100.00
11.321	11.321 (0.793)	43	197190			0.00- 68.26	18.09
11.321	11.321 (0.793)	59	42747			0.00- 53.91	3.92
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	1447321	25.0000	25.898	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.432	11.432 (0.801)	76	151388	25.0000	31.968	50.00- 150.00	100.00
11.432	11.432 (0.801)	41	558396			294.73- 394.73	368.85
54 Methylene Chloride					CAS #: 75-09-2		
11.736	11.736 (0.822)	49	735054	25.0000	23.535	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	463741			9.29- 109.29	63.09
11.736	11.736 (0.822)	51	214608			0.00- 79.76	29.20
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	530281	25.0000	24.262	50.00- 150.00	100.00
12.151	12.151 (0.851)	57	155290			0.00- 76.94	29.28
12.151	12.151 (0.851)	41	136743			0.00- 77.27	25.79
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	608846	25.0000	29.156	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	954885			114.11- 214.11	156.84
12.178	12.178 (0.853)	98	384723			12.81- 112.81	63.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	1390611	25.0000	28.205	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	883847			17.91- 117.91	63.56
12.566	12.566 (0.880)	86	205039			0.00- 65.19	14.74
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	152566	25.0000	30.535	50.00- 150.00	100.00
13.063	13.063 (0.915)	43	1976752			1309.79-1409.79	1295.67
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	1155997	25.0000	33.857	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	349110			0.00- 81.73	30.20
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	347673	25.0000	31.932	50.00- 150.00	100.00
13.920	13.920 (0.975)	43	1682063			487.34- 587.34	483.81
13.948	13.948 (0.977)	57	127727			0.00- 92.73	36.74
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	995094	25.0000	28.686	50.00- 150.00	100.00
13.893	13.893 (0.973)	96	683544			22.72- 122.72	68.69
13.893	13.893 (0.973)	98	431220			0.00- 93.33	43.33
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1069934	25.0000	20.454	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	328370			0.00- 80.80	30.69
14.252	14.252 (0.998)	72	358299			0.00- 82.50	33.49
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	1357959	25.0000	30.833	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	842508			14.17- 114.17	62.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	1399291	25.0000	31.731	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	885899			8.68- 108.68	63.31
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	1125039	25.0000	27.644	50.00- 150.00	100.00
14.556	14.556 (1.019)	56	1523051			78.48- 178.48	135.38
14.556	14.556 (1.019)	41	799926			28.22- 128.22	71.10
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	1251974	25.0000	29.328	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	1304242			51.24- 151.24	104.17
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	2429767	25.0000	28.554	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	556679			0.00- 74.11	22.91
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	4820200	25.0000	28.607	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	1570128			0.00- 83.91	32.57
15.109	15.109 (1.058)	41	1154806			0.00- 74.82	23.96
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	1001997	25.0000	29.573	50.00- 150.00	100.00
15.248	15.248 (0.968)	64	314385			0.00- 84.87	31.38
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	930266	25.0000	28.278	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	1955279			164.30- 264.30	210.18
15.358	15.358 (0.975)	57	1019337			57.03- 157.03	109.57
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	986582	25.0000	28.419	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	970387			42.76- 142.76	98.36
16.132	16.132 (1.025)	97	639576			13.18- 113.18	64.83
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	941744	25.0000	27.874	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	676485			19.17- 119.17	71.83
16.575	16.575 (1.053)	41	572162			11.99- 111.99	60.76
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	588621	25.0000	26.242	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	474847			32.59- 132.59	80.67
16.713	16.713 (1.061)	57	149190			0.00- 76.59	25.35
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	1564403	25.0000	30.099	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	956005			11.08- 111.08	61.11
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	1361167	25.0000	29.310	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	431623			0.00- 84.93	31.71
17.625	17.625 (1.119)	39	771742			4.29- 104.29	56.70
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	965620	25.0000	29.722	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	2458556			211.41- 311.41	254.61
17.791	17.791 (1.130)	85	360844			0.00- 90.33	37.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	3259651	25.0000	28.358	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	1973956			12.36- 112.36	60.56
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	1462435	25.0000	30.256	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	468338			0.00- 87.70	32.02
18.427	18.427 (0.920)	39	783853			4.93- 104.93	53.60
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	1128776	25.0000	28.310	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	710798			10.65- 110.65	62.97
18.704	18.704 (0.934)	83	930840			31.08- 131.08	82.46
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	1332337	25.0000	28.760	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	1048496			27.94- 127.94	78.70
18.814	18.814 (0.939)	131	996416			24.34- 124.34	74.79
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	1450261	25.0000	27.573	50.00- 150.00	100.00
18.953	18.953 (0.946)	43	2617757			133.06- 233.06	180.50
18.980	18.980 (0.948)	100	291796			0.00- 70.06	20.12
121 Dibromochloromethane					CAS #: 124-48-1		
19.229	19.229 (0.960)	129	1639081	25.0000	30.918	50.00- 150.00	100.00
19.229	19.229 (0.960)	127	1257659			25.30- 125.30	76.73
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	1761050	25.0000	31.705	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	1652021			47.82- 147.82	93.81
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	2978562	25.0000	28.428	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	933024			0.00- 82.10	31.32
20.059	20.059 (1.001)	77	1926789			27.22- 127.22	64.69
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	1698599	25.0000	29.704	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	5320804			271.39- 371.39	313.25
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	2110463	25.0000	29.858	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	4207316			162.27- 262.27	199.36
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	1980738	25.0000	28.408	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	4173778			160.96- 260.96	210.72
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	3223605	25.0000	27.503	50.00- 150.00	100.00
20.833	20.833	(1.040)	78	1518126			0.00- 97.10	47.09
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	1498083	25.0000	29.915	50.00- 150.00	100.00
21.137	21.137	(1.055)	171	781883			0.00- 98.52	52.19
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	5843107	25.0000	30.148	50.00- 150.00	100.00
21.247	21.247	(1.061)	120	1488230			0.00- 76.11	25.47
21.247	21.247	(1.061)	51	614274			0.00- 61.16	10.51
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	2649810	25.0000	24.768	50.00- 150.00	100.00
21.662	21.662	(1.081)	85	1651607			10.65- 110.65	62.33
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	7064639	25.0000	28.442	50.00- 150.00	100.00
21.745	21.745	(1.086)	120	1556612			0.00- 73.64	22.03
21.745	21.745	(1.086)	105	259252			0.00- 55.84	3.67
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	6192337	25.0000	29.041	50.00- 150.00	100.00
21.883	21.883	(1.092)	120	1775433			0.00- 79.33	28.67
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	5492350	25.0000	28.506	50.00- 150.00	100.00
21.939	21.939	(1.095)	120	2527422			0.00- 94.35	46.02
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	4314803	25.0000	28.089	50.00- 150.00	100.00
22.409	22.409	(1.119)	120	1933171			0.00- 96.40	44.80
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.823	(1.139)	146	2465453	25.0000	25.429	50.00- 150.00	100.00
22.823	22.823	(1.139)	148	1548840			12.15- 112.15	62.82
22.823	22.823	(1.139)	111	1051814			0.00- 91.25	42.66
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	2523551	25.0000	27.356	50.00- 150.00	100.00
22.934	22.934	(1.145)	148	1588431			18.64- 118.64	62.94
22.934	22.934	(1.145)	111	1016202			0.00- 91.31	40.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	3600090	25.0000	25.751	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	704749			0.00- 69.56	19.58
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	2014241	25.0000	23.490	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	1278801			11.50- 111.50	63.49
23.404	23.404 (1.168)	111	897151			0.00- 93.59	44.54
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	582788	25.0000	20.475	50.00- 150.00	100.00
25.257	25.257 (1.261)	182	546749			43.27- 143.27	93.82
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	446785	25.0000	20.919	50.00- 150.00	100.00
25.340	25.340 (1.265)	223	276379			15.51- 115.51	61.86
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	87368	25.0000	24.160	50.00- 150.00	100.00
5.460	5.460 (0.382)	43	693261			685.50- 785.50	793.50
29 Isopentane					CAS #: 78-78-4		
8.280	8.280 (0.580)	43	682504	25.0000	25.968	50.00- 150.00	100.00
8.280	8.280 (0.580)	57	479097			17.91- 117.91	70.20
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	1605401	25.0000	28.779	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	770194			0.00- 97.89	47.98
16.354	16.354 (1.145)	55	1481216			47.46- 147.46	92.26
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	505386	25.0000	19.677	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	127429			0.00- 67.50	25.21
12.068	12.068 (0.845)	57	50587			0.00- 63.77	10.01

Data File: /chem/msd1.i/1-19may.b/1051917.d
Report Date: 20-May-2008 11:30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051917.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->25ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 19:59
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	327508	196505	458511	327508	0.00
95 1,4-Difluorobenze	1675761	1005457	2346065	1675761	0.00
123 Chlorobenzene-d5	1902736	1141642	2663830	1902736	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

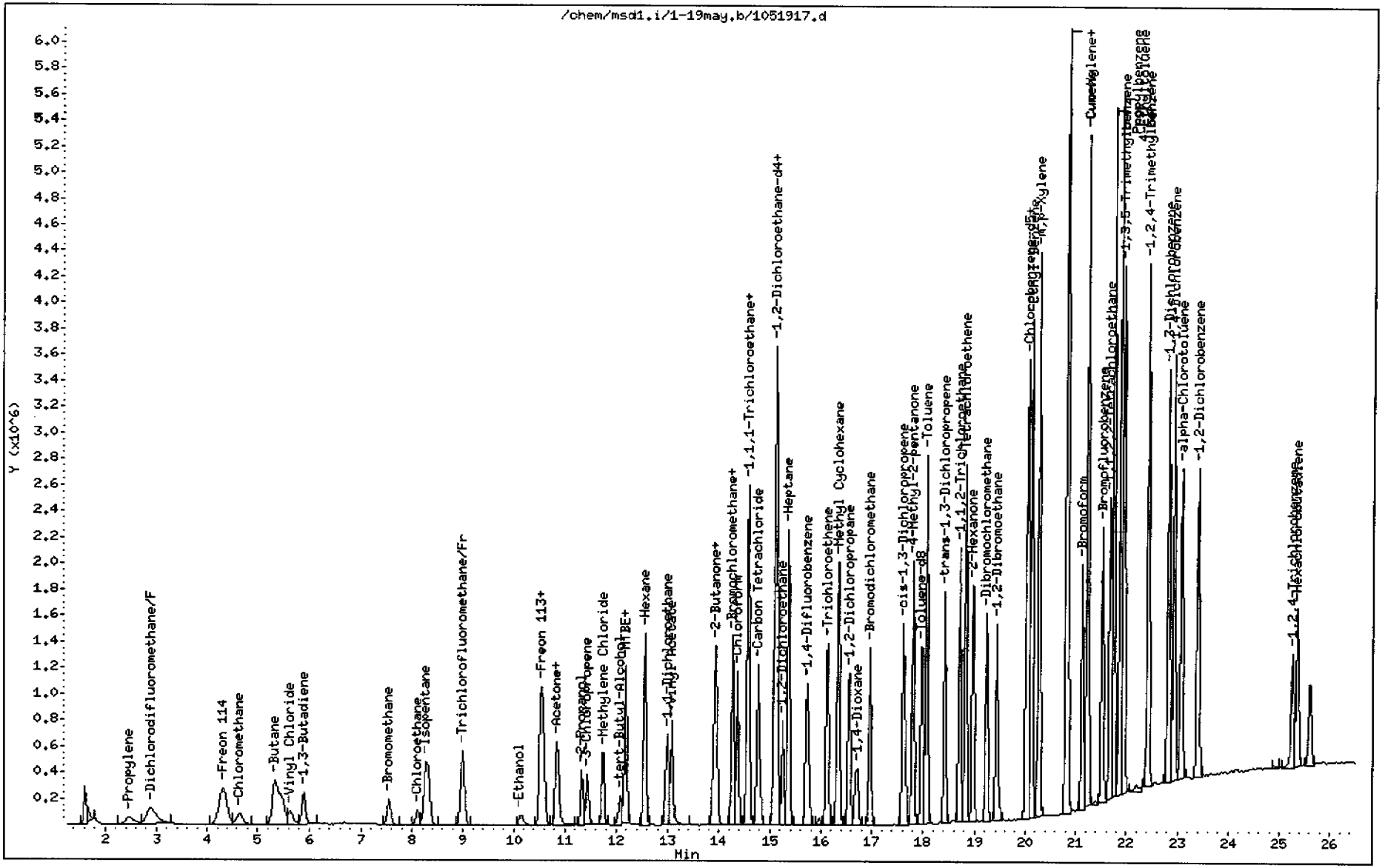
Data File: /chem/msd1.i/1-19may.b/1051917.d
Date : 19-MAY-2008 19:59
Client ID: Level 4
Sample Info: 12.5mL #1612-3

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0122



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052005.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 20-MAY-2008 10:59
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 10:59
Cal File: 1052005.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	312076	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	246703			29.05- 129.05	79.05
14.255	14.255 (1.000)	49	557015			128.49- 228.49	178.49
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1622087	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	250668			0.00- 65.45	15.45
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.034	20.034 (1.000)	117	1805786	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1042207			8.42- 108.42	57.71
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	1466529	50.0000	55.633	80.00- 120.00	100.00
4.636	4.636 (0.325)	45	361369			0.00- 75.41	24.64
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	337242	50.0000	55.227	80.00- 120.00	100.00
2.411	2.411 (0.169)	69	269690			32.58- 132.58	79.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.411	2.411 (0.169)	63	36152			0.00- 58.36	10.72
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.190)	65	312010	50.0000	53.952	80.00- 120.00	100.00
2.721	2.721 (0.190)	51	666992			172.46- 272.46	213.77
2.749	2.749 (0.192)	47	162961			0.63- 100.63	52.23
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	1137258	50.0000	54.303	80.00- 120.00	100.00
3.453	3.453 (0.242)	67	180724			0.00- 65.39	15.89
3.425	3.425 (0.240)	85	15915			0.00- 51.20	1.40
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	1398684	300.000	282.19	80.00- 120.00	100.00
7.818	7.818 (0.547)	32	1117573			29.90- 129.90	79.90
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	1405104	50.0000	56.578	80.00- 120.00	100.00
9.195	9.195 (0.644)	69	425214			0.00- 79.81	30.26
9.195	9.195 (0.644)	35	66364			0.00- 55.10	4.72
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	648338	50.0000	58.002	80.00- 120.00	100.00
10.356	10.356 (0.725)	67	928673			96.88- 196.88	143.24
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	106534	50.0000	56.134	80.00- 120.00	100.00
10.577	10.577 (0.741)	133	22924			0.00- 73.50	21.52
10.577	10.577 (0.741)	85	68994			10.10- 110.10	64.76
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	4821886	50.0000	58.671	80.00- 120.00	100.00
13.011	13.011 (0.911)	87	1016872			0.00- 71.33	21.09
12.983	12.983 (0.909)	59	495344			0.00- 60.24	10.27
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	238759	50.0000	60.021	80.00- 120.00	100.00
13.204	13.204 (0.924)	59	255065			47.04- 147.04	106.83
13.204	13.204 (0.924)	41	155524			14.12- 114.12	65.14
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.564	13.564 (0.950)	59	2049003	50.0000	59.437	80.00- 120.00	100.00
13.564	13.564 (0.950)	87	740271			0.00- 86.33	36.13
13.564	13.564 (0.950)	41	358075			0.00- 70.48	17.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.951	13.951 (0.977)	45	487841	50.0000	58.046	80.00- 120.00	100.00
13.951	13.951 (0.977)	61	435150			36.81- 136.81	89.20
13.951	13.951 (0.977)	43	3378151			616.84- 716.84	692.47
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.066)	73	2274918	50.0000	58.183	80.00- 120.00	100.00
15.223	15.223 (1.066)	87	536743			0.00- 73.95	23.59
15.223	15.223 (1.066)	55	655844			0.00- 80.63	28.83
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	3650607	50.0000	54.574	80.00- 120.00	100.00
20.918	20.918 (1.465)	43	5592030			99.63- 199.63	153.18
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	1159321	50.0000	55.878	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	790480			20.92- 120.92	68.18
15.941	15.941 (1.012)	43	652245			4.89- 104.89	56.26
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	2400247	50.0000	57.643	80.00- 120.00	100.00
19.066	19.066 (1.211)	73	803755			0.00- 83.49	33.49
19.066	19.066 (1.211)	43	5597507			183.21- 283.21	233.21
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	2669553	50.0000	51.791	80.00- 120.00	100.00
21.471	21.471 (1.072)	98	1073676			0.00- 90.24	40.22
21.471	21.471 (1.072)	42	1781890			17.74- 117.74	66.75
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.102)	57	6022108	50.0000	52.015	80.00- 120.00	100.00
22.080	22.080 (1.102)	85	4727987			28.51- 128.51	78.51
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052005.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	312076	0.00
95 1,4-Difluorobenze	1622087	973252	2270922	1622087	0.00
123 Chlorobenzene-d5	1805786	1083472	2528100	1805786	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

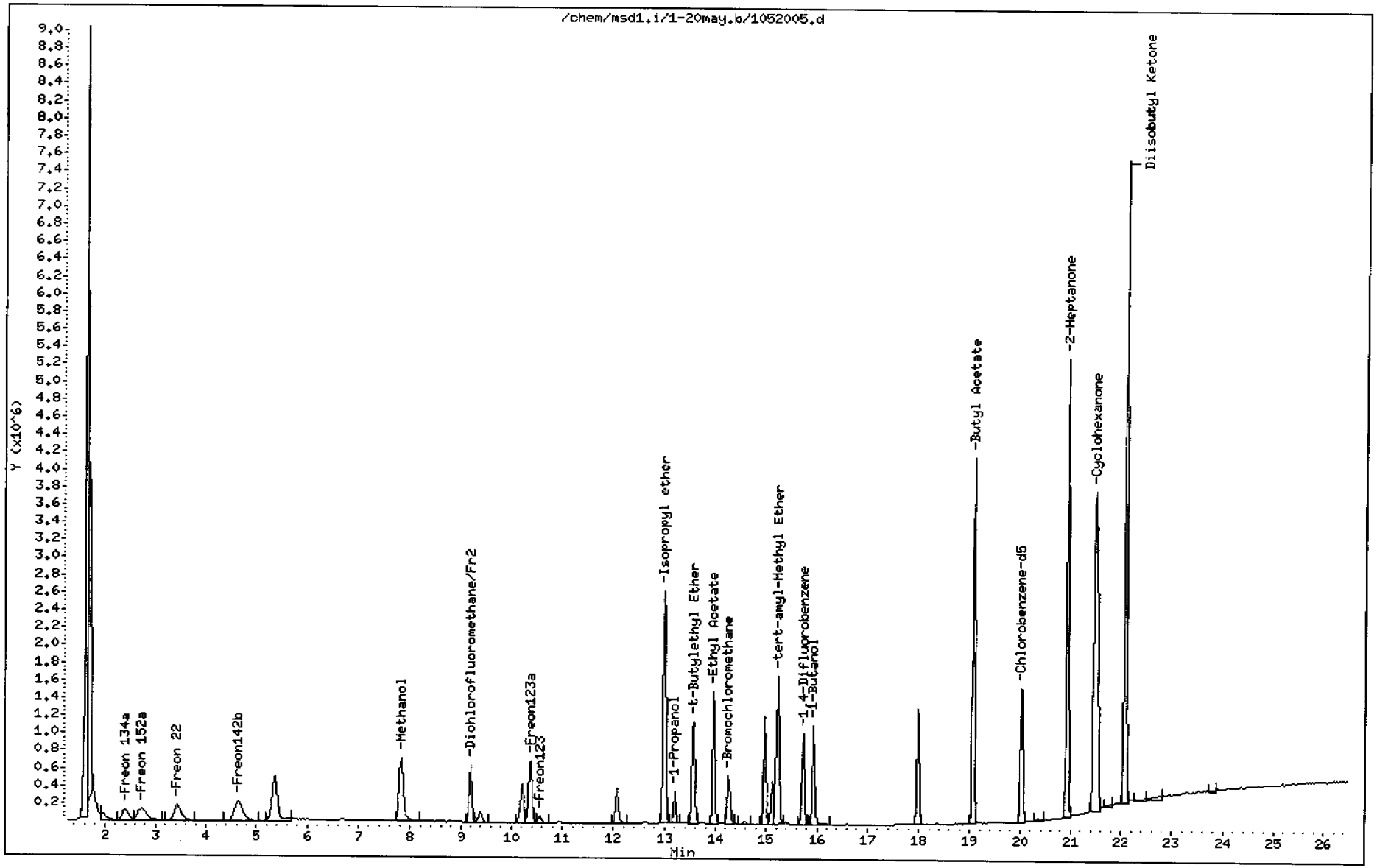
0127

Data File: /chem/msd1.i/1-20may.b/1052005.d
Date : 20-MAY-2008 10:59
Client ID: Level 5
Sample Info: 25mL #1541-142

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051913.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 19-MAY-2008 15:47
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 15:47
Cal File: 1051913.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	311243	25.0000			80.00- 120.00	100.00
14.280	14.280 (1.000)	128	242864				28.03- 128.03	78.03
14.252	14.252 (1.000)	49	577844				135.66- 235.66	185.66
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1618588	25.0000			80.00- 120.00	100.00
15.745	15.745 (1.000)	88	256867				0.00- 65.87	15.87
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1862744	25.0000			80.00- 120.00	100.00
20.031	20.031 (1.000)	82	1088781				8.42- 108.42	58.45
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	513720	25.0000	25.448		80.00- 120.00	100.00
15.137	15.137 (1.060)	67	312850				4.08- 104.08	60.90
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1819475	25.0000	24.829		80.00- 120.00	100.00
17.985	17.985 (1.142)	70	194127				0.00- 60.34	10.67

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.985	17.985	(1.142)	100	1209777			15.53- 115.53	66.49
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.524	21.524	(1.075)	174	1005148	25.0000	25.486	80.00- 120.00	100.00
21.524	21.524	(1.075)	95	1598935			109.07- 209.07	159.07
21.524	21.524	(1.075)	176	957758			45.29- 145.29	95.29
12 Propylene						CAS #: 115-07-1		
2.501	2.501	(0.175)	41	360585	50.0000	51.884	80.00- 120.00	100.00
2.501	2.501	(0.175)	42	242370			17.02- 117.02	67.22
2.501	2.501	(0.175)	39	299419			39.39- 139.39	83.04
14 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
2.888	2.888	(0.202)	85	1798174	50.0000	51.121	80.00- 120.00	100.00
2.888	2.888	(0.202)	87	585293			0.00- 73.77	32.55
17 Freon 114						CAS #: 76-14-2		
4.326	4.326	(0.303)	135	1237350	50.0000	52.107	80.00- 120.00	100.00
4.326	4.326	(0.303)	137	383518			0.00- 81.00	31.00
21 Chloromethane						CAS #: 74-87-3		
4.658	4.658	(0.326)	50	744126	50.0000	47.191	80.00- 120.00	100.00
4.658	4.658	(0.326)	52	230433			0.00- 79.64	30.97
23 Vinyl Chloride						CAS #: 75-01-4		
5.625	5.625	(0.394)	62	806945	50.0000	47.759	80.00- 120.00	100.00
5.625	5.625	(0.394)	64	249493			0.00- 76.69	30.92
24 1,3-Butadiene						CAS #: 106-99-0		
5.902	5.902	(0.413)	54	651884	50.0000	52.828	80.00- 120.00	100.00
5.902	5.902	(0.413)	39	634569			35.52- 135.52	97.34
26 Bromomethane						CAS #: 74-83-9		
7.561	7.561	(0.529)	94	610006	50.0000	57.789	80.00- 120.00	100.00
7.561	7.561	(0.529)	96	580461			45.16- 145.16	95.16
28 Chloroethane						CAS #: 75-00-3		
8.114	8.114	(0.568)	64	459776	50.0000	52.353	80.00- 120.00	100.00
8.114	8.114	(0.568)	49	134055			0.00- 79.01	29.16
8.114	8.114	(0.568)	66	138617			0.00- 82.37	30.15
34 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.999	8.999	(0.630)	101	2358673	50.0000	53.022	80.00- 120.00	100.00
8.999	8.999	(0.630)	103	1524903			14.65- 114.65	64.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	374337	50.0000	55.726	80.00- 120.00	100.00
10.132	10.132 (0.710)	43	80303			0.00- 77.66	21.45
10.132	10.132 (0.710)	46	152340			0.00- 93.77	40.70
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	1243369	50.0000	52.999	80.00- 120.00	100.00
10.575	10.575 (0.741)	153	783865			13.04- 113.04	63.04
10.575	10.575 (0.741)	101	1635840			81.57- 181.57	131.57
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	1616509	50.0000	48.967	80.00- 120.00	100.00
10.519	10.519 (0.737)	96	859569			3.17- 103.17	53.17
10.519	10.519 (0.737)	98	547443			0.00- 83.87	33.87
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	527520	50.0000	46.635	80.00- 120.00	100.00
10.879	10.879 (0.762)	43	1738029			272.64- 372.64	329.47
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	1967200	50.0000	50.215	80.00- 120.00	100.00
11.321	11.321 (0.793)	43	360399			0.00- 68.28	18.32
11.321	11.321 (0.793)	59	70529			0.00- 53.80	3.59
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	2681577	50.0000	50.367	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.459	11.459 (0.802)	76	303801	50.0000	60.450	80.00- 120.00	100.00
11.432	11.432 (0.801)	41	1093119			299.76- 399.76	359.81
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	1331277	50.0000	46.037	80.00- 120.00	100.00
11.764	11.764 (0.824)	84	842487			13.28- 113.28	63.28
11.764	11.764 (0.824)	51	403064			0.00- 79.89	30.28
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	988086	50.0000	48.156	80.00- 120.00	100.00
12.151	12.151 (0.851)	57	288091			0.00- 79.16	29.16
12.151	12.151 (0.851)	41	300240			0.00- 78.05	30.39
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	1081098	50.0000	53.284	80.00- 120.00	100.00
12.178	12.178 (0.853)	61	1739285			110.88- 210.88	160.88
12.178	12.178 (0.853)	98	688621			13.03- 113.03	63.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.565	12.565 (0.880)	57	2425088	50.0000	51.307	80.00- 120.00	100.00
12.565	12.565 (0.880)	43	1555392			16.97- 116.97	64.14
12.565	12.565 (0.880)	86	349083			0.00- 64.99	14.39
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	276520	50.0000	55.205	80.00- 120.00	100.00
13.063	13.063 (0.915)	43	3499814			1278.41-1378.41	1265.66
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	2141994	50.0000	61.120	80.00- 120.00	100.00
12.980	12.980 (0.909)	65	646062			0.00- 80.16	30.16
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	626519	50.0000	57.516	80.00- 120.00	100.00
13.920	13.920 (0.975)	43	3044440			435.93- 535.93	485.93
13.948	13.948 (0.977)	57	235067			0.00- 91.43	37.52
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	1769577	50.0000	52.709	80.00- 120.00	100.00
13.893	13.893 (0.973)	96	1225432			19.25- 119.25	69.25
13.920	13.920 (0.975)	98	777903			0.00- 93.96	43.96
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1886953	50.0000	40.390	80.00- 120.00	100.00
14.252	14.252 (0.998)	71	596466			0.00- 81.61	31.61
14.252	14.252 (0.998)	72	626831			0.00- 82.68	33.22
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	2443411	50.0000	56.485	80.00- 120.00	100.00
14.363	14.363 (1.006)	85	1523945			12.37- 112.37	62.37
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	2600789	50.0000	58.530	80.00- 120.00	100.00
14.584	14.584 (1.021)	99	1666030			14.06- 114.06	64.06
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	2030305	50.0000	51.848	80.00- 120.00	100.00
14.556	14.556 (1.019)	56	2737295			84.82- 184.82	134.82
14.556	14.556 (1.019)	41	1425392			20.21- 120.21	70.21
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	2305167	50.0000	54.948	80.00- 120.00	100.00
14.777	14.777 (1.035)	117	2380314			53.26- 153.26	103.26
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	4319242	50.0000	52.020	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	998304			0.00- 73.91	23.11
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	8748238	50.0000	53.396	80.00- 120.00	100.00
15.109	15.109 (1.058)	56	2804665			0.00- 83.45	32.06
15.109	15.109 (1.058)	41	2066523			0.00- 74.52	23.62
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.247	15.247 (0.968)	62	1844212	50.0000	54.617	80.00- 120.00	100.00
15.247	15.247 (0.968)	64	576340			0.00- 83.97	31.25
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	1676261	50.0000	52.038	80.00- 120.00	100.00
15.358	15.358 (0.975)	43	3512657			163.12- 263.12	209.55
15.358	15.358 (0.975)	57	1831041			57.58- 157.58	109.23
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	1790543	50.0000	52.507	80.00- 120.00	100.00
16.132	16.132 (1.025)	130	1720210			46.07- 146.07	96.07
16.132	16.132 (1.025)	97	1155110			14.51- 114.51	64.51
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	1734141	50.0000	52.318	80.00- 120.00	100.00
16.575	16.575 (1.053)	62	1217301			20.20- 120.20	70.20
16.575	16.575 (1.053)	41	1027297			9.24- 109.24	59.24
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	1080415	50.0000	49.913	80.00- 120.00	100.00
16.713	16.713 (1.061)	58	858282			29.44- 129.44	79.44
16.713	16.713 (1.061)	57	262472			0.00- 75.83	24.29
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	2878003	50.0000	55.302	80.00- 120.00	100.00
16.962	16.962 (1.077)	85	1749735			10.80- 110.80	60.80
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	2458845	50.0000	53.528	80.00- 120.00	100.00
17.625	17.625 (1.119)	77	773098			0.00- 81.44	31.44
17.625	17.625 (1.119)	39	1385049			6.33- 106.33	56.33
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	1790776	50.0000	55.120	80.00- 120.00	100.00
17.791	17.791 (1.130)	43	4600222			210.28- 310.28	256.88
17.791	17.791 (1.130)	85	675508			0.00- 89.68	37.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	5957659	50.0000	52.696	80.00- 120.00	100.00
18.068	18.068 (1.147)	92	3565557			9.85- 109.85	59.85
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	2682897	50.0000	54.860	80.00- 120.00	100.00
18.427	18.427 (0.920)	77	849465			0.00- 81.66	31.66
18.427	18.427 (0.920)	39	1428831			3.26- 103.26	53.26
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	2069564	50.0000	52.231	80.00- 120.00	100.00
18.704	18.704 (0.934)	99	1282815			11.98- 111.98	61.98
18.704	18.704 (0.934)	83	1714594			32.85- 132.85	82.85
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	2435720	50.0000	52.730	80.00- 120.00	100.00
18.814	18.814 (0.939)	129	1877332			27.08- 127.08	77.08
18.814	18.814 (0.939)	131	1798928			23.86- 123.86	73.86
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	2757699	50.0000	52.316	80.00- 120.00	100.00
18.952	18.952 (0.946)	43	4989009			130.91- 230.91	180.91
18.980	18.980 (0.948)	100	538010			0.00- 69.88	19.51
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	3028623	50.0000	56.015	80.00- 120.00	100.00
19.229	19.229 (0.960)	127	2345422			25.84- 125.84	77.44
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	3243106	50.0000	57.426	80.00- 120.00	100.00
19.450	19.450 (0.971)	109	3077045			44.88- 144.88	94.88
124 Chlorobenzene					CAS #: 108-90-7		
20.058	20.058 (1.001)	112	5520564	50.0000	52.812	80.00- 120.00	100.00
20.058	20.058 (1.001)	114	1737652			0.00- 81.48	31.48
20.058	20.058 (1.001)	77	3532733			13.99- 113.99	63.99
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	3074274	50.0000	53.597	80.00- 120.00	100.00
20.141	20.141 (1.006)	91	9922198			271.73- 371.73	322.75
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	3919171	50.0000	54.818	80.00- 120.00	100.00
20.280	20.280 (1.012)	91	7839584			159.21- 259.21	200.03
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	3699795	50.0000	53.086	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	7792191			160.61- 260.61	210.61
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	6039714	50.0000	52.087	80.00- 120.00	100.00
20.833	20.833 (1.040)	78	2833993			0.00- 96.92	46.92
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	2825250	50.0000	55.511	80.00- 120.00	100.00
21.137	21.137 (1.055)	171	1479769			2.38- 102.38	52.38
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	11135621	50.0000	56.718	80.00- 120.00	100.00
21.247	21.247 (1.061)	120	2813886			0.00- 75.94	25.27
21.247	21.247 (1.061)	51	1145065			0.00- 60.99	10.28
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	5016541	50.0000	48.405	80.00- 120.00	100.00
21.662	21.662 (1.081)	85	3114518			12.08- 112.08	62.08
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	13635292	50.0000	54.422	80.00- 120.00	100.00
21.745	21.745 (1.086)	120	2906385			0.00- 73.06	21.32
21.745	21.745 (1.086)	105	483819			0.00- 55.27	3.55
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	11812272	50.0000	54.783	80.00- 120.00	100.00
21.883	21.883 (1.092)	120	3315979			0.00- 78.07	28.07
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	10794497	50.0000	55.620	80.00- 120.00	100.00
21.966	21.966 (1.097)	120	4887642			0.00- 94.53	45.28
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	8510509	50.0000	55.139	80.00- 120.00	100.00
22.409	22.409 (1.119)	120	3736634			0.00- 95.90	43.91
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	4849436	50.0000	50.814	80.00- 120.00	100.00
22.823	22.823 (1.139)	148	3004289			12.10- 112.10	61.95
22.823	22.823 (1.139)	111	2056212			0.00- 91.54	42.40
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	4958070	50.0000	53.588	80.00- 120.00	100.00
22.934	22.934 (1.145)	148	3143033			17.32- 117.32	63.39
22.934	22.934 (1.145)	111	2020205			0.00- 91.17	40.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	7270717	50.0000	52.306	80.00- 120.00	100.00
23.100	23.100 (1.153)	126	1414577			0.00- 69.53	19.46
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	4101795	50.0000	49.142	80.00- 120.00	100.00
23.404	23.404 (1.168)	148	2571627			12.70- 112.70	62.70
23.404	23.404 (1.168)	111	1792411			0.00- 93.70	43.70
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	1407936	50.0000	50.350	80.00- 120.00	100.00
25.257	25.257 (1.261)	182	1307637			42.88- 142.88	92.88
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.339	25.339 (1.265)	225	1017736	50.0000	49.109	80.00- 120.00	100.00
25.339	25.339 (1.265)	223	651091			15.12- 115.12	63.97
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	158328	50.0000	47.310	80.00- 120.00	100.00
5.487	5.487 (0.384)	43	1245731			702.60- 802.60	786.80
29 Isopentane					CAS #: 78-78-4		
8.307	8.307 (0.582)	43	1209257	50.0000	48.931	80.00- 120.00	100.00
8.307	8.307 (0.582)	57	844988			18.56- 118.56	69.88
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.353	16.353 (1.145)	83	2942153	50.0000	54.014	80.00- 120.00	100.00
16.353	16.353 (1.145)	98	1400773			0.00- 97.82	47.61
16.353	16.353 (1.145)	55	2701794			46.05- 146.05	91.83
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	858235	50.0000	37.979	80.00- 120.00	100.00
12.068	12.068 (0.845)	41	166751			0.00- 67.50	19.43
12.068	12.068 (0.845)	57	87140			0.00- 63.77	10.15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

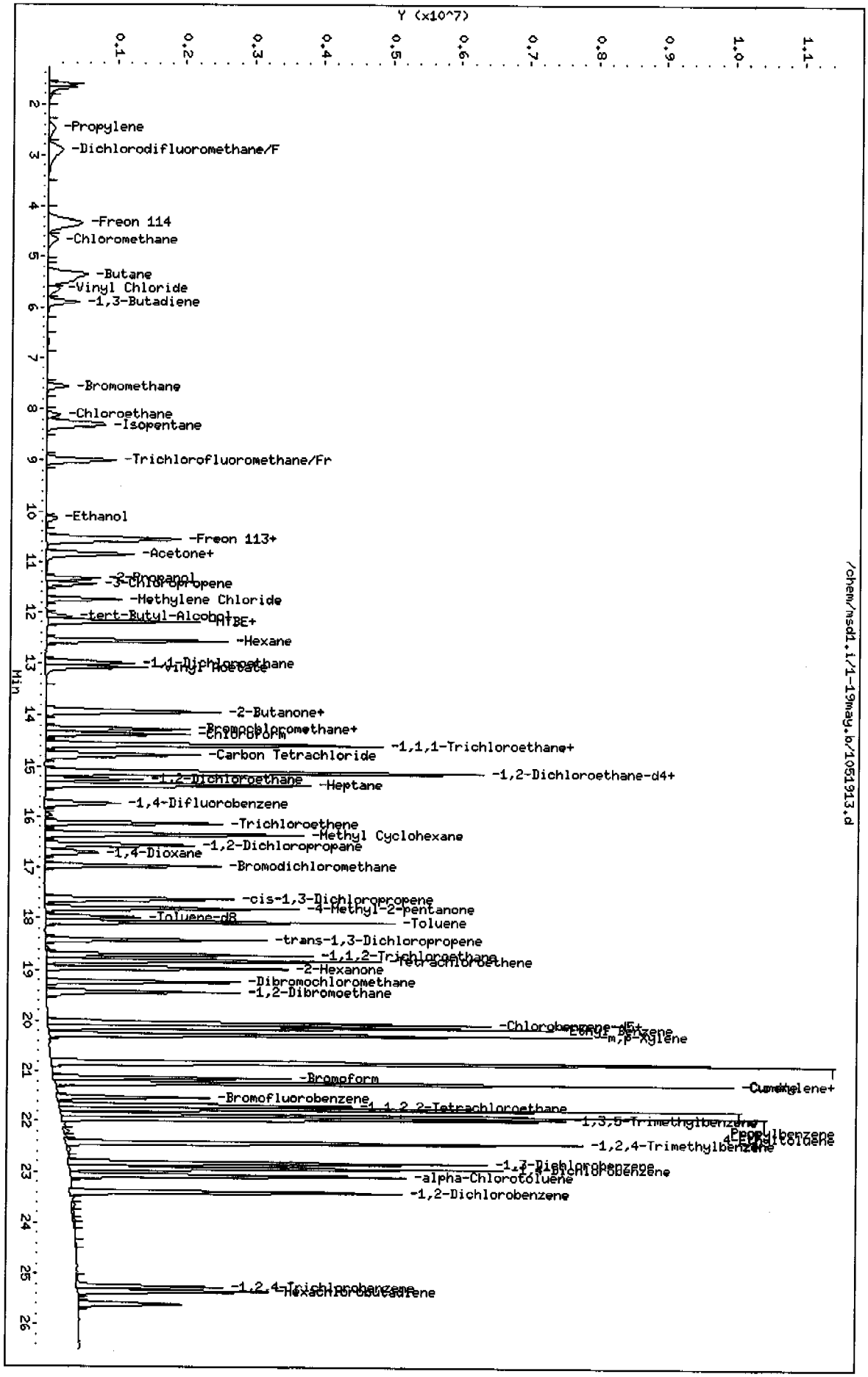
Instrument ID: msd1.i
Lab File ID: 1051913.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	311243	0.00
95 1,4-Difluorobenze	1618588	971153	2266023	1618588	0.00
123 Chlorobenzene-d5	1862744	1117646	2607842	1862744	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051913.d
Date : 19-MAY-2008 15:47
Client ID: Level 5
Sample Info: 25mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051914.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 19-MAY-2008 16:26
Operator : kr
Inst ID: msd1.i
Smp Info : 50mL #1612-3
Misc Info : 200ppbv ->100ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:26
Cal File: 1051914.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5	
14.280	14.280 (1.000)	130	317781	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	252692			27.36- 127.36	79.52
14.252	14.252 (1.000)	49	590454			133.45- 233.45	185.81
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.745	15.745 (1.000)	114	1668207	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	265663			0.00- 65.96	15.93
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.031	20.031 (1.000)	117	1905887	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1124103			8.51- 108.51	58.98
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.137	15.137 (1.060)	65	555871	25.0000	26.620	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	366050			6.04- 106.04	65.85
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.985	17.985 (1.142)	98	1903361	25.0000	25.167	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	198653			0.00- 60.35	10.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1238292			15.45- 115.45	65.06
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1040922	25.0000	25.660	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1660232			109.02- 209.02	159.50
21.524	21.524 (1.075)	176	996378			45.30- 145.30	95.72
12 Propylene					CAS #: 115-07-1		
2.473	2.473 (0.173)	41	690431	100.000	97.962	50.00- 150.00	100.00
2.473	2.473 (0.173)	42	459731			16.91- 116.91	66.59
2.473	2.473 (0.173)	39	555414			37.15- 137.15	80.44
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	3382538	100.000	95.293	50.00- 150.00	100.00
2.860	2.860 (0.200)	87	1078033			0.00- 75.39	31.87
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	2362792	100.000	97.953	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	734306			0.00- 79.32	31.08
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	1385503	100.000	89.165	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	438740			0.00- 80.15	31.67
23 Vinyl Chloride					CAS #: 75-01-4		
5.625	5.625 (0.394)	62	1516829	100.000	90.103	50.00- 150.00	100.00
5.625	5.625 (0.394)	64	471683			0.00- 77.57	31.10
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	1247743	100.000	99.196	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	1209170			37.41- 137.41	96.91
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	1195850	100.000	108.58	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	1112318			55.55- 155.55	93.01
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	879588	100.000	98.470	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	262766			0.00- 79.23	29.87
8.114	8.114 (0.568)	66	270181			0.00- 81.96	30.72
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	4464199	100.000	98.626	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	2887499			16.35- 116.35	64.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	756158	100.000	107.50	50.00- 150.00	100.00
10.132	10.132 (0.710)	43	153167			0.00- 75.81	20.26
10.132	10.132 (0.710)	46	303218			0.00- 92.85	40.10
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	2319178	100.000	97.442	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	1464340			14.16- 114.16	63.14
10.575	10.575 (0.741)	101	3092619			84.00- 184.00	133.35
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	3087655	100.000	93.170	50.00- 150.00	100.00
10.519	10.519 (0.737)	96	1611407			6.46- 106.46	52.19
10.519	10.519 (0.737)	98	1030936			0.00- 82.24	33.39
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	1011913	100.000	90.417	50.00- 150.00	100.00
10.879	10.879 (0.762)	43	3373982			275.34- 375.34	333.43
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	3769034	100.000	95.609	50.00- 150.00	100.00
11.321	11.321 (0.793)	43	673534			0.00- 68.18	17.87
11.321	11.321 (0.793)	59	141366			0.00- 53.79	3.75
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	5234647	100.000	97.016	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.459	11.459 (0.802)	76	655240	100.000	119.43	50.00- 150.00	100.00
11.432	11.432 (0.801)	41	2398251			303.82- 403.82	366.01
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	2578164	100.000	89.593	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	1626133			10.84- 110.84	63.07
11.764	11.764 (0.824)	51	779624			0.00- 79.96	30.24
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	1925544	100.000	93.424	50.00- 150.00	100.00
12.151	12.151 (0.851)	57	558000			0.00- 77.79	28.98
12.151	12.151 (0.851)	41	560033			0.00- 78.25	29.08
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	2063623	100.000	99.693	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	3325955			112.88- 212.88	161.17
12.178	12.178 (0.853)	98	1317858			13.20- 113.20	63.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.565	12.565 (0.880)	57	4662480	100.000	97.272	50.00- 150.00	100.00
12.565	12.565 (0.880)	43	2995785			16.42- 116.42	64.25
12.565	12.565 (0.880)	86	673721			0.00- 64.88	14.45
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	570739	100.000	108.45	50.00- 150.00	100.00
13.063	13.063 (0.915)	43	7088928			1256.82-1356.82	1242.06
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	4158640	100.000	112.57	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	1249118			0.00- 81.08	30.04
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	1218286	100.000	107.49	50.00- 150.00	100.00
13.920	13.920 (0.975)	43	5958328			467.40- 567.40	489.07
13.920	13.920 (0.975)	57	452028			0.00- 90.57	37.10
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	3380815	100.000	98.900	50.00- 150.00	100.00
13.893	13.893 (0.973)	96	2340178			21.33- 121.33	69.22
13.920	13.920 (0.975)	98	1490662			0.00- 93.61	44.09
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	3667153	100.000	80.608	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	1147732			0.00- 81.06	31.30
14.252	14.252 (0.998)	72	1217054			0.00- 82.78	33.19
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	4686768	100.000	105.04	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	2898963			13.48- 113.48	61.85
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	5093377	100.000	109.58	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	3243057			10.75- 110.75	63.67
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	3856506	100.000	97.146	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	5180992			80.92- 180.92	134.34
14.556	14.556 (1.019)	41	2730836			25.14- 125.14	70.81
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	4493648	100.000	103.89	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	4650108			52.09- 152.09	103.48
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	8400613	100.000	98.467	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	1890966			0.00- 73.68	22.51
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	16975947	100.000	101.18	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	5354603			0.00- 83.07	31.54
15.109	15.109 (1.058)	41	3923607			0.00- 74.24	23.11
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.247	15.247 (0.968)	62	3557102	100.000	101.76	50.00- 150.00	100.00
15.247	15.247 (0.968)	64	1126548			0.00- 83.51	31.67
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	3258276	100.000	98.508	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	6868749			162.65- 262.65	210.81
15.358	15.358 (0.975)	57	3549357			57.85- 157.85	108.93
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	3442836	100.000	98.359	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	3338642			44.27- 144.27	96.97
16.132	16.132 (1.025)	97	2218096			13.70- 113.70	64.43
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	3340461	100.000	98.219	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	2373335			19.75- 119.75	71.05
16.575	16.575 (1.053)	41	1981698			10.91- 110.91	59.32
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	2121111	100.000	96.261	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	1719276			31.42- 131.42	81.06
16.713	16.713 (1.061)	57	537321			0.00- 75.70	25.33
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	5638401	100.000	104.06	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	3435599			10.99- 110.99	60.93
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	4843268	100.000	101.83	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	1528144			0.00- 83.56	31.55
17.625	17.625 (1.119)	39	2699684			4.99- 104.99	55.74
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	3518388	100.000	104.02	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	9156215			210.27- 310.27	260.24
17.791	17.791 (1.130)	85	1319872			0.00- 89.24	37.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	11772181	100.000	100.82	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	7001403			11.28- 111.28	59.47
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	5311517	100.000	104.86	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	1669848			0.00- 85.24	31.44
18.427	18.427 (0.920)	39	2811595			4.20- 104.20	52.93
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	4032162	100.000	99.567	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	2491084			11.14- 111.14	61.78
18.704	18.704 (0.934)	83	3295638			31.56- 131.56	81.73
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	4665455	100.000	98.969	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	3608149			27.65- 127.65	77.34
18.814	18.814 (0.939)	131	3462380			24.22- 124.22	74.21
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	5471536	100.000	101.08	50.00- 150.00	100.00
18.952	18.952 (0.946)	43	10018443			132.53- 232.53	183.10
18.980	18.980 (0.948)	100	1055246			0.00- 69.73	19.29
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	5991081	100.000	106.53	50.00- 150.00	100.00
19.257	19.257 (0.961)	127	4621020			26.10- 126.10	77.13
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	6359366	100.000	108.24	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	6011524			46.78- 146.78	94.53
124 Chlorobenzene					CAS #: 108-90-7		
20.058	20.058 (1.001)	112	10759663	100.000	100.48	50.00- 150.00	100.00
20.058	20.058 (1.001)	114	3349675			0.00- 81.78	31.13
20.058	20.058 (1.001)	77	6884647			21.93- 121.93	63.99
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	5977313	100.000	101.47	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	19890069			273.94- 373.94	332.76
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	7691807	100.000	104.08	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	15605632			157.95- 257.95	202.89
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	7175360	100.000	100.50	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	15393182			161.60- 261.60	214.53
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	12092933	100.000	101.60	50.00- 150.00	100.00
20.833	20.833 (1.040)	78	5600073			0.00- 96.94	46.31
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	5690890	100.000	107.29	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	2951921			0.00- 99.96	51.87
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	21894738	100.000	107.38	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	5494034			0.00- 75.80	25.09
21.247	21.247 (1.061)	51	2224286			0.00- 60.85	10.16
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	10243835	100.000	97.266	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	6251264			11.01- 111.01	61.02
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	23960500	100.000	94.705	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	5780307			0.00- 73.27	24.12
21.745	21.745 (1.086)	105	943438			0.00- 55.00	3.94
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	22622973	100.000	102.02	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	6629081			0.00- 79.07	29.30
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	22565255	100.000	111.11	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	9990592			0.00- 94.49	44.27
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	17617523	100.000	109.45	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	7642331			0.00- 95.48	43.38
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	10100884	100.000	102.74	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	6299555			12.15- 112.15	62.37
22.823	22.823 (1.139)	111	4214576			0.00- 91.58	41.72
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	10452557	100.000	108.16	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	6510815			16.32- 116.32	62.29
22.934	22.934 (1.145)	111	4190585			0.00- 90.95	40.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	15665413	100.000	107.96	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	3007095			0.00- 69.46	19.20
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	8740333	100.000	101.87	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	5458348			11.93- 111.93	62.45
23.404	23.404 (1.168)	111	3812134			0.00- 93.62	43.62
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.256	25.256 (1.261)	180	4113268	100.000	129.59	50.00- 150.00	100.00
25.256	25.256 (1.261)	182	3862917			43.32- 143.32	93.91
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.339	25.339 (1.265)	225	2776060	100.000	121.53	50.00- 150.00	100.00
25.339	25.339 (1.265)	223	1758396			14.77- 114.77	63.34
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	316062	100.000	94.267	50.00- 150.00	100.00
5.460	5.460 (0.382)	43	2384365			703.05- 803.05	754.40
29 Isopentane					CAS #: 78-78-4		
8.280	8.280 (0.580)	43	2306736	100.000	93.423	50.00- 150.00	100.00
8.307	8.307 (0.582)	57	1579509			18.54- 118.54	68.47
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.353	16.353 (1.145)	83	5659026	100.000	101.40	50.00- 150.00	100.00
16.353	16.353 (1.145)	98	2723142			0.00- 97.88	48.12
16.353	16.353 (1.145)	55	5250510			45.40- 145.40	92.78
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	1640654	100.000	75.471	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	324867			0.00- 67.50	19.80
12.068	12.068 (0.845)	57	168891			0.00- 63.77	10.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051914.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->100ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	317781	2.10
95 1,4-Difluorobenze	1618588	971153	2266023	1668207	3.07
123 Chlorobenzene-d5	1862744	1117646	2607842	1905887	2.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

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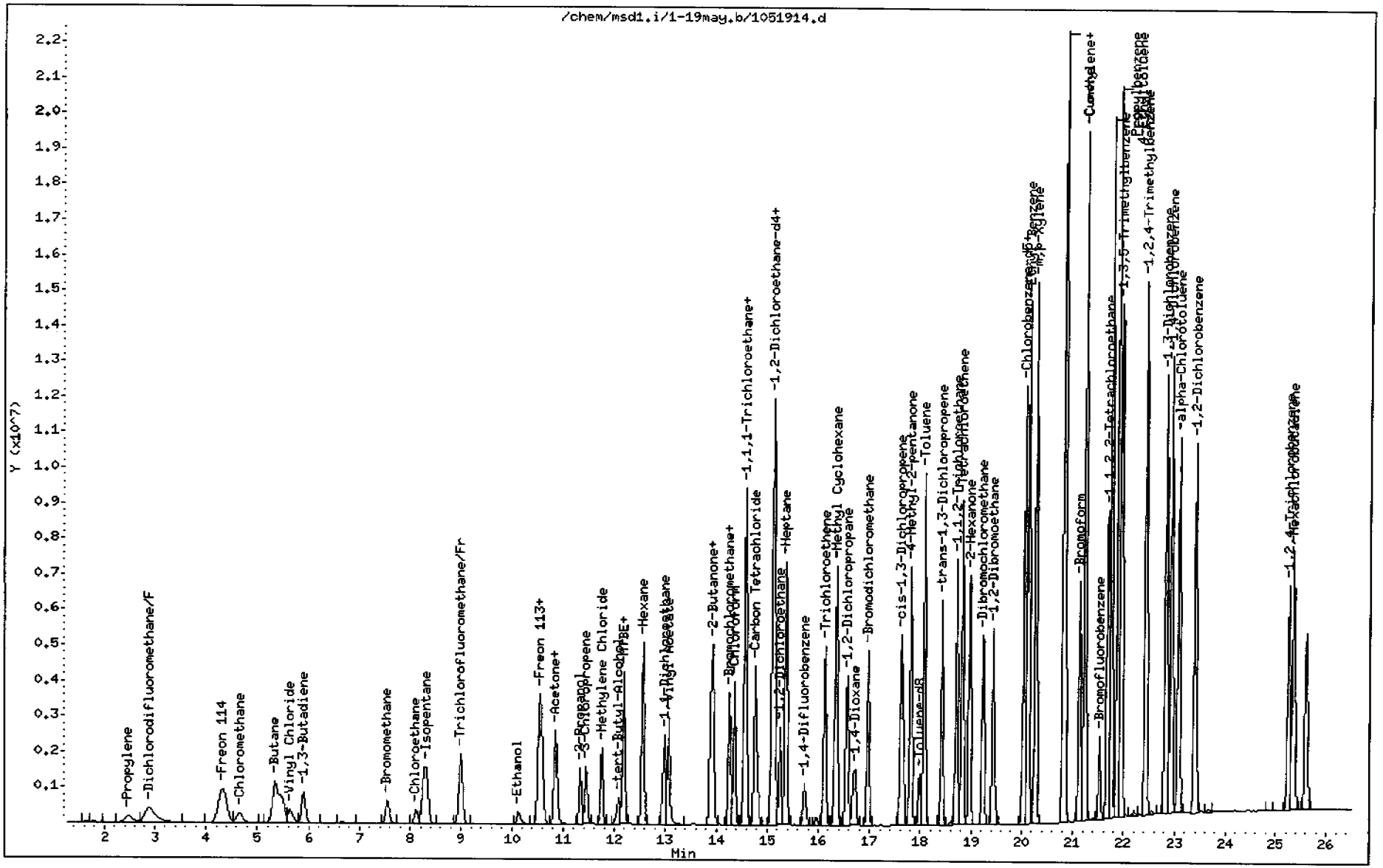
Data File: /chem/msd1.i/1-19may.b/1051914.d
Date : 19-MAY-2008 16:26
Client ID: Level 6
Sample Info: 50mL #1612-3

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052006.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 20-MAY-2008 11:33
Operator : lo
Inst ID: msd1.i
Smp Info : 200mL #1541-142
Misc Info : 200ppbv ->200ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	314012	25.0000		50.00- 150.00	100.00
14.282	14.282 (1.000)	128	238511			28.24- 128.24	75.96
14.255	14.255 (1.000)	49	561936			133.94- 233.94	178.95
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1591700	25.0000		50.00- 150.00	100.00
15.748	15.748 (1.000)	88	245348			0.00- 65.99	15.41
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1776659	25.0000		50.00- 150.00	100.00
20.033	20.033 (1.000)	82	1027556			8.42- 108.42	57.84
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	5530415	200.000	208.50	50.00- 150.00	100.00(A)
4.636	4.636 (0.325)	45	1351918			0.00- 75.41	24.45
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	1267609	200.000	206.30	50.00- 150.00	100.00(A)
2.411	2.411 (0.169)	69	1020733			32.58- 132.58	80.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.411	2.411 (0.169)	63	133083			0.00- 58.36	10.50
13 Freon 152a					CAS #: 75-37-6		
2.749	2.749 (0.192)	65	1174383	200.000	201.82	50.00- 150.00	100.00
2.749	2.749 (0.192)	51	2503230			172.46- 272.46	213.15
2.721	2.721 (0.190)	47	599405			0.63- 100.63	51.04
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	4142101	200.000	196.56	50.00- 150.00	100.00
3.453	3.453 (0.242)	67	669093			0.00- 65.39	16.15
3.453	3.453 (0.242)	85	61374			0.00- 51.20	1.48
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	5195942	1200.00	1041.8	50.00- 150.00	100.00
7.818	7.818 (0.547)	32	3678217			64.72- 164.72	70.79
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	5383908	200.000	215.45	50.00- 150.00	100.00(A)
9.195	9.195 (0.644)	69	1618187			0.00- 79.81	30.06
9.195	9.195 (0.644)	35	285897			0.00- 55.10	5.31
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	2460953	200.000	218.81	50.00- 150.00	100.00(A)
10.384	10.384 (0.727)	67	3514284			96.88- 196.88	142.80
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	400324	200.000	209.63	50.00- 150.00	100.00(A)
10.577	10.577 (0.741)	133	79678			0.00- 73.50	19.90
10.577	10.577 (0.741)	85	252816			10.10- 110.10	63.15
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	18399253	200.000	222.49	50.00- 150.00	100.00(A)
13.010	13.010 (0.911)	87	3765626			0.00- 71.33	20.47
12.983	12.983 (0.909)	59	1808653			0.00- 60.24	9.83
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	975174	200.000	243.63	50.00- 150.00	100.00(A)
13.204	13.204 (0.924)	59	1068682			47.04- 147.04	109.59
13.204	13.204 (0.924)	41	590567			14.12- 114.12	60.56
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.563	13.563 (0.950)	59	8098370	200.000	233.47	50.00- 150.00	100.00(A)
13.563	13.563 (0.950)	87	2919330			0.00- 86.33	36.05
13.536	13.536 (0.948)	41	1366896			0.00- 70.48	16.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.950	13.950 (0.977)	45	1854061	200.000	219.25	50.00- 150.00	100.00(A)
13.950	13.950 (0.977)	61	1646174			36.81- 136.81	88.79
13.950	13.950 (0.977)	43	13093375			616.84- 716.84	706.20
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.222	15.222 (1.066)	73	8550605	200.000	217.34	50.00- 150.00	100.00(A)
15.222	15.222 (1.066)	87	2038710			0.00- 73.95	23.84
15.222	15.222 (1.066)	55	2370852			0.00- 80.63	27.73
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	15902034	200.000	236.26	50.00- 150.00	100.00(A)
20.918	20.918 (1.465)	43	22867085			99.63- 199.63	143.80
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	5130060	200.000	251.98	50.00- 150.00	100.00(A)
15.941	15.941 (1.012)	41	3448438			20.92- 120.92	67.22
15.941	15.941 (1.012)	43	2818861			4.89- 104.89	54.95
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	9527376	200.000	233.17	50.00- 150.00	100.00(A)
19.066	19.066 (1.211)	73	3096010			0.00- 87.23	32.50
19.066	19.066 (1.211)	43	23062749			180.18- 280.18	242.07
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	12049319	200.000	237.60	50.00- 150.00	100.00(A)
21.471	21.471 (1.072)	98	4764199			0.00- 90.24	39.54
21.471	21.471 (1.072)	42	8017173			17.74- 117.74	66.54
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.079	22.079 (1.102)	57	22993489	200.000	201.86	50.00- 150.00	100.00
22.079	22.079 (1.102)	85	20351826			28.61- 128.61	88.51
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

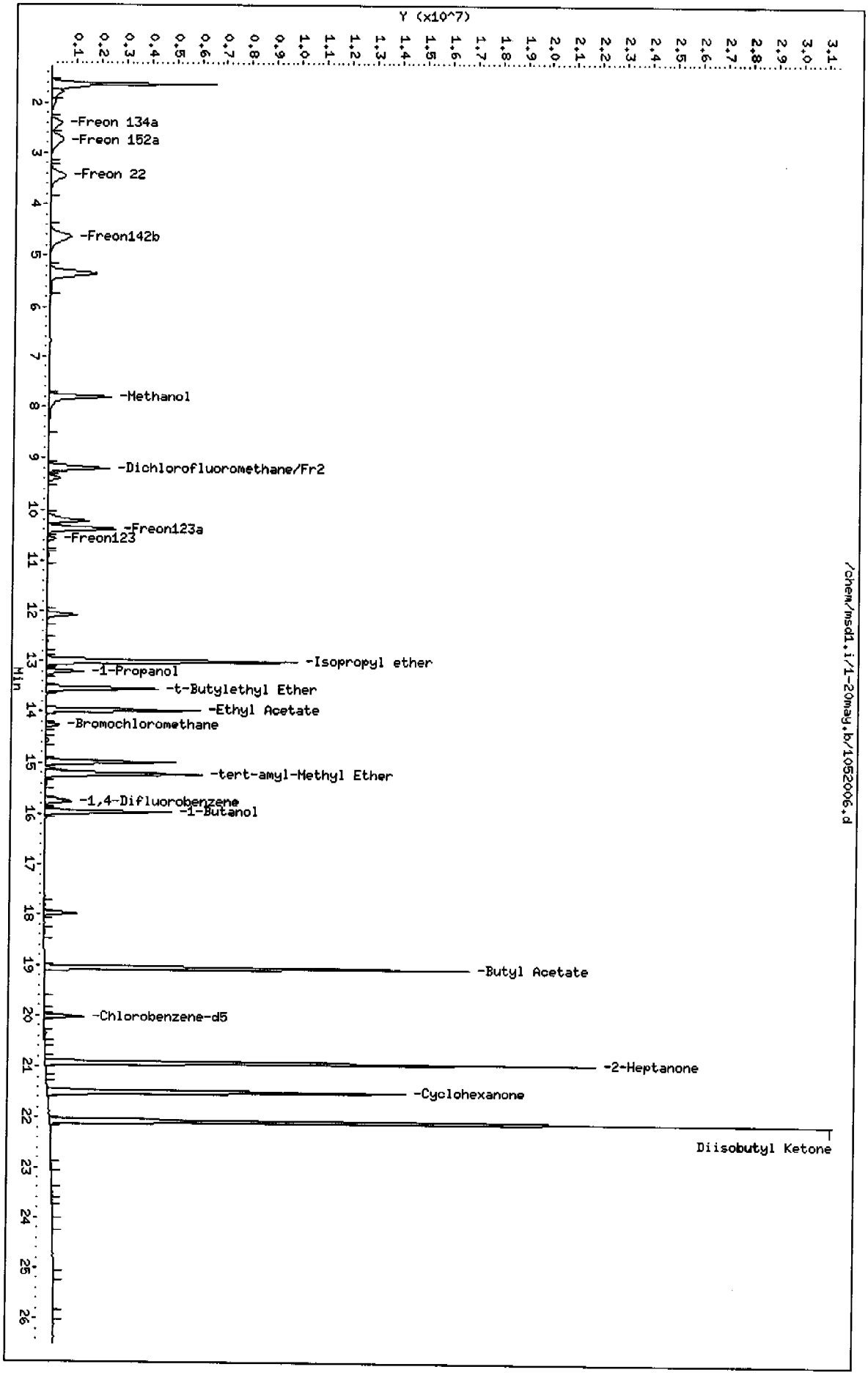
Instrument ID: msd1.i
Lab File ID: 1052006.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->200ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	314012	0.62
95 1,4-Difluorobenze	1622087	973252	2270922	1591700	-1.87
123 Chlorobenzene-d5	1805786	1083472	2528100	1776659	-1.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-20may.b/1052006.d
Date : 20-MAY-2006 11:33
Client ID: Level 7
Sample Info: 200mL #1541-142
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051915.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 19-MAY-2008 16:59
Operator : kr
Inst ID: msd1.i
Smp Info : 100mL #1612-3
Misc Info : 200ppbv ->200ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:31 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:59
Cal File: 1051915.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280	(1.000)	130	321295	25.0000		50.00- 150.00	100.00
14.280	14.280	(1.000)	128	250333			27.36- 127.36	77.91
14.252	14.252	(1.000)	49	599684			133.45- 233.45	186.65
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745	(1.000)	114	1704270	25.0000		50.00- 150.00	100.00
15.745	15.745	(1.000)	88	272968			0.00- 65.96	16.02
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031	(1.000)	117	1926203	25.0000		50.00- 150.00	100.00
20.031	20.031	(1.000)	82	1134490			8.51- 108.51	58.90
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137	(1.060)	65	585385	25.0000	27.302	50.00- 150.00	100.00
15.137	15.137	(1.060)	67	455555			6.04- 106.04	77.82
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985	(1.142)	98	1924287	25.0000	24.919	50.00- 150.00	100.00
17.985	17.985	(1.142)	70	204358			0.00- 60.35	10.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1267101			15.45- 115.45	65.85
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1063071	25.0000	25.792	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1695024			109.02- 209.02	159.45
21.524	21.524 (1.075)	176	1004813			45.30- 145.30	94.52
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	1393208	200.000	196.39	50.00- 150.00	100.00
2.501	2.501 (0.175)	42	938846			16.91- 116.91	67.39
2.474	2.474 (0.173)	39	1119651			37.15- 137.15	80.36
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	6614003	200.000	186.74	50.00- 150.00	100.00
2.888	2.888 (0.202)	87	2132193			0.00- 75.39	32.24
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	4707701	200.000	194.16	50.00- 150.00	100.00
4.354	4.354 (0.305)	137	1473850			0.00- 79.32	31.31
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	2694919	200.000	176.56	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	872786			0.00- 80.15	32.39
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	3007796	200.000	180.21	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	928005			0.00- 77.57	30.85
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	2506410	200.000	197.49	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	2436139			37.41- 137.41	97.20
26 Bromomethane					CAS #: 74-83-9		
7.561	7.561 (0.529)	94	2386479	200.000	211.79	50.00- 150.00	100.00(A)
7.561	7.561 (0.529)	96	2235910			55.55- 155.55	93.69
28 Chloroethane					CAS #: 75-00-3		
8.142	8.142 (0.570)	64	1786155	200.000	198.14	50.00- 150.00	100.00
8.142	8.142 (0.570)	49	522931			0.00- 79.23	29.28
8.142	8.142 (0.570)	66	544047			0.00- 81.66	30.46
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	8936722	200.000	196.05	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	5737359			16.35- 116.35	64.20

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.132	10.132	(0.710)	45	1530509	200.000	211.98	50.00- 150.00	100.00(A)
10.132	10.132	(0.710)	43	305751			0.00- 75.81	19.98
10.132	10.132	(0.710)	46	616925			0.00- 92.85	40.31
43 Freon 113						CAS #: 76-13-1		
10.575	10.575	(0.741)	151	4558860	200.000	191.13	50.00- 150.00	100.00
10.575	10.575	(0.741)	153	2909083			14.16- 114.16	63.81
10.575	10.575	(0.741)	101	6187449			84.00- 184.00	135.72
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.520	10.520	(0.737)	61	6175075	200.000	186.74	50.00- 150.00	100.00
10.520	10.520	(0.737)	96	3247587			6.46- 106.46	52.59
10.520	10.520	(0.737)	98	2070529			0.00- 82.24	33.53
45 Acetone						CAS #: 67-64-1		
10.879	10.879	(0.762)	58	2054002	200.000	184.94	50.00- 150.00	100.00
10.879	10.879	(0.762)	43	6875650			275.34- 375.34	334.74
46 2-Propanol						CAS #: 67-63-0		
11.321	11.321	(0.793)	45	7377423	200.000	187.90	50.00- 150.00	100.00
11.321	11.321	(0.793)	43	1310249			0.00- 68.18	17.76
11.321	11.321	(0.793)	59	272731			0.00- 53.79	3.70
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	10808014	200.000	198.43	50.00- 150.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.460	11.460	(0.802)	76	1446974	200.000	245.89	50.00- 150.00	100.00(A)
11.432	11.432	(0.801)	41	5224565			303.82- 403.82	361.07
54 Methylene Chloride						CAS #: 75-09-2		
11.764	11.764	(0.824)	49	5279151	200.000	184.30	50.00- 150.00	100.00
11.764	11.764	(0.824)	84	3329945			10.84- 110.84	63.08
11.764	11.764	(0.824)	51	1574054			0.00- 79.96	29.82
58 MTBE						CAS #: 1634-04-4		
12.151	12.151	(0.851)	73	3685482	200.000	180.34	50.00- 150.00	100.00
12.151	12.151	(0.851)	57	1067238			0.00- 77.79	28.96
12.151	12.151	(0.851)	41	993835			0.00- 78.25	26.97
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.178	(0.853)	96	4151625	200.000	198.64	50.00- 150.00	100.00
12.178	12.178	(0.853)	61	6735924			112.88- 212.88	162.25
12.178	12.178	(0.853)	98	2644991			13.20- 113.20	63.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	9374601	200.000	194.50	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	5930488			16.42- 116.42	63.26
12.566	12.566 (0.880)	86	1348110			0.00- 64.88	14.38
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	1134518	200.000	210.44	50.00- 150.00	100.00(A)
13.063	13.063 (0.915)	43	14852383			1256.82-1356.82	1309.14
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	8456750	200.000	221.54	50.00- 150.00	100.00(A)
12.980	12.980 (0.909)	65	2483866			0.00- 81.08	29.37
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	2430439	200.000	209.98	50.00- 150.00	100.00(A)
13.920	13.920 (0.975)	43	12106660			467.40- 567.40	498.13
13.920	13.920 (0.975)	57	900406			0.00- 90.57	37.05
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	6752986	200.000	196.14	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	4667759			21.33- 121.33	69.12
13.920	13.920 (0.975)	98	2926267			0.00- 93.61	43.33
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	7355772	200.000	165.44	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	2273850			0.00- 81.06	30.91
14.252	14.252 (0.998)	72	2473313			0.00- 82.78	33.62
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	9496044	200.000	208.94	50.00- 150.00	100.00(A)
14.363	14.363 (1.006)	85	5805997			13.48- 113.48	61.14
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	10230304	200.000	214.52	50.00- 150.00	100.00(A)
14.584	14.584 (1.021)	99	6430222			10.75- 110.75	62.85
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	7553060	200.000	190.05	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	10290932			80.92- 180.92	136.25
14.584	14.584 (1.021)	41	5333862			25.14- 125.14	70.62
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.778	14.778 (1.035)	119	9197578	200.000	208.52	50.00- 150.00	100.00(A)
14.778	14.778 (1.035)	117	9523857			52.09- 152.09	103.55
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	16817311	200.000	193.93	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	3699449			0.00- 73.68	22.00
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	33956766	200.000	200.15	50.00- 150.00	100.00(A)
15.109	15.109 (1.058)	56	10631071			0.00- 83.07	31.31
15.109	15.109 (1.058)	41	7791258			0.00- 74.24	22.94
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	7322789	200.000	204.20	50.00- 150.00	100.00(A)
15.248	15.248 (0.968)	64	2293119			0.00- 83.51	31.31
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	6591354	200.000	195.87	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	13930068			162.65- 262.65	211.34
15.358	15.358 (0.975)	57	7108043			57.85- 157.85	107.84
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	6914390	200.000	194.43	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	6586266			44.27- 144.27	95.25
16.132	16.132 (1.025)	97	4413313			13.70- 113.70	63.83
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	6741009	200.000	194.98	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	4766127			19.75- 119.75	70.70
16.575	16.575 (1.053)	41	3943479			10.91- 110.91	58.50
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	4307492	200.000	193.02	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	3451393			31.42- 131.42	80.13
16.713	16.713 (1.061)	57	1078386			0.00- 75.70	25.04
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	11522507	200.000	206.74	50.00- 150.00	100.00(A)
16.962	16.962 (1.077)	85	6959572			10.99- 110.99	60.40
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	9922414	200.000	203.49	50.00- 150.00	100.00(A)
17.625	17.625 (1.119)	77	3059909			0.00- 83.56	30.84
17.625	17.625 (1.119)	39	5410495			4.99- 104.99	54.53
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	7196459	200.000	206.83	50.00- 150.00	100.00(A)
17.791	17.791 (1.130)	43	19101777			210.27- 310.27	265.43
17.791	17.791 (1.130)	85	2700121			0.00- 89.24	37.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	23846877	200.000	199.93	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	14084991			11.28- 111.28	59.06
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	10894545	200.000	210.56	50.00- 150.00	100.00(A)
18.427	18.427 (0.920)	77	3361250			0.00- 85.24	30.85
18.427	18.427 (0.920)	39	5717327			4.20- 104.20	52.48
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	7988217	200.000	195.96	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	4909238			11.14- 111.14	61.46
18.704	18.704 (0.934)	83	6558070			31.56- 131.56	82.10
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	9023702	200.000	191.09	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	7099496			27.65- 127.65	78.68
18.814	18.814 (0.939)	131	6764215			24.22- 124.22	74.96
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	11361697	200.000	206.10	50.00- 150.00	100.00(A)
18.980	18.980 (0.948)	43	21098753			132.53- 232.53	185.70
18.980	18.980 (0.948)	100	2174839			0.00- 69.73	19.14
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	12120300	200.000	210.92	50.00- 150.00	100.00(A)
19.257	19.257 (0.961)	127	9285656			26.10- 126.10	76.61
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	12789780	200.000	213.06	50.00- 150.00	100.00(A)
19.450	19.450 (0.971)	109	12052357			46.78- 146.78	94.23
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	22054737	200.000	203.15	50.00- 150.00	100.00(A)
20.059	20.059 (1.001)	114	6663028			0.00- 81.78	30.21
20.059	20.059 (1.001)	77	13765136			21.93- 121.93	62.41
125 Ethyl Benzene					CAS #: 100-41-4		
20.142	20.142 (1.006)	106	11904683	200.000	199.98	50.00- 150.00	100.00
20.142	20.142 (1.006)	91	30502666			273.94- 373.94	256.22
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	15600068	200.000	207.33	50.00- 150.00	100.00(A)
20.280	20.280 (1.012)	91	27555251			157.95- 257.95	176.64
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	14088951	200.000	196.03	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	28555162			161.60- 261.60	202.68
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	24422474	200.000	202.59	50.00- 150.00	100.00(A)
20.833	20.833 (1.040)	78	11183023			0.00- 96.94	45.79
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	11327738	200.000	209.34	50.00- 150.00	100.00(A)
21.137	21.137 (1.055)	171	5765590			0.00- 99.96	50.90
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	30834079	200.000	155.22	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	10835564			0.00- 75.80	35.14
21.247	21.247 (1.061)	51	4422542			0.00- 60.85	14.34
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.690	21.690 (1.083)	83	20958905	200.000	197.42	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	12518467			11.01- 111.01	59.73
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	33267167	200.000	138.15	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	11488216			0.00- 73.27	34.53
21.745	21.745 (1.086)	105	1837576			0.00- 55.00	5.52
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	32070637	200.000	150.23	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	12971014			0.00- 79.07	40.45
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	39202834	200.000	192.24	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	20107236			0.00- 94.49	51.29
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	30758856	200.000	190.56	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	15368937			0.00- 95.48	49.97
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	20656280	200.000	206.52	50.00- 150.00	100.00(A)
22.823	22.823 (1.139)	148	12666106			12.15- 112.15	61.32
22.823	22.823 (1.139)	111	8505978			0.00- 91.58	41.18
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	21355009	200.000	215.30	50.00- 150.00	100.00(A)
22.934	22.934 (1.145)	148	13209417			16.32- 116.32	61.86
22.934	22.934 (1.145)	111	8388254			0.00- 90.95	39.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	28688410	200.000	196.33	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	6129339			0.00- 69.46	21.37
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	18203848	200.000	208.20	50.00- 150.00	100.00(A)
23.404	23.404 (1.168)	148	11226690			11.93- 111.93	61.67
23.404	23.404 (1.168)	111	7844083			0.00- 93.62	43.09
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	11364295	200.000	306.91	50.00- 150.00	100.00(A)
25.257	25.257 (1.261)	182	10661419			43.32- 143.32	93.82
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	6942661	200.000	273.20	50.00- 150.00	100.00(A)
25.340	25.340 (1.265)	223	4333437			14.77- 114.77	62.42
22 Butane					CAS #: 106-97-8		
5.487	5.487 (0.384)	58	630756	200.000	188.70	50.00- 150.00	100.00
5.487	5.487 (0.384)	43	4753872			703.05- 803.05	753.68
29 Isopentane					CAS #: 78-78-4		
8.308	8.308 (0.582)	43	4567848	200.000	186.14	50.00- 150.00	100.00
8.308	8.308 (0.582)	57	3180256			18.54- 118.54	69.62
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	11547392	200.000	203.85	50.00- 150.00	100.00(A)
16.354	16.354 (1.145)	98	5439139			0.00- 97.88	47.10
16.354	16.354 (1.145)	55	10686110			45.40- 145.40	92.54
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	2861045	200.000	138.21	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	557533			0.00- 67.50	19.49
12.068	12.068 (0.845)	57	310186			0.00- 63.77	10.84

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

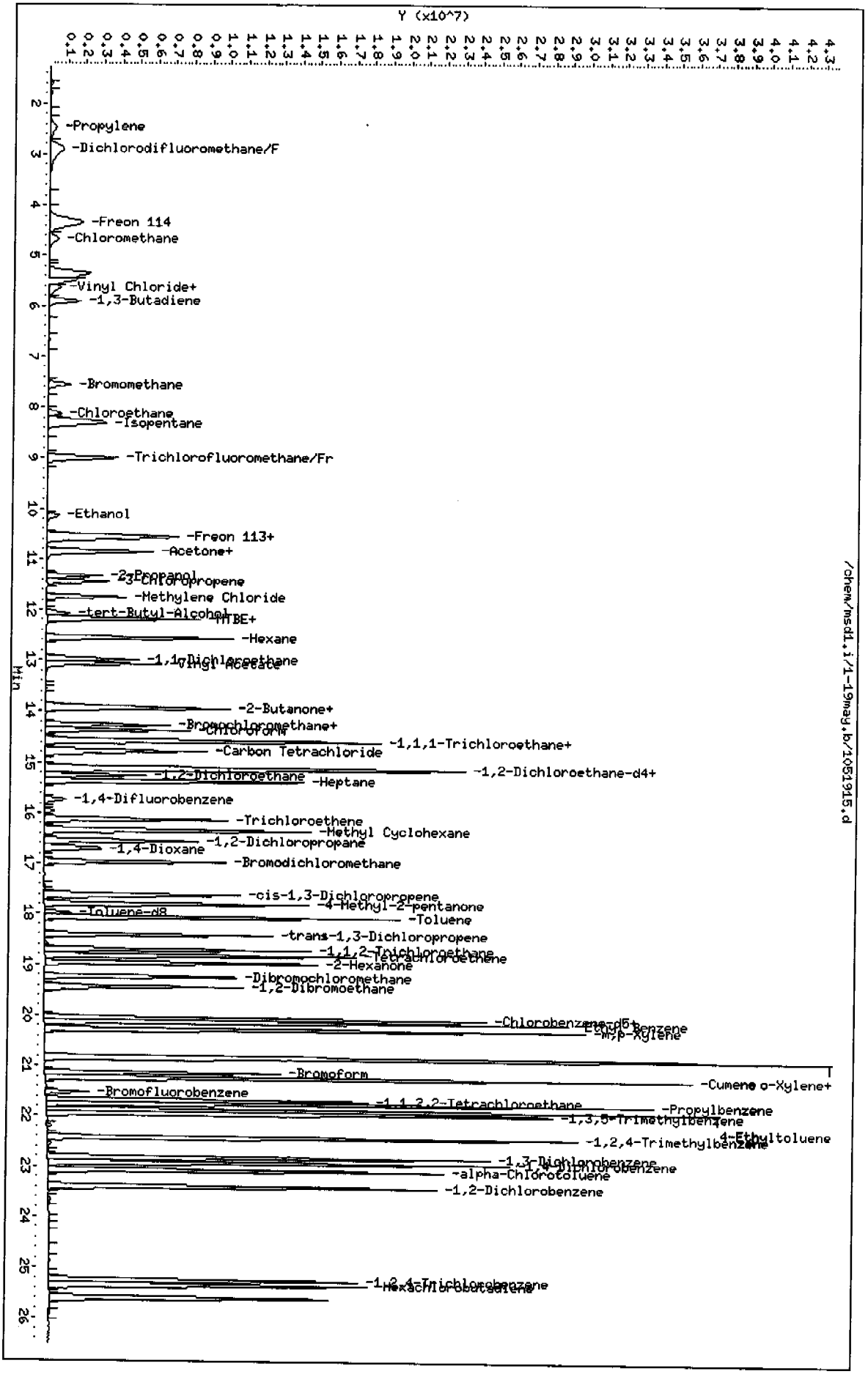
Instrument ID: msd1.i
Lab File ID: 1051915.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->200ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	321295	3.23
95 1,4-Difluorobenze	1618588	971153	2266023	1704270	5.29
123 Chlorobenzene-d5	1862744	1117646	2607842	1926203	3.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



/chem/msd1.i/1-19may.b/1051915.d

Data File: /chem/msd1.i/1-19may.b/1051915.d
Date : 19-MAY-2008 16:59
Client ID: Level 7
Sample Info: 100mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805347-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052802 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/28/08 08:50 AM

Compound	%Recovery
Freon 12	98
Freon 114	99
Chloromethane	97
Vinyl Chloride	96
1,3-Butadiene	99
Bromomethane	112
Chloroethane	107
Freon 11	99
Ethanol	102
Freon 113	101
1,1-Dichloroethene	94
Acetone	95
2-Propanol	96
Carbon Disulfide	99
Methylene Chloride	91
Methyl tert-butyl ether	100
trans-1,2-Dichloroethene	105
Hexane	102
1,1-Dichloroethane	112
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	99
Tetrahydrofuran	86
Chloroform	105
1,1,1-Trichloroethane	108
Cyclohexane	100
Carbon Tetrachloride	101
Benzene	102
1,2-Dichloroethane	100
Heptane	102
Trichloroethene	101
1,2-Dichloropropane	100
1,4-Dioxane	99
Bromodichloromethane	102
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	102
Toluene	98
trans-1,3-Dichloropropene	106
1,1,2-Trichloroethane	105
Tetrachloroethene	108

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805347-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052802 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/28/08 08:50 AM

Compound	%Recovery
2-Hexanone	103
Dibromochloromethane	109
1,2-Dibromoethane (EDB)	111
Chlorobenzene	103
Ethyl Benzene	104
m,p-Xylene	105
o-Xylene	104
Styrene	101
Bromoform	111
1,1,2,2-Tetrachloroethane	96
4-Ethyltoluene	115
1,3,5-Trimethylbenzene	120
1,2,4-Trimethylbenzene	107
1,3-Dichlorobenzene	100
1,4-Dichlorobenzene	102
alpha-Chlorotoluene	103
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	87
Hexachlorobutadiene	94
Chlorodifluoromethane	110
Methanol	111
n-Butanol	119
Propylene	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i Injection Date: 28-MAY-2008 08:50
Lab File ID: 1052802.d Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Analysis Type: AIR Init. Cal. Times: 13:23 11:33
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd1.i/1-28may.b/t14q519b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.62729	0.010	2.46112	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.09524	0.010	3.31264	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.53940	0.010	-0.83371	30.00000	Averaged
12 Propylene	0.55198	0.56050	0.010	-1.54343	30.00000	Averaged
14 Dichlorodifluoromethane/Fr1	2.75595	2.71424	0.010	1.51331	30.00000	Averaged
17 Freon 114	1.88665	1.86724	0.010	1.02840	30.00000	Averaged
21 Chloromethane	1.18763	1.15279	0.010	2.93356	30.00000	Averaged
23 Vinyl Chloride	1.29868	1.25307	0.010	3.51160	30.00000	Averaged
24 1,3-Butadiene	0.98750	0.97952	0.010	0.80795	30.00000	Averaged
26 Bromomethane	0.87679	0.98095	0.010	-11.87992	30.00000	Averaged
28 Chloroethane	0.70142	0.75269	0.010	-7.30883	30.00000	Averaged
34 Trichlorofluoromethane/Fr11	3.54692	3.49962	0.010	1.33346	30.00000	Averaged
38 Ethanol	0.56181	0.57254	0.010	-1.91017	30.00000	Averaged
43 Freon 113	1.85594	1.88218	0.010	-1.41373	30.00000	Averaged
44 1,1-Dichloroethene	2.57302	2.42924	0.010	5.58815	30.00000	Averaged
45 Acetone	0.86419	0.82481	0.010	4.55686	30.00000	Averaged
46 2-Propanol	3.05508	2.94270	0.010	3.67838	30.00000	Averaged
48 Carbon Disulfide	4.23812	4.19691	0.010	0.97234	30.00000	Averaged
50 3-Chloropropene	0.45789	0.56154	0.010	-22.63728	30.00000	Averaged
54 Methylene Chloride	2.22886	2.03927	0.010	8.50612	30.00000	Averaged
58 MTBE	1.59019	1.58260	0.010	0.47707	30.00000	Averaged
59 trans-1,2-Dichloroethene	1.62625	1.70365	0.010	-4.75902	30.00000	Averaged
64 Hexane	3.75026	3.83987	0.010	-2.38950	30.00000	Averaged
67 Vinyl Acetate	0.41948	0.44503	0.010	-6.09064	30.00000	Averaged
68 1,1-Dichloroethane	2.97028	3.31579	0.010	-11.63251	30.00000	Averaged
75 2-Butanone	0.90063	0.98165	0.010	-8.99565	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.67894	2.65814	0.010	0.77644	30.00000	Averaged
78 Tetrahydrofuran	3.45948	2.98100	0.010	13.83122	30.00000	Averaged
81 Chloroform	3.53636	3.71028	0.010	-4.91796	30.00000	Averaged
83 1,1,1-Trichloroethane	3.71062	4.00361	0.010	-7.89595	30.00000	Averaged
84 Cyclohexane	3.09231	3.08889	0.010	0.11040	30.00000	Averaged
85 Carbon Tetrachloride	3.43205	3.46591	0.010	-0.98659	30.00000	Averaged
88 2,2,4-Trimethylpentane	13.20094	13.39647	0.010	-1.48115	30.00000	Averaged
91 Benzene	1.27209	1.29771	0.010	-2.01355	30.00000	Averaged
93 1,2-Dichloroethane	0.52605	0.52829	0.010	-0.42587	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i Injection Date: 28-MAY-2008 08:50
Lab File ID: 1052802.d Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Analysis Type: AIR Init. Cal. Times: 13:23 11:33
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd1.i/1-28may.b/t14q519b.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
94 Heptane	0.49365	0.50142	0.010	-1.57479	30.00000	Averaged
97 Trichloroethene	0.52165	0.52791	0.010	-1.19910	30.00000	Averaged
102 1,2-Dichloropropane	0.50714	0.50780	0.010	-0.13004	30.00000	Averaged
103 1,4-Dioxane	0.32736	0.32334	0.010	1.22746	30.00000	Averaged
106 Bromodichloromethane	0.81756	0.83271	0.010	-1.85368	30.00000	Averaged
109 cis-1,3-Dichloropropene	0.71526	0.71760	0.010	-0.32706	30.00000	Averaged
110 4-Methyl-2-pentanone	0.51039	0.52302	0.010	-2.47430	30.00000	Averaged
114 Toluene	1.74969	1.72481	0.010	1.42171	30.00000	Averaged
115 trans-1,3-Dichloropropene	0.67152	0.71430	0.010	-6.37092	30.00000	Averaged
116 1,1,2-Trichloroethane	0.52907	0.55569	0.010	-5.03047	30.00000	Averaged
117 Tetrachloroethene	0.61290	0.65950	0.010	-7.60450	30.00000	Averaged
118 2-Hexanone	0.71548	0.74013	0.010	-3.44470	30.00000	Averaged
121 Dibromochloromethane	0.74584	0.81042	0.010	-8.65935	30.00000	Averaged
122 1,2-Dibromoethane	0.77913	0.86253	0.010	-10.70395	30.00000	Averaged
124 Chlorobenzene	1.40905	1.45056	0.010	-2.94602	30.00000	Averaged
125 Ethyl Benzene	0.77264	0.80759	0.010	-4.52218	30.00000	Averaged
128 m,p-Xylene	0.97657	1.02424	0.010	-4.88150	30.00000	Averaged
130 o-Xylene	0.93283	0.96758	0.010	-3.72516	30.00000	Averaged
131 Styrene	1.56461	1.58131	0.010	-1.06739	30.00000	Averaged
133 Bromoform	0.70231	0.78004	0.010	-11.06804	30.00000	Averaged
134 Cumene	2.57828	2.91846	0.010	-13.19391	30.00000	Averaged
138 1,1,2,2-Tetrachloroethane	1.37791	1.32310	0.010	3.97787	30.00000	Averaged
140 Propylbenzene	3.12538	3.54023	0.010	-13.27357	30.00000	Averaged
144 4-Ethyltoluene	2.77069	3.18134	0.010	-14.82106	30.00000	Averaged
146 1,3,5-Trimethylbenzene	2.64680	3.18134	0.010	-20.19550	30.00000	Averaged
152 1,2,4-Trimethylbenzene	2.09493	2.24011	0.010	-6.92996	30.00000	Averaged
158 1,3-Dichlorobenzene	1.29813	1.30496	0.010	-0.52659	30.00000	Averaged
159 1,4-Dichlorobenzene	1.28732	1.32054	0.010	-2.58032	30.00000	Averaged
162 alpha-Chlorotoluene	1.89648	1.95256	0.010	-2.95659	30.00000	Averaged
164 1,2-Dichlorobenzene	1.13478	1.11290	0.010	1.92832	30.00000	Averaged
169 1,2,4-Trichlorobenzene	0.48058	0.41844	0.010	12.93105	30.00000	Averaged
170 Hexachlorobutadiene	0.32982	0.31020	0.010	5.94981	30.00000	Averaged
29 Isopentane	1.90941	1.93855	0.010	-1.52612	30.00000	Averaged
22 Butane	0.26009	0.25096	0.010	3.51031	30.00000	Averaged
99 Methyl Cyclohexane	4.40757	4.46027	0.010	-1.19573	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i Injection Date: 28-MAY-2008 08:50
Lab File ID: 1052802.d Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Analysis Type: AIR Init. Cal. Times: 13:23 11:33
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd1.i/1-28may.b/t14q519b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
57 tert-Butyl-Alcohol	1.61070	1.42019	0.010	11.82773	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-28may.b/1052802.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 28-MAY-2008 08:50
Operator : sjr Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-28may.b/t14q519b.m
Meth Date : 28-May-2008 10:49 sruth Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	****	========	=======	=======	==========	*****
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	295803	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	224018			25.73- 125.73	75.73
14.255	14.255 (1.000)	49	544357			134.03- 234.03	184.03
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1549116	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	233072			0.00- 65.05	15.05
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1677167	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	979503			8.42- 108.42	58.40
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	481358	25.0000	24.385	80.00- 120.00	100.00
15.140	15.140 (1.062)	67	292355			6.04- 106.04	60.74
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1696649	25.0000	24.172	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	178390			0.00- 60.35	10.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1124068			15.45- 115.45	66.25
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.076)	174	904670	25.0000	25.208	80.00- 120.00	100.00
21.499	21.499 (1.075)	95	1417204			106.65- 206.65	156.65
21.527	21.527 (1.076)	176	869641			46.13- 146.13	96.13
12 Propylene					CAS #: 115-07-1		
2.467	2.467 (0.173)	41	331594	50.0000	50.772	80.00- 120.00	100.00
2.467	2.467 (0.173)	42	226288			16.91- 116.91	68.24
2.467	2.467 (0.173)	39	272513			37.15- 137.15	82.18
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.862	2.862 (0.201)	85	1605761	50.0000	49.243	80.00- 120.00	100.00
2.862	2.862 (0.201)	87	518174			0.00- 75.39	32.27
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1104673	50.0000	49.486	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	345289			0.00- 81.26	31.26
21 Chloromethane					CAS #: 74-87-3		
4.636	4.636 (0.325)	50	682000	50.0000	48.533	80.00- 120.00	100.00
4.636	4.636 (0.325)	52	215032			0.00- 80.15	31.53
23 Vinyl Chloride					CAS #: 75-01-4		
5.622	5.622 (0.394)	62	741325	50.0000	48.244	80.00- 120.00	100.00
5.622	5.622 (0.394)	64	225402			0.00- 77.57	30.41
24 1,3-Butadiene					CAS #: 106-99-0		
5.875	5.875 (0.412)	54	579491	50.0000	49.596	80.00- 120.00	100.00
5.875	5.875 (0.412)	39	564504			37.41- 137.41	97.41
26 Bromomethane					CAS #: 74-83-9		
7.536	7.536 (0.529)	94	580337	50.0000	55.940	80.00- 120.00	100.00
7.536	7.536 (0.529)	96	540134			43.07- 143.07	93.07
28 Chloroethane					CAS #: 75-00-3		
8.100	8.100 (0.568)	64	445294	50.0000	53.654	80.00- 120.00	100.00
8.100	8.100 (0.568)	49	132650			0.00- 79.23	29.79
8.100	8.100 (0.568)	66	138349			0.00- 81.66	31.07
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
9.001	9.001 (0.631)	101	2070398	50.0000	49.333	80.00- 120.00	100.00
9.001	9.001 (0.631)	103	1332911			14.38- 114.38	64.38

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.135	10.135	(0.711)	45	338716	50.0000	50.955	80.00- 120.00	100.00
10.135	10.135	(0.711)	43	69595			0.00- 75.81	20.55
10.135	10.135	(0.711)	46	143470			0.00- 92.85	42.36
43 Freon 113						CAS #: 76-13-1		
10.577	10.577	(0.742)	151	1113510	50.0000	50.707	80.00- 120.00	100.00
10.577	10.577	(0.742)	153	712275			13.97- 113.97	63.97
10.550	10.550	(0.740)	101	1489728			83.79- 183.79	133.79
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.522	10.522	(0.738)	61	1437151	50.0000	47.206	80.00- 120.00	100.00
10.522	10.522	(0.738)	96	762313			3.04- 103.04	53.04
10.522	10.522	(0.738)	98	495309			0.00- 84.46	34.46
45 Acetone						CAS #: 67-64-1		
10.882	10.882	(0.763)	58	487960	50.0000	47.722	80.00- 120.00	100.00
10.882	10.882	(0.763)	43	1589000			275.34- 375.34	325.64
46 2-Propanol						CAS #: 67-63-0		
11.324	11.324	(0.794)	45	1740921	50.0000	48.161	80.00- 120.00	100.00
11.324	11.324	(0.794)	43	320673			0.00- 68.18	18.42
11.324	11.324	(0.794)	59	66121			0.00- 53.79	3.80
48 Carbon Disulfide						CAS #: 75-15-0		
10.826	10.826	(0.759)	76	2482915	50.0000	49.514	80.00- 120.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.435	11.435	(0.802)	76	332213	50.0000	61.319	80.00- 120.00	100.00
11.435	11.435	(0.802)	41	1234214			303.82- 403.82	371.51
54 Methylene Chloride						CAS #: 75-09-2		
11.739	11.739	(0.823)	49	1206444	50.0000	45.747	80.00- 120.00	100.00
11.739	11.739	(0.823)	84	766290			13.52- 113.52	63.52
11.739	11.739	(0.823)	51	360590			0.00- 79.96	29.89
58 MTBE						CAS #: 1634-04-4		
12.153	12.153	(0.853)	73	936276	50.0000	49.761	80.00- 120.00	100.00
12.153	12.153	(0.853)	57	267190			0.00- 78.54	28.54
12.153	12.153	(0.853)	41	267668			0.00- 78.25	28.59
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.181	12.181	(0.855)	96	1007887	50.0000	52.380	80.00- 120.00	100.00
12.181	12.181	(0.855)	61	1568674			105.64- 205.64	155.64
12.181	12.181	(0.855)	98	631427			13.20- 113.20	62.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.568	12.568 (0.882)	57	2271693	50.0000	51.195	80.00- 120.00	100.00
12.541	12.541 (0.880)	43	1499593			16.42- 116.42	66.01
12.568	12.568 (0.882)	86	333750			0.00- 64.88	14.69
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.917)	86	263281	50.0000	53.045	80.00- 120.00	100.00
13.066	13.066 (0.917)	43	3410021			1256.82-1356.82	1295.20
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.911)	63	1961643	50.0000	55.816	80.00- 120.00	100.00
12.983	12.983 (0.911)	65	582878			0.00- 79.71	29.71
75 2-Butanone					CAS #: 78-93-3		
13.923	13.923 (0.977)	72	580749	50.0000	54.498	80.00- 120.00	100.00
13.923	13.923 (0.977)	43	2825733			436.57- 536.57	486.57
13.923	13.923 (0.977)	57	214516			0.00- 90.57	36.94
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.975)	61	1572571	50.0000	49.612	80.00- 120.00	100.00
13.895	13.895 (0.975)	96	1114396			20.86- 120.86	70.86
13.895	13.895 (0.975)	98	715393			0.00- 95.49	45.49
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (1.000)	42	1763575	50.0000	43.084	80.00- 120.00	100.00
14.255	14.255 (1.000)	71	538370			0.00- 80.53	30.53
14.255	14.255 (1.000)	72	592727			0.00- 82.78	33.61
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	2195025	50.0000	52.459	80.00- 120.00	100.00
14.365	14.365 (1.008)	85	1363973			12.14- 112.14	62.14
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.023)	97	2368562	50.0000	53.948	80.00- 120.00	100.00
14.587	14.587 (1.023)	99	1504576			13.52- 113.52	63.52
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.021)	84	1827408	50.0000	49.945	80.00- 120.00	100.00
14.559	14.559 (1.021)	56	2475658			85.47- 185.47	135.47
14.559	14.559 (1.021)	41	1325745			22.55- 122.55	72.55
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.037)	119	2050451	50.0000	50.493	80.00- 120.00	100.00
14.780	14.780 (1.037)	117	2113949			53.10- 153.10	103.10
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.084	15.084 (1.058)	57	7925432	50.0000	50.740	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.084	15.084 (1.058)	56	2575799			0.00- 83.07	32.50
15.084	15.084 (1.058)	41	1894619			0.00- 74.24	23.91
91 Benzene					CAS #: 71-43-2		
15.140	15.140 (0.961)	78	4020594	50.0000	51.007	80.00- 120.00	100.00
15.140	15.140 (0.961)	77	916078			0.00- 73.68	22.78
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	1636768	50.0000	50.213	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	517848			0.00- 83.51	31.64
94 Heptane					CAS #: 142-82-5		
15.361	15.361 (0.975)	71	1553514	50.0000	50.787	80.00- 120.00	100.00
15.361	15.361 (0.975)	43	3294569			162.65- 262.65	212.07
15.361	15.361 (0.975)	57	1700783			57.85- 157.85	109.48
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1635581	50.0000	50.600	80.00- 120.00	100.00
16.107	16.107 (1.023)	130	1567394			45.83- 145.83	95.83
16.107	16.107 (1.023)	97	1049472			14.17- 114.17	64.17
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.550	16.550 (1.051)	63	1573286	50.0000	50.065	80.00- 120.00	100.00
16.550	16.550 (1.051)	62	1117991			21.06- 121.06	71.06
16.550	16.550 (1.051)	41	950890			10.44- 110.44	60.44
103 1,4-Dioxane					CAS #: 123-91-1		
16.688	16.688 (1.060)	88	1001793	50.0000	49.386	80.00- 120.00	100.00
16.688	16.688 (1.060)	58	804150			30.27- 130.27	80.27
16.688	16.688 (1.060)	57	254965			0.00- 75.70	25.45
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	2579940	50.0000	50.927	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	1589377			11.61- 111.61	61.61
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.628	17.628 (1.119)	75	2223302	50.0000	50.164	80.00- 120.00	100.00
17.628	17.628 (1.119)	77	708177			0.00- 81.85	31.85
17.628	17.628 (1.119)	39	1280467			7.59- 107.59	57.59
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.794	17.794 (1.130)	58	1620424	50.0000	51.237	80.00- 120.00	100.00
17.794	17.794 (1.130)	43	4172251			210.27- 310.27	257.48
17.794	17.794 (1.130)	85	606323			0.00- 89.24	37.42

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.070	18.070	(1.147)	91	5343868	50.0000	49.289	80.00- 120.00	100.00
18.070	18.070	(1.147)	92	3221177			10.28- 110.28	60.28
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.430	18.430	(0.921)	75	2396012	50.0000	53.185	80.00- 120.00	100.00
18.430	18.430	(0.921)	77	754762			0.00- 81.50	31.50
18.430	18.430	(0.921)	39	1299267			4.23- 104.23	54.23
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.706	18.706	(0.935)	97	1863959	50.0000	52.515	80.00- 120.00	100.00
18.706	18.706	(0.935)	99	1167557			12.64- 112.64	62.64
18.706	18.706	(0.935)	83	1541715			32.71- 132.71	82.71
117 Tetrachloroethene						CAS #: 127-18-4		
18.817	18.817	(0.941)	166	2212193	50.0000	53.802	80.00- 120.00	100.00
18.817	18.817	(0.941)	129	1711429			27.36- 127.36	77.36
18.817	18.817	(0.941)	131	1628880			23.63- 123.63	73.63
118 2-Hexanone						CAS #: 591-78-6		
18.955	18.955	(0.947)	58	2482633	50.0000	51.722	80.00- 120.00	100.00
18.955	18.955	(0.947)	43	4499800			131.25- 231.25	181.25
18.955	18.955	(0.947)	100	476313			0.00- 69.73	19.19
121 Dibromochloromethane						CAS #: 124-48-1		
19.232	19.232	(0.961)	129	2718420	50.0000	54.330	80.00- 120.00	100.00
19.232	19.232	(0.961)	127	2111552			26.10- 126.10	77.68
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.453	19.453	(0.972)	107	2893201	50.0000	55.352	80.00- 120.00	100.00
19.453	19.453	(0.972)	109	2737310			44.61- 144.61	94.61
124 Chlorobenzene						CAS #: 108-90-7		
20.061	20.061	(1.003)	112	4865662	50.0000	51.473	80.00- 120.00	100.00
20.061	20.061	(1.003)	114	1523706			0.00- 81.32	31.32
20.061	20.061	(1.003)	77	2882698			9.25- 109.25	59.25
125 Ethyl Benzene						CAS #: 100-41-4		
20.144	20.144	(1.007)	106	2708911	50.0000	52.261	80.00- 120.00	100.00
20.144	20.144	(1.007)	91	8688956			273.94- 373.94	320.75
128 m,p-Xylene						CAS #: 108-38-3		
20.282	20.282	(1.014)	106	3435645	50.0000	52.441	80.00- 120.00	100.00
20.282	20.282	(1.014)	91	6873638			157.95- 257.95	200.07
130 o-Xylene						CAS #: 95-47-6		
20.808	20.808	(1.040)	106	3245576	50.0000	51.862	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.808	20.808	(1.040)	91	6885981			162.17- 262.17	212.17
131 Styrene						CAS #: 100-42-5		
20.835	20.835	(1.041)	104	5304250	50.0000	50.534	80.00- 120.00	100.00
20.835	20.835	(1.041)	78	2504913			0.00- 97.22	47.22
133 Bromoform						CAS #: 75-25-2		
21.139	21.139	(1.057)	173	2616531	50.0000	55.534	80.00- 120.00	100.00
21.139	21.139	(1.057)	171	1349402			1.57- 101.57	51.57
134 Cumene						CAS #: 98-82-8		
21.250	21.250	(1.062)	105	9789475	50.0000	56.597	80.00- 120.00	100.00
21.250	21.250	(1.062)	120	2451633			0.00- 75.80	25.04
21.250	21.250	(1.062)	51	1039227			0.00- 60.85	10.62
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.665	21.665	(1.083)	83	4438128	50.0000	48.011	80.00- 120.00	100.00
21.665	21.665	(1.083)	85	2749248			11.95- 111.95	61.95
140 Propylbenzene						CAS #: 103-65-1		
21.748	21.748	(1.087)	91	11875128	50.0000	56.637	80.00- 120.00	100.00
21.748	21.748	(1.087)	120	2538782			0.00- 73.27	21.38
21.748	21.748	(1.087)	105	415085			0.00- 55.00	3.50
144 4-Ethyltoluene						CAS #: 622-96-8		
21.886	21.886	(1.094)	105	10671271	50.0000	57.410	80.00- 120.00	100.00
21.886	21.886	(1.094)	120	3077476			0.00- 78.84	28.84
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.886	21.886	(1.094)	105	10671271	50.0000	60.098	80.00- 120.00	100.00
21.886	21.886	(1.094)	120	3077476			0.00- 94.49	28.84
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.411	22.411	(1.120)	105	7514080	50.0000	53.465	80.00- 120.00	100.00
22.411	22.411	(1.120)	120	3298720			0.00- 95.48	43.90
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.826	22.826	(1.141)	146	4377278	50.0000	50.263	80.00- 120.00	100.00
22.826	22.826	(1.141)	148	2763396			12.15- 112.15	63.13
22.826	22.826	(1.141)	111	1827423			0.00- 91.58	41.75
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.146)	146	4429518	50.0000	51.290	80.00- 120.00	100.00
22.937	22.937	(1.146)	148	2792005			16.32- 116.32	63.03
22.937	22.937	(1.146)	111	1766552			0.00- 90.95	39.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.103	23.103 (1.155)	91	6549522	50.0000	51.478	80.00- 120.00	100.00
23.103	23.103 (1.155)	126	1290260			0.00- 69.46	19.70
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.170)	146	3733047	50.0000	49.036	80.00- 120.00	100.00
23.407	23.407 (1.170)	148	2377293			13.68- 113.68	63.68
23.407	23.407 (1.170)	111	1640645			0.00- 93.95	43.95
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.263)	180	1403572	50.0000	43.534	80.00- 120.00	100.00
25.259	25.259 (1.263)	182	1307910			43.18- 143.18	93.18
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.267)	225	1040500	50.0000	47.025	80.00- 120.00	100.00
25.342	25.342 (1.267)	223	657523			14.77- 114.77	63.19
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.582)	43	1146856	50.0000	50.763	80.00- 120.00	100.00
8.297	8.297 (0.582)	57	776307			18.54- 118.54	67.69
22 Butane					CAS #: 106-97-8		
5.453	5.453 (0.382)	58	148472	50.0000	48.245	80.00- 120.00	100.00
5.453	5.453 (0.382)	43	1130532			703.05- 803.05	761.44
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.147)	83	2638725	50.0000	50.598	80.00- 120.00	100.00
16.356	16.356 (1.147)	98	1273926			0.00- 97.88	48.28
16.356	16.356 (1.147)	55	2457081			45.40- 145.40	93.12
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.070	12.070 (0.847)	59	840191	50.0000	44.086	80.00- 120.00	100.00
12.070	12.070 (0.847)	41	175993			0.00- 67.50	20.95
12.070	12.070 (0.847)	57	91165			0.00- 63.77	10.85

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

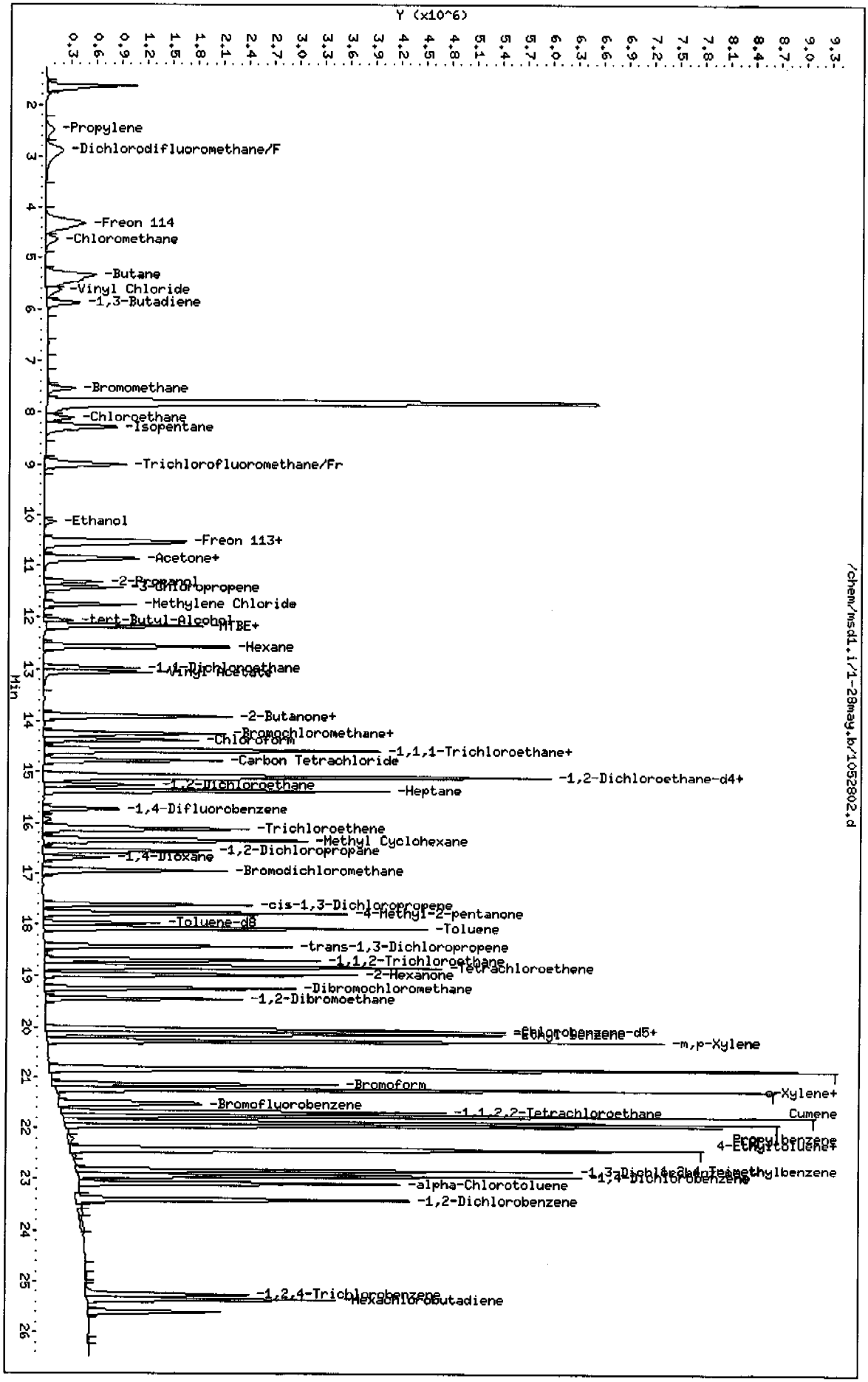
Instrument ID: msd1.i
Lab File ID: 1052802.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 28-MAY-2008
Calibration Time: 10:38
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	276571	165943	387199	295803	6.95
95 1,4-Difluorobenze	1471605	882963	2060247	1549116	5.27
123 Chlorobenzene-d5	1570004	942002	2198006	1677167	6.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-28may.b/1052802.d
Date : 28-MAY-2008 08:50
Client ID: CCV-1
Sample Info: 25mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: sjr
Column diameter: 0.53

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052804.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd1.i/1-28may.b/t14q519b.m

Injection Date: 28-MAY-2008 10:38
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.62733	0.010	2.45872	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.07426	0.010	5.16474	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.51409	0.010	3.89895	30.00000	Averaged
19 Freon142b	2.11173	2.33385	0.010	-10.51872	40.00000	Averaged
9 Freon 134a	0.48918	0.52563	0.010	-7.45074	40.00000	Averaged
13 Freon 152a	0.46327	0.50132	0.010	-8.21236	40.00000	Averaged
15 Freon 22	1.67769	1.85399	0.010	-10.50807	40.00000	Averaged
25 Methanol	0.39706	0.44025	0.010	-10.87700	40.00000	Averaged
32 Dichlorofluoromethane/Fr21	1.98948	2.28291	0.010	-14.74880	40.00000	Averaged
40 Freon123a	0.89543	1.04483	0.010	-16.68400	40.00000	Averaged
41 Freon123	0.15204	0.17277	0.010	-13.64098	40.00000	Averaged
66 Isopropyl ether	6.58377	7.86262	0.010	-19.42427	40.00000	Averaged
69 1-Propanol	0.31867	0.40395	0.010	-26.76320	40.00000	Averaged
72 t-Butylethyl Ether	2.76163	3.41048	0.010	-23.49523	40.00000	Averaged
73 Ethyl Acetate	0.67326	0.80446	0.010	-19.48652	40.00000	Averaged
92 tert-amyl-Methyl Ether	3.13220	3.81164	0.010	-21.69198	40.00000	Averaged
132 2-Heptanone	5.35867	6.02660	0.010	-12.46449	40.00000	Averaged
96 1-Butanol	0.31976	0.38085	0.010	-19.10177	40.00000	Averaged
120 Butyl Acetate	0.64176	0.72134	0.010	-12.39927	40.00000	Averaged
135 Cyclohexanone	0.71361	0.82445	0.010	-15.53200	40.00000	Averaged
148 Diisobutyl Ketone	1.60285	1.77048	0.010	-10.45798	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-28may.b/1052804.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 28-MAY-2008 10:38
Operator : sjr
Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200/1200ppbv -> 50/300ppbv
Comment :
Method : /chem/msd1.i/1-28may.b/t14q519b.m
Meth Date : 28-May-2008 10:49 sruth
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22aCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	276571	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	216345			28.22- 128.22	78.22
14.255	14.255 (1.000)	49	506569			133.16- 233.16	183.16
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1471605	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	228805			0.00- 65.55	15.55
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1570004	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	903212			8.42- 108.42	57.53
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.139 (1.062)	65	450073	25.0000	24.385	80.00- 120.00	100.00
15.139	15.139 (1.062)	67	236392			6.04- 106.04	52.52
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1580882	25.0000	23.709	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	167922			0.00- 60.35	10.62

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.960	(1.140)	100	1042052			15.45- 115.45	65.92
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.526	21.526	(1.075)	174	807118	25.0000	24.025	80.00- 120.00	100.00
21.526	21.526	(1.075)	95	1296400			110.62- 210.62	160.62
21.526	21.526	(1.075)	176	771861			45.63- 145.63	95.63
19 Freon142b						CAS #: 75-68-3		
4.607	4.607	(0.323)	65	1290952	50.0000	55.259	80.00- 120.00	100.00
4.607	4.607	(0.323)	45	325229			0.00- 75.41	25.19
9 Freon 134a						CAS #: 811-97-2		
2.383	2.383	(0.167)	83	290748	50.0000	53.725	80.00- 120.00	100.00
2.411	2.411	(0.169)	69	236054			32.58- 132.58	81.19
2.411	2.411	(0.169)	63	30597			0.00- 58.36	10.52
13 Freon 152a						CAS #: 75-37-6		
2.721	2.721	(0.191)	65	277300	50.0000	54.106	80.00- 120.00	100.00
2.721	2.721	(0.191)	51	586398			172.46- 272.46	211.47
2.693	2.693	(0.189)	47	142465			0.63- 100.63	51.38
15 Freon 22						CAS #: 75-45-6		
3.425	3.425	(0.240)	51	1025518	50.0000	55.254	80.00- 120.00	100.00
3.425	3.425	(0.240)	67	157818			0.00- 65.39	15.39
3.397	3.397	(0.238)	85	7668			0.00- 51.20	0.75
25 Methanol						CAS #: 67-56-1		
7.790	7.790	(0.546)	31	1461122	300.000	332.63	80.00- 120.00	100.00
7.790	7.790	(0.546)	32	1162411			29.56- 129.56	79.56
32 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
9.167	9.167	(0.643)	67	1262772	50.0000	57.374	80.00- 120.00	100.00
9.167	9.167	(0.643)	69	387215			0.00- 79.81	30.66
9.167	9.167	(0.643)	35	65203			0.00- 55.10	5.16
40 Freon123a						CAS #: 354-23-4		
10.356	10.356	(0.726)	117	577939	50.0000	58.342	80.00- 120.00	100.00
10.356	10.356	(0.726)	67	843842			96.88- 196.88	146.01
41 Freon123						CAS #: 306-83-2		
10.577	10.577	(0.742)	83	95569	50.0000	56.820	80.00- 120.00	100.00
10.577	10.577	(0.742)	133	19820			0.00- 73.50	20.74
10.577	10.577	(0.742)	85	60988			10.10- 110.10	63.82
66 Isopropyl ether						CAS #: 108-20-3		
12.983	12.983	(0.911)	45	4349145	50.0000	59.712	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
66 Isopropyl ether (continued)							
12.983	12.983 (0.911)	87	915544			0.00- 71.33	21.05
12.983	12.983 (0.911)	59	440814			0.00- 60.24	10.14
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.926)	42	223444	50.0000	63.382	80.00- 120.00	100.00
13.204	13.204 (0.926)	59	234730			47.04- 147.04	105.05
13.204	13.204 (0.926)	41	131794			14.12- 114.12	58.98
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.536	13.536 (0.950)	59	1886478	50.0000	61.748	80.00- 120.00	100.00
13.536	13.536 (0.950)	87	686474			0.00- 86.33	36.39
13.536	13.536 (0.950)	41	330628			0.00- 70.48	17.53
73 Ethyl Acetate					CAS #: 141-78-6		
13.950	13.950 (0.979)	45	444978	50.0000	59.743	80.00- 120.00	100.00
13.950	13.950 (0.979)	61	397385			36.81- 136.81	89.30
13.950	13.950 (0.979)	43	3041232			616.84- 716.84	683.46
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.222	15.222 (1.068)	73	2108376	50.0000	60.846	80.00- 120.00	100.00
15.222	15.222 (1.068)	87	497379			0.00- 73.95	23.59
15.222	15.222 (1.068)	55	598150			0.00- 80.63	28.37
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.467)	58	3333566	50.0000	56.232	80.00- 120.00	100.00
20.918	20.918 (1.467)	43	5182755			99.63- 199.63	155.47
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	1120908	50.0000	59.551	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	766957			20.92- 120.92	68.42
15.941	15.941 (1.012)	43	623160			4.89- 104.89	55.59
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	2123043	50.0000	56.200	80.00- 120.00	100.00
19.066	19.066 (1.211)	73	716362			0.00- 83.74	33.74
19.066	19.066 (1.211)	43	5034474			187.13- 287.13	237.13
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	2588765	50.0000	57.766	80.00- 120.00	100.00
21.471	21.471 (1.072)	98	1029943			0.00- 90.24	39.79
21.471	21.471 (1.072)	42	1775257			17.74- 117.74	68.58
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.079	22.079 (1.102)	57	5559321	50.0000	55.229	80.00- 120.00	100.00
22.079	22.079 (1.102)	85	4274334			26.89- 126.89	76.89

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
148 Diisobutyl Ketone (continued)								
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd1.i/1-28may.b/1052804.d
Report Date: 28-May-2008 10:49

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

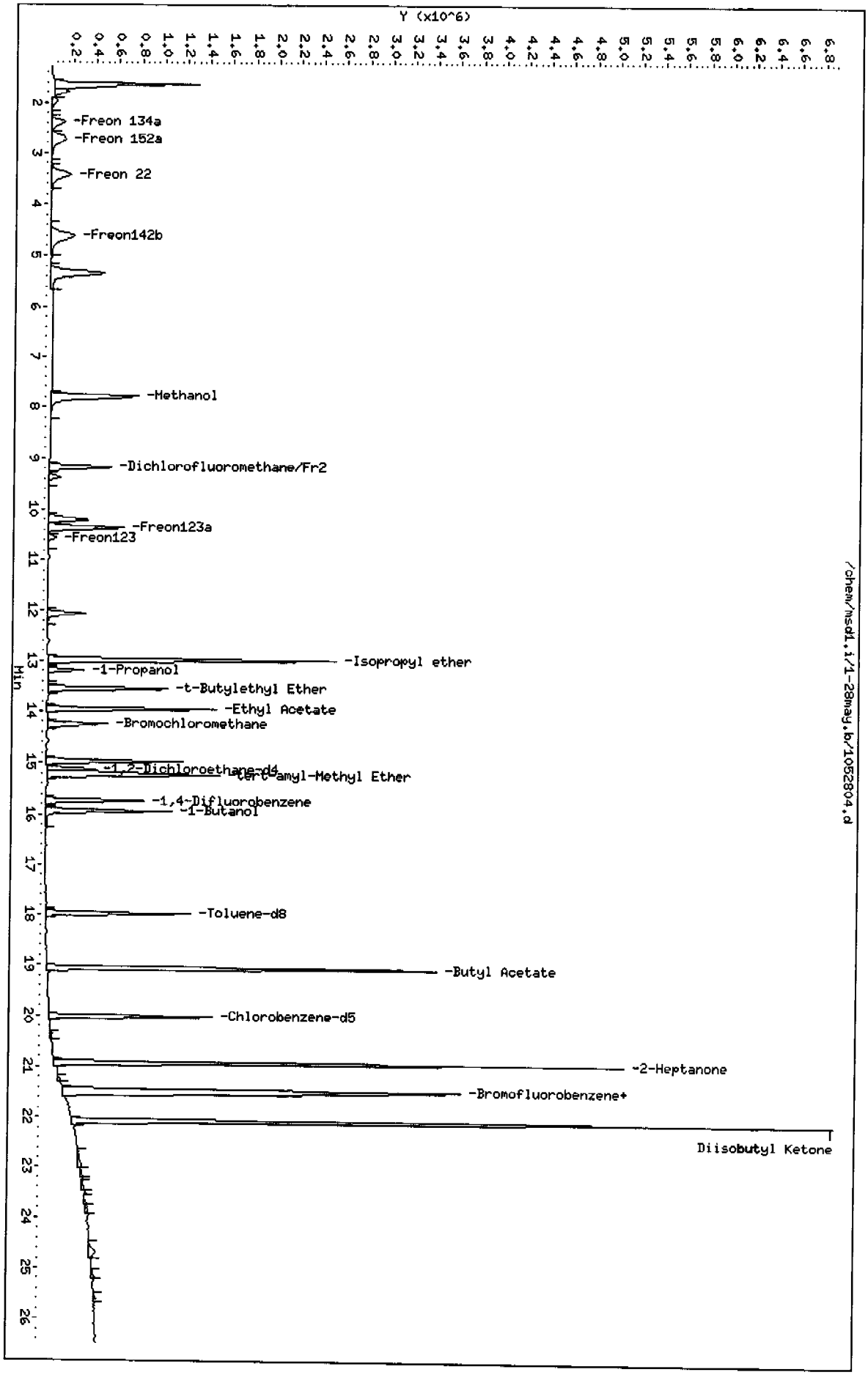
Instrument ID: msd1.i
Lab File ID: 1052804.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 200/1200ppbv -> 50/300ppbv

Calibration Date: 28-MAY-2008
Calibration Time: 08:50
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295803	177482	414124	276571	-6.50
95 1,4-Difluorobenze	1549116	929470	2168762	1471605	-5.00
123 Chlorobenzene-d5	1677167	1006300	2348034	1570004	-6.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-28may.b/1052804.d
Date : 28-MAY-2008 10:38
Client ID: CCVsp
Sample Info: 25mL #1541-142
Column phase: RTx-624

Instrument: msd1.i
Operator: sjr
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805347-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052803
Dil Factor: 1.00
Date Collection: NA
Date Analysis: 5/28/08 09:54 AM

Compound	%Recovery
Freon 12	98
Freon 114	100
Chloromethane	98
Vinyl Chloride	96
1,3-Butadiene	97
Bromomethane	111
Chloroethane	108
Freon 11	100
Ethanol	107
Freon 113	116
1,1-Dichloroethene	106
Acetone	97
2-Propanol	101
Carbon Disulfide	101
Methylene Chloride	103
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	105
Hexane	104
1,1-Dichloroethane	118
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	103
Tetrahydrofuran	87
Chloroform	108
1,1,1-Trichloroethane	112
Cyclohexane	101
Carbon Tetrachloride	105
Benzene	102
1,2-Dichloroethane	100
Heptane	99
Trichloroethene	99
1,2-Dichloropropane	98
1,4-Dioxane	96
Bromodichloromethane	101
cis-1,3-Dichloropropene	97
4-Methyl-2-pentanone	101
Toluene	101
trans-1,3-Dichloropropene	105
1,1,2-Trichloroethane	103
Tetrachloroethene	109

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805347-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	052803	Date Collection:	NA
Dil. Factor:	1.00	Date Analysis:	5/28/08 09:54 AM

Compound	%Recovery
2-Hexanone	102
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	106
Chlorobenzene	101
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	100
Styrene	96
Bromoform	106
1,1,2,2-Tetrachloroethane	90
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	113
1,2,4-Trimethylbenzene	95
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	88
alpha-Chlorotoluene	88
1,2-Dichlorobenzene	82
1,2,4-Trichlorobenzene	57 Q
Hexachlorobutadiene	65 Q
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	108

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	98	70-130

0186

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Client SDG: 1-28may
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	53.991	107.98	60-140
14 Dichlorodifluorome	50.000	49.202	98.40	70-130
17 Freon 114	50.000	50.163	100.33	70-130
21 Chloromethane	50.000	48.833	97.67	70-130
23 Vinyl Chloride	50.000	47.905	95.81	70-130
24 1,3-Butadiene	50.000	48.749	97.50	60-140
26 Bromomethane	50.000	55.436	110.87	70-130
28 Chloroethane	50.000	54.011	108.02	70-130
34 Trichlorofluoromet	50.000	50.288	100.58	70-130
38 Ethanol	50.000	53.552	107.10	60-140
43 Freon 113	50.000	57.812	115.62	70-130
44 1,1-Dichloroethene	50.000	53.109	106.22	70-130
45 Acetone	50.000	48.608	97.22	60-140
48 Carbon Disulfide	50.000	50.527	101.05	60-140
46 2-Propanol	50.000	50.679	101.36	60-140
54 Methylene Chloride	50.000	51.516	103.03	70-130
58 MTBE	50.000	50.471	100.94	60-140
59 trans-1,2-Dichloro	50.000	52.627	105.25	60-140
64 Hexane	50.000	52.175	104.35	60-140
67 Vinyl Acetate	50.000	55.717	111.43	60-140
68 1,1-Dichloroethane	50.000	59.234	118.47	70-130
76 cis-1,2-Dichloroet	50.000	51.589	103.18	70-130
75 2-Butanone	50.000	55.685	111.37	60-140
78 Tetrahydrofuran	50.000	43.549	87.10	60-140
81 Chloroform	50.000	54.201	108.40	70-130
84 Cyclohexane	50.000	50.419	100.84	60-140
83 1,1,1-Trichloroeth	50.000	55.770	111.54	70-130
85 Carbon Tetrachlori	50.000	52.679	105.36	70-130
91 Benzene	50.000	50.778	101.56	70-130
93 1,2-Dichloroethane	50.000	50.194	100.39	70-130
94 Heptane	50.000	49.632	99.26	60-140
97 Trichloroethene	50.000	49.594	99.19	70-130
102 1,2-Dichloropropan	50.000	49.194	98.39	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	48.119	96.24	60-140
106 Bromodichlorometha	50.000	50.629	101.26	60-140
109 cis-1,3-Dichloropr	50.000	48.380	96.76	70-130
110 4-Methyl-2-pentano	50.000	50.598	101.20	60-140
114 Toluene	50.000	50.607	101.21	70-130
115 trans-1,3-Dichloro	50.000	52.678	105.36	70-130
116 1,1,2-Trichloroeth	50.000	51.663	103.33	70-130
117 Tetrachloroethene	50.000	54.356	108.71	70-130
118 2-Hexanone	50.000	51.107	102.21	60-140
121 Dibromochlorometha	50.000	53.642	107.29	60-140
122 1,2-Dibromoethane	50.000	52.891	105.78	70-130
124 Chlorobenzene	50.000	50.737	101.47	70-130
125 Ethyl Benzene	50.000	50.889	101.78	70-130
128 m,p-Xylene	50.000	50.908	101.82	70-130
130 o-Xylene	50.000	50.253	100.51	70-130
131 Styrene	50.000	47.952	95.90	70-130
133 Bromoform	50.000	53.283	106.57	60-140
138 1,1,2,2-Tetrachlor	50.000	44.908	89.82	70-130
144 4-Ethyltoluene	50.000	53.998	108.00	60-140
146 1,3,5-Trimethylben	50.000	56.526	113.05	70-130
152 1,2,4-Trimethylben	50.000	47.580	95.16	70-130
158 1,3-Dichlorobenzen	50.000	44.220	88.44	70-130
159 1,4-Dichlorobenzen	50.000	44.108	88.22	70-130
162 alpha-Chlorotoluen	50.000	44.182	88.36	70-130
164 1,2-Dichlorobenzen	50.000	41.181	82.36	70-130
169 1,2,4-Trichloroben	50.000	28.649	57.30*	70-130
170 Hexachlorobutadien	50.000	32.599	65.20*	70-130
140 Propylbenzene	50.000	54.513	109.03	60-140
134 Cumene	50.000	55.320	110.64	60-140
50 3-Chloropropene	50.000	64.565	129.13	60-140
88 2,2,4-Trimethylpen	50.000	51.593	103.19	60-140
29 Isopentane	50.000	51.531	103.06	70-130
22 Butane	50.000	47.991	95.98	70-130
99 Methyl Cyclohexane	50.000	51.568	103.14	70-130
57 tert-Butyl-Alcohol	50.000	43.668	87.34	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.164	100.66	70-130
$ 111 Toluene-d8	25.000	23.940	95.76	70-130
$ 136 Bromofluorobenzene	25.000	24.581	98.32	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-28may.b/1052803.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 28-MAY-2008 09:54
Operator : sjr Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-28may.b/t14q519b.m
Meth Date : 28-May-2008 10:02 sruth Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.255	14.255 (1.000)	130	283144	25.0000		80.00- 120.00	100.00
	14.255	14.255 (1.000)	128	218246			25.73- 125.73	77.08
	14.255	14.255 (1.000)	49	539551			134.03- 234.03	190.56
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1533203	25.0000		80.00- 120.00	100.00
	15.720	15.748 (1.000)	88	230644			0.00- 65.05	15.04
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.006	20.006 (1.000)	117	1616982	25.0000		80.00- 120.00	100.00
	20.006	20.006 (1.000)	82	942673			8.42- 108.42	58.30
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.139	15.140 (1.062)	65	475482	25.1640	25.164	80.00- 120.00	100.00
	15.139	15.140 (1.062)	67	286794			6.04- 106.04	60.32
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.960 (1.140)	98	1663139	23.9404	23.940	80.00- 120.00	100.00
	17.960	17.960 (1.140)	70	168938			0.00- 60.35	10.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1098540			15.45- 115.45	66.05
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.076)	174	850494	24.5809	24.581	80.00- 120.00	100.00
21.499	21.499 (1.075)	95	1350938			106.65- 206.65	158.84
21.526	21.527 (1.076)	176	822389			46.13- 146.13	96.70
12 Propylene					CAS #: 115-07-1		
2.467	2.467 (0.173)	41	337529	53.9910	53.991	80.00- 120.00	100.00
2.467	2.467 (0.173)	42	221994			16.91- 116.91	65.77
2.467	2.467 (0.173)	39	276279			37.15- 137.15	81.85
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.862	2.862 (0.201)	85	1535752	49.2020	49.202	80.00- 120.00	100.00
2.890	2.862 (0.203)	87	499074			0.00- 75.39	32.50
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1071861	50.1627	50.163	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	334075			0.00- 81.26	31.17
21 Chloromethane					CAS #: 74-87-3		
4.636	4.636 (0.325)	50	656847	48.8331	48.833	80.00- 120.00	100.00
4.636	4.636 (0.325)	52	209158			0.00- 80.15	31.84
23 Vinyl Chloride					CAS #: 75-01-4		
5.621	5.622 (0.394)	62	704616	47.9054	47.905	80.00- 120.00	100.00
5.621	5.622 (0.394)	64	213692			0.00- 77.57	30.33
24 1,3-Butadiene					CAS #: 106-99-0		
5.875	5.875 (0.412)	54	545216	48.7488	48.749	80.00- 120.00	100.00
5.875	5.875 (0.412)	39	529986			37.41- 137.41	97.21
26 Bromomethane					CAS #: 74-83-9		
7.536	7.536 (0.529)	94	550495	55.4358	55.436	80.00- 120.00	100.00
7.536	7.536 (0.529)	96	517337			43.07- 143.07	93.98
28 Chloroethane					CAS #: 75-00-3		
8.100	8.100 (0.568)	64	429069	54.0108	54.011	80.00- 120.00	100.00
8.100	8.100 (0.568)	49	127643			0.00- 79.23	29.75
8.100	8.100 (0.568)	66	128696			0.00- 81.66	29.99
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
9.001	9.001 (0.631)	101	2020129	50.2875	50.288	80.00- 120.00	100.00
9.001	9.001 (0.631)	103	1287426			14.38- 114.38	63.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.135	10.135 (0.711)	45	340745	53.5521	53.552	80.00- 120.00	100.00
10.135	10.135 (0.711)	43	69805			0.00- 75.81	20.49
10.135	10.135 (0.711)	46	142070			0.00- 92.85	41.69
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.742)	151	1215217	57.8125	57.812	80.00- 120.00	100.00
10.577	10.577 (0.742)	153	766254			13.97- 113.97	63.05
10.550	10.550 (0.740)	101	1618930			83.79- 183.79	133.22
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.738)	61	1547672	53.1090	53.109	80.00- 120.00	100.00
10.522	10.522 (0.738)	96	839767			3.04- 103.04	54.26
10.522	10.522 (0.738)	98	542830			0.00- 84.46	35.07
45 Acetone					CAS #: 67-64-1		
10.881	10.882 (0.763)	58	475754	48.6080	48.608	80.00- 120.00	100.00
10.881	10.882 (0.763)	43	1550728			275.34- 375.34	325.95
46 2-Propanol					CAS #: 67-63-0		
11.324	11.324 (0.794)	45	1753554	50.6791	50.679	80.00- 120.00	100.00
11.324	11.324 (0.794)	43	313197			0.00- 68.18	17.86
11.324	11.324 (0.794)	59	66431			0.00- 53.79	3.79
48 Carbon Disulfide					CAS #: 75-15-0		
10.826	10.826 (0.759)	76	2425285	50.5269	50.527	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.434	11.435 (0.802)	76	334830	64.5647	64.565	80.00- 120.00	100.00
11.434	11.435 (0.802)	41	1216489			303.82- 403.82	363.32
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.823)	49	1300445	51.5160	51.516	80.00- 120.00	100.00
11.739	11.739 (0.823)	84	814764			13.52- 113.52	62.65
11.739	11.739 (0.823)	51	389597			0.00- 79.96	29.96
58 MTBE					CAS #: 1634-04-4		
12.153	12.153 (0.853)	73	908991	50.4713	50.471	80.00- 120.00	100.00
12.153	12.153 (0.853)	57	261876			0.00- 78.54	28.81
12.153	12.153 (0.853)	41	259473			0.00- 78.25	28.55
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.181	12.181 (0.855)	96	969319	52.6274	52.627	80.00- 120.00	100.00
12.181	12.181 (0.855)	61	1533563			105.64- 205.64	158.21
12.181	12.181 (0.855)	98	616074			13.20- 113.20	63.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.540	12.568 (0.880)	57	2216120	52.1752	52.175	80.00- 120.00	100.00
12.540	12.541 (0.880)	43	1429114			16.42- 116.42	64.49
12.568	12.568 (0.882)	86	322514			0.00- 64.88	14.55
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.917)	86	264705	55.7166	55.717	80.00- 120.00	100.00
13.066	13.066 (0.917)	43	3331856			1256.82-1356.82	1258.71
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.911)	63	1992676	59.2342	59.234	80.00- 120.00	100.00
12.983	12.983 (0.911)	65	592340			0.00- 79.71	29.73
75 2-Butanone					CAS #: 78-93-3		
13.923	13.923 (0.977)	72	568008	55.6853	55.685	80.00- 120.00	100.00
13.923	13.923 (0.977)	43	2762447			436.57- 536.57	486.34
13.923	13.923 (0.977)	57	207647			0.00- 90.57	36.56
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.975)	61	1565261	51.5889	51.589	80.00- 120.00	100.00
13.895	13.895 (0.975)	96	1106471			20.86- 120.86	70.69
13.895	13.895 (0.975)	98	702102			0.00- 95.49	44.86
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (1.000)	42	1706324	43.5495	43.549	80.00- 120.00	100.00
14.255	14.255 (1.000)	71	530491			0.00- 80.53	31.09
14.255	14.255 (1.000)	72	577058			0.00- 82.78	33.82
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	2170864	54.2011	54.201	80.00- 120.00	100.00
14.365	14.365 (1.008)	85	1353992			12.14- 112.14	62.37
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.587 (1.023)	97	2343761	55.7698	55.770	80.00- 120.00	100.00
14.586	14.587 (1.023)	99	1501886			13.52- 113.52	64.08
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.021)	84	1765821	50.4193	50.419	80.00- 120.00	100.00
14.559	14.559 (1.021)	56	2429384			85.47- 185.47	137.58
14.559	14.559 (1.021)	41	1264183			22.55- 122.55	71.59
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.037)	119	2047653	52.6788	52.679	80.00- 120.00	100.00
14.780	14.780 (1.037)	117	2130559			53.10- 153.10	104.05
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.084	15.084 (1.058)	57	7713671	51.5928	51.593	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)								
15.084	15.084	(1.058)	56	2494027			0.00- 83.07	32.33
15.084	15.084	(1.058)	41	1823926			0.00- 74.24	23.65
91 Benzene						CAS #: 71-43-2		
15.139	15.140	(0.961)	78	3961474	50.7784	50.778	80.00- 120.00	100.00
15.139	15.140	(0.961)	77	899294			0.00- 73.68	22.70
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.250	15.250	(0.968)	62	1619363	50.1946	50.194	80.00- 120.00	100.00
15.250	15.250	(0.968)	64	512784			0.00- 83.51	31.67
94 Heptane						CAS #: 142-82-5		
15.361	15.361	(0.975)	71	1502582	49.6322	49.632	80.00- 120.00	100.00
15.361	15.361	(0.975)	43	3165240			162.65- 262.65	210.65
15.361	15.361	(0.975)	57	1634541			57.85- 157.85	108.78
97 Trichloroethene						CAS #: 79-01-6		
16.107	16.107	(1.023)	95	1586626	49.5945	49.594	80.00- 120.00	100.00
16.107	16.107	(1.023)	130	1535807			45.83- 145.83	96.80
16.107	16.107	(1.023)	97	1031109			14.17- 114.17	64.99
102 1,2-Dichloropropane						CAS #: 78-87-5		
16.550	16.550	(1.051)	63	1530039	49.1942	49.194	80.00- 120.00	100.00
16.550	16.550	(1.051)	62	1078824			21.06- 121.06	70.51
16.550	16.550	(1.051)	41	918991			10.44- 110.44	60.06
103 1,4-Dioxane						CAS #: 123-91-1		
16.688	16.688	(1.060)	88	966057	48.1189	48.119	80.00- 120.00	100.00
16.688	16.688	(1.060)	58	784529			30.27- 130.27	81.21
16.688	16.688	(1.060)	57	246960			0.00- 75.70	25.56
106 Bromodichloromethane						CAS #: 75-27-4		
16.964	16.964	(1.077)	83	2538528	50.6295	50.629	80.00- 120.00	100.00
16.964	16.964	(1.077)	85	1546746			11.61- 111.61	60.93
109 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
17.628	17.628	(1.119)	75	2122239	48.3803	48.380	80.00- 120.00	100.00
17.628	17.628	(1.119)	77	675582			0.00- 81.85	31.83
17.628	17.628	(1.119)	39	1209333			7.59- 107.59	56.98
110 4-Methyl-2-pentanone						CAS #: 108-10-1		
17.794	17.794	(1.130)	58	1583764	50.5977	50.598	80.00- 120.00	100.00
17.794	17.794	(1.130)	43	4105110			210.27- 310.27	259.20
17.794	17.794	(1.130)	85	595726			0.00- 89.24	37.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	5430359	50.6067	50.607	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	3281273			10.28- 110.28	60.42
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.430	18.430 (0.921)	75	2287978	52.6777	52.678	80.00- 120.00	100.00
18.430	18.430 (0.921)	77	720422			0.00- 81.50	31.49
18.430	18.430 (0.921)	39	1246557			4.23- 104.23	54.48
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.935)	97	1767921	51.6634	51.663	80.00- 120.00	100.00
18.706	18.706 (0.935)	99	1110170			12.64- 112.64	62.80
18.706	18.706 (0.935)	83	1468734			32.71- 132.71	83.08
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.941)	166	2154776	54.3564	54.356	80.00- 120.00	100.00
18.817	18.817 (0.941)	129	1672409			27.36- 127.36	77.61
18.817	18.817 (0.941)	131	1573413			23.63- 123.63	73.02
118 2-Hexanone					CAS #: 591-78-6		
18.955	18.955 (0.947)	58	2365058	51.1068	51.107	80.00- 120.00	100.00
18.955	18.955 (0.947)	43	4357857			131.25- 231.25	184.26
18.955	18.955 (0.947)	100	461630			0.00- 69.73	19.52
121 Dibromochloromethane					CAS #: 124-48-1		
19.232	19.232 (0.961)	129	2587721	53.6425	53.642	80.00- 120.00	100.00
19.232	19.232 (0.961)	127	2009324			26.10- 126.10	77.65
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.453	19.453 (0.972)	107	2665350	52.8908	52.891	80.00- 120.00	100.00
19.453	19.453 (0.972)	109	2514194			44.61- 144.61	94.33
124 Chlorobenzene					CAS #: 108-90-7		
20.061	20.061 (1.003)	112	4623997	50.7372	50.737	80.00- 120.00	100.00
20.061	20.061 (1.003)	114	1470535			0.00- 81.32	31.80
20.061	20.061 (1.003)	77	2764415			9.25- 109.25	59.78
125 Ethyl Benzene					CAS #: 100-41-4		
20.144	20.144 (1.007)	106	2543150	50.8893	50.889	80.00- 120.00	100.00
20.116	20.144 (1.006)	91	8170797			273.94- 373.94	321.29
128 m,p-Xylene					CAS #: 108-38-3		
20.282	20.282 (1.014)	106	3215531	50.9078	50.908	80.00- 120.00	100.00
20.282	20.282 (1.014)	91	6478818			157.95- 257.95	201.49
130 o-Xylene					CAS #: 95-47-6		
20.808	20.808 (1.040)	106	3032008	50.2532	50.253	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.808	20.808 (1.040)	91	6426834			162.17- 262.17	211.97
131 Styrene					CAS #: 100-42-5		
20.835	20.835 (1.041)	104	4852618	47.9517	47.952	80.00- 120.00	100.00
20.835	20.835 (1.041)	78	2301063			0.00- 97.22	47.42
133 Bromoform					CAS #: 75-25-2		
21.139	21.139 (1.057)	173	2420395	53.2832	53.283	80.00- 120.00	100.00
21.139	21.139 (1.057)	171	1248806			1.57- 101.57	51.60
134 Cumene					CAS #: 98-82-8		
21.250	21.250 (1.062)	105	9225296	55.3204	55.320	80.00- 120.00	100.00
21.250	21.250 (1.062)	120	2303100			0.00- 75.80	24.97
21.250	21.250 (1.062)	51	976714			0.00- 60.85	10.59
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.665	21.665 (1.083)	83	4002351	44.9084	44.908	80.00- 120.00	100.00
21.665	21.665 (1.083)	85	2487891			11.95- 111.95	62.16
140 Propylbenzene					CAS #: 103-65-1		
21.748	21.748 (1.087)	91	11019748	54.5134	54.513	80.00- 120.00	100.00
21.748	21.748 (1.087)	120	2337894			0.00- 73.27	21.22
21.748	21.748 (1.087)	105	387875			0.00- 55.00	3.52
144 4-Ethyltoluene					CAS #: 622-96-8		
21.886	21.886 (1.094)	105	9676792	53.9980	53.998	80.00- 120.00	100.00
21.886	21.886 (1.094)	120	2809100			0.00- 78.84	29.03
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.886	21.886 (1.094)	105	9676792	56.5255	56.526	80.00- 120.00	100.00
21.886	21.886 (1.094)	120	2809100			0.00- 94.49	29.03
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.411	22.411 (1.120)	105	6447026	47.5800	47.580	80.00- 120.00	100.00
22.411	22.411 (1.120)	120	2849944			0.00- 95.48	44.21
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.826	22.826 (1.141)	146	3712804	44.2201	44.220	80.00- 120.00	100.00
22.826	22.826 (1.141)	148	2334858			12.15- 112.15	62.89
22.826	22.826 (1.141)	111	1555773			0.00- 91.58	41.90
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.146)	146	3672589	44.1084	44.108	80.00- 120.00	100.00
22.937	22.937 (1.146)	148	2328446			16.32- 116.32	63.40
22.937	22.937 (1.146)	111	1493544			0.00- 90.95	40.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.075	23.103 (1.153)	91	5419495	44.1819	44.182	80.00- 120.00	100.00
23.102	23.103 (1.155)	126	1077675			0.00- 69.46	19.89
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.170)	146	3022555	41.1809	41.181	80.00- 120.00	100.00
23.407	23.407 (1.170)	148	1915033			13.68- 113.68	63.36
23.379	23.407 (1.169)	111	1334625			0.00- 93.95	44.16
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.263)	180	890524	28.6494	28.649	80.00- 120.00	100.00(R)
25.259	25.259 (1.263)	182	844986			43.18- 143.18	94.89
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.267)	225	695426	32.5994	32.599	80.00- 120.00	100.00(R)
25.342	25.342 (1.267)	223	430322			14.77- 114.77	61.88
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.582)	43	1114376	51.5307	51.531	80.00- 120.00	100.00
8.297	8.297 (0.582)	57	742618			18.54- 118.54	66.64
22 Butane					CAS #: 106-97-8		
5.452	5.453 (0.382)	58	141370	47.9909	47.991	80.00- 120.00	100.00
5.452	5.453 (0.382)	43	1121670			703.05- 803.05	793.43
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.147)	83	2574237	51.5682	51.568	80.00- 120.00	100.00
16.356	16.356 (1.147)	98	1242412			0.00- 97.88	48.26
16.328	16.356 (1.145)	55	2391702			45.40- 145.40	92.91
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.070	12.070 (0.847)	59	796615	43.6684	43.668	80.00- 120.00	100.00
12.070	12.070 (0.847)	41	160553			0.00- 67.50	20.15
12.070	12.070 (0.847)	57	90787			0.00- 63.77	11.40

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

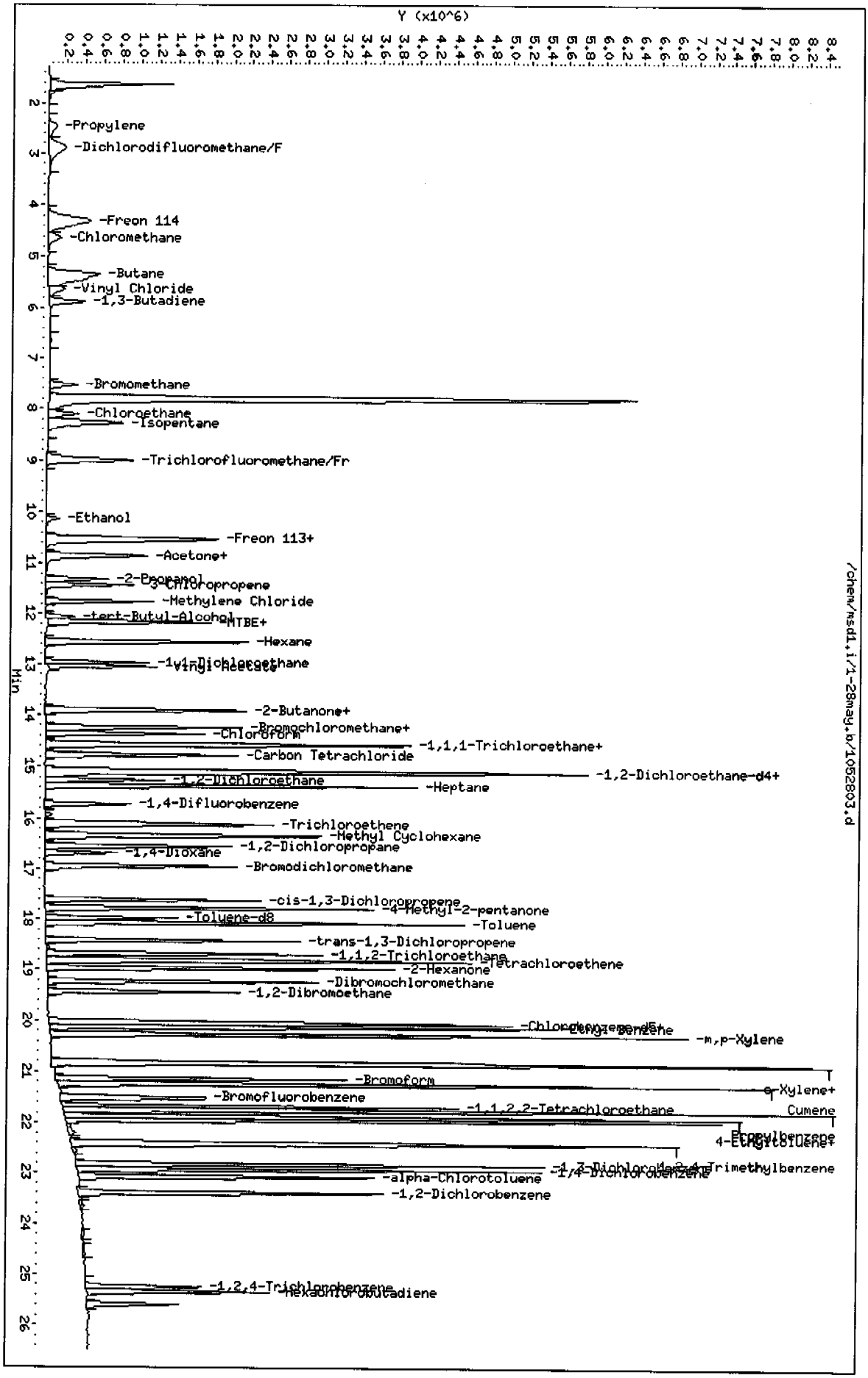
Instrument ID: msd1.i
Lab File ID: 1052803.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd1.i/1-28may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 28-MAY-2008
Calibration Time: 08:50
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295803	177482	414124	283144	-4.28
95 1,4-Difluorobenze	1549116	929470	2168762	1533203	-1.03
123 Chlorobenzene-d5	1677167	1006300	2348034	1616982	-3.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.01	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-28may.b/1052803.d
Date : 28-MAY-2008 09:54
Client ID: LCS-1
Sample Info: 25mL #1541-138
Column phase: RTx-624

Instrument: msd1.i
Operator: sjr
Column diameter: 0.53

MSD-1

@ Air Toxics Ltd.

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.19
75	30.0 – 60.0% of mass 95	42.34
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.62
173	Less than 2.0% of mass 174	(0.77)[1]
174	Greater than 50.0% of mass 95	63.64
175	5.0 – 9.0% of mass 174	(7.18)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.09)[1]
177	5.0 – 9.0% of mass 176	(6.37)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

Verify 176/174 m/z Ratio: 84664/88130 x 100 = 96.09

BFB Injection Date: 5/28/08

BFB Injection Time: 0818

BFB File ID: 1052801

Tekmar Purge Flow: ——

Vacuum: 8.4e-6

IS/S Std.#: 1541-144	Exp. Date 8/2/08
BCM	295803
1,4-DFB	1549116
CB-d5	1677167

Verified CCV IS vs ICAL mid-point (- 40%D)

NOAH Cart #: NA File #: NA

0199

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(169649)}{(1549116)} \times \frac{(25.0)}{(1.13276)} = 24.172$

Reported Result 24.172

File ID:	1052807
Compound:	Tol-d8
Initials:	

NOAH 596

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	1052801	BFB Tune Check	NA-275	50psig	2mL	1.00	5/28/08	0818		
2	✓	02	CCV-1 (200ppbv)	1612-3	50psig	25mL			0850		2 out
3	✓	03	LCS-1	1541-138					0954		2 out
4	✓	04	CCVsp (200ppbv)	1541-142	50psig				1038		
5	✓	05	Lab blank	12809	atmos.	100mL			1127		
6	✗	06	0805244A-02AA	33392	4"Hg-15psi 30"Hg-15psi	100mL	9.5	5/28/08	1242		9.8"Hg-15psi DF=19.2
7	✓	07	0805347-01A	3392B	7"Hg-5psi		1.75		1347	KR	
8	✗	08	-02A	5574	7.5"Hg-5psi		1.79		1442	KR	IS ↓
9	✓	09	-02A	↓	↓	↓	↓		1554	KR	

Signature

5/28/08
Date

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-19may.b/1051908.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 19-MAY-2008 13:04
Operator : lo Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-19may.b/bfb60.m
Meth Date : 19-May-2008 12:54 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.520	5.564	-0.044	95	1410409			100.00- 100.00	100.00
5.520	5.564	-0.044	50	261176			15.00- 40.00	18.52
5.520	5.564	-0.044	75	596367			30.00- 60.00	42.28
5.520	5.564	-0.044	96	91372			5.00- 9.00	6.48
5.520	5.564	-0.044	173	7186			0.00- 2.00	0.79
5.520	5.564	-0.044	174	912971			50.00- 100.00	64.73
5.520	5.564	-0.044	175	65495			5.00- 9.00	7.17
5.520	5.564	-0.044	176	873397			95.00- 101.00	95.67
5.520	5.564	-0.044	177	56249			5.00- 9.00	6.44

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

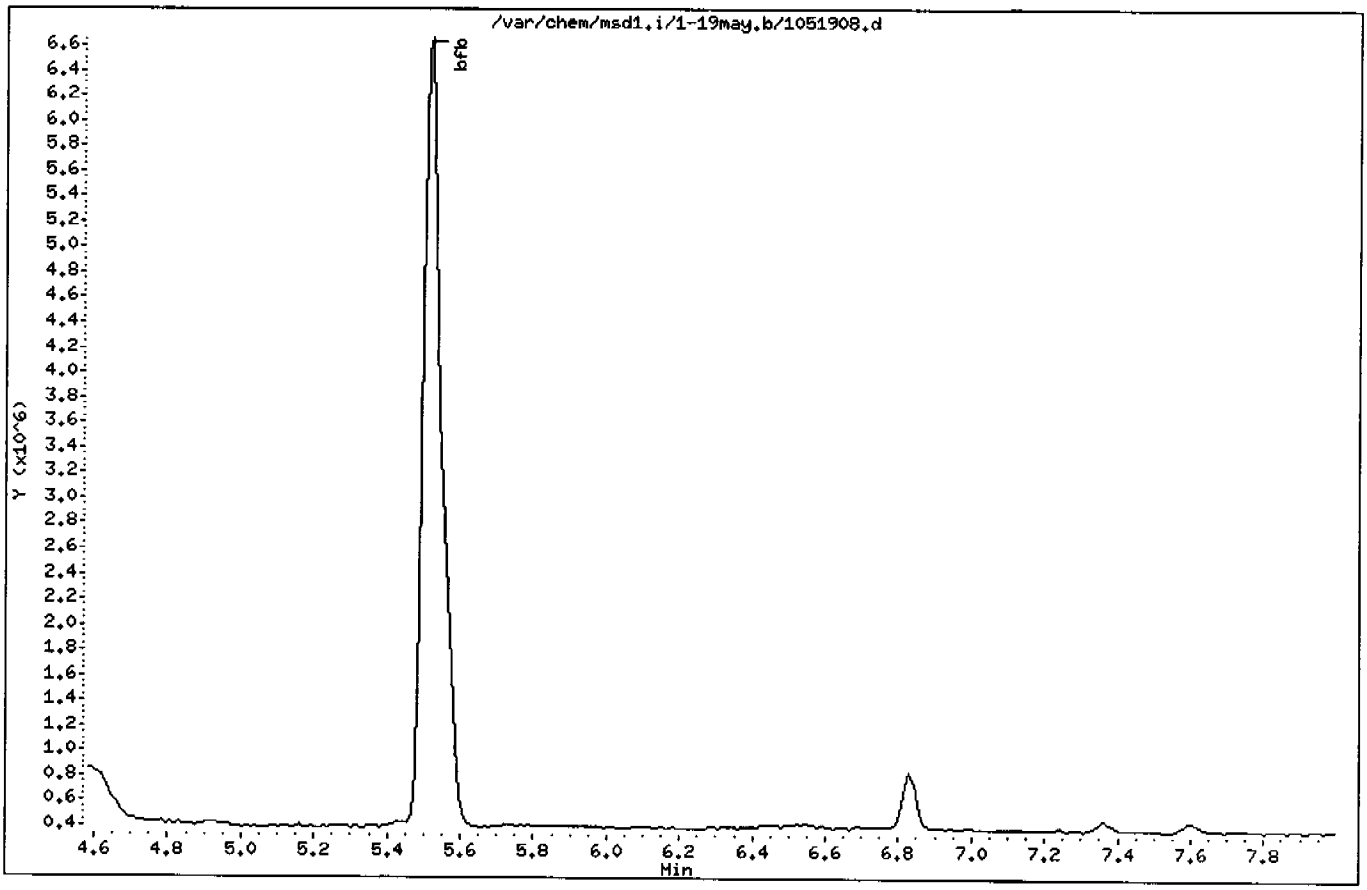
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

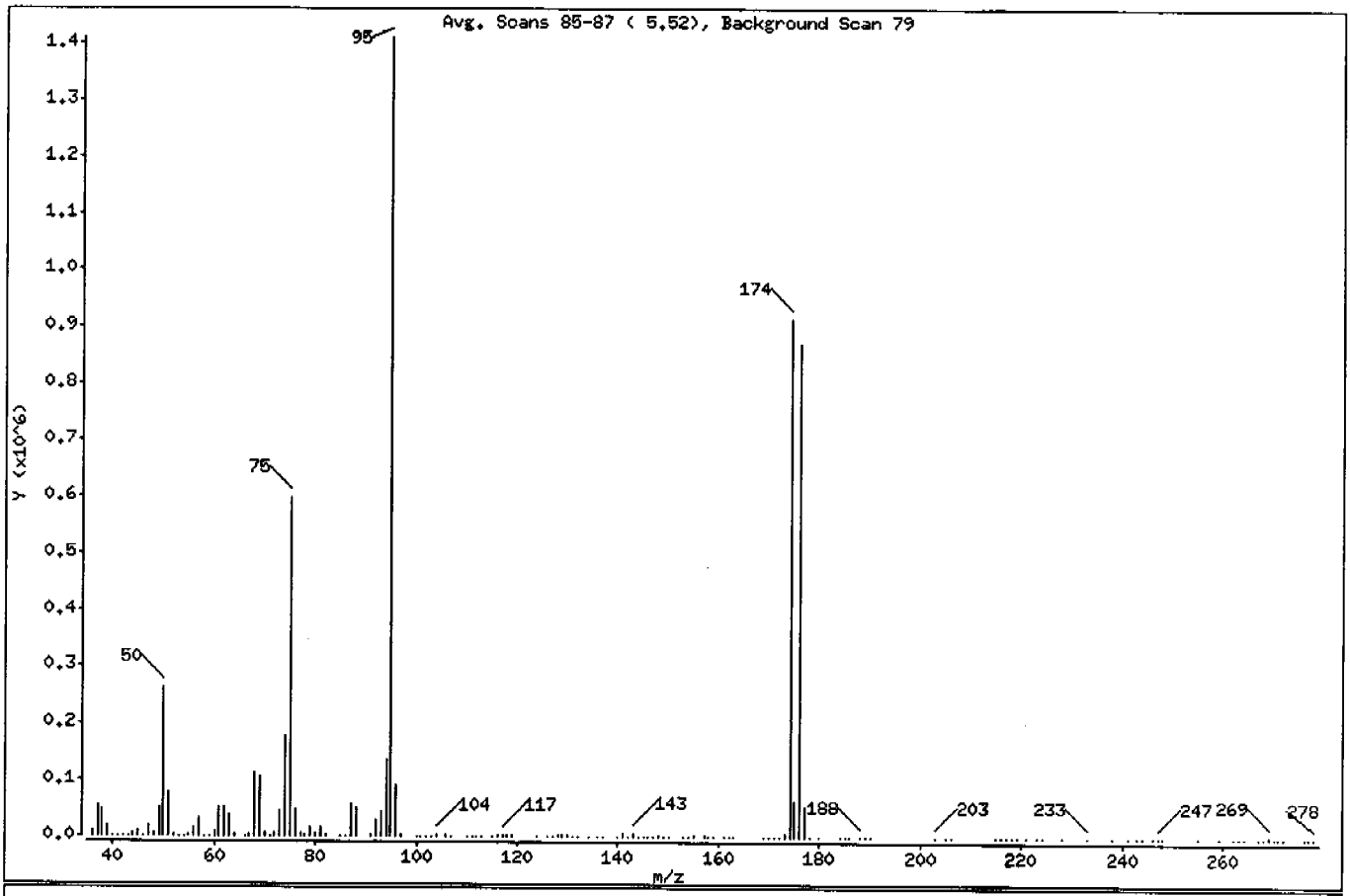
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.52
75	30.00 - 60.00% of mass 95	42.28
96	5.00 - 9.00% of mass 95	6.48
173	Less than 2.00% of mass 174	0.51 (0.79)
174	50.00 - 100.00% of mass 95	64.73
175	5.00 - 9.00% of mass 174	4.64 (7.17)
176	95.00 - 101.00% of mass 174	61.93 (95.67)
177	5.00 - 9.00% of mass 176	3.99 (6.44)

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1051908.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9545	76.00	47712	130.00	2906	186.00	63
37.00	56536	77.00	6773	131.00	823	188.00	430
38.00	49992	78.00	4818	132.00	367	189.00	34
39.00	19808	79.00	16536	134.00	668	190.00	84
40.00	991	80.00	5727	136.00	72	203.00	451
41.00	272	81.00	17048	137.00	503	205.00	199
42.00	45	82.00	3676	140.00	710	206.00	44
43.00	594	85.00	12	141.00	7303	215.00	52
44.00	5340	86.00	1466	142.00	1001	216.00	101
45.00	9201	87.00	59536	143.00	7330	217.00	273
46.00	19	88.00	52440	144.00	324	218.00	315
47.00	19752	91.00	1740	145.00	1045	219.00	68
48.00	6754	92.00	29408	146.00	1009	221.00	19
49.00	52704	93.00	47000	147.00	24	223.00	275
50.00	261120	94.00	134656	148.00	2017	224.00	182
51.00	79376	95.00	1410048	149.00	82	228.00	79
52.00	2983	96.00	91368	150.00	681	233.00	515
53.00	248	97.00	2142	153.00	122	238.00	143
54.00	172	100.00	266	154.00	369	241.00	2
55.00	3133	101.00	643	155.00	2185	243.00	136
56.00	15651	102.00	134	157.00	1759	244.00	144
57.00	31040	103.00	350	158.00	377	246.00	50
58.00	1022	104.00	3424	159.00	700	247.00	361
59.00	625	106.00	3205	161.00	789	248.00	75
60.00	9778	107.00	545	162.00	154	255.00	201
61.00	52056	110.00	698	163.00	241	259.00	136
62.00	50888	111.00	474	169.00	541	262.00	232
63.00	38928	112.00	240	170.00	380	263.00	48
64.00	3505	113.00	490	171.00	370	264.00	293
66.00	302	115.00	790	172.00	668	267.00	169
67.00	1776	116.00	2653	173.00	7186	268.00	17
68.00	112392	117.00	4066	174.00	912960	269.00	1803
69.00	106960	118.00	2769	175.00	65488	270.00	833
70.00	7062	119.00	2216	176.00	873344	271.00	293
71.00	289	124.00	278	177.00	56248	272.00	333

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1051908.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	5359	126.00	340	178.00	272	276.00	72
73.00	44560	127.00	380	180.00	200	277.00	277
74.00	178432	128.00	3485	184.00	79	278.00	135
75.00	596352	129.00	1664	185.00	53		

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-20may.b/1052001.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 20-MAY-2008 07:53
Operator : lo Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-20may.b/bfb60.m
Meth Date : 20-May-2008 07:43 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	MASS	RESPONSE				
1 bfb						CAS #: 460-00-4		
5.531	5.564	-0.033	95	1574570			100.00- 100.00	100.00
5.531	5.564	-0.033	50	298984			15.00- 40.00	18.99
5.531	5.564	-0.033	75	665204			30.00- 60.00	42.25
5.531	5.564	-0.033	96	102822			5.00- 9.00	6.53
5.531	5.564	-0.033	173	7532			0.00- 2.00	0.77
5.531	5.564	-0.033	174	978830			50.00- 100.00	62.16
5.531	5.564	-0.033	175	67392			5.00- 9.00	6.88
5.531	5.564	-0.033	176	935173			95.00- 101.00	95.54
5.531	5.564	-0.033	177	57783			5.00- 9.00	6.18

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

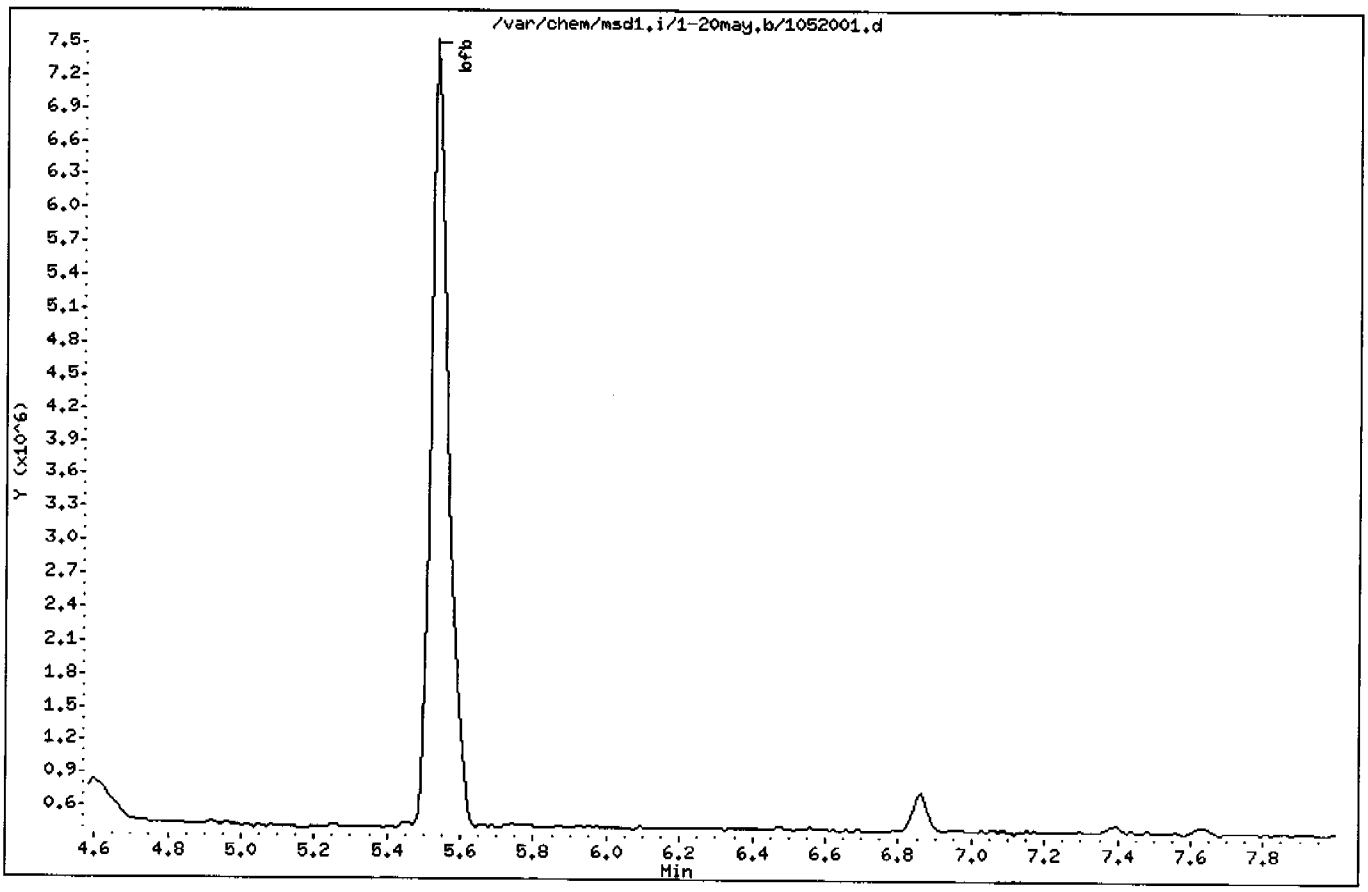
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

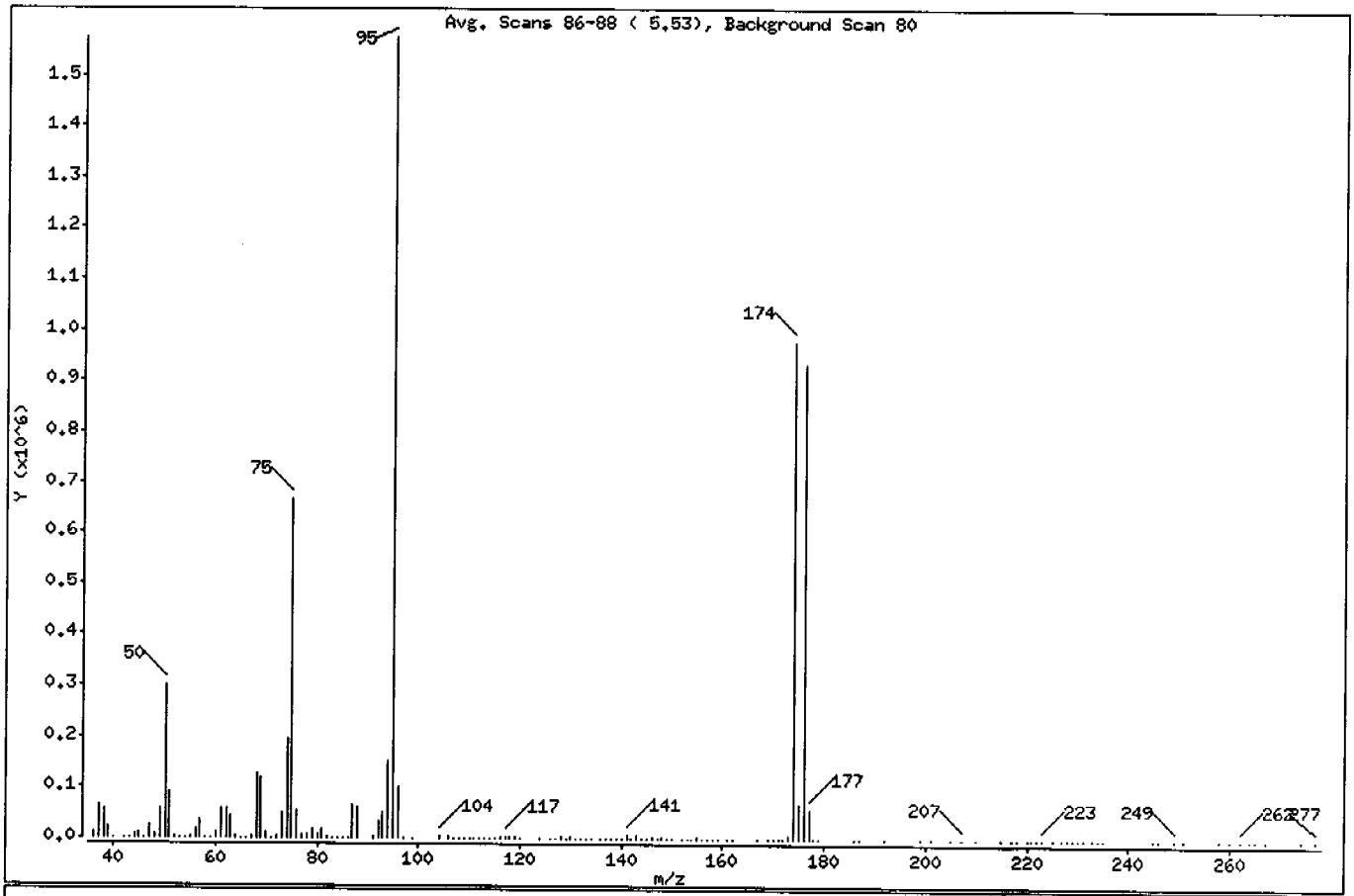
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.99
75	30.00 - 60.00% of mass 95	42.25
96	5.00 - 9.00% of mass 95	6.53
173	Less than 2.00% of mass 174	0.48 (0.77)
174	50.00 - 100.00% of mass 95	62.16
175	5.00 - 9.00% of mass 174	4.28 (6.88)
176	95.00 - 101.00% of mass 174	59.39 (95.54)
177	5.00 - 9.00% of mass 176	3.67 (6.18)

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052001.d

Spectrum: Avg. Scans 86-88 (5.53), Background Scan 80

Location of Maximum: 95.00

Number of points: 159

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10172	77.00	7077	129.00	1326	177.00	57776
37.00	63912	78.00	5860	130.00	3357	178.00	1445
38.00	58088	79.00	18408	131.00	1206	179.00	485
39.00	22616	80.00	6403	132.00	65	186.00	68
40.00	780	81.00	19880	133.00	378	187.00	98
42.00	42	82.00	4674	134.00	157	192.00	31
43.00	35	83.00	300	136.00	158	199.00	72
44.00	5594	84.00	122	137.00	598	201.00	63
45.00	10474	85.00	46	138.00	50	205.00	185
46.00	736	86.00	1309	139.00	161	207.00	762
47.00	23784	87.00	63944	140.00	546	210.00	253
48.00	7303	88.00	61088	141.00	7913	215.00	70
49.00	57432	91.00	2282	142.00	598	217.00	198
50.00	298944	92.00	33144	143.00	7391	218.00	237
51.00	91056	93.00	50160	144.00	439	220.00	27
52.00	3461	94.00	151488	145.00	602	221.00	215
53.00	225	95.00	1574400	146.00	2054	222.00	69
54.00	129	96.00	102816	147.00	178	223.00	488
55.00	2872	97.00	1309	148.00	2276	225.00	142
56.00	17464	99.00	277	149.00	72	227.00	153
57.00	35208	104.00	3448	150.00	1209	228.00	73
58.00	1164	106.00	3346	152.00	216	229.00	145
59.00	66	107.00	510	153.00	255	230.00	56
60.00	11146	108.00	195	154.00	695	231.00	76
61.00	56816	109.00	591	155.00	2081	233.00	144
62.00	56664	110.00	18	156.00	751	234.00	6
63.00	42648	111.00	417	157.00	1738	235.00	120
64.00	3264	112.00	338	158.00	188	245.00	50
65.00	456	113.00	157	159.00	880	246.00	66
66.00	231	114.00	14	161.00	612	249.00	246
67.00	3193	115.00	1153	162.00	123	251.00	117
68.00	125216	116.00	2621	167.00	102	258.00	135
69.00	120696	117.00	5027	169.00	359	260.00	357
70.00	9363	118.00	2186	170.00	335	262.00	426
71.00	441	119.00	2904	171.00	524	264.00	17

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052001.d
Spectrum: Avg. Scans 86-88 (5.53), Background Scan 80
Location of Maximum: 95.00
Number of points: 159

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	5210	120.00	348	172.00	1266	265.00	277
73.00	51488	124.00	465	173.00	7532	267.00	137
74.00	196328	126.00	217	174.00	978816	274.00	58
75.00	665152	127.00	967	175.00	67392	277.00	109
76.00	55112	128.00	2522	176.00	935168		

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-28may.b/1052801.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 28-MAY-2008 08:18
Operator : sjr Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-28may.b/bfb60.m
Meth Date : 28-May-2008 08:08 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.487	5.564	-0.077	95	1384448			100.00- 100.00	100.00
5.487	5.564	-0.077	50	265619			15.00- 40.00	19.19
5.487	5.564	-0.077	75	586200			30.00- 60.00	42.34
5.487	5.564	-0.077	96	91669			5.00- 9.00	6.62
5.487	5.564	-0.077	173	6770			0.00- 2.00	0.77
5.487	5.564	-0.077	174	881130			50.00- 100.00	63.64
5.487	5.564	-0.077	175	63251			5.00- 9.00	7.18
5.487	5.564	-0.077	176	846641			95.00- 101.00	96.09
5.487	5.564	-0.077	177	53961			5.00- 9.00	6.37

Data File: /chem/msd1.i/1-28may.b/1052801.d

Page 1

Date : 28-MAY-2008 08:18

Client ID: BFB

Instrument: msd1.i

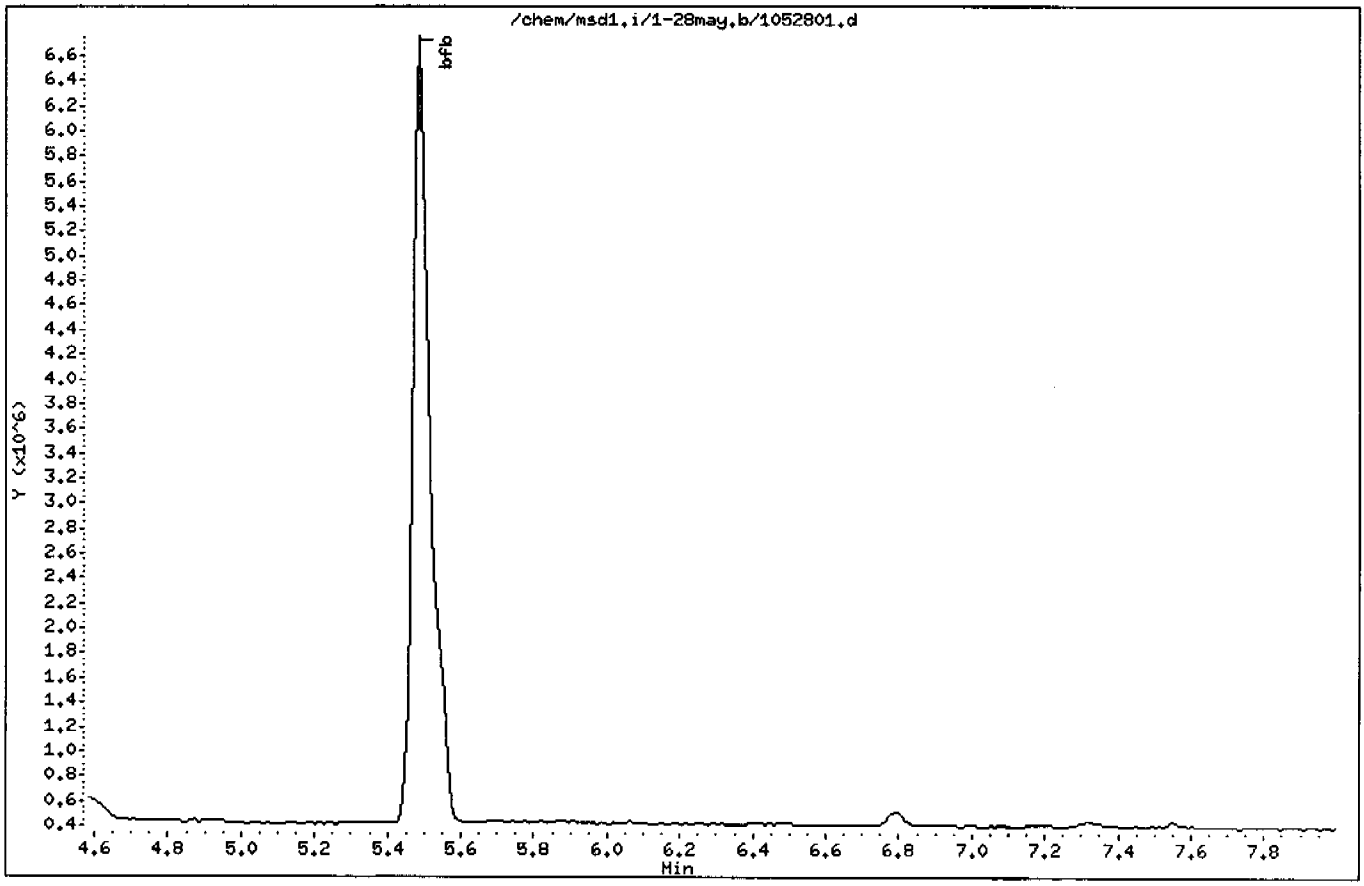
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msd1.i/1-28may.b/1052801.d

Date : 28-MAY-2008 08:18

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

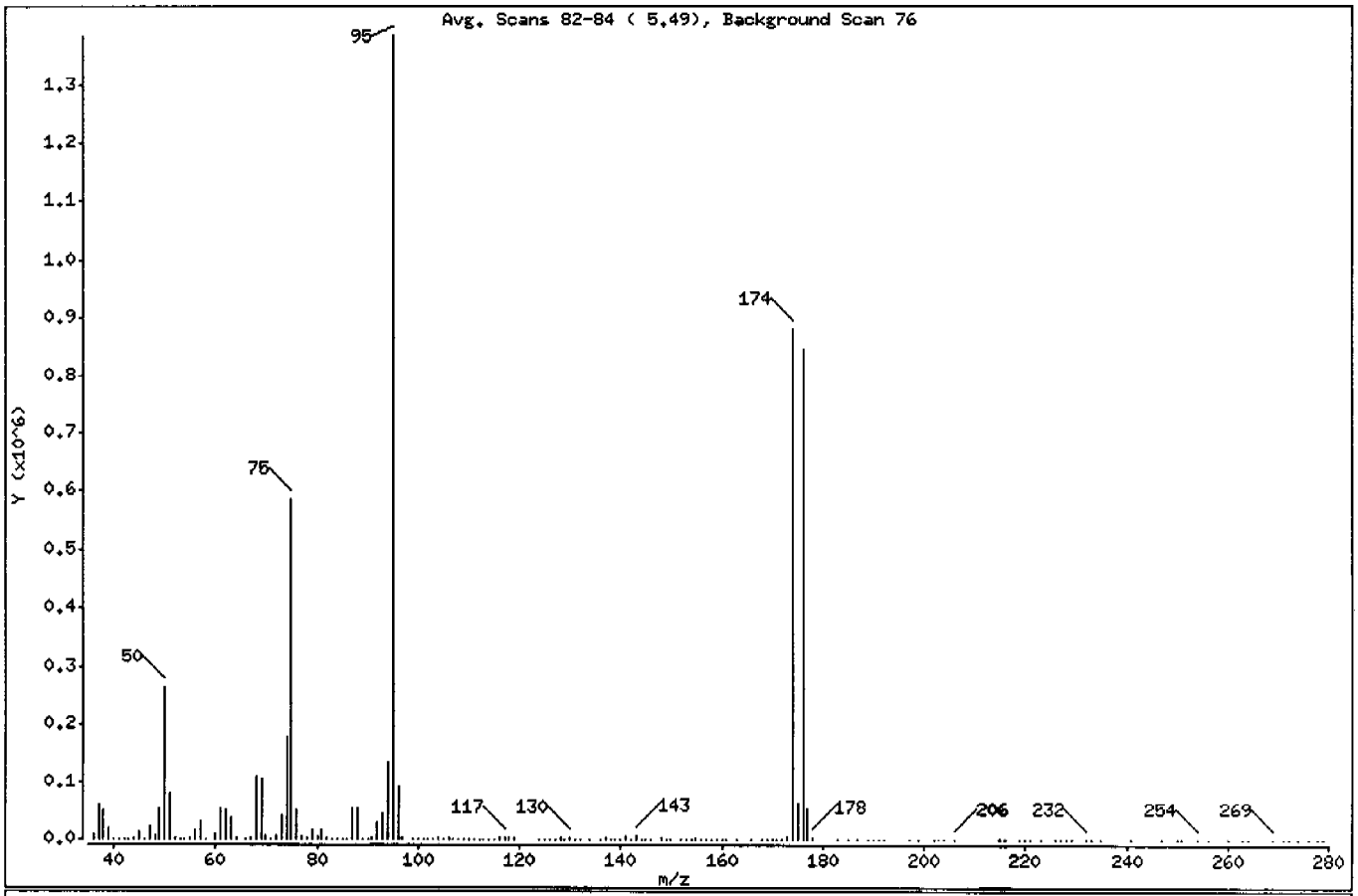
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.19
75	30.00 - 60.00% of mass 95	42.34
96	5.00 - 9.00% of mass 95	6.62
173	Less than 2.00% of mass 174	0.49 (0.77)
174	50.00 - 100.00% of mass 95	63.64
175	5.00 - 9.00% of mass 174	4.57 (7.18)
176	95.00 - 101.00% of mass 174	61.15 (96.09)
177	5.00 - 9.00% of mass 176	3.90 (6.37)

Data File: /chem/msd1.i/1-28may.b/1052801.d

Date : 28-MAY-2008 08:18

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: 1052801.d

Spectrum: Avg. Scans 82-84 (5.49), Background Scan 76

Location of Maximum: 95.00

Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9802	81.00	17000	129.00	1421	185.00	62
37.00	59184	82.00	4625	130.00	3693	187.00	155
38.00	51912	83.00	367	131.00	918	189.00	96
39.00	20656	84.00	129	132.00	232	190.00	107
40.00	180	85.00	159	134.00	14	191.00	338
41.00	798	86.00	1056	136.00	332	192.00	123
42.00	30	87.00	55064	137.00	1635	197.00	37
43.00	815	88.00	54136	138.00	188	199.00	81
44.00	4757	89.00	52	139.00	242	202.00	75
45.00	11392	90.00	243	140.00	25	203.00	167
46.00	574	91.00	2470	141.00	6939	204.00	135
47.00	21784	92.00	27584	142.00	633	206.00	221
48.00	7031	93.00	45856	143.00	7519	215.00	55
49.00	53936	94.00	134464	144.00	196	216.00	98
50.00	265600	95.00	1384448	145.00	602	219.00	383
51.00	80024	96.00	91664	146.00	1290	220.00	218
52.00	3397	97.00	1854	148.00	2223	221.00	339
53.00	116	99.00	1	149.00	324	223.00	99
54.00	107	100.00	87	150.00	782	226.00	60
55.00	2498	101.00	298	152.00	407	227.00	121
56.00	15817	102.00	293	153.00	520	228.00	52
57.00	30304	103.00	175	154.00	193	229.00	68
58.00	1324	104.00	3323	155.00	2286	232.00	585
60.00	10034	105.00	1266	156.00	967	233.00	155
61.00	53448	106.00	3025	157.00	1483	235.00	72
62.00	50472	107.00	529	158.00	304	241.00	7
63.00	36672	108.00	581	159.00	719	247.00	137
64.00	3375	109.00	2	160.00	366	250.00	121
66.00	176	110.00	386	161.00	1186	251.00	14
67.00	2450	111.00	490	163.00	375	254.00	324
68.00	109752	112.00	76	166.00	23	256.00	48
69.00	105312	113.00	89	168.00	398	260.00	271
70.00	7549	114.00	70	169.00	182	263.00	9
71.00	433	115.00	1205	170.00	564	264.00	198
72.00	4844	116.00	2287	171.00	341	269.00	538

Data File: /chem/msd1.i/1-28may.b/1052801.d

Date : 28-MAY-2008 08:18

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: 1052801.d

Spectrum: Avg. Scans 82-84 (5.49), Background Scan 76

Location of Maximum: 95.00

Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	42704	117.00	3733	172.00	407	271.00	**109**
74.00	177536	118.00	2108	173.00	6770	272.00	**270**
75.00	586176	119.00	3165	174.00	881088	274.00	**53**
76.00	50384	124.00	701	175.00	63248	276.00	**101**
77.00	6752	125.00	620	176.00	846592	278.00	**188**
78.00	4123	126.00	182	177.00	53960	279.00	**170**
79.00	17504	127.00	978	178.00	1609		
80.00	6366	128.00	3096	183.00	165		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0805347
# of pages (Including Cover): 1

6/2/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies.
In order to expedite analysis and reporting, please review the attached information for accuracy.
Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0805347

0217

Wednesday, May 14, 2008

REQUEST NUMBER: 08-1147

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-1147
Per Agreement Number:TIPS#24256
Project Cost Code: MR3R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/14/2008
TURNAROUND/REPORT DUE: 6/13/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-12252	GAS	5/9/2008		
		02A	1	MD21-08-12255	GAS	5/8/2008		

Final Page of REQUEST NUMBER 08-1147

0805347

Wednesday, May 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1147C

REQUEST NUMBER: 08-1147

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/13/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12252	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12255	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[signature]	5/14/08	1400	[illegible]	ATL	05-15-08	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP 0.0
Fed Ex

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0805347

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: TB

Date Promised: 05/30/08
Date Completed: 5/29/08
Date Received: 5/15/08
PO#: 47247-001-07
Project#: 08-1147

Total $: $ 600.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-12252	Modified TO-15	5/9/2008	7.0 "Hg	$205.00
02A	MD21-08-12255	Modified TO-15	5/8/2008	7.5 "Hg	$205.00
03A	Lab Blank	Modified TO-15	NA	NA	$0.00
04A	CCV	Modified TO-15	NA	NA	$0.00
05A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (2) @ $60.00 each., Shipment 58694	$120.00
CVP (2) @ $20.00 each.	$40.00
Client Specific EDD (2) @ $5.00 each.	$10.00
eCVP (2) @ $10.00 each.	$20.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

0219

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0805347

A	R	T	M	Q	
☑	☐	☐	☐	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☐	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
NA	☐	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	☐	☐	☑	☐	Corrective Action issued - #
☐	☐	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — *CIRCLE (YES / NO)*

☑	☐	☐	☐	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	☐	Hold time is met for all samples
	☐	☐	☐	☐	Appropriate data qualifier flags are applied
	☐	☐	☐	☐	Manual integrations for samples and QC are properly documented
☑	☐	☐		☐	Samples analyzed within the project or method specific clock
	☐	☐			Retention times have been verified
☑	☐	☐		☐	Appropriate ICAL(s) included
	☐	☐	☑	☐	At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐		☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☐	☐			Correct amount of sample analyzed (i.e. sample not over-diluted)
NA	☐	☐			Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
NA	☐	☐			TICs resemble reference spectra
	☐	☐			TICs between duplicate samples are consistent
NA	☐	☐	☑		Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☐		☑		Special units for all samples in the final report are correctly calculated
NA	☐	☐	☑		Manually entered results checked (i.e. special CCV compounds)
	☐	☐	☑		TPH/NMOC (verify calculations and correct reference compound used)
	☐				Chain of Custody scanned correctly
		☐			Verify sample id's vs. chain of custody
☑	☑				Samples pressurized w/ appropriate gas (N2 or He) ☐ Tedlar Bag only
☑	☑				Final pressure consistent with canister size (6L vs. 1L)
☑	☑				Verify receipt pressures against logbook and Target
☑	☑				Verify canister ID #'s
NA	☐		☑		Extra printed copies are provided per client profile
	☐		☑		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☐	☐	☑	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: 1,2,4-TCB 35% in ICAL. ND out in CCV.
1,2,4-TCB & HCB ✓ in LCS. CCV from multiple files.

M/Q:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
5/29/08	R: C Taylor 5-29-08	5/29/08	
	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 08/29/05

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-1114

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/12/2008

TURNAROUND/REPORT DUE: 6/11/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12236	GAS	5/9/2008	Port #1	
		1	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1	MD21-08-12238	GAS	5/9/2008	Port #4	
		1	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1	MD21-08-12240	GAS	5/9/2008		
		1	MD21-08-12242	GAS	5/9/2008	Port # 1	
		1	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1	MD21-08-12245	GAS	5/9/2008	Port #4	
		1	MD21-08-12246	GAS	5/9/2008	Port #5	

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TOI5	

Final Page of REQUEST NUMBER 08-1114

Monday, May 12, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1114C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-1114

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/11/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12237	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12244	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12240	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12246	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12238	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12245	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12239	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12242	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12253	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12236

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Part #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1\%$

$O_2 = 18.7\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)**

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12237

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1113	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:	Port #3	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.0\%$

$O_2 = 18.8\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12238

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1117	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.0\%$

$O_2 = 18.7\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dwyroff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 1225
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12239

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 18.8\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12240

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dwykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12242

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1115	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port # 1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 1.4 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12244

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217.0 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222.0 Ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = ~~19.~~ 0.2 %

O_2 = ~~0.2~~ KR 5/8/08 19.0 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wyckoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/8 1225	(Printed Name)	5/9/08 1225
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12245

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$Co_2 = 0.9\%$

$O_2 = 18.5\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dal 2/11

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1225	(Printed Name)	5/9/08
(Signature)	5/9/08	(Signature)	12125
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12246

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Co_2 = 0.7 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12253

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12240 Field duplicate of H3 & TO15.

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	5/1/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12256

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD 21-08-12246 Field duplicate of TO15 sample only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Co_2 = 0.7 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1225 5/9/08	(Printed Name)	1225 5/9/08
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-1114 VALIDATION DATE: 6/23/08 LAB CODE: ARS

CONTRACT LABORATORY NAME: American Radiation Services

VALIDATOR: Jessica Jorvig ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☒ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The tritium results for samples MD21-08-12236, -12242 and -12246 were ≤ the MDCs and, thus, were qualified U,R5.
2. It should be noted that an LCS Duplicate was analyzed instead of a duplicate analysis on a field sample. No sample data were qualified as a result.
3. It should be noted that an MS was not analyzed. However, an LCS was analyzed and passed acceptance criteria. Thus, no sample data were qualified.
4. It should be noted that the quality control summary form indicated a 1-sigma TPU for the LCS Duplicate; however, the value shown was actually the 2-sigma TPU. The RER was calculated correctly. No data were qualified as a result.

Reviewed By: ETM **Level:** I **Date:** 6/23/08

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos
NATIONAL LABORATORY

VALIDATOR'S SIGNATURE: _____ DATE: 6/23/08

Form 5119-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12236	**ARS Sample ID:**	ARS1-08-00867-001
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	138.148	60.552	196.435	96.567	U	pCi/L	ARS-054/EPA 906.0	6/6/08 18:59	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bailey
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12237	**ARS Sample ID:**	ARS1-08-00867-002
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC		Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
	329.351	65.604	[illegible]	98.666		pCi/L	ARS-054/EPA 906.0	6/6/08 22:09	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bulging
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12238	**ARS Sample ID:**	ARS1-08-00867-003
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	768.824	77.392	196.216	96.459		pCi/L	ARS-054/EPA 906.0	6/7/08 1:18	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C Bourgeois

...pretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in

...658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12239	**ARS Sample ID:**	ARS1-08-00867-004
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	227.726	62.647	198.058	97.365		pCi/L	ARS-054/EPA 906.0	6/7/08 4:27	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bulleigny
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12240	**ARS Sample ID:**	ARS1-08-00867-005
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Results	TPU (1S)	MD	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
4277.966	242.005	194.629	95.679	pCi/L	ARS-054/EPA 906.0	6/7/08 7:37	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Baliguy
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12242	**ARS Sample ID:**	ARS1-08-00867-006
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	-32.584	57.839	194.594	95.662	U	pCi/L	ARS-054/EPA 906.0	6/7/08 10:44	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Burleigh

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in [illegible] requires the written consent of the client.

LELAP Certificate# 30653 NELAP Certificate # E87556

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00867	**Request or PO Number:**	08-1114
Client Sample ID:	MD21-08-12244	**ARS Sample ID:**	ARS1-08-00867-007
Sample Collection Date:	05/09/08	**Date Received:**	05/13/08
Sample Matrix:	Air/Gel	**Report Date:**	06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	418.555	68.674	203.775	100.175		pCi/L	ARS-054/EPA 906.0	6/7/08 13:52	AJ	N/A

NOTES: Project Cost Code: **MR8R032NFB00**

C. Bridges
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12245
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-008
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Results	TPU (1S)	MDC	DLC	Q.A.	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
361.873	65.505	197.664	97.171		pCi/L	ARS-054/EPA 906.0	6/7/08 17:01	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bridges
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12246
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-009
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	-48.594	58.681	197.869	97.272	U	pCi/L	ARS-054/EPA 906.0	6/7/08 20:09	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12253
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-010
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	3888.715	222.437	195.815	96.262		pCi/L	ARS-054/EPA 906.0	6/7/08 23:17	AJ	N/A

NOTES: Project Cost Code: **MR8R032NFB00**

C. Bridges
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
6/23/08

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-1114
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/12/2008
TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12236	GAS	5/9/2008	Port #1	
		1	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1	MD21-08-12238	GAS	5/9/2008	Port #4	
		1	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1	MD21-08-12240	GAS	5/9/2008		
		1	MD21-08-12242	GAS	5/9/2008	Port # 1	
		1	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1	MD21-08-12245	GAS	5/9/2008	Port #4	
		1	MD21-08-12246	GAS	5/9/2008	Port #5	

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TOI5	

Final Page of REQUEST NUMBER 08-1114

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-1114

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-1114
Original COC

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-1114

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 5/12/2008

TURNAROUND/REPORT DUE: 6/11/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12236	GAS	5/9/2008	Port #1	
		1	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1	MD21-08-12238	GAS	5/9/2008	Port #4	
		1	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1	MD21-08-12240	GAS	5/9/2008		
		1	MD21-08-12242	GAS	5/9/2008	Port # 1	
		1	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1	MD21-08-12245	GAS	5/9/2008	Port #4	
		1	MD21-08-12246	GAS	5/9/2008	Port #5	

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TOI5	

Final Page of REQUEST NUMBER 08-1114

Monday, May 12, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1114(

REQUEST NUMBER: 08-1114

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

LAB REQUEST COMMENTS:

TURNAROUND/REPORT DUE: 6/11/2008

TURNAROUND REQ'D: 30

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12237	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12244	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12240	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12246	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12238	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12245	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12239	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12242	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12253	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	5/12/08	1400	Printed Name	Signature	5-13-08	0948
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-1114

Case Narrative

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

June 11, 2008

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-1114
LANL Sample ID: MD21-08-12236, MD21-08-12237, MD21-08-012238, MD21-08-012239, MD21-08-012240, MD21-08-12242, MD21-08-012244, MD21-08-012245, MD21-08-012246, MD21-08-012253

Dear Mr. Greene:

On May 13, 2008 American Radiation Services (ARS) received ten Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet quality control parameters for counting equipment were within acceptance criteria and statistical sound detection limits.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

Eugene Mulligan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-1114	MD21-08-012236	ARS1-08-00867-001
08-1114	MD21-08-012237	ARS1-08-00867-002
08-1114	MD21-08-012238	ARS1-08-00867-003
08-1114	MD21-08-012239	ARS1-08-00867-004
08-1114	MD21-08-012240	ARS1-08-00867-005
08-1114	MD21-08-012242	ARS1-08-00867-006
08-1114	MD21-08-012244	ARS1-08-00867-007
08-1114	MD21-08-012245	ARS1-08-00867-008
08-1114	MD21-08-012246	ARS1-08-00867-009
08-1114	MD21-08-012253	ARS1-08-00867-010

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicate that the activity is below the MDC.

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."

Eugene Mullegan
Signature

Lab Manager/Technical Director, American Radiation Services
Title

6-11-08
Date

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12236
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-001
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	138.148	60.552	196.435	96.567	U	pCi/L	ARS-054/EPA 906.0	6/6/08 18:59	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bailey
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12237
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-002
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	329.351	65.604	200.705	98.666		pCi/L	ARS-054/EPA 906.0	6/6/08 22:09	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bullejos
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12238
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-003
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	768.824	77.392	196.216	96.459		pCi/L	ARS-054/EPA 906.0	6/7/08 1:18	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bridging
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12239
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-004
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	227.726	62.647	198.058	97.365		pCi/L	ARS-054/EPA 906.0	6/7/08 4:27	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bulleigny
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12240
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-005
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	4277.966	242.005	194.629	95.679		pCi/L	ARS-054/EPA 906.0	6/7/08 7:37	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Baldigny
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12242
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-006
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	-32.584	57.839	194.594	95.662	U	pCi/L	ARS-054/EPA 906.0	6/7/08 10:44	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bourgeois
Project Manager Review

Notes: America;. Radiation Services, Inc assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12244
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-007
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	418.555	68.674	203.775	100.175		pCi/L	ARS-054/EPA 906.0	6/7/08 13:52	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bridges
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12245
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-008
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	361.873	65.505	197.664	97.171		pCi/L	ARS-054/EPA 906.0	6/7/08 17:01	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bulings
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12246
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-009
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	-48.594	58.681	197.869	97.272	U	pCi/L	ARS-054/EPA 906.0	6/7/08 20:09	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12253
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-010
Date Received: 05/13/08
Report Date: 06/11/08 14:52

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	3888.715	222.437	195.815	96.262		pCi/L	ARS-054/EPA 906.0	6/7/08 23:17	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

C. Bridges
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-08-00867
Date Received: 5/13/2008

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU (2s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B08-01367	LCS	H3	1060.49	183.1	217.39109	1170.00		pCi/L	ARS-054/EPA 906.0	6/6/08 9:38	AJ	91	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU (2s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B08-01367	MBL	H3	-83.121	110.45667	190.92555	NA	U	pCi/L	ARS-054/EPA 906.0	6/6/08 15:52	AJ

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU (2s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B08-01367	LCSD	H3	1060.49	183.1	977.25723	164.5519		pCi/L	ARS-054/EPA 906.0	6/6/08 12:45	AJ	0.24	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU (2s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B08-01367	LCSD	H3	1060.49	183.1	977.25723	164.5519		pCi/L	ARS-054/EPA 906.0	6/6/08 12:45	AJ	0.68	< 3

Lindsay Lanseigne
Project Manager Review

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ARS
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

LSC Instrument Data Transfer Report

\\PACKARD3170_NEW\Results\ARS\H-3 Normal Lvl

Batch Sample ID	Non-BKG Samples Transferred	Samples Eligible To Save	
ARS1-B08-01367	16	16	LSC 2

LIMS Batch Sample ID	LSC P#	LSC PID	LSC S#	LSC SMPL_ID	LSC Count Date	LSC CPMA	LSC tSIE	LSC EFF	LSC Count Dur	Analysis Batch	LIMS SDG	LIMS Run
BKG	44		1	BACKGROUND	06/06/08 06:31	6.45	361.77	39.1700	180.00	ARS1-B08-01367		
ARS1-B08-01367-01	44		2	B08-01367-01	06/06/08 09:38	10.82	339.30	36.9500	180.00	ARS1-B08-01367		
ARS1-B08-01367-02	44		3	B08-01367-02	06/06/08 12:45	11.02	398.17	42.0100	180.00	ARS1-B08-01367		
ARS1-B08-01367-03	44		4	B08-01367-03	06/06/08 15:52	6.06	397.95	42.0000	180.00	ARS1-B08-01367		
ARS1-B08-01367-04	44		5	B08-01367-04	06/06/08 18:59	7.08	385.26	41.1900	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-05	44		6	B08-01367-05	06/06/08 22:08	7.92	384.39	41.1300	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-06	44		7	B08-01367-06	06/07/08 01:17	9.96	386.21	41.2500	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-07	44		8	B08-01367-07	06/07/08 04:27	7.48	380.72	40.9000	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-08	44		9	B08-01367-08	06/07/08 07:36	26.14	390.87	41.5500	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-09	44		10	B08-01367-09	06/07/08 10:44	6.30	383.39	41.0700	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-10	44		11	B08-01367-10	06/07/08 13:51	8.29	367.31	39.7200	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-11	44		12	B08-01367-11	06/07/08 17:01	8.09	380.61	40.8900	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-12	44		13	B08-01367-12	06/07/08 20:09	6.23	379.94	40.8500	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-13	44		14	B08-01367-13	06/07/08 23:16	24.24	386.94	41.3000	180.00	ARS1-B08-01367	ARS1-08-00867	1
ARS1-B08-01367-14	44		15	B08-01367-14	06/08/08 02:24	323.58	383.39	41.0700	180.00	ARS1-B08-01367	ARS1-08-00900	1
ARS1-B08-01367-15	44		16	B08-01367-15	06/08/08 05:31	5769.96	386.80	41.2900	27.74	ARS1-B08-01367	ARS1-08-00901	1
ARS1-B08-01367-16	44		17	B08-01367-16	06/08/08 06:04	3408.90	380.69	40.9000	46.95	ARS1-B08-01367	ARS1-08-00901	1

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	10.820000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.369500
Sample Aliquot	5.023500
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	6/6/08 9:38 AM
Count Date (t2)	6/6/08 9:38 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**1060.492529**	**1060.492529**	**OK**
CU	**147.330331**	**147.330331**	**OK**
TPU	**183.070211**	**183.070211**	**OK**
MDA	**217.391093**	**217.391093**	**OK**
DL	**106.868738**	**106.868738**	**OK**
Net Count Rate	**4.370000**	**4.370000**	**OK**
D t 1 (t2 - t1)	**0.000000**	**0.000000**	**OK**
DF	**1.000000**	**1.000000**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004121**	**0.004121**	**OK**
K MDA	**0.741731**	**0.741731**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-01
Analysis Code	
SDG	ARS1-08-00901
Fraction	002
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44-S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	11.020000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.420100
Sample Aliquot	5.014200
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	6/6/08 12:45 PM
Count Date (t2)	6/6/08 12:45 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**977.257229**	**977.257229**	**OK**
CU	**130.574678**	**130.574678**	**OK**
TPU	**164.551914**	**164.551914**	**OK**
MDA	**191.561514**	**191.561514**	**OK**
DL	**94.171003**	**94.171003**	**OK**
Net Count Rate	**4.570000**	**4.570000**	**OK**
D t 1 (t2 - t1)	**0.000000**	**0.000000**	**OK**
DF	**1.000000**	**1.000000**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004676**	**0.004676**	**OK**
K MDA	**0.841744**	**0.841744**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-02
Analysis Code	
SDG	ARS1-08-00901
Fraction	002
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44-S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	6.060000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.420000
Sample Aliquot	5.032100
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	6/6/08 3:52 PM
Count Date (t2)	6/6/08 3:52 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**-83.121444**	**-83.121444**	**OK**
CU	**110.127796**	**110.127796**	**OK**
TPU	**110.456670**	**110.456670**	**OK**
MDA	**190.925546**	**190.925546**	**OK**
DL	**93.858363**	**93.858363**	**OK**
Net Count Rate	**-0.390000**	**-0.390000**	**OK**
D t 1 (t2 - t1)	**0.000000**	**0.000000**	**OK**
DF	**1.000000**	**1.000000**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004692**	**0.004692**	**OK**
K MDA	**0.844547**	**0.844547**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-03
Analysis Code	
SDG	ARS1-08-00901
Fraction	002
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44-S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6-11-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	7.080000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.411900
Sample Aliquot	5.009300
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/6/08 6:59 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**138.148068**	**138.148068**	**OK**
CU	**117.834641**	**117.834641**	**OK**
TPU	**118.681881**	**118.681881**	**OK**
MDA	**196.435436**	**196.435436**	**OK**
DL	**96.567007**	**96.567007**	**OK**
Net Count Rate	**0.630000**	**0.630000**	**OK**
D t 1 (t2 - t1)	**28.790972**	**28.790972**	**OK**
DF	**0.995575**	**0.995575**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004560**	**0.004560**	**OK**
K MDA	**0.820858**	**0.820858**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-04
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12236
Instr File Name	73
Instr Detector	P-44-S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6-11-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	7.920000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.411300
Sample Aliquot	4.910000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/6/08 10:09 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**329.351055**	**329.351055**	**OK**
CU	**124.076612**	**124.076612**	**OK**
TPU	**128.584349**	**128.584349**	**OK**
MDA	**200.704585**	**200.704585**	**OK**
DL	**98.665706**	**98.665706**	**OK**
Net Count Rate	**1.470000**	**1.470000**	**OK**
D t 1 (t2 - t1)	**28.922917**	**28.922917**	**OK**
DF	**0.995555**	**0.995555**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004463**	**0.004463**	**OK**
K MDA	**0.803398**	**0.803398**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-05
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	002
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12237
Instr File Name	73
Instr Detector	P-44-S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	9.960000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.412500
Sample Aliquot	5.007800
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 1:18 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**768.823933**	**768.823933**	**OK**
CU	**129.626528**	**129.626527**	**OK**
TPU	**151.688271**	**151.688271**	**OK**
MDA	**196.216420**	**196.216420**	**OK**
DL	**96.459339**	**96.459339**	**OK**
Net Count Rate	**3.510000**	**3.510000**	**OK**
D t 1 (t2 - t1)	**29.054167**	**29.054167**	**OK**
DF	**0.995535**	**0.995535**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004565**	**0.004565**	**OK**
K MDA	**0.821775**	**0.821775**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-06
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	003
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12238
Instr File Name	73
Instr Detector	P-44-S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	7.480000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.409000
Sample Aliquot	5.003800
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 4:27 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**227.726442**	**227.726442**	**OK**
CU	**120.551221**	**120.551221**	**OK**
TPU	**122.788869**	**122.788869**	**OK**
MDA	**198.057734**	**198.057734**	**OK**
DL	**97.364523**	**97.364523**	**OK**
Net Count Rate	**1.030000**	**1.030000**	**OK**
D t 1 (t2 - t1)	**29.185417**	**29.185417**	**OK**
DF	**0.995514**	**0.995514**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004523**	**0.004523**	**OK**
K MDA	**0.814135**	**0.814135**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-07
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	004
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12239
Instr File Name	73
Instr Detector	P-44-S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6-11-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	26.140000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.415500
Sample Aliquot	5.012400
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 7:37 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**4277.965527**	**4277.965525**	**OK**
CU	**181.198068**	**181.198068**	**OK**
TPU	**474.329418**	**474.329418**	**OK**
MDA	**194.628813**	**194.628813**	**OK**
DL	**95.678877**	**95.678877**	**OK**
Net Count Rate	**19.690000**	**19.690000**	**OK**
D t 1 (t2 - t1)	**29.317361**	**29.317361**	**OK**
DF	**0.995494**	**0.995494**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004603**	**0.004603**	**OK**
K MDA	**0.828478**	**0.828478**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-08
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12240
Instr File Name	73
Instr Detector	P-44-S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CD **Date:** 6-11-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	6.300000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.410700
Sample Aliquot	5.072000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 10:44 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**-32.583994**	**-32.583994**	**OK**
CU	**113.315147**	**113.315147**	**OK**
TPU	**113.364325**	**113.364325**	**OK**
MDA	**194.593631**	**194.593631**	**OK**
DL	**95.661582**	**95.661582**	**OK**
Net Count Rate	**-0.150000**	**-0.150000**	**OK**
D t 1 (t2 - t1)	**29.447222**	**29.447222**	**OK**
DF	**0.995474**	**0.995474**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004603**	**0.004603**	**OK**
K MDA	**0.828628**	**0.828628**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-09
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	006
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12242
Instr File Name	73
Instr Detector	P-44-S-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	8.290000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.397200
Sample Aliquot	5.008200
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 1:52 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**418.555116**	**418.555116**	**OK**
CU	**127.586109**	**127.586109**	**OK**
TPU	**134.601813**	**134.601812**	**OK**
MDA	**203.774765**	**203.774765**	**OK**
DL	**100.174997**	**100.174997**	**OK**
Net Count Rate	**1.840000**	**1.840000**	**OK**
D t 1 (t2 - t1)	**29.577778**	**29.577778**	**OK**
DF	**0.995454**	**0.995454**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004396**	**0.004396**	**OK**
K MDA	**0.791294**	**0.791294**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-10
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	007
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12244
Instr File Name	73
Instr Detector	P-44-S-11
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	8.090000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.408900
Sample Aliquot	5.015400
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 5:01 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**361.872581**	**361.872581**	**OK**
CU	**122.917538**	**122.917538**	**OK**
TPU	**128.388788**	**128.388787**	**OK**
MDA	**197.663918**	**197.663918**	**OK**
DL	**97.170924**	**97.170924**	**OK**
Net Count Rate	**1.640000**	**1.640000**	**OK**
D t 1 (t2 - t1)	**29.709028**	**29.709028**	**OK**
DF	**0.995434**	**0.995434**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004532**	**0.004532**	**OK**
K MDA	**0.815757**	**0.815757**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-11
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	008
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12245
Instr File Name	73
Instr Detector	P-44-S-12
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6-11-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	6.230000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.408500
Sample Aliquot	5.015200
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 8:09 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**-48.594332**	**-48.594332**	**OK**
CU	**114.905913**	**114.905913**	**OK**
TPU	**115.013751**	**115.013751**	**OK**
MDA	**197.869338**	**197.869338**	**OK**
DL	**97.271909**	**97.271908**	**OK**
Net Count Rate	**-0.220000**	**-0.220000**	**OK**
D t 1 (t2 - t1)	**29.839583**	**29.839583**	**OK**
DF	**0.995414**	**0.995414**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004527**	**0.004527**	**OK**
K MDA	**0.814910**	**0.814910**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-12
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	009
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12246
Instr File Name	73
Instr Detector	P-44-S-13
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	24.240000
Sample Count Mins	180.000000
BKG Count Rate	6.450000
BKG Count Mins	180.000000
Instrument Efficiency	0.413000
Sample Aliquot	5.012700
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/9/08 12:00 AM
Count Date (t2)	6/7/08 11:17 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**3888.715458**	**3888.715456**	**OK**
CU	**176.908411**	**176.908411**	**OK**
TPU	**435.975701**	**435.975701**	**OK**
MDA	**195.814924**	**195.814924**	**OK**
DL	**96.261965**	**96.261965**	**OK**
Net Count Rate	**17.790000**	**17.790000**	**OK**
D t 1 (t2 - t1)	**29.970139**	**29.970139**	**OK**
DF	**0.995394**	**0.995394**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004575**	**0.004575**	**OK**
K MDA	**0.823460**	**0.823460**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01367
Batch ID	ARS1-B08-01367-13
Analysis Code	LSC-A-001
SDG	ARS1-08-00867
Fraction	010
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12253
Instr File Name	73
Instr Detector	P-44-S-14
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: CB **Date:** 6.11.08

Assay Definition-

Assay Description:
H3 Normal Lvl

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080606_0626
Raw Results Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080606_0626\20080606_0626.results
RTF File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080606_0626\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080606_0626\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\H-3 Normal Lvl.lsa

Count Conditions-

Nuclide: H-3 Normal
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set:
  Low Energy: H3 Normal
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nuc1 In A	Count Time	DATE	TIME	MESSAGES
44	1	BACKGROUND	6.45	16.46	361.77	39.17	180.00	6/6/2008	6:31:26 AM	
44	2	B08-01367-01	10.82	29.27	339.30	36.95	180.00	6/6/2008	9:38:26 AM	
44	3	B08-01367-02	11.02	26.24	398.17	42.01	180.00	6/6/2008	12:45:20 PM	
44	4	B08-01367-03	6.06	14.44	397.95	42.00	180.00	6/6/2008	3:52:12 PM	
44	5	B08-01367-04	7.08	17.18	385.26	41.19	180.00	6/6/2008	6:59:06 PM	
44	6	B08-01367-05	7.92	19.26	384.39	41.13	180.00	6/6/2008	10:08:31 PM	
44	**7**	**B08-01367-06**	**9.96**	**24.15**	**386.21**	**41.25**	**180.00**	**6/7/2008**	**1:17:59 AM**	
44	8	B08-01367-07	7.48	18.29	380.72	40.90	180.00	6/7/2008	4:27:24 AM	
44	9	B08-01367-08	26.14	62.93	390.87	41.55	180.00	6/7/2008	7:36:38 AM	
44	10	B08-01367-09	6.30	15.34	383.39	41.07	180.00	6/7/2008	10:44:12 AM	
44	11	B08-01367-10	8.29	20.88	367.31	39.72	180.00	6/7/2008	1:51:46 PM	
44	12	B08-01367-11	8.09	19.79	380.61	40.89	180.00	6/7/2008	5:01:12 PM	
44	13	B08-01367-12	6.23	15.26	379.94	40.85	180.00	6/7/2008	8:09:14 PM	
44	14	B08-01367-13	24.24	58.70	386.94	41.30	180.00	6/7/2008	11:16:46 PM	
44	15	B08-01367-14	323.58	787.85	383.39	41.07	180.00	6/8/2008	2:24:05 AM	
44	16	B08-01367-15	5769.96	13974.76	386.80	41.29	27.74	6/8/2008	5:31:15 AM	
44	17	B08-01367-16	3408.90	8335.03	380.69	40.90	46.95	6/8/2008	6:04:53 AM	

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Laboratory Records

Analysis Batch Report

Analysis Batch ID **ARS1-B08-01367**

Method **ARS-054**

Description **TRITIUM IN WATER**

Matrix **AQ**

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3	SDG	1	FR	Client ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-B08-01367-01	LCS	B-05039			**ARS1-08-00867**	1	001	MD21-08-12236	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-02	LCSD	B-05040			**ARS1-08-00867**	1	002	MD21-08-12237	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-03	MBL				**ARS1-08-00867**	1	003	MD21-08-12238	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-04	TRG				**ARS1-08-00867**	1	004	MD21-08-12239	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-05	TRG				**ARS1-08-00867**	1	005	MD21-08-12240	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-06	TRG				**ARS1-08-00867**	1	006	MD21-08-12242	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-07	TRG				**ARS1-08-00867**	1	007	MD21-08-12244	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-08	TRG				**ARS1-08-00867**	1	008	MD21-08-12245	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-09	TRG				**ARS1-08-00867**	1	009	MD21-08-12246	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-10	TRG				**ARS1-08-00867**	1	010	MD21-08-12253	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01367-11	TRG				**ARS1-08-00900**	1	001	MD50-08-7655	06/13/08	06/10/08	LSC-A-001
ARS1-B08-01367-12	TRG				**ARS1-08-00901**	1	001	MD50-08-7656	06/14/08	06/10/08	LSC-A-001
ARS1-B08-01367-13	TRG				**ARS1-08-00901**	1	002	MD50-08-7657	06/14/08	06/10/08	LSC-A-001
ARS1-B08-01367-14	TRG										
ARS1-B08-01367-15	TRG										
ARS1-B08-01367-16	TRG										

Expected Value Calculations

LANL

ARS Batch Number: ARS1-B08 - 01367

LCS

CALCULATED EXPECTED VALUE = 1170.000

Range 585.000 - 1755.000

LCSD

CALCULATED EXPECTED VALUE = 1170.000

Range 585.000 - 1755.000

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	ACT	CU	TPU	DL	MDA	BP_DL	BP_MDA	Sb	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	EFF	ALIQ	UCF	CF	GrossCountRate
ARS1-B08-01367	ARS1-B08-01367-01	H-3	MD50-08-7657	1060.492529	147.3303307	183.0702107	106.86874	217.39109				0.06011	180.00000	0.03583	180.00000	0.36950	5.02350	2.22000	1.96000	10.82000
ARS1-B08-01367	ARS1-B08-01367-02	H-3	MD50-08-7657	977.2572286	130.5746778	164.5519143	94.17100	191.56151				0.06122	180.00000	0.03583	180.00000	0.42010	5.01420	2.22000	1.96000	11.02000
ARS1-B08-01367	ARS1-B08-01367-03	H-3	MD50-08-7657	-83.12144398	110.1277955	110.4566697	93.85836	190.92555				0.03367	180.00000	0.03583	180.00000	0.42000	5.03210	2.22000	1.96000	6.06000
ARS1-B08-01367	ARS1-B08-01367-04	H-3	MD21-08-12236	138.1480677	117.8346409	118.6818815	96.56701	196.43544				0.03933	180.00000	0.03583	180.00000	0.41190	5.00930	2.22000	1.96000	7.08000
ARS1-B08-01367	ARS1-B08-01367-05	H-3	MD21-08-12237	329.3510551	124.0766123	128.5843494	98.66571	200.70458				0.04400	180.00000	0.03583	180.00000	0.41130	4.91000	2.22000	1.96000	7.92000
ARS1-B08-01367	ARS1-B08-01367-06	H-3	MD21-08-12238	768.823933	129.6265275	151.6882706	96.45934	196.21642				0.05533	180.00000	0.03583	180.00000	0.41250	5.00780	2.22000	1.96000	9.96000
ARS1-B08-01367	ARS1-B08-01367-07	H-3	MD21-08-12239	227.726442	120.5512209	122.7888694	97.36452	198.05773				0.04156	180.00000	0.03583	180.00000	0.40900	5.00380	2.22000	1.96000	7.48000
ARS1-B08-01367	ARS1-B08-01367-08	H-3	MD21-08-12240	4277.965525	181.1980682	474.3294179	95.67888	194.62881				0.14522	180.00000	0.03583	180.00000	0.41550	5.01240	2.22000	1.96000	26.14000
ARS1-B08-01367	ARS1-B08-01367-09	H-3	MD21-08-12242	-32.58399366	113.3151465	113.364325	95.66158	194.59363				0.03500	180.00000	0.03583	180.00000	0.41070	5.07200	2.22000	1.96000	6.30000
ARS1-B08-01367	ARS1-B08-01367-10	H-3	MD21-08-12244	418.5551158	127.5861087	134.6018125	100.17500	203.77476				0.04606	180.00000	0.03583	180.00000	0.39720	5.00820	2.22000	1.96000	8.29000
ARS1-B08-01367	ARS1-B08-01367-11	H-3	MD21-08-12245	361.8725806	122.9175376	128.3887875	97.17092	197.66392				0.04494	180.00000	0.03583	180.00000	0.40890	5.01540	2.22000	1.96000	8.09000
ARS1-B08-01367	ARS1-B08-01367-12	H-3	MD21-08-12246	-48.59433158	114.9059129	115.0137514	97.27191	197.86934				0.03461	180.00000	0.03583	180.00000	0.40850	5.01520	2.22000	1.96000	6.23000
ARS1-B08-01367	ARS1-B08-01367-13	H-3	MD21-08-12253	3888.715456	176.9084108	435.9757011	96.26197	195.81492				0.13467	180.00000	0.03583	180.00000	0.41300	5.01270	2.22000	1.96000	24.24000
ARS1-B08-01367	ARS1-B08-01367-14	H-3	MD50-08-7655	69845.06042	584.513974	7180.730265	96.98909	197.29403				1.79767	180.00000	0.03583	180.00000	0.41070	5.00000	2.22000	1.96000	323.58000
ARS1-B08-01367	ARS1-B08-01367-15	H-3	MD50-08-7656	1258151.481	6171.241357	129068.1964	186.02111	393.36818				208.00144	27.74000	0.03583	180.00000	0.41290	5.01700	2.22000	1.96000	5769.96000
ARS1-B08-01367	ARS1-B08-01367-16	H-3	MD50-08-7657	750769.2697	3686.101424	77018.27013	151.06767	314.87180				72.60703	46.95000	0.03583	180.00000	0.40900	5.01070	2.22000	1.96000	3408.90000

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3	TPUF_1
ARS1-B08-01367	ARS1-B08-01367-01	H-3	MD50-08-7657	6.45000	4.37000							6/9/08 8:41	6/6/08 9:38	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-02	H-3	MD50-08-7657	6.45000	4.57000							6/9/08 8:41	6/6/08 12:45	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-03	H-3	MD50-08-7657	6.45000	-0.39000							6/9/08 8:41	6/6/08 15:52	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-04	H-3	MD21-08-12236	6.45000	0.63000							5/9/08 0:00	6/6/08 18:59	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-05	H-3	MD21-08-12237	6.45000	1.47000							5/9/08 0:00	6/6/08 22:09	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-06	H-3	MD21-08-12238	6.45000	3.51000							5/9/08 0:00	6/7/08 1:18	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-07	H-3	MD21-08-12239	6.45000	1.03000							5/9/08 0:00	6/7/08 4:27	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-08	H-3	MD21-08-12240	6.45000	19.69000							5/9/08 0:00	6/7/08 7:37	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-09	H-3	MD21-08-12242	6.45000	-0.15000							5/9/08 0:00	6/7/08 10:44	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-10	H-3	MD21-08-12244	6.45000	1.84000							5/9/08 0:00	6/7/08 13:52	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-11	H-3	MD21-08-12245	6.45000	1.64000							5/9/08 0:00	6/7/08 17:01	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-12	H-3	MD21-08-12246	6.45000	-0.22000							5/9/08 0:00	6/7/08 20:09	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-13	H-3	MD21-08-12253	6.45000	17.79000							5/9/08 0:00	6/7/08 23:17	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-14	H-3	MD50-08-7655	6.45000	317.13000							5/13/08 0:00	6/8/08 2:24	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-15	H-3	MD50-08-7656	6.45000	5763.51000							5/14/08 0:00	6/8/08 5:31	4499.80000			0.04133
ARS1-B08-01367	ARS1-B08-01367-16	H-3	MD50-08-7657	6.45000	3402.45000							5/14/08 0:00	6/8/08 6:05	4499.80000			0.04133

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentkeV	TracerIsotope
ARS1-B08-01367	ARS1-B08-01367-01	H-3	MD50-08-7657	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00412	0.74173	73	P-44-S-2		
ARS1-B08-01367	ARS1-B08-01367-02	H-3	MD50-08-7657	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00468	0.84174	73	P-44-S-3		
ARS1-B08-01367	ARS1-B08-01367-03	H-3	MD50-08-7657	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00469	0.84455	73	P-44-S-4		
ARS1-B08-01367	ARS1-B08-01367-04	H-3	MD21-08-12236	0.02000	0.00000	0.02500	0.00000	0.00000	28.79097						0.99557					0.05228	0.00456	0.82086	73	P-44-S-5		
ARS1-B08-01367	ARS1-B08-01367-05	H-3	MD21-08-12237	0.02000	0.00000	0.02500	0.00000	0.00000	28.92292						0.99555					0.05228	0.00446	0.80340	73	P-44-S-6		
ARS1-B08-01367	ARS1-B08-01367-06	H-3	MD21-08-12238	0.02000	0.00000	0.02500	0.00000	0.00000	29.05417						0.99553					0.05228	0.00457	0.82177	73	P-44-S-7		
ARS1-B08-01367	ARS1-B08-01367-07	H-3	MD21-08-12239	0.02000	0.00000	0.02500	0.00000	0.00000	29.18542						0.99551					0.05228	0.00452	0.81413	73	P-44-S-8		
ARS1-B08-01367	ARS1-B08-01367-08	H-3	MD21-08-12240	0.02000	0.00000	0.02500	0.00000	0.00000	29.31736						0.99549					0.05228	0.00460	0.82848	73	P-44-S-9		
ARS1-B08-01367	ARS1-B08-01367-09	H-3	MD21-08-12242	0.02000	0.00000	0.02500	0.00000	0.00000	29.44722						0.99547					0.05228	0.00460	0.82863	73	P-44-S-10		
ARS1-B08-01367	ARS1-B08-01367-10	H-3	MD21-08-12244	0.02000	0.00000	0.02500	0.00000	0.00000	29.57778						0.99545					0.05228	0.00440	0.79129	73	P-44-S-11		
ARS1-B08-01367	ARS1-B08-01367-11	H-3	MD21-08-12245	0.02000	0.00000	0.02500	0.00000	0.00000	29.70903						0.99543					0.05228	0.00453	0.81576	73	P-44-S-12		
ARS1-B08-01367	ARS1-B08-01367-12	H-3	MD21-08-12246	0.02000	0.00000	0.02500	0.00000	0.00000	29.83958						0.99541					0.05228	0.00453	0.81491	73	P-44-S-13		
ARS1-B08-01367	ARS1-B08-01367-13	H-3	MD21-08-12253	0.02000	0.00000	0.02500	0.00000	0.00000	29.97014						0.99539					0.05228	0.00457	0.82346	73	P-44-S-14		
ARS1-B08-01367	ARS1-B08-01367-14	H-3	MD50-08-7655	0.02000	0.00000	0.02500	0.00000	0.00000	26.10000						0.99599					0.05228	0.00454	0.81729	73	P-44-S-15		
ARS1-B08-01367	ARS1-B08-01367-15	H-3	MD50-08-7656	0.02000	0.00000	0.02500	0.00000	0.00000	25.22986						0.99612					0.05228	0.00458	0.12708	73	P-44-S-16		
ARS1-B08-01367	ARS1-B08-01367-16	H-3	MD50-08-7657	0.02000	0.00000	0.02500	0.00000	0.00000	25.25347						0.99612					0.05228	0.00453	0.21278	73	P-44-S-17		

ABatch	ABatchSampleID	Isotope	ClientID	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B08-01367	ARS1-B08-01367-01	H-3	MD50-08-7657				ARS1-08-00901	1	002		AJOHNSON	6/9/08 8:41
ARS1-B08-01367	ARS1-B08-01367-02	H-3	MD50-08-7657				ARS1-08-00901	1	002		AJOHNSON	6/9/08 8:41
ARS1-B08-01367	ARS1-B08-01367-03	H-3	MD50-08-7657				ARS1-08-00901	1	002		AJOHNSON	6/9/08 8:41
ARS1-B08-01367	ARS1-B08-01367-04	H-3	MD21-08-12236				ARS1-08-00867	1	001	LSC-A-001	AJOHNSON	6/9/08 8:41
ARS1-B08-01367	ARS1-B08-01367-05	H-3	MD21-08-12237				ARS1-08-00867	1	002	LSC-A-001	AJOHNSON	6/9/08 8:41
ARS1-B08-01367	ARS1-B08-01367-06	H-3	MD21-08-12238				ARS1-08-00867	1	003	LSC-A-001	AJOHNSON	6/9/08 8:41
ARS1-B08-01367	ARS1-B08-01367-07	H-3	MD21-08-12239				ARS1-08-00867	1	004	LSC-A-001	AJOHNSON	6/9/08 8:42
ARS1-B08-01367	ARS1-B08-01367-08	H-3	MD21-08-12240				ARS1-08-00867	1	005	LSC-A-001	AJOHNSON	6/9/08 8:42
ARS1-B08-01367	ARS1-B08-01367-09	H-3	MD21-08-12242				ARS1-08-00867	1	006	LSC-A-001	AJOHNSON	6/9/08 8:42
ARS1-B08-01367	ARS1-B08-01367-10	H-3	MD21-08-12244				ARS1-08-00867	1	007	LSC-A-001	AJOHNSON	6/9/08 8:42
ARS1-B08-01367	ARS1-B08-01367-11	H-3	MD21-08-12245				ARS1-08-00867	1	008	LSC-A-001	AJOHNSON	6/9/08 8:43
ARS1-B08-01367	ARS1-B08-01367-12	H-3	MD21-08-12246				ARS1-08-00867	1	009	LSC-A-001	AJOHNSON	6/9/08 8:43
ARS1-B08-01367	ARS1-B08-01367-13	H-3	MD21-08-12253				ARS1-08-00867	1	010	LSC-A-001	AJOHNSON	6/9/08 8:43
ARS1-B08-01367	ARS1-B08-01367-14	H-3	MD50-08-7655				ARS1-08-00900	1	001	LSC-A-001	AJOHNSON	6/9/08 8:43
ARS1-B08-01367	ARS1-B08-01367-15	H-3	MD50-08-7656				ARS1-08-00901	1	001	LSC-A-001	AJOHNSON	6/9/08 8:43
ARS1-B08-01367	ARS1-B08-01367-16	H-3	MD50-08-7657				ARS1-08-00901	1	002	LSC-A-001	AJOHNSON	6/9/08 8:43

Batch: ARS1-B08-01367

	1.96s CSU	CSU 1 (1s)
ARS1-B08-01367-04	118.682	60.552
ARS1-B08-01367-05	128.584	65.604
ARS1-B08-01367-06	151.688	77.392
ARS1-B08-01367-07	122.789	62.647
ARS1-B08-01367-08	474.329	242.005
ARS1-B08-01367-09	113.364	57.839
ARS1-B08-01367-10	134.602	68.674
ARS1-B08-01367-11	128.389	65.505
ARS1-B08-01367-12	115.014	58.681
ARS1-B08-01367-13	435.976	222.437
ARS1-B08-01367-14	7180.730	3663.638
ARS1-B08-01367-15	129068.196	65851.121
ARS1-B08-01367-16	77018.270	39295.036

C. Bulligan 6.11.08

Project Manager

The CSU 1 (1s) was derived by dividing the 1.96s CSU value by 1.96 per Virgene Mulligan.

QC Evaluation

EPA Method: 906.0
Batch ID: ARS1-B08-01367
SDG's: ARS1-08-00867

LCS	1060.4925	**CSU**	183.0702
LCSD	977.2572	**CSU-D**	164.5519

DER = $\frac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\frac{83.2353}{123.07725}$ = 0.676285 **< 3**

% RPD= $\frac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\frac{83.2353}{1018.8749}$ *100 = 8.169335 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\frac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\frac{83.2353004}{347.6221}$ 0.239442 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-83.45477	110.45667	190.9256
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? **NO**

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
518	ARS1-B08-01367	ARS1-B08-01367-01		0	g	5.0235	g	AJOHNSON	6/5/2008
519	ARS1-B08-01367	ARS1-B08-01367-02		0	g	5.0142	g	AJOHNSON	6/5/2008
520	ARS1-B08-01367	ARS1-B08-01367-03		0	g	5.0321	g	AJOHNSON	6/5/2008
521	ARS1-B08-01367	ARS1-B08-01367-04	MD21-08-12236	0	g	5.0093	g	AJOHNSON	6/5/2008
522	ARS1-B08-01367	ARS1-B08-01367-05	MD21-08-12237	0	g	4.91	g	AJOHNSON	6/5/2008
523	ARS1-B08-01367	ARS1-B08-01367-06	MD21-08-12238	0	g	5.0078	g	AJOHNSON	6/5/2008
524	ARS1-B08-01367	ARS1-B08-01367-07	MD21-08-12239	0	g	5.0038	g	AJOHNSON	6/5/2008
525	ARS1-B08-01367	ARS1-B08-01367-08	MD21-08-12240	0	g	5.0124	g	AJOHNSON	6/5/2008
526	ARS1-B08-01367	ARS1-B08-01367-09	MD21-08-12242	0	g	5.072	g	AJOHNSON	6/5/2008
527	ARS1-B08-01367	ARS1-B08-01367-10	MD21-08-12244	0	g	5.0082	g	AJOHNSON	6/5/2008
528	ARS1-B08-01367	ARS1-B08-01367-11	MD21-08-12245	0	g	5.0154	g	AJOHNSON	6/5/2008
529	ARS1-B08-01367	ARS1-B08-01367-12	MD21-08-12246	0	g	5.0152	g	AJOHNSON	6/5/2008
530	ARS1-B08-01367	ARS1-B08-01367-13	MD21-08-12253	0	g	5.0127	g	AJOHNSON	6/5/2008
531	ARS1-B08-01367	ARS1-B08-01367-14	MD50-08-7655	0	g	5	g	AJOHNSON	6/5/2008
532	ARS1-B08-01367	ARS1-B08-01367-15	MD50-08-7656	0	g	5.017	g	AJOHNSON	6/5/2008
533	ARS1-B08-01367	ARS1-B08-01367-16	MD50-08-7657	0	g	5.0107	g	AJOHNSON	6/5/2008

LCS Report
Analytical Batch: ARS1-B08-01367

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
5014	B-05039	ARS1-B08-01367	ARS1-B08-01367-01	B-H3	S-0156	H-3	5	1.172712573	0	1	1	ACOX	5/27/2008
5015	B-05040	ARS1-B08-01367	ARS1-B08-01367-02	B-H3	S-0156	H-3	5	1.172712573	0	1	1	ACOX	5/27/2008

ARS Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0001	Am-241	S	04/30/08	04/30/09	OK	03/16/06	5.1937E+01	51.7505	1.579E+05	S-0069		S-0001 Working level Am-241 solution - Information entered from dilutio
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	114.3008	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	Ra-226	S	05/29/07	05/29/08	EXP	02/01/06	6.5015E+01	64.9483	5.840E+05	S-0105		T88 - Information entered from dilution records - 4/18/2006 - RTS
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.0054	5.053E+01	S-0109		
A	S-0023	Pu-238	S	11/02/05	11/02/06	EXP	11/01/05	1.1657E+01	11.4191	3.204E+04	S-0071		S-0023 Entered information from dilution records
A	S-0024	Pu-239	S	04/26/08	04/26/09	OK	10/26/05	1.1412E+01	11.4112	8.807E+06	S-0073		
A	S-0027	Tc-99	SLC	09/01/06	09/01/07	EXP	10/18/05	9.4141E+03	9414.0580	7.710E+07	S-0113		S-0027 - Information entered from dilution records - RTS 4/19/2006
A	S-0028	U-238	S	06/18/07	06/18/08	OK	10/26/05	3.4935E+01	34.9349	1.632E+12	S-0063		
A	S-0032	H-3	SL	04/02/07	04/02/08	EXP	03/01/06	3.4431E+03	3028.4697	4.500E+03	S-0031		S-0032 - Intermediate dilution for preparation of control solutions
A	S-0033	Tc-99	SLC	10/18/05	10/18/06	EXP	10/18/05	1.9470E+02	194.6955	7.710E+07	S-0027	04/25/06	S-0033 Working level dilution - Information entered from dilution reco
A	S-003[illegible]	Ra-226	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	S-010[illegible]		[illegible]
A	S-0039	Tc-99	SC	08/03/07	08/03/08	OK	03/30/06	1.1146E+04	11146.2594	7.710E+07	S-0114		S-0039 - Information entered from dilution records - 4/19/2006 RTS
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.4863	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions
A	S-0063	U-238	P			Not Ver	08/01/97	2.4200E+02	242.0000	1.632E+12			S-0028 Entered from dilution record on 4/6/2006 RTS
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E-07			S-0036 Information entered on 4/6/2006 RTS. Decay entered based on ac
A	S-0067	Am-243	PT			Not Ver	10/20/05	3.6240E+01	36.2310	2.692E+06			S-0038 Entered on 4/6/2006 RTS from dilution documentation
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records - Dilution records
A	S-0071	Pu-238	PL			Not Ver	11/15/99	4.1520E+01	38.8005	3.204E+04			S-0023 Entered from dilution records
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2303	8.807E-06			S-0024 Information entered from dilution records
A	S-0074	Pu-239	SL			Not Ver	10/26/05	1.1412E+01	11.4112	8.807E+06	S-0073		
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	S-0077	U-232	PT			Not Ver	07/01/02	3.8220E+01	36.0003	2.516E+04			S-0026 Information eneterd from dilution records
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E-12			NIST 4321 - Uranium standard for use as total uranium standard solut
A	S-0103	U-nat	SC	06/18/07	06/18/08	OK	10/26/05	7.0226E+01	70.2265	1.632E+12	S-0102		S-0028 relogged as total uranium solution. Activity is the sum total o
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8206	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	01/01/93	1.1900E+01	11.8206	5.840E+05			Primary solution for S-0007 - Information entered from dilution record
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	366275.3690	4.500E+03			Primary for S-0031 - Information entered from dilution records - RTS
A	S-0108	Sr-90	PC			Not Ver	07/01/95	4.0100E+03	2926.7738	1.041E+04			Primary for S-0017
A	S-0109	Sr-89	PLC			Not Ver	03/24/05	3.9414E+05	0.0175	5.053E+01			Activity on calibration calculated per certificate information - 3.010E
A	S-0111	H-3	PC			Not Ver	04/01/06	2.0870E+00	1.8445	4.500E+03			Primary
A	S-0112	H-3	SC	04/27/07	04/27/08	EXP	04/18/06	1.1410E+04	10110.8330	4.500E+03	S-0111		Solution for use as calibration stock standard. Entered from dilution
A	S-0113	Tc-99	PLC			Not Ver	09/01/96	3.2610E+04	32608.7392	7.710E+07			Primary solution
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E-07			primary
A	S-0115	Cs-137	PL			Not Ver	01/23/95	2.9000E+01	21.3020	1.098E+04			S-0003 primary - Information entered from dilution records - 4/19/2006
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4263	5.840E+05	S-0105		S-0007 - Information entered from dilution records - 4/19/2006 RTS
A	S-0117	Sr-90	PLCT			Not Ver	07/01/95	4.0100E+03	2926.7738	1.041E+04			S-0017 primary - Information entered from dilution records. 4/19/2006
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0868	1.098E-04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	04/19/06	04/19/07	EXP	04/03/06	1.1621E+04	11048.8463	1.098E+04	S-0118		Solution for use as calibration stock standard.
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9424	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	09/14/07	09/14/08	OK	03/31/06	1.1282E+04	10694.5028	1.041E+04	S-0120		Solution for use as calibration stock standard.
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0976	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	04/24/06	04/24/07	EXP	04/03/06	1.1632E+04	11591.2196	1.579E+05	S-0122		Solution for use as calibration stock standard.
A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	03/27/06	1.0413E+04	10412.8070	2.753E+07	S-0124		Solution for use as calibration stock standard. Entered from dilution
A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	82171.6133	2.100E+03			Primary Ra-228 Standard

ARS Standards Report

A	S-0127	Ra-228	SL	05/10/06	05/10/07	EXP	05/10/06	1.1274E+04	8763.8992	2.100E+03	S-0126	Measurements performed using Balance# 1125183449 and Pipettor# V29840.
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0456	7.710E+07	S-0039	[illegible]
A	S-0129	Sr-90	PL			Not Ver	07/01/95	4.0100E+03	2926.7738	1.041E+04		
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	35.0517	2.100E+03	S-0127	[illegible]
A	S-0134	Sr-90	SL			Not Ver	09/26/03	4.7747E+02	425.7972	1.041E+04	S-0129	Original solution ID# was TLtc. Dilution information entered from exis
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	52.6144	1.041E+04	S-0134	[illegible]
A	S-0137	Th-229	PT			Not Ver	12/05/03	1.2294E+05	122887.5573	2.681E+06		Primary Th-229 standard.
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6621	2.681E+06	S-0137	[illegible]
A	S-0139	Po-209	P			Not Ver	03/15/94	5.1252E+03	4652.4265	3.726E+04		Primary Po-209 standard.
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5104	3.726E+04	S-0139	
A	S-0141	Ra-226	PC			Not Ver	01/21/93	2.6418E+04	26242.3690	5.840E+05		Primary solution for creating calibration stock.
A	S-0142	Ra-226	SC	04/03/07	04/03/08	EXP	07/21/06	6.5210E+02	651.5631	5.840E+05	S-0141	[illegible]
A	S-0143	Pb-210	P			Not Ver	07/18/06	7.6400E+00	7.2011	8.130E+03		ARS-WRM-001
A	S-0144	Pb-210	S	10/24/07	10/24/08	OK	07/18/06	1.6961E+01	15.9864	8.130E+03	S-0143	[illegible]
A	S-0145	Th-229	ST			Not Ver	01/28/05	1.1938E+02	119.3455	2.681E+06	S-0138	Information was gathered from existing incomplete dilution records cre
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9792	2.681E+06	S-0145	[illegible]
A	S-0147	Tc-99	SC	02/27/08	02/27/09	OK	08/08/06	2.3201E+02	232.0119	7.710E+07	S-0027	Tc-99 LCS standard. -BJS 9/1/2006
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473065.9429	2.090E+06		[illegible]
A	S-0151	I-129	PLC			Not Ver	10/12/06	2.4390E+05	243899.9821	5.730E+09		Primary I-129 standard
A	S-0152	H-3	P	05/09/08	05/09/09	OK	09/03/98	2.0090E+00	1.1594	4.500E+03		[illegible]
A	S-0153	C-14	S			Not Ver	10/13/06	1.1837E+04	11834.1866	2.090E+06	S-0148	Standard was originally logged as S-0149. After discovering an error I
A	S-0154	C-14	S	03/12/07	03/12/08	EXP	10/13/06	1.7245E+02	172.4154	2.090E+06	S-0153	[illegible]
A	S-0155	Ra-226	SC	04/03/07	04/03/08	EXP	03/20/07	5.9902E+01	59.8705	5.840E+05	S-0142	Calibration stock solution for Ra-226. Dilution performed as stated ab
A	S-0156	H-3	S	05/09/08	05/09/09	OK	04/27/07	2.7672E+00	2.5974	4.500E+03	S-0032	[illegible]
A	S-0157	Sr-90	P			Not Ver	05/15/07	7.6040E+03	7407.5940	1.041E+04		Primary Sr-90 LCS standard
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	823.3874	2.516E+04		Primary U-232 standard
A	S-0159	Sr-89	PC			Not Ver	05/15/07	1.7538E+04	79.9273	5.053E+01		Primary Sr-89 standard
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4409.8419	1.041E+04	S-0157	[illegible]
A	S-0161	U-232	ST	06/18/07	06/18/08	OK	06/06/07	5.1903E+02	513.7476	2.516E+04	S-0158	Intermediate U-232 standard to be used in creating stock tracer soluti
A	S-0162	U-232	ST	06/18/07	06/18/08	OK	06/08/07	9.8656E+00	9.7659	2.516E+04	S-0161	[illegible]
A	S-0163	Sr-90	S	07/16/07	07/16/08	OK	06/12/07	4.7407E+01	46.2684	1.041E+04	S-0160	Sr-90 LCS stock solution. Dilution performed as stated above by L Lass
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	79.9039	5.053E+01		Primary Sr-89 calibration standard.
A	S-0165	Sr-89	SC	08/10/07	04/18/08	EXP	08/08/07	3.2967E+03	48.2150	5.053E+01	S-0164	Calibration stock solution. Dilution performed as stated above by K Ha
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6490	2.681E+06	S-0145	[illegible]
A	S-0168	Pu-242	PT			Not Ver	06/07/94	2.6310E+01	26.3093	1.365E+08		Primary Pu-242 standard
A	S-0169	Pu-242	ST	04/26/08	04/26/09	OK	12/17/07	7.6719E+00	7.6719	1.365E+08	S-0168	[illegible]
A	S-0170	Th-230	PL			Not Ver	09/10/07	7.9235E+03	7923.4440	2.753E+07		Primary Th-230 standard.
A	S-0171	Th-229	PT			Not Ver	09/10/07	7.7817E+01	77.8119	2.681E+06		Primary Th-229 standard.
A	S-0172	Th-230	S	02/21/08	02/21/09	OK	02/05/08	4.7041E+03	4704.0733	2.753E+07	S-0170	Intermediate level Th-230 standard for use in creating LCS stock solut
A	S-0173	Th-230	S	02/21/08	02/21/09	OK	02/05/08	1.2638E+01	12.6383	2.753E+07	S-0172	[illegible]
A	S-0176	H-3	S	02/20/08	02/20/09	OK	02/20/08	7.0273E-02	0.0691	4.500E+03	S-0152	Low level tritium LCS stock solution. Dilution performed as stated abo
A	S-0177	Ni-63	PL			Not Ver	02/07/08	7.6217E+03	7603.6980	3.660E+04		Primary Ni-63 LCS standard
A	S-0178	Ni-63	S	03/28/08	03/28/09	OK	03/14/08	4.5403E+03	4532.6936	3.660E+04	S-0177	Intermediate level Ni-63 standard for use in creating LCS stock soluti
A	S-0179	Ni-63	PC			Not Ver	11/15/05	4.7100E+04	46269.8149	3.660E+04		Primary Ni-63 calibration standard.
A	S-0180	Ni-63	SC	03/28/08	03/28/09	OK	03/27/08	2.7929E+04	27889.0392	3.660E+04	S-0179	Ni-63 Calibration stock standard. Dilution performed as stated above b
A	S-0181	Am-243	PT			Not Ver	03/29/05	2.2248E+05	222412.9898	2.692E+06		Primary Am-243 standard.

Standards Report

A	S-0182	Fe-55	PC			Not Ver	11/30/05	5.8430E+04	30516.5074	9.860E+02			Primary Fe-55 standard.
A	S-0183	Fe-55	SC			Not Ver	04/09/08	1.9025E+04	18200.5321	9.860E+02	S-0182		
A	S-0184	Am-243	PT			Not Ver	04/03/08	7.2645E+01	72.6438	2.692E+06			Primary Am-243 Tracer solution.
A	S-0185	Am-243	ST	04/30/08	04/30/09	OK	04/29/08	1.0981E+01	10.9811	2.692E+06	S-0184		
A	S-0186	PU-239	PC			Not Ver	04/17/08	6.5207E+03	6520.6824	8.807E+06			Primary PU-239
A	S-0187	Ra-226	SC			Not Ver	05/08/08	5.8759E+01	58.7568	5.840E+05	S-0142		
A	S-0188	PU-241	PLC			Not Ver	05/01/03	1.5520E-01	0.1212	5.242E+03			Primary PU-241 Standard
A	S-0189	H-3	SL	05/20/08	05/20/09	OK	05/16/08	7.1011E-02	0.0707	4.500E+03	S-0152		
A	S-0190	H-3	SL	05/20/08	05/20/09	OK	05/20/08	7.0792E-02	0.0706	4.500E+03	S-0152		LL3H LCS soln. dilution preformed by April Johnson.
A	S-0191	Pu-241	SLC			Not Ver	05/20/08	4.8833E+03	4869.0902	5.242E+03	S-0188		
A	S-0192	PU-241	SLC			Not Ver	05/20/08	2.1923E+03	2185.9264	5.242E+03	S-0188		PU-241 LCS standard. Dilution performed as stated above by S Steffens.
I	S-0025	Pu-242	ST	04/17/07	04/17/08	EXP	10/24/05	7.6328E+00	7.6328	1.365E+08	S-0075	01/09/06	
I	S-0026	U-232	ST	06/19/06	06/19/07	EXP	10/26/05	1.0854E+01	10.5707	2.516E+04	S-0077	06/21/07	S-0026 Information entered from dilution records
I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4664	4.500E+03			H Lum to Of
I	S-0031	H-3	S	10/26/05	10/26/06	EXP	10/19/05	6.0777E+05	523738.4709	4.500E+03	S-0107		S-0031 Intermediate dilution - Information entered from dilution recor
I	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4894	2.753E+07	S-0065	02/22/08	
I	S-0038	Am-243	ST	06/07/07	06/07/08	EXP	01/25/06	1.0656E+01	10.6540	2.692E+06	S-0067	05/07/08	S-0038 Entered from dilution documentation. Density from certificate use
I	S-0130	Sr-90	SL			Not Ver	09/26/03	5.3620E+02	478.1794	1.041E+04	S-0129	05/26/06	
I	S-0131	Sr-90	SL			Not Ver	02/02/06	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	
I	S-0133	Sr-90	SL	01/09/06	01/09/07	EXP	06/09/04	5.8438E+01	52.0132	1.041E+04	S-0130	05/26/06	
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2036E+01	47.2059	1.041E+04	S-0134	07/17/07	Original standard ID# was T11c-1/5-0017. Dilution information entered
I	S-0149	C-14	SL			Not Ver	10/13/06	5.9553E+04	59341.0743	2.090E+06	S-0148	03/16/07	
I	S-0150	C-14	SL			Not Ver	10/13/06	8.6764E+02	867.4696	2.090E+06	S-0149	03/16/07	LCS standard for C-14 in water. Dilution performed as stated above. -B
I	S-0167	Th-229	ST			Not Ver	08/27/07	5.6494E+00	5.6490	2.681E+06	S-0145	08/28/07	
I	S-0174	H-3	S			Not Ver	02/07/08	4.4669E-01	0.4382	4.500E+03	S-0152	05/20/08	Intermediate level standard for creating low level tritium LCS solutio
I	S-0175	H-3	S	02/11/08	02/11/09	OK	02/11/08	7.0455E-02	0.0692	4.500E+03	S-0152	05/20/08	

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
10:11	6-3-08	BOS-01294-05	BOS-01294	1239	AJ
↓	↓	BOS-01294-04	↓	↓	AJ
12:39	6-5-08	SNC	QA	QA	AJ
↓	↓	Buchgraw2	BOS-01367	0626	AJ
↓	↓	BOS-01367-01	↓	↓	AJ
↓	↓	BOS-01367-02	↓	↓	AJ
↓	↓	BOS-01367-03	↓	↓	AJ
↓	↓	BOS-01367-04	↓	↓	AJ
↓	↓	BOS-01367-05	↓	↓	AJ
↓	↓	BOS-01367-06	↓	↓	AJ
↓	↓	BOS-01367-07	↓	↓	AJ
↓	↓	BOS-01367-08	↓	↓	AJ
↓	↓	BOS-01367-09	↓	↓	AJ
↓	↓	BOS-01367-10	↓	↓	AJ
↓	↓	BOS-01367-11	↓	↓	AJ
↓	↓	BOS-01367-12	↓	↓	AJ
↓	↓	BOS-01367-13	↓	↓	AJ
↓	↓	BOS-01367-14	↓	↓	AJ
↓	↓	BOS-01367-15	↓	↓	AJ
↓	↓	BOS-01367-16	↓	↓	AJ

Reviewed By: _____ Date: 6/11/08
Initials

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

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American Radiation Services Analytical Reports

for

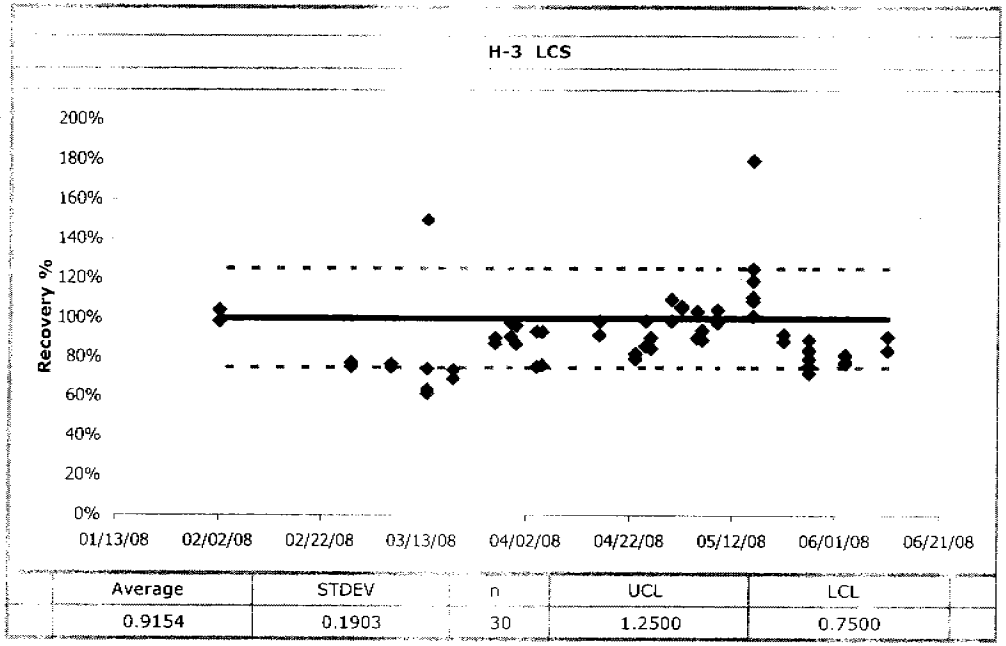
Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Control Charts

American Radiation Services
Baton Rouge Laboratory

QC Chart



Average	STDEV	n	UCL	LCL
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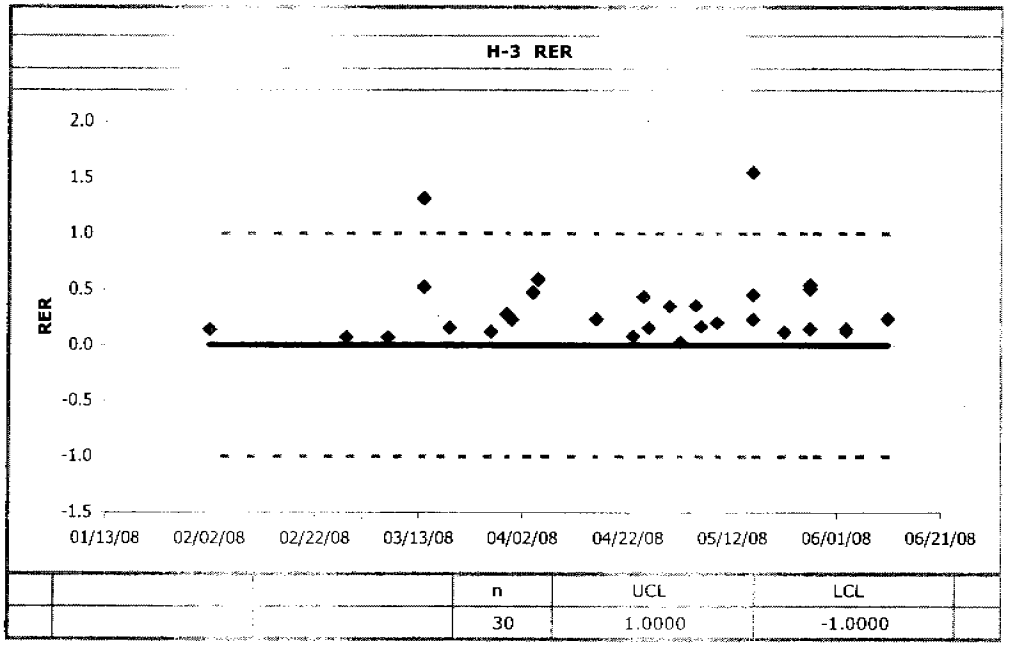
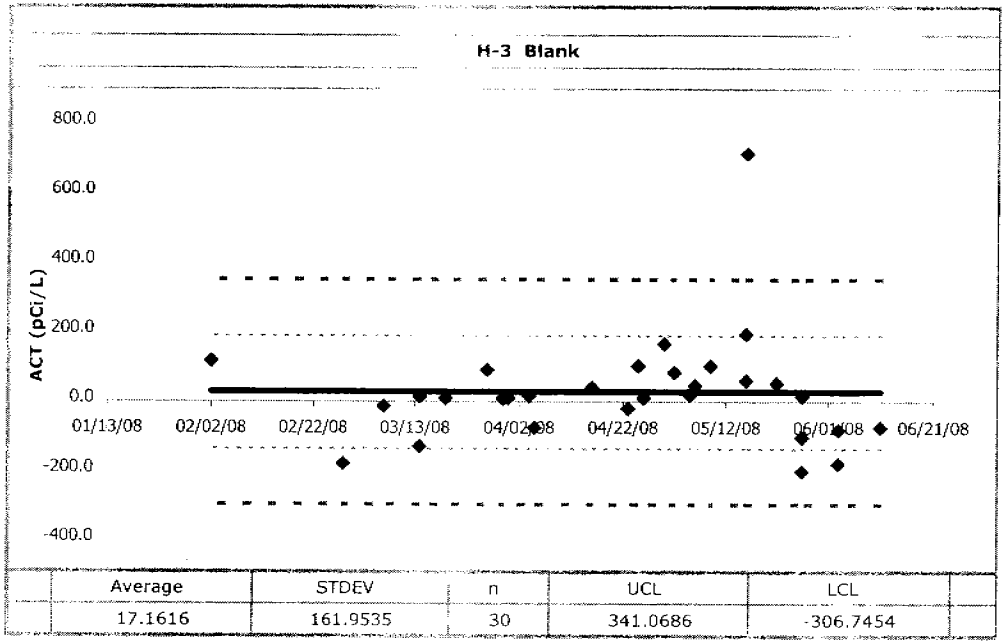
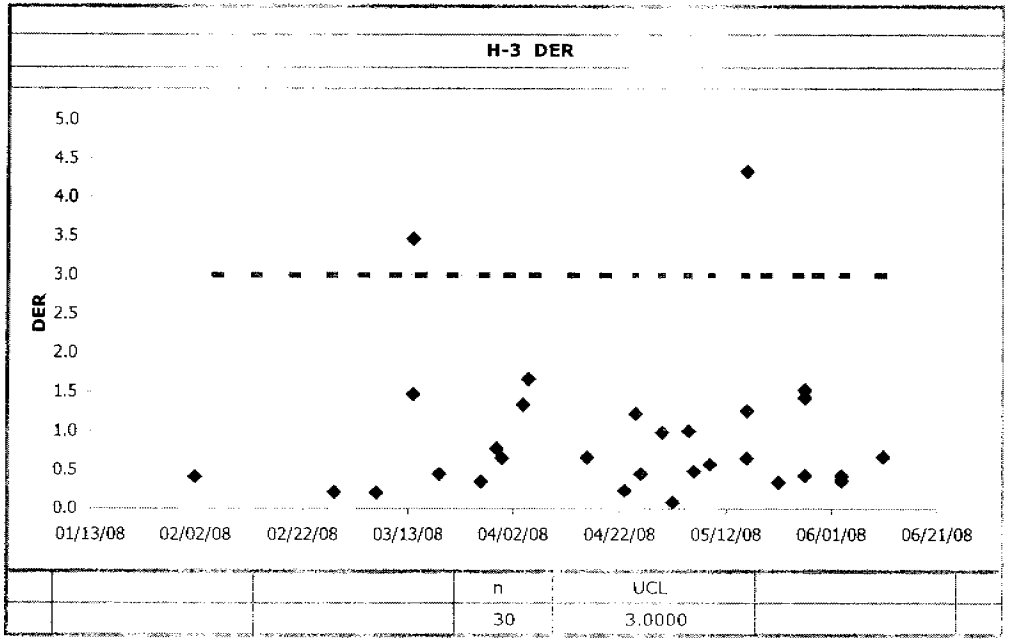


n	UCL	LCL
30	1.0000	-1.0000



Average	STDEV	n	UCL	LCL
17.1616	161.9535	30	341.0686	-306.7454



n	UCL
30	3.0000

H Efficiency
Total # pts : 791
Valid # pts : 225
Mean : 65.95
SD : 0.25

Date	Value	Valid Pt
Jan 04, 2008	66.38	X
Jan 07, 2008	66.08	X
Jan 07, 2008	66.15	X
Jan 07, 2008	66.04	X
Jan 07, 2008	66.12	X
Jan 08, 2008	66.38	X
Jan 11, 2008	65.92	X
Jan 17, 2008	66.17	X
Jan 17, 2008	66.40	X
Jan 17, 2008	66.33	X
Jan 17, 2008	65.98	X
Jan 18, 2008	66.39	X
Jan 18, 2008	66.29	X
Jan 18, 2008	66.35	X
Jan 18, 2008	66.14	X
Jan 18, 2008	66.08	X
Jan 18, 2008	66.04	X
Jan 18, 2008	66.07	X
Jan 18, 2008	66.28	X
Jan 18, 2008	65.93	X
Jan 18, 2008	66.34	X
Jan 18, 2008	66.25	X
Jan 28, 2008	65.48	X
Jan 31, 2008	66.04	X
Jan 31, 2008	66.45	X
Jan 31, 2008	66.06	X
Jan 31, 2008	66.10	X
Jan 31, 2008	66.28	X
Jan 31, 2008	66.00	X
Jan 31, 2008	66.03	X
Jan 31, 2008	66.24	X
Jan 31, 2008	65.86	X
Jan 31, 2008	66.08	X
Jan 31, 2008	66.21	X
Jan 31, 2008	66.09	X
Feb 01, 2008	66.14	X
Feb 01, 2008	66.25	X
Feb 01, 2008	65.97	X
Feb 01, 2008	65.99	X
Feb 01, 2008	66.03	X
Feb 01, 2008	65.70	X
Feb 01, 2008	66.07	X
Feb 01, 2008	66.04	X
Feb 01, 2008	65.97	X
Feb 01, 2008	65.82	X
Feb 01, 2008	66.03	X
Feb 02, 2008	66.10	X

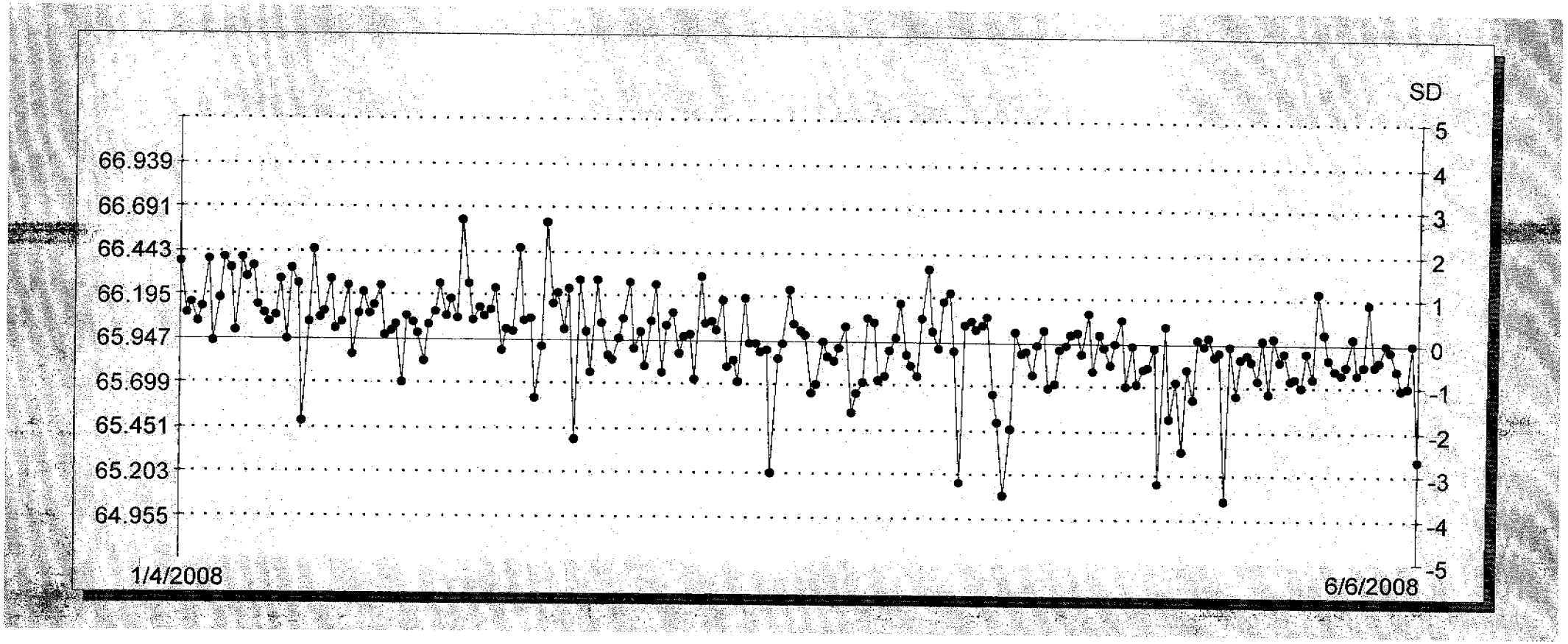
Feb	02,	2008	66.26	X
Feb	02,	2008	66.07	X
Feb	02,	2008	66.17	X
Feb	02,	2008	66.06	X
Feb	02,	2008	66.62	X
Feb	02,	2008	66.26	X
Feb	02,	2008	66.05	X
Feb	02,	2008	66.12	X
Feb	02,	2008	66.08	X
Feb	03,	2008	66.11	X
Feb	03,	2008	66.24	X
Feb	03,	2008	65.88	X
Feb	03,	2008	66.00	X
Feb	03,	2008	65.99	X
Feb	03,	2008	66.46	X
Feb	03,	2008	66.05	X
Feb	03,	2008	66.06	X
Feb	03,	2008	65.62	X
Feb	03,	2008	65.90	X
Feb	**03,**	**2008**	**66.61**	**X**
Feb	03,	2008	66.15	X
Feb	03,	2008	66.21	X
Feb	03,	2008	66.01	X
Feb	04,	2008	66.23	X
Feb	04,	2008	65.38	X
Feb	04,	2008	66.28	X
Feb	04,	2008	65.98	X
Feb	04,	2008	65.76	X
Feb	04,	2008	66.28	X
Feb	07,	2008	66.04	X
Feb	08,	2008	65.86	X
Feb	08,	2008	65.83	X
Feb	08,	2008	65.95	X
Feb	08,	2008	66.06	X
Feb	08,	2008	66.26	X
Feb	13,	2008	65.89	X
Feb	14,	2008	65.98	X
Feb	14,	2008	65.80	X
Feb	14,	2008	66.05	X
Feb	14,	2008	66.26	X
Feb	14,	2008	65.76	X
Feb	19,	2008	66.03	X
Feb	20,	2008	66.09	X
Feb	21,	2008	65.87	X
Feb	22,	2008	65.96	X
Feb	22,	2008	65.97	X
Feb	22,	2008	65.72	X
Feb	25,	2008	66.30	X
Feb	27,	2008	66.04	X
Feb	28,	2008	66.05	X
Mar	04,	2008	66.01	X
Mar	05,	2008	66.17	X
Mar	05,	2008	65.79	X
Mar	05,	2008	65.83	X
Mar	05,	2008	65.71	X
Mar	05,	2008	66.19	X
Mar	05,	2008	65.93	X

Mar 11, 2008	65.93	x
Mar 17, 2008	65.89	x
Mar 19, 2008	65.89	x
Mar 19, 2008	65.20	x
Mar 19, 2008	65.84	x
Mar 19, 2008	65.93	x
Mar 19, 2008	66.23	x
Mar 19, 2008	66.04	x
Mar 24, 2008	66.01	x
Mar 26, 2008	65.97	x
Mar 27, 2008	65.66	x
Mar 28, 2008	65.70	x
Mar 30, 2008	65.94	x
Mar 30, 2008	65.85	x
Mar 30, 2008	65.83	x
Mar 30, 2008	65.91	x
Mar 30, 2008	66.03	x
Mar 30, 2008	65.54	x
Mar 30, 2008	65.64	x
Mar 30, 2008	**65.71**	**x**
Mar 30, 2008	66.08	x
Mar 30, 2008	66.04	x
Mar 31, 2008	65.72	x
Mar 31, 2008	65.75	x
Mar 31, 2008	65.89	x
Mar 31, 2008	65.97	x
Mar 31, 2008	66.16	x
Apr 01, 2008	65.87	x
Apr 04, 2008	65.80	x
Apr 04, 2008	65.74	x
Apr 04, 2008	66.07	x
Apr 08, 2008	66.35	x
Apr 11, 2008	66.00	x
Apr 13, 2008	65.91	x
Apr 13, 2008	66.17	x
Apr 13, 2008	66.22	x
Apr 13, 2008	65.89	x
Apr 13, 2008	65.15	x
Apr 13, 2008	66.04	x
Apr 13, 2008	66.06	x
Apr 13, 2008	66.01	x
Apr 14, 2008	66.04	x
Apr 14, 2008	66.08	x
Apr 14, 2008	65.65	x
Apr 14, 2008	65.49	x
Apr 14, 2008	65.08	x
Apr 15, 2008	65.45	x
Apr 18, 2008	66.00	x
Apr 23, 2008	65.87	x
Apr 24, 2008	65.90	x
Apr 25, 2008	65.76	x
Apr 28, 2008	65.93	x
May 01, 2008	66.02	x
May 04, 2008	65.68	x
May 05, 2008	65.72	x
May 05, 2008	65.90	x
May 05, 2008	65.93	x

May 05, 2008	66.00	X
May 05, 2008	65.88	X
May 05, 2008	66.11	X
May 06, 2008	65.79	X
May 06, 2008	65.98	X
May 08, 2008	65.92	X
May 08, 2008	65.82	X
May 08, 2008	65.94	X
May 08, 2008	66.07	X
May 08, 2008	65.70	X
May 08, 2008	65.93	X
May 08, 2008	65.71	X
May 09, 2008	65.80	X
May 09, 2008	65.80	X
May 09, 2008	65.92	X
May 09, 2008	65.16	X
May 09, 2008	66.04	X
May 12, 2008	65.51	X
May 14, 2008	65.73	X
May 15, 2008	65.34	X
May 16, 2008	65.79	X
May 16, 2008	65.63	X
May 16, 2008	65.97	X
May 16, 2008	65.93	X
May 20, 2008	65.97	X
May 20, 2008	65.86	X
May 23, 2008	65.89	X
May 24, 2008	65.06	X
May 25, 2008	65.92	X
May 27, 2008	65.65	X
May 27, 2008	65.85	X
May 27, 2008	65.88	X
May 27, 2008	65.84	X
May 27, 2008	65.73	X
May 27, 2008	65.96	X
May 27, 2008	65.66	X
May 27, 2008	65.98	X
May 27, 2008	65.85	X
May 27, 2008	65.89	X
May 27, 2008	65.73	X
May 27, 2008	65.75	X
May 27, 2008	65.70	X
May 27, 2008	65.89	X
May 28, 2008	65.75	X
May 28, 2008	66.23	X
May 28, 2008	66.00	X
May 28, 2008	65.85	X
May 28, 2008	65.79	X
May 28, 2008	65.77	X
May 28, 2008	65.82	X
May 28, 2008	65.97	X
May 30, 2008	65.77	X
Jun 02, 2008	65.82	X
Jun 02, 2008	66.16	X
Jun 02, 2008	65.82	X
Jun 02, 2008	65.84	X

Jun 02, 2008	65.94	X
Jun 02, 2008	65.91	X
Jun 02, 2008	65.79	X
Jun 02, 2008	65.68	X
Jun 02, 2008	65.69	X
Jun 05, 2008	65.94	X
Jun 06, 2008	65.28	X

3H Efficiency
Total # pts : 791
Valid # pts : 225
Mean : 65.95
SD : 0.25



3H Background
Total # pts : 772
Valid # pts : 219
Mean : 2.18
SD : 0.22

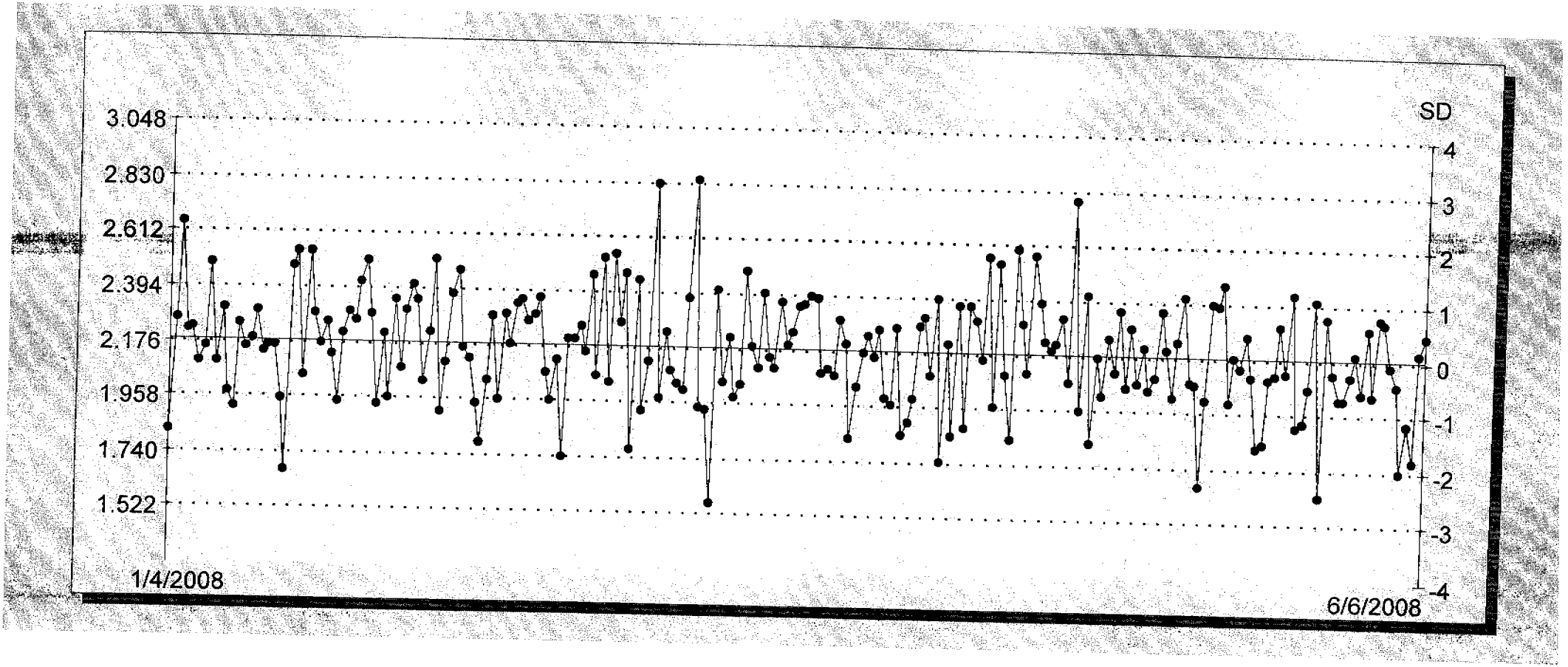
Date	Value	Valid Pt
Jan 04, 2008	1.82	X
Jan 07, 2008	2.26	X
Jan 07, 2008	2.65	X
Jan 07, 2008	2.22	X
Jan 07, 2008	2.23	X
Jan 08, 2008	2.09	X
Jan 11, 2008	2.15	X
Jan 17, 2008	2.49	X
Jan 17, 2008	2.09	X
Jan 17, 2008	2.31	X
Jan 17, 2008	1.98	X
Jan 18, 2008	1.92	X
Jan 18, 2008	2.25	X
Jan 18, 2008	2.16	X
Jan 18, 2008	2.19	X
Jan 18, 2008	2.30	X
Jan 18, 2008	2.14	X
Jan 18, 2008	2.16	X
Jan 18, 2008	2.16	X
Jan 18, 2008	1.95	X
Jan 18, 2008	1.67	X
Jan 28, 2008	2.47	X
Jan 31, 2008	2.54	X
Jan 31, 2008	2.04	X
Jan 31, 2008	2.54	X
Jan 31, 2008	2.29	X
Jan 31, 2008	2.17	X
Jan 31, 2008	2.26	X
Jan 31, 2008	2.13	X
Jan 31, 2008	1.94	X
Jan 31, 2008	2.22	X
Jan 31, 2008	2.30	X
Jan 31, 2008	2.26	X
Jan 31, 2008	2.42	X
Feb 01, 2008	2.50	X
Feb 01, 2008	2.29	X
Feb 01, 2008	1.94	X
Feb 01, 2008	2.21	X
Feb 01, 2008	1.96	X
Feb 01, 2008	2.35	X
Feb 01, 2008	2.08	X
Feb 01, 2008	2.31	X
Feb 01, 2008	2.41	X
Feb 01, 2008	2.35	X
Feb 01, 2008	2.03	X
Feb 02, 2008	2.23	X
Feb 02, 2008	2.51	X

Feb 02, 2008	1.91	X
Feb 02, 2008	2.11	X
Feb 02, 2008	2.38	X
Feb 02, 2008	2.47	X
Feb 02, 2008	2.17	X
Feb 02, 2008	2.12	X
Feb 02, 2008	1.94	X
Feb 02, 2008	1.79	X
Feb 03, 2008	2.03	X
Feb 03, 2008	2.29	X
Feb 03, 2008	1.96	X
Feb 03, 2008	2.30	X
Feb 03, 2008	2.18	X
Feb 03, 2008	2.34	X
Feb 03, 2008	2.36	X
Feb 03, 2008	2.28	X
Feb 03, 2008	2.30	X
Feb 03, 2008	2.36	X
Feb 03, 2008	2.07	X
Feb 03, 2008	**1.96**	**X**
Feb 03, 2008	2.13	X
Feb 03, 2008	1.74	X
Feb 04, 2008	2.20	X
Feb 04, 2008	2.20	X
Feb 04, 2008	2.26	X
Feb 04, 2008	2.16	X
Feb 04, 2008	2.46	X
Feb 07, 2008	2.06	X
Feb 08, 2008	2.53	X
Feb 08, 2008	2.03	X
Feb 08, 2008	2.55	X
Feb 08, 2008	2.28	X
Feb 08, 2008	2.47	X
Feb 13, 2008	1.77	X
Feb 14, 2008	2.44	X
Feb 14, 2008	1.93	X
Feb 14, 2008	2.12	X
Feb 14, 2008	2.83	X
Feb 14, 2008	1.97	X
Feb 19, 2008	2.24	X
Feb 20, 2008	2.08	X
Feb 21, 2008	2.03	X
Feb 22, 2008	2.01	X
Feb 22, 2008	2.37	X
Feb 22, 2008	2.84	X
Feb 25, 2008	1.94	X
Feb 27, 2008	1.94	X
Feb 28, 2008	1.57	X
Mar 04, 2008	2.41	X
Mar 05, 2008	2.04	X
Mar 05, 2008	2.23	X
Mar 05, 2008	1.99	X
Mar 05, 2008	2.04	X
Mar 05, 2008	2.48	X
Mar 11, 2008	2.19	X
Mar 17, 2008	2.10	X
Mar 19, 2008	2.40	X

Mar 19, 2008	2.10	X
Mar 19, 2008	2.37	X
Mar 19, 2008	2.20	X
Mar 19, 2008	2.25	X
Mar 24, 2008	2.35	X
Mar 26, 2008	2.36	X
Mar 27, 2008	2.39	X
Mar 28, 2008	2.39	X
Mar 30, 2008	2.08	X
Mar 30, 2008	2.11	X
Mar 30, 2008	2.08	X
Mar 30, 2008	2.30	X
Mar 30, 2008	2.20	X
Mar 30, 2008	1.83	X
Mar 30, 2008	2.04	X
Mar 30, 2008	2.17	X
Mar 30, 2008	2.24	X
Mar 30, 2008	2.16	X
Mar 31, 2008	2.27	X
Mar 31, 2008	1.99	X
Mar 31, 2008	1.96	X
Mar 31, 2008	2.28	X
Mar 31, 2008	1.85	X
Apr 01, 2008	1.90	X
Apr 04, 2008	1.99	X
Apr 04, 2008	2.28	X
Apr 08, 2008	2.32	X
Apr 11, 2008	2.09	X
Apr 13, 2008	2.39	X
Apr 13, 2008	1.75	X
Apr 13, 2008	2.21	X
Apr 13, 2008	1.85	X
Apr 13, 2008	2.37	X
Apr 13, 2008	1.88	X
Apr 13, 2008	2.37	X
Apr 13, 2008	2.31	X
Apr 14, 2008	2.15	X
Apr 14, 2008	2.56	X
Apr 14, 2008	1.97	X
Apr 14, 2008	2.54	X
Apr 14, 2008	2.09	X
Apr 15, 2008	1.84	X
Apr 18, 2008	2.59	X
Apr 23, 2008	2.30	X
Apr 24, 2008	2.10	X
Apr 25, 2008	2.58	X
Apr 28, 2008	2.39	X
May 01, 2008	2.23	X
May 04, 2008	2.19	X
May 05, 2008	2.22	X
May 05, 2008	2.33	X
May 05, 2008	2.07	X
May 05, 2008	2.79	X
May 05, 2008	1.96	X
May 05, 2008	2.42	X
May 06, 2008	1.83	X

May 08, 2008	2.02	X
May 08, 2008	2.25	X
May 08, 2008	2.11	X
May 08, 2008	2.36	X
May 08, 2008	2.05	X
May 08, 2008	2.29	X
May 08, 2008	2.07	X
May 09, 2008	2.21	X
May 09, 2008	2.05	X
May 09, 2008	2.10	X
May 09, 2008	2.36	X
May 09, 2008	2.21	X
May 12, 2008	2.02	X
May 14, 2008	2.24	X
May 15, 2008	2.42	X
May 16, 2008	2.08	X
May 16, 2008	2.07	X
May 16, 2008	1.67	X
May 20, 2008	2.01	X
May 20, 2008	**2.39**	X
May 23, 2008	2.39	X
May 24, 2008	2.47	X
May 25, 2008	2.01	X
May 27, 2008	2.18	X
May 27, 2008	2.14	X
May 27, 2008	2.27	X
May 27, 2008	2.11	X
May 27, 2008	1.82	X
May 27, 2008	1.84	X
May 27, 2008	2.09	X
May 27, 2008	2.11	X
May 27, 2008	2.31	X
May 27, 2008	2.12	X
May 27, 2008	2.44	X
May 27, 2008	1.91	X
May 27, 2008	1.93	X
May 27, 2008	2.06	X
May 28, 2008	2.41	X
May 28, 2008	1.64	X
May 28, 2008	2.34	X
May 28, 2008	2.12	X
May 28, 2008	2.02	X
May 28, 2008	2.02	X
May 28, 2008	2.11	X
May 28, 2008	2.20	X
May 30, 2008	2.05	X
Jun 02, 2008	2.30	X
Jun 02, 2008	2.04	X
Jun 02, 2008	2.34	X
Jun 02, 2008	2.33	X
Jun 02, 2008	2.16	X
Jun 02, 2008	2.08	X
Jun 02, 2008	1.74	X
Jun 02, 2008	1.92	X
Jun 02, 2008	1.78	X
Jun 05, 2008	2.20	X

3H Background
Total # pts : 772
Valid # pts : 219
Mean : 2.18
SD : 0.22



ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0190

ARS AMERICAN RADIATION SERVICES, INC.

Add/Edit *Secondary Stds*

Planning

Planning Comments	LL3H LCS
Target dpm/g (on dil. date)	0.07
Target Final volume mL	4000
Appx mass g of Parent Sol'n	4.011529368
Appx vol ml of Parent Sol'n	4.019568505
Expected Addition for Analysis g	250

Standards Preparation / Dilution

Secondary Solution #	S-0190
Dilution Date (New Ref Date)	05/20/2008 08:52
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	1.78
Container Plus Solution (g)	5.81
Net Wt Transferred (g)	4.03
DPM Xferred on 05/20/2008 08:52	281.2892282
Diluent/matrix	Distilled dead H2O
Diluent Density Cont, empty (g)	59.9001
Test Mass of 5 ml of Diluent (g)	64.8669
Diluent Density Test - (g/mL)	0.99336
Dilution Empty Container Mass (g)	
Dilution Full Cont g (if measured)	
Dilution Final Volume ml (if measured)	4000
Final Dilution Density (g/mL)	0.99336
Final Dilution Measured Mass g	3973.44
Comments	LL3H LCS soln. dilution preformed by April Johnson.
Final Dilution dpm/g	0.070792368
Final Dil New Ref Date/Time	05/20/2008 08:52

Parent Standard Data

Parent Solution Reference #	NIST 4361C				
Parent Solution #	S-0152				
Parent Principal Radionuclide	H-3	Half Life (Days)	4499.8000000		
Parent Reference Date	09/03/1998 11:00				
Parent Certified Act	120.54	Certi Act/Vol Units	dpm	g	
Parent Cert Act Uncert 1 Sigma	0.0076				
Parent Sp. Gravity G/Ml	0.998				
Parent Supplier	NIST				
Parent Date Recvd	12/04/06				
Parent Received By	LU				
Parent Cert Exp Date					
Parent Matrix	H2O				
Certified dpm/g At Ref Date	120.54				
Certified dpm/g on 05/20/2008 08:52	69.79881594				
Parent Comments	Liquid in a 500-ml borosilicate-glass medis bottle with teflon-lined screw cap. Approximately 500 grams				
Parent Tech					
Is_Primary	FALSE				
Is_LCS	TRUE				
Is_Tracer	FALSE				
Is_Calib	FALSE				

ARS, International
Port Allen Lab

LCS

Printed: 5/20/2008 11:38 AM

PARENT STD ID: ~~S-0188~~ S-0152 AJ 5-20-08

STANDARDS PREPARATION / DILUTION		
Dilution Date/Time:	5/20/08 8:52	
Transfer Container, empty (g)	1.78	
Appx mass g of Parent Solution:	4.007880444	*Lab Supervisor will give you*
Target Wt of Container & Parent Soln	5.787880444	
Container Plus Solution (g)	5.81	
Diluent/matrix:	Distilled Dead H2O	
Diluent Density Cont, empty (g)	59.9001	
Test Mass of 5mL of Diluent (g)	64.8669	
Dilution Final Volum mL (if measured)	4000	

Chemist Signature:

S-0152 and S-0156 Tritium standard reverification 5/9/2008

Std ID	Gr CPM	Bkg CPM	Net CPM	Std DPM/g	To	T1	T 1/2	Std DPM/g decayed	grams added	STD DPM at count	CPM/ DPM	Mean CPM/DPM	Stdev of CPM/DPM	%RSD of CPM/DPM
Bkg		7.38												
S-0152-V1	134.473	7.38	127.093	120.54	9/3/1998	5/9/2008	4499.8	69.92	5	349.58	0.3636			
S-0152-V2	140.853	7.38	133.473	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.01	350.28	0.3810			
S-0152-V3	133.506	7.38	126.126	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.01	350.28	0.3601			
S-0152-V4	137.132	7.38	129.752	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.04	352.38	0.3682			
S-0152-V5	137.202	7.38	129.822	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.03	351.68	0.3691	0.3684	0.0080	2.2%
S-0156-V1	12.587	7.38	5.207	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.03	13.1126	0.3971			
S-0156-V2	12.298	7.38	4.918	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.3766			
S-0156-V3	12.707	7.38	5.327	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.4079			
S-0156-V4	12.031	7.38	4.651	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.3561			
S-0156-V5	11.822	7.38	4.442	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.3401	0.3756	0.0280	7.5%
											Deviation between stds	5%		
											Acceptance Criteria	<5%		<10%
												Passes		Passes

Reviewed by: Virginia Mullegan 5-13-08

QA approval: [signature] 5-21-08

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953\20080509_0953.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.1sa

Count Conditions-

Nuclide: H-3 Normal
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3 Normal
Count Time (min): 30.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

Standard Verification S-0152

	Tare of vial	Standard Added	Cocktail Added
S-0152 V1	17.47	5	15.22
S-0152 V2	17.52	5.01	15.01
S-0152 V3	17.42	5.01	15.22
S-0152 V4	17.51	5.04	15.02
S-0152 V5	17.37	5.03	15

Standard Verification S-0156

	Tare of Vial	Standard Added	Cocktail Added
S-0156 V1	17.26	5.03	15.02
S-0156 V2	17.16	5.01	15.08
S-0156 V3	17.27	5.01	15.89
S-0156 V4	17.2	5.01	15.43
S-0156 V5	17.34	5.01	15.02

4-17-08 / 09:43

ARS AMERICAN RADIATION SERVICES, INC.	**Add / Edit *Primary* Standards**			
Solution Reference #	**NIST 4361C**			
Solution #	**S-0152**			
Principal Radionuclide	**H-3**	Half Life (Days)	**4499.8000**	
Reference Date	**09/03/98 11:00**			
Certified Act	**2.0090**	Certi Act/Vol Units	**Bq**	**g**
Cert Act Uncert 1 Sigma (fractional .03=3%)	**0.0076**			
Sp. Gravity G/Ml	**0.9980**			
Supplier	**NIST**			
Date Recvd	**12/04/06**			
Received By	**LU**			
Cert Exp Date				
Matrix	**H2O**			
Certified dpm/g At Reference Date	**120.54**			
Certified dpm/g On 03/08/2007 15:19	**74.67900474**			
Comments	Liquid in a 500-ml borosilicate-glass medis bottle with teflon-lined screw cap. Approximately 500 grams			
Primary Tech				
Is_Primary	**TRUE**			
Is_LCS	**FALSE**			
Is_Tracer	**FALSE**			
Is_Calib	**FALSE**			

S-0152 12/4/06 LL

National Institute of Standards & Technology
Certificate

Standard Reference Material 4361C
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 500 mL of distilled water. The solution is contained in a 500-mL borosilicate-glass bottle. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM bottle contains hydrogen-3 with a total activity of approximately 1100 Bq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM bottle. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM bottle contains only distilled water. There is no chemical hazard.

Storage and Handling: The SRM should be stored and used at a temperature between 5 and 35 °C. The solution in an unopened bottle should remain stable and homogeneous until at least September 2008. The bottle (or any subsequent container) should always be clearly marked as containing radioactive material. If the bottle is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000
Text revised and expiration date extended September 2004

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4361C

Certified values

Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 03 September 1998**
Massic activity of the solution [b]*	**2.009 Bq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.76%** [c] [d]
Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20 °C** [e]

Uncertified values

Physical Properties:			
Source description	Liquid in a 500-mL borosilicate-glass media bottle with a teflon-lined screw cap		
Solution mass	Approximately 500 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O	55	1.00
	^3HHO	2×10^{-12}	4×10^{-14}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g] [5]		
Calibration method and measuring instrument(s)	4πß gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E / 4926E / 4361C using two 4πß liquid-scintillation counting systems. [h]		

*Notes and references are on pages 5 and 6.

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Bottle (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1(Not detectable)		

[b] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[c] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k=2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[d] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[e] The stated uncertainty is two times the standard uncertainty.

[f] The estimated limit of detection for radionuclidic impurities is 0.001 $Bq \cdot g^{-1}$.

[g] The stated uncertainty is the standard uncertainty.

[h] Extensive gas-counting measurements were made on the SRM 4927E solution during 1998 and 1999. The SRM 4926E solution was intercompared with the SRM 4927E solution using liquid-scintillation counting. The SRM 4926E solution was then quantitatively diluted, using distilled water with a measured hydrogen-3 content, to make the SRM 4361C solution. The 4926E/4361C massic activity ratio was confirmed by liquid-scintillation counting.

[i] Relative standard uncertainty of the input quantity x_i.

[j] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

(REV. 5-2002)
15 U.S.C. 275C
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U.S. DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

STANDARD REFERENCE MATERIALS PACKING SLIP

S.O.# 0702374
Page# 1

ADDRESS: 100 BUREAU DRIVE STOP 2300 GAITHERSBURG, MD 20899-2300
TELEPHONE: (301) 975-OSRM (6776) FAX: (301) 948-3730

S.O.#	Ship#	Order	Request	Shipped	Customer P.O.#	Order Type	Tax ID#	Terms
0702374	1	11/22/06			06-0692	R/A ORDER		Net 30

Bill to: 13771

AMERICAN RADIATION SERVICES
ACCOUNTS PAYABLE
2609 NORTH RIVER ROAD
PORT ALLEN, LA 70767

1 (800)401-4277

Ship to: 13772

CLARE WILSON
AMERICAN RADIATION SERVICES
2609 NORTH RIVER ROAD
PORT ALLEN, LA 70767

1 (800)401-4277

Ship via	FedEx Priority Overnight	Description		Ship from	
Salesmen	STOTVE2	Instructions		Blanket	
Contact	CLARE WILSON	Pro#		Truck#	

Order discrepancies (other than back ordered items) must be reported to our Customer Relations Department at 301-975-6776 within 5 days of receipt of shipment or order will be considered complete. NIST SRMs/RMs are generally not returnable - with the exception of defective goods or shipments made in error by NIST. To return SRM/RM, please call for instructions and a Return SRM/RM Authorization Number before shipment. Returns WILL NOT BE ACCEPTED without prior authorization.

Order	UOM	Ship	UOM	B/O	UOM	Item	Description
1	EACH	1	EACH	0	EACH	4361C	Hydrogen-3 Water Hazardous: 7.0
						Total qty:	1 / EACH

The Standard Reference Materials in this package are not considered to be radioactive material under the transport regulations of the IATA, the ICAO, the IAEA, or the U.S. DOT, and the package is exempt from all radioactivity labeling requirements. See IATA Dangerous Goods Regulations, Section 10.3.1 or US 49 CFR 173.436.

0702374

11/22/06
10:10 AM

Picked by	
Packed by	
# of pieces	1
Weight	

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12236
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-001
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	1.638	N/A	N/A	N/A		%	ARS-054/EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanseigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12237
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-002
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	14.197	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL
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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12238
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-003
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.654	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12239
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-004
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	6.461	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12240
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-005
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	19.906	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12242
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-006
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	20.538	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lasseigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12244
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-007
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	14.026	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamaigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12245
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-008
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	18.967	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamarque
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12246
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-009
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	19.426	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamoigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00867
Client Sample ID: MD21-08-12253
Sample Collection Date: 05/09/08
Sample Matrix: Air/Gel

Request or PO Number: 08-1114
ARS Sample ID: ARS1-08-00867-010
Date Received: 05/13/08
Report Date: 06/11/08 12:53

Analysis Description	Analysis Results	TPU (1S)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.898	N/A	N/A	N/A		%	ARS-054/ EPA 906.0	6/5/08 10:30	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review: Lindsay Lanoiqne

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

Port Allen, LA

PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-00867,900,901
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-12236	ARS1-08-00867-001	612	456	1556	26.3551	5.0093	**1.69377249**
MD21-08-12237	ARS1-08-00867-002	604	457	148	21.0113	4.91	**14.1968243**
MD21-08-12238	ARS1-08-00867-003	609	453	156	18.1798	5.0078	**11.6637179**
MD21-08-12239	ARS1-08-00867-004	593	457	137	8.8511	5.0038	**6.46065693**
MD21-08-12240	ARS1-08-00867-005	619	459	159	31.6502	5.0124	**19.9057862**
MD21-08-12242	ARS1-08-00867-006	615	450	165	33.8882	5.072	**20.538303**
MD21-08-12244	ARS1-08-00867-007	605	450	156	21.8799	5.0082	**14.0255769**
MD21-08-12245	ARS1-08-00867-008	616	462	151	28.6398	5.0154	**18.966755**
MD21-08-12246	ARS1-08-00867-009	605	442	163	31.6644	5.0152	**19.4260123**
MD21-08-12253	ARS1-08-00867-010	614	458	162	19.2744	5.0127	**11.8977778**
MD50-08-7655	ARS-08-00900-001	614	461	153	8.7909	5	**5.74568627**
MD50-08-7656	ARS1-08-00901-001	613	457	154	7.9483	5.017	**5.16123377**
MD50-08-7657	ARS1-08-00901-002	618	459	158	8.5608	5.0107	**5.41822785**
							#DIV/0!

Balance ID: 0102/H1331122173560P
Pipettor ID: V97676

Signature

Date/ Time 6-5-08 10:30

ARS
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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory

Folder Duplicate

ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 08-00867 Client Name: LANL Sample Matrix: Silica Gel

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Rameigne 6-11-08
Report Generator Signature Date

Virginia Mullegan 6-11-08
Management Review Signature Date

ARS AMERICAN RADIATION SERVICES, INC.

LSC
Technical Review Checklist

ARS SDG 08-00867

Sample Matrix: Silica Gel **Aliquot** (Circle One) : Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) (LCS) (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): **Batch A:** 808-01367 **Batch B:** NA **Batch C:** NA

Test(s): LSC-A-001 NA NA

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	(Yes) No N/A	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) **NCR #** (If initiated): _____

Chemist Signature 6-5-08 Date

Analyst Signature Jamaal Brown 6-9-08 Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	Yes No (N/A)	Yes No (N/A)
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) **NCR #** (If initiated): _____

Analyst Signature 6-9-08 Date

Project Manager Signature Lindsay Lamoigne 6-11-08 Date

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: B08-01367

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	Yes No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)

7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated): _____

Lindsay Ramsigne 6-11-08
Project Manager Signature Date

QA Officer Signature 6-12-08
Date

GENERAL COMMENTS

TRAX Checklist

ARS ABatch: ARS1B58-01367 **Test Method:** LCS-A-001 **Matrix:** SilicaGel

LABORATORY TECHNICIAN

	CHEMIST			Note (*If Check No*)
1. Procedural Data Report Printed	~~YES~~	NO	N/A	
2. Tracer Report Printed	YES	NO	~~N/A~~	
3. LCS Report for One Batch Printed	~~YES~~	NO	N/A	
4. Matrix Spike Report Printed	YES	NO	~~N/A~~	
5. Technical Notes Printed	YES	NO	~~N/A~~	

April Johnson 6-5-08

Chemist Signature *Date*

~~5-6-08~~ RS 6-5-08

COUNT ROOM TECHNICIAN

	COUNT TECHNICIAN			Note (*If Check No*)
1. Imported/Printed Batch	YES	NO	~~N/A~~	
2. Processed and Printed Batch	~~YES~~	NO	N/A	
3. Calculated and Printed Batch	~~YES~~	NO	N/A	
3. Efficiency Printed for Batch	YES	NO	~~N/A~~	
4. Air Flow Data Printed for Batch	YES	NO	~~N/A~~	

April Johnson 6-9-08

Count Technician Signature *Date*

COUNT ROOM DATA REVIEW using "Enter Results Data" function

	TECHNICIAN			Note (*If Check No*)
1. Load Data	(YES)	NO	N/A	
2. Starred Required Isotopes (column 3)	YES	NO	(N/A)	
3. Deleted SDG form fission products (column 5)	YES	NO	(N/A)	
4. Entered Lab Tech initials (column 20)	(YES)	NO	N/A	

Technician Signature 6/11/08 *Date*

DQO Report for SDG

ARS1-08-00867

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DiltionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

DQO Report for SDG

ARS1-08-00867

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DiltionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

ARS INTERNATIONAL

Sample Check In Report
Samples

SDG **ARS1-08-00867**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	Level 4
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	5/13/2008	COC No 1
Project Type	Environmental		Client Deadline	6/11/2008	COC No 2
Comments			Internal Deadline	6/10/2008	COC No 3
			Lab Deadline	6/9/2008	COC No 4
			Workdays	FALSE	

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-12236	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
002	MD21-08-12237	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
003	MD21-08-12238	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
004	MD21-08-12239	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
005	MD21-08-12240	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
006	MD21-08-12242	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
007	MD21-08-12244	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
008	MD21-08-12245	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
009	MD21-08-12246	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
010	MD21-08-12253	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5

Sample Check In Report
Samples

SDG **ARS1-08-00867**

Client Code	**114**	**Los Alamos National Laboratory**	TAT Days	**30**	Level	**4**
Profile Number	PN-00094	**Site Alias: Keith Greene**	Date Received	**5/13/2008**		
Project Type	**Environmental**		Client Deadline	**6/11/2008**	COC No 1	
Comments			Internal Deadline	**6/10/2008**	COC No 2	
			Lab Deadline	**6/9/2008**	COC No 3	
			Workdays	**FALSE**	COC No 4	

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-12236	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
002	MD21-08-12237	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
003	MD21-08-12238	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
004	MD21-08-12239	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
005	MD21-08-12240	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
006	MD21-08-12242	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
007	MD21-08-12244	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
008	MD21-08-12245	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5
009	MD21-08-12246	1	AQ	05/09/08 00:00	05/09/08 00:00	Q6	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00867
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	9
001	X
002	X
003	X
004	X
005	X
006	X
007	X
008	X
009	X

ARS INTERNATIONAL

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00867**

Fraction	Client ID	Comments
001	MD21-08-12236	[redacted]
002	MD21-08-12237	
003	MD21-08-12238	[redacted]
004	MD21-08-12239	
005	MD21-08-12240	[redacted]
006	MD21-08-12242	
007	MD21-08-12244	[redacted]
008	MD21-08-12245	
009	MD21-08-12246	[redacted]

ARS FILE TRACKING SHEET

SDG: 08-00867

Task	Date / Time	Initials
Date & Time Received	5-13-08 / 09:44	LMM
Storage Location: Q6	5-14-08 / 16:41	LMM
Chain of Custody Completed	5-14-08 / 16:41	LMM
Report Written	6-11-08 / 15:54	LMM
Laboratory Supervisor Checks Performed	See batch	NA
Quality Assurance Checks Performed on Report	6/11/08 / 1626	[signature]
Laboratory Director Check Performed on Report	6-11-08 / 1631	VHM
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 5/14/08 Shipper's Name: LANL

Technician Performing Inspection: Lindsay Lasseigne Initials: LML

SDG: **08-00867**

External and Internal Surveys

Exposure Rate Meter: 104898 Serial No: 013681 Calibration. Due Date: 5/1/9

Count Rate Meter: 108796 Serial No: 109043 Calibration. Due Date: 5/1/9

Background Exposure Rate (μR/hr) 31 Background Count Rate (cpm): 60

Max. Exposure Rate on Shipping Containers Externals (Including Background): 31

Max. Removable Count Rate on Shipping Container Externals (Including Background): 80

Max. Removable Count Rate on Shipping Container Internals (Including Background): 110

Max. Removable Count Rate on Sample Container Externals (Including Background): 30

Max. Exposure Rate on Sample Containers Externals (Including Background): 110

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? Yes If yes, were the seals intact? Yes

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 15

Was the pH of Aqueous Samples < 2? N/A

If no, was the sample(s) checked for acid reactivity? _____ Was the sample(s) acidified to a pH < 2? _____

Matrix of Samples: Silica Gel

Volume of Each Sample Container: 615g,592g,616g,609g,603g,618g,604g,605g,613g,611g,613g,614g,621g,617g,611g

Brief Description of Sample Material: _____

Inspectors' Comments

_____

_____

SAMPLE CHECK-IN COMMENT SHEET

SDG: 08-00867

NOTES

COMPANY NAME: LANL **SDG:** 08-00867

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes ☐ No	☐ N/A
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Seal Intact	☑ Yes ☐ No	☐ N/A
Marked Radioactive	☐ Yes	☑ No

Samples Rcv 15

Matrix [AF , (AQ) , BI , FE , LT , SI , SO , UR , VG]

External and Internal Surveys

Exposure Rate Meter: 104898 Serial No.: 013681 Calibration Due Date: 5/1/2009

Count Rate Meter: 108796 Serial No.: 109043 Calibration Due Date: 5/1/2009

Background Exposure Rate (µR/hr): 31

Max. Exposure Rate on Shipping Containers Externals (Plus Bkgd): 31

Background Count Rate (cpm): 60

Max. Removable Count Rate on Shipping Containers Externals (Plus Bkgd): 80

Max. Removable Count Rate on Shipping Containers Internals (Plus Bkgd): 110

Received 5-13-08 9.44

Sample Label/Comments/Notes	pH Orig	pH Final	Standard Chemistry Temp	VOA Headspace	Weight(g) Volume(mL)	µR/hr	cpm
MD21-08-12242					615	26	70
MD21-08-12239					592	27	70
MD21-08-12245					616	27	100
MD21-08-12238					609	28	110
MD SB-08 UR MD ~~MD~~ 21-08-12246					603	27	90
MD21-08-12240					618	27	90
MD21-08-12237					604	27	100
MD21-08-12244					605	27	80
MD21-08-12253					613	27	70
MD21-08-12236					611	30	90
MD50-08-74600					613	30	110
MD50-08-12140					614	30	110
MD50-08-74467					621	29	80
MD50-08-7459					617	30	80
MD50-08-7451					611	29	90

12/12 5/14/08 UR

Surveyors' Name: LANL

Date/Time Surveyed: 5-14-08 14:00

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-1114
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/12/2008
TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12236	GAS	5/9/2008	Port #1	
		1	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1	MD21-08-12238	GAS	5/9/2008	Port #4	
		1	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1	MD21-08-12240	GAS	5/9/2008		
		1	MD21-08-12242	GAS	5/9/2008	Port # 1	
		1	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1	MD21-08-12245	GAS	5/9/2008	Port #4	

REQUEST NUMBER: 08-1114

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TO15	

Final Page of REQUEST NUMBER 08-1114

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-

REQUEST NUMBER: 08-111

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRI
MD21-08-12236	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12237	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12244	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12240	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12246	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12238	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12245	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12239	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12242	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12253	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature 5/12/08 1400 Printed Name Signature 5-13-08 094

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, May 12, 2008

REQUEST NUMBER: 08-1114

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-1114
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/12/2008
TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12236	GAS	5/9/2008	Port #1	
		1	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1	MD21-08-12238	GAS	5/9/2008	Port #4	
		1	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1	MD21-08-12240	GAS	5/9/2008		
		1	MD21-08-12242	GAS	5/9/2008	Port # 1	
		1	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1	MD21-08-12245	GAS	5/9/2008		

REQUEST NUMBER: 08-1114

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TOI5	

Final Page of REQUEST NUMBER 08-1114

Monday, May 12, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-

REQUEST NUMBER: 08-111

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12237	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12244	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12240	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12246	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12238	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12245	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12239	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12242	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12253	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature 5/12/08 1400 Printed Name Signature 5-13-08 0944

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, May 12, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1114C

REQUEST NUMBER: 08-1114

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12237	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12244	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12240	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12246	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12238	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12245	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12239	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12242	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12253	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	5/12/08	1400	Printed Name	Signature	5-13-08	0948
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Monday, May 12, 2008

REQUEST NUMBER: 08-1113

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630.

These Samples are on:

LANL Request Number:08-1113

Per Agreement Number:TIPS#24256

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/12/2008

TURNAROUND/REPORT DUE: 6/11/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-12236	GAS	5/9/2008	Port #1	
		1	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1	MD21-08-12238	GAS	5/9/2008	Port #4	
		1	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1	MD21-08-12240	GAS	5/9/2008		
		1	MD21-08-12242	GAS	5/9/2008	Port # 1	
		1	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1	MD21-08-12245	GAS	5/9/2008	Port #4	
		1	MD21-08-12246	GAS	5/9/2008	Port #5	

REQUEST NUMBER: 08-1113

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TOl5	
		1	MD21-08-12256	GAS	5/9/2008	Port # 5; Field duplicate of To15 sample only	

Final Page of REQUEST NUMBER 08-1113

Monday, May 12, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1113C

REQUEST NUMBER: 08-1113

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/11/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12237	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12244	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12240	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12246	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12238	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12245	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12239	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12242	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12253	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12256	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12236

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1110	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1\%$

$O_2 = 18.7\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)**

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12237

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1113	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:	Port #3	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.0\%$

$O_2 = 18.8\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12238

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1117	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.0\%$

$O_2 = 18.7\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dwyhoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 1225
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12239

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 18.8\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/9/08 1225	(Printed Name)	5/9/08 12:25
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12240

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:	Port #6	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dwykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12242

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1115	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 1.4 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12244

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217.0 Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222.0 Ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = ~~14.~~ 0.2 %

O_2 = ~~0.2~~ KR 5/8/08 19.0 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wyckoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 1225
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12245

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$Co_2 = 0.9\%$

$O_2 = 18.5\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dal Zinn

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1225 5/9/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 1225
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12246

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2: 0.7 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 5/9/08 1225	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12253

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/09/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-12240 Field duplicate of H3 & TO15.

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) D Wyatt

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	Date/Time 5/1/08 1225	RECEIVED BY (Printed Name) (Signature)	Date/Time 5/9/08 12:25
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12256

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/08/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1125	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	N	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD 21-08-12246 Field duplicate of TO15 sample only

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.7 %

O_2 = 18.7 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D W/koff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1225 5/9/08	(Printed Name)	1225 5/9/08
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-1113 VALIDATION DATE: 6/17/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Jessica Jorvig ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): TO-15 VOC

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The initial calibration (ICAL) curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. Two field blanks (FBs) reported in RN 08-1147 were associated with the samples in this data package, MD21-08-12252 FB and -12255 FB. Samples -12236 through -12240 and -12253 were associated with -12252 FB. Samples -12242, -12244 through -12246 and -11256 were associated with -12255 FB. Acetone, 2-butanone and trichloroethene were detected in -12255 FB. The acetone and 2-butaone results for samples -12242 and -12244 were detects ≤10X the associated FB concentrations and, thus, were qualified U,V4d. All other associated sample results were either NDs or detects >5/10X the FB concentrations and, thus, were not qualified.
3. The ICAL %RSD for 1,2,4-trichlorobenzene was >30%. All associated sample results were NDs and, thus, were qualified UJ,V7a.
4. For the CCVs associated with all the samples, the percent differences for 1,2,4-trichlorobenzene were >30%. All

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Data Validation Cover Sheet

Los Alamos NATIONAL LABORATORY

associated sample results were NDs and, thus, were qualified UJ,V7c.

5. For the LCS associated with samples -11242, -12244 through -12246, -12253 and -12256, the percent recoveries (%Rs) for 1,2,4-trichlorobenzene and hexachlorobutadiene were < the laboratory's LALs but ≥10%. For the LCS associated with all the other samples, the %R for 1,2,4-trichlorobenzene was < the laboratory's LAL but ≥10%. All associated sample results were NDs and, thus, were qualified UJ,V12a.
6. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCSs. No sample data were qualified as a result.
7. It should be noted that several samples had mass spectra that contained contamination from co-eluting target analytes. No sample data were qualified as a result, based on professional judgment.
8. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

Reviewed By: ETM **Level:** I **Date:** 6/17/08

VALIDATOR'S SIGNATURE: _____ DATE: 6/17/08

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☒	☐	☐	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☒	☐	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12236

Lab ID#: 0805274-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052127**	**Date of Collection:**	**5/9/08**
Dil. Factor:	**1.71**	**Date of Analysis:**	**5/22/08 04:02 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	0.86	6.6	6.6
1,1-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Acetone	3.4	4.8	8.1	11
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	0.93	2.7	2.9
Methylene Chloride	0.86	0.90	3.0	3.1
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	0.96	2.5	2.8
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	180	4.2	900
1,1,1-Trichloroethane	0.86	3.4	4.7	19
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	9.1	5.4	57
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	120	4.6	670
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	200	5.8	1400

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0008 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12236

Lab ID#: 0805274-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052127**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 04:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.4	Not Detected	14	Not Detected	
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected	
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected	
Chlorobenzene	0.86	Not Detected	3.9	Not Detected	
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected	
m,p-Xylene	0.86	Not Detected	3.7	Not Detected	
o-Xylene	0.86	Not Detected	3.7	Not Detected	
Styrene	0.86	Not Detected	3.6	Not Detected	
Bromoform	0.86	Not Detected	8.8	Not Detected	
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected	
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected	
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected	
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected	
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected	
Methanol	86	Not Detected	110	Not Detected	
n-Butanol	3.4	Not Detected	10	Not Detected	
Propylene	3.4	Not Detected	5.9	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	98	70-130

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0009 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12237

Lab ID#: 0805274-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052128**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 04:42 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	2.3	6.6	18
1,1-Dichloroethene	0.86	1.8	3.4	7.1
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.86	6.3	3.0	22
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	120	4.2	610
1,1,1-Trichloroethane	0.86	4.5	4.7	24
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	22	5.4	140
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	82	4.6	440
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	0.99	5.7	6.7
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	48	5.8	320

0027

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12237

Lab ID#: 0805274-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052128**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 04:42 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.4	Not Detected	14	Not Detected	
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected	
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected	
Chlorobenzene	0.86	Not Detected	3.9	Not Detected	
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected	
m,p-Xylene	0.86	Not Detected	3.7	Not Detected	
o-Xylene	0.86	Not Detected	3.7	Not Detected	
Styrene	0.86	Not Detected	3.6	Not Detected	
Bromoform	0.86	Not Detected	8.8	Not Detected	
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected	
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected	
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected	
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected	
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected	
Methanol	86	Not Detected	110	Not Detected	
n-Butanol	3.4	Not Detected	10	Not Detected	
Propylene	3.4	Not Detected	5.9	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	96	70-130

0028

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12238

Lab ID#: 0805274-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052129**	**Date of Collection:**	**5/9/08**
Dil. Factor:	**1.75**	**Date of Analysis:**	**5/22/08 05:19 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.7	4.3	8.4
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	4.6	6.7	35
1,1-Dichloroethene	0.88	3.6	3.5	14
Acetone	3.5	13	8.3	31
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	1.3	2.7	4.0
Methylene Chloride	0.88	14	3.0	50
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	1.3	2.6	4.0
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	140	4.3	670
1,1,1-Trichloroethane	0.88	5.3	4.8	29
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	52	5.5	330
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	120	4.7	620
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	1.0	5.9	6.8
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	36	5.9	240

0045

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12238

Lab ID#: 0805274-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052129**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 5/22/08 05:19 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.5	Not Detected	14	Not Detected	
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected	
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected	
Chlorobenzene	0.88	Not Detected	4.0	Not Detected	
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected	
m,p-Xylene	0.88	Not Detected	3.8	Not Detected	
o-Xylene	0.88	Not Detected	3.8	Not Detected	
Styrene	0.88	Not Detected	3.7	Not Detected	
Bromoform	0.88	Not Detected	9.0	Not Detected	
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected	
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected	
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected	
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,2,4-Trichlorobenzene	3.5	Not Detected U J	26	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected	
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected	
Methanol	88	Not Detected	110	Not Detected	
n-Butanol	3.5	Not Detected	11	Not Detected	
Propylene	3.5	Not Detected	6.0	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	97	70-130

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JEJ 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12239

Lab ID#: 0805274-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052130**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 05:56 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.8	4.2	9.0
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	11	6.4	21
Freon 113	0.86	7.1	6.6	54
1,1-Dichloroethene	0.86	6.2	3.4	24
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.86	84	3.0	290
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	3.4	13
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	130	4.2	650
1,1,1-Trichloroethane	0.86	4.6	4.7	25
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	99	5.4	620
Benzene	0.86	0.89	2.7	2.8
1,2-Dichloroethane	0.86	1.3	3.5	5.3
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	200	4.6	1000
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.2	5.7	8.4
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	1.0	3.2	3.8
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	4.0	4.7	22
Tetrachloroethene	0.86	25	5.8	170

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12239

Lab ID#: 0805274-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052130**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 05:56 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.4	Not Detected	14	Not Detected	
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected	
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected	
Chlorobenzene	0.86	Not Detected	3.9	Not Detected	
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected	
m,p-Xylene	0.86	Not Detected	3.7	Not Detected	
o-Xylene	0.86	Not Detected	3.7	Not Detected	
Styrene	0.86	Not Detected	3.6	Not Detected	
Bromoform	0.86	Not Detected	8.8	Not Detected	
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected	
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected	
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected	
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected	
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected	
Methanol	86	Not Detected	110	Not Detected	
n-Butanol	3.4	Not Detected	10	Not Detected	
Propylene	3.4	Not Detected	5.9	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	96	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12240

Lab ID#: 0805274-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052131**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.68**	**Date of Analysis: 5/22/08 06:32 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	Not Detected	4.2	Not Detected
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	34	6.3	65
Freon 113	0.84	3.6	6.4	28
1,1-Dichloroethene	0.84	13	3.3	51
Acetone	3.4	24	8.0	58
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	Not Detected	2.6	Not Detected
Methylene Chloride	0.84	250	2.9	880
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.2	2.5	6.6
cis-1,2-Dichloroethene	0.84	1.1	3.3	4.4
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	160	4.1	780
1,1,1-Trichloroethane	0.84	2.2	4.6	12
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	87	5.3	540
Benzene	0.84	1.0	2.7	3.2
1,2-Dichloroethane	0.84	3.4	3.4	14
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	220	4.5	1200
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	1.6	5.6	10
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	1.6	3.2	6.2
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	20	4.6	110
Tetrachloroethene	0.84	15	5.7	100

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12240

Lab ID#: 0805274-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052131**	**Date of Collection:**	**5/9/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**5/22/08 06:32 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.4	Not Detected	14	Not Detected	
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected	
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected	
Chlorobenzene	0.84	Not Detected	3.9	Not Detected	
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected	
m,p-Xylene	0.84	Not Detected	3.6	Not Detected	
o-Xylene	0.84	Not Detected	3.6	Not Detected	
Styrene	0.84	Not Detected	3.6	Not Detected	
Bromoform	0.84	Not Detected	8.7	Not Detected	
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected	
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected	
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected	
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected	
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected	
1,4-Dichlorobenzene	0.84	1.3	5.0	7.6	
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected	
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected	
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected	
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected	
Methanol	84	Not Detected	110	Not Detected	
n-Butanol	3.4	Not Detected	10	Not Detected	
Propylene	3.4	Not Detected	5.8	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	97	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12242

Lab ID#: 0805274-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052207**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.58**	**Date of Analysis: 5/22/08 12:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.79	Not Detected	3.9	Not Detected	
Freon 114	0.79	Not Detected	5.5	Not Detected	
Chloromethane	3.2	Not Detected	6.5	Not Detected	
Vinyl Chloride	0.79	Not Detected	2.0	Not Detected	
1,3-Butadiene	0.79	Not Detected	1.7	Not Detected	
Bromomethane	0.79	Not Detected	3.1	Not Detected	
Chloroethane	0.79	Not Detected	2.1	Not Detected	
Freon 11	0.79	Not Detected	4.4	Not Detected	
Ethanol	3.2	6.1	6.0	12	
Freon 113	0.79	Not Detected	6.0	Not Detected	
1,1-Dichloroethene	0.79	Not Detected	3.1	Not Detected	
Acetone	3.2	5.8	7.5	14	U,V4d
2-Propanol	3.2	Not Detected	7.8	Not Detected	
Carbon Disulfide	0.79	2.0	2.5	6.3	
Methylene Chloride	0.79	2.0	2.7	6.8	
Methyl tert-butyl ether	0.79	Not Detected	2.8	Not Detected	
trans-1,2-Dichloroethene	0.79	Not Detected	3.1	Not Detected	
Hexane	0.79	Not Detected	2.8	Not Detected	
1,1-Dichloroethane	0.79	Not Detected	3.2	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.79	1.5	2.3	4.4	U,V4d
cis-1,2-Dichloroethene	0.79	Not Detected	3.1	Not Detected	
Tetrahydrofuran	0.79	0.93	2.3	2.7	
Chloroform	0.79	100	3.8	490	
1,1,1-Trichloroethane	0.79	3.8	4.3	21	
Cyclohexane	0.79	Not Detected	2.7	Not Detected	
Carbon Tetrachloride	0.79	9.7	5.0	61	
Benzene	0.79	Not Detected	2.5	Not Detected	
1,2-Dichloroethane	0.79	Not Detected	3.2	Not Detected	
Heptane	0.79	Not Detected	3.2	Not Detected	
Trichloroethene	0.79	55	4.2	300	
1,2-Dichloropropane	0.79	Not Detected	3.6	Not Detected	
1,4-Dioxane	3.2	Not Detected	11	Not Detected	
Bromodichloromethane	0.79	Not Detected	5.3	Not Detected	
cis-1,3-Dichloropropene	0.79	Not Detected	3.6	Not Detected	
4-Methyl-2-pentanone	0.79	Not Detected	3.2	Not Detected	
Toluene	0.79	Not Detected	3.0	Not Detected	
trans-1,3-Dichloropropene	0.79	Not Detected	3.6	Not Detected	
1,1,2-Trichloroethane	0.79	Not Detected	4.3	Not Detected	
Tetrachloroethene	0.79	94	5.4	640	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12242

Lab ID#: 0805274-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052207**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.58**	**Date of Analysis: 5/22/08 12:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.2	Not Detected	13	Not Detected	
Dibromochloromethane	0.79	Not Detected	6.7	Not Detected	
1,2-Dibromoethane (EDB)	0.79	Not Detected	6.1	Not Detected	
Chlorobenzene	0.79	Not Detected	3.6	Not Detected	
Ethyl Benzene	0.79	Not Detected	3.4	Not Detected	
m,p-Xylene	0.79	Not Detected	3.4	Not Detected	
o-Xylene	0.79	Not Detected	3.4	Not Detected	
Styrene	0.79	Not Detected	3.4	Not Detected	
Bromoform	0.79	Not Detected	8.2	Not Detected	
1,1,2,2-Tetrachloroethane	0.79	Not Detected	5.4	Not Detected	
4-Ethyltoluene	0.79	Not Detected	3.9	Not Detected	
1,3,5-Trimethylbenzene	0.79	Not Detected	3.9	Not Detected	
1,2,4-Trimethylbenzene	0.79	Not Detected	3.9	Not Detected	
1,3-Dichlorobenzene	0.79	Not Detected	4.8	Not Detected	
1,4-Dichlorobenzene	0.79	Not Detected	4.8	Not Detected	
alpha-Chlorotoluene	0.79	Not Detected	4.1	Not Detected	
1,2-Dichlorobenzene	0.79	Not Detected	4.7	Not Detected	
1,2,4-Trichlorobenzene	3.2	Not Detected U J	23	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.2	Not Detected	34	Not Detected	UJ,V12a
Chlorodifluoromethane	3.2	Not Detected	11	Not Detected	
Methanol	79	Not Detected	100	Not Detected	
n-Butanol	3.2	17	9.6	52	
Propylene	3.2	Not Detected	5.4	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	96	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12244

Lab ID#: 0805274-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052208**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 5/22/08 01:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
Freon 12	0.88	1.3	4.3	6.5	
Freon 114	0.88	Not Detected	6.1	Not Detected	
Chloromethane	3.5	Not Detected	7.2	Not Detected	
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected	
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected	
Bromomethane	0.88	Not Detected	3.4	Not Detected	
Chloroethane	0.88	Not Detected	2.3	Not Detected	
Freon 11	0.88	Not Detected	4.9	Not Detected	
Ethanol	3.5	8.0	6.6	15	
Freon 113	0.88	3.5	6.7	27	
1,1-Dichloroethene	0.88	2.5	3.5	9.9	
Acetone	3.5	4.7	8.3	11	U,V4d
2-Propanol	3.5	Not Detected	8.6	Not Detected	
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected	
Methylene Chloride	0.88	110	3.0	380	
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected	
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected	
Hexane	0.88	Not Detected	3.1	Not Detected	
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	0.88	0.90	2.6	2.6	U,V4d
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected	
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected	
Chloroform	0.88	150	4.3	740	
1,1,1-Trichloroethane	0.88	6.4	4.8	35	
Cyclohexane	0.88	Not Detected	3.0	Not Detected	
Carbon Tetrachloride	0.88	59	5.5	370	
Benzene	0.88	Not Detected	2.8	Not Detected	
1,2-Dichloroethane	0.88	1.3	3.5	5.4	
Heptane	0.88	Not Detected	3.6	Not Detected	
Trichloroethene	0.88	140	4.7	780	
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected	
1,4-Dioxane	3.5	Not Detected	13	Not Detected	
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected	
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected	
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected	
Toluene	0.88	Not Detected	3.3	Not Detected	
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected	
1,1,2-Trichloroethane	0.88	2.4	4.8	13	
Tetrachloroethene	0.88	36	5.9	240	

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12244

Lab ID#: 0805274-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052208**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 5/22/08 01:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.5	Not Detected	14	Not Detected	
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected	
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected	
Chlorobenzene	0.88	Not Detected	4.0	Not Detected	
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected	
m,p-Xylene	0.88	Not Detected	3.8	Not Detected	
o-Xylene	0.88	Not Detected	3.8	Not Detected	
Styrene	0.88	Not Detected	3.7	Not Detected	
Bromoform	0.88	Not Detected	9.0	Not Detected	
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected	
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected	
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,4-Dichlorobenzene	0.88	0.92	5.3	5.5	
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected	
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,2,4-Trichlorobenzene	3.5	Not Detected U J	26	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected	UJ,V12a
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected	
Methanol	88	Not Detected	110	Not Detected	
n-Butanol	3.5	Not Detected	11	Not Detected	
Propylene	3.5	Not Detected	6.0	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	96	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12245

Lab ID#: 0805274-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052212**	**Date of Collection: 5/9/08**	
Dil. Factor:	**2.28**	**Date of Analysis: 5/22/08 06:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	1.6	5.6	8.0
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	4.6	Not Detected	9.4	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	1.1	Not Detected	4.4	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	4.6	29	8.6	55
Freon 113	1.1	4.8	8.7	37
1,1-Dichloroethene	1.1	4.4	4.5	17
Acetone	4.6	Not Detected	11	Not Detected
2-Propanol	4.6	Not Detected	11	Not Detected
Carbon Disulfide	1.1	1.8	3.6	5.6
Methylene Chloride	1.1	360	4.0	1200
Methyl tert-butyl ether	1.1	Not Detected	4.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	1.1	1.5	4.5	6.0
Tetrahydrofuran	1.1	1.3	3.4	3.8
Chloroform	1.1	230	5.6	1100
1,1,1-Trichloroethane	1.1	5.9	6.2	32
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	98	7.2	610
Benzene	1.1	1.3	3.6	4.1
1,2-Dichloroethane	1.1	4.1	4.6	17
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	230	6.1	1200
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	7.8	6.2	42
Tetrachloroethene	1.1	25	7.7	170

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12245

Lab ID#: 0805274-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052212**	**Date of Collection: 5/9/08**	
Dil. Factor:	**2.28**	**Date of Analysis: 5/22/08 06:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	4.6	Not Detected	19	Not Detected	
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected	
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected	
Chlorobenzene	1.1	Not Detected	5.2	Not Detected	
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected	
m,p-Xylene	1.1	Not Detected	5.0	Not Detected	
o-Xylene	1.1	Not Detected	5.0	Not Detected	
Styrene	1.1	Not Detected	4.8	Not Detected	
Bromoform	1.1	Not Detected	12	Not Detected	
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected	
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected	
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected	
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected	
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected	
1,4-Dichlorobenzene	1.1	2.4	6.8	14	
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected	
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected	
1,2,4-Trichlorobenzene	4.6	Not Detected U J	34	Not Detected U J	UJ,V7a
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected	UJ,V12a
Chlorodifluoromethane	4.6	Not Detected	16	Not Detected	
Methanol	110	Not Detected	150	Not Detected	
n-Butanol	4.6	Not Detected	14	Not Detected	
Propylene	4.6	Not Detected	7.8	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	96	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12246

Lab ID#: 0805274-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052213**	**Date of Collection:**	**5/9/08**
Dil. Factor:	**3.36**	**Date of Analysis:**	**5/22/08 07:02 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	Not Detected	8.3	Not Detected
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.7	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.3	Not Detected
1,3-Butadiene	1.7	Not Detected	3.7	Not Detected
Bromomethane	1.7	Not Detected	6.5	Not Detected
Chloroethane	1.7	Not Detected	4.4	Not Detected
Freon 11	1.7	Not Detected	9.4	Not Detected
Ethanol	6.7	22	13	42
Freon 113	1.7	3.6	13	28
1,1-Dichloroethene	1.7	3.9	6.7	15
Acetone	6.7	Not Detected	16	Not Detected
2-Propanol	6.7	Not Detected	16	Not Detected
Carbon Disulfide	1.7	Not Detected	5.2	Not Detected
Methylene Chloride	1.7	510	5.8	1800
Methyl tert-butyl ether	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Hexane	1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran	1.7	Not Detected	5.0	Not Detected
Chloroform	1.7	230	8.2	1100
1,1,1-Trichloroethane	1.7	2.1	9.2	11
Cyclohexane	1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride	1.7	82	10	510
Benzene	1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane	1.7	5.9	6.8	24
Heptane	1.7	Not Detected	6.9	Not Detected
Trichloroethene	1.7	190	9.0	1000
1,2-Dichloropropane	1.7	Not Detected	7.8	Not Detected
1,4-Dioxane	6.7	Not Detected	24	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	6.9	Not Detected
Toluene	1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane	1.7	5.7	9.2	31
Tetrachloroethene	1.7	9.0	11	61

JEJ
0218 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12246

Lab ID#: 0805274-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052213**	**Date of Collection: 5/9/08**	
Dil. Factor:	**3.36**	**Date of Analysis: 5/22/08 07:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	6.7	Not Detected	28	Not Detected	
Dibromochloromethane	1.7	Not Detected	14	Not Detected	
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected	
Chlorobenzene	1.7	Not Detected	7.7	Not Detected	
Ethyl Benzene	1.7	Not Detected	7.3	Not Detected	
m,p-Xylene	1.7	Not Detected	7.3	Not Detected	
o-Xylene	1.7	Not Detected	7.3	Not Detected	
Styrene	1.7	Not Detected	7.2	Not Detected	
Bromoform	1.7	Not Detected	17	Not Detected	
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected	
4-Ethyltoluene	1.7	Not Detected	8.2	Not Detected	
1,3,5-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected	
1,2,4-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected	
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected	
1,4-Dichlorobenzene	1.7	2.9	10	18	
alpha-Chlorotoluene	1.7	Not Detected	8.7	Not Detected	
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected	
1,2,4-Trichlorobenzene	6.7	Not Detected U J	50	Not Detected U J	UJ,V7a
Hexachlorobutadiene	6.7	Not Detected	72	Not Detected	UJ,V12a
Chlorodifluoromethane	6.7	Not Detected	24	Not Detected	
Methanol	170	Not Detected	220	Not Detected	
n-Butanol	6.7	Not Detected	20	Not Detected	
Propylene	6.7	Not Detected	12	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	96	70-130

JEJ
0219 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12253

Lab ID#: 0805274-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052211**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 04:28 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	35	6.4	66
Freon 113	0.86	3.5	6.6	27
1,1-Dichloroethene	0.86	12	3.4	50
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	0.97	2.7	3.0
Methylene Chloride	0.86	250	3.0	860
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	1.1	3.4	4.2
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	160	4.2	770
1,1,1-Trichloroethane	0.86	2.2	4.7	12
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	86	5.4	540
Benzene	0.86	1.0	2.7	3.2
1,2-Dichloroethane	0.86	3.6	3.5	15
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	220	4.6	1200
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.6	5.7	11
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	1.6	3.2	6.1
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	21	4.7	110
Tetrachloroethene	0.86	15	5.8	100

0239

JEJ
6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12253

Lab ID#: 0805274-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052211**	**Date of Collection: 5/9/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/22/08 04:28 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.4	Not Detected	14	Not Detected	
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected	
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected	
Chlorobenzene	0.86	Not Detected	3.9	Not Detected	
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected	
m,p-Xylene	0.86	Not Detected	3.7	Not Detected	
o-Xylene	0.86	Not Detected	3.7	Not Detected	
Styrene	0.86	Not Detected	3.6	Not Detected	
Bromoform	0.86	Not Detected	8.8	Not Detected	
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected	
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected	
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,4-Dichlorobenzene	0.86	1.4	5.1	8.2	
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected	
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J	UJ,V7a
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected	UJ,V12a
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected	
Methanol	86	Not Detected	110	Not Detected	
n-Butanol	3.4	Not Detected	10	Not Detected	
Propylene	3.4	Not Detected	5.9	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	97	70-130

0240

JEJ 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12256

Lab ID#: 0805274-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052214**	**Date of Collection:**	**5/9/08**
Dil. Factor:	**3.10**	**Date of Analysis:**	**5/22/08 08:38 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.6	Not Detected	7.7	Not Detected
Freon 114	1.6	Not Detected	11	Not Detected
Chloromethane	6.2	Not Detected	13	Not Detected
Vinyl Chloride	1.6	Not Detected	4.0	Not Detected
1,3-Butadiene	1.6	Not Detected	3.4	Not Detected
Bromomethane	1.6	Not Detected	6.0	Not Detected
Chloroethane	1.6	Not Detected	4.1	Not Detected
Freon 11	1.6	Not Detected	8.7	Not Detected
Ethanol	6.2	20	12	38
Freon 113	1.6	3.3	12	25
1,1-Dichloroethene	1.6	3.7	6.1	15
Acetone	6.2	Not Detected	15	Not Detected
2-Propanol	6.2	Not Detected	15	Not Detected
Carbon Disulfide	1.6	Not Detected	4.8	Not Detected
Methylene Chloride	1.6	490	5.4	1700
Methyl tert-butyl ether	1.6	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	1.6	Not Detected	6.1	Not Detected
Hexane	1.6	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.6	Not Detected	6.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.6	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.6	Not Detected	6.1	Not Detected
Tetrahydrofuran	1.6	Not Detected	4.6	Not Detected
Chloroform	1.6	220	7.6	1100
1,1,1-Trichloroethane	1.6	1.9	8.4	10
Cyclohexane	1.6	Not Detected	5.3	Not Detected
Carbon Tetrachloride	1.6	75	9.8	470
Benzene	1.6	Not Detected	5.0	Not Detected
1,2-Dichloroethane	1.6	5.2	6.3	21
Heptane	1.6	Not Detected	6.4	Not Detected
Trichloroethene	1.6	170	8.3	920
1,2-Dichloropropane	1.6	Not Detected	7.2	Not Detected
1,4-Dioxane	6.2	Not Detected	22	Not Detected
Bromodichloromethane	1.6	Not Detected	10	Not Detected
cis-1,3-Dichloropropene	1.6	Not Detected	7.0	Not Detected
4-Methyl-2-pentanone	1.6	Not Detected	6.3	Not Detected
Toluene	1.6	Not Detected	5.8	Not Detected
trans-1,3-Dichloropropene	1.6	Not Detected	7.0	Not Detected
1,1,2-Trichloroethane	1.6	5.4	8.4	29
Tetrachloroethene	1.6	8.2	10	56

JEJ
0265 6/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12256

Lab ID#: 0805274-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052214**	**Date of Collection: 5/9/08**	
Dil. Factor:	**3.10**	**Date of Analysis: 5/22/08 08:38 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	6.2	Not Detected	25	Not Detected	
Dibromochloromethane	1.6	Not Detected	13	Not Detected	
1,2-Dibromoethane (EDB)	1.6	Not Detected	12	Not Detected	
Chlorobenzene	1.6	Not Detected	7.1	Not Detected	
Ethyl Benzene	1.6	Not Detected	6.7	Not Detected	
m,p-Xylene	1.6	Not Detected	6.7	Not Detected	
o-Xylene	1.6	Not Detected	6.7	Not Detected	
Styrene	1.6	Not Detected	6.6	Not Detected	
Bromoform	1.6	Not Detected	16	Not Detected	
1,1,2,2-Tetrachloroethane	1.6	Not Detected	11	Not Detected	
4-Ethyltoluene	1.6	Not Detected	7.6	Not Detected	
1,3,5-Trimethylbenzene	1.6	Not Detected	7.6	Not Detected	
1,2,4-Trimethylbenzene	1.6	Not Detected	7.6	Not Detected	
1,3-Dichlorobenzene	1.6	Not Detected	9.3	Not Detected	
1,4-Dichlorobenzene	1.6	2.9	9.3	17	
alpha-Chlorotoluene	1.6	Not Detected	8.0	Not Detected	
1,2-Dichlorobenzene	1.6	Not Detected	9.3	Not Detected	
1,2,4-Trichlorobenzene	6.2	Not Detected U J	46	Not Detected U J	UJ,V7a
Hexachlorobutadiene	6.2	Not Detected	66	Not Detected	UJ,V12a
Chlorodifluoromethane	6.2	Not Detected	22	Not Detected	
Methanol	160	Not Detected	200	Not Detected	
n-Butanol	6.2	Not Detected	19	Not Detected	
Propylene	6.2	Not Detected	11	Not Detected	

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	96	70-130

0266

JEJ 6/17/08

0805274

Monday, May 12, 2008

REQUEST NUMBER: 08-1113

0531

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argenio
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-1113
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/12/2008
TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1 01A	MD21-08-12236	GAS	5/9/2008	Port #1	
		1 02A	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1 03A	MD21-08-12238	GAS	5/9/2008	Port #4	
		1 04A	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1 05A	MD21-08-12240	GAS	5/9/2008		
		1 06A	MD21-08-12242	GAS	5/9/2008	Port #1	
		1 07A	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1 08A	MD21-08-12245	GAS	5/9/2008	Port #4	
		1 09A	MD21-08-12246	GAS	5/9/2008	Port #5	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1 1A	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TO15	
		1A	MD21-08-12256	GAS	5/9/2008	Port # 5; Field duplicate of To15 sample only	

Final Page of REQUEST NUMBER 08-1113

0805274

Page 1 of 1

Monday, May 12, 2008

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
190 Blue Ravine Rd. Suite B
Folsom, CA 95630

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1113C
REQUEST NUMBER: 08-1113

TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12237	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12244	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12240	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12246	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12238	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12245	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12239	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12242	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12253	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12256	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	5/12/08	1400	Printed Name	Signature	05-13-08	0855
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP ND

Fedex

Request # 08-1113

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0805274

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Comments:

Completed by:

Vera Belitsky — Vera Belitsky / Document Control — 5/28/08

(Signature) — (Print Name & Title) — (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0805274

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-1113
DATE RECEIVED:	05/13/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	05/27/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-12236	Modified TO-15	6.5 "Hg	5 psi
02A	MD21-08-12237	Modified TO-15	6.5 "Hg	5 psi
03A	MD21-08-12238	Modified TO-15	7.0 "Hg	5 psi
04A	MD21-08-12239	Modified TO-15	6.5 "Hg	5 psi
05A	MD21-08-12240	Modified TO-15	6.0 "Hg	5 psi
05AA	MD21-08-12240 Lab Duplicate	Modified TO-15	6.0 "Hg	5 psi
06A	MD21-08-12242	Modified TO-15	4.5 "Hg	5 psi
07A	MD21-08-12244	Modified TO-15	7.0 "Hg	5 psi
08A	MD21-08-12245	Modified TO-15	6.5 "Hg	5 psi
09A	MD21-08-12246	Modified TO-15	6.0 "Hg	5 psi
10A	MD21-08-12253	Modified TO-15	6.5 "Hg	5 psi
11A	MD21-08-12256	Modified TO-15	4.0 "Hg	5 psi
12A	Lab Blank	Modified TO-15	NA	NA
12B	Lab Blank	Modified TO-15	NA	NA
13A	CCV	Modified TO-15	NA	NA
13B	CCV	Modified TO-15	NA	NA
14A	LCS	Modified TO-15	NA	NA

Continued on next page

Request #08-1113

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0805274

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-1113
DATE RECEIVED:	05/13/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	05/27/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
14B	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda A. Freeman DATE: 05/27/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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0002

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0805274

Eleven 6 Liter Summa Canister samples were received on May 13, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All Quality Control Limit failures and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-08-12236	0805274-01A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12237	0805274-02A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12238	0805274-03A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12239	0805274-04A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12240	0805274-05A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12240 Lab Dup	0805274-05AA	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12242	0805274-06A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12244	0805274-07A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12245	0805274-08A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12246	0805274-09A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12253	0805274-10A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
MD21-08-12256	0805274-11A	5/ 9/2008	5/13/2008	NA	13	5/22/2008	NA	Good
Lab Blank	0805274-12A	NA	NA	NA	NA	5/21/2008	NA	Good
Lab Blank	0805274-12B	NA	NA	NA	NA	5/22/2008	NA	Good
CCV	0805274-13A	NA	NA	NA	NA	5/21/2008	NA	Good
CCV	0805274-13B	NA	NA	NA	NA	5/22/2008	NA	Good
LCS	0805274-14A	NA	NA	NA	NA	5/21/2008	NA	Good
LCS	0805274-14B	NA	NA	NA	NA	5/22/2008	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12236

Lab ID#: 0805274-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	0.86	0.86	6.6	6.6
Acetone	3.4	4.8	8.1	11
Carbon Disulfide	0.86	0.93	2.7	2.9
Methylene Chloride	0.86	0.90	3.0	3.1
2-Butanone (Methyl Ethyl Ketone)	0.86	0.96	2.5	2.8
Chloroform	0.86	180	4.2	900
1,1,1-Trichloroethane	0.86	3.4	4.7	19
Carbon Tetrachloride	0.86	9.1	5.4	57
Trichloroethene	0.86	120	4.6	670
Tetrachloroethene	0.86	200	5.8	1400

0007

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Client Sample ID: MD21-08-12236

Lab ID#: 0805274-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted]052127
Dil. Factor: [redacted]1.71
Date of Collection: 5/9/08
Date of Analysis: 5/22/08 04:02 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	0.86	6.6	6.6
1,1-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Acetone	3.4	4.8	8.1	11
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	0.93	2.7	2.9
Methylene Chloride	0.86	0.90	3.0	3.1
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	0.96	2.5	2.8
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	180	4.2	900
1,1,1-Trichloroethane	0.86	3.4	4.7	19
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	9.1	5.4	57
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	120	4.6	670
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	200	5.8	1400

0008

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12236

Lab ID#: 0805274-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	052127	Date of Collection:	5/9/08
Dil. Factor:	1.71	Date of Analysis:	5/22/08 04:02 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	98	70-130

0009

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052127.d
Lab Smp Id: 0805274-01A
Inj Date : 22-MAY-2008 04:02
Operator : cb Inst ID: msd1.i
Smp Info : 100mL #3735
Misc Info : 6.5"Hg --> 5psi
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	292076	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	225660			28.93- 128.93	77.26
14.255	14.282 (1.000)	49	520914			132.03- 232.03	178.35
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1474098	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	233109			0.00- 65.76	15.81
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.034	20.033 (1.000)	117	1686028	25.0000		80.00- 120.00	100.00
20.006	20.033 (1.000)	82	968255			8.42- 108.42	57.43
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.139 (1.060)	65	449975	23.0858	23.086	80.00- 120.00	100.00
15.140	15.139 (1.060)	67	231772			6.04- 106.04	51.51
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.987 (1.140)	98	1647365	24.6641	24.664	80.00- 120.00	100.00
17.960	17.987 (1.140)	70	172409			0.00- 60.35	10.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.987 (1.140)	100	1084149			15.45- 115.45	65.81
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.526 (1.075)	174	884578	24.5190	24.519	80.00- 120.00	100.00
21.527	21.526 (1.075)	95	1433042			110.56- 210.56	162.00
21.527	21.526 (1.075)	176	852424			45.40- 145.40	96.36
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	10975	0.50616	0.8655	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	5911			12.64- 112.64	53.85
10.577	10.577 (0.741)	101	14561			83.95- 183.95	132.66
45 Acetone					CAS #: 67-64-1		
10.909	10.881 (0.764)	58	28063	2.77953	4.753	80.00- 120.00	100.00
10.909	10.881 (0.764)	43	83300			275.34- 375.34	296.83
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.854 (0.760)	76	26990	0.54510	0.9321	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.766	11.739 (0.824)	49	13743	0.52777	0.9025	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	9068			13.77- 113.77	65.98
11.766	11.739 (0.824)	51	5036			0.00- 79.96	36.65
75 2-Butanone					CAS #: 78-93-3		
13.951	13.923 (0.977)	72	5930	0.56358	0.9637	80.00- 120.00	100.00
13.951	13.923 (0.977)	43	25186			420.83- 520.83	424.66
13.951	13.923 (0.977)	57	2589			0.00- 90.57	43.66
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	4455307	107.836	184.40	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	2771036			12.14- 112.14	62.20
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.586 (1.021)	97	86858	2.00358	3.426	80.00- 120.00	100.00
14.587	14.586 (1.021)	99	53243			13.23- 113.23	61.30
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	213428	5.32283	9.102	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	225584			53.03- 153.03	105.70
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	2245853	73.0152	124.86	80.00- 120.00	100.00
16.135	16.107 (1.025)	130	2164284			46.53- 146.53	96.37
16.107	16.107 (1.023)	97	1433836			14.98- 114.98	63.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	4837259	117.028	200.12	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	3757839			27.45- 127.45	77.69
18.817	18.817 (0.939)	131	3572649			24.33- 124.33	73.86

Data File: /chem/msd1.i/1-21may.b/1052127.d
Report Date: 27-May-2008 14:32

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052127.d
Lab Smp Id: 0805274-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.5"Hg --> 5psi

Calibration Date: 21-MAY-2008
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	292076	-5.95
95 1,4-Difluorobenze	1646495	987897	2305093	1474098	-10.47
123 Chlorobenzene-d5	1819110	1091466	2546754	1686028	-7.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-21may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805274-01A
Level: LOW
Operator: cb
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.5"Hg --> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.086	92.34	70-130
$ 111 Toluene-d8	25.000	24.664	98.66	70-130
$ 136 Bromofluorobenzene	25.000	24.519	98.08	70-130

Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Sample Info: 100mL #3735

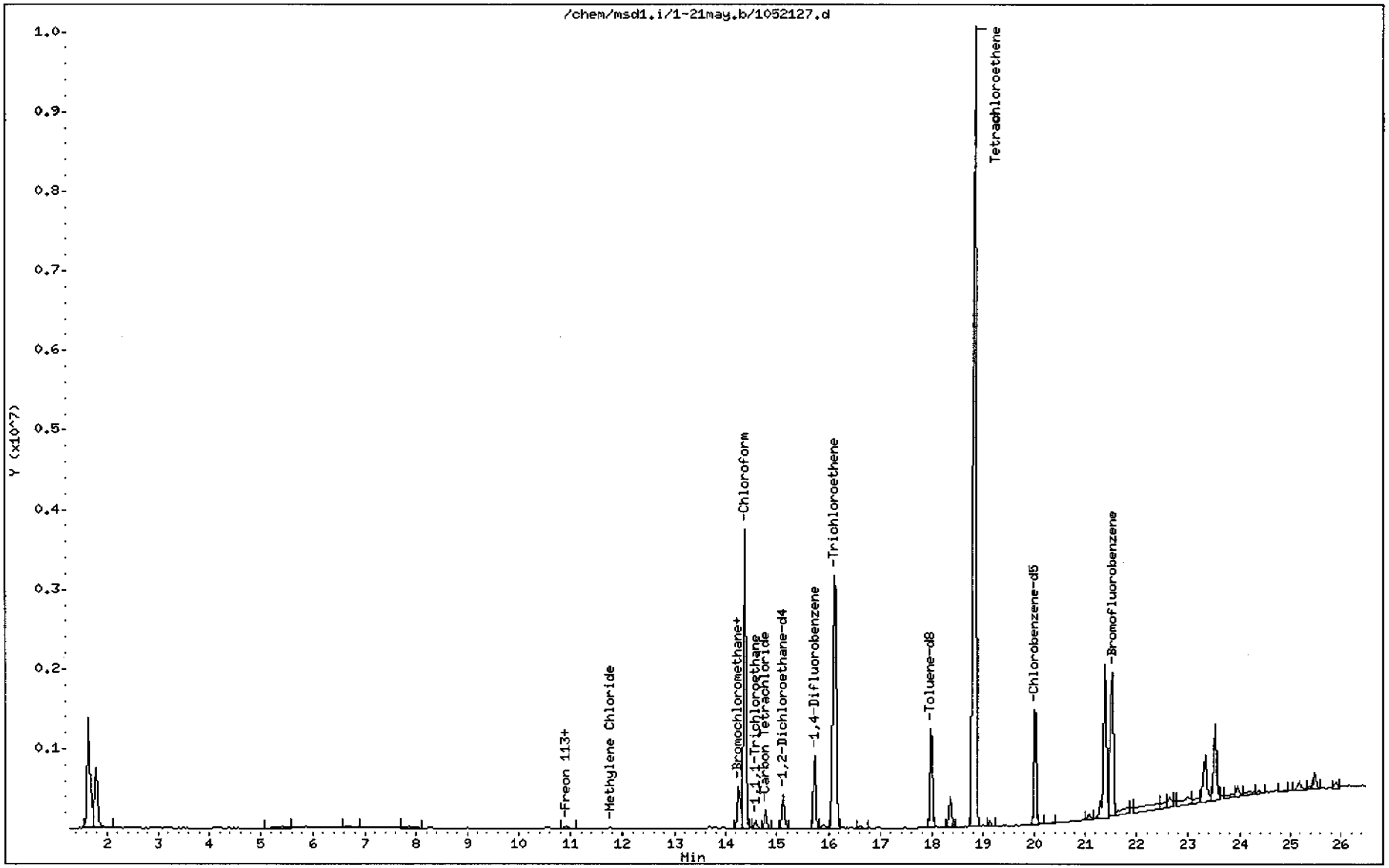
Column phase: RTx-624

Instrument: msd1.i

Operator: cb

Column diameter: 0.53

0015



Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

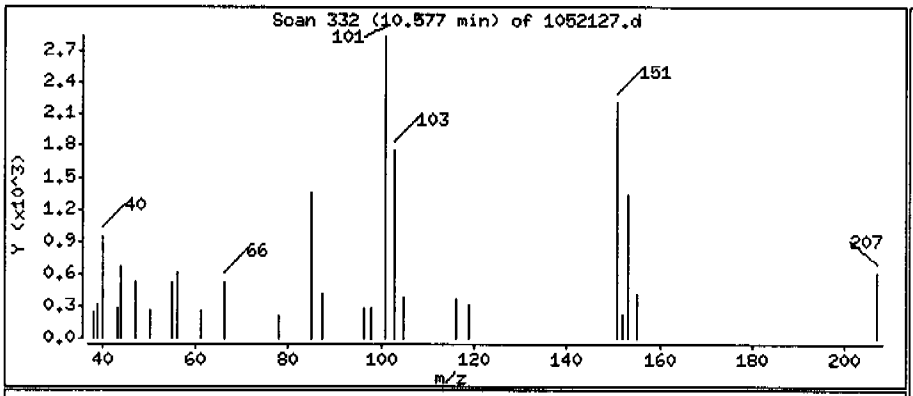
Operator: cb

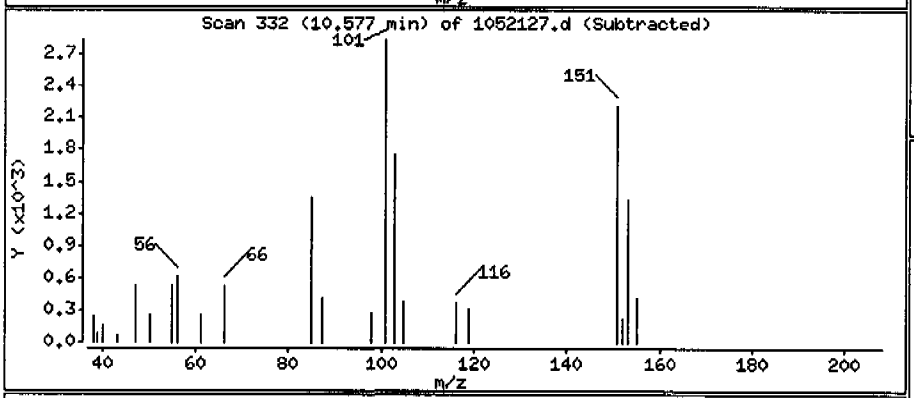
Column phase: RTx-624

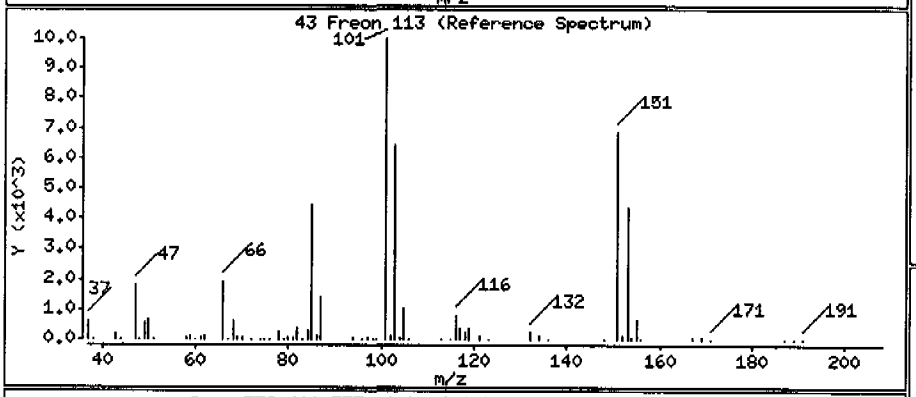
Column diameter: 0.53

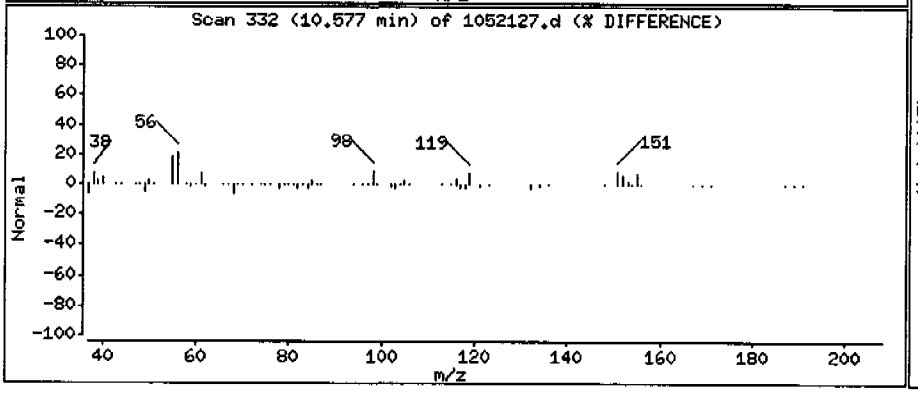
43 Freon 113

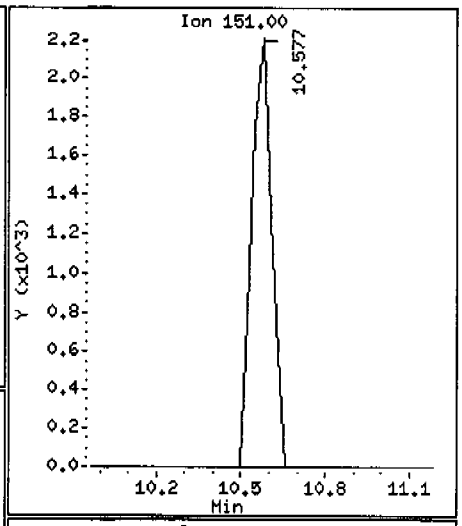
Concentration: 0.8655 PPBV

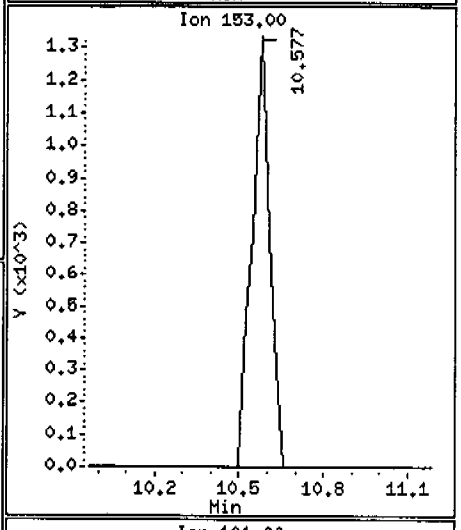


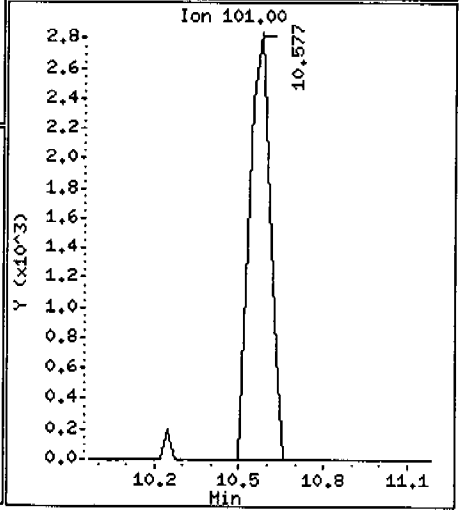












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

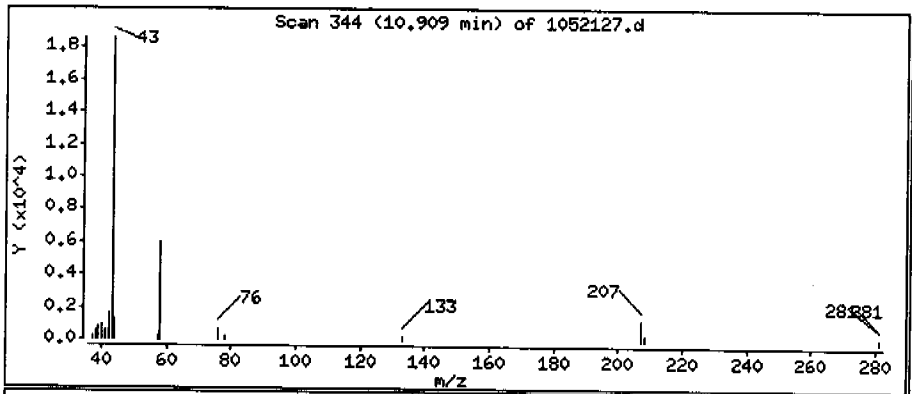
Operator: cb

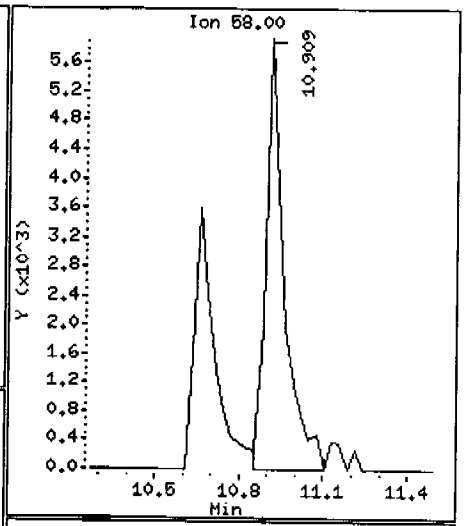
Column phase: RTx-624

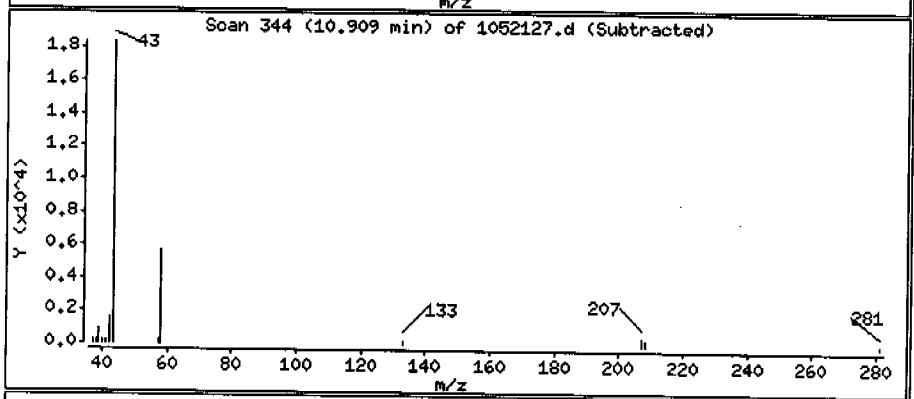
Column diameter: 0.53

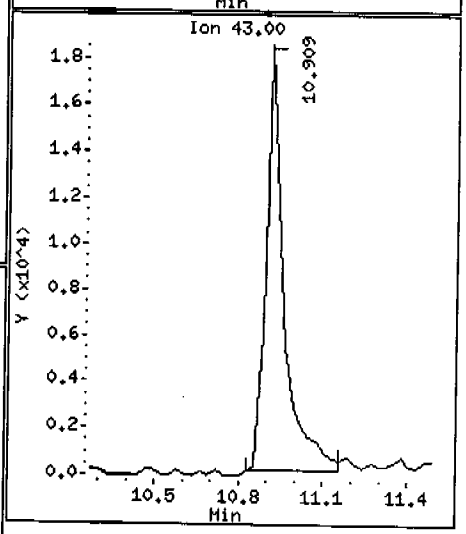
45 Acetone

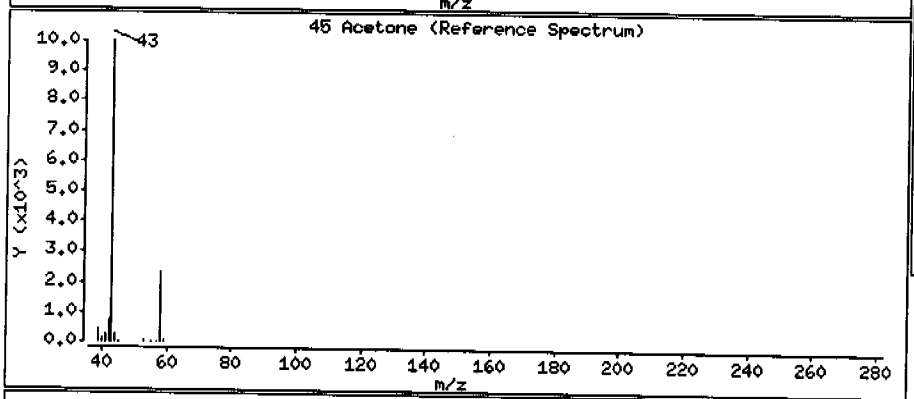
Concentration: 4.753 PPBV

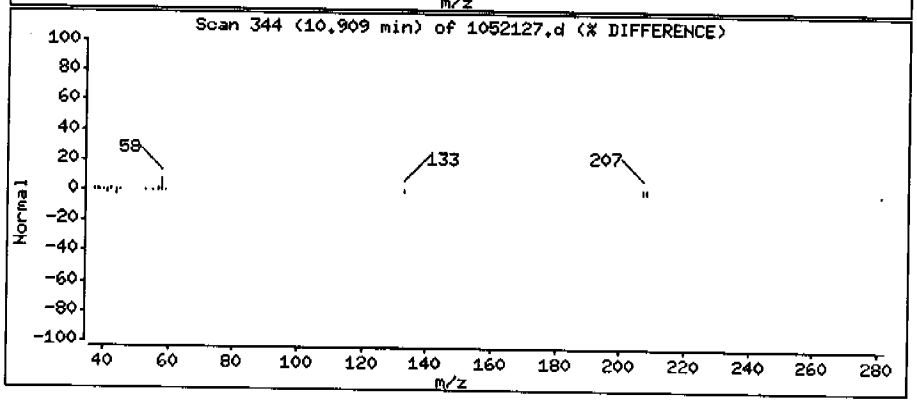












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

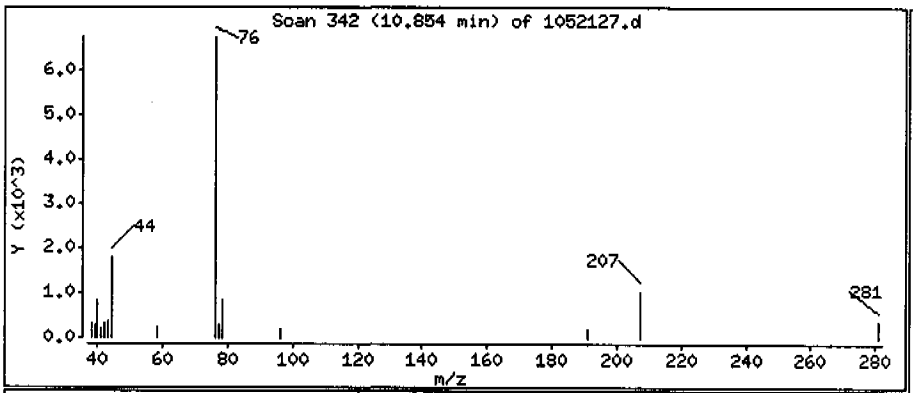
Operator: cb

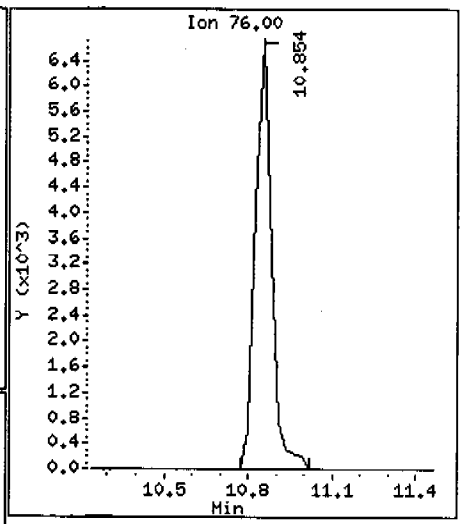
Column phase: RTx-624

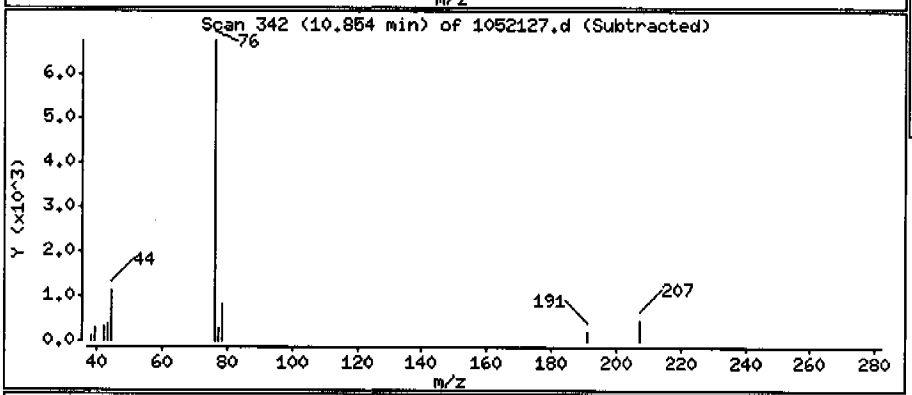
Column diameter: 0.53

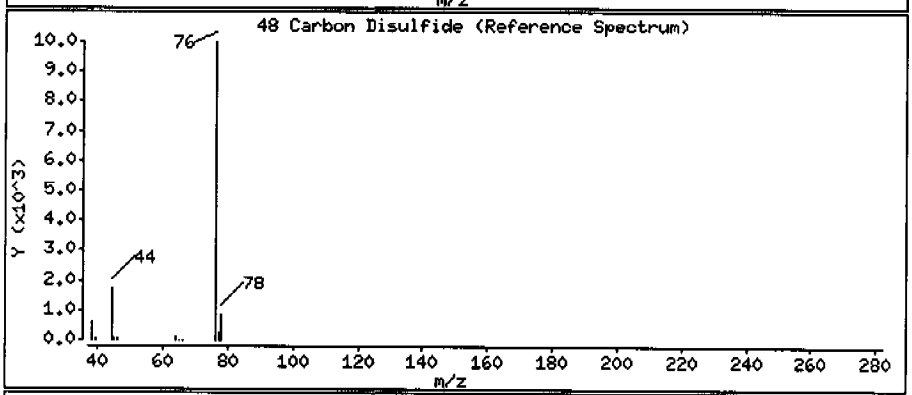
48 Carbon Disulfide

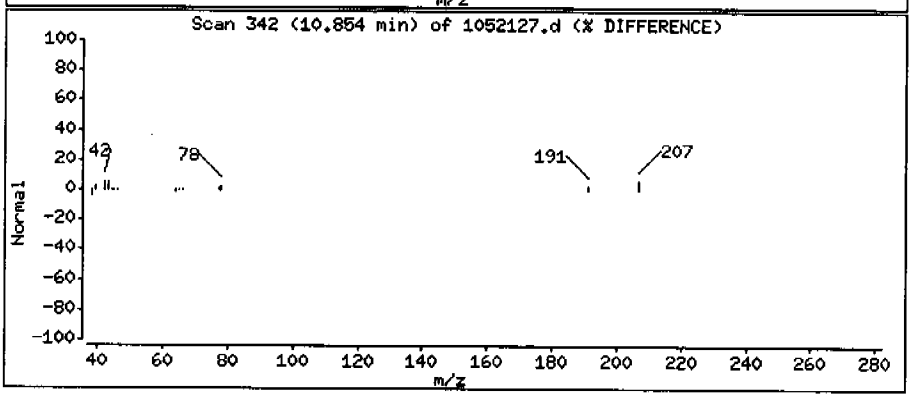
Concentration: 0.9321 PPBV











Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

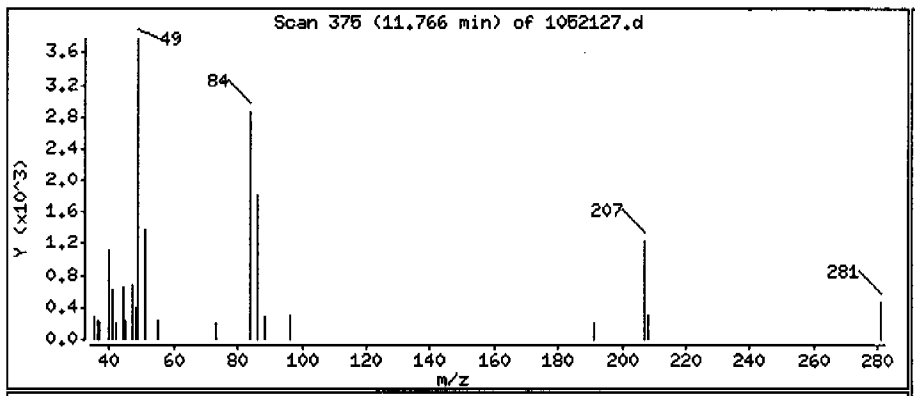
Operator: cb

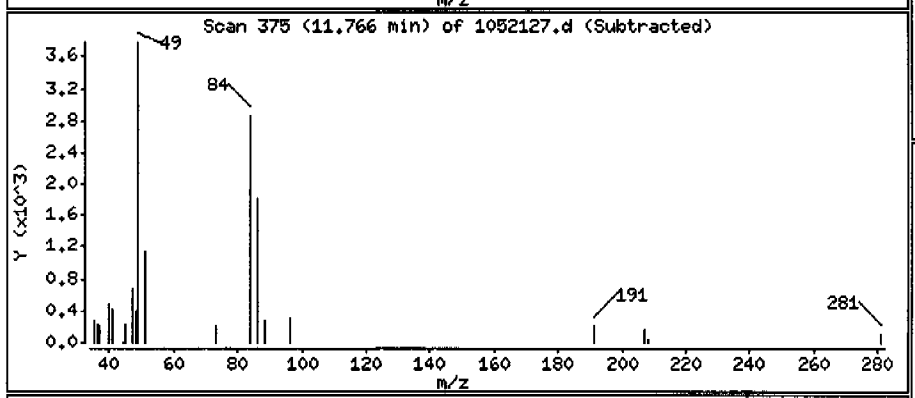
Column phase: RTx-624

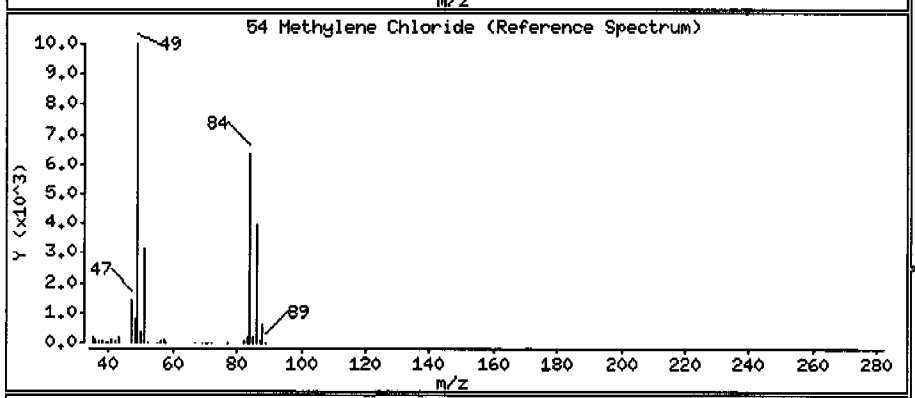
Column diameter: 0.53

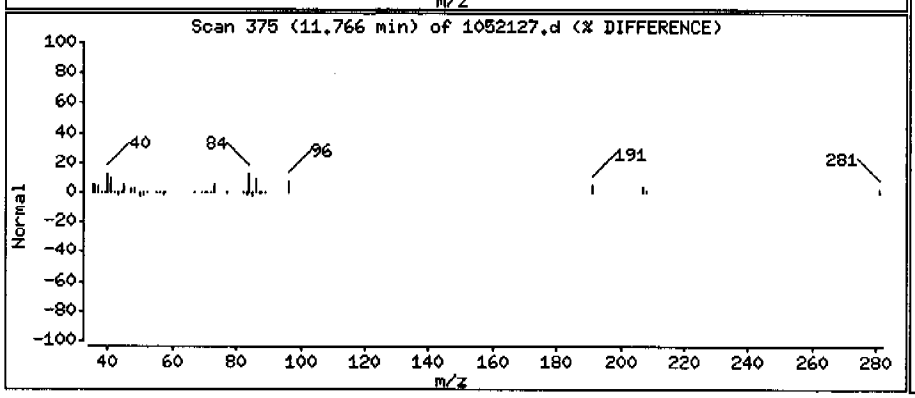
54 Methylene Chloride

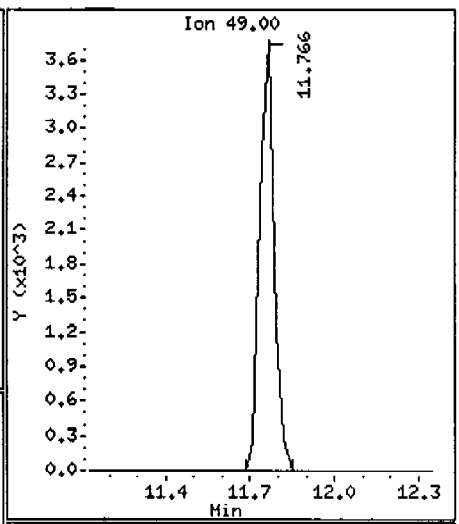
Concentration: 0.9025 PPBV

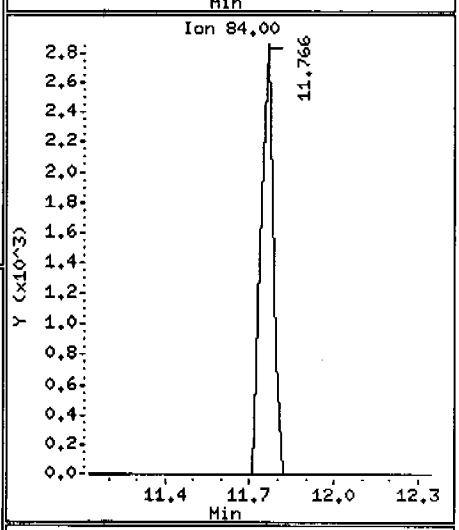


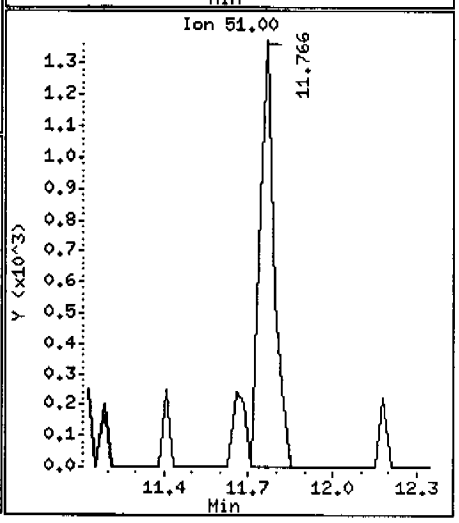












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Sample Info: 100mL #3735

Instrument: msd1.i

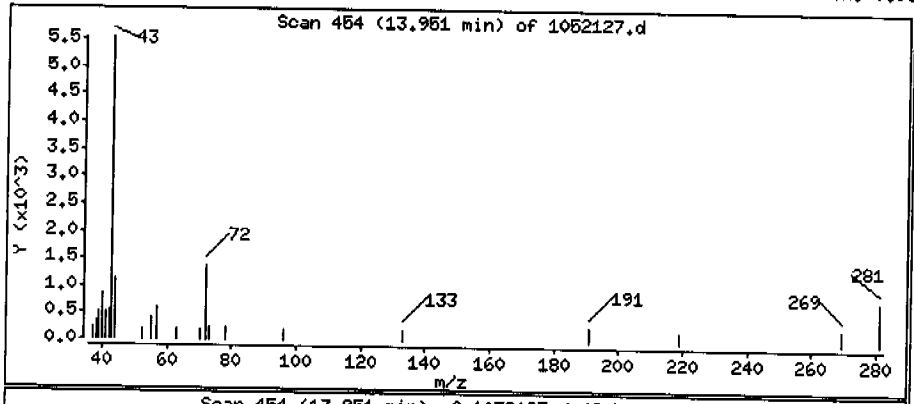
Operator: cb

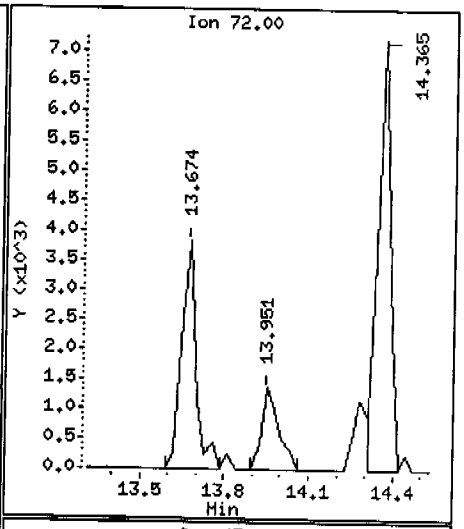
Column phase: RTx-624

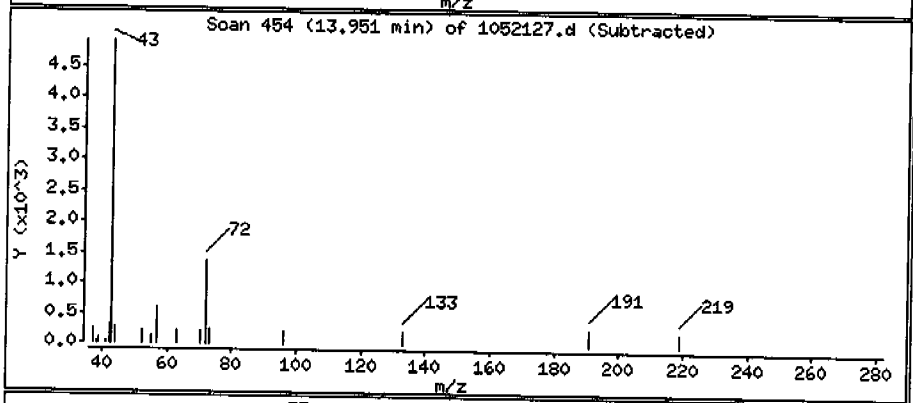
Column diameter: 0.53

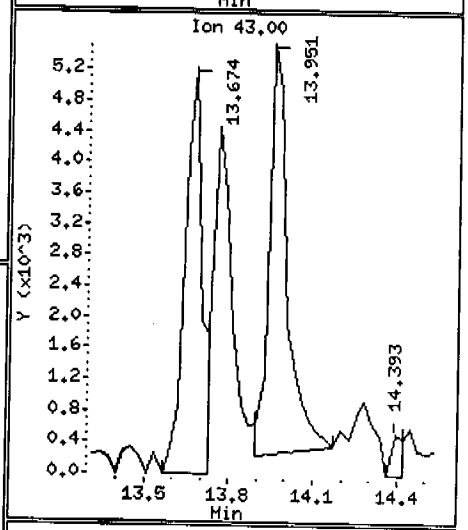
75 2-Butanone

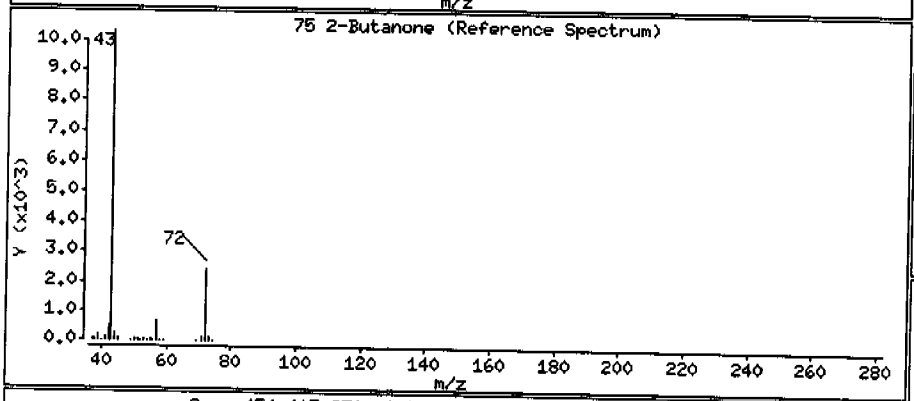
Concentration: 0.9637 PPBV

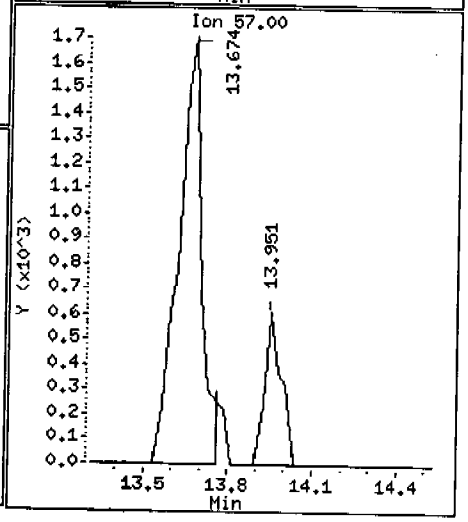


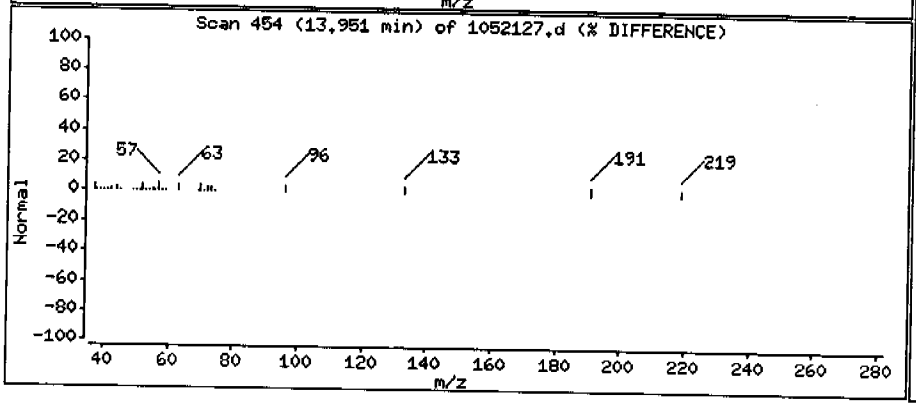












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

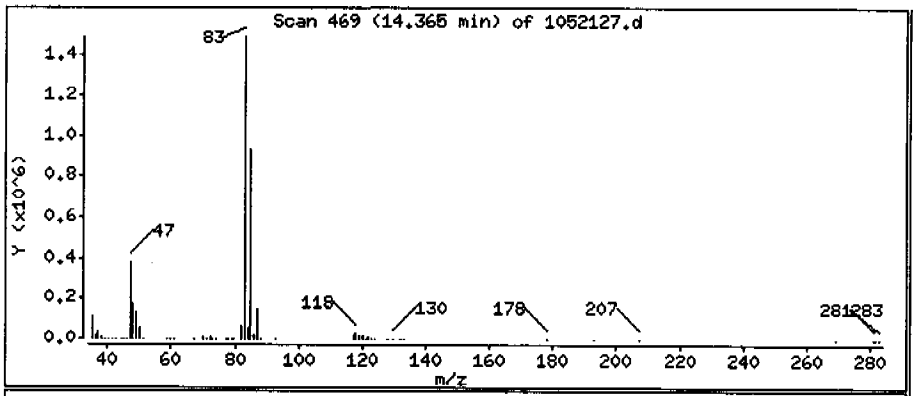
Operator: cb

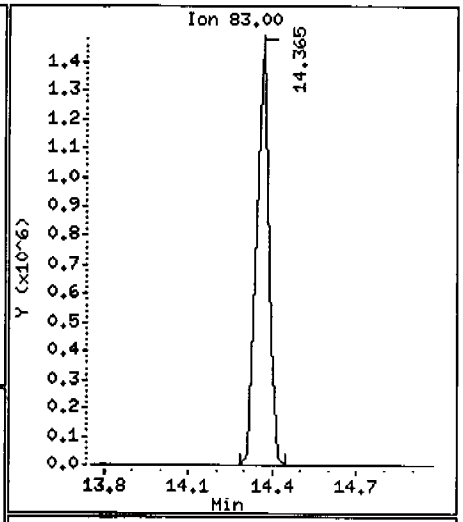
Column phase: RTx-624

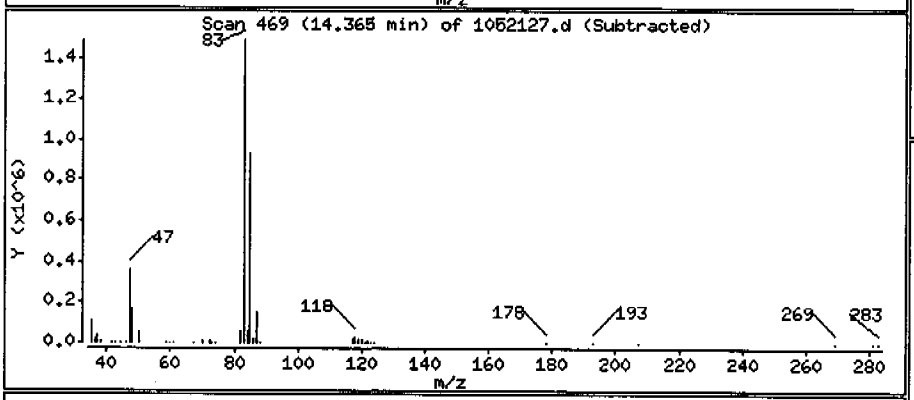
Column diameter: 0.53

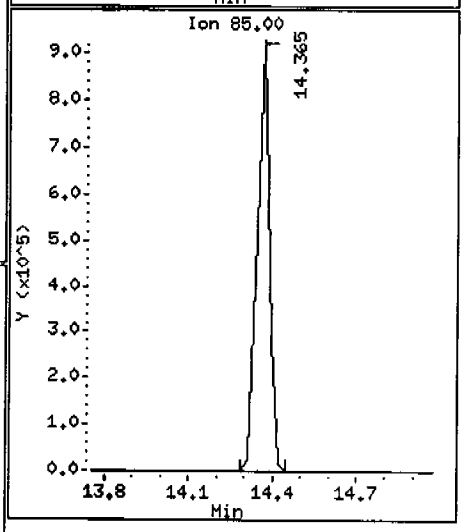
81 Chloroform

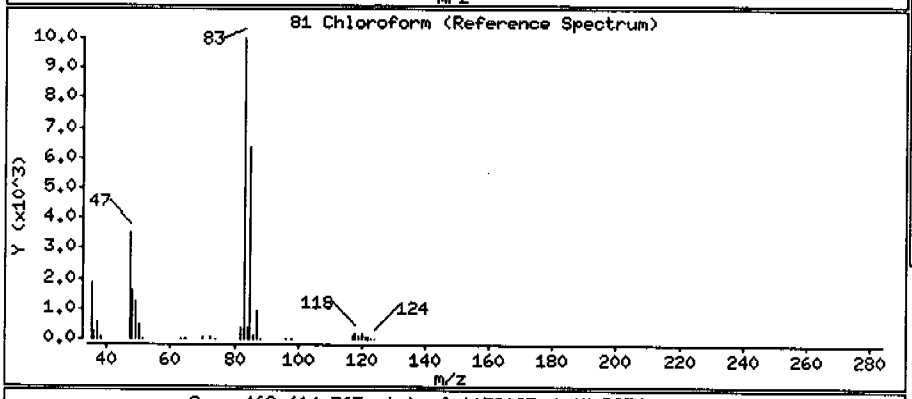
Concentration: 184.40 PPBV

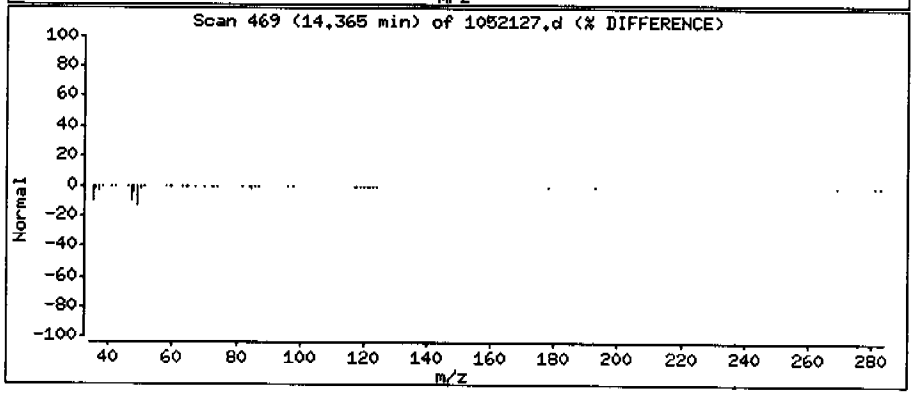












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

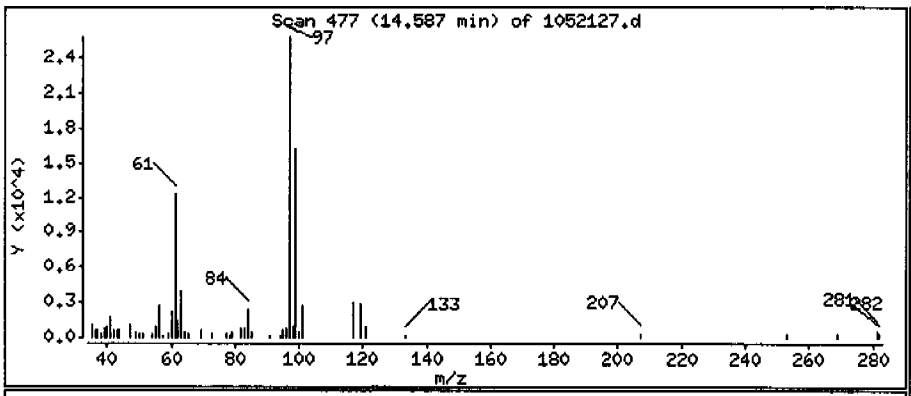
Operator: cb

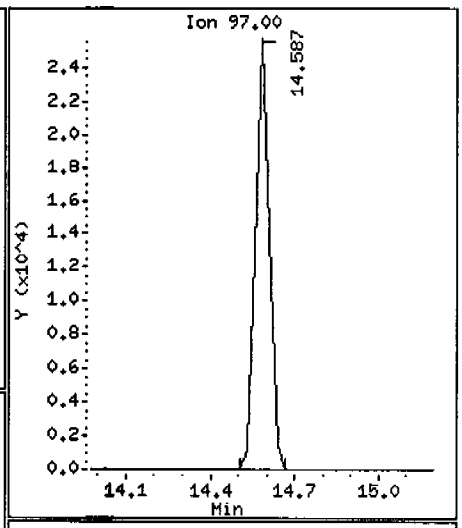
Column phase: RTx-624

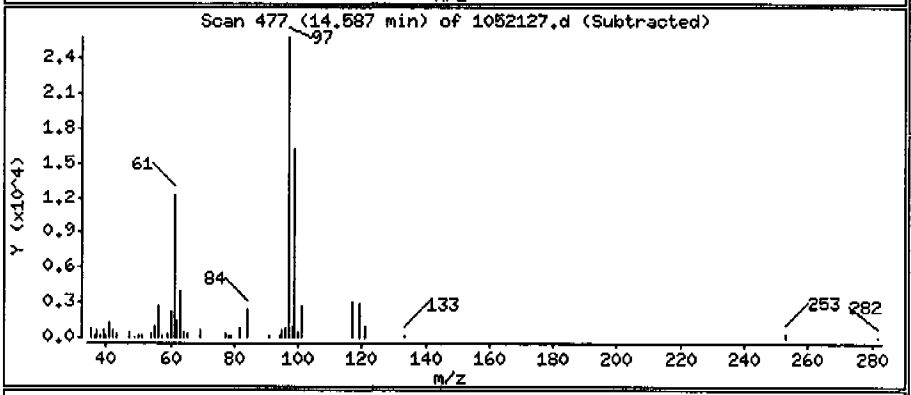
Column diameter: 0.53

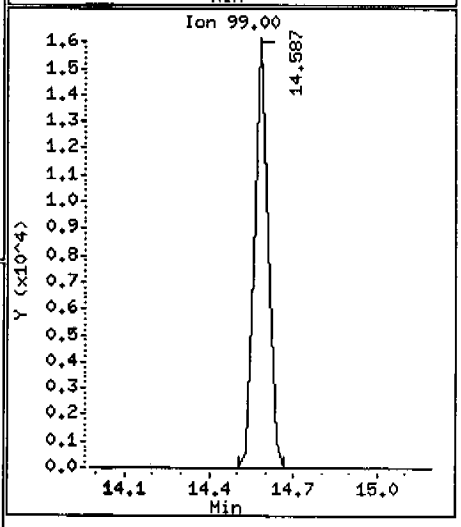
83 1,1,1-Trichloroethane

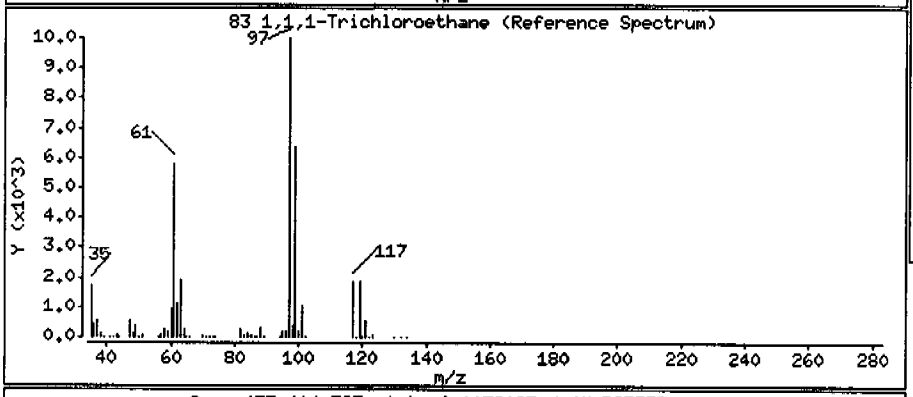
Concentration: 3.426 PPBV

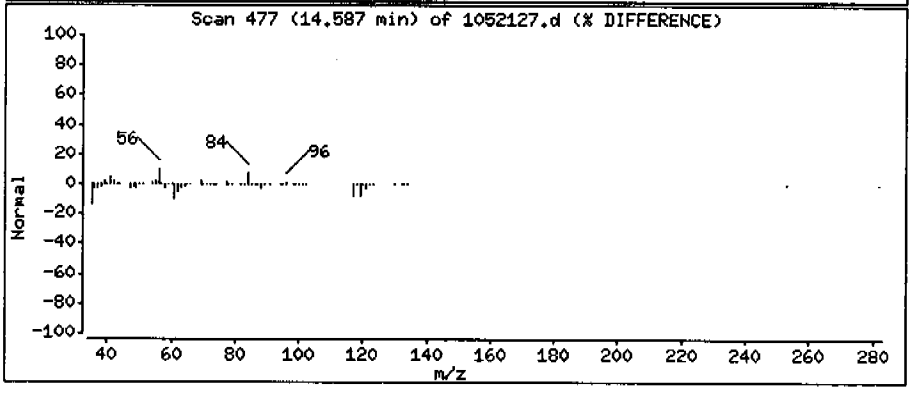












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

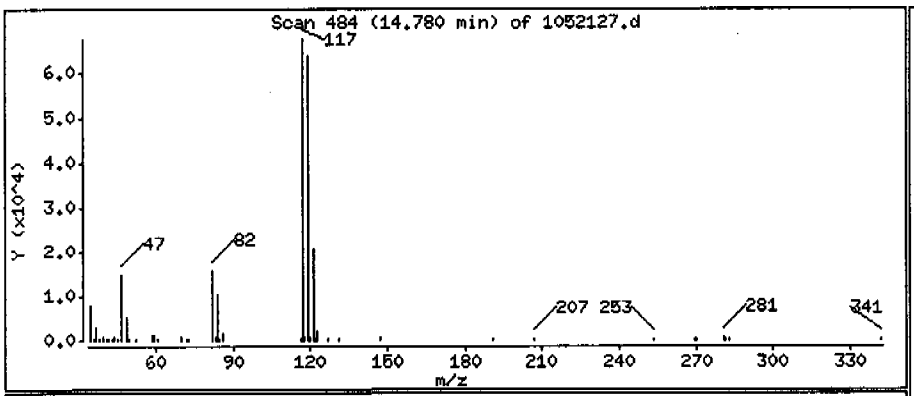
Operator: cb

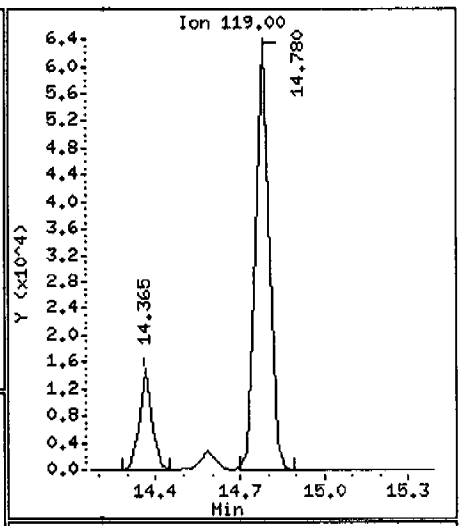
Column phase: RTx-624

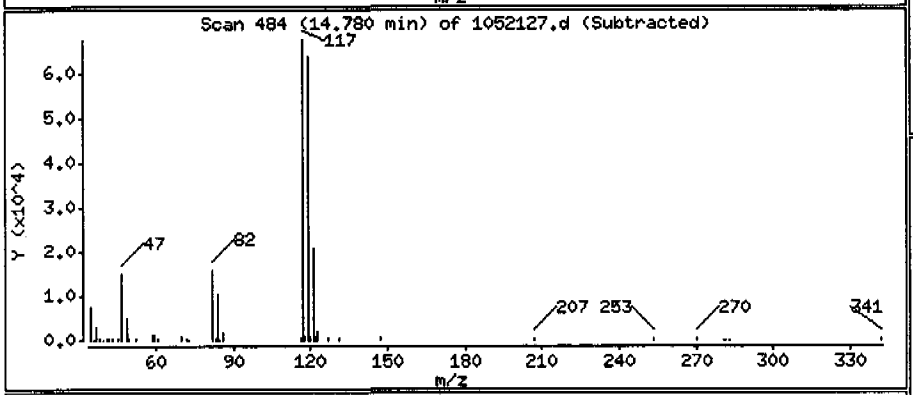
Column diameter: 0.53

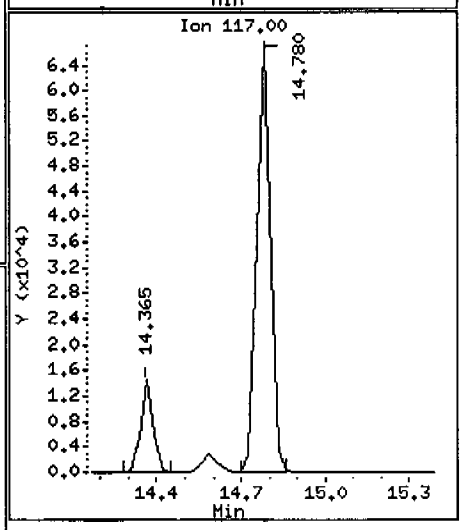
85 Carbon Tetrachloride

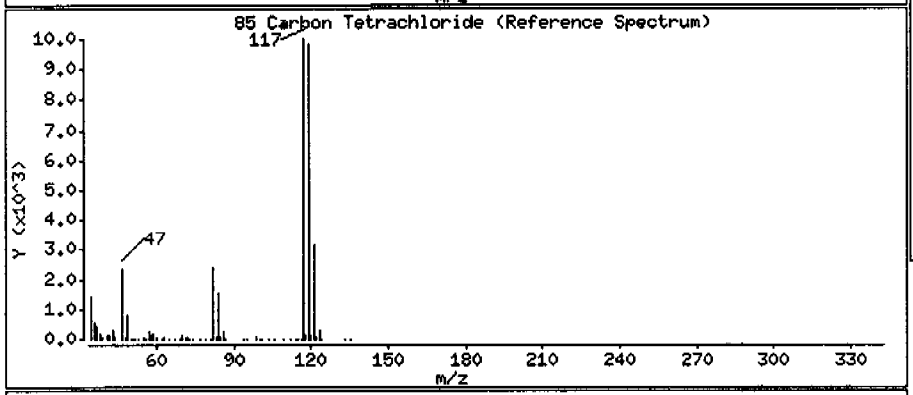
Concentration: 9.102 PPBV

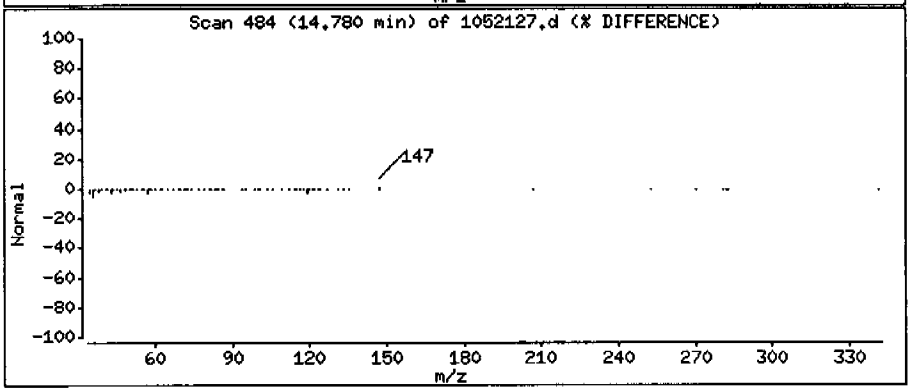












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

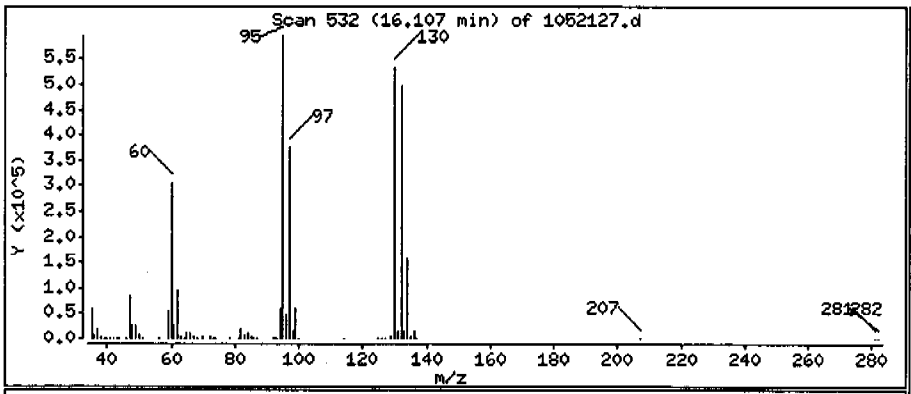
Operator: cb

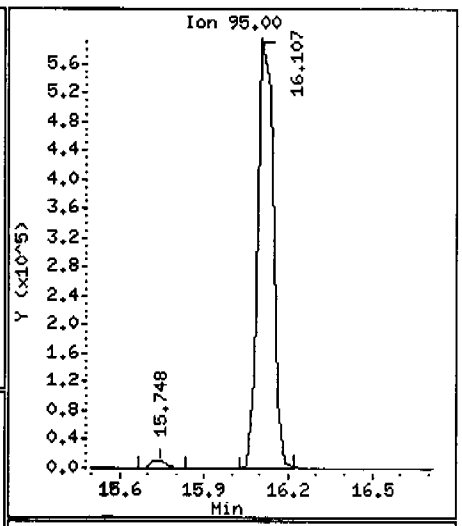
Column phase: RTx-624

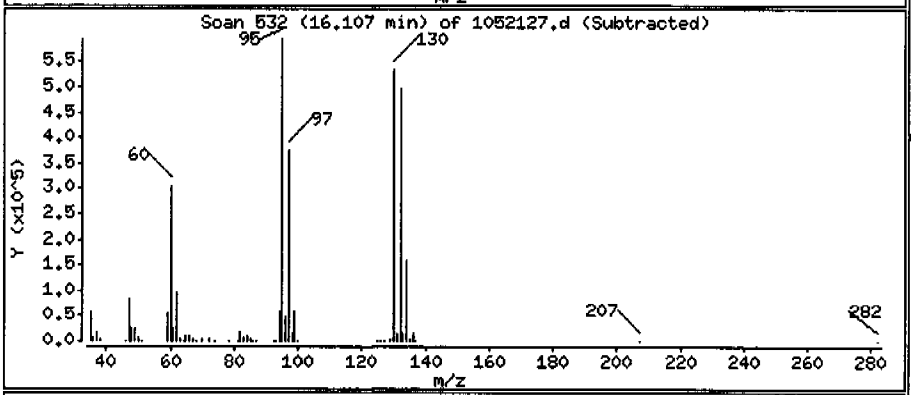
Column diameter: 0.53

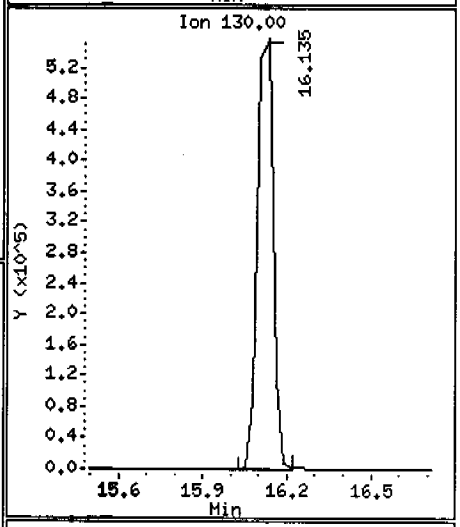
97 Trichloroethene

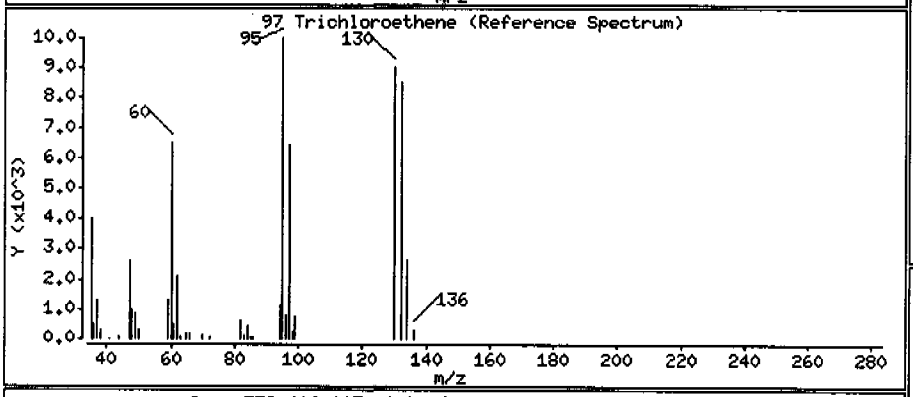
Concentration: 124.86 PPBV

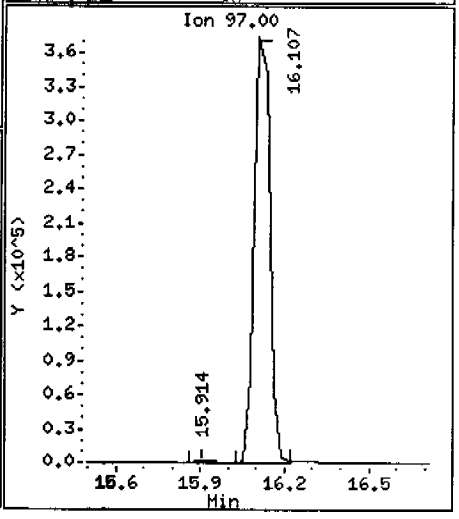


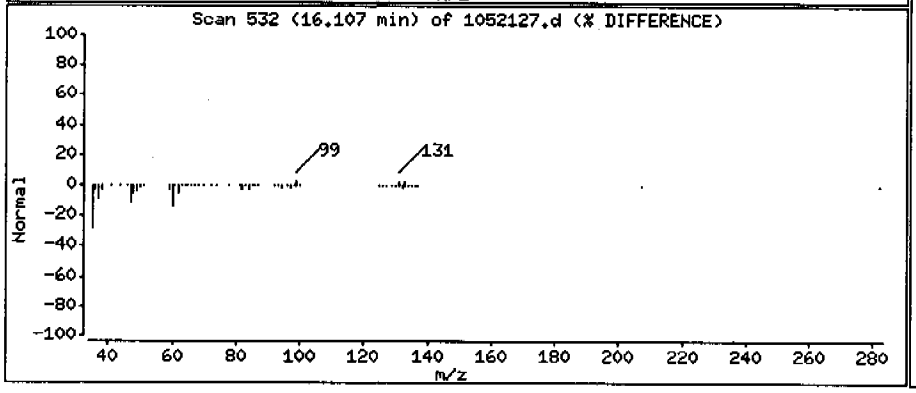












Data File: /chem/msd1.i/1-21may.b/1052127.d

Date : 22-MAY-2008 04:02

Client ID:

Instrument: msd1.i

Sample Info: 100mL #3735

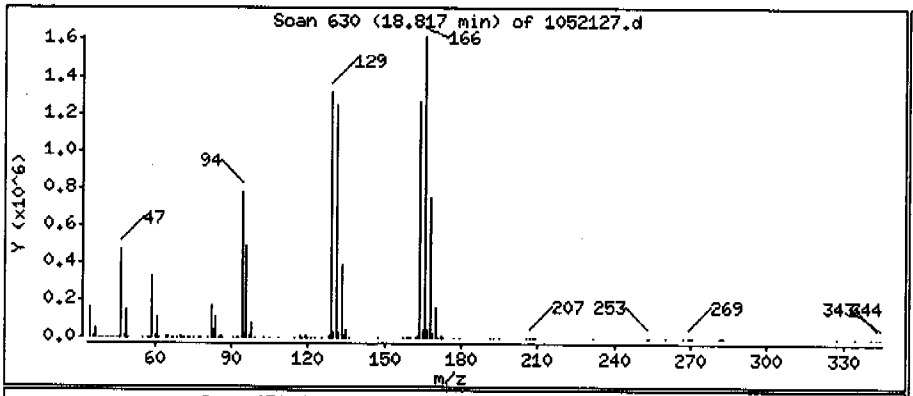
Operator: cb

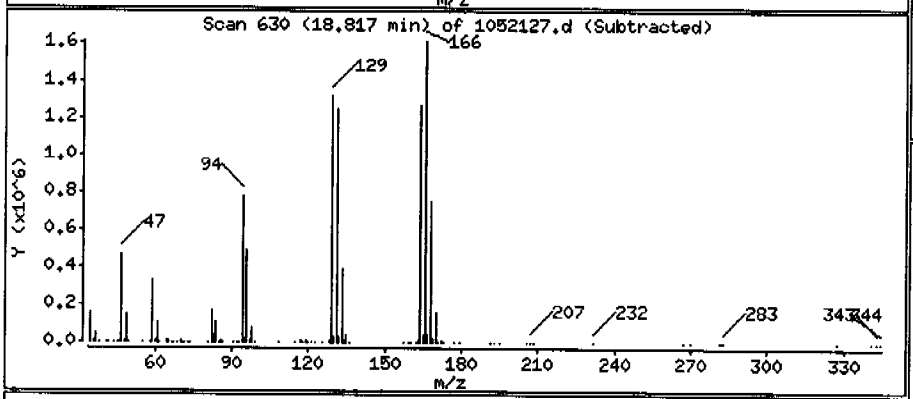
Column phase: RTx-624

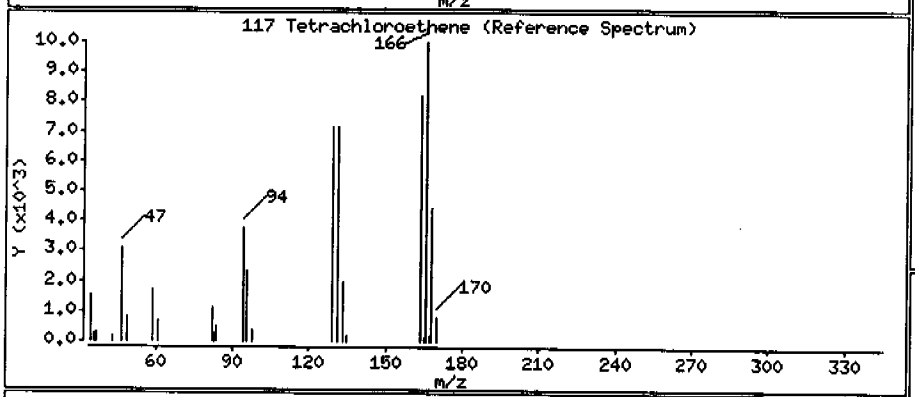
Column diameter: 0.53

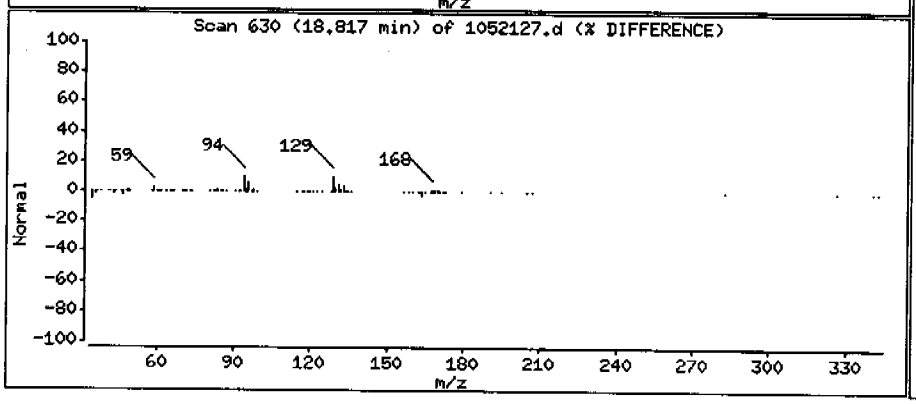
117 Tetrachloroethene

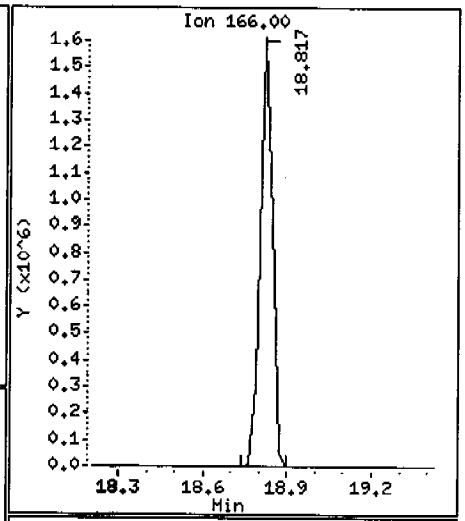
Concentration: 200.12 PPBV

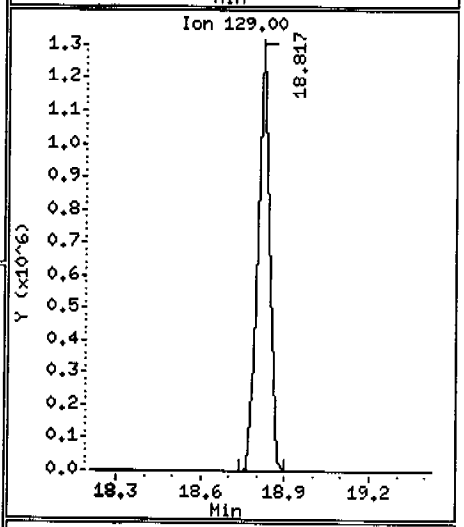


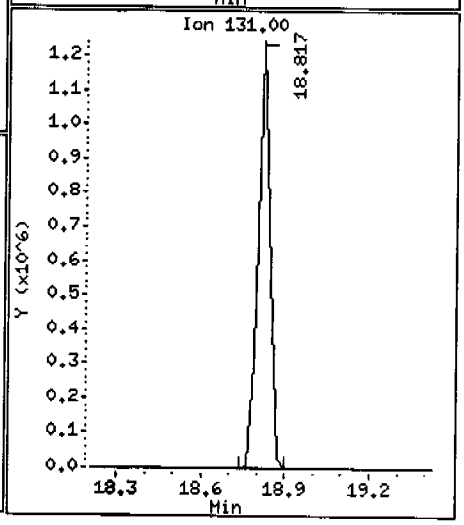












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12237

Lab ID#: 0805274-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	0.86	2.3	6.6	18
1,1-Dichloroethene	0.86	1.8	3.4	7.1
Methylene Chloride	0.86	6.3	3.0	22
Chloroform	0.86	120	4.2	610
1,1,1-Trichloroethane	0.86	4.5	4.7	24
Carbon Tetrachloride	0.86	22	5.4	140
Trichloroethene	0.86	82	4.6	440
Bromodichloromethane	0.86	0.99	5.7	6.7
Tetrachloroethene	0.86	48	5.8	320

0026

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12237

Lab ID#: 0805274-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted]052128 Date of Collection: 5/9/08
Dil. Factor: 1.71 Date of Analysis: 5/22/08 04:42 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	2.3	6.6	18
1,1-Dichloroethene	0.86	1.8	3.4	7.1
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.86	6.3	3.0	22
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	120	4.2	610
1,1,1-Trichloroethane	0.86	4.5	4.7	24
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	22	5.4	140
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	82	4.6	440
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	0.99	5.7	6.7
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	48	5.8	320

0027

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12237

Lab ID#: 0805274-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] Date of Collection: 5/9/08
Dil. Factor: [redacted] Date of Analysis: 5/22/08 04:42 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	96	70-130

0028

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052128.d
Lab Smp Id: 0805274-02A
Inj Date : 22-MAY-2008 04:42
Operator : cb Inst ID: msd1.i
Smp Info : 100mL #34344
Misc Info : 6.5"Hg --> 5psi
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	290655	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	228240			28.93- 128.93	78.53
14.255	14.282 (1.000)	49	532169			132.03- 232.03	183.09
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1455279	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	229567			0.00- 65.76	15.77
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.034	20.033 (1.000)	117	1684918	25.0000		80.00- 120.00	100.00
20.006	20.033 (1.000)	82	968812			8.42- 108.42	57.50
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.139 (1.060)	65	448195	23.1069	23.107	80.00- 120.00	100.00
15.140	15.139 (1.060)	67	236304			6.04- 106.04	52.72
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.987	17.987 (1.142)	98	1634397	24.7864	24.786	80.00- 120.00	100.00
17.960	17.987 (1.140)	70	173858			0.00- 60.35	10.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.987 (1.140)	100	1081857			15.45- 115.45	66.19
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.526 (1.075)	174	868383	24.0860	24.086	80.00- 120.00	100.00
21.527	21.526 (1.075)	95	1392846			110.56- 210.56	160.40
21.527	21.526 (1.075)	176	827427			45.40- 145.40	95.28
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	29393	1.36220	2.329	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	16877			12.64- 112.64	57.42
10.577	10.577 (0.741)	101	38673			83.95- 183.95	131.57
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	31168	1.04190	1.782	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	16694			3.86- 103.86	53.56
10.522	10.522 (0.737)	98	11586			0.00- 85.09	37.18
54 Methylene Chloride					CAS #: 75-09-2		
11.766	11.739 (0.824)	49	96139	3.71005	6.344	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	60203			13.77- 113.77	62.62
11.766	11.739 (0.824)	51	31172			0.00- 79.96	32.42
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	3022049	73.5033	125.69	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1852796			12.14- 112.14	61.31
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.586 (1.021)	97	112976	2.61879	4.478	80.00- 120.00	100.00
14.587	14.586 (1.021)	99	74665			13.23- 113.23	66.09
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	515771	12.9261	22.104	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	539926			53.03- 153.03	104.68
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1460411	48.0936	82.240	80.00- 120.00	100.00
16.135	16.107 (1.025)	130	1418013			46.53- 146.53	97.10
16.135	16.107 (1.025)	97	951393			14.98- 114.98	65.15
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	27673	0.58147	0.9943	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	17032			11.42- 111.42	61.55
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	1155539	27.9743	47.836	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
117 Tetrachloroethene (continued)								
18.817	18.817	(0.939)	129	906967			27.45- 127.45	78.49
18.817	18.817	(0.939)	131	857261			24.33- 124.33	74.19

Data File: /chem/msd1.i/1-21may.b/1052128.d
Report Date: 27-May-2008 15:02

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052128.d
Lab Smp Id: 0805274-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.5"Hg --> 5psi

Calibration Date: 21-MAY-2008
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	290655	-6.40
95 1,4-Difluorobenze	1646495	987897	2305093	1455279	-11.61
123 Chlorobenzene-d5	1819110	1091466	2546754	1684918	-7.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-21may.b/1052128.d
Report Date: 27-May-2008 15:02

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-21may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805274-02A
Level: LOW
Operator: cb
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.5"Hg --> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.107	92.43	70-130
$ 111 Toluene-d8	25.000	24.786	99.15	70-130
$ 136 Bromofluorobenzene	25.000	24.086	96.34	70-130

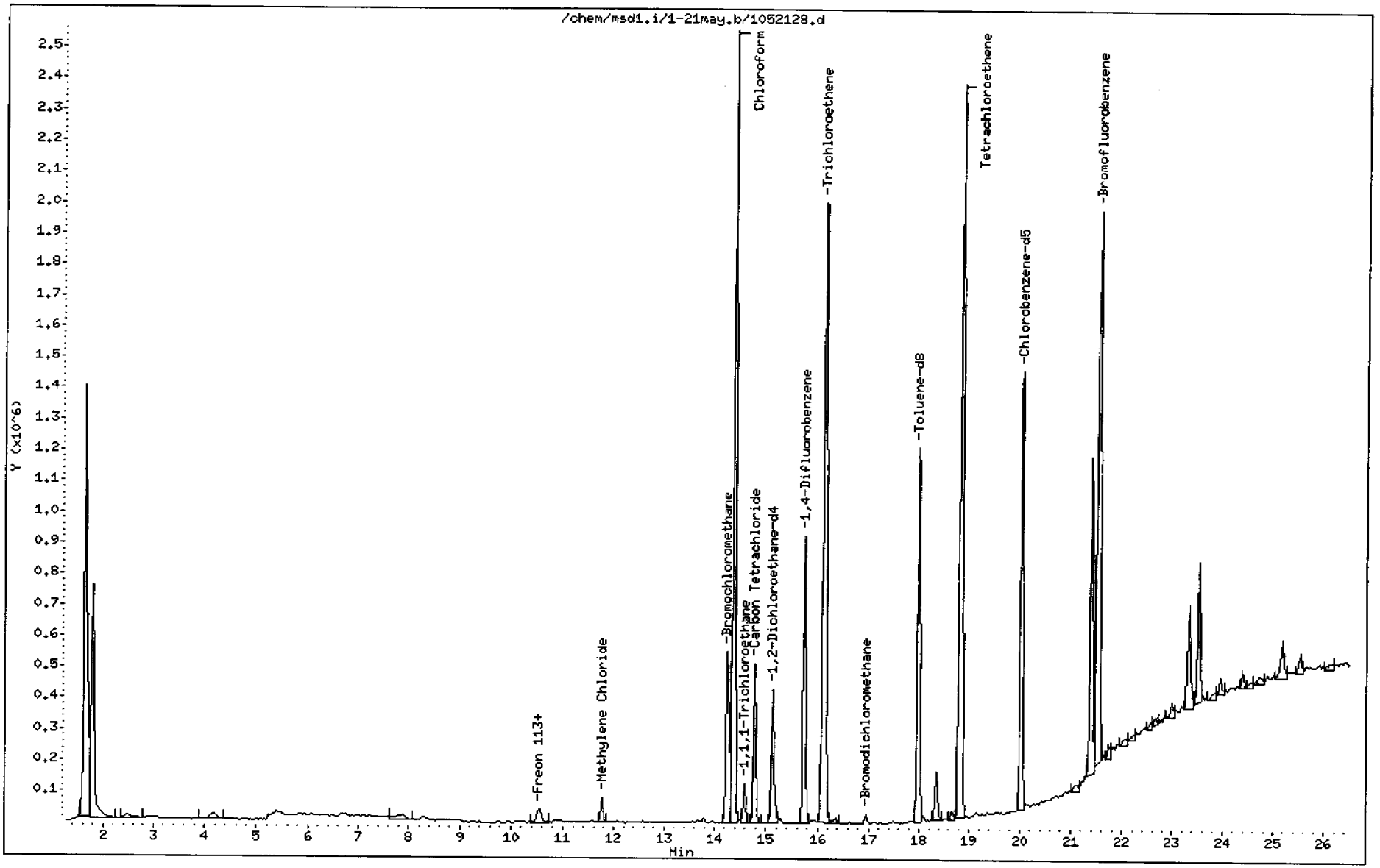
Data File: /chem/msd1.i/1-21may.b/1052128.d
Date : 22-MAY-2008 04:42
Client ID:
Sample Info: 100mL #34344

Column phase: RTx-624

Instrument: msd1.i

Operator: cb
Column diameter: 0.53

0034



Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

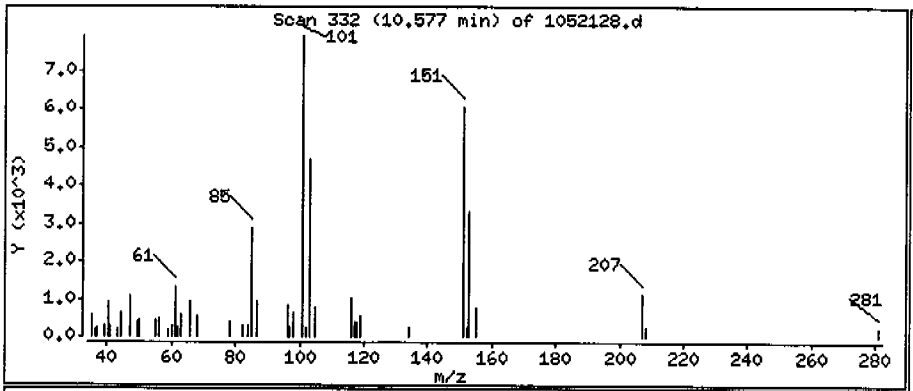
Operator: cb

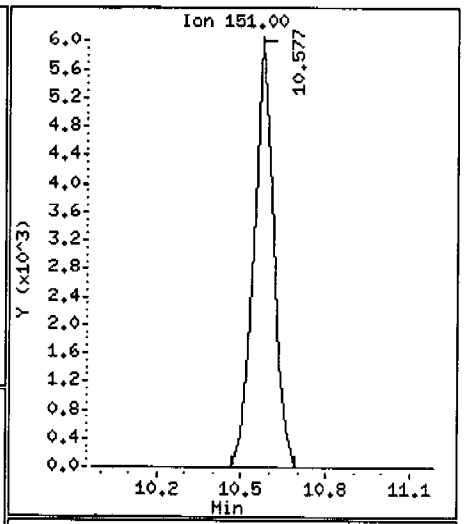
Column phase: RTx-624

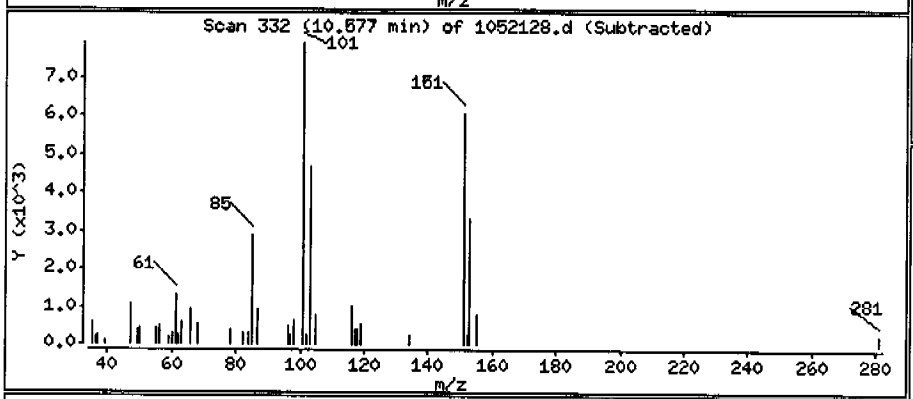
Column diameter: 0.53

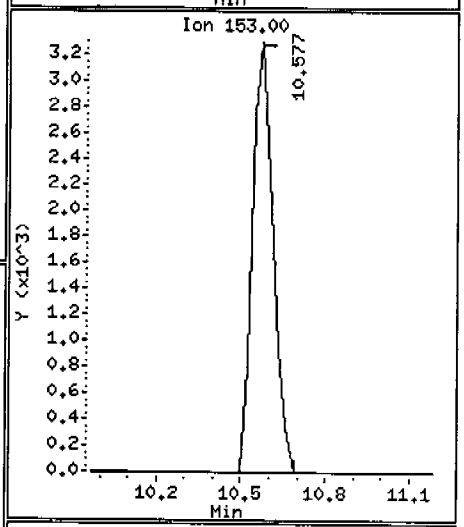
43 Freon 113

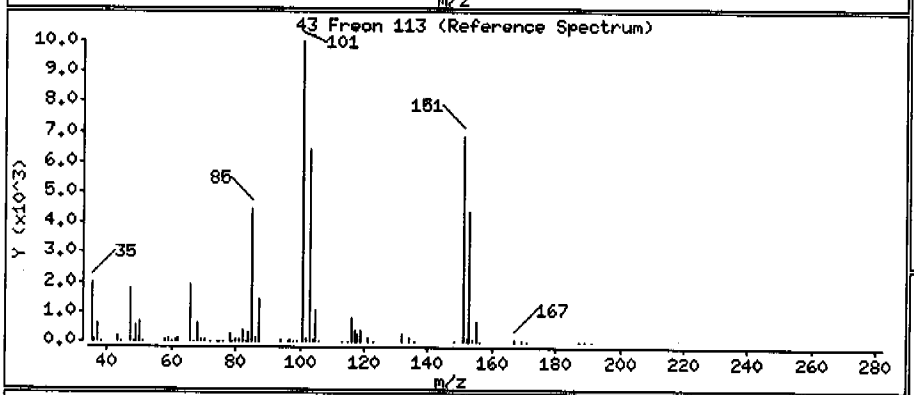
Concentration: 2.329 PPBV

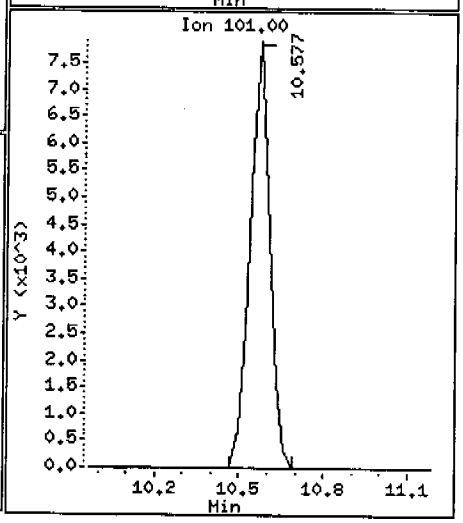


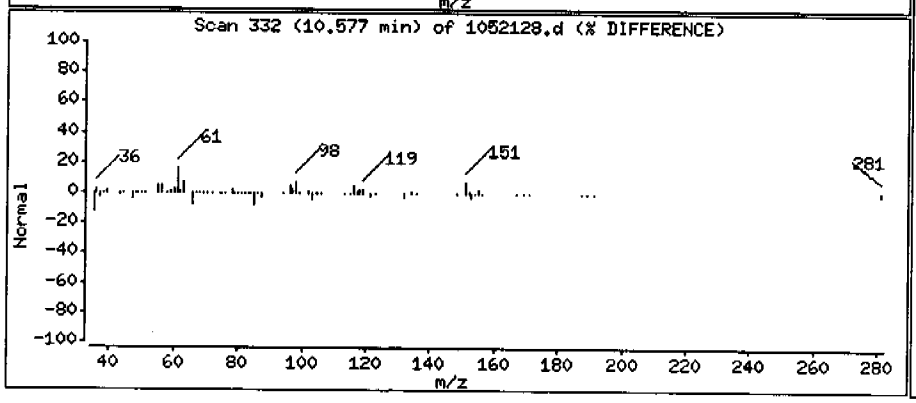












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

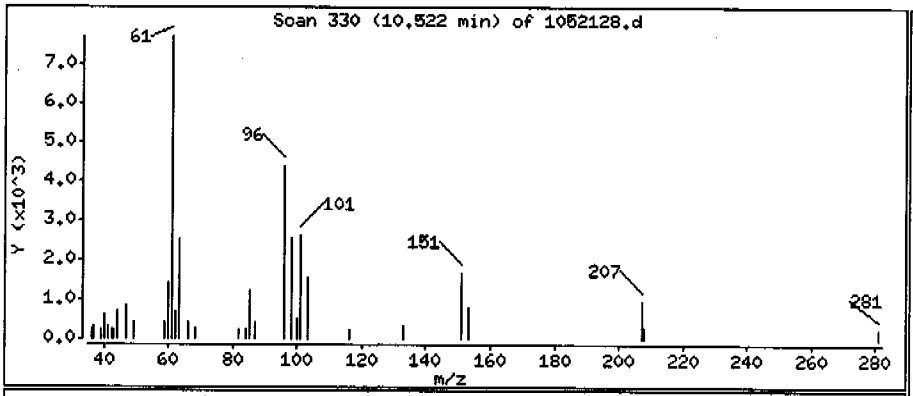
Operator: cb

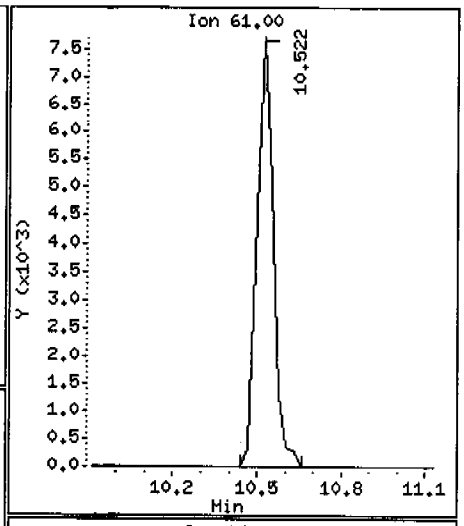
Column phase: RTx-624

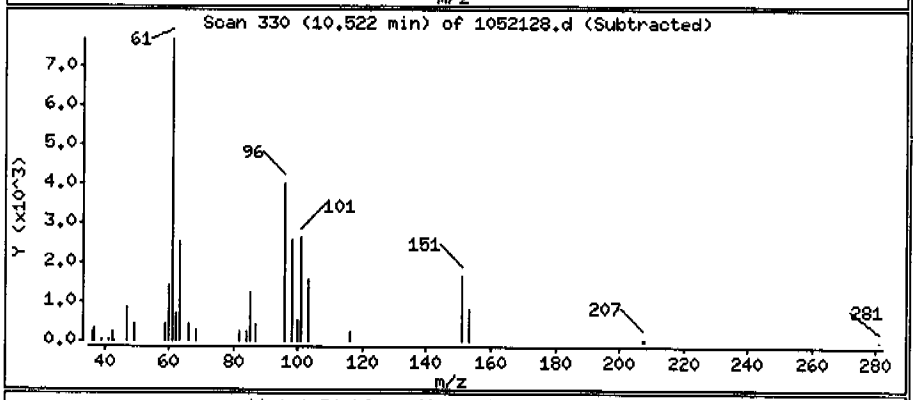
Column diameter: 0.53

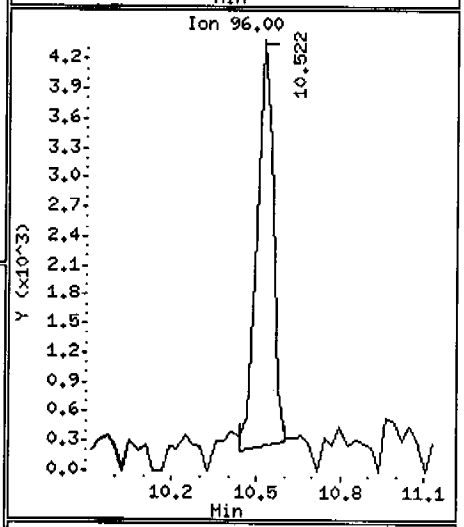
44 1,1-Dichloroethene

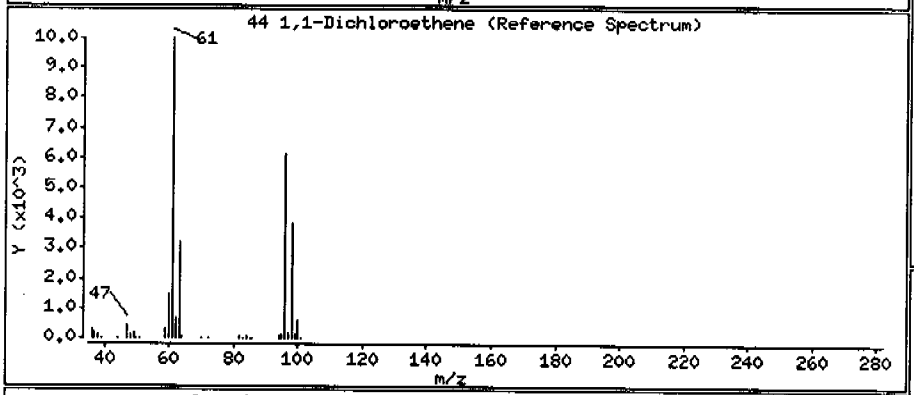
Concentration: 1.782 PPBV

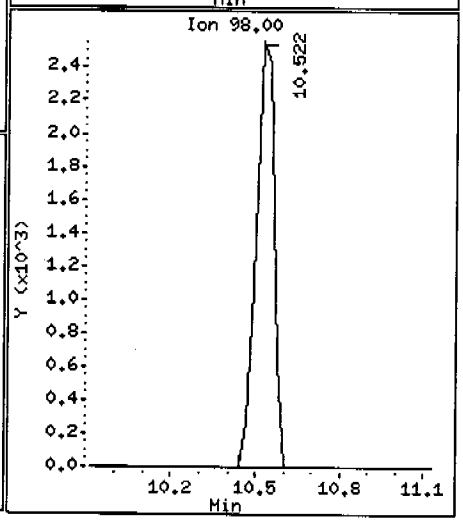


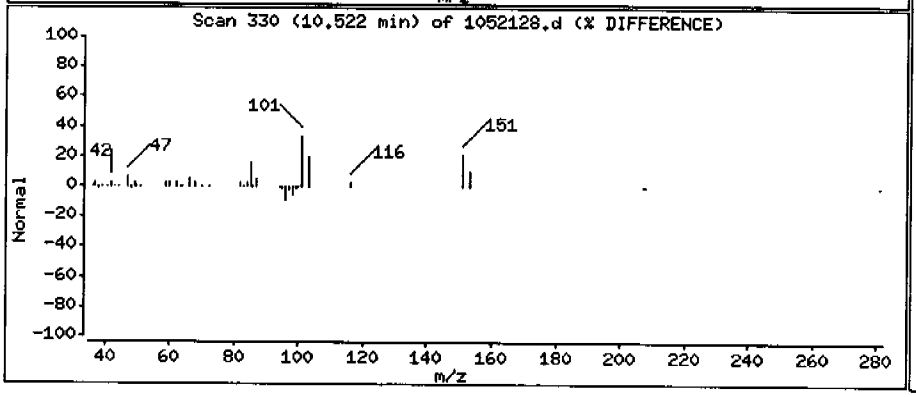












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

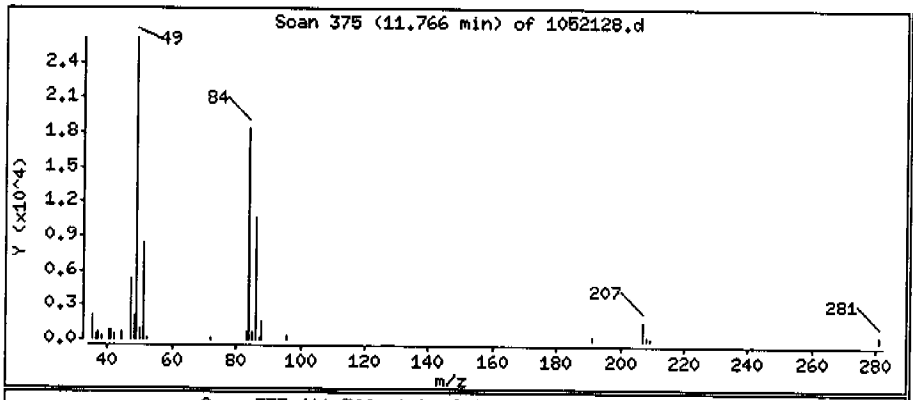
Operator: cb

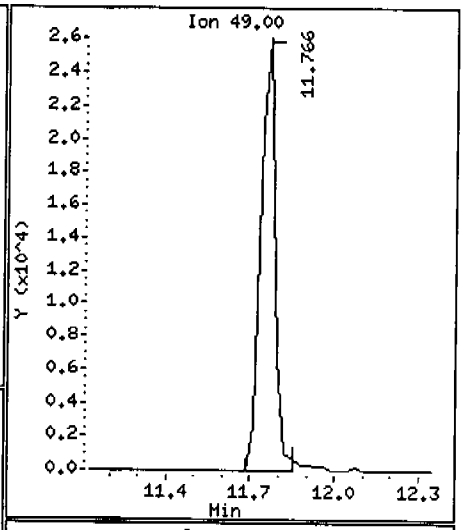
Column phase: RTx-624

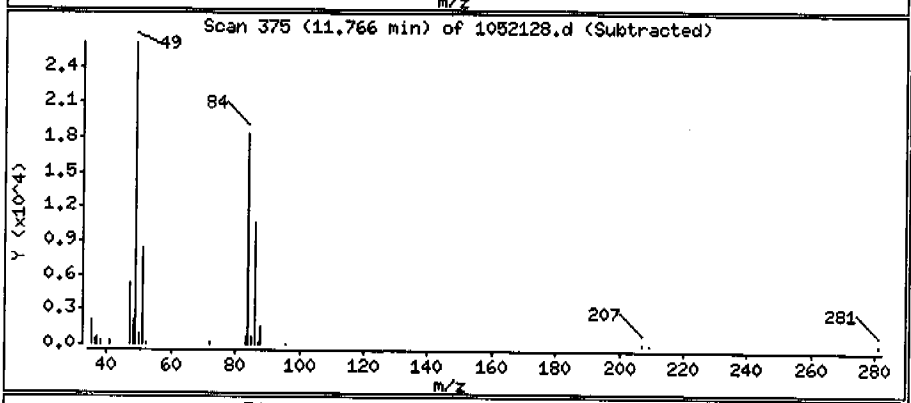
Column diameter: 0.53

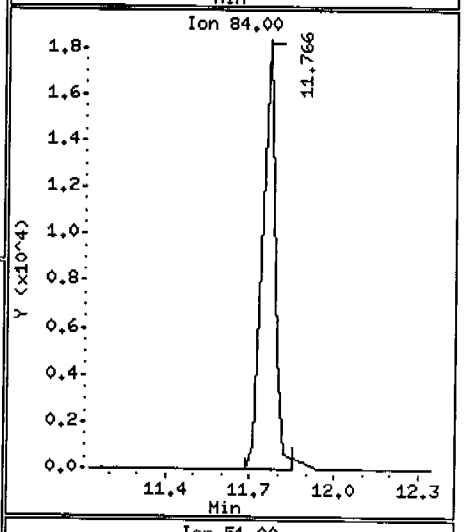
54 Methylene Chloride

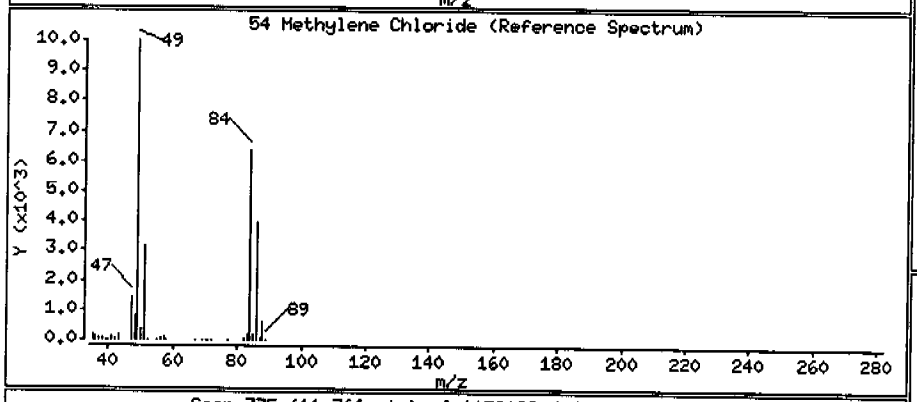
Concentration: 6.344 PPBV

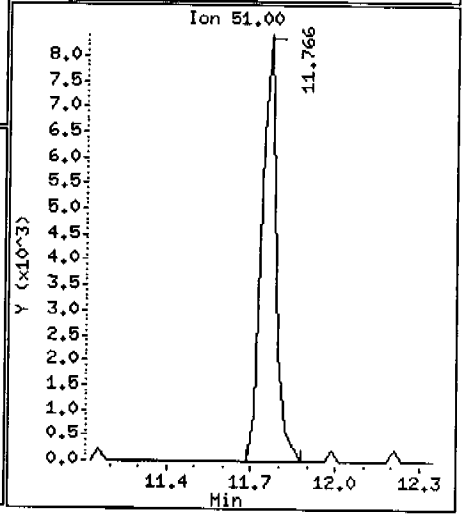


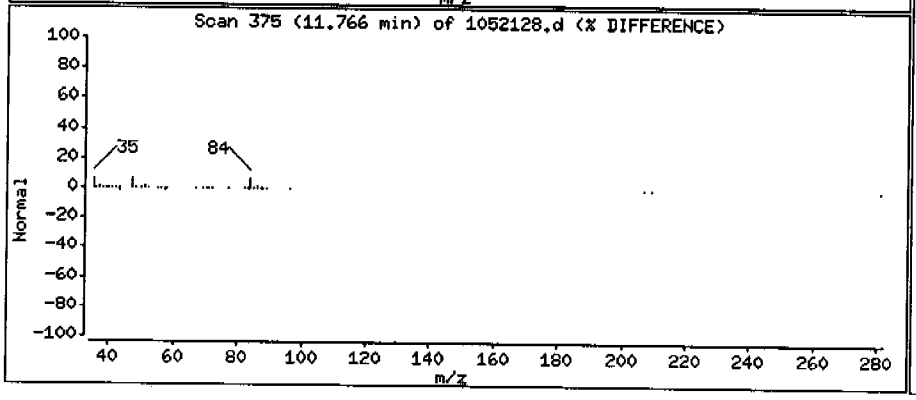












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

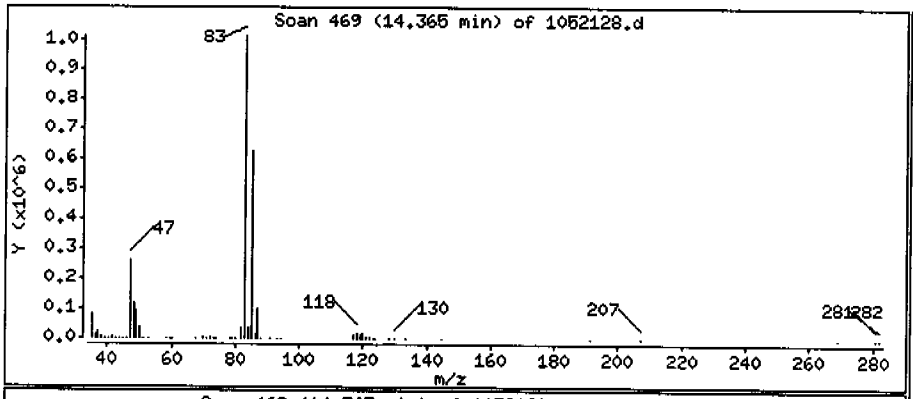
Operator: cb

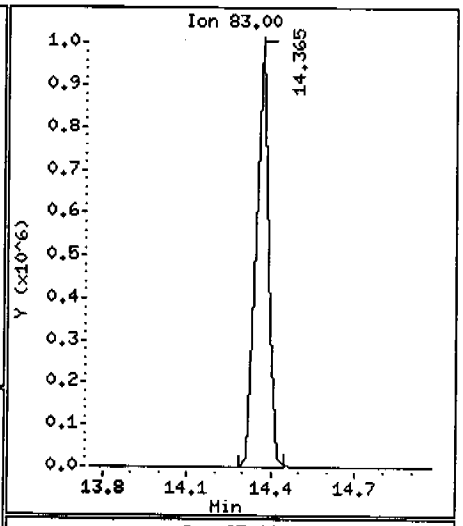
Column phase: RTx-624

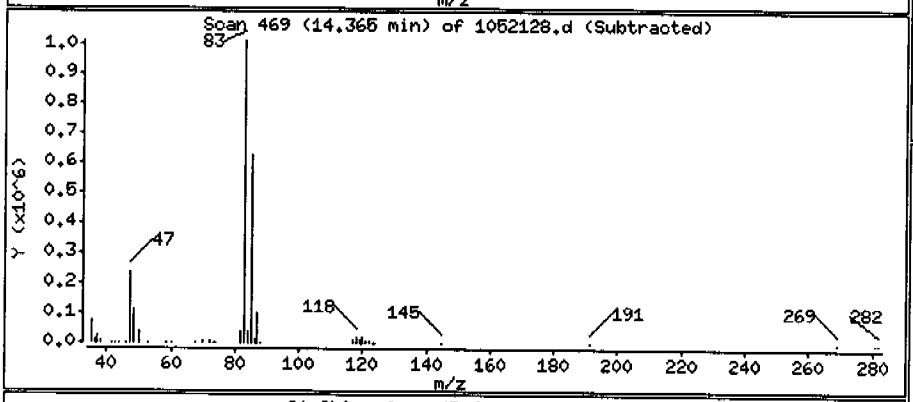
Column diameter: 0.53

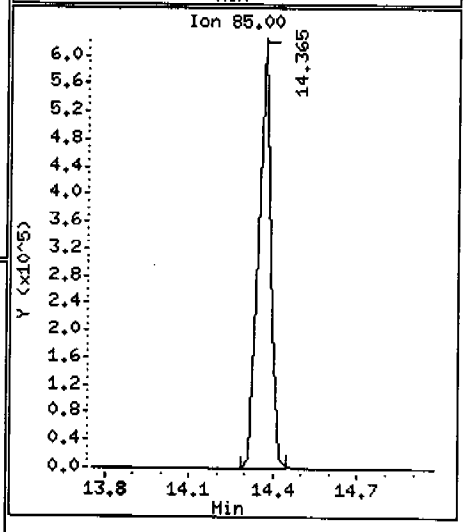
81 Chloroform

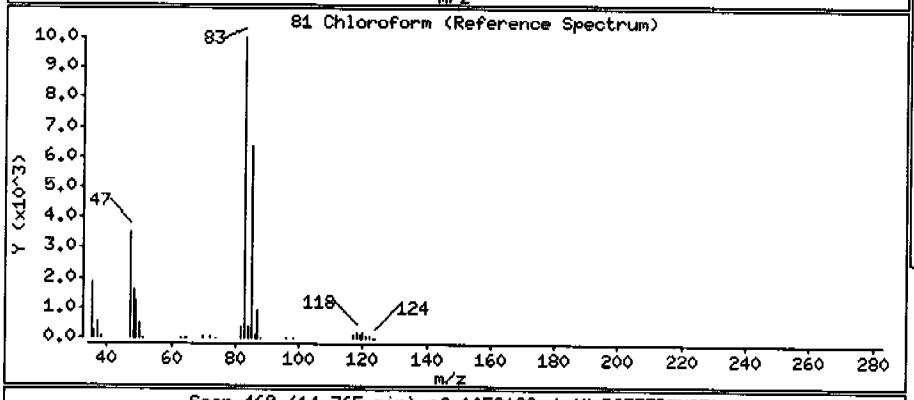
Concentration: 125.69 PPBV

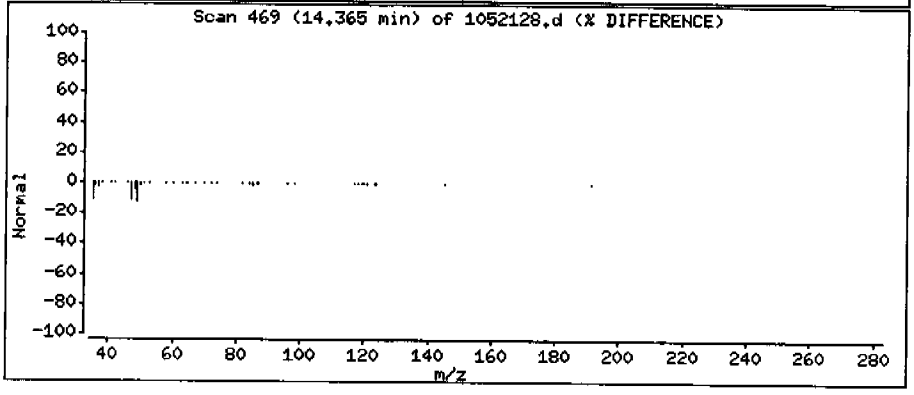












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

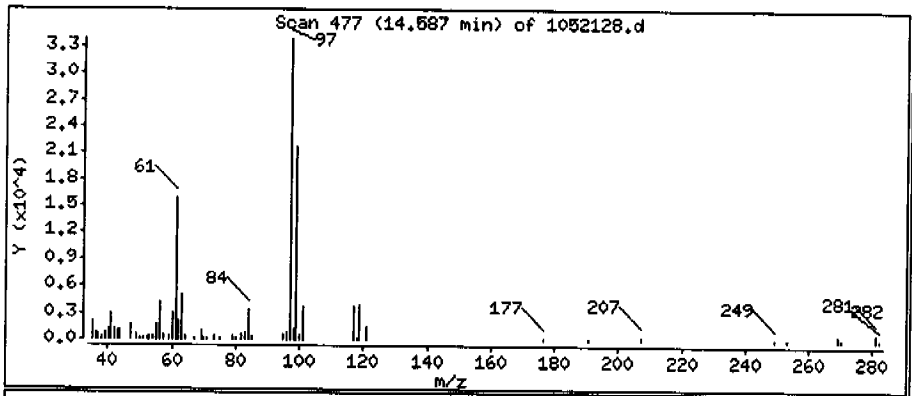
Operator: cb

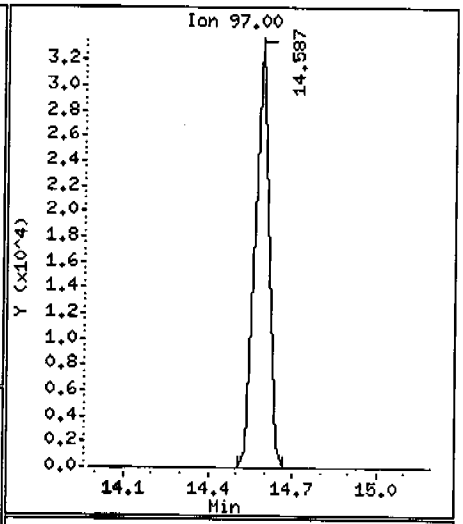
Column phase: RTx-624

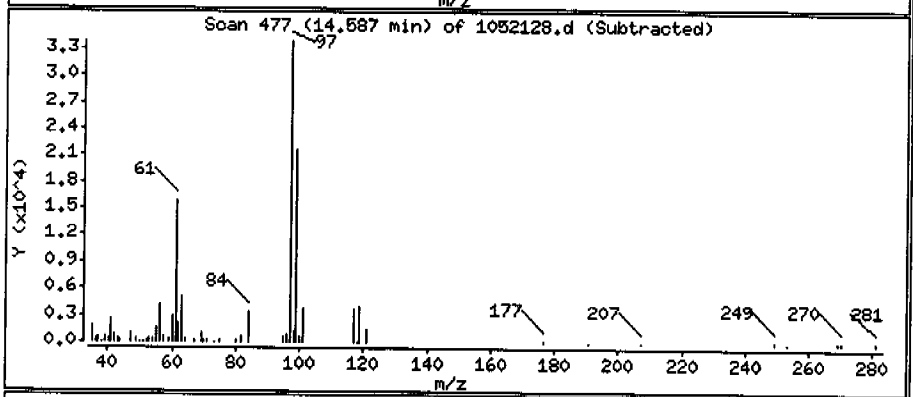
Column diameter: 0.53

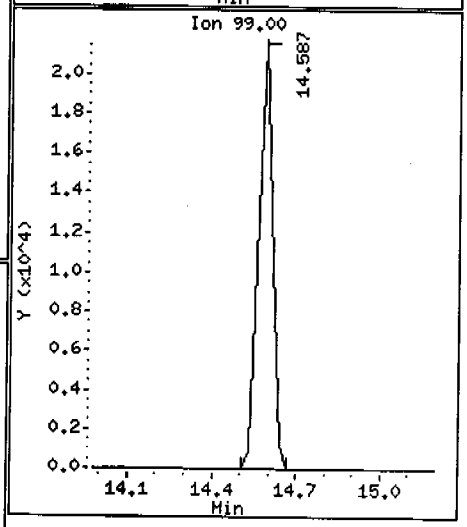
83 1,1,1-Trichloroethane

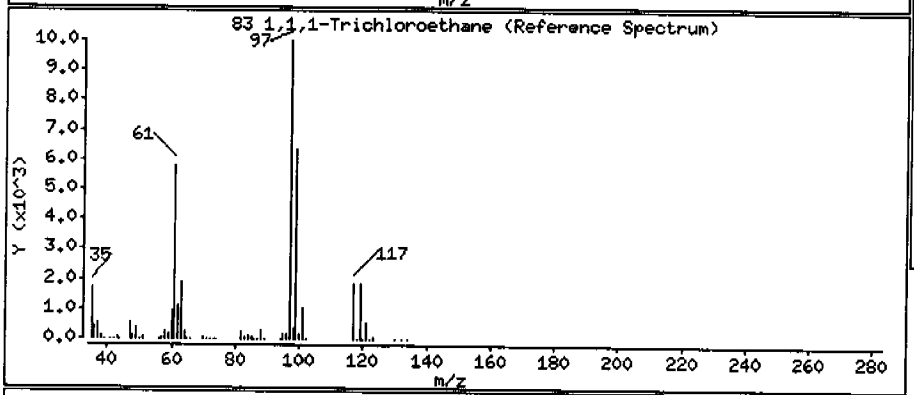
Concentration: 4.478 PPBV

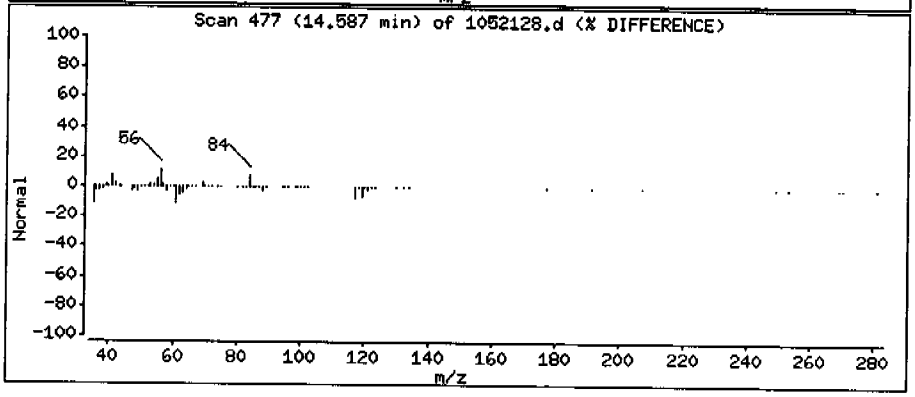












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Sample Info: 100mL #34344

Instrument: msd1.i

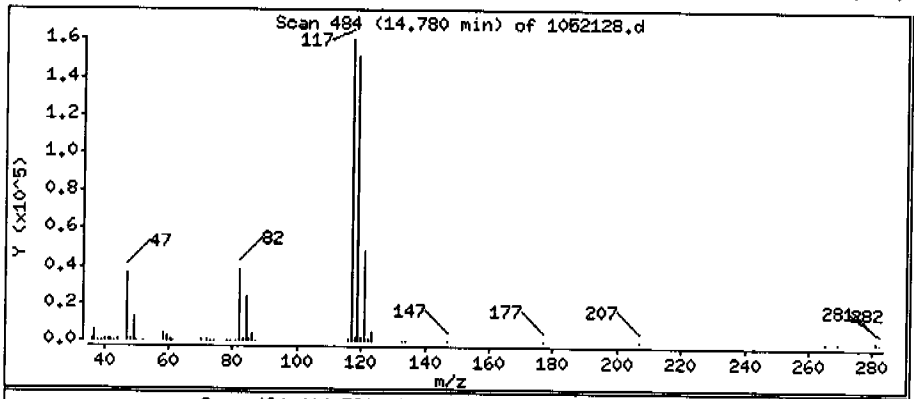
Operator: cb

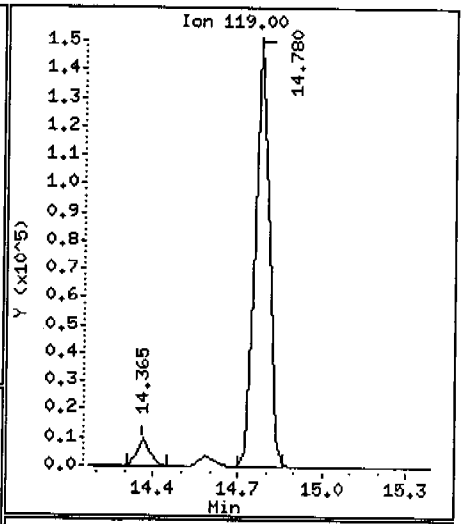
Column phase: RTx-624

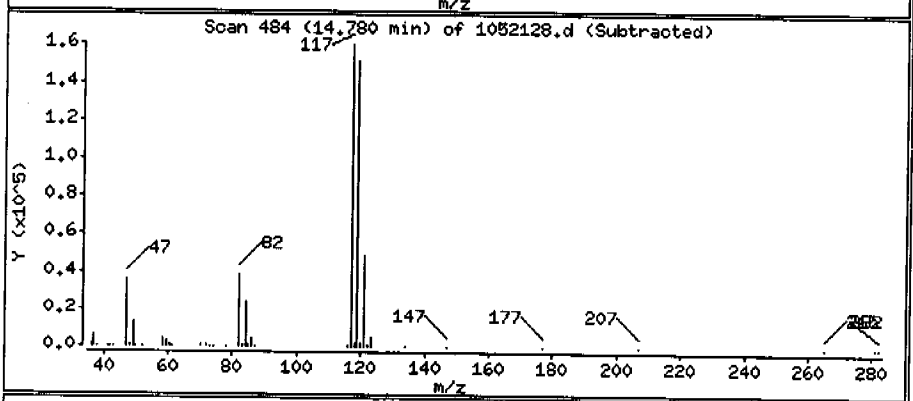
Column diameter: 0.53

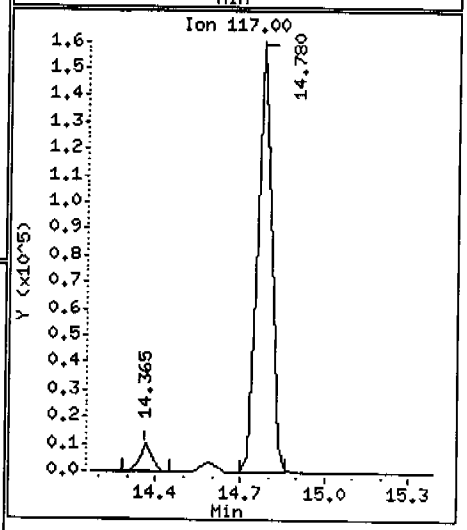
85 Carbon Tetrachloride

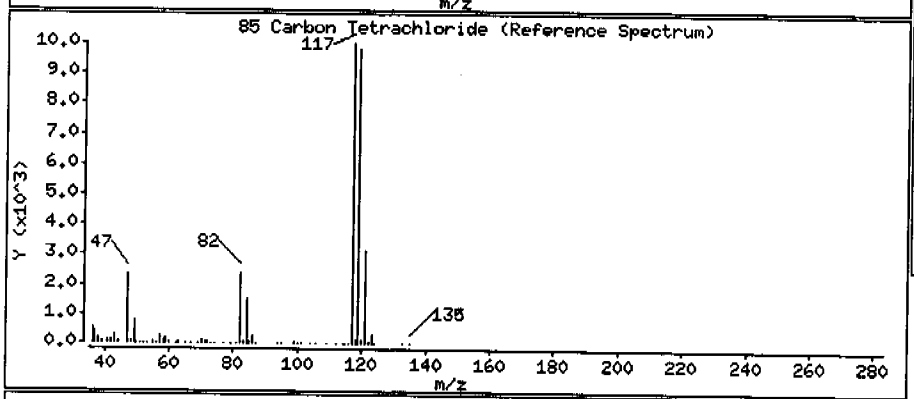
Concentration: 22.104 PPBV

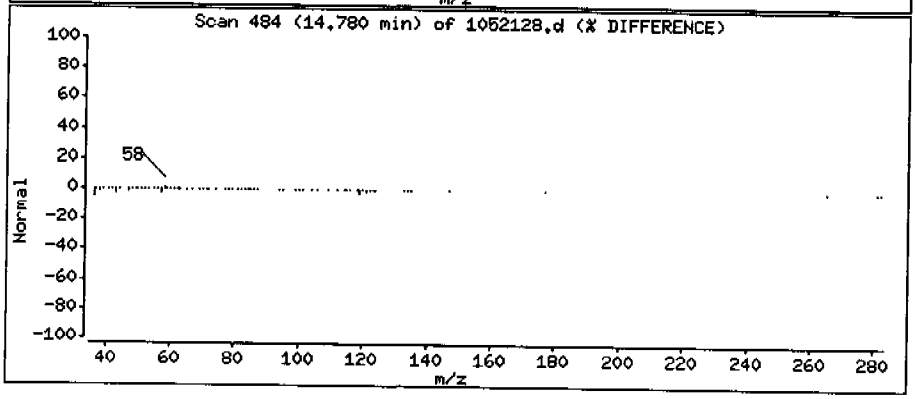












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Sample Info: 100mL #34344

Instrument: msd1.i

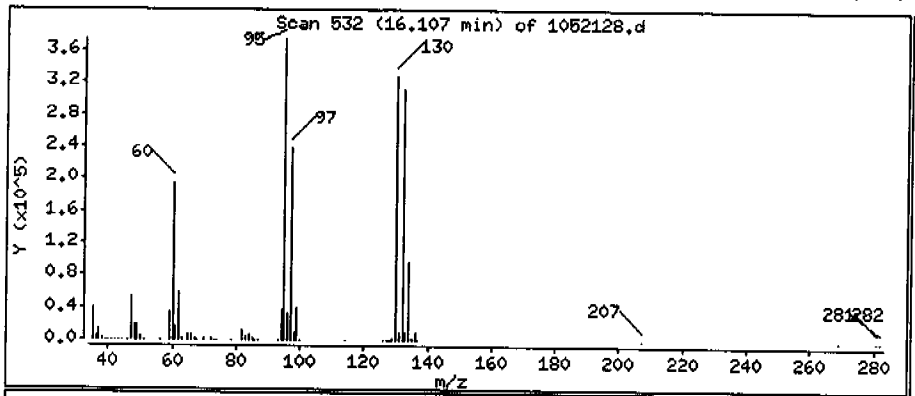
Operator: cb

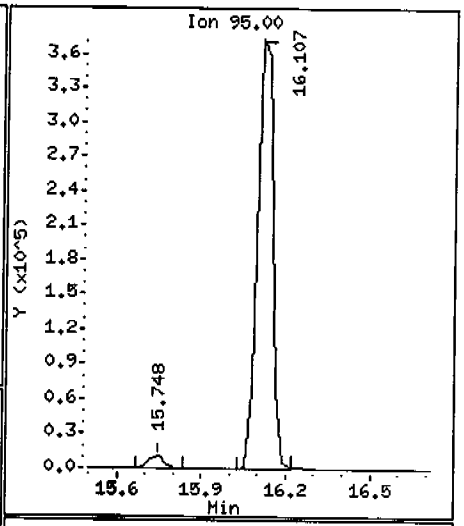
Column phase: RTx-624

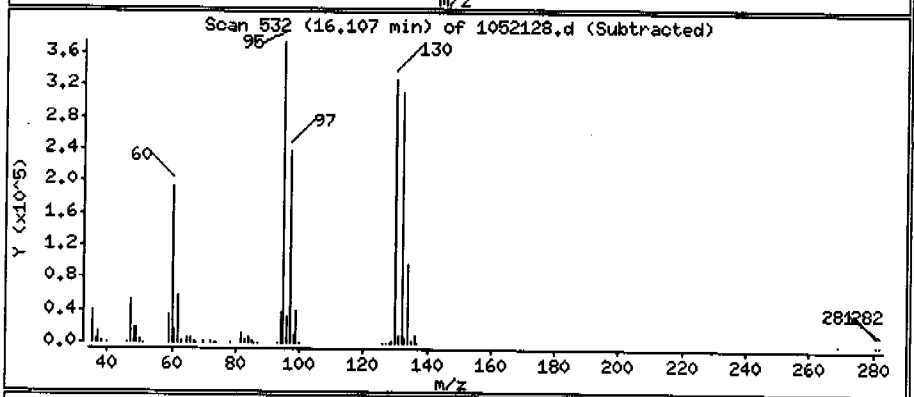
Column diameter: 0.53

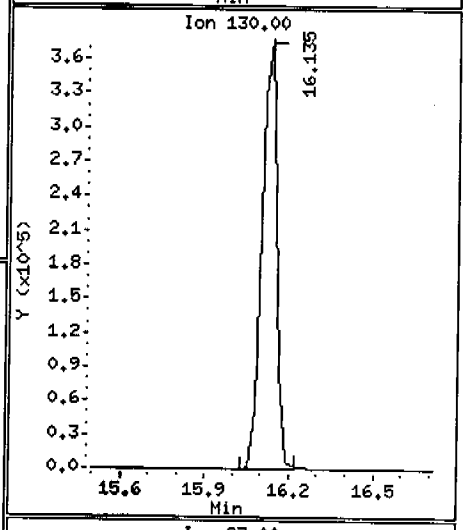
97 Trichloroethene

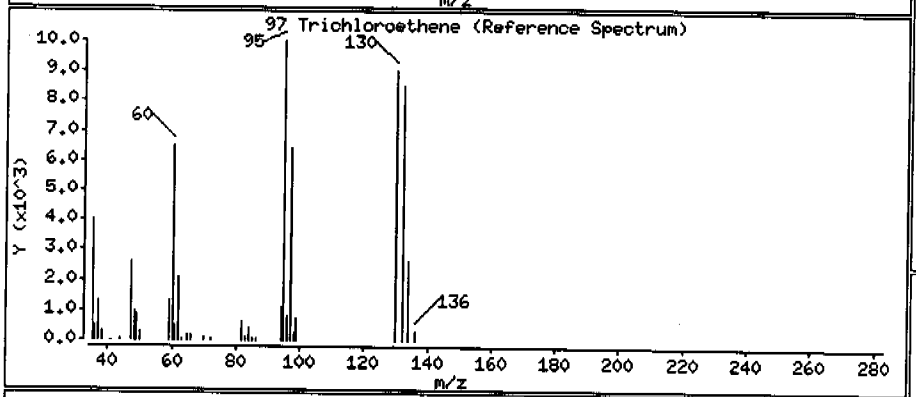
Concentration: 82.240 PPBV

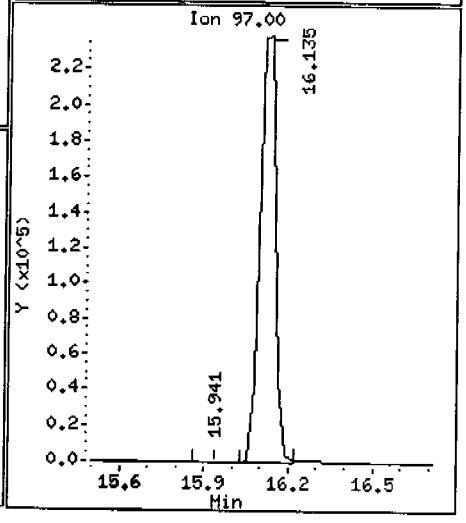


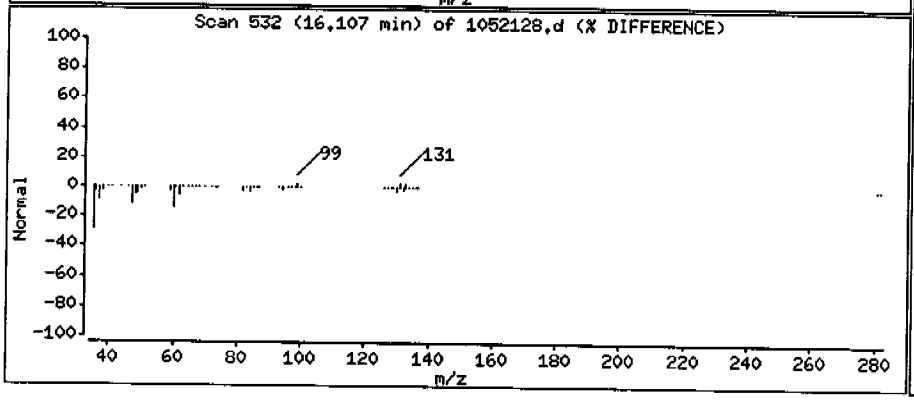












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

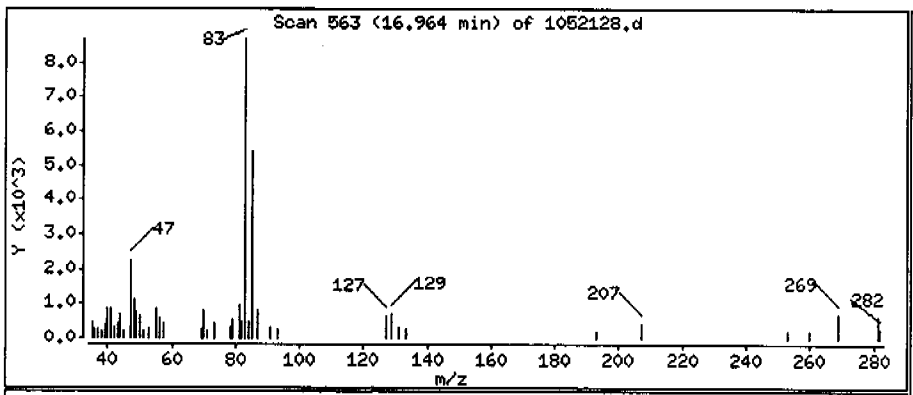
Operator: cb

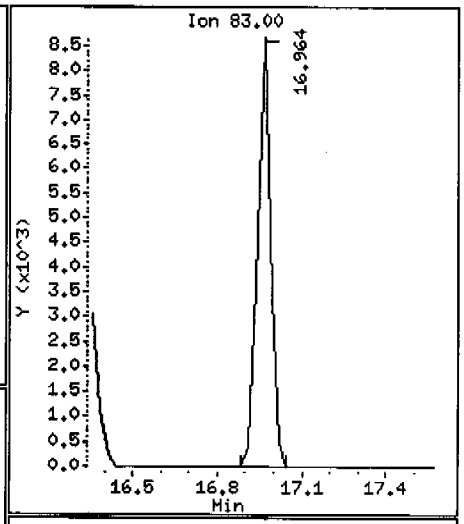
Column phase: RTx-624

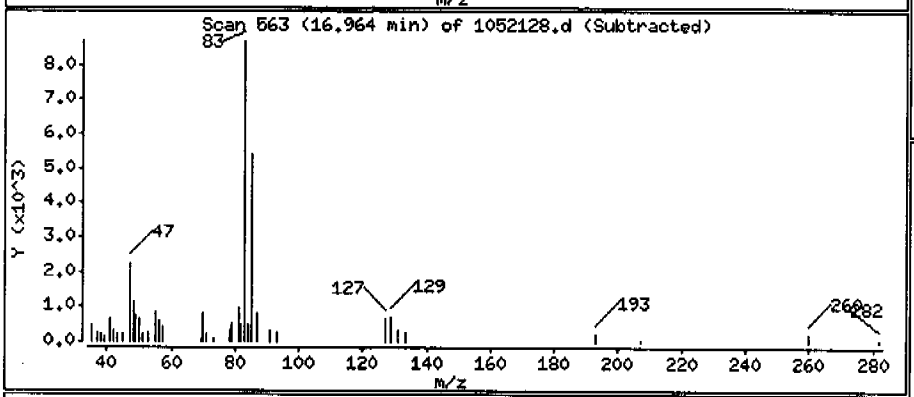
Column diameter: 0.53

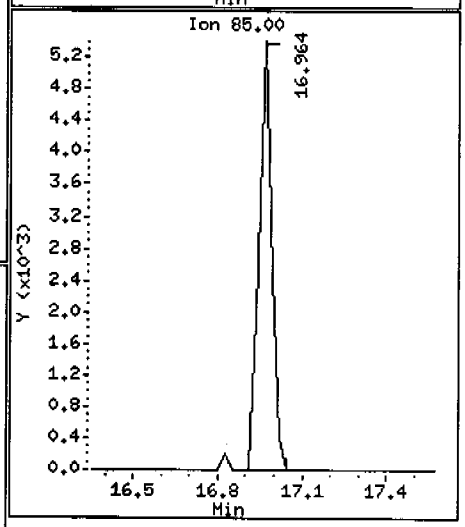
106 Bromodichloromethane

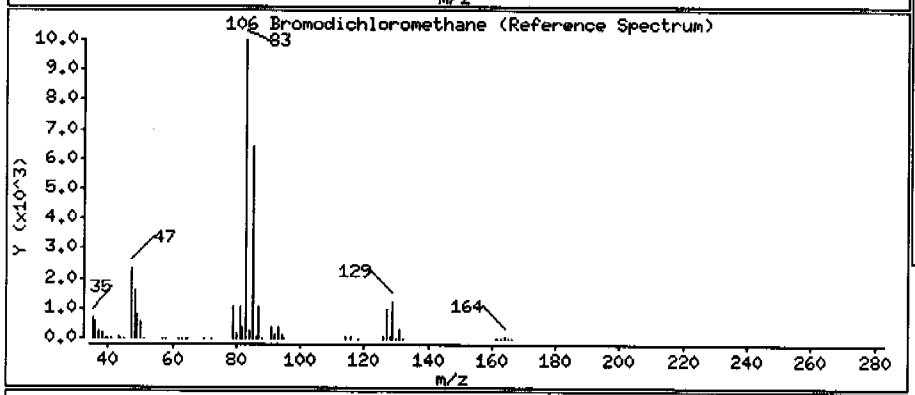
Concentration: 0.9943 PPBV

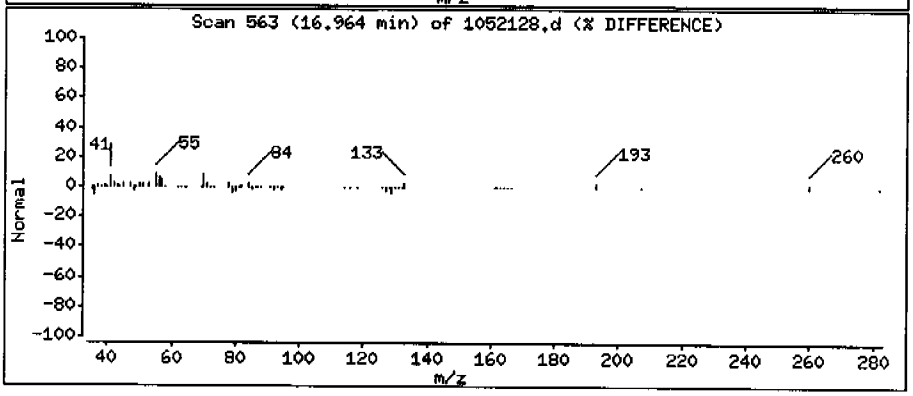












Data File: /chem/msd1.i/1-21may.b/1052128.d

Date : 22-MAY-2008 04:42

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34344

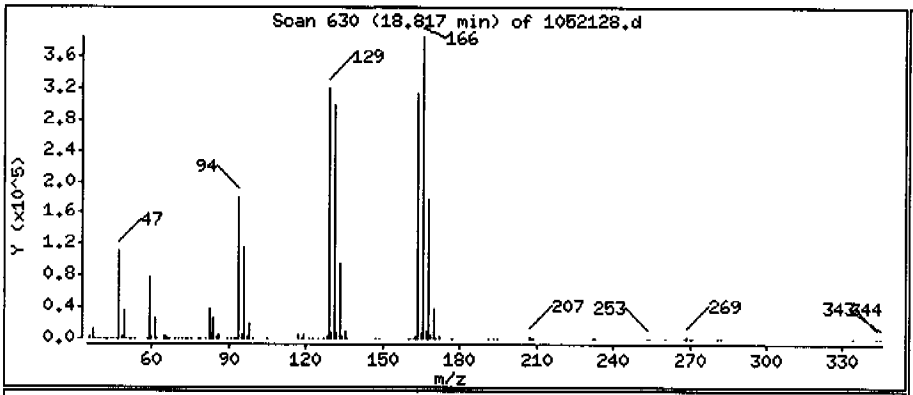
Operator: cb

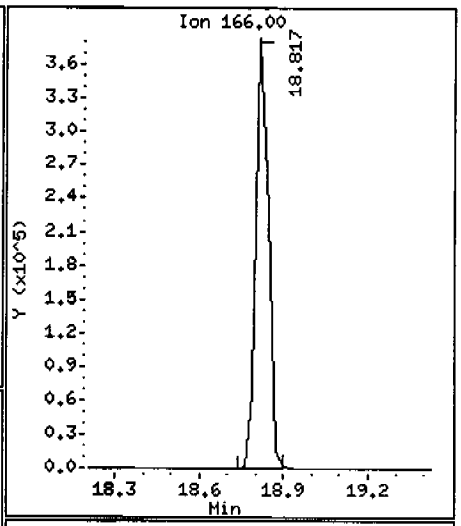
Column phase: RTx-624

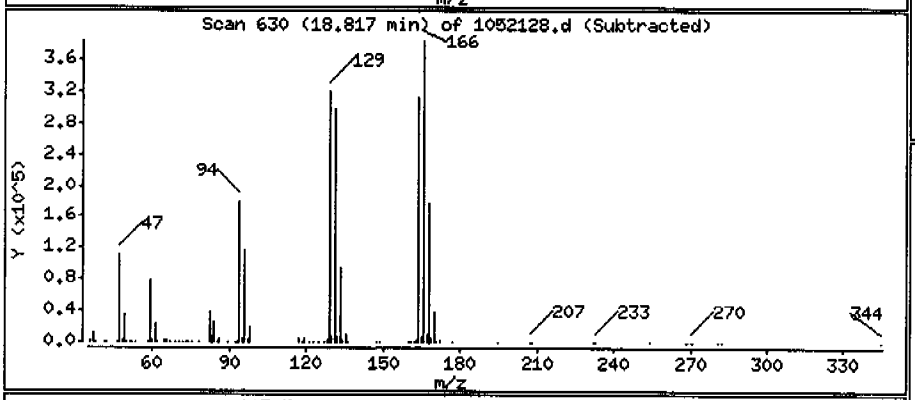
Column diameter: 0.53

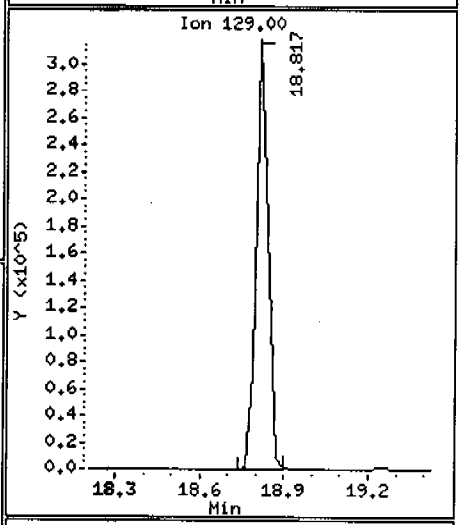
117 Tetrachloroethene

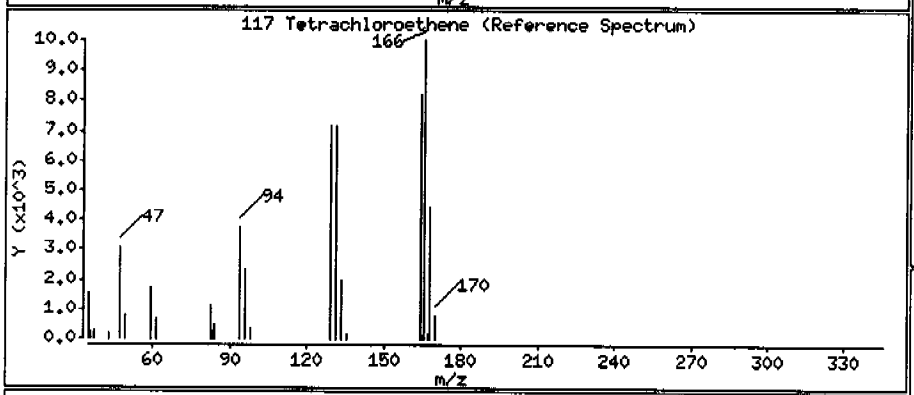
Concentration: 47.836 PPBV

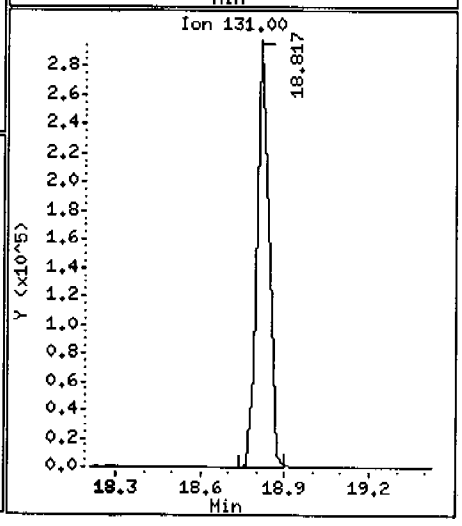


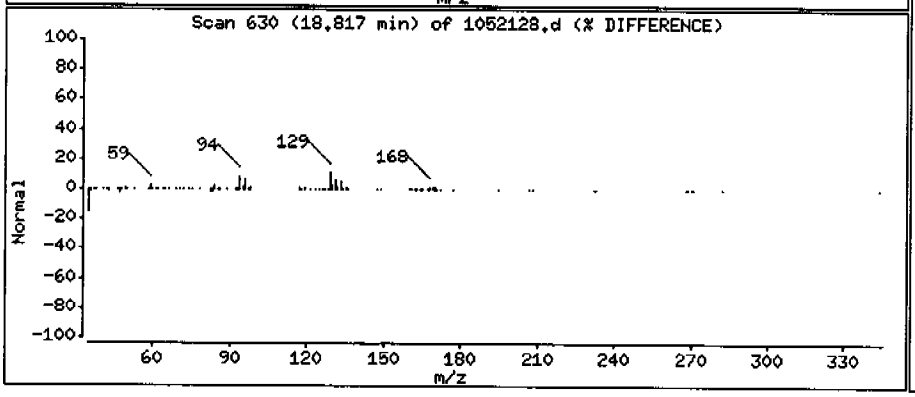












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12238

Lab ID#: 0805274-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.7	4.3	8.4
Freon 113	0.88	4.6	6.7	35
1,1-Dichloroethene	0.88	3.6	3.5	14
Acetone	3.5	13	8.3	31
Carbon Disulfide	0.88	1.3	2.7	4.0
Methylene Chloride	0.88	14	3.0	50
2-Butanone (Methyl Ethyl Ketone)	0.88	1.3	2.6	4.0
Chloroform	0.88	140	4.3	670
1,1,1-Trichloroethane	0.88	5.3	4.8	29
Carbon Tetrachloride	0.88	52	5.5	330
Trichloroethene	0.88	120	4.7	620
Bromodichloromethane	0.88	1.0	5.9	6.8
Tetrachloroethene	0.88	36	5.9	240

0044

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12238

Lab ID#: 0805274-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] Date of Collection: 5/9/08
Dil. Factor: 1.75 Date of Analysis: 5/22/08 05:19 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.7	4.3	8.4
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	4.6	6.7	35
1,1-Dichloroethene	0.88	3.6	3.5	14
Acetone	3.5	13	8.3	31
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	1.3	2.7	4.0
Methylene Chloride	0.88	14	3.0	50
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	1.3	2.6	4.0
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	140	4.3	670
1,1,1-Trichloroethane	0.88	5.3	4.8	29
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	52	5.5	330
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	120	4.7	620
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	1.0	5.9	6.8
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	36	5.9	240

0045

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12238

Lab ID#: 0805274-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052129 Date Collection: 5/9/08
Dil. Factor: 1.75 Date Analysis: 5/22/08 05:19 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected U J	26	Not Detected U J
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	97	70-130

0046

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052129.d
Lab Smp Id: 0805274-03A
Inj Date : 22-MAY-2008 05:19
Operator : cb
Inst ID: msd1.i
Smp Info : 100mL #34375
Misc Info : 7.0"Hg --> 5psi
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	****	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	284567	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	223108			28.93- 128.93	78.40
14.255	14.282 (1.000)	49	515387			132.03- 232.03	181.11
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1448095	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	226927			0.00- 65.76	15.67
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.034	20.033 (1.000)	117	1644549	25.0000		80.00- 120.00	100.00
20.006	20.033 (1.000)	82	958033			8.42- 108.42	58.26
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.139 (1.060)	65	447002	23.5384	23.538	80.00- 120.00	100.00
15.140	15.139 (1.060)	67	229287			6.04- 106.04	51.29
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.987 (1.140)	98	1612373	24.5737	24.574	80.00- 120.00	100.00
17.960	17.987 (1.140)	70	168857			0.00- 60.35	10.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.987 (1.140)	100	1066534			15.45- 115.45	66.15
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.526 (1.075)	174	855893	24.3223	24.322	80.00- 120.00	100.00
21.527	21.526 (1.075)	95	1375234			110.56- 210.56	160.68
21.527	21.526 (1.075)	176	810487			45.40- 145.40	94.69
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.890	2.890 (0.202)	85	30331	0.96689	1.692	80.00- 120.00	100.00(M)
2.834	2.890 (0.198)	87	4083			0.00- 75.39	13.46
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	55208	2.61332	4.573	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	36602			12.64- 112.64	66.30
10.577	10.577 (0.741)	101	70709			83.95- 183.95	128.08
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	59777	2.04102	3.572	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	35753			3.86- 103.86	59.81
10.522	10.522 (0.737)	98	20093			0.00- 85.09	33.61
45 Acetone					CAS #: 67-64-1		
10.909	10.881 (0.764)	58	73186	7.44006	13.020	80.00- 120.00	100.00
10.909	10.881 (0.764)	43	227901			275.34- 375.34	311.40
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.854 (0.760)	76	35495	0.73578	1.288	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.766	11.739 (0.824)	49	209718	8.26625	14.466	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	134071			13.77- 113.77	63.93
11.766	11.739 (0.824)	51	67007			0.00- 79.96	31.95
75 2-Butanone					CAS #: 78-93-3		
13.951	13.923 (0.977)	72	7853	0.76603	1.340	80.00- 120.00	100.00
13.951	13.923 (0.977)	43	39351			420.83- 520.83	501.06
13.951	13.923 (0.977)	57	3437			0.00- 90.57	43.77
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	3143868	78.1021	136.68	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1947111			12.14- 112.14	61.93
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.586 (1.021)	97	127678	3.02290	5.290	80.00- 120.00	100.00
14.587	14.586 (1.021)	99	80184			13.23- 113.23	62.80

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 Carbon Tetrachloride						CAS #: 56-23-5		
14.780	14.780	(1.035)	119	1174150	30.0556	52.597	80.00- 120.00	100.00
14.780	14.780	(1.035)	117	1223227			53.03- 153.03	104.18
97 Trichloroethene						CAS #: 79-01-6		
16.107	16.107	(1.023)	95	2006782	66.4143	116.22	80.00- 120.00	100.00
16.135	16.107	(1.025)	130	1931772			46.53- 146.53	96.26
16.107	16.107	(1.023)	97	1289849			14.98- 114.98	64.27
106 Bromodichloromethane						CAS #: 75-27-4		
16.964	16.964	(1.077)	83	27323	0.57697	1.010	80.00- 120.00	100.00
16.964	16.964	(1.077)	85	17509			11.42- 111.42	64.08
117 Tetrachloroethene						CAS #: 127-18-4		
18.817	18.817	(0.939)	166	820926	20.3616	35.633	80.00- 120.00	100.00
18.817	18.817	(0.939)	129	647783			27.45- 127.45	78.91
18.817	18.817	(0.939)	131	615223			24.33- 124.33	74.94

QC Flag Legend

M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052129.d
Lab Smp Id: 0805274-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 7.0"Hg --> 5psi

Calibration Date: 21-MAY-2008
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	284567	-8.36
95 1,4-Difluorobenze	1646495	987897	2305093	1448095	-12.05
123 Chlorobenzene-d5	1819110	1091466	2546754	1644549	-9.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 1-21may
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0805274-03A
Level: LOW Operator: cb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 7.0"Hg --> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.538	94.15	70-130
$ 111 Toluene-d8	25.000	24.574	98.29	70-130
$ 136 Bromofluorobenzene	25.000	24.322	97.29	70-130

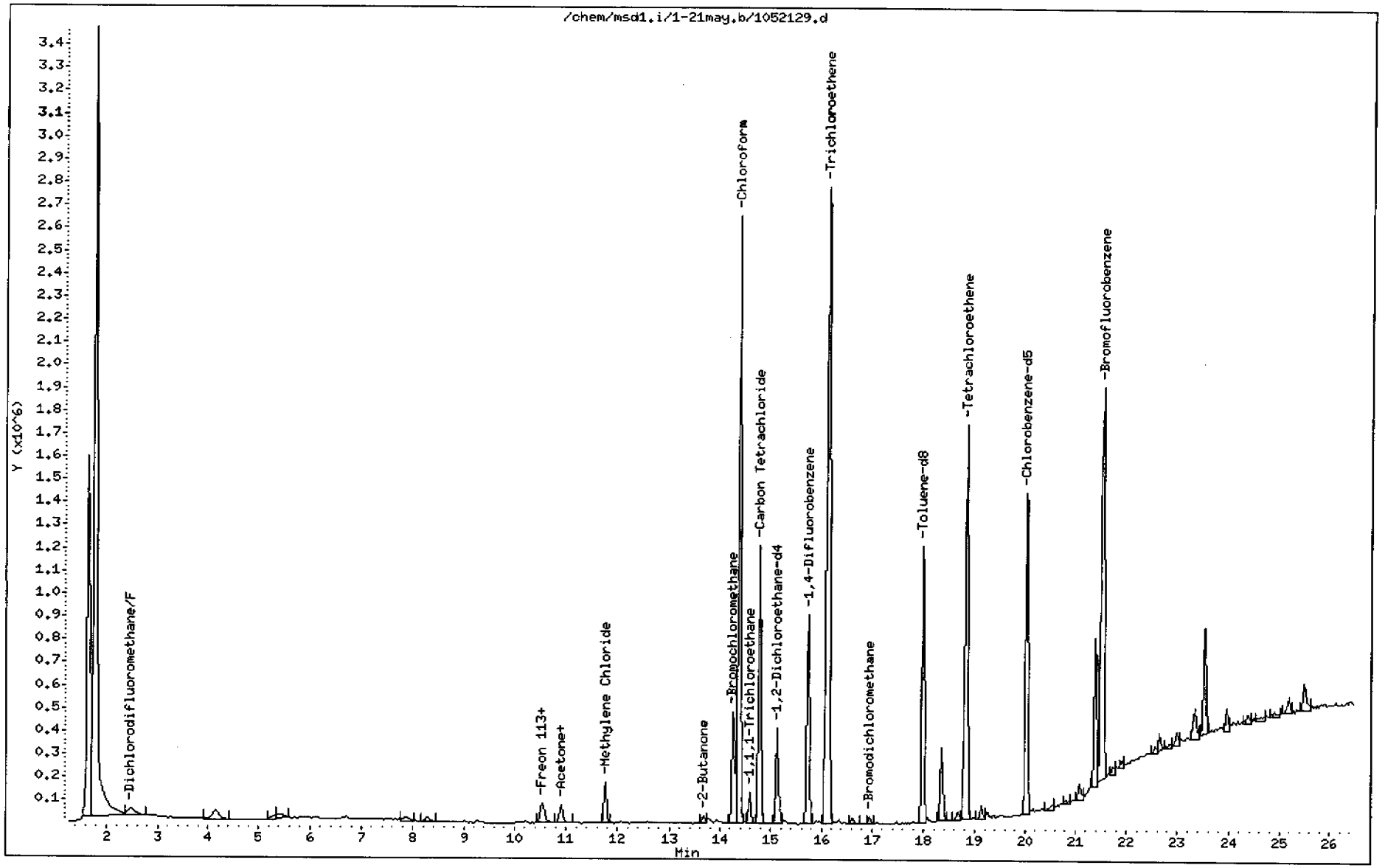
Data File: /chem/msd1.i/1-21may.b/1052129.d
Date : 22-MAY-2008 05:19
Client ID:
Sample Info: 100mL #34375

Column phase: RTx-624

Instrument: msd1.i

Operator: cb
Column diameter: 0.53

0052



Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

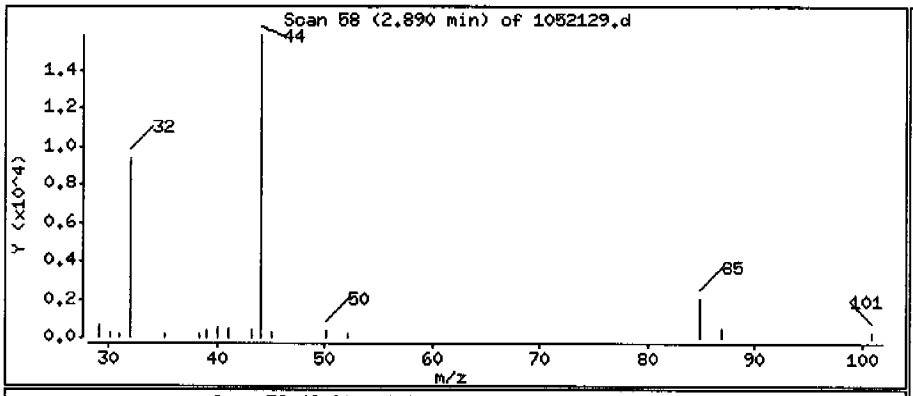
Operator: cb

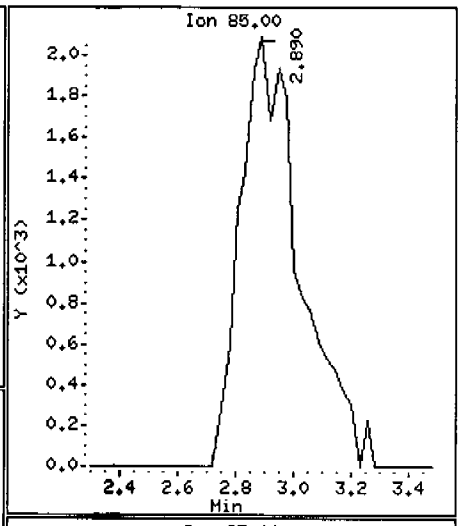
Column phase: RTx-624

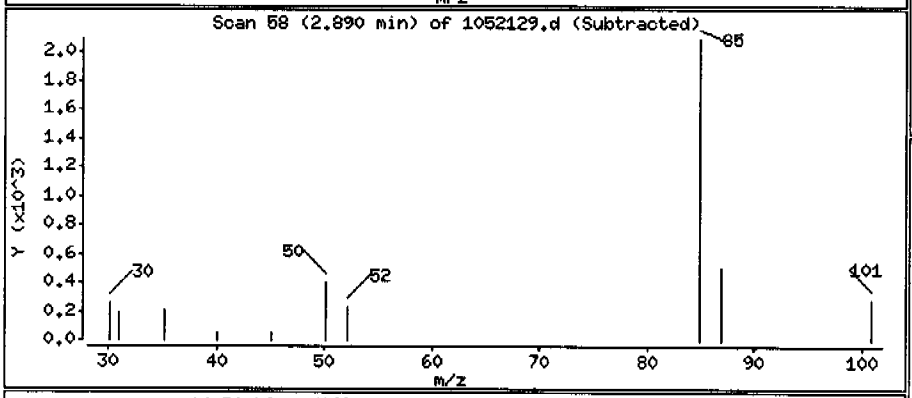
Column diameter: 0.53

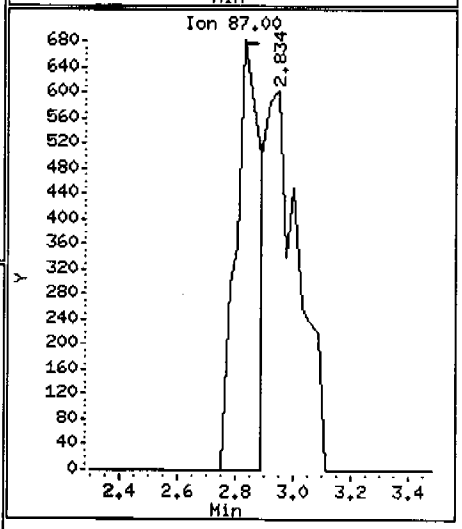
14 Dichlorodifluoromethane/Fr12

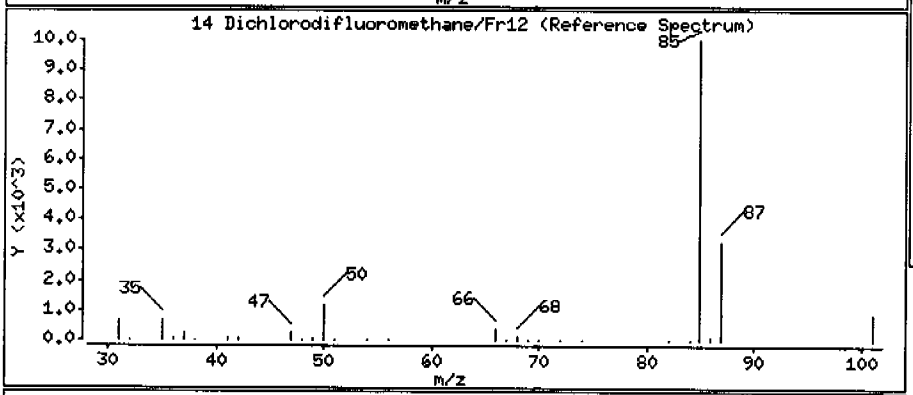
Concentration: 1.692 PPBV

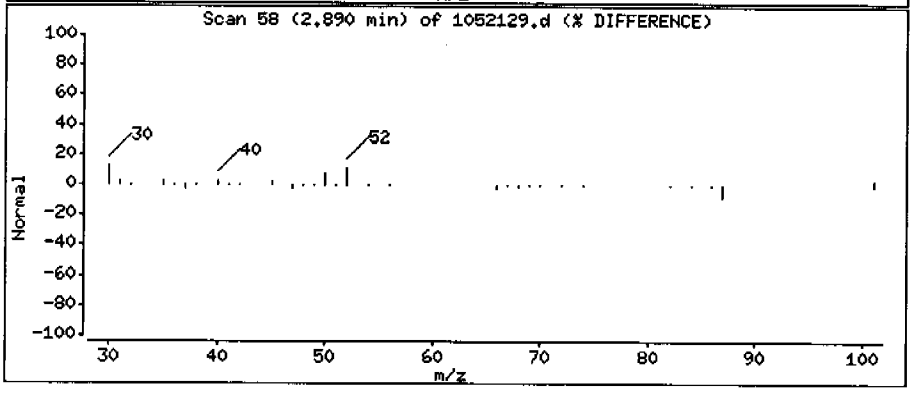












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

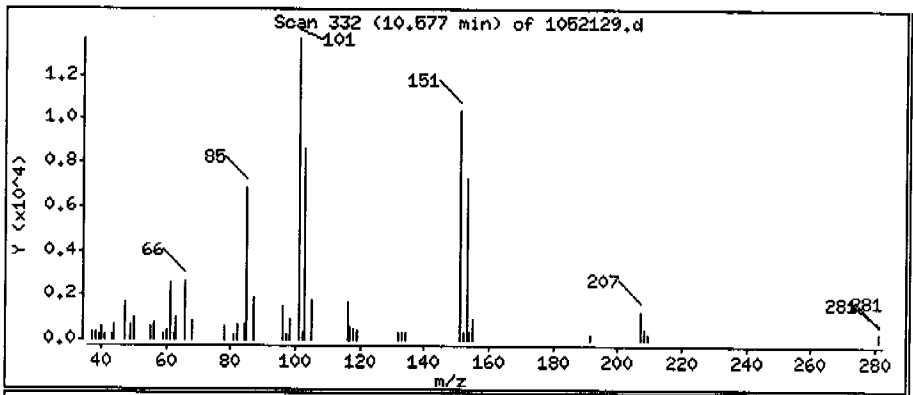
Operator: cb

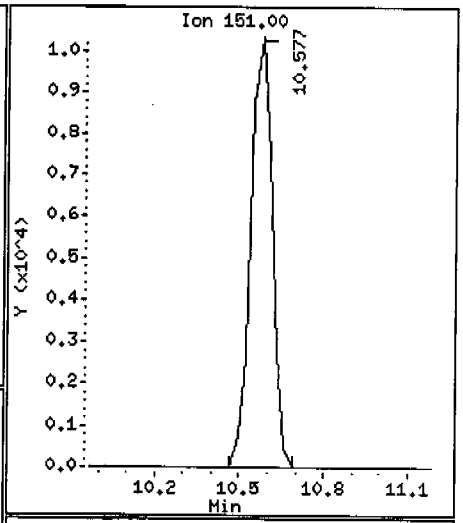
Column phase: RTx-624

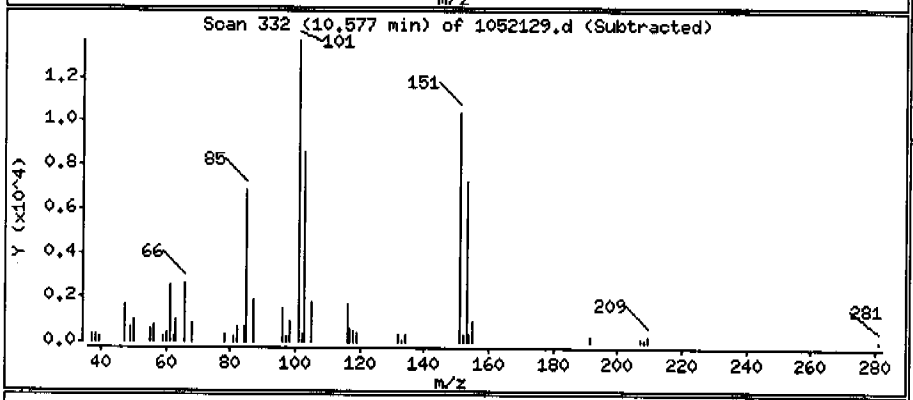
Column diameter: 0.53

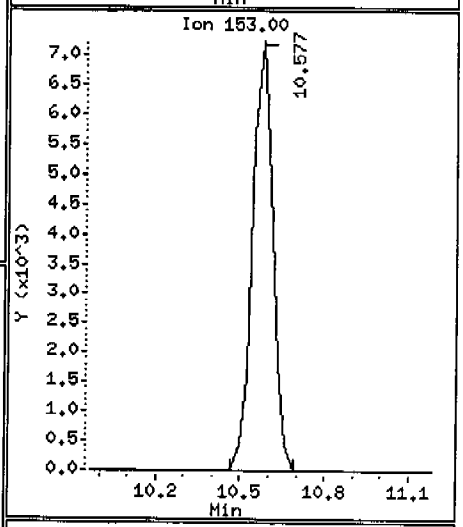
43 Freon 113

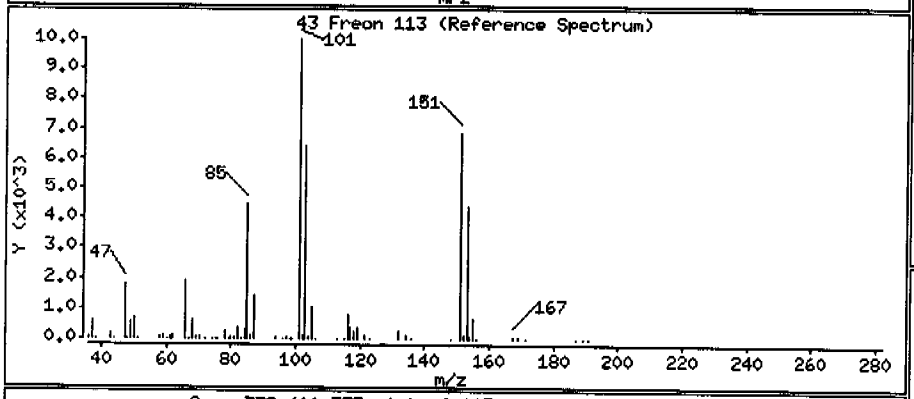
Concentration: 4.573 PPBV

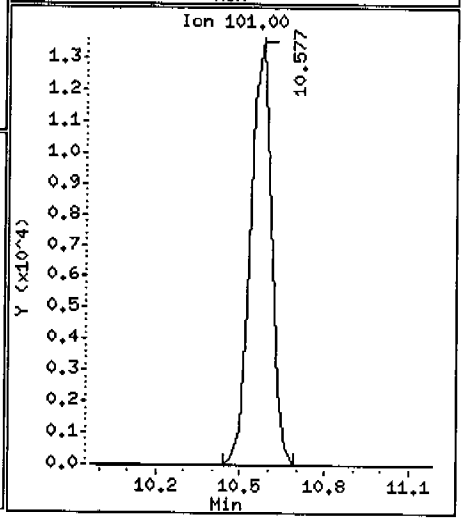


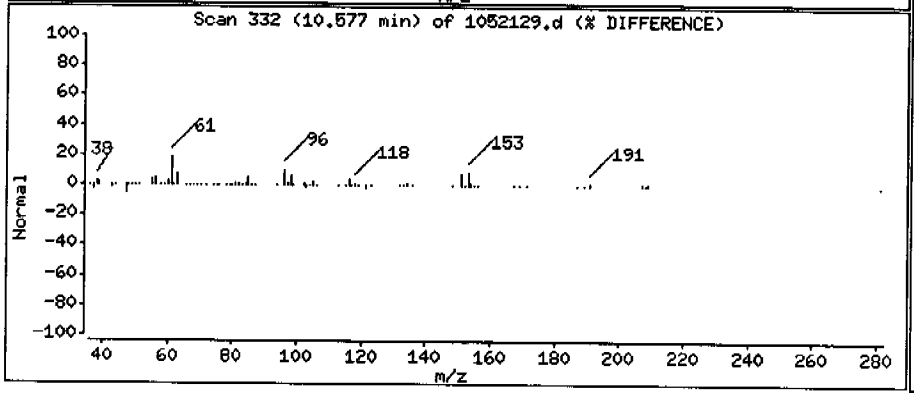












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

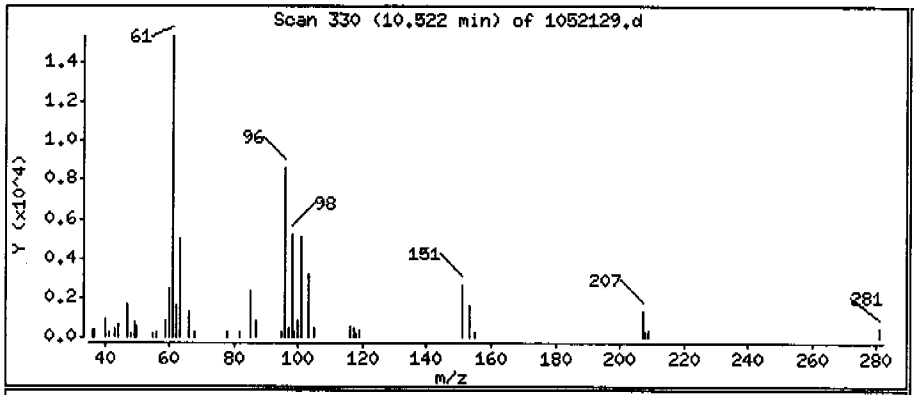
Operator: cb

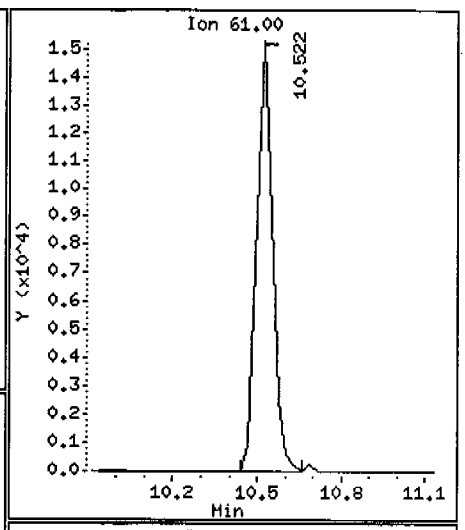
Column phase: RTx-624

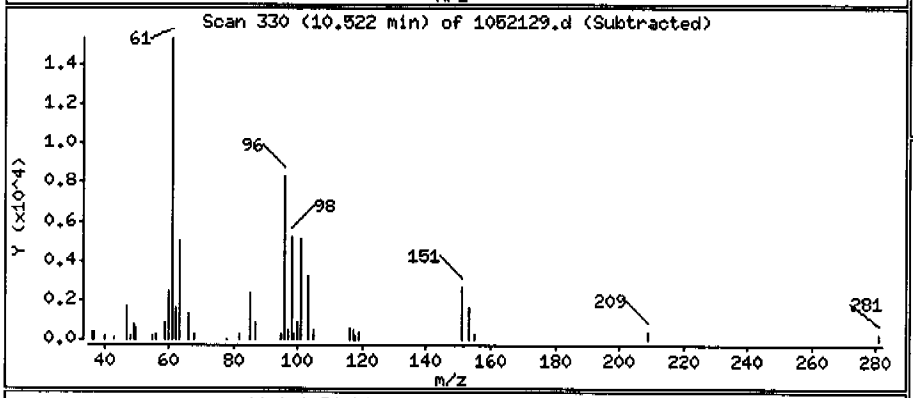
Column diameter: 0.53

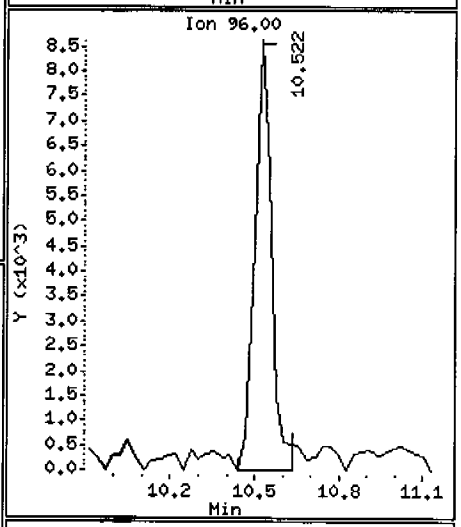
44 1,1-Dichloroethene

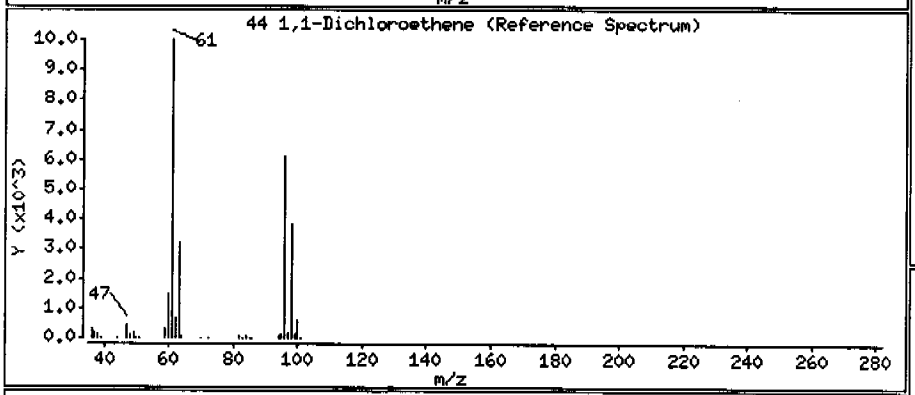
Concentration: 3.572 PPBV

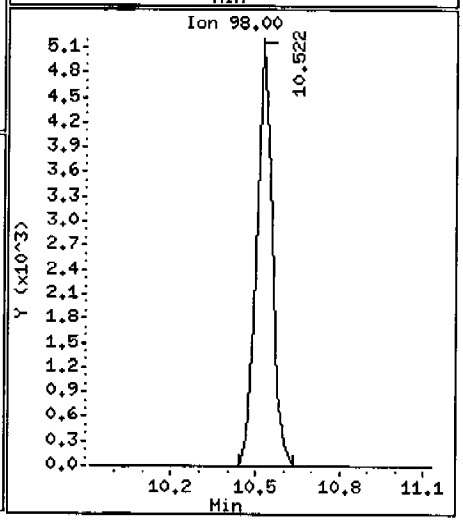


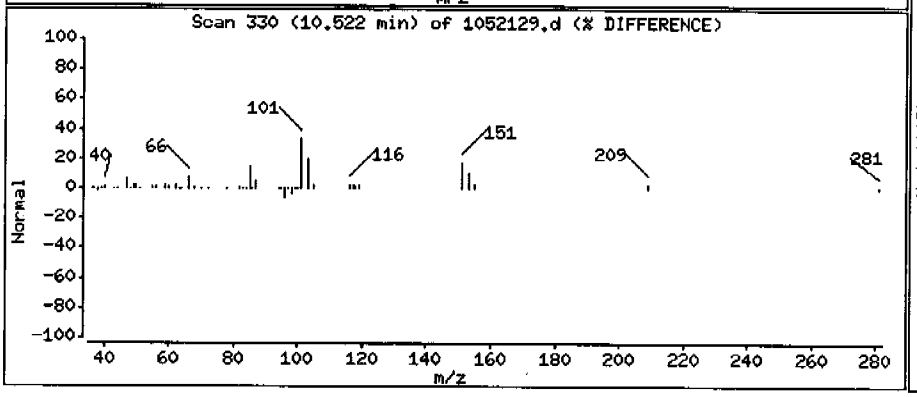












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

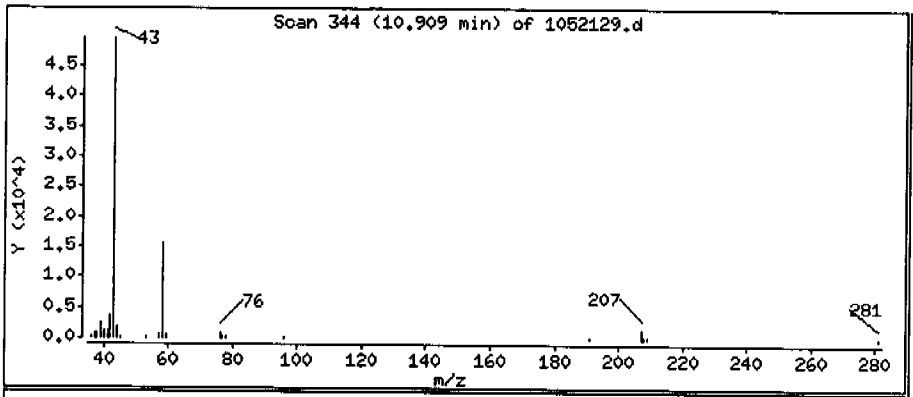
Operator: cb

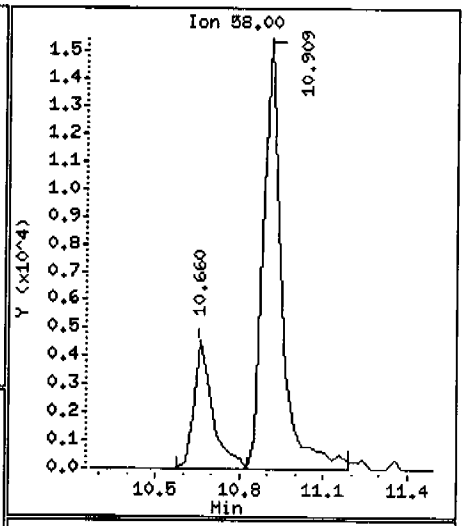
Column phase: RTx-624

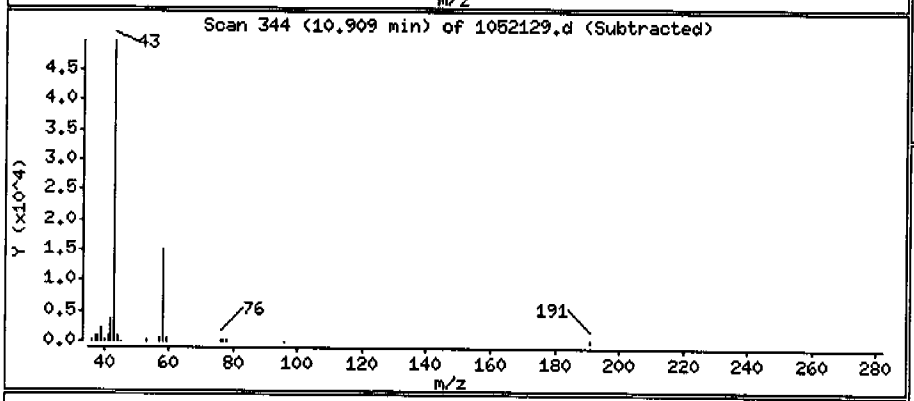
Column diameter: 0.53

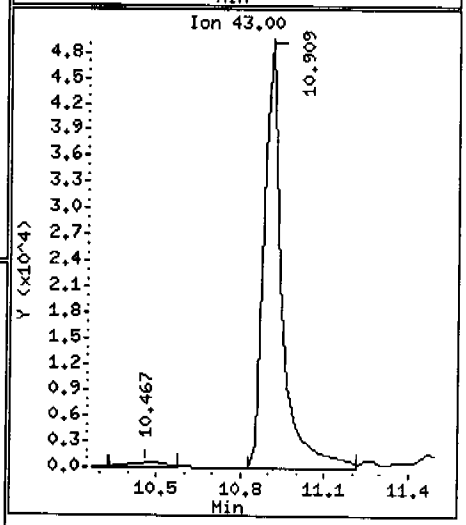
45 Acetone

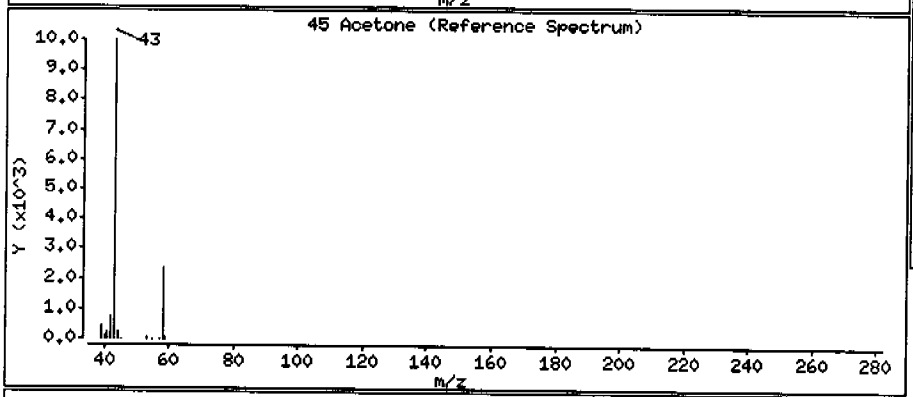
Concentration: 13.020 PPBV

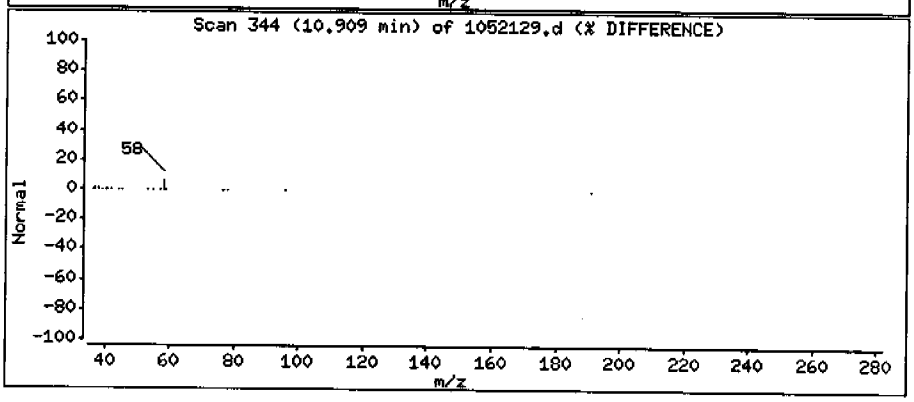












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

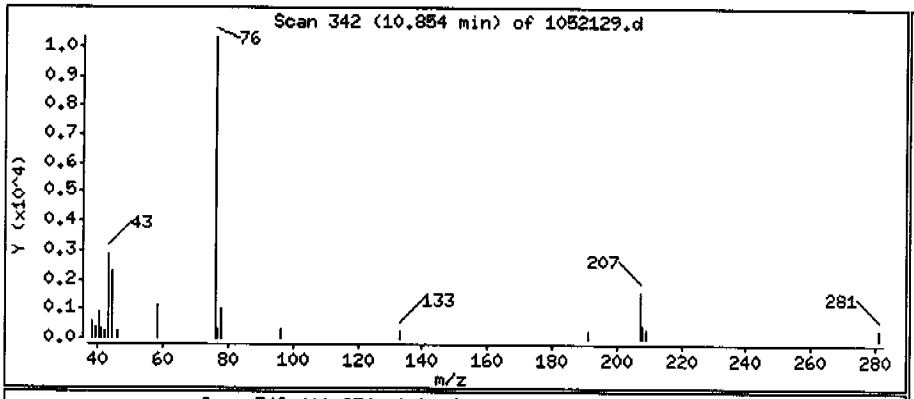
Operator: cb

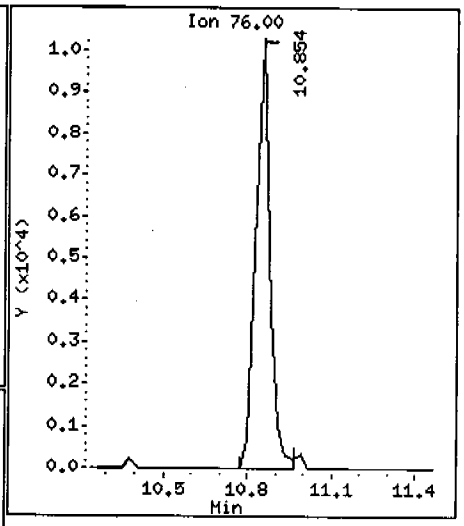
Column phase: RTx-624

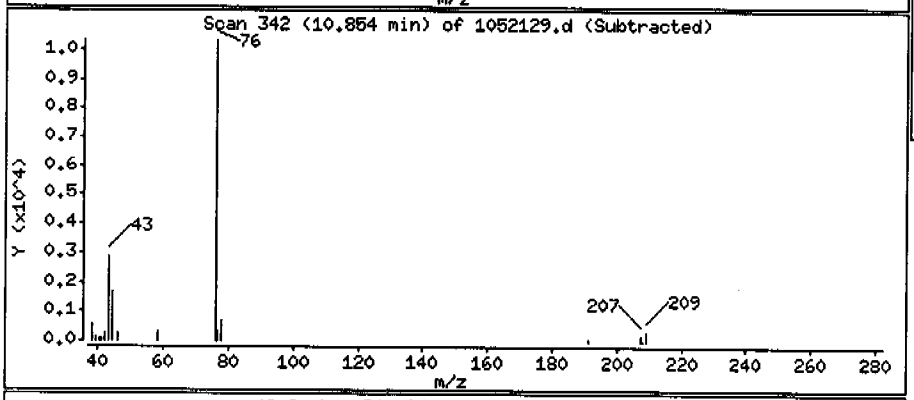
Column diameter: 0.53

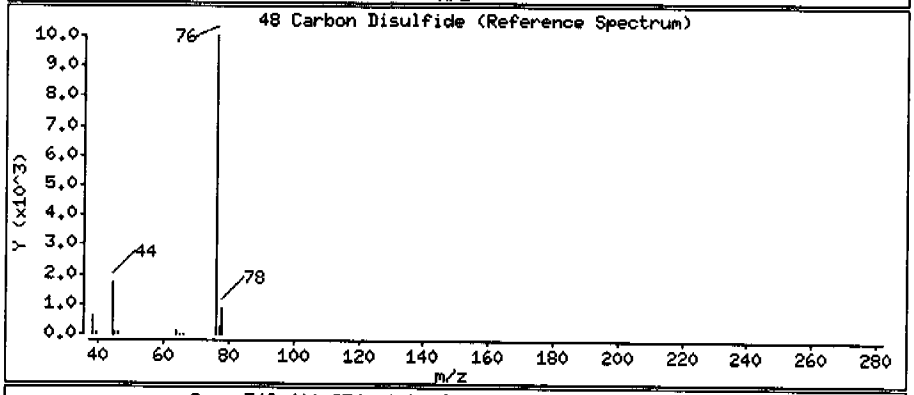
48 Carbon Disulfide

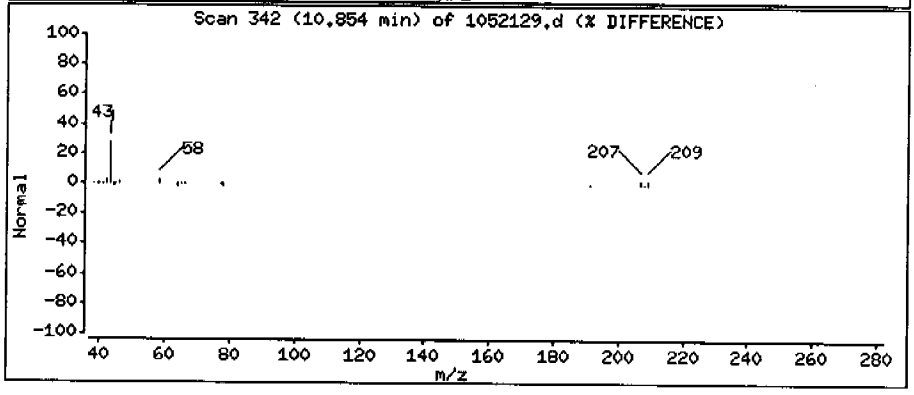
Concentration: 1.288 PPBV











Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

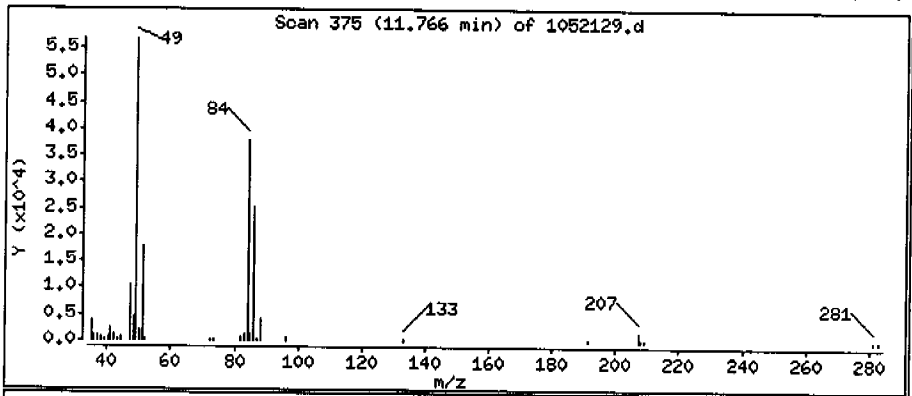
Operator: cb

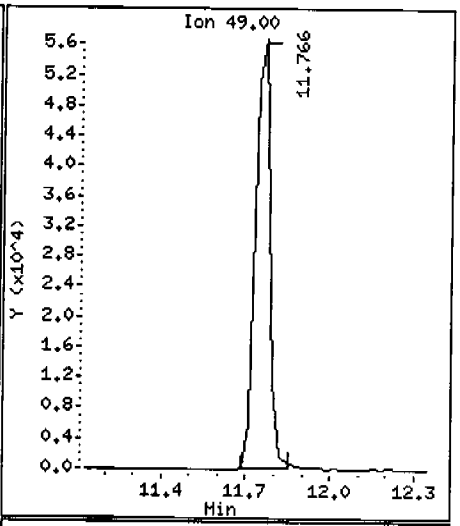
Column phase: RTx-624

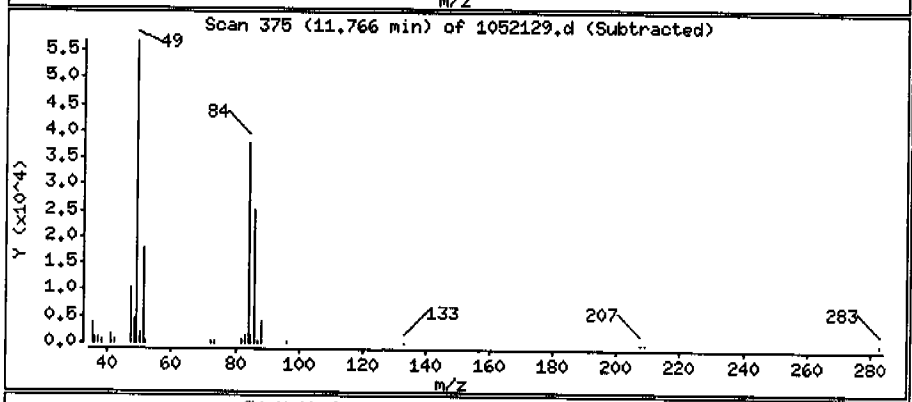
Column diameter: 0.53

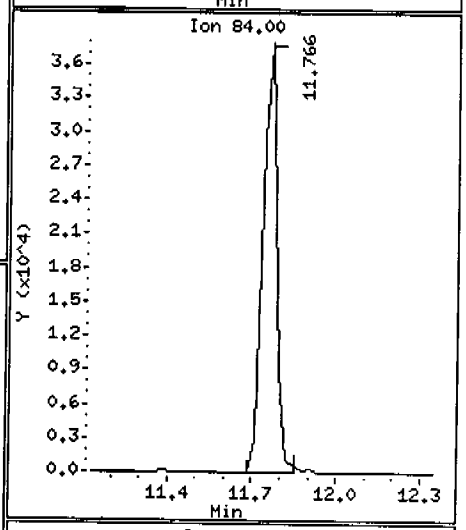
54 Methylene Chloride

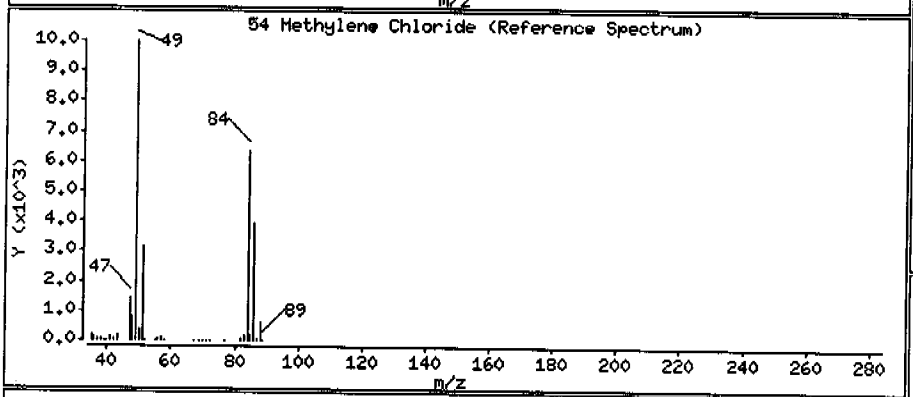
Concentration: 14.466 PPBV

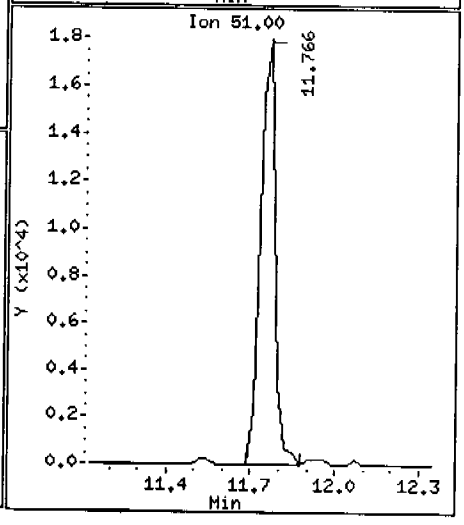


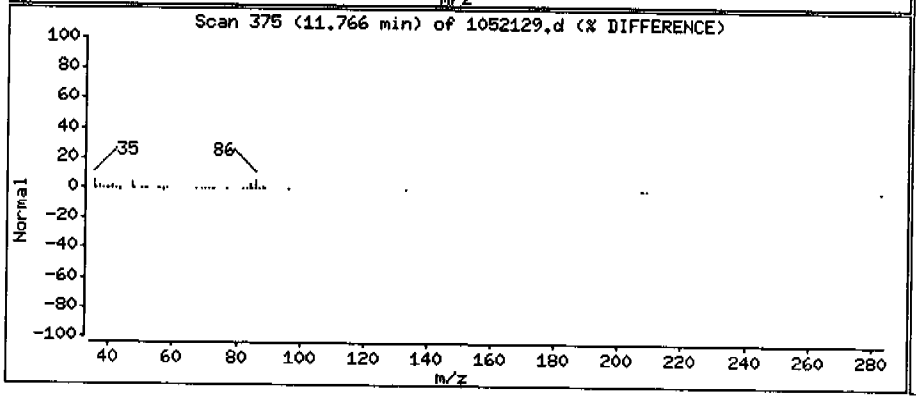












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

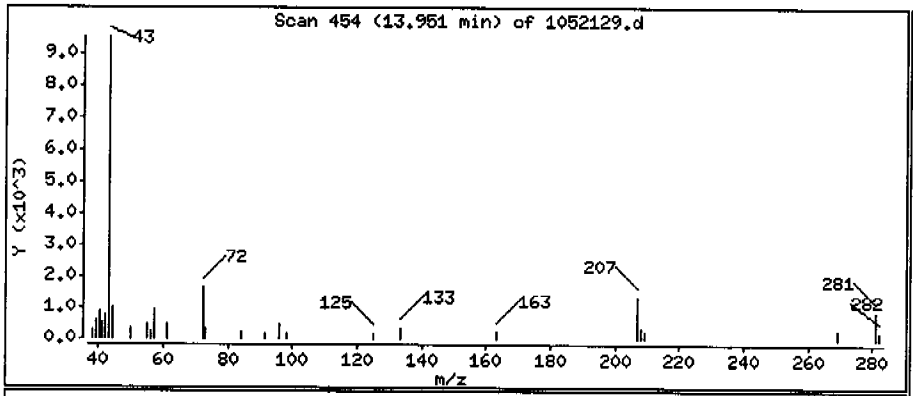
Operator: cb

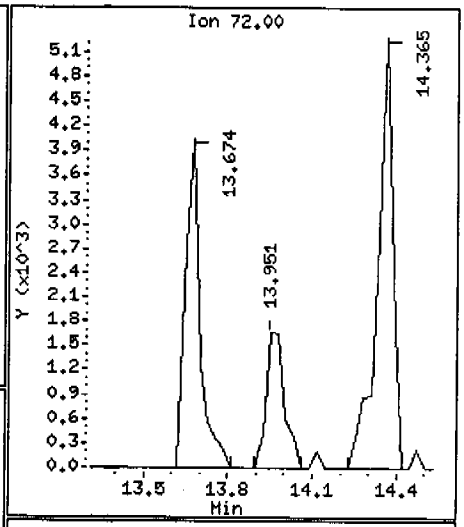
Column phase: RTx-624

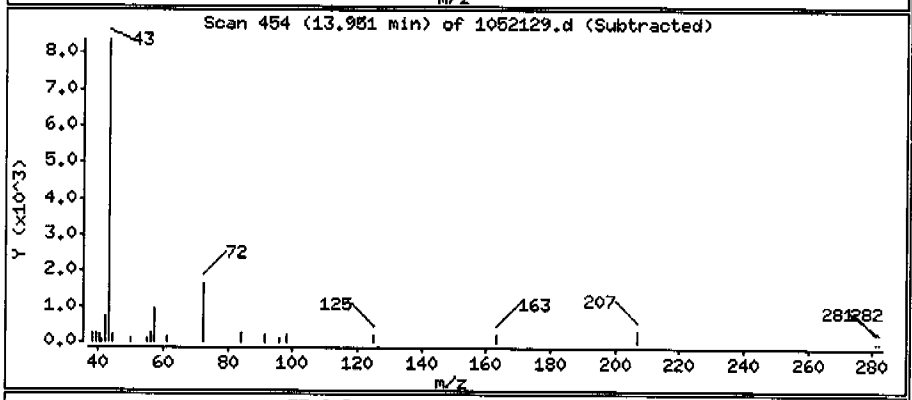
Column diameter: 0.53

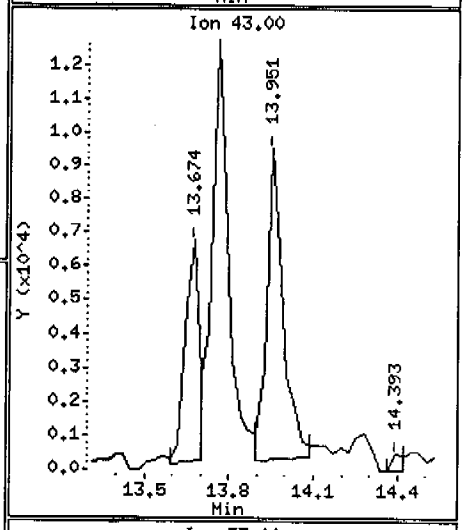
75 2-Butanone

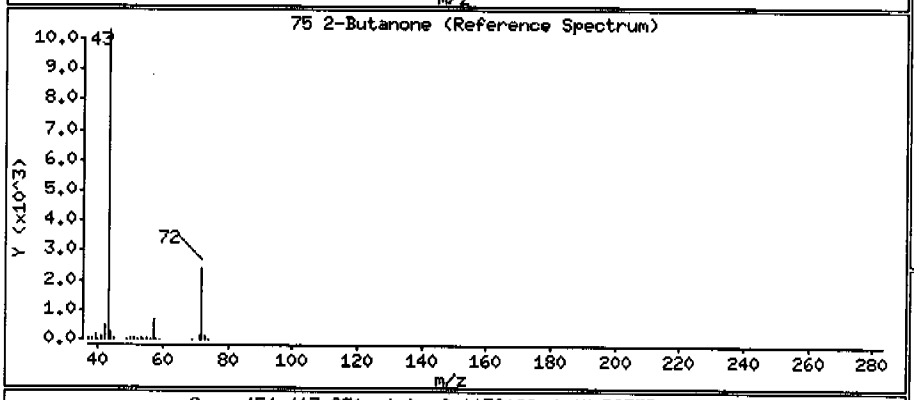
Concentration: 1.340 PPBV

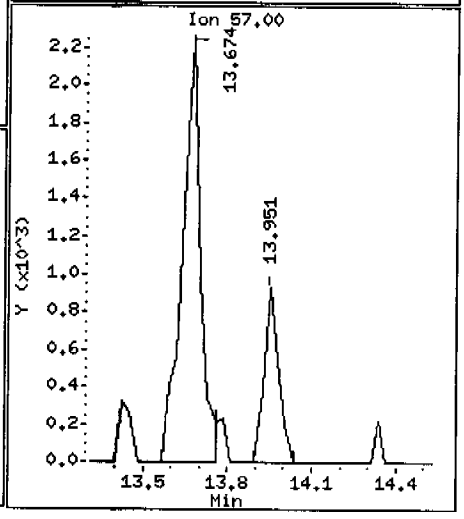


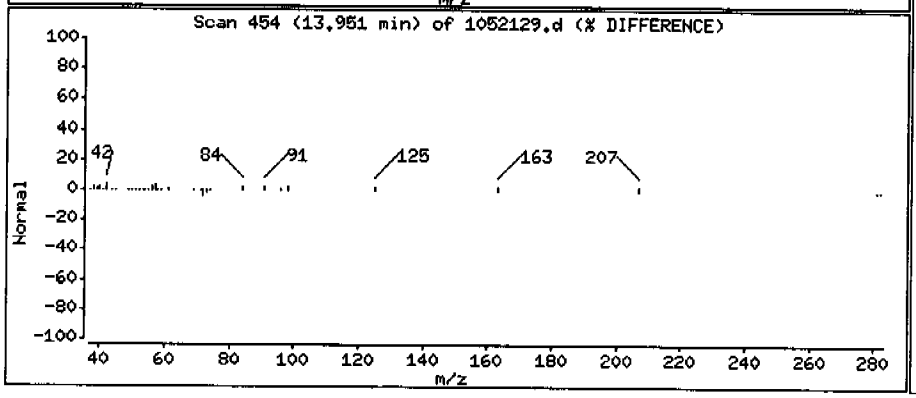












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

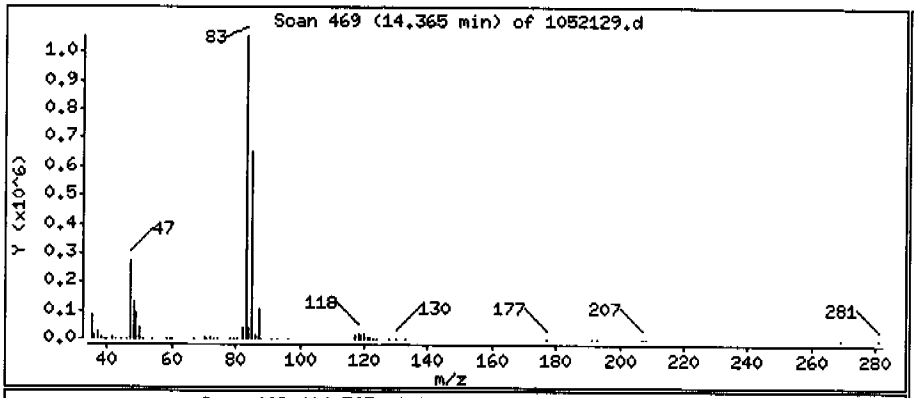
Operator: cb

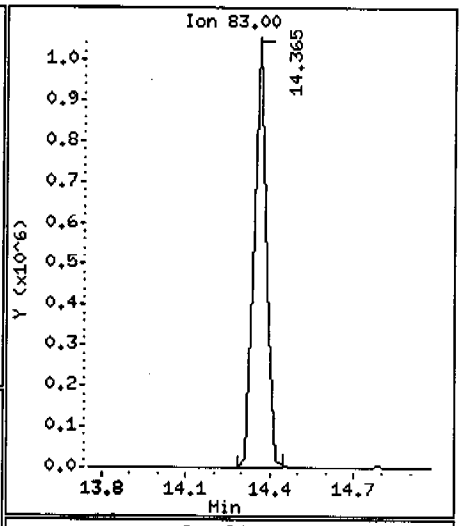
Column phase: RTx-624

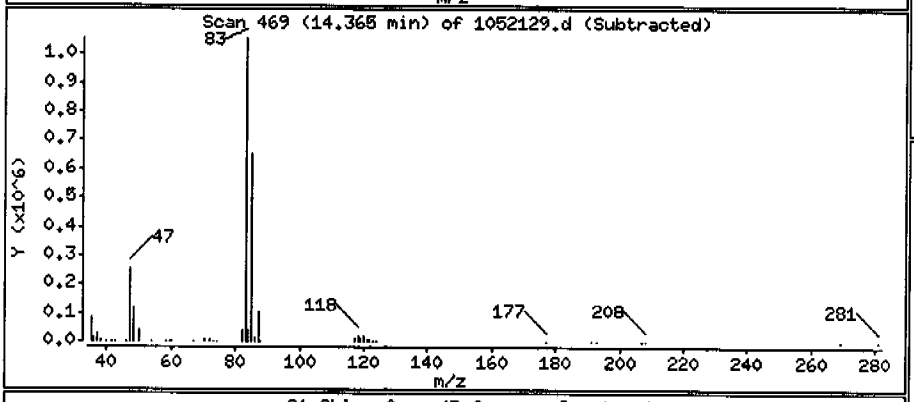
Column diameter: 0.53

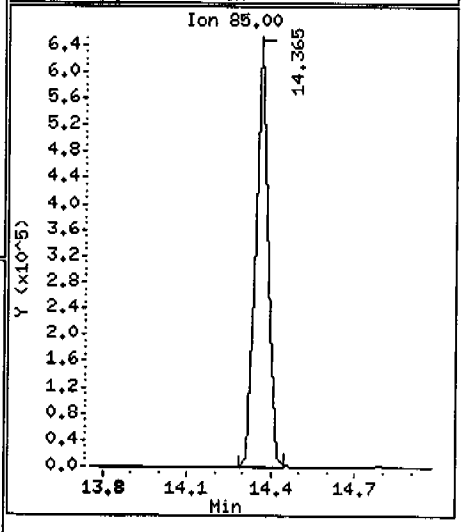
81 Chloroform

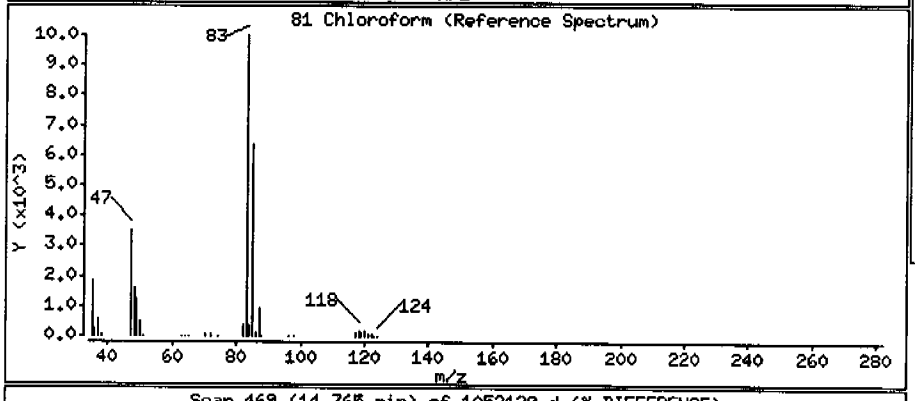
Concentration: 136.68 PPBV

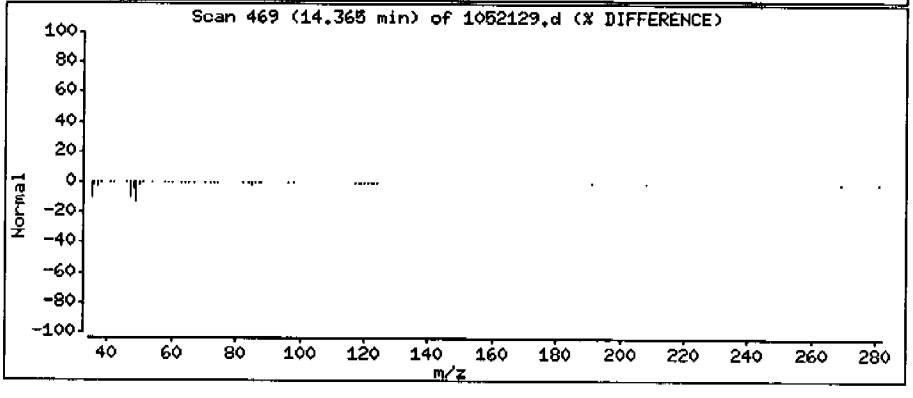












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

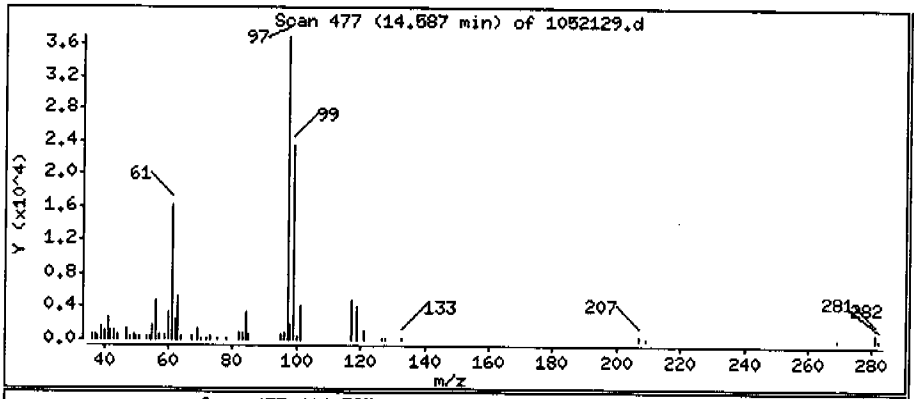
Operator: cb

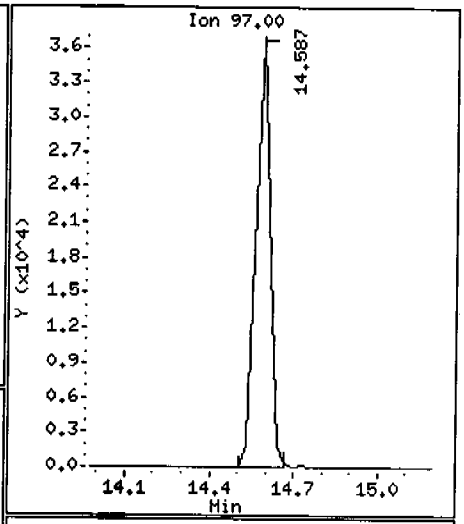
Column phase: RTx-624

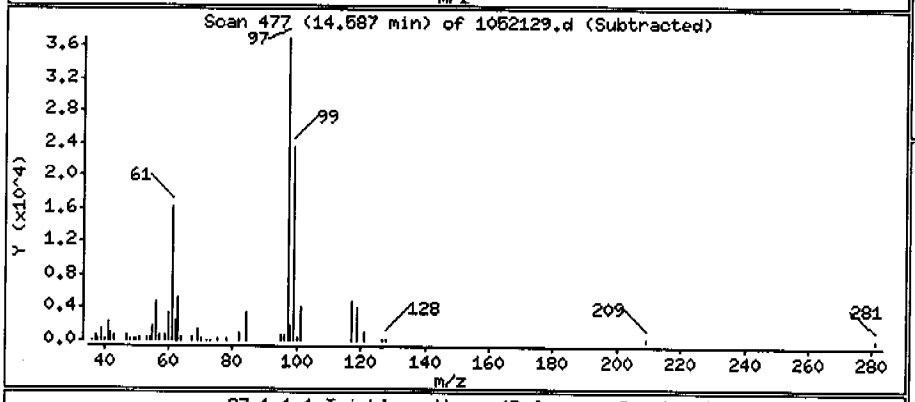
Column diameter: 0.53

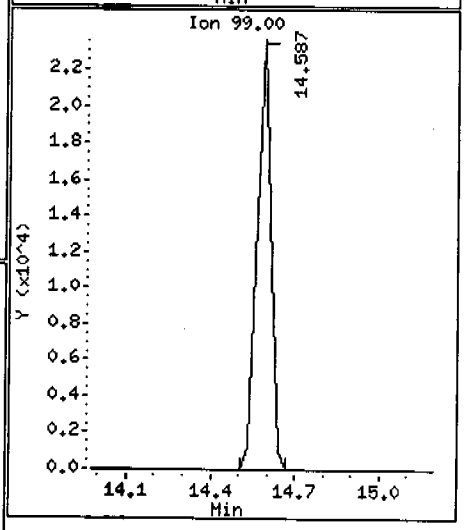
83 1,1,1-Trichloroethane

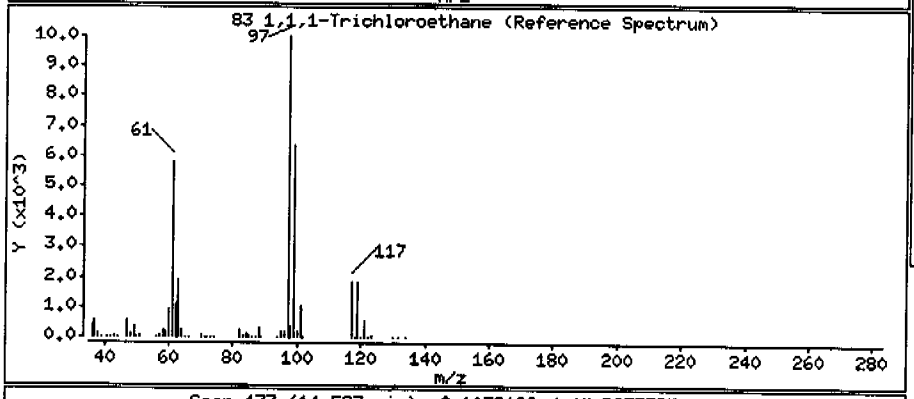
Concentration: 5.290 PPBV

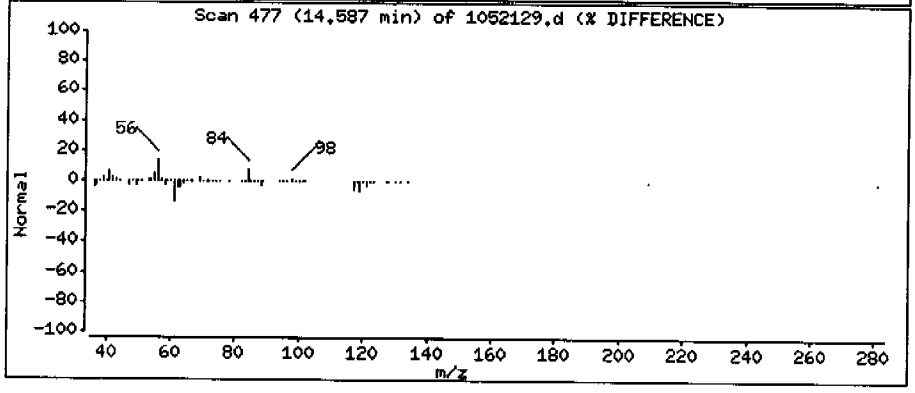












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Sample Info: 100mL #34375

Instrument: msd1.i

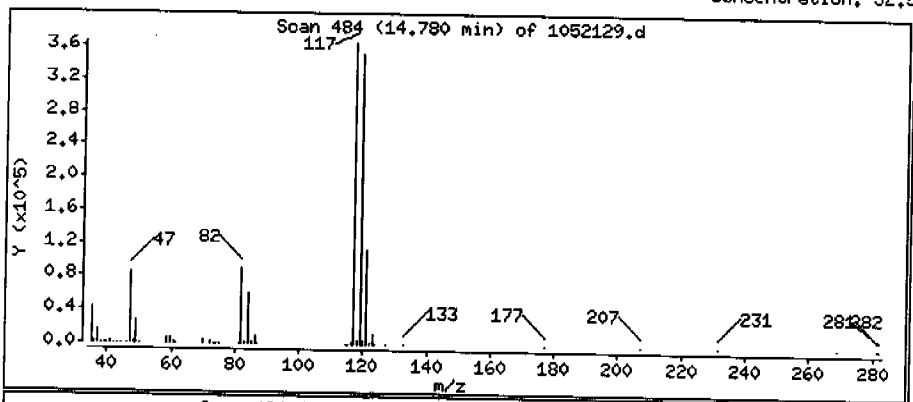
Operator: cb

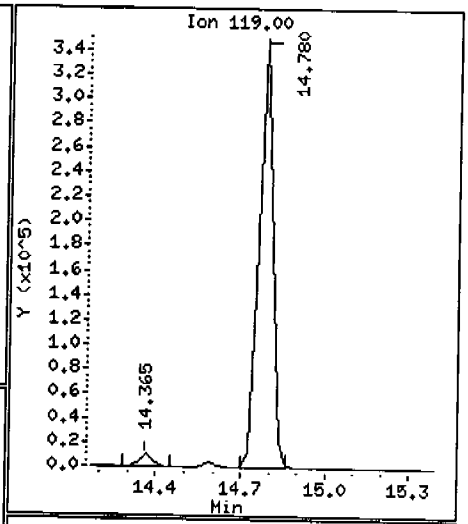
Column phase: RTx-624

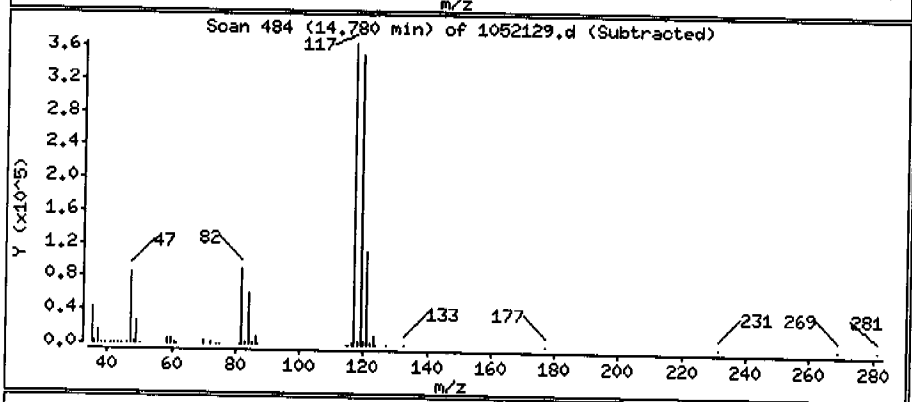
Column diameter: 0.53

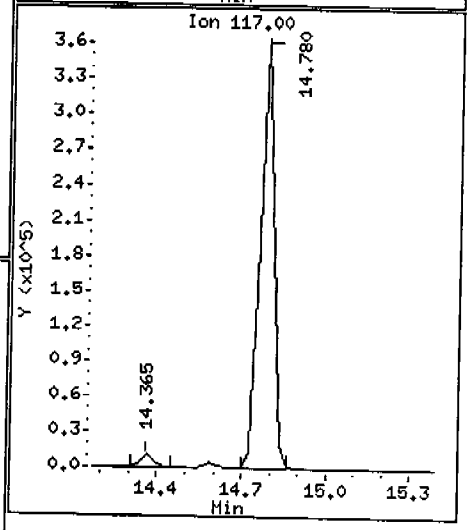
85 Carbon Tetrachloride

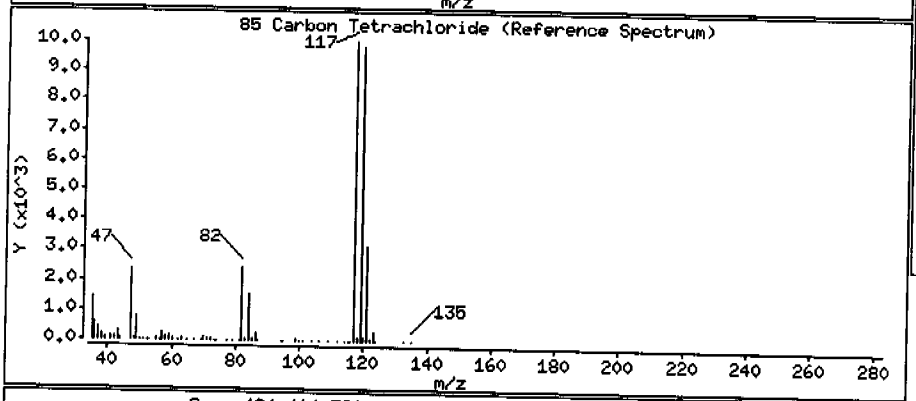
Concentration: 52.597 PPBV

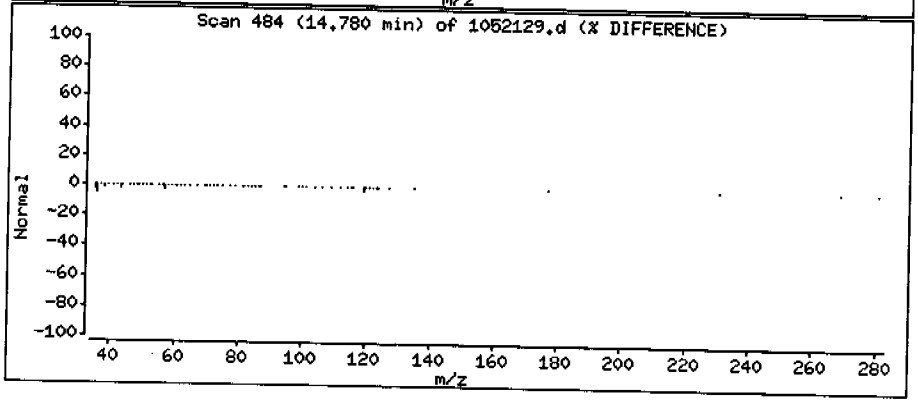












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

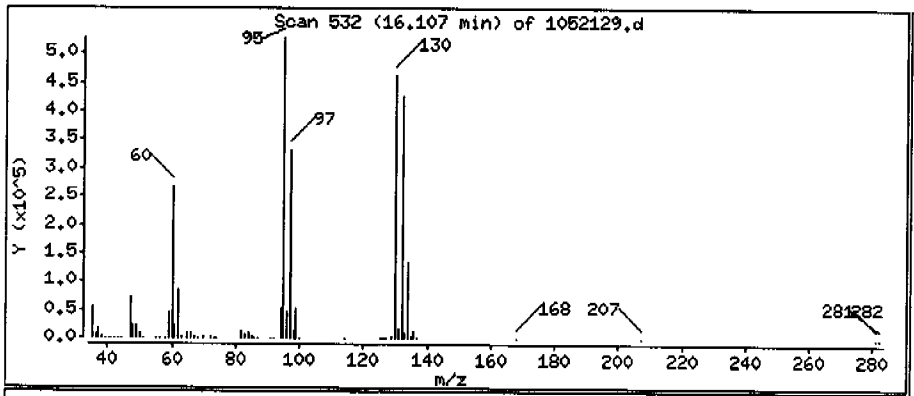
Operator: cb

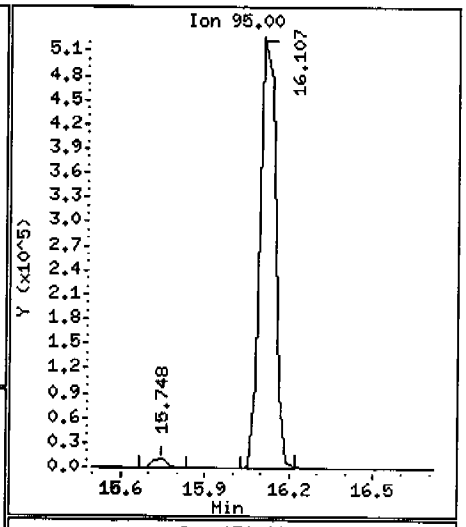
Column phase: RTx-624

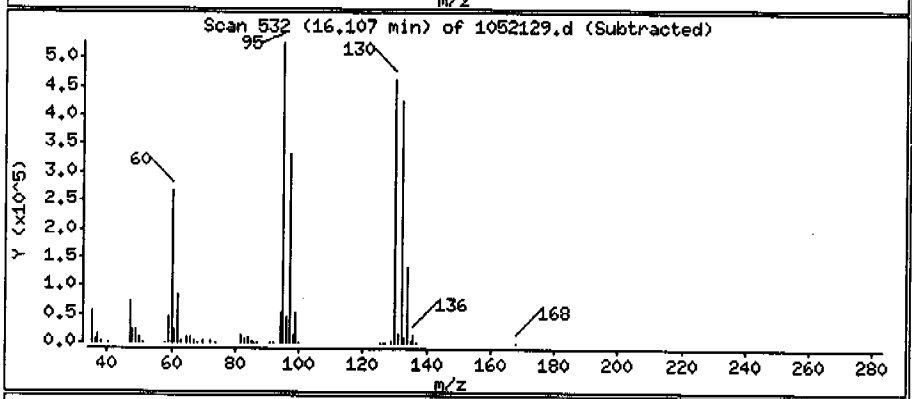
Column diameter: 0.53

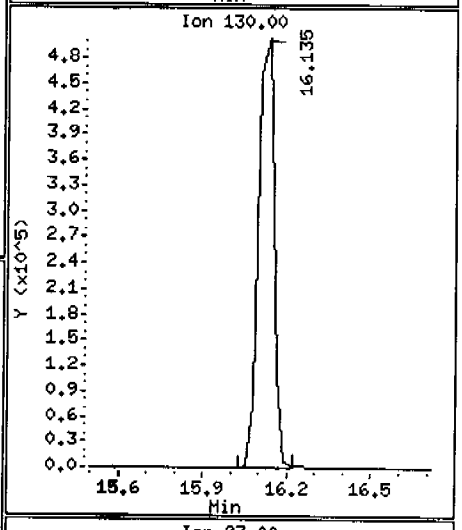
97 Trichloroethene

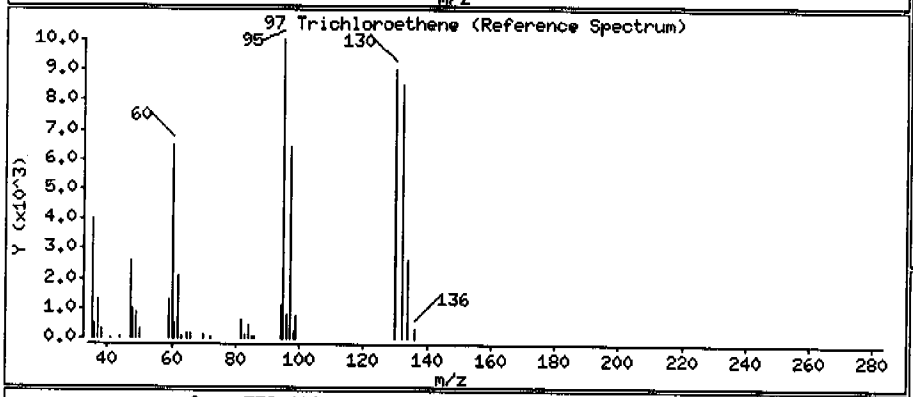
Concentration: 116.22 PPBV

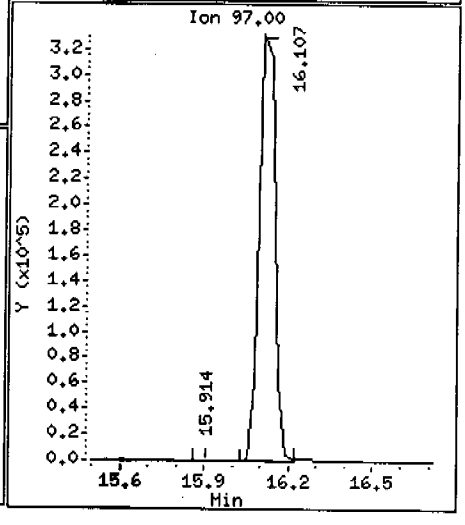


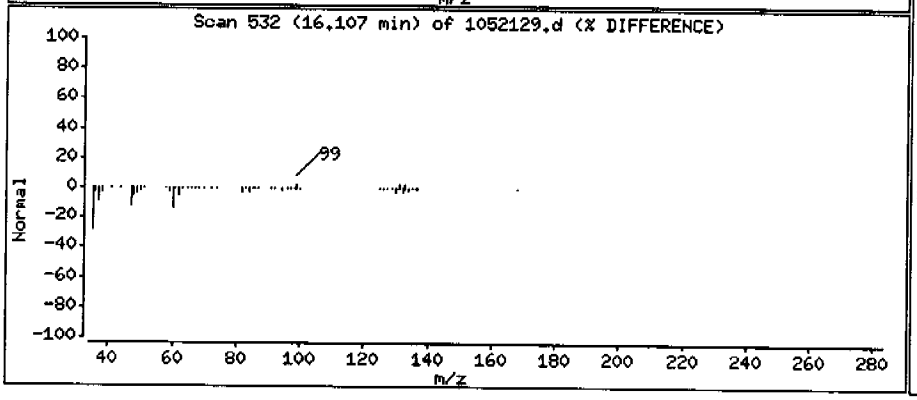












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34375

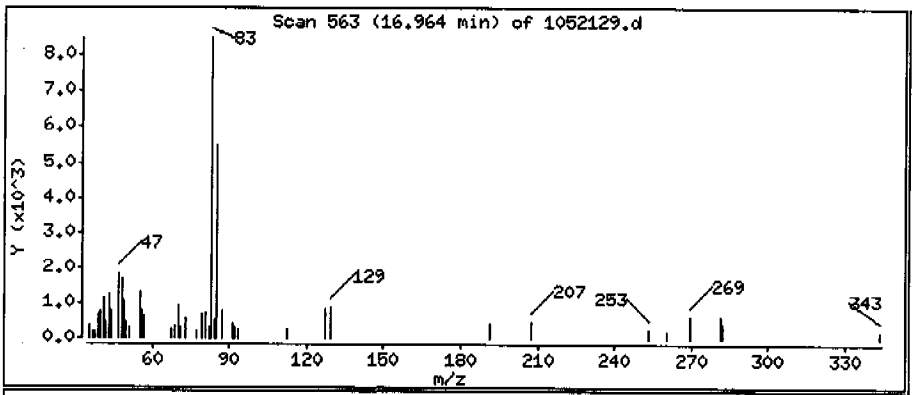
Operator: cb

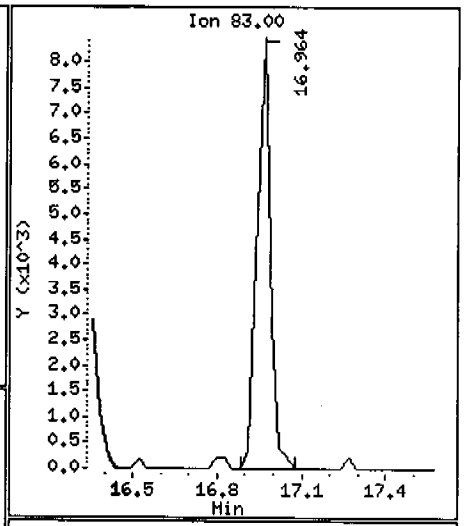
Column phase: RTx-624

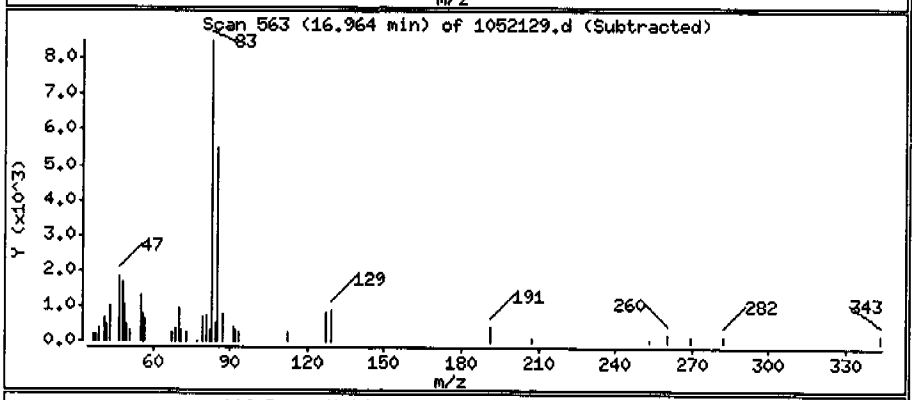
Column diameter: 0.53

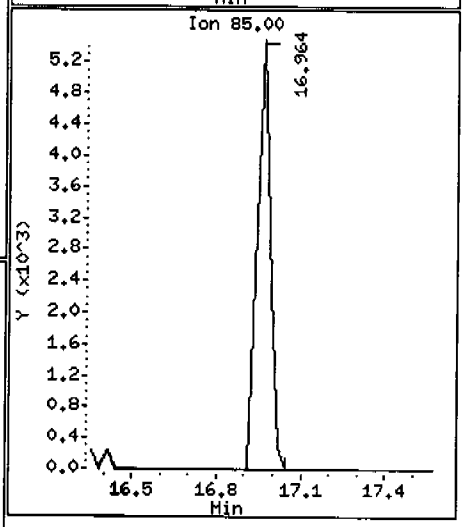
106 Bromodichloromethane

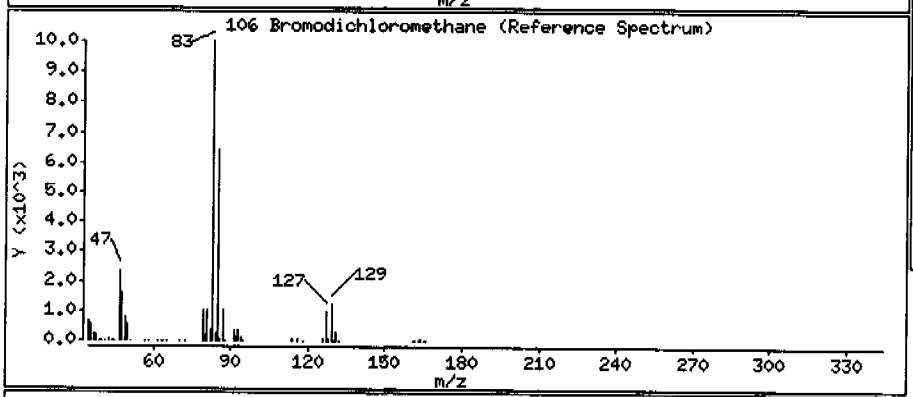
Concentration: 1.010 PPBV

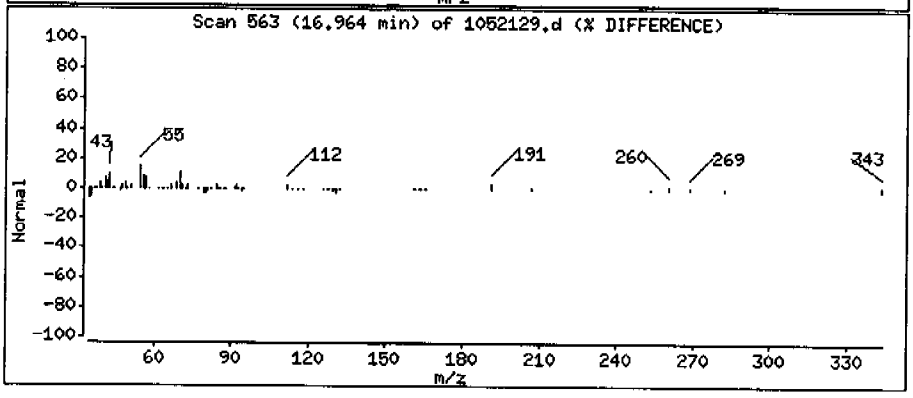












Data File: /chem/msd1.i/1-21may.b/1052129.d

Date : 22-MAY-2008 05:19

Client ID:

Sample Info: 100mL #34375

Instrument: msd1.i

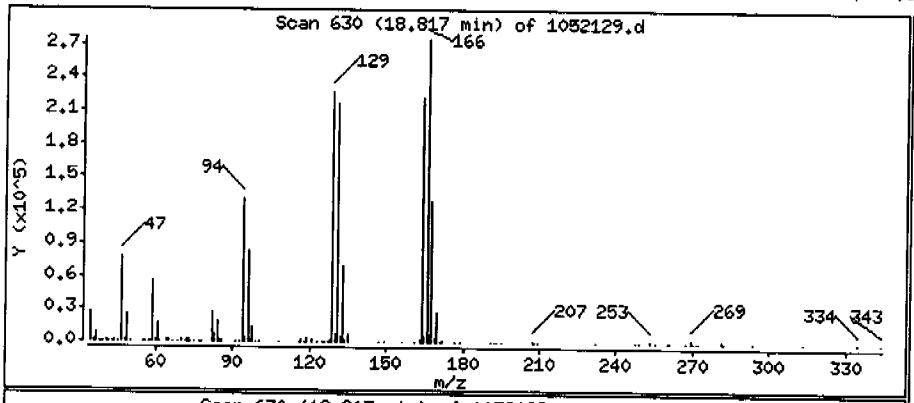
Operator: cb

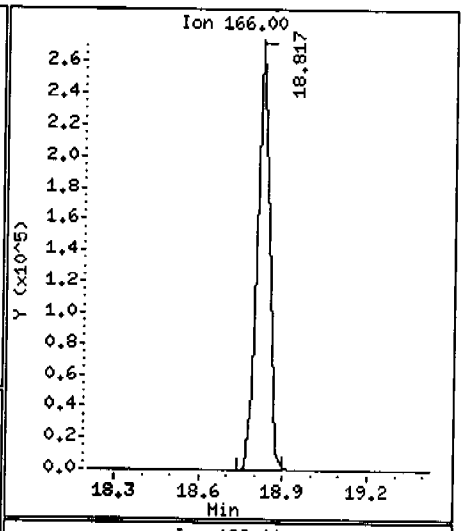
Column phase: RTx-624

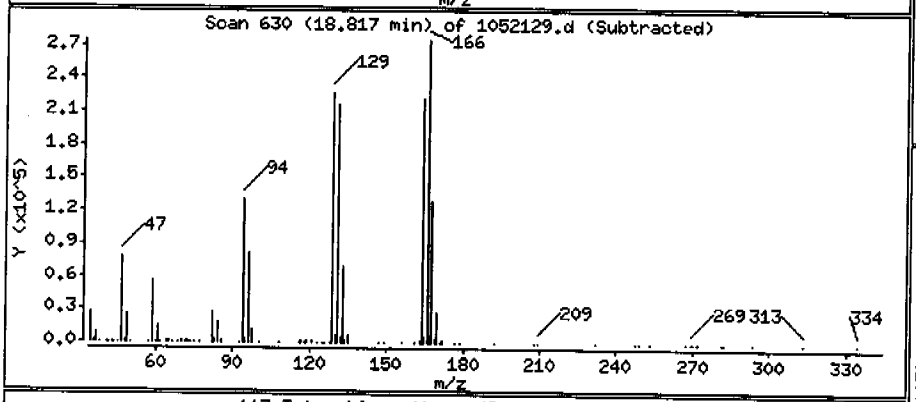
Column diameter: 0.53

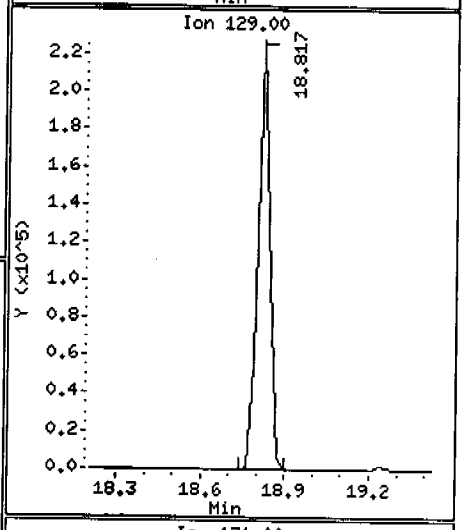
117 Tetrachloroethene

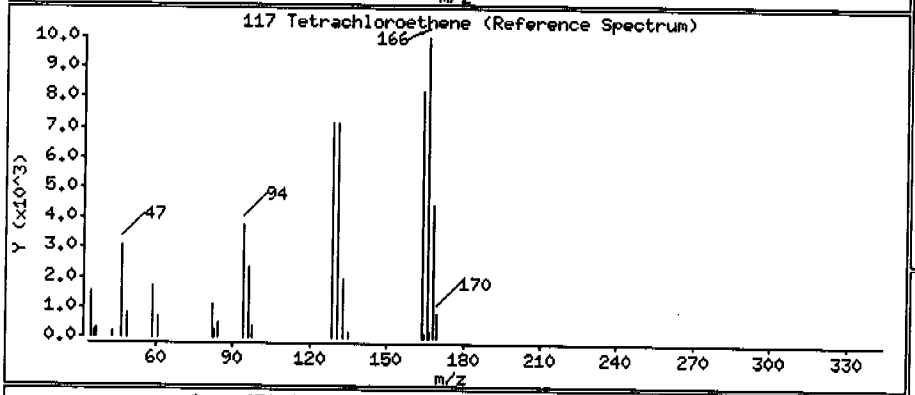
Concentration: 35.633 PPBV

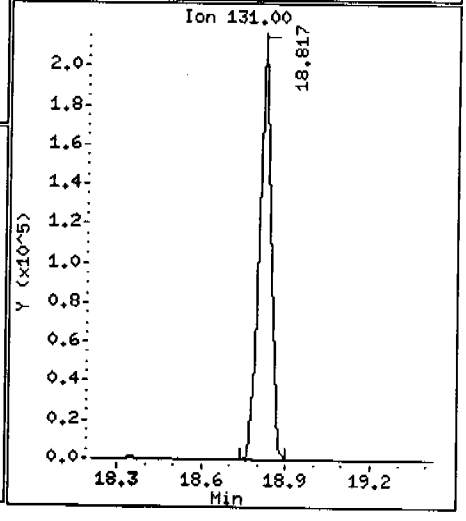


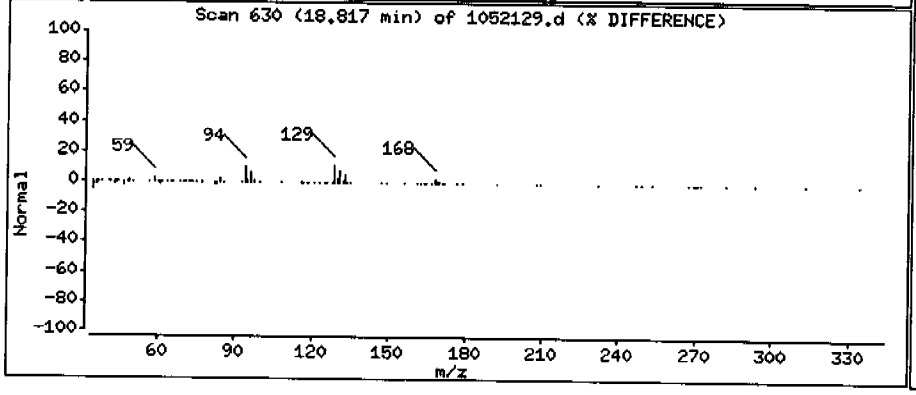












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12239

Lab ID#: 0805274-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.8	4.2	9.0
Ethanol	3.4	11	6.4	21
Freon 113	0.86	7.1	6.6	54
1,1-Dichloroethene	0.86	6.2	3.4	24
Methylene Chloride	0.86	84	3.0	290
cis-1,2-Dichloroethene	0.86	3.4	3.4	13
Chloroform	0.86	130	4.2	650
1,1,1-Trichloroethane	0.86	4.6	4.7	25
Carbon Tetrachloride	0.86	99	5.4	620
Benzene	0.86	0.89	2.7	2.8
1,2-Dichloroethane	0.86	1.3	3.5	5.3
Trichloroethene	0.86	200	4.6	1000
Bromodichloromethane	0.86	1.2	5.7	8.4
Toluene	0.86	1.0	3.2	3.8
1,1,2-Trichloroethane	0.86	4.0	4.7	22
Tetrachloroethene	0.86	25	5.8	170

0066

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12239

Lab ID#: 0805274-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052130 Date of Collection: 5/9/08
Dil. Factor: 1.71 Date of Analysis: 5/22/08 05:56 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.8	4.2	9.0
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	11	6.4	21
Freon 113	0.86	7.1	6.6	54
1,1-Dichloroethene	0.86	6.2	3.4	24
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.86	84	3.0	290
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	3.4	13
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	130	4.2	650
1,1,1-Trichloroethane	0.86	4.6	4.7	25
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	99	5.4	620
Benzene	0.86	0.89	2.7	2.8
1,2-Dichloroethane	0.86	1.3	3.5	5.3
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	200	4.6	1000
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.2	5.7	8.4
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	1.0	3.2	3.8
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	4.0	4.7	22
Tetrachloroethene	0.86	25	5.8	170

0067

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12239

Lab ID#: 0805274-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052130 Date Collection: 5/9/08
Dil. Factor: Date Analysis: 5/22/08 05:56 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	96	70-130

0068

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052130.d
Lab Smp Id: 0805274-04A
Inj Date : 22-MAY-2008 05:56
Operator : cb Inst ID: msd1.i
Smp Info : 100mL #34482
Misc Info : 6.5"Hg --> 5psi
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	288871	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	228226			28.93- 128.93	79.01
14.255	14.282 (1.000)	49	517531			132.03- 232.03	179.16
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1461838	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	232168			0.00- 65.76	15.88
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1665158	25.0000		80.00- 120.00	100.00
20.006	20.033 (1.000)	82	963198			8.42- 108.42	57.84
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.139 (1.060)	65	449308	23.3073	23.307	80.00- 120.00	100.00
15.139	15.139 (1.060)	67	235642			6.04- 106.04	52.45
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.987 (1.140)	98	1620621	24.4672	24.467	80.00- 120.00	100.00
17.960	17.987 (1.140)	70	175270			0.00- 60.35	10.82

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.987	(1.140)	100	1075129			15.45- 115.45	66.34
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.526	21.526	(1.075)	174	853180	23.9451	23.945	80.00- 120.00	100.00
21.526	21.526	(1.075)	95	1365884			110.56- 210.56	160.09
21.526	21.526	(1.075)	176	814044			45.40- 145.40	95.41
14 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
2.862	2.890	(0.200)	85	33701	1.05830	1.810	80.00- 120.00	100.00
2.890	2.890	(0.202)	87	11138			0.00- 75.39	33.05
38 Ethanol						CAS #: 64-17-5		
10.080	10.135	(0.706)	45	41639	6.41432	10.968	80.00- 120.00	100.00
10.080	10.135	(0.706)	43	11442			0.00- 75.81	27.48
0.000	10.135	(0.000)	46	0			0.00- 92.85	0.00
43 Freon 113						CAS #: 76-13-1		
10.577	10.577	(0.741)	151	88818	4.14164	7.082	80.00- 120.00	100.00
10.577	10.577	(0.741)	153	52171			12.64- 112.64	58.74
10.577	10.577	(0.741)	101	112804			83.95- 183.95	127.01
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.522	10.522	(0.737)	61	107722	3.62324	6.196	80.00- 120.00	100.00
10.522	10.522	(0.737)	96	59383			3.86- 103.86	55.13
10.522	10.522	(0.737)	98	37130			0.00- 85.09	34.47
54 Methylene Chloride						CAS #: 75-09-2		
11.739	11.739	(0.822)	49	1261714	48.9908	83.774	80.00- 120.00	100.00
11.766	11.739	(0.824)	84	810210			13.77- 113.77	64.22
11.739	11.739	(0.822)	51	379147			0.00- 79.96	30.05
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.950	13.895	(0.977)	61	60926	1.96823	3.366	80.00- 120.00	100.00
13.923	13.895	(0.975)	96	15458			20.70- 120.70	25.37
13.923	13.895	(0.975)	98	7590			0.00- 94.62	12.46
81 Chloroform						CAS #: 67-66-3		
14.365	14.365	(1.006)	83	3198469	78.2747	133.85	80.00- 120.00	100.00
14.365	14.365	(1.006)	85	2007258			12.14- 112.14	62.76
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.586	14.586	(1.021)	97	116496	2.71706	4.646	80.00- 120.00	100.00
14.586	14.586	(1.021)	99	76662			13.23- 113.23	65.81
85 Carbon Tetrachloride						CAS #: 56-23-5		
14.780	14.780	(1.035)	119	2299522	57.9857	99.155	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
85 Carbon Tetrachloride (continued)								
14.780	14.780	(1.035)	117	2343535			53.03- 153.03	101.91
91 Benzene						CAS #: 71-43-2		
15.139	15.139	(0.961)	78	38767	0.52118	0.8912	80.00- 120.00	100.00
15.139	15.139	(0.961)	77	8557			0.00- 73.68	22.07
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.250	15.250	(0.968)	62	23572	0.76632	1.310	80.00- 120.00	100.00
15.250	15.250	(0.968)	64	9031			0.00- 83.51	38.31
97 Trichloroethene						CAS #: 79-01-6		
16.107	16.107	(1.023)	95	3480137	114.092	195.10	80.00- 120.00	100.00
16.135	16.107	(1.025)	130	3372320			46.53- 146.53	96.90
16.107	16.107	(1.023)	97	2244225			14.98- 114.98	64.49
106 Bromodichloromethane						CAS #: 75-27-4		
16.964	16.964	(1.077)	83	35174	0.73577	1.258	80.00- 120.00	100.00
16.964	16.964	(1.077)	85	21480			11.42- 111.42	61.07
114 Toluene						CAS #: 108-88-3		
18.070	18.070	(1.147)	91	60474	0.59108	1.011	80.00- 120.00	100.00
18.070	18.070	(1.147)	92	36793			9.73- 109.73	60.84
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.706	18.706	(0.934)	97	82319	2.33598	3.994	80.00- 120.00	100.00
18.706	18.706	(0.934)	99	49992			11.60- 111.60	60.73
18.706	18.706	(0.934)	83	66681			31.38- 131.38	81.00
117 Tetrachloroethene						CAS #: 127-18-4		
18.817	18.817	(0.939)	166	597135	14.6275	25.013	80.00- 120.00	100.00
18.817	18.817	(0.939)	129	463244			27.45- 127.45	77.58
18.817	18.817	(0.939)	131	446893			24.33- 124.33	74.84

Data File: /chem/msd1.i/1-21may.b/1052130.d
Report Date: 27-May-2008 15:09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052130.d
Lab Smp Id: 0805274-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.5"Hg --> 5psi

Calibration Date: 21-MAY-2008
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	288871	-6.98
95 1,4-Difluorobenze	1646495	987897	2305093	1461838	-11.22
123 Chlorobenzene-d5	1819110	1091466	2546754	1665158	-8.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-21may.b/1052130.d
Report Date: 27-May-2008 15:09

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805274-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.5"Hg --> 5psi

Client SDG: 1-21may
Fraction: VOA

Operator: cb
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.307	93.23	70-130
$ 111 Toluene-d8	25.000	24.467	97.87	70-130
$ 136 Bromofluorobenzene	25.000	23.945	95.78	70-130

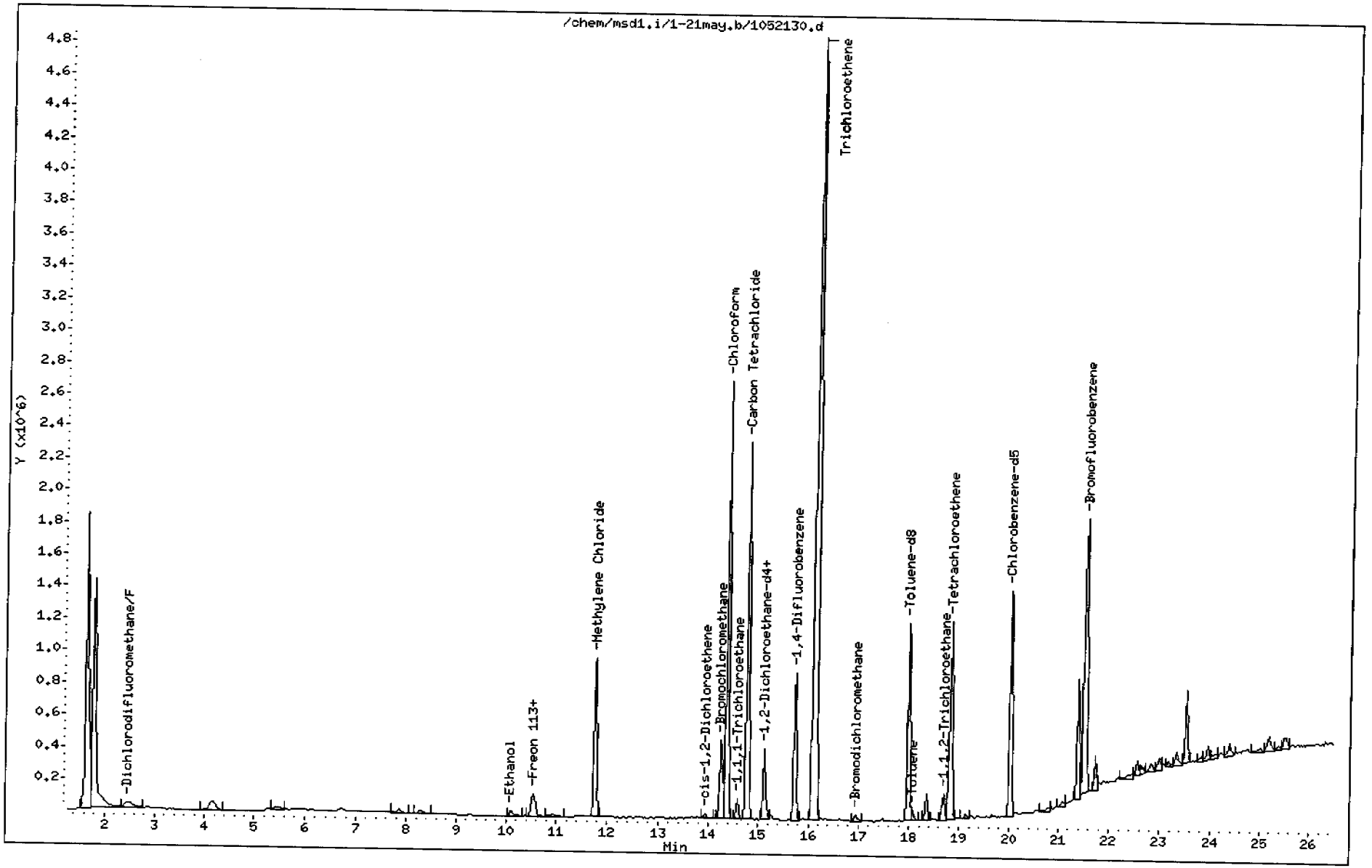
Data File: /chem/msd1.i/1-21may.b/1052130.d
Date : 22-MAY-2008 05:56
Client ID:
Sample Info: 100mL #34482

Column phase: RTx-624

Instrument: msd1.i

Operator: cb
Column diameter: 0.53

0074



Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

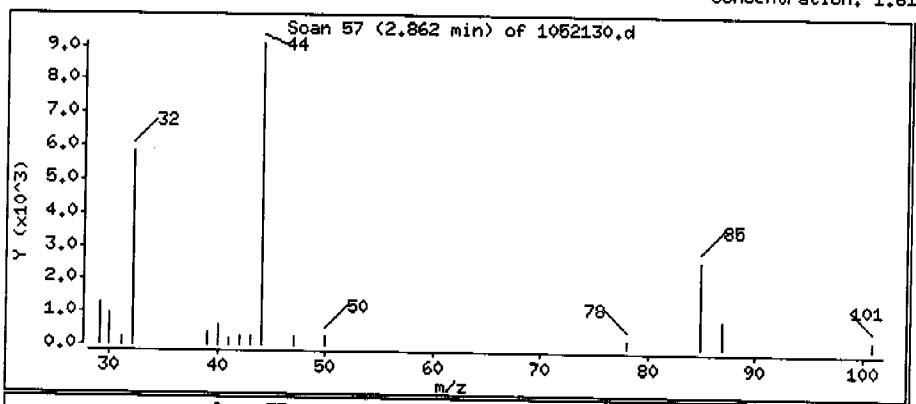
Operator: cb

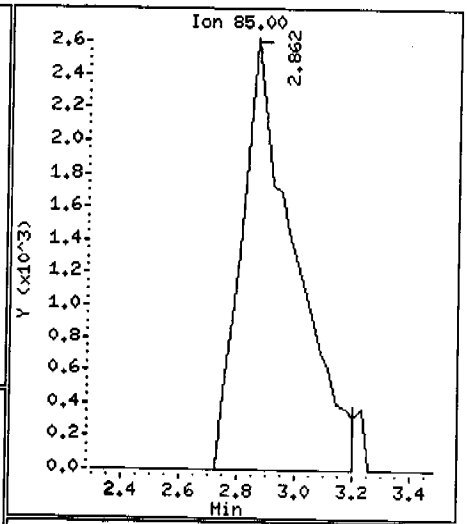
Column phase: RTx-624

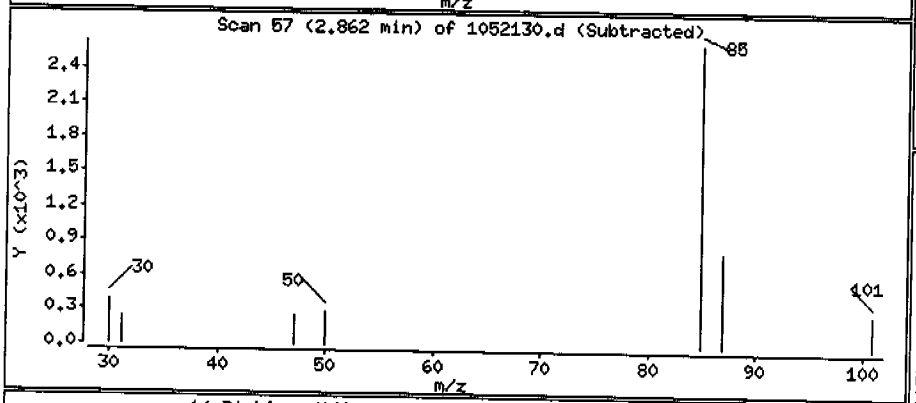
Column diameter: 0.53

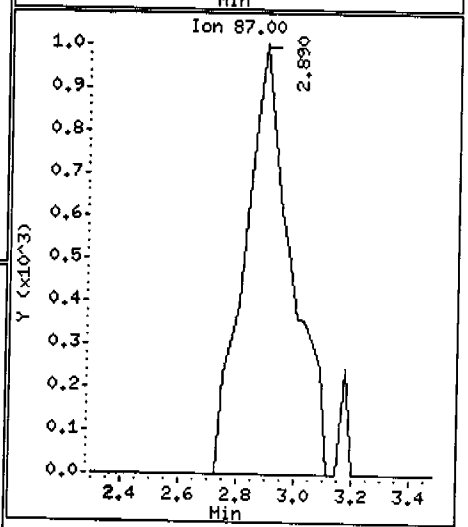
14 Dichlorodifluoromethane/Fr12

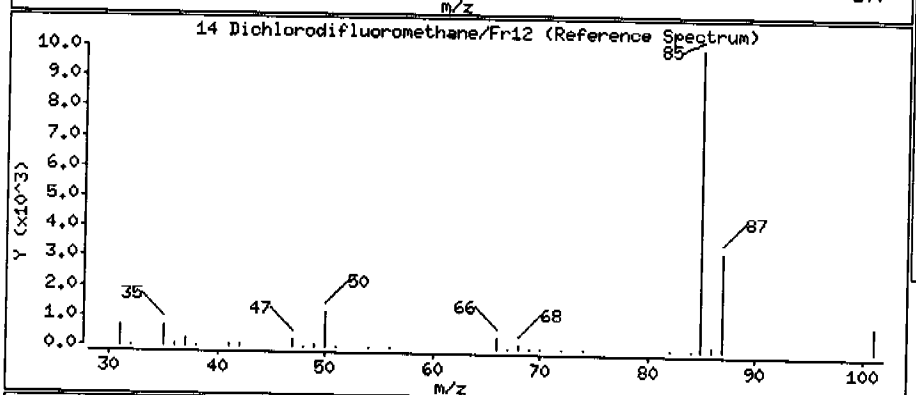
Concentration: 1.810 PPBV

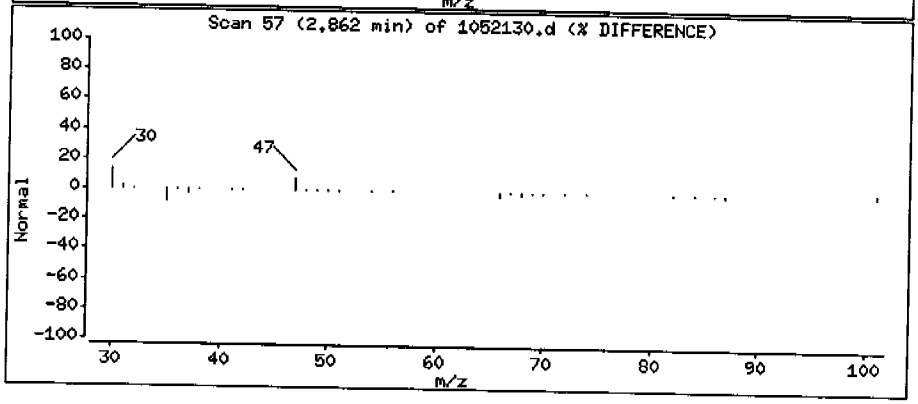












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

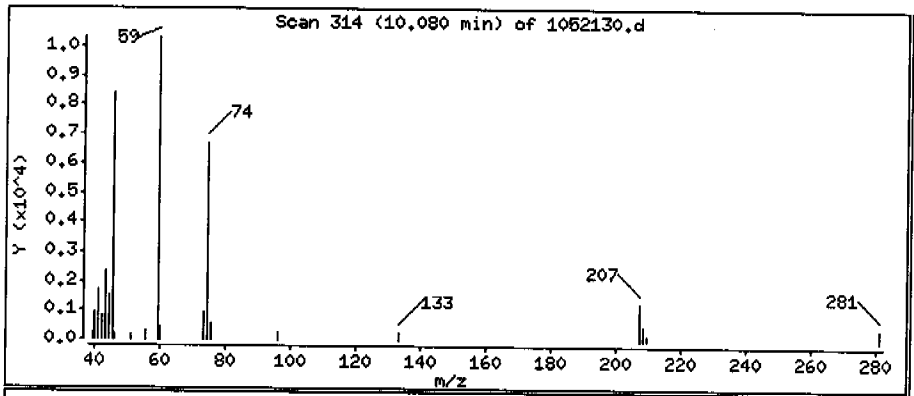
Operator: cb

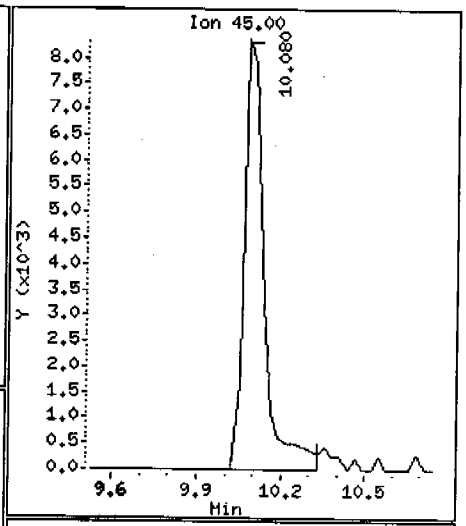
Column phase: RTx-624

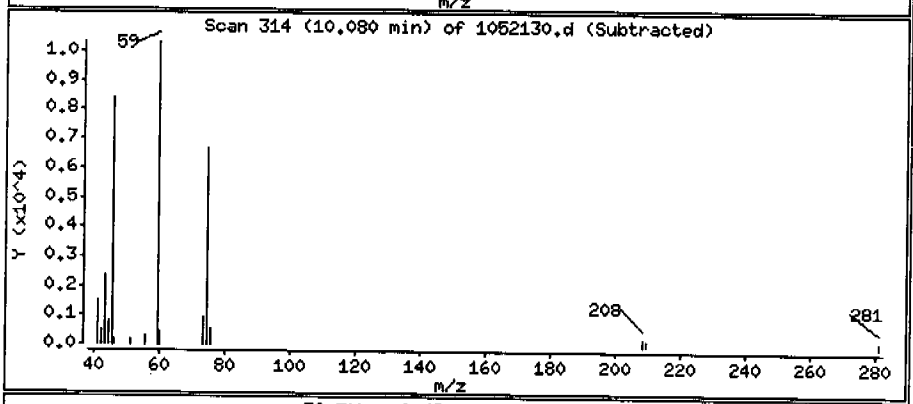
Column diameter: 0.53

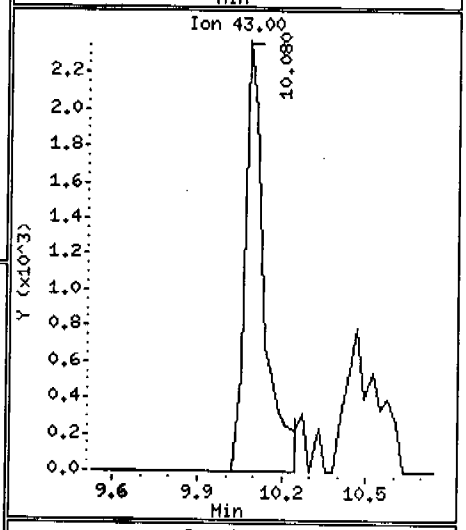
38 Ethanol

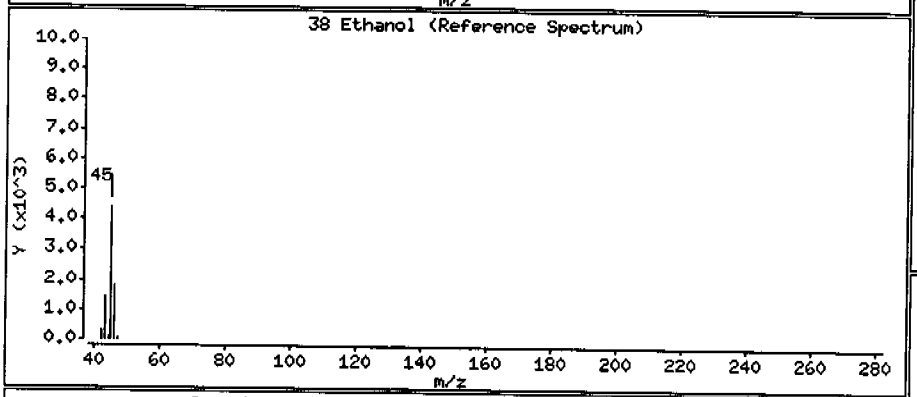
Concentration: 10.968 PPBV

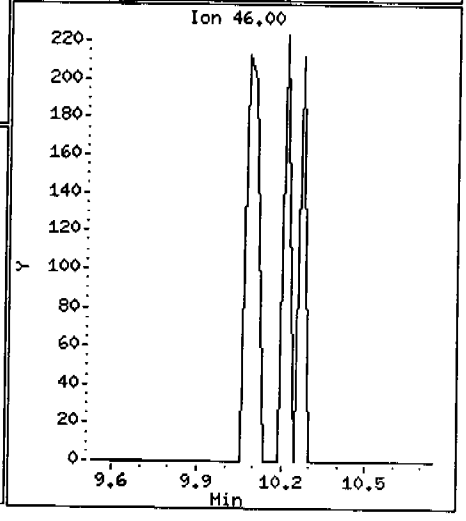


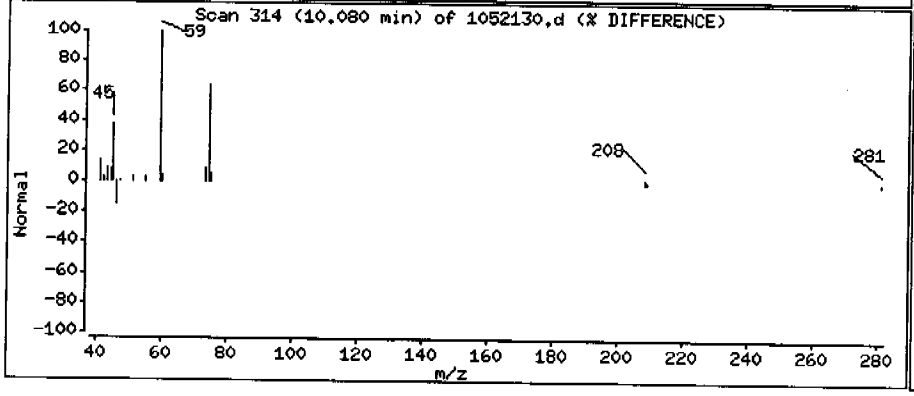












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

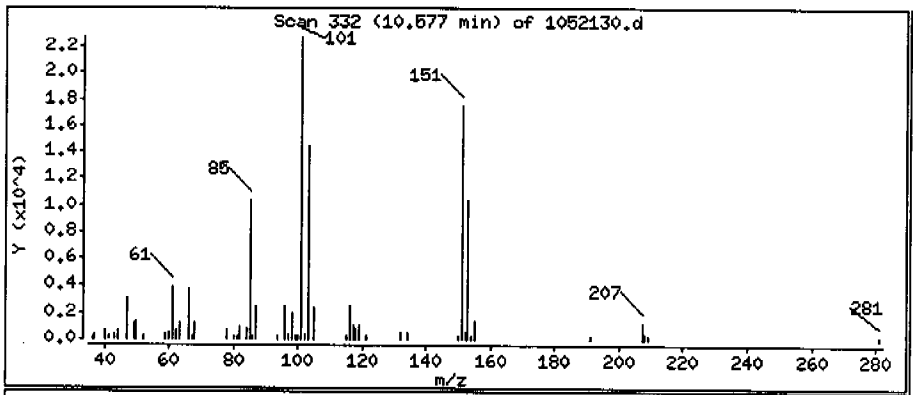
Operator: cb

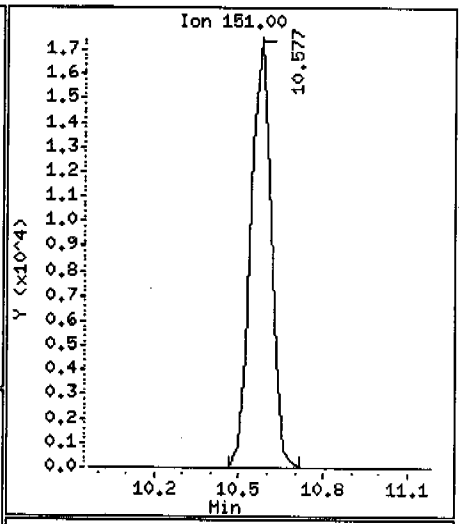
Column phase: RTx-624

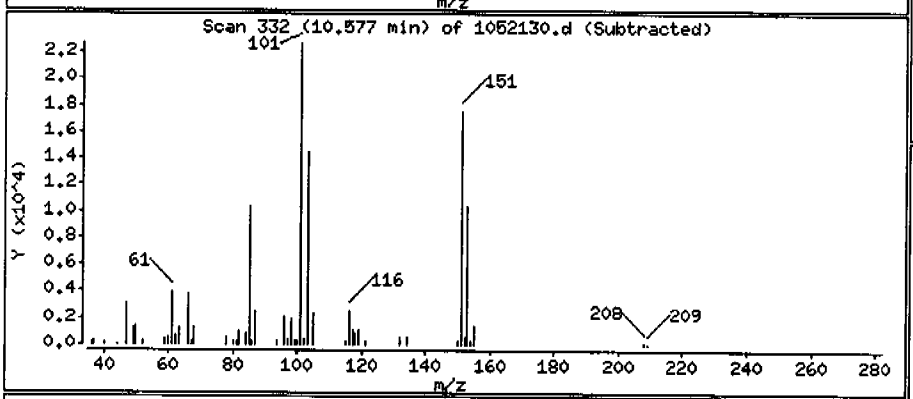
Column diameter: 0.53

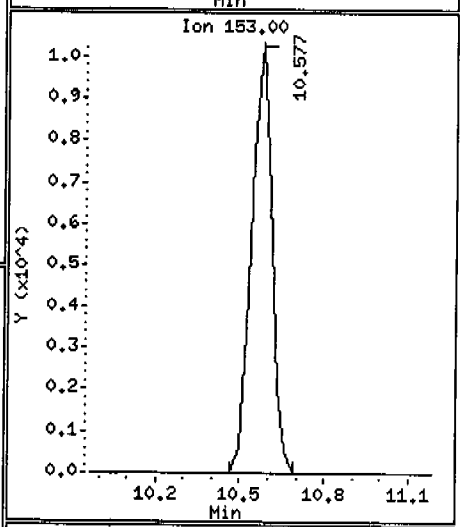
43 Freon 113

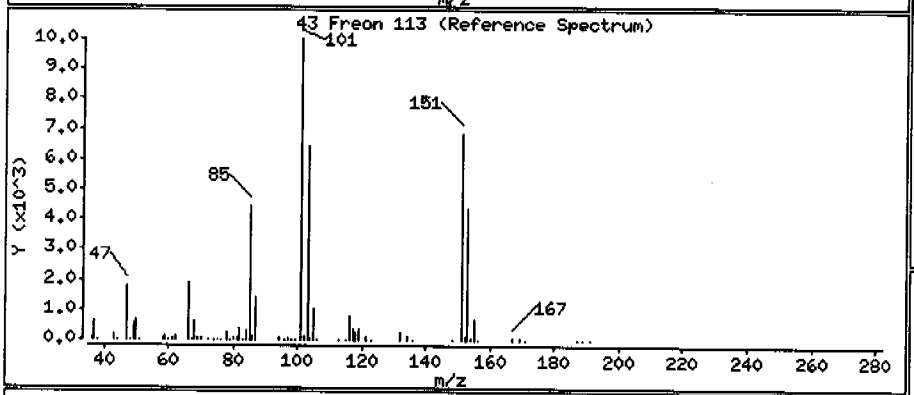
Concentration: 7.082 PPBV

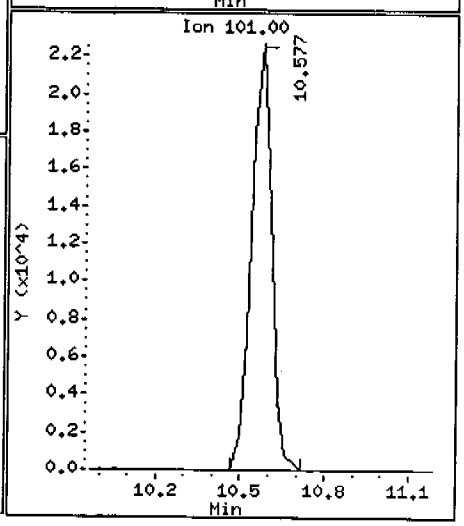


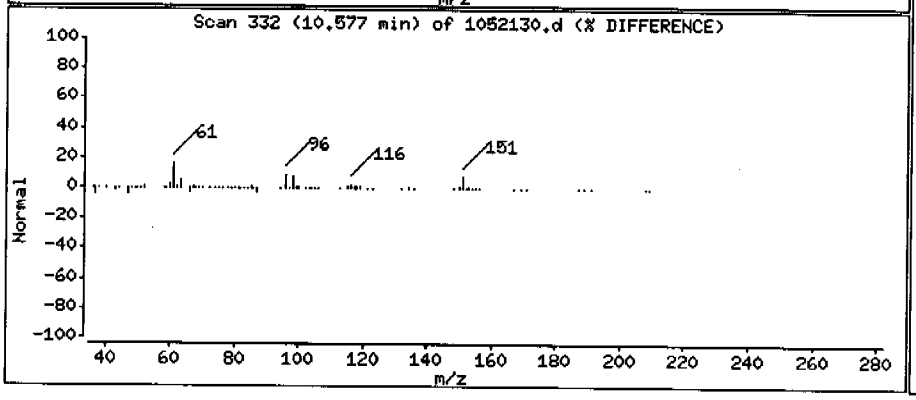












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

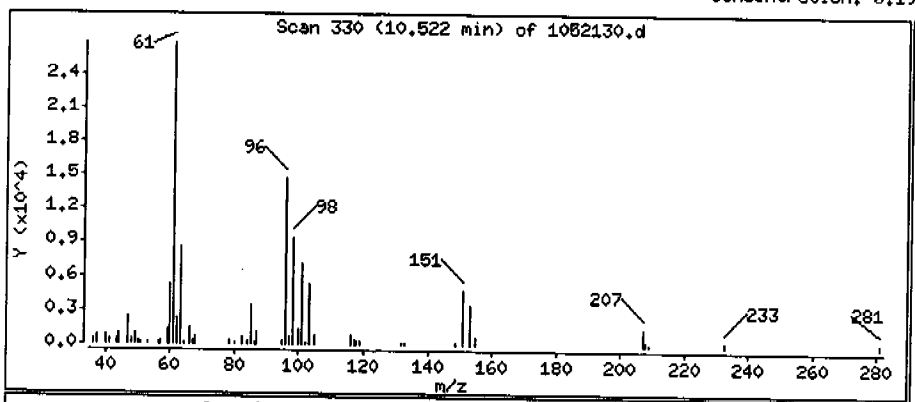
Operator: cb

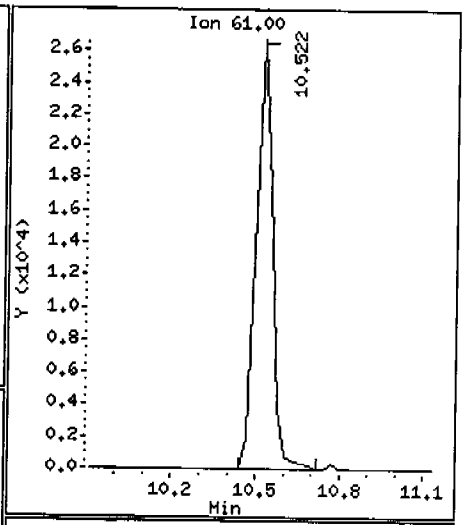
Column phase: RTx-624

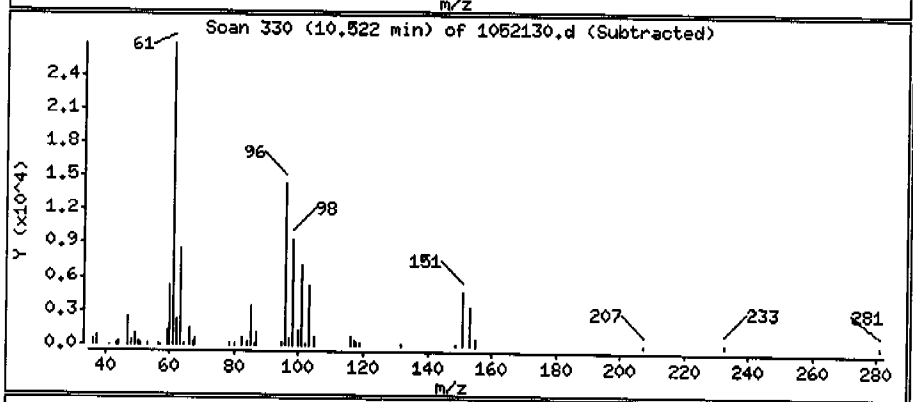
Column diameter: 0.53

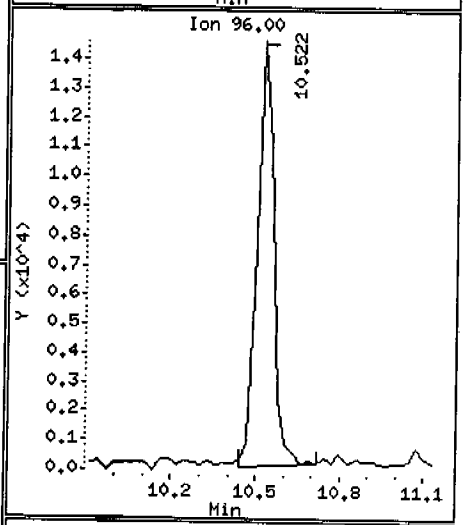
44 1,1-Dichloroethene

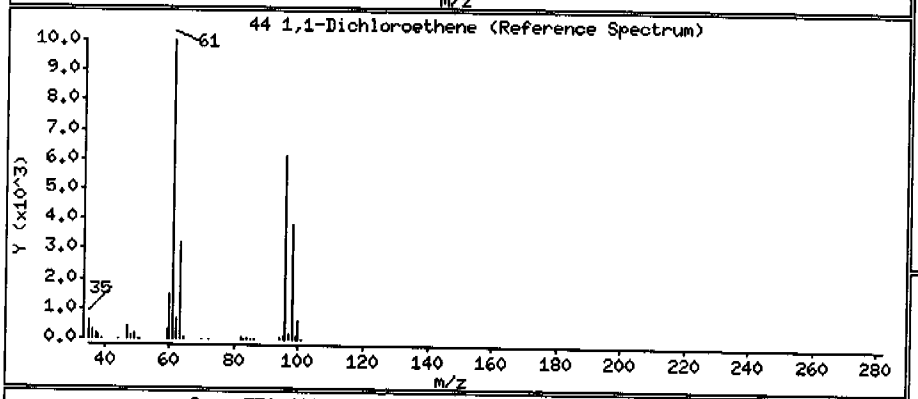
Concentration: 6.196 PPBV

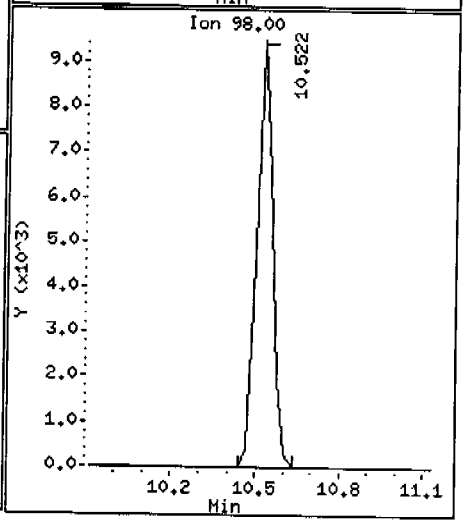


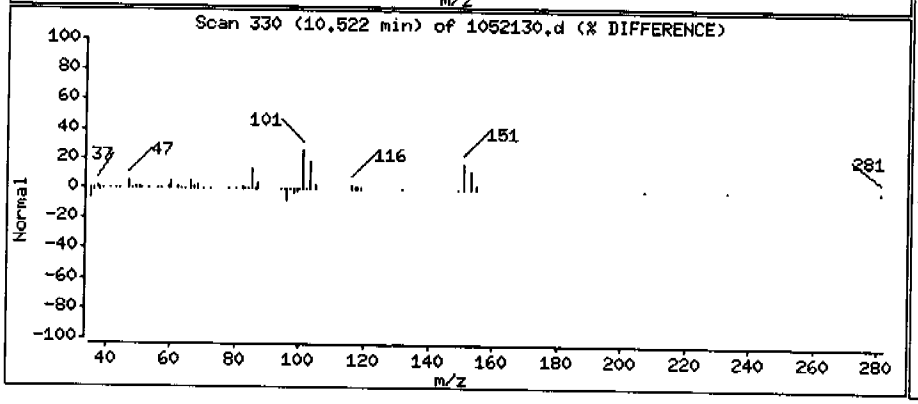












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

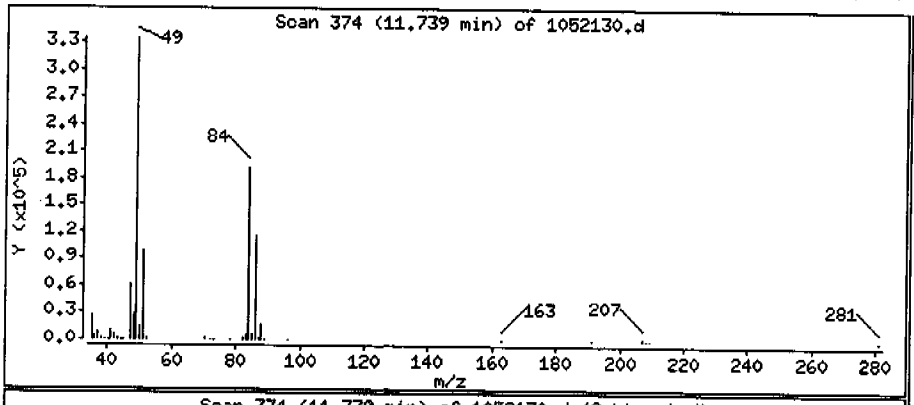
Operator: cb

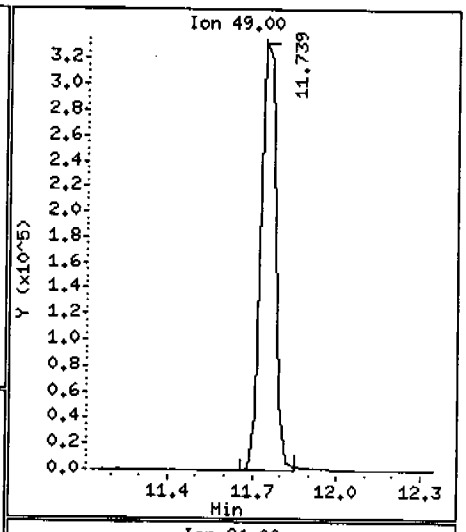
Column phase: RTx-624

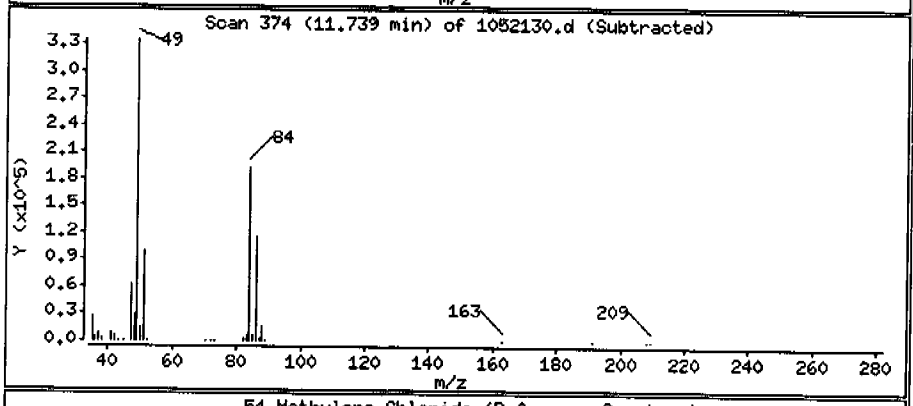
Column diameter: 0.53

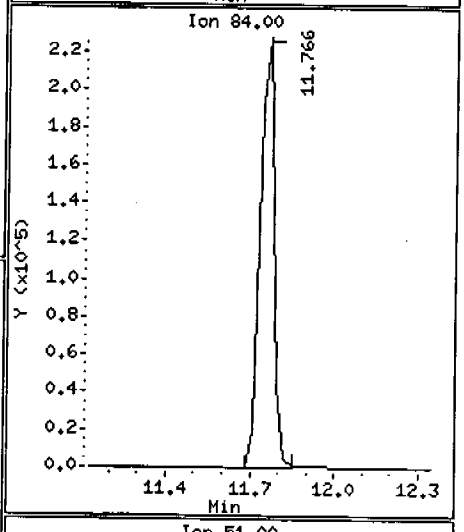
54 Methylene Chloride

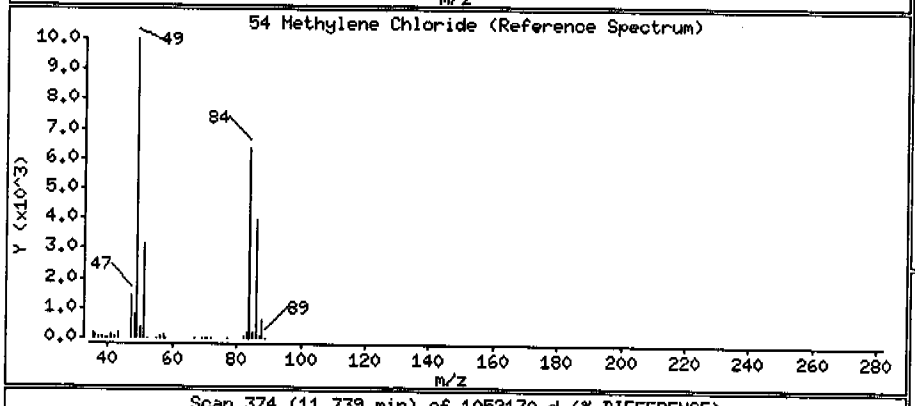
Concentration: 83.774 PPBV

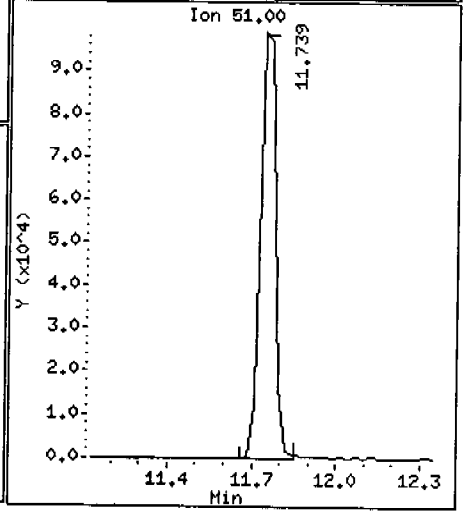


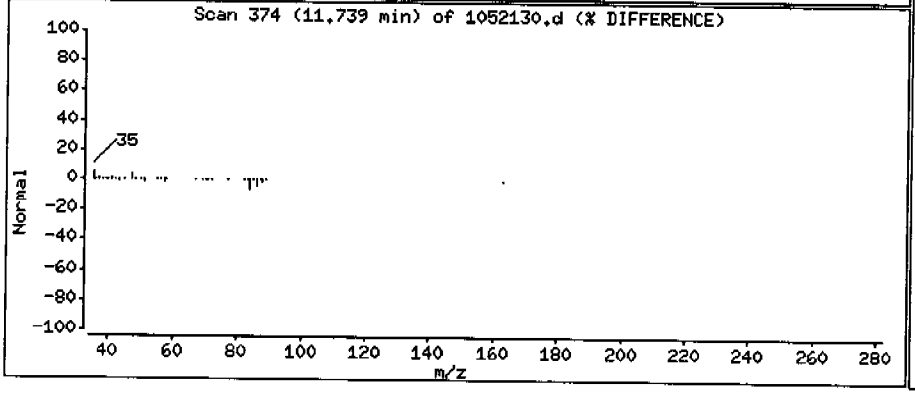












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

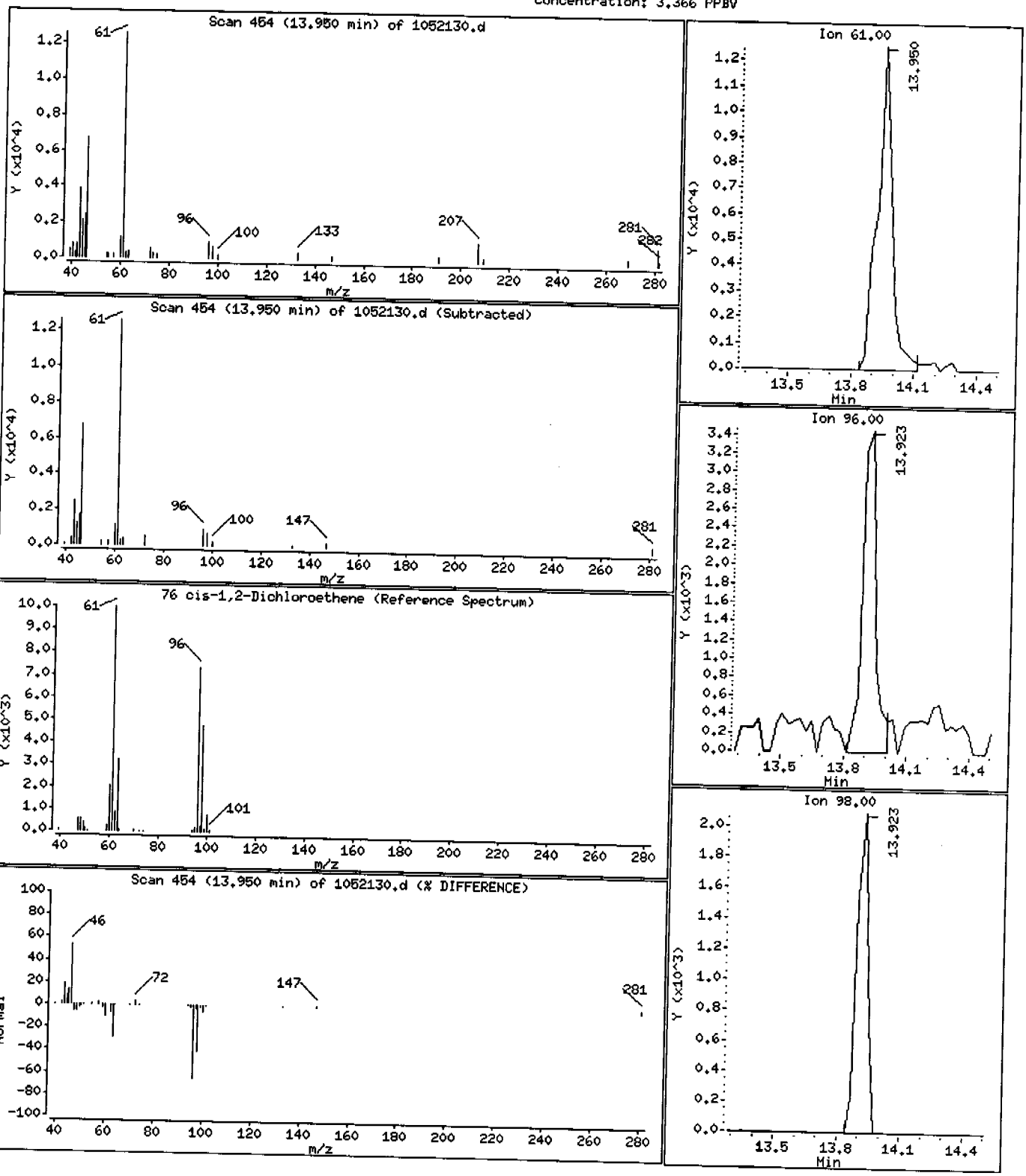
Operator: cb

Column phase: RTx-624

Column diameter: 0.53

76 cis-1,2-Dichloroethene

Concentration: 3.366 PPBV



Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

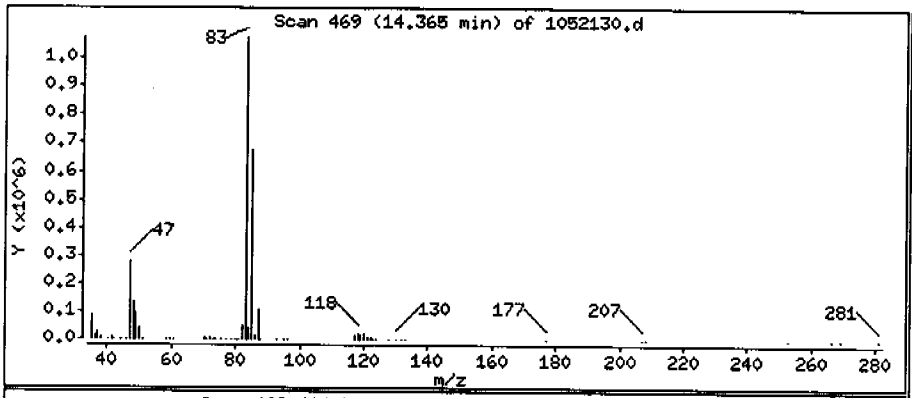
Operator: cb

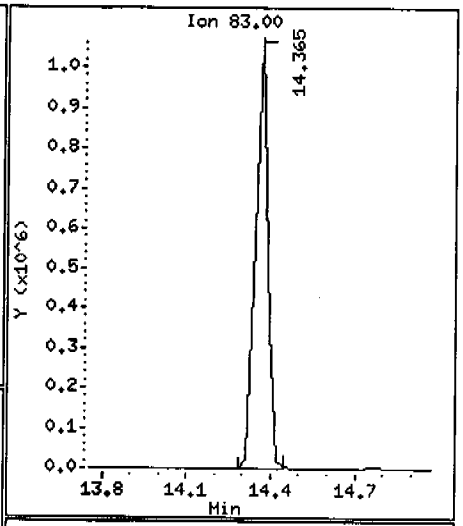
Column phase: RTx-624

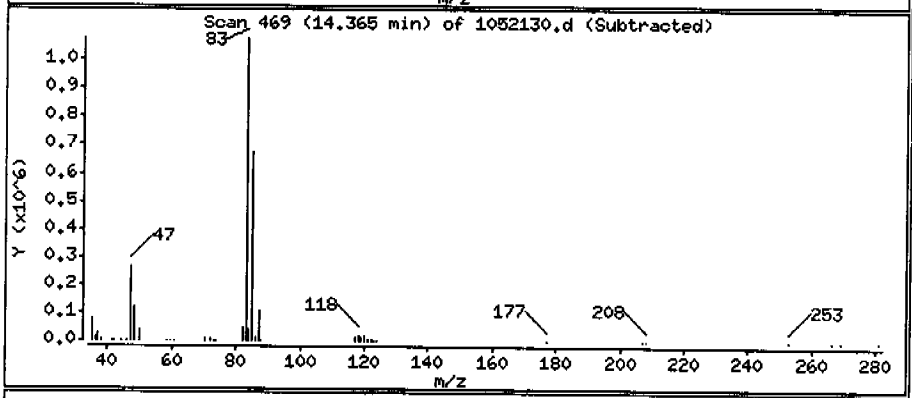
Column diameter: 0.53

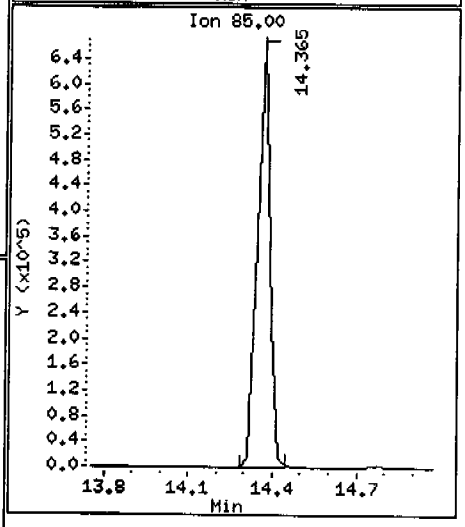
81 Chloroform

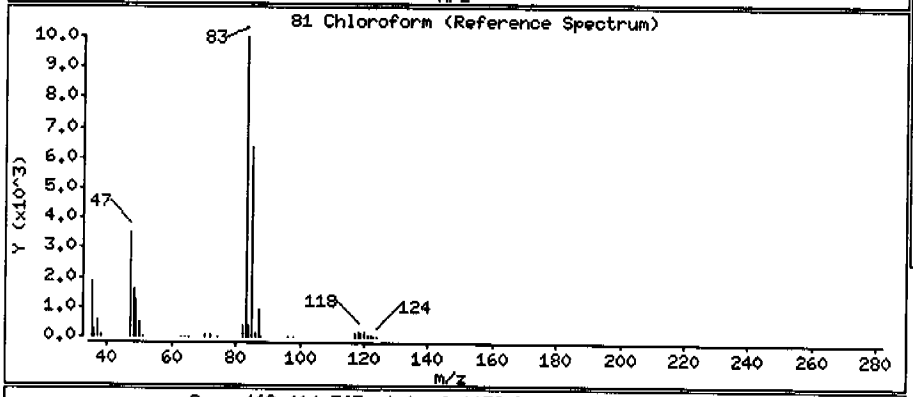
Concentration: 133.85 PPBV

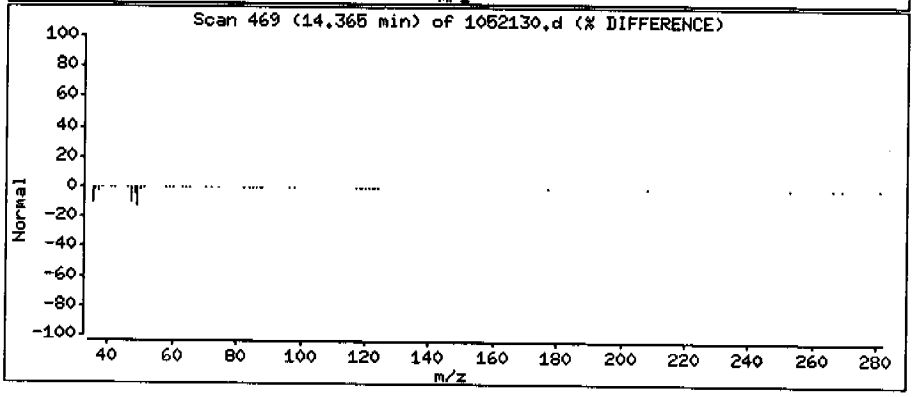












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

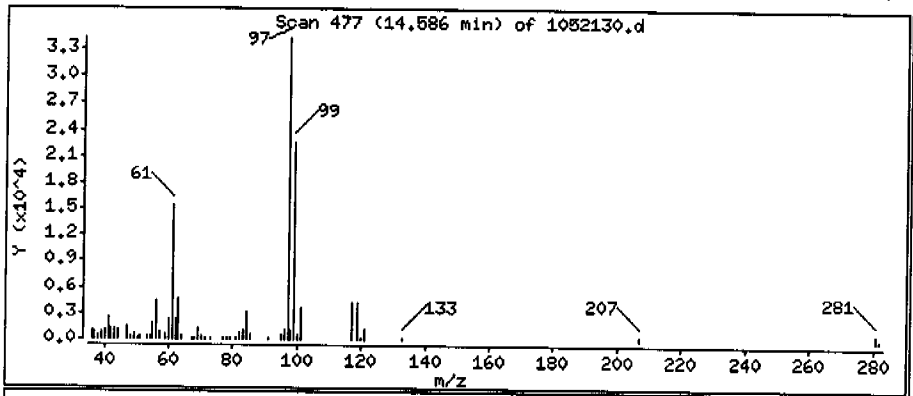
Operator: cb

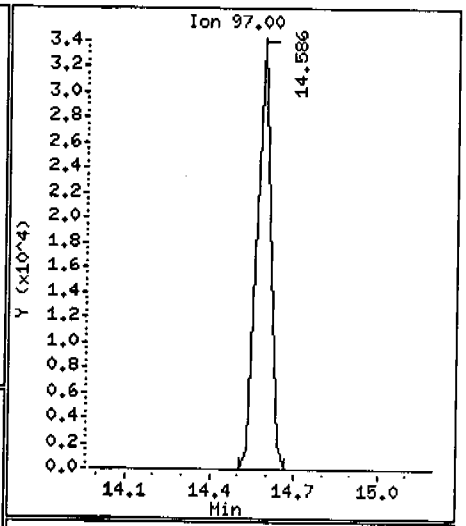
Column phase: RTx-624

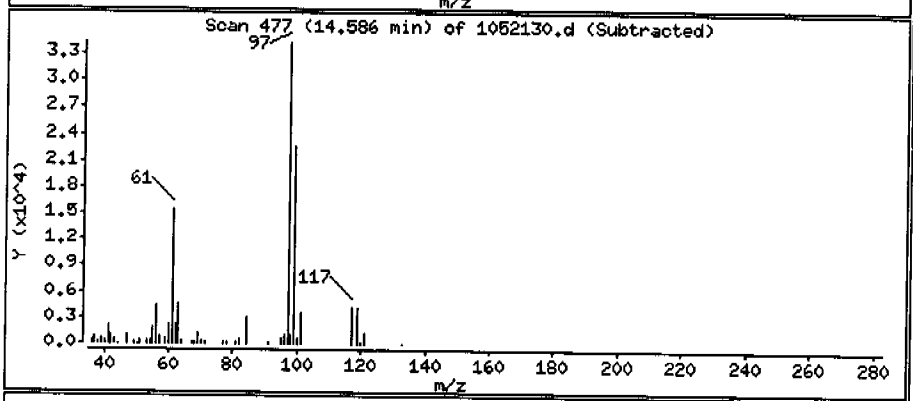
Column diameter: 0.53

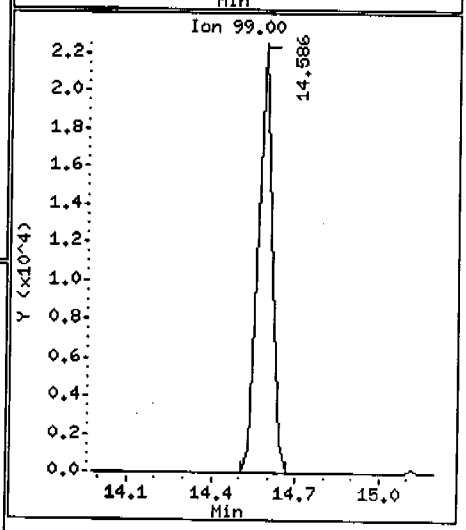
83 1,1,1-Trichloroethane

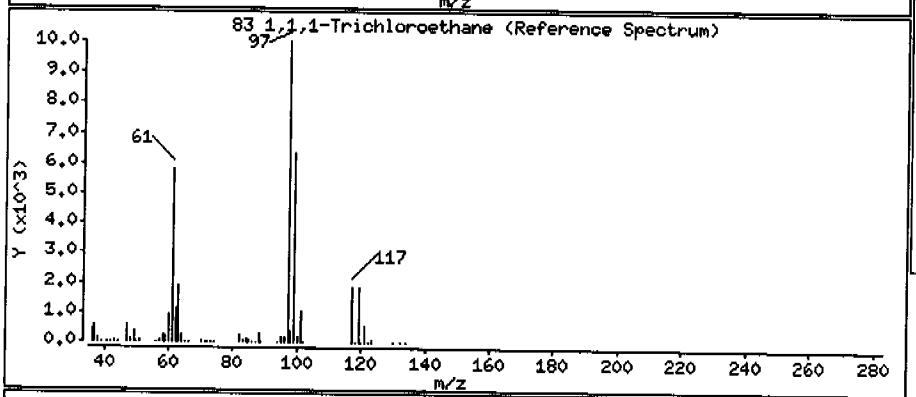
Concentration: 4.646 PPBV

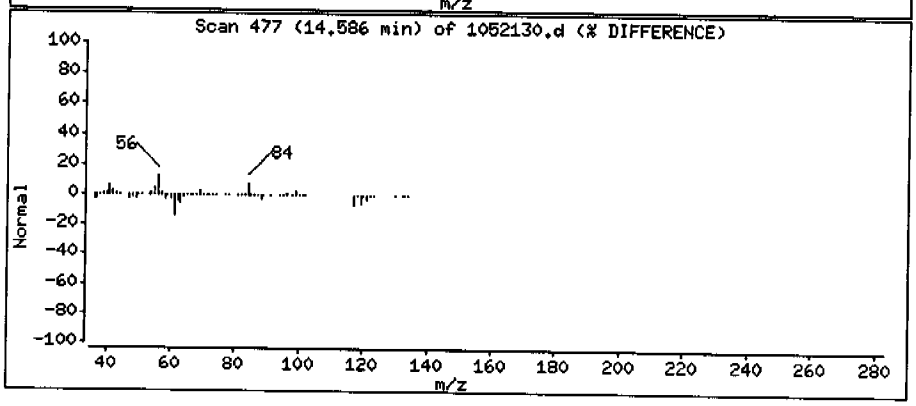












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

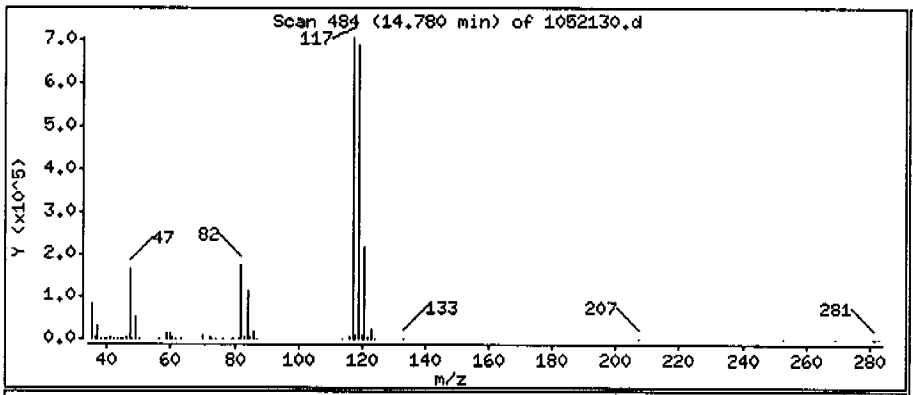
Operator: cb

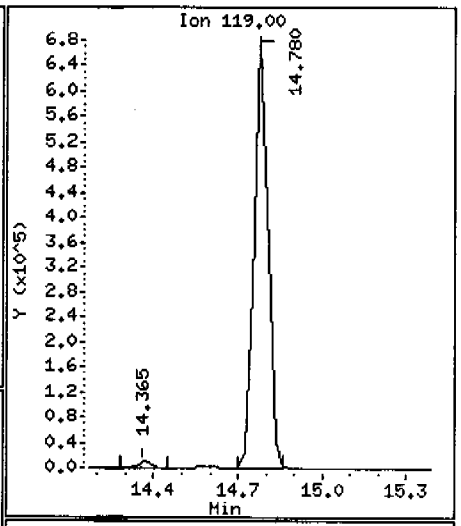
Column phase: RTx-624

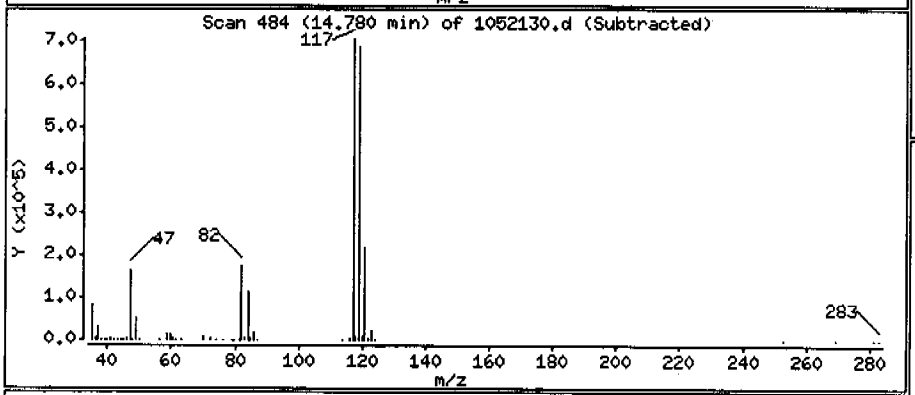
Column diameter: 0.53

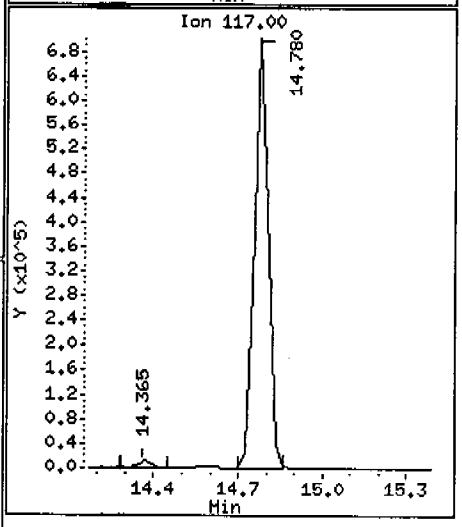
85 Carbon Tetrachloride

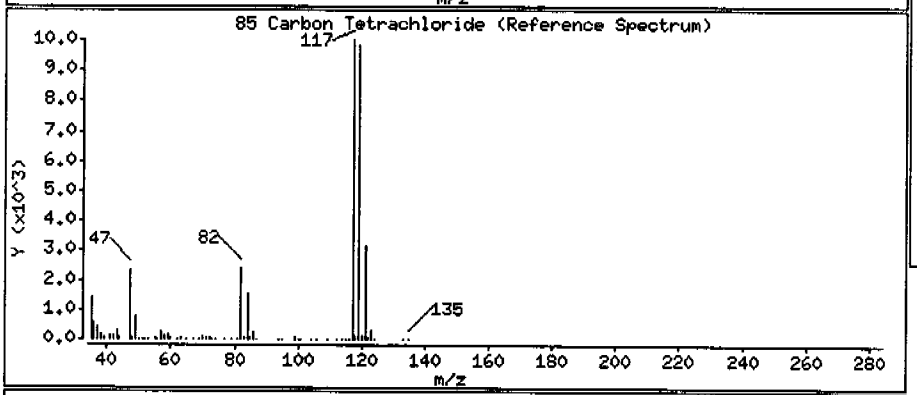
Concentration: 99.155 PPBV

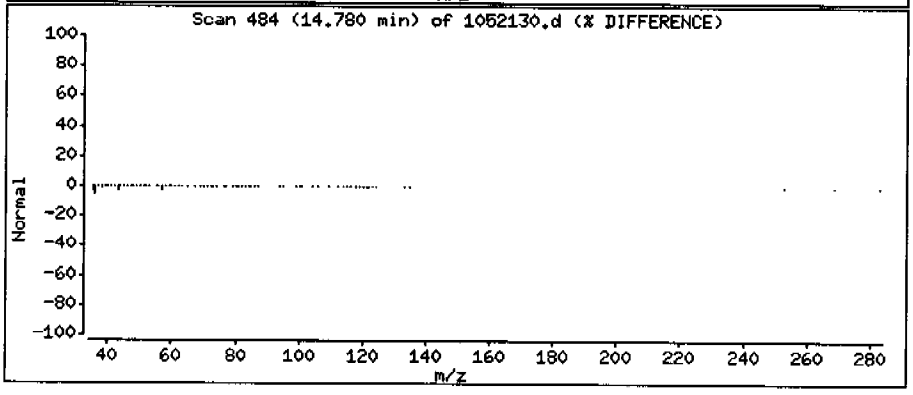












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

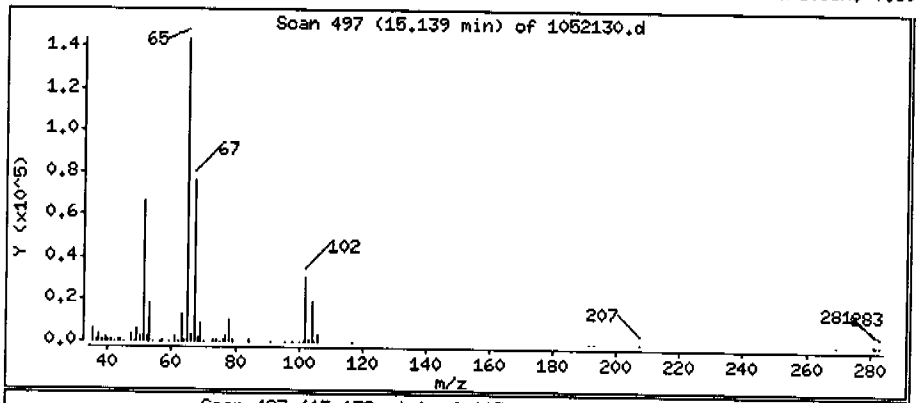
Operator: cb

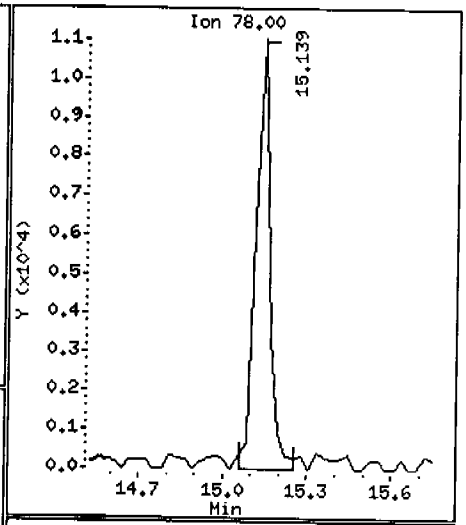
Column phase: RTx-624

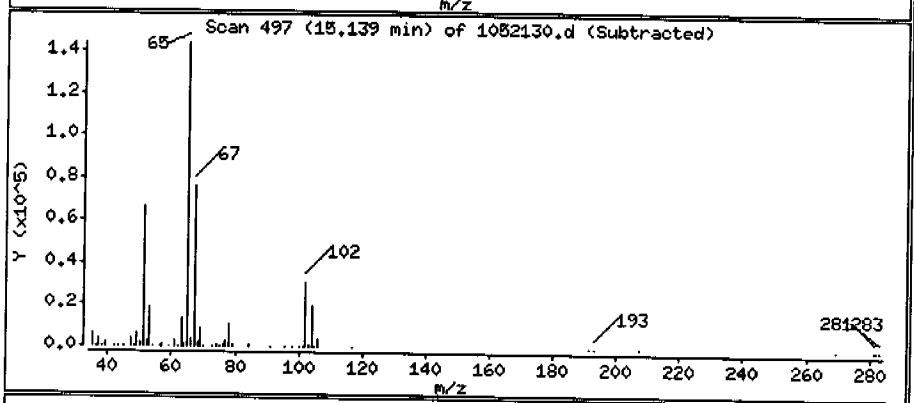
Column diameter: 0.53

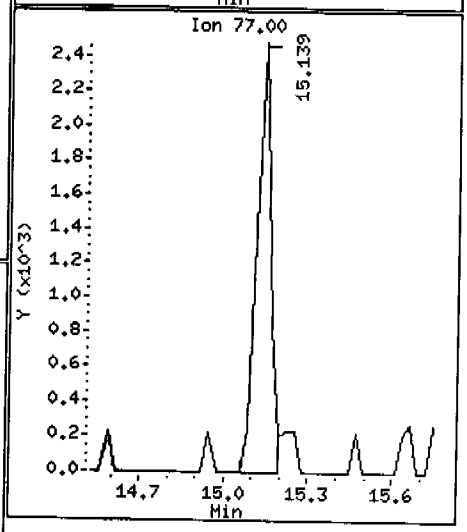
91 Benzene

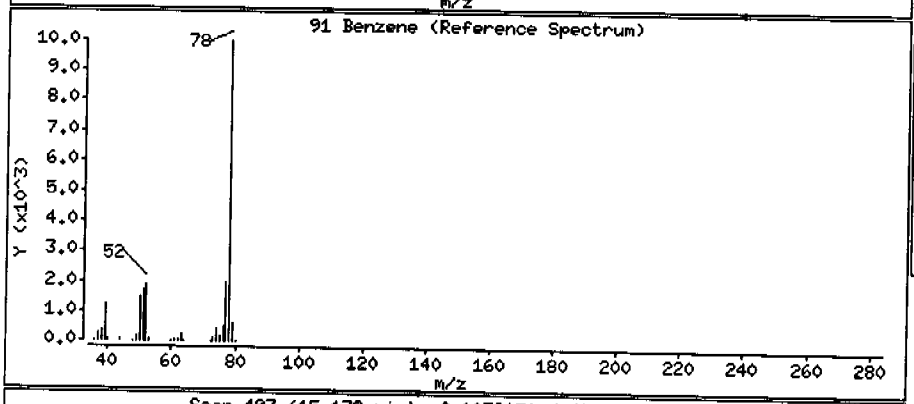
Concentration: 0.8912 PPBV

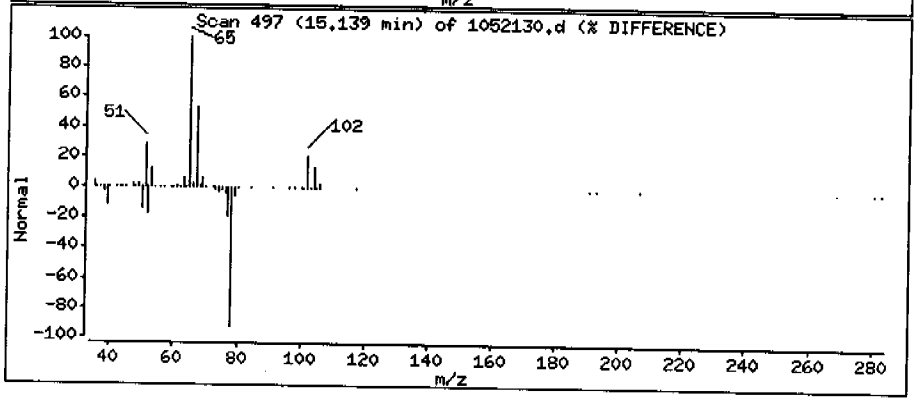












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

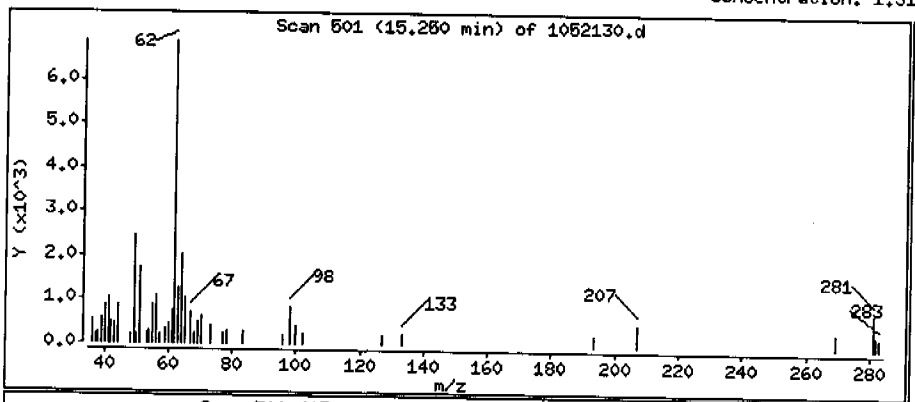
Operator: cb

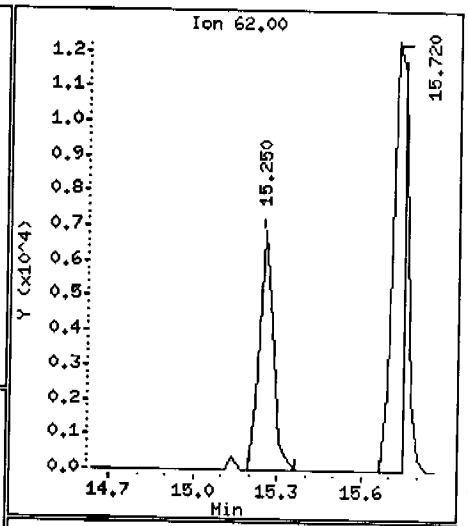
Column phase: RTx-624

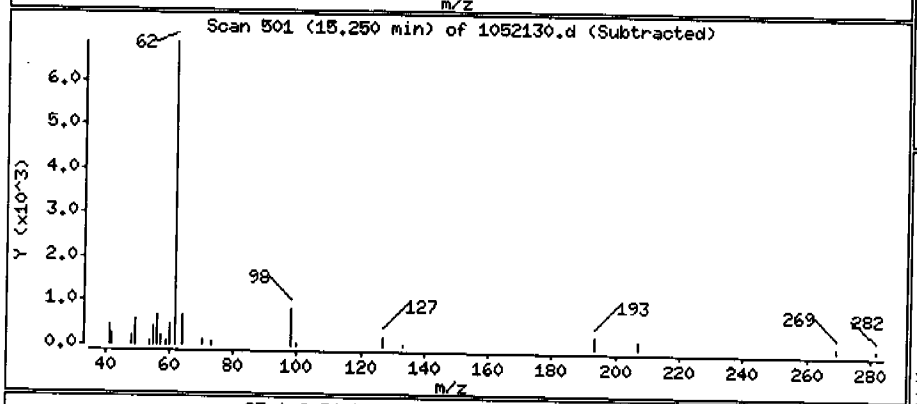
Column diameter: 0.53

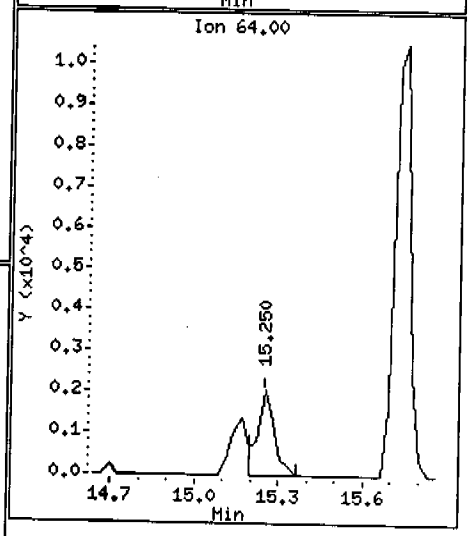
93 1,2-Dichloroethane

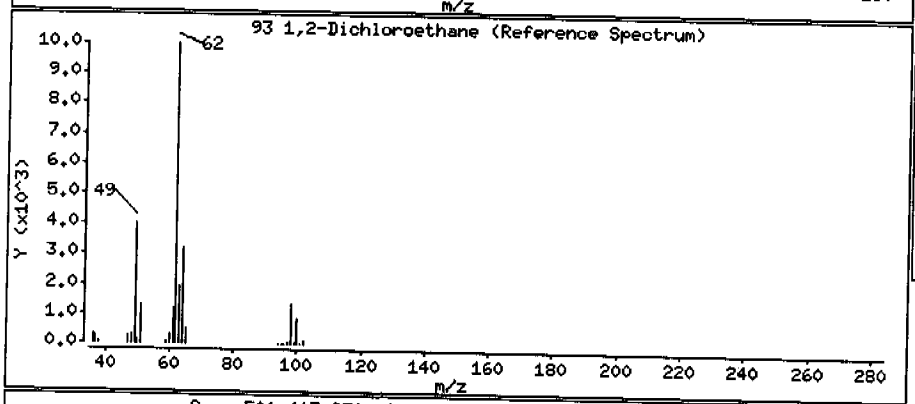
Concentration: 1.310 PPBV

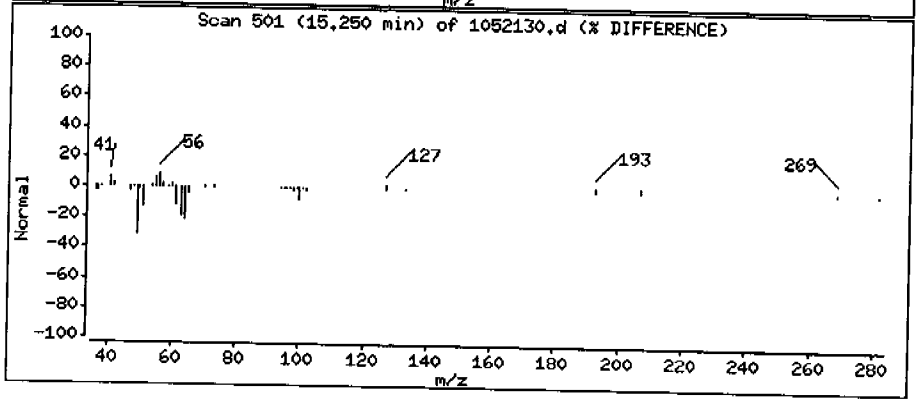












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

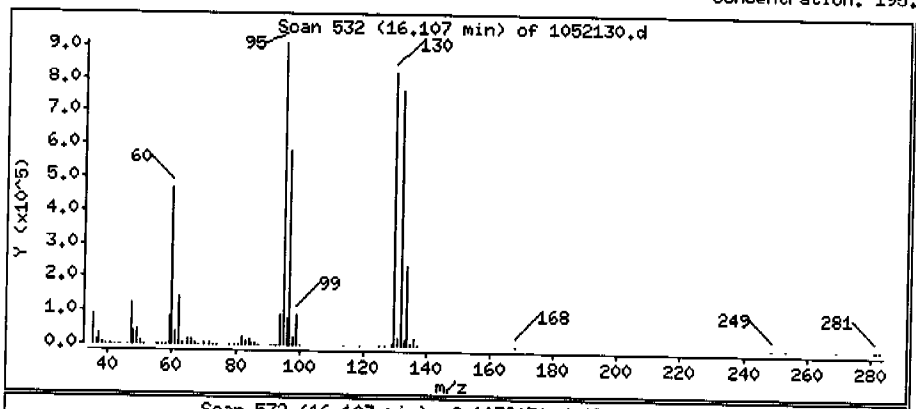
Operator: cb

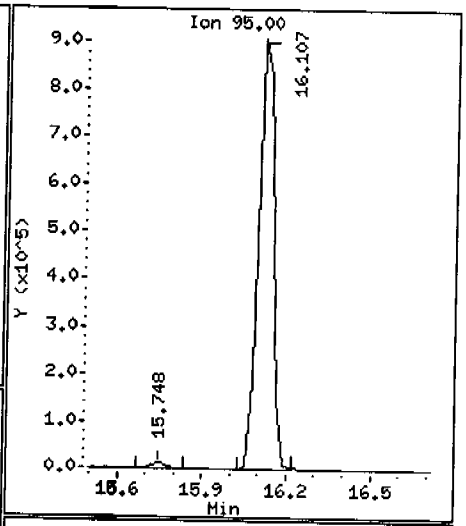
Column phase: RTx-624

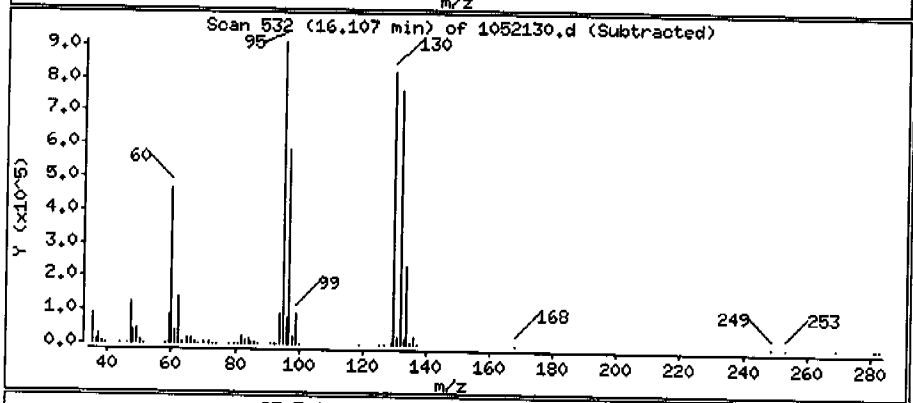
Column diameter: 0.53

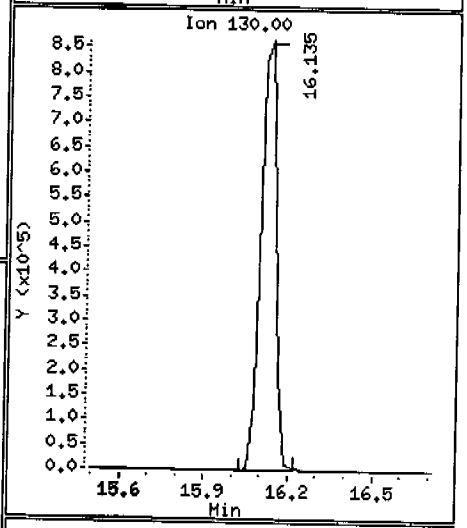
97 Trichloroethene

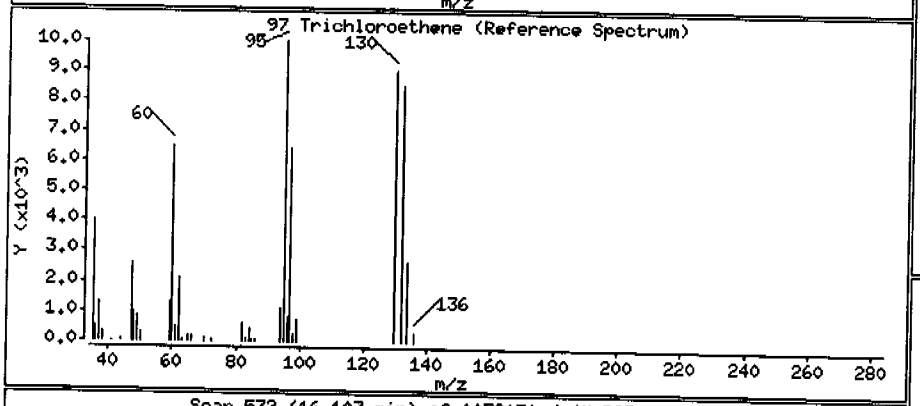
Concentration: 195.10 PPBV

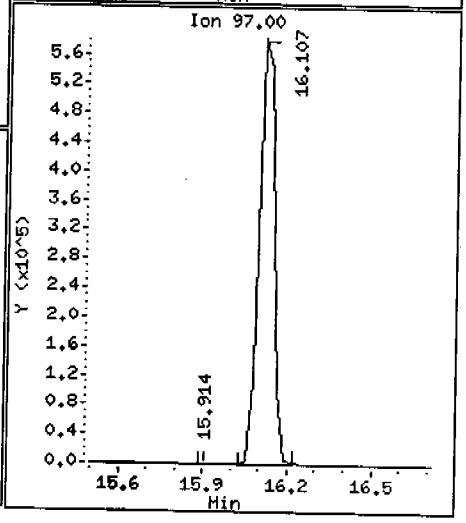


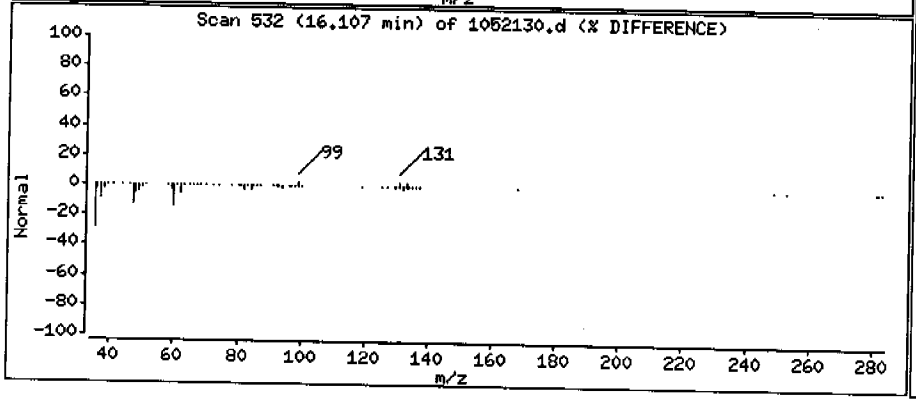












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

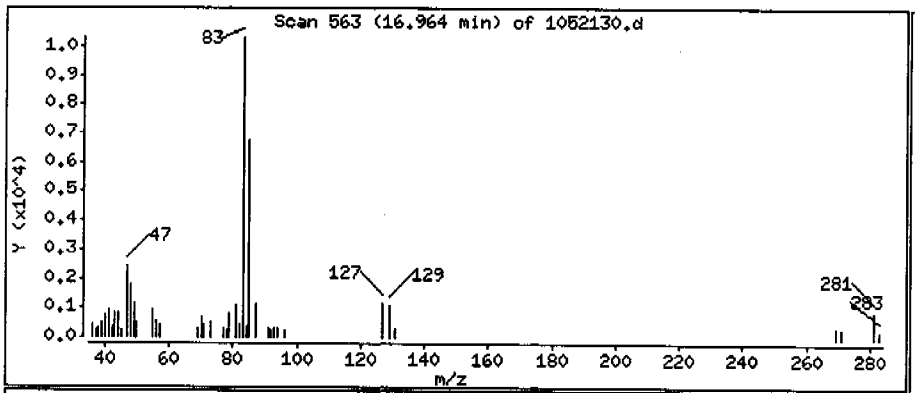
Operator: cb

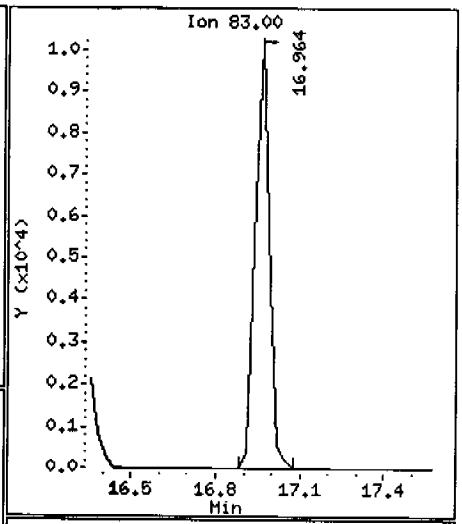
Column phase: RTx-624

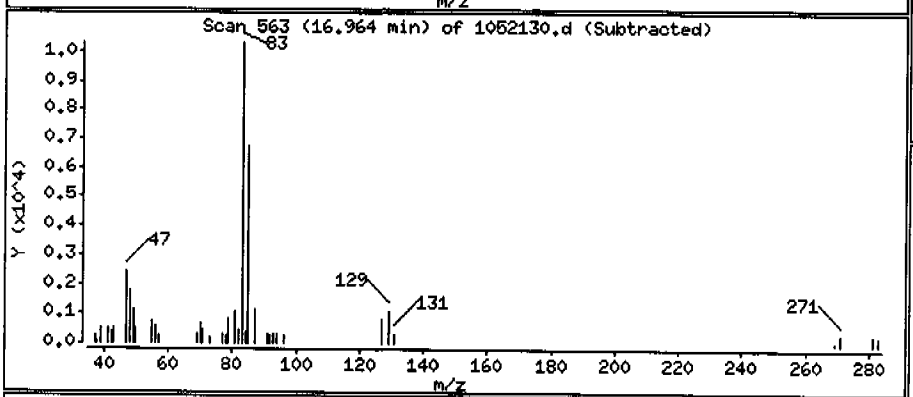
Column diameter: 0.53

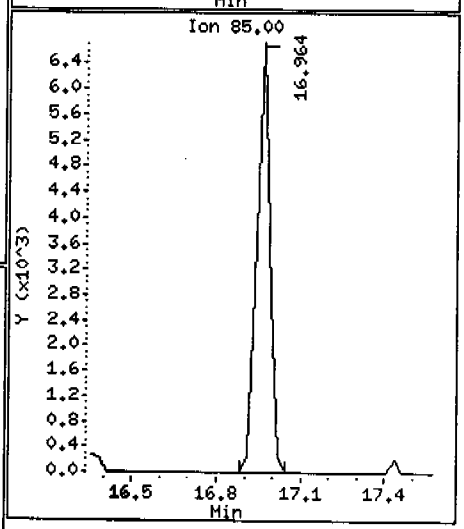
106 Bromodichloromethane

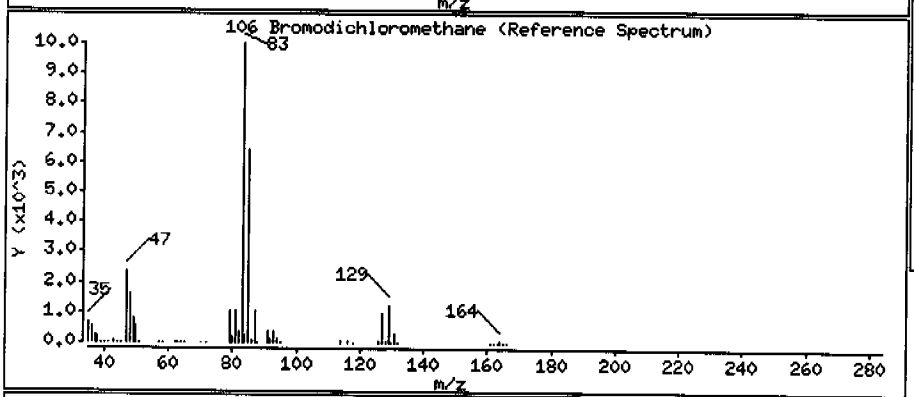
Concentration: 1.258 PPBV

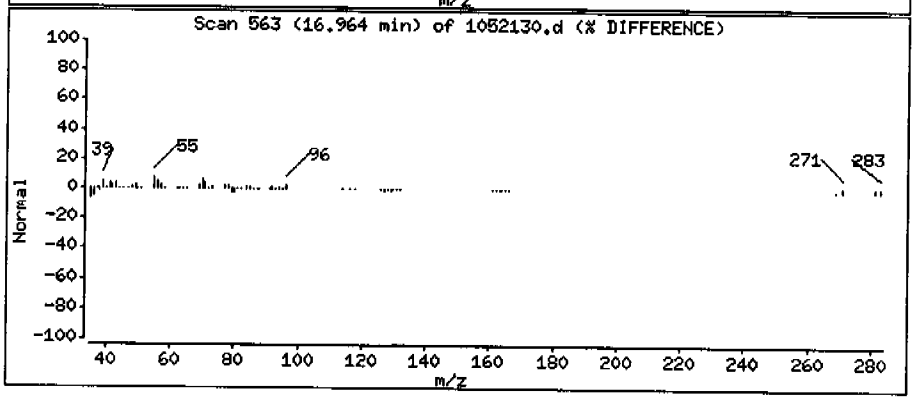












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

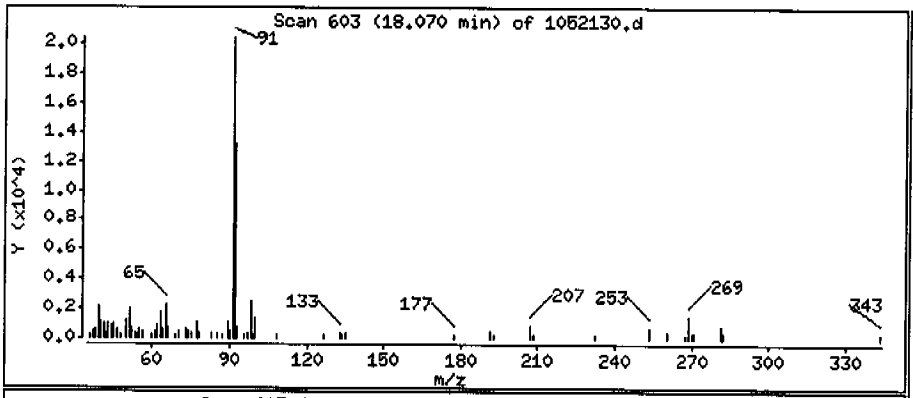
Operator: cb

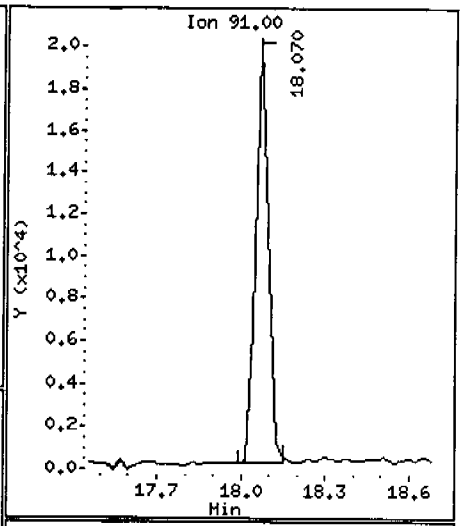
Column phase: RTx-624

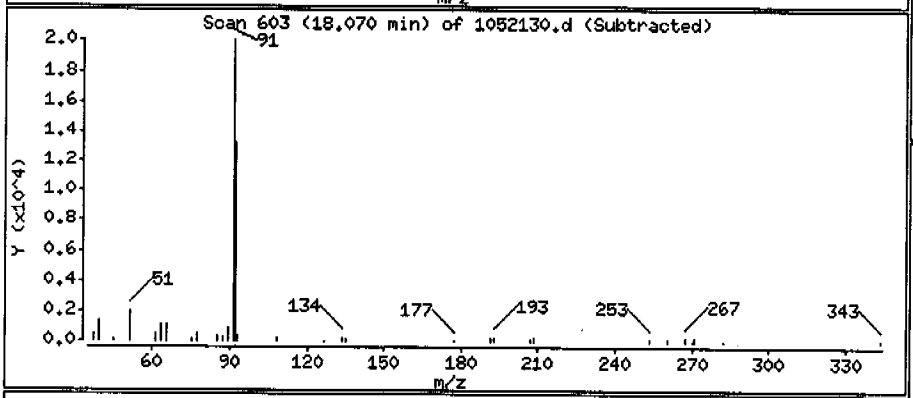
Column diameter: 0.53

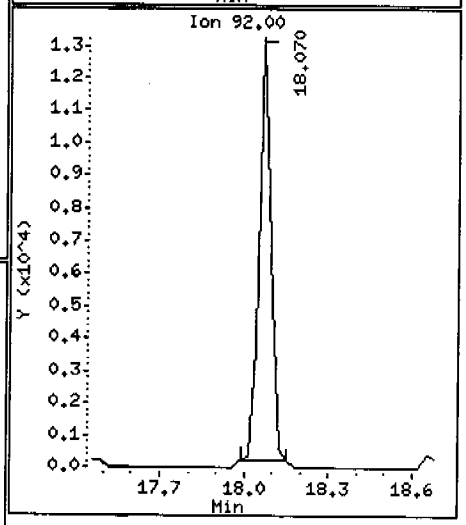
114 Toluene

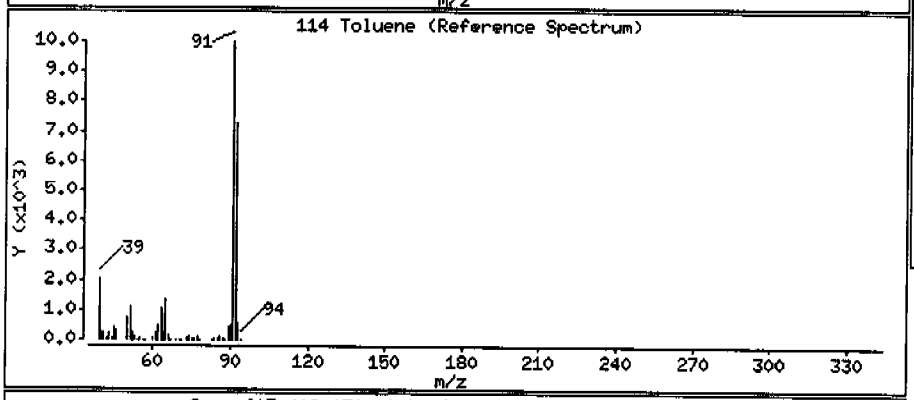
Concentration: 1.011 PPBV

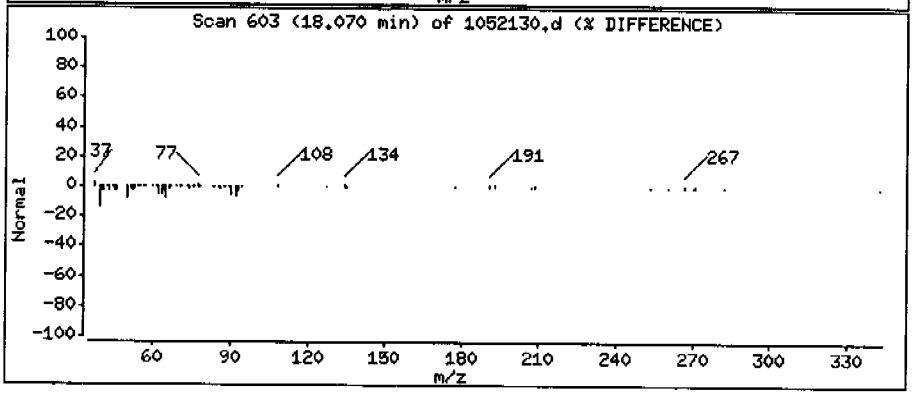












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34482

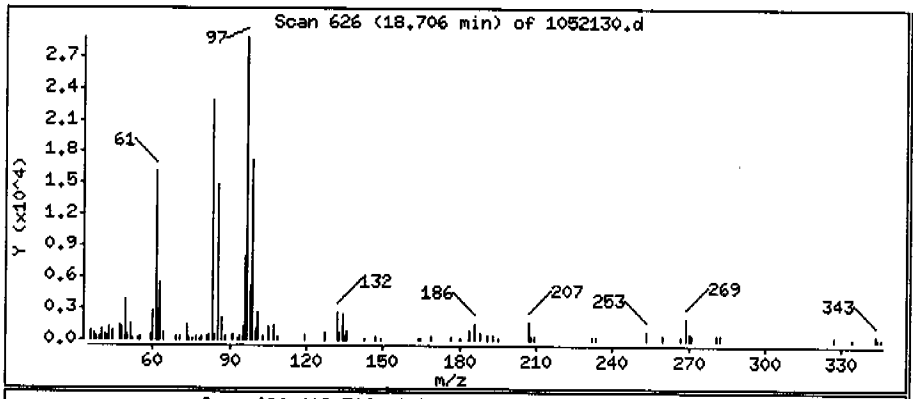
Operator: cb

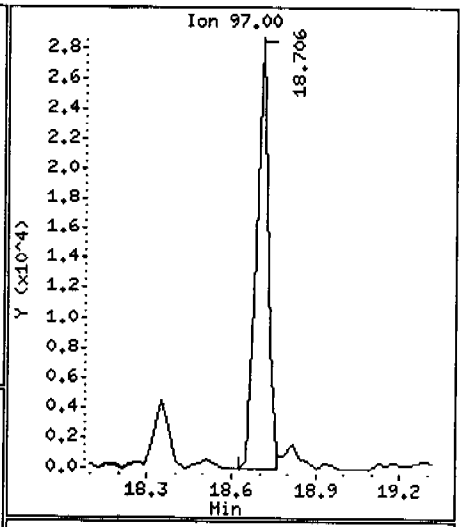
Column phase: RTx-624

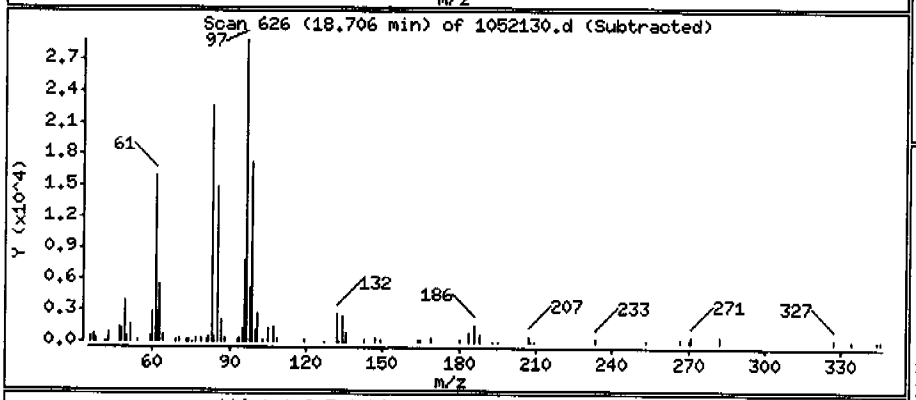
Column diameter: 0.53

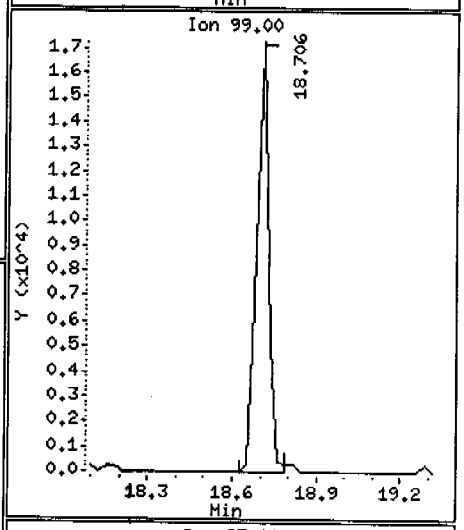
116 1,1,2-Trichloroethane

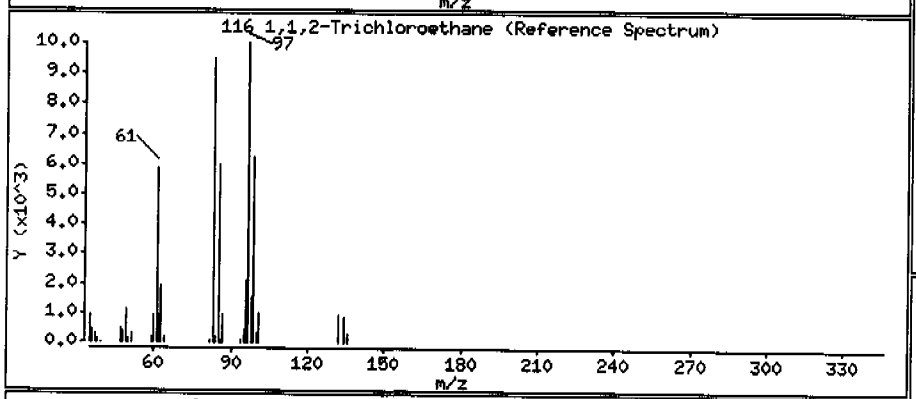
Concentration: 3.994 PPBV

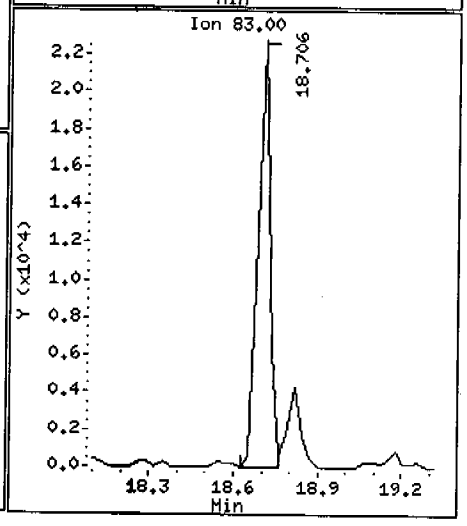


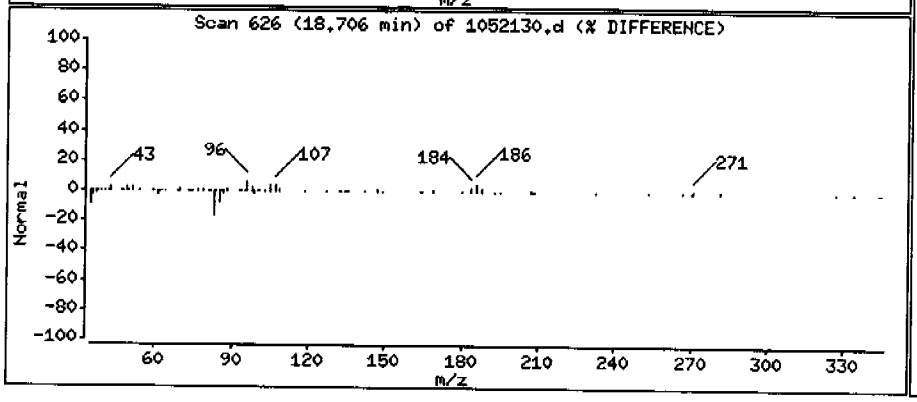












Data File: /chem/msd1.i/1-21may.b/1052130.d

Date : 22-MAY-2008 05:56

Client ID:

Sample Info: 100mL #34482

Instrument: msd1.i

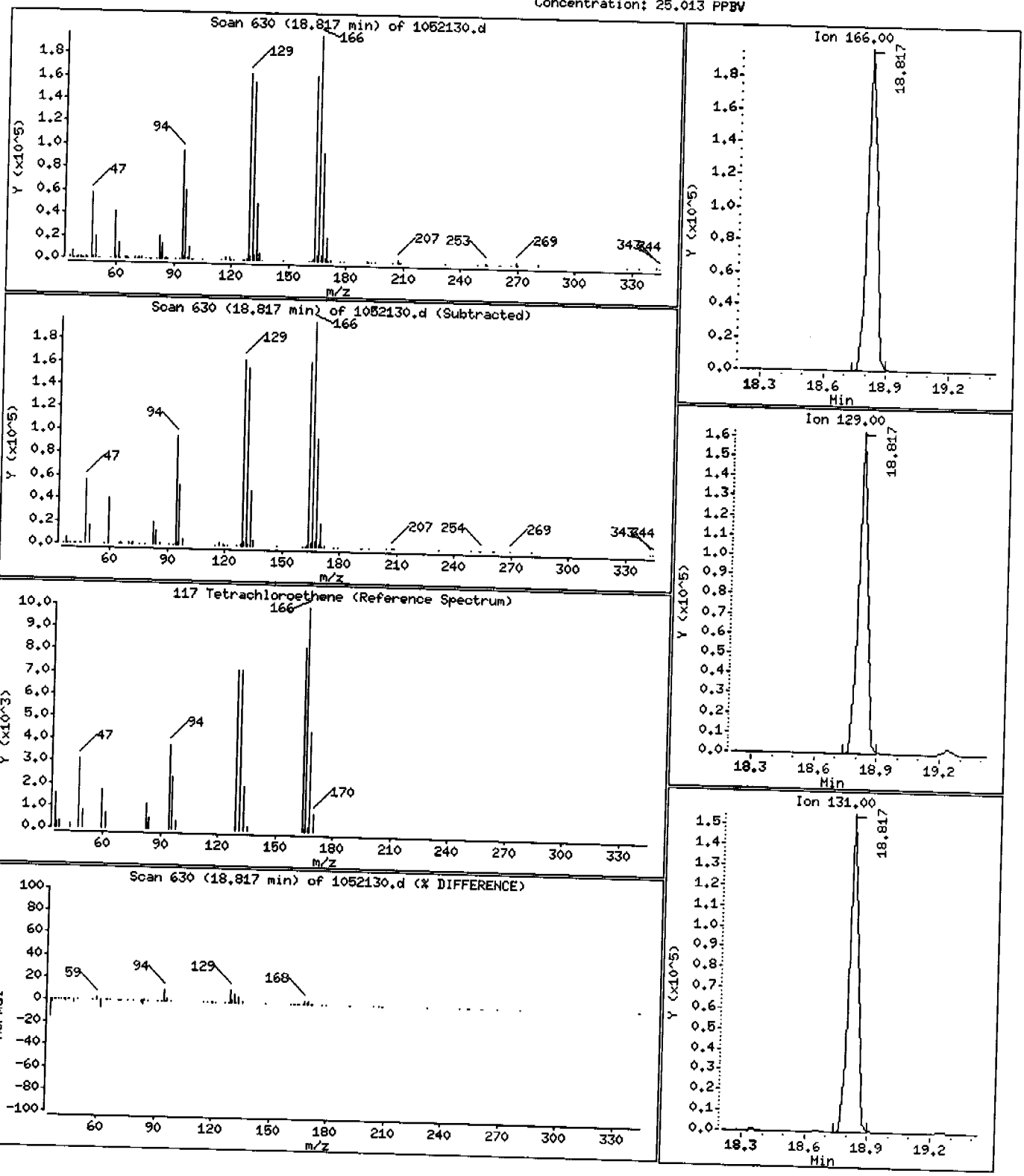
Operator: cb

Column phase: RTx-624

Column diameter: 0.53

117 Tetrachloroethene

Concentration: 25.013 PPBV



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12240

Lab ID#: 0805274-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethanol	3.4	34	6.3	65
Freon 113	0.84	3.6	6.4	28
1,1-Dichloroethene	0.84	13	3.3	51
Acetone	3.4	24	8.0	58
Methylene Chloride	0.84	250	2.9	880
2-Butanone (Methyl Ethyl Ketone)	0.84	2.2	2.5	6.6
cis-1,2-Dichloroethene	0.84	1.1	3.3	4.4
Chloroform	0.84	160	4.1	780
1,1,1-Trichloroethane	0.84	2.2	4.6	12
Carbon Tetrachloride	0.84	87	5.3	540
Benzene	0.84	1.0	2.7	3.2
1,2-Dichloroethane	0.84	3.4	3.4	14
Trichloroethene	0.84	220	4.5	1200
Bromodichloromethane	0.84	1.6	5.6	10
Toluene	0.84	1.6	3.2	6.2
1,1,2-Trichloroethane	0.84	20	4.6	110
Tetrachloroethene	0.84	15	5.7	100
1,4-Dichlorobenzene	0.84	1.3	5.0	7.6

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12240

Lab ID#: 0805274-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052131
Dil. Factor: 1.68
Date of Collection: 5/9/08
Date of Analysis: 5/22/08 06:32 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	Not Detected	4.2	Not Detected
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	34	6.3	65
Freon 113	0.84	3.6	6.4	28
1,1-Dichloroethene	0.84	13	3.3	51
Acetone	3.4	24	8.0	58
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	Not Detected	2.6	Not Detected
Methylene Chloride	0.84	250	2.9	880
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.2	2.5	6.6
cis-1,2-Dichloroethene	0.84	1.1	3.3	4.4
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	160	4.1	780
1,1,1-Trichloroethane	0.84	2.2	4.6	12
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	87	5.3	540
Benzene	0.84	1.0	2.7	3.2
1,2-Dichloroethane	0.84	3.4	3.4	14
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	220	4.5	1200
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	1.6	5.6	10
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	1.6	3.2	6.2
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	20	4.6	110
Tetrachloroethene	0.84	15	5.7	100

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12240

Lab ID#: 0805274-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052208 [illegible]
Dil. Factor: 1.68

Date of Collection: 5/9/08
Date of Analysis: 5/22/08 06:32 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	1.3	5.0	7.6
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	97	70-130

0093

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052131.d
Lab Smp Id: 0805274-05A
Inj Date : 22-MAY-2008 06:32
Operator : cb
Inst ID: msd1.i
Smp Info : 100mL #5613
Misc Info : 6.0"Hg --> 5psi
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS			
				ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5	
14.282	14.282 (1.000)	130	284501	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	223999			28.93- 128.93	78.73
14.255	14.282 (1.000)	49	522921			132.03- 232.03	183.80
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.748	15.748 (1.000)	114	1464363	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	233724			0.00- 65.76	15.96
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.033	20.033 (1.000)	117	1648223	25.0000		80.00- 120.00	100.00
20.006	20.033 (1.000)	82	956675			8.42- 108.42	58.04
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.139	15.139 (1.060)	65	450951	23.7519	23.752	80.00- 120.00	100.00
15.139	15.139 (1.060)	67	235035			6.04- 106.04	52.12
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.987	17.987 (1.142)	98	1615871	24.3534	24.353	80.00- 120.00	100.00
17.960	17.987 (1.140)	70	167268			0.00- 60.35	10.35

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.987	17.987 (1.142)	100	1085279			15.45- 115.45	67.16
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.526 (1.075)	174	857557	24.3153	24.315	80.00- 120.00	100.00
21.527	21.526 (1.075)	95	1370428			110.56- 210.56	159.81
21.527	21.526 (1.075)	176	813570			45.40- 145.40	94.87
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.706)	45	131570	20.5792	34.573	80.00- 120.00	100.00
10.080	10.135 (0.706)	43	36705			0.00- 75.81	27.90
10.080	10.135 (0.706)	46	3052			0.00- 92.85	2.32
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	45625	2.16020	3.629	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	27716			12.64- 112.64	60.75
10.577	10.577 (0.741)	101	55869			83.95- 183.95	122.45
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	225213	7.69142	12.922	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	119826			3.86- 103.86	53.21
10.522	10.522 (0.737)	98	74454			0.00- 85.09	33.06
45 Acetone					CAS #: 67-64-1		
10.909	10.881 (0.764)	58	143861	14.6282	24.575	80.00- 120.00	100.00
10.881	10.881 (0.762)	43	472956			275.34- 375.34	328.76
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	3821846	150.677	253.14	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	2433656			13.77- 113.77	63.68
11.739	11.739 (0.822)	51	1139925			0.00- 79.96	29.83
75 2-Butanone					CAS #: 78-93-3		
13.951	13.923 (0.977)	72	13736	1.34020	2.252	80.00- 120.00	100.00
13.951	13.923 (0.977)	43	68303			420.83- 520.83	497.23
13.951	13.923 (0.977)	57	5339			0.00- 90.57	38.87
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.923	13.895 (0.975)	61	20183	0.66203	1.112	80.00- 120.00	100.00
13.923	13.895 (0.975)	96	18366			20.70- 120.70	91.00
13.923	13.895 (0.975)	98	8556			0.00- 94.62	42.39
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	3830378	95.1789	159.90	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	2390852			12.14- 112.14	62.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.586 (1.021)	97	55808	1.32162	2.220	80.00- 120.00	100.00
14.587	14.586 (1.021)	99	36791			13.23- 113.23	65.92
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	2016570	51.6317	86.741	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	2087490			53.03- 153.03	103.52
91 Benzene					CAS #: 71-43-2		
15.139	15.139 (0.961)	78	44701	0.59992	1.008	80.00- 120.00	100.00
15.139	15.139 (0.961)	77	9610			0.00- 73.68	21.50
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	62049	2.01372	3.383	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	20156			0.00- 83.51	32.48
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	3949836	129.267	217.17	80.00- 120.00	100.00
16.135	16.107 (1.025)	130	3751048			46.53- 146.53	94.97
16.107	16.107 (1.023)	97	2533513			14.98- 114.98	64.14
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	44428	0.92775	1.559	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	31574			11.42- 111.42	71.07
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	99744	0.97323	1.635	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	57083			9.73- 109.73	57.23
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	417857	11.9795	20.125	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	259852			11.60- 111.60	62.19
18.706	18.706 (0.934)	83	353581			31.38- 131.38	84.62
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	354159	8.76468	14.725	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	283043			27.45- 127.45	79.92
18.817	18.817 (0.939)	131	271698			24.33- 124.33	76.72
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.145)	146	64215	0.75661	1.271	80.00- 120.00	100.00
22.937	22.937 (1.145)	148	42402			16.32- 116.32	66.03
22.937	22.937 (1.145)	111	24243			0.00- 90.95	37.75

Data File: /chem/msd1.i/1-21may.b/1052131.d
Report Date: 27-May-2008 15:11

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052131.d
Lab Smp Id: 0805274-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.0"Hg --> 5psi

Calibration Date: 21-MAY-2008
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	284501	-8.38
95 1,4-Difluorobenze	1646495	987897	2305093	1464363	-11.06
123 Chlorobenzene-d5	1819110	1091466	2546754	1648223	-9.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

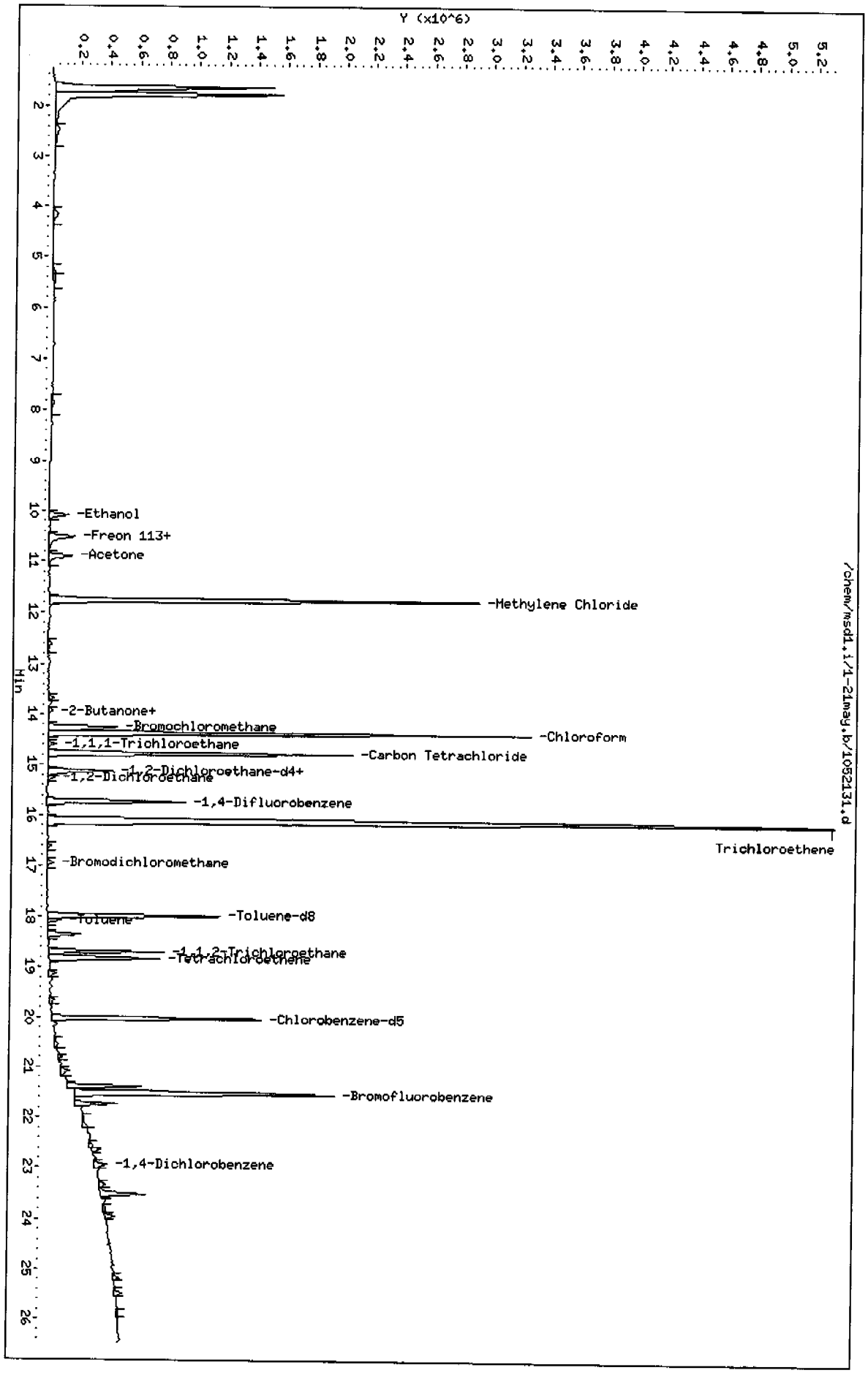
RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805274-05A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.0"Hg --> 5psi

Client SDG: 1-21may
Fraction: VOA

Operator: cb
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.752	95.01	70-130
$ 111 Toluene-d8	25.000	24.353	97.41	70-130
$ 136 Bromofluorobenzene	25.000	24.315	97.26	70-130


Data File: /chem/msd1.i/1-21may.b/1052131.d
Date : 22-MAY-2008 06:32
Client ID:
Sample Info: 100mL #5613
Column phase: RTx-624
Instrument: msd1.i
Operator: cb
Column diameter: 0.53
Y (x10^6)
Min
/chem/msd1.i/1-21may.b/1052131.d
-Ethanol
-Freon 113+
-Acetone
-Methylene Chloride
-2-Butanone+
-Bromochloromethane
-Chloroform
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane
-1,4-Difluorobenzene
Trichloroethene
-Bromodichloromethane
-Toluene
-Toluene-d8
-1,1,2-Trichloroethane
-Tetrachloroethene
-Chlorobenzene-d5
-Bromofluorobenzene
-1,4-Dichlorobenzene

Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

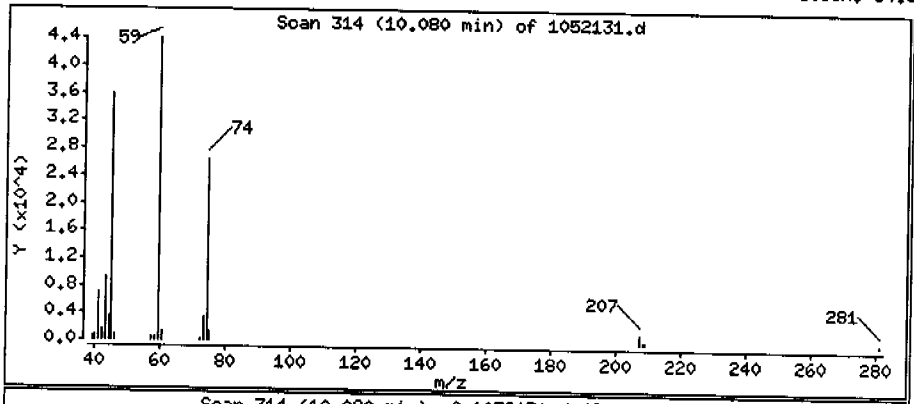
Operator: cb

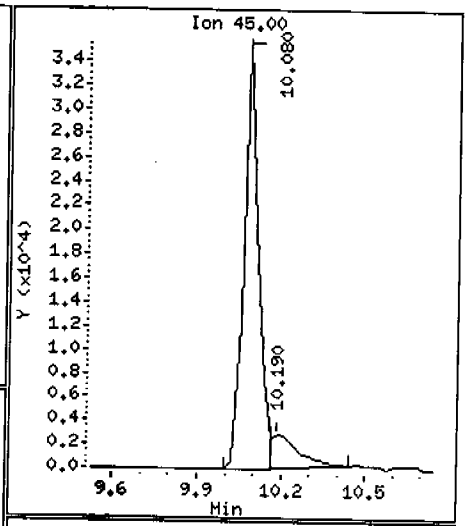
Column phase: RTx-624

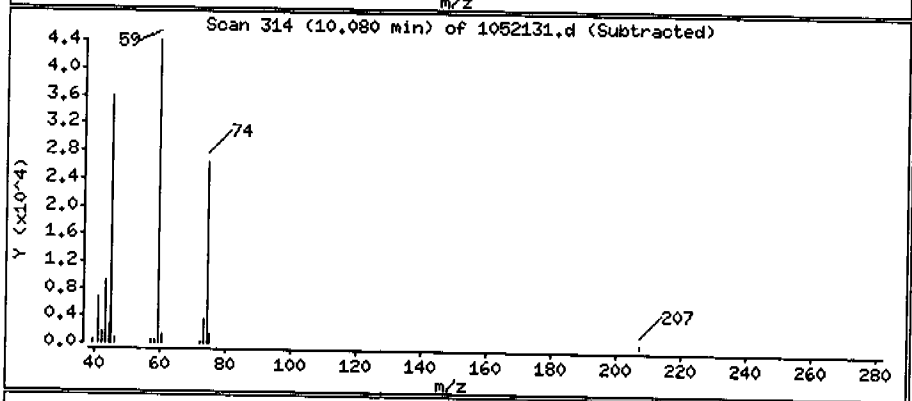
Column diameter: 0.53

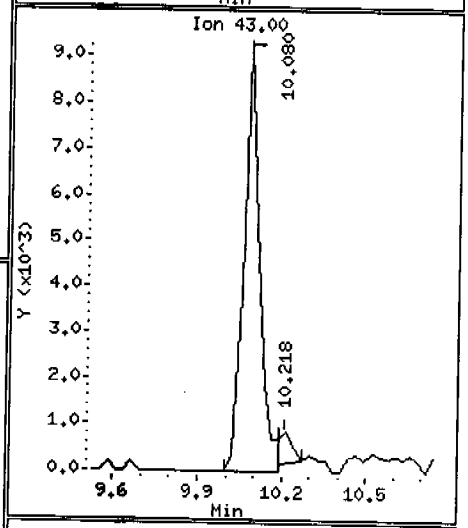
38 Ethanol

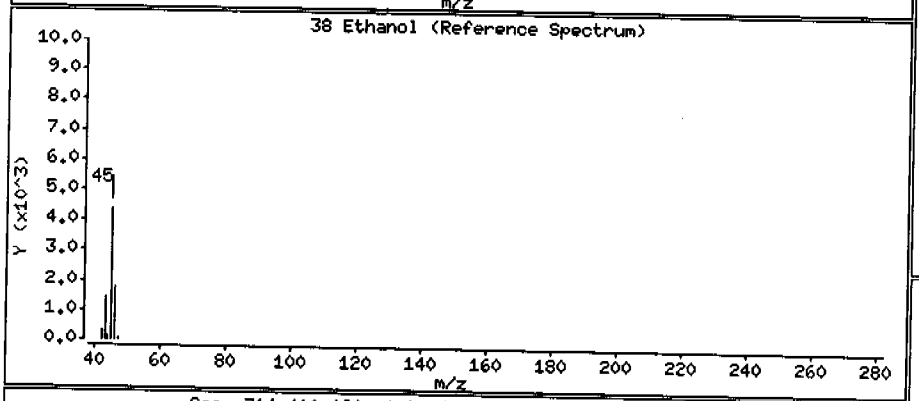
Concentration: 34.573 PPBV

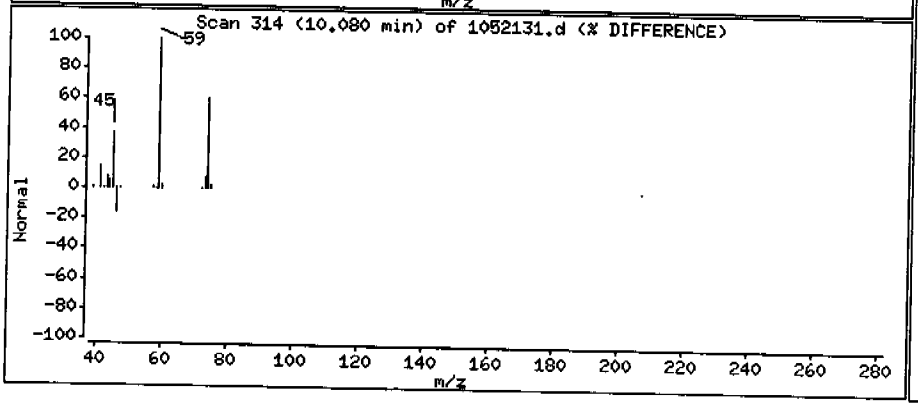


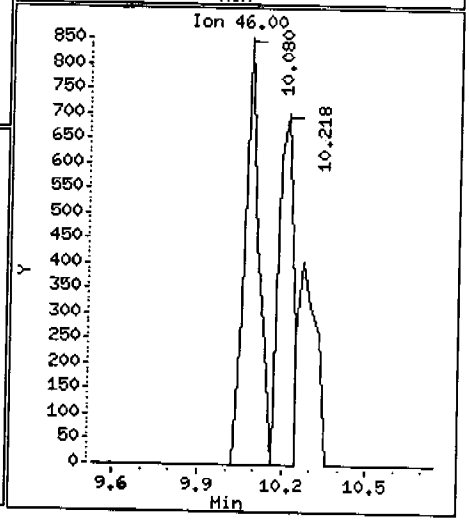












0100

Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

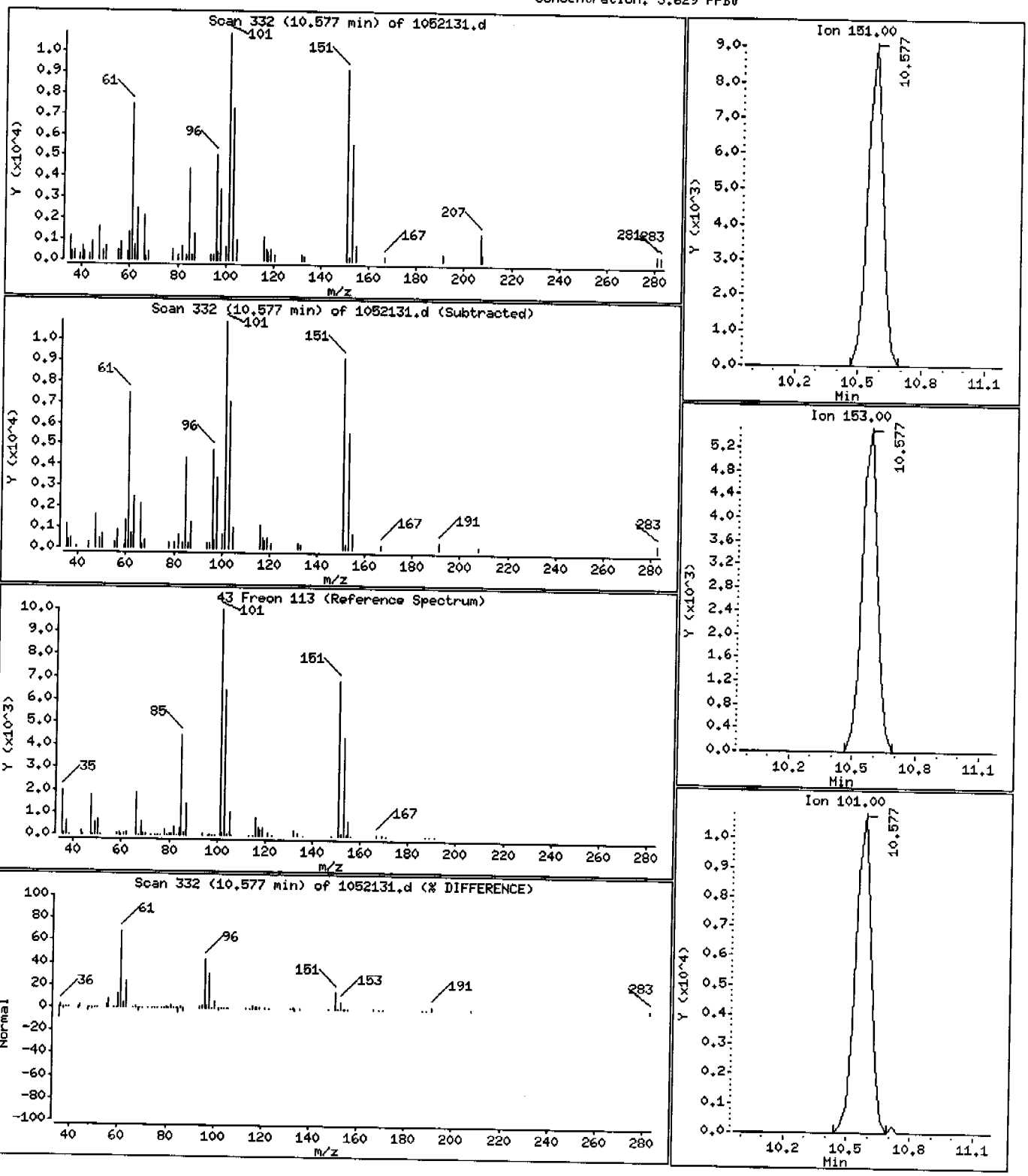
Operator: cb

Column phase: RTx-624

Column diameter: 0.53

43 Freon 113

Concentration: 3.629 PPBV



Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

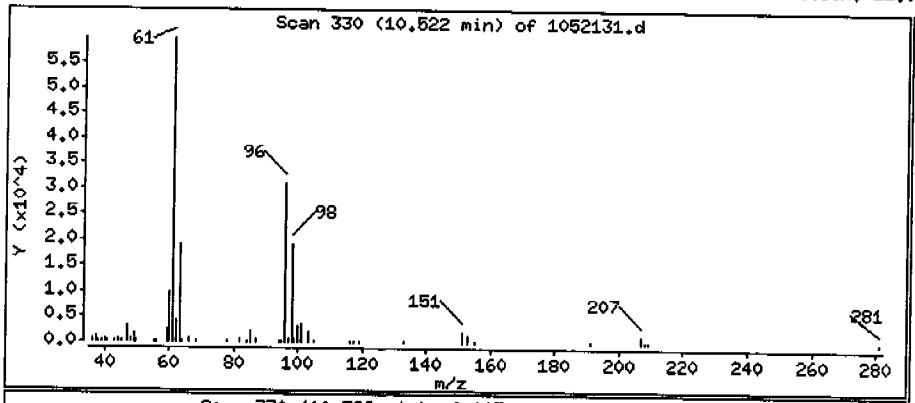
Operator: cb

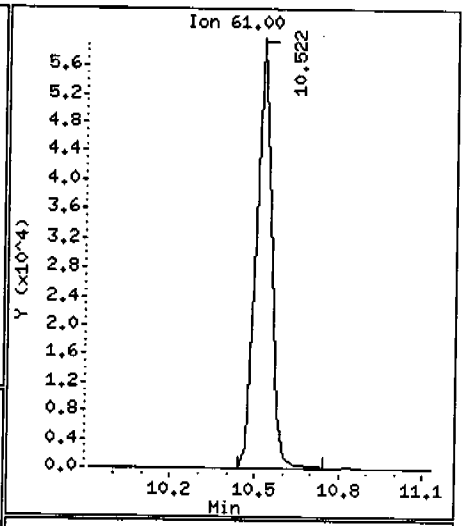
Column phase: RTx-624

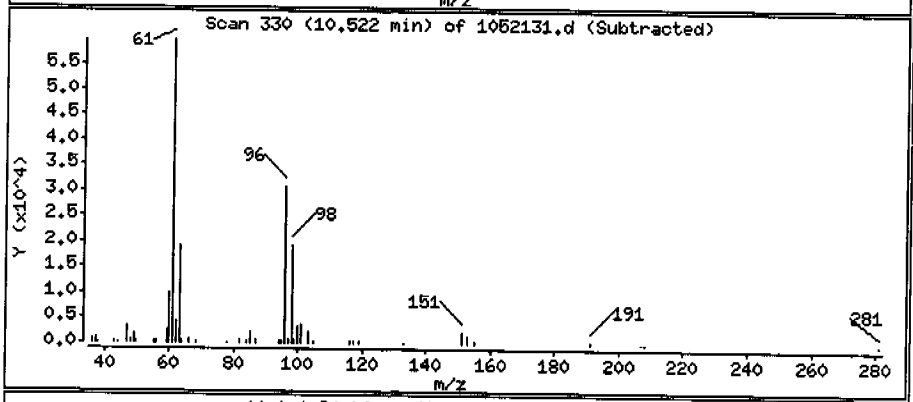
Column diameter: 0.53

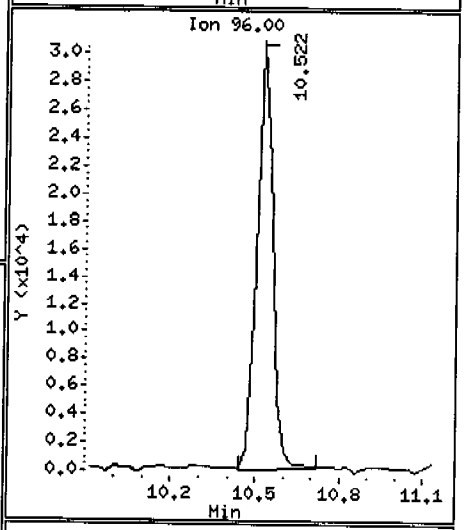
44 1,1-Dichloroethene

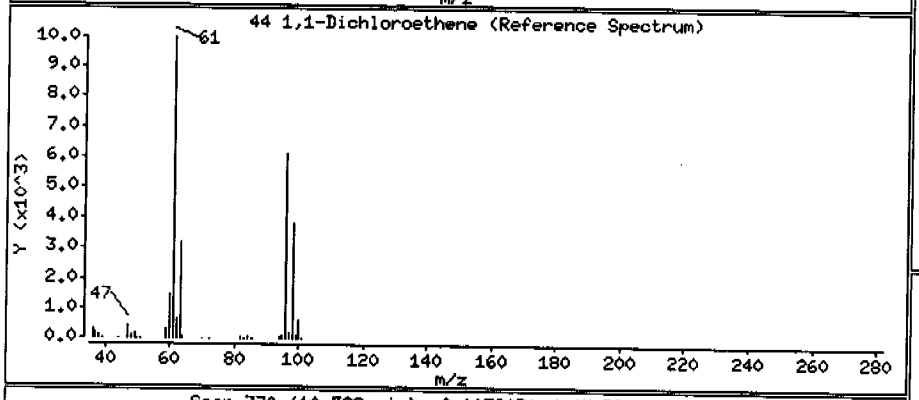
Concentration: 12.922 PPBV

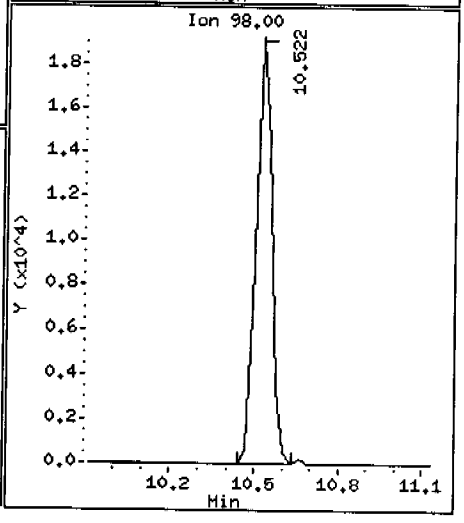


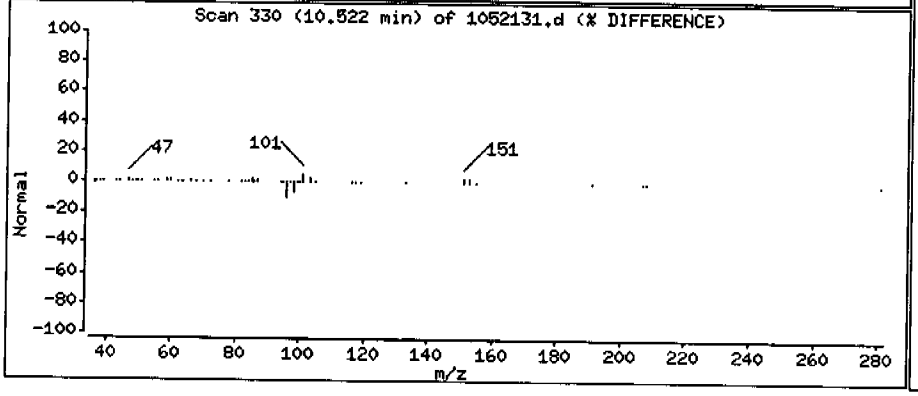












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

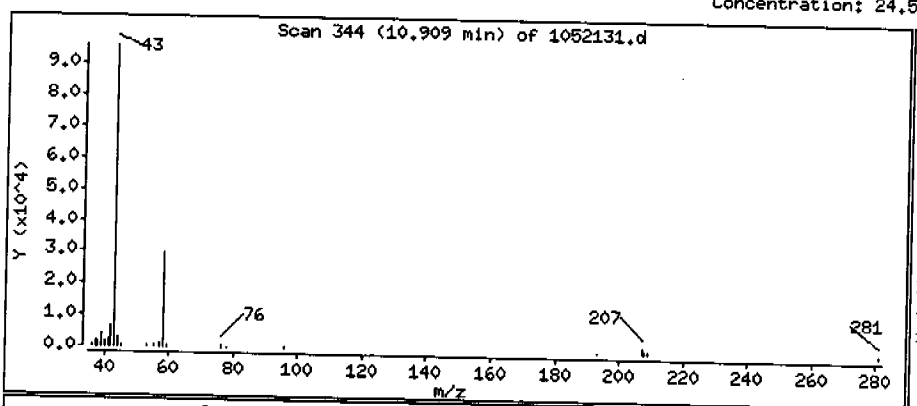
Operator: cb

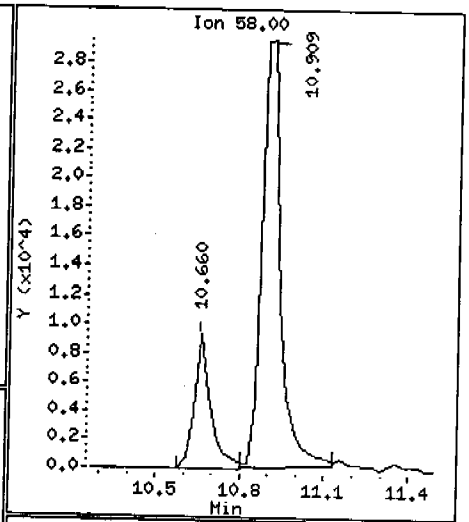
Column phase: RTx-624

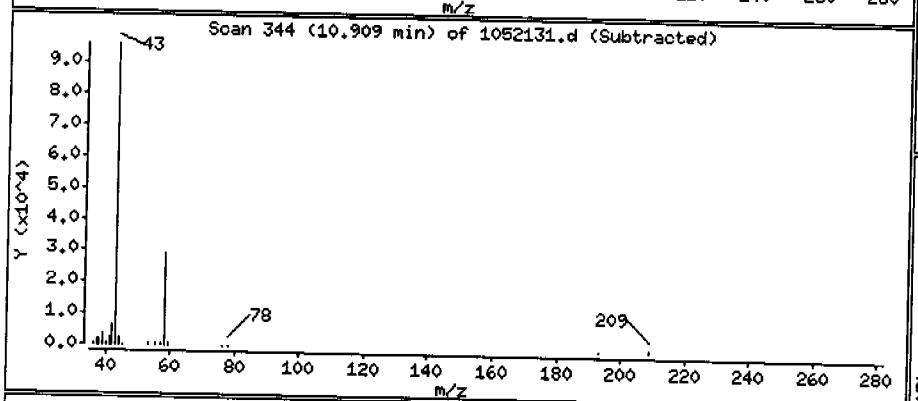
Column diameter: 0.53

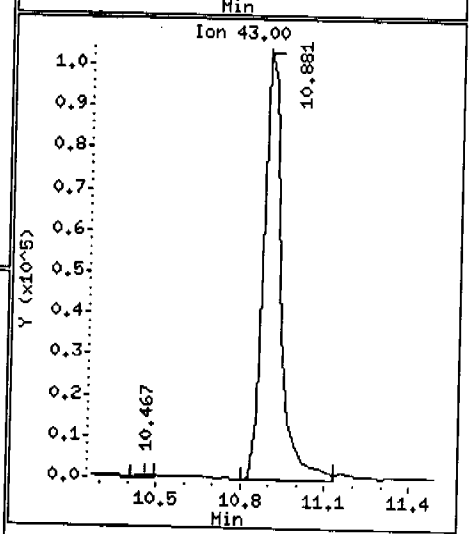
45 Acetone

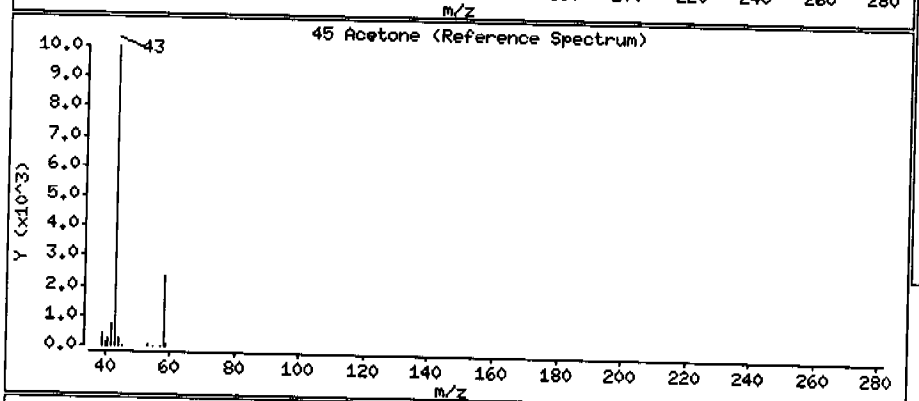
Concentration: 24.575 PPBV

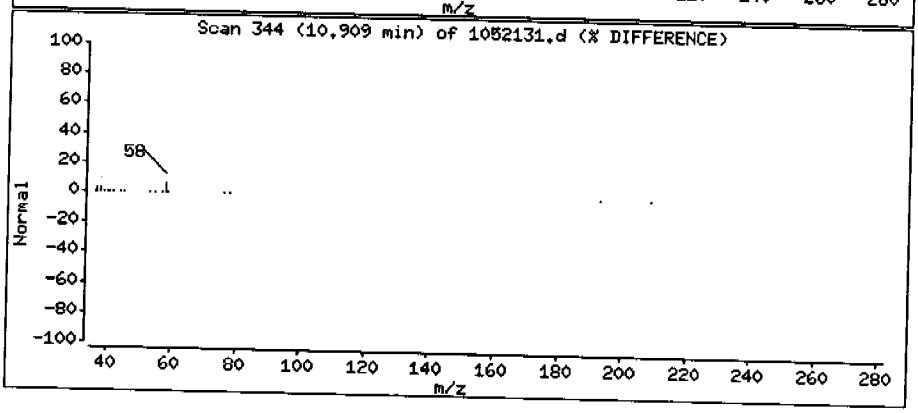












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

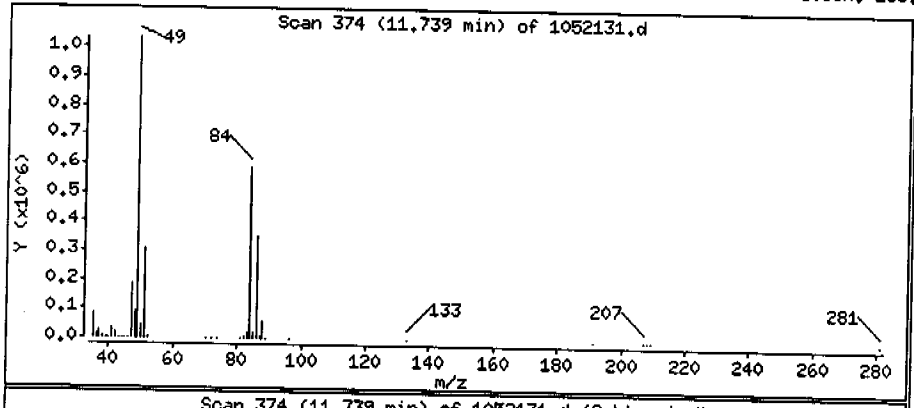
Operator: cb

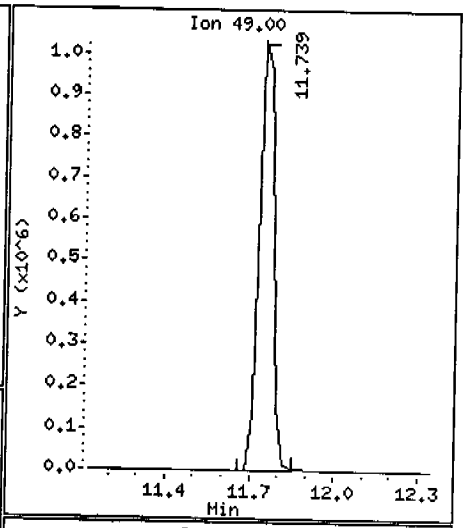
Column phase: RTx-624

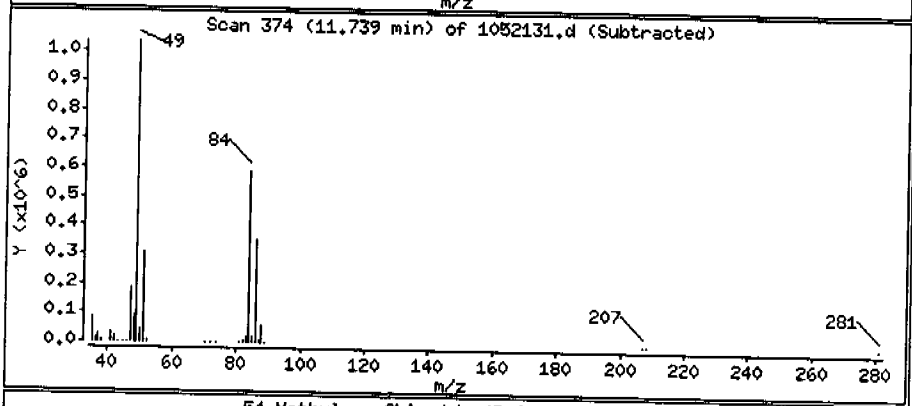
Column diameter: 0.53

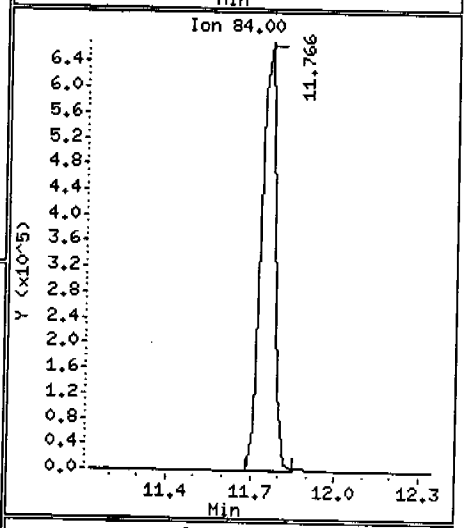
54 Methylene Chloride

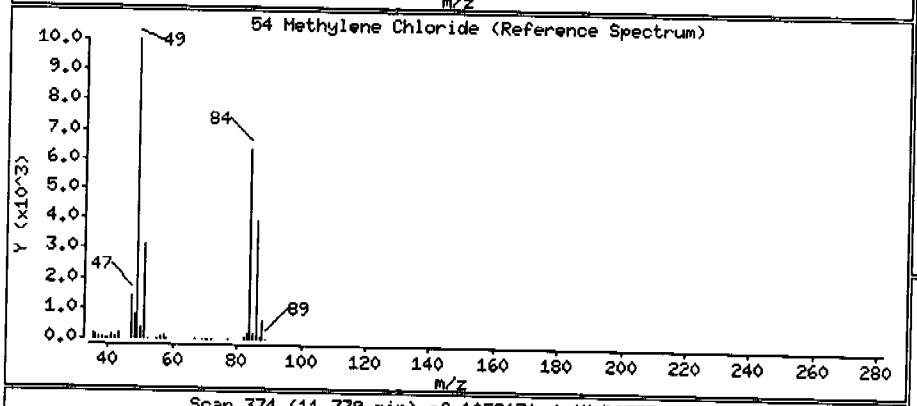
Concentration: 253.14 PPBV

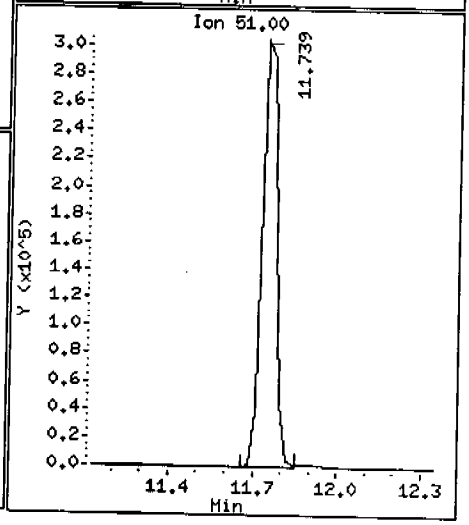


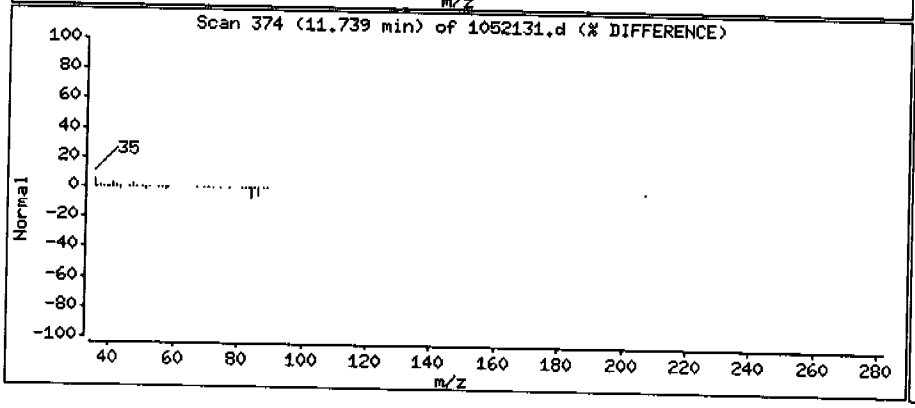












Data File: /chem/msd1.i/1-21may.b/1052131.d

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Date : 22-MAY-2008 06:32

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5613

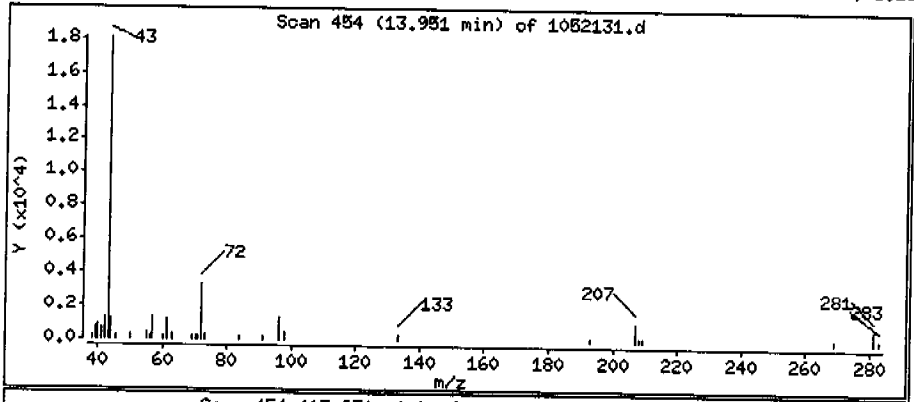
Operator: cb

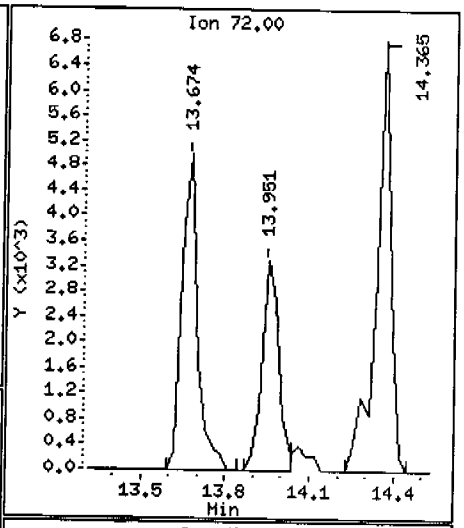
Column phase: RTx-624

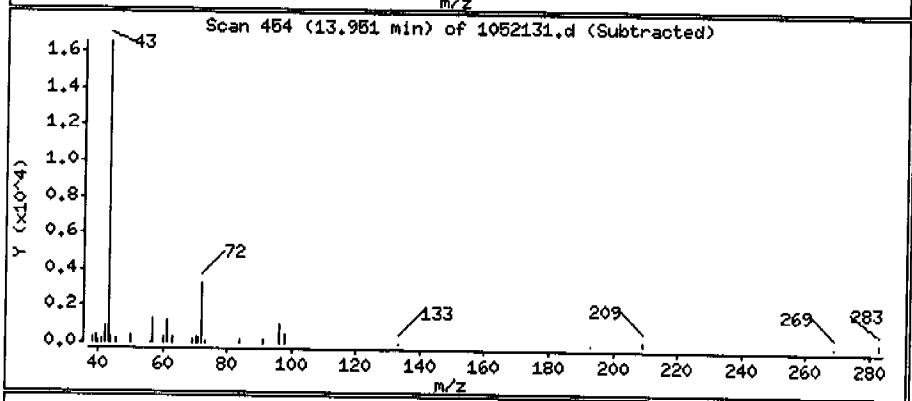
Column diameter: 0.53

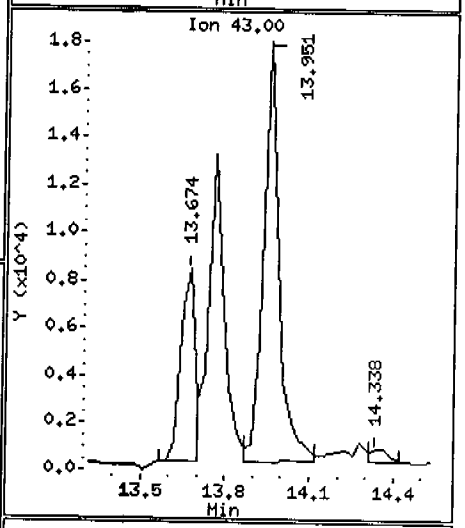
75 2-Butanone

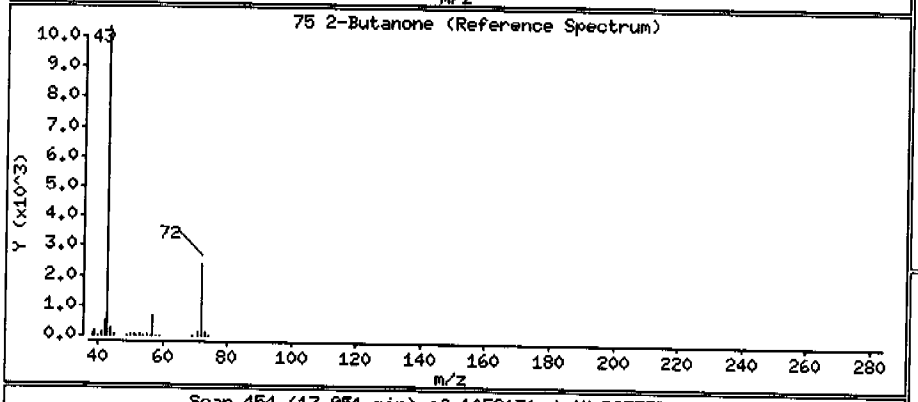
Concentration: 2.252 PPBV

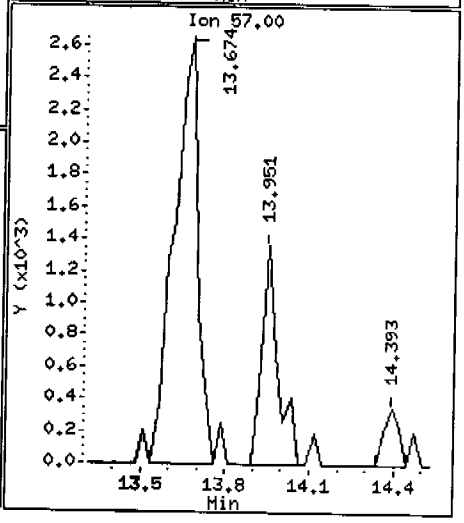


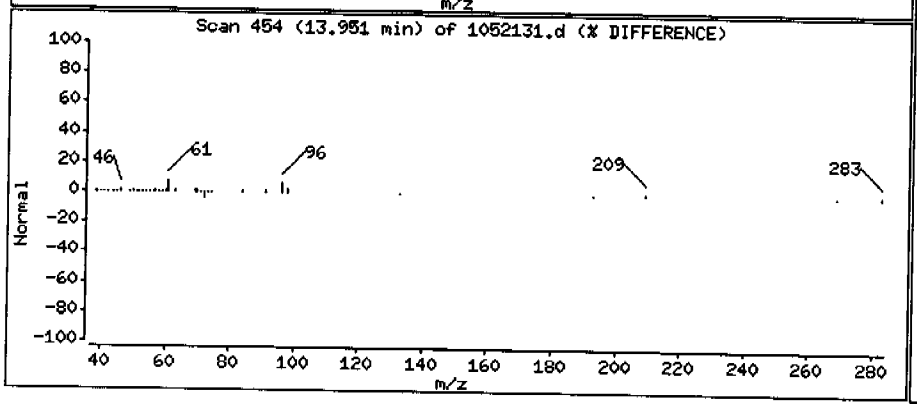












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

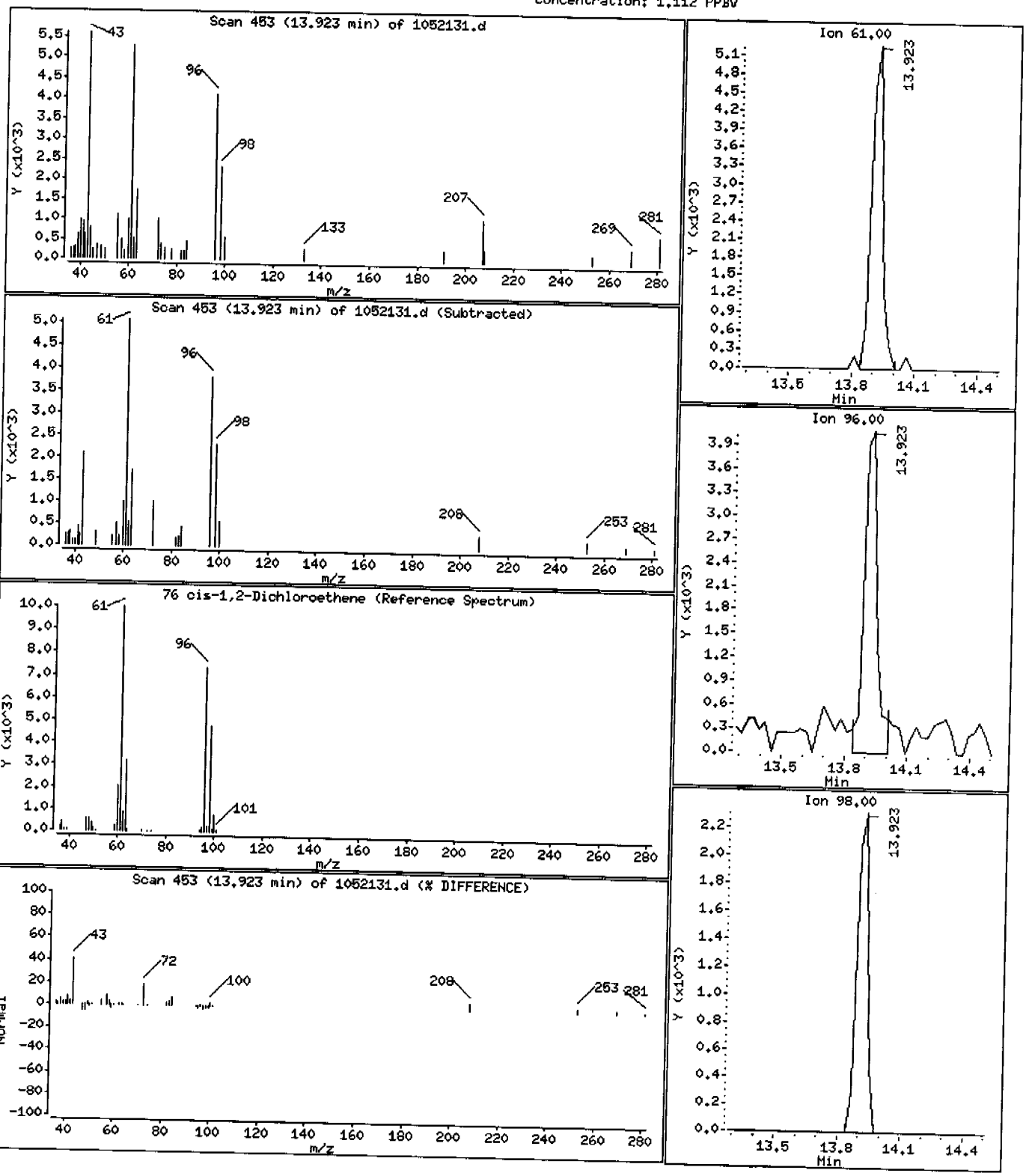
Operator: cb

Column phase: RTx-624

Column diameter: 0.53

76 cis-1,2-Dichloroethene

Concentration: 1.112 PPBV



Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

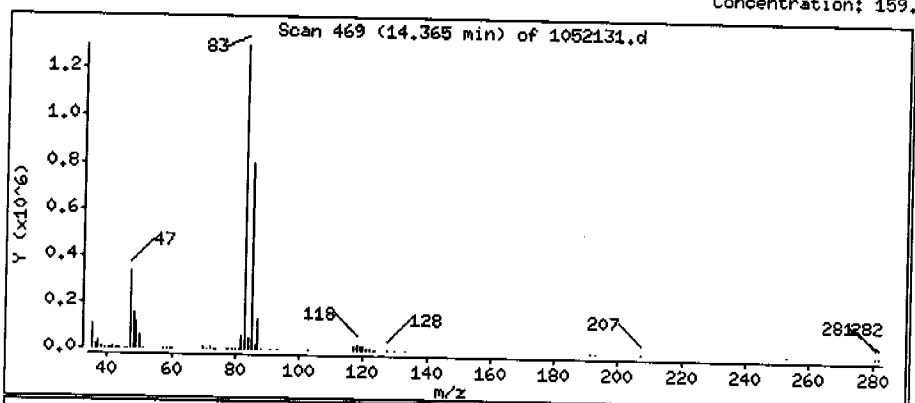
Operator: cb

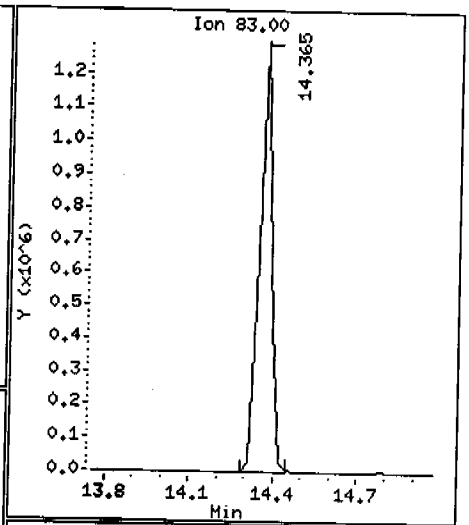
Column phase: RTx-624

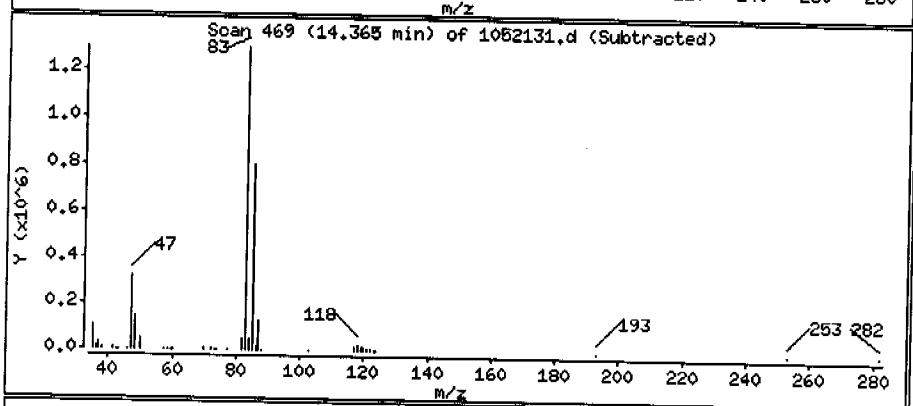
Column diameter: 0.53

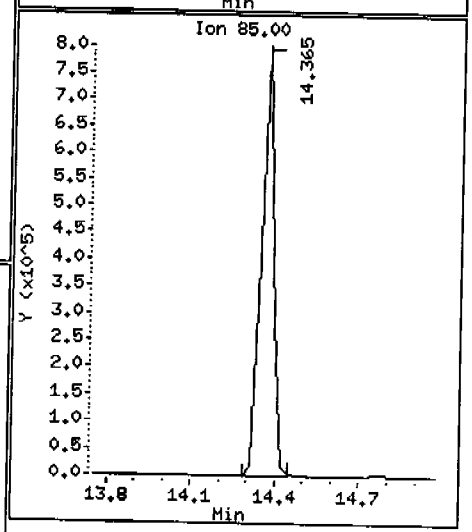
81 Chloroform

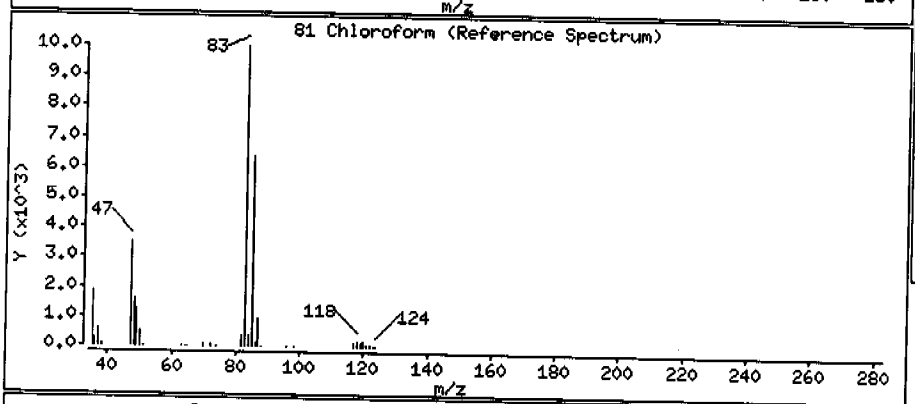
Concentration: 159.90 PPBV

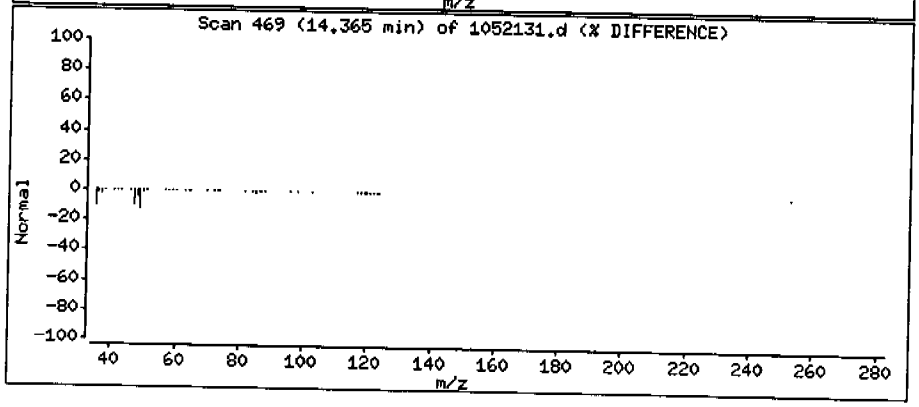












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

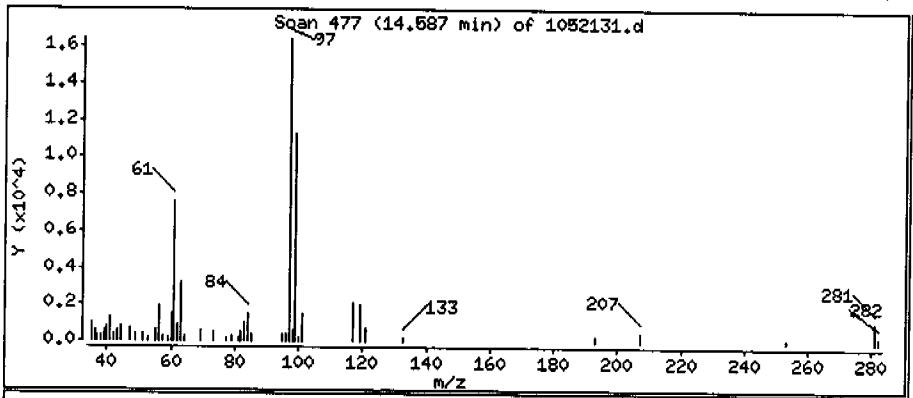
Operator: cb

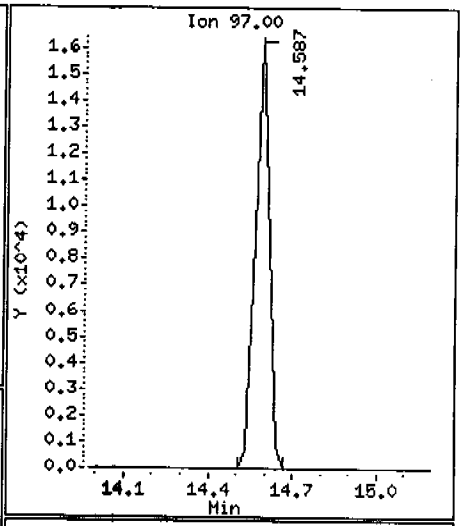
Column phase: RTx-624

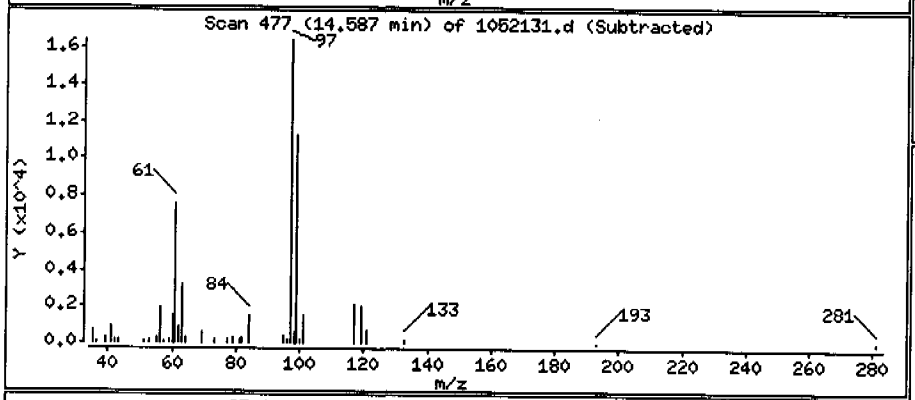
Column diameter: 0.53

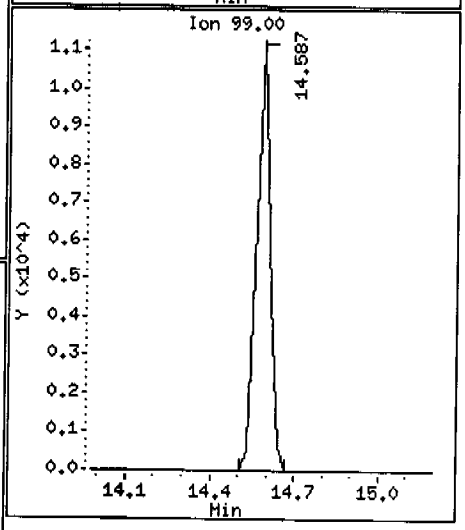
83 1,1,1-Trichloroethane

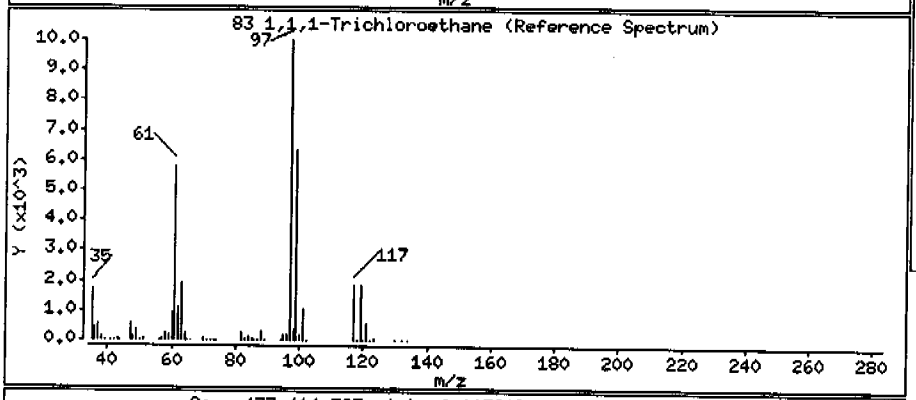
Concentration: 2.220 PPBV

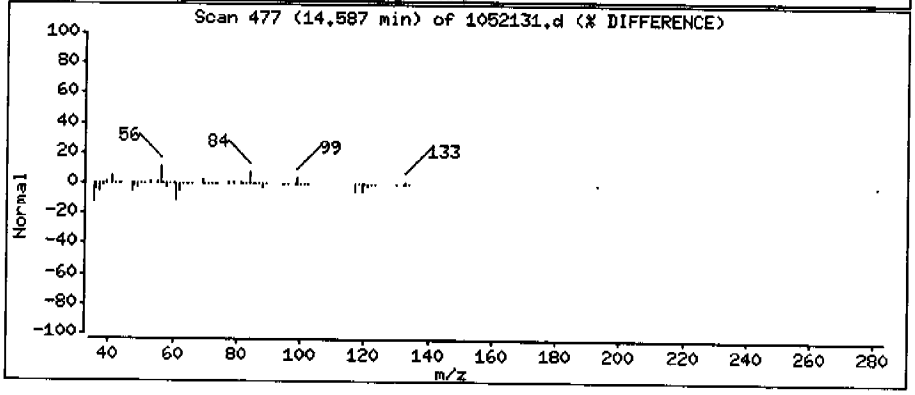












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Column phase: RTx-624

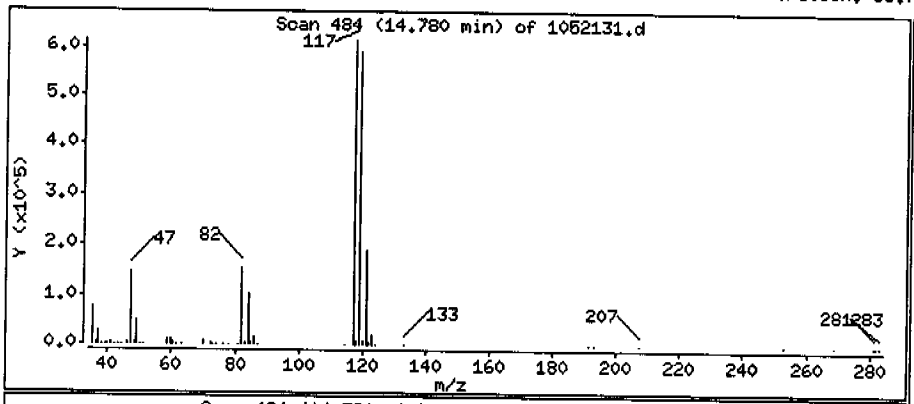
85 Carbon Tetrachloride

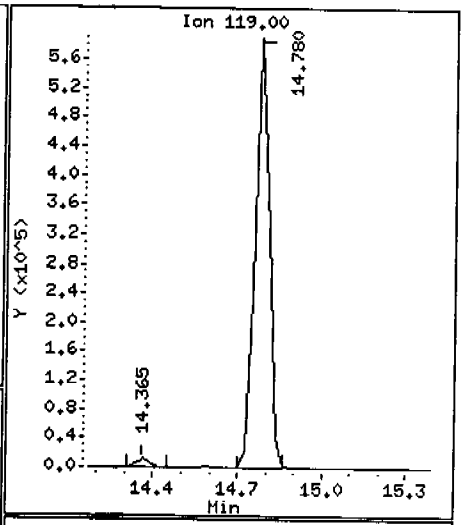
Instrument: msd1.i

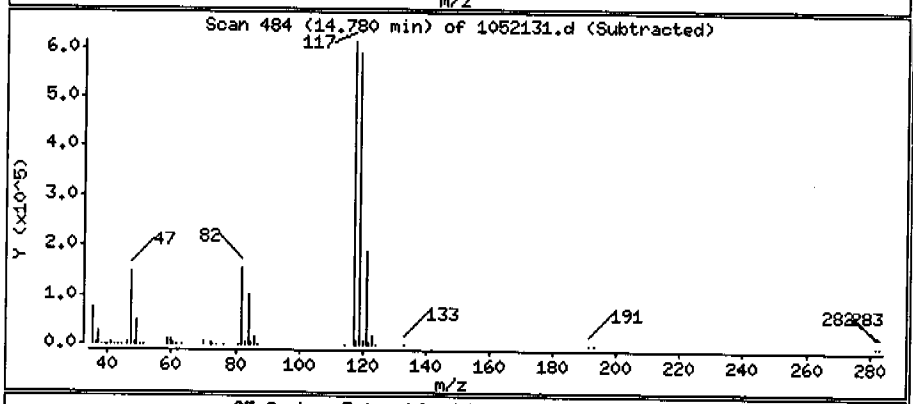
Operator: cb

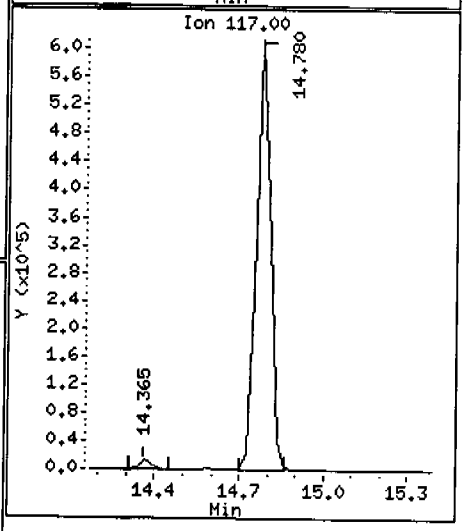
Column diameter: 0.53

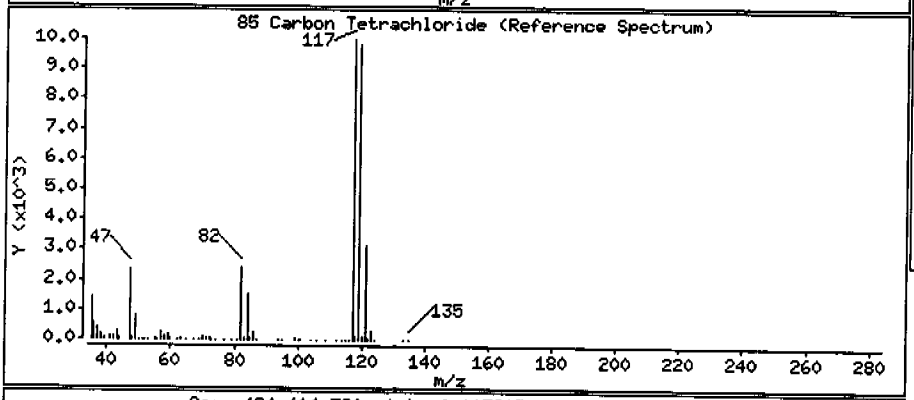
Concentration: 86.741 PPBV

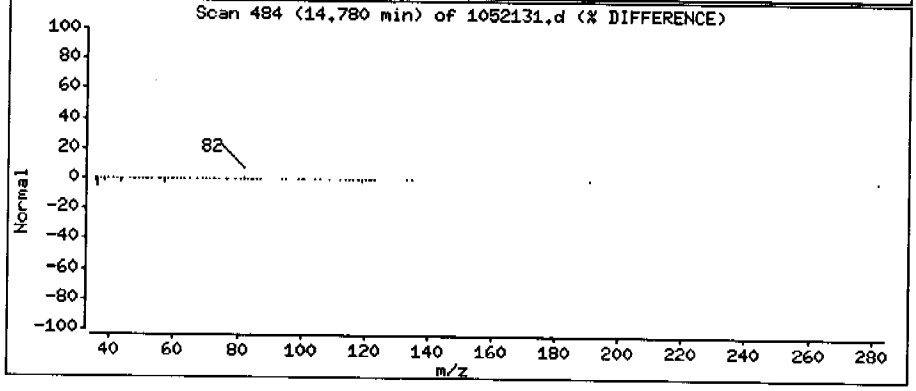












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

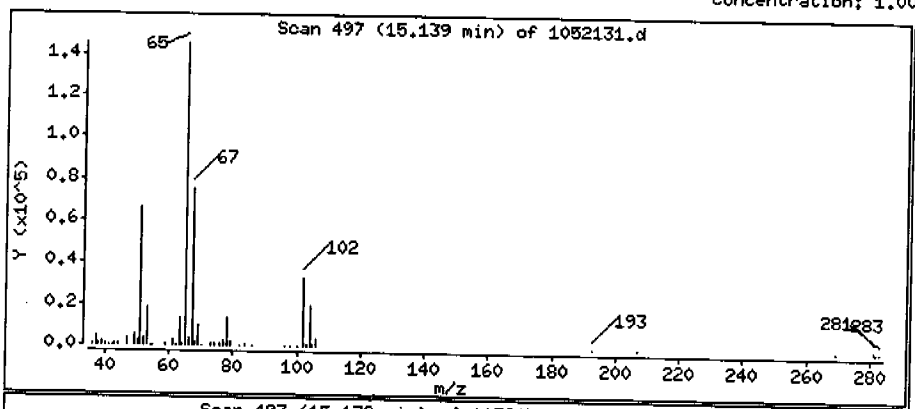
Operator: cb

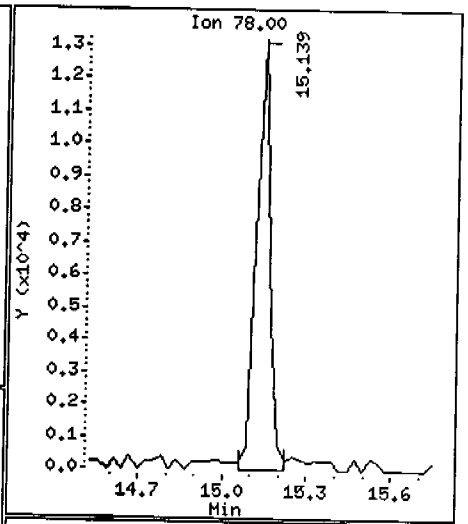
Column phase: RTx-624

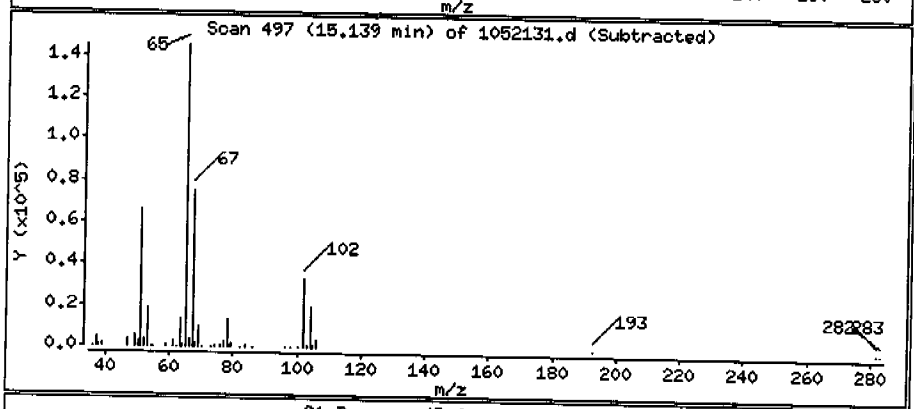
Column diameter: 0.53

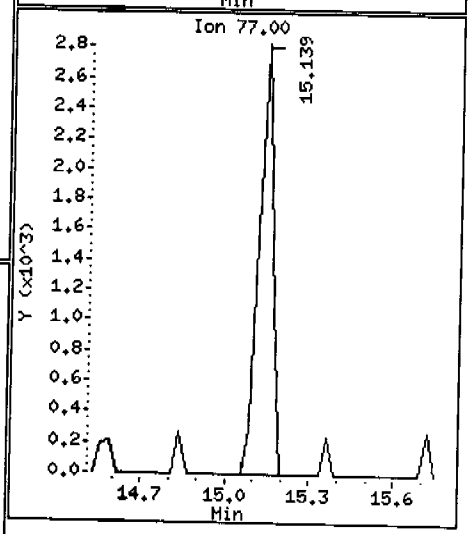
91 Benzene

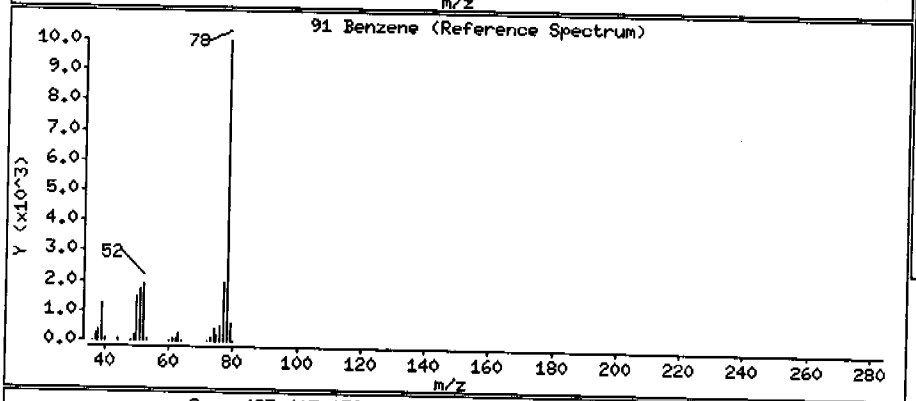
Concentration: 1.008 PPBV

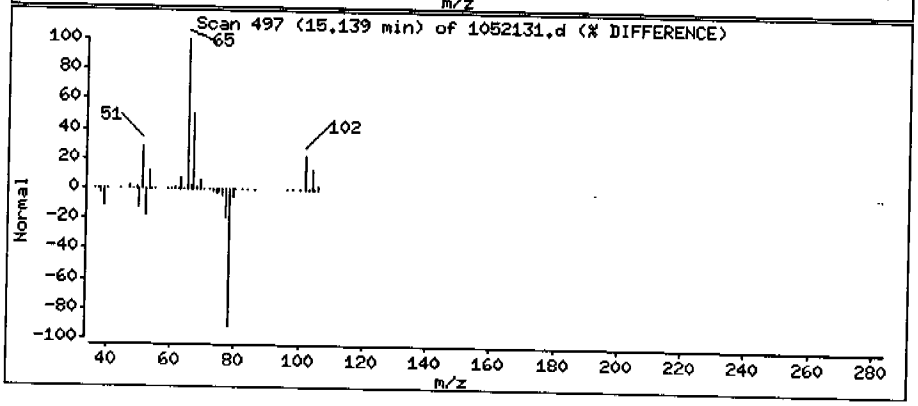












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

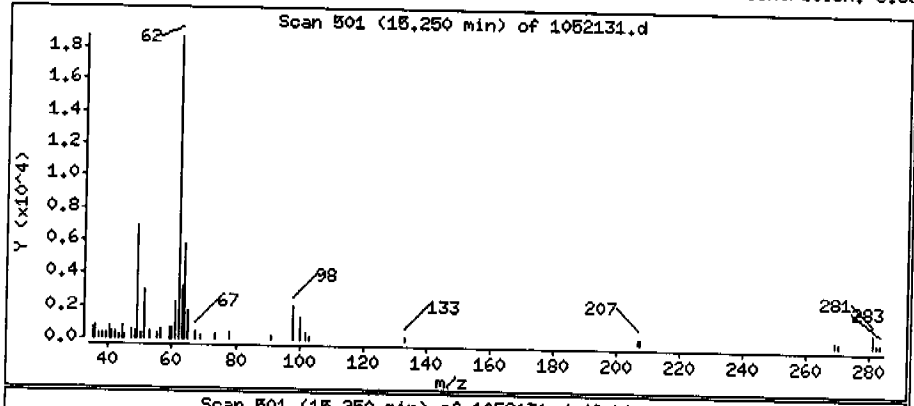
Operator: cb

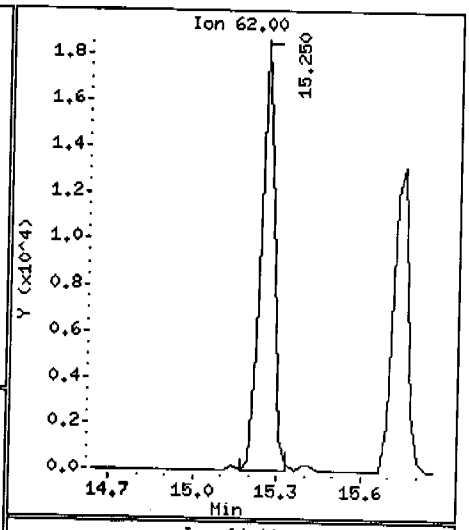
Column phase: RTx-624

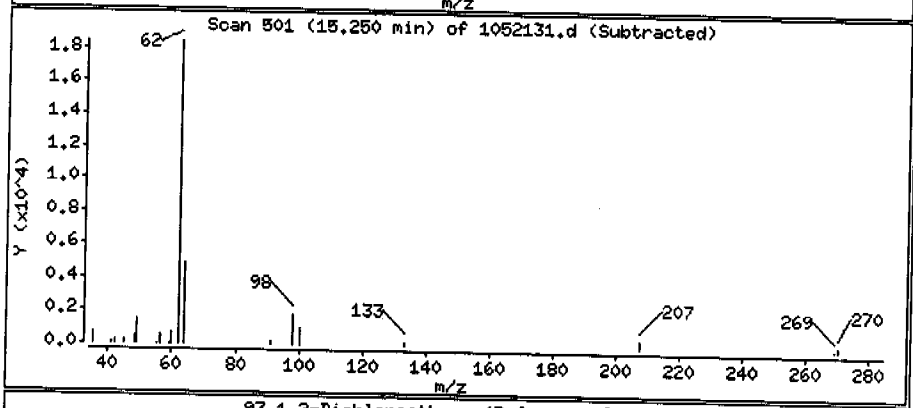
Column diameter: 0.53

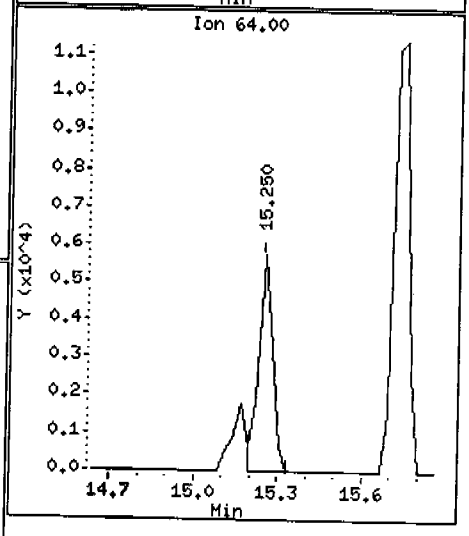
93 1,2-Dichloroethane

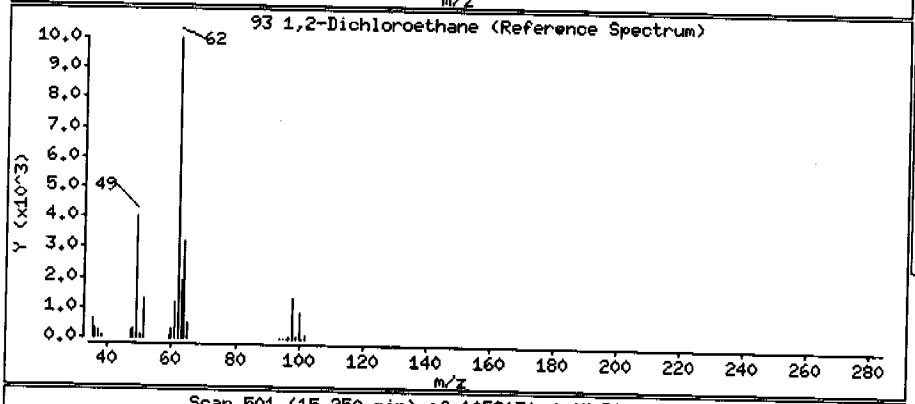
Concentration: 3.383 PPBV

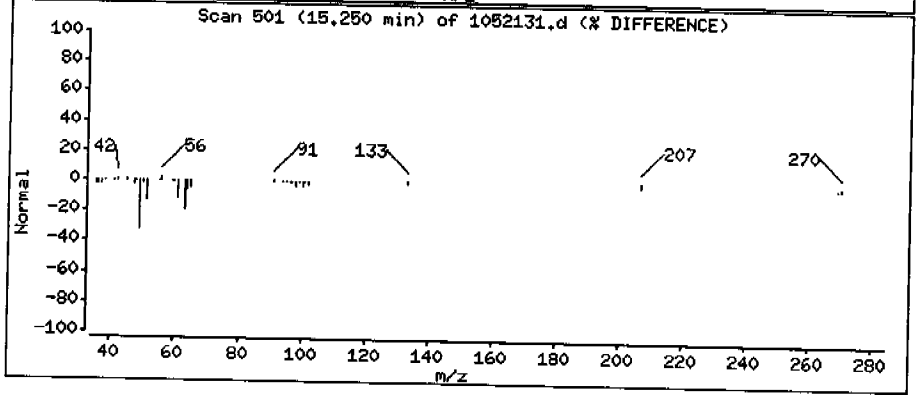












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

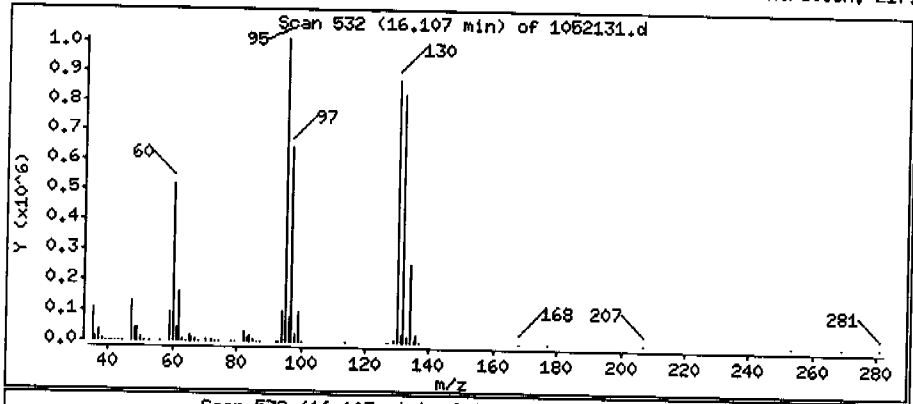
Operator: cb

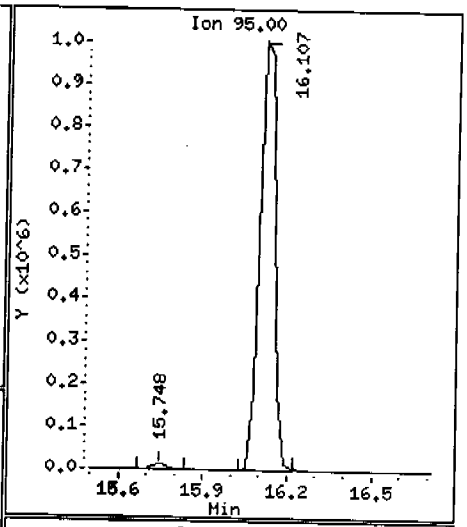
Column phase: RTx-624

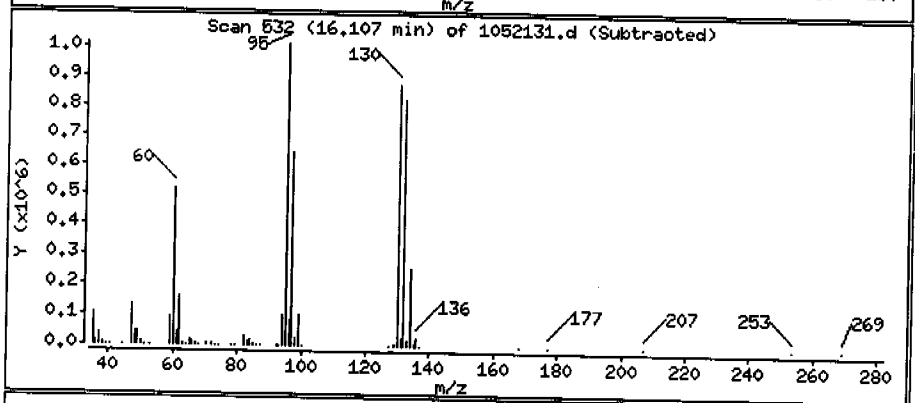
Column diameter: 0.53

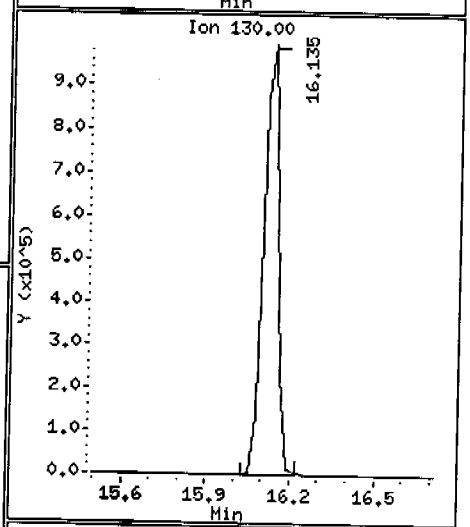
97 Trichloroethene

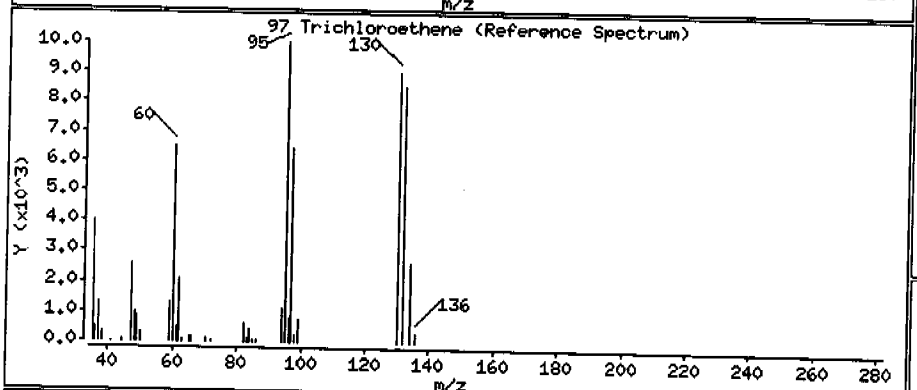
Concentration: 217.17 PPBV

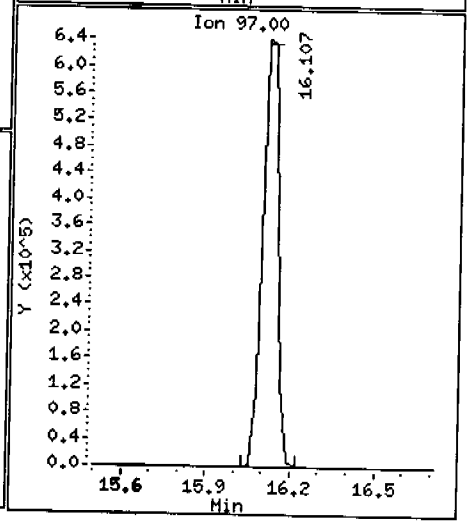


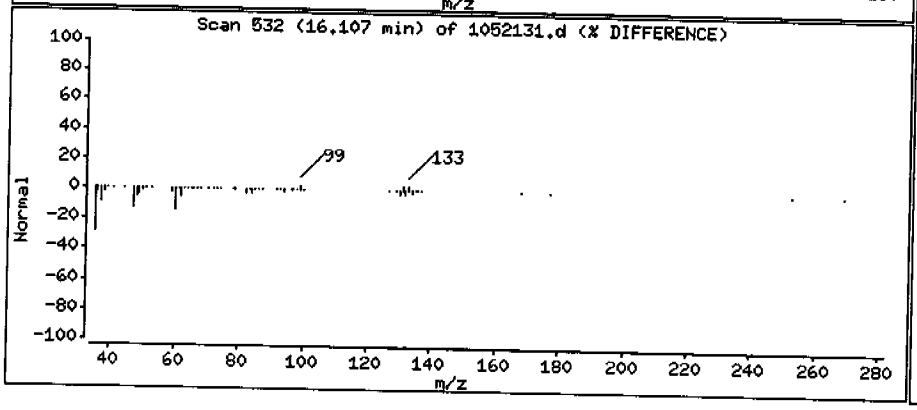












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

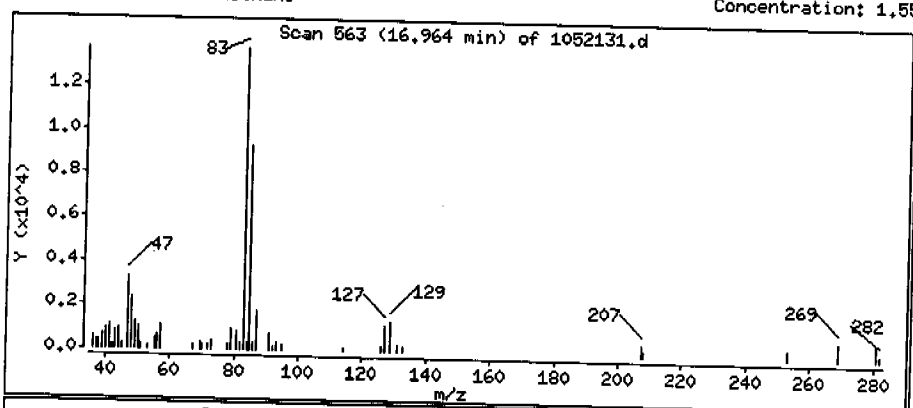
Operator: cb

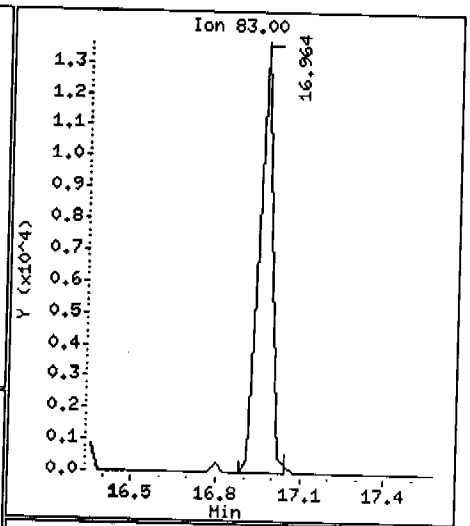
Column phase: RTx-624

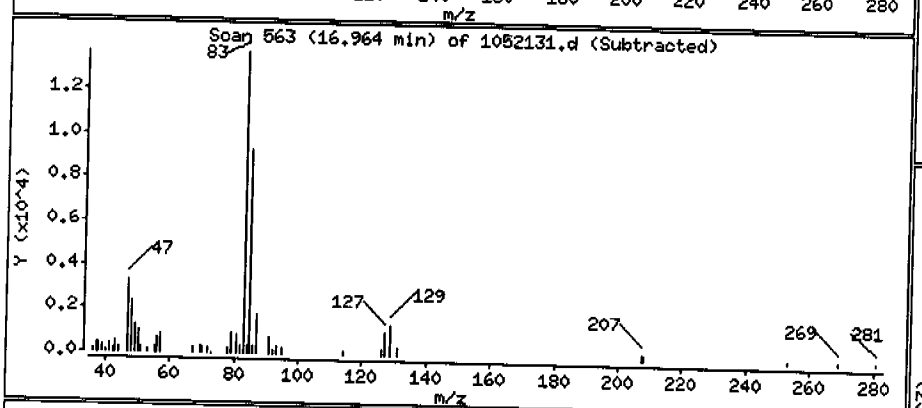
Column diameter: 0.53

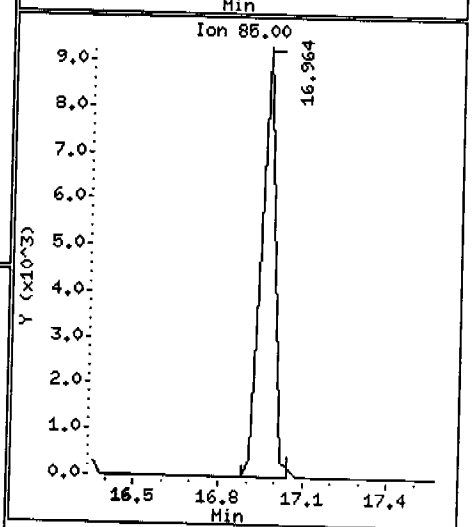
106 Bromodichloromethane

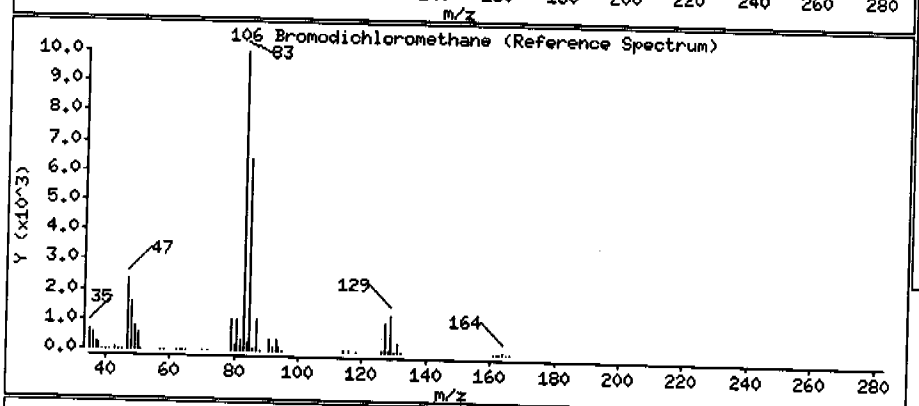
Concentration: 1.559 PPBV

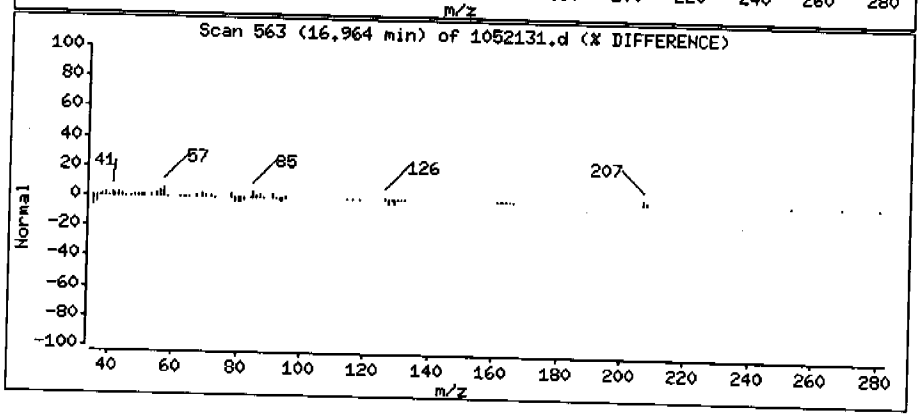












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

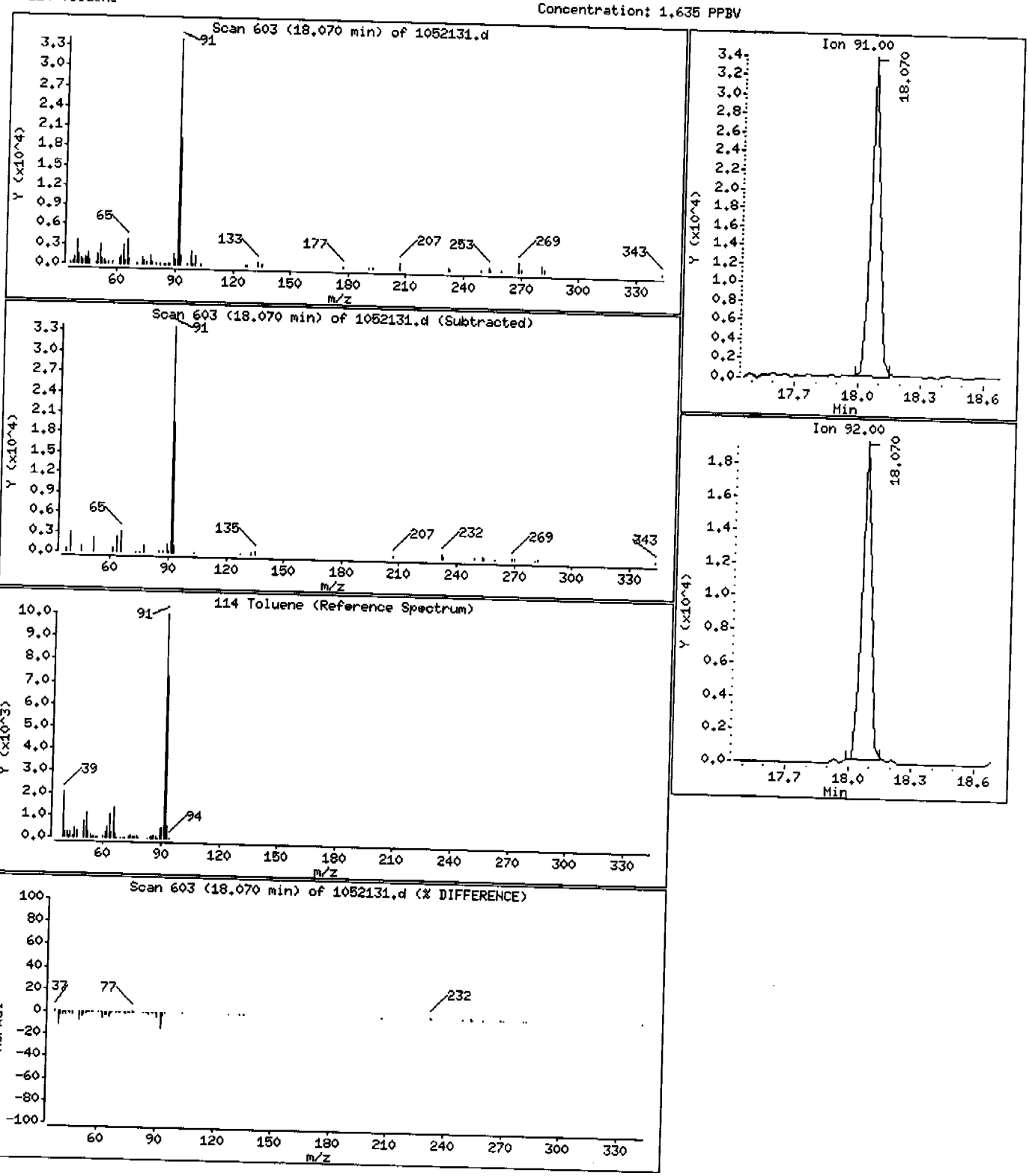
Operator: cb

Column phase: RTx-624

Column diameter: 0.53

114 Toluene

Concentration: 1.635 PPBV



Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

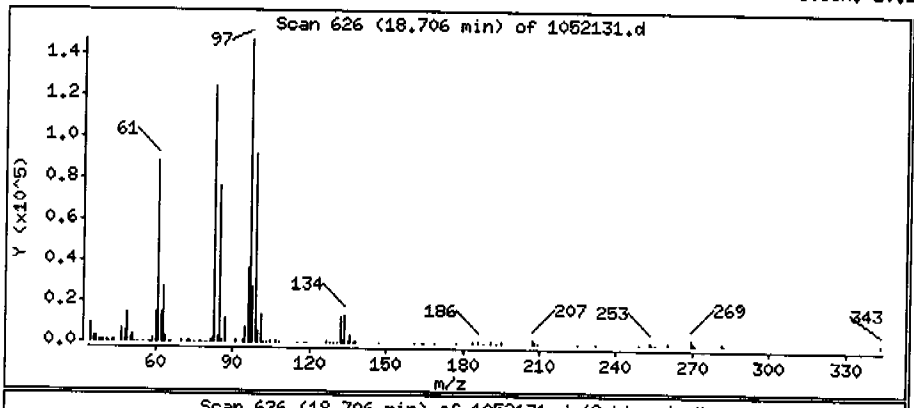
Operator: cb

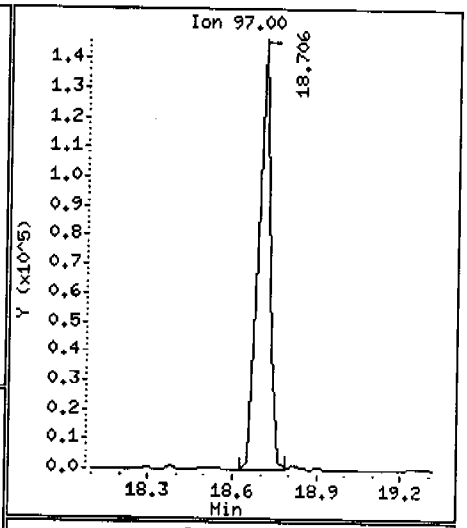
Column phase: RTx-624

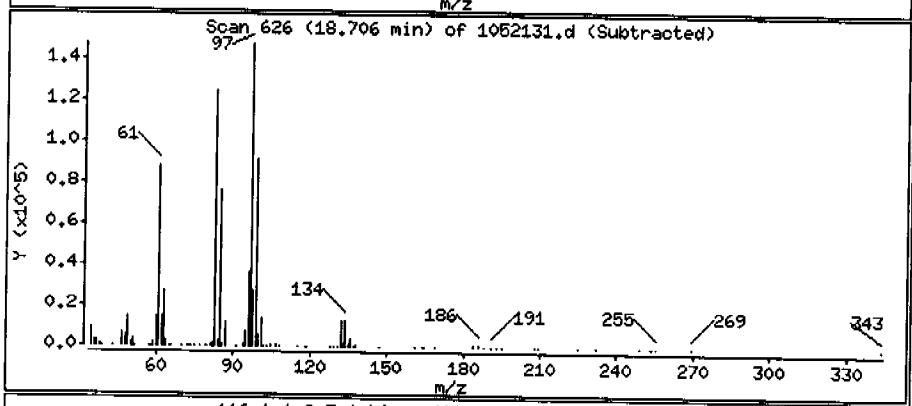
Column diameter: 0.53

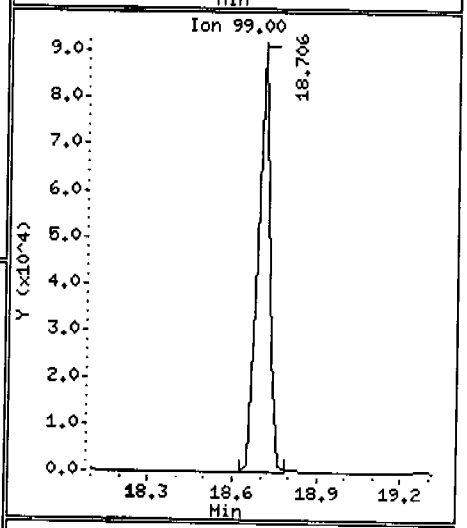
116 1,1,2-Trichloroethane

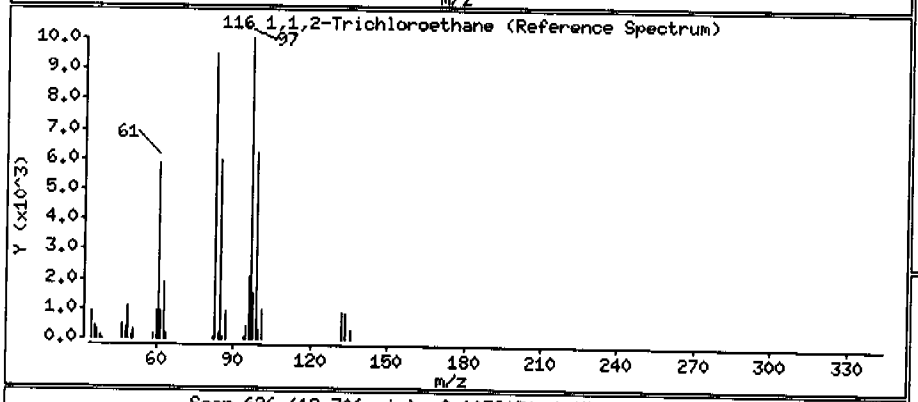
Concentration: 20.125 PPBV

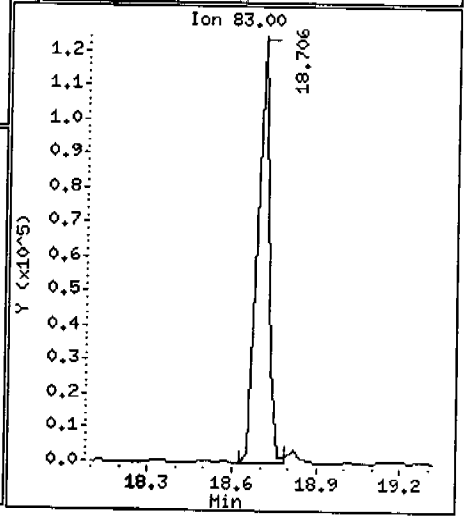


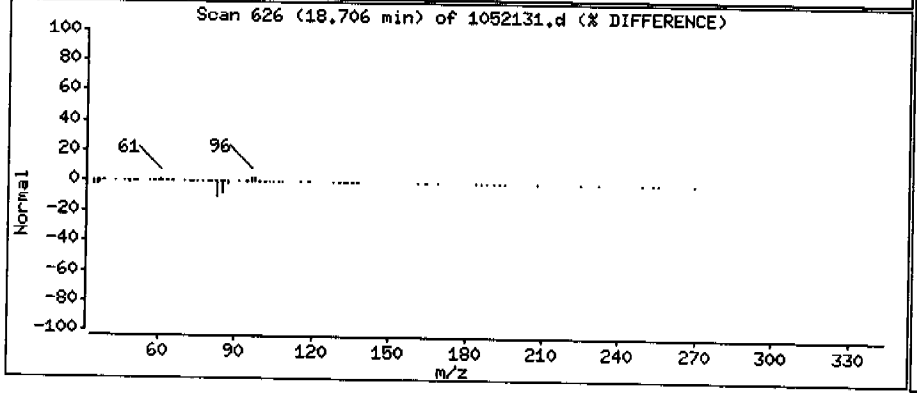












Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

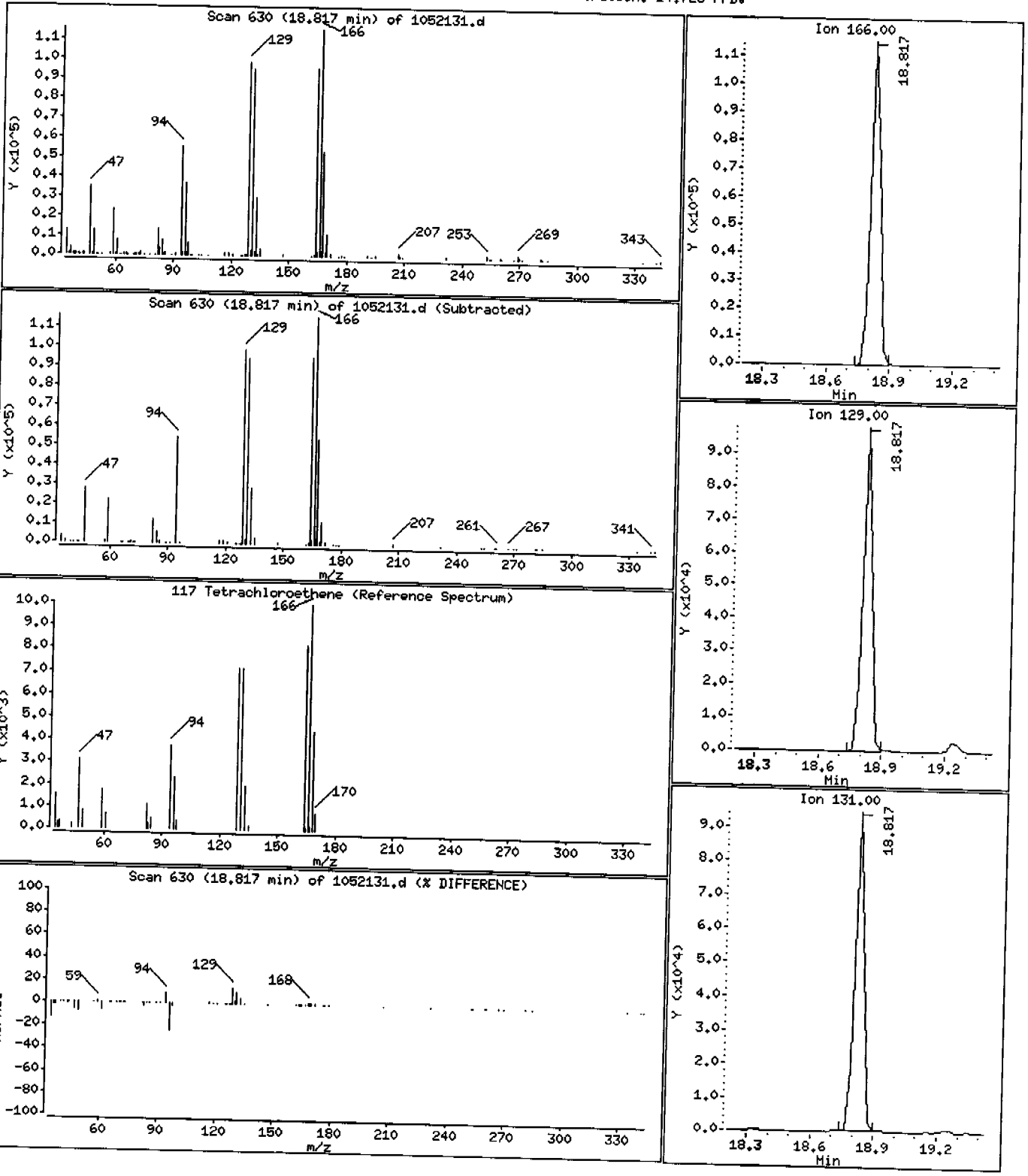
Operator: cb

Column phase: RTx-624

Column diameter: 0.53

117 Tetrachloroethene

Concentration: 14.725 PPBV



Data File: /chem/msd1.i/1-21may.b/1052131.d

Date : 22-MAY-2008 06:32

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

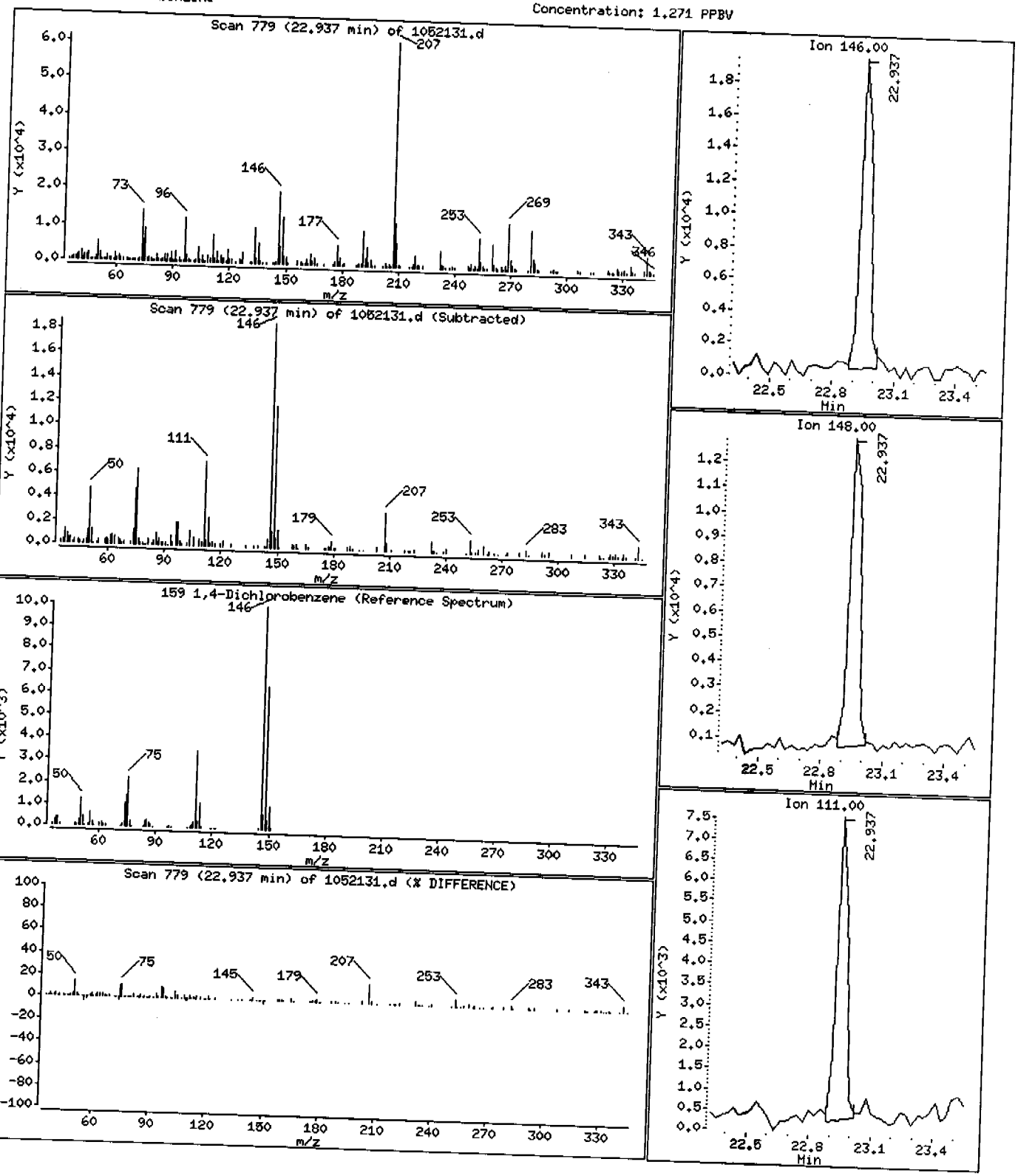
Column phase: RTx-624

Operator: cb

Column diameter: 0.53

159 1,4-Dichlorobenzene

Concentration: 1.271 PPBV



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12240 Lab Duplicate

Lab ID#: 0805274-05AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethanol	3.4	35	6.3	66
Freon 113	0.84	3.5	6.4	27
1,1-Dichloroethene	0.84	13	3.3	51
Acetone	3.4	23	8.0	54
Methylene Chloride	0.84	250	2.9	880
2-Butanone (Methyl Ethyl Ketone)	0.84	2.4	2.5	7.1
cis-1,2-Dichloroethene	0.84	1.2	3.3	4.7
Chloroform	0.84	160	4.1	780
1,1,1-Trichloroethane	0.84	2.3	4.6	12
Carbon Tetrachloride	0.84	87	5.3	550
Benzene	0.84	1.0	2.7	3.4
1,2-Dichloroethane	0.84	3.5	3.4	14
Trichloroethene	0.84	220	4.5	1200
Bromodichloromethane	0.84	1.6	5.6	10
Toluene	0.84	1.6	3.2	5.9
1,1,2-Trichloroethane	0.84	20	4.6	110
Tetrachloroethene	0.84	15	5.7	100
1,4-Dichlorobenzene	0.84	1.4	5.0	8.1

0118

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12240 Lab Duplicate

Lab ID#: 0805274-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [illegible] 052132 Date of Collection: 5/9/08
Dil. Factor: [illegible] 1.68 Date of Analysis: 5/22/08 07:20 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	Not Detected	4.2	Not Detected
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	35	6.3	66
Freon 113	0.84	3.5	6.4	27
1,1-Dichloroethene	0.84	13	3.3	51
Acetone	3.4	23	8.0	54
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	Not Detected	2.6	Not Detected
Methylene Chloride	0.84	250	2.9	880
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.4	2.5	7.1
cis-1,2-Dichloroethene	0.84	1.2	3.3	4.7
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	160	4.1	780
1,1,1-Trichloroethane	0.84	2.3	4.6	12
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	87	5.3	550
Benzene	0.84	1.0	2.7	3.4
1,2-Dichloroethane	0.84	3.5	3.4	14
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	220	4.5	1200
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	1.6	5.6	10
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	1.6	3.2	5.9
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	20	4.6	110
Tetrachloroethene	0.84	15	5.7	100

0119

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12240 Lab Duplicate

Lab ID#: 0805274-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052132 Collection: 5/9/08
Dil.Factor: 1.68 Analysis: 5/22/08 07:20 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	1.4	5.0	8.1
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	95	70-130

0120

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052132.d
Lab Smp Id: 0805274-05AA
Inj Date : 22-MAY-2008 07:20
Operator : lo
Inst ID: msd1.i
Smp Info : 100mL #5613
Misc Info : 6.0"Hg --> 5psi
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.282	14.282 (1.000)	130	289928	25.0000		80.00- 120.00	100.00
	14.282	14.282 (1.000)	128	233588			28.93- 128.93	80.57
	14.255	14.282 (1.000)	49	536218			132.03- 232.03	184.95
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1491208	25.0000		80.00- 120.00	100.00
	15.748	15.748 (1.000)	88	239582			0.00- 65.76	16.07
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.033	20.033 (1.000)	117	1693027	25.0000		80.00- 120.00	100.00
	20.006	20.033 (1.000)	82	971950			8.42- 108.42	57.41
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.139	15.139 (1.060)	65	458260	23.6850	23.685	80.00- 120.00	100.00
	15.139	15.139 (1.060)	67	242280			6.04- 106.04	52.87
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.987 (1.140)	98	1644566	24.3397	24.340	80.00- 120.00	100.00
	17.960	17.987 (1.140)	70	172172			0.00- 60.35	10.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.987 (1.140)	100	1099960			15.45- 115.45	66.88
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.526 (1.075)	174	859227	23.7179	23.718	80.00- 120.00	100.00
21.526	21.526 (1.075)	95	1385835			110.56- 210.56	161.29
21.526	21.526 (1.075)	176	822707			45.40- 145.40	95.75
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.706)	45	135822	20.8466	35.022	80.00- 120.00	100.00(H)
10.080	10.135 (0.706)	43	38229			0.00- 75.81	28.15
10.080	10.135 (0.706)	46	3245			0.00- 92.85	2.39
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	44746	2.07893	3.492	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	25863			12.64- 112.64	57.80
10.577	10.577 (0.741)	101	58572			83.95- 183.95	130.90
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	229205	7.68123	12.904	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	119479			3.86- 103.86	52.13
10.522	10.522 (0.737)	98	75967			0.00- 85.09	33.14
45 Acetone					CAS #: 67-64-1		
10.881	10.881 (0.762)	58	135701	13.5402	22.748	80.00- 120.00	100.00
10.881	10.881 (0.762)	43	465839			275.34- 375.34	343.28
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	3916288	151.510	254.54	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	2514780			13.77- 113.77	64.21
11.739	11.739 (0.822)	51	1181705			0.00- 79.96	30.17
75 2-Butanone					CAS #: 78-93-3		
13.950	13.923 (0.977)	72	14949	1.43125	2.404	80.00- 120.00	100.00
13.950	13.923 (0.977)	43	75593			420.83- 520.83	505.67
13.950	13.923 (0.977)	57	5006			0.00- 90.57	33.49
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.973)	61	22019	0.70874	1.191	80.00- 120.00	100.00
13.895	13.895 (0.973)	96	14033			20.70- 120.70	63.73
13.923	13.895 (0.975)	98	9939			0.00- 94.62	45.14
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	3926875	95.7502	160.86	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	2447657			12.14- 112.14	62.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.586 (1.021)	97	58355	1.35607	2.278	80.00- 120.00	100.00
14.586	14.586 (1.021)	99	37067			13.23- 113.23	63.52
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	2067636	51.9482	87.273	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	2149428			53.03- 153.03	103.96
91 Benzene					CAS #: 71-43-2		
15.139	15.139 (0.961)	78	47750	0.62930	1.057	80.00- 120.00	100.00
15.139	15.139 (0.961)	77	11807			0.00- 73.68	24.73
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	65818	2.09758	3.524	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	21630			0.00- 83.51	32.86
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	4015331	129.045	216.80	80.00- 120.00	100.00
16.107	16.107 (1.023)	130	3866810			46.53- 146.53	96.30
16.107	16.107 (1.023)	97	2593311			14.98- 114.98	64.59
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	45080	0.92441	1.553	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	30009			11.42- 111.42	66.57
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	97792	0.93701	1.574	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	62587			9.73- 109.73	64.00
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	436637	12.1866	20.473	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	269146			11.60- 111.60	61.64
18.706	18.706 (0.934)	83	362348			31.38- 131.38	82.99
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	366337	8.82614	14.828	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	290260			27.45- 127.45	79.23
18.817	18.817 (0.939)	131	272691			24.33- 124.33	74.44
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.145)	146	70140	0.80456	1.352	80.00- 120.00	100.00
22.937	22.937 (1.145)	148	41277			16.32- 116.32	58.85
22.937	22.937 (1.145)	111	26693			0.00- 90.95	38.06

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052132.d
Lab Smp Id: 0805274-05AA
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.0"Hg --> 5psi

Calibration Date: 21-MAY-2008
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	289928	-6.64
95 1,4-Difluorobenze	1646495	987897	2305093	1491208	-9.43
123 Chlorobenzene-d5	1819110	1091466	2546754	1693027	-6.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-21may.b/1052132.d
Report Date: 27-May-2008 15:13

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805274-05AA
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 6.0"Hg --> 5psi

Client SDG: 1-21may
Fraction: VOA

Operator: lo
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.685	94.74	70-130
$ 111 Toluene-d8	25.000	24.340	97.36	70-130
$ 136 Bromofluorobenzene	25.000	23.718	94.87	70-130

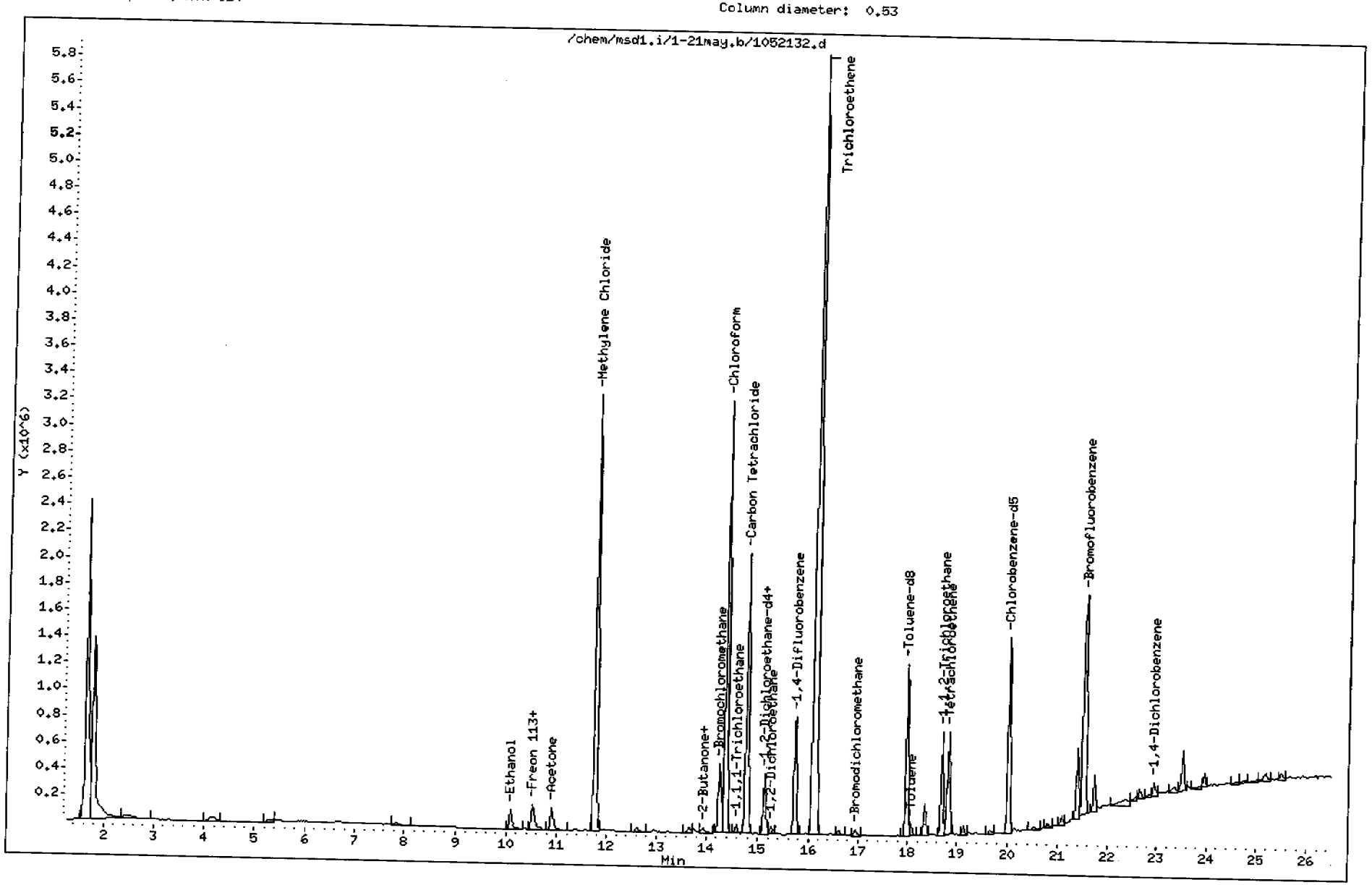
Data File: /chem/msd1.i/1-21may.b/1052132.d
Date : 22-MAY-2008 07:20
Client ID:
Sample Info: 100mL #5613

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0127



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

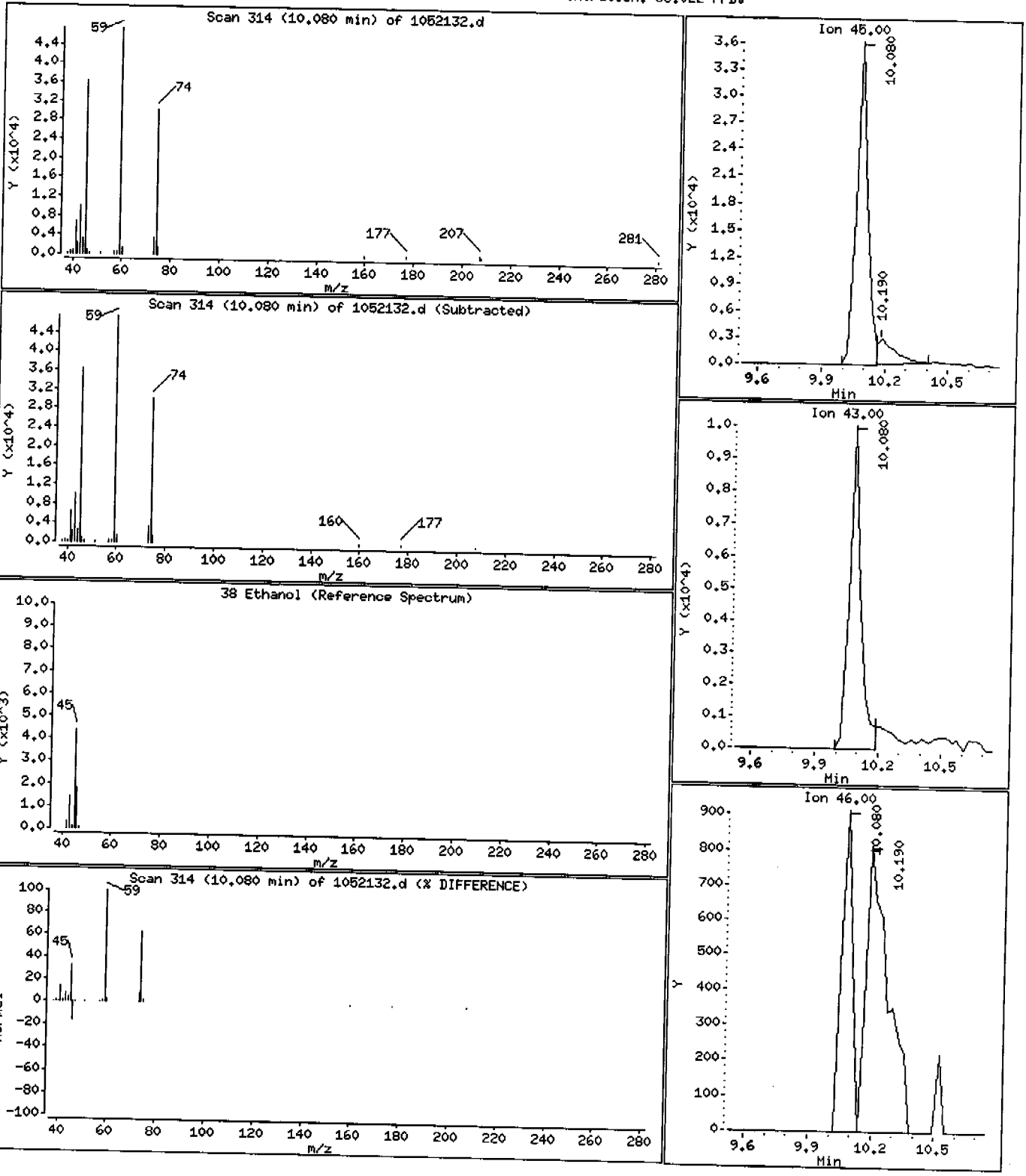
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

38 Ethanol

Concentration: 35.022 PPBV



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

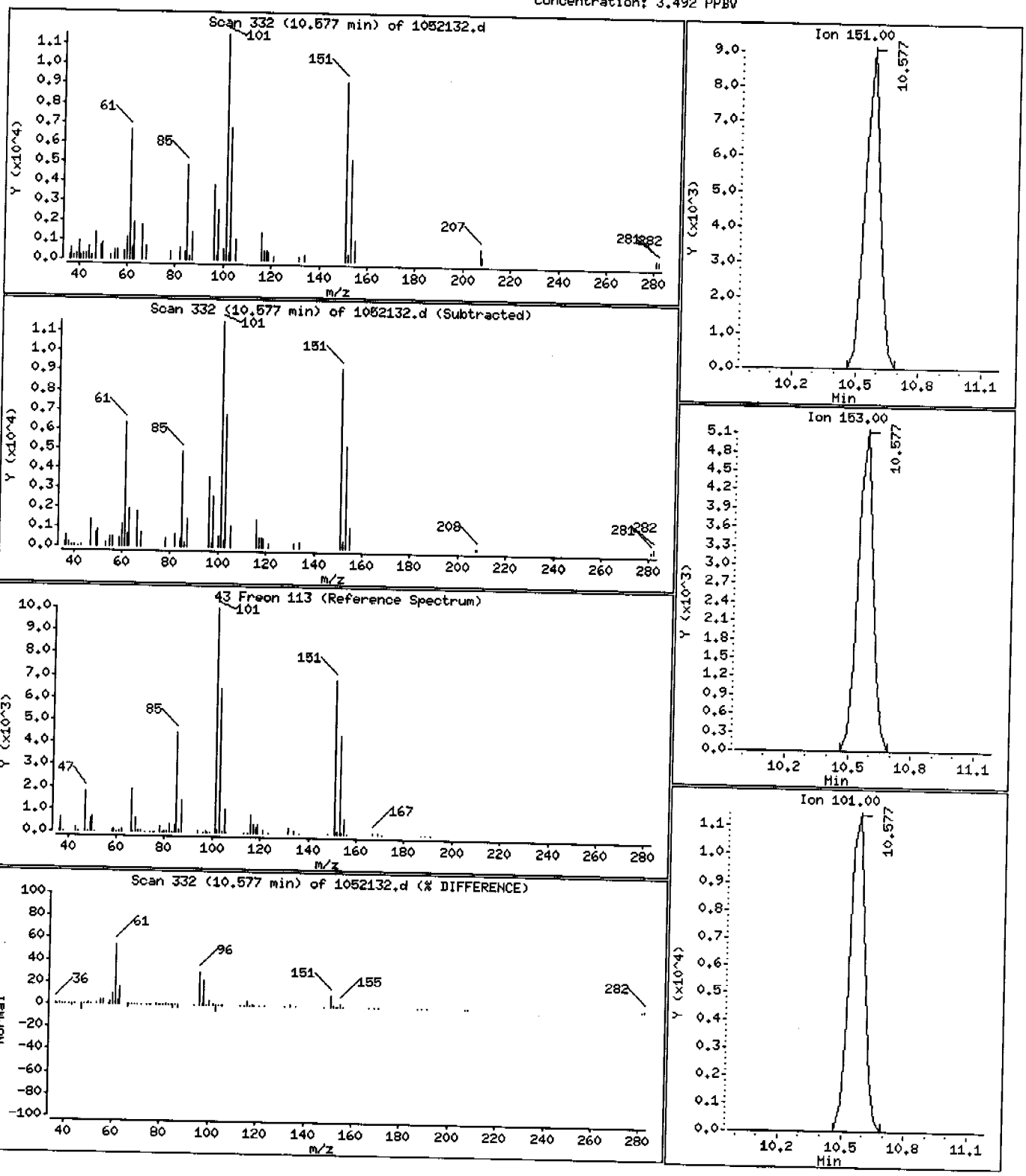
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

43 Freon 113

Concentration: 3.492 PPBV



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

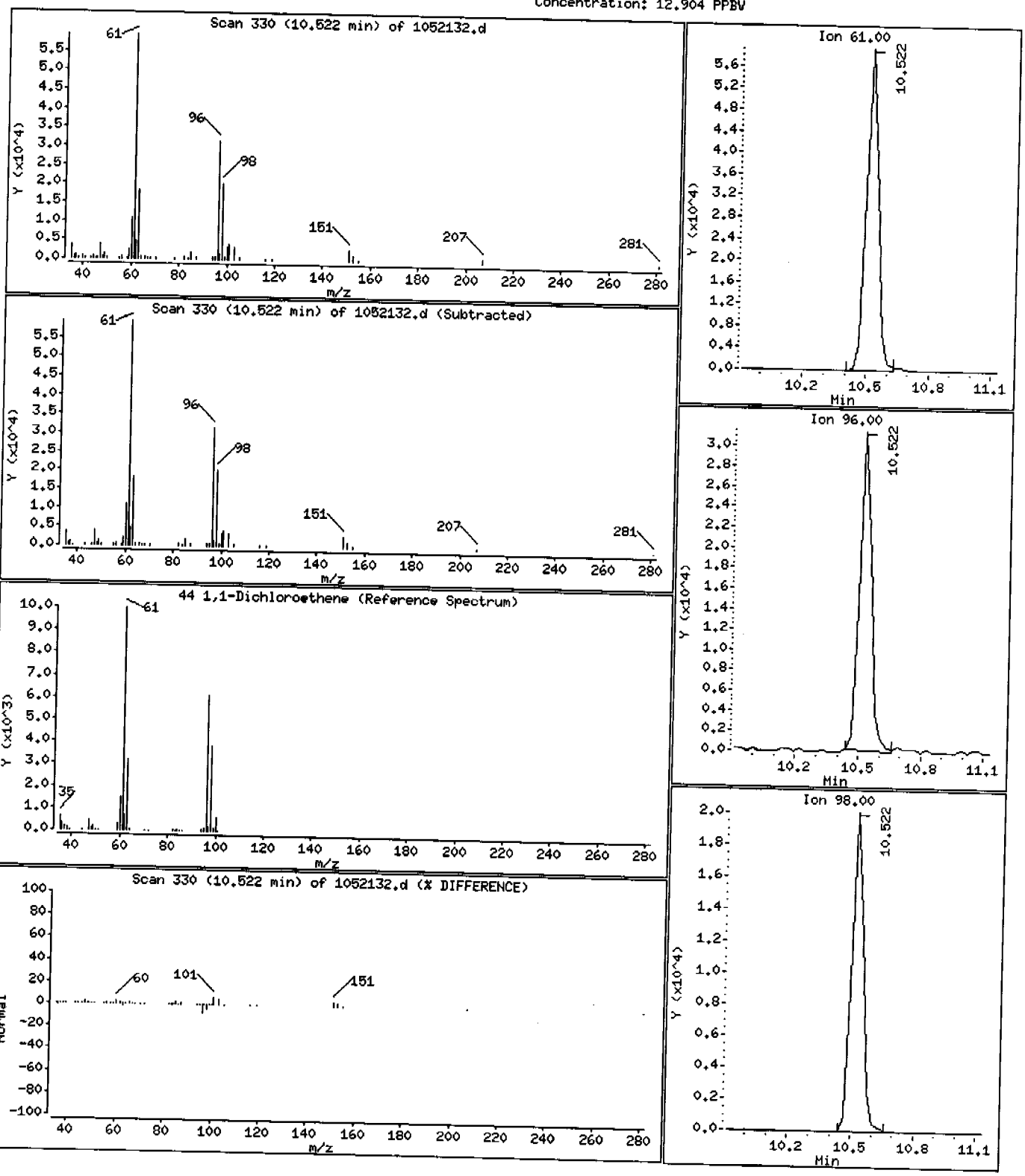
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

44 1,1-Dichloroethene

Concentration: 12.904 PPBV



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

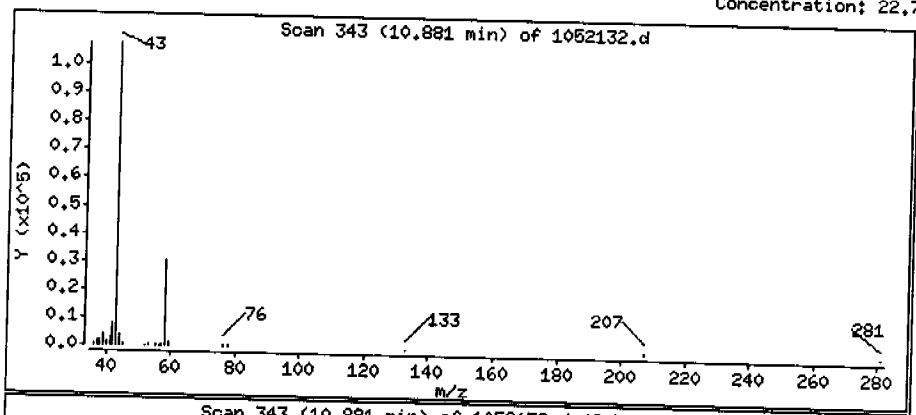
Operator: lo

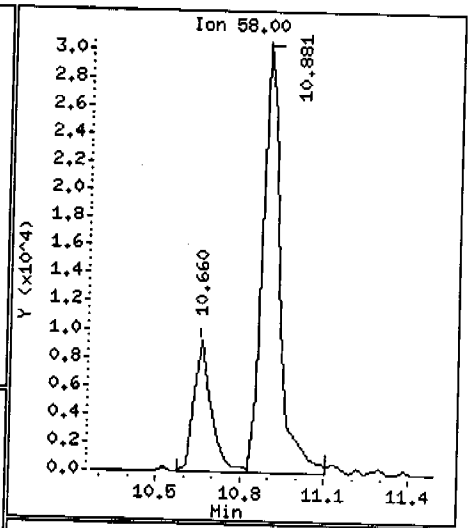
Column phase: RTx-624

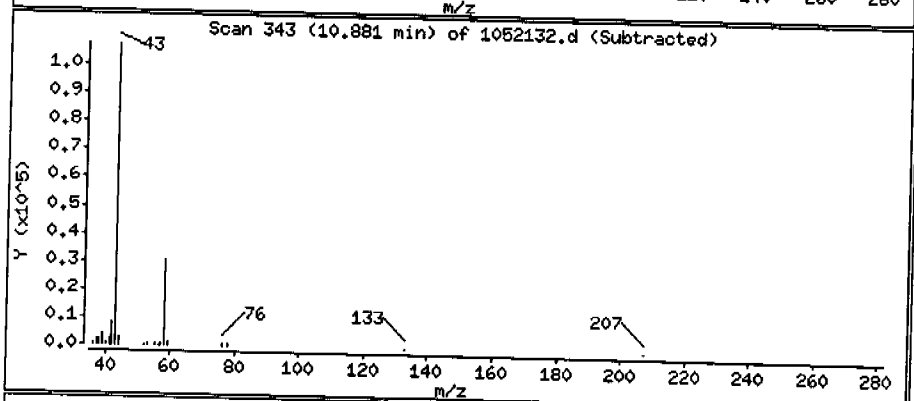
Column diameter: 0.53

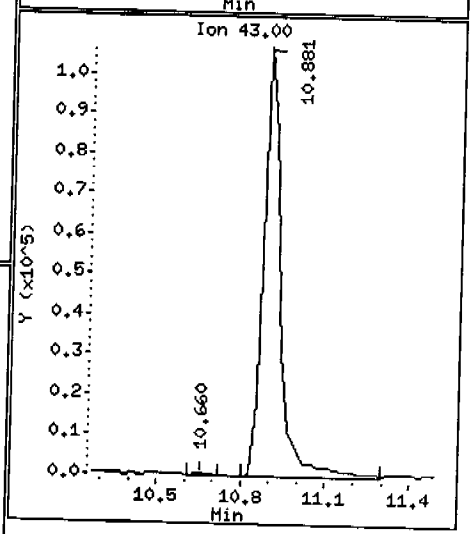
45 Acetone

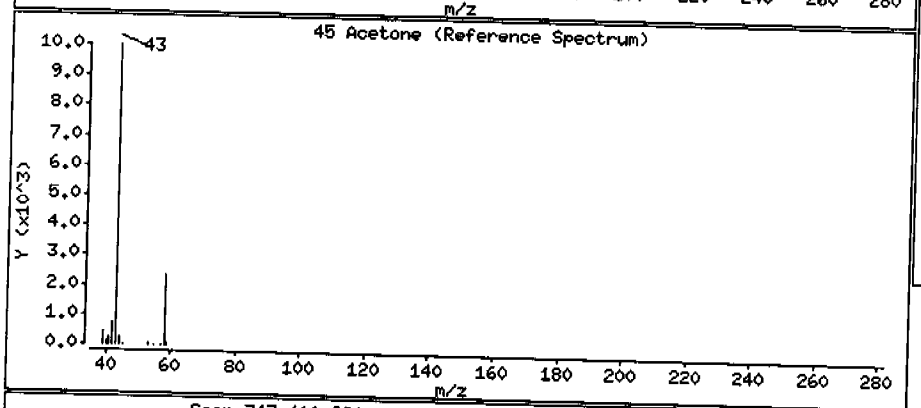
Concentration: 22.748 PPBV

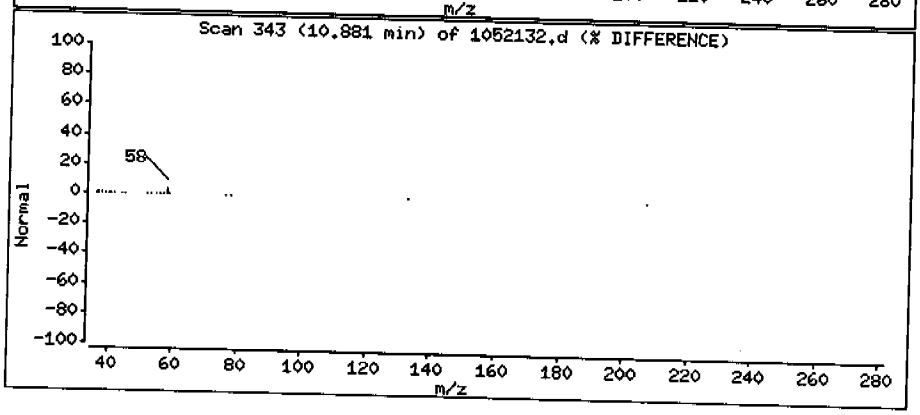












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

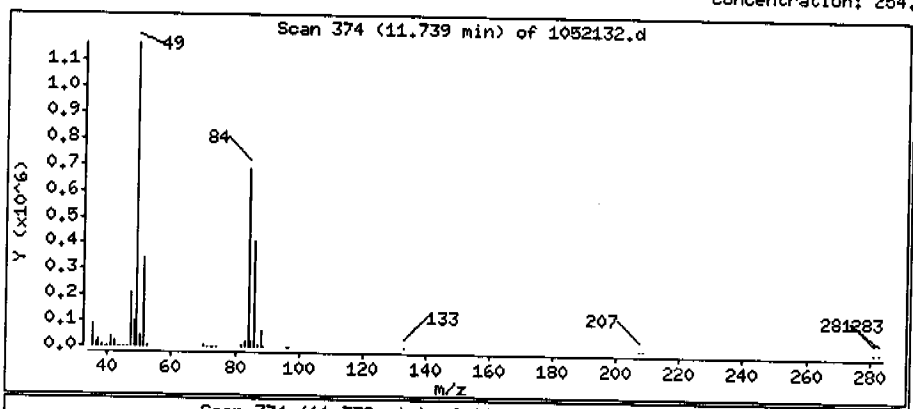
Operator: lo

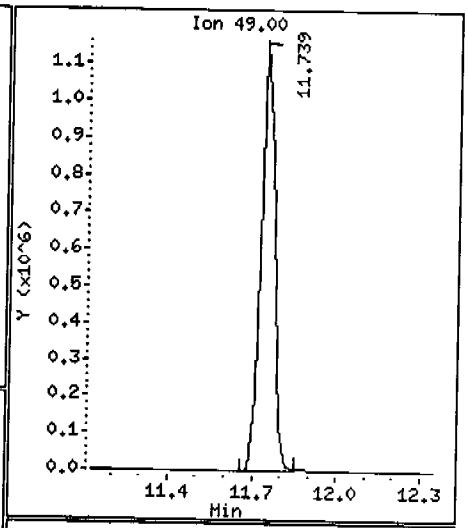
Column phase: RTx-624

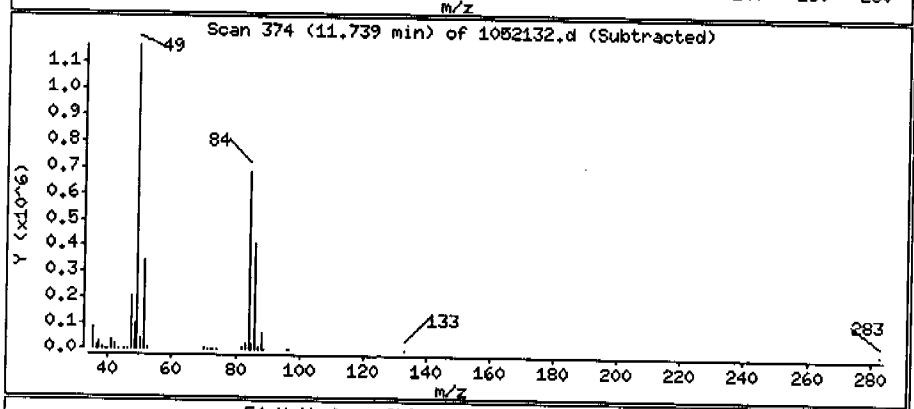
Column diameter: 0.53

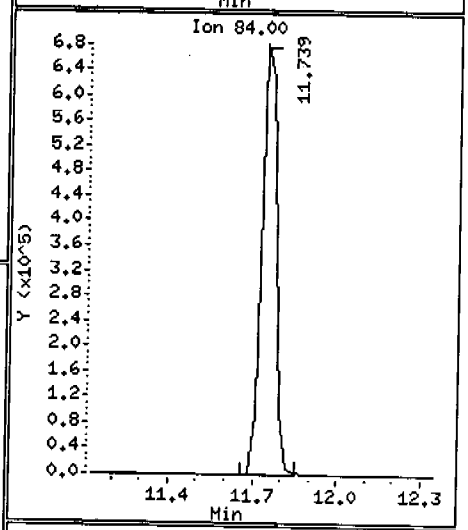
54 Methylene Chloride

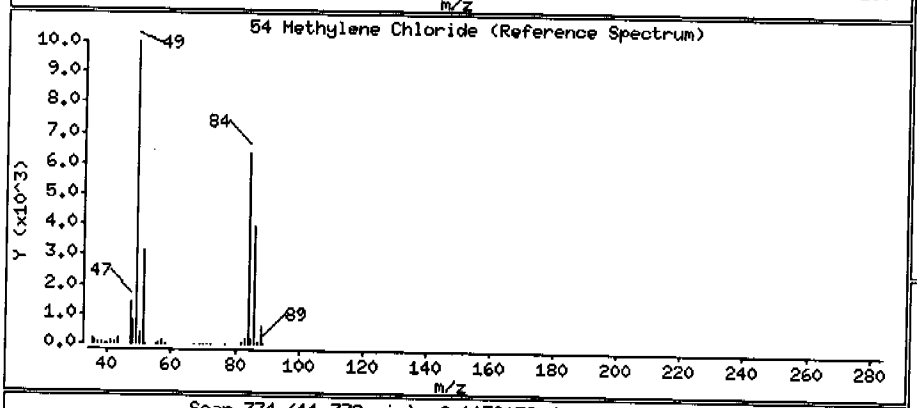
Concentration: 254.54 PPBV

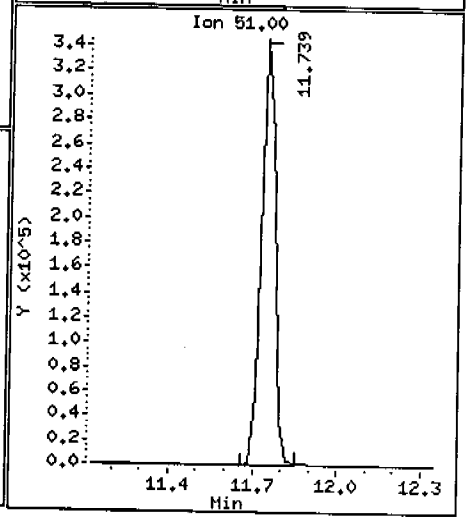


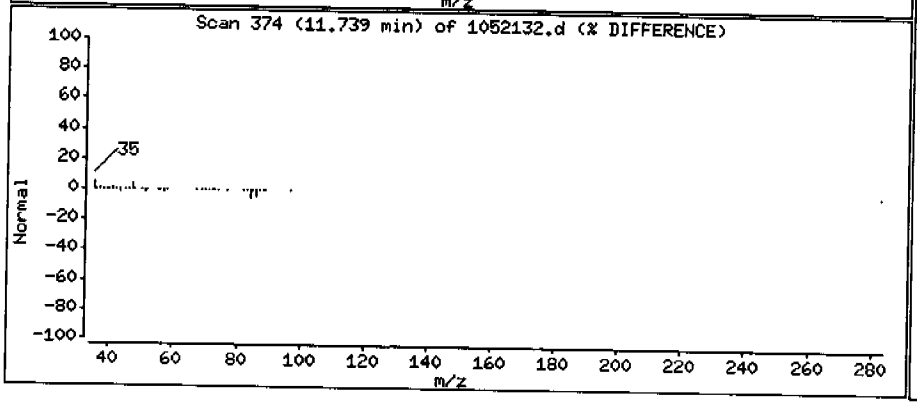












0132

Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

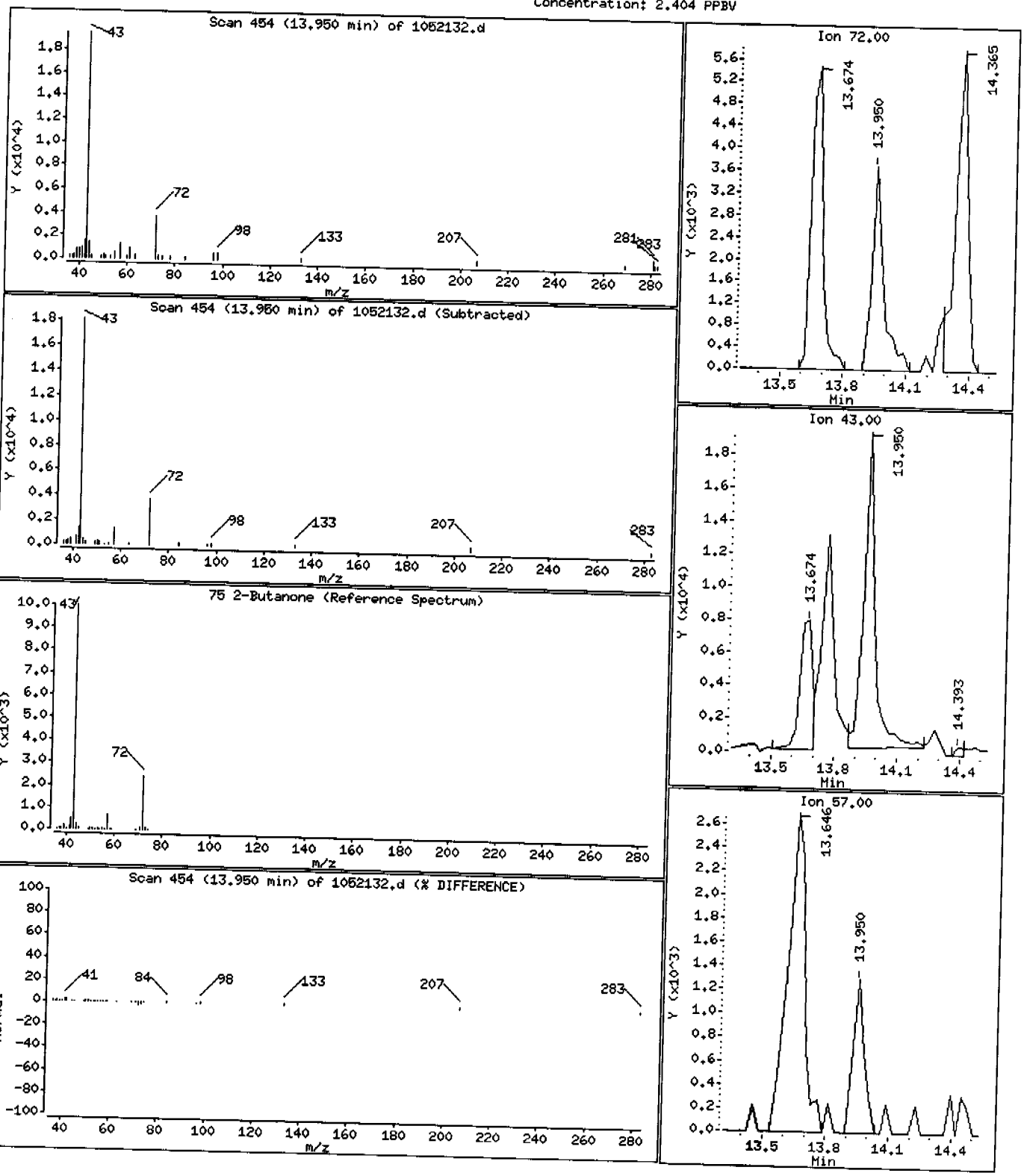
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

75 2-Butanone

Concentration: 2.404 PPBV



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

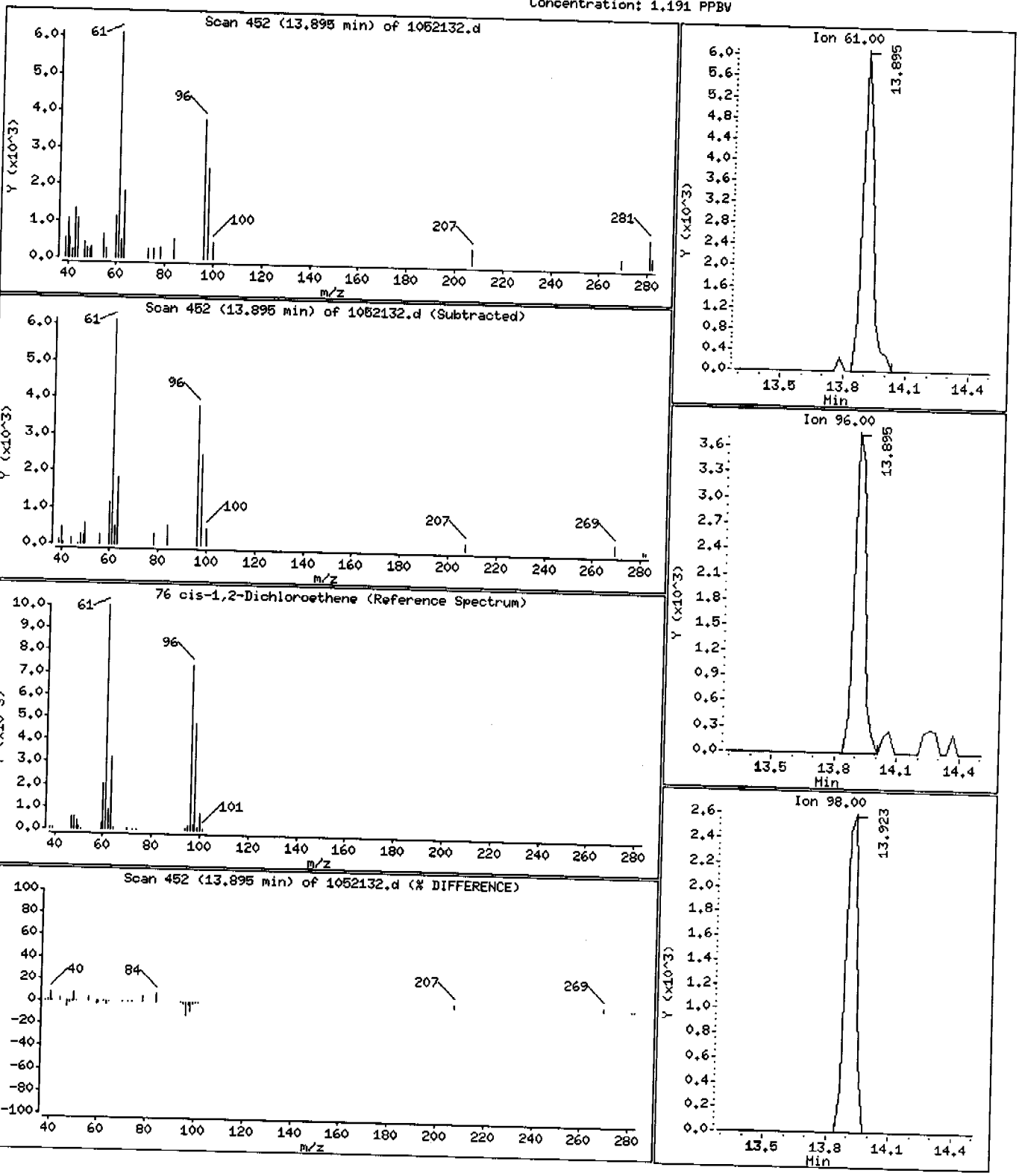
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

76 cis-1,2-Dichloroethene

Concentration: 1.191 PPBV



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5613

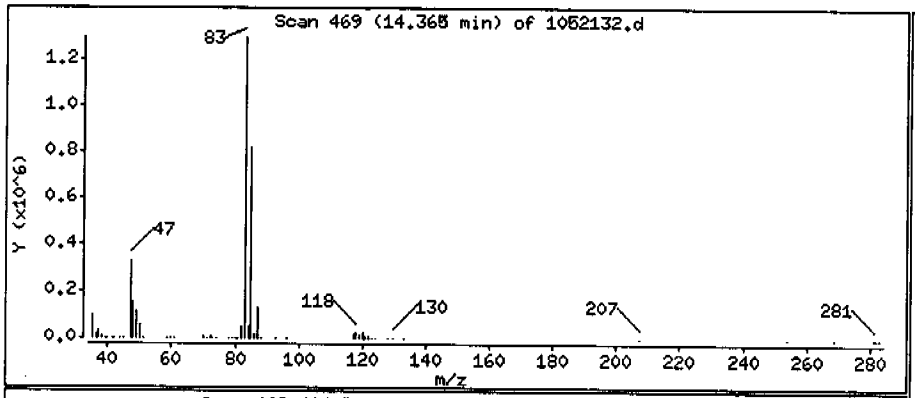
Operator: lo

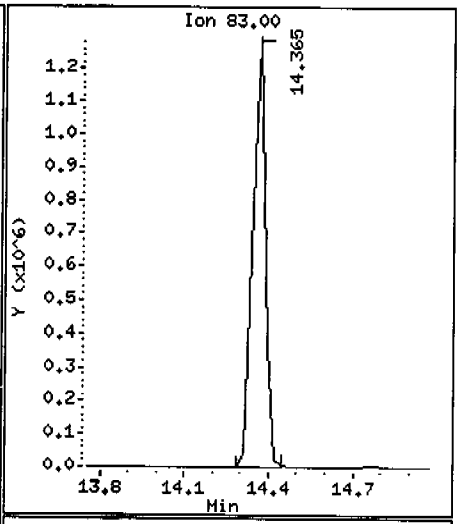
Column phase: RTx-624

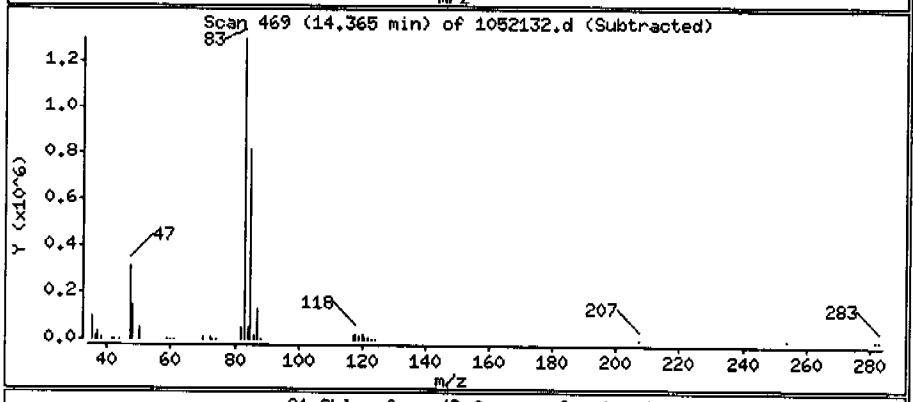
Column diameter: 0.53

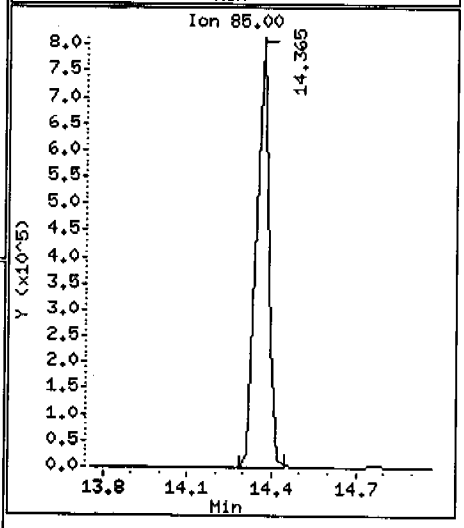
81 Chloroform

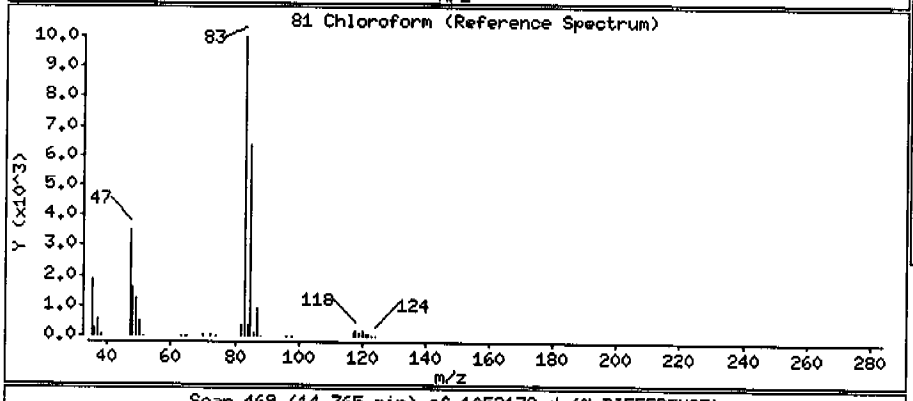
Concentration: 160.86 PPBV

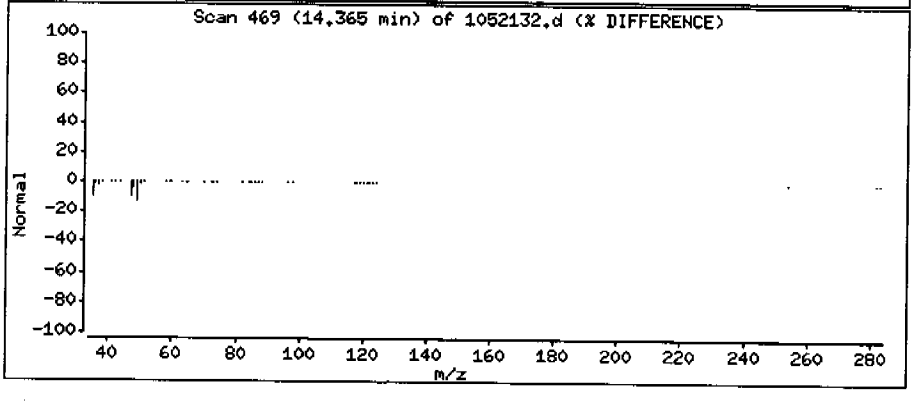












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5613

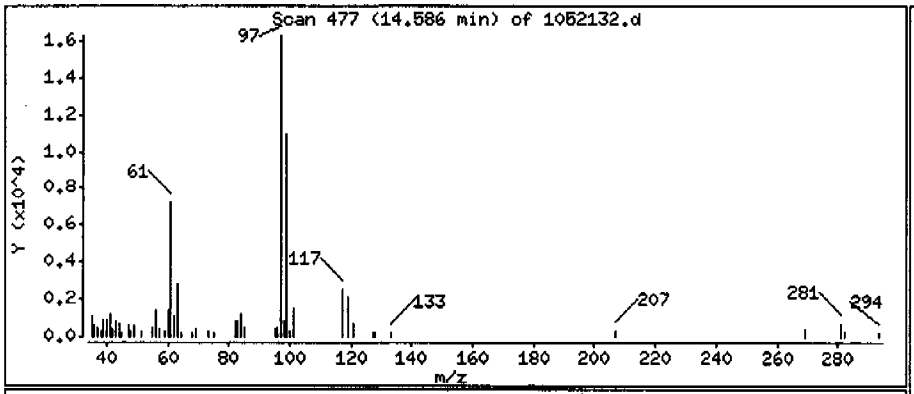
Operator: lo

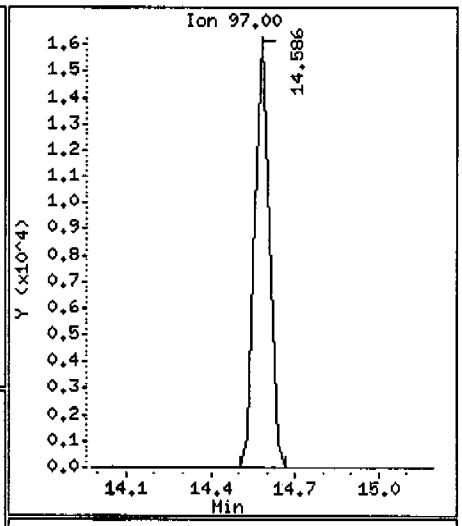
Column phase: RTx-624

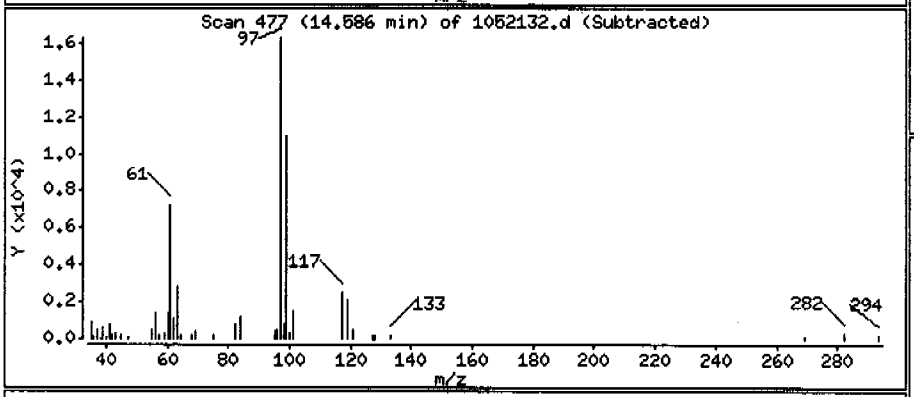
Column diameter: 0.53

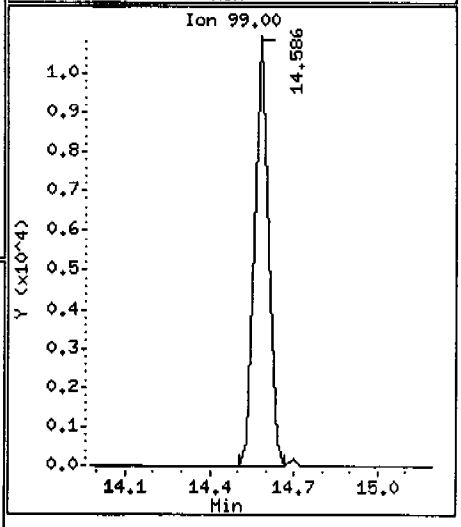
83 1,1,1-Trichloroethane

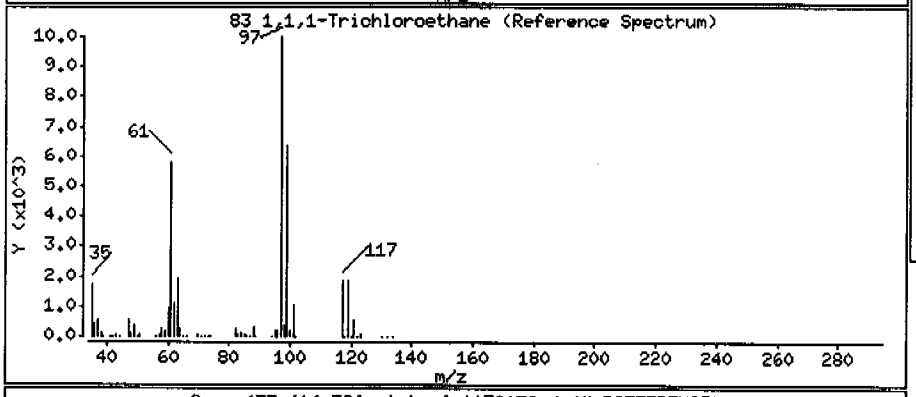
Concentration: 2.278 PPBV

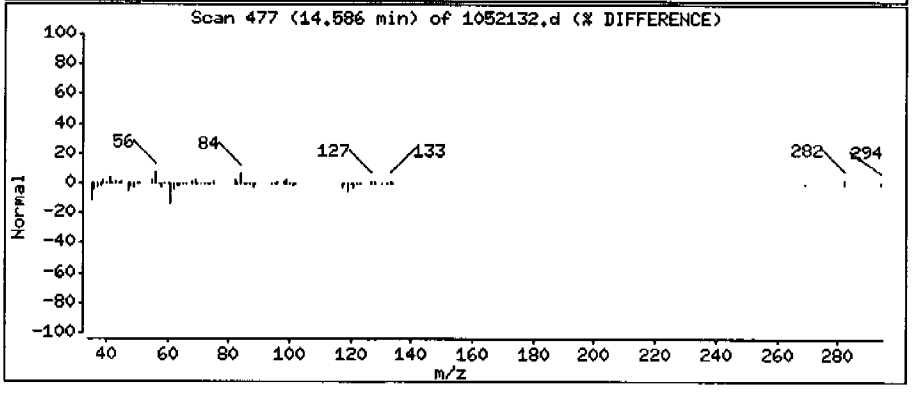












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5613

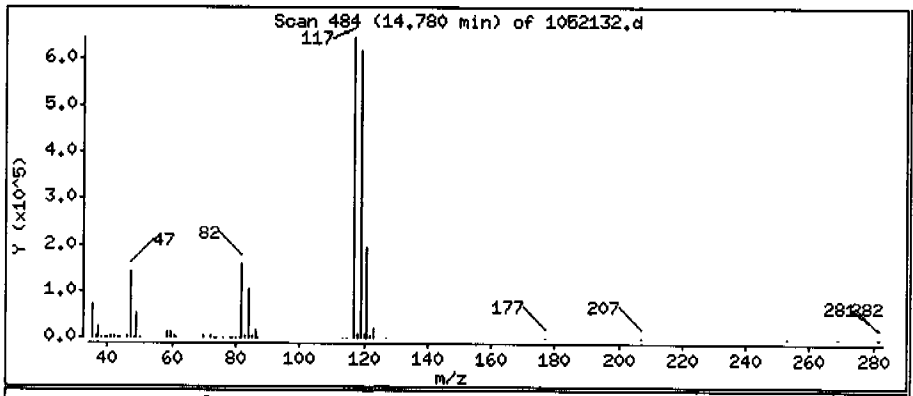
Operator: lo

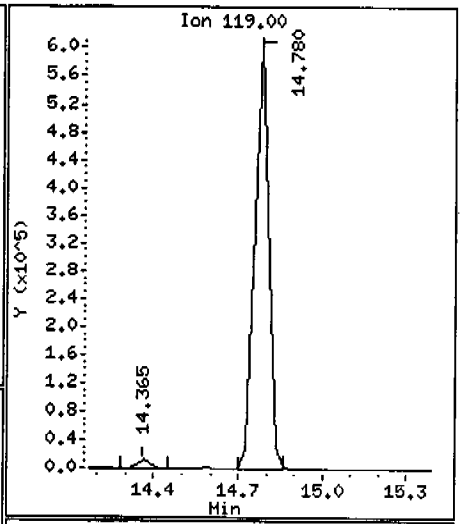
Column phase: RTx-624

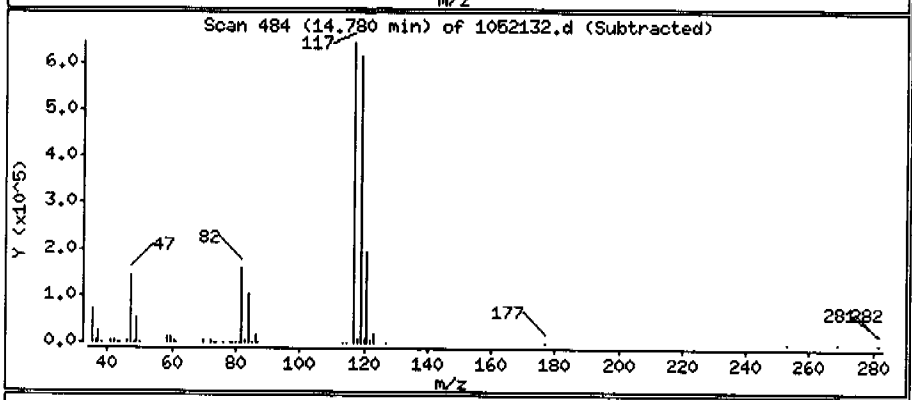
Column diameter: 0.53

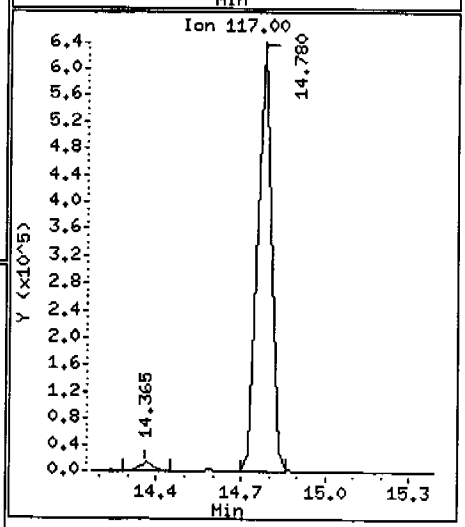
85 Carbon Tetrachloride

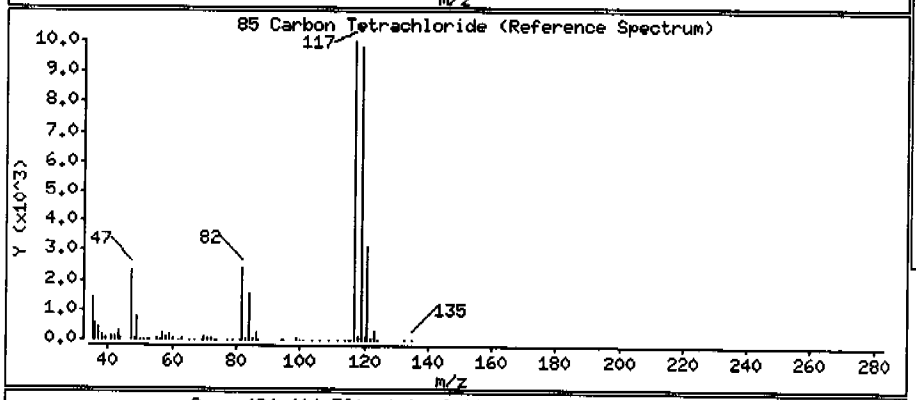
Concentration: 87.273 PPBV

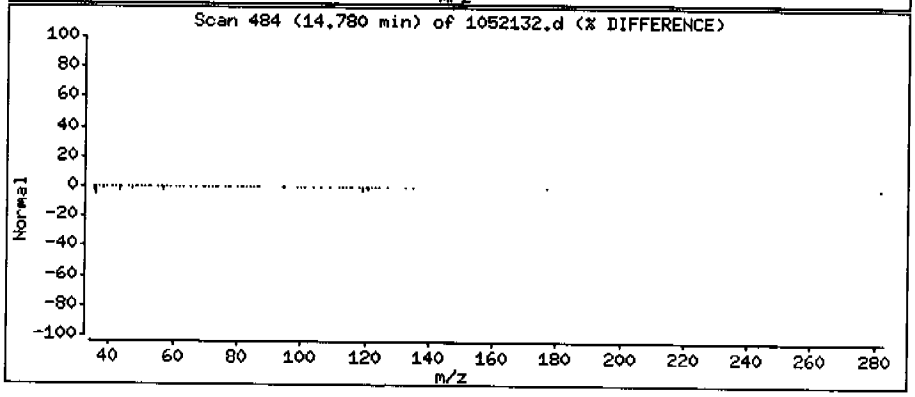












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5613

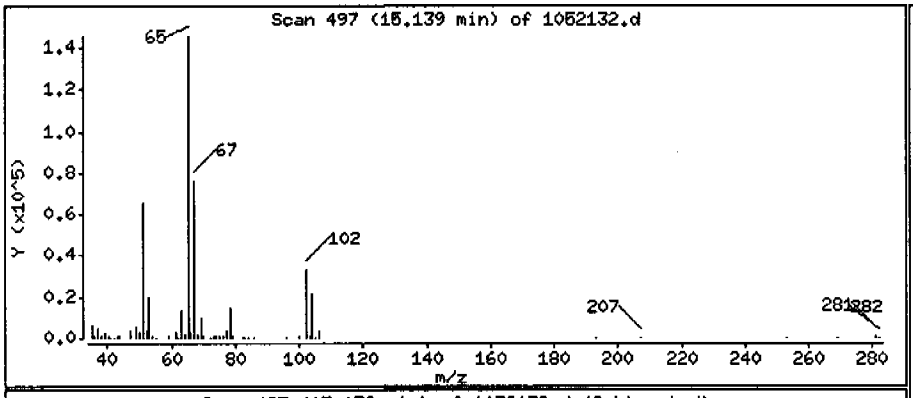
Operator: lo

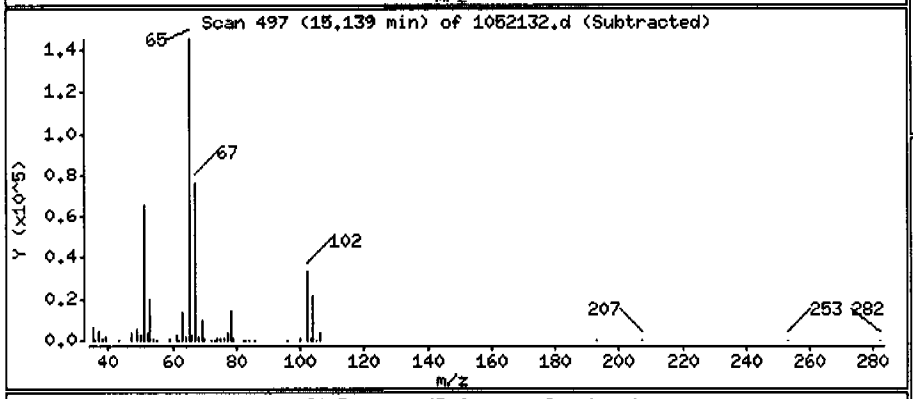
Column phase: RTx-624

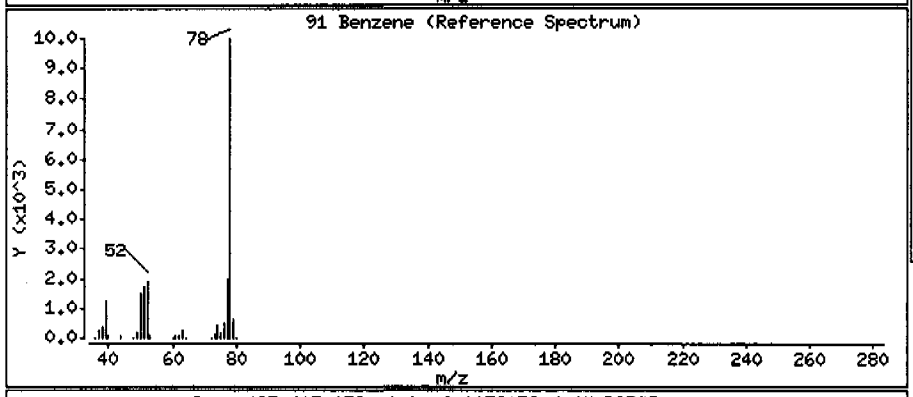
Column diameter: 0.53

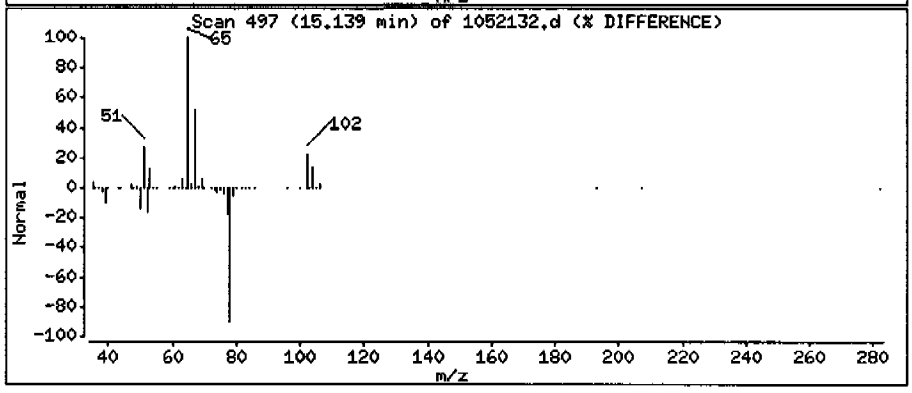
91 Benzene

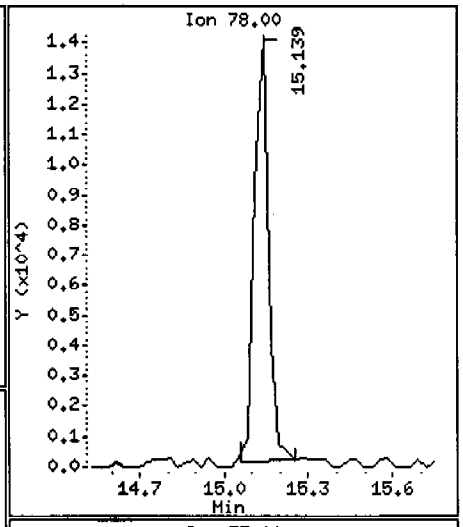
Concentration: 1.057 PPBV

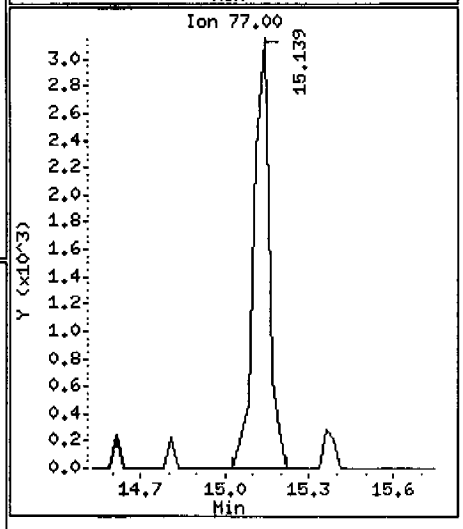












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5613

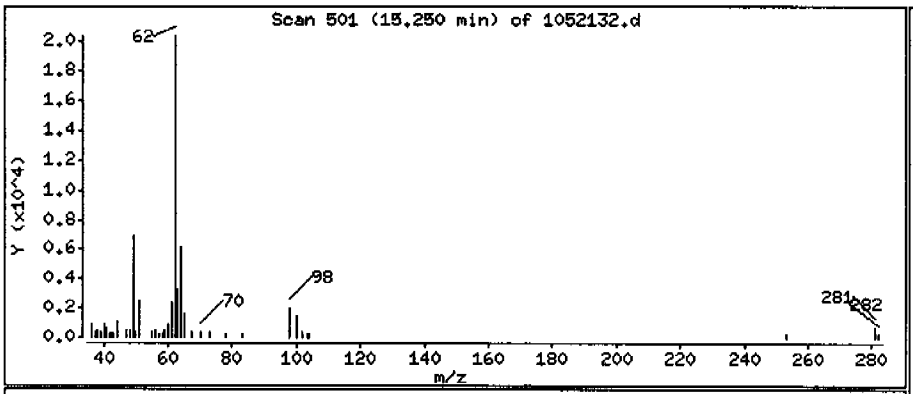
Operator: lo

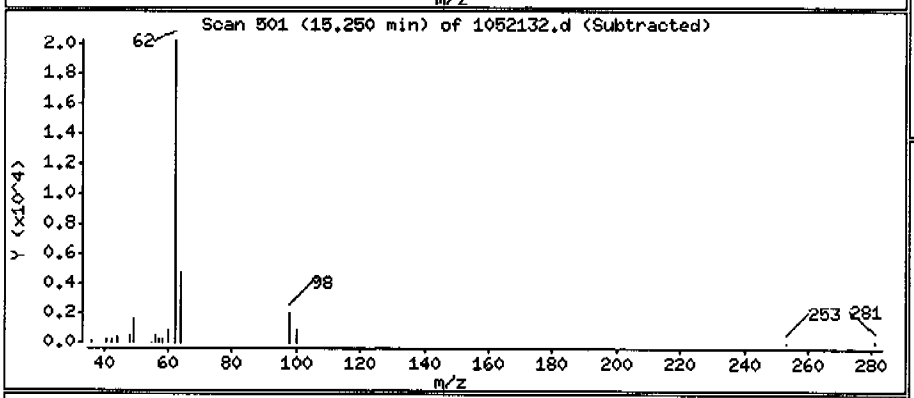
Column phase: RTx-624

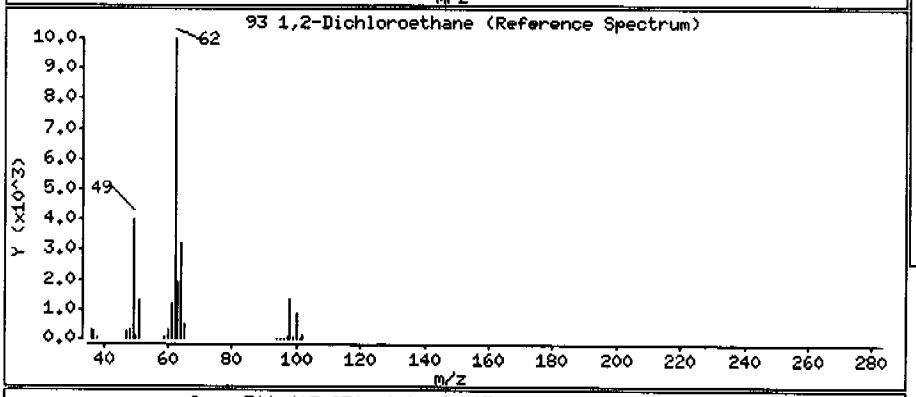
Column diameter: 0.53

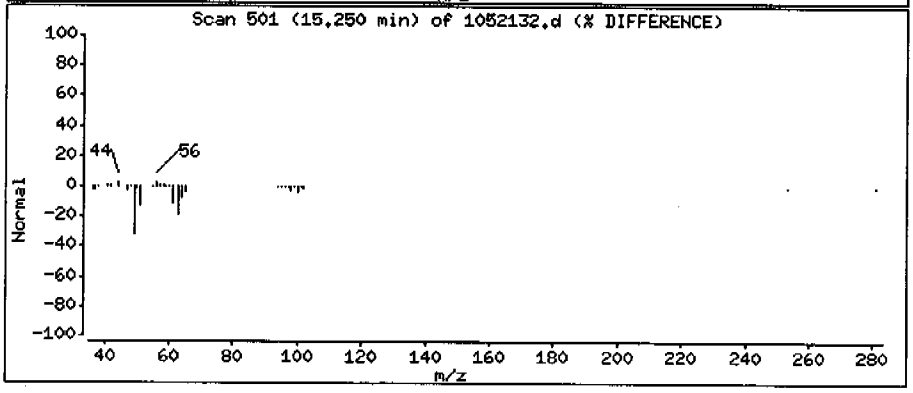
93 1,2-Dichloroethane

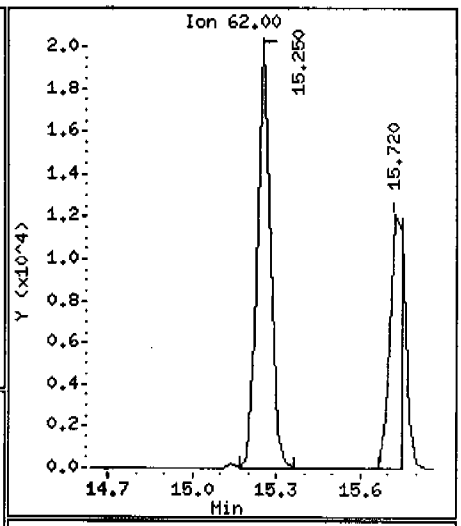
Concentration: 3,524 PPBV

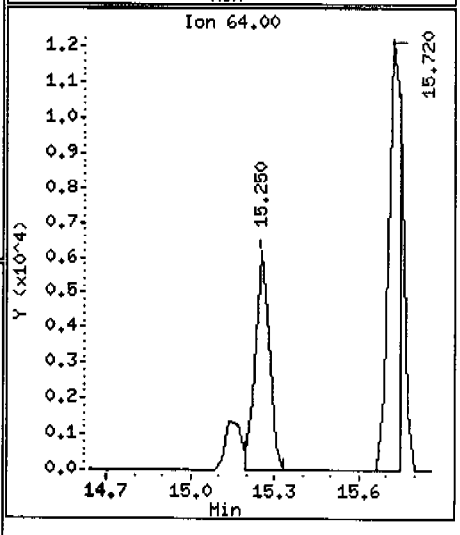












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

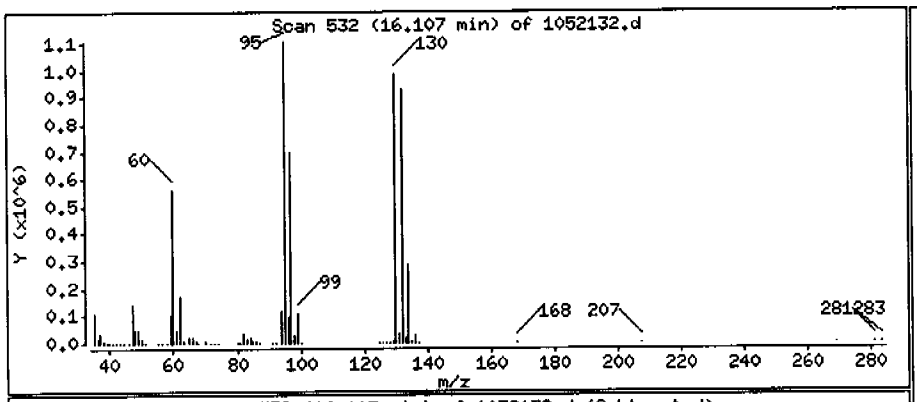
Operator: lo

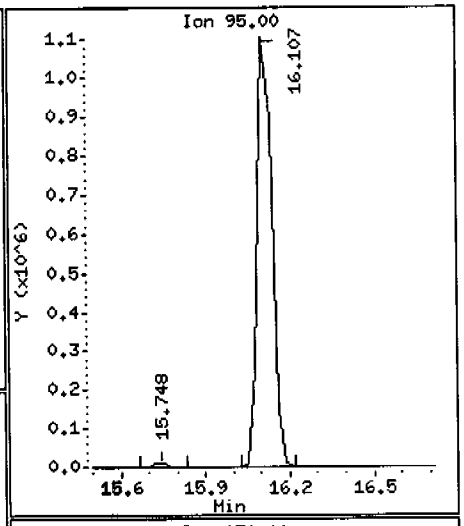
Column phase: RTx-624

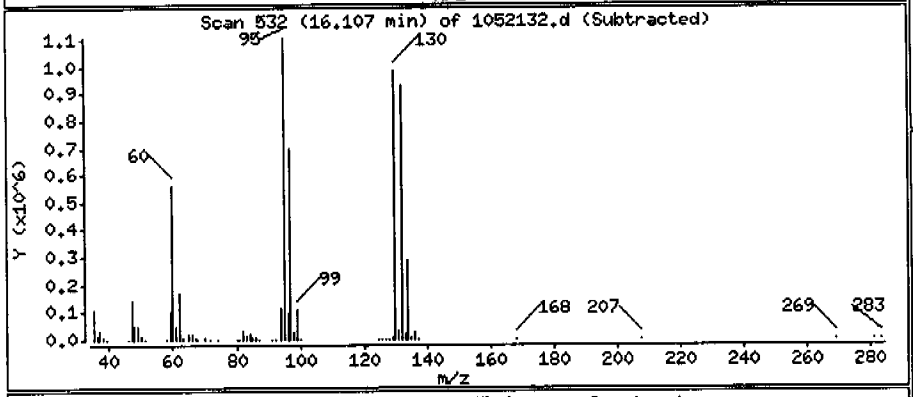
Column diameter: 0.53

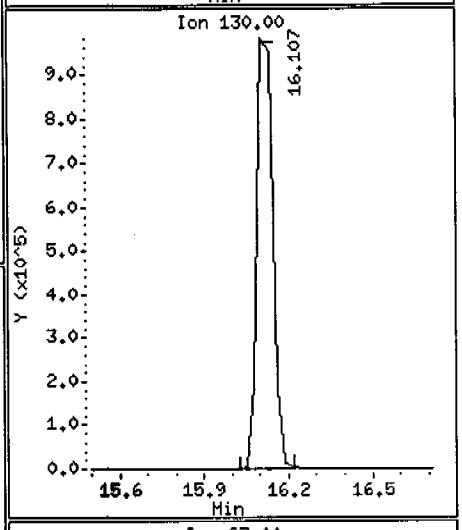
97 Trichloroethene

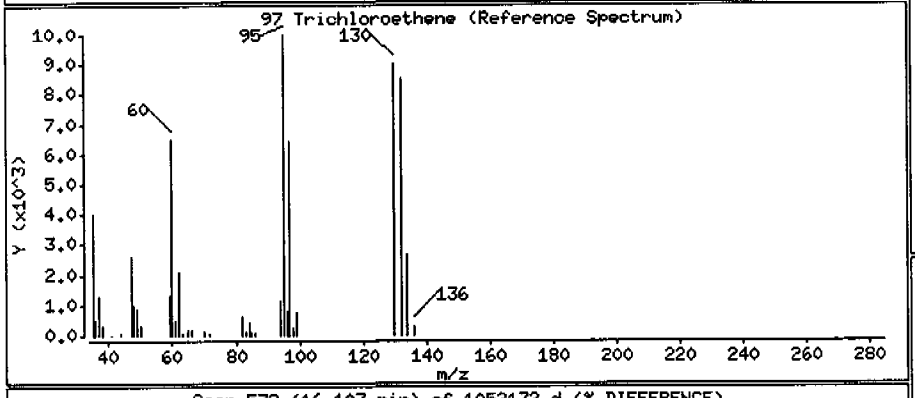
Concentration: 216.80 PPBV

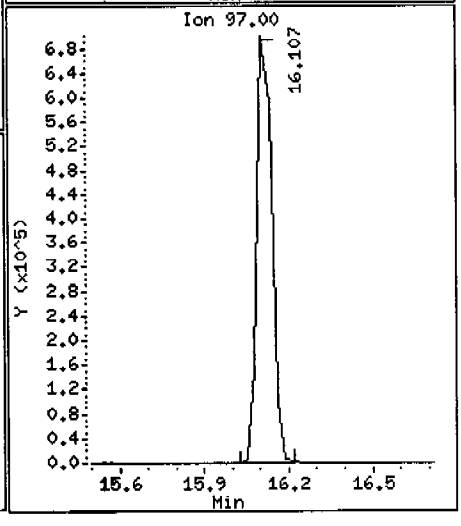


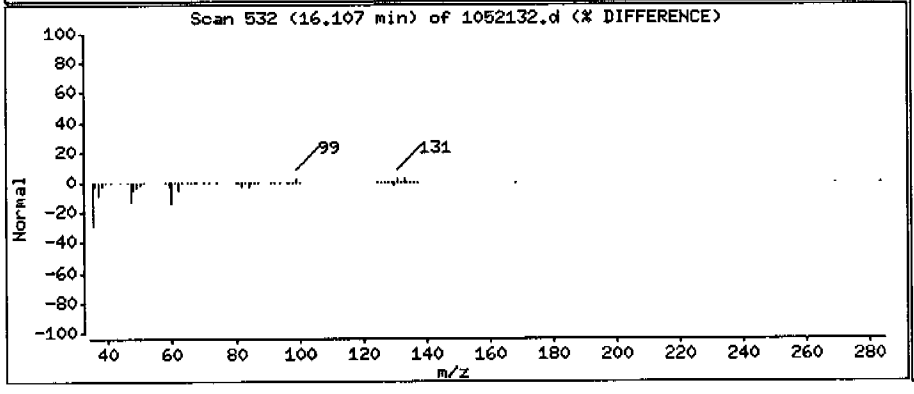












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

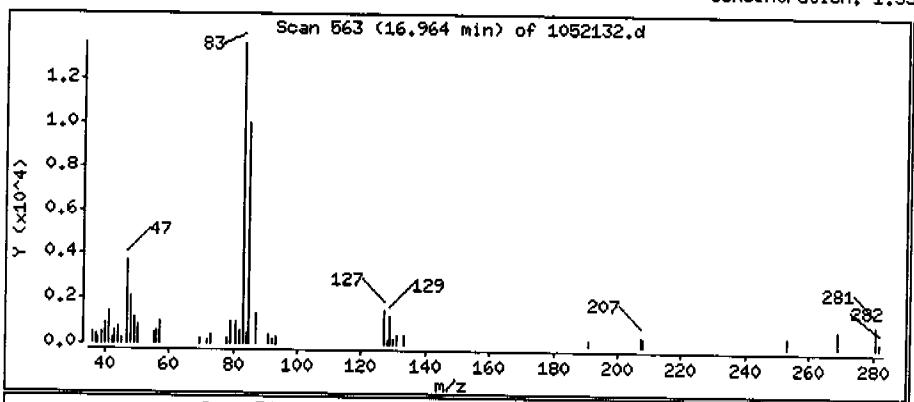
Operator: lo

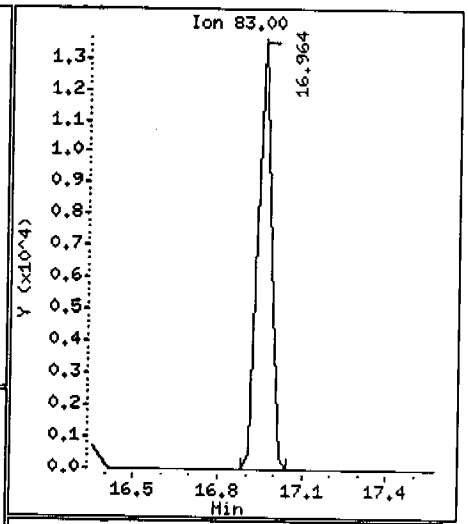
Column phase: RTx-624

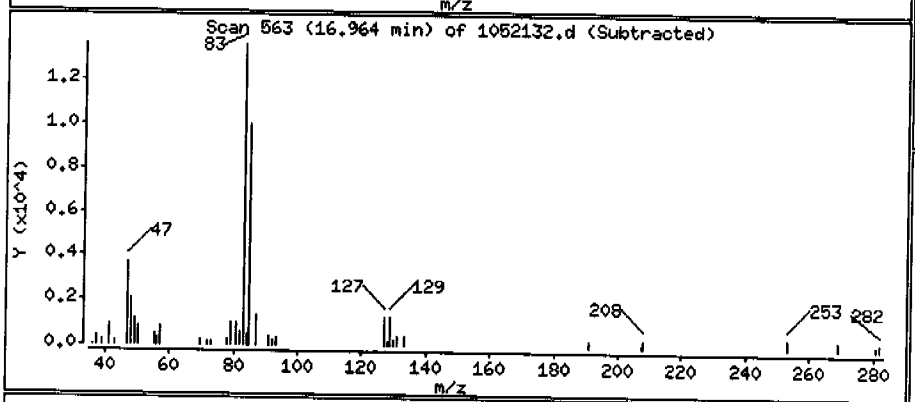
Column diameter: 0.53

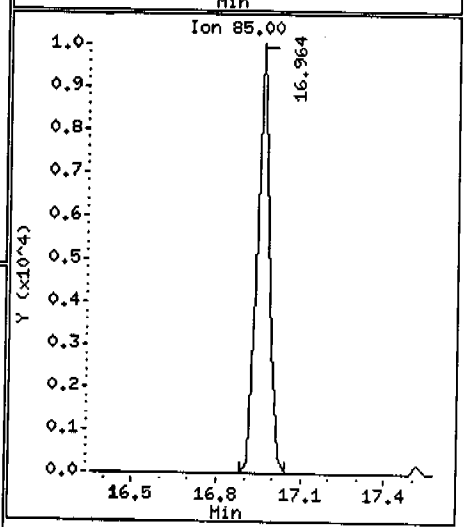
106 Bromodichloromethane

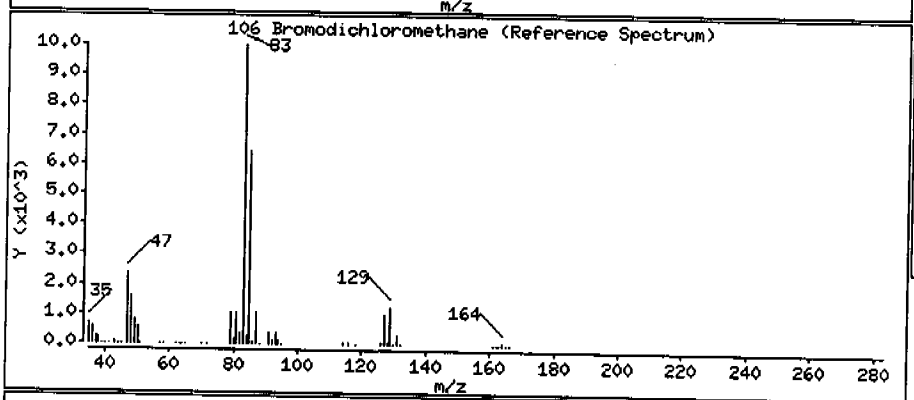
Concentration: 1.553 PPBV

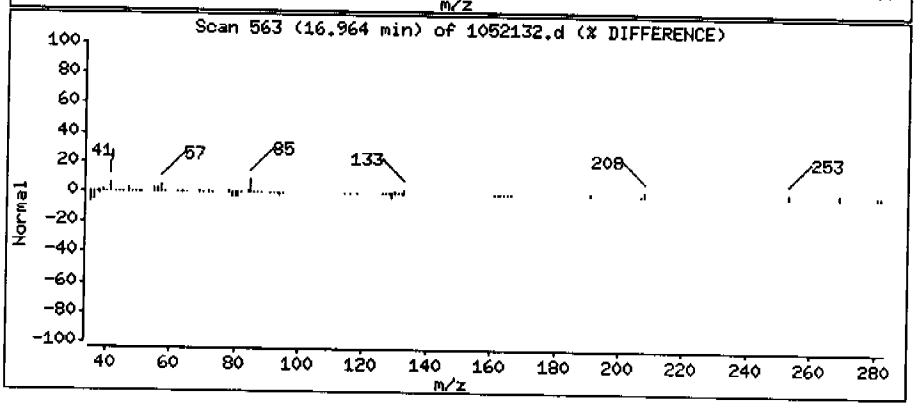












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

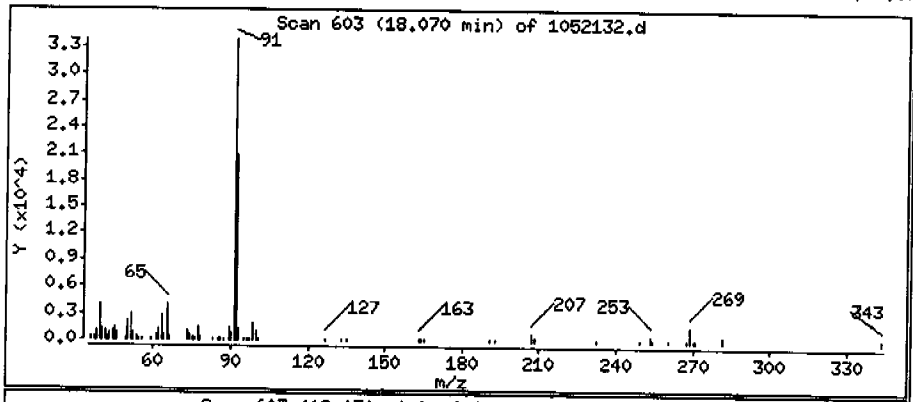
Operator: lo

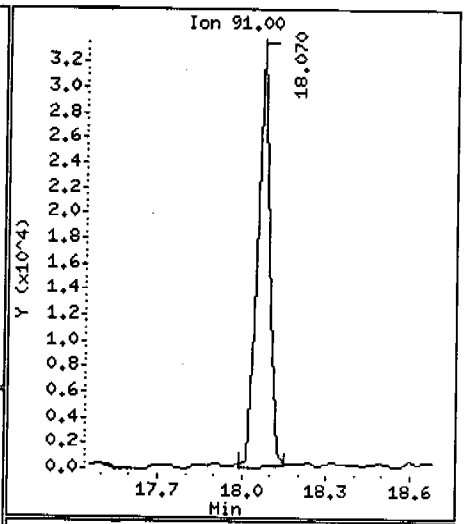
Column phase: RTx-624

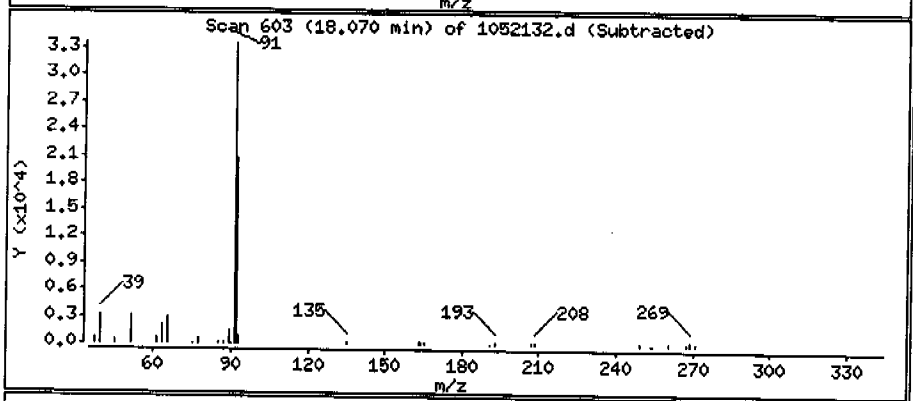
Column diameter: 0.53

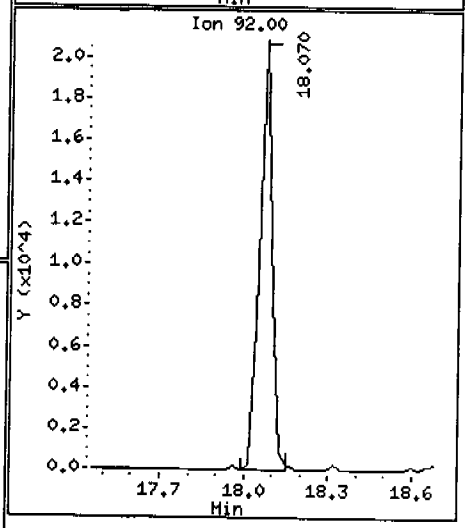
114 Toluene

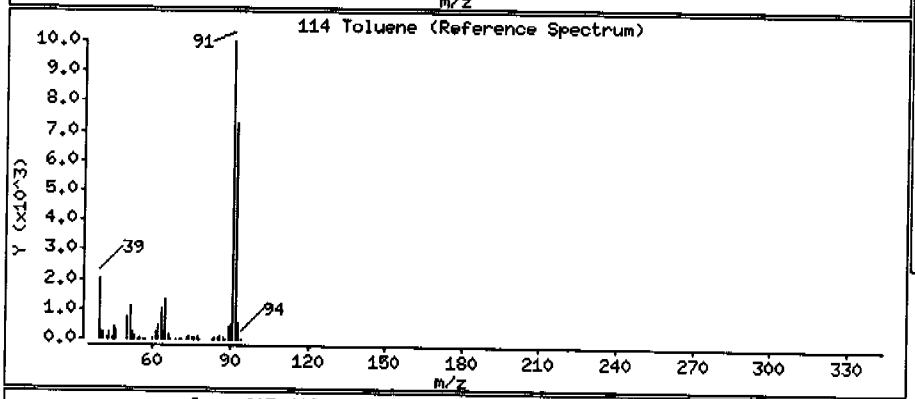
Concentration: 1.574 PPBV

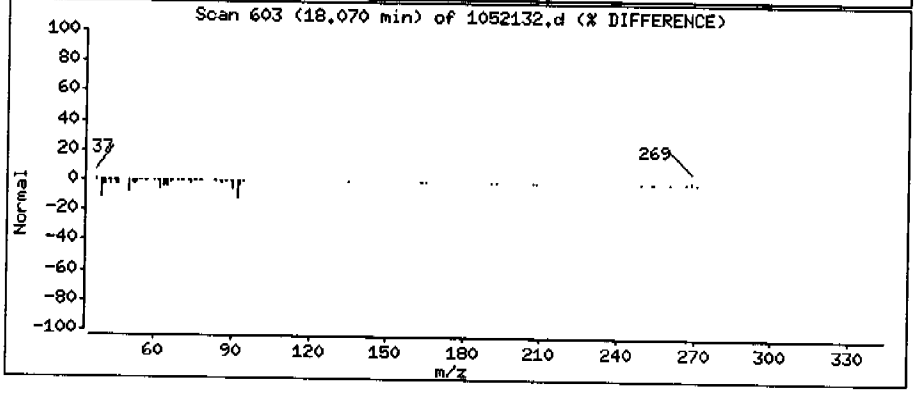












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

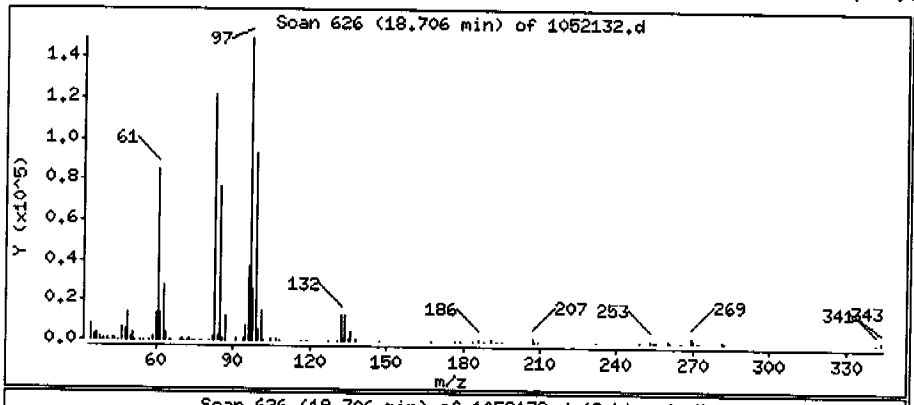
Operator: lo

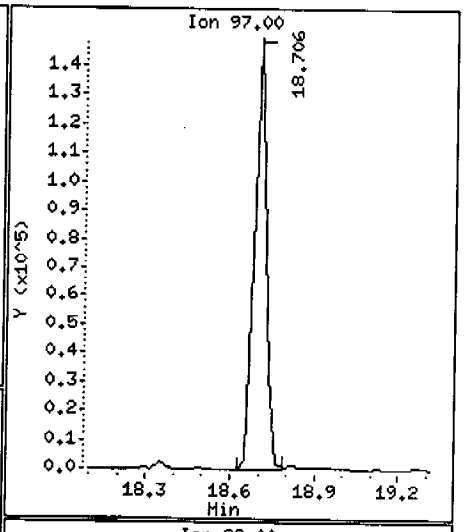
Column phase: RTx-624

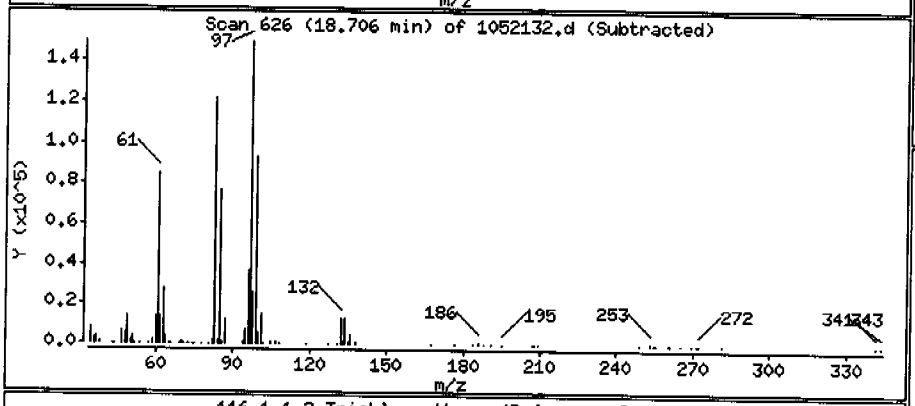
Column diameter: 0.53

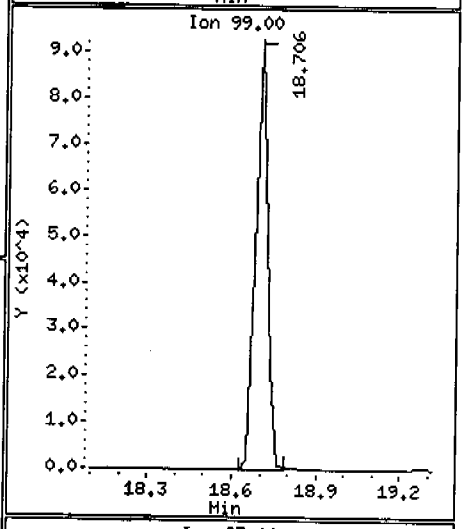
116 1,1,2-Trichloroethane

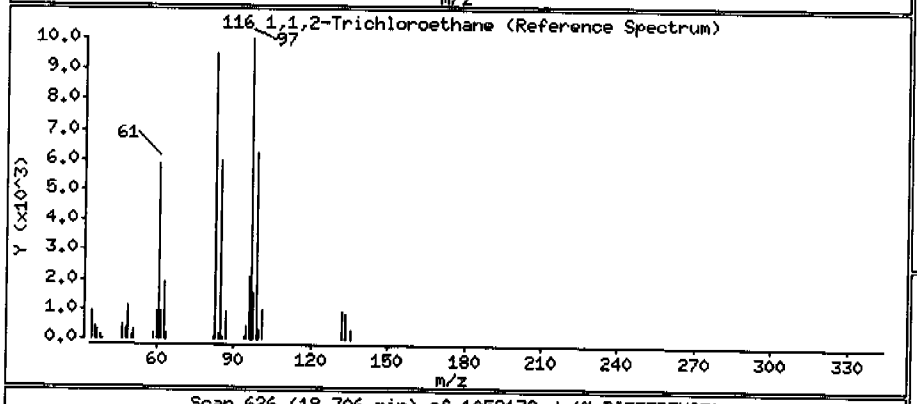
Concentration: 20.473 PPBV

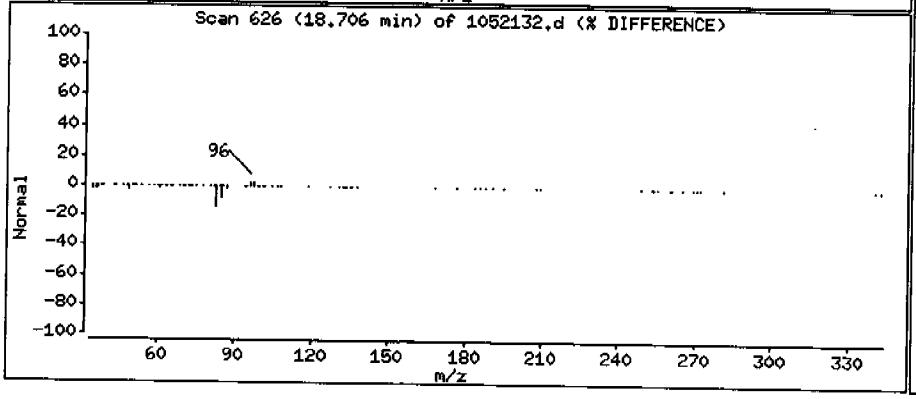


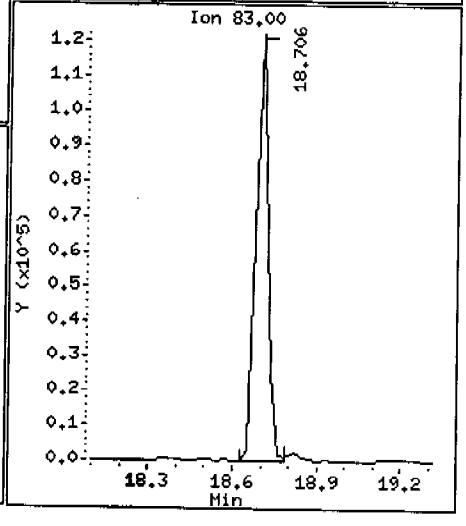












Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

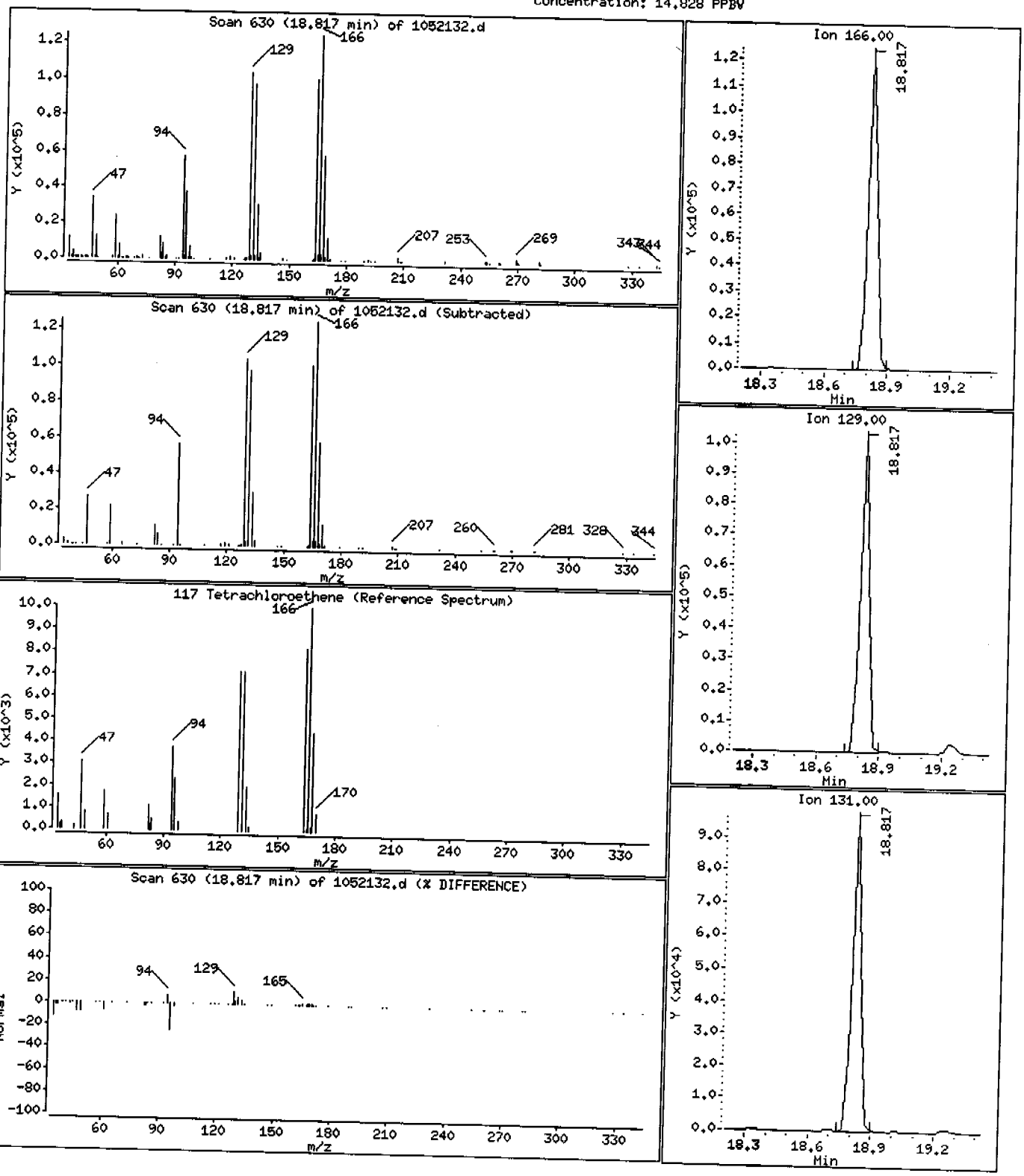
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

117 Tetrachloroethene

Concentration: 14.828 PPBV



Data File: /chem/msd1.i/1-21may.b/1052132.d

Date : 22-MAY-2008 07:20

Client ID:

Sample Info: 100mL #5613

Instrument: msd1.i

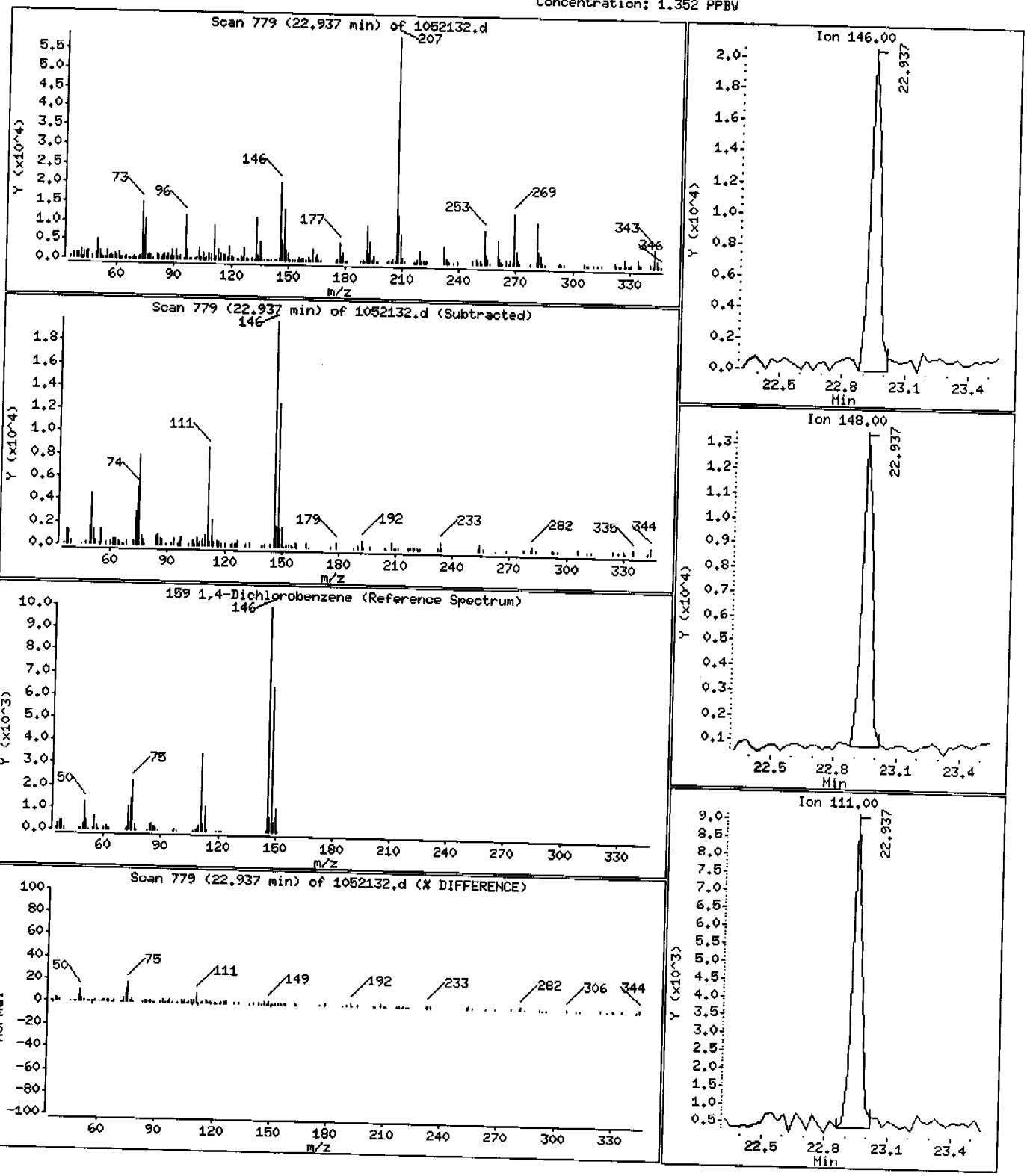
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

159 1,4-Dichlorobenzene

Concentration: 1.352 PPBV



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12242

Lab ID#: 0805274-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethanol	3.2	6.1	6.0	12
Acetone	3.2	5.8	7.5	14
Carbon Disulfide	0.79	2.0	2.5	6.3
Methylene Chloride	0.79	2.0	2.7	6.8
2-Butanone (Methyl Ethyl Ketone)	0.79	1.5	2.3	4.4
Tetrahydrofuran	0.79	0.93	2.3	2.7
Chloroform	0.79	100	3.8	490
1,1,1-Trichloroethane	0.79	3.8	4.3	21
Carbon Tetrachloride	0.79	9.7	5.0	61
Trichloroethene	0.79	55	4.2	300
Tetrachloroethene	0.79	94	5.4	640
n-Butanol	3.2	17	9.6	52

0146

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12242

Lab ID#: 0805274-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052207[illegible]
Dil. Factor: 1.58
Date of Collection: 5/9/08
Date of Analysis: 5/22/08 12:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.79	Not Detected	3.9	Not Detected
Freon 114	0.79	Not Detected	5.5	Not Detected
Chloromethane	3.2	Not Detected	6.5	Not Detected
Vinyl Chloride	0.79	Not Detected	2.0	Not Detected
1,3-Butadiene	0.79	Not Detected	1.7	Not Detected
Bromomethane	0.79	Not Detected	3.1	Not Detected
Chloroethane	0.79	Not Detected	2.1	Not Detected
Freon 11	0.79	Not Detected	4.4	Not Detected
Ethanol	3.2	6.1	6.0	12
Freon 113	0.79	Not Detected	6.0	Not Detected
1,1-Dichloroethene	0.79	Not Detected	3.1	Not Detected
Acetone	3.2	5.8	7.5	14
2-Propanol	3.2	Not Detected	7.8	Not Detected
Carbon Disulfide	0.79	2.0	2.5	6.3
Methylene Chloride	0.79	2.0	2.7	6.8
Methyl tert-butyl ether	0.79	Not Detected	2.8	Not Detected
trans-1,2-Dichloroethene	0.79	Not Detected	3.1	Not Detected
Hexane	0.79	Not Detected	2.8	Not Detected
1,1-Dichloroethane	0.79	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.79	1.5	2.3	4.4
cis-1,2-Dichloroethene	0.79	Not Detected	3.1	Not Detected
Tetrahydrofuran	0.79	0.93	2.3	2.7
Chloroform	0.79	100	3.8	490
1,1,1-Trichloroethane	0.79	3.8	4.3	21
Cyclohexane	0.79	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.79	9.7	5.0	61
Benzene	0.79	Not Detected	2.5	Not Detected
1,2-Dichloroethane	0.79	Not Detected	3.2	Not Detected
Heptane	0.79	Not Detected	3.2	Not Detected
Trichloroethene	0.79	55	4.2	300
1,2-Dichloropropane	0.79	Not Detected	3.6	Not Detected
1,4-Dioxane	3.2	Not Detected	11	Not Detected
Bromodichloromethane	0.79	Not Detected	5.3	Not Detected
cis-1,3-Dichloropropene	0.79	Not Detected	3.6	Not Detected
4-Methyl-2-pentanone	0.79	Not Detected	3.2	Not Detected
Toluene	0.79	Not Detected	3.0	Not Detected
trans-1,3-Dichloropropene	0.79	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.79	Not Detected	4.3	Not Detected
Tetrachloroethene	0.79	94	5.4	640

0147

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12242

Lab ID#: 0805274-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052207 | Date Collected: 5/9/08

Dil. Factor: 1.58 | Date Analysis: 5/22/08 12:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.2	Not Detected	13	Not Detected
Dibromochloromethane	0.79	Not Detected	6.7	Not Detected
1,2-Dibromoethane (EDB)	0.79	Not Detected	6.1	Not Detected
Chlorobenzene	0.79	Not Detected	3.6	Not Detected
Ethyl Benzene	0.79	Not Detected	3.4	Not Detected
m,p-Xylene	0.79	Not Detected	3.4	Not Detected
o-Xylene	0.79	Not Detected	3.4	Not Detected
Styrene	0.79	Not Detected	3.4	Not Detected
Bromoform	0.79	Not Detected	8.2	Not Detected
1,1,2,2-Tetrachloroethane	0.79	Not Detected	5.4	Not Detected
4-Ethyltoluene	0.79	Not Detected	3.9	Not Detected
1,3,5-Trimethylbenzene	0.79	Not Detected	3.9	Not Detected
1,2,4-Trimethylbenzene	0.79	Not Detected	3.9	Not Detected
1,3-Dichlorobenzene	0.79	Not Detected	4.8	Not Detected
1,4-Dichlorobenzene	0.79	Not Detected	4.8	Not Detected
alpha-Chlorotoluene	0.79	Not Detected	4.1	Not Detected
1,2-Dichlorobenzene	0.79	Not Detected	4.7	Not Detected
1,2,4-Trichlorobenzene	3.2	Not Detected U J	23	Not Detected U J
Hexachlorobutadiene	3.2	Not Detected	34	Not Detected
Chlorodifluoromethane	3.2	Not Detected	11	Not Detected
Methanol	79	Not Detected	100	Not Detected
n-Butanol	3.2	17	9.6	52
Propylene	3.2	Not Detected	5.4	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	96	70-130

0148

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052207.d
Lab Smp Id: 0805274-06A
Inj Date : 22-MAY-2008 12:36
Operator : lo
Inst ID: msd1.i
Smp Info : 100mL #34370
Misc Info : 4.5"Hg-5psi
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.58000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.282	14.255 (1.000)	130	307927	25.0000		80.00- 120.00	100.00
	14.282	14.255 (1.000)	128	236922			27.30- 127.30	76.94
	14.255	14.255 (1.000)	49	554475			131.96- 231.96	180.07
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1521520	25.0000		80.00- 120.00	100.00
	15.748	15.748 (1.000)	88	238648			0.00- 65.38	15.68
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.033	20.033 (1.000)	117	1715884	25.0000		80.00- 120.00	100.00
	20.006	20.006 (1.000)	82	998184			8.42- 108.42	58.17
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.139	15.140 (1.060)	65	461512	22.4588	22.459	80.00- 120.00	100.00
	15.139	15.140 (1.060)	67	243050			6.04- 106.04	52.66
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.960 (1.140)	98	1687899	24.4833	24.483	80.00- 120.00	100.00
	17.960	17.960 (1.140)	70	175925			0.00- 60.35	10.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1108882			15.45- 115.45	65.70
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.075)	174	886420	24.1426	24.142	80.00- 120.00	100.00
21.526	21.527 (1.075)	95	1420551			110.38- 210.38	160.26
21.526	21.527 (1.075)	176	856762			44.94- 144.94	96.65
38 Ethanol					CAS #: 64-17-5		
10.190	10.135 (0.713)	45	26930	3.89173	6.149	80.00- 120.00	100.00
10.190	10.135 (0.713)	43	6653			0.00- 75.81	24.71
10.190	10.135 (0.713)	46	9667			0.00- 92.85	35.90
45 Acetone					CAS #: 67-64-1		
10.909	10.882 (0.764)	58	38797	3.64488	5.759	80.00- 120.00	100.00
10.909	10.882 (0.764)	43	119532			275.34- 375.34	308.10
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.826 (0.760)	76	66434	1.27265	2.011	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.766	11.739 (0.824)	49	34191	1.24544	1.968	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	22578			14.84- 114.84	66.04
11.766	11.739 (0.824)	51	11584			0.00- 79.96	33.88
75 2-Butanone					CAS #: 78-93-3		
13.950	13.923 (0.977)	72	10576	0.95338	1.506	80.00- 120.00	100.00
13.950	13.923 (0.977)	43	64777			436.22- 536.22	612.49
13.950	13.923 (0.977)	57	4300			0.00- 90.57	40.66
78 Tetrahydrofuran					CAS #: 109-99-9		
14.282	14.255 (1.000)	42	24992	0.58652	0.9267	80.00- 120.00	100.00
14.282	14.255 (1.000)	71	6721			0.00- 81.29	26.89
14.282	14.255 (1.000)	72	5841			0.00- 82.78	23.37
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2776674	63.7470	100.72	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1718181			12.44- 112.44	61.88
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.587 (1.021)	97	109741	2.40112	3.794	80.00- 120.00	100.00
14.586	14.587 (1.021)	99	71426			14.11- 114.11	65.09
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	259305	6.13409	9.692	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	273433			52.90- 152.90	105.45

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1112462	35.0402	55.363	80.00- 120.00	100.00
16.135	16.135 (1.025)	130	1066931			47.48- 147.48	95.91
16.107	16.107 (1.023)	97	717552			14.50- 114.50	64.50
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	2517884	59.8551	94.571	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	1997377			27.36- 127.36	79.33
18.817	18.817 (0.939)	131	1891346			25.62- 125.62	75.12
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	213395	10.9652	17.325	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	153331			20.92- 120.92	71.85
15.941	15.941 (1.012)	43	114317			4.89- 104.89	53.57

Data File: /chem/msd1.i/1-22may.b/1052207.d
Report Date: 27-May-2008 15:22

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052207.d
Lab Smp Id: 0805274-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 4.5"Hg-5psi

Calibration Date: 22-MAY-2008
Calibration Time: 09:16

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	307927	-0.05
95 1,4-Difluorobenze	1638375	983025	2293725	1521520	-7.13
123 Chlorobenzene-d5	1818182	1090909	2545455	1715884	-5.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-May-2008 15:22

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 1-22may
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0805274-06A
Level: LOW Operator: lo
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 4.5"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.459	89.84	70-130
$ 111 Toluene-d8	25.000	24.483	97.93	70-130
$ 136 Bromofluorobenzene	25.000	24.142	96.57	70-130

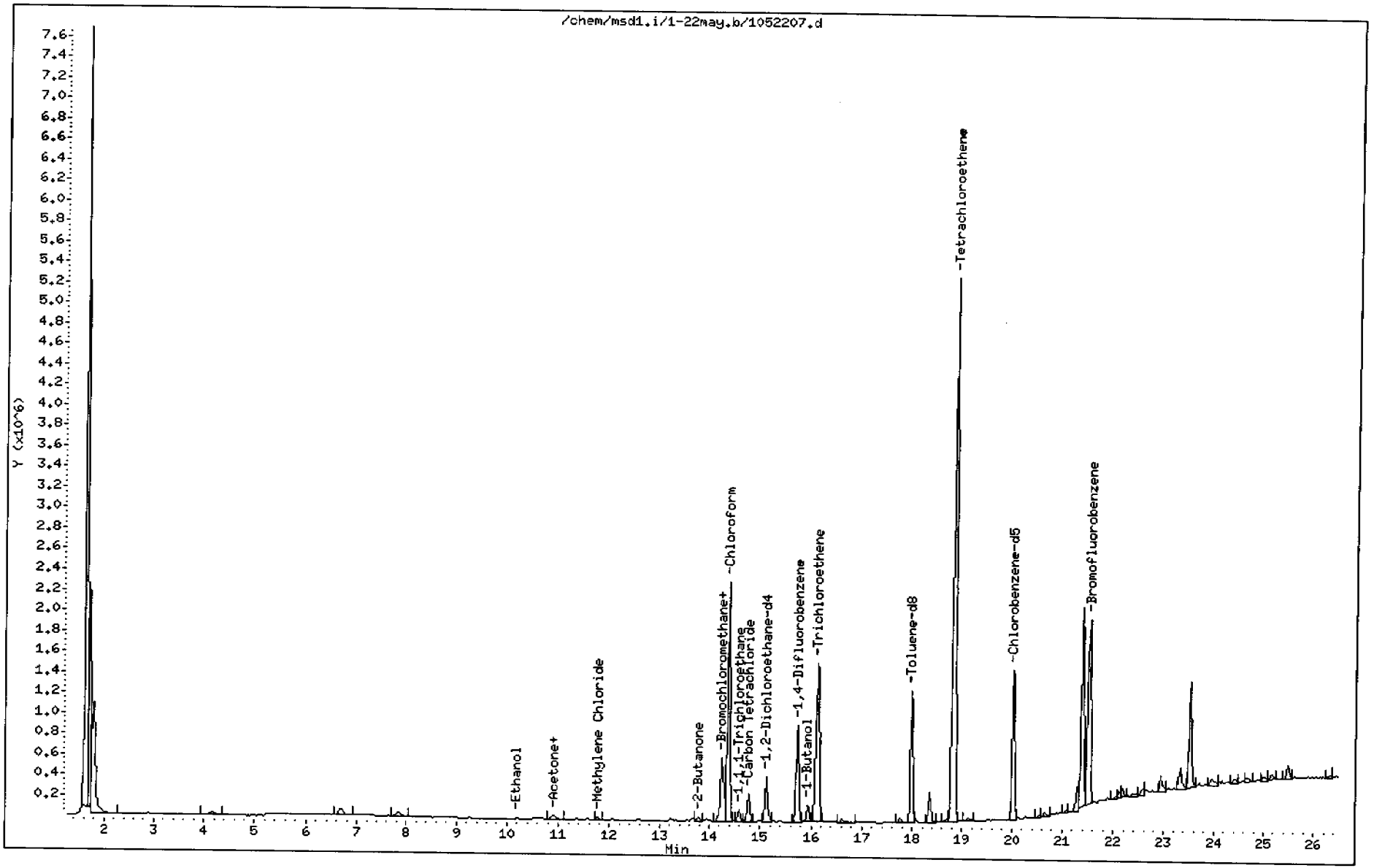
Data File: /chem/msd1.i/1-22may.b/1052207.d
Date : 22-MAY-2008 12:36
Client ID:
Sample Info: 100mL #34370

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0154



Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Sample Info: 100mL #34370

Instrument: msd1.i

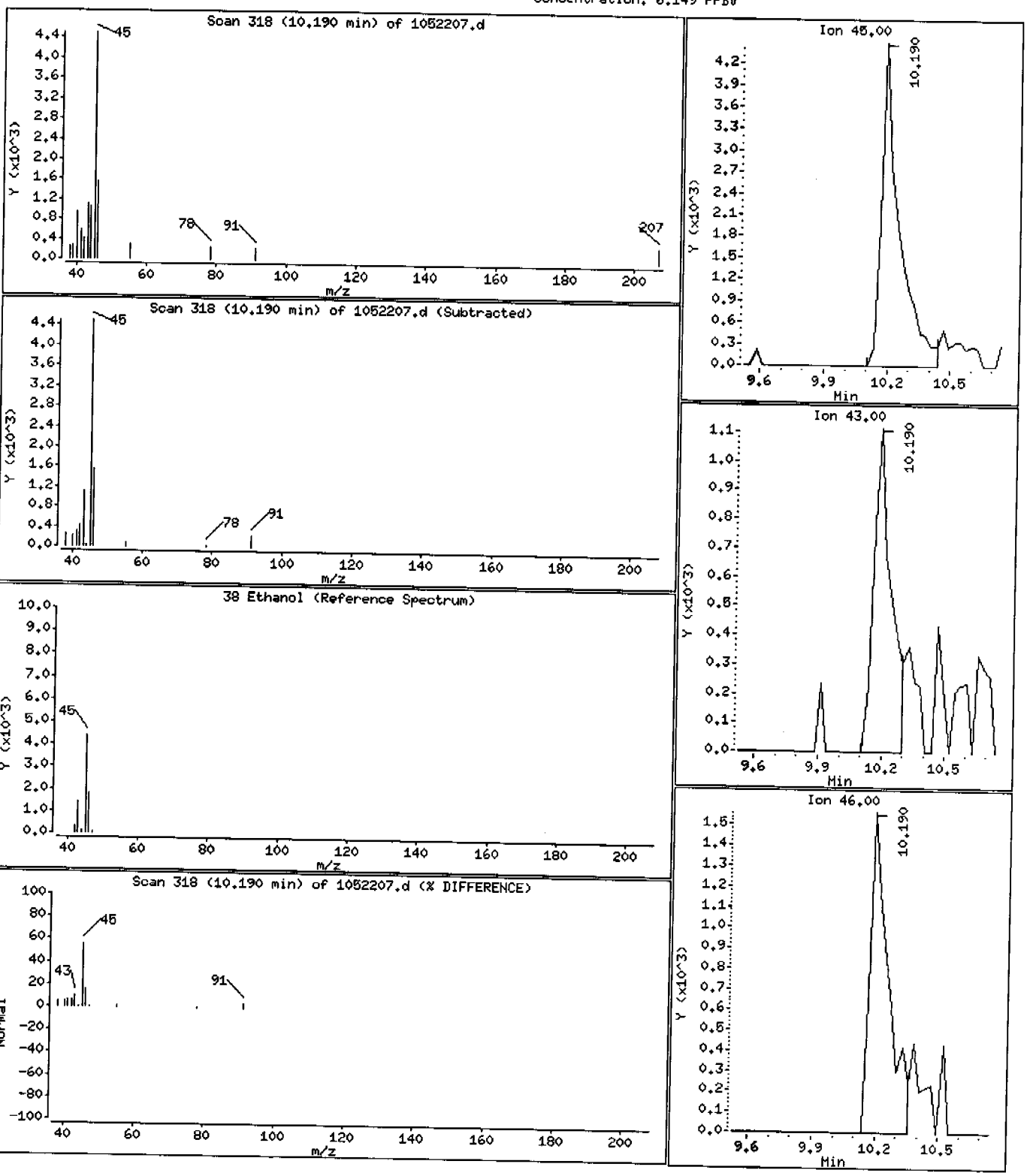
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

38 Ethanol

Concentration: 6.149 PPBV



Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Sample Info: 100mL #34370

Instrument: msd1.i

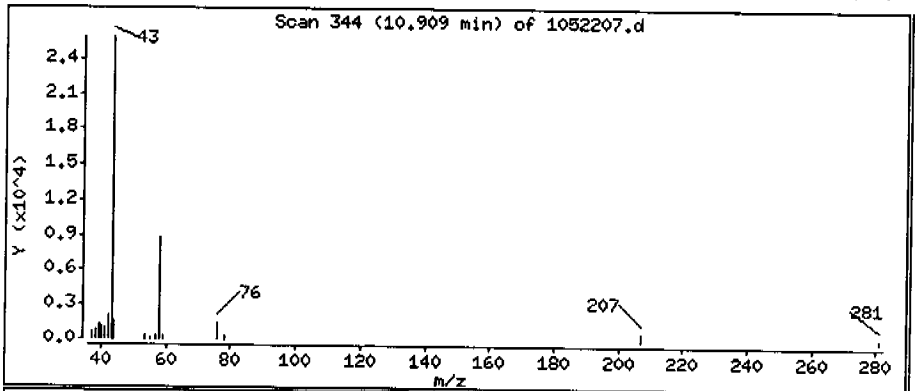
Operator: lo

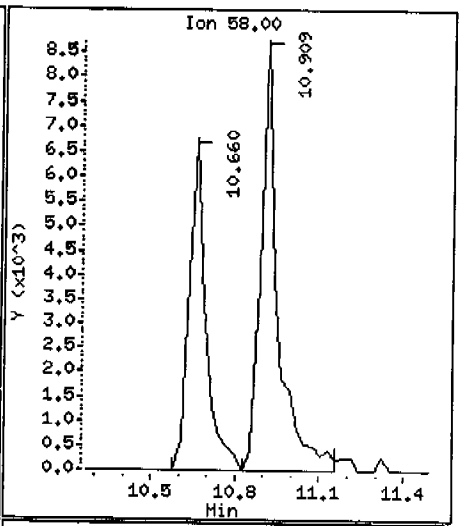
Column phase: RTx-624

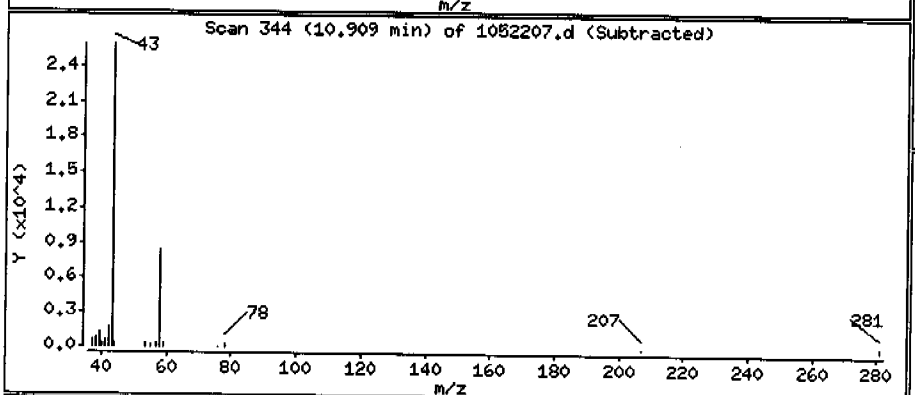
Column diameter: 0.53

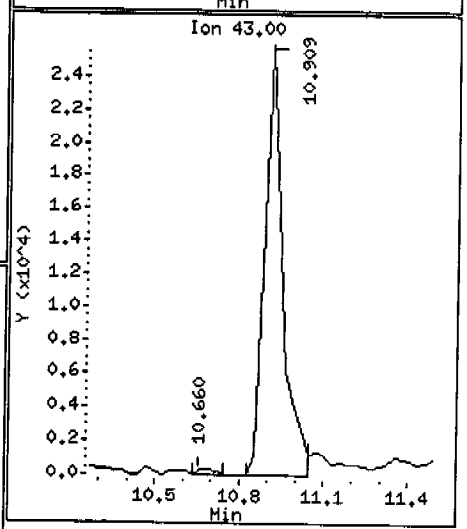
45 Acetone

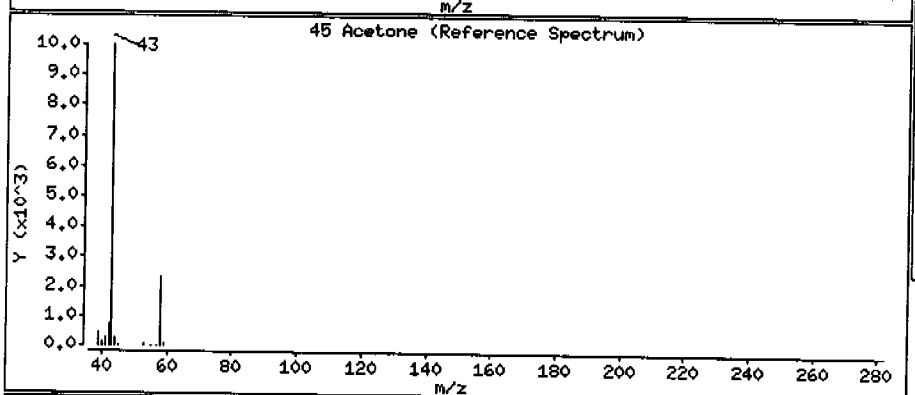
Concentration: 5.759 PPBV

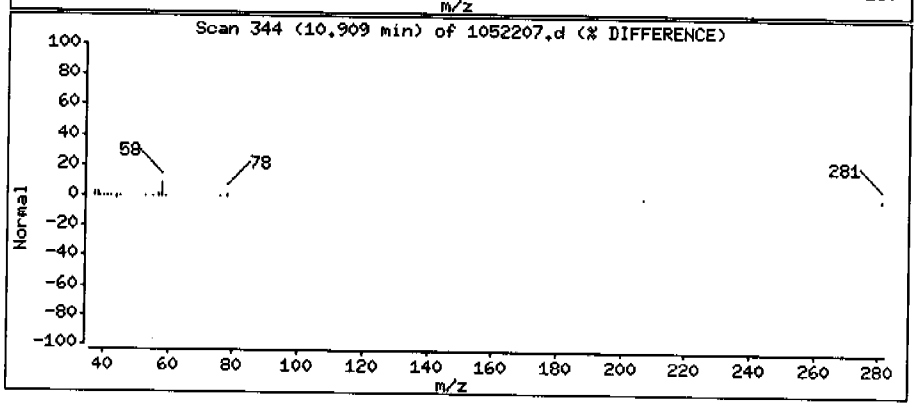












Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34370

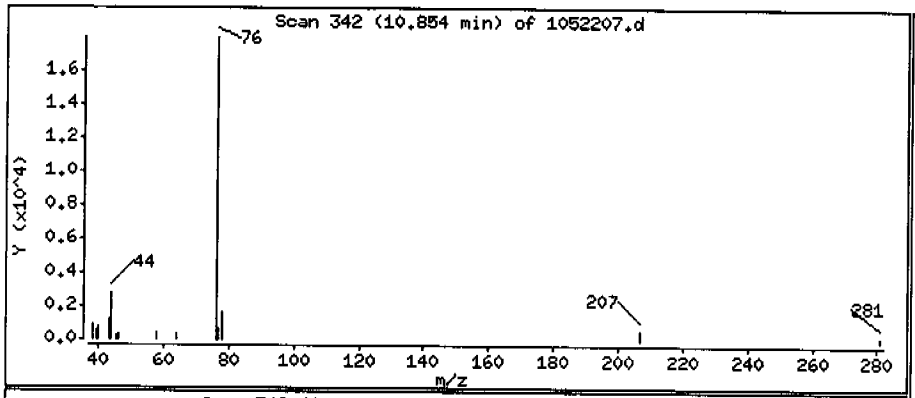
Operator: lo

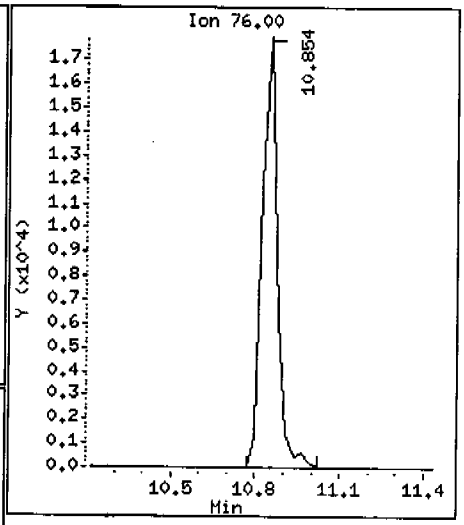
Column phase: RTx-624

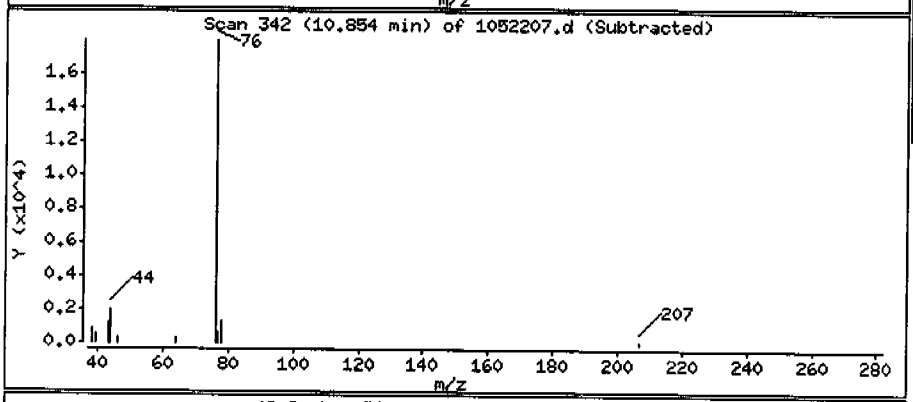
Column diameter: 0.53

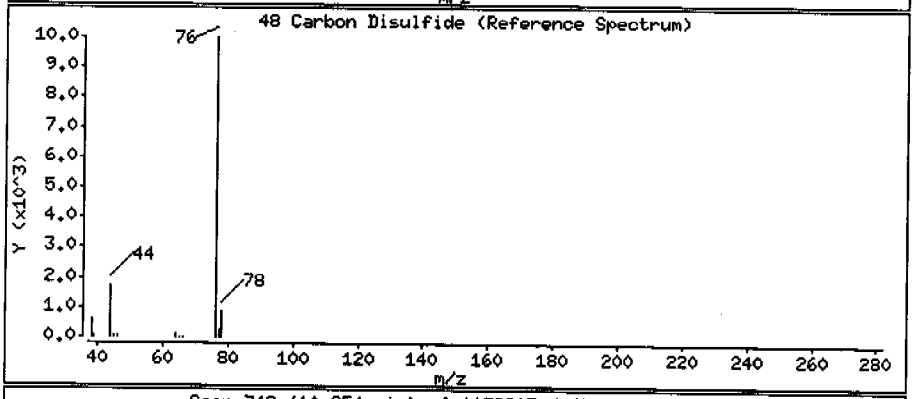
48 Carbon Disulfide

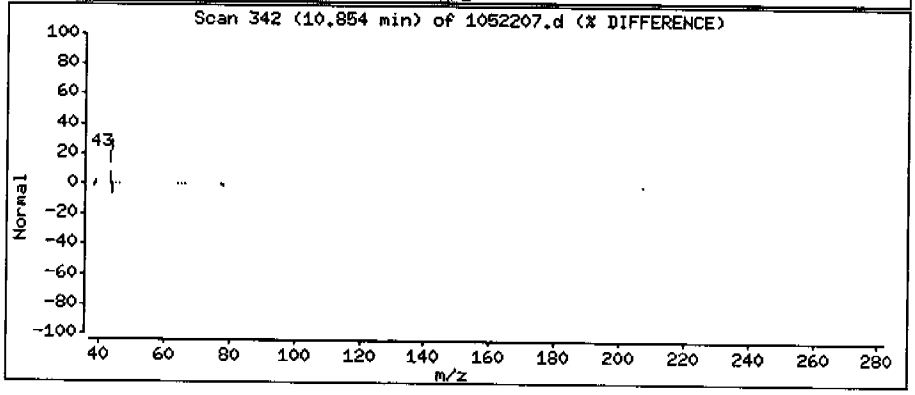
Concentration: 2.011 PPBV











Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34370

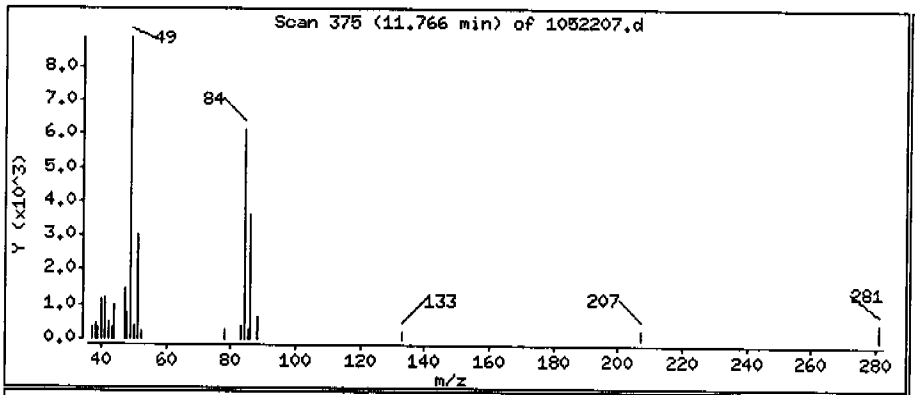
Operator: lo

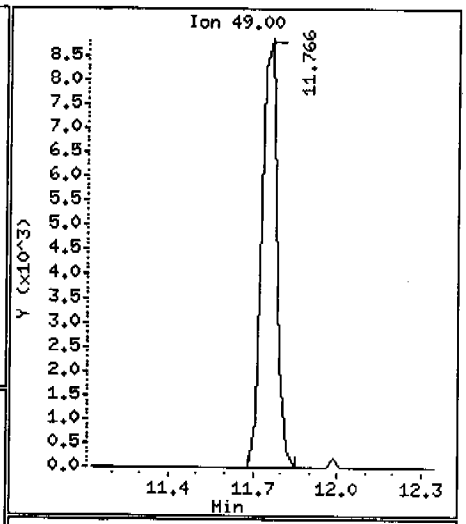
Column phase: RTx-624

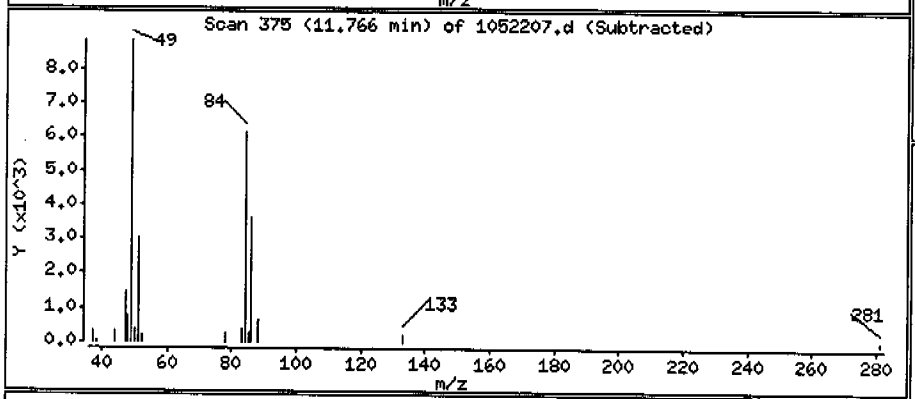
Column diameter: 0.53

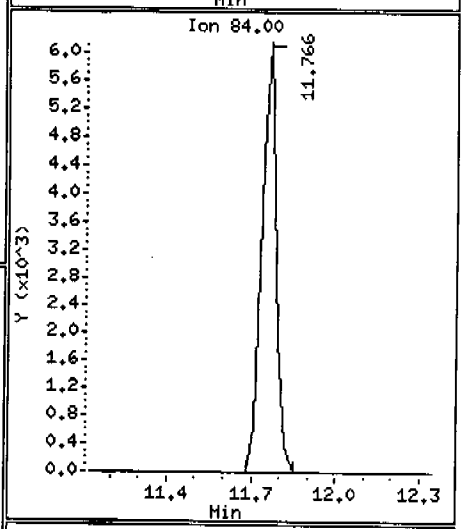
54 Methylene Chloride

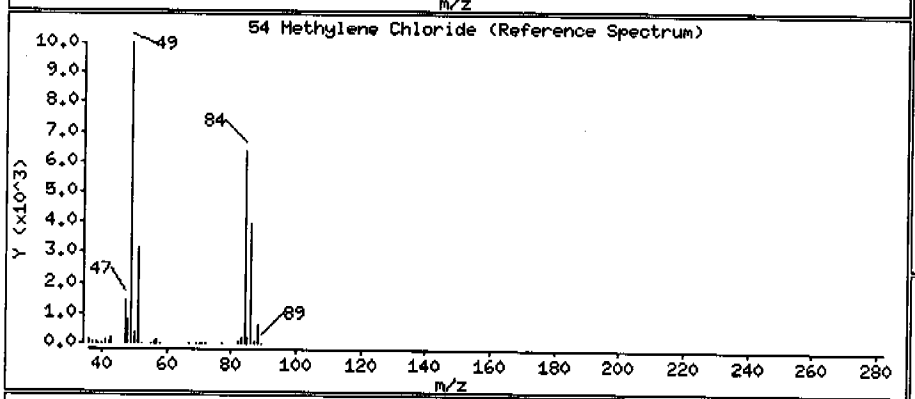
Concentration: 1.968 PPBV

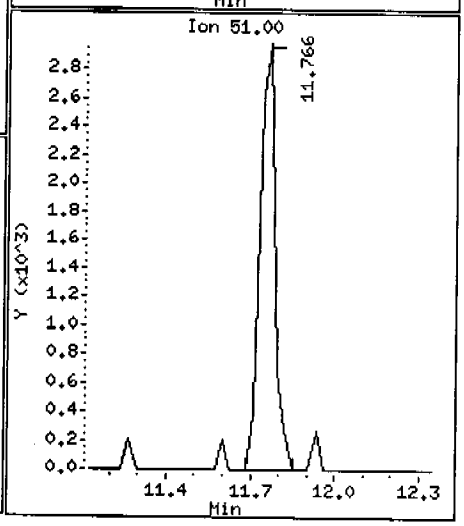


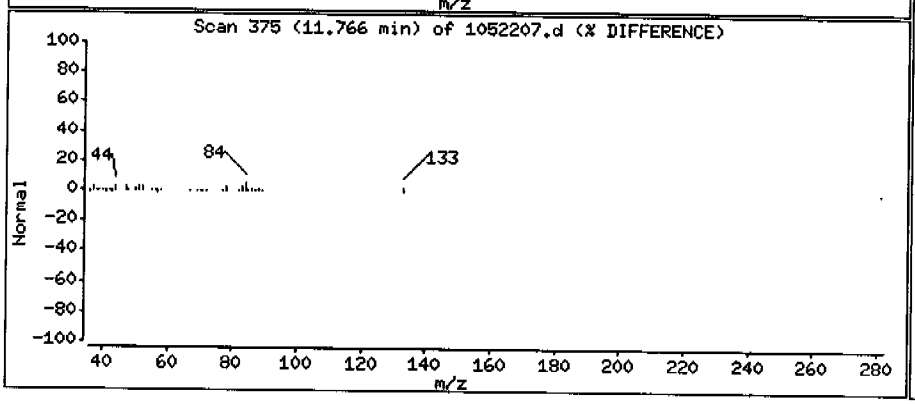












Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34370

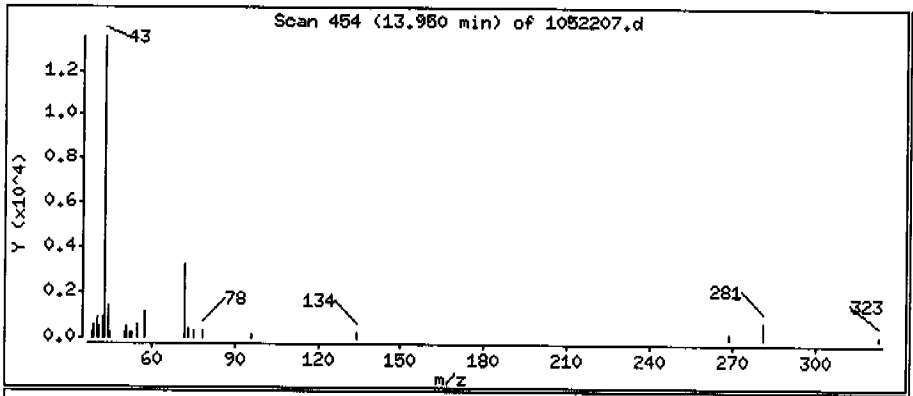
Operator: lo

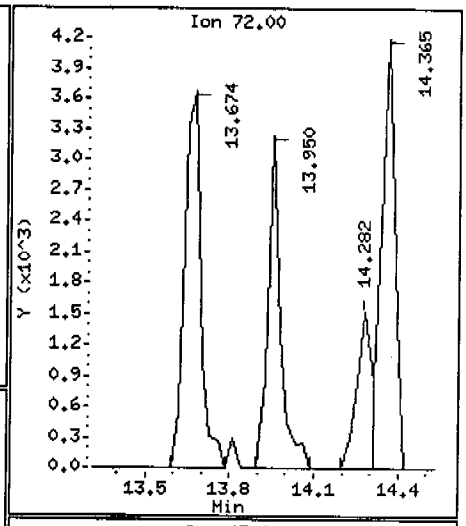
Column phase: RTx-624

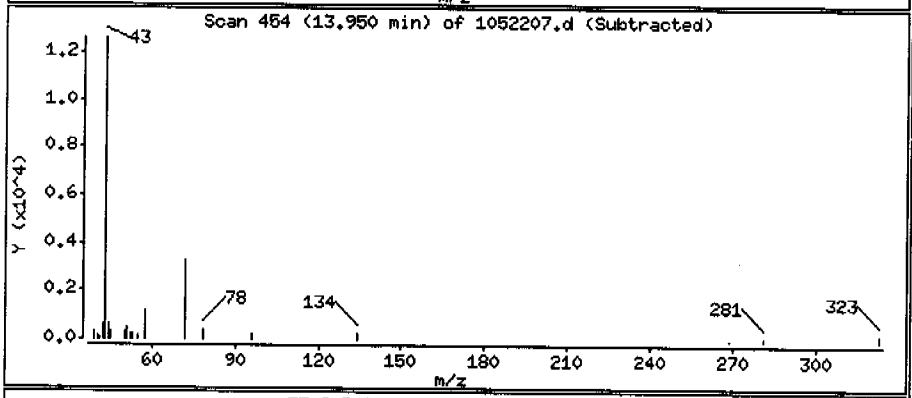
Column diameter: 0.53

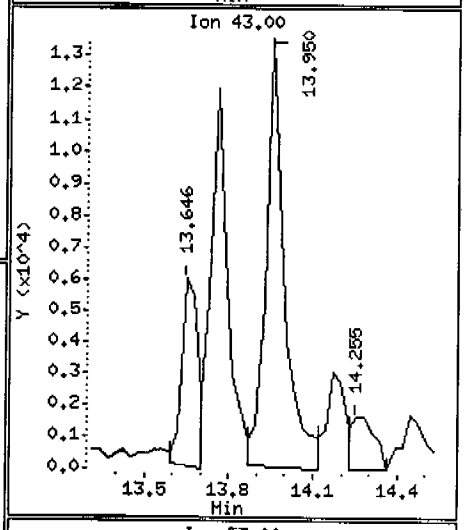
75 2-Butanone

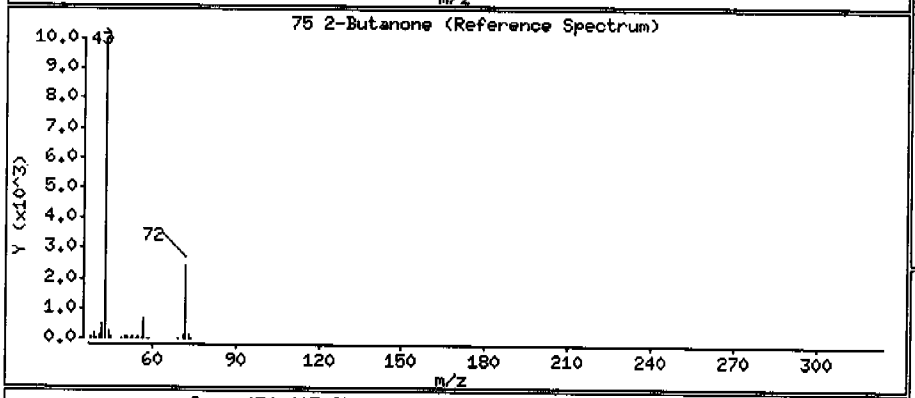
Concentration: 1.506 PPBV

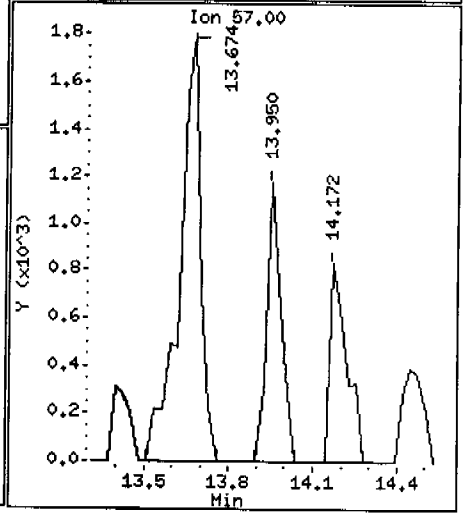


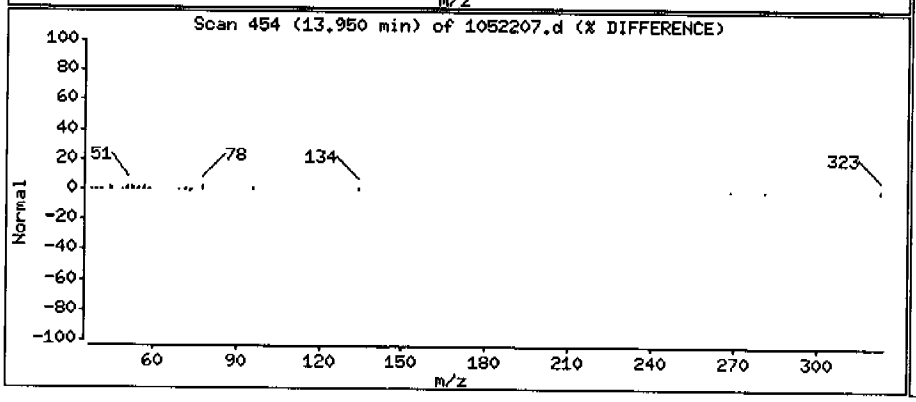












Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34370

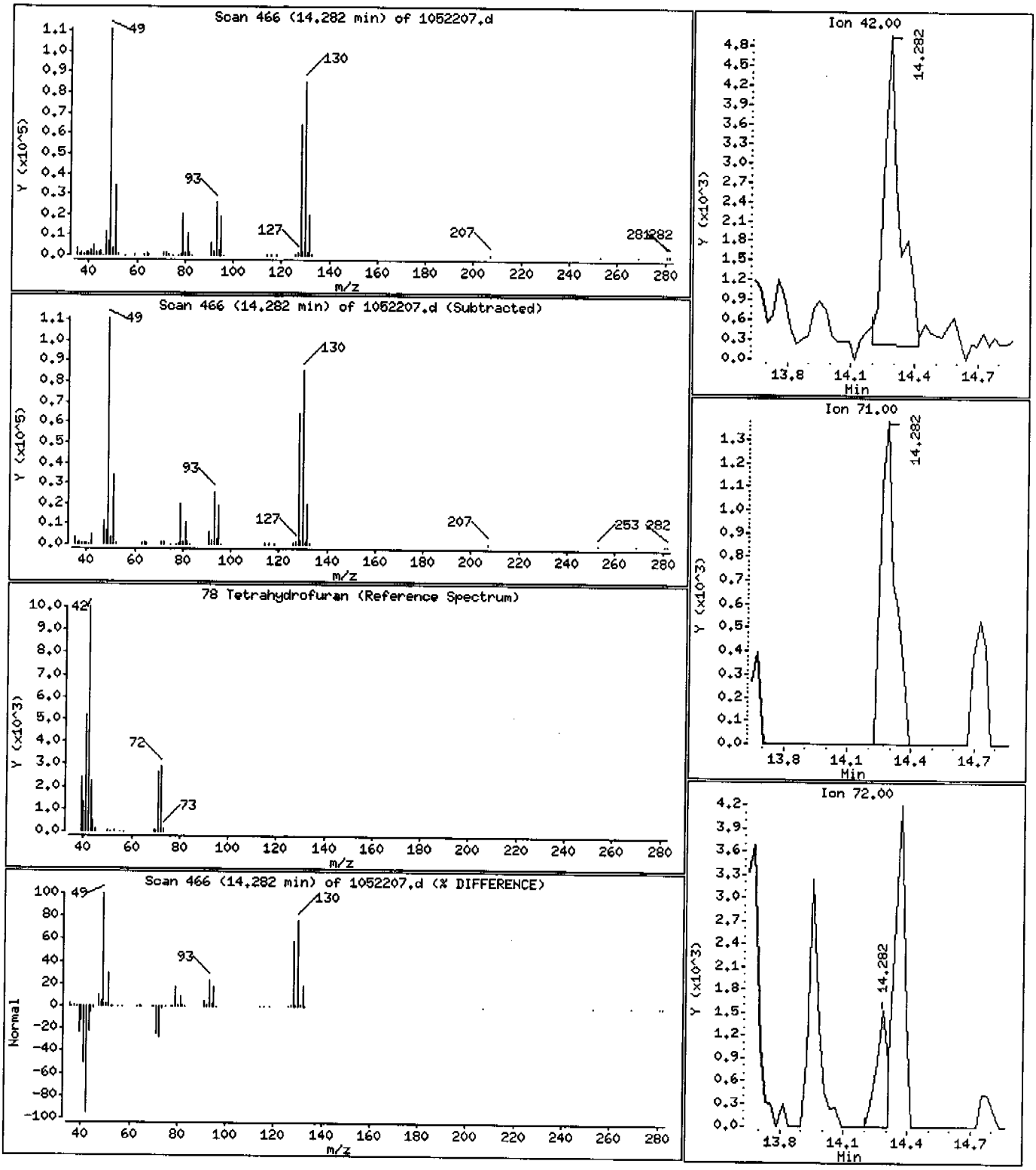
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

78 Tetrahydrofuran

Concentration: 0.9267 PPBV



Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Sample Info: 100mL #34370

Instrument: msd1.i

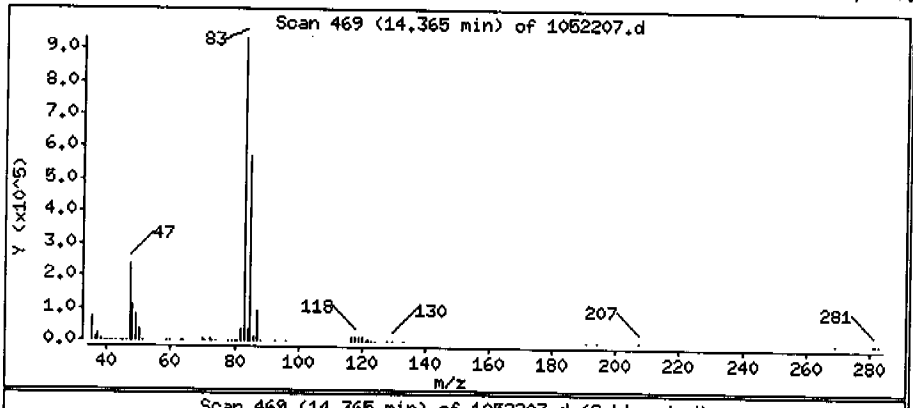
Operator: lo

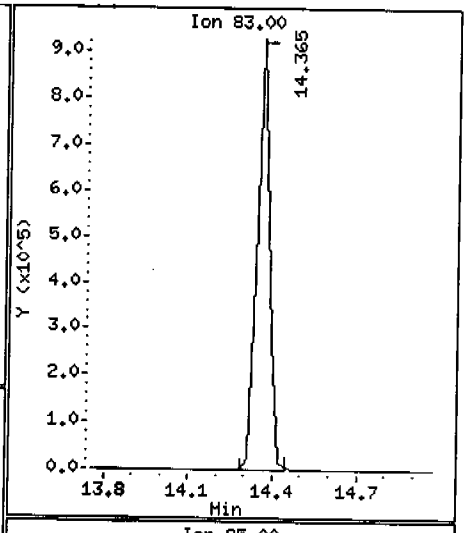
Column phase: RTx-624

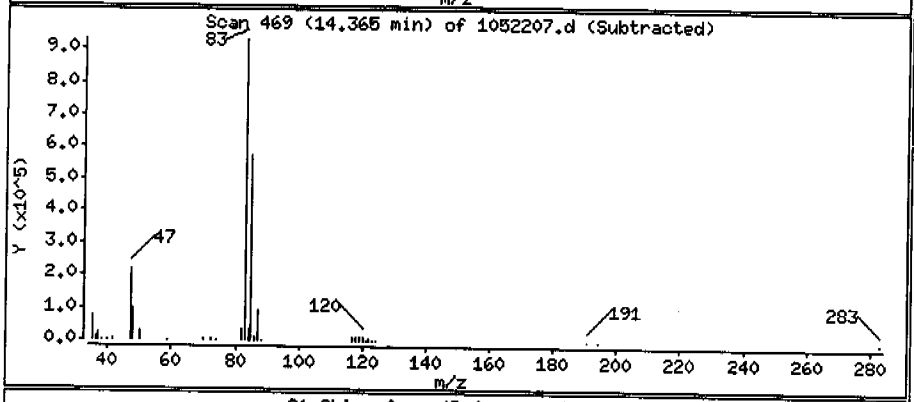
Column diameter: 0.53

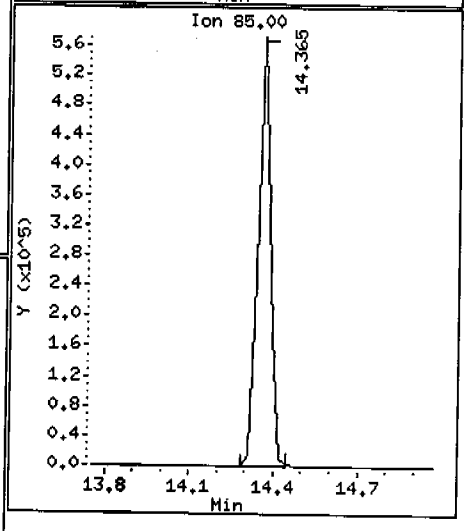
81 Chloroform

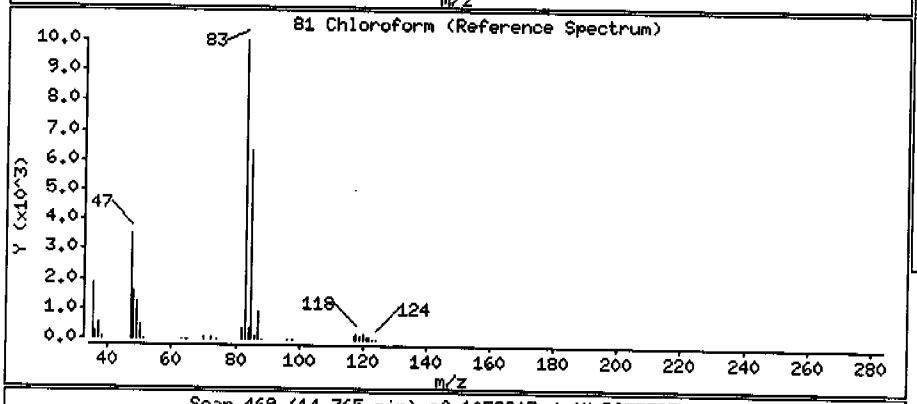
Concentration: 100.72 PPBV

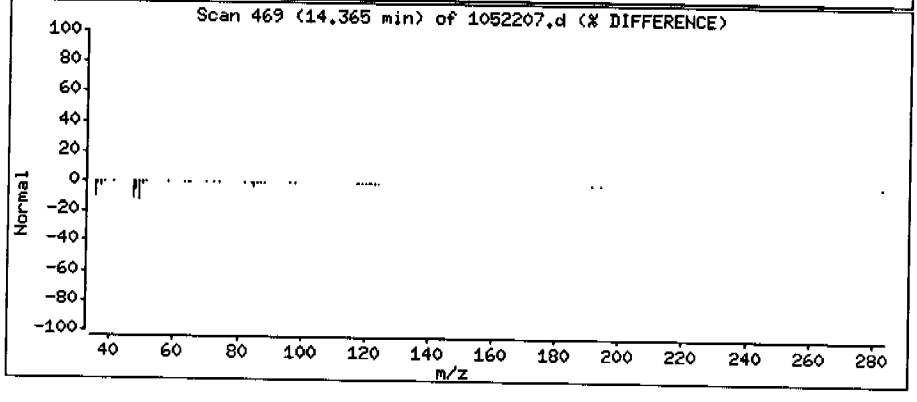












Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Sample Info: 100mL #34370

Instrument: msd1.i

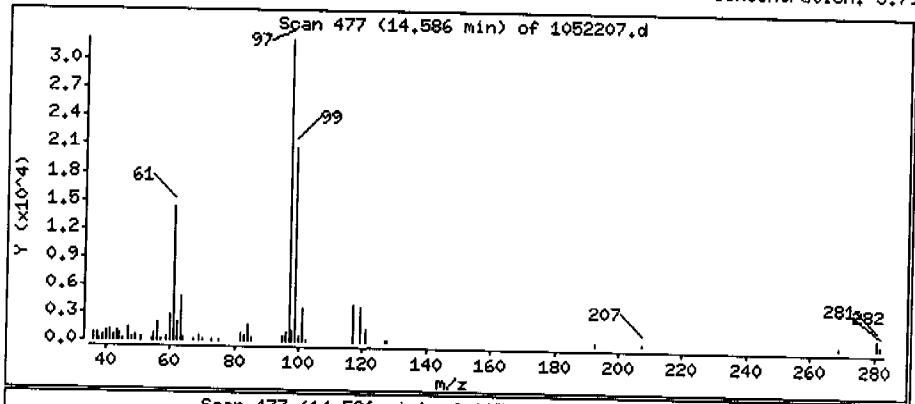
Operator: lo

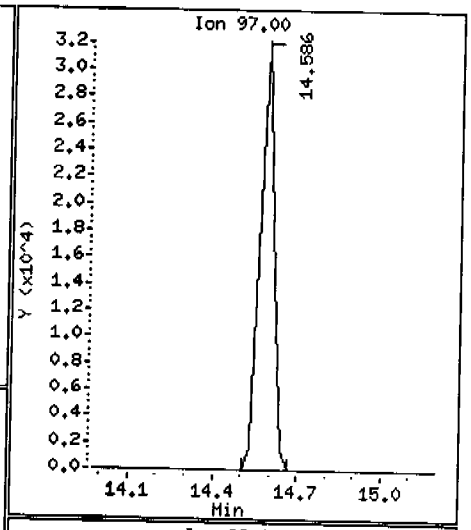
Column phase: RTx-624

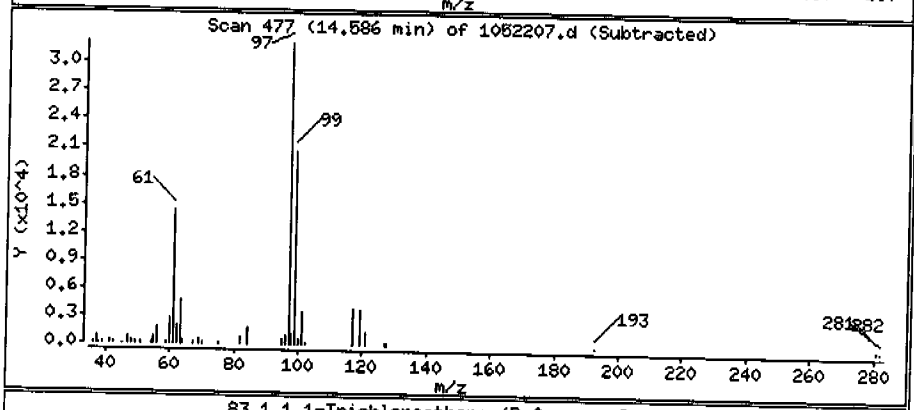
Column diameter: 0.53

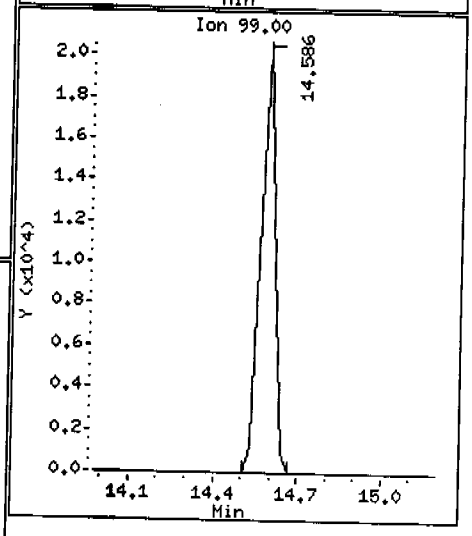
83 1,1,1-Trichloroethane

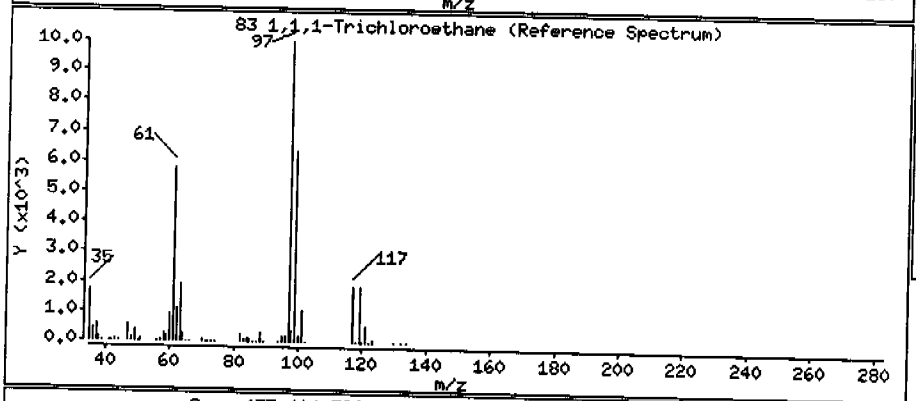
Concentration: 3.794 PPBV

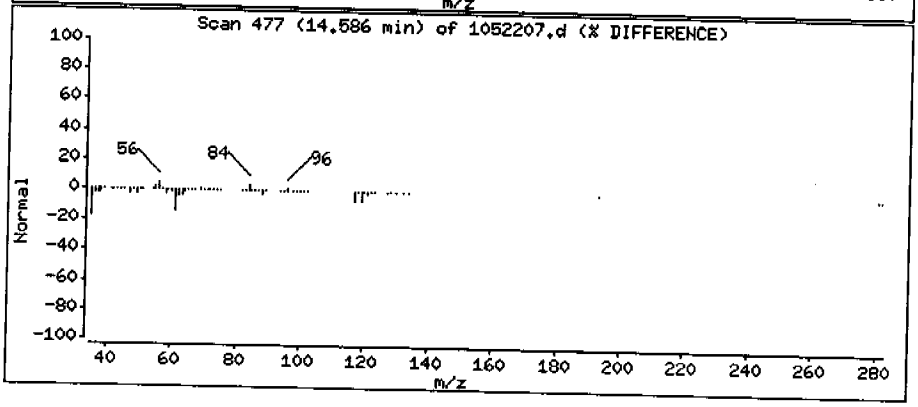












Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34370

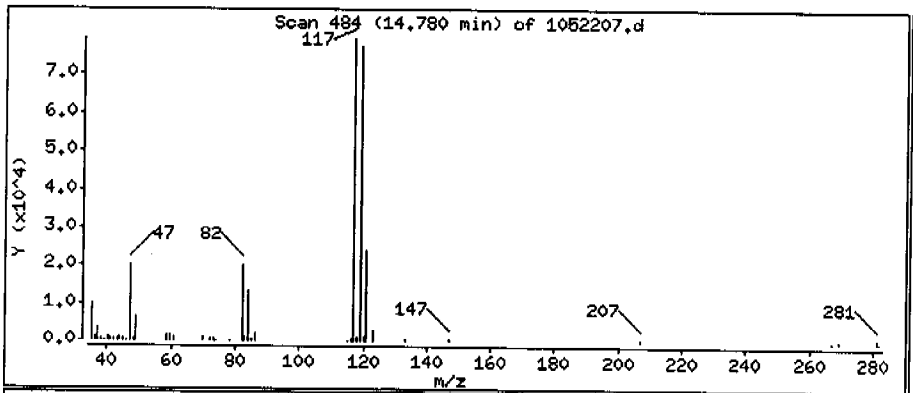
Operator: lo

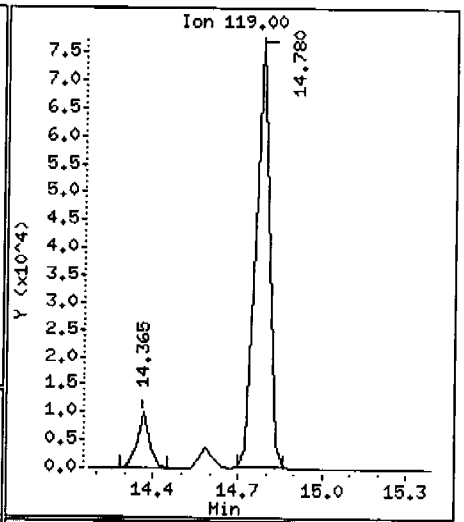
Column phase: RTx-624

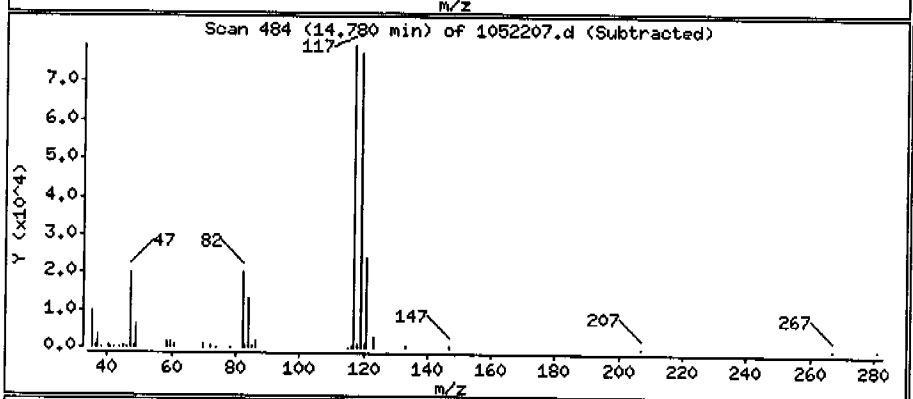
Column diameter: 0.53

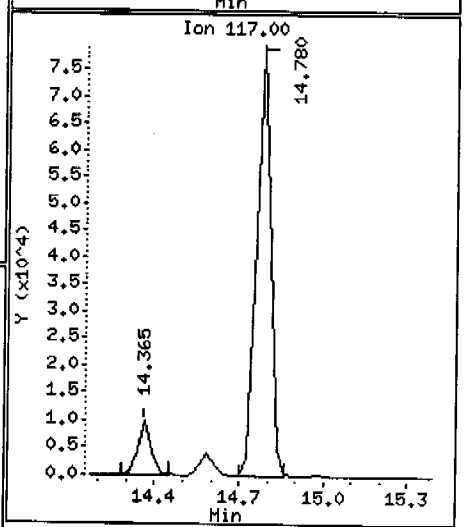
85 Carbon Tetrachloride

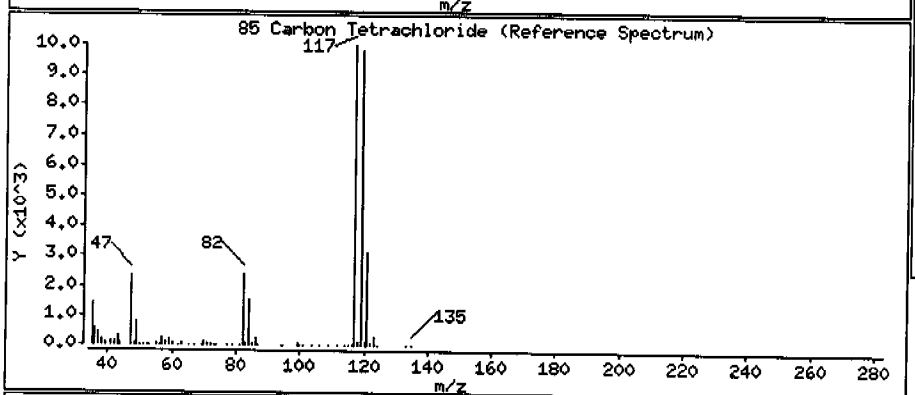
Concentration: 9.692 PPBV

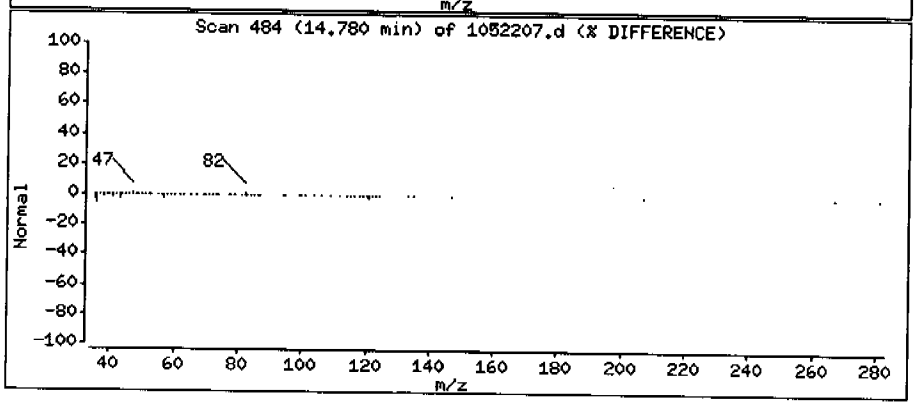












Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Sample Info: 100mL #34370

Instrument: msd1.i

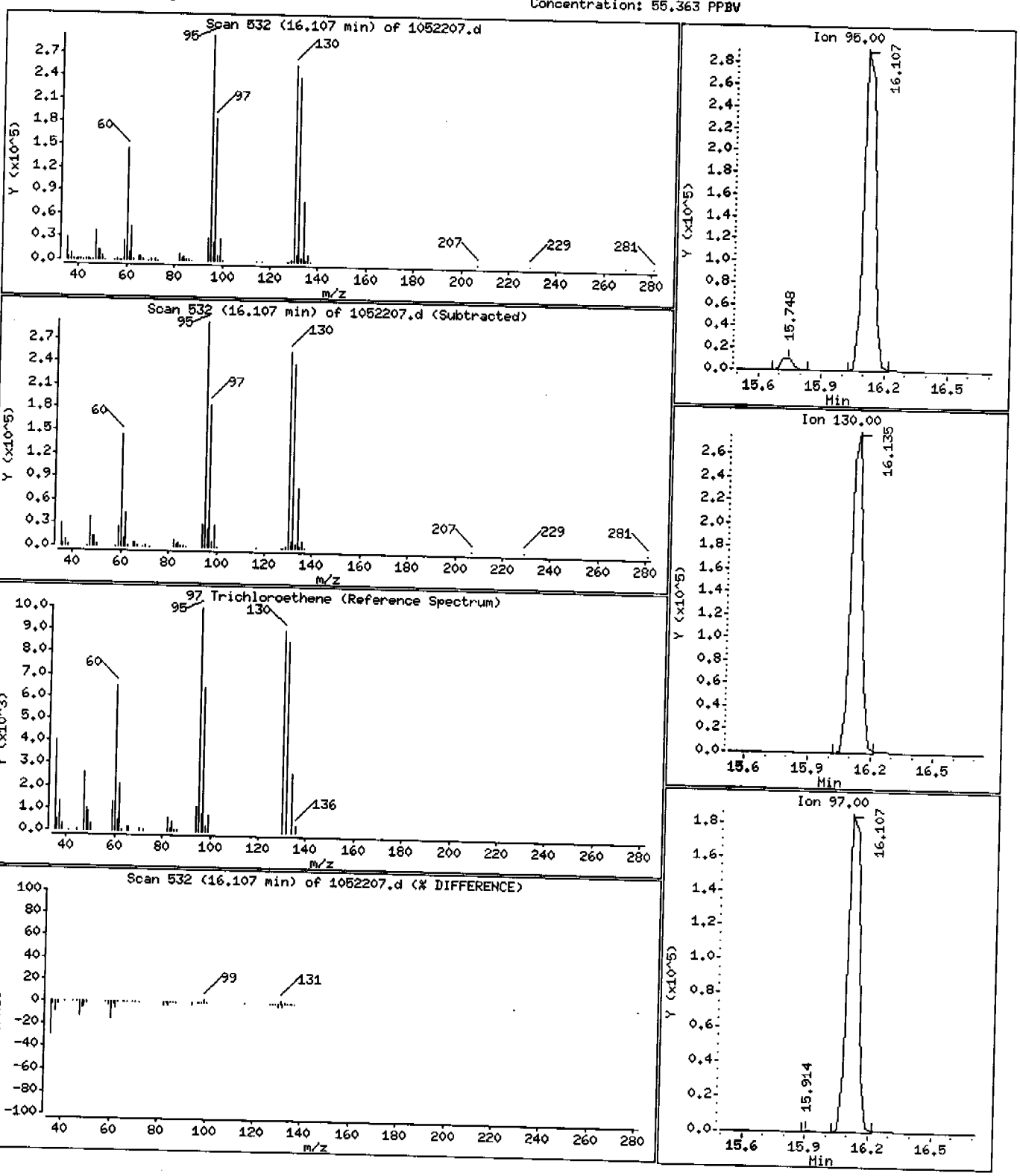
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

97 Trichloroethene

Concentration: 55.363 PPBV



Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Sample Info: 100mL #34370

Instrument: msd1.i

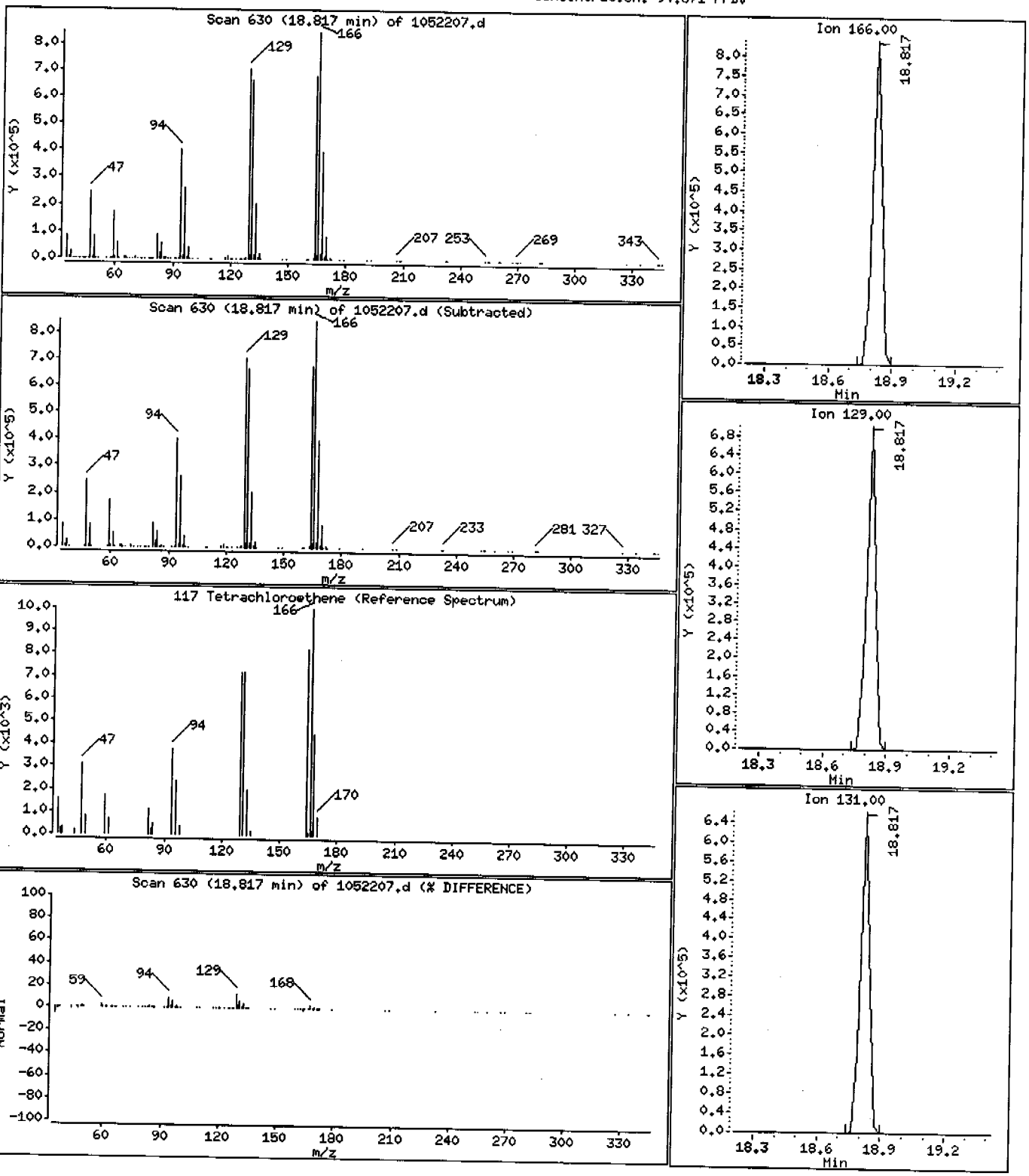
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

117 Tetrachloroethene

Concentration: 94.571 PPBV



Data File: /chem/msd1.i/1-22may.b/1052207.d

Date : 22-MAY-2008 12:36

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34370

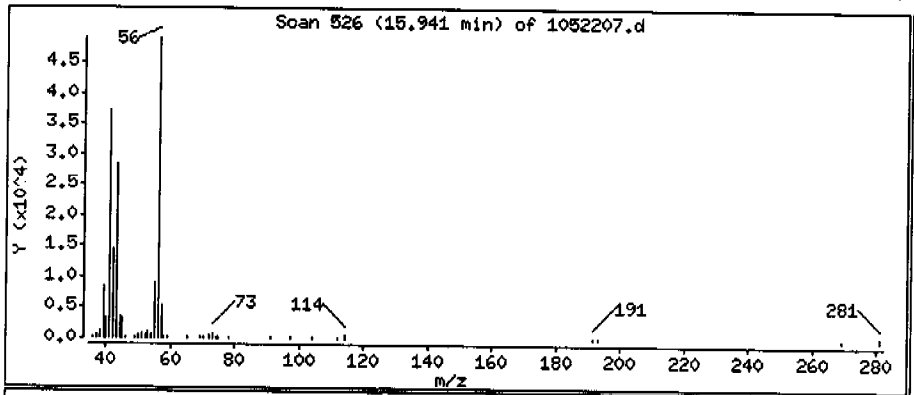
Operator: lo

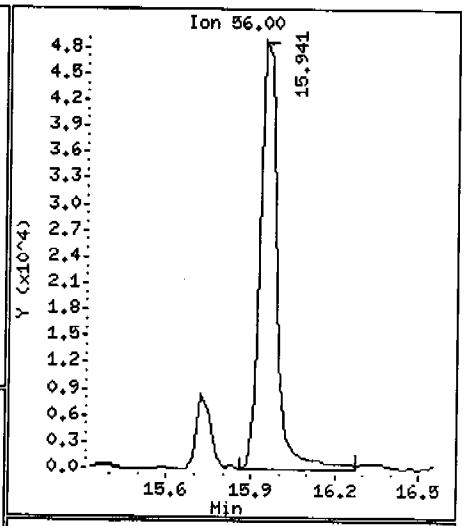
Column phase: RTx-624

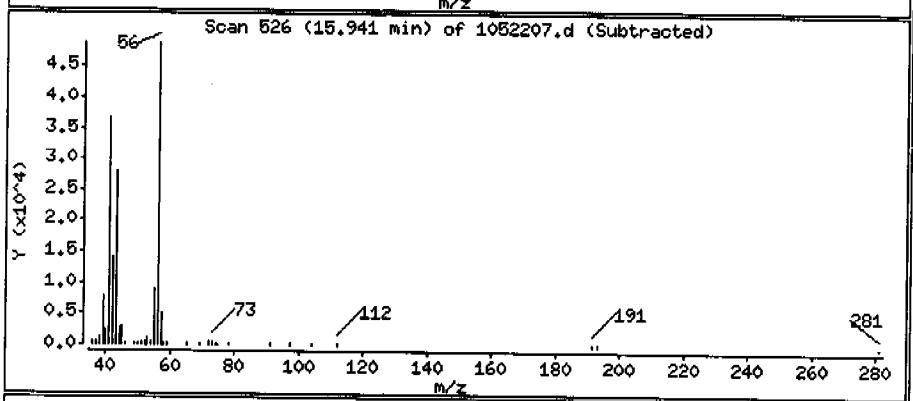
Column diameter: 0.53

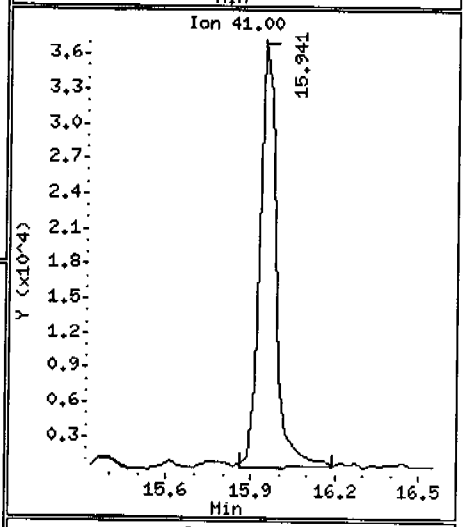
96 1-Butanol

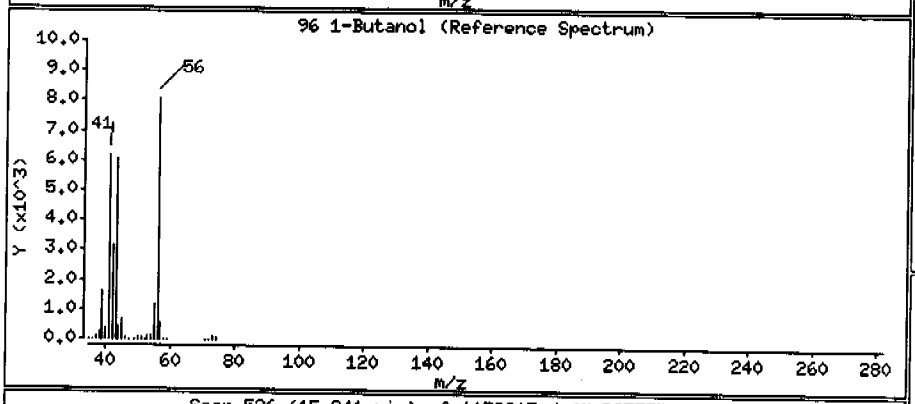
Concentration: 17.325 PPBV

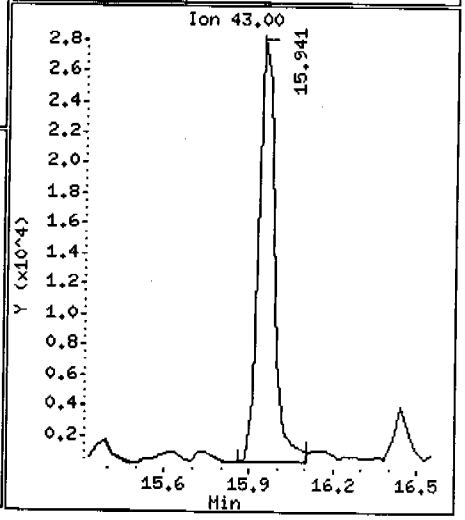


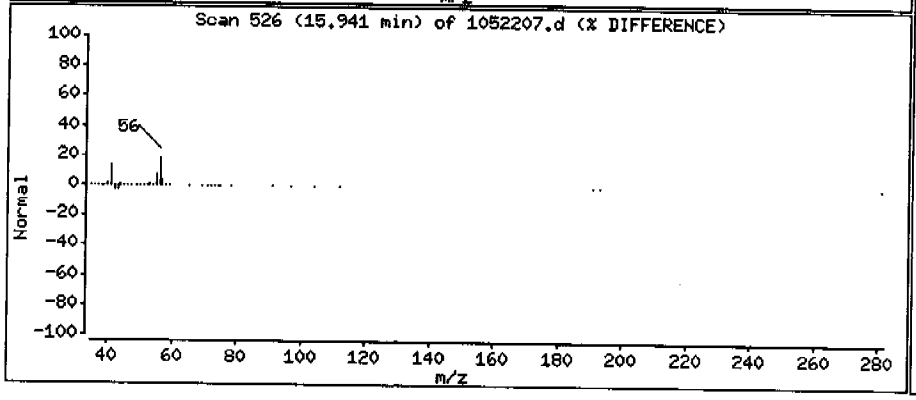












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12244

Lab ID#: 0805274-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.3	4.3	6.5
Ethanol	3.5	8.0	6.6	15
Freon 113	0.88	3.5	6.7	27
1,1-Dichloroethene	0.88	2.5	3.5	9.9
Acetone	3.5	4.7	8.3	11
Methylene Chloride	0.88	110	3.0	380
2-Butanone (Methyl Ethyl Ketone)	0.88	0.90	2.6	2.6
Chloroform	0.88	150	4.3	740
1,1,1-Trichloroethane	0.88	6.4	4.8	35
Carbon Tetrachloride	0.88	59	5.5	370
1,2-Dichloroethane	0.88	1.3	3.5	5.4
Trichloroethene	0.88	140	4.7	780
1,1,2-Trichloroethane	0.88	2.4	4.8	13
Tetrachloroethene	0.88	36	5.9	240
1,4-Dichlorobenzene	0.88	0.92	5.3	5.5

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12244

Lab ID#: 0805274-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052208 Date of Collection: 5/9/08
Dil. Factor: 1.75 Date of Analysis: 5/22/08 01:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.3	4.3	6.5
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	8.0	6.6	15
Freon 113	0.88	3.5	6.7	27
1,1-Dichloroethene	0.88	2.5	3.5	9.9
Acetone	3.5	4.7	8.3	11
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	110	3.0	380
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	0.90	2.6	2.6
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	150	4.3	740
1,1,1-Trichloroethane	0.88	6.4	4.8	35
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	59	5.5	370
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	1.3	3.5	5.4
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	140	4.7	780
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	2.4	4.8	13
Tetrachloroethene	0.88	36	5.9	240

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12244

Lab ID#: 0805274-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052208 Date of Collection: 5/9/08
Dil. Factor: 1.75 Date of Analysis: 5/22/08 01:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	0.92	5.3	5.5
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected U J	26	Not Detected U J
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	96	70-130

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052208.d
Lab Smp Id: 0805274-07A
Inj Date : 22-MAY-2008 13:22
Operator : lo
Inst ID: msd1.i
Smp Info : 100mL #34717
Misc Info : 7.0"Hg-5psi
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.282	14.255 (1.000)	130	290814	25.0000		80.00- 120.00	100.00
	14.282	14.255 (1.000)	128	226425			27.30- 127.30	77.86
	14.255	14.255 (1.000)	49	520159			131.96- 231.96	178.86
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1484143	25.0000		80.00- 120.00	100.00
	15.748	15.748 (1.000)	88	234151			0.00- 65.38	15.78
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.033	20.033 (1.000)	117	1667620	25.0000		80.00- 120.00	100.00
	20.006	20.006 (1.000)	82	966322			8.42- 108.42	57.95
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.140	15.140 (1.060)	65	448810	23.1259	23.126	80.00- 120.00	100.00
	15.140	15.140 (1.060)	67	232679			6.04- 106.04	51.84
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.960 (1.140)	98	1640339	24.3927	24.393	80.00- 120.00	100.00
	17.960	17.960 (1.140)	70	168137			0.00- 60.35	10.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1090873			15.45- 115.45	66.50
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	861714	24.1489	24.149	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1383262			110.38- 210.38	160.52
21.527	21.527 (1.075)	176	821719			44.94- 144.94	95.36
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.862	2.862 (0.200)	85	24232	0.75586	1.323	80.00- 120.00	100.00
2.918	2.862 (0.204)	87	6272			0.00- 75.39	25.88
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.706)	45	29770	4.55531	7.972	80.00- 120.00	100.00
10.080	10.135 (0.706)	43	8898			0.00- 75.81	29.89
0.000	10.135 (0.000)	46	0			0.00- 92.85	0.00
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	42900	1.98709	3.477	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	26718			13.47- 113.47	62.28
10.550	10.577 (0.739)	101	54972			83.83- 183.83	128.14
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	42888	1.43290	2.508	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	25526			3.44- 103.44	59.52
10.522	10.522 (0.737)	98	15082			0.00- 84.21	35.17
45 Acetone					CAS #: 67-64-1		
10.909	10.882 (0.764)	58	27242	2.70992	4.742	80.00- 120.00	100.00
10.909	10.882 (0.764)	43	88778			275.34- 375.34	325.88
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	1600176	61.7177	108.01	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	1030278			14.84- 114.84	64.39
11.739	11.739 (0.822)	51	485926			0.00- 79.96	30.37
75 2-Butanone					CAS #: 78-93-3		
13.978	13.923 (0.979)	72	5363	0.51190	0.8958	80.00- 120.00	100.00
13.951	13.923 (0.977)	43	23514			436.22- 536.22	438.42
13.951	13.923 (0.977)	57	2418			0.00- 90.57	45.10
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	3547182	86.2286	150.90	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	2220110			12.44- 112.44	62.59
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.021)	97	158280	3.66694	6.417	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane (continued)							
14.587	14.587 (1.021)	99	99281			14.11- 114.11	62.72
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	1348408	33.7748	59.106	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	1393810			52.90- 152.90	103.37
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	23680	0.75826	1.327	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	7906			0.00- 83.51	33.39
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	2563695	82.7845	144.87	80.00- 120.00	100.00
16.135	16.135 (1.025)	130	2474279			47.48- 147.48	96.51
16.107	16.107 (1.023)	97	1674622			14.50- 114.50	65.32
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	48417	1.37191	2.401	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	30044			12.19- 112.19	62.05
18.706	18.706 (0.934)	83	40167			31.81- 131.81	82.96
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	836258	20.4549	35.796	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	659132			27.36- 127.36	78.82
18.817	18.817 (0.939)	131	624533			25.62- 125.62	74.68
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.145)	146	44960	0.52358	0.9163	80.00- 120.00	100.00
22.937	22.937 (1.145)	148	26988			16.32- 116.32	60.03
22.937	22.937 (1.145)	111	18335			0.00- 90.95	40.78

Data File: /chem/msd1.i/1-22may.b/1052208.d
Report Date: 27-May-2008 15:24

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052208.d
Lab Smp Id: 0805274-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 7.0"Hg-5psi

Calibration Date: 22-MAY-2008
Calibration Time: 09:16

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	290814	-5.60
95 1,4-Difluorobenze	1638375	983025	2293725	1484143	-9.41
123 Chlorobenzene-d5	1818182	1090909	2545455	1667620	-8.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-22may.b/1052208.d
Report Date: 27-May-2008 15:24

Air Toxics Ltd.

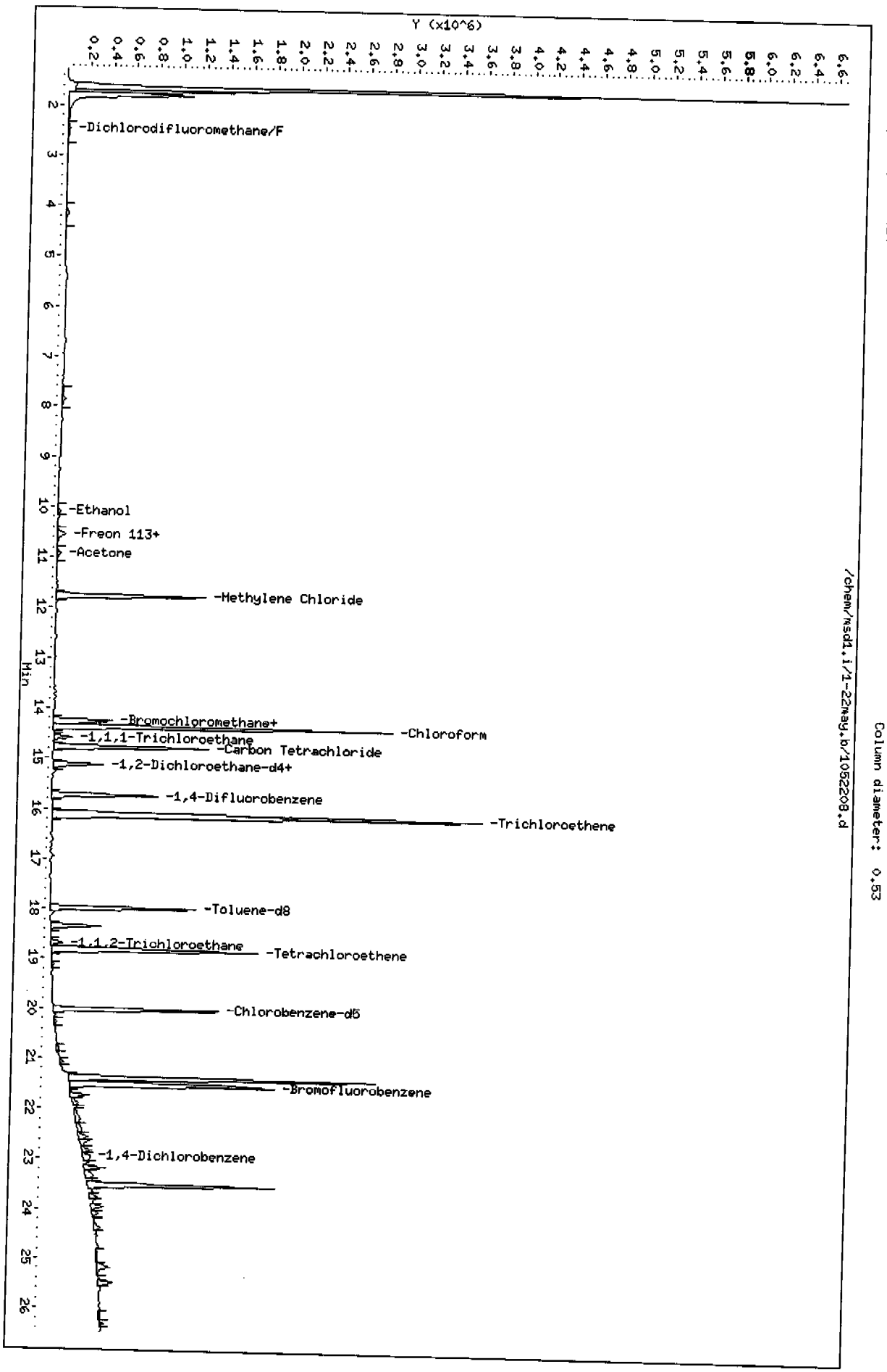
RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805274-07A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 7.0"Hg-5psi

Client SDG: 1-22may
Fraction: VOA

Operator: lo
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.126	92.50	70-130
$ 111 Toluene-d8	25.000	24.393	97.57	70-130
$ 136 Bromofluorobenzene	25.000	24.149	96.60	70-130


Data File: /chem/msd1.i/1-22may.b/1052208.d
Date : 22-MAY-2008 13:22
Client ID:
Sample Info: 100mL #34717
Column phase: RTx-624
Instrument: msd1.i
Operator: lo
Column diameter: 0.53
/chem/msd1.i/1-22may.b/1052208.d
Y (x10^6)
Min
-Dichlorodifluoromethane/F
-Ethanol
-Freon 113+
-Acetone
-Methylene Chloride
-Bromochloromethane+
-Chloroform
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,4-Difluorobenzene
-Trichloroethene
-Toluene-d8
-1,1,2-Trichloroethane
-Tetrachloroethene
-Chlorobenzene-d5
-Bromofluorobenzene
-1,4-Dichlorobenzene

Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

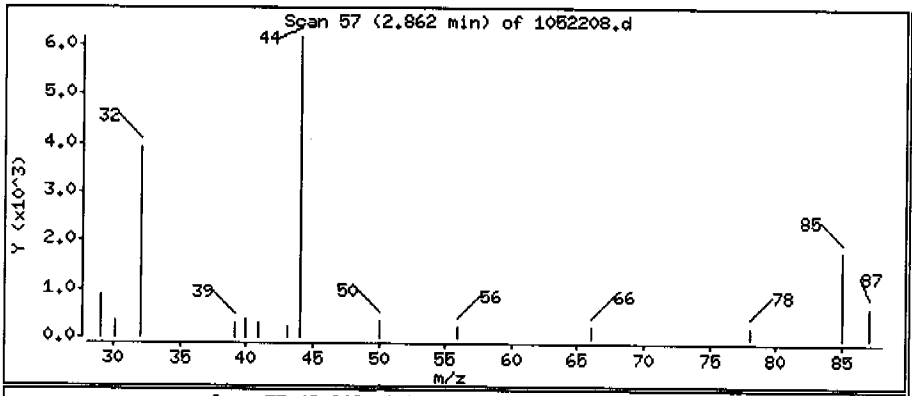
Operator: lo

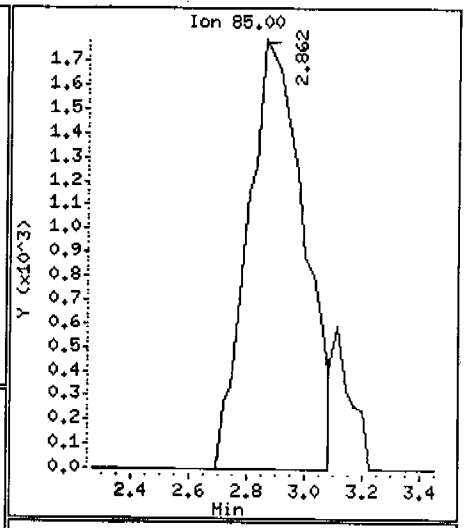
Column phase: RTx-624

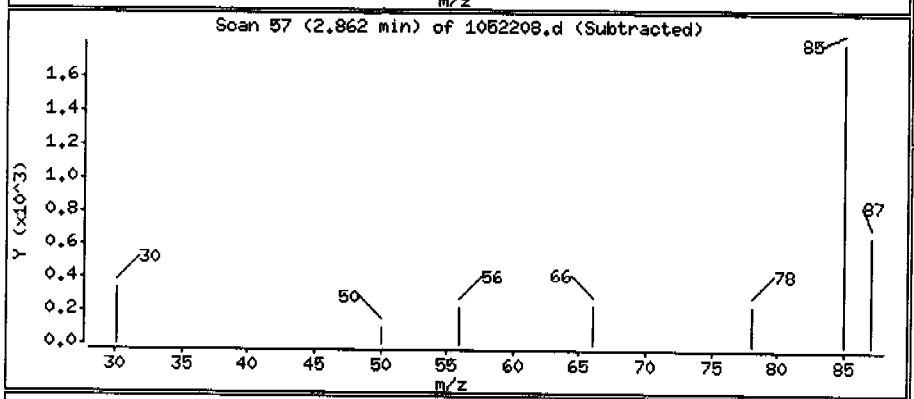
Column diameter: 0.53

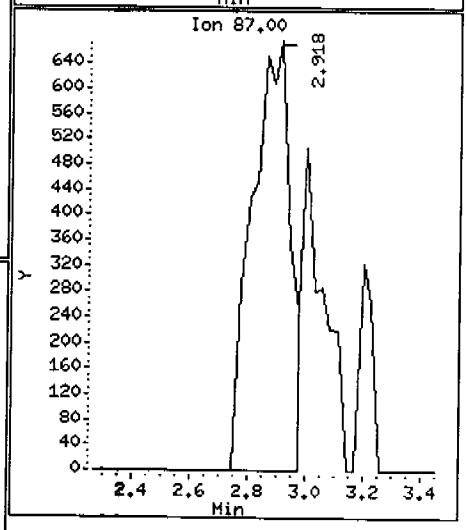
14 Dichlorodifluoromethane/Fr12

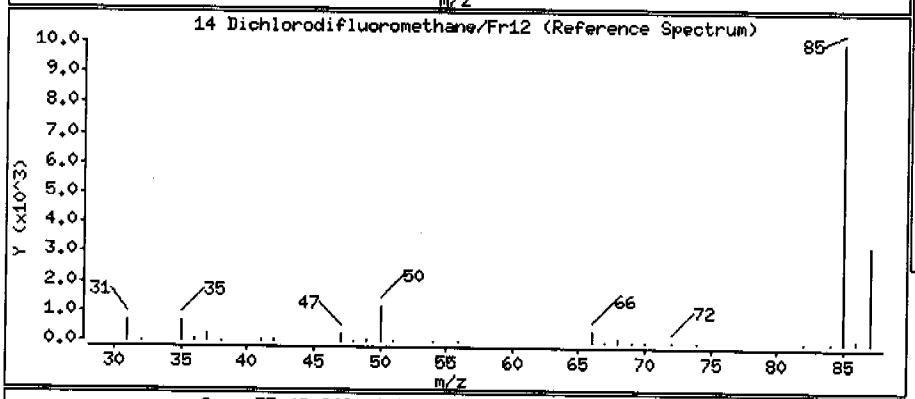
Concentration: 1.323 PPBV

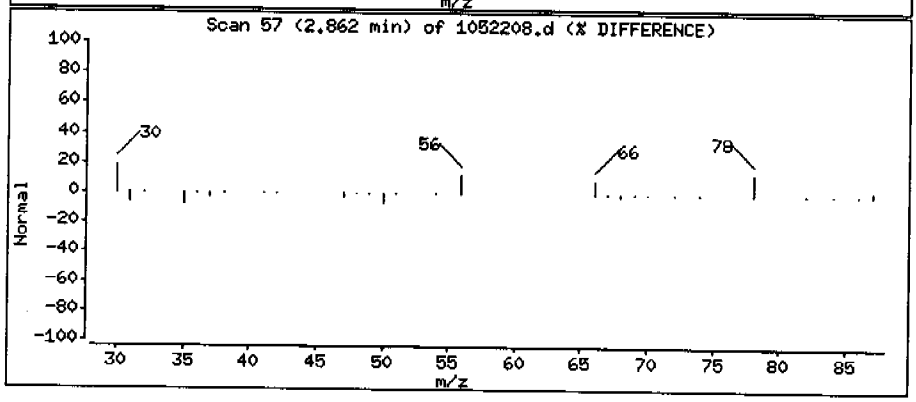












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

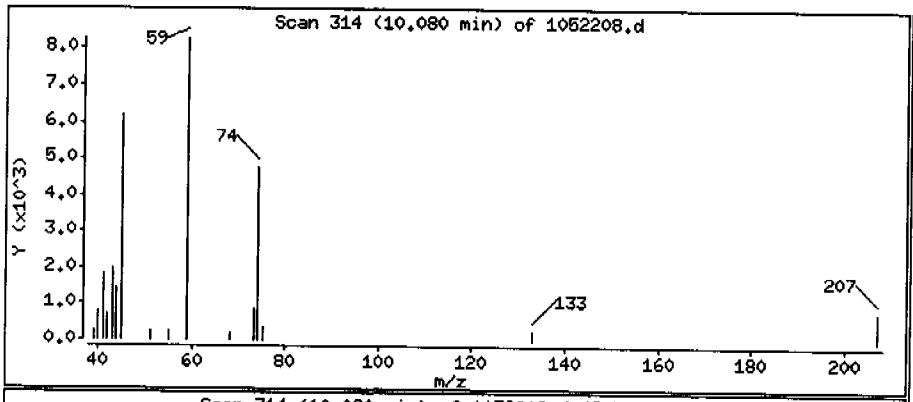
Operator: lo

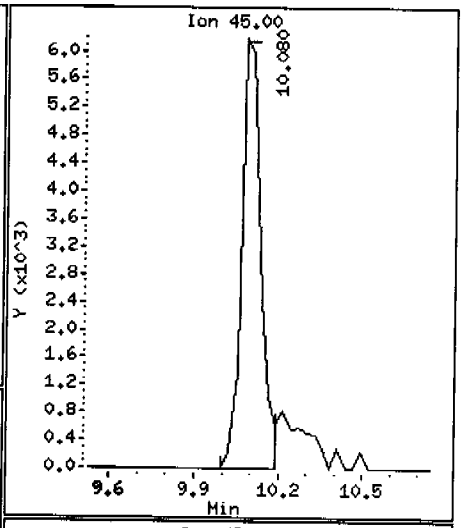
Column phase: RTx-624

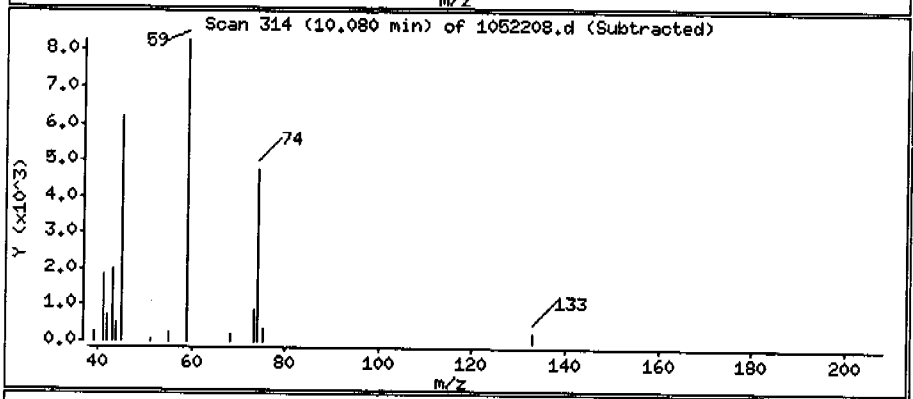
Column diameter: 0.53

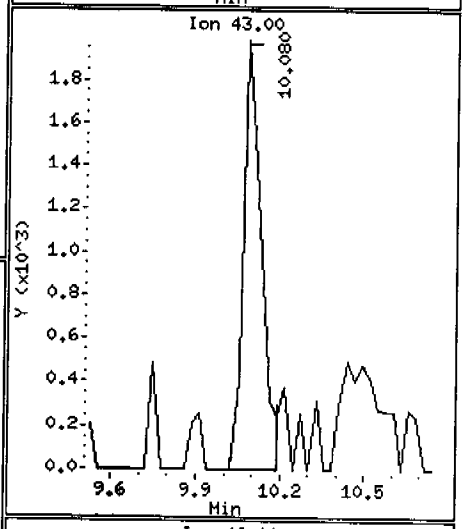
38 Ethanol

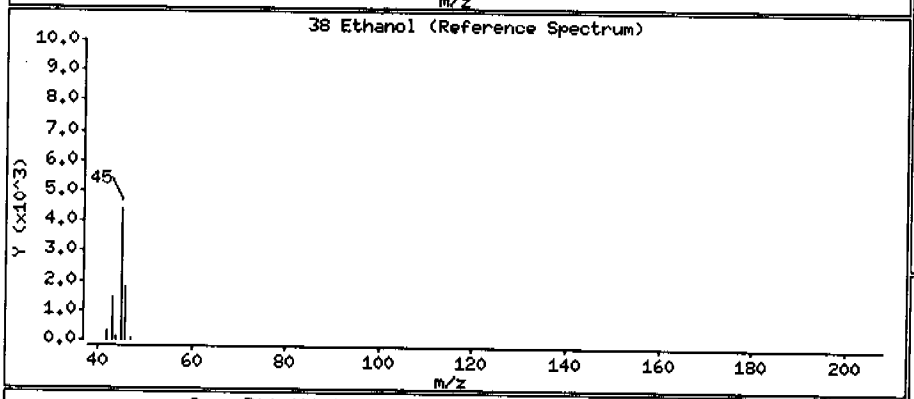
Concentration: 7.972 PPBV

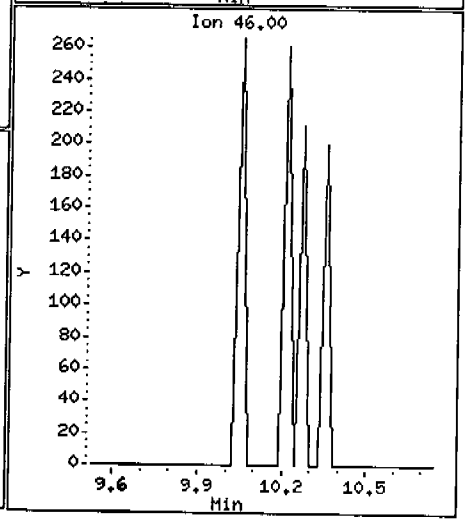


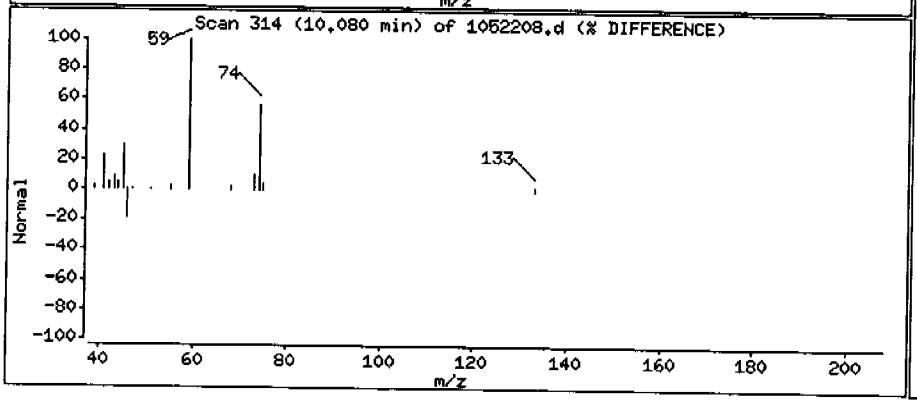












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

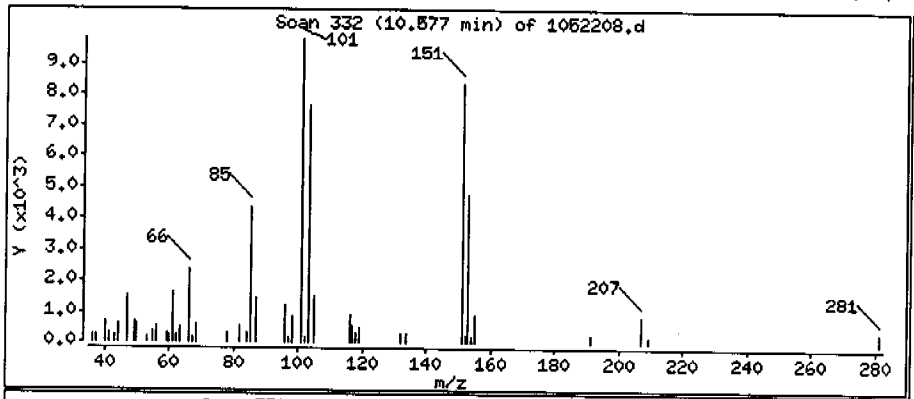
Operator: lo

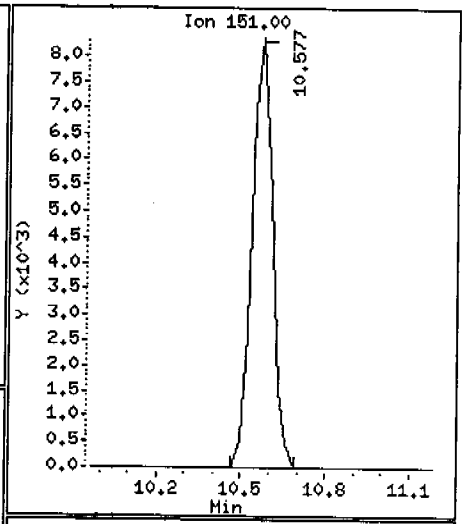
Column phase: RTx-624

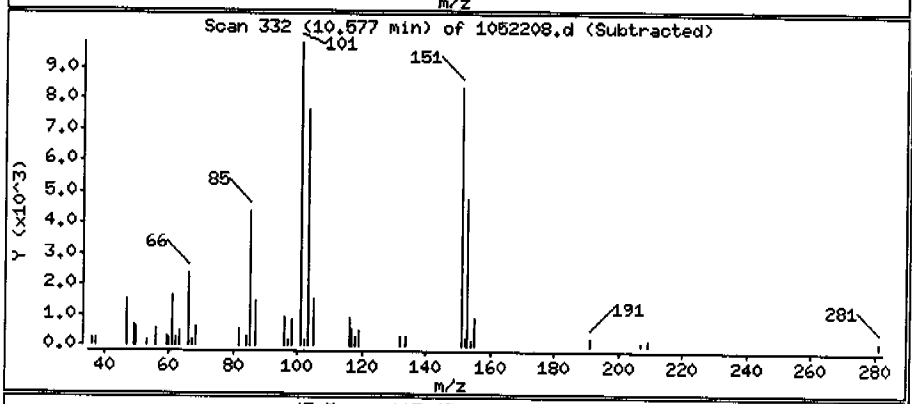
Column diameter: 0.53

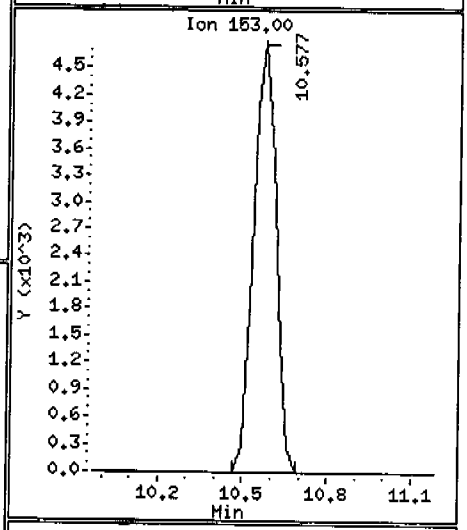
43 Freon 113

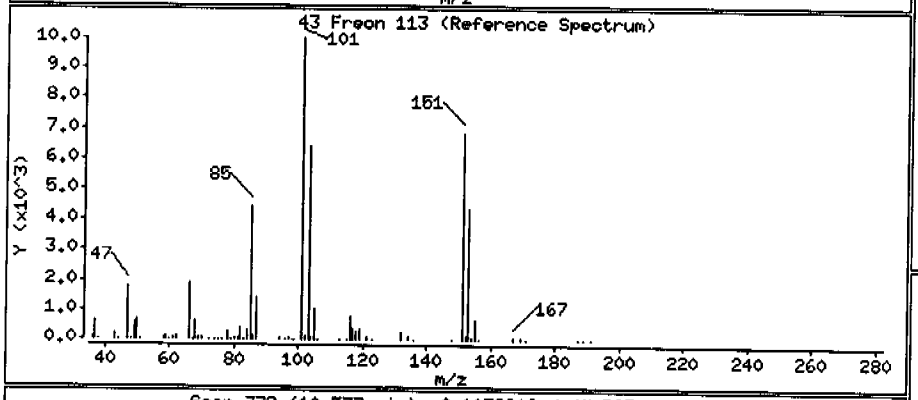
Concentration: 3.477 PPBV

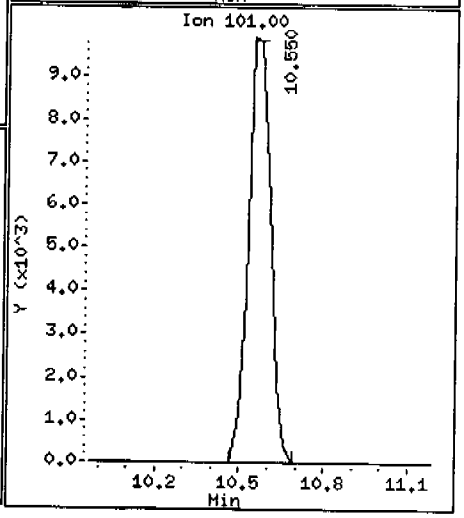


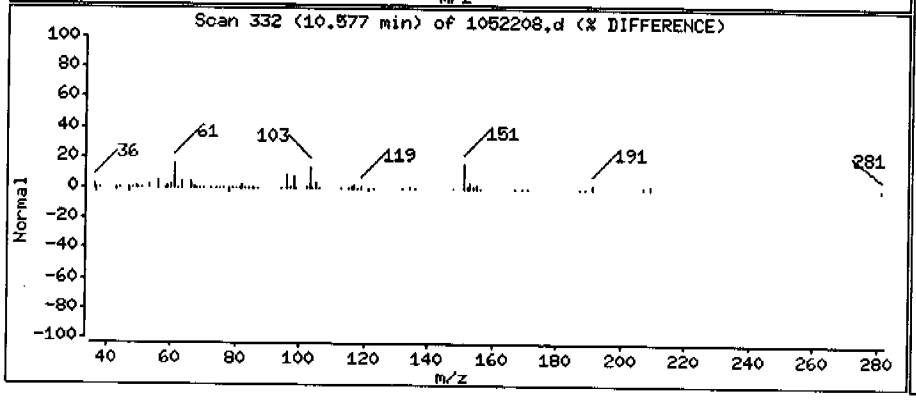












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

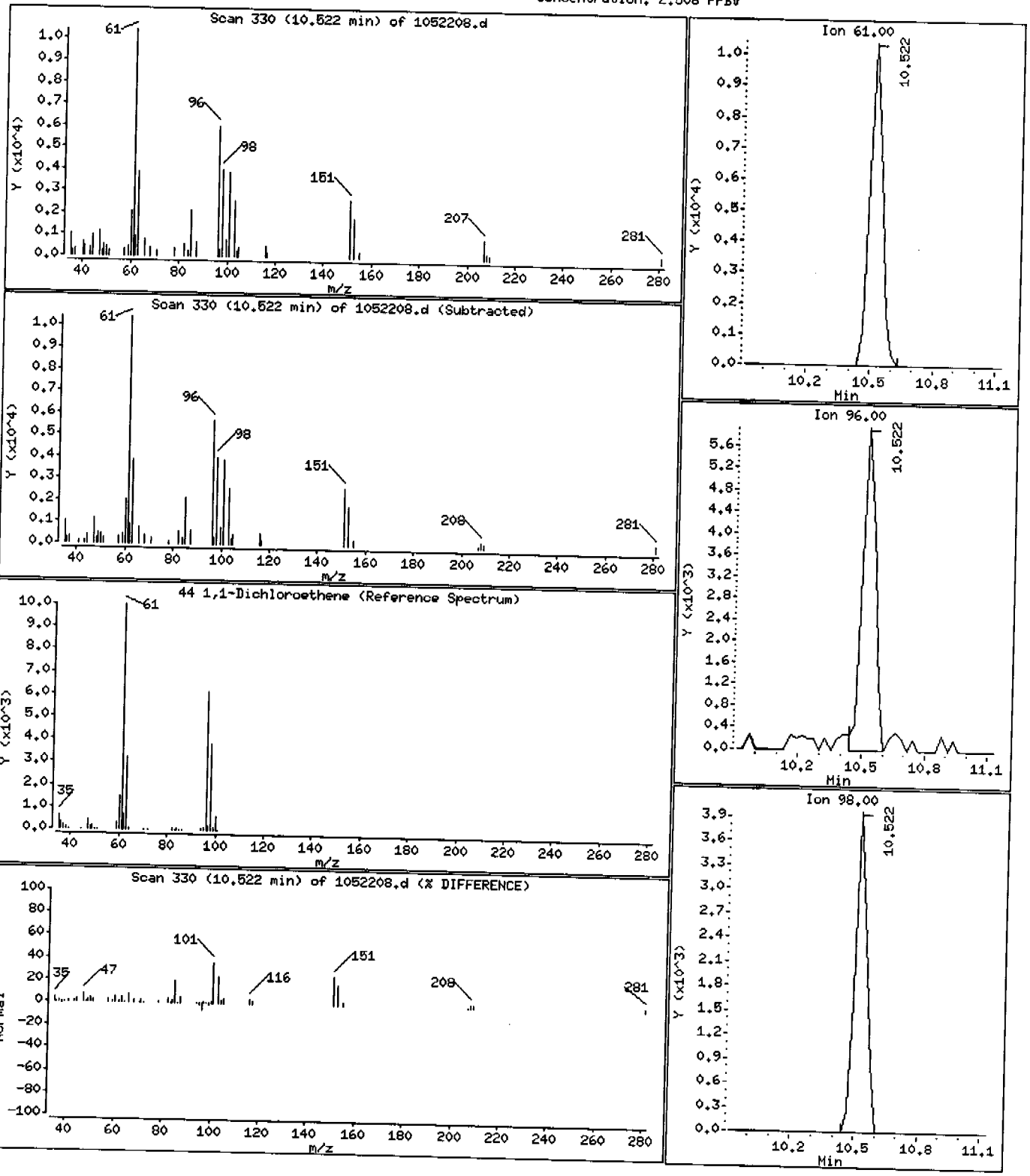
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

44 1,1-Dichloroethene

Concentration: 2.508 PPBV



Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

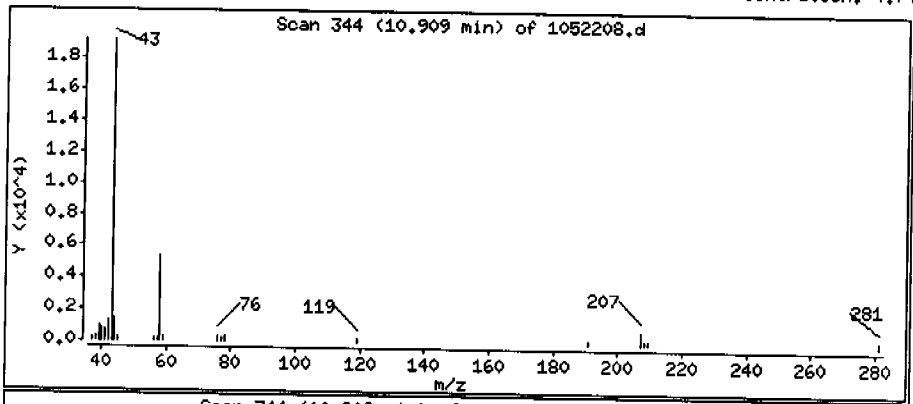
Operator: lo

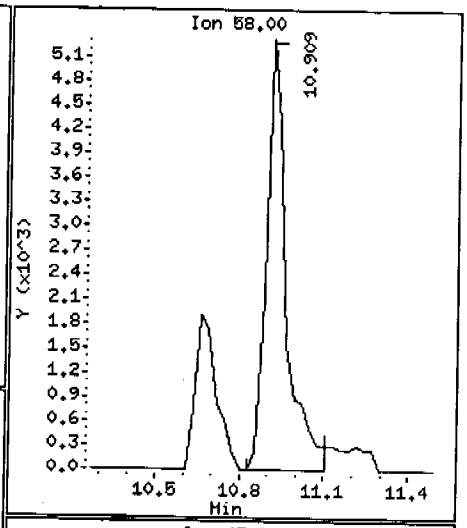
Column phase: RTx-624

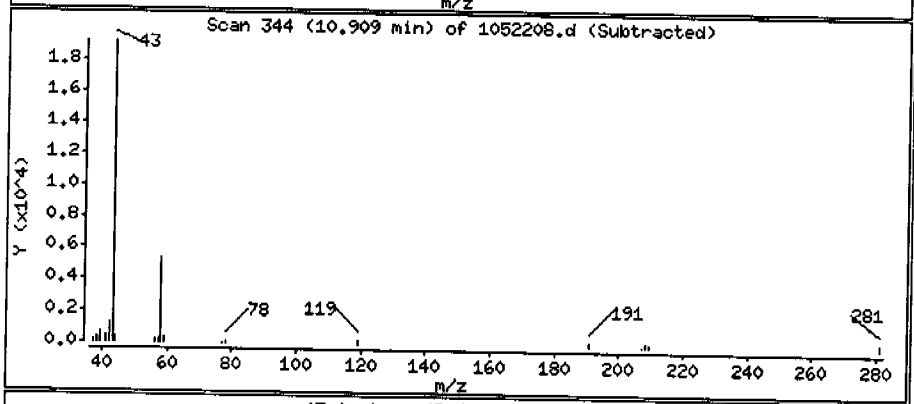
Column diameter: 0.53

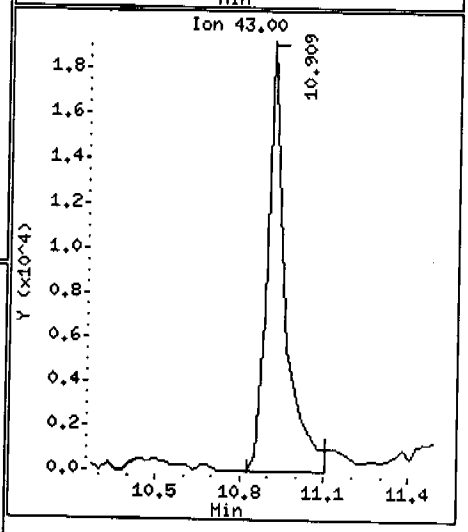
45 Acetone

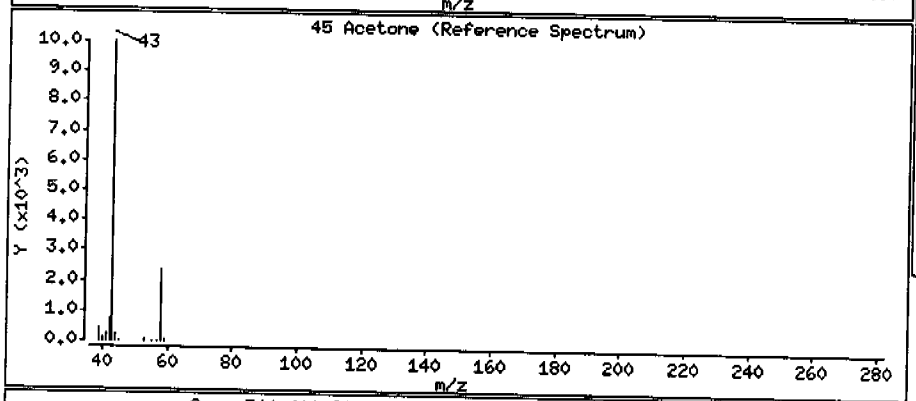
Concentration: 4.742 PPBV

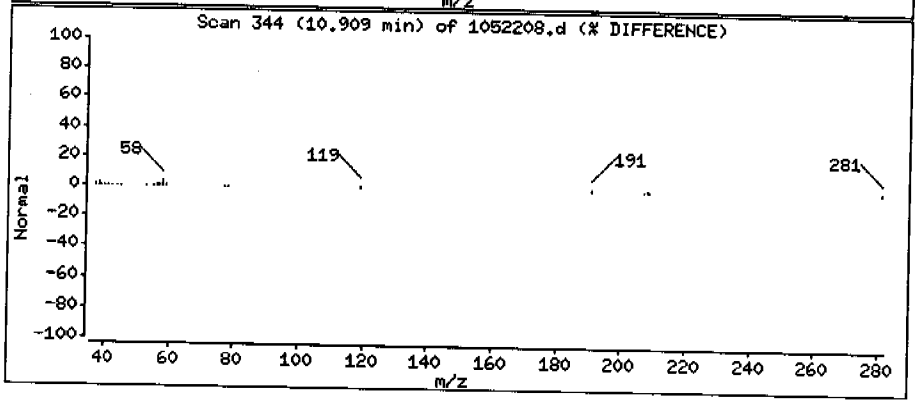












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

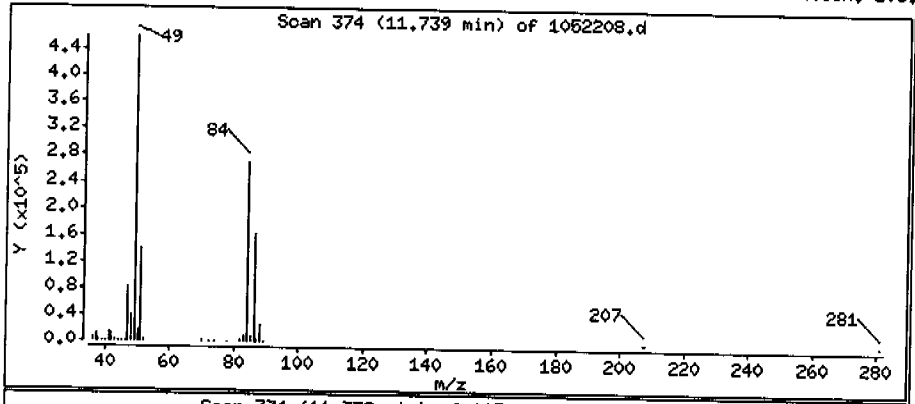
Operator: lo

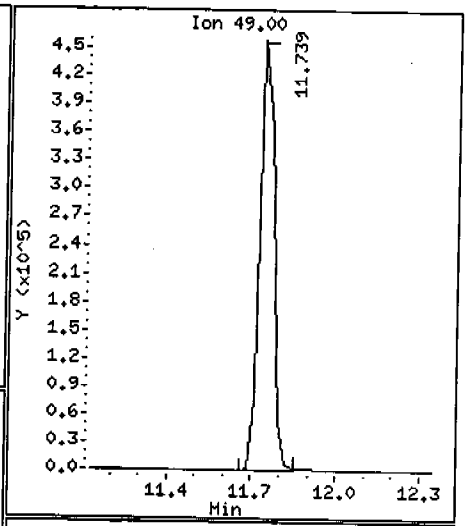
Column phase: RTx-624

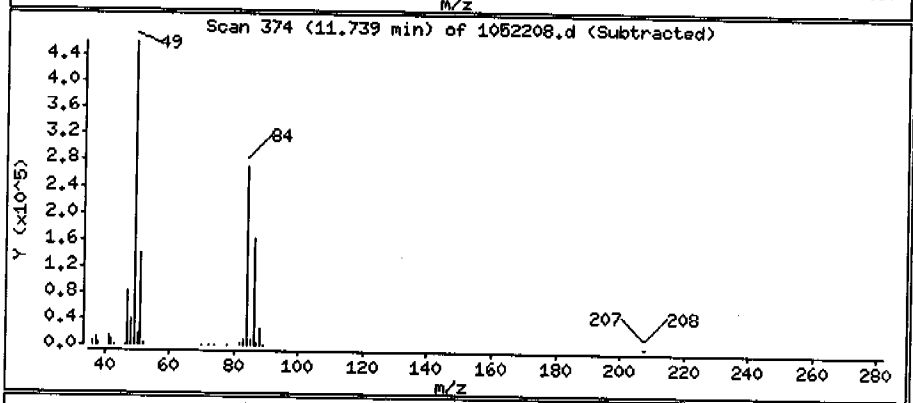
Column diameter: 0.53

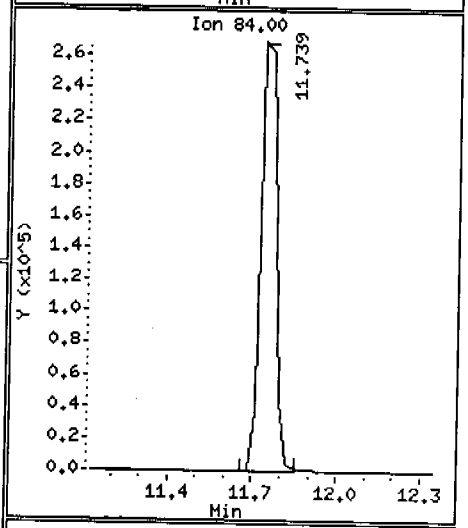
54 Methylene Chloride

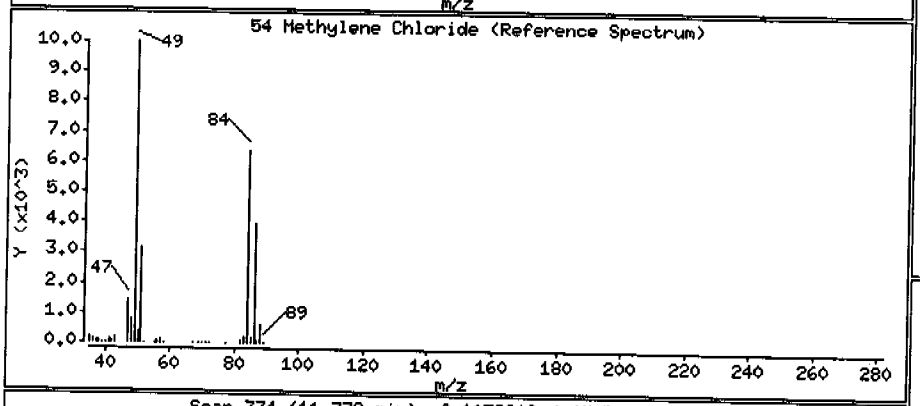
Concentration: 108.01 PPBV

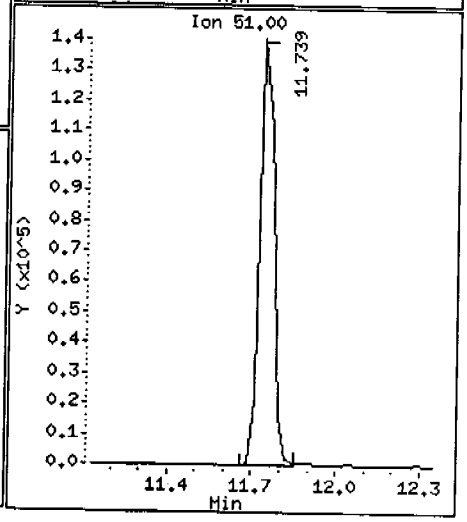


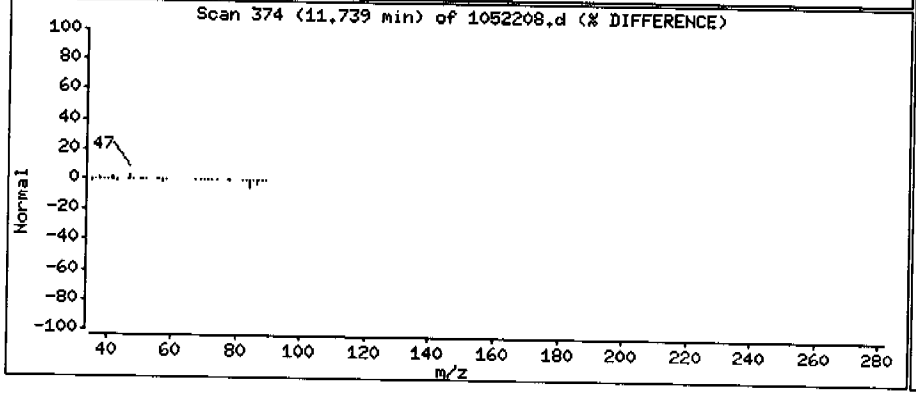












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

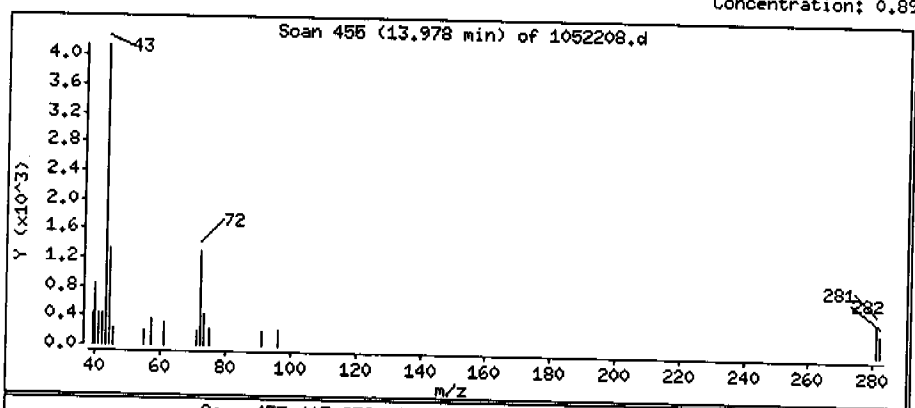
Operator: lo

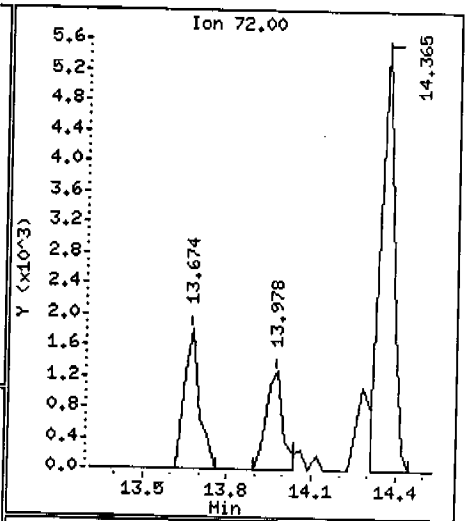
Column phase: RTx-624

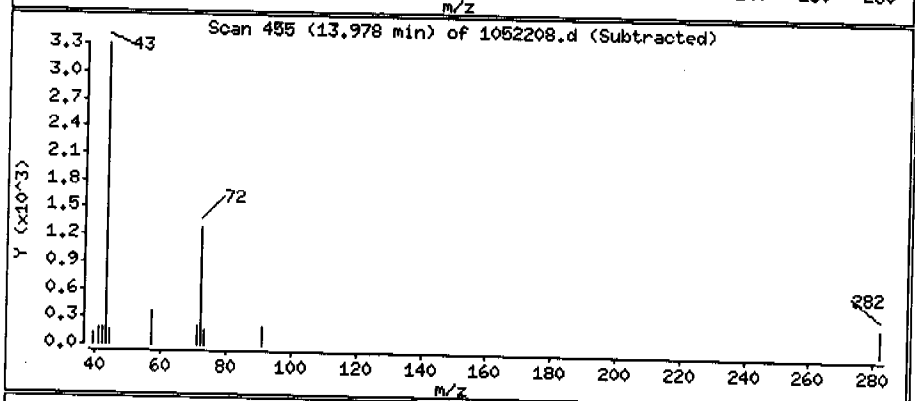
Column diameter: 0.53

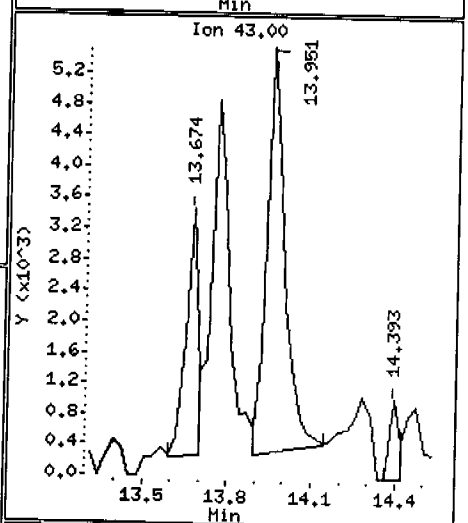
75 2-Butanone

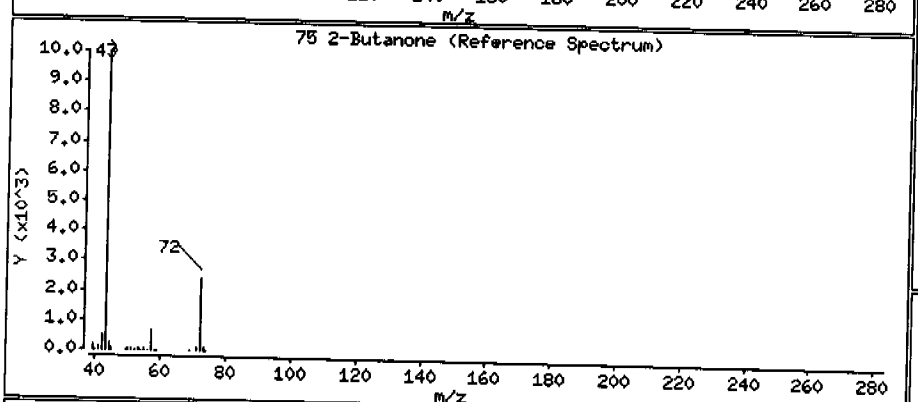
Concentration: 0.8958 PPBV

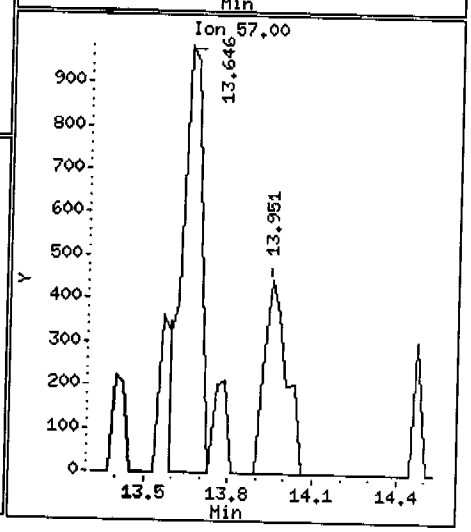


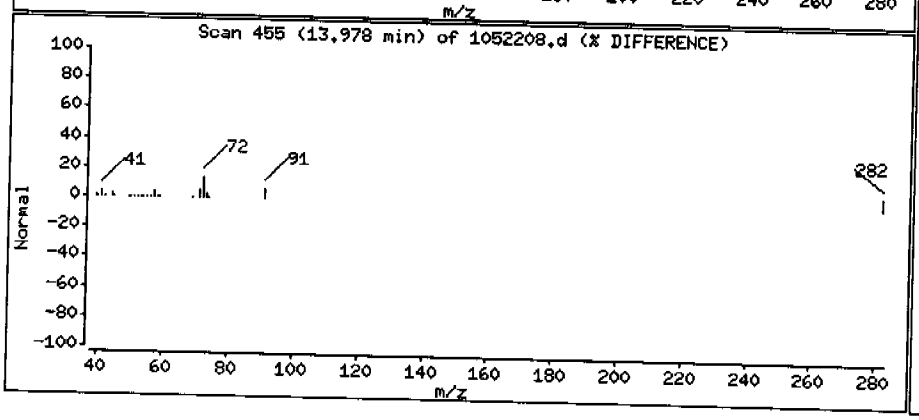












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

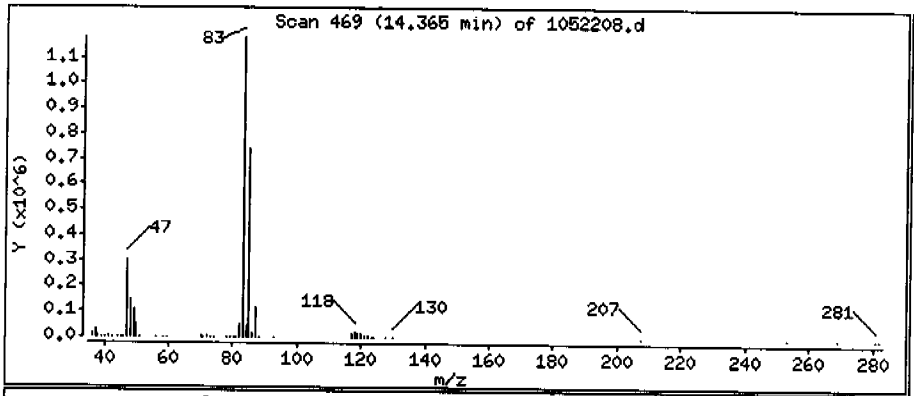
Operator: lo

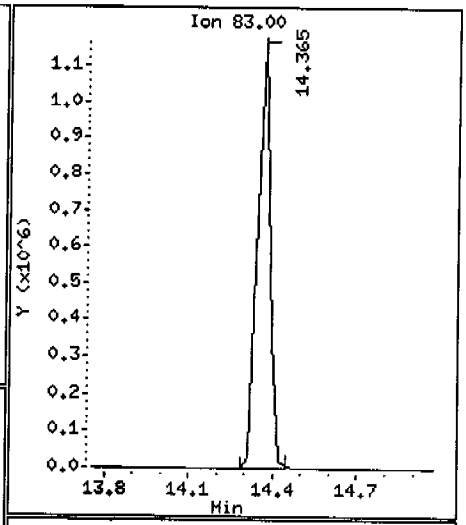
Column phase: RTx-624

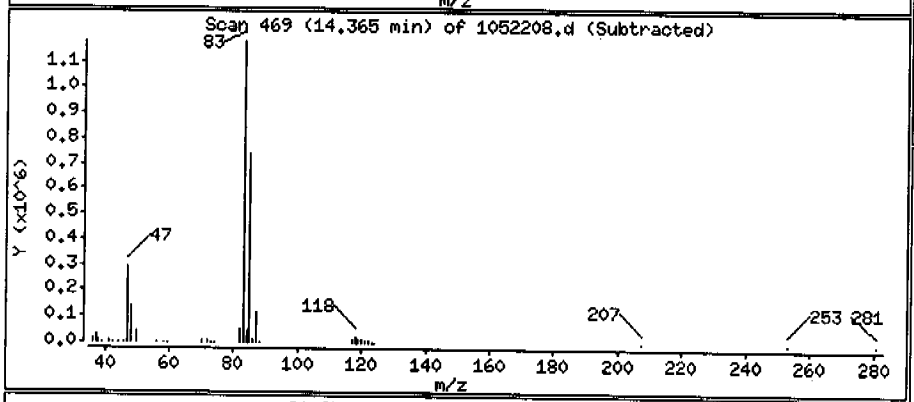
Column diameter: 0.53

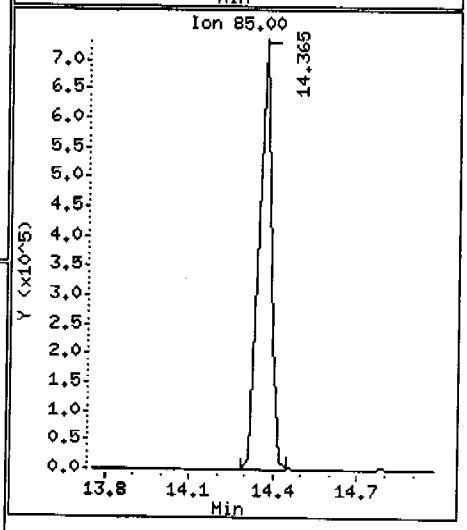
81 Chloroform

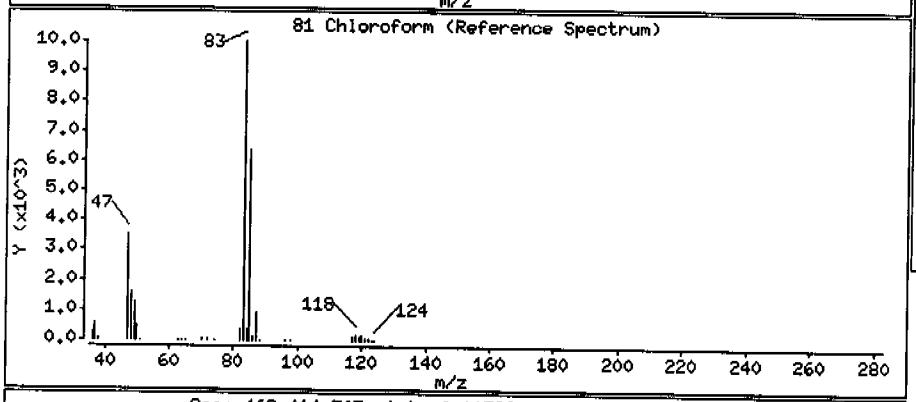
Concentration: 150.90 PPBV

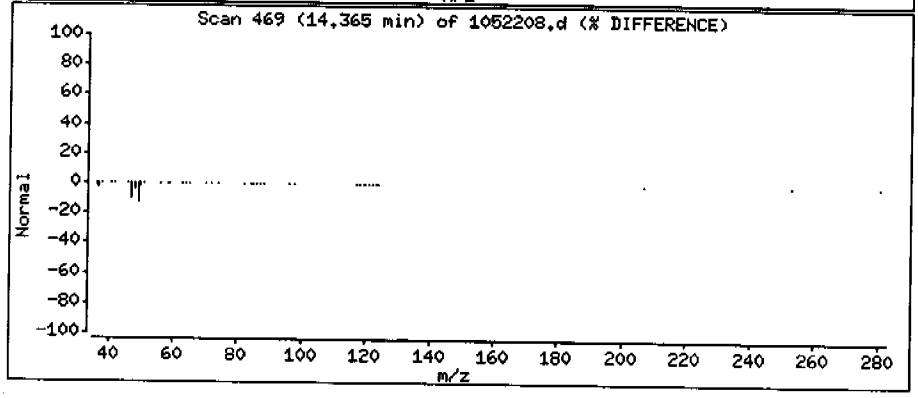












Data File: /chem/msd1.i/1-22may.b/1052208.d

Page 10

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

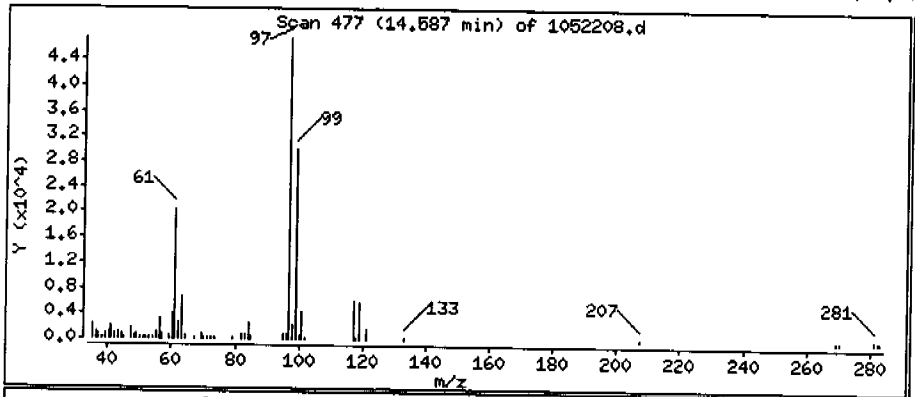
Operator: lo

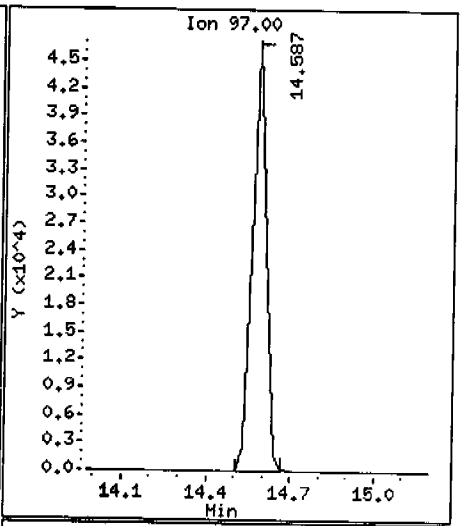
Column phase: RTx-624

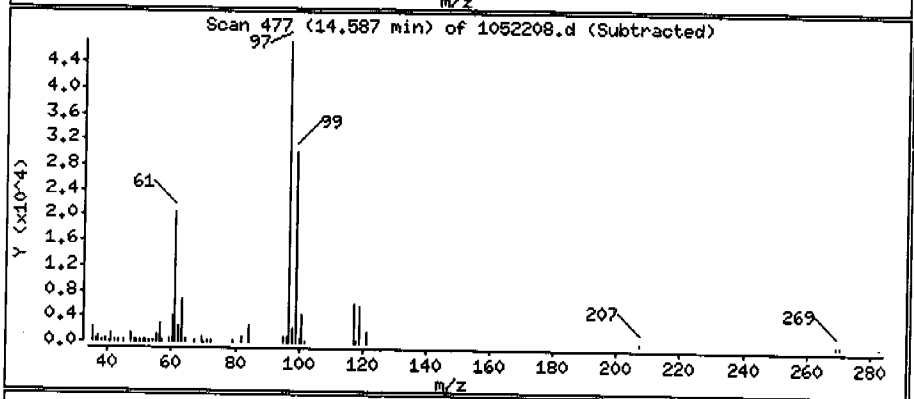
Column diameter: 0.53

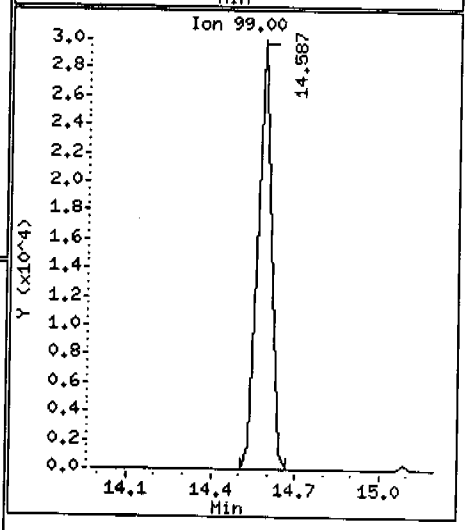
83 1,1,1-Trichloroethane

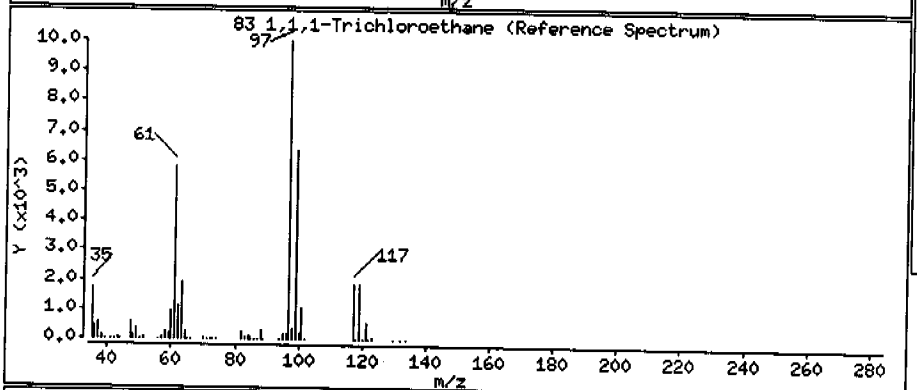
Concentration: 6.417 PPBV

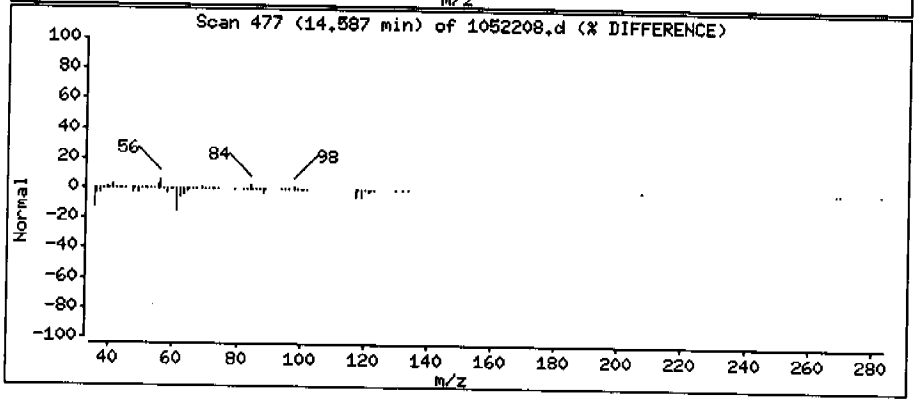












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

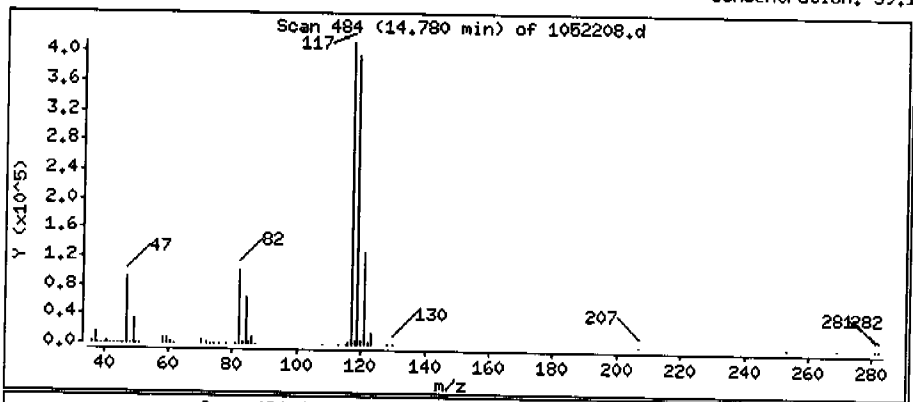
Operator: lo

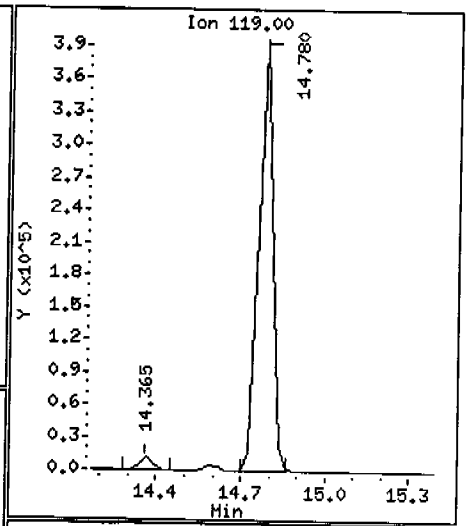
Column phase: RTx-624

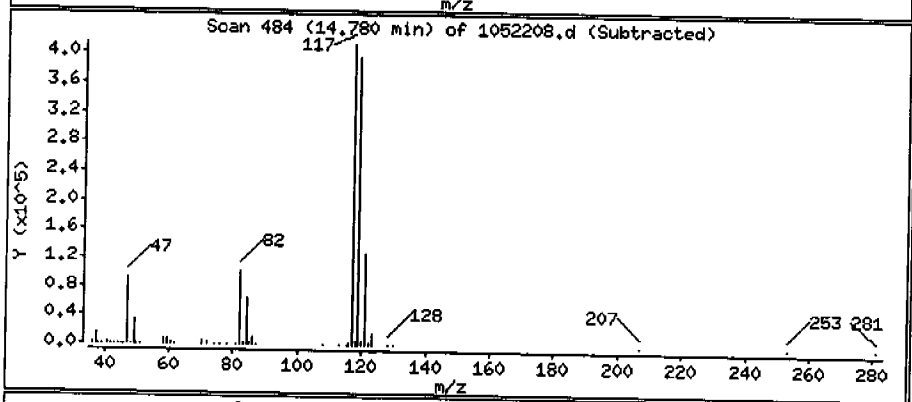
Column diameter: 0.53

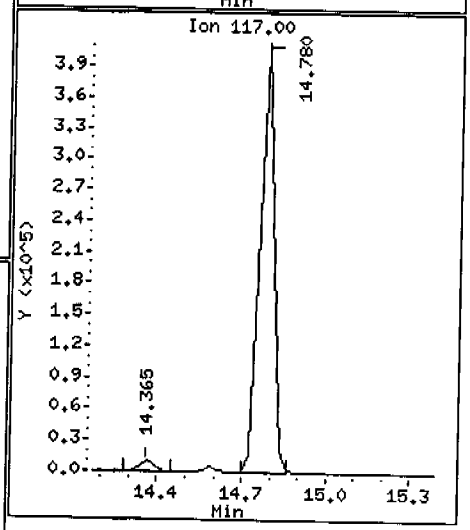
85 Carbon Tetrachloride

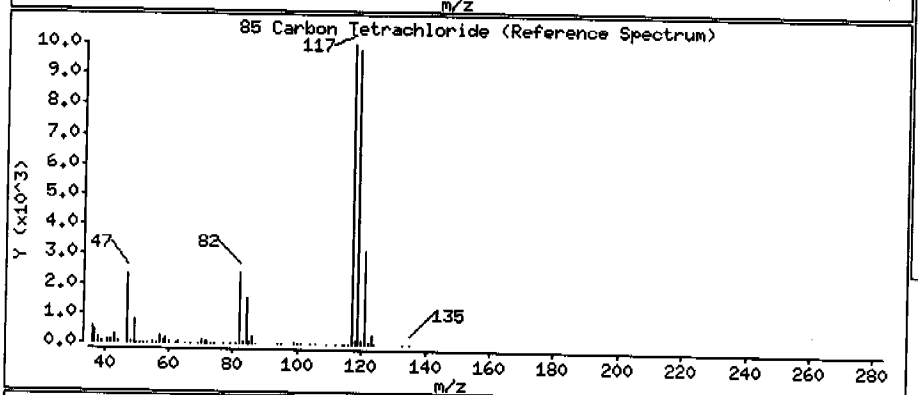
Concentration: 59.106 PPBV

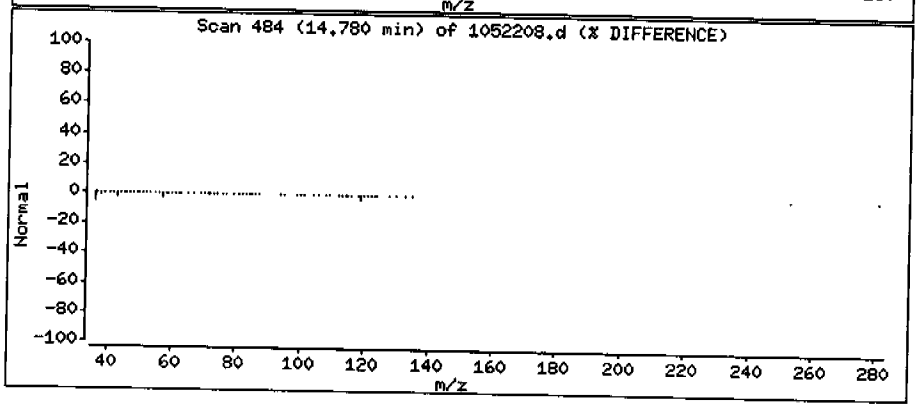












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Sample Info: 100mL #34717

Instrument: msd1.i

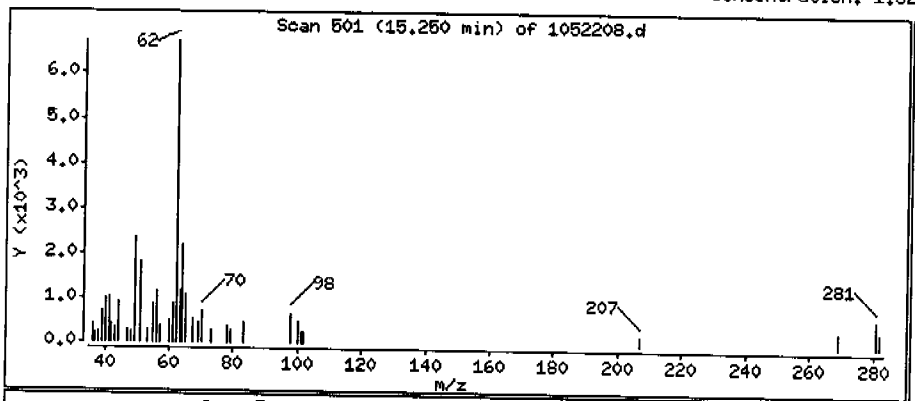
Operator: lo

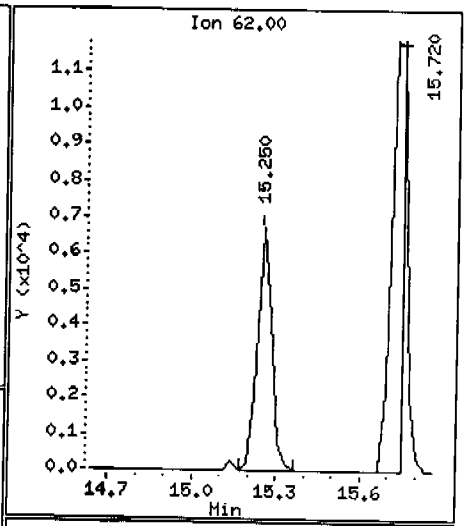
Column phase: RTx-624

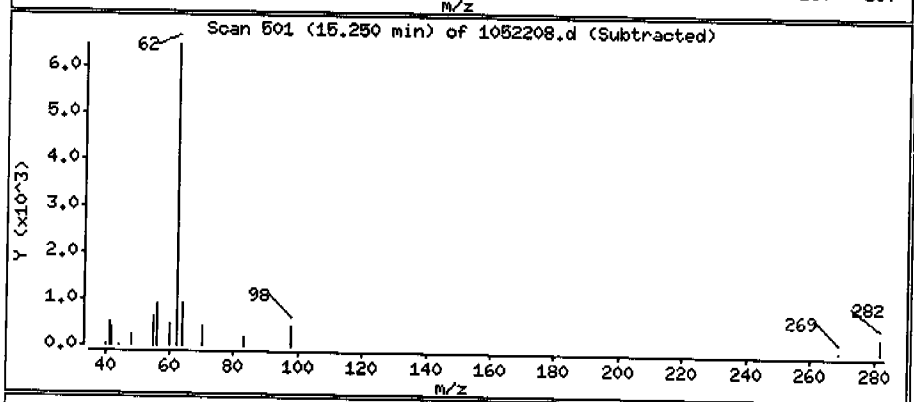
Column diameter: 0.53

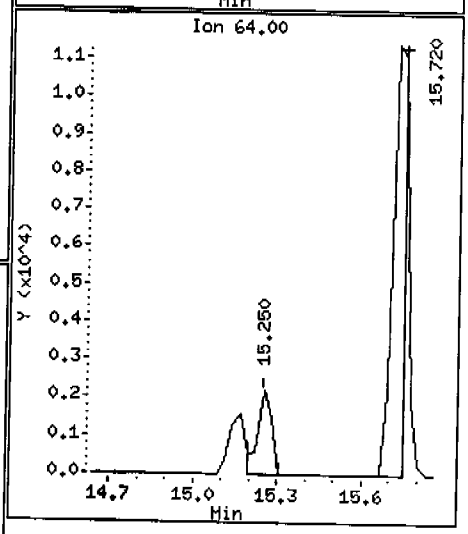
93 1,2-Dichloroethane

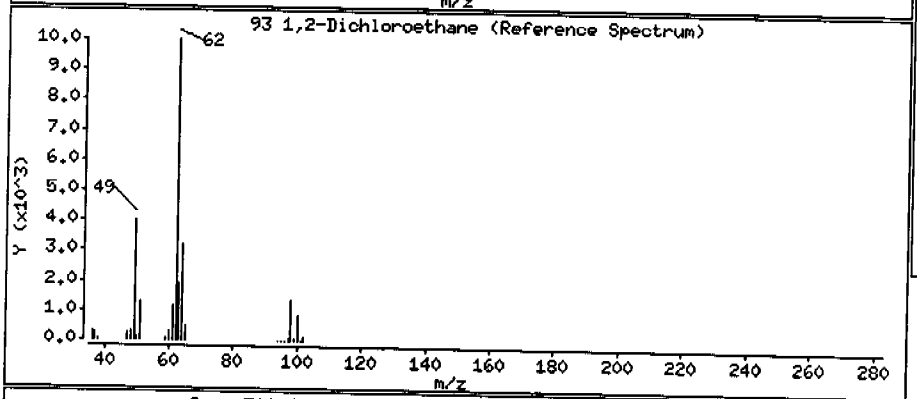
Concentration: 1.327 PPBV

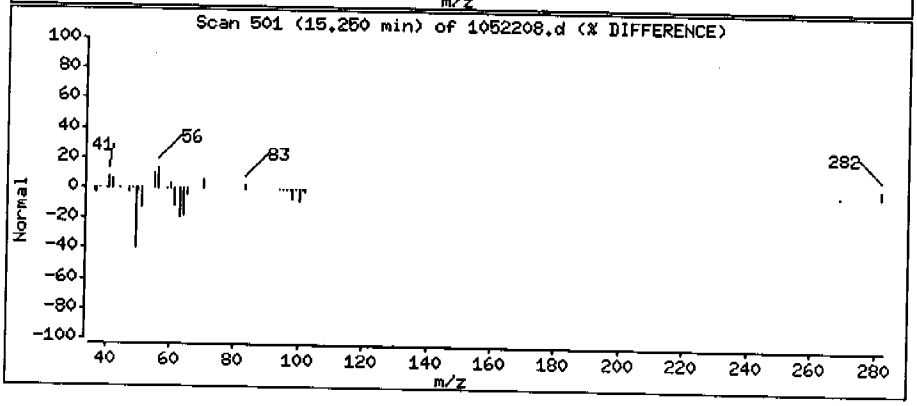












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

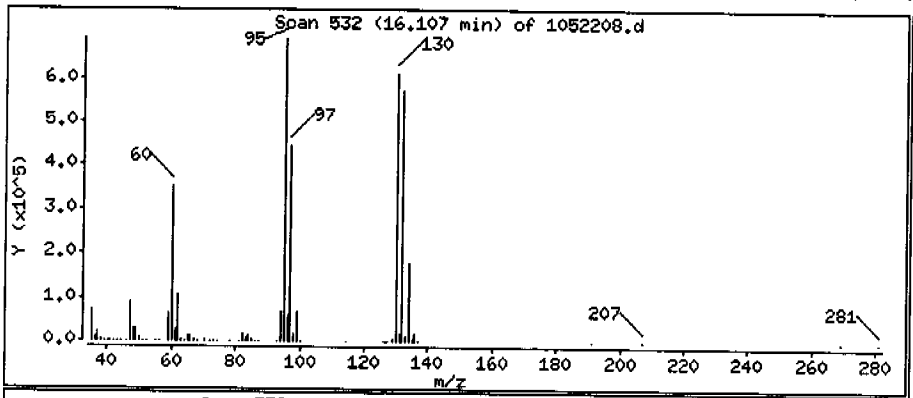
Operator: lo

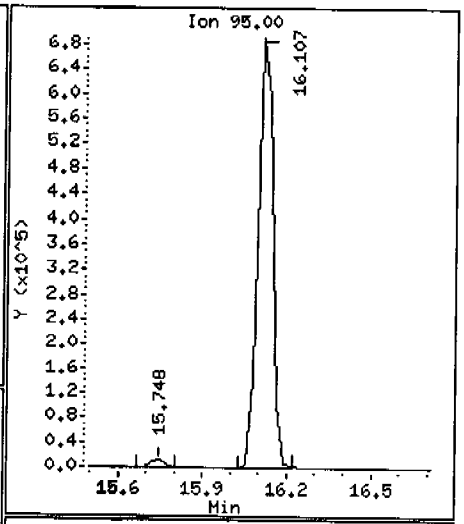
Column phase: RTx-624

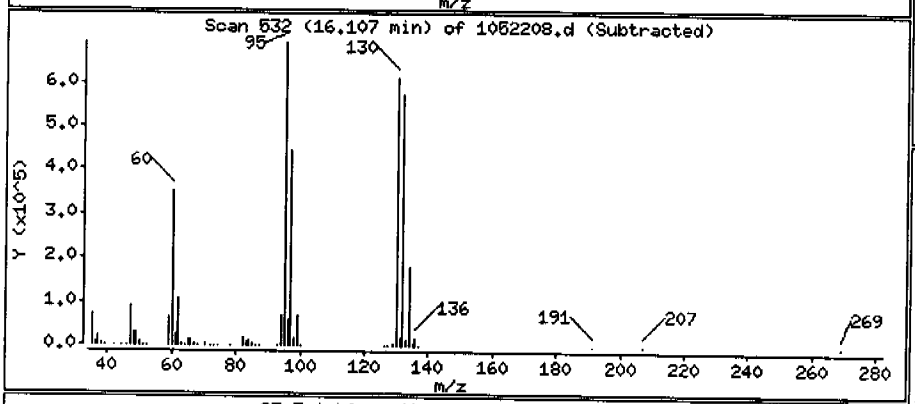
Column diameter: 0.53

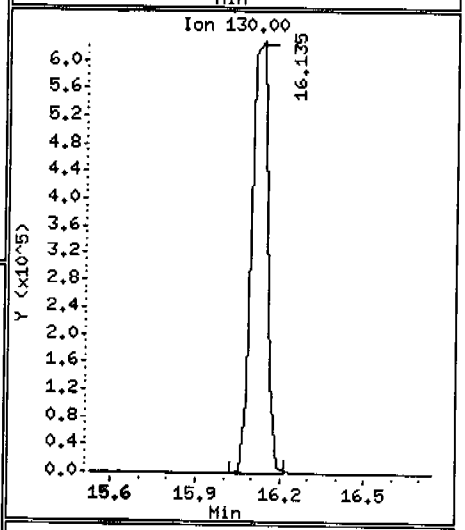
97 Trichloroethene

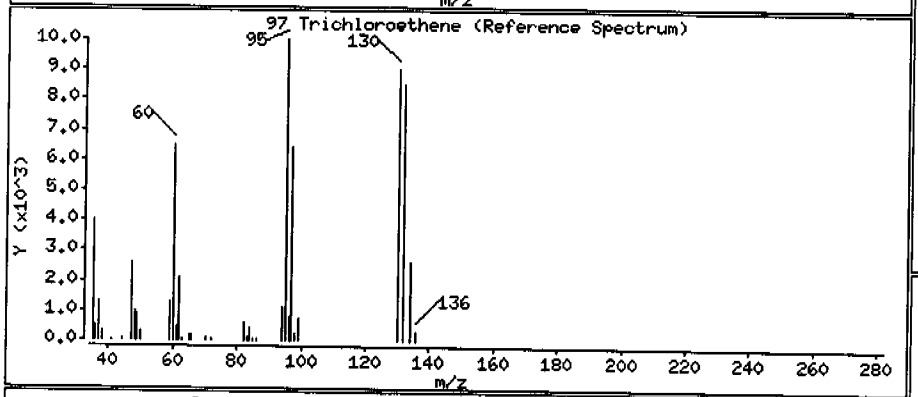
Concentration: 144.87 PPBV

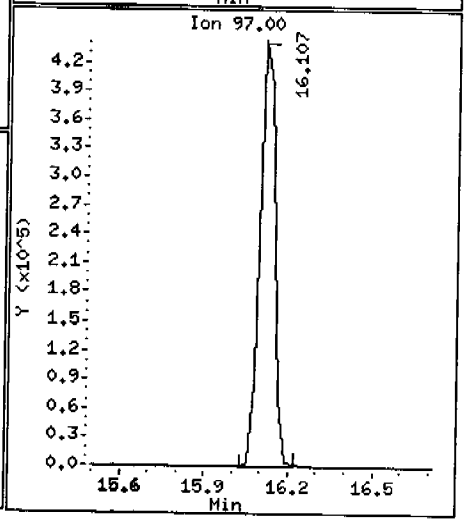


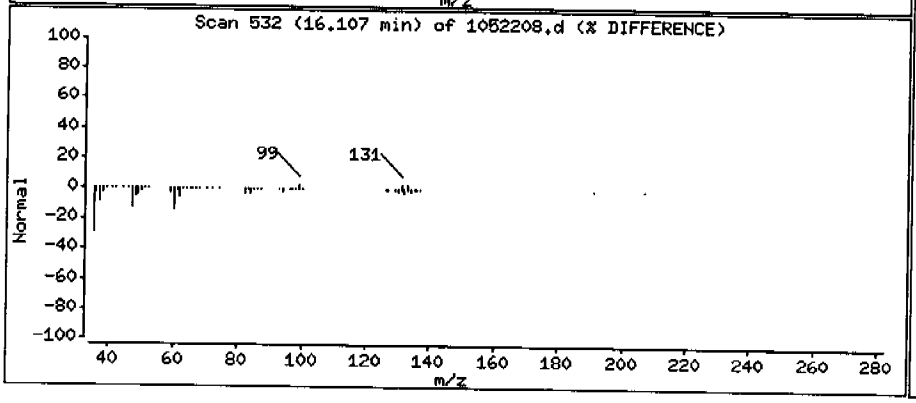












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

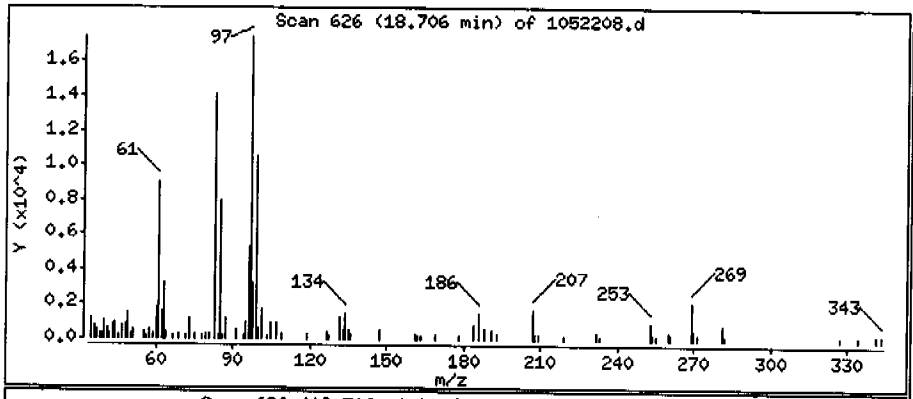
Operator: lo

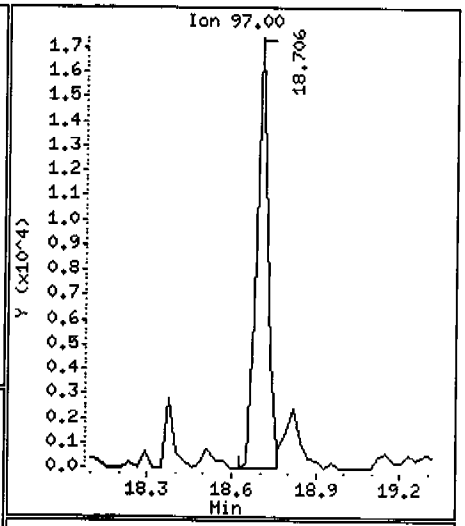
Column phase: RTx-624

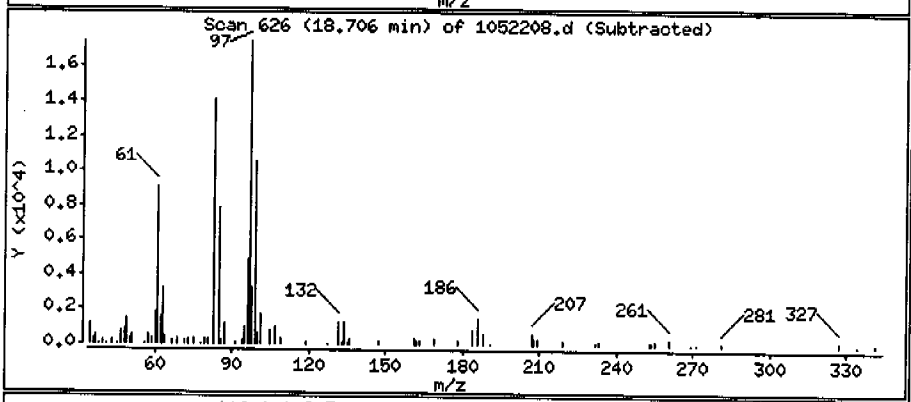
Column diameter: 0.53

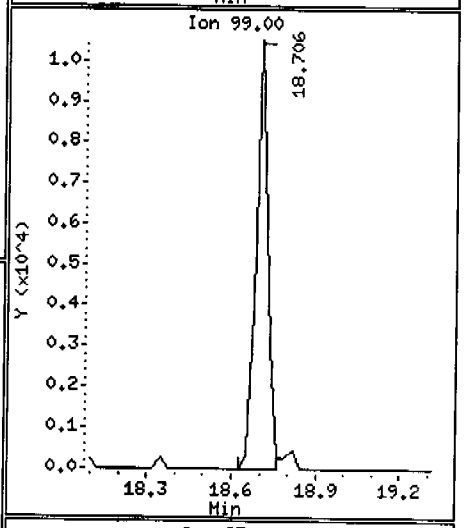
116 1,1,2-Trichloroethane

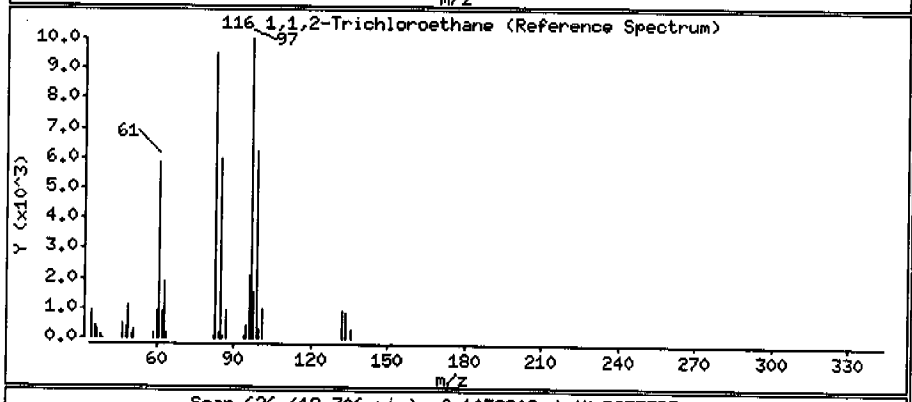
Concentration: 2.401 PPBV

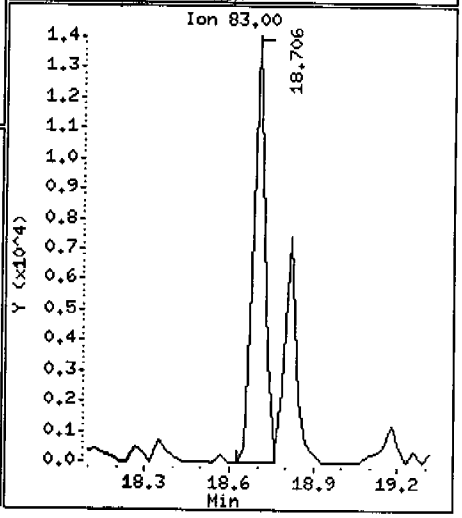


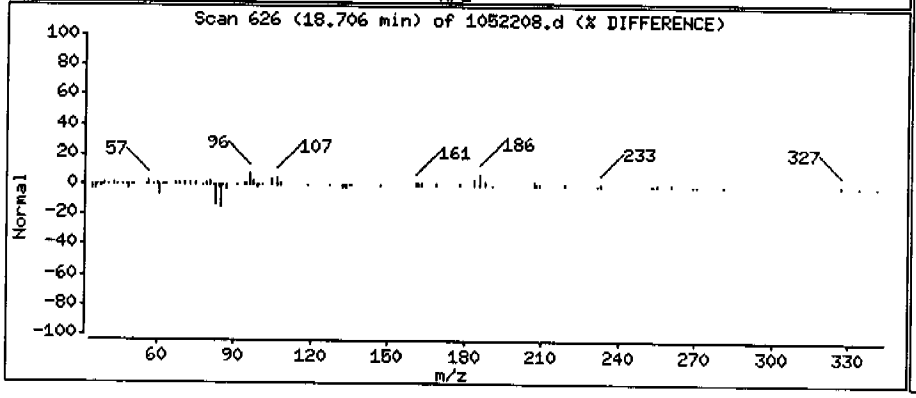












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

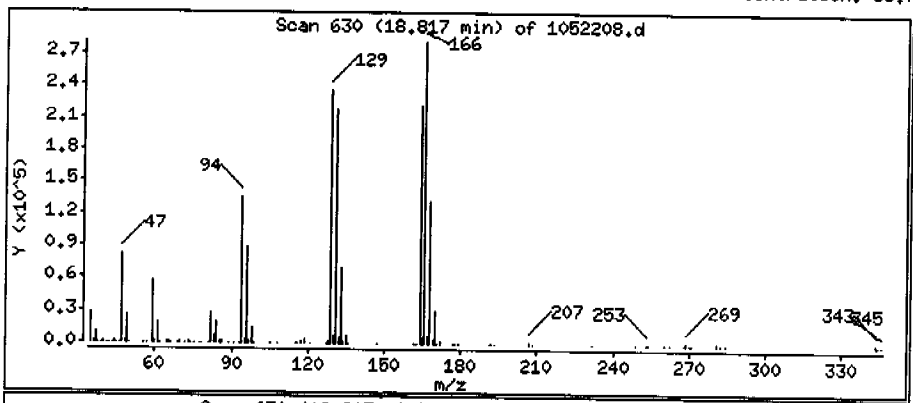
Operator: lo

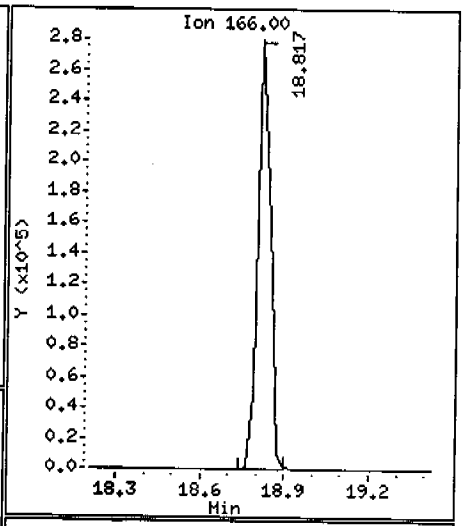
Column phase: RTx-624

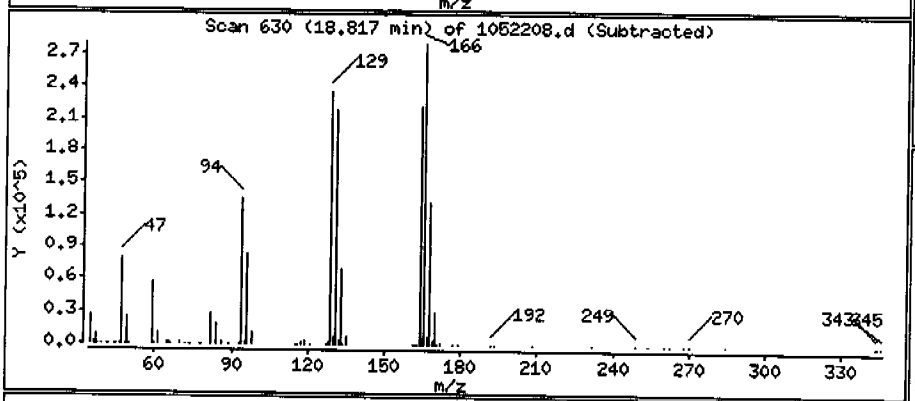
Column diameter: 0.53

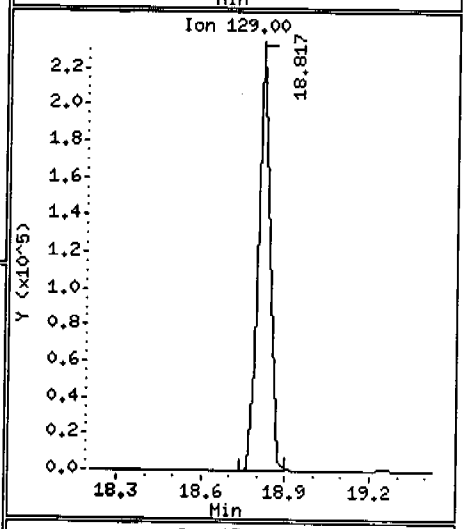
117 Tetrachloroethene

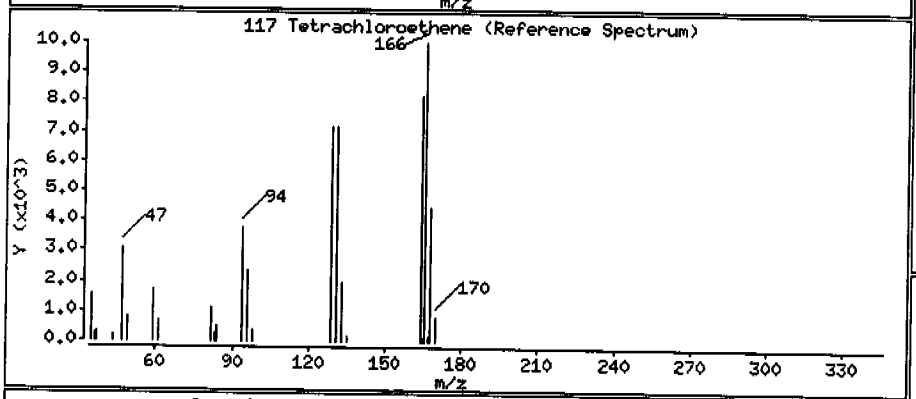
Concentration: 35.796 PPBV

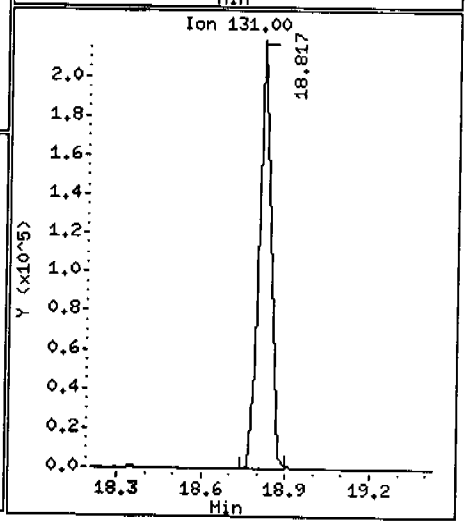


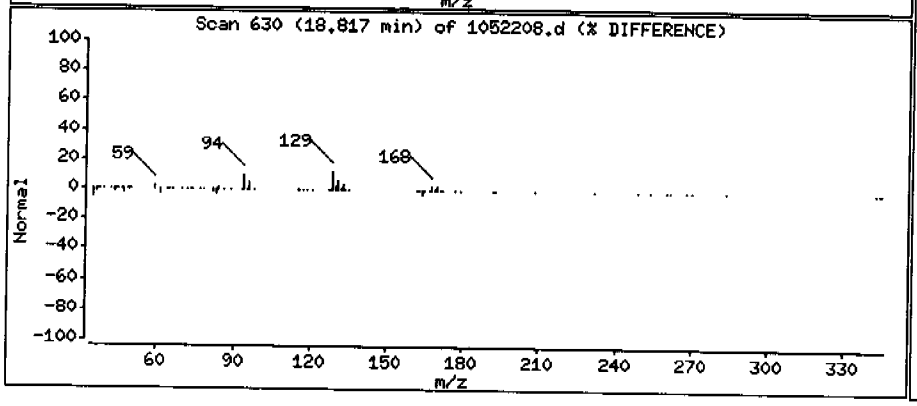












Data File: /chem/msd1.i/1-22may.b/1052208.d

Date : 22-MAY-2008 13:22

Client ID:

Instrument: msd1.i

Sample Info: 100mL #34717

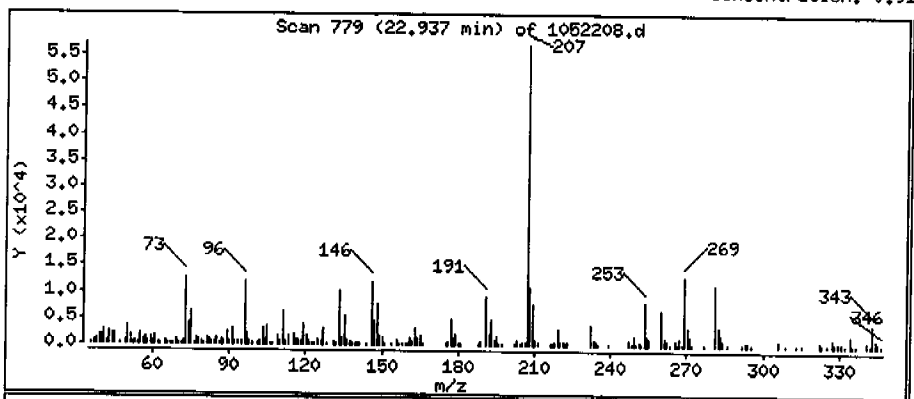
Operator: lo

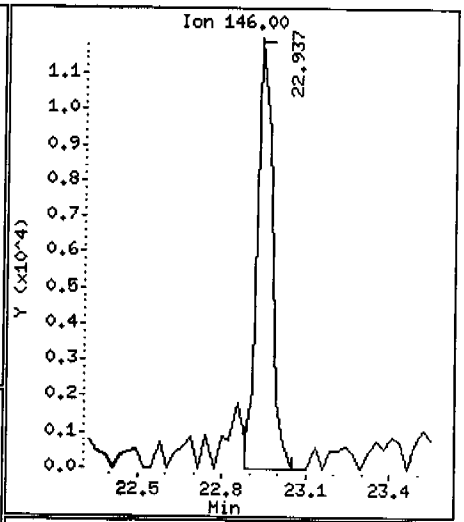
Column phase: RTx-624

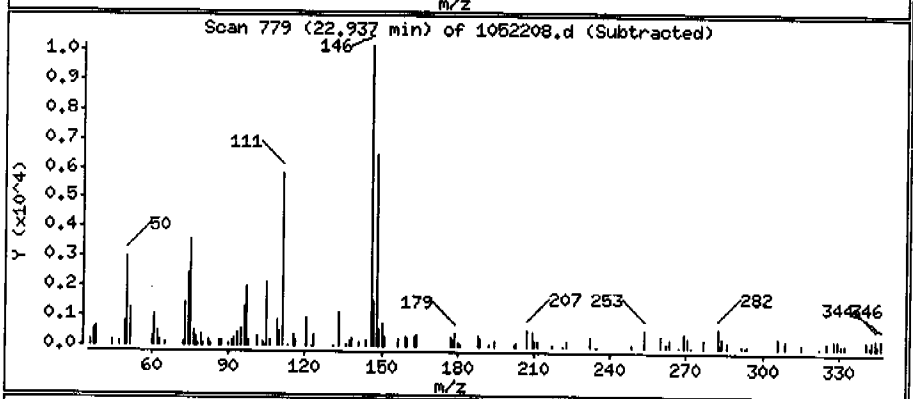
Column diameter: 0.53

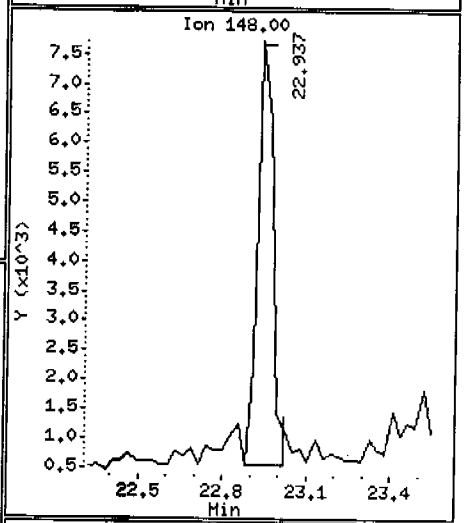
159 1,4-Dichlorobenzene

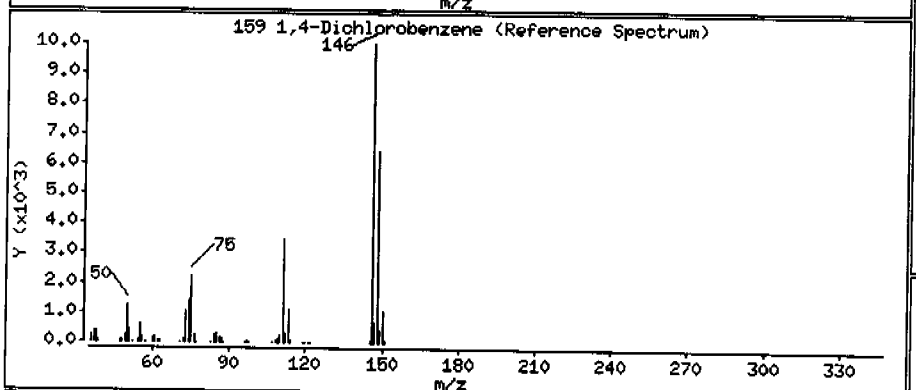
Concentration: 0.9163 PPBV

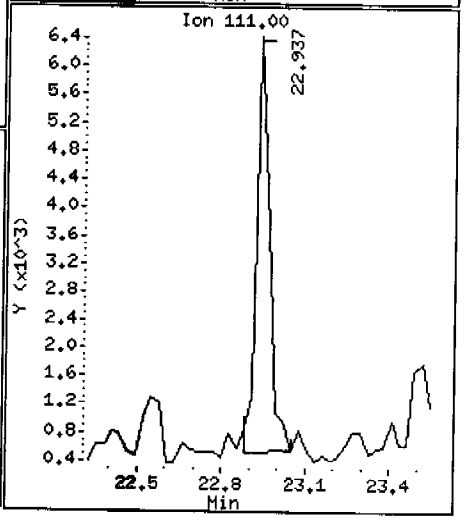


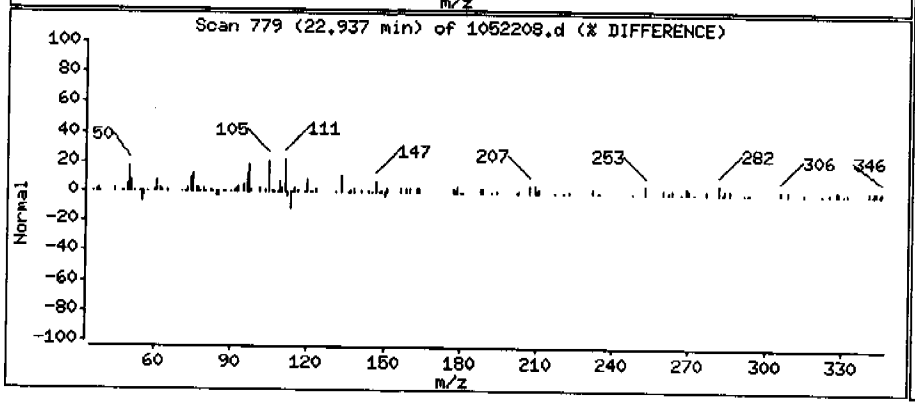












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12245

Lab ID#: 0805274-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	1.6	5.6	8.0
Ethanol	4.6	29	8.6	55
Freon 113	1.1	4.8	8.7	37
1,1-Dichloroethene	1.1	4.4	4.5	17
Carbon Disulfide	1.1	1.8	3.6	5.6
Methylene Chloride	1.1	360	4.0	1200
cis-1,2-Dichloroethene	1.1	1.5	4.5	6.0
Tetrahydrofuran	1.1	1.3	3.4	3.8
Chloroform	1.1	230	5.6	1100
1,1,1-Trichloroethane	1.1	5.9	6.2	32
Carbon Tetrachloride	1.1	98	7.2	610
Benzene	1.1	1.3	3.6	4.1
1,2-Dichloroethane	1.1	4.1	4.6	17
Trichloroethene	1.1	230	6.1	1200
1,1,2-Trichloroethane	1.1	7.8	6.2	42
Tetrachloroethene	1.1	25	7.7	170
1,4-Dichlorobenzene	1.1	2.4	6.8	14

0191

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12245

Lab ID#: 0805274-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] 1052212
Dil. Factor: 2.28

Date of Collection: 5/9/08
Date of Analysis: 5/22/08 06:09 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	1.6	5.6	8.0
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	4.6	Not Detected	9.4	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	1.1	Not Detected	4.4	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	4.6	29	8.6	55
Freon 113	1.1	4.8	8.7	37
1,1-Dichloroethene	1.1	4.4	4.5	17
Acetone	4.6	Not Detected	11	Not Detected
2-Propanol	4.6	Not Detected	11	Not Detected
Carbon Disulfide	1.1	1.8	3.6	5.6
Methylene Chloride	1.1	360	4.0	1200
Methyl tert-butyl ether	1.1	Not Detected	4.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	1.1	1.5	4.5	6.0
Tetrahydrofuran	1.1	1.3	3.4	3.8
Chloroform	1.1	230	5.6	1100
1,1,1-Trichloroethane	1.1	5.9	6.2	32
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	98	7.2	610
Benzene	1.1	1.3	3.6	4.1
1,2-Dichloroethane	1.1	4.1	4.6	17
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	230	6.1	1200
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	7.8	6.2	42
Tetrachloroethene	1.1	25	7.7	170

0192

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12245

Lab ID#: 0805274-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052212 Date Collection: 5/9/08
Dil. Factor: 2.28 Date Analysis: 5/22/08 06:09 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	4.6	Not Detected	19	Not Detected
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	2.4	6.8	14
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected U J	34	Not Detected U J
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Chlorodifluoromethane	4.6	Not Detected	16	Not Detected
Methanol	110	Not Detected	150	Not Detected
n-Butanol	4.6	Not Detected	14	Not Detected
Propylene	4.6	Not Detected	7.8	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	96	70-130

0193

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052212.d
Lab Smp Id: 0805274-08A
Inj Date : 22-MAY-2008 18:09
Operator : kr Inst ID: msd1.i
Smp Info : 75mL #34484
Misc Info : 6.5"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 2.28000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.255	14.255 (1.000)	130	284757	25.0000		80.00- 120.00	100.00
	14.255	14.255 (1.000)	128	227901			27.30- 127.30	80.03
	14.255	14.255 (1.000)	49	542255			131.96- 231.96	190.43
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1505360	25.0000		80.00- 120.00	100.00
	15.720	15.748 (1.000)	88	235375			0.00- 65.38	15.64
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.034	20.033 (1.000)	117	1683612	25.0000		80.00- 120.00	100.00
	20.006	20.006 (1.000)	82	966929			8.42- 108.42	57.43
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.140	15.140 (1.062)	65	463298	24.3803	24.380	80.00- 120.00	100.00
	15.140	15.140 (1.062)	67	241785			6.04- 106.04	52.19
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.960 (1.140)	98	1680497	24.6376	24.638	80.00- 120.00	100.00
	17.960	17.960 (1.140)	70	172552			0.00- 60.35	10.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1105806			15.45- 115.45	65.80
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	863720	23.9752	23.975	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1366153			110.38- 210.38	158.17
21.527	21.527 (1.075)	176	822510			44.94- 144.94	95.23
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.862	2.862 (0.201)	85	22159	0.70590	1.609	80.00- 120.00	100.00
2.834	2.862 (0.199)	87	2563			0.00- 75.39	11.57
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.707)	45	82238	12.8515	29.301	80.00- 120.00	100.00
10.080	10.135 (0.707)	43	24601			0.00- 75.81	29.91
10.080	10.135 (0.707)	46	2145			0.00- 92.85	2.61
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.742)	151	44399	2.10026	4.789	80.00- 120.00	100.00
10.577	10.577 (0.742)	153	30157			13.47- 113.47	67.92
10.577	10.577 (0.742)	101	62426			83.83- 183.83	140.60
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.738)	61	56233	1.91873	4.375	80.00- 120.00	100.00
10.522	10.522 (0.738)	96	31814			3.44- 103.44	56.58
10.522	10.522 (0.738)	98	18741			0.00- 84.21	33.33
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.826 (0.761)	76	37919	0.78551	1.791	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.823)	49	4014697	158.138	360.55	80.00- 120.00	100.00
11.739	11.739 (0.823)	84	2532561			14.84- 114.84	63.08
11.739	11.739 (0.823)	51	1200218			0.00- 79.96	29.90
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.975)	61	20261	0.66399	1.514	80.00- 120.00	100.00
13.895	13.895 (0.975)	96	15695			22.01- 122.01	77.47
13.923	13.895 (0.977)	98	8741			0.00- 95.61	43.14
78 Tetrahydrofuran					CAS #: 109-99-9		
14.282	14.255 (1.002)	42	22449	0.56971	1.299	80.00- 120.00	100.00
14.282	14.255 (1.002)	71	6670			0.00- 81.29	29.71
14.282	14.255 (1.002)	72	6777			0.00- 82.78	30.19
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	3994049	99.1567	226.08	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
81 Chloroform (continued)								
14.365	14.365	(1.008)	85	2484703			12.44- 112.44	62.21
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.587	14.587	(1.023)	97	109346	2.58715	5.899	80.00- 120.00	100.00
14.587	14.587	(1.023)	99	71841			14.11- 114.11	65.70
85 Carbon Tetrachloride						CAS #: 56-23-5		
14.780	14.780	(1.037)	119	1674436	42.8333	97.660	80.00- 120.00	100.00
14.780	14.780	(1.037)	117	1745765			52.90- 152.90	104.26
91 Benzene						CAS #: 71-43-2		
15.140	15.140	(0.961)	78	43369	0.56619	1.291	80.00- 120.00	100.00
15.140	15.140	(0.961)	77	11455			0.00- 73.68	26.41
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.250	15.250	(0.968)	62	57092	1.80238	4.109	80.00- 120.00	100.00
15.250	15.250	(0.968)	64	18654			0.00- 83.51	32.67
97 Trichloroethene						CAS #: 79-01-6		
16.107	16.107	(1.023)	95	3123528	99.4406	226.72	80.00- 120.00	100.00
16.107	16.135	(1.023)	130	3017207			47.48- 147.48	96.60
16.107	16.107	(1.023)	97	2012412			14.50- 114.50	64.43
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.706	18.706	(0.934)	97	121639	3.41394	7.784	80.00- 120.00	100.00
18.706	18.706	(0.934)	99	76806			12.19- 112.19	63.14
18.706	18.706	(0.934)	83	98836			31.81- 131.81	81.25
117 Tetrachloroethene						CAS #: 127-18-4		
18.817	18.817	(0.939)	166	450927	10.9249	24.909	80.00- 120.00	100.00
18.817	18.817	(0.939)	129	352801			27.36- 127.36	78.24
18.817	18.817	(0.939)	131	335054			25.62- 125.62	74.30
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.145)	146	89864	1.03657	2.363	80.00- 120.00	100.00
22.937	22.937	(1.145)	148	55435			16.32- 116.32	61.69
22.937	22.937	(1.145)	111	37062			0.00- 90.95	41.24

Data File: /chem/msd1.i/1-22may.b/1052212.d
Report Date: 27-May-2008 15:26

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052212.d
Lab Smp Id: 0805274-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

Calibration Date: 22-MAY-2008
Calibration Time: 09:16

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	284757	-7.57
95 1,4-Difluorobenze	1638375	983025	2293725	1505360	-8.12
123 Chlorobenzene-d5	1818182	1090909	2545455	1683612	-7.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-22may.b/1052212.d
Report Date: 27-May-2008 15:26

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805274-08A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

Client SDG: 1-22may
Fraction: VOA

Operator: kr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.380	97.52	70-130
$ 111 Toluene-d8	25.000	24.638	98.55	70-130
$ 136 Bromofluorobenzene	25.000	23.975	95.90	70-130

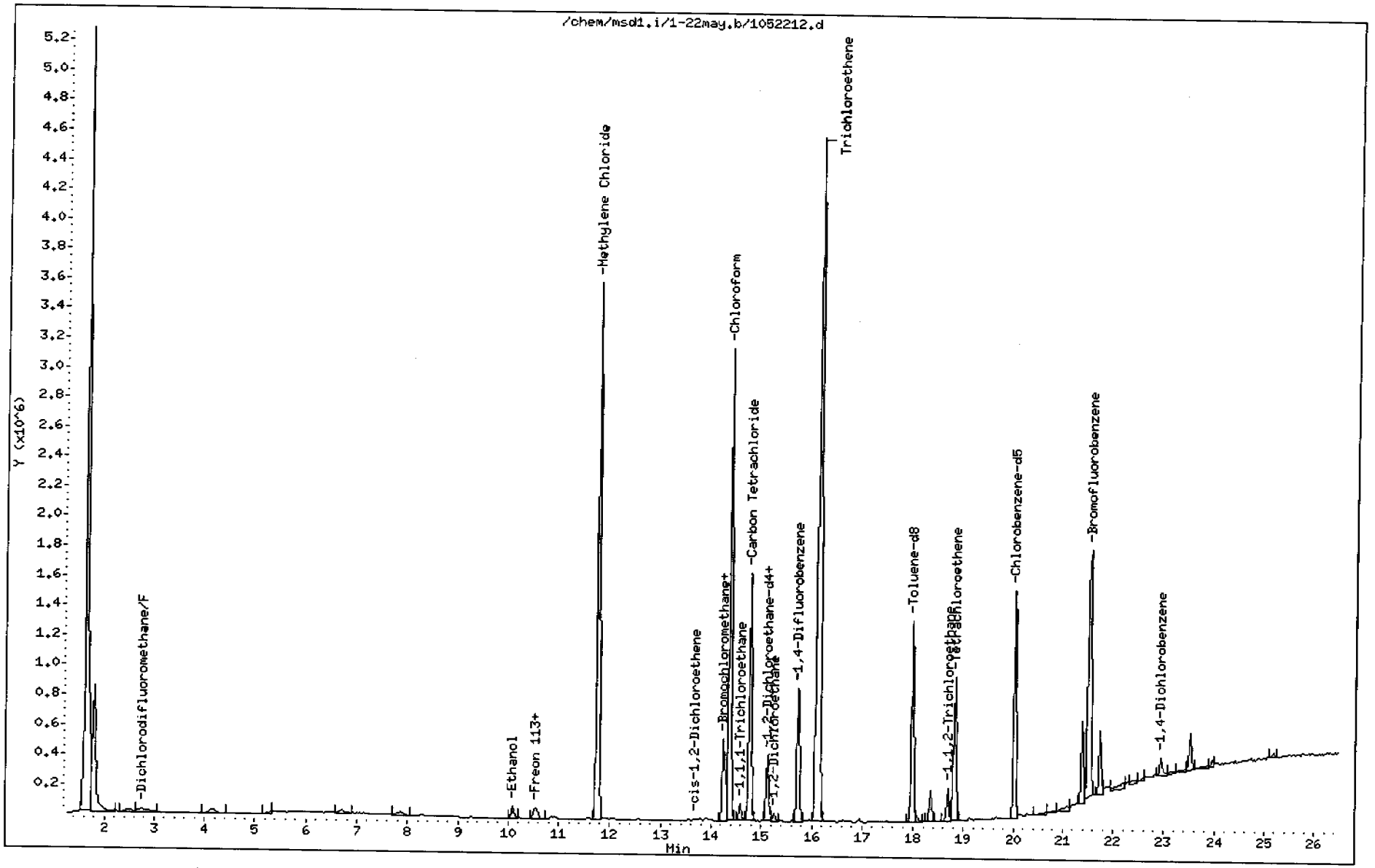
Data File: /chem/msd1.i/1-22may.b/1052212.d
Date : 22-MAY-2008 18:09
Client ID:
Sample Info: 75mL #34484

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0199



Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

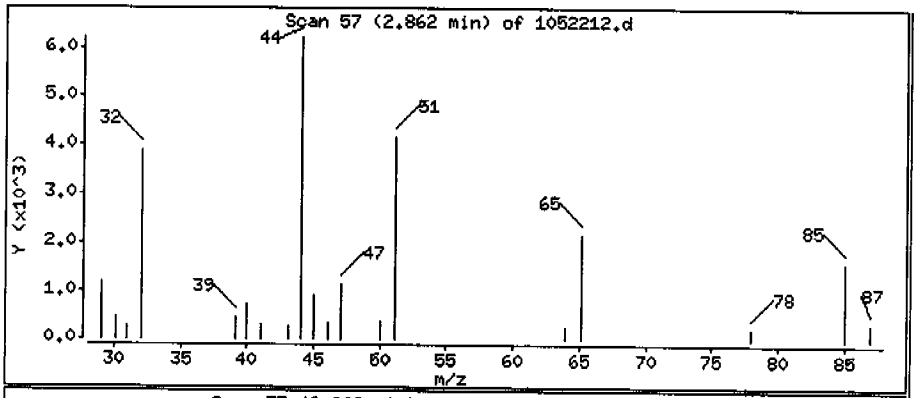
Operator: kr

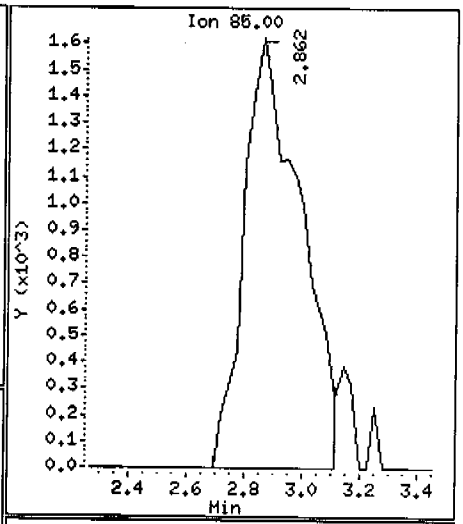
Column phase: RTx-624

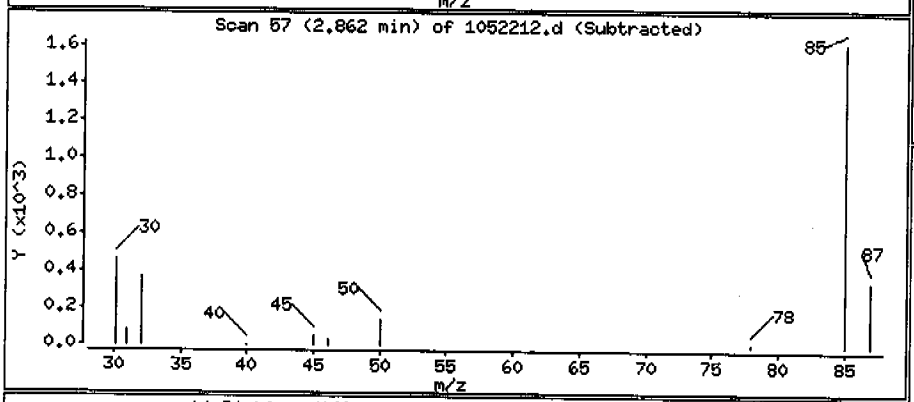
Column diameter: 0.53

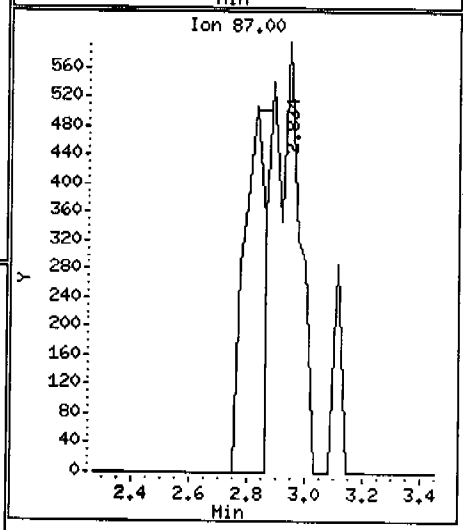
14 Dichlorodifluoromethane/Fr12

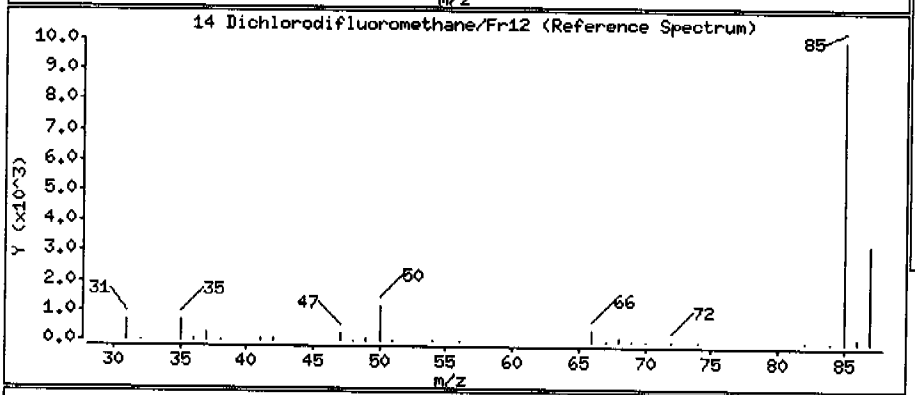
Concentration: 1.609 PPBV

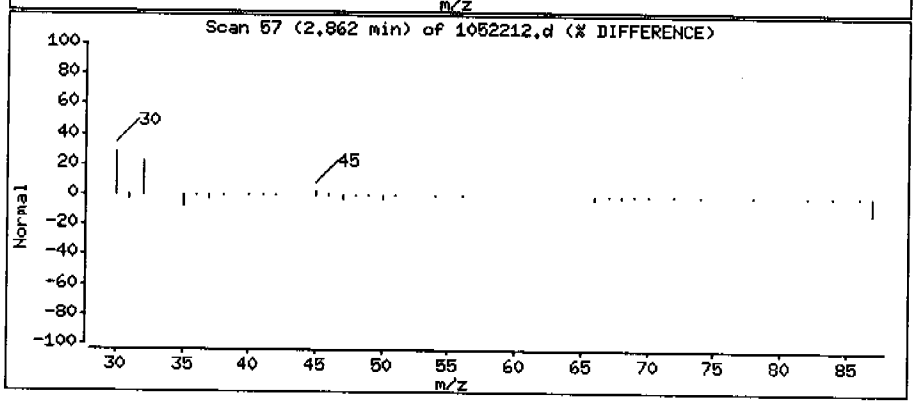












0200

Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

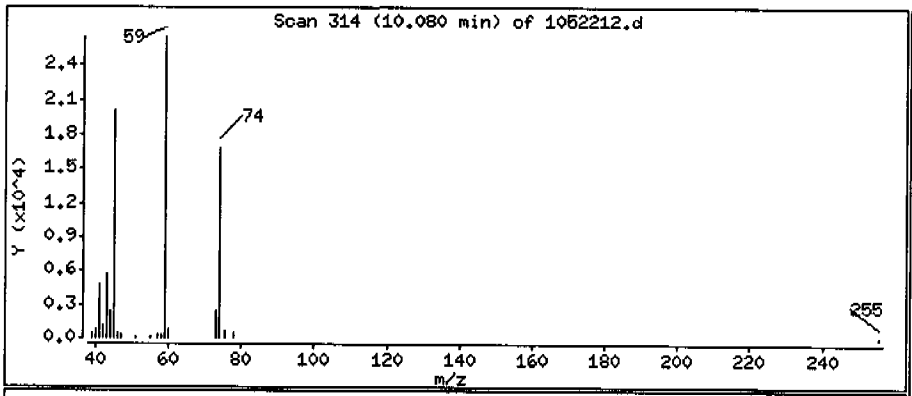
Operator: kr

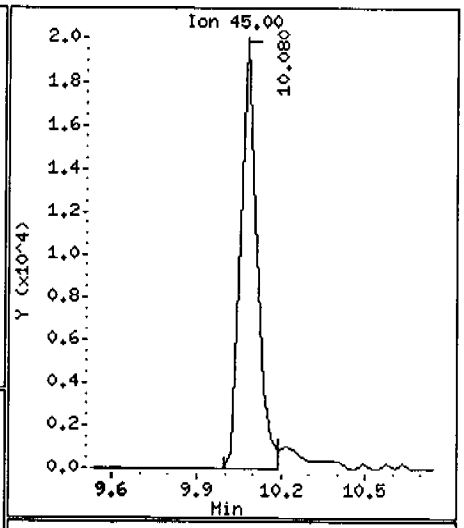
Column phase: RTx-624

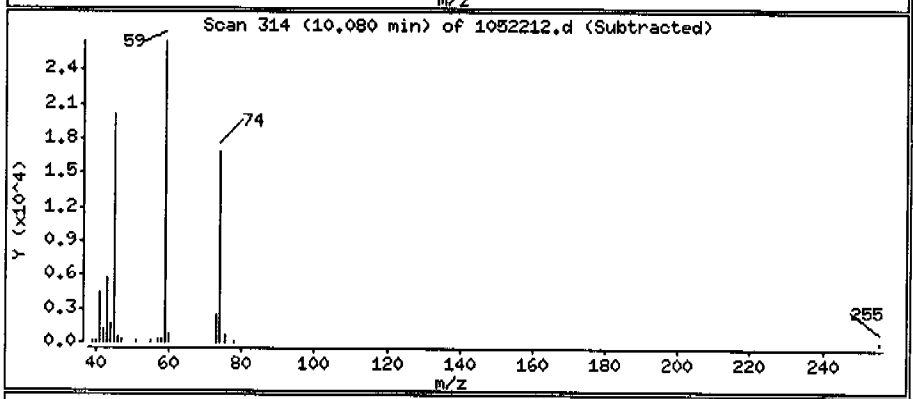
Column diameter: 0.53

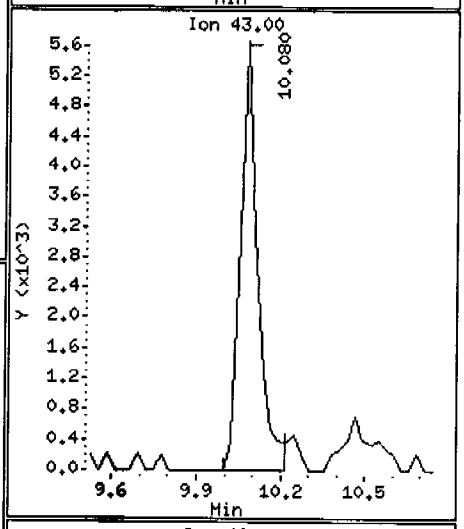
38 Ethanol

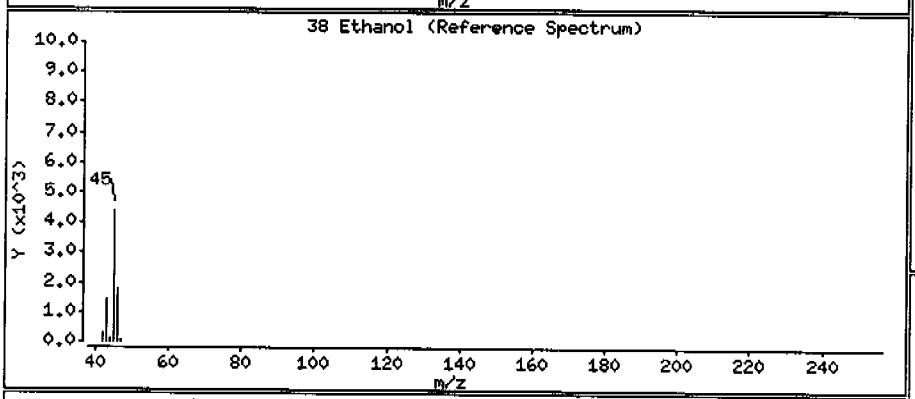
Concentration: 29.301 PPBV

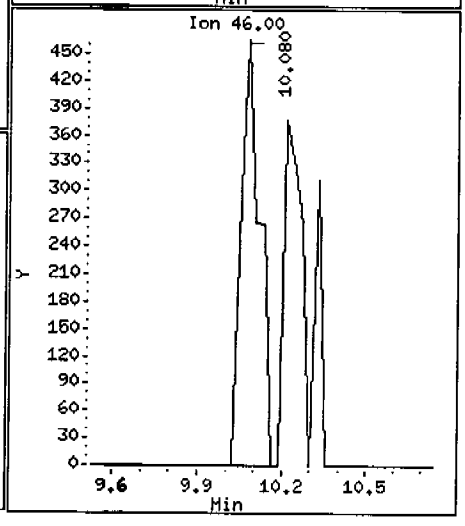


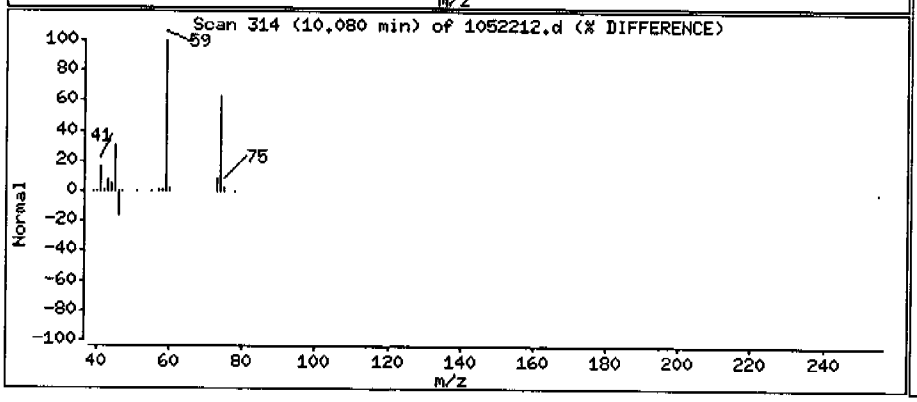












0201

Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

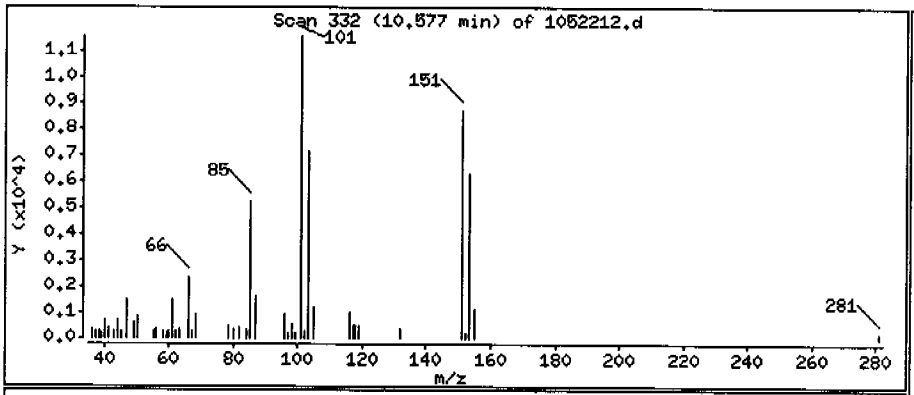
Operator: kr

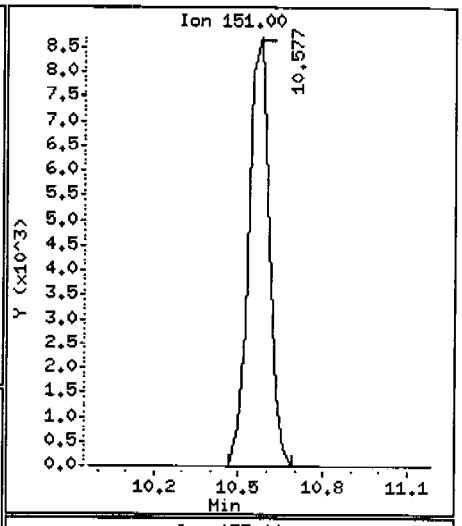
Column phase: RTx-624

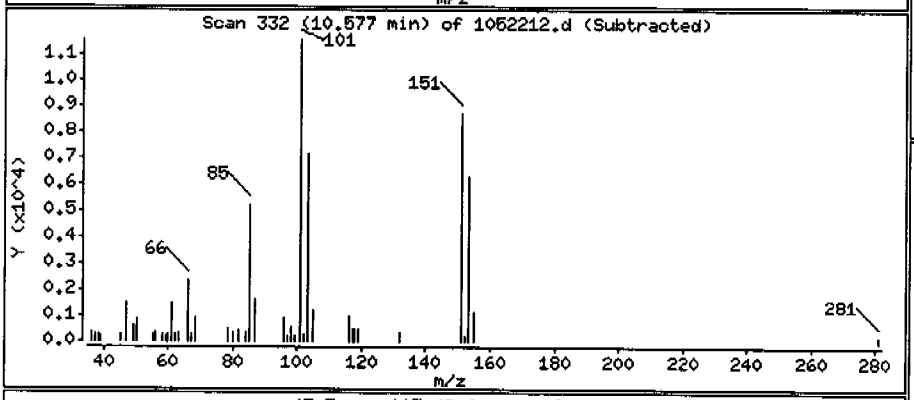
Column diameter: 0.53

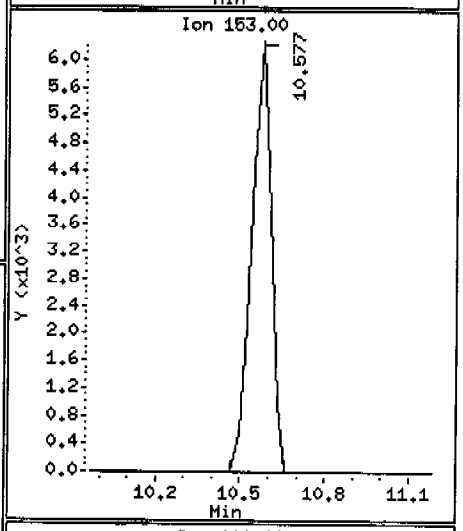
43 Freon 113

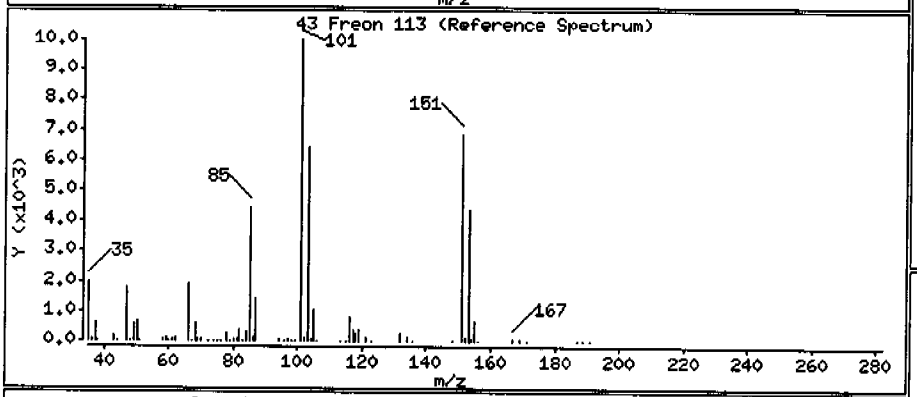
Concentration: 4.789 PPBV

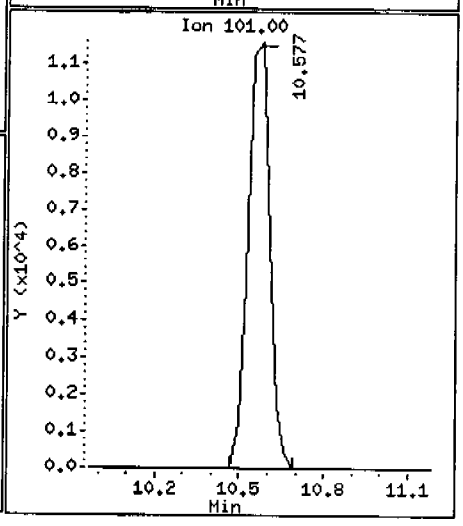


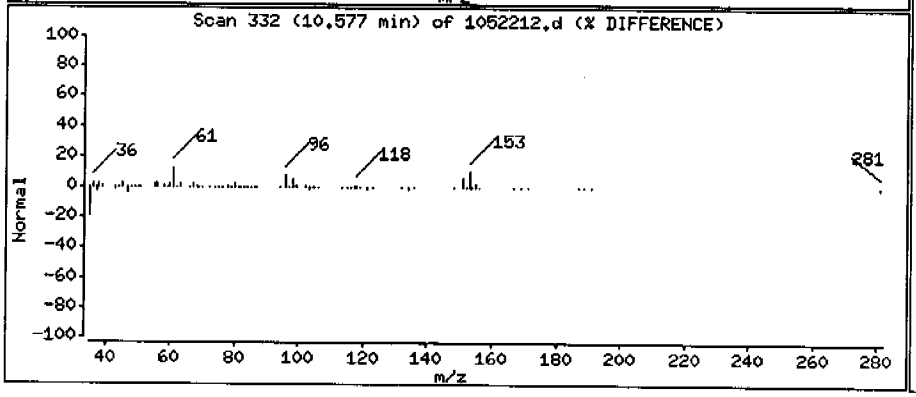












0202

Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Sample Info: 75mL #34484

Instrument: msd1.i

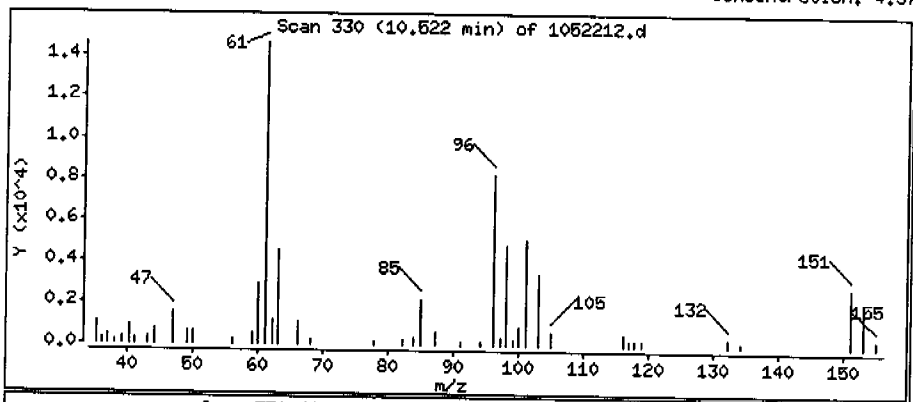
Operator: kr

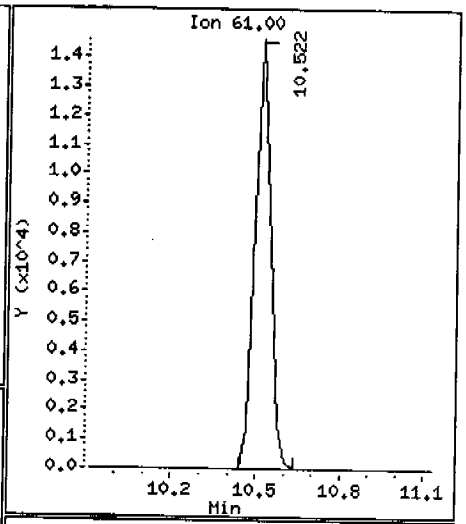
Column phase: RTx-624

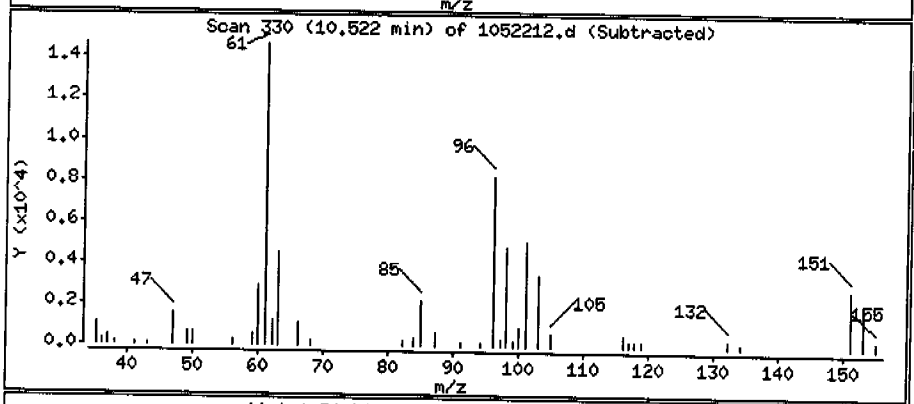
Column diameter: 0.53

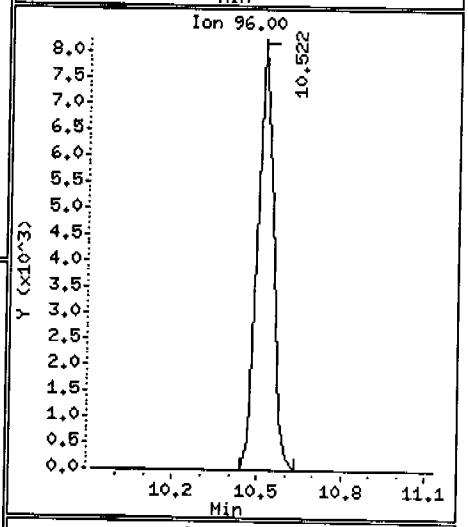
44 1,1-Dichloroethene

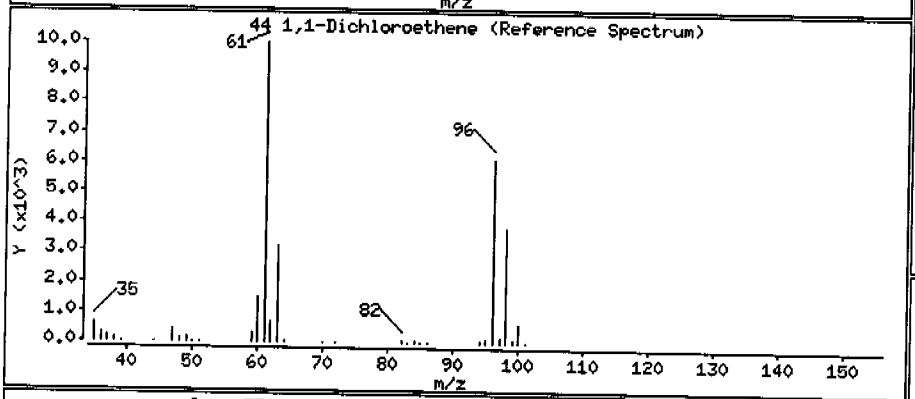
Concentration: 4.375 PPBV

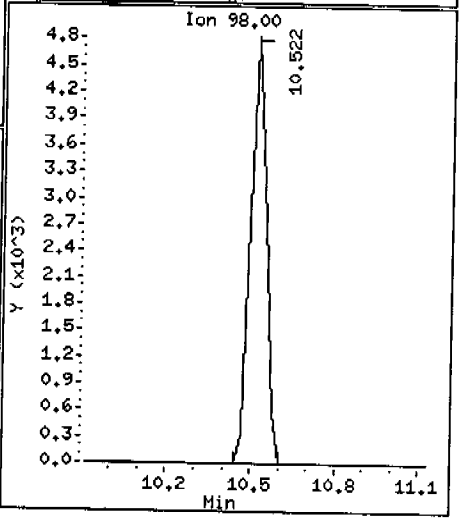


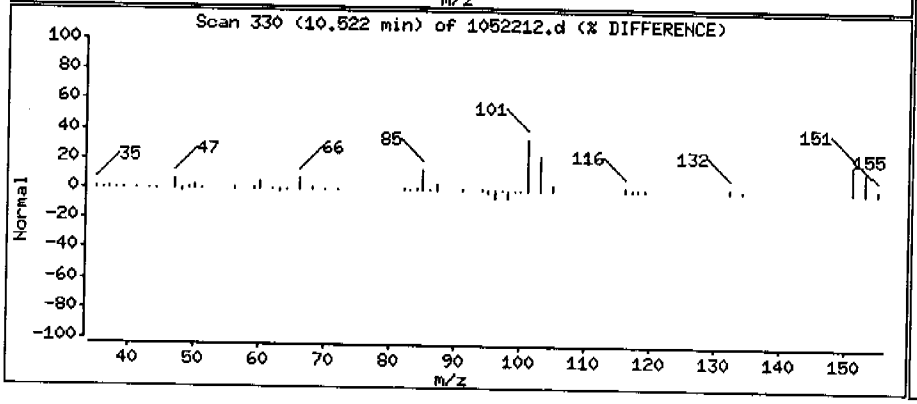












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

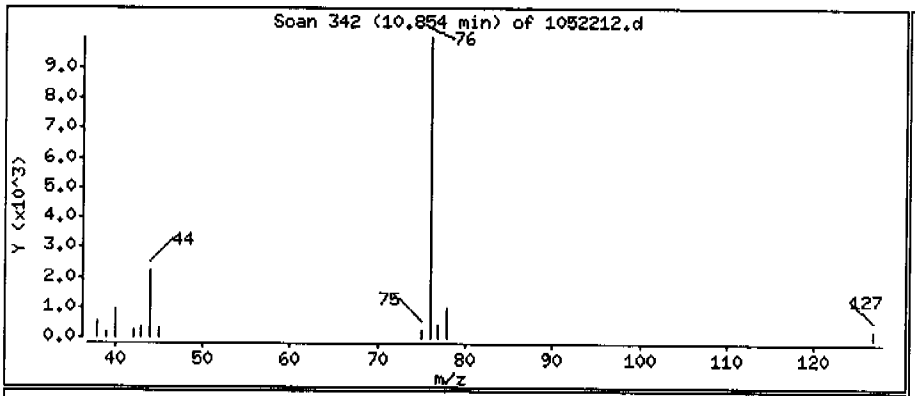
Operator: kr

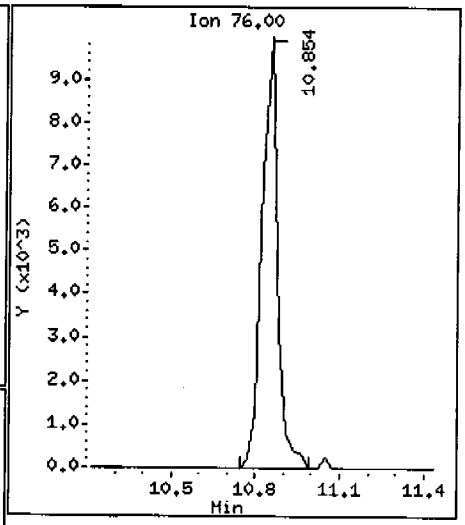
Column phase: RTx-624

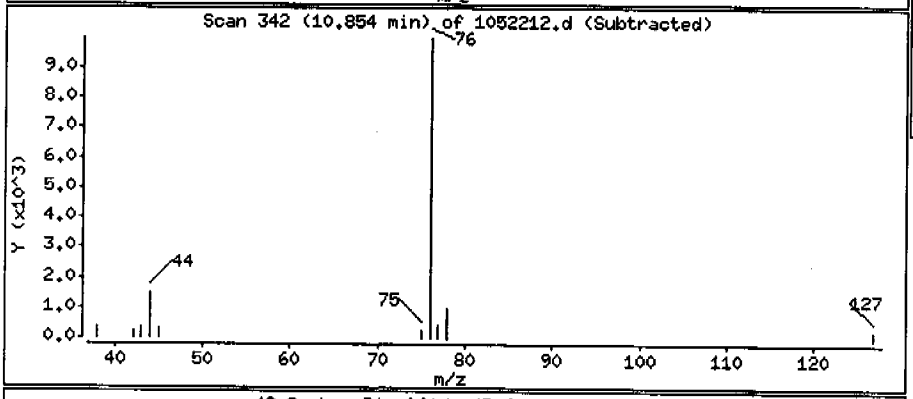
Column diameter: 0.53

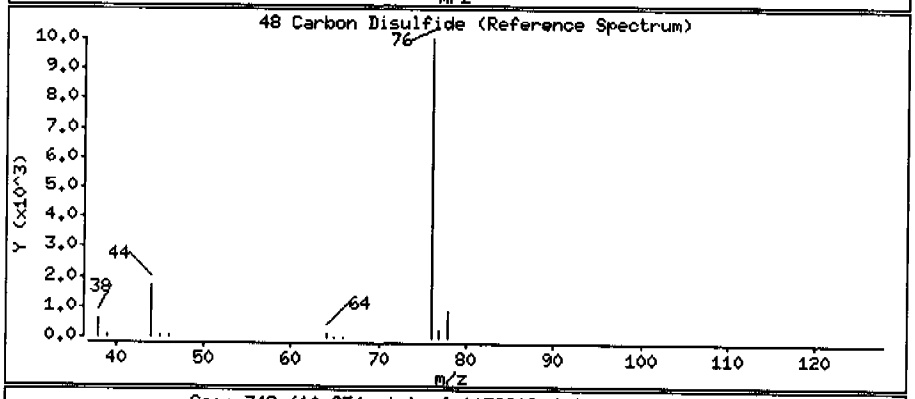
48 Carbon Disulfide

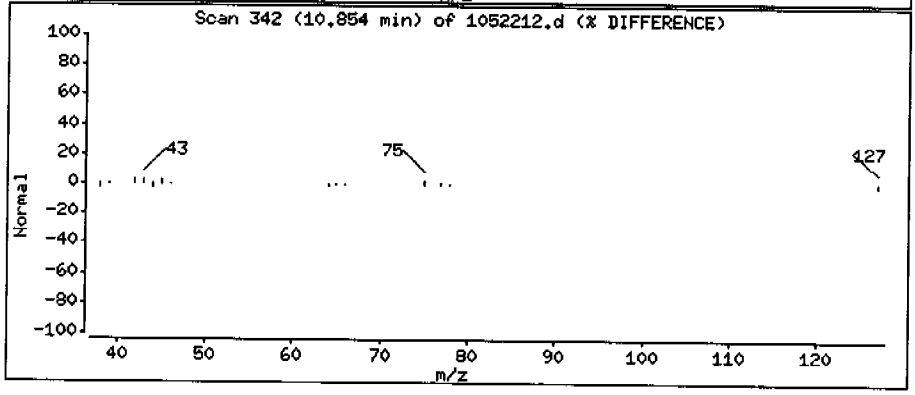
Concentration: 1.791 PPBV











Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

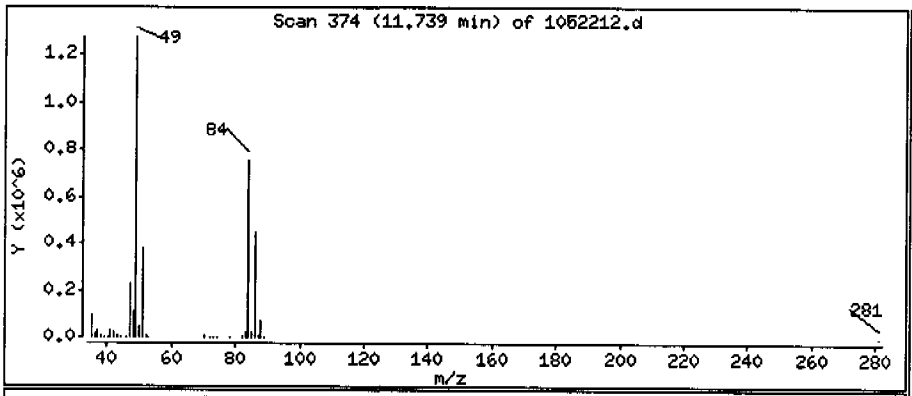
Operator: kr

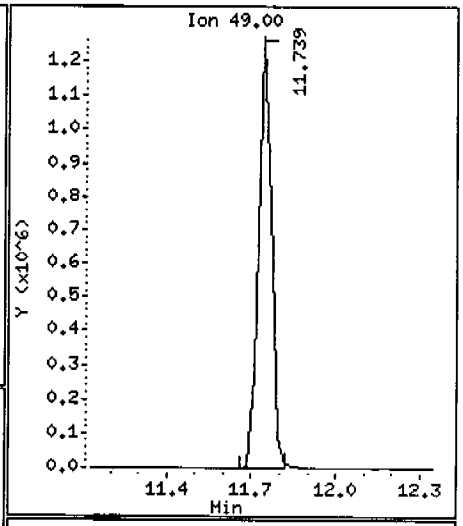
Column phase: RTx-624

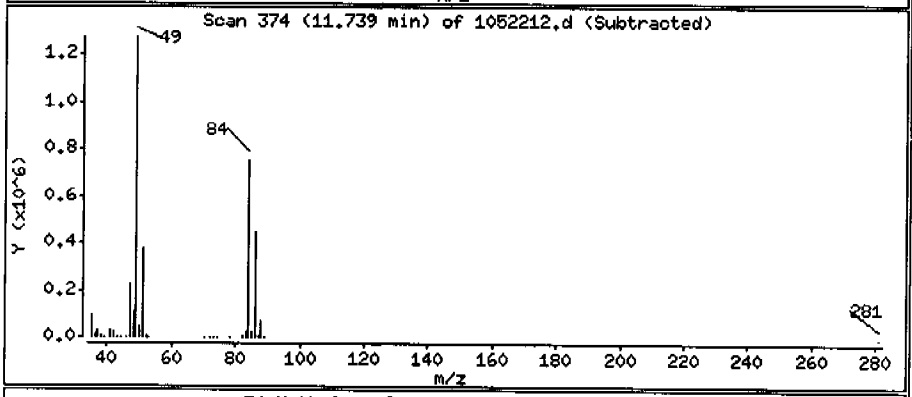
Column diameter: 0.53

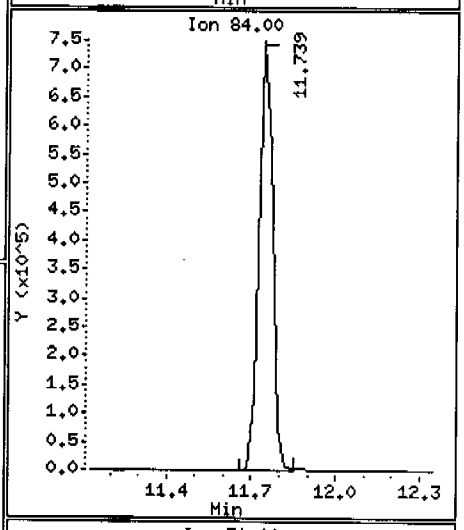
54 Methylene Chloride

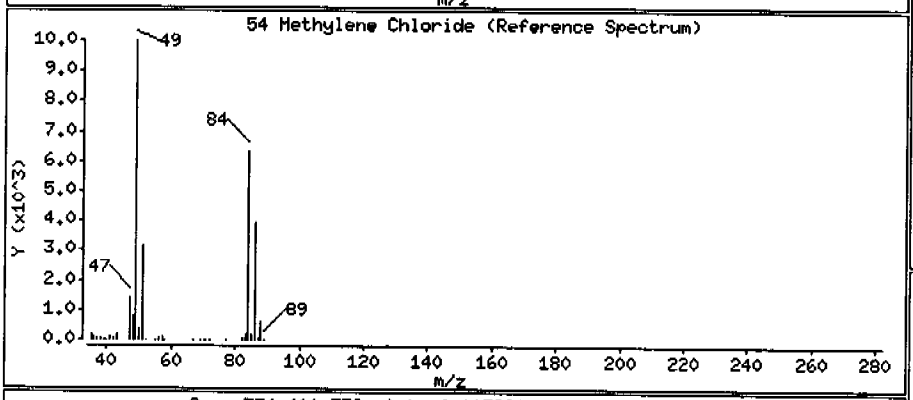
Concentration: 360.55 PPBV

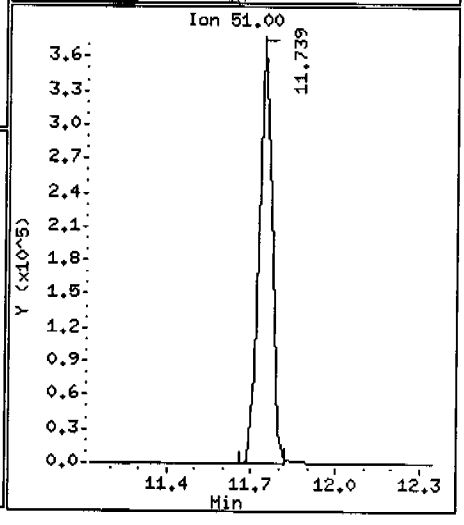


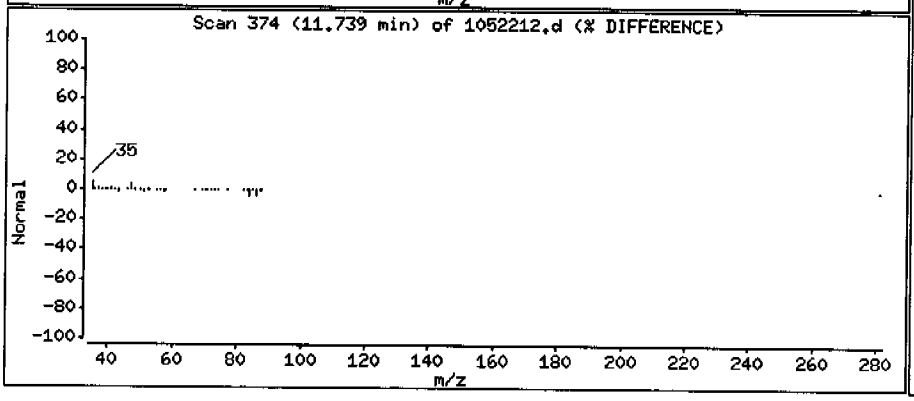












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Sample Info: 75mL #34484

Instrument: msd1.i

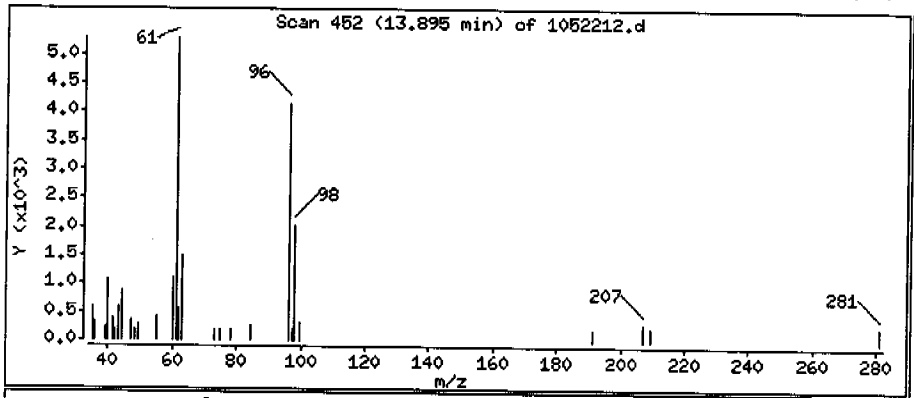
Operator: kr

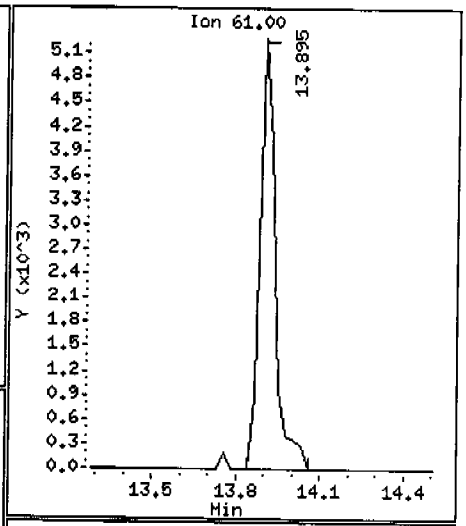
Column phase: RTx-624

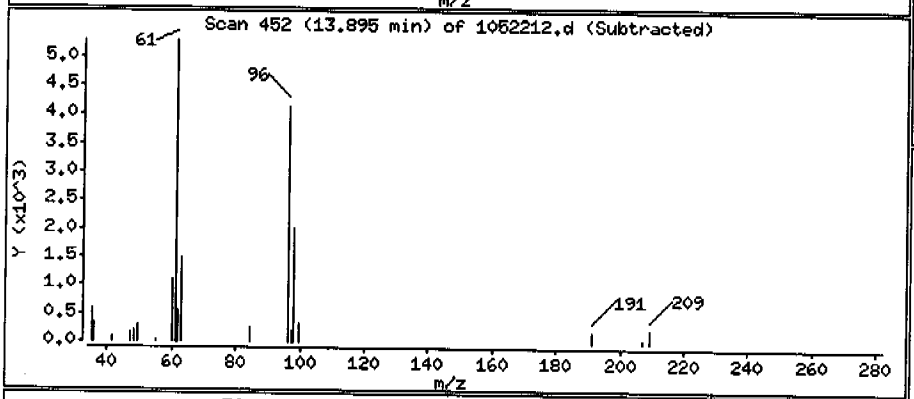
Column diameter: 0.53

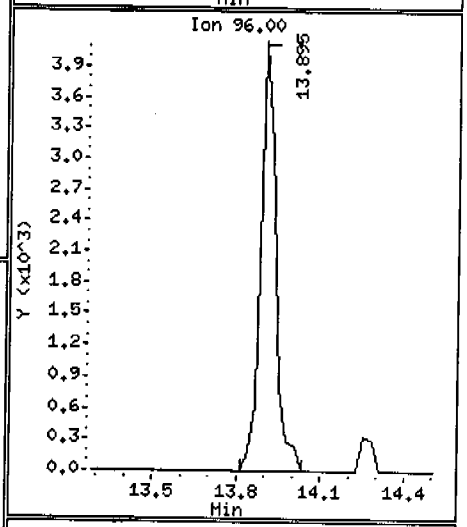
76 cis-1,2-Dichloroethene

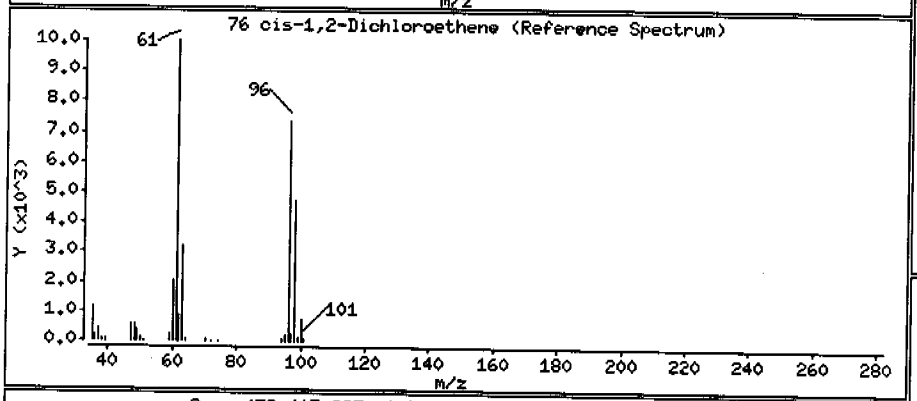
Concentration: 1.514 PPBV

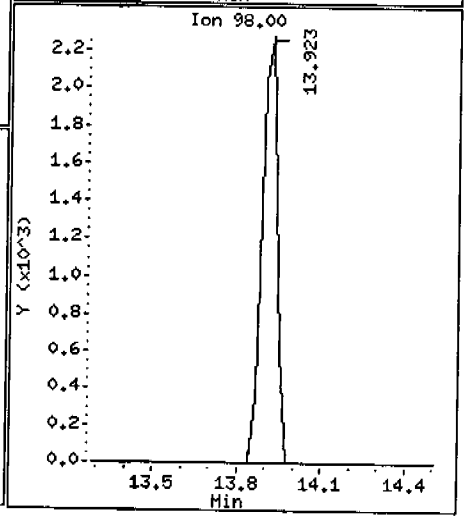


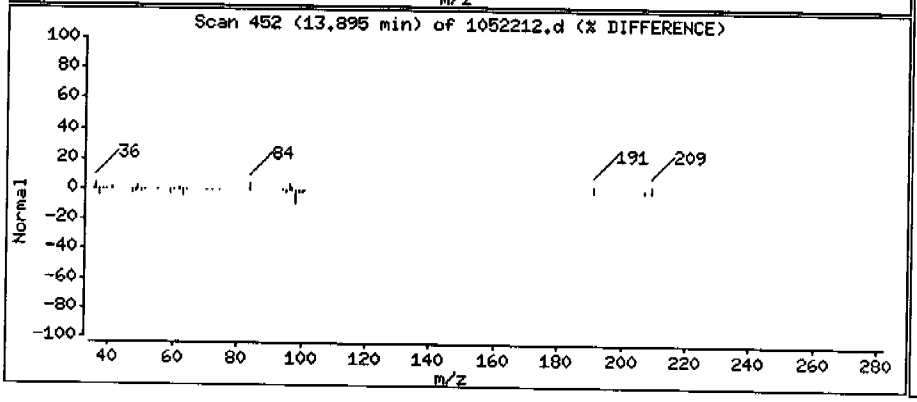












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

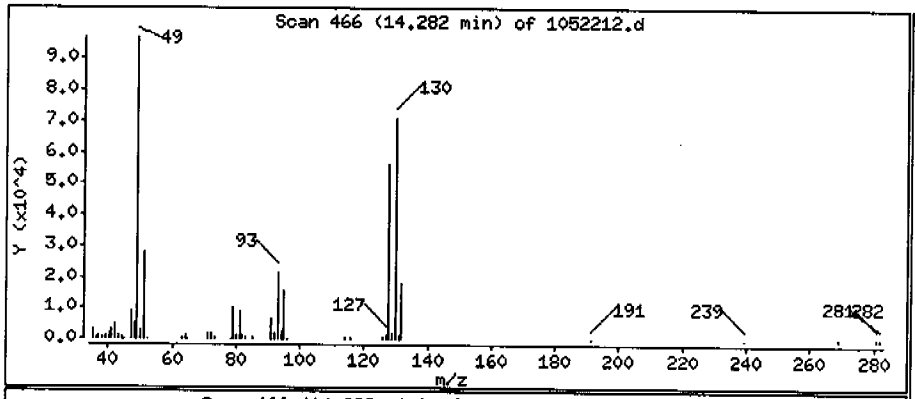
Operator: kr

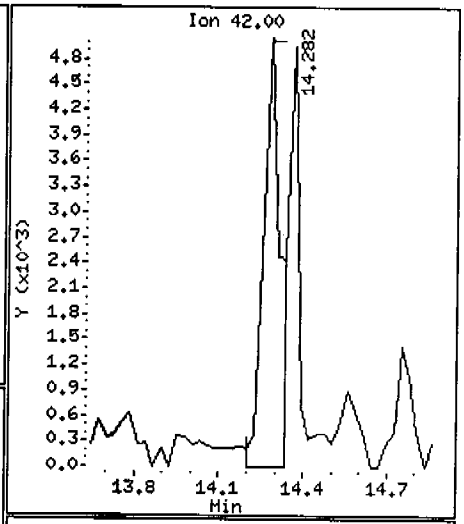
Column phase: RTx-624

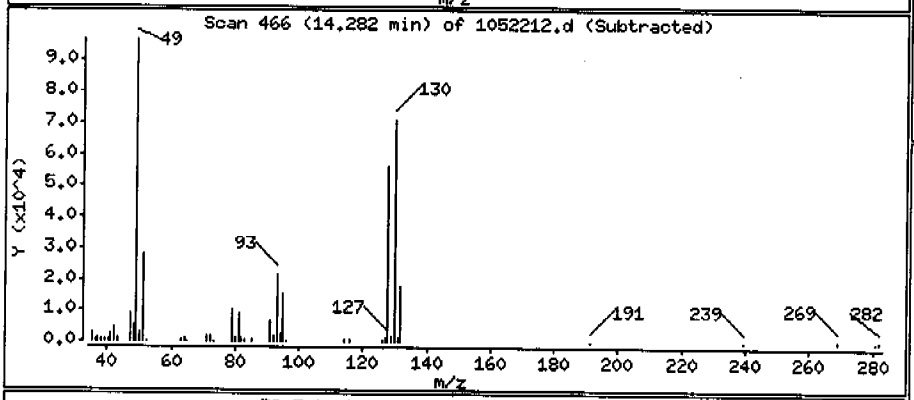
Column diameter: 0.53

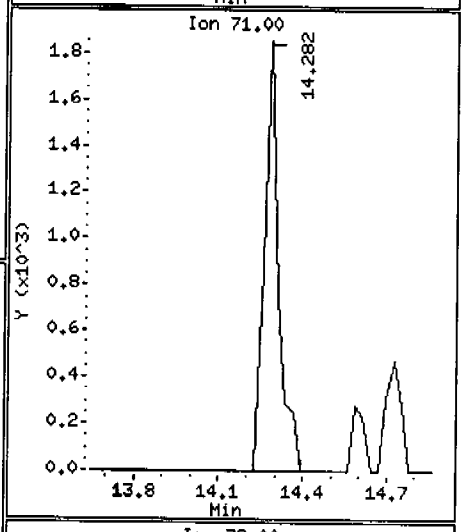
78 Tetrahydrofuran

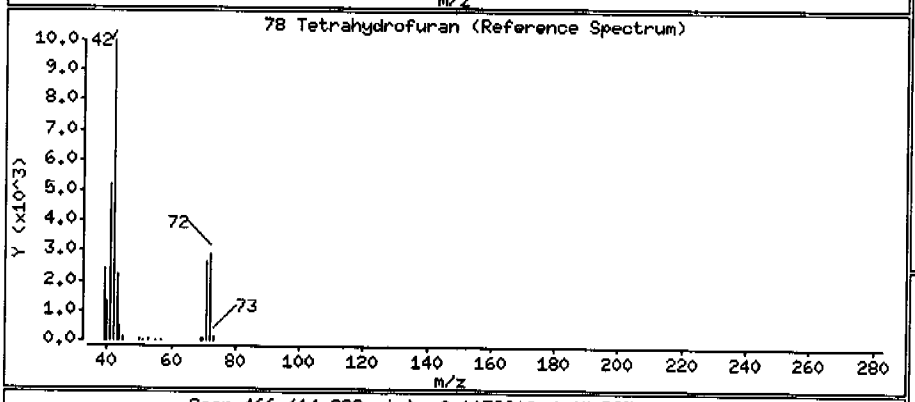
Concentration: 1.299 PPBV

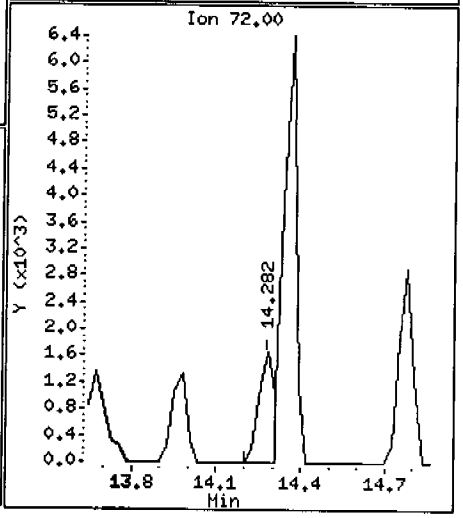


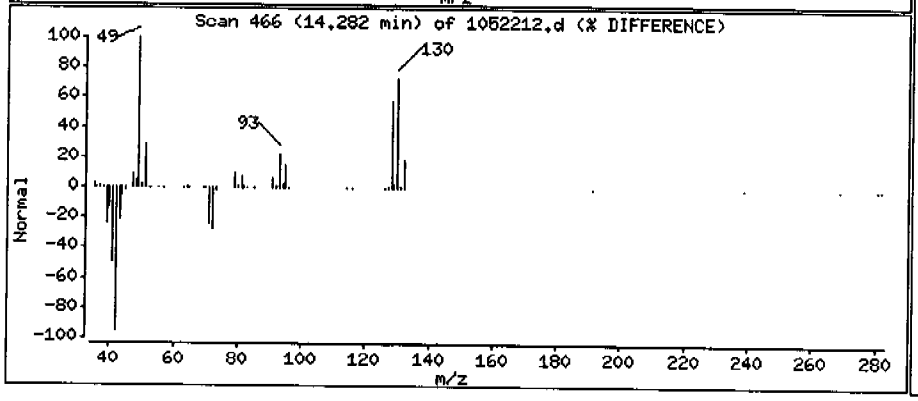












0207

Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

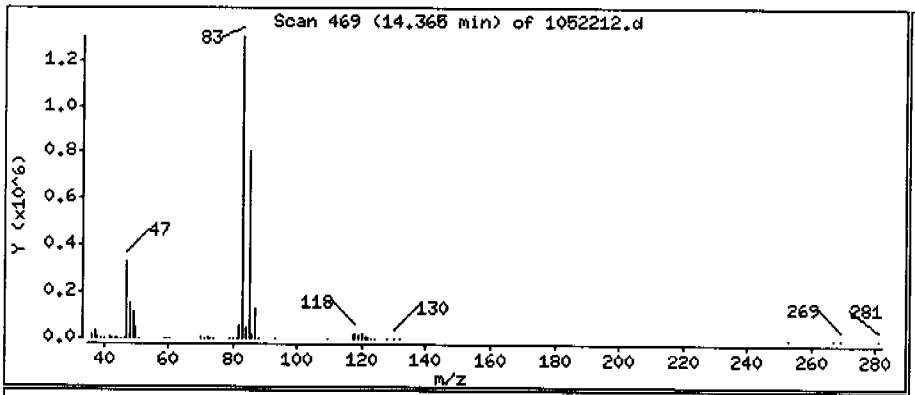
Operator: kr

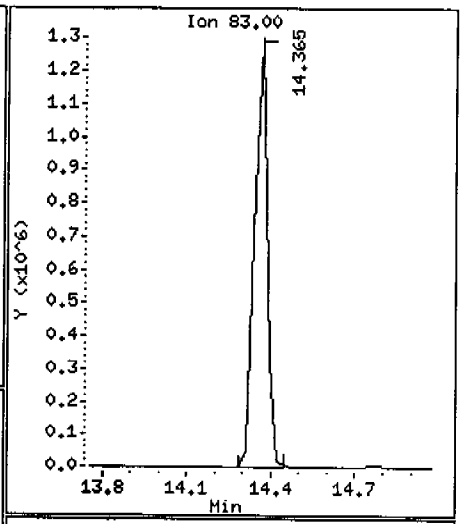
Column phase: RTx-624

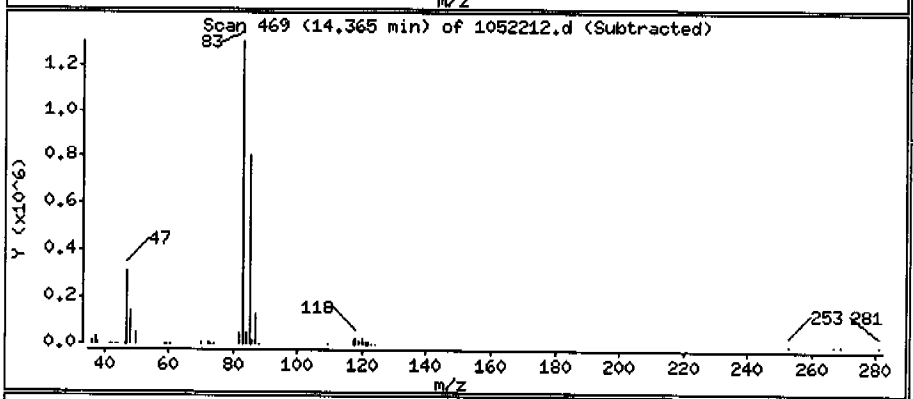
Column diameter: 0.53

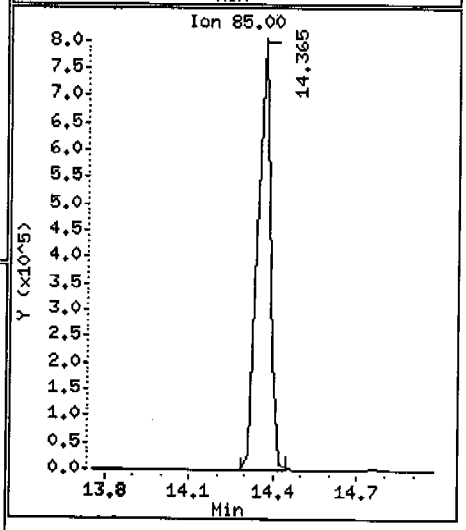
81 Chloroform

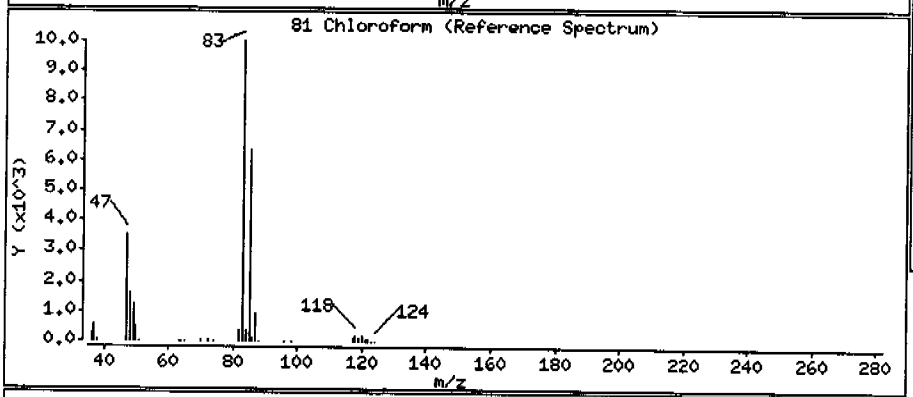
Concentration: 226.08 PPBV

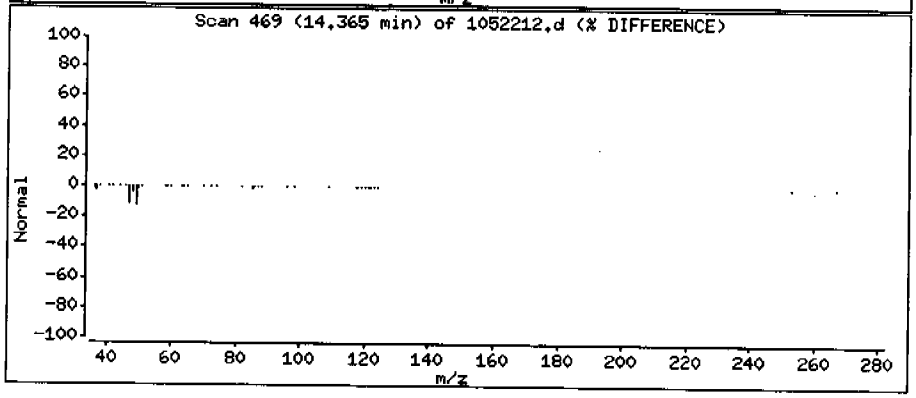












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Sample Info: 75mL #34484

Instrument: msd1.i

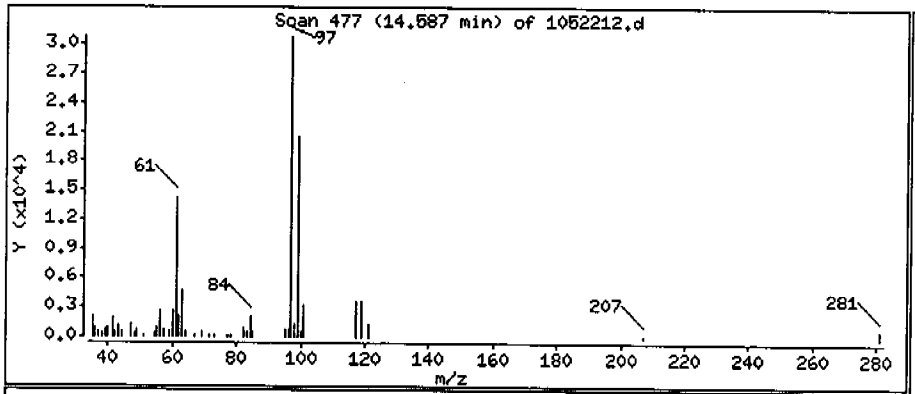
Operator: kr

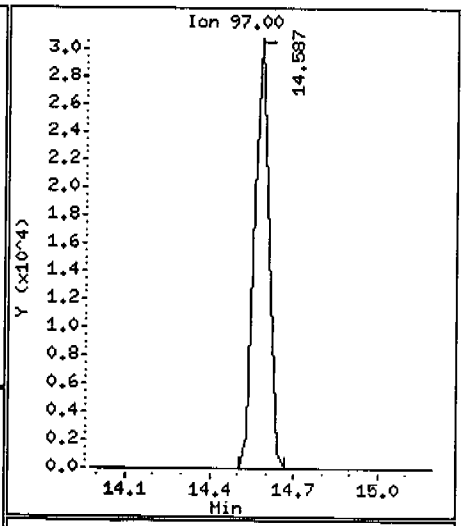
Column phase: RTx-624

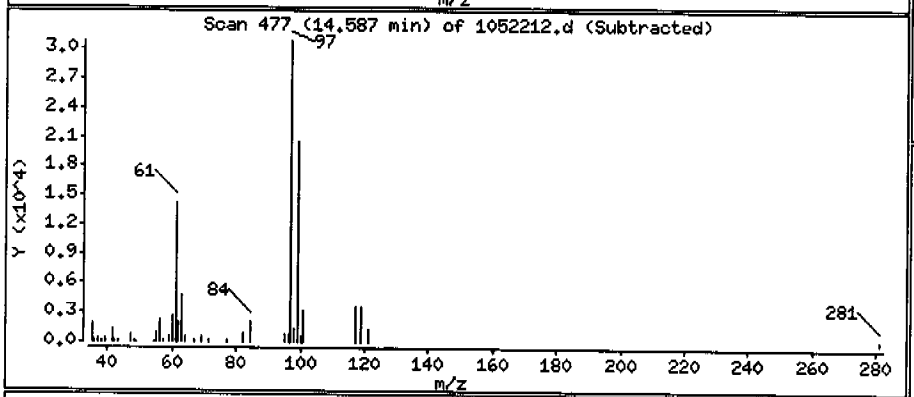
Column diameter: 0.53

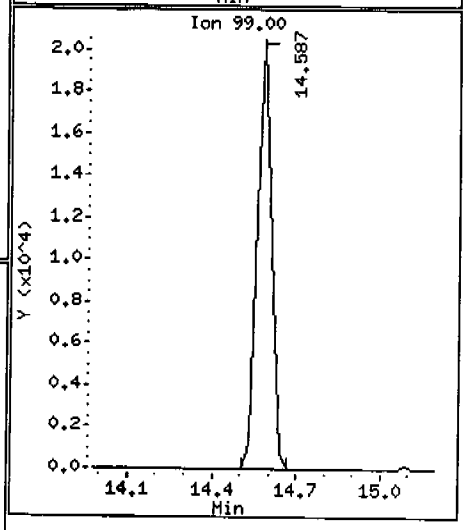
83 1,1,1-Trichloroethane

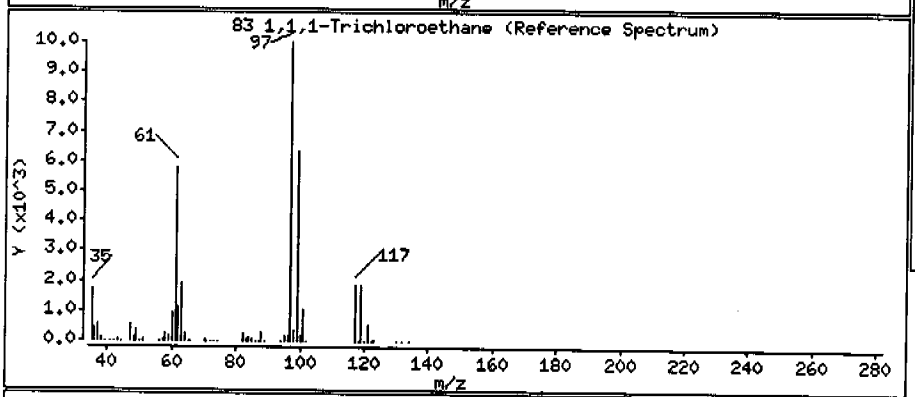
Concentration: 5.899 PPBV

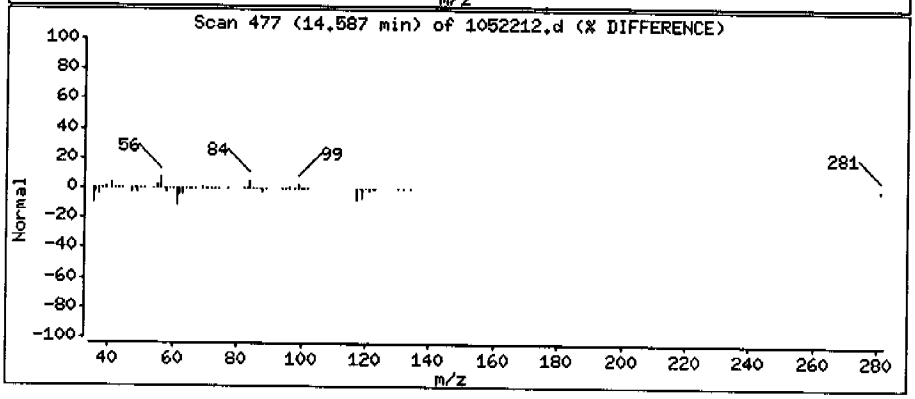












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

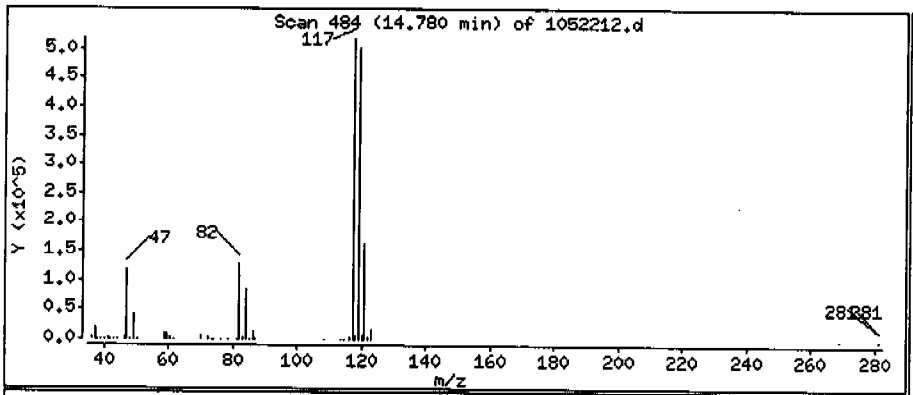
Operator: kr

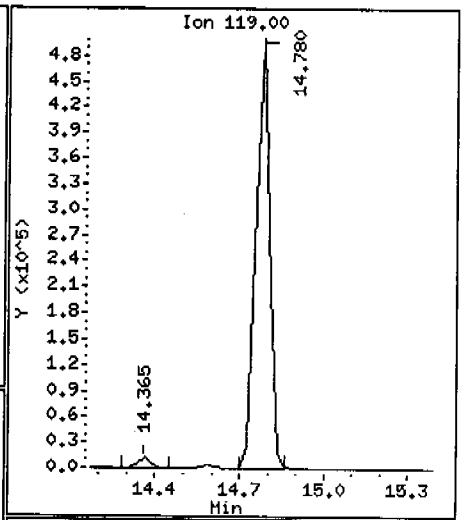
Column phase: RTx-624

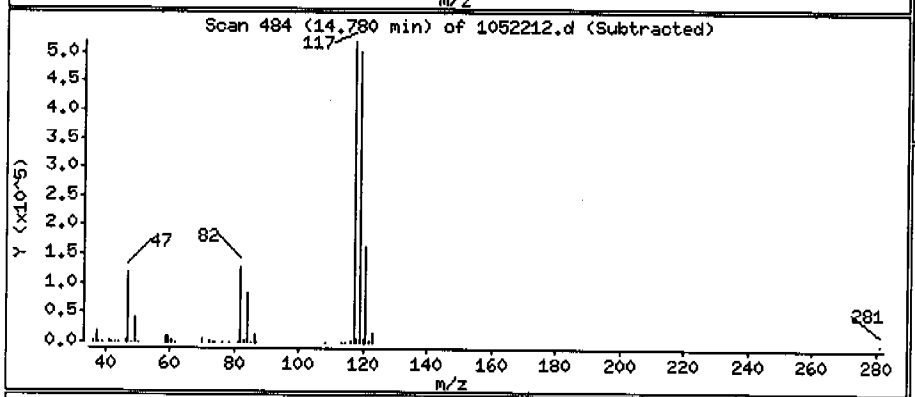
Column diameter: 0.53

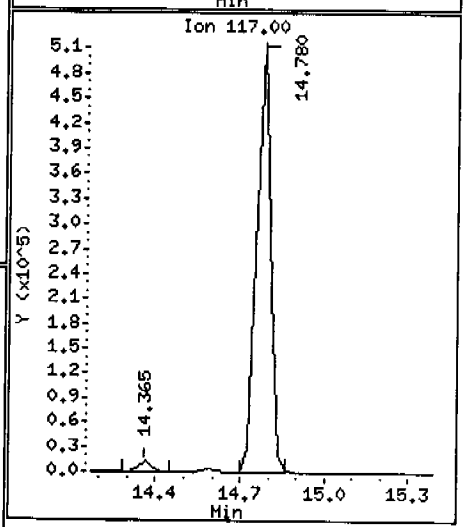
85 Carbon Tetrachloride

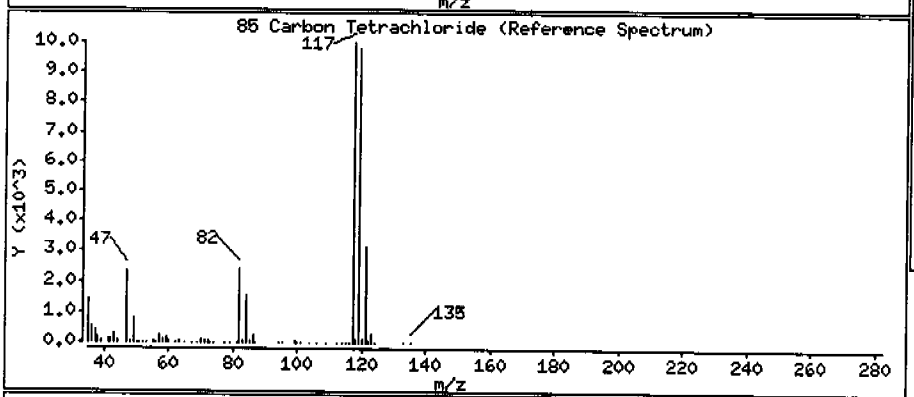
Concentration: 97.660 PPBV

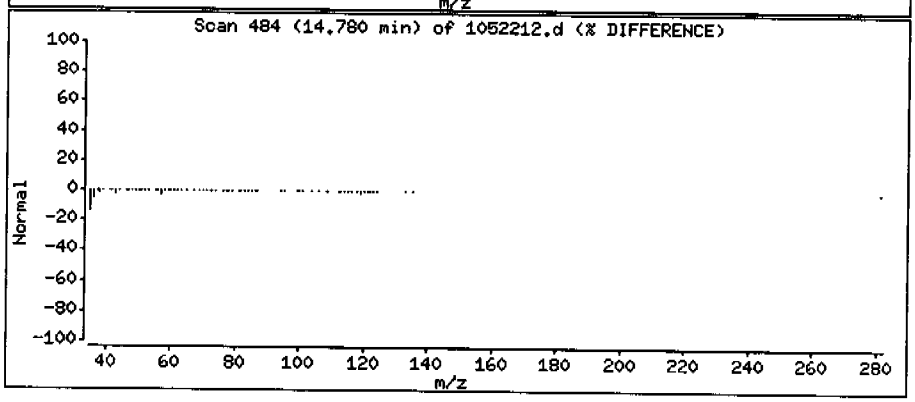












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Sample Info: 75mL #34484

Instrument: msd1.i

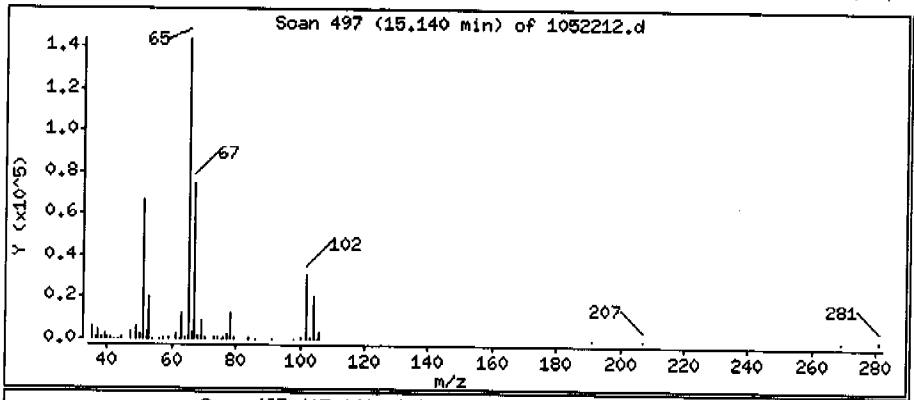
Operator: kr

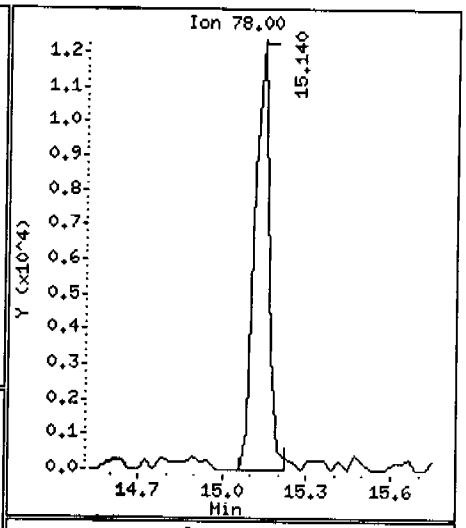
Column phase: RTx-624

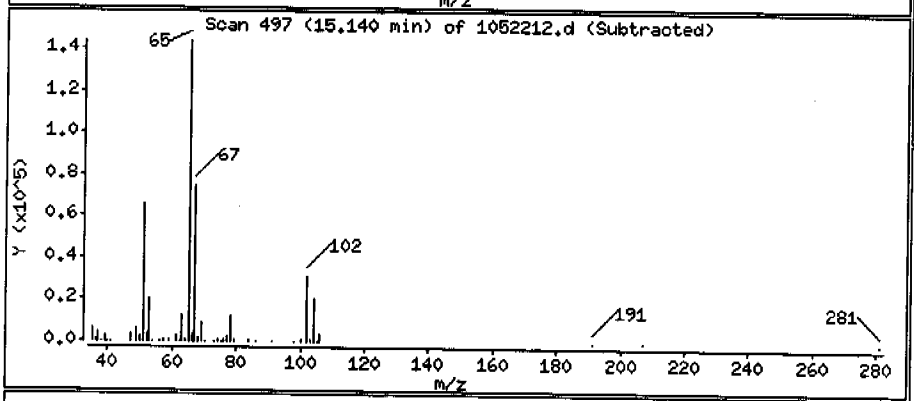
Column diameter: 0.53

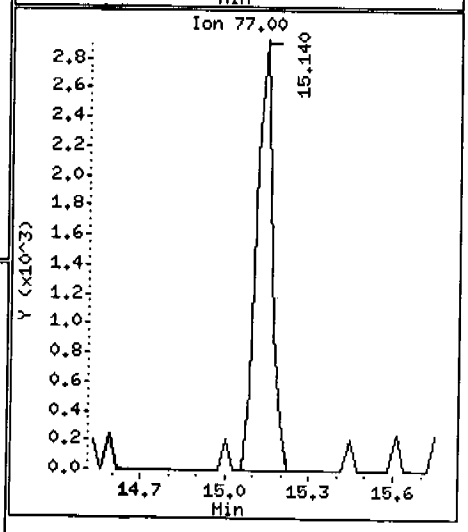
91 Benzene

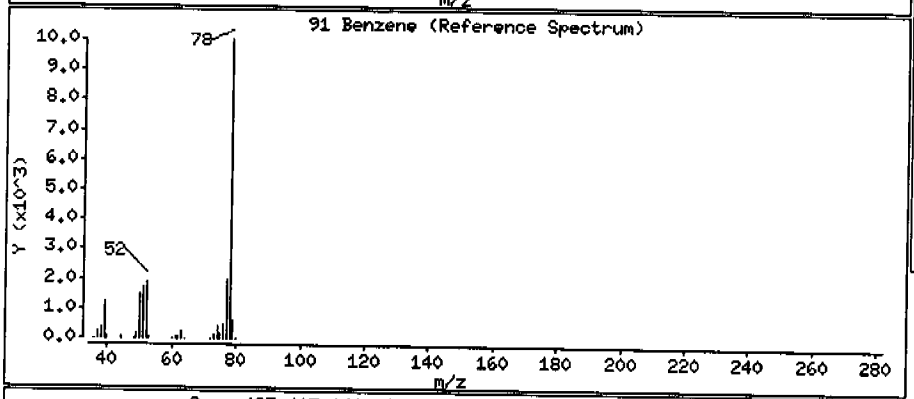
Concentration: 1.291 PPBV

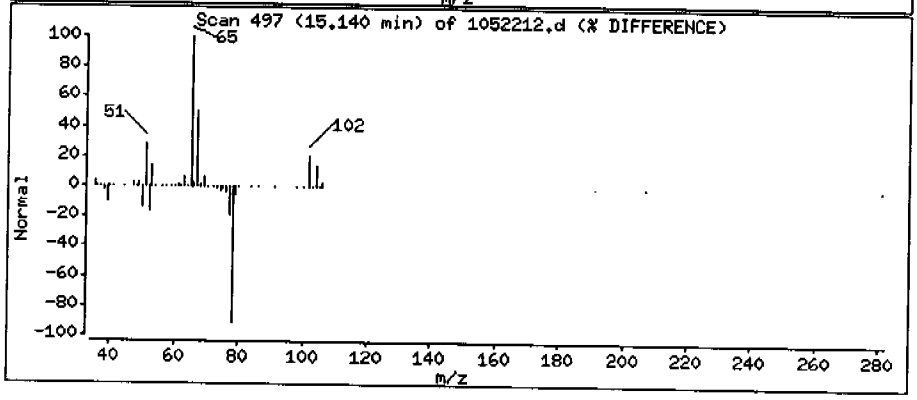












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

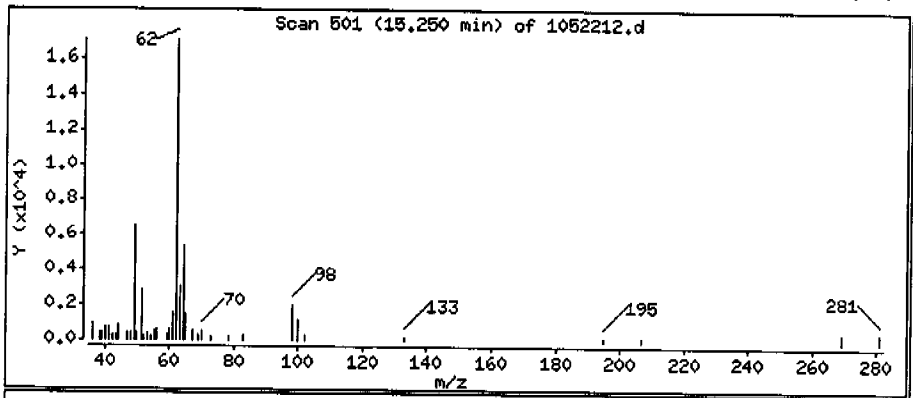
Operator: kr

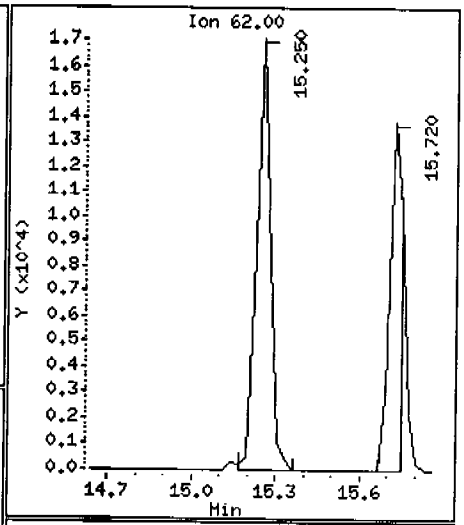
Column phase: RTx-624

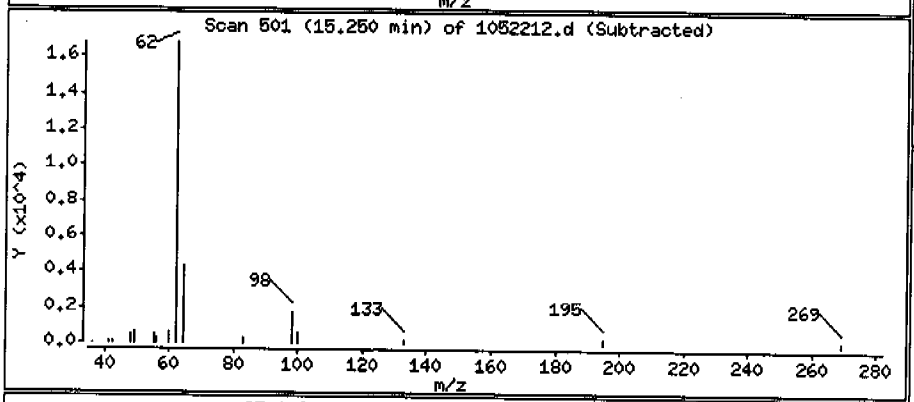
Column diameter: 0.53

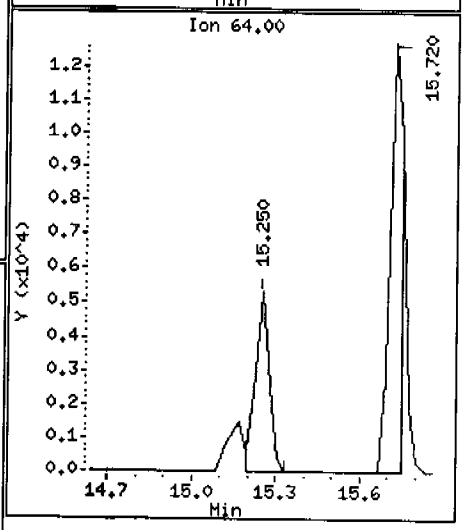
93 1,2-Dichloroethane

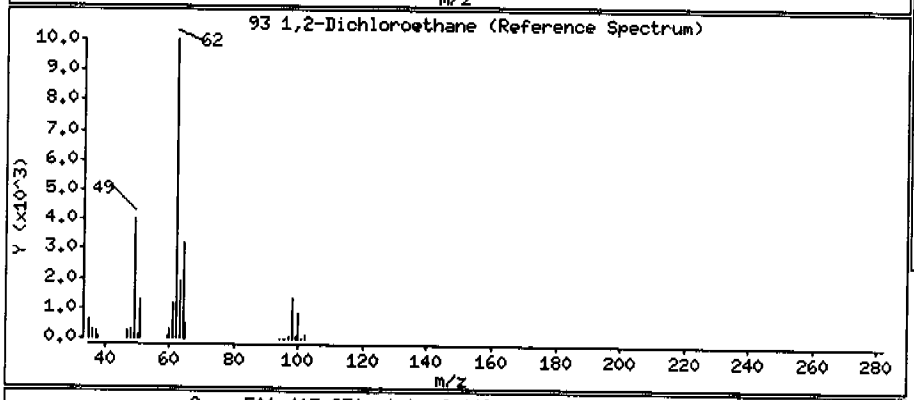
Concentration: 4.109 PPBV

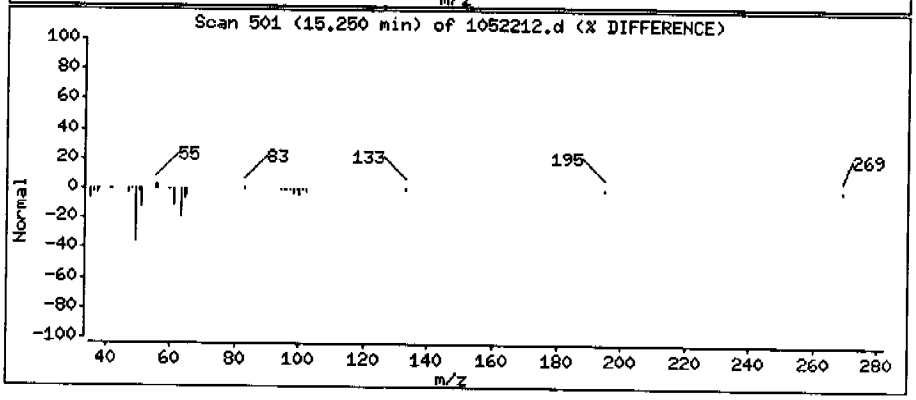












0212

Data File: /chem/msd1.i/1-22may.b/1052212.d

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Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

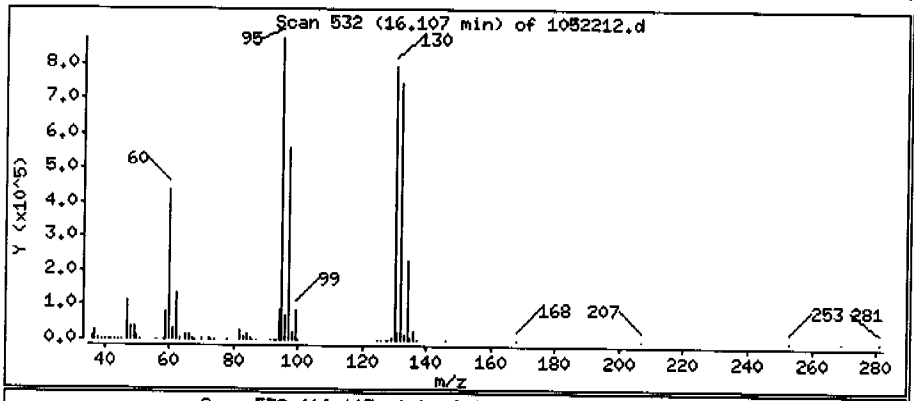
Operator: kr

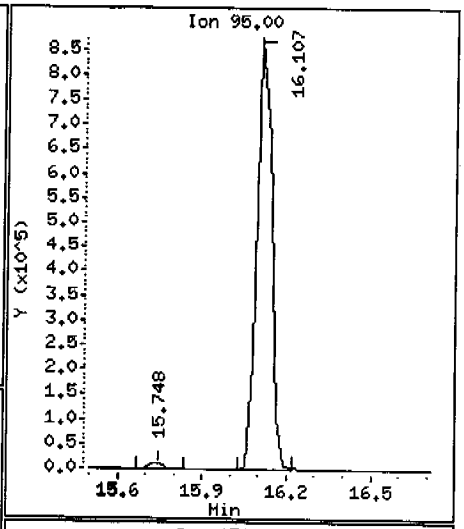
Column phase: RTx-624

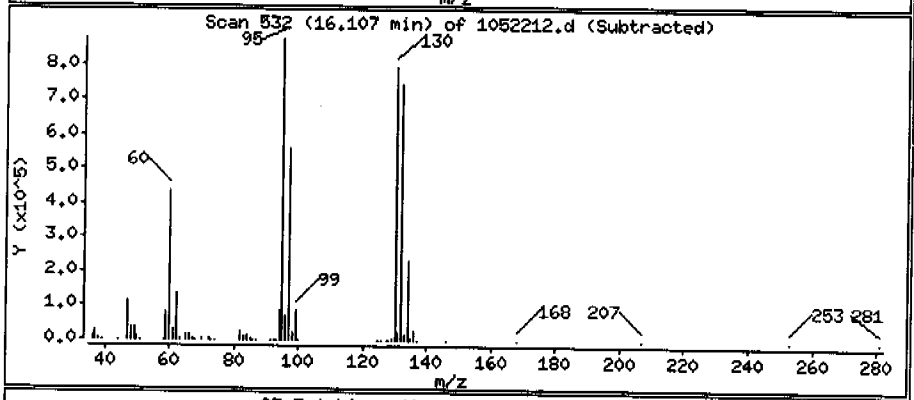
Column diameter: 0.53

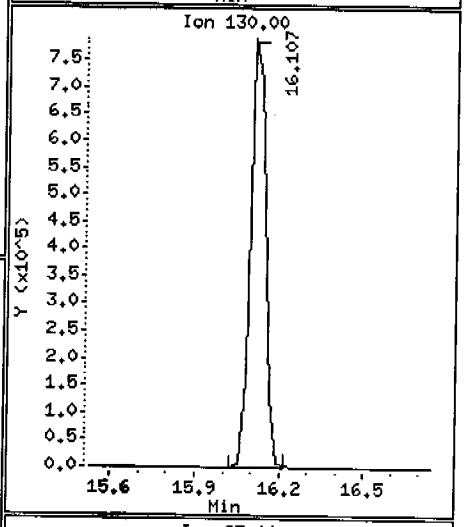
97 Trichloroethene

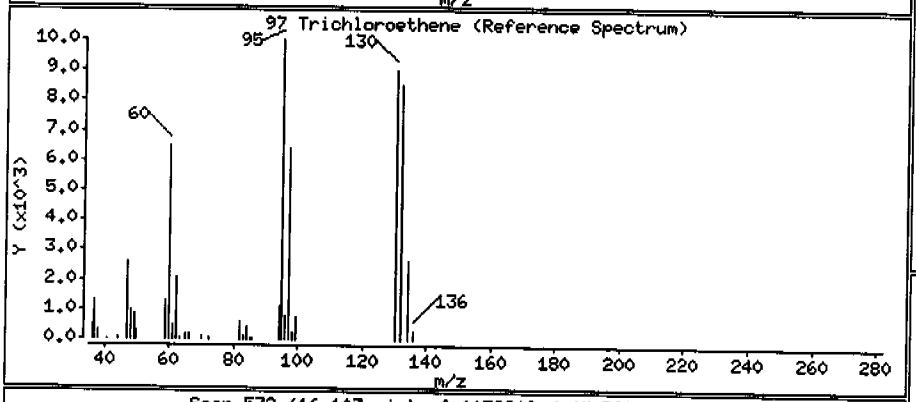
Concentration: 226.72 PPBV

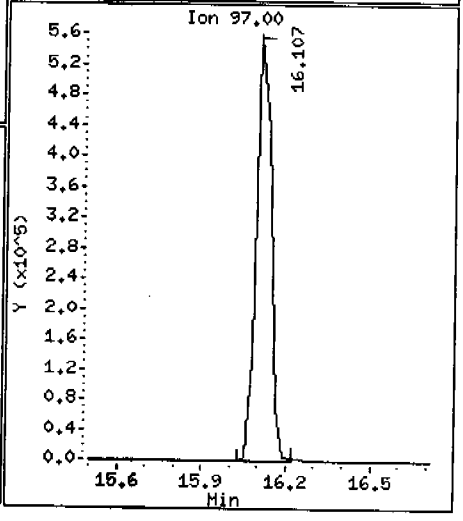


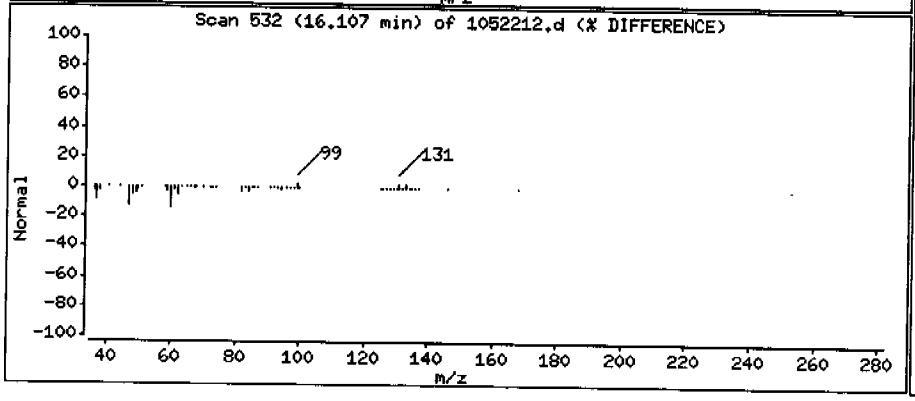












0213

Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

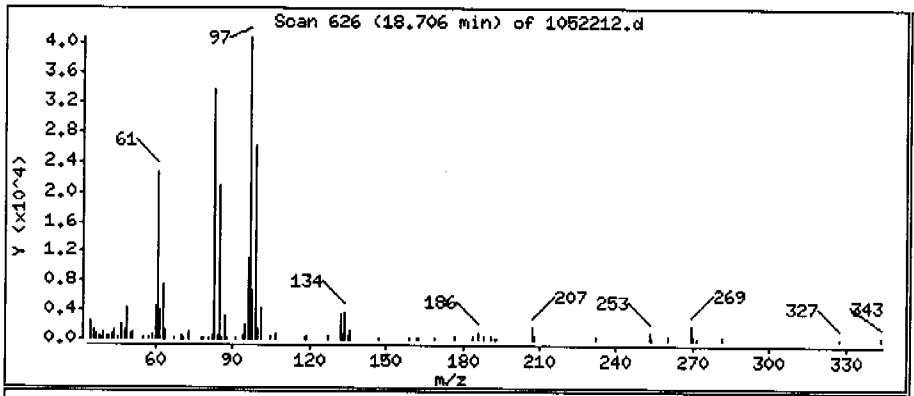
Operator: kr

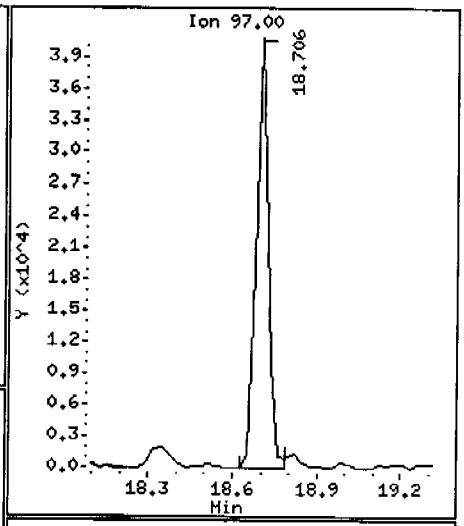
Column phase: RTx-624

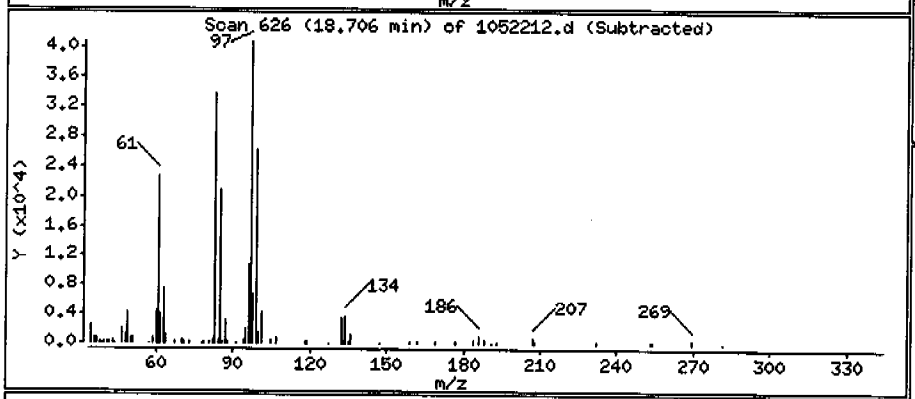
Column diameter: 0.53

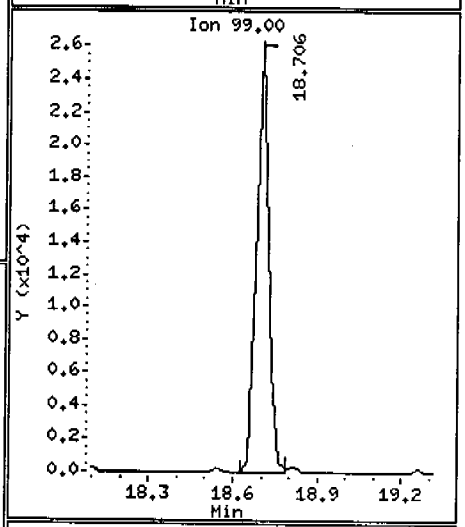
116 1,1,2-Trichloroethane

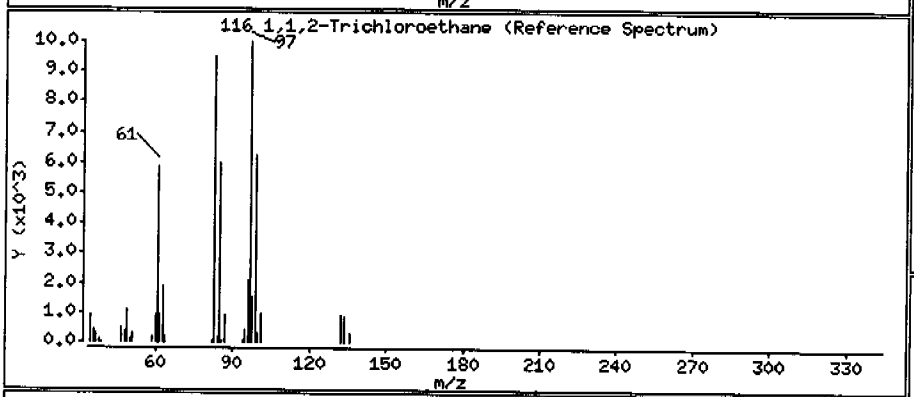
Concentration: 7.784 PPBV

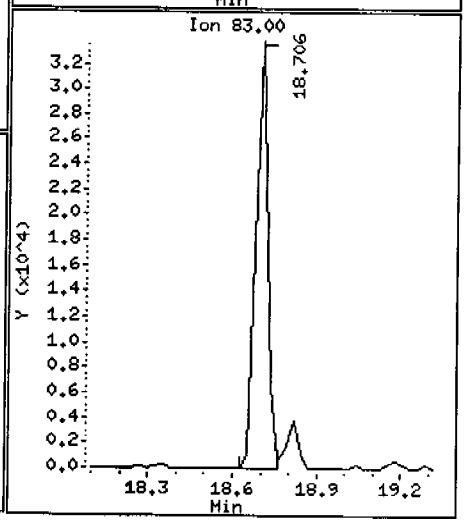


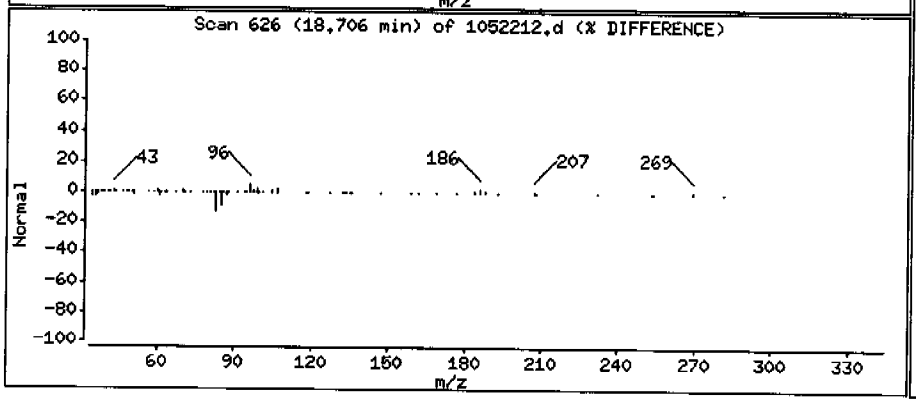












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

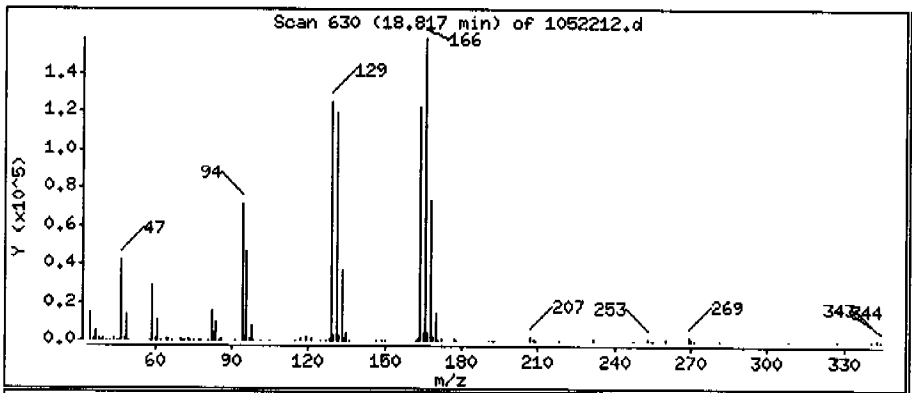
Operator: kr

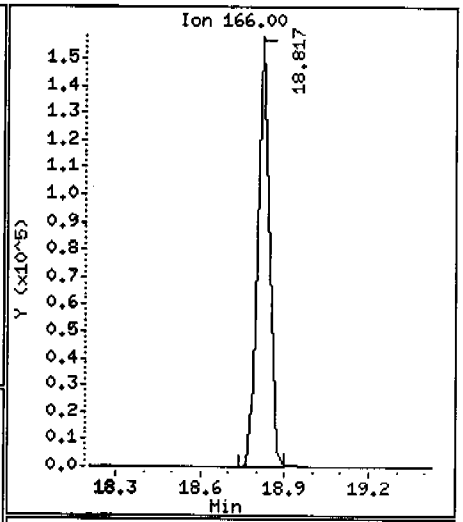
Column phase: RTx-624

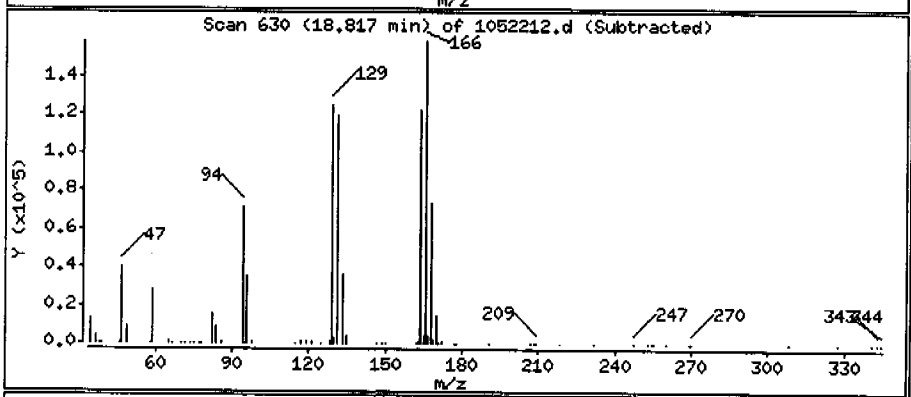
Column diameter: 0.53

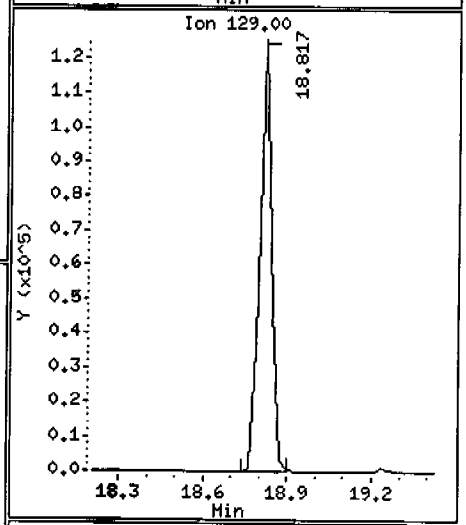
117 Tetrachloroethene

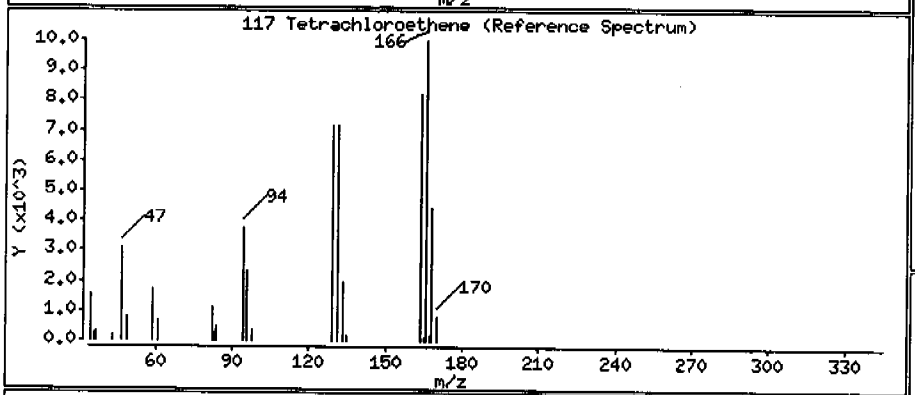
Concentration: 24,909 PPBV

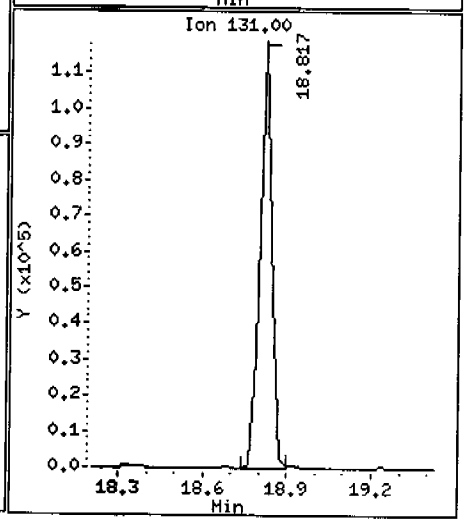


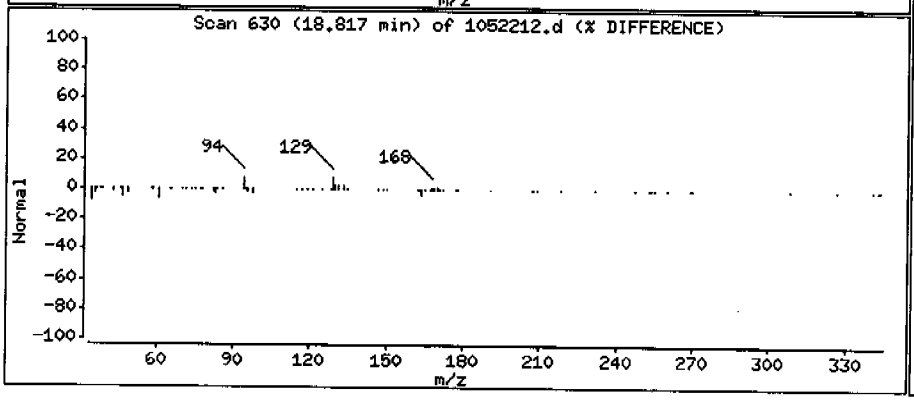












Data File: /chem/msd1.i/1-22may.b/1052212.d

Date : 22-MAY-2008 18:09

Client ID:

Instrument: msd1.i

Sample Info: 75mL #34484

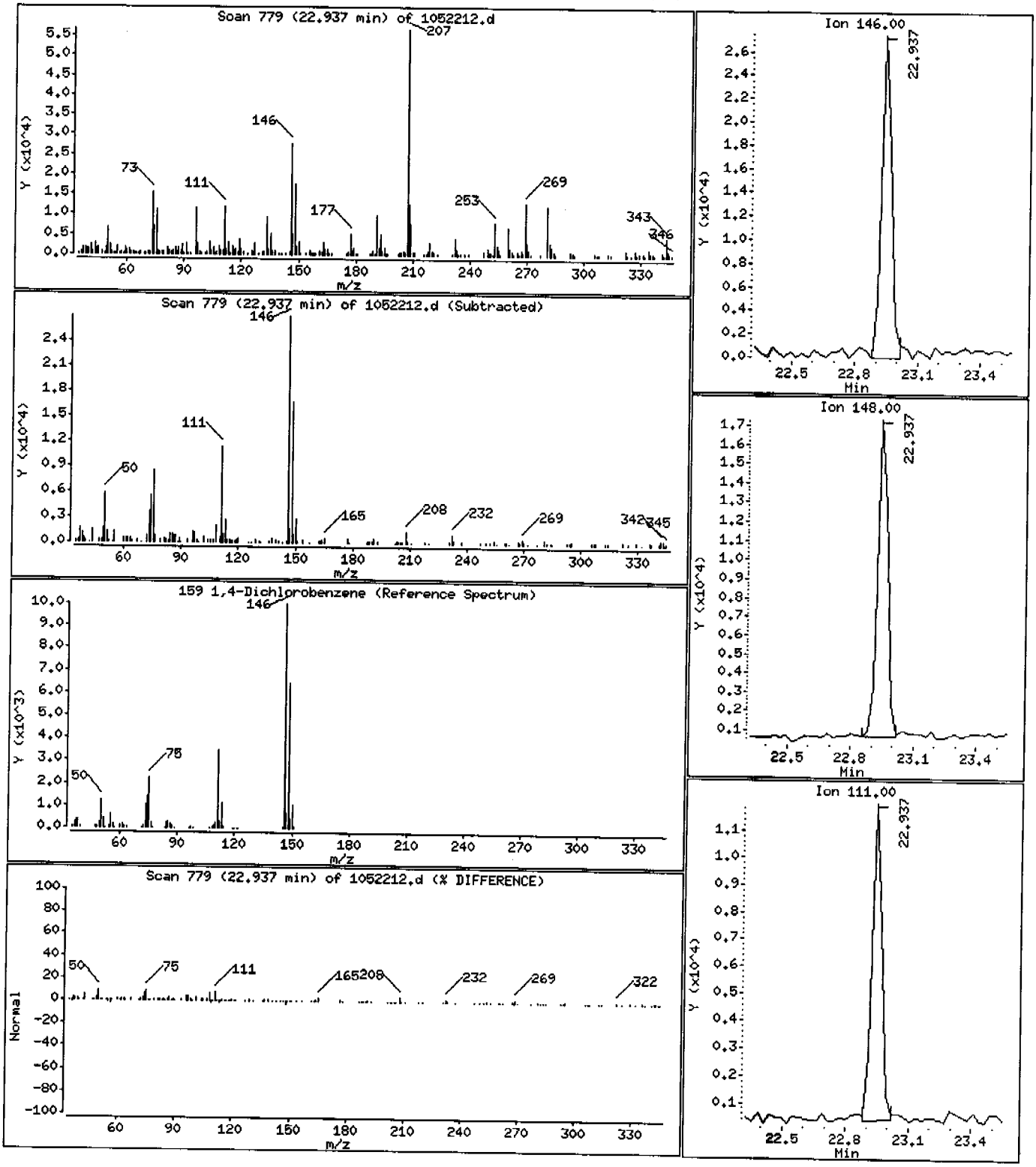
Operator: kr

Column phase: RTx-624

Column diameter: 0.53

159 1,4-Dichlorobenzene

Concentration: 2.363 PPBV



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12246

Lab ID#: 0805274-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethanol	6.7	22	13	42
Freon 113	1.7	3.6	13	28
1,1-Dichloroethene	1.7	3.9	6.7	15
Methylene Chloride	1.7	510	5.8	1800
Chloroform	1.7	230	8.2	1100
1,1,1-Trichloroethane	1.7	2.1	9.2	11
Carbon Tetrachloride	1.7	82	10	510
1,2-Dichloroethane	1.7	5.9	6.8	24
Trichloroethene	1.7	190	9.0	1000
1,1,2-Trichloroethane	1.7	5.7	9.2	31
Tetrachloroethene	1.7	9.0	11	61
1,4-Dichlorobenzene	1.7	2.9	10	18

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12246

Lab ID#: 0805274-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted]0522r13 Date of Collection: 5/9/08
Dil. Factor: 3.36 Date of Analysis: 5/22/08 07:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	Not Detected	8.3	Not Detected
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.7	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.3	Not Detected
1,3-Butadiene	1.7	Not Detected	3.7	Not Detected
Bromomethane	1.7	Not Detected	6.5	Not Detected
Chloroethane	1.7	Not Detected	4.4	Not Detected
Freon 11	1.7	Not Detected	9.4	Not Detected
Ethanol	6.7	22	13	42
Freon 113	1.7	3.6	13	28
1,1-Dichloroethene	1.7	3.9	6.7	15
Acetone	6.7	Not Detected	16	Not Detected
2-Propanol	6.7	Not Detected	16	Not Detected
Carbon Disulfide	1.7	Not Detected	5.2	Not Detected
Methylene Chloride	1.7	510	5.8	1800
Methyl tert-butyl ether	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Hexane	1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran	1.7	Not Detected	5.0	Not Detected
Chloroform	1.7	230	8.2	1100
1,1,1-Trichloroethane	1.7	2.1	9.2	11
Cyclohexane	1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride	1.7	82	10	510
Benzene	1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane	1.7	5.9	6.8	24
Heptane	1.7	Not Detected	6.9	Not Detected
Trichloroethene	1.7	190	9.0	1000
1,2-Dichloropropane	1.7	Not Detected	7.8	Not Detected
1,4-Dioxane	6.7	Not Detected	24	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	6.9	Not Detected
Toluene	1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane	1.7	5.7	9.2	31
Tetrachloroethene	1.7	9.0	11	61

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12246

Lab ID#: 0805274-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052213[illegible]
Dil. Factor: [illegible]

Date of Collection: 5/9/08
Date of Analysis: 5/22/08 07:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.7	Not Detected	28	Not Detected
Dibromochloromethane	1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected
Chlorobenzene	1.7	Not Detected	7.7	Not Detected
Ethyl Benzene	1.7	Not Detected	7.3	Not Detected
m,p-Xylene	1.7	Not Detected	7.3	Not Detected
o-Xylene	1.7	Not Detected	7.3	Not Detected
Styrene	1.7	Not Detected	7.2	Not Detected
Bromoform	1.7	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected
4-Ethyltoluene	1.7	Not Detected	8.2	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene	1.7	2.9	10	18
alpha-Chlorotoluene	1.7	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	6.7	Not Detected U J	50	Not Detected U J
Hexachlorobutadiene	6.7	Not Detected	72	Not Detected
Chlorodifluoromethane	6.7	Not Detected	24	Not Detected
Methanol	170	Not Detected	220	Not Detected
n-Butanol	6.7	Not Detected	20	Not Detected
Propylene	6.7	Not Detected	12	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	96	70-130

0219

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052213.d
Lab Smp Id: 0805274-09A
Inj Date : 22-MAY-2008 19:02
Operator : kr Inst ID: msd1.i
Smp Info : 50mL #12338
Misc Info : 6.0"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 3.36000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5	
14.282	14.255 (1.000)	130	291731	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	222863			27.30- 127.30	76.39
14.255	14.255 (1.000)	49	527002			131.96- 231.96	180.65
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.748	15.748 (1.000)	114	1524445	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	240199			0.00- 65.38	15.76
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.033	20.033 (1.000)	117	1698041	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	988739			8.42- 108.42	58.23
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.139	15.140 (1.060)	65	467315	24.0038	24.004	80.00- 120.00	100.00
15.139	15.140 (1.060)	67	234587			6.04- 106.04	50.20
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.960	17.960 (1.140)	98	1670063	24.1781	24.178	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	178014			0.00- 60.35	10.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1115479			15.45- 115.45	66.79
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.075)	174	868677	23.9079	23.908	80.00- 120.00	100.00
21.526	21.527 (1.075)	95	1382250			110.38- 210.38	159.12
21.526	21.527 (1.075)	176	826320			44.94- 144.94	95.12
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.706)	45	43489	6.63363	22.289	80.00- 120.00	100.00
10.080	10.135 (0.706)	43	12495			0.00- 75.81	28.73
10.107	10.135 (0.708)	46	1099			0.00- 92.85	2.53
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	23247	1.07339	3.607	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	15678			13.47- 113.47	67.44
10.577	10.577 (0.741)	101	31984			83.83- 183.83	137.58
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	34641	1.15373	3.876	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	20593			3.44- 103.44	59.45
10.522	10.522 (0.737)	98	13240			0.00- 84.21	38.22
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	3967413	152.539	512.53	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	2537093			14.84- 114.84	63.95
11.739	11.739 (0.822)	51	1187625			0.00- 79.96	29.93
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2831459	68.6137	230.54	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1773306			12.44- 112.44	62.63
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.587 (1.021)	97	27131	0.62658	2.105	80.00- 120.00	100.00
14.586	14.587 (1.021)	99	18549			14.11- 114.11	68.37
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	975417	24.3554	81.834	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	1001343			52.90- 152.90	102.66
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	56379	1.75759	5.906	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	17975			0.00- 83.51	31.88
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1762435	55.4064	186.16	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
97 Trichloroethene (continued)							
16.107	16.135 (1.023)	130	1693610			47.48- 147.48	96.09
16.107	16.107 (1.023)	97	1130581			14.50- 114.50	64.15
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	60951	1.69613	5.699	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	38681			12.19- 112.19	63.46
18.706	18.706 (0.934)	83	51266			31.81- 131.81	84.11
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	111443	2.67706	8.995	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	85667			27.36- 127.36	76.87
18.817	18.817 (0.939)	131	79985			25.62- 125.62	71.77
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.145)	146	75970	0.86886	2.919	80.00- 120.00	100.00
22.937	22.937 (1.145)	148	51912			16.32- 116.32	68.33
22.937	22.937 (1.145)	111	32426			0.00- 90.95	42.68

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052213.d
Lab Smp Id: 0805274-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 6.0"Hg -> 5psi

Calibration Date: 22-MAY-2008
Calibration Time: 09:16

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	291731	-5.30
95 1,4-Difluorobenze	1638375	983025	2293725	1524445	-6.95
123 Chlorobenzene-d5	1818182	1090909	2545455	1698041	-6.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-22may.b/1052213.d
Report Date: 27-May-2008 15:27

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805274-09A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 6.0"Hg -> 5psi

Client SDG: 1-22may
Fraction: VOA

Operator: kr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.004	96.02	70-130
$ 111 Toluene-d8	25.000	24.178	96.71	70-130
$ 136 Bromofluorobenzene	25.000	23.908	95.63	70-130

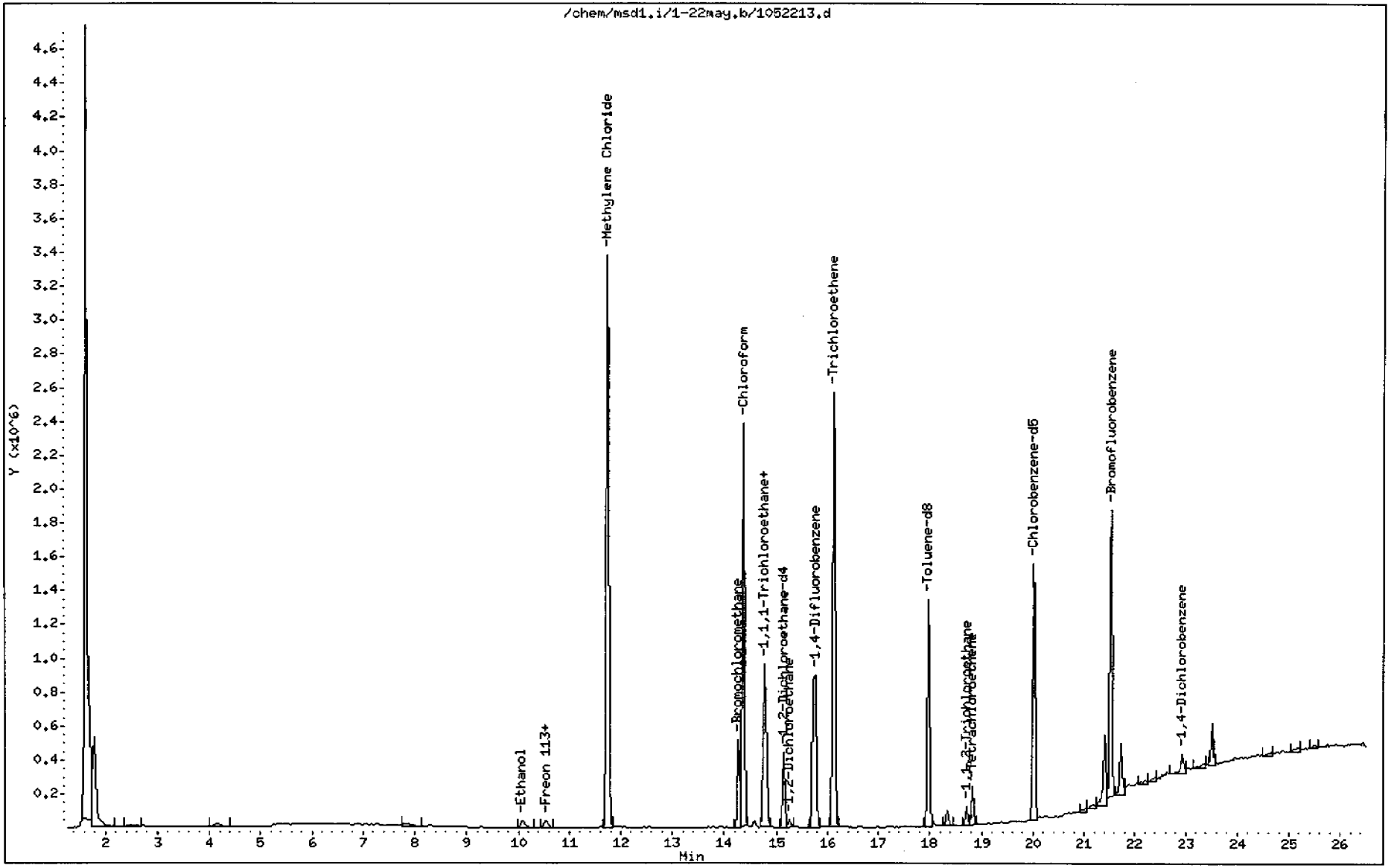
Data File: /chem/msd1.i/1-22may.b/1052213.d
Date : 22-MAY-2008 19:02
Client ID:
Sample Info: 50mL #12338

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0225



Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

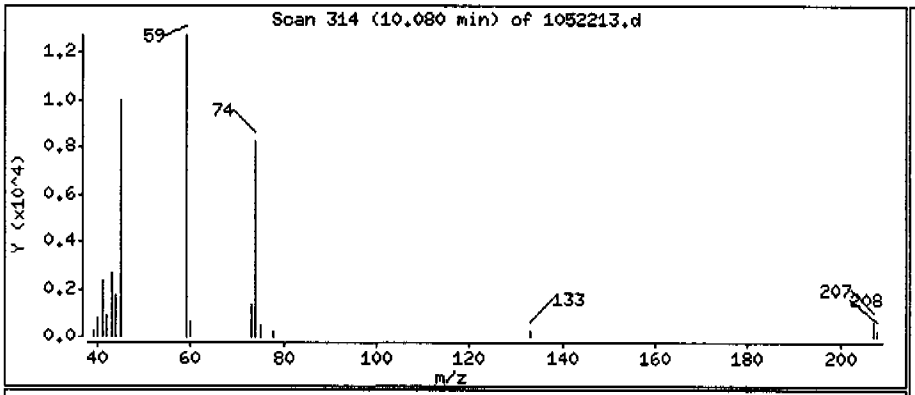
Operator: kr

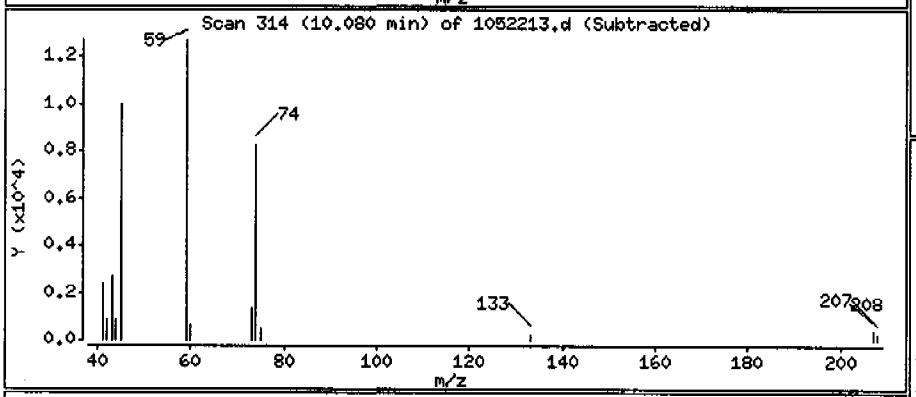
Column phase: RTx-624

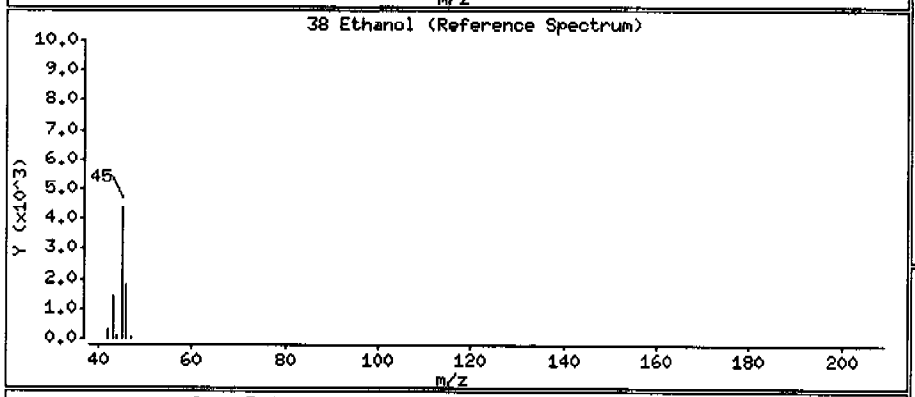
Column diameter: 0.53

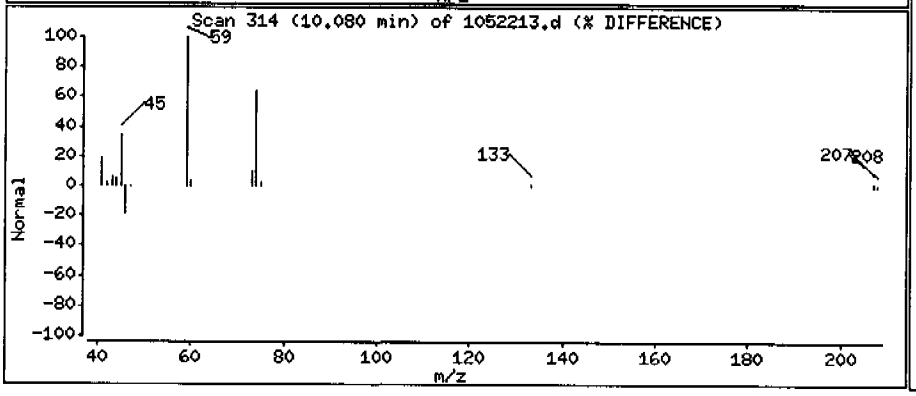
38 Ethanol

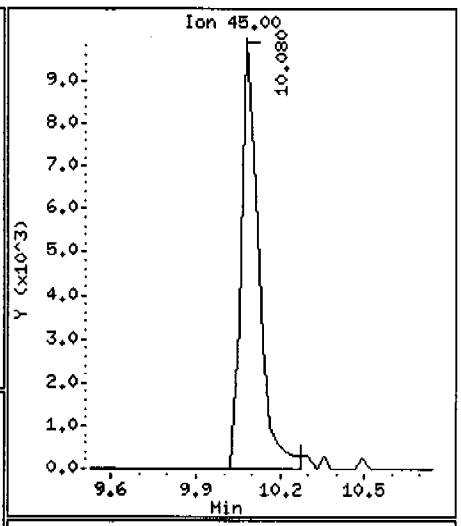
Concentration: 22.289 PPBV

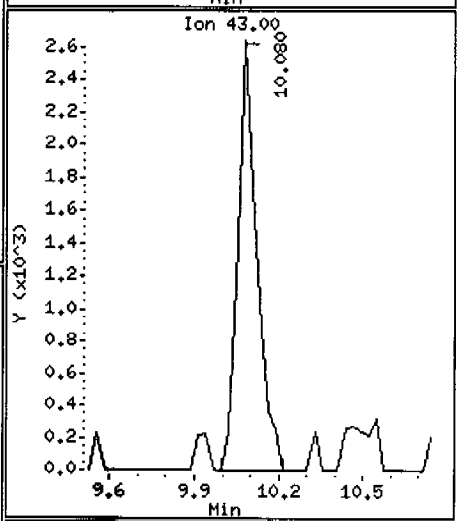


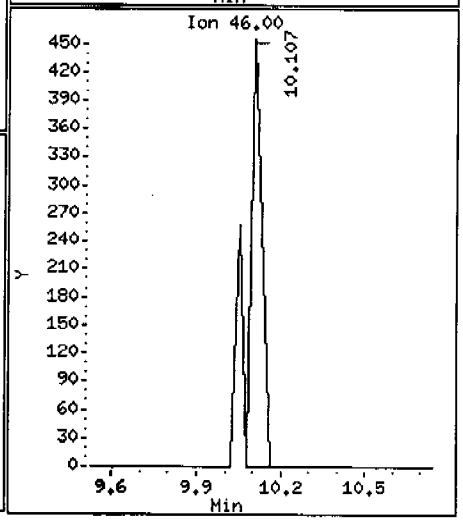












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

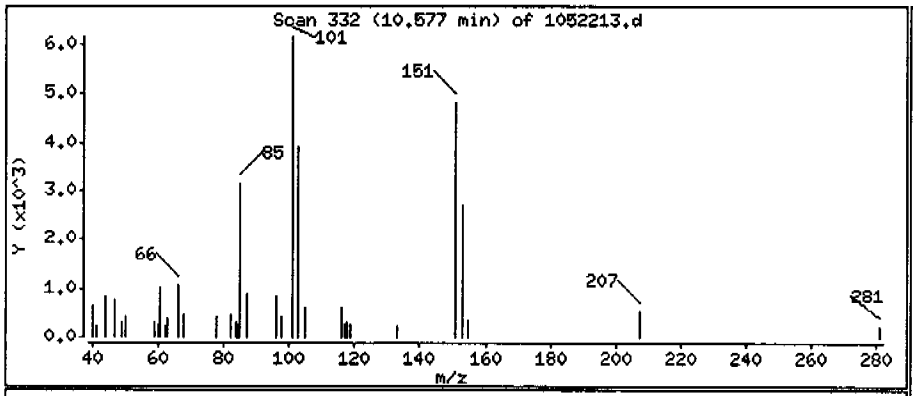
Operator: kr

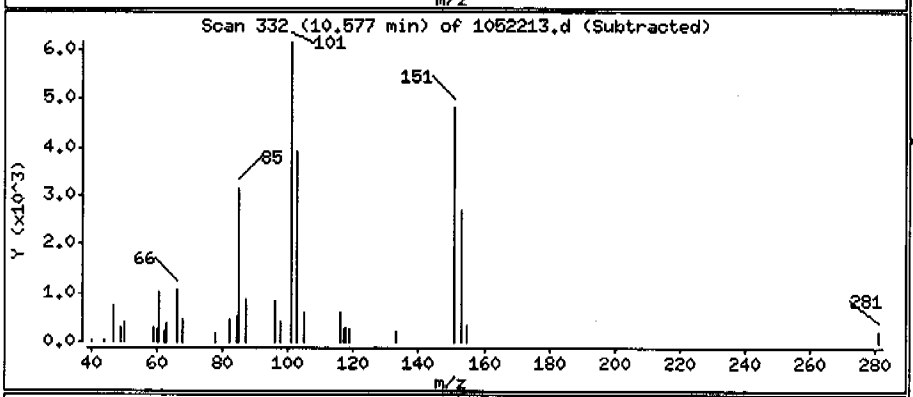
Column phase: RTx-624

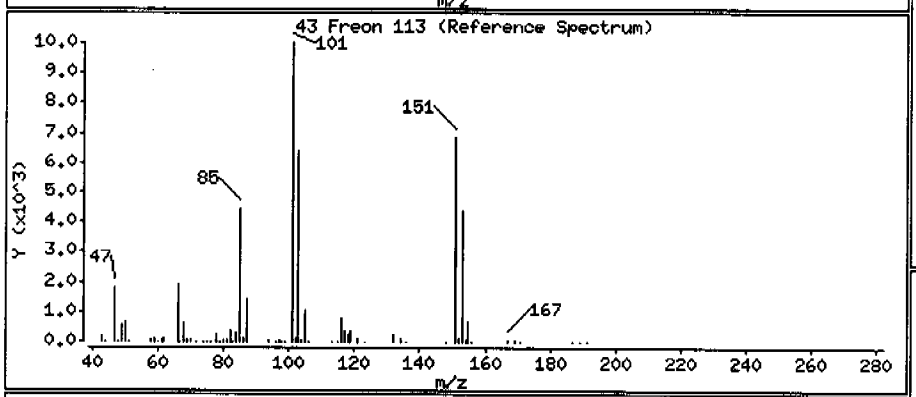
Column diameter: 0.53

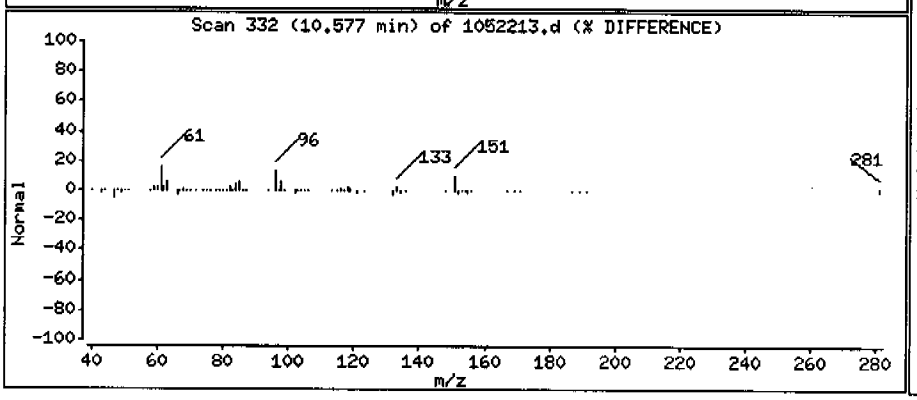
43 Freon 113

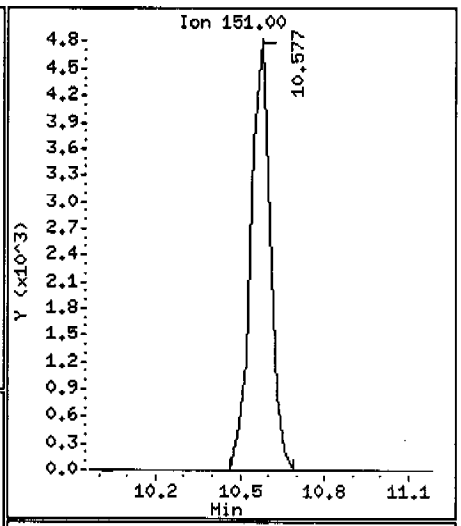
Concentration: 3.607 PPBV

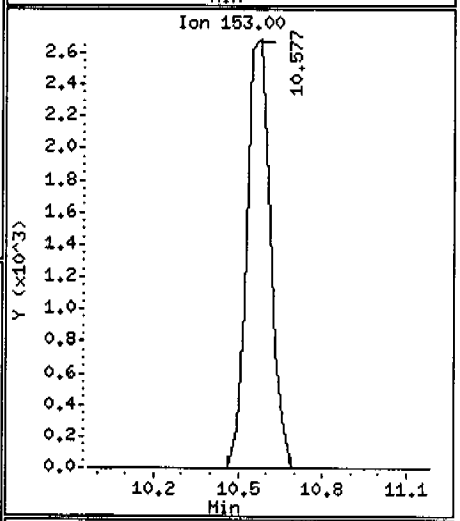


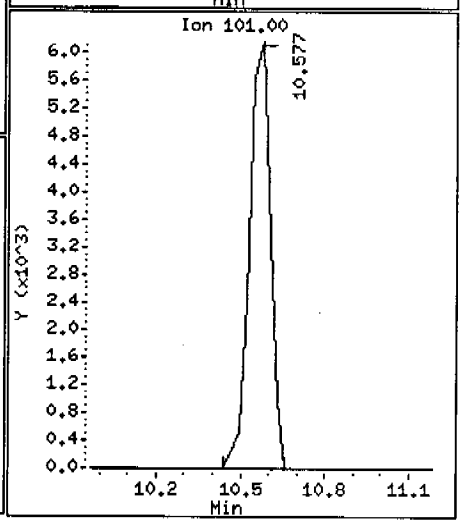












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

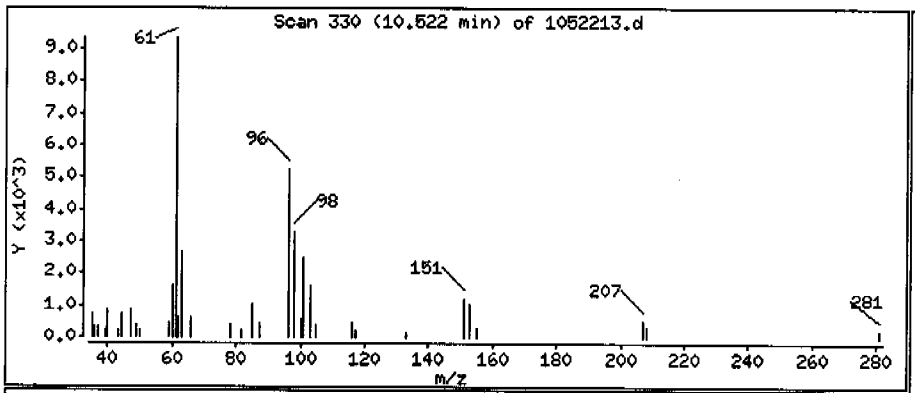
Operator: kr

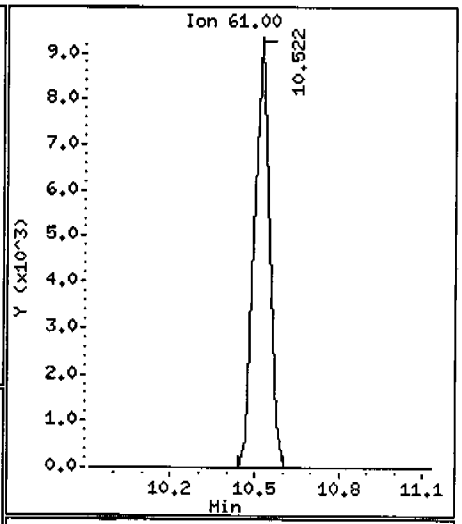
Column phase: RTx-624

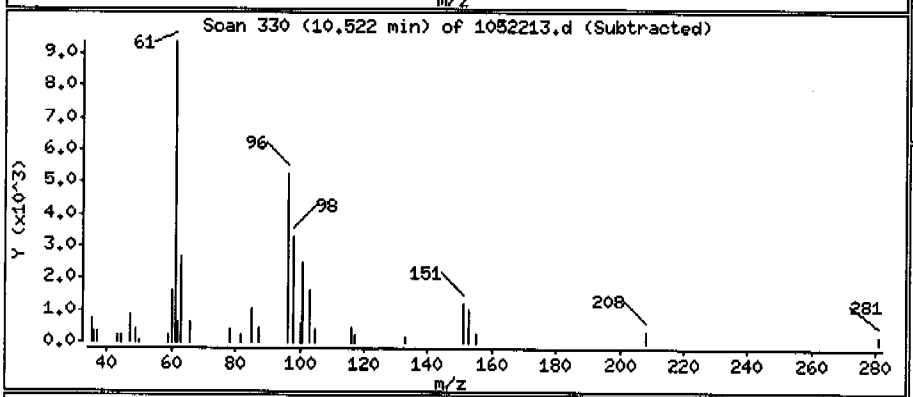
Column diameter: 0.53

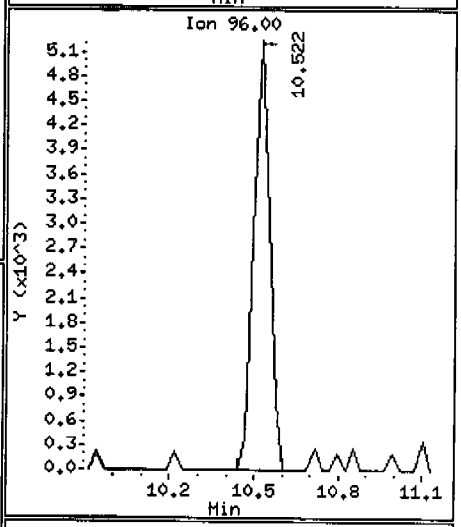
44 1,1-Dichloroethene

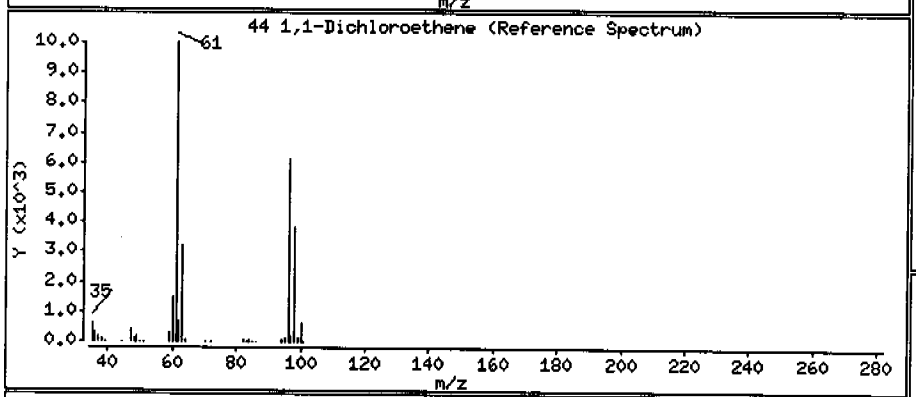
Concentration: 3.876 PPBV

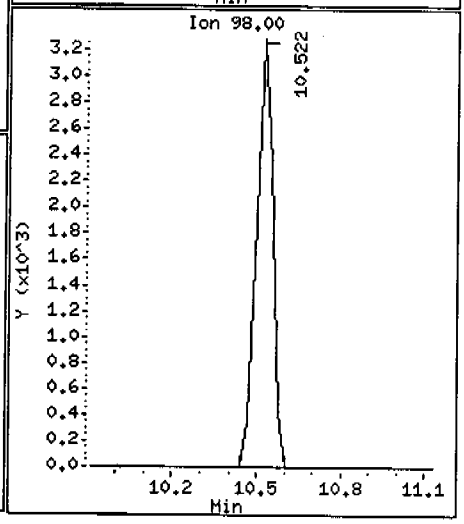


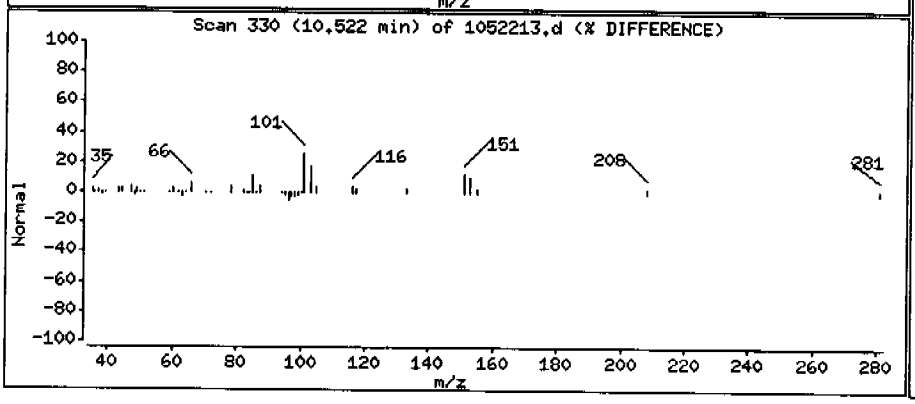












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

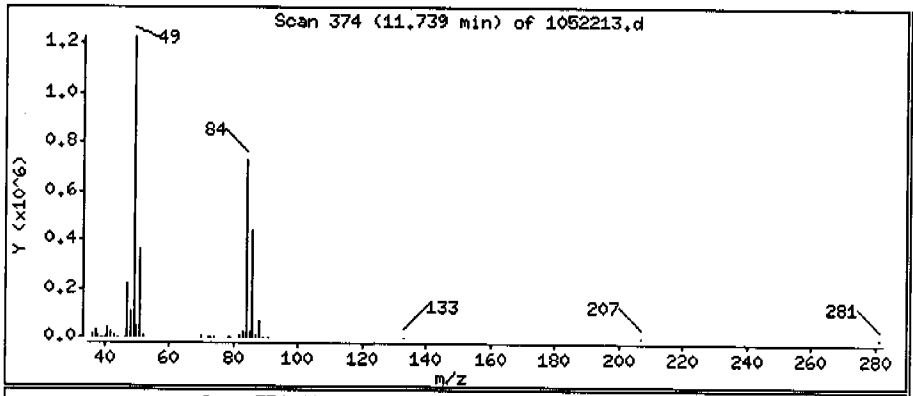
Operator: kr

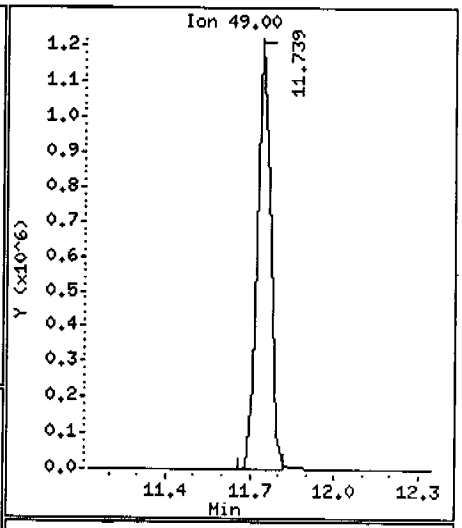
Column phase: RTx-624

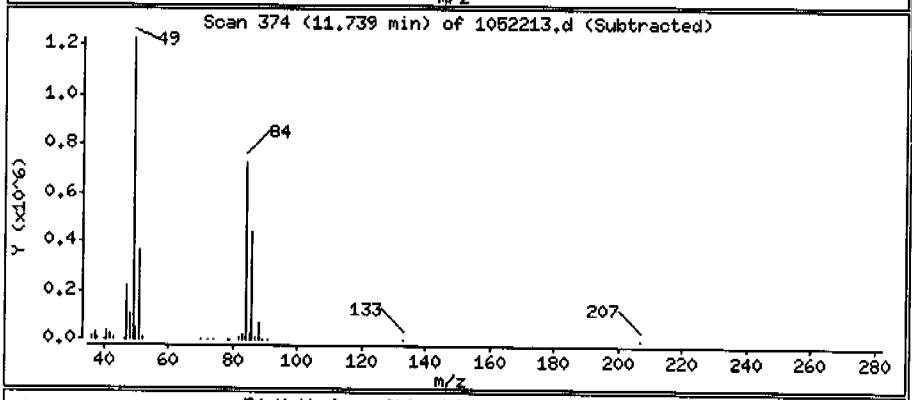
Column diameter: 0.53

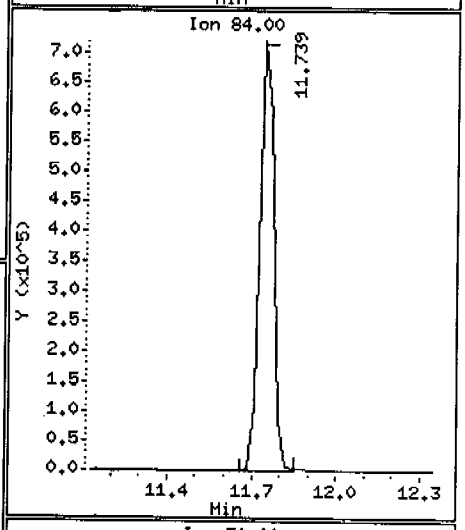
54 Methylene Chloride

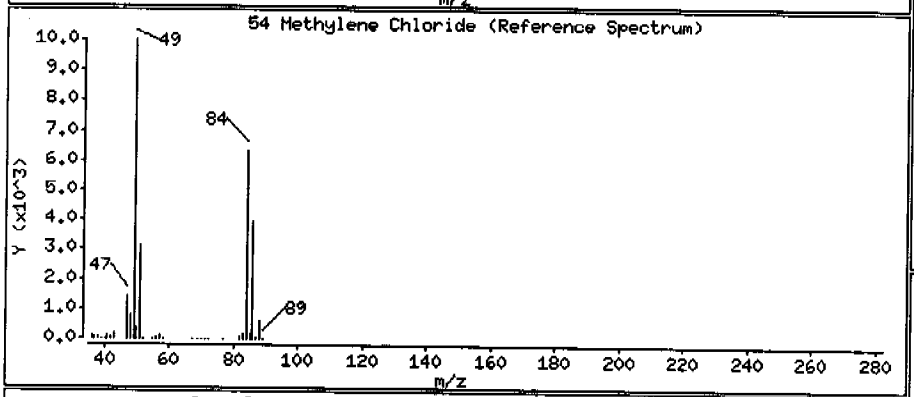
Concentration: 512.53 PPBV

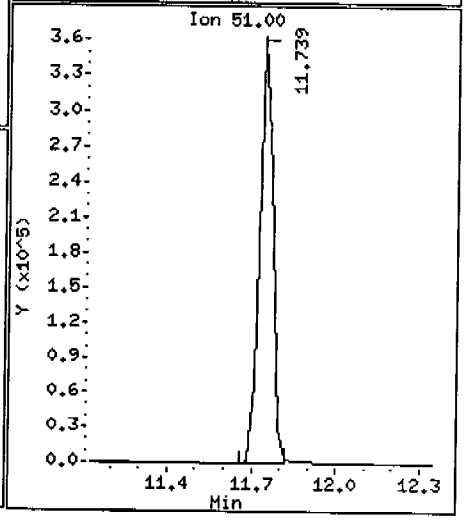


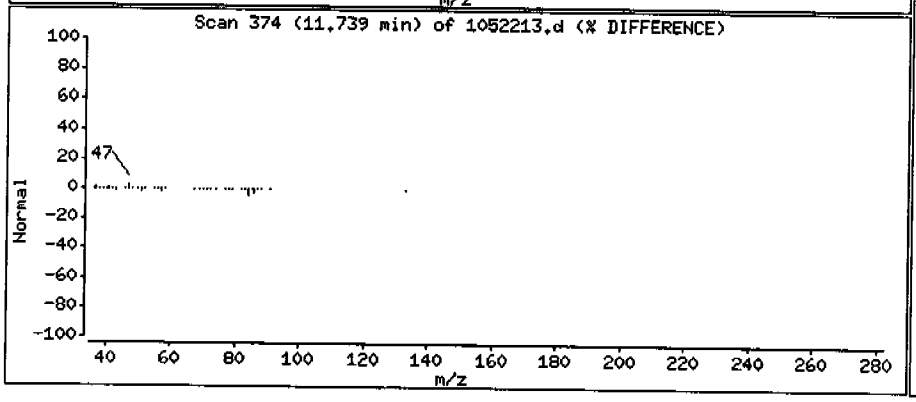












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

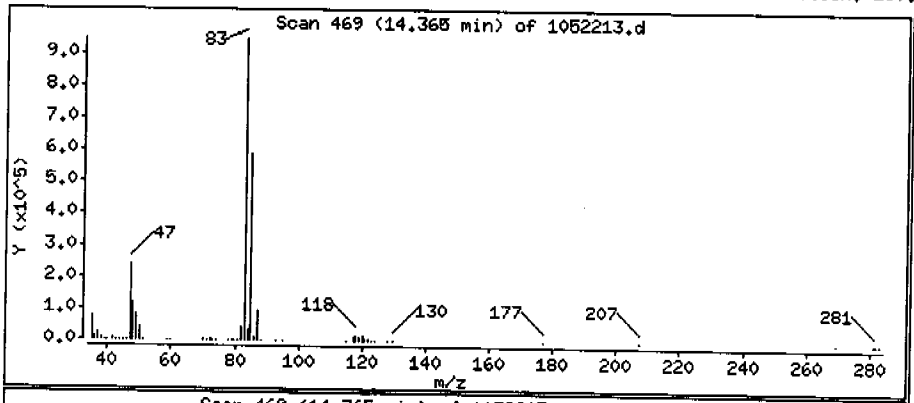
Operator: kr

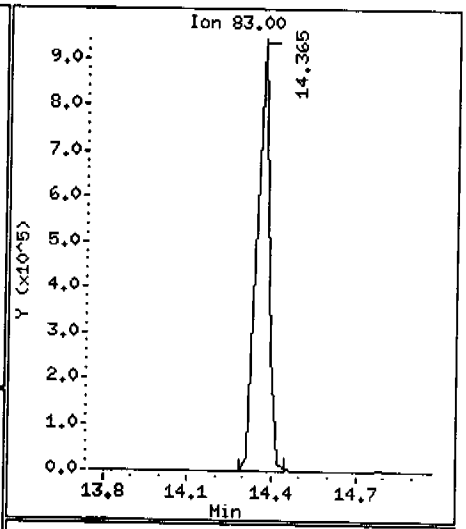
Column phase: RTx-624

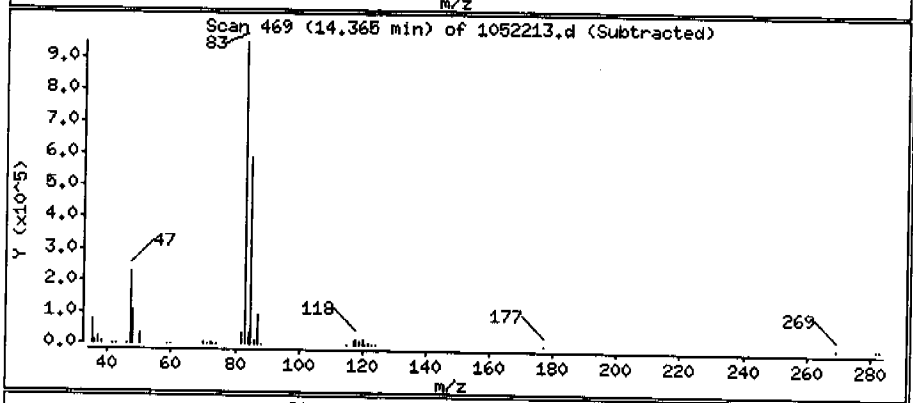
Column diameter: 0.53

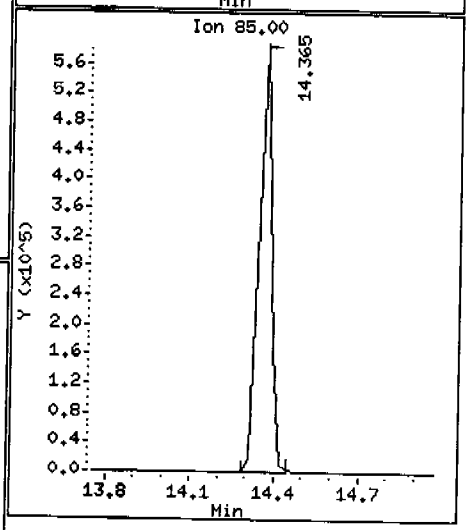
81 Chloroform

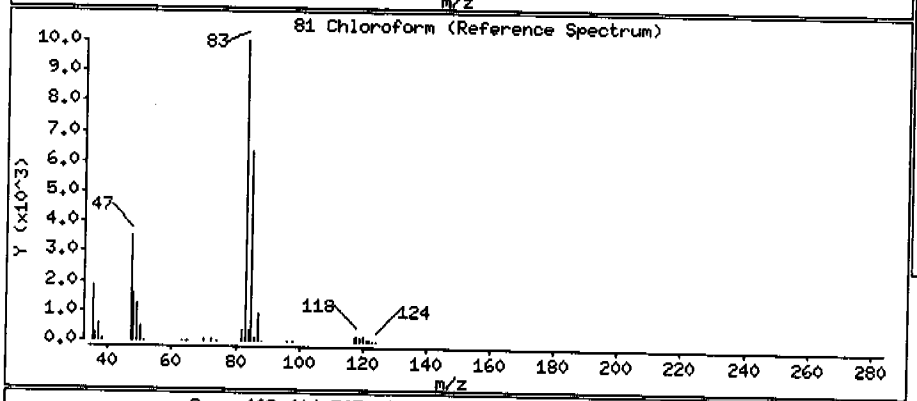
Concentration: 230.54 PPBV

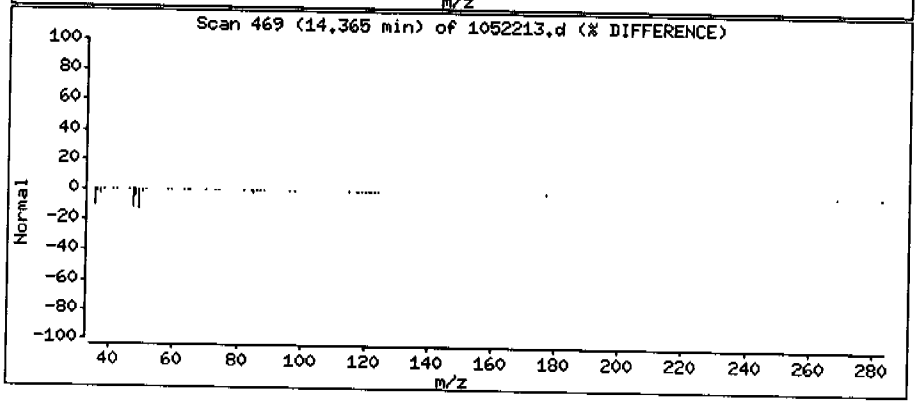












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

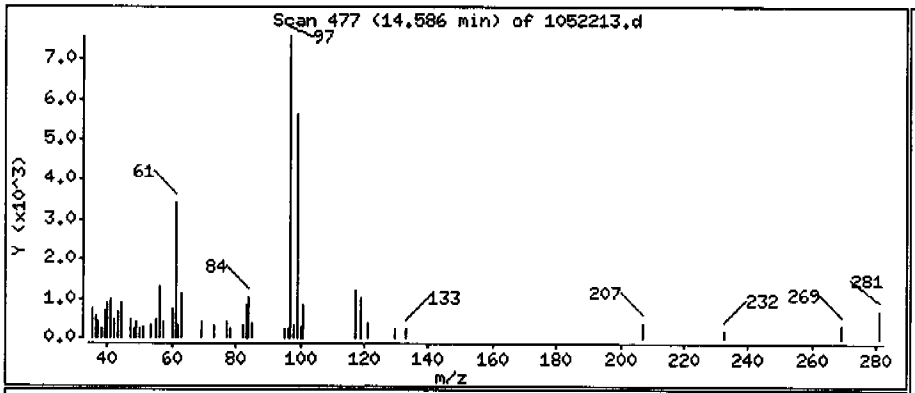
Operator: kr

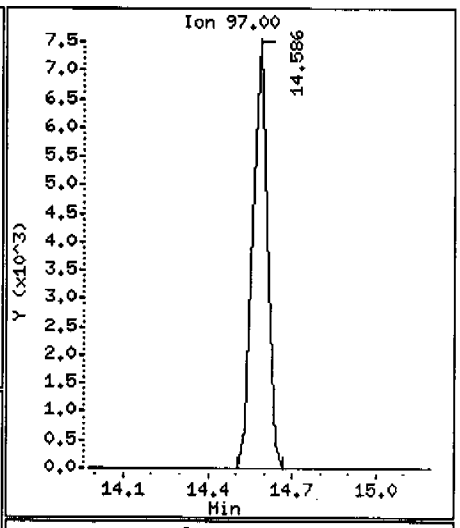
Column phase: RTx-624

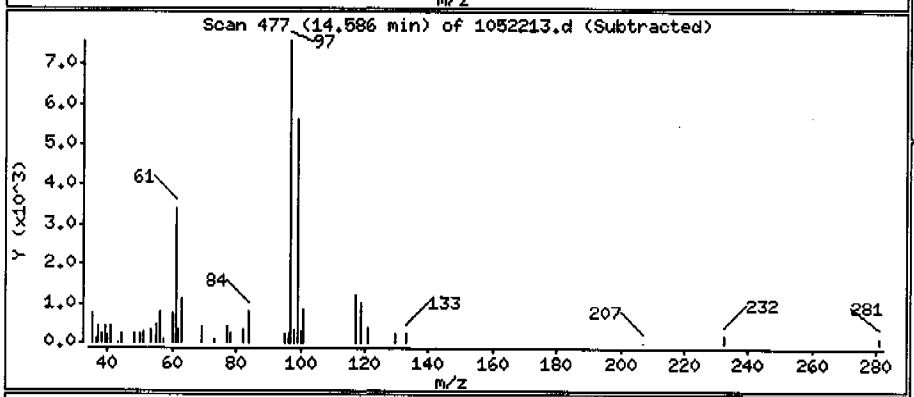
Column diameter: 0.53

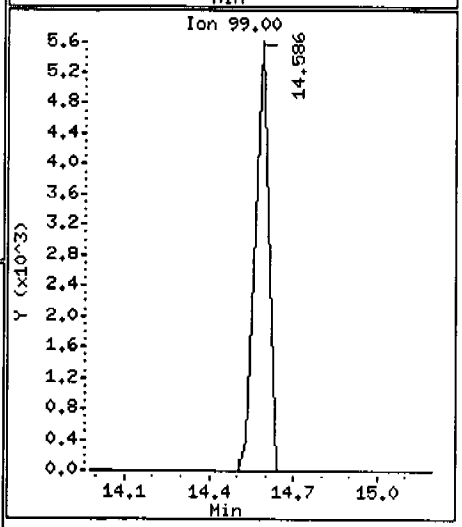
83 1,1,1-Trichloroethane

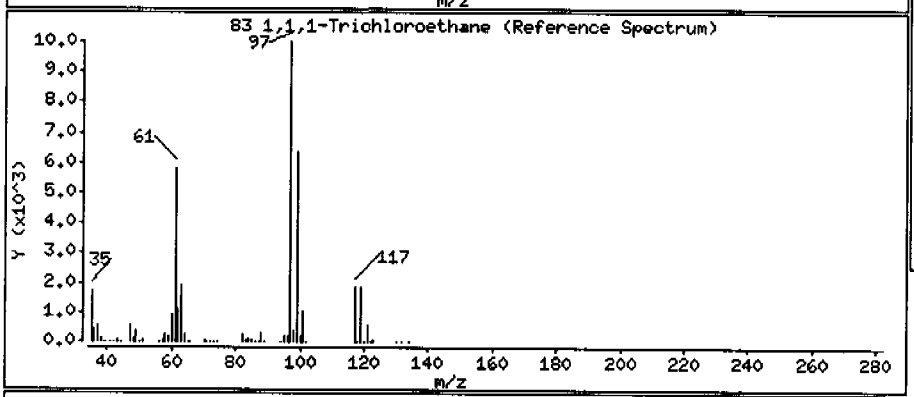
Concentration: 2.105 PPBV

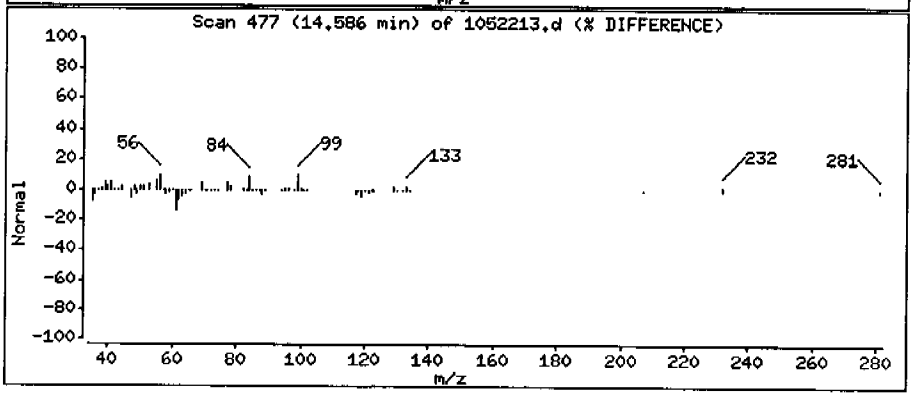












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

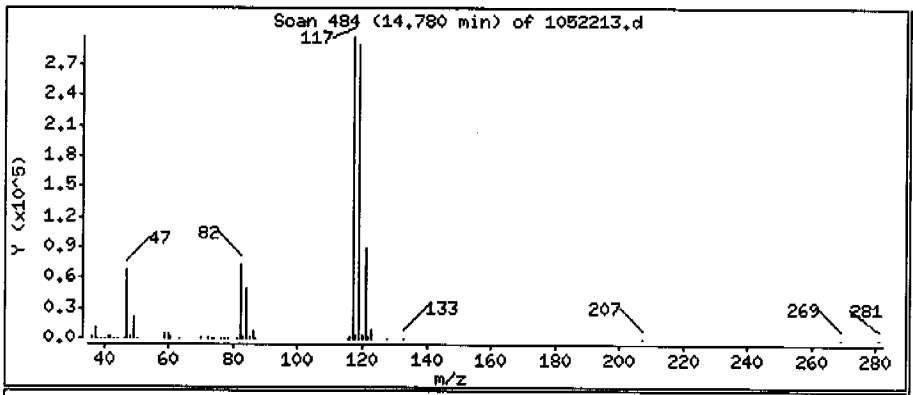
Operator: kr

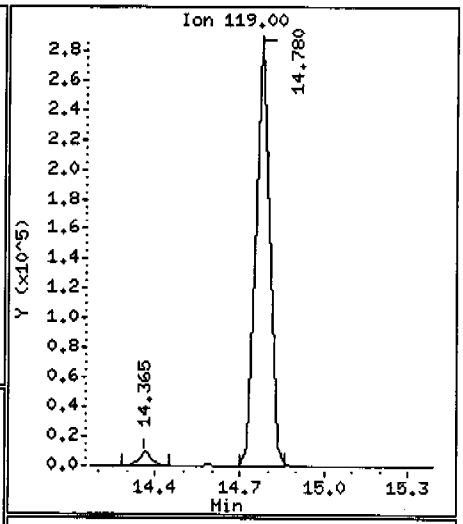
Column phase: RTx-624

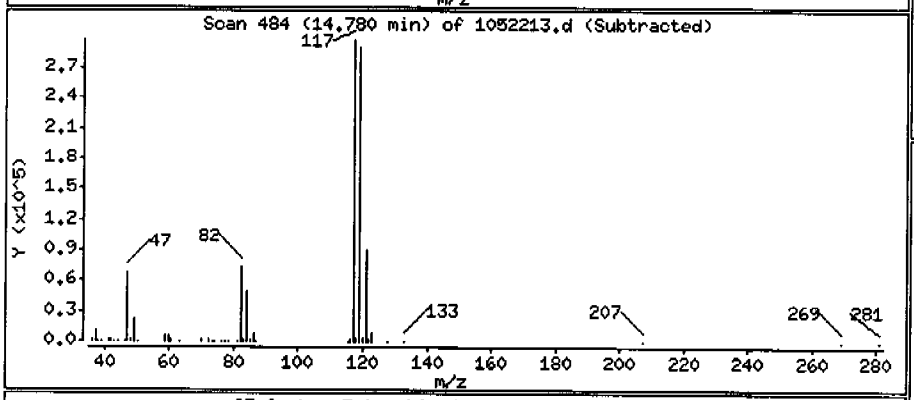
Column diameter: 0.53

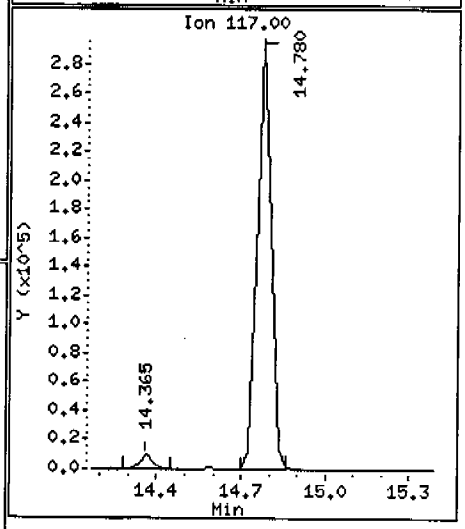
85 Carbon Tetrachloride

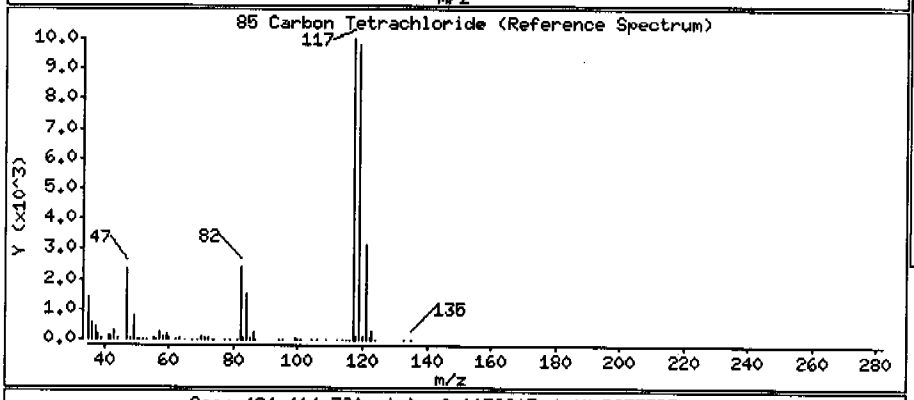
Concentration: 81.834 PPBV

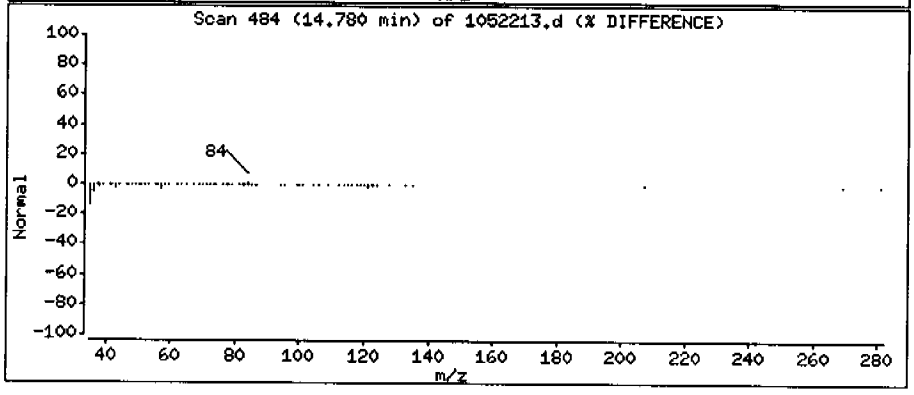












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

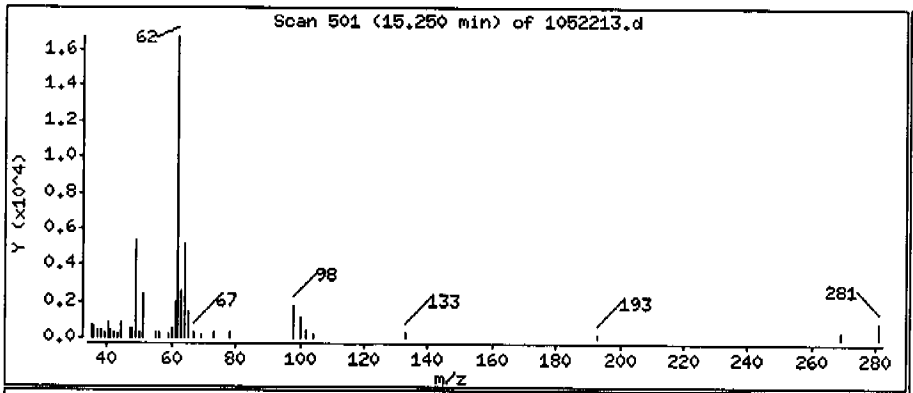
Operator: kr

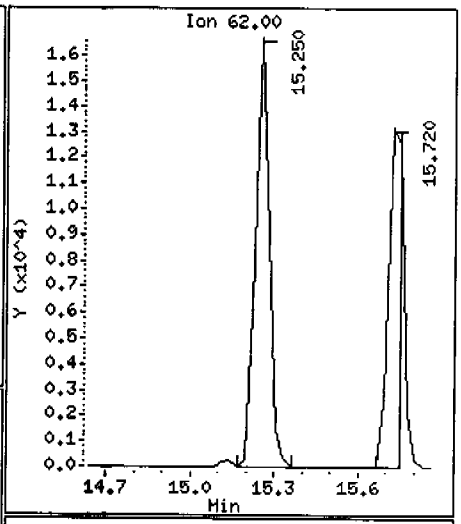
Column phase: RTx-624

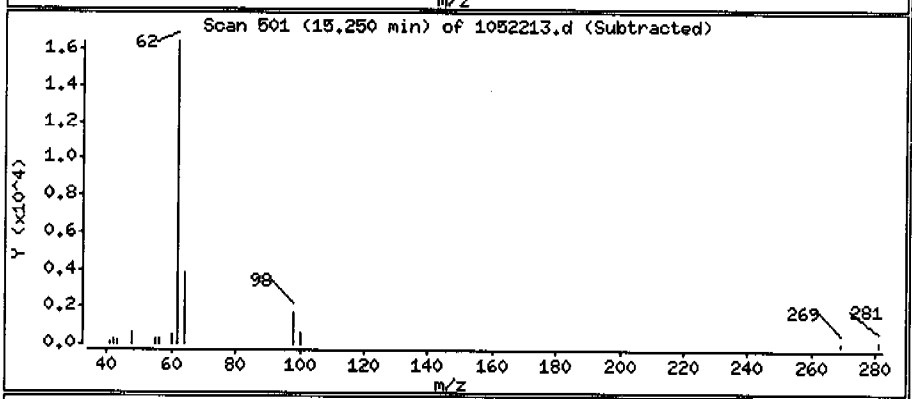
Column diameter: 0.53

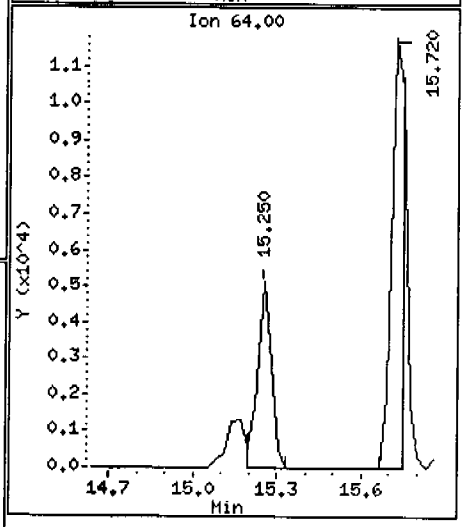
93 1,2-Dichloroethane

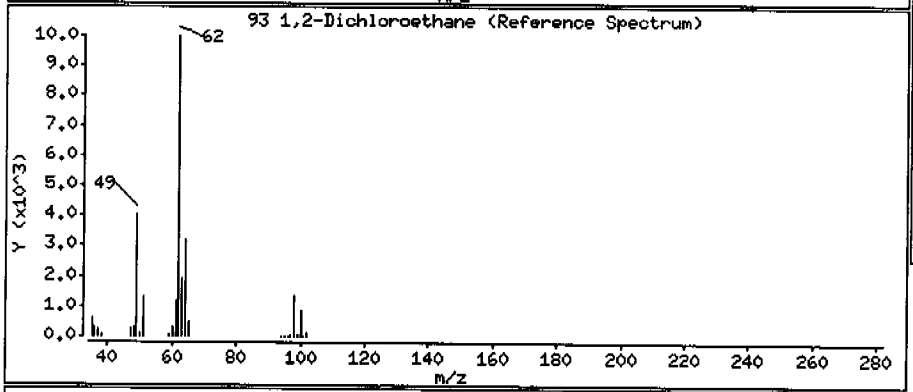
Concentration: 5.906 PPBV

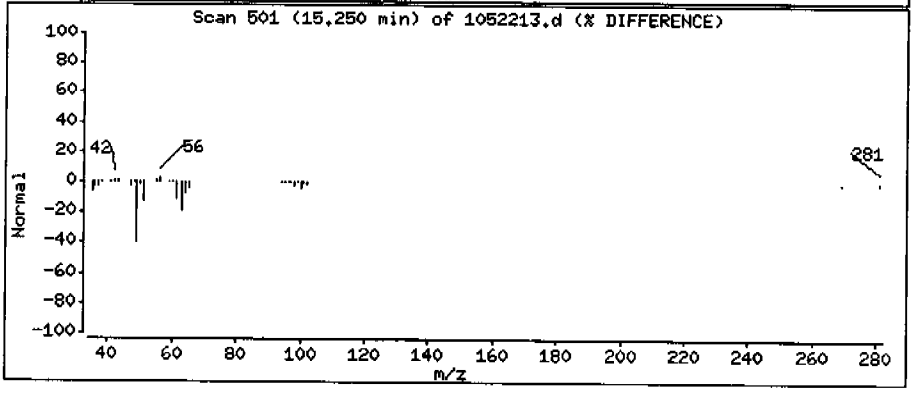












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

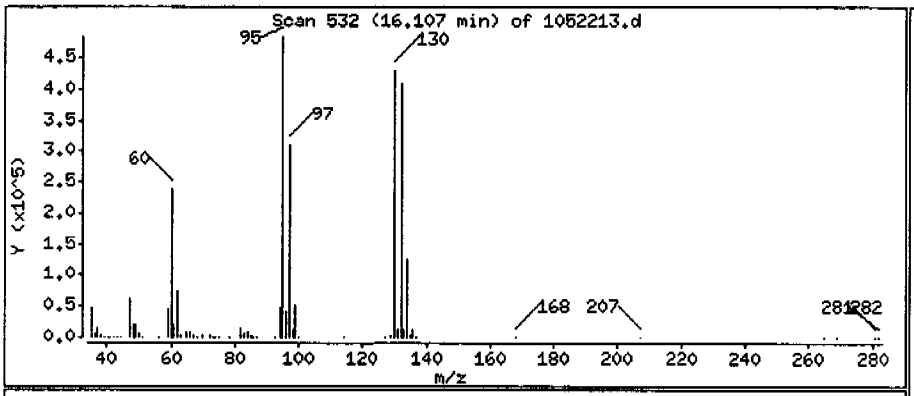
Operator: kr

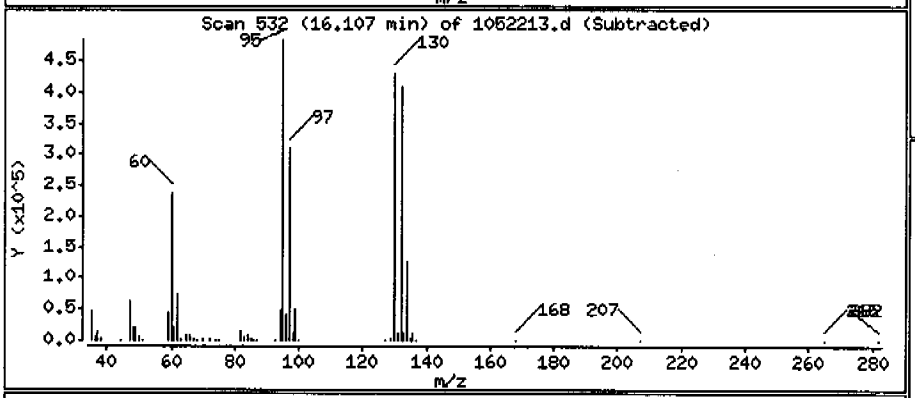
Column phase: RTx-624

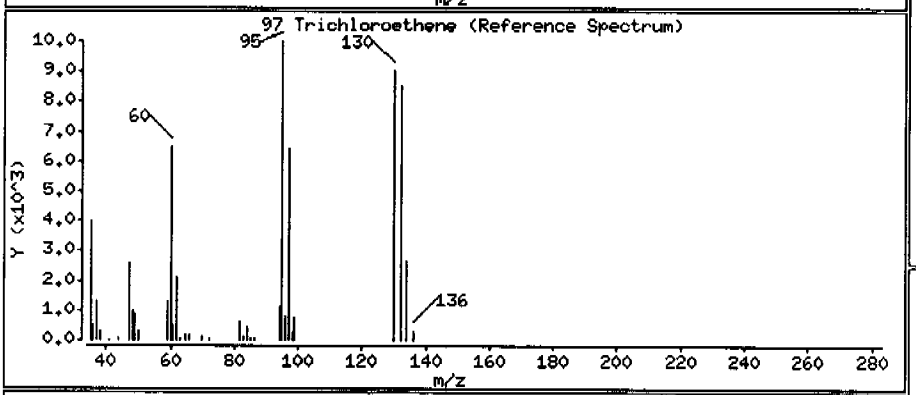
Column diameter: 0.53

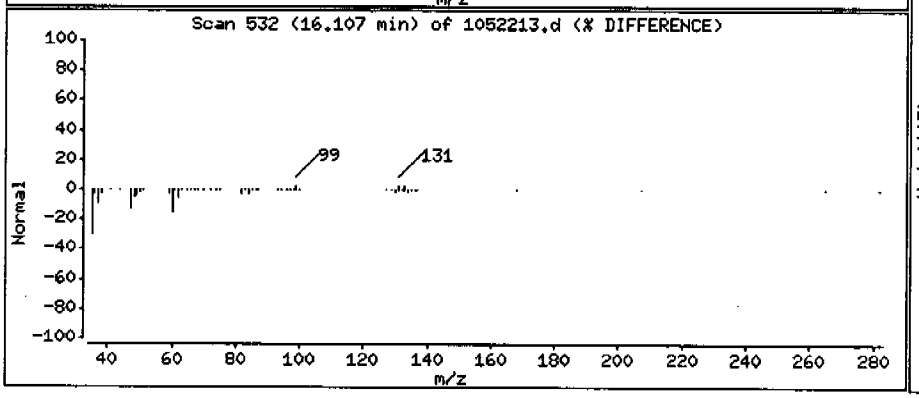
97 Trichloroethene

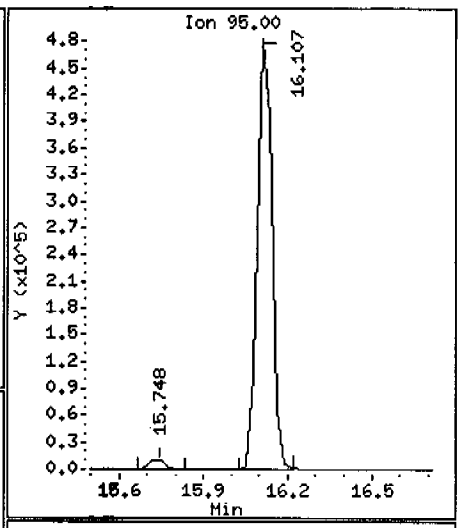
Concentration: 186.16 PPBV

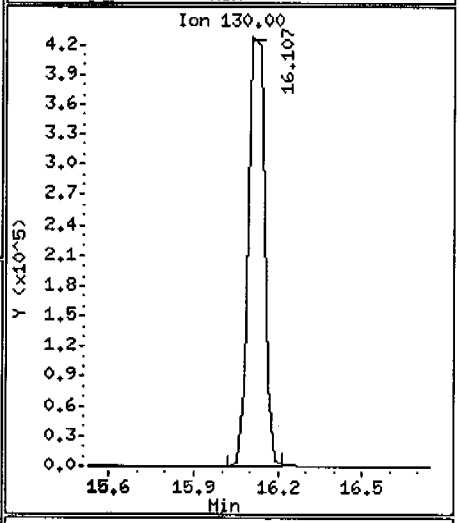


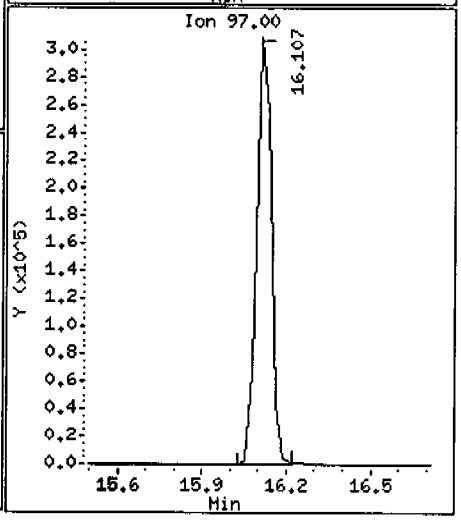












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

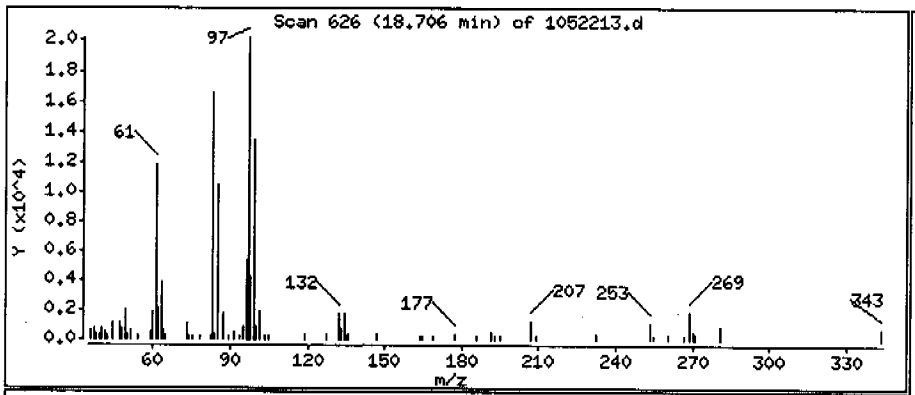
Operator: kr

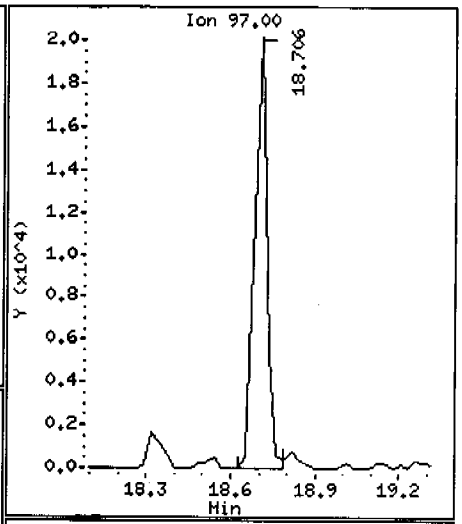
Column phase: RTx-624

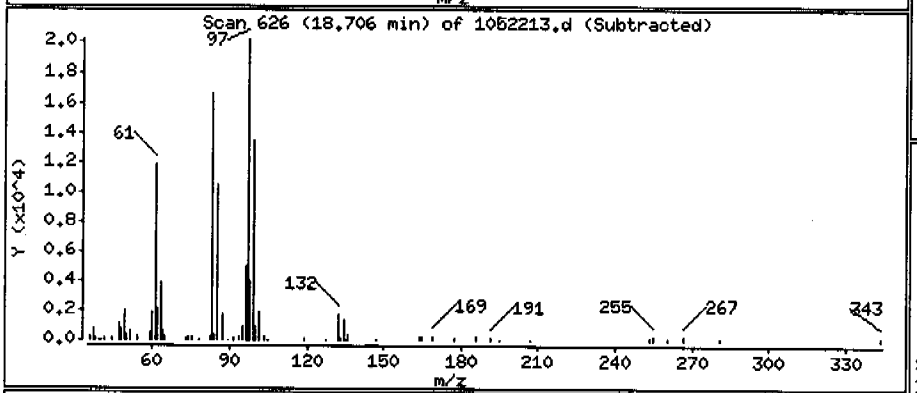
Column diameter: 0.53

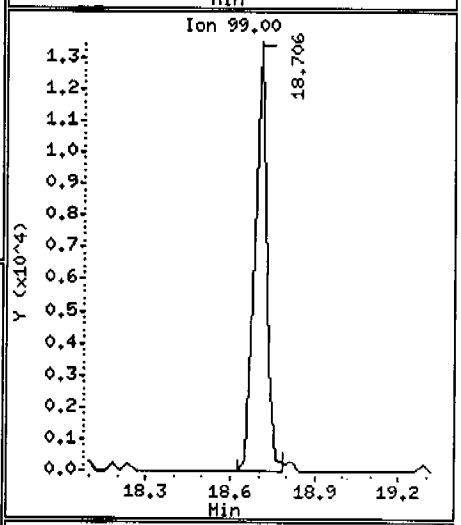
116 1,1,2-Trichloroethane

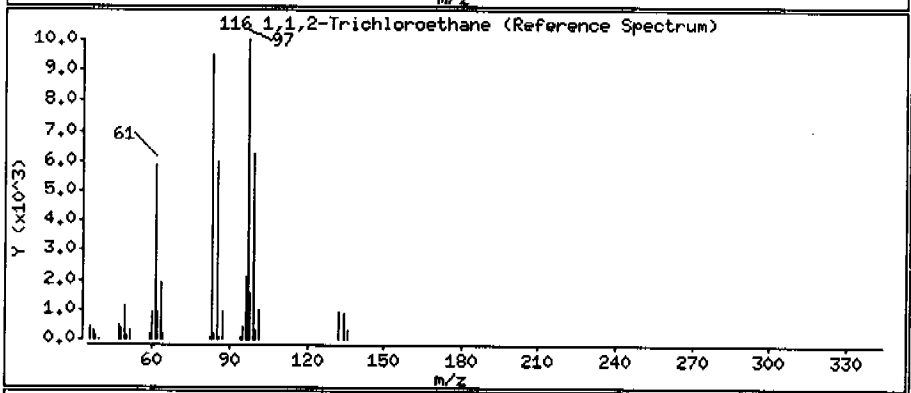
Concentration: 5.699 PPBV

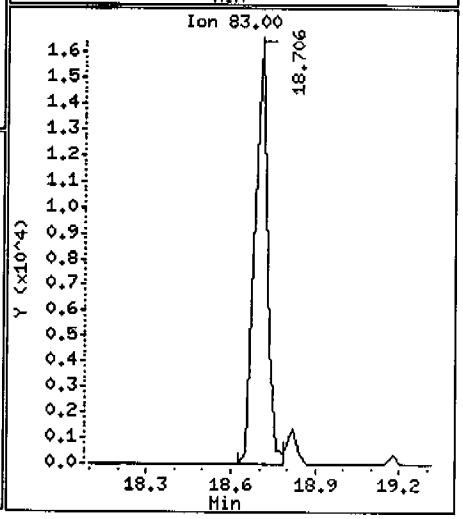


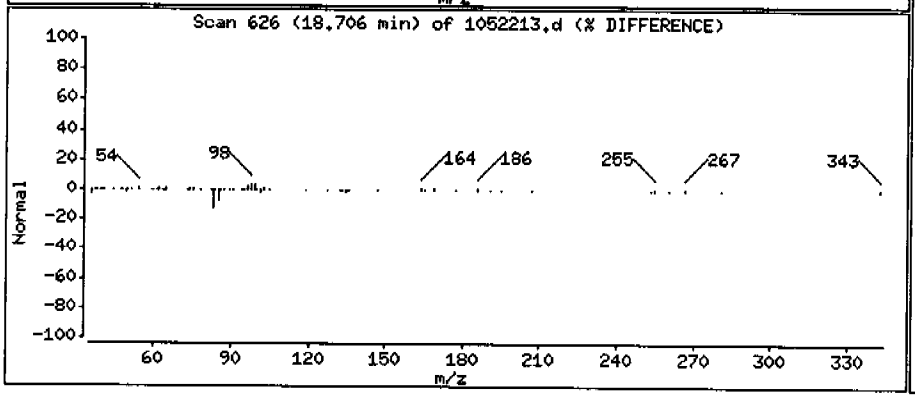












Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

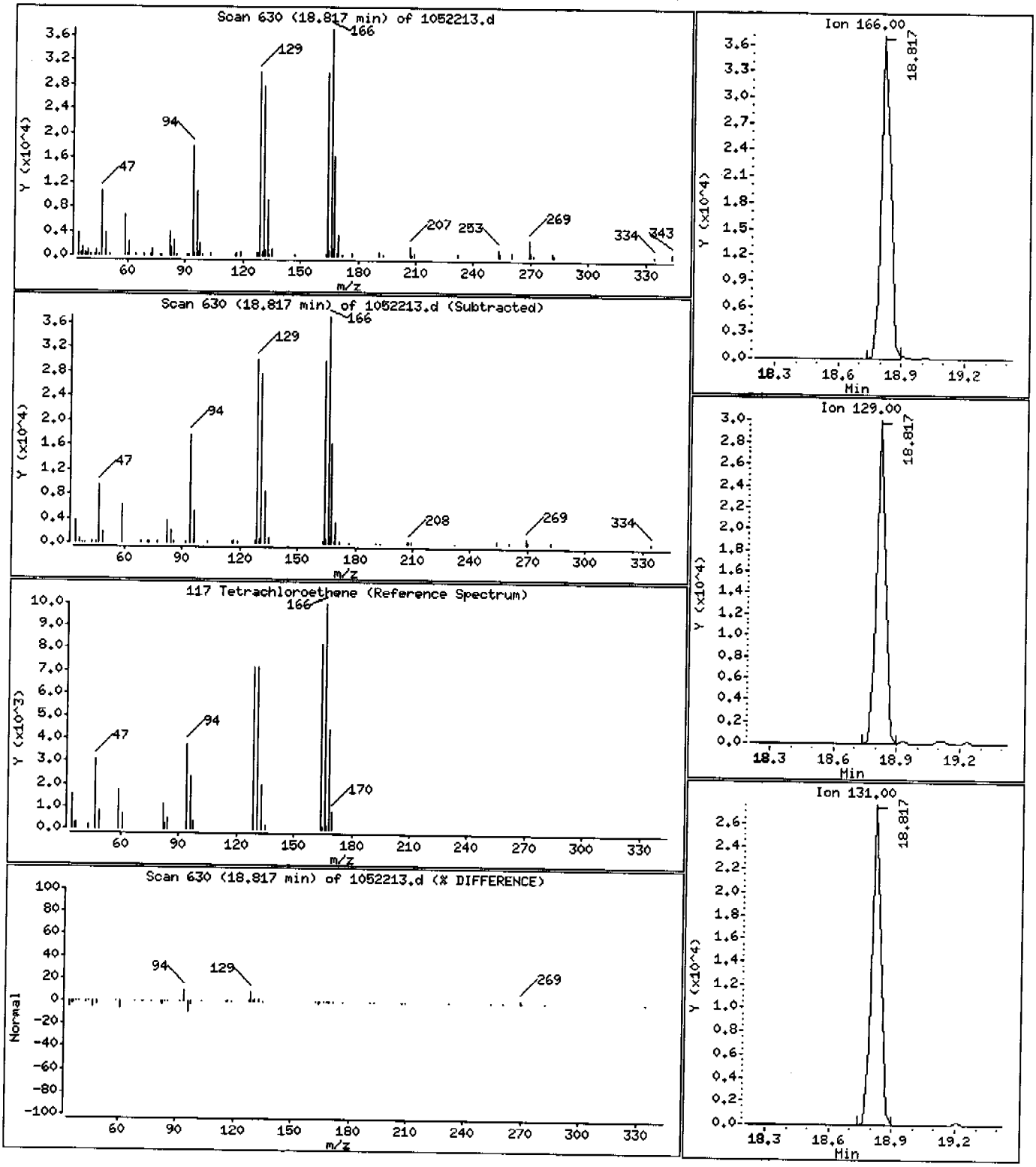
Operator: kr

Column phase: RTx-624

Column diameter: 0.53

117 Tetrachloroethene

Concentration: 8.995 PPBV



Data File: /chem/msd1.i/1-22may.b/1052213.d

Date : 22-MAY-2008 19:02

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12338

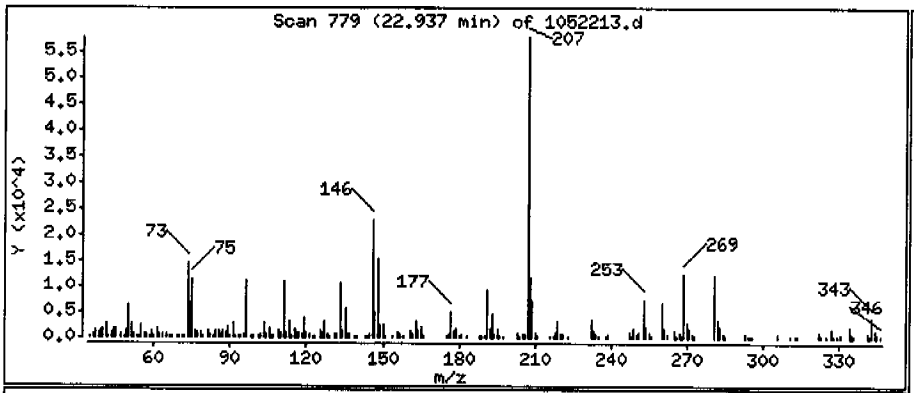
Operator: kr

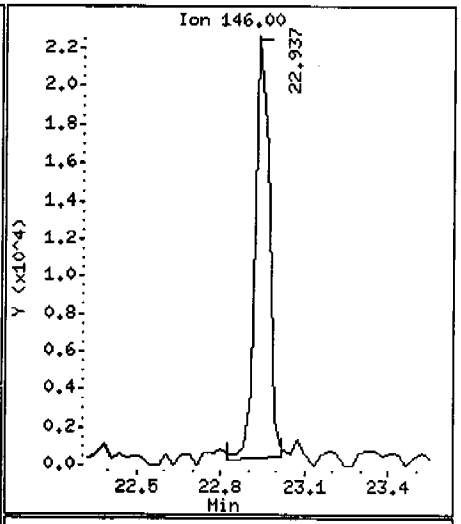
Column phase: RTx-624

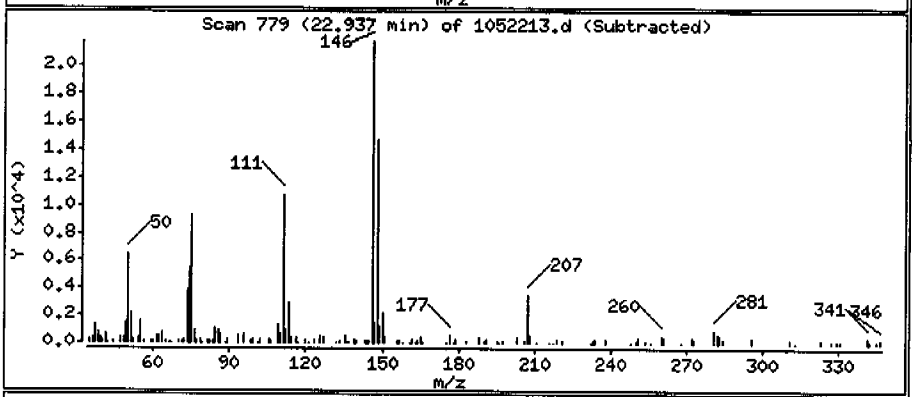
Column diameter: 0.53

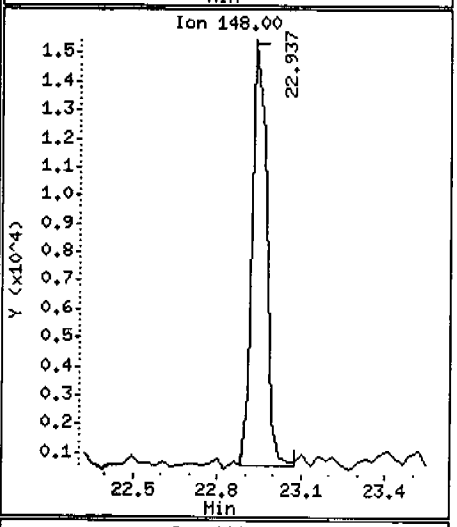
159 1,4-Dichlorobenzene

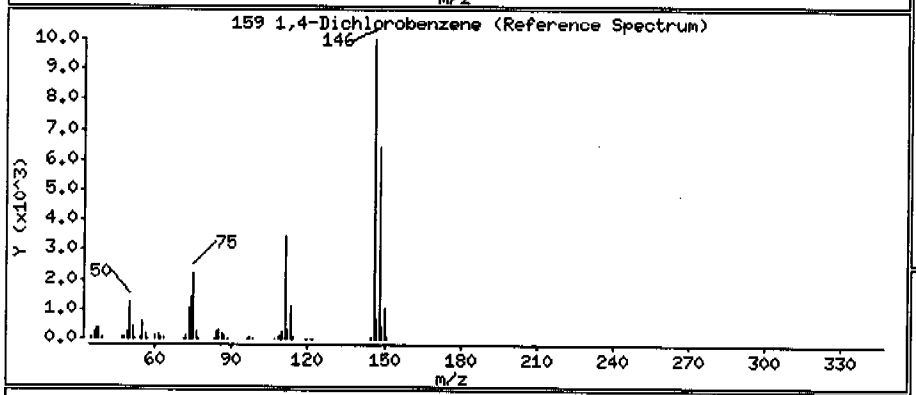
Concentration: 2.919 PPBV

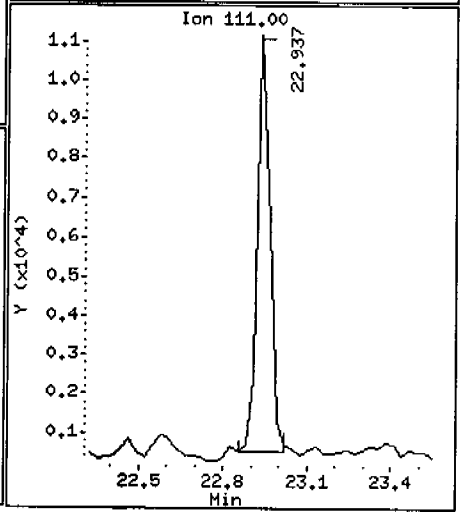


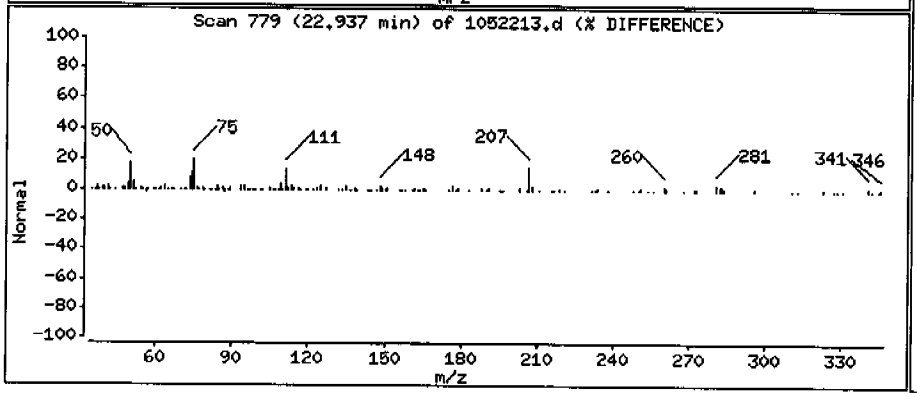












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12253

Lab ID#: 0805274-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethanol	3.4	35	6.4	66
Freon 113	0.86	3.5	6.6	27
1,1-Dichloroethene	0.86	12	3.4	50
Carbon Disulfide	0.86	0.97	2.7	3.0
Methylene Chloride	0.86	250	3.0	860
cis-1,2-Dichloroethene	0.86	1.1	3.4	4.2
Chloroform	0.86	160	4.2	770
1,1,1-Trichloroethane	0.86	2.2	4.7	12
Carbon Tetrachloride	0.86	86	5.4	540
Benzene	0.86	1.0	2.7	3.2
1,2-Dichloroethane	0.86	3.6	3.5	15
Trichloroethene	0.86	220	4.6	1200
Bromodichloromethane	0.86	1.6	5.7	11
Toluene	0.86	1.6	3.2	6.1
1,1,2-Trichloroethane	0.86	21	4.7	110
Tetrachloroethene	0.86	15	5.8	100
1,4-Dichlorobenzene	0.86	1.4	5.1	8.2

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12253

Lab ID#: 0805274-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052211 Date of Collection: 5/9/08
Dil. Factor: 1.71 Date of Analysis: 5/22/08 04:28 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	35	6.4	66
Freon 113	0.86	3.5	6.6	27
1,1-Dichloroethene	0.86	12	3.4	50
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	0.97	2.7	3.0
Methylene Chloride	0.86	250	3.0	860
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	1.1	3.4	4.2
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	160	4.2	770
1,1,1-Trichloroethane	0.86	2.2	4.7	12
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	86	5.4	540
Benzene	0.86	1.0	2.7	3.2
1,2-Dichloroethane	0.86	3.6	3.5	15
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	220	4.6	1200
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.6	5.7	11
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	1.6	3.2	6.1
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	21	4.7	110
Tetrachloroethene	0.86	15	5.8	100

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12253

Lab ID#: 0805274-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052211 Date of Collection: 5/9/08
Dil. Factor: 1.71 Date of Analysis: 5/22/08 04:28 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	1.4	5.1	8.2
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected U J	25	Not Detected U J
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	97	70-130

0240

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052211.d
Lab Smp Id: 0805274-10A
Inj Date : 22-MAY-2008 16:28
Operator : kr Inst ID: msd1.i
Smp Info : 100mL #11875
Misc Info : 6.5"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	294122	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	225088			27.30- 127.30	76.53
14.255	14.255 (1.000)	49	519434			131.96- 231.96	176.61
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1476552	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	231958			0.00- 65.38	15.71
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1648045	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	962221			8.42- 108.42	58.39
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.140 (1.060)	65	450295	22.9415	22.941	80.00- 120.00	100.00
15.139	15.140 (1.060)	67	231720			6.04- 106.04	51.46
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1640953	24.5273	24.527	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	169860			0.00- 60.35	10.35

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1079931			15.45- 115.45	65.81
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.075)	174	857442	24.3146	24.315	80.00- 120.00	100.00
21.526	21.527 (1.075)	95	1363303			110.38- 210.38	159.00
21.526	21.527 (1.075)	176	805688			44.94- 144.94	93.96
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.706)	45	135959	20.5700	35.175	80.00- 120.00	100.00
10.080	10.135 (0.706)	43	37702			0.00- 75.81	27.73
10.052	10.135 (0.704)	46	3045			0.00- 92.85	2.24
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	45083	2.06472	3.531	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	26981			13.47- 113.47	59.85
10.577	10.577 (0.741)	101	56488			83.83- 183.83	125.30
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	222193	7.34006	12.552	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	123670			3.44- 103.44	55.66
10.522	10.522 (0.737)	98	77347			0.00- 84.21	34.81
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.826 (0.760)	76	28353	0.56864	0.9724	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	3820693	145.704	249.15	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	2431098			14.84- 114.84	63.63
11.739	11.739 (0.822)	51	1142430			0.00- 79.96	29.90
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.973)	61	19572	0.62099	1.062	80.00- 120.00	100.00
13.923	13.895 (0.975)	96	15508			22.01- 122.01	79.23
13.923	13.895 (0.975)	98	8741			0.00- 95.61	44.66
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	3840173	92.3010	157.83	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	2375756			12.44- 112.44	61.87
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.587 (1.021)	97	56440	1.29286	2.211	80.00- 120.00	100.00
14.586	14.587 (1.021)	99	37591			14.11- 114.11	66.60
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	2030338	50.2838	85.985	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
85 Carbon Tetrachloride (continued)							
14.780	14.780 (1.035)	117	2117157			52.90- 152.90	104.28
91 Benzene					CAS #: 71-43-2		
15.139	15.140 (0.961)	78	44661	0.59443	1.016	80.00- 120.00	100.00
15.139	15.140 (0.961)	77	10705			0.00- 73.68	23.97
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	65850	2.11943	3.624	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	21716			0.00- 83.51	32.98
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	3885090	126.099	215.63	80.00- 120.00	100.00
16.107	16.135 (1.023)	130	3761238			47.48- 147.48	96.81
16.107	16.107 (1.023)	97	2507832			14.50- 114.50	64.55
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	45440	0.94105	1.609	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	27086			11.34- 111.34	59.61
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	98431	0.95249	1.629	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	57481			9.92- 109.92	58.40
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	422016	12.1000	20.691	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	263084			12.19- 112.19	62.34
18.706	18.706 (0.934)	83	352106			31.81- 131.81	83.43
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	360271	8.91690	15.248	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	280040			27.36- 127.36	77.73
18.817	18.817 (0.939)	131	267958			25.62- 125.62	74.38
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.145)	146	67310	0.79317	1.356	80.00- 120.00	100.00
22.937	22.937 (1.145)	148	43688			16.32- 116.32	64.91
22.937	22.937 (1.145)	111	30318			0.00- 90.95	45.04

Data File: /chem/msd1.i/1-22may.b/1052211.d
Report Date: 27-May-2008 15:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052211.d
Lab Smp Id: 0805274-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

Calibration Date: 22-MAY-2008
Calibration Time: 09:16

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	294122	-4.53
95 1,4-Difluorobenze	1638375	983025	2293725	1476552	-9.88
123 Chlorobenzene-d5	1818182	1090909	2545455	1648045	-9.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-22may.b/1052211.d
Report Date: 27-May-2008 15:28

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-22may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805274-10A
Level: LOW
Operator: kr
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.941	91.77	70-130
$ 111 Toluene-d8	25.000	24.527	98.11	70-130
$ 136 Bromofluorobenzene	25.000	24.315	97.26	70-130

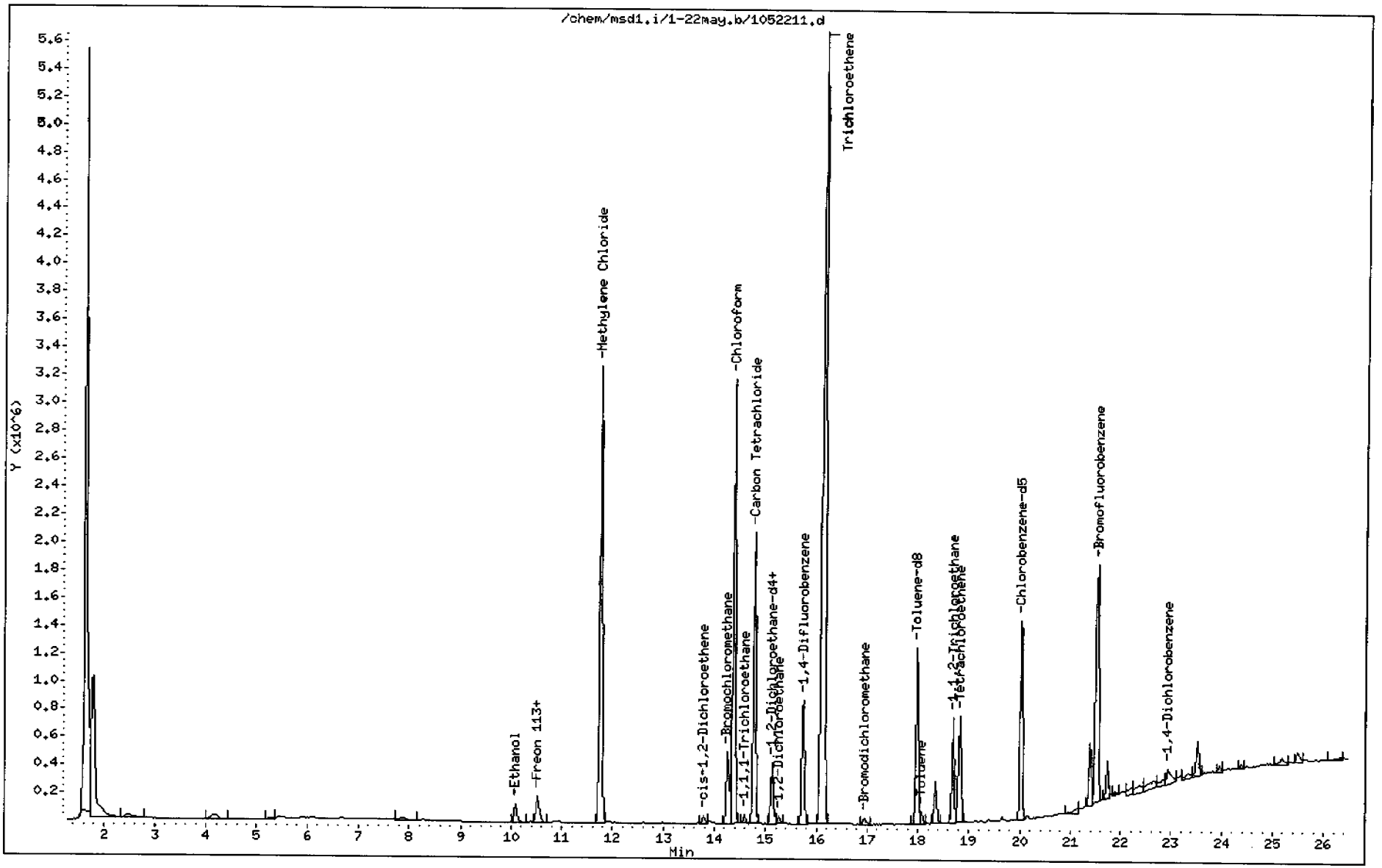
Data File: /chem/msd1.i/1-22may.b/1052211.d
Date : 22-MAY-2008 16:28
Client ID:
Sample Info: 100mL #11875

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0246



Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

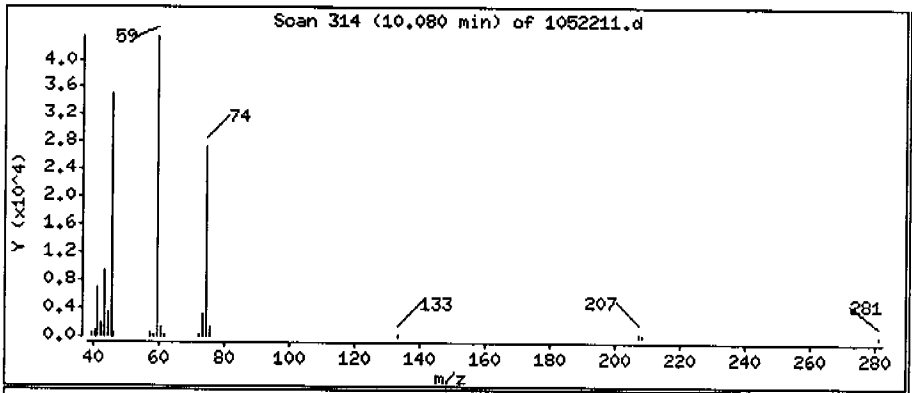
Operator: kr

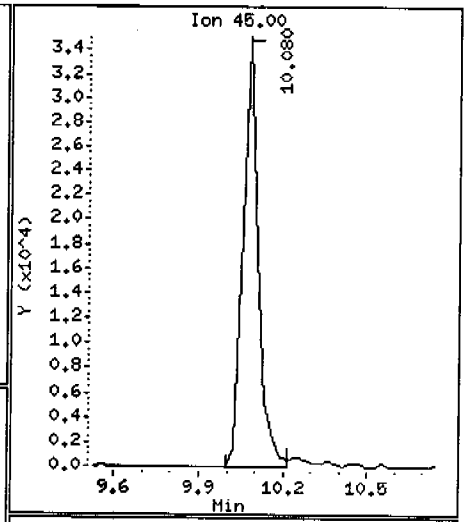
Column phase: RTx-624

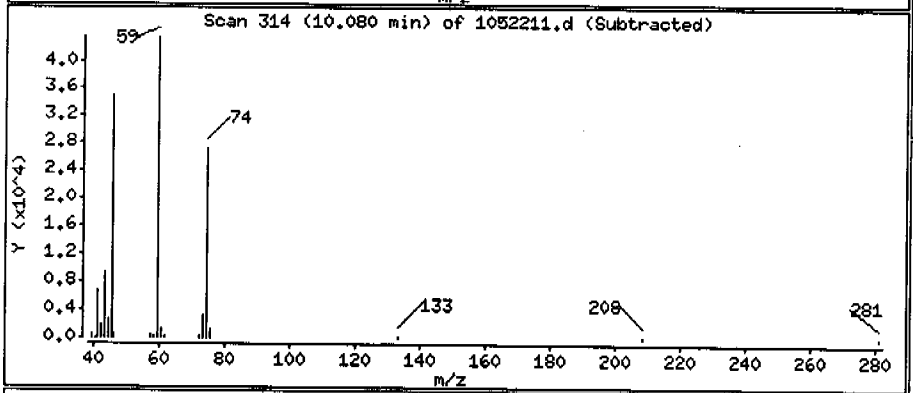
Column diameter: 0.53

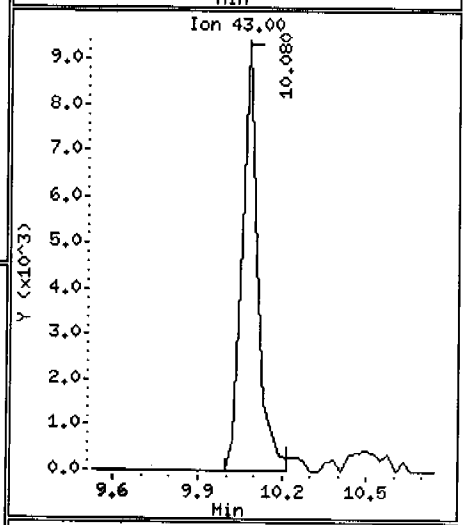
38 Ethanol

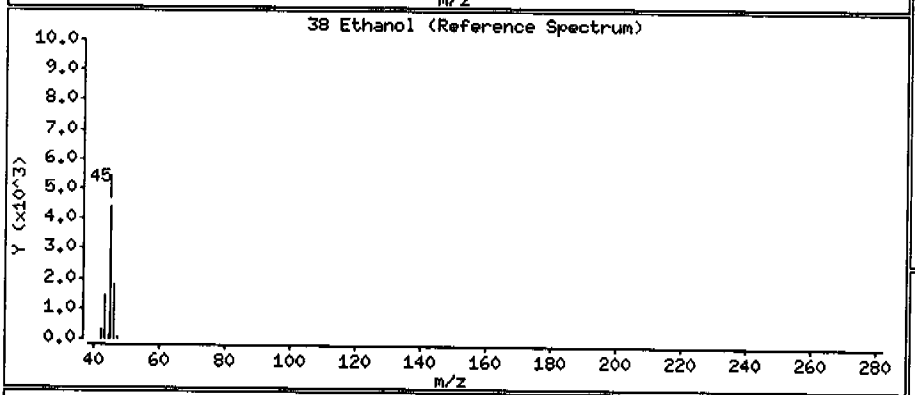
Concentration: 35.175 PPBV

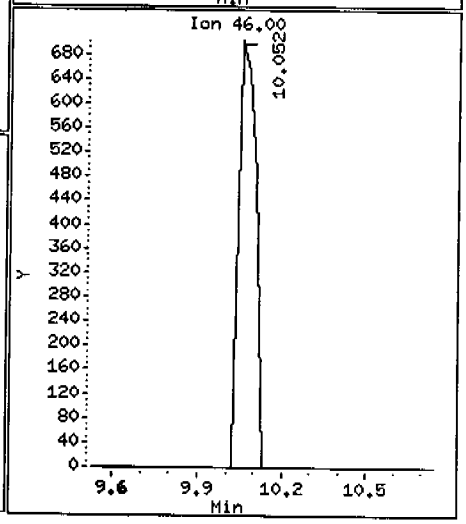


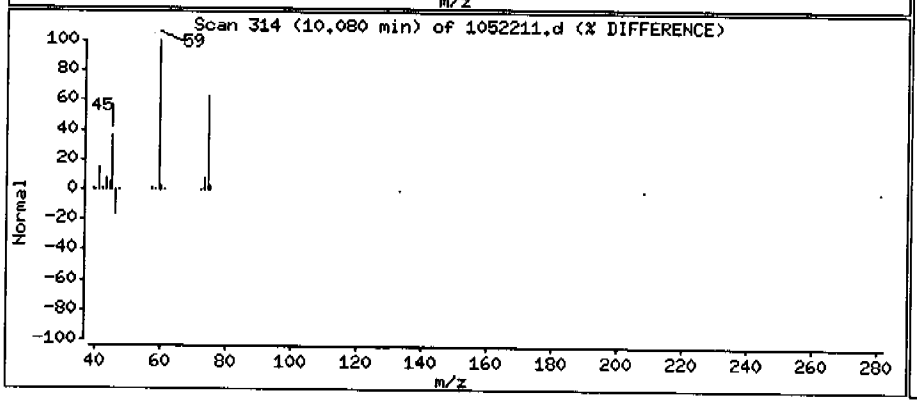












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Sample Info: 100mL #11875

Instrument: msd1.i

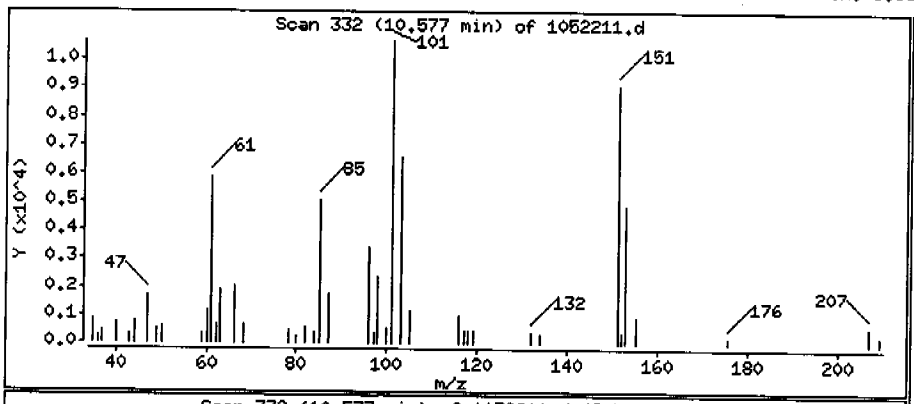
Operator: kr

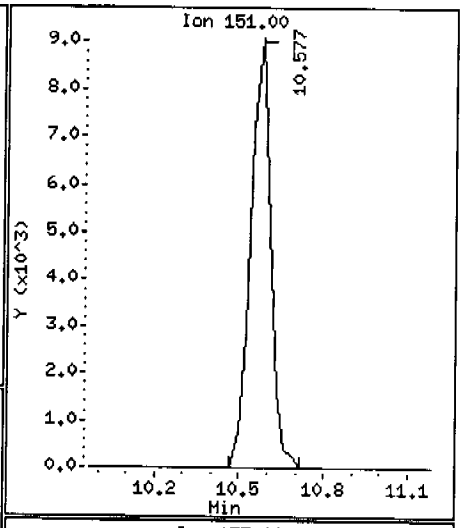
Column phase: RTx-624

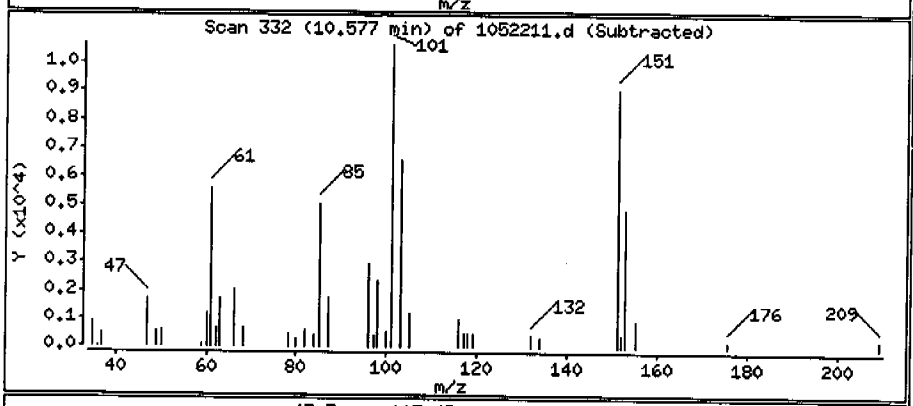
Column diameter: 0.53

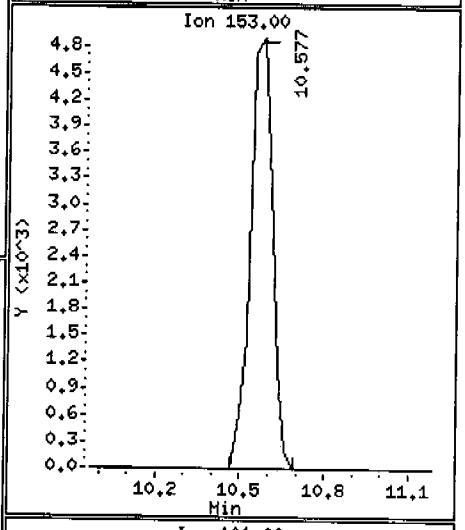
43 Freon 113

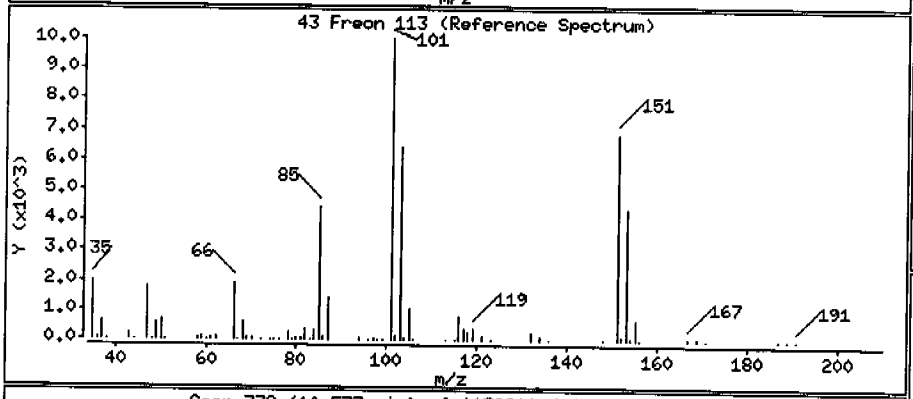
Concentration: 3.531 PPBV

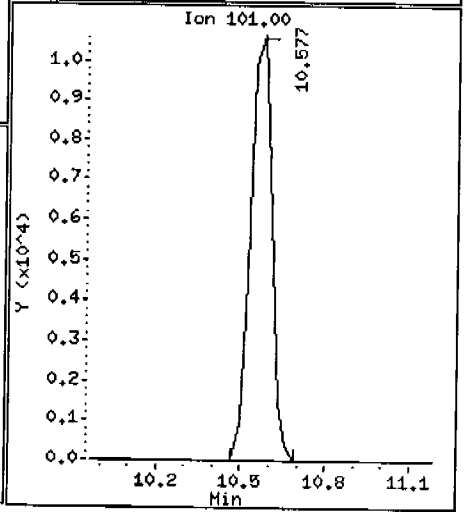


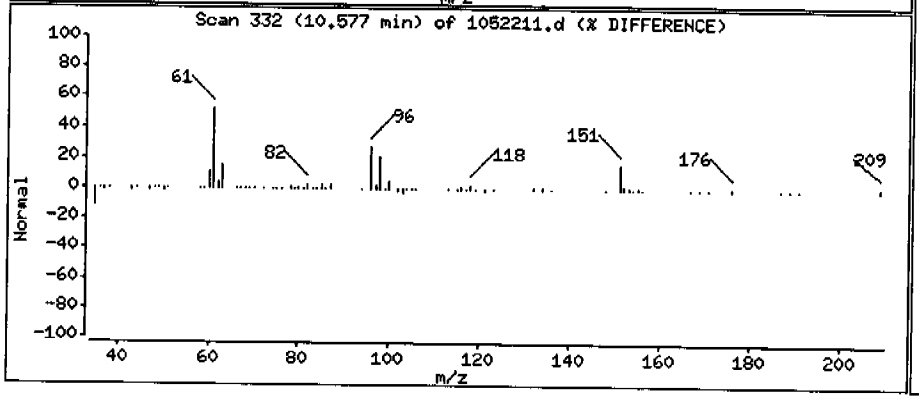












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

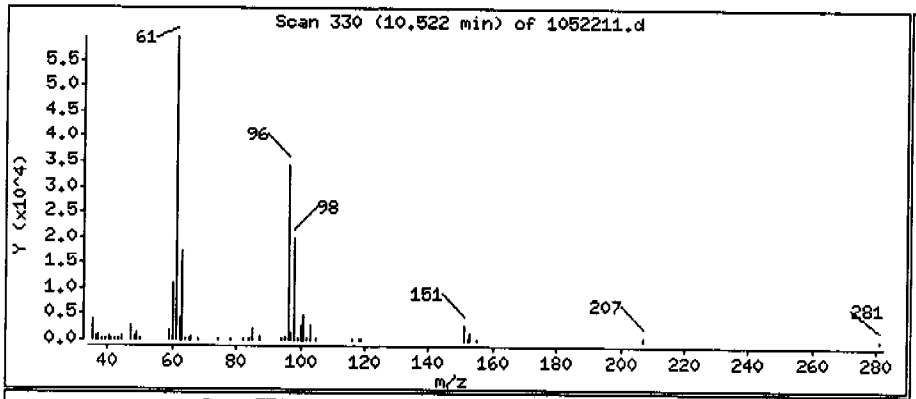
Operator: kr

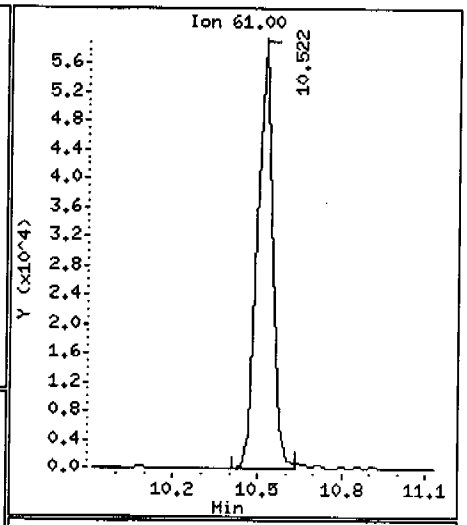
Column phase: RTx-624

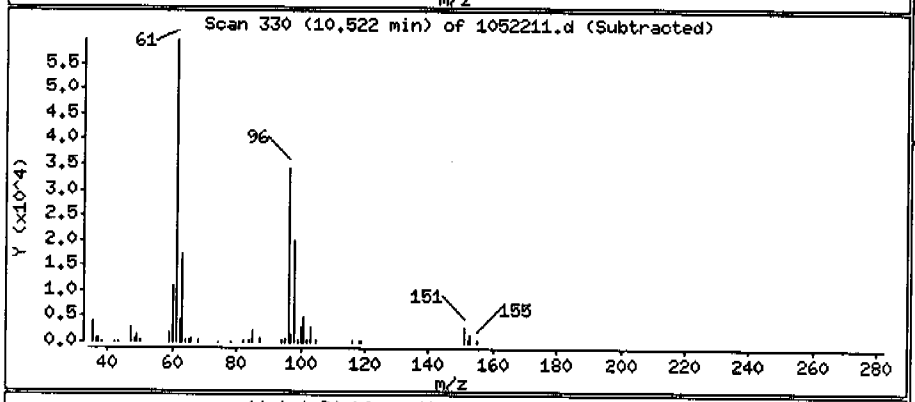
Column diameter: 0.53

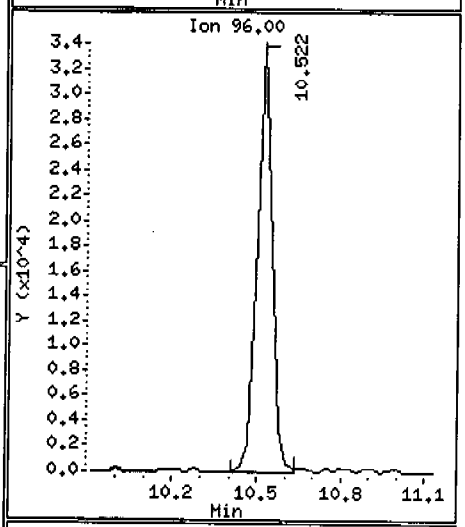
44 1,1-Dichloroethene

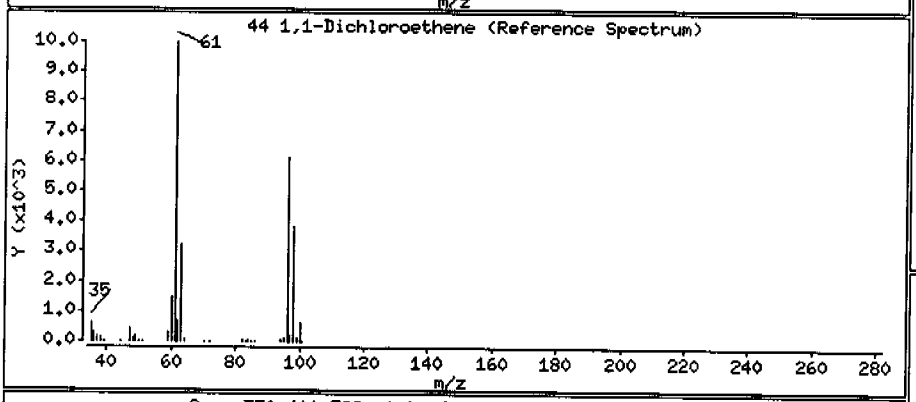
Concentration: 12.552 PPBV

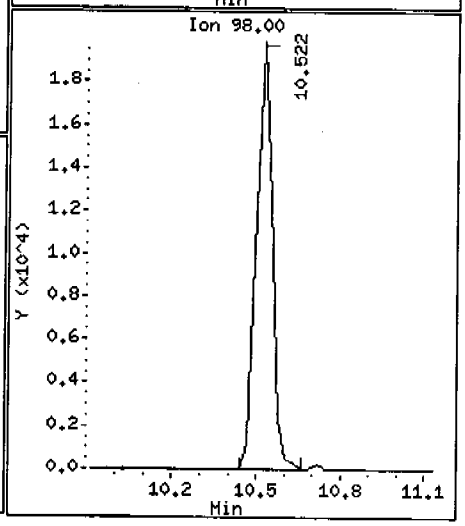


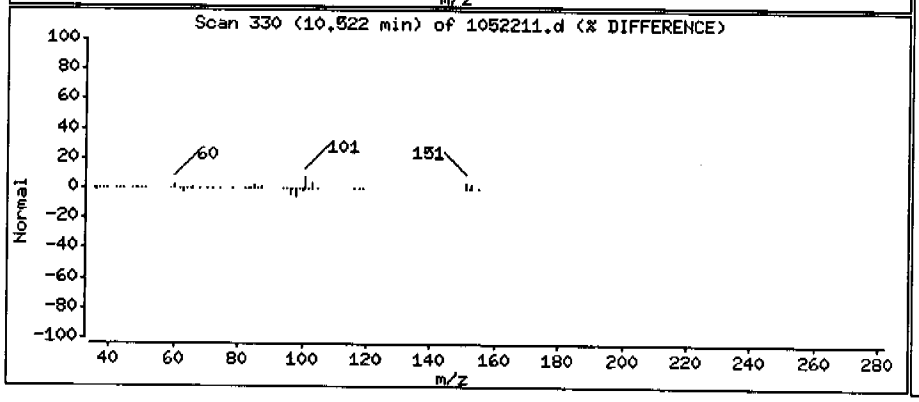












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

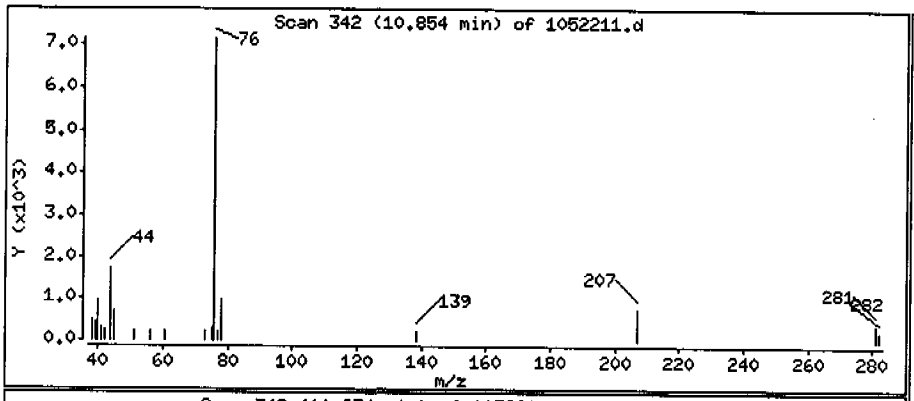
Operator: kr

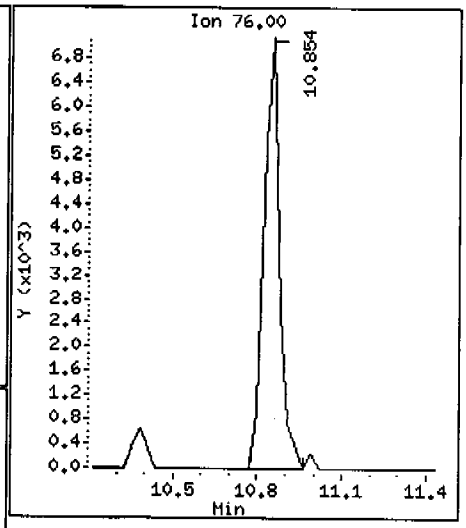
Column phase: RTx-624

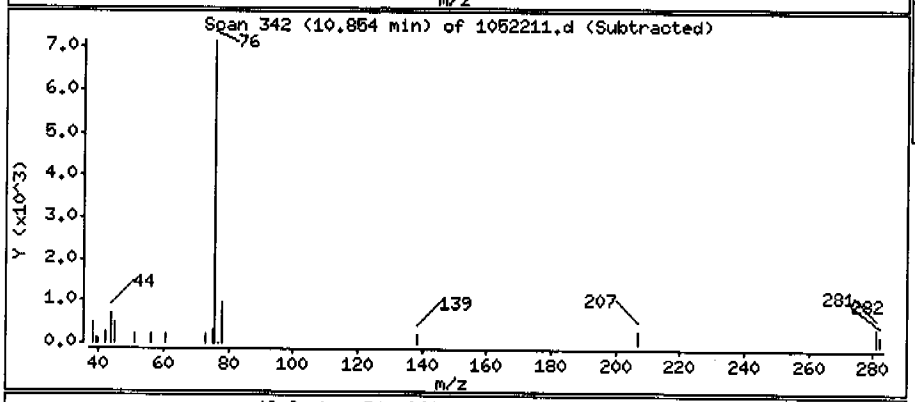
Column diameter: 0.53

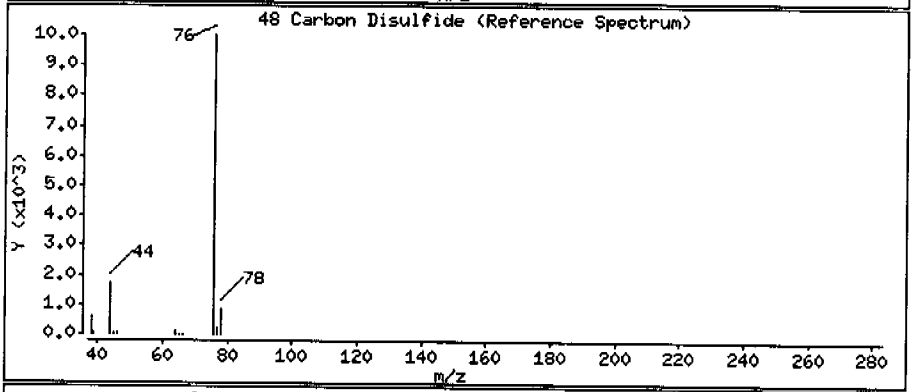
48 Carbon Disulfide

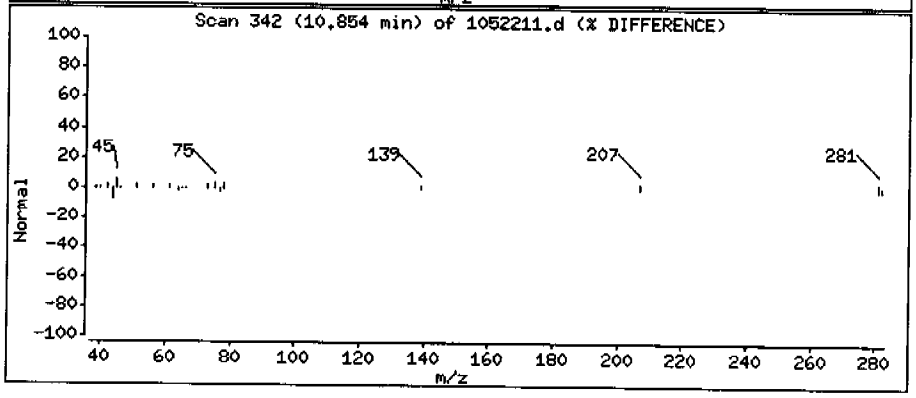
Concentration: 0.9724 PPBV











Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

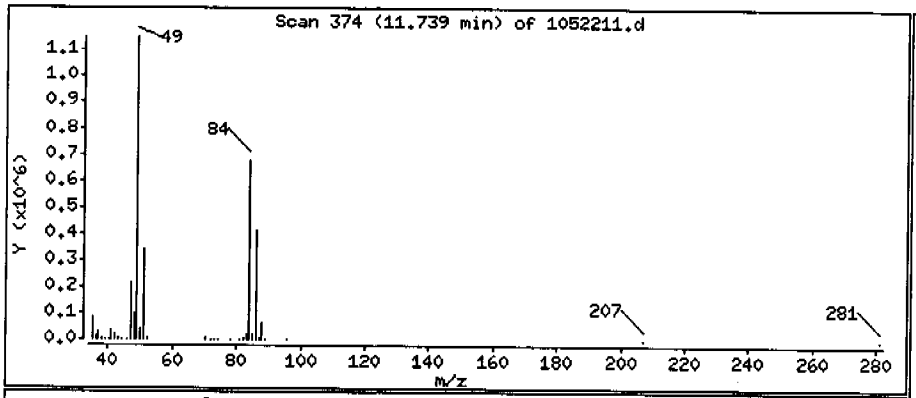
Operator: kr

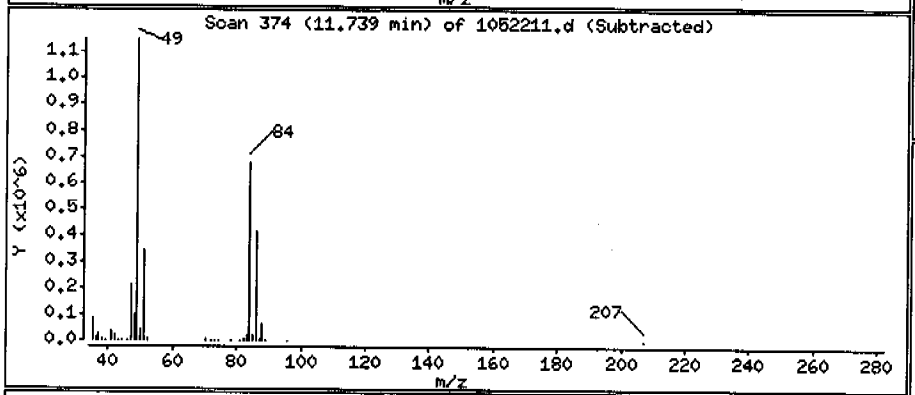
Column phase: RTx-624

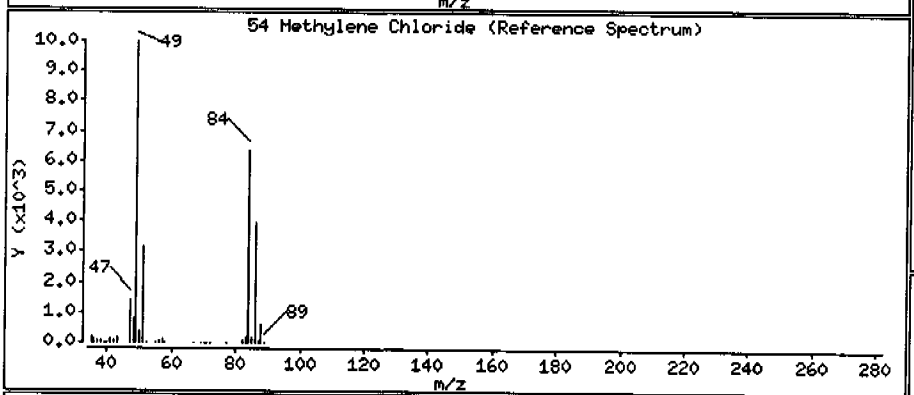
Column diameter: 0.53

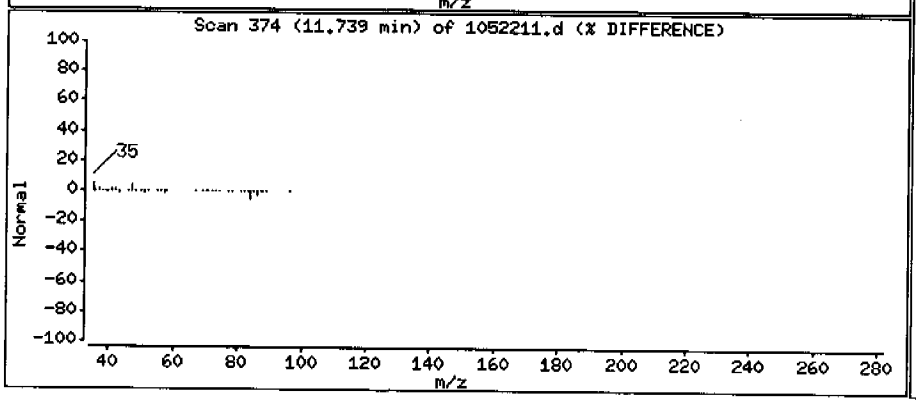
54 Methylene Chloride

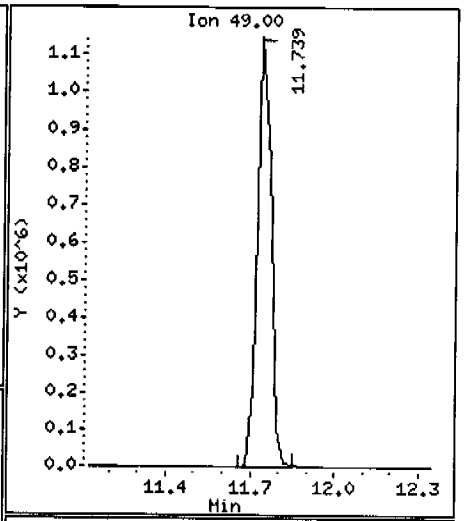
Concentration: 249.15 PPBV

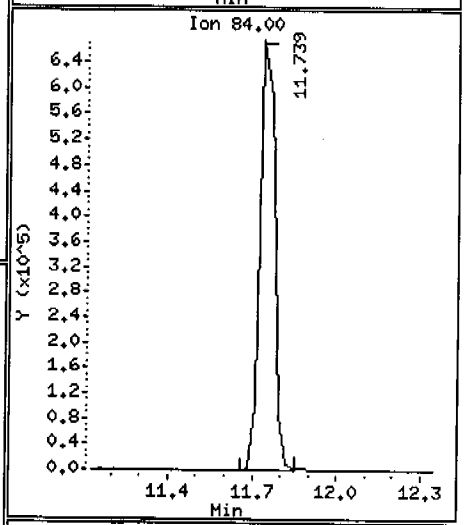


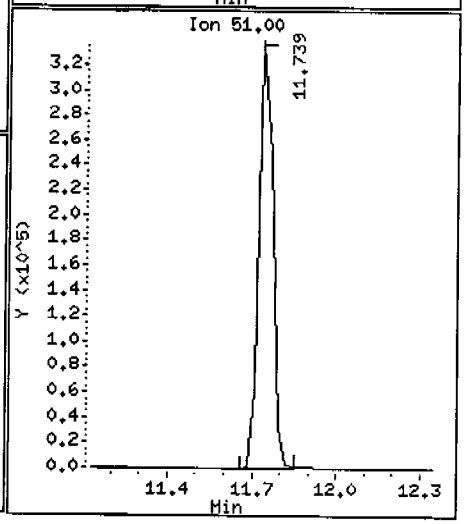












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

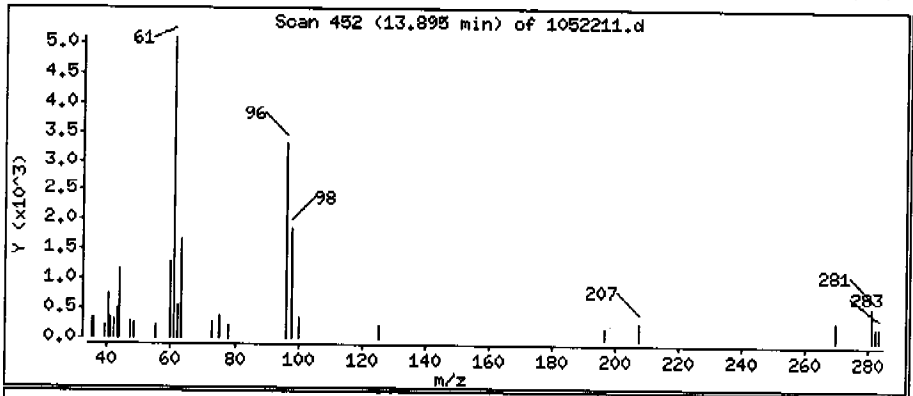
Operator: kr

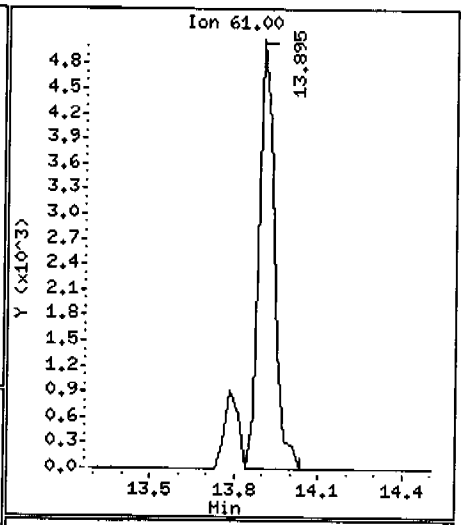
Column phase: RTx-624

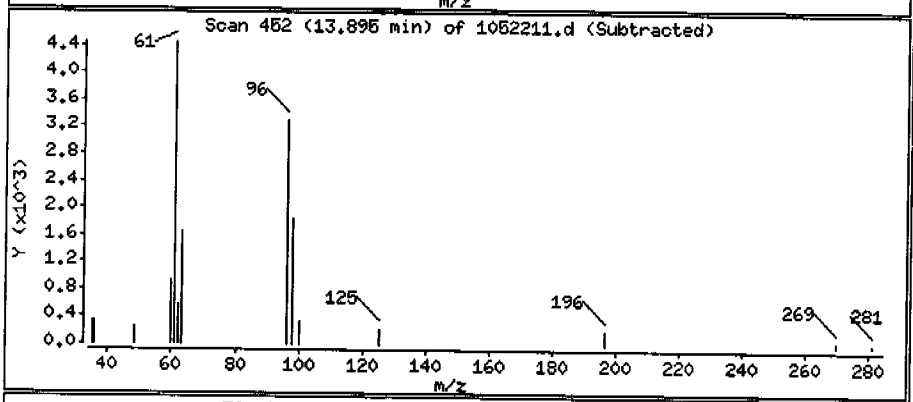
Column diameter: 0.53

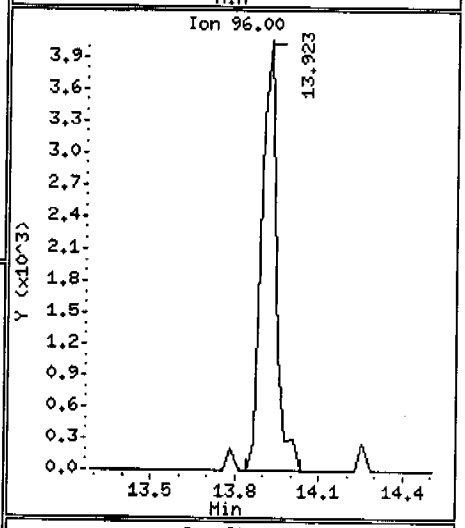
76 cis-1,2-Dichloroethene

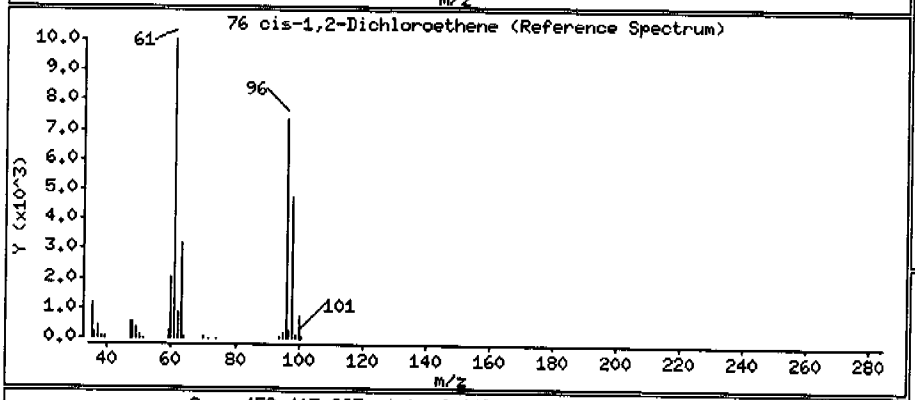
Concentration: 1.062 PPBV

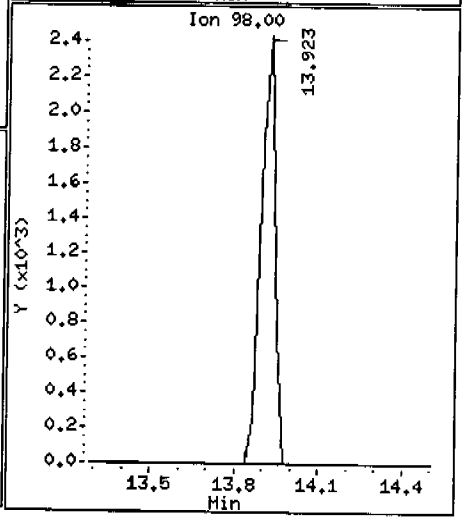


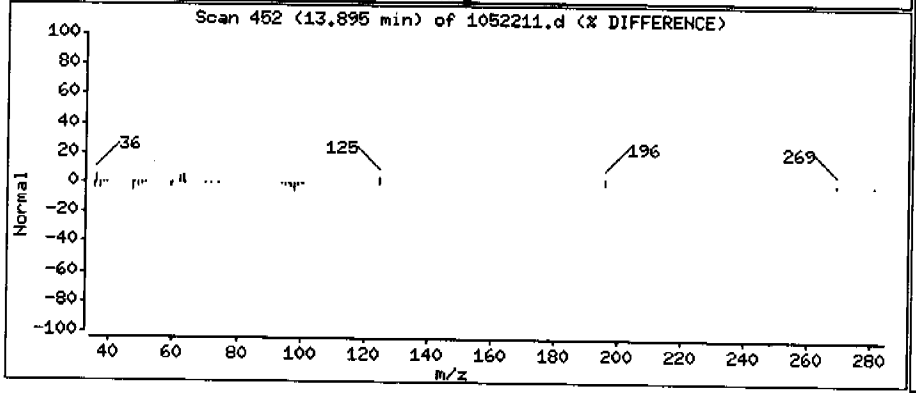












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

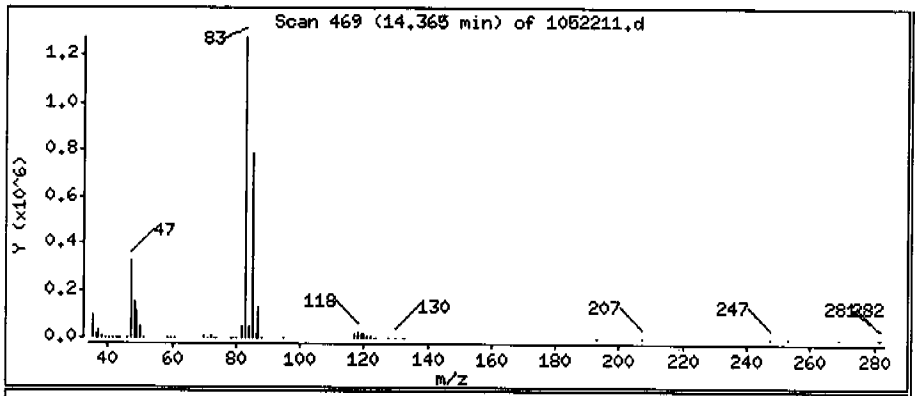
Operator: kr

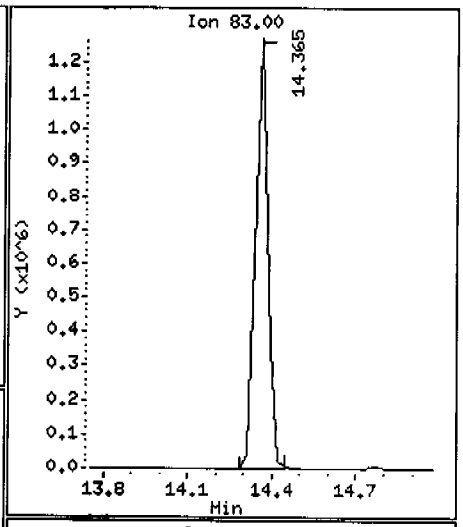
Column phase: RTx-624

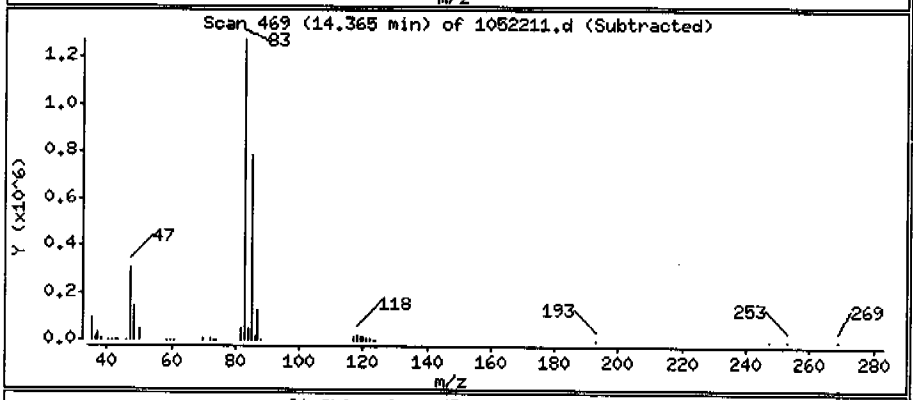
Column diameter: 0.53

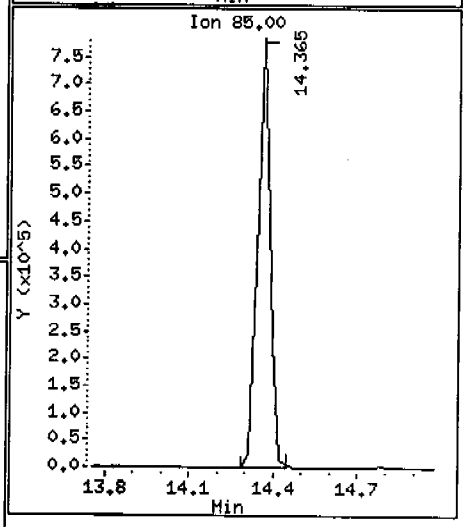
81 Chloroform

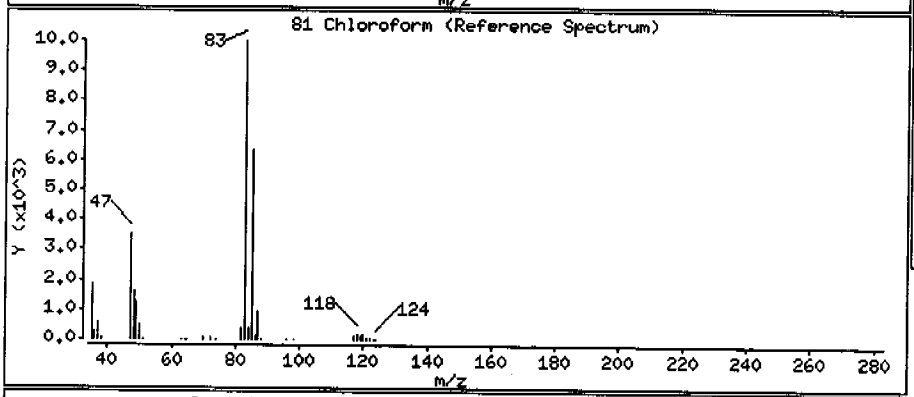
Concentration: 157.83 PPBV

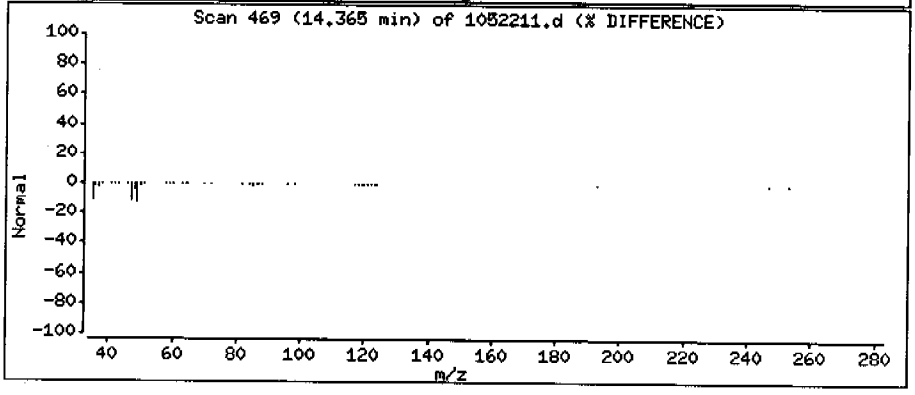












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

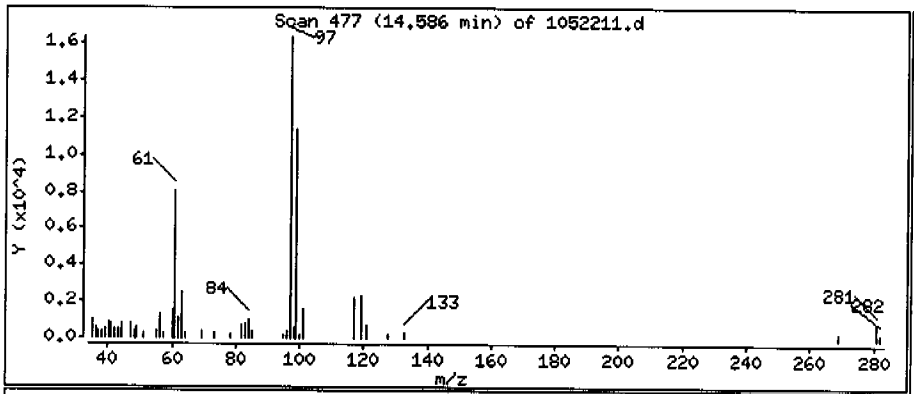
Operator: kr

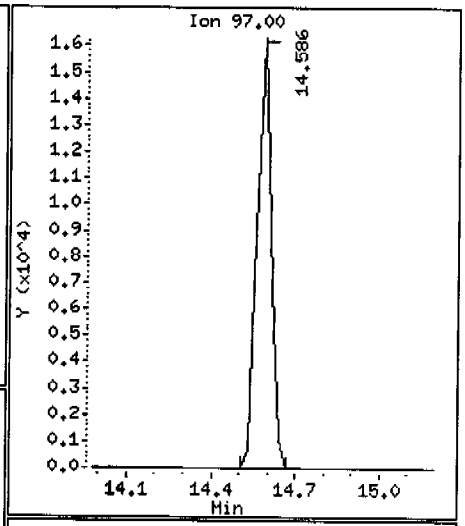
Column phase: RTx-624

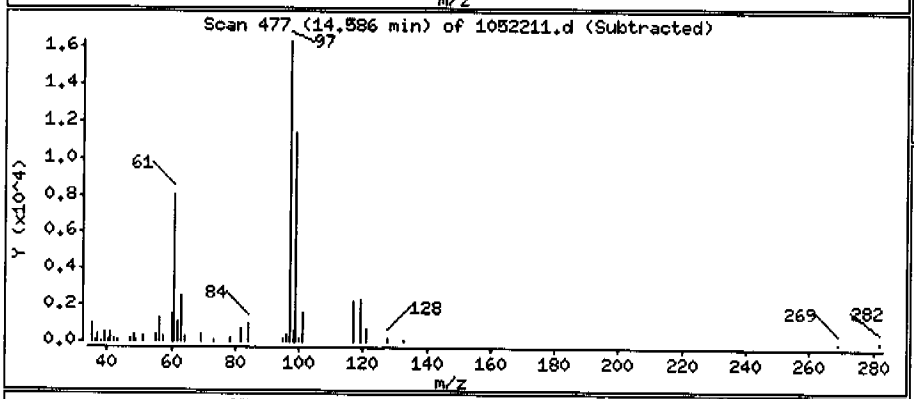
Column diameter: 0.53

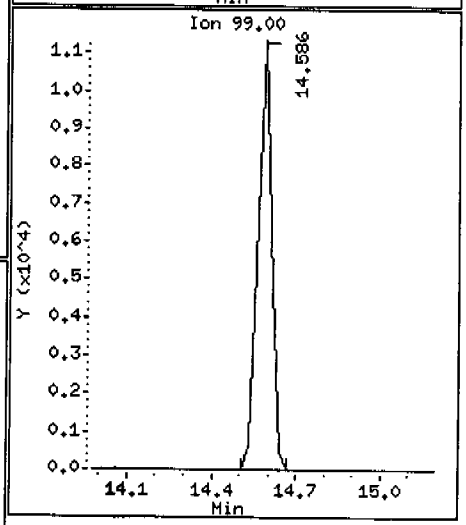
83 1,1,1-Trichloroethane

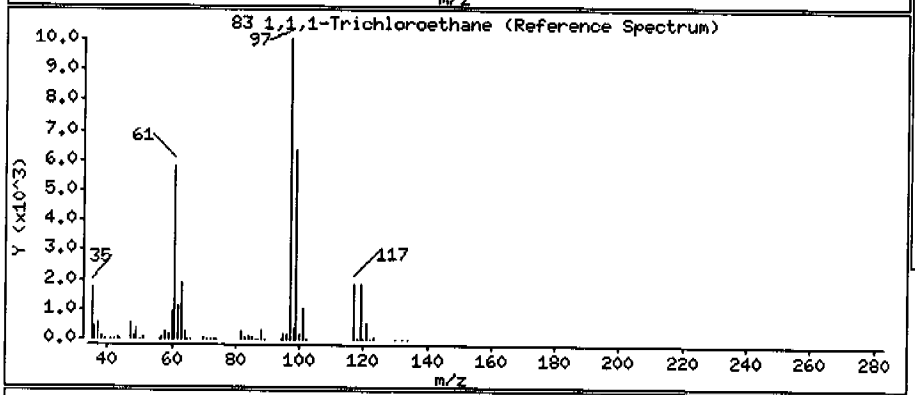
Concentration: 2.211 PPBV

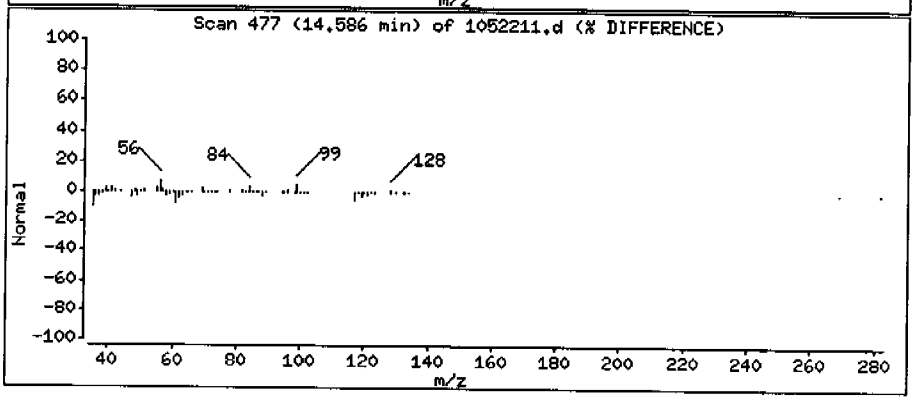












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

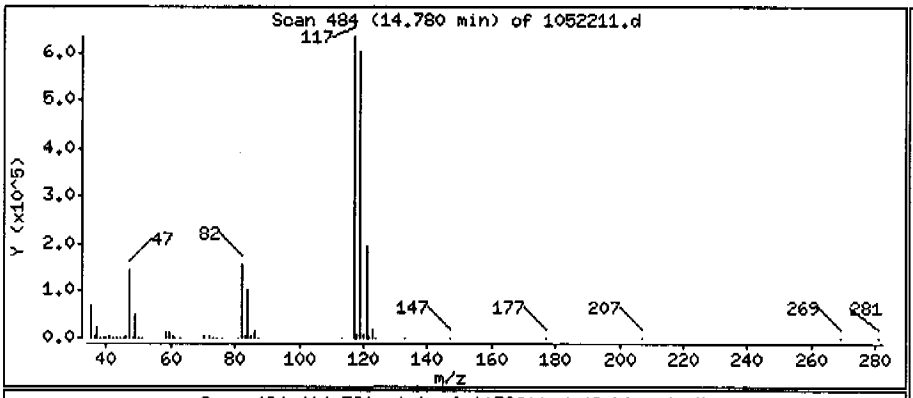
Operator: kr

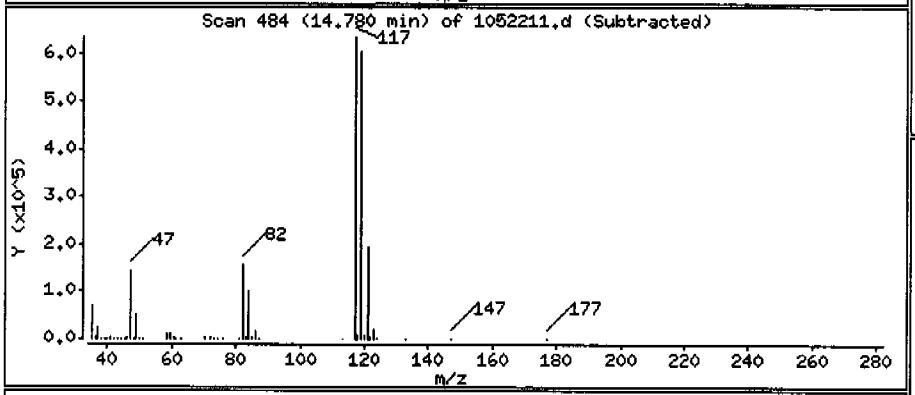
Column phase: RTx-624

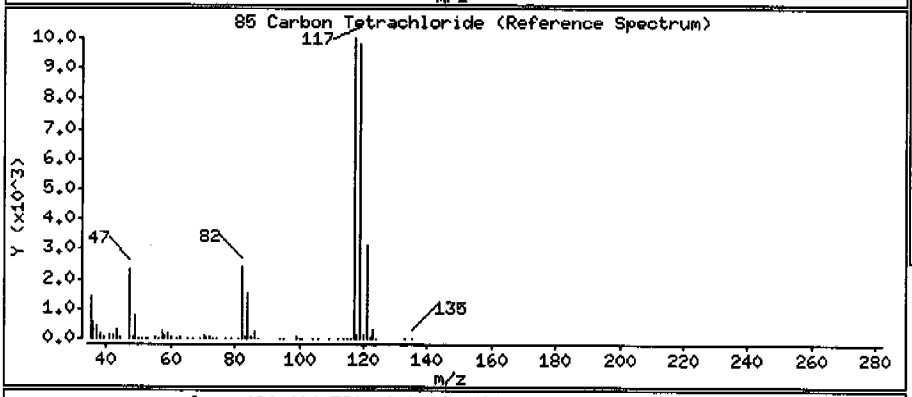
Column diameter: 0.53

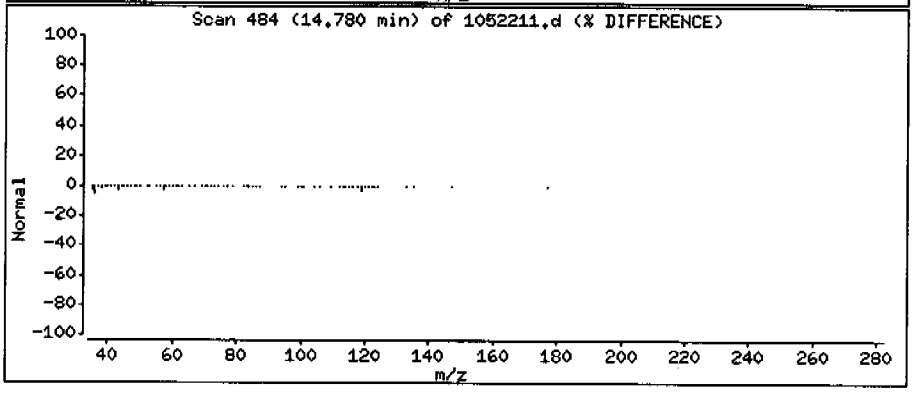
85 Carbon Tetrachloride

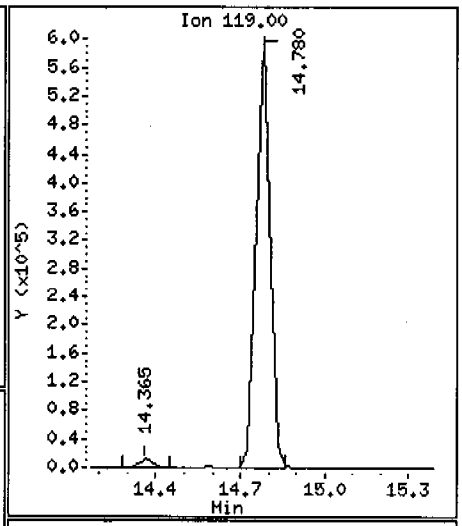
Concentration: 85.985 PPBV

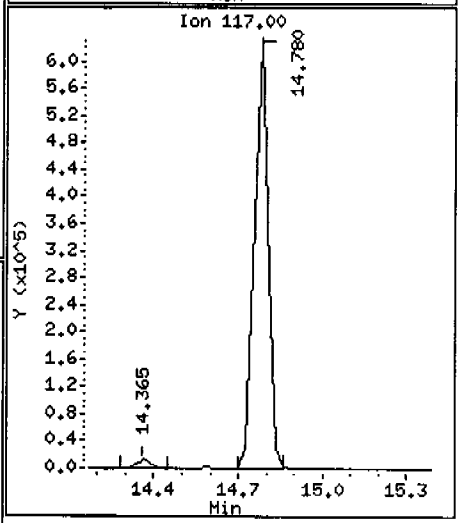












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

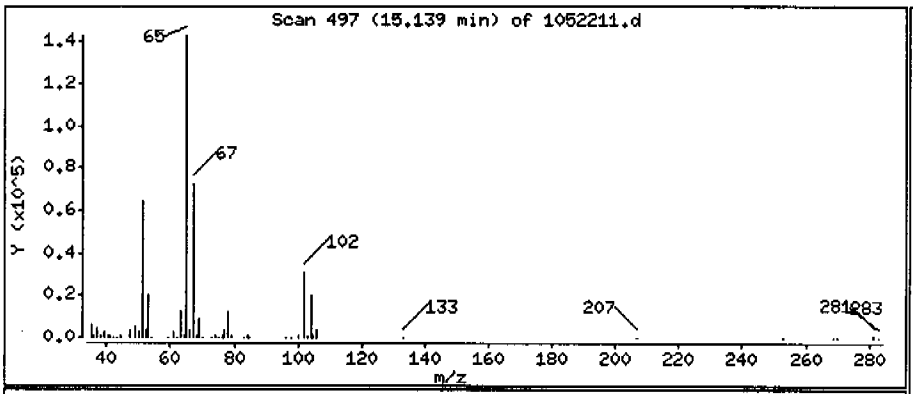
Operator: kr

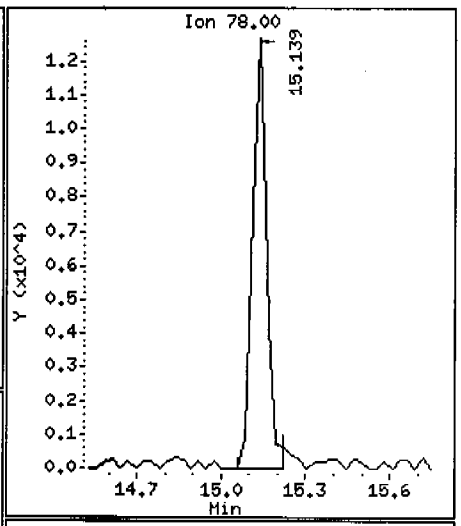
Column phase: RTx-624

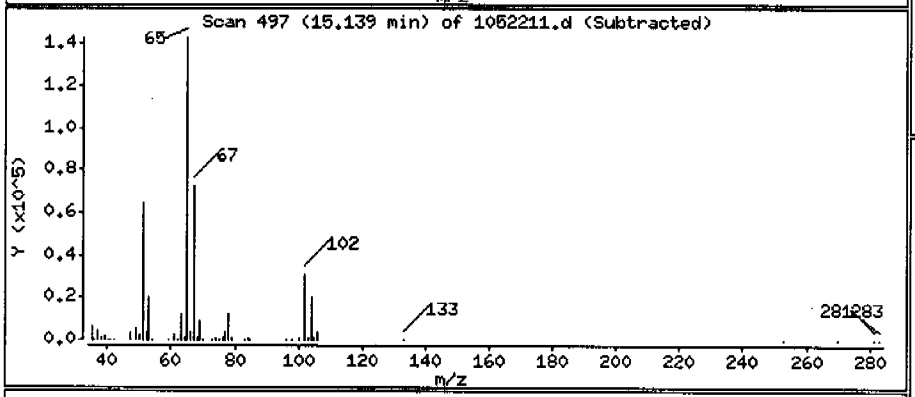
Column diameter: 0.53

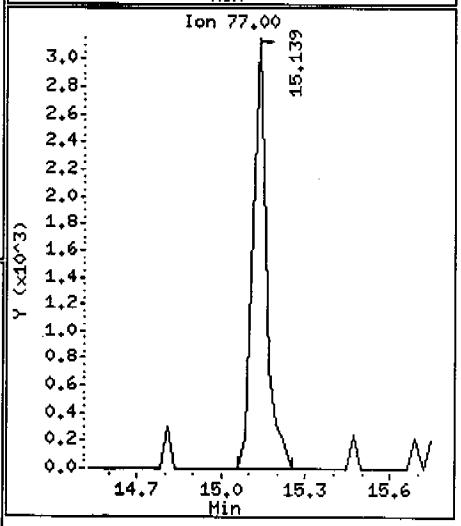
91 Benzene

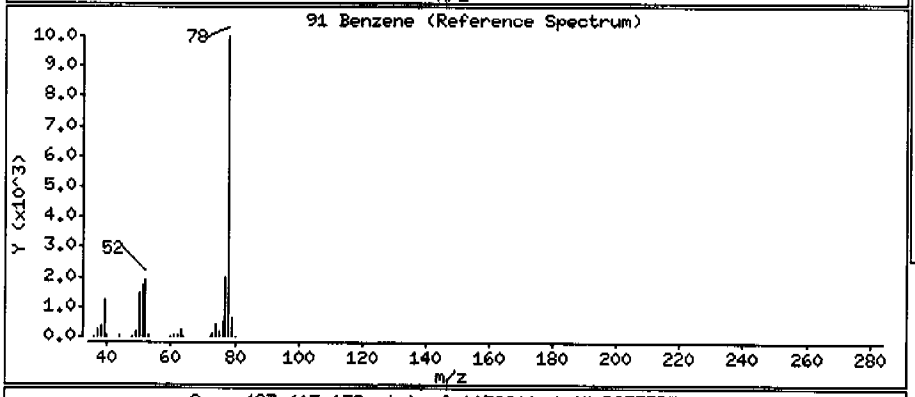
Concentration: 1.016 PPBV

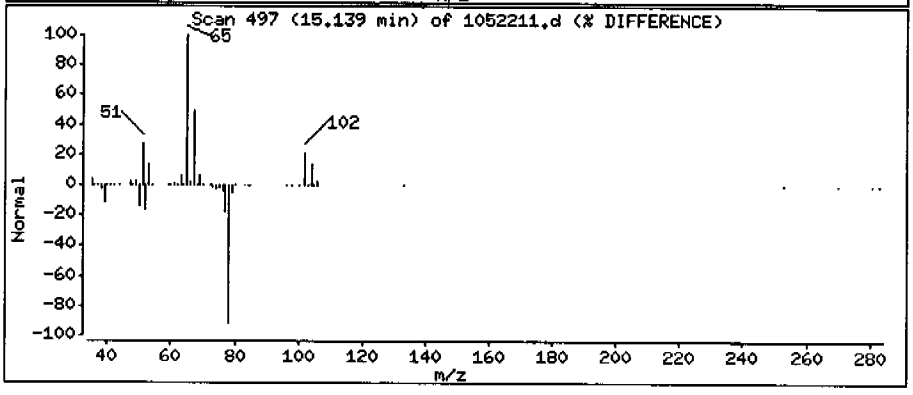












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

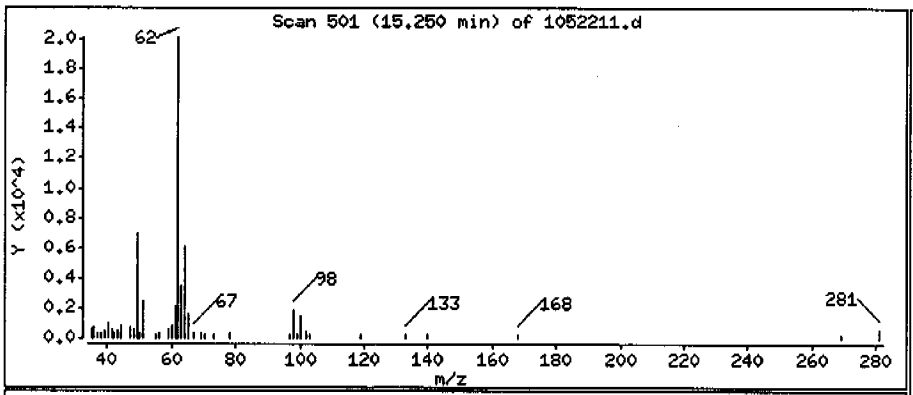
Operator: kr

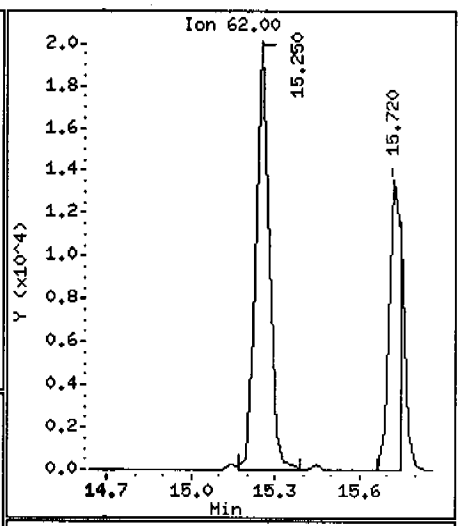
Column phase: RTx-624

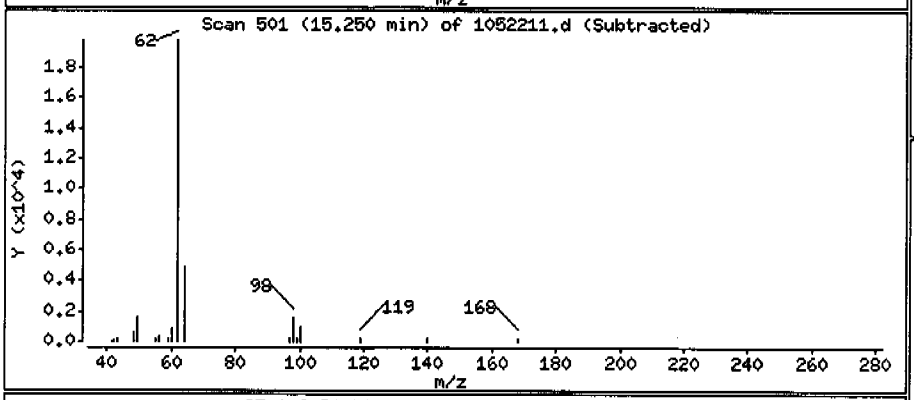
Column diameter: 0.53

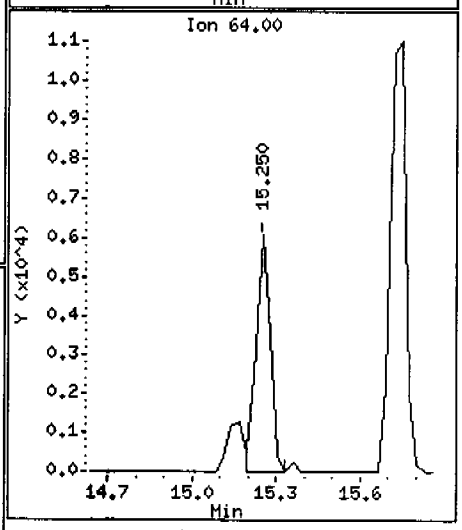
93 1,2-Dichloroethane

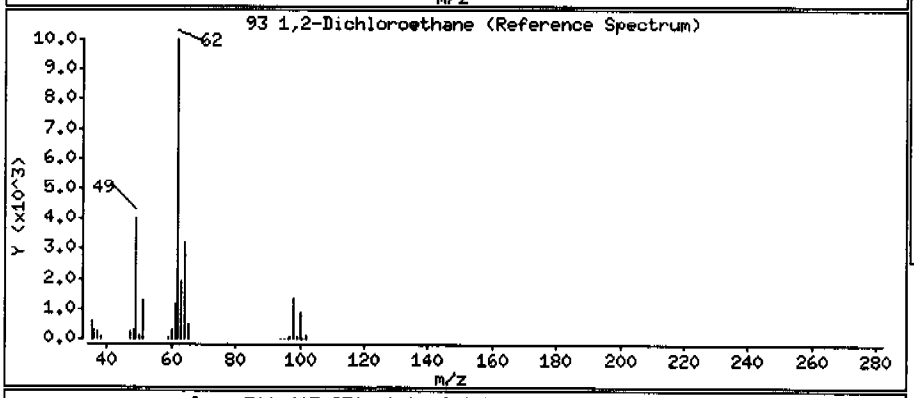
Concentration: 3.624 PPBV

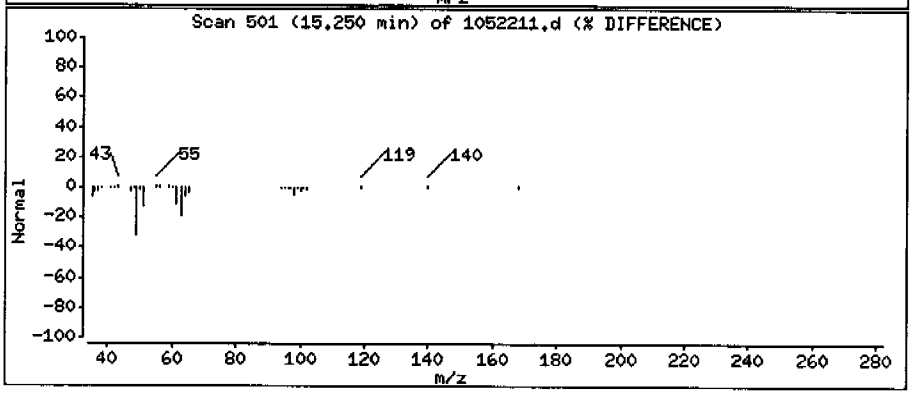












0257

Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

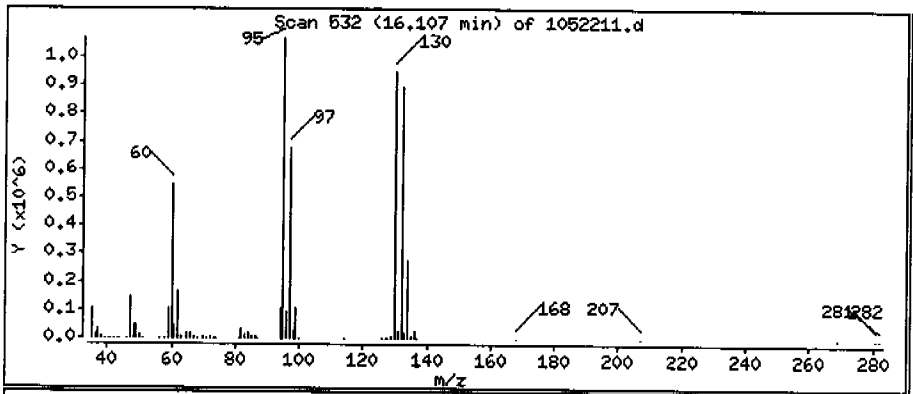
Operator: kr

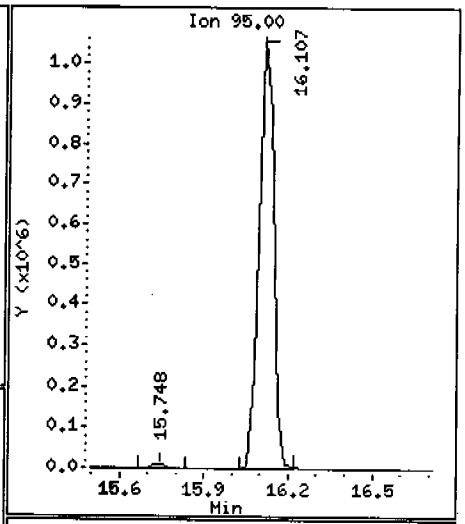
Column phase: RTx-624

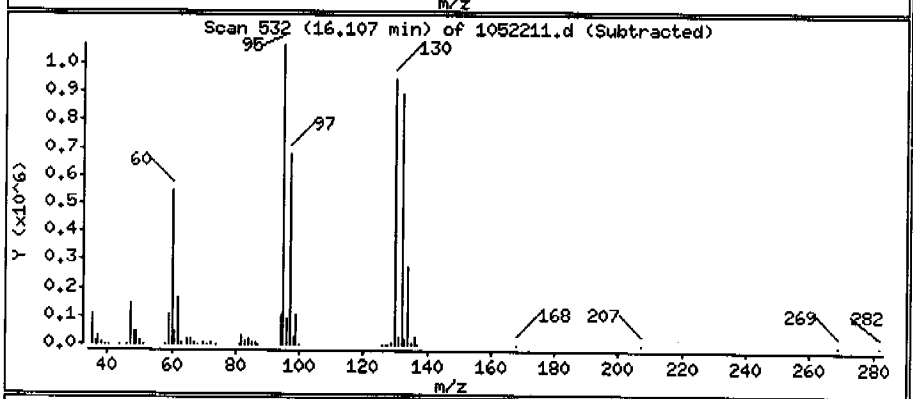
Column diameter: 0.53

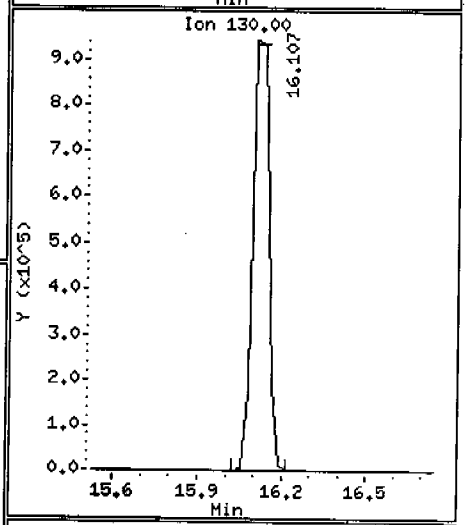
97 Trichloroethene

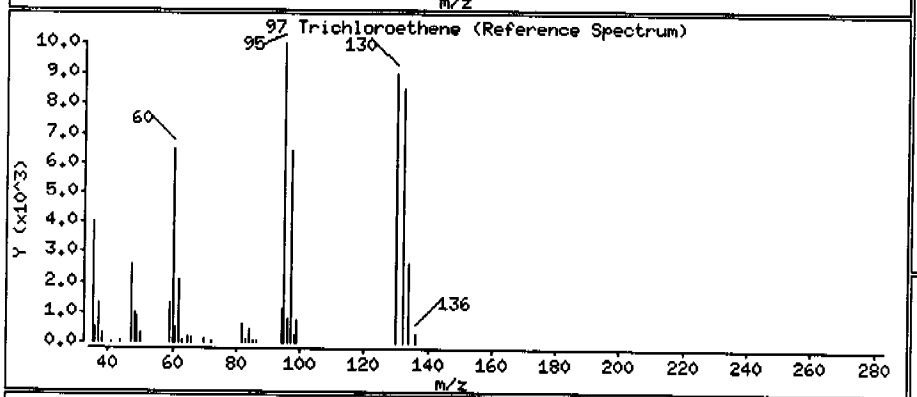
Concentration: 215.63 PPBV

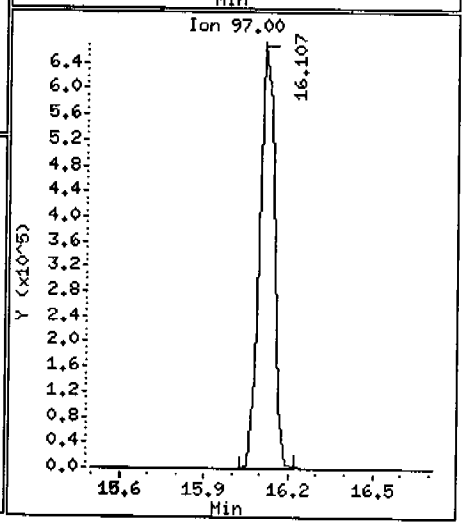


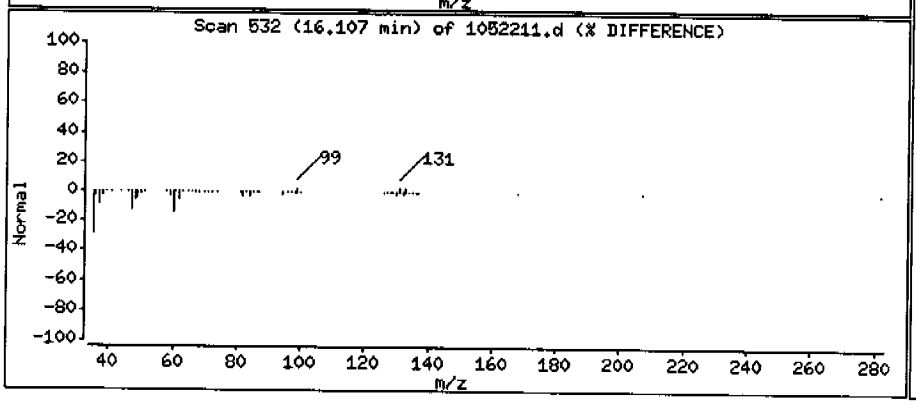












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

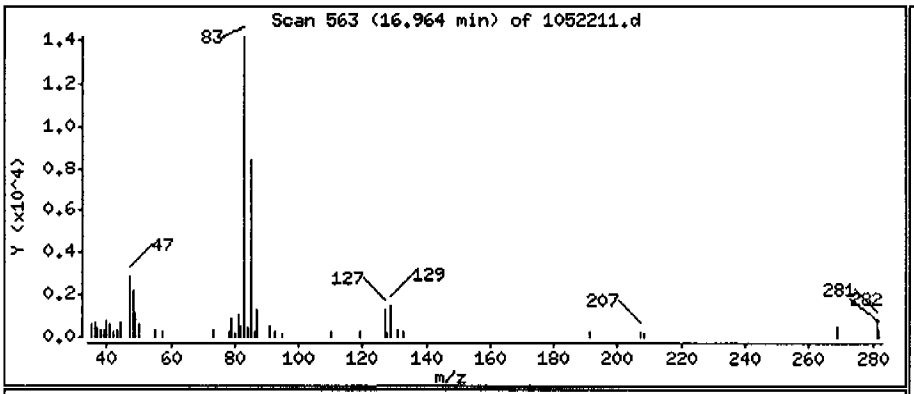
Operator: kr

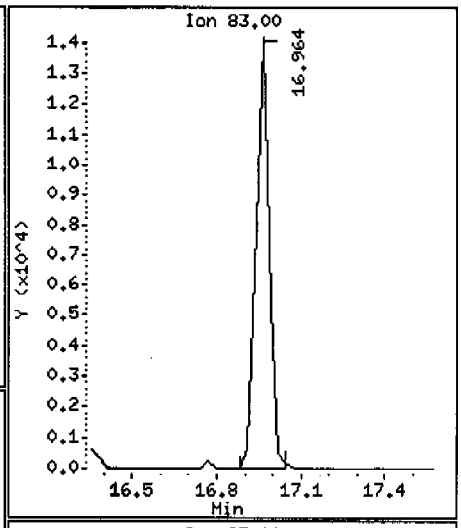
Column phase: RTx-624

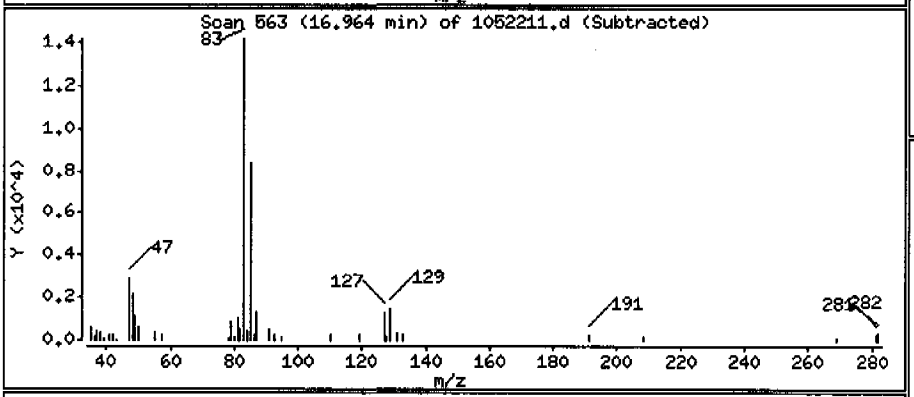
Column diameter: 0.53

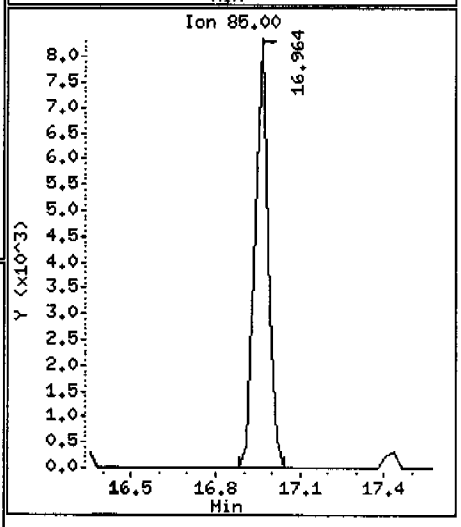
106 Bromodichloromethane

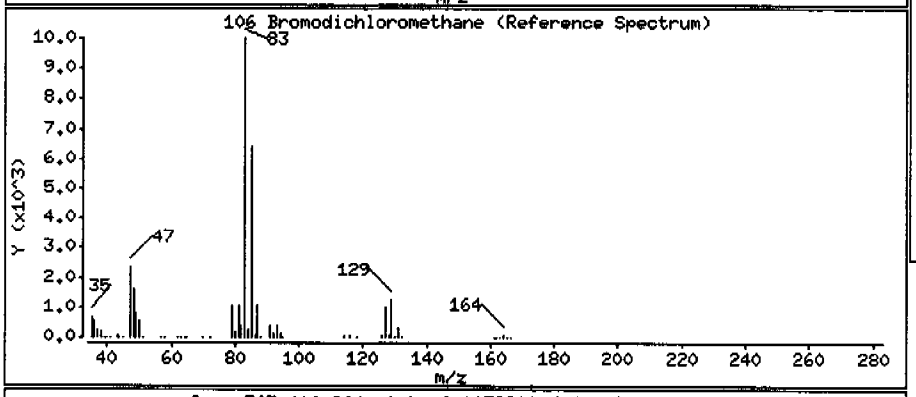
Concentration: 1.609 PPBV

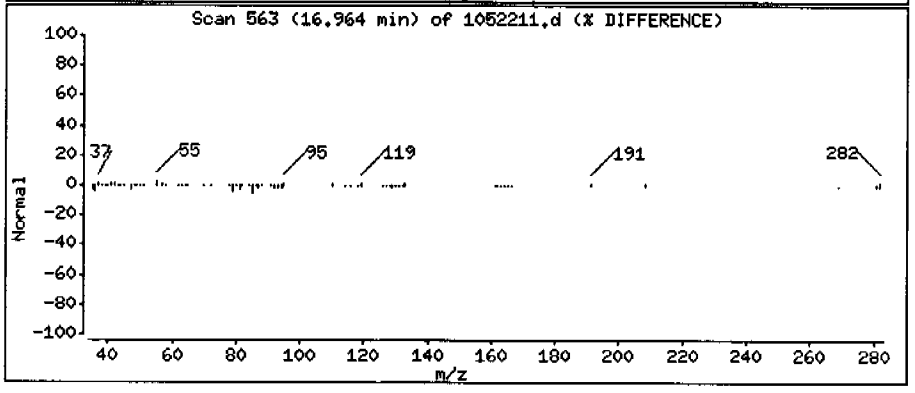












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

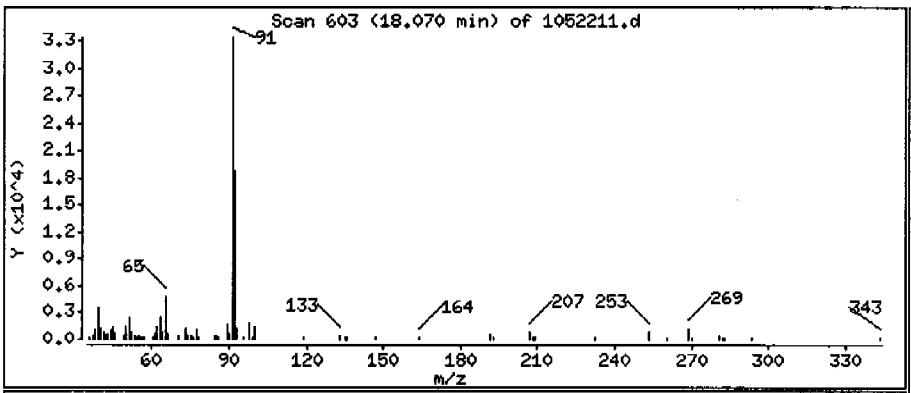
Operator: kr

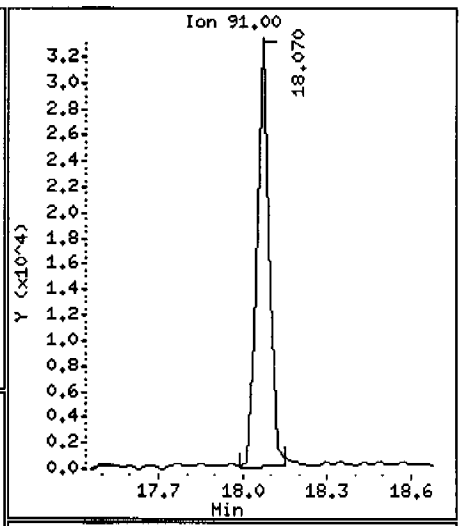
Column phase: RTx-624

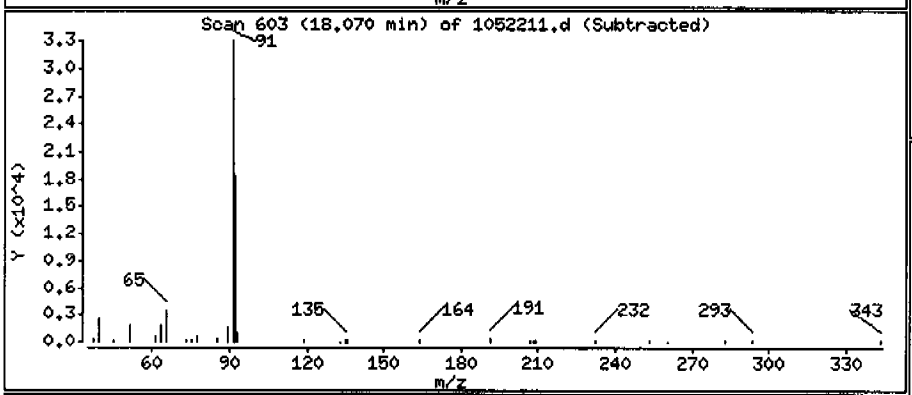
Column diameter: 0.53

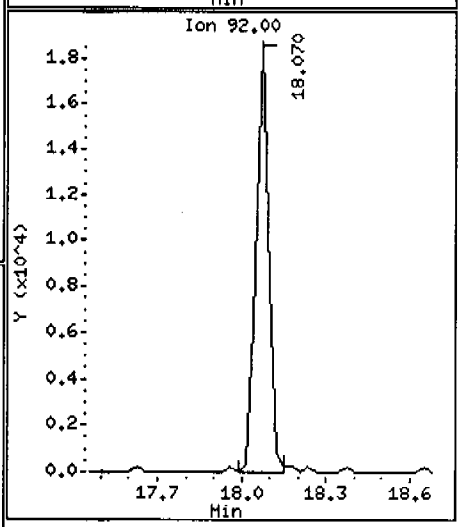
114 Toluene

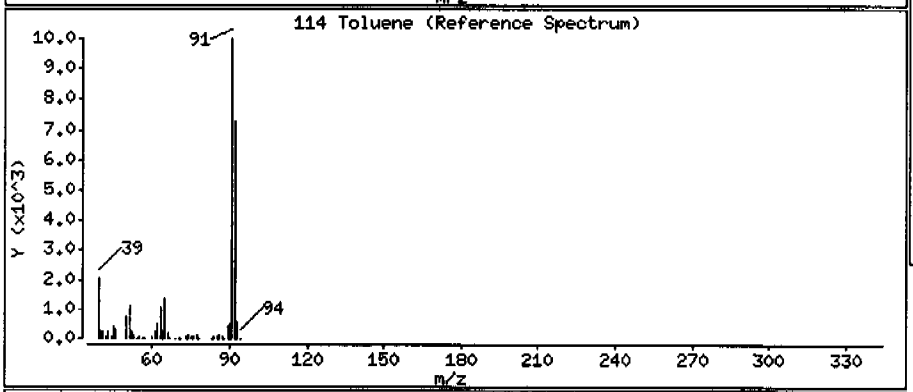
Concentration: 1.629 PPBV

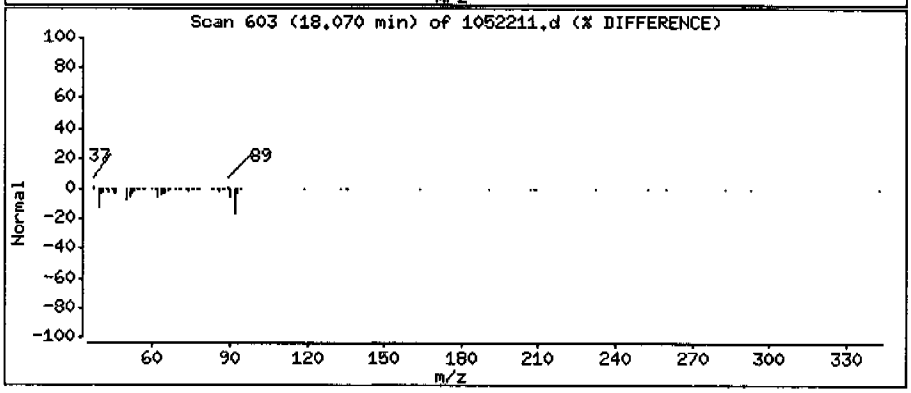












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

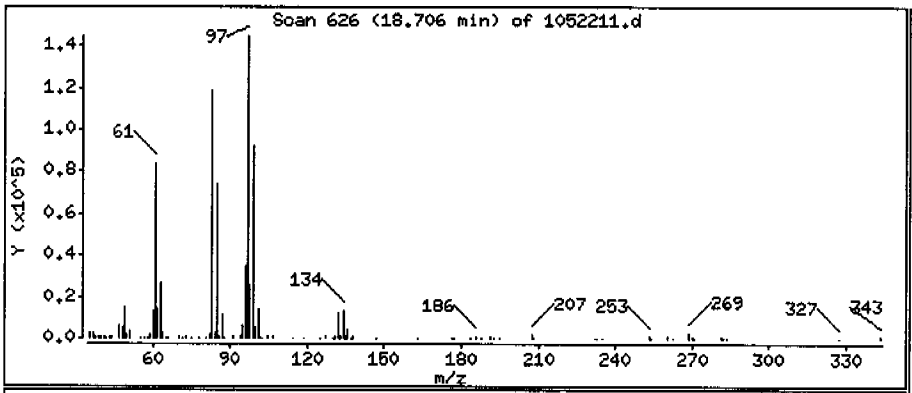
Operator: kr

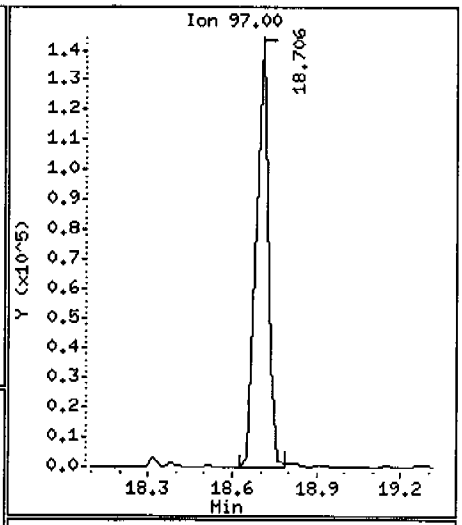
Column phase: RTx-624

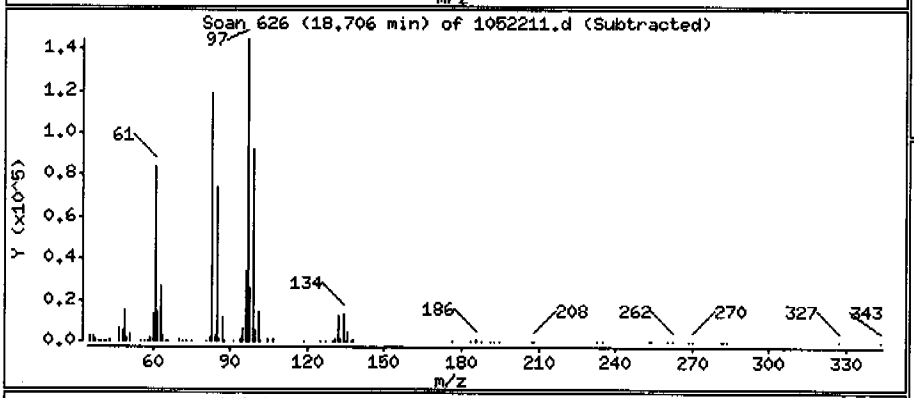
Column diameter: 0.53

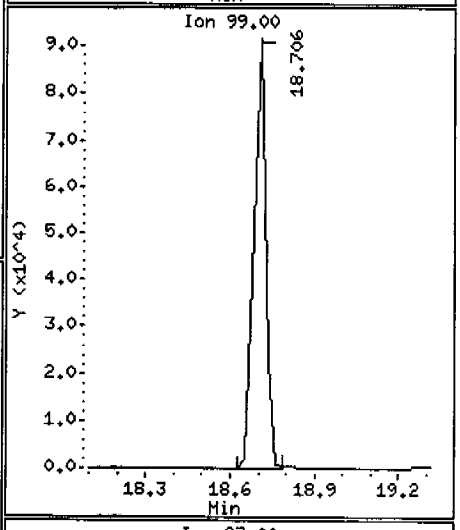
116 1,1,2-Trichloroethane

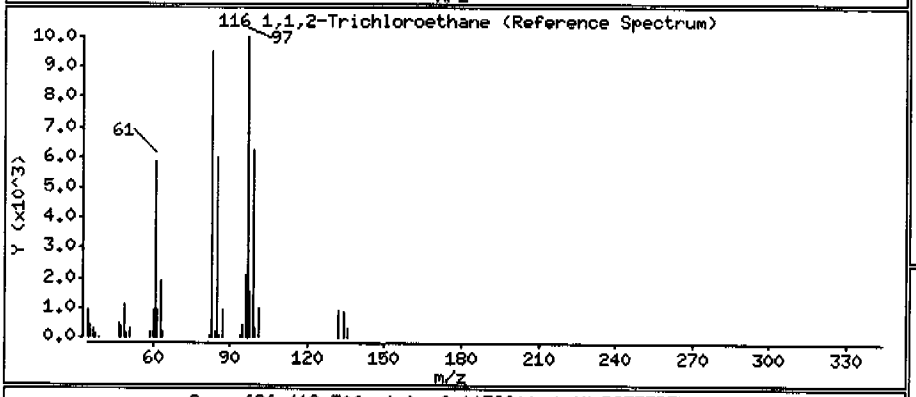
Concentration: 20.691 PPBV

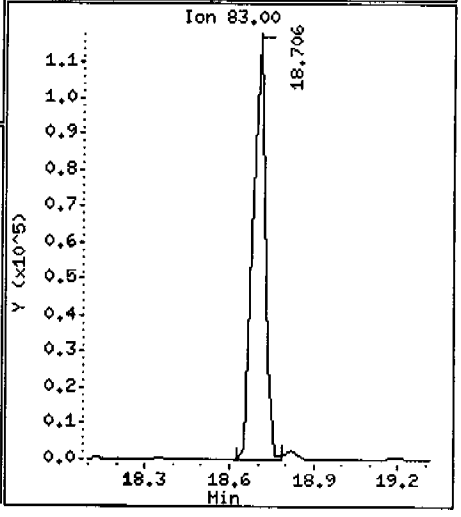


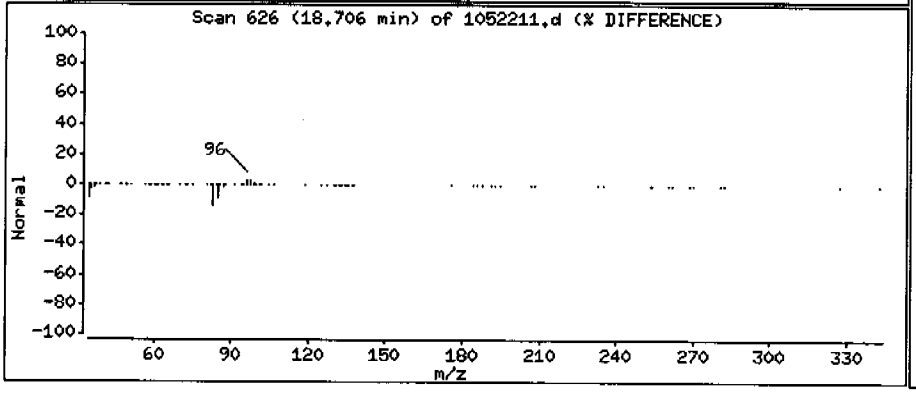












Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

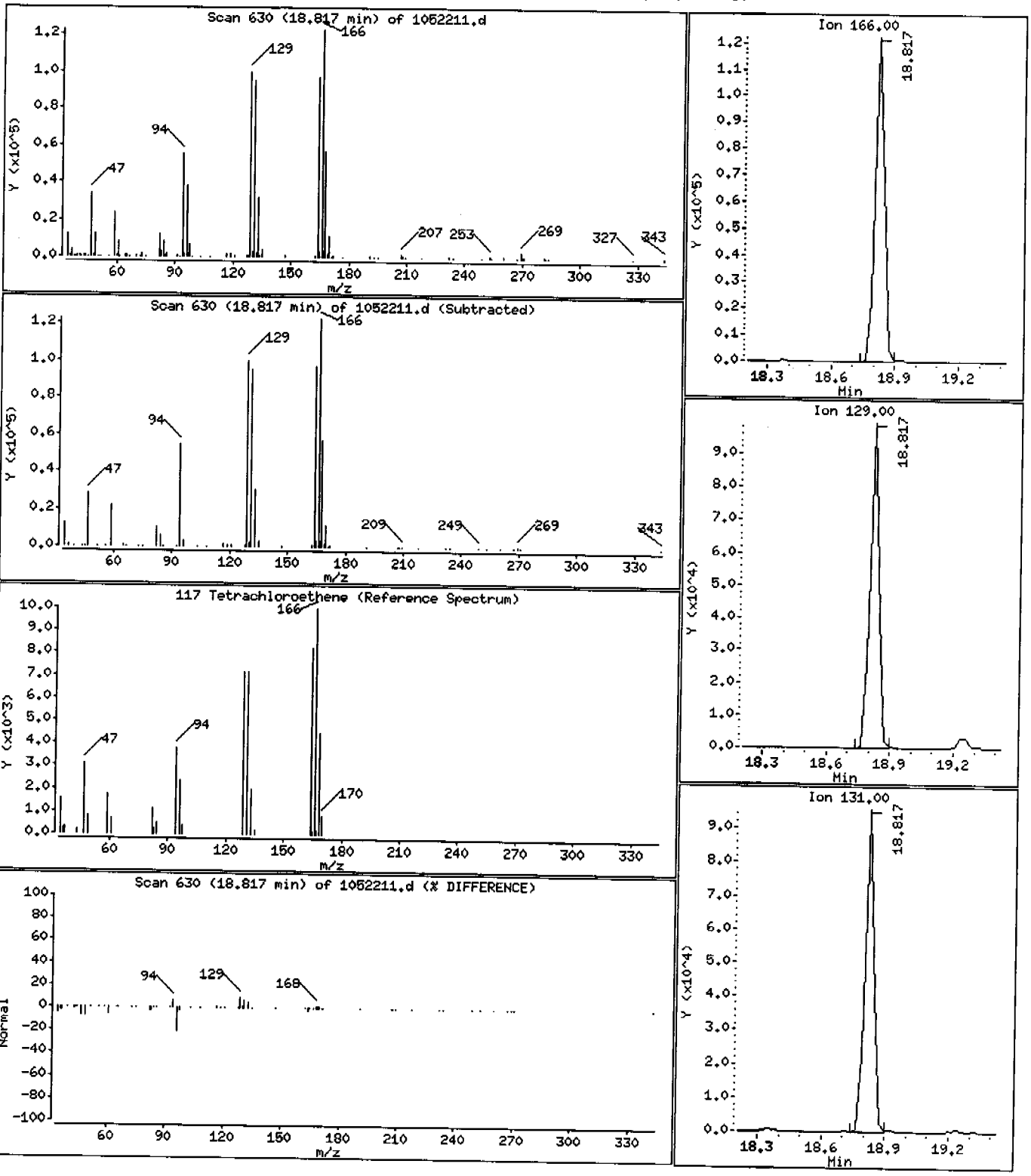
Operator: kr

Column phase: RTx-624

Column diameter: 0.53

117 Tetrachloroethene

Concentration: 15.248 PPBV



Data File: /chem/msd1.i/1-22may.b/1052211.d

Date : 22-MAY-2008 16:28

Client ID:

Instrument: msd1.i

Sample Info: 100mL #11875

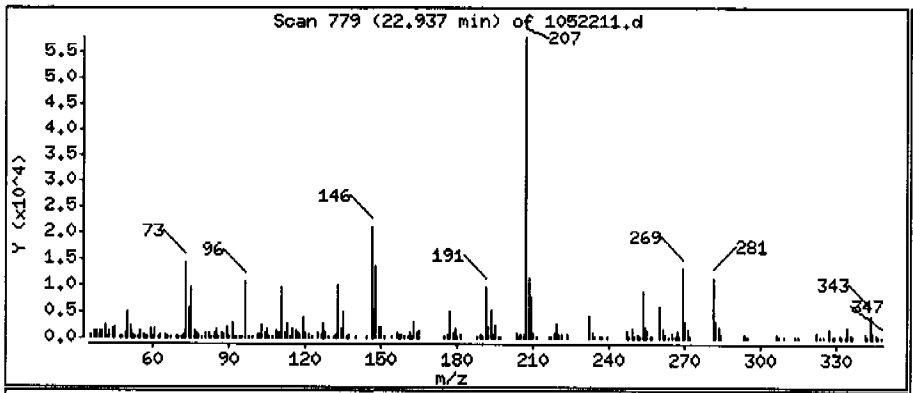
Operator: kr

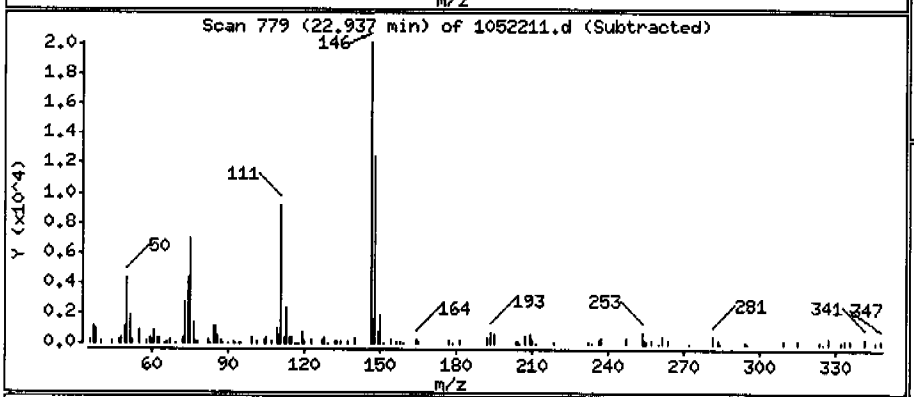
Column phase: RTx-624

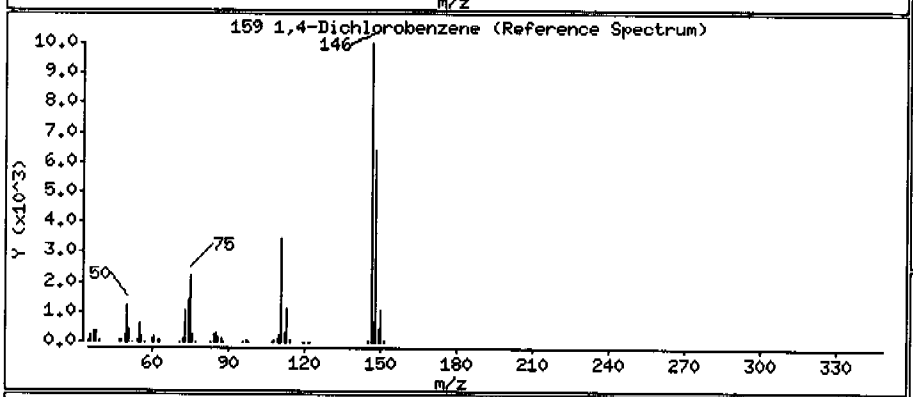
Column diameter: 0.53

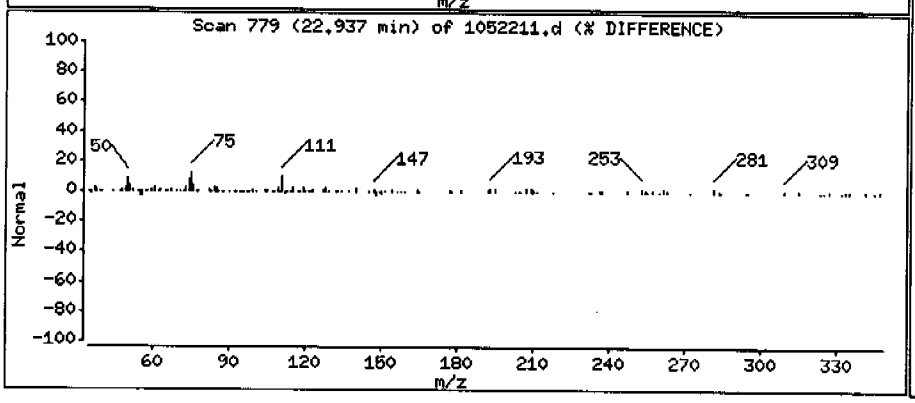
159 1,4-Dichlorobenzene

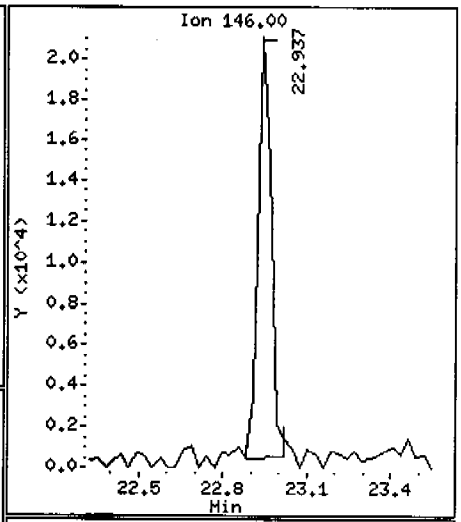
Concentration: 1.356 PPBV

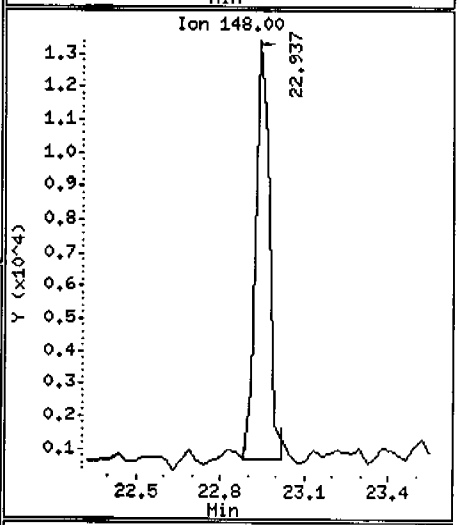


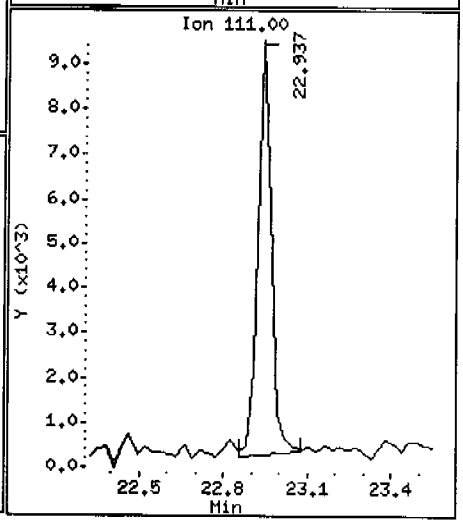












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12256

Lab ID#: 0805274-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethanol	6.2	20	12	38
Freon 113	1.6	3.3	12	25
1,1-Dichloroethene	1.6	3.7	6.1	15
Methylene Chloride	1.6	490	5.4	1700
Chloroform	1.6	220	7.6	1100
1,1,1-Trichloroethane	1.6	1.9	8.4	10
Carbon Tetrachloride	1.6	75	9.8	470
1,2-Dichloroethane	1.6	5.2	6.3	21
Trichloroethene	1.6	170	8.3	920
1,1,2-Trichloroethane	1.6	5.4	8.4	29
Tetrachloroethene	1.6	8.2	10	56
1,4-Dichlorobenzene	1.6	2.9	9.3	17

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12256

Lab ID#: 0805274-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 0522-14 Date of Collection: 5/9/08
Dil. Factor: 3.10 Date of Analysis: 5/22/08 08:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.6	Not Detected	7.7	Not Detected
Freon 114	1.6	Not Detected	11	Not Detected
Chloromethane	6.2	Not Detected	13	Not Detected
Vinyl Chloride	1.6	Not Detected	4.0	Not Detected
1,3-Butadiene	1.6	Not Detected	3.4	Not Detected
Bromomethane	1.6	Not Detected	6.0	Not Detected
Chloroethane	1.6	Not Detected	4.1	Not Detected
Freon 11	1.6	Not Detected	8.7	Not Detected
Ethanol	6.2	20	12	38
Freon 113	1.6	3.3	12	25
1,1-Dichloroethene	1.6	3.7	6.1	15
Acetone	6.2	Not Detected	15	Not Detected
2-Propanol	6.2	Not Detected	15	Not Detected
Carbon Disulfide	1.6	Not Detected	4.8	Not Detected
Methylene Chloride	1.6	490	5.4	1700
Methyl tert-butyl ether	1.6	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	1.6	Not Detected	6.1	Not Detected
Hexane	1.6	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.6	Not Detected	6.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.6	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.6	Not Detected	6.1	Not Detected
Tetrahydrofuran	1.6	Not Detected	4.6	Not Detected
Chloroform	1.6	220	7.6	1100
1,1,1-Trichloroethane	1.6	1.9	8.4	10
Cyclohexane	1.6	Not Detected	5.3	Not Detected
Carbon Tetrachloride	1.6	75	9.8	470
Benzene	1.6	Not Detected	5.0	Not Detected
1,2-Dichloroethane	1.6	5.2	6.3	21
Heptane	1.6	Not Detected	6.4	Not Detected
Trichloroethene	1.6	170	8.3	920
1,2-Dichloropropane	1.6	Not Detected	7.2	Not Detected
1,4-Dioxane	6.2	Not Detected	22	Not Detected
Bromodichloromethane	1.6	Not Detected	10	Not Detected
cis-1,3-Dichloropropene	1.6	Not Detected	7.0	Not Detected
4-Methyl-2-pentanone	1.6	Not Detected	6.3	Not Detected
Toluene	1.6	Not Detected	5.8	Not Detected
trans-1,3-Dichloropropene	1.6	Not Detected	7.0	Not Detected
1,1,2-Trichloroethane	1.6	5.4	8.4	29
Tetrachloroethene	1.6	8.2	10	56

0265

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12256

Lab ID#: 0805274-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052214_3 Date of Collection: 5/9/08
Dil. Factor: 3.10 Date of Analysis: 5/22/08 08:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.2	Not Detected	25	Not Detected
Dibromochloromethane	1.6	Not Detected	13	Not Detected
1,2-Dibromoethane (EDB)	1.6	Not Detected	12	Not Detected
Chlorobenzene	1.6	Not Detected	7.1	Not Detected
Ethyl Benzene	1.6	Not Detected	6.7	Not Detected
m,p-Xylene	1.6	Not Detected	6.7	Not Detected
o-Xylene	1.6	Not Detected	6.7	Not Detected
Styrene	1.6	Not Detected	6.6	Not Detected
Bromoform	1.6	Not Detected	16	Not Detected
1,1,2,2-Tetrachloroethane	1.6	Not Detected	11	Not Detected
4-Ethyltoluene	1.6	Not Detected	7.6	Not Detected
1,3,5-Trimethylbenzene	1.6	Not Detected	7.6	Not Detected
1,2,4-Trimethylbenzene	1.6	Not Detected	7.6	Not Detected
1,3-Dichlorobenzene	1.6	Not Detected	9.3	Not Detected
1,4-Dichlorobenzene	1.6	2.9	9.3	17
alpha-Chlorotoluene	1.6	Not Detected	8.0	Not Detected
1,2-Dichlorobenzene	1.6	Not Detected	9.3	Not Detected
1,2,4-Trichlorobenzene	6.2	Not Detected U J	46	Not Detected U J
Hexachlorobutadiene	6.2	Not Detected	66	Not Detected
Chlorodifluoromethane	6.2	Not Detected	22	Not Detected
Methanol	160	Not Detected	200	Not Detected
n-Butanol	6.2	Not Detected	19	Not Detected
Propylene	6.2	Not Detected	11	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	96	70-130

0266

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052214.d
Lab Smp Id: 0805274-11A
Inj Date : 22-MAY-2008 20:38
Operator : kr Inst ID: msd1.i
Smp Info : 50mL #4176
Misc Info : 4.0"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 3.10000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	291995	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	227724			27.30- 127.30	77.99
14.255	14.255 (1.000)	49	544538			131.96- 231.96	186.49
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1553459	25.0000		80.00- 120.00	100.00
15.720	15.748 (1.000)	88	244278			0.00- 65.38	15.72
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.033 (1.000)	117	1701946	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	977588			8.42- 108.42	57.44
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	471889	24.2168	24.217	80.00- 120.00	100.00
15.140	15.140 (1.062)	67	247799			6.04- 106.04	52.51
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1695491	24.0878	24.088	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	173224			0.00- 60.35	10.22

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1129118			15.45- 115.45	66.60
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.076)	174	872169	23.9490	23.949	80.00- 120.00	100.00
21.527	21.527 (1.076)	95	1406710			110.38- 210.38	161.29
21.527	21.527 (1.076)	176	832351			44.94- 144.94	95.43
38 Ethanol					CAS #: 64-17-5		
10.080	10.135 (0.707)	45	42303	6.44689	19.985	80.00- 120.00	100.00
10.080	10.135 (0.707)	43	13348			0.00- 75.81	31.55
10.246	10.135 (0.719)	46	2772			0.00- 92.85	6.55
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.742)	151	23172	1.06896	3.314	80.00- 120.00	100.00
10.577	10.577 (0.742)	153	15445			13.47- 113.47	66.65
10.577	10.577 (0.742)	101	31511			83.83- 183.83	135.98
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.738)	61	35801	1.19129	3.693	80.00- 120.00	100.00
10.522	10.522 (0.738)	96	22633			3.44- 103.44	63.22
10.522	10.522 (0.738)	98	13238			0.00- 84.21	36.98
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.823)	49	4097324	157.392	487.91	80.00- 120.00	100.00
11.739	11.739 (0.823)	84	2589293			14.84- 114.84	63.19
11.739	11.739 (0.823)	51	1224597			0.00- 79.96	29.89
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	2919134	70.6743	219.09	80.00- 120.00	100.00
14.365	14.365 (1.008)	85	1816444			12.44- 112.44	62.23
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.023)	97	26333	0.60760	1.884	80.00- 120.00	100.00
14.587	14.587 (1.023)	99	18696			14.11- 114.11	71.00
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.037)	119	973270	24.2798	75.267	80.00- 120.00	100.00
14.780	14.780 (1.037)	117	1003077			52.90- 152.90	103.06
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	54810	1.67677	5.198	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	20185			0.00- 83.51	36.83
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1783501	55.0215	170.57	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
97 Trichloroethene (continued)							
16.107	16.135 (1.023)	130	1729427			47.48- 147.48	96.97
16.107	16.107 (1.023)	97	1157963			14.50- 114.50	64.93
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.935)	97	62594	1.73785	5.387	80.00- 120.00	100.00
18.706	18.706 (0.935)	99	39754			12.19- 112.19	63.51
18.706	18.706 (0.935)	83	51253			31.81- 131.81	81.88
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.941)	166	110736	2.65397	8.227	80.00- 120.00	100.00
18.817	18.817 (0.941)	129	88290			27.36- 127.36	79.73
18.817	18.817 (0.941)	131	84813			25.62- 125.62	76.59
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.146)	146	81869	0.93417	2.896	80.00- 120.00	100.00
22.937	22.937 (1.146)	148	51338			16.32- 116.32	62.71
22.937	22.937 (1.146)	111	36081			0.00- 90.95	44.07

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052214.d
Lab Smp Id: 0805274-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 4.0"Hg -> 5psi

Calibration Date: 22-MAY-2008
Calibration Time: 09:16

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	291995	-5.22
95 1,4-Difluorobenze	1638375	983025	2293725	1553459	-5.18
123 Chlorobenzene-d5	1818182	1090909	2545455	1701946	-6.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-22may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805274-11A
Level: LOW
Operator: kr
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 4.0"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.217	96.87	70-130
$ 111 Toluene-d8	25.000	24.088	96.35	70-130
$ 136 Bromofluorobenzene	25.000	23.949	95.80	70-130

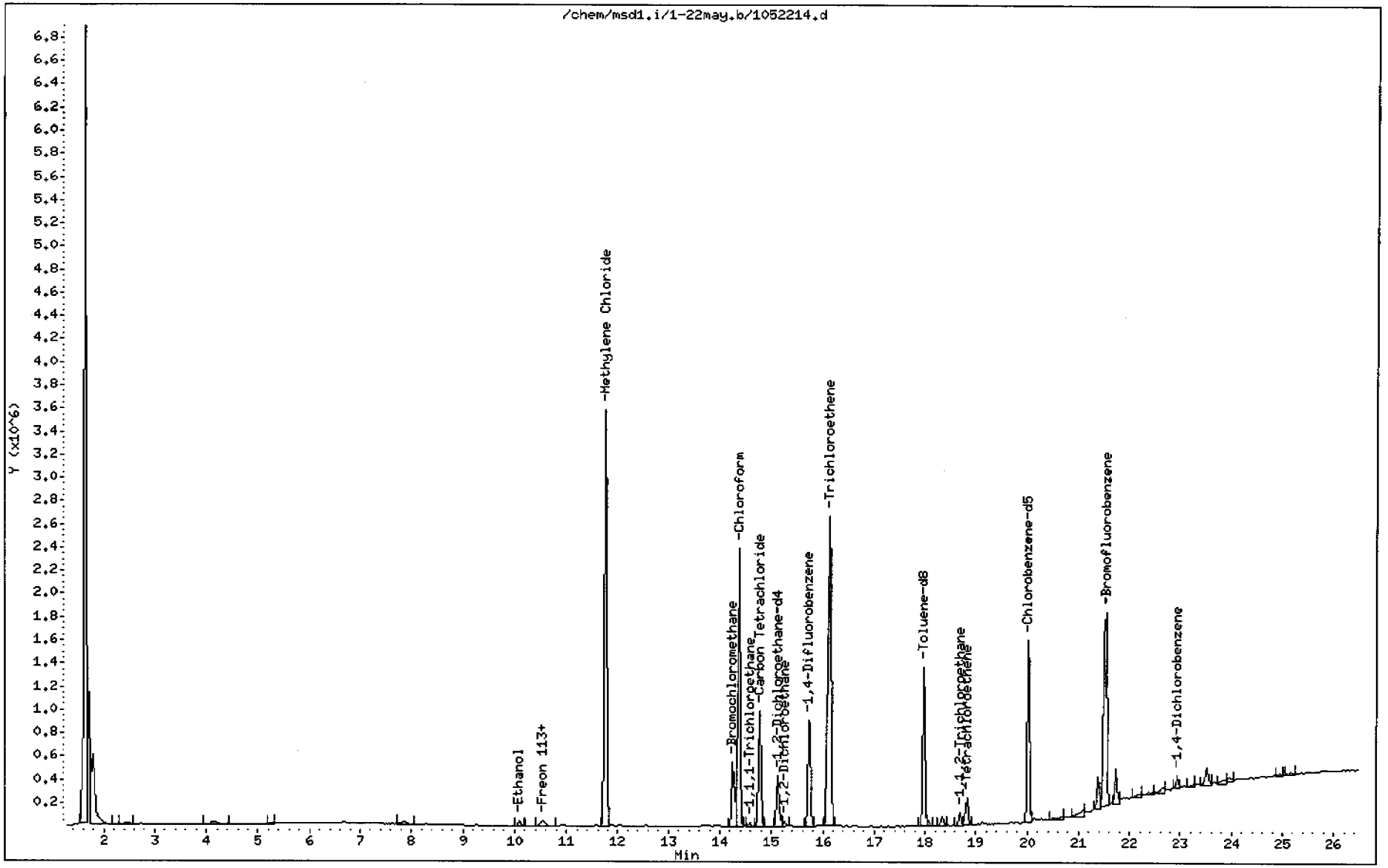
Data File: /chem/msd1.i/1-22may.b/1052214.d
Date : 22-MAY-2008 20:38
Client ID:
Sample Info: 50mL #4176

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0272



Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

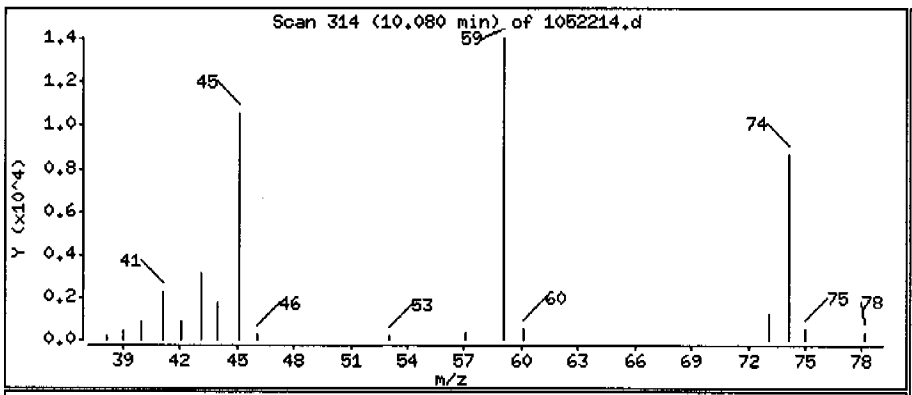
Operator: kr

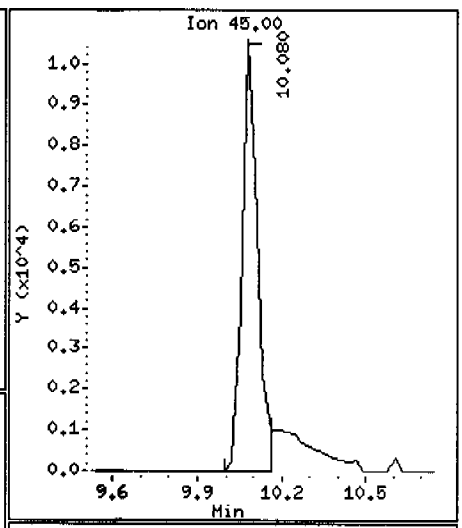
Column phase: RTx-624

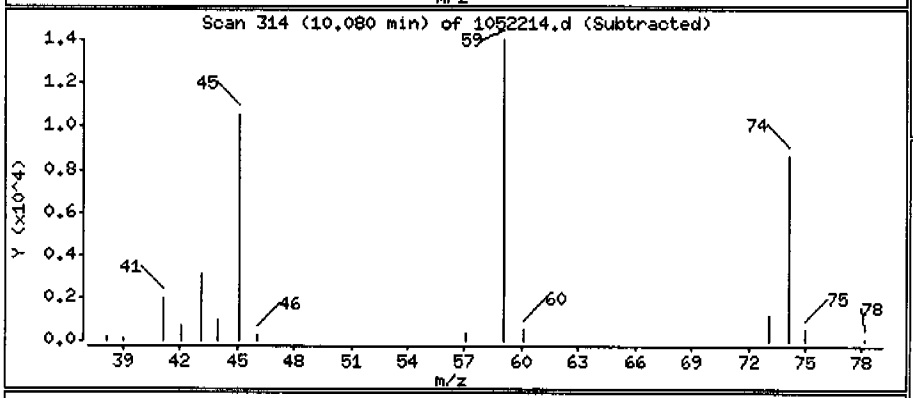
Column diameter: 0.53

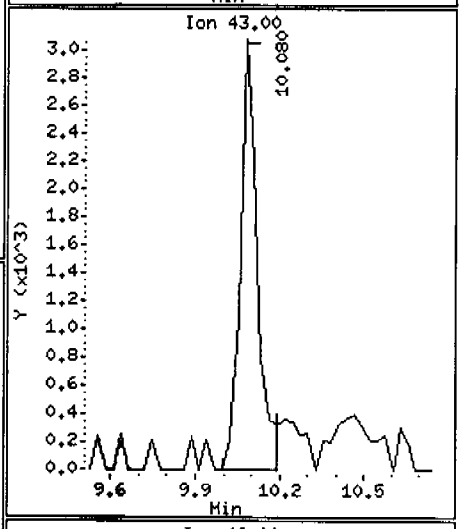
38 Ethanol

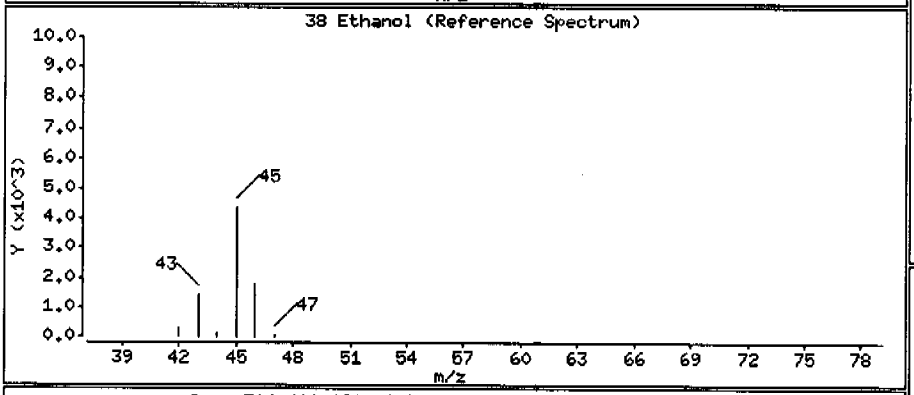
Concentration: 19.985 PPBV

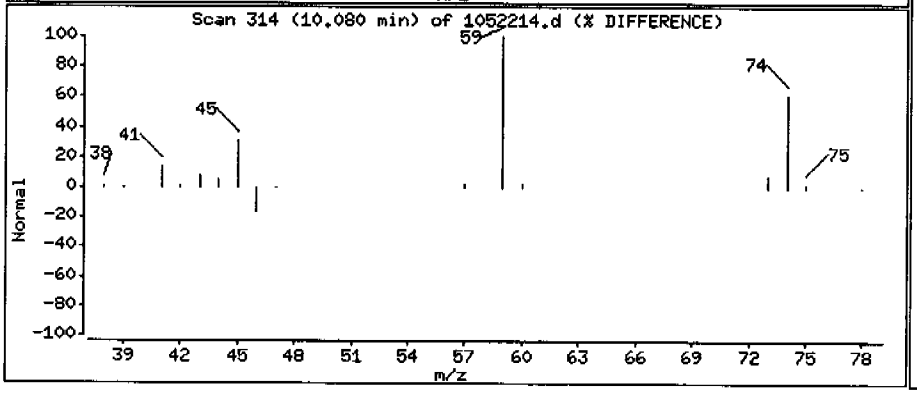


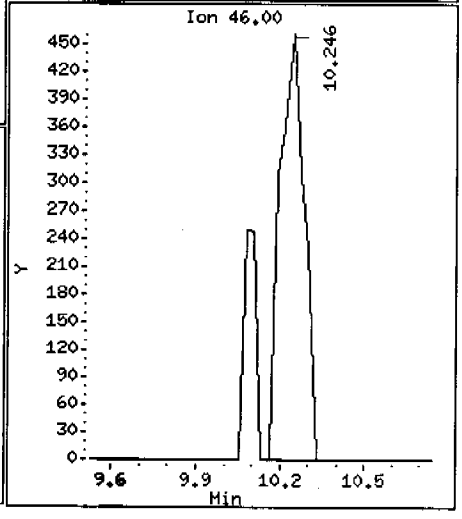












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

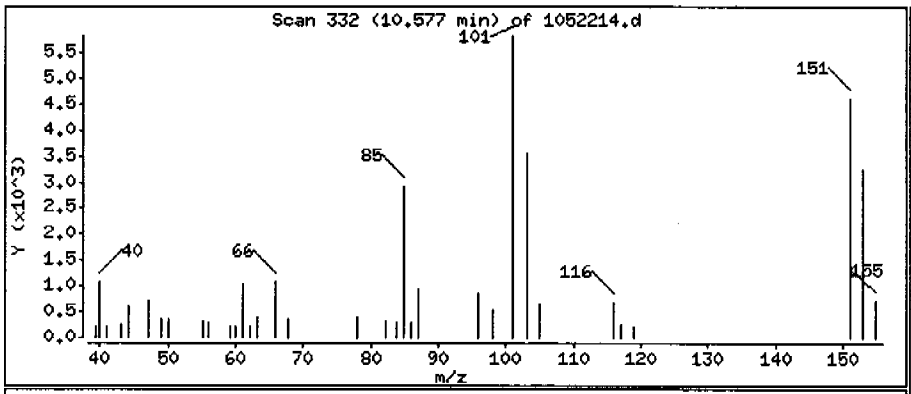
Operator: kr

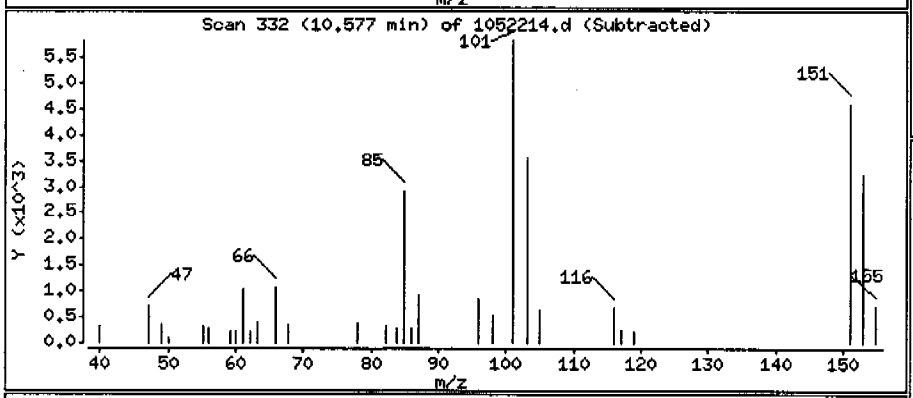
Column phase: RTx-624

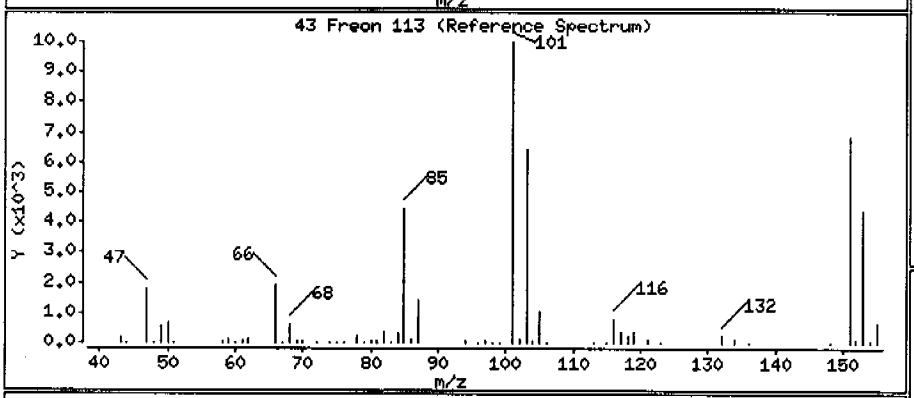
Column diameter: 0.53

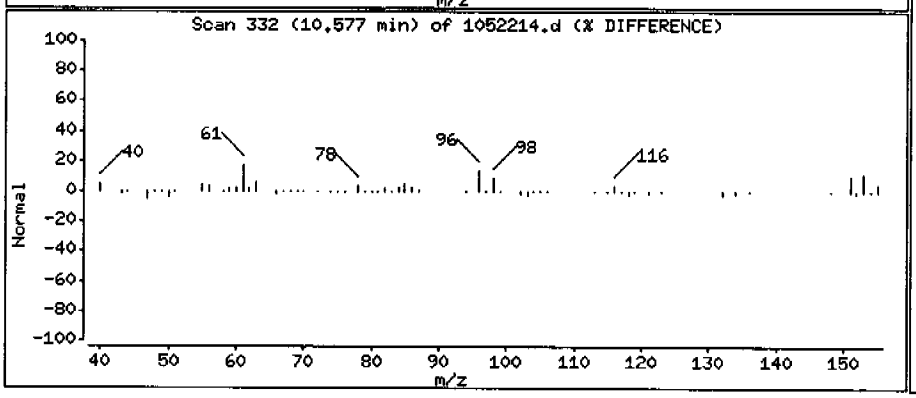
43 Freon 113

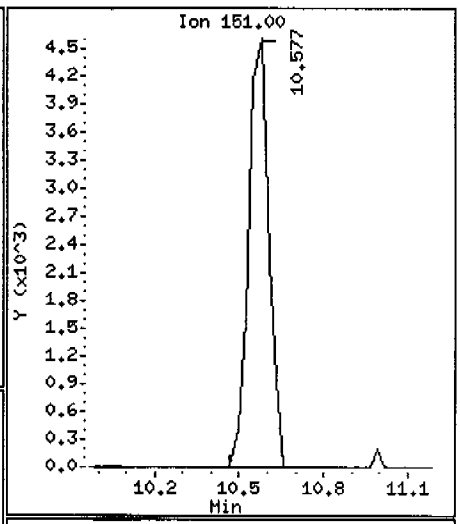
Concentration: 3.314 PPBV

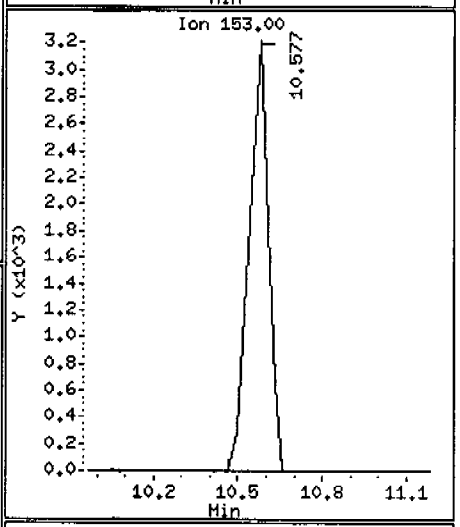


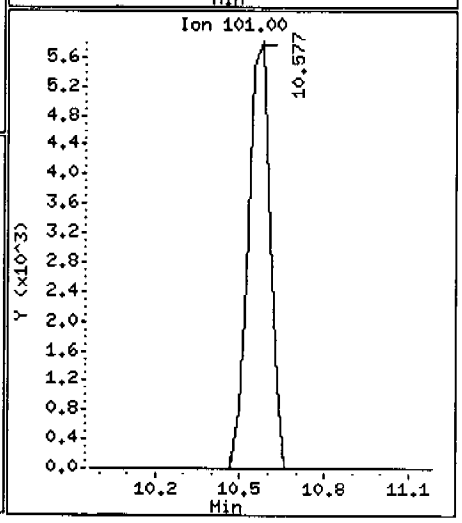












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

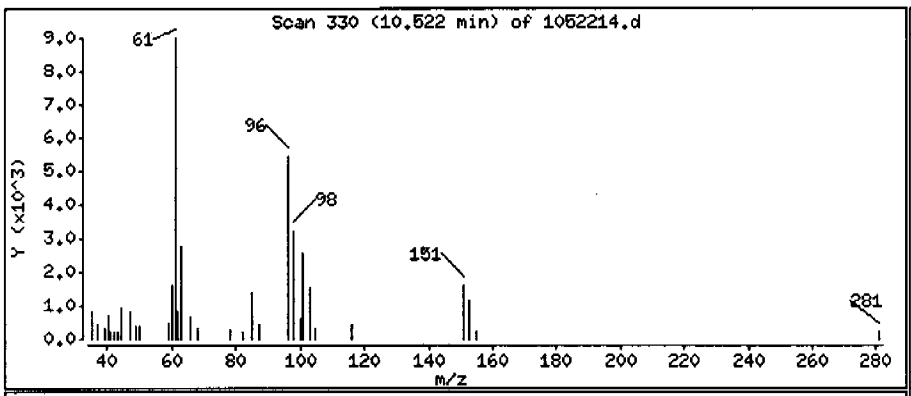
Operator: kr

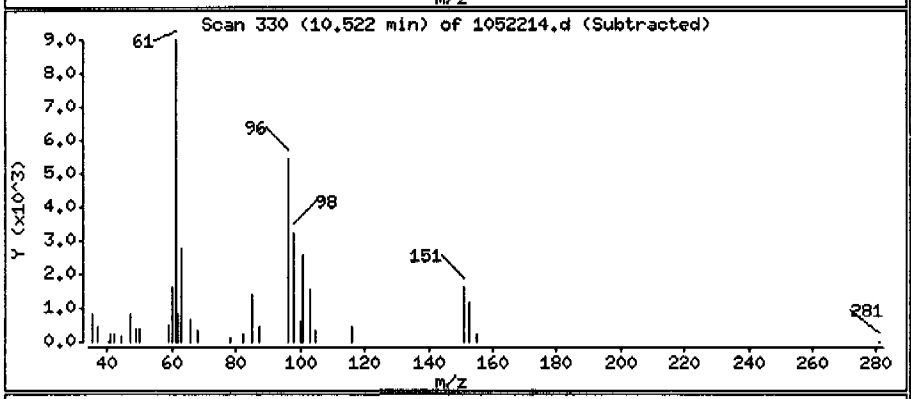
Column phase: RTx-624

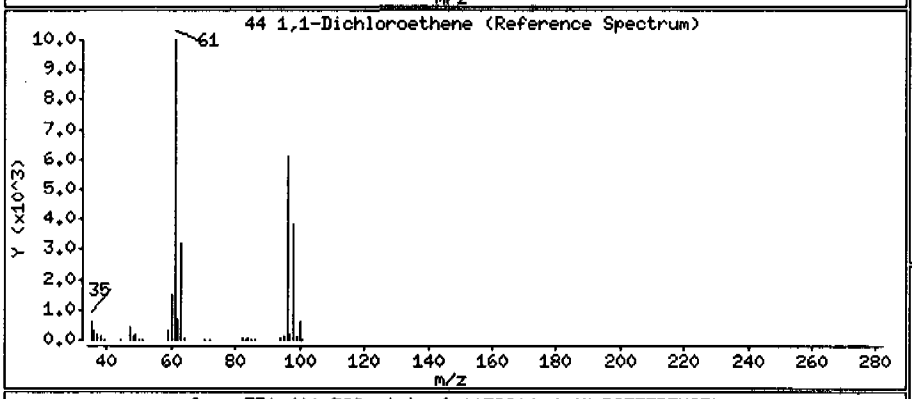
Column diameter: 0.53

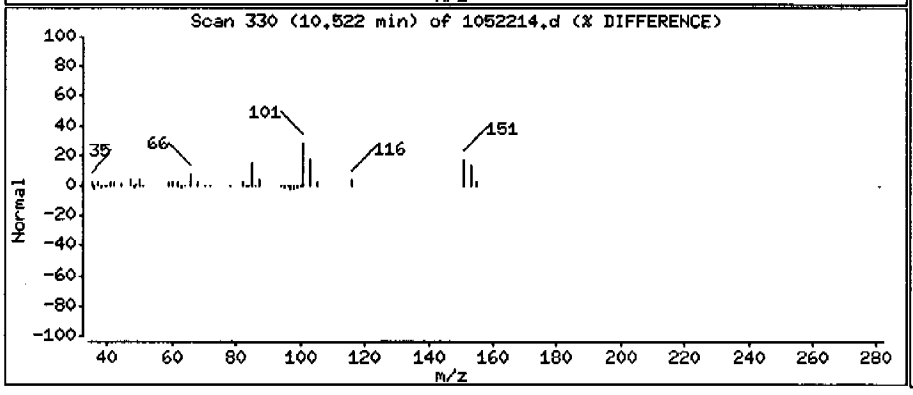
44 1,1-Dichloroethene

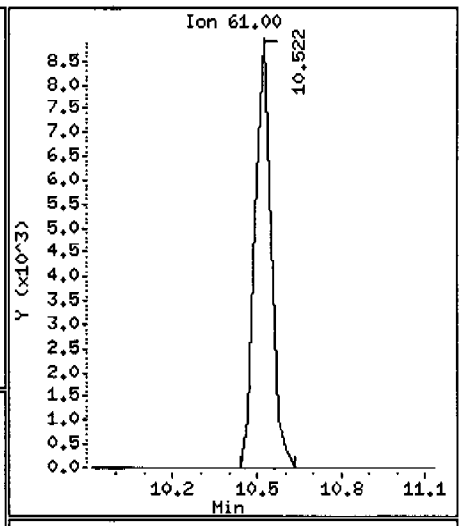
Concentration: 3.693 PPBV

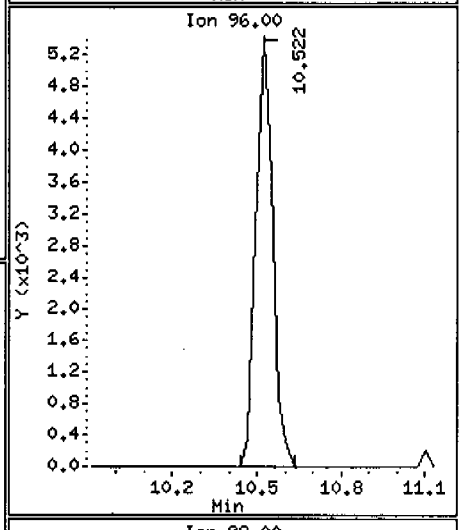


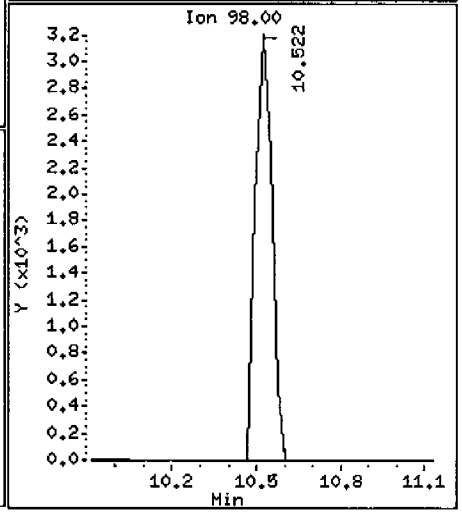












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Sample Info: 50mL #4176

Instrument: msd1.i

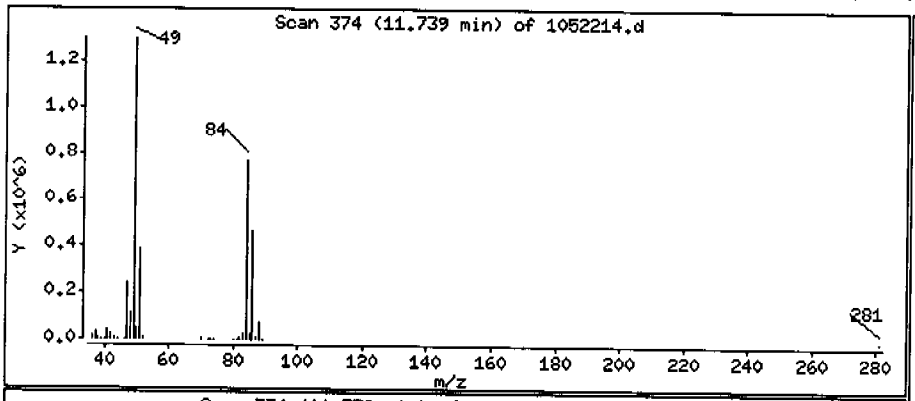
Operator: kr

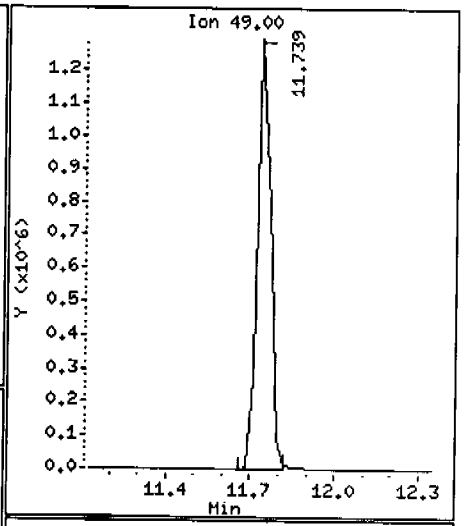
Column phase: RTx-624

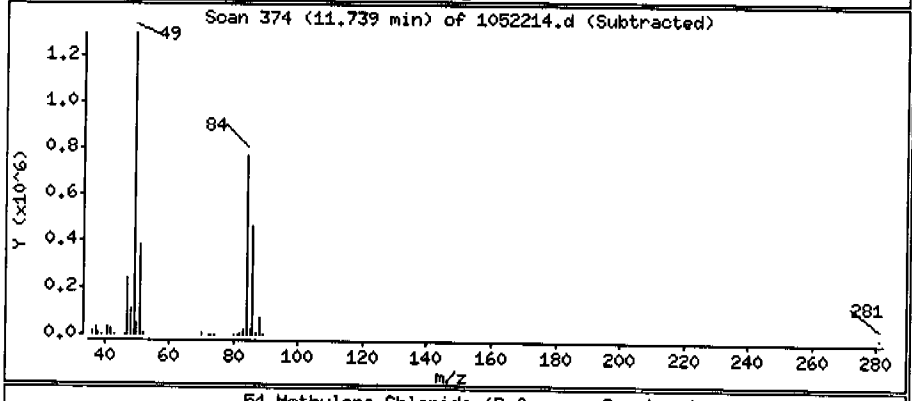
Column diameter: 0.53

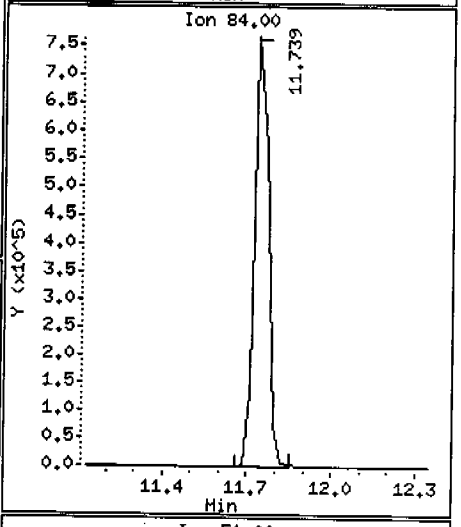
54 Methylene Chloride

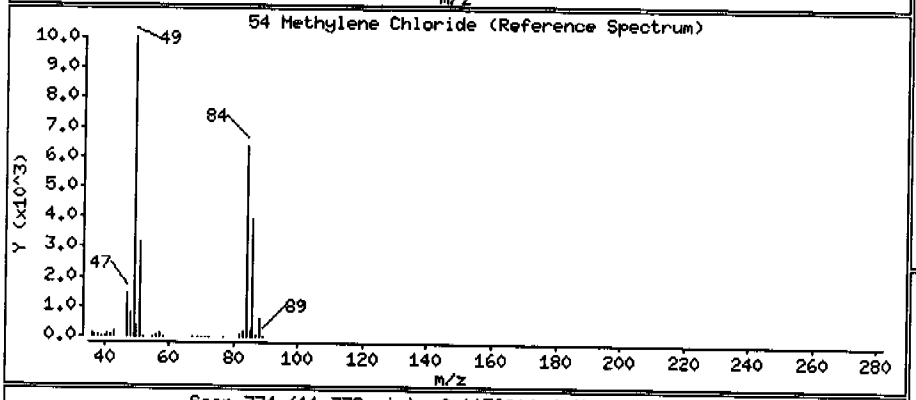
Concentration: 487.91 PPBV

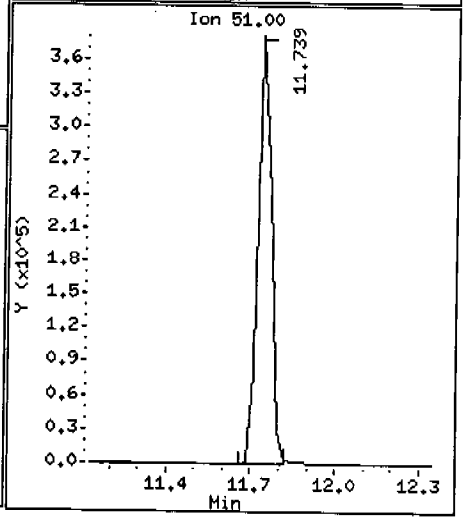


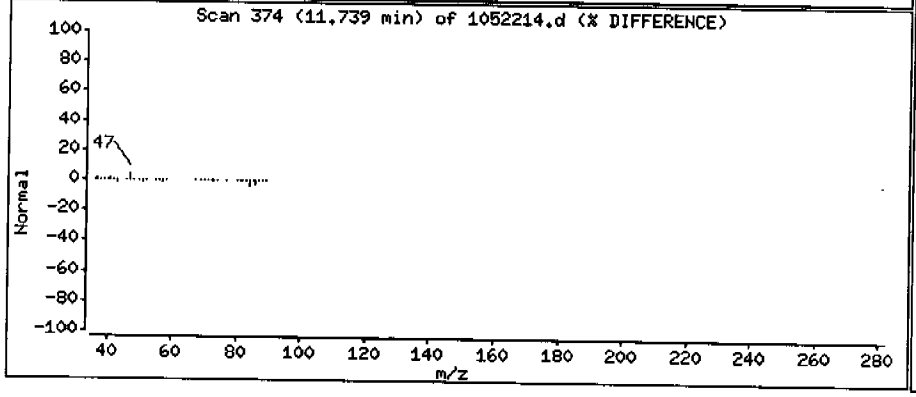












0276

Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Sample Info: 50mL #4176

Instrument: msd1.i

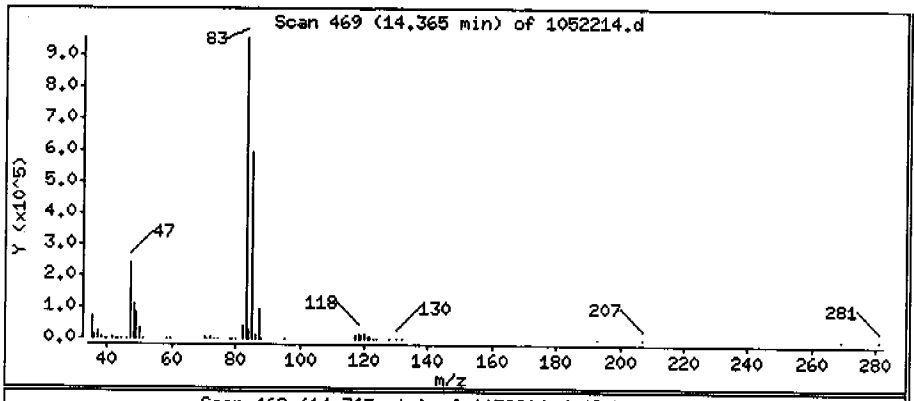
Operator: kr

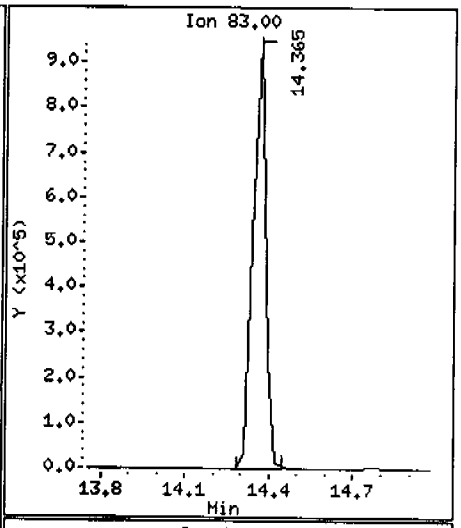
Column phase: RTx-624

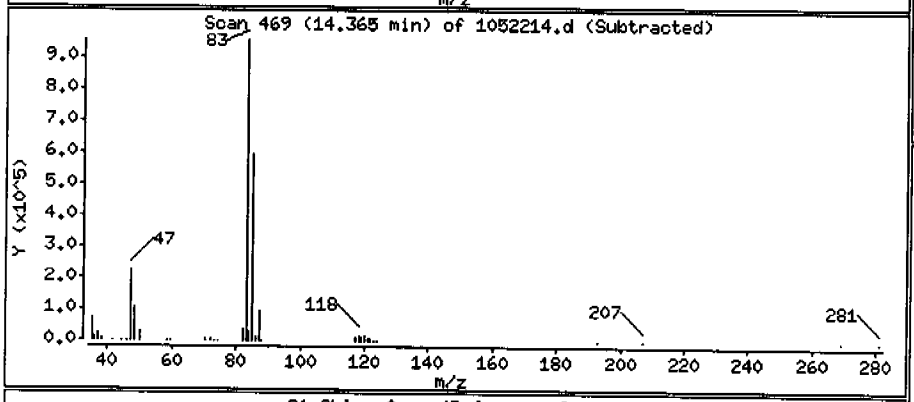
Column diameter: 0.53

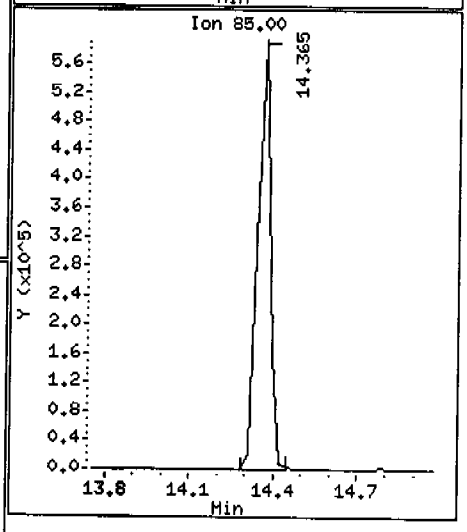
81 Chloroform

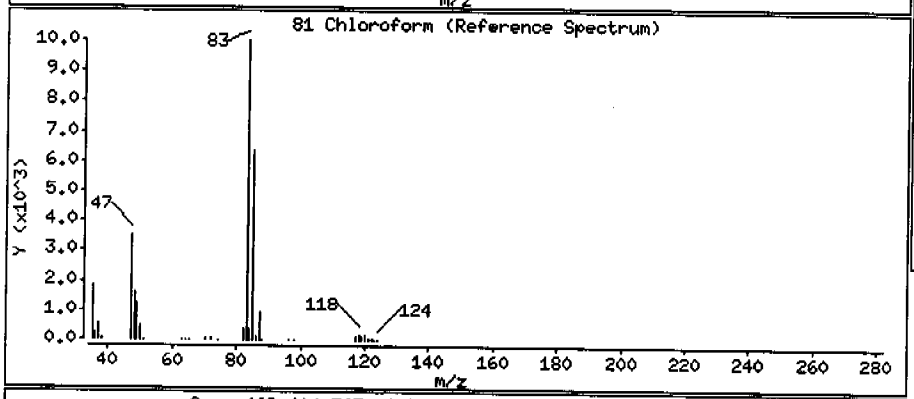
Concentration: 219.09 PPBV

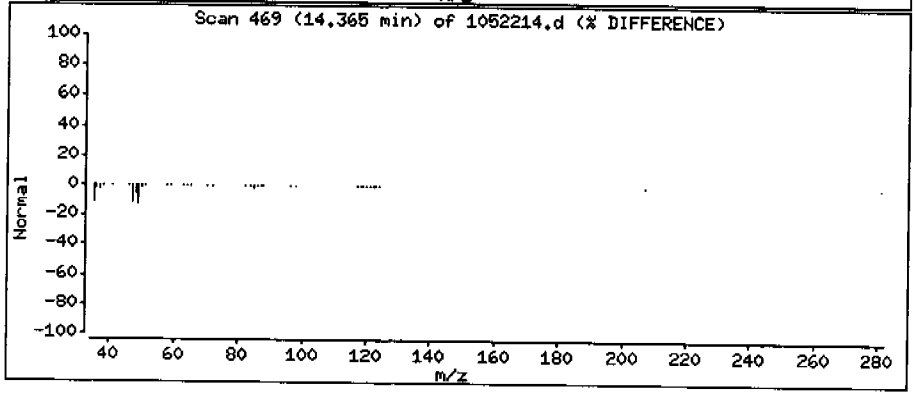












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

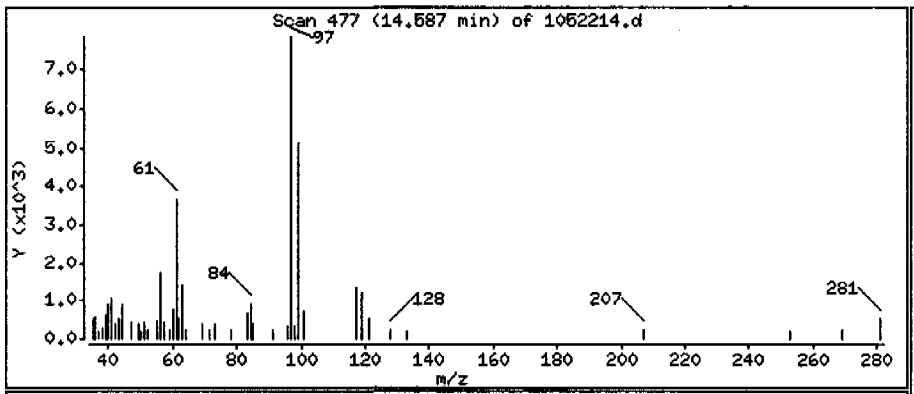
Operator: kr

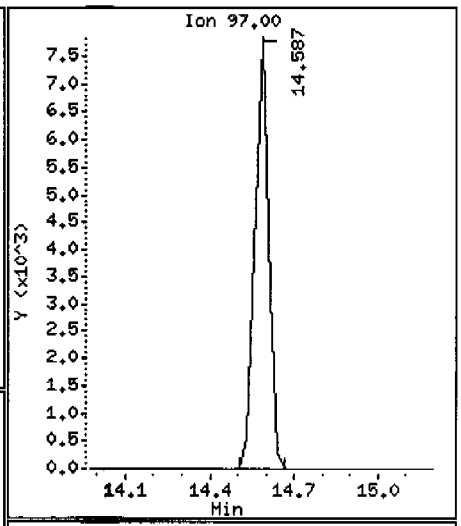
Column phase: RTx-624

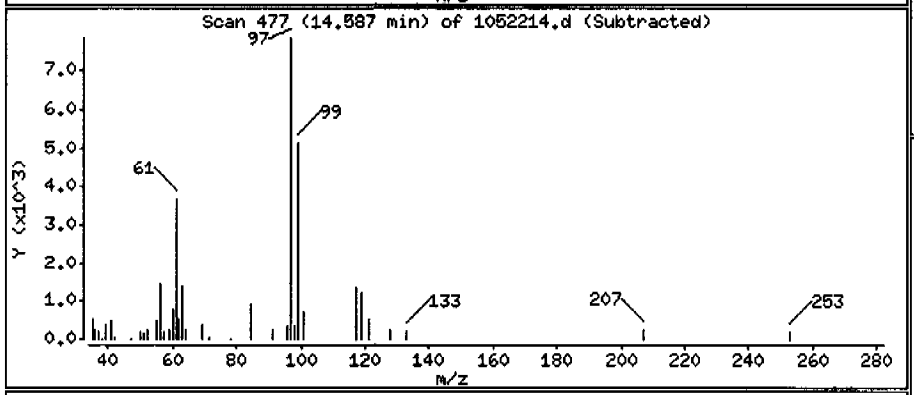
Column diameter: 0.53

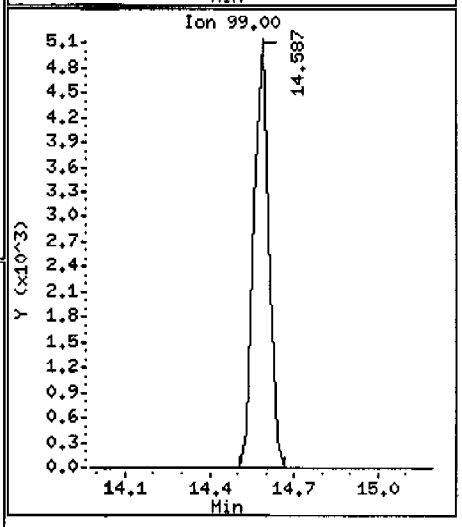
83 1,1,1-Trichloroethane

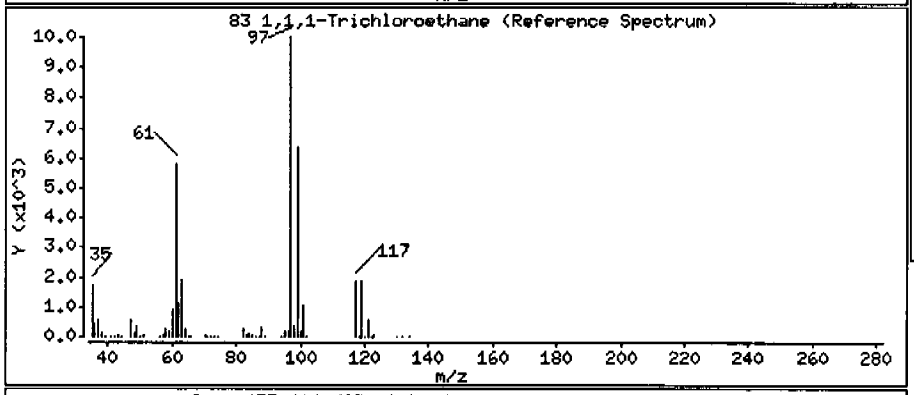
Concentration: 1.884 PPBV

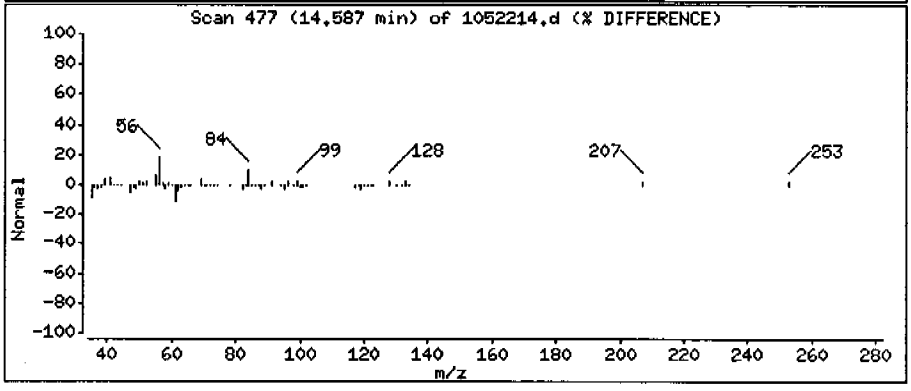












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

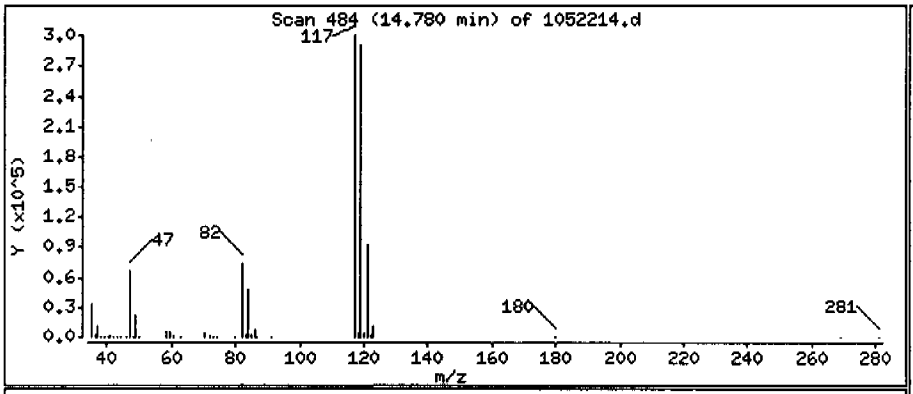
Operator: kr

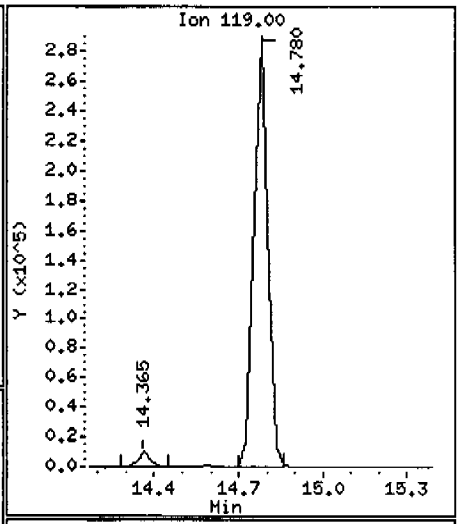
Column phase: RTx-624

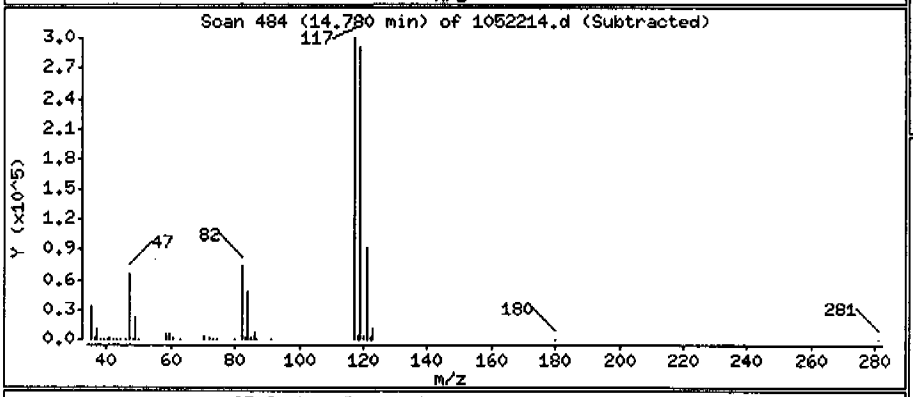
Column diameter: 0.53

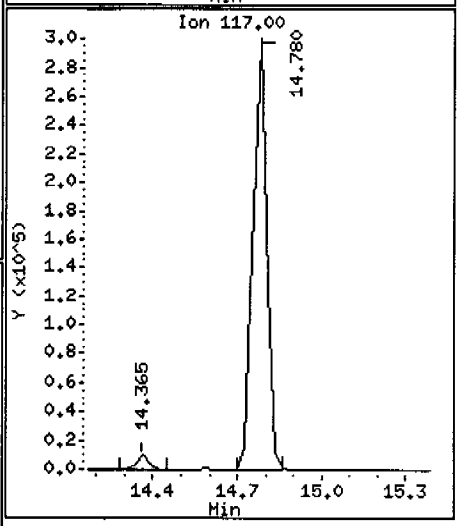
85 Carbon Tetrachloride

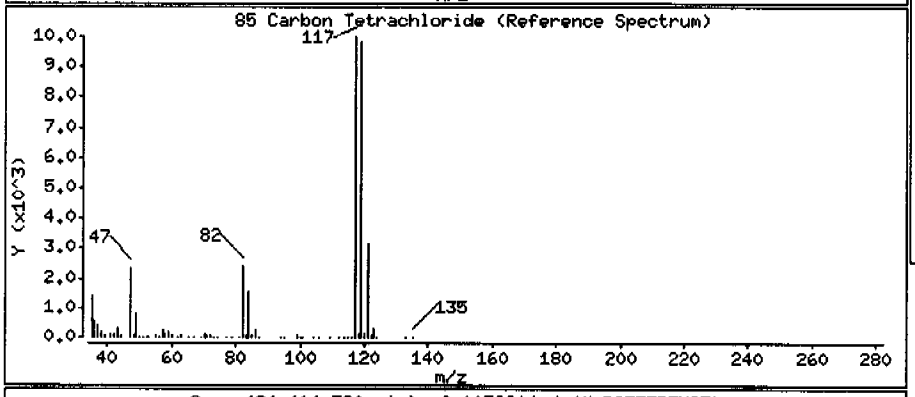
Concentration: 75.267 PPBV

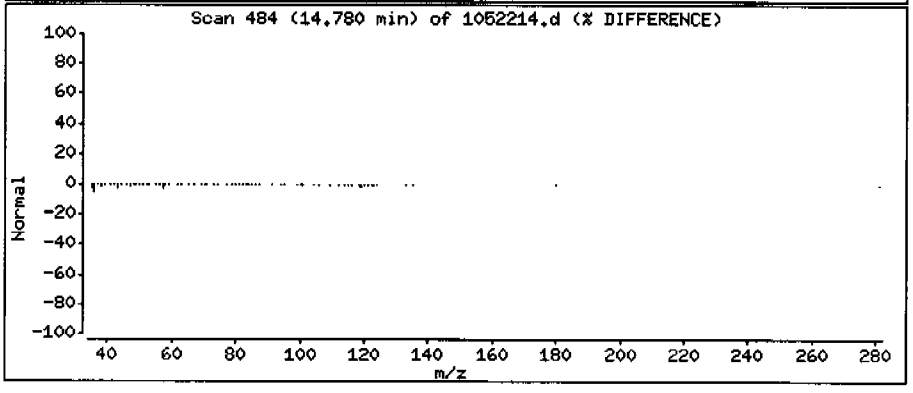












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

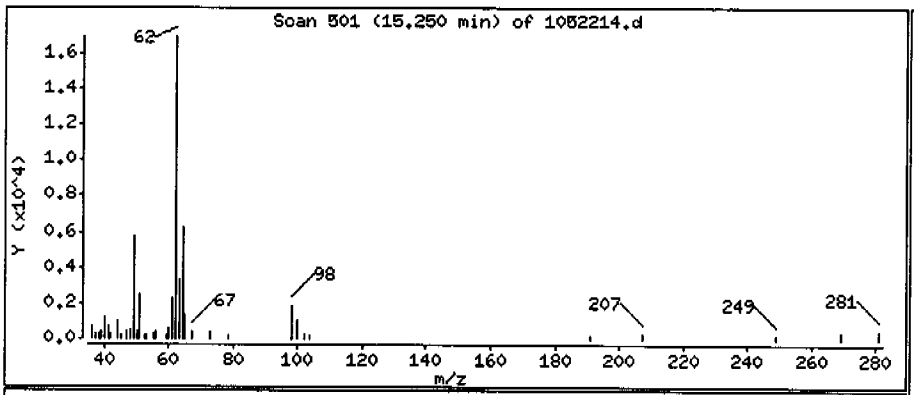
Operator: kr

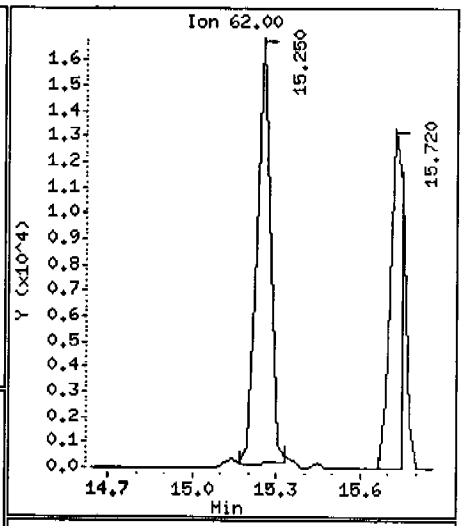
Column phase: RTx-624

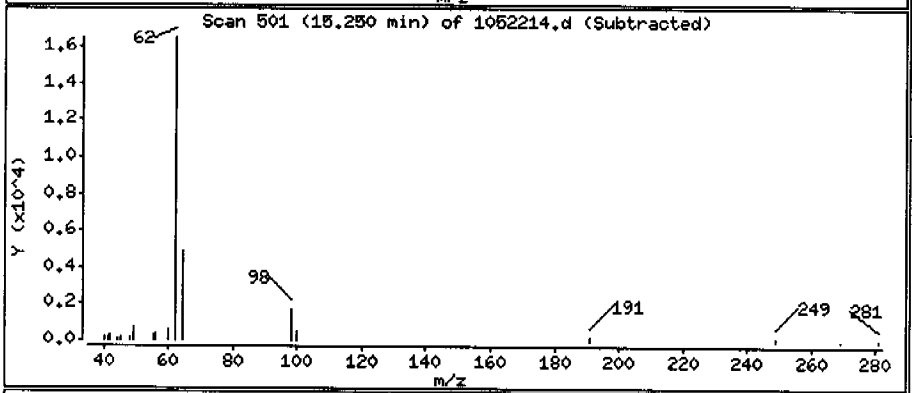
Column diameter: 0.53

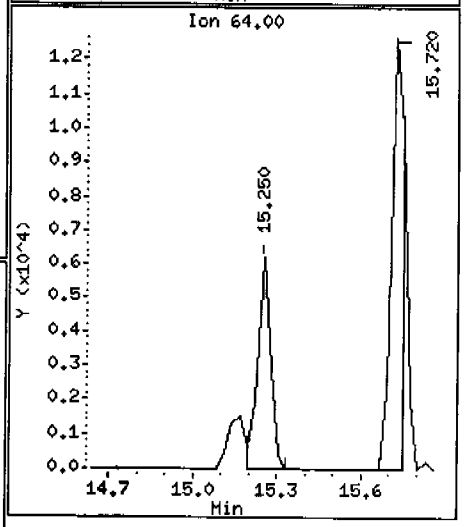
93 1,2-Dichloroethane

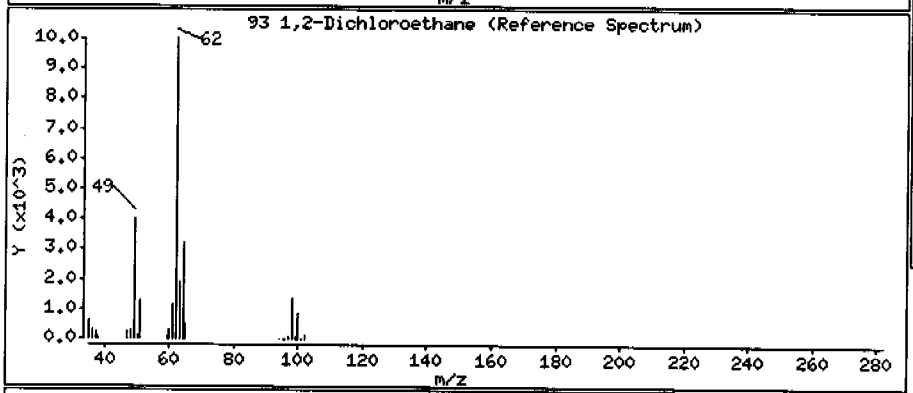
Concentration: 5.198 PPBV

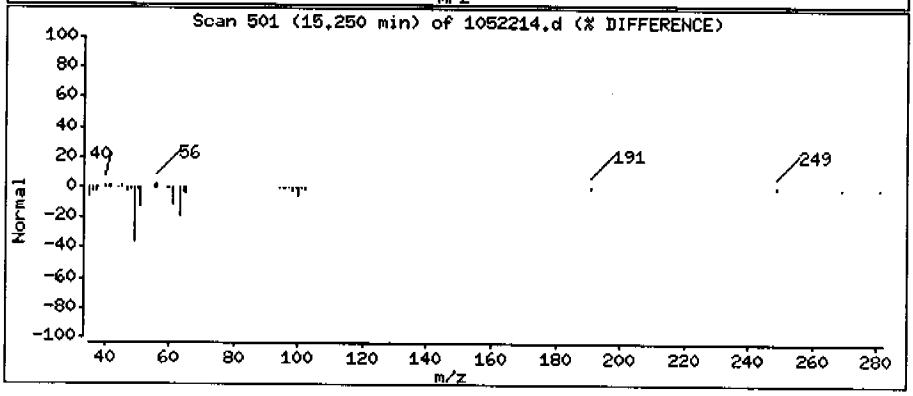












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

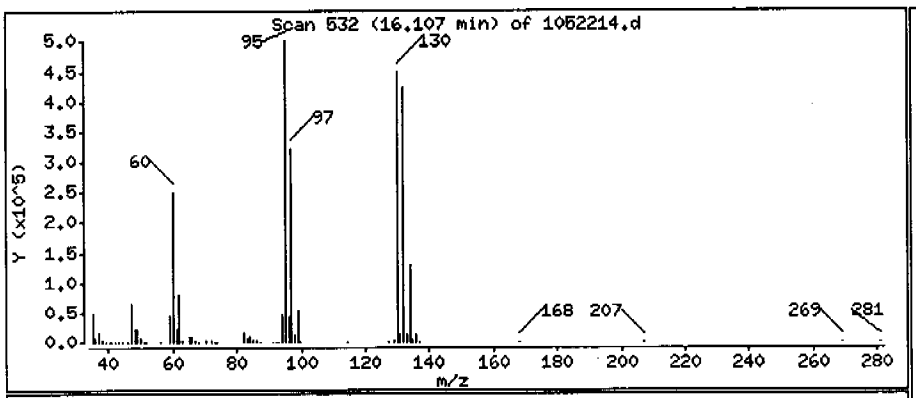
Operator: kr

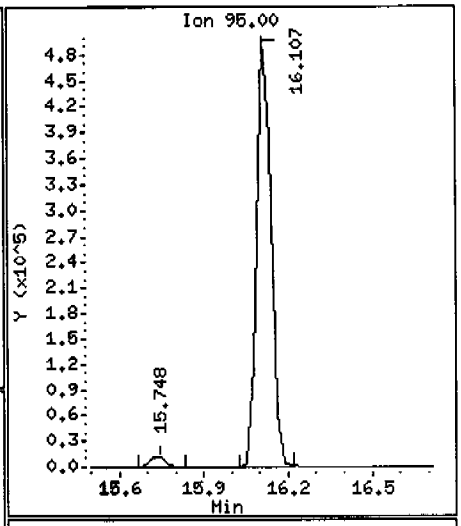
Column phase: RTx-624

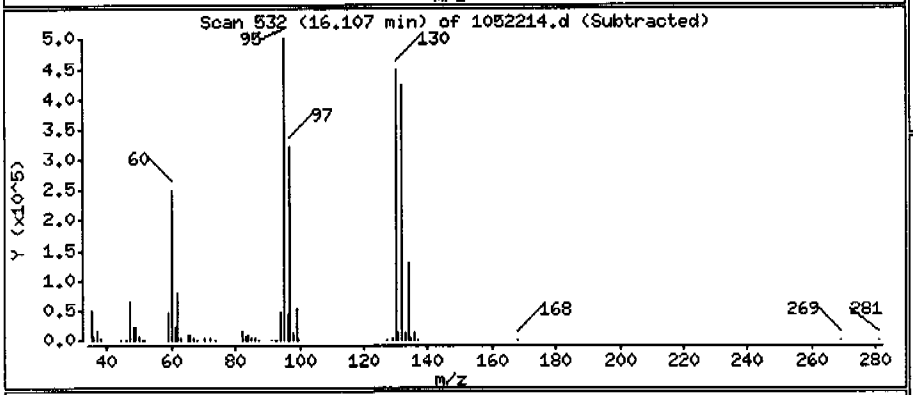
Column diameter: 0.53

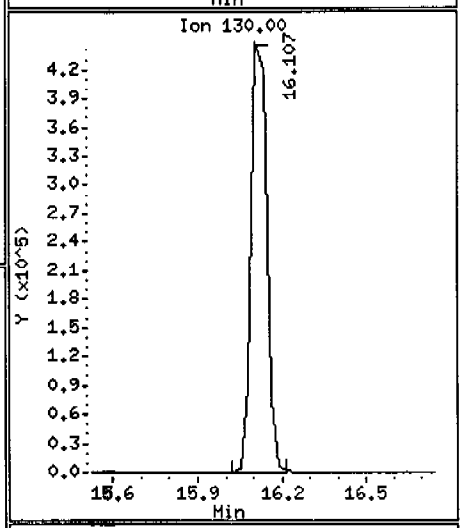
97 Trichloroethene

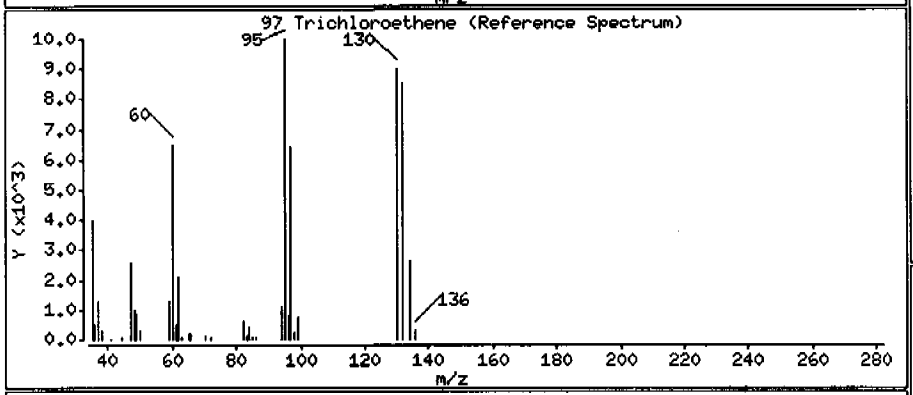
Concentration: 170.57 PPBV

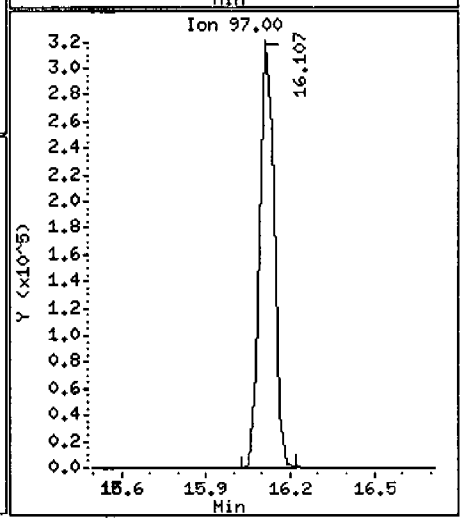


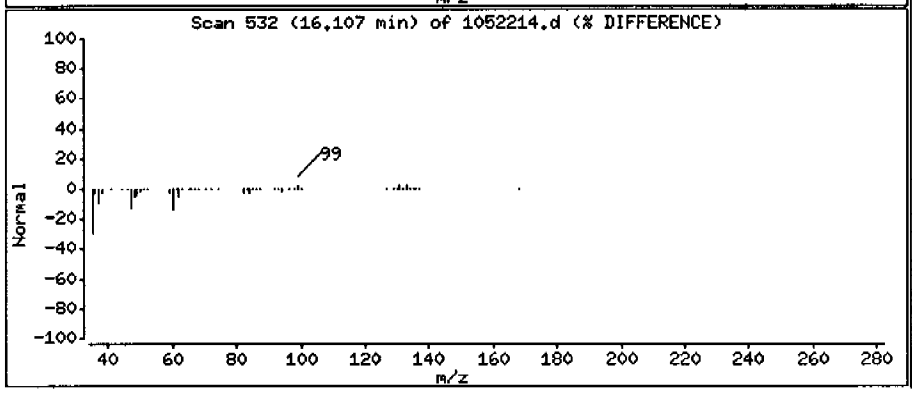












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

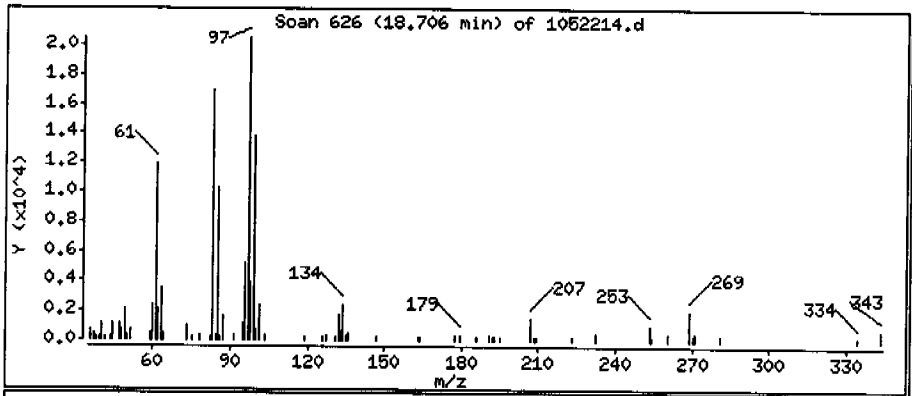
Operator: kr

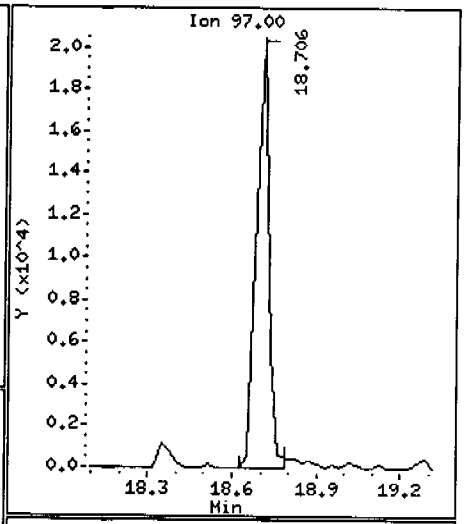
Column phase: RTx-624

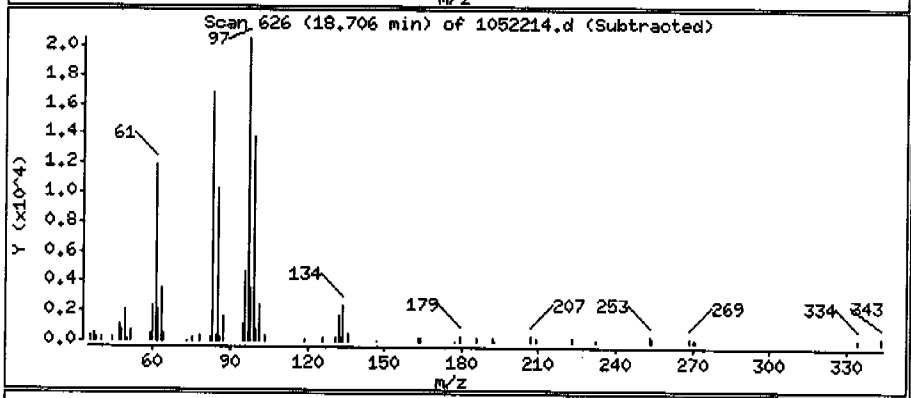
Column diameter: 0.53

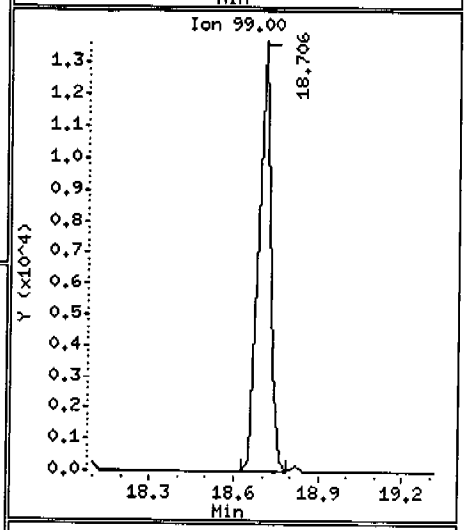
116 1,1,2-Trichloroethane

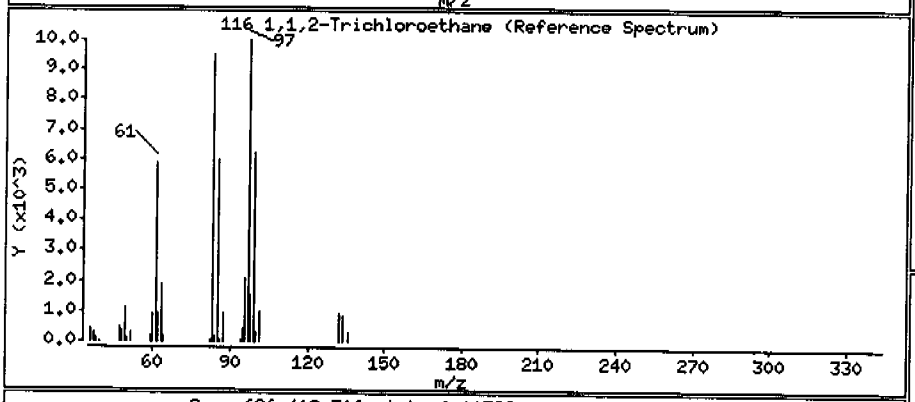
Concentration: 5.387 PPBV

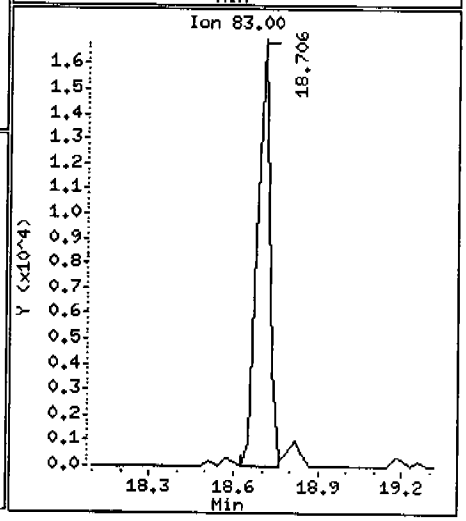


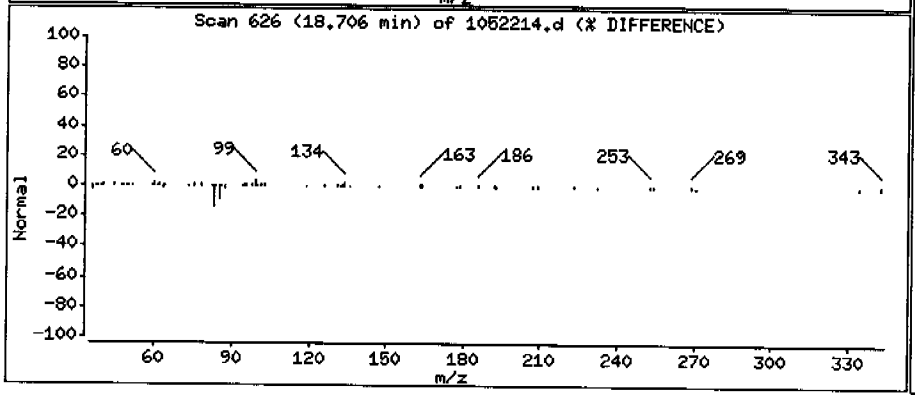












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 50mL #4176

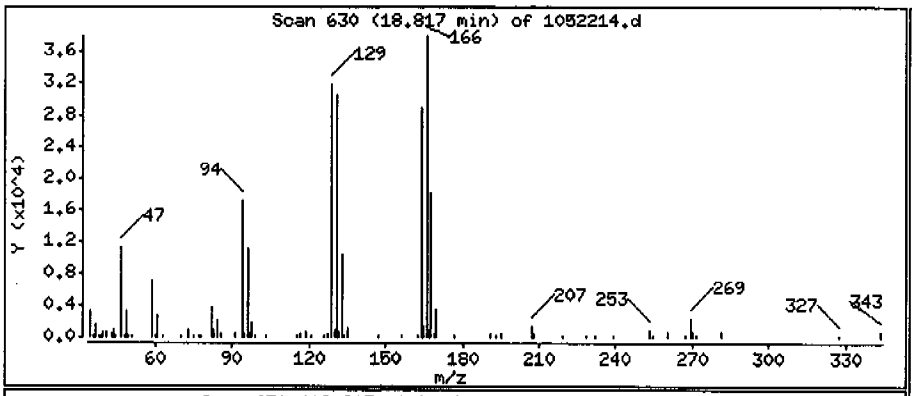
Operator: kr

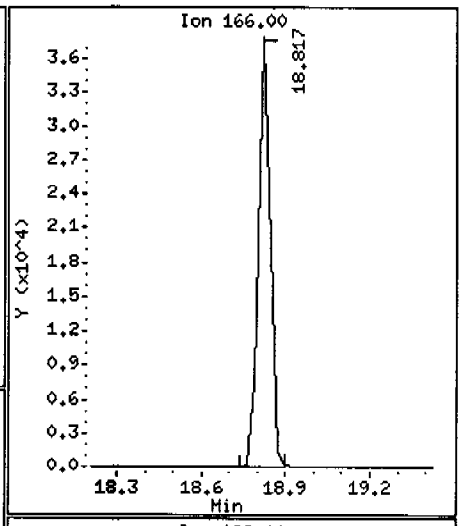
Column phase: RTx-624

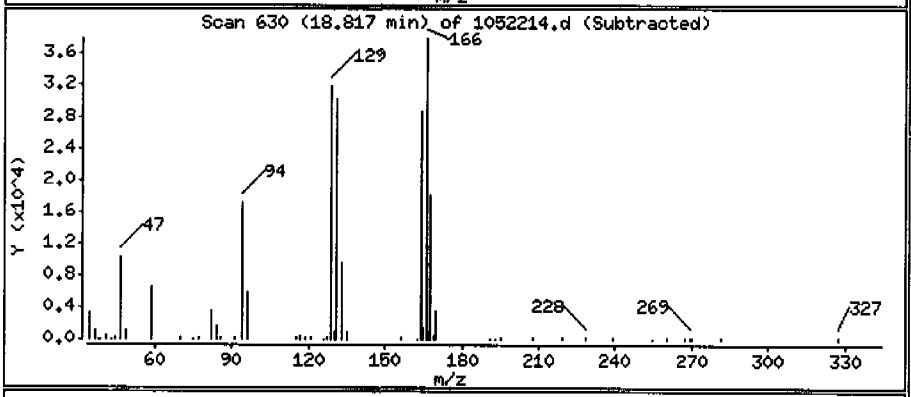
Column diameter: 0.53

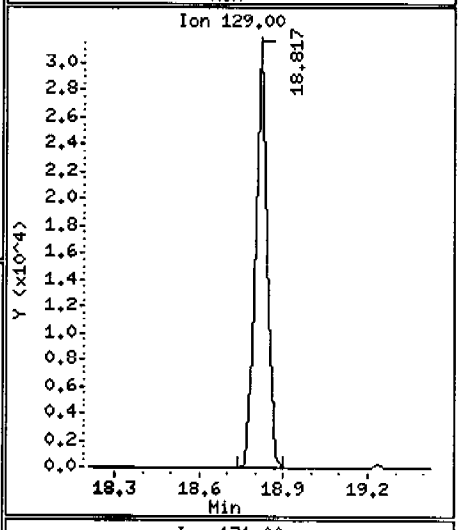
117 Tetrachloroethene

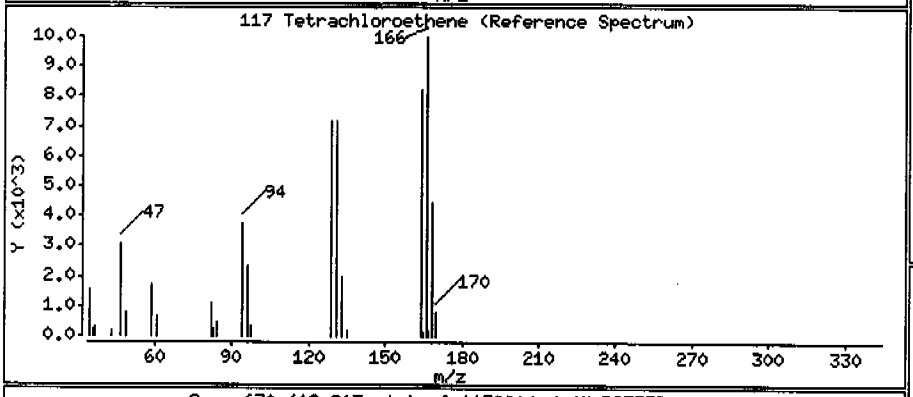
Concentration: 8.227 PPBV

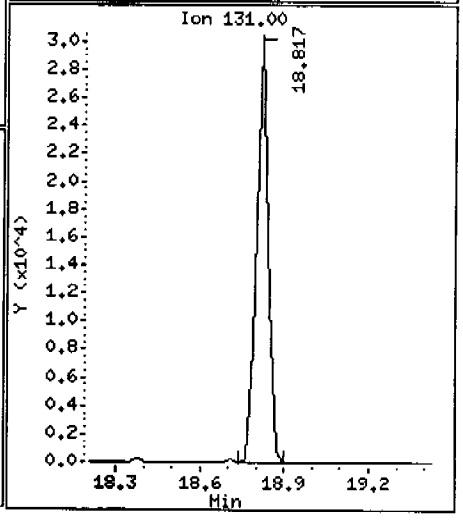


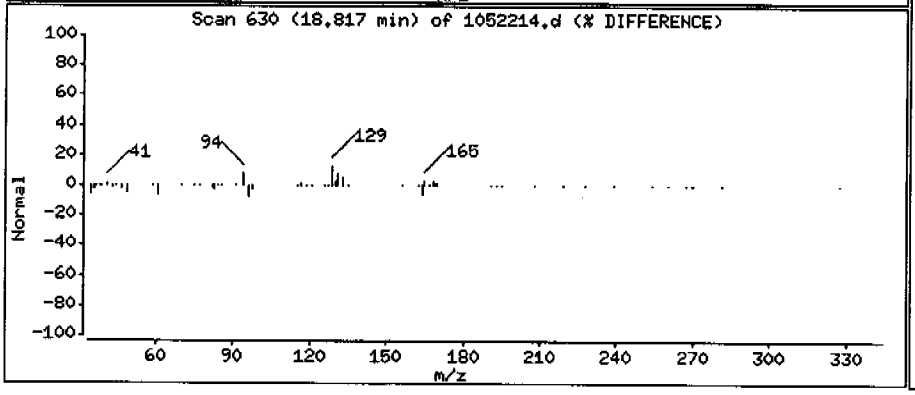












Data File: /chem/msd1.i/1-22may.b/1052214.d

Date : 22-MAY-2008 20:38

Client ID:

Sample Info: 50mL #4176

Instrument: msd1.i

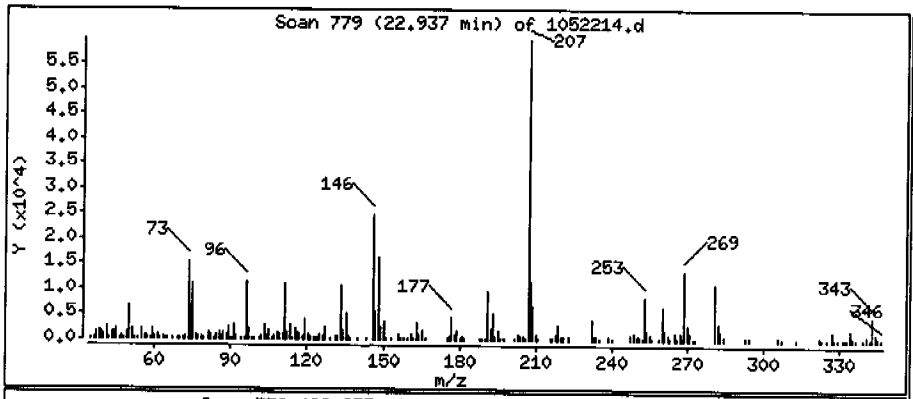
Operator: kr

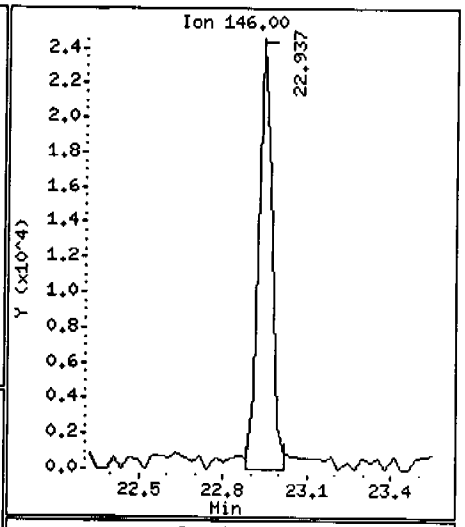
Column phase: RTx-624

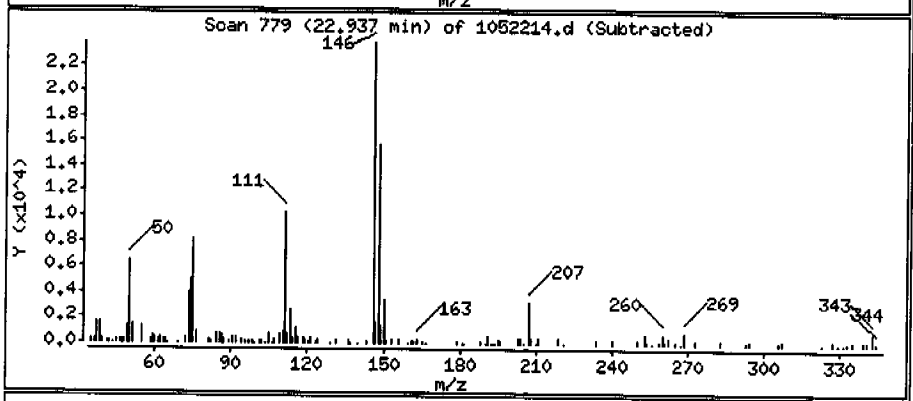
Column diameter: 0.53

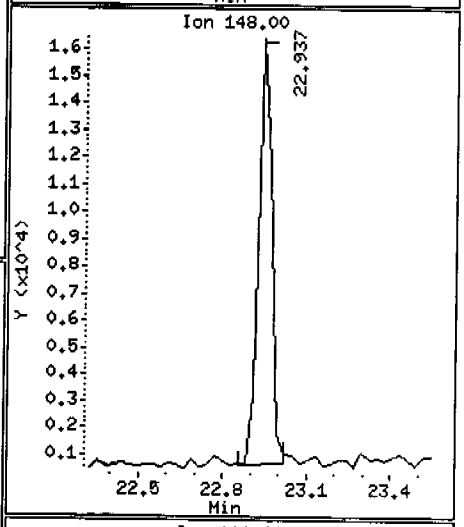
159 1,4-Dichlorobenzene

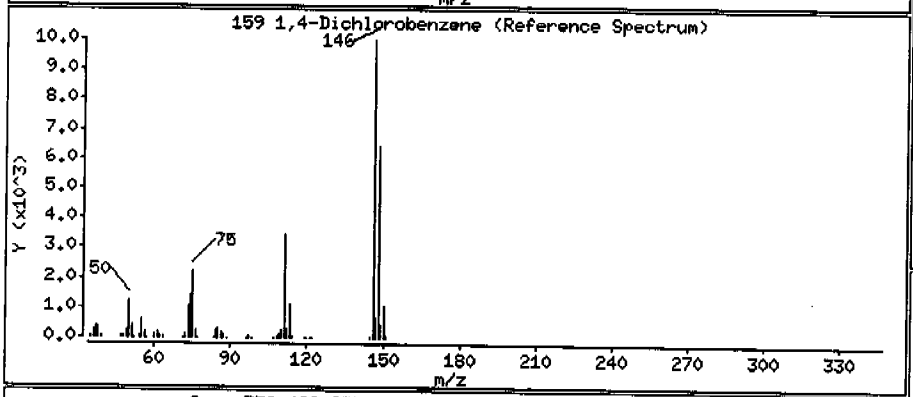
Concentration: 2.896 PPBV

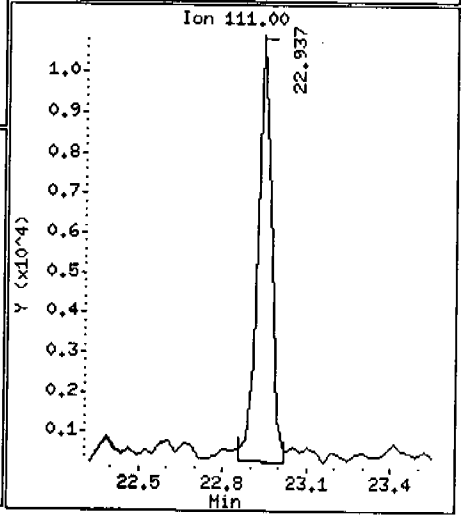


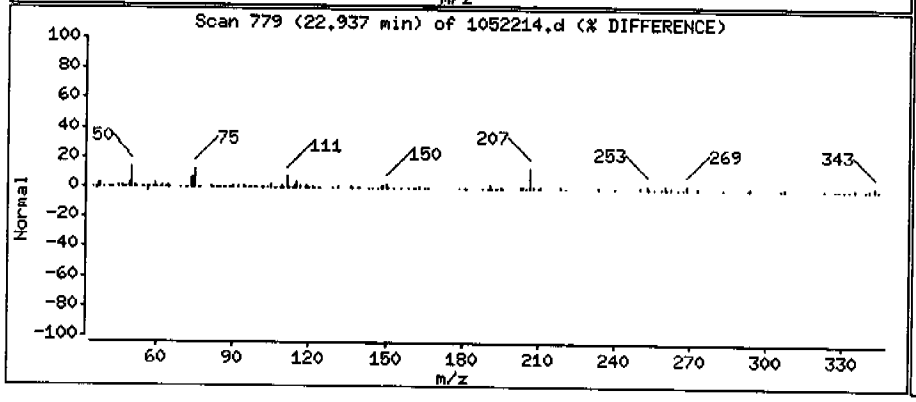












QC Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805274-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052106 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/21/08 11:00 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

0286

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805274-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] Date of Collection: NA

Dil. Factor: 100 Date of Analysis: 5/21/08 11:00 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected U J	15	Not Detected U J
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	96	70-130

0287

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052106.d
Lab Smp Id: Lab blank
Client Smp ID: Lab blank
Inj Date : 21-MAY-2008 11:00
Operator : lo
Inst ID: msd1.i
Smp Info : 100mL #12009
Misc Info : humid
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:54 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.282	14.282 (1.000)	130	284463	25.0000		80.00- 120.00	100.00
	14.282	14.282 (1.000)	128	221202			28.93- 128.93	77.76
	14.255	14.282 (1.000)	49	518347			132.03- 232.03	182.22
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1449495	25.0000		80.00- 120.00	100.00
	15.748	15.748 (1.000)	88	230199			0.00- 65.76	15.88
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.034	20.033 (1.000)	117	1631925	25.0000		80.00- 120.00	100.00
	20.006	20.033 (1.000)	82	951036			8.42- 108.42	58.28
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.140	15.139 (1.060)	65	448623	23.6324	23.632	80.00- 120.00	100.00
	15.140	15.139 (1.060)	67	231047			6.04- 106.04	51.50
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.987 (1.140)	98	1614329	24.5797	24.580	80.00- 120.00	100.00
	17.960	17.987 (1.140)	70	167509			0.00- 60.35	10.38

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.987	(1.140)	100	1058654			15.45- 115.45	65.58
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.527	21.526	(1.075)	174	838687	24.0177	24.018	80.00- 120.00	100.00
21.527	21.526	(1.075)	95	1342240			110.56- 210.56	160.04
21.527	21.526	(1.075)	176	792159			45.40- 145.40	94.45

Data File: /chem/msd1.i/1-21may.b/1052106.d
Report Date: 21-May-2008 11:14

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052106.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: humid

Calibration Date: 21-MAY-2008
Calibration Time: 08:52
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	284463	-8.40
95 1,4-Difluorobenze	1646495	987897	2305093	1449495	-11.96
123 Chlorobenzene-d5	1819110	1091466	2546754	1631925	-10.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-21may.b/1052106.d
Report Date: 21-May-2008 11:14

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08a.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: humid

Client SDG: 1-21may
Fraction: VOA
Client Smp ID: Lab blank
Operator: lo
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.632	94.53	70-130
$ 111 Toluene-d8	25.000	24.580	98.32	70-130
$ 136 Bromofluorobenzene	25.000	24.018	96.07	70-130

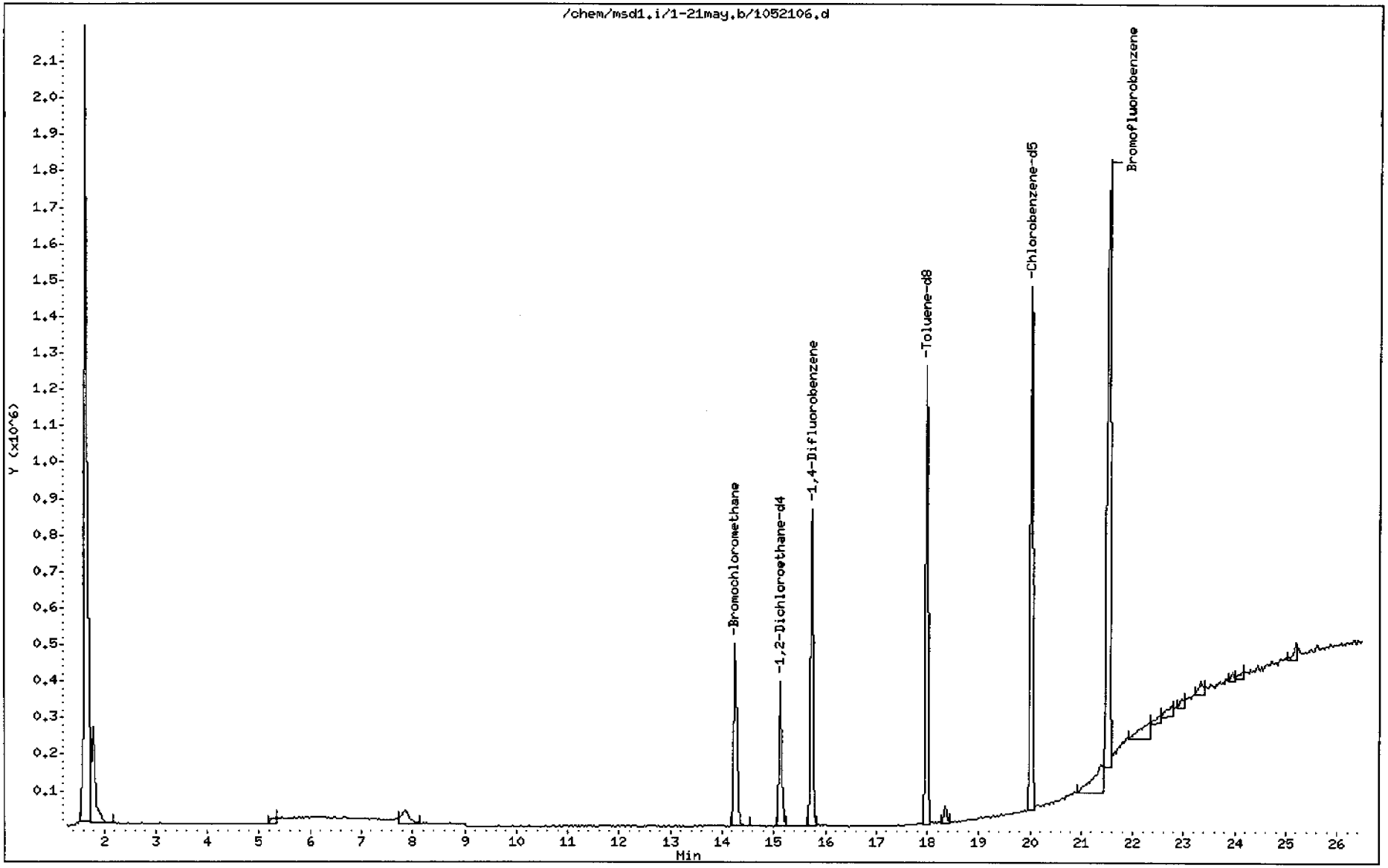
Data File: /chem/msd1.i/1-21may.b/1052106.d
Date : 21-MAY-2008 11:00
Client ID: Lab blank
Sample Info: 100mL #12009

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0292



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805274-12B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052205 Date Collection: NA
Dil. Factor: 1.00 Date Analysis: 5/22/08 10:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805274-12B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [illegible] Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 5/22/08 10:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected U J	15	Not Detected U J
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	95	70-130

0294

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052205.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 22-MAY-2008 10:50
Operator : lo Inst ID: msd1.i
Smp Info : 100mL #12009
Misc Info : humid
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS			
				ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	282280	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	222873			27.30- 127.30	78.95
14.255	14.255 (1.000)	49	520046			131.96- 231.96	184.23
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1453082	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	229574			0.00- 65.38	15.80
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1627940	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	939290			8.42- 108.42	57.70
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.140 (1.060)	65	449121	23.8416	23.842	80.00- 120.00	100.00
15.139	15.140 (1.060)	67	231501			6.04- 106.04	51.55
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1607210	24.4109	24.411	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	165710			0.00- 60.35	10.31

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1062466			15.45- 115.45	66.11
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.075)	174	824156	23.6594	23.659	80.00- 120.00	100.00
21.526	21.527 (1.075)	95	1355135			110.38- 210.38	164.43
21.526	21.527 (1.075)	176	800896			44.94- 144.94	97.18

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052205.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: humid

Calibration Date: 22-MAY-2008
Calibration Time: 09:16
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	282280	-8.37
95 1,4-Difluorobenze	1638375	983025	2293725	1453082	-11.31
123 Chlorobenzene-d5	1818182	1090909	2545455	1627940	-10.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08a.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: humid

Client SDG: 1-22may
Fraction: VOA
Client Smp ID: Lab blank
Operator: lo
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.842	95.37	70-130
$ 111 Toluene-d8	25.000	24.411	97.64	70-130
$ 136 Bromofluorobenzene	25.000	23.659	94.64	70-130

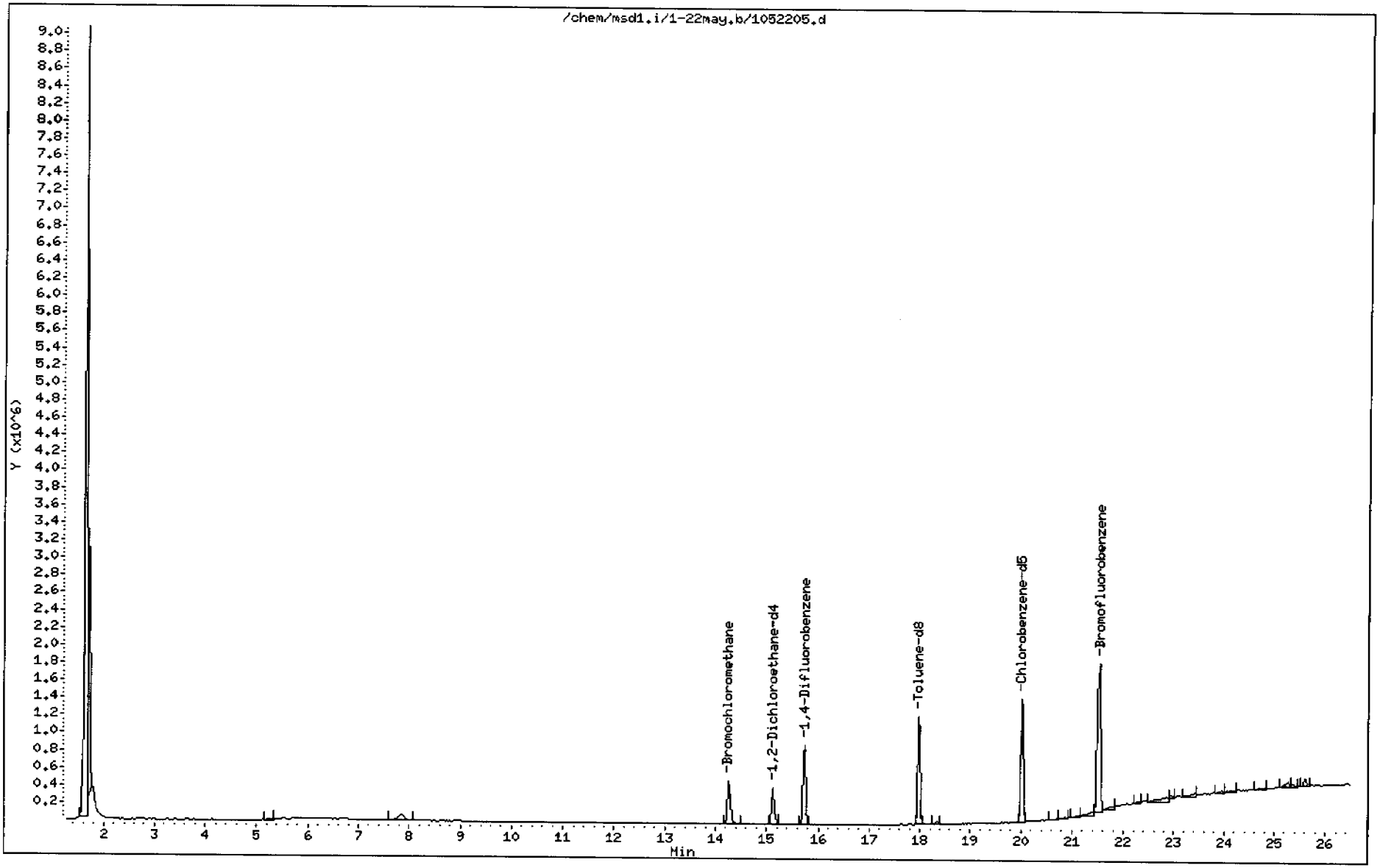
Data File: /chem/msd1.i/1-22may.b/1052205.d
Date : 22-MAY-2008 10:50
Client ID: Lab blank
Sample Info: 100mL #12009

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0299



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0805274

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-12236	92		99		98				0
02	MD21-08-12237	92		99		96				0
03	MD21-08-12238	94		98		97				0
04	MD21-08-12239	93		98		96				0
05	MD21-08-12240	95		97		97				0
06	MD21-08-12240 Lab Duplicate	95		97		95				0
07	MD21-08-12242	90		98		96				0
08	MD21-08-12244	92		98		96				0
09	MD21-08-12245	98		98		96				0
10	MD21-08-12246	96		97		96				0
11	MD21-08-12253	92		98		97				0
12	MD21-08-12256	97		96		96				0
13	Lab Blank	94		98		96				0
14	Lab Blank	95		98		95				0
15	CCV	101		99		99				0
16	CCV	99		97		98				0
17	LCS	97		98		99				0
18	LCS	98		97		98				0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
Lab File ID: 1052103.d
Instrument ID: msd1.i
SDG No: 0805274
Date Analyzed: 05/21/2008
Time Analyzed: 08:52 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1819110		20.03		1646495		15.75		310538		14.28	
	UPPER LIMIT	2546754		20.36		2305093		16.08		434753		14.61	
	LOWER LIMIT	1091466		19.70		987897		15.42		186323		13.95	
	CLIENT SAMPLE NO												
01	MD21-08-12236	1686028		20.03		1474098		15.75		292076		14.28	
02	MD21-08-12237	1684918		20.03		1455279		15.75		290655		14.28	
03	MD21-08-12238	1644549		20.03		1448095		15.75		284567		14.28	
04	MD21-08-12239	1665158		20.03		1461838		15.75		288871		14.28	
05	MD21-08-12240	1648223		20.03		1464363		15.75		284501		14.28	
06	MD21-08-12240 Lab Duplicate	1693027		20.03		1491208		15.75		289928		14.28	
07	Lab Blank	1631925		20.03		1449495		15.75		284463		14.28	
08	CCV	1819110		20.03		1646495		15.75		310538		14.28	
09	LCS	1800944		20.03		1644052		15.75		314947		14.28	
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

0301

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 0805274

Lab File ID: 1052203.d | Date Analyzed: 05/22/2008

Instrument ID: msd1.i | Time Analyzed: 09:16 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1818182		20.03		1638375		15.75		308066		14.25	
	UPPER LIMIT	2545455		20.36		2293725		16.08		431292		14.58	
	LOWER LIMIT	1090909		19.70		983025		15.42		184840		13.92	
	CLIENT SAMPLE NO												
01	MD21-08-12242	1715884		20.03		1521520		15.75		307927		14.28	
02	MD21-08-12244	1667620		20.03		1484143		15.75		290814		14.28	
03	MD21-08-12245	1683612		20.03		1505360		15.75		284757		14.25	
04	MD21-08-12246	1698041		20.03		1524445		15.75		291731		14.28	
05	MD21-08-12253	1648045		20.03		1476552		15.75		294122		14.28	
06	MD21-08-12256	1701946		20.01		1553459		15.75		291995		14.25	
07	Lab Blank	1627940		20.03		1453082		15.75		282280		14.28	
08	CCV	1818182		20.03		1638375		15.75		308066		14.25	
09	LCS	1785492		20.03		1613816		15.75		301769		14.28	
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

0302

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 1052132.d & 1052131.d

Lab Sample ID: 05A & 05AA

Dilution: 1.68 & 1.68

Client Sample ID: &

Date Analyzed: 5/22/08 & 5/22/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	2.22		2.278		2.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	20.125		20.473		1.7
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	12.922		12.904		0.14
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	3.383		3.524		4.1
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	1.271		1.352		6.2
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2.252		2.404		6.5
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	24.575		22.748		7.7
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	1.008		1.057		4.7
75-27-4	Bromodichloromethane	1.559		1.553		0.38
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	ND	U	ND	U	0
56-23-5	Carbon Tetrachloride	86.741		87.273		0.61
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	159.9		160.86		0.60
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	1.112		1.191		6.9
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	34.573		35.022		1.3
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	3.629		3.492		3.8
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	ND	U	ND	U	0
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab Sample ID: 05A & 05AA

Client Sample ID: &

Lab File ID: 1052132.d & 1052131.d

Dilution: 1.68 & 1.68

Date Analyzed: 5/22/08 & 5/22/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	253.14		254.54		0.55
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	ND	U	ND	U	0
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	14.725		14.828		0.70
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	1.635		1.574		3.8
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	217.17		216.8		0.17
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd1.i/1-19may.b/1051909.d
Level 2: /chem/msd1.i/1-19may.b/1051910.d
Level 3: /chem/msd1.i/1-20may.b/1052003.d
Level 4: /chem/msd1.i/1-20may.b/1052004.d
Level 5: /chem/msd1.i/1-20may.b/1052005.d
Level 6: /chem/msd1.i/1-19may.b/1051914.d
Level 7: /chem/msd1.i/1-20may.b/1052006.d

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 134a	+++++	+++++	0.39502	0.51678	0.54032	+++++		
	0.50460						0.48918	13.185
10 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
12 Propylene	+++++	+++++	0.47660	0.61884	0.57927	0.54317		
	0.54203						0.55198	9.532
13 Freon 152a	+++++	+++++	0.42915	0.45655	0.49989	+++++		
	0.46749						0.46327	6.316
14 Dichlorodifluoromethane/Fr12	+++++	2.76445	2.56056	3.08773	2.88870	2.66106		
	2.57318						2.75595	7.407
15 Freon 22	+++++	+++++	1.57175	1.66807	1.82209	+++++		
	1.64886						1.67769	6.251
16 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
17 Freon 114	+++++	1.67479	1.85622	2.11076	1.98776	1.85882		
	1.83153						1.88665	7.864

0306

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
19 Freon142b	+++++	+++++	1.86827	2.02749	2.34963	+++++		
	2.20151						2.11173	9.897
20 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
21 Chloromethane	+++++	+++++	1.32370	1.28062	1.19541	1.08998		
	1.04846						1.18763	9.974
22 Butane	+++++	+++++	0.28531	0.26677	0.25435	0.24865		
	0.24540						0.26009	6.261
23 Vinyl Chloride	+++++	1.40040	1.33114	1.40070	1.29633	1.19330		
	1.17018						1.29868	7.656
24 1,3-Butadiene	1.07219	0.82498	0.92650	1.08488	1.04723	0.98161		
	0.97512						0.98750	9.295
25 Methanol	+++++	+++++	+++++	0.47297	0.37349	+++++		
	0.34473						0.39706	16.947
26 Bromomethane	+++++	0.64699	0.70798	1.05658	0.97995	0.94078		
	0.92846						0.87679	18.464
27 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
28 Chloroethane	+++++	0.69436	0.62757	0.76111	0.73861	0.69198	0.69490	0.70142	6.559
29 Isopentane	+++++	+++++	1.92863	2.08393	1.94263	1.81472	1.77712	1.90941	6.328
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Dichlorofluoromethane/Fr21	+++++	+++++	1.56207	2.00145	2.25122	+++++	2.14319	1.98948	15.217
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Trichlorofluoromethane/Fr11	+++++	3.13047	3.40834	3.96475	3.78912	3.51201	3.47684	3.54692	8.287
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
38 Ethanol	+++++	+++++	0.38421	0.63314	0.60136	0.59487		
	0.59545						0.56181	17.892
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
40 Freon123a	+++++	+++++	0.68867	0.87467	1.03875	+++++		
	0.97964						0.89543	17.158
41 Freon123	+++++	+++++	0.11866	0.15944	0.17069	+++++		
	0.15936						0.15204	15.047
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 Freon 113	+++++	1.61886	1.84175	2.07949	1.99742	1.82451		
	1.77363						1.85594	8.826
44 1,1-Dichloroethene	+++++	2.52247	2.72244	2.76486	2.59686	2.42907		
	2.40242						2.57302	5.819
45 Acetone	+++++	+++++	0.95878	0.91952	0.84744	0.79608		
	0.79911						0.86419	8.417
46 2-Propanol	+++++	+++++	2.95124	3.32862	3.16023	2.96512		
	2.87019						3.05508	6.100
47 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

0309

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
48 Carbon Disulfide	+++++	3.88997	4.48868	4.41919	4.30785	4.11812		
	4.20486						4.23812	5.139
49 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 3-Chloropropene	+++++	+++++	0.26074	0.46224	0.48804	0.51548		
	0.56295						0.45789	25.410
51 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
52 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	2.84309	2.06493	2.24438	2.13865	2.02826		
	2.05386						2.22886	13.950
55 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
57 tert-Butyl-Alcohol	+++++	2.10710	2.23142	1.54313	1.37872	1.29071		
	1.11309						1.61070	28.316

0310

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
58 MTBE	+++++	1.58958	1.79640	1.61914	1.58732	1.51484		
	1.43384						1.59019	7.624
59 trans-1,2-Dichloroethene	+++++	1.29068	1.63241	1.85903	1.73674	1.62346		
	1.61519						1.62625	11.640
60 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
61 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
62 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
63 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
64 Hexane	+++++	3.37081	3.67373	4.24604	3.89581	3.66800		
	3.64719						3.75026	7.858
65 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
66 Isopropyl ether	+++++	+++++	4.87970	6.40561	7.72550	+++++		
	7.32426						6.58377	19.187
67 Vinyl Acetate	+++++	+++++	0.29695	0.46584	0.44422	0.44900		
	0.44138						0.41948	16.485

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
68 1,1-Dichloroethane	+++++	1.75260	2.53662	3.52968	3.44103	3.27162		
	3.29010						2.97028	23.317
69 1-Propanol	+++++	+++++	0.22633	0.27762	0.38253	+++++		
	0.38819						0.31867	25.055
70 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
71 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
72 t-Butylethyl Ether	+++++	+++++	2.22274	2.31716	3.28286	+++++		
	3.22375						2.76163	20.624
73 Ethyl Acetate	+++++	+++++	0.50093	0.67245	0.78161	+++++		
	0.73805						0.67326	18.319
74 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
75 2-Butanone	+++++	0.58480	0.84693	1.06157	1.00648	0.95843		
	0.94556						0.90063	18.915
76 cis-1,2-Dichloroethene	+++++	2.29431	2.61123	3.03838	2.84276	2.65971		
	2.62725						2.67894	9.319
77 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
78 Tetrahydrofuran	+++++	5.32871	3.38325	3.26689	3.03132	2.88497	2.86177	3.45948	27.140
80 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 Chloroform	2.82358	2.94294	3.53490	4.14634	3.92525	3.68711	3.69444	3.53636	13.811
82 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.48036	3.34569	4.27254	4.17807	4.00699	3.98011	3.71062	18.442
84 Cyclohexane	+++++	2.85065	3.03398	3.43515	3.26161	3.03393	2.93852	3.09231	7.012
85 Carbon Tetrachloride	+++++	2.71658	3.23630	3.82273	3.70316	3.53518	3.57832	3.43205	11.716
86 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 2,2,4-Trimethylpentane	+++++	10.92851	12.93967	14.71781	14.05371	13.35507	13.21090	13.20094	9.751

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 Benzene	1.25002	1.12107	1.25694	1.44995	1.33426	1.25893	1.23347	1.27209	7.906
92 tert-amyl-Methyl Ether	+++++	+++++	2.60942	2.87079	3.64481	+++++	3.40377	3.13220	15.179
93 1,2-Dichloroethane	+++++	0.40543	0.51308	0.59794	0.56970	0.53307	0.53709	0.52605	12.599
94 Heptane	+++++	0.42177	0.49542	0.55513	0.51782	0.48829	0.48344	0.49365	8.907
96 1-Butanol	+++++	+++++	0.23773	0.28110	0.35735	+++++	0.40288	0.31976	23.225
97 Trichloroethene	+++++	0.45421	0.51077	0.58874	0.55312	0.51595	0.50714	0.52165	8.743
98 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Methyl Cyclohexane	+++++	3.55011	4.32249	4.90187	4.72646	4.45199	4.49252	4.40757	10.630
100 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
101 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 1,2-Dichloropropane	+++++	0.45112	0.49902	0.56198	0.53570	0.50061	0.49442	0.50714	7.499
103 1,4-Dioxane	+++++	+++++	0.31799	0.35126	0.33375	0.31787	0.31593	0.32736	4.633
104 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Bromodichloromethane	+++++	0.61951	0.77315	0.93355	0.88905	0.84498	0.84512	0.81756	13.540
107 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 cis-1,3-Dichloropropene	+++++	0.60933	0.65684	0.81227	0.75956	0.72582	0.72776	0.71526	10.135
110 4-Methyl-2-pentanone	+++++	0.39745	0.48036	0.57623	0.55319	0.52727	0.52783	0.51039	12.519

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Toluene	+++++	1.50227	1.69705	1.94518	1.84039	1.76420	1.74905	1.74969	8.502
115 trans-1,3-Dichloropropene	+++++	0.50679	0.62987	0.76860	0.72015	0.69673	0.70700	0.67152	13.738
116 1,1,2-Trichloroethane	+++++	0.46020	0.51818	0.59324	0.55551	0.52891	0.51839	0.52907	8.365
117 Tetrachloroethene	+++++	0.52486	0.60092	0.70022	0.65380	0.61198	0.58559	0.61290	9.773
118 2-Hexanone	+++++	+++++	0.61995	0.76220	0.74022	0.71772	0.73731	0.71548	7.782
119 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 Butyl Acetate	+++++	+++++	0.45293	0.62604	0.73986	+++++	0.74821	0.64176	21.452
121 Dibromochloromethane	+++++	0.56459	0.66364	0.86143	0.81295	0.78587	0.78654	0.74584	14.777

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Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
122 1,2-Dibromoethane	0.58968	0.62112	0.78288	0.92554	0.87052	0.83417		
	0.82999						0.77913	16.258
124 Chlorobenzene	+++++	1.15566	1.40879	1.56541	1.48184	1.41137		
	1.43123						1.40905	9.754
125 Ethyl Benzene	+++++	0.59553	0.76582	0.89271	0.82520	0.78406		
	0.77255						0.77264	12.777
126 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
127 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 m,p-Xylene	+++++	0.71446	0.96248	1.10917	1.05199	1.00895		
	1.01236						0.97657	14.077
129 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
130 o-Xylene	+++++	0.78477	0.92259	1.04099	0.99310	0.94121		
	0.91430						0.93283	9.317
131 Styrene	1.70444	1.41504	1.34627	1.69419	1.62119	1.58626		
	1.58488						1.56461	8.672
132 2-Heptanone	+++++	+++++	3.98060	5.27499	5.84891	+++++		
	6.33019						5.35867	18.940

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
133 Bromoform	+++++	0.56104	0.62556	0.78733	0.75836	0.74649	0.73511	0.70231	12.615
134 Cumene	2.06386	2.32437	2.72684	3.07090	2.98904	2.87199	2.00096	2.57828	17.216
135 Cyclohexanone	+++++	+++++	0.54565	0.72187	0.73917	+++++	0.84775	0.71361	17.526
137 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1,1,2,2-Tetrachloroethane	+++++	1.55756	1.26692	1.39263	1.34655	1.34371	1.36012	1.37791	7.057
139 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 Propylbenzene	+++++	2.85361	3.22399	3.71288	3.66000	3.14296	2.15886	3.12538	18.375
141 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
144 4-Ethyltoluene	+++++	2.35997	2.79036	3.25444	3.17066	2.96751		
	2.08121						2.77069	16.752
145 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
146 1,3,5-Trimethylbenzene	2.23613	2.30798	2.69550	2.88655	2.89747	2.95994		
	2.54405						2.64680	11.066
147 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
148 Diisobutyl Ketone	+++++	+++++	1.35451	1.77171	1.66745	+++++		
	1.61775						1.60285	11.078
149 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
150 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
151 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
152 1,2,4-Trimethylbenzene	1.81442	1.93820	2.05281	2.26768	2.28440	2.31093		
	1.99608						2.09493	9.289
153 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
154 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 1,3-Dichlorobenzene	+++++	1.28691	1.23898	1.29574	1.30169	1.32496	1.34048	1.29813	2.703
159 1,4-Dichlorobenzene	+++++	1.07031	1.23957	1.32627	1.33085	1.37109	1.38582	1.28732	9.159
160 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 alpha-Chlorotoluene	+++++	1.94310	1.67554	1.89206	1.95161	2.05487	1.86172	1.89648	6.684
163 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
164 1,2-Dichlorobenzene	+++++	1.24572	1.07556	1.05860	1.10101	1.14649			
	1.18133						1.13478	6.239	
165 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
166 Aniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
167 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
168 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
169 1,2,4-Trichlorobenzene	+++++	+++++	0.44166	0.30629	0.37792	0.53955			
	0.73748						0.48058	34.804	<-
170 Hexachlorobutadiene	+++++	+++++	0.32642	0.23481	0.27318	0.36414			
	0.45054						0.32982	25.366	
171 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
172 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
173 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
174 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
175 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.58394	1.61384	1.63102	1.62794	1.65054	1.74923		
	1.82195						1.66835	5.108
$ 111 Toluene-d8	1.13996	1.13438	1.13329	1.12752	1.12411	1.14096		
	1.12910						1.13276	0.556
$ 136 Bromofluorobenzene	0.52476	0.52571	0.52552	0.53095	0.53961	0.54616		
	0.55190						0.53494	2.060

Calibration History

Method : /chem/msd1.i/1-20may.b/t14q519b.m
Start Cal Date: 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.25000		
19-MAY-2008 13:23	AFCEElow	/chem/msd1.i/1-19may.b/1051909.d
Cal Level: 2 , Cal Amount: 0.50000		
19-MAY-2008 13:56	AT08low	/chem/msd1.i/1-19may.b/1051910.d
Cal Level: 3 , Cal Amount: 2.00000		
20-MAY-2008 09:45	sp22a	/chem/msd1.i/1-20may.b/1052003.d
19-MAY-2008 14:29	AT08mdl	/chem/msd1.i/1-19may.b/1051911.d
Cal Level: 4 , Cal Amount: 25.00000		
20-MAY-2008 10:26	sp22a	/chem/msd1.i/1-20may.b/1052004.d
19-MAY-2008 19:59	AT08mdl	/chem/msd1.i/1-19may.b/1051917.d
Cal Level: 5 , Cal Amount: 50.00000		
20-MAY-2008 10:59	sp22a	/chem/msd1.i/1-20may.b/1052005.d
19-MAY-2008 15:47	AT08mdl	/chem/msd1.i/1-19may.b/1051913.d
Cal Level: 6 , Cal Amount: 100.00000		
19-MAY-2008 16:26	AT08mdl	/chem/msd1.i/1-19may.b/1051914.d
Cal Level: 7 , Cal Amount: 200.00000		
20-MAY-2008 11:33	sp22a	/chem/msd1.i/1-20may.b/1052006.d

19-MAY-2008 16:59	AT08md1	/chem/msd1.i/1-19may.b/1051915.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
20-MAY-2008 12:26	AT08	/chem/msd1.i/1-20may.b/1052007.d
Ccal Level: 5 , Ccal Amount: 50.000		
20-MAY-2008 10:59	sp22aCCV	/chem/msd1.i/1-20may.b/1052005a.d

Initial Calibration Narrative

A seven point initial calibration was analyzed on MSD-1 on 05/19/2008. As noted on the accompanying analytical run logs, the following point calibration level 4 was re-analyzed due to:

a. anomalous unacceptable linearity for several compounds

The following compounds used 0.25 ppbv as the lowest calibration concentration:

Chloroform, Benzene, Cumene, 1,3-Butadiene, 1,2-Dibromoethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, and Styrene.

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MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.52
75	30.0 – 60.0% of mass 95	42.28
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.48
173	Less than 2.0% of mass 174	(0.79)[1]
174	Greater than 50.0% of mass 95	64.73
175	5.0 – 9.0% of mass 174	(7.17)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(95.67)[1]
177	5.0 – 9.0% of mass 176	(6.44)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 5/19/08
BFB Injection Time: 1304
BFB File ID: 1051908
Tekmar Purge Flow: NA
Vacuum: 1.1-5

IS/S Std.#:	1541-144	Exp. Date: 8/2/08
BCM	312163	
1,4-DFB	1618588	
CB-d5	1862744	

Verified CCV IS vs ICAL mid-point (- 40%D) KR (initials)

Verify 176/174 m/z Ratio: 873397/912971*100= 95.665

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 1819475\ )}{(\ 1618588\ )} \times \frac{(\ 25.0\ )}{(\ 1.13276\ )} = 24.809$

File ID:	1051913
Compound:	Tol-d8
Initials:	KR

Reported Result 24.809

	Lab	VOC #	Sample / Client Name	Can #	Pressure	Amt. Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	1051908	BFB Tune Check	1476225	50ng	2uL	1.00	5/19/08	1304	KR	
2	✓	09	ICAL Level 1 (5ppbv)	1541-147	0.25ppbv	5mL			1323	KR	KR 5/19/08 1445519a
3	✓	10	2 (5ppbv)		0.5ppbv	10mL			1356	KR	
4	✓	11	3 (5ppbv)		20ppbv	40mL			1429	KR	
5	X	12	4 (20ppbv)	1102-3	25ppbv	12.5mL			1514	KR	
6	✓	13	5 (20ppbv)		50ppbv	25mL			1547	KR	
7	✓	14	6 (20ppbv)		100ppbv	50mL			1626	KR	
8	✓	15	7 (20ppbv)		200ppbv	100mL			1659	KR	
9	✓	16	System Blank	12009	Humid	100mL	↓	↓	1735	KR	

Signature

5/19/08
Date

0326

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MSD-1

Logbook #: 1628

0327

10	✓	1051917	ICAL Level 4	1612-3	25ppbv	12.5mL	1.00	5/19/08	1959	KR	
11	✓	18	LCS (200ppbv)	1541-138	50ppbv	25mL	1.00		2033	KR	ICal LCS 2-out
12	✓	19	System Blank	12009	Humid	200mL	1.00		2201	KR	
13	✓	20	LCSD (200ppbv)	1541-138	50ppbv	25mL	1.00		CB 5/19/08 2343	CB	
14	✓	21	Lab Blank	12009	Humid	100mL	1.00	↓	2327	CB	
15	✓	22	080515I - 01A	3641	15"Hg-15psi	100mL	2.13	5/20/08	0016	CB	
16	✓	23	↓ -02A	3649	20"Hg-15psi	↓	2.16		0057	CB	
17	✓	24	080515S -01AA	1424	12.0"Hg-15psi	50mL	6.74		0141	CB	RL@ 20mL
18	✓	25	-02A	1425	11.5"Hg-15psi	100mL	3.28		0227	CB	
19	✓	26	-01A	1424	12.0"Hg-15psi	20mL	16.8		0318	CB	
20	✓	27	-03A	SC82	12.0"Hg-15psi	7mL	48.1		0410	CB	
21	X	28	-04A	1440	11.5"Hg-15psi	2mL	164		0448	CB	
22	✓	29	-04A	↓	↓	65mL CB 5/20/08	CB 5/20/08 65.6		0526	CB	DF: 54.7
23											
24											
25											
26											
27											
28			F 5/20/08								
29											
30											
31											
32											

Comments:

Flow Controller : AADI1430449

NIST Flow Meter : 200-7744 exp 8/27/08

Actual	Nominal
12.5mL/min	11.5mL/min

Signature

5/20/08
Date

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

0328

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.91
75	30.0 – 60.0% of mass 95	42.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.53
173	Less than 2.0% of mass 174	(0.77)[1]
174	Greater than 50.0% of mass 95	62.16
175	5.0 – 9.0% of mass 174	(6.88)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	(95.54)[1]
177	5.0 – 9.0% of mass 176	(6.18)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 5/20/08
BFB Injection Time: 0753
BFB File ID: 1052001
Tekmar Purge Flow: NA
Vacuum: NA

IS/S Std.#:	1541 - 144	Exp. Date: 8/2/08
BCM	325915	
1,4-DFB	1718149	
CB-d5	1889040	

Verified CCV IS vs ICAL mid-point (- 40%D) JB initials

Verify 176/174 m/z Ratio: 935173/978830 x 100 = 95.540

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 535014\ )}{(\ 325915\ )} \times \frac{(\ 25.00\ )}{(\ 1.66835\ )} =$ 24.59878

Reported Result 24.599

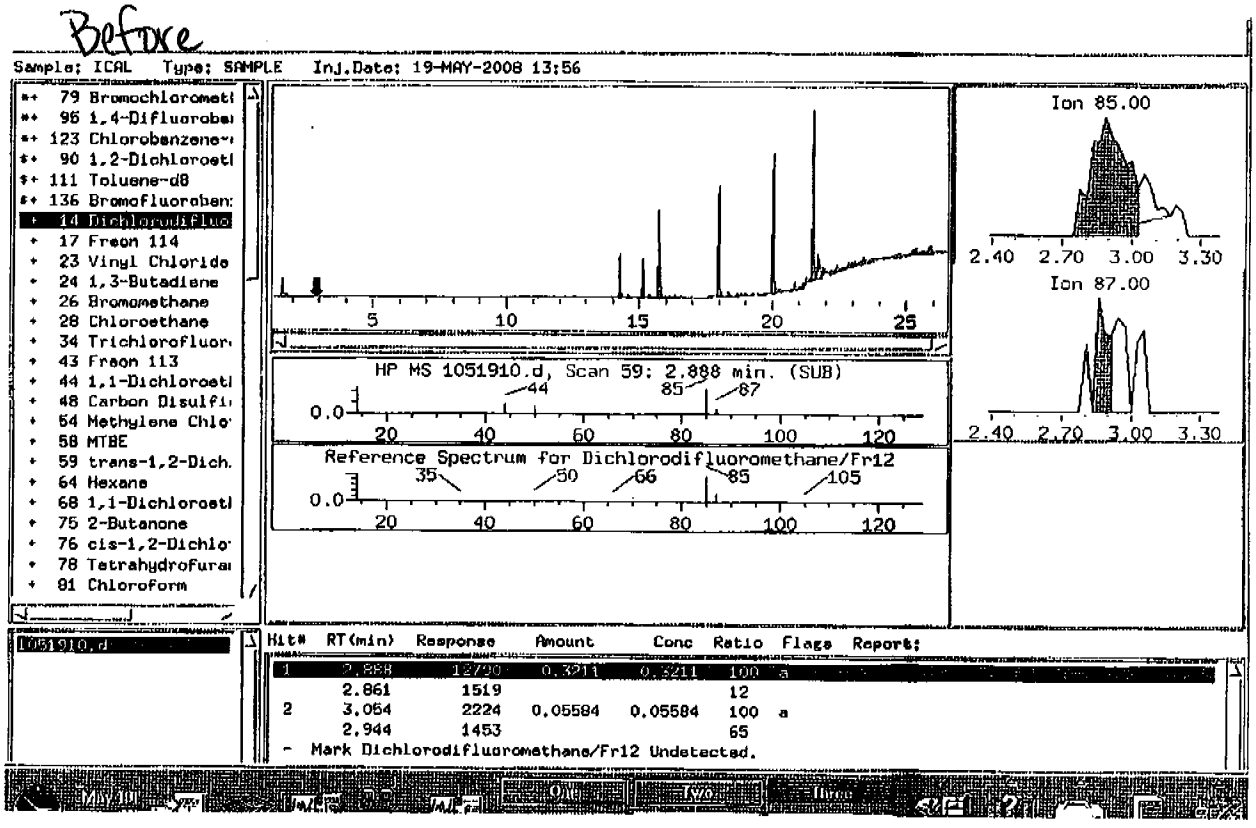
File ID:	1052007
Compound:	1,2-DCA-d4
Initials:	JB

	S	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	1052001	BFB Tune Check	1476 215	50mg	2ul	1.00	5/20/08	0753	JB/KR	
2	✓	02	System Blank	12009	Humid	100mL			0826	JB	
3	✓	03	CAL Level 3 (200ppbv)	1541-142	20ppbv	1.0mL			0945	JB/KR	Sp22a H2596
4	✓	04	Level 4 (200ppbv)		8.0ppbv/Humid	4.0mL			1026	JB/KR	
5	✓	05	Level 5 (200ppbv)		50ppbv/Humid	25mL			1059	JB/KR	Sp22a CCV
6	✓	06	Level 7 (200ppbv)		200ppbv/Humid	100mL 200mL			1133	JB/KR	
7	✓	07	CCV-1 #1622-3	200ppbv	50ppbv	25mL			1226	JB/KR	
8	✓	08	LCS-1 #1541-135	↓	↓	↓			1302	JB/KR	1 out
9	✓	09	Lab Blank	12009	Humid	100mL	↓	↓	1347	JB/KR	

Laura Chamness
Signature

5/20/08
Date

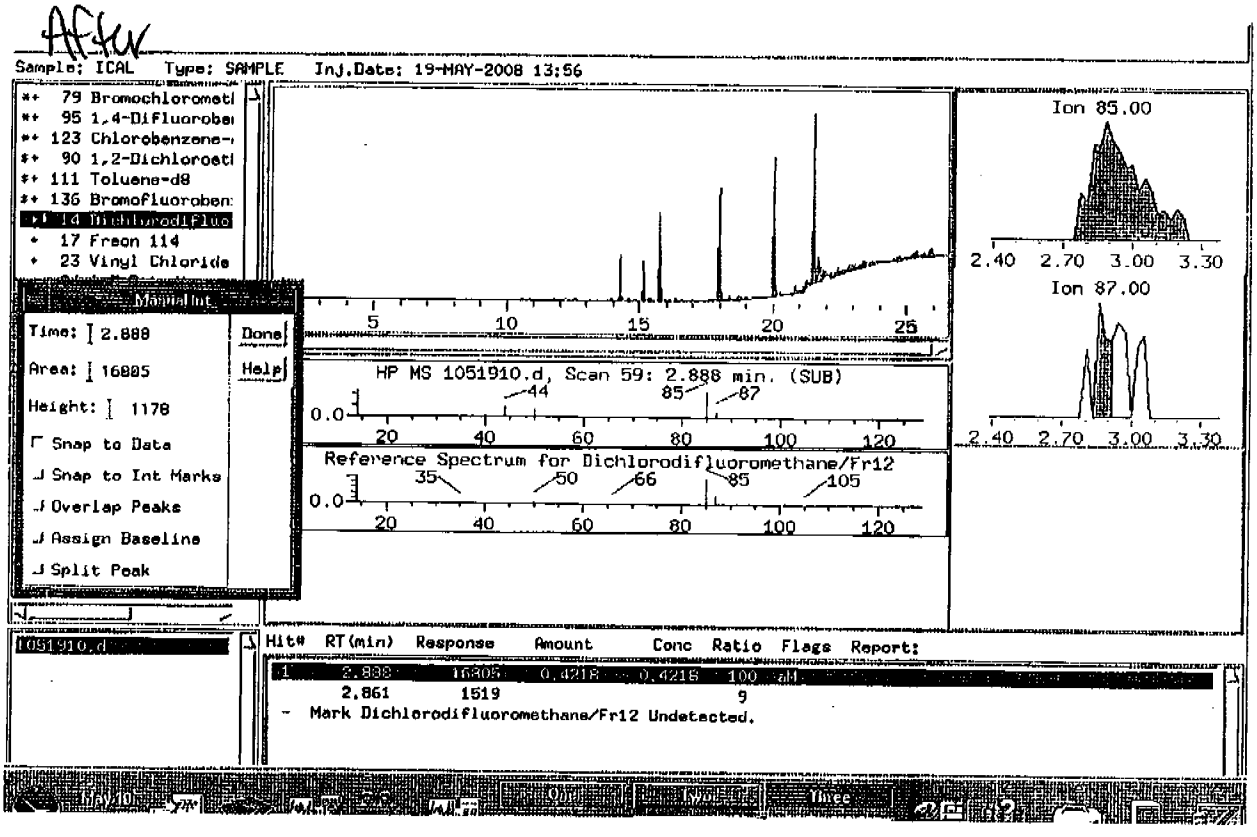
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 13:56
79 Bromochlorometl
96 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroetl
111 Toluene-d8
136 Bromofluoroben
14 Dichlorodifluo
17 Freon 114
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluor
43 Freon 113
44 1,1-Dichloroetl
48 Carbon Disulfi
54 Methylene Chlo
58 MTBE
59 trans-1,2-Dich.
64 Hexane
68 1,1-Dichloroetl
75 2-Butanone
76 cis-1,2-Dichlo
78 Tetrahydrofura
91 Chloroform
Ion 85.00
Ion 87.00
HP MS 1051910.d, Scan 59: 2.888 min. (SUB)
Reference Spectrum for Dichlorodifluoromethane/Fr12
1051910.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.888 12790 0.3911 0.3911 100 a
2.861 1519 12
2 3.054 2224 0.05584 0.05584 100 a
2.944 1453 65
- Mark Dichlorodifluoromethane/Fr12 Undetected.

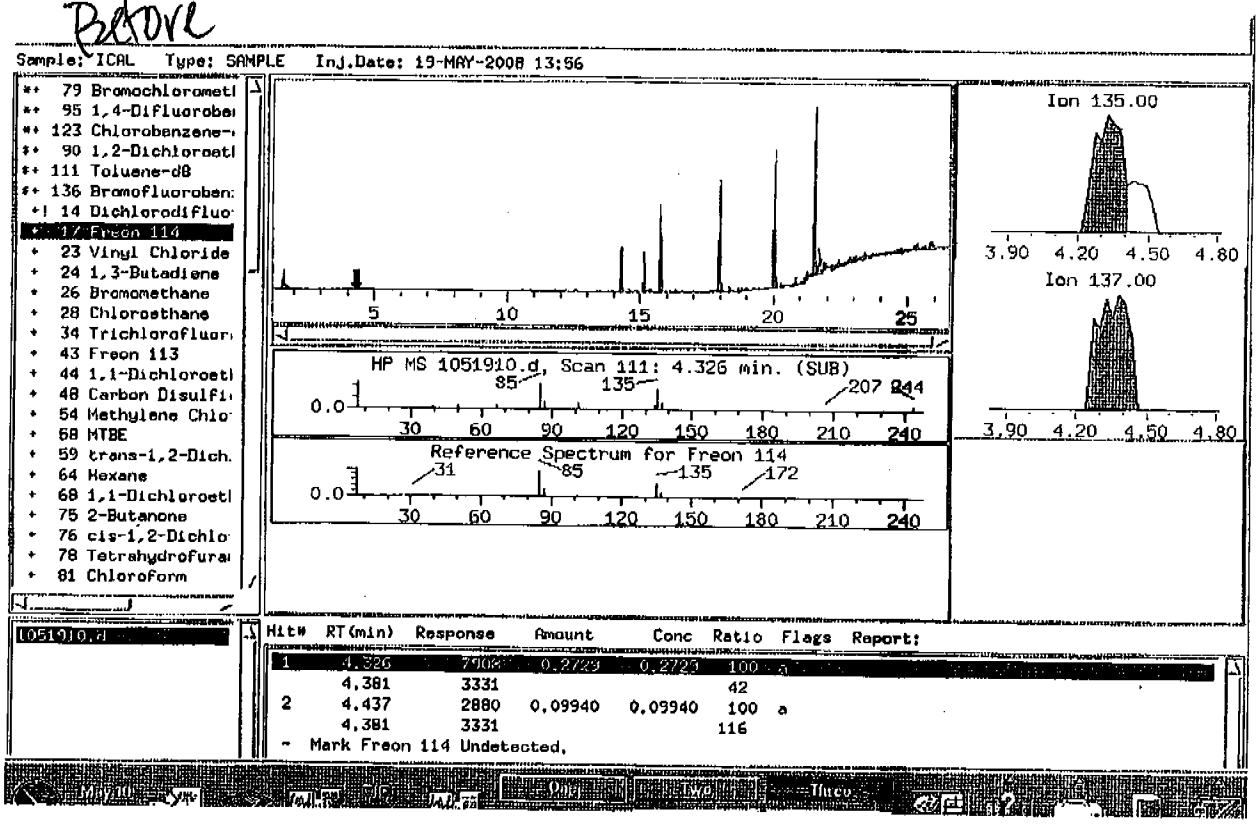
Team A

Date / Initial	5/19/08 SO / WC
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

AFSW

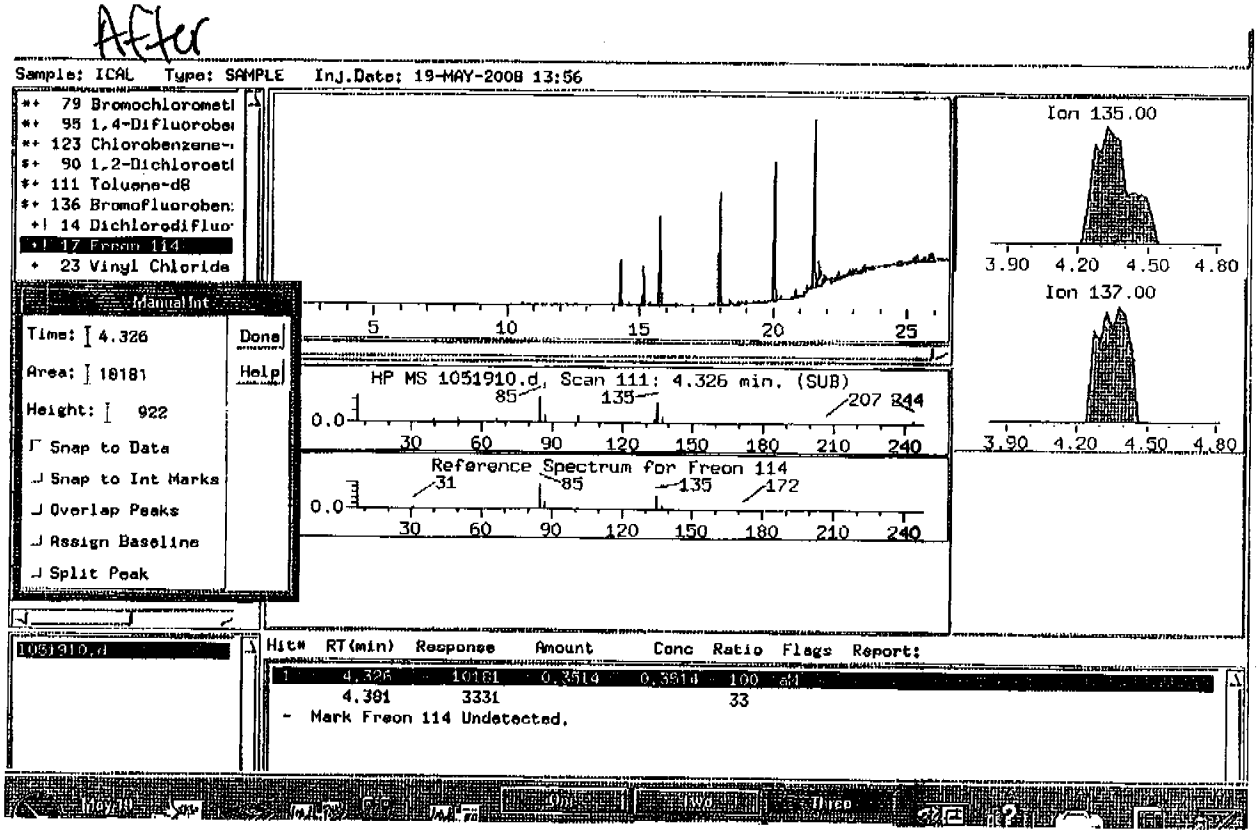


Before

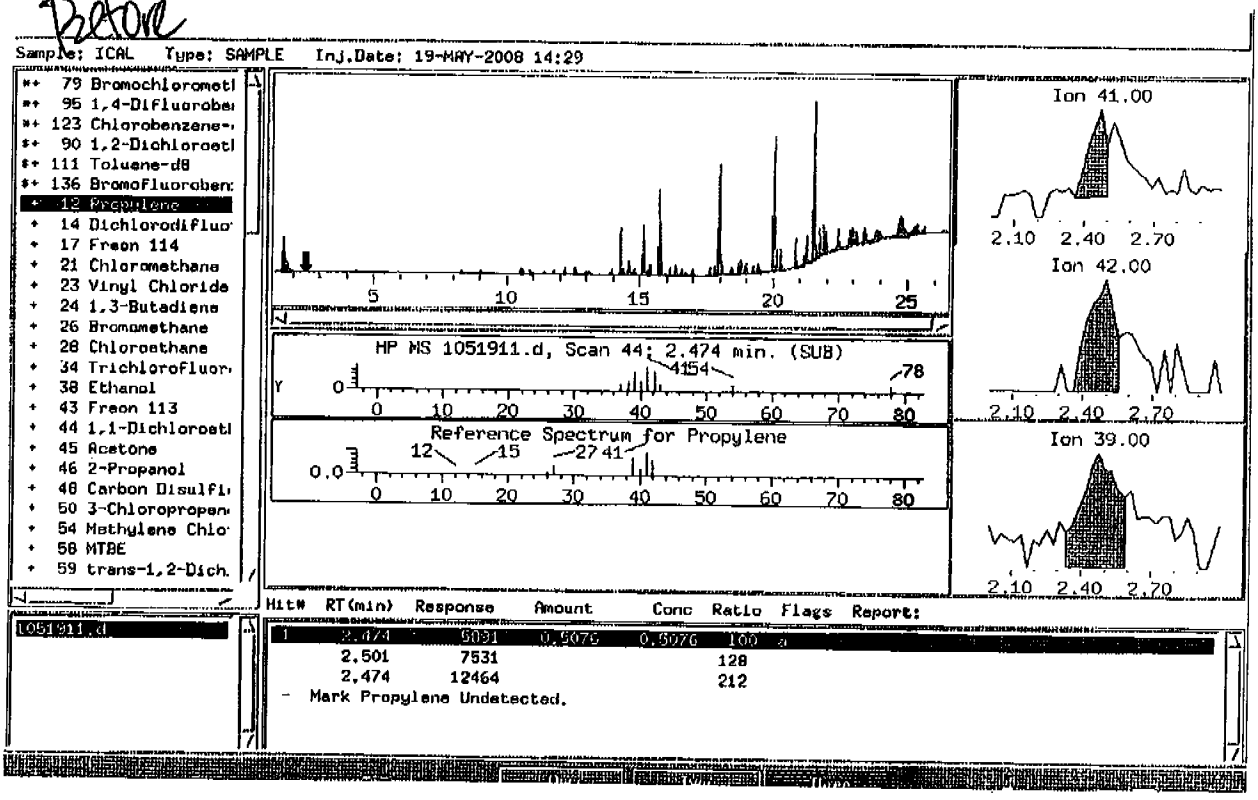

Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 13:56
79 Bromochlorometl
95 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroetl
111 Toluene-d8
136 Bromofluoroben
14 Dichlorodifluo
17 Freon 114
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluor
43 Freon 113
44 1,1-Dichloroetl
48 Carbon Disulfi
54 Methylene Chlo
68 MTBE
59 trans-1,2-Dich
64 Hexane
68 1,1-Dichloroetl
75 2-Butanone
76 cis-1,2-Dichlo
78 Tetrahydrofura
81 Chloroform
5 10 15 20 25
HP MS 1051910.d, Scan 111: 4.326 min. (SUB)
85 135 207 244
0.0
30 60 90 120 150 180 210 240
Reference Spectrum for Freon 114
31 85 135 172
0.0
30 60 90 120 150 180 210 240
Ion 135.00
3.90 4.20 4.50 4.80
Ion 137.00
3.90 4.20 4.50 4.80
1051910.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 4.326 7902 0.2729 0.2729 100 S
4.381 3331 42
2 4.437 2880 0.09940 0.09940 100 a
4.381 3331 116
- Mark Freon 114 Undetected.

Issue A	
Date / Initial	5/19/08 SO
Poor Integration	
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



Before

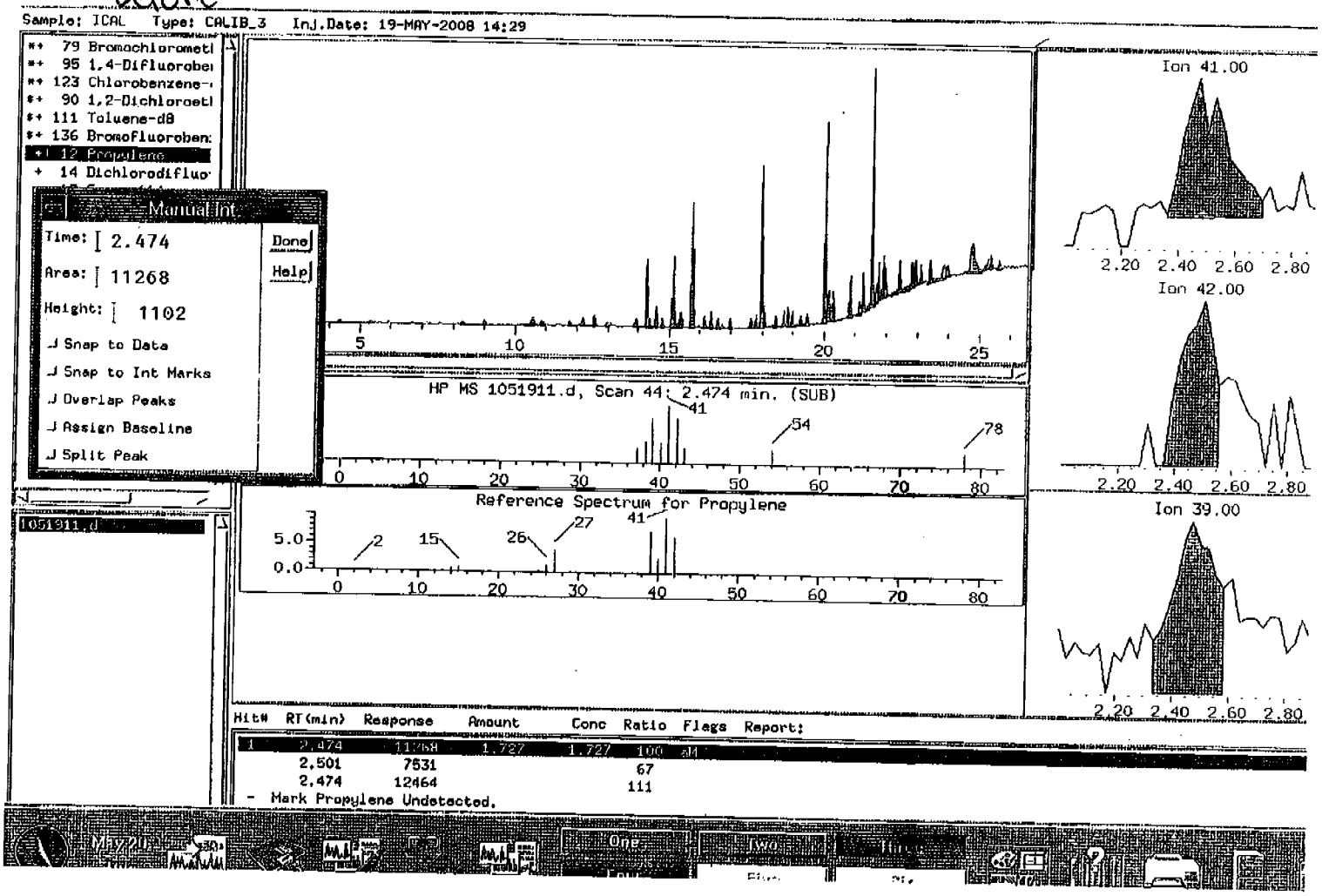

Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 14:29
79 Bromochloromethane
95 1,4-Difluorobenzene
123 Chlorobenzene-d5
90 1,2-Dichloroethane-d4
111 Toluene-d8
136 Bromofluorobenzene
12 Propylene
14 Dichlorodifluoromethane
17 Freon 114
21 Chloromethane
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluoromethane
38 Ethanol
43 Freon 113
44 1,1-Dichloroethene
45 Acetone
46 2-Propanol
48 Carbon Disulfide
50 3-Chloropropene
54 Methylene Chloride
58 MTBE
59 trans-1,2-Dichloroethene
5 10 15 20 25
HP MS 1051911.d, Scan 44: 2.474 min. (SUB)
Y 0
41 54
78
0 10 20 30 40 50 60 70 80
Reference Spectrum for Propylene
0.0
12 15 27 41
0 10 20 30 40 50 60 70 80
Ion 41.00
2.10 2.40 2.70
Ion 42.00
2.10 2.40 2.70
Ion 39.00
2.10 2.40 2.70
1051911.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.474 5091 0.5076 0.5076 100 a
2.501 7531 128
2.474 12464 212
- Mark Propylene Undetected.

Team A

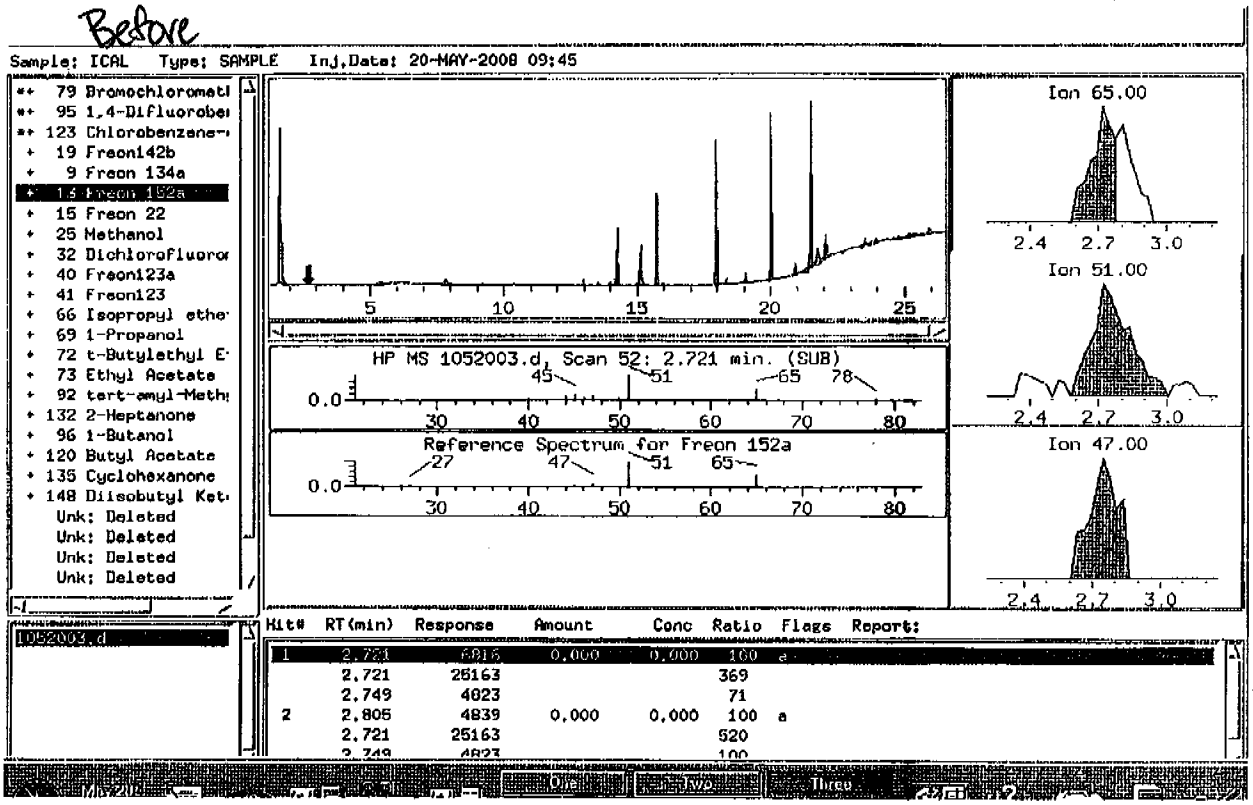
Date / Initial	5/20/08 RC
Poor Integration	✓
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

INC

Before

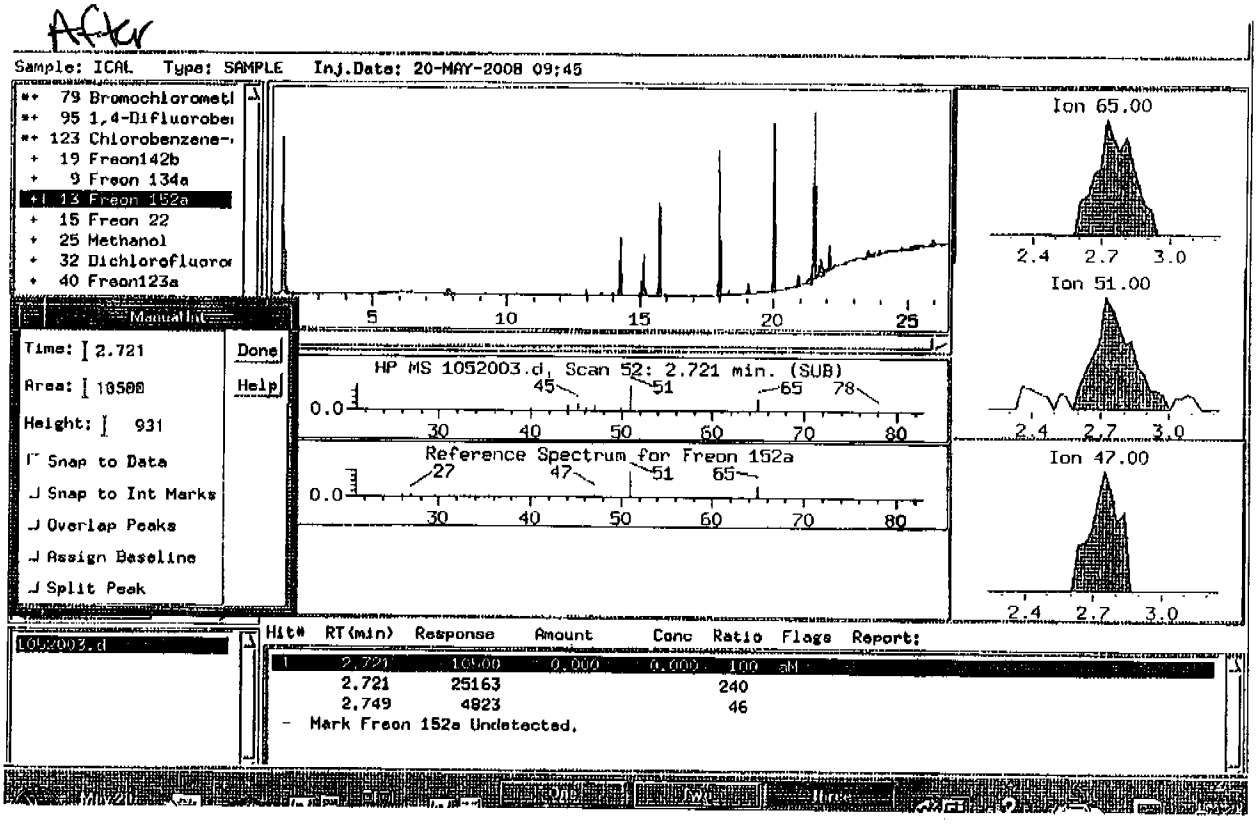


Before


Sample: ICAL Type: SAMPLE Inj.Date: 20-MAY-2008 09:45
79 Bromochloromeths
95 1,4-Difluorober
123 Chlorobenzene-d
19 Freon142b
9 Freon 134a
15 Freon 22
25 Methanol
32 Dichlorofluoro
40 Freon123a
41 Freon123
66 Isopropyl ethe
69 1-Propanol
72 t-Butylethyl E
73 Ethyl Acetate
92 tert-amyl-Meth
132 2-Heptanone
96 1-Butanol
120 Butyl Acetate
135 Cyclohexanone
148 Diisobutyl Ket
Unk: Deleted
Unk: Deleted
Unk: Deleted
Unk: Deleted
HP MS 1052003.d, Scan 52: 2.721 min. (SUB)
Reference Spectrum for Freon 152a
Ion 65.00
Ion 51.00
Ion 47.00
1052003.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.721 6816 0.000 0.000 100 a
2.721 25163 369
2.749 4823 71
2 2.806 4839 0.000 0.000 100 a
2.721 25163 520
2.749 4823 100

Date / Initial	5/20/08 LS
Poor Integration	
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051918.d
Lab Smp Id: LCS
Client Smp ID: LCS
Inj Date : 19-MAY-2008 20:33
Operator : kr
Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv-->50ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:40 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:59
Cal File: 1051915.d
Als bottle: 1
QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	313340	25.0000		80.00- 120.00	100.00
14.280	14.280 (1.000)	128	248742			28.03- 128.03	79.38
14.252	14.252 (1.000)	49	585074			135.66- 235.66	186.72
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1657292	25.0000		80.00- 120.00	100.00
15.745	15.745 (1.000)	88	259633			0.00- 65.87	15.67
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1876684	25.0000		80.00- 120.00	100.00
20.031	20.031 (1.000)	82	1105000			8.51- 108.51	58.88
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	519273	24.8332	24.833	80.00- 120.00	100.00
15.137	15.137 (1.060)	67	316980			6.04- 106.04	61.04
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1864621	24.8309	24.831	80.00- 120.00	100.00
17.957	17.985 (1.140)	70	194952			0.00- 60.35	10.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1233113			15.45- 115.45	66.13
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1000370	24.9116	24.912	80.00- 120.00	100.00
21.524	21.524 (1.075)	95	1606794			109.07- 209.07	160.62
21.524	21.524 (1.075)	176	960897			45.29- 145.29	96.05
12 Propylene					CAS #: 115-07-1		
2.474	2.501 (0.173)	41	361686	52.2798	52.280	80.00- 120.00	100.00
2.474	2.501 (0.173)	42	249788			16.91- 116.91	69.06
2.474	2.501 (0.173)	39	286870			37.15- 137.15	79.31
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	1721292	49.8320	49.832	80.00- 120.00	100.00
2.888	2.888 (0.202)	87	552532			0.00- 75.39	32.10
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1165246	49.2778	49.278	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	364298			0.00- 81.00	31.26
21 Chloromethane					CAS #: 74-87-3		
4.630	4.658 (0.324)	50	716400	48.1279	48.128	80.00- 120.00	100.00
4.658	4.658 (0.326)	52	223683			0.00- 80.15	31.22
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.625 (0.394)	62	780672	47.9614	47.961	80.00- 120.00	100.00
5.626	5.625 (0.394)	64	241296			0.00- 77.57	30.91
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	604592	48.8483	48.848	80.00- 120.00	100.00
5.902	5.902 (0.413)	39	579427			37.41- 137.41	95.84
26 Bromomethane					CAS #: 74-83-9		
7.533	7.561 (0.528)	94	602107	54.7901	54.790	80.00- 120.00	100.00
7.561	7.561 (0.529)	96	562668			45.16- 145.16	93.45
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	445250	50.6465	50.646	80.00- 120.00	100.00
8.114	8.114 (0.568)	49	132653			0.00- 79.23	29.79
8.114	8.114 (0.568)	66	139382			0.00- 81.66	31.30
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	2279610	51.2783	51.278	80.00- 120.00	100.00
8.999	8.999 (0.630)	103	1457179			14.65- 114.65	63.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	388109	55.1178	55.118	80.00- 120.00	100.00
10.132	10.132 (0.710)	43	79956			0.00- 75.81	20.60
10.132	10.132 (0.710)	46	157062			0.00- 92.85	40.47
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	1332755	57.2941	57.294	80.00- 120.00	100.00
10.575	10.575 (0.741)	153	853663			13.04- 113.04	64.05
10.575	10.575 (0.741)	101	1787104			81.57- 181.57	134.09
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.520	10.519 (0.737)	61	1749919	54.2624	54.262	80.00- 120.00	100.00
10.520	10.519 (0.737)	96	927125			3.17- 103.17	52.98
10.520	10.519 (0.737)	98	588603			0.00- 83.87	33.64
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	534712	49.3670	49.367	80.00- 120.00	100.00
10.879	10.879 (0.762)	43	1756874			275.34- 375.34	328.56
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	2015633	52.6396	52.640	80.00- 120.00	100.00
11.321	11.321 (0.793)	43	368593			0.00- 68.18	18.29
11.321	11.321 (0.793)	59	75754			0.00- 53.79	3.76
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	2642105	49.7395	49.740	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.460	11.459 (0.802)	76	301286	52.4979	52.498	80.00- 120.00	100.00
11.432	11.432 (0.801)	41	1128655			303.82- 403.82	374.61
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	1413978	50.6156	50.616	80.00- 120.00	100.00
11.764	11.764 (0.824)	84	900413			13.28- 113.28	63.68
11.764	11.764 (0.824)	51	426975			0.00- 79.96	30.20
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	1064411	53.4054	53.405	80.00- 120.00	100.00
12.151	12.151 (0.851)	57	313341			0.00- 79.16	29.44
12.151	12.151 (0.851)	41	326431			0.00- 78.25	30.67
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.179	12.178 (0.853)	96	1083622	53.1636	53.164	80.00- 120.00	100.00
12.179	12.178 (0.853)	61	1721562			110.88- 210.88	158.87
12.179	12.178 (0.853)	98	689966			13.20- 113.20	63.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.565 (0.880)	57	2477435	52.7066	52.706	80.00- 120.00	100.00
12.566	12.565 (0.880)	43	1599393			16.42- 116.42	64.56
12.566	12.565 (0.880)	86	363284			0.00- 64.88	14.66
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	300333	57.1238	57.124	80.00- 120.00	100.00
13.063	13.063 (0.915)	43	3625557			1256.82-1356.82	1207.18
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	2197941	59.0396	59.040	80.00- 120.00	100.00
12.980	12.980 (0.909)	65	663372			0.00- 80.16	30.18
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	632518	56.0338	56.034	80.00- 120.00	100.00
13.920	13.920 (0.975)	43	3092928			435.93- 535.93	488.99
13.948	13.948 (0.977)	57	232921			0.00- 90.57	36.82
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	1760877	52.4433	52.443	80.00- 120.00	100.00
13.920	13.893 (0.975)	96	1261861			19.25- 119.25	71.66
13.920	13.920 (0.975)	98	789712			0.00- 93.96	44.85
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1888094	43.5448	43.545	80.00- 120.00	100.00
14.252	14.252 (0.998)	71	597716			0.00- 81.61	31.66
14.252	14.252 (0.998)	72	646572			0.00- 82.78	34.24
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	2469792	55.7221	55.722	80.00- 120.00	100.00
14.363	14.363 (1.006)	85	1540225			12.37- 112.37	62.36
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	2647521	56.9268	56.927	80.00- 120.00	100.00
14.584	14.584 (1.021)	99	1686565			14.06- 114.06	63.70
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	2032971	52.4533	52.453	80.00- 120.00	100.00
14.584	14.556 (1.021)	56	2711905			84.82- 184.82	133.40
14.556	14.556 (1.019)	41	1418803			20.21- 120.21	69.79
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.778	14.777 (1.035)	119	2361367	54.8952	54.895	80.00- 120.00	100.00
14.778	14.777 (1.035)	117	2416721			53.26- 153.26	102.34
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	8689832	52.5207	52.521	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.109	15.109 (1.058)	56	2801437			0.00- 83.07	32.24
15.109	15.109 (1.058)	41	2057418			0.00- 74.24	23.68
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	4423828	52.4591	52.459	80.00- 120.00	100.00
15.137	15.137 (0.961)	77	1011117			0.00- 73.68	22.86
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.247 (0.968)	62	1879235	53.8883	53.888	80.00- 120.00	100.00
15.248	15.247 (0.968)	64	590235			0.00- 83.51	31.41
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	1708186	52.1988	52.199	80.00- 120.00	100.00
15.358	15.358 (0.975)	43	3554954			162.65- 262.65	208.11
15.358	15.358 (0.975)	57	1836841			57.85- 157.85	107.53
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	1820181	52.6349	52.635	80.00- 120.00	100.00
16.132	16.132 (1.025)	130	1729947			46.07- 146.07	95.04
16.132	16.132 (1.025)	97	1165406			14.51- 114.51	64.03
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	1705705	50.7359	50.736	80.00- 120.00	100.00
16.575	16.575 (1.053)	62	1231671			20.20- 120.20	72.21
16.575	16.575 (1.053)	41	1022038			9.24- 109.24	59.92
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	1107908	51.0525	51.052	80.00- 120.00	100.00
16.713	16.713 (1.061)	58	897220			29.44- 129.44	80.98
16.713	16.713 (1.061)	57	275160			0.00- 75.70	24.84
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	2903702	53.5765	53.576	80.00- 120.00	100.00
16.962	16.962 (1.077)	85	1775830			10.80- 110.80	61.16
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	2469354	52.0784	52.078	80.00- 120.00	100.00
17.625	17.625 (1.119)	77	783931			0.00- 81.44	31.75
17.625	17.625 (1.119)	39	1370071			6.33- 106.33	55.48
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	1833284	54.1840	54.184	80.00- 120.00	100.00
17.791	17.791 (1.130)	43	4707682			210.27- 310.27	256.79
17.791	17.791 (1.130)	85	709086			0.00- 89.24	38.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	6289543	54.2250	54.225	80.00- 120.00	100.00
18.068	18.068 (1.147)	92	3798827			9.85- 109.85	60.40
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	2666771	52.9023	52.902	80.00- 120.00	100.00
18.427	18.427 (0.920)	77	838040			0.00- 81.66	31.43
18.427	18.427 (0.920)	39	1417987			3.26- 103.26	53.17
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	2078823	52.3422	52.342	80.00- 120.00	100.00
18.704	18.704 (0.934)	99	1291138			11.98- 111.98	62.11
18.704	18.704 (0.934)	83	1703756			32.85- 132.85	81.96
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	2464213	53.5600	53.560	80.00- 120.00	100.00
18.814	18.814 (0.939)	129	1906224			27.08- 127.08	77.36
18.814	18.814 (0.939)	131	1810246			23.86- 123.86	73.46
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	2772388	51.6184	51.618	80.00- 120.00	100.00
18.953	18.952 (0.946)	43	5035879			130.91- 230.91	181.64
18.980	18.980 (0.948)	100	537134			0.00- 69.73	19.37
121 Dibromochloromethane					CAS #: 124-48-1		
19.229	19.257 (0.960)	129	3027670	54.0772	54.077	80.00- 120.00	100.00
19.229	19.229 (0.960)	127	2345313			26.10- 126.10	77.46
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	3123591	53.4065	53.406	80.00- 120.00	100.00
19.450	19.450 (0.971)	109	2949619			44.88- 144.88	94.43
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.058 (1.001)	112	5467368	51.6894	51.689	80.00- 120.00	100.00
20.059	20.058 (1.001)	114	1723425			0.00- 81.48	31.52
20.059	20.058 (1.001)	77	3575053			13.99- 113.99	65.39
125 Ethyl Benzene					CAS #: 100-41-4		
20.142	20.141 (1.006)	106	3030608	52.2515	52.251	80.00- 120.00	100.00
20.142	20.141 (1.006)	91	9672587			273.94- 373.94	319.16
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	3861221	52.6709	52.671	80.00- 120.00	100.00
20.280	20.280 (1.012)	91	7703725			157.95- 257.95	199.52
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	3647367	52.0867	52.087	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	7665336			160.61- 260.61	210.16
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	5916078	50.3705	50.370	80.00- 120.00	100.00
20.833	20.833 (1.040)	78	2771804			0.00- 96.92	46.85
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	2834466	53.7638	53.764	80.00- 120.00	100.00
21.137	21.137 (1.055)	171	1468996			2.38- 102.38	51.83
134 Cumene					CAS #: 98-82-8		
21.248	21.247 (1.061)	105	11218800	57.9649	57.965	80.00- 120.00	100.00
21.248	21.247 (1.061)	120	2813345			0.00- 75.80	25.08
21.248	21.247 (1.061)	51	1147030			0.00- 60.85	10.22
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	4961519	47.9669	47.967	80.00- 120.00	100.00
21.662	21.662 (1.081)	85	3071844			12.08- 112.08	61.91
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	13665464	58.2465	58.246	80.00- 120.00	100.00
21.745	21.745 (1.086)	120	2913506			0.00- 73.27	21.32
21.745	21.745 (1.086)	105	480736			0.00- 55.00	3.52
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	11705669	56.2804	56.280	80.00- 120.00	100.00
21.883	21.883 (1.092)	120	3325749			0.00- 78.07	28.41
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	10343947	52.0611	52.061	80.00- 120.00	100.00
21.939	21.966 (1.095)	120	4693859			0.00- 94.49	45.38
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	8182890	52.0338	52.034	80.00- 120.00	100.00
22.409	22.409 (1.119)	120	3600190			0.00- 95.48	44.00
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.824	22.823 (1.139)	146	4654714	47.7667	47.767	80.00- 120.00	100.00
22.824	22.823 (1.139)	148	2895602			12.15- 112.15	62.21
22.824	22.823 (1.139)	111	1976428			0.00- 91.58	42.46
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	4690356	48.5365	48.536	80.00- 120.00	100.00
22.934	22.934 (1.145)	148	2949614			16.32- 116.32	62.89
22.934	22.934 (1.145)	111	1913556			0.00- 90.95	40.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	6954687	48.8514	48.851	80.00- 120.00	100.00
23.100	23.100 (1.153)	126	1372069			0.00- 69.46	19.73
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	3847656	45.1681	45.168	80.00- 120.00	100.00
23.404	23.404 (1.168)	148	2418956			12.70- 112.70	62.87
23.404	23.404 (1.168)	111	1691598			0.00- 93.70	43.96
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	1225425	33.9680	33.968	80.00- 120.00	100.00(R)
25.257	25.257 (1.261)	182	1158340			42.88- 142.88	94.53
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.339 (1.265)	225	913020	36.8768	36.877	80.00- 120.00	100.00
25.340	25.339 (1.265)	223	574742			14.77- 114.77	62.95
29 Isopentane					CAS #: 78-78-4		
8.308	8.307 (0.582)	43	1183830	49.4669	49.467	80.00- 120.00	100.00
8.308	8.307 (0.582)	57	812622			18.54- 118.54	68.64
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	158299	48.5592	48.559	80.00- 120.00	100.00
5.460	5.487 (0.382)	43	1206407			703.05- 803.05	762.11
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.353 (1.145)	83	2964186	53.6575	53.657	80.00- 120.00	100.00
16.354	16.353 (1.145)	98	1431426			0.00- 97.88	48.29
16.354	16.353 (1.145)	55	2743689			45.40- 145.40	92.56
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	931581	46.1457	46.146	80.00- 120.00	100.00
12.068	12.068 (0.845)	41	183276			0.00- 67.50	19.67
12.068	12.068 (0.845)	57	96263			0.00- 63.77	10.33

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051918.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->50ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	313340	0.67
95 1,4-Difluorobenze	1618588	971153	2266023	1657292	2.39
123 Chlorobenzene-d5	1862744	1117646	2607842	1876684	0.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-19may.b/1051918.d
Report Date: 20-May-2008 11:41

Air Toxics Ltd.

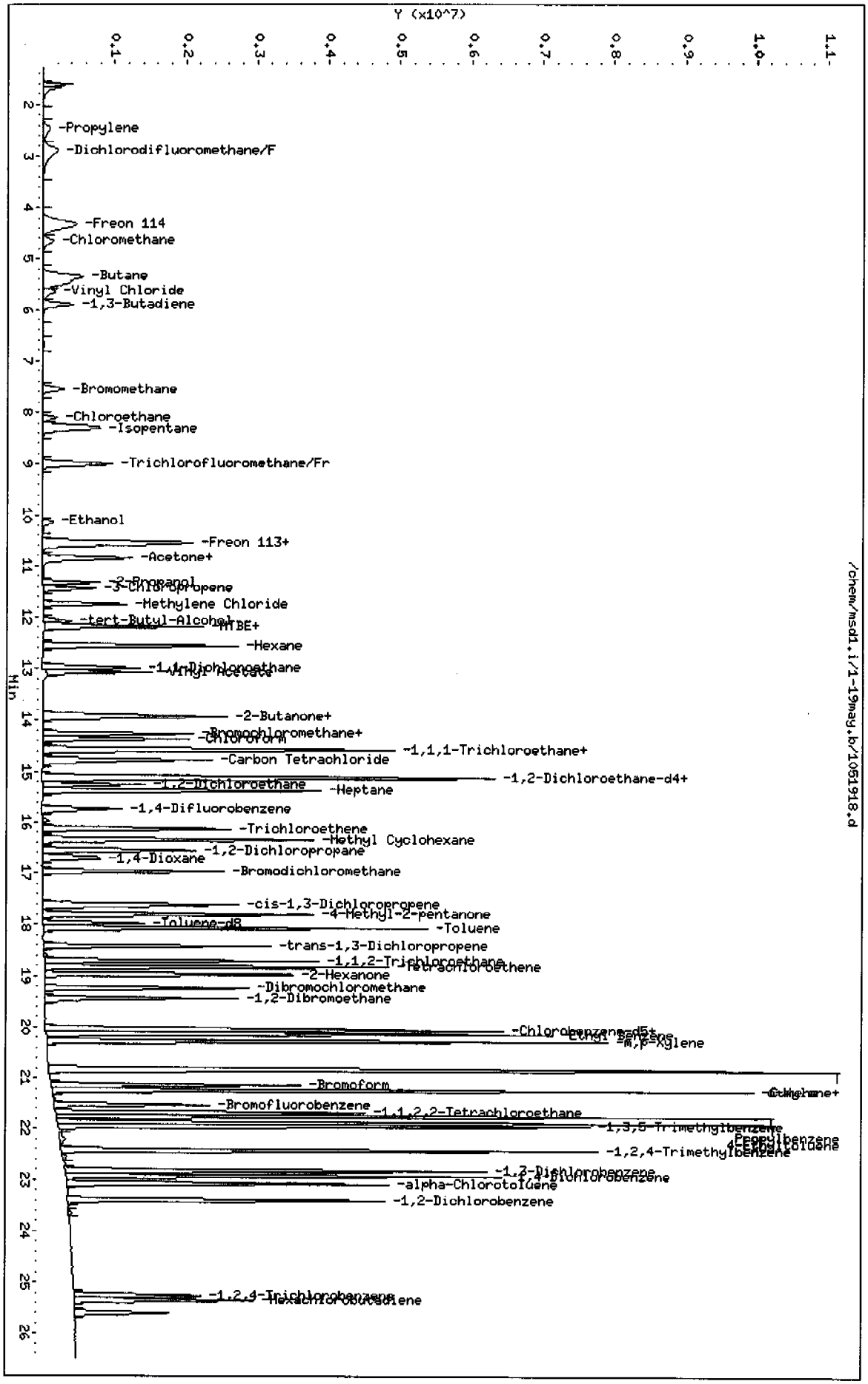
RECOVERY REPORT

Client Name:
Client SDG: 1-19may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: kr
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: AT08.sub
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	52.280	104.56	60-140
14 Dichlorodifluorome	50.000	49.832	99.66	70-130
17 Freon 114	50.000	49.278	98.56	70-130
21 Chloromethane	50.000	48.128	96.26	70-130
23 Vinyl Chloride	50.000	47.961	95.92	70-130
24 1,3-Butadiene	50.000	48.848	97.70	60-140
26 Bromomethane	50.000	54.790	109.58	70-130
28 Chloroethane	50.000	50.646	101.29	70-130
34 Trichlorofluoromet	50.000	51.278	102.56	70-130
38 Ethanol	50.000	55.118	110.24	60-140
43 Freon 113	50.000	57.294	114.59	70-130
44 1,1-Dichloroethene	50.000	54.262	108.52	70-130
45 Acetone	50.000	49.367	98.73	60-140
48 Carbon Disulfide	50.000	49.740	99.48	60-140
46 2-Propanol	50.000	52.640	105.28	60-140
54 Methylene Chloride	50.000	50.616	101.23	70-130
58 MTBE	50.000	53.405	106.81	60-140
59 trans-1,2-Dichloro	50.000	53.164	106.33	60-140
64 Hexane	50.000	52.706	105.41	60-140
67 Vinyl Acetate	50.000	57.124	114.25	60-140
68 1,1-Dichloroethane	50.000	59.040	118.08	70-130
76 cis-1,2-Dichloroet	50.000	52.443	104.89	70-130
75 2-Butanone	50.000	56.034	112.07	60-140
78 Tetrahydrofuran	50.000	43.545	87.09	60-140
81 Chloroform	50.000	55.722	111.44	70-130
84 Cyclohexane	50.000	52.453	104.91	60-140
83 1,1,1-Trichloroeth	50.000	56.927	113.85	70-130
85 Carbon Tetrachlori	50.000	54.895	109.79	70-130
91 Benzene	50.000	52.459	104.92	70-130
93 1,2-Dichloroethane	50.000	53.888	107.78	70-130
94 Heptane	50.000	52.199	104.40	60-140
97 Trichloroethene	50.000	52.635	105.27	70-130
102 1,2-Dichloropropan	50.000	50.736	101.47	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	51.052	102.10	60-140
106 Bromodichlorometha	50.000	53.576	107.15	60-140
109 cis-1,3-Dichloropr	50.000	52.078	104.16	70-130
110 4-Methyl-2-pentano	50.000	54.184	108.37	60-140
114 Toluene	50.000	54.225	108.45	70-130
115 trans-1,3-Dichloro	50.000	52.902	105.80	70-130
116 1,1,2-Trichloroeth	50.000	52.342	104.68	70-130
117 Tetrachloroethene	50.000	53.560	107.12	70-130
118 2-Hexanone	50.000	51.618	103.24	60-140
121 Dibromochlorometha	50.000	54.077	108.15	60-140
122 1,2-Dibromoethane	50.000	53.406	106.81	70-130
124 Chlorobenzene	50.000	51.689	103.38	70-130
125 Ethyl Benzene	50.000	52.251	104.50	70-130
128 m,p-Xylene	50.000	52.671	105.34	70-130
130 o-Xylene	50.000	52.087	104.17	70-130
131 Styrene	50.000	50.370	100.74	70-130
133 Bromoform	50.000	53.764	107.53	60-140
138 1,1,2,2-Tetrachlor	50.000	47.967	95.93	70-130
144 4-Ethyltoluene	50.000	56.280	112.56	60-140
146 1,3,5-Trimethylben	50.000	52.061	104.12	70-130
152 1,2,4-Trimethylben	50.000	52.034	104.07	70-130
158 1,3-Dichlorobenzen	50.000	47.767	95.53	70-130
159 1,4-Dichlorobenzen	50.000	48.536	97.07	70-130
162 alpha-Chlorotoluen	50.000	48.851	97.70	70-130
164 1,2-Dichlorobenzen	50.000	45.168	90.34	70-130
169 1,2,4-Trichloroben	50.000	33.968	67.94*	70-130
170 Hexachlorobutadien	50.000	36.877	73.75	70-130
140 Propylbenzene	50.000	58.246	116.49	60-140
134 Cumene	50.000	57.965	115.93	60-140
50 3-Chloropropene	50.000	52.498	105.00	60-140
88 2,2,4-Trimethylpen	50.000	52.521	105.04	60-140
29 Isopentane	50.000	49.467	98.93	70-130
22 Butane	50.000	48.559	97.12	70-130
99 Methyl Cyclohexane	50.000	53.657	107.31	70-130
57 tert-Butyl-Alcohol	50.000	46.146	92.29	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.833	99.33	70-130
$ 111 Toluene-d8	25.000	24.831	99.32	70-130
$ 136 Bromofluorobenzene	25.000	24.912	99.65	70-130



Data File: /chem/msd1.i/1-19may.b/1051918.d
Date : 19-MAY-2008 20:33
Client ID: LCS
Sample Info: 25mL #1541-138
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051909.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 19-MAY-2008 13:23
Operator : lo
Inst ID: msd1.i
Smp Info : 5.0mL #1541-167
Misc Info : 5ppbv ->0.25ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 13:23
Cal File: 1051909.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	316548	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	243697			26.99- 126.99	76.99
14.252	14.252 (1.000)	49	583201			134.24- 234.24	184.24
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1595090	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	258069			0.00- 66.18	16.18
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1814026	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1064226			8.67- 108.67	58.67
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	501394	25.0000	25.000	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	256177			1.09- 101.09	51.09
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1818335	25.0000	25.000	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	187819			0.00- 60.33	10.33

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.985	17.985	(1.142)	100	1180495			14.92- 114.92	64.92
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.524	21.524	(1.075)	174	951928	25.0000	25.000	50.00- 150.00	100.00
21.524	21.524	(1.075)	95	1516671			109.33- 209.33	159.33
21.524	21.524	(1.075)	176	910867			45.69- 145.69	95.69
24 1,3-Butadiene						CAS #: 106-99-0		
5.902	5.902	(0.413)	54	3394	0.25000	0.2500	50.00- 150.00	100.00
5.874	5.874	(0.411)	39	2969			37.48- 137.48	87.48
81 Chloroform						CAS #: 67-66-3		
14.363	14.363	(1.006)	83	8938	0.25000	0.2500	50.00- 150.00	100.00
14.363	14.363	(1.006)	85	6086			18.09- 118.09	68.09
91 Benzene						CAS #: 71-43-2		
15.137	15.137	(0.961)	78	19939	0.25000	0.2500	50.00- 150.00	100.00
15.137	15.137	(0.961)	77	5108			0.00- 75.62	25.62
131 Styrene						CAS #: 100-42-5		
20.860	20.860	(1.041)	104	30919	0.25000	0.2500	50.00- 150.00	100.00
20.833	20.833	(1.040)	78	14065			0.00- 95.49	45.49
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	37439	0.25000	0.2500	50.00- 150.00	100.00
21.247	21.247	(1.061)	120	11094			0.00- 79.63	29.63
21.247	21.247	(1.061)	51	4793			0.00- 62.80	12.80
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.450	(0.971)	107	10697	0.25000	0.2500	50.00- 150.00	100.00
19.450	19.450	(0.971)	109	10320			46.48- 146.48	96.48
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	32914	0.25000	0.2500	50.00- 150.00	100.00
22.409	22.409	(1.119)	120	17731			3.87- 103.87	53.87
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	40564	0.25000	0.2500	50.00- 150.00	100.00
21.939	21.939	(1.095)	120	17175			0.00- 92.34	42.34

Data File: /chem/msd1.i/1-19may.b/1051909.d
Report Date: 20-May-2008 11:30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051909.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->0.25ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 13:23
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	316548	189929	443167	316548	0.00
95 1,4-Difluorobenze	1595090	957054	2233126	1595090	0.00
123 Chlorobenzene-d5	1814026	1088416	2539636	1814026	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

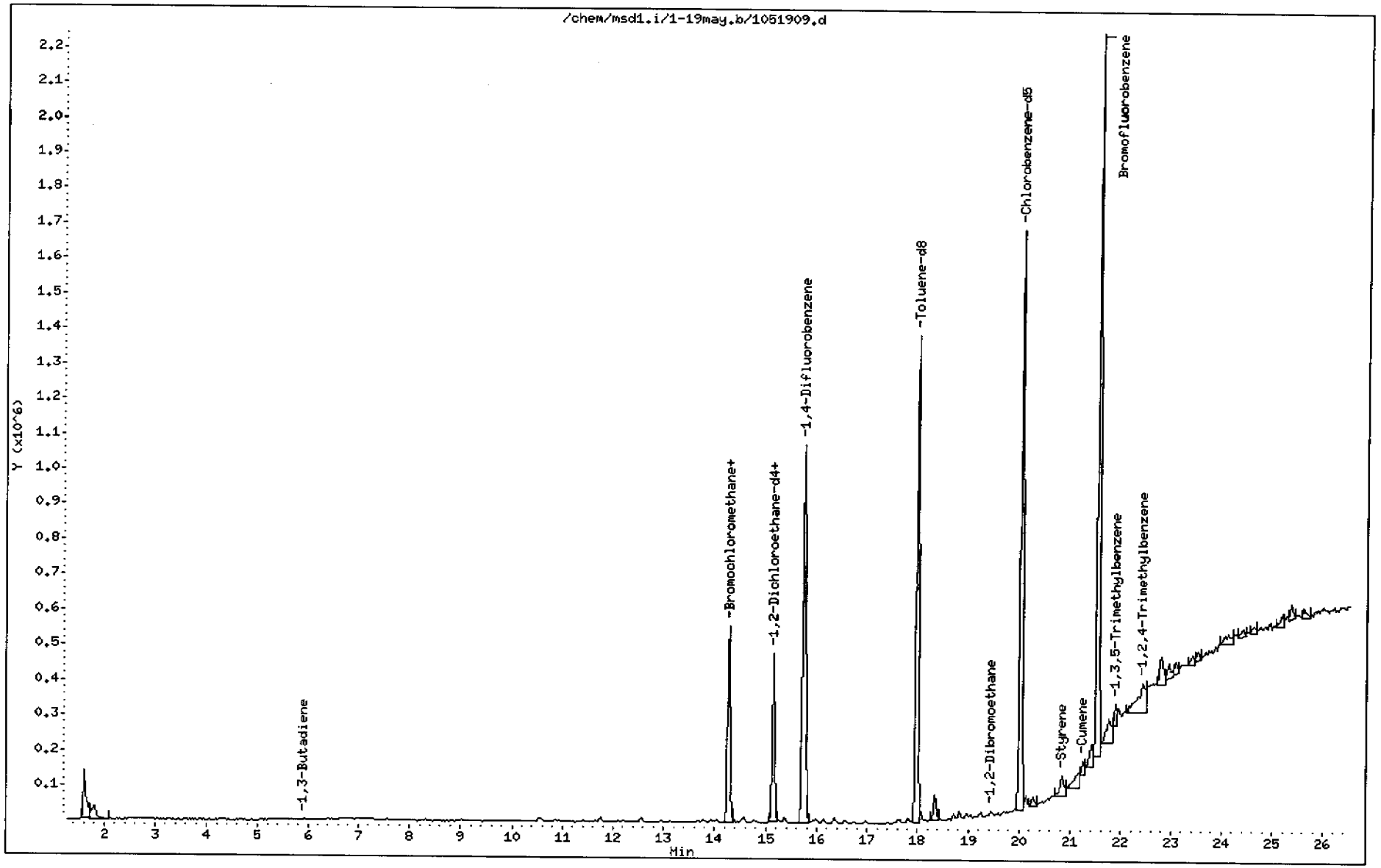
Data File: /chem/msd1.i/1-19may.b/1051909.d
Date : 19-MAY-2008 13:23
Client ID: Level 1
Sample Info: 5.0mL #1541-167

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0353



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051910.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 19-MAY-2008 13:56
Operator : lo
Inst ID: msd1.i
Smp Info : 10mL #1541-167
Misc Info : 5ppbv ->0.5ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 13:56
Cal File: 1051910.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08low.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	303948	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	235042			27.16- 127.16	77.33
14.252	14.252 (1.000)	49	553447			133.16- 233.16	182.09
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1572292	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	256139			0.00- 66.23	16.29
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1814856	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1057184			8.46- 108.46	58.25
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	490524	25.0000	25.234	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	247224			0.75- 100.75	50.40
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1783580	25.0000	24.939	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	184946			0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1174395			15.38- 115.38	65.84
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	954080	25.0000	25.022	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1520994			109.37- 209.37	159.42
21.524	21.524 (1.075)	176	913795			45.73- 145.73	95.78
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	16805	0.50000	0.5000	50.00- 150.00	100.00(M)
2.861	2.861 (0.200)	87	1519			0.00- 59.04	9.04
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	10181	0.50000	0.5000	50.00- 150.00	100.00(M)
4.381	4.381 (0.307)	137	3331			0.00- 82.72	32.72
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	8513	0.50000	0.5000	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	2524			0.00- 79.65	29.65
24 1,3-Butadiene					CAS #: 106-99-0		
5.930	5.930 (0.415)	54	5015	0.50000	0.4348	50.00- 150.00	100.00(a)
5.930	5.930 (0.415)	39	2579			19.45- 119.45	51.43
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	3933	0.50000	0.5000	50.00- 150.00	100.00
7.561	7.561 (0.529)	96	5710			95.18- 195.18	145.18
28 Chloroethane					CAS #: 75-00-3		
8.142	8.142 (0.570)	64	4221	0.50000	0.5000	50.00- 150.00	100.00
0.000	1.000 (0.000)	49	0			0.00- 50.00	0.00
0.000	1.000 (0.000)	66	0			0.00- 50.00	0.00
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	19030	0.50000	0.5000	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	13373			20.27- 120.27	70.27
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	9841	0.50000	0.5000	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	6923			20.35- 120.35	70.35
10.575	10.575 (0.741)	101	13023			82.33- 182.33	132.33
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	15334	0.50000	0.5000	50.00- 150.00	100.00
10.547	10.547 (0.739)	96	10304			17.20- 117.20	67.20
10.547	10.547 (0.739)	98	4478			0.00- 79.20	29.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	23647	0.50000	0.5000	50.00- 150.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	17283	0.50000	0.5000	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	9038			2.29- 102.29	52.29
11.764	11.764 (0.824)	51	4791			0.00- 77.72	27.72
58 MTBE					CAS #: 1634-04-4		
12.178	12.178 (0.853)	73	9663	0.50000	0.5000	50.00- 150.00	100.00
12.178	12.178 (0.853)	57	2083			0.00- 71.56	21.56
12.151	12.151 (0.851)	41	2524			0.00- 76.12	26.12
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.206	12.206 (0.855)	96	7846	0.50000	0.5000	50.00- 150.00	100.00
12.206	12.206 (0.855)	61	13640			123.85- 223.85	173.85
12.206	12.206 (0.855)	98	4840			11.69- 111.69	61.69
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	20491	0.50000	0.5000	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	14912			22.77- 122.77	72.77
12.566	12.566 (0.880)	86	2979			0.00- 64.54	14.54
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	10654	0.50000	0.5000	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	3505			0.00- 82.90	32.90
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	3555	0.50000	0.5000	50.00- 150.00	100.00
13.948	13.948 (0.977)	43	22469			582.04- 682.04	632.04
13.976	13.976 (0.979)	57	1581			0.00- 94.47	44.47
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.920	13.920 (0.975)	61	13947	0.50000	0.5000	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	10152			22.79- 122.79	72.79
13.920	13.920 (0.975)	98	5739			0.00- 91.15	41.15
78 Tetrahydrofuran					CAS #: 109-99-9		
14.280	14.280 (1.000)	42	32393	0.50000	0.5000	50.00- 150.00	100.00
14.280	14.280 (1.000)	71	9751			0.00- 80.10	30.10
14.280	14.280 (1.000)	72	9413			0.00- 79.06	29.06
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	17890	0.50000	0.5103	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	10909			14.53- 114.53	60.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	15078	0.50000	0.5000	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	7175			0.00- 97.59	47.59
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	17329	0.50000	0.5000	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	20367			67.53- 167.53	117.53
14.584	14.584 (1.021)	41	15870			41.58- 141.58	91.58
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	16514	0.50000	0.5000	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	15571			44.29- 144.29	94.29
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	35253	0.50000	0.4728	50.00- 150.00	100.00(a)
15.137	15.137 (0.961)	77	8563			0.00- 74.95	24.29
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	66434	0.50000	0.5000	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	23566			0.00- 85.47	35.47
15.109	15.109 (1.058)	41	16773			0.00- 75.25	25.25
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	12749	0.50000	0.5000	50.00- 150.00	100.00
15.275	15.275 (0.970)	64	4776			0.00- 87.46	37.46
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	13263	0.50000	0.5000	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	30245			178.04- 278.04	228.04
15.358	15.358 (0.975)	57	13983			55.43- 155.43	105.43
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	14283	0.50000	0.5000	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	12656			38.61- 138.61	88.61
16.132	16.132 (1.025)	97	9182			14.29- 114.29	64.29
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	14186	0.50000	0.5000	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	9549			17.31- 117.31	67.31
16.575	16.575 (1.053)	41	8942			13.03- 113.03	63.03
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	19481	0.50000	0.5000	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	12266			12.96- 112.96	62.96
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	19161	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
109 cis-1,3-Dichloropropene (continued)							
17.625	17.625 (1.119)	77	7196			0.00- 87.56	37.56
17.625	17.625 (1.119)	39	9350			0.00- 98.80	48.80
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	12498	0.50000	0.5000	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	33327			216.66- 316.66	266.66
17.819	17.819 (1.132)	85	5761			0.00- 96.10	46.10
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	47240	0.50000	0.5000	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	30199			13.93- 113.93	63.93
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	18395	0.50000	0.5000	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	8532			0.00- 96.38	46.38
18.427	18.427 (0.920)	39	10430			6.70- 106.70	56.70
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	16704	0.50000	0.5000	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	9584			7.38- 107.38	57.38
18.704	18.704 (0.934)	83	12543			25.09- 125.09	75.09
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	19051	0.50000	0.5000	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	14224			24.66- 124.66	74.66
18.814	18.814 (0.939)	131	13457			20.64- 120.64	70.64
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	20493	0.50000	0.5000	50.00- 150.00	100.00
19.257	19.257 (0.961)	127	14911			22.76- 122.76	72.76
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	22545	0.50000	0.5130	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	24662			52.93- 152.93	109.39
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	41947	0.50000	0.5000	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	14285			0.00- 84.05	34.05
20.059	20.059 (1.001)	77	41302			48.46- 148.46	98.46
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	21616	0.50000	0.5000	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	72567			285.71- 385.71	335.71
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	25933	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
128 m,p-Xylene (continued)							
20.280	20.280 (1.012)	91	61636			187.67- 287.67	237.67
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	28485	0.50000	0.5000	50.00- 150.00	100.00
20.805	20.805 (1.039)	91	61432			165.66- 265.66	215.66
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	51362	0.50000	0.4536	50.00- 150.00	100.00(a)
20.833	20.833 (1.040)	78	24656			0.00- 96.75	48.00
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	20364	0.50000	0.5000	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	8842			0.00- 93.42	43.42
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	84368	0.50000	0.5297	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	20564			0.00- 77.00	24.37
21.247	21.247 (1.061)	51	8944			0.00- 61.70	10.60
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.690	21.690 (1.083)	83	56535	0.50000	0.5000	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	32888			8.17- 108.17	58.17
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	103578	0.50000	0.5000	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	26850			0.00- 75.92	25.92
21.745	21.745 (1.086)	105	10347			0.00- 59.99	9.99
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	85660	0.50000	0.5000	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	25692			0.00- 79.99	29.99
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.966	21.966 (1.097)	105	83773	0.50000	0.5079	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	36740			0.00- 93.10	43.86
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	70351	0.50000	0.5165	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	29165			0.00- 97.66	41.46
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	46711	0.50000	0.5000	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	28503			11.02- 111.02	61.02
22.823	22.823 (1.139)	111	17470			0.00- 87.40	37.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	38849	0.50000	0.5000	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	30572			28.69- 128.69	78.69
22.934	22.934 (1.145)	111	16551			0.00- 92.60	42.60
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	70529	0.50000	0.5000	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	12871			0.00- 68.25	18.25
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	45216	0.50000	0.5000	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	27214			10.19- 110.19	60.19
23.404	23.404 (1.168)	111	19685			0.00- 93.54	43.54
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	30459	0.50000		0.00- 50.00	100.00(a)
25.257	25.257 (1.261)	182	27093			38.95- 138.95	88.95
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	19054	0.50000		0.00- 50.00	100.00(a)
25.340	25.340 (1.265)	223	13056			18.52- 118.52	68.52
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	21581	0.50000	0.5000	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	10737			0.00- 99.75	49.75
16.354	16.354 (1.145)	55	23108			57.08- 157.08	107.08
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.095	12.095 (0.847)	59	12809	0.50000	0.5000	50.00- 150.00	100.00
12.095	12.095 (0.847)	41	1828			0.00- 64.27	14.27
12.178	12.178 (0.853)	57	2083			0.00- 66.26	16.26

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/msd1.i/1-19may.b/1051910.d
Report Date: 20-May-2008 11:30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

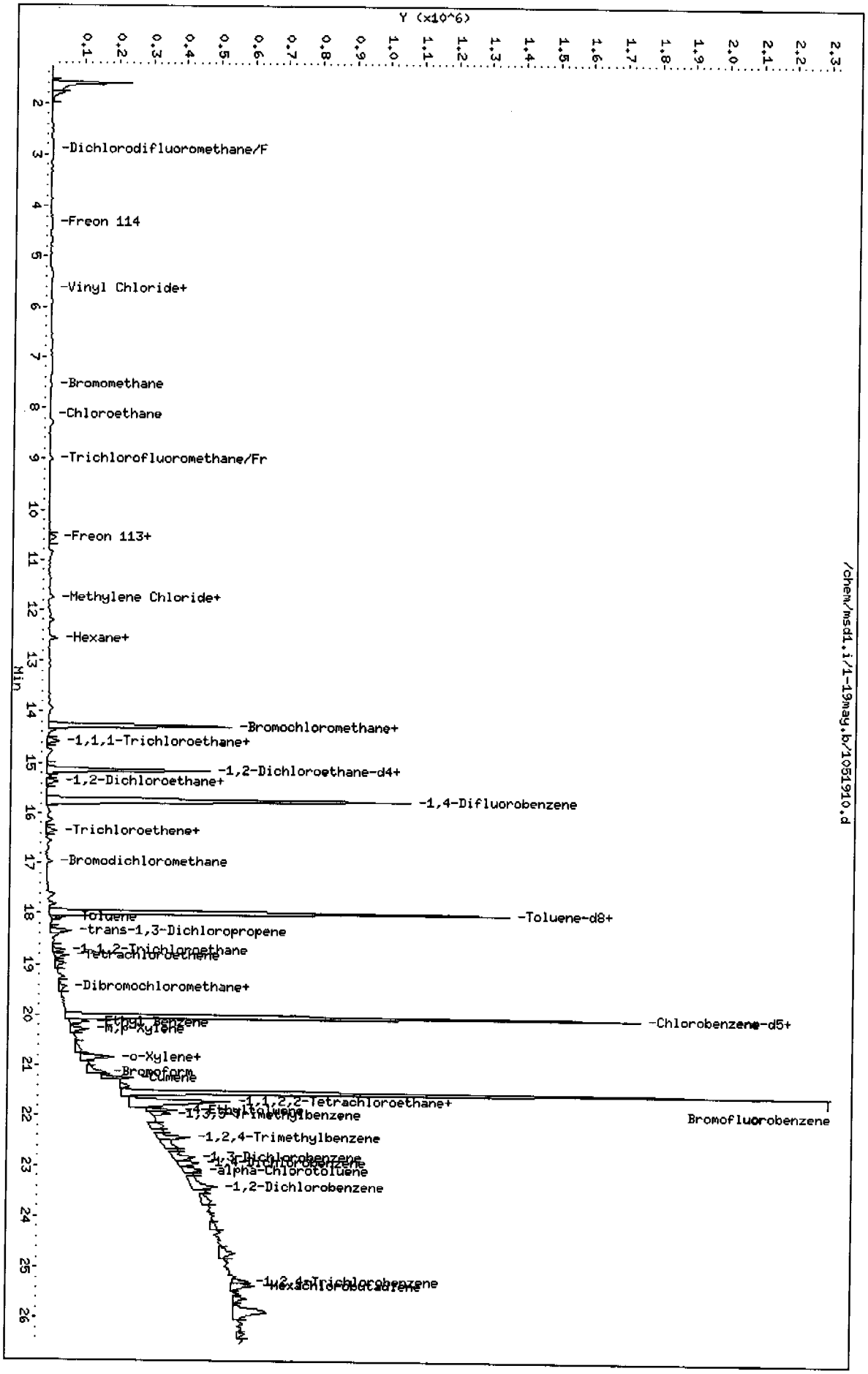
Instrument ID: msd1.i
Lab File ID: 1051910.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->0.5ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 13:56
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	303948	182369	425527	303948	0.00
95 1,4-Difluorobenze	1572292	943375	2201209	1572292	0.00
123 Chlorobenzene-d5	1814856	1088914	2540798	1814856	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051910.d
Date : 19-MAY-2008 13:56
Client ID: Level 2
Sample Info: 10mL #1541-167
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052003.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 20-MAY-2008 09:45
Operator : lo
Inst ID: msd1.i
Smp Info : 1.0mL #1541-142
Misc Info : 200ppbv ->2.0ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 09:45
Cal File: 1052003.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
RT	EXP RT (REL RT)	MASS	RESPONSE	CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
**	====== ========	****	========	=======	=======	==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5	
14.255	14.255 (1.000)	130	305805	25.0000		50.00- 150.00	100.00
14.255	14.255 (1.000)	128	242476			28.24- 128.24	79.29
14.255	14.255 (1.000)	49	566293			133.94- 233.94	185.18
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.748	15.748 (1.000)	114	1590850	25.0000		50.00- 150.00	100.00
15.720	15.720 (1.000)	88	249808			0.00- 65.99	15.70
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.006	20.006 (1.000)	117	1798258	25.0000		50.00- 150.00	100.00
20.006	20.006 (1.000)	82	1053360			8.42- 108.42	58.58
19 Freon142b						CAS #: 75-68-3	
4.608	4.608 (0.323)	65	45706	2.00000	1.769	50.00- 150.00	100.00(a)
4.608	4.608 (0.323)	45	11963			0.00- 75.41	26.17
9 Freon 134a						CAS #: 811-97-2	
2.383	2.383 (0.167)	83	9664	2.00000	1.615	50.00- 150.00	100.00(a)
2.439	2.439 (0.171)	69	8503			32.58- 132.58	87.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
0.000	1.000 (0.000)	63	0			0.00- 58.36	0.00
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.191)	65	10499	2.00000	1.853	50.00- 150.00	100.00(aM)
2.721	2.721 (0.191)	51	25163			172.46- 272.46	239.67
2.749	2.749 (0.193)	47	4823			0.63- 100.63	45.94
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	38452	2.00000	1.874	50.00- 150.00	100.00(a)
3.425	3.425 (0.240)	67	5690			0.00- 65.39	14.80
0.000	1.000 (0.000)	85	0			0.00- 51.20	0.00
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.548)	31	141222	12.0000	29.076	50.00- 150.00	100.00(a)
7.818	7.818 (0.548)	32	216708			64.72- 164.72	153.45
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.167	9.167 (0.643)	67	38215	2.00000	1.570	50.00- 150.00	100.00(a)
9.167	9.167 (0.643)	69	10866			0.00- 79.81	28.43
9.167	9.167 (0.643)	35	2302			0.00- 55.10	6.02
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.728)	117	16848	2.00000	1.538	50.00- 150.00	100.00(a)
10.356	10.356 (0.726)	67	25452			96.88- 196.88	151.07
41 Freon123					CAS #: 306-83-2		
10.550	10.550 (0.740)	83	2903	2.00000	1.561	50.00- 150.00	100.00(a)
0.000	1.000 (0.000)	133	0			0.00- 73.50	0.00
10.550	10.550 (0.740)	85	1547			10.10- 110.10	53.29
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.911)	45	119379	2.00000	1.482	50.00- 150.00	100.00(a)
13.011	13.011 (0.913)	87	25714			0.00- 71.33	21.54
13.011	13.011 (0.913)	59	12255			0.00- 60.24	10.27
69 1-Propanol					CAS #: 71-23-8		
13.232	13.232 (0.928)	42	5537	2.00000	1.420	50.00- 150.00	100.00(a)
13.232	13.232 (0.928)	59	4215			47.04- 147.04	76.12
13.232	13.232 (0.928)	41	3418			14.12- 114.12	61.73
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.536	13.536 (0.950)	59	54378	2.00000	1.610	50.00- 150.00	100.00(a)
13.536	13.536 (0.950)	87	19755			0.00- 86.33	36.33
13.536	13.536 (0.950)	41	13615			0.00- 70.48	25.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.978	13.978 (0.981)	45	12255	2.00000	1.488	50.00- 150.00	100.00(a)
13.978	13.978 (0.981)	61	10459			36.81- 136.81	85.34
13.978	13.978 (0.981)	43	80613			616.84- 716.84	657.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.222	15.222 (1.068)	73	63838	2.00000	1.666	50.00- 150.00	100.00(a)
15.222	15.222 (1.068)	87	15654			0.00- 73.95	24.52
15.222	15.222 (1.068)	55	20268			0.00- 80.63	31.75
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.467)	58	97383	2.00000	1.486	50.00- 150.00	100.00(a)
20.918	20.918 (1.467)	43	138911			99.63- 199.63	142.64
96 1-Butanol					CAS #: 71-36-3		
15.969	15.969 (1.014)	56	30255	2.00000	1.487	50.00- 150.00	100.00(a)
15.969	15.969 (1.014)	41	23114			20.92- 120.92	76.40
15.969	15.969 (1.014)	43	16994			4.89- 104.89	56.17
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	57644	2.00000	1.412	50.00- 150.00	100.00(a)
19.066	19.066 (1.211)	73	25792			0.00- 87.23	44.74
19.066	19.066 (1.211)	43	136176			180.18- 280.18	236.24
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.073)	55	78497	2.00000	1.529	50.00- 150.00	100.00(a)
21.471	21.471 (1.073)	98	32591			0.00- 90.24	41.52
21.471	21.471 (1.073)	42	55499			17.74- 117.74	70.70
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.104)	57	194861	2.00000	1.690	50.00- 150.00	100.00(a)
22.080	22.080 (1.104)	85	153236			28.61- 128.61	78.64
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

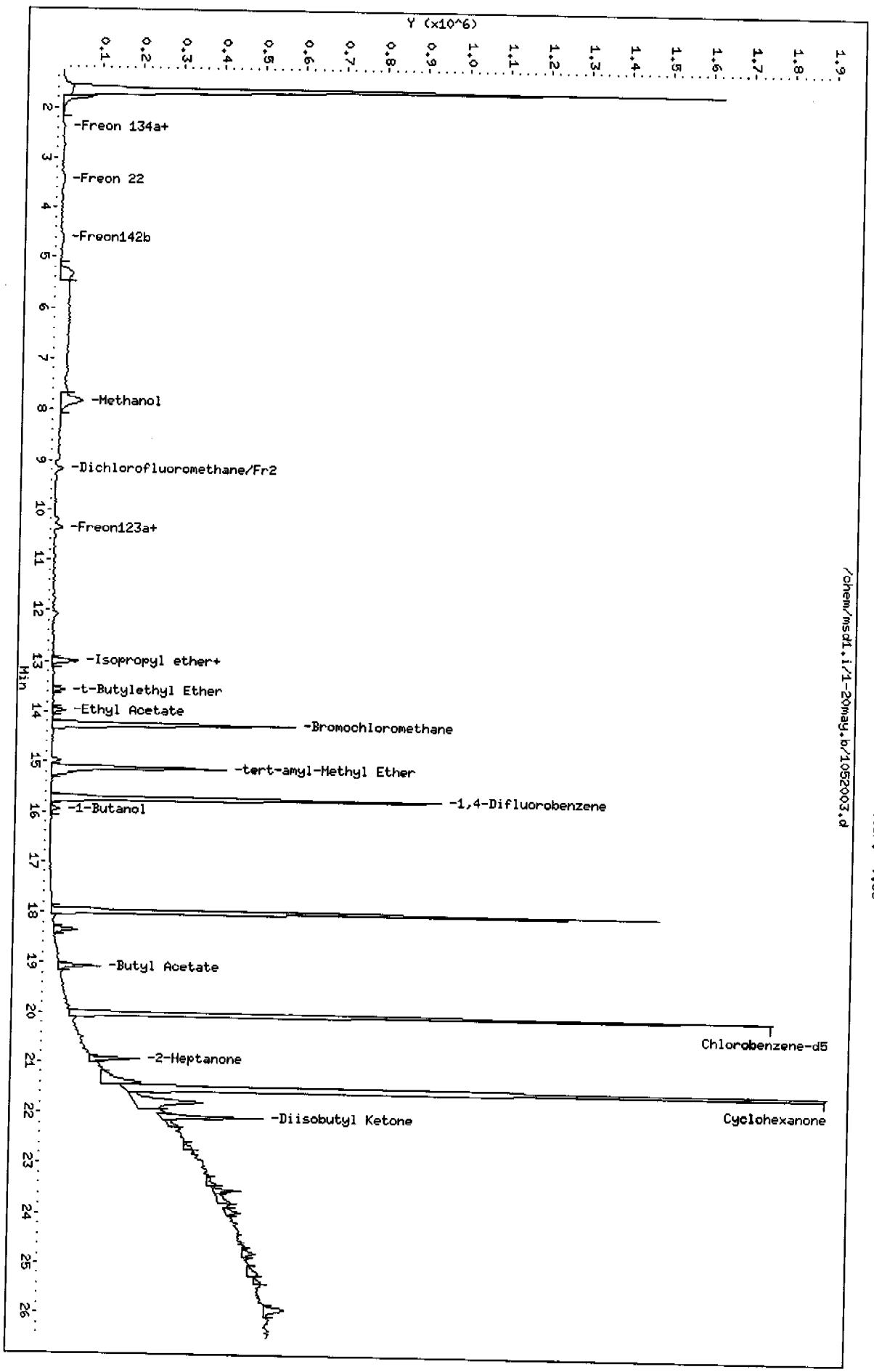
Instrument ID: msd1.i
Lab File ID: 1052003.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->2.0ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	305805	-2.01
95 1,4-Difluorobenze	1622087	973252	2270922	1590850	-1.93
123 Chlorobenzene-d5	1805786	1083472	2528100	1798258	-0.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.25	-0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-20may.b/1052003.d
Date : 20-MAY-2008 09:45
Client ID: Level 3
Sample Info: 1.0mL #1541-142
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051911.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 19-MAY-2008 14:29
Operator : lo
Inst ID: msd1.i
Smp Info : 40mL #1541-167
Misc Info : 5ppbv ->2.0ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 14:29
Cal File: 1051911.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5	
14.280	14.280 (1.000)	130	295507	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	222617			26.55- 126.55	75.33
14.252	14.252 (1.000)	49	542213			133.27- 233.27	183.49
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.745	15.745 (1.000)	114	1523302	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	239685			0.00- 66.07	15.73
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.031	20.031 (1.000)	117	1736378	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1018299			8.52- 108.52	58.65
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.137	15.137 (1.060)	65	481977	25.0000	25.333	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	251948			1.26- 101.26	52.27
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.985	17.985 (1.142)	98	1726349	25.0000	24.943	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	178478			0.00- 60.35	10.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1116896			15.15- 115.15	64.70
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	912499	25.0000	25.009	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1438409			108.79- 208.79	157.63
21.524	21.524 (1.075)	176	860584			45.26- 145.26	94.31
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	11267	2.00000	2.000	50.00- 150.00	100.00(M)
2.501	2.501 (0.175)	42	7531			16.84- 116.84	66.84
2.474	2.474 (0.173)	39	12464			60.62- 160.62	110.62
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	60533	2.00000	1.923	50.00- 150.00	100.00
2.861	2.861 (0.200)	87	12609			0.00- 64.93	20.83
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	43882	2.00000	2.103	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	8882			0.00- 76.48	20.24
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	31293	2.00000	2.000	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	8280			0.00- 76.46	26.46
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	31469	2.00000	1.949	50.00- 150.00	100.00
5.598	5.598 (0.392)	64	4746			0.00- 72.37	15.08
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	21903	2.00000	1.969	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	20719			27.83- 127.83	94.59
26 Bromomethane					CAS #: 74-83-9		
7.561	7.561 (0.529)	94	16737	2.00000	2.090	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	16641			72.30- 172.30	99.43
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	14836	2.00000	1.899	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	4268			0.00- 78.77	28.77
8.142	8.142 (0.570)	66	5234			0.00- 85.28	35.28
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	80575	2.00000	2.085	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	54803			19.14- 119.14	68.01

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.215	10.215 (0.715)	45	9083	2.00000	2.000	50.00- 150.00	100.00
10.188	10.188 (0.713)	43	3886			0.00- 92.78	42.78
10.243	10.243 (0.717)	46	4591			0.54- 100.54	50.54
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	43540	2.00000	2.129	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	27015			16.20- 116.20	62.05
10.575	10.575 (0.741)	101	60679			85.85- 185.85	139.36
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	64360	2.00000	2.076	50.00- 150.00	100.00
10.519	10.519 (0.737)	96	36282			11.79- 111.79	56.37
10.519	10.519 (0.737)	98	19405			0.00- 79.68	30.15
45 Acetone					CAS #: 67-64-1		
10.907	10.907 (0.764)	58	22666	2.00000	2.000	50.00- 150.00	100.00
10.907	10.907 (0.764)	43	73341			273.57- 373.57	323.57
46 2-Propanol					CAS #: 67-63-0		
11.349	11.349 (0.795)	45	69769	2.00000	2.000	50.00- 150.00	100.00
11.349	11.349 (0.795)	43	12855			0.00- 68.43	18.43
11.349	11.349 (0.795)	59	2725			0.00- 53.91	3.91
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	106115	2.00000	2.143	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.460	11.460 (0.802)	76	6164	2.00000	2.000	50.00- 150.00	100.00
11.460	11.460 (0.802)	41	19762			270.60- 370.60	320.60
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	48816	2.00000	1.683	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	30499			7.39- 107.39	62.48
11.764	11.764 (0.824)	51	15797			0.00- 80.04	32.36
58 MTBE					CAS #: 1634-04-4		
12.178	12.178 (0.853)	73	42468	2.00000	2.122	50.00- 150.00	100.00
12.178	12.178 (0.853)	57	12729			0.00- 75.76	29.97
12.178	12.178 (0.853)	41	12694			0.00- 78.01	29.89
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	38591	2.00000	2.234	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	62386			117.75- 217.75	161.66
12.178	12.178 (0.853)	98	24528			12.62- 112.62	63.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	86849	2.00000	2.086	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	58532			20.08- 120.08	67.40
12.566	12.566 (0.880)	86	14149			0.00- 65.41	16.29
67 Vinyl Acetate					CAS #: 108-05-4		
13.091	13.091 (0.917)	86	7020	2.00000	2.000	50.00- 150.00	100.00
13.091	13.091 (0.917)	43	99958			1373.90-1473.90	1423.90
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	59967	2.00000	2.366	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	19246			0.00- 82.50	32.09
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	20022	2.00000	2.366	50.00- 150.00	100.00
13.948	13.948 (0.977)	43	99342			514.10- 614.10	496.16
13.948	13.948 (0.977)	57	9409			0.00- 95.73	46.99
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.920	13.920 (0.975)	61	61731	2.00000	2.129	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	47334			24.73- 124.73	76.68
13.920	13.920 (0.975)	98	28085			0.00- 93.32	45.50
78 Tetrahydrofuran					CAS #: 109-99-9		
14.280	14.280 (1.000)	42	79982	2.00000	1.553	50.00- 150.00	100.00
14.280	14.280 (1.000)	71	25276			0.00- 80.85	31.60
14.280	14.280 (1.000)	72	27955			0.00- 82.01	34.95
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	83567	2.00000	2.280	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	54778			14.87- 114.87	65.55
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	79094	2.00000	2.297	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	51528			6.37- 106.37	65.15
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	71725	2.00000	2.062	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	95068			75.04- 175.04	132.55
14.584	14.584 (1.021)	41	51636			31.79- 131.79	71.99
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	76508	2.00000	2.175	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	80519			49.77- 149.77	105.24
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	153176	2.00000	2.079	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	36177			0.00- 74.51	23.62
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	305901	2.00000	2.168	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	103028			0.00- 84.58	33.68
15.109	15.109 (1.058)	41	77250			0.00- 75.25	25.25
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	62526	2.00000	2.234	50.00- 150.00	100.00
15.248	15.248 (0.968)	64	22369			0.00- 86.62	35.78
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	60374	2.00000	2.160	50.00- 150.00	100.00
15.386	15.386 (0.977)	43	123577			166.36- 266.36	204.69
15.386	15.386 (0.977)	57	64045			55.75- 155.75	106.08
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	62244	2.00000	2.117	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	56845			39.97- 139.97	91.33
16.132	16.132 (1.025)	97	37619			12.36- 112.36	60.44
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	60813	2.00000	2.101	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	41579			17.84- 117.84	68.37
16.575	16.575 (1.053)	41	37810			12.60- 112.60	62.17
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	38752	2.00000	2.000	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	32752			34.52- 134.52	84.52
16.713	16.713 (1.061)	57	10790			0.00- 77.84	27.84
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	94219	2.00000	2.221	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	55747			11.07- 111.07	59.17
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	80045	2.00000	2.075	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	28431			0.00- 86.54	35.52
17.625	17.625 (1.119)	39	45932			3.09- 103.09	57.38
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	58539	2.00000	2.189	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	153936			214.81- 314.81	262.96
17.819	17.819 (1.132)	85	21961			0.00- 91.81	37.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	206809	2.00000	2.122	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	129436			13.26- 113.26	62.59
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	87496	2.00000	2.216	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	30362			0.00- 90.54	34.70
18.427	18.427 (0.920)	39	47683			5.60- 105.60	54.50
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	71980	2.00000	2.118	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	44345			9.49- 109.49	61.61
18.704	18.704 (0.934)	83	61670			30.38- 130.38	85.68
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	83474	2.00000	2.135	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	67167			27.56- 127.56	80.46
18.814	18.814 (0.939)	131	64772			24.12- 124.12	77.60
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	86118	2.00000	2.000	50.00- 150.00	100.00
18.980	18.980 (0.948)	43	159846			135.61- 235.61	185.61
18.980	18.980 (0.948)	100	17227			0.00- 70.00	20.00
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	92186	2.00000	2.161	50.00- 150.00	100.00
19.257	19.257 (0.961)	127	70449			24.59- 124.59	76.42
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	108750	2.00000	2.356	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	99604			49.15- 149.15	91.59
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	195695	2.00000	2.197	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	60539			0.00- 82.50	30.94
20.059	20.059 (1.001)	77	134057			33.48- 133.48	68.50
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	106380	2.00000	2.250	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	335328			275.46- 375.46	315.22
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	133698	2.00000	2.296	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	267110			168.73- 268.73	199.79
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	128157	2.00000	2.161	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	264646			161.08- 261.08	206.50
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	187011	2.00000	1.809	50.00- 150.00	100.00
20.833	20.833 (1.040)	78	89417			0.00- 97.10	47.81
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	86896	2.00000	2.109	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	43414			0.00- 96.69	49.96
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	378786	2.00000	2.299	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	94563			0.00- 76.32	24.96
21.247	21.247 (1.061)	51	40632			0.00- 61.38	10.73
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	175988	2.00000	1.794	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	108133			9.81- 109.81	61.44
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	447845	2.00000	2.122	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	102869			0.00- 74.45	22.97
21.745	21.745 (1.086)	105	17261			0.00- 56.92	3.85
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	387610	2.00000	2.167	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	113624			0.00- 79.65	29.31
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	374432	2.00000	2.234	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	169145			0.00- 93.79	45.17
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	285157	2.00000	2.122	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	129650			0.00- 96.93	45.47
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	172107	2.00000	1.962	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	107766			11.82- 111.82	62.62
22.823	22.823 (1.139)	111	75195			0.00- 90.55	43.69
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	172189	2.00000	2.146	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	110661			21.48- 121.48	64.27
22.934	22.934 (1.145)	111	70681			0.00- 91.83	41.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	232749	2.00000	1.852	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	48507			0.00- 69.55	20.84
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	149406	2.00000	1.853	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	90856			10.50- 110.50	60.81
23.404	23.404 (1.168)	111	63781			0.00- 93.11	42.69
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	61351	2.00000	2.000	50.00- 150.00	100.00
25.257	25.257 (1.261)	182	59539			43.00- 143.00	97.05
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	45343	2.00000	2.000	50.00- 150.00	100.00
25.340	25.340 (1.265)	223	29988			17.33- 117.33	66.14
22 Butane					CAS #: 106-97-8		
5.487	5.487 (0.384)	58	6745	2.00000	2.000	50.00- 150.00	100.00
5.487	5.487 (0.384)	43	45698			627.51- 727.51	677.51
29 Isopentane					CAS #: 78-78-4		
8.308	8.308 (0.582)	43	45594	2.00000	2.000	50.00- 150.00	100.00
8.280	8.280 (0.580)	57	29918			15.62- 115.62	65.62
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	102186	2.00000	2.196	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	46943			0.00- 97.85	45.94
16.354	16.354 (1.145)	55	95083			50.06- 150.06	93.05
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	52752	2.00000	2.057	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	10936			0.00- 67.50	20.73
12.068	12.068 (0.845)	57	5954			0.00- 63.77	11.29

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/msd1.i/1-19may.b/1051911.d
Report Date: 20-May-2008 11:30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

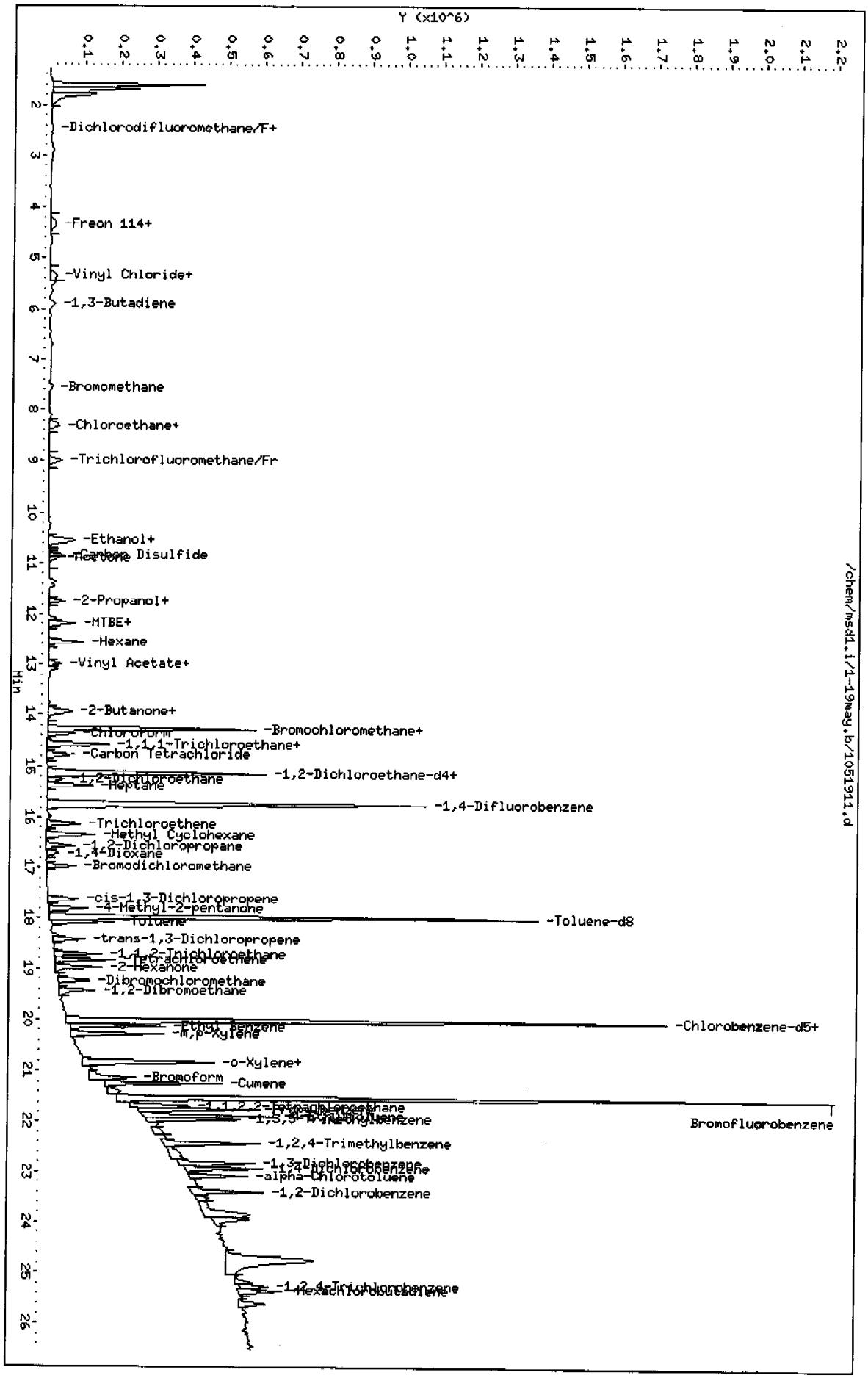
Instrument ID: msd1.i
Lab File ID: 1051911.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->2.0ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 14:29
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295507	177304	413710	295507	0.00
95 1,4-Difluorobenze	1523302	913981	2132623	1523302	0.00
123 Chlorobenzene-d5	1736378	1041827	2430929	1736378	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051911.d
Date : 19-MAY-2008 14:29
Client ID: Level 3
Sample Info: 40mL #1541-167
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052004.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 20-MAY-2008 10:26
Operator : lo
Inst ID: msd1.i
Smp Info : 4.0mL #1541-142
Misc Info : 200ppbv ->8.0ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 10:26
Cal File: 1052004.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	****	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	305060	25.0000		50.00- 150.00	100.00
14.255	14.255 (1.000)	128	235622			28.24- 128.24	77.24
14.255	14.255 (1.000)	49	573065			133.94- 233.94	187.85
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1596621	25.0000		50.00- 150.00	100.00
15.748	15.748 (1.000)	88	262145			0.00- 65.99	16.42
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1797015	25.0000		50.00- 150.00	100.00
20.006	20.006 (1.000)	82	1048456			8.42- 108.42	58.34
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	197922	8.00000	7.681	50.00- 150.00	100.00
4.608	4.608 (0.323)	45	50295			0.00- 75.41	25.41
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	50448	8.00000	8.451	50.00- 150.00	100.00
2.411	2.411 (0.169)	69	41279			32.58- 132.58	81.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.383	2.383 (0.167)	63	1954			0.00- 58.36	3.87
13 Freon 152a					CAS #: 75-37-6		
2.749	2.749 (0.192)	65	44568	8.00000	7.884	50.00- 150.00	100.00
2.749	2.749 (0.192)	51	99489			172.46- 272.46	223.23
2.749	2.749 (0.192)	47	23768			0.63- 100.63	53.33
15 Freon 22					CAS #: 75-45-6		
3.453	3.453 (0.242)	51	162836	8.00000	7.954	50.00- 150.00	100.00
3.397	3.397 (0.238)	67	25231			0.00- 65.39	15.49
3.425	3.425 (0.240)	85	1635			0.00- 51.20	1.00
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	277023	48.0000	57.176	50.00- 150.00	100.00
7.818	7.818 (0.547)	32	306961			64.72- 164.72	110.81
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	195380	8.00000	8.048	50.00- 150.00	100.00
9.195	9.195 (0.644)	69	60054			0.00- 79.81	30.74
9.167	9.167 (0.642)	35	8872			0.00- 55.10	4.54
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	85385	8.00000	7.814	50.00- 150.00	100.00
10.356	10.356 (0.725)	67	124934			96.88- 196.88	146.32
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	15564	8.00000	8.389	50.00- 150.00	100.00
10.577	10.577 (0.741)	133	3966			0.00- 73.50	25.48
10.577	10.577 (0.741)	85	9690			10.10- 110.10	62.26
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	625311	8.00000	7.784	50.00- 150.00	100.00
13.011	13.011 (0.911)	87	133541			0.00- 71.33	21.36
12.983	12.983 (0.909)	59	63610			0.00- 60.24	10.17
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	27101	8.00000	6.969	50.00- 150.00	100.00
13.204	13.204 (0.924)	59	29313			47.04- 147.04	108.16
13.204	13.204 (0.924)	41	17747			14.12- 114.12	65.48
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.564	13.564 (0.950)	59	226199	8.00000	6.712	50.00- 150.00	100.00
13.564	13.564 (0.950)	87	82654			0.00- 86.33	36.54
13.564	13.564 (0.950)	41	42822			0.00- 70.48	18.93

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.978	13.978 (0.979)	45	65644	8.00000	7.990	50.00- 150.00	100.00
13.978	13.978 (0.979)	61	56382			36.81- 136.81	85.89
13.978	13.978 (0.979)	43	426844			616.84- 716.84	650.24
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.066)	73	280244	8.00000	7.332	50.00- 150.00	100.00
15.223	15.223 (1.066)	87	66481			0.00- 73.95	23.72
15.223	15.223 (1.066)	55	87749			0.00- 80.63	31.31
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	514940	8.00000	7.875	50.00- 150.00	100.00
20.918	20.918 (1.465)	43	788192			99.63- 199.63	153.06
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	143620	8.00000	7.033	50.00- 150.00	100.00
15.941	15.941 (1.012)	41	97914			20.92- 120.92	68.18
15.941	15.941 (1.012)	43	75011			4.89- 104.89	52.23
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	319857	8.00000	7.804	50.00- 150.00	100.00
19.066	19.066 (1.211)	73	107017			0.00- 87.23	33.46
19.066	19.066 (1.211)	43	707211			180.18- 280.18	221.10
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.073)	55	415106	8.00000	8.092	50.00- 150.00	100.00
21.471	21.471 (1.073)	98	164669			0.00- 90.24	39.67
21.471	21.471 (1.073)	42	277966			17.74- 117.74	66.96
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.104)	57	1018811	8.00000	8.843	50.00- 150.00	100.00
22.080	22.080 (1.104)	85	801537			28.61- 128.61	78.67
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052004.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->8.0ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	305060	-2.25
95 1,4-Difluorobenze	1622087	973252	2270922	1596621	-1.57
123 Chlorobenzene-d5	1805786	1083472	2528100	1797015	-0.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

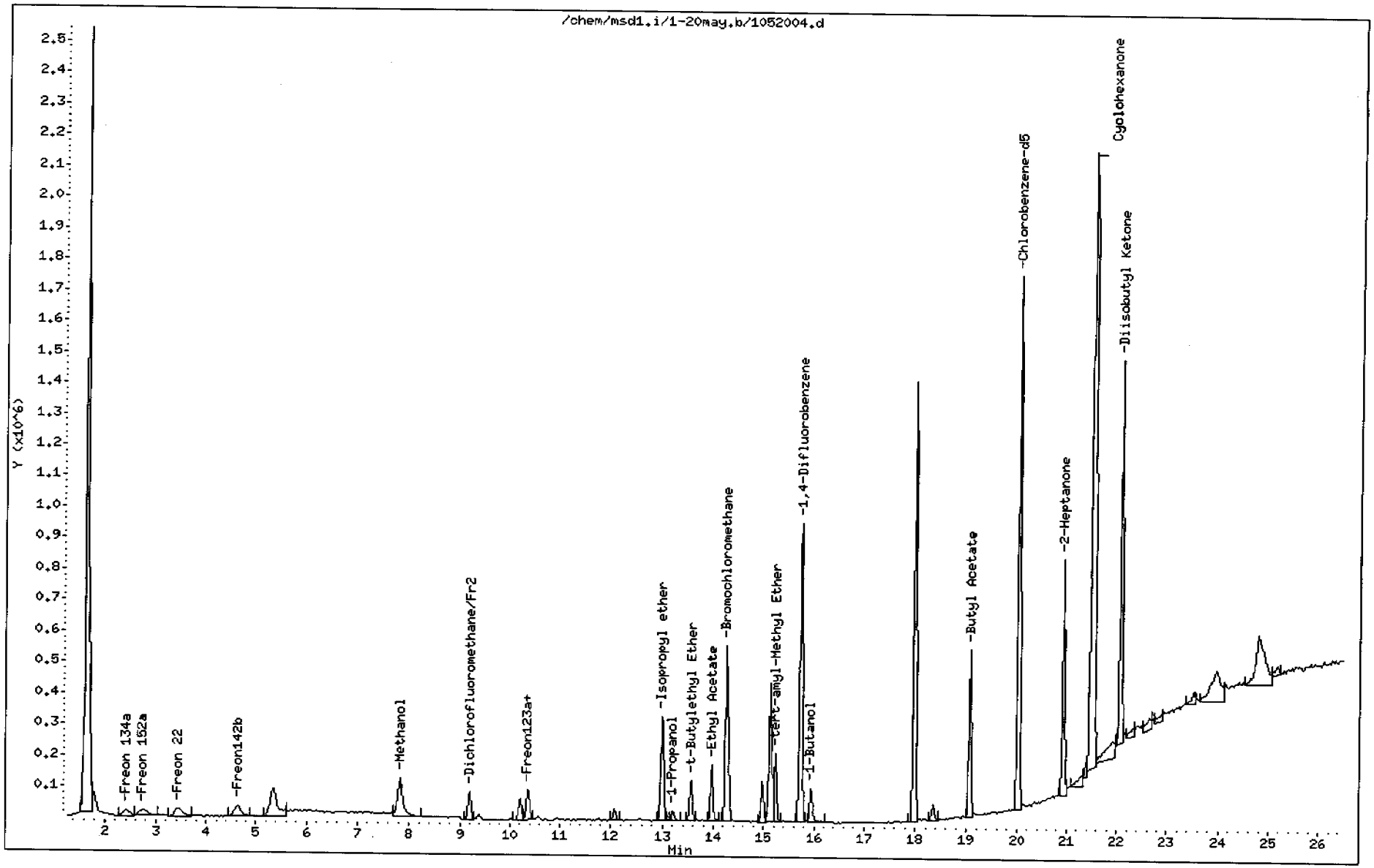
Data File: /chem/msd1.i/1-20may.b/1052004.d
Date : 20-MAY-2008 10:26
Client ID: Level 4
Sample Info: 4.0mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0382



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051917.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 19-MAY-2008 19:59
Operator : kr
Inst ID: msd1.i
Smp Info : 12.5mL #1612-3
Misc Info : 200ppbv-->25ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 19:59
Cal File: 1051917.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08mdl.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	============	=====
* 79 Bromochloromethane						CAS #: 74-97-5	
14.280	14.280 (1.000)	130	327508	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	252074			26.65- 126.65	76.97
14.252	14.252 (1.000)	49	587687			132.31- 232.31	179.44
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.745	15.745 (1.000)	114	1675761	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	263792			0.00- 65.99	15.74
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.031	20.031 (1.000)	117	1902736	25.0000		50.00- 150.00	100.00
20.003	20.003 (1.000)	82	1105221			8.41- 108.41	58.09
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.137	15.137 (1.060)	65	533164	25.0000	25.213	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	297184			2.38- 102.38	55.74
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.985	17.985 (1.142)	98	1889458	25.0000	24.862	50.00- 150.00	100.00
17.957	17.957 (1.140)	70	188629			0.00- 60.26	9.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1241685			15.30- 115.30	65.72
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1010267	25.0000	25.200	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1607932			108.88- 208.88	159.16
21.524	21.524 (1.075)	176	959869			45.20- 145.20	95.01
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	202674	25.0000	28.246	50.00- 150.00	100.00
2.474	2.474 (0.173)	42	135814			16.93- 116.93	67.01
2.474	2.474 (0.173)	39	150989			42.56- 142.56	74.50
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.861	2.861 (0.200)	85	1011256	25.0000	27.527	50.00- 150.00	100.00
2.888	2.888 (0.202)	87	330163			0.00- 70.84	32.65
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	691291	25.0000	28.060	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	218202			0.00- 78.17	31.56
21 Chloromethane					CAS #: 74-87-3		
4.630	4.630 (0.324)	50	419413	25.0000	24.586	50.00- 150.00	100.00
4.630	4.630 (0.324)	52	132144			0.00- 78.98	31.51
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	458741	25.0000	25.423	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	142750			0.00- 75.28	31.12
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	355307	25.0000	27.757	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	343702			32.56- 132.56	96.73
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	346039	25.0000	32.860	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	328687			63.20- 163.20	94.99
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	249268	25.0000	27.404	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	72558			0.00- 78.94	29.11
8.114	8.114 (0.568)	66	78984			0.00- 83.48	31.69
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	1298487	25.0000	28.310	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	832680			17.47- 117.47	64.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.160	10.160 (0.711)	45	207357	25.0000	31.117	50.00- 150.00	100.00
10.132	10.132 (0.710)	43	38882			0.00- 80.77	18.75
10.132	10.132 (0.710)	46	83062			0.00- 95.30	40.06
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	681049	25.0000	28.151	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	423703			14.87- 114.87	62.21
10.575	10.575 (0.741)	101	908470			85.03- 185.03	133.39
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	905515	25.0000	25.889	50.00- 150.00	100.00
10.519	10.519 (0.737)	96	483019			8.97- 108.97	53.34
10.519	10.519 (0.737)	98	313058			0.00- 81.31	34.57
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	301151	25.0000	24.478	50.00- 150.00	100.00
10.879	10.879 (0.762)	43	948251			269.22- 369.22	314.88
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	1090150	25.0000	26.502	50.00- 150.00	100.00
11.321	11.321 (0.793)	43	197190			0.00- 68.26	18.09
11.321	11.321 (0.793)	59	42747			0.00- 53.91	3.92
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	1447321	25.0000	25.898	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.432	11.432 (0.801)	76	151388	25.0000	31.968	50.00- 150.00	100.00
11.432	11.432 (0.801)	41	558396			294.73- 394.73	368.85
54 Methylene Chloride					CAS #: 75-09-2		
11.736	11.736 (0.822)	49	735054	25.0000	23.535	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	463741			9.29- 109.29	63.09
11.736	11.736 (0.822)	51	214608			0.00- 79.76	29.20
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	530281	25.0000	24.262	50.00- 150.00	100.00
12.151	12.151 (0.851)	57	155290			0.00- 76.94	29.28
12.151	12.151 (0.851)	41	136743			0.00- 77.27	25.79
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	608846	25.0000	29.156	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	954885			114.11- 214.11	156.84
12.178	12.178 (0.853)	98	384723			12.81- 112.81	63.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	1390611	25.0000	28.205	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	883847			17.91- 117.91	63.56
12.566	12.566 (0.880)	86	205039			0.00- 65.19	14.74
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	152566	25.0000	30.535	50.00- 150.00	100.00
13.063	13.063 (0.915)	43	1976752			1309.79-1409.79	1295.67
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	1155997	25.0000	33.857	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	349110			0.00- 81.73	30.20
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	347673	25.0000	31.932	50.00- 150.00	100.00
13.920	13.920 (0.975)	43	1682063			487.34- 587.34	483.81
13.948	13.948 (0.977)	57	127727			0.00- 92.73	36.74
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	995094	25.0000	28.686	50.00- 150.00	100.00
13.893	13.893 (0.973)	96	683544			22.72- 122.72	68.69
13.893	13.893 (0.973)	98	431220			0.00- 93.33	43.33
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1069934	25.0000	20.454	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	328370			0.00- 80.80	30.69
14.252	14.252 (0.998)	72	358299			0.00- 82.50	33.49
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	1357959	25.0000	30.833	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	842508			14.17- 114.17	62.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	1399291	25.0000	31.731	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	885899			8.68- 108.68	63.31
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	1125039	25.0000	27.644	50.00- 150.00	100.00
14.556	14.556 (1.019)	56	1523051			78.48- 178.48	135.38
14.556	14.556 (1.019)	41	799926			28.22- 128.22	71.10
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	1251974	25.0000	29.328	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	1304242			51.24- 151.24	104.17
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	2429767	25.0000	28.554	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	556679			0.00- 74.11	22.91
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	4820200	25.0000	28.607	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	1570128			0.00- 83.91	32.57
15.109	15.109 (1.058)	41	1154806			0.00- 74.82	23.96
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	1001997	25.0000	29.573	50.00- 150.00	100.00
15.248	15.248 (0.968)	64	314385			0.00- 84.87	31.38
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	930266	25.0000	28.278	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	1955279			164.30- 264.30	210.18
15.358	15.358 (0.975)	57	1019337			57.03- 157.03	109.57
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	986582	25.0000	28.419	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	970387			42.76- 142.76	98.36
16.132	16.132 (1.025)	97	639576			13.18- 113.18	64.83
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	941744	25.0000	27.874	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	676485			19.17- 119.17	71.83
16.575	16.575 (1.053)	41	572162			11.99- 111.99	60.76
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	588621	25.0000	26.242	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	474847			32.59- 132.59	80.67
16.713	16.713 (1.061)	57	149190			0.00- 76.59	25.35
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	1564403	25.0000	30.099	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	956005			11.08- 111.08	61.11
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	1361167	25.0000	29.310	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	431623			0.00- 84.93	31.71
17.625	17.625 (1.119)	39	771742			4.29- 104.29	56.70
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	965620	25.0000	29.722	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	2458556			211.41- 311.41	254.61
17.791	17.791 (1.130)	85	360844			0.00- 90.33	37.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	3259651	25.0000	28.358	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	1973956			12.36- 112.36	60.56
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	1462435	25.0000	30.256	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	468338			0.00- 87.70	32.02
18.427	18.427 (0.920)	39	783853			4.93- 104.93	53.60
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	1128776	25.0000	28.310	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	710798			10.65- 110.65	62.97
18.704	18.704 (0.934)	83	930840			31.08- 131.08	82.46
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	1332337	25.0000	28.760	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	1048496			27.94- 127.94	78.70
18.814	18.814 (0.939)	131	996416			24.34- 124.34	74.79
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	1450261	25.0000	27.573	50.00- 150.00	100.00
18.953	18.953 (0.946)	43	2617757			133.06- 233.06	180.50
18.980	18.980 (0.948)	100	291796			0.00- 70.06	20.12
121 Dibromochloromethane					CAS #: 124-48-1		
19.229	19.229 (0.960)	129	1639081	25.0000	30.918	50.00- 150.00	100.00
19.229	19.229 (0.960)	127	1257659			25.30- 125.30	76.73
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	1761050	25.0000	31.705	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	1652021			47.82- 147.82	93.81
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	2978562	25.0000	28.428	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	933024			0.00- 82.10	31.32
20.059	20.059 (1.001)	77	1926789			27.22- 127.22	64.69
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	1698599	25.0000	29.704	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	5320804			271.39- 371.39	313.25
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	2110463	25.0000	29.858	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	4207316			162.27- 262.27	199.36
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	1980738	25.0000	28.408	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	4173778			160.96- 260.96	210.72
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	3223605	25.0000	27.503	50.00- 150.00	100.00
20.833	20.833 (1.040)	78	1518126			0.00- 97.10	47.09
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	1498083	25.0000	29.915	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	781883			0.00- 98.52	52.19
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	5843107	25.0000	30.148	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	1488230			0.00- 76.11	25.47
21.247	21.247 (1.061)	51	614274			0.00- 61.16	10.51
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	2649810	25.0000	24.768	50.00- 150.00	100.00
21.662	21.662 (1.081)	85	1651607			10.65- 110.65	62.33
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	7064639	25.0000	28.442	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	1556612			0.00- 73.64	22.03
21.745	21.745 (1.086)	105	259252			0.00- 55.84	3.67
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	6192337	25.0000	29.041	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	1775433			0.00- 79.33	28.67
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	5492350	25.0000	28.506	50.00- 150.00	100.00
21.939	21.939 (1.095)	120	2527422			0.00- 94.35	46.02
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	4314803	25.0000	28.089	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	1933171			0.00- 96.40	44.80
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	2465453	25.0000	25.429	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	1548840			12.15- 112.15	62.82
22.823	22.823 (1.139)	111	1051814			0.00- 91.25	42.66
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	2523551	25.0000	27.356	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	1588431			18.64- 118.64	62.94
22.934	22.934 (1.145)	111	1016202			0.00- 91.31	40.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	3600090	25.0000	25.751	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	704749			0.00- 69.56	19.58
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	2014241	25.0000	23.490	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	1278801			11.50- 111.50	63.49
23.404	23.404 (1.168)	111	897151			0.00- 93.59	44.54
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	582788	25.0000	20.475	50.00- 150.00	100.00
25.257	25.257 (1.261)	182	546749			43.27- 143.27	93.82
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	446785	25.0000	20.919	50.00- 150.00	100.00
25.340	25.340 (1.265)	223	276379			15.51- 115.51	61.86
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	87368	25.0000	24.160	50.00- 150.00	100.00
5.460	5.460 (0.382)	43	693261			685.50- 785.50	793.50
29 Isopentane					CAS #: 78-78-4		
8.280	8.280 (0.580)	43	682504	25.0000	25.968	50.00- 150.00	100.00
8.280	8.280 (0.580)	57	479097			17.91- 117.91	70.20
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	1605401	25.0000	28.779	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	770194			0.00- 97.89	47.98
16.354	16.354 (1.145)	55	1481216			47.46- 147.46	92.26
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	505386	25.0000	19.677	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	127429			0.00- 67.50	25.21
12.068	12.068 (0.845)	57	50587			0.00- 63.77	10.01

Data File: /chem/msd1.i/1-19may.b/1051917.d
Report Date: 20-May-2008 11:30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

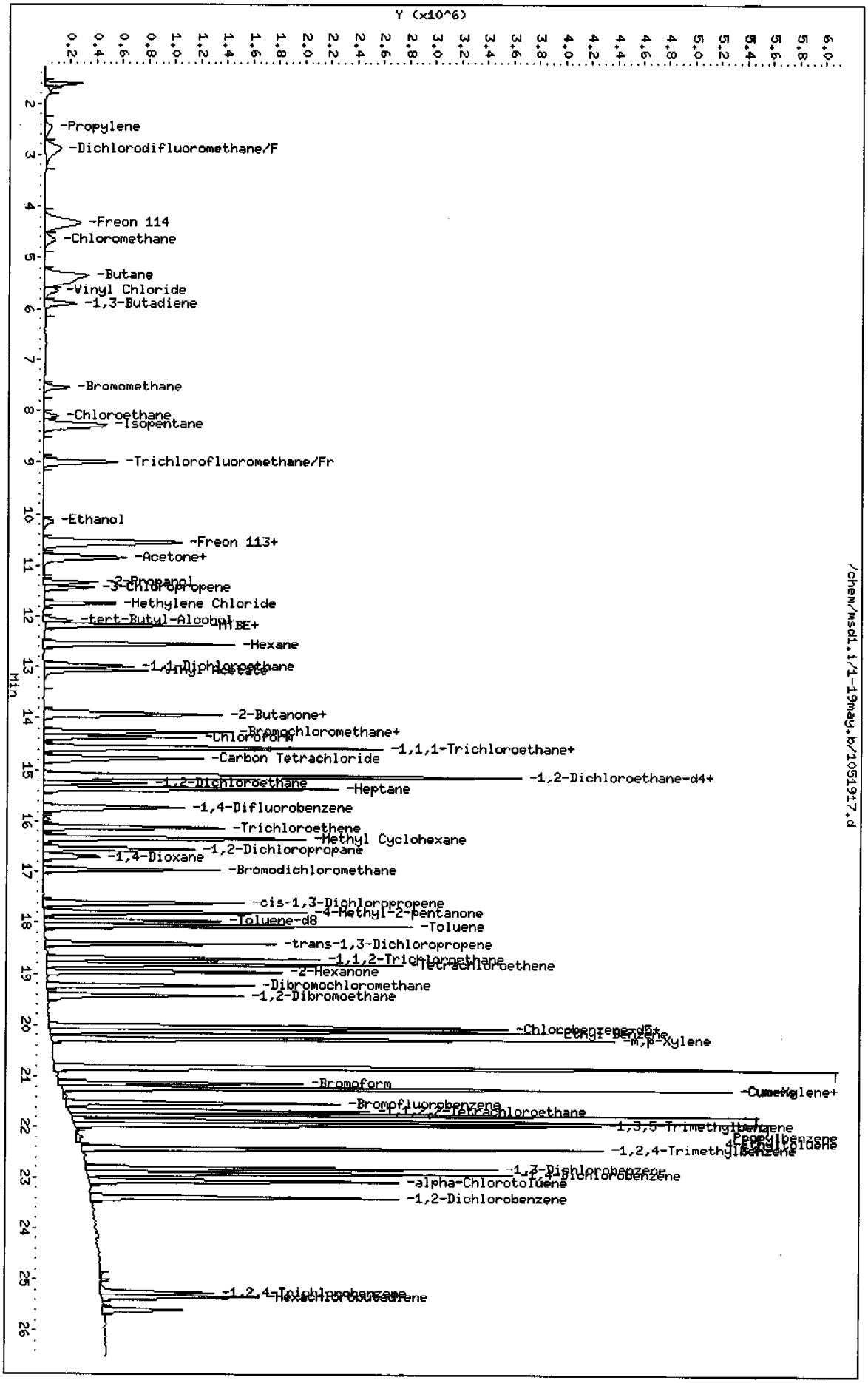
Instrument ID: msd1.i
Lab File ID: 1051917.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->25ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 19:59
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	327508	196505	458511	327508	0.00
95 1,4-Difluorobenze	1675761	1005457	2346065	1675761	0.00
123 Chlorobenzene-d5	1902736	1141642	2663830	1902736	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051917.d
Date : 19-MAY-2008 19:59
Client ID: Level 4
Sample Info: 12.5mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052005.d
Lab Smp Id: ICAL — Client Smp ID: Level 5
Inj Date : 20-MAY-2008 10:59
Operator : lo — Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover — Quant Type: ISTD
Cal Date : 20-MAY-2008 10:59 — Cal File: 1052005.d
Als bottle: 1 — Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: sp22a.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	****	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.282	14.282 (1.000)	130	312076	25.0000		80.00- 120.00		100.00
14.282	14.282 (1.000)	128	246703			29.05- 129.05		79.05
14.255	14.255 (1.000)	49	557015			128.49- 228.49		178.49
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1622087	25.0000		80.00- 120.00		100.00
15.748	15.748 (1.000)	88	250668			0.00- 65.45		15.45
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.034	20.034 (1.000)	117	1805786	25.0000		80.00- 120.00		100.00
20.006	20.006 (1.000)	82	1042207			8.42- 108.42		57.71
19 Freon142b						CAS #: 75-68-3		
4.636	4.636 (0.325)	65	1466529	50.0000	55.633	80.00- 120.00		100.00
4.636	4.636 (0.325)	45	361369			0.00- 75.41		24.64
9 Freon 134a						CAS #: 811-97-2		
2.411	2.411 (0.169)	83	337242	50.0000	55.227	80.00- 120.00		100.00
2.411	2.411 (0.169)	69	269690			32.58- 132.58		79.97

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)								
2.411	2.411	(0.169)	63	36152			0.00- 58.36	10.72
13 Freon 152a						CAS #: 75-37-6		
2.721	2.721	(0.190)	65	312010	50.0000	53.952	80.00- 120.00	100.00
2.721	2.721	(0.190)	51	666992			172.46- 272.46	213.77
2.749	2.749	(0.192)	47	162961			0.63- 100.63	52.23
15 Freon 22						CAS #: 75-45-6		
3.425	3.425	(0.240)	51	1137258	50.0000	54.303	80.00- 120.00	100.00
3.453	3.453	(0.242)	67	180724			0.00- 65.39	15.89
3.425	3.425	(0.240)	85	15915			0.00- 51.20	1.40
25 Methanol						CAS #: 67-56-1		
7.818	7.818	(0.547)	31	1398684	300.000	282.19	80.00- 120.00	100.00
7.818	7.818	(0.547)	32	1117573			29.90- 129.90	79.90
32 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
9.195	9.195	(0.644)	67	1405104	50.0000	56.578	80.00- 120.00	100.00
9.195	9.195	(0.644)	69	425214			0.00- 79.81	30.26
9.195	9.195	(0.644)	35	66364			0.00- 55.10	4.72
40 Freon123a						CAS #: 354-23-4		
10.384	10.384	(0.727)	117	648338	50.0000	58.002	80.00- 120.00	100.00
10.356	10.356	(0.725)	67	928673			96.88- 196.88	143.24
41 Freon123						CAS #: 306-83-2		
10.577	10.577	(0.741)	83	106534	50.0000	56.134	80.00- 120.00	100.00
10.577	10.577	(0.741)	133	22924			0.00- 73.50	21.52
10.577	10.577	(0.741)	85	68994			10.10- 110.10	64.76
66 Isopropyl ether						CAS #: 108-20-3		
12.983	12.983	(0.909)	45	4821886	50.0000	58.671	80.00- 120.00	100.00
13.011	13.011	(0.911)	87	1016872			0.00- 71.33	21.09
12.983	12.983	(0.909)	59	495344			0.00- 60.24	10.27
69 1-Propanol						CAS #: 71-23-8		
13.204	13.204	(0.924)	42	238759	50.0000	60.021	80.00- 120.00	100.00
13.204	13.204	(0.924)	59	255065			47.04- 147.04	106.83
13.204	13.204	(0.924)	41	155524			14.12- 114.12	65.14
72 t-Butylethyl Ether						CAS #: 637-92-3		
13.564	13.564	(0.950)	59	2049003	50.0000	59.437	80.00- 120.00	100.00
13.564	13.564	(0.950)	87	740271			0.00- 86.33	36.13
13.564	13.564	(0.950)	41	358075			0.00- 70.48	17.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.951	13.951 (0.977)	45	487841	50.0000	58.046	80.00- 120.00	100.00
13.951	13.951 (0.977)	61	435150			36.81- 136.81	89.20
13.951	13.951 (0.977)	43	3378151			616.84- 716.84	692.47
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.066)	73	2274918	50.0000	58.183	80.00- 120.00	100.00
15.223	15.223 (1.066)	87	536743			0.00- 73.95	23.59
15.223	15.223 (1.066)	55	655844			0.00- 80.63	28.83
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	3650607	50.0000	54.574	80.00- 120.00	100.00
20.918	20.918 (1.465)	43	5592030			99.63- 199.63	153.18
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	1159321	50.0000	55.878	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	790480			20.92- 120.92	68.18
15.941	15.941 (1.012)	43	652245			4.89- 104.89	56.26
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	2400247	50.0000	57.643	80.00- 120.00	100.00
19.066	19.066 (1.211)	73	803755			0.00- 83.49	33.49
19.066	19.066 (1.211)	43	5597507			183.21- 283.21	233.21
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	2669553	50.0000	51.791	80.00- 120.00	100.00
21.471	21.471 (1.072)	98	1073676			0.00- 90.24	40.22
21.471	21.471 (1.072)	42	1781890			17.74- 117.74	66.75
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.102)	57	6022108	50.0000	52.015	80.00- 120.00	100.00
22.080	22.080 (1.102)	85	4727987			28.51- 128.51	78.51
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd1.i/1-20may.b/1052005.d
Report Date: 20-May-2008 11:59

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

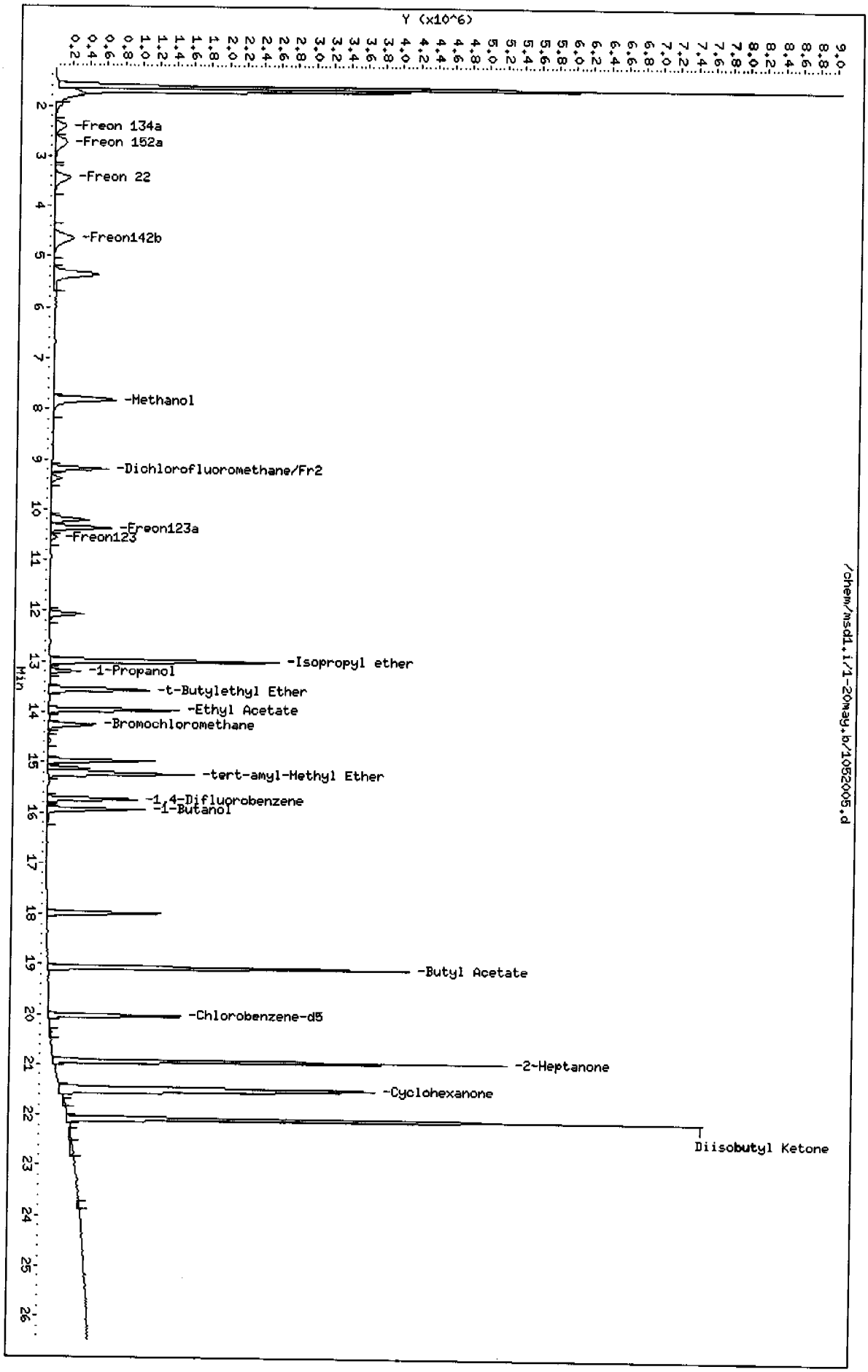
Instrument ID: msd1.i
Lab File ID: 1052005.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	312076	0.00
95 1,4-Difluorobenze	1622087	973252	2270922	1622087	0.00
123 Chlorobenzene-d5	1805786	1083472	2528100	1805786	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-20may.b/10052005.d
Date : 20-MAY-2008 10:59
Client ID: Level 5
Sample Info: 25mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo

Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051913.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 19-MAY-2008 15:47
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 15:47
Cal File: 1051913.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	311243	25.0000			80.00- 120.00	100.00
14.280	14.280 (1.000)	128	242864				28.03- 128.03	78.03
14.252	14.252 (1.000)	49	577844				135.66- 235.66	185.66
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1618588	25.0000			80.00- 120.00	100.00
15.745	15.745 (1.000)	88	256867				0.00- 65.87	15.87
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1862744	25.0000			80.00- 120.00	100.00
20.031	20.031 (1.000)	82	1088781				8.42- 108.42	58.45
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	513720	25.0000	25.448		80.00- 120.00	100.00
15.137	15.137 (1.060)	67	312850				4.08- 104.08	60.90
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1819475	25.0000	24.829		80.00- 120.00	100.00
17.985	17.985 (1.142)	70	194127				0.00- 60.34	10.67

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.985	17.985	(1.142)	100	1209777			15.53- 115.53	66.49
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.524	21.524	(1.075)	174	1005148	25.0000	25.486	80.00- 120.00	100.00
21.524	21.524	(1.075)	95	1598935			109.07- 209.07	159.07
21.524	21.524	(1.075)	176	957758			45.29- 145.29	95.29
12 Propylene						CAS #: 115-07-1		
2.501	2.501	(0.175)	41	360585	50.0000	51.884	80.00- 120.00	100.00
2.501	2.501	(0.175)	42	242370			17.02- 117.02	67.22
2.501	2.501	(0.175)	39	299419			39.39- 139.39	83.04
14 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
2.888	2.888	(0.202)	85	1798174	50.0000	51.121	80.00- 120.00	100.00
2.888	2.888	(0.202)	87	585293			0.00- 73.77	32.55
17 Freon 114						CAS #: 76-14-2		
4.326	4.326	(0.303)	135	1237350	50.0000	52.107	80.00- 120.00	100.00
4.326	4.326	(0.303)	137	383518			0.00- 81.00	31.00
21 Chloromethane						CAS #: 74-87-3		
4.658	4.658	(0.326)	50	744126	50.0000	47.191	80.00- 120.00	100.00
4.658	4.658	(0.326)	52	230433			0.00- 79.64	30.97
23 Vinyl Chloride						CAS #: 75-01-4		
5.625	5.625	(0.394)	62	806945	50.0000	47.759	80.00- 120.00	100.00
5.625	5.625	(0.394)	64	249493			0.00- 76.69	30.92
24 1,3-Butadiene						CAS #: 106-99-0		
5.902	5.902	(0.413)	54	651884	50.0000	52.828	80.00- 120.00	100.00
5.902	5.902	(0.413)	39	634569			35.52- 135.52	97.34
26 Bromomethane						CAS #: 74-83-9		
7.561	7.561	(0.529)	94	610006	50.0000	57.789	80.00- 120.00	100.00
7.561	7.561	(0.529)	96	580461			45.16- 145.16	95.16
28 Chloroethane						CAS #: 75-00-3		
8.114	8.114	(0.568)	64	459776	50.0000	52.353	80.00- 120.00	100.00
8.114	8.114	(0.568)	49	134055			0.00- 79.01	29.16
8.114	8.114	(0.568)	66	138617			0.00- 82.37	30.15
34 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.999	8.999	(0.630)	101	2358673	50.0000	53.022	80.00- 120.00	100.00
8.999	8.999	(0.630)	103	1524903			14.65- 114.65	64.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	374337	50.0000	55.726	80.00- 120.00	100.00
10.132	10.132 (0.710)	43	80303			0.00- 77.66	21.45
10.132	10.132 (0.710)	46	152340			0.00- 93.77	40.70
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	1243369	50.0000	52.999	80.00- 120.00	100.00
10.575	10.575 (0.741)	153	783865			13.04- 113.04	63.04
10.575	10.575 (0.741)	101	1635840			81.57- 181.57	131.57
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	1616509	50.0000	48.967	80.00- 120.00	100.00
10.519	10.519 (0.737)	96	859569			3.17- 103.17	53.17
10.519	10.519 (0.737)	98	547443			0.00- 83.87	33.87
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	527520	50.0000	46.635	80.00- 120.00	100.00
10.879	10.879 (0.762)	43	1738029			272.64- 372.64	329.47
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	1967200	50.0000	50.215	80.00- 120.00	100.00
11.321	11.321 (0.793)	43	360399			0.00- 68.28	18.32
11.321	11.321 (0.793)	59	70529			0.00- 53.80	3.59
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	2681577	50.0000	50.367	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.459	11.459 (0.802)	76	303801	50.0000	60.450	80.00- 120.00	100.00
11.432	11.432 (0.801)	41	1093119			299.76- 399.76	359.81
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	1331277	50.0000	46.037	80.00- 120.00	100.00
11.764	11.764 (0.824)	84	842487			13.28- 113.28	63.28
11.764	11.764 (0.824)	51	403064			0.00- 79.89	30.28
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	988086	50.0000	48.156	80.00- 120.00	100.00
12.151	12.151 (0.851)	57	288091			0.00- 79.16	29.16
12.151	12.151 (0.851)	41	300240			0.00- 78.05	30.39
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	1081098	50.0000	53.284	80.00- 120.00	100.00
12.178	12.178 (0.853)	61	1739285			110.88- 210.88	160.88
12.178	12.178 (0.853)	98	688621			13.03- 113.03	63.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.565	12.565 (0.880)	57	2425088	50.0000	51.307	80.00- 120.00	100.00
12.565	12.565 (0.880)	43	1555392			16.97- 116.97	64.14
12.565	12.565 (0.880)	86	349083			0.00- 64.99	14.39
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	276520	50.0000	55.205	80.00- 120.00	100.00
13.063	13.063 (0.915)	43	3499814			1278.41-1378.41	1265.66
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	2141994	50.0000	61.120	80.00- 120.00	100.00
12.980	12.980 (0.909)	65	646062			0.00- 80.16	30.16
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	626519	50.0000	57.516	80.00- 120.00	100.00
13.920	13.920 (0.975)	43	3044440			435.93- 535.93	485.93
13.948	13.948 (0.977)	57	235067			0.00- 91.43	37.52
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	1769577	50.0000	52.709	80.00- 120.00	100.00
13.893	13.893 (0.973)	96	1225432			19.25- 119.25	69.25
13.920	13.920 (0.975)	98	777903			0.00- 93.96	43.96
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1886953	50.0000	40.390	80.00- 120.00	100.00
14.252	14.252 (0.998)	71	596466			0.00- 81.61	31.61
14.252	14.252 (0.998)	72	626831			0.00- 82.68	33.22
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	2443411	50.0000	56.485	80.00- 120.00	100.00
14.363	14.363 (1.006)	85	1523945			12.37- 112.37	62.37
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	2600789	50.0000	58.530	80.00- 120.00	100.00
14.584	14.584 (1.021)	99	1666030			14.06- 114.06	64.06
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	2030305	50.0000	51.848	80.00- 120.00	100.00
14.556	14.556 (1.019)	56	2737295			84.82- 184.82	134.82
14.556	14.556 (1.019)	41	1425392			20.21- 120.21	70.21
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	2305167	50.0000	54.948	80.00- 120.00	100.00
14.777	14.777 (1.035)	117	2380314			53.26- 153.26	103.26
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	4319242	50.0000	52.020	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	998304			0.00- 73.91	23.11
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	8748238	50.0000	53.396	80.00- 120.00	100.00
15.109	15.109 (1.058)	56	2804665			0.00- 83.45	32.06
15.109	15.109 (1.058)	41	2066523			0.00- 74.52	23.62
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.247	15.247 (0.968)	62	1844212	50.0000	54.617	80.00- 120.00	100.00
15.247	15.247 (0.968)	64	576340			0.00- 83.97	31.25
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	1676261	50.0000	52.038	80.00- 120.00	100.00
15.358	15.358 (0.975)	43	3512657			163.12- 263.12	209.55
15.358	15.358 (0.975)	57	1831041			57.58- 157.58	109.23
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	1790543	50.0000	52.507	80.00- 120.00	100.00
16.132	16.132 (1.025)	130	1720210			46.07- 146.07	96.07
16.132	16.132 (1.025)	97	1155110			14.51- 114.51	64.51
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	1734141	50.0000	52.318	80.00- 120.00	100.00
16.575	16.575 (1.053)	62	1217301			20.20- 120.20	70.20
16.575	16.575 (1.053)	41	1027297			9.24- 109.24	59.24
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	1080415	50.0000	49.913	80.00- 120.00	100.00
16.713	16.713 (1.061)	58	858282			29.44- 129.44	79.44
16.713	16.713 (1.061)	57	262472			0.00- 75.83	24.29
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	2878003	50.0000	55.302	80.00- 120.00	100.00
16.962	16.962 (1.077)	85	1749735			10.80- 110.80	60.80
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	2458845	50.0000	53.528	80.00- 120.00	100.00
17.625	17.625 (1.119)	77	773098			0.00- 81.44	31.44
17.625	17.625 (1.119)	39	1385049			6.33- 106.33	56.33
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	1790776	50.0000	55.120	80.00- 120.00	100.00
17.791	17.791 (1.130)	43	4600222			210.28- 310.28	256.88
17.791	17.791 (1.130)	85	675508			0.00- 89.68	37.72

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.068	18.068	(1.147)	91	5957659	50.0000	52.696	80.00- 120.00	100.00
18.068	18.068	(1.147)	92	3565557			9.85- 109.85	59.85
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.427	18.427	(0.920)	75	2682897	50.0000	54.860	80.00- 120.00	100.00
18.427	18.427	(0.920)	77	849465			0.00- 81.66	31.66
18.427	18.427	(0.920)	39	1428831			3.26- 103.26	53.26
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.704	18.704	(0.934)	97	2069564	50.0000	52.231	80.00- 120.00	100.00
18.704	18.704	(0.934)	99	1282815			11.98- 111.98	61.98
18.704	18.704	(0.934)	83	1714594			32.85- 132.85	82.85
117 Tetrachloroethene						CAS #: 127-18-4		
18.814	18.814	(0.939)	166	2435720	50.0000	52.730	80.00- 120.00	100.00
18.814	18.814	(0.939)	129	1877332			27.08- 127.08	77.08
18.814	18.814	(0.939)	131	1798928			23.86- 123.86	73.86
118 2-Hexanone						CAS #: 591-78-6		
18.980	18.980	(0.948)	58	2757699	50.0000	52.316	80.00- 120.00	100.00
18.952	18.952	(0.946)	43	4989009			130.91- 230.91	180.91
18.980	18.980	(0.948)	100	538010			0.00- 69.88	19.51
121 Dibromochloromethane						CAS #: 124-48-1		
19.257	19.257	(0.961)	129	3028623	50.0000	56.015	80.00- 120.00	100.00
19.229	19.229	(0.960)	127	2345422			25.84- 125.84	77.44
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.450	(0.971)	107	3243106	50.0000	57.426	80.00- 120.00	100.00
19.450	19.450	(0.971)	109	3077045			44.88- 144.88	94.88
124 Chlorobenzene						CAS #: 108-90-7		
20.058	20.058	(1.001)	112	5520564	50.0000	52.812	80.00- 120.00	100.00
20.058	20.058	(1.001)	114	1737652			0.00- 81.48	31.48
20.058	20.058	(1.001)	77	3532733			13.99- 113.99	63.99
125 Ethyl Benzene						CAS #: 100-41-4		
20.141	20.141	(1.006)	106	3074274	50.0000	53.597	80.00- 120.00	100.00
20.141	20.141	(1.006)	91	9922198			271.73- 371.73	322.75
128 m,p-Xylene						CAS #: 108-38-3		
20.280	20.280	(1.012)	106	3919171	50.0000	54.818	80.00- 120.00	100.00
20.280	20.280	(1.012)	91	7839584			159.21- 259.21	200.03
130 o-Xylene						CAS #: 95-47-6		
20.805	20.805	(1.039)	106	3699795	50.0000	53.086	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	7792191			160.61- 260.61	210.61
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	6039714	50.0000	52.087	80.00- 120.00	100.00
20.833	20.833 (1.040)	78	2833993			0.00- 96.92	46.92
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	2825250	50.0000	55.511	80.00- 120.00	100.00
21.137	21.137 (1.055)	171	1479769			2.38- 102.38	52.38
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	11135621	50.0000	56.718	80.00- 120.00	100.00
21.247	21.247 (1.061)	120	2813886			0.00- 75.94	25.27
21.247	21.247 (1.061)	51	1145065			0.00- 60.99	10.28
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	5016541	50.0000	48.405	80.00- 120.00	100.00
21.662	21.662 (1.081)	85	3114518			12.08- 112.08	62.08
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	13635292	50.0000	54.422	80.00- 120.00	100.00
21.745	21.745 (1.086)	120	2906385			0.00- 73.06	21.32
21.745	21.745 (1.086)	105	483819			0.00- 55.27	3.55
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	11812272	50.0000	54.783	80.00- 120.00	100.00
21.883	21.883 (1.092)	120	3315979			0.00- 78.07	28.07
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	10794497	50.0000	55.620	80.00- 120.00	100.00
21.966	21.966 (1.097)	120	4887642			0.00- 94.53	45.28
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	8510509	50.0000	55.139	80.00- 120.00	100.00
22.409	22.409 (1.119)	120	3736634			0.00- 95.90	43.91
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	4849436	50.0000	50.814	80.00- 120.00	100.00
22.823	22.823 (1.139)	148	3004289			12.10- 112.10	61.95
22.823	22.823 (1.139)	111	2056212			0.00- 91.54	42.40
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	4958070	50.0000	53.588	80.00- 120.00	100.00
22.934	22.934 (1.145)	148	3143033			17.32- 117.32	63.39
22.934	22.934 (1.145)	111	2020205			0.00- 91.17	40.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	7270717	50.0000	52.306	80.00- 120.00	100.00
23.100	23.100 (1.153)	126	1414577			0.00- 69.53	19.46
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	4101795	50.0000	49.142	80.00- 120.00	100.00
23.404	23.404 (1.168)	148	2571627			12.70- 112.70	62.70
23.404	23.404 (1.168)	111	1792411			0.00- 93.70	43.70
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	1407936	50.0000	50.350	80.00- 120.00	100.00
25.257	25.257 (1.261)	182	1307637			42.88- 142.88	92.88
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.339	25.339 (1.265)	225	1017736	50.0000	49.109	80.00- 120.00	100.00
25.339	25.339 (1.265)	223	651091			15.12- 115.12	63.97
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	158328	50.0000	47.310	80.00- 120.00	100.00
5.487	5.487 (0.384)	43	1245731			702.60- 802.60	786.80
29 Isopentane					CAS #: 78-78-4		
8.307	8.307 (0.582)	43	1209257	50.0000	48.931	80.00- 120.00	100.00
8.307	8.307 (0.582)	57	844988			18.56- 118.56	69.88
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.353	16.353 (1.145)	83	2942153	50.0000	54.014	80.00- 120.00	100.00
16.353	16.353 (1.145)	98	1400773			0.00- 97.82	47.61
16.353	16.353 (1.145)	55	2701794			46.05- 146.05	91.83
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	858235	50.0000	37.979	80.00- 120.00	100.00
12.068	12.068 (0.845)	41	166751			0.00- 67.50	19.43
12.068	12.068 (0.845)	57	87140			0.00- 63.77	10.15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

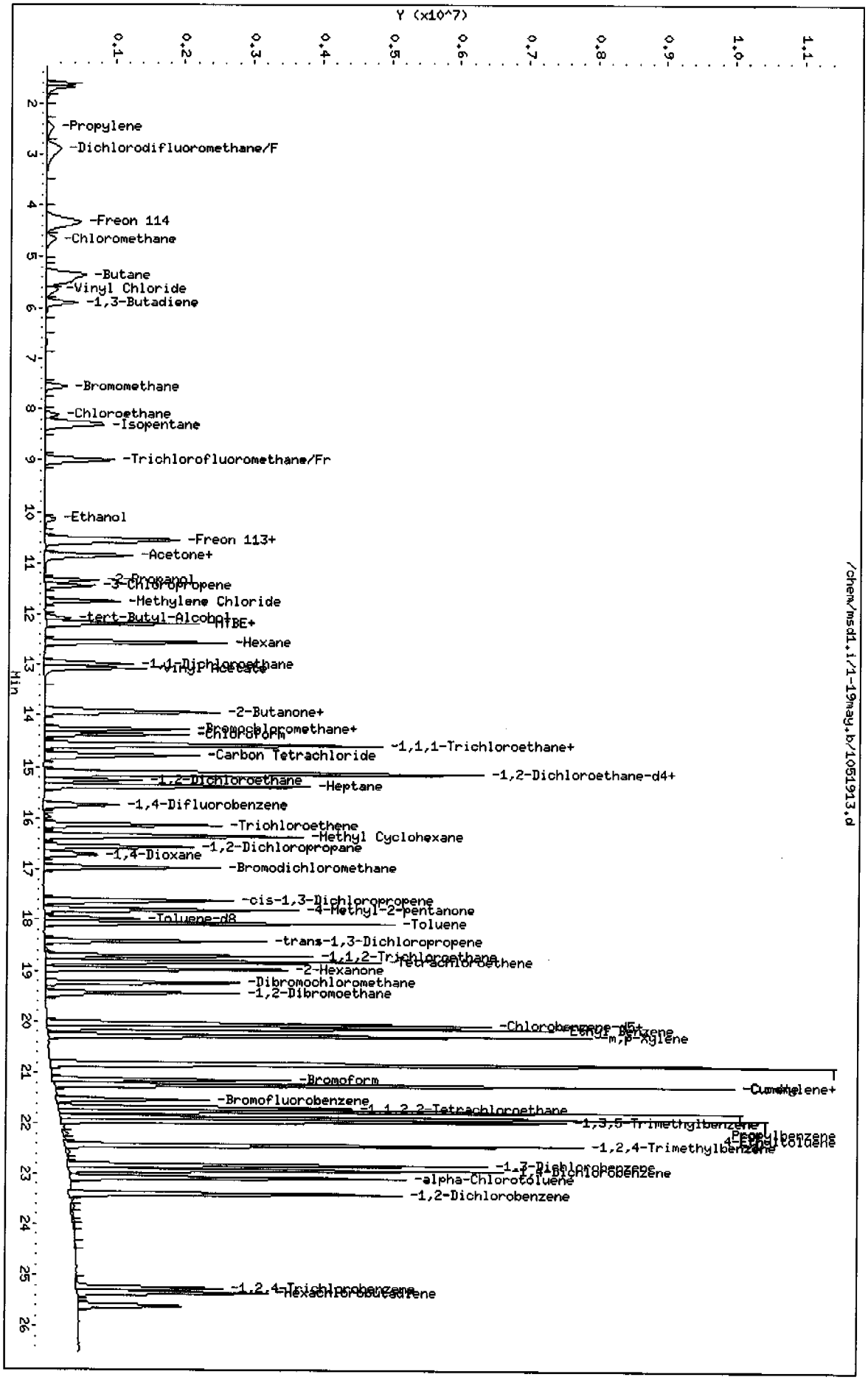
Instrument ID: msd1.i
Lab File ID: 1051913.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	311243	0.00
95 1,4-Difluorobenze	1618588	971153	2266023	1618588	0.00
123 Chlorobenzene-d5	1862744	1117646	2607842	1862744	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051913.d
Date : 19-MAY-2008 15:47
Client ID: Level 5
Sample Info: 25mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051914.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 19-MAY-2008 16:26
Operator : kr
Inst ID: msd1.i
Smp Info : 50mL #1612-3
Misc Info : 200ppbv ->100ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:26
Cal File: 1051914.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	317781	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	252692			27.36- 127.36	79.52
14.252	14.252 (1.000)	49	590454			133.45- 233.45	185.81
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1668207	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	265663			0.00- 65.96	15.93
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1905887	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1124103			8.51- 108.51	58.98
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	555871	25.0000	26.620	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	366050			6.04- 106.04	65.85
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1903361	25.0000	25.167	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	198653			0.00- 60.35	10.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1238292			15.45- 115.45	65.06
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1040922	25.0000	25.660	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1660232			109.02- 209.02	159.50
21.524	21.524 (1.075)	176	996378			45.30- 145.30	95.72
12 Propylene					CAS #: 115-07-1		
2.473	2.473 (0.173)	41	690431	100.000	97.962	50.00- 150.00	100.00
2.473	2.473 (0.173)	42	459731			16.91- 116.91	66.59
2.473	2.473 (0.173)	39	555414			37.15- 137.15	80.44
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	3382538	100.000	95.293	50.00- 150.00	100.00
2.860	2.860 (0.200)	87	1078033			0.00- 75.39	31.87
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	2362792	100.000	97.953	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	734306			0.00- 79.32	31.08
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	1385503	100.000	89.165	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	438740			0.00- 80.15	31.67
23 Vinyl Chloride					CAS #: 75-01-4		
5.625	5.625 (0.394)	62	1516829	100.000	90.103	50.00- 150.00	100.00
5.625	5.625 (0.394)	64	471683			0.00- 77.57	31.10
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	1247743	100.000	99.196	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	1209170			37.41- 137.41	96.91
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	1195850	100.000	108.58	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	1112318			55.55- 155.55	93.01
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	879588	100.000	98.470	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	262766			0.00- 79.23	29.87
8.114	8.114 (0.568)	66	270181			0.00- 81.96	30.72
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	4464199	100.000	98.626	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	2887499			16.35- 116.35	64.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	756158	100.000	107.50	50.00- 150.00	100.00
10.132	10.132 (0.710)	43	153167			0.00- 75.81	20.26
10.132	10.132 (0.710)	46	303218			0.00- 92.85	40.10
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	2319178	100.000	97.442	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	1464340			14.16- 114.16	63.14
10.575	10.575 (0.741)	101	3092619			84.00- 184.00	133.35
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	3087655	100.000	93.170	50.00- 150.00	100.00
10.519	10.519 (0.737)	96	1611407			6.46- 106.46	52.19
10.519	10.519 (0.737)	98	1030936			0.00- 82.24	33.39
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	1011913	100.000	90.417	50.00- 150.00	100.00
10.879	10.879 (0.762)	43	3373982			275.34- 375.34	333.43
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	3769034	100.000	95.609	50.00- 150.00	100.00
11.321	11.321 (0.793)	43	673534			0.00- 68.18	17.87
11.321	11.321 (0.793)	59	141366			0.00- 53.79	3.75
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	5234647	100.000	97.016	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.459	11.459 (0.802)	76	655240	100.000	119.43	50.00- 150.00	100.00
11.432	11.432 (0.801)	41	2398251			303.82- 403.82	366.01
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	2578164	100.000	89.593	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	1626133			10.84- 110.84	63.07
11.764	11.764 (0.824)	51	779624			0.00- 79.96	30.24
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	1925544	100.000	93.424	50.00- 150.00	100.00
12.151	12.151 (0.851)	57	558000			0.00- 77.79	28.98
12.151	12.151 (0.851)	41	560033			0.00- 78.25	29.08
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	2063623	100.000	99.693	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	3325955			112.88- 212.88	161.17
12.178	12.178 (0.853)	98	1317858			13.20- 113.20	63.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.565	12.565 (0.880)	57	4662480	100.000	97.272	50.00- 150.00	100.00
12.565	12.565 (0.880)	43	2995785			16.42- 116.42	64.25
12.565	12.565 (0.880)	86	673721			0.00- 64.88	14.45
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	570739	100.000	108.45	50.00- 150.00	100.00
13.063	13.063 (0.915)	43	7088928			1256.82-1356.82	1242.06
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	4158640	100.000	112.57	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	1249118			0.00- 81.08	30.04
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	1218286	100.000	107.49	50.00- 150.00	100.00
13.920	13.920 (0.975)	43	5958328			467.40- 567.40	489.07
13.920	13.920 (0.975)	57	452028			0.00- 90.57	37.10
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	3380815	100.000	98.900	50.00- 150.00	100.00
13.893	13.893 (0.973)	96	2340178			21.33- 121.33	69.22
13.920	13.920 (0.975)	98	1490662			0.00- 93.61	44.09
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	3667153	100.000	80.608	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	1147732			0.00- 81.06	31.30
14.252	14.252 (0.998)	72	1217054			0.00- 82.78	33.19
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	4686768	100.000	105.04	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	2898963			13.48- 113.48	61.85
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	5093377	100.000	109.58	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	3243057			10.75- 110.75	63.67
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	3856506	100.000	97.146	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	5180992			80.92- 180.92	134.34
14.556	14.556 (1.019)	41	2730836			25.14- 125.14	70.81
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	4493648	100.000	103.89	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	4650108			52.09- 152.09	103.48
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	8400613	100.000	98.467	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	1890966			0.00- 73.68	22.51
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	16975947	100.000	101.18	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	5354603			0.00- 83.07	31.54
15.109	15.109 (1.058)	41	3923607			0.00- 74.24	23.11
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.247	15.247 (0.968)	62	3557102	100.000	101.76	50.00- 150.00	100.00
15.247	15.247 (0.968)	64	1126548			0.00- 83.51	31.67
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	3258276	100.000	98.508	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	6868749			162.65- 262.65	210.81
15.358	15.358 (0.975)	57	3549357			57.85- 157.85	108.93
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	3442836	100.000	98.359	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	3338642			44.27- 144.27	96.97
16.132	16.132 (1.025)	97	2218096			13.70- 113.70	64.43
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	3340461	100.000	98.219	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	2373335			19.75- 119.75	71.05
16.575	16.575 (1.053)	41	1981698			10.91- 110.91	59.32
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	2121111	100.000	96.261	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	1719276			31.42- 131.42	81.06
16.713	16.713 (1.061)	57	537321			0.00- 75.70	25.33
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	5638401	100.000	104.06	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	3435599			10.99- 110.99	60.93
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	4843268	100.000	101.83	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	1528144			0.00- 83.56	31.55
17.625	17.625 (1.119)	39	2699684			4.99- 104.99	55.74
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	3518388	100.000	104.02	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	9156215			210.27- 310.27	260.24
17.791	17.791 (1.130)	85	1319872			0.00- 89.24	37.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	11772181	100.000	100.82	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	7001403			11.28- 111.28	59.47
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	5311517	100.000	104.86	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	1669848			0.00- 85.24	31.44
18.427	18.427 (0.920)	39	2811595			4.20- 104.20	52.93
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	4032162	100.000	99.567	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	2491084			11.14- 111.14	61.78
18.704	18.704 (0.934)	83	3295638			31.56- 131.56	81.73
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	4665455	100.000	98.969	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	3608149			27.65- 127.65	77.34
18.814	18.814 (0.939)	131	3462380			24.22- 124.22	74.21
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	5471536	100.000	101.08	50.00- 150.00	100.00
18.952	18.952 (0.946)	43	10018443			132.53- 232.53	183.10
18.980	18.980 (0.948)	100	1055246			0.00- 69.73	19.29
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	5991081	100.000	106.53	50.00- 150.00	100.00
19.257	19.257 (0.961)	127	4621020			26.10- 126.10	77.13
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	6359366	100.000	108.24	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	6011524			46.78- 146.78	94.53
124 Chlorobenzene					CAS #: 108-90-7		
20.058	20.058 (1.001)	112	10759663	100.000	100.48	50.00- 150.00	100.00
20.058	20.058 (1.001)	114	3349675			0.00- 81.78	31.13
20.058	20.058 (1.001)	77	6884647			21.93- 121.93	63.99
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	5977313	100.000	101.47	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	19890069			273.94- 373.94	332.76
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	7691807	100.000	104.08	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	15605632			157.95- 257.95	202.89
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	7175360	100.000	100.50	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	15393182			161.60- 261.60	214.53
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	12092933	100.000	101.60	50.00- 150.00	100.00
20.833	20.833	(1.040)	78	5600073			0.00- 96.94	46.31
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	5690890	100.000	107.29	50.00- 150.00	100.00
21.137	21.137	(1.055)	171	2951921			0.00- 99.96	51.87
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	21894738	100.000	107.38	50.00- 150.00	100.00
21.247	21.247	(1.061)	120	5494034			0.00- 75.80	25.09
21.247	21.247	(1.061)	51	2224286			0.00- 60.85	10.16
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	10243835	100.000	97.266	50.00- 150.00	100.00
21.690	21.690	(1.083)	85	6251264			11.01- 111.01	61.02
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	23960500	100.000	94.705	50.00- 150.00	100.00
21.745	21.745	(1.086)	120	5780307			0.00- 73.27	24.12
21.745	21.745	(1.086)	105	943438			0.00- 55.00	3.94
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	22622973	100.000	102.02	50.00- 150.00	100.00
21.883	21.883	(1.092)	120	6629081			0.00- 79.07	29.30
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	22565255	100.000	111.11	50.00- 150.00	100.00
21.966	21.966	(1.097)	120	9990592			0.00- 94.49	44.27
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	17617523	100.000	109.45	50.00- 150.00	100.00
22.409	22.409	(1.119)	120	7642331			0.00- 95.48	43.38
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.823	(1.139)	146	10100884	100.000	102.74	50.00- 150.00	100.00
22.823	22.823	(1.139)	148	6299555			12.15- 112.15	62.37
22.823	22.823	(1.139)	111	4214576			0.00- 91.58	41.72
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	10452557	100.000	108.16	50.00- 150.00	100.00
22.934	22.934	(1.145)	148	6510815			16.32- 116.32	62.29
22.934	22.934	(1.145)	111	4190585			0.00- 90.95	40.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	15665413	100.000	107.96	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	3007095			0.00- 69.46	19.20
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	8740333	100.000	101.87	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	5458348			11.93- 111.93	62.45
23.404	23.404 (1.168)	111	3812134			0.00- 93.62	43.62
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.256	25.256 (1.261)	180	4113268	100.000	129.59	50.00- 150.00	100.00
25.256	25.256 (1.261)	182	3862917			43.32- 143.32	93.91
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.339	25.339 (1.265)	225	2776060	100.000	121.53	50.00- 150.00	100.00
25.339	25.339 (1.265)	223	1758396			14.77- 114.77	63.34
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	316062	100.000	94.267	50.00- 150.00	100.00
5.460	5.460 (0.382)	43	2384365			703.05- 803.05	754.40
29 Isopentane					CAS #: 78-78-4		
8.280	8.280 (0.580)	43	2306736	100.000	93.423	50.00- 150.00	100.00
8.307	8.307 (0.582)	57	1579509			18.54- 118.54	68.47
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.353	16.353 (1.145)	83	5659026	100.000	101.40	50.00- 150.00	100.00
16.353	16.353 (1.145)	98	2723142			0.00- 97.88	48.12
16.353	16.353 (1.145)	55	5250510			45.40- 145.40	92.78
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	1640654	100.000	75.471	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	324867			0.00- 67.50	19.80
12.068	12.068 (0.845)	57	168891			0.00- 63.77	10.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

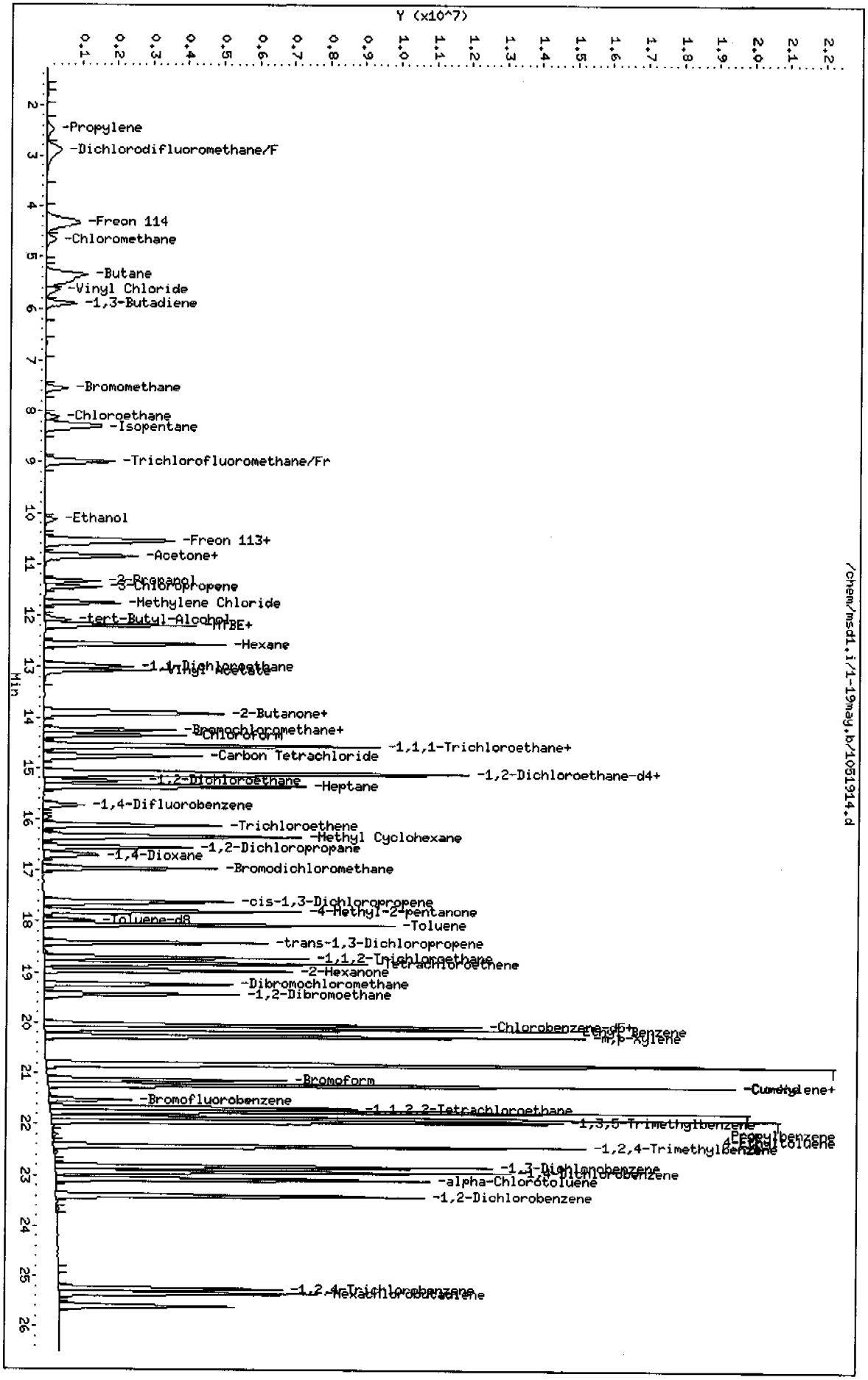
Instrument ID: msd1.i
Lab File ID: 1051914.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->100ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	317781	2.10
95 1,4-Difluorobenze	1618588	971153	2266023	1668207	3.07
123 Chlorobenzene-d5	1862744	1117646	2607842	1905887	2.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051914.d
Date : 19-MAY-2008 16:26
Client ID: Level 6
Sample Info: 50mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052006.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 20-MAY-2008 11:33
Operator : lo
Inst ID: msd1.i
Smp Info : 200mL #1541-142
Misc Info : 200ppbv ->200ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	314012	25.0000		50.00- 150.00	100.00
14.282	14.282 (1.000)	128	238511			28.24- 128.24	75.96
14.255	14.255 (1.000)	49	561936			133.94- 233.94	178.95
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1591700	25.0000		50.00- 150.00	100.00
15.748	15.748 (1.000)	88	245348			0.00- 65.99	15.41
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1776659	25.0000		50.00- 150.00	100.00
20.033	20.033 (1.000)	82	1027556			8.42- 108.42	57.84
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	5530415	200.000	208.50	50.00- 150.00	100.00(A)
4.636	4.636 (0.325)	45	1351918			0.00- 75.41	24.45
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	1267609	200.000	206.30	50.00- 150.00	100.00(A)
2.411	2.411 (0.169)	69	1020733			32.58- 132.58	80.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.411	2.411 (0.169)	63	133083			0.00- 58.36	10.50
13 Freon 152a					CAS #: 75-37-6		
2.749	2.749 (0.192)	65	1174383	200.000	201.82	50.00- 150.00	100.00
2.749	2.749 (0.192)	51	2503230			172.46- 272.46	213.15
2.721	2.721 (0.190)	47	599405			0.63- 100.63	51.04
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	4142101	200.000	196.56	50.00- 150.00	100.00
3.453	3.453 (0.242)	67	669093			0.00- 65.39	16.15
3.453	3.453 (0.242)	85	61374			0.00- 51.20	1.48
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	5195942	1200.00	1041.8	50.00- 150.00	100.00
7.818	7.818 (0.547)	32	3678217			64.72- 164.72	70.79
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	5383908	200.000	215.45	50.00- 150.00	100.00(A)
9.195	9.195 (0.644)	69	1618187			0.00- 79.81	30.06
9.195	9.195 (0.644)	35	285897			0.00- 55.10	5.31
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	2460953	200.000	218.81	50.00- 150.00	100.00(A)
10.384	10.384 (0.727)	67	3514284			96.88- 196.88	142.80
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	400324	200.000	209.63	50.00- 150.00	100.00(A)
10.577	10.577 (0.741)	133	79678			0.00- 73.50	19.90
10.577	10.577 (0.741)	85	252816			10.10- 110.10	63.15
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	18399253	200.000	222.49	50.00- 150.00	100.00(A)
13.010	13.010 (0.911)	87	3765626			0.00- 71.33	20.47
12.983	12.983 (0.909)	59	1808653			0.00- 60.24	9.83
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	975174	200.000	243.63	50.00- 150.00	100.00(A)
13.204	13.204 (0.924)	59	1068682			47.04- 147.04	109.59
13.204	13.204 (0.924)	41	590567			14.12- 114.12	60.56
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.563	13.563 (0.950)	59	8098370	200.000	233.47	50.00- 150.00	100.00(A)
13.563	13.563 (0.950)	87	2919330			0.00- 86.33	36.05
13.536	13.536 (0.948)	41	1366896			0.00- 70.48	16.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.950	13.950 (0.977)	45	1854061	200.000	219.25	50.00- 150.00	100.00(A)
13.950	13.950 (0.977)	61	1646174			36.81- 136.81	88.79
13.950	13.950 (0.977)	43	13093375			616.84- 716.84	706.20
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.222	15.222 (1.066)	73	8550605	200.000	217.34	50.00- 150.00	100.00(A)
15.222	15.222 (1.066)	87	2038710			0.00- 73.95	23.84
15.222	15.222 (1.066)	55	2370852			0.00- 80.63	27.73
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	15902034	200.000	236.26	50.00- 150.00	100.00(A)
20.918	20.918 (1.465)	43	22867085			99.63- 199.63	143.80
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	5130060	200.000	251.98	50.00- 150.00	100.00(A)
15.941	15.941 (1.012)	41	3448438			20.92- 120.92	67.22
15.941	15.941 (1.012)	43	2818861			4.89- 104.89	54.95
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	9527376	200.000	233.17	50.00- 150.00	100.00(A)
19.066	19.066 (1.211)	73	3096010			0.00- 87.23	32.50
19.066	19.066 (1.211)	43	23062749			180.18- 280.18	242.07
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	12049319	200.000	237.60	50.00- 150.00	100.00(A)
21.471	21.471 (1.072)	98	4764199			0.00- 90.24	39.54
21.471	21.471 (1.072)	42	8017173			17.74- 117.74	66.54
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.079	22.079 (1.102)	57	22993489	200.000	201.86	50.00- 150.00	100.00
22.079	22.079 (1.102)	85	20351826			28.61- 128.61	88.51
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052006.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->200ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	314012	0.62
95 1,4-Difluorobenze	1622087	973252	2270922	1591700	-1.87
123 Chlorobenzene-d5	1805786	1083472	2528100	1776659	-1.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

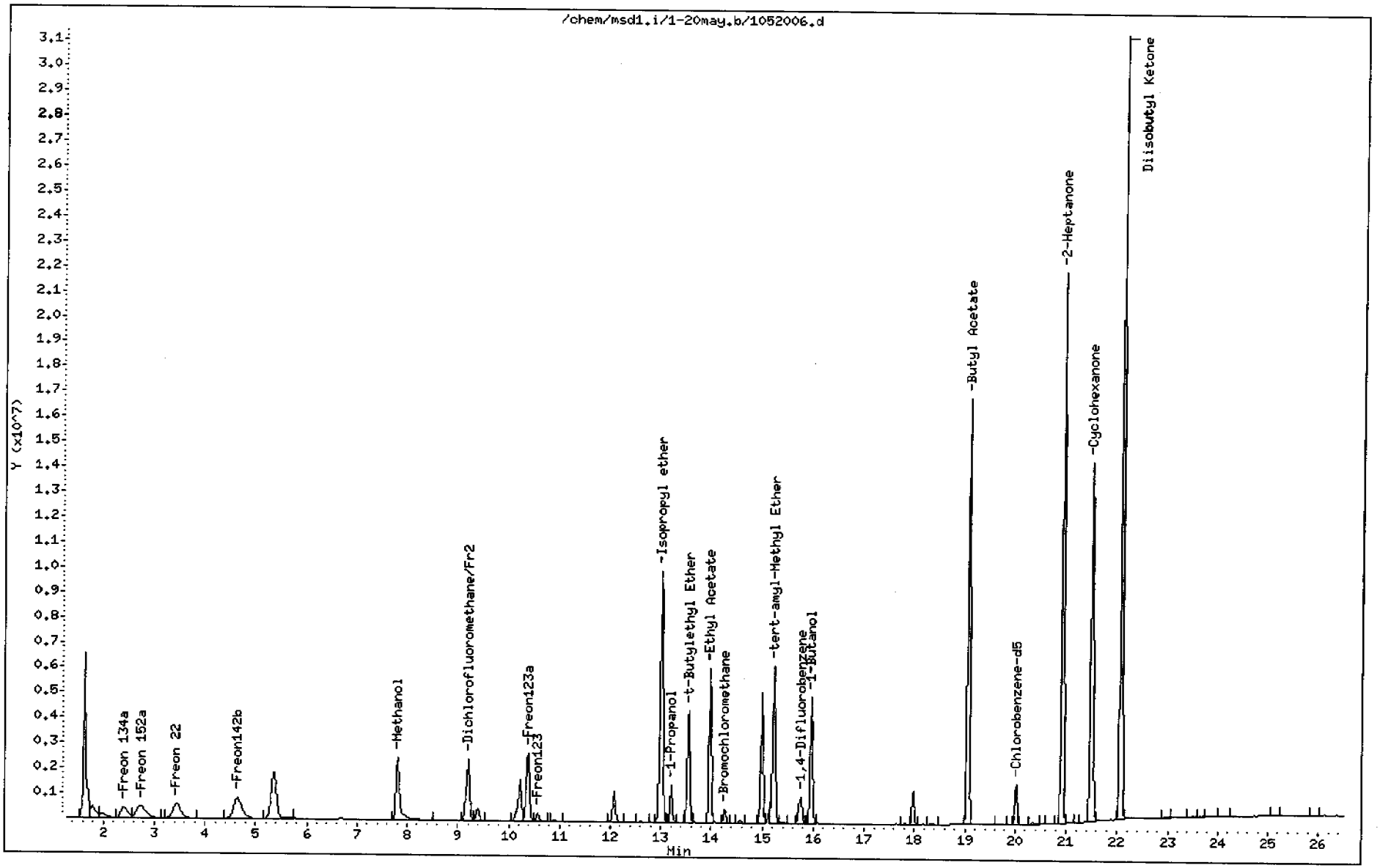
Data File: /chem/msd1.i/1-20may.b/1052006.d
Date : 20-MAY-2008 11:33
Client ID: Level 7
Sample Info: 200mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0422



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051915.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 19-MAY-2008 16:59
Operator : kr
Inst ID: msd1.i
Smp Info : 100mL #1612-3
Misc Info : 200ppbv ->200ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:31 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:59
Cal File: 1051915.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	****	========	=======	=======	==========	*****	
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	321295	25.0000			50.00- 150.00	100.00
14.280	14.280 (1.000)	128	250333				27.36- 127.36	77.91
14.252	14.252 (1.000)	49	599684				133.45- 233.45	186.65
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1704270	25.0000			50.00- 150.00	100.00
15.745	15.745 (1.000)	88	272968				0.00- 65.96	16.02
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1926203	25.0000			50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1134490				8.51- 108.51	58.90
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	585385	25.0000	27.302		50.00- 150.00	100.00
15.137	15.137 (1.060)	67	455555				6.04- 106.04	77.82
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1924287	25.0000	24.919		50.00- 150.00	100.00
17.985	17.985 (1.142)	70	204358				0.00- 60.35	10.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1267101			15.45- 115.45	65.85
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1063071	25.0000	25.792	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1695024			109.02- 209.02	159.45
21.524	21.524 (1.075)	176	1004813			45.30- 145.30	94.52
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	1393208	200.000	196.39	50.00- 150.00	100.00
2.501	2.501 (0.175)	42	938846			16.91- 116.91	67.39
2.474	2.474 (0.173)	39	1119651			37.15- 137.15	80.36
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	6614003	200.000	186.74	50.00- 150.00	100.00
2.888	2.888 (0.202)	87	2132193			0.00- 75.39	32.24
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	4707701	200.000	194.16	50.00- 150.00	100.00
4.354	4.354 (0.305)	137	1473850			0.00- 79.32	31.31
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	2694919	200.000	176.56	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	872786			0.00- 80.15	32.39
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	3007796	200.000	180.21	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	928005			0.00- 77.57	30.85
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	2506410	200.000	197.49	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	2436139			37.41- 137.41	97.20
26 Bromomethane					CAS #: 74-83-9		
7.561	7.561 (0.529)	94	2386479	200.000	211.79	50.00- 150.00	100.00(A)
7.561	7.561 (0.529)	96	2235910			55.55- 155.55	93.69
28 Chloroethane					CAS #: 75-00-3		
8.142	8.142 (0.570)	64	1786155	200.000	198.14	50.00- 150.00	100.00
8.142	8.142 (0.570)	49	522931			0.00- 79.23	29.28
8.142	8.142 (0.570)	66	544047			0.00- 81.66	30.46
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	8936722	200.000	196.05	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	5737359			16.35- 116.35	64.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	1530509	200.000	211.98	50.00- 150.00	100.00(A)
10.132	10.132 (0.710)	43	305751			0.00- 75.81	19.98
10.132	10.132 (0.710)	46	616925			0.00- 92.85	40.31
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	4558860	200.000	191.13	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	2909083			14.16- 114.16	63.81
10.575	10.575 (0.741)	101	6187449			84.00- 184.00	135.72
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.520	10.520 (0.737)	61	6175075	200.000	186.74	50.00- 150.00	100.00
10.520	10.520 (0.737)	96	3247587			6.46- 106.46	52.59
10.520	10.520 (0.737)	98	2070529			0.00- 82.24	33.53
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	2054002	200.000	184.94	50.00- 150.00	100.00
10.879	10.879 (0.762)	43	6875650			275.34- 375.34	334.74
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	7377423	200.000	187.90	50.00- 150.00	100.00
11.321	11.321 (0.793)	43	1310249			0.00- 68.18	17.76
11.321	11.321 (0.793)	59	272731			0.00- 53.79	3.70
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	10808014	200.000	198.43	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.460	11.460 (0.802)	76	1446974	200.000	245.89	50.00- 150.00	100.00(A)
11.432	11.432 (0.801)	41	5224565			303.82- 403.82	361.07
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	5279151	200.000	184.30	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	3329945			10.84- 110.84	63.08
11.764	11.764 (0.824)	51	1574054			0.00- 79.96	29.82
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	3685482	200.000	180.34	50.00- 150.00	100.00
12.151	12.151 (0.851)	57	1067238			0.00- 77.79	28.96
12.151	12.151 (0.851)	41	993835			0.00- 78.25	26.97
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	4151625	200.000	198.64	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	6735924			112.88- 212.88	162.25
12.178	12.178 (0.853)	98	2644991			13.20- 113.20	63.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	9374601	200.000	194.50	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	5930488			16.42- 116.42	63.26
12.566	12.566 (0.880)	86	1348110			0.00- 64.88	14.38
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	1134518	200.000	210.44	50.00- 150.00	100.00(A)
13.063	13.063 (0.915)	43	14852383			1256.82-1356.82	1309.14
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	8456750	200.000	221.54	50.00- 150.00	100.00(A)
12.980	12.980 (0.909)	65	2483866			0.00- 81.08	29.37
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	2430439	200.000	209.98	50.00- 150.00	100.00(A)
13.920	13.920 (0.975)	43	12106660			467.40- 567.40	498.13
13.920	13.920 (0.975)	57	900406			0.00- 90.57	37.05
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	6752986	200.000	196.14	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	4667759			21.33- 121.33	69.12
13.920	13.920 (0.975)	98	2926267			0.00- 93.61	43.33
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	7355772	200.000	165.44	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	2273850			0.00- 81.06	30.91
14.252	14.252 (0.998)	72	2473313			0.00- 82.78	33.62
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	9496044	200.000	208.94	50.00- 150.00	100.00(A)
14.363	14.363 (1.006)	85	5805997			13.48- 113.48	61.14
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	10230304	200.000	214.52	50.00- 150.00	100.00(A)
14.584	14.584 (1.021)	99	6430222			10.75- 110.75	62.85
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	7553060	200.000	190.05	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	10290932			80.92- 180.92	136.25
14.584	14.584 (1.021)	41	5333862			25.14- 125.14	70.62
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.778	14.778 (1.035)	119	9197578	200.000	208.52	50.00- 150.00	100.00(A)
14.778	14.778 (1.035)	117	9523857			52.09- 152.09	103.55
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	16817311	200.000	193.93	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	3699449			0.00- 73.68	22.00
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	33956766	200.000	200.15	50.00- 150.00	100.00(A)
15.109	15.109 (1.058)	56	10631071			0.00- 83.07	31.31
15.109	15.109 (1.058)	41	7791258			0.00- 74.24	22.94
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	7322789	200.000	204.20	50.00- 150.00	100.00(A)
15.248	15.248 (0.968)	64	2293119			0.00- 83.51	31.31
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	6591354	200.000	195.87	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	13930068			162.65- 262.65	211.34
15.358	15.358 (0.975)	57	7108043			57.85- 157.85	107.84
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	6914390	200.000	194.43	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	6586266			44.27- 144.27	95.25
16.132	16.132 (1.025)	97	4413313			13.70- 113.70	63.83
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	6741009	200.000	194.98	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	4766127			19.75- 119.75	70.70
16.575	16.575 (1.053)	41	3943479			10.91- 110.91	58.50
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	4307492	200.000	193.02	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	3451393			31.42- 131.42	80.13
16.713	16.713 (1.061)	57	1078386			0.00- 75.70	25.04
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	11522507	200.000	206.74	50.00- 150.00	100.00(A)
16.962	16.962 (1.077)	85	6959572			10.99- 110.99	60.40
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	9922414	200.000	203.49	50.00- 150.00	100.00(A)
17.625	17.625 (1.119)	77	3059909			0.00- 83.56	30.84
17.625	17.625 (1.119)	39	5410495			4.99- 104.99	54.53
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	7196459	200.000	206.83	50.00- 150.00	100.00(A)
17.791	17.791 (1.130)	43	19101777			210.27- 310.27	265.43
17.791	17.791 (1.130)	85	2700121			0.00- 89.24	37.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	23846877	200.000	199.93	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	14084991			11.28- 111.28	59.06
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	10894545	200.000	210.56	50.00- 150.00	100.00(A)
18.427	18.427 (0.920)	77	3361250			0.00- 85.24	30.85
18.427	18.427 (0.920)	39	5717327			4.20- 104.20	52.48
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	7988217	200.000	195.96	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	4909238			11.14- 111.14	61.46
18.704	18.704 (0.934)	83	6558070			31.56- 131.56	82.10
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	9023702	200.000	191.09	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	7099496			27.65- 127.65	78.68
18.814	18.814 (0.939)	131	6764215			24.22- 124.22	74.96
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	11361697	200.000	206.10	50.00- 150.00	100.00(A)
18.980	18.980 (0.948)	43	21098753			132.53- 232.53	185.70
18.980	18.980 (0.948)	100	2174839			0.00- 69.73	19.14
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	12120300	200.000	210.92	50.00- 150.00	100.00(A)
19.257	19.257 (0.961)	127	9285656			26.10- 126.10	76.61
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	12789780	200.000	213.06	50.00- 150.00	100.00(A)
19.450	19.450 (0.971)	109	12052357			46.78- 146.78	94.23
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	22054737	200.000	203.15	50.00- 150.00	100.00(A)
20.059	20.059 (1.001)	114	6663028			0.00- 81.78	30.21
20.059	20.059 (1.001)	77	13765136			21.93- 121.93	62.41
125 Ethyl Benzene					CAS #: 100-41-4		
20.142	20.142 (1.006)	106	11904683	200.000	199.98	50.00- 150.00	100.00
20.142	20.142 (1.006)	91	30502666			273.94- 373.94	256.22
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	15600068	200.000	207.33	50.00- 150.00	100.00(A)
20.280	20.280 (1.012)	91	27555251			157.95- 257.95	176.64
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	14088951	200.000	196.03	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	28555162			161.60- 261.60	202.68
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	24422474	200.000	202.59	50.00- 150.00	100.00(A)
20.833	20.833 (1.040)	78	11183023			0.00- 96.94	45.79
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	11327738	200.000	209.34	50.00- 150.00	100.00(A)
21.137	21.137 (1.055)	171	5765590			0.00- 99.96	50.90
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	30834079	200.000	155.22	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	10835564			0.00- 75.80	35.14
21.247	21.247 (1.061)	51	4422542			0.00- 60.85	14.34
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.690	21.690 (1.083)	83	20958905	200.000	197.42	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	12518467			11.01- 111.01	59.73
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	33267167	200.000	138.15	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	11488216			0.00- 73.27	34.53
21.745	21.745 (1.086)	105	1837576			0.00- 55.00	5.52
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	32070637	200.000	150.23	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	12971014			0.00- 79.07	40.45
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	39202834	200.000	192.24	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	20107236			0.00- 94.49	51.29
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	30758856	200.000	190.56	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	15368937			0.00- 95.48	49.97
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	20656280	200.000	206.52	50.00- 150.00	100.00(A)
22.823	22.823 (1.139)	148	12666106			12.15- 112.15	61.32
22.823	22.823 (1.139)	111	8505978			0.00- 91.58	41.18
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	21355009	200.000	215.30	50.00- 150.00	100.00(A)
22.934	22.934 (1.145)	148	13209417			16.32- 116.32	61.86
22.934	22.934 (1.145)	111	8388254			0.00- 90.95	39.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	28688410	200.000	196.33	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	6129339			0.00- 69.46	21.37
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	18203848	200.000	208.20	50.00- 150.00	100.00(A)
23.404	23.404 (1.168)	148	11226690			11.93- 111.93	61.67
23.404	23.404 (1.168)	111	7844083			0.00- 93.62	43.09
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	11364295	200.000	306.91	50.00- 150.00	100.00(A)
25.257	25.257 (1.261)	182	10661419			43.32- 143.32	93.82
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	6942661	200.000	273.20	50.00- 150.00	100.00(A)
25.340	25.340 (1.265)	223	4333437			14.77- 114.77	62.42
22 Butane					CAS #: 106-97-8		
5.487	5.487 (0.384)	58	630756	200.000	188.70	50.00- 150.00	100.00
5.487	5.487 (0.384)	43	4753872			703.05- 803.05	753.68
29 Isopentane					CAS #: 78-78-4		
8.308	8.308 (0.582)	43	4567848	200.000	186.14	50.00- 150.00	100.00
8.308	8.308 (0.582)	57	3180256			18.54- 118.54	69.62
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	11547392	200.000	203.85	50.00- 150.00	100.00(A)
16.354	16.354 (1.145)	98	5439139			0.00- 97.88	47.10
16.354	16.354 (1.145)	55	10686110			45.40- 145.40	92.54
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	2861045	200.000	138.21	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	557533			0.00- 67.50	19.49
12.068	12.068 (0.845)	57	310186			0.00- 63.77	10.84

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msd1.i/1-19may.b/1051915.d
Report Date: 20-May-2008 11:31

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

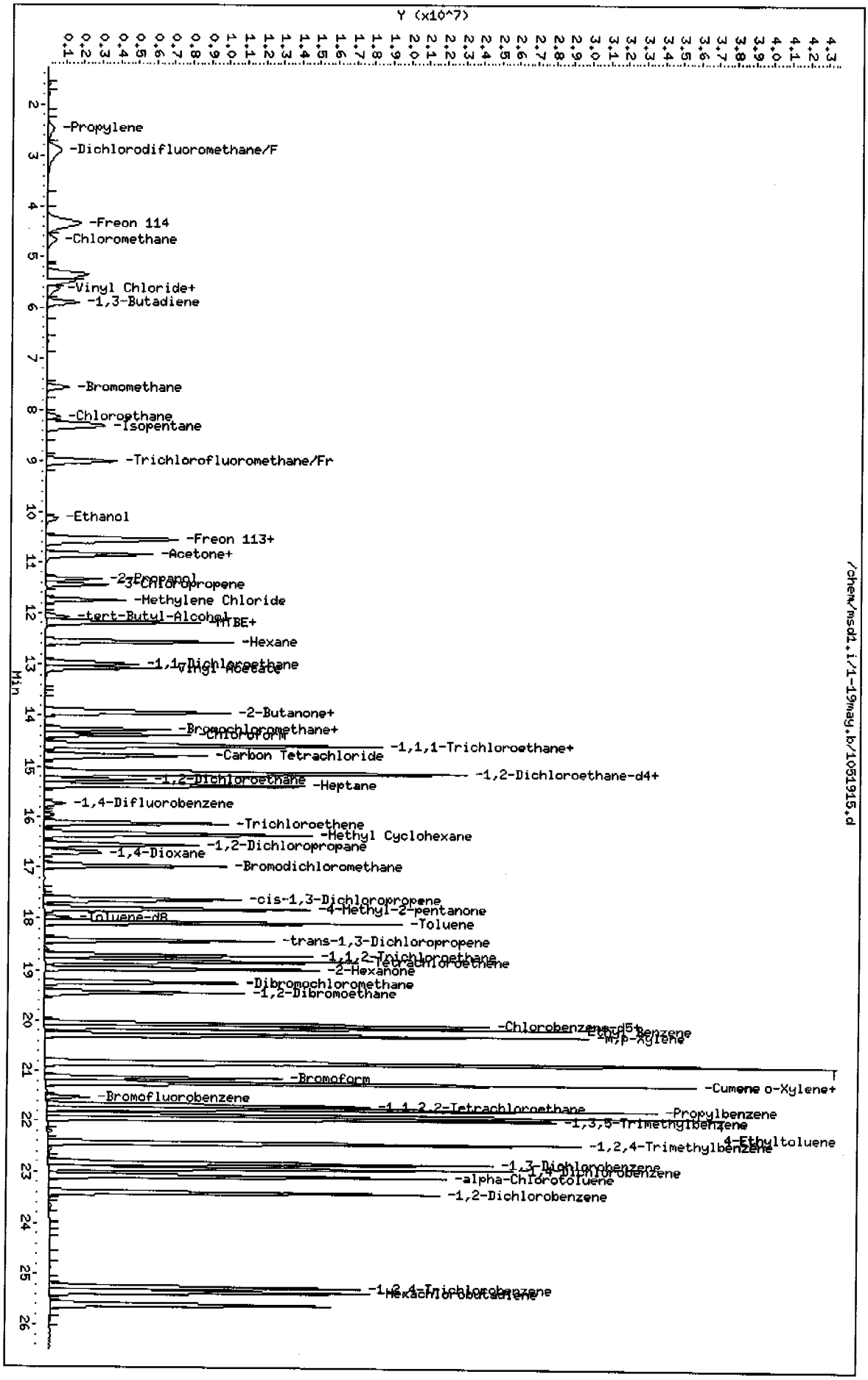
Instrument ID: msd1.i
Lab File ID: 1051915.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->200ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	321295	3.23
95 1,4-Difluorobenze	1618588	971153	2266023	1704270	5.29
123 Chlorobenzene-d5	1862744	1117646	2607842	1926203	3.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051915.d
Date : 19-MAY-2008 16:59
Client ID: Level 7
Sample Info: 100mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805274-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 10521031 Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 5/21/08 08:52 AM

Compound	%Recovery
Freon 12	100
Freon 114	99
Chloromethane	94
Vinyl Chloride	95
1,3-Butadiene	100
Bromomethane	104
Chloroethane	107
Freon 11	103
Ethanol	102
Freon 113	104
1,1-Dichloroethene	95
Acetone	94
2-Propanol	99
Carbon Disulfide	99
Methylene Chloride	93
Methyl tert-butyl ether	103
trans-1,2-Dichloroethene	107
Hexane	104
1,1-Dichloroethane	116
2-Butanone (Methyl Ethyl Ketone)	113
cis-1,2-Dichloroethene	103
Tetrahydrofuran	86
Chloroform	109
1,1,1-Trichloroethane	112
Cyclohexane	104
Carbon Tetrachloride	105
Benzene	104
1,2-Dichloroethane	102
Heptane	103
Trichloroethene	104
1,2-Dichloropropane	102
1,4-Dioxane	99
Bromodichloromethane	104
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	105
Toluene	103
trans-1,3-Dichloropropene	107
1,1,2-Trichloroethane	107
Tetrachloroethene	108

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805274-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052103 Date Collection: NA
Dil. Factor: 1.00 Date Analysis: 5/21/08 08:52 AM

Compound	%Recovery
2-Hexanone	104
Dibromochloromethane	109
1,2-Dibromoethane (EDB)	112
Chlorobenzene	105
Ethyl Benzene	106
m,p-Xylene	108
o-Xylene	104
Styrene	102
Bromoform	107
1,1,2,2-Tetrachloroethane	95
4-Ethyltoluene	112
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	104
1,3-Dichlorobenzene	94
1,4-Dichlorobenzene	97
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	90
1,2,4-Trichlorobenzene	66 Q
Hexachlorobutadiene	73
Chlorodifluoromethane	108
Methanol	128
n-Butanol	109
Propylene	97

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

0434

Data File: /chem/msd1.i/1-21may.b/1052103.d
Report Date: 21-May-2008 09:15

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052103.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-21may.b/t14q519b.m

Injection Date: 21-MAY-2008 08:52
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.68198	0.010	-0.81687	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.12052	0.010	1.08031	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.53157	0.010	0.63101	30.00000	Averaged
12 Propylene	0.55198	0.53710	0.010	2.69490	30.00000	Averaged
14 Dichlorodifluoromethane/Fr1	2.75595	2.74743	0.010	0.30901	30.00000	Averaged
17 Freon 114	1.88665	1.87335	0.010	0.70484	30.00000	Averaged
21 Chloromethane	1.18763	1.11266	0.010	6.31269	30.00000	Averaged
23 Vinyl Chloride	1.29868	1.23568	0.010	4.85059	30.00000	Averaged
24 1,3-Butadiene	0.98750	0.99252	0.010	-0.50859	30.00000	Averaged
26 Bromomethane	0.87679	0.91021	0.010	-3.81190	30.00000	Averaged
28 Chloroethane	0.70142	0.74795	0.010	-6.63288	30.00000	Averaged
34 Trichlorofluoromethane/Fr11	3.54692	3.64181	0.010	-2.67515	30.00000	Averaged
38 Ethanol	0.56181	0.57353	0.010	-2.08681	30.00000	Averaged
43 Freon 113	1.85594	1.92255	0.010	-3.58858	30.00000	Averaged
44 1,1-Dichloroethene	2.57302	2.45032	0.010	4.76862	30.00000	Averaged
45 Acetone	0.86419	0.81650	0.010	5.51807	30.00000	Averaged
46 2-Propanol	3.05508	3.03339	0.010	0.71013	30.00000	Averaged
48 Carbon Disulfide	4.23812	4.20776	0.010	0.71616	30.00000	Averaged
50 3-Chloropropene	0.45789	0.58340	0.010	-27.40944	30.00000	Averaged
54 Methylene Chloride	2.22886	2.06438	0.010	7.37943	30.00000	Averaged
58 MTBE	1.59019	1.63653	0.010	-2.91447	30.00000	Averaged
59 trans-1,2-Dichloroethene	1.62625	1.73748	0.010	-6.83972	30.00000	Averaged
64 Hexane	3.75026	3.88685	0.010	-3.64211	30.00000	Averaged
67 Vinyl Acetate	0.41948	0.46736	0.010	-11.41369	30.00000	Averaged
68 1,1-Dichloroethane	2.97028	3.43394	0.010	-15.61012	30.00000	Averaged
75 2-Butanone	0.90063	1.01439	0.010	-12.63139	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.67894	2.76011	0.010	-3.03013	30.00000	Averaged
78 Tetrahydrofuran	3.45948	2.97601	0.010	13.97536	30.00000	Averaged
81 Chloroform	3.53636	3.86856	0.010	-9.39366	30.00000	Averaged
83 1,1,1-Trichloroethane	3.71062	4.14869	0.010	-11.80562	30.00000	Averaged
84 Cyclohexane	3.09231	3.21801	0.010	-4.06501	30.00000	Averaged
85 Carbon Tetrachloride	3.43205	3.60870	0.010	-5.14705	30.00000	Averaged
88 2,2,4-Trimethylpentane	13.20094	13.87223	0.010	-5.08515	30.00000	Averaged
91 Benzene	1.27209	1.31915	0.010	-3.69936	30.00000	Averaged
93 1,2-Dichloroethane	0.52605	0.53878	0.010	-2.41927	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i Injection Date: 21-MAY-2008 08:52
Lab File ID: 1052103.d Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Analysis Type: AIR Init. Cal. Times: 13:23 11:33
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd1.i/1-21may.b/t14q519b.m

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94	Heptane	0.49365	0.51005	0.010	-3.32215	30.00000	Averaged	
97	Trichloroethene	0.52165	0.54151	0.010	-3.80667	30.00000	Averaged	
102	1,2-Dichloropropane	0.50714	0.52001	0.010	-2.53749	30.00000	Averaged	
103	1,4-Dioxane	0.32736	0.32506	0.010	0.70322	30.00000	Averaged	
106	Bromodichloromethane	0.81756	0.85447	0.010	-4.51541	30.00000	Averaged	
109	cis-1,3-Dichloropropene	0.71526	0.73881	0.010	-3.29162	30.00000	Averaged	
110	4-Methyl-2-pentanone	0.51039	0.53464	0.010	-4.75172	30.00000	Averaged	
114	Toluene	1.74969	1.80732	0.010	-3.29398	30.00000	Averaged	
115	trans-1,3-Dichloropropene	0.67152	0.72011	0.010	-7.23601	30.00000	Averaged	
116	1,1,2-Trichloroethane	0.52907	0.56427	0.010	-6.65189	30.00000	Averaged	
117	Tetrachloroethene	0.61290	0.66007	0.010	-7.69716	30.00000	Averaged	
118	2-Hexanone	0.71548	0.74313	0.010	-3.86410	30.00000	Averaged	
121	Dibromochloromethane	0.74584	0.81032	0.010	-8.64598	30.00000	Averaged	
122	1,2-Dibromoethane	0.77913	0.86901	0.010	-11.53572	30.00000	Averaged	
124	Chlorobenzene	1.40905	1.47740	0.010	-4.85115	30.00000	Averaged	
125	Ethyl Benzene	0.77264	0.82164	0.010	-6.34142	30.00000	Averaged	
128	m,p-Xylene	0.97657	1.05141	0.010	-7.66400	30.00000	Averaged	
130	o-Xylene	0.93283	0.97251	0.010	-4.25384	30.00000	Averaged	
131	Styrene	1.56461	1.60399	0.010	-2.51661	30.00000	Averaged	
133	Bromoform	0.70231	0.75163	0.010	-7.02174	30.00000	Averaged	
134	Cumene	2.57828	2.93419	0.010	-13.80421	30.00000	Averaged	
138	1,1,2,2-Tetrachloroethane	1.37791	1.30837	0.010	5.04672	30.00000	Averaged	
140	Propylbenzene	3.12538	3.56606	0.010	-14.10000	30.00000	Averaged	
144	4-Ethyltoluene	2.77069	3.11611	0.010	-12.46687	30.00000	Averaged	
146	1,3,5-Trimethylbenzene	2.64680	2.70468	0.010	-2.18652	30.00000	Averaged	
152	1,2,4-Trimethylbenzene	2.09493	2.17592	0.010	-3.86568	30.00000	Averaged	
158	1,3-Dichlorobenzene	1.29813	1.22360	0.010	5.74082	30.00000	Averaged	
159	1,4-Dichlorobenzene	1.28732	1.24661	0.010	3.16243	30.00000	Averaged	
162	alpha-Chlorotoluene	1.89648	1.84139	0.010	2.90515	30.00000	Averaged	
164	1,2-Dichlorobenzene	1.13478	1.02431	0.010	9.73536	30.00000	Averaged	
169	1,2,4-Trichlorobenzene	0.48058	0.31745	0.010	33.94431	30.00000	Averaged	<-
170	Hexachlorobutadiene	0.32982	0.24069	0.010	27.02219	30.00000	Averaged	
29	Isopentane	1.90941	1.94862	0.010	-2.05391	30.00000	Averaged	
22	Butane	0.26009	0.24801	0.010	4.64559	30.00000	Averaged	
99	Methyl Cyclohexane	4.40757	4.66845	0.010	-5.91893	30.00000	Averaged	

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052103.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-21may.b/t14q519b.m

Injection Date: 21-MAY-2008 08:52
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
57 tert-Butyl-Alcohol	1.61070	1.51502	0.010	5.94027	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052103.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 21-MAY-2008 08:52
Operator : lo Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 50ppbv (200ppbv)
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:15 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane						CAS #: 74-97-5		
14.282	14.282 (1.000)	130	310538	25.0000			80.00- 120.00	100.00
14.282	14.282 (1.000)	128	245120				28.93- 128.93	78.93
14.255	14.255 (1.000)	49	565261				132.03- 232.03	182.03
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1646495	25.0000			80.00- 120.00	100.00
15.748	15.748 (1.000)	88	259528				0.00- 65.76	15.76
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1819110	25.0000			80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1066466				8.42- 108.42	58.63
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.139	15.139 (1.060)	65	522319	25.0000	25.204		80.00- 120.00	100.00
15.139	15.139 (1.060)	67	307717				6.04- 106.04	58.91
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.987	17.987 (1.142)	98	1844937	25.0000	24.730		80.00- 120.00	100.00
17.960	17.960 (1.140)	70	193371				0.00- 60.35	10.48

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.960	17.960	(1.140)	100	1209503			15.45- 115.45	65.56
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.526	21.526	(1.075)	174	966981	25.0000	24.842	80.00- 120.00	100.00
21.526	21.526	(1.075)	95	1552591			110.56- 210.56	160.56
21.526	21.526	(1.075)	176	922521			45.40- 145.40	95.40
12 Propylene						CAS #: 115-07-1		
2.467	2.467	(0.173)	41	333582	50.0000	48.652	80.00- 120.00	100.00
2.467	2.467	(0.173)	42	218226			16.91- 116.91	65.42
2.495	2.495	(0.175)	39	270578			37.15- 137.15	81.11
14 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
2.890	2.890	(0.202)	85	1706363	50.0000	49.845	80.00- 120.00	100.00
2.890	2.890	(0.202)	87	549810			0.00- 75.39	32.22
17 Freon 114						CAS #: 76-14-2		
4.326	4.326	(0.303)	135	1163492	50.0000	49.648	80.00- 120.00	100.00
4.326	4.326	(0.303)	137	368592			0.00- 81.68	31.68
21 Chloromethane						CAS #: 74-87-3		
4.636	4.636	(0.325)	50	691048	50.0000	46.844	80.00- 120.00	100.00
4.636	4.636	(0.325)	52	220522			0.00- 80.15	31.91
23 Vinyl Chloride						CAS #: 75-01-4		
5.621	5.621	(0.394)	62	767453	50.0000	47.575	80.00- 120.00	100.00
5.621	5.621	(0.394)	64	232021			0.00- 77.57	30.23
24 1,3-Butadiene						CAS #: 106-99-0		
5.903	5.903	(0.413)	54	616432	50.0000	50.254	80.00- 120.00	100.00
5.903	5.903	(0.413)	39	595829			37.41- 137.41	96.66
26 Bromomethane						CAS #: 74-83-9		
7.536	7.536	(0.528)	94	565311	50.0000	51.906	80.00- 120.00	100.00
7.536	7.536	(0.528)	96	522586			42.44- 142.44	92.44
28 Chloroethane						CAS #: 75-00-3		
8.128	8.128	(0.569)	64	464531	50.0000	53.316	80.00- 120.00	100.00
8.128	8.128	(0.569)	49	132692			0.00- 79.23	28.56
8.128	8.128	(0.569)	66	144122			0.00- 81.66	31.03
34 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
9.001	9.001	(0.630)	101	2261838	50.0000	51.338	80.00- 120.00	100.00
9.001	9.001	(0.630)	103	1461639			14.62- 114.62	64.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.135	10.135 (0.710)	45	356205	50.0000	51.043	80.00- 120.00	100.00
10.135	10.135 (0.710)	43	69045			0.00- 75.81	19.38
10.135	10.135 (0.710)	46	145979			0.00- 92.85	40.98
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	1194047	50.0000	51.794	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	748006			12.64- 112.64	62.64
10.577	10.577 (0.741)	101	1599393			83.95- 183.95	133.95
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	1521837	50.0000	47.616	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	819721			3.86- 103.86	53.86
10.522	10.522 (0.737)	98	534075			0.00- 85.09	35.09
45 Acetone					CAS #: 67-64-1		
10.881	10.881 (0.762)	58	507108	50.0000	47.241	80.00- 120.00	100.00
10.881	10.881 (0.762)	43	1672204			275.34- 375.34	329.75
46 2-Propanol					CAS #: 67-63-0		
11.324	11.324 (0.793)	45	1883963	50.0000	49.645	80.00- 120.00	100.00
11.324	11.324 (0.793)	43	345143			0.00- 68.18	18.32
11.324	11.324 (0.793)	59	70492			0.00- 53.79	3.74
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.854 (0.760)	76	2613341	50.0000	49.642	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.434	11.434 (0.801)	76	362333	50.0000	63.705	80.00- 120.00	100.00
11.434	11.434 (0.801)	41	1308099			303.82- 403.82	361.02
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	1282138	50.0000	46.310	80.00- 120.00	100.00
11.766	11.766 (0.824)	84	817659			13.77- 113.77	63.77
11.739	11.739 (0.822)	51	383967			0.00- 79.96	29.95
58 MTBE					CAS #: 1634-04-4		
12.153	12.153 (0.851)	73	1016411	50.0000	51.457	80.00- 120.00	100.00
12.153	12.153 (0.851)	57	292405			0.00- 78.77	28.77
12.153	12.153 (0.851)	41	301616			0.00- 78.25	29.67
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.181	12.181 (0.853)	96	1079109	50.0000	53.420	80.00- 120.00	100.00
12.181	12.181 (0.853)	61	1690585			106.66- 206.66	156.66
12.181	12.181 (0.853)	98	690683			13.20- 113.20	64.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.568	12.568 (0.880)	57	2414030	50.0000	51.821	80.00- 120.00	100.00
12.568	12.568 (0.880)	43	1566872			16.42- 116.42	64.91
12.568	12.568 (0.880)	86	355276			0.00- 64.88	14.72
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.915)	86	290264	50.0000	55.707	80.00- 120.00	100.00
13.066	13.066 (0.915)	43	3562845			1256.82-1356.82	1227.45
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.909)	63	2132737	50.0000	57.805	80.00- 120.00	100.00
12.983	12.983 (0.909)	65	641606			0.00- 80.08	30.08
75 2-Butanone					CAS #: 78-93-3		
13.923	13.923 (0.975)	72	630015	50.0000	56.316	80.00- 120.00	100.00
13.923	13.923 (0.975)	43	2966282			420.83- 520.83	470.83
13.923	13.923 (0.975)	57	235961			0.00- 90.57	37.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.973)	61	1714241	50.0000	51.515	80.00- 120.00	100.00
13.895	13.895 (0.973)	96	1211945			20.70- 120.70	70.70
13.895	13.895 (0.973)	98	764979			0.00- 94.62	44.62
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (0.998)	42	1848328	50.0000	43.012	80.00- 120.00	100.00
14.255	14.255 (0.998)	71	588458			0.00- 81.84	31.84
14.255	14.255 (0.998)	72	625566			0.00- 82.78	33.84
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2402669	50.0000	54.697	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1493012			12.14- 112.14	62.14
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.586 (1.021)	97	2576650	50.0000	55.903	80.00- 120.00	100.00
14.586	14.586 (1.021)	99	1629093			13.23- 113.23	63.23
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.019)	84	1998629	50.0000	52.032	80.00- 120.00	100.00
14.559	14.559 (1.019)	56	2663973			83.29- 183.29	133.29
14.559	14.559 (1.019)	41	1388883			19.49- 119.49	69.49
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	2241274	50.0000	52.574	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	2309094			53.03- 153.03	103.03
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.112	15.112 (1.058)	57	8615711	50.0000	52.542	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.112	15.112 (1.058)	56	2779160			0.00- 83.07	32.26
15.112	15.112 (1.058)	41	2018813			0.00- 74.24	23.43
91 Benzene					CAS #: 71-43-2		
15.139	15.139 (0.961)	78	4343951	50.0000	51.850	80.00- 120.00	100.00
15.139	15.139 (0.961)	77	987173			0.00- 73.68	22.73
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	1774188	50.0000	51.210	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	565988			0.00- 83.51	31.90
94 Heptane					CAS #: 142-82-5		
15.361	15.361 (0.975)	71	1679574	50.0000	51.661	80.00- 120.00	100.00
15.361	15.361 (0.975)	43	3502106			162.65- 262.65	208.51
15.361	15.361 (0.975)	57	1814931			57.85- 157.85	108.06
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1783188	50.0000	51.903	80.00- 120.00	100.00
16.135	16.135 (1.025)	130	1721394			46.53- 146.53	96.53
16.135	16.135 (1.025)	97	1158759			14.98- 114.98	64.98
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.577	16.577 (1.053)	63	1712389	50.0000	51.269	80.00- 120.00	100.00
16.577	16.577 (1.053)	62	1216942			21.07- 121.07	71.07
16.550	16.550 (1.051)	41	1008857			8.92- 108.92	58.92
103 1,4-Dioxane					CAS #: 123-91-1		
16.715	16.715 (1.061)	88	1070418	50.0000	49.648	80.00- 120.00	100.00
16.688	16.688 (1.060)	58	852205			29.61- 129.61	79.61
16.688	16.688 (1.060)	57	264144			0.00- 75.70	24.68
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	2813777	50.0000	52.258	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	1728087			11.42- 111.42	61.42
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.628	17.628 (1.119)	75	2432887	50.0000	51.646	80.00- 120.00	100.00
17.628	17.628 (1.119)	77	766779			0.00- 81.52	31.52
17.628	17.628 (1.119)	39	1343303			5.21- 105.21	55.21
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.794	17.794 (1.130)	58	1760562	50.0000	52.376	80.00- 120.00	100.00
17.794	17.794 (1.130)	43	4483589			210.27- 310.27	254.67
17.794	17.794 (1.130)	85	663873			0.00- 89.24	37.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	5951493	50.0000	51.647	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	3554987			9.73- 109.73	59.73
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.430	18.430 (0.920)	75	2619928	50.0000	53.618	80.00- 120.00	100.00
18.430	18.430 (0.920)	77	830821			0.00- 81.71	31.71
18.430	18.430 (0.920)	39	1387269			2.95- 102.95	52.95
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	2052921	50.0000	53.326	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	1264521			11.60- 111.60	61.60
18.706	18.706 (0.934)	83	1670598			31.38- 131.38	81.38
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	2401483	50.0000	53.848	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	1860052			27.45- 127.45	77.45
18.817	18.817 (0.939)	131	1784908			24.33- 124.33	74.33
118 2-Hexanone					CAS #: 591-78-6		
18.955	18.955 (0.946)	58	2703662	50.0000	51.932	80.00- 120.00	100.00
18.955	18.955 (0.946)	43	4840872			129.05- 229.05	179.05
18.983	18.983 (0.948)	100	515121			0.00- 69.73	19.05
121 Dibromochloromethane					CAS #: 124-48-1		
19.232	19.232 (0.960)	129	2948124	50.0000	54.323	80.00- 120.00	100.00
19.232	19.232 (0.960)	127	2265024			26.10- 126.10	76.83
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.453	19.453 (0.971)	107	3161638	50.0000	55.768	80.00- 120.00	100.00
19.453	19.453 (0.971)	109	2997298			44.80- 144.80	94.80
124 Chlorobenzene					CAS #: 108-90-7		
20.061	20.061 (1.001)	112	5375121	50.0000	52.426	80.00- 120.00	100.00
20.061	20.061 (1.001)	114	1690379			0.00- 81.45	31.45
20.061	20.061 (1.001)	77	3490253			14.93- 114.93	64.93
125 Ethyl Benzene					CAS #: 100-41-4		
20.144	20.144 (1.006)	106	2989313	50.0000	53.171	80.00- 120.00	100.00
20.144	20.144 (1.006)	91	9595826			273.94- 373.94	321.00
128 m,p-Xylene					CAS #: 108-38-3		
20.282	20.282 (1.012)	106	3825274	50.0000	53.832	80.00- 120.00	100.00
20.282	20.282 (1.012)	91	7602971			157.95- 257.95	198.76
130 o-Xylene					CAS #: 95-47-6		
20.808	20.808 (1.039)	106	3538200	50.0000	52.127	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.808	20.808	(1.039)	91	7529130			162.80- 262.80	212.80
131 Styrene						CAS #: 100-42-5		
20.835	20.835	(1.040)	104	5835658	50.0000	51.258	80.00- 120.00	100.00
20.835	20.835	(1.040)	78	2755449			0.00- 97.22	47.22
133 Bromoform						CAS #: 75-25-2		
21.139	21.139	(1.055)	173	2734585	50.0000	53.511	80.00- 120.00	100.00
21.139	21.139	(1.055)	171	1414040			1.71- 101.71	51.71
134 Cumene						CAS #: 98-82-8		
21.250	21.250	(1.061)	105	10675232	50.0000	56.902	80.00- 120.00	100.00
21.250	21.250	(1.061)	120	2660306			0.00- 75.80	24.92
21.250	21.250	(1.061)	51	1098977			0.00- 60.85	10.29
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.665	21.665	(1.081)	83	4760155	50.0000	47.477	80.00- 120.00	100.00
21.665	21.665	(1.081)	85	2951055			11.99- 111.99	61.99
140 Propylbenzene						CAS #: 103-65-1		
21.748	21.748	(1.086)	91	12974123	50.0000	57.050	80.00- 120.00	100.00
21.748	21.748	(1.086)	120	2780593			0.00- 73.27	21.43
21.748	21.748	(1.086)	105	452867			0.00- 55.00	3.49
144 4-Ethyltoluene						CAS #: 622-96-8		
21.886	21.886	(1.092)	105	11337097	50.0000	56.233	80.00- 120.00	100.00
21.886	21.886	(1.092)	120	3158311			0.00- 77.86	27.86
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.941	21.941	(1.095)	105	9840207	50.0000	51.093	80.00- 120.00	100.00
21.941	21.941	(1.095)	120	4457674			0.00- 94.49	45.30
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.411	22.411	(1.119)	105	7916462	50.0000	51.933	80.00- 120.00	100.00
22.411	22.411	(1.119)	120	3485733			0.00- 95.48	44.03
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.826	22.826	(1.139)	146	4451737	50.0000	47.130	80.00- 120.00	100.00
22.826	22.826	(1.139)	148	2814785			12.15- 112.15	63.23
22.826	22.826	(1.139)	111	1889605			0.00- 91.58	42.45
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.145)	146	4535435	50.0000	48.419	80.00- 120.00	100.00
22.937	22.937	(1.145)	148	2895477			16.32- 116.32	63.84
22.937	22.937	(1.145)	111	1836785			0.00- 90.95	40.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.103	23.103 (1.153)	91	6699375	50.0000	48.547	80.00- 120.00	100.00
23.103	23.103 (1.153)	126	1313134			0.00- 69.46	19.60
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.168)	146	3726663	50.0000	45.132	80.00- 120.00	100.00
23.407	23.407 (1.168)	148	2367741			13.54- 113.54	63.54
23.407	23.407 (1.168)	111	1654932			0.00- 94.41	44.41
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.261)	180	1154953	50.0000	33.028	80.00- 120.00	100.00
25.259	25.259 (1.261)	182	1104397			45.62- 145.62	95.62
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.265)	225	875701	50.0000	36.489	80.00- 120.00	100.00
25.342	25.342 (1.265)	223	551322			14.77- 114.77	62.96
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.581)	43	1210244	50.0000	51.027	80.00- 120.00	100.00
8.297	8.297 (0.581)	57	822056			18.54- 118.54	67.92
22 Butane					CAS #: 106-97-8		
5.452	5.452 (0.382)	58	154034	50.0000	47.677	80.00- 120.00	100.00
5.481	5.481 (0.384)	43	1177734			703.05- 803.05	764.59
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.145)	83	2899464	50.0000	52.959	80.00- 120.00	100.00
16.356	16.356 (1.145)	98	1378763			0.00- 97.88	47.55
16.356	16.356 (1.145)	55	2653479			45.40- 145.40	91.52
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.070	12.070 (0.845)	59	940940	50.0000	47.030	80.00- 120.00	100.00
12.070	12.070 (0.845)	41	182623			0.00- 67.50	19.41
12.070	12.070 (0.845)	57	98242			0.00- 63.77	10.44

Data File: /chem/msd1.i/1-21may.b/1052103.d
Report Date: 21-May-2008 09:15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

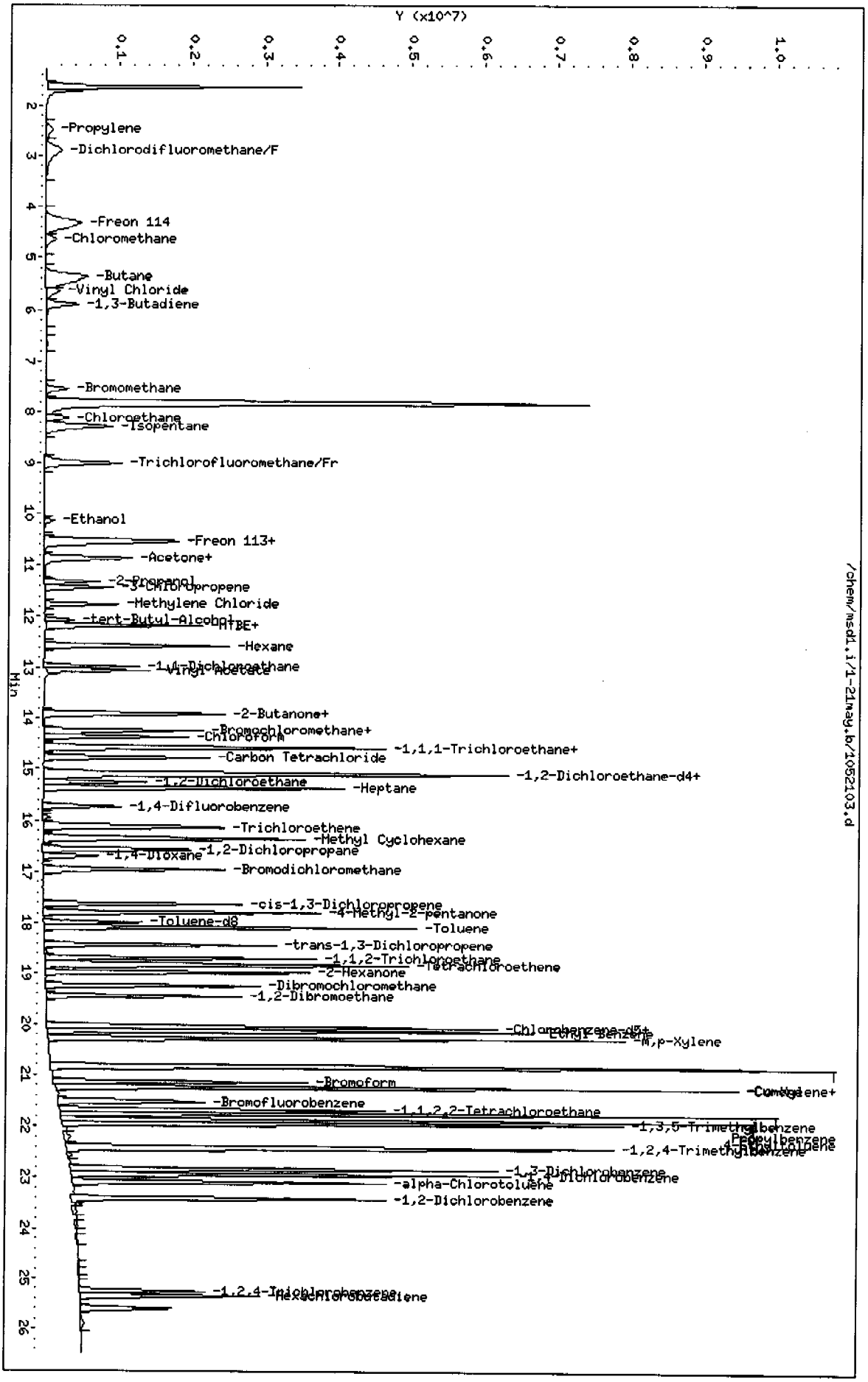
Instrument ID: msd1.i
Lab File ID: 1052103.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 21-MAY-2008
Calibration Time: 08:18
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308729	185237	432221	310538	0.59
95 1,4-Difluorobenze	1614575	968745	2260405	1646495	1.98
123 Chlorobenzene-d5	1766428	1059857	2472999	1819110	2.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-21may.b/1052103.d
Date : 21-MAY-2008 08:52
Client ID: CCV-1
Sample Info: 25mL #1642-3
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805274-13B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 10522[illegible] Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/22/08 09:16 AM

Compound	%Recovery
Freon 12	101
Freon 114	100
Chloromethane	95
Vinyl Chloride	94
1,3-Butadiene	98
Bromomethane	105
Chloroethane	106
Freon 11	102
Ethanol	100
Freon 113	104
1,1-Dichloroethene	97
Acetone	97
2-Propanol	98
Carbon Disulfide	100
Methylene Chloride	92
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	107
Hexane	105
1,1-Dichloroethane	116
2-Butanone (Methyl Ethyl Ketone)	112
cis-1,2-Dichloroethene	103
Tetrahydrofuran	87
Chloroform	110
1,1,1-Trichloroethane	112
Cyclohexane	104
Carbon Tetrachloride	106
Benzene	104
1,2-Dichloroethane	102
Heptane	104
Trichloroethene	104
1,2-Dichloropropane	102
1,4-Dioxane	99
Bromodichloromethane	104
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	104
Toluene	102
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	106
Tetrachloroethene	106

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805274-13B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	105r203	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/22/08 09:16 AM

Compound	%Recovery
2-Hexanone	100
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	110
Chlorobenzene	104
Ethyl Benzene	105
m,p-Xylene	105
o-Xylene	103
Styrene	102
Bromoform	106
1,1,2,2-Tetrachloroethane	93
4-Ethyltoluene	110
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	92
1,4-Dichlorobenzene	94
alpha-Chlorotoluene	94
1,2-Dichlorobenzene	87
1,2,4-Trichlorobenzene	66 Q
Hexachlorobutadiene	72
Chlorodifluoromethane	108
Methanol	113
n-Butanol	107
Propylene	103

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052203.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-22may.b/t14q519b.m

Injection Date: 22-MAY-2008 09:16
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.64598	0.010	1.34090	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.10401	0.010	2.53806	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.52552	0.010	1.76256	30.00000	Averaged
12 Propylene	0.55198	0.57116	0.010	-3.47563	30.00000	Averaged
14 Dichlorodifluoromethane/Frl	2.75595	2.79332	0.010	-1.35599	30.00000	Averaged
17 Freon 114	1.88665	1.89438	0.010	-0.41014	30.00000	Averaged
21 Chloromethane	1.18763	1.12972	0.010	4.87680	30.00000	Averaged
23 Vinyl Chloride	1.29868	1.22781	0.010	5.45670	30.00000	Averaged
24 1,3-Butadiene	0.98750	0.97232	0.010	1.53749	30.00000	Averaged
26 Bromomethane	0.87679	0.91894	0.010	-4.80707	30.00000	Averaged
28 Chloroethane	0.70142	0.74751	0.010	-6.57083	30.00000	Averaged
34 Trichlorofluoromethane/Frll	3.54692	3.63793	0.010	-2.56584	30.00000	Averaged
38 Ethanol	0.56181	0.56274	0.010	-0.16638	30.00000	Averaged
43 Freon 113	1.85594	1.93780	0.010	-4.41071	30.00000	Averaged
44 1,1-Dichloroethene	2.57302	2.48929	0.010	3.25401	30.00000	Averaged
45 Acetone	0.86419	0.83834	0.010	2.99094	30.00000	Averaged
46 2-Propanol	3.05508	2.97888	0.010	2.49425	30.00000	Averaged
48 Carbon Disulfide	4.23812	4.22542	0.010	0.29953	30.00000	Averaged
50 3-Chloropropene	0.45789	0.57653	0.010	-25.91055	30.00000	Averaged
54 Methylene Chloride	2.22886	2.06188	0.010	7.49177	30.00000	Averaged
58 MTBE	1.59019	1.60809	0.010	-1.12578	30.00000	Averaged
59 trans-1,2-Dichloroethene	1.62625	1.74010	0.010	-7.00091	30.00000	Averaged
64 Hexane	3.75026	3.92958	0.010	-4.78134	30.00000	Averaged
67 Vinyl Acetate	0.41948	0.44974	0.010	-7.21511	30.00000	Averaged
68 1,1-Dichloroethane	2.97028	3.43931	0.010	-15.79079	30.00000	Averaged
75 2-Butanone	0.90063	1.00697	0.010	-11.80749	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.67894	2.75703	0.010	-2.91508	30.00000	Averaged
78 Tetrahydrofuran	3.45948	2.99943	0.010	13.29826	30.00000	Averaged
81 Chloroform	3.53636	3.88859	0.010	-9.96006	30.00000	Averaged
83 1,1,1-Trichloroethane	3.71062	4.14015	0.010	-11.57559	30.00000	Averaged
84 Cyclohexane	3.09231	3.21726	0.010	-4.04070	30.00000	Averaged
85 Carbon Tetrachloride	3.43205	3.63371	0.010	-5.87577	30.00000	Averaged
88 2,2,4-Trimethylpentane	13.20094	13.78616	0.010	-4.43312	30.00000	Averaged
91 Benzene	1.27209	1.32789	0.010	-4.38649	30.00000	Averaged
93 1,2-Dichloroethane	0.52605	0.53550	0.010	-1.79601	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052203.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-22may.b/t14q519b.m

Injection Date: 22-MAY-2008 09:16
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Heptane	0.49365	0.51329	0.010	-3.97877	30.00000	Averaged	
97 Trichloroethene	0.52165	0.54280	0.010	-4.05344	30.00000	Averaged	
102 1,2-Dichloropropane	0.50714	0.52029	0.010	-2.59315	30.00000	Averaged	
103 1,4-Dioxane	0.32736	0.32285	0.010	1.37910	30.00000	Averaged	
106 Bromodichloromethane	0.81756	0.85449	0.010	-4.51786	30.00000	Averaged	
109 cis-1,3-Dichloropropene	0.71526	0.74001	0.010	-3.46008	30.00000	Averaged	
110 4-Methyl-2-pentanone	0.51039	0.53058	0.010	-3.95595	30.00000	Averaged	
114 Toluene	1.74969	1.78626	0.010	-2.09034	30.00000	Averaged	
115 trans-1,3-Dichloropropene	0.67152	0.72211	0.010	-7.53371	30.00000	Averaged	
116 1,1,2-Trichloroethane	0.52907	0.55994	0.010	-5.83492	30.00000	Averaged	
117 Tetrachloroethene	0.61290	0.64940	0.010	-5.95666	30.00000	Averaged	
118 2-Hexanone	0.71548	0.71803	0.010	-0.35605	30.00000	Averaged	
121 Dibromochloromethane	0.74584	0.80594	0.010	-8.05817	30.00000	Averaged	
122 1,2-Dibromoethane	0.77913	0.86170	0.010	-10.59734	30.00000	Averaged	
124 Chlorobenzene	1.40905	1.46039	0.010	-3.64400	30.00000	Averaged	
125 Ethyl Benzene	0.77264	0.81188	0.010	-5.07790	30.00000	Averaged	
128 m,p-Xylene	0.97657	1.02883	0.010	-5.35147	30.00000	Averaged	
130 o-Xylene	0.93283	0.96116	0.010	-3.03731	30.00000	Averaged	
131 Styrene	1.56461	1.58840	0.010	-1.52053	30.00000	Averaged	
133 Bromoform	0.70231	0.74845	0.010	-6.56976	30.00000	Averaged	
134 Cumene	2.57828	2.87780	0.010	-11.61692	30.00000	Averaged	
138 1,1,2,2-Tetrachloroethane	1.37791	1.27958	0.010	7.13629	30.00000	Averaged	
140 Propylbenzene	3.12538	3.47551	0.010	-11.20258	30.00000	Averaged	
144 4-Ethyltoluene	2.77069	3.05143	0.010	-10.13228	30.00000	Averaged	
146 1,3,5-Trimethylbenzene	2.64680	2.60082	0.010	1.73745	30.00000	Averaged	
152 1,2,4-Trimethylbenzene	2.09493	2.11131	0.010	-0.78187	30.00000	Averaged	
158 1,3-Dichlorobenzene	1.29813	1.19881	0.010	7.65074	30.00000	Averaged	
159 1,4-Dichlorobenzene	1.28732	1.20935	0.010	6.05640	30.00000	Averaged	
162 alpha-Chlorotoluene	1.89648	1.78777	0.010	5.73231	30.00000	Averaged	
164 1,2-Dichlorobenzene	1.13478	0.99059	0.010	12.70699	30.00000	Averaged	
169 1,2,4-Trichlorobenzene	0.48058	0.31564	0.010	34.32111	30.00000	Averaged	<-
170 Hexachlorobutadiene	0.32982	0.23740	0.010	28.02076	30.00000	Averaged	
29 Isopentane	1.90941	1.94224	0.010	-1.71943	30.00000	Averaged	
22 Butane	0.26009	0.24983	0.010	3.94784	30.00000	Averaged	
99 Methyl Cyclohexane	4.40757	4.60365	0.010	-4.44863	30.00000	Averaged	

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052203.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-22may.b/t14q519b.m

Injection Date: 22-MAY-2008 09:16
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
57 tert-Butyl-Alcohol	1.61070	1.46888	0.010	8.80481	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052203.d
Lab Smp Id: CCV-1
Client Smp ID: CCV-1
Inj Date : 22-MAY-2008 09:16
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 50ppbv (200ppbv)
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.255	14.255 (1.000)	130	308066	25.0000		80.00- 120.00		100.00
14.255	14.255 (1.000)	128	238122			27.30- 127.30		77.30
14.255	14.255 (1.000)	49	560547			131.96- 231.96		181.96
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1638375	25.0000		80.00- 120.00		100.00
15.748	15.748 (1.000)	88	252010			0.00- 65.38		15.38
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1818182	25.0000		80.00- 120.00		100.00
20.006	20.006 (1.000)	82	1047225			8.42- 108.42		57.60
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	507071	25.0000	24.665	80.00- 120.00		100.00
15.140	15.140 (1.062)	67	311961			6.04- 106.04		61.52
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1808784	25.0000	24.365	80.00- 120.00		100.00
17.960	17.960 (1.140)	70	188455			0.00- 60.35		10.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1218535			15.45- 115.45	67.37
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	955482	25.0000	24.559	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1532356			110.38- 210.38	160.38
21.527	21.527 (1.075)	176	907098			44.94- 144.94	94.94
12 Propylene					CAS #: 115-07-1		
2.467	2.467 (0.173)	41	351912	50.0000	51.738	80.00- 120.00	100.00
2.467	2.467 (0.173)	42	219416			16.91- 116.91	62.35
2.467	2.467 (0.173)	39	269091			37.15- 137.15	76.47
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.862	2.862 (0.201)	85	1721052	50.0000	50.678	80.00- 120.00	100.00
2.862	2.862 (0.201)	87	544665			0.00- 75.39	31.65
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1167191	50.0000	50.205	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	363074			0.00- 81.11	31.11
21 Chloromethane					CAS #: 74-87-3		
4.636	4.636 (0.325)	50	696054	50.0000	47.562	80.00- 120.00	100.00
4.636	4.636 (0.325)	52	224092			0.00- 80.15	32.19
23 Vinyl Chloride					CAS #: 75-01-4		
5.621	5.621 (0.394)	62	756494	50.0000	47.272	80.00- 120.00	100.00
5.621	5.621 (0.394)	64	238087			0.00- 77.57	31.47
24 1,3-Butadiene					CAS #: 106-99-0		
5.903	5.903 (0.414)	54	599076	50.0000	49.231	80.00- 120.00	100.00
5.875	5.875 (0.412)	39	580874			37.41- 137.41	96.96
26 Bromomethane					CAS #: 74-83-9		
7.536	7.536 (0.529)	94	566187	50.0000	52.404	80.00- 120.00	100.00
7.536	7.536 (0.529)	96	528089			43.27- 143.27	93.27
28 Chloroethane					CAS #: 75-00-3		
8.100	8.100 (0.568)	64	460565	50.0000	53.285	80.00- 120.00	100.00
8.100	8.100 (0.568)	49	133180			0.00- 79.23	28.92
8.100	8.100 (0.568)	66	141692			0.00- 81.66	30.76
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
9.001	9.001 (0.631)	101	2241444	50.0000	51.283	80.00- 120.00	100.00
9.001	9.001 (0.631)	103	1443269			14.39- 114.39	64.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.135	10.135 (0.711)	45	346722	50.0000	50.083	80.00- 120.00	100.00
10.135	10.135 (0.711)	43	73118			0.00- 75.81	21.09
10.135	10.135 (0.711)	46	145393			0.00- 92.85	41.93
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.742)	151	1193943	50.0000	52.205	80.00- 120.00	100.00
10.577	10.577 (0.742)	153	757785			13.47- 113.47	63.47
10.577	10.577 (0.742)	101	1597827			83.83- 183.83	133.83
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.738)	61	1533734	50.0000	48.373	80.00- 120.00	100.00
10.522	10.522 (0.738)	96	819670			3.44- 103.44	53.44
10.522	10.522 (0.738)	98	524730			0.00- 84.21	34.21
45 Acetone					CAS #: 67-64-1		
10.882	10.882 (0.763)	58	516527	50.0000	48.504	80.00- 120.00	100.00
10.882	10.882 (0.763)	43	1650708			275.34- 375.34	319.58
46 2-Propanol					CAS #: 67-63-0		
11.324	11.324 (0.794)	45	1835383	50.0000	48.753	80.00- 120.00	100.00
11.324	11.324 (0.794)	43	330055			0.00- 68.18	17.98
11.324	11.324 (0.794)	59	70300			0.00- 53.79	3.83
48 Carbon Disulfide					CAS #: 75-15-0		
10.826	10.826 (0.759)	76	2603417	50.0000	49.850	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.434	11.434 (0.802)	76	355220	50.0000	62.955	80.00- 120.00	100.00
11.434	11.434 (0.802)	41	1291133			303.82- 403.82	363.47
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.823)	49	1270389	50.0000	46.254	80.00- 120.00	100.00
11.739	11.739 (0.823)	84	823758			14.84- 114.84	64.84
11.739	11.739 (0.823)	51	386326			0.00- 79.96	30.41
58 MTBE					CAS #: 1634-04-4		
12.153	12.153 (0.853)	73	990795	50.0000	50.563	80.00- 120.00	100.00
12.153	12.153 (0.853)	57	274726			0.00- 77.73	27.73
12.153	12.153 (0.853)	41	291652			0.00- 78.25	29.44
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.181	12.181 (0.855)	96	1072134	50.0000	53.500	80.00- 120.00	100.00
12.181	12.181 (0.855)	61	1683503			107.02- 207.02	157.02
12.181	12.181 (0.855)	98	689052			13.20- 113.20	64.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.568	12.568 (0.882)	57	2421137	50.0000	52.391	80.00- 120.00	100.00
12.568	12.568 (0.882)	43	1551511			16.42- 116.42	64.08
12.568	12.568 (0.882)	86	360391			0.00- 64.88	14.89
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.917)	86	277102	50.0000	53.608	80.00- 120.00	100.00
13.066	13.066 (0.917)	43	3576541			1256.82-1356.82	1290.69
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.911)	63	2119066	50.0000	57.895	80.00- 120.00	100.00
12.983	12.983 (0.911)	65	634286			0.00- 79.93	29.93
75 2-Butanone					CAS #: 78-93-3		
13.923	13.923 (0.977)	72	620428	50.0000	55.904	80.00- 120.00	100.00
13.923	13.923 (0.977)	43	3016655			436.22- 536.22	486.22
13.923	13.923 (0.977)	57	226297			0.00- 90.57	36.47
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.975)	61	1698696	50.0000	51.458	80.00- 120.00	100.00
13.895	13.895 (0.975)	96	1223283			22.01- 122.01	72.01
13.895	13.895 (0.975)	98	774794			0.00- 95.61	45.61
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (1.000)	42	1848047	50.0000	43.351	80.00- 120.00	100.00
14.255	14.255 (1.000)	71	578224			0.00- 81.29	31.29
14.255	14.255 (1.000)	72	641609			0.00- 82.78	34.72
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	2395884	50.0000	54.980	80.00- 120.00	100.00
14.365	14.365 (1.008)	85	1495877			12.44- 112.44	62.44
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.023)	97	2550880	50.0000	55.788	80.00- 120.00	100.00
14.587	14.587 (1.023)	99	1635337			14.11- 114.11	64.11
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.021)	84	1982256	50.0000	52.020	80.00- 120.00	100.00
14.559	14.559 (1.021)	56	2658880			84.13- 184.13	134.13
14.559	14.559 (1.021)	41	1402779			20.77- 120.77	70.77
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.037)	119	2238842	50.0000	52.938	80.00- 120.00	100.00
14.780	14.780 (1.037)	117	2303732			52.90- 152.90	102.90
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.112	15.112 (1.060)	57	8494093	50.0000	52.216	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.112	15.112 (1.060)	56	2738673			0.00- 83.07	32.24
15.084	15.084 (1.058)	41	1978457			0.00- 74.24	23.29
91 Benzene					CAS #: 71-43-2		
15.140	15.140 (0.961)	78	4351170	50.0000	52.193	80.00- 120.00	100.00
15.140	15.140 (0.961)	77	992765			0.00- 73.68	22.82
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	1754695	50.0000	50.898	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	564586			0.00- 83.51	32.18
94 Heptane					CAS #: 142-82-5		
15.361	15.361 (0.975)	71	1681912	50.0000	51.989	80.00- 120.00	100.00
15.361	15.361 (0.975)	43	3496730			162.65- 262.65	207.90
15.361	15.361 (0.975)	57	1787540			57.85- 157.85	106.28
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1778612	50.0000	52.027	80.00- 120.00	100.00
16.135	16.135 (1.025)	130	1733714			47.48- 147.48	97.48
16.107	16.107 (1.023)	97	1147185			14.50- 114.50	64.50
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.550	16.550 (1.051)	63	1704869	50.0000	51.296	80.00- 120.00	100.00
16.550	16.550 (1.051)	62	1206351			20.76- 120.76	70.76
16.550	16.550 (1.051)	41	1005979			9.01- 109.01	59.01
103 1,4-Dioxane					CAS #: 123-91-1		
16.688	16.688 (1.060)	88	1057889	50.0000	49.310	80.00- 120.00	100.00
16.688	16.688 (1.060)	58	852390			30.57- 130.57	80.57
16.688	16.688 (1.060)	57	267128			0.00- 75.70	25.25
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	2799966	50.0000	52.259	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	1717534			11.34- 111.34	61.34
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.628	17.628 (1.119)	75	2424837	50.0000	51.730	80.00- 120.00	100.00
17.628	17.628 (1.119)	77	771446			0.00- 81.81	31.81
17.628	17.628 (1.119)	39	1347355			5.56- 105.56	55.56
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.794	17.794 (1.130)	58	1738571	50.0000	51.978	80.00- 120.00	100.00
17.794	17.794 (1.130)	43	4444996			210.27- 310.27	255.67
17.794	17.794 (1.130)	85	655622			0.00- 89.24	37.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	5853134	50.0000	51.045	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	3507373			9.92- 109.92	59.92
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.430	18.430 (0.920)	75	2625861	50.0000	53.767	80.00- 120.00	100.00
18.430	18.430 (0.920)	77	812604			0.00- 80.95	30.95
18.430	18.430 (0.920)	39	1389430			2.91- 102.91	52.91
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	2036156	50.0000	52.917	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	1266260			12.19- 112.19	62.19
18.706	18.706 (0.934)	83	1665703			31.81- 131.81	81.81
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	2361467	50.0000	52.978	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	1826801			27.36- 127.36	77.36
18.817	18.817 (0.939)	131	1785721			25.62- 125.62	75.62
118 2-Hexanone					CAS #: 591-78-6		
18.955	18.955 (0.946)	58	2611012	50.0000	50.178	80.00- 120.00	100.00
18.955	18.955 (0.946)	43	4777895			132.99- 232.99	182.99
18.983	18.983 (0.948)	100	507947			0.00- 69.73	19.45
121 Dibromochloromethane					CAS #: 124-48-1		
19.232	19.232 (0.960)	129	2930678	50.0000	54.029	80.00- 120.00	100.00
19.232	19.232 (0.960)	127	2258801			26.10- 126.10	77.07
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.453	19.453 (0.971)	107	3133439	50.0000	55.299	80.00- 120.00	100.00
19.453	19.453 (0.971)	109	2981379			45.15- 145.15	95.15
124 Chlorobenzene					CAS #: 108-90-7		
20.061	20.061 (1.001)	112	5310527	50.0000	51.822	80.00- 120.00	100.00
20.061	20.061 (1.001)	114	1677006			0.00- 81.58	31.58
20.061	20.061 (1.001)	77	3466697			15.28- 115.28	65.28
125 Ethyl Benzene					CAS #: 100-41-4		
20.144	20.144 (1.006)	106	2952288	50.0000	52.539	80.00- 120.00	100.00
20.144	20.144 (1.006)	91	9532200			273.94- 373.94	322.88
128 m,p-Xylene					CAS #: 108-38-3		
20.282	20.282 (1.012)	106	3741201	50.0000	52.676	80.00- 120.00	100.00
20.282	20.282 (1.012)	91	7474737			157.95- 257.95	199.80
130 o-Xylene					CAS #: 95-47-6		
20.808	20.808 (1.039)	106	3495129	50.0000	51.519	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.808	20.808	(1.039)	91	7406676			161.91- 261.91	211.91
131 Styrene						CAS #: 100-42-5		
20.835	20.835	(1.040)	104	5776009	50.0000	50.760	80.00- 120.00	100.00
20.835	20.835	(1.040)	78	2697864			0.00- 96.71	46.71
133 Bromoform						CAS #: 75-25-2		
21.139	21.139	(1.055)	173	2721647	50.0000	53.285	80.00- 120.00	100.00
21.139	21.139	(1.055)	171	1402799			1.54- 101.54	51.54
134 Cumene						CAS #: 98-82-8		
21.250	21.250	(1.061)	105	10464716	50.0000	55.808	80.00- 120.00	100.00
21.250	21.250	(1.061)	120	2619353			0.00- 75.80	25.03
21.250	21.250	(1.061)	51	1068371			0.00- 60.85	10.21
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.665	21.665	(1.081)	83	4653027	50.0000	46.432	80.00- 120.00	100.00
21.665	21.665	(1.081)	85	2863246			11.54- 111.54	61.54
140 Propylbenzene						CAS #: 103-65-1		
21.748	21.748	(1.086)	91	12638212	50.0000	55.601	80.00- 120.00	100.00
21.748	21.748	(1.086)	120	2677579			0.00- 73.27	21.19
21.748	21.748	(1.086)	105	438480			0.00- 55.00	3.47
144 4-Ethyltoluene						CAS #: 622-96-8		
21.886	21.886	(1.092)	105	11096097	50.0000	55.066	80.00- 120.00	100.00
21.886	21.886	(1.092)	120	3163873			0.00- 78.51	28.51
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.941	21.941	(1.095)	105	9457515	50.0000	49.131	80.00- 120.00	100.00
21.941	21.941	(1.095)	120	4303764			0.00- 94.49	45.51
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.411	22.411	(1.119)	105	7677501	50.0000	50.391	80.00- 120.00	100.00
22.411	22.411	(1.119)	120	3355609			0.00- 95.48	43.71
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.826	22.826	(1.139)	146	4359309	50.0000	46.175	80.00- 120.00	100.00
22.826	22.826	(1.139)	148	2733984			12.15- 112.15	62.72
22.826	22.826	(1.139)	111	1843346			0.00- 91.58	42.29
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.145)	146	4397650	50.0000	46.972	80.00- 120.00	100.00
22.937	22.937	(1.145)	148	2782461			16.32- 116.32	63.27
22.937	22.937	(1.145)	111	1765164			0.00- 90.95	40.14

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.103	23.103 (1.153)	91	6500988	50.0000	47.134	80.00- 120.00	100.00
23.103	23.103 (1.153)	126	1279961			0.00- 69.46	19.69
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.168)	146	3602138	50.0000	43.646	80.00- 120.00	100.00
23.407	23.407 (1.168)	148	2278117			13.24- 113.24	63.24
23.407	23.407 (1.168)	111	1605774			0.00- 94.58	44.58
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.261)	180	1147779	50.0000	32.839	80.00- 120.00	100.00
25.259	25.259 (1.261)	182	1099456			45.79- 145.79	95.79
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.265)	225	863278	50.0000	35.990	80.00- 120.00	100.00
25.342	25.342 (1.265)	223	546660			14.77- 114.77	63.32
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.582)	43	1196675	50.0000	50.860	80.00- 120.00	100.00
8.297	8.297 (0.582)	57	829420			18.54- 118.54	69.31
22 Butane					CAS #: 106-97-8		
5.452	5.452 (0.382)	58	153926	50.0000	48.026	80.00- 120.00	100.00
5.452	5.452 (0.382)	43	1159625			703.05- 803.05	753.37
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.147)	83	2836455	50.0000	52.224	80.00- 120.00	100.00
16.356	16.356 (1.147)	98	1385369			0.00- 97.88	48.84
16.356	16.356 (1.147)	55	2627938			45.40- 145.40	92.65
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.070	12.070 (0.847)	59	905022	50.0000	45.598	80.00- 120.00	100.00
12.070	12.070 (0.847)	41	176705			0.00- 67.50	19.52
12.070	12.070 (0.847)	57	91721			0.00- 63.77	10.13

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

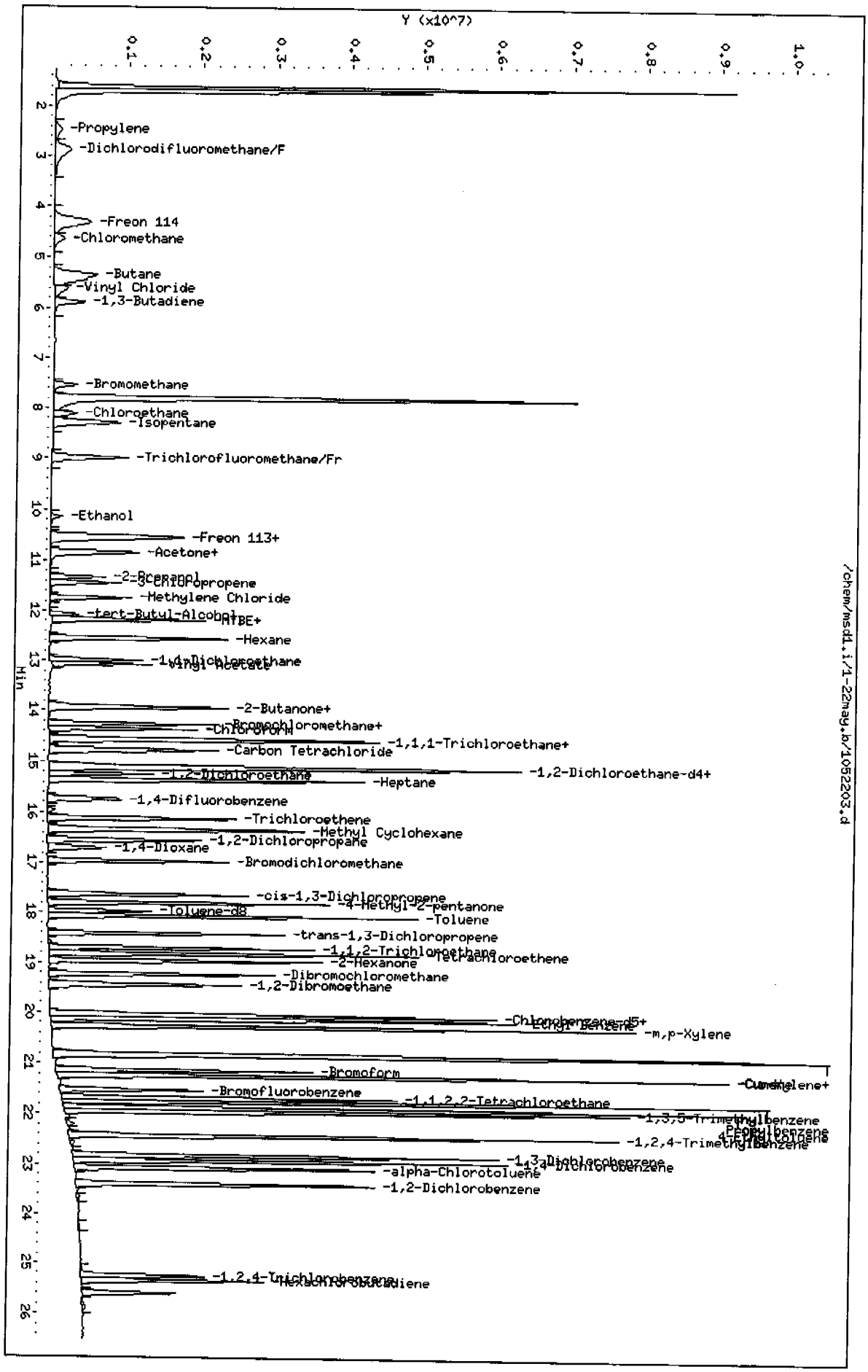
Instrument ID: msd1.i
Lab File ID: 1052203.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-MAY-2008
Calibration Time: 08:38
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310674	186404	434944	308066	-0.84
95 1,4-Difluorobenze	1610069	966041	2254097	1638375	1.76
123 Chlorobenzene-d5	1733182	1039909	2426455	1818182	4.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-22may.b/1052203.d
Date : 22-MAY-2008 09:16
Client ID: CCV-1
Sample Info: 25mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Data File: /chem/msd1.i/1-21may.b/1052102.d
Report Date: 21-May-2008 08:33

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052102.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd1.i/1-21may.b/t14q519b.m

Injection Date: 21-MAY-2008 08:18
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.58183	0.010	5.18588	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.08567	0.010	4.15746	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.50430	0.010	5.72752	30.00000	Averaged
19 Freon142b	2.11173	2.38948	0.010	-13.15296	40.00000	Averaged
9 Freon 134a	0.48918	0.53014	0.010	-8.37297	40.00000	Averaged
13 Freon 152a	0.46327	0.51411	0.010	-10.97279	40.00000	Averaged
15 Freon 22	1.67769	1.81355	0.010	-8.09772	40.00000	Averaged
25 Methanol	0.39706	0.50641	0.010	-27.53926	40.00000	Averaged
32 Dichlorofluoromethane/Fr21	1.98948	2.28167	0.010	-14.68681	40.00000	Averaged
40 Freon123a	0.89543	1.05431	0.010	-17.74257	40.00000	Averaged
41 Freon123	0.15204	0.17154	0.010	-12.82694	40.00000	Averaged
66 Isopropyl ether	6.58377	7.61989	0.010	-15.73756	40.00000	Averaged
69 1-Propanol	0.31867	0.37662	0.010	-18.18455	40.00000	Averaged
72 t-Butylethyl Ether	2.76163	3.36933	0.010	-22.00541	40.00000	Averaged
73 Ethyl Acetate	0.67326	0.79130	0.010	-17.53195	40.00000	Averaged
92 tert-amyl-Methyl Ether	3.13220	3.64028	0.010	-16.22114	40.00000	Averaged
132 2-Heptanone	5.35867	5.70179	0.010	-6.40309	40.00000	Averaged
96 1-Butanol	0.31976	0.34934	0.010	-9.24964	40.00000	Averaged
120 Butyl Acetate	0.64176	0.72020	0.010	-12.22234	40.00000	Averaged
135 Cyclohexanone	0.71361	0.73120	0.010	-2.46457	40.00000	Averaged
148 Diisobutyl Ketone	1.60285	1.63619	0.010	-2.07978	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052102.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 21-MAY-2008 08:18
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 08:33 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22aCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	308729	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	244802			29.29- 129.29	79.29
14.255	14.255 (1.000)	49	555066			129.79- 229.79	179.79
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1614575	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	253996			0.00- 65.73	15.73
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1766428	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1015888			8.42- 108.42	57.51
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.139 (1.060)	65	488358	25.0000	23.704	80.00- 120.00	100.00
15.139	15.139 (1.060)	67	258108			6.04- 106.04	52.85
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1752891	25.0000	23.961	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	186214			0.00- 60.35	10.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1139805			15.45- 115.45	65.02
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.526 (1.075)	174	890818	25.0000	23.568	80.00- 120.00	100.00
21.526	21.526 (1.075)	95	1453491			113.16- 213.16	163.16
21.526	21.526 (1.075)	176	855574			46.04- 146.04	96.04
19 Freon142b					CAS #: 75-68-3		
4.608	4.608 (0.323)	65	1475404	50.0000	56.576	80.00- 120.00	100.00
4.608	4.608 (0.323)	45	365084			0.00- 75.41	24.74
9 Freon 134a					CAS #: 811-97-2		
2.383	2.383 (0.167)	83	327340	50.0000	54.186	80.00- 120.00	100.00
2.383	2.383 (0.167)	69	269625			32.58- 132.58	82.37
2.383	2.383 (0.167)	63	33744			0.00- 58.36	10.31
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.190)	65	317439	50.0000	55.486	80.00- 120.00	100.00
2.693	2.693 (0.189)	51	659429			172.46- 272.46	207.73
2.721	2.721 (0.190)	47	157145			0.63- 100.63	49.50
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	1119790	50.0000	54.049	80.00- 120.00	100.00
3.425	3.425 (0.240)	67	177501			0.00- 65.39	15.85
3.453	3.453 (0.242)	85	9813			0.00- 51.20	0.88
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	1876116	300.000	382.62	80.00- 120.00	100.00
7.818	7.818 (0.547)	32	1478247			28.79- 128.79	78.79
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	1408838	50.0000	57.343	80.00- 120.00	100.00
9.195	9.195 (0.644)	69	430034			0.00- 79.81	30.52
9.167	9.167 (0.642)	35	35877			0.00- 55.10	2.55
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	650991	50.0000	58.871	80.00- 120.00	100.00
10.356	10.356 (0.725)	67	929686			96.88- 196.88	142.81
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	105917	50.0000	56.413	80.00- 120.00	100.00
10.577	10.577 (0.741)	133	23021			0.00- 73.50	21.73
10.577	10.577 (0.741)	85	65354			10.10- 110.10	61.70
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	4704965	50.0000	57.869	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
66 Isopropyl ether (continued)								
12.983	12.983	(0.909)	87	1006400			0.00- 71.33	21.39
12.983	12.983	(0.909)	59	485579			0.00- 60.24	10.32
69 1-Propanol						CAS #: 71-23-8		
13.204	13.204	(0.924)	42	232545	50.0000	59.092	80.00- 120.00	100.00
13.204	13.204	(0.924)	59	255826			47.04- 147.04	110.01
13.204	13.204	(0.924)	41	143192			14.12- 114.12	61.58
72 t-Butylethyl Ether						CAS #: 637-92-3		
13.563	13.563	(0.950)	59	2080422	50.0000	61.003	80.00- 120.00	100.00
13.563	13.563	(0.950)	87	741601			0.00- 86.33	35.65
13.536	13.536	(0.948)	41	354756			0.00- 70.48	17.05
73 Ethyl Acetate						CAS #: 141-78-6		
13.951	13.951	(0.977)	45	488592	50.0000	58.766	80.00- 120.00	100.00
13.951	13.951	(0.977)	61	425951			36.81- 136.81	87.18
13.951	13.951	(0.977)	43	3260073			616.84- 716.84	667.24
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
15.222	15.222	(1.066)	73	2247719	50.0000	58.110	80.00- 120.00	100.00
15.222	15.222	(1.066)	87	544911			0.00- 73.95	24.24
15.222	15.222	(1.066)	55	650794			0.00- 80.63	28.95
132 2-Heptanone						CAS #: 110-43-0		
20.918	20.918	(1.465)	58	3520616	50.0000	53.202	80.00- 120.00	100.00
20.918	20.918	(1.465)	43	5405209			99.63- 199.63	153.53
96 1-Butanol						CAS #: 71-36-3		
15.941	15.941	(1.012)	56	1128077	50.0000	54.625	80.00- 120.00	100.00
15.941	15.941	(1.012)	41	761424			20.92- 120.92	67.50
15.941	15.941	(1.012)	43	632936			4.89- 104.89	56.11
120 Butyl Acetate						CAS #: 123-86-4		
19.066	19.066	(1.211)	56	2325635	50.0000	56.111	80.00- 120.00	100.00
19.066	19.066	(1.211)	73	781810			0.00- 83.62	33.62
19.066	19.066	(1.211)	43	5401808			182.27- 282.27	232.27
135 Cyclohexanone						CAS #: 108-94-1		
21.471	21.471	(1.072)	55	2583207	50.0000	51.232	80.00- 120.00	100.00
21.471	21.471	(1.072)	98	1030690			0.00- 90.24	39.90
21.471	21.471	(1.072)	42	1717823			17.74- 117.74	66.50
148 Diisobutyl Ketone						CAS #: 108-83-8		
22.079	22.079	(1.102)	57	5780422	50.0000	51.040	80.00- 120.00	100.00
22.079	22.079	(1.102)	85	4524567			28.27- 128.27	78.27

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
148 Diisobutyl Ketone (continued)								
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd1.i/1-21may.b/1052102.d
Report Date: 21-May-2008 08:33

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052102.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-MAY-2008
Calibration Time: 08:18
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308729	185237	432221	308729	0.00
95 1,4-Difluorobenze	1614575	968745	2260405	1614575	0.00
123 Chlorobenzene-d5	1766428	1059857	2472999	1766428	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

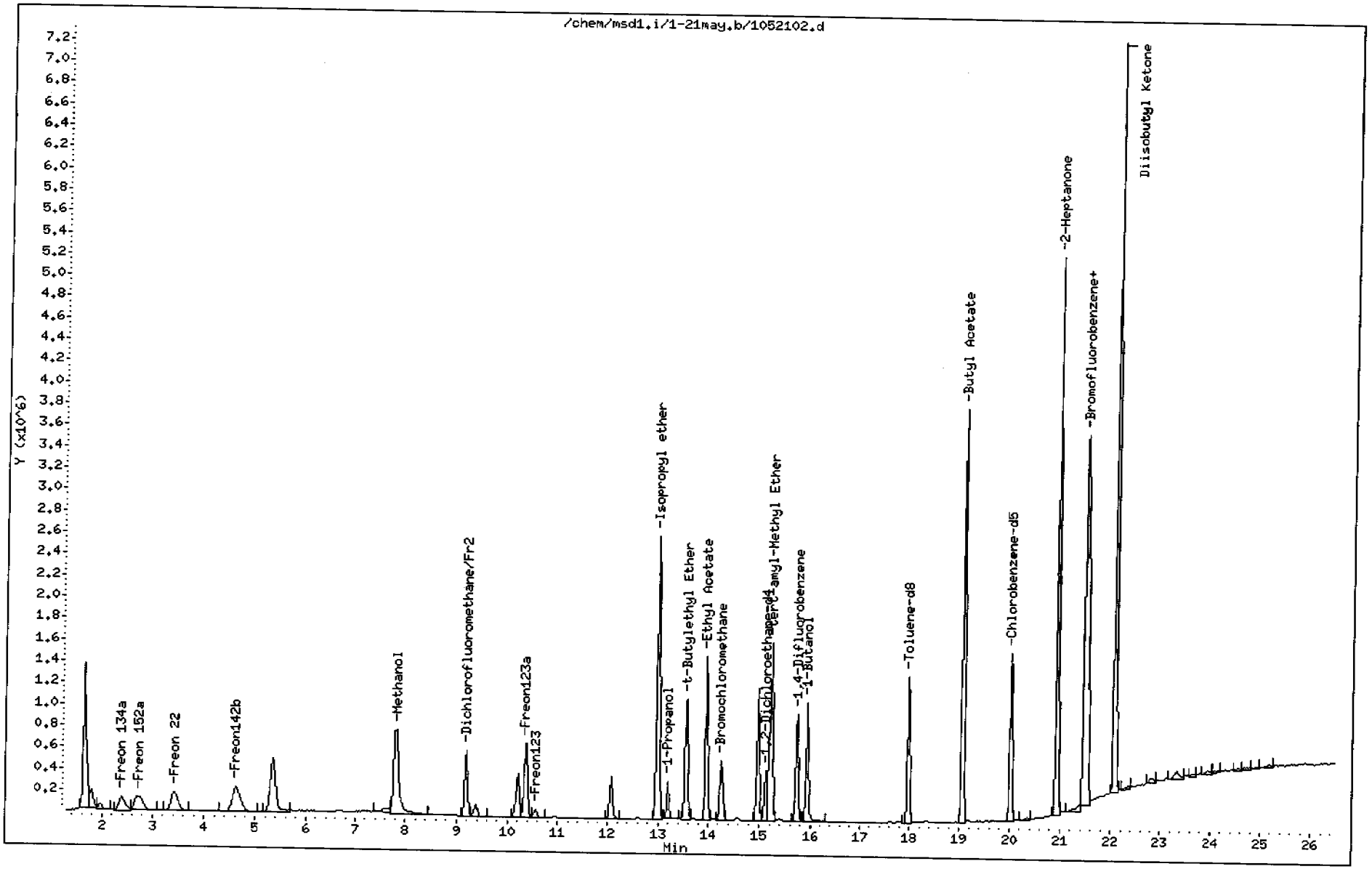
Data File: /chem/msd1.i/1-21may.b/1052102.d
Date : 21-MAY-2008 08:18
Client ID: CCVsp
Sample Info: 25mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0469



Data File: /chem/msd1.i/1-22may.b/1052202.d
Report Date: 22-May-2008 08:50

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052202.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd1.i/1-22may.b/t14q519b.m

Injection Date: 22-MAY-2008 08:38
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.56019	0.010	6.48291	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.07919	0.010	4.72911	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.51826	0.010	3.11921	30.00000	Averaged
19 Freon142b	2.11173	2.32405	0.010	-10.05468	40.00000	Averaged
9 Freon 134a	0.48918	0.51296	0.010	-4.86115	40.00000	Averaged
13 Freon 152a	0.46327	0.49081	0.010	-5.94319	40.00000	Averaged
15 Freon 22	1.67769	1.81269	0.010	-8.04652	40.00000	Averaged
25 Methanol	0.39706	0.45057	0.010	-13.47598	40.00000	Averaged
32 Dichlorofluoromethane/Fr21	1.98948	2.24430	0.010	-12.80803	40.00000	Averaged
40 Freon123a	0.89543	1.04631	0.010	-16.84888	40.00000	Averaged
41 Freon123	0.15204	0.16279	0.010	-7.07649	40.00000	Averaged
66 Isopropyl ether	6.58377	7.42472	0.010	-12.77312	40.00000	Averaged
69 1-Propanol	0.31867	0.36386	0.010	-14.18209	40.00000	Averaged
72 t-Butylethyl Ether	2.76163	3.07234	0.010	-11.25114	40.00000	Averaged
73 Ethyl Acetate	0.67326	0.75398	0.010	-11.98986	40.00000	Averaged
92 tert-amyl-Methyl Ether	3.13220	3.47424	0.010	-10.92028	40.00000	Averaged
132 2-Heptanone	5.35867	5.44545	0.010	-1.61951	40.00000	Averaged
96 1-Butanol	0.31976	0.34147	0.010	-6.78921	40.00000	Averaged
120 Butyl Acetate	0.64176	0.70022	0.010	-9.10893	40.00000	Averaged
135 Cyclohexanone	0.71361	0.71598	0.010	-0.33229	40.00000	Averaged
148 Diisobutyl Ketone	1.60285	1.59751	0.010	0.33312	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052202.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 22-MAY-2008 08:38
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 08:50 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22aCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	310674	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	239786			27.18- 127.18	77.18
14.255	14.255 (1.000)	49	552774			127.93- 227.93	177.93
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1610069	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	255119			0.00- 65.85	15.85
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.034	20.034 (1.000)	117	1733182	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1007858			8.42- 108.42	58.15
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	484712	25.0000	23.379	80.00- 120.00	100.00
15.140	15.140 (1.062)	67	252953			6.04- 106.04	52.19
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1737573	25.0000	23.818	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	175170			0.00- 60.35	10.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1149159			15.45- 115.45	66.14
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	898235	25.0000	24.220	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1444896			110.86- 210.86	160.86
21.527	21.527 (1.075)	176	864732			46.27- 146.27	96.27
19 Freon142b					CAS #: 75-68-3		
4.608	4.608 (0.323)	65	1444046	50.0000	55.027	80.00- 120.00	100.00
4.608	4.608 (0.323)	45	352705			0.00- 75.41	24.42
9 Freon 134a					CAS #: 811-97-2		
2.383	2.383 (0.167)	83	318728	50.0000	52.430	80.00- 120.00	100.00
2.383	2.383 (0.167)	69	261697			32.58- 132.58	82.11
2.411	2.411 (0.169)	63	35048			0.00- 58.36	11.00
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.191)	65	304961	50.0000	52.972	80.00- 120.00	100.00
2.721	2.721 (0.191)	51	669448			172.46- 272.46	219.52
2.721	2.721 (0.191)	47	162352			0.63- 100.63	53.24
15 Freon 22					CAS #: 75-45-6		
3.397	3.397 (0.238)	51	1126311	50.0000	54.023	80.00- 120.00	100.00
3.425	3.425 (0.240)	67	183710			0.00- 65.39	16.31
3.425	3.425 (0.240)	85	15737			0.00- 51.20	1.40
25 Methanol					CAS #: 67-56-1		
7.790	7.790 (0.546)	31	1679760	300.000	340.43	80.00- 120.00	100.00
7.790	7.790 (0.546)	32	1319489			28.55- 128.55	78.55
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.645)	67	1394489	50.0000	56.404	80.00- 120.00	100.00
9.195	9.195 (0.645)	69	419660			0.00- 79.81	30.09
9.167	9.167 (0.643)	35	68155			0.00- 55.10	4.89
40 Freon123a					CAS #: 354-23-4		
10.356	10.356 (0.726)	117	650120	50.0000	58.424	80.00- 120.00	100.00
10.356	10.356 (0.726)	67	921607			96.88- 196.88	141.76
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.742)	83	101152	50.0000	53.538	80.00- 120.00	100.00
10.577	10.577 (0.742)	133	20302			0.00- 73.50	20.07
10.577	10.577 (0.742)	85	64923			10.10- 110.10	64.18
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.911)	45	4613337	50.0000	56.386	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
66 Isopropyl ether (continued)							
12.983	12.983 (0.911)	87	987883			0.00- 71.33	21.41
12.983	12.983 (0.911)	59	479046			0.00- 60.24	10.38
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.926)	42	226085	50.0000	57.091	80.00- 120.00	100.00
13.204	13.204 (0.926)	59	245748			47.04- 147.04	108.70
13.204	13.204 (0.926)	41	136698			14.12- 114.12	60.46
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.536	13.536 (0.950)	59	1908993	50.0000	55.626	80.00- 120.00	100.00
13.564	13.564 (0.952)	87	706115			0.00- 86.33	36.99
13.536	13.536 (0.950)	41	336344			0.00- 70.48	17.62
73 Ethyl Acetate					CAS #: 141-78-6		
13.951	13.951 (0.979)	45	468486	50.0000	55.995	80.00- 120.00	100.00
13.951	13.951 (0.979)	61	412112			36.81- 136.81	87.97
13.951	13.951 (0.979)	43	3227994			616.84- 716.84	689.03
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.068)	73	2158715	50.0000	55.460	80.00- 120.00	100.00
15.223	15.223 (1.068)	87	519728			0.00- 73.95	24.08
15.223	15.223 (1.068)	55	604854			0.00- 80.63	28.02
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.467)	58	3383522	50.0000	50.810	80.00- 120.00	100.00
20.918	20.918 (1.467)	43	5205630			99.63- 199.63	153.85
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	1099594	50.0000	53.395	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	756532			20.92- 120.92	68.80
15.941	15.941 (1.012)	43	620219			4.89- 104.89	56.40
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	2254804	50.0000	54.554	80.00- 120.00	100.00
19.066	19.066 (1.211)	73	765504			0.00- 83.95	33.95
19.066	19.066 (1.211)	43	5246587			182.68- 282.68	232.68
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	2481844	50.0000	50.166	80.00- 120.00	100.00
21.471	21.471 (1.072)	98	998364			0.00- 90.24	40.23
21.471	21.471 (1.072)	42	1685701			17.74- 117.74	67.92
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.102)	57	5537566	50.0000	49.833	80.00- 120.00	100.00
22.080	22.080 (1.102)	85	4332665			28.24- 128.24	78.24

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
148 Diisobutyl Ketone (continued)								
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd1.i/1-22may.b/1052202.d
Report Date: 22-May-2008 08:50

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 22-MAY-2008
Calibration Time: 08:38
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310674	186404	434944	310674	0.00
95 1,4-Difluorobenze	1610069	966041	2254097	1610069	0.00
123 Chlorobenzene-d5	1733182	1039909	2426455	1733182	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

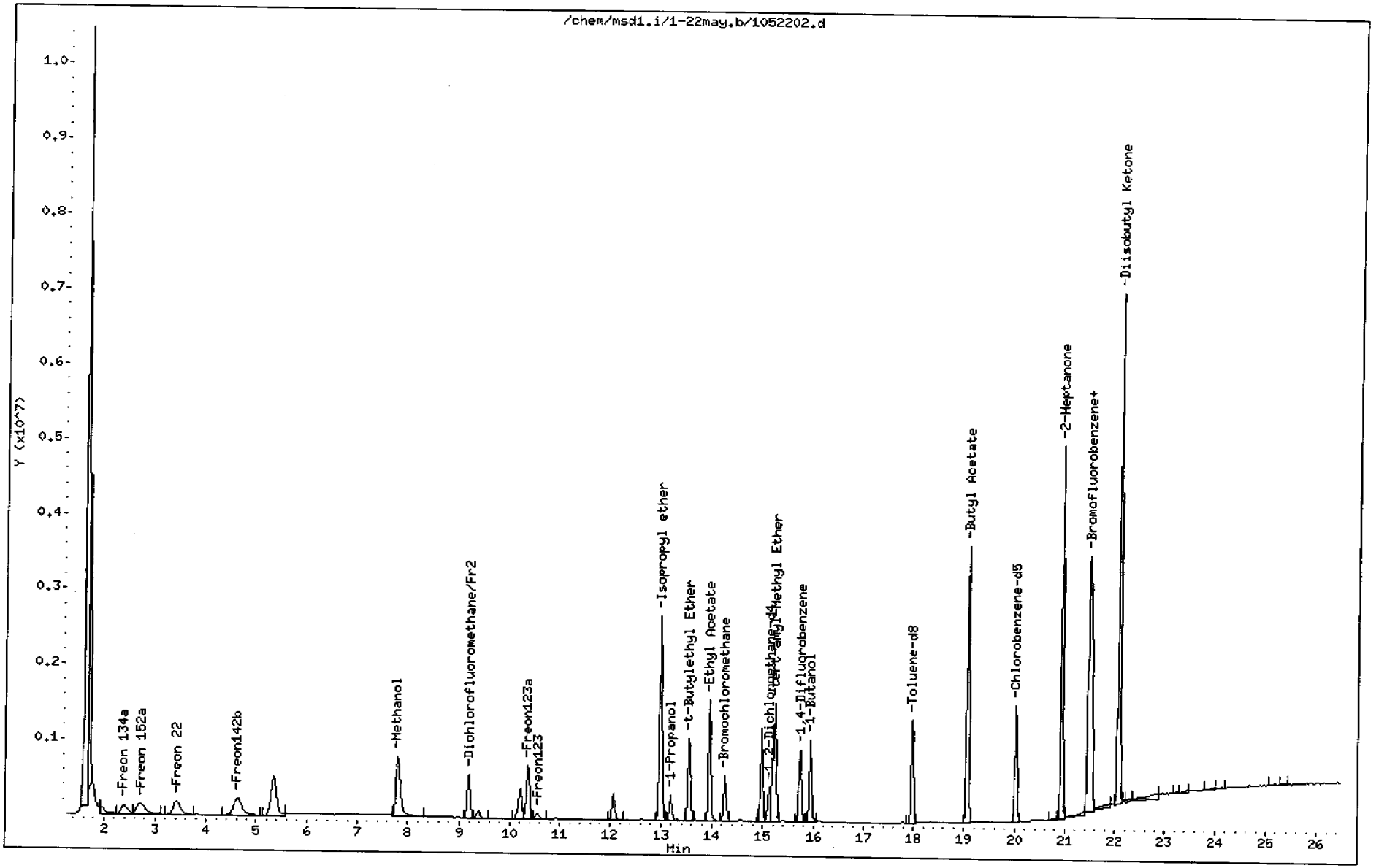
Data File: /chem/msd1.i/1-22may.b/1052202.d
Date : 22-MAY-2008 08:38
Client ID: CCVsp
Sample Info: 25mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0476



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805274-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052104 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/21/08 09:25 AM

Compound	%Recovery
Freon 12	96
Freon 114	98
Chloromethane	92
Vinyl Chloride	94
1,3-Butadiene	95
Bromomethane	99
Chloroethane	104
Freon 11	99
Ethanol	103
Freon 113	113
1,1-Dichloroethene	104
Acetone	94
2-Propanol	99
Carbon Disulfide	98
Methylene Chloride	98
Methyl tert-butyl ether	100
trans-1,2-Dichloroethene	106
Hexane	101
1,1-Dichloroethane	117
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	102
Tetrahydrofuran	84
Chloroform	108
1,1,1-Trichloroethane	110
Cyclohexane	101
Carbon Tetrachloride	105
Benzene	104
1,2-Dichloroethane	103
Heptane	103
Trichloroethene	103
1,2-Dichloropropane	101
1,4-Dioxane	100
Bromodichloromethane	104
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	105
Toluene	105
trans-1,3-Dichloropropene	106
1,1,2-Trichloroethane	105
Tetrachloroethene	107

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805274-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	052104	Date Collection: NA
Dil. Factor:	1.00	Date Analysis: 5/21/08 09:25 AM

Compound	%Recovery
2-Hexanone	102
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	107
Chlorobenzene	104
Ethyl Benzene	104
m,p-Xylene	104
o-Xylene	102
Styrene	99
Bromoform	106
1,1,2,2-Tetrachloroethane	94
4-Ethyltoluene	111
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	100
1,3-Dichlorobenzene	91
1,4-Dichlorobenzene	92
alpha-Chlorotoluene	94
1,2-Dichlorobenzene	87
1,2,4-Trichlorobenzene	63 Q
Hexachlorobutadiene	71
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	102

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	99	70-130

0478

Data File: /chem/msd1.i/1-21may.b/1052104.d
Report Date: 21-May-2008 09:38

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 1-21may
Fraction: VOA
Client Smp ID: LCS-1
Operator: lo
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	51.125	102.25	60-140
14 Dichlorodifluorome	50.000	48.233	96.47	70-130
17 Freon 114	50.000	48.825	97.65	70-130
21 Chloromethane	50.000	46.129	92.26	70-130
23 Vinyl Chloride	50.000	46.753	93.51	70-130
24 1,3-Butadiene	50.000	47.345	94.69	60-140
26 Bromomethane	50.000	49.586	99.17	70-130
28 Chloroethane	50.000	52.211	104.42	70-130
34 Trichlorofluoromet	50.000	49.436	98.87	70-130
38 Ethanol	50.000	51.535	103.07	60-140
43 Freon 113	50.000	56.428	112.86	70-130
44 1,1-Dichloroethene	50.000	52.009	104.02	70-130
45 Acetone	50.000	46.800	93.60	60-140
48 Carbon Disulfide	50.000	49.160	98.32	60-140
46 2-Propanol	50.000	49.598	99.20	60-140
54 Methylene Chloride	50.000	49.230	98.46	70-130
58 MTBE	50.000	50.022	100.04	60-140
59 trans-1,2-Dichloro	50.000	52.796	105.59	60-140
64 Hexane	50.000	50.715	101.43	60-140
67 Vinyl Acetate	50.000	55.368	110.74	60-140
68 1,1-Dichloroethane	50.000	58.597	117.19	70-130
76 cis-1,2-Dichloroet	50.000	51.230	102.46	70-130
75 2-Butanone	50.000	55.539	111.08	60-140
78 Tetrahydrofuran	50.000	42.154	84.31	60-140
81 Chloroform	50.000	54.127	108.25	70-130
84 Cyclohexane	50.000	50.727	101.45	60-140
83 1,1,1-Trichloroeth	50.000	54.870	109.74	70-130
85 Carbon Tetrachlori	50.000	52.706	105.41	70-130
91 Benzene	50.000	51.995	103.99	70-130
93 1,2-Dichloroethane	50.000	51.682	103.36	70-130
94 Heptane	50.000	51.497	102.99	60-140
97 Trichloroethene	50.000	51.481	102.96	70-130
102 1,2-Dichloropropan	50.000	50.447	100.89	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	49.892	99.78	60-140
106 Bromodichlorometha	50.000	51.932	103.86	60-140
109 cis-1,3-Dichloropr	50.000	50.859	101.72	70-130
110 4-Methyl-2-pentano	50.000	52.428	104.86	60-140
114 Toluene	50.000	52.388	104.78	70-130
115 trans-1,3-Dichloro	50.000	52.954	105.91	70-130
116 1,1,2-Trichloroeth	50.000	52.648	105.30	70-130
117 Tetrachloroethene	50.000	53.401	106.80	70-130
118 2-Hexanone	50.000	51.033	102.07	60-140
121 Dibromochlorometha	50.000	54.001	108.00	60-140
122 1,2-Dibromoethane	50.000	53.488	106.98	70-130
124 Chlorobenzene	50.000	51.813	103.63	70-130
125 Ethyl Benzene	50.000	51.800	103.60	70-130
128 m,p-Xylene	50.000	51.962	103.92	70-130
130 o-Xylene	50.000	51.153	102.31	70-130
131 Styrene	50.000	49.509	99.02	70-130
133 Bromoform	50.000	53.248	106.50	60-140
138 1,1,2,2-Tetrachlor	50.000	47.162	94.33	70-130
144 4-Ethyltoluene	50.000	55.326	110.65	60-140
146 1,3,5-Trimethylben	50.000	48.982	97.96	70-130
152 1,2,4-Trimethylben	50.000	50.289	100.58	70-130
158 1,3-Dichlorobenzen	50.000	45.742	91.48	70-130
159 1,4-Dichlorobenzen	50.000	46.160	92.32	70-130
162 alpha-Chlorotoluen	50.000	47.064	94.13	70-130
164 1,2-Dichlorobenzen	50.000	43.330	86.66	70-130
169 1,2,4-Trichloroben	50.000	31.438	62.88*	70-130
170 Hexachlorobutadien	50.000	35.699	71.40	70-130
140 Propylbenzene	50.000	56.958	113.92	60-140
134 Cumene	50.000	57.240	114.48	60-140
50 3-Chloropropene	50.000	61.143	122.29	60-140
88 2,2,4-Trimethylpen	50.000	51.164	102.33	60-140
29 Isopentane	50.000	48.524	97.05	70-130
22 Butane	50.000	48.465	96.93	70-130
99 Methyl Cyclohexane	50.000	51.486	102.97	70-130
57 tert-Butyl-Alcohol	50.000	44.064	88.13	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.314	97.26	70-130
$ 111 Toluene-d8	25.000	24.629	98.52	70-130
$ 136 Bromofluorobenzene	25.000	24.731	98.92	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-21may.b/1052104.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 21-MAY-2008 09:25
Operator : lo Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-21may.b/t14q519b.m
Meth Date : 21-May-2008 09:15 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	======= ========	****	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	314947	25.0000		80.00- 120.00	100.00
14.282	14.282 (1.000)	128	238258			28.93- 128.93	75.65
14.255	14.255 (1.000)	49	571090			132.03- 232.03	181.33
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1644052	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	259295			0.00- 65.76	15.77
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1800944	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1060779			8.42- 108.42	58.90
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.139 (1.060)	65	511034	24.3145	24.314	80.00- 120.00	100.00
15.139	15.139 (1.060)	67	301591			6.04- 106.04	59.02
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.987 (1.140)	98	1834701	24.6293	24.629	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	189759			0.00- 60.35	10.34

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1185121			15.45- 115.45	64.59
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.526 (1.075)	174	953035	24.7309	24.731	80.00- 120.00	100.00
21.526	21.526 (1.075)	95	1533710			110.56- 210.56	160.93
21.526	21.526 (1.075)	176	918709			45.40- 145.40	96.40
12 Propylene					CAS #: 115-07-1		
2.467	2.467 (0.173)	41	355510	51.1249	51.125	80.00- 120.00	100.00
2.467	2.467 (0.173)	42	230984			16.91- 116.91	64.97
2.467	2.495 (0.173)	39	281642			37.15- 137.15	79.22
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.890	2.890 (0.202)	85	1674594	48.2327	48.233	80.00- 120.00	100.00
2.890	2.890 (0.202)	87	536806			0.00- 75.39	32.06
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1160460	48.8250	48.825	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	359345			0.00- 81.68	30.97
21 Chloromethane					CAS #: 74-87-3		
4.664	4.636 (0.327)	50	690172	46.1293	46.129	80.00- 120.00	100.00
4.636	4.636 (0.325)	52	217505			0.00- 80.15	31.51
23 Vinyl Chloride					CAS #: 75-01-4		
5.621	5.621 (0.394)	62	764908	46.7531	46.753	80.00- 120.00	100.00
5.650	5.621 (0.396)	64	233648			0.00- 77.57	30.55
24 1,3-Butadiene					CAS #: 106-99-0		
5.903	5.903 (0.413)	54	588988	47.3447	47.345	80.00- 120.00	100.00
5.903	5.903 (0.413)	39	562393			37.41- 137.41	95.48
26 Bromomethane					CAS #: 74-83-9		
7.536	7.536 (0.528)	94	547713	49.5861	49.586	80.00- 120.00	100.00
7.536	7.536 (0.528)	96	519894			42.44- 142.44	94.92
28 Chloroethane					CAS #: 75-00-3		
8.128	8.128 (0.569)	64	461355	52.2106	52.211	80.00- 120.00	100.00
8.128	8.128 (0.569)	49	135098			0.00- 79.23	29.28
8.128	8.128 (0.569)	66	143766			0.00- 81.66	31.16
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
9.001	9.001 (0.630)	101	2208971	49.4358	49.436	80.00- 120.00	100.00
9.001	9.001 (0.630)	103	1429971			14.62- 114.62	64.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.135	10.135 (0.710)	45	364744	51.5353	51.535	80.00- 120.00	100.00
10.135	10.135 (0.710)	43	75083			0.00- 75.81	20.59
10.135	10.135 (0.710)	46	143899			0.00- 92.85	39.45
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	1319354	56.4286	56.428	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	840097			12.64- 112.64	63.67
10.577	10.577 (0.741)	101	1767221			83.95- 183.95	133.95
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	1685855	52.0091	52.009	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	916123			3.86- 103.86	54.34
10.522	10.522 (0.737)	98	591000			0.00- 85.09	35.06
45 Acetone					CAS #: 67-64-1		
10.881	10.881 (0.762)	58	509506	46.7999	46.800	80.00- 120.00	100.00
10.881	10.881 (0.762)	43	1680915			275.34- 375.34	329.91
46 2-Propanol					CAS #: 67-63-0		
11.324	11.324 (0.793)	45	1908900	49.5979	49.598	80.00- 120.00	100.00
11.324	11.324 (0.793)	43	348895			0.00- 68.18	18.28
11.324	11.324 (0.793)	59	71343			0.00- 53.79	3.74
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.854 (0.760)	76	2624718	49.1601	49.160	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.434	11.434 (0.801)	76	352698	61.1426	61.143	80.00- 120.00	100.00
11.434	11.434 (0.801)	41	1285374			303.82- 403.82	364.44
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	1382328	49.2301	49.230	80.00- 120.00	100.00
11.766	11.766 (0.824)	84	885317			13.77- 113.77	64.05
11.766	11.739 (0.824)	51	413382			0.00- 79.96	29.90
58 MTBE					CAS #: 1634-04-4		
12.153	12.153 (0.851)	73	1002083	50.0217	50.022	80.00- 120.00	100.00
12.153	12.153 (0.851)	57	291429			0.00- 78.77	29.08
12.153	12.153 (0.851)	41	302516			0.00- 78.25	30.19
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.181	12.181 (0.853)	96	1081648	52.7960	52.796	80.00- 120.00	100.00
12.181	12.181 (0.853)	61	1679934			106.66- 206.66	155.31
12.181	12.181 (0.853)	98	674736			13.20- 113.20	62.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.568	12.568 (0.880)	57	2396040	50.7148	50.715	80.00- 120.00	100.00
12.568	12.568 (0.880)	43	1553582			16.42- 116.42	64.84
12.568	12.568 (0.880)	86	355951			0.00- 64.88	14.86
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.915)	86	292593	55.3677	55.368	80.00- 120.00	100.00
13.066	13.066 (0.915)	43	3570471			1256.82-1356.82	1220.29
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.909)	63	2192645	58.5968	58.597	80.00- 120.00	100.00
12.983	12.983 (0.909)	65	655897			0.00- 80.08	29.91
75 2-Butanone					CAS #: 78-93-3		
13.951	13.923 (0.977)	72	630146	55.5389	55.539	80.00- 120.00	100.00
13.923	13.923 (0.975)	43	2963795			420.83- 520.83	470.33
13.923	13.923 (0.975)	57	229700			0.00- 90.57	36.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.973)	61	1728966	51.2302	51.230	80.00- 120.00	100.00
13.895	13.895 (0.973)	96	1233494			20.70- 120.70	71.34
13.895	13.895 (0.973)	98	770572			0.00- 94.62	44.57
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (0.998)	42	1837166	42.1541	42.154	80.00- 120.00	100.00
14.255	14.255 (0.998)	71	580898			0.00- 81.84	31.62
14.255	14.255 (0.998)	72	621966			0.00- 82.78	33.85
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2411410	54.1273	54.127	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1500121			12.14- 112.14	62.21
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.586 (1.021)	97	2564968	54.8703	54.870	80.00- 120.00	100.00
14.586	14.586 (1.021)	99	1631273			13.23- 113.23	63.60
84 Cyclohexane					CAS #: 110-82-7		
14.586	14.559 (1.021)	84	1976160	50.7273	50.727	80.00- 120.00	100.00
14.559	14.559 (1.019)	56	2655713			83.29- 183.29	134.39
14.559	14.559 (1.019)	41	1378632			19.49- 119.49	69.76
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	2278802	52.7055	52.706	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	2369385			53.03- 153.03	103.98
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.112	15.112 (1.058)	57	8508746	51.1638	51.164	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.112	15.112 (1.058)	56	2740473			0.00- 83.07	32.21
15.112	15.112 (1.058)	41	1974023			0.00- 74.24	23.20
91 Benzene					CAS #: 71-43-2		
15.139	15.139 (0.961)	78	4349648	51.9948	51.995	80.00- 120.00	100.00
15.139	15.139 (0.961)	77	990399			0.00- 73.68	22.77
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	1787900	51.6821	51.682	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	565289			0.00- 83.51	31.62
94 Heptane					CAS #: 142-82-5		
15.361	15.361 (0.975)	71	1671770	51.4974	51.497	80.00- 120.00	100.00
15.361	15.361 (0.975)	43	3452105			162.65- 262.65	206.49
15.361	15.361 (0.975)	57	1790306			57.85- 157.85	107.09
97 Trichloroethene					CAS #: 79-01-6		
16.135	16.107 (1.025)	95	1766066	51.4813	51.481	80.00- 120.00	100.00
16.135	16.135 (1.025)	130	1684225			46.53- 146.53	95.37
16.135	16.135 (1.025)	97	1132951			14.98- 114.98	64.15
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.577	16.577 (1.053)	63	1682443	50.4470	50.447	80.00- 120.00	100.00
16.577	16.577 (1.053)	62	1199364			21.07- 121.07	71.29
16.550	16.550 (1.051)	41	992543			8.92- 108.92	58.99
103 1,4-Dioxane					CAS #: 123-91-1		
16.715	16.715 (1.061)	88	1074073	49.8919	49.892	80.00- 120.00	100.00
16.688	16.688 (1.060)	58	859485			29.61- 129.61	80.02
16.688	16.688 (1.060)	57	266671			0.00- 75.70	24.83
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	2792115	51.9325	51.932	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	1694310			11.42- 111.42	60.68
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.628	17.628 (1.119)	75	2392279	50.8592	50.859	80.00- 120.00	100.00
17.628	17.628 (1.119)	77	763541			0.00- 81.52	31.92
17.628	17.628 (1.119)	39	1314658			5.21- 105.21	54.95
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.794	17.794 (1.130)	58	1759686	52.4276	52.428	80.00- 120.00	100.00
17.794	17.794 (1.130)	43	4520426			210.27- 310.27	256.89
17.794	17.794 (1.130)	85	672132			0.00- 89.24	38.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	6027941	52.3881	52.388	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	3654456			9.73- 109.73	60.63
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.430	18.430 (0.920)	75	2561645	52.9540	52.954	80.00- 120.00	100.00
18.430	18.430 (0.920)	77	807646			0.00- 81.71	31.53
18.430	18.430 (0.920)	39	1360385			2.95- 102.95	53.11
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	2006568	52.6476	52.648	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	1238919			11.60- 111.60	61.74
18.706	18.706 (0.934)	83	1646451			31.38- 131.38	82.05
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	2357749	53.4012	53.401	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	1857496			27.45- 127.45	78.78
18.817	18.817 (0.939)	131	1767909			24.33- 124.33	74.98
118 2-Hexanone					CAS #: 591-78-6		
18.955	18.955 (0.946)	58	2630317	51.0329	51.033	80.00- 120.00	100.00
18.955	18.955 (0.946)	43	4768493			129.05- 229.05	181.29
18.983	18.983 (0.948)	100	521823			0.00- 69.73	19.84
121 Dibromochloromethane					CAS #: 124-48-1		
19.232	19.232 (0.960)	129	2901375	54.0008	54.001	80.00- 120.00	100.00
19.232	19.232 (0.960)	127	2250308			26.10- 126.10	77.56
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.453	19.453 (0.971)	107	3002123	53.4883	53.488	80.00- 120.00	100.00
19.453	19.453 (0.971)	109	2825535			44.80- 144.80	94.12
124 Chlorobenzene					CAS #: 108-90-7		
20.061	20.061 (1.001)	112	5259231	51.8127	51.813	80.00- 120.00	100.00
20.061	20.061 (1.001)	114	1656726			0.00- 81.45	31.50
20.061	20.061 (1.001)	77	3393952			14.93- 114.93	64.53
125 Ethyl Benzene					CAS #: 100-41-4		
20.144	20.144 (1.006)	106	2883157	51.7998	51.800	80.00- 120.00	100.00
20.144	20.144 (1.006)	91	9278324			273.94- 373.94	321.81
128 m,p-Xylene					CAS #: 108-38-3		
20.282	20.282 (1.012)	106	3655528	51.9621	51.962	80.00- 120.00	100.00
20.282	20.282 (1.012)	91	7365631			157.95- 257.95	201.49
130 o-Xylene					CAS #: 95-47-6		
20.808	20.808 (1.039)	106	3437418	51.1530	51.153	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.808	20.808	(1.039)	91	7354983			162.80- 262.80	213.97
131 Styrene						CAS #: 100-42-5		
20.835	20.835	(1.040)	104	5580182	49.5087	49.509	80.00- 120.00	100.00
20.835	20.835	(1.040)	78	2613138			0.00- 97.22	46.83
133 Bromoform						CAS #: 75-25-2		
21.139	21.139	(1.055)	173	2694000	53.2484	53.248	80.00- 120.00	100.00
21.139	21.139	(1.055)	171	1389624			1.71- 101.71	51.58
134 Cumene						CAS #: 98-82-8		
21.250	21.250	(1.061)	105	10631484	57.2405	57.240	80.00- 120.00	100.00
21.250	21.250	(1.061)	120	2653739			0.00- 75.80	24.96
21.250	21.250	(1.061)	51	1094383			0.00- 60.85	10.29
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.665	21.665	(1.081)	83	4681445	47.1626	47.162	80.00- 120.00	100.00
21.665	21.665	(1.081)	85	2891646			11.99- 111.99	61.77
140 Propylbenzene						CAS #: 103-65-1		
21.748	21.748	(1.086)	91	12823934	56.9584	56.958	80.00- 120.00	100.00
21.748	21.748	(1.086)	120	2726261			0.00- 73.27	21.26
21.748	21.748	(1.086)	105	443237			0.00- 55.00	3.46
144 4-Ethyltoluene						CAS #: 622-96-8		
21.886	21.886	(1.092)	105	11042702	55.3257	55.326	80.00- 120.00	100.00
21.886	21.886	(1.092)	120	3157484			0.00- 77.86	28.59
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.941	21.941	(1.095)	105	9339445	48.9823	48.982	80.00- 120.00	100.00
21.941	21.941	(1.095)	120	4242317			0.00- 94.49	45.42
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.411	22.411	(1.119)	105	7589346	50.2891	50.289	80.00- 120.00	100.00
22.411	22.411	(1.119)	120	3327005			0.00- 95.48	43.84
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.826	22.826	(1.139)	146	4277479	45.7415	45.742	80.00- 120.00	100.00
22.826	22.826	(1.139)	148	2704513			12.15- 112.15	63.23
22.826	22.826	(1.139)	111	1827809			0.00- 91.58	42.73
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.145)	146	4280648	46.1597	46.160	80.00- 120.00	100.00
22.937	22.937	(1.145)	148	2697132			16.32- 116.32	63.01
22.937	22.937	(1.145)	111	1733570			0.00- 90.95	40.50

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.103	23.103 (1.153)	91	6429770	47.0637	47.064	80.00- 120.00	100.00
23.103	23.103 (1.153)	126	1268202			0.00- 69.46	19.72
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.168)	146	3542086	43.3297	43.330	80.00- 120.00	100.00
23.407	23.407 (1.168)	148	2232387			13.54- 113.54	63.02
23.407	23.407 (1.168)	111	1562206			0.00- 94.41	44.10
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.261)	180	1088370	31.4377	31.438	80.00- 120.00	100.00(R)
25.259	25.259 (1.261)	182	1050909			45.62- 145.62	96.56
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.265)	225	848183	35.6988	35.699	80.00- 120.00	100.00
25.342	25.342 (1.265)	223	517403			14.77- 114.77	61.00
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.581)	43	1167231	48.5245	48.524	80.00- 120.00	100.00
8.297	8.297 (0.581)	57	810641			18.54- 118.54	69.45
22 Butane					CAS #: 106-97-8		
5.481	5.452 (0.384)	58	158801	48.4646	48.465	80.00- 120.00	100.00
5.481	5.481 (0.384)	43	1176391			703.05- 803.05	740.80
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.145)	83	2858795	51.4856	51.486	80.00- 120.00	100.00
16.356	16.356 (1.145)	98	1383541			0.00- 97.88	48.40
16.356	16.356 (1.145)	55	2655373			45.40- 145.40	92.88
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.070	12.070 (0.845)	59	894114	44.0638	44.064	80.00- 120.00	100.00
12.070	12.070 (0.845)	41	180824			0.00- 67.50	20.22
12.070	12.070 (0.845)	57	91777			0.00- 63.77	10.26

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/msd1.i/1-21may.b/1052104.d
Report Date: 21-May-2008 09:38

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

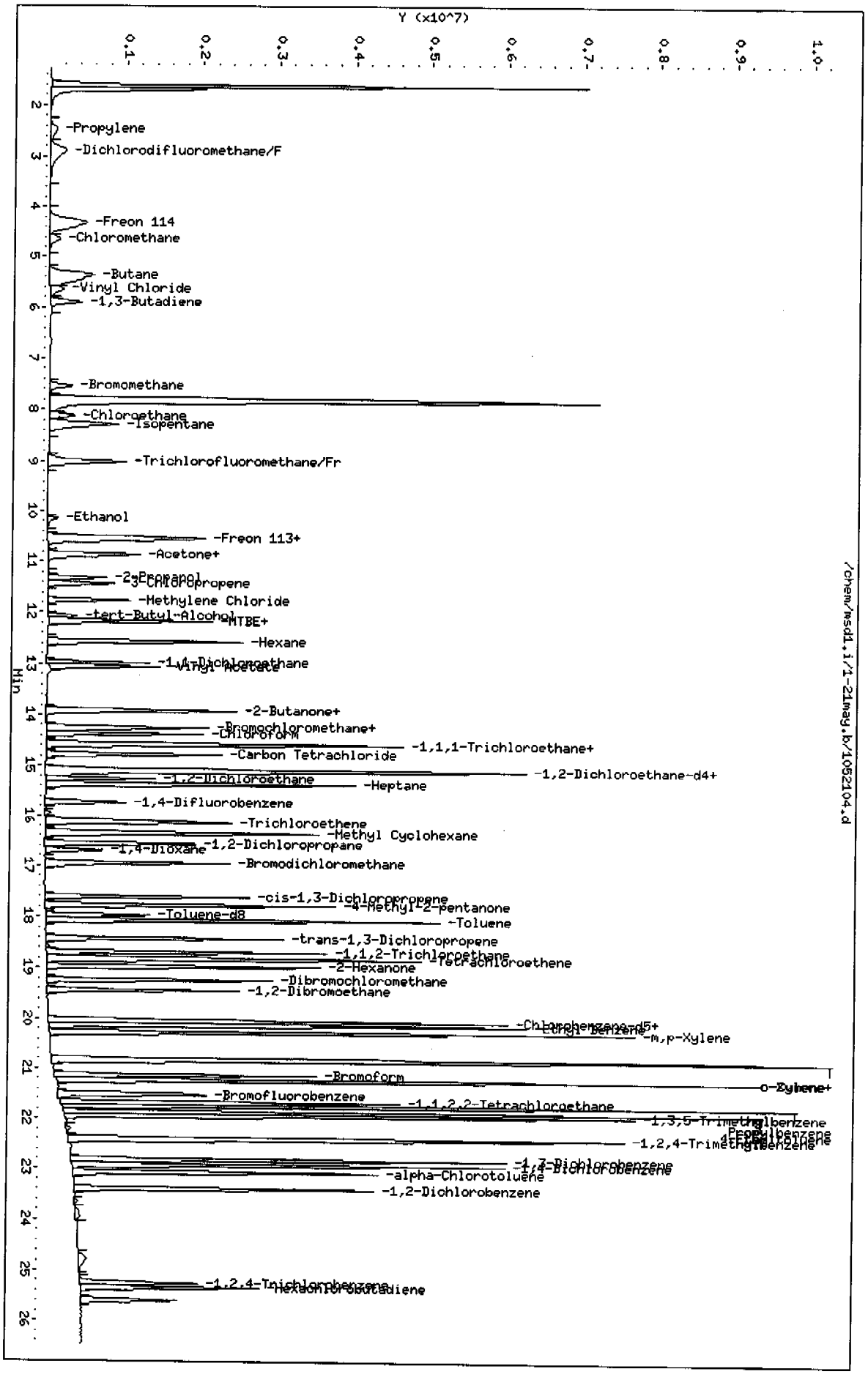
Instrument ID: msd1.i
Lab File ID: 1052104.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-21may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-MAY-2008
Calibration Time: 08:52
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	310538	186323	434753	314947	1.42
95 1,4-Difluorobenze	1646495	987897	2305093	1644052	-0.15
123 Chlorobenzene-d5	1819110	1091466	2546754	1800944	-1.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-21may.b/1052104.d
Date : 21-MAY-2008 09:25
Client ID: LCS-1
Sample Info: 25mL #1541-138
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805274-14B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	052204	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/22/08 09:59 AM

Compound	%Recovery
Freon 12	101
Freon 114	102
Chloromethane	97
Vinyl Chloride	96
1,3-Butadiene	97
Bromomethane	108
Chloroethane	108
Freon 11	102
Ethanol	107
Freon 113	118
1,1-Dichloroethene	108
Acetone	100
2-Propanol	102
Carbon Disulfide	103
Methylene Chloride	103
Methyl tert-butyl ether	104
trans-1,2-Dichloroethene	110
Hexane	106
1,1-Dichloroethane	122
2-Butanone (Methyl Ethyl Ketone)	114
cis-1,2-Dichloroethene	105
Tetrahydrofuran	87
Chloroform	114
1,1,1-Trichloroethane	114
Cyclohexane	105
Carbon Tetrachloride	109
Benzene	105
1,2-Dichloroethane	104
Heptane	105
Trichloroethene	105
1,2-Dichloropropane	101
1,4-Dioxane	101
Bromodichloromethane	106
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	106
Toluene	107
trans-1,3-Dichloropropene	105
1,1,2-Trichloroethane	105
Tetrachloroethene	107

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805274-14B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052204 | Date Collection: NA
Dilution: 1.00 | Date Analysis: 5/22/08 09:59 AM

Compound	%Recovery
2-Hexanone	102
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	107
Chlorobenzene	102
Ethyl Benzene	102
m,p-Xylene	103
o-Xylene	101
Styrene	98
Bromoform	106
1,1,2,2-Tetrachloroethane	93
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	96
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	90
1,4-Dichlorobenzene	91
alpha-Chlorotoluene	92
1,2-Dichlorobenzene	84
1,2,4-Trichlorobenzene	62 Q
Hexachlorobutadiene	68 Q
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	108

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	98	70-130

0492

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 1-22may
Fraction: VOA
Client Smp ID: LCS-1
Operator: lo
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	54.177	108.35	60-140
14 Dichlorodifluorome	50.000	50.683	101.37	70-130
17 Freon 114	50.000	50.770	101.54	70-130
21 Chloromethane	50.000	48.437	96.87	70-130
23 Vinyl Chloride	50.000	47.758	95.52	70-130
24 1,3-Butadiene	50.000	48.722	97.44	60-140
26 Bromomethane	50.000	53.810	107.62	70-130
28 Chloroethane	50.000	54.076	108.15	70-130
34 Trichlorofluoromet	50.000	51.290	102.58	70-130
38 Ethanol	50.000	53.521	107.04	60-140
43 Freon 113	50.000	59.074	118.15	70-130
44 1,1-Dichloroethene	50.000	54.172	108.34	70-130
45 Acetone	50.000	49.769	99.54	60-140
48 Carbon Disulfide	50.000	51.386	102.77	60-140
46 2-Propanol	50.000	50.909	101.82	60-140
54 Methylene Chloride	50.000	51.715	103.43	70-130
58 MTBE	50.000	51.788	103.58	60-140
59 trans-1,2-Dichloro	50.000	55.154	110.31	60-140
64 Hexane	50.000	53.226	106.45	60-140
67 Vinyl Acetate	50.000	56.766	113.53	60-140
68 1,1-Dichloroethane	50.000	61.069	122.14	70-130
76 cis-1,2-Dichloroet	50.000	52.714	105.43	70-130
75 2-Butanone	50.000	56.988	113.98	60-140
78 Tetrahydrofuran	50.000	43.660	87.32	60-140
81 Chloroform	50.000	56.865	113.73	70-130
84 Cyclohexane	50.000	52.703	105.41	60-140
83 1,1,1-Trichloroeth	50.000	57.242	114.48	70-130
85 Carbon Tetrachlori	50.000	54.704	109.41	70-130
91 Benzene	50.000	52.600	105.20	70-130
93 1,2-Dichloroethane	50.000	52.029	104.06	70-130
94 Heptane	50.000	52.696	105.39	60-140
97 Trichloroethene	50.000	52.676	105.35	70-130
102 1,2-Dichloropropan	50.000	50.636	101.27	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	50.351	100.70	60-140
106 Bromodichlorometha	50.000	53.005	106.01	60-140
109 cis-1,3-Dichloropr	50.000	51.093	102.19	70-130
110 4-Methyl-2-pentano	50.000	53.242	106.49	60-140
114 Toluene	50.000	53.676	107.35	70-130
115 trans-1,3-Dichloro	50.000	52.611	105.22	70-130
116 1,1,2-Trichloroeth	50.000	52.664	105.33	70-130
117 Tetrachloroethene	50.000	53.319	106.64	70-130
118 2-Hexanone	50.000	51.207	102.41	60-140
121 Dibromochlorometha	50.000	53.805	107.61	60-140
122 1,2-Dibromoethane	50.000	53.716	107.43	70-130
124 Chlorobenzene	50.000	51.254	102.51	70-130
125 Ethyl Benzene	50.000	50.784	101.57	70-130
128 m,p-Xylene	50.000	51.657	103.31	70-130
130 o-Xylene	50.000	50.467	100.93	70-130
131 Styrene	50.000	49.269	98.54	70-130
133 Bromoform	50.000	52.892	105.78	60-140
138 1,1,2,2-Tetrachlor	50.000	46.440	92.88	70-130
144 4-Ethyltoluene	50.000	54.256	108.51	60-140
146 1,3,5-Trimethylben	50.000	48.290	96.58	70-130
152 1,2,4-Trimethylben	50.000	49.185	98.37	70-130
158 1,3-Dichlorobenzen	50.000	45.023	90.05	70-130
159 1,4-Dichlorobenzen	50.000	45.393	90.79	70-130
162 alpha-Chlorotoluen	50.000	46.163	92.33	70-130
164 1,2-Dichlorobenzen	50.000	42.188	84.38	70-130
169 1,2,4-Trichloroben	50.000	31.104	62.21*	70-130
170 Hexachlorobutadien	50.000	34.187	68.37*	70-130
140 Propylbenzene	50.000	55.943	111.89	60-140
134 Cumene	50.000	56.208	112.42	60-140
50 3-Chloropropene	50.000	66.732	133.46	60-140
88 2,2,4-Trimethylpen	50.000	52.564	105.13	60-140
29 Isopentane	50.000	50.734	101.47	70-130
22 Butane	50.000	49.653	99.31	70-130
99 Methyl Cyclohexane	50.000	53.233	106.47	70-130
57 tert-Butyl-Alcohol	50.000	44.935	89.87	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.566	98.26	70-130
$ 111 Toluene-d8	25.000	24.341	97.36	70-130
$ 136 Bromofluorobenzene	25.000	24.589	98.35	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-22may.b/1052204.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 22-MAY-2008 09:59
Operator : lo Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-22may.b/t14q519b.m
Meth Date : 22-May-2008 09:31 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	301769	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	239782			27.30- 127.30	79.46
14.255	14.255 (1.000)	49	562825			131.96- 231.96	186.51
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1613816	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	252163			0.00- 65.38	15.63
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1785492	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1036458			8.42- 108.42	58.05
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.060)	65	494710	24.5656	24.566	80.00- 120.00	100.00
15.140	15.140 (1.060)	67	309501			6.04- 106.04	62.56
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1779868	24.3408	24.341	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	180018			0.00- 60.35	10.11

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1181367			15.45- 115.45	66.37
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	939422	24.5887	24.589	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1500331			110.38- 210.38	159.71
21.527	21.527 (1.075)	176	892390			44.94- 144.94	94.99
12 Propylene					CAS #: 115-07-1		
2.467	2.467 (0.173)	41	360969	54.1768	54.177	80.00- 120.00	100.00
2.467	2.467 (0.173)	42	240019			16.91- 116.91	66.49
2.467	2.467 (0.173)	39	286288			37.15- 137.15	79.31
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.890	2.862 (0.202)	85	1686055	50.6835	50.683	80.00- 120.00	100.00
2.890	2.862 (0.202)	87	542174			0.00- 75.39	32.16
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1156202	50.7702	50.770	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	359356			0.00- 81.11	31.08
21 Chloromethane					CAS #: 74-87-3		
4.636	4.636 (0.325)	50	694382	48.4374	48.437	80.00- 120.00	100.00
4.636	4.636 (0.325)	52	218558			0.00- 80.15	31.48
23 Vinyl Chloride					CAS #: 75-01-4		
5.621	5.621 (0.394)	62	748653	47.7579	47.758	80.00- 120.00	100.00
5.621	5.621 (0.394)	64	231701			0.00- 77.57	30.95
24 1,3-Butadiene					CAS #: 106-99-0		
5.903	5.903 (0.413)	54	580759	48.7219	48.722	80.00- 120.00	100.00
5.903	5.875 (0.413)	39	562910			37.41- 137.41	96.93
26 Bromomethane					CAS #: 74-83-9		
7.536	7.536 (0.528)	94	569498	53.8099	53.810	80.00- 120.00	100.00
7.536	7.536 (0.528)	96	528281			43.27- 143.27	92.76
28 Chloroethane					CAS #: 75-00-3		
8.100	8.100 (0.567)	64	457848	54.0764	54.076	80.00- 120.00	100.00
8.100	8.100 (0.567)	49	133424			0.00- 79.23	29.14
8.128	8.100 (0.569)	66	141833			0.00- 81.66	30.98
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
9.001	9.001 (0.630)	101	2195951	51.2905	51.290	80.00- 120.00	100.00
9.001	9.001 (0.630)	103	1431619			14.39- 114.39	65.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.135	10.135 (0.710)	45	362949	53.5211	53.521	80.00- 120.00	100.00
10.135	10.135 (0.710)	43	74604			0.00- 75.81	20.55
10.135	10.135 (0.710)	46	142421			0.00- 92.85	39.24
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	1323412	59.0739	59.074	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	842360			13.47- 113.47	63.65
10.577	10.577 (0.741)	101	1756957			83.83- 183.83	132.76
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	1682484	54.1718	54.172	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	895012			3.44- 103.44	53.20
10.522	10.522 (0.737)	98	577557			0.00- 84.21	34.33
45 Acetone					CAS #: 67-64-1		
10.882	10.882 (0.762)	58	519162	49.7693	49.769	80.00- 120.00	100.00
10.882	10.882 (0.762)	43	1691611			275.34- 375.34	325.83
46 2-Propanol					CAS #: 67-63-0		
11.324	11.324 (0.793)	45	1877389	50.9093	50.909	80.00- 120.00	100.00
11.324	11.324 (0.793)	43	345213			0.00- 68.18	18.39
11.324	11.324 (0.793)	59	71597			0.00- 53.79	3.81
48 Carbon Disulfide					CAS #: 75-15-0		
10.826	10.826 (0.758)	76	2628765	51.3860	51.386	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.435	11.434 (0.801)	76	368835	66.7323	66.732	80.00- 120.00	100.00
11.435	11.434 (0.801)	41	1308240			303.82- 403.82	354.70
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	1391338	51.7149	51.715	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	889618			14.84- 114.84	63.94
11.739	11.739 (0.822)	51	425123			0.00- 79.96	30.55
58 MTBE					CAS #: 1634-04-4		
12.153	12.153 (0.851)	73	994059	51.7880	51.788	80.00- 120.00	100.00
12.153	12.153 (0.851)	57	290312			0.00- 77.73	29.20
12.153	12.153 (0.851)	41	290902			0.00- 78.25	29.26
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.181	12.181 (0.853)	96	1082681	55.1541	55.154	80.00- 120.00	100.00
12.181	12.181 (0.853)	61	1675311			107.02- 207.02	154.74
12.181	12.181 (0.853)	98	692551			13.20- 113.20	63.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.568	12.568 (0.880)	57	2409473	53.2262	53.226	80.00- 120.00	100.00
12.568	12.568 (0.880)	43	1555473			16.42- 116.42	64.56
12.568	12.568 (0.880)	86	363589			0.00- 64.88	15.09
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.915)	86	287428	56.7655	56.766	80.00- 120.00	100.00
13.066	13.066 (0.915)	43	3558564			1256.82-1356.82	1238.07
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.909)	63	2189533	61.0689	61.069	80.00- 120.00	100.00
12.983	12.983 (0.909)	65	661418			0.00- 79.93	30.21
75 2-Butanone					CAS #: 78-93-3		
13.923	13.923 (0.975)	72	619536	56.9882	56.988	80.00- 120.00	100.00
13.923	13.923 (0.975)	43	2977505			436.22- 536.22	480.60
13.923	13.923 (0.975)	57	227969			0.00- 90.57	36.80
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.973)	61	1704610	52.7142	52.714	80.00- 120.00	100.00
13.895	13.895 (0.973)	96	1225729			22.01- 122.01	71.91
13.895	13.895 (0.973)	98	787409			0.00- 95.61	46.19
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (0.998)	42	1823188	43.6602	43.660	80.00- 120.00	100.00
14.255	14.255 (0.998)	71	582543			0.00- 81.29	31.95
14.255	14.255 (0.998)	72	631278			0.00- 82.78	34.62
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2427357	56.8646	56.865	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1511110			12.44- 112.44	62.25
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.021)	97	2563863	57.2418	57.242	80.00- 120.00	100.00
14.587	14.587 (1.021)	99	1635840			14.11- 114.11	63.80
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.019)	84	1967225	52.7032	52.703	80.00- 120.00	100.00
14.559	14.559 (1.019)	56	2636021			84.13- 184.13	134.00
14.559	14.559 (1.019)	41	1373202			20.77- 120.77	69.80
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	2266242	54.7039	54.704	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	2340988			52.90- 152.90	103.30
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.112	15.112 (1.058)	57	8375777	52.5636	52.564	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.112	15.112 (1.058)	56	2717924			0.00- 83.07	32.45
15.112	15.084 (1.058)	41	1979029			0.00- 74.24	23.63
91 Benzene					CAS #: 71-43-2		
15.140	15.140 (0.961)	78	4319383	52.6004	52.600	80.00- 120.00	100.00
15.140	15.140 (0.961)	77	977973			0.00- 73.68	22.64
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	1766811	52.0294	52.029	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	562134			0.00- 83.51	31.82
94 Heptane					CAS #: 142-82-5		
15.361	15.361 (0.975)	71	1679228	52.6963	52.696	80.00- 120.00	100.00
15.361	15.361 (0.975)	43	3438927			162.65- 262.65	204.79
15.361	15.361 (0.975)	57	1778004			57.85- 157.85	105.88
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1773821	52.6762	52.676	80.00- 120.00	100.00
16.135	16.135 (1.025)	130	1700093			47.48- 147.48	95.84
16.107	16.107 (1.023)	97	1133299			14.50- 114.50	63.89
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.550	16.550 (1.051)	63	1657686	50.6359	50.636	80.00- 120.00	100.00
16.550	16.550 (1.051)	62	1193673			20.76- 120.76	72.01
16.550	16.550 (1.051)	41	991305			9.01- 109.01	59.80
103 1,4-Dioxane					CAS #: 123-91-1		
16.716	16.688 (1.061)	88	1064017	50.3508	50.351	80.00- 120.00	100.00
16.688	16.688 (1.060)	58	851066			30.57- 130.57	79.99
16.688	16.688 (1.060)	57	266956			0.00- 75.70	25.09
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	2797362	53.0049	53.005	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	1729973			11.34- 111.34	61.84
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.628	17.628 (1.119)	75	2359068	51.0928	51.093	80.00- 120.00	100.00
17.628	17.628 (1.119)	77	742211			0.00- 81.81	31.46
17.628	17.628 (1.119)	39	1298295			5.56- 105.56	55.03
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.794	17.794 (1.130)	58	1754173	53.2425	53.242	80.00- 120.00	100.00
17.794	17.794 (1.130)	43	4478478			210.27- 310.27	255.30
17.794	17.794 (1.130)	85	664519			0.00- 89.24	37.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	6062523	53.6758	53.676	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	3607175			9.92- 109.92	59.50
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.430	18.430 (0.920)	75	2523220	52.6111	52.611	80.00- 120.00	100.00
18.430	18.430 (0.920)	77	789093			0.00- 80.95	31.27
18.430	18.430 (0.920)	39	1345716			2.91- 102.91	53.33
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.934)	97	1989963	52.6638	52.664	80.00- 120.00	100.00
18.706	18.706 (0.934)	99	1248833			12.19- 112.19	62.76
18.706	18.706 (0.934)	83	1640664			31.81- 131.81	82.45
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	2333906	53.3187	53.319	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	1833020			27.36- 127.36	78.54
18.817	18.817 (0.939)	131	1739945			25.62- 125.62	74.55
118 2-Hexanone					CAS #: 591-78-6		
18.955	18.955 (0.946)	58	2616669	51.2074	51.207	80.00- 120.00	100.00
18.955	18.955 (0.946)	43	4687755			132.99- 232.99	179.15
18.983	18.983 (0.948)	100	510892			0.00- 69.73	19.52
121 Dibromochloromethane					CAS #: 124-48-1		
19.232	19.232 (0.960)	129	2866034	53.8047	53.805	80.00- 120.00	100.00
19.232	19.232 (0.960)	127	2217352			26.10- 126.10	77.37
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.453	19.453 (0.971)	107	2989038	53.7161	53.716	80.00- 120.00	100.00
19.453	19.453 (0.971)	109	2807593			45.15- 145.15	93.93
124 Chlorobenzene					CAS #: 108-90-7		
20.061	20.061 (1.001)	112	5157850	51.2536	51.254	80.00- 120.00	100.00
20.061	20.061 (1.001)	114	1642913			0.00- 81.58	31.85
20.061	20.061 (1.001)	77	3352249			15.28- 115.28	64.99
125 Ethyl Benzene					CAS #: 100-41-4		
20.144	20.144 (1.006)	106	2802357	50.7838	50.784	80.00- 120.00	100.00
20.144	20.144 (1.006)	91	9067700			273.94- 373.94	323.57
128 m,p-Xylene					CAS #: 108-38-3		
20.282	20.282 (1.012)	106	3602913	51.6574	51.657	80.00- 120.00	100.00
20.282	20.282 (1.012)	91	7253803			157.95- 257.95	201.33
130 o-Xylene					CAS #: 95-47-6		
20.808	20.808 (1.039)	106	3362244	50.4673	50.467	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.808	20.808 (1.039)	91	7199693			161.91- 261.91	214.13
131 Styrene					CAS #: 100-42-5		
20.835	20.835 (1.040)	104	5505528	49.2691	49.269	80.00- 120.00	100.00
20.835	20.835 (1.040)	78	2590430			0.00- 96.71	47.05
133 Bromoform					CAS #: 75-25-2		
21.139	21.139 (1.055)	173	2653031	52.8925	52.892	80.00- 120.00	100.00
21.139	21.139 (1.055)	171	1379420			1.54- 101.54	51.99
134 Cumene					CAS #: 98-82-8		
21.250	21.250 (1.061)	105	10350240	56.2086	56.208	80.00- 120.00	100.00
21.250	21.250 (1.061)	120	2607528			0.00- 75.80	25.19
21.250	21.250 (1.061)	51	1078881			0.00- 60.85	10.42
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.665	21.665 (1.081)	83	4570139	46.4397	46.440	80.00- 120.00	100.00
21.665	21.665 (1.081)	85	2810871			11.54- 111.54	61.51
140 Propylbenzene					CAS #: 103-65-1		
21.748	21.748 (1.086)	91	12487215	55.9428	55.943	80.00- 120.00	100.00
21.748	21.748 (1.086)	120	2643757			0.00- 73.27	21.17
21.748	21.748 (1.086)	105	438521			0.00- 55.00	3.51
144 4-Ethyltoluene					CAS #: 622-96-8		
21.886	21.886 (1.092)	105	10736272	54.2559	54.256	80.00- 120.00	100.00
21.886	21.886 (1.092)	120	3052740			0.00- 78.51	28.43
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.941	21.941 (1.095)	105	9128454	48.2901	48.290	80.00- 120.00	100.00
21.941	21.941 (1.095)	120	4168277			0.00- 94.49	45.66
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.411	22.411 (1.119)	105	7359020	49.1849	49.185	80.00- 120.00	100.00
22.411	22.411 (1.119)	120	3208261			0.00- 95.48	43.60
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.826	22.826 (1.139)	146	4174148	45.0229	45.023	80.00- 120.00	100.00
22.826	22.826 (1.139)	148	2610030			12.15- 112.15	62.53
22.826	22.826 (1.139)	111	1773716			0.00- 91.58	42.49
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.937	22.937 (1.145)	146	4173416	45.3929	45.393	80.00- 120.00	100.00
22.937	22.937 (1.145)	148	2651848			16.32- 116.32	63.54
22.937	22.937 (1.145)	111	1695921			0.00- 90.95	40.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.103	23.103 (1.153)	91	6252663	46.1634	46.163	80.00- 120.00	100.00
23.103	23.103 (1.153)	126	1231902			0.00- 69.46	19.70
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.168)	146	3419203	42.1884	42.188	80.00- 120.00	100.00
23.407	23.407 (1.168)	148	2155624			13.24- 113.24	63.04
23.407	23.407 (1.168)	111	1522631			0.00- 94.58	44.53
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.261)	180	1067588	31.1043	31.104	80.00- 120.00	100.00(R)
25.259	25.259 (1.261)	182	994451			45.79- 145.79	93.15
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.265)	225	805306	34.1875	34.187	80.00- 120.00	100.00(R)
25.342	25.342 (1.265)	223	511823			14.77- 114.77	63.56
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.581)	43	1169314	50.7339	50.734	80.00- 120.00	100.00
8.297	8.297 (0.581)	57	805006			18.54- 118.54	68.84
22 Butane					CAS #: 106-97-8		
5.453	5.452 (0.382)	58	155887	49.6529	49.653	80.00- 120.00	100.00
5.453	5.452 (0.382)	43	1175798			703.05- 803.05	754.26
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.145)	83	2832122	53.2326	53.233	80.00- 120.00	100.00
16.356	16.356 (1.145)	98	1379478			0.00- 97.88	48.71
16.356	16.356 (1.145)	55	2601756			45.40- 145.40	91.87
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.070	12.070 (0.845)	59	873649	44.9354	44.935	80.00- 120.00	100.00
12.070	12.070 (0.845)	41	174140			0.00- 67.50	19.93
12.070	12.070 (0.845)	57	91603			0.00- 63.77	10.49

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

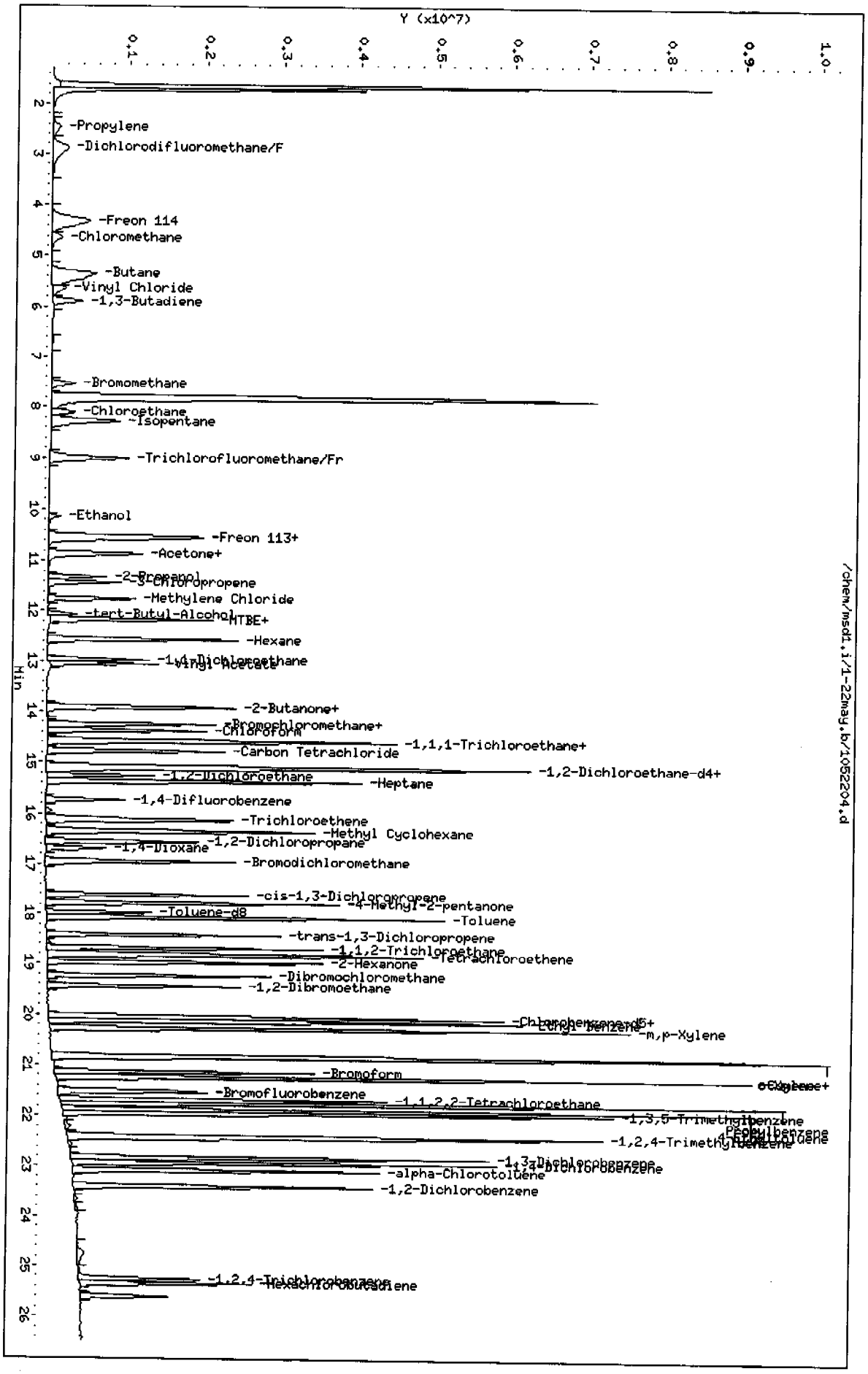
Instrument ID: msd1.i
Lab File ID: 1052204.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-22may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 22-MAY-2008
Calibration Time: 09:16
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	308066	184840	431292	301769	-2.04
95 1,4-Difluorobenze	1638375	983025	2293725	1613816	-1.50
123 Chlorobenzene-d5	1818182	1090909	2545455	1785492	-1.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-22may.b/1052204.d
Date : 22-MAY-2008 09:59
Client ID: LCS-1
Sample Info: 25mL #1541-138
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

0504

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.31
75	30.0 – 60.0% of mass 95	42.96
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.65
173	Less than 2.0% of mass 174	(0.83)[1]
174	Greater than 50.0% of mass 95	60.01
175	5.0 – 9.0% of mass 174	(7.27)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.25)[1]
177	5.0 – 9.0% of mass 176	(6.43)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 5/21/08
BFB Injection Time: 0757
BFB File ID: 1052101
Tekmar Purge Flow: NA
Vacuum: NA

IS/S Std.#: 1541-144	Exp. Date: 8/2/08
BCM	310538
1,4-DFB	1616495
CB-d5	1919110

Verified CCV IS vs ICAL mid-point (- 40%D) LO (initials)

Verify 176/174 m/z Ratio: 76015/79026.74100 = 96.248%

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 522319\ )}{(\ 310538\ )} \times \frac{(\ 25.00\ )}{(\ 1.66835\ )} = 25.20426$

Reported Result 25.204

File ID:	1052103
Compound:	1,2-DCA-d4
Initials:	LO

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	√	1052101	BFBTuneCheck	14716-275	50psig	2uL	1.00	5/21/08	0757	LO/CL	
2	√	02	CCVstd#1541-142	200ppbV	50ppbV	25mL			0818	LO/CL	
3	√	03	CCV-1#1622-3	↓	↓	↓			0852	LO/CL	
4	√	04	LCS-1#1541-138						0925	LO/CL	
5	X	05	LabBlank	12009	Humid	100mL	↓		1009	LO/—	
6	√	06	↓	↓	↓	↓			1100	LO/CL	
7	X	07	0805443-01A	33890	7.0"Hg/5psi	20mL	87.5		1141	LO/—	
8	√	08	↓ 01A	↓	↓	80mL	21.9		1243	LO/CL	
9	X	09	0805276-02A	25245	↓	1.0mL	175	↓	1329	LO/—	RR 2.0mL

Laura Quinn
Signature

5/21/08
Date

10	✓	1052110	0805276-02A	25245	7.0"Hg 5psi	2.0mL	87.5	5/21/08	1409	LO/GT	
11	✓	11	-03A	33940	↓	↓	↓	↓	1455	KR	
12	✓	12	↓ -04A	5606	↓	↓	↓		1537	KR	
13	✗	13	0805453-03A	1L Bag	SVE Trailer Inf	~~25mL~~	4.00		1724	KR	~~05/21/08 ... 100...~~
14	✓	14	-01A	↓	SVE Inf	25mL	4.00		1820	OM/KR	Dilute N!
15	✗	15	02A	↓	AS Inf	↓	↓		1857	OM	rv 75mL
16	✓	16	↓ 02A	↓	↓	75mL	1.33		1941	KR	
17	✗	17	0805454-01A		NRS EFF	12.5mL	8.00		2027	KR	RR 4mL
18	✓	18	System Blank	12009	Humid	200mL	1.00		2119	KR	
19	✓	19	0805454-01A	1L Bag	NRS Eff	4mL	25.0		2203	KR	
20	✗	20	↓ -02A	↓	NRS Inf	10mL	10.0		2257	CB	RR @ 1mL
21	✗	21	System Blank	12009	Humid	1 800mL	1.00	↓	2350	CB	
22	✓	22	↓	↓	↓	↓	↓	5/22/08	0030	CB	
23	✗	23	0805454-02A	1L Bag	NRS Inf	1mL	100		0109	CB	
24	✗	24	System Blank	12009	Humid	1 800mL	1.00		0152	CB	
25	✓	25	↓	↓	↓	↓	↓		0232	CB	
26	✓	26	0805454-02A	1L Bag	NRS Inf	25mL	400		0317	CB	100x
27	✓	27	0805274-01A	3735	6.5"Hg-5psi	100mL	1.71		0402	CB	
28	✓	28	-02A	34344	6.5"Hg-5psi		1.71		0442	CB	
29	✓	29	-03A	34375	7.0"Hg-5psi		1.75		0519	CB	
30	✓	30	-04A	34482	6.5"Hg-5psi		1.71		0556	CB	
31	✓	31	-05A	5613	6.0"Hg-5psi		1.68	↓	0632	LO	
32	✓	32 ↓	↓ -05AA	↓	↓	↓	↓	5/22/08	0720	LO/GT	

Comments:

Laura [signature]
Signature

5/22/08
Date

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.22
75	30.0 – 60.0% of mass 95	41.77
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.70
173	Less than 2.0% of mass 174	(0.78)[1]
174	Greater than 50.0% of mass 95	65.35
175	5.0 – 9.0% of mass 174	(6.95)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(95.80)[1]
177	5.0 – 9.0% of mass 176	(6.51)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 5/22/08
BFB Injection Time: 0801
BFB File ID: 1052201
Tekmar Purge Flow: NA
Vacuum: 8.5-6

IS/S Std.#:	1541-144	Exp. Date: 8/2/08
BCM	3080666	
1,4-DFB	1638375	
CB-d5	1818182	

Verified CCV IS vs ICAL mid-point (- 40%D) KD (initials)

Verify 176/174 m/z Ratio: 799021/834090 x100 = 95.796

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 507071\ )}{(\ 3080666\ )} \times \frac{(\ 25.00\ )}{(\ 1.166835\ )} =$ 24.66481

File ID:	1052203
Compound:	1,2-DCA-d4
Initials:	KD

Reported Result 24.665

	Dup.	File#	Sample/Client Name	Can#	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	√	1052201	BFB True Check	1476275	50 psig	2uL	1.00	5/22/08	0801	KD/CT	
2	√	02	CCV-1 #1541-142	30ppbv	50ppbv	25mL			0838	KD/CT	Spiked CCV
3	√	03	LCV-1 #1612-3	↓	↓	↓			0916	KD/CT	
4	√	04	LCS-1 #1541-138	↓	↓	↓			0959	KD/CT	
5	√	05	Lab Blank	12009	Humid	100mL			1050	KD/CT	
6	√	06	0805453-03A	1L bag	SVE Trailer Influent Combined	↓	↓		1141	KD/CT	
7	√	07	0805274-01A	34378	4.5" Hg-5psi		1.58		1236	KD/CT	
8	√	08	07A	34717	7.0" Hg-5psi		1.75		1322	KD/CT	
9	—	09	08A	34184	6.5" Hg-5psi	↓	1.11	↓			Run lost due to power failure

Laura Quarmyn
Signature

5/22/08
Date

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

0508

10	X	105210	0805274-09A	12338	6.0"Hg-5psi	100mL	1.68	5/22/08	1537	KR	RR 50mL	
11	✓	11	-10A	11875	6.5"Hg-5psi	100mL	1.71		1628	KR		
12	✓	12	-08A	34484	6.5"Hg-5psi	75mL	2.28		1809	KR		
13	✓	13	-09A	12338	6.0"Hg-5psi	50mL	3.36		1902	KR		
14	✓	14	-11A	4176	4.0"Hg-5psi	50mL	3.10		2038	KR		
15	✓	15	0805480-01A	1L Bag	SVE EFF	100mL	1.00		2138	KR		
16	✓	16	0805481-01AA		SVE 101 INF	100mL	1.00		2217	CB	~~RR 50mL 5/23/08~~ RR 50mL	
17	✓	17	-04A		SVE INT	50mL	2.00		2309	CB		
18	✓	18	-01A		SVE 101 INF	50mL	2.00		2354	CB		
19	X	19	-02A		SVE 201 INF	4mL	25.0	5/23/08	0034	CB	RR @ 1mL Bad screen	
20	✓	20	System Blank	12009	Humid	100mL	1.00		0126	CB		
21	✓	21	0805481-02A	1L Bag	SVE 201 INF	1mL	100		0204	CB		
22	✓	22	-03A		SVE Com INF	1.5mL	66.7		0300	CB		
23	✓	23	0805483A-01A		SM-2	100mL	1.00		0353	CB		
24	✓	24	-02A		NM-2	50mL	2.00		0433	CB		
25	✓	25	-03A		NM-3	100mL	1.00		0510	CB		
26	✓	26	-04A		SE Sys	35mL	2.86		0544	CB		
27	✓	27	-05A		SSV-2	100mL	1.00		0632	CB		
28	✓	28	-06A		SSV-3	100mL	1.00		0709	CB		
29												
30												
31			5/23/08									
32												

Comments:

Laura Dermyer
Signature

5/23/08
Date

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-19may.b/1051908.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 19-MAY-2008 13:04
Operator : lo
Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-19may.b/bfb60.m
Meth Date : 19-May-2008 12:54
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.520	5.564	-0.044	95	1410409			100.00- 100.00	100.00
5.520	5.564	-0.044	50	261176			15.00- 40.00	18.52
5.520	5.564	-0.044	75	596367			30.00- 60.00	42.28
5.520	5.564	-0.044	96	91372			5.00- 9.00	6.48
5.520	5.564	-0.044	173	7186			0.00- 2.00	0.79
5.520	5.564	-0.044	174	912971			50.00- 100.00	64.73
5.520	5.564	-0.044	175	65495			5.00- 9.00	7.17
5.520	5.564	-0.044	176	873397			95.00- 101.00	95.67
5.520	5.564	-0.044	177	56249			5.00- 9.00	6.44

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

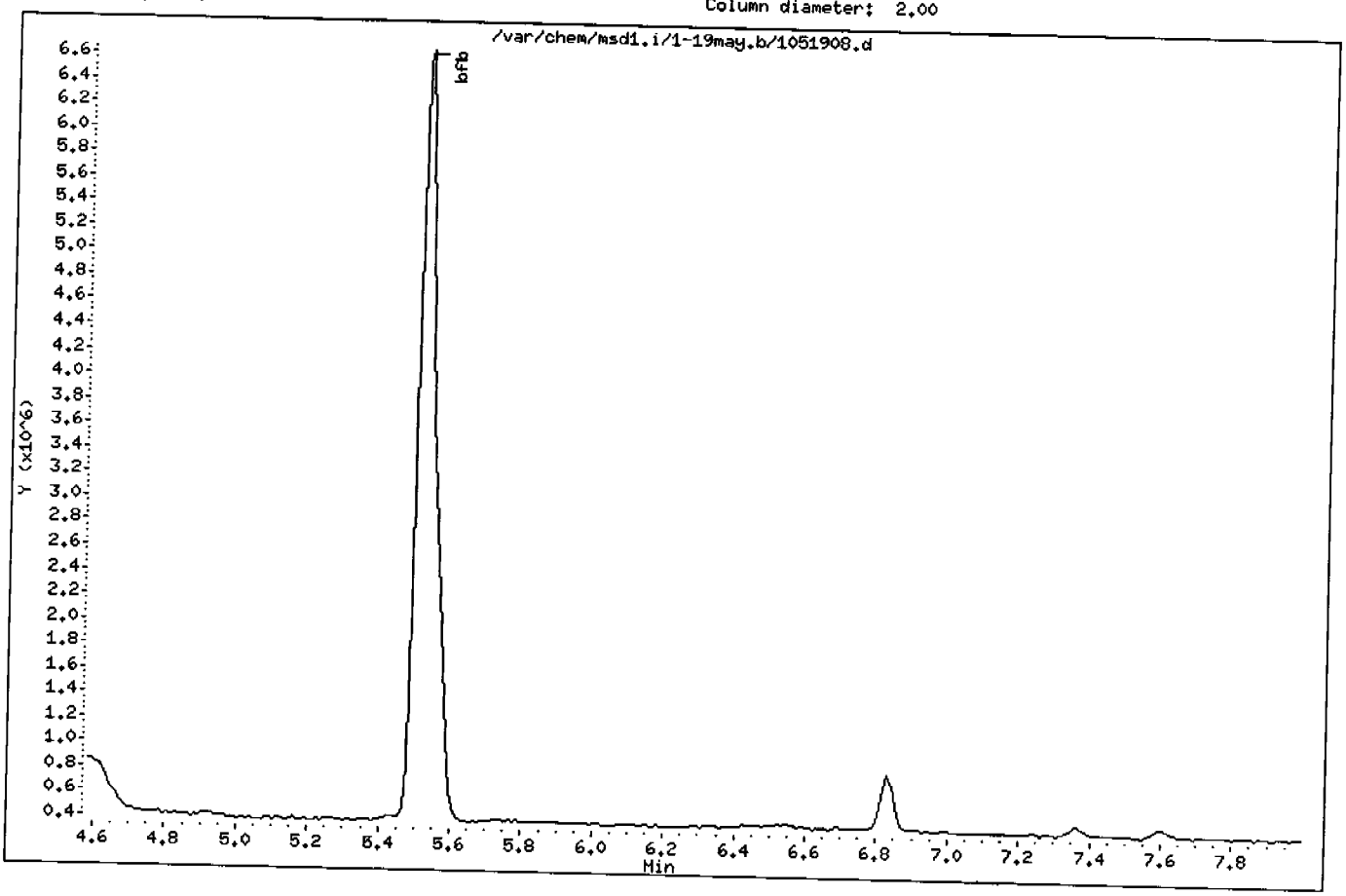
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

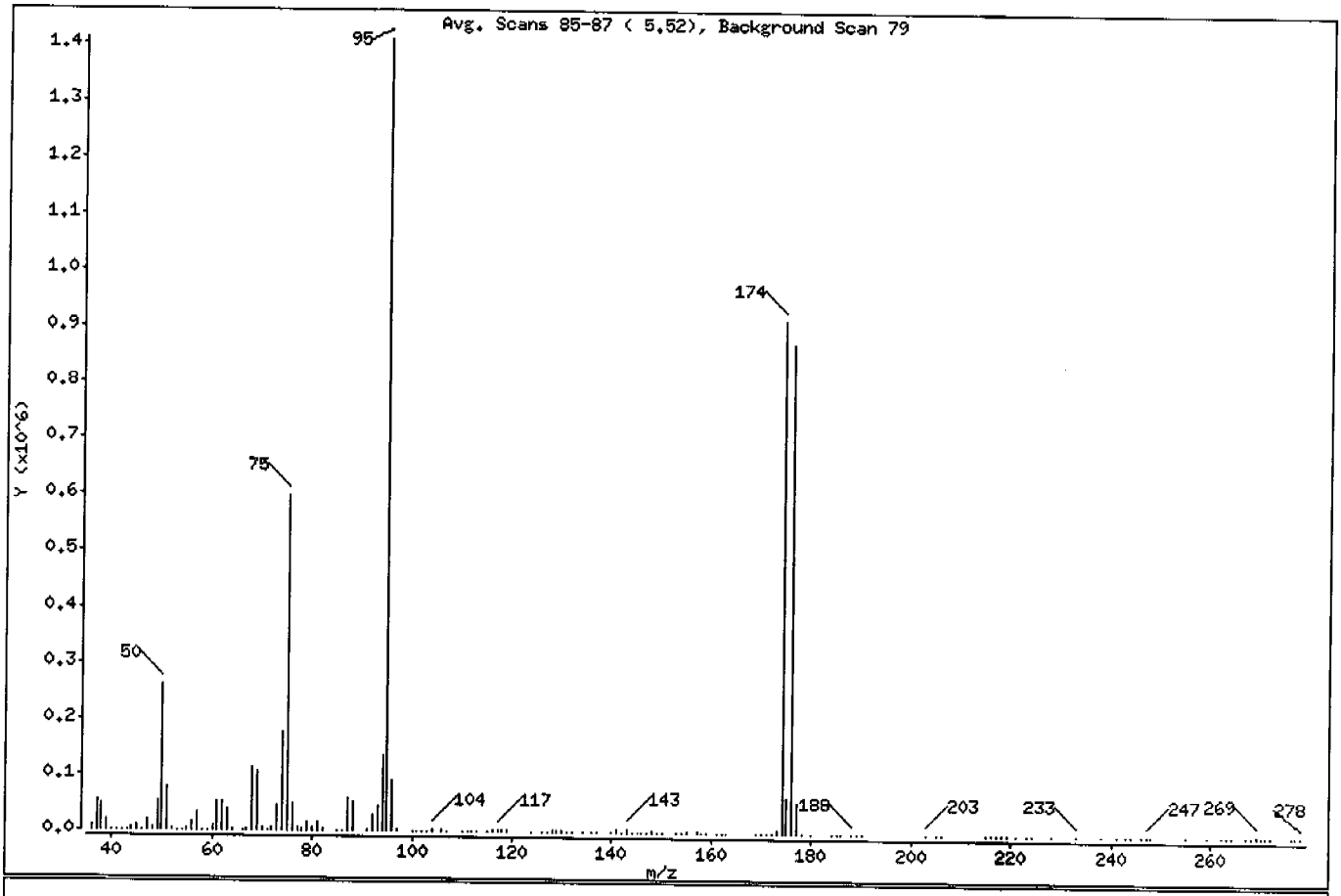
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.52
75	30.00 - 60.00% of mass 95	42.28
96	5.00 - 9.00% of mass 95	6.48
173	Less than 2.00% of mass 174	0.51 (0.79)
174	50.00 - 100.00% of mass 95	64.73
175	5.00 - 9.00% of mass 174	4.64 (7.17)
176	95.00 - 101.00% of mass 174	61.93 (95.67)
177	5.00 - 9.00% of mass 176	3.99 (6.44)

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1051908.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9545	76.00	47712	130.00	2906	186.00	63
37.00	56536	77.00	6773	131.00	823	188.00	430
38.00	49992	78.00	4818	132.00	367	189.00	34
39.00	19808	79.00	16536	134.00	668	190.00	84
40.00	991	80.00	5727	136.00	72	203.00	451
41.00	272	81.00	17048	137.00	503	205.00	199
42.00	45	82.00	3676	140.00	710	206.00	44
43.00	594	85.00	12	141.00	7303	215.00	52
44.00	5340	86.00	1466	142.00	1001	216.00	101
45.00	9201	87.00	59536	143.00	7330	217.00	273
46.00	19	88.00	52440	144.00	324	218.00	315
47.00	19752	91.00	1740	145.00	1045	219.00	68
48.00	6754	92.00	29408	146.00	1009	221.00	19
49.00	52704	93.00	47000	147.00	24	223.00	276
50.00	261120	94.00	134656	148.00	2017	224.00	182
51.00	79376	95.00	1410048	149.00	82	228.00	79
52.00	2983	96.00	91368	150.00	681	233.00	515
53.00	248	97.00	2142	153.00	122	238.00	143
54.00	172	100.00	266	154.00	369	241.00	2
55.00	3133	101.00	643	155.00	2185	243.00	136
56.00	15651	102.00	134	157.00	1759	244.00	144
57.00	31040	103.00	350	158.00	377	246.00	50
58.00	1022	104.00	3424	159.00	700	247.00	361
59.00	625	106.00	3205	161.00	789	248.00	75
60.00	9778	107.00	545	162.00	154	255.00	201
61.00	52056	110.00	698	163.00	241	259.00	136
62.00	50888	111.00	474	169.00	541	262.00	232
63.00	38928	112.00	240	170.00	380	263.00	48
64.00	3505	113.00	490	171.00	370	264.00	293
66.00	302	115.00	790	172.00	668	267.00	169
67.00	1776	116.00	2653	173.00	7186	268.00	17
68.00	112392	117.00	4066	174.00	912960	269.00	1803
69.00	106960	118.00	2769	175.00	65488	270.00	833
70.00	7062	119.00	2216	176.00	873344	271.00	293
71.00	289	124.00	278	177.00	56248	272.00	333

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1051908.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	5359	126.00	340	178.00	272	276.00	72
73.00	44560	127.00	380	180.00	200	277.00	277
74.00	178432	128.00	3485	184.00	79	278.00	135
75.00	596362	129.00	1664	185.00	53		

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-20may.b/1052001.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 20-MAY-2008 07:53
Operator : lo
Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-20may.b/bfb60.m
Meth Date : 20-May-2008 07:43
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.531	5.564	-0.033	95	1574570			100.00- 100.00	100.00
5.531	5.564	-0.033	50	298984			15.00- 40.00	18.99
5.531	5.564	-0.033	75	665204			30.00- 60.00	42.25
5.531	5.564	-0.033	96	102822			5.00- 9.00	6.53
5.531	5.564	-0.033	173	7532			0.00- 2.00	0.77
5.531	5.564	-0.033	174	978830			50.00- 100.00	62.16
5.531	5.564	-0.033	175	67392			5.00- 9.00	6.88
5.531	5.564	-0.033	176	935173			95.00- 101.00	95.54
5.531	5.564	-0.033	177	57783			5.00- 9.00	6.18

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

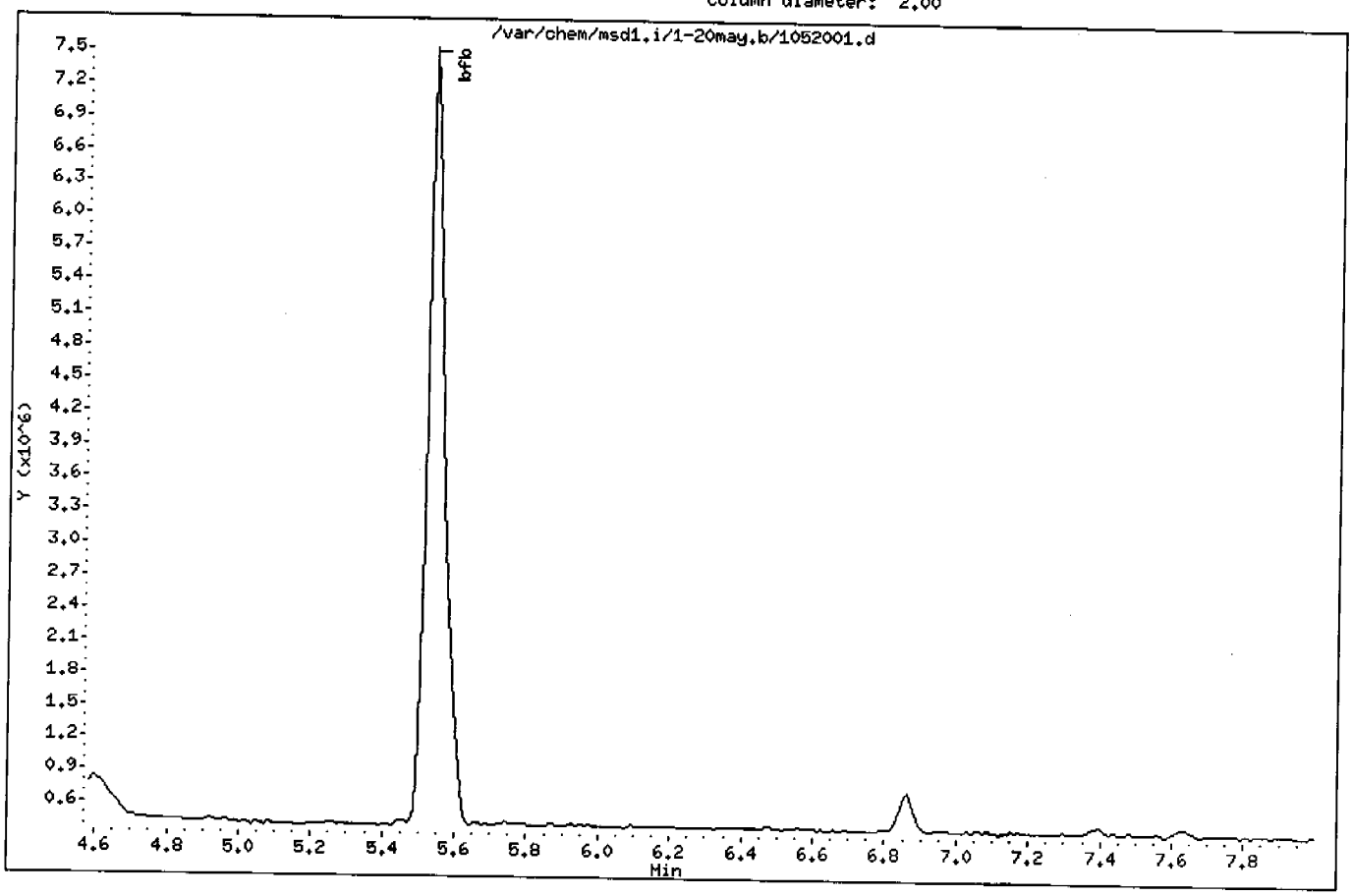
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

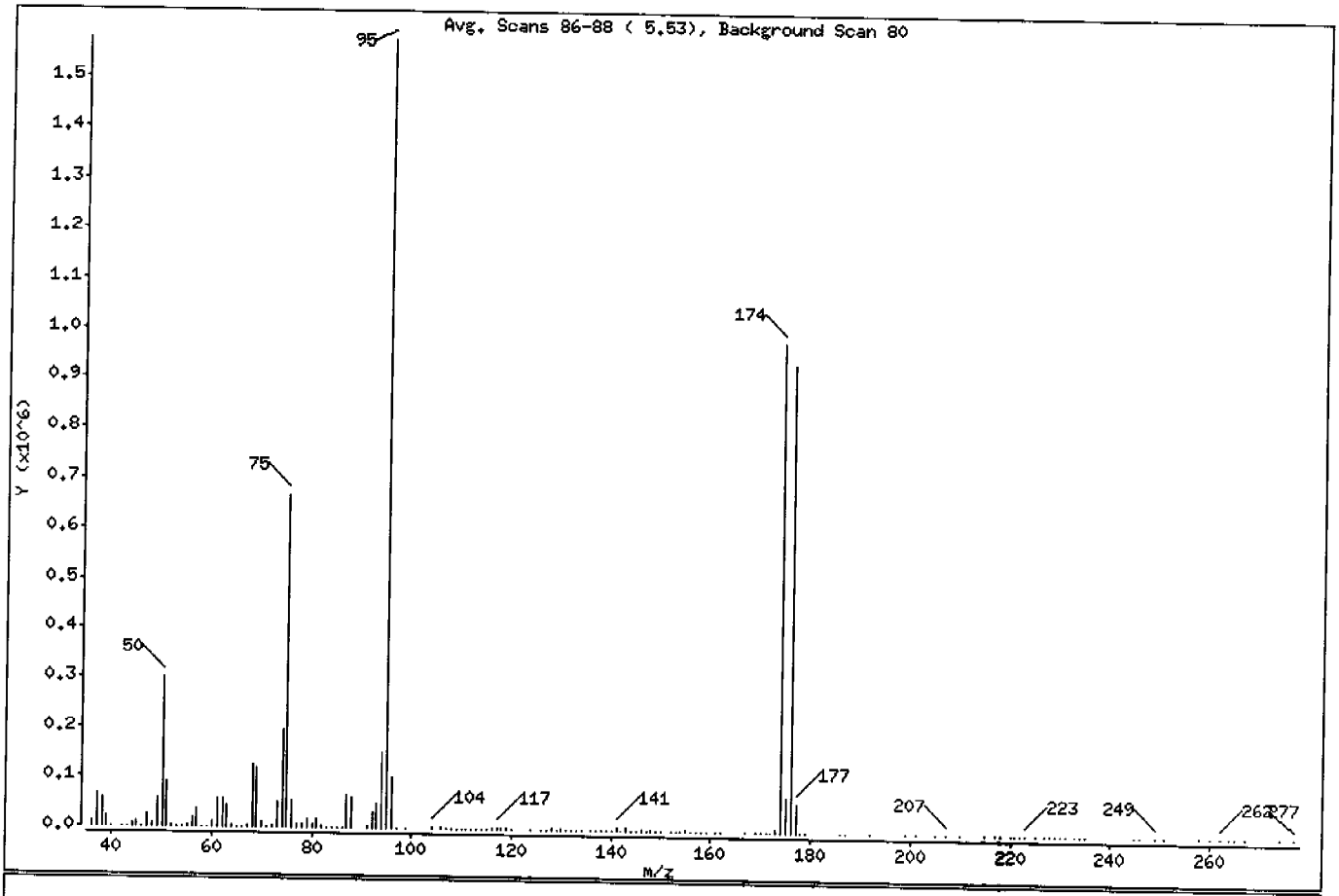
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.99
75	30.00 - 60.00% of mass 95	42.25
96	5.00 - 9.00% of mass 95	6.53
173	Less than 2.00% of mass 174	0.48 (0.77)
174	50.00 - 100.00% of mass 95	62.16
175	5.00 - 9.00% of mass 174	4.28 (6.88)
176	95.00 - 101.00% of mass 174	59.39 (95.54)
177	5.00 - 9.00% of mass 176	3.67 (6.18)

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052001.d

Spectrum: Avg. Scans 86-88 (5.53), Background Scan 80

Location of Maximum: 95.00

Number of points: 159

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10172	77.00	7077	129.00	1326	177.00	57776
37.00	63912	78.00	5860	130.00	3357	178.00	1445
38.00	58088	79.00	18408	131.00	1206	179.00	485
39.00	22616	80.00	6403	132.00	65	186.00	68
40.00	780	81.00	19880	133.00	378	187.00	98
42.00	42	82.00	4674	134.00	157	192.00	31
43.00	35	83.00	300	136.00	158	199.00	72
44.00	5594	84.00	122	137.00	598	201.00	63
45.00	10474	85.00	46	138.00	50	205.00	185
46.00	736	86.00	1309	139.00	161	207.00	762
47.00	23784	87.00	63944	140.00	546	210.00	253
48.00	7303	88.00	61088	141.00	7913	215.00	70
49.00	57432	91.00	2282	142.00	598	217.00	198
50.00	298944	92.00	33144	143.00	7391	218.00	237
51.00	91056	93.00	50160	144.00	439	220.00	27
52.00	3461	94.00	151488	145.00	602	221.00	215
53.00	225	95.00	1574400	146.00	2054	222.00	69
54.00	129	96.00	102816	147.00	178	223.00	488
55.00	2872	97.00	1309	148.00	2276	225.00	142
56.00	17464	99.00	277	149.00	72	227.00	153
57.00	38208	104.00	3448	150.00	1209	228.00	73
58.00	1164	106.00	3346	152.00	216	229.00	145
59.00	66	107.00	510	153.00	255	230.00	56
60.00	11146	108.00	196	154.00	695	231.00	76
61.00	56816	109.00	591	155.00	2081	233.00	144
62.00	56664	110.00	18	156.00	751	234.00	6
63.00	42648	111.00	417	157.00	1738	235.00	120
64.00	3264	112.00	338	158.00	188	245.00	50
65.00	456	113.00	157	159.00	880	246.00	66
66.00	231	114.00	14	161.00	612	249.00	246
67.00	3193	115.00	1153	162.00	123	251.00	117
68.00	125216	116.00	2621	167.00	102	258.00	135
69.00	120696	117.00	5027	169.00	359	260.00	357
70.00	9363	118.00	2186	170.00	335	262.00	426
71.00	441	119.00	2904	171.00	524	264.00	17

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052001.d

Spectrum: Avg. Scans 86-88 (5.53), Background Scan 80

Location of Maximum: 95.00

Number of points: 159

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	5210	120.00	348	172.00	1266	265.00	277
73.00	51488	124.00	465	173.00	7532	267.00	137
74.00	195328	126.00	217	174.00	978816	274.00	58
75.00	665152	127.00	967	175.00	67392	277.00	109
76.00	55112	128.00	2522	176.00	935168		

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-21may.b/1052101.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 21-MAY-2008 07:57
Operator : lo Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-21may.b/bfb60.m
Meth Date : 21-May-2008 07:48 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.520	5.564	-0.044	95	1316967			100.00- 100.00	100.00
5.520	5.564	-0.044	50	254312			15.00- 40.00	19.31
5.520	5.564	-0.044	75	565775			30.00- 60.00	42.96
5.520	5.564	-0.044	96	87641			5.00- 9.00	6.65
5.520	5.564	-0.044	173	6593			0.00- 2.00	0.83
5.520	5.564	-0.044	174	790267			50.00- 100.00	60.01
5.520	5.564	-0.044	175	57437			5.00- 9.00	7.27
5.520	5.564	-0.044	176	760615			95.00- 101.00	96.25
5.520	5.564	-0.044	177	48933			5.00- 9.00	6.43

Data File: /var/chem/msd1.i/1-21may.b/1052101.d

Date : 21-MAY-2008 07:57

Client ID: BFB

Instrument: msd1.i

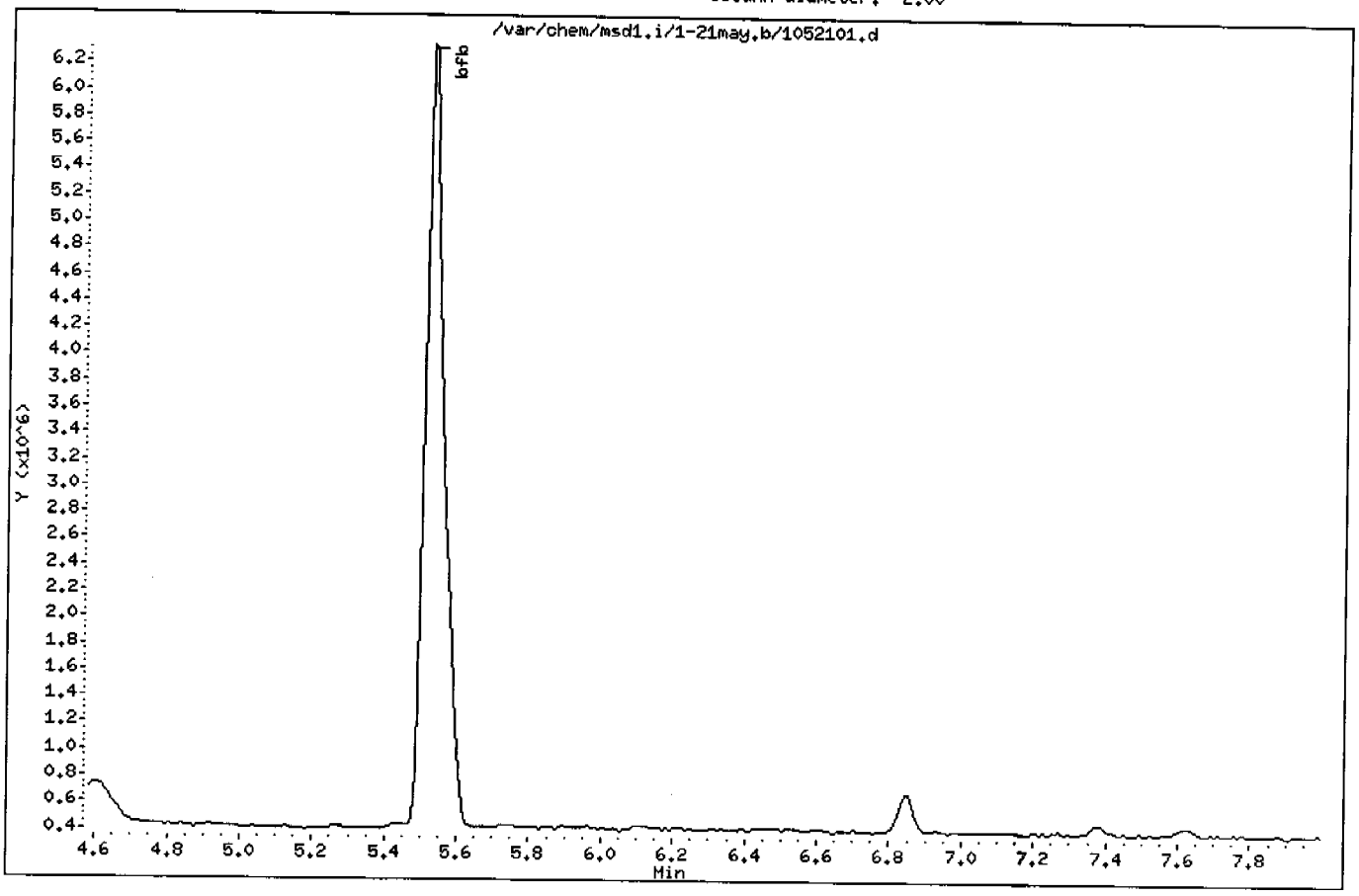
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-21may.b/1052101.d

Date : 21-MAY-2008 07:57

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

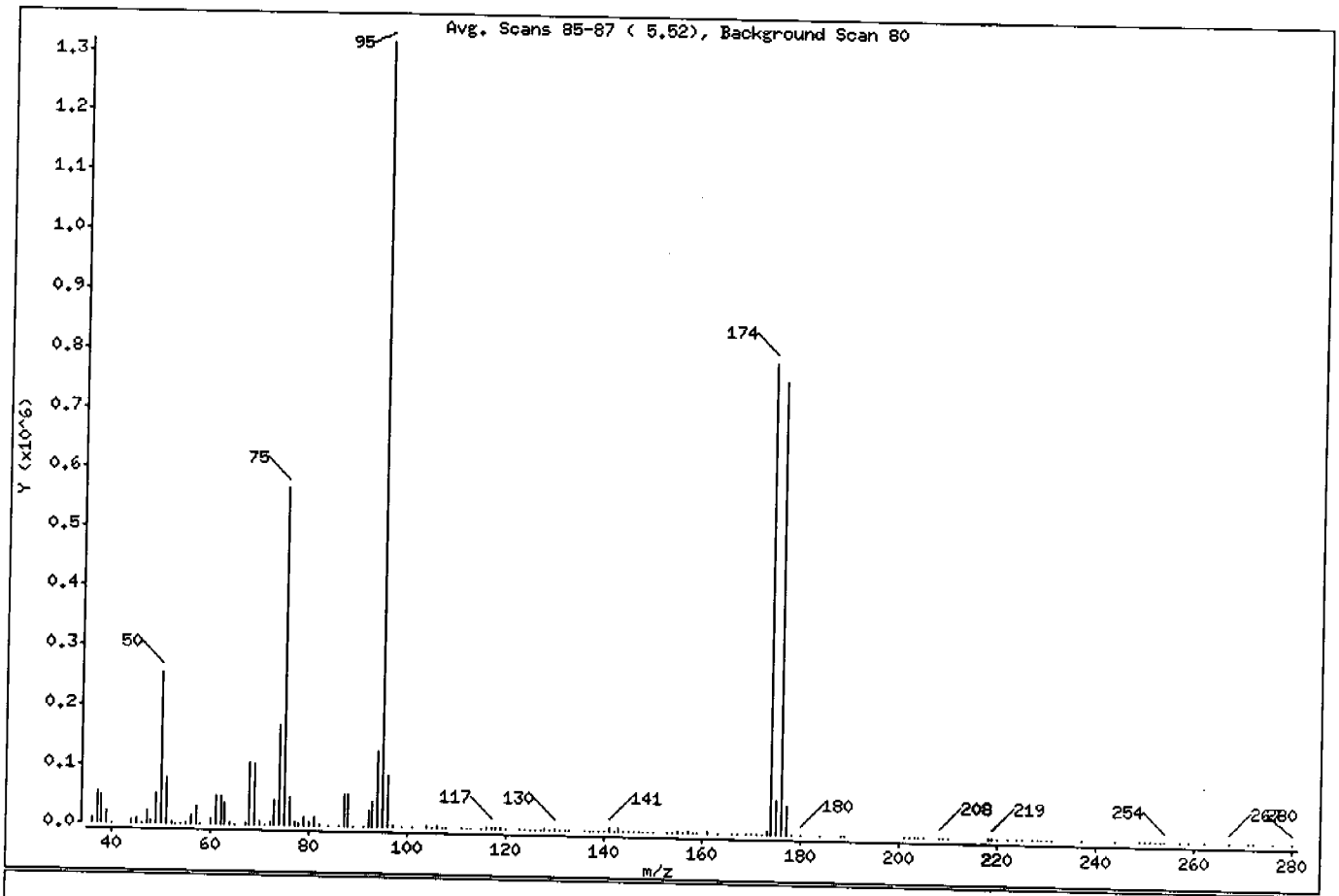
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.31
75	30.00 - 60.00% of mass 95	42.96
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.50 (0.83)
174	50.00 - 100.00% of mass 95	60.01
175	5.00 - 9.00% of mass 174	4.36 (7.27)
176	95.00 - 101.00% of mass 174	57.76 (96.26)
177	5.00 - 9.00% of mass 176	3.72 (6.43)

Data File: /var/chem/msd1.i/1-21may.b/1052101.d

Date : 21-MAY-2008 07:57

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052101.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 80

Location of Maximum: 95.00

Number of points: 156

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9611	81.00	14930	133.00	1397	189.00	173
37.00	53240	82.00	3965	136.00	355	201.00	135
38.00	48984	84.00	212	137.00	996	202.00	71
39.00	19760	86.00	1004	138.00	293	203.00	140
40.00	461	87.00	53448	139.00	277	204.00	76
44.00	4657	88.00	55256	140.00	397	205.00	49
45.00	9996	89.00	1093	141.00	6675	208.00	500
46.00	460	91.00	1323	142.00	812	209.00	176
47.00	20000	92.00	26632	143.00	6414	210.00	86
48.00	6863	93.00	41336	144.00	384	218.00	28
49.00	51184	94.00	127112	145.00	231	219.00	474
50.00	254272	95.00	1316864	146.00	907	220.00	323
51.00	78832	96.00	87640	147.00	1004	222.00	147
52.00	3168	97.00	2318	148.00	1233	224.00	73
53.00	234	99.00	10	149.00	49	225.00	30
54.00	148	101.00	233	150.00	516	227.00	107
55.00	2585	104.00	3083	153.00	920	228.00	74
56.00	15197	105.00	430	154.00	261	229.00	113
57.00	29776	106.00	2728	155.00	1894	230.00	154
58.00	1122	107.00	1032	156.00	381	231.00	9
60.00	9163	108.00	178	157.00	1827	237.00	142
61.00	48888	111.00	624	158.00	334	244.00	185
62.00	47472	112.00	15	159.00	998	249.00	286
63.00	35832	113.00	647	161.00	1781	250.00	61
64.00	3562	115.00	690	163.00	517	251.00	424
65.00	104	116.00	2399	166.00	217	252.00	63
67.00	2211	117.00	4021	167.00	138	253.00	396
68.00	107272	118.00	2290	169.00	354	254.00	452
69.00	102784	119.00	2143	170.00	320	257.00	124
70.00	7327	120.00	210	171.00	1015	259.00	112
71.00	283	123.00	77	172.00	892	262.00	76
72.00	5299	124.00	621	173.00	6593	267.00	355
73.00	41784	125.00	355	174.00	790208	271.00	94
74.00	169472	126.00	66	175.00	57432	272.00	162
75.00	565760	127.00	643	176.00	760576	276.00	57

Data File: /var/chem/msd1.i/1-21may.b/1052101.d

Date : 21-MAY-2008 07:57

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052101.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 80

Location of Maximum: 95.00

Number of points: 156

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	48600	128.00	2669	177.00	48928	280.00	64
77.00	5719	129.00	1347	178.00	1415		
78.00	3968	130.00	3149	180.00	378		
79.00	15840	131.00	613	184.00	55		
80.00	4960	132.00	1	188.00	8		

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-22may.b/1052201.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 22-MAY-2008 08:01
Operator : lo
Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-22may.b/bfb60.m
Meth Date : 22-May-2008 07:52
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.520	5.564	-0.044	95	1276435			100.00- 100.00	100.00
5.520	5.564	-0.044	50	245336			15.00- 40.00	19.22
5.520	5.564	-0.044	75	533115			30.00- 60.00	41.77
5.520	5.564	-0.044	96	85486			5.00- 9.00	6.70
5.520	5.564	-0.044	173	6514			0.00- 2.00	0.78
5.520	5.564	-0.044	174	834090			50.00- 100.00	65.35
5.520	5.564	-0.044	175	58002			5.00- 9.00	6.95
5.520	5.564	-0.044	176	799021			95.00- 101.00	95.80
5.520	5.564	-0.044	177	52040			5.00- 9.00	6.51

Data File: /var/chem/msd1.i/1-22may.b/1052201.d

Date : 22-MAY-2008 08:01

Client ID: BFB

Instrument: msd1.i

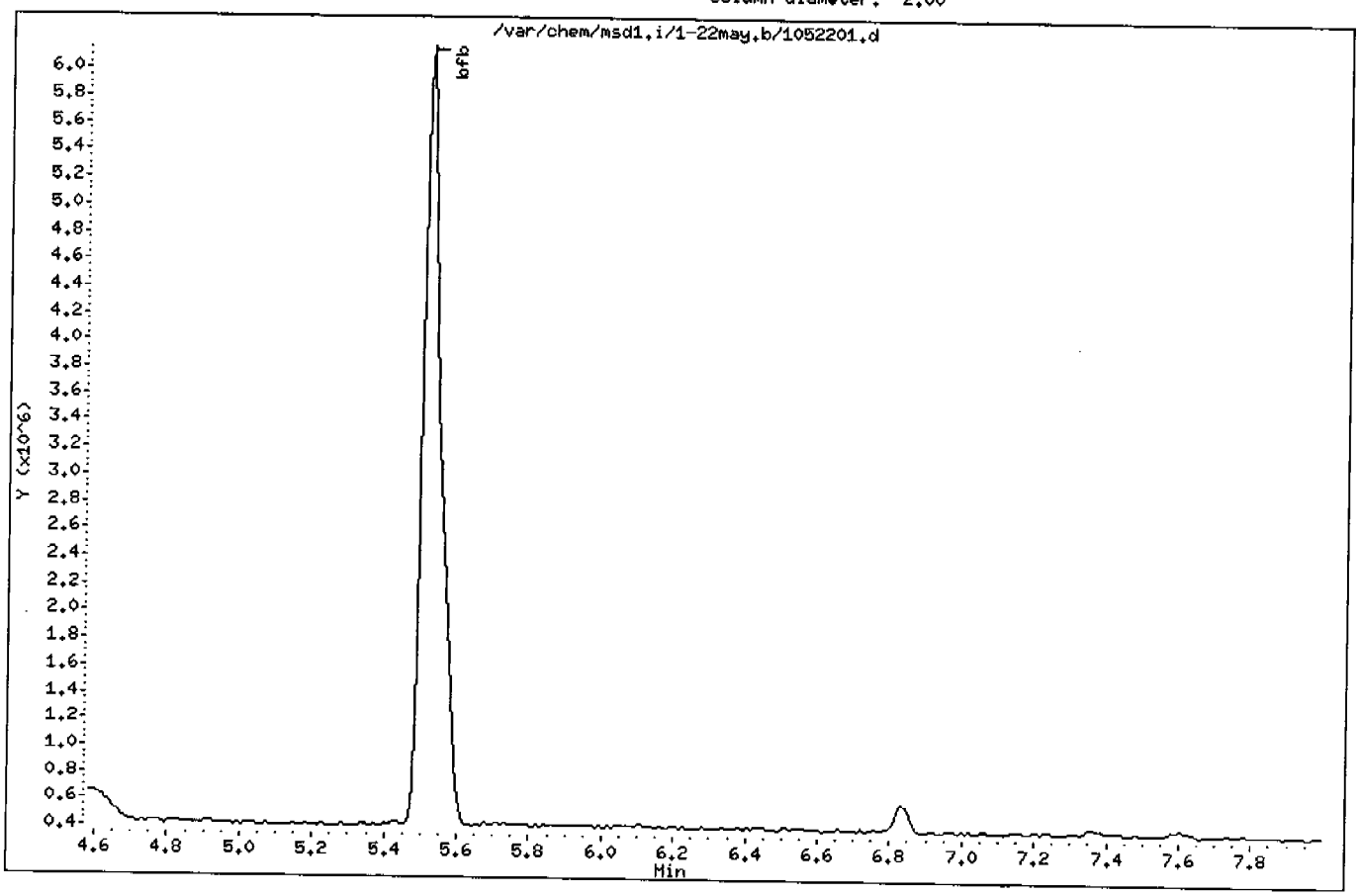
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-22may.b/1052201.d

Date : 22-MAY-2008 08:01

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

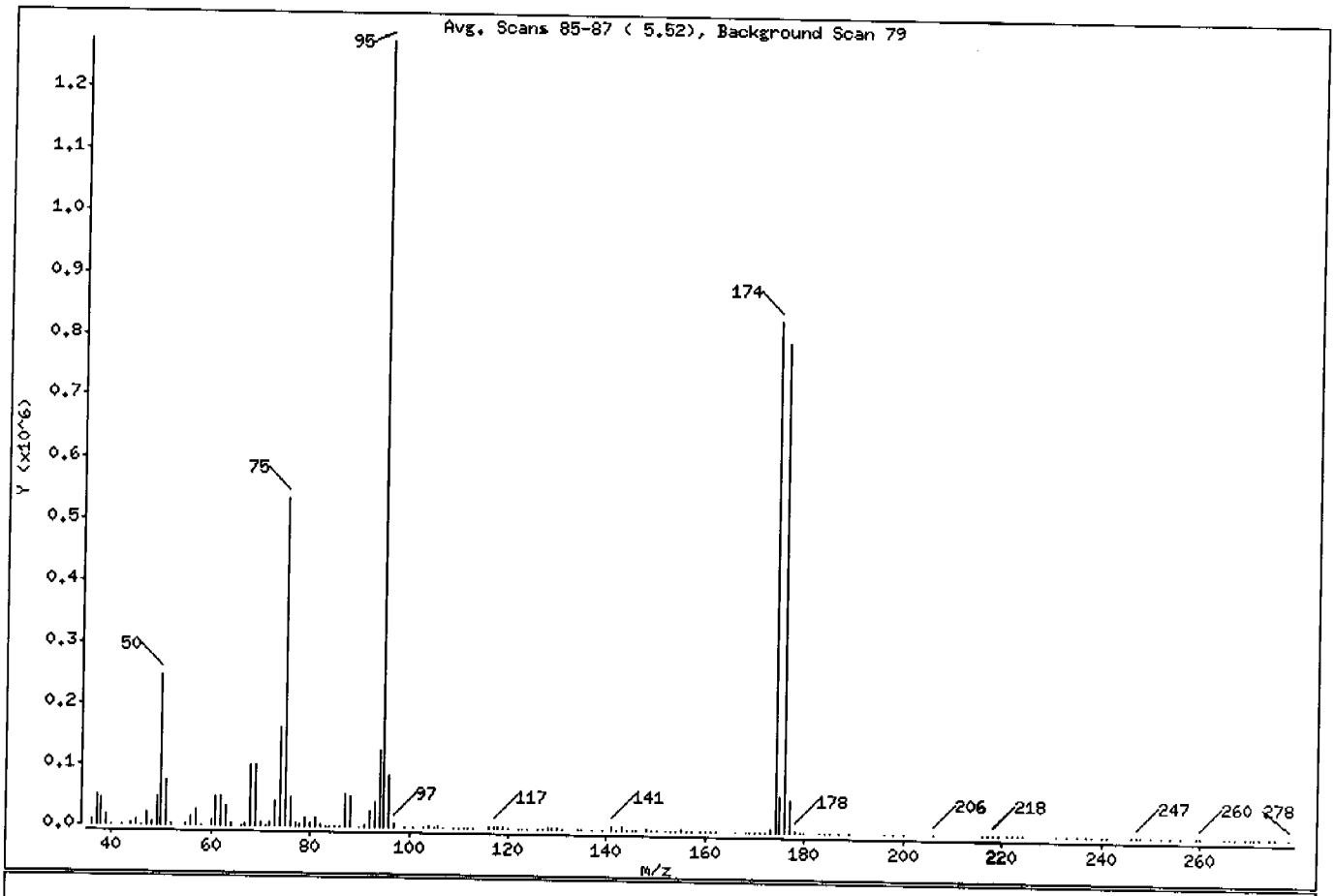
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.22
75	30.00 - 60.00% of mass 95	41.77
96	5.00 - 9.00% of mass 95	6.70
173	Less than 2.00% of mass 174	0.51 (0.78)
174	50.00 - 100.00% of mass 95	65.35
175	5.00 - 9.00% of mass 174	4.54 (6.95)
176	95.00 - 101.00% of mass 174	62.60 (95.80)
177	5.00 - 9.00% of mass 176	4.08 (6.51)

Data File: /var/chem/msd1.i/1-22may.b/1052201.d

Date : 22-MAY-2008 08:01

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052201.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 161

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9003	83.00	312	135.00	638	196.00	59
37.00	51256	84.00	230	137.00	840	198.00	127
38.00	45376	85.00	325	139.00	601	200.00	164
39.00	18400	86.00	1133	141.00	6717	206.00	309
40.00	408	87.00	52280	142.00	818	216.00	61
42.00	166	88.00	51056	143.00	6683	217.00	120
44.00	3916	90.00	646	144.00	305	218.00	375
45.00	9466	91.00	2416	145.00	274	219.00	283
46.00	611	92.00	27088	146.00	1227	221.00	88
47.00	19216	93.00	39952	148.00	1726	222.00	202
48.00	5977	94.00	125152	149.00	932	223.00	319
49.00	45496	95.00	1276416	150.00	1292	224.00	149
50.00	245312	96.00	85480	152.00	237	231.00	23
51.00	72216	97.00	4506	153.00	364	233.00	228
52.00	3192	99.00	163	154.00	600	235.00	33
55.00	2208	101.00	197	155.00	1877	237.00	284
56.00	13665	103.00	289	156.00	473	238.00	85
57.00	27456	104.00	2869	157.00	476	240.00	105
58.00	1002	105.00	1381	159.00	1028	241.00	269
60.00	9269	106.00	2489	160.00	272	246.00	55
61.00	46848	107.00	638	161.00	802	247.00	396
62.00	46416	109.00	35	162.00	188	248.00	151
63.00	33264	110.00	948	166.00	131	250.00	142
64.00	2686	111.00	250	168.00	520	252.00	31
66.00	134	112.00	464	169.00	131	254.00	234
67.00	2029	113.00	64	170.00	159	256.00	121
68.00	101072	116.00	2029	171.00	853	259.00	152
69.00	99168	117.00	4317	172.00	462	260.00	813
70.00	6829	118.00	2648	173.00	6514	265.00	243
71.00	321	119.00	2743	174.00	834048	266.00	398
72.00	4910	120.00	280	175.00	58000	267.00	369
73.00	42160	122.00	70	176.00	798976	269.00	253
74.00	162688	123.00	365	177.00	52040	270.00	709
75.00	533056	124.00	409	178.00	1812	271.00	10
76.00	45568	126.00	606	179.00	63	272.00	358

Data File: /var/chem/msd1.i/1-22may.b/1052201.d

Date : 22-MAY-2008 08:01

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052201.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 161

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	6007	127.00	817	180.00	82	274.00	190
78.00	4331	128.00	3220	183.00	41	275.00	64
79.00	15359	129.00	1719	184.00	180	278.00	74
80.00	5420	130.00	3076	185.00	52		
81.00	16130	131.00	1393	187.00	266		
82.00	3627	134.00	188	189.00	69		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0805274
# of pages (Including Cover): 1

5/28/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0805274

Monday, May 12, 2008

REQUEST NUMBER: 08-1113

0531

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-1113
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/12/2008
TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1 01A	MD21-08-12236	GAS	5/9/2008	Port #1	
		1 02A	MD21-08-12237	GAS	5/9/2008	Port # 3	
		1 03A	MD21-08-12238	GAS	5/9/2008	Port #4	
		1 04A	MD21-08-12239	GAS	5/9/2008	Port # 5	
		1 05A	MD21-08-12240	GAS	5/9/2008		
		1 06A	MD21-08-12242	GAS	5/9/2008	Port #.1	
		1 07A	MD21-08-12244	GAS	5/9/2008	Port # 3	
		1 08A	MD21-08-12245	GAS	5/9/2008	Port #4	
		1 09A	MD21-08-12246	GAS	5/9/2008	Port #5	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1 NA	MD21-08-12253	GAS	5/9/2008	Port # 6; Field duplicate of HE & TO15	
		NA	MD21-08-12256	GAS	5/9/2008	Port # 5; Field duplicate of To15 sample only	

Final Page of REQUEST NUMBER 08-1113

0532

U805274

Page 1 of 1

Monday, May 12, 2008

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1113C
REQUEST NUMBER: 08-1113

ATTN: Lisa Argento
Air Toxic LTD
190 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/11/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12236	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12237	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12244	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12240	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12246	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12238	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12245	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12239	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12242	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12253	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12256	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	5/12/08	1400	Printed Name	Signature	05-13-08	0855
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT
Y N NONE TEMP ND

Fedex

0533

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0805274

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: TB

Date Promised: 05/28/08
Date Completed: 5/27/08
Date Received: 5/13/08
PO#: 47247-001-07
Project#: 08-1113

Total $: $ 3,300.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-12236	Modified TO-15	5/9/2008	6.5 "Hg	$205.00
02A	MD21-08-12237	Modified TO-15	5/9/2008	6.5 "Hg	$205.00
03A	MD21-08-12238	Modified TO-15	5/9/2008	7.0 "Hg	$205.00
04A	MD21-08-12239	Modified TO-15	5/9/2008	6.5 "Hg	$205.00
05A	MD21-08-12240	Modified TO-15	5/9/2008	6.0 "Hg	$205.00
05AA	MD21-08-12240 Lab Duplicate	Modified TO-15	5/9/2008	6.0 "Hg	$0.00
06A	MD21-08-12242	Modified TO-15	5/9/2008	4.5 "Hg	$205.00
07A	MD21-08-12244	Modified TO-15	5/9/2008	7.0 "Hg	$205.00
08A	MD21-08-12245	Modified TO-15	5/9/2008	6.5 "Hg	$205.00
09A	MD21-08-12246	Modified TO-15	5/9/2008	6.0 "Hg	$205.00
10A	MD21-08-12253	Modified TO-15	5/9/2008	6.5 "Hg	$205.00
11A	MD21-08-12256	Modified TO-15	5/9/2008	4.0 "Hg	$205.00
12A	Lab Blank	Modified TO-15	NA	NA	$0.00
12B	Lab Blank	Modified TO-15	NA	NA	$0.00
13A	CCV	Modified TO-15	NA	NA	$0.00
13B	CCV	Modified TO-15	NA	NA	$0.00
14A	LCS	Modified TO-15	NA	NA	$0.00
14B	LCS	Modified TO-15	NA	NA	$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep:

Date Promised:
Date Completed: 5/27/08
Date Received: 5/13/08
PO#: 47247-001-07
Project#: 08-1113

Total $: $ 3,300.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
Misc. Charges	6 Liter Summa Canister (11) @ $60.00 each., Shipment 58694				$660.00
	CVP (11) @ $20.00 each.				$220.00
	Client Specific EDD (11) @ $5.00 each.				$55.00
	eCVP (11) @ $10.00 each.				$110.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

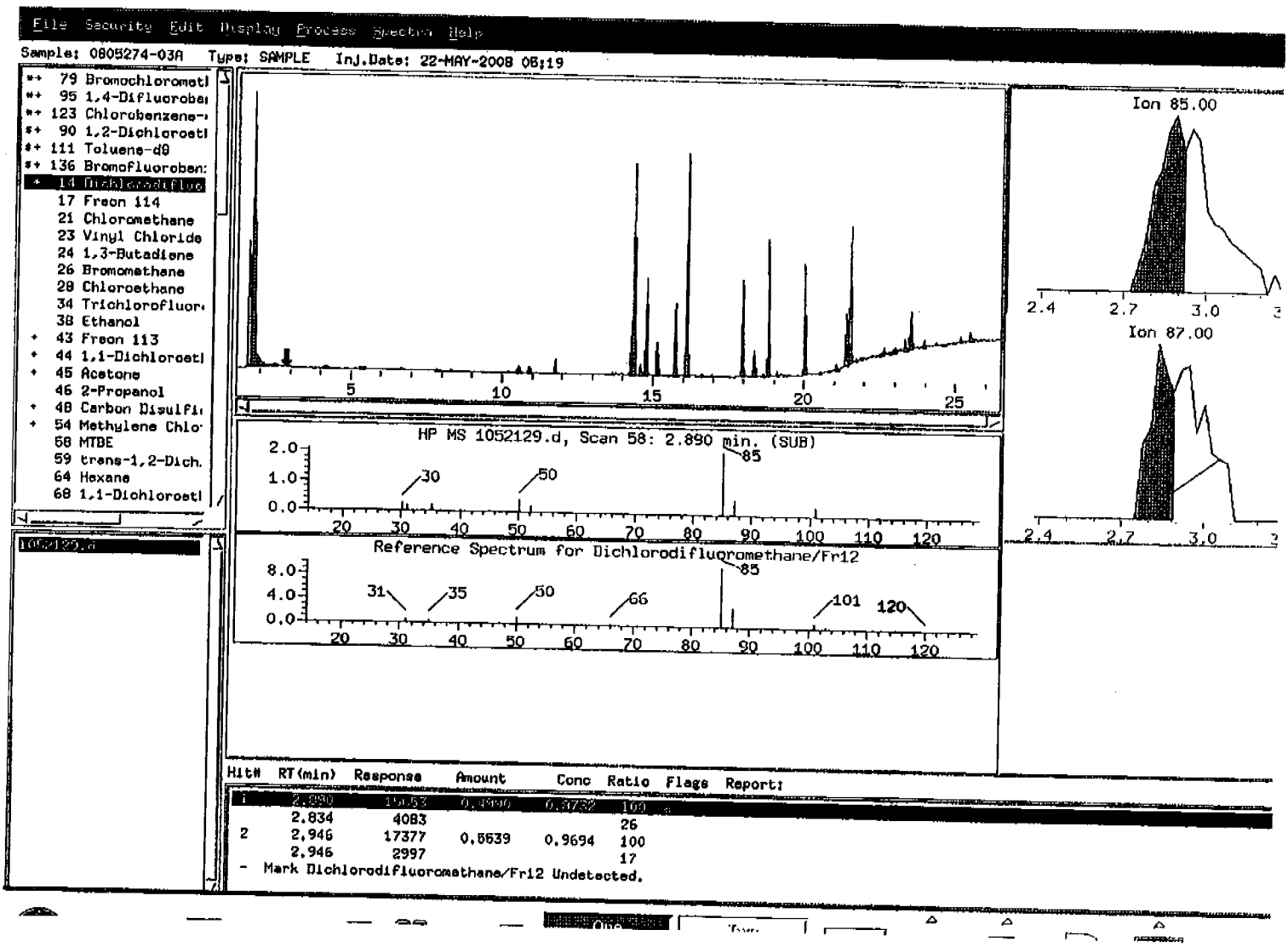
Analysis Code: TO-14A

TERMS:

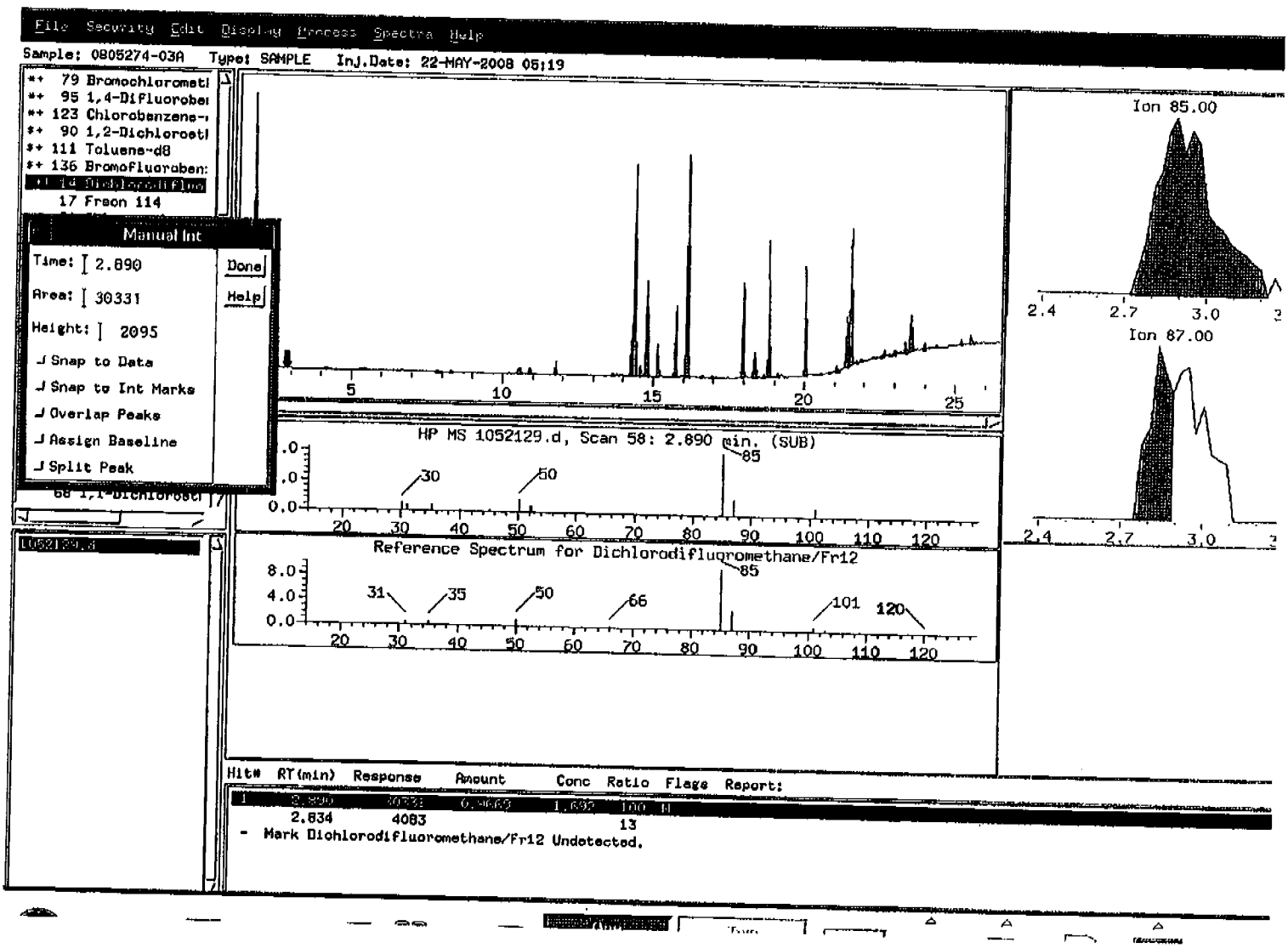
Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

KJ 5-27-08
Before

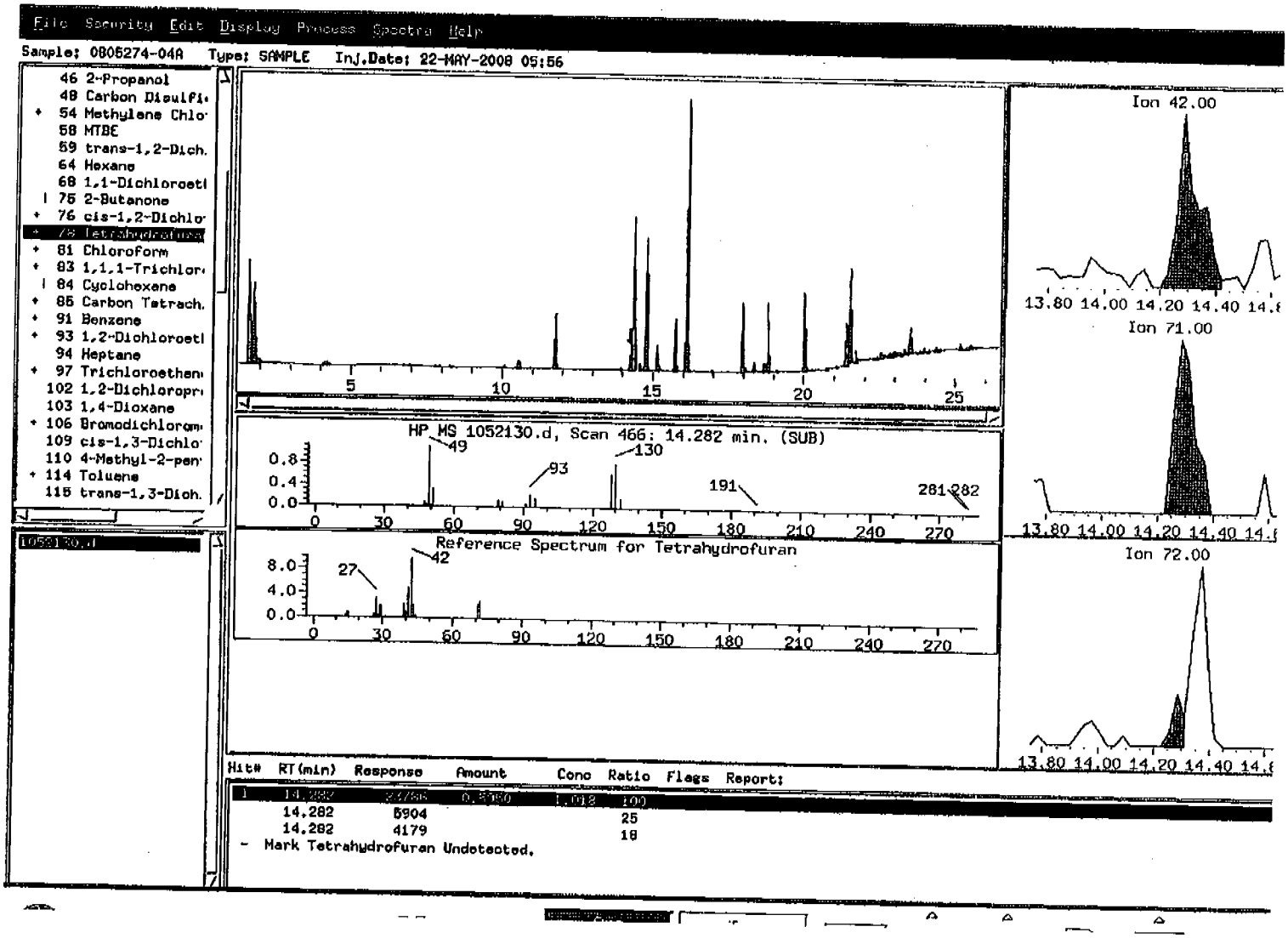


5-27-08
After


File Security Edit Display Process Spectra Help
Sample: 0805274-03A Type: SAMPLE Inj.Date: 22-MAY-2008 05:19
79 Bromochloromet
95 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroet
111 Toluene-d8
136 Bromofluoroben
17 Freon 114
Manual Int
Time: 2.890
Area: 30331
Height: 2095
Done
Help
Snap to Data
Snap to Int Marks
Overlap Peaks
Assign Baseline
Split Peak
Ion 85.00
Ion 87.00
HP MS 1052129.d, Scan 58: 2.890 min. (SUB)
Reference Spectrum for Dichlorodifluoromethane/Fr12
Hit# RT(min) Response Amount Conc Ratio Flags Report:
2.834 4083 13
- Mark Dichlorodifluoromethane/Fr12 Undetected.

5-27-08

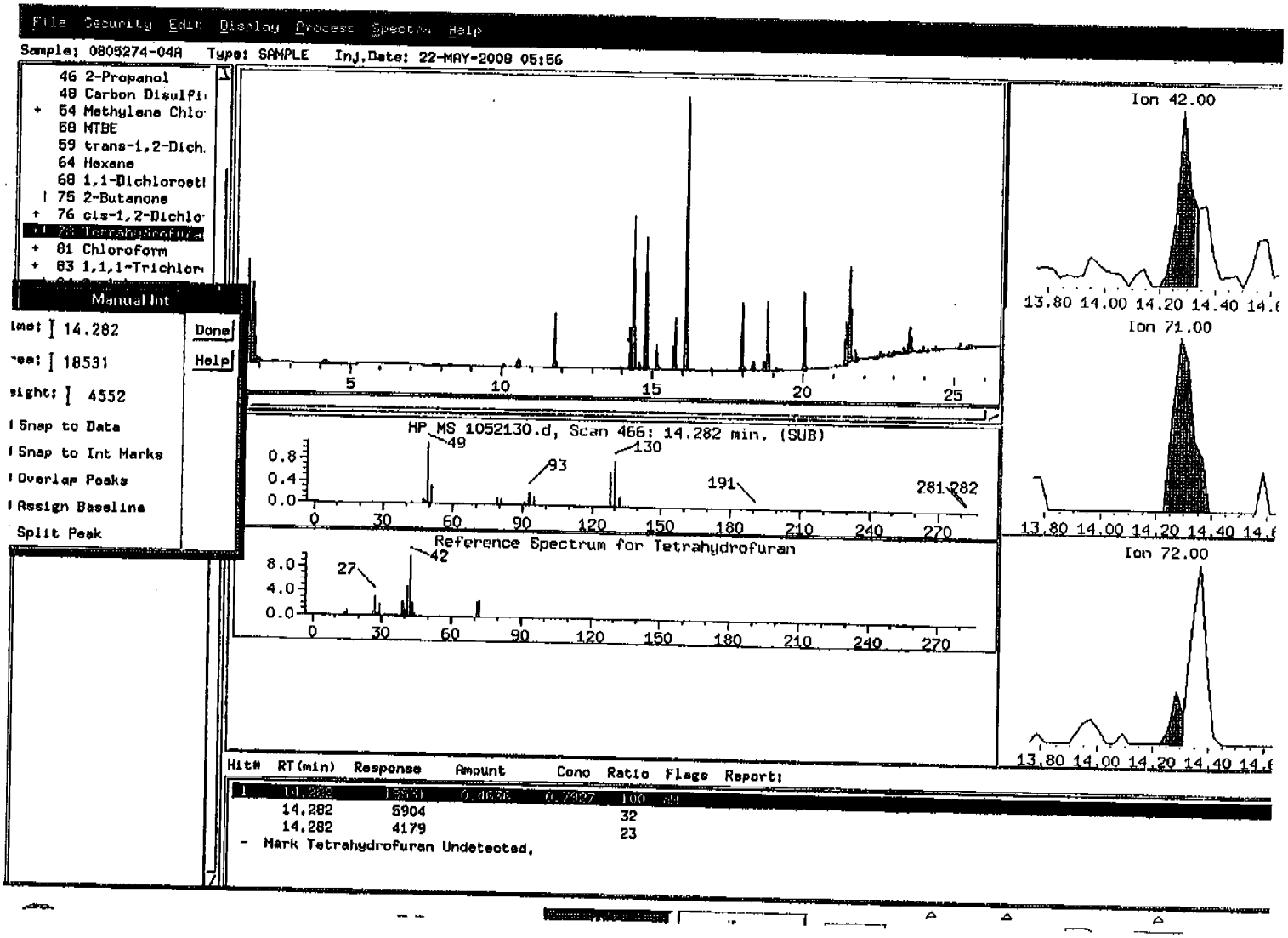
Before



eff J-27-08

Affd

Below R.L.
non-detect



DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.76	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0805274

A	R	T	M	Q	
☑	☐	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☐	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
	☐	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	NA	☐	☑	☐	Corrective Action issued - #
☑	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — ***CIRCLE (YES / NO)***

☑	☐	☐	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	Hold time is met for all samples
	☐	☐	☐	Appropriate data qualifier flags are applied
	☑	☐	☐	Manual integrations for samples and QC are properly documented
☑	☐		☐	Samples analyzed within the project or method specific clock
	☐			Retention times have been verified
☑	☐		☐	Appropriate ICAL(s) included
	☐	☑	☐	At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐	☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☐	☐		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☐	☐		Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
	☑	☐		TICs resemble reference spectra
	☐	☐		TICs between duplicate samples are consistent
NA	☐	☐	☐	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☐		☑	Special units for all samples in the final report are correctly calculated
	☑	☐	☑	Manually entered results checked (i.e. special CCV compounds)
	☐	☐	☑	TPH/NMOC (verify calculations and correct reference compound used)
	☐			Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☑			Samples pressurized w/ appropriate gas (N2 or He) ☐ Tedlar Bag only
☑	☑			Final pressure consistent with canister size (6L vs. 1L)
☑	☐			Verify receipt pressures against logbook and Target
☑	☑			Verify canister ID #'s
	☑	☑		Extra printed copies are provided per client profile
	☑	☐		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☑	☐	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: 1,2,4-TCBz in CCV, 2out LCS (5/22)
1,2,4-TCBz in CCV, 1out LCS (5/21)
CCV from multi files
dup05A

M/O:

A	R/T	M	Q
(Analytical Review/Date)	(Reporting Review/Date)	(Management Review/Date)	(QA Review/Date)
JG 5/23/08	R: ROANGAS/5-22-08	5/27/08	
	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 08/29/05

Not Applicable

Page 1 of

Thursday, May 08, 2008

REQUEST NUMBER: 08-1108

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-1108

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/8/2008

TURNAROUND/REPORT DUE: 6/7/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12247	GAS	5/7/2008		
		1	MD21-08-12248	GAS	5/7/2008		
		1	MD21-08-12249	GAS	5/7/2008		
		1	MD21-08-12250	GAS	5/7/2008		
		1	MD21-08-12251	GAS	5/7/2008		
		1	MD21-08-12257	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1108

Thursday, May 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1108C

REQUEST NUMBER: 08-1108

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

LAB REQUEST COMMENTS:

TURNAROUND/REPORT DUE: 6/7/2008

TURNAROUND REQ'D: 30

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12251	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12248	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12249	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12247	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12257	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12247

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port 1	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1\%$

$O_2 = 18.9\%$

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) Dave Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 1445
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12248

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1532	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:	Port #2	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.9 %

O_2 = 19.0 %

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wyatt

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1645 5/7/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 1445
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12249

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1535	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.1\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1645 5/7/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 4:45
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12250

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1537	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328.0 ft	SCREEN/PORT DESC:		port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.6\ \%$

$O_2 = 19.2\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	5/7/08 1645	(Printed Name)	5/7/08 4:45
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12251

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1540	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		Rack #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.5\ \%$

$O_2 = 19.2\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 1445
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12257

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/7/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	N	

SAMPLE DESC: QC Sample of MD21-08-12247 Field duplicate

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

~~CO_2 = 1% 0.9 %~~ KR

~~O_2 = 18.9 1.0 %~~ 5/7/08

$CO_2 = 1\%$

$O_2 = 18.9\%$

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Reid (Signature)	**Date/Time** 1645 5/7/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 4:45
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-1108 VALIDATION DATE: 6/14/08 LAB CODE: ARS

CONTRACT LABORATORY NAME: American Radiation Services

VALIDATOR: Charissa Lewis ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☒ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. It should be noted that no MS/MSD or Duplicate samples were analyzed. However, an LCS and LCS Duplicate were analyzed and, thus, no sample data were qualified, based on professional judgment.

Reviewed By: ETM **Level:** I **Date:** 6/16/08

VALIDATOR'S SIGNATURE: Charissa Lewis DATE: 6/14/08

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☒	☐	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☒	☐	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☐	☒	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☐	☒	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☐	☒	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☒	☐	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☒	☐	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12247
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-001
Date Received: 5/9/2008
Report Date: 06/03/08 11:42

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	4353.514	246.732	201.700	99.156		pCi/L	ARS-054/EPA 906.0	5/31/08 6:38	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsey
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12248
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-002
Date Received: 5/9/2008
Report Date: 06/03/08 11:42

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
U-238	128042.969	6706.072	198.577	97.621		pCi/L	ARS-054/EPA 906.0	5/31/08 9:47	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-11249
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-003
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Q-al	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	45383.138	2385.128	199.049	97.853		pCi/L	ARS-054/EPA 906.0	5/31/08 12:57	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoiqne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client

LELAP Certificate # 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12250
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-004
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	2688.041	164.192	205.791	101.167		pCi/L	ARS-054/EPA 906.0	5/31/08 16:06	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanciaux
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12251
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-005
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1406.676	104.289	203.399	99.992		pCi/L	ARS-054/EPA 906.0	5/31/08 19:16	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lameiqne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12257
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-006
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	5071.115	284.533	211.945	104.193		pCi/L	ARS-054/EPA 906.0	5/31/08 22:25	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lasseigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

Thursday, May 08, 2008

REQUEST NUMBER: 08-1108

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-1108

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 5/8/2008

TURNAROUND/REPORT DUE: 6/7/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12247	GAS	5/7/2008		
		1	MD21-08-12248	GAS	5/7/2008		
		1	MD21-08-12249	GAS	5/7/2008		
		1	MD21-08-12250	GAS	5/7/2008		
		1	MD21-08-12251	GAS	5/7/2008		
		1	MD21-08-12257	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1108

Thursday, May 08, 2008

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1108
REQUEST NUMBER: 08-1108

TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12251	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12248	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12249	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12247	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12257	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
[illegible]	[illegible]	5/8/08	1400	Lindsay Lasseigne	Lindsay Lasseigne	5-14-08	16:59
Printed Name	Signature			Printed Name	Signature	for 5-9-08	9:54
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-1108

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory Request Number: 08-1108

Original COC

Thursday, May 08, 2008

REQUEST NUMBER: 08-1108

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-1108

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/8/2008

TURNAROUND/REPORT DUE: 6/7/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12247	GAS	5/7/2008		
		1	MD21-08-12248	GAS	5/7/2008		
		1	MD21-08-12249	GAS	5/7/2008		
		1	MD21-08-12250	GAS	5/7/2008		
		1	MD21-08-12251	GAS	5/7/2008		
		1	MD21-08-12257	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1108

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-110

REQUEST NUMBER: 08-1108

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12251	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12248	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12249	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12247	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12257	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
	5/8/08			Lindsay Lasseigne	Lindsay Lasseigne	5-14-08	16.59
Printed Name	Signature			Printed Name	Signature	for 5-9-08	9:54
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-1108

Case Narrative

ARS
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1 (800) 401-4277 • Fax (225) 381-2996

April 3, 2008

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-1108
LANL Sample ID: MD21-08-12247, MD21-08-12248, MD21-08-12249, MD21-08-11250, MD21-08-11251, MD21-08-11257

Dear Mr. Greene:

On May 9, 2008, American Radiation Services (ARS) received six Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet quality control parameters for counting equipment were within acceptance criteria and statistical sound detection limits.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

Eugene Mulligan

Laboratory Director
American Radiation Services

ARS
AMERICAN RADIATION SERVICES, INC.

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1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-1108	MD21-08-12247	ARS1-08-00864-001
08-1108	MD21-08-12248	ARS1-08-00864-002
08-1108	MD21-08-12249	ARS1-08-00864-003
08-1108	MD21-08-12250	ARS1-08-00864-004
08-1108	MD21-08-12251	ARS1-08-00864-005
08-1108	MD21-08-12257	ARS1-08-00864-006

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicate that the activity is below the MDC.

AMERICAN RADIATION SERVICES, INC.

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American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."

Eugene Millegan
Signature

Lab Manager/Technical Director, American Radiation Services
Title

6-9-08
Date

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SERVICES, INC.

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12247
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-001
Date Received: 5/9/2008
Report Date: 06/03/08 11:42

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	4353.514	246.732	201.700	99.156		pCi/L	ARS-054/EPA 906.0	5/31/08 6:38	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ranciqne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12248
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-002
Date Received: 5/9/2008
Report Date: 06/03/08 11:42

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	128042.969	6706.072	198.577	97.621		pCi/L	ARS-054/EPA 906.0	5/31/08 9:47	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-11249
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-003
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	45383.138	2385.128	199.049	97.853		pCi/L	ARS-054/EPA 906.0	5/31/08 12:57	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12250
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-004
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	2688.041	164.192	205.791	101.167		pCi/L	ARS-054/EPA 906.0	5/31/08 16:06	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanciaux
Project Manager Review

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ARS INTERNATIONAL

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12251
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-005
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1406.676	104.289	203.399	99.992		pCi/L	ARS-054/EPA 906.0	5/31/08 19:16	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanneigne
Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12257
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-006
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	5071.115	284.533	211.945	104.193		pCi/L	ARS-054/EPA 906.0	5/31/08 22:25	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lasseigne
Project Manager Review

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AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
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QC Results Report

Sample Delivery Group: ARS1-08-00864
Date Received: 5/9/2008

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU (2s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B08-01350	LCS	H3	901.79	160.0	193.87256	1172.70		pCi/L	ARS-054/EPA 906.0	5/30/08 21:16	AJ	77	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU (2s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B08-01350	MBL	H3	-188.132	111.34364	193.86064	NA	U	pCi/L	ARS-054/EPA 906.0	5/31/08 3:30	AJ

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU (2s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B08-01350	LCSD	H3	901.79	160.0	950.45091	163.2939		pCi/L	ARS-054/EPA 906.0	5/31/08 0:23	AJ	0.15	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU (2s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B08-01350	LCSD	H3	901.79	160.0	950.45091	163.2939		pCi/L	ARS-054/EPA 906.0	5/31/08 0:23	AJ	0.43	< 3

Lindsay Lanseigne
Project Manager Review

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Samples

LSC Instrument Data Transfer Report

\\PACKARD3170_NEW\Results\ARS\H-3 Normal Lvl\

Batch Sample ID: Sample

Non-BKG Samples Transferred: 16

Samples Eligible To Save: 13

LSC 2

LIMS Batch Sample ID	LSC P#	LSC PID	LSC S#	LSC SMPL_ID	LSC Count Date	LSC CPMA	LSC tSIE	LSC EFF	LSC Count Dur	Analysis Batch	LIMS SDG	LIMS Run
BKG	44		1	BACKGROUND	05/30/08 18:07	6.46	358.15	38.8100	180.00	ARS1-B08-01350		
ARS1-B08-01350-01	44		2	B08-01350-01	05/30/08 21:16	10.63	387.34	41.3200	180.00	ARS1-B08-01350		
ARS1-B08-01350-02	44		3	B08-01350-02	05/31/08 00:23	10.87	393.43	41.7100	180.00	ARS1-B08-01350		
ARS1-B08-01350-03	44		4	B08-01350-03	05/31/08 03:30	5.59	386.28	41.3800	180.00	ARS1-B08-01350		
ARS1-B08-01350-04	44		5	B08-01350-04	05/31/08 06:38	25.81	369.84	39.9700	180.00	ARS1-B08-01350	ARS1-08-00864	1
ARS1-B08-01350-05	44		6	B08-01350-05	05/31/08 09:47	584.52	379.06	40.7900	180.00	ARS1-B08-01350	ARS1-08-00864	1
ARS1-B08-01350-06	44		7	B08-01350-06	05/31/08 12:56	210.86	377.01	40.6600	180.00	ARS1-B08-01350	ARS1-08-00864	1
ARS1-B08-01350-07	44		8	B08-01350-07	05/31/08 16:06	18.17	362.82	39.2700	180.00	ARS1-B08-01350	ARS1-08-00864	1
ARS1-B08-01350-08	44		9	B08-01350-08	05/31/08 19:15	12.66	369.06	39.8900	180.00	ARS1-B08-01350	ARS1-08-00864	1
ARS1-B08-01350-09	44		10	B08-01350-09	05/31/08 22:25	27.91	353.06	38.3100	180.00	ARS1-B08-01350	ARS1-08-00864	1
ARS1-B08-01350-10	44		11	B08-01350-10	06/01/08 01:34	13.39	375.21	40.5000	180.00	ARS1-B08-01350	ARS1-08-00866	1
ARS1-B08-01350-11	44		12	B08-01350-11	06/01/08 04:42	123.99	377.86	40.7200	180.00	ARS1-B08-01350	ARS1-08-00866	1
ARS1-B08-01350-12	44		13	B08-01350-12	06/01/08 07:51	65.42	393.09	41.6900	180.00	ARS1-B08-01350	ARS1-08-00866	1
ARS1-B08-01350-13	44		14	B08-01350-13	06/01/08 10:59	94.13	381.88	40.9700	180.00	ARS1-B08-01350	ARS1-08-00866	1
	44		25	Sample #25	06/01/08 14:11	8.96	360.37	39.0300	180.00			
	44		26	Sample #26	06/01/08 17:18	6.93	361.16	39.1100	180.00			
	44		27	Sample #27	06/01/08 20:25	7.68	364.74	39.4600	180.00			

Calculation Verification

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	10.630000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.413200
Sample Aliquot	5.041000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/30/08 9:16 PM
Count Date (t2)	5/30/08 9:16 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 **Variables Intact Test**	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	901.791360	901.791360	OK
CU	130.605319	130.605319	OK
TPU	159.988843	159.988843	OK
MDA	193.872555	193.872555	OK
DL	95.308344	95.308344	OK
Net Count Rate	4.170000	4.170000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004624	0.004624	OK
K MDA	0.832343	0.832343	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-01
Analysis Code	
SDG	QC Sample
Fraction	N/A QC Sample
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44-S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML

Date: 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	10.870000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.417100
Sample Aliquot	5.010900
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/31/08 12:24 AM
Count Date (t2)	5/31/08 12:24 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	950.450907	950.450907	OK
CU	131.072083	131.072083	OK
TPU	163.293923	163.293923	OK
MDA	193.213478	193.213478	OK
DL	94.984339	94.984339	OK
Net Count Rate	4.410000	4.410000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004640	0.004640	OK
K MDA	0.835183	0.835183	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-02
Analysis Code	
SDG	QC Sample
Fraction	N/A QC Sample
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44-S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: 6-30-8

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	5.590000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.413800
Sample Aliquot	5.034000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/31/08 3:31 AM
Count Date (t2)	5/31/08 3:31 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L

0 Variables Intact Test — **OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	-188.131960	-188.131960	OK
CU	109.662128	109.662128	OK
TPU	111.343641	111.343641	OK
MDA	193.860642	193.860642	OK
DL	95.302487	95.302487	OK
Net Count Rate	-0.870000	-0.870000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004624	0.004624	OK
K MDA	0.832394	0.832394	OK

Batch Identifiers and Other Related Information

Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-03
Analysis Code	
SDG	QC Sample
Fraction	N/A QC Sample
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44-S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	25.810000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.399700
Sample Aliquot	5.027800
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/7/08 12:00 AM
Count Date (t2)	5/31/08 6:38 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L

0	Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	4353.513622	4353.513621	OK
CU	186.714583	186.714583	OK
TPU	483.595687	483.595686	OK
MDA	201.699702	201.699702	OK
DL	99.156193	99.156193	OK
Net Count Rate	19.350000	19.350000	OK
D t 1 (t2 - t1)	24.276389	24.276389	OK
DF	0.996267	0.996267	OK
Sys Err	0.052280	0.052280	OK
K	0.004445	0.004445	OK
K MDA	0.800043	0.800043	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-04
Analysis Code	LSC-A-001
SDG	ARS1-08-00864
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12247
Instr File Name	73
Instr Detector	P-44-S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMC Date: 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	584.520000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.407900
Sample Aliquot	5.004300
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/7/08 12:00 AM
Count Date (t2)	5/31/08 9:47 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 **Variables Intact Test**	**OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	**128042.969298**	**128042.969268**	**OK**
CU	**786.663552**	**786.663552**	**OK**
TPU	**13143.900665**	**13143.900662**	**OK**
MDA	**198.577088**	**198.577088**	**OK**
DL	**97.621106**	**97.621106**	**OK**
Net Count Rate	**578.060000**	**578.060000**	**OK**
D t 1 (t2 - t1)	**24.407639**	**24.407639**	**OK**
DF	**0.996247**	**0.996247**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.004515**	**0.004515**	**OK**
K MDA	**0.812624**	**0.812624**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-05
Analysis Code	LSC-A-001
SDG	ARS1-08-00864
Fraction	002
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12248
Instr File Name	73
Instr Detector	P-44-S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML **Date:** 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	210.860000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.406600
Sample Aliquot	5.008500
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/7/08 12:00 AM
Count Date (t2)	5/31/08 12:57 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	45383.138510	45383.138500	OK
CU	478.171075	478.171075	OK
TPU	4674.850020	4674.850018	OK
MDA	199.048979	199.048979	OK
DL	97.853089	97.853089	OK
Net Count Rate	204.400000	204.400000	OK
D t 1 (t2 - t1)	24.539583	24.539583	OK
DF	0.996227	0.996227	OK
Sys Err	0.052280	0.052280	OK
K	0.004504	0.004504	OK
K MDA	0.810698	0.810698	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-06
Analysis Code	LSC-A-001
SDG	ARS1-08-00864
Fraction	003
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-11249
Instr File Name	73
Instr Detector	P-44-S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMC Date: 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	18.170000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.392700
Sample Aliquot	5.016000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/7/08 12:00 AM
Count Date (t2)	5/31/08 4:06 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	2688.041281	2688.041280	OK
CU	166.429789	166.429789	OK
TPU	321.815864	321.815864	OK
MDA	205.790517	205.790517	OK
DL	101.167250	101.167250	OK
Net Count Rate	11.710000	11.710000	OK
D t 1 (t2 - t1)	24.670833	24.670833	OK
DF	0.996207	0.996207	OK
Sys Err	0.052280	0.052280	OK
K	0.004356	0.004356	OK
K MDA	0.784140	0.784140	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-07
Analysis Code	LSC-A-001
SDG	ARS1-08-00864
Fraction	004
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12250
Instr File Name	73
Instr Detector	P-44-S-B
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	12.660000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.398900
Sample Aliquot	4.996200
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/7/08 12:00 AM
Count Date (t2)	5/31/08 7:16 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	1406.676179	1406.676178	OK
CU	144.932641	144.932641	OK
TPU	204.405741	204.405741	OK
MDA	203.398976	203.398976	OK
DL	99.991561	99.991561	OK
Net Count Rate	6.200000	6.200000	OK
D t 1 (t2 - t1)	24.802778	24.802778	OK
DF	0.996187	0.996187	OK
Sys Err	0.052280	0.052280	OK
K	0.004408	0.004408	OK
K MDA	0.793360	0.793360	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-08
Analysis Code	LSC-A-001
SDG	ARS1-08-00864
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12251
Instr File Name	73
Instr Detector	P-44-S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: 6-3-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	27.910000
Sample Count Mins	180.000000
BKG Count Rate	6.460000
BKG Count Mins	180.000000
Instrument Efficiency	0.383100
Sample Aliquot	4.992600
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	5/7/08 12:00 AM
Count Date (t2)	5/31/08 10:25 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L

0 Variables Intact Test — **OK**

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	5071.114861	5071.114860	OK
CU	202.481680	202.481680	OK
TPU	557.684812	557.684812	OK
MDA	211.944656	211.944656	OK
DL	104.192644	104.192644	OK
Net Count Rate	21.450000	21.450000	OK
D t 1 (t2 - t1)	24.934028	24.934028	OK
DF	0.996167	0.996167	OK
Sys Err	0.052280	0.052280	OK
K	0.004230	0.004230	OK
K MDA	0.761371	0.761371	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-01350
Batch ID	ARS1-B08-01350-09
Analysis Code	LSC-A-001
SDG	ARS1-08-00864
Fraction	006
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-12257
Instr File Name	73
Instr Detector	P-44-S-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 6-3-08

Assay Definition-

Assay Description:
H3 Normal Lvl

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080530_1802
Raw Results Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080530_1802\20080530_1802.results
RTF File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080530_1802\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080530_1802\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\H-3 Normal Lvl.lsa

Count Conditions-

Nuclide: H-3 Normal
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set:
  Low Energy: H3 Normal
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
44	1	BACKGROUND	6.46	16.65	358.15	38.81	180.00	5/30/2008	6:07:30 PM	
44	2	B08-01350-01	10.63	25.73	387.34	41.32	180.00	5/30/2008	9:16:05 PM	
44	3	B08-01350-02	10.87	26.07	393.43	41.71	180.00	5/31/2008	12:23:37 AM	
44	4	B08-01350-03	5.59	13.51	388.28	41.38	180.00	5/31/2008	3:30:54 AM	
44	5	B08-01350-04	25.81	64.58	369.84	39.97	180.00	5/31/2008	6:38:00 AM	
44	6	B08-01350-05	584.52	1432.85	379.06	40.79	180.00	5/31/2008	9:47:27 AM	
44	7	B08-01350-06	210.86	518.54	377.01	40.66	180.00	5/31/2008	12:56:54 PM	
44	8	B08-01350-07	18.17	46.25	362.82	39.27	180.00	5/31/2008	4:06:23 PM	
44	9	B08-01350-08	12.66	31.74	369.06	39.89	180.00	5/31/2008	7:15:48 PM	
44	10	B08-01350-09	27.91	72.85	353.06	38.31	180.00	5/31/2008	10:25:14 PM	
44	11	B08-01350-10	13.39	33.05	375.21	40.50	180.00	6/1/2008	1:34:40 AM	
44	12	B08-01350-11	123.99	304.51	377.86	40.72	180.00	6/1/2008	4:42:16 AM	
44	13	B08-01350-12	65.42	156.93	393.09	41.69	180.00	6/1/2008	7:51:21 AM	
44	14	B08-01350-13	94.13	229.73	381.88	40.97	180.00	6/1/2008	10:59:58 AM	
Missing vial 15.										
Missing vial 16.										
Missing vial 17.										
Missing vial 18.										
Missing vial 19.										
Missing vial 20.										
Missing vial 21.										
Missing vial 22.										
Missing vial 23.										
Missing vial 24.										
44	25	Sample #25	8.96	22.96	360.37	39.03	180.00	6/1/2008	2:11:01 PM	
44	26	Sample #26	6.93	17.73	361.16	39.11	180.00	6/1/2008	5:18:03 PM	
44	27	Sample #27	7.68	19.47	364.74	39.46	180.00	6/1/2008	8:25:09 PM	

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium
by
Low Level Liquid Scintillation Counting
Laboratory Records

Analysis Batch Report

Analysis Batch ID ARS1-B08-01350

Method ARS-054 **Matrix** AQ

Description TRITIUM IN WATER

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3	SDG	1	FR	Client ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-B08-01350-01	LCS	B-05037			ARS1-08-00864	1	001	MD21-08-12247	06/07/08	06/03/08	LSC-A-001
ARS1-B08-01350-02	LCSD	B-05038			ARS1-08-00864	1	002	MD21-08-12248	06/07/08	06/03/08	LSC-A-001
ARS1-B08-01350-03	MBL				ARS1-08-00864	1	003	MD21-08-11249	06/07/08	06/03/08	LSC-A-001
ARS1-B08-01350-04	TRG				ARS1-08-00864	1	004	MD21-08-12250	06/07/08	06/03/08	LSC-A-001
ARS1-B08-01350-05	TRG				ARS1-08-00864	1	005	MD21-08-12251	06/07/08	06/03/08	LSC-A-001
ARS1-B08-01350-06	TRG				ARS1-08-00864	1	006	MD21-08-12257	06/07/08	06/03/08	LSC-A-001
ARS1-B08-01350-07	TRG				ARS1-08-00866	1	001	MD50-08-7451	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01350-08	TRG				ARS1-08-00866	1	002	MD50-08-7459	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01350-09	TRG				ARS1-08-00866	1	003	MD50-08-7460	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01350-10	TRG				ARS1-08-00866	1	004	MD50-08-7467	06/11/08	06/09/08	LSC-A-001
ARS1-B08-01350-11	TRG										
ARS1-B08-01350-12	TRG										
ARS1-B08-01350-13	TRG										

Expected Value Calculations LANL

ARS Batch Number: ARS1-B08 - 01350

LCS

CALCULATED EXPECTED VALUE = 1172.703

Range 586.351 - 1759.054

LCSD

CALCULATED EXPECTED VALUE = 1172.703

Range 586.351 - 1759.054

ABatch	ABatchSampleID	Isotope	ClientID	ACT	CU	TPU	DL	MDA	BP_DL	BP_MDA	Sb	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	EFF	ALIQ	UCF	CF	GrossCountRate
ARS1-B08-01350	ARS1-B08-01350-01	H-3		901.7913604	130.6053193	159.9888426	95.30834	193.87256				0.05906	180.00000	0.03589	180.00000	0.41320	5.04100	2.22000	1.96000	10.63000
ARS1-B08-01350	ARS1-B08-01350-02	H-3		950.4509067	131.0720826	163.2939227	94.98434	193.21348				0.06039	180.00000	0.03589	180.00000	0.41710	5.01090	2.22000	1.96000	10.87000
ARS1-B08-01350	ARS1-B08-01350-03	H-3		-188.1319602	109.6621283	111.343641	95.30249	193.86064				0.03106	180.00000	0.03589	180.00000	0.41380	5.03400	2.22000	1.96000	-5.59000
ARS1-B08-01350	ARS1-B08-01350-04	H-3	MD21-08-12247	4353.513621	186.7145833	483.5956864	99.15619	201.69970				0.14339	180.00000	0.03589	180.00000	0.39970	5.02780	2.22000	1.96000	25.81000
ARS1-B08-01350	ARS1-B08-01350-05	H-3	MD21-08-12248	128042.9693	786.6635521	13143.90066	97.62111	198.57709				3.24733	180.00000	0.03589	180.00000	0.40790	5.00430	2.22000	1.96000	584.52000
ARS1-B08-01350	ARS1-B08-01350-06	H-3	MD21-08-11249	45383.1385	478.1710753	4674.850018	97.85309	199.04898				1.17144	180.00000	0.03589	180.00000	0.40660	5.00850	2.22000	1.96000	210.86000
ARS1-B08-01350	ARS1-B08-01350-07	H-3	MD21-08-12250	2688.04128	166.4297894	321.8158638	101.16725	205.79052				0.10094	180.00000	0.03589	180.00000	0.39270	5.01600	2.22000	1.96000	18.17000
ARS1-B08-01350	ARS1-B08-01350-08	H-3	MD21-08-12251	1406.676178	144.932641	204.4057408	99.99156	203.39898				0.07033	180.00000	0.03589	180.00000	0.39890	4.99620	2.22000	1.96000	12.66000
ARS1-B08-01350	ARS1-B08-01350-09	H-3	MD21-08-12257	5071.11486	202.4816801	557.6848116	104.19264	211.94466				0.15506	180.00000	0.03589	180.00000	0.38310	4.99260	2.22000	1.96000	27.91000
ARS1-B08-01350	ARS1-B08-01350-10	H-3	MD50-08-7451	1536.259751	144.2884247	213.5404575	97.69950	198.73655				0.07439	180.00000	0.03589	180.00000	0.40500	5.03660	2.22000	1.96000	13.39000
ARS1-B08-01350	ARS1-B08-01350-11	H-3	MD50-08-7459	26004.97022	369.1896226	2690.137592	97.51435	198.35993				0.68883	180.00000	0.03589	180.00000	0.40720	5.01900	2.22000	1.96000	123.99000
ARS1-B08-01350	ARS1-B08-01350-12	H-3	MD50-08-7460	12779.27618	268.4557029	1336.704986	95.52338	194.30998				0.36344	180.00000	0.03589	180.00000	0.41690	5.00450	2.22000	1.96000	65.42000
ARS1-B08-01350	ARS1-B08-01350-13	H-3	MD50-08-7467	19334.80465	323.1364912	2007.382538	97.19629	197.71294				0.52294	180.00000	0.03589	180.00000	0.40970	5.00490	2.22000	1.96000	94.13000

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3
ARS1-B08-01350	ARS1-B08-01350-01	H-3		6.46000	4.17000							6/2/08 8:12	5/30/08 21:16	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-02	H-3		6.46000	4.41000							6/2/08 8:12	5/31/08 0:24	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-03	H-3		6.46000	-0.87000							6/2/08 8:12	5/31/08 3:31	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-04	H-3	MD21-08-12247	6.46000	19.35000							5/7/08 0:00	5/31/08 6:38	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-05	H-3	MD21-08-12248	6.46000	578.06000							5/7/08 0:00	5/31/08 9:47	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-06	H-3	MD21-08-11249	6.46000	204.40000							5/7/08 0:00	5/31/08 12:57	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-07	H-3	MD21-08-12250	6.46000	11.71000							5/7/08 0:00	5/31/08 16:06	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-08	H-3	MD21-08-12251	6.46000	6.20000							5/7/08 0:00	5/31/08 19:16	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-09	H-3	MD21-08-12257	6.46000	21.45000							5/7/08 0:00	5/31/08 22:25	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-10	H-3	MD50-08-7451	6.46000	6.93000							5/7/08 0:00	6/1/08 1:35	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-11	H-3	MD50-08-7459	6.46000	117.53000							5/7/08 0:00	6/1/08 4:42	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-12	H-3	MD50-08-7460	6.46000	58.96000							5/7/08 0:00	6/1/08 7:51	4499.80000		
ARS1-B08-01350	ARS1-B08-01350-13	H-3	MD50-08-7467	6.46000	87.67000							5/7/08 0:00	6/1/08 11:00	4499.80000		

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_1	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentkeV
ARS1-B08-01350	ARS1-B08-01350-01	H-3		0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00462	0.83234	73	P-44-S-2	
ARS1-B08-01350	ARS1-B08-01350-02	H-3		0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00464	0.83518	73	P-44-S-3	
ARS1-B08-01350	ARS1-B08-01350-03	H-3		0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00462	0.83239	73	P-44-S-4	
ARS1-B08-01350	ARS1-B08-01350-04	H-3	MD21-08-12247	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	24.27639						0.99627					0.05228	0.00444	0.80004	73	P-44-S-5	
ARS1-B08-01350	ARS1-B08-01350-05	H-3	MD21-08-12248	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	24.40764						0.99625					0.05228	0.00451	0.81262	73	P-44-S-6	
ARS1-B08-01350	ARS1-B08-01350-06	H-3	MD21-08-11249	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	24.53958						0.99623					0.05228	0.00450	0.81070	73	P-44-S-7	
ARS1-B08-01350	ARS1-B08-01350-07	H-3	MD21-08-12250	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	24.67083						0.99621					0.05228	0.00436	0.78414	73	P-44-S-8	
ARS1-B08-01350	ARS1-B08-01350-08	H-3	MD21-08-12251	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	24.80278						0.99619					0.05228	0.00441	0.79336	73	P-44-S-9	
ARS1-B08-01350	ARS1-B08-01350-09	H-3	MD21-08-12257	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	24.93403						0.99617					0.05228	0.00423	0.76137	73	P-44-S-10	
ARS1-B08-01350	ARS1-B08-01350-10	H-3	MD50-08-7451	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	25.06597						0.99615					0.05228	0.00451	0.81197	73	P-44-S-11	
ARS1-B08-01350	ARS1-B08-01350-11	H-3	MD50-08-7459	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	25.19583						0.99613					0.05228	0.00452	0.81351	73	P-44-S-12	
ARS1-B08-01350	ARS1-B08-01350-12	H-3	MD50-08-7460	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	25.32708						0.99611					0.05228	0.00461	0.83047	73	P-44-S-13	
ARS1-B08-01350	ARS1-B08-01350-13	H-3	MD50-08-7467	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	25.45833						0.99609					0.05228	0.00453	0.81618	73	P-44-S-14	

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B08-01350	ARS1-B08-01350-01	H-3							1			AJOHNSON	6/2/08 8:11
ARS1-B08-01350	ARS1-B08-01350-02	H-3							1			AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-03	H-3							1			AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-04	H-3	MD21-08-12247					ARS1-08-00864	1	001	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-05	H-3	MD21-08-12248					ARS1-08-00864	1	002	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-06	H-3	MD21-08-11249					ARS1-08-00864	1	003	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-07	H-3	MD21-08-12250					ARS1-08-00864	1	004	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-08	H-3	MD21-08-12251					ARS1-08-00864	1	005	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-09	H-3	MD21-08-12257					ARS1-08-00864	1	006	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-10	H-3	MD50-08-7451					ARS1-08-00866	1	001	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-11	H-3	MD50-08-7459					ARS1-08-00866	1	002	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-12	H-3	MD50-08-7460					ARS1-08-00866	1	003	LSC-A-001	AJOHNSON	6/2/08 8:12
ARS1-B08-01350	ARS1-B08-01350-13	H-3	MD50-08-7467					ARS1-08-00866	1	004	LSC-A-001	AJOHNSON	6/2/08 8:12

Batch: ARS1-B08-01350

	1.96s CSU	CSU 1 (1s)
ARS1-B08-01350-01	159.989	81.627
ARS1-B08-01350-02	163.294	83.313
ARS1-B08-01350-03	111.344	56.808
ARS1-B08-01350-04	483.596	246.732
ARS1-B08-01350-05	13143.901	6706.072
ARS1-B08-01350-06	4674.850	2385.128
ARS1-B08-01350-07	321.816	164.192
ARS1-B08-01350-08	204.406	104.289
ARS1-B08-01350-09	557.685	284.533
ARS1-B08-01350-10	213.540	108.949
ARS1-B08-01350-11	2690.138	1372.519
ARS1-B08-01350-12	1336.705	681.992
ARS1-B08-01350-13	2007.383	1024.175

LML 6-3-08

Project Manager

The CSU 1 (1s) was derived by dividing the 1.96s CSU value by 1.96 per Virgene Mulligan.

ARS-054

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
505	ARS1-B08-01350	ARS1-B08-01350-01		0	g	5.041	g	AJOHNSON	5/30/2008
506	ARS1-B08-01350	ARS1-B08-01350-02		0	g	5.0109	g	AJOHNSON	5/30/2008
507	ARS1-B08-01350	ARS1-B08-01350-03		0	g	5.034	g	AJOHNSON	5/30/2008
508	ARS1-B08-01350	ARS1-B08-01350-04	MD21-08-12247	0	g	5.0278	g	AJOHNSON	5/30/2008
509	ARS1-B08-01350	ARS1-B08-01350-05	MD21-08-12248	0	g	5.0043	g	AJOHNSON	5/30/2008
510	ARS1-B08-01350	ARS1-B08-01350-06	MD21-08-11249	0	g	5.0085	g	AJOHNSON	5/30/2008
511	ARS1-B08-01350	ARS1-B08-01350-07	MD21-08-12250	0	g	5.016	g	AJOHNSON	5/30/2008
512	ARS1-B08-01350	ARS1-B08-01350-08	MD21-08-12251	0	g	4.9962	g	AJOHNSON	5/30/2008
513	ARS1-B08-01350	ARS1-B08-01350-09	MD21-08-12257	0	g	4.9926	g	AJOHNSON	5/30/2008
514	ARS1-B08-01350	ARS1-B08-01350-10	MD50-08-7451	0	g	5.0366	g	AJOHNSON	5/30/2008
515	ARS1-B08-01350	ARS1-B08-01350-11	MD50-08-7459	0	g	5.019	g	AJOHNSON	5/30/2008
516	ARS1-B08-01350	ARS1-B08-01350-12	MD50-08-7460	0	g	5.0045	g	AJOHNSON	5/30/2008
517	ARS1-B08-01350	ARS1-B08-01350-13	MD50-08-7467	0	g	5.0049	g	AJOHNSON	5/30/2008

American Radiation Services
Baton Rouge Laboratory

LCS Report
Analytical Batch: ARS1-B08-01350

Printed: 5/30/2008 11:43 AM

ID_59050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
5012	B-05037	ARS1-B08-01350	ARS1-B08-01350-01	B-H3	S-0156	H-3	5	1.172712573	0	1	1	ACOX	5/27/2008
5013	B-05038	ARS1-B08-01350	ARS1-B08-01350-02	B-H3	S-0156	H-3	5	1.172712573	0	1	1	ACOX	5/27/2008

American Radiation Services
Baton Rouge Laboratory

5-26-08

ARS INTERNATIONAL Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expanded Date	Comments
A	S-0001	Am-241	S	04/30/02	04/30/09	OK	05/14/06	5.1838E+01	54.2553	1.579E+05	S-0069		
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	114.4091	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	Ra-226	S	05/29/07	05/29/08	OK	02/01/06	5.5615E+01	64.8985	5.840E+05	S-0105		
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.0066	5.053E+01	S-0109		
A	S-0023	Pu-238	S	11/02/05	11/02/06	EXP	11/01/05	1.1657E+01	11.4228	3.204E+04	S-0071		S-0023 Entered from dilution records
A	S-0024	Pu-239	S	04/26/08	04/26/09	OK	10/26/05	1.1412E+01	11.4112	8.807E+06	S-0073		
A	S-0027	Tc-99	SLC	05/01/06	05/01/07	EXP	10/18/05	9.9141E+03	2418.0693	7.710E+07	S-0113		S-0027 Working level dilution - Information entered from dilution reco
A	S-0028	U-238	S	06/18/07	06/18/08	OK	10/26/05	3.4935E+01	34.9349	1.632E+12	S-0063		
A	S-0032	H-3	SL	04/02/07	04/02/08	EXP	03/01/06	3.4431E+03	3035.8723	4.500E+03	S-0031		S-0032 Working level dilution - Information entered from dilution reco
A	S-0033	Tc-99	SLC	10/18/05	10/18/06	EXP	10/18/05	1.9470E+02	194.6956	7.710E+07	S-0027	04/25/06	S-0033 Working level dilution - Information entered from dilution reco
A	S-0037	Ra-226	SC	02/13/06	02/13/07	EXP	01/03/97	6.4956E+02	646.3599	5.840E+05	S-0104		S-0037 Working level dilution - Information entered from dilution reco
A	S-0039	Tc-99	SC	08/03/07	08/03/08	OK	03/30/06	1.1146E+04	11146.2609	7.710E+07	S-0114		S-0039 - Information entered from dilution records - 4/19/2006 RTS
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8162E+00	2.4921	4.500E+03	S-0032		S-0041 Working level dilution - Information entered from dilution reco
A	S-0063	U-238	P			Not Ver	08/01/97	2.4200E+02	242.0000	1.632E+12			S-0028 Entered from dilution record on 4/6/2006 RTS
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0065 Primary solution - Information entered from dilution record
A	S-0067	Am-243	PT			Not Ver	10/20/05	3.6240E+01	36.2311	2.692E+06			S-0038 Entered on 4/6/2006 RTS from dilution documentation
A	S-0069	Am-241	PL			Not Ver	04/19/96	9.0000E-03	0.0094	1.579E+05			S-0069 - Information entered from dilution record - Dilution record
A	S-0071	Pu-238	PL			Not Ver	11/15/99	4.1520E+01	38.8131	3.204E+04			S-0023 Entered from dilution records
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2304	8.807E+06			S-0024 Entered from dilution records
A	S-0074	Pu-239	SL			Not Ver	10/26/05	1.1412E+01	11.4112	8.807E+06	S-0073		
A	S-0075	Pu-242	PT			Not Ver	06/04/04	2.6150E+01	26.3093	1.363E+08			S-0025 Information entered from dilution records
A	S-0077	U-232	PT			Not Ver	07/01/02	3.8220E+01	36.0151	2.516E+04			S-0026 Information entered from dilution records
A	S-0102	U-nat	PC			Not Ver	08/01/97	3.8624E+02	486.2400	1.632E+12			S-0102 Working solution prepared from stock solution number abo
A	S-0103	U-nat	SC	06/18/07	06/18/08	OK	10/26/05	7.0226E+01	70.2265	1.632E+12	S-0102		S-0028 relogged as total uranium solution. Activity is the sum total o
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8208	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	01/01/93	1.1900E+01	11.8208	5.840E+05			Primary solution for S-0007 - Information entered from dilution record
A	S-0107	H-3	P			Not Ver	09/05/98	6.5470E+05	367122.6607	4.500E+03			S-0107 Primary solution - Information entered from dilution records 11/19/
A	S-0108	Sr-90	PC			Not Ver	07/01/95	4.0100E+03	2929.6986	1.041E+04			Primary for S-0017
A	S-0109	Sr-90	PLC			Not Ver	07/01/95	4.0100E+03	2929.6986	1.041E+04			S-0017 primary - Information entered from dilution records, 4/19/2006
A	S-0111	H-3	PC			Not Ver	04/01/06	2.0870E+00	1.8487	4.500E+03			Primary
A	S-0112	H-3	SC	04/27/07	04/27/08	EXP	04/16/06	1.1410E+04	10130.2330	4.500E+03	S-0111		S-0112 Working level dilution - Information entered from dilution reco
A	S-0113	Tc-99	PLC			Not Ver	09/01/96	3.2610E+04	32608.7436	7.710E+07			Primary solution
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	S-0115	Cs-137	PL			Not Ver	01/23/95	2.9000E+01	21.3221	1.098E+04			S-0003 primary - Information entered from dilution records - 4/19/2006
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4274	5.840E+05	S-0105		S-0007 Working level dilution - Information entered from dilution reco 4/19/2006 RTS
A	S-0117	Sr-90	PLCT			Not Ver	07/01/95	4.0100E+03	2929.6986	1.041E+04			S-0017 primary - Information entered from dilution records, 4/19/2006
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0087	1.098E+04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	04/19/06	04/19/07	EXP	04/03/06	1.1621E+04	11059.3112	1.098E+04	S-0118		Solution for use as calibration stock standard.
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9444	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	09/14/07	09/14/08	OK	03/31/06	1.1282E+04	10705.1899	1.041E+04	S-0120		Solution for use as calibration stock standard.
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0977	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	04/24/06	04/24/07	EXP	04/03/06	1.1632E+04	11591.9830	1.579E+05	S-0122		Solution for use as calibration stock standard.
A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	03/27/06	1.0413E+04	10412.8110	2.753E+07	S-0124		Solution for use as calibration stock standard. Entered from dilution
A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	82979.4579	2.100E+00			Primary Ra-228 Standard

American Radiation Services
Baton Rouge Laboratory

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ARS INTERNATIONAL Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expanded Date	Comments
A	S-0127	Ra-228	SL	05/10/06	05/10/07	EXP	05/10/06	1.1274E+04	8807.3973	2.100E+03	S-0126		Measurements performed using Balance# 1125183149 and Pipettor# V29840.
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0463	7.710E+07	S-0039		[illegible]
A	S-0129	Sr-90	PL			Not Ver	07/01/95	4.0100E+03	2929.6986	1.041E+04			
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	35.2257	2.100E+03	S-0127		[illegible]
A	S-0134	Sr-90	SL			Not Ver	09/26/03	4.7747E+02	426.2227	1.041E+04	S-0129		Original solution ID# was T11c. Dilution information entered from exis
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	52.6669	1.041E+04	S-0134		[illegible]
A	S-0137	Th-229	PT			Not Ver	12/05/03	1.2294E+05	122888.0340	2.681E+06			Primary Th-229 standard.
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6645	2.681E+06	S-0137		[illegible]
A	S-0139	Po-209	P			Not Ver	03/15/94	5.1252E+03	4653.7250	3.726E+04			Primary Po-209 standard.
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5136	3.726E+04	S-0139		
A	S-0141	Ra-226	PC			Not Ver	01/21/93	2.6418E+04	26242.8362	5.840E+05			Primary solution for creating calibration stock.
A	S-0142	Ra-226	SC	04/03/07	04/03/08	EXP	07/21/06	6.5210E+02	661.5747	5.840E+05	S-0141		[illegible]
A	S-0143	Pb-210	P			Not Ver	07/18/06	7.6400E+00	7.2103	8.130E+03			ARS-WRM-001
A	S-0144	Pb-210	S	10/24/07	10/24/08	OK	07/18/06	1.6961E+01	16.0068	8.130E+03	S-0143		[illegible]
A	S-0145	Th-229	ST			Not Ver	01/28/05	1.1938E+02	119.3460	2.681E+06	S-0138		Information was gathered from existing incomplete dilution records cre
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9793	2.681E+06	S-0145		[illegible]
A	S-0147	Tc-99	SC	02/27/08	02/27/09	OK	08/08/06	2.3201E+02	232.0119	7.710E+07	S-0027		Tc-99 LCS standard. -BJS 9/1/2006
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473068.2963	2.090E+06			[illegible]
A	S-0151	I-129	PLC			Not Ver	10/12/06	2.4390E+05	243899.9825	5.730E+09			Primary I-129 standard
A	S-0152	H-3	P	05/09/08	05/09/09	OK	09/03/98	2.0000E+00	1.1620	4.500E+03			[illegible]
A	S-0153	C-14	S			Not Ver	10/13/06	1.1837E+04	11834.2455	2.090E+06	S-0148		Standard was originally logged as S-0149. After discovering an error I
A	S-0154	C-14	S	03/12/07	03/12/08	EXP	10/13/06	1.7245E+02	172.4162	2.090E+06	S-0153		[illegible]
A	S-0155	Ra-226	SC	04/03/07	04/03/08	EXP	03/20/07	5.9902E+01	59.8716	5.840E+05	S-0142		Calibration stock solution for Ra-226. Dilution performed as stated ab
A	S-0156	H-3	S	05/09/08	05/09/09	OK	04/27/07	2.7672E+00	2.6034	4.500E+03	S-0032		[illegible]
A	S-0157	Sr-90	P			Not Ver	05/15/07	7.6040E+03	7414.9964	1.041E+04			Primary Sr-90 LCS standard
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	823.7378	2.516E+04			Primary U-232 standard
A	S-0159	Sr-89	PC			Not Ver	05/15/07	1.7538E+04	98.1877	5.053E+01			Primary Sr-89 standard
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4414.2487	1.041E+04	S-0157		[illegible]
A	S-0161	U-232	ST	06/18/07	06/18/08	OK	06/06/07	5.1903E+02	513.9600	2.516E+04	S-0158		Intermediate U-232 standard to be used in creating stock tracer soluti
[illegible]	[illegible]	[illegible]	ST	[illegible]	[illegible]	OK	[illegible]	[illegible]	9.7699	[illegible]	S-0161		[illegible]
A	S-0163	Sr-90	S	07/16/07	07/16/08	OK	06/12/07	4.7407E+01	46.3147	1.041E+04	S-0160		Sr-90 LCS stock solution. Dilution performed as stated above by L Lass
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	98.1589	5.053E+01			Primary Sr-89 calibration standard.
A	S-0165	Sr-89	SC	08/10/07	04/18/08	EXP	08/08/07	3.2967E+03	59.2303	5.053E+01	S-0164		Calibration stock solution. Dilution performed as stated above by K Ha
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6490	2.681E+06	S-0145		[illegible]
A	S-0168	Pu-242	PT			Not Ver	06/07/94	2.6310E+01	26.3093	1.365E+08			Primary Pu-242 standard
A	S-0169	Pu-242	ST	04/26/08	04/26/09	OK	12/17/07	7.6719E+00	7.6719	1.365E+08	S-0168		[illegible]
A	S-0170	Th-230	PL			Not Ver	09/10/07	7.9235E+03	7923.4470	2.753E+07			Primary Th-230 standard.
A	S-0171	Th-229	PT			Not Ver	09/10/07	7.7817E+01	77.8122	2.681E+06			Primary Th-229 standard.
A	S-0172	Th-230	S	02/21/08	02/21/09	OK	02/05/08	4.7041E+03	4704.0750	2.753E+07	S-0170		Intermediate level Th-230 standard for use in creating LCS stock solut
A	S-0173	Th-230	S	02/21/08	02/21/09	OK	02/05/08	1.2638E+01	12.6383	2.753E+07	S-0172		[illegible]
A	S-0176	H-3	S	02/20/08	02/20/09	OK	02/20/08	7.0273E-02	0.0692	4.500E+03	S-0152		Low level tritium LCS stock solution. Dilution performed as stated abo
A	S-0177	Ni-63	PL			Not Ver	02/07/08	7.6217E+03	7605.8583	3.660E+04			Primary Ni-63 LCS standard.
A	S-0178	Ni-63	S	03/28/08	03/28/09	OK	03/14/08	4.5403E+03	4533.9814	3.660E+04	S-0177		Intermediate level Ni-63 standard for use in creating LCS stock soluti
A	S-0179	Ni-63	PC			Not Ver	11/15/05	4.7100E+04	46282.9610	3.660E+04			Primary Ni-63 calibration standard.
A	S-0180	Ni-63	SC	03/28/08	03/28/09	OK	03/27/08	2.7929E+04	27896.9629	3.660E+04	S-0179		Ni-63 Calibration stock standard. Dilution performed as stated above b

ARS International Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0181	Am-243	PT			Not Ver	03/29/05	2.2248E+05	222413.8488	2.692E+06			Primary Am-243 standard.
A	S-0182	Fe-55	PC			Not Ver	11/30/05	5.8430E+04	30840.0015	9.860E+02			Primary Fe-55 standard.
A	S-0183	Fe-55	SC			Not Ver	04/09/08	1.9025E+04	18393.4691	9.860E+02	S-0182		[illegible]
A	S-0184	Am-243	PT			Not Ver	04/03/08	7.2645E+01	72.6441	2.692E+06			Primary Am-243 Tracer solution.
A	S-0185	Am-243	ST	04/30/08	04/30/09	OK	04/29/08	1.0981E+01	10.9812	2.692E+06	S-0184		[illegible]
A	S-0186	PU-239	PC			Not Ver	04/17/08	6.5207E+03	6520.6901	8.807E+06			Primary PU-239
A	S-0187	Ra-226	SC			Not Ver	05/08/08	5.8759E+01	58.7579	5.840E+05	S-0142		[illegible]
A	S-0188	PU-241	PLC			Not Ver	05/01/03	1.5520E-01	0.1215	5.242E+03			Primary PU-241 Standard
A	S-0189	H-3	SL	05/20/08	05/20/09	OK	05/16/08	7.1011E-02	0.0709	4.500E+03	S-0152		[illegible]
A	S-0190	H-3	SL	05/20/08	05/20/09	OK	05/20/08	7.0792E-02	0.0707	4.500E+03	S-0152		LL3H LCS soln. dilution preformed by April Johnson.
A	S-0191	PU-241	SLC			Not Ver	05/20/08	4.8833E+03	4878.7576	5.242E+03	S-0188		[illegible]
A	S-0192	PU-241	SLC			Not Ver	05/20/08	2.1923E+03	2190.2665	5.242E+03	S-0188		PU-241 LCS standard. Dilution performed as stated above by B Steffens.
I	S-0025	Pu-242	ST	04/17/07	04/17/08	EXP	10/24/05	7.6328E+00	7.6328	1.365E+08	S-0075	01/09/08	S-0025 Information entered from dilution records
I	S-0026	U-232	ST	06/19/06	06/19/07	EXP	10/26/05	1.0854E+01	10.5750	2.516E+04	S-0077	06/21/07	S-0026 Information entered from dilution records
I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4074	4.500E+03			Tritium in Oil
I	S-0031	H-3	S	10/26/05	10/26/06	EXP	10/19/05	6.0777E+05	524950.0163	4.500E+03	S-0107		S-0031 Intermediate dilution - Information entered from dilution recor
I	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4894	2.751E+07	S-0065	02/22/08	[illegible]
I	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6541	2.692E+06	S-0067	05/07/08	S-0038 Entered from dilution documention. Density from certificate use
I	S-0130	Sr-90	SL			Not Ver	09/26/03	5.3620E+02	479.6572	1.041E-04	S-0129	05/26/06	[illegible]
I	S-0131	Sr-90	SL			Not Ver	02/02/06	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	
I	S-0133	Sr-90	SL	01/09/06	01/09/07	EXP	06/09/04	5.6438E+01	53.0662	1.041E+04	S-0130	05/26/06	[illegible]
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2036E+01	47.2531	1.041E+04	S-0134	07/17/07	Original standard ID# was T11c-1/S-0017. Dilution information entered
I	S-0149	C-14	SL			Not Ver	10/13/06	5.9553E+04	59541.3795	2.090E+06	S-0148	03/16/07	Intermediate standard for creating LCS [illegible]
I	S-0150	C-14	SL			Not Ver	10/13/06	8.6764E+02	867.4740	2.090E+06	S-0149	03/16/07	LCS standard for C-14 in water. Dilution performed as stated above. -B
I	S-0167	Th-229	ST			Not Ver	08/27/07	5.6494E+00	5.6490	2.681E+06	S-0145	08/28/07	[illegible]
I	S-0174	H-3	S			Not Ver	02/07/08	4.4669E-01	0.4392	4.500E+03	S-0152	05/20/08	Intermediate level standard for creating low level tritium LCS solutio
I	S-0175	H-3	S	02/11/08	02/11/09	OK	02/11/08	7.0455E-02	0.0693	4.500E+03	S-0152	05/20/08	[illegible]

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B08-01350
SDG's: ARS1-08-00864; 00866

LCS	901.7914	**CSU**	159.9888
LCSD	950.4509	**CSU-D**	163.2939

DER = $\frac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\frac{48.65955}{114.3037}$ = 0.425704 **< 3**

% RPD= $\frac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\frac{48.65955}{926.1211}$ *100 = 5.254123 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\frac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\frac{48.6595463}{323.2828}$ 0.150517 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-188.132	111.3436	193.8606
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
5-28-08	15:35	BD8-01349-14	BD8-01349	1712	AJ
5-30-08	14:12	SNC	QA	QA	AJ
↓	↓	Background	BD8-01350	1802	AJ
↓	↓	BD8-01350-01	↓	↓	AJ
↓	↓	BD8-01350-02	↓	↓	AJ
↓	↓	BD8-01350-03	↓	↓	AJ
↓	↓	BD8-01350-04	↓	↓	AJ
↓	↓	BD8-01350-05	↓	↓	AJ
↓	↓	BD8-01350-06	↓	↓	AJ
↓	↓	BD8-01350-07	↓	↓	AJ
↓	↓	BD8-01350-08	↓	↓	AJ
↓	↓	BD8-01350-09	↓	↓	AJ
↓	↓	BD8-01350-10	↓	↓	AJ
↓	↓	BD8-01350-11	↓	↓	AJ
↓	↓	BD8-01350-12	↓	↓	AJ
↓	↓	BD8-01350-13	↓	↓	AJ
				NA	
				SNC 6-4-08	

Reviewed By: _____ Date: 6-4-08
Initials

Technical Notes

Batch	ARS1-B08-01350
Analysis Code	LSC-A-001
Procedure No	ARS-054
Matrix	AQ

#	Date	Dept	Batch Technical Notes	User ID
1	06/02/08 08:18	COUNTROOM	On the LSC Instrument Data Transfer Report-3 samples #25,26,27 are not apart of this batch. These samples were left in the instrument on accident and counted behind the samples for this batch. Not calculation was given for these there samples 25,26,27.	AJOHNSON

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

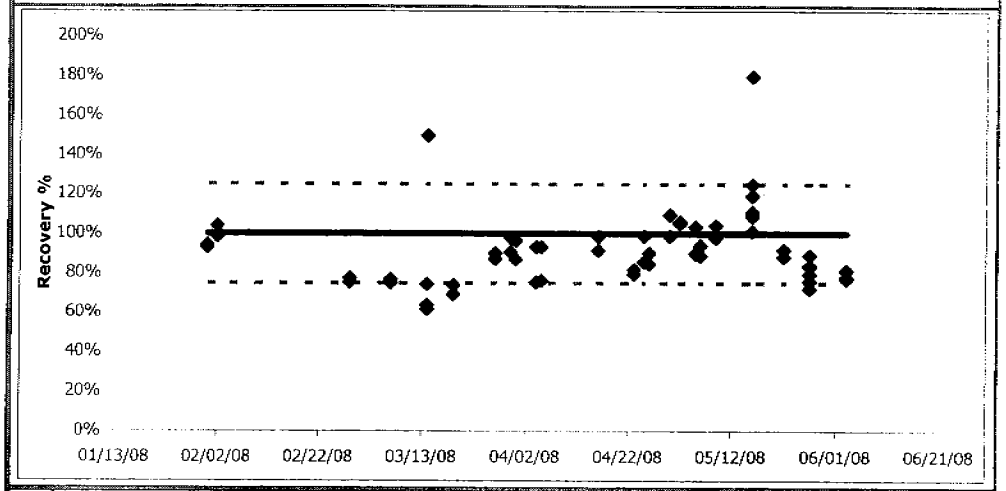
for

Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Control Charts

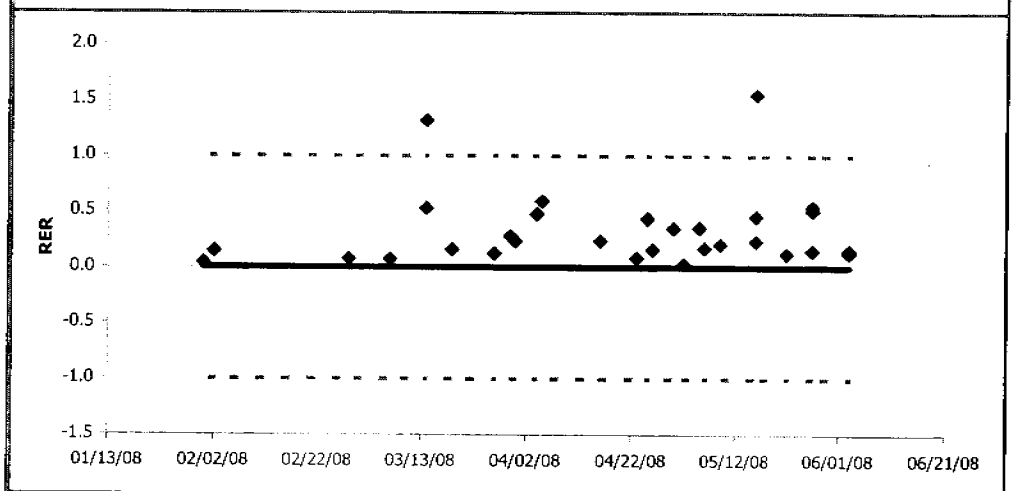
QC Chart

H-3 LCS



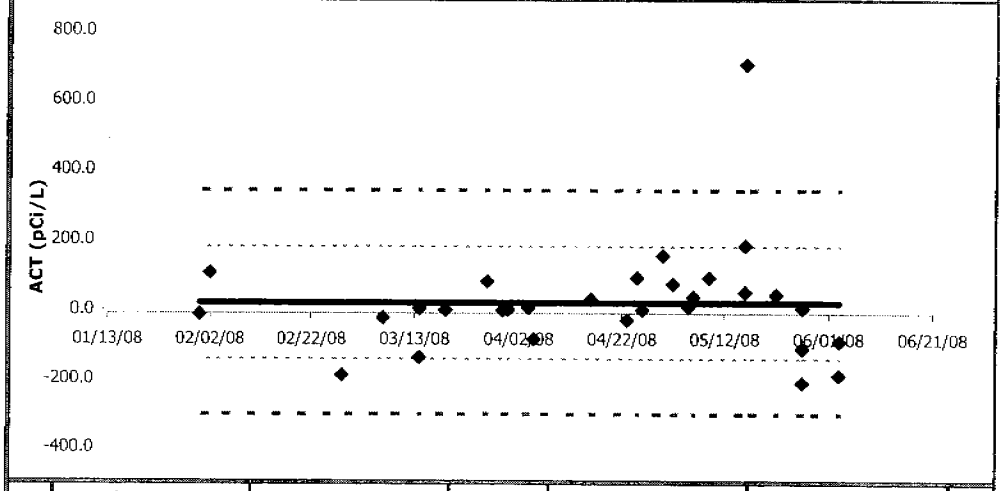
Average	STDEV	n	UCL	LCL
0.9175	0.1901	30	1.2500	0.7500

H-3 RER



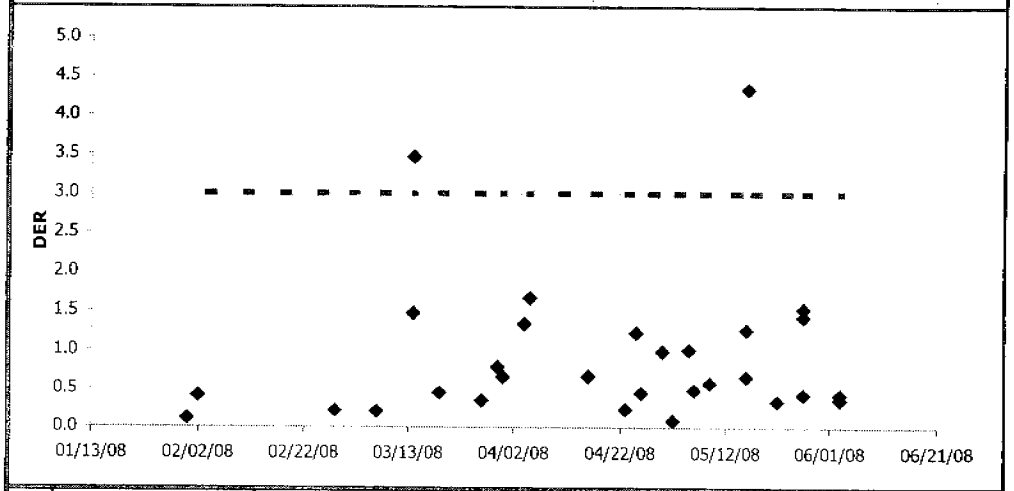
n	UCL	LCL
30	1.0000	-1.0000

H-3 Blank



Average	STDEV	n	UCL	LCL
19.5078	160.9574	30	341.4226	-302.4069

H-3 DER



n	UCL
30	3.0000

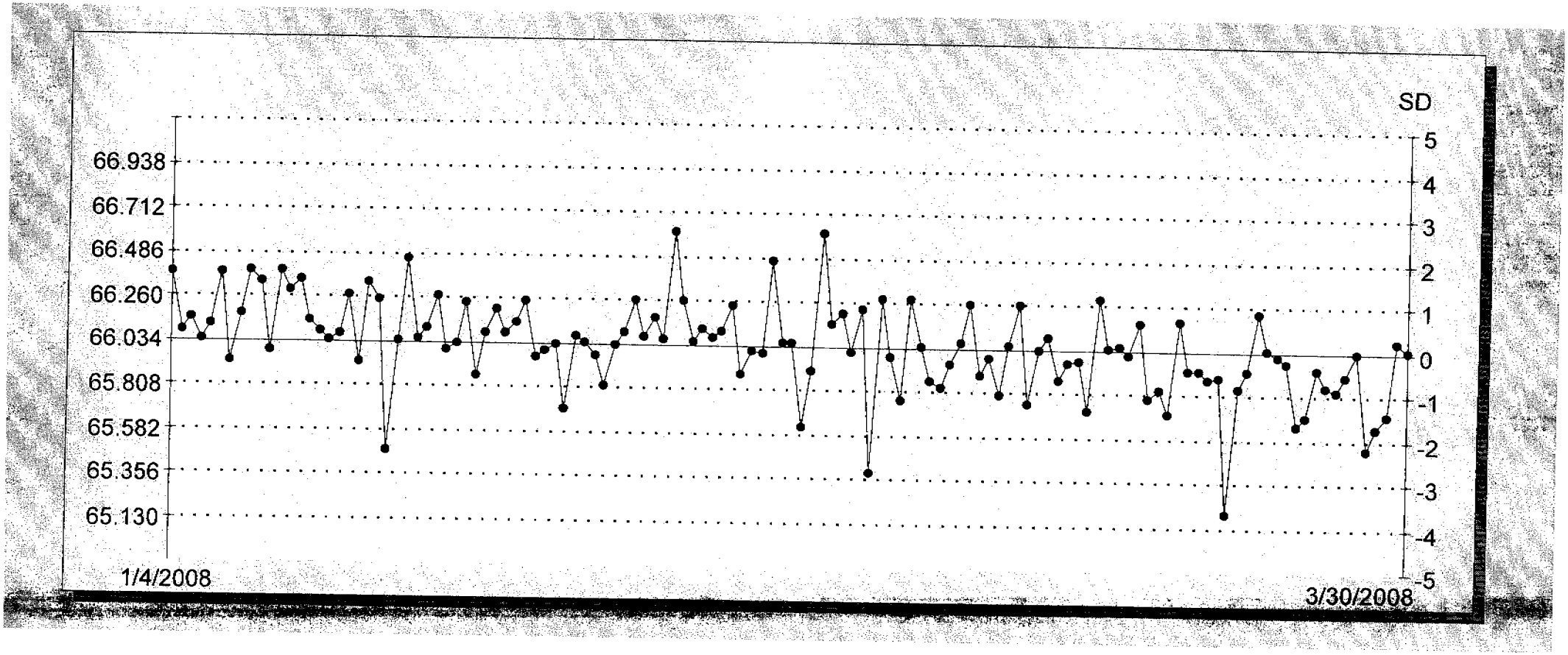
3H Efficiency
Total # pts : 785
Valid # pts : 126
Mean : 66.03
SD : 0.23

Date	Value	Valid Pt
Jan 04, 2008	66.38	X
Jan 07, 2008	66.08	X
Jan 07, 2008	66.15	X
Jan 07, 2008	66.04	X
Jan 07, 2008	66.12	X
Jan 08, 2008	66.38	X
Jan 11, 2008	65.92	X
Jan 17, 2008	66.17	X
Jan 17, 2008	66.40	X
Jan 17, 2008	66.33	X
Jan 17, 2008	65.98	X
Jan 18, 2008	66.39	X
Jan 18, 2008	66.29	X
Jan 18, 2008	66.35	X
Jan 18, 2008	66.14	X
Jan 18, 2008	66.08	X
Jan 18, 2008	66.04	X
Jan 18, 2008	66.07	X
Jan 18, 2008	66.28	X
Jan 18, 2008	65.93	X
Jan 18, 2008	66.34	X
Jan 18, 2008	66.25	X
Jan 28, 2008	65.48	X
Jan 31, 2008	66.04	X
Jan 31, 2008	66.45	X
Jan 31, 2008	66.06	X
Jan 31, 2008	66.10	X
Jan 31, 2008	66.28	X
Jan 31, 2008	**66.00**	**X**
Jan 31, 2008	66.03	X
Jan 31, 2008	66.24	X
Jan 31, 2008	65.86	X
Jan 31, 2008	66.08	X
Jan 31, 2008	66.21	X
Jan 31, 2008	66.09	X
Feb 01, 2008	66.14	X
Feb 01, 2008	66.25	X
Feb 01, 2008	65.97	X
Feb 01, 2008	65.99	X
Feb 01, 2008	66.03	X
Feb 01, 2008	65.70	X
Feb 01, 2008	66.07	X
Feb 01, 2008	66.04	X
Feb 01, 2008	65.97	X
Feb 01, 2008	65.82	X
Feb 01, 2008	66.03	X
Feb 02, 2008	66.10	X

Feb 02, 2008	66.26	X
Feb 02, 2008	66.07	X
Feb 02, 2008	66.17	X
Feb 02, 2008	66.06	X
Feb 02, 2008	66.62	X
Feb 02, 2008	66.26	X
Feb 02, 2008	66.05	X
Feb 02, 2008	66.12	X
Feb 02, 2008	66.08	X
Feb 03, 2008	66.11	X
Feb 03, 2008	66.24	X
Feb 03, 2008	65.88	X
Feb 03, 2008	66.00	X
Feb 03, 2008	65.99	X
Feb 03, 2008	66.46	X
Feb 03, 2008	66.05	X
Feb 03, 2008	66.06	X
Feb 03, 2008	65.62	X
Feb 03, 2008	65.90	X
Feb 03, 2008	66.61	X
Feb 03, 2008	66.15	X
Feb 03, 2008	66.21	X
Feb 03, 2008	66.01	X
Feb 04, 2008	66.23	X
Feb 04, 2008	65.38	X
Feb 04, 2008	66.28	X
Feb 04, 2008	65.98	X
Feb 04, 2008	65.76	X
Feb 04, 2008	66.28	X
Feb 07, 2008	66.04	X
Feb 08, 2008	65.86	X
Feb 08, 2008	65.83	X
Feb 08, 2008	65.95	X
Feb 08, 2008	66.06	X
Feb 08, 2008	66.26	X
Feb 13, 2008	65.89	X
Feb 14, 2008	65.98	X
Feb 14, 2008	65.80	X
Feb 14, 2008	66.05	X
Feb 14, 2008	66.26	X
Feb 14, 2008	65.76	X
Feb 19, 2008	66.03	X
Feb 20, 2008	66.09	X
Feb 21, 2008	65.87	X
Feb 22, 2008	65.96	X
Feb 22, 2008	65.97	X
Feb 22, 2008	65.72	X
Feb 25, 2008	66.30	X
Feb 27, 2008	66.04	X
Feb 28, 2008	66.05	X
Mar 04, 2008	66.01	X
Mar 05, 2008	66.17	X
Mar 05, 2008	65.79	X
Mar 05, 2008	65.83	X
Mar 05, 2008	65.71	X
Mar 05, 2008	66.19	X
Mar 05, 2008	65.93	X

Mar 11, 2008	65.93	X
Mar 17, 2008	65.89	X
Mar 19, 2008	65.89	X
Mar 19, 2008	65.20	X
Mar 19, 2008	65.84	X
Mar 19, 2008	65.93	X
Mar 19, 2008	66.23	X
Mar 19, 2008	66.04	X
Mar 24, 2008	66.01	X
Mar 26, 2008	65.97	X
Mar 27, 2008	65.66	X
Mar 28, 2008	65.70	X
Mar 30, 2008	65.94	X
Mar 30, 2008	65.85	X
Mar 30, 2008	65.83	X
Mar 30, 2008	65.91	X
Mar 30, 2008	66.03	X
Mar 30, 2008	65.54	X
Mar 30, 2008	65.64	X
Mar 30, 2008	65.71	X
Mar 30, 2008	66.08	X
Mar 30, 2008	66.04	X

3H Efficiency
Total # pts : 785
Valid # pts : 126
Mean : 66.03
SD : 0.23



3H Background

Total # pts	: 766
Valid # pts	: 123
Mean	: 2.20
SD	: 0.22

Date	Value	Valid Pt
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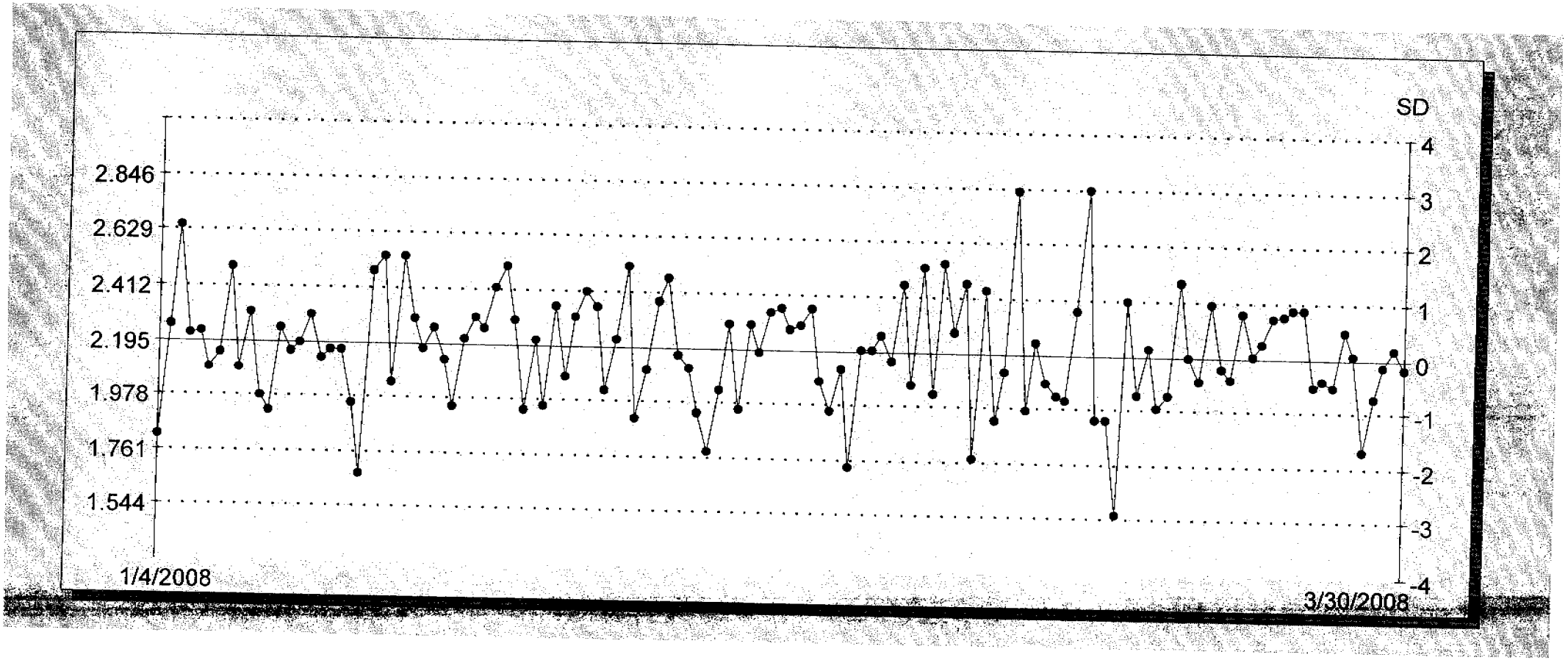
Jan 07, 2008	2.26	X
Jan 07, 2008	2.65	X
Jan 07, 2008	2.22	X
Jan 07, 2008	2.23	X
Jan 08, 2008	2.09	X
Jan 11, 2008	2.15	X
Jan 17, 2008	2.49	X
Jan 17, 2008	2.09	X
Jan 17, 2008	2.31	X
Jan 17, 2008	1.98	X
Jan 18, 2008	1.92	X
Jan 18, 2008	2.25	X
Jan 18, 2008	2.16	X
Jan 18, 2008	2.19	X
Jan 18, 2008	2.30	X
Jan 18, 2008	2.14	X
Jan 18, 2008	2.16	X
Jan 18, 2008	2.16	X
Jan 18, 2008	1.95	X
Jan 18, 2008	1.67	X
Jan 28, 2008	2.47	X
Jan 31, 2008	2.54	X
Jan 31, 2008	2.04	X
Jan 31, 2008	2.54	X
Jan 31, 2008	2.29	X
Jan 31, 2008	2.17	X
Jan 31, 2008	2.26	X
Jan 31, 2008	2.13	X
Jan 31, 2008	1.94	X
Jan 31, 2008	2.22	X
Jan 31, 2008	2.30	X
Jan 31, 2008	2.26	X
Jan 31, 2008	2.42	X
Feb 01, 2008	2.50	X
Feb 01, 2008	2.29	X
Feb 01, 2008	1.94	X
Feb 01, 2008	2.21	X
Feb 01, 2008	1.96	X
Feb 01, 2008	2.35	X
Feb 01, 2008	2.08	X
Feb 01, 2008	2.31	X
Feb 01, 2008	2.41	X
Feb 01, 2008	2.35	X
Feb 01, 2008	2.03	X
Feb 02, 2008	2.23	X
Feb 02, 2008	2.51	X

Feb 02, 2008	1.91	X
Feb 02, 2008	2.11	X
Feb 02, 2008	2.38	X
Feb 02, 2008	2.47	X
Feb 02, 2008	2.17	X
Feb 02, 2008	2.12	X
Feb 02, 2008	1.94	X
Feb 02, 2008	1.79	X
Feb 03, 2008	2.03	X
Feb 03, 2008	2.29	X
Feb 03, 2008	1.96	X
Feb 03, 2008	2.30	X
Feb 03, 2008	2.18	X
Feb 03, 2008	2.34	X
Feb 03, 2008	2.36	X
Feb 03, 2008	2.28	X
Feb 03, 2008	2.30	X
Feb 03, 2008	2.36	X
Feb 03, 2008	2.07	X
Feb 03, 2008	1.96	X
Feb 03, 2008	2.13	X
Feb 03, 2008	1.74	X
Feb 04, 2008	2.20	X
Feb 04, 2008	2.20	X
Feb 04, 2008	2.26	X
Feb 04, 2008	2.16	X
Feb 04, 2008	2.46	X
Feb 07, 2008	2.06	X
Feb 08, 2008	2.53	X
Feb 08, 2008	2.03	X
Feb 08, 2008	2.55	X
Feb 08, 2008	2.28	X
Feb 08, 2008	2.47	X
Feb 13, 2008	1.77	X
Feb 14, 2008	2.44	X
Feb 14, 2008	1.93	X
Feb 14, 2008	2.12	X
Feb 14, 2008	2.83	X
Feb 14, 2008	1.97	X
Feb 19, 2008	2.24	X
Feb 20, 2008	2.08	X
Feb 21, 2008	2.03	X
Feb 22, 2008	2.01	X
Feb 22, 2008	2.37	X
Feb 22, 2008	2.84	X
Feb 25, 2008	1.94	X
Feb 27, 2008	1.94	X
Feb 28, 2008	1.57	X
Mar 04, 2008	2.41	X
Mar 05, 2008	2.04	X
Mar 05, 2008	2.23	X
Mar 05, 2008	1.99	X
Mar 05, 2008	2.04	X
Mar 05, 2008	2.48	X
Mar 11, 2008	2.19	X
Mar 17, 2008	2.10	X
Mar 19, 2008	2.40	X

Mar 19, 2008	2.15	X
Mar 19, 2008	2.10	X
Mar 19, 2008	2.37	X
Mar 19, 2008	2.20	X
Mar 19, 2008	2.25	X
Mar 24, 2008	2.35	X
Mar 26, 2008	2.36	X
Mar 27, 2008	2.39	X
Mar 28, 2008	2.39	X
Mar 30, 2008	2.08	X
Mar 30, 2008	2.11	X
Mar 30, 2008	2.08	X
Mar 30, 2008	2.30	X
Mar 30, 2008	2.20	X
Mar 30, 2008	1.83	X
Mar 30, 2008	2.04	X
Mar 30, 2008	2.17	X
Mar 30, 2008	2.24	X
Mar 30, 2008	2.16	X

3H Background
Total # pts : 766
Valid # pts : 123
Mean : 2.20
SD : 0.22



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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

ARS AMERICAN RADIATION SERVICES, INC.

Add/Edit *Secondary Stds*

Planning

Planning Comments	Create a dilution of S-0032 for use as LCS stock solution
Target dpm/g (on dil. date)	2.76
Target Final volume mL	2000
Appx mass g of Parent Sol'n	1.710554008
Appx vol ml of Parent Sol'n	1.713966152
Expected Addition for Analysis g	5

Standards Preparation / Dilution

Secondary Solution #	S-0156
Dilution Date (New Ref Date)	04/27/2007 00:00
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	17.8583
Container Plus Solution (g)	19.5702
Net Wt Transferred (g)	1.7119
DPM Xferred on 04/27/2007 00:00	5523.278
Diluent/matrix	H2O
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	
Dilution Empty Container Mass (g)	1
Dilution Full Cont g (if measured)	1997
Dilution Final Volume ml (if measured)	2000
Final Dilution Density (g/mL)	0.998
Final Dilution Measured Mass g	1996
Comments	Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007
Final Dilution dpm/g	2.767173247
Final Dil New Ref Date/Time	04/27/2007 00:00

Parent Standard Data

Parent Solution Reference #	NIST SRM 4927F
Parent Solution #	S-0032
Parent Principal Radionuclide	H-3
Half Life (Days)	4499.8000000
Parent Reference Date	03/01/2006 00:00
Parent Certified Act	3443.100423
Certi Act/Vol Units	dpm / g
Parent Cert Act Uncert 1 Sigma	0.0036
Parent Sp. Gravity G/Ml	0.9982
Parent Supplier	NIST SRM 4927F
Parent Date Recvd	01/02/00
Parent Received By	Unknown
Parent Cert Exp Date	
Parent Matrix	H2O
Certified dpm/g At Ref Date	3443.100423
Certified dpm/g on 04/27/2007 00:00	3225.402243
Parent Comments	S-0032 = intermediate dilution for preparation of control solutions. Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution record 5/9/2006 LFH
Parent Tech	Unknown
Is_Primary	FALSE
Is_LCS	FALSE
Is_Tracer	FALSE
Is_Calib	FALSE

S-0152 and S-0156 Tritium standard reverification 5/9/2008

Std ID	Gr CPM	Bkg CPM	Net CPM	Std DPM/g	To	T1	T 1/2	Std DPM/g decayed	grams added	STD DPM at count	CPM/ DPM	Mean CPM/DPM	Stdev of CPM/DPM	%RSD of CPM/DPM
Bkg		7.38												
S-0152-V1	134.473	7.38	127.093	120.54	9/3/1998	5/9/2008	4499.8	69.92	5	349.58	0.3636			
S-0152-V2	140.853	7.38	133.473	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.01	350.28	0.3810			
S-0152-V3	133.506	7.38	126.126	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.01	350.28	0.3601			
S-0152-V4	137.132	7.38	129.752	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.04	352.38	0.3682			
S-0152-V5	137.202	7.38	129.822	120.54	9/3/1998	5/9/2008	4499.8	69.92	5.03	351.68	0.3691	0.3684	0.0080	2.2%
S-0156-V1	12.587	7.38	5.207	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.03	13.1126	0.3971			
S-0156-V2	12.298	7.38	4.918	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.3766			
S-0156-V3	12.707	7.38	5.327	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.4079			
S-0156-V4	12.031	7.38	4.651	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.3561			
S-0156-V5	11.822	7.38	4.442	2.767	4/18/2007	5/9/2008	4499.8	2.61	5.01	13.0604	0.3401	0.3756	0.0280	7.5%
										Deviation between stds		5%		
										Acceptance Criteria		<5% Passes		<10% Passes

Reviewed by: Virginia Mulligan 5-13-08

QA approval: [signature] 5-21-08

Standard Verification S-0152

	Tare of vial	Standard Added	Cocktail Added
S-0152 V1	17.47	5	15.22
S-0152 V2	17.52	5.01	15.01
S-0152 V3	17.42	5.01	15.22
S-0152 V4	17.51	5.04	15.02
S-0152 V5	17.37	5.03	15

Standard Verification S-0156

	Tare of Vial	Standard Added	Cocktail Added
S-0156 V1	17.26	5.03	15.02
S-0156 V2	17.16	5.01	15.08
S-0156 V3	17.27	5.01	15.89
S-0156 V4	17.2	5.01	15.43
S-0156 V5	17.34	5.01	15.02

4-17-08 / 09:43

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953\20080509_0953.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080509_0953\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.lsa

Count Conditions-

Nuclide: H-3 Normal
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3 Normal
Count Time (min): 30.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	7.380	14.55	415.57	50.70	30.00	5/9/2008	9:58:25 AM	E
5	2	S-0152-V1	134.473	264.04	417.92	50.93	30.00	5/9/2008	10:33:33 AM	E
5	3	S-0152-V2	140.853	276.20	418.63	51.00	30.00	5/9/2008	11:08:50 AM	E
5	4	S-0152-V3	133.506	261.72	418.78	51.01	30.00	5/9/2008	11:44:16 AM	E
5	5	S-0152-V4	137.132	269.04	418.36	50.97	30.00	5/9/2008	12:19:45 PM	E
5	6	S-0152-V5	137.202	269.45	417.81	50.92	30.00	5/9/2008	12:55:17 PM	E
5	7	S-0156-V1	12.587	24.61	420.13	51.14	30.00	5/9/2008	1:30:51 PM	E
5	8	S-0156-V2	12.298	24.02	420.70	51.19	30.00	5/9/2008	2:06:08 PM	E
5	9	S-0156-V3	12.707	24.98	417.31	50.87	30.00	5/9/2008	2:41:28 PM	E
5	10	S-0156-V4	12.031	23.50	420.73	51.20	30.00	5/9/2008	3:16:51 PM	E
5	11	S-0156-V5	11.822	23.07	421.28	51.25	30.00	5/9/2008	3:52:01 PM	E

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

Nancy M. Trahey, Chief
Standard Reference Materials Program

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πß gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πß liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 and 6.

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Los Alamos National Laboratory

Percent Moisture

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12247
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-001
Date Received: 5/9/2008
Report Date: 06/03/08 11:42

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.888	N/A	N/A	N/A		pCi/L	ARS-054/EPA 906.0	5/31/08 6:38	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamuigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12248
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-002
Date Received: 5/9/2008
Report Date: 06/03/08 11:42

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	16.335	N/A	N/A	N/A		pCi/L	ARS-054/EPA 906.0	5/31/08 9:47	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-11249
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-003
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.348	N/A	N/A	N/A		pCi/L	ARS-054/EPA 906.0	5/31/08 12:57	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12250
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-004
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	17.622	N/A	N/A	N/A		pCi/L	ARS-054/EPA 906.0	5/31/08 16:06	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoiqne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12251
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-005
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	16.241	N/A	N/A	N/A		pCi/L	ARS-054/EPA 906.0	5/31/08 19:16	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-00864
Client Sample ID: MD21-08-12257
Sample Collection Date: 5/7/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-1108
ARS Sample ID: ARS1-08-00864-006
Date Received: 5/9/2008
Report Date: 06/03/08 11:43

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	16.649	N/A	N/A	N/A		pCi/L	ARS-054/EPA 906.0	5/31/08 22:25	AJ	N/A

NOTES: Project Cost Code: MR8R032NFB00

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-00651, 637
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-12247	ARS1-08-00864-001	590	421	169	21.7799	5.0278	12.8875148
MD21-08-12248	ARS1-08-00864-002	584	440	144	23.5227	5.0043	16.3352083
MD21-08-12249	ARS1-08-00864-003	607	448	160	19.7568	5.0085	12.348
MD21-08-12250	ARS1-08-00864-004	609	449	162	28.5471	5.016	17.6216667
MD21-08-12251	ARS1-08-00864-005	618	459	159	25.8231	4.9962	16.2409434
MD21-08-12257	ARS1-08-00864-006	607	455	151	25.1399	4.9926	16.6489404
MD50-08-7451	ARS1-08-00866-001	612	451	159	6.9782	5.0366	4.38880503
MD50-08-7459	ARS1-08-00866-002	617	457	161	7.6211	5.019	4.73360248
MD50-08-7460	ARS1-08-00866-003	614	453	160	6.97625	5.0045	4.36015625
MD50-08-7467	ARS1-08-00866-004	622	458	164	10.9563	5.0049	6.68067073
							#DIV/0!
							#DIV/0!
							#DIV/0!
							#DIV/0!

Balance ID: 0102/H1331122173560P
Pipettor ID: V97676

Signature [signature] Date/ Time 5-30-08 13:49

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ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 08-00864 **Client Name:** LANL **Sample Matrix:** Silica Gel

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Lamerigne 6-3-08
Report Generator Signature Date

Maryanne Medlegan 6-9-08
Management Review Signature Date

ARS AMERICAN RADIATION SERVICES, INC.

LSC
Technical Review Checklist

ARS SDG 08-000864

Sample Matrix: Silica Gel **Aliquot** (Circle One): Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) (LCS) (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): Batch A: ~~LSC 808-0135~~ A-JS-30-08 D Batch B: NA Batch C: NA

Test(s): LSC-A-001 NA NA

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	(Yes) No N/A
2) 100% of Manual Calculations Verified?	(Yes) No N/A	(Yes) No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	(Yes) No N/A
4) Deviations from procedure are documented and verified?	Yes No ~~N/A~~	Yes No (N/A)
5) Appropriate Cocktail Selected?	(Yes) No N/A	(Yes) No N/A

6) Sample Prep Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated): _____

Chemist Signature 5-30-08 Date

Analyst Signature 5-30-08 Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	Yes No ~~N/A~~	Yes No (N/A)
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☑ No ☐ Yes (See Comments) NCR # (If initiated): _____

Analyst Signature 6-2-08 Date

Project Manager Signature 6-3-08 Date

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: B08-01350

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)

7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated): ______

Lindsay Lamoureux 6-3-08
Project Manager Signature Date

[signature] 6-4-08
QA Officer Signature Date

GENERAL COMMENTS

ARS INTERNATIONAL

TRAX Checklist

ARS ABatch: B08-01350 **Test Method:** LSC-A-001 **Matrix:** Silica Gel

LABORATORY TECHNICIAN

	CHEMIST			Note (*If Check No*)
1. Procedural Data Report Printed	~~YES~~	NO	N/A	
2. Tracer Report Printed	YES	NO	~~N/A~~	
3. LCS Report for One Batch Printed	~~YES~~	NO	N/A	
4. Matrix Spike Report Printed	YES	NO	~~N/A~~	
5. Technical Notes Printed	YES	NO	~~N/A~~	

Chemist Signature 5-30-08 Date

COUNT ROOM TECHNICIAN

	COUNT TECHNICIAN			Note (*If Check No*)
1. Imported/Printed Batch	YES	NO	~~N/A~~	
2. Processed and Printed Batch	~~YES~~	NO	N/A	
3. Calculated and Printed Batch	~~YES~~	NO	N/A	
3. Efficiency Printed for Batch	YES	NO	~~N/A~~	
4. Air Flow Data Printed for Batch	YES	NO	~~N/A~~	

Count Technician Signature 6-2-08 Date

COUNT ROOM DATA REVIEW using "Enter Results Data" function

	TECHNICIAN			Note (*If Check No*)
1. Load Data	~~YES~~	NO	N/A	
2. Starred Required Isotopes (column 3)	YES	NO	~~N/A~~	
3. Deleted SDG form fission products (column 5)	YES	NO	~~N/A~~	
4. Entered Lab Tech initials (column 20)	~~YES~~	NO	N/A	

Technician Signature 6-3-08 Date

American Radiation Services
Baton Rouge Laboratory

DQO Report for SDG

ARS1-08-00864

Printed: 5/15/2008 9:36 AM

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DiltionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

ARS INTERNATIONAL

Sample Check In Report
Samples

SDG **ARS1-08-00864**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	Level	4	
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	5/9/2008	COC No 1		
Project Type	Environmental		Client Deadline	6/7/2008	COC No 2		
Comments			Internal Deadline	6/6/2008	COC No 3		
			Lab Deadline	6/3/2008	COC No 4		
			Workdays	FALSE			

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-12247	1	AQ	05/07/08 00:00	05/07/08 00:00	Q6	H	90	5
002	MD21-08-12248	1	AQ	05/07/08 00:00	05/07/08 00:00	Q6	H	90	5
003	MD21-08-12249	1	AQ	05/07/08 00:00	05/07/08 00:00	Q6	H	90	5
004	MD21-08-12250	1	AQ	05/07/08 00:00	05/07/08 00:00	Q6	H	90	5
005	MD21-08-12251	1	AQ	05/07/08 00:00	05/07/08 00:00	Q6	H	90	5
006	MD21-08-12257	1	AQ	05/07/08 00:00	05/07/08 00:00	Q6	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00864
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS INTERNATIONAL

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00864**

Fraction	Client ID	Comments
001	MD21-08-12247	[redacted]
002	MD21-08-12248	
003	MD21-08-12249	
004	MD21-08-12250	[redacted]
005	MD21-08-12251	
006	MD21-08-12257	

ARS FILE TRACKING SHEET

SDG: 08-00864

Task	Date / Time	Initials
Date & Time Received	5-9-08 / 09:54	LML
Storage Location: Q6	5-14-08 / 16:20	LML
Chain of Custody Completed	5-14-08 / 16:20	LML
Report Written	6-30812.07	LML
Laboratory Supervisor Checks Performed	See batch	NA
Quality Assurance Checks Performed on Report	6-4-08/ 0811	
Laboratory Director Check Performed on Report	6-4-08 / 1248	ZM
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 5/14/08 Shipper's Name: LANL

Technician Performing Inspection: Lindsay Lasseigne Initials: LMV

SDG: **08-00864**

External and Internal Surveys

Exposure Rate Meter: 104898 Serial No: 013681 Calibration. Due Date: 5/1/9

Count Rate Meter: 108796 Serial No: 109043 Calibration. Due Date: 5/1/9

Background Exposure Rate (μR/hr) 31 Background Count Rate (cpm): 60

Max. Exposure Rate on Shipping Containers Externals (Including Background): 24

Max. Removable Count Rate on Shipping Container Externals (Including Background): 90

Max. Removable Count Rate on Shipping Container Internals (Including Background): 90

Max. Removable Count Rate on Sample Container Externals (Including Background): 33

Max. Exposure Rate on Sample Containers Externals (Including Background): 100

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? Yes If yes, were the seals intact? Yes

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 6

Was the pH of Aqueous Samples < 2? N/A

If no, was the sample(s) checked for acid reactivity? _____ Was the sample(s) acidified to a pH < 2? _____

Matrix of Samples: Silica Gel

Volume of Each Sample Container: 583g,589g,609g,617g,606g,607g

Brief Description of Sample Material: _____

Inspectors' Comments

_____

_____

_____

SAMPLE CHECK-IN COMMENT SHEET

SDG: 08-00864

NOTES

COMPANY NAME: hANh

SDG: 08-008664

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No ☐ N/A
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Seal Intact	☑ Yes	☐ No ☐ N/A
Marked Radioactive	☐ Yes	☑ No

Samples Rcv: 6

Matrix: [AF , (AQ) , BI , FE , LT , SI , SO , UR , VG]

External and Internal Surveys

Exposure Rate Meter: 104898 Serial No.: 013681 Calibration Due Date: 5/1/2009

Count Rate Meter: 108796 Serial No.: 109043 Calibration Due Date: 5/1/2009

Background Exposure Rate (µR/hr): 31

Background Count Rate (cpm): 60

Max. Exposure Rate on Shipping Containers Externals (Plus Bkgd): 24

Max. Removable Count Rate on Shipping Containers Externals (Plus Bkgd): 90

Max. Removable Count Rate on Shipping Containers Internals (Plus Bkgd): 90

Received 5-9-08 9:54

Sample Label/Comments/Notes	pH Orig	pH Final	Standard Chemistry: Temp	Standard Chemistry: VOA Headspace	Weight(g) / Volume(mL)	µR/hr	cpm
MD21-08-12248					583	33	100
MD21-08-12247					589	36	90
MD21-08-12250		N/A			609	35	90
MD21-08-12251			UML 5-14-08	5-14-08	617	34	70
MD21-08-12257		~~4~~	UML		606	32	90
MD21-08-12249					607	31	90

Surveyors' Name: UML

Date/Time Surveyed: 5-14-08 15:00

Thursday, May 08, 2008

REQUEST NUMBER: 08-1108

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-1108

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 5/8/2008

TURNAROUND/REPORT DUE: 6/7/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12247	GAS	5/7/2008		
		1	MD21-08-12248	GAS	5/7/2008		
		1	MD21-08-12249	GAS	5/7/2008		
		1	MD21-08-12250	GAS	5/7/2008		
		1	MD21-08-12251	GAS	5/7/2008		
		1	MD21-08-12257	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1108

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-11

REQUEST NUMBER: 08-1108

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12251	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12248	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12249	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12247	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12257	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
				Lindsay Lasseigne	Lindsay Lasseigne	5-14-08	16:59
Printed Name	Signature			Printed Name	Signature		
						for 5-9-08	9:5
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Thursday, May 08, 2008

REQUEST NUMBER: 08-1108

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-1108
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/8/2008
TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-12247	GAS	5/7/2008		
		1	MD21-08-12248	GAS	5/7/2008		
		1	MD21-08-12249	GAS	5/7/2008		
		1	MD21-08-12250	GAS	5/7/2008		
		1	MD21-08-12251	GAS	5/7/2008		
		1	MD21-08-12257	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1108

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-11
REQUEST NUMBER: 08-1108

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12251	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12248	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12249	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12247	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-12257	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
				Lindsay Lasseigne	Lindsay Lasseigne	5-14-08	16:59
Printed Name	Signature			Printed Name	Signature		
						for 5-9-08	9:5
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Thursday, May 08, 2008

REQUEST NUMBER: 08-1107

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630.

These Samples are on:
LANL Request Number:08-1107
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/8/2008
TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-12247	GAS	5/7/2008		
		1	MD21-08-12248	GAS	5/7/2008		
		1	MD21-08-12249	GAS	5/7/2008		
		1	MD21-08-12250	GAS	5/7/2008		
		1	MD21-08-12251	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1107

Thursday, May 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1107C

REQUEST NUMBER: 08-1107

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/7/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12251	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12248	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12249	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12247	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12247

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port 1	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1\%$

$O_2 = 18.9\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Dave Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1645 5/7/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 1645
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12248

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1532	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:	Port #2	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.0\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** DWyatt

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 1145
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12249

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1535	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		NO

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.1\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 1645 5/7/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 5/7/08 4:45
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12250

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1537	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328.0 ft	SCREEN/PORT DESC:		port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.6 %

O_2 = 19.2 %

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	5/7/08 1645	(Printed Name)	5/7/08 4:45
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12251

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		05/07/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1540	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.5\ \%$

$O_2 = 19.2\ \%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** D Wycoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1645 5/7/08	(Printed Name)	5/7/08 1445
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 407 **EVENT NAME:** MDA-T Third round

SAMPLE ID: MD21-08-12257

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		5/7/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1530	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	N	

SAMPLE DESC: QC Sample of MD21-08-12247 Field duplicate

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

~~CO_2 = 1% 0.9 %~~ KR

~~O_2 = 18.9 19.0 %~~ 5/7/08

$CO_2 = 1\%$

$O_2 = 18.9\%$

COLLECTED BY (PRINT) Kevin Reid **REVIEWED BY (PRINT)** D Wykoff

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1645 5/7/08	(Printed Name)	5/7/08 4145
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-1107 VALIDATION DATE: 6/16/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Jessica Jorvig ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): TO-15 VOC

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The initial calibration (ICAL) curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. The ICAL %RSD for 1,2,4-trichlorobenzene was >30%. All associated sample results were NDs and, thus, were qualified UJ,V7a.
3. The LCS percent recovery for 1,2,4-trichlorobenzene was < the laboratory's LAL but ≥10%. All associated sample results were NDs and, thus, were qualified UJ,V12a.
4. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.
5. A duplicate sample was not reported in the data package. No sample data were qualified as a result.
6. It should be noted that several samples had mass spectra that contained contamination from co-eluting target

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Los Alamos NATIONAL LABORATORY

Data Validation Cover Sheet

analytes. No sample data were qualified as a result, based on professional judgment.

7. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

Reviewed By: ETM **Level:** I **Date:** 6/16/08

VALIDATOR'S SIGNATURE: _____ DATE: 6/16/08

Form 5114-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☐	☒	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☒	☐	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12247

Lab ID#: 0805220-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052017**	**Date of Collection:**	**5/7/08**
Dil. Factor:	**3.42**	**Date of Analysis:**	**5/20/08 07:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	2.6	8.4	13
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.8	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.4	Not Detected
1,3-Butadiene	1.7	Not Detected	3.8	Not Detected
Bromomethane	1.7	Not Detected	6.6	Not Detected
Chloroethane	1.7	Not Detected	4.5	Not Detected
Freon 11	1.7	Not Detected	9.6	Not Detected
Ethanol	6.8	Not Detected	13	Not Detected
Freon 113	1.7	Not Detected	13	Not Detected
1,1-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Acetone	6.8	Not Detected	16	Not Detected
2-Propanol	6.8	Not Detected	17	Not Detected
Carbon Disulfide	1.7	Not Detected	5.3	Not Detected
Methylene Chloride	1.7	7.1	5.9	24
Methyl tert-butyl ether	1.7	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Hexane	1.7	Not Detected	6.0	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Tetrahydrofuran	1.7	1.8	5.0	5.2
Chloroform	1.7	85	8.3	410
1,1,1-Trichloroethane	1.7	4.8	9.3	26
Cyclohexane	1.7	Not Detected	5.9	Not Detected
Carbon Tetrachloride	1.7	22	11	140
Benzene	1.7	Not Detected	5.5	Not Detected
1,2-Dichloroethane	1.7	Not Detected	6.9	Not Detected
Heptane	1.7	Not Detected	7.0	Not Detected
Trichloroethene	1.7	160	9.2	880
1,2-Dichloropropane	1.7	Not Detected	7.9	Not Detected
1,4-Dioxane	6.8	Not Detected	25	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.8	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	7.0	Not Detected
Toluene	1.7	Not Detected	6.4	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.7	Not Detected	9.3	Not Detected
Tetrachloroethene	1.7	340	12	2300

0007

JEJ
6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12247

Lab ID#: 0805220-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052017**	**Date of Collection: 5/7/08**	
Dil. Factor:	**3.42**	**Date of Analysis: 5/20/08 07:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	6.8	Not Detected	28	Not Detected	
Dibromochloromethane	1.7	Not Detected	14	Not Detected	
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected	
Chlorobenzene	1.7	Not Detected	7.9	Not Detected	
Ethyl Benzene	1.7	Not Detected	7.4	Not Detected	
m,p-Xylene	1.7	Not Detected	7.4	Not Detected	
o-Xylene	1.7	Not Detected	7.4	Not Detected	
Styrene	1.7	Not Detected	7.3	Not Detected	
Bromoform	1.7	Not Detected	18	Not Detected	
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected	
4-Ethyltoluene	1.7	Not Detected	8.4	Not Detected	
1,3,5-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected	
1,2,4-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected	
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected	
1,4-Dichlorobenzene	1.7	Not Detected	10	Not Detected	
alpha-Chlorotoluene	1.7	Not Detected	8.8	Not Detected	
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected	
1,2,4-Trichlorobenzene	6.8	Not Detected	51	Not Detected	UJ,V7a
Hexachlorobutadiene	6.8	Not Detected	73	Not Detected	
Chlorodifluoromethane	6.8	Not Detected	24	Not Detected	
Methanol	170	Not Detected	220	Not Detected	
n-Butanol	6.8	Not Detected	21	Not Detected	
Propylene	6.8	Not Detected	12	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	96	70-130

0008 JEJ 6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12248

Lab ID#: 0805220-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052018**	**Date of Collection:**	**5/7/08**
Dil. Factor:	**1.75**	**Date of Analysis:**	**5/20/08 08:38 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	2.0	4.3	9.7
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	5.3	6.6	10
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	31	8.3	73
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	55	3.0	190
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	5.0	2.6	15
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	75	4.3	360
1,1,1-Trichloroethane	0.88	4.2	4.8	23
Cyclohexane	0.88	1.6	3.0	5.4
Carbon Tetrachloride	0.88	24	5.5	150
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	90	4.7	480
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	60	5.9	400

0023

JEJ
6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12248

Lab ID#: 0805220-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052018**	**Date of Collection: 5/7/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 5/20/08 08:38 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.5	Not Detected	14	Not Detected	
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected	
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected	
Chlorobenzene	0.88	Not Detected	4.0	Not Detected	
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected	
m,p-Xylene	0.88	Not Detected	3.8	Not Detected	
o-Xylene	0.88	Not Detected	3.8	Not Detected	
Styrene	0.88	Not Detected	3.7	Not Detected	
Bromoform	0.88	Not Detected	9.0	Not Detected	
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected	
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected	
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected	
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected	UJ,V7a
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected	
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected	
Methanol	88	Not Detected	110	Not Detected	
n-Butanol	3.5	Not Detected	11	Not Detected	
Propylene	3.5	Not Detected	6.0	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	96	70-130

0024 JEJ 6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12249

Lab ID#: 0805220-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052019**	**Date of Collection:**	**5/7/08**
Dil. Factor:	**1.71**	**Date of Analysis:**	**5/20/08 09:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.7	4.2	8.6
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	1.4	6.6	11
1,1-Dichloroethene	0.86	1.7	3.4	6.6
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	1.0	2.7	3.2
Methylene Chloride	0.86	170	3.0	590
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	96	4.2	470
1,1,1-Trichloroethane	0.86	3.9	4.7	21
Cyclohexane	0.86	1.8	2.9	6.2
Carbon Tetrachloride	0.86	46	5.4	290
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	2.3	3.5	9.3
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	110	4.6	580
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	0.90	3.2	3.4
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	28	5.8	190

0043

JEJ
6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12249

Lab ID#: 0805220-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052019**	**Date of Collection: 5/7/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 5/20/08 09:20 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.4	Not Detected	14	Not Detected	
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected	
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected	
Chlorobenzene	0.86	Not Detected	3.9	Not Detected	
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected	
m,p-Xylene	0.86	Not Detected	3.7	Not Detected	
o-Xylene	0.86	Not Detected	3.7	Not Detected	
Styrene	0.86	Not Detected	3.6	Not Detected	
Bromoform	0.86	Not Detected	8.8	Not Detected	
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected	
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected	
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected	
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected	
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected	
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected	UJ,V7a
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected	
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected	
Methanol	86	Not Detected	110	Not Detected	
n-Butanol	3.4	Not Detected	10	Not Detected	
Propylene	3.4	Not Detected	5.9	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	96	70-130

0044

JEJ 6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12250

Lab ID#: 0805220-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052020**	**Date of Collection: 5/7/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 5/20/08 10:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	1.4	6.7	11
1,1-Dichloroethene	0.88	1.9	3.5	7.6
Acetone	3.5	45	8.3	110
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	340	3.0	1200
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	3.6	2.6	11
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	120	4.3	570
1,1,1-Trichloroethane	0.88	1.6	4.8	8.6
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	53	5.5	340
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	3.2	3.5	13
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	110	4.7	600
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	11	5.9	77

0065

JEJ
6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12250

Lab ID#: 0805220-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052020**	**Date of Collection: 5/7/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 5/20/08 10:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	3.5	Not Detected	14	Not Detected	
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected	
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected	
Chlorobenzene	0.88	Not Detected	4.0	Not Detected	
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected	
m,p-Xylene	0.88	Not Detected	3.8	Not Detected	
o-Xylene	0.88	Not Detected	3.8	Not Detected	
Styrene	0.88	Not Detected	3.7	Not Detected	
Bromoform	0.88	Not Detected	9.0	Not Detected	
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected	
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected	
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected	
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,4-Dichlorobenzene	0.88	1.0	5.3	6.0	
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected	
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected	
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected	UJ,V7a
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected	
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected	
Methanol	88	Not Detected	110	Not Detected	
n-Butanol	3.5	Not Detected	11	Not Detected	
Propylene	3.5	Not Detected	6.0	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	97	70-130

0066 JEJ 6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12251

Lab ID#: 0805220-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052023**	**Date of Collection: 5/7/08**	
Dil. Factor:	**3.65**	**Date of Analysis: 5/21/08 12:21 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.8	Not Detected	9.0	Not Detected
Freon 114	1.8	Not Detected	13	Not Detected
Chloromethane	7.3	Not Detected	15	Not Detected
Vinyl Chloride	1.8	Not Detected	4.7	Not Detected
1,3-Butadiene	1.8	Not Detected	4.0	Not Detected
Bromomethane	1.8	Not Detected	7.1	Not Detected
Chloroethane	1.8	Not Detected	4.8	Not Detected
Freon 11	1.8	Not Detected	10	Not Detected
Ethanol	7.3	Not Detected	14	Not Detected
Freon 113	1.8	Not Detected	14	Not Detected
1,1-Dichloroethene	1.8	3.0	7.2	12
Acetone	7.3	Not Detected	17	Not Detected
2-Propanol	7.3	Not Detected	18	Not Detected
Carbon Disulfide	1.8	Not Detected	5.7	Not Detected
Methylene Chloride	1.8	550	6.3	1900
Methyl tert-butyl ether	1.8	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.8	Not Detected	7.2	Not Detected
Hexane	1.8	Not Detected	6.4	Not Detected
1,1-Dichloroethane	1.8	Not Detected	7.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.8	Not Detected	5.4	Not Detected
cis-1,2-Dichloroethene	1.8	Not Detected	7.2	Not Detected
Tetrahydrofuran	1.8	Not Detected	5.4	Not Detected
Chloroform	1.8	190	8.9	940
1,1,1-Trichloroethane	1.8	Not Detected	10	Not Detected
Cyclohexane	1.8	Not Detected	6.3	Not Detected
Carbon Tetrachloride	1.8	58	11	360
Benzene	1.8	Not Detected	5.8	Not Detected
1,2-Dichloroethane	1.8	5.9	7.4	24
Heptane	1.8	Not Detected	7.5	Not Detected
Trichloroethene	1.8	130	9.8	720
1,2-Dichloropropane	1.8	Not Detected	8.4	Not Detected
1,4-Dioxane	7.3	Not Detected	26	Not Detected
Bromodichloromethane	1.8	Not Detected	12	Not Detected
cis-1,3-Dichloropropene	1.8	Not Detected	8.3	Not Detected
4-Methyl-2-pentanone	1.8	Not Detected	7.5	Not Detected
Toluene	1.8	4.4	6.9	16
trans-1,3-Dichloropropene	1.8	Not Detected	8.3	Not Detected
1,1,2-Trichloroethane	1.8	Not Detected	10	Not Detected
Tetrachloroethene	1.8	4.7	12	32

0086 JEJ 6/16/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12251

Lab ID#: 0805220-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**1052023**	**Date of Collection: 5/7/08**	
Dil. Factor:	**3.65**	**Date of Analysis: 5/21/08 12:21 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)	
2-Hexanone	7.3	Not Detected	30	Not Detected	
Dibromochloromethane	1.8	Not Detected	16	Not Detected	
1,2-Dibromoethane (EDB)	1.8	Not Detected	14	Not Detected	
Chlorobenzene	1.8	Not Detected	8.4	Not Detected	
Ethyl Benzene	1.8	Not Detected	7.9	Not Detected	
m,p-Xylene	1.8	Not Detected	7.9	Not Detected	
o-Xylene	1.8	Not Detected	7.9	Not Detected	
Styrene	1.8	Not Detected	7.8	Not Detected	
Bromoform	1.8	Not Detected	19	Not Detected	
1,1,2,2-Tetrachloroethane	1.8	Not Detected	12	Not Detected	
4-Ethyltoluene	1.8	Not Detected	9.0	Not Detected	
1,3,5-Trimethylbenzene	1.8	Not Detected	9.0	Not Detected	
1,2,4-Trimethylbenzene	1.8	Not Detected	9.0	Not Detected	
1,3-Dichlorobenzene	1.8	Not Detected	11	Not Detected	
1,4-Dichlorobenzene	1.8	Not Detected	11	Not Detected	
alpha-Chlorotoluene	1.8	Not Detected	9.4	Not Detected	
1,2-Dichlorobenzene	1.8	Not Detected	11	Not Detected	
1,2,4-Trichlorobenzene	7.3	Not Detected	54	Not Detected	UJ,V7a
Hexachlorobutadiene	7.3	Not Detected	78	Not Detected	
Chlorodifluoromethane	7.3	Not Detected	26	Not Detected	
Methanol	180	Not Detected	240	Not Detected	
n-Butanol	7.3	Not Detected	22	Not Detected	
Propylene	7.3	Not Detected	12	Not Detected	

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	96	70-130

0087 JEJ 6/16/08

0805220

Thursday, May 08, 2008

REQUEST NUMBER: 08-1107

0289

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-1107
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/8/2008
TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: **30 Days**

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1 01A	MD21-08-12247	GAS	5/7/2008		
		1 02A	MD21-08-12248	GAS	5/7/2008		
		1 03A	MD21-08-12249	GAS	5/7/2008		
		1 04A	MD21-08-12250	GAS	5/7/2008		
		1 05A	MD21-08-12251	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1107

0805220 Page 1 of 1

Thursday, May 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1107C

REQUEST NUMBER: 08-1107

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 8/7/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12251	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12248	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12249	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12247	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	5/8/08	1400	Printed Name	Signature	05-09-08	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

MD

Printed Name Signature

CUSTODY SEAL INTACT Y N NONE

Fedex

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Request #08-1107

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0805220

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b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
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Comments:

Completed by:

Kara McKiernan — Kara McKiernan / Document Control — 5/23/08

(Signature) (Print Name & Title) (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0805220

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-1107
DATE RECEIVED:	05/09/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	05/22/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-12247	Modified TO-15	6.5 "Hg	5 psi
02A	MD21-08-12248	Modified TO-15	7.0 "Hg	5 psi
03A	MD21-08-12249	Modified TO-15	6.5 "Hg	5 psi
04A	MD21-08-12250	Modified TO-15	7.0 "Hg	5 psi
05A	MD21-08-12251	Modified TO-15	2.5 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 05/22/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0805220

Five 6 Liter Summa Canister samples were received on May 09, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-08-12247	0805220-01A	5/ 7/2008	5/ 9/2008	NA	13	5/20/2008	NA	Good
MD21-08-12248	0805220-02A	5/ 7/2008	5/ 9/2008	NA	13	5/20/2008	NA	Good
MD21-08-12249	0805220-03A	5/ 7/2008	5/ 9/2008	NA	13	5/20/2008	NA	Good
MD21-08-12250	0805220-04A	5/ 7/2008	5/ 9/2008	NA	13	5/20/2008	NA	Good
MD21-08-12251	0805220-05A	5/ 7/2008	5/ 9/2008	NA	14	5/21/2008	NA	Good
Lab Blank	0805220-06A	NA	NA	NA	NA	5/20/2008	NA	Good
CCV	0805220-07A	NA	NA	NA	NA	5/20/2008	NA	Good
LCS	0805220-08A	NA	NA	NA	NA	5/20/2008	NA	Good

Sample Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12247

Lab ID#: 0805220-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	2.6	8.4	13
Methylene Chloride	1.7	7.1	5.9	24
Tetrahydrofuran	1.7	1.8	5.0	5.2
Chloroform	1.7	85	8.3	410
1,1,1-Trichloroethane	1.7	4.8	9.3	26
Carbon Tetrachloride	1.7	22	11	140
Trichloroethene	1.7	160	9.2	880
Tetrachloroethene	1.7	340	12	2300

0006

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12247

Lab ID#: 0805220-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted]052017 Date of Collection: 5/7/08
Dil. Factor: 3.42 Date of Analysis: 5/20/08 07:53 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	2.6	8.4	13
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.8	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.4	Not Detected
1,3-Butadiene	1.7	Not Detected	3.8	Not Detected
Bromomethane	1.7	Not Detected	6.6	Not Detected
Chloroethane	1.7	Not Detected	4.5	Not Detected
Freon 11	1.7	Not Detected	9.6	Not Detected
Ethanol	6.8	Not Detected	13	Not Detected
Freon 113	1.7	Not Detected	13	Not Detected
1,1-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Acetone	6.8	Not Detected	16	Not Detected
2-Propanol	6.8	Not Detected	17	Not Detected
Carbon Disulfide	1.7	Not Detected	5.3	Not Detected
Methylene Chloride	1.7	7.1	5.9	24
Methyl tert-butyl ether	1.7	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Hexane	1.7	Not Detected	6.0	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Tetrahydrofuran	1.7	1.8	5.0	5.2
Chloroform	1.7	85	8.3	410
1,1,1-Trichloroethane	1.7	4.8	9.3	26
Cyclohexane	1.7	Not Detected	5.9	Not Detected
Carbon Tetrachloride	1.7	22	11	140
Benzene	1.7	Not Detected	5.5	Not Detected
1,2-Dichloroethane	1.7	Not Detected	6.9	Not Detected
Heptane	1.7	Not Detected	7.0	Not Detected
Trichloroethene	1.7	160	9.2	880
1,2-Dichloropropane	1.7	Not Detected	7.9	Not Detected
1,4-Dioxane	6.8	Not Detected	25	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.8	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	7.0	Not Detected
Toluene	1.7	Not Detected	6.4	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.7	Not Detected	9.3	Not Detected
Tetrachloroethene	1.7	340	12	2300

0007

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12247

Lab ID#: 0805220-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] Date of Collection: 5/7/08
Dil. Factor: 3.42 Date of Analysis: 5/20/08 07:53 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.8	Not Detected	28	Not Detected
Dibromochloromethane	1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected
Chlorobenzene	1.7	Not Detected	7.9	Not Detected
Ethyl Benzene	1.7	Not Detected	7.4	Not Detected
m,p-Xylene	1.7	Not Detected	7.4	Not Detected
o-Xylene	1.7	Not Detected	7.4	Not Detected
Styrene	1.7	Not Detected	7.3	Not Detected
Bromoform	1.7	Not Detected	18	Not Detected
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected
4-Ethyltoluene	1.7	Not Detected	8.4	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene	1.7	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.7	Not Detected	8.8	Not Detected
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	6.8	Not Detected	51	Not Detected
Hexachlorobutadiene	6.8	Not Detected	73	Not Detected
Chlorodifluoromethane	6.8	Not Detected	24	Not Detected
Methanol	170	Not Detected	220	Not Detected
n-Butanol	6.8	Not Detected	21	Not Detected
Propylene	6.8	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	96	70-130

0008

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052017.d
Lab Smp Id: 0805220-01A
Inj Date : 20-MAY-2008 19:53
Operator : kr
Inst ID: msd1.i
Smp Info : 50mL #12077
Misc Info : 6.5"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 18:39 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 3.42000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.282	14.255 (1.000)	130	291454	25.0000		80.00- 120.00	100.00
	14.282	14.255 (1.000)	128	227747			28.28- 128.28	78.14
	14.255	14.255 (1.000)	49	538810			132.70- 232.70	184.87
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1570693	25.0000		80.00- 120.00	100.00
	15.748	15.748 (1.000)	88	239453			0.00- 65.54	15.25
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.033	20.006 (1.000)	117	1791895	25.0000		80.00- 120.00	100.00
	20.006	20.006 (1.000)	82	1033605			8.42- 108.42	57.68
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.140	15.140 (1.060)	65	480018	24.6797	24.680	80.00- 120.00	100.00
	15.140	15.140 (1.060)	67	248496			6.04- 106.04	51.77
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.960 (1.140)	98	1733577	24.3587	24.359	80.00- 120.00	100.00
	17.960	17.960 (1.140)	70	177267			0.00- 60.35	10.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1154967			15.45- 115.45	66.62
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	919676	23.9858	23.986	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1472742			112.36- 212.36	160.14
21.527	21.527 (1.075)	176	879514			46.57- 146.57	95.63
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.862	2.890 (0.200)	85	24777	0.77117	2.637	80.00- 120.00	100.00
2.862	2.890 (0.200)	87	4835			0.00- 75.39	19.51
54 Methylene Chloride					CAS #: 75-09-2		
11.766	11.739 (0.824)	49	53685	2.06605	7.066	80.00- 120.00	100.00
11.766	11.739 (0.824)	84	35836			13.80- 113.80	66.75
11.766	11.739 (0.824)	51	17789			0.00- 79.96	33.14
78 Tetrahydrofuran					CAS #: 109-99-9		
14.282	14.255 (1.000)	42	20832	0.51652	1.766	80.00- 120.00	100.00
14.282	14.255 (1.000)	71	5089			0.00- 81.21	24.43
14.282	14.255 (1.000)	72	6446			0.00- 82.78	30.94
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	1024256	24.8440	84.966	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	635569			12.63- 112.63	62.05
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.021)	97	61277	1.41651	4.844	80.00- 120.00	100.00
14.587	14.587 (1.021)	99	36890			14.19- 114.19	60.20
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	254185	6.35282	21.727	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	252254			52.80- 152.80	99.24
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1574495	48.0406	164.30	80.00- 120.00	100.00
16.135	16.107 (1.025)	130	1523103			46.95- 146.95	96.74
16.107	16.107 (1.023)	97	1004760			13.89- 113.89	63.81
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	4347030	98.9541	338.42	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	3382102			27.45- 127.45	77.80
18.817	18.817 (0.939)	131	3244731			24.16- 124.16	74.64

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052017.d
Lab Smp Id: 0805220-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

Calibration Date: 20-MAY-2008
Calibration Time: 12:26

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	291454	-10.57
95 1,4-Difluorobenze	1718149	1030889	2405409	1570693	-8.58
123 Chlorobenzene-d5	1889046	1133428	2644664	1791895	-5.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 1-20may
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0805220-01A
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.680	98.72	70-130
$ 111 Toluene-d8	25.000	24.359	97.43	70-130
$ 136 Bromofluorobenzene	25.000	23.986	95.94	70-130

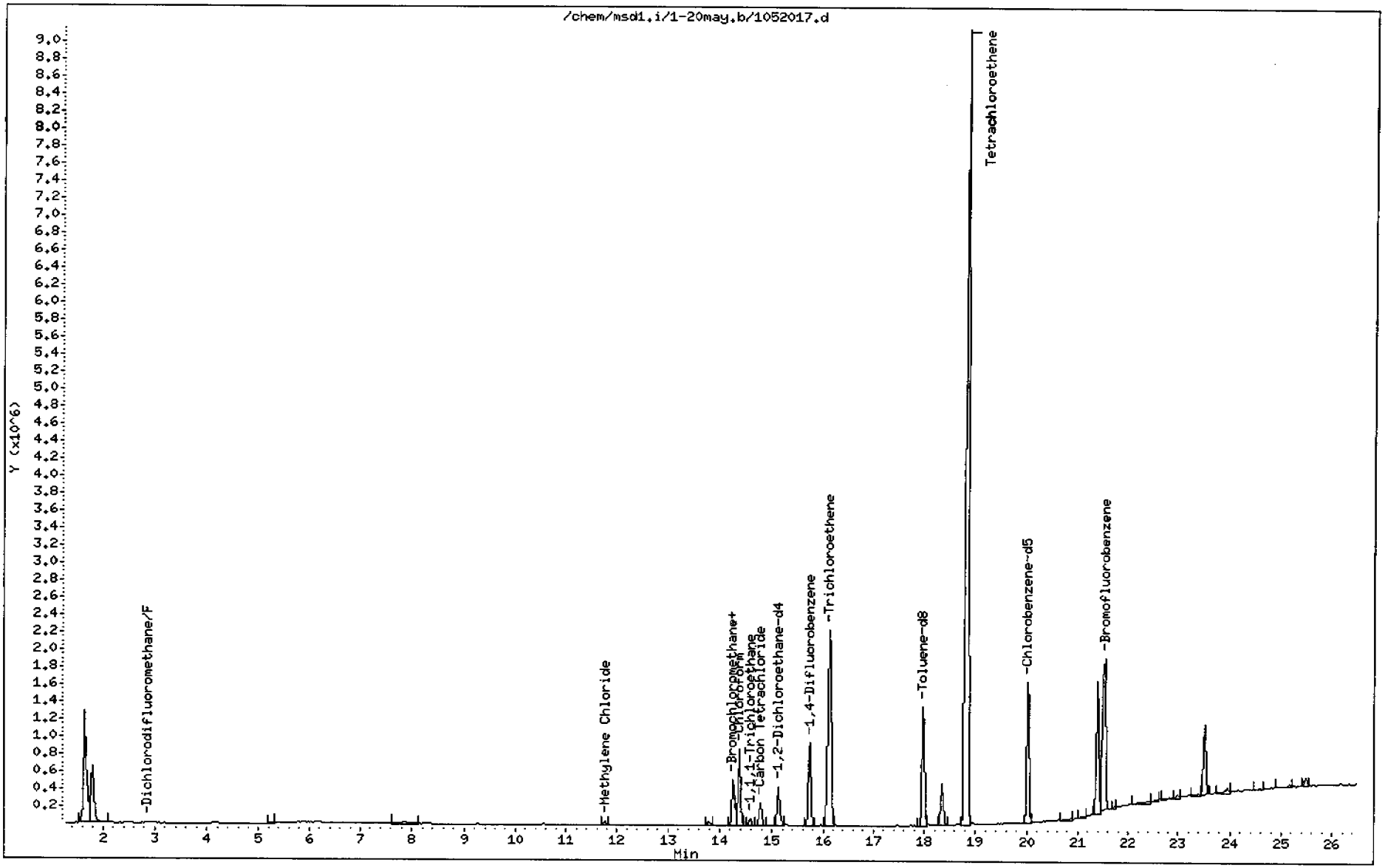
Data File: /chem/msd1.i/1-20may.b/1052017.d
Date : 20-MAY-2008 19:53
Client ID:
Sample Info: 50mL #12077

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0013



Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

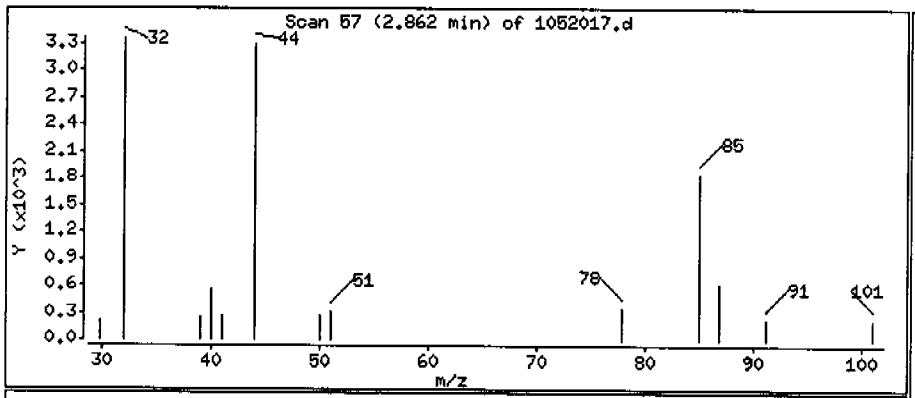
Operator: kr

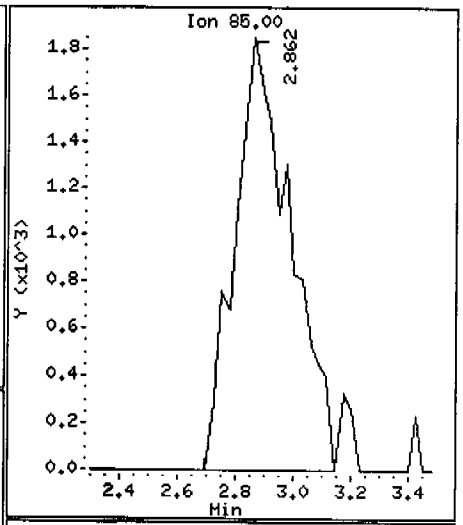
Column phase: RTx-624

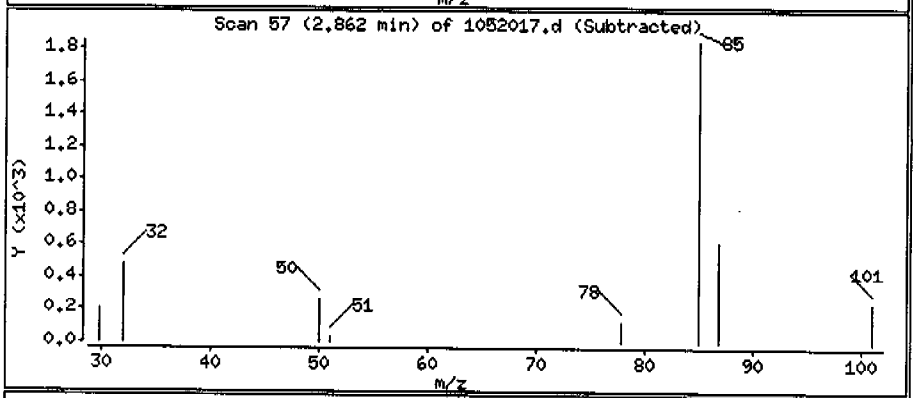
Column diameter: 0.53

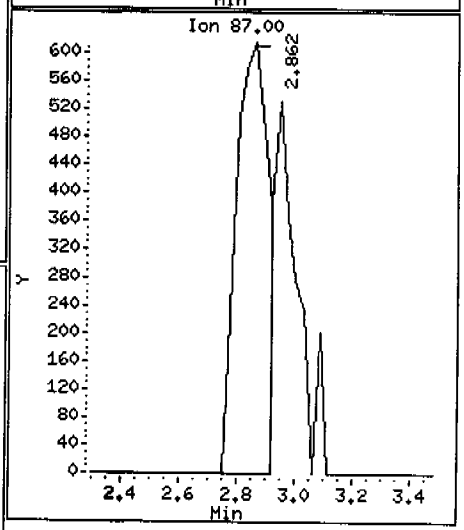
14 Dichlorodifluoromethane/Fr12

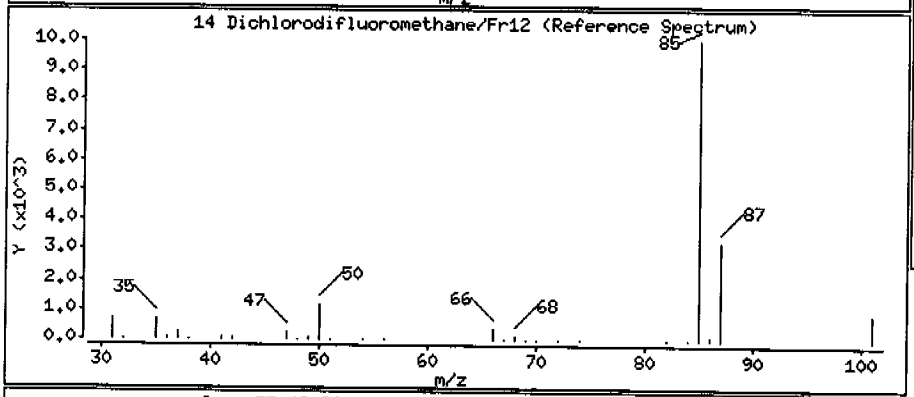
Concentration: 2.637 PPBV

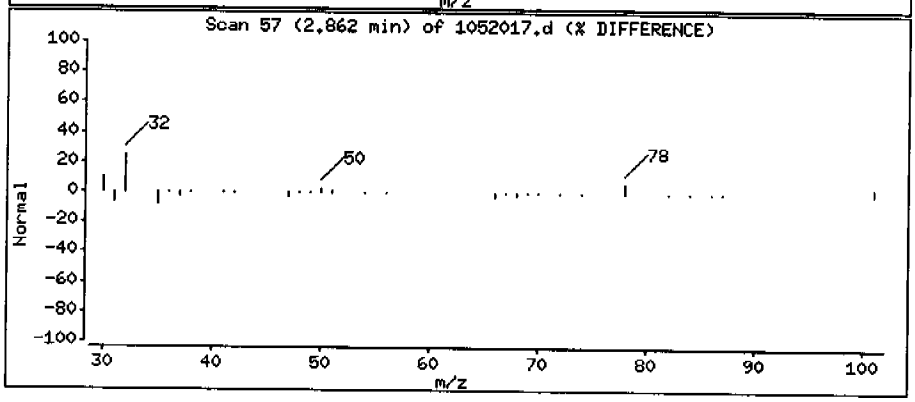












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

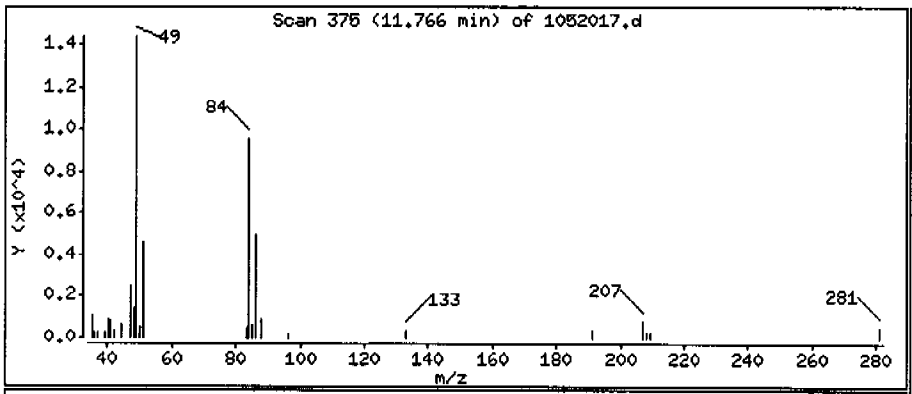
Operator: kr

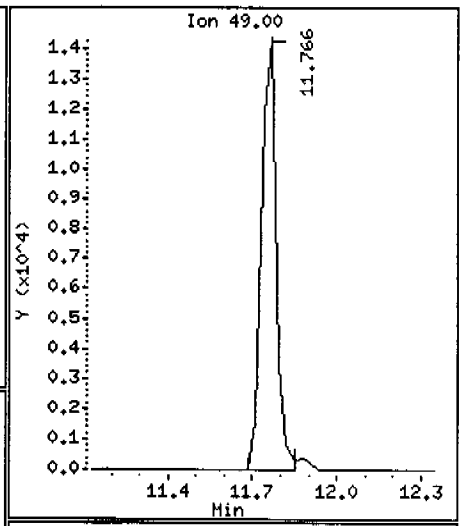
Column phase: RTx-624

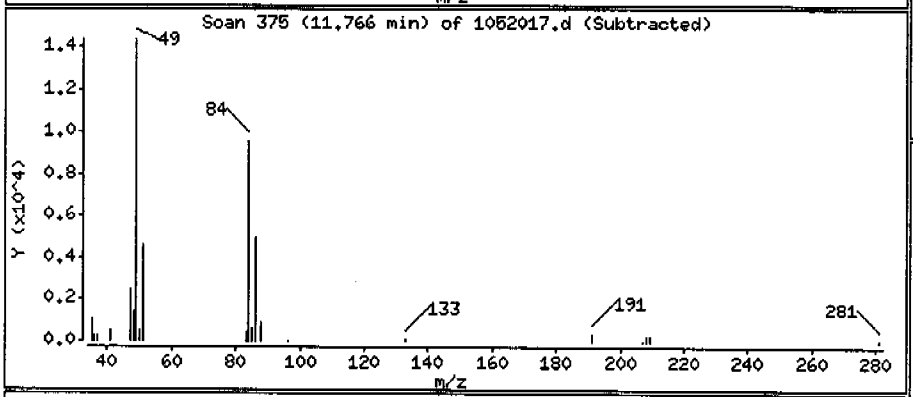
Column diameter: 0.53

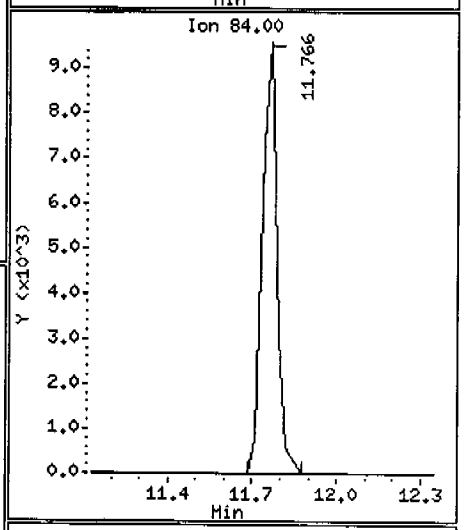
54 Methylene Chloride

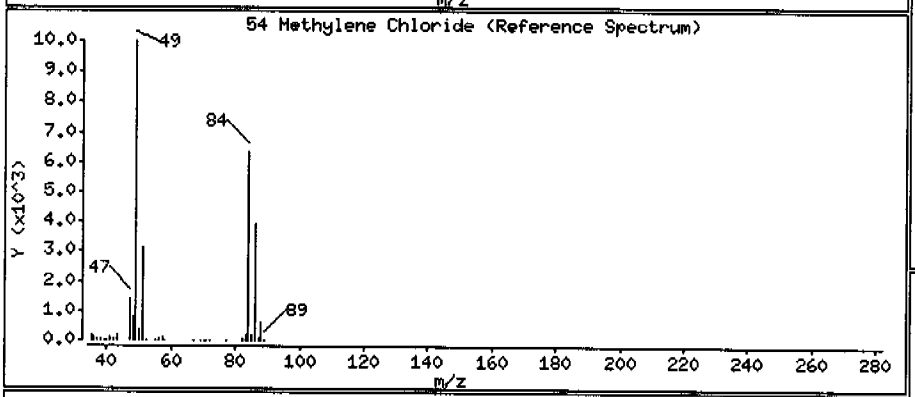
Concentration: 7.066 PPBV

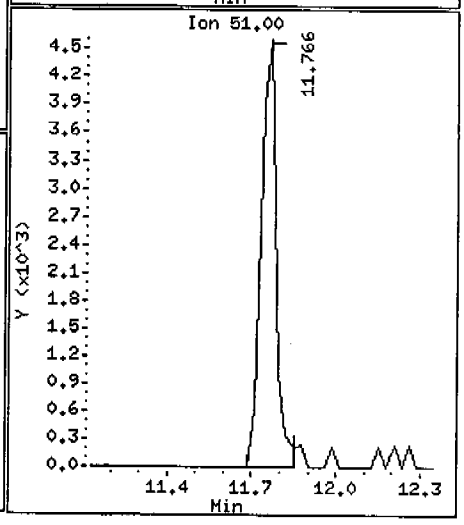


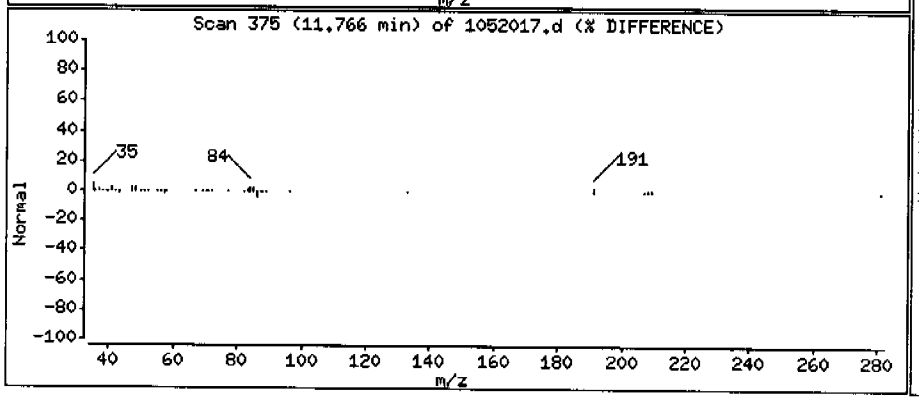












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

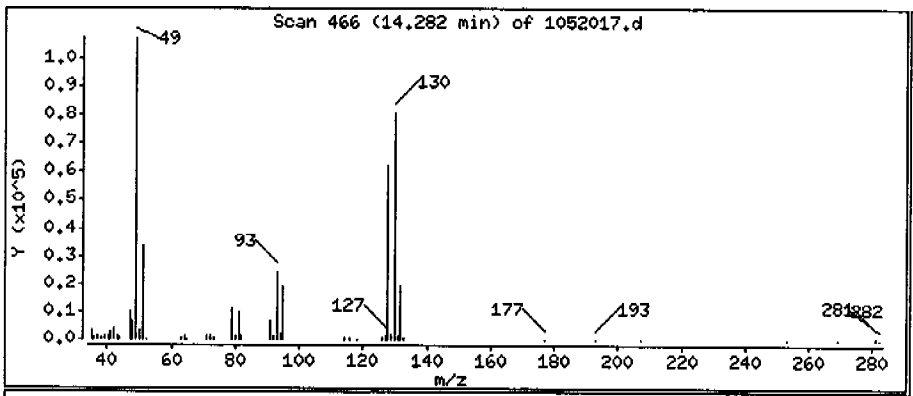
Operator: kr

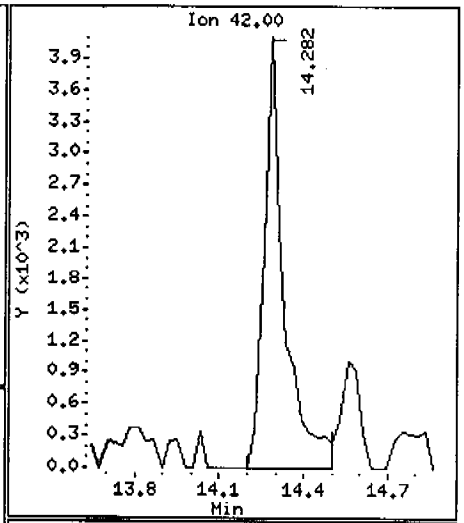
Column phase: RTx-624

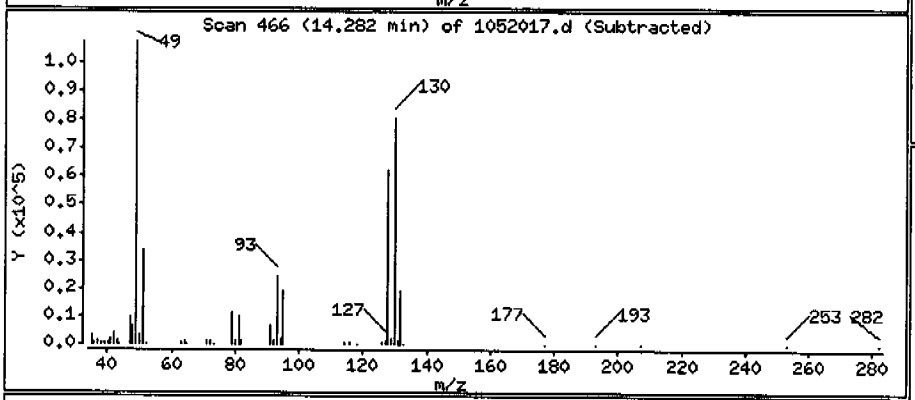
Column diameter: 0.53

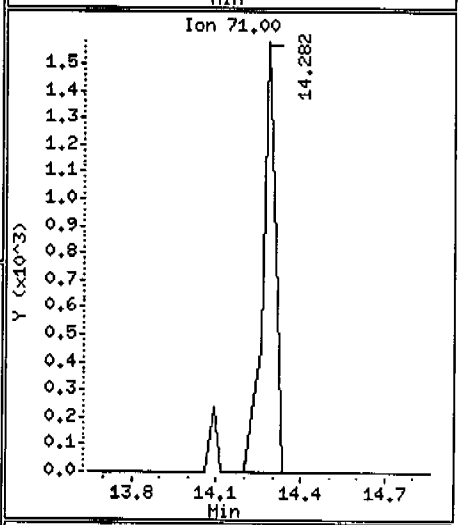
78 Tetrahydrofuran

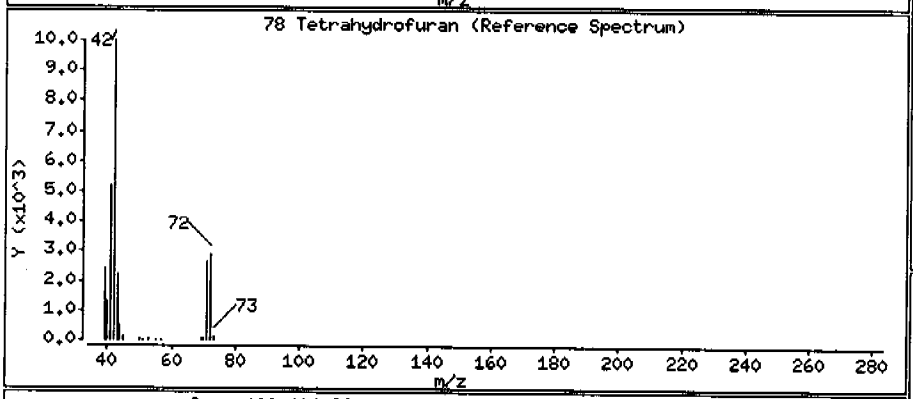
Concentration: 1.766 PPBV

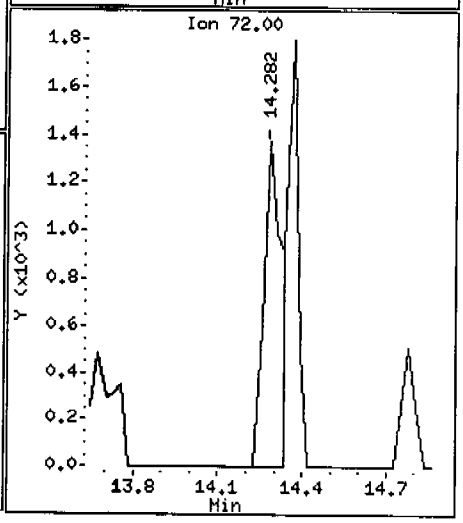


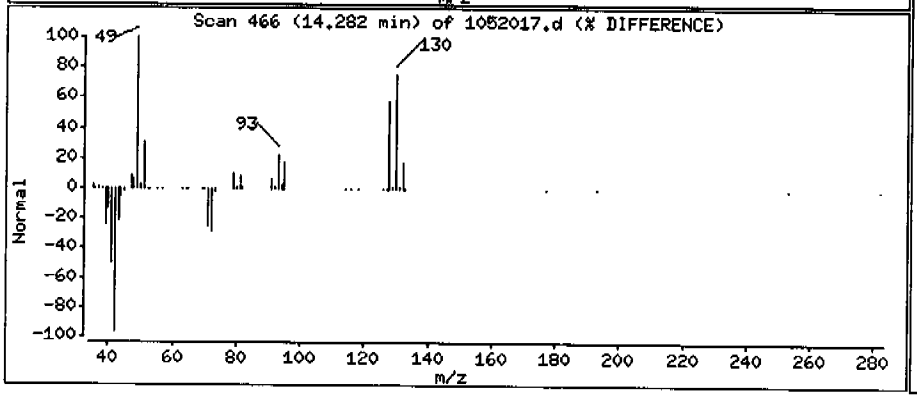












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

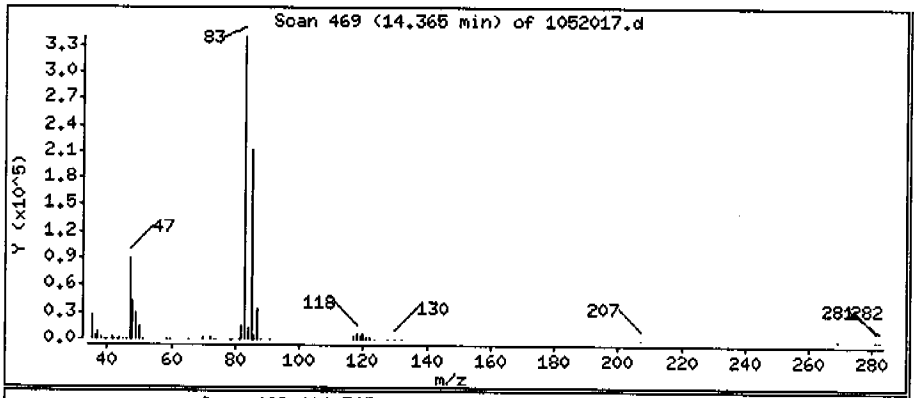
Operator: kr

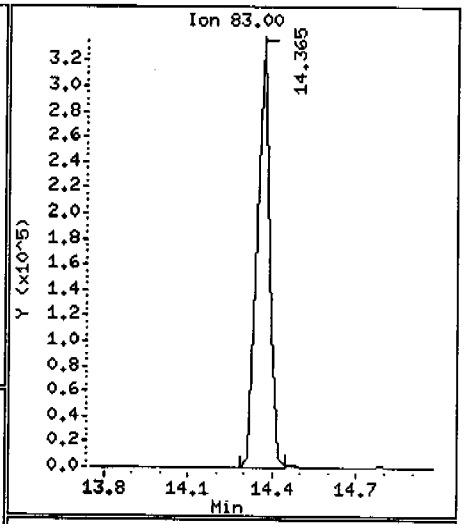
Column phase: RTx-624

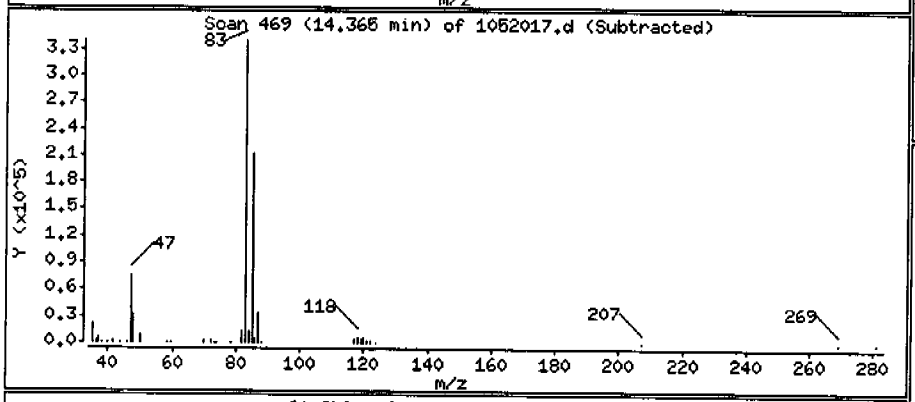
Column diameter: 0.53

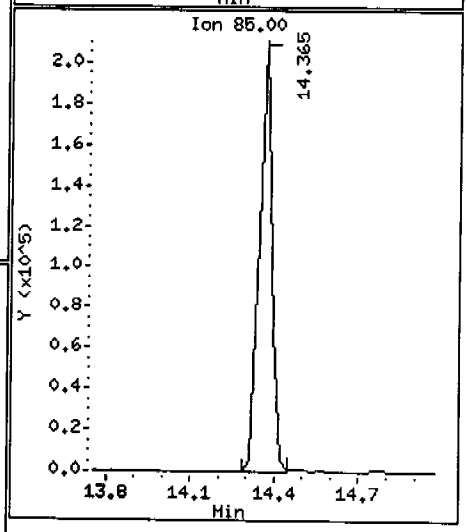
81 Chloroform

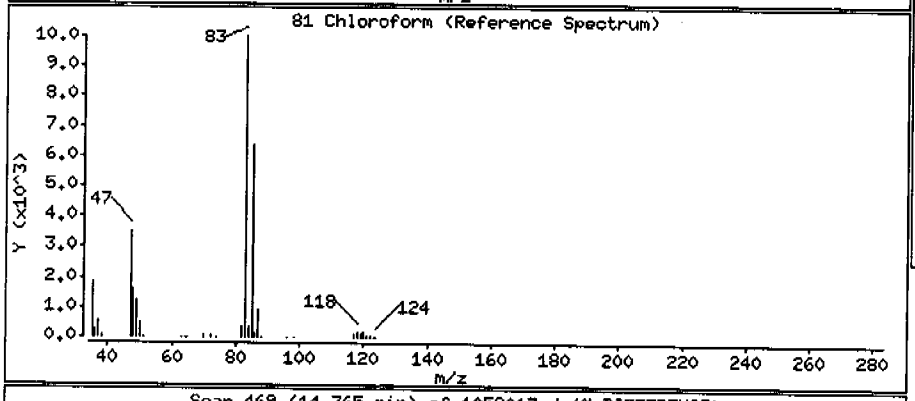
Concentration: 84.966 PPBV

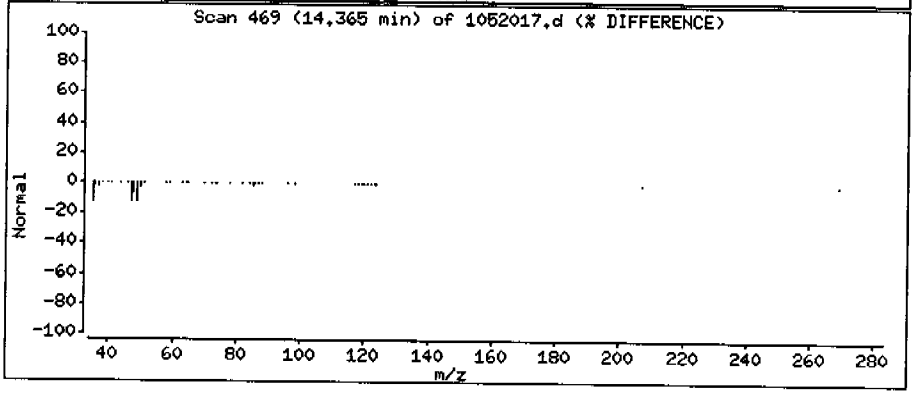












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

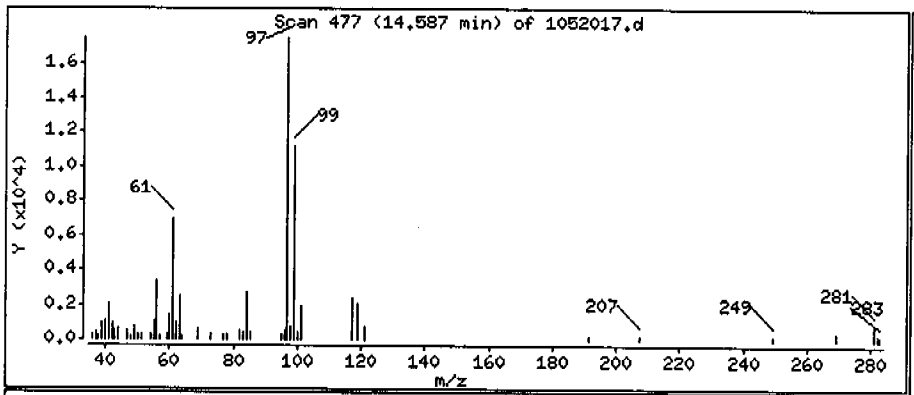
Operator: kr

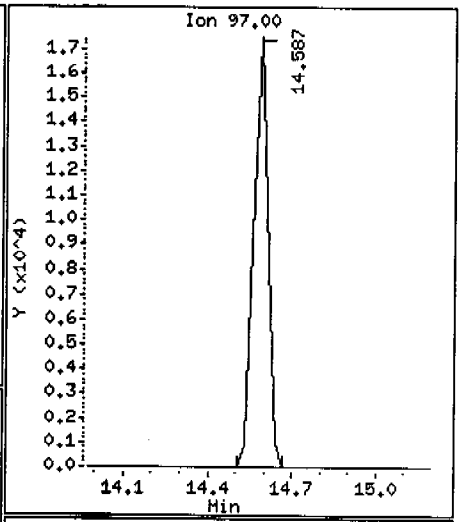
Column phase: RTx-624

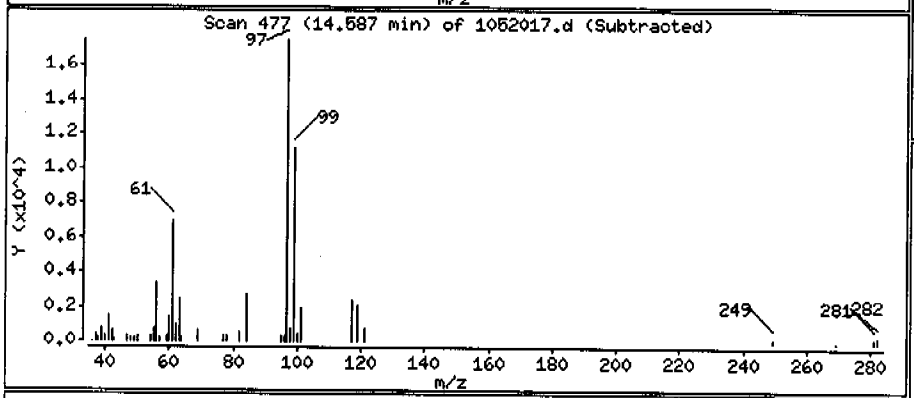
Column diameter: 0.53

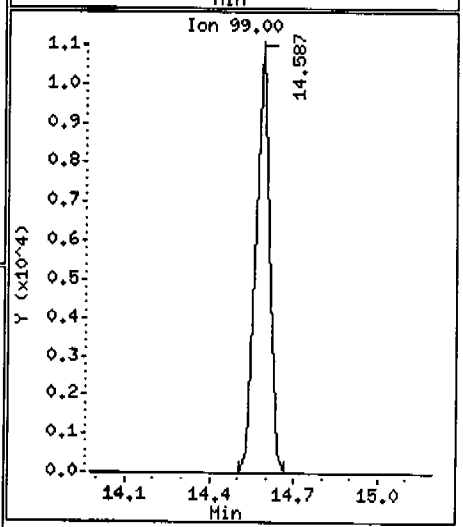
83 1,1,1-Trichloroethane

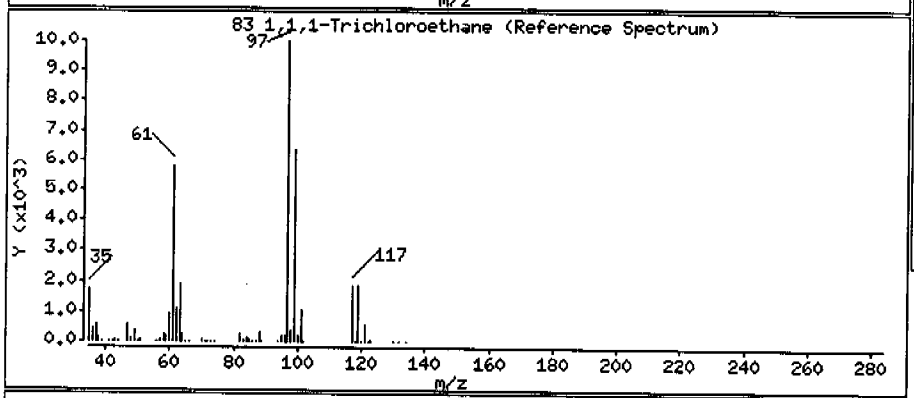
Concentration: 4.844 PPBV

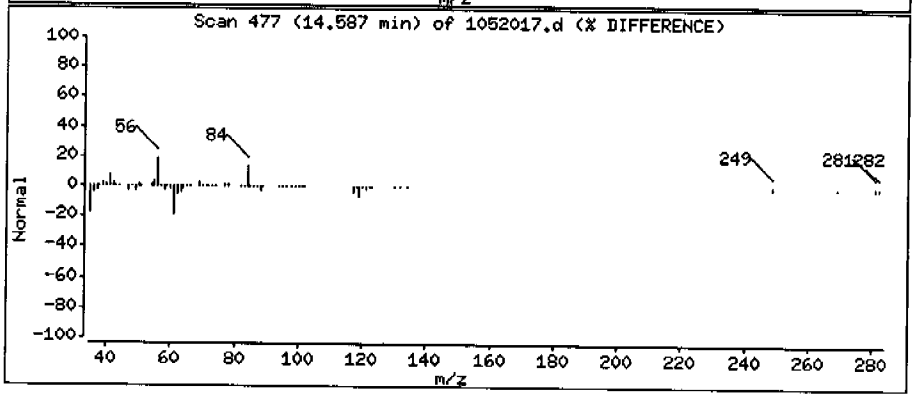












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

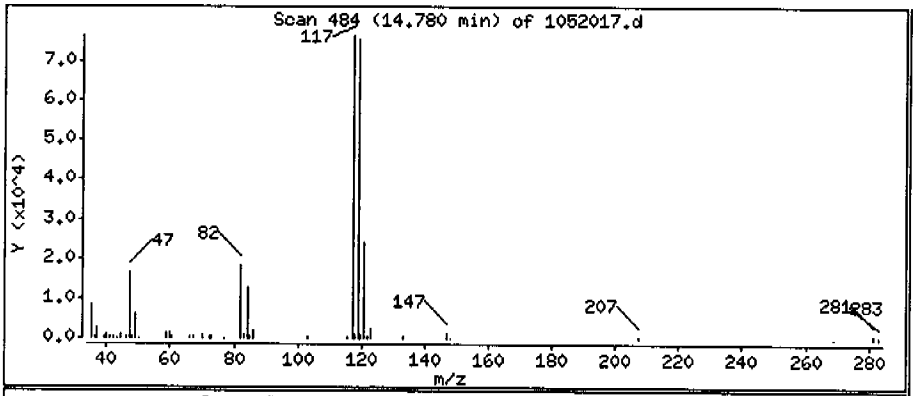
Operator: kr

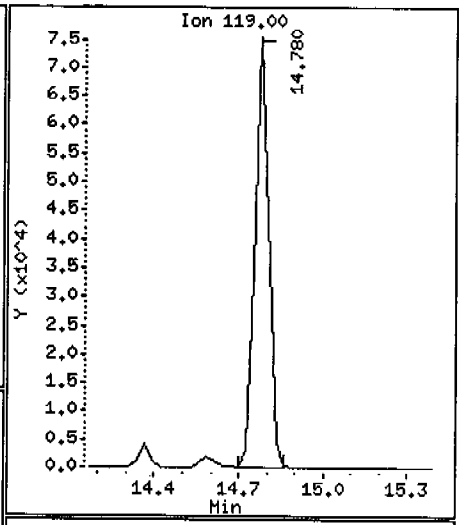
Column phase: RTx-624

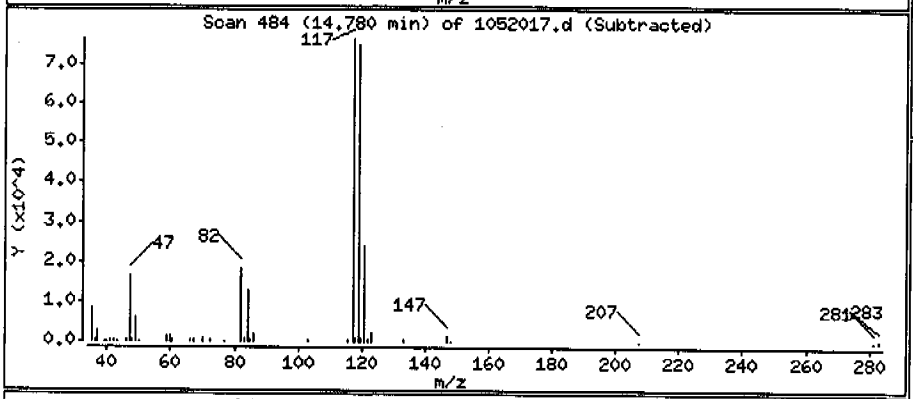
Column diameter: 0.53

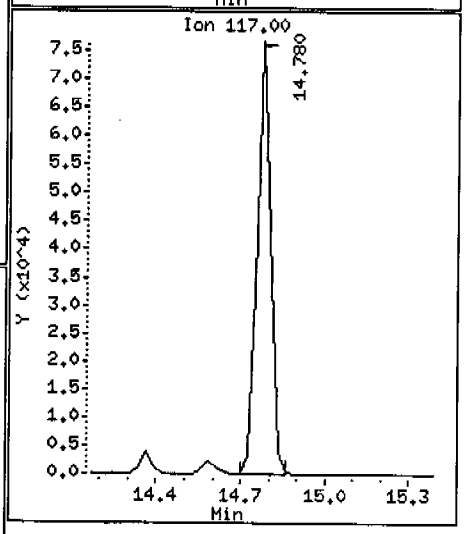
85 Carbon Tetrachloride

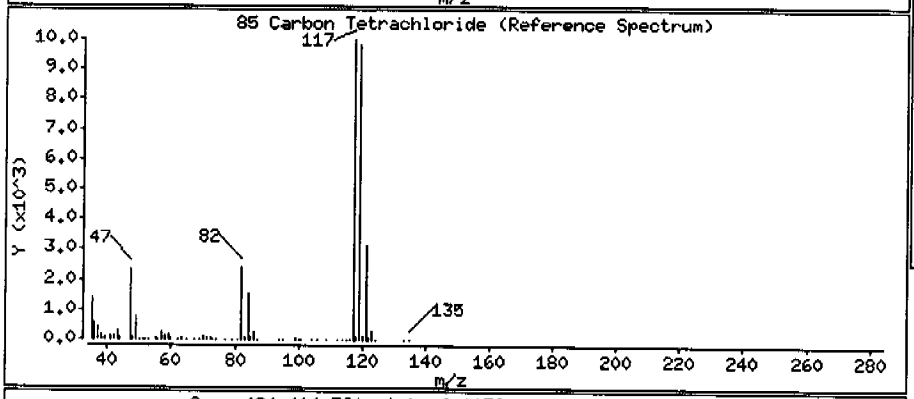
Concentration: 21.727 PPBV

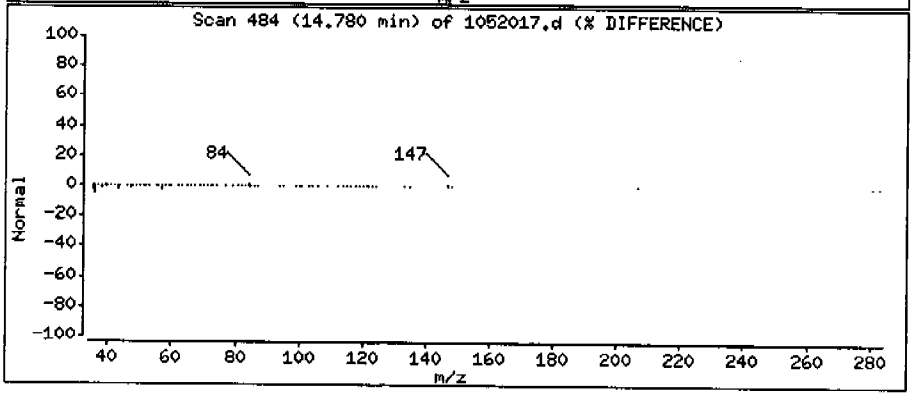












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

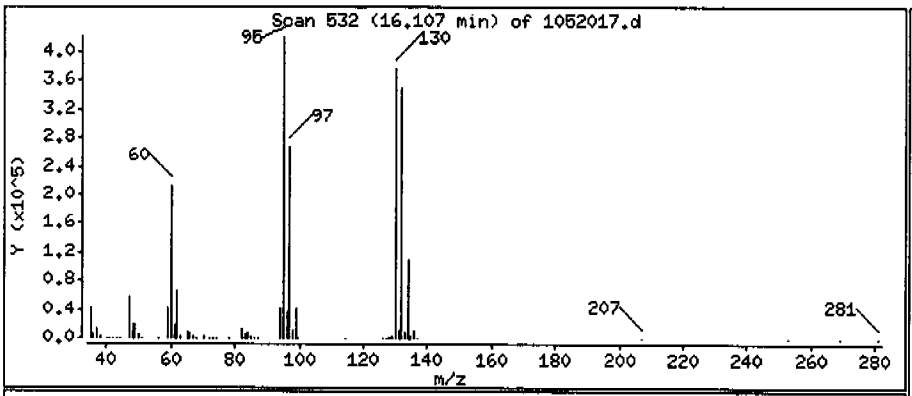
Operator: kr

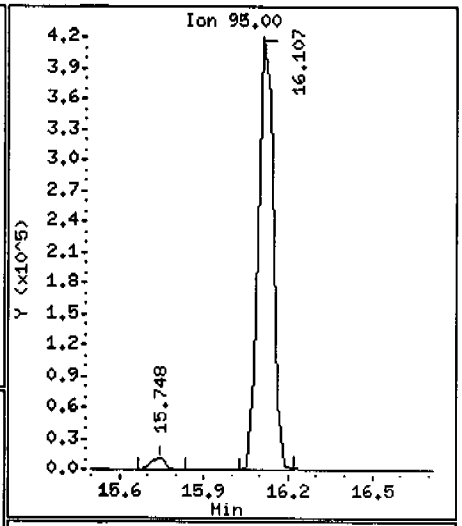
Column phase: RTx-624

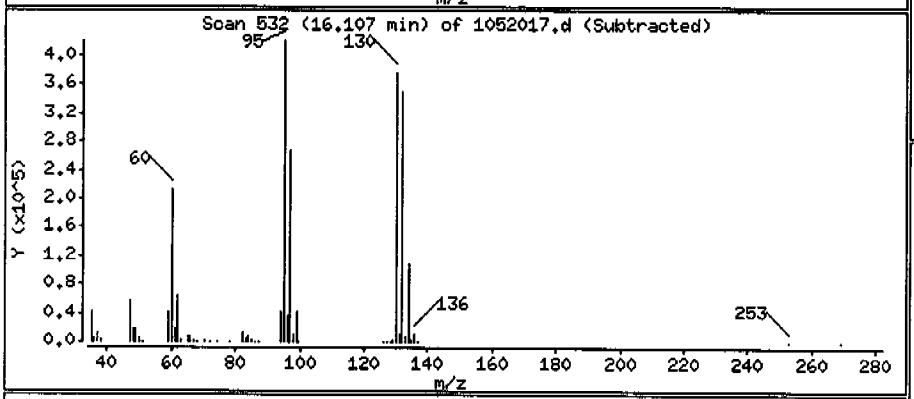
Column diameter: 0.53

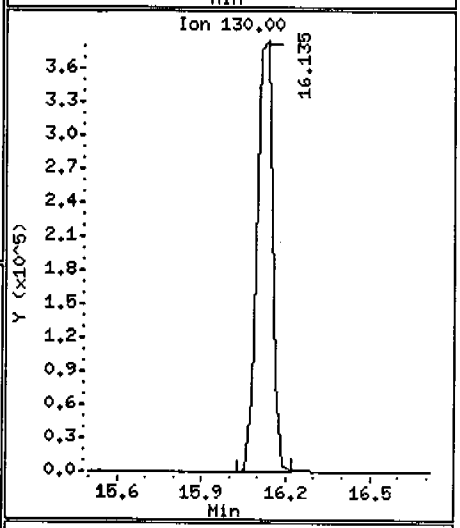
97 Trichloroethene

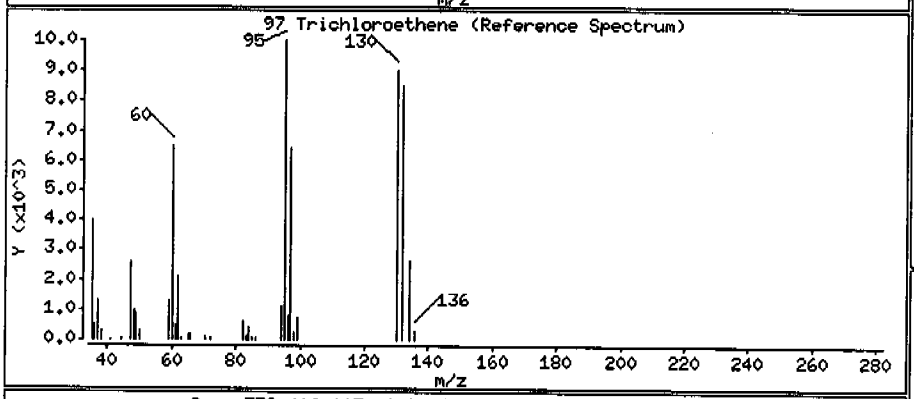
Concentration: 164.30 PPBV

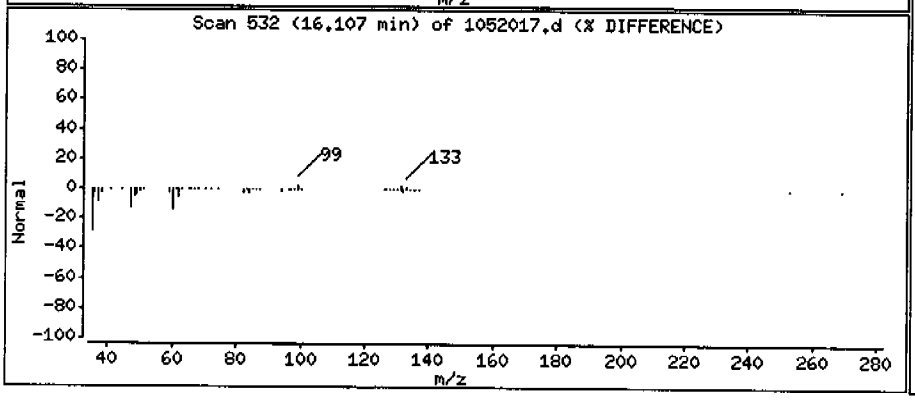


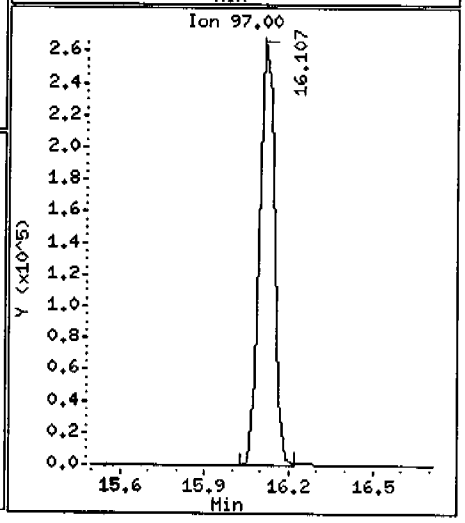












Data File: /chem/msd1.i/1-20may.b/1052017.d

Date : 20-MAY-2008 19:53

Client ID:

Instrument: msd1.i

Sample Info: 50mL #12077

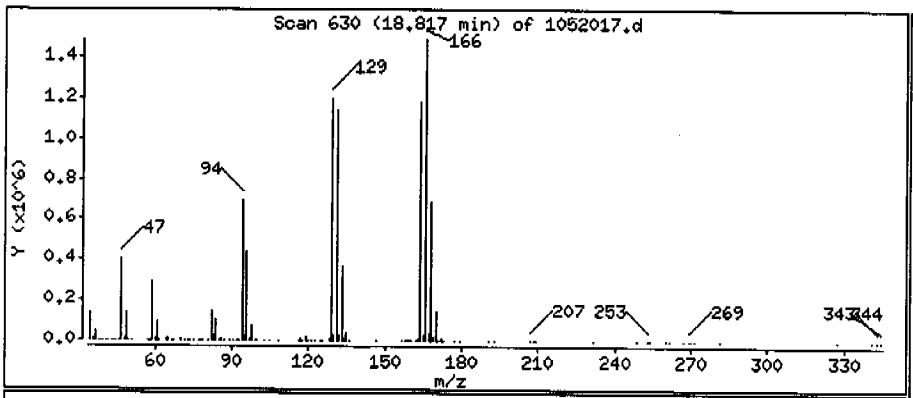
Operator: kr

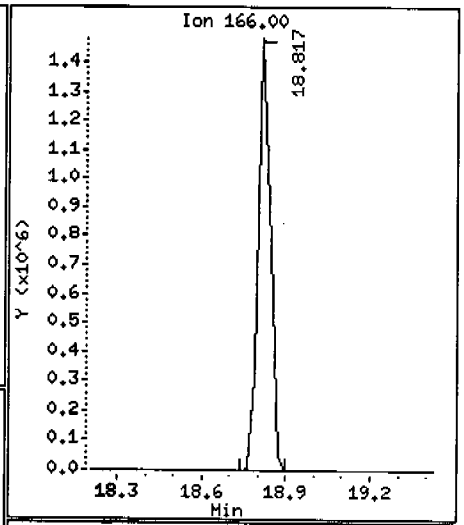
Column phase: RTx-624

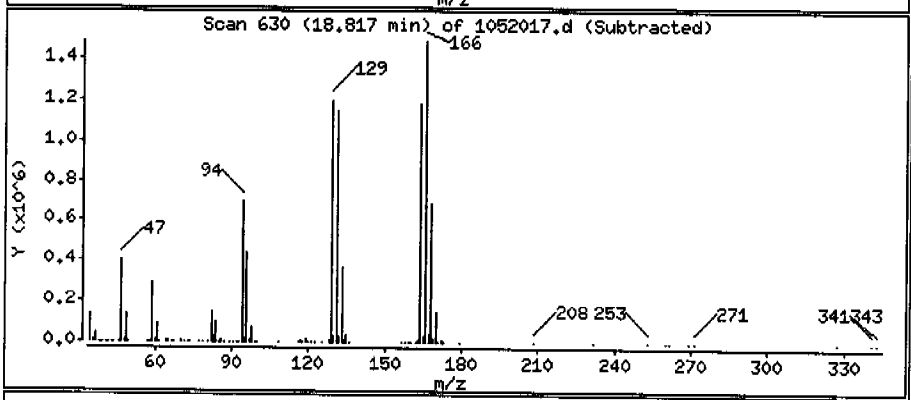
Column diameter: 0.53

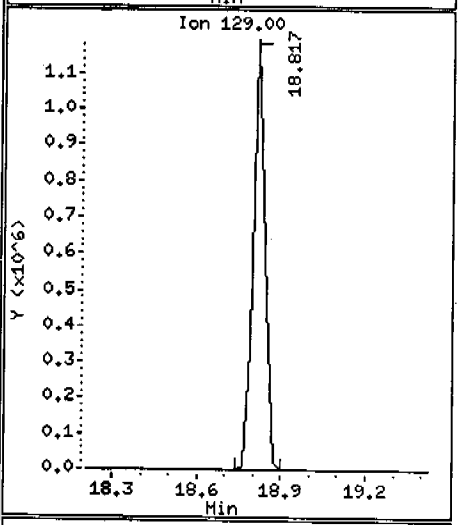
117 Tetrachloroethene

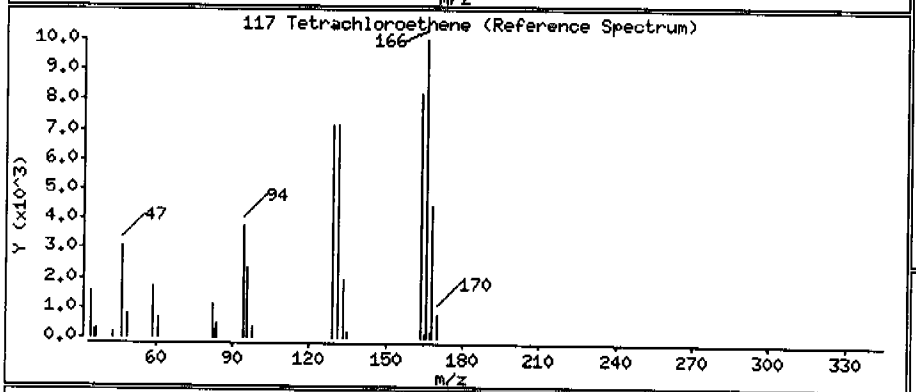
Concentration: 338.42 PPBV

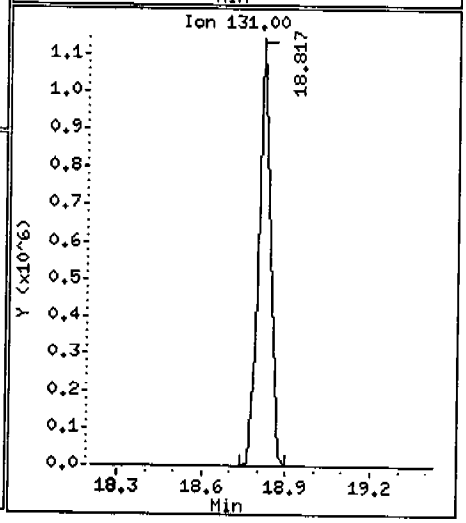


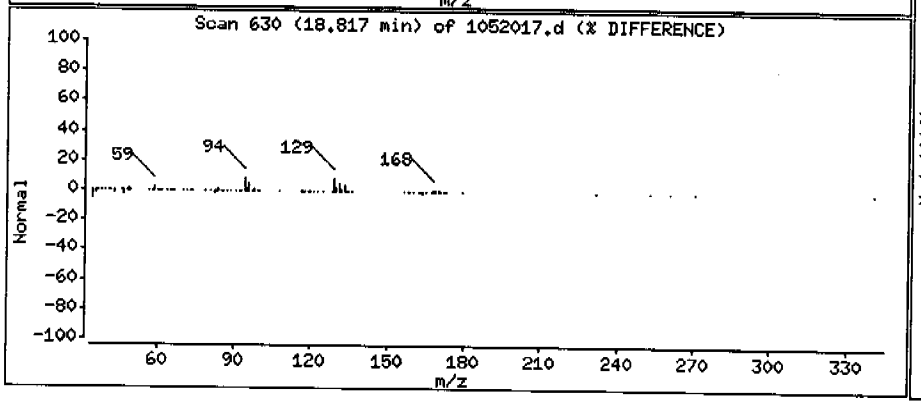












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12248

Lab ID#: 0805220-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	2.0	4.3	9.7
Ethanol	3.5	5.3	6.6	10
Acetone	3.5	31	8.3	73
Methylene Chloride	0.88	55	3.0	190
2-Butanone (Methyl Ethyl Ketone)	0.88	5.0	2.6	15
Chloroform	0.88	75	4.3	360
1,1,1-Trichloroethane	0.88	4.2	4.8	23
Cyclohexane	0.88	1.6	3.0	5.4
Carbon Tetrachloride	0.88	24	5.5	150
Trichloroethene	0.88	90	4.7	480
Tetrachloroethene	0.88	60	5.9	400

0022

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12248

Lab ID#: 0805220-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 10520018 Date of Collection: 5/7/08
Dil. Factor: 1.75 Date of Analysis: 5/20/08 08:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	2.0	4.3	9.7
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	5.3	6.6	10
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	31	8.3	73
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	55	3.0	190
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	5.0	2.6	15
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	75	4.3	360
1,1,1-Trichloroethane	0.88	4.2	4.8	23
Cyclohexane	0.88	1.6	3.0	5.4
Carbon Tetrachloride	0.88	24	5.5	150
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	90	4.7	480
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	60	5.9	400

0023

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12248

Lab ID#: 0805220-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted]052018 Date of Collection: 5/7/08
Dil. Factor: 1.175 Date of Analysis: 5/20/08 08:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	96	70-130

0024

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052018.d
Lab Smp Id: 0805220-02A
Inj Date : 20-MAY-2008 20:38
Operator : kr Inst ID: msd1.i
Smp Info : 100mL #5557
Misc Info : 7.0"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 18:39 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	298014	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	233784			28.28- 128.28	78.45
14.255	14.255 (1.000)	49	544200			132.70- 232.70	182.61
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1521775	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	248184			0.00- 65.54	16.31
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.006 (1.000)	117	1739091	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1009637			8.42- 108.42	58.06
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.140	15.140 (1.062)	65	460206	23.1402	23.140	80.00- 120.00	100.00
15.140	15.140 (1.062)	67	245052			6.04- 106.04	53.25
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1710749	24.8106	24.811	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	177395			0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1134473			15.45- 115.45	66.31
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	896596	24.0939	24.094	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1441111			112.36- 212.36	160.73
21.527	21.527 (1.075)	176	854010			46.57- 146.57	95.25
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.918	2.890 (0.205)	85	36989	1.12591	1.970	80.00- 120.00	100.00
2.862	2.890 (0.201)	87	7842			0.00- 75.39	21.20
38 Ethanol					CAS #: 64-17-5		
10.190	10.135 (0.715)	45	20234	3.02134	5.287	80.00- 120.00	100.00
10.190	10.135 (0.715)	43	5167			0.00- 75.81	25.54
10.190	10.135 (0.715)	46	5428			0.00- 92.85	26.83
45 Acetone					CAS #: 67-64-1		
10.882	10.882 (0.763)	58	181396	17.6086	30.815	80.00- 120.00	100.00
10.882	10.882 (0.763)	43	584029			275.34- 375.34	321.96
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.823)	49	839266	31.5879	55.279	80.00- 120.00	100.00
11.766	11.739 (0.825)	84	537589			13.80- 113.80	64.05
11.739	11.739 (0.823)	51	256147			0.00- 79.96	30.52
75 2-Butanone					CAS #: 78-93-3		
13.951	13.923 (0.979)	72	30504	2.84128	4.972	80.00- 120.00	100.00
13.951	13.923 (0.979)	43	147752			438.06- 538.06	484.37
13.951	13.923 (0.979)	57	10941			0.00- 90.57	35.87
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	1799643	42.6906	74.709	80.00- 120.00	100.00
14.365	14.365 (1.008)	85	1129701			12.63- 112.63	62.77
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.023)	97	105271	2.37993	4.165	80.00- 120.00	100.00
14.587	14.587 (1.023)	99	69750			14.19- 114.19	66.26
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.021)	84	32867	0.89162	1.560	80.00- 120.00	100.00
14.559	14.559 (1.021)	56	48529			84.94- 184.94	147.65
14.559	14.559 (1.021)	41	28767			21.35- 121.35	87.53
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.037)	119	552775	13.5113	23.645	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 Carbon Tetrachloride (continued)							
14.780	14.780 (1.037)	117	563275			52.80- 152.80	101.90
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1636781	51.5464	90.206	80.00- 120.00	100.00
16.107	16.107 (1.023)	130	1593020			46.95- 146.95	97.33
16.107	16.107 (1.023)	97	1045493			13.89- 113.89	63.87
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	1455507	34.1386	59.742	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	1141919			27.45- 127.45	78.46
18.817	18.817 (0.939)	131	1100363			24.16- 124.16	75.60

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052018.d
Lab Smp Id: 0805220-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 7.0"Hg -> 5psi

Calibration Date: 20-MAY-2008
Calibration Time: 12:26

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	298014	-8.56
95 1,4-Difluorobenze	1718149	1030889	2405409	1521775	-11.43
123 Chlorobenzene-d5	1889046	1133428	2644664	1739091	-7.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.25	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805220-02A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 7.0"Hg -> 5psi

Client SDG: 1-20may
Fraction: VOA

Operator: kr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.140	92.56	70-130
$ 111 Toluene-d8	25.000	24.811	99.24	70-130
$ 136 Bromofluorobenzene	25.000	24.094	96.38	70-130

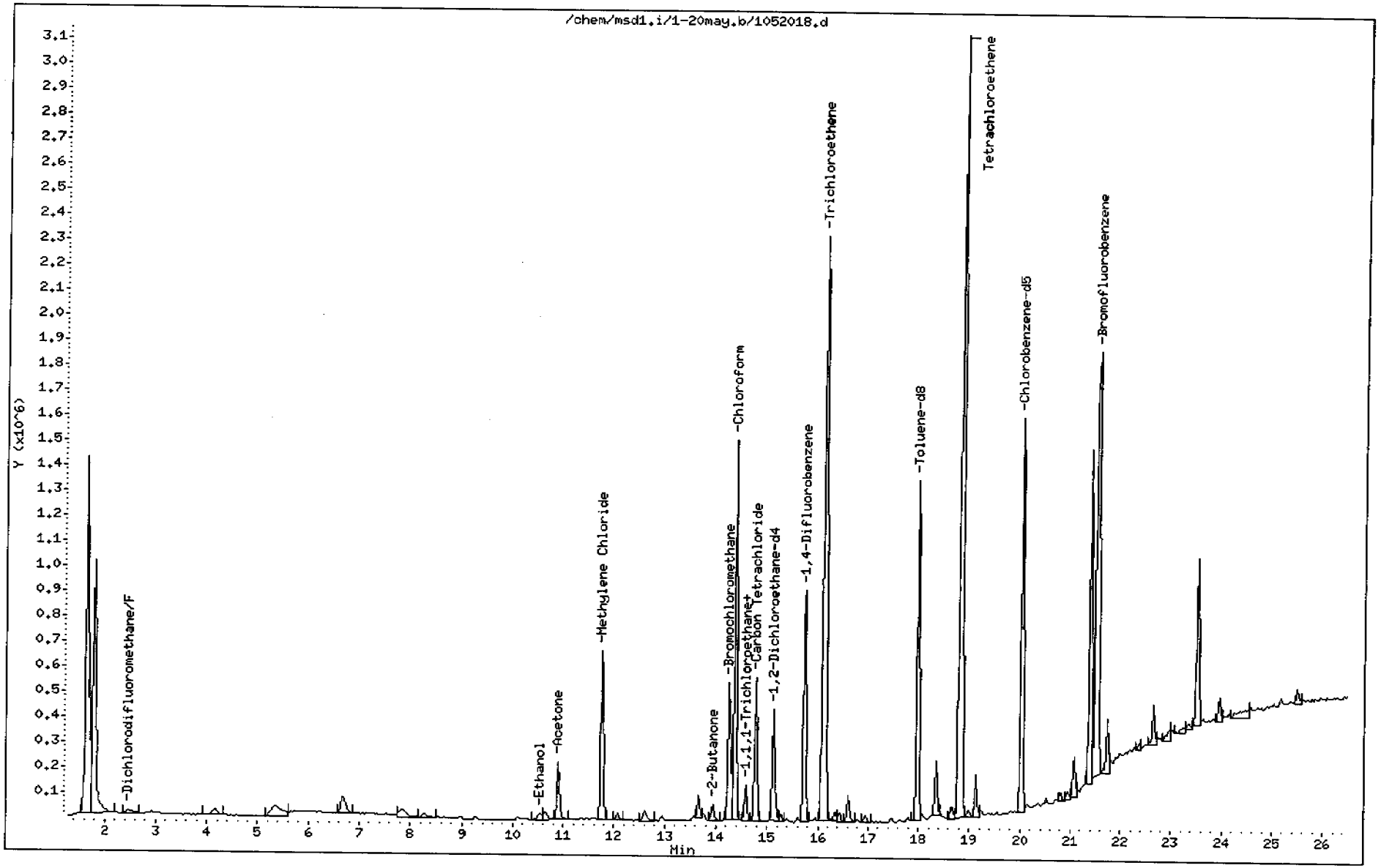
Data File: /chem/msd1.i/1-20may.b/1052018.d
Date : 20-MAY-2008 20:38
Client ID:
Sample Info: 100mL #5557

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0030



Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

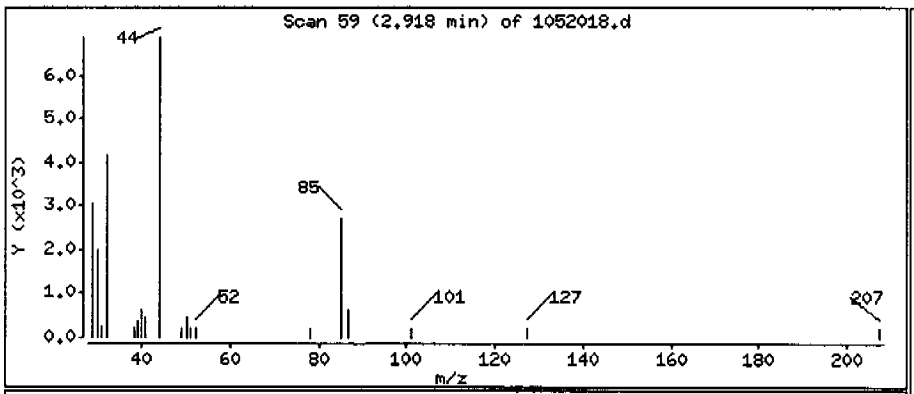
Operator: kr

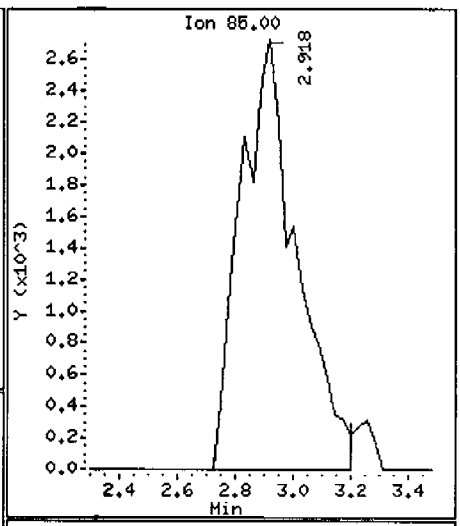
Column phase: RTx-624

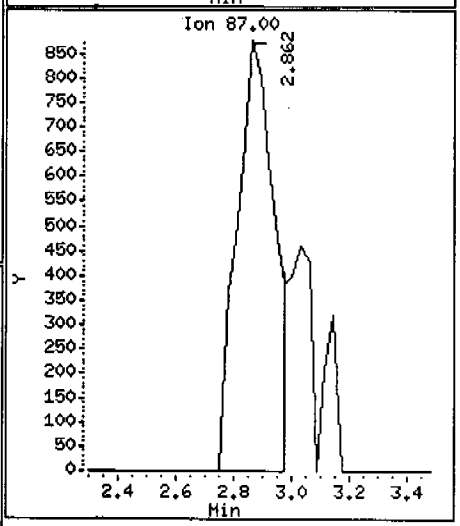
Column diameter: 0.53

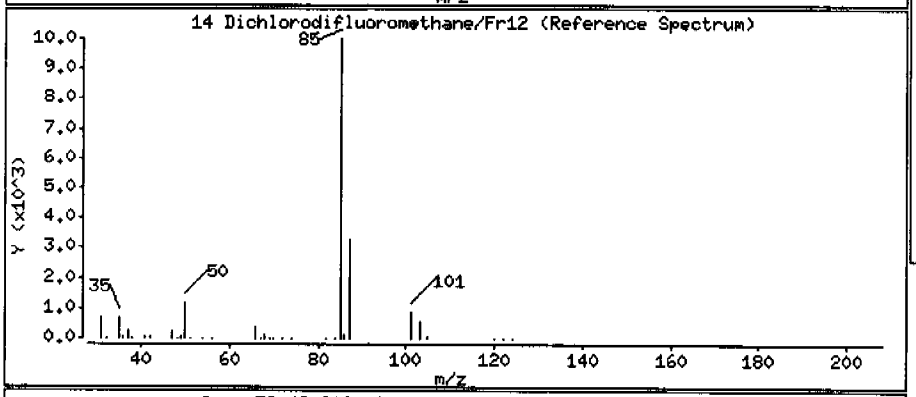
14 Dichlorodifluoromethane/Fr12

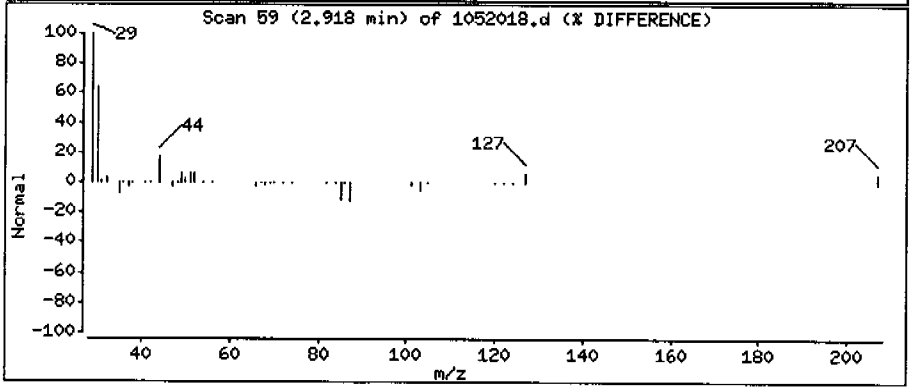
Concentration: 1.970 PPBV











Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

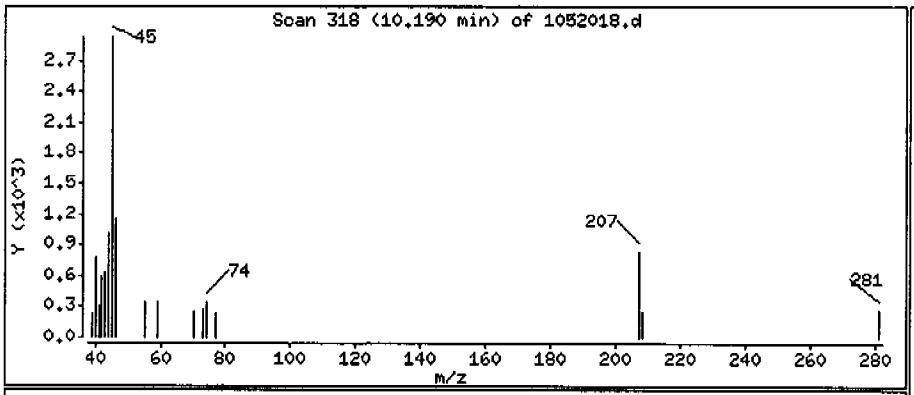
Operator: kr

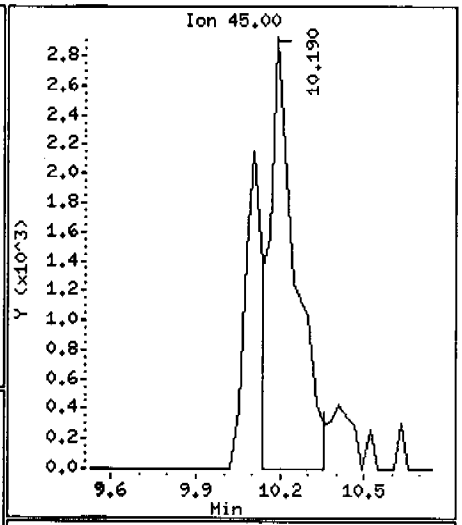
Column phase: RTx-624

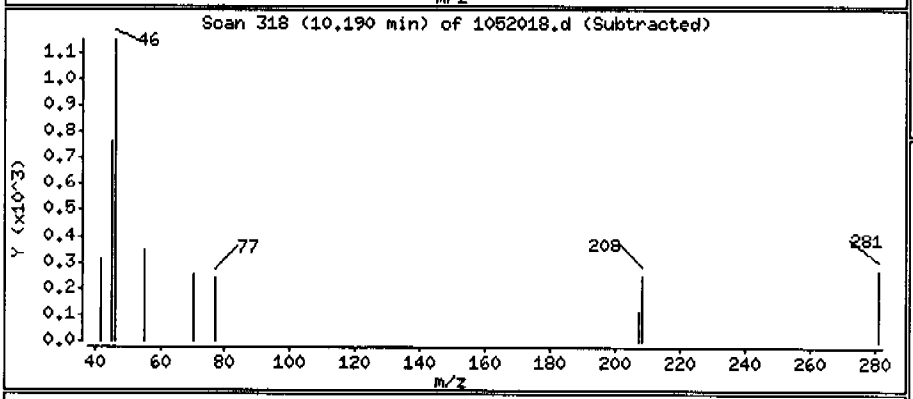
Column diameter: 0.53

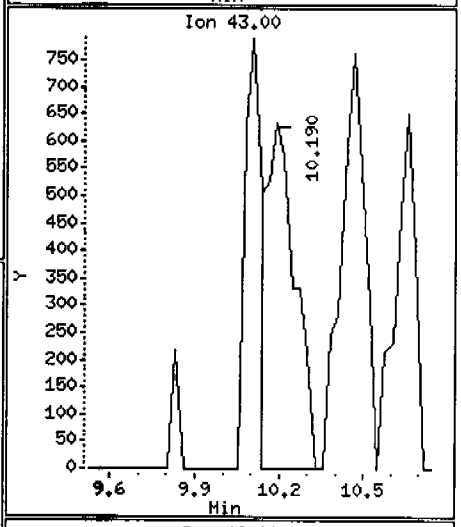
38 Ethanol

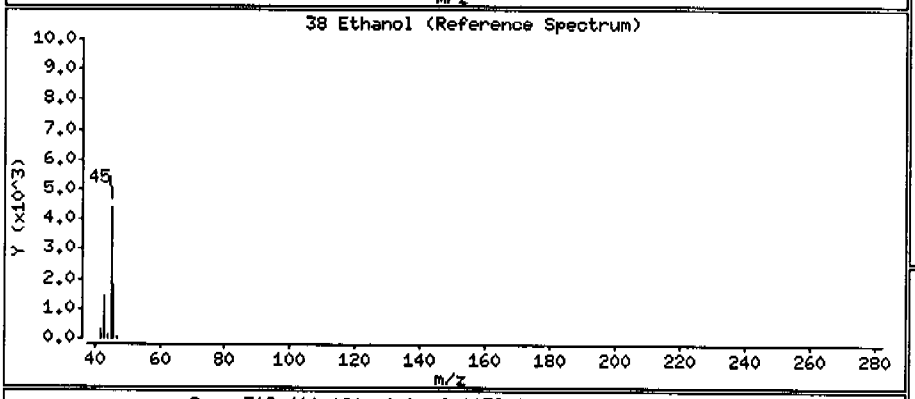
Concentration: 5.287 PPBV

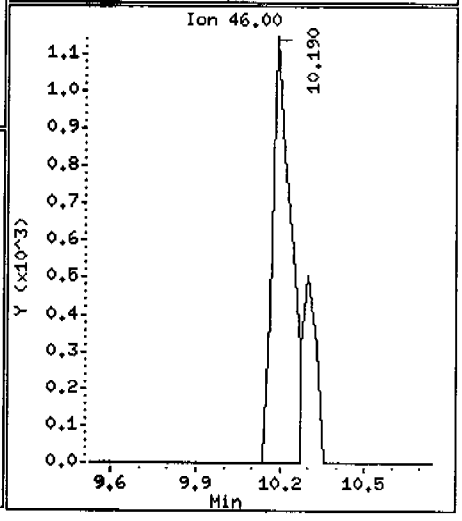


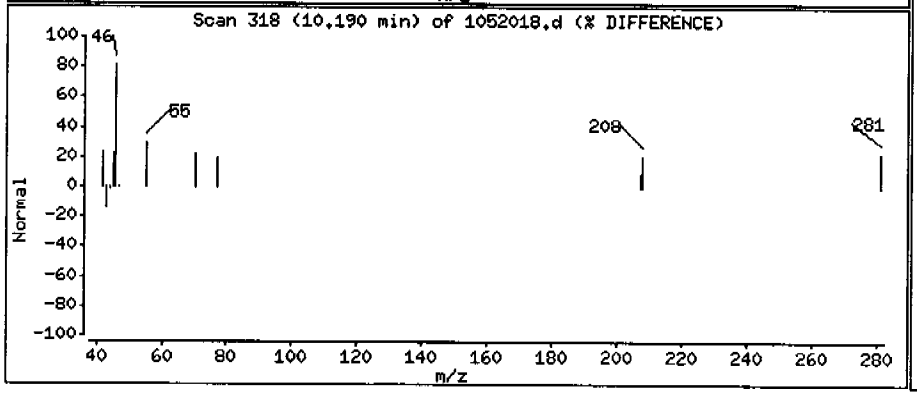












0032

Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

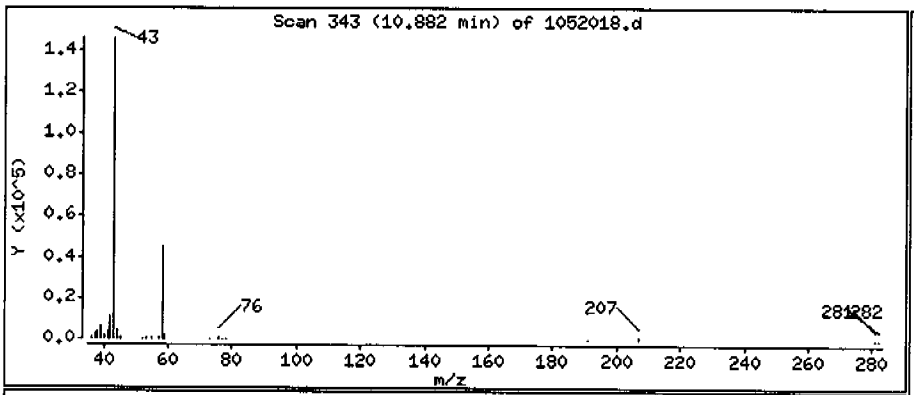
Operator: kr

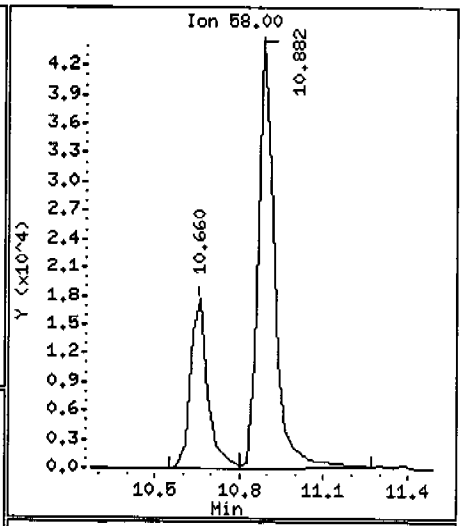
Column phase: RTx-624

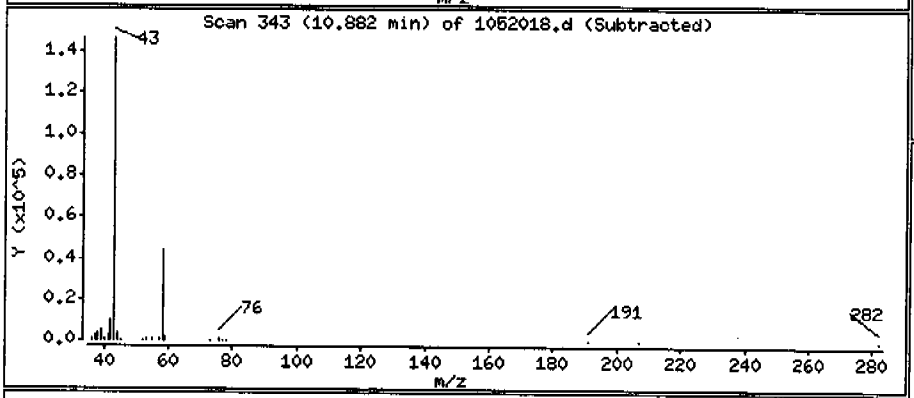
Column diameter: 0.53

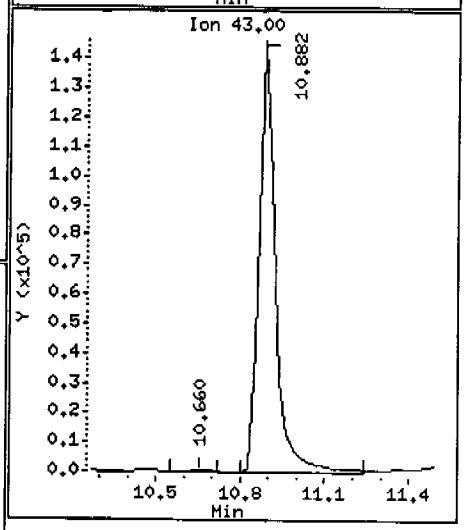
45 Acetone

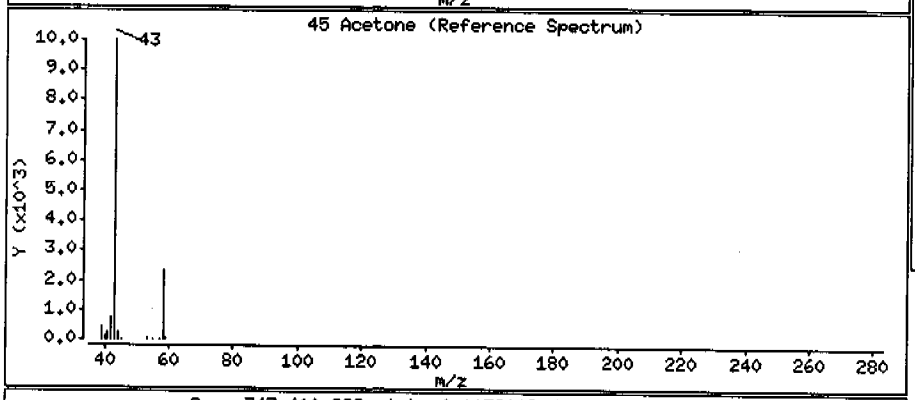
Concentration: 30.815 PPBV

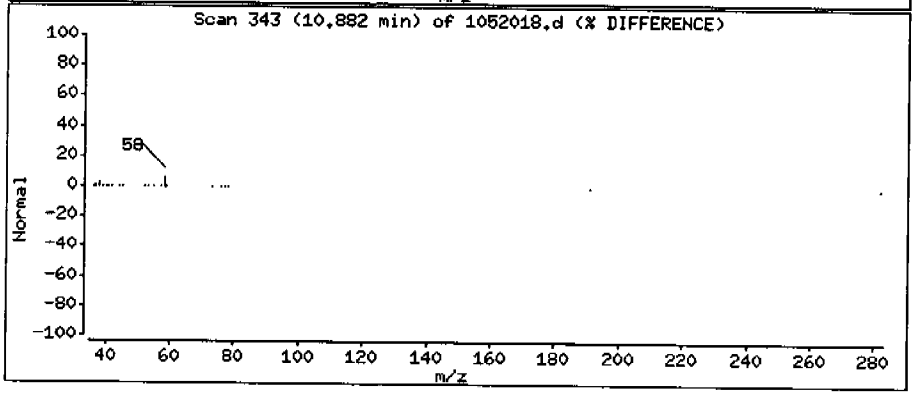












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

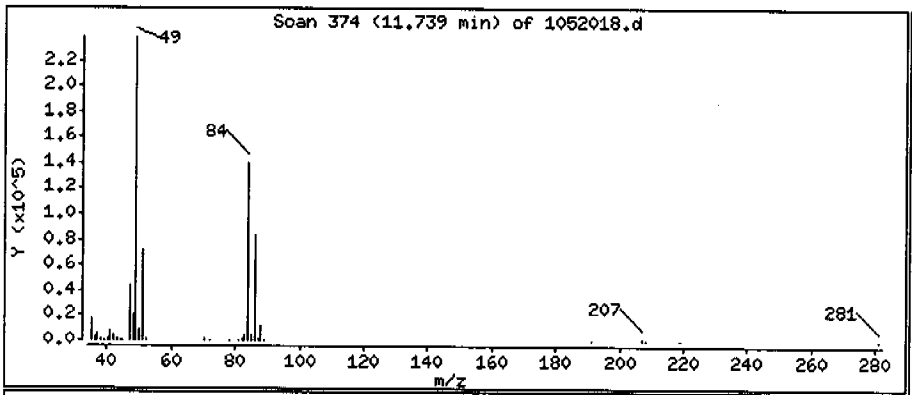
Operator: kr

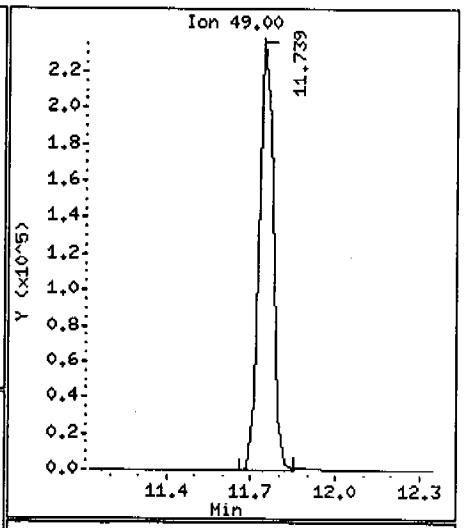
Column phase: RTx-624

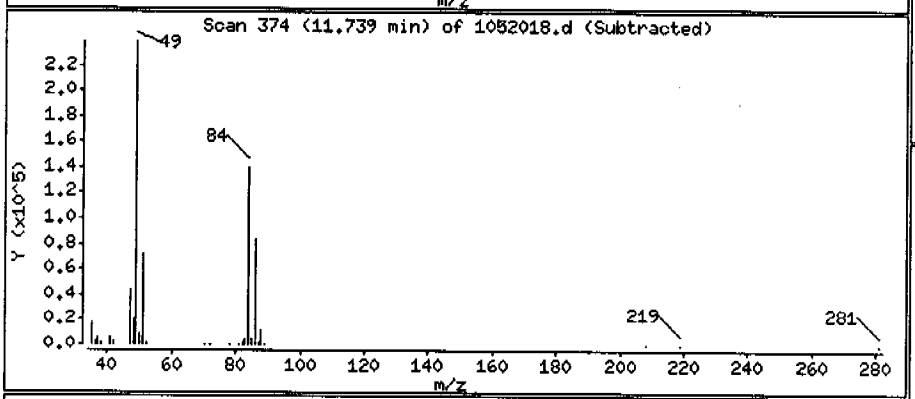
Column diameter: 0.53

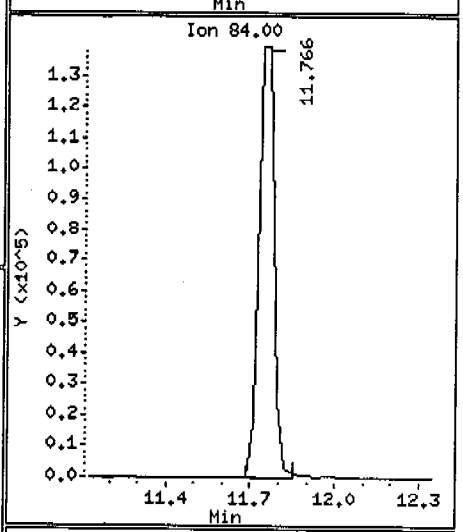
54 Methylene Chloride

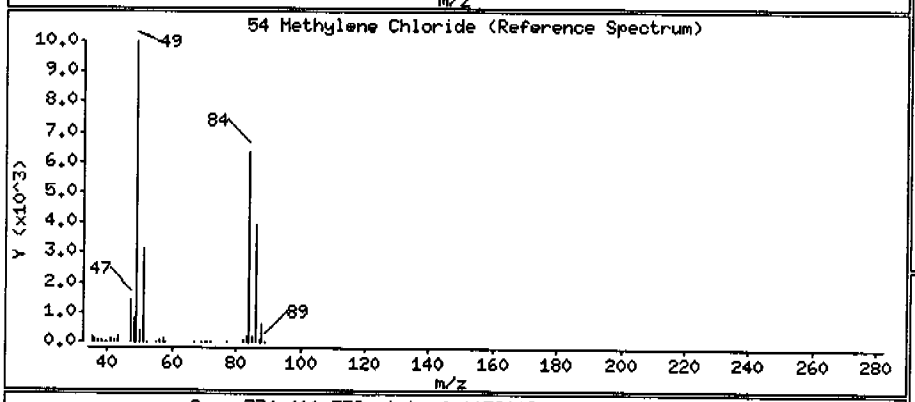
Concentration: 55.279 PPBV

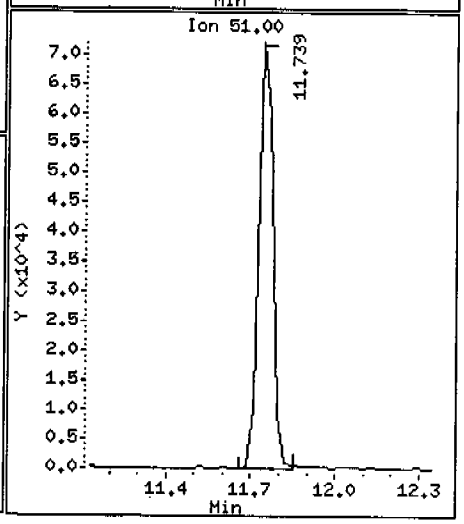


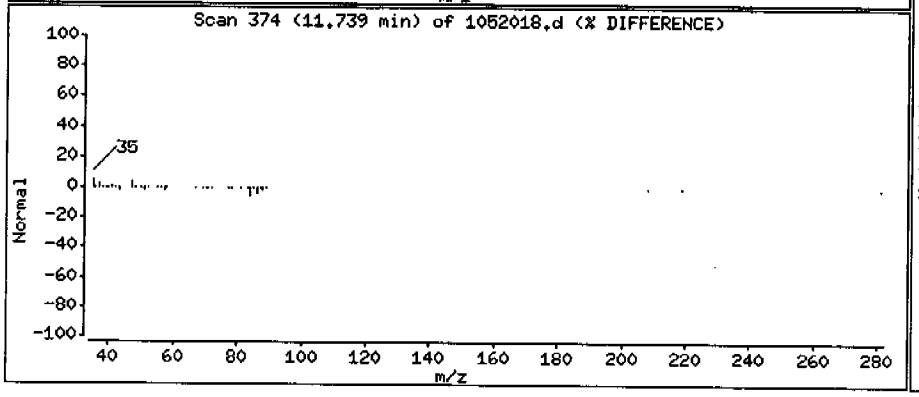












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

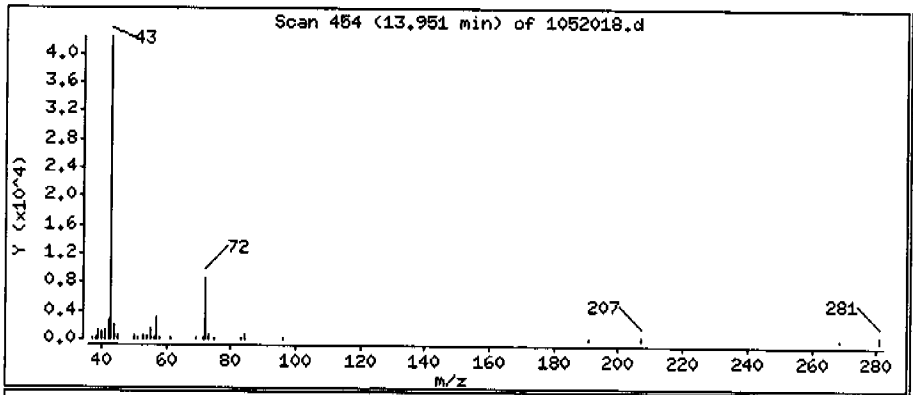
Operator: kr

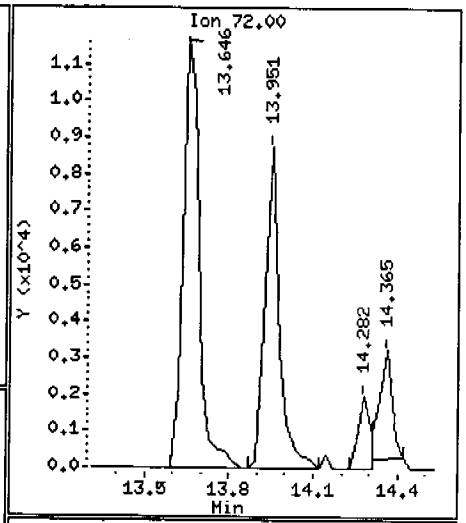
Column phase: RTx-624

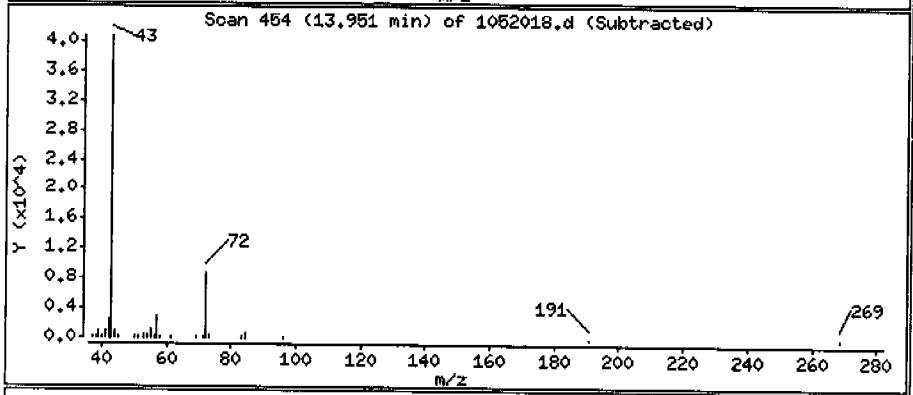
Column diameter: 0.53

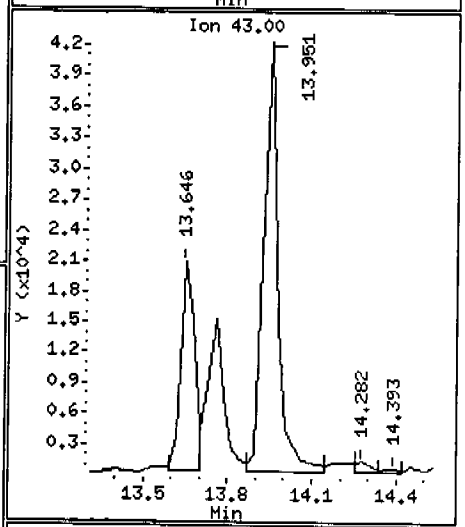
75 2-Butanone

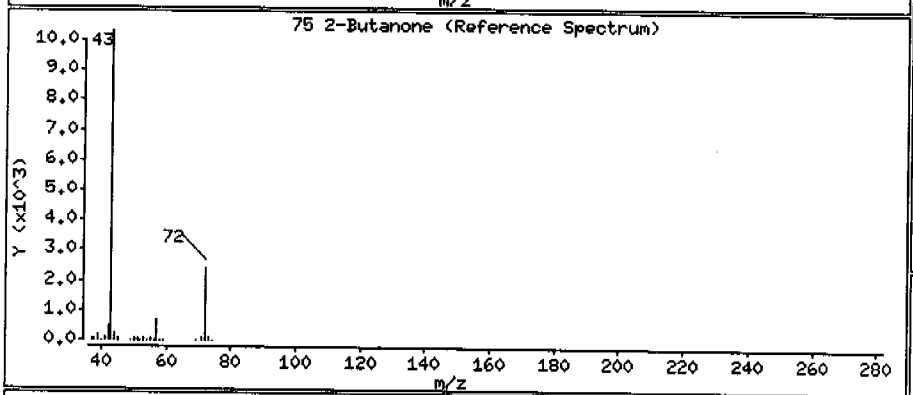
Concentration: 4.972 PPBV

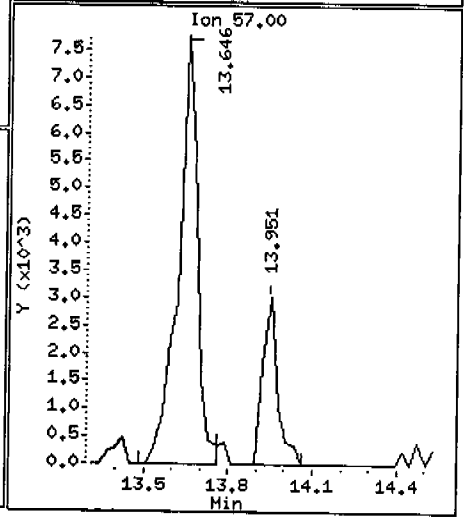


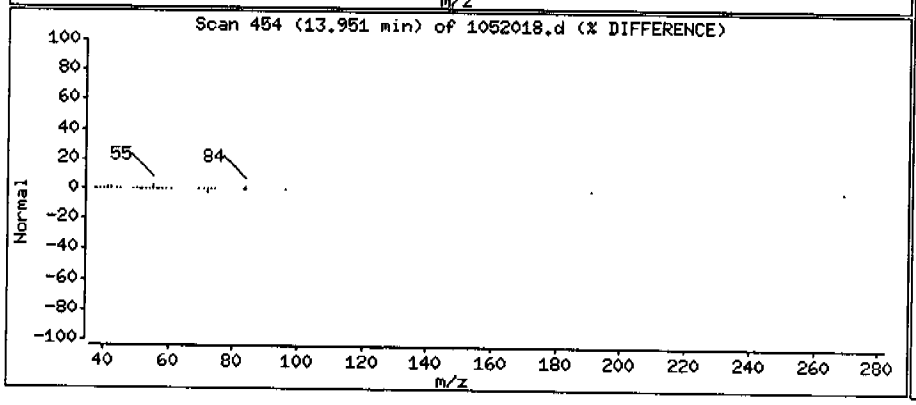












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

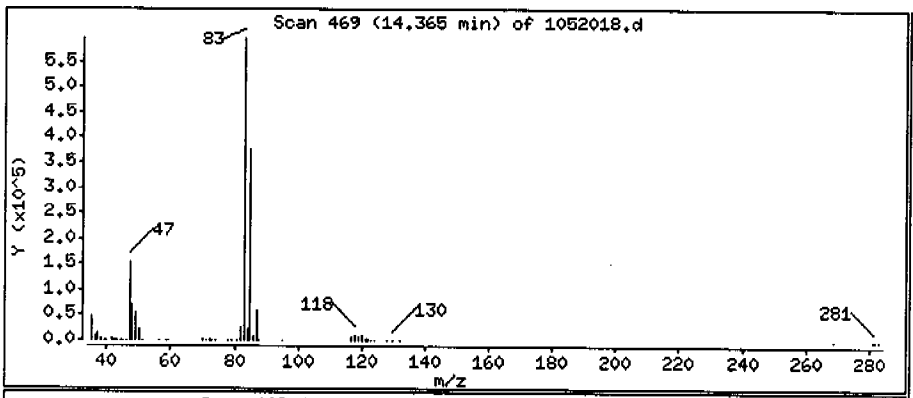
Operator: kr

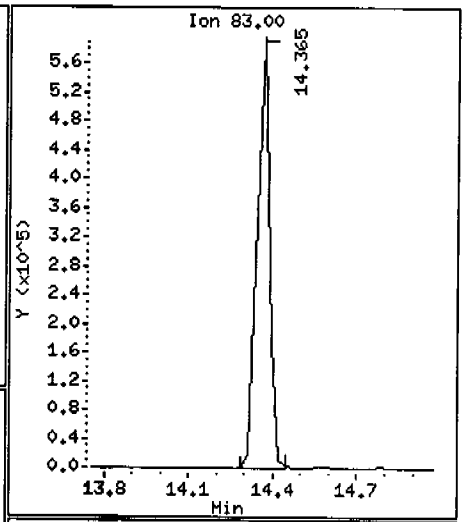
Column phase: RTx-624

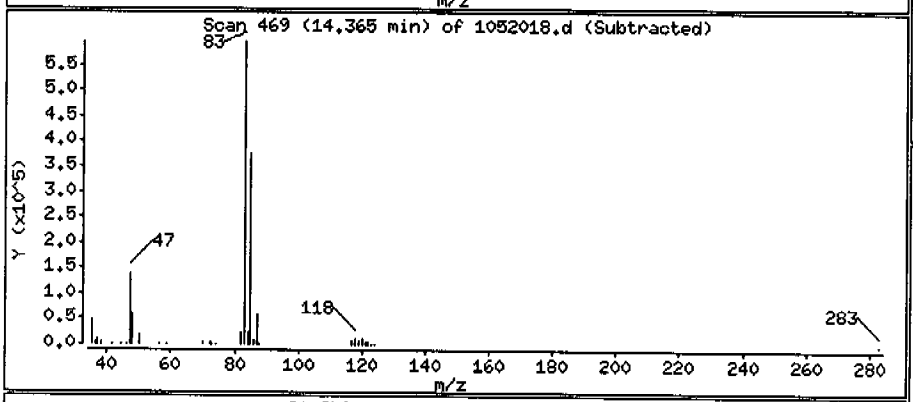
Column diameter: 0.53

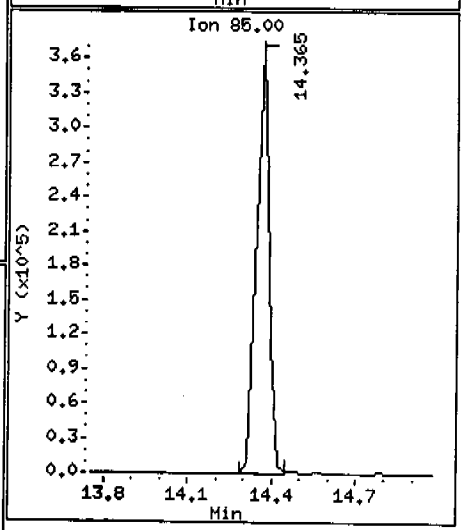
81 Chloroform

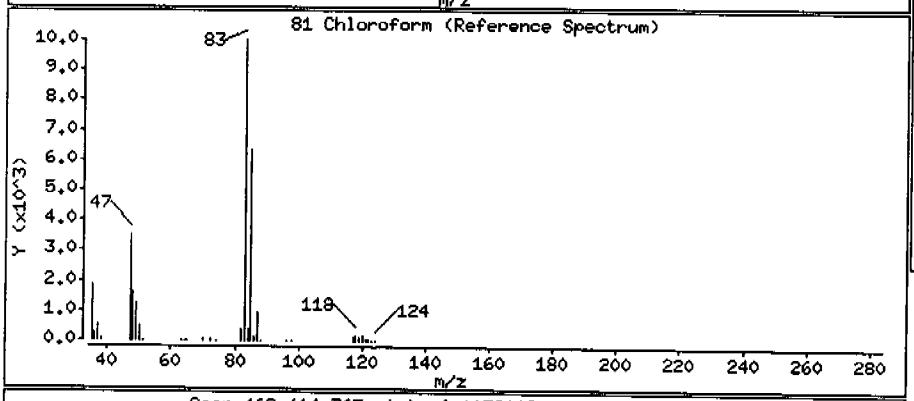
Concentration: 74.709 PPBV

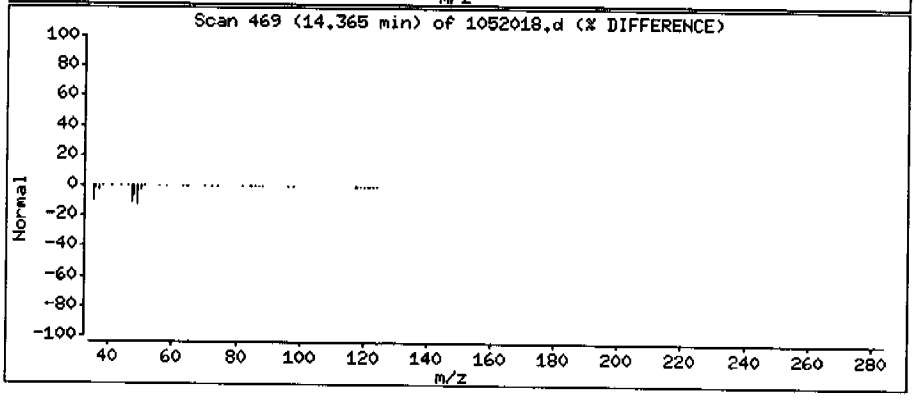












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

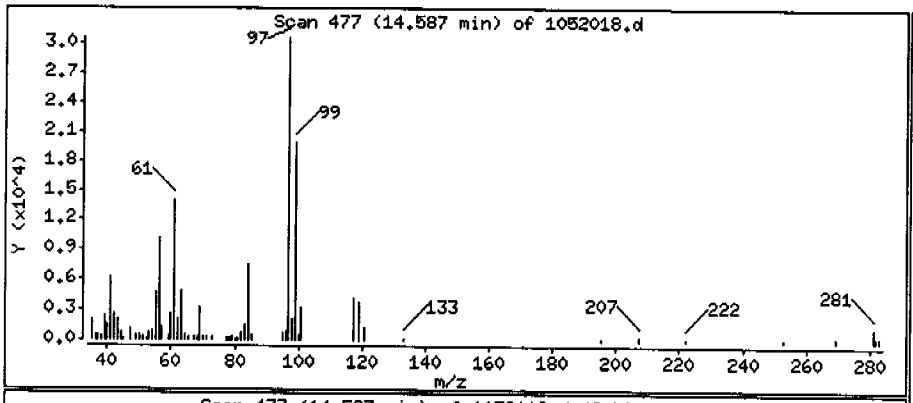
Operator: kr

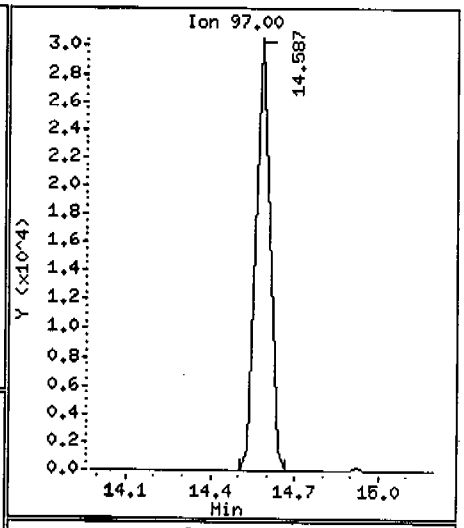
Column phase: RTx-624

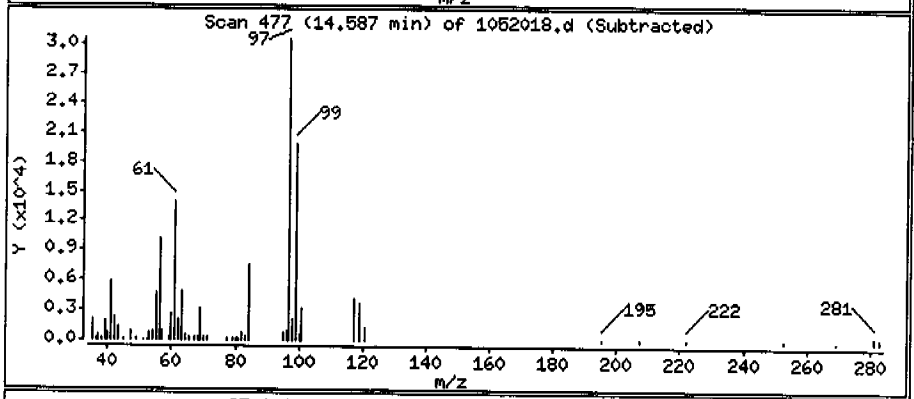
Column diameter: 0.53

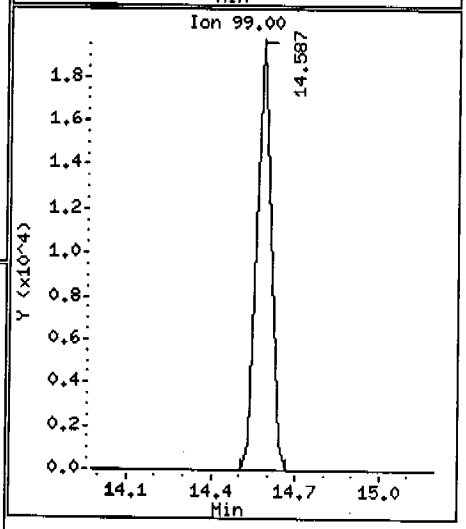
83 1,1,1-Trichloroethane

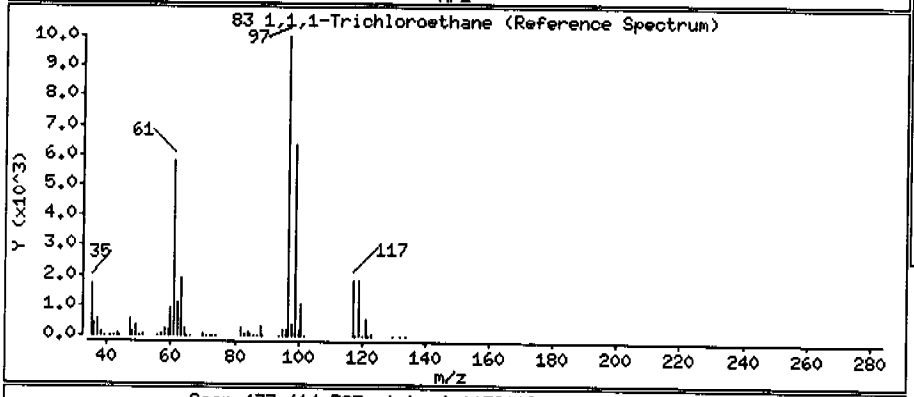
Concentration: 4.165 PPBV

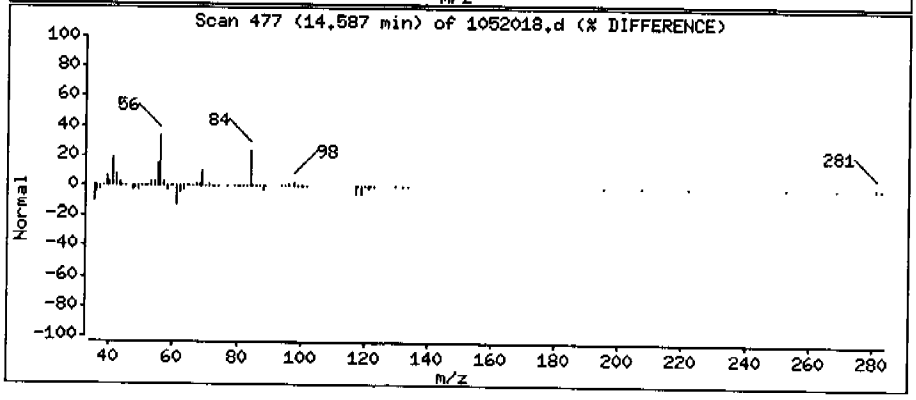












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

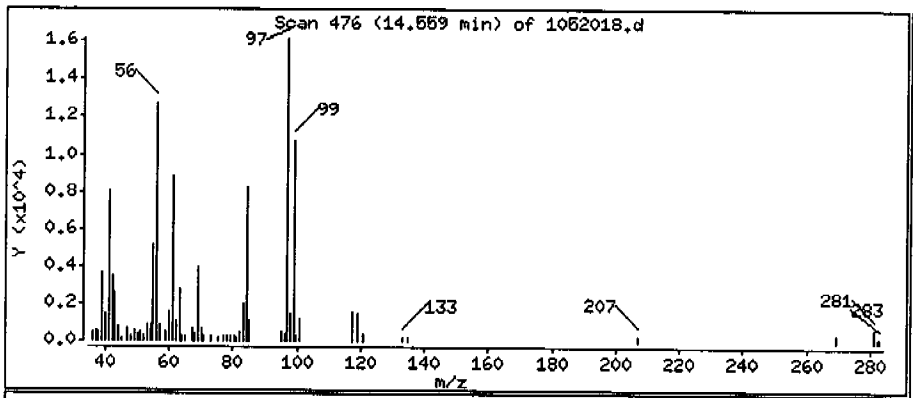
Operator: kr

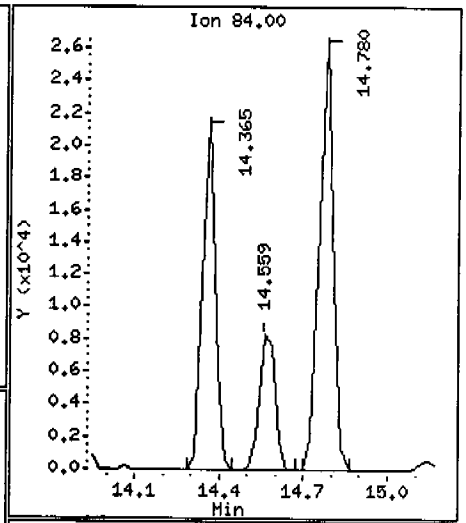
Column phase: RTx-624

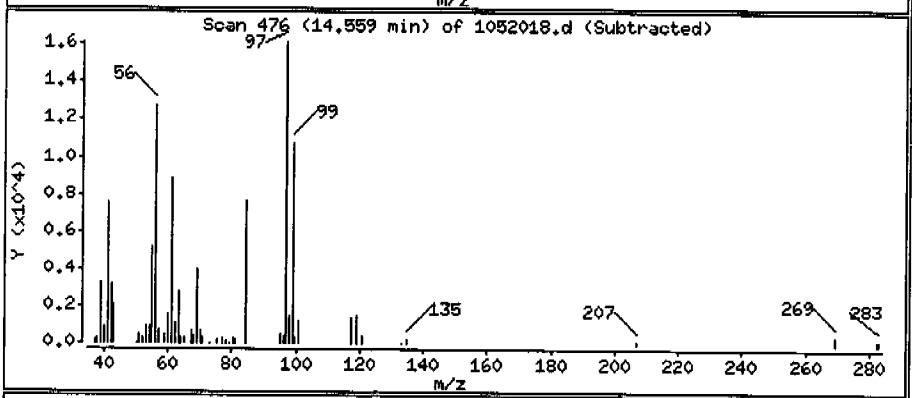
Column diameter: 0.53

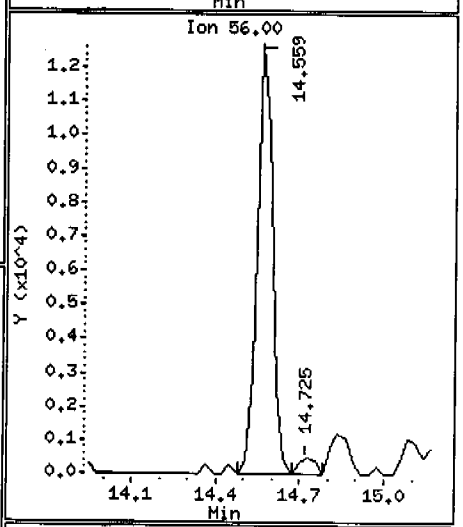
84 Cyclohexane

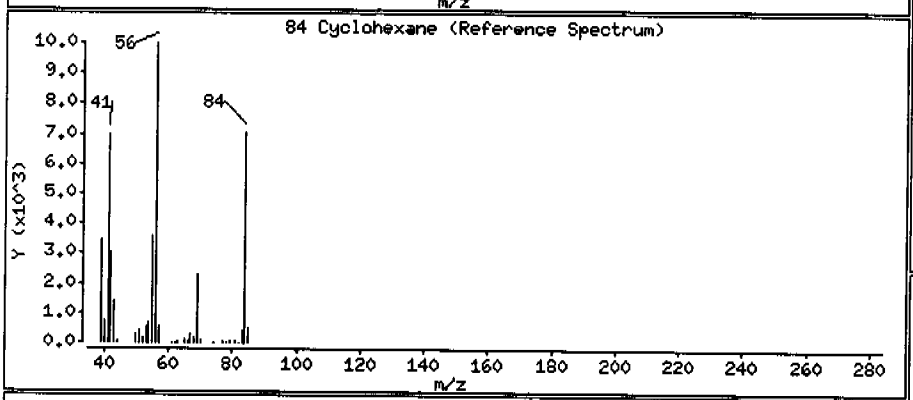
Concentration: 1.560 PPBV

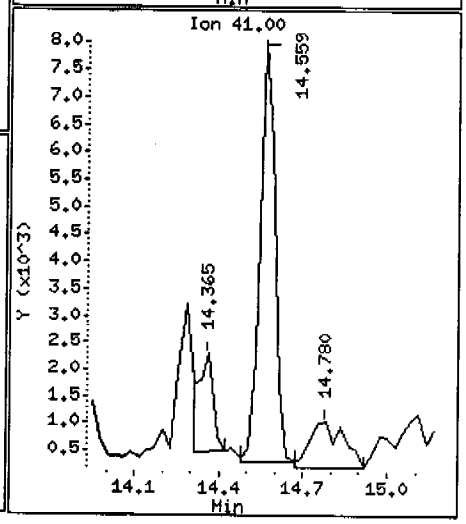


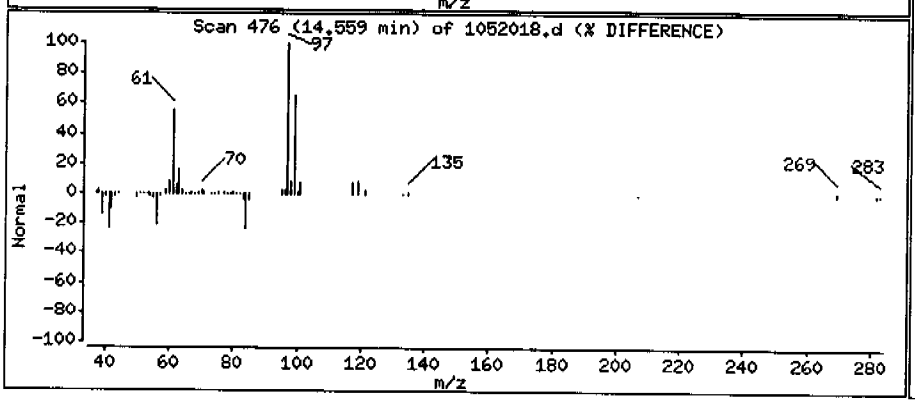












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

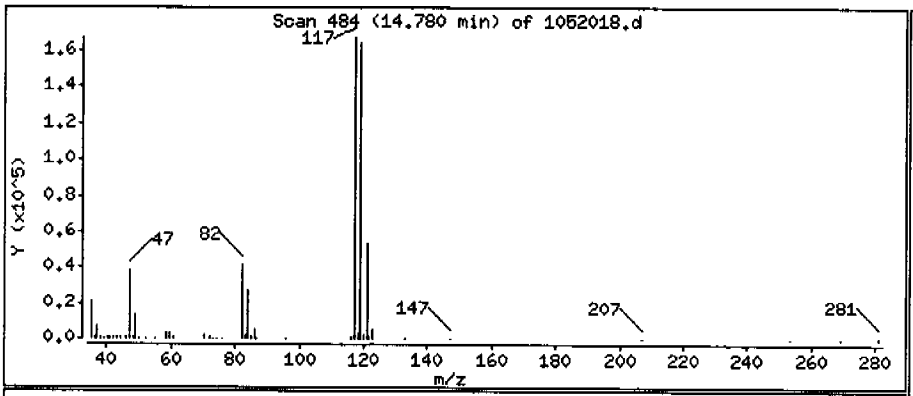
Operator: kr

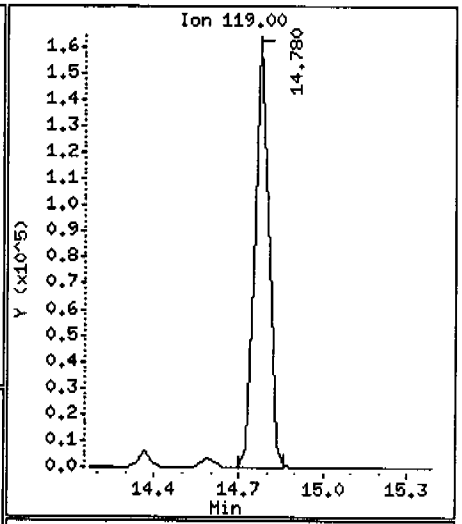
Column phase: RTx-624

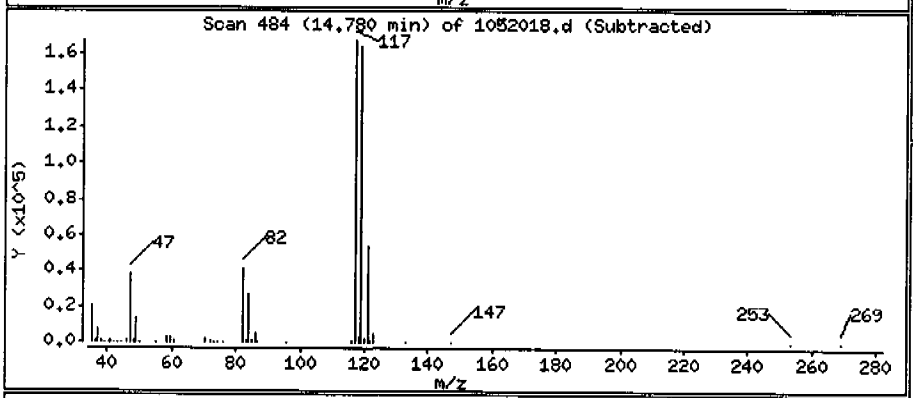
Column diameter: 0.53

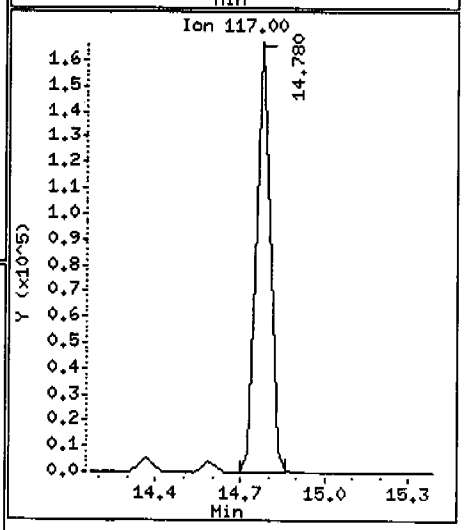
85 Carbon Tetrachloride

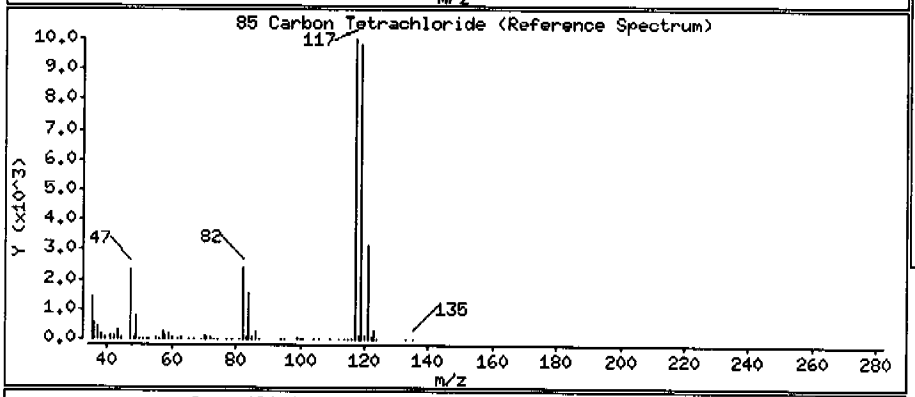
Concentration: 23.645 PPBV

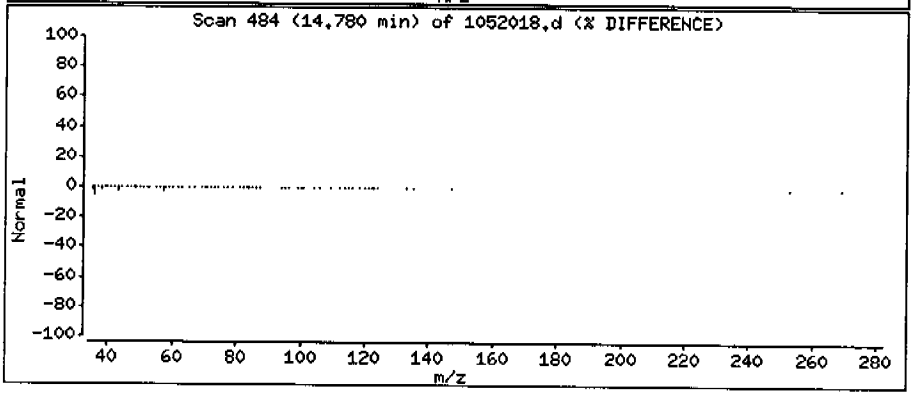












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

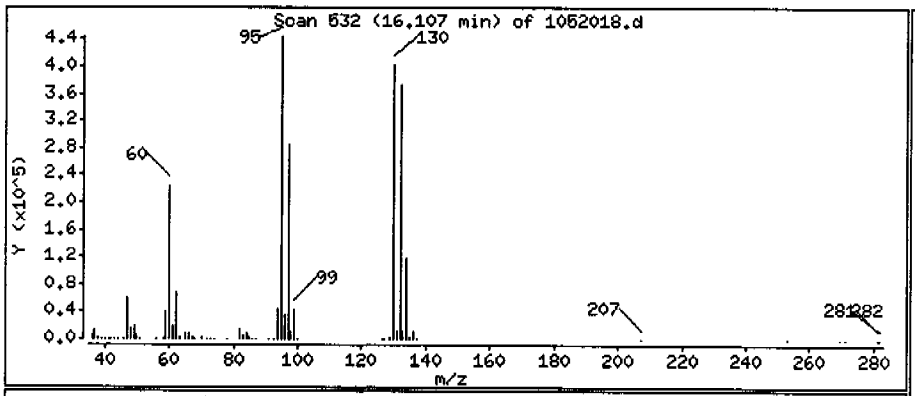
Operator: kr

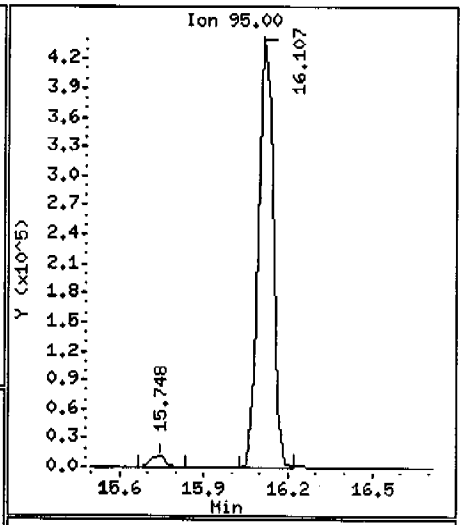
Column phase: RTx-624

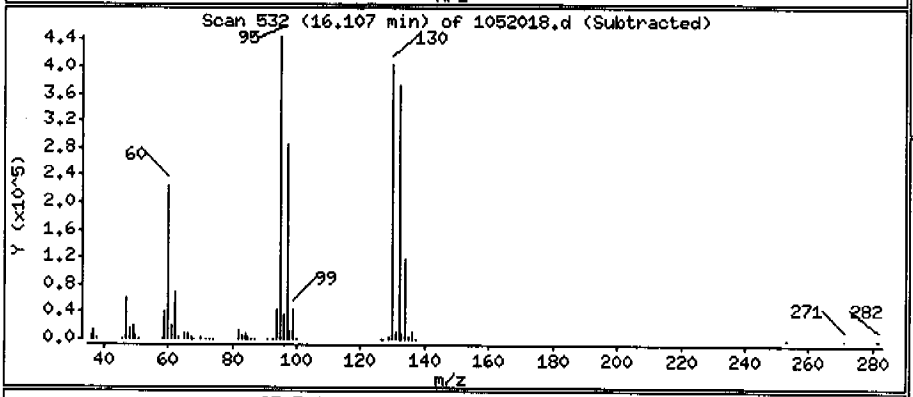
Column diameter: 0.53

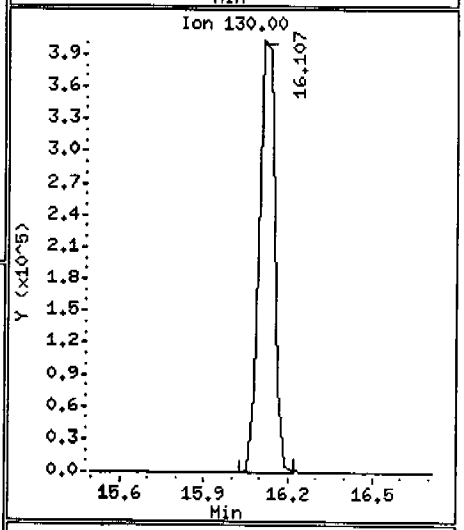
97 Trichloroethene

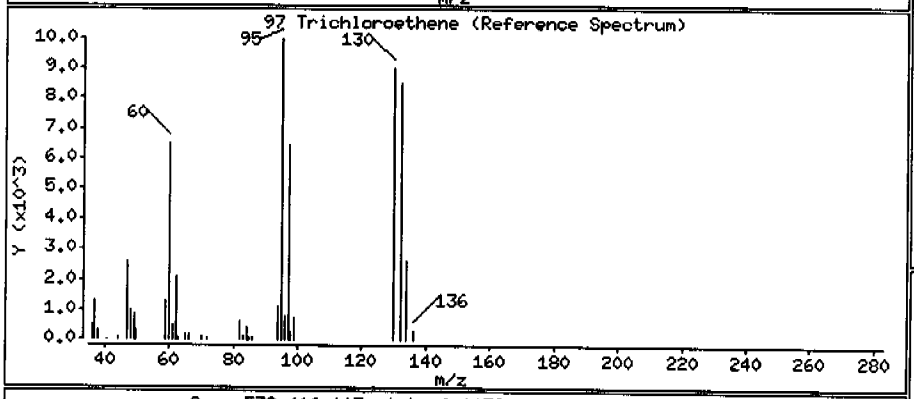
Concentration: 90.206 PPBV

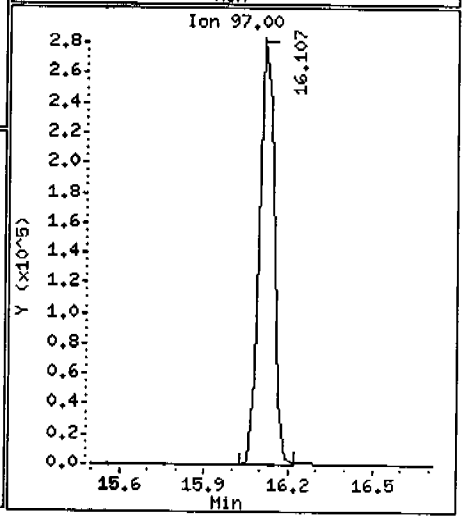


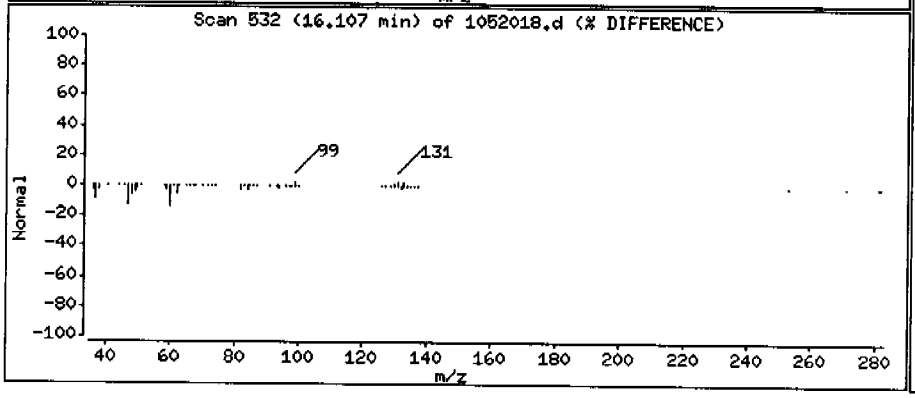












Data File: /chem/msd1.i/1-20may.b/1052018.d

Date : 20-MAY-2008 20:38

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5557

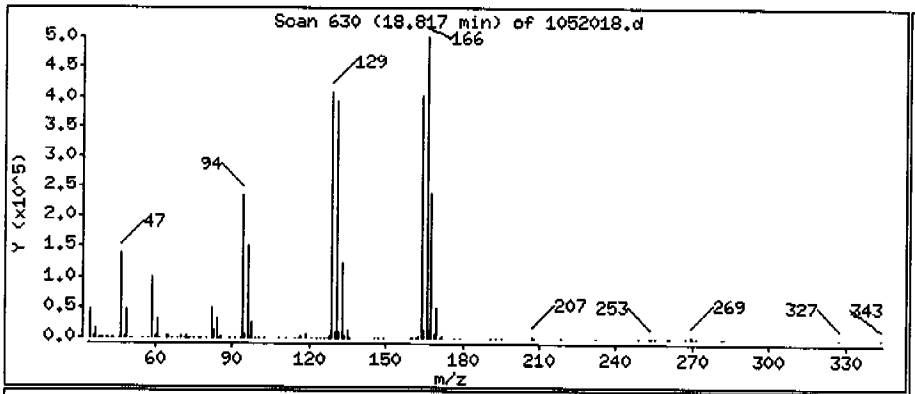
Operator: kr

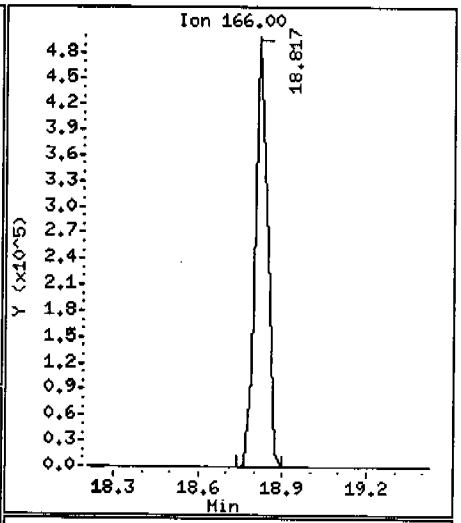
Column phase: RTx-624

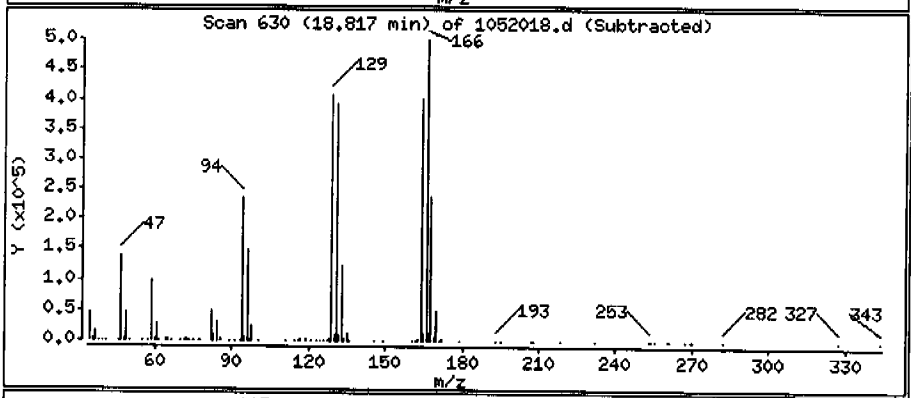
Column diameter: 0.53

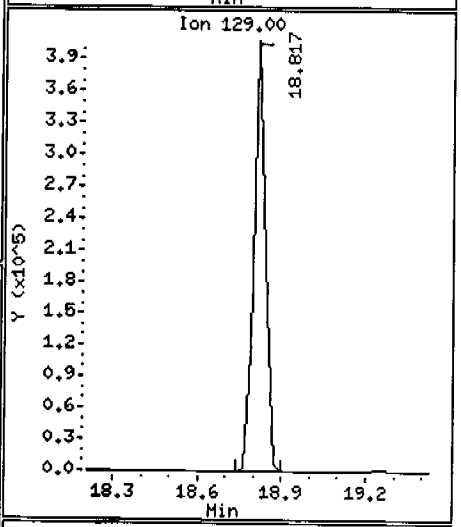
117 Tetrachloroethene

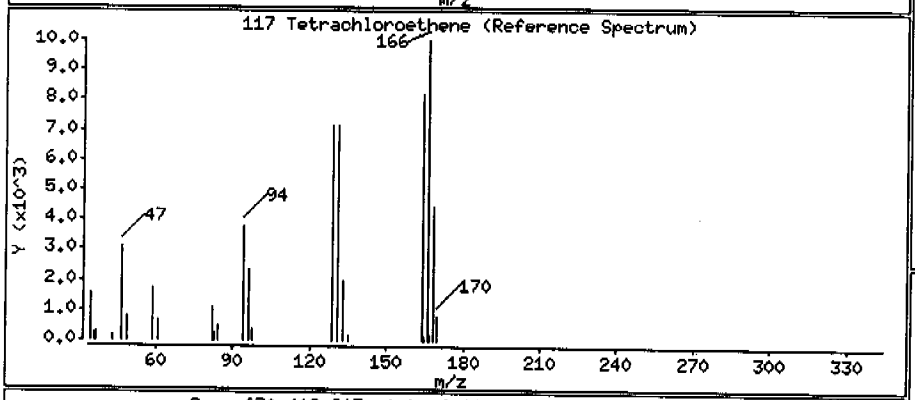
Concentration: 59.742 PPBV

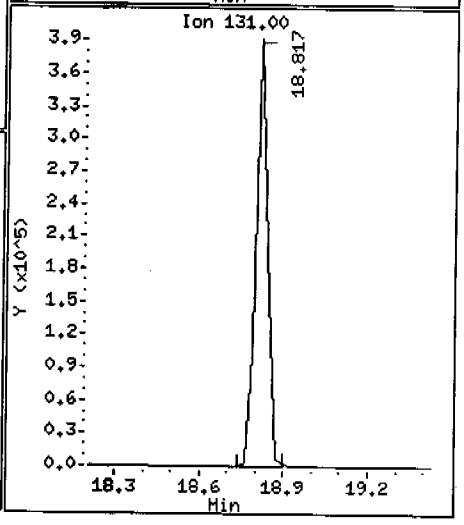


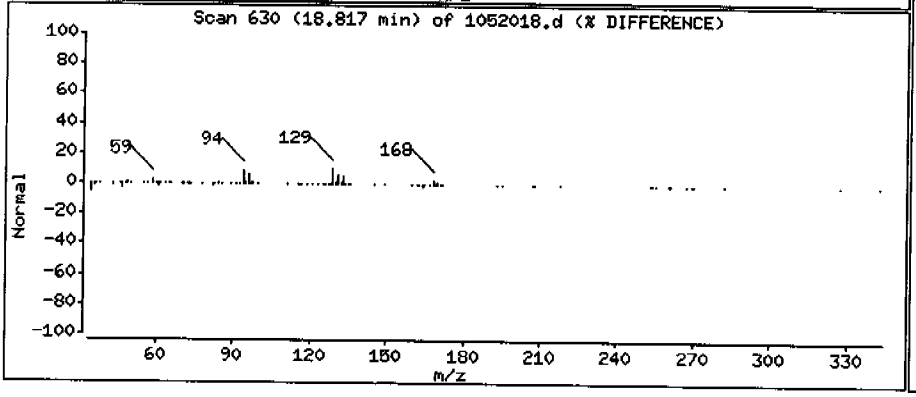












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12249

Lab ID#: 0805220-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.7	4.2	8.6
Freon 113	0.86	1.4	6.6	11
1,1-Dichloroethene	0.86	1.7	3.4	6.6
Carbon Disulfide	0.86	1.0	2.7	3.2
Methylene Chloride	0.86	170	3.0	590
Chloroform	0.86	96	4.2	470
1,1,1-Trichloroethane	0.86	3.9	4.7	21
Cyclohexane	0.86	1.8	2.9	6.2
Carbon Tetrachloride	0.86	46	5.4	290
1,2-Dichloroethane	0.86	2.3	3.5	9.3
Trichloroethene	0.86	110	4.6	580
Toluene	0.86	0.90	3.2	3.4
Tetrachloroethene	0.86	28	5.8	190

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12249

Lab ID#: 0805220-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1052019	Date of Collection:	5/7/08
Dil. Factor:	1.71	Date of Analysis:	5/20/08 09:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.7	4.2	8.6
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	1.4	6.6	11
1,1-Dichloroethene	0.86	1.7	3.4	6.6
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	1.0	2.7	3.2
Methylene Chloride	0.86	170	3.0	590
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	96	4.2	470
1,1,1-Trichloroethane	0.86	3.9	4.7	21
Cyclohexane	0.86	1.8	2.9	6.2
Carbon Tetrachloride	0.86	46	5.4	290
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	2.3	3.5	9.3
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	110	4.6	580
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	0.90	3.2	3.4
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	28	5.8	190

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12249

Lab ID#: 0805220-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] 052019 [redacted] Date of Collection: 5/7/08
Dil Factor: [redacted] 1.71 [redacted] Date of Analysis: 5/20/08 09:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	96	70-130

0044

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052019.d
Lab Smp Id: 0805220-03A
Inj Date : 20-MAY-2008 21:20
Operator : kr Inst ID: msd1.i
Smp Info : 100mL #96102
Misc Info : 6.5"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 18:39 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	300939	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	237560			28.28- 128.28	78.94
14.255	14.255 (1.000)	49	551685			132.70- 232.70	183.32
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1539534	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	237538			0.00- 65.54	15.43
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.006 (1.000)	117	1735888	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	988476			8.42- 108.42	56.94
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.140 (1.060)	65	474133	23.6088	23.609	80.00- 120.00	100.00
15.139	15.140 (1.060)	67	245575			6.04- 106.04	51.79
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1726791	24.7544	24.754	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	172718			0.00- 60.35	10.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1122515			15.45- 115.45	65.01
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.075)	174	889625	23.9506	23.951	80.00- 120.00	100.00
21.499	21.527 (1.073)	95	1451553			112.36- 212.36	163.16
21.526	21.527 (1.075)	176	856405			46.57- 146.57	96.27
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.918	2.890 (0.204)	85	33749	1.01731	1.740	80.00- 120.00	100.00
2.890	2.890 (0.202)	87	2859			0.00- 75.39	8.47
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	19032	0.85189	1.457	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	11463			13.61- 113.61	60.23
10.577	10.577 (0.741)	101	25860			84.63- 184.63	135.88
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	30137	0.97301	1.664	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	14111			3.46- 103.46	46.82
10.522	10.522 (0.737)	98	11052			0.00- 84.66	36.67
48 Carbon Disulfide					CAS #: 75-15-0		
10.854	10.826 (0.760)	76	30920	0.60608	1.036	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	2676660	99.7636	170.60	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	1707188			13.80- 113.80	63.78
11.739	11.739 (0.822)	51	804616			0.00- 79.96	30.06
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2394029	56.2385	96.168	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1474026			12.63- 112.63	61.57
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.586	14.587 (1.021)	97	101023	2.26170	3.868	80.00- 120.00	100.00
14.586	14.587 (1.021)	99	64136			14.19- 114.19	63.49
84 Cyclohexane					CAS #: 110-82-7		
14.586	14.559 (1.021)	84	39532	1.06201	1.816	80.00- 120.00	100.00
14.559	14.559 (1.019)	56	66947			84.94- 184.94	169.35
14.559	14.559 (1.019)	41	38426			21.35- 121.35	97.20
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	1112897	26.9379	46.064	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	1148661			52.80- 152.80	103.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	43340	1.33786	2.288	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	14210			0.00- 83.51	32.79
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	2024830	63.0315	107.78	80.00- 120.00	100.00
16.107	16.107 (1.023)	130	1957421			46.95- 146.95	96.67
16.107	16.107 (1.023)	97	1305857			13.89- 113.89	64.49
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	56593	0.52523	0.8982	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	36663			9.42- 109.42	64.78
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.939)	166	684871	16.0931	27.519	80.00- 120.00	100.00
18.817	18.817 (0.939)	129	537131			27.45- 127.45	78.43
18.817	18.817 (0.939)	131	513049			24.16- 124.16	74.91

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052019.d
Lab Smp Id: 0805220-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

Calibration Date: 20-MAY-2008
Calibration Time: 12:26

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	300939	-7.66
95 1,4-Difluorobenze	1718149	1030889	2405409	1539534	-10.40
123 Chlorobenzene-d5	1889046	1133428	2644664	1735888	-8.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0805220-03A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 6.5"Hg -> 5psi

Client SDG: 1-20may
Fraction: VOA

Operator: kr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.609	94.44	70-130
$ 111 Toluene-d8	25.000	24.754	99.02	70-130
$ 136 Bromofluorobenzene	25.000	23.951	95.80	70-130

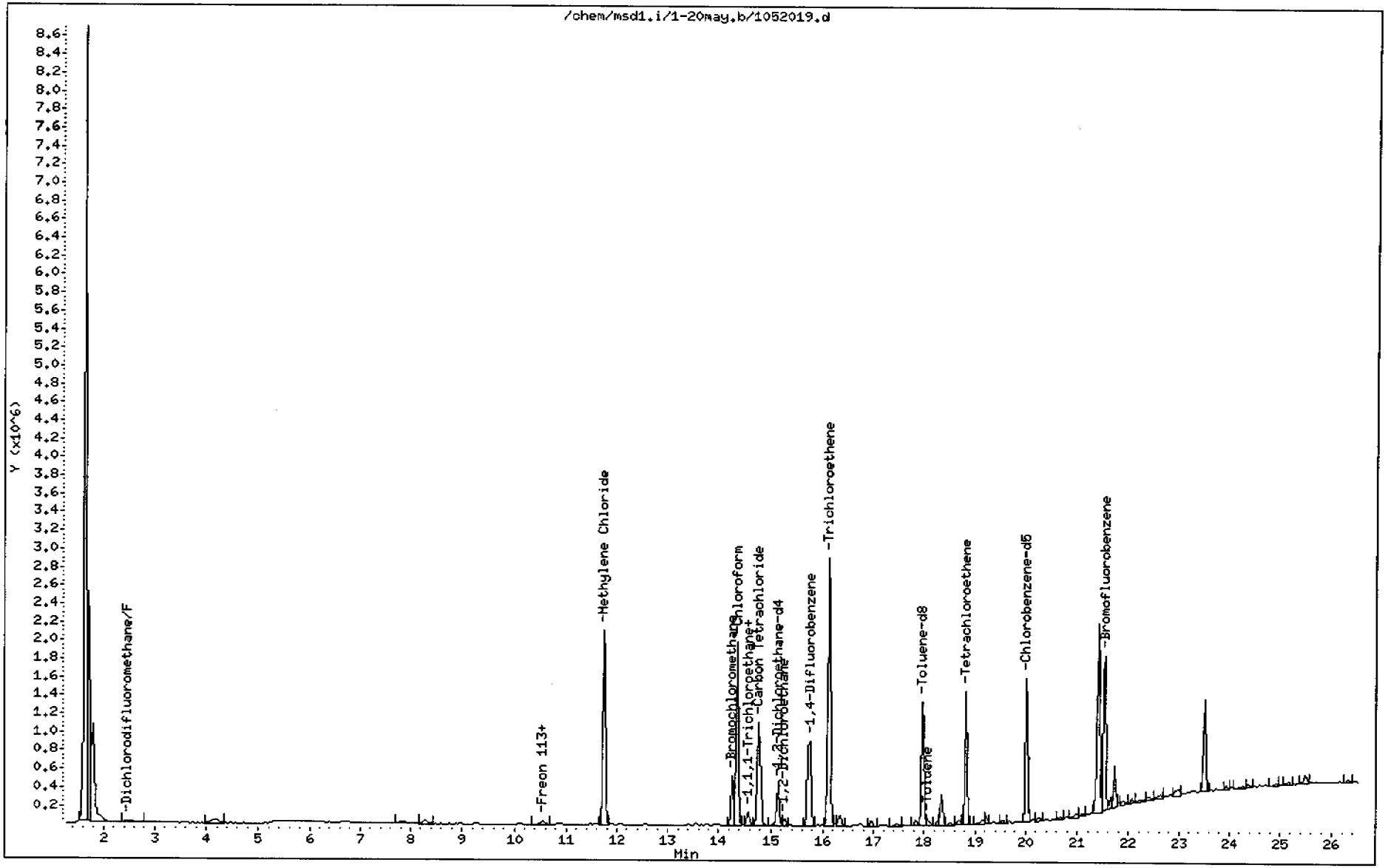
Data File: /chem/msd1.i/1-20may.b/1052019.d
Date : 20-MAY-2008 21:20
Client ID:
Sample Info: 100mL #96102

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0050



Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

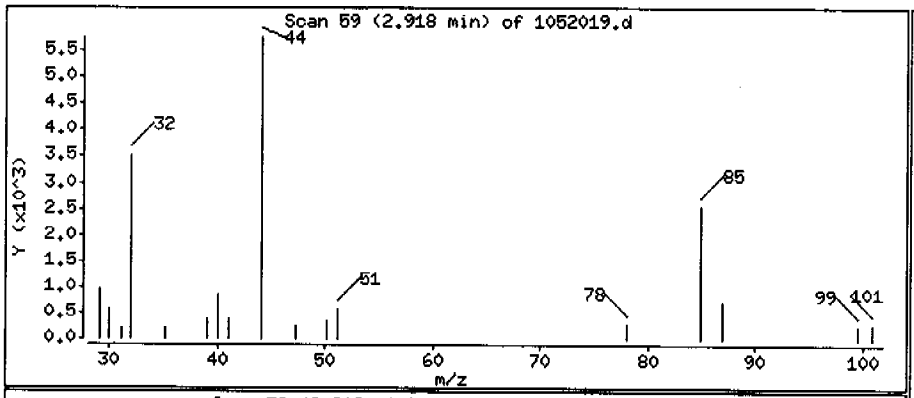
Operator: kr

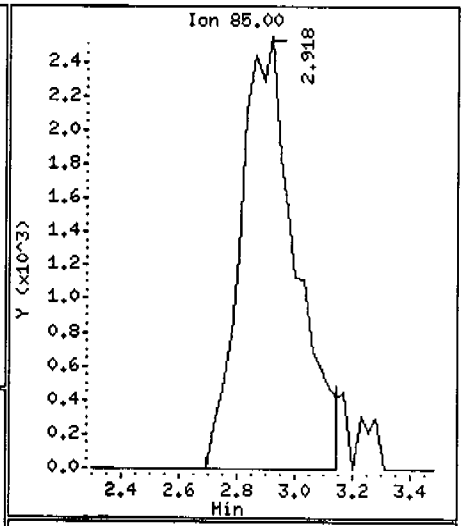
Column phase: RTx-624

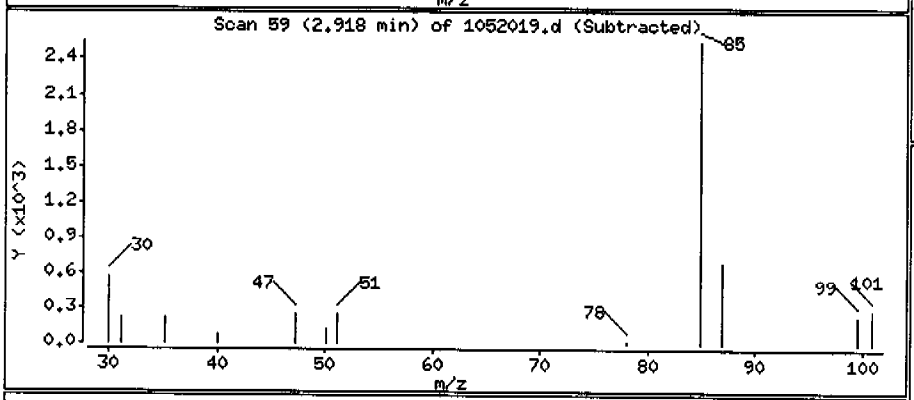
Column diameter: 0.53

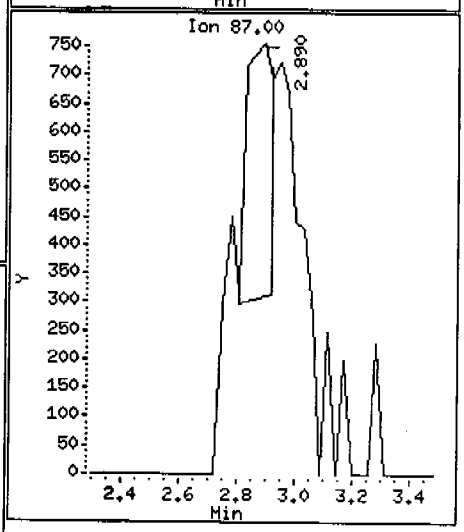
14 Dichlorodifluoromethane/Fr12

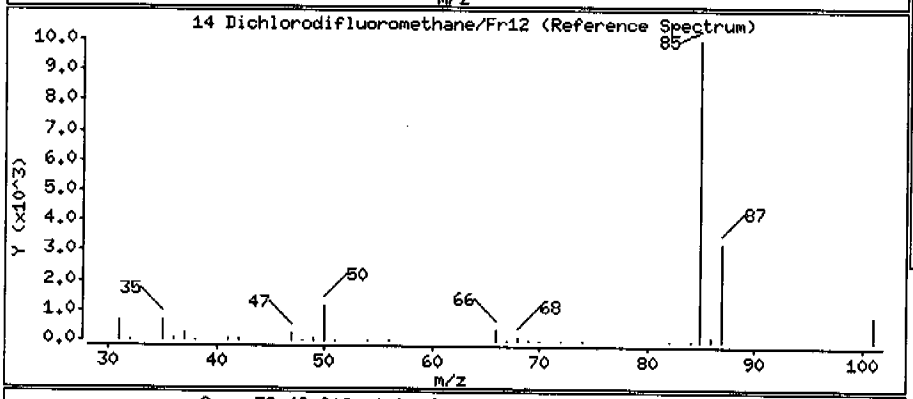
Concentration: 1.740 PPBV

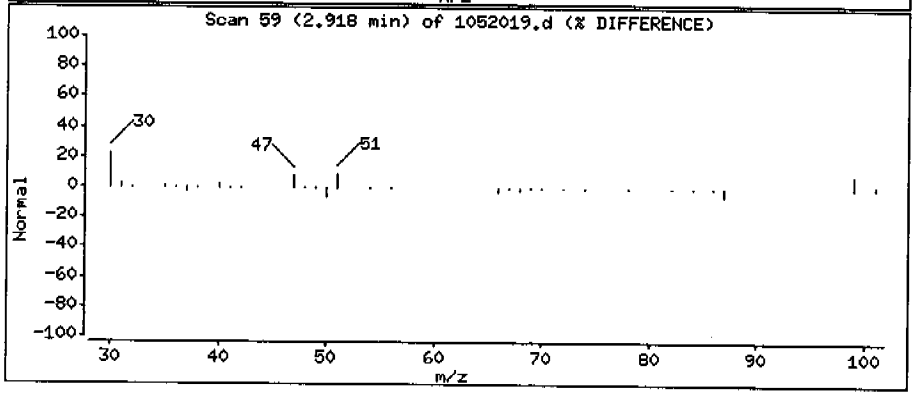












0051

Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

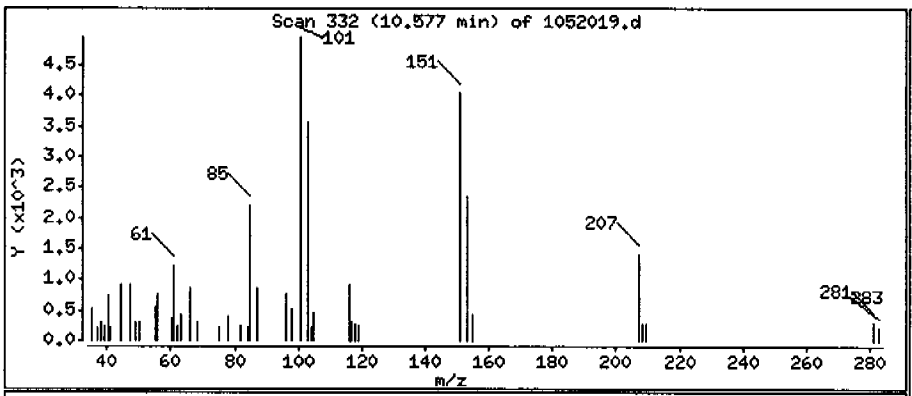
Operator: kr

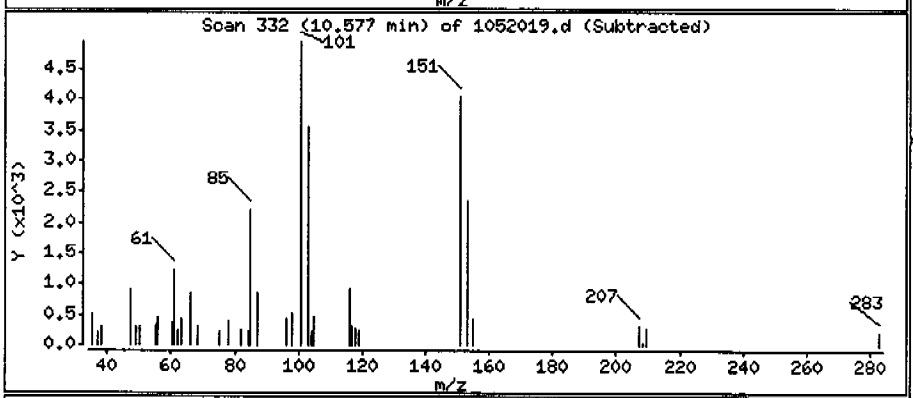
Column phase: RTx-624

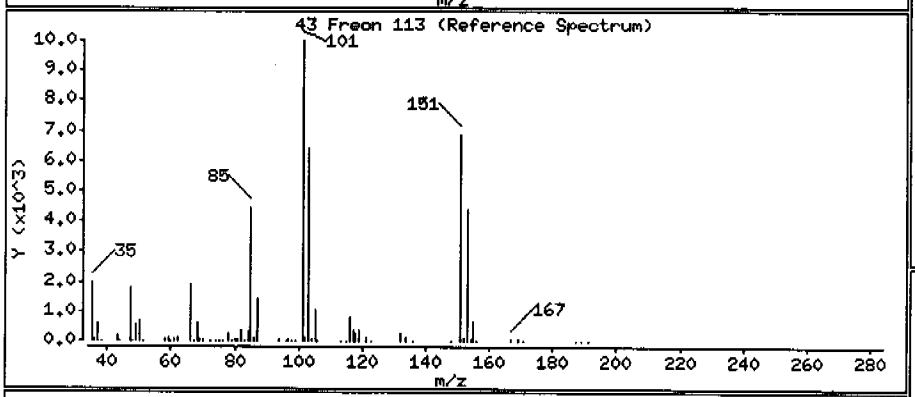
Column diameter: 0.53

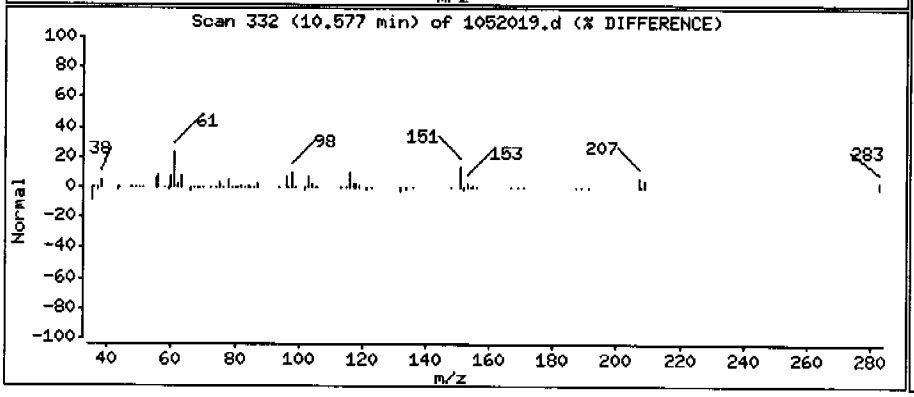
43 Freon 113

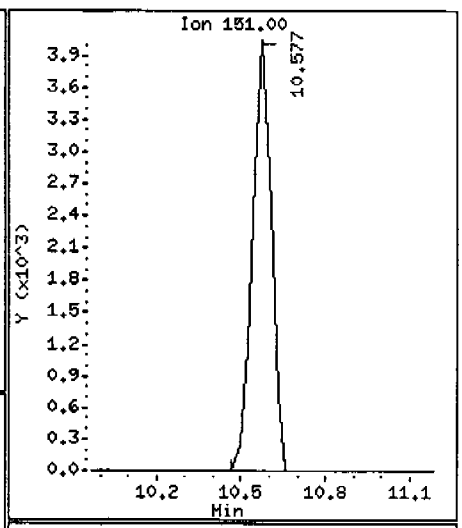
Concentration: 1.457 PPBV

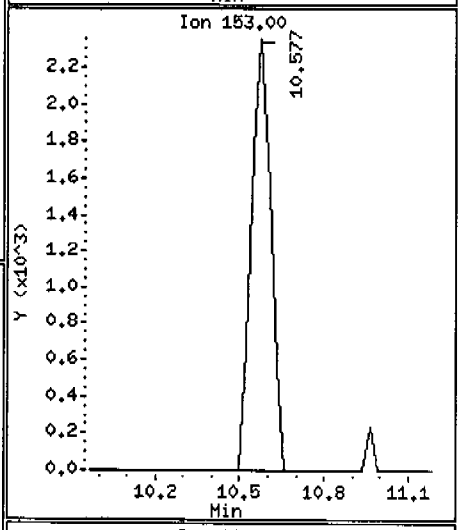


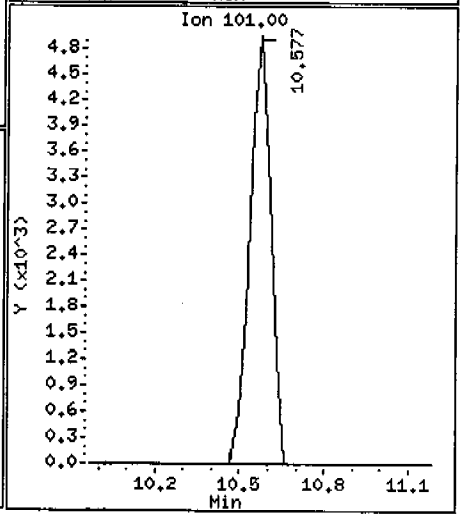












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

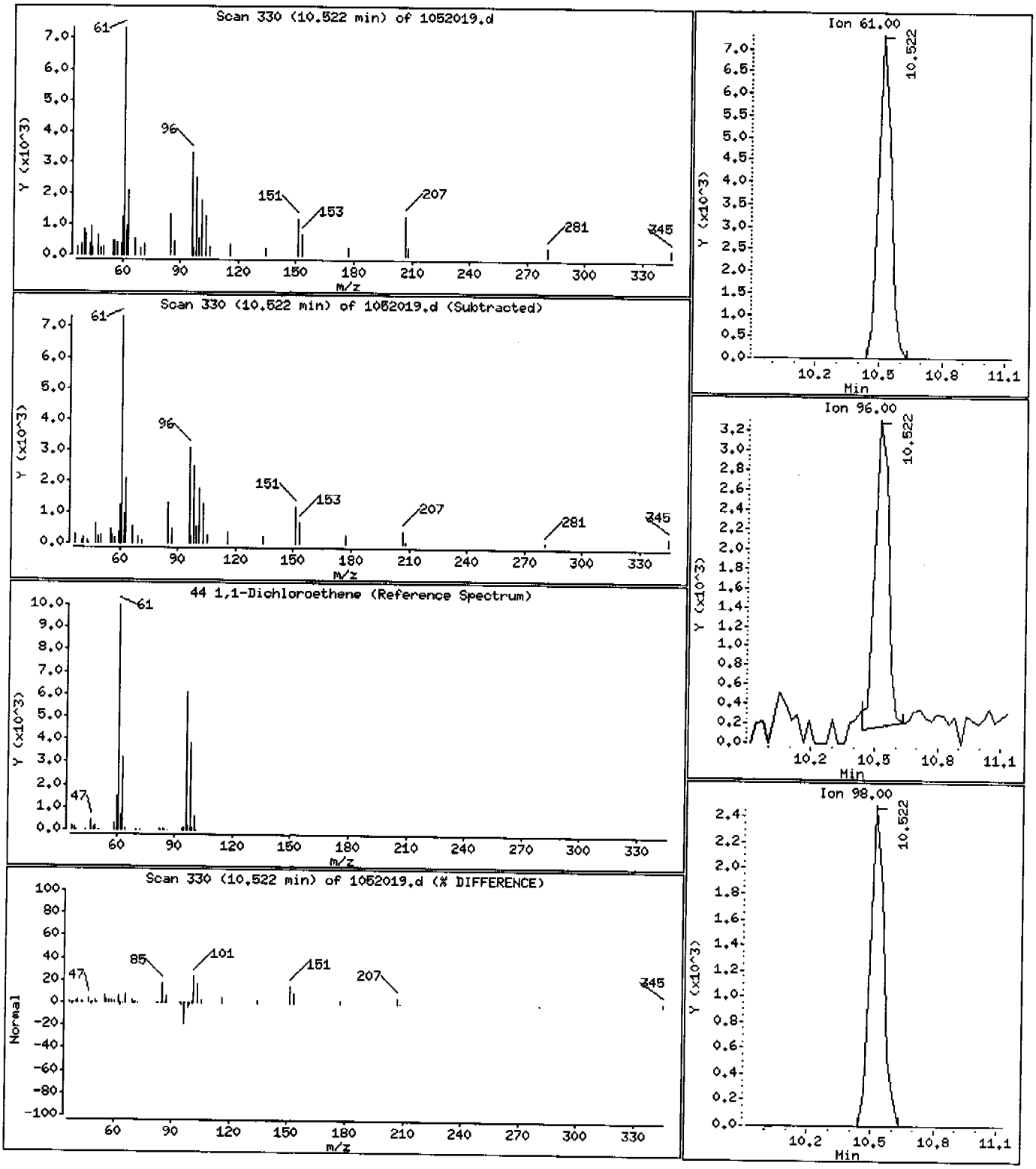
Operator: kr

Column phase: RTx-624

Column diameter: 0.53

44 1,1-Dichloroethene

Concentration: 1.664 PPBV



Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

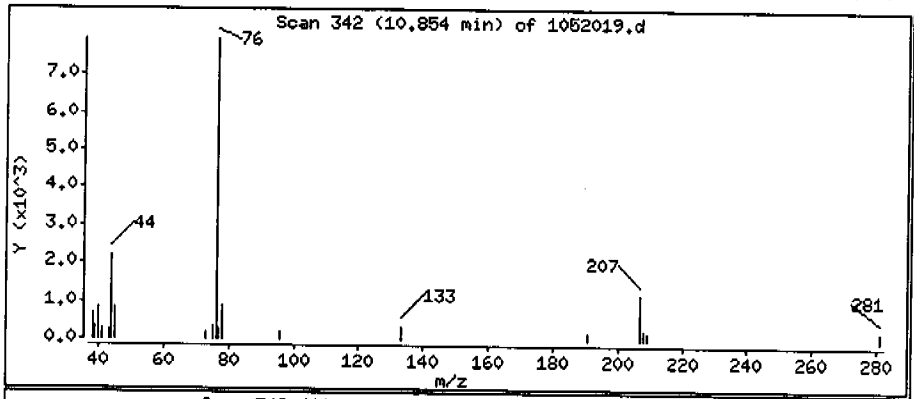
Operator: kr

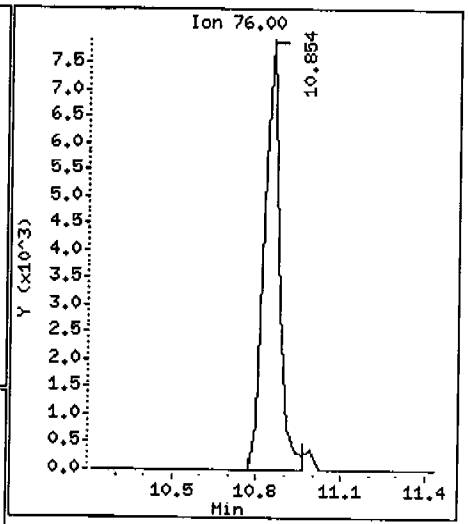
Column phase: RTx-624

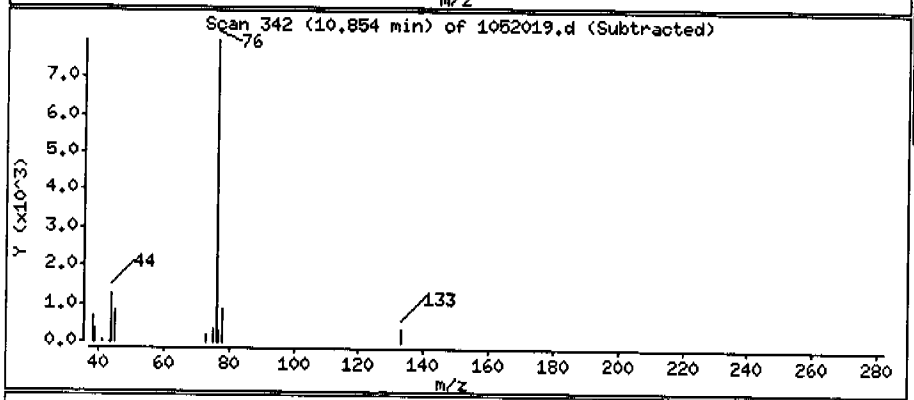
Column diameter: 0.53

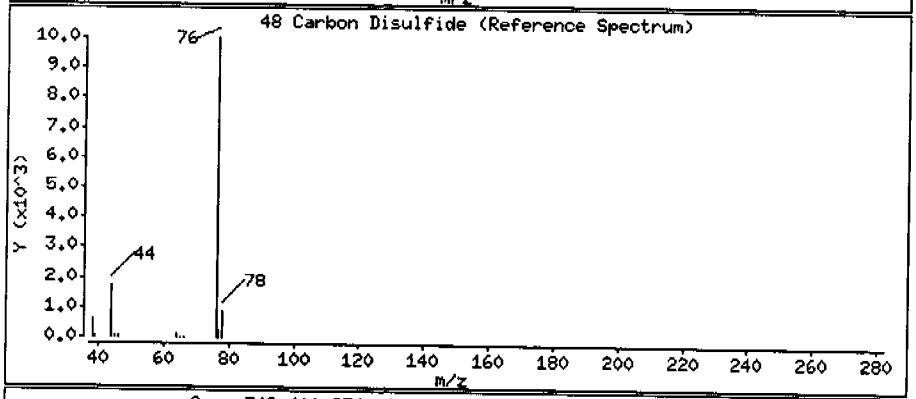
48 Carbon Disulfide

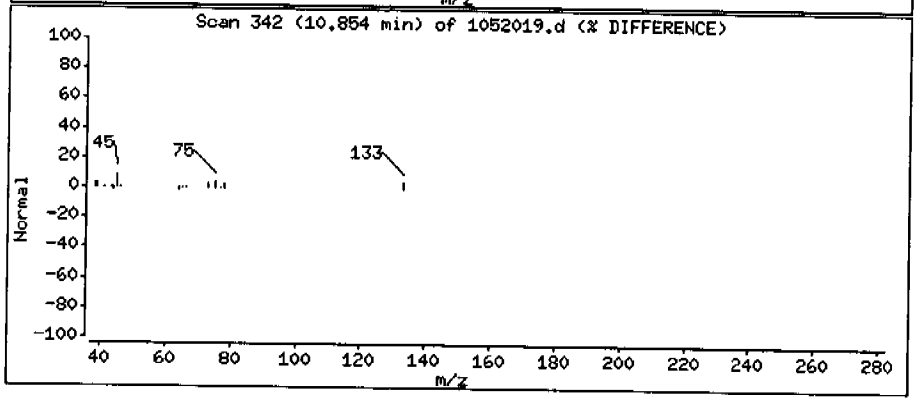
Concentration: 1.036 PPBV











Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Sample Info: 100mL #96102

Instrument: msd1.i

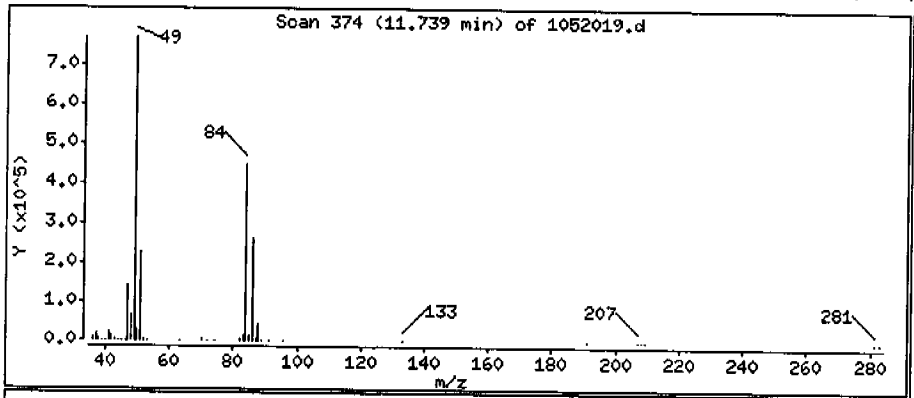
Operator: kr

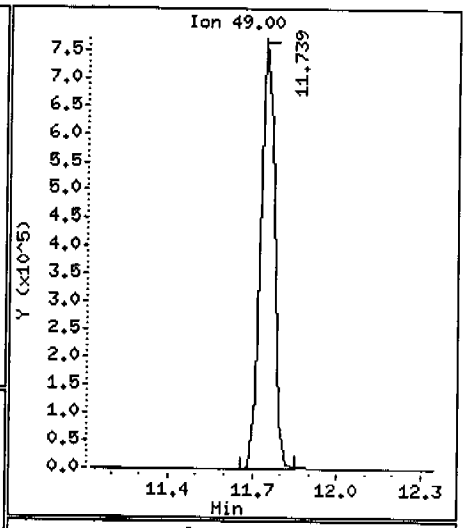
Column phase: RTx-624

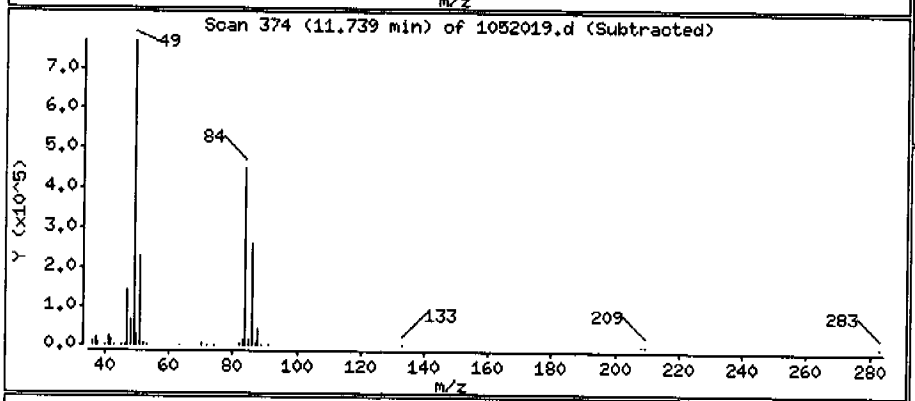
Column diameter: 0.53

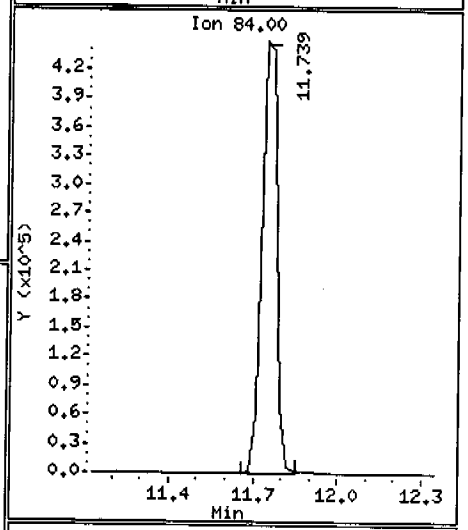
54 Methylene Chloride

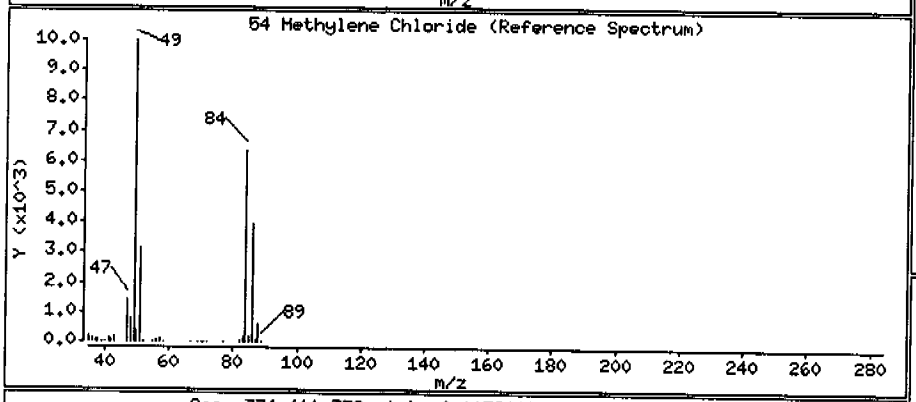
Concentration: 170.60 PPBV

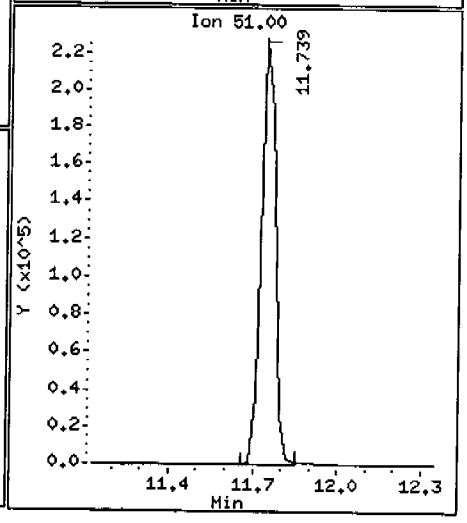


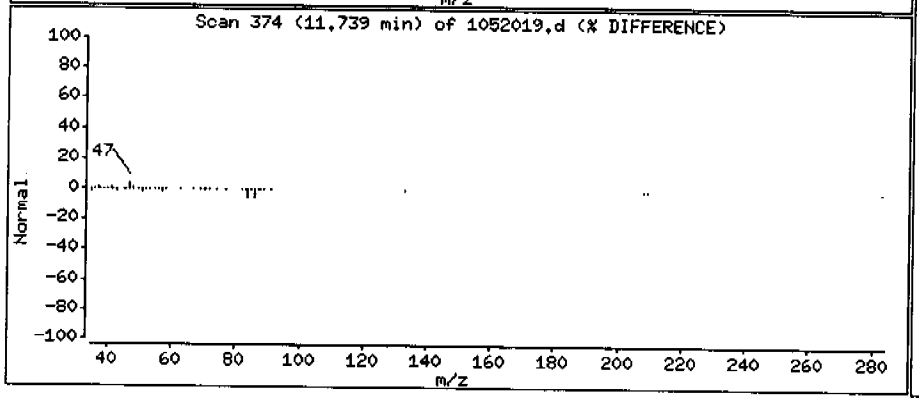












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

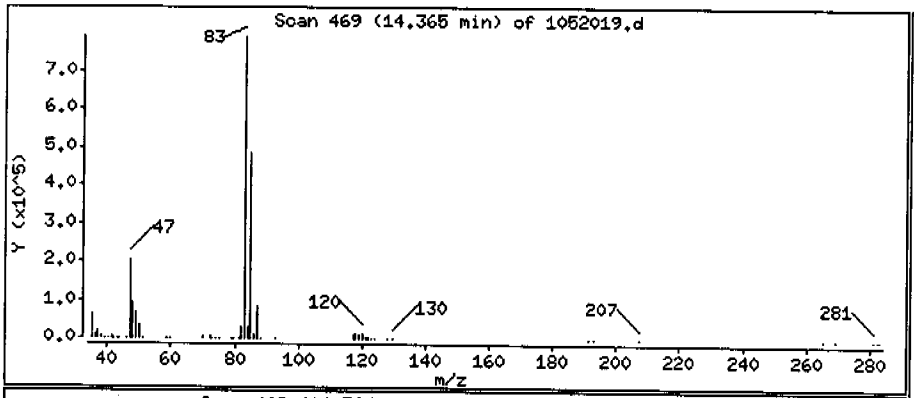
Operator: kr

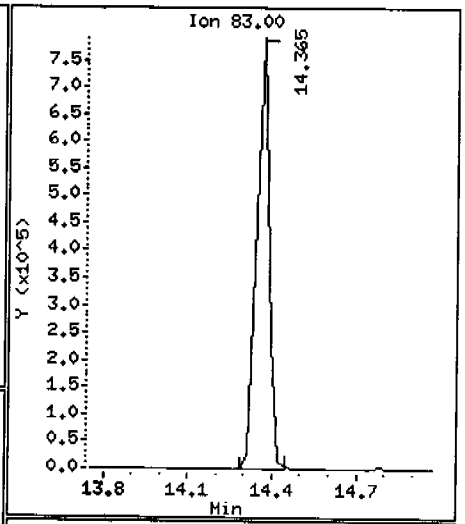
Column phase: RTx-624

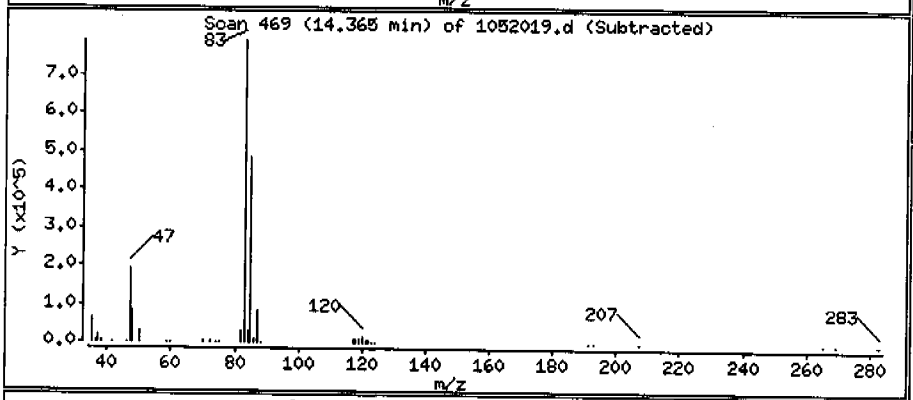
Column diameter: 0.53

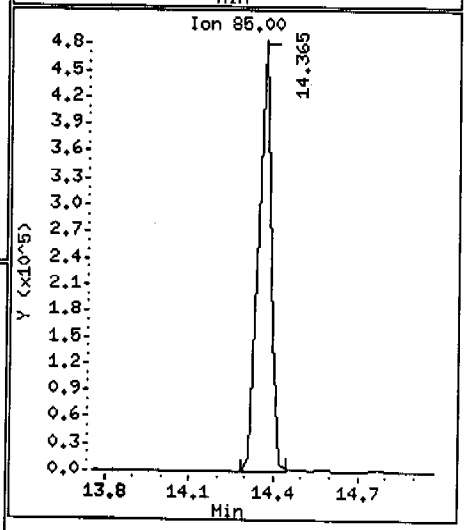
81 Chloroform

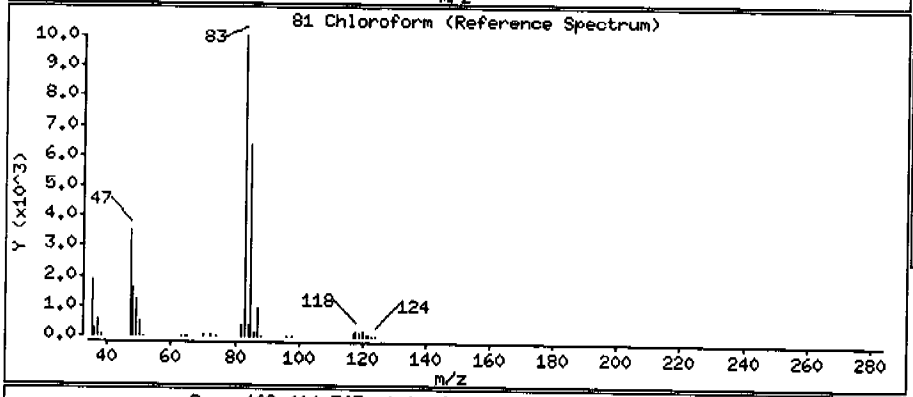
Concentration: 96.168 PPBV

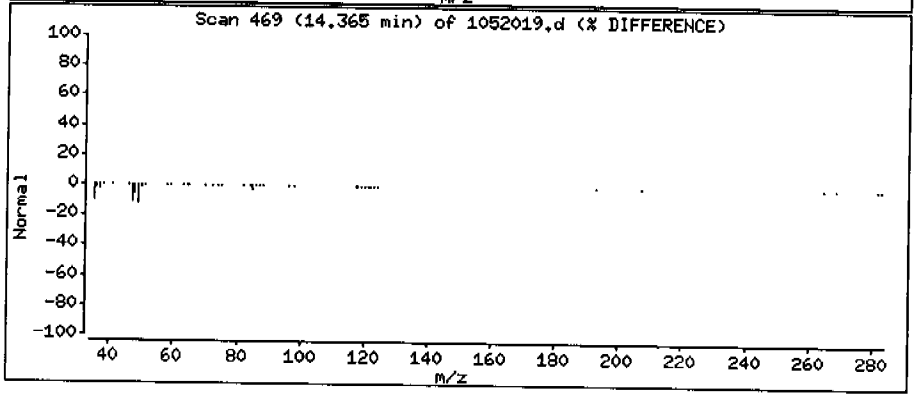












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

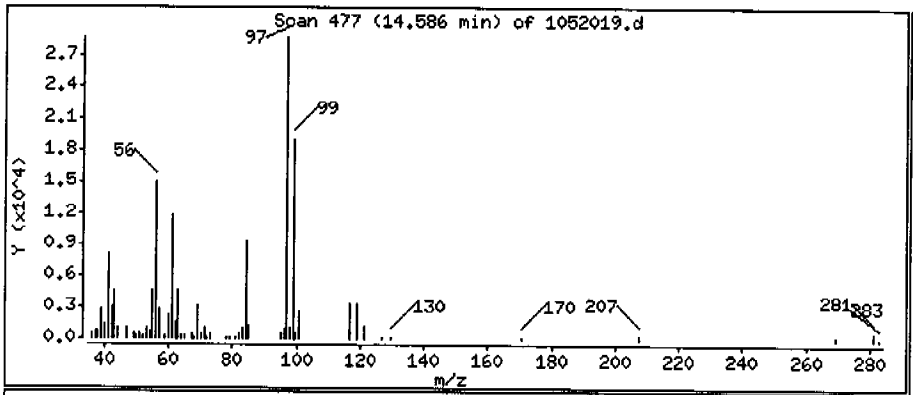
Operator: kr

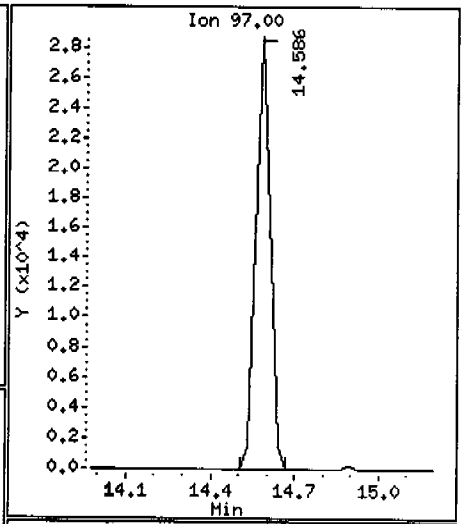
Column phase: RTx-624

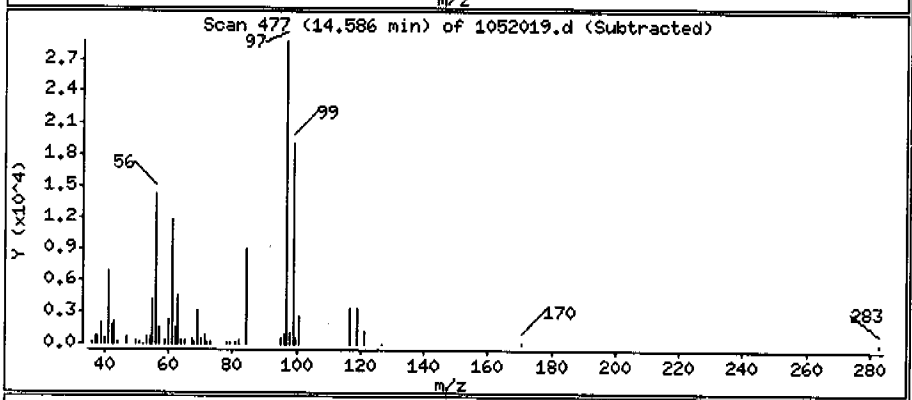
Column diameter: 0.53

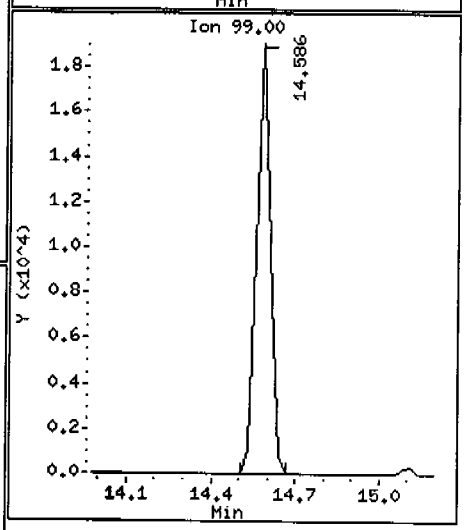
83 1,1,1-Trichloroethane

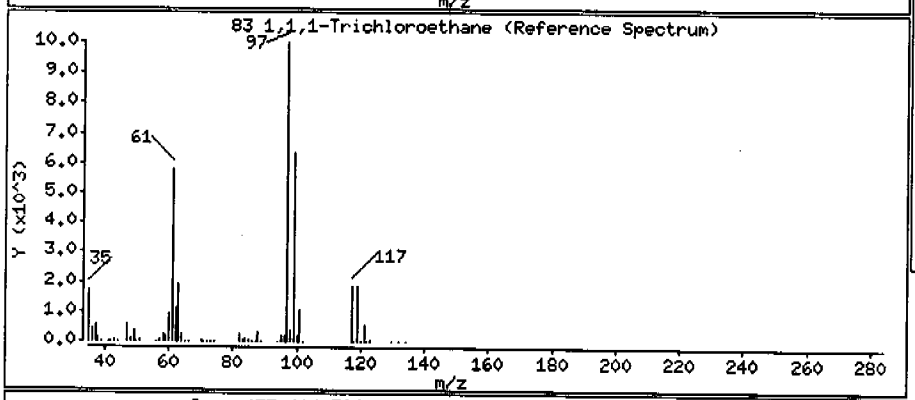
Concentration: 3.868 PPBV

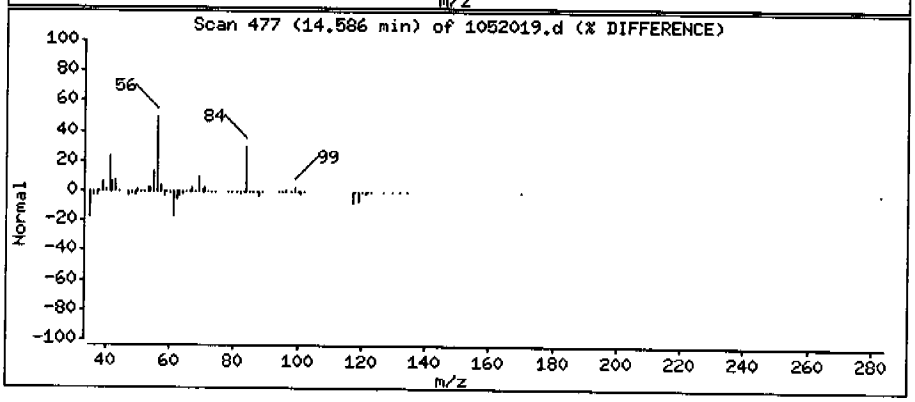












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

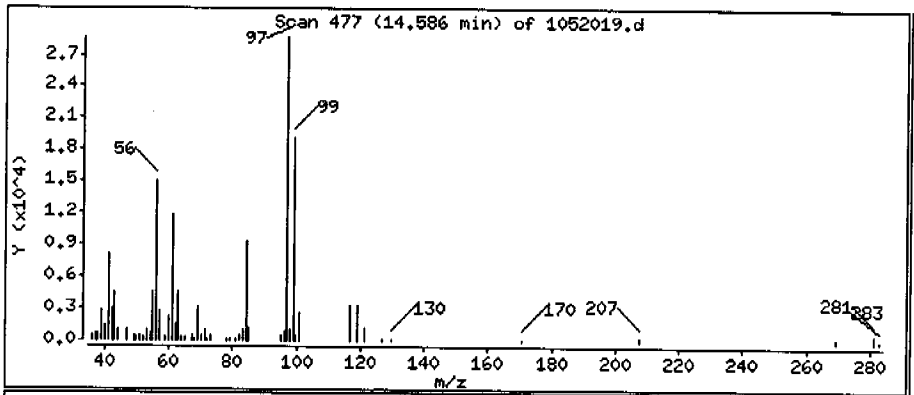
Operator: kr

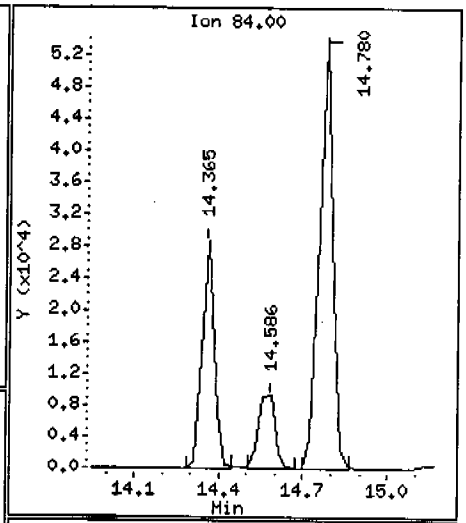
Column phase: RTx-624

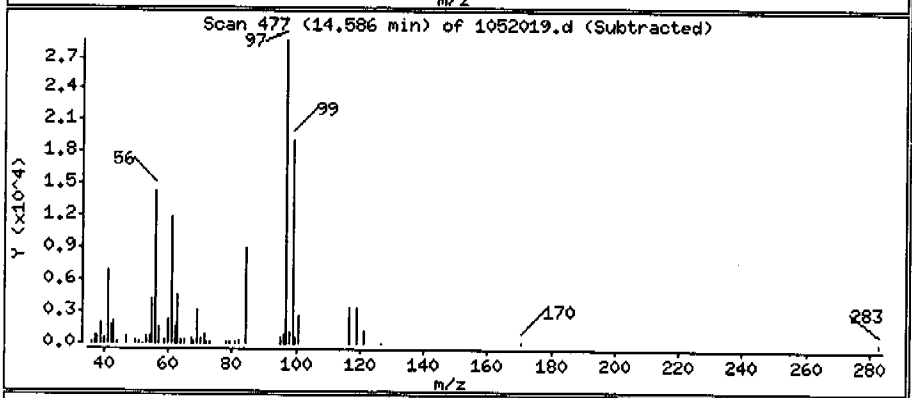
Column diameter: 0.53

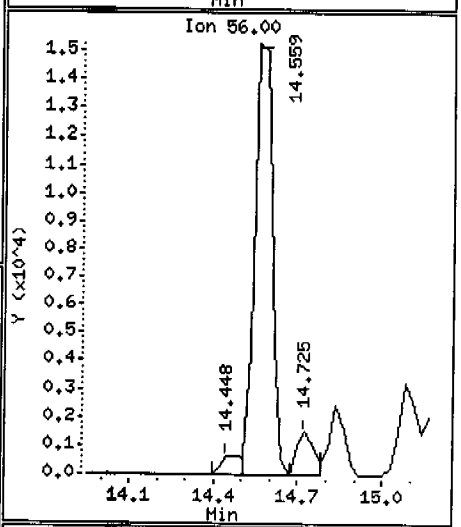
84 Cyclohexane

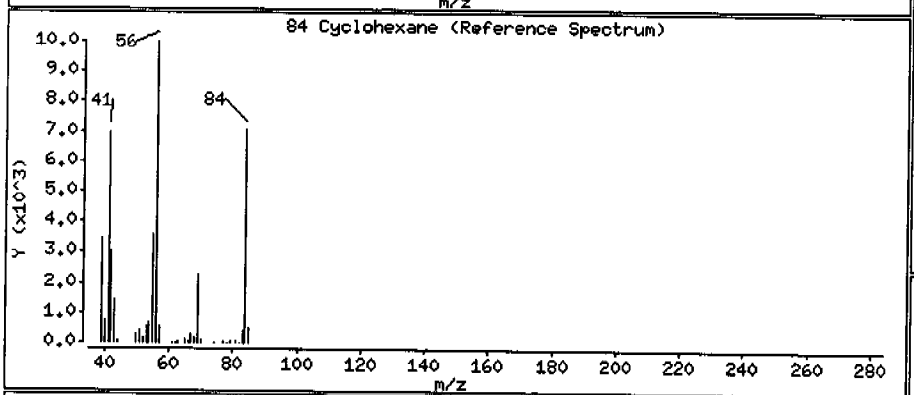
Concentration: 1.816 PPBV

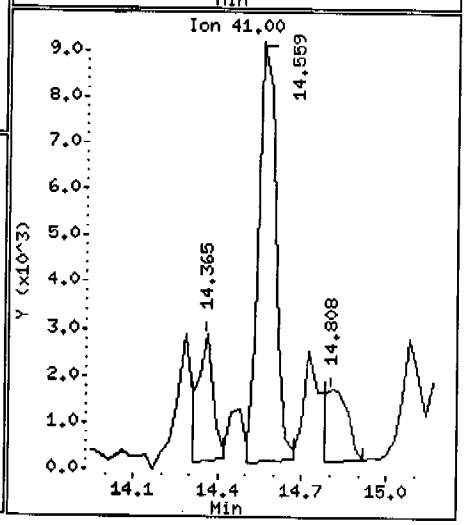


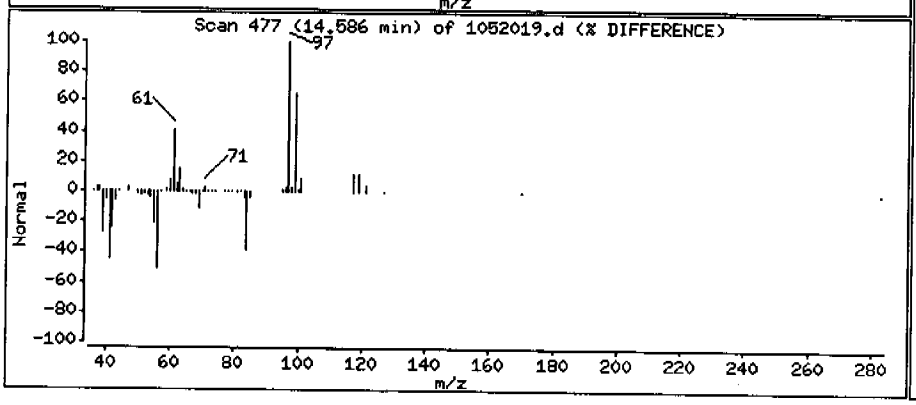












0058

Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Sample Info: 100mL #96102

Instrument: msd1.i

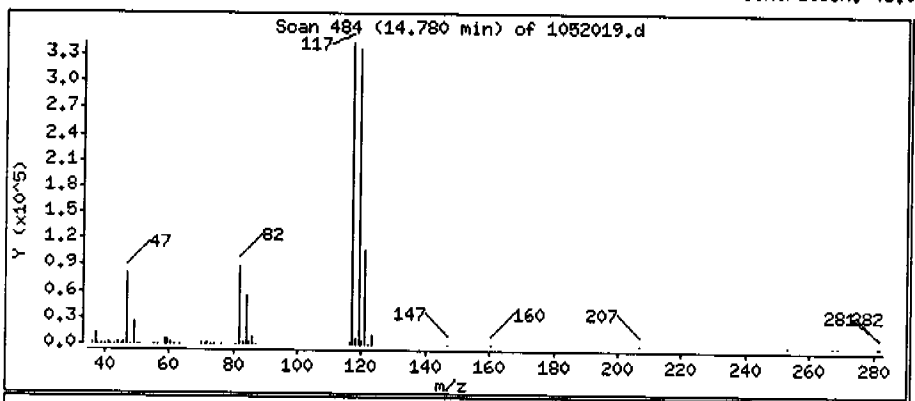
Operator: kr

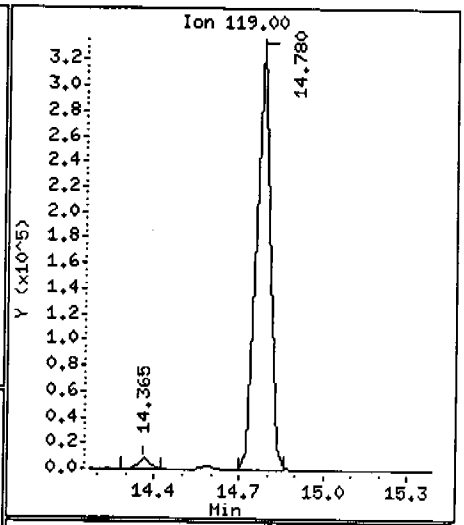
Column phase: RTx-624

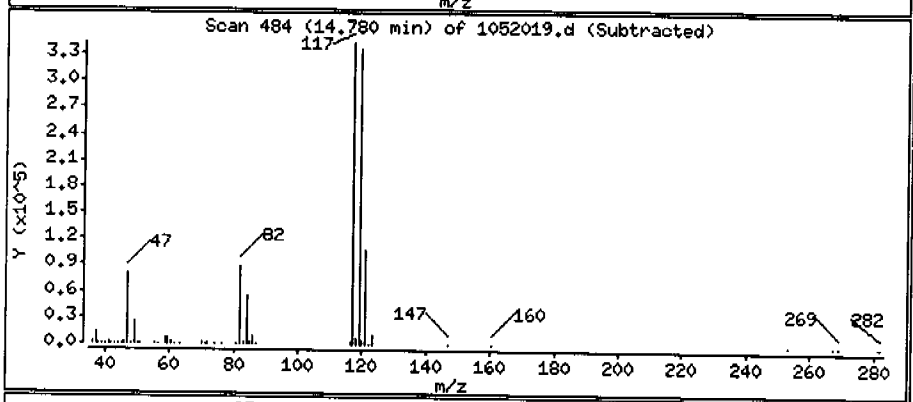
Column diameter: 0.53

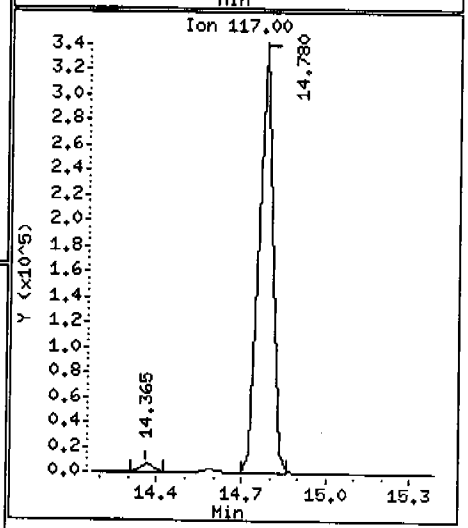
85 Carbon Tetrachloride

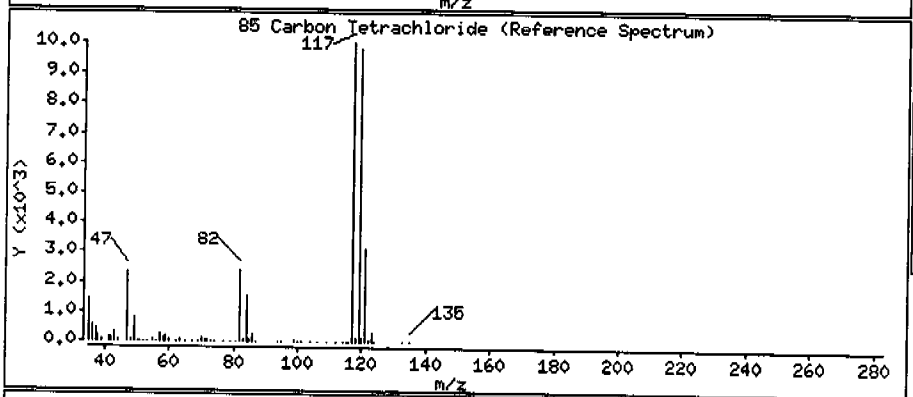
Concentration: 46.064 PPBV

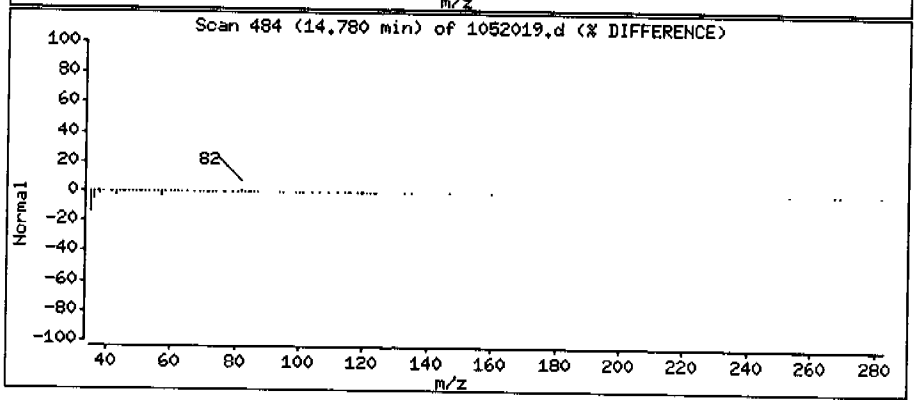












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

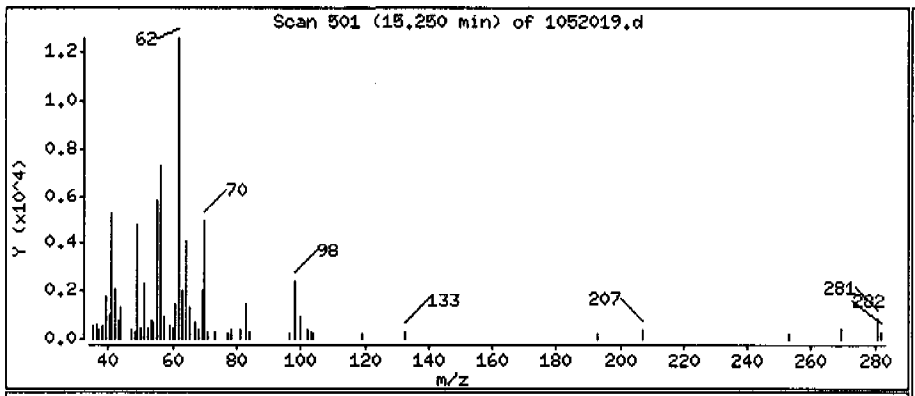
Operator: kr

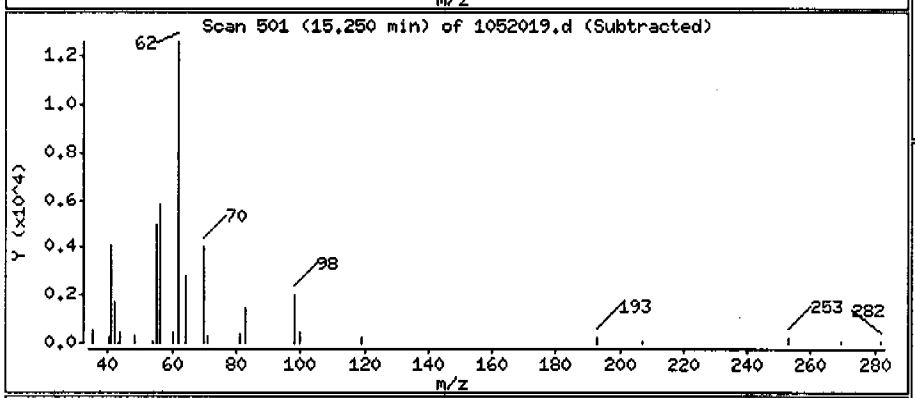
Column phase: RTx-624

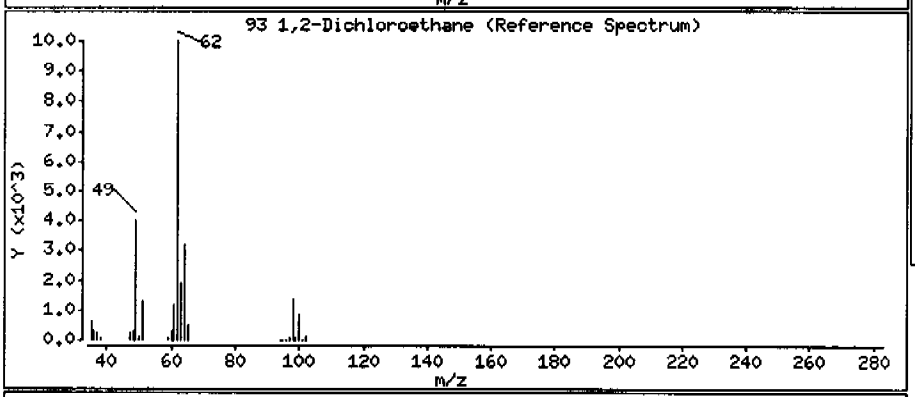
Column diameter: 0.53

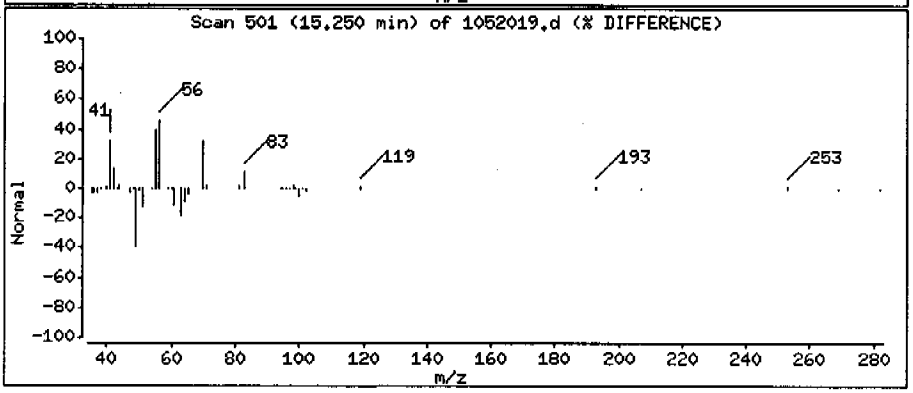
93 1,2-Dichloroethane

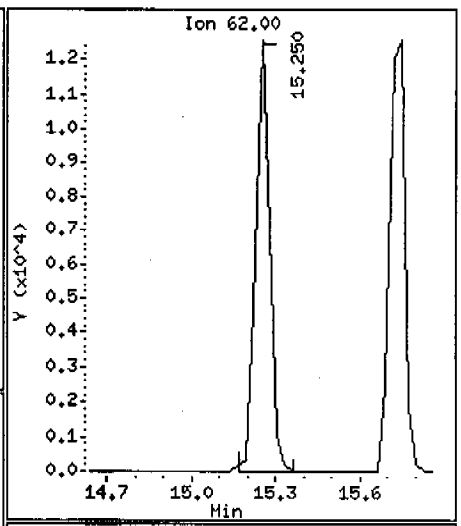
Concentration: 2,288 PPBV

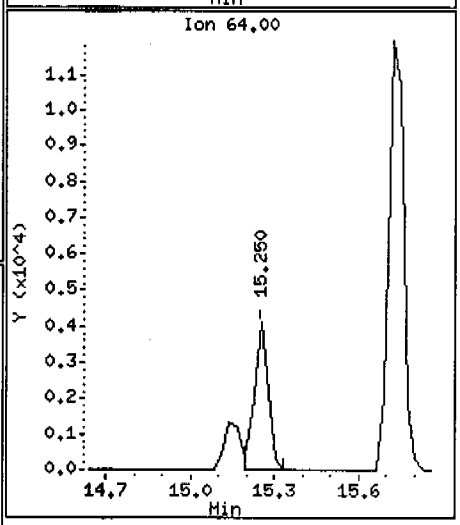












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

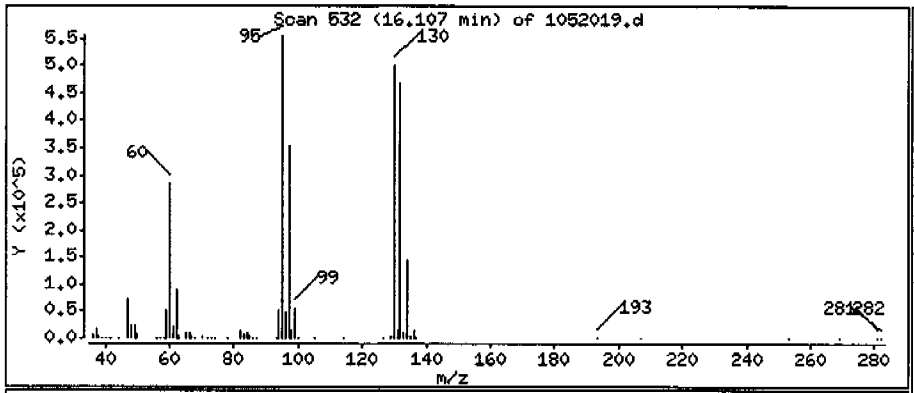
Operator: kr

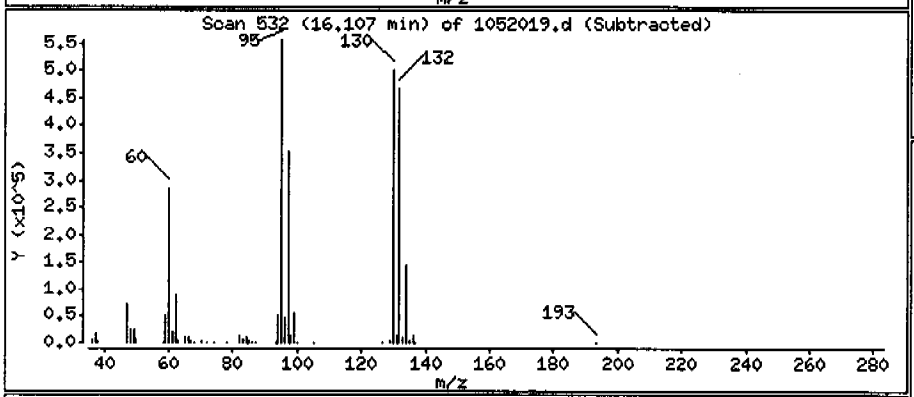
Column phase: RTx-624

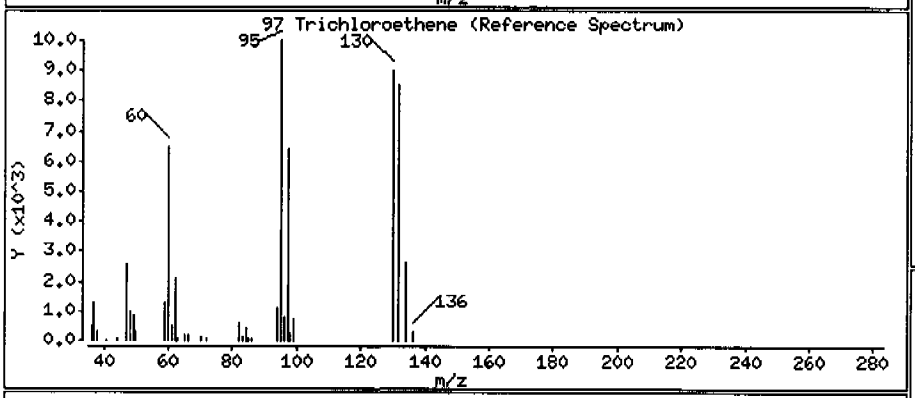
Column diameter: 0.53

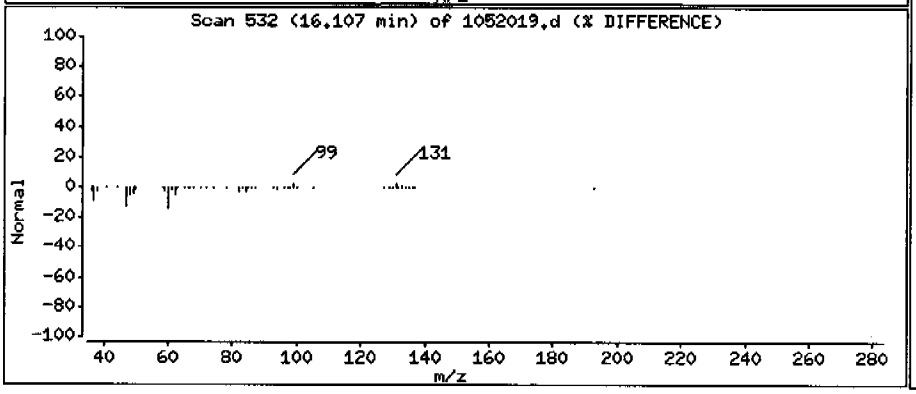
97 Trichloroethene

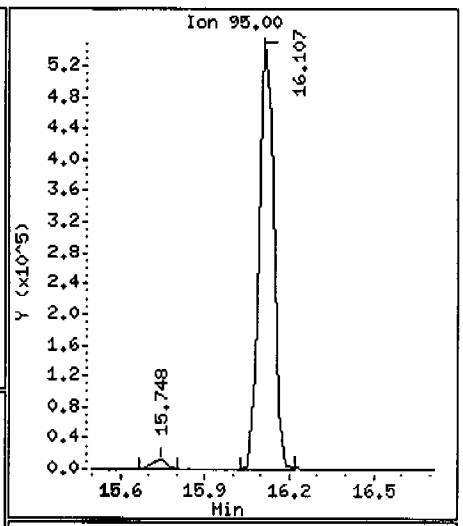
Concentration: 107.78 PPBV

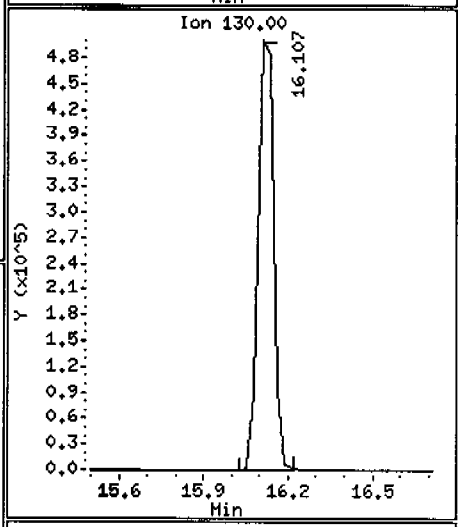


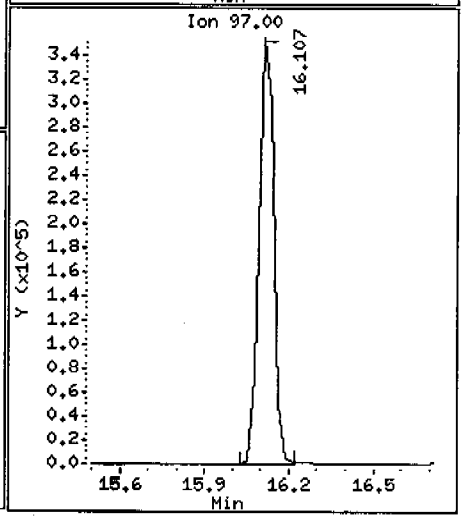












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

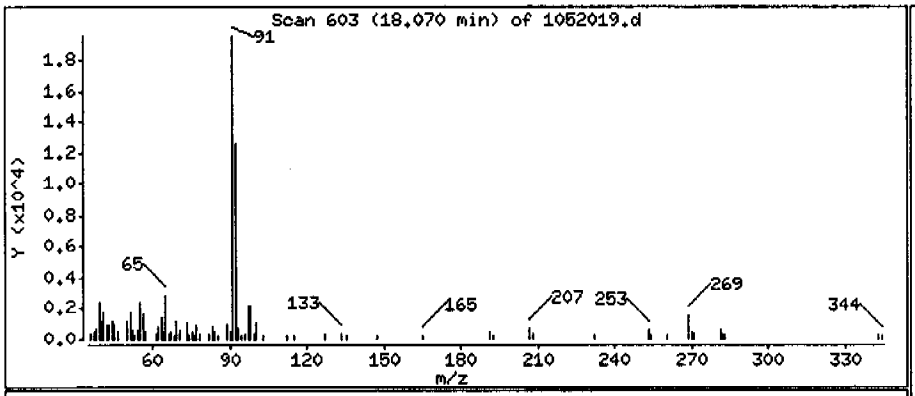
Operator: kr

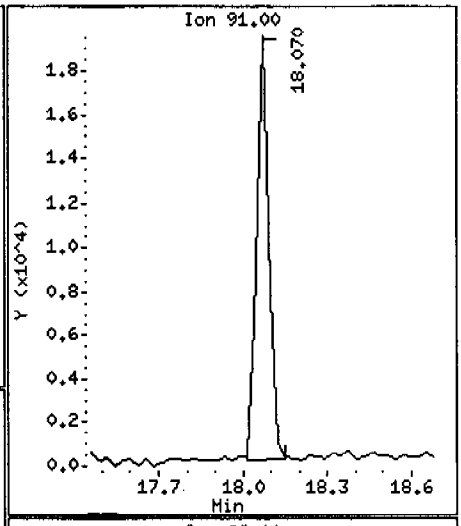
Column phase: RTx-624

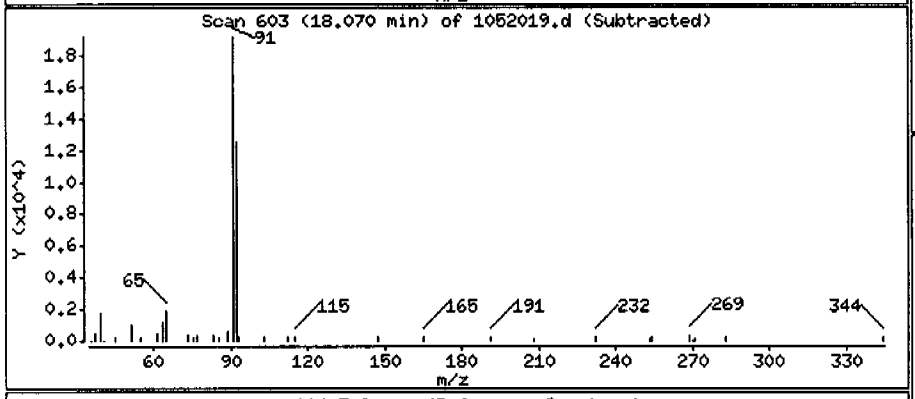
Column diameter: 0.53

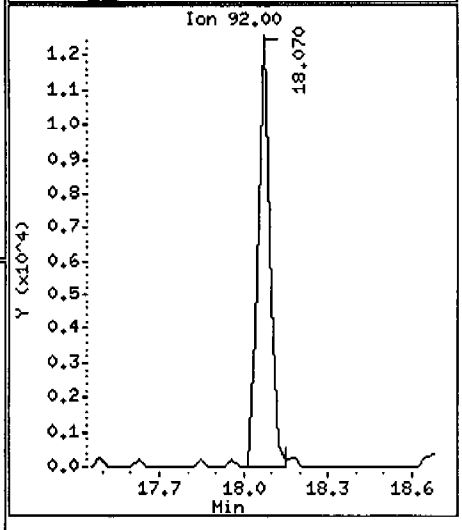
114 Toluene

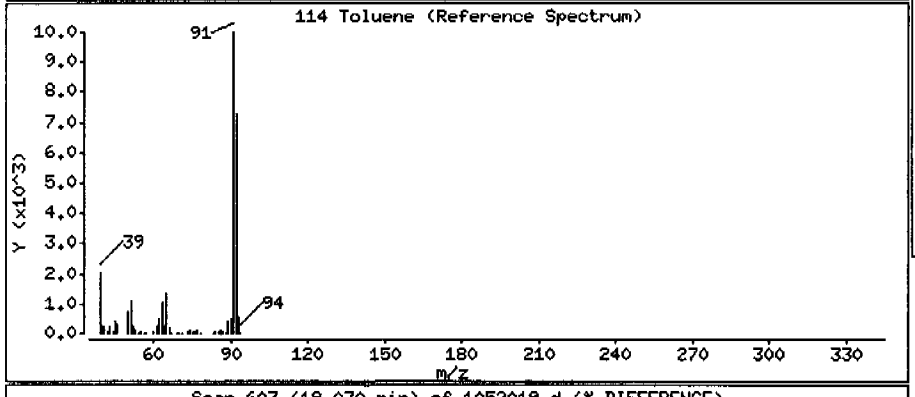
Concentration: 0.8982 PPBV

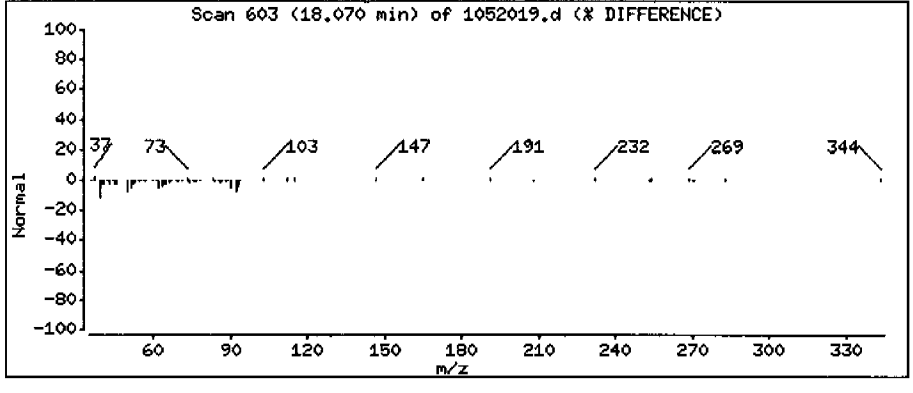












Data File: /chem/msd1.i/1-20may.b/1052019.d

Date : 20-MAY-2008 21:20

Client ID:

Instrument: msd1.i

Sample Info: 100mL #96102

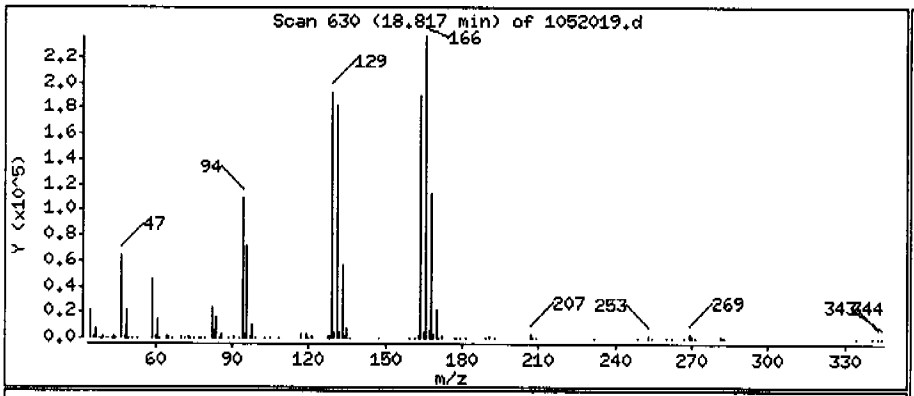
Operator: kr

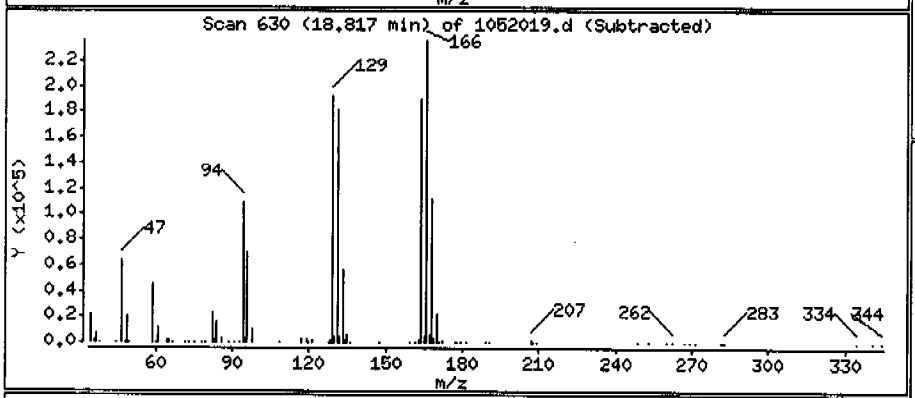
Column phase: RTx-624

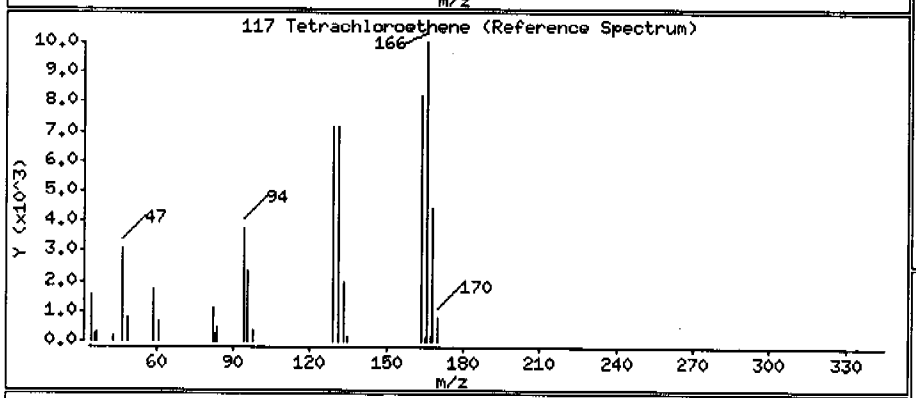
Column diameter: 0.53

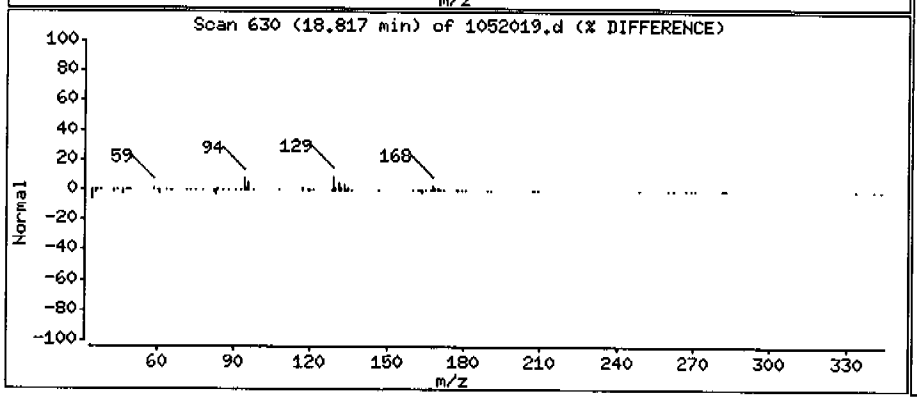
117 Tetrachloroethene

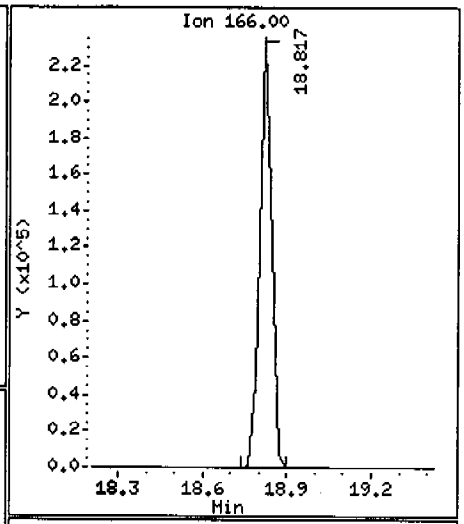
Concentration: 27.519 PPBV

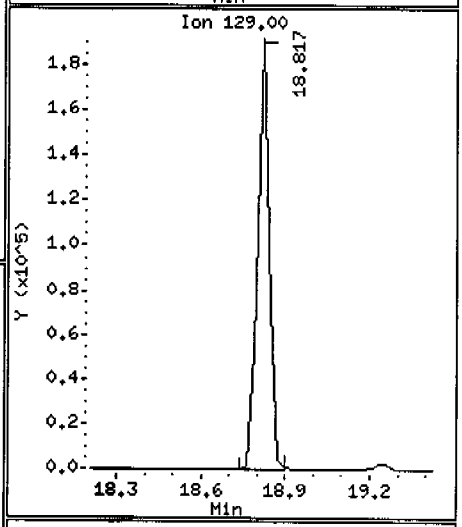


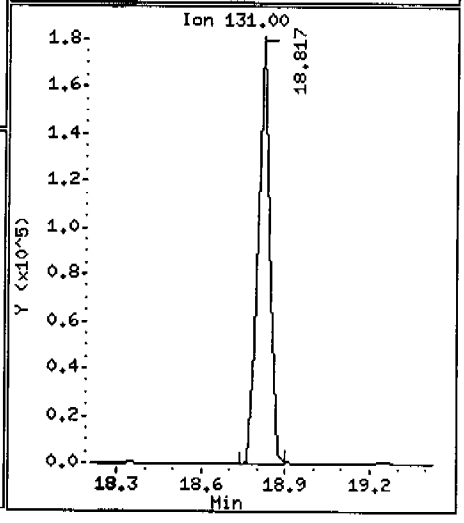












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12250

Lab ID#: 0805220-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	0.88	1.4	6.7	11
1,1-Dichloroethene	0.88	1.9	3.5	7.6
Acetone	3.5	45	8.3	110
Methylene Chloride	0.88	340	3.0	1200
2-Butanone (Methyl Ethyl Ketone)	0.88	3.6	2.6	11
Chloroform	0.88	120	4.3	570
1,1,1-Trichloroethane	0.88	1.6	4.8	8.6
Carbon Tetrachloride	0.88	53	5.5	340
1,2-Dichloroethane	0.88	3.2	3.5	13
Trichloroethene	0.88	110	4.7	600
Tetrachloroethene	0.88	11	5.9	77
1,4-Dichlorobenzene	0.88	1.0	5.3	6.0

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12250

Lab ID#: 0805220-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 052020 Date of Collection: 5/7/08
Dil. Factor: 1.75 Date of Analysis: 5/20/08 10:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	1.4	6.7	11
1,1-Dichloroethene	0.88	1.9	3.5	7.6
Acetone	3.5	45	8.3	110
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	340	3.0	1200
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	3.6	2.6	11
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	120	4.3	570
1,1,1-Trichloroethane	0.88	1.6	4.8	8.6
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	53	5.5	340
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	3.2	3.5	13
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	110	4.7	600
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	11	5.9	77

0065

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12250

Lab ID#: 0805220-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: [redacted] 1052020 | Date of Collection: 5/7/08
Dil. Factor: [redacted] 1.75 | Date of Analysis: 5/20/08 10:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	1.0	5.3	6.0
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	97	70-130

0066

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052020.d
Lab Smp Id: 0805220-04A
Inj Date : 20-MAY-2008 22:00
Operator : kr Inst ID: msd1.i
Smp Info : 100mL #5696
Misc Info : 7.0"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 18:39 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane						CAS #: 74-97-5		
14.282	14.255	(1.000)	130	304218	25.0000		80.00- 120.00	100.00
14.282	14.255	(1.000)	128	232721			28.28- 128.28	76.50
14.255	14.255	(1.000)	49	540447			132.70- 232.70	177.65
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748	(1.000)	114	1536258	25.0000		80.00- 120.00	100.00
15.748	15.748	(1.000)	88	239095			0.00- 65.54	15.56
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.034	20.006	(1.000)	117	1709265	25.0000		80.00- 120.00	100.00
20.006	20.006	(1.000)	82	990477			8.42- 108.42	57.95
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.140	15.140	(1.060)	65	477043	23.4977	23.498	80.00- 120.00	100.00
15.140	15.140	(1.060)	67	242246			6.04- 106.04	50.78
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.960	17.960	(1.140)	98	1708096	24.5386	24.538	80.00- 120.00	100.00
17.960	17.960	(1.140)	70	177075			0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1122313			15.45- 115.45	65.71
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	885642	24.2148	24.215	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1434457			112.36- 212.36	161.97
21.527	21.527 (1.075)	176	836228			46.57- 146.57	94.42
43 Freon 113					CAS #: 76-13-1		
10.577	10.577 (0.741)	151	18779	0.83150	1.455	80.00- 120.00	100.00
10.577	10.577 (0.741)	153	12130			13.61- 113.61	64.59
10.577	10.577 (0.741)	101	26109			84.63- 184.63	139.03
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	34182	1.09171	1.910	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	20624			3.46- 103.46	60.34
10.522	10.522 (0.737)	98	12326			0.00- 84.66	36.06
45 Acetone					CAS #: 67-64-1		
10.882	10.882 (0.762)	58	272436	25.9067	45.337	80.00- 120.00	100.00
10.882	10.882 (0.762)	43	923172			275.34- 375.34	338.86
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	5278582	194.621	340.59	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	3345874			13.80- 113.80	63.39
11.739	11.739 (0.822)	51	1571642			0.00- 79.96	29.77
75 2-Butanone					CAS #: 78-93-3		
13.951	13.923 (0.977)	72	22588	2.06104	3.607	80.00- 120.00	100.00
13.951	13.923 (0.977)	43	120514			438.06- 538.06	533.53
13.951	13.923 (0.977)	57	9414			0.00- 90.57	41.68
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2892303	67.2112	117.62	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1824877			12.63- 112.63	63.09
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.021)	97	40645	0.90015	1.575	80.00- 120.00	100.00
14.587	14.587 (1.021)	99	25463			14.19- 114.19	62.65
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	1273416	30.4910	53.359	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	1332296			52.80- 152.80	104.62
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	59164	1.83023	3.203	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 1,2-Dichloroethane (continued)								
15.250	15.250	(0.968)	64	19126			0.00- 83.51	32.33
97 Trichloroethene						CAS #: 79-01-6		
16.107	16.107	(1.023)	95	2048496	63.9042	111.83	80.00- 120.00	100.00
16.135	16.107	(1.025)	130	1974905			46.95- 146.95	96.41
16.107	16.107	(1.023)	97	1324492			13.89- 113.89	64.66
117 Tetrachloroethene						CAS #: 127-18-4		
18.817	18.817	(0.939)	166	271807	6.48642	11.351	80.00- 120.00	100.00
18.817	18.817	(0.939)	129	217274			27.45- 127.45	79.94
18.817	18.817	(0.939)	131	207373			24.16- 124.16	76.29
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.145)	146	50271	0.57117	0.9995	80.00- 120.00	100.00
22.937	22.937	(1.145)	148	29329			16.32- 116.32	58.34
22.937	22.937	(1.145)	111	18222			0.00- 90.95	36.25

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052020.d
Lab Smp Id: 0805220-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 7.0"Hg -> 5psi

Calibration Date: 20-MAY-2008
Calibration Time: 12:26

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	304218	-6.66
95 1,4-Difluorobenze	1718149	1030889	2405409	1536258	-10.59
123 Chlorobenzene-d5	1889046	1133428	2644664	1709265	-9.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 1-20may
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0805220-04A
Level: LOW
Operator: kr
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 7.0"Hg -> 5psi

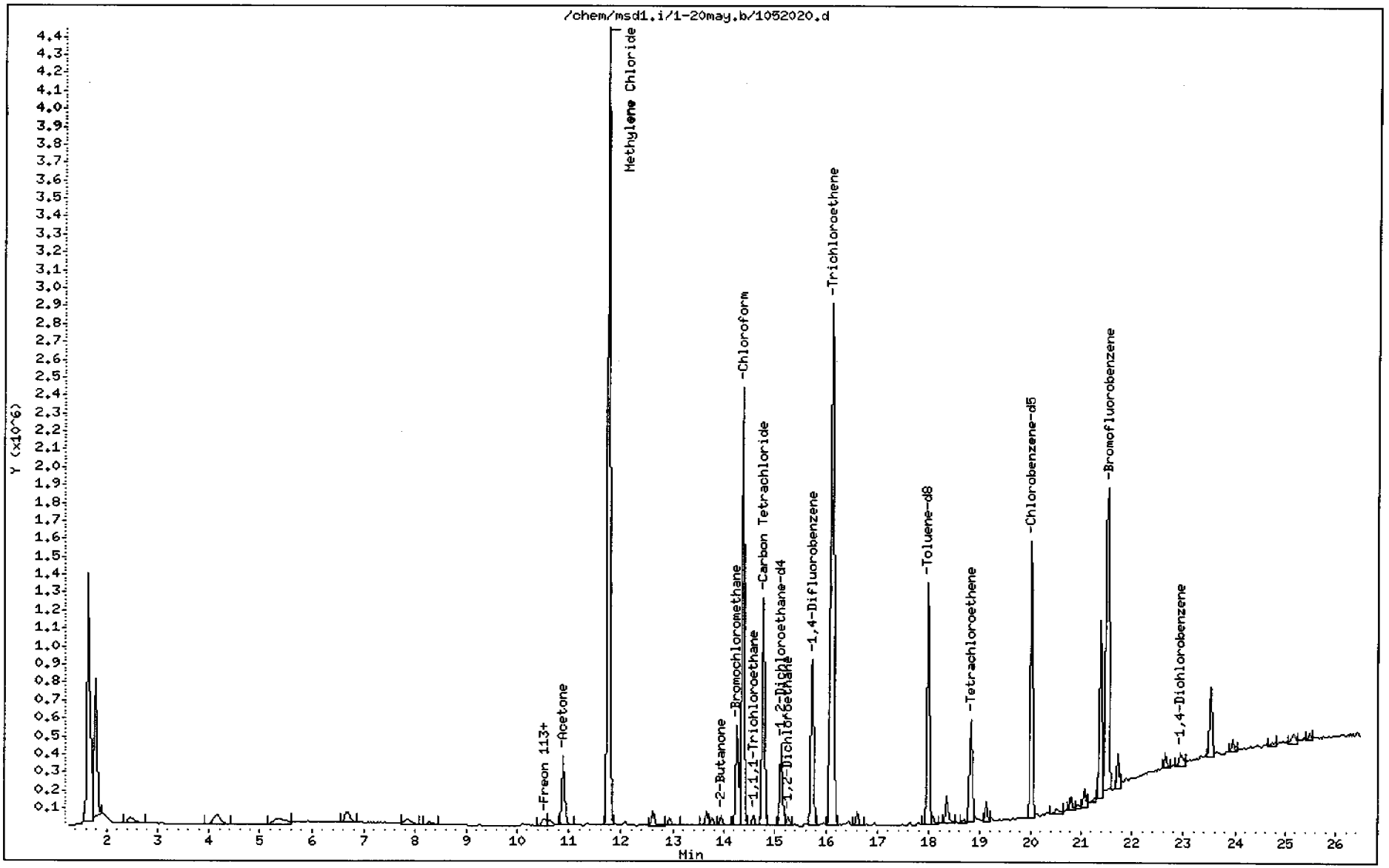
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.498	93.99	70-130
$ 111 Toluene-d8	25.000	24.538	98.15	70-130
$ 136 Bromofluorobenzene	25.000	24.215	96.86	70-130

Data File: /chem/msd1.i/1-20may.b/1052020.d
Date : 20-MAY-2008 22:00
Client ID:
Sample Info: 100mL #5696

Instrument: msd1.i

Operator: kr
Column phase: RTx-624
Column diameter: 0.53

0072



Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

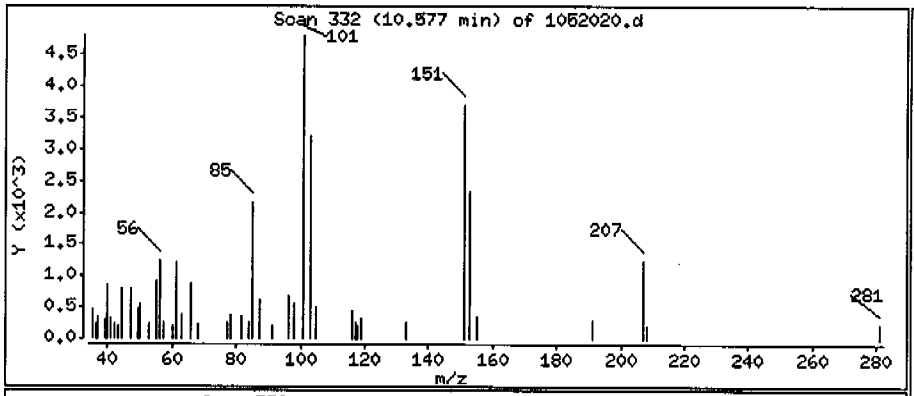
Operator: kr

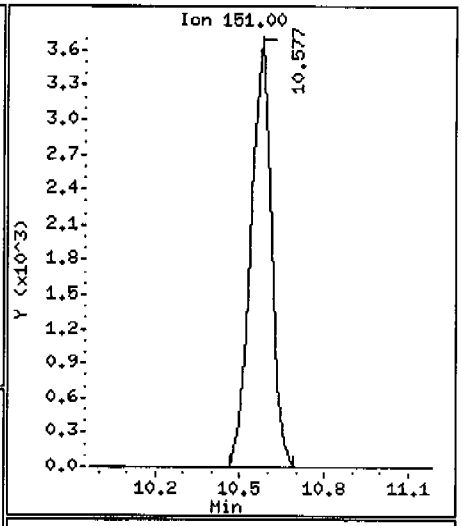
Column phase: RTx-624

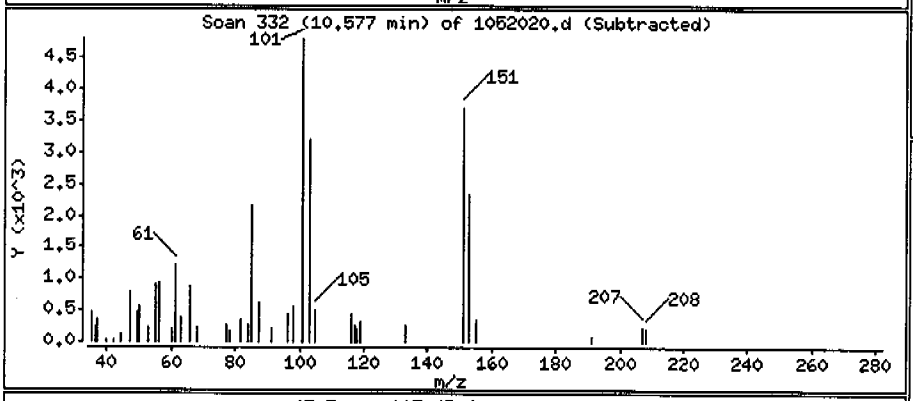
Column diameter: 0.53

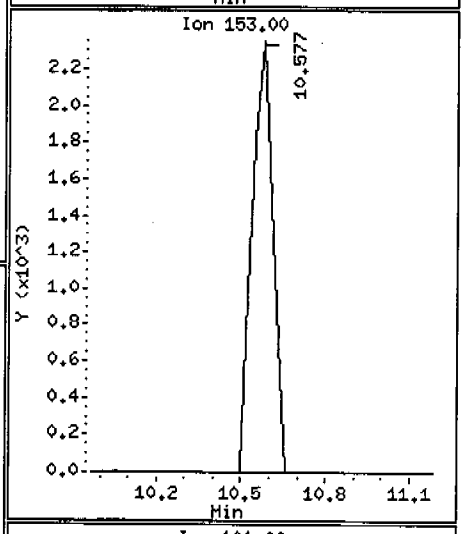
43 Freon 113

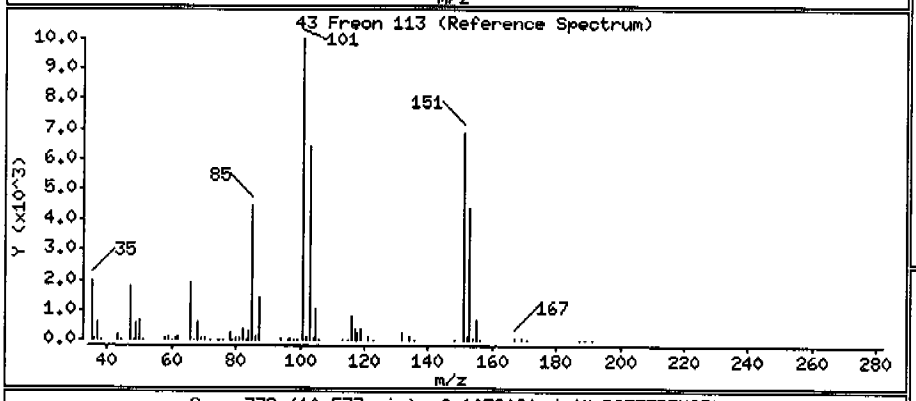
Concentration: 1.455 PPBV

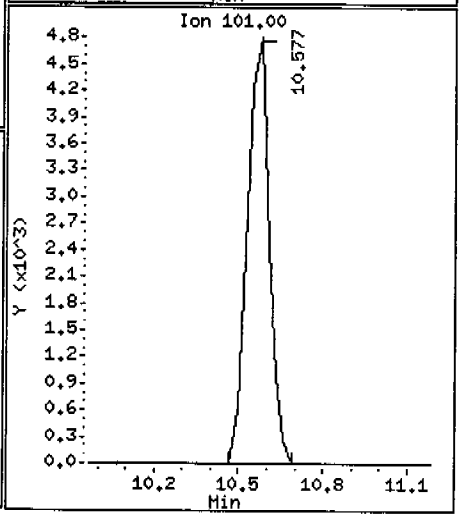


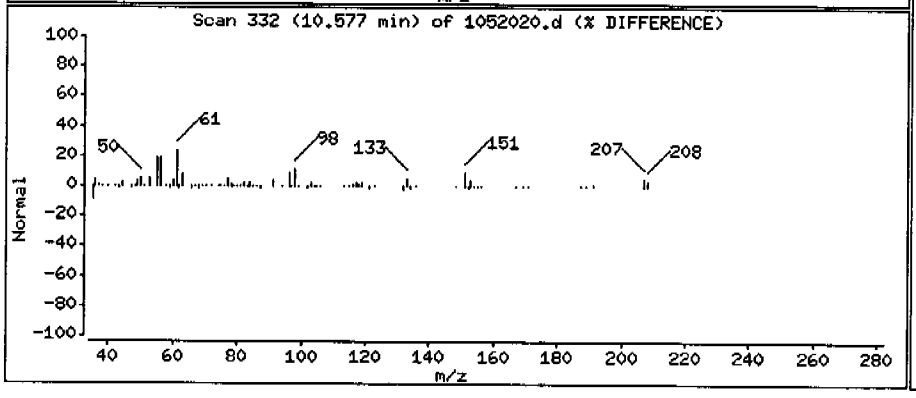












0073

Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

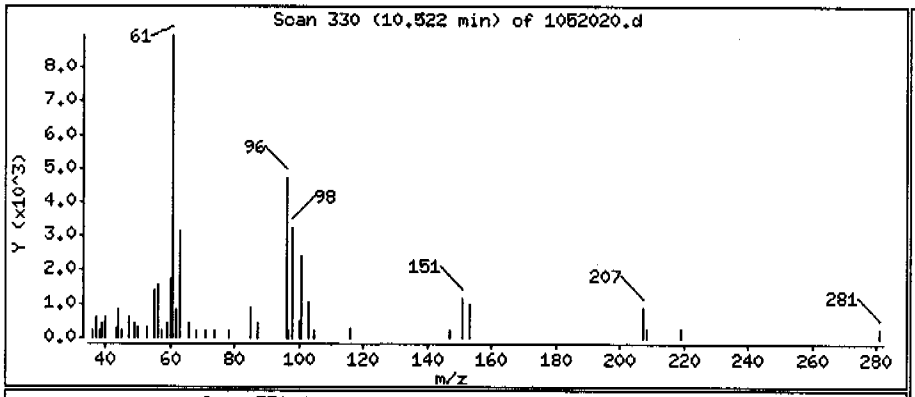
Operator: kr

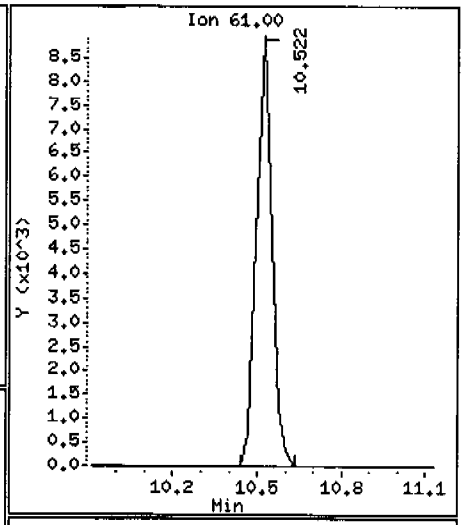
Column phase: RTx-624

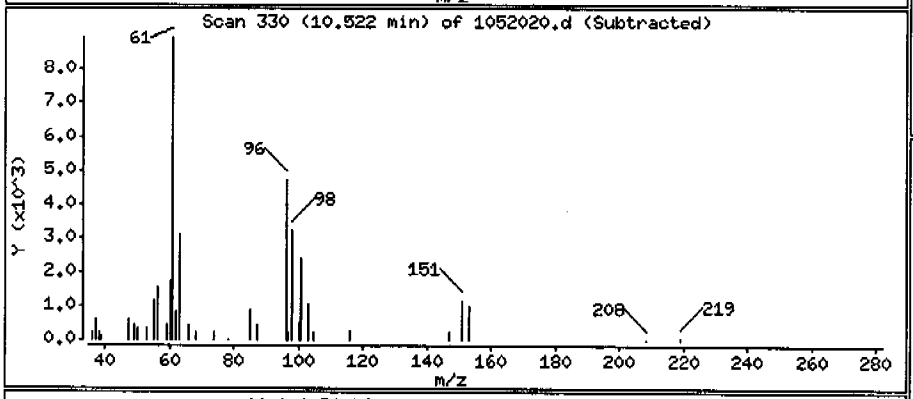
Column diameter: 0.53

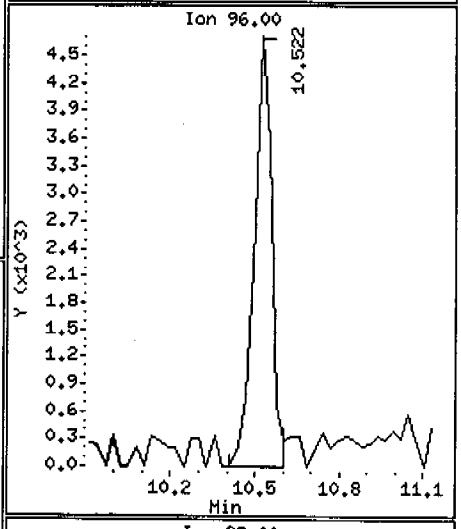
44 1,1-Dichloroethene

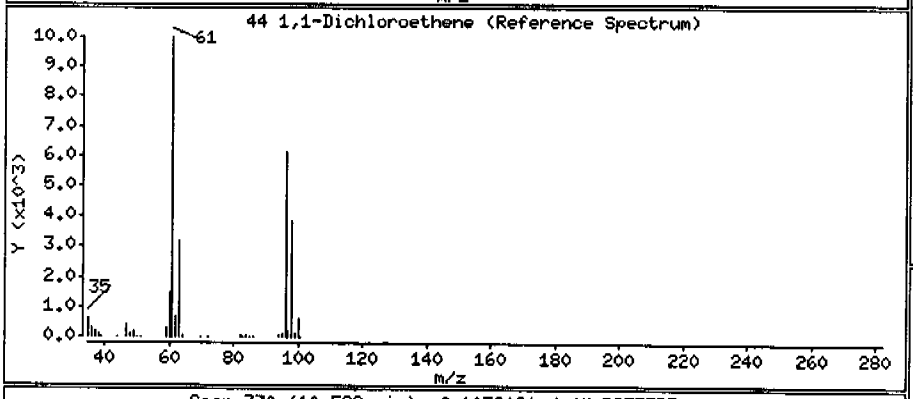
Concentration: 1.910 PPBV

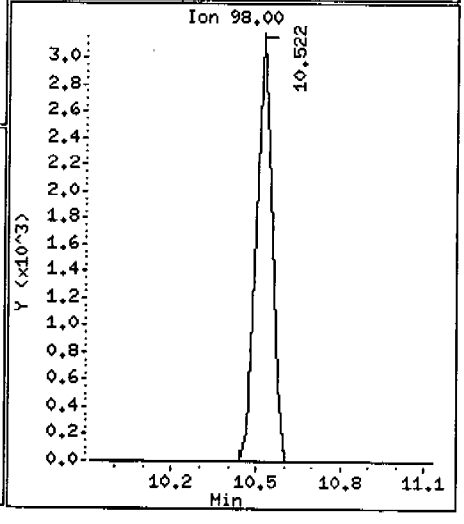


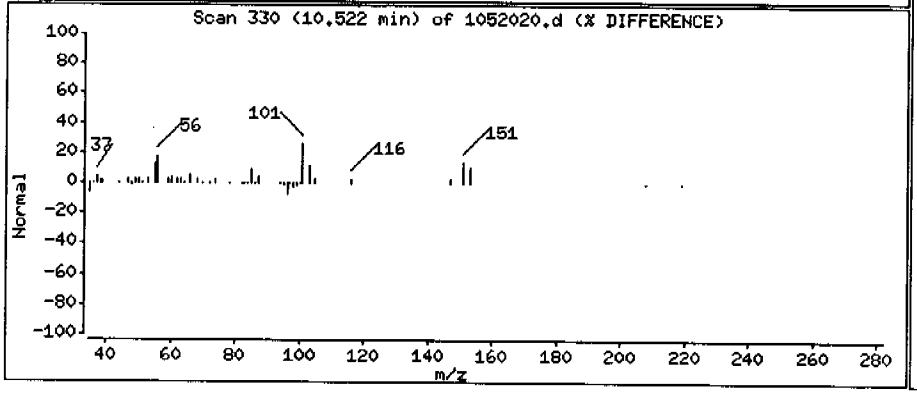












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

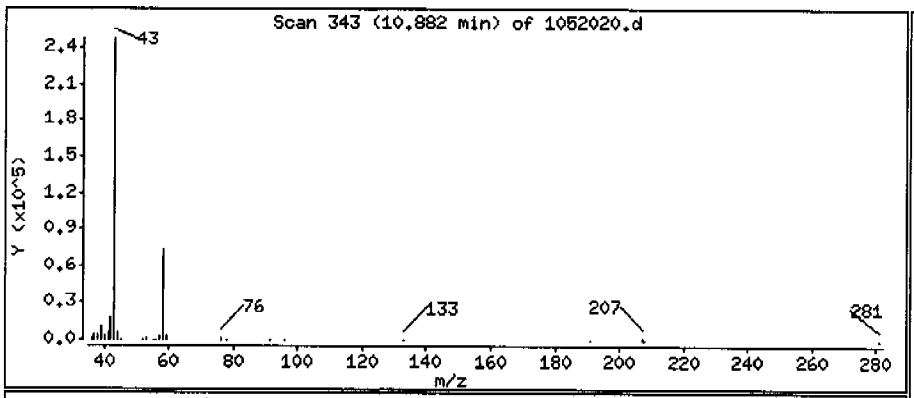
Operator: kr

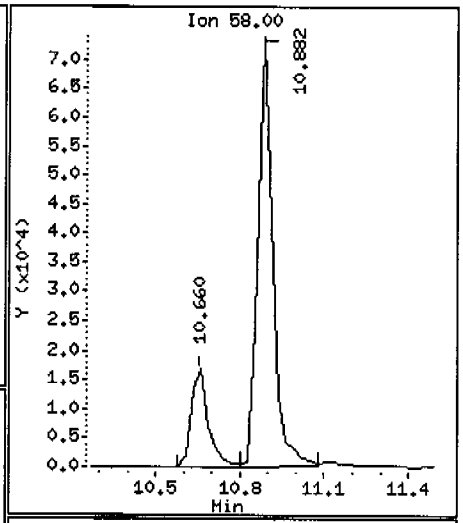
Column phase: RTx-624

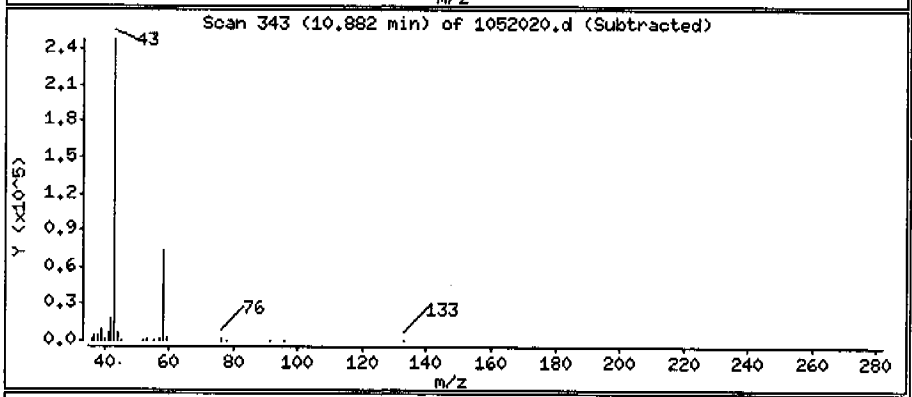
Column diameter: 0.53

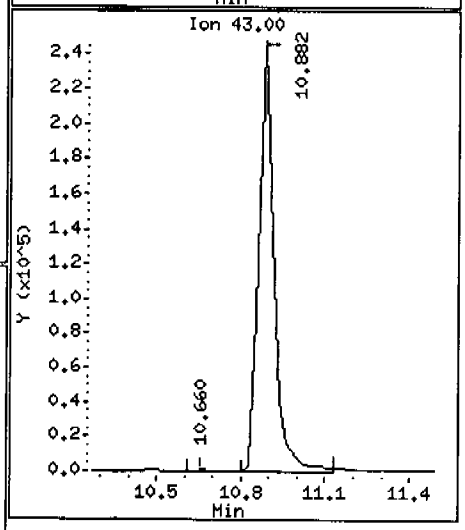
45 Acetone

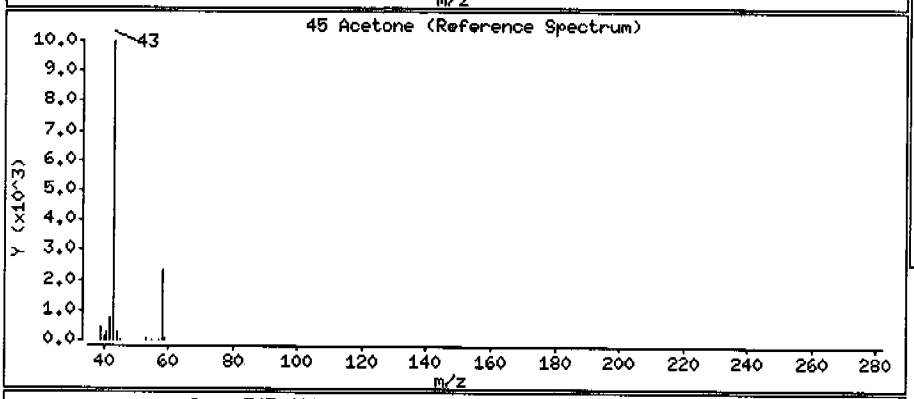
Concentration: 45.337 PPBV

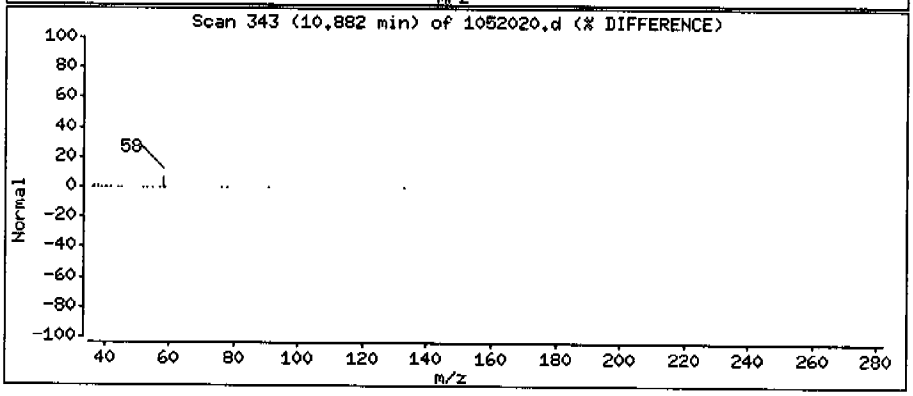












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

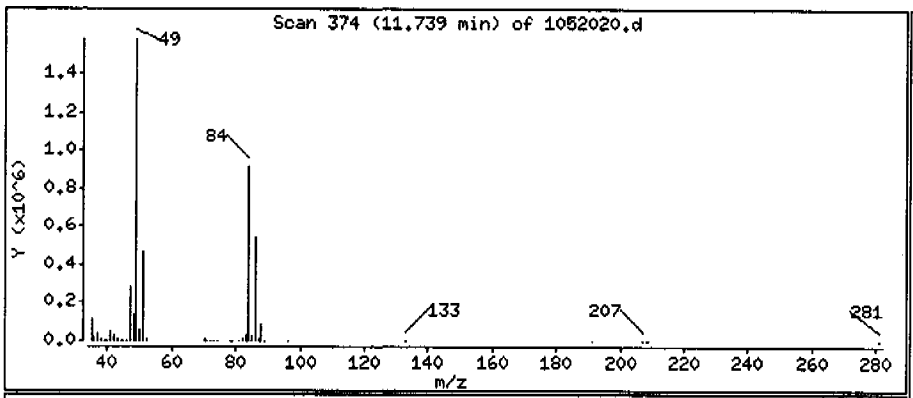
Operator: kr

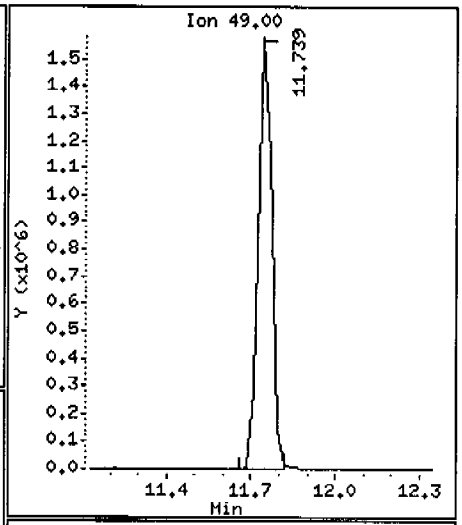
Column phase: RTx-624

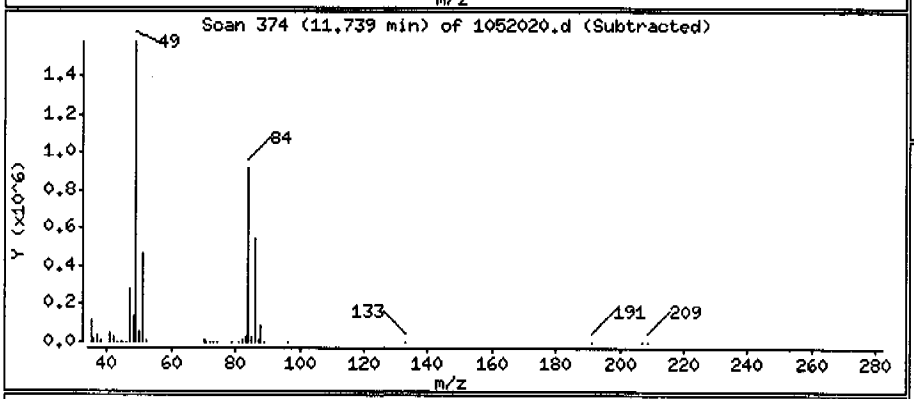
Column diameter: 0.53

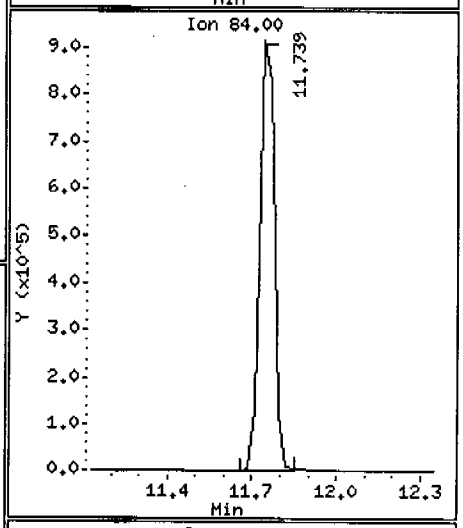
54 Methylene Chloride

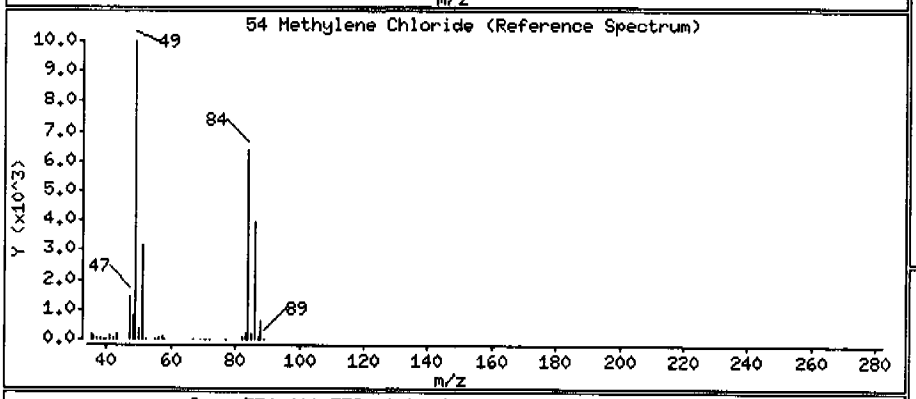
Concentration: 340.59 PPBV

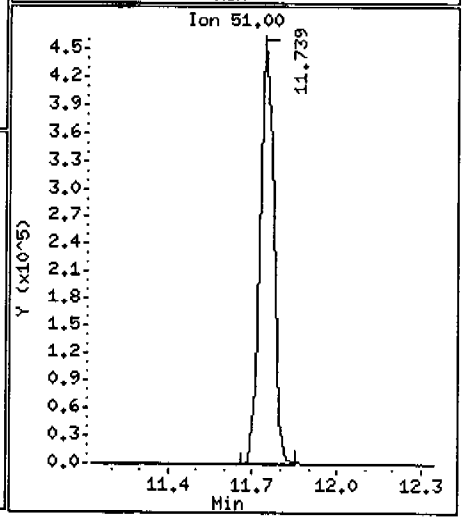


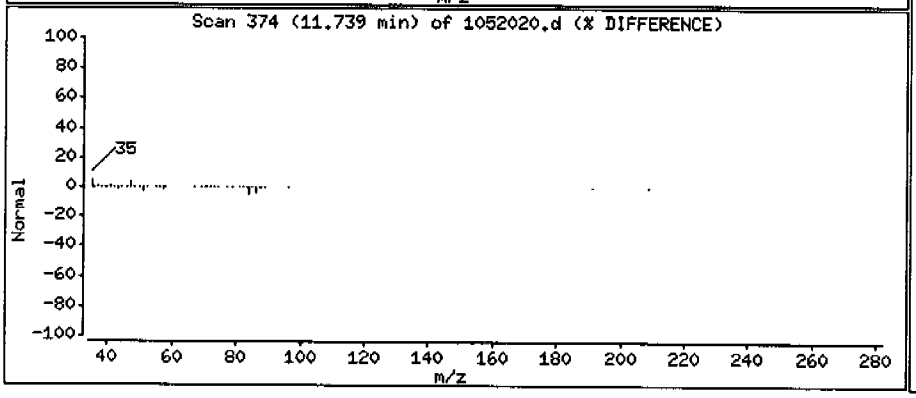












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

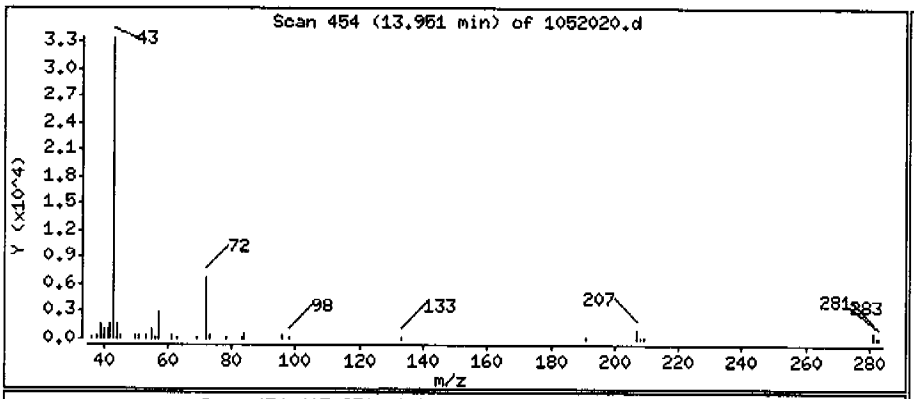
Operator: kr

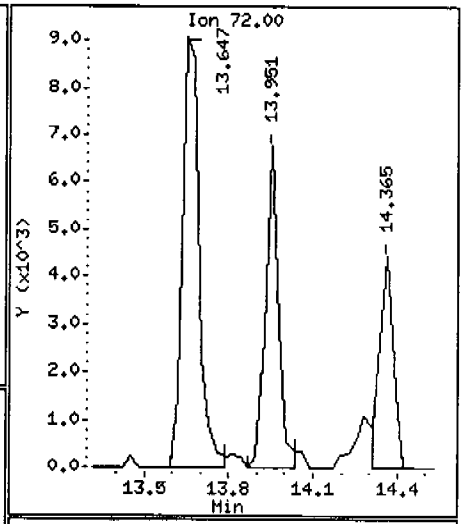
Column phase: RTx-624

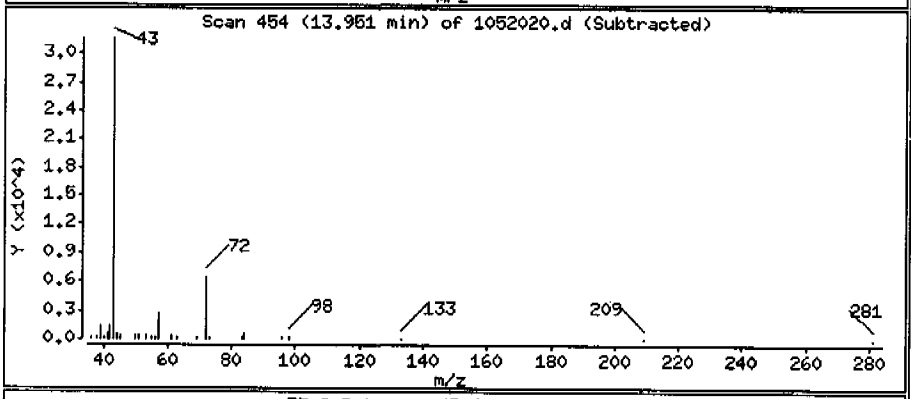
Column diameter: 0.53

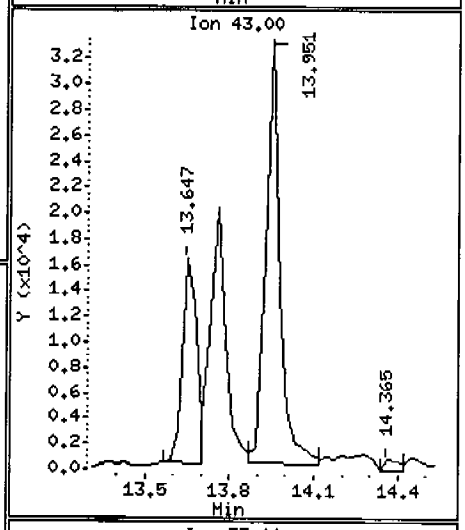
75 2-Butanone

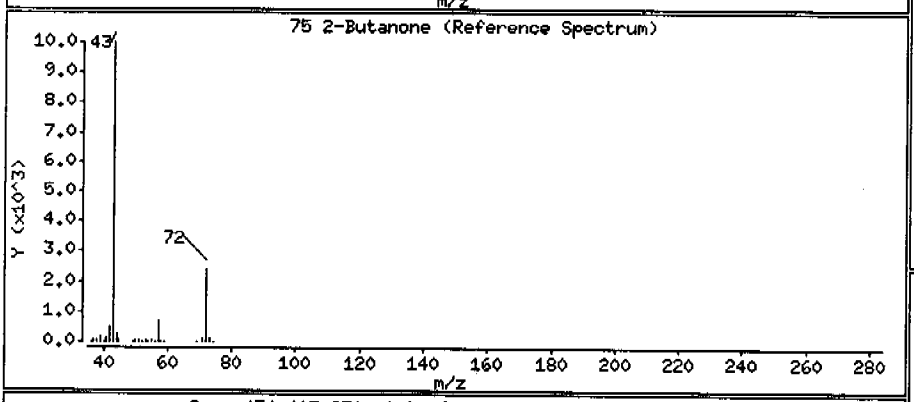
Concentration: 3.607 PPBV

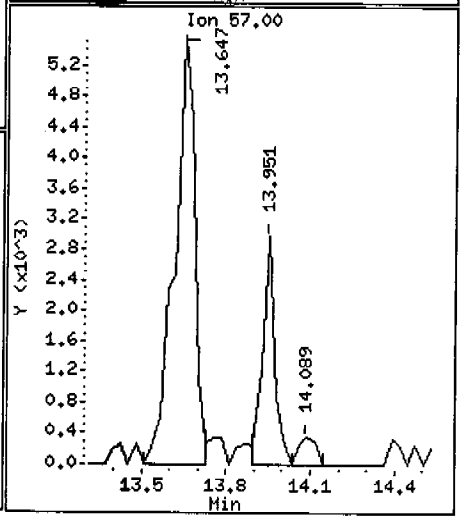


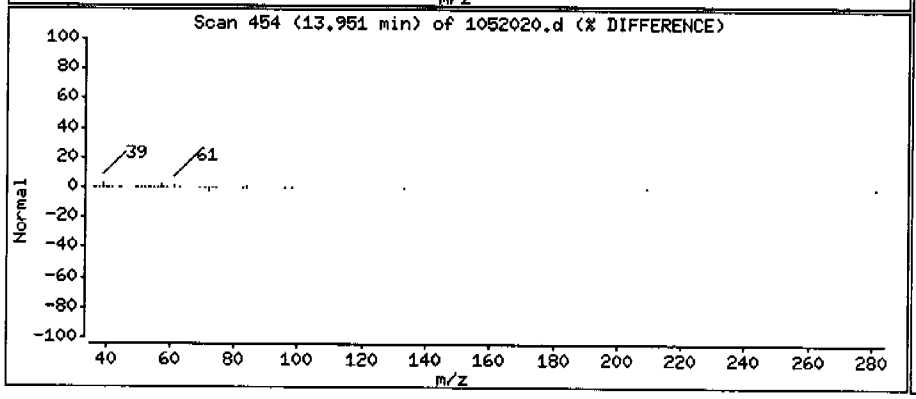












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

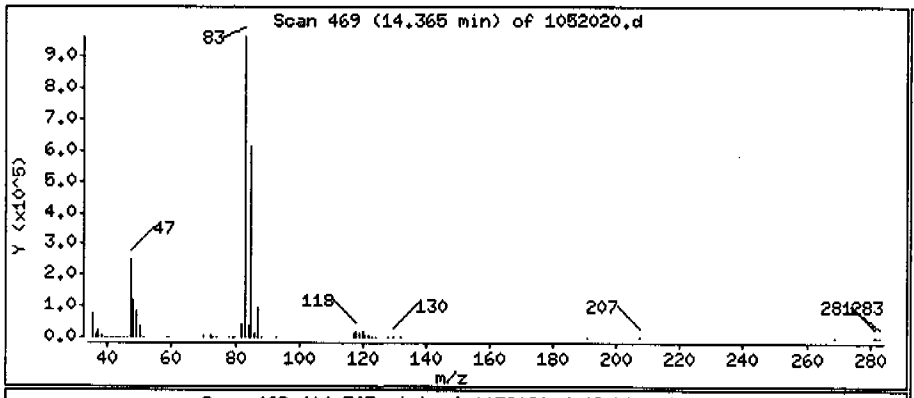
Operator: kr

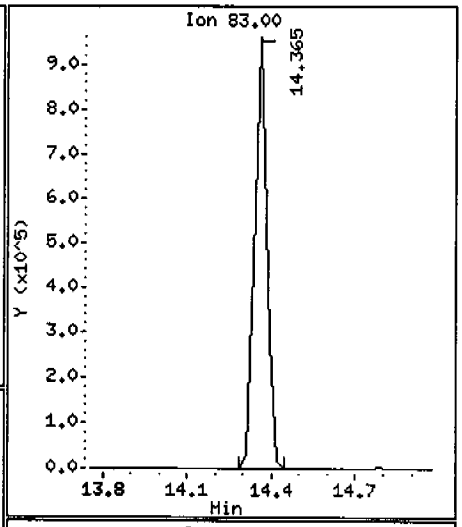
Column phase: RTx-624

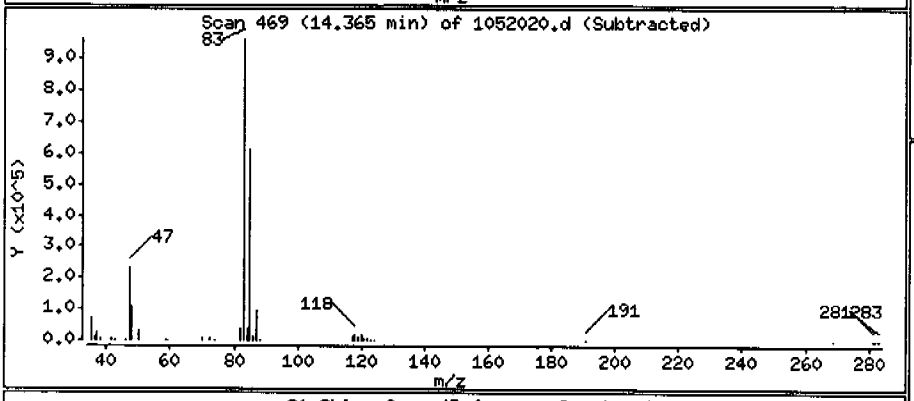
Column diameter: 0.53

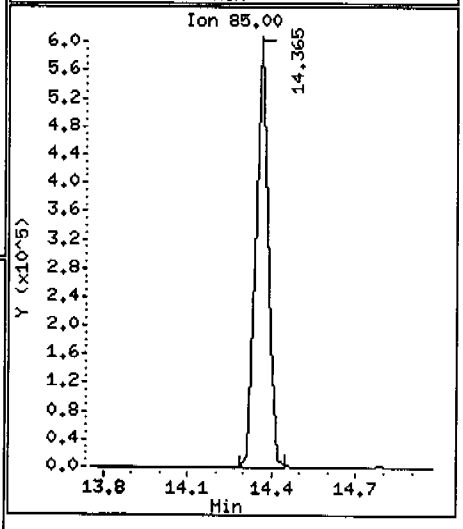
81 Chloroform

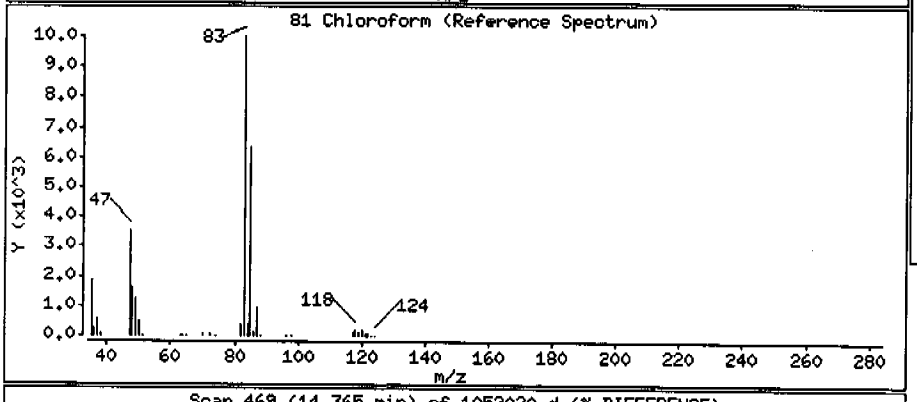
Concentration: 117.62 PPBV

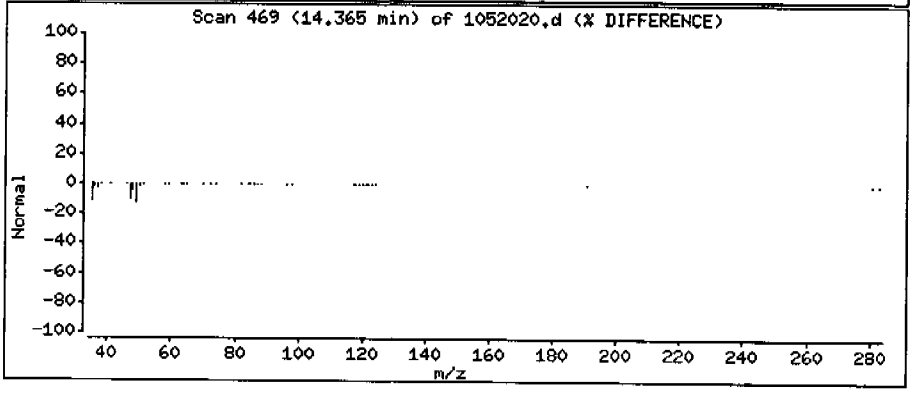












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

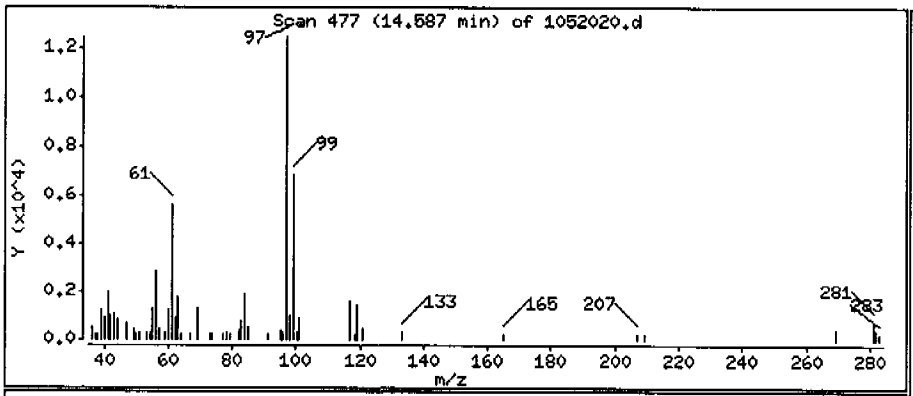
Operator: kr

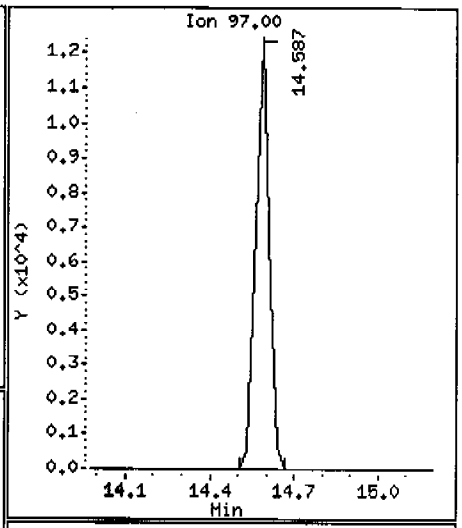
Column phase: RTx-624

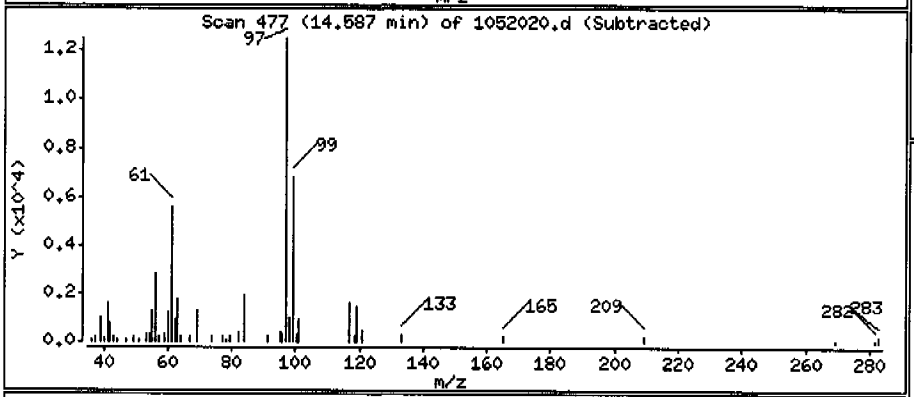
Column diameter: 0.53

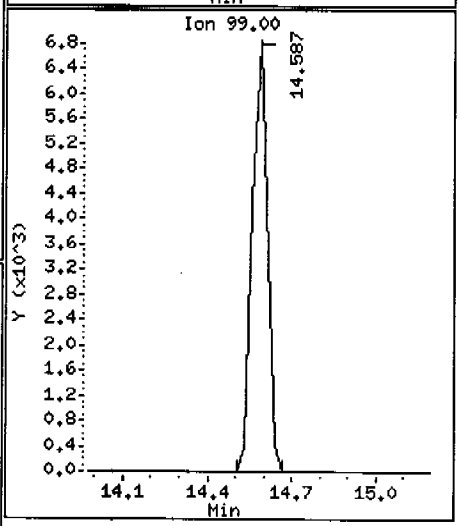
83 1,1,1-Trichloroethane

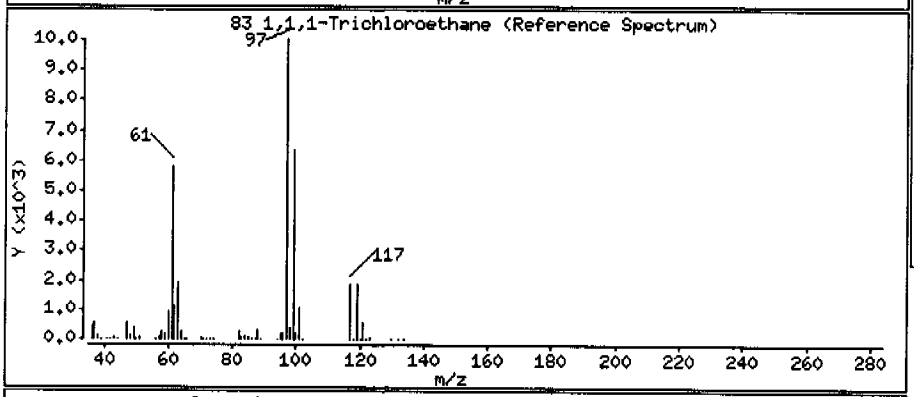
Concentration: 1.575 PPBV

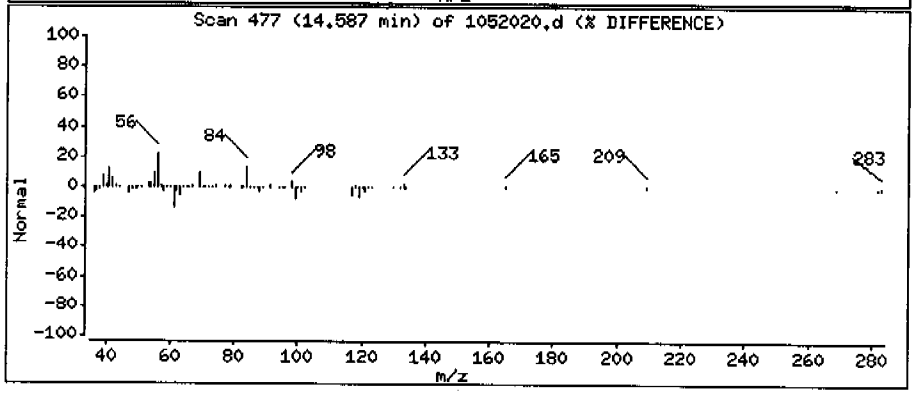












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

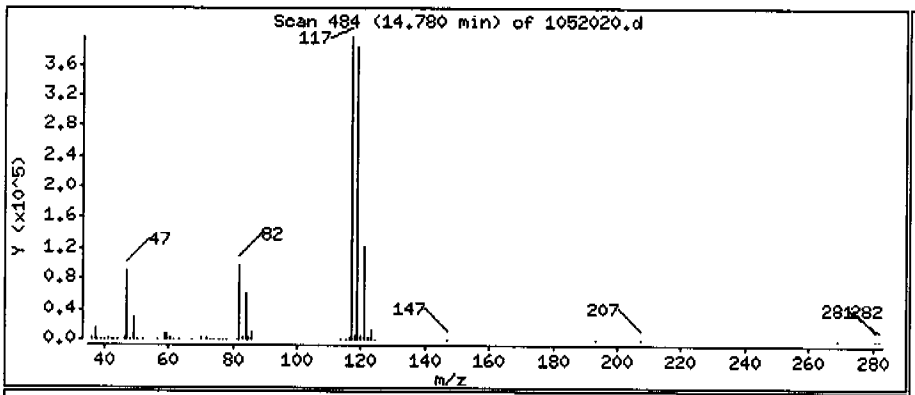
Operator: kr

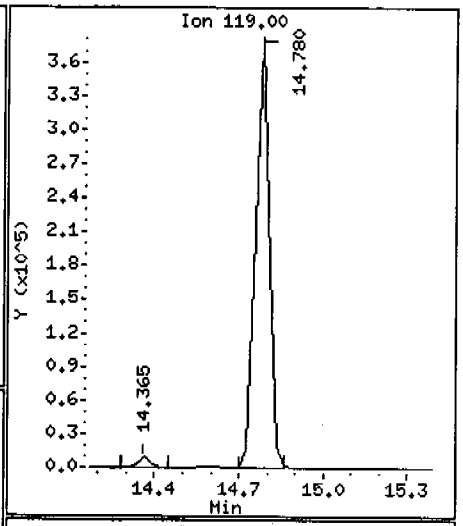
Column phase: RTx-624

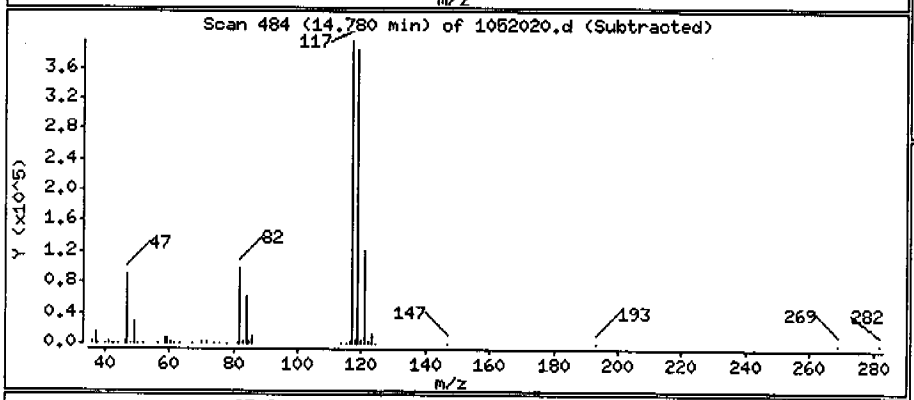
Column diameter: 0.53

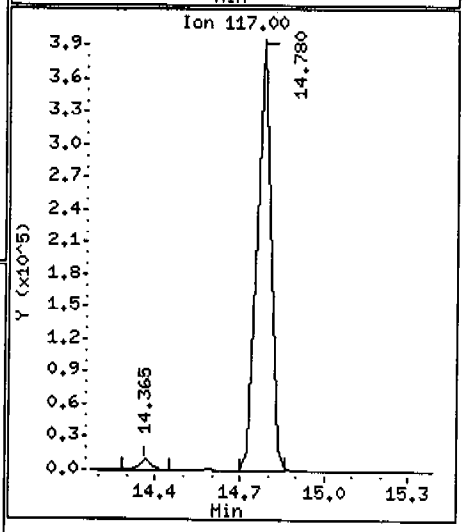
85 Carbon Tetrachloride

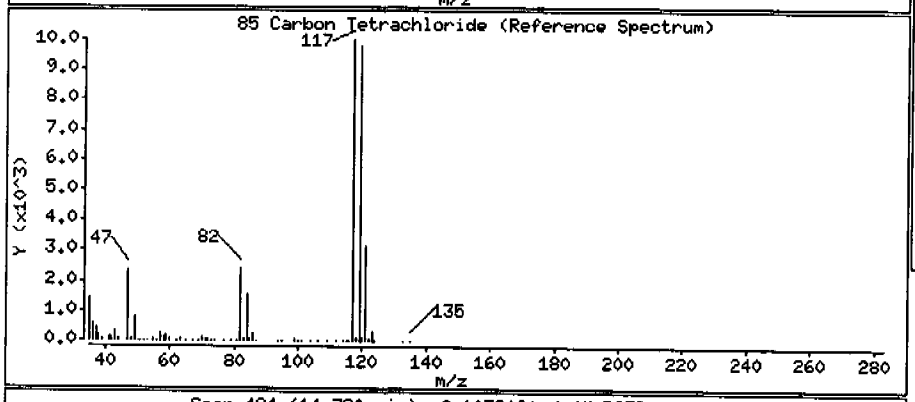
Concentration: 53.359 PPBV

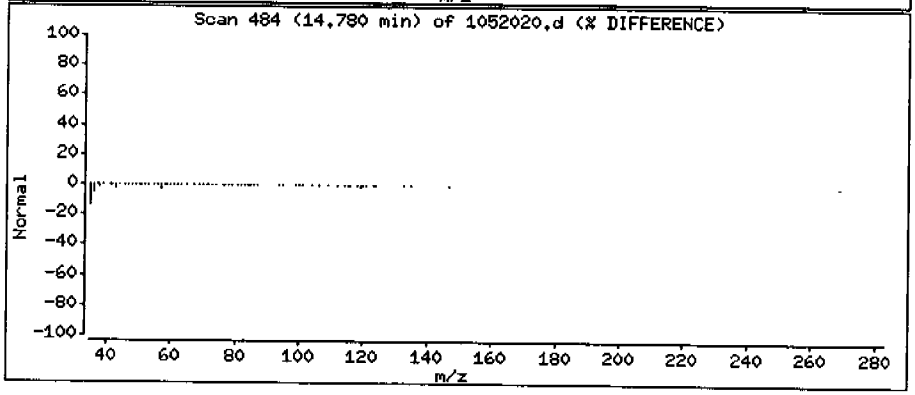












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

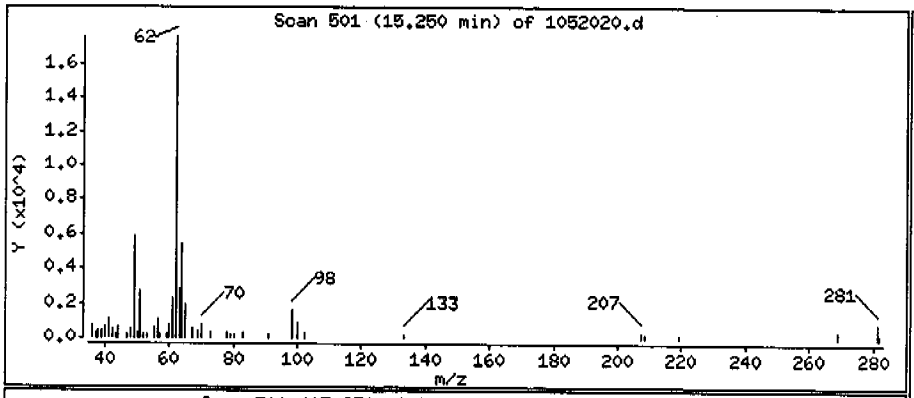
Operator: kr

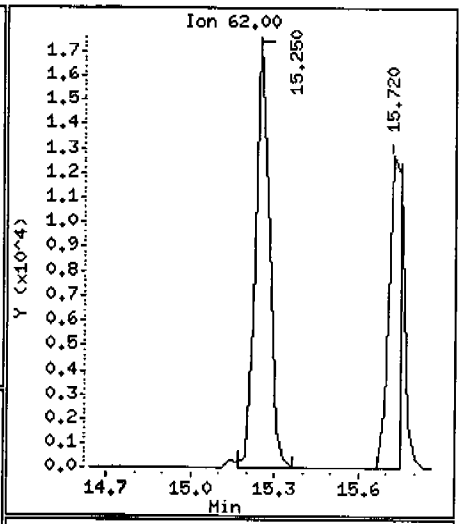
Column phase: RTx-624

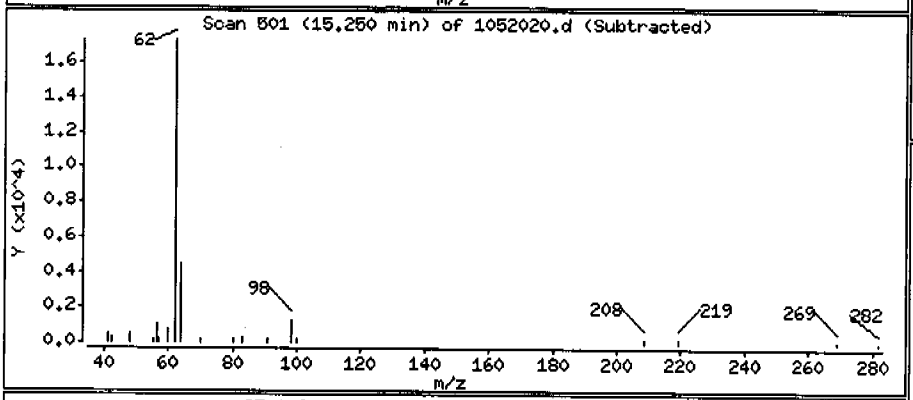
Column diameter: 0.53

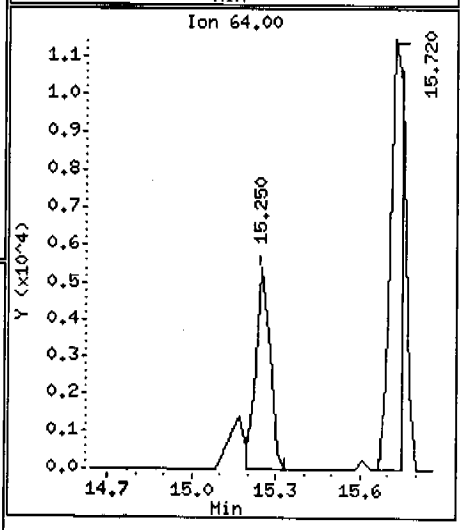
93 1,2-Dichloroethane

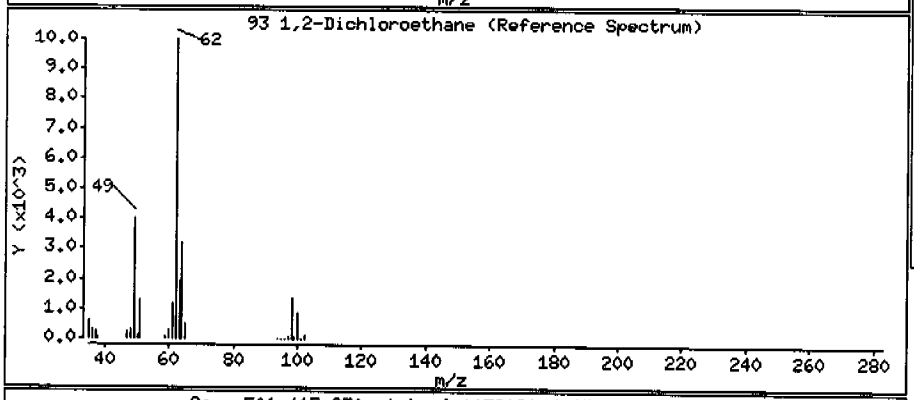
Concentration: 3,203 PPBV

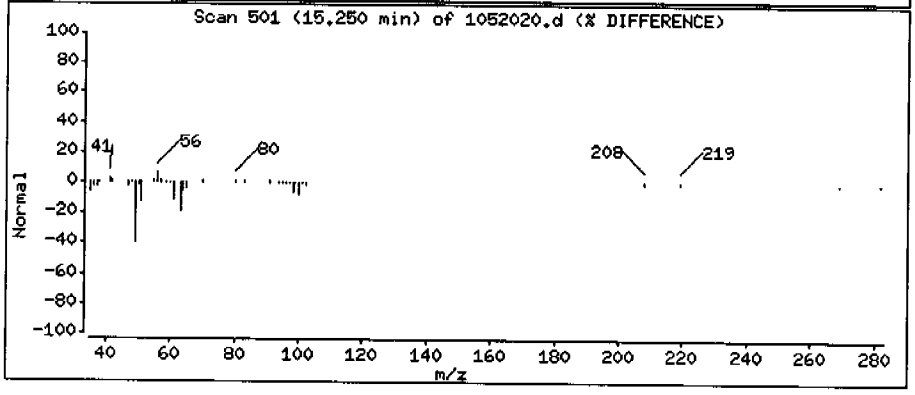












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

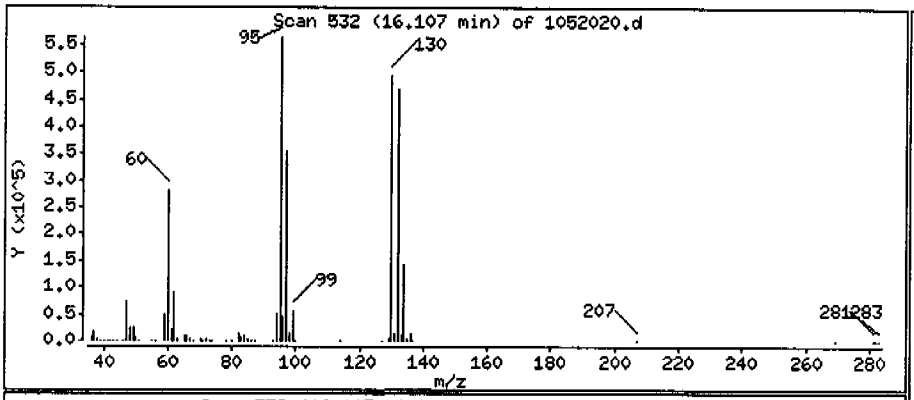
Operator: kr

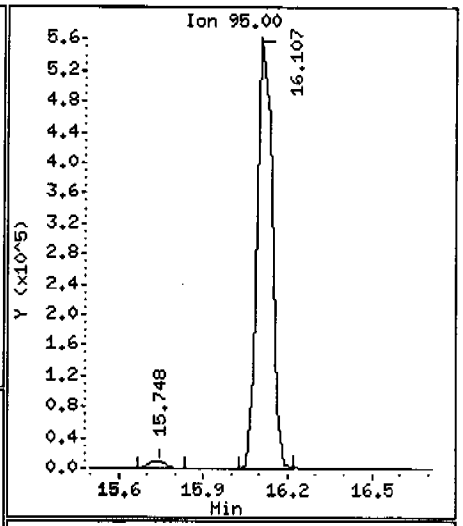
Column phase: RTx-624

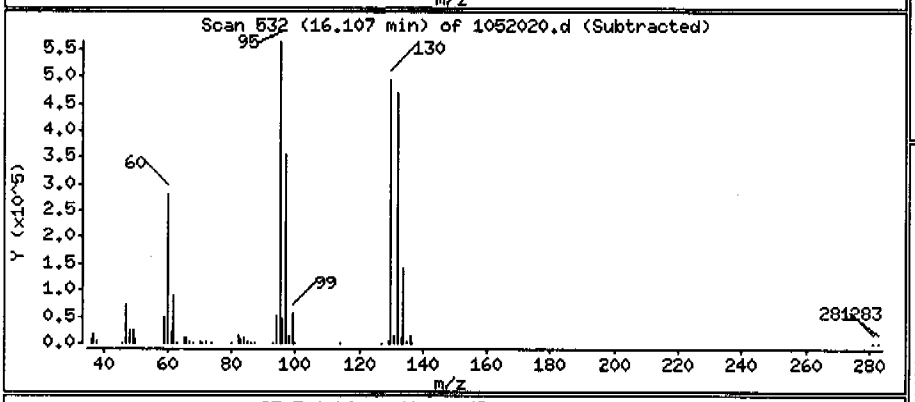
Column diameter: 0.53

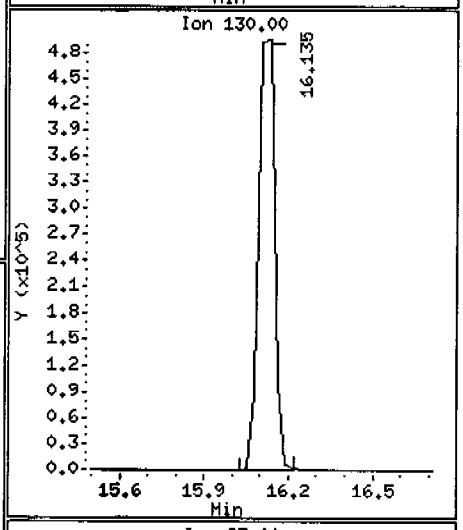
97 Trichloroethene

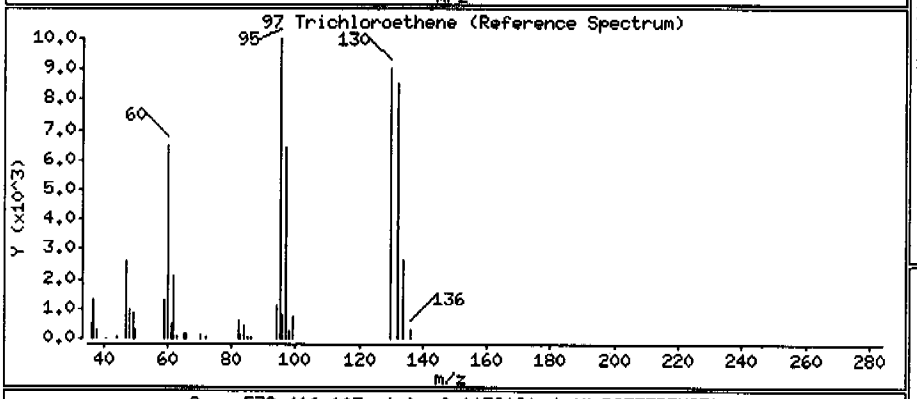
Concentration: 111.83 PPBV

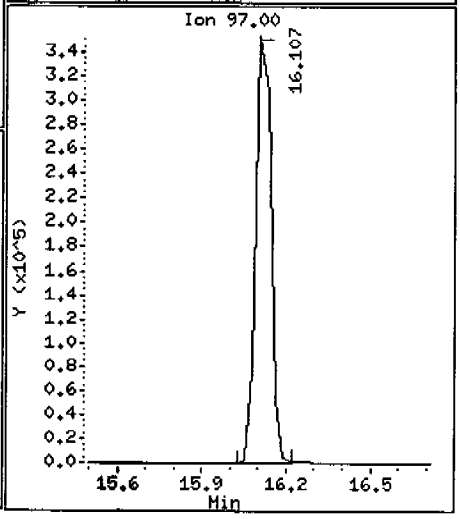


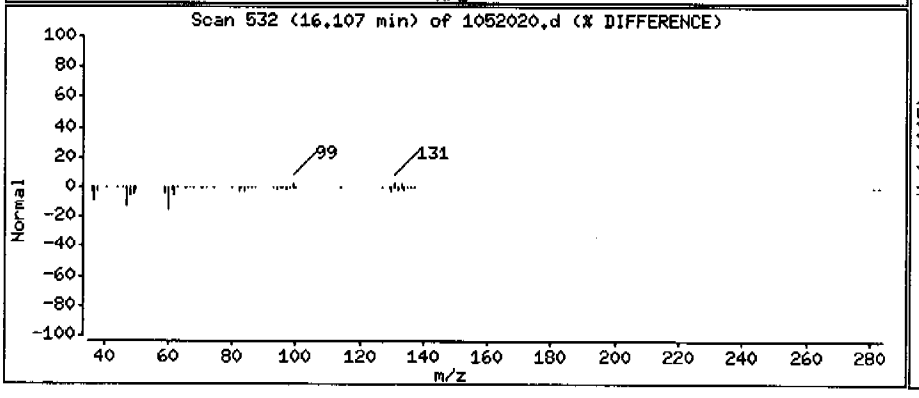












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Sample Info: 100mL #5696

Instrument: msd1.i

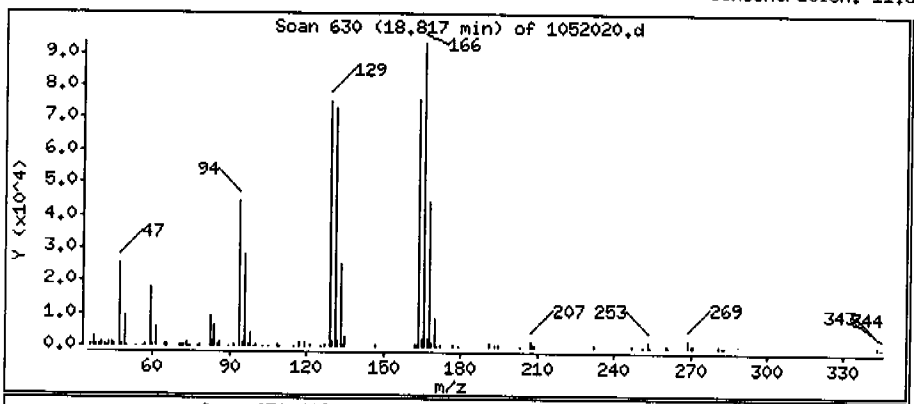
Operator: kr

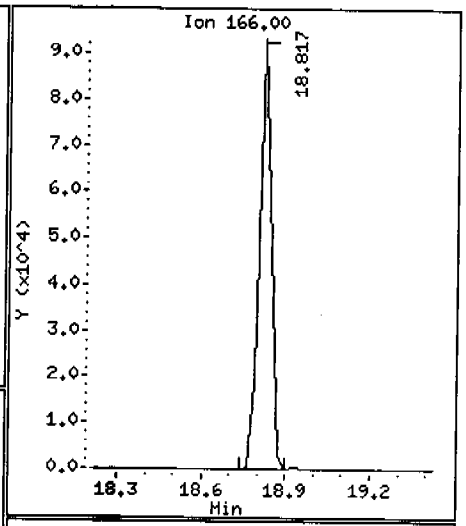
Column phase: RTx-624

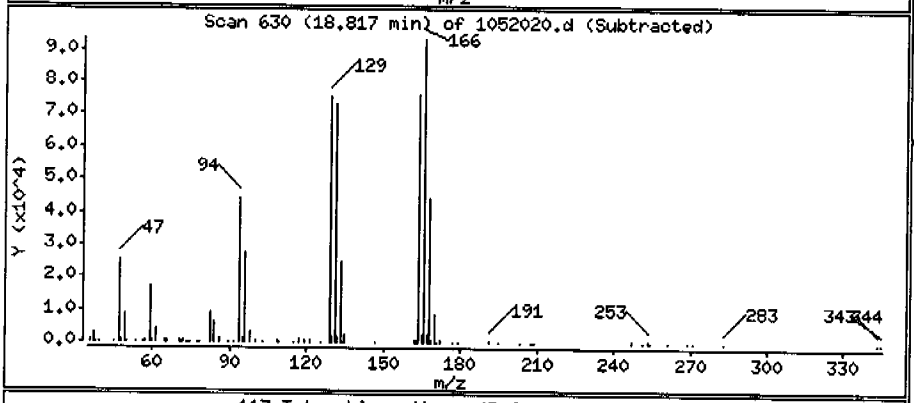
Column diameter: 0.53

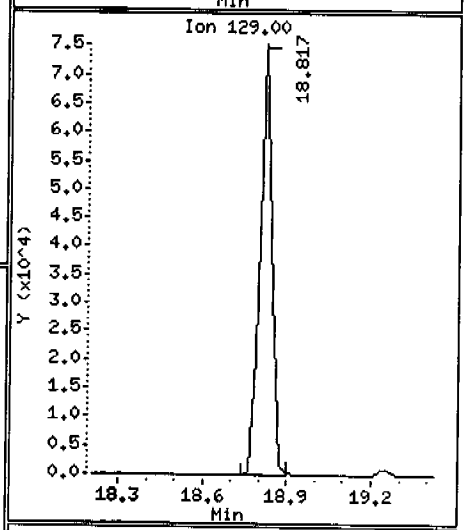
117 Tetrachloroethene

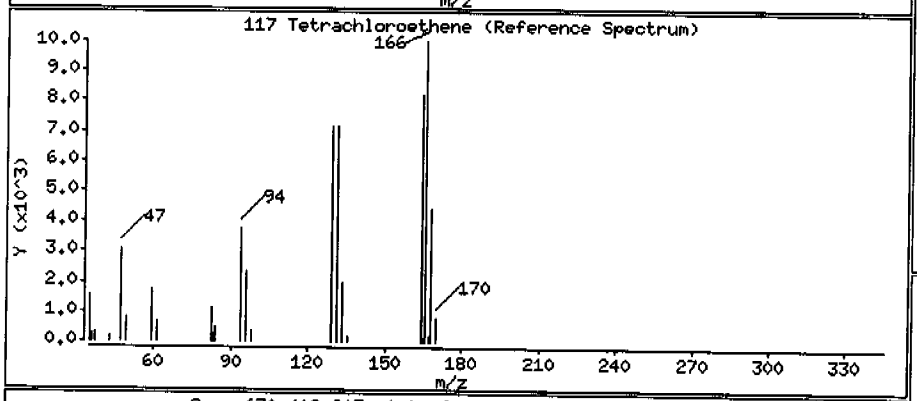
Concentration: 11.351 PPBV

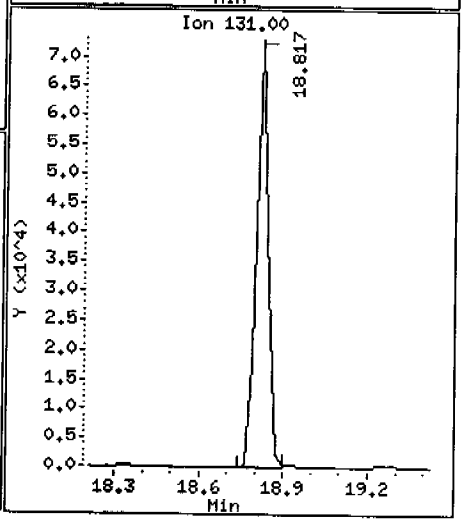


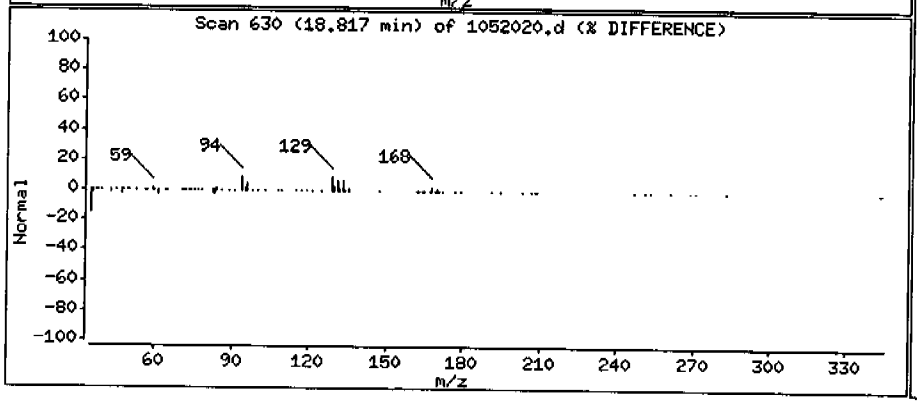












Data File: /chem/msd1.i/1-20may.b/1052020.d

Date : 20-MAY-2008 22:00

Client ID:

Instrument: msd1.i

Sample Info: 100mL #5696

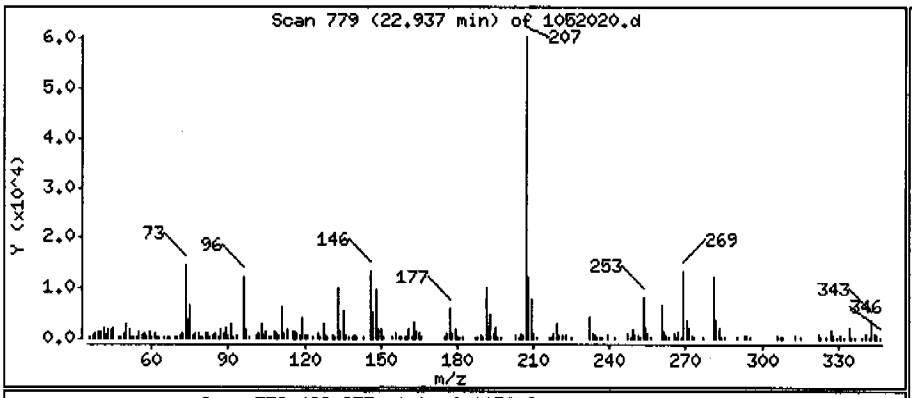
Operator: kr

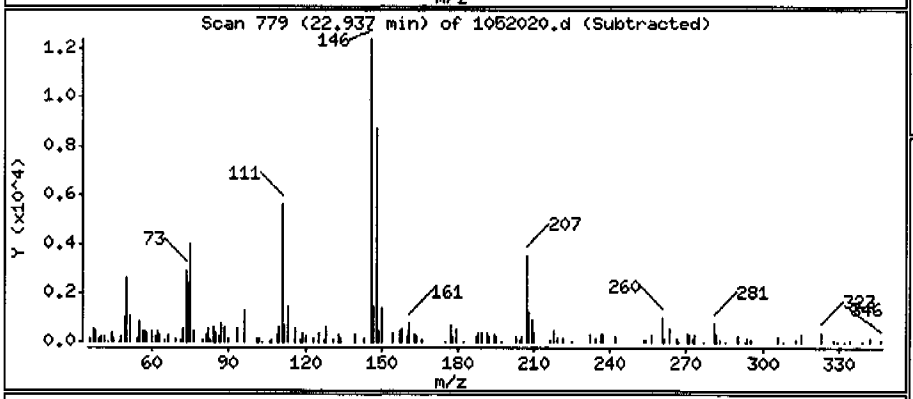
Column phase: RTx-624

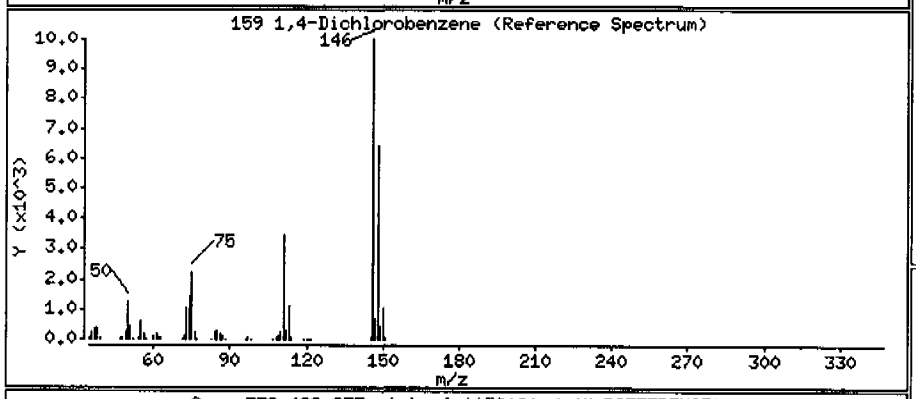
Column diameter: 0.53

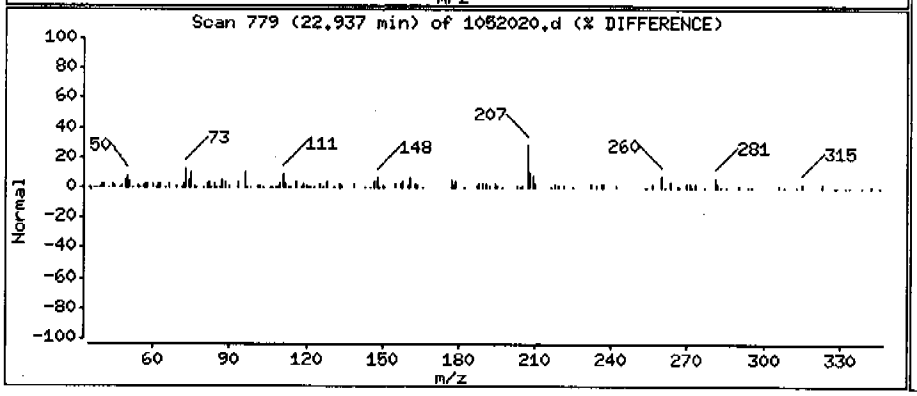
159 1,4-Dichlorobenzene

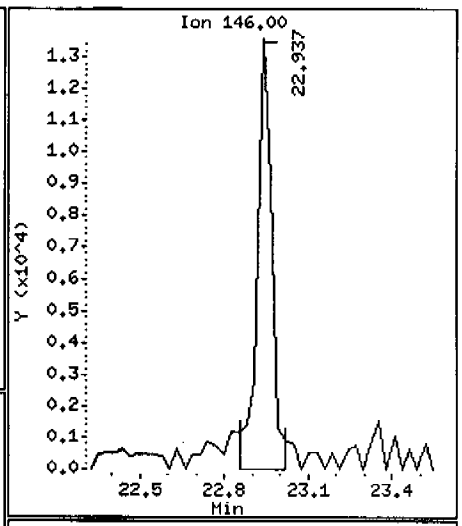
Concentration: 0.9995 PPBV

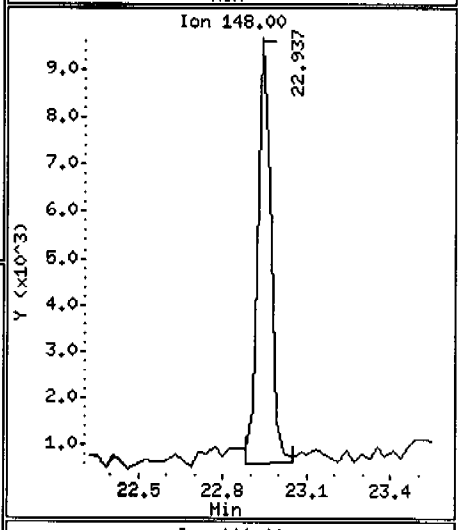


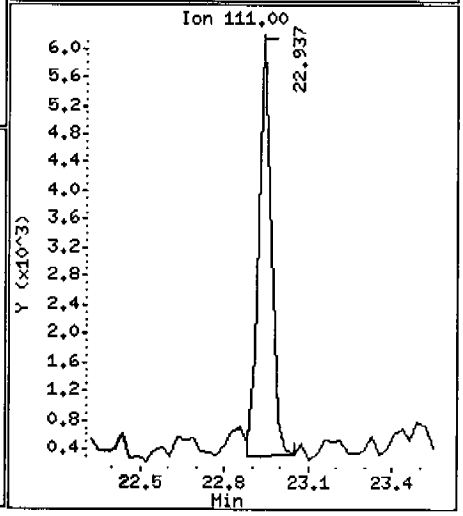












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-12251

Lab ID#: 0805220-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	1.8	3.0	7.2	12
Methylene Chloride	1.8	550	6.3	1900
Chloroform	1.8	190	8.9	940
Carbon Tetrachloride	1.8	58	11	360
1,2-Dichloroethane	1.8	5.9	7.4	24
Trichloroethene	1.8	130	9.8	720
Toluene	1.8	4.4	6.9	16
Tetrachloroethene	1.8	4.7	12	32

0085

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12251

Lab ID#: 0805220-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1052023 Date of Collection: 5/7/08
Dil. Factor: 3.65 Date of Analysis: 5/21/08 12:21 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.8	Not Detected	9.0	Not Detected
Freon 114	1.8	Not Detected	13	Not Detected
Chloromethane	7.3	Not Detected	15	Not Detected
Vinyl Chloride	1.8	Not Detected	4.7	Not Detected
1,3-Butadiene	1.8	Not Detected	4.0	Not Detected
Bromomethane	1.8	Not Detected	7.1	Not Detected
Chloroethane	1.8	Not Detected	4.8	Not Detected
Freon 11	1.8	Not Detected	10	Not Detected
Ethanol	7.3	Not Detected	14	Not Detected
Freon 113	1.8	Not Detected	14	Not Detected
1,1-Dichloroethene	1.8	3.0	7.2	12
Acetone	7.3	Not Detected	17	Not Detected
2-Propanol	7.3	Not Detected	18	Not Detected
Carbon Disulfide	1.8	Not Detected	5.7	Not Detected
Methylene Chloride	1.8	550	6.3	1900
Methyl tert-butyl ether	1.8	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.8	Not Detected	7.2	Not Detected
Hexane	1.8	Not Detected	6.4	Not Detected
1,1-Dichloroethane	1.8	Not Detected	7.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.8	Not Detected	5.4	Not Detected
cis-1,2-Dichloroethene	1.8	Not Detected	7.2	Not Detected
Tetrahydrofuran	1.8	Not Detected	5.4	Not Detected
Chloroform	1.8	190	8.9	940
1,1,1-Trichloroethane	1.8	Not Detected	10	Not Detected
Cyclohexane	1.8	Not Detected	6.3	Not Detected
Carbon Tetrachloride	1.8	58	11	360
Benzene	1.8	Not Detected	5.8	Not Detected
1,2-Dichloroethane	1.8	5.9	7.4	24
Heptane	1.8	Not Detected	7.5	Not Detected
Trichloroethene	1.8	130	9.8	720
1,2-Dichloropropane	1.8	Not Detected	8.4	Not Detected
1,4-Dioxane	7.3	Not Detected	26	Not Detected
Bromodichloromethane	1.8	Not Detected	12	Not Detected
cis-1,3-Dichloropropene	1.8	Not Detected	8.3	Not Detected
4-Methyl-2-pentanone	1.8	Not Detected	7.5	Not Detected
Toluene	1.8	4.4	6.9	16
trans-1,3-Dichloropropene	1.8	Not Detected	8.3	Not Detected
1,1,2-Trichloroethane	1.8	Not Detected	10	Not Detected
Tetrachloroethene	1.8	4.7	12	32

0086

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-12251

Lab ID#: 0805220-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 10520231 Date of Collection: 5/7/08
Dil. Factor: 3.65 Date of Analysis: 5/21/08 12:21 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	7.3	Not Detected	30	Not Detected
Dibromochloromethane	1.8	Not Detected	16	Not Detected
1,2-Dibromoethane (EDB)	1.8	Not Detected	14	Not Detected
Chlorobenzene	1.8	Not Detected	8.4	Not Detected
Ethyl Benzene	1.8	Not Detected	7.9	Not Detected
m,p-Xylene	1.8	Not Detected	7.9	Not Detected
o-Xylene	1.8	Not Detected	7.9	Not Detected
Styrene	1.8	Not Detected	7.8	Not Detected
Bromoform	1.8	Not Detected	19	Not Detected
1,1,2,2-Tetrachloroethane	1.8	Not Detected	12	Not Detected
4-Ethyltoluene	1.8	Not Detected	9.0	Not Detected
1,3,5-Trimethylbenzene	1.8	Not Detected	9.0	Not Detected
1,2,4-Trimethylbenzene	1.8	Not Detected	9.0	Not Detected
1,3-Dichlorobenzene	1.8	Not Detected	11	Not Detected
1,4-Dichlorobenzene	1.8	Not Detected	11	Not Detected
alpha-Chlorotoluene	1.8	Not Detected	9.4	Not Detected
1,2-Dichlorobenzene	1.8	Not Detected	11	Not Detected
1,2,4-Trichlorobenzene	7.3	Not Detected	54	Not Detected
Hexachlorobutadiene	7.3	Not Detected	78	Not Detected
Chlorodifluoromethane	7.3	Not Detected	26	Not Detected
Methanol	180	Not Detected	240	Not Detected
n-Butanol	7.3	Not Detected	22	Not Detected
Propylene	7.3	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	96	70-130

0087

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052023.d
Lab Smp Id: 0805220-05A
Inj Date : 21-MAY-2008 00:21
Operator : cb Inst ID: msd1.i
Smp Info : 40mL #35142
Misc Info : 2.5"Hg -> 5psi
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 18:39 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1
Dil Factor: 3.65000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	****** ********	****	********	*******	*******	**********	*****
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	297765	25.0000		80.00- 120.00	100.00
14.255	14.255 (1.000)	128	239626			28.28- 128.28	80.47
14.255	14.255 (1.000)	49	558896			132.70- 232.70	187.70
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1564430	25.0000		80.00- 120.00	100.00
15.720	15.748 (1.000)	88	241807			0.00- 65.54	15.46
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1783689	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1021271			8.42- 108.42	57.26
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.140 (1.060)	65	482388	24.2759	24.276	80.00- 120.00	100.00
15.139	15.140 (1.060)	67	246731			6.04- 106.04	51.15
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1754087	24.7455	24.746	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	182091			0.00- 60.35	10.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1151871			15.45- 115.45	65.67
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.076)	174	918176	24.0568	24.057	80.00- 120.00	100.00
21.499	21.527 (1.075)	95	1458481			112.36- 212.36	158.85
21.526	21.527 (1.076)	176	881408			46.57- 146.57	96.00
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.522	10.522 (0.737)	61	25663	0.83740	3.056	80.00- 120.00	100.00
10.522	10.522 (0.737)	96	15063			3.46- 103.46	58.70
10.522	10.522 (0.737)	98	8855			0.00- 84.66	34.50
54 Methylene Chloride					CAS #: 75-09-2		
11.739	11.739 (0.822)	49	4014373	151.217	551.94	80.00- 120.00	100.00
11.739	11.739 (0.822)	84	2543880			13.80- 113.80	63.37
11.739	11.739 (0.822)	51	1206543			0.00- 79.96	30.06
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.006)	83	2212367	52.5251	191.72	80.00- 120.00	100.00
14.365	14.365 (1.006)	85	1367497			12.63- 112.63	61.81
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.035)	119	650135	15.9044	58.051	80.00- 120.00	100.00
14.780	14.780 (1.035)	117	659900			52.80- 152.80	101.50
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	52913	1.60738	5.867	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	18252			0.00- 83.51	34.49
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1202164	36.8270	134.42	80.00- 120.00	100.00
16.107	16.107 (1.023)	130	1143605			46.95- 146.95	95.13
16.107	16.107 (1.023)	97	764760			13.89- 113.89	63.62
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	130551	1.19235	4.352	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	78006			9.42- 109.42	59.75
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.941)	166	56117	1.28330	4.684	80.00- 120.00	100.00
18.817	18.817 (0.941)	129	40176			27.45- 127.45	71.59
18.817	18.817 (0.941)	131	40061			24.16- 124.16	71.39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052023.d
Lab Smp Id: 0805220-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 2.5"Hg -> 5psi

Calibration Date: 20-MAY-2008
Calibration Time: 12:26

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	297765	-8.64
95 1,4-Difluorobenze	1718149	1030889	2405409	1564430	-8.95
123 Chlorobenzene-d5	1889046	1133428	2644664	1783689	-5.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.01	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 1-20may
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0805220-05A
Level: LOW Operator: cb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 2.5"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.276	97.10	70-130
$ 111 Toluene-d8	25.000	24.746	98.98	70-130
$ 136 Bromofluorobenzene	25.000	24.057	96.23	70-130

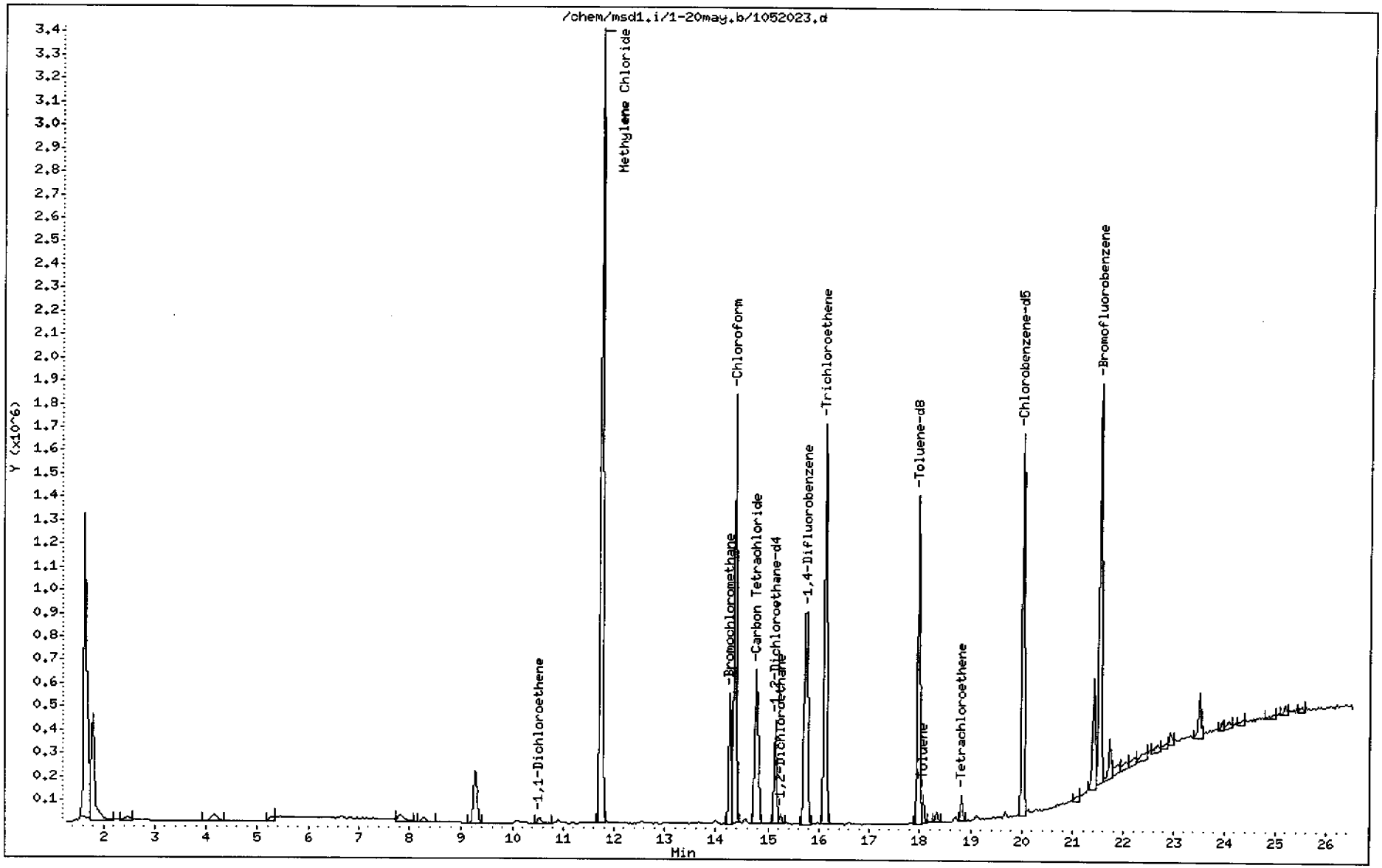
Data File: /chem/msd1.i/1-20may.b/1052023.d
Date : 21-MAY-2008 00:21
Client ID:
Sample Info: 40mL #35142

Column phase: RTx-624

Instrument: msd1.i

Operator: cb
Column diameter: 0.53

0092



Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

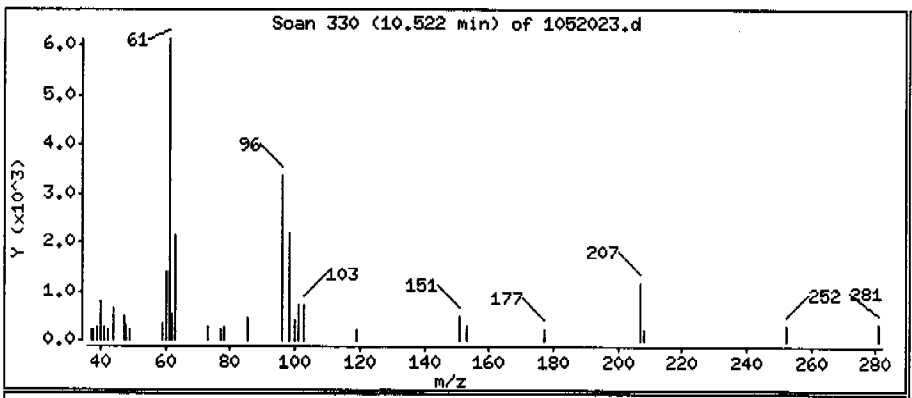
Operator: cb

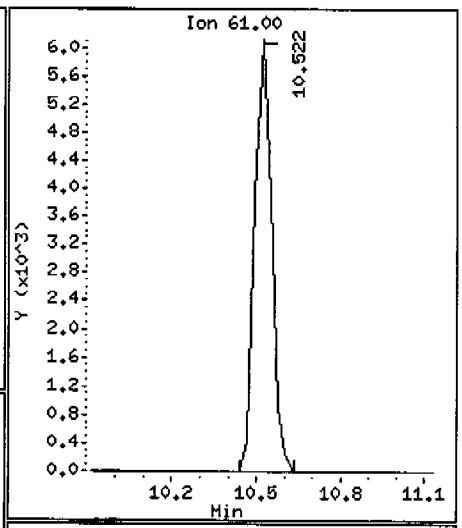
Column phase: RTx-624

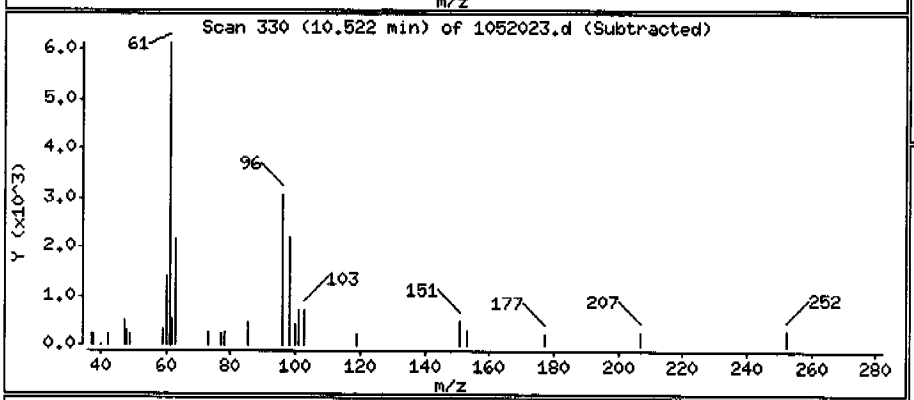
Column diameter: 0.53

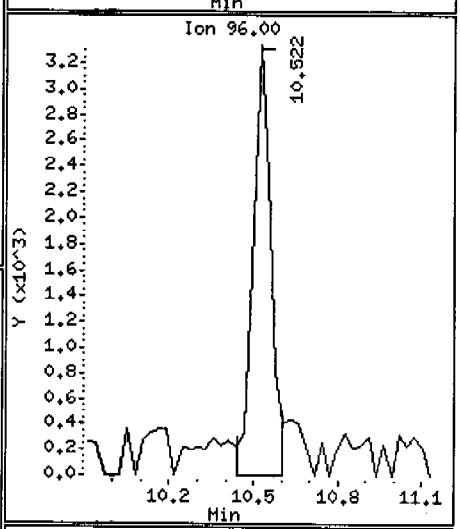
44 1,1-Dichloroethene

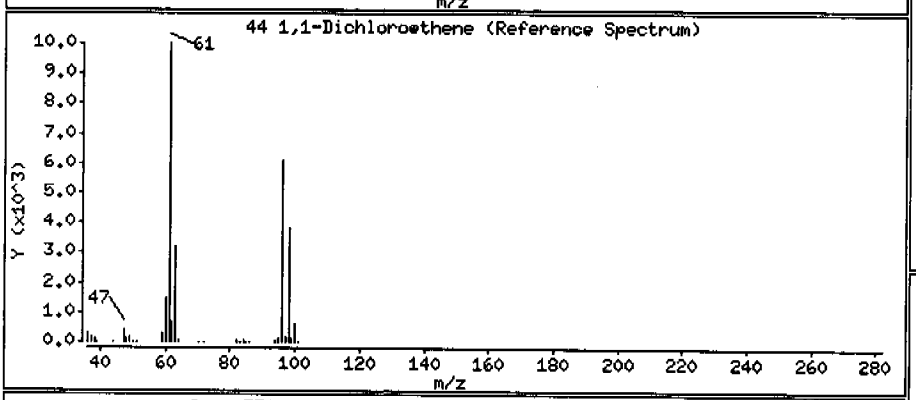
Concentration: 3.056 PPBV

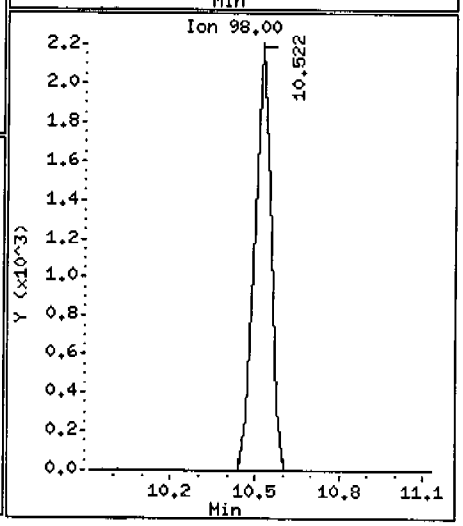


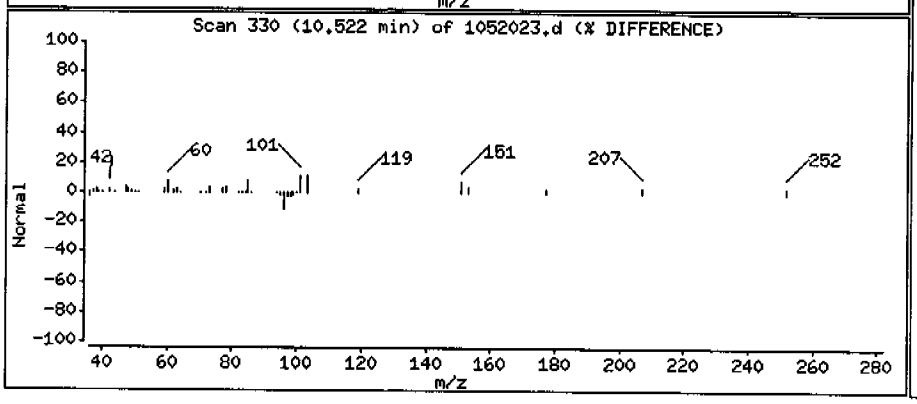












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

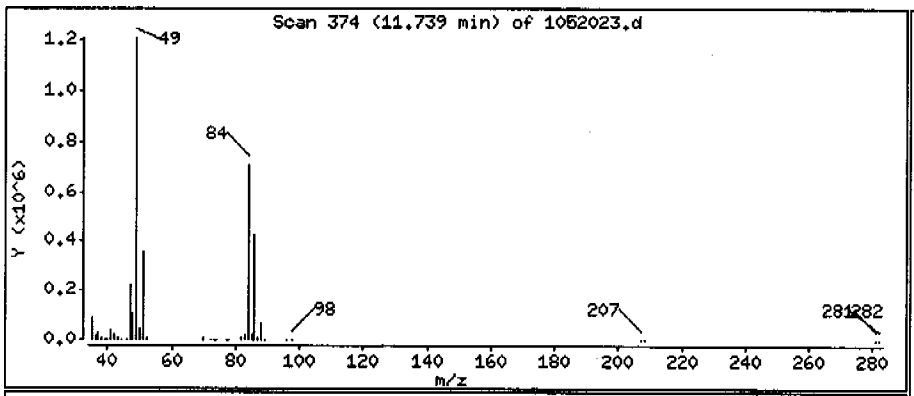
Operator: cb

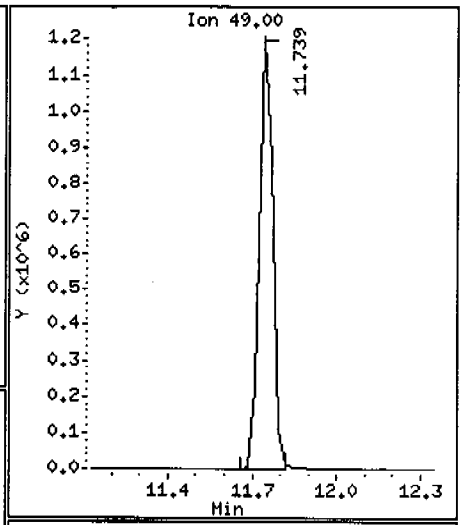
Column phase: RTx-624

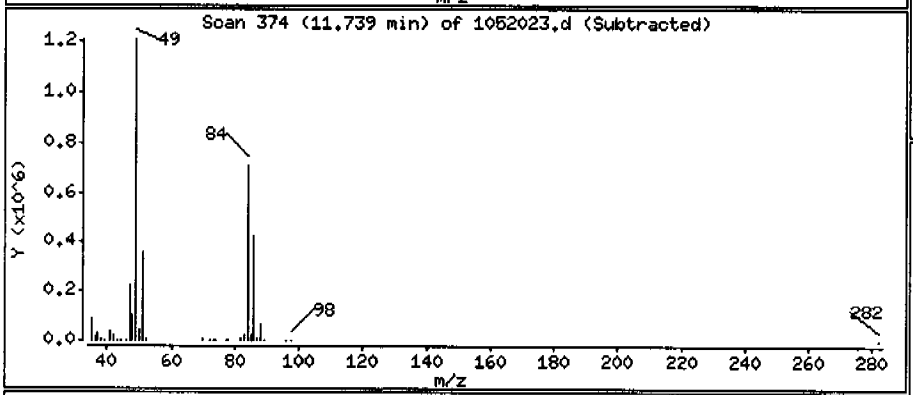
Column diameter: 0.53

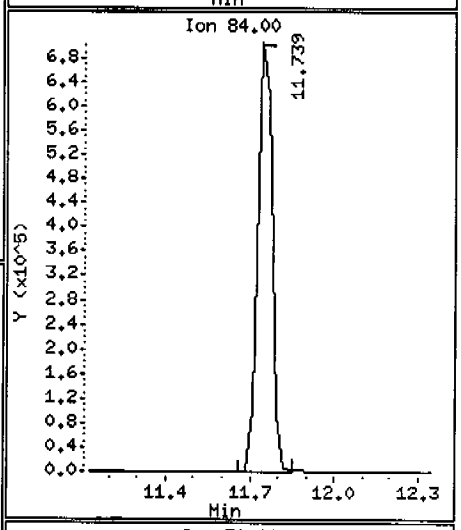
54 Methylene Chloride

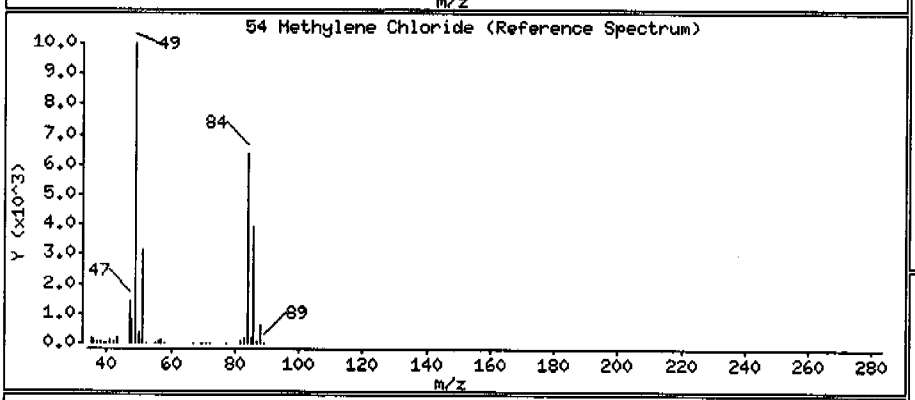
Concentration: 551.94 PPBV

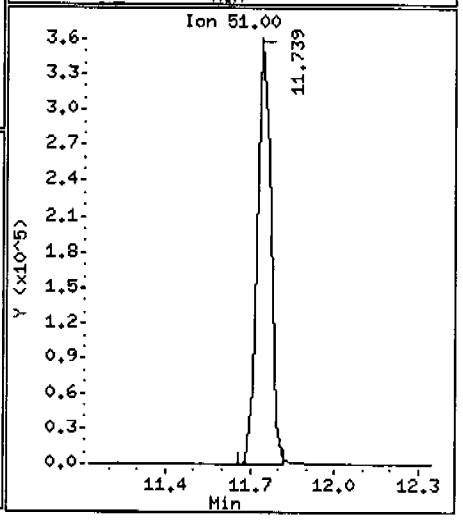


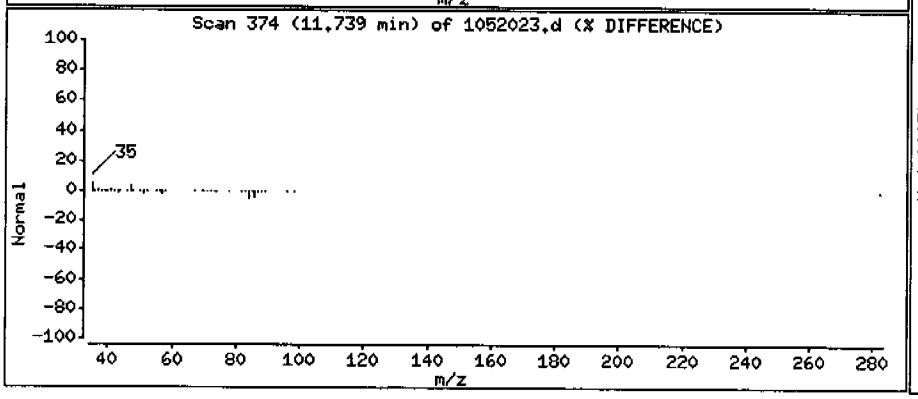












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

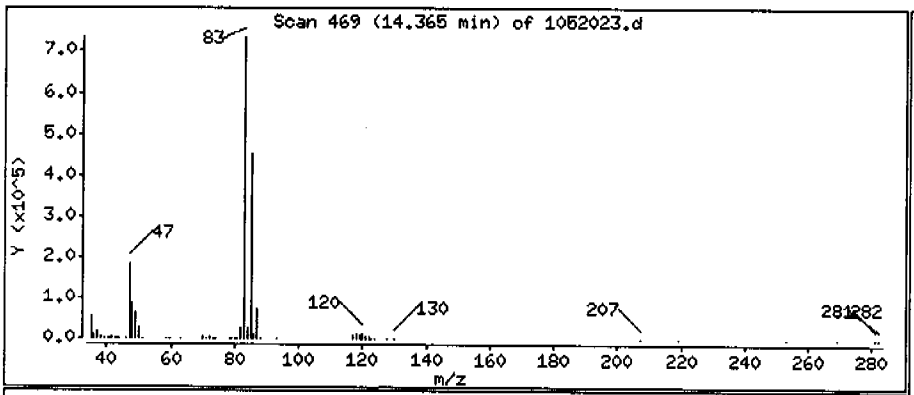
Operator: cb

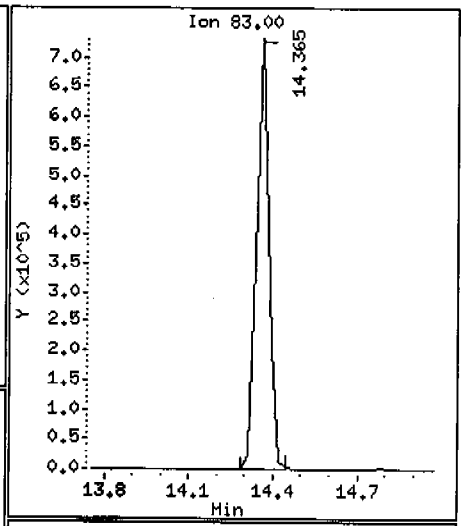
Column phase: RTx-624

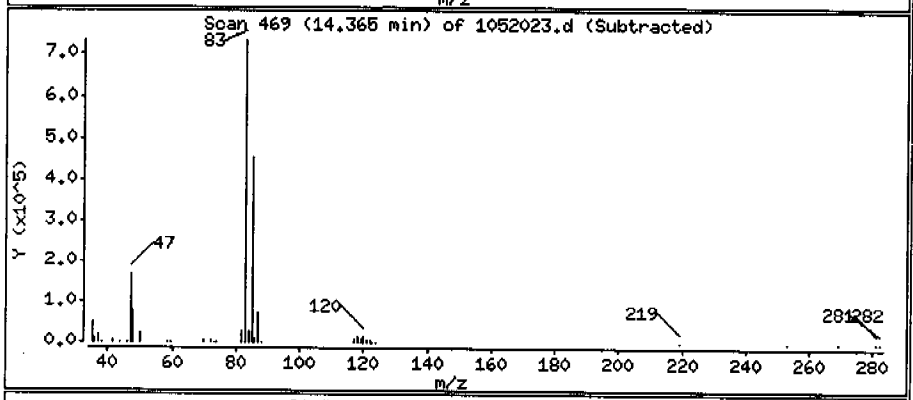
Column diameter: 0.53

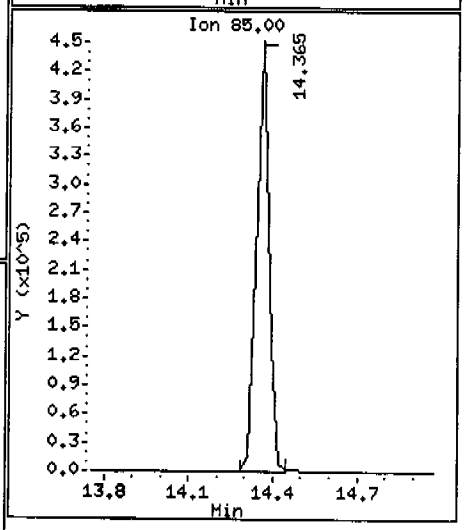
81 Chloroform

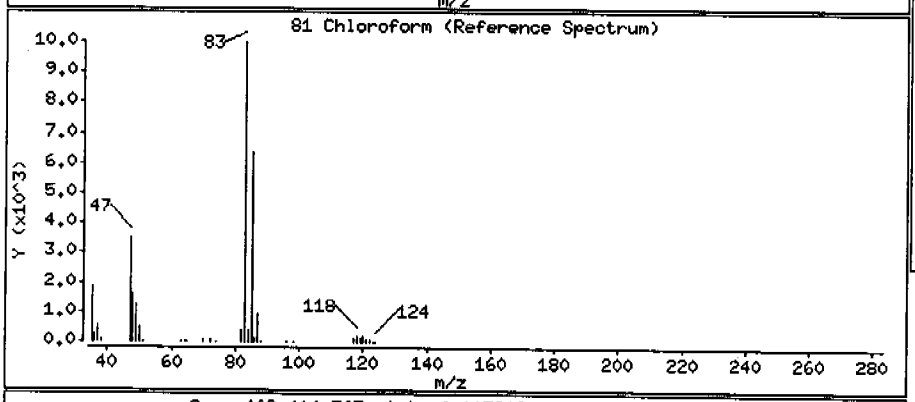
Concentration: 191.72 PPBV

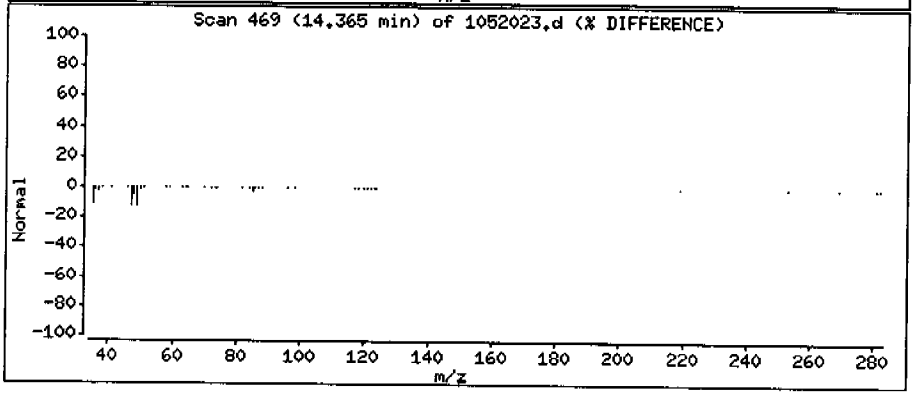












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

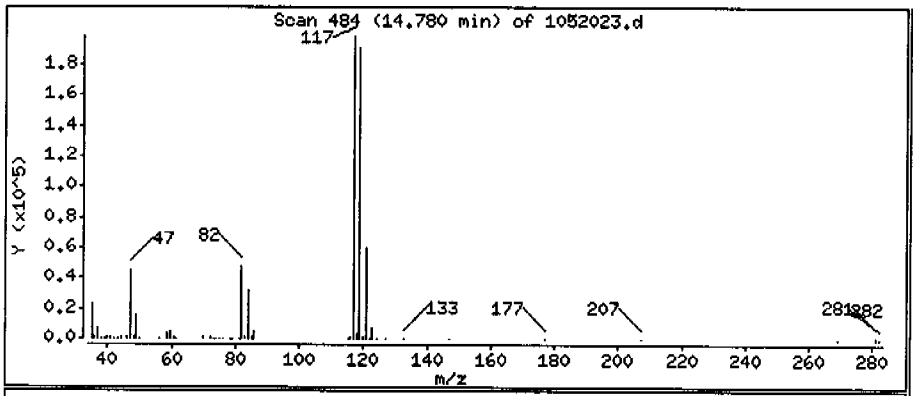
Operator: cb

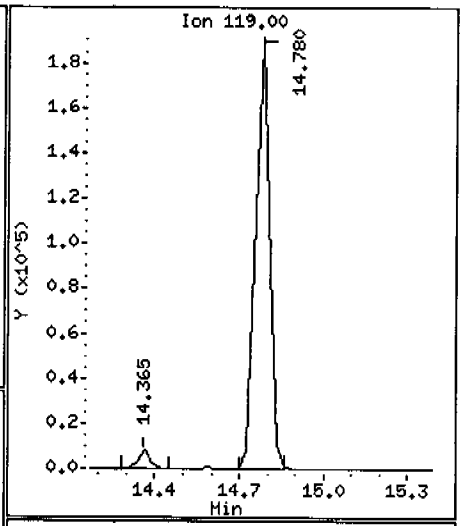
Column phase: RTx-624

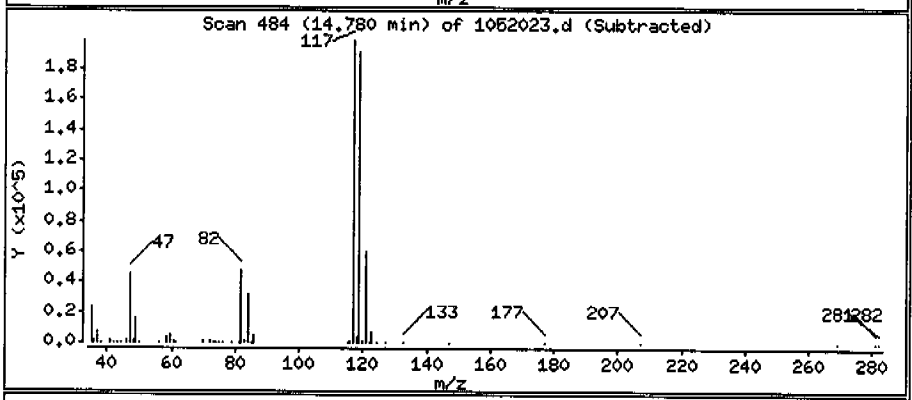
Column diameter: 0.53

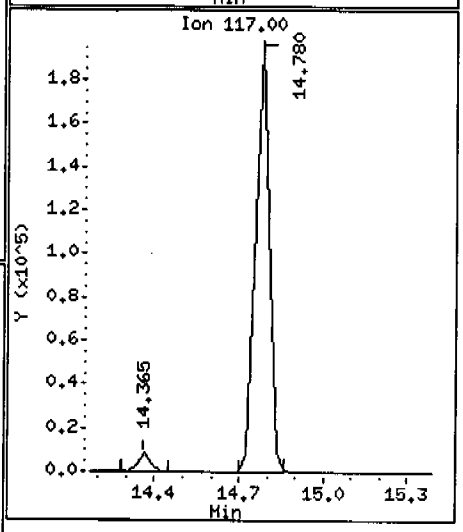
85 Carbon Tetrachloride

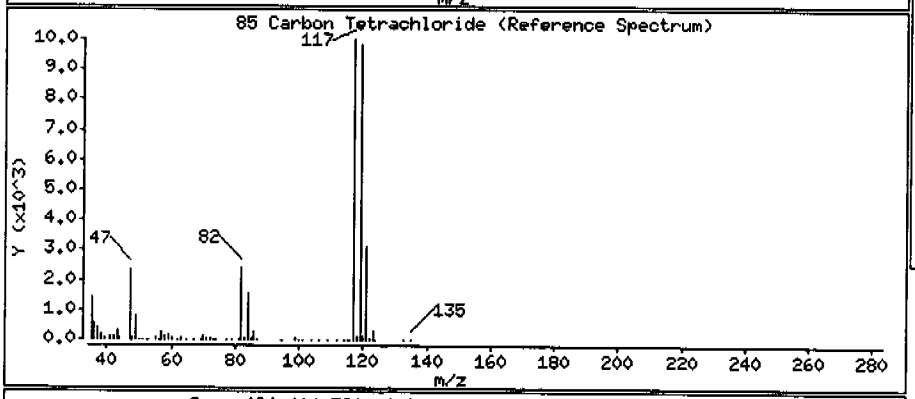
Concentration: 58.051 PPBV

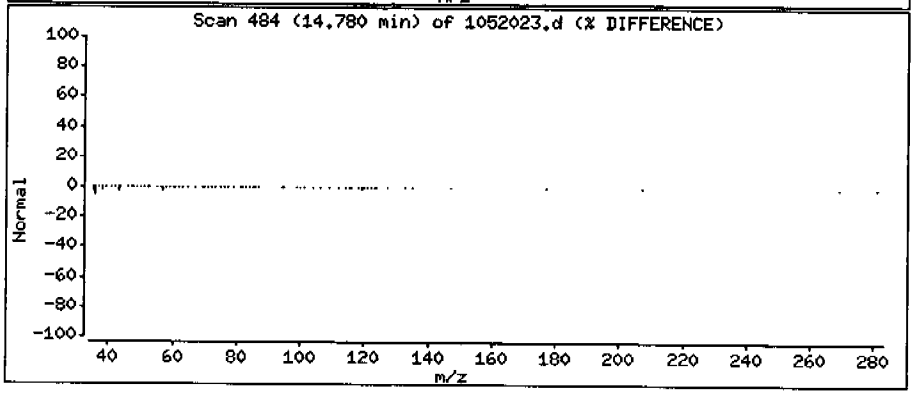












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

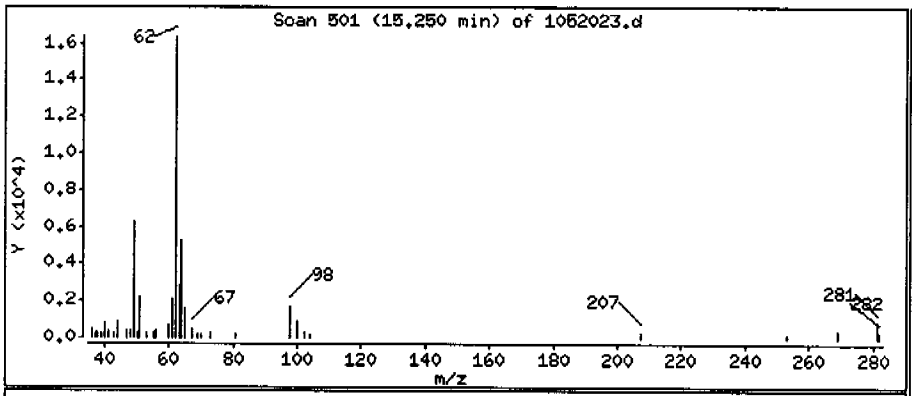
Operator: cb

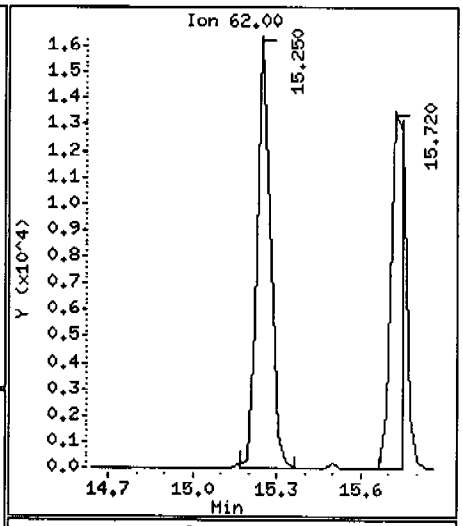
Column phase: RTx-624

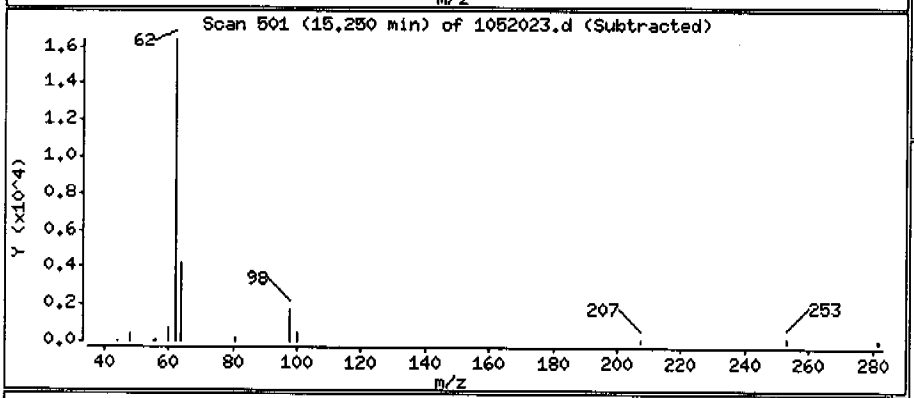
Column diameter: 0.53

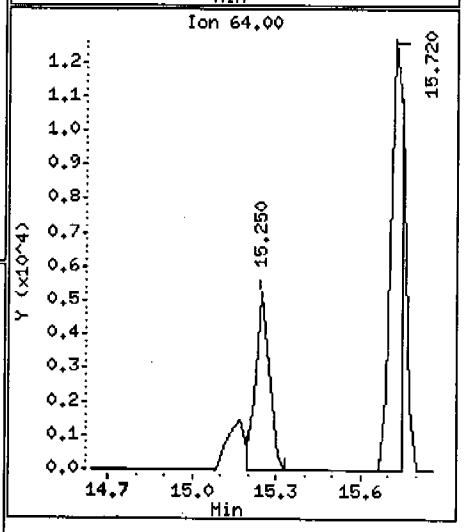
93 1,2-Dichloroethane

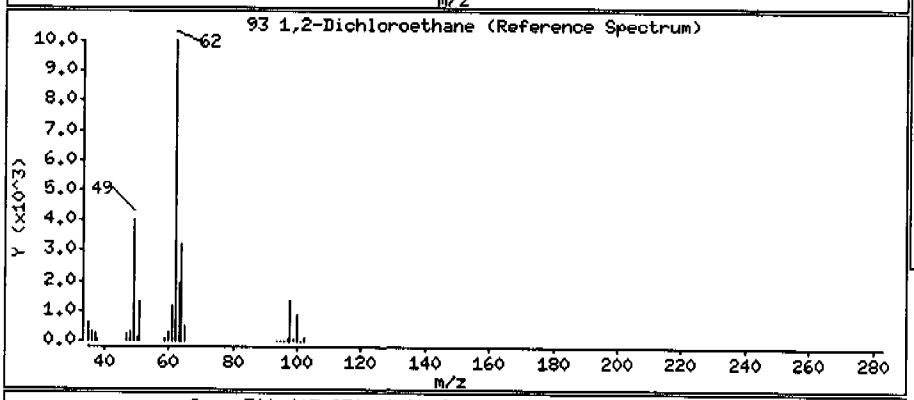
Concentration: 5.867 PPBV

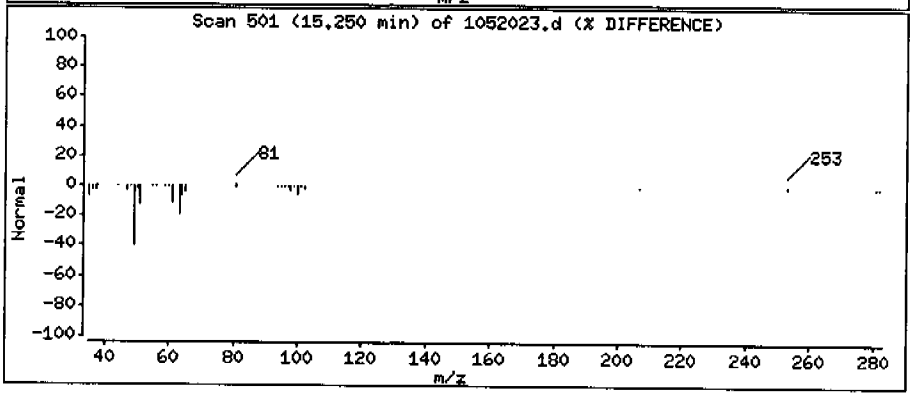












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Sample Info: 40mL #35142

Instrument: msd1.i

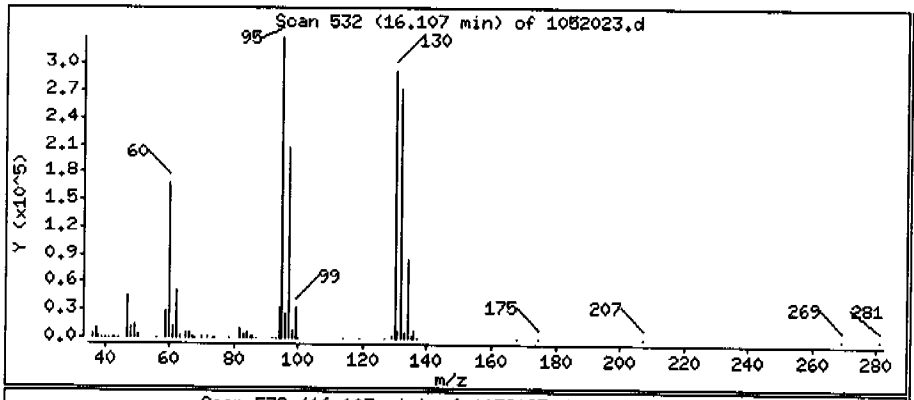
Operator: cb

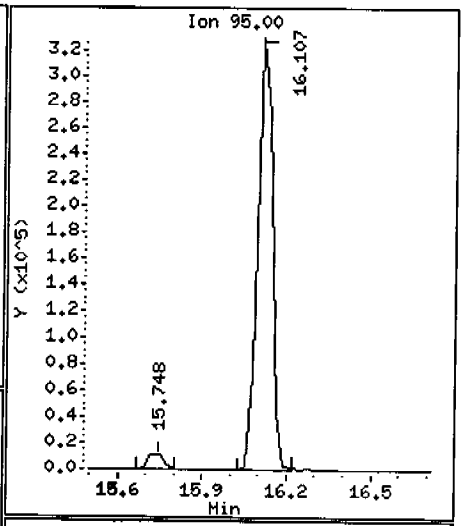
Column phase: RTx-624

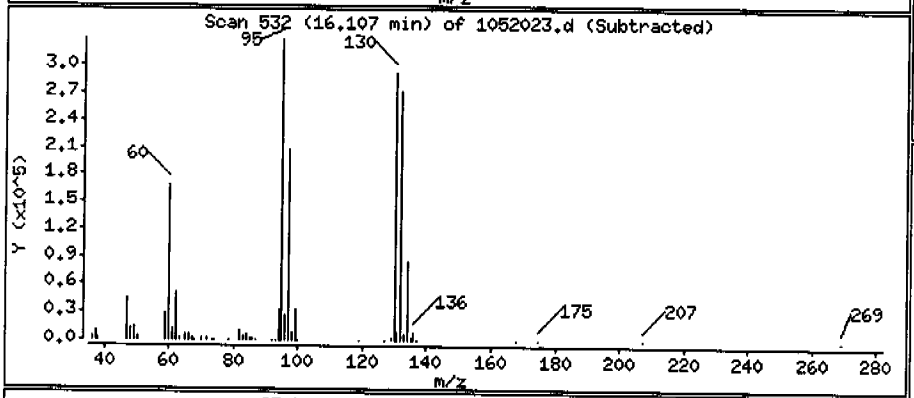
Column diameter: 0.53

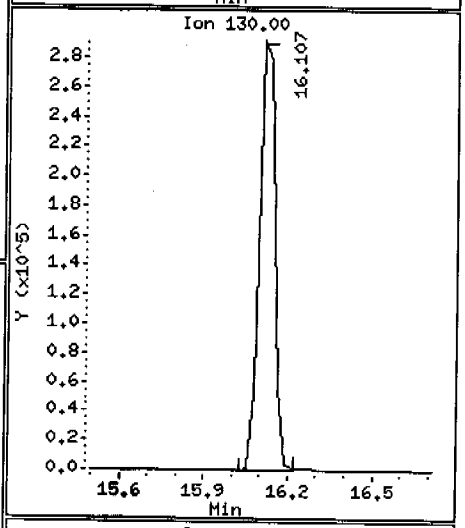
97 Trichloroethene

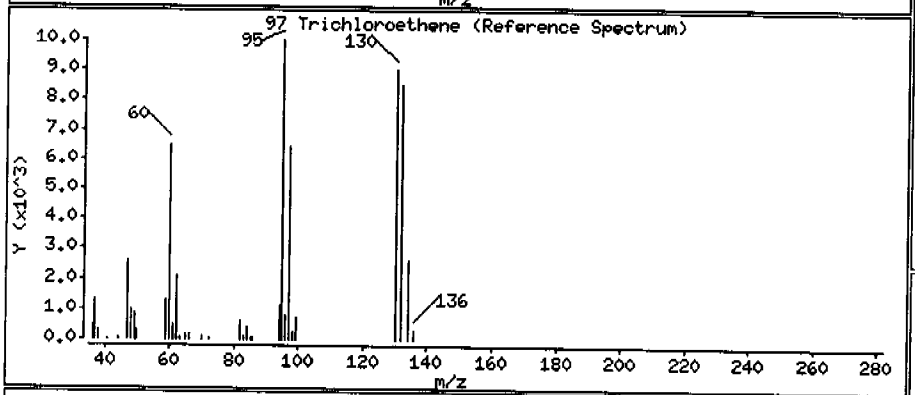
Concentration: 134.42 PPBV

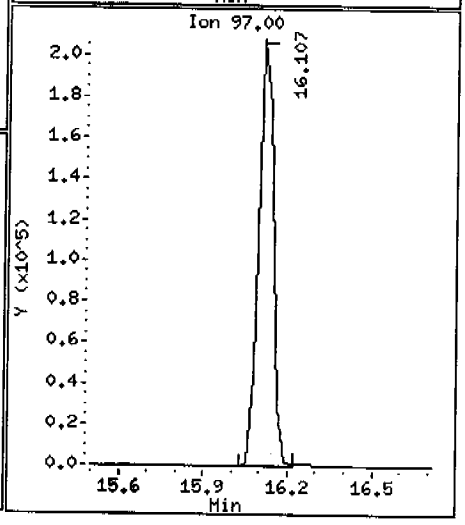


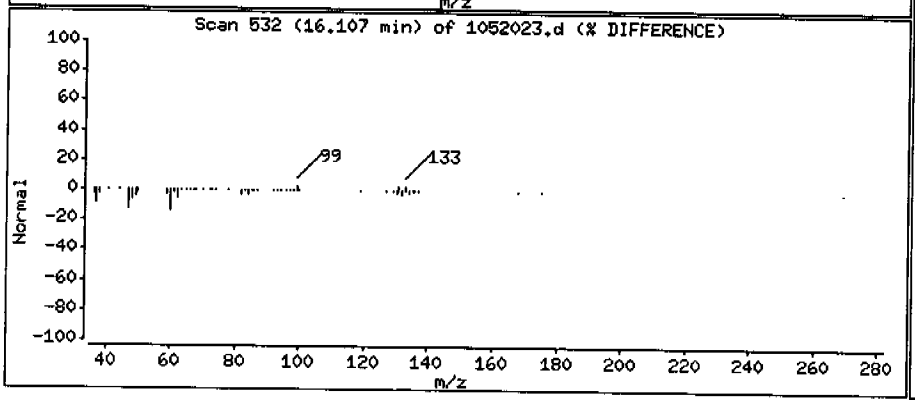












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

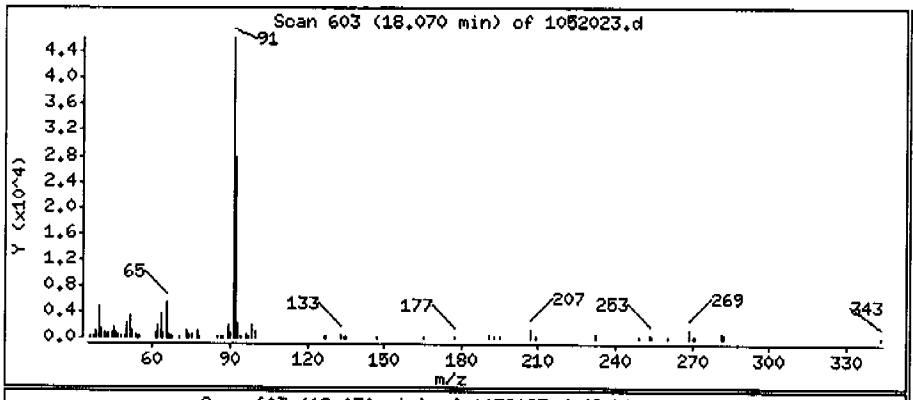
Operator: cb

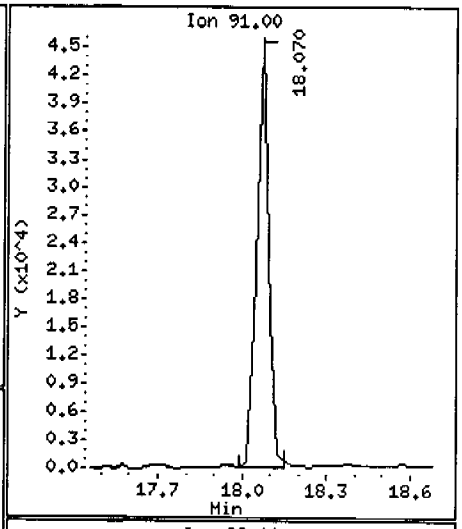
Column phase: RTx-624

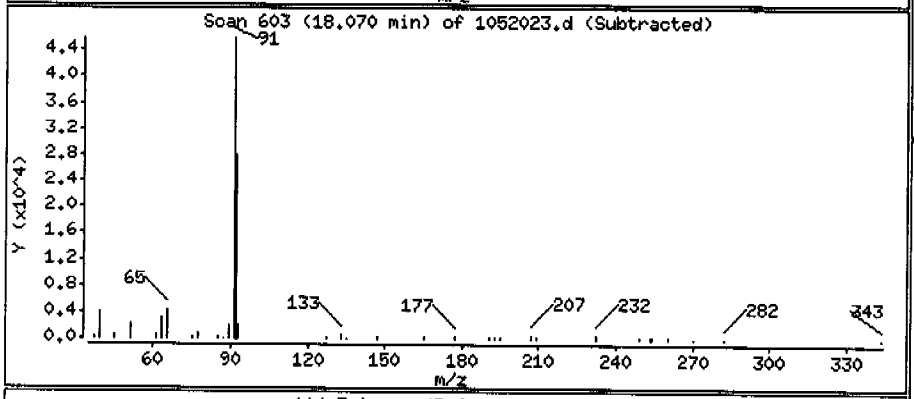
Column diameter: 0.53

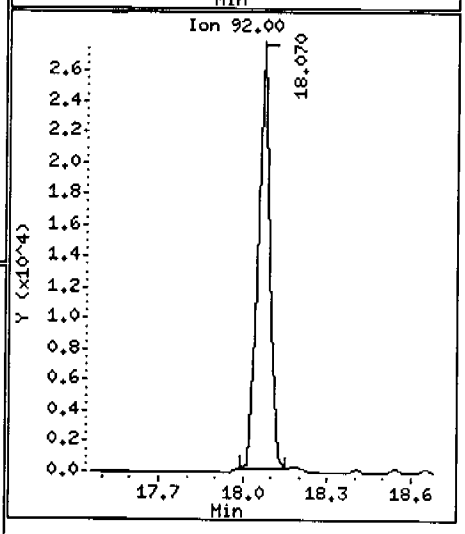
114 Toluene

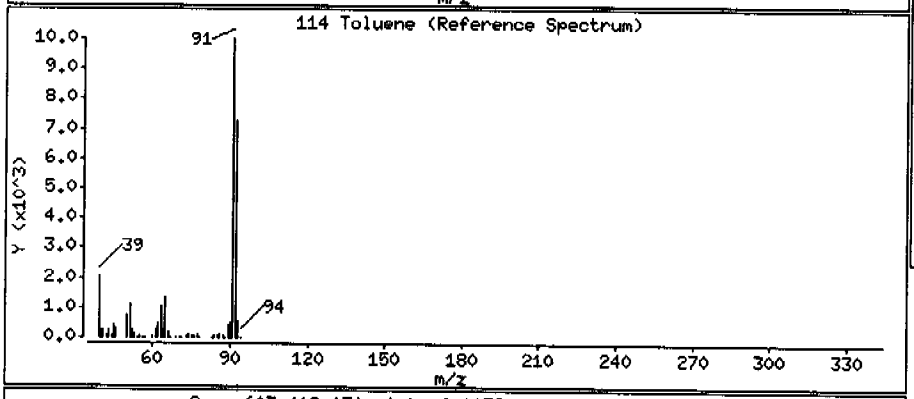
Concentration: 4.352 PPBV

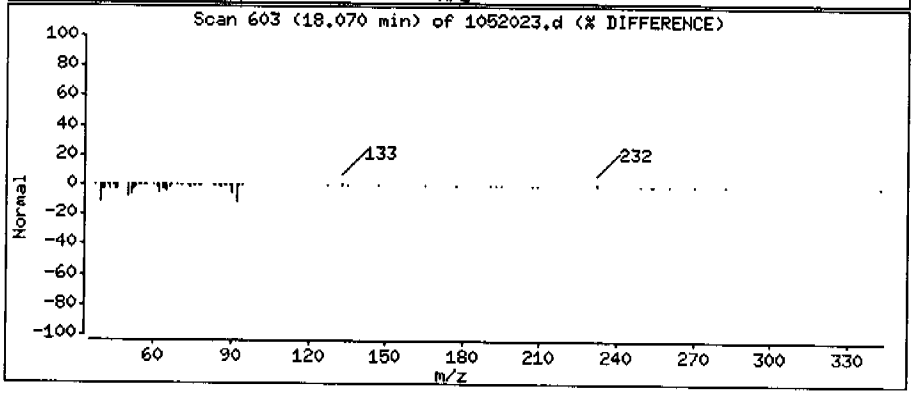












Data File: /chem/msd1.i/1-20may.b/1052023.d

Date : 21-MAY-2008 00:21

Client ID:

Instrument: msd1.i

Sample Info: 40mL #35142

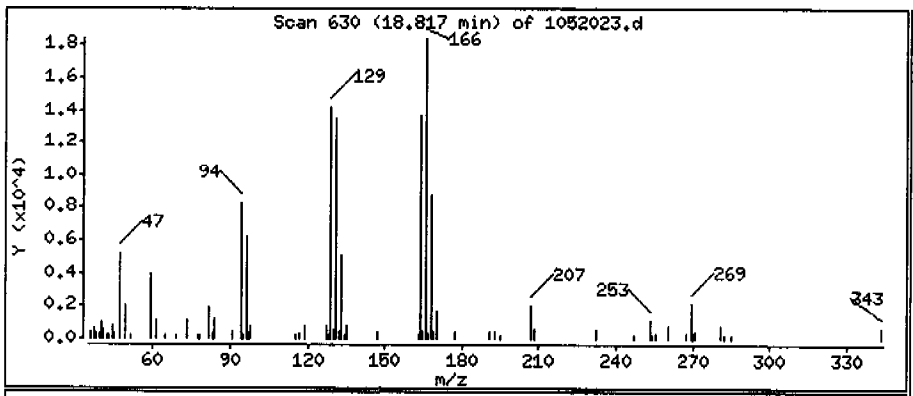
Operator: cb

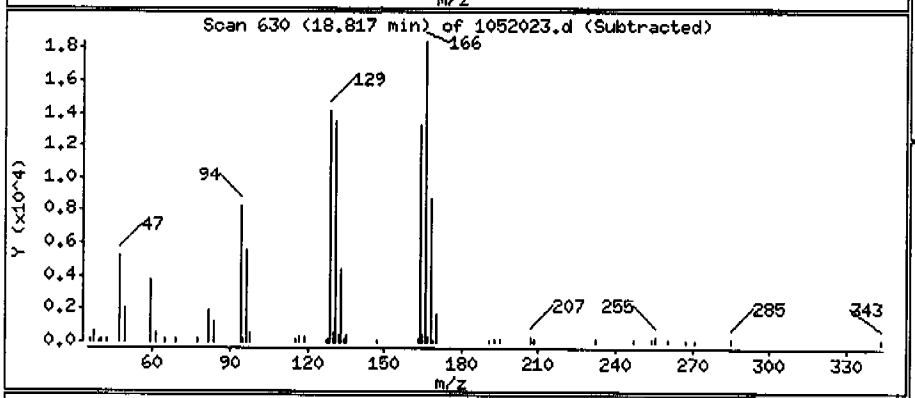
Column phase: RTx-624

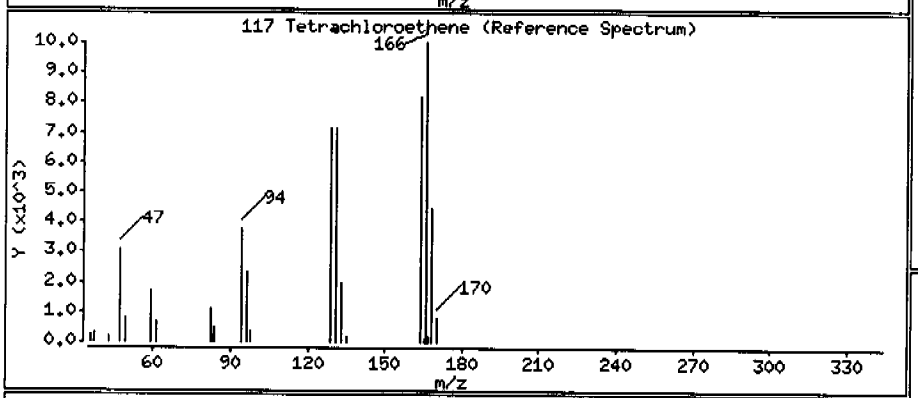
Column diameter: 0.53

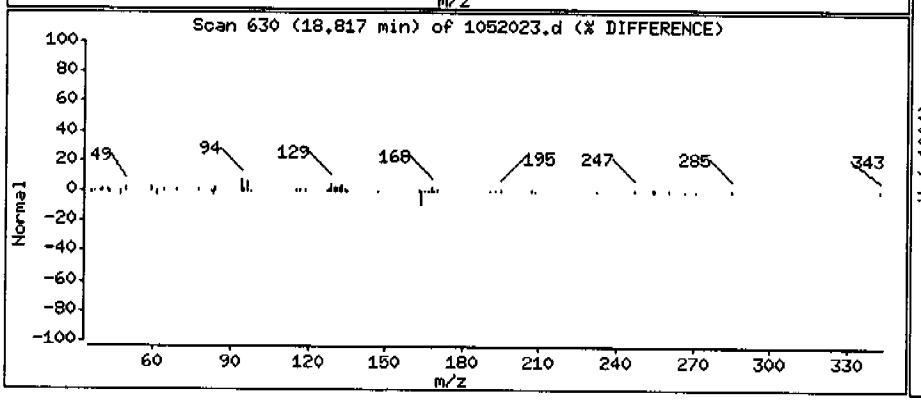
117 Tetrachloroethene

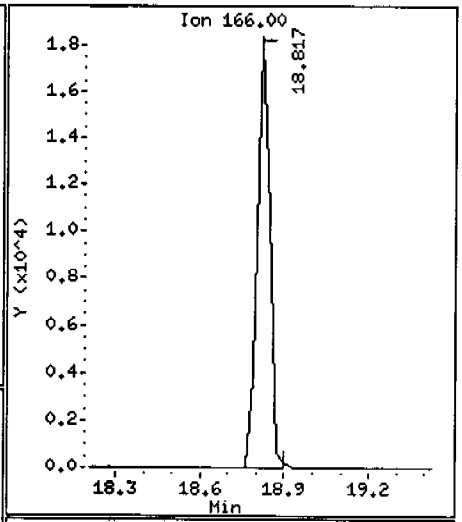
Concentration: 4.684 PPBV

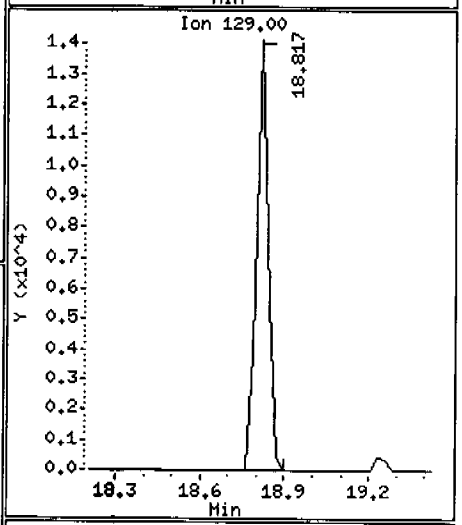


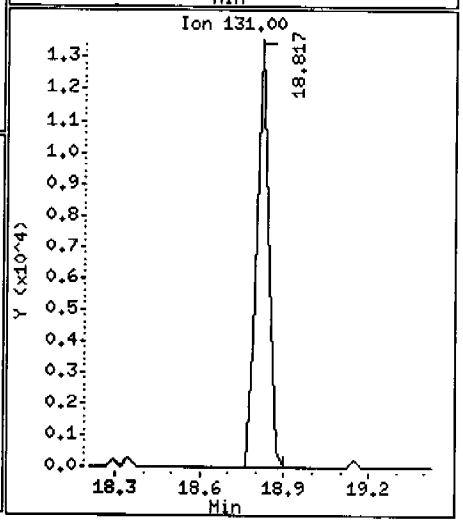












QC Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805220-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 10052009 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/20/08 01:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

0102

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0805220-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 110520[illegible]09 Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 5/20/08 01:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	96	70-130

0103

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052009.d
Lab Smp Id: Lab blank
Client Smp ID: Lab blank
Inj Date : 20-MAY-2008 13:47
Operator : lo
Inst ID: msd1.i
Smp Info : 100mL #12009
Misc Info : humid
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 14:01 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.255 (1.000)	130	288065	25.0000		80.00- 120.00	100.00
14.282	14.255 (1.000)	128	231795			28.28- 128.28	80.47
14.255	14.255 (1.000)	49	530637			132.70- 232.70	184.21
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1497577	25.0000		80.00- 120.00	100.00
15.748	15.748 (1.000)	88	232235			0.00- 65.54	15.51
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.006 (1.000)	117	1705350	25.0000		80.00- 120.00	100.00
20.006	20.006 (1.000)	82	988128			8.42- 108.42	57.94
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.139	15.140 (1.060)	65	461779	24.0213	24.021	80.00- 120.00	100.00
15.139	15.140 (1.060)	67	240994			6.04- 106.04	52.19
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.987	17.960 (1.142)	98	1686920	24.8603	24.860	80.00- 120.00	100.00
17.960	17.960 (1.140)	70	175009			0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.987	17.960 (1.142)	100	1100882			15.45- 115.45	65.26
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.526	21.527 (1.075)	174	874171	23.9560	23.956	80.00- 120.00	100.00
21.526	21.527 (1.075)	95	1399593			112.36- 212.36	160.11
21.526	21.527 (1.075)	176	830964			46.57- 146.57	95.06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052009.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: humid

Calibration Date: 20-MAY-2008
Calibration Time: 12:26
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	288065	-11.61
95 1,4-Difluorobenze	1718149	1030889	2405409	1497577	-12.84
123 Chlorobenzene-d5	1889046	1133428	2644664	1705350	-9.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 20-May-2008 14:02

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08a.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: humid

Client SDG: 1-20may
Fraction: VOA
Client Smp ID: Lab blank
Operator: lo
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.021	96.09	70-130
$ 111 Toluene-d8	25.000	24.860	99.44	70-130
$ 136 Bromofluorobenzene	25.000	23.956	95.82	70-130

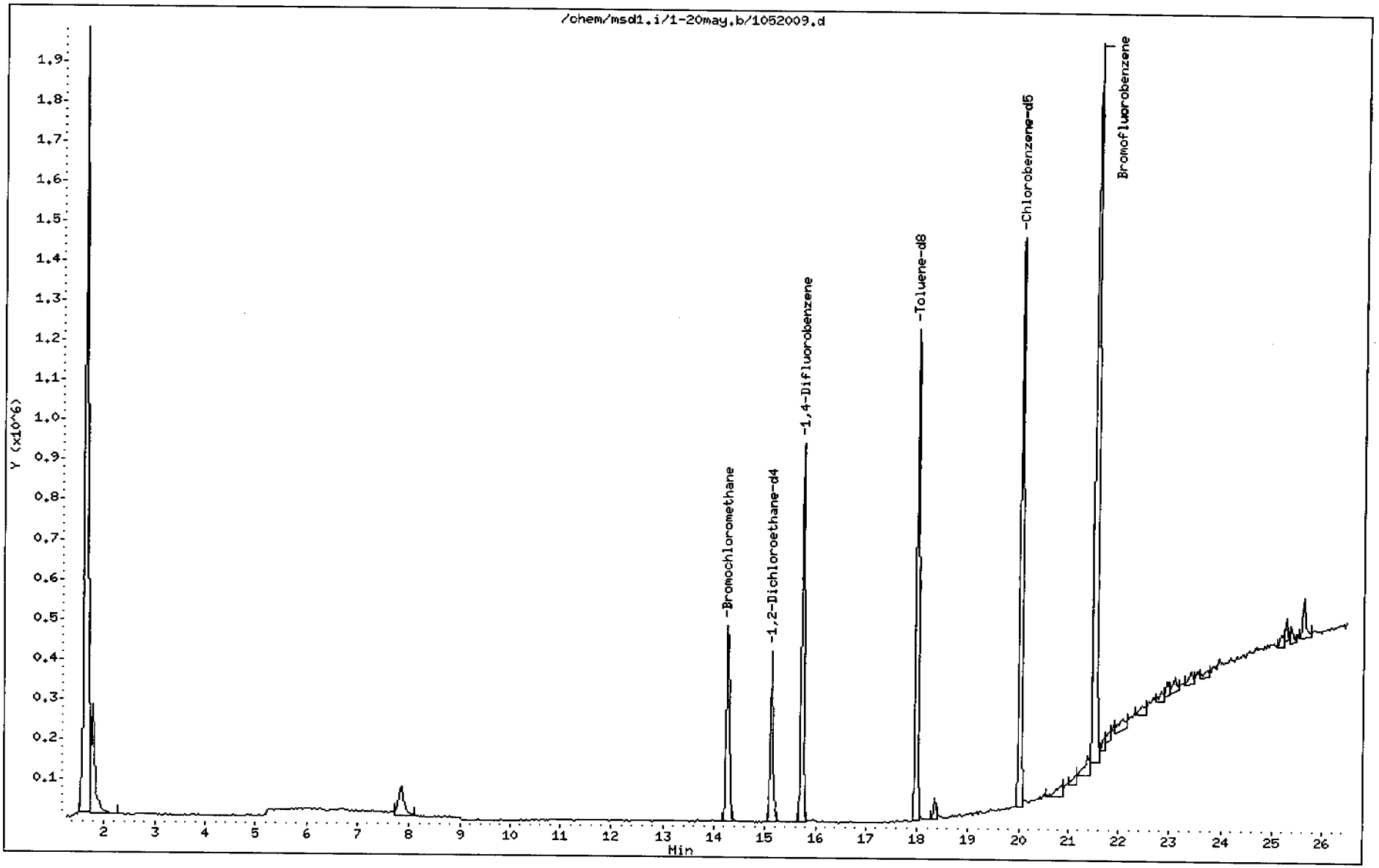
Data File: /chem/msd1.i/1-20may.b/1052009.d
Date : 20-MAY-2008 13:47
Client ID: Lab blank
Sample Info: 100mL #12009

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0108



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0805220

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-12247	99		97		96				0
02	MD21-08-12248	92		99		96				0
03	MD21-08-12249	94		99		96				0
04	MD21-08-12250	94		98		97				0
05	MD21-08-12251	97		99		96				0
06	Lab Blank	96		99		96				0
07	CCV	98		98		98				0
08	LCS	98		98		98				0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0805220
Lab File ID: 1052007.d
Date Analyzed: 05/20/2008
Instrument ID: msd1.i
Time Analyzed: 12:26 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1889046		20.01		1718149		15.75		325915		14.25	
	UPPER LIMIT	2644664		20.34		2405409		16.08		456281		14.58	
	LOWER LIMIT	1133428		19.68		1030889		15.42		195549		13.92	
	CLIENT SAMPLE NO												
01	MD21-08-12247	1791895		20.03		1570693		15.75		291454		14.28	
02	MD21-08-12248	1739091		20.03		1521775		15.75		298014		14.25	
03	MD21-08-12249	1735888		20.03		1539534		15.75		300939		14.28	
04	MD21-08-12250	1709265		20.03		1536258		15.75		304218		14.28	
05	MD21-08-12251	1783689		20.01		1564430		15.75		297765		14.28	
06	Lab Blank	1705350		20.03		1497577		15.75		288065		14.28	
07	CCV	1889046		20.01		1718149		15.75		325915		14.25	
08	LCS	1881903		20.03		1684804		15.75		321437		14.28	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

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Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd1.i/1-19may.b/1051909.d
Level 2: /chem/msd1.i/1-19may.b/1051910.d
Level 3: /chem/msd1.i/1-20may.b/1052003.d
Level 4: /chem/msd1.i/1-20may.b/1052004.d
Level 5: /chem/msd1.i/1-20may.b/1052005.d
Level 6: /chem/msd1.i/1-19may.b/1051914.d
Level 7: /chem/msd1.i/1-20may.b/1052006.d

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 134a	+++++	+++++	0.39502	0.51678	0.54032	+++++		
	0.50460						0.48918	13.185
10 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
12 Propylene	+++++	+++++	0.47660	0.61884	0.57927	0.54317		
	0.54203						0.55198	9.532
13 Freon 152a	+++++	+++++	0.42915	0.45655	0.49989	+++++		
	0.46749						0.46327	6.316
14 Dichlorodifluoromethane/Fr12	+++++	2.76445	2.56056	3.08773	2.88870	2.66106		
	2.57318						2.75595	7.407
15 Freon 22	+++++	+++++	1.57175	1.66807	1.82209	+++++		
	1.64886						1.67769	6.251
16 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
17 Freon 114	+++++	1.67479	1.85622	2.11076	1.98776	1.85882		
	1.83153						1.88665	7.864

Air Toxics Ltd.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Freon142b	+++++	+++++	1.86827	2.02749	2.34963	+++++	2.20151	2.11173	9.897
20 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Chloromethane	+++++	+++++	1.32370	1.28062	1.19541	1.08998	1.04846	1.18763	9.974
22 Butane	+++++	+++++	0.28531	0.26677	0.25435	0.24865	0.24540	0.26009	6.261
23 Vinyl Chloride	+++++	1.40040	1.33114	1.40070	1.29633	1.19330	1.17018	1.29868	7.656
24 1,3-Butadiene	1.07219	0.82498	0.92650	1.08488	1.04723	0.98161	0.97512	0.98750	9.295
25 Methanol	+++++	+++++	+++++	0.47297	0.37349	+++++	0.34473	0.39706	16.947
26 Bromomethane	+++++	0.64699	0.70798	1.05658	0.97995	0.94078	0.92846	0.87679	18.464
27 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
28 Chloroethane	+++++	0.69436	0.62757	0.76111	0.73861	0.69198	0.69490	0.70142	6.559
29 Isopentane	+++++	+++++	1.92863	2.08393	1.94263	1.81472	1.77712	1.90941	6.328
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Dichlorofluoromethane/Fr21	+++++	+++++	1.56207	2.00145	2.25122	+++++	2.14319	1.98948	15.217
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Trichlorofluoromethane/Fr11	+++++	3.13047	3.40834	3.96475	3.78912	3.51201	3.47684	3.54692	8.287
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
38 Ethanol	+++++	+++++	0.38421	0.63314	0.60136	0.59487	0.59545	0.56181	17.892
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 Freon123a	+++++	+++++	0.68867	0.87467	1.03875	+++++	0.97964	0.89543	17.158
41 Freon123	+++++	+++++	0.11866	0.15944	0.17069	+++++	0.15936	0.15204	15.047
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	1.61886	1.84175	2.07949	1.99742	1.82451	1.77363	1.85594	8.826
44 1,1-Dichloroethene	+++++	2.52247	2.72244	2.76486	2.59686	2.42907	2.40242	2.57302	5.819
45 Acetone	+++++	+++++	0.95878	0.91952	0.84744	0.79608	0.79911	0.86419	8.417
46 2-Propanol	+++++	+++++	2.95124	3.32862	3.16023	2.96512	2.87019	3.05508	6.100
47 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
48 Carbon Disulfide	+++++	3.88997	4.48868	4.41919	4.30785	4.11812		
	4.20486						4.23812	5.139
49 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 3-Chloropropene	+++++	+++++	0.26074	0.46224	0.48804	0.51548		
	0.56295						0.45789	25.410
51 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
52 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	2.84309	2.06493	2.24438	2.13865	2.02826		
	2.05386						2.22886	13.950
55 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
57 tert-Butyl-Alcohol	+++++	2.10710	2.23142	1.54313	1.37872	1.29071		
	1.11309						1.61070	28.316

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Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
58 MTBE	+++++	1.58958	1.79640	1.61914	1.58732	1.51484		
	1.43384						1.59019	7.624
59 trans-1,2-Dichloroethene	+++++	1.29068	1.63241	1.85903	1.73674	1.62346		
	1.61519						1.62625	11.640
60 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
61 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
62 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
63 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
64 Hexane	+++++	3.37081	3.67373	4.24604	3.89581	3.66800		
	3.64719						3.75026	7.858
65 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
66 Isopropyl ether	+++++	+++++	4.87970	6.40561	7.72550	+++++		
	7.32426						6.58377	19.187
67 Vinyl Acetate	+++++	+++++	0.29695	0.46584	0.44422	0.44900		
	0.44138						0.41948	16.485

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
68 1,1-Dichloroethane	+++++	1.75260	2.53662	3.52968	3.44103	3.27162	3.29010	2.97028	23.317
69 1-Propanol	+++++	+++++	0.22633	0.27762	0.38253	+++++	0.38819	0.31867	25.055
70 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 t-Butylethyl Ether	+++++	+++++	2.22274	2.31716	3.28286	+++++	3.22375	2.76163	20.624
73 Ethyl Acetate	+++++	+++++	0.50093	0.67245	0.78161	+++++	0.73805	0.67326	18.319
74 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.58480	0.84693	1.06157	1.00648	0.95843	0.94556	0.90063	18.915
76 cis-1,2-Dichloroethene	+++++	2.29431	2.61123	3.03838	2.84276	2.65971	2.62725	2.67894	9.319
77 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
78 Tetrahydrofuran	+++++	5.32871	3.38325	3.26689	3.03132	2.88497		
	2.86177						3.45948	27.140
80 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
81 Chloroform	2.82358	2.94294	3.53490	4.14634	3.92525	3.68711		
	3.69444						3.53636	13.811
82 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.48036	3.34569	4.27254	4.17807	4.00699		
	3.98011						3.71062	18.442
84 Cyclohexane	+++++	2.85065	3.03398	3.43515	3.26161	3.03393		
	2.93852						3.09231	7.012
85 Carbon Tetrachloride	+++++	2.71658	3.23630	3.82273	3.70316	3.53518		
	3.57832						3.43205	11.716
86 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
88 2,2,4-Trimethylpentane	+++++	10.92851	12.93967	14.71781	14.05371	13.35507		
	13.21090						13.20094	9.751

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 Benzene	1.25002	1.12107	1.25694	1.44995	1.33426	1.25893	1.23347	1.27209	7.906
92 tert-amyl-Methyl Ether	+++++	+++++	2.60942	2.87079	3.64481	+++++	3.40377	3.13220	15.179
93 1,2-Dichloroethane	+++++	0.40543	0.51308	0.59794	0.56970	0.53307	0.53709	0.52605	12.599
94 Heptane	+++++	0.42177	0.49542	0.55513	0.51782	0.48829	0.48344	0.49365	8.907
96 1-Butanol	+++++	+++++	0.23773	0.28110	0.35735	+++++	0.40288	0.31976	23.225
97 Trichloroethene	+++++	0.45421	0.51077	0.58874	0.55312	0.51595	0.50714	0.52165	8.743
98 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Methyl Cyclohexane	+++++	3.55011	4.32249	4.90187	4.72646	4.45199	4.49252	4.40757	10.630
100 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
101 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 1,2-Dichloropropane	+++++	0.45112	0.49902	0.56198	0.53570	0.50061	0.49442	0.50714	7.499
103 1,4-Dioxane	+++++	+++++	0.31799	0.35126	0.33375	0.31787	0.31593	0.32736	4.633
104 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Bromodichloromethane	+++++	0.61951	0.77315	0.93355	0.88905	0.84498	0.84512	0.81756	13.540
107 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 cis-1,3-Dichloropropene	+++++	0.60933	0.65684	0.81227	0.75956	0.72582	0.72776	0.71526	10.135
110 4-Methyl-2-pentanone	+++++	0.39745	0.48036	0.57623	0.55319	0.52727	0.52783	0.51039	12.519

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
113 Undecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
114 Toluene	+++++	1.50227	1.69705	1.94518	1.84039	1.76420		
	1.74905						1.74969	8.502
115 trans-1,3-Dichloropropene	+++++	0.50679	0.62987	0.76860	0.72015	0.69673		
	0.70700						0.67152	13.738
116 1,1,2-Trichloroethane	+++++	0.46020	0.51818	0.59324	0.55551	0.52891		
	0.51839						0.52907	8.365
117 Tetrachloroethene	+++++	0.52486	0.60092	0.70022	0.65380	0.61198		
	0.58559						0.61290	9.773
118 2-Hexanone	+++++	+++++	0.61995	0.76220	0.74022	0.71772		
	0.73731						0.71548	7.782
119 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
120 Butyl Acetate	+++++	+++++	0.45293	0.62604	0.73986	+++++		
	0.74821						0.64176	21.452
121 Dibromochloromethane	+++++	0.56459	0.66364	0.86143	0.81295	0.78587		
	0.78654						0.74584	14.777

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
122 1,2-Dibromoethane	0.58968	0.62112	0.78288	0.92554	0.87052	0.83417		
	0.82999						0.77913	16.258
124 Chlorobenzene	+++++	1.15566	1.40879	1.56541	1.48184	1.41137		
	1.43123						1.40905	9.754
125 Ethyl Benzene	+++++	0.59553	0.76582	0.89271	0.82520	0.78406		
	0.77255						0.77264	12.777
126 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
127 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 m,p-Xylene	+++++	0.71446	0.96248	1.10917	1.05199	1.00895		
	1.01236						0.97657	14.077
129 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
130 o-Xylene	+++++	0.78477	0.92259	1.04099	0.99310	0.94121		
	0.91430						0.93283	9.317
131 Styrene	1.70444	1.41504	1.34627	1.69419	1.62119	1.58626		
	1.58488						1.56461	8.672
132 2-Heptanone	+++++	+++++	3.98060	5.27499	5.84891	+++++		
	6.33019						5.35867	18.940

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
133 Bromoform	+++++	0.56104	0.62556	0.78733	0.75836	0.74649		
	0.73511						0.70231	12.615
134 Cumene	2.06386	2.32437	2.72684	3.07090	2.98904	2.87199		
	2.00096						2.57828	17.216
135 Cyclohexanone	+++++	+++++	0.54565	0.72187	0.73917	+++++		
	0.84775						0.71361	17.526
137 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
138 1,1,2,2-Tetrachloroethane	+++++	1.55756	1.26692	1.39263	1.34655	1.34371		
	1.36012						1.37791	7.057
139 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 Propylbenzene	+++++	2.85361	3.22399	3.71288	3.66000	3.14296		
	2.15886						3.12538	18.375
141 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
142 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
143 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
144 4-Ethyltoluene	+++++	2.35997	2.79036	3.25444	3.17066	2.96751	2.08121	2.77069	16.752
145 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 1,3,5-Trimethylbenzene	2.23613	2.30798	2.69550	2.88655	2.89747	2.95994	2.54405	2.64680	11.066
147 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 Diisobutyl Ketone	+++++	+++++	1.35451	1.77171	1.66745	+++++	1.61775	1.60285	11.078
149 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1,2,4-Trimethylbenzene	1.81442	1.93820	2.05281	2.26768	2.28440	2.31093	1.99608	2.09493	9.289
153 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
154 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
155 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
156 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
157 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
158 1,3-Dichlorobenzene	+++++	1.28691	1.23898	1.29574	1.30169	1.32496		
	1.34048						1.29813	2.703
159 1,4-Dichlorobenzene	+++++	1.07031	1.23957	1.32627	1.33085	1.37109		
	1.38582						1.28732	9.159
160 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
162 alpha-Chlorotoluene	+++++	1.94310	1.67554	1.89206	1.95161	2.05487		
	1.86172						1.89648	6.684
163 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
164 1,2-Dichlorobenzene	+++++	1.24572	1.07556	1.05860	1.10101	1.14649			
	1.18133						1.13478	6.239	
165 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
166 Aniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
167 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
168 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
169 1,2,4-Trichlorobenzene	+++++	+++++	0.44166	0.30629	0.37792	0.53955			
	0.73748						0.48058	34.804	<-
170 Hexachlorobutadiene	+++++	+++++	0.32642	0.23481	0.27318	0.36414			
	0.45054						0.32982	25.366	
171 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
172 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
173 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd1.i/1-20may.b/t14q519b.m
Cal Date : 20-May-2008 11:58 lover
Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
174 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
175 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.58394	1.61384	1.63102	1.62794	1.65054	1.74923		
	1.82195						1.66835	5.108
$ 111 Toluene-d8	1.13996	1.13438	1.13329	1.12752	1.12411	1.14096		
	1.12910						1.13276	0.556
$ 136 Bromofluorobenzene	0.52476	0.52571	0.52552	0.53095	0.53961	0.54616		
	0.55190						0.53494	2.060

Calibration History

Method : /chem/msd1.i/1-20may.b/t14q519b.m
Start Cal Date: 19-MAY-2008 13:23
End Cal Date : 20-MAY-2008 11:33

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.25000		
19-MAY-2008 13:23	AFCEElow	/chem/msd1.i/1-19may.b/1051909.d
Cal Level: 2 , Cal Amount: 0.50000		
19-MAY-2008 13:56	AT08low	/chem/msd1.i/1-19may.b/1051910.d
Cal Level: 3 , Cal Amount: 2.00000		
20-MAY-2008 09:45	sp22a	/chem/msd1.i/1-20may.b/1052003.d
19-MAY-2008 14:29	AT08md1	/chem/msd1.i/1-19may.b/1051911.d
Cal Level: 4 , Cal Amount: 25.00000		
20-MAY-2008 10:26	sp22a	/chem/msd1.i/1-20may.b/1052004.d
19-MAY-2008 19:59	AT08md1	/chem/msd1.i/1-19may.b/1051917.d
Cal Level: 5 , Cal Amount: 50.00000		
20-MAY-2008 10:59	sp22a	/chem/msd1.i/1-20may.b/1052005.d
19-MAY-2008 15:47	AT08md1	/chem/msd1.i/1-19may.b/1051913.d
Cal Level: 6 , Cal Amount: 100.00000		
19-MAY-2008 16:26	AT08md1	/chem/msd1.i/1-19may.b/1051914.d
Cal Level: 7 , Cal Amount: 200.00000		
20-MAY-2008 11:33	sp22a	/chem/msd1.i/1-20may.b/1052006.d
19-MAY-2008 16:59	AT08md1	/chem/msd1.i/1-19may.b/1051915.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
20-MAY-2008 12:26	AT08	/chem/msd1.i/1-20may.b/1052007.d
Ccal Level: 5 , Ccal Amount: 50.000		
20-MAY-2008 10:59	sp22aCCV	/chem/msd1.i/1-20may.b/1052005a.d

Initial Calibration Narrative

A seven point initial calibration was analyzed on MSD-1 on 05/19/2008. As noted on the accompanying analytical run logs, the following point calibration level 4 was re-analyzed due to:

a. anomalous unacceptable linearity for several compounds

The following compounds used 0.25 ppbv as the lowest calibration concentration:

Chloroform, Benzene, Cumene, 1,3-Butadiene, 1,2-Dibromoethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, and Styrene.

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.52
75	30.0 – 60.0% of mass 95	42.28
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.48
173	Less than 2.0% of mass 174	(0.79)[1]
174	Greater than 50.0% of mass 95	64.73
175	5.0 – 9.0% of mass 174	(7.17)[1]
176	**Greater than 95.0% but less than 101.0% of mass 174**	(95.67)[1]
177	5.0 – 9.0% of mass 176	(6.44)[2]

[1] - *value in parenthesis is % mass 174* [2] - *value in parenthesis is % mass 176*

BFB Injection Date: 5/19/08
BFB Injection Time: 1304
BFB File ID: 1051908
Tekmar Purge Flow: NA
Vacuum: 1.1-5

IS/S Std.#: 1541-144		Exp. Date: 8/2/08
BCM	312263	
1,4-DFB	1618588	
CB-d5	1862744	

Verified CCV IS vs ICAL mid-point (- 40%D) KR (initials)

Verify 176/174 m/z Ratio: 873397/912971 400= 95.665

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1819475)}{(1618588)} \times \frac{(25.0)}{(1.13276)} = 24.809$

Reported Result 24.809

File ID:	1051913
Compound:	Tol-d8
Initials:	KR

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init	Comments
1	✓	1051908	BFB Tune Check	1476275	50ng	2uL	1.00	5/19/08	1304	[illegible]/KR	
2	✓	09	ICAL Level 1 (5ppbv)	1541-167	0.25ppbv	5mL	↓	↓	1323	[illegible]/KR	[illegible] 5/19/08 1476239 1485190
3	✓	10	2(5ppbv)	↓	0.5ppbv	10mL			1356	[illegible]/KR	
4	✓	11	3(5ppbv)	↓	20ppbv	40mL			1429	[illegible]/KR	
5	✗	12	4(200ppbv)	1102-3	25ppbv	12.5mL			1514	[illegible]/KR	
6	✓	13	5(200ppbv)		50ppbv	25mL			1547	KR	
7	✓	14	6(200ppbv)		100ppbv	50mL			1626	KR	
8	✓	15	7(200ppbv)	↓	200ppbv	100mL			1659	KR	
9	✓	16	System Blank	12009	Humid	100mL	↓	↓	1755	KR	

Ken R[illegible] 5/19/08

Signature Date

0132

@ Air Toxics Ltd.

MSD-1

Logbook #: 1628

0133

10	✓	105917	ICAL Level 4	1612-3	25ppbv	12.5mL	1.00	5/19/08	1959	KR	
11	✓	18	LCS (200ppbv)	1541-138	50ppbv	25mL	1.00		2033	KR	ZCal LCS 2-out
12	✓	19	System Blank	12009	Humid	100mL	1.00		2201	KR	
13	✓	20	LCSD (200ppbv)	1541-138	50ppbv	25mL	1.00		~~2243~~	CB	
14	✓	21	Lab Blank	12009	Humid	100mL	1.00	↓	2327	CB	
15	✓	22	080515I - 01A	3644	15"Hg-15psi	100mL	2.13	5/20/08	0016	CB	
16	✓	23	↓ -02A	3649	20"Hg-15psi	↓	2.16		0057	CB	
17	✓	24	080515S -01AA	1424	12.0"Hg-15psi	50mL	6.74		0141	CB	RL@ 20mL
18	✓	25	-02A	1425	11.5"Hg-15psi	100mL	3.28		0227	CB	
19	✓	26	-01A	1424	12.0"Hg-15psi	20mL	16.8		0318	CB	
20	✓	27	-03A	SC82	12.0"Hg-15psi	7mL	48.1		0410	CB	
21	X	28	-04A	1440	11.5"Hg-15psi	2mL	164		0448	CB	
22	✓	29	-04A	↓	↓	65mL	65.6		0526	CB	DF = 54.7
23											
24											
25											
26											
27											
28			F 5/20/08								
29											
30											
31											
32											

Comments:

Flow Controller : AAD1143049

NIST Flow Meter : 200-7744 exp 8/27/08

Actual	Nominal
12.5mL/min	11.5mL/min

Signature

5/20/08
Date

@ Air Toxics Ltd. **MSD-1** **Logbook #: 1628**

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.99
75	30.0 – 60.0% of mass 95	42.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.53
173	Less than 2.0% of mass 174	(0.77)[1]
174	Greater than 50.0% of mass 95	62.16
175	5.0 – 9.0% of mass 174	(6.88)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(95.54)[1]
177	5.0 – 9.0% of mass 176	(6.18)[2]

[1] - *value in parenthesis is % mass 174* [2] - *value in parenthesis is % mass 176*

BFB Injection Date: 5/20/08
BFB Injection Time: 0753
BFB File ID: 1052001
Tekmar Purge Flow: NA
Vacuum: NA

IS/S Std.#:	1541 - 144	Exp. Date: 8/2/08
BCM	325915	
1,4-DFB	1718149	
CB-d5	1889046	

Verified CCV IS vs ICAL mid-point (- 40%D) LO *initials*

Verify 176/174 m/z Ratio: 93517.3/97883.0 x 100 = 95.540

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 535014\ )}{(\ 325915\ )} \times \frac{(\ 25.00\ )}{(\ 1.66835\ )} =$ 24.59878

Reported Result 24.599

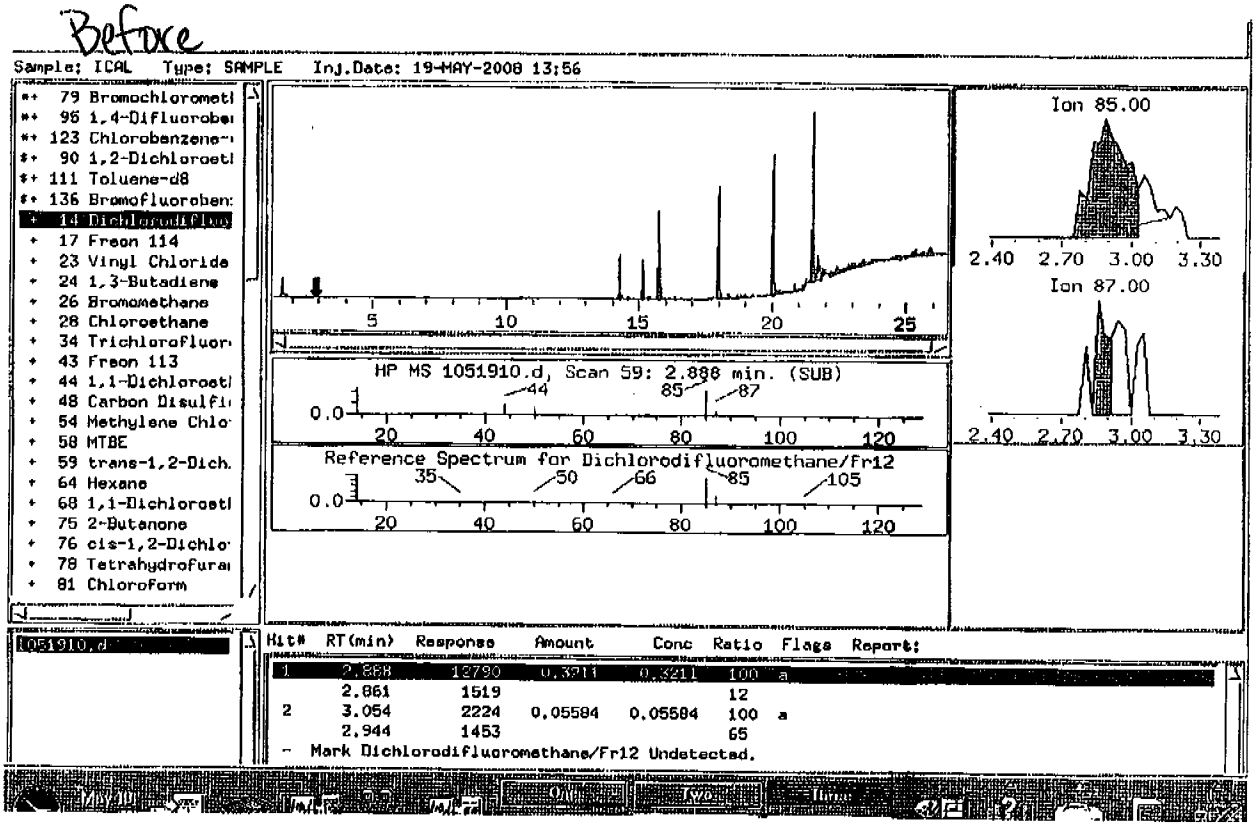
File ID:	1052007
Compound:	1,2-DCA-d4
Initials:	LO

	S#	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	1052001	BFB Tune Check	1476 215	50 psig	2 uL	1.00	5/20/08	0753	LO/KR	
2	✓	02	System Blank	12009	Humid	100mL			0826	LO	
3	✓	03	CCV Level 3 (200ppbv)	1541-142	20 psig	1.0mL			0945	LO/KR	sp22a H4:59
4	✓	04	Level 4 (500ppbv)		8.0psig/Humid	4.0mL			1026	LO/KR	
5	✓	05	Level 5 (2000ppbv)		5psig/Humid	25 mL			1059	LO/KR	sp22a CCV
6	✓	06	Level 7 (5000ppbv)		20psig/Humid	100mL 2 Humid			1133	LO/KR	
7	✓	07	CCV-1 #1602-3	200ppbv	50 psig	25mL			1226	LO/KR	
8	✓	08	LCS-1 #1541-138	↓	↓	↓			1302	LO/KR	out
9	✓	09	Lab Blank	12009	Humid	100 mL			1347	LO/KR	

Laura Ormaza
Signature

5/20/08
Date

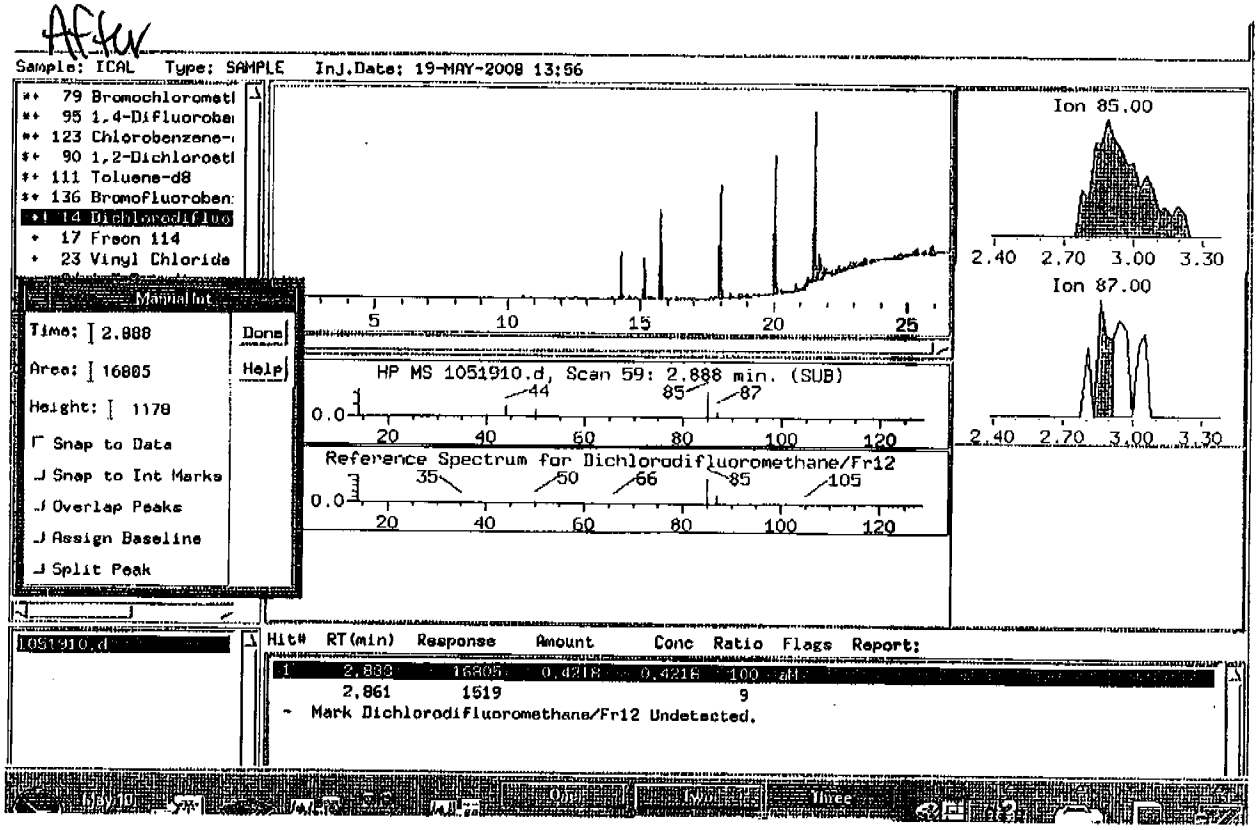
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 13:56
79 Bromochloromethane
96 1,4-Difluorobenzene
123 Chlorobenzene-d5
90 1,2-Dichloroethane-d4
111 Toluene-d8
136 Bromofluorobenzene
14 Dichlorodifluoromethane
17 Freon 114
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluoromethane
43 Freon 113
44 1,1-Dichloroethene
48 Carbon Disulfide
54 Methylene Chloride
58 MTBE
59 trans-1,2-Dichloroethene
64 Hexane
68 1,1-Dichloroethane
75 2-Butanone
76 cis-1,2-Dichloroethene
78 Tetrahydrofuran
81 Chloroform
Ion 85.00
Ion 87.00
HP MS 1051910.d, Scan 59: 2.888 min. (SUB)
Reference Spectrum for Dichlorodifluoromethane/Fr12
1051910.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.888 12790 0.3911 0.3211 100 a
2.861 1519 12
2 3.054 2224 0.05584 0.05584 100 a
2.944 1453 65
- Mark Dichlorodifluoromethane/Fr12 Undetected.

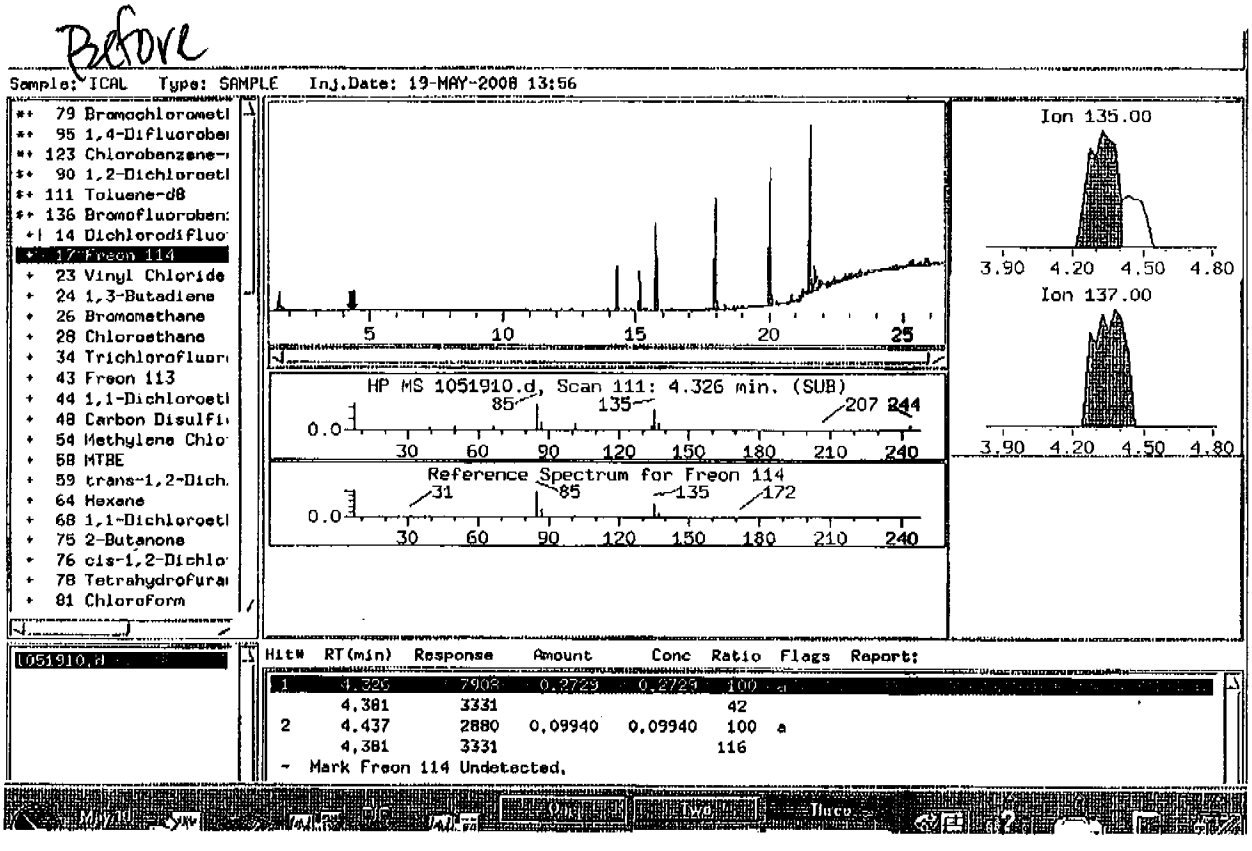
Team A

Date / Initial	5/19/08 SS / ajk
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



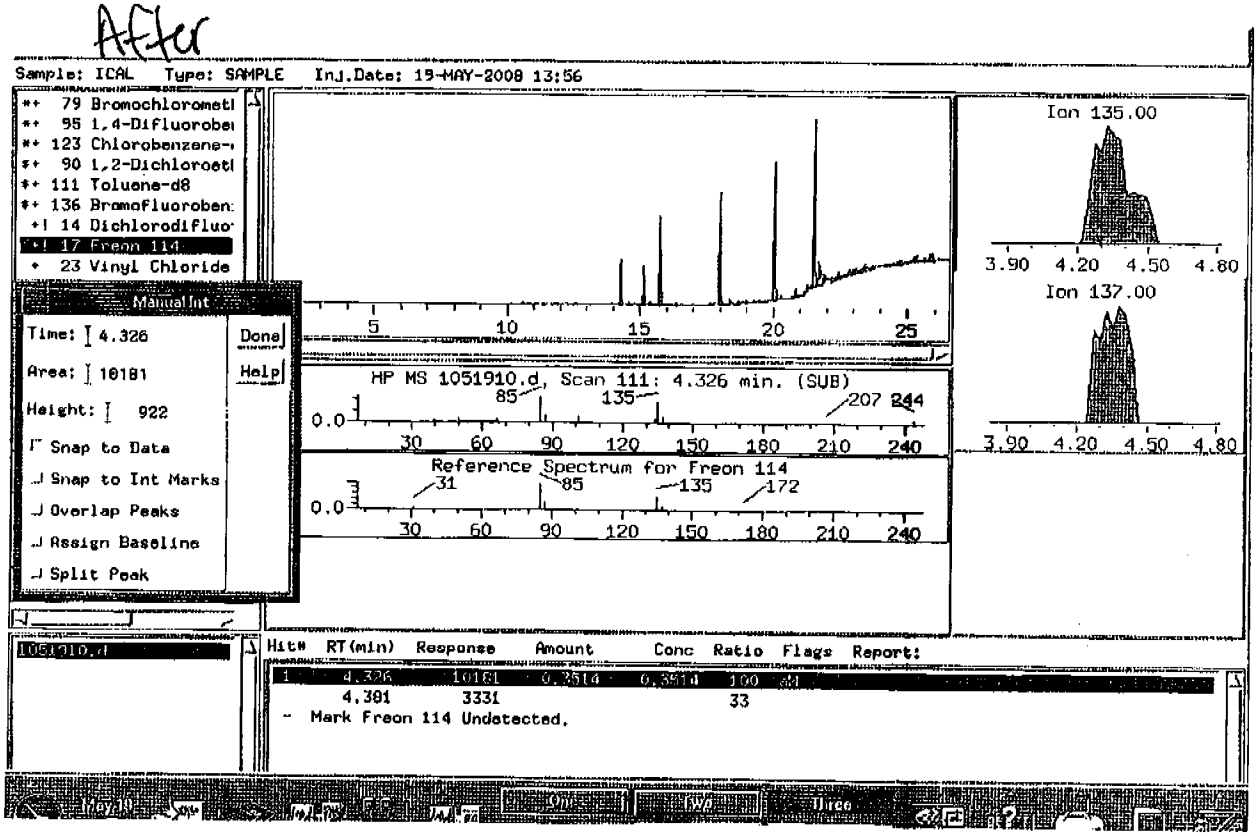
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 13:56
79 Bromochlorometl
95 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroetl
111 Toluene-d8
136 Bromofluorobenz
14 Dichlorodifluo
17 Freon 114
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluor
43 Freon 113
44 1,1-Dichloroetl
48 Carbon Disulfi
54 Methylene Chlo
58 MTBE
59 trans-1,2-Dich
64 Hexane
68 1,1-Dichloroetl
75 2-Butanone
76 cis-1,2-Dichlo
78 Tetrahydrofura
81 Chloroform
Ion 135.00
Ion 137.00
HP MS 1051910.d, Scan 111: 4.326 min. (SUB)
Reference Spectrum for Freon 114
1051910.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 4.326 7908 0.2729 0.2729 100
4.381 3331 42
2 4.437 2880 0.09940 0.09940 100 a
4.381 3331 116
- Mark Freon 114 Undetected.

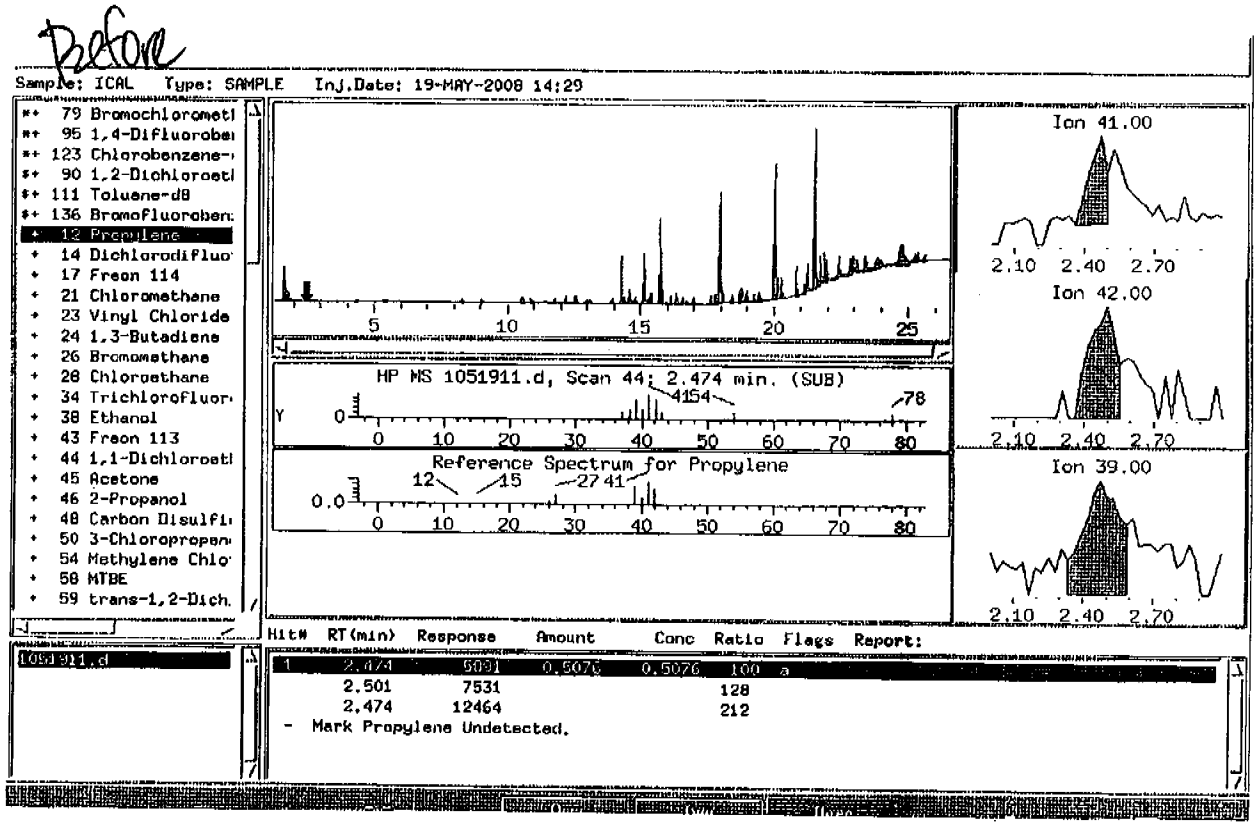
Form A

Date / Initial	5/19/08 BO
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



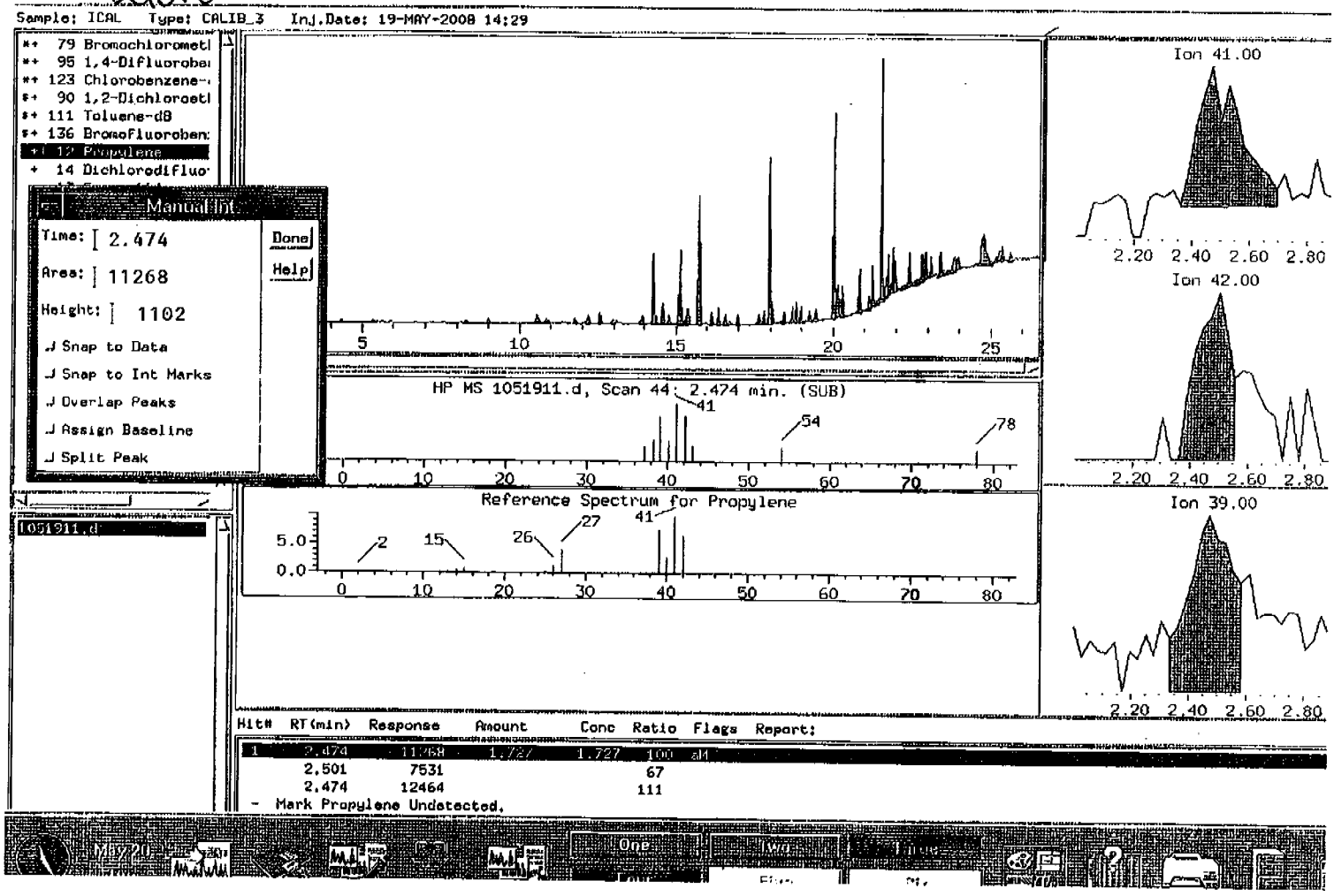
Before


Sample: ICAL Type: SAMPLE Inj.Date: 19-MAY-2008 14:29
79 Bromochlorometl
95 1,4-Difluorobe
123 Chlorobenzene-
90 1,2-Dichloroetl
111 Toluene-d8
136 Bromofluoroben
12 Propylene
14 Dichlorodifluo
17 Freon 114
21 Chloromethane
23 Vinyl Chloride
24 1,3-Butadiene
26 Bromomethane
28 Chloroethane
34 Trichlorofluor
38 Ethanol
43 Freon 113
44 1,1-Dichloroetl
45 Acetone
46 2-Propanol
48 Carbon Disulfi
50 3-Chloroprope
54 Methylene Chlo
58 MTBE
59 trans-1,2-Dich
HP MS 1051911.d, Scan 44; 2.474 min. (SUB)
Reference Spectrum for Propylene
Ion 41.00
Ion 42.00
Ion 39.00
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.474 9091 0.5076 0.5076 100 a
2.501 7531 128
2.474 12464 212
- Mark Propylene Undetected.

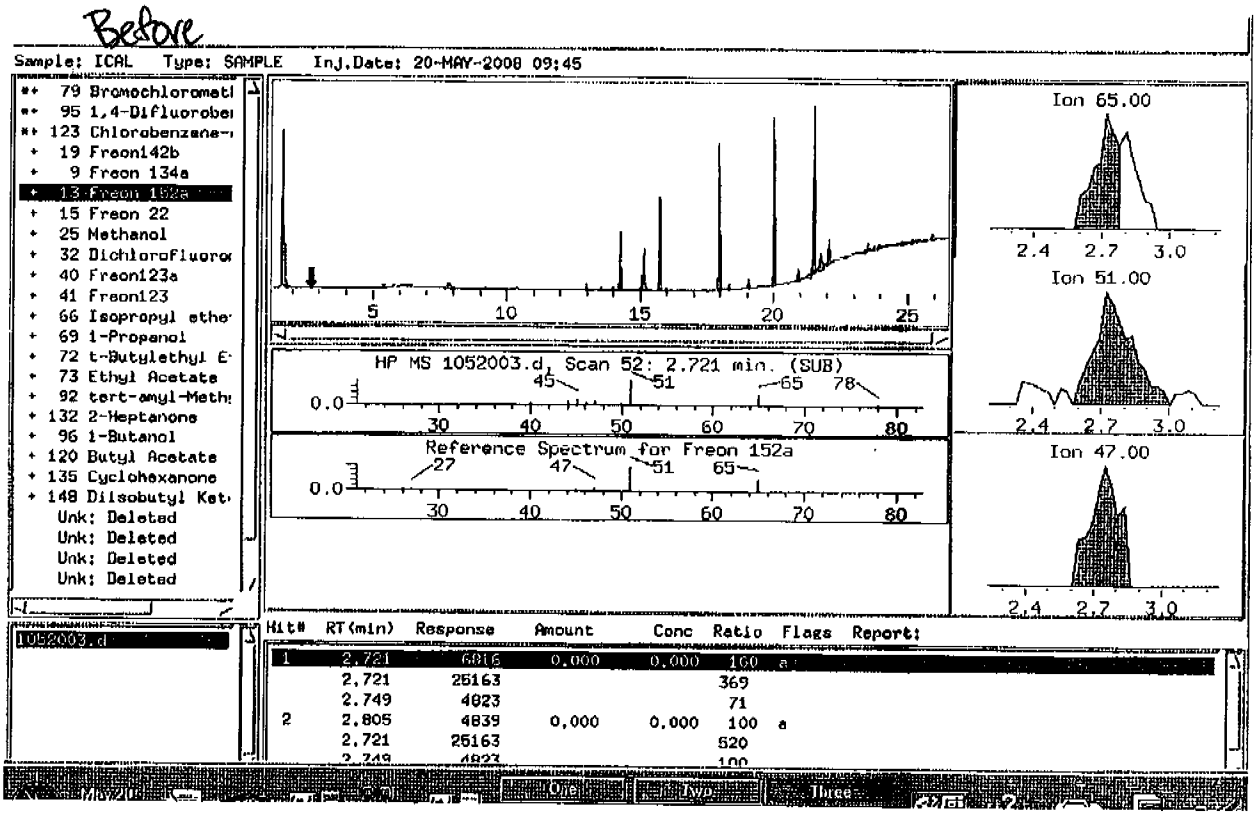
Team A

Date / Initial	5/20/08 LR / NK
Poor Integration	✓
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

Before



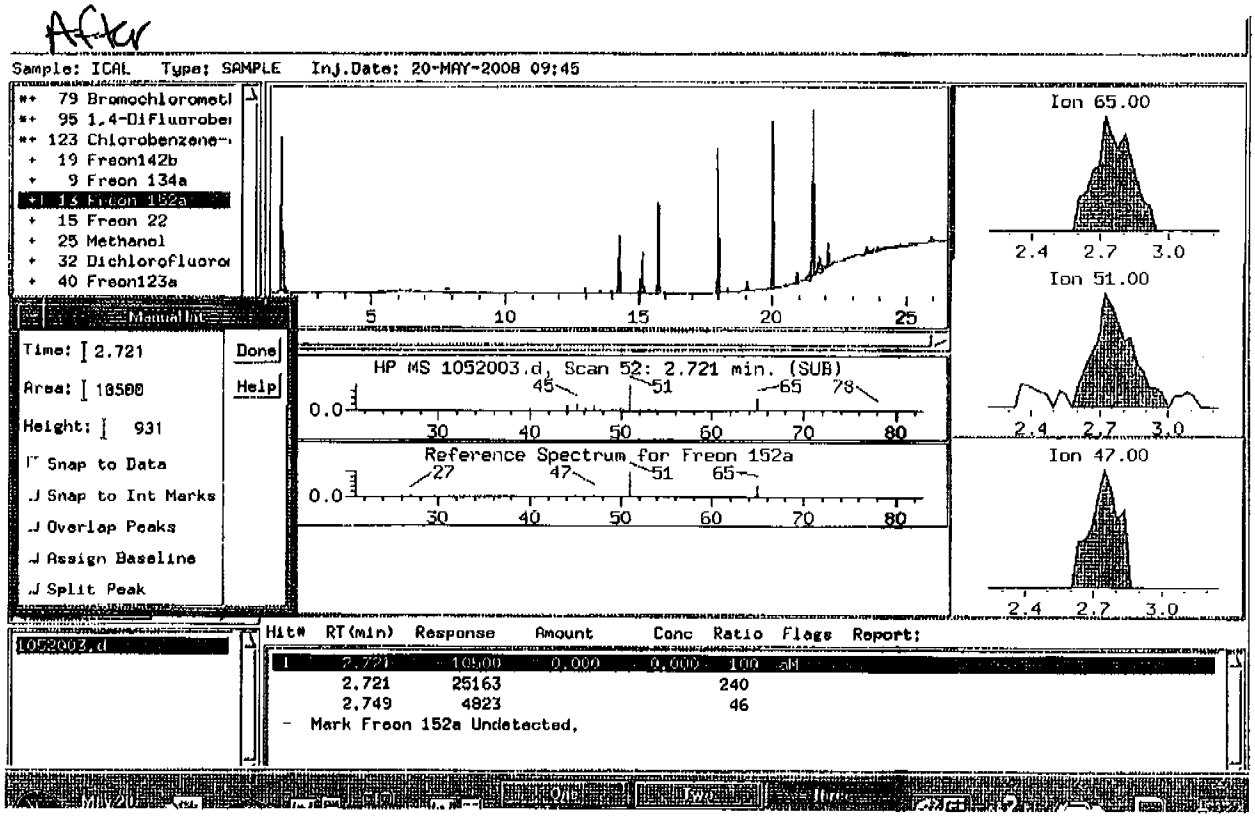
Before


Sample: ICAL Type: SAMPLE Inj.Date: 20-MAY-2008 09:45
79 Bromochlorometl
95 1,4-Difluorobe
123 Chlorobenzene-
19 Freon142b
9 Freon 134a
13 Freon 152a
15 Freon 22
25 Methanol
32 Dichlorofluoro
40 Freon123a
41 Freon123
66 Isopropyl ethe
69 1-Propanol
72 t-Butylethyl E
73 Ethyl Acetate
92 tert-amyl-Meth
132 2-Heptanone
96 1-Butanol
120 Butyl Acetate
135 Cyclohexanone
148 Diisobutyl Ket
Unk; Deleted
Unk; Deleted
Unk; Deleted
Unk; Deleted
HP MS 1052003.d, Scan 52: 2.721 min. (SUB)
Reference Spectrum for Freon 152a
Ion 65.00
Ion 51.00
Ion 47.00
1052003.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 2.721 6816 0.000 0.000 100 a
2.721 25163 369
2.749 4823 71
2 2.805 4839 0.000 0.000 100 a
2.721 25163 520
2.749 4823 100

Before

Date / Initial	5/20/08 LS
Poor Integration	
Split Peak	✓
Peak Tailing	
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

After



Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051918.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 19-MAY-2008 20:33
Operator : kr Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv-->50ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:40 lover Quant Type: ISTD
Cal Date : 19-MAY-2008 16:59 Cal File: 1051915.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	313340	25.0000		80.00- 120.00	100.00
14.280	14.280 (1.000)	128	248742			28.03- 128.03	79.38
14.252	14.252 (1.000)	49	585074			135.66- 235.66	186.72
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1657292	25.0000		80.00- 120.00	100.00
15.745	15.745 (1.000)	88	259633			0.00- 65.87	15.67
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1876684	25.0000		80.00- 120.00	100.00
20.031	20.031 (1.000)	82	1105000			8.51- 108.51	58.88
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	519273	24.8332	24.833	80.00- 120.00	100.00
15.137	15.137 (1.060)	67	316980			6.04- 106.04	61.04
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1864621	24.8309	24.831	80.00- 120.00	100.00
17.957	17.985 (1.140)	70	194952			0.00- 60.35	10.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1233113			15.45- 115.45	66.13
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1000370	24.9116	24.912	80.00- 120.00	100.00
21.524	21.524 (1.075)	95	1606794			109.07- 209.07	160.62
21.524	21.524 (1.075)	176	960897			45.29- 145.29	96.05
12 Propylene					CAS #: 115-07-1		
2.474	2.501 (0.173)	41	361686	52.2798	52.280	80.00- 120.00	100.00
2.474	2.501 (0.173)	42	249788			16.91- 116.91	69.06
2.474	2.501 (0.173)	39	286870			37.15- 137.15	79.31
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	1721292	49.8320	49.832	80.00- 120.00	100.00
2.888	2.888 (0.202)	87	552532			0.00- 75.39	32.10
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1165246	49.2778	49.278	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	364298			0.00- 81.00	31.26
21 Chloromethane					CAS #: 74-87-3		
4.630	4.658 (0.324)	50	716400	48.1279	48.128	80.00- 120.00	100.00
4.658	4.658 (0.326)	52	223683			0.00- 80.15	31.22
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.625 (0.394)	62	780672	47.9614	47.961	80.00- 120.00	100.00
5.626	5.625 (0.394)	64	241296			0.00- 77.57	30.91
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	604592	48.8483	48.848	80.00- 120.00	100.00
5.902	5.902 (0.413)	39	579427			37.41- 137.41	95.84
26 Bromomethane					CAS #: 74-83-9		
7.533	7.561 (0.528)	94	602107	54.7901	54.790	80.00- 120.00	100.00
7.561	7.561 (0.529)	96	562668			45.16- 145.16	93.45
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	445250	50.6465	50.646	80.00- 120.00	100.00
8.114	8.114 (0.568)	49	132653			0.00- 79.23	29.79
8.114	8.114 (0.568)	66	139382			0.00- 81.66	31.30
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	2279610	51.2783	51.278	80.00- 120.00	100.00
8.999	8.999 (0.630)	103	1457179			14.65- 114.65	63.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	388109	55.1178	55.118	80.00- 120.00	100.00
10.132	10.132 (0.710)	43	79956			0.00- 75.81	20.60
10.132	10.132 (0.710)	46	157062			0.00- 92.85	40.47
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	1332755	57.2941	57.294	80.00- 120.00	100.00
10.575	10.575 (0.741)	153	853663			13.04- 113.04	64.05
10.575	10.575 (0.741)	101	1787104			81.57- 181.57	134.09
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.520	10.519 (0.737)	61	1749919	54.2624	54.262	80.00- 120.00	100.00
10.520	10.519 (0.737)	96	927125			3.17- 103.17	52.98
10.520	10.519 (0.737)	98	588603			0.00- 83.87	33.64
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	534712	49.3670	49.367	80.00- 120.00	100.00
10.879	10.879 (0.762)	43	1756874			275.34- 375.34	328.56
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	2015633	52.6396	52.640	80.00- 120.00	100.00
11.321	11.321 (0.793)	43	368593			0.00- 68.18	18.29
11.321	11.321 (0.793)	59	75754			0.00- 53.79	3.76
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	2642105	49.7395	49.740	80.00- 120.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.460	11.459 (0.802)	76	301286	52.4979	52.498	80.00- 120.00	100.00
11.432	11.432 (0.801)	41	1128655			303.82- 403.82	374.61
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	1413978	50.6156	50.616	80.00- 120.00	100.00
11.764	11.764 (0.824)	84	900413			13.28- 113.28	63.68
11.764	11.764 (0.824)	51	426975			0.00- 79.96	30.20
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	1064411	53.4054	53.405	80.00- 120.00	100.00
12.151	12.151 (0.851)	57	313341			0.00- 79.16	29.44
12.151	12.151 (0.851)	41	326431			0.00- 78.25	30.67
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.179	12.178 (0.853)	96	1083622	53.1636	53.164	80.00- 120.00	100.00
12.179	12.178 (0.853)	61	1721562			110.88- 210.88	158.87
12.179	12.178 (0.853)	98	689966			13.20- 113.20	63.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.565 (0.880)	57	2477435	52.7066	52.706	80.00- 120.00	100.00
12.566	12.565 (0.880)	43	1599393			16.42- 116.42	64.56
12.566	12.565 (0.880)	86	363284			0.00- 64.88	14.66
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	300333	57.1238	57.124	80.00- 120.00	100.00
13.063	13.063 (0.915)	43	3625557			1256.82-1356.82	1207.18
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	2197941	59.0396	59.040	80.00- 120.00	100.00
12.980	12.980 (0.909)	65	663372			0.00- 80.16	30.18
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	632518	56.0338	56.034	80.00- 120.00	100.00
13.920	13.920 (0.975)	43	3092928			435.93- 535.93	488.99
13.948	13.948 (0.977)	57	232921			0.00- 90.57	36.82
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	1760877	52.4433	52.443	80.00- 120.00	100.00
13.920	13.893 (0.975)	96	1261861			19.25- 119.25	71.66
13.920	13.920 (0.975)	98	789712			0.00- 93.96	44.85
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1888094	43.5448	43.545	80.00- 120.00	100.00
14.252	14.252 (0.998)	71	597716			0.00- 81.61	31.66
14.252	14.252 (0.998)	72	646572			0.00- 82.78	34.24
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	2469792	55.7221	55.722	80.00- 120.00	100.00
14.363	14.363 (1.006)	85	1540225			12.37- 112.37	62.36
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	2647521	56.9268	56.927	80.00- 120.00	100.00
14.584	14.584 (1.021)	99	1686565			14.06- 114.06	63.70
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	2032971	52.4533	52.453	80.00- 120.00	100.00
14.584	14.556 (1.021)	56	2711905			84.82- 184.82	133.40
14.556	14.556 (1.019)	41	1418803			20.21- 120.21	69.79
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.778	14.777 (1.035)	119	2361367	54.8952	54.895	80.00- 120.00	100.00
14.778	14.777 (1.035)	117	2416721			53.26- 153.26	102.34
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	8689832	52.5207	52.521	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.109	15.109 (1.058)	56	2801437			0.00- 83.07	32.24
15.109	15.109 (1.058)	41	2057418			0.00- 74.24	23.68
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	4423828	52.4591	52.459	80.00- 120.00	100.00
15.137	15.137 (0.961)	77	1011117			0.00- 73.68	22.86
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.247 (0.968)	62	1879235	53.8883	53.888	80.00- 120.00	100.00
15.248	15.247 (0.968)	64	590235			0.00- 83.51	31.41
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	1708186	52.1988	52.199	80.00- 120.00	100.00
15.358	15.358 (0.975)	43	3554954			162.65- 262.65	208.11
15.358	15.358 (0.975)	57	1836841			57.85- 157.85	107.53
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	1820181	52.6349	52.635	80.00- 120.00	100.00
16.132	16.132 (1.025)	130	1729947			46.07- 146.07	95.04
16.132	16.132 (1.025)	97	1165406			14.51- 114.51	64.03
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	1705705	50.7359	50.736	80.00- 120.00	100.00
16.575	16.575 (1.053)	62	1231671			20.20- 120.20	72.21
16.575	16.575 (1.053)	41	1022038			9.24- 109.24	59.92
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	1107908	51.0525	51.052	80.00- 120.00	100.00
16.713	16.713 (1.061)	58	897220			29.44- 129.44	80.98
16.713	16.713 (1.061)	57	275160			0.00- 75.70	24.84
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	2903702	53.5765	53.576	80.00- 120.00	100.00
16.962	16.962 (1.077)	85	1775830			10.80- 110.80	61.16
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	2469354	52.0784	52.078	80.00- 120.00	100.00
17.625	17.625 (1.119)	77	783931			0.00- 81.44	31.75
17.625	17.625 (1.119)	39	1370071			6.33- 106.33	55.48
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	1833284	54.1840	54.184	80.00- 120.00	100.00
17.791	17.791 (1.130)	43	4707682			210.27- 310.27	256.79
17.791	17.791 (1.130)	85	709086			0.00- 89.24	38.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	6289543	54.2250	54.225	80.00- 120.00	100.00
18.068	18.068 (1.147)	92	3798827			9.85- 109.85	60.40
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	2666771	52.9023	52.902	80.00- 120.00	100.00
18.427	18.427 (0.920)	77	838040			0.00- 81.66	31.43
18.427	18.427 (0.920)	39	1417987			3.26- 103.26	53.17
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	2078823	52.3422	52.342	80.00- 120.00	100.00
18.704	18.704 (0.934)	99	1291138			11.98- 111.98	62.11
18.704	18.704 (0.934)	83	1703756			32.85- 132.85	81.96
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	2464213	53.5600	53.560	80.00- 120.00	100.00
18.814	18.814 (0.939)	129	1906224			27.08- 127.08	77.36
18.814	18.814 (0.939)	131	1810246			23.86- 123.86	73.46
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	2772388	51.6184	51.618	80.00- 120.00	100.00
18.953	18.952 (0.946)	43	5035879			130.91- 230.91	181.64
18.980	18.980 (0.948)	100	537134			0.00- 69.73	19.37
121 Dibromochloromethane					CAS #: 124-48-1		
19.229	19.257 (0.960)	129	3027670	54.0772	54.077	80.00- 120.00	100.00
19.229	19.229 (0.960)	127	2345313			26.10- 126.10	77.46
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	3123591	53.4065	53.406	80.00- 120.00	100.00
19.450	19.450 (0.971)	109	2949619			44.88- 144.88	94.43
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.058 (1.001)	112	5467368	51.6894	51.689	80.00- 120.00	100.00
20.059	20.058 (1.001)	114	1723425			0.00- 81.48	31.52
20.059	20.058 (1.001)	77	3575053			13.99- 113.99	65.39
125 Ethyl Benzene					CAS #: 100-41-4		
20.142	20.141 (1.006)	106	3030608	52.2515	52.251	80.00- 120.00	100.00
20.142	20.141 (1.006)	91	9672587			273.94- 373.94	319.16
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	3861221	52.6709	52.671	80.00- 120.00	100.00
20.280	20.280 (1.012)	91	7703725			157.95- 257.95	199.52
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	3647367	52.0867	52.087	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	7665336			160.61- 260.61	210.16
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	5916078	50.3705	50.370	80.00- 120.00	100.00
20.833	20.833	(1.040)	78	2771804			0.00- 96.92	46.85
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	2834466	53.7638	53.764	80.00- 120.00	100.00
21.137	21.137	(1.055)	171	1468996			2.38- 102.38	51.83
134 Cumene						CAS #: 98-82-8		
21.248	21.247	(1.061)	105	11218800	57.9649	57.965	80.00- 120.00	100.00
21.248	21.247	(1.061)	120	2813345			0.00- 75.80	25.08
21.248	21.247	(1.061)	51	1147030			0.00- 60.85	10.22
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	4961519	47.9669	47.967	80.00- 120.00	100.00
21.662	21.662	(1.081)	85	3071844			12.08- 112.08	61.91
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	13665464	58.2465	58.246	80.00- 120.00	100.00
21.745	21.745	(1.086)	120	2913506			0.00- 73.27	21.32
21.745	21.745	(1.086)	105	480736			0.00- 55.00	3.52
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	11705669	56.2804	56.280	80.00- 120.00	100.00
21.883	21.883	(1.092)	120	3325749			0.00- 78.07	28.41
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	10343947	52.0611	52.061	80.00- 120.00	100.00
21.939	21.966	(1.095)	120	4693859			0.00- 94.49	45.38
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	8182890	52.0338	52.034	80.00- 120.00	100.00
22.409	22.409	(1.119)	120	3600190			0.00- 95.48	44.00
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.824	22.823	(1.139)	146	4654714	47.7667	47.767	80.00- 120.00	100.00
22.824	22.823	(1.139)	148	2895602			12.15- 112.15	62.21
22.824	22.823	(1.139)	111	1976428			0.00- 91.58	42.46
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	4690356	48.5365	48.536	80.00- 120.00	100.00
22.934	22.934	(1.145)	148	2949614			16.32- 116.32	62.89
22.934	22.934	(1.145)	111	1913556			0.00- 90.95	40.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	6954687	48.8514	48.851	80.00- 120.00	100.00
23.100	23.100 (1.153)	126	1372069			0.00- 69.46	19.73
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	3847656	45.1681	45.168	80.00- 120.00	100.00
23.404	23.404 (1.168)	148	2418956			12.70- 112.70	62.87
23.404	23.404 (1.168)	111	1691598			0.00- 93.70	43.96
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	1225425	33.9680	33.968	80.00- 120.00	100.00(R)
25.257	25.257 (1.261)	182	1158340			42.88- 142.88	94.53
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.339 (1.265)	225	913020	36.8768	36.877	80.00- 120.00	100.00
25.340	25.339 (1.265)	223	574742			14.77- 114.77	62.95
29 Isopentane					CAS #: 78-78-4		
8.308	8.307 (0.582)	43	1183830	49.4669	49.467	80.00- 120.00	100.00
8.308	8.307 (0.582)	57	812622			18.54- 118.54	68.64
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	158299	48.5592	48.559	80.00- 120.00	100.00
5.460	5.487 (0.382)	43	1206407			703.05- 803.05	762.11
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.353 (1.145)	83	2964186	53.6575	53.657	80.00- 120.00	100.00
16.354	16.353 (1.145)	98	1431426			0.00- 97.88	48.29
16.354	16.353 (1.145)	55	2743689			45.40- 145.40	92.56
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	931581	46.1457	46.146	80.00- 120.00	100.00
12.068	12.068 (0.845)	41	183276			0.00- 67.50	19.67
12.068	12.068 (0.845)	57	96263			0.00- 63.77	10.33

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051918.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->50ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	313340	0.67
95 1,4-Difluorobenze	1618588	971153	2266023	1657292	2.39
123 Chlorobenzene-d5	1862744	1117646	2607842	1876684	0.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd1.i/1-19may.b/1051918.d
Report Date: 20-May-2008 11:41

Air Toxics Ltd.

RECOVERY REPORT

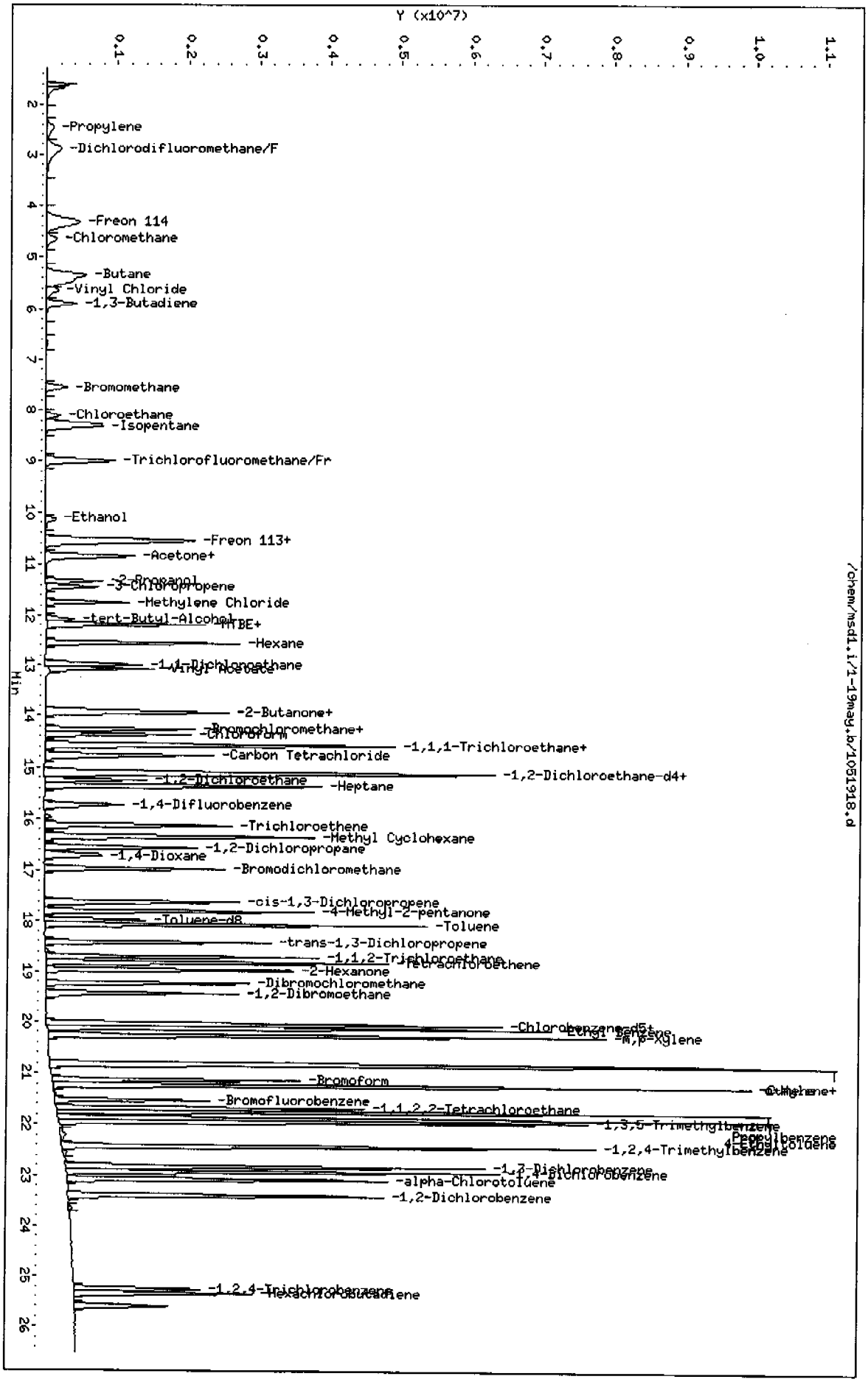
Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->50ppbv

Client SDG: 1-19may
Fraction: VOA
Client Smp ID: LCS
Operator: kr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	52.280	104.56	60-140
14 Dichlorodifluorome	50.000	49.832	99.66	70-130
17 Freon 114	50.000	49.278	98.56	70-130
21 Chloromethane	50.000	48.128	96.26	70-130
23 Vinyl Chloride	50.000	47.961	95.92	70-130
24 1,3-Butadiene	50.000	48.848	97.70	60-140
26 Bromomethane	50.000	54.790	109.58	70-130
28 Chloroethane	50.000	50.646	101.29	70-130
34 Trichlorofluoromet	50.000	51.278	102.56	70-130
38 Ethanol	50.000	55.118	110.24	60-140
43 Freon 113	50.000	57.294	114.59	70-130
44 1,1-Dichloroethene	50.000	54.262	108.52	70-130
45 Acetone	50.000	49.367	98.73	60-140
48 Carbon Disulfide	50.000	49.740	99.48	60-140
46 2-Propanol	50.000	52.640	105.28	60-140
54 Methylene Chloride	50.000	50.616	101.23	70-130
58 MTBE	50.000	53.405	106.81	60-140
59 trans-1,2-Dichloro	50.000	53.164	106.33	60-140
64 Hexane	50.000	52.706	105.41	60-140
67 Vinyl Acetate	50.000	57.124	114.25	60-140
68 1,1-Dichloroethane	50.000	59.040	118.08	70-130
76 cis-1,2-Dichloroet	50.000	52.443	104.89	70-130
75 2-Butanone	50.000	56.034	112.07	60-140
78 Tetrahydrofuran	50.000	43.545	87.09	60-140
81 Chloroform	50.000	55.722	111.44	70-130
84 Cyclohexane	50.000	52.453	104.91	60-140
83 1,1,1-Trichloroeth	50.000	56.927	113.85	70-130
85 Carbon Tetrachlori	50.000	54.895	109.79	70-130
91 Benzene	50.000	52.459	104.92	70-130
93 1,2-Dichloroethane	50.000	53.888	107.78	70-130
94 Heptane	50.000	52.199	104.40	60-140
97 Trichloroethene	50.000	52.635	105.27	70-130
102 1,2-Dichloropropan	50.000	50.736	101.47	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	51.052	102.10	60-140
106 Bromodichlorometha	50.000	53.576	107.15	60-140
109 cis-1,3-Dichloropr	50.000	52.078	104.16	70-130
110 4-Methyl-2-pentano	50.000	54.184	108.37	60-140
114 Toluene	50.000	54.225	108.45	70-130
115 trans-1,3-Dichloro	50.000	52.902	105.80	70-130
116 1,1,2-Trichloroeth	50.000	52.342	104.68	70-130
117 Tetrachloroethene	50.000	53.560	107.12	70-130
118 2-Hexanone	50.000	51.618	103.24	60-140
121 Dibromochlorometha	50.000	54.077	108.15	60-140
122 1,2-Dibromoethane	50.000	53.406	106.81	70-130
124 Chlorobenzene	50.000	51.689	103.38	70-130
125 Ethyl Benzene	50.000	52.251	104.50	70-130
128 m,p-Xylene	50.000	52.671	105.34	70-130
130 o-Xylene	50.000	52.087	104.17	70-130
131 Styrene	50.000	50.370	100.74	70-130
133 Bromoform	50.000	53.764	107.53	60-140
138 1,1,2,2-Tetrachlor	50.000	47.967	95.93	70-130
144 4-Ethyltoluene	50.000	56.280	112.56	60-140
146 1,3,5-Trimethylben	50.000	52.061	104.12	70-130
152 1,2,4-Trimethylben	50.000	52.034	104.07	70-130
158 1,3-Dichlorobenzen	50.000	47.767	95.53	70-130
159 1,4-Dichlorobenzen	50.000	48.536	97.07	70-130
162 alpha-Chlorotoluen	50.000	48.851	97.70	70-130
164 1,2-Dichlorobenzen	50.000	45.168	90.34	70-130
169 1,2,4-Trichloroben	50.000	33.968	67.94*	70-130
170 Hexachlorobutadien	50.000	36.877	73.75	70-130
140 Propylbenzene	50.000	58.246	116.49	60-140
134 Cumene	50.000	57.965	115.93	60-140
50 3-Chloropropene	50.000	52.498	105.00	60-140
88 2,2,4-Trimethylpen	50.000	52.521	105.04	60-140
29 Isopentane	50.000	49.467	98.93	70-130
22 Butane	50.000	48.559	97.12	70-130
99 Methyl Cyclohexane	50.000	53.657	107.31	70-130
57 tert-Butyl-Alcohol	50.000	46.146	92.29	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.833	99.33	70-130
$ 111 Toluene-d8	25.000	24.831	99.32	70-130
$ 136 Bromofluorobenzene	25.000	24.912	99.65	70-130



Data File: /chem/msd1.i/1-19may.b/1051918.d
Date : 19-MAY-2008 20:33
Client ID: LCS
Sample Info: 25mL #1541-138
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051909.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 19-MAY-2008 13:23
Operator : lo
Inst ID: msd1.i
Smp Info : 5.0mL #1541-167
Misc Info : 5ppbv ->0.25ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 13:23
Cal File: 1051909.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	316548	25.0000		50.00- 150.00		100.00
14.280	14.280 (1.000)	128	243697			26.99- 126.99		76.99
14.252	14.252 (1.000)	49	583201			134.24- 234.24		184.24
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1595090	25.0000		50.00- 150.00		100.00
15.745	15.745 (1.000)	88	258069			0.00- 66.18		16.18
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1814026	25.0000		50.00- 150.00		100.00
20.031	20.031 (1.000)	82	1064226			8.67- 108.67		58.67
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	501394	25.0000	25.000	50.00- 150.00		100.00
15.137	15.137 (1.060)	67	256177			1.09- 101.09		51.09
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1818335	25.0000	25.000	50.00- 150.00		100.00
17.985	17.985 (1.142)	70	187819			0.00- 60.33		10.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1180495			14.92- 114.92	64.92
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	951928	25.0000	25.000	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1516671			109.33- 209.33	159.33
21.524	21.524 (1.075)	176	910867			45.69- 145.69	95.69
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	3394	0.25000	0.2500	50.00- 150.00	100.00
5.874	5.874 (0.411)	39	2969			37.48- 137.48	87.48
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	8938	0.25000	0.2500	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	6086			18.09- 118.09	68.09
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	19939	0.25000	0.2500	50.00- 150.00	100.00
15.137	15.137 (0.961)	77	5108			0.00- 75.62	25.62
131 Styrene					CAS #: 100-42-5		
20.860	20.860 (1.041)	104	30919	0.25000	0.2500	50.00- 150.00	100.00
20.833	20.833 (1.040)	78	14065			0.00- 95.49	45.49
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	37439	0.25000	0.2500	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	11094			0.00- 79.63	29.63
21.247	21.247 (1.061)	51	4793			0.00- 62.80	12.80
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	10697	0.25000	0.2500	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	10320			46.48- 146.48	96.48
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	32914	0.25000	0.2500	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	17731			3.87- 103.87	53.87
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	40564	0.25000	0.2500	50.00- 150.00	100.00
21.939	21.939 (1.095)	120	17175			0.00- 92.34	42.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051909.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->0.25ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 13:23
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	316548	189929	443167	316548	0.00
95 1,4-Difluorobenze	1595090	957054	2233126	1595090	0.00
123 Chlorobenzene-d5	1814026	1088416	2539636	1814026	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

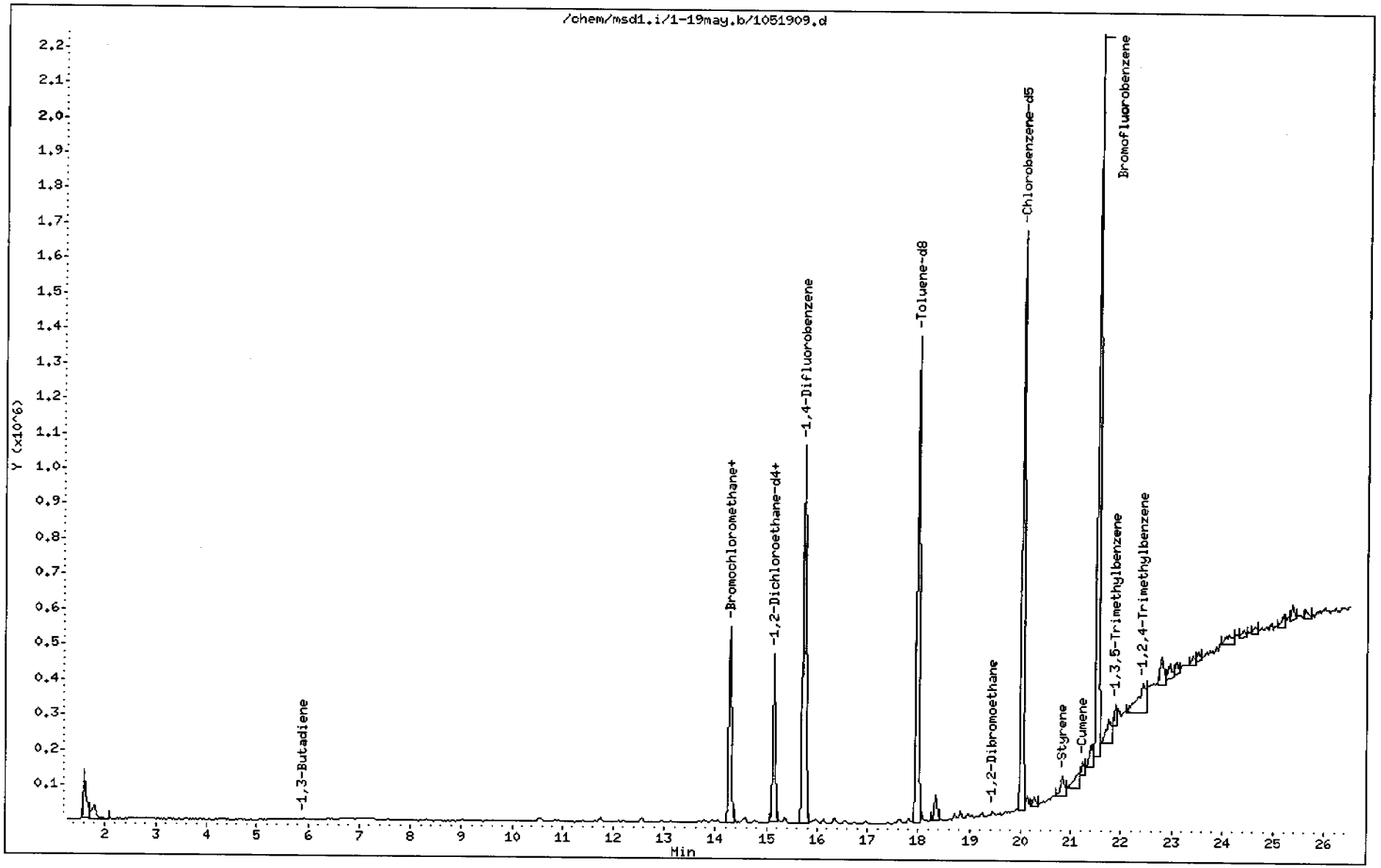
Data File: /chem/msd1.i/1-19may.b/1051909.d
Date : 19-MAY-2008 13:23
Client ID: Level 1
Sample Info: 5.0mL #1541-167

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0159



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051910.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 19-MAY-2008 13:56
Operator : lo
Inst ID: msd1.i
Smp Info : 10mL #1541-167
Misc Info : 5ppbv ->0.5ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 13:56
Cal File: 1051910.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08low.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane						CAS #: 74-97-5	
14.280	14.280 (1.000)	130	303948	25.0000		50.00- 150.00	100.00
14.280	14.280 (1.000)	128	235042			27.16- 127.16	77.33
14.252	14.252 (1.000)	49	553447			133.16- 233.16	182.09
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.745	15.745 (1.000)	114	1572292	25.0000		50.00- 150.00	100.00
15.745	15.745 (1.000)	88	256139			0.00- 66.23	16.29
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.031	20.031 (1.000)	117	1814856	25.0000		50.00- 150.00	100.00
20.031	20.031 (1.000)	82	1057184			8.46- 108.46	58.25
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.137	15.137 (1.060)	65	490524	25.0000	25.234	50.00- 150.00	100.00
15.137	15.137 (1.060)	67	247224			0.75- 100.75	50.40
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.985	17.985 (1.142)	98	1783580	25.0000	24.939	50.00- 150.00	100.00
17.985	17.985 (1.142)	70	184946			0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1174395			15.38- 115.38	65.84
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	954080	25.0000	25.022	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1520994			109.37- 209.37	159.42
21.524	21.524 (1.075)	176	913795			45.73- 145.73	95.78
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	16805	0.50000	0.5000	50.00- 150.00	100.00(M)
2.861	2.861 (0.200)	87	1519			0.00- 59.04	9.04
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	10181	0.50000	0.5000	50.00- 150.00	100.00(M)
4.381	4.381 (0.307)	137	3331			0.00- 82.72	32.72
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	8513	0.50000	0.5000	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	2524			0.00- 79.65	29.65
24 1,3-Butadiene					CAS #: 106-99-0		
5.930	5.930 (0.415)	54	5015	0.50000	0.4348	50.00- 150.00	100.00(a)
5.930	5.930 (0.415)	39	2579			19.45- 119.45	51.43
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	3933	0.50000	0.5000	50.00- 150.00	100.00
7.561	7.561 (0.529)	96	5710			95.18- 195.18	145.18
28 Chloroethane					CAS #: 75-00-3		
8.142	8.142 (0.570)	64	4221	0.50000	0.5000	50.00- 150.00	100.00
0.000	1.000 (0.000)	49	0			0.00- 50.00	0.00
0.000	1.000 (0.000)	66	0			0.00- 50.00	0.00
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	19030	0.50000	0.5000	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	13373			20.27- 120.27	70.27
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	9841	0.50000	0.5000	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	6923			20.35- 120.35	70.35
10.575	10.575 (0.741)	101	13023			82.33- 182.33	132.33
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.519	10.519 (0.737)	61	15334	0.50000	0.5000	50.00- 150.00	100.00
10.547	10.547 (0.739)	96	10304			17.20- 117.20	67.20
10.547	10.547 (0.739)	98	4478			0.00- 79.20	29.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	23647	0.50000	0.5000	50.00- 150.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	17283	0.50000	0.5000	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	9038			2.29- 102.29	52.29
11.764	11.764 (0.824)	51	4791			0.00- 77.72	27.72
58 MTBE					CAS #: 1634-04-4		
12.178	12.178 (0.853)	73	9663	0.50000	0.5000	50.00- 150.00	100.00
12.178	12.178 (0.853)	57	2083			0.00- 71.56	21.56
12.151	12.151 (0.851)	41	2524			0.00- 76.12	26.12
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.206	12.206 (0.855)	96	7846	0.50000	0.5000	50.00- 150.00	100.00
12.206	12.206 (0.855)	61	13640			123.85- 223.85	173.85
12.206	12.206 (0.855)	98	4840			11.69- 111.69	61.69
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	20491	0.50000	0.5000	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	14912			22.77- 122.77	72.77
12.566	12.566 (0.880)	86	2979			0.00- 64.54	14.54
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	10654	0.50000	0.5000	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	3505			0.00- 82.90	32.90
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	3555	0.50000	0.5000	50.00- 150.00	100.00
13.948	13.948 (0.977)	43	22469			582.04- 682.04	632.04
13.976	13.976 (0.979)	57	1581			0.00- 94.47	44.47
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.920	13.920 (0.975)	61	13947	0.50000	0.5000	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	10152			22.79- 122.79	72.79
13.920	13.920 (0.975)	98	5739			0.00- 91.15	41.15
78 Tetrahydrofuran					CAS #: 109-99-9		
14.280	14.280 (1.000)	42	32393	0.50000	0.5000	50.00- 150.00	100.00
14.280	14.280 (1.000)	71	9751			0.00- 80.10	30.10
14.280	14.280 (1.000)	72	9413			0.00- 79.06	29.06
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	17890	0.50000	0.5103	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	10909			14.53- 114.53	60.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	15078	0.50000	0.5000	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	7175			0.00- 97.59	47.59
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	17329	0.50000	0.5000	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	20367			67.53- 167.53	117.53
14.584	14.584 (1.021)	41	15870			41.58- 141.58	91.58
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	16514	0.50000	0.5000	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	15571			44.29- 144.29	94.29
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	35253	0.50000	0.4728	50.00- 150.00	100.00(a)
15.137	15.137 (0.961)	77	8563			0.00- 74.95	24.29
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	66434	0.50000	0.5000	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	23566			0.00- 85.47	35.47
15.109	15.109 (1.058)	41	16773			0.00- 75.25	25.25
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	12749	0.50000	0.5000	50.00- 150.00	100.00
15.275	15.275 (0.970)	64	4776			0.00- 87.46	37.46
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	13263	0.50000	0.5000	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	30245			178.04- 278.04	228.04
15.358	15.358 (0.975)	57	13983			55.43- 155.43	105.43
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	14283	0.50000	0.5000	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	12656			38.61- 138.61	88.61
16.132	16.132 (1.025)	97	9182			14.29- 114.29	64.29
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	14186	0.50000	0.5000	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	9549			17.31- 117.31	67.31
16.575	16.575 (1.053)	41	8942			13.03- 113.03	63.03
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	19481	0.50000	0.5000	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	12266			12.96- 112.96	62.96
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	19161	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
109 cis-1,3-Dichloropropene (continued)								
17.625	17.625	(1.119)	77	7196			0.00- 87.56	37.56
17.625	17.625	(1.119)	39	9350			0.00- 98.80	48.80
110 4-Methyl-2-pentanone						CAS #: 108-10-1		
17.791	17.791	(1.130)	58	12498	0.50000	0.5000	50.00- 150.00	100.00
17.791	17.791	(1.130)	43	33327			216.66- 316.66	266.66
17.819	17.819	(1.132)	85	5761			0.00- 96.10	46.10
114 Toluene						CAS #: 108-88-3		
18.068	18.068	(1.147)	91	47240	0.50000	0.5000	50.00- 150.00	100.00
18.068	18.068	(1.147)	92	30199			13.93- 113.93	63.93
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.427	18.427	(0.920)	75	18395	0.50000	0.5000	50.00- 150.00	100.00
18.427	18.427	(0.920)	77	8532			0.00- 96.38	46.38
18.427	18.427	(0.920)	39	10430			6.70- 106.70	56.70
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.704	18.704	(0.934)	97	16704	0.50000	0.5000	50.00- 150.00	100.00
18.704	18.704	(0.934)	99	9584			7.38- 107.38	57.38
18.704	18.704	(0.934)	83	12543			25.09- 125.09	75.09
117 Tetrachloroethene						CAS #: 127-18-4		
18.814	18.814	(0.939)	166	19051	0.50000	0.5000	50.00- 150.00	100.00
18.814	18.814	(0.939)	129	14224			24.66- 124.66	74.66
18.814	18.814	(0.939)	131	13457			20.64- 120.64	70.64
121 Dibromochloromethane						CAS #: 124-48-1		
19.257	19.257	(0.961)	129	20493	0.50000	0.5000	50.00- 150.00	100.00
19.257	19.257	(0.961)	127	14911			22.76- 122.76	72.76
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.450	(0.971)	107	22545	0.50000	0.5130	50.00- 150.00	100.00
19.450	19.450	(0.971)	109	24662			52.93- 152.93	109.39
124 Chlorobenzene						CAS #: 108-90-7		
20.059	20.059	(1.001)	112	41947	0.50000	0.5000	50.00- 150.00	100.00
20.059	20.059	(1.001)	114	14285			0.00- 84.05	34.05
20.059	20.059	(1.001)	77	41302			48.46- 148.46	98.46
125 Ethyl Benzene						CAS #: 100-41-4		
20.141	20.141	(1.006)	106	21616	0.50000	0.5000	50.00- 150.00	100.00
20.141	20.141	(1.006)	91	72567			285.71- 385.71	335.71
128 m,p-Xylene						CAS #: 108-38-3		
20.280	20.280	(1.012)	106	25933	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
128 m,p-Xylene (continued)							
20.280	20.280 (1.012)	91	61636			187.67- 287.67	237.67
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	28485	0.50000	0.5000	50.00- 150.00	100.00
20.805	20.805 (1.039)	91	61432			165.66- 265.66	215.66
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	51362	0.50000	0.4536	50.00- 150.00	100.00(a)
20.833	20.833 (1.040)	78	24656			0.00- 96.75	48.00
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	20364	0.50000	0.5000	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	8842			0.00- 93.42	43.42
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	84368	0.50000	0.5297	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	20564			0.00- 77.00	24.37
21.247	21.247 (1.061)	51	8944			0.00- 61.70	10.60
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.690	21.690 (1.083)	83	56535	0.50000	0.5000	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	32888			8.17- 108.17	58.17
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	103578	0.50000	0.5000	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	26850			0.00- 75.92	25.92
21.745	21.745 (1.086)	105	10347			0.00- 59.99	9.99
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	85660	0.50000	0.5000	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	25692			0.00- 79.99	29.99
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.966	21.966 (1.097)	105	83773	0.50000	0.5079	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	36740			0.00- 93.10	43.86
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	70351	0.50000	0.5165	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	29165			0.00- 97.66	41.46
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	46711	0.50000	0.5000	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	28503			11.02- 111.02	61.02
22.823	22.823 (1.139)	111	17470			0.00- 87.40	37.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	38849	0.50000	0.5000	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	30572			28.69- 128.69	78.69
22.934	22.934 (1.145)	111	16551			0.00- 92.60	42.60
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	70529	0.50000	0.5000	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	12871			0.00- 68.25	18.25
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	45216	0.50000	0.5000	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	27214			10.19- 110.19	60.19
23.404	23.404 (1.168)	111	19685			0.00- 93.54	43.54
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	30459	0.50000		0.00- 50.00	100.00(a)
25.257	25.257 (1.261)	182	27093			38.95- 138.95	88.95
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	19054	0.50000		0.00- 50.00	100.00(a)
25.340	25.340 (1.265)	223	13056			18.52- 118.52	68.52
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	21581	0.50000	0.5000	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	10737			0.00- 99.75	49.75
16.354	16.354 (1.145)	55	23108			57.08- 157.08	107.08
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.095	12.095 (0.847)	59	12809	0.50000	0.5000	50.00- 150.00	100.00
12.095	12.095 (0.847)	41	1828			0.00- 64.27	14.27
12.178	12.178 (0.853)	57	2083			0.00- 66.26	16.26

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051910.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->0.5ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 13:56
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	303948	182369	425527	303948	0.00
95 1,4-Difluorobenze	1572292	943375	2201209	1572292	0.00
123 Chlorobenzene-d5	1814856	1088914	2540798	1814856	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

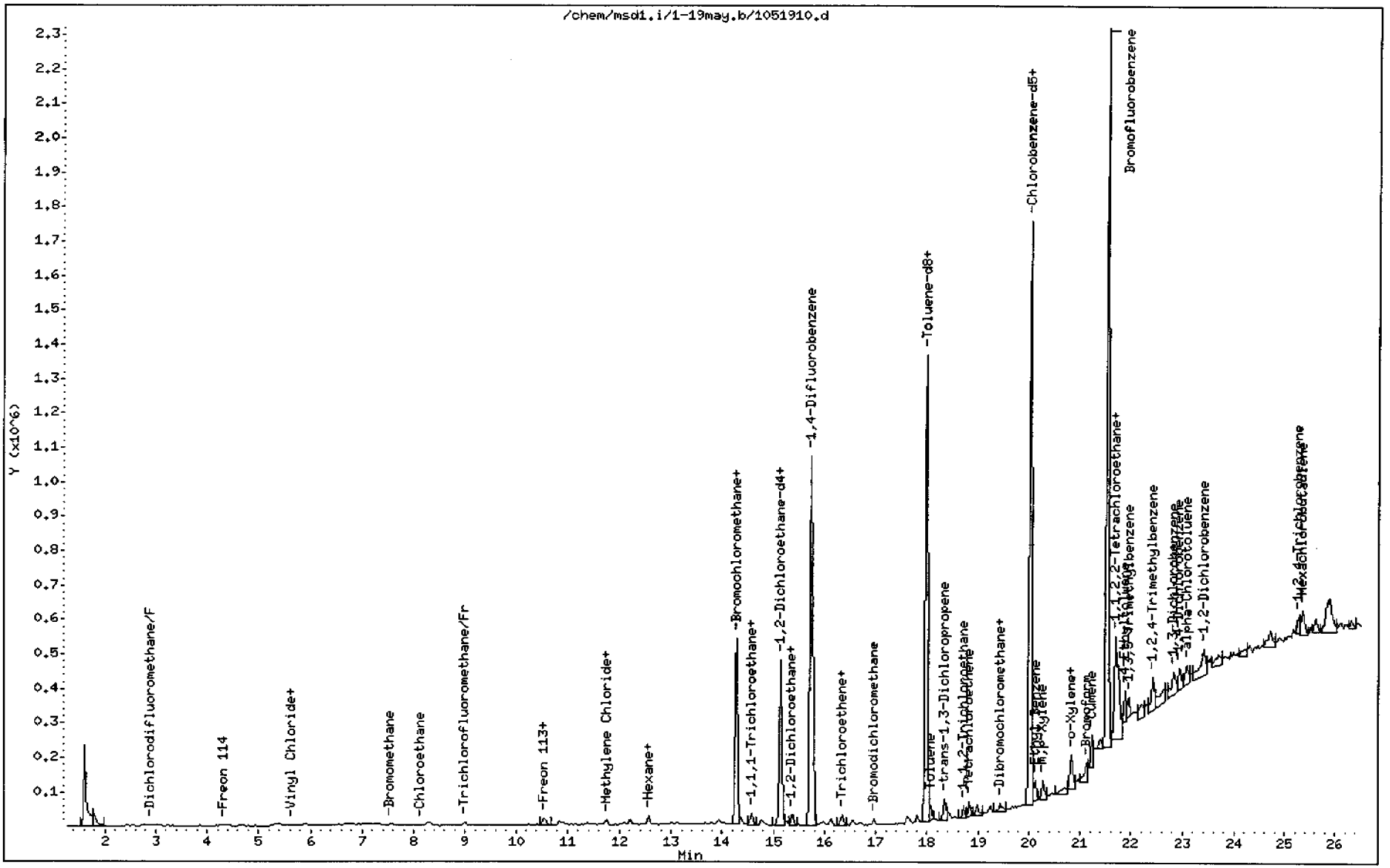
Data File: /chem/msd1.i/1-19may.b/1051910.d
Date : 19-MAY-2008 13:56
Client ID: Level 2
Sample Info: 10mL #1541-167

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

Column phase: RTx-624

0168



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052003.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 20-MAY-2008 09:45
Operator : lo Inst ID: msd1.i
Smp Info : 1.0mL #1541-142
Misc Info : 200ppbv ->2.0ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 09:45 Cal File: 1052003.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.255	14.255 (1.000)	130	305805	25.0000		50.00- 150.00	100.00
14.255	14.255 (1.000)	128	242476			28.24- 128.24	79.29
14.255	14.255 (1.000)	49	566293			133.94- 233.94	185.18
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1590850	25.0000		50.00- 150.00	100.00
15.720	15.720 (1.000)	88	249808			0.00- 65.99	15.70
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1798258	25.0000		50.00- 150.00	100.00
20.006	20.006 (1.000)	82	1053360			8.42- 108.42	58.58
19 Freon142b					CAS #: 75-68-3		
4.608	4.608 (0.323)	65	45706	2.00000	1.769	50.00- 150.00	100.00(a)
4.608	4.608 (0.323)	45	11963			0.00- 75.41	26.17
9 Freon 134a					CAS #: 811-97-2		
2.383	2.383 (0.167)	83	9664	2.00000	1.615	50.00- 150.00	100.00(a)
2.439	2.439 (0.171)	69	8503			32.58- 132.58	87.99

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO	
9 Freon 134a (continued)									
0.000	1.000	(0.000)	63	0			0.00- 58.36	0.00	
13 Freon 152a						CAS #: 75-37-6			
2.721	2.721	(0.191)	65	10499	2.00000	1.853	50.00- 150.00	100.00	(aM)
2.721	2.721	(0.191)	51	25163			172.46- 272.46	239.67	
2.749	2.749	(0.193)	47	4823			0.63- 100.63	45.94	
15 Freon 22						CAS #: 75-45-6			
3.425	3.425	(0.240)	51	38452	2.00000	1.874	50.00- 150.00	100.00	(a)
3.425	3.425	(0.240)	67	5690			0.00- 65.39	14.80	
0.000	1.000	(0.000)	85	0			0.00- 51.20	0.00	
25 Methanol						CAS #: 67-56-1			
7.818	7.818	(0.548)	31	141222	12.0000	29.076	50.00- 150.00	100.00	(a)
7.818	7.818	(0.548)	32	216708			64.72- 164.72	153.45	
32 Dichlorofluoromethane/Fr21						CAS #: 75-43-4			
9.167	9.167	(0.643)	67	38215	2.00000	1.570	50.00- 150.00	100.00	(a)
9.167	9.167	(0.643)	69	10866			0.00- 79.81	28.43	
9.167	9.167	(0.643)	35	2302			0.00- 55.10	6.02	
40 Freon123a						CAS #: 354-23-4			
10.384	10.384	(0.728)	117	16848	2.00000	1.538	50.00- 150.00	100.00	(a)
10.356	10.356	(0.726)	67	25452			96.88- 196.88	151.07	
41 Freon123						CAS #: 306-83-2			
10.550	10.550	(0.740)	83	2903	2.00000	1.561	50.00- 150.00	100.00	(a)
0.000	1.000	(0.000)	133	0			0.00- 73.50	0.00	
10.550	10.550	(0.740)	85	1547			10.10- 110.10	53.29	
66 Isopropyl ether						CAS #: 108-20-3			
12.983	12.983	(0.911)	45	119379	2.00000	1.482	50.00- 150.00	100.00	(a)
13.011	13.011	(0.913)	87	25714			0.00- 71.33	21.54	
13.011	13.011	(0.913)	59	12255			0.00- 60.24	10.27	
69 1-Propanol						CAS #: 71-23-8			
13.232	13.232	(0.928)	42	5537	2.00000	1.420	50.00- 150.00	100.00	(a)
13.232	13.232	(0.928)	59	4215			47.04- 147.04	76.12	
13.232	13.232	(0.928)	41	3418			14.12- 114.12	61.73	
72 t-Butylethyl Ether						CAS #: 637-92-3			
13.536	13.536	(0.950)	59	54378	2.00000	1.610	50.00- 150.00	100.00	(a)
13.536	13.536	(0.950)	87	19755			0.00- 86.33	36.33	
13.536	13.536	(0.950)	41	13615			0.00- 70.48	25.04	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.978	13.978 (0.981)	45	12255	2.00000	1.488	50.00- 150.00	100.00(a)
13.978	13.978 (0.981)	61	10459			36.81- 136.81	85.34
13.978	13.978 (0.981)	43	80613			616.84- 716.84	657.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.222	15.222 (1.068)	73	63838	2.00000	1.666	50.00- 150.00	100.00(a)
15.222	15.222 (1.068)	87	15654			0.00- 73.95	24.52
15.222	15.222 (1.068)	55	20268			0.00- 80.63	31.75
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.467)	58	97383	2.00000	1.486	50.00- 150.00	100.00(a)
20.918	20.918 (1.467)	43	138911			99.63- 199.63	142.64
96 1-Butanol					CAS #: 71-36-3		
15.969	15.969 (1.014)	56	30255	2.00000	1.487	50.00- 150.00	100.00(a)
15.969	15.969 (1.014)	41	23114			20.92- 120.92	76.40
15.969	15.969 (1.014)	43	16994			4.89- 104.89	56.17
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	57644	2.00000	1.412	50.00- 150.00	100.00(a)
19.066	19.066 (1.211)	73	25792			0.00- 87.23	44.74
19.066	19.066 (1.211)	43	136176			180.18- 280.18	236.24
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.073)	55	78497	2.00000	1.529	50.00- 150.00	100.00(a)
21.471	21.471 (1.073)	98	32591			0.00- 90.24	41.52
21.471	21.471 (1.073)	42	55499			17.74- 117.74	70.70
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.104)	57	194861	2.00000	1.690	50.00- 150.00	100.00(a)
22.080	22.080 (1.104)	85	153236			28.61- 128.61	78.64
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052003.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->2.0ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	305805	-2.01
95 1,4-Difluorobenze	1622087	973252	2270922	1590850	-1.93
123 Chlorobenzene-d5	1805786	1083472	2528100	1798258	-0.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.25	-0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

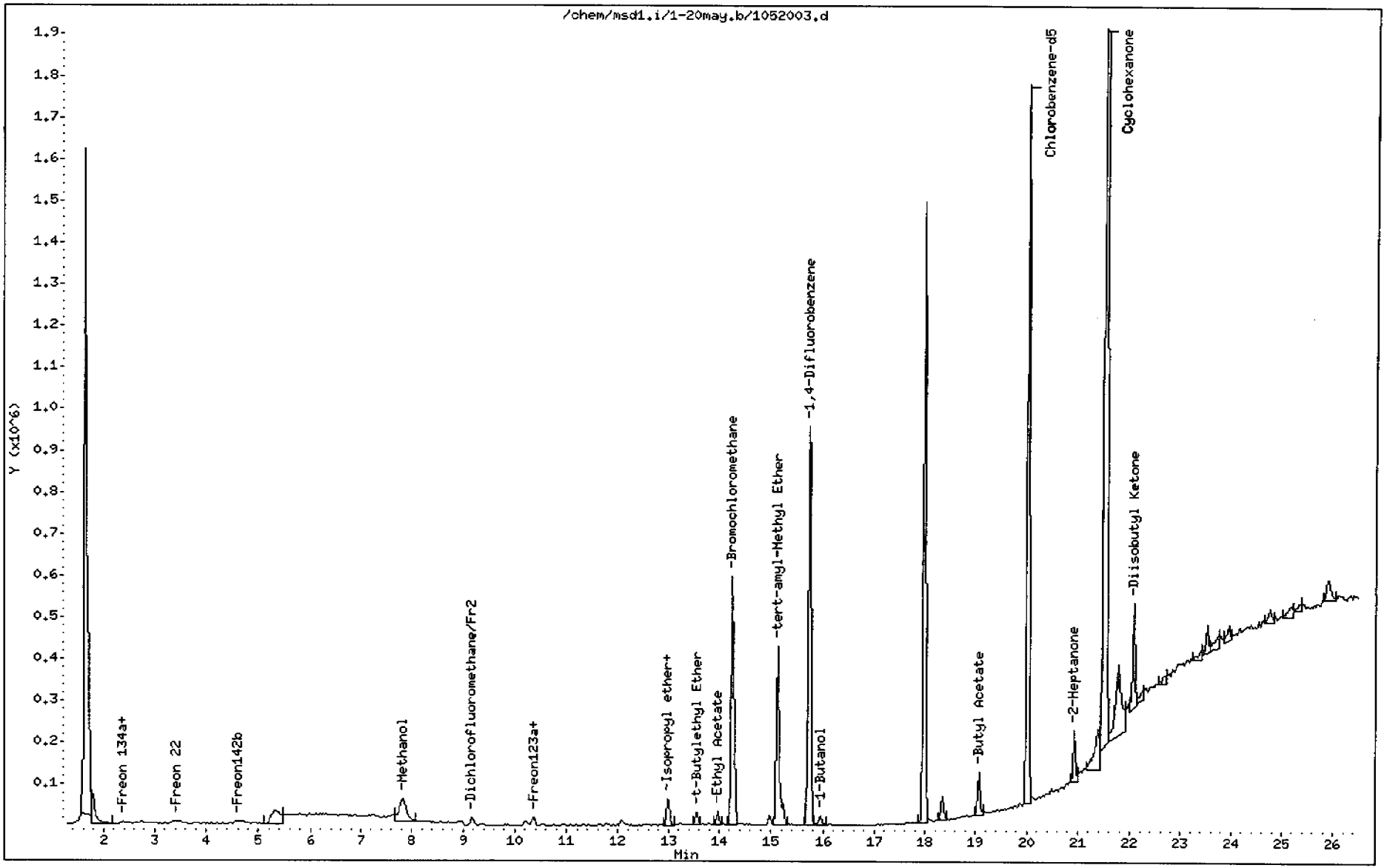
Data File: /chem/msd1.i/1-20may.b/1052003.d
Date : 20-MAY-2008 09:45
Client ID: Level 3
Sample Info: 1.0mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0173



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051911.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 19-MAY-2008 14:29
Operator : lo Inst ID: msd1.i
Smp Info : 40mL #1541-167
Misc Info : 5ppbv ->2.0ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover Quant Type: ISTD
Cal Date : 19-MAY-2008 14:29 Cal File: 1051911.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
**	****** ********	****	********	*******	*******	**********		*****
* 79 Bromochloromethane					CAS #: 74-97-5			
14.280	14.280 (1.000)	130	295507	25.0000		50.00- 150.00		100.00
14.280	14.280 (1.000)	128	222617			26.55- 126.55		75.33
14.252	14.252 (1.000)	49	542213			133.27- 233.27		183.49
* 95 1,4-Difluorobenzene					CAS #: 540-36-3			
15.745	15.745 (1.000)	114	1523302	25.0000		50.00- 150.00		100.00
15.745	15.745 (1.000)	88	239685			0.00- 66.07		15.73
* 123 Chlorobenzene-d5					CAS #: 3114-55-4			
20.031	20.031 (1.000)	117	1736378	25.0000		50.00- 150.00		100.00
20.031	20.031 (1.000)	82	1018299			8.52- 108.52		58.65
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
15.137	15.137 (1.060)	65	481977	25.0000	25.333	50.00- 150.00		100.00
15.137	15.137 (1.060)	67	251948			1.26- 101.26		52.27
$ 111 Toluene-d8					CAS #: 2037-26-5			
17.985	17.985 (1.142)	98	1726349	25.0000	24.943	50.00- 150.00		100.00
17.985	17.985 (1.142)	70	178478			0.00- 60.35		10.34

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)								
17.985	17.985	(1.142)	100	1116896			15.15- 115.15	64.70
$ 136 Bromofluorobenzene						CAS #: 460-00-4		
21.524	21.524	(1.075)	174	912499	25.0000	25.009	50.00- 150.00	100.00
21.524	21.524	(1.075)	95	1438409			108.79- 208.79	157.63
21.524	21.524	(1.075)	176	860584			45.26- 145.26	94.31
12 Propylene						CAS #: 115-07-1		
2.474	2.474	(0.173)	41	11267	2.00000	2.000	50.00- 150.00	100.00(M)
2.501	2.501	(0.175)	42	7531			16.84- 116.84	66.84
2.474	2.474	(0.173)	39	12464			60.62- 160.62	110.62
14 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
2.888	2.888	(0.202)	85	60533	2.00000	1.923	50.00- 150.00	100.00
2.861	2.861	(0.200)	87	12609			0.00- 64.93	20.83
17 Freon 114						CAS #: 76-14-2		
4.354	4.354	(0.305)	135	43882	2.00000	2.103	50.00- 150.00	100.00
4.326	4.326	(0.303)	137	8882			0.00- 76.48	20.24
21 Chloromethane						CAS #: 74-87-3		
4.658	4.658	(0.326)	50	31293	2.00000	2.000	50.00- 150.00	100.00
4.658	4.658	(0.326)	52	8280			0.00- 76.46	26.46
23 Vinyl Chloride						CAS #: 75-01-4		
5.626	5.626	(0.394)	62	31469	2.00000	1.949	50.00- 150.00	100.00
5.598	5.598	(0.392)	64	4746			0.00- 72.37	15.08
24 1,3-Butadiene						CAS #: 106-99-0		
5.902	5.902	(0.413)	54	21903	2.00000	1.969	50.00- 150.00	100.00
5.902	5.902	(0.413)	39	20719			27.83- 127.83	94.59
26 Bromomethane						CAS #: 74-83-9		
7.561	7.561	(0.529)	94	16737	2.00000	2.090	50.00- 150.00	100.00
7.533	7.533	(0.528)	96	16641			72.30- 172.30	99.43
28 Chloroethane						CAS #: 75-00-3		
8.114	8.114	(0.568)	64	14836	2.00000	1.899	50.00- 150.00	100.00
8.114	8.114	(0.568)	49	4268			0.00- 78.77	28.77
8.142	8.142	(0.570)	66	5234			0.00- 85.28	35.28
34 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.999	8.999	(0.630)	101	80575	2.00000	2.085	50.00- 150.00	100.00
8.999	8.999	(0.630)	103	54803			19.14- 119.14	68.01

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.215	10.215	(0.715)	45	9083	2.00000	2.000	50.00- 150.00	100.00
10.188	10.188	(0.713)	43	3886			0.00- 92.78	42.78
10.243	10.243	(0.717)	46	4591			0.54- 100.54	50.54
43 Freon 113						CAS #: 76-13-1		
10.575	10.575	(0.741)	151	43540	2.00000	2.129	50.00- 150.00	100.00
10.575	10.575	(0.741)	153	27015			16.20- 116.20	62.05
10.575	10.575	(0.741)	101	60679			85.85- 185.85	139.36
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.519	10.519	(0.737)	61	64360	2.00000	2.076	50.00- 150.00	100.00
10.519	10.519	(0.737)	96	36282			11.79- 111.79	56.37
10.519	10.519	(0.737)	98	19405			0.00- 79.68	30.15
45 Acetone						CAS #: 67-64-1		
10.907	10.907	(0.764)	58	22666	2.00000	2.000	50.00- 150.00	100.00
10.907	10.907	(0.764)	43	73341			273.57- 373.57	323.57
46 2-Propanol						CAS #: 67-63-0		
11.349	11.349	(0.795)	45	69769	2.00000	2.000	50.00- 150.00	100.00
11.349	11.349	(0.795)	43	12855			0.00- 68.43	18.43
11.349	11.349	(0.795)	59	2725			0.00- 53.91	3.91
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	106115	2.00000	2.143	50.00- 150.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.460	11.460	(0.802)	76	6164	2.00000	2.000	50.00- 150.00	100.00
11.460	11.460	(0.802)	41	19762			270.60- 370.60	320.60
54 Methylene Chloride						CAS #: 75-09-2		
11.764	11.764	(0.824)	49	48816	2.00000	1.683	50.00- 150.00	100.00
11.764	11.764	(0.824)	84	30499			7.39- 107.39	62.48
11.764	11.764	(0.824)	51	15797			0.00- 80.04	32.36
58 MTBE						CAS #: 1634-04-4		
12.178	12.178	(0.853)	73	42468	2.00000	2.122	50.00- 150.00	100.00
12.178	12.178	(0.853)	57	12729			0.00- 75.76	29.97
12.178	12.178	(0.853)	41	12694			0.00- 78.01	29.89
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.178	(0.853)	96	38591	2.00000	2.234	50.00- 150.00	100.00
12.178	12.178	(0.853)	61	62386			117.75- 217.75	161.66
12.178	12.178	(0.853)	98	24528			12.62- 112.62	63.56

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane						CAS #: 110-54-3		
12.566	12.566	(0.880)	57	86849	2.00000	2.086	50.00- 150.00	100.00
12.566	12.566	(0.880)	43	58532			20.08- 120.08	67.40
12.566	12.566	(0.880)	86	14149			0.00- 65.41	16.29
67 Vinyl Acetate						CAS #: 108-05-4		
13.091	13.091	(0.917)	86	7020	2.00000	2.000	50.00- 150.00	100.00
13.091	13.091	(0.917)	43	99958			1373.90-1473.90	1423.90
68 1,1-Dichloroethane						CAS #: 75-34-3		
12.980	12.980	(0.909)	63	59967	2.00000	2.366	50.00- 150.00	100.00
12.980	12.980	(0.909)	65	19246			0.00- 82.50	32.09
75 2-Butanone						CAS #: 78-93-3		
13.948	13.948	(0.977)	72	20022	2.00000	2.366	50.00- 150.00	100.00
13.948	13.948	(0.977)	43	99342			514.10- 614.10	496.16
13.948	13.948	(0.977)	57	9409			0.00- 95.73	46.99
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.920	13.920	(0.975)	61	61731	2.00000	2.129	50.00- 150.00	100.00
13.920	13.920	(0.975)	96	47334			24.73- 124.73	76.68
13.920	13.920	(0.975)	98	28085			0.00- 93.32	45.50
78 Tetrahydrofuran						CAS #: 109-99-9		
14.280	14.280	(1.000)	42	79982	2.00000	1.553	50.00- 150.00	100.00
14.280	14.280	(1.000)	71	25276			0.00- 80.85	31.60
14.280	14.280	(1.000)	72	27955			0.00- 82.01	34.95
81 Chloroform						CAS #: 67-66-3		
14.363	14.363	(1.006)	83	83567	2.00000	2.280	50.00- 150.00	100.00
14.363	14.363	(1.006)	85	54778			14.87- 114.87	65.55
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.584	14.584	(1.021)	97	79094	2.00000	2.297	50.00- 150.00	100.00
14.584	14.584	(1.021)	99	51528			6.37- 106.37	65.15
84 Cyclohexane						CAS #: 110-82-7		
14.584	14.584	(1.021)	84	71725	2.00000	2.062	50.00- 150.00	100.00
14.584	14.584	(1.021)	56	95068			75.04- 175.04	132.55
14.584	14.584	(1.021)	41	51636			31.79- 131.79	71.99
85 Carbon Tetrachloride						CAS #: 56-23-5		
14.777	14.777	(1.035)	119	76508	2.00000	2.175	50.00- 150.00	100.00
14.777	14.777	(1.035)	117	80519			49.77- 149.77	105.24
91 Benzene						CAS #: 71-43-2		
15.137	15.137	(0.961)	78	153176	2.00000	2.079	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	36177			0.00- 74.51	23.62
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	305901	2.00000	2.168	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	103028			0.00- 84.58	33.68
15.109	15.109 (1.058)	41	77250			0.00- 75.25	25.25
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	62526	2.00000	2.234	50.00- 150.00	100.00
15.248	15.248 (0.968)	64	22369			0.00- 86.62	35.78
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	60374	2.00000	2.160	50.00- 150.00	100.00
15.386	15.386 (0.977)	43	123577			166.36- 266.36	204.69
15.386	15.386 (0.977)	57	64045			55.75- 155.75	106.08
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	62244	2.00000	2.117	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	56845			39.97- 139.97	91.33
16.132	16.132 (1.025)	97	37619			12.36- 112.36	60.44
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	60813	2.00000	2.101	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	41579			17.84- 117.84	68.37
16.575	16.575 (1.053)	41	37810			12.60- 112.60	62.17
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	38752	2.00000	2.000	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	32752			34.52- 134.52	84.52
16.713	16.713 (1.061)	57	10790			0.00- 77.84	27.84
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	94219	2.00000	2.221	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	55747			11.07- 111.07	59.17
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	80045	2.00000	2.075	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	28431			0.00- 86.54	35.52
17.625	17.625 (1.119)	39	45932			3.09- 103.09	57.38
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	58539	2.00000	2.189	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	153936			214.81- 314.81	262.96
17.819	17.819 (1.132)	85	21961			0.00- 91.81	37.52

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.068	18.068	(1.147)	91	206809	2.00000	2.122	50.00- 150.00	100.00
18.068	18.068	(1.147)	92	129436			13.26- 113.26	62.59
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.427	18.427	(0.920)	75	87496	2.00000	2.216	50.00- 150.00	100.00
18.427	18.427	(0.920)	77	30362			0.00- 90.54	34.70
18.427	18.427	(0.920)	39	47683			5.60- 105.60	54.50
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.704	18.704	(0.934)	97	71980	2.00000	2.118	50.00- 150.00	100.00
18.704	18.704	(0.934)	99	44345			9.49- 109.49	61.61
18.704	18.704	(0.934)	83	61670			30.38- 130.38	85.68
117 Tetrachloroethene						CAS #: 127-18-4		
18.814	18.814	(0.939)	166	83474	2.00000	2.135	50.00- 150.00	100.00
18.814	18.814	(0.939)	129	67167			27.56- 127.56	80.46
18.814	18.814	(0.939)	131	64772			24.12- 124.12	77.60
118 2-Hexanone						CAS #: 591-78-6		
18.980	18.980	(0.948)	58	86118	2.00000	2.000	50.00- 150.00	100.00
18.980	18.980	(0.948)	43	159846			135.61- 235.61	185.61
18.980	18.980	(0.948)	100	17227			0.00- 70.00	20.00
121 Dibromochloromethane						CAS #: 124-48-1		
19.257	19.257	(0.961)	129	92186	2.00000	2.161	50.00- 150.00	100.00
19.257	19.257	(0.961)	127	70449			24.59- 124.59	76.42
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.450	(0.971)	107	108750	2.00000	2.356	50.00- 150.00	100.00
19.450	19.450	(0.971)	109	99604			49.15- 149.15	91.59
124 Chlorobenzene						CAS #: 108-90-7		
20.059	20.059	(1.001)	112	195695	2.00000	2.197	50.00- 150.00	100.00
20.059	20.059	(1.001)	114	60539			0.00- 82.50	30.94
20.059	20.059	(1.001)	77	134057			33.48- 133.48	68.50
125 Ethyl Benzene						CAS #: 100-41-4		
20.141	20.141	(1.006)	106	106380	2.00000	2.250	50.00- 150.00	100.00
20.141	20.141	(1.006)	91	335328			275.46- 375.46	315.22
128 m,p-Xylene						CAS #: 108-38-3		
20.280	20.280	(1.012)	106	133698	2.00000	2.296	50.00- 150.00	100.00
20.280	20.280	(1.012)	91	267110			168.73- 268.73	199.79
130 o-Xylene						CAS #: 95-47-6		
20.805	20.805	(1.039)	106	128157	2.00000	2.161	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	264646			161.08- 261.08	206.50
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	187011	2.00000	1.809	50.00- 150.00	100.00
20.833	20.833 (1.040)	78	89417			0.00- 97.10	47.81
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	86896	2.00000	2.109	50.00- 150.00	100.00
21.137	21.137 (1.055)	171	43414			0.00- 96.69	49.96
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	378786	2.00000	2.299	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	94563			0.00- 76.32	24.96
21.247	21.247 (1.061)	51	40632			0.00- 61.38	10.73
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.662	21.662 (1.081)	83	175988	2.00000	1.794	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	108133			9.81- 109.81	61.44
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	447845	2.00000	2.122	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	102869			0.00- 74.45	22.97
21.745	21.745 (1.086)	105	17261			0.00- 56.92	3.85
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	387610	2.00000	2.167	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	113624			0.00- 79.65	29.31
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	374432	2.00000	2.234	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	169145			0.00- 93.79	45.17
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	285157	2.00000	2.122	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	129650			0.00- 96.93	45.47
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	172107	2.00000	1.962	50.00- 150.00	100.00
22.823	22.823 (1.139)	148	107766			11.82- 111.82	62.62
22.823	22.823 (1.139)	111	75195			0.00- 90.55	43.69
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	172189	2.00000	2.146	50.00- 150.00	100.00
22.934	22.934 (1.145)	148	110661			21.48- 121.48	64.27
22.934	22.934 (1.145)	111	70681			0.00- 91.83	41.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	232749	2.00000	1.852	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	48507			0.00- 69.55	20.84
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	149406	2.00000	1.853	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	90856			10.50- 110.50	60.81
23.404	23.404 (1.168)	111	63781			0.00- 93.11	42.69
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	61351	2.00000	2.000	50.00- 150.00	100.00
25.257	25.257 (1.261)	182	59539			43.00- 143.00	97.05
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	45343	2.00000	2.000	50.00- 150.00	100.00
25.340	25.340 (1.265)	223	29988			17.33- 117.33	66.14
22 Butane					CAS #: 106-97-8		
5.487	5.487 (0.384)	58	6745	2.00000	2.000	50.00- 150.00	100.00
5.487	5.487 (0.384)	43	45698			627.51- 727.51	677.51
29 Isopentane					CAS #: 78-78-4		
8.308	8.308 (0.582)	43	45594	2.00000	2.000	50.00- 150.00	100.00
8.280	8.280 (0.580)	57	29918			15.62- 115.62	65.62
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	102186	2.00000	2.196	50.00- 150.00	100.00
16.354	16.354 (1.145)	98	46943			0.00- 97.85	45.94
16.354	16.354 (1.145)	55	95083			50.06- 150.06	93.05
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	52752	2.00000	2.057	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	10936			0.00- 67.50	20.73
12.068	12.068 (0.845)	57	5954			0.00- 63.77	11.29

QC Flag Legend

M - Compound response manually integrated.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051911.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 5ppbv ->2.0ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 14:29
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	295507	177304	413710	295507	0.00
95 1,4-Difluorobenze	1523302	913981	2132623	1523302	0.00
123 Chlorobenzene-d5	1736378	1041827	2430929	1736378	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

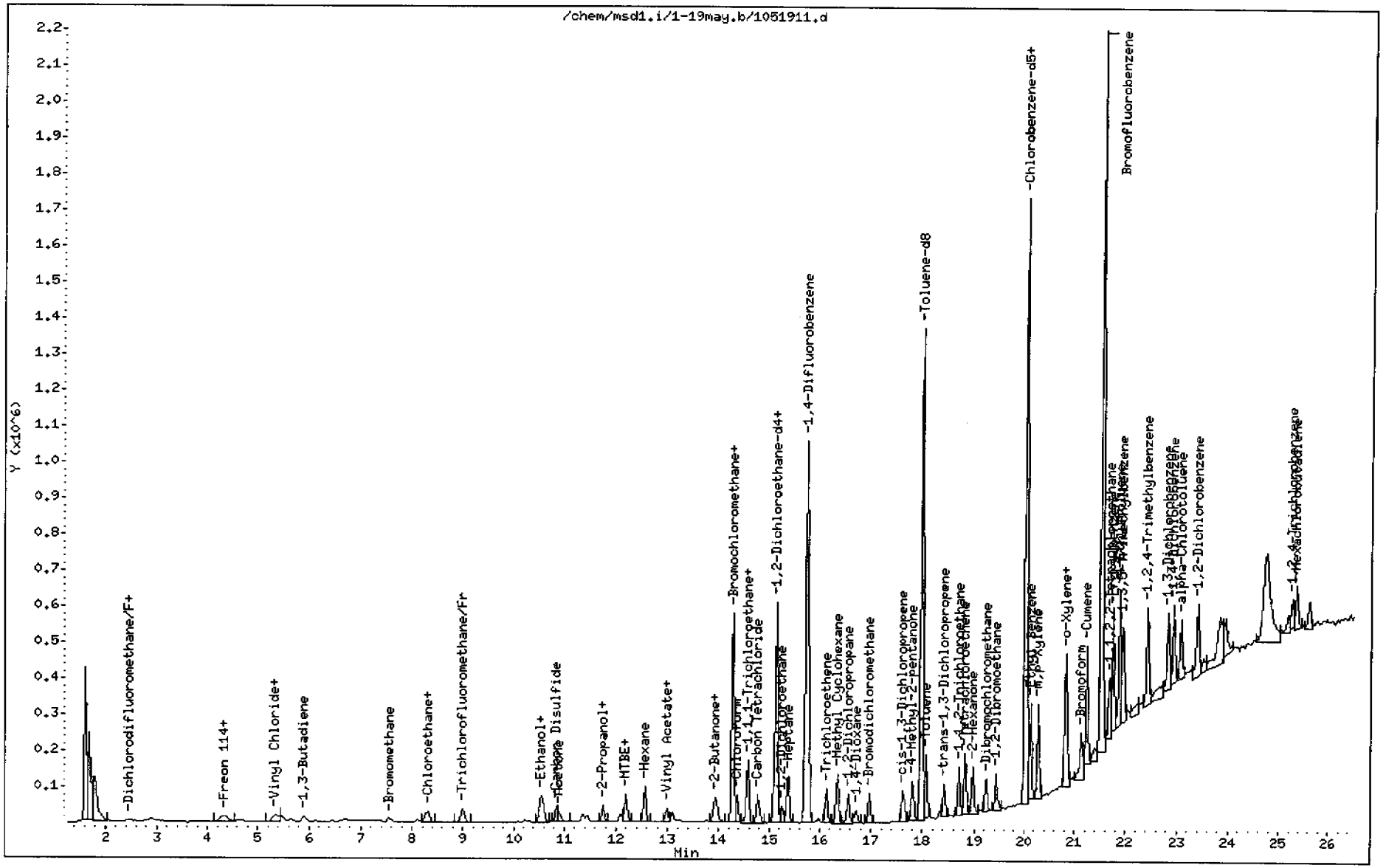
Data File: /chem/msd1.i/1-19may.b/1051911.d
Date : 19-MAY-2008 14:29
Client ID: Level 3
Sample Info: 40mL #1541-167

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0183



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052004.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 20-MAY-2008 10:26
Operator : lo Inst ID: msd1.i
Smp Info : 4.0mL #1541-142
Misc Info : 200ppbv ->8.0ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 10:26 Cal File: 1052004.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane						CAS #: 74-97-5		
14.282	14.282 (1.000)	130	305060	25.0000			50.00- 150.00	100.00
14.255	14.255 (1.000)	128	235622				28.24- 128.24	77.24
14.255	14.255 (1.000)	49	573065				133.94- 233.94	187.85
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1596621	25.0000			50.00- 150.00	100.00
15.748	15.748 (1.000)	88	262145				0.00- 65.99	16.42
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.006	20.006 (1.000)	117	1797015	25.0000			50.00- 150.00	100.00
20.006	20.006 (1.000)	82	1048456				8.42- 108.42	58.34
19 Freon142b						CAS #: 75-68-3		
4.636	4.636 (0.325)	65	197922	8.00000	7.681		50.00- 150.00	100.00
4.608	4.608 (0.323)	45	50295				0.00- 75.41	25.41
9 Freon 134a						CAS #: 811-97-2		
2.411	2.411 (0.169)	83	50448	8.00000	8.451		50.00- 150.00	100.00
2.411	2.411 (0.169)	69	41279				32.58- 132.58	81.82

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)								
2.383	2.383	(0.167)	63	1954			0.00- 58.36	3.87
13 Freon 152a						CAS #: 75-37-6		
2.749	2.749	(0.192)	65	44568	8.00000	7.884	50.00- 150.00	100.00
2.749	2.749	(0.192)	51	99489			172.46- 272.46	223.23
2.749	2.749	(0.192)	47	23768			0.63- 100.63	53.33
15 Freon 22						CAS #: 75-45-6		
3.453	3.453	(0.242)	51	162836	8.00000	7.954	50.00- 150.00	100.00
3.397	3.397	(0.238)	67	25231			0.00- 65.39	15.49
3.425	3.425	(0.240)	85	1635			0.00- 51.20	1.00
25 Methanol						CAS #: 67-56-1		
7.818	7.818	(0.547)	31	277023	48.0000	57.176	50.00- 150.00	100.00
7.818	7.818	(0.547)	32	306961			64.72- 164.72	110.81
32 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
9.195	9.195	(0.644)	67	195380	8.00000	8.048	50.00- 150.00	100.00
9.195	9.195	(0.644)	69	60054			0.00- 79.81	30.74
9.167	9.167	(0.642)	35	8872			0.00- 55.10	4.54
40 Freon123a						CAS #: 354-23-4		
10.384	10.384	(0.727)	117	85385	8.00000	7.814	50.00- 150.00	100.00
10.356	10.356	(0.725)	67	124934			96.88- 196.88	146.32
41 Freon123						CAS #: 306-83-2		
10.577	10.577	(0.741)	83	15564	8.00000	8.389	50.00- 150.00	100.00
10.577	10.577	(0.741)	133	3966			0.00- 73.50	25.48
10.577	10.577	(0.741)	85	9690			10.10- 110.10	62.26
66 Isopropyl ether						CAS #: 108-20-3		
12.983	12.983	(0.909)	45	625311	8.00000	7.784	50.00- 150.00	100.00
13.011	13.011	(0.911)	87	133541			0.00- 71.33	21.36
12.983	12.983	(0.909)	59	63610			0.00- 60.24	10.17
69 1-Propanol						CAS #: 71-23-8		
13.204	13.204	(0.924)	42	27101	8.00000	6.969	50.00- 150.00	100.00
13.204	13.204	(0.924)	59	29313			47.04- 147.04	108.16
13.204	13.204	(0.924)	41	17747			14.12- 114.12	65.48
72 t-Butylethyl Ether						CAS #: 637-92-3		
13.564	13.564	(0.950)	59	226199	8.00000	6.712	50.00- 150.00	100.00
13.564	13.564	(0.950)	87	82654			0.00- 86.33	36.54
13.564	13.564	(0.950)	41	42822			0.00- 70.48	18.93

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate						CAS #: 141-78-6		
13.978	13.978	(0.979)	45	65644	8.00000	7.990	50.00- 150.00	100.00
13.978	13.978	(0.979)	61	56382			36.81- 136.81	85.89
13.978	13.978	(0.979)	43	426844			616.84- 716.84	650.24
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
15.223	15.223	(1.066)	73	280244	8.00000	7.332	50.00- 150.00	100.00
15.223	15.223	(1.066)	87	66481			0.00- 73.95	23.72
15.223	15.223	(1.066)	55	87749			0.00- 80.63	31.31
132 2-Heptanone						CAS #: 110-43-0		
20.918	20.918	(1.465)	58	514940	8.00000	7.875	50.00- 150.00	100.00
20.918	20.918	(1.465)	43	788192			99.63- 199.63	153.06
96 1-Butanol						CAS #: 71-36-3		
15.941	15.941	(1.012)	56	143620	8.00000	7.033	50.00- 150.00	100.00
15.941	15.941	(1.012)	41	97914			20.92- 120.92	68.18
15.941	15.941	(1.012)	43	75011			4.89- 104.89	52.23
120 Butyl Acetate						CAS #: 123-86-4		
19.066	19.066	(1.211)	56	319857	8.00000	7.804	50.00- 150.00	100.00
19.066	19.066	(1.211)	73	107017			0.00- 87.23	33.46
19.066	19.066	(1.211)	43	707211			180.18- 280.18	221.10
135 Cyclohexanone						CAS #: 108-94-1		
21.471	21.471	(1.073)	55	415106	8.00000	8.092	50.00- 150.00	100.00
21.471	21.471	(1.073)	98	164669			0.00- 90.24	39.67
21.471	21.471	(1.073)	42	277966			17.74- 117.74	66.96
148 Diisobutyl Ketone						CAS #: 108-83-8		
22.080	22.080	(1.104)	57	1018811	8.00000	8.843	50.00- 150.00	100.00
22.080	22.080	(1.104)	85	801537			28.61- 128.61	78.67
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052004.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->8.0ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	305060	-2.25
95 1,4-Difluorobenze	1622087	973252	2270922	1596621	-1.57
123 Chlorobenzene-d5	1805786	1083472	2528100	1797015	-0.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

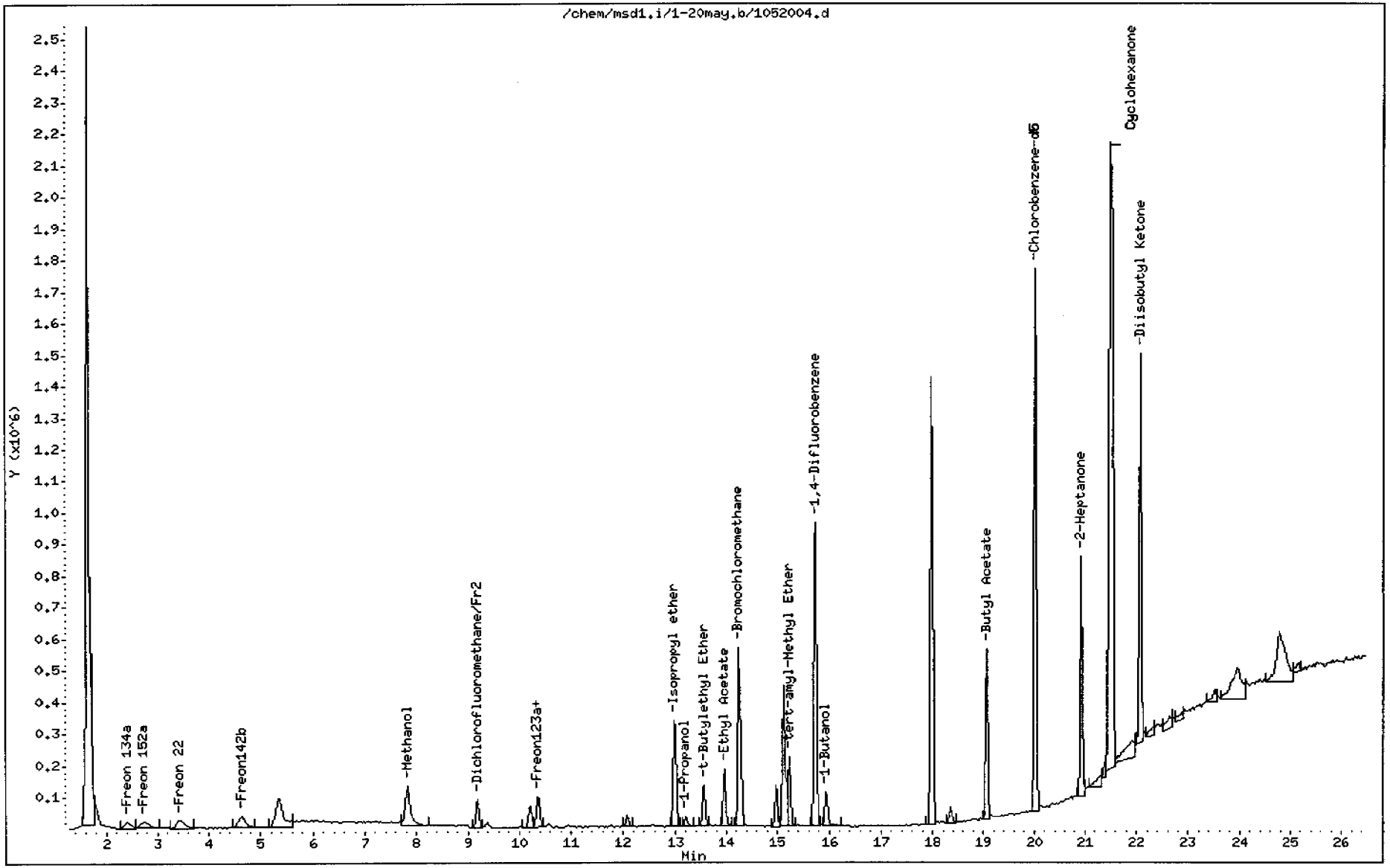
Data File: /chem/msd1.i/1-20may.b/1052004.d
Date : 20-MAY-2008 10:26
Client ID: Level 4
Sample Info: 4.0mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0188



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051917.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 19-MAY-2008 19:59
Operator : kr
Inst ID: msd1.i
Smp Info : 12.5mL #1612-3
Misc Info : 200ppbv-->25ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 19:59
Cal File: 1051917.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane					CAS #: 74-97-5			
14.280	14.280 (1.000)	130	327508	25.0000		50.00-	150.00	100.00
14.280	14.280 (1.000)	128	252074			26.65-	126.65	76.97
14.252	14.252 (1.000)	49	587687			132.31-	232.31	179.44
* 95 1,4-Difluorobenzene					CAS #: 540-36-3			
15.745	15.745 (1.000)	114	1675761	25.0000		50.00-	150.00	100.00
15.745	15.745 (1.000)	88	263792			0.00-	65.99	15.74
* 123 Chlorobenzene-d5					CAS #: 3114-55-4			
20.031	20.031 (1.000)	117	1902736	25.0000		50.00-	150.00	100.00
20.003	20.003 (1.000)	82	1105221			8.41-	108.41	58.09
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
15.137	15.137 (1.060)	65	533164	25.0000	25.213	50.00-	150.00	100.00
15.137	15.137 (1.060)	67	297184			2.38-	102.38	55.74
$ 111 Toluene-d8					CAS #: 2037-26-5			
17.985	17.985 (1.142)	98	1889458	25.0000	24.862	50.00-	150.00	100.00
17.957	17.957 (1.140)	70	188629			0.00-	60.26	9.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1241685			15.30- 115.30	65.72
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1010267	25.0000	25.200	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1607932			108.88- 208.88	159.16
21.524	21.524 (1.075)	176	959869			45.20- 145.20	95.01
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	202674	25.0000	28.246	50.00- 150.00	100.00
2.474	2.474 (0.173)	42	135814			16.93- 116.93	67.01
2.474	2.474 (0.173)	39	150989			42.56- 142.56	74.50
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.861	2.861 (0.200)	85	1011256	25.0000	27.527	50.00- 150.00	100.00
2.888	2.888 (0.202)	87	330163			0.00- 70.84	32.65
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	691291	25.0000	28.060	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	218202			0.00- 78.17	31.56
21 Chloromethane					CAS #: 74-87-3		
4.630	4.630 (0.324)	50	419413	25.0000	24.586	50.00- 150.00	100.00
4.630	4.630 (0.324)	52	132144			0.00- 78.98	31.51
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	458741	25.0000	25.423	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	142750			0.00- 75.28	31.12
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	355307	25.0000	27.757	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	343702			32.56- 132.56	96.73
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	346039	25.0000	32.860	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	328687			63.20- 163.20	94.99
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	249268	25.0000	27.404	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	72558			0.00- 78.94	29.11
8.114	8.114 (0.568)	66	78984			0.00- 83.48	31.69
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	1298487	25.0000	28.310	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	832680			17.47- 117.47	64.13

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.160	10.160	(0.711)	45	207357	25.0000	31.117	50.00- 150.00	100.00
10.132	10.132	(0.710)	43	38882			0.00- 80.77	18.75
10.132	10.132	(0.710)	46	83062			0.00- 95.30	40.06
43 Freon 113						CAS #: 76-13-1		
10.575	10.575	(0.741)	151	681049	25.0000	28.151	50.00- 150.00	100.00
10.575	10.575	(0.741)	153	423703			14.87- 114.87	62.21
10.575	10.575	(0.741)	101	908470			85.03- 185.03	133.39
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.519	10.519	(0.737)	61	905515	25.0000	25.889	50.00- 150.00	100.00
10.519	10.519	(0.737)	96	483019			8.97- 108.97	53.34
10.519	10.519	(0.737)	98	313058			0.00- 81.31	34.57
45 Acetone						CAS #: 67-64-1		
10.879	10.879	(0.762)	58	301151	25.0000	24.478	50.00- 150.00	100.00
10.879	10.879	(0.762)	43	948251			269.22- 369.22	314.88
46 2-Propanol						CAS #: 67-63-0		
11.321	11.321	(0.793)	45	1090150	25.0000	26.502	50.00- 150.00	100.00
11.321	11.321	(0.793)	43	197190			0.00- 68.26	18.09
11.321	11.321	(0.793)	59	42747			0.00- 53.91	3.92
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	1447321	25.0000	25.898	50.00- 150.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.432	11.432	(0.801)	76	151388	25.0000	31.968	50.00- 150.00	100.00
11.432	11.432	(0.801)	41	558396			294.73- 394.73	368.85
54 Methylene Chloride						CAS #: 75-09-2		
11.736	11.736	(0.822)	49	735054	25.0000	23.535	50.00- 150.00	100.00
11.764	11.764	(0.824)	84	463741			9.29- 109.29	63.09
11.736	11.736	(0.822)	51	214608			0.00- 79.76	29.20
58 MTBE						CAS #: 1634-04-4		
12.151	12.151	(0.851)	73	530281	25.0000	24.262	50.00- 150.00	100.00
12.151	12.151	(0.851)	57	155290			0.00- 76.94	29.28
12.151	12.151	(0.851)	41	136743			0.00- 77.27	25.79
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.178	(0.853)	96	608846	25.0000	29.156	50.00- 150.00	100.00
12.178	12.178	(0.853)	61	954885			114.11- 214.11	156.84
12.178	12.178	(0.853)	98	384723			12.81- 112.81	63.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	1390611	25.0000	28.205	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	883847			17.91- 117.91	63.56
12.566	12.566 (0.880)	86	205039			0.00- 65.19	14.74
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	152566	25.0000	30.535	50.00- 150.00	100.00
13.063	13.063 (0.915)	43	1976752			1309.79-1409.79	1295.67
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	1155997	25.0000	33.857	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	349110			0.00- 81.73	30.20
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	347673	25.0000	31.932	50.00- 150.00	100.00
13.920	13.920 (0.975)	43	1682063			487.34- 587.34	483.81
13.948	13.948 (0.977)	57	127727			0.00- 92.73	36.74
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	995094	25.0000	28.686	50.00- 150.00	100.00
13.893	13.893 (0.973)	96	683544			22.72- 122.72	68.69
13.893	13.893 (0.973)	98	431220			0.00- 93.33	43.33
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1069934	25.0000	20.454	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	328370			0.00- 80.80	30.69
14.252	14.252 (0.998)	72	358299			0.00- 82.50	33.49
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	1357959	25.0000	30.833	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	842508			14.17- 114.17	62.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	1399291	25.0000	31.731	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	885899			8.68- 108.68	63.31
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	1125039	25.0000	27.644	50.00- 150.00	100.00
14.556	14.556 (1.019)	56	1523051			78.48- 178.48	135.38
14.556	14.556 (1.019)	41	799926			28.22- 128.22	71.10
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	1251974	25.0000	29.328	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	1304242			51.24- 151.24	104.17
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	2429767	25.0000	28.554	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	556679			0.00- 74.11	22.91
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	4820200	25.0000	28.607	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	1570128			0.00- 83.91	32.57
15.109	15.109 (1.058)	41	1154806			0.00- 74.82	23.96
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	1001997	25.0000	29.573	50.00- 150.00	100.00
15.248	15.248 (0.968)	64	314385			0.00- 84.87	31.38
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	930266	25.0000	28.278	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	1955279			164.30- 264.30	210.18
15.358	15.358 (0.975)	57	1019337			57.03- 157.03	109.57
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	986582	25.0000	28.419	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	970387			42.76- 142.76	98.36
16.132	16.132 (1.025)	97	639576			13.18- 113.18	64.83
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	941744	25.0000	27.874	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	676485			19.17- 119.17	71.83
16.575	16.575 (1.053)	41	572162			11.99- 111.99	60.76
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	588621	25.0000	26.242	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	474847			32.59- 132.59	80.67
16.713	16.713 (1.061)	57	149190			0.00- 76.59	25.35
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	1564403	25.0000	30.099	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	956005			11.08- 111.08	61.11
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	1361167	25.0000	29.310	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	431623			0.00- 84.93	31.71
17.625	17.625 (1.119)	39	771742			4.29- 104.29	56.70
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	965620	25.0000	29.722	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	2458556			211.41- 311.41	254.61
17.791	17.791 (1.130)	85	360844			0.00- 90.33	37.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	3259651	25.0000	28.358	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	1973956			12.36- 112.36	60.56
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	1462435	25.0000	30.256	50.00- 150.00	100.00
18.427	18.427 (0.920)	77	468338			0.00- 87.70	32.02
18.427	18.427 (0.920)	39	783853			4.93- 104.93	53.60
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	1128776	25.0000	28.310	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	710798			10.65- 110.65	62.97
18.704	18.704 (0.934)	83	930840			31.08- 131.08	82.46
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	1332337	25.0000	28.760	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	1048496			27.94- 127.94	78.70
18.814	18.814 (0.939)	131	996416			24.34- 124.34	74.79
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	1450261	25.0000	27.573	50.00- 150.00	100.00
18.953	18.953 (0.946)	43	2617757			133.06- 233.06	180.50
18.980	18.980 (0.948)	100	291796			0.00- 70.06	20.12
121 Dibromochloromethane					CAS #: 124-48-1		
19.229	19.229 (0.960)	129	1639081	25.0000	30.918	50.00- 150.00	100.00
19.229	19.229 (0.960)	127	1257659			25.30- 125.30	76.73
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	1761050	25.0000	31.705	50.00- 150.00	100.00
19.450	19.450 (0.971)	109	1652021			47.82- 147.82	93.81
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	2978562	25.0000	28.428	50.00- 150.00	100.00
20.059	20.059 (1.001)	114	933024			0.00- 82.10	31.32
20.059	20.059 (1.001)	77	1926789			27.22- 127.22	64.69
125 Ethyl Benzene					CAS #: 100-41-4		
20.141	20.141 (1.006)	106	1698599	25.0000	29.704	50.00- 150.00	100.00
20.141	20.141 (1.006)	91	5320804			271.39- 371.39	313.25
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	2110463	25.0000	29.858	50.00- 150.00	100.00
20.280	20.280 (1.012)	91	4207316			162.27- 262.27	199.36
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	1980738	25.0000	28.408	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	4173778			160.96- 260.96	210.72
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	3223605	25.0000	27.503	50.00- 150.00	100.00
20.833	20.833	(1.040)	78	1518126			0.00- 97.10	47.09
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	1498083	25.0000	29.915	50.00- 150.00	100.00
21.137	21.137	(1.055)	171	781883			0.00- 98.52	52.19
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	5843107	25.0000	30.148	50.00- 150.00	100.00
21.247	21.247	(1.061)	120	1488230			0.00- 76.11	25.47
21.247	21.247	(1.061)	51	614274			0.00- 61.16	10.51
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	2649810	25.0000	24.768	50.00- 150.00	100.00
21.662	21.662	(1.081)	85	1651607			10.65- 110.65	62.33
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	7064639	25.0000	28.442	50.00- 150.00	100.00
21.745	21.745	(1.086)	120	1556612			0.00- 73.64	22.03
21.745	21.745	(1.086)	105	259252			0.00- 55.84	3.67
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	6192337	25.0000	29.041	50.00- 150.00	100.00
21.883	21.883	(1.092)	120	1775433			0.00- 79.33	28.67
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	5492350	25.0000	28.506	50.00- 150.00	100.00
21.939	21.939	(1.095)	120	2527422			0.00- 94.35	46.02
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	4314803	25.0000	28.089	50.00- 150.00	100.00
22.409	22.409	(1.119)	120	1933171			0.00- 96.40	44.80
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.823	(1.139)	146	2465453	25.0000	25.429	50.00- 150.00	100.00
22.823	22.823	(1.139)	148	1548840			12.15- 112.15	62.82
22.823	22.823	(1.139)	111	1051814			0.00- 91.25	42.66
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	2523551	25.0000	27.356	50.00- 150.00	100.00
22.934	22.934	(1.145)	148	1588431			18.64- 118.64	62.94
22.934	22.934	(1.145)	111	1016202			0.00- 91.31	40.27

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene						CAS #: 100-44-7		
23.100	23.100	(1.153)	91	3600090	25.0000	25.751	50.00- 150.00	100.00
23.100	23.100	(1.153)	126	704749			0.00- 69.56	19.58
164 1,2-Dichlorobenzene						CAS #: 95-50-1		
23.404	23.404	(1.168)	146	2014241	25.0000	23.490	50.00- 150.00	100.00
23.404	23.404	(1.168)	148	1278801			11.50- 111.50	63.49
23.404	23.404	(1.168)	111	897151			0.00- 93.59	44.54
169 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
25.257	25.257	(1.261)	180	582788	25.0000	20.475	50.00- 150.00	100.00
25.257	25.257	(1.261)	182	546749			43.27- 143.27	93.82
170 Hexachlorobutadiene						CAS #: 87-68-3		
25.340	25.340	(1.265)	225	446785	25.0000	20.919	50.00- 150.00	100.00
25.340	25.340	(1.265)	223	276379			15.51- 115.51	61.86
22 Butane						CAS #: 106-97-8		
5.460	5.460	(0.382)	58	87368	25.0000	24.160	50.00- 150.00	100.00
5.460	5.460	(0.382)	43	693261			685.50- 785.50	793.50
29 Isopentane						CAS #: 78-78-4		
8.280	8.280	(0.580)	43	682504	25.0000	25.968	50.00- 150.00	100.00
8.280	8.280	(0.580)	57	479097			17.91- 117.91	70.20
99 Methyl Cyclohexane						CAS #: 108-87-2		
16.354	16.354	(1.145)	83	1605401	25.0000	28.779	50.00- 150.00	100.00
16.354	16.354	(1.145)	98	770194			0.00- 97.89	47.98
16.354	16.354	(1.145)	55	1481216			47.46- 147.46	92.26
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
12.068	12.068	(0.845)	59	505386	25.0000	19.677	50.00- 150.00	100.00
12.068	12.068	(0.845)	41	127429			0.00- 67.50	25.21
12.068	12.068	(0.845)	57	50587			0.00- 63.77	10.01

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

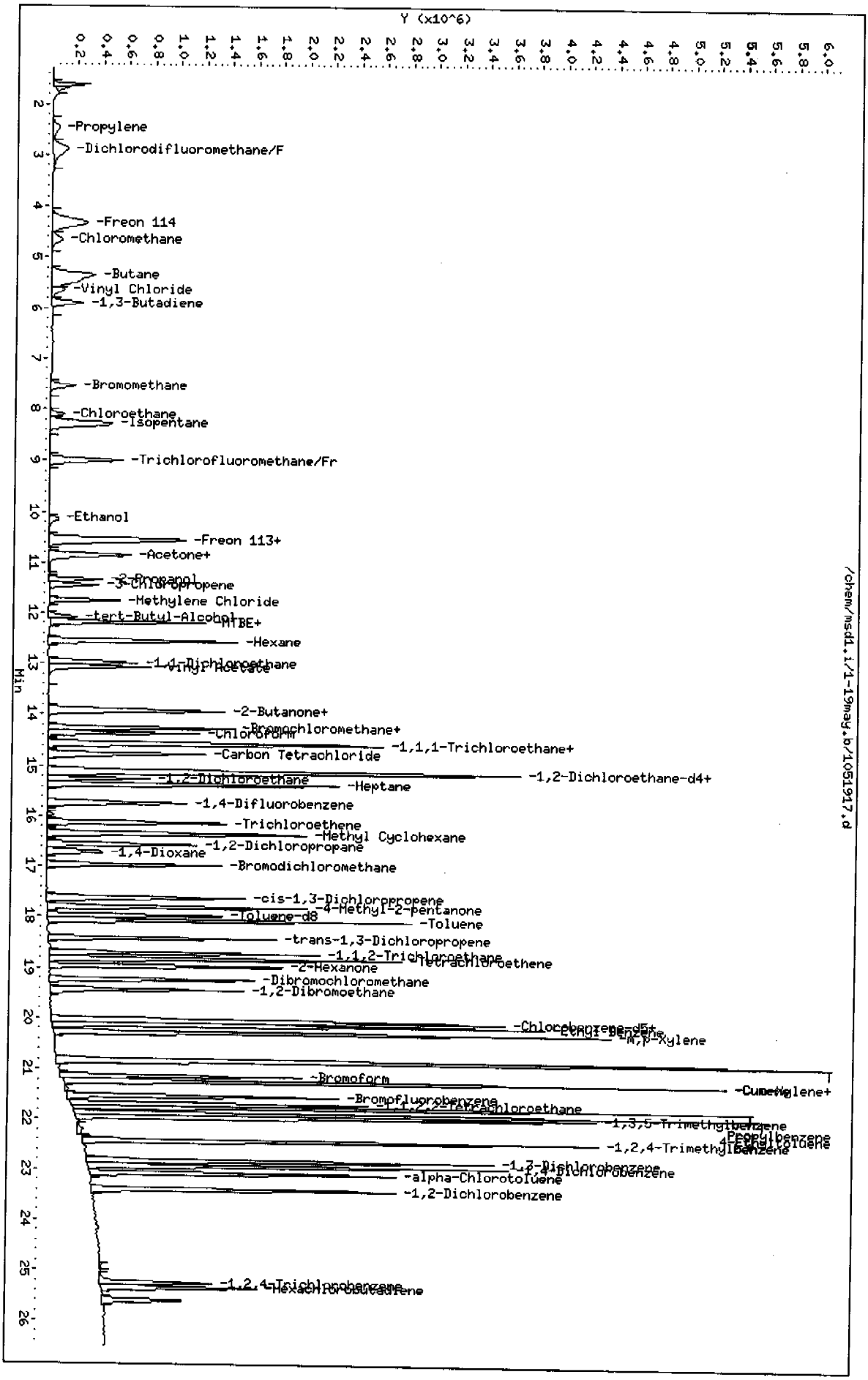
Instrument ID: msd1.i
Lab File ID: 1051917.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv-->25ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 19:59
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	327508	196505	458511	327508	0.00
95 1,4-Difluorobenze	1675761	1005457	2346065	1675761	0.00
123 Chlorobenzene-d5	1902736	1141642	2663830	1902736	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051917.d
Date : 19-MAY-2008 19:59
Client ID: Level 4
Sample Info: 12.5mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052005.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 20-MAY-2008 10:59
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 10:59
Cal File: 1052005.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
**	====== ========	****	========	=======	=======		==========	=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.282	14.282 (1.000)	130	312076	25.0000			80.00- 120.00	100.00
14.282	14.282 (1.000)	128	246703				29.05- 129.05	79.05
14.255	14.255 (1.000)	49	557015				128.49- 228.49	178.49
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1622087	25.0000			80.00- 120.00	100.00
15.748	15.748 (1.000)	88	250668				0.00- 65.45	15.45
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.034	20.034 (1.000)	117	1805786	25.0000			80.00- 120.00	100.00
20.006	20.006 (1.000)	82	1042207				8.42- 108.42	57.71
19 Freon142b						CAS #: 75-68-3		
4.636	4.636 (0.325)	65	1466529	50.0000	55.633		80.00- 120.00	100.00
4.636	4.636 (0.325)	45	361369				0.00- 75.41	24.64
9 Freon 134a						CAS #: 811-97-2		
2.411	2.411 (0.169)	83	337242	50.0000	55.227		80.00- 120.00	100.00
2.411	2.411 (0.169)	69	269690				32.58- 132.58	79.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.411	2.411 (0.169)	63	36152			0.00- 58.36	10.72
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.190)	65	312010	50.0000	53.952	80.00- 120.00	100.00
2.721	2.721 (0.190)	51	666992			172.46- 272.46	213.77
2.749	2.749 (0.192)	47	162961			0.63- 100.63	52.23
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	1137258	50.0000	54.303	80.00- 120.00	100.00
3.453	3.453 (0.242)	67	180724			0.00- 65.39	15.89
3.425	3.425 (0.240)	85	15915			0.00- 51.20	1.40
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	1398684	300.000	282.19	80.00- 120.00	100.00
7.818	7.818 (0.547)	32	1117573			29.90- 129.90	79.90
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	1405104	50.0000	56.578	80.00- 120.00	100.00
9.195	9.195 (0.644)	69	425214			0.00- 79.81	30.26
9.195	9.195 (0.644)	35	66364			0.00- 55.10	4.72
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	648338	50.0000	58.002	80.00- 120.00	100.00
10.356	10.356 (0.725)	67	928673			96.88- 196.88	143.24
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	106534	50.0000	56.134	80.00- 120.00	100.00
10.577	10.577 (0.741)	133	22924			0.00- 73.50	21.52
10.577	10.577 (0.741)	85	68994			10.10- 110.10	64.76
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	4821886	50.0000	58.671	80.00- 120.00	100.00
13.011	13.011 (0.911)	87	1016872			0.00- 71.33	21.09
12.983	12.983 (0.909)	59	495344			0.00- 60.24	10.27
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	238759	50.0000	60.021	80.00- 120.00	100.00
13.204	13.204 (0.924)	59	255065			47.04- 147.04	106.83
13.204	13.204 (0.924)	41	155524			14.12- 114.12	65.14
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.564	13.564 (0.950)	59	2049003	50.0000	59.437	80.00- 120.00	100.00
13.564	13.564 (0.950)	87	740271			0.00- 86.33	36.13
13.564	13.564 (0.950)	41	358075			0.00- 70.48	17.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate					CAS #: 141-78-6		
13.951	13.951 (0.977)	45	487841	50.0000	58.046	80.00- 120.00	100.00
13.951	13.951 (0.977)	61	435150			36.81- 136.81	89.20
13.951	13.951 (0.977)	43	3378151			616.84- 716.84	692.47
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.066)	73	2274918	50.0000	58.183	80.00- 120.00	100.00
15.223	15.223 (1.066)	87	536743			0.00- 73.95	23.59
15.223	15.223 (1.066)	55	655844			0.00- 80.63	28.83
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	3650607	50.0000	54.574	80.00- 120.00	100.00
20.918	20.918 (1.465)	43	5592030			99.63- 199.63	153.18
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	1159321	50.0000	55.878	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	790480			20.92- 120.92	68.18
15.941	15.941 (1.012)	43	652245			4.89- 104.89	56.26
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	2400247	50.0000	57.643	80.00- 120.00	100.00
19.066	19.066 (1.211)	73	803755			0.00- 83.49	33.49
19.066	19.066 (1.211)	43	5597507			183.21- 283.21	233.21
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	2669553	50.0000	51.791	80.00- 120.00	100.00
21.471	21.471 (1.072)	98	1073676			0.00- 90.24	40.22
21.471	21.471 (1.072)	42	1781890			17.74- 117.74	66.75
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.102)	57	6022108	50.0000	52.015	80.00- 120.00	100.00
22.080	22.080 (1.102)	85	4727987			28.51- 128.51	78.51
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052005.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	312076	0.00
95 1,4-Difluorobenze	1622087	973252	2270922	1622087	0.00
123 Chlorobenzene-d5	1805786	1083472	2528100	1805786	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

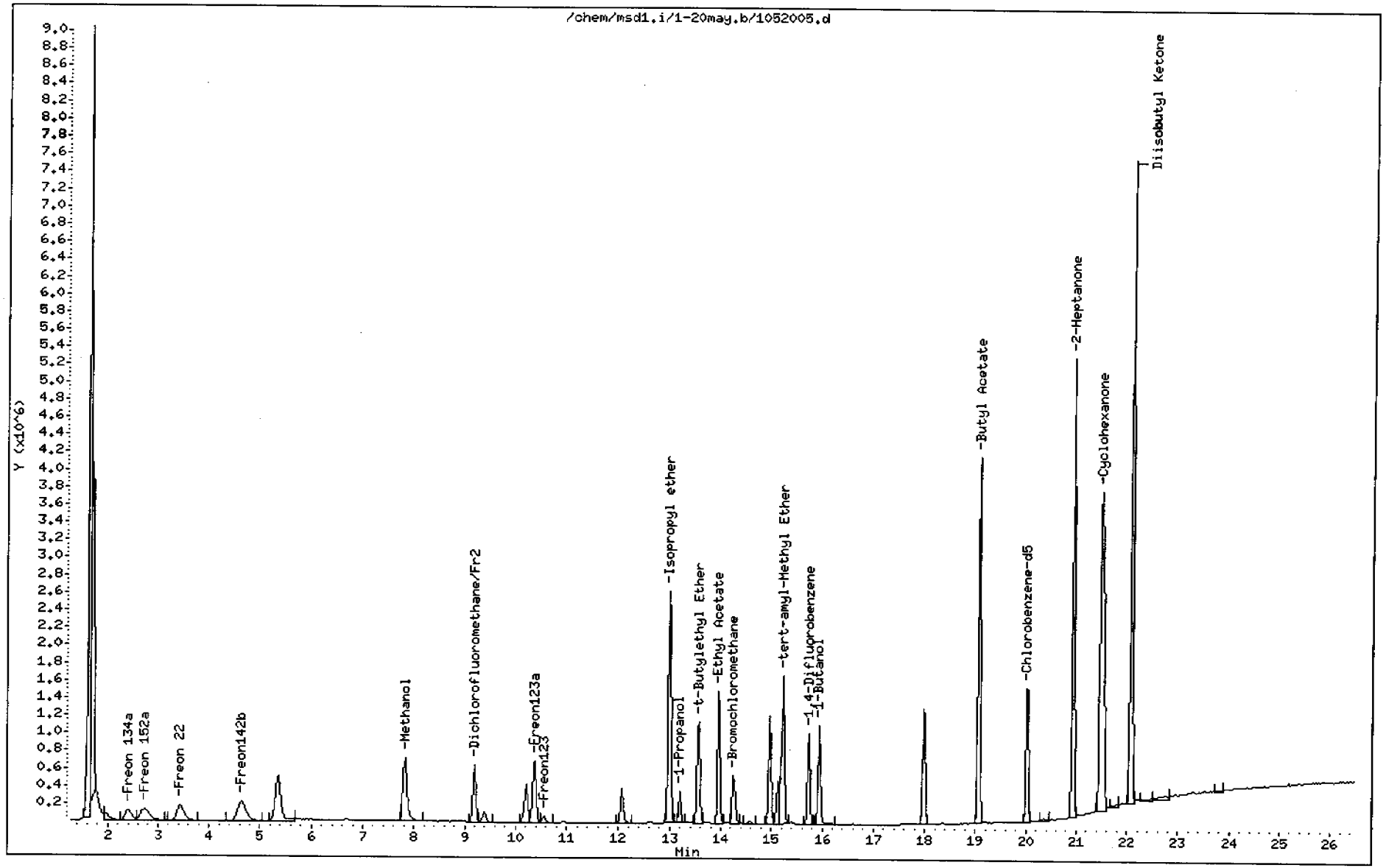
Data File: /chem/msd1.i/1-20may.b/1052005.d
Date : 20-MAY-2008 10:59
Client ID: Level 5
Sample Info: 25mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0203



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051913.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 19-MAY-2008 15:47
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 15:47
Cal File: 1051913.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08mdl.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 79 Bromochloromethane					CAS #: 74-97-5		
14.280	14.280 (1.000)	130	311243	25.0000		80.00- 120.00	100.00
14.280	14.280 (1.000)	128	242864			28.03- 128.03	78.03
14.252	14.252 (1.000)	49	577844			135.66- 235.66	185.66
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1618588	25.0000		80.00- 120.00	100.00
15.745	15.745 (1.000)	88	256867			0.00- 65.87	15.87
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1862744	25.0000		80.00- 120.00	100.00
20.031	20.031 (1.000)	82	1088781			8.42- 108.42	58.45
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	513720	25.0000	25.448	80.00- 120.00	100.00
15.137	15.137 (1.060)	67	312850			4.08- 104.08	60.90
$ 111 Toluene-d8					CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1819475	25.0000	24.829	80.00- 120.00	100.00
17.985	17.985 (1.142)	70	194127			0.00- 60.34	10.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1209777			15.53- 115.53	66.49
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1005148	25.0000	25.486	80.00- 120.00	100.00
21.524	21.524 (1.075)	95	1598935			109.07- 209.07	159.07
21.524	21.524 (1.075)	176	957758			45.29- 145.29	95.29
12 Propylene					CAS #: 115-07-1		
2.501	2.501 (0.175)	41	360585	50.0000	51.884	80.00- 120.00	100.00
2.501	2.501 (0.175)	42	242370			17.02- 117.02	67.22
2.501	2.501 (0.175)	39	299419			39.39- 139.39	83.04
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	1798174	50.0000	51.121	80.00- 120.00	100.00
2.888	2.888 (0.202)	87	585293			0.00- 73.77	32.55
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1237350	50.0000	52.107	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	383518			0.00- 81.00	31.00
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	744126	50.0000	47.191	80.00- 120.00	100.00
4.658	4.658 (0.326)	52	230433			0.00- 79.64	30.97
23 Vinyl Chloride					CAS #: 75-01-4		
5.625	5.625 (0.394)	62	806945	50.0000	47.759	80.00- 120.00	100.00
5.625	5.625 (0.394)	64	249493			0.00- 76.69	30.92
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	651884	50.0000	52.828	80.00- 120.00	100.00
5.902	5.902 (0.413)	39	634569			35.52- 135.52	97.34
26 Bromomethane					CAS #: 74-83-9		
7.561	7.561 (0.529)	94	610006	50.0000	57.789	80.00- 120.00	100.00
7.561	7.561 (0.529)	96	580461			45.16- 145.16	95.16
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	459776	50.0000	52.353	80.00- 120.00	100.00
8.114	8.114 (0.568)	49	134055			0.00- 79.01	29.16
8.114	8.114 (0.568)	66	138617			0.00- 82.37	30.15
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	2358673	50.0000	53.022	80.00- 120.00	100.00
8.999	8.999 (0.630)	103	1524903			14.65- 114.65	64.65

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.132	10.132	(0.710)	45	374337	50.0000	55.726	80.00- 120.00	100.00
10.132	10.132	(0.710)	43	80303			0.00- 77.66	21.45
10.132	10.132	(0.710)	46	152340			0.00- 93.77	40.70
43 Freon 113						CAS #: 76-13-1		
10.575	10.575	(0.741)	151	1243369	50.0000	52.999	80.00- 120.00	100.00
10.575	10.575	(0.741)	153	783865			13.04- 113.04	63.04
10.575	10.575	(0.741)	101	1635840			81.57- 181.57	131.57
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.519	10.519	(0.737)	61	1616509	50.0000	48.967	80.00- 120.00	100.00
10.519	10.519	(0.737)	96	859569			3.17- 103.17	53.17
10.519	10.519	(0.737)	98	547443			0.00- 83.87	33.87
45 Acetone						CAS #: 67-64-1		
10.879	10.879	(0.762)	58	527520	50.0000	46.635	80.00- 120.00	100.00
10.879	10.879	(0.762)	43	1738029			272.64- 372.64	329.47
46 2-Propanol						CAS #: 67-63-0		
11.321	11.321	(0.793)	45	1967200	50.0000	50.215	80.00- 120.00	100.00
11.321	11.321	(0.793)	43	360399			0.00- 68.28	18.32
11.321	11.321	(0.793)	59	70529			0.00- 53.80	3.59
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	2681577	50.0000	50.367	80.00- 120.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.459	11.459	(0.802)	76	303801	50.0000	60.450	80.00- 120.00	100.00
11.432	11.432	(0.801)	41	1093119			299.76- 399.76	359.81
54 Methylene Chloride						CAS #: 75-09-2		
11.764	11.764	(0.824)	49	1331277	50.0000	46.037	80.00- 120.00	100.00
11.764	11.764	(0.824)	84	842487			13.28- 113.28	63.28
11.764	11.764	(0.824)	51	403064			0.00- 79.89	30.28
58 MTBE						CAS #: 1634-04-4		
12.151	12.151	(0.851)	73	988086	50.0000	48.156	80.00- 120.00	100.00
12.151	12.151	(0.851)	57	288091			0.00- 79.16	29.16
12.151	12.151	(0.851)	41	300240			0.00- 78.05	30.39
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.178	(0.853)	96	1081098	50.0000	53.284	80.00- 120.00	100.00
12.178	12.178	(0.853)	61	1739285			110.88- 210.88	160.88
12.178	12.178	(0.853)	98	688621			13.03- 113.03	63.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.565	12.565 (0.880)	57	2425088	50.0000	51.307	80.00- 120.00	100.00
12.565	12.565 (0.880)	43	1555392			16.97- 116.97	64.14
12.565	12.565 (0.880)	86	349083			0.00- 64.99	14.39
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	276520	50.0000	55.205	80.00- 120.00	100.00
13.063	13.063 (0.915)	43	3499814			1278.41-1378.41	1265.66
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	2141994	50.0000	61.120	80.00- 120.00	100.00
12.980	12.980 (0.909)	65	646062			0.00- 80.16	30.16
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	626519	50.0000	57.516	80.00- 120.00	100.00
13.920	13.920 (0.975)	43	3044440			435.93- 535.93	485.93
13.948	13.948 (0.977)	57	235067			0.00- 91.43	37.52
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	1769577	50.0000	52.709	80.00- 120.00	100.00
13.893	13.893 (0.973)	96	1225432			19.25- 119.25	69.25
13.920	13.920 (0.975)	98	777903			0.00- 93.96	43.96
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	1886953	50.0000	40.390	80.00- 120.00	100.00
14.252	14.252 (0.998)	71	596466			0.00- 81.61	31.61
14.252	14.252 (0.998)	72	626831			0.00- 82.68	33.22
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	2443411	50.0000	56.485	80.00- 120.00	100.00
14.363	14.363 (1.006)	85	1523945			12.37- 112.37	62.37
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	2600789	50.0000	58.530	80.00- 120.00	100.00
14.584	14.584 (1.021)	99	1666030			14.06- 114.06	64.06
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	2030305	50.0000	51.848	80.00- 120.00	100.00
14.556	14.556 (1.019)	56	2737295			84.82- 184.82	134.82
14.556	14.556 (1.019)	41	1425392			20.21- 120.21	70.21
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	2305167	50.0000	54.948	80.00- 120.00	100.00
14.777	14.777 (1.035)	117	2380314			53.26- 153.26	103.26
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	4319242	50.0000	52.020	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	998304			0.00- 73.91	23.11
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	8748238	50.0000	53.396	80.00- 120.00	100.00
15.109	15.109 (1.058)	56	2804665			0.00- 83.45	32.06
15.109	15.109 (1.058)	41	2066523			0.00- 74.52	23.62
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.247	15.247 (0.968)	62	1844212	50.0000	54.617	80.00- 120.00	100.00
15.247	15.247 (0.968)	64	576340			0.00- 83.97	31.25
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	1676261	50.0000	52.038	80.00- 120.00	100.00
15.358	15.358 (0.975)	43	3512657			163.12- 263.12	209.55
15.358	15.358 (0.975)	57	1831041			57.58- 157.58	109.23
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	1790543	50.0000	52.507	80.00- 120.00	100.00
16.132	16.132 (1.025)	130	1720210			46.07- 146.07	96.07
16.132	16.132 (1.025)	97	1155110			14.51- 114.51	64.51
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	1734141	50.0000	52.318	80.00- 120.00	100.00
16.575	16.575 (1.053)	62	1217301			20.20- 120.20	70.20
16.575	16.575 (1.053)	41	1027297			9.24- 109.24	59.24
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	1080415	50.0000	49.913	80.00- 120.00	100.00
16.713	16.713 (1.061)	58	858282			29.44- 129.44	79.44
16.713	16.713 (1.061)	57	262472			0.00- 75.83	24.29
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	2878003	50.0000	55.302	80.00- 120.00	100.00
16.962	16.962 (1.077)	85	1749735			10.80- 110.80	60.80
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	2458845	50.0000	53.528	80.00- 120.00	100.00
17.625	17.625 (1.119)	77	773098			0.00- 81.44	31.44
17.625	17.625 (1.119)	39	1385049			6.33- 106.33	56.33
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	1790776	50.0000	55.120	80.00- 120.00	100.00
17.791	17.791 (1.130)	43	4600222			210.28- 310.28	256.88
17.791	17.791 (1.130)	85	675508			0.00- 89.68	37.72

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.068	18.068	(1.147)	91	5957659	50.0000	52.696	80.00- 120.00	100.00
18.068	18.068	(1.147)	92	3565557			9.85- 109.85	59.85
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.427	18.427	(0.920)	75	2682897	50.0000	54.860	80.00- 120.00	100.00
18.427	18.427	(0.920)	77	849465			0.00- 81.66	31.66
18.427	18.427	(0.920)	39	1428831			3.26- 103.26	53.26
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.704	18.704	(0.934)	97	2069564	50.0000	52.231	80.00- 120.00	100.00
18.704	18.704	(0.934)	99	1282815			11.98- 111.98	61.98
18.704	18.704	(0.934)	83	1714594			32.85- 132.85	82.85
117 Tetrachloroethene						CAS #: 127-18-4		
18.814	18.814	(0.939)	166	2435720	50.0000	52.730	80.00- 120.00	100.00
18.814	18.814	(0.939)	129	1877332			27.08- 127.08	77.08
18.814	18.814	(0.939)	131	1798928			23.86- 123.86	73.86
118 2-Hexanone						CAS #: 591-78-6		
18.980	18.980	(0.948)	58	2757699	50.0000	52.316	80.00- 120.00	100.00
18.952	18.952	(0.946)	43	4989009			130.91- 230.91	180.91
18.980	18.980	(0.948)	100	538010			0.00- 69.88	19.51
121 Dibromochloromethane						CAS #: 124-48-1		
19.257	19.257	(0.961)	129	3028623	50.0000	56.015	80.00- 120.00	100.00
19.229	19.229	(0.960)	127	2345422			25.84- 125.84	77.44
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.450	(0.971)	107	3243106	50.0000	57.426	80.00- 120.00	100.00
19.450	19.450	(0.971)	109	3077045			44.88- 144.88	94.88
124 Chlorobenzene						CAS #: 108-90-7		
20.058	20.058	(1.001)	112	5520564	50.0000	52.812	80.00- 120.00	100.00
20.058	20.058	(1.001)	114	1737652			0.00- 81.48	31.48
20.058	20.058	(1.001)	77	3532733			13.99- 113.99	63.99
125 Ethyl Benzene						CAS #: 100-41-4		
20.141	20.141	(1.006)	106	3074274	50.0000	53.597	80.00- 120.00	100.00
20.141	20.141	(1.006)	91	9922198			271.73- 371.73	322.75
128 m,p-Xylene						CAS #: 108-38-3		
20.280	20.280	(1.012)	106	3919171	50.0000	54.818	80.00- 120.00	100.00
20.280	20.280	(1.012)	91	7839584			159.21- 259.21	200.03
130 o-Xylene						CAS #: 95-47-6		
20.805	20.805	(1.039)	106	3699795	50.0000	53.086	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	7792191			160.61- 260.61	210.61
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	6039714	50.0000	52.087	80.00- 120.00	100.00
20.833	20.833	(1.040)	78	2833993			0.00- 96.92	46.92
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	2825250	50.0000	55.511	80.00- 120.00	100.00
21.137	21.137	(1.055)	171	1479769			2.38- 102.38	52.38
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	11135621	50.0000	56.718	80.00- 120.00	100.00
21.247	21.247	(1.061)	120	2813886			0.00- 75.94	25.27
21.247	21.247	(1.061)	51	1145065			0.00- 60.99	10.28
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	5016541	50.0000	48.405	80.00- 120.00	100.00
21.662	21.662	(1.081)	85	3114518			12.08- 112.08	62.08
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	13635292	50.0000	54.422	80.00- 120.00	100.00
21.745	21.745	(1.086)	120	2906385			0.00- 73.06	21.32
21.745	21.745	(1.086)	105	483819			0.00- 55.27	3.55
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	11812272	50.0000	54.783	80.00- 120.00	100.00
21.883	21.883	(1.092)	120	3315979			0.00- 78.07	28.07
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	10794497	50.0000	55.620	80.00- 120.00	100.00
21.966	21.966	(1.097)	120	4887642			0.00- 94.53	45.28
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	8510509	50.0000	55.139	80.00- 120.00	100.00
22.409	22.409	(1.119)	120	3736634			0.00- 95.90	43.91
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.823	(1.139)	146	4849436	50.0000	50.814	80.00- 120.00	100.00
22.823	22.823	(1.139)	148	3004289			12.10- 112.10	61.95
22.823	22.823	(1.139)	111	2056212			0.00- 91.54	42.40
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	4958070	50.0000	53.588	80.00- 120.00	100.00
22.934	22.934	(1.145)	148	3143033			17.32- 117.32	63.39
22.934	22.934	(1.145)	111	2020205			0.00- 91.17	40.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	7270717	50.0000	52.306	80.00- 120.00	100.00
23.100	23.100 (1.153)	126	1414577			0.00- 69.53	19.46
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	4101795	50.0000	49.142	80.00- 120.00	100.00
23.404	23.404 (1.168)	148	2571627			12.70- 112.70	62.70
23.404	23.404 (1.168)	111	1792411			0.00- 93.70	43.70
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	1407936	50.0000	50.350	80.00- 120.00	100.00
25.257	25.257 (1.261)	182	1307637			42.88- 142.88	92.88
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.339	25.339 (1.265)	225	1017736	50.0000	49.109	80.00- 120.00	100.00
25.339	25.339 (1.265)	223	651091			15.12- 115.12	63.97
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	158328	50.0000	47.310	80.00- 120.00	100.00
5.487	5.487 (0.384)	43	1245731			702.60- 802.60	786.80
29 Isopentane					CAS #: 78-78-4		
8.307	8.307 (0.582)	43	1209257	50.0000	48.931	80.00- 120.00	100.00
8.307	8.307 (0.582)	57	844988			18.56- 118.56	69.88
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.353	16.353 (1.145)	83	2942153	50.0000	54.014	80.00- 120.00	100.00
16.353	16.353 (1.145)	98	1400773			0.00- 97.82	47.61
16.353	16.353 (1.145)	55	2701794			46.05- 146.05	91.83
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	858235	50.0000	37.979	80.00- 120.00	100.00
12.068	12.068 (0.845)	41	166751			0.00- 67.50	19.43
12.068	12.068 (0.845)	57	87140			0.00- 63.77	10.15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051913.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	311243	0.00
95 1,4-Difluorobenze	1618588	971153	2266023	1618588	0.00
123 Chlorobenzene-d5	1862744	1117646	2607842	1862744	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

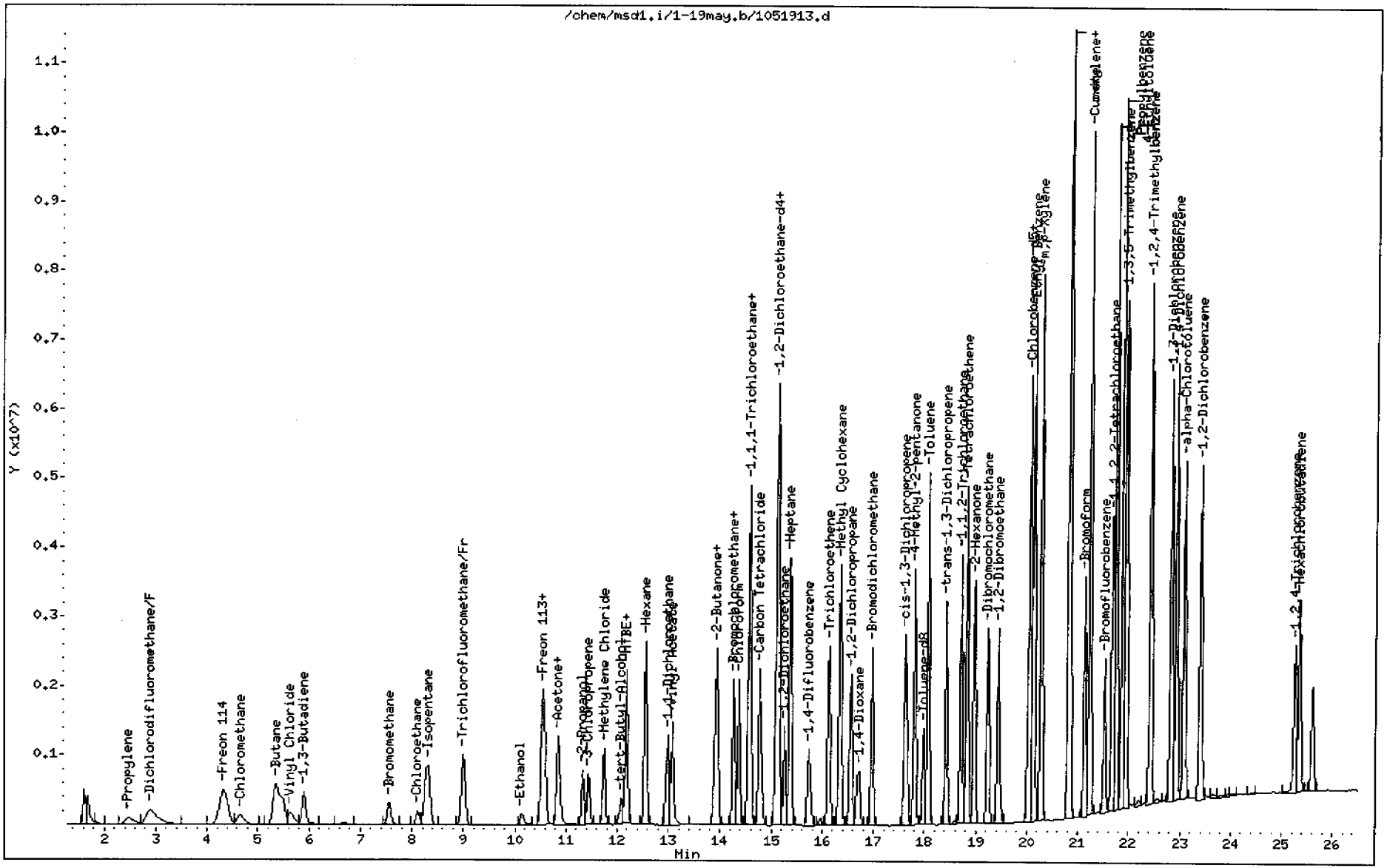
Data File: /chem/msd1.i/1-19may.b/1051913.d
Date : 19-MAY-2008 15:47
Client ID: Level 5
Sample Info: 25mL #1612-3

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0213



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051914.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 19-MAY-2008 16:26
Operator : kr
Inst ID: msd1.i
Smp Info : 50mL #1612-3
Misc Info : 200ppbv ->100ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:30 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:26
Cal File: 1051914.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
**	====== ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	317781	25.0000		50.00- 150.00		100.00
14.280	14.280 (1.000)	128	252692			27.36- 127.36		79.52
14.252	14.252 (1.000)	49	590454			133.45- 233.45		185.81
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1668207	25.0000		50.00- 150.00		100.00
15.745	15.745 (1.000)	88	265663			0.00- 65.96		15.93
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1905887	25.0000		50.00- 150.00		100.00
20.031	20.031 (1.000)	82	1124103			8.51- 108.51		58.98
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	555871	25.0000	26.620	50.00- 150.00		100.00
15.137	15.137 (1.060)	67	366050			6.04- 106.04		65.85
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1903361	25.0000	25.167	50.00- 150.00		100.00
17.985	17.985 (1.142)	70	198653			0.00- 60.35		10.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1238292			15.45- 115.45	65.06
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1040922	25.0000	25.660	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1660232			109.02- 209.02	159.50
21.524	21.524 (1.075)	176	996378			45.30- 145.30	95.72
12 Propylene					CAS #: 115-07-1		
2.473	2.473 (0.173)	41	690431	100.000	97.962	50.00- 150.00	100.00
2.473	2.473 (0.173)	42	459731			16.91- 116.91	66.59
2.473	2.473 (0.173)	39	555414			37.15- 137.15	80.44
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	3382538	100.000	95.293	50.00- 150.00	100.00
2.860	2.860 (0.200)	87	1078033			0.00- 75.39	31.87
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	2362792	100.000	97.953	50.00- 150.00	100.00
4.326	4.326 (0.303)	137	734306			0.00- 79.32	31.08
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	1385503	100.000	89.165	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	438740			0.00- 80.15	31.67
23 Vinyl Chloride					CAS #: 75-01-4		
5.625	5.625 (0.394)	62	1516829	100.000	90.103	50.00- 150.00	100.00
5.625	5.625 (0.394)	64	471683			0.00- 77.57	31.10
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	1247743	100.000	99.196	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	1209170			37.41- 137.41	96.91
26 Bromomethane					CAS #: 74-83-9		
7.533	7.533 (0.528)	94	1195850	100.000	108.58	50.00- 150.00	100.00
7.533	7.533 (0.528)	96	1112318			55.55- 155.55	93.01
28 Chloroethane					CAS #: 75-00-3		
8.114	8.114 (0.568)	64	879588	100.000	98.470	50.00- 150.00	100.00
8.114	8.114 (0.568)	49	262766			0.00- 79.23	29.87
8.114	8.114 (0.568)	66	270181			0.00- 81.96	30.72
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	4464199	100.000	98.626	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	2887499			16.35- 116.35	64.68

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.132	10.132	(0.710)	45	756158	100.000	107.50	50.00- 150.00	100.00
10.132	10.132	(0.710)	43	153167			0.00- 75.81	20.26
10.132	10.132	(0.710)	46	303218			0.00- 92.85	40.10
43 Freon 113						CAS #: 76-13-1		
10.575	10.575	(0.741)	151	2319178	100.000	97.442	50.00- 150.00	100.00
10.575	10.575	(0.741)	153	1464340			14.16- 114.16	63.14
10.575	10.575	(0.741)	101	3092619			84.00- 184.00	133.35
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.519	10.519	(0.737)	61	3087655	100.000	93.170	50.00- 150.00	100.00
10.519	10.519	(0.737)	96	1611407			6.46- 106.46	52.19
10.519	10.519	(0.737)	98	1030936			0.00- 82.24	33.39
45 Acetone						CAS #: 67-64-1		
10.879	10.879	(0.762)	58	1011913	100.000	90.417	50.00- 150.00	100.00
10.879	10.879	(0.762)	43	3373982			275.34- 375.34	333.43
46 2-Propanol						CAS #: 67-63-0		
11.321	11.321	(0.793)	45	3769034	100.000	95.609	50.00- 150.00	100.00
11.321	11.321	(0.793)	43	673534			0.00- 68.18	17.87
11.321	11.321	(0.793)	59	141366			0.00- 53.79	3.75
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.851	(0.760)	76	5234647	100.000	97.016	50.00- 150.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.459	11.459	(0.802)	76	655240	100.000	119.43	50.00- 150.00	100.00
11.432	11.432	(0.801)	41	2398251			303.82- 403.82	366.01
54 Methylene Chloride						CAS #: 75-09-2		
11.764	11.764	(0.824)	49	2578164	100.000	89.593	50.00- 150.00	100.00
11.764	11.764	(0.824)	84	1626133			10.84- 110.84	63.07
11.764	11.764	(0.824)	51	779624			0.00- 79.96	30.24
58 MTBE						CAS #: 1634-04-4		
12.151	12.151	(0.851)	73	1925544	100.000	93.424	50.00- 150.00	100.00
12.151	12.151	(0.851)	57	558000			0.00- 77.79	28.98
12.151	12.151	(0.851)	41	560033			0.00- 78.25	29.08
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.178	(0.853)	96	2063623	100.000	99.693	50.00- 150.00	100.00
12.178	12.178	(0.853)	61	3325955			112.88- 212.88	161.17
12.178	12.178	(0.853)	98	1317858			13.20- 113.20	63.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.565	12.565 (0.880)	57	4662480	100.000	97.272	50.00- 150.00	100.00
12.565	12.565 (0.880)	43	2995785			16.42- 116.42	64.25
12.565	12.565 (0.880)	86	673721			0.00- 64.88	14.45
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	570739	100.000	108.45	50.00- 150.00	100.00
13.063	13.063 (0.915)	43	7088928			1256.82-1356.82	1242.06
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	4158640	100.000	112.57	50.00- 150.00	100.00
12.980	12.980 (0.909)	65	1249118			0.00- 81.08	30.04
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	1218286	100.000	107.49	50.00- 150.00	100.00
13.920	13.920 (0.975)	43	5958328			467.40- 567.40	489.07
13.920	13.920 (0.975)	57	452028			0.00- 90.57	37.10
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	3380815	100.000	98.900	50.00- 150.00	100.00
13.893	13.893 (0.973)	96	2340178			21.33- 121.33	69.22
13.920	13.920 (0.975)	98	1490662			0.00- 93.61	44.09
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	3667153	100.000	80.608	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	1147732			0.00- 81.06	31.30
14.252	14.252 (0.998)	72	1217054			0.00- 82.78	33.19
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	4686768	100.000	105.04	50.00- 150.00	100.00
14.363	14.363 (1.006)	85	2898963			13.48- 113.48	61.85
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	5093377	100.000	109.58	50.00- 150.00	100.00
14.584	14.584 (1.021)	99	3243057			10.75- 110.75	63.67
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	3856506	100.000	97.146	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	5180992			80.92- 180.92	134.34
14.556	14.556 (1.019)	41	2730836			25.14- 125.14	70.81
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.777 (1.035)	119	4493648	100.000	103.89	50.00- 150.00	100.00
14.777	14.777 (1.035)	117	4650108			52.09- 152.09	103.48
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	8400613	100.000	98.467	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	1890966			0.00- 73.68	22.51
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	16975947	100.000	101.18	50.00- 150.00	100.00
15.109	15.109 (1.058)	56	5354603			0.00- 83.07	31.54
15.109	15.109 (1.058)	41	3923607			0.00- 74.24	23.11
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.247	15.247 (0.968)	62	3557102	100.000	101.76	50.00- 150.00	100.00
15.247	15.247 (0.968)	64	1126548			0.00- 83.51	31.67
94 Heptane					CAS #: 142-82-5		
15.358	15.358 (0.975)	71	3258276	100.000	98.508	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	6868749			162.65- 262.65	210.81
15.358	15.358 (0.975)	57	3549357			57.85- 157.85	108.93
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	3442836	100.000	98.359	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	3338642			44.27- 144.27	96.97
16.132	16.132 (1.025)	97	2218096			13.70- 113.70	64.43
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	3340461	100.000	98.219	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	2373335			19.75- 119.75	71.05
16.575	16.575 (1.053)	41	1981698			10.91- 110.91	59.32
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	2121111	100.000	96.261	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	1719276			31.42- 131.42	81.06
16.713	16.713 (1.061)	57	537321			0.00- 75.70	25.33
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	5638401	100.000	104.06	50.00- 150.00	100.00
16.962	16.962 (1.077)	85	3435599			10.99- 110.99	60.93
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	4843268	100.000	101.83	50.00- 150.00	100.00
17.625	17.625 (1.119)	77	1528144			0.00- 83.56	31.55
17.625	17.625 (1.119)	39	2699684			4.99- 104.99	55.74
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	3518388	100.000	104.02	50.00- 150.00	100.00
17.791	17.791 (1.130)	43	9156215			210.27- 310.27	260.24
17.791	17.791 (1.130)	85	1319872			0.00- 89.24	37.51

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.068	18.068	(1.147)	91	11772181	100.000	100.82	50.00- 150.00	100.00
18.068	18.068	(1.147)	92	7001403			11.28- 111.28	59.47
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.427	18.427	(0.920)	75	5311517	100.000	104.86	50.00- 150.00	100.00
18.427	18.427	(0.920)	77	1669848			0.00- 85.24	31.44
18.427	18.427	(0.920)	39	2811595			4.20- 104.20	52.93
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.704	18.704	(0.934)	97	4032162	100.000	99.567	50.00- 150.00	100.00
18.704	18.704	(0.934)	99	2491084			11.14- 111.14	61.78
18.704	18.704	(0.934)	83	3295638			31.56- 131.56	81.73
117 Tetrachloroethene						CAS #: 127-18-4		
18.814	18.814	(0.939)	166	4665455	100.000	98.969	50.00- 150.00	100.00
18.814	18.814	(0.939)	129	3608149			27.65- 127.65	77.34
18.814	18.814	(0.939)	131	3462380			24.22- 124.22	74.21
118 2-Hexanone						CAS #: 591-78-6		
18.980	18.980	(0.948)	58	5471536	100.000	101.08	50.00- 150.00	100.00
18.952	18.952	(0.946)	43	10018443			132.53- 232.53	183.10
18.980	18.980	(0.948)	100	1055246			0.00- 69.73	19.29
121 Dibromochloromethane						CAS #: 124-48-1		
19.257	19.257	(0.961)	129	5991081	100.000	106.53	50.00- 150.00	100.00
19.257	19.257	(0.961)	127	4621020			26.10- 126.10	77.13
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.450	(0.971)	107	6359366	100.000	108.24	50.00- 150.00	100.00
19.450	19.450	(0.971)	109	6011524			46.78- 146.78	94.53
124 Chlorobenzene						CAS #: 108-90-7		
20.058	20.058	(1.001)	112	10759663	100.000	100.48	50.00- 150.00	100.00
20.058	20.058	(1.001)	114	3349675			0.00- 81.78	31.13
20.058	20.058	(1.001)	77	6884647			21.93- 121.93	63.99
125 Ethyl Benzene						CAS #: 100-41-4		
20.141	20.141	(1.006)	106	5977313	100.000	101.47	50.00- 150.00	100.00
20.141	20.141	(1.006)	91	19890069			273.94- 373.94	332.76
128 m,p-Xylene						CAS #: 108-38-3		
20.280	20.280	(1.012)	106	7691807	100.000	104.08	50.00- 150.00	100.00
20.280	20.280	(1.012)	91	15605632			157.95- 257.95	202.89
130 o-Xylene						CAS #: 95-47-6		
20.805	20.805	(1.039)	106	7175360	100.000	100.50	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.805	(1.039)	91	15393182			161.60- 261.60	214.53
131 Styrene						CAS #: 100-42-5		
20.833	20.833	(1.040)	104	12092933	100.000	101.60	50.00- 150.00	100.00
20.833	20.833	(1.040)	78	5600073			0.00- 96.94	46.31
133 Bromoform						CAS #: 75-25-2		
21.137	21.137	(1.055)	173	5690890	100.000	107.29	50.00- 150.00	100.00
21.137	21.137	(1.055)	171	2951921			0.00- 99.96	51.87
134 Cumene						CAS #: 98-82-8		
21.247	21.247	(1.061)	105	21894738	100.000	107.38	50.00- 150.00	100.00
21.247	21.247	(1.061)	120	5494034			0.00- 75.80	25.09
21.247	21.247	(1.061)	51	2224286			0.00- 60.85	10.16
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.662	(1.081)	83	10243835	100.000	97.266	50.00- 150.00	100.00
21.690	21.690	(1.083)	85	6251264			11.01- 111.01	61.02
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.745	(1.086)	91	23960500	100.000	94.705	50.00- 150.00	100.00
21.745	21.745	(1.086)	120	5780307			0.00- 73.27	24.12
21.745	21.745	(1.086)	105	943438			0.00- 55.00	3.94
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.883	(1.092)	105	22622973	100.000	102.02	50.00- 150.00	100.00
21.883	21.883	(1.092)	120	6629081			0.00- 79.07	29.30
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.939	(1.095)	105	22565255	100.000	111.11	50.00- 150.00	100.00
21.966	21.966	(1.097)	120	9990592			0.00- 94.49	44.27
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.409	(1.119)	105	17617523	100.000	109.45	50.00- 150.00	100.00
22.409	22.409	(1.119)	120	7642331			0.00- 95.48	43.38
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.823	(1.139)	146	10100884	100.000	102.74	50.00- 150.00	100.00
22.823	22.823	(1.139)	148	6299555			12.15- 112.15	62.37
22.823	22.823	(1.139)	111	4214576			0.00- 91.58	41.72
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.934	(1.145)	146	10452557	100.000	108.16	50.00- 150.00	100.00
22.934	22.934	(1.145)	148	6510815			16.32- 116.32	62.29
22.934	22.934	(1.145)	111	4190585			0.00- 90.95	40.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	15665413	100.000	107.96	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	3007095			0.00- 69.46	19.20
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	8740333	100.000	101.87	50.00- 150.00	100.00
23.404	23.404 (1.168)	148	5458348			11.93- 111.93	62.45
23.404	23.404 (1.168)	111	3812134			0.00- 93.62	43.62
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.256	25.256 (1.261)	180	4113268	100.000	129.59	50.00- 150.00	100.00
25.256	25.256 (1.261)	182	3862917			43.32- 143.32	93.91
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.339	25.339 (1.265)	225	2776060	100.000	121.53	50.00- 150.00	100.00
25.339	25.339 (1.265)	223	1758396			14.77- 114.77	63.34
22 Butane					CAS #: 106-97-8		
5.460	5.460 (0.382)	58	316062	100.000	94.267	50.00- 150.00	100.00
5.460	5.460 (0.382)	43	2384365			703.05- 803.05	754.40
29 Isopentane					CAS #: 78-78-4		
8.280	8.280 (0.580)	43	2306736	100.000	93.423	50.00- 150.00	100.00
8.307	8.307 (0.582)	57	1579509			18.54- 118.54	68.47
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.353	16.353 (1.145)	83	5659026	100.000	101.40	50.00- 150.00	100.00
16.353	16.353 (1.145)	98	2723142			0.00- 97.88	48.12
16.353	16.353 (1.145)	55	5250510			45.40- 145.40	92.78
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	1640654	100.000	75.471	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	324867			0.00- 67.50	19.80
12.068	12.068 (0.845)	57	168891			0.00- 63.77	10.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

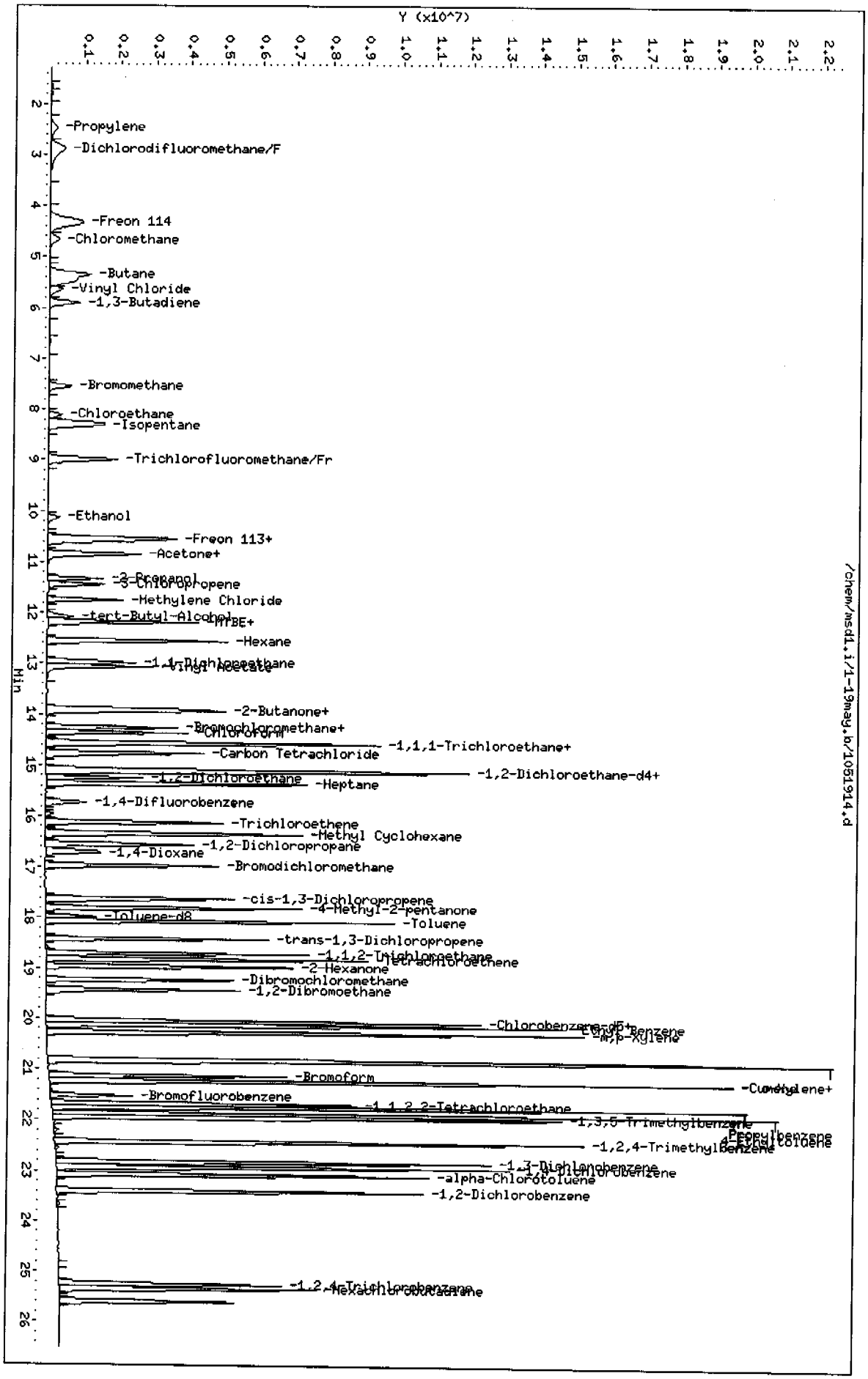
Instrument ID: msd1.i
Lab File ID: 1051914.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->100ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	317781	2.10
95 1,4-Difluorobenze	1618588	971153	2266023	1668207	3.07
123 Chlorobenzene-d5	1862744	1117646	2607842	1905887	2.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-19may.b/1051914.d
Date : 19-MAY-2008 16:26
Client ID: Level 6
Sample Info: 50mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: kr
Column diameter: 0.53

0223

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052006.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 20-MAY-2008 11:33
Operator : lo
Inst ID: msd1.i
Smp Info : 200mL #1541-142
Misc Info : 200ppbv ->200ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519a.m
Meth Date : 20-May-2008 11:59 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane					CAS #: 74-97-5		
14.282	14.282 (1.000)	130	314012	25.0000		50.00- 150.00	100.00
14.282	14.282 (1.000)	128	238511			28.24- 128.24	75.96
14.255	14.255 (1.000)	49	561936			133.94- 233.94	178.95
* 95 1,4-Difluorobenzene					CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1591700	25.0000		50.00- 150.00	100.00
15.748	15.748 (1.000)	88	245348			0.00- 65.99	15.41
* 123 Chlorobenzene-d5					CAS #: 3114-55-4		
20.033	20.033 (1.000)	117	1776659	25.0000		50.00- 150.00	100.00
20.033	20.033 (1.000)	82	1027556			8.42- 108.42	57.84
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	5530415	200.000	208.50	50.00- 150.00	100.00(A)
4.636	4.636 (0.325)	45	1351918			0.00- 75.41	24.45
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	1267609	200.000	206.30	50.00- 150.00	100.00(A)
2.411	2.411 (0.169)	69	1020733			32.58- 132.58	80.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 134a (continued)							
2.411	2.411 (0.169)	63	133083			0.00- 58.36	10.50
13 Freon 152a					CAS #: 75-37-6		
2.749	2.749 (0.192)	65	1174383	200.000	201.82	50.00- 150.00	100.00
2.749	2.749 (0.192)	51	2503230			172.46- 272.46	213.15
2.721	2.721 (0.190)	47	599405			0.63- 100.63	51.04
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	4142101	200.000	196.56	50.00- 150.00	100.00
3.453	3.453 (0.242)	67	669093			0.00- 65.39	16.15
3.453	3.453 (0.242)	85	61374			0.00- 51.20	1.48
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	5195942	1200.00	1041.8	50.00- 150.00	100.00
7.818	7.818 (0.547)	32	3678217			64.72- 164.72	70.79
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	5383908	200.000	215.45	50.00- 150.00	100.00(A)
9.195	9.195 (0.644)	69	1618187			0.00- 79.81	30.06
9.195	9.195 (0.644)	35	285897			0.00- 55.10	5.31
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	2460953	200.000	218.81	50.00- 150.00	100.00(A)
10.384	10.384 (0.727)	67	3514284			96.88- 196.88	142.80
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	400324	200.000	209.63	50.00- 150.00	100.00(A)
10.577	10.577 (0.741)	133	79678			0.00- 73.50	19.90
10.577	10.577 (0.741)	85	252816			10.10- 110.10	63.15
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	18399253	200.000	222.49	50.00- 150.00	100.00(A)
13.010	13.010 (0.911)	87	3765626			0.00- 71.33	20.47
12.983	12.983 (0.909)	59	1808653			0.00- 60.24	9.83
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	975174	200.000	243.63	50.00- 150.00	100.00(A)
13.204	13.204 (0.924)	59	1068682			47.04- 147.04	109.59
13.204	13.204 (0.924)	41	590567			14.12- 114.12	60.56
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.563	13.563 (0.950)	59	8098370	200.000	233.47	50.00- 150.00	100.00(A)
13.563	13.563 (0.950)	87	2919330			0.00- 86.33	36.05
13.536	13.536 (0.948)	41	1366896			0.00- 70.48	16.88

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 Ethyl Acetate						CAS #: 141-78-6		
13.950	13.950	(0.977)	45	1854061	200.000	219.25	50.00- 150.00	100.00(A)
13.950	13.950	(0.977)	61	1646174			36.81- 136.81	88.79
13.950	13.950	(0.977)	43	13093375			616.84- 716.84	706.20
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
15.222	15.222	(1.066)	73	8550605	200.000	217.34	50.00- 150.00	100.00(A)
15.222	15.222	(1.066)	87	2038710			0.00- 73.95	23.84
15.222	15.222	(1.066)	55	2370852			0.00- 80.63	27.73
132 2-Heptanone						CAS #: 110-43-0		
20.918	20.918	(1.465)	58	15902034	200.000	236.26	50.00- 150.00	100.00(A)
20.918	20.918	(1.465)	43	22867085			99.63- 199.63	143.80
96 1-Butanol						CAS #: 71-36-3		
15.941	15.941	(1.012)	56	5130060	200.000	251.98	50.00- 150.00	100.00(A)
15.941	15.941	(1.012)	41	3448438			20.92- 120.92	67.22
15.941	15.941	(1.012)	43	2818861			4.89- 104.89	54.95
120 Butyl Acetate						CAS #: 123-86-4		
19.066	19.066	(1.211)	56	9527376	200.000	233.17	50.00- 150.00	100.00(A)
19.066	19.066	(1.211)	73	3096010			0.00- 87.23	32.50
19.066	19.066	(1.211)	43	23062749			180.18- 280.18	242.07
135 Cyclohexanone						CAS #: 108-94-1		
21.471	21.471	(1.072)	55	12049319	200.000	237.60	50.00- 150.00	100.00(A)
21.471	21.471	(1.072)	98	4764199			0.00- 90.24	39.54
21.471	21.471	(1.072)	42	8017173			17.74- 117.74	66.54
148 Diisobutyl Ketone						CAS #: 108-83-8		
22.079	22.079	(1.102)	57	22993489	200.000	201.86	50.00- 150.00	100.00
22.079	22.079	(1.102)	85	20351826			28.61- 128.61	88.51
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052006.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519a.m
Misc Info: 200ppbv ->200ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	314012	0.62
95 1,4-Difluorobenze	1622087	973252	2270922	1591700	-1.87
123 Chlorobenzene-d5	1805786	1083472	2528100	1776659	-1.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

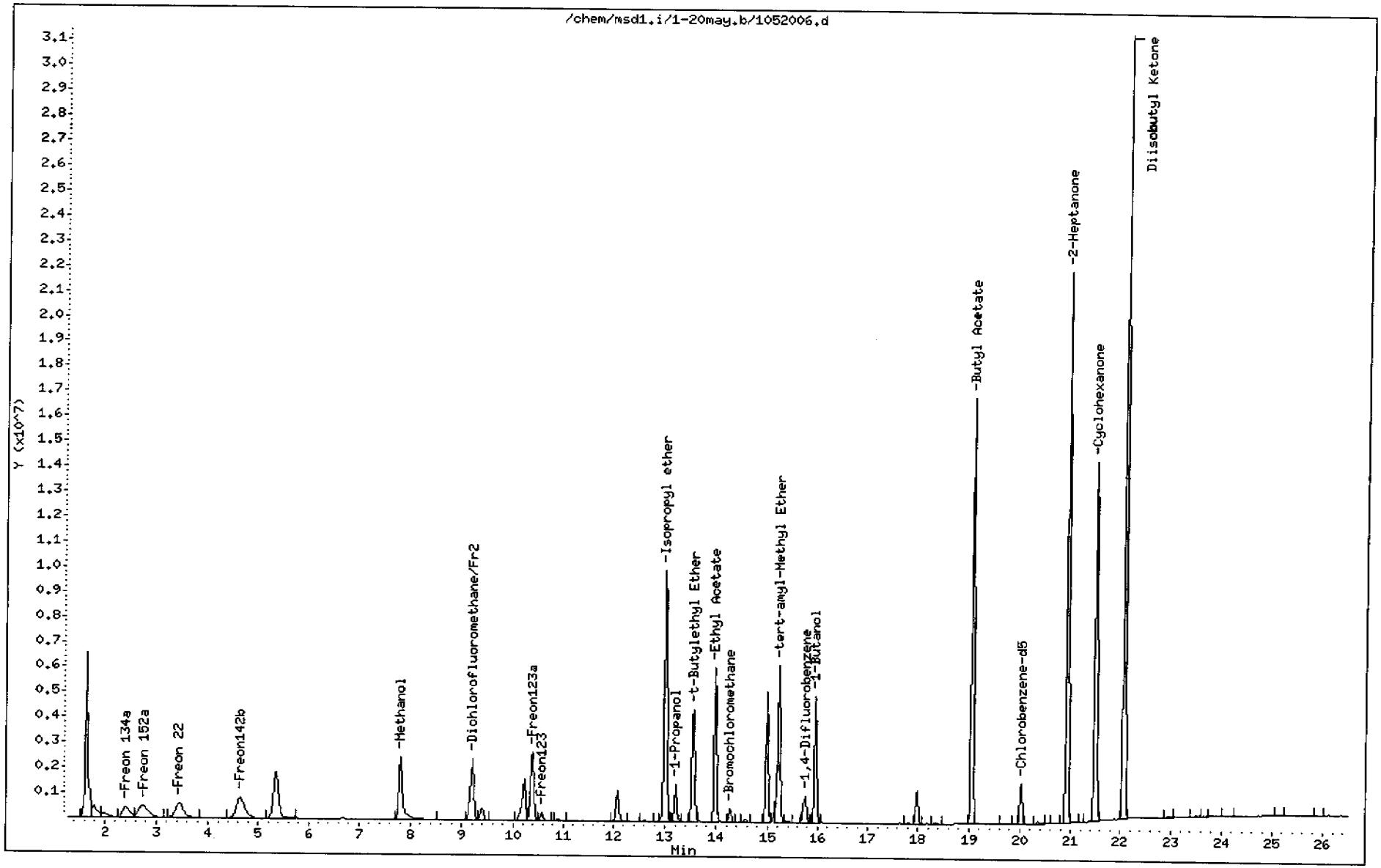
Data File: /chem/msd1.i/1-20may.b/1052006.d
Date : 20-MAY-2008 11:33
Client ID: Level 7
Sample Info: 200mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

0228



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-19may.b/1051915.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 19-MAY-2008 16:59
Operator : kr
Inst ID: msd1.i
Smp Info : 100mL #1612-3
Misc Info : 200ppbv ->200ppbv
Comment :
Method : /chem/msd1.i/1-19may.b/t14q519a.m
Meth Date : 20-May-2008 11:31 lover
Quant Type: ISTD
Cal Date : 19-MAY-2008 16:59
Cal File: 1051915.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT08md1.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.280	14.280 (1.000)	130	321295	25.0000		50.00- 150.00		100.00
14.280	14.280 (1.000)	128	250333			27.36- 127.36		77.91
14.252	14.252 (1.000)	49	599684			133.45- 233.45		186.65
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.745	15.745 (1.000)	114	1704270	25.0000		50.00- 150.00		100.00
15.745	15.745 (1.000)	88	272968			0.00- 65.96		16.02
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.031	20.031 (1.000)	117	1926203	25.0000		50.00- 150.00		100.00
20.031	20.031 (1.000)	82	1134490			8.51- 108.51		58.90
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.137	15.137 (1.060)	65	585385	25.0000	27.302	50.00- 150.00		100.00
15.137	15.137 (1.060)	67	455555			6.04- 106.04		77.82
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.985	17.985 (1.142)	98	1924287	25.0000	24.919	50.00- 150.00		100.00
17.985	17.985 (1.142)	70	204358			0.00- 60.35		10.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.985 (1.142)	100	1267101			15.45- 115.45	65.85
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.524 (1.075)	174	1063071	25.0000	25.792	50.00- 150.00	100.00
21.524	21.524 (1.075)	95	1695024			109.02- 209.02	159.45
21.524	21.524 (1.075)	176	1004813			45.30- 145.30	94.52
12 Propylene					CAS #: 115-07-1		
2.474	2.474 (0.173)	41	1393208	200.000	196.39	50.00- 150.00	100.00
2.501	2.501 (0.175)	42	938846			16.91- 116.91	67.39
2.474	2.474 (0.173)	39	1119651			37.15- 137.15	80.36
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.888 (0.202)	85	6614003	200.000	186.74	50.00- 150.00	100.00
2.888	2.888 (0.202)	87	2132193			0.00- 75.39	32.24
17 Freon 114					CAS #: 76-14-2		
4.354	4.354 (0.305)	135	4707701	200.000	194.16	50.00- 150.00	100.00
4.354	4.354 (0.305)	137	1473850			0.00- 79.32	31.31
21 Chloromethane					CAS #: 74-87-3		
4.658	4.658 (0.326)	50	2694919	200.000	176.56	50.00- 150.00	100.00
4.658	4.658 (0.326)	52	872786			0.00- 80.15	32.39
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.626 (0.394)	62	3007796	200.000	180.21	50.00- 150.00	100.00
5.626	5.626 (0.394)	64	928005			0.00- 77.57	30.85
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.902 (0.413)	54	2506410	200.000	197.49	50.00- 150.00	100.00
5.902	5.902 (0.413)	39	2436139			37.41- 137.41	97.20
26 Bromomethane					CAS #: 74-83-9		
7.561	7.561 (0.529)	94	2386479	200.000	211.79	50.00- 150.00	100.00(A)
7.561	7.561 (0.529)	96	2235910			55.55- 155.55	93.69
28 Chloroethane					CAS #: 75-00-3		
8.142	8.142 (0.570)	64	1786155	200.000	198.14	50.00- 150.00	100.00
8.142	8.142 (0.570)	49	522931			0.00- 79.23	29.28
8.142	8.142 (0.570)	66	544047			0.00- 81.66	30.46
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	8.999 (0.630)	101	8936722	200.000	196.05	50.00- 150.00	100.00
8.999	8.999 (0.630)	103	5737359			16.35- 116.35	64.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
10.132	10.132 (0.710)	45	1530509	200.000	211.98	50.00- 150.00	100.00(A)
10.132	10.132 (0.710)	43	305751			0.00- 75.81	19.98
10.132	10.132 (0.710)	46	616925			0.00- 92.85	40.31
43 Freon 113					CAS #: 76-13-1		
10.575	10.575 (0.741)	151	4558860	200.000	191.13	50.00- 150.00	100.00
10.575	10.575 (0.741)	153	2909083			14.16- 114.16	63.81
10.575	10.575 (0.741)	101	6187449			84.00- 184.00	135.72
44 1,1-Dichloroethene					CAS #: 75-35-4		
10.520	10.520 (0.737)	61	6175075	200.000	186.74	50.00- 150.00	100.00
10.520	10.520 (0.737)	96	3247587			6.46- 106.46	52.59
10.520	10.520 (0.737)	98	2070529			0.00- 82.24	33.53
45 Acetone					CAS #: 67-64-1		
10.879	10.879 (0.762)	58	2054002	200.000	184.94	50.00- 150.00	100.00
10.879	10.879 (0.762)	43	6875650			275.34- 375.34	334.74
46 2-Propanol					CAS #: 67-63-0		
11.321	11.321 (0.793)	45	7377423	200.000	187.90	50.00- 150.00	100.00
11.321	11.321 (0.793)	43	1310249			0.00- 68.18	17.76
11.321	11.321 (0.793)	59	272731			0.00- 53.79	3.70
48 Carbon Disulfide					CAS #: 75-15-0		
10.851	10.851 (0.760)	76	10808014	200.000	198.43	50.00- 150.00	100.00
50 3-Chloropropene					CAS #: 107-05-1		
11.460	11.460 (0.802)	76	1446974	200.000	245.89	50.00- 150.00	100.00(A)
11.432	11.432 (0.801)	41	5224565			303.82- 403.82	361.07
54 Methylene Chloride					CAS #: 75-09-2		
11.764	11.764 (0.824)	49	5279151	200.000	184.30	50.00- 150.00	100.00
11.764	11.764 (0.824)	84	3329945			10.84- 110.84	63.08
11.764	11.764 (0.824)	51	1574054			0.00- 79.96	29.82
58 MTBE					CAS #: 1634-04-4		
12.151	12.151 (0.851)	73	3685482	200.000	180.34	50.00- 150.00	100.00
12.151	12.151 (0.851)	57	1067238			0.00- 77.79	28.96
12.151	12.151 (0.851)	41	993835			0.00- 78.25	26.97
59 trans-1,2-Dichloroethene					CAS #: 156-60-5		
12.178	12.178 (0.853)	96	4151625	200.000	198.64	50.00- 150.00	100.00
12.178	12.178 (0.853)	61	6735924			112.88- 212.88	162.25
12.178	12.178 (0.853)	98	2644991			13.20- 113.20	63.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.566 (0.880)	57	9374601	200.000	194.50	50.00- 150.00	100.00
12.566	12.566 (0.880)	43	5930488			16.42- 116.42	63.26
12.566	12.566 (0.880)	86	1348110			0.00- 64.88	14.38
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.063 (0.915)	86	1134518	200.000	210.44	50.00- 150.00	100.00(A)
13.063	13.063 (0.915)	43	14852383			1256.82-1356.82	1309.14
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.980 (0.909)	63	8456750	200.000	221.54	50.00- 150.00	100.00(A)
12.980	12.980 (0.909)	65	2483866			0.00- 81.08	29.37
75 2-Butanone					CAS #: 78-93-3		
13.948	13.948 (0.977)	72	2430439	200.000	209.98	50.00- 150.00	100.00(A)
13.920	13.920 (0.975)	43	12106660			467.40- 567.40	498.13
13.920	13.920 (0.975)	57	900406			0.00- 90.57	37.05
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.893 (0.973)	61	6752986	200.000	196.14	50.00- 150.00	100.00
13.920	13.920 (0.975)	96	4667759			21.33- 121.33	69.12
13.920	13.920 (0.975)	98	2926267			0.00- 93.61	43.33
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.252 (0.998)	42	7355772	200.000	165.44	50.00- 150.00	100.00
14.252	14.252 (0.998)	71	2273850			0.00- 81.06	30.91
14.252	14.252 (0.998)	72	2473313			0.00- 82.78	33.62
81 Chloroform					CAS #: 67-66-3		
14.363	14.363 (1.006)	83	9496044	200.000	208.94	50.00- 150.00	100.00(A)
14.363	14.363 (1.006)	85	5805997			13.48- 113.48	61.14
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.584 (1.021)	97	10230304	200.000	214.52	50.00- 150.00	100.00(A)
14.584	14.584 (1.021)	99	6430222			10.75- 110.75	62.85
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.584 (1.021)	84	7553060	200.000	190.05	50.00- 150.00	100.00
14.584	14.584 (1.021)	56	10290932			80.92- 180.92	136.25
14.584	14.584 (1.021)	41	5333862			25.14- 125.14	70.62
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.778	14.778 (1.035)	119	9197578	200.000	208.52	50.00- 150.00	100.00(A)
14.778	14.778 (1.035)	117	9523857			52.09- 152.09	103.55
91 Benzene					CAS #: 71-43-2		
15.137	15.137 (0.961)	78	16817311	200.000	193.93	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.137	15.137 (0.961)	77	3699449			0.00- 73.68	22.00
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.109 (1.058)	57	33956766	200.000	200.15	50.00- 150.00	100.00(A)
15.109	15.109 (1.058)	56	10631071			0.00- 83.07	31.31
15.109	15.109 (1.058)	41	7791258			0.00- 74.24	22.94
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.248	15.248 (0.968)	62	7322789	200.000	204.20	50.00- 150.00	100.00(A)
15.248	15.248 (0.968)	64	2293119			0.00- 83.51	31.31
94 Heptane					CAS #: 142-82-5		
15.386	15.386 (0.977)	71	6591354	200.000	195.87	50.00- 150.00	100.00
15.358	15.358 (0.975)	43	13930068			162.65- 262.65	211.34
15.358	15.358 (0.975)	57	7108043			57.85- 157.85	107.84
97 Trichloroethene					CAS #: 79-01-6		
16.132	16.132 (1.025)	95	6914390	200.000	194.43	50.00- 150.00	100.00
16.132	16.132 (1.025)	130	6586266			44.27- 144.27	95.25
16.132	16.132 (1.025)	97	4413313			13.70- 113.70	63.83
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.053)	63	6741009	200.000	194.98	50.00- 150.00	100.00
16.575	16.575 (1.053)	62	4766127			19.75- 119.75	70.70
16.575	16.575 (1.053)	41	3943479			10.91- 110.91	58.50
103 1,4-Dioxane					CAS #: 123-91-1		
16.713	16.713 (1.061)	88	4307492	200.000	193.02	50.00- 150.00	100.00
16.713	16.713 (1.061)	58	3451393			31.42- 131.42	80.13
16.713	16.713 (1.061)	57	1078386			0.00- 75.70	25.04
106 Bromodichloromethane					CAS #: 75-27-4		
16.962	16.962 (1.077)	83	11522507	200.000	206.74	50.00- 150.00	100.00(A)
16.962	16.962 (1.077)	85	6959572			10.99- 110.99	60.40
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.625	17.625 (1.119)	75	9922414	200.000	203.49	50.00- 150.00	100.00(A)
17.625	17.625 (1.119)	77	3059909			0.00- 83.56	30.84
17.625	17.625 (1.119)	39	5410495			4.99- 104.99	54.53
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.791	17.791 (1.130)	58	7196459	200.000	206.83	50.00- 150.00	100.00(A)
17.791	17.791 (1.130)	43	19101777			210.27- 310.27	265.43
17.791	17.791 (1.130)	85	2700121			0.00- 89.24	37.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.068	18.068 (1.147)	91	23846877	200.000	199.93	50.00- 150.00	100.00
18.068	18.068 (1.147)	92	14084991			11.28- 111.28	59.06
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.427	18.427 (0.920)	75	10894545	200.000	210.56	50.00- 150.00	100.00(A)
18.427	18.427 (0.920)	77	3361250			0.00- 85.24	30.85
18.427	18.427 (0.920)	39	5717327			4.20- 104.20	52.48
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.704	18.704 (0.934)	97	7988217	200.000	195.96	50.00- 150.00	100.00
18.704	18.704 (0.934)	99	4909238			11.14- 111.14	61.46
18.704	18.704 (0.934)	83	6558070			31.56- 131.56	82.10
117 Tetrachloroethene					CAS #: 127-18-4		
18.814	18.814 (0.939)	166	9023702	200.000	191.09	50.00- 150.00	100.00
18.814	18.814 (0.939)	129	7099496			27.65- 127.65	78.68
18.814	18.814 (0.939)	131	6764215			24.22- 124.22	74.96
118 2-Hexanone					CAS #: 591-78-6		
18.980	18.980 (0.948)	58	11361697	200.000	206.10	50.00- 150.00	100.00(A)
18.980	18.980 (0.948)	43	21098753			132.53- 232.53	185.70
18.980	18.980 (0.948)	100	2174839			0.00- 69.73	19.14
121 Dibromochloromethane					CAS #: 124-48-1		
19.257	19.257 (0.961)	129	12120300	200.000	210.92	50.00- 150.00	100.00(A)
19.257	19.257 (0.961)	127	9285656			26.10- 126.10	76.61
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.450	19.450 (0.971)	107	12789780	200.000	213.06	50.00- 150.00	100.00(A)
19.450	19.450 (0.971)	109	12052357			46.78- 146.78	94.23
124 Chlorobenzene					CAS #: 108-90-7		
20.059	20.059 (1.001)	112	22054737	200.000	203.15	50.00- 150.00	100.00(A)
20.059	20.059 (1.001)	114	6663028			0.00- 81.78	30.21
20.059	20.059 (1.001)	77	13765136			21.93- 121.93	62.41
125 Ethyl Benzene					CAS #: 100-41-4		
20.142	20.142 (1.006)	106	11904683	200.000	199.98	50.00- 150.00	100.00
20.142	20.142 (1.006)	91	30502666			273.94- 373.94	256.22
128 m,p-Xylene					CAS #: 108-38-3		
20.280	20.280 (1.012)	106	15600068	200.000	207.33	50.00- 150.00	100.00(A)
20.280	20.280 (1.012)	91	27555251			157.95- 257.95	176.64
130 o-Xylene					CAS #: 95-47-6		
20.805	20.805 (1.039)	106	14088951	200.000	196.03	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
20.805	20.805 (1.039)	91	28555162			161.60- 261.60	202.68
131 Styrene					CAS #: 100-42-5		
20.833	20.833 (1.040)	104	24422474	200.000	202.59	50.00- 150.00	100.00(A)
20.833	20.833 (1.040)	78	11183023			0.00- 96.94	45.79
133 Bromoform					CAS #: 75-25-2		
21.137	21.137 (1.055)	173	11327738	200.000	209.34	50.00- 150.00	100.00(A)
21.137	21.137 (1.055)	171	5765590			0.00- 99.96	50.90
134 Cumene					CAS #: 98-82-8		
21.247	21.247 (1.061)	105	30834079	200.000	155.22	50.00- 150.00	100.00
21.247	21.247 (1.061)	120	10835564			0.00- 75.80	35.14
21.247	21.247 (1.061)	51	4422542			0.00- 60.85	14.34
138 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
21.690	21.690 (1.083)	83	20958905	200.000	197.42	50.00- 150.00	100.00
21.690	21.690 (1.083)	85	12518467			11.01- 111.01	59.73
140 Propylbenzene					CAS #: 103-65-1		
21.745	21.745 (1.086)	91	33267167	200.000	138.15	50.00- 150.00	100.00
21.745	21.745 (1.086)	120	11488216			0.00- 73.27	34.53
21.745	21.745 (1.086)	105	1837576			0.00- 55.00	5.52
144 4-Ethyltoluene					CAS #: 622-96-8		
21.883	21.883 (1.092)	105	32070637	200.000	150.23	50.00- 150.00	100.00
21.883	21.883 (1.092)	120	12971014			0.00- 79.07	40.45
146 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
21.939	21.939 (1.095)	105	39202834	200.000	192.24	50.00- 150.00	100.00
21.966	21.966 (1.097)	120	20107236			0.00- 94.49	51.29
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
22.409	22.409 (1.119)	105	30758856	200.000	190.56	50.00- 150.00	100.00
22.409	22.409 (1.119)	120	15368937			0.00- 95.48	49.97
158 1,3-Dichlorobenzene					CAS #: 541-73-1		
22.823	22.823 (1.139)	146	20656280	200.000	206.52	50.00- 150.00	100.00(A)
22.823	22.823 (1.139)	148	12666106			12.15- 112.15	61.32
22.823	22.823 (1.139)	111	8505978			0.00- 91.58	41.18
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
22.934	22.934 (1.145)	146	21355009	200.000	215.30	50.00- 150.00	100.00(A)
22.934	22.934 (1.145)	148	13209417			16.32- 116.32	61.86
22.934	22.934 (1.145)	111	8388254			0.00- 90.95	39.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.100 (1.153)	91	28688410	200.000	196.33	50.00- 150.00	100.00
23.100	23.100 (1.153)	126	6129339			0.00- 69.46	21.37
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.404 (1.168)	146	18203848	200.000	208.20	50.00- 150.00	100.00(A)
23.404	23.404 (1.168)	148	11226690			11.93- 111.93	61.67
23.404	23.404 (1.168)	111	7844083			0.00- 93.62	43.09
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.257 (1.261)	180	11364295	200.000	306.91	50.00- 150.00	100.00(A)
25.257	25.257 (1.261)	182	10661419			43.32- 143.32	93.82
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.340 (1.265)	225	6942661	200.000	273.20	50.00- 150.00	100.00(A)
25.340	25.340 (1.265)	223	4333437			14.77- 114.77	62.42
22 Butane					CAS #: 106-97-8		
5.487	5.487 (0.384)	58	630756	200.000	188.70	50.00- 150.00	100.00
5.487	5.487 (0.384)	43	4753872			703.05- 803.05	753.68
29 Isopentane					CAS #: 78-78-4		
8.308	8.308 (0.582)	43	4567848	200.000	186.14	50.00- 150.00	100.00
8.308	8.308 (0.582)	57	3180256			18.54- 118.54	69.62
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.145)	83	11547392	200.000	203.85	50.00- 150.00	100.00(A)
16.354	16.354 (1.145)	98	5439139			0.00- 97.88	47.10
16.354	16.354 (1.145)	55	10686110			45.40- 145.40	92.54
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.068 (0.845)	59	2861045	200.000	138.21	50.00- 150.00	100.00
12.068	12.068 (0.845)	41	557533			0.00- 67.50	19.49
12.068	12.068 (0.845)	57	310186			0.00- 63.77	10.84

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1051915.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msd1.i/1-19may.b/t14q519a.m
Misc Info: 200ppbv ->200ppbv

Calibration Date: 19-MAY-2008
Calibration Time: 15:47
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	311243	186746	435740	321295	3.23
95 1,4-Difluorobenze	1618588	971153	2266023	1704270	5.29
123 Chlorobenzene-d5	1862744	1117646	2607842	1926203	3.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

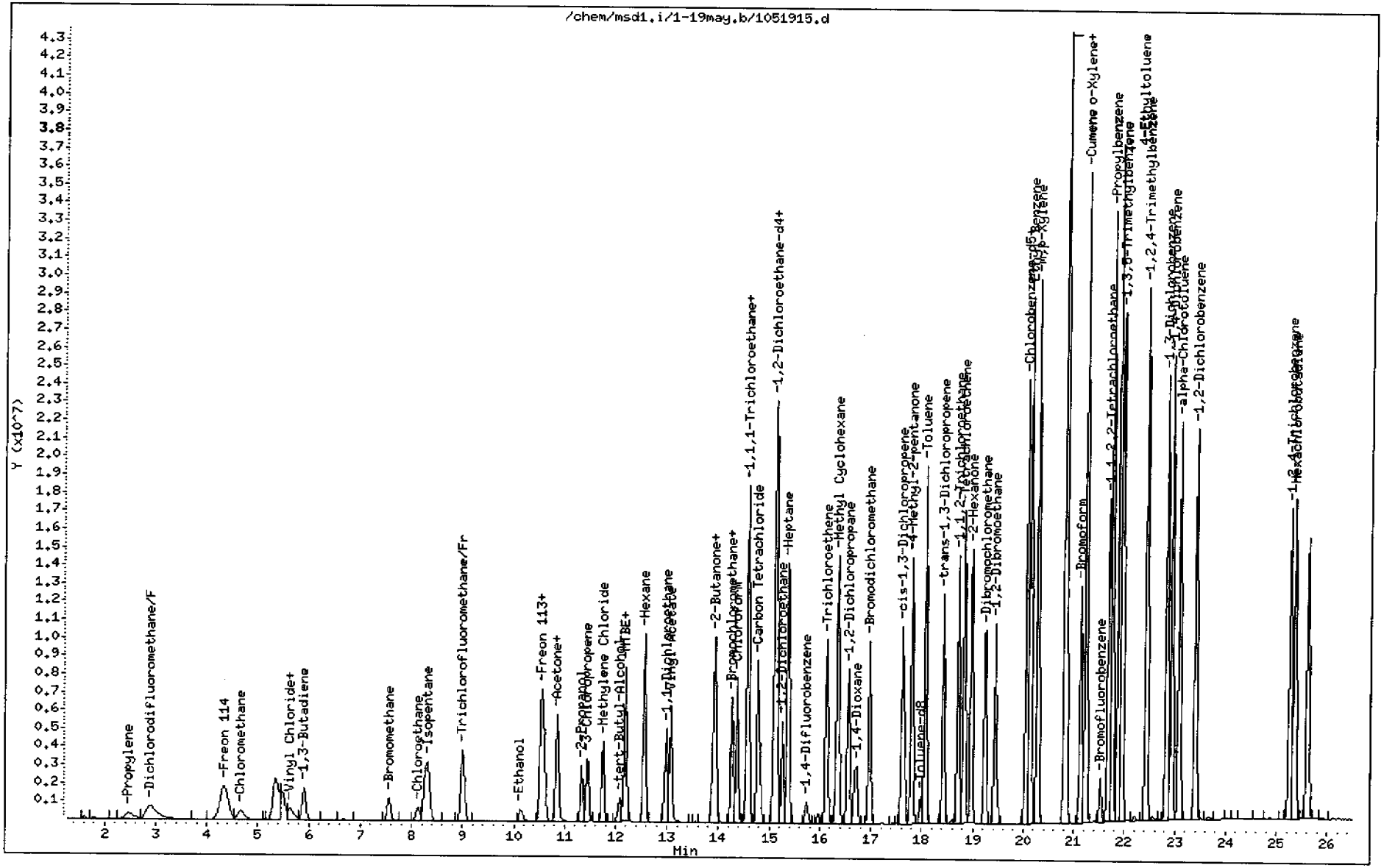
Data File: /chem/msd1.i/1-19may.b/1051915.d
Date : 19-MAY-2008 16:59
Client ID: Level 7
Sample Info: 100mL #1612-3

Column phase: RTx-624

Instrument: msd1.i

Operator: kr
Column diameter: 0.53

0238



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805220-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1052007 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 5/20/08 12:26 PM

Compound	%Recovery
Freon 12	103
Freon 114	102
Chloromethane	97
Vinyl Chloride	97
1,3-Butadiene	102
Bromomethane	110
Chloroethane	104
Freon 11	103
Ethanol	100
Freon 113	104
1,1-Dichloroethene	97
Acetone	94
2-Propanol	100
Carbon Disulfide	100
Methylene Chloride	93
Methyl tert-butyl ether	98
trans-1,2-Dichloroethene	106
Hexane	104
1,1-Dichloroethane	116
2-Butanone (Methyl Ethyl Ketone)	110
cis-1,2-Dichloroethene	103
Tetrahydrofuran	87
Chloroform	109
1,1,1-Trichloroethane	111
Cyclohexane	103
Carbon Tetrachloride	106
Benzene	104
1,2-Dichloroethane	103
Heptane	103
Trichloroethene	104
1,2-Dichloropropane	101
1,4-Dioxane	99
Bromodichloromethane	104
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	104
Toluene	103
trans-1,3-Dichloropropene	107
1,1,2-Trichloroethane	106
Tetrachloroethene	108

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0805220-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 1052007 Date Collected: NA

Dil. Factor: 1.00 Date Analysis: 5/20/08 12:26 PM

Compound	%Recovery
2-Hexanone	103
Dibromochloromethane	110
1,2-Dibromoethane (EDB)	112
Chlorobenzene	105
Ethyl Benzene	106
m,p-Xylene	108
o-Xylene	105
Styrene	104
Bromoform	107
1,1,2,2-Tetrachloroethane	97
4-Ethyltoluene	115
1,3,5-Trimethylbenzene	100
1,2,4-Trimethylbenzene	106
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	99
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	92
1,2,4-Trichlorobenzene	70
Hexachlorobutadiene	75
Chlorodifluoromethane	109
Methanol	94
n-Butanol	112
Propylene	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i Injection Date: 20-MAY-2008 12:26
Lab File ID: 1052007.d Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Analysis Type: AIR Init. Cal. Times: 13:23 11:33
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msd1.i/1-20may.b/t14q519b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.64158	0.010	1.60502	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.10769	0.010	2.21341	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.52485	0.010	1.88637	30.00000	Averaged
12 Propylene	0.55198	0.56200	0.010	-1.81624	30.00000	Averaged
14 Dichlorodifluoromethane/Fr1	2.75595	2.84587	0.010	-3.26292	30.00000	Averaged
17 Freon 114	1.88665	1.92197	0.010	-1.87214	30.00000	Averaged
21 Chloromethane	1.18763	1.15708	0.010	2.57262	30.00000	Averaged
23 Vinyl Chloride	1.29868	1.26480	0.010	2.60825	30.00000	Averaged
24 1,3-Butadiene	0.98750	1.00469	0.010	-1.74025	30.00000	Averaged
26 Bromomethane	0.87679	0.96270	0.010	-9.79847	30.00000	Averaged
28 Chloroethane	0.70142	0.72839	0.010	-3.84436	30.00000	Averaged
34 Trichlorofluoromethane/Fr11	3.54692	3.66355	0.010	-3.28830	30.00000	Averaged
38 Ethanol	0.56181	0.55921	0.010	0.46269	30.00000	Averaged
43 Freon 113	1.85594	1.92358	0.010	-3.64454	30.00000	Averaged
44 1,1-Dichloroethene	2.57302	2.49527	0.010	3.02189	30.00000	Averaged
45 Acetone	0.86419	0.81209	0.010	6.02820	30.00000	Averaged
46 2-Propanol	3.05508	3.04684	0.010	0.26983	30.00000	Averaged
48 Carbon Disulfide	4.23812	4.24497	0.010	-0.16182	30.00000	Averaged
50 3-Chloropropene	0.45789	0.56473	0.010	-23.33369	30.00000	Averaged
54 Methylene Chloride	2.22886	2.07005	0.010	7.12503	30.00000	Averaged
58 MTBE	1.59019	1.55448	0.010	2.24571	30.00000	Averaged
59 trans-1,2-Dichloroethene	1.62625	1.73189	0.010	-6.49581	30.00000	Averaged
64 Hexane	3.75026	3.89588	0.010	-3.88284	30.00000	Averaged
67 Vinyl Acetate	0.41948	0.45558	0.010	-8.60634	30.00000	Averaged
68 1,1-Dichloroethane	2.97028	3.44090	0.010	-15.84464	30.00000	Averaged
75 2-Butanone	0.90063	0.99031	0.010	-9.95761	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.67894	2.76523	0.010	-3.22108	30.00000	Averaged
78 Tetrahydrofuran	3.45948	3.00851	0.010	13.03603	30.00000	Averaged
81 Chloroform	3.53636	3.85391	0.010	-8.97955	30.00000	Averaged
83 1,1,1-Trichloroethane	3.71062	4.12392	0.010	-11.13804	30.00000	Averaged
84 Cyclohexane	3.09231	3.17597	0.010	-2.70542	30.00000	Averaged
85 Carbon Tetrachloride	3.43205	3.62584	0.010	-5.64659	30.00000	Averaged
88 2,2,4-Trimethylpentane	13.20094	13.79190	0.010	-4.47658	30.00000	Averaged
91 Benzene	1.27209	1.32223	0.010	-3.94146	30.00000	Averaged
93 1,2-Dichloroethane	0.52605	0.54227	0.010	-3.08393	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052007.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-20may.b/t14q519b.m

Injection Date: 20-MAY-2008 12:26
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Heptane	0.49365	0.50967	0.010	-3.24701	30.00000	Averaged	
97 Trichloroethene	0.52165	0.54037	0.010	-3.58755	30.00000	Averaged	
102 1,2-Dichloropropane	0.50714	0.51270	0.010	-1.09600	30.00000	Averaged	
103 1,4-Dioxane	0.32736	0.32475	0.010	0.79857	30.00000	Averaged	
106 Bromodichloromethane	0.81756	0.85259	0.010	-4.28482	30.00000	Averaged	
109 cis-1,3-Dichloropropene	0.71526	0.73509	0.010	-2.77153	30.00000	Averaged	
110 4-Methyl-2-pentanone	0.51039	0.53244	0.010	-4.32112	30.00000	Averaged	
114 Toluene	1.74969	1.80281	0.010	-3.03635	30.00000	Averaged	
115 trans-1,3-Dichloropropene	0.67152	0.72087	0.010	-7.34915	30.00000	Averaged	
116 1,1,2-Trichloroethane	0.52907	0.55931	0.010	-5.71572	30.00000	Averaged	
117 Tetrachloroethene	0.61290	0.66193	0.010	-7.99988	30.00000	Averaged	
118 2-Hexanone	0.71548	0.73414	0.010	-2.60858	30.00000	Averaged	
121 Dibromochloromethane	0.74584	0.81839	0.010	-9.72815	30.00000	Averaged	
122 1,2-Dibromoethane	0.77913	0.87339	0.010	-12.09851	30.00000	Averaged	
124 Chlorobenzene	1.40905	1.48258	0.010	-5.21817	30.00000	Averaged	
125 Ethyl Benzene	0.77264	0.82205	0.010	-6.39477	30.00000	Averaged	
128 m,p-Xylene	0.97657	1.05004	0.010	-7.52297	30.00000	Averaged	
130 o-Xylene	0.93283	0.98044	0.010	-5.10411	30.00000	Averaged	
131 Styrene	1.56461	1.62035	0.010	-3.56250	30.00000	Averaged	
133 Bromoform	0.70231	0.75043	0.010	-6.85167	30.00000	Averaged	
134 Cumene	2.57828	2.95010	0.010	-14.42126	30.00000	Averaged	
138 1,1,2,2-Tetrachloroethane	1.37791	1.33257	0.010	3.29106	30.00000	Averaged	
140 Propylbenzene	3.12538	3.58829	0.010	-14.81115	30.00000	Averaged	
144 4-Ethyltoluene	2.77069	3.19978	0.010	-15.48658	30.00000	Averaged	
146 1,3,5-Trimethylbenzene	2.64680	2.66161	0.010	-0.55954	30.00000	Averaged	
152 1,2,4-Trimethylbenzene	2.09493	2.22485	0.010	-6.20134	30.00000	Averaged	
158 1,3-Dichlorobenzene	1.29813	1.25760	0.010	3.12164	30.00000	Averaged	
159 1,4-Dichlorobenzene	1.28732	1.27853	0.010	0.68239	30.00000	Averaged	
162 alpha-Chlorotoluene	1.89648	1.86630	0.010	1.59173	30.00000	Averaged	
164 1,2-Dichlorobenzene	1.13478	1.04962	0.010	7.50481	30.00000	Averaged	
169 1,2,4-Trichlorobenzene	0.48058	0.33536	0.010	30.21662	30.00000	Averaged	<-
170 Hexachlorobutadiene	0.32982	0.24663	0.010	25.22180	30.00000	Averaged	
29 Isopentane	1.90941	1.94689	0.010	-1.96304	30.00000	Averaged	
22 Butane	0.26009	0.25655	0.010	1.36275	30.00000	Averaged	
99 Methyl Cyclohexane	4.40757	4.59574	0.010	-4.26920	30.00000	Averaged	

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052007.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd1.i/1-20may.b/t14q519b.m

Injection Date: 20-MAY-2008 12:26
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
57 tert-Butyl-Alcohol	1.61070	1.45013	0.010	9.96844	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052007.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 20-MAY-2008 12:26
Operator : lo Inst ID: msd1.i
Smp Info : 25mL #1612-3
Misc Info : 50ppbv (200ppbv)
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 12:43 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
*	79 Bromochloromethane					CAS #: 74-97-5		
	14.255	14.255 (1.000)	130	325915	25.0000		80.00- 120.00	100.00
	14.255	14.255 (1.000)	128	255114			28.28- 128.28	78.28
	14.255	14.255 (1.000)	49	595438			132.70- 232.70	182.70
*	95 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.748	15.748 (1.000)	114	1718149	25.0000		80.00- 120.00	100.00
	15.748	15.748 (1.000)	88	267052			0.00- 65.54	15.54
*	123 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.006	20.006 (1.000)	117	1889046	25.0000		80.00- 120.00	100.00
	20.006	20.006 (1.000)	82	1088172			8.42- 108.42	57.60
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.140	15.140 (1.062)	65	535014	25.0000	24.599	80.00- 120.00	100.00
	15.140	15.140 (1.062)	67	322675			6.04- 106.04	60.31
$	111 Toluene-d8					CAS #: 2037-26-5		
	17.960	17.960 (1.140)	98	1903174	25.0000	24.447	80.00- 120.00	100.00
	17.960	17.960 (1.140)	70	197437			0.00- 60.35	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.960	17.960 (1.140)	100	1238680			15.45- 115.45	65.08
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.076)	174	991471	25.0000	24.528	80.00- 120.00	100.00
21.527	21.527 (1.076)	95	1609742			112.36- 212.36	162.36
21.527	21.527 (1.076)	176	957418			46.57- 146.57	96.57
12 Propylene					CAS #: 115-07-1		
2.496	2.496 (0.175)	41	366331	50.0000	50.908	80.00- 120.00	100.00
2.467	2.467 (0.173)	42	240638			16.91- 116.91	65.69
2.467	2.467 (0.173)	39	297760			37.15- 137.15	81.28
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.890	2.890 (0.203)	85	1855024	50.0000	51.631	80.00- 120.00	100.00
2.890	2.890 (0.203)	87	586850			0.00- 75.39	31.64
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1252796	50.0000	50.936	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	389785			0.00- 81.11	31.11
21 Chloromethane					CAS #: 74-87-3		
4.636	4.636 (0.325)	50	754220	50.0000	48.714	80.00- 120.00	100.00
4.636	4.636 (0.325)	52	244350			0.00- 80.15	32.40
23 Vinyl Chloride					CAS #: 75-01-4		
5.622	5.622 (0.394)	62	824437	50.0000	48.696	80.00- 120.00	100.00
5.622	5.622 (0.394)	64	248436			0.00- 77.57	30.13
24 1,3-Butadiene					CAS #: 106-99-0		
5.903	5.903 (0.414)	54	654884	50.0000	50.870	80.00- 120.00	100.00
5.903	5.903 (0.414)	39	627122			37.41- 137.41	95.76
26 Bromomethane					CAS #: 74-83-9		
7.537	7.537 (0.529)	94	627518	50.0000	54.899	80.00- 120.00	100.00
7.537	7.537 (0.529)	96	585812			43.35- 143.35	93.35
28 Chloroethane					CAS #: 75-00-3		
8.128	8.128 (0.570)	64	474784	50.0000	51.922	80.00- 120.00	100.00
8.128	8.128 (0.570)	49	139753			0.00- 79.23	29.44
8.128	8.128 (0.570)	66	149171			0.00- 81.66	31.42
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
9.001	9.001 (0.631)	101	2388014	50.0000	51.644	80.00- 120.00	100.00
9.001	9.001 (0.631)	103	1543247			14.62- 114.62	64.62

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.135	10.135	(0.711)	45	364507	50.0000	49.769	80.00- 120.00	100.00
10.135	10.135	(0.711)	43	77949			0.00- 75.81	21.38
10.135	10.135	(0.711)	46	154262			0.00- 92.85	42.32
43 Freon 113						CAS #: 76-13-1		
10.577	10.577	(0.742)	151	1253850	50.0000	51.822	80.00- 120.00	100.00
10.577	10.577	(0.742)	153	797620			13.61- 113.61	63.61
10.577	10.577	(0.742)	101	1688073			84.63- 184.63	134.63
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.522	10.522	(0.738)	61	1626490	50.0000	48.489	80.00- 120.00	100.00
10.522	10.522	(0.738)	96	869577			3.46- 103.46	53.46
10.522	10.522	(0.738)	98	563721			0.00- 84.66	34.66
45 Acetone						CAS #: 67-64-1		
10.882	10.882	(0.763)	58	529345	50.0000	46.986	80.00- 120.00	100.00
10.882	10.882	(0.763)	43	1743556			275.34- 375.34	329.38
46 2-Propanol						CAS #: 67-63-0		
11.324	11.324	(0.794)	45	1986020	50.0000	49.865	80.00- 120.00	100.00
11.324	11.324	(0.794)	43	357973			0.00- 68.18	18.02
11.324	11.324	(0.794)	59	76529			0.00- 53.79	3.85
48 Carbon Disulfide						CAS #: 75-15-0		
10.826	10.826	(0.759)	76	2767001	50.0000	50.081	80.00- 120.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.435	11.435	(0.802)	76	368110	50.0000	61.667	80.00- 120.00	100.00
11.435	11.435	(0.802)	41	1357520			303.82- 403.82	368.78
54 Methylene Chloride						CAS #: 75-09-2		
11.739	11.739	(0.823)	49	1349322	50.0000	46.437	80.00- 120.00	100.00
11.739	11.739	(0.823)	84	860835			13.80- 113.80	63.80
11.739	11.739	(0.823)	51	424048			0.00- 79.96	31.43
58 MTBE						CAS #: 1634-04-4		
12.153	12.153	(0.853)	73	1013254	50.0000	48.877	80.00- 120.00	100.00
12.153	12.153	(0.853)	57	289926			0.00- 78.61	28.61
12.153	12.153	(0.853)	41	304361			0.00- 78.25	30.04
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.181	12.181	(0.855)	96	1128898	50.0000	53.248	80.00- 120.00	100.00
12.181	12.181	(0.855)	61	1761215			106.01- 206.01	156.01
12.181	12.181	(0.855)	98	716392			13.20- 113.20	63.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.568	12.568 (0.882)	57	2539451	50.0000	51.941	80.00- 120.00	100.00
12.568	12.568 (0.882)	43	1640055			16.42- 116.42	64.58
12.568	12.568 (0.882)	86	372975			0.00- 64.88	14.69
67 Vinyl Acetate					CAS #: 108-05-4		
13.066	13.066 (0.917)	86	296961	50.0000	54.303	80.00- 120.00	100.00
13.066	13.066 (0.917)	43	3734773			1256.82-1356.82	1257.66
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.983	12.983 (0.911)	63	2242885	50.0000	57.922	80.00- 120.00	100.00
12.983	12.983 (0.911)	65	674245			0.00- 80.06	30.06
75 2-Butanone					CAS #: 78-93-3		
13.923	13.923 (0.977)	72	645515	50.0000	54.979	80.00- 120.00	100.00
13.923	13.923 (0.977)	43	3150497			438.06- 538.06	488.06
13.923	13.923 (0.977)	57	243999			0.00- 90.57	37.80
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.895	13.895 (0.975)	61	1802460	50.0000	51.610	80.00- 120.00	100.00
13.895	13.895 (0.975)	96	1273289			20.64- 120.64	70.64
13.895	13.895 (0.975)	98	808334			0.00- 94.85	44.85
78 Tetrahydrofuran					CAS #: 109-99-9		
14.255	14.255 (1.000)	42	1961034	50.0000	43.482	80.00- 120.00	100.00
14.255	14.255 (1.000)	71	611942			0.00- 81.21	31.21
14.255	14.255 (1.000)	72	671574			0.00- 82.78	34.25
81 Chloroform					CAS #: 67-66-3		
14.365	14.365 (1.008)	83	2512097	50.0000	54.490	80.00- 120.00	100.00
14.365	14.365 (1.008)	85	1573433			12.63- 112.63	62.63
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.587	14.587 (1.023)	97	2688092	50.0000	55.569	80.00- 120.00	100.00
14.587	14.587 (1.023)	99	1725515			14.19- 114.19	64.19
84 Cyclohexane					CAS #: 110-82-7		
14.559	14.559 (1.021)	84	2070191	50.0000	51.353	80.00- 120.00	100.00
14.559	14.559 (1.021)	56	2793619			84.94- 184.94	134.94
14.559	14.559 (1.021)	41	1477170			21.35- 121.35	71.35
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.780	14.780 (1.037)	119	2363431	50.0000	52.823	80.00- 120.00	100.00
14.780	14.780 (1.037)	117	2429653			52.80- 152.80	102.80
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.112	15.112 (1.060)	57	8989971	50.0000	52.238	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)							
15.112	15.112 (1.060)	56	2869728			0.00- 83.07	31.92
15.084	15.084 (1.058)	41	2107975			0.00- 74.24	23.45
91 Benzene					CAS #: 71-43-2		
15.140	15.140 (0.961)	78	4543579	50.0000	51.971	80.00- 120.00	100.00
15.140	15.140 (0.961)	77	1032123			0.00- 73.68	22.72
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.250	15.250 (0.968)	62	1863414	50.0000	51.542	80.00- 120.00	100.00
15.250	15.250 (0.968)	64	586131			0.00- 83.51	31.45
94 Heptane					CAS #: 142-82-5		
15.361	15.361 (0.975)	71	1751393	50.0000	51.624	80.00- 120.00	100.00
15.361	15.361 (0.975)	43	3642996			162.65- 262.65	208.01
15.361	15.361 (0.975)	57	1878389			57.85- 157.85	107.25
97 Trichloroethene					CAS #: 79-01-6		
16.107	16.107 (1.023)	95	1856863	50.0000	51.794	80.00- 120.00	100.00
16.107	16.107 (1.023)	130	1800318			46.95- 146.95	96.95
16.107	16.107 (1.023)	97	1186342			13.89- 113.89	63.89
102 1,2-Dichloropropane					CAS #: 78-87-5		
16.550	16.550 (1.051)	63	1761790	50.0000	50.548	80.00- 120.00	100.00
16.550	16.550 (1.051)	62	1279109			22.60- 122.60	72.60
16.550	16.550 (1.051)	41	1066132			10.51- 110.51	60.51
103 1,4-Dioxane					CAS #: 123-91-1		
16.688	16.688 (1.060)	88	1115929	50.0000	49.601	80.00- 120.00	100.00
16.688	16.688 (1.060)	58	891377			29.88- 129.88	79.88
16.688	16.688 (1.060)	57	275077			0.00- 75.70	24.65
106 Bromodichloromethane					CAS #: 75-27-4		
16.964	16.964 (1.077)	83	2929752	50.0000	52.142	80.00- 120.00	100.00
16.964	16.964 (1.077)	85	1782651			10.85- 110.85	60.85
109 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.628	17.628 (1.119)	75	2525981	50.0000	51.386	80.00- 120.00	100.00
17.628	17.628 (1.119)	77	804467			0.00- 81.85	31.85
17.628	17.628 (1.119)	39	1394240			5.20- 105.20	55.20
110 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.794	17.794 (1.130)	58	1829628	50.0000	52.160	80.00- 120.00	100.00
17.794	17.794 (1.130)	43	4650701			210.27- 310.27	254.19
17.794	17.794 (1.130)	85	697257			0.00- 89.24	38.11

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.070	18.070 (1.147)	91	6195007	50.0000	51.518	80.00- 120.00	100.00
18.070	18.070 (1.147)	92	3680896			9.42- 109.42	59.42
115 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.430	18.430 (0.921)	75	2723522	50.0000	53.674	80.00- 120.00	100.00
18.430	18.430 (0.921)	77	853694			0.00- 81.35	31.35
18.430	18.430 (0.921)	39	1458086			3.54- 103.54	53.54
116 1,1,2-Trichloroethane					CAS #: 79-00-5		
18.706	18.706 (0.935)	97	2113133	50.0000	52.858	80.00- 120.00	100.00
18.706	18.706 (0.935)	99	1322639			12.59- 112.59	62.59
18.706	18.706 (0.935)	83	1751094			32.87- 132.87	82.87
117 Tetrachloroethene					CAS #: 127-18-4		
18.817	18.817 (0.941)	166	2500818	50.0000	54.000	80.00- 120.00	100.00
18.817	18.817 (0.941)	129	1936967			27.45- 127.45	77.45
18.817	18.817 (0.941)	131	1854729			24.16- 124.16	74.16
118 2-Hexanone					CAS #: 591-78-6		
18.955	18.955 (0.947)	58	2773666	50.0000	51.304	80.00- 120.00	100.00
18.955	18.955 (0.947)	43	5029876			131.34- 231.34	181.34
18.983	18.983 (0.949)	100	540437			0.00- 69.73	19.48
121 Dibromochloromethane					CAS #: 124-48-1		
19.232	19.232 (0.961)	129	3091959	50.0000	54.864	80.00- 120.00	100.00
19.232	19.232 (0.961)	127	2370767			26.10- 126.10	76.68
122 1,2-Dibromoethane					CAS #: 106-93-4		
19.453	19.453 (0.972)	107	3299754	50.0000	56.049	80.00- 120.00	100.00
19.453	19.453 (0.972)	109	3129769			44.85- 144.85	94.85
124 Chlorobenzene					CAS #: 108-90-7		
20.061	20.061 (1.003)	112	5601307	50.0000	52.609	80.00- 120.00	100.00
20.061	20.061 (1.003)	114	1745193			0.00- 81.16	31.16
20.061	20.061 (1.003)	77	3671061			15.54- 115.54	65.54
125 Ethyl Benzene					CAS #: 100-41-4		
20.144	20.144 (1.007)	106	3105795	50.0000	53.197	80.00- 120.00	100.00
20.144	20.144 (1.007)	91	10043310			273.94- 373.94	323.37
128 m,p-Xylene					CAS #: 108-38-3		
20.282	20.282 (1.014)	106	3967134	50.0000	53.761	80.00- 120.00	100.00
20.282	20.282 (1.014)	91	7930628			157.95- 257.95	199.91
130 o-Xylene					CAS #: 95-47-6		
20.808	20.808 (1.040)	106	3704193	50.0000	52.552	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.808	20.808	(1.040)	91	7877109			162.65- 262.65	212.65
131 Styrene						CAS #: 100-42-5		
20.835	20.835	(1.041)	104	6121836	50.0000	51.781	80.00- 120.00	100.00
20.835	20.835	(1.041)	78	2835174			0.00- 96.31	46.31
133 Bromoform						CAS #: 75-25-2		
21.140	21.140	(1.057)	173	2835204	50.0000	53.426	80.00- 120.00	100.00
21.140	21.140	(1.057)	171	1476860			2.09- 102.09	52.09
134 Cumene						CAS #: 98-82-8		
21.250	21.250	(1.062)	105	11145750	50.0000	57.211	80.00- 120.00	100.00
21.250	21.250	(1.062)	120	2799956			0.00- 75.80	25.12
21.250	21.250	(1.062)	51	1125336			0.00- 60.85	10.10
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.665	21.665	(1.083)	83	5034558	50.0000	48.354	80.00- 120.00	100.00
21.665	21.665	(1.083)	85	3086612			11.31- 111.31	61.31
140 Propylbenzene						CAS #: 103-65-1		
21.748	21.748	(1.087)	91	13556888	50.0000	57.406	80.00- 120.00	100.00
21.748	21.748	(1.087)	120	2885920			0.00- 73.27	21.29
21.748	21.748	(1.087)	105	478546			0.00- 55.00	3.53
144 4-Ethyltoluene						CAS #: 622-96-8		
21.886	21.886	(1.094)	105	12089054	50.0000	57.743	80.00- 120.00	100.00
21.886	21.886	(1.094)	120	3435901			0.00- 78.42	28.42
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.941	21.941	(1.097)	105	10055819	50.0000	50.280	80.00- 120.00	100.00
21.941	21.941	(1.097)	120	4617851			0.00- 94.49	45.92
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.411	22.411	(1.120)	105	8405676	50.0000	53.101	80.00- 120.00	100.00
22.411	22.411	(1.120)	120	3664988			0.00- 95.48	43.60
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.826	22.826	(1.141)	146	4751341	50.0000	48.439	80.00- 120.00	100.00
22.826	22.826	(1.141)	148	2984104			12.15- 112.15	62.81
22.826	22.826	(1.141)	111	2026999			0.00- 91.58	42.66
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.937	22.937	(1.146)	146	4830420	50.0000	49.659	80.00- 120.00	100.00
22.937	22.937	(1.146)	148	3027812			16.32- 116.32	62.68
22.937	22.937	(1.146)	111	1929081			0.00- 90.95	39.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.103	23.103 (1.155)	91	7051042	50.0000	49.204	80.00- 120.00	100.00
23.103	23.103 (1.155)	126	1388716			0.00- 69.46	19.70
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.407	23.407 (1.170)	146	3965566	50.0000	46.248	80.00- 120.00	100.00
23.407	23.407 (1.170)	148	2511415			13.33- 113.33	63.33
23.407	23.407 (1.170)	111	1740140			0.00- 93.88	43.88
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.259	25.259 (1.263)	180	1267038	50.0000	34.892	80.00- 120.00	100.00
25.259	25.259 (1.263)	182	1189574			43.89- 143.89	93.89
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.342	25.342 (1.267)	225	931802	50.0000	37.389	80.00- 120.00	100.00
25.342	25.342 (1.267)	223	580671			14.77- 114.77	62.32
29 Isopentane					CAS #: 78-78-4		
8.297	8.297 (0.582)	43	1269041	50.0000	50.982	80.00- 120.00	100.00
8.297	8.297 (0.582)	57	869926			18.54- 118.54	68.55
22 Butane					CAS #: 106-97-8		
5.481	5.481 (0.384)	58	167227	50.0000	49.319	80.00- 120.00	100.00
5.453	5.453 (0.382)	43	1243863			703.05- 803.05	743.82
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.356	16.356 (1.147)	83	2995641	50.0000	52.134	80.00- 120.00	100.00
16.356	16.356 (1.147)	98	1436793			0.00- 97.88	47.96
16.356	16.356 (1.147)	55	2744944			45.40- 145.40	91.63
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.071	12.071 (0.847)	59	945241	50.0000	45.016	80.00- 120.00	100.00
12.071	12.071 (0.847)	41	190058			0.00- 67.50	20.11
12.071	12.071 (0.847)	57	99700			0.00- 63.77	10.55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

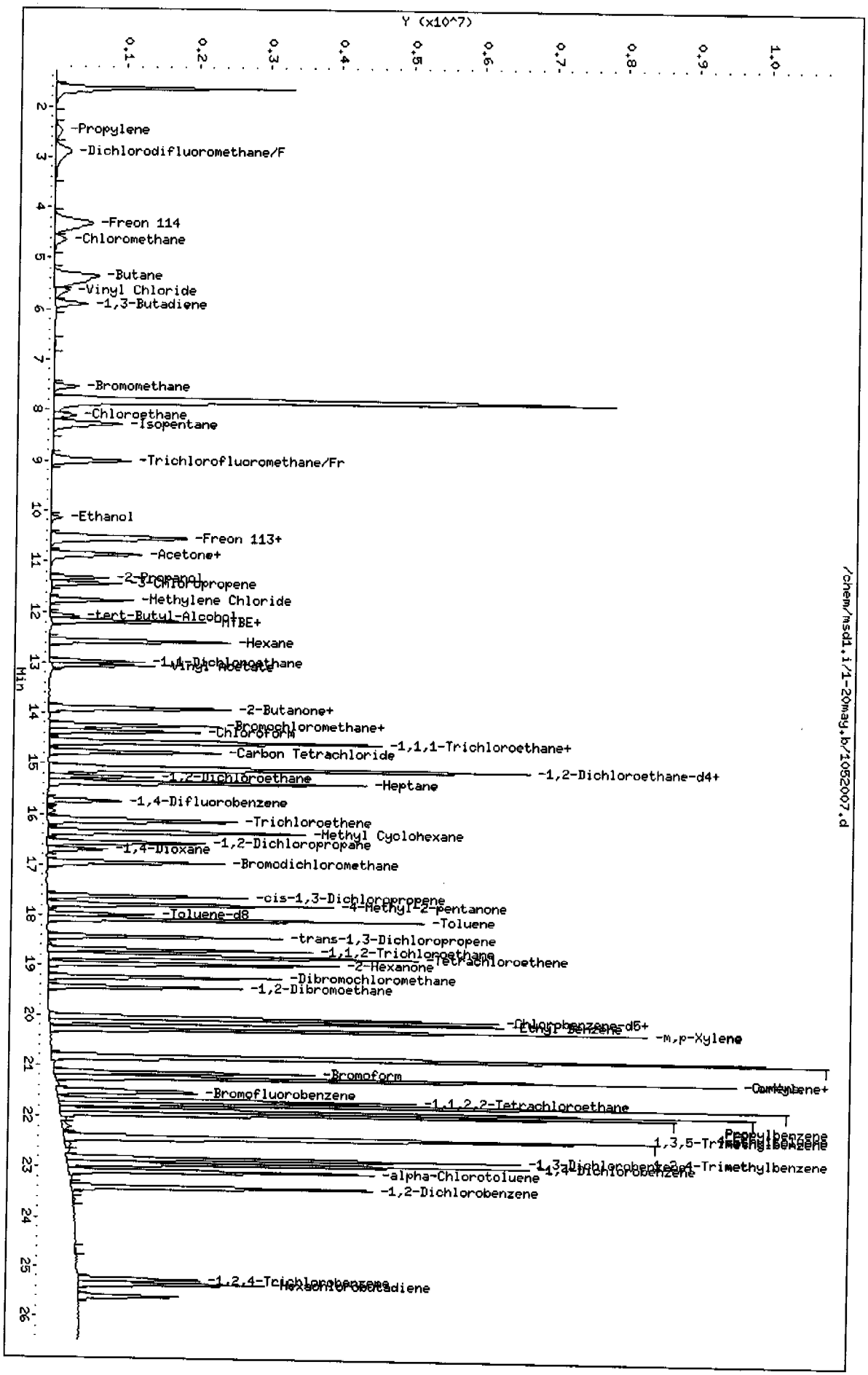
Instrument ID: msd1.i
Lab File ID: 1052007.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	325915	4.43
95 1,4-Difluorobenze	1622087	973252	2270922	1718149	5.92
123 Chlorobenzene-d5	1805786	1083472	2528100	1889046	4.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.25	-0.19
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.01	-0.14

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-20may.b/1052007.d
Date : 20-MAY-2008 12:26
Client ID: CCV-1
Sample Info: 25mL #1612-3
Column phase: RTx-624

Instrument: msd1.i
Operator: lo
Column diameter: 0.53

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd1.i
Lab File ID: 1052005a.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd1.i/1-20may.b/t14q519b.m

Injection Date: 20-MAY-2008 10:59
Init. Cal. Date(s): 19-MAY-2008 20-MAY-2008
Init. Cal. Times: 13:23 11:33
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.66835	1.58459	0.010	5.02039	30.00000	Averaged
$ 111 Toluene-d8	1.13276	1.10242	0.010	2.67847	30.00000	Averaged
$ 136 Bromofluorobenzene	0.53494	0.50754	0.010	5.12249	30.00000	Averaged
19 Freon142b	2.11173	2.34963	0.010	-11.26605	40.00000	Averaged
9 Freon 134a	0.48918	0.54032	0.010	-10.45378	40.00000	Averaged
13 Freon 152a	0.46327	0.49989	0.010	-7.90506	40.00000	Averaged
15 Freon 22	1.67769	1.82209	0.010	-8.60654	40.00000	Averaged
25 Methanol	0.39706	0.37349	0.010	5.93656	40.00000	Averaged
32 Dichlorofluoromethane/Fr21	1.98948	2.25122	0.010	-13.15609	40.00000	Averaged
40 Freon123a	0.89543	1.03875	0.010	-16.00509	40.00000	Averaged
41 Freon123	0.15204	0.17069	0.010	-12.26708	40.00000	Averaged
66 Isopropyl ether	6.58377	7.72550	0.010	-17.34157	40.00000	Averaged
69 1-Propanol	0.31867	0.38253	0.010	-20.04125	40.00000	Averaged
72 t-Butylethyl Ether	2.76163	3.28286	0.010	-18.87411	40.00000	Averaged
73 Ethyl Acetate	0.67326	0.78161	0.010	-16.09271	40.00000	Averaged
92 tert-amyl-Methyl Ether	3.13220	3.64481	0.010	-16.36595	40.00000	Averaged
132 2-Heptanone	5.35867	5.84891	0.010	-9.14848	40.00000	Averaged
96 1-Butanol	0.31976	0.35735	0.010	-11.75554	40.00000	Averaged
120 Butyl Acetate	0.64176	0.73986	0.010	-15.28632	40.00000	Averaged
135 Cyclohexanone	0.71361	0.73917	0.010	-3.58162	40.00000	Averaged
148 Diisobutyl Ketone	1.60285	1.66745	0.010	-4.02994	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052005a.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 20-MAY-2008 10:59
Operator : lo
Inst ID: msd1.i
Smp Info : 25mL #1541-142
Misc Info : 200ppbv ->50ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 12:00 lover
Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33
Cal File: 1052006.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22aCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
**	====== ========	====	========	=======	=======	==========		=====
* 79 Bromochloromethane						CAS #: 74-97-5		
14.282	14.282 (1.000)	130	312076	25.0000		80.00- 120.00		100.00
14.282	14.282 (1.000)	128	246703			29.05- 129.05		79.05
14.255	14.255 (1.000)	49	557015			128.49- 228.49		178.49
* 95 1,4-Difluorobenzene						CAS #: 540-36-3		
15.748	15.748 (1.000)	114	1622087	25.0000		80.00- 120.00		100.00
15.748	15.748 (1.000)	88	250668			0.00- 65.45		15.45
* 123 Chlorobenzene-d5						CAS #: 3114-55-4		
20.034	20.034 (1.000)	117	1805786	25.0000		80.00- 120.00		100.00
20.006	20.006 (1.000)	82	1042207			8.42- 108.42		57.71
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.140	15.140 (1.060)	65	494514	25.0000	23.745	80.00- 120.00		100.00
15.140	15.140 (1.060)	67	259275			6.04- 106.04		52.43
$ 111 Toluene-d8						CAS #: 2037-26-5		
17.960	17.960 (1.140)	98	1788222	25.0000	24.330	80.00- 120.00		100.00
17.960	17.960 (1.140)	70	178548			0.00- 60.35		9.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.987	17.987 (1.142)	100	1177364			15.45- 115.45	65.84
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.527	21.527 (1.075)	174	916511	25.0000	23.719	80.00- 120.00	100.00
21.527	21.527 (1.075)	95	1498417			113.49- 213.49	163.49
21.527	21.527 (1.075)	176	888756			46.97- 146.97	96.97
19 Freon142b					CAS #: 75-68-3		
4.636	4.636 (0.325)	65	1466529	50.0000	55.633	80.00- 120.00	100.00
4.636	4.636 (0.325)	45	361369			0.00- 75.41	24.64
9 Freon 134a					CAS #: 811-97-2		
2.411	2.411 (0.169)	83	337242	50.0000	55.227	80.00- 120.00	100.00
2.411	2.411 (0.169)	69	269690			32.58- 132.58	79.97
2.411	2.411 (0.169)	63	36152			0.00- 58.36	10.72
13 Freon 152a					CAS #: 75-37-6		
2.721	2.721 (0.190)	65	312010	50.0000	53.952	80.00- 120.00	100.00
2.721	2.721 (0.190)	51	666992			172.46- 272.46	213.77
2.749	2.749 (0.192)	47	162961			0.63- 100.63	52.23
15 Freon 22					CAS #: 75-45-6		
3.425	3.425 (0.240)	51	1137258	50.0000	54.303	80.00- 120.00	100.00
3.453	3.453 (0.242)	67	180724			0.00- 65.39	15.89
3.425	3.425 (0.240)	85	15915			0.00- 51.20	1.40
25 Methanol					CAS #: 67-56-1		
7.818	7.818 (0.547)	31	1398684	300.000	282.19	80.00- 120.00	100.00
7.818	7.818 (0.547)	32	1117573			29.90- 129.90	79.90
32 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
9.195	9.195 (0.644)	67	1405104	50.0000	56.578	80.00- 120.00	100.00
9.195	9.195 (0.644)	69	425214			0.00- 79.81	30.26
9.195	9.195 (0.644)	35	66364			0.00- 55.10	4.72
40 Freon123a					CAS #: 354-23-4		
10.384	10.384 (0.727)	117	648338	50.0000	58.002	80.00- 120.00	100.00
10.356	10.356 (0.725)	67	928673			96.88- 196.88	143.24
41 Freon123					CAS #: 306-83-2		
10.577	10.577 (0.741)	83	106534	50.0000	56.134	80.00- 120.00	100.00
10.577	10.577 (0.741)	133	22924			0.00- 73.50	21.52
10.577	10.577 (0.741)	85	68994			10.10- 110.10	64.76
66 Isopropyl ether					CAS #: 108-20-3		
12.983	12.983 (0.909)	45	4821886	50.0000	58.671	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
66 Isopropyl ether (continued)							
13.011	13.011 (0.911)	87	1016872			0.00- 71.33	21.09
12.983	12.983 (0.909)	59	495344			0.00- 60.24	10.27
69 1-Propanol					CAS #: 71-23-8		
13.204	13.204 (0.924)	42	238759	50.0000	60.021	80.00- 120.00	100.00
13.204	13.204 (0.924)	59	255065			47.04- 147.04	106.83
13.204	13.204 (0.924)	41	155524			14.12- 114.12	65.14
72 t-Butylethyl Ether					CAS #: 637-92-3		
13.564	13.564 (0.950)	59	2049003	50.0000	59.437	80.00- 120.00	100.00
13.564	13.564 (0.950)	87	740271			0.00- 86.33	36.13
13.564	13.564 (0.950)	41	358075			0.00- 70.48	17.48
73 Ethyl Acetate					CAS #: 141-78-6		
13.951	13.951 (0.977)	45	487841	50.0000	58.046	80.00- 120.00	100.00
13.951	13.951 (0.977)	61	435150			36.81- 136.81	89.20
13.951	13.951 (0.977)	43	3378151			616.84- 716.84	692.47
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.223	15.223 (1.066)	73	2274918	50.0000	58.183	80.00- 120.00	100.00
15.223	15.223 (1.066)	87	536743			0.00- 73.95	23.59
15.223	15.223 (1.066)	55	655844			0.00- 80.63	28.83
132 2-Heptanone					CAS #: 110-43-0		
20.918	20.918 (1.465)	58	3650607	50.0000	54.574	80.00- 120.00	100.00
20.918	20.918 (1.465)	43	5592030			99.63- 199.63	153.18
96 1-Butanol					CAS #: 71-36-3		
15.941	15.941 (1.012)	56	1159321	50.0000	55.878	80.00- 120.00	100.00
15.941	15.941 (1.012)	41	790480			20.92- 120.92	68.18
15.941	15.941 (1.012)	43	652245			4.89- 104.89	56.26
120 Butyl Acetate					CAS #: 123-86-4		
19.066	19.066 (1.211)	56	2400247	50.0000	57.643	80.00- 120.00	100.00
19.066	19.066 (1.211)	73	803755			0.00- 83.49	33.49
19.066	19.066 (1.211)	43	5597507			183.21- 283.21	233.21
135 Cyclohexanone					CAS #: 108-94-1		
21.471	21.471 (1.072)	55	2669553	50.0000	51.791	80.00- 120.00	100.00
21.471	21.471 (1.072)	98	1073676			0.00- 90.24	40.22
21.471	21.471 (1.072)	42	1781890			17.74- 117.74	66.75
148 Diisobutyl Ketone					CAS #: 108-83-8		
22.080	22.080 (1.102)	57	6022108	50.0000	52.015	80.00- 120.00	100.00
22.080	22.080 (1.102)	85	4727987			28.51- 128.51	78.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
148 Diisobutyl Ketone (continued)							
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

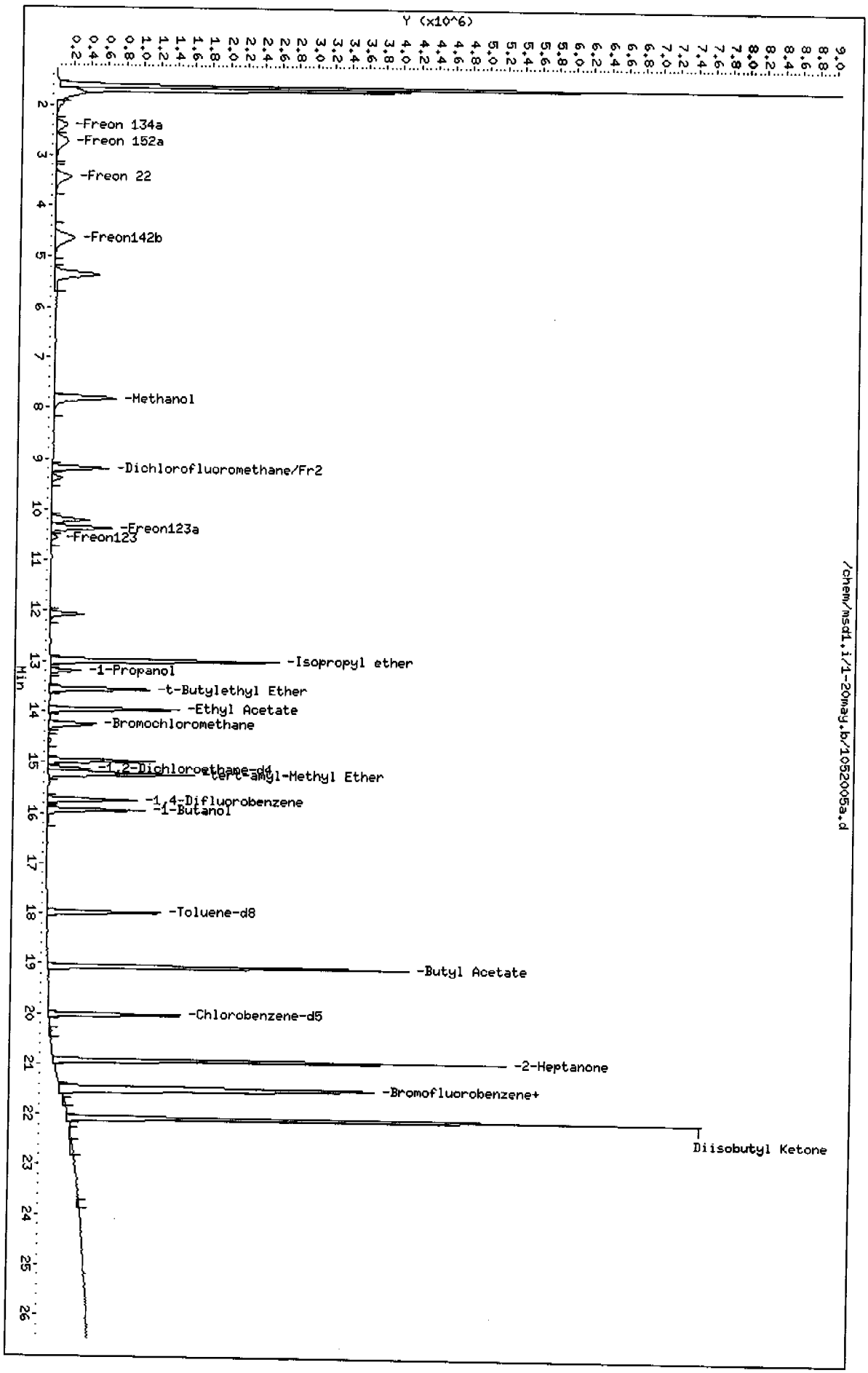
Instrument ID: msd1.i
Lab File ID: 1052005a.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 200ppbv ->50ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 10:59
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	312076	187246	436906	312076	0.00
95 1,4-Difluorobenze	1622087	973252	2270922	1622087	0.00
123 Chlorobenzene-d5	1805786	1083472	2528100	1805786	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.28	13.95	14.61	14.28	0.00
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	0.00
123 Chlorobenzene-d5	20.03	19.70	20.36	20.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msd1.i/1-20may.b/10520005a.d
Date : 20-MAY-2008 10:59
Client ID: CCVsp
Sample Info: 25mL #1541-142

Column phase: RTx-624

Instrument: msd1.i

Operator: lo

Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805220-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1052008	Date Collection:	NA
Dil Factor:	1.00	Date Analysis:	5/20/08 01:02 PM

Compound	%Recovery
Freon 12	98
Freon 114	98
Chloromethane	96
Vinyl Chloride	94
1,3-Butadiene	95
Bromomethane	106
Chloroethane	104
Freon 11	101
Ethanol	106
Freon 113	115
1,1-Dichloroethene	105
Acetone	95
2-Propanol	103
Carbon Disulfide	99
Methylene Chloride	100
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	105
Hexane	105
1,1-Dichloroethane	120
2-Butanone (Methyl Ethyl Ketone)	113
cis-1,2-Dichloroethene	105
Tetrahydrofuran	86
Chloroform	110
1,1,1-Trichloroethane	113
Cyclohexane	103
Carbon Tetrachloride	107
Benzene	105
1,2-Dichloroethane	106
Heptane	105
Trichloroethene	104
1,2-Dichloropropane	102
1,4-Dioxane	102
Bromodichloromethane	107
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	108
Toluene	108
trans-1,3-Dichloropropene	106
1,1,2-Trichloroethane	105
Tetrachloroethene	107

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0805220-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	1052008	Date Collection: NA	
Dil. Factor:	1.00	Date Analysis: 5/20/08 01:02 PM	

Compound	%Recovery
2-Hexanone	104
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	107
Chlorobenzene	104
Ethyl Benzene	103
m,p-Xylene	104
o-Xylene	102
Styrene	99
Bromoform	106
1,1,2,2-Tetrachloroethane	95
4-Ethyltoluene	111
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	93
1,4-Dichlorobenzene	95
alpha-Chlorotoluene	95
1,2-Dichlorobenzene	88
1,2,4-Trichlorobenzene	64 Q
Hexachlorobutadiene	71
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	100

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	98	70-130

Data File: /chem/msd1.i/1-20may.b/1052008.d
Report Date: 20-May-2008 13:15

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT08.sub
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 1-20may
Fraction: VOA
Client Smp ID: LCS-1
Operator: lo
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Propylene	50.000	49.833	99.67	60-140
14 Dichlorodifluorome	50.000	48.912	97.82	70-130
17 Freon 114	50.000	48.962	97.92	70-130
21 Chloromethane	50.000	48.259	96.52	70-130
23 Vinyl Chloride	50.000	46.847	93.69	70-130
24 1,3-Butadiene	50.000	47.644	95.29	60-140
26 Bromomethane	50.000	53.103	106.21	70-130
28 Chloroethane	50.000	51.946	103.89	70-130
34 Trichlorofluoromet	50.000	50.323	100.65	70-130
38 Ethanol	50.000	52.947	105.89	60-140
43 Freon 113	50.000	57.461	114.92	70-130
44 1,1-Dichloroethene	50.000	52.521	105.04	70-130
45 Acetone	50.000	47.330	94.66	60-140
48 Carbon Disulfide	50.000	49.343	98.69	60-140
46 2-Propanol	50.000	51.332	102.66	60-140
54 Methylene Chloride	50.000	49.900	99.80	70-130
58 MTBE	50.000	50.303	100.61	60-140
59 trans-1,2-Dichloro	50.000	52.706	105.41	60-140
64 Hexane	50.000	52.410	104.82	60-140
67 Vinyl Acetate	50.000	56.895	113.79	60-140
68 1,1-Dichloroethane	50.000	59.828	119.66	70-130
76 cis-1,2-Dichloroet	50.000	52.730	105.46	70-130
75 2-Butanone	50.000	56.528	113.06	60-140
78 Tetrahydrofuran	50.000	42.867	85.73	60-140
81 Chloroform	50.000	55.208	110.42	70-130
84 Cyclohexane	50.000	51.573	103.15	60-140
83 1,1,1-Trichloroeth	50.000	56.320	112.64	70-130
85 Carbon Tetrachlori	50.000	53.636	107.27	70-130
91 Benzene	50.000	52.585	105.17	70-130
93 1,2-Dichloroethane	50.000	52.788	105.58	70-130
94 Heptane	50.000	52.366	104.73	60-140
97 Trichloroethene	50.000	52.150	104.30	70-130
102 1,2-Dichloropropan	50.000	51.091	102.18	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
103 1,4-Dioxane	50.000	51.009	102.02	60-140
106 Bromodichlorometha	50.000	53.301	106.60	60-140
109 cis-1,3-Dichloropr	50.000	51.755	103.51	70-130
110 4-Methyl-2-pentano	50.000	53.775	107.55	60-140
114 Toluene	50.000	54.056	108.11	70-130
115 trans-1,3-Dichloro	50.000	52.867	105.73	70-130
116 1,1,2-Trichloroeth	50.000	52.457	104.91	70-130
117 Tetrachloroethene	50.000	53.314	106.63	70-130
118 2-Hexanone	50.000	51.757	103.51	60-140
121 Dibromochlorometha	50.000	53.946	107.89	60-140
122 1,2-Dibromoethane	50.000	53.669	107.34	70-130
124 Chlorobenzene	50.000	51.899	103.80	70-130
125 Ethyl Benzene	50.000	51.437	102.87	70-130
128 m,p-Xylene	50.000	52.071	104.14	70-130
130 o-Xylene	50.000	51.296	102.59	70-130
131 Styrene	50.000	49.662	99.32	70-130
133 Bromoform	50.000	53.219	106.44	60-140
138 1,1,2,2-Tetrachlor	50.000	47.406	94.81	70-130
144 4-Ethyltoluene	50.000	55.362	110.72	60-140
146 1,3,5-Trimethylben	50.000	51.228	102.46	70-130
152 1,2,4-Trimethylben	50.000	50.557	101.11	70-130
158 1,3-Dichlorobenzen	50.000	46.631	93.26	70-130
159 1,4-Dichlorobenzen	50.000	47.484	94.97	70-130
162 alpha-Chlorotoluen	50.000	47.516	95.03	70-130
164 1,2-Dichlorobenzen	50.000	44.065	88.13	70-130
169 1,2,4-Trichloroben	50.000	32.049	64.10*	70-130
170 Hexachlorobutadien	50.000	35.455	70.91	70-130
140 Propylbenzene	50.000	57.027	114.05	60-140
134 Cumene	50.000	57.428	114.86	60-140
50 3-Chloropropene	50.000	63.681	127.36	60-140
88 2,2,4-Trimethylpen	50.000	52.185	104.37	60-140
29 Isopentane	50.000	48.705	97.41	70-130
22 Butane	50.000	47.109	94.22	70-130
99 Methyl Cyclohexane	50.000	52.600	105.20	70-130
57 tert-Butyl-Alcohol	50.000	44.680	89.36	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.574	98.30	70-130
$ 111 Toluene-d8	25.000	24.497	97.99	70-130
$ 136 Bromofluorobenzene	25.000	24.451	97.81	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd1.i/1-20may.b/1052008.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 20-MAY-2008 13:02
Operator : lo Inst ID: msd1.i
Smp Info : 25mL #1541-138
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msd1.i/1-20may.b/t14q519b.m
Meth Date : 20-May-2008 13:03 lover Quant Type: ISTD
Cal Date : 20-MAY-2008 11:33 Cal File: 1052006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT08.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 79 Bromochloromethane						CAS #: 74-97-5	
14.280	14.255 (1.000)	130	321437	25.0000		80.00- 120.00	100.00
14.280	14.255 (1.000)	128	247886			28.28- 128.28	77.12
14.252	14.255 (1.000)	49	584543			132.70- 232.70	181.85
* 95 1,4-Difluorobenzene						CAS #: 540-36-3	
15.745	15.748 (1.000)	114	1684804	25.0000		80.00- 120.00	100.00
15.745	15.748 (1.000)	88	264348			0.00- 65.54	15.69
* 123 Chlorobenzene-d5						CAS #: 3114-55-4	
20.031	20.006 (1.000)	117	1881903	25.0000		80.00- 120.00	100.00
20.031	20.006 (1.000)	82	1073112			8.42- 108.42	57.02
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.137	15.140 (1.060)	65	527137	24.5742	24.574	80.00- 120.00	100.00
15.137	15.140 (1.060)	67	319138			6.04- 106.04	60.54
$ 111 Toluene-d8						CAS #: 2037-26-5	
17.985	17.960 (1.142)	98	1870094	24.4972	24.497	80.00- 120.00	100.00
17.957	17.960 (1.140)	70	197366			0.00- 60.35	10.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 111 Toluene-d8 (continued)							
17.985	17.960 (1.142)	100	1226603			15.45- 115.45	65.59
$ 136 Bromofluorobenzene					CAS #: 460-00-4		
21.524	21.527 (1.075)	174	984621	24.4514	24.451	80.00- 120.00	100.00
21.524	21.527 (1.075)	95	1581279			112.36- 212.36	160.60
21.524	21.527 (1.075)	176	942997			46.57- 146.57	95.77
12 Propylene					CAS #: 115-07-1		
2.474	2.496 (0.173)	41	353668	49.8331	49.833	80.00- 120.00	100.00
2.474	2.496 (0.173)	42	243339			16.91- 116.91	68.80
2.474	2.496 (0.173)	39	287225			37.15- 137.15	81.21
14 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
2.888	2.890 (0.202)	85	1733176	48.9121	48.912	80.00- 120.00	100.00
2.888	2.890 (0.202)	87	553227			0.00- 75.39	31.92
17 Freon 114					CAS #: 76-14-2		
4.326	4.326 (0.303)	135	1187690	48.9617	48.962	80.00- 120.00	100.00
4.326	4.326 (0.303)	137	368675			0.00- 81.11	31.04
21 Chloromethane					CAS #: 74-87-3		
4.630	4.636 (0.324)	50	736913	48.2589	48.259	80.00- 120.00	100.00
4.630	4.636 (0.324)	52	226715			0.00- 80.15	30.77
23 Vinyl Chloride					CAS #: 75-01-4		
5.626	5.622 (0.394)	62	782237	46.8470	46.847	80.00- 120.00	100.00
5.626	5.622 (0.394)	64	237574			0.00- 77.57	30.37
24 1,3-Butadiene					CAS #: 106-99-0		
5.902	5.903 (0.413)	54	604928	47.6443	47.644	80.00- 120.00	100.00
5.902	5.903 (0.413)	39	585753			37.41- 137.41	96.83
26 Bromomethane					CAS #: 74-83-9		
7.533	7.537 (0.528)	94	598648	53.1031	53.103	80.00- 120.00	100.00
7.533	7.537 (0.528)	96	562021			43.35- 143.35	93.88
28 Chloroethane					CAS #: 75-00-3		
8.114	8.128 (0.568)	64	468472	51.9456	51.946	80.00- 120.00	100.00
8.114	8.128 (0.568)	49	133627			0.00- 79.23	28.52
8.114	8.128 (0.568)	66	141380			0.00- 81.66	30.18
34 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.999	9.001 (0.630)	101	2294972	50.3234	50.323	80.00- 120.00	100.00
8.999	9.001 (0.630)	103	1501653			14.62- 114.62	65.43

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
10.132	10.135	(0.710)	45	382457	52.9470	52.947	80.00- 120.00	100.00
10.132	10.135	(0.710)	43	79205			0.00- 75.81	20.71
10.132	10.135	(0.710)	46	151398			0.00- 92.85	39.59
43 Freon 113						CAS #: 76-13-1		
10.575	10.577	(0.741)	151	1371189	57.4615	57.461	80.00- 120.00	100.00
10.575	10.577	(0.741)	153	859304			13.61- 113.61	62.67
10.575	10.577	(0.741)	101	1826049			84.63- 184.63	133.17
44 1,1-Dichloroethene						CAS #: 75-35-4		
10.519	10.522	(0.737)	61	1737530	52.5210	52.521	80.00- 120.00	100.00
10.519	10.522	(0.737)	96	938441			3.46- 103.46	54.01
10.519	10.522	(0.737)	98	600189			0.00- 84.66	34.54
45 Acetone						CAS #: 67-64-1		
10.879	10.882	(0.762)	58	525896	47.3301	47.330	80.00- 120.00	100.00
10.879	10.882	(0.762)	43	1731840			275.34- 375.34	329.31
46 2-Propanol						CAS #: 67-63-0		
11.321	11.324	(0.793)	45	2016355	51.3320	51.332	80.00- 120.00	100.00
11.321	11.324	(0.793)	43	371011			0.00- 68.18	18.40
11.321	11.324	(0.793)	59	77863			0.00- 53.79	3.86
48 Carbon Disulfide						CAS #: 75-15-0		
10.851	10.826	(0.760)	76	2688784	49.3432	49.343	80.00- 120.00	100.00
50 3-Chloropropene						CAS #: 107-05-1		
11.432	11.435	(0.801)	76	374913	63.6815	63.681	80.00- 120.00	100.00
11.432	11.435	(0.801)	41	1325709			303.82- 403.82	353.60
54 Methylene Chloride						CAS #: 75-09-2		
11.736	11.739	(0.822)	49	1430026	49.9006	49.900	80.00- 120.00	100.00
11.764	11.739	(0.824)	84	917705			13.80- 113.80	64.17
11.736	11.739	(0.822)	51	435238			0.00- 79.96	30.44
58 MTBE						CAS #: 1634-04-4		
12.151	12.153	(0.851)	73	1028481	50.3028	50.303	80.00- 120.00	100.00
12.151	12.153	(0.851)	57	299038			0.00- 78.61	29.08
12.151	12.153	(0.851)	41	307972			0.00- 78.25	29.94
59 trans-1,2-Dichloroethene						CAS #: 156-60-5		
12.178	12.181	(0.853)	96	1102067	52.7065	52.706	80.00- 120.00	100.00
12.178	12.181	(0.853)	61	1736118			106.01- 206.01	157.53
12.178	12.181	(0.853)	98	699693			13.20- 113.20	63.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
64 Hexane					CAS #: 110-54-3		
12.566	12.568 (0.880)	57	2527133	52.4096	52.410	80.00- 120.00	100.00
12.566	12.568 (0.880)	43	1627427			16.42- 116.42	64.40
12.566	12.568 (0.880)	86	370205			0.00- 64.88	14.65
67 Vinyl Acetate					CAS #: 108-05-4		
13.063	13.066 (0.915)	86	306858	56.8947	56.895	80.00- 120.00	100.00
13.063	13.066 (0.915)	43	3707557			1256.82-1356.82	1208.23
68 1,1-Dichloroethane					CAS #: 75-34-3		
12.980	12.983 (0.909)	63	2284834	59.8277	59.828	80.00- 120.00	100.00
12.980	12.983 (0.909)	65	679401			0.00- 80.06	29.74
75 2-Butanone					CAS #: 78-93-3		
13.948	13.923 (0.977)	72	654587	56.5282	56.528	80.00- 120.00	100.00
13.920	13.923 (0.975)	43	3121509			438.06- 538.06	476.87
13.920	13.923 (0.975)	57	242581			0.00- 90.57	37.06
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.893	13.895 (0.973)	61	1816269	52.7304	52.730	80.00- 120.00	100.00
13.893	13.895 (0.973)	96	1260920			20.64- 120.64	69.42
13.893	13.895 (0.973)	98	794355			0.00- 94.85	43.74
78 Tetrahydrofuran					CAS #: 109-99-9		
14.252	14.255 (0.998)	42	1906748	42.8673	42.867	80.00- 120.00	100.00
14.252	14.255 (0.998)	71	596374			0.00- 81.21	31.28
14.252	14.255 (0.998)	72	659364			0.00- 82.78	34.58
81 Chloroform					CAS #: 67-66-3		
14.363	14.365 (1.006)	83	2510241	55.2081	55.208	80.00- 120.00	100.00
14.363	14.365 (1.006)	85	1556740			12.63- 112.63	62.02
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.584	14.587 (1.021)	97	2686979	56.3198	56.320	80.00- 120.00	100.00
14.584	14.587 (1.021)	99	1707001			14.19- 114.19	63.53
84 Cyclohexane					CAS #: 110-82-7		
14.584	14.559 (1.021)	84	2050490	51.5726	51.573	80.00- 120.00	100.00
14.556	14.559 (1.019)	56	2739080			84.94- 184.94	133.58
14.556	14.559 (1.019)	41	1415430			21.35- 121.35	69.03
85 Carbon Tetrachloride					CAS #: 56-23-5		
14.777	14.780 (1.035)	119	2366824	53.6361	53.636	80.00- 120.00	100.00
14.777	14.780 (1.035)	117	2460357			52.80- 152.80	103.95
88 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.109	15.112 (1.058)	57	8857484	52.1855	52.185	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
88 2,2,4-Trimethylpentane (continued)								
15.109	15.112	(1.058)	56	2858376			0.00- 83.07	32.27
15.109	15.112	(1.058)	41	2077008			0.00- 74.24	23.45
91 Benzene						CAS #: 71-43-2		
15.137	15.140	(0.961)	78	4508062	52.5850	52.585	80.00- 120.00	100.00
15.137	15.140	(0.961)	77	1016997			0.00- 73.68	22.56
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.248	15.250	(0.968)	62	1871413	52.7877	52.788	80.00- 120.00	100.00
15.248	15.250	(0.968)	64	597183			0.00- 83.51	31.91
94 Heptane						CAS #: 142-82-5		
15.358	15.361	(0.975)	71	1742094	52.3657	52.366	80.00- 120.00	100.00
15.358	15.361	(0.975)	43	3592055			162.65- 262.65	206.19
15.358	15.361	(0.975)	57	1856535			57.85- 157.85	106.57
97 Trichloroethene						CAS #: 79-01-6		
16.132	16.107	(1.025)	95	1833364	52.1504	52.150	80.00- 120.00	100.00
16.132	16.107	(1.025)	130	1774590			46.95- 146.95	96.79
16.132	16.107	(1.025)	97	1184413			13.89- 113.89	64.60
102 1,2-Dichloropropane						CAS #: 78-87-5		
16.575	16.550	(1.053)	63	1746150	51.0908	51.091	80.00- 120.00	100.00
16.575	16.550	(1.053)	62	1236525			22.60- 122.60	70.81
16.575	16.550	(1.053)	41	1043652			10.51- 110.51	59.77
103 1,4-Dioxane						CAS #: 123-91-1		
16.713	16.688	(1.061)	88	1125337	51.0088	51.009	80.00- 120.00	100.00
16.713	16.688	(1.061)	58	883560			29.88- 129.88	78.52
16.713	16.688	(1.061)	57	272731			0.00- 75.70	24.24
106 Bromodichloromethane						CAS #: 75-27-4		
16.962	16.964	(1.077)	83	2936730	53.3010	53.301	80.00- 120.00	100.00
16.962	16.964	(1.077)	85	1799374			10.85- 110.85	61.27
109 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
17.625	17.628	(1.119)	75	2494772	51.7553	51.755	80.00- 120.00	100.00
17.625	17.628	(1.119)	77	786211			0.00- 81.85	31.51
17.625	17.628	(1.119)	39	1371057			5.20- 105.20	54.96
110 4-Methyl-2-pentanone						CAS #: 108-10-1		
17.791	17.794	(1.130)	58	1849639	53.7747	53.775	80.00- 120.00	100.00
17.791	17.794	(1.130)	43	4707507			210.27- 310.27	254.51
17.791	17.794	(1.130)	85	691552			0.00- 89.24	37.39

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene						CAS #: 108-88-3		
18.068	18.070	(1.147)	91	6374082	54.0565	54.056	80.00- 120.00	100.00
18.068	18.070	(1.147)	92	3817529			9.42- 109.42	59.89
115 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
18.427	18.430	(0.920)	75	2672408	52.8671	52.867	80.00- 120.00	100.00
18.427	18.430	(0.920)	77	840743			0.00- 81.35	31.46
18.427	18.430	(0.920)	39	1411435			3.54- 103.54	52.82
116 1,1,2-Trichloroethane						CAS #: 79-00-5		
18.704	18.706	(0.934)	97	2089193	52.4574	52.457	80.00- 120.00	100.00
18.704	18.706	(0.934)	99	1307822			12.59- 112.59	62.60
18.704	18.706	(0.934)	83	1723336			32.87- 132.87	82.49
117 Tetrachloroethene						CAS #: 127-18-4		
18.814	18.817	(0.939)	166	2459708	53.3138	53.314	80.00- 120.00	100.00
18.814	18.817	(0.939)	129	1916370			27.45- 127.45	77.91
18.814	18.817	(0.939)	131	1833025			24.16- 124.16	74.52
118 2-Hexanone						CAS #: 591-78-6		
18.980	18.955	(0.948)	58	2787581	51.7574	51.757	80.00- 120.00	100.00
18.953	18.955	(0.946)	43	5041447			131.34- 231.34	180.85
18.980	18.955	(0.948)	100	543470			0.00- 69.73	19.50
121 Dibromochloromethane						CAS #: 124-48-1		
19.257	19.232	(0.961)	129	3028746	53.9464	53.946	80.00- 120.00	100.00
19.229	19.232	(0.960)	127	2337295			26.10- 126.10	77.17
122 1,2-Dibromoethane						CAS #: 106-93-4		
19.450	19.453	(0.971)	107	3147690	53.6693	53.669	80.00- 120.00	100.00
19.450	19.453	(0.971)	109	2968402			44.85- 144.85	94.30
124 Chlorobenzene						CAS #: 108-90-7		
20.059	20.061	(1.001)	112	5504807	51.8990	51.899	80.00- 120.00	100.00
20.059	20.061	(1.001)	114	1728795			0.00- 81.16	31.41
20.059	20.061	(1.001)	77	3529923			15.54- 115.54	64.12
125 Ethyl Benzene						CAS #: 100-41-4		
20.141	20.144	(1.006)	106	2991691	51.4375	51.437	80.00- 120.00	100.00
20.141	20.144	(1.006)	91	9688130			273.94- 373.94	323.83
128 m,p-Xylene						CAS #: 108-38-3		
20.280	20.282	(1.012)	106	3827898	52.0715	52.071	80.00- 120.00	100.00
20.280	20.282	(1.012)	91	7604590			157.95- 257.95	198.66
130 o-Xylene						CAS #: 95-47-6		
20.805	20.808	(1.039)	106	3601989	51.2960	51.296	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
20.805	20.808	(1.039)	91	7639847			162.65- 262.65	212.10
131 Styrene						CAS #: 100-42-5		
20.833	20.835	(1.040)	104	5849088	49.6620	49.662	80.00- 120.00	100.00
20.833	20.835	(1.040)	78	2733089			0.00- 96.31	46.73
133 Bromoform						CAS #: 75-25-2		
21.137	21.140	(1.055)	173	2813547	53.2190	53.219	80.00- 120.00	100.00
21.137	21.140	(1.055)	171	1458579			2.09- 102.09	51.84
134 Cumene						CAS #: 98-82-8		
21.247	21.250	(1.061)	105	11145749	57.4278	57.428	80.00- 120.00	100.00
21.247	21.250	(1.061)	120	2792830			0.00- 75.80	25.06
21.247	21.250	(1.061)	51	1137929			0.00- 60.85	10.21
138 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
21.662	21.665	(1.081)	83	4917120	47.4058	47.406	80.00- 120.00	100.00
21.662	21.665	(1.081)	85	3038730			11.31- 111.31	61.80
140 Propylbenzene						CAS #: 103-65-1		
21.745	21.748	(1.086)	91	13416671	57.0275	57.027	80.00- 120.00	100.00
21.745	21.748	(1.086)	120	2854155			0.00- 73.27	21.27
21.745	21.748	(1.086)	105	471147			0.00- 55.00	3.51
144 4-Ethyltoluene						CAS #: 622-96-8		
21.883	21.886	(1.092)	105	11546662	55.3619	55.362	80.00- 120.00	100.00
21.883	21.886	(1.092)	120	3252733			0.00- 78.42	28.17
146 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
21.939	21.941	(1.095)	105	10206751	51.2281	51.228	80.00- 120.00	100.00
21.939	21.941	(1.095)	120	4608904			0.00- 94.49	45.16
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
22.409	22.411	(1.119)	105	7972701	50.5566	50.557	80.00- 120.00	100.00
22.409	22.411	(1.119)	120	3506883			0.00- 95.48	43.99
158 1,3-Dichlorobenzene						CAS #: 541-73-1		
22.823	22.826	(1.139)	146	4556695	46.6311	46.631	80.00- 120.00	100.00
22.823	22.826	(1.139)	148	2833576			12.15- 112.15	62.18
22.823	22.826	(1.139)	111	1921334			0.00- 91.58	42.17
159 1,4-Dichlorobenzene						CAS #: 106-46-7		
22.934	22.937	(1.145)	146	4601421	47.4841	47.484	80.00- 120.00	100.00
22.934	22.937	(1.145)	148	2872733			16.32- 116.32	62.43
22.934	22.937	(1.145)	111	1847934			0.00- 90.95	40.16

Data File: /chem/msd1.i/1-20may.b/1052008.d
Report Date: 20-May-2008 13:15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
162 alpha-Chlorotoluene					CAS #: 100-44-7		
23.100	23.103 (1.153)	91	6783363	47.5159	47.516	80.00- 120.00	100.00
23.100	23.103 (1.153)	126	1332510			0.00- 69.46	19.64
164 1,2-Dichlorobenzene					CAS #: 95-50-1		
23.404	23.407 (1.168)	146	3764154	44.0653	44.065	80.00- 120.00	100.00
23.404	23.407 (1.168)	148	2371255			13.33- 113.33	63.00
23.404	23.407 (1.168)	111	1660638			0.00- 93.88	44.12
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
25.257	25.259 (1.261)	180	1159407	32.0489	32.049	80.00- 120.00	100.00(R)
25.257	25.259 (1.261)	182	1076598			43.89- 143.89	92.86
170 Hexachlorobutadiene					CAS #: 87-68-3		
25.340	25.342 (1.265)	225	880262	35.4551	35.455	80.00- 120.00	100.00
25.340	25.342 (1.265)	223	554587			14.77- 114.77	63.00
29 Isopentane					CAS #: 78-78-4		
8.280	8.297 (0.580)	43	1195709	48.7047	48.705	80.00- 120.00	100.00
8.280	8.297 (0.580)	57	828945			18.54- 118.54	69.33
22 Butane					CAS #: 106-97-8		
5.460	5.481 (0.382)	58	157541	47.1093	47.109	80.00- 120.00	100.00
5.460	5.481 (0.382)	43	1214975			703.05- 803.05	771.21
99 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.356 (1.145)	83	2980863	52.6001	52.600	80.00- 120.00	100.00
16.354	16.356 (1.145)	98	1440192			0.00- 97.88	48.31
16.354	16.356 (1.145)	55	2740226			45.40- 145.40	91.93
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
12.068	12.071 (0.845)	59	925298	44.6799	44.680	80.00- 120.00	100.00
12.068	12.071 (0.845)	41	181955			0.00- 67.50	19.66
12.068	12.071 (0.845)	57	90893			0.00- 63.77	9.82

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/msd1.i/1-20may.b/1052008.d
Report Date: 20-May-2008 13:15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd1.i
Lab File ID: 1052008.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd1.i/1-20may.b/t14q519b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 20-MAY-2008
Calibration Time: 12:26
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	325915	195549	456281	321437	-1.37
95 1,4-Difluorobenze	1718149	1030889	2405409	1684804	-1.94
123 Chlorobenzene-d5	1889046	1133428	2644664	1881903	-0.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
79 Bromochloromethan	14.25	13.92	14.58	14.28	0.18
95 1,4-Difluorobenze	15.75	15.42	16.08	15.75	-0.02
123 Chlorobenzene-d5	20.01	19.68	20.34	20.03	0.12

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

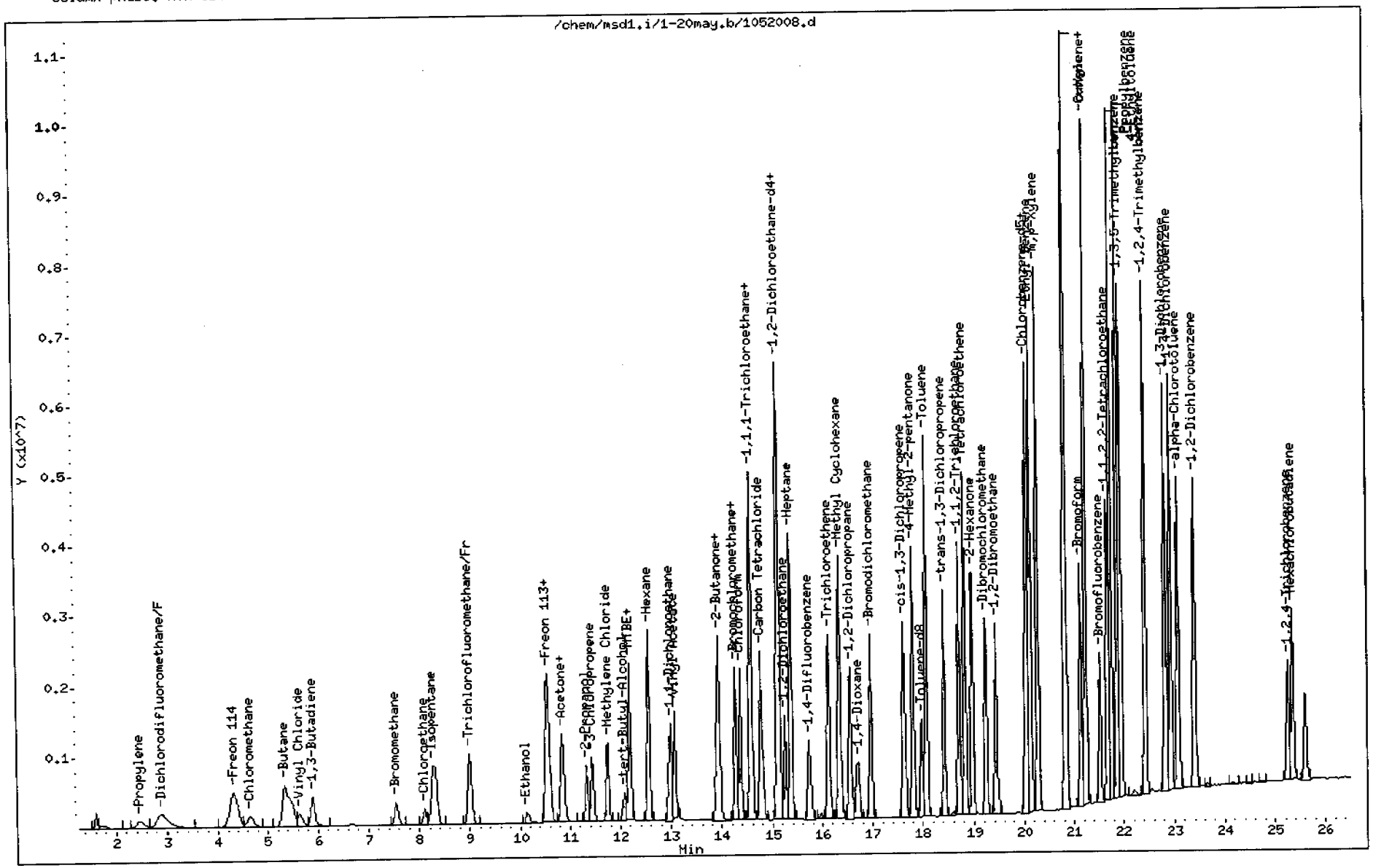
0274

Data File: /chem/msd1.i/1-20may.b/1052008.d
Date : 20-MAY-2008 13:02
Client ID: LCS-1
Sample Info: 25mL #1541-138

Instrument: msd1.i

Operator: lo
Column diameter: 0.53

Column phase: RTx-624



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MSD-1

Logbook #: 1628

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.99
75	30.0 – 60.0% of mass 95	42.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.53
173	Less than 2.0% of mass 174	(0.77)[1]
174	Greater than 50.0% of mass 95	62.16
175	5.0 – 9.0% of mass 174	(6.58)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(95.54)[1]
177	5.0 – 9.0% of mass 176	(6.18)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 5/20/08
BFB Injection Time: 0753
BFB File ID: 1052001
Tekmar Purge Flow: NA
Vacuum: NA

IS/S Std.#: 1541-144	Exp. Date: 8/2/08
BCM	325915
1,4-DFB	1718149
CB-d5	1889040

Verified CCV IS vs ICAL mid-point (- 40%D) LO initials

Verify 176/174 m/z Ratio: 935173/978630 x100 = 95.540

NOAH Cart #: NA File #: NA

Calculation Check:

ppbv of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 535014\ )}{(\ 325915\ )} \times \frac{(\ 25.00\ )}{(\ 1.06835\ )} = 24.59878$

Reported Result 24.599

File ID:	1052007
Compound:	1,2DCA-d4
Initials:	LO

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	1052001	BFB Tune Check	1416-325	50 psig	2 uL	1.00	5/20/08	0753	LO/KR	
2	✓	02	System Blank	12009	Humid	100mL			0826	LO	
3	✓	03	ICAL Level 3 (20ppbv)	1541-#2	20 psig	1.0mL			0945	LO/KR	Sp22a 1442916
4	✓	04	Level 4 (30ppbv)		2.0 psig/13 psig	4.0mL			1026	LO/KR	
5	✓	05	Level 5 (40ppbv)		5 psig/20 psig	25mL			1059	LO/KR	Sp22a CCV
6	✓	06	Level 7 (60ppbv)		30ppbv/120ppbv	200mL/25mL			1133	LO/KR	
7	✓	07	CCV-1 #1662-3	30ppbv	50 psig	25mL			1226	LO/KR	
8	✓	08	LCS-1 #1541-B50	↓	↓	↓			1302	LO/KR	1 out
9	✓	09	Lab Blank	12009	Humid	100mL	↓	↓	1347	LO/KR	

Laura Ormeyer
Signature

5/20/08
Date

0276

@ Air/Toxics Ltd.

MSD-1

Logbook #: 1628

10	✓	10	5	20	10	080553628A - D1A	36492	4.5"Hg-15psi	25mL	9.52	5/20/08	1428	JD	KR	Dil due TONT
11	✓				11	D3A	1353	4.0"Hg-15psi	100mL	2.33		1570		KR	
12	✓				12	D5A	20021	4.5"Hg-15psi	100mL	2.38		1543		KR	
13	✓				13	D5AA	↓	↓	↓	↓		1624		KR	
14	✓				14	08053154 - D1A	35683	4.5"Hg-15psi	100mL	2.38		1722		KR	
15	✓				15	-D2A	2114	0.5"Hg-15psi	100mL	2.05		1824		KR	
16	✓				16	-D2AA	↓	↓	↓	↓		1907		KR	
17	✓				17	0805220 - D1A	12577	6.5"Hg-15psi	50mL	3.42		1953		KR	
18	✓				18	-D2A	5557	7.0"Hg-15psi	100mL	1.75		2038		KR	
19	✓				19	-D3A	96102	6.5"Hg-15psi	100mL	1.71		2120		KR	
20	✓				20	-D4A	5696	7.0"Hg-15psi	100mL	1.75		2200		KR	
21	X				21	-D5A	35142	2.5"Hg-15psi	100mL	1.46		2244		CB	RR@ 40mL
22	✓				22	0805276 - D1A	33675	7.5"Hg-15psi	1.5mL	117	✓	2337		CB	
23	✓				23	0805220 - D5A	35142	2.5"Hg-15psi	40mL	3.65	5/21/08	0021		CB	
24	✓				24	0805224 - D1A	36538	1.0"Hg-15psi	2.5mL	83.6		0101		CB	Dil for NT
25	✓				25	-D3A	36553	29.5"Hg-15psi	100mL	1.00		0144		CB	
26	X				26	-D2A	36481	0.5"Hg-15psi	50mL	2050		0224		CB	500X RR@ 1mL
27	✓				27	-D2A	↓	↓	1mL	205		0352		CB	E-224-TMP
28	✓				28	-D2AA	↓	↓	↓	↓		0341		CB	E-224-TMP
29	X				29	08052266 - D2A	20775	0.5"Hg-15psi	7mL	14,400		0426		CB	500X RR@ 35mL
30	✓				30	-D2A	20775	↓	35mL	2880		0504		CB	500X
31	✓				31	-D2AA	↓	↓	↓	↓		0540		CB	500X
32	✓				32	0805211 - D1A	33386	0.6psi-15psi	15mL	12.9		0018		JD	
	✓	✓			33	↓ D2A	31771	0.0"Hg-15psi	~~2.00~~ 100mL 50split	2.00	✓	0719		JD	ET

Comments:

Laura Overmyer
Signature

5/21/08
Date

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-19may.b/1051908.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 19-MAY-2008 13:04
Operator : lo Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-19may.b/bfb60.m
Meth Date : 19-May-2008 12:54 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.520	5.564	-0.044	95	1410409			100.00- 100.00	100.00
5.520	5.564	-0.044	50	261176			15.00- 40.00	18.52
5.520	5.564	-0.044	75	596367			30.00- 60.00	42.28
5.520	5.564	-0.044	96	91372			5.00- 9.00	6.48
5.520	5.564	-0.044	173	7186			0.00- 2.00	0.79
5.520	5.564	-0.044	174	912971			50.00- 100.00	64.73
5.520	5.564	-0.044	175	65495			5.00- 9.00	7.17
5.520	5.564	-0.044	176	873397			95.00- 101.00	95.67
5.520	5.564	-0.044	177	56249			5.00- 9.00	6.44

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

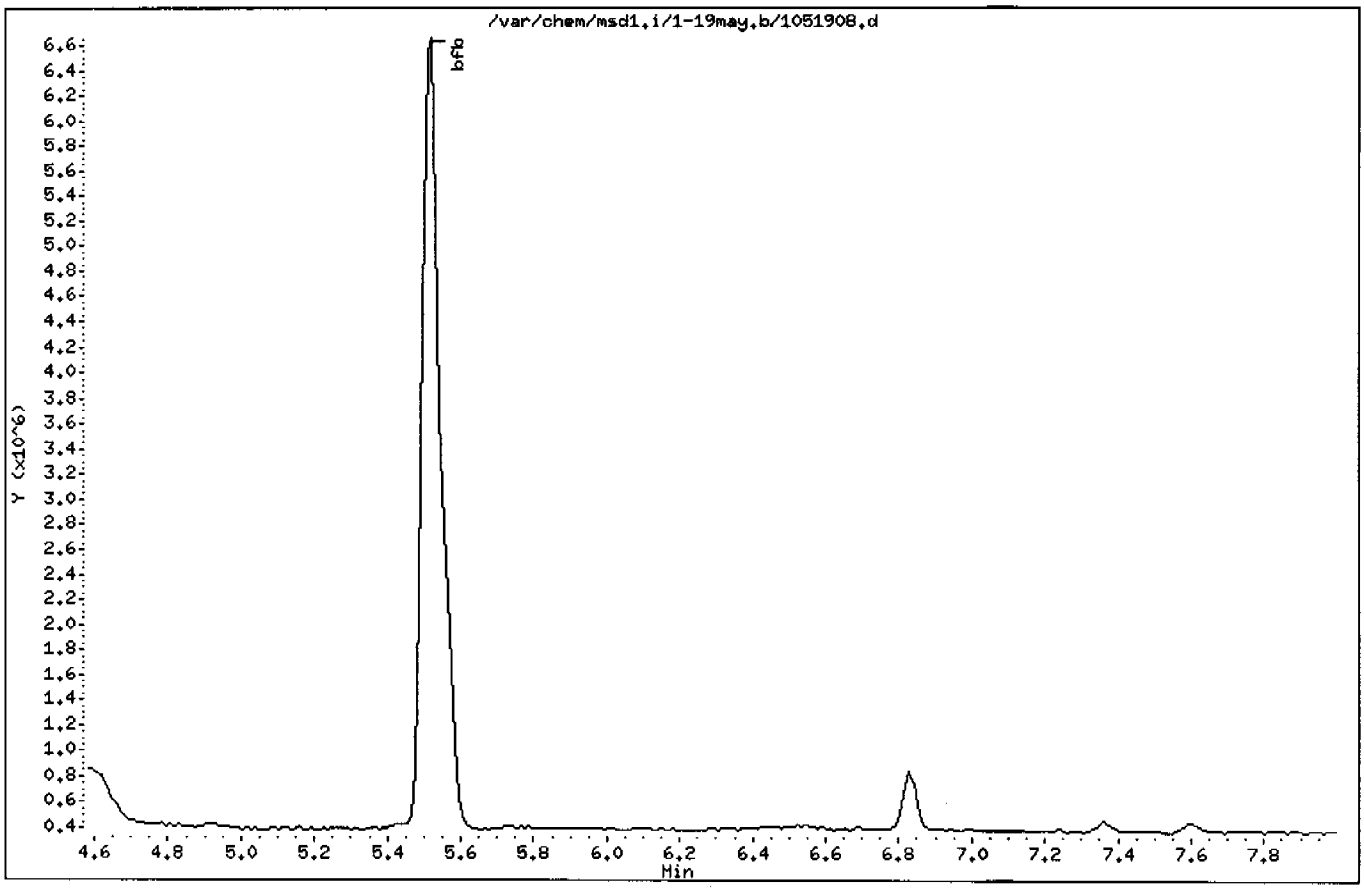
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

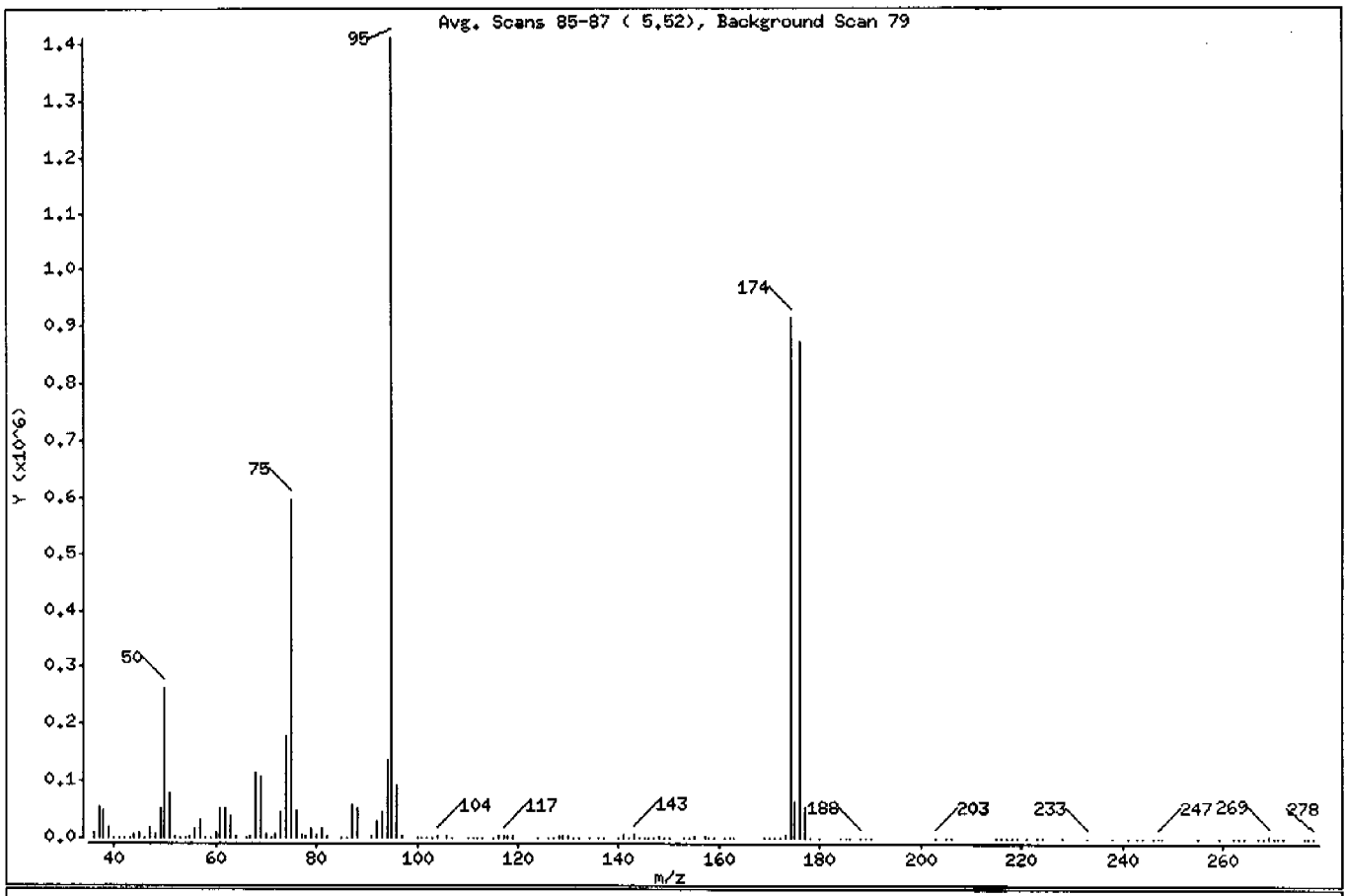
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.52
75	30.00 - 60.00% of mass 95	42.28
96	5.00 - 9.00% of mass 95	6.48
173	Less than 2.00% of mass 174	0.51 (0.79)
174	50.00 - 100.00% of mass 95	64.73
175	5.00 - 9.00% of mass 174	4.64 (7.17)
176	95.00 - 101.00% of mass 174	61.93 (95.67)
177	5.00 - 9.00% of mass 176	3.99 (6.44)

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1051908.d
Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79
Location of Maximum: 95.00
Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9545	76.00	47712	130.00	2906	186.00	63
37.00	56536	77.00	6773	131.00	823	188.00	430
38.00	49992	78.00	4818	132.00	367	189.00	34
39.00	19808	79.00	16536	134.00	668	190.00	84
40.00	991	80.00	5727	136.00	72	203.00	451
41.00	272	81.00	17048	137.00	503	205.00	199
42.00	45	82.00	3676	140.00	710	206.00	44
43.00	594	85.00	12	141.00	7303	215.00	52
44.00	5340	86.00	1466	142.00	1001	216.00	101
45.00	9201	87.00	59536	143.00	7330	217.00	273
46.00	19	88.00	52440	144.00	324	218.00	315
47.00	19752	91.00	1740	145.00	1045	219.00	68
48.00	6754	92.00	29408	146.00	1009	221.00	19
49.00	52704	93.00	47000	147.00	24	223.00	275
50.00	261120	94.00	134656	148.00	2017	224.00	182
51.00	79376	95.00	1410048	149.00	82	228.00	79
52.00	2983	96.00	91368	150.00	681	233.00	515
53.00	248	97.00	2142	153.00	122	238.00	143
54.00	172	100.00	266	154.00	369	241.00	2
55.00	3133	101.00	643	155.00	2185	243.00	136
56.00	15651	102.00	134	157.00	1759	244.00	144
57.00	31040	103.00	350	158.00	377	246.00	50
58.00	1022	104.00	3424	159.00	700	247.00	361
59.00	625	106.00	3205	161.00	789	248.00	75
60.00	9778	107.00	545	162.00	154	255.00	201
61.00	52056	110.00	698	163.00	241	259.00	136
62.00	50888	111.00	474	169.00	541	262.00	232
63.00	38928	112.00	240	170.00	380	263.00	48
64.00	3505	113.00	490	171.00	370	264.00	293
66.00	302	115.00	790	172.00	668	267.00	169
67.00	1776	116.00	2653	173.00	7186	268.00	17
68.00	112392	117.00	4066	174.00	912960	269.00	1803
69.00	106960	118.00	2769	175.00	65488	270.00	833
70.00	7062	119.00	2216	176.00	873344	271.00	293
71.00	289	124.00	278	177.00	56248	272.00	333

Data File: /var/chem/msd1.i/1-19may.b/1051908.d

Date : 19-MAY-2008 13:04

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1051908.d

Spectrum: Avg. Scans 85-87 (5.52), Background Scan 79

Location of Maximum: 95.00

Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	5359	126.00	340	178.00	272	276.00	72
73.00	44560	127.00	380	180.00	200	277.00	277
74.00	178432	128.00	3485	184.00	79	278.00	135
75.00	596352	129.00	1664	185.00	53		

Air Toxics Ltd.

Data file : /var/chem/msd1.i/1-20may.b/1052001.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 20-MAY-2008 07:53
Operator : lo Inst ID: msd1.i
Smp Info : 2.0ul #1476-275;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd1.i/1-20may.b/bfb60.m
Meth Date : 20-May-2008 07:43 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
5.531	5.564	-0.033	95	1574570			100.00- 100.00	100.00
5.531	5.564	-0.033	50	298984			15.00- 40.00	18.99
5.531	5.564	-0.033	75	665204			30.00- 60.00	42.25
5.531	5.564	-0.033	96	102822			5.00- 9.00	6.53
5.531	5.564	-0.033	173	7532			0.00- 2.00	0.77
5.531	5.564	-0.033	174	978830			50.00- 100.00	62.16
5.531	5.564	-0.033	175	67392			5.00- 9.00	6.88
5.531	5.564	-0.033	176	935173			95.00- 101.00	95.54
5.531	5.564	-0.033	177	57783			5.00- 9.00	6.18

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

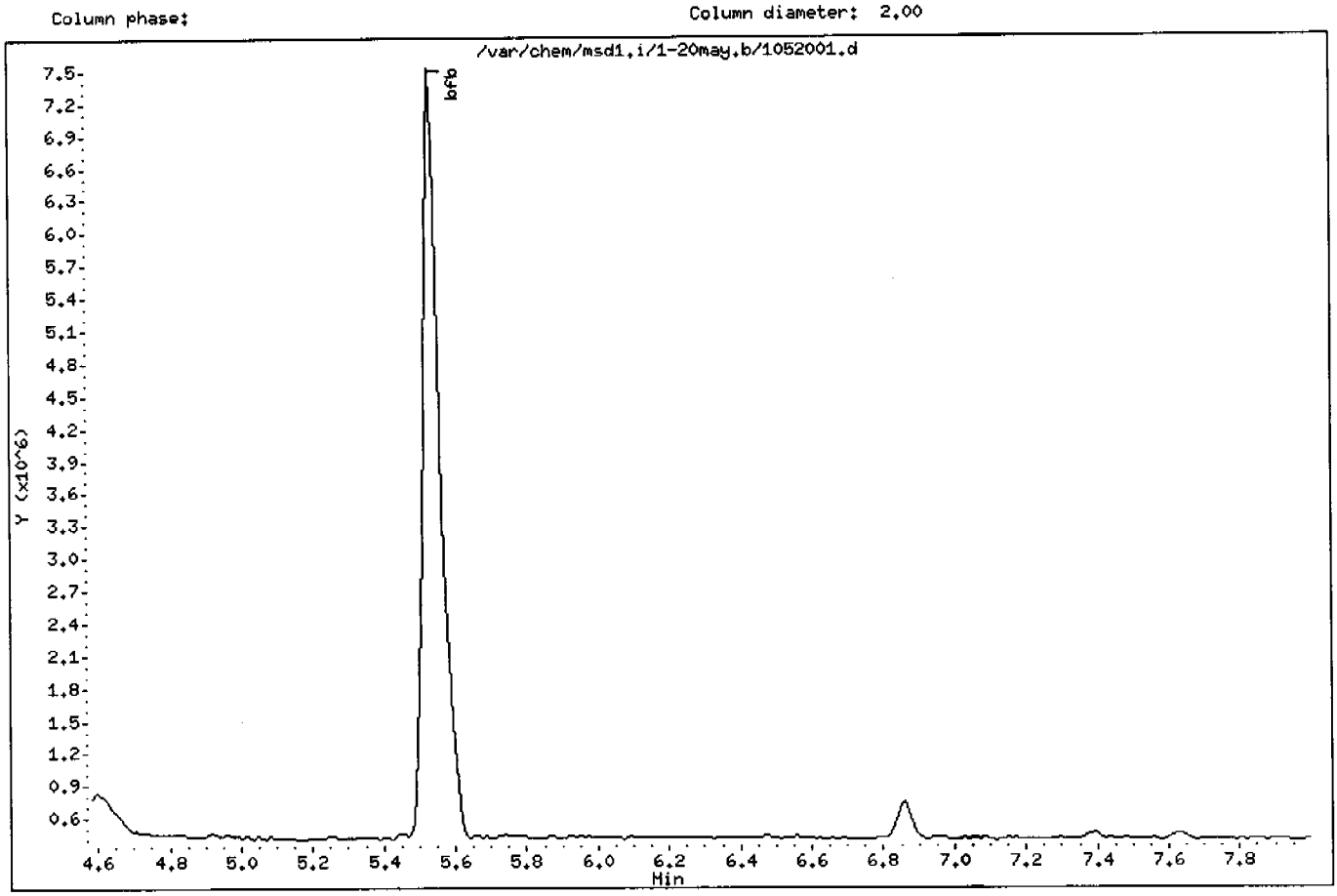
Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

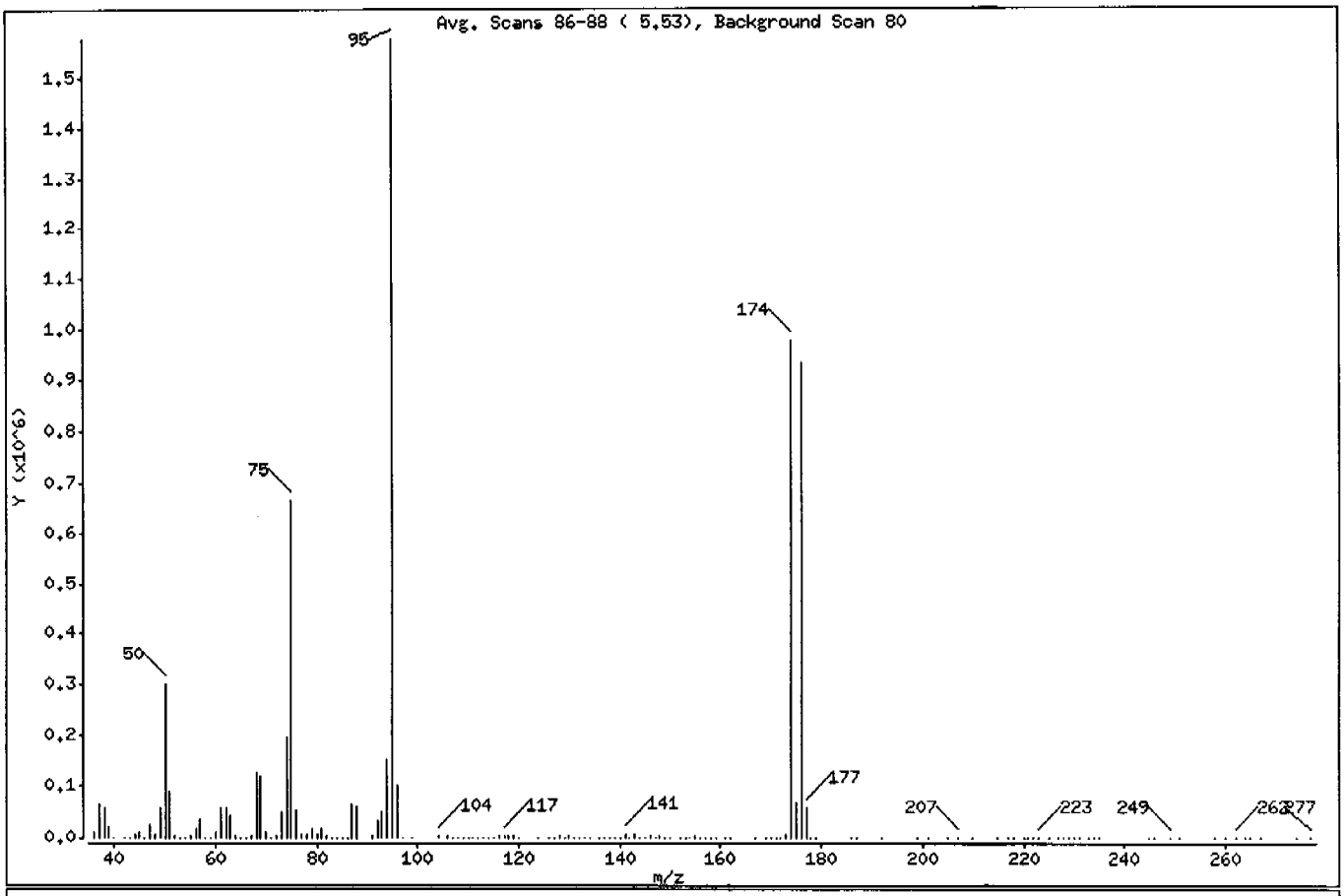
Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.99
75	30.00 - 60.00% of mass 95	42.25
96	5.00 - 9.00% of mass 95	6.53
173	Less than 2.00% of mass 174	0.48 (0.77)
174	50.00 - 100.00% of mass 95	62.16
175	5.00 - 9.00% of mass 174	4.28 (6.88)
176	95.00 - 101.00% of mass 174	59.39 (95.54)
177	5.00 - 9.00% of mass 176	3.67 (6.18)

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052001.d

Spectrum: Avg. Scans 86-88 (5.53), Background Scan 80

Location of Maximum: 95.00

Number of points: 159

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10172	77.00	7077	129.00	1326	177.00	57776
37.00	63912	78.00	5860	130.00	3357	178.00	1445
38.00	58088	79.00	18408	131.00	1206	179.00	485
39.00	22616	80.00	6403	132.00	65	186.00	68
40.00	780	81.00	19880	133.00	378	187.00	98
42.00	42	82.00	4674	134.00	157	192.00	31
43.00	35	83.00	300	136.00	158	199.00	72
44.00	5594	84.00	122	137.00	598	201.00	63
45.00	10474	85.00	46	138.00	50	205.00	185
46.00	736	86.00	1309	139.00	161	207.00	762
47.00	23784	87.00	63944	140.00	546	210.00	253
48.00	7303	88.00	61088	141.00	7913	215.00	70
49.00	57432	91.00	2282	142.00	598	217.00	198
50.00	298944	92.00	33144	143.00	7391	218.00	237
51.00	91056	93.00	50160	144.00	439	220.00	27
52.00	3461	94.00	151488	145.00	602	221.00	215
53.00	225	95.00	1574400	146.00	2054	222.00	69
54.00	129	96.00	102816	147.00	178	223.00	488
55.00	2872	97.00	1309	148.00	2276	225.00	142
56.00	17464	99.00	277	149.00	72	227.00	153
57.00	35208	104.00	3448	150.00	1209	228.00	73
58.00	1164	106.00	3346	152.00	216	229.00	145
59.00	66	107.00	510	153.00	255	230.00	56
60.00	11146	108.00	195	154.00	695	231.00	76
61.00	56816	109.00	591	155.00	2081	233.00	144
62.00	56664	110.00	18	156.00	751	234.00	6
63.00	42648	111.00	417	157.00	1738	235.00	120
64.00	3264	112.00	338	158.00	188	245.00	50
65.00	456	113.00	157	159.00	880	246.00	66
66.00	231	114.00	14	161.00	612	249.00	246
67.00	3193	115.00	1153	162.00	123	251.00	117
68.00	125216	116.00	2621	167.00	102	258.00	135
69.00	120696	117.00	5027	169.00	359	260.00	357
70.00	9363	118.00	2186	170.00	335	262.00	426
71.00	441	119.00	2904	171.00	524	264.00	17

Data File: /var/chem/msd1.i/1-20may.b/1052001.d

Date : 20-MAY-2008 07:53

Client ID: BFB

Instrument: msd1.i

Sample Info: 2.0ul #1476-275;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lo

Column phase:

Column diameter: 2.00

Data File: 1052001.d

Spectrum: Avg. Scans 86-88 (5.53), Background Scan 80

Location of Maximum: 95.00

Number of points: 159

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	5210	120.00	348	172.00	1266	265.00	277
73.00	51488	124.00	465	173.00	7532	267.00	137
74.00	195328	126.00	217	174.00	978816	274.00	68
75.00	665152	127.00	967	175.00	67392	277.00	109
76.00	55112	128.00	2522	176.00	935168		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY:	Los Alamos National Laboratories
ATTENTION:	Mr. Keith Greene
FAX #:	505-665-8855
FROM:	Sample Receiving
Workorder #:	0805220
# of pages (Including Cover):	1

5/23/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0805220

Thursday, May 08, 2008

REQUEST NUMBER: 08-1107

0289

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-1107
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 5/8/2008
TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature: Jacquelin Wells

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1 01A	MD21-08-12247	GAS	5/7/2008		
		1 02A	MD21-08-12246	GAS	5/7/2008		
		1 03A	MD21-08-12249	GAS	5/7/2008		
		1 04A	MD21-08-12250	GAS	5/7/2008		
		1 05A	MD21-08-12251	GAS	5/7/2008		

Final Page of REQUEST NUMBER 08-1107

0R05220

Thursday, May 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-1107C

REQUEST NUMBER: 08-1107

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 6/7/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-12250	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12251	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12248	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12249	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-12247	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	5/8/08	1400	Printed Name	Signature	05-09-08	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

MD

Printed Name Signature

CUSTODY SEAL INTACT
Y N NONE TEMP

Fedex

0290

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0805220

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: TB

Date Promised: 05/23/08
Date Completed: 5/22/08
Date Received: 5/9/08
PO#: 47247-001-07
Project#: 08-1107

Total $: $ 1,500.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-12247	Modified TO-15	5/7/2008	6.5 "Hg	$205.00
02A	MD21-08-12248	Modified TO-15	5/7/2008	7.0 "Hg	$205.00
03A	MD21-08-12249	Modified TO-15	5/7/2008	6.5 "Hg	$205.00
04A	MD21-08-12250	Modified TO-15	5/7/2008	7.0 "Hg	$205.00
05A	MD21-08-12251	Modified TO-15	5/7/2008	2.5 "Hg	$205.00
06A	Lab Blank	Modified TO-15	NA	NA	$0.00
07A	CCV	Modified TO-15	NA	NA	$0.00
08A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges	6 Liter Summa Canister (1) @ $60.00 each., Shipment 58693	$60.00
	6 Liter Summa Canister (4) @ $60.00 each., Shipment 58694	$240.00
	CVP (5) @ $20.00 each.	$100.00
	Client Specific EDD (5) @ $5.00 each.	$25.00
	eCVP (5) @ $10.00 each.	$50.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} - [(\text{Initial Pressure ("Hg)})\ (14.7\ \text{psi} / 30\ \text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0805220

A	R	T	M	Q	
☑	☐	☐	☐	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☑	☐	☐	☐	The final report has the correct reporting list, special units, and header info.
	☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	NA	☐	☐	☐	Corrective Action issued - # _____
☑	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — *CIRCLE (YES / NO)*

☑	☐	☐	☐	☐ Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	☐ Hold time is met for all samples
	☐	☐	☐	☐ Appropriate data qualifier flags are applied
	☐	☐	☐	☐ Manual integrations for samples and QC are properly documented
☑	☐	☐		☐ Samples analyzed within the project or method specific clock
	☐	☐		Retention times have been verified
☑	☐	☐	☑	☐ Appropriate ICAL(s) included
	☐	☐	☐	☐ At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☑		☐ Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑	☑		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐		Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
	NA	☐		TICs resemble reference spectra
	☐	☐		TICs between duplicate samples are consistent
NA	☐	☐	☑	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☑		☑	Special units for all samples in the final report are correctly calculated
	☑	☐	☑	Manually entered results checked (i.e. special CCV compounds)
	NA	☐	☑	TPH/NMOC (verify calculations and correct reference compound used)
	☑			Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☑			Samples pressurized w/ appropriate gas (N2 or He) ☐ Tedlar Bag only
☑	☑			Final pressure consistent with canister size (6L vs. 1L)
☑	☑			Verify receipt pressures against logbook and Target
☑	☑			Verify canister ID #'s
	NA	☑		Extra printed copies are provided per client profile
	☑	☐		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☑	☐	☑	☐ Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: 2nd CCV, Q flag 1,2,4-TCB in LCS
CV from mult files

M/Q:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
5/21/08	R: 5/22/08	5/22/08	
	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 08/29/05

Wednesday, February 20, 2008

REQUEST NUMBER: 08-646

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-646
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/20/2008
TURNAROUND/REPORT DUE: 3/12/2008
TURNAROUND REQ'D: 21 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-10517	GAS	2/19/2008		
		1	MD21-08-10525	GAS	2/19/2008		

Final Page of REQUEST NUMBER 08-646

Wednesday, February 20, 2008

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-646C

REQUEST NUMBER: 08-646

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND REPORT DUE: 3/12/2008

TURNAROUND REQ'D: 21

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10517	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10525	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/20/08	1400	Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10525

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		15:30	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	NOST	
LOCATION ID:	21-603059	NA	FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:

Field blank of ultra pure nitrogen run through sample train

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Rea

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 2/19/08 15:56	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/19/08 15:56
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10517

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2008	MEDIA:	NA	NA
TIME COLLECTED (HH:MM)		1535	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	NOST	
LOCATION ID:	21-25264	NA	FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of

SAMPLE COMMENTS:
Field blank of nitrogen run through sample train.

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Rick Stewart **REVIEWED BY (PRINT)** Kevin Rent

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Rick Stewart	2/19/08	(Printed Name)	2/19/08
(Signature)	15:56	(Signature)	15:56
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos

Section I.

REQUEST NUMBER: 08-646 VALIDATION DATE: 3/17/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): VOC (TO-15)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The ICAL curves for methanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. The ICAL %RSDs were >30% for methanol, methyl tert-butyl ether, n-butanol, and 4-methyl-2-pentanone. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
3. The CCV %Ds were >30% for methyl tert-butyl ether and methanol. The associated sample results were NDs and, thus, were qualified UJ,V7c.
4. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.
5. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Data Validation Cover Sheet

Los Alamos NATIONAL LABORATORY

Reviewed By: KAS **Level:** I **Date:** 3/18/08

VALIDATOR'S SIGNATURE: Eric T. Mik DATE: 3/17/08

Form 5114-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A	(Check One)	Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☐	☒	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☐	☒	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10517

Lab ID#: 0802422-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t030307**	**Date of Collection: 2/19/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 3/3/08 03:18 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.88	Not Detected	4.3	Not Detected
Freon 114		0.88	Not Detected	6.1	Not Detected
Chloromethane		3.5	Not Detected	7.2	Not Detected
Vinyl Chloride		0.88	Not Detected	2.2	Not Detected
1,3-Butadiene		0.88	Not Detected	1.9	Not Detected
Bromomethane		0.88	Not Detected	3.4	Not Detected
Chloroethane		0.88	Not Detected	2.3	Not Detected
Freon 11		0.88	Not Detected	4.9	Not Detected
Ethanol		3.5	Not Detected	6.6	Not Detected
Freon 113		0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Acetone		3.5	Not Detected	8.3	Not Detected
2-Propanol		3.5	Not Detected	8.6	Not Detected
Carbon Disulfide		0.88	Not Detected	2.7	Not Detected
Methylene Chloride		0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	UJ,V7a	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Hexane		0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane		0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.88	Not Detected	2.6	Not Detected
Chloroform		0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane		0.88	Not Detected	4.8	Not Detected
Cyclohexane		0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride		0.88	Not Detected	5.5	Not Detected
Benzene		0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane		0.88	Not Detected	3.5	Not Detected
Heptane		0.88	Not Detected	3.6	Not Detected
Trichloroethene		0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane		0.88	Not Detected	4.0	Not Detected
1,4-Dioxane		3.5	Not Detected	13	Not Detected
Bromodichloromethane		0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene		0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.88	Not Detected	3.6	Not Detected
Toluene		0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene		0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane		0.88	Not Detected	4.8	Not Detected
Tetrachloroethene		0.88	Not Detected	5.9	Not Detected

0007 ETM 3/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10517

Lab ID#: 0802422-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t030307**	**Date of Collection:**	**2/19/08**
Dil. Factor:	**1.75**	**Date of Analysis:**	**3/3/08 03:18 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.5	Not Detected	14	Not Detected
Dibromochloromethane		0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)		0.88	Not Detected	6.7	Not Detected
Chlorobenzene		0.88	Not Detected	4.0	Not Detected
Ethyl Benzene		0.88	Not Detected	3.8	Not Detected
m,p-Xylene		0.88	Not Detected	3.8	Not Detected
o-Xylene		0.88	Not Detected	3.8	Not Detected
Styrene		0.88	Not Detected	3.7	Not Detected
Bromoform		0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane		0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene		0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene		0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene		3.5	Not Detected	26	Not Detected
Hexachlorobutadiene		3.5	Not Detected	37	Not Detected
Chlorodifluoromethane		3.5	Not Detected	12	Not Detected
Methanol	UJ,V7a	88	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.5	Not Detected	11	Not Detected
Propylene		3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	104	70-130

0008 ETM 3/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10525

Lab ID#: 0802422-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t030308	**Date of Collection:**	2/19/08
Dil. Factor:	1.75	**Date of Analysis:**	3/3/08 04:26 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.88	Not Detected	4.3	Not Detected
Freon 114		0.88	Not Detected	6.1	Not Detected
Chloromethane		3.5	Not Detected	7.2	Not Detected
Vinyl Chloride		0.88	Not Detected	2.2	Not Detected
1,3-Butadiene		0.88	Not Detected	1.9	Not Detected
Bromomethane		0.88	Not Detected	3.4	Not Detected
Chloroethane		0.88	Not Detected	2.3	Not Detected
Freon 11		0.88	Not Detected	4.9	Not Detected
Ethanol		3.5	Not Detected	6.6	Not Detected
Freon 113		0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Acetone		3.5	Not Detected	8.3	Not Detected
2-Propanol		3.5	Not Detected	8.6	Not Detected
Carbon Disulfide		0.88	Not Detected	2.7	Not Detected
Methylene Chloride		0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	UJ,V7a	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Hexane		0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane		0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.88	Not Detected	2.6	Not Detected
Chloroform		0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane		0.88	Not Detected	4.8	Not Detected
Cyclohexane		0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride		0.88	Not Detected	5.5	Not Detected
Benzene		0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane		0.88	Not Detected	3.5	Not Detected
Heptane		0.88	Not Detected	3.6	Not Detected
Trichloroethene		0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane		0.88	Not Detected	4.0	Not Detected
1,4-Dioxane		3.5	Not Detected	13	Not Detected
Bromodichloromethane		0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene		0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.88	Not Detected	3.6	Not Detected
Toluene		0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene		0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane		0.88	Not Detected	4.8	Not Detected
Tetrachloroethene		0.88	Not Detected	5.9	Not Detected

0015

ETM 3/17/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10525

Lab ID#: 0802422-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t030308**	**Date of Collection: 2/19/08**	
Dil. Factor:	**1.75**	**Date of Analysis: 3/3/08 04:26 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.5	Not Detected	14	Not Detected
Dibromochloromethane		0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)		0.88	Not Detected	6.7	Not Detected
Chlorobenzene		0.88	Not Detected	4.0	Not Detected
Ethyl Benzene		0.88	Not Detected	3.8	Not Detected
m,p-Xylene		0.88	Not Detected	3.8	Not Detected
o-Xylene		0.88	Not Detected	3.8	Not Detected
Styrene		0.88	Not Detected	3.7	Not Detected
Bromoform		0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane		0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene		0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene		0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene		3.5	Not Detected	26	Not Detected
Hexachlorobutadiene		3.5	Not Detected	37	Not Detected
Chlorodifluoromethane		3.5	Not Detected	12	Not Detected
Methanol	UJ,V7a	88	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.5	Not Detected	11	Not Detected
Propylene		3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

0016 ETM 3/17/08

0802422

Page 1 of 1

Wednesday, February 20, 2008

REQUEST NUMBER: 08-646

0238

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-646
Per Agreement Number:TIPS#24256
Project Cost Code: MR5R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/20/2008
TURNAROUND/REPORT DUE: 3/12/2008
TURNAROUND REQ'D: 21 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10517	GAS	2/19/2008		
		~~02A~~	1	MD21-08-10526	GAS	2/19/2008		

Final Page of REQUEST NUMBER 08-646

Wednesday, February 20, 2008

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

LAB REQUEST COMMENTS:

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-646C

REQUEST NUMBER: 08-646

TURNAROUND/REPORT DUE: 3/12/2008

TURNAROUND REQ'D: 21

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10517	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10526	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/20/08	1700	Printed Name	Signature		
				Monica Gregson	ATL	2/21/08	845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Fed Ex 7209 7843 7457

CUSTODY SEAL INTACT? Y N (NONE) TEMP N/A

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Request #08-646

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0802422

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b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
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Comments:

Completed by:

Kara McKiernan | Kara McKiernan / Document Control | 3/6/08

(Signature) | (Print Name & Title) | (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0802422

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47207-001-07
FAX:	505-665-8855	**PROJECT #**	08-016
DATE RECEIVED:	02/21/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	03/05/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-10517	Modified TO-15	7.0 "Hg	5 psi
02A	MD21-08-10525	Modified TO-15	7.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda J. Fruman

Laboratory Director

DATE: 03/05/08

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0802422

LUMEN DATA VALIDATED

Two 6 Liter Summa Canister samples were received on February 21, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

All Quality Control Limit failures and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

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Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Extract Sample Condition
MD21-08-10517	0802422-01A	2/19/2008	2/21/2008	NA	13	3/ 3/2008	NA	Good
MD21-08-10525	0802422-02A	2/19/2008	2/21/2008	NA	13	3/ 3/2008	NA	Good
Lab Blank	0802422-03A	NA	NA	NA	NA	3/ 3/2008	NA	Good
CCV	0802422-04A	NA	NA	NA	NA	3/ 3/2008	NA	Good
LCS	0802422-05A	NA	NA	NA	NA	3/ 3/2008	NA	Good

Sample Results and Raw Data

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10517

Lab ID#: 0802422-01A

No Detections Were Found.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10517

Lab ID#: 0802422-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted] Date of Collection: 2/19/08

[redacted] Date of Analysis: 3/3/08 03:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	Not Detected	8.3	Not Detected
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10517

Lab ID#: 0802422-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	080307	Date of Collection: 2/13/08
Dil. Factor:	2.5	Date of Analysis: 3/3/08 03:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	104	70-130

Data File: /chem/msdt.i/03Mar2008.b/t030307.d
Report Date: 05-Mar-2008 09:17

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AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/03Mar2008.b/t030307.d
Lab Smp Id: 0802422-01A
Inj Date : 03-MAR-2008 15:18
Operator : sjr Inst ID: msdt.i
Smp Info : 200mL #14871
Misc Info : 7.0"Hg -> 5psi
Comment :
Method : /chem/msdt.i/03Mar2008.b/t14q206c.m
Meth Date : 03-Mar-2008 14:31 sruth Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24 Cal File: t022806.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	272135	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	207014			28.50- 128.50	76.07
13.865	13.865 (1.000)	49	321520			133.01- 233.01	118.15
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1033694	25.0000		80.00- 120.00	100.00
15.607	15.607 (1.000)	88	168592			0.00- 66.79	16.31
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	987642	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	583334			7.65- 107.65	59.06
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	434838	24.8326	24.833	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	216312			3.57- 103.57	49.75
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1032269	25.9247	25.925	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	119859			0.00- 61.29	11.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	709011			18.71- 118.71	68.68
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	661310	25.8866	25.887	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	825038			74.10- 174.10	124.76
22.796	22.796 (1.096)	176	630730			45.88- 145.88	95.38

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t030307.d
Lab Smp Id: 0802422-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 7.0"Hg -> 5psi

Calibration Date: 03-MAR-2008
Calibration Time: 12:22

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	278947	167368	390526	272135	-2.44
97 1,4-Difluorobenze	1137525	682515	1592535	1033694	-9.13
126 Chlorobenzene-d5	1055616	633370	1477862	987642	-6.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

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RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802422-01A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 7.0"Hg -> 5psi

Client SDG: 03Mar2008
Fraction: VOA

Operator: sjr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.833	99.33	70-130
$ 113 Toluene-d8	25.000	25.925	103.70	70-130
$ 137 Bromofluorobenzene	25.000	25.887	103.55	70-130

Data File: /chem/msdt.i/03Mar2008.b/t030307.d
Date : 03-MAR-2008 15:18
Client ID:
Sample Info: 200mL #14871

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

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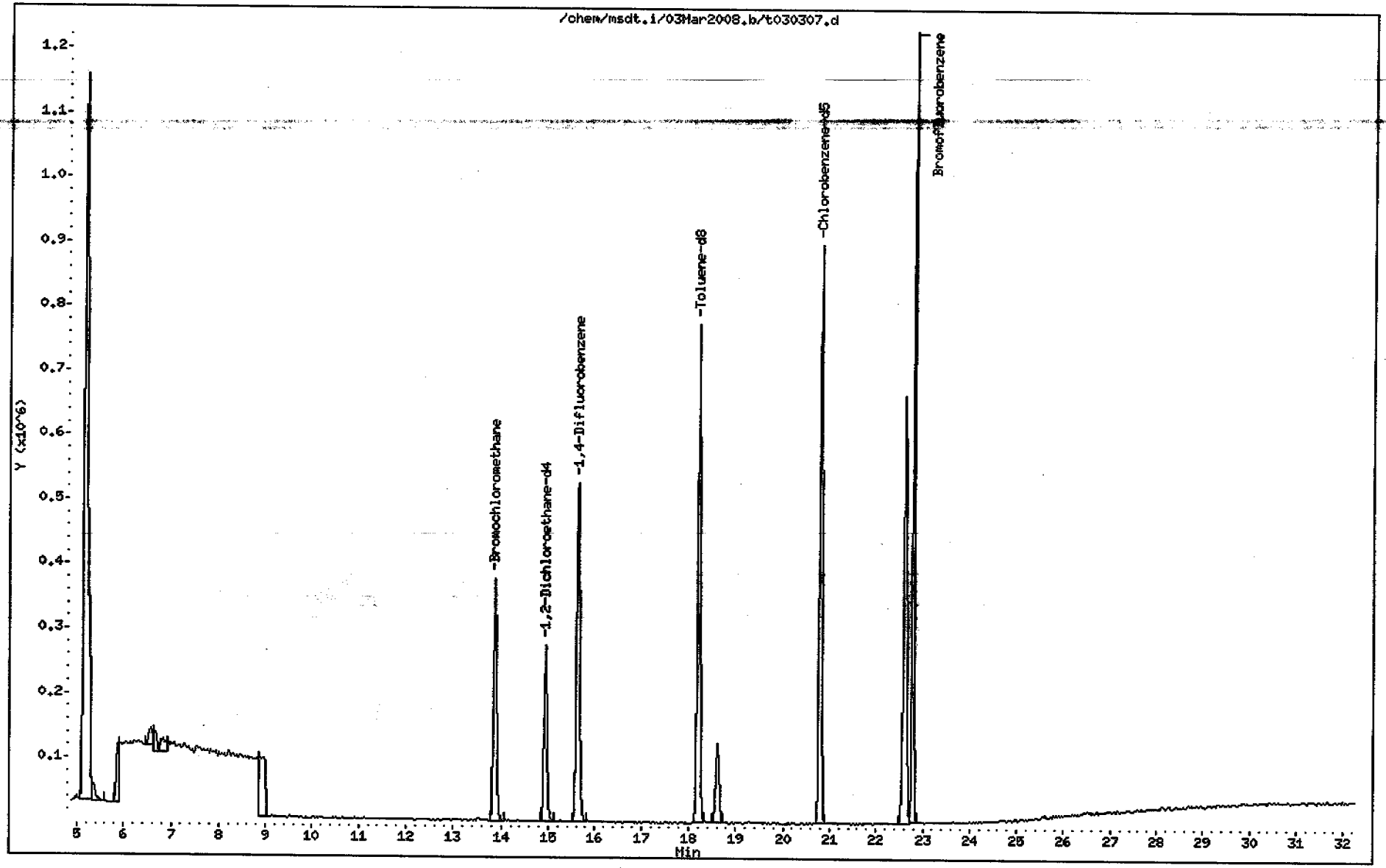

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10525

Lab ID#: 0802422-02A

No Detections Were Found.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10525

Lab ID#: 0802422-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	Not Detected	8.3	Not Detected
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10525

Lab ID#: 0802422-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/03Mar2008.b/t030308.d
Lab Smp Id: 0802422-02A
Inj Date : 03-MAR-2008 16:26
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #9940
Misc Info : 7.0"Hg -> 5psi
Comment :
Method : /chem/msdt.i/03Mar2008.b/t14q206c.m
Meth Date : 03-Mar-2008 14:31 sruth Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24 Cal File: t022806.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	268232	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	204413			28.50- 128.50	76.21
13.865	13.865 (1.000)	49	322466			133.01- 233.01	120.22
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1021848	25.0000		80.00- 120.00	100.00
15.607	15.607 (1.000)	88	161835			0.00- 66.79	15.84
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	966160	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	570203			7.65- 107.65	59.02
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	437339	25.3389	25.339	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	210811			3.57- 103.57	48.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1029114	26.1451	26.145	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	115932			0.00- 61.29	11.27

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	706065			18.71- 118.71	68.61
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	652184	26.0970	26.097	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	821953			74.10- 174.10	126.03
22.796	22.796	(1.096)	176	621570			45.88- 145.88	95.31

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t030308.d
Lab Smp Id: 0802422-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 7.0"Hg -> 5psi

Calibration Date: 03-MAR-2008
Calibration Time: 12:22

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	278947	167368	390526	268232	-3.84
97 1,4-Difluorobenze	1137525	682515	1592535	1021848	-10.17
126 Chlorobenzene-d5	1055616	633370	1477862	966160	-8.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802422-02A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 7.0"Hg -> 5psi

Client SDG: 03Mar2008
Fraction: VOA

Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.339	101.36	70-130
$ 113 Toluene-d8	25.000	26.145	104.58	70-130
$ 137 Bromofluorobenzene	25.000	26.097	104.39	70-130

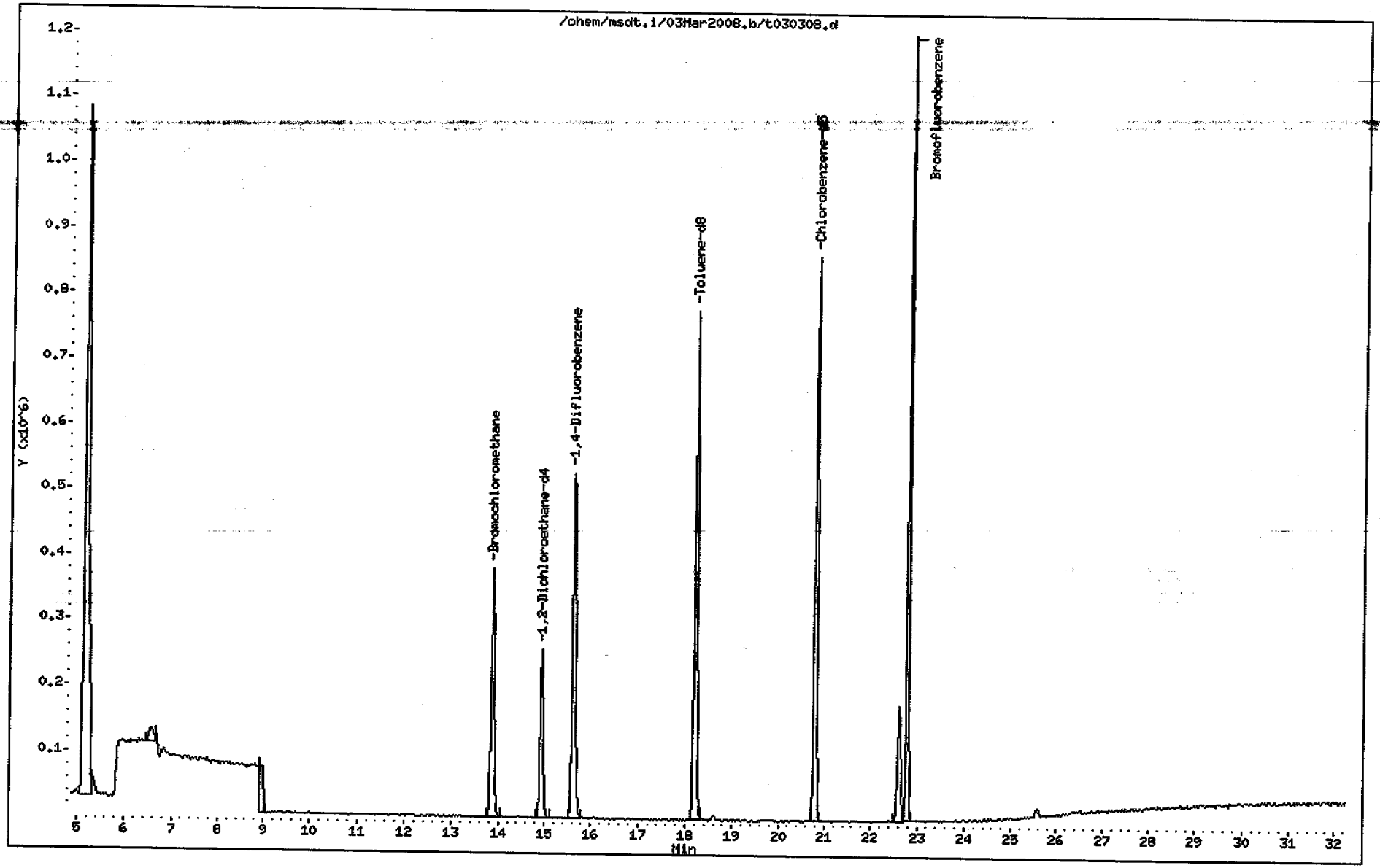
Data File: /chem/msdt.i/03Mar2008.b/t030308.d
Date : 03-MAR-2008 16:26
Client ID:
Sample Info: 200mL #9940

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0021



QC Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802422-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802422-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/03Mar2008.b/t030306.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 03-MAR-2008 14:10
Operator : sjr Inst ID: msdt.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msdt.i/03Mar2008.b/t14q206c.m
Meth Date : 03-Mar-2008 14:31 sruth Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24 Cal File: t022806.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSRpb.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====	
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	262420	25.0000			80.00- 120.00	100.00
13.865	13.865 (1.000)	128	210067				28.50- 128.50	80.05
13.865	13.865 (1.000)	49	326020				133.01- 233.01	124.24
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1049247	25.0000			80.00- 120.00	100.00
15.635	15.607 (1.000)	88	168099				0.00- 66.79	16.02
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	997892	25.0000			80.00- 120.00	100.00
20.805	20.805 (1.000)	82	577980				7.65- 107.65	57.92
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	428638	25.3848	25.385		80.00- 120.00	100.00
14.943	14.943 (1.078)	67	210710				3.57- 103.57	49.16
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1066399	26.3849	26.385		80.00- 120.00	100.00
18.206	18.206 (1.164)	70	122974				0.00- 61.29	11.53

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	711404			18.71- 118.71	66.71
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	632367	24.4994	24.499	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	810212			74.10- 174.10	128.12
22.796	22.796	(1.096)	176	623769			45.88- 145.88	98.64

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t030306.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: Humid

Calibration Date: 03-MAR-2008
Calibration Time: 12:22
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	278947	167368	390526	262420	-5.92
97 1,4-Difluorobenze	1137525	682515	1592535	1049247	-7.76
126 Chlorobenzene-d5	1055616	633370	1477862	997892	-5.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/03Mar2008.b/t030306.d
Report Date: 03-Mar-2008 14:31

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSRpb.sub
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: Humid

Client SDG: 03Mar2008
Fraction: VOA
Client Smp ID: Lab Blank
Operator: sjr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.385	101.54	70-130
$ 113 Toluene-d8	25.000	26.385	105.54	70-130
$ 137 Bromofluorobenzene	25.000	24.499	98.00	70-130

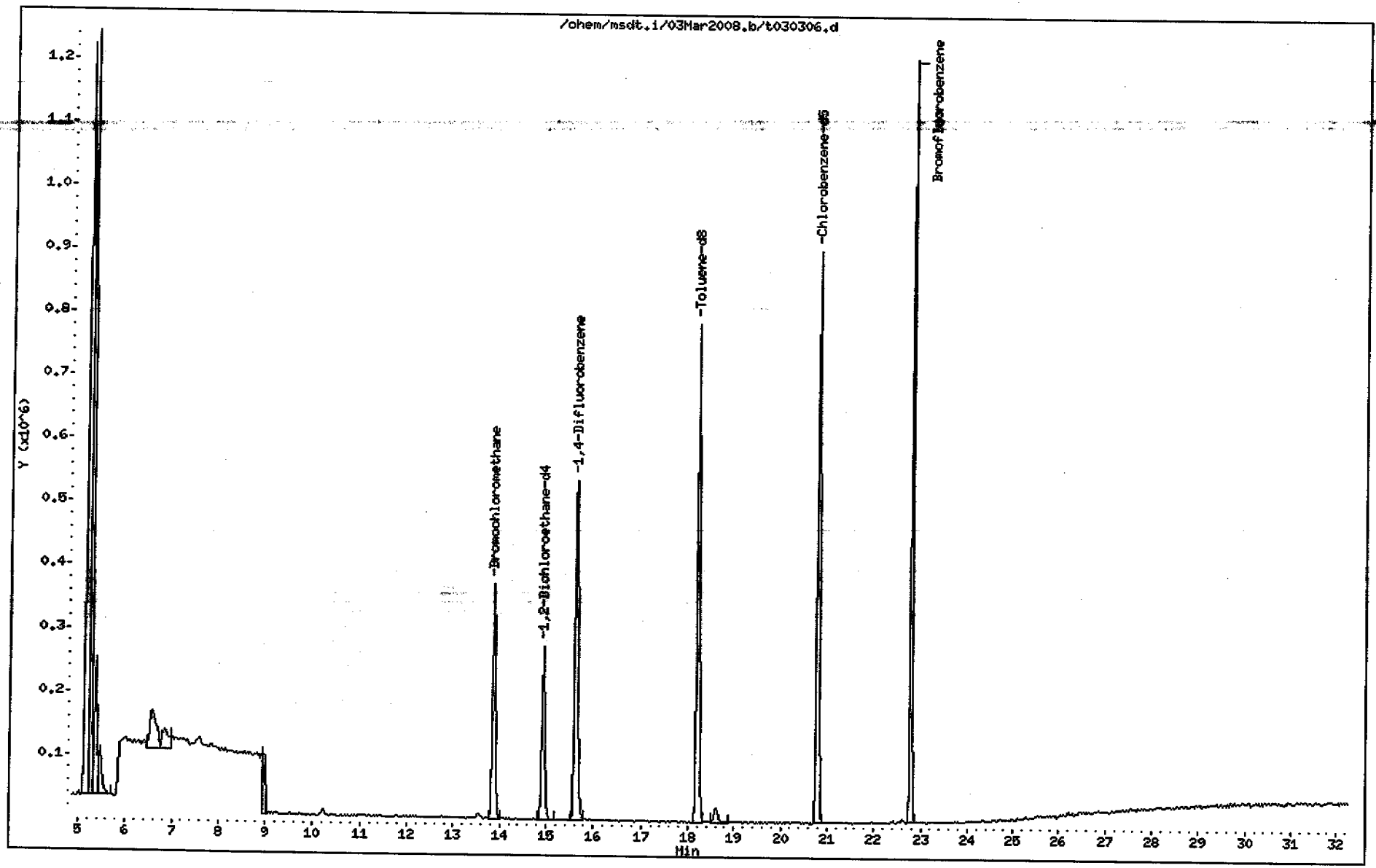
Data File: /chem/msdt.i/03Mar2008.b/t030306.d
Date : 03-MAR-2008 14:10
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0029



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0802422

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								TOTAL OUT
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	
01	MD21-08-10517	99		104		104				0
02	MD21-08-10525	101		104		104				0
03	Lab Blank	102		106		98				0
04	CCV	111		107		103				0
05	LCS	111		104		104				0
06										0
07										0
08										0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 902422
Lab File ID: t030304.d
Date Analyzed: 03/03/2008
Instrument ID: msdt.i
Time Analyzed: 12:22 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1055616		20.81		1137525		15.63		278947		13.87	
	UPPER LIMIT	1477862		21.14		1592535		15.96		390526		14.20	
	LOWER LIMIT	633370		20.48		682515		15.30		167368		13.54	
	CLIENT SAMPLE NO												
01	MD21-08-10517	987642		20.81		1033694		15.63		272135		13.87	
02	MD21-08-10525	966160		20.81		1021848		15.63		268232		13.87	
03	Lab Blank	997892		20.81		1049247		15.63		262420		13.87	
04	CCV	1055616		20.81		1137525		15.63		278947		13.87	
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdt.i/06Feb2008.b/t020607.d
Level 2: /chem/msdt.i/06Feb2008.b/t020615.d
Level 3: /chem/msdt.i/28Feb2008.b/t022804.d
Level 4: /chem/msdt.i/21Feb2008.b/t022103.d
Level 5: /chem/msdt.i/28Feb2008.b/t022805.d
Level 6: /chem/msdt.i/21Feb2008.b/t022109.d
Level 7: /chem/msdt.i/28Feb2008.b/t022806.d

Compound	0.20000 Level 1 / 200.000 Level 7	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
1 Dimethyl Ether	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 Propane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 143a	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon142b	+++++ / 3.77448	+++++	3.08434	3.14708	3.61347	3.56308	3.43649	8.842

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 13	+++++	+++++	3.23618	3.29433	3.34933	3.57982		
	3.77364						3.44586	6.498
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
13 Freon 134a	+++++	+++++	1.43136	1.41603	1.53392	1.58057		
	1.72491						1.53736	8.164
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Propylene	+++++	+++++	0.84673	0.85060	0.79894	0.79144		
	0.80075						0.81770	3.488
15 Freon 152a	+++++	+++++	0.83463	0.73405	0.81286	0.82968		
	0.92807						0.82784	8.351
12 Dichlorodifluoromethane/Fr12	+++++	4.16310	4.59106	5.40232	5.14446	5.05621		
	4.93291						4.88168	9.041
17 Freon 22	+++++	+++++	0.34699	0.36399	0.38557	0.40086		
	0.44934						0.39055	10.202

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
16 Freon 114	+++++	2.99040	2.92556	3.49436	3.32698	3.32662		
	3.29796						3.22698	6.836
18 Chloromethane	+++++	+++++	0.98827	1.10944	1.03446	1.10461		
	1.09200						1.06576	4.941
21 Isobutane	+++++	+++++	2.23567	+++++	2.09534	+++++		
	1.67818						2.00306	14.477
20 Vinyl Chloride	+++++	1.42862	1.28255	1.59625	1.47907	1.49981		
	1.49340						1.46323	7.103
19 Butane	+++++	+++++	0.25023	0.30439	0.28440	0.28549		
	0.27474						0.27985	7.053
22 1,3-Butadiene	+++++	0.97057	1.02558	1.21355	1.14007	1.13828		
	1.11885						1.10115	7.979
26 Methanol	+++++	+++++	+++++	0.32872	0.14314	0.16584		
	0.19742						0.20868	39.806
25 Bromomethane	+++++	1.36425	1.28940	1.56898	1.45095	1.49081		
	1.52877						1.44878	7.247
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
27 Chloroethane	+++++	0.65321	0.67403	0.83510	0.80667	0.80944		
	0.80030						0.76312	10.255
29 Isopentane	+++++	+++++	1.41966	1.72435	1.68834	1.64271		
	1.60636						1.61629	7.342
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.46115	2.48121	2.61085	2.39743		
	2.32898						2.45592	4.280
35 1-Pentene	+++++	+++++	1.78303	+++++	1.38783	+++++		
	1.12705						1.43263	23.054
31 Trichlorofluoromethane/Fr11	+++++	4.83077	5.16410	6.19720	5.82682	5.63959		
	5.49991						5.52640	8.749
37 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
38 Ethanol	+++++	+++++	0.30720	0.46457	0.45284	0.43897	0.45254	0.42283	15.461
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 Freon123a	+++++	+++++	1.67093	1.80792	2.07320	1.91202	2.00931	1.89468	8.465
41 Freon123	+++++	+++++	0.20549	0.20922	0.23514	0.23486	0.22855	0.22255	6.365
44 Acrolein	+++++	+++++	0.64319	+++++	0.40537	+++++	0.32137	0.45665	36.555
42 Freon 113	+++++	2.32343	2.43842	2.80201	2.61026	2.58402	2.51013	2.54471	6.421
43 1,1-Dichloroethene	+++++	1.89819	1.96458	2.53705	2.44002	2.45483	2.44852	2.29053	12.275
45 Acetone	+++++	+++++	0.64513	0.75269	0.75542	0.70777	0.68836	0.70987	6.519
46 2-Propanol	+++++	+++++	1.84353	2.56755	2.62153	2.59185	2.53924	2.43274	13.597
48 Ethyl acrylate	+++++	+++++	0.05509	+++++	0.06352	+++++	0.05701	0.05854	7.549

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Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
47 Carbon Disulfide	+++++	3.75552	3.89953	4.70232	4.46118	4.57127	4.60543	4.33254	9.262
49 Iodomethane	+++++	+++++	4.21277	+++++	3.30963	+++++	2.95714	3.49318	18.540
50 Methyl Methacrylate	+++++	+++++	0.45580	+++++	0.43139	+++++	0.37995	0.42238	9.166
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 3-Chloropropene	+++++	+++++	0.57241	0.83863	0.77832	0.77986	0.76166	0.74606	13.589
52 Acetonitrile	+++++	+++++	0.71886	+++++	0.52834	+++++	0.41464	0.55395	27.750
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Cyclopentane	+++++	+++++	1.19413	+++++	0.92648	+++++	0.76485	0.96182	22.542
54 Methylene Chloride	+++++	1.42542	1.38589	1.54346	1.44317	1.45052	1.44235	1.44840	3.593

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD	
57 tert-Butyl-Alcohol	+++++	+++++	1.82841	3.04910	3.01051	2.74877	2.61830	2.65102	18.624	
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 MTBE	+++++	1.74667	2.48598	5.35404	5.24034	5.08244	5.03910	4.15810	38.544	<-
61 trans-1,2-Dichloroethene	+++++	1.37259	1.40223	1.98489	1.85179	1.82018	1.78174	1.70224	14.889	
62 Acrylonitrile	+++++	+++++	1.37347	+++++	0.97775	+++++	0.77507	1.04210	29.205	
66 1-Hexene	+++++	+++++	1.02676	+++++	0.97511	+++++	0.78446	0.92878	13.741	
63 2-Pentanone	+++++	+++++	0.83769	+++++	0.79579	+++++	0.69487	0.77612	9.459	
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 Hexane	+++++	1.32672	1.77918	2.62091	2.58448	2.58635	2.58008	2.24629	24.751	

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Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
68 Isopropyl ether	+++++	+++++	3.46151	3.51777	4.38551	4.38287		
	4.73654						4.09678	13.986
69 Vinyl Acetate	+++++	+++++	0.32869	0.45891	0.45656	0.47908		
	0.47874						0.44040	14.383
70 1,1-Dichloroethane	+++++	2.38432	2.79344	3.61652	3.47281	3.35304		
	3.23668						3.14283	14.814
71 1-Propanol	+++++	+++++	0.15996	0.23615	0.18897	0.23804		
	0.25309						0.21526	18.202
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.22964	3.53835	4.86959	4.90857		
	5.27473						4.36418	20.970
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
77 Ethyl Acetate	+++++	+++++	0.43635	0.37272	0.45984	0.44419		
	0.49610						0.44196	10.172

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Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
78 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.54840	0.64439	0.87500	0.88005	0.92166	0.92719	0.79961	20.225
76 cis-1,2-Dichloroethene	+++++	1.50980	1.82949	2.43792	2.35871	2.32430	2.22781	2.11467	17.285
79 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 Tetrahydrofuran	+++++	0.86924	1.09182	1.54446	1.53666	1.53780	1.51283	1.34868	21.793
82 Chloroform	2.87970	2.73754	3.43045	4.29177	4.13727	4.05588	3.88461	3.63101	17.201
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.56837	3.64494	4.67327	4.45606	4.41788	4.33648	4.01616	19.679
85 Cyclohexane	+++++	1.36064	1.71484	2.48744	2.40989	2.47478	2.45912	2.15044	22.709
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
88 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Carbon Tetrachloride	+++++	2.69834	3.44710	4.47510	4.26367	4.18227		
	4.08084						3.85789	17.248
99 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
89 2,2,4-Trimethylpentane	+++++	3.17139	4.19445	6.10478	5.79296	5.98557		
	6.21058						5.24329	24.009
91 Benzene	1.30575	0.88191	1.17697	1.40059	1.35772	1.31312		
	1.31185						1.24979	14.092
92 tert-amyl-Methyl Ether	+++++	+++++	3.16063	3.41817	4.52447	4.57501		
	4.96193						4.12820	19.123
96 2-Heptanone	+++++	+++++	1.27450	1.66153	2.39901	2.62659		
	2.87236						2.16686	31.086
93 1,2-Dichloroethane	+++++	0.44681	0.57569	0.69764	0.67542	0.64388		
	0.61956						0.60974	14.846
94 Heptane	+++++	0.22192	0.29435	0.41861	0.39712	0.39858		
	0.39194						0.35378	22.068
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
98 1-Butanol	+++++	+++++	0.09734	0.14280	0.14126	0.20927	0.22835	0.16280	32.451
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Trichloroethene	+++++	0.34601	0.49463	0.62804	0.59888	0.57328	0.57089	0.53529	19.204
102 Methyl Cyclohexane	+++++	1.53385	2.04963	2.92705	2.84733	2.93514	2.98281	2.54614	23.889
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
104 1,2-Dichloropropane	+++++	0.29580	0.38067	0.47917	0.46930	0.45378	0.45136	0.42168	16.773
106 1,4-Dioxane	+++++	+++++	0.24229	0.32501	0.32675	0.32486	0.32497	0.30866	12.023
105 Dibromomethane	+++++	+++++	0.53145	+++++	0.42969	+++++	0.38093	0.44735	17.168
107 Bromodichloromethane	+++++	0.61966	0.87952	1.12677	1.07497	1.03421	1.01275	0.95798	19.338
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
110 cis-1,3-Dichloropropene	+++++	0.38794	0.53248	0.74519	0.74052	0.72047			
	0.72072						0.64255	23.143	
111 4-Methyl-2-pentanone	+++++	0.14029	0.20868	0.34424	0.34948	0.35032			
	0.35871						0.29195	32.073	<-
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
114 Toluene	+++++	0.81092	1.24660	1.54307	1.48194	1.44683			
	1.46639						1.33263	20.608	
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
116 trans-1,3-Dichloropropene	+++++	0.47967	0.69609	0.94114	0.90256	0.87044			
	0.85094						0.79014	21.981	
117 1,1,2-Trichloroethane	+++++	0.34939	0.54719	0.67788	0.64198	0.60975			
	0.59063						0.56947	20.481	
120 Tetrachloroethene	+++++	0.49262	0.70999	0.91885	0.85607	0.81552			
	0.78542						0.76308	19.624	

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
121 2-Hexanone	+++++	+++++	0.25507	0.52868	0.53983	0.53185	0.52933	0.47685	26.017
118 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Butyl Acetate	+++++	+++++	0.24369	0.28185	0.37466	0.39586	0.40225	0.33960	21.243
122 Dibromochloromethane	+++++	0.53953	0.85628	1.18704	1.12813	1.07161	1.03522	0.96963	24.619
123 1,2-Dibromoethane	0.84179	0.55970	0.80137	1.10140	1.04350	1.00995	0.98755	0.90581	20.585
127 Chlorobenzene	+++++	0.89505	1.25385	1.53453	1.44109	1.38836	1.37527	1.31466	17.116
124 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Ethyl Benzene	+++++	0.41019	0.61882	0.81504	0.76644	0.73986	0.73702	0.68116	21.679
125 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 m,p-Xylene	+++++	0.45061	0.77115	1.03224	0.98373	0.95372	0.95497	0.85774	25.449

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
130 o-Xylene	+++++	0.44049	0.71861	0.99008	0.93480	0.90783			
	0.90371						0.81592	25.179	
131 Styrene	1.03326	0.59334	1.00313	1.58534	1.52043	1.48920			
	1.52545						1.25002	30.248	<-
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
133 Bromoform	+++++	0.55412	0.90763	1.25794	1.20404	1.16528			
	1.15578						1.04080	25.677	
134 Cumene	2.06305	1.21611	1.95934	2.74683	2.61042	2.56662			
	2.59241						2.25068	24.218	
135 Cyclohexanone	+++++	+++++	0.27258	0.41193	0.36212	0.49851			
	0.52619						0.41426	24.859	
140 1,1,2,2-Tetrachloroethane	+++++	0.66388	1.29422	1.55449	1.46984	1.42576			
	1.44462						1.30880	24.983	
136 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
138 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
142 Propylbenzene	+++++	1.65274	2.71658	3.50920	3.34294	3.25756			
	3.02690						2.91760	23.239	

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++	1.20333	2.36567	3.05246	2.92449	2.81345	2.54265	2.48367	27.208
141 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 1,3,5-Trimethylbenzene	+++++	1.09055	1.94838	2.57321	2.40165	2.34685	2.35136	2.11868	25.670
143 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Diisobutyl Ketone	+++++	+++++	0.72243	0.92643	1.23471	1.30548	1.32951	1.10363	24.207
148 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 1,2,4-Trimethylbenzene	+++++	0.93406	1.80498	2.41563	2.30233	2.24772	2.27401	1.99645	28.110
201 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
152 D-Limonene	*****	*****	*****	*****	*****	*****		
	*****						*****	*****
149 sec-Butylbenzene	*****	*****	*****	*****	*****	*****		
	*****						*****	*****
151 bis(2-chloroethyl)ether	*****	*****	*****	*****	*****	*****		
	*****						*****	*****
153 p-Cymene	*****	*****	*****	*****	*****	*****		
	*****						*****	*****
155 1,3-Dichlorobenzene	*****	0.82952	1.50140	1.66547	1.57037	1.51511		
	1.52780						1.43495	21.080
154 1,2,3-Trimethylbenzene	*****	*****	*****	*****	*****	*****		
	*****						*****	*****
156 1,4-Dichlorobenzene	*****	0.86046	1.50599	1.71817	1.62550	1.56465		
	1.58445						1.47654	20.993
157 Indan	*****	*****	*****	*****	*****	*****		
	*****						*****	*****
159 alpha-Chlorotoluene	*****	1.02357	1.93206	2.54425	2.48304	2.45510		
	2.37094						2.13483	27.499
158 Butylbenzene	*****	*****	*****	*****	*****	*****		
	*****						*****	*****

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.79871	1.48339	1.61702	1.52034	1.46826		
	1.49927						1.39783	21.332
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
165 1,2,4-Trichlorobenzene	+++++	+++++	1.02280	1.08351	1.06141	1.06577		
	1.09716						1.06613	2.638
166 Hexachlorobutadiene	+++++	+++++	1.24188	1.06702	1.02142	0.99965		
	1.03510						1.07297	9.091
167 Naphthalene	+++++	+++++	1.26860	1.50335	1.49914	1.52053		
	1.58611						1.47559	8.191
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/28Feb2008.b/t14q206c.m
Cal Date : 28-Feb-2008 16:07 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.52060	1.52978	1.50295	1.59264	1.64012	1.70487		
	1.76955						1.60865	6.296
$ 113 Toluene-d8	0.94316	0.95996	0.94937	0.96424	0.96043	0.97540		
	0.98845						0.96300	1.585
$ 137 Bromofluorobenzene	0.65286	0.64773	0.63223	0.63637	0.65401	0.65089		
	0.65249						0.64665	1.353

Calibration History

Method : /chem/msdt.i/28Feb2008.b/t14q206c.m
Start Cal Date: 06-FEB-2008 14:27
End Cal Date : 28-FEB-2008 15:24

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-FEB-2008 14:27	AFCEElow	/chem/msdt.i/06Feb2008.b/t020607.d
Cal Level: 2 , Cal Amount: 0.50000		
06-FEB-2008 22:02	AT04low+ENSR	/chem/msdt.i/06Feb2008.b/t020615.d
Cal Level: 3 , Cal Amount: 2.00000		
28-FEB-2008 13:03	sp12c	/chem/msdt.i/28Feb2008.b/t022804.d
21-FEB-2008 09:41	sp22b	/chem/msdt.i/21Feb2008.b/t022102.d
06-FEB-2008 15:52	AT04md1+ENSR	/chem/msdt.i/06Feb2008.b/t020609.d
Cal Level: 4 , Cal Amount: 25.00000		
21-FEB-2008 10:21	sp22b	/chem/msdt.i/21Feb2008.b/t022103.d
06-FEB-2008 16:33	AT04md1+ENSR	/chem/msdt.i/06Feb2008.b/t020610.d
Cal Level: 5 , Cal Amount: 50.00000		
28-FEB-2008 14:33	sp12c	/chem/msdt.i/28Feb2008.b/t022805.d
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d
06-FEB-2008 17:13	AT04md1+ENSR	/chem/msdt.i/06Feb2008.b/t020611.d
Cal Level: 6 , Cal Amount: 100.00000		
21-FEB-2008 17:00	sp22b	/chem/msdt.i/21Feb2008.b/t022109.d
06-FEB-2008 17:51	AT04md1+ENSR	/chem/msdt.i/06Feb2008.b/t020612.d
Cal Level: 7 , Cal Amount: 200.00000		
28-FEB-2008 15:24	sp12c	/chem/msdt.i/28Feb2008.b/t022806.d

21-FEB-2008 12:05	sp22b	/chem/msdt.i/21Feb2008.b/t022105.d
06-FEB-2008 19:41	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020613.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
28-FEB-2008 14:33	sp12c	/chem/msdt.i/28Feb2008.b/t022805.d
Ccal Level: 5 , Ccal Amount: 50.000		
28-FEB-2008 14:33	sp12cCCV	/chem/msdt.i/28Feb2008.b/t022805a.d
Ccal Level: 5 , Ccal Amount: 50.000		
28-FEB-2008 09:49	AT04ENSR	/chem/msdt.i/28Feb2008.b/t022802.d

Initial Calibration Narrative

A 7 point initial calibration was analyzed on MSD-T on February 6, 2008.

The following compounds used 0.2ppbv as the lowest calibration concentration:

Chloroform, Benzene, Styrene, Cumene, and 1,2-Dibromoethane.

As noted on the accompanying analytical run log, the following point, 0.5ppbv, was re-analyzed due to:

a. anomalous unacceptable linearity for various compounds

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.07
75	30.0 – 60.0% of mass 95	50.99
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.46
173	Less than 2.0% of mass 174	(0.76)[1]
174	Greater than 50.0% of mass 95	75.96
175	5.0 – 9.0% of mass 174	(7.09)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.77)[1]
177	5.0 – 9.0% of mass 176	(6.41)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/6/08

BFB Injection Time: 1226

BFB File ID: t020605

Tekmar Purge Flow: ——

Vacuum: 2.16e-5

IS/S Std.#:	1443-398	Exp. Date: 3/28/08
BCM	355997	
1,4-DFB	1372567	
CB-16	1327265	

Verified CCV IS vs ICAL mid-point (- 40%D) ____ Initials

Verify 176/174 m/z Ratio: 1308292 / 1351956 x 100 = 96.77

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1318253)}{(1372567)} \times \frac{(25.0)}{(0.96300)} = 24.933$

File ID:	t020611
Compound:	Tol-d8
Initials:	

Reported Result 24.933

Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init	Comments
1	✓ t020605	BFB Tune Check	14765	50psig	2mL	1.00	2/6/08	1226		
2	✓ 06	System Blank	3368	Humid	200mL			1303		
3	✓ 07	ICAL Level 1	15776-261	0.2ppbv	0.2mL			1427		t14g206a
4	X 08	2		0.5ppbv	0.5mL			1512		
5	~~X~~ ✓ 09	3		2.0ppbv	2.0mL			1552		
6	✓ 10	4		25ppbv	25mL			1633		
7	✓ 11	5		50ppbv	50mL			1713		
8	✓ 12	6		100ppbv	100mL			1751		
9	✓ 13	7		200ppbv	200mL	V		1941		

for 2/7/08

Signature

2/6/08

Date

0053

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MSD-T

Logbook #: 1599

0054

10	✓	T020614	System Blank	33668	Humid	200ml	2.00	2/6/08	2019	SS	
11	✓	| 15	2CAL Level 2	1576-261	0.5ppbv	0.5ml	1.00	|	2202	SS	
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
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25											
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29											
30											
31											
32											

SS 2/7/08

Comments: Flow controller # AA98123220 — Actual / Nominal

Flow meter #200-7744 ; exp 8/27/08 — 25 mL/min / 22.9 mL/min

Signature

2/7/08
Date

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.83
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.35
173	Less than 2.0% of mass 174	(0.80)[1]
174	Greater than 50.0% of mass 95	74.12
175	5.0 – 9.0% of mass 174	(7.27)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.56)[1]
177	5.0 – 9.0% of mass 176	(6.47)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/7/08

BFB Injection Time: 0918

BFB File ID: t020701

Tekmar Purge Flow: 19.5mL/min

Vacuum: 4.24e-5

IS/S Std.#:	1443-398	Exp. Date: 3/28/08
BCM	357541	
1,4-DFB	1413414	
CB-d5	1290623	

Verified CCV IS vs ICAL mid-point (- 40%D) Initials

Verify 176/174 m/z Ratio: 1426273/1477051 x100 = 96.56

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1382401)}{(1413414)} \times \frac{(25.0)}{(0.96300)} = 25.391$

Reported Result 25.391

File ID:	t020702
Compound:	Tol-d8
Initials:	

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Reviewed	Comments
1	✓	t020701	BFB Tune Check	1476-65	50psig	2uL	1.00	2/7/08	0918		
2	✓	02	CCV-1 (20ppbv)	1576-26	50psig	50mL			0941		6 out
3	✓	03	LCS-1	1576-25					1041		4 out ICAL LCS
4	—	04	Cont. Std. (50ppm)	1576-14A	2500psig	10mL					
5											
6											
7											
8											
9											

Signature

2/7/08
Date

0055

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76) [1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21) [1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.15) [1]
177	5.0 – 9.0% of mass 176	(6.42) [2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08

BFB Injection Time: 0830

BFB File ID: t022101

Tekmar Purge Flow: ——

Vacuum: 3.99e-5

IS/S Std.#:	1443-386 Exp. Date: 3/28/08
BCM	318158
1,4-DFB	1251468
CB-15	[illegible]

Verified CCV IS vs ICAL mid-point (- 40%D) SM (initials)

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15

NOAH Cart #: NA File #: NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1267119)}{(1251468)} \times \frac{(25.0)}{(0.96300)} = 26.285$

Reported Result 26.285

File ID:	t022106
Compound:	Tol-d8
Initials:	SM

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t022101	BFB Tune Check	1476-274	50psig	2mL	1.00	2/21/08	0830	SM	
2	✓	02	ICAL Level 3	1576-299	2psig/12psig	20mL			0941	SM	t14g206b
3	✓	03	4		8psig/48psig	80mL			1021	SM	MeOH022IA
4	✓	04	5		50psig/300psig	50mL			1103	SM	sp22b
5	✓	05	7		200psig/1200psig	200mL			1205	SM	
6	✓	06	CCV-1 (200ppbv)	1576-261	50psig	50mL			1436	SM	0 air
7	~~✓~~	~~07~~	~~ICAL Level 6~~	1576-299	~~100psig/600psig~~	~~100mL~~			SM 2/21/08		not loaded
8	✓	07	LCS-1 (200ppbv)	1576-253	50psig	50mL	1.00		1525	SM	0 air
9	✓	08	System blank	3366	Humid	200mL	1	↓	1617	SM	

SM
Signature

2/21/08
Date

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MSD-T

Logbook #: 1599

10	✓	+022109	ICAL Level 6	15Ra-289	100cc/min/100cc/min	100 mL	1.00	2/21/08	1700	Air			
11	✓	10	Lab Blank	33668	Humid	200 mL	↓		1755	Air			
12	✓	11	0802200 -01A	33942	6.0"Hg→5psi		1.68		1847	Air			
13	✓	12	-02A	33943	7.5"Hg→5psi		1.79		PRG	Air			
14	✓	13	-01AA	33942	6.0"Hg→5psi		1.68		2005	Air			
15	✓	14	-02AA	33943	7.5"Hg→5psi		1.79		2043	Air			
16	✓	15	-03A	50116	6.5"Hg→5psi		1.71		2122	Air			
17	✓	16	-04A	33945	↓		↓		2201	Air			
18	✓	17	-05A	34306	↓		↓		2239	Air	↓		
19	✓	18	-06A	PB-4	6.0"Hg→5psi		1.68	↓	4338	01			
20	✓	19	0802283 -01A	22497	1	↓	1	2/22/08	0017	01			
21	✓	20	-01AA	34438	5.5"Hg→5.4psi	250mL	1.64		0134	01			
22	✓	21	-03A	23996	5.5"Hg→5.4psi	200mL	1.64		0221	01			
23	✓	22	-04A	35171	6.5"Hg→5.8psi	200mL	1.71		0308	01			MeCl†
24	X	23	-05A	34746	6.0"Hg→5.8psi	200mL	1.68		0351	01			MeCl†
25	X	24	0802328-01A	12666	5.5"Hg→5.8psi	200mL	1.64		0432	01	↓		PCE†
26	✓	25	0802283 -04A	35171	6.5"Hg→5.8psi	100mL	3.42		0510	01			
27	✓	26	1 -05A	34746	6.0"Hg→5.8psi	100mL	3.36		0711				
28	✓	27	0802328 - 01A	12666	5.5"Hg→5.8psi	100mL	3.25		0749				
29													
30													
31													
32													

0057

Comments:

Signature

2/22/08
Date

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.01
75	30.0 – 60.0% of mass 95	51.34
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.50
173	Less than 2.0% of mass 174	(0.76)[1]
174	Greater than 50.0% of mass 95	76.84
175	5.0 – 9.0% of mass 174	(7.17)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.54)[1]
177	5.0 – 9.0% of mass 176	(6.53)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/28/08

BFB Injection Time: 0835

BFB File ID: T022801

Tekmar Purge Flow:

Vacuum: 4.25e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM	284561
1,4-DFB	1165938
CB-d5	1063313

Verified CCV IS vs ICAL mid-point (- 40%B): 2/29/08 initials

Verify 176/174 m/z Ratio: 1188562/1231218 x100 = 96.54

NOAH Cart #: NA File #: NA

0058

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1171755)}{(1165938)} \times \frac{(25.0)}{(0.96300)} = 26.090$

File ID:	T022802
Compound:	Tol-d8
Initials:	SJR

Reported Result 26.090

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	T022801	BFB Tune Check	1576-274	50 psig	2 uL	1.00	2/28/08	0835	SJR	
2	✓	02	CCV-1 (200ppbv)	1576-261	50ppbv	50mL			0949	SJR	2 out
3	✓	03	LCS-1	1576-255					1051	SJR	0 out
4	✓	04	ICAL Level 3	1576-304	2.0ppbv	2.0mL			1303	SJR	Et4a206
5	✓	05	5		50ppbv	50mL			1433	SJR	sp12 CCV
6	✓	06	7		200ppbv	200mL			1524	SJR	
7		07	Gas Std (100ppmv)	1576-305	2500ppbv	5.0mL			1657		
8	✓	08	Lab Blank	3368	Humid	200mL			1735	AG / SJR	
9	X	09	080250 -01A	1L Bag	SVE Effluent	20 mL	10.0		1818	KP / SJR	RR 20 out

Signature

2/29/08
Date

Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15 Low Level

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/07Feb2008.b/t020703.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 07-FEB-2008 10:41
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/07Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 10:17 sruth Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02 Cal File: t020615.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane							CAS #: 74-97-5	
13.858	13.858 (1.000)	130	364188	25.0000			80.00- 120.00	100.00
13.858	13.858 (1.000)	128	282636				26.53- 126.53	77.61
13.858	13.858 (1.000)	49	642409				128.17- 228.17	176.39
* 97 1,4-Difluorobenzene							CAS #: 540-36-3	
15.627	15.628 (1.000)	114	1439060	25.0000			80.00- 120.00	100.00
15.627	15.628 (1.000)	88	235739				0.00- 66.52	16.38
* 126 Chlorobenzene-d5							CAS #: 3114-55-4	
20.798	20.798 (1.000)	117	1292442	25.0000			80.00- 120.00	100.00
20.798	20.798 (1.000)	82	752973				6.72- 106.72	58.26
$ 90 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
14.936	14.937 (1.078)	65	592767	25.2952		25.295	80.00- 120.00	100.00
14.936	14.937 (1.078)	67	339519				3.57- 103.57	57.28
$ 113 Toluene-d8							CAS #: 2037-26-5	
18.199	18.199 (1.165)	98	1388717	25.0524		25.052	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	157888				0.00- 61.29	11.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	938828			18.71- 118.71	67.60
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	875940	26.2019	26.202	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	1106906			72.28- 172.28	126.37
22.789	22.789 (1.096)	176	852956			45.76- 145.76	97.38
11 Propylene					CAS #: 115-07-1		
5.812	5.785 (0.419)	41	613591	51.5112	51.511	80.00- 120.00	100.00
5.812	5.785 (0.419)	42	426221			17.96- 117.96	69.46
5.812	5.785 (0.419)	39	492845			33.44- 133.44	80.32
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.895 (0.427)	85	3630724	51.0550	51.055	80.00- 120.00	100.00
5.923	5.895 (0.427)	87	1142768			0.00- 82.13	31.47
16 Freon 114					CAS #: 76-14-2		
6.310	6.282 (0.455)	135	2403733	51.1334	51.133	80.00- 120.00	100.00
6.310	6.282 (0.455)	137	762741			0.00- 81.89	31.73
18 Chloromethane					CAS #: 74-87-3		
6.558	6.531 (0.473)	50	747784	48.1651	48.165	80.00- 120.00	100.00
6.558	6.531 (0.473)	52	249680			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.863 (0.497)	62	1087955	51.0401	51.040	80.00- 120.00	100.00
6.890	6.863 (0.497)	64	353730			0.00- 89.61	32.51
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.946 (0.503)	54	820117	51.1387	51.139	80.00- 120.00	100.00
6.973	6.946 (0.503)	39	782893			53.33- 153.33	95.44
25 Bromomethane					CAS #: 74-83-9		
7.913	7.886 (0.571)	94	1069630	50.6811	50.681	80.00- 120.00	100.00
7.913	7.886 (0.571)	96	989108			42.77- 142.77	92.47
27 Chloroethane					CAS #: 75-00-3		
8.190	8.162 (0.591)	64	530045	52.9526	52.952	80.00- 120.00	100.00
8.190	8.162 (0.591)	49	150442			0.00- 76.71	25.56
8.190	8.162 (0.591)	66	190911			0.00- 83.02	32.43
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.771 (0.635)	101	4126874	51.2618	51.262	80.00- 120.00	100.00
8.798	8.771 (0.635)	103	2656892			14.63- 114.63	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.240	9.213 (0.667)	45	334932	54.3761	54.376	80.00- 120.00	100.00
9.240	9.213 (0.667)	43	78044			0.00- 75.24	23.30
9.240	9.213 (0.667)	46	130611			0.00- 89.78	39.00
42 Freon 113					CAS #: 76-13-1		
9.959	9.932 (0.719)	151	2155060	58.1347	58.135	80.00- 120.00	100.00
9.959	9.932 (0.719)	153	1372575			14.76- 114.76	63.69
9.959	9.932 (0.719)	101	2781208			80.58- 180.58	129.05
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.015 (0.725)	61	1971376	59.0809	59.081	80.00- 120.00	100.00
10.042	10.043 (0.725)	96	1202804			10.93- 110.93	61.01
10.042	10.043 (0.725)	98	780821			0.00- 89.40	39.61
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	560983	54.2480	54.248	80.00- 120.00	100.00
10.181	10.181 (0.735)	43	1718440			267.82- 367.82	306.33
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	1942177	54.8034	54.803	80.00- 120.00	100.00
10.374	10.374 (0.749)	43	475790			0.00- 76.64	24.50
10.374	10.374 (0.749)	59	81347			0.00- 54.31	4.19
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	3305899	52.3795	52.380	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.816	10.817 (0.781)	76	597711	54.9965	54.996	80.00- 120.00	100.00
10.816	10.817 (0.781)	41	1275321			173.84- 273.84	213.37
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	1145006	54.2668	54.267	80.00- 120.00	100.00
11.121	11.093 (0.802)	84	1034033			40.82- 140.82	90.31
11.093	11.093 (0.800)	51	377986			0.00- 83.83	33.01
60 MTBE					CAS #: 1634-04-4		
11.452	11.453 (0.826)	73	3774615	62.3150	62.315	80.00- 120.00	100.00
11.452	11.453 (0.826)	57	719078			0.00- 69.06	19.05
11.452	11.453 (0.826)	41	687732			0.00- 70.47	18.22
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.536 (0.834)	96	1387532	55.9548	55.955	80.00- 120.00	100.00
11.535	11.536 (0.832)	61	1901887			88.49- 188.49	137.07
11.563	11.536 (0.834)	98	891584			16.26- 116.26	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	1891161	57.7934	57.793	80.00- 120.00	100.00
11.895	11.895 (0.858)	43	1080395			9.30- 109.30	57.12
11.895	11.895 (0.858)	86	341505			0.00- 66.83	18.06
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	348239	54.2809	54.281	80.00- 120.00	100.00
12.365	12.337 (0.892)	43	3106079			832.23- 932.23	891.94
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	2630332	57.4518	57.452	80.00- 120.00	100.00
12.365	12.365 (0.892)	65	853608			0.00- 82.30	32.45
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	646558	55.5063	55.506	80.00- 120.00	100.00
13.388	13.388 (0.966)	43	2171765			282.56- 382.56	335.90
13.388	13.388 (0.966)	57	194672			0.00- 79.56	30.11
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	1740573	56.5020	56.502	80.00- 120.00	100.00
13.416	13.416 (0.968)	96	1385696			31.20- 131.20	79.61
13.416	13.416 (0.968)	98	895062			1.78- 101.78	51.42
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	1101132	56.0458	56.046	80.00- 120.00	100.00
13.858	13.858 (1.000)	71	583896			2.70- 102.70	53.03
13.858	13.858 (1.000)	72	619526			2.04- 102.04	56.26
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	3047174	57.6082	57.608	80.00- 120.00	100.00
13.941	13.941 (1.006)	85	2012329			15.21- 115.21	66.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	3228969	55.1909	55.191	80.00- 120.00	100.00
14.273	14.273 (1.030)	99	2060721			14.57- 114.57	63.82
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.301 (1.032)	84	1772344	56.5763	56.576	80.00- 120.00	100.00
14.300	14.301 (1.032)	56	1739685			49.56- 149.56	98.16
14.300	14.301 (1.032)	41	902671			1.20- 101.20	50.93
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.522 (1.050)	119	2960464	52.6774	52.677	80.00- 120.00	100.00
14.549	14.522 (1.050)	117	3142043			57.09- 157.09	106.13
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	4200762	54.9970	54.997	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
14.881	14.881 (1.074)	56	1354857			0.00- 82.82	32.25
14.881	14.881 (1.074)	41	1075995			0.00- 78.43	25.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3843383	53.4243	53.424	80.00- 120.00	100.00
14.964	14.964 (0.958)	77	887809			0.00- 73.50	23.10
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1887283	53.7716	53.772	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	614030			0.00- 84.23	32.54
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1130162	55.4972	55.497	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1515301			85.70- 185.70	134.08
15.185	15.185 (0.972)	57	927126			28.72- 128.72	82.03
101 Trichloroethene					CAS #: 79-01-6		
16.070	16.070 (1.028)	95	1648538	53.5021	53.502	80.00- 120.00	100.00
16.098	16.070 (1.030)	130	1512857			41.36- 141.36	91.77
16.070	16.070 (1.028)	97	1054939			13.70- 113.70	63.99
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1289567	53.1277	53.128	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	932367			22.07- 122.07	72.30
16.568	16.568 (1.060)	41	714853			6.80- 106.80	55.43
106 1,4-Dioxane					CAS #: 123-91-1		
16.678	16.678 (1.067)	88	909360	51.1825	51.182	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	520290			7.38- 107.38	57.21
16.678	16.678 (1.067)	57	184864			0.00- 71.19	20.33
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.983 (1.087)	83	2955752	53.6010	53.601	80.00- 120.00	100.00
16.982	16.983 (1.087)	85	1906864			14.75- 114.75	64.51
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2055925	55.5852	55.585	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	662734			0.00- 81.51	32.24
17.784	17.784 (1.138)	39	920517			0.00- 94.39	44.77
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.950	17.950 (1.149)	58	970511	57.7496	57.750	80.00- 120.00	100.00
17.950	17.950 (1.149)	43	2207573			175.34- 275.34	227.47
17.978	17.978 (1.150)	85	478187			0.64- 100.64	49.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4390035	57.2296	57.230	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2652998			10.63- 110.63	60.43
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2209362	54.0869	54.087	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	716340			0.00- 81.36	32.42
18.752	18.752 (0.902)	39	915171			0.00- 91.03	41.42
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.112 (0.919)	97	1580720	53.6925	53.692	80.00- 120.00	100.00
19.111	19.112 (0.919)	99	997611			14.06- 114.06	63.11
19.111	19.112 (0.919)	83	1366879			35.72- 135.72	86.47
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2122005	53.7905	53.790	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1462582			18.51- 118.51	68.92
19.277	19.277 (0.927)	131	1396687			15.23- 115.23	65.82
121 2-Hexanone					CAS #: 591-78-6		
19.415	19.416 (0.934)	58	1306064	52.9797	52.980	80.00- 120.00	100.00
19.415	19.416 (0.934)	43	2176893			117.36- 217.36	166.68
19.415	19.416 (0.934)	100	281719			0.00- 71.71	21.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2715281	54.1671	54.167	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2100341			28.82- 128.82	77.35
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.052 (0.964)	107	2456852	52.4651	52.465	80.00- 120.00	100.00
20.051	20.052 (0.964)	109	2268304			42.74- 142.74	92.33
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3552960	52.2765	52.276	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1108333			0.00- 81.00	31.19
20.853	20.853 (1.003)	77	2210378			12.54- 112.54	62.21
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1878900	53.3558	53.356	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6014846			269.96- 369.96	320.13
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414838	54.4582	54.458	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4845879			149.87- 249.87	200.67
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2323688	55.0883	55.088	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	4908221			163.91- 263.91	211.23
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	3755676	58.1165	58.116	80.00- 120.00	100.00
21.876	21.876 (1.052)	78	1922908			0.81- 100.81	51.20
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	2946351	54.7578	54.758	80.00- 120.00	100.00
22.291	22.291 (1.072)	171	1505628			1.45- 101.45	51.10
134 Cumene					CAS #: 98-82-8		
22.429	22.430 (1.078)	105	6696362	57.5511	57.551	80.00- 120.00	100.00
22.429	22.430 (1.078)	120	1712846			0.00- 77.62	25.58
22.402	22.402 (1.077)	51	569801			0.00- 58.75	8.51
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	3679813	54.3852	54.385	80.00- 120.00	100.00
23.010	23.010 (1.106)	85	2370044			14.60- 114.60	64.41
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	8483170	56.2420	56.242	80.00- 120.00	100.00
23.120	23.121 (1.112)	120	1809726			0.00- 71.63	21.33
23.120	23.121 (1.112)	105	307547			0.00- 53.71	3.63
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.287 (1.120)	105	7219729	56.2284	56.228	80.00- 120.00	100.00
23.286	23.287 (1.120)	120	2130209			0.00- 79.51	29.51
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	5917601	54.0267	54.027	80.00- 120.00	100.00
23.397	23.397 (1.125)	120	2884828			0.00- 98.23	48.75
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	5720909	55.4287	55.429	80.00- 120.00	100.00
24.033	24.033 (1.156)	120	2603971			0.00- 94.91	45.52
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	3870355	52.1728	52.173	80.00- 120.00	100.00
24.586	24.586 (1.182)	148	2460421			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	1598480			0.00- 91.36	41.30
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	3937785	51.5866	51.586	80.00- 120.00	100.00
24.724	24.724 (1.189)	148	2521733			16.09- 116.09	64.04
24.724	24.724 (1.189)	111	1553706			0.00- 90.13	39.46

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene						CAS #: 100-44-7		
24.945	24.946	(1.199)	91	6230172	56.4503	56.450	80.00- 120.00	100.00
24.945	24.946	(1.199)	126	1164614			0.00- 69.28	18.69
161 1,2-Dichlorobenzene						CAS #: 95-50-1		
25.360	25.360	(1.219)	146	3752105	51.9217	51.922	80.00- 120.00	100.00
25.360	25.360	(1.219)	148	2421672			14.02- 114.02	64.54
25.360	25.360	(1.219)	111	1612191			0.00- 92.17	42.97
165 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
28.153	28.153	(1.354)	180	2788156	50.5867	50.587	80.00- 120.00	100.00
28.153	28.153	(1.354)	182	2645129			44.12- 144.12	94.87
166 Hexachlorobutadiene						CAS #: 87-68-3		
28.319	28.319	(1.362)	225	2570482	46.3399	46.340	80.00- 120.00	100.00
28.319	28.319	(1.362)	223	1603808			12.90- 112.90	62.39
29 Isopentane						CAS #: 78-78-4		
8.273	8.245	(0.597)	43	1190271	50.5525	50.552	80.00- 120.00	100.00
8.273	8.245	(0.597)	57	941476			27.67- 127.67	79.10
19 Butane						CAS #: 106-97-8		
6.807	6.780	(0.491)	58	209961	51.5020	51.502	80.00- 120.00	100.00
6.807	6.780	(0.491)	43	1472102			666.74- 766.74	701.13
102 Methyl Cyclohexane						CAS #: 108-87-2		
16.346	16.347	(1.180)	83	2075922	55.9685	55.968	80.00- 120.00	100.00
16.346	16.347	(1.180)	98	946654			0.00- 95.22	45.60
16.346	16.347	(1.180)	55	1458457			20.82- 120.82	70.26
167 Naphthalene						CAS #: 91-20-3		
28.678	28.678	(1.379)	128	4181723	54.8172	54.817	80.00- 120.00	100.00
28.678	28.678	(1.379)	127	514318			0.00- 62.74	12.30

Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Report Date: 07-Feb-2008 11:09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020703.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 07-FEB-2008
Calibration Time: 09:41
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	357541	214525	500557	364188	1.86
97 1,4-Difluorobenze	1413414	848048	1978780	1439060	1.81
126 Chlorobenzene-d5	1290063	774038	1806088	1292442	0.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Report Date: 07-Feb-2008 11:09

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 07Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	51.055	102.11	70-130
16 Freon 114	50.000	51.133	102.27	70-130
18 Chloromethane	50.000	48.165	96.33	70-130
20 Vinyl Chloride	50.000	51.040	102.08	70-130
22 1,3-Butadiene	50.000	51.139	102.28	60-140
25 Bromomethane	50.000	50.681	101.36	70-130
27 Chloroethane	50.000	52.952	105.91	70-130
31 Trichlorofluoromet	50.000	51.262	102.52	70-130
38 Ethanol	50.000	54.376	108.75	60-140
42 Freon 113	50.000	58.135	116.27	70-130
43 1,1-Dichloroethene	50.000	59.081	118.16	70-130
45 Acetone	50.000	54.248	108.50	60-140
47 Carbon Disulfide	50.000	52.380	104.76	60-140
46 2-Propanol	50.000	54.803	109.61	60-140
54 Methylene Chloride	50.000	54.267	108.53	70-130
60 MTBE	50.000	62.315	124.63	60-140
61 trans-1,2-Dichloro	50.000	55.955	111.91	60-140
65 Hexane	50.000	57.793	115.59	60-140
69 Vinyl Acetate	50.000	54.281	108.56	60-140
70 1,1-Dichloroethane	50.000	57.452	114.90	70-130
76 cis-1,2-Dichloroet	50.000	56.502	113.00	70-130
75 2-Butanone	50.000	55.506	111.01	60-140
80 Tetrahydrofuran	50.000	56.046	112.09	60-140
82 Chloroform	50.000	57.608	115.22	70-130
85 Cyclohexane	50.000	56.576	113.15	60-140
83 1,1,1-Trichloroeth	50.000	55.191	110.38	70-130
87 Carbon Tetrachlori	50.000	52.677	105.35	70-130
91 Benzene	50.000	53.424	106.85	70-130
93 1,2-Dichloroethane	50.000	53.772	107.54	70-130
94 Heptane	50.000	55.497	110.99	60-140
101 Trichloroethene	50.000	53.502	107.00	70-130
104 1,2-Dichloropropan	50.000	53.128	106.26	70-130
106 1,4-Dioxane	50.000	51.182	102.37	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	53.601	107.20	60-140
110 cis-1,3-Dichloropr	50.000	55.585	111.17	70-130
111 4-Methyl-2-pentano	50.000	57.750	115.50	60-140
114 Toluene	50.000	57.230	114.46	70-130
116 trans-1,3-Dichloro	50.000	54.087	108.17	70-130
117 1,1,2-Trichloroeth	50.000	53.692	107.39	70-130
120 Tetrachloroethene	50.000	53.790	107.58	70-130
121 2-Hexanone	50.000	52.980	105.96	60-140
122 Dibromochlorometha	50.000	54.167	108.33	60-140
123 1,2-Dibromoethane	50.000	52.465	104.93	70-130
127 Chlorobenzene	50.000	52.276	104.55	70-130
128 Ethyl Benzene	50.000	53.356	106.71	70-130
129 m,p-Xylene	50.000	54.458	108.92	70-130
130 o-Xylene	50.000	55.088	110.18	70-130
131 Styrene	50.000	58.116	116.23	70-130
133 Bromoform	50.000	54.758	109.52	60-140
140 1,1,2,2-Tetrachlor	50.000	54.385	108.77	70-130
145 4-Ethyltoluene	50.000	56.228	112.46	60-140
147 1,3,5-Trimethylben	50.000	54.027	108.05	70-130
150 1,2,4-Trimethylben	50.000	55.429	110.86	70-130
155 1,3-Dichlorobenzen	50.000	52.173	104.35	70-130
156 1,4-Dichlorobenzen	50.000	51.586	103.17	70-130
159 alpha-Chlorotoluen	50.000	56.450	112.90	70-130
161 1,2-Dichlorobenzen	50.000	51.922	103.84	70-130
165 1,2,4-Trichloroben	50.000	50.587	101.17	70-130
166 Hexachlorobutadien	50.000	46.340	92.68	70-130
142 Propylbenzene	50.000	56.242	112.48	60-140
134 Cumene	50.000	57.551	115.10	60-140
51 3-Chloropropene	50.000	54.996	109.99	60-140
89 2,2,4-Trimethylpen	50.000	54.997	109.99	60-140
19 Butane	50.000	51.502	103.00	70-130
29 Isopentane	50.000	50.552	101.10	70-130
102 Methyl Cyclohexane	50.000	55.968	111.94	70-130
11 Propylene	50.000	51.511	103.02	60-140
167 Naphthalene	50.000	54.817	109.63	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.295	101.18	70-130
$ 113 Toluene-d8	25.000	25.052	100.21	70-130
$ 137 Bromofluorobenzene	25.000	26.202	104.81	70-130

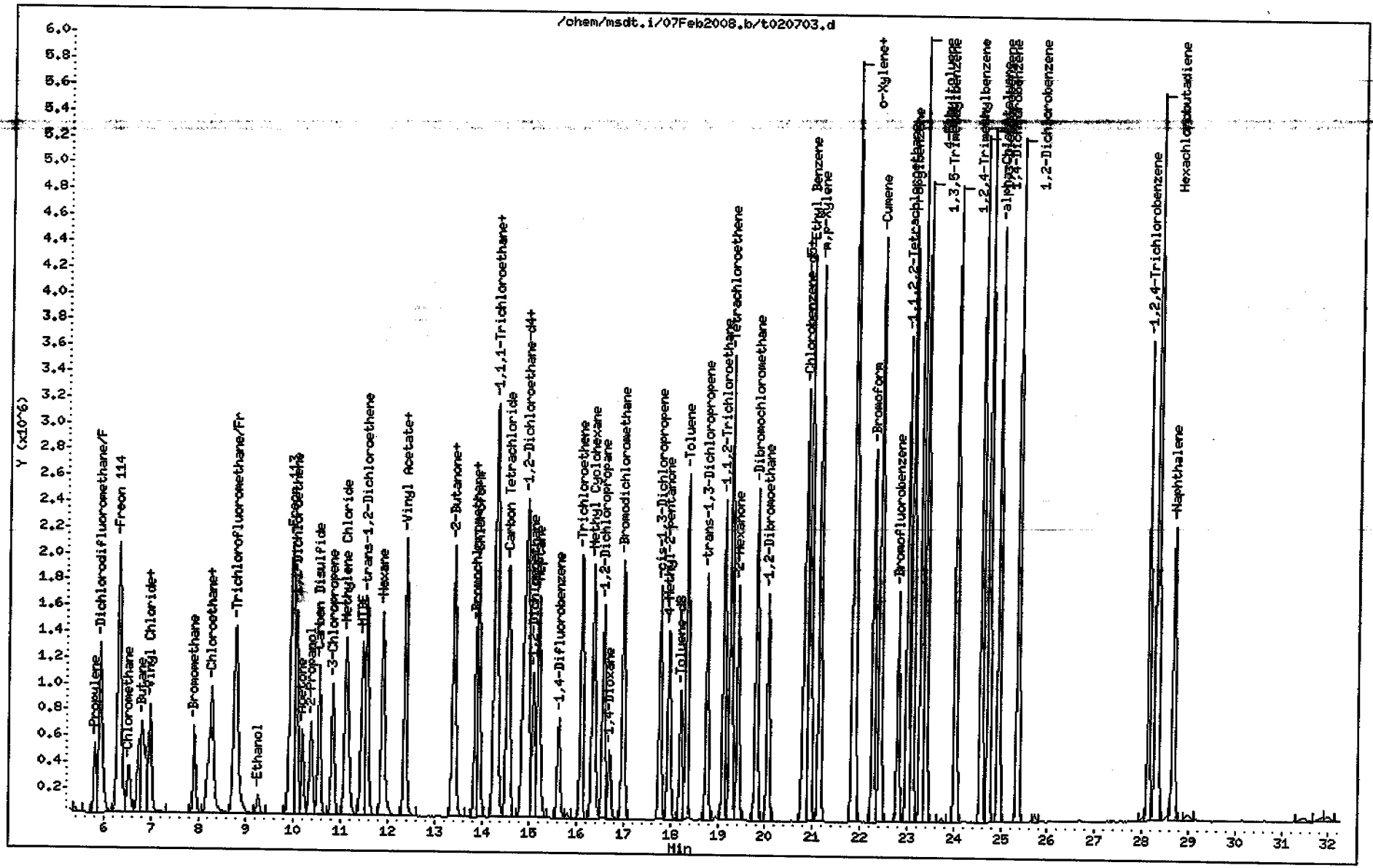
Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Date : 07-FEB-2008 10:41
Client ID: LCS-1
Sample Info: 50mL #1576-255

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0071



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020607.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 06-FEB-2008 14:27
Operator : sjr
Inst ID: msdt.i
Smp Info : 0.2ml #1576-261
Misc Info : 200ppbv -> 0.2ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 14:27
Cal File: t020607.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	332370	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	254115			26.39- 126.39	76.46
13.858	13.858 (1.000)	49	379355			99.95- 199.95	114.14
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1144843	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	188070			0.00- 66.12	16.43
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1006037	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	576806			6.72- 106.72	57.33
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.937	14.937 (1.078)	65	505401	25.0000	23.632	50.00- 150.00	100.00
14.937	14.937 (1.078)	67	247783			3.57- 103.57	49.03
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1079766	25.0000	24.485	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	125347			0.00- 61.29	11.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	742258			18.71- 118.71	68.74
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	656799	25.0000	25.240	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	812697			75.58- 175.58	123.74
22.789	22.789 (1.096)	176	634912			47.41- 147.41	96.67
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	7657	0.20000	0.1586	50.00- 150.00	100.00(a)
13.941	13.941 (1.006)	85	5855			16.43- 116.43	76.47
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	11959	0.20000	0.2090	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	2943			0.00- 73.50	24.61
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	8316	0.20000	0.1653	50.00- 150.00	100.00(a)
21.877	21.877 (1.052)	78	6770			9.02- 109.02	81.41
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	16604	0.20000	0.1833	50.00- 150.00	100.00(a)
22.430	22.430 (1.078)	120	5207			0.00- 77.62	31.36
22.430	22.430 (1.078)	51	1333			0.00- 58.75	8.03
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	6775	0.20000	0.1859	50.00- 150.00	100.00(a)
20.052	20.052 (0.964)	109	7462			46.68- 146.68	110.14

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/06Feb2008.b/t020607.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020607.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.2ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 14:27
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	332370	199422	465318	332370	0.00
97 1,4-Difluorobenze	1144843	686906	1602780	1144843	0.00
126 Chlorobenzene-d5	1006037	603622	1408452	1006037	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

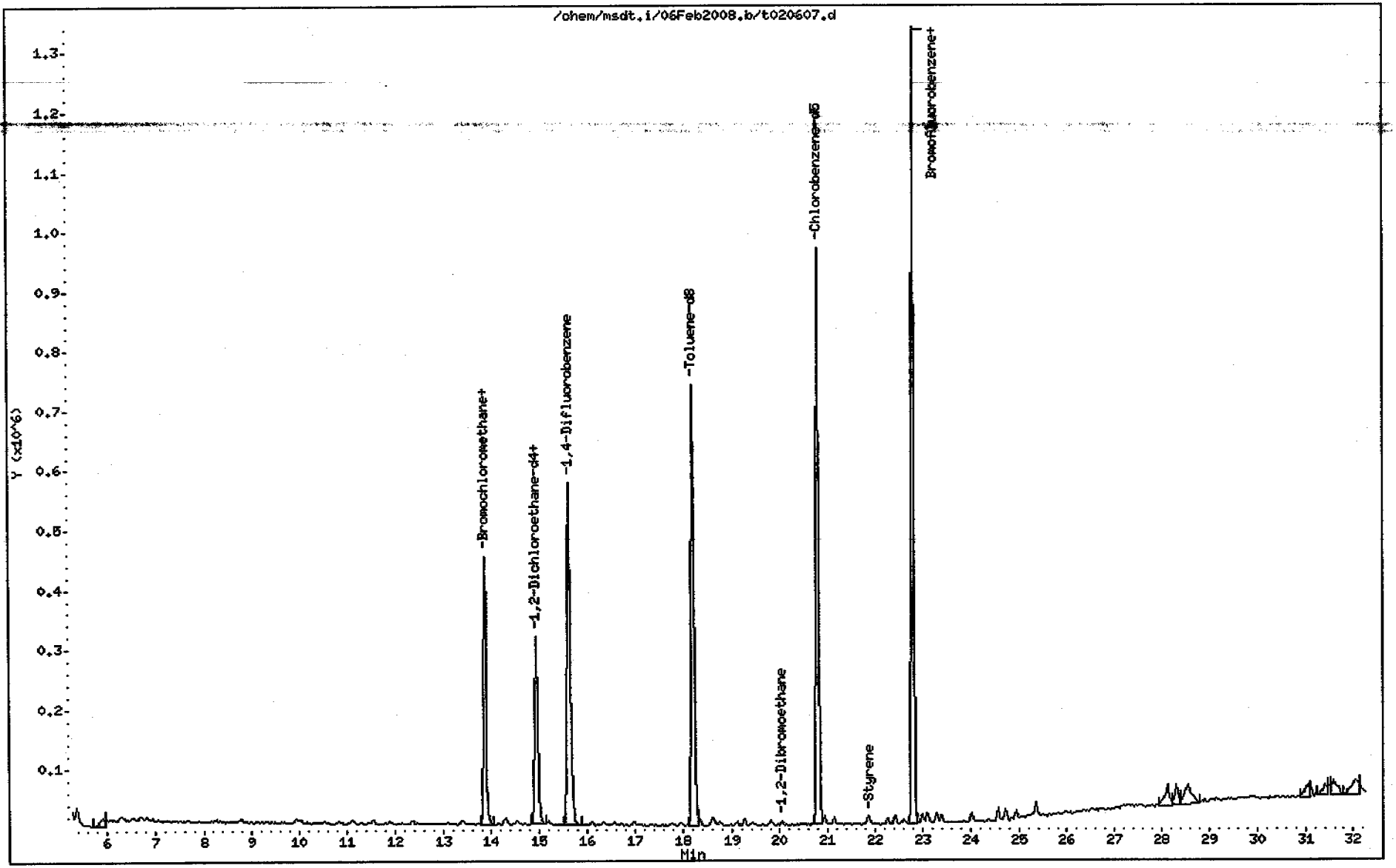
0075

Data File: /chem/msdt.i/06Feb2008.b/t020607.d
Date : 06-FEB-2008 14:27
Client ID: Level 1
Sample Info: 0.2ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020615.d
Lab Smp Id: ICAL Client Smp ID: Level 2
Inj Date : 06-FEB-2008 22:02
Operator : srs Inst ID: msdt.i
Smp Info : 0.5mL #1576-261
Misc Info : 200ppbv -> 0.5ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:40 sruth Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02 Cal File: t020615.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
13.886	13.886 (1.000)	130	359684	25.0000		50.00- 150.00		100.00
13.886	13.886 (1.000)	128	275976			26.39- 126.39		76.73
13.858	13.858 (1.000)	49	409784			99.95- 199.95		113.93
* 81 Bromochloromethane					CAS #: 74-97-5			
15.628	15.628 (1.000)	114	1311527	25.0000		50.00- 150.00		100.00
15.628	15.628 (1.000)	88	209950			0.00- 66.12		16.01
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
20.798	20.798 (1.000)	117	1165188	25.0000		50.00- 150.00		100.00
20.798	20.798 (1.000)	82	664676			6.72- 106.72		57.04
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
14.936	14.936 (1.076)	65	550238	25.0000	23.774	50.00- 150.00		100.00
14.936	14.936 (1.076)	67	270699			3.57- 103.57		49.20
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
18.199	18.199 (1.165)	98	1259013	25.0000	24.921	50.00- 150.00		100.00
18.199	18.199 (1.165)	70	132880			0.00- 61.29		10.55
$ 113 Toluene-d8					CAS #: 2037-26-5			

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	855222			18.71- 118.71	67.93
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	754728	25.0000	25.042	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	954528			75.58- 175.58	126.47
22.789	22.789 (1.096)	176	726618			47.41- 147.41	96.28
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	29948	0.50000	0.4264	50.00- 150.00	100.00(a)
5.923	5.923 (0.427)	87	9731			0.00- 82.13	32.49
16 Freon 114					CAS #: 76-14-2		
6.337	6.337 (0.456)	135	21512	0.50000	0.4633	50.00- 150.00	100.00(a)
6.310	6.310 (0.454)	137	6108			0.00- 81.89	28.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	10277	0.50000	0.4882	50.00- 150.00	100.00(a)
6.890	6.890 (0.496)	64	5846			0.00- 89.61	56.88
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	6982	0.50000	0.4407	50.00- 150.00	100.00(a)
6.973	6.973 (0.502)	39	9131			53.33- 153.33	130.78
25 Bromomethane					CAS #: 74-83-9		
7.941	7.941 (0.572)	94	9814	0.50000	0.4708	50.00- 150.00	100.00(a)
7.941	7.941 (0.572)	96	8139			43.69- 143.69	82.93
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	4699	0.50000	0.4280	50.00- 150.00	100.00(a)
8.190	8.190 (0.590)	49	1473			0.00- 76.71	31.35
8.190	8.190 (0.590)	66	1459			0.00- 83.02	31.05
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	34751	0.50000	0.4371	50.00- 150.00	100.00(a)
8.771	8.771 (0.632)	103	20296			13.52- 113.52	58.40
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	16714	0.50000	0.4565	50.00- 150.00	100.00(a)
9.932	9.932 (0.715)	153	11029			14.28- 114.28	65.99
9.960	9.960 (0.717)	101	20956			80.55- 180.55	125.38
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	13655	0.50000	0.4144	50.00- 150.00	100.00(a)
10.042	10.042 (0.723)	96	9202			13.15- 113.15	67.39
10.042	10.042 (0.723)	98	4439			0.00- 88.14	32.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	27016	0.50000	0.4334	50.00- 150.00	100.00(a)
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	10254	0.50000	0.4921	50.00- 150.00	100.00(a)
11.121	11.121 (0.801)	84	8021			36.08- 136.08	78.22
11.093	11.093 (0.799)	51	3950			0.00- 83.83	38.52
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	12565	0.50000	0.2100	50.00- 150.00	100.00(a)
11.425	11.425 (0.823)	57	2521			0.00- 69.02	20.06
11.480	11.480 (0.827)	41	3603			0.00- 70.47	28.67
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.536	11.536 (0.831)	96	9874	0.50000	0.4032	50.00- 150.00	100.00(a)
11.563	11.563 (0.833)	61	14614			95.77- 195.77	148.00
11.563	11.563 (0.833)	98	6468			16.26- 116.26	65.51
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	9544	0.50000	0.2953	50.00- 150.00	100.00(a)
11.923	11.923 (0.859)	43	6284			9.30- 109.30	65.84
11.923	11.923 (0.859)	86	1121			0.00- 66.83	11.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	17152	0.50000	0.3793	50.00- 150.00	100.00(a)
12.365	12.365 (0.890)	65	6222			0.00- 82.79	36.28
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	3945	0.50000	0.3429	50.00- 150.00	100.00(a)
13.388	13.388 (0.964)	43	12276			275.22- 375.22	311.18
0.000	1.000 (0.000)	57	0			0.00- 79.56	0.00
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	10861	0.50000	0.3570	50.00- 150.00	100.00(a)
13.416	13.416 (0.966)	96	7530			27.39- 127.39	69.33
13.443	13.443 (0.968)	98	5683			0.96- 100.96	52.32
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	6253	0.50000	0.3222	50.00- 150.00	100.00(a)
13.858	13.858 (0.998)	71	2426			0.00- 99.16	38.80
13.858	13.858 (0.998)	72	2304			2.04- 102.04	36.85
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	19693	0.50000	0.3770	50.00- 150.00	100.00(a)
13.941	13.941 (1.004)	85	12570			16.43- 116.43	63.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	18476	0.50000	0.3198	50.00- 150.00	100.00(a)
14.300	14.300 (1.030)	99	14551			17.45- 117.45	78.76
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	9788	0.50000	0.3164	50.00- 150.00	100.00(a)
14.328	14.328 (1.032)	56	9199			47.55- 147.55	93.98
14.300	14.300 (1.030)	41	6425			5.12- 105.12	65.64
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.522	14.522 (1.046)	119	19411	0.50000	0.3497	50.00- 150.00	100.00(a)
14.549	14.549 (1.048)	117	18547			53.78- 153.78	95.55
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	23133	0.50000	0.3528	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	5786			0.00- 73.50	25.01
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	22814	0.50000	0.3024	50.00- 150.00	100.00(a)
14.881	14.881 (1.072)	56	7722			0.00- 82.82	33.85
14.881	14.881 (1.072)	41	7717			0.00- 78.43	33.83
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	11720	0.50000	0.3664	50.00- 150.00	100.00(a)
15.075	15.075 (0.965)	64	4807			0.00- 84.23	41.02
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	5821	0.50000	0.3136	50.00- 150.00	100.00(a)
15.185	15.185 (0.972)	43	7881			85.70- 185.70	135.39
15.185	15.185 (0.972)	57	4021			28.72- 128.72	69.08
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	9076	0.50000	0.3232	50.00- 150.00	100.00(a)
16.098	16.098 (1.030)	130	8832			42.94- 142.94	97.31
16.098	16.098 (1.030)	97	5670			13.25- 113.25	62.47
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	7759	0.50000	0.3507	50.00- 150.00	100.00(a)
16.568	16.568 (1.060)	62	5454			21.32- 121.32	70.29
16.568	16.568 (1.060)	41	5773			8.96- 108.96	74.40
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	16254	0.50000	0.3234	50.00- 150.00	100.00(a)
16.983	16.983 (1.087)	85	9643			13.51- 113.51	59.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	10176	0.50000	0.3019	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
17.784	17.784 (1.138)	77	4424			0.00- 84.89	43.47
17.784	17.784 (1.138)	39	5484			0.00- 97.13	53.89
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	3680	0.50000	0.2403	50.00- 150.00	100.00(a)
17.978	17.978 (1.150)	43	7232			175.34- 275.34	196.52
17.950	17.950 (1.149)	85	1899			0.64- 100.64	51.60
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	21271	0.50000	0.3042	50.00- 150.00	100.00(a)
18.337	18.337 (1.173)	92	13947			11.62- 111.62	65.57
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	11178	0.50000	0.3035	50.00- 150.00	100.00(a)
18.780	18.780 (0.903)	77	3382			0.00- 81.86	30.26
18.780	18.780 (0.903)	39	4867			0.00- 91.58	43.54
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	8142	0.50000	0.3068	50.00- 150.00	100.00(a)
19.111	19.111 (0.919)	99	5361			13.21- 113.21	65.84
19.111	19.111 (0.919)	83	7611			35.76- 135.76	93.48
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	11480	0.50000	0.3228	50.00- 150.00	100.00(a)
19.277	19.277 (0.927)	129	7435			19.36- 119.36	64.76
19.277	19.277 (0.927)	131	7336			16.43- 116.43	63.90
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	12573	0.50000	0.2782	50.00- 150.00	100.00(a)
19.803	19.803 (0.952)	127	10083			28.82- 128.82	80.20
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.079	20.079 (0.965)	107	13043	0.50000	0.3089	50.00- 150.00	100.00(a)
20.079	20.079 (0.965)	109	12513			46.68- 146.68	95.94
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	20558	0.50000	0.3404	50.00- 150.00	100.00(a)
20.853	20.853 (1.003)	114	7591			0.00- 82.06	36.39
20.853	20.853 (1.003)	77	22391			22.53- 122.53	107.35
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	9559	0.50000	0.3011	50.00- 150.00	100.00(a)
20.936	20.936 (1.007)	91	30384			269.96- 369.96	317.86
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	10501	0.50000	0.2627	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.130	21.130 (1.016)	91	21263			149.87- 249.87	202.49
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	10265	0.50000	0.2699	50.00- 150.00	100.00(a)
21.849	21.849 (1.051)	91	22643			160.81- 260.81	220.58
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	13827	0.50000	0.2373	50.00- 150.00	100.00(a)
21.876	21.876 (1.052)	78	8943			9.02- 109.02	64.68
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12913	0.50000	0.2662	50.00- 150.00	100.00(a)
22.291	22.291 (1.072)	171	6556			1.83- 101.83	50.77
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	28340	0.50000	0.2702	50.00- 150.00	100.00(a)
22.429	22.429 (1.078)	120	8960			0.00- 77.62	31.62
22.402	22.402 (1.077)	51	3140			0.00- 58.75	11.08
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15471	0.50000	0.2536	50.00- 150.00	100.00(a)
23.010	23.010 (1.106)	85	11730			16.89- 116.89	75.82
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	38515	0.50000	0.2832	50.00- 150.00	100.00(a)
23.121	23.121 (1.112)	120	8217			0.00- 71.63	21.33
23.121	23.121 (1.112)	105	1592			0.00- 53.71	4.13
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	28042	0.50000	0.2422	50.00- 150.00	100.00(a)
23.287	23.287 (1.120)	120	8426			0.00- 79.69	30.05
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	25414	0.50000	0.2574	50.00- 150.00	100.00(a)
23.397	23.397 (1.125)	120	11861			0.00- 98.23	46.67
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	21767	0.50000	0.2339	50.00- 150.00	100.00(a)
24.033	24.033 (1.156)	120	9142			0.00- 94.91	42.00
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	19331	0.50000	0.2890	50.00- 150.00	100.00(a)
24.586	24.586 (1.182)	148	12995			14.68- 114.68	67.22
24.586	24.586 (1.182)	111	8206			0.00- 91.36	42.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	20052	0.50000	0.2914	50.00- 150.00	100.00(a)
24.724	24.724 (1.189)	148	14332			16.09- 116.09	71.47
24.724	24.724 (1.189)	111	8007			0.00- 90.13	39.93
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	23853	0.50000	0.2397	50.00- 150.00	100.00(a)
24.946	24.946 (1.199)	126	4759			0.00- 69.28	19.95
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	18613	0.50000	0.2857	50.00- 150.00	100.00(a)
25.360	25.360 (1.219)	148	12636			15.85- 115.85	67.89
25.360	25.360 (1.219)	111	8799			0.00- 94.46	47.27
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	11034	0.50000	0.3012	50.00- 150.00	100.00(a)
16.347	16.347 (1.177)	98	5077			0.00- 95.22	46.01
16.347	16.347 (1.177)	55	8471			20.82- 120.82	76.77

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/06Feb2008.b/t020615.d
Report Date: 07-Feb-2008 08:40

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020615.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.5ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	359684	1.04
97 1,4-Difluorobenze	1372567	823540	1921594	1311527	-4.45
126 Chlorobenzene-d5	1227265	736359	1718171	1165188	-5.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

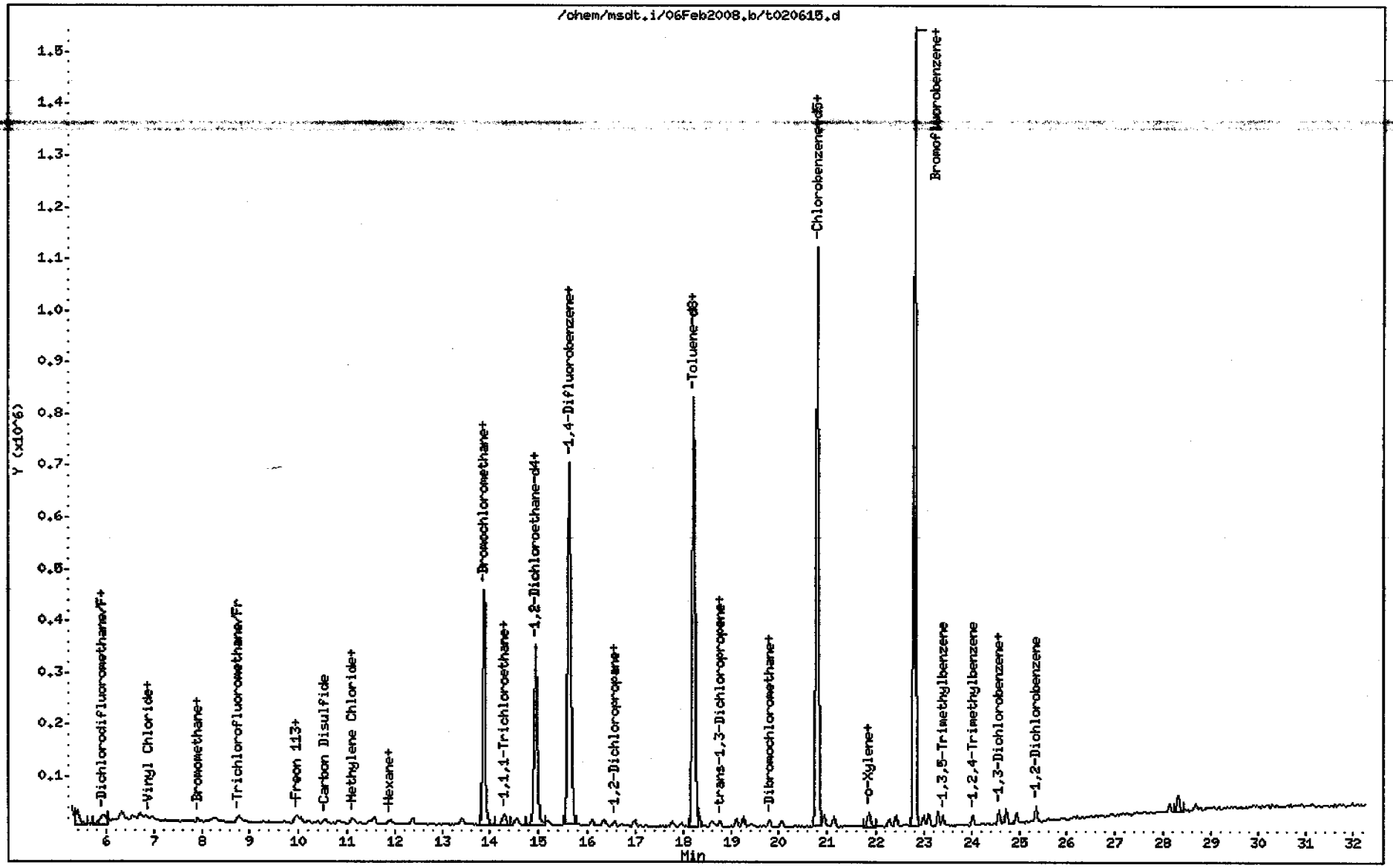
Data File: /chem/msdt.i/06Feb2008.b/t020615.d
Date : 06-FEB-2008 22:02
Client ID: Level 2
Sample Info: 0.5mL #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

0084



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/28Feb2008.b/t022804.d
Lab Smp Id: ICAL — Client Smp ID: Level 3
Inj Date : 28-FEB-2008 13:03
Operator : sjr — Inst ID: msdt.i
Smp Info : 2.0ml #1576-304
Misc Info : 200ppbv -> 2.0ppbv
Comment :
Method : /chem/msdt.i/28Feb2008.b/t14q206c.m
Meth Date : 28-Feb-2008 16:07 sruth — Quant Type: ISTD
Cal Date : 28-FEB-2008 13:03 — Cal File: t022804.d
Als bottle: 1 — Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: sp12c.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	318819	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	242149			26.19- 126.19	75.95
13.858	13.858 (1.000)	49	375161			67.56- 167.56	117.67
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1180952	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	194801			0.00- 66.34	16.50
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1099034	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	646231			7.65- 107.65	58.80
21 Isobutane					CAS #: 75-28-5		
6.365	6.365 (0.459)	43	57022	2.00000	2.232	50.00- 150.00	100.00
6.365	6.365 (0.459)	42	22750			0.00- 86.63	39.90
6.365	6.365 (0.459)	58	1705			0.00- 52.93	2.99
35 1-Pentene					CAS #: 109-67-1		
8.798	8.798 (0.635)	55	45477	2.00000	2.489	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
35 1-Pentene (continued)							
8.798	8.798 (0.635)	42	46463			56.59- 156.59	102.17
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
44 Acrolein					CAS #: 107-02-8		
9.877	9.877 (0.713)	55	16405	2.00000	2.817	50.00- 150.00	100.00
9.904	9.904 (0.715)	56	23892			92.43- 192.43	145.64
48 Ethyl acrylate					CAS #: 140-88-5		
16.153	16.153 (1.034)	99	5205	2.00000	1.882	50.00- 150.00	100.00(a)
16.153	16.153 (1.034)	45	6265			60.54- 160.54	120.37
16.153	16.153 (1.034)	55	73255			1235.80-1335.80	1407.40
49 Iodomethane					CAS #: 74-88-4		
10.430	10.430 (0.753)	142	107449	2.00000	2.412	50.00- 150.00	100.00
10.430	10.430 (0.753)	127	48290			0.00- 95.19	44.94
50 Methyl Methacrylate					CAS #: 80-62-6		
16.568	16.568 (1.060)	41	43062	2.00000	2.158	50.00- 150.00	100.00
16.568	16.568 (1.060)	69	42574			45.56- 145.56	98.87
16.568	16.568 (1.060)	100	12872			0.00- 82.77	29.89
52 Acetonitrile					CAS #: 75-05-8		
10.900	10.900 (0.786)	40	18335	2.00000	2.595	50.00- 150.00	100.00
10.900	10.900 (0.786)	41	37294			146.13- 246.13	203.40
10.900	10.900 (0.786)	38	5663			0.00- 78.90	30.89
56 Cyclopentane					CAS #: 287-92-3		
11.093	11.093 (0.800)	70	34487	2.00000	2.483	50.00- 150.00	100.00
11.093	11.093 (0.800)	55	34875			66.73- 166.73	111.88
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
62 Acrylonitrile					CAS #: 107-13-1		
11.646	11.646 (0.840)	53	35031	2.00000	2.636	50.00- 150.00	100.00
11.646	11.646 (0.840)	52	32796			38.74- 138.74	93.62
63 2-Pentanone					CAS #: 107-87-9		
16.374	16.374 (1.048)	43	79142	2.00000	2.159	50.00- 150.00	100.00
16.374	16.374 (1.048)	58	6956			0.00- 58.83	8.79
16.374	16.374 (1.048)	86	17107			0.00- 71.75	21.62
66 1-Hexene					CAS #: 592-41-6		
11.784	11.784 (0.850)	55	26188	2.00000	2.211	50.00- 150.00	100.00
11.784	11.784 (0.850)	41	40494			98.04- 198.04	154.63
11.784	11.784 (0.850)	84	12188			0.00- 96.48	46.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
105 Dibromomethane					CAS #: 74-95-3		
16.789	16.789 (1.074)	174	50209	2.00000	2.376	50.00- 150.00	100.00
16.789	16.789 (1.074)	93	53141			55.32- 155.32	105.84
16.789	16.789 (1.074)	95	41926			35.19- 135.19	83.50

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/28Feb2008.b/t022804.d
Report Date: 28-Feb-2008 16:07

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022804.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/28Feb2008.b/t14q206c.m
Misc Info: 200ppbv -> 2.0ppbv

Calibration Date: 28-FEB-2008
Calibration Time: 14:33
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	284844	170906	398782	318819	11.93
97 1,4-Difluorobenze	1138044	682826	1593262	1180952	3.77
126 Chlorobenzene-d5	1084863	650918	1518808	1099034	1.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.86	-0.20
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

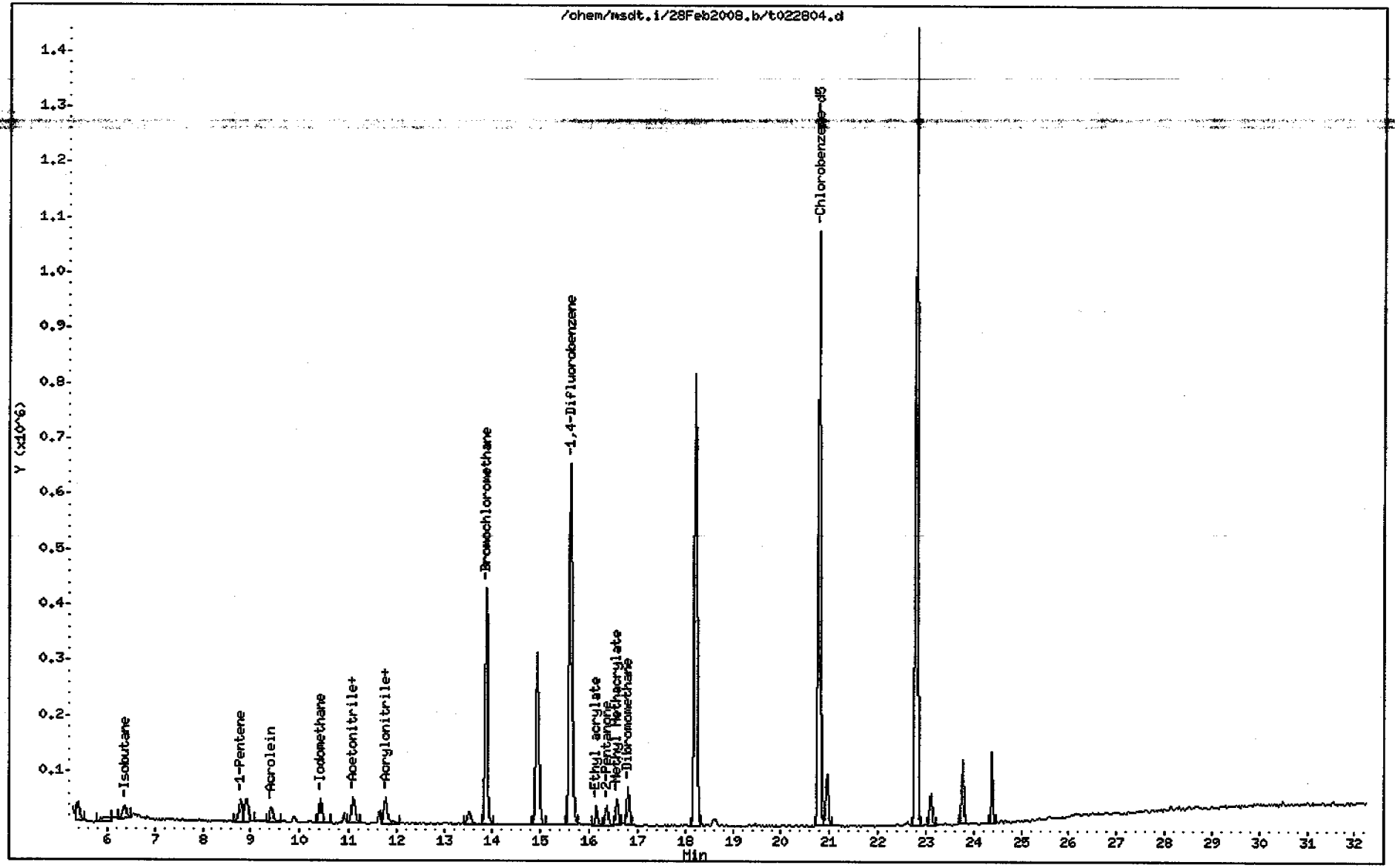
Data File: /chem/msdt.i/28Feb2008.b/t022804.d
Date : 28-FEB-2008 13:03
Client ID: Level 3
Sample Info: 2.0ml #1576-304

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0089



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022102.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 21-FEB-2008 09:41
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0ml #1576-299
Misc Info : 200ppbv -> 2.0(12.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 09:41 Cal File: t022102.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	323136	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	248884			26.66- 126.66	77.02
13.865	13.865 (1.000)	49	384478			100.22- 200.22	118.98
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1233520	25.0000		50.00- 150.00	100.00
15.607	15.607 (1.000)	88	206796			0.00- 66.22	16.76
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1168316	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	676739			7.02- 107.02	57.92
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	79733	2.00000	2.000	50.00- 150.00	100.00
6.407	6.407 (0.462)	45	18145			0.00- 72.76	22.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	83658	2.00000	2.000	50.00- 150.00	100.00
5.422	5.422 (0.391)	85	25442			0.00- 80.41	30.41

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.422	5.422	(0.391)	87	9056			0.00- 60.83	10.83
13 Freon 134a						CAS #: 811-97-2		
5.675	5.675	(0.409)	83	37002	2.00000	2.000	50.00- 150.00	100.00
5.675	5.675	(0.409)	69	29504			29.74- 129.74	79.74
15 Freon 152a						CAS #: 75-37-6		
5.844	5.844	(0.422)	65	21576	2.00000	2.000	50.00- 150.00	100.00
5.844	5.844	(0.422)	51	40829			139.23- 239.23	189.23
5.844	5.844	(0.422)	47	9103			0.00- 92.19	42.19
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	8970	2.00000	2.000	50.00- 150.00	100.00
5.985	5.985	(0.432)	51	50505			513.04- 613.04	563.04
5.985	5.985	(0.432)	85	2799			0.00- 81.20	31.20
26 Methanol						CAS #: 67-56-1		
7.562	7.562	(0.545)	31	107293	12.0000	12.000	50.00- 150.00	100.00(a)
7.562	7.562	(0.545)	32	159991			99.12- 199.12	149.12
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	63623	2.00000	2.000	50.00- 150.00	100.00
8.717	8.717	(0.629)	69	20718			0.00- 82.56	32.56
8.688	8.688	(0.627)	35	3460			0.00- 55.44	5.44
40 Freon123a						CAS #: 354-23-4		
9.579	9.579	(0.691)	67	43195	2.00000	2.000	50.00- 150.00	100.00
9.579	9.579	(0.691)	117	30046			19.56- 119.56	69.56
41 Freon123						CAS #: 306-83-2		
9.690	9.690	(0.699)	83	5312	2.00000	2.000	50.00- 150.00	100.00
9.745	9.745	(0.703)	133	1071			0.00- 70.16	20.16
9.579	9.579	(0.691)	85	21678			358.09- 458.09	408.09
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	89483	2.00000	2.000	50.00- 150.00	100.00
12.289	12.289	(0.886)	87	25084			0.00- 78.03	28.03
12.289	12.289	(0.886)	59	11599			0.00- 62.96	12.96
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	4135	2.00000	2.000	50.00- 150.00	100.00
12.427	12.427	(0.896)	59	3892			44.12- 144.12	94.12
12.289	12.289	(0.886)	41	23097			508.57- 608.57	558.57
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	83489	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	36614			0.00- 93.85	43.85
12.925	12.925 (0.932)	41	21913			0.00- 76.25	26.25
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	11280	2.00000	2.000	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	9228			31.81- 131.81	81.81
13.395	13.395 (0.966)	43	57387			458.75- 558.75	508.75
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	81705	2.00000	2.000	50.00- 150.00	100.00
15.026	15.026 (1.084)	87	18497			0.00- 72.64	22.64
14.999	14.999 (1.082)	55	21377			0.00- 76.16	26.16
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	32947	2.00000	2.000	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	45146			87.03- 187.03	137.03
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	9606	2.00000	2.000	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	10253			56.74- 156.74	106.74
15.801	15.801 (1.011)	43	8257			35.96- 135.96	85.96
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	24048	2.00000	2.000	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	11636			0.00- 98.39	48.39
19.533	19.533 (1.249)	43	54116			175.03- 275.03	225.03
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	25477	2.00000	2.000	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	12571			0.00- 99.34	49.34
22.741	22.741 (1.093)	42	15548			11.03- 111.03	61.03
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	67522	2.00000	2.000	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	63912			44.65- 144.65	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/21Feb2008.b/t022102.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022102.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 2.0(12.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 09:41
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	323136	193882	452390	323136	0.00
97 1,4-Difluorobenze	1233520	740112	1726928	1233520	0.00
126 Chlorobenzene-d5	1168316	700990	1635642	1168316	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

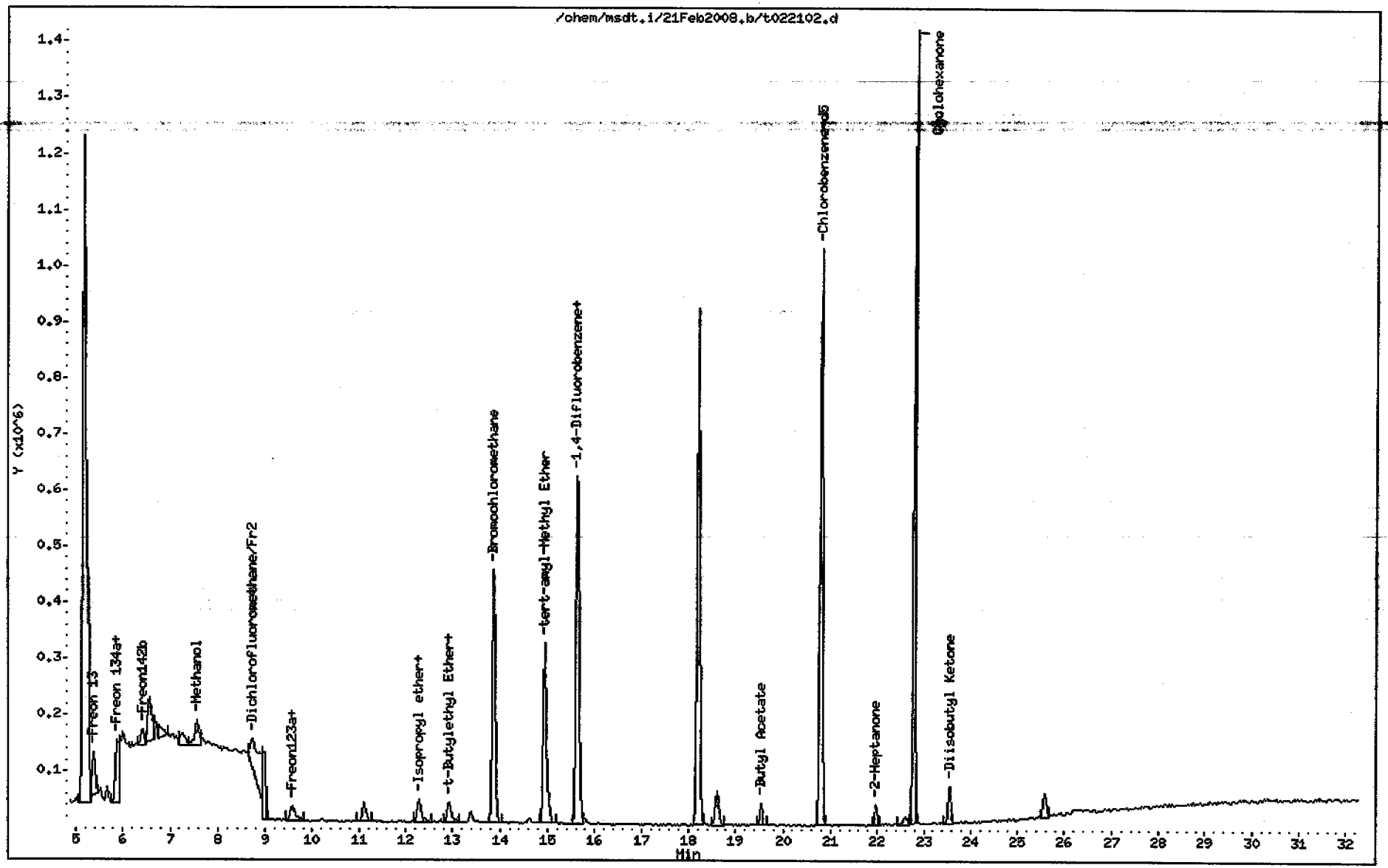
Data File: /chem/msdt.i/21Feb2008.b/t022102.d
Date : 21-FEB-2008 09:41
Client ID: Level 3
Sample Info: 2.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0094



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020609.d
Lab Smp Id: ICAL — Client Smp ID: Level 3
Inj Date : 06-FEB-2008 15:52
Operator : sjr — Inst ID: msdt.i
Smp Info : 2.0ml #1576-261
Misc Info : 200ppbv -> 2.0ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth — Quant Type: ISTD
Cal Date : 06-FEB-2008 15:52 — Cal File: t020609.d
Als bottle: 1 — Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.858	13.858 (1.000)	130	335688	25.0000		50.00- 150.00		100.00
13.858	13.858 (1.000)	128	253015			26.39- 126.39		75.37
13.858	13.858 (1.000)	49	393871			99.95- 199.95		117.33
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1208496	25.0000		50.00- 150.00		100.00
15.628	15.628 (1.000)	88	195592			0.00- 66.12		16.18
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1074623	25.0000		50.00- 150.00		100.00
20.798	20.798 (1.000)	82	603306			6.72- 106.72		56.14
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	504523	25.0000	23.357	50.00- 150.00		100.00
14.936	14.936 (1.078)	67	255336			3.57- 103.57		50.61
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1147306	25.0000	24.646	50.00- 150.00		100.00
18.199	18.199 (1.165)	70	135898			0.00- 61.29		11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	787197			18.71- 118.71	68.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	679408	25.0000	24.442	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	860445			75.58- 175.58	126.65
22.789	22.789 (1.096)	176	670526			47.41- 147.41	98.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	22739	2.00000	2.071	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	15435			17.96- 117.96	67.88
5.784	5.784 (0.417)	39	20226			33.44- 133.44	88.95
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	123293	2.00000	1.881	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	38794			0.00- 82.13	31.46
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	78566	2.00000	1.813	50.00- 150.00	100.00
6.282	6.282 (0.453)	137	26889			0.00- 81.89	34.22
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	26540	2.00000	1.854	50.00- 150.00	100.00(a)
6.531	6.531 (0.471)	52	9438			0.00- 83.62	35.56
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	34443	2.00000	1.753	50.00- 150.00	100.00
6.863	6.863 (0.495)	64	15275			0.00- 89.61	44.35
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	27542	2.00000	1.863	50.00- 150.00	100.00
6.946	6.946 (0.501)	39	26577			53.33- 153.33	96.50
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	34627	2.00000	1.780	50.00- 150.00	100.00
7.913	7.913 (0.571)	96	36867			43.69- 143.69	106.47
27 Chloroethane					CAS #: 75-00-3		
8.162	8.162 (0.589)	64	18101	2.00000	1.766	50.00- 150.00	100.00
8.162	8.162 (0.589)	49	4451			0.00- 76.71	24.59
8.162	8.162 (0.589)	66	6377			0.00- 83.02	35.23
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.770	8.770 (0.633)	101	138682	2.00000	1.869	50.00- 150.00	100.00
8.770	8.770 (0.633)	103	89495			13.52- 113.52	64.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	8250	2.00000	1.453	50.00- 150.00	100.00(a)
9.241	9.241 (0.667)	43	2392			0.00- 75.24	28.99
9.241	9.241 (0.667)	46	4013			0.00- 89.78	48.64
42 Freon 113					CAS #: 76-13-1		
9.932	9.932 (0.717)	151	65484	2.00000	1.916	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	41750			14.28- 114.28	63.76
9.932	9.932 (0.717)	101	88957			80.55- 180.55	135.85
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	52759	2.00000	1.715	50.00- 150.00	100.00
10.042	10.042 (0.725)	96	35580			13.15- 113.15	67.44
10.042	10.042 (0.725)	98	22419			0.00- 88.14	42.49
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	17325	2.00000	1.818	50.00- 150.00	100.00(a)
10.181	10.181 (0.735)	43	56147			267.82- 367.82	324.08
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	49508	2.00000	1.516	50.00- 150.00	100.00(a)
10.374	10.374 (0.749)	43	15582			0.00- 76.64	31.47
10.374	10.374 (0.749)	59	2412			0.00- 54.31	4.87
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	104722	2.00000	1.800	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	15372	2.00000	1.534	50.00- 150.00	100.00
10.817	10.817 (0.781)	41	36495			173.84- 273.84	237.41
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	37218	2.00000	1.914	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	31883			36.08- 136.08	85.67
11.093	11.093 (0.800)	51	11885			0.00- 83.83	31.93
60 MTBE					CAS #: 1634-04-4		
11.452	11.452 (0.826)	73	66761	2.00000	1.196	50.00- 150.00	100.00
11.452	11.452 (0.826)	57	12002			0.00- 69.02	17.98
11.452	11.452 (0.826)	41	12228			0.00- 70.47	18.32
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	37657	2.00000	1.648	50.00- 150.00	100.00
11.535	11.535 (0.832)	61	60152			95.77- 195.77	159.74
11.535	11.535 (0.832)	98	27454			16.26- 116.26	72.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	47780	2.00000	1.584	50.00- 150.00	100.00
11.895	11.895 (0.858)	43	27530			9.30- 109.30	57.62
11.895	11.895 (0.858)	86	8949			0.00- 66.83	18.73
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	8827	2.00000	1.493	50.00- 150.00	100.00(a)
12.365	12.365 (0.892)	43	72295			832.23- 932.23	819.02
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	75018	2.00000	1.778	50.00- 150.00	100.00
12.365	12.365 (0.892)	65	22968			0.00- 82.79	30.62
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	17305	2.00000	1.612	50.00- 150.00	100.00
13.388	13.388 (0.966)	43	54370			275.22- 375.22	314.19
13.388	13.388 (0.966)	57	5456			0.00- 79.56	31.53
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	49131	2.00000	1.730	50.00- 150.00	100.00
13.416	13.416 (0.968)	96	40888			27.39- 127.39	83.22
13.416	13.416 (0.968)	98	25507			0.96- 100.96	51.92
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	29321	2.00000	1.619	50.00- 150.00	100.00
13.886	13.886 (1.002)	71	14128			0.00- 99.16	48.18
13.858	13.858 (1.000)	72	15805			2.04- 102.04	53.90
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	92125	2.00000	1.890	50.00- 150.00	100.00
13.941	13.941 (1.006)	85	57968			16.43- 116.43	62.92
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	97885	2.00000	1.815	50.00- 150.00	100.00
14.273	14.273 (1.030)	99	63207			17.45- 117.45	64.57
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	46052	2.00000	1.595	50.00- 150.00	100.00
14.300	14.300 (1.032)	56	44767			47.55- 147.55	97.21
14.300	14.300 (1.032)	41	25199			5.12- 105.12	54.72
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	92572	2.00000	1.787	50.00- 150.00	100.00
14.549	14.549 (1.050)	117	96223			53.78- 153.78	103.94
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	113789	2.00000	1.883	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	26346			0.00- 73.50	23.15
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	112642	2.00000	1.600	50.00- 150.00	100.00
14.881	14.881 (1.074)	56	37981			0.00- 82.82	33.72
14.881	14.881 (1.074)	41	33953			0.00- 78.43	30.14
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	55658	2.00000	1.888	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	18886			0.00- 84.23	33.93
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	28458	2.00000	1.664	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	38964			85.70- 185.70	136.92
15.185	15.185 (0.972)	57	22207			28.72- 128.72	78.03
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	47821	2.00000	1.848	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	44019			42.94- 142.94	92.05
16.098	16.098 (1.030)	97	30818			13.25- 113.25	64.44
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	36803	2.00000	1.805	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	26650			21.32- 121.32	72.41
16.568	16.568 (1.060)	41	20186			8.96- 108.96	54.85
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	23425	2.00000	1.570	50.00- 150.00	100.00(a)
16.678	16.678 (1.067)	58	14454			9.36- 109.36	61.70
16.706	16.706 (1.069)	57	5506			0.00- 71.19	23.50
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	85032	2.00000	1.836	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	56563			13.51- 113.51	66.52
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	51480	2.00000	1.657	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	17678			0.00- 84.89	34.34
17.784	17.784 (1.138)	39	24641			0.00- 97.13	47.87
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	20175	2.00000	1.430	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	50030			175.34- 275.34	247.98
17.978	17.978 (1.150)	85	10629			0.64- 100.64	52.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	120521	2.00000	1.871	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	71179			11.62- 111.62	59.06
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	59843	2.00000	1.762	50.00- 150.00	100.00
18.752	18.752 (0.902)	77	20118			0.00- 81.86	33.62
18.752	18.752 (0.902)	39	25251			0.00- 91.58	42.20
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	47042	2.00000	1.922	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	29057			13.21- 113.21	61.77
19.111	19.111 (0.919)	83	38865			35.76- 135.76	82.62
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	61038	2.00000	1.861	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	45046			19.36- 119.36	73.80
19.277	19.277 (0.927)	131	43125			16.43- 116.43	70.65
121 2-Hexanone					CAS #: 591-78-6		
19.443	19.443 (0.935)	58	21928	2.00000	1.070	50.00- 150.00	100.00(a)
19.416	19.416 (0.934)	43	43343			124.96- 224.96	197.66
19.443	19.443 (0.935)	100	5059			0.00- 71.71	23.07
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	73614	2.00000	1.766	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	61421			28.82- 128.82	83.44
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	68894	2.00000	1.769	50.00- 150.00	100.00
20.051	20.051 (0.964)	109	66726			46.68- 146.68	96.85
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	107793	2.00000	1.907	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	32353			0.00- 82.06	30.01
20.853	20.853 (1.003)	77	75346			22.53- 122.53	69.90
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	53200	2.00000	1.817	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	171345			269.96- 369.96	322.08
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	66296	2.00000	1.798	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	127807			149.87- 249.87	192.78
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	61779	2.00000	1.761	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
21.849	21.849	(1.051)	91	123534			160.81- 260.81	199.96
131 Styrene						CAS #: 100-42-5		
21.876	21.876	(1.052)	104	86239	2.00000	1.605	50.00- 150.00	100.00
21.876	21.876	(1.052)	78	46667			9.02- 109.02	54.11
133 Bromoform						CAS #: 75-25-2		
22.291	22.291	(1.072)	173	78029	2.00000	1.744	50.00- 150.00	100.00
22.291	22.291	(1.072)	171	43129			1.83- 101.83	55.27
134 Cumene						CAS #: 98-82-8		
22.429	22.429	(1.078)	105	168444	2.00000	1.741	50.00- 150.00	100.00
22.429	22.429	(1.078)	120	43006			0.00- 77.62	25.53
22.429	22.429	(1.078)	51	12970			0.00- 58.75	7.70
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.010	23.010	(1.106)	83	111264	2.00000	1.978	50.00- 150.00	100.00
23.010	23.010	(1.106)	85	71555			16.89- 116.89	64.31
142 Propylbenzene						CAS #: 103-65-1		
23.121	23.121	(1.112)	91	233544	2.00000	1.862	50.00- 150.00	100.00
23.121	23.121	(1.112)	120	50752			0.00- 71.63	21.73
23.121	23.121	(1.112)	105	8175			0.00- 53.71	3.50
145 4-Ethyltoluene						CAS #: 622-96-8		
23.286	23.286	(1.120)	105	203376	2.00000	1.905	50.00- 150.00	100.00
23.286	23.286	(1.120)	120	60019			0.00- 79.69	29.51
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.397	23.397	(1.125)	105	167502	2.00000	1.839	50.00- 150.00	100.00
23.397	23.397	(1.125)	120	80768			0.00- 98.23	48.22
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.033	24.033	(1.156)	105	155174	2.00000	1.808	50.00- 150.00	100.00
24.033	24.033	(1.156)	120	68143			0.00- 94.91	43.91
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
24.586	24.586	(1.182)	146	129075	2.00000	2.093	50.00- 150.00	100.00
24.586	24.586	(1.182)	148	83042			14.68- 114.68	64.34
24.586	24.586	(1.182)	111	51936			0.00- 91.36	40.24
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
24.724	24.724	(1.189)	146	129470	2.00000	2.040	50.00- 150.00	100.00
24.724	24.724	(1.189)	148	86858			16.09- 116.09	67.09
24.724	24.724	(1.189)	111	52523			0.00- 90.13	40.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	166099	2.00000	1.810	50.00- 150.00	100.00
24.945	24.945 (1.199)	126	32450			0.00- 69.28	19.54
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	127527	2.00000	2.122	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	87225			15.85- 115.85	68.40
25.360	25.360 (1.219)	111	57743			0.00- 94.46	45.28
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	87930	2.00000	1.919	50.00- 150.00	100.00(a)
28.153	28.153 (1.354)	182	83811			44.78- 144.78	95.32
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	106764	2.00000	2.315	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	66440			12.90- 112.90	62.23
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	109061	2.00000	1.719	50.00- 150.00	100.00(a)
28.678	28.678 (1.379)	127	15349			0.00- 62.74	14.07
29 Isopentane					CAS #: 78-78-4		
8.245	8.245 (0.595)	43	38125	2.00000	1.757	50.00- 150.00	100.00(a)
8.273	8.273 (0.597)	57	29545			27.67- 127.67	77.50
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	6720	2.00000	1.788	50.00- 150.00	100.00(a)
6.780	6.780 (0.489)	43	51151			666.74- 766.74	761.18
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	55043	2.00000	1.610	50.00- 150.00	100.00
16.346	16.346 (1.180)	98	24267			0.00- 95.22	44.09
16.346	16.346 (1.180)	55	36926			20.82- 120.82	67.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	49102	2.00000	1.379	50.00- 150.00	100.00(a)
11.148	11.148 (0.804)	41	11220			0.00- 72.85	22.85
11.148	11.148 (0.804)	57	4875			0.00- 59.93	9.93

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020609.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 2.0ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 15:52
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	335688	201413	469963	335688	0.00
97 1,4-Difluorobenze	1208496	725098	1691894	1208496	0.00
126 Chlorobenzene-d5	1074623	644774	1504472	1074623	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

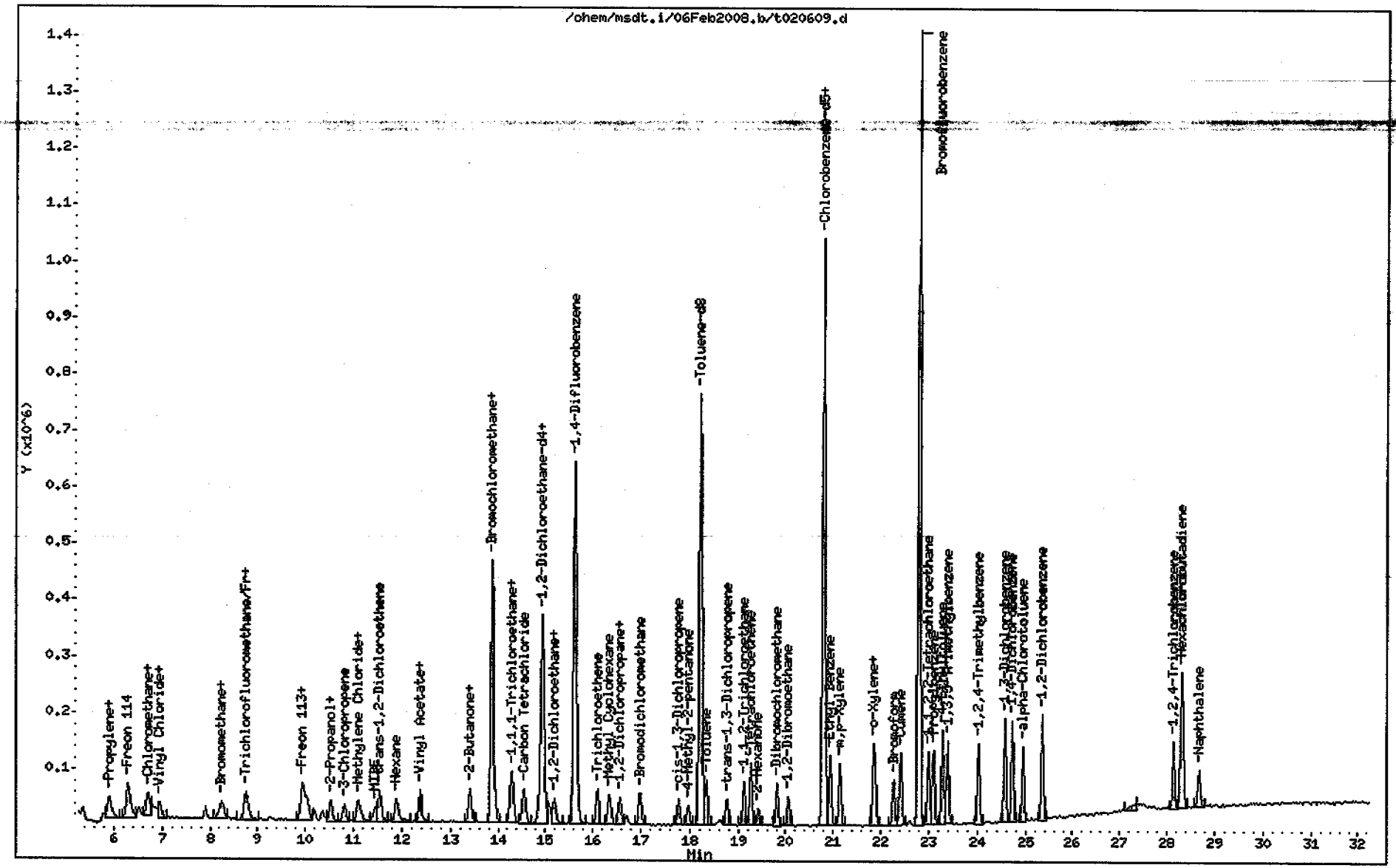
Data File: /chem/msdt.i/06Feb2008.b/t020609.d
Date : 06-FEB-2008 15:52
Client ID: Level 3
Sample Info: 2.0ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0104



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022103.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 21-FEB-2008 10:21
Operator : sjr Inst ID: msdt.i
Smp Info : 8.0ml #1576-299
Misc Info : 200ppbv -> 8.0(48.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 10:21 Cal File: t022103.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312185	25.0000		50.00- 150.00		100.00
13.865	13.865 (1.000)	128	236346			26.53- 126.53		75.71
13.865	13.865 (1.000)	49	371766			95.42- 195.42		119.09
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1223661	25.0000		50.00- 150.00		100.00
15.635	15.635 (1.000)	88	198736			0.00- 66.25		16.24
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1150030	25.0000		50.00- 150.00		100.00
20.805	20.805 (1.000)	82	661640			7.16- 107.16		57.53
6 Freon142b						CAS #: 75-68-3		
6.408	6.408 (0.462)	65	314391	8.00000	8.080	50.00- 150.00		100.00
6.408	6.408 (0.462)	45	67573			0.00- 72.13		21.49
9 Freon 13						CAS #: 75-72-9		
5.394	5.394 (0.389)	69	329101	8.00000	8.071	50.00- 150.00		100.00
5.394	5.394 (0.389)	85	99340			0.00- 80.30		30.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.394	5.394 (0.389)	87	34120			0.00- 60.60	10.37
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	141460	8.00000	7.957	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	121869			32.94- 132.94	86.15
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	73331	8.00000	7.487	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	133000			135.30- 235.30	181.37
5.844	5.844 (0.422)	47	31133			0.00- 92.32	42.46
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	36362	8.00000	8.191	50.00- 150.00	100.00
5.985	5.985 (0.432)	51	183210			483.45- 583.45	503.85
5.985	5.985 (0.432)	85	4459			0.00- 71.73	12.26
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	197031	48.0000	30.924	50.00- 150.00	100.00(a)
7.534	7.534 (0.543)	32	284448			96.74- 196.74	144.37
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	247871	8.00000	8.032	50.00- 150.00	100.00
8.717	8.717 (0.629)	69	81283			0.00- 82.68	32.79
8.717	8.717 (0.629)	35	14325			0.00- 55.61	5.78
40 Freon123a					CAS #: 354-23-4		
9.580	9.580 (0.691)	67	180610	8.00000	8.315	50.00- 150.00	100.00
9.580	9.580 (0.691)	117	129025			20.50- 120.50	71.44
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	20901	8.00000	8.072	50.00- 150.00	100.00
9.745	9.745 (0.703)	133	4660			0.00- 71.23	22.30
9.580	9.580 (0.691)	85	89551			368.27- 468.27	428.45
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	351422	8.00000	8.064	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	111725			0.00- 79.91	31.79
12.289	12.289 (0.886)	59	41310			0.00- 62.36	11.76
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	23591	8.00000	9.539	50.00- 150.00	100.00
12.400	12.400 (0.894)	59	31738			64.33- 164.33	134.53
12.400	12.400 (0.894)	41	18558			268.62- 368.62	78.67
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	353478	8.00000	8.365	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	151766			0.00- 93.39	42.94
12.925	12.925 (0.932)	41	69691			0.00- 72.98	19.72
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	37234	8.00000	7.371	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	39315			43.70- 143.70	105.59
13.395	13.395 (0.966)	43	256151			548.35- 648.35	687.95
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	341472	8.00000	8.313	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	75821			0.00- 72.42	22.20
14.999	14.999 (1.082)	55	93846			0.00- 76.82	27.48
96 2-Heptanone					CAS #: 110-43-0		
21.994	21.994 (1.586)	58	165986	8.00000	9.054	50.00- 150.00	100.00
21.967	21.967 (1.584)	43	236874			89.87- 189.87	142.71
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	55918	8.00000	9.514	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	42576			41.44- 141.44	76.14
15.801	15.801 (1.011)	43	29218			19.10- 119.10	52.25
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	110364	8.00000	8.581	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	48409			0.00- 96.12	43.86
19.533	19.533 (1.249)	43	247267			174.54- 274.54	224.05
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	151594	8.00000	9.628	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	75635			0.00- 99.62	49.89
22.741	22.741 (1.093)	42	93458			11.34- 111.34	61.65
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	340934	8.00000	8.990	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	328214			45.46- 145.46	96.27
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022103.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 8.0(48.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 10:21
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312185	187311	437059	312185	0.00
97 1,4-Difluorobenze	1223661	734197	1713125	1223661	0.00
126 Chlorobenzene-d5	1150030	690018	1610042	1150030	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

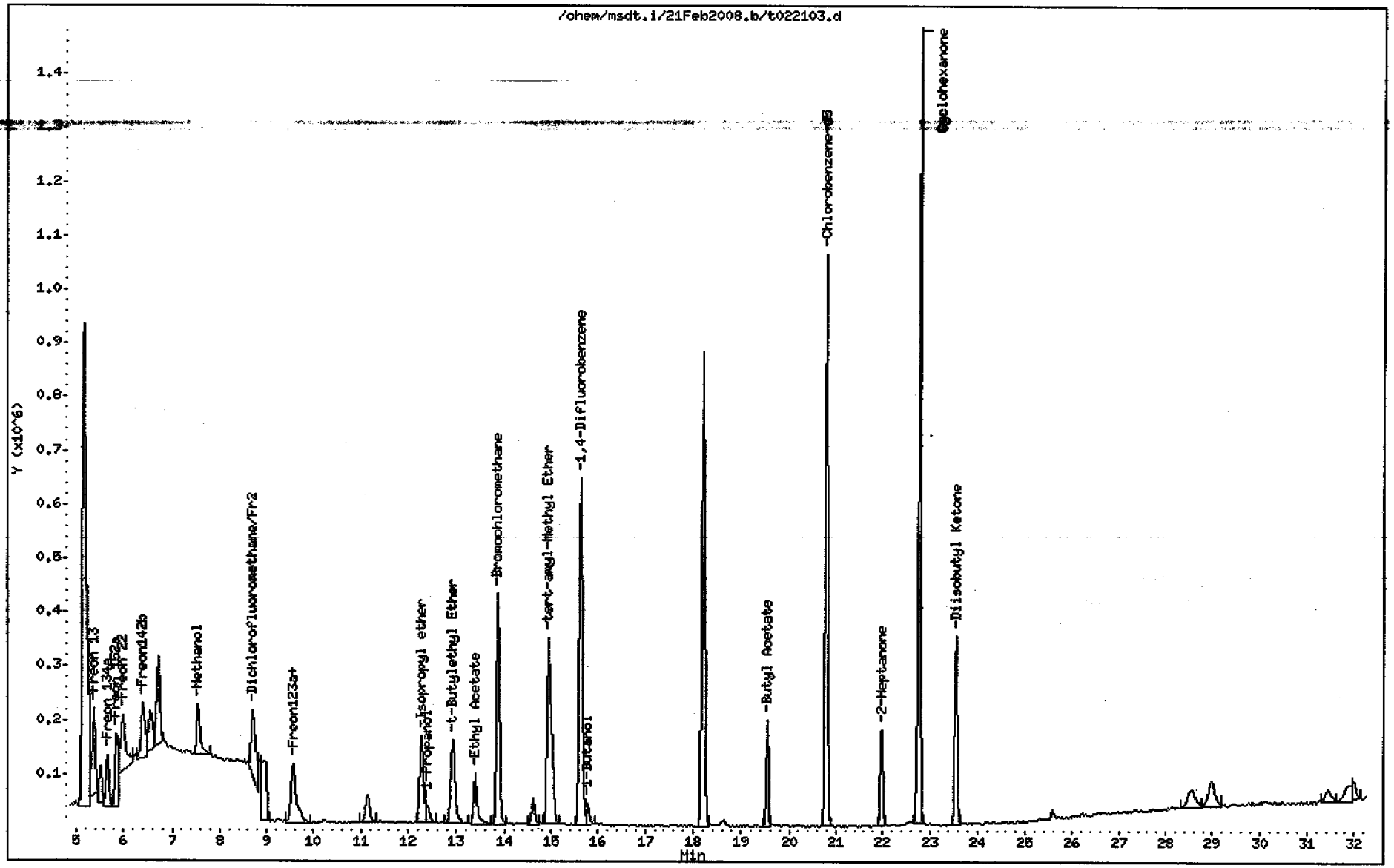
Data File: /chem/msdt.i/21Feb2008.b/t022103.d
Date : 21-FEB-2008 10:21
Client ID: Level 4
Sample Info: 8.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0109



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020610.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 06-FEB-2008 16:33
Operator : sjr
Inst ID: msdt.i
Smp Info : 25ml #1576-261
Misc Info : 200ppbv -> 25ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 16:33
Cal File: t020610.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886 (1.000)	130	334218	25.0000			50.00- 150.00	100.00
13.858	13.858 (1.000)	128	255710				26.39- 126.39	76.51
13.858	13.858 (1.000)	49	494332				99.95- 199.95	147.91
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1289398	25.0000			50.00- 150.00	100.00
15.628	15.628 (1.000)	88	207335				0.00- 66.12	16.08
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1136429	25.0000			50.00- 150.00	100.00
20.798	20.798 (1.000)	82	643863				6.72- 106.72	56.66
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.937	14.937 (1.076)	65	532290	25.0000	24.751		50.00- 150.00	100.00
14.937	14.937 (1.076)	67	283909				3.57- 103.57	53.34
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1243286	25.0000	25.032		50.00- 150.00	100.00
18.199	18.199 (1.165)	70	135082				0.00- 61.29	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	859790			18.71- 118.71	69.15
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	723188	25.0000	24.602	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	908149			75.58- 175.58	125.58
22.789	22.789 (1.096)	176	710103			47.41- 147.41	98.19
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	284287	25.0000	26.006	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	196485			17.96- 117.96	69.12
5.812	5.812 (0.419)	39	232847			33.44- 133.44	81.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	1805554	25.0000	27.666	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	593653			0.00- 82.13	32.88
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	1167878	25.0000	27.071	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	380476			0.00- 81.89	32.58
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	370794	25.0000	26.025	50.00- 150.00	100.00
6.531	6.531 (0.470)	52	124290			0.00- 83.62	33.52
20 Vinyl Chloride					CAS #: 75-01-4		
6.891	6.891 (0.496)	62	533497	25.0000	27.273	50.00- 150.00	100.00
6.891	6.891 (0.496)	64	172106			0.00- 89.61	32.26
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	405591	25.0000	27.552	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	386988			53.33- 153.33	95.41
25 Bromomethane					CAS #: 74-83-9		
7.914	7.914 (0.570)	94	524382	25.0000	27.074	50.00- 150.00	100.00
7.914	7.914 (0.570)	96	479513			43.69- 143.69	91.44
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	279105	25.0000	27.358	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	74678			0.00- 76.71	26.76
8.190	8.190 (0.590)	66	91110			0.00- 83.02	32.64
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	2071216	25.0000	28.034	50.00- 150.00	100.00
8.771	8.771 (0.632)	103	1351487			13.52- 113.52	65.25

Data File: /chem/msdt.i/06Feb2008.b/t020610.d
Report Date: 07-Feb-2008 08:39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	155269	25.0000	27.468	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	37536			0.00- 75.24	24.17
9.241	9.241 (0.665)	46	56946			0.00- 89.78	36.03
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	936482	25.0000	27.528	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	599235			14.28- 114.28	63.99
9.960	9.960 (0.717)	101	1225808			80.55- 180.55	130.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.043	10.043 (0.723)	61	847928	25.0000	27.691	50.00- 150.00	100.00
10.043	10.043 (0.723)	96	515431			13.15- 113.15	60.79
10.043	10.043 (0.723)	98	326894			0.00- 88.14	38.55
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	251564	25.0000	26.508	50.00- 150.00	100.00
10.181	10.181 (0.733)	43	818668			267.82- 367.82	325.43
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	898121	25.0000	26.385	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	230141			0.00- 76.64	26.82
10.374	10.374 (0.747)	59	35435			0.00- 54.31	4.13
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	1571599	25.0000	27.134	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	280286	25.0000	28.102	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	605264			173.84- 273.84	215.95
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	515852	25.0000	26.641	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	457155			36.08- 136.08	88.62
11.093	11.093 (0.799)	51	169738			0.00- 83.83	32.90
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	1789417	25.0000	32.190	50.00- 150.00	100.00
11.453	11.453 (0.825)	57	342391			0.00- 69.02	19.13
11.453	11.453 (0.825)	41	333822			0.00- 70.47	18.66
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	663385	25.0000	29.151	50.00- 150.00	100.00
11.536	11.536 (0.831)	61	928452			95.77- 195.77	139.96
11.563	11.563 (0.833)	98	425861			16.26- 116.26	64.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	875954	25.0000	29.169	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	512217			9.30- 109.30	58.48
11.895	11.895 (0.857)	86	154784			0.00- 66.83	17.67
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	153376	25.0000	26.051	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	1371221			832.23- 932.23	894.03
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	1208705	25.0000	28.768	50.00- 150.00	100.00
12.365	12.365 (0.890)	65	387741			0.00- 82.79	32.08
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	292440	25.0000	27.357	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	970748			275.22- 375.22	331.95
13.388	13.388 (0.964)	57	81299			0.00- 79.56	27.80
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	814797	25.0000	28.821	50.00- 150.00	100.00
13.416	13.416 (0.966)	96	629811			27.39- 127.39	77.30
13.416	13.416 (0.966)	98	405600			0.96- 100.96	49.78
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	516188	25.0000	28.629	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	270836			0.00- 99.16	52.47
13.858	13.858 (0.998)	72	286491			2.04- 102.04	55.50
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	1434387	25.0000	29.549	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	936553			16.43- 116.43	65.29
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	1561890	25.0000	29.090	50.00- 150.00	100.00
14.273	14.273 (1.028)	99	1011367			17.45- 117.45	64.75
85 Cyclohexane					CAS #: 110-82-7		
14.301	14.301 (1.030)	84	831348	25.0000	28.918	50.00- 150.00	100.00
14.301	14.301 (1.030)	56	822590			47.55- 147.55	98.95
14.301	14.301 (1.030)	41	437816			5.12- 105.12	52.66
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	1495659	25.0000	29.000	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	1593507			53.78- 153.78	106.54
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	1805921	25.0000	28.017	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	415076			0.00- 73.50	22.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	2040326	25.0000	29.108	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	651578			0.00- 82.82	31.93
14.881	14.881 (1.072)	41	527319			0.00- 78.43	25.84
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	899538	25.0000	28.604	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	287058			0.00- 84.23	31.91
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	539758	25.0000	29.582	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	725497			85.70- 185.70	134.41
15.185	15.185 (0.972)	57	433724			28.72- 128.72	80.36
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	809796	25.0000	29.332	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	736330			42.94- 142.94	90.93
16.098	16.098 (1.030)	97	502564			13.25- 113.25	62.06
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	617846	25.0000	28.408	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	449048			21.32- 121.32	72.68
16.568	16.568 (1.060)	41	350593			8.96- 108.96	56.74
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	419073	25.0000	26.325	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	248796			9.36- 109.36	59.37
16.706	16.706 (1.069)	57	87940			0.00- 71.19	20.98
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	1452860	25.0000	29.405	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	925446			13.51- 113.51	63.70
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	960843	25.0000	28.993	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	311058			0.00- 84.89	32.37
17.784	17.784 (1.138)	39	433889			0.00- 97.13	45.16
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	443863	25.0000	29.477	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	1012229			175.34- 275.34	228.05
17.978	17.978 (1.150)	85	219633			0.64- 100.64	49.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	1989625	25.0000	28.948	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	1214679			11.62- 111.62	61.05
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	1069541	25.0000	29.778	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	338491			0.00- 81.86	31.65
18.752	18.752 (0.902)	39	431851			0.00- 91.58	40.38
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.112	19.112 (0.919)	97	770359	25.0000	29.759	50.00- 150.00	100.00
19.112	19.112 (0.919)	99	476886			13.21- 113.21	61.90
19.112	19.112 (0.919)	83	637669			35.76- 135.76	82.78
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	1044211	25.0000	30.103	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	733649			19.36- 119.36	70.26
19.277	19.277 (0.927)	131	692279			16.43- 116.43	66.30
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	600804	25.0000	27.717	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	1022657			124.96- 224.96	170.21
19.416	19.416 (0.934)	100	132839			0.00- 71.71	22.11
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	1348982	25.0000	30.605	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	1034685			28.82- 128.82	76.70
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	1251667	25.0000	30.398	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	1153749			46.68- 146.68	92.18
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	1743887	25.0000	29.181	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	545791			0.00- 82.06	31.30
20.853	20.853 (1.003)	77	1078189			22.53- 122.53	61.83
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	926234	25.0000	29.913	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	2920081			269.96- 369.96	315.26
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	1173062	25.0000	30.086	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	2352767			149.87- 249.87	200.57
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	1125158	25.0000	30.336	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	2362887			160.81- 260.81	210.00
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	1801628	25.0000	31.706	50.00- 150.00	100.00
21.877	21.877 (1.052)	78	925547			9.02- 109.02	51.37
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	1429561	25.0000	30.216	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	734724			1.83- 101.83	51.40
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	3121582	25.0000	30.511	50.00- 150.00	100.00
22.430	22.430 (1.078)	120	803583			0.00- 77.62	25.74
22.430	22.430 (1.078)	51	269302			0.00- 58.75	8.63
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	1766566	25.0000	29.693	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	1142101			16.89- 116.89	64.65
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	3987999	25.0000	30.069	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	870154			0.00- 71.63	21.82
23.121	23.121 (1.112)	105	149480			0.00- 53.71	3.75
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	3468899	25.0000	30.725	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	1046336			0.00- 79.69	30.16
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	2924272	25.0000	30.363	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	1422059			0.00- 98.23	48.63
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	2745190	25.0000	30.249	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	1286028			0.00- 94.91	46.85
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	1892688	25.0000	29.016	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	1226520			14.68- 114.68	64.80
24.586	24.586 (1.182)	111	789350			0.00- 91.36	41.71
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	1952581	25.0000	29.091	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	1247055			16.09- 116.09	63.87
24.724	24.724 (1.189)	111	788240			0.00- 90.13	40.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	2891364	25.0000	29.794	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	551882			0.00- 69.28	19.09
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	1837629	25.0000	28.920	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	1188804			15.85- 115.85	64.69
25.360	25.360 (1.219)	111	792947			0.00- 94.46	43.15
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	1231331	25.0000	25.408	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	1163126			44.78- 144.78	94.46
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	1212587	25.0000	24.861	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	768070			12.90- 112.90	63.34
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	1766446	25.0000	25.470	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	211414			0.00- 62.74	12.37
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	576310	25.0000	26.672	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	453950			27.67- 127.67	78.77
19 Butane					CAS #: 106-97-8		
6.808	6.808 (0.490)	58	101733	25.0000	27.192	50.00- 150.00	100.00
6.808	6.808 (0.490)	43	712263			666.74- 766.74	700.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	978273	25.0000	28.740	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	444120			0.00- 95.22	45.40
16.347	16.347 (1.177)	55	690170			20.82- 120.82	70.55
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.149	11.149 (0.803)	59	1019065	25.0000	28.754	50.00- 150.00	100.00
11.149	11.149 (0.803)	41	225570			0.00- 72.85	22.13
11.149	11.149 (0.803)	57	106009			0.00- 59.93	10.40

Data File: /chem/msdt.i/06Feb2008.b/t020610.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020610.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 25ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 16:33
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	334218	200531	467905	334218	0.00
97 1,4-Difluorobenze	1289398	773639	1805157	1289398	0.00
126 Chlorobenzene-d5	1136429	681857	1591001	1136429	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

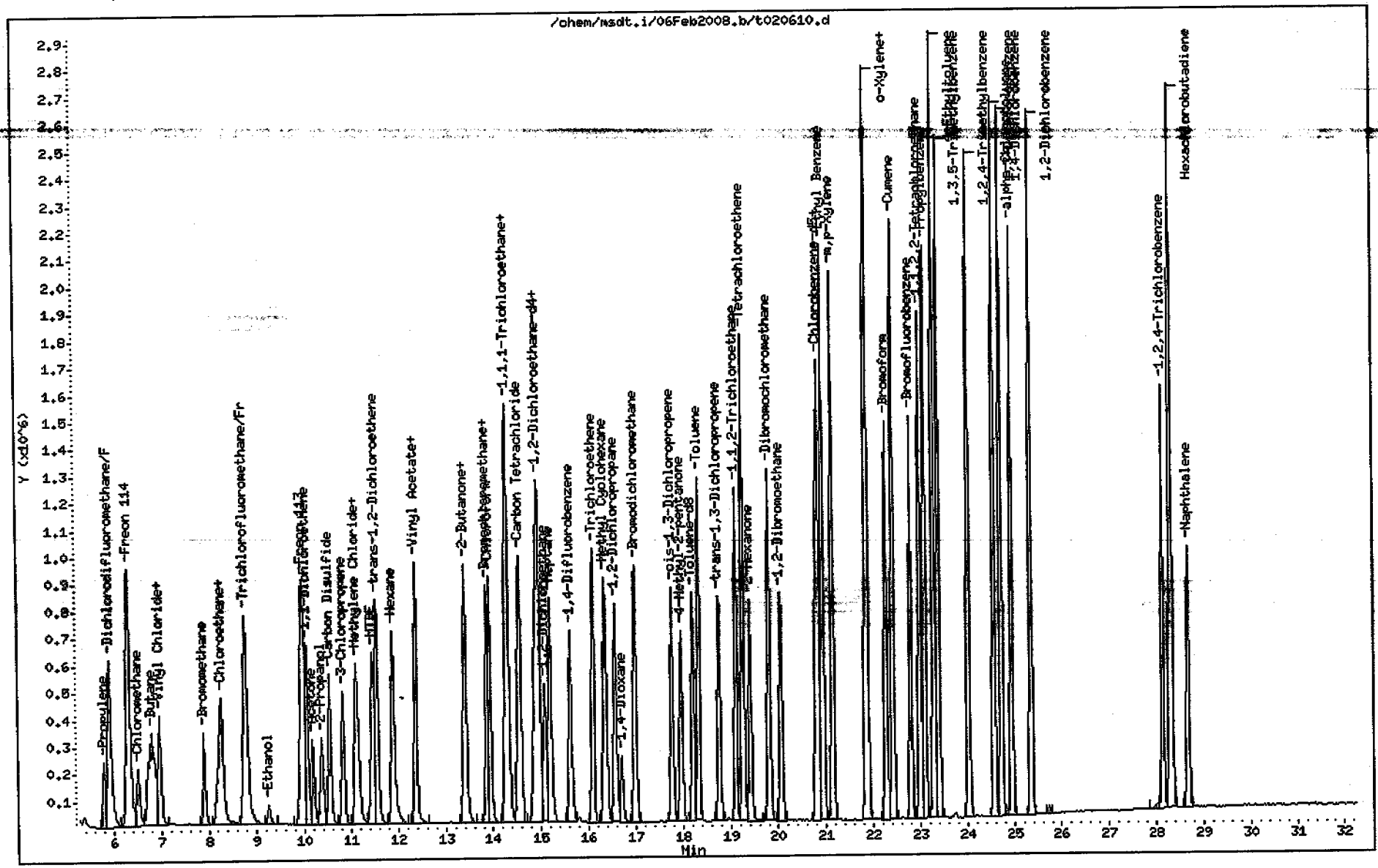
0119

Data File: /chem/msdt.i/06Feb2008.b/t020610.d
Date : 06-FEB-2008 16:33
Client ID: Level 4
Sample Info: 25ml #1576-261

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/28Feb2008.b/t022805.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 28-FEB-2008 14:33
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-304
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/28Feb2008.b/t14q206c.m
Meth Date : 28-Feb-2008 16:07 sruth
Quant Type: ISTD
Cal Date : 28-FEB-2008 14:33
Cal File: t022805.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp12c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	284844	25.0000		80.00- 120.00	100.00
13.886	13.886 (1.000)	128	215567			25.68- 125.68	75.68
13.858	13.858 (1.000)	49	341756			69.98- 169.98	119.98
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1138044	25.0000		80.00- 120.00	100.00
15.628	15.628 (1.000)	88	188474			0.00- 66.56	16.56
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1084863	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	619994			7.65- 107.65	57.15
21 Isobutane					CAS #: 75-28-5		
6.365	6.365 (0.458)	43	1193690	50.0000	52.303	80.00- 120.00	100.00(A)
6.365	6.365 (0.458)	42	398350			0.00- 86.63	33.37
6.337	6.337 (0.456)	58	34334			0.00- 52.93	2.88
35 1-Pentene					CAS #: 109-67-1		
8.826	8.826 (0.636)	55	790631	50.0000	48.436	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
35 1-Pentene (continued)							
8.826	8.826 (0.636)	42	877710			56.59- 156.59	111.01
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
44 Acrolein					CAS #: 107-02-8		
9.904	9.904 (0.713)	55	230934	50.0000	44.386	80.00- 120.00	100.00(A)
9.904	9.904 (0.713)	56	321507			92.43- 192.43	139.22
48 Ethyl acrylate					CAS #: 140-88-5		
16.153	16.153 (1.034)	99	144583	50.0000	54.255	80.00- 120.00	100.00(A)
16.153	16.153 (1.034)	45	145628			50.72- 150.72	100.72
16.153	16.153 (1.034)	55	1683242			1114.20-1214.20	1164.20
49 Iodomethane					CAS #: 74-88-4		
10.430	10.430 (0.751)	142	1885455	50.0000	47.373	80.00- 120.00	100.00(A)
10.430	10.430 (0.751)	127	860879			0.00- 95.19	45.66
50 Methyl Methacrylate					CAS #: 80-62-6		
16.568	16.568 (1.060)	41	981877	50.0000	51.066	80.00- 120.00	100.00(A)
16.568	16.568 (1.060)	69	905741			45.56- 145.56	92.25
16.568	16.568 (1.060)	100	350034			0.00- 82.77	35.65
52 Acetonitrile					CAS #: 75-05-8		
10.900	10.900 (0.785)	40	300989	50.0000	47.688	80.00- 120.00	100.00(A)
10.900	10.900 (0.785)	41	568426			146.13- 246.13	188.85
10.900	10.900 (0.785)	38	80989			0.00- 78.90	26.91
56 Cyclopentane					CAS #: 287-92-3		
11.121	11.121 (0.801)	70	527802	50.0000	48.162	80.00- 120.00	100.00(A)
11.121	11.121 (0.801)	55	634784			66.73- 166.73	120.27
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
62 Acrylonitrile					CAS #: 107-13-1		
11.646	11.646 (0.839)	53	557012	50.0000	46.912	80.00- 120.00	100.00(A)
11.646	11.646 (0.839)	52	467142			38.74- 138.74	83.87
63 2-Pentanone					CAS #: 107-87-9		
16.374	16.374 (1.048)	43	1811289	50.0000	51.267	80.00- 120.00	100.00(A)
16.374	16.374 (1.048)	58	160718			0.00- 58.83	8.87
16.374	16.374 (1.048)	86	396567			0.00- 71.75	21.89
66 1-Hexene					CAS #: 592-41-6		
11.784	11.784 (0.849)	55	555507	50.0000	52.494	80.00- 120.00	100.00(A)
11.784	11.784 (0.849)	41	785755			98.04- 198.04	141.45
11.784	11.784 (0.849)	84	257836			0.00- 96.48	46.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
105 Dibromomethane					CAS #: 74-95-3		
16.789	16.789 (1.074)	174	978005	50.0000	48.025	80.00- 120.00	100.00(A)
16.789	16.789 (1.074)	93	1025001			55.32- 155.32	104.81
16.789	16.789 (1.074)	95	849678			35.19- 135.19	86.88

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msdt.i/28Feb2008.b/t022805.d
Report Date: 28-Feb-2008 16:07

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022805.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/28Feb2008.b/t14q206c.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 28-FEB-2008
Calibration Time: 14:33
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	284844	170906	398782	284844	0.00
97 1,4-Difluorobenze	1138044	682826	1593262	1138044	0.00
126 Chlorobenzene-d5	1084863	650918	1518808	1084863	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

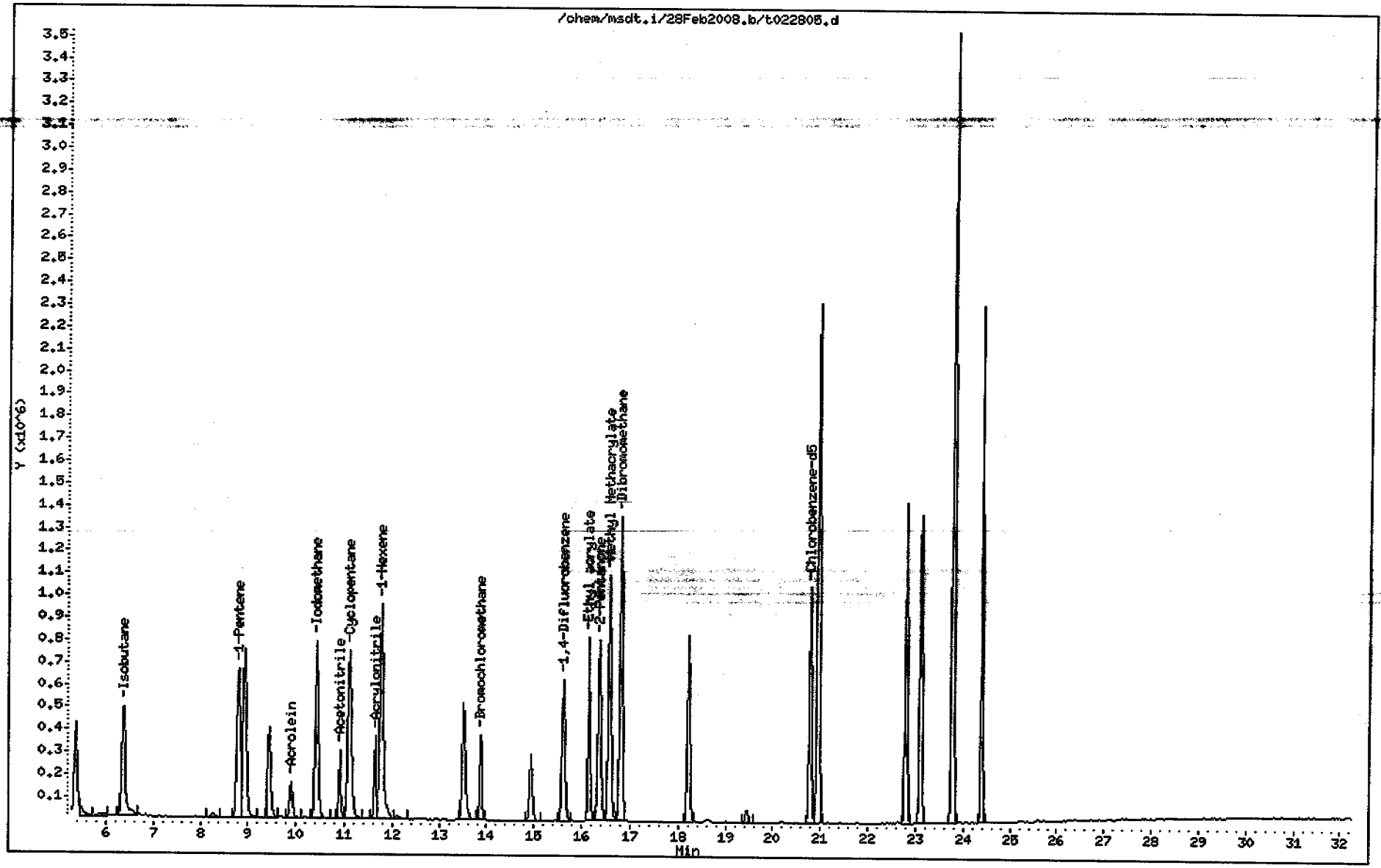
Data File: /chem/msdt.i/28Feb2008.b/t022805.d
Date : 28-FEB-2008 14:33
Client ID: Level 5
Sample Info: 50ml #1576-304

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0124



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104.d
Lab Smp Id: ICAL — Client Smp ID: Level 5
Inj Date : 21-FEB-2008 11:03
Operator : sjr — Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth — Quant Type: ISTD
Cal Date : 21-FEB-2008 11:03 — Cal File: t022104.d
Als bottle: 1 — Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: sp22b.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312258	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	236420			25.71- 125.71	75.71
13.865	13.865 (1.000)	49	373343			69.56- 169.56	119.56
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1266888	25.0000		80.00- 120.00	100.00
15.635	15.635 (1.000)	88	209470			0.00- 66.53	16.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1159473	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	667973			7.40- 107.40	57.61
6 Freon142b					CAS #: 75-68-3		
6.408	6.408 (0.462)	65	2256667	50.0000	55.056	80.00- 120.00	100.00
6.408	6.408 (0.462)	45	455198			0.00- 71.47	20.17
9 Freon 13					CAS #: 75-72-9		
5.366	5.366 (0.387)	69	2091709	50.0000	50.851	80.00- 120.00	100.00
5.366	5.366 (0.387)	85	681331			0.00- 81.06	32.57

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.366	5.366	(0.387)	87	212271			0.00- 60.45	10.15
13 Freon 134a						CAS #: 811-97-2		
5.647	5.647	(0.407)	83	957959	50.0000	52.516	80.00- 120.00	100.00
5.647	5.647	(0.407)	69	790194			32.79- 132.79	82.49
15 Freon 152a						CAS #: 75-37-6		
5.816	5.816	(0.419)	65	507647	50.0000	51.198	80.00- 120.00	100.00
5.816	5.816	(0.419)	51	855266			129.69- 229.69	168.48
5.816	5.816	(0.419)	47	223144			0.00- 92.87	43.96
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	240792	50.0000	52.743	80.00- 120.00	100.00
5.985	5.985	(0.432)	51	1193969			470.91- 570.91	495.85
5.985	5.985	(0.432)	85	25075			0.00- 67.96	10.41
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	536359	300.000	110.71	80.00- 120.00	100.00
7.534	7.534	(0.543)	32	456083			35.03- 135.03	85.03
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	1630517	50.0000	51.849	80.00- 120.00	100.00
8.717	8.717	(0.629)	69	532919			0.00- 82.68	32.68
8.717	8.717	(0.629)	35	85037			0.00- 55.48	5.22
40 Freon123a						CAS #: 354-23-4		
9.552	9.552	(0.689)	67	1294749	50.0000	56.012	80.00- 120.00	100.00
9.552	9.552	(0.689)	117	946703			21.37- 121.37	73.12
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	146846	50.0000	54.275	80.00- 120.00	100.00
9.718	9.718	(0.701)	133	29959			0.00- 70.95	20.40
9.718	9.718	(0.701)	85	122663			256.69- 356.69	83.53
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	2738824	50.0000	57.883	80.00- 120.00	100.00
12.289	12.289	(0.886)	87	875522			0.00- 80.60	31.97
12.289	12.289	(0.886)	59	320352			0.00- 62.14	11.70
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	118012	50.0000	48.447	80.00- 120.00	100.00
12.400	12.400	(0.894)	59	177514			76.36- 176.36	150.42
12.289	12.289	(0.886)	41	548379			317.31- 417.31	464.68
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	3041136	50.0000	62.766	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	1293560			0.00- 93.11	42.54
12.925	12.925 (0.932)	41	498322			0.00- 70.78	16.39
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	287177	50.0000	54.359	80.00- 120.00	100.00
13.395	13.395 (0.966)	61	317488			49.32- 149.32	110.55
13.395	13.395 (0.966)	43	1980955			578.83- 678.83	689.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	2825604	50.0000	61.124	80.00- 120.00	100.00
14.999	14.999 (1.082)	87	674366			0.00- 72.90	23.87
14.999	14.999 (1.082)	55	659557			0.00- 75.66	23.34
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	1498222	50.0000	67.450	80.00- 120.00	100.00
21.966	21.966 (1.584)	43	2089626			89.74- 189.74	139.47
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	357913	50.0000	55.554	80.00- 120.00	100.00
15.801	15.801 (1.011)	41	242656			33.56- 133.56	67.80
15.801	15.801 (1.011)	43	184494			13.25- 113.25	51.55
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	949314	50.0000	62.430	80.00- 120.00	100.00
19.533	19.533 (1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533 (1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	839726	50.0000	51.897	80.00- 120.00	100.00
22.741	22.741 (1.093)	98	429311			0.12- 100.12	51.13
22.741	22.741 (1.093)	42	544268			12.50- 112.50	64.81
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.543	23.543 (1.132)	57	2863217	50.0000	64.228	80.00- 120.00	100.00
23.570	23.570 (1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	312258	0.00
97 1,4-Difluorobenze	1266888	760133	1773643	1266888	0.00
126 Chlorobenzene-d5	1159473	695684	1623262	1159473	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

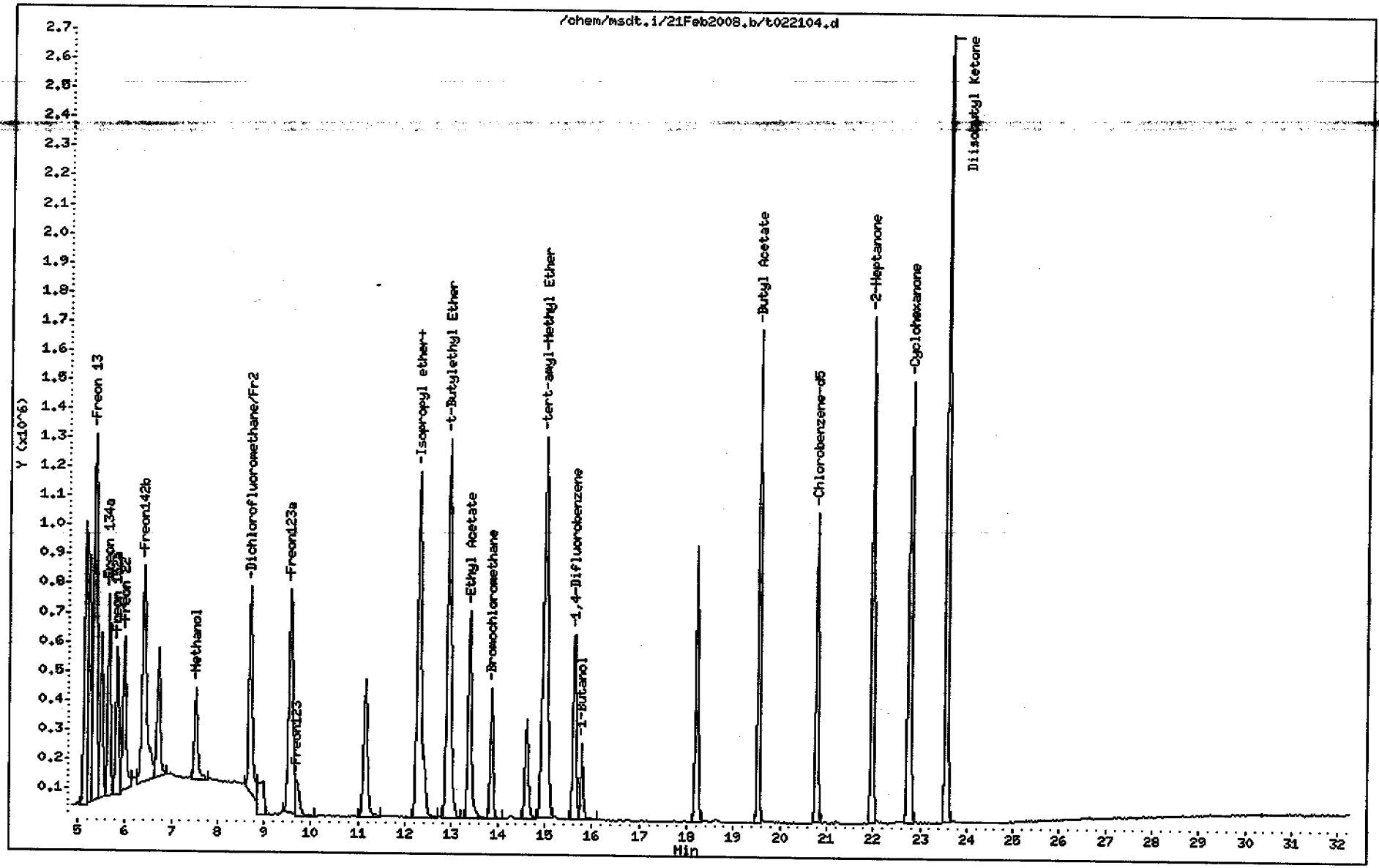
Data File: /chem/msdt.i/21Feb2008.b/t022104.d
Date : 21-FEB-2008 11:03
Client ID: Level 5
Sample Info: 50ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0129



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020611.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 06-FEB-2008 17:13
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:13
Cal File: t020611.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	355997	25.0000		80.00- 120.00	100.00
13.886	13.886 (1.000)	128	270515			25.99- 125.99	75.99
13.858	13.858 (1.000)	49	620343			124.26- 224.26	174.26
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1372567	25.0000		80.00- 120.00	100.00
15.628	15.628 (1.000)	88	218941			0.00- 65.95	15.95
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1227265	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	689313			6.72- 106.72	56.17
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	583879	25.0000	25.489	80.00- 120.00	100.00
14.936	14.936 (1.076)	67	331459			3.57- 103.57	56.77
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1318253	25.0000	24.933	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	152530			0.00- 61.29	11.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	907157			18.71- 118.71	68.82
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	802647	25.0000	25.285	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	997548			74.28- 174.28	124.28
22.789	22.789 (1.096)	176	784103			47.69- 147.69	97.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	568844	50.0000	48.853	80.00- 120.00	100.00
5.812	5.812 (0.419)	42	386786			17.96- 117.96	68.00
5.812	5.812 (0.419)	39	460707			33.44- 133.44	80.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	3662828	50.0000	52.692	80.00- 120.00	100.00
5.895	5.895 (0.425)	87	1170633			0.00- 82.13	31.96
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.452)	135	2368790	50.0000	51.549	80.00- 120.00	100.00
6.282	6.282 (0.452)	137	767760			0.00- 81.89	32.41
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	736532	50.0000	48.532	80.00- 120.00	100.00
6.531	6.531 (0.470)	52	242289			0.00- 83.62	32.90
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.494)	62	1053090	50.0000	50.541	80.00- 120.00	100.00
6.863	6.863 (0.494)	64	342558			0.00- 89.61	32.53
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	811723	50.0000	51.767	80.00- 120.00	100.00
6.973	6.973 (0.502)	39	793975			53.33- 153.33	97.81
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	1033071	50.0000	50.075	80.00- 120.00	100.00
7.913	7.913 (0.570)	96	968870			43.79- 143.79	93.79
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	574342	50.0000	52.853	80.00- 120.00	100.00
8.162	8.162 (0.588)	49	147684			0.00- 76.71	25.71
8.162	8.162 (0.588)	66	193610			0.00- 83.02	33.71
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	4148660	50.0000	52.718	80.00- 120.00	100.00
8.771	8.771 (0.632)	103	2679418			14.59- 114.59	64.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	322418	50.0000	53.549	80.00- 120.00	100.00
9.241	9.241 (0.665)	43	79459			0.00- 75.24	24.64
9.241	9.241 (0.665)	46	120478			0.00- 89.78	37.37
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	1858487	50.0000	51.888	80.00- 120.00	100.00
9.960	9.960 (0.717)	153	1188101			13.93- 113.93	63.93
9.960	9.960 (0.717)	101	2437243			81.14- 181.14	131.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	1737278	50.0000	53.263	80.00- 120.00	100.00
10.042	10.042 (0.723)	96	1039511			9.84- 109.84	59.84
10.042	10.042 (0.723)	98	667871			0.00- 88.44	38.44
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	537852	50.0000	53.208	80.00- 120.00	100.00
10.181	10.181 (0.733)	43	1662243			267.82- 367.82	309.05
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	1866517	50.0000	53.880	80.00- 120.00	100.00
10.374	10.374 (0.747)	43	458202			0.00- 76.64	24.55
10.374	10.374 (0.747)	59	78354			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	3176334	50.0000	51.484	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	554160	50.0000	52.162	80.00- 120.00	100.00
10.817	10.817 (0.779)	41	1242594			173.84- 273.84	224.23
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	1027528	50.0000	49.819	80.00- 120.00	100.00
11.121	11.121 (0.801)	84	915087			39.06- 139.06	89.06
11.093	11.093 (0.799)	51	342626			0.00- 83.83	33.34
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	3731089	50.0000	63.014	80.00- 120.00	100.00
11.453	11.453 (0.825)	57	708379			0.00- 68.99	18.99
11.453	11.453 (0.825)	41	693527			0.00- 70.47	18.59
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	1318462	50.0000	54.393	80.00- 120.00	100.00
11.536	11.536 (0.831)	61	1860568			91.12- 191.12	141.12
11.563	11.563 (0.833)	98	850578			16.26- 116.26	64.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	1840132	50.0000	57.528	80.00- 120.00	100.00
11.895	11.895 (0.857)	43	1061185			9.30- 109.30	57.67
11.895	11.895 (0.857)	86	329230			0.00- 66.83	17.89
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	325069	50.0000	51.835	80.00- 120.00	100.00
12.365	12.365 (0.890)	43	2991357			832.23- 932.23	920.22
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	2472619	50.0000	55.250	80.00- 120.00	100.00
12.365	12.365 (0.890)	65	805934			0.00- 82.59	32.59
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	626587	50.0000	55.030	80.00- 120.00	100.00
13.388	13.388 (0.964)	43	2118345			288.08- 388.08	338.08
13.388	13.388 (0.964)	57	187831			0.00- 79.56	29.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	1679389	50.0000	55.770	80.00- 120.00	100.00
13.416	13.416 (0.966)	96	1321033			28.66- 128.66	78.66
13.416	13.416 (0.966)	98	843715			0.24- 100.24	50.24
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	1094094	50.0000	56.969	80.00- 120.00	100.00
13.858	13.858 (0.998)	71	585510			3.52- 103.52	53.52
13.858	13.858 (0.998)	72	623609			2.04- 102.04	57.00
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	2945710	50.0000	56.971	80.00- 120.00	100.00
13.941	13.941 (1.004)	85	1913887			14.97- 114.97	64.97
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	3172686	50.0000	55.477	80.00- 120.00	100.00
14.273	14.273 (1.028)	99	2055059			14.77- 114.77	64.77
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	1715824	50.0000	56.032	80.00- 120.00	100.00
14.300	14.300 (1.030)	56	1705812			49.42- 149.42	99.42
14.300	14.300 (1.030)	41	887756			1.74- 101.74	51.74
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	3035706	50.0000	55.259	80.00- 120.00	100.00
14.549	14.549 (1.048)	117	3225264			56.24- 156.24	106.24
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3727114	50.0000	54.318	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	840170			0.00- 73.50	22.54
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	4124554	50.0000	55.242	80.00- 120.00	100.00
14.881	14.881 (1.072)	56	1342557			0.00- 82.82	32.55
14.881	14.881 (1.072)	41	1097372			0.00- 78.43	26.61
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1854128	50.0000	55.386	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	600236			0.00- 84.23	32.37
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1090153	50.0000	56.126	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1492099			85.70- 185.70	136.87
15.185	15.185 (0.972)	57	911942			28.72- 128.72	83.65
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	1644017	50.0000	55.940	80.00- 120.00	100.00
16.098	16.098 (1.030)	130	1508329			41.75- 141.75	91.75
16.098	16.098 (1.030)	97	1036281			13.03- 113.03	63.03
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1288303	50.0000	55.647	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	908468			20.52- 120.52	70.52
16.568	16.568 (1.060)	41	703834			4.63- 104.63	54.63
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	896963	50.0000	52.930	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	524585			8.48- 108.48	58.48
16.706	16.706 (1.069)	57	181915			0.00- 71.19	20.28
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	2950939	50.0000	56.106	80.00- 120.00	100.00
17.010	17.010 (1.088)	85	1891495			14.10- 114.10	64.10
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2032815	50.0000	57.623	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	657095			0.00- 82.32	32.32
17.784	17.784 (1.138)	39	911517			0.00- 94.84	44.84
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	959360	50.0000	59.852	80.00- 120.00	100.00
17.978	17.978 (1.150)	43	2178902			175.34- 275.34	227.12
17.978	17.978 (1.150)	85	471816			0.64- 100.64	49.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4068135	50.0000	55.602	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2482867			11.03- 111.03	61.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2215353	50.0000	57.114	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	703689			0.00- 81.76	31.76
18.752	18.752 (0.902)	39	903343			0.00- 90.78	40.78
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	1575767	50.0000	56.367	80.00- 120.00	100.00
19.111	19.111 (0.919)	99	1008005			13.97- 113.97	63.97
19.111	19.111 (0.919)	83	1339264			34.99- 134.99	84.99
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2101247	50.0000	56.093	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1460862			19.52- 119.52	69.52
19.277	19.277 (0.927)	131	1379543			15.65- 115.65	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	1325035	50.0000	56.604	80.00- 120.00	100.00
19.416	19.416 (0.934)	43	2195972			115.73- 215.73	165.73
19.416	19.416 (0.934)	100	272545			0.00- 71.71	20.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2769035	50.0000	58.173	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2123510			28.82- 128.82	76.69
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	2561313	50.0000	57.601	80.00- 120.00	100.00
20.052	20.052 (0.964)	109	2365543			42.36- 142.36	92.36
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3537203	50.0000	54.809	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1102906			0.00- 81.18	31.18
20.853	20.853 (1.003)	77	2193657			12.02- 112.02	62.02
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1881257	50.0000	56.260	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6033553			269.96- 369.96	320.72
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414591	50.0000	57.344	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4867839			149.87- 249.87	201.60
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2294486	50.0000	57.285	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	4831196			160.56- 260.56	210.56
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	3731947	50.0000	60.816	80.00- 120.00	100.00
21.876	21.876 (1.052)	78	1927539			1.65- 101.65	51.65
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	2955362	50.0000	57.842	80.00- 120.00	100.00
22.291	22.291 (1.072)	171	1502352			0.83- 100.83	50.83
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	6407360	50.0000	57.992	80.00- 120.00	100.00
22.429	22.429 (1.078)	120	1652751			0.00- 77.62	25.79
22.429	22.429 (1.078)	51	552478			0.00- 58.75	8.62
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	3607778	50.0000	56.152	80.00- 120.00	100.00
23.010	23.010 (1.106)	85	2344026			14.97- 114.97	64.97
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	8285341	50.0000	57.289	80.00- 120.00	100.00
23.121	23.121 (1.112)	120	1793463			0.00- 71.63	21.86
23.121	23.121 (1.112)	105	296421			0.00- 53.71	3.61
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	7178250	50.0000	58.874	80.00- 120.00	100.00
23.287	23.287 (1.120)	120	2114319			0.00- 79.45	29.45
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	5894923	50.0000	56.678	80.00- 120.00	100.00
23.397	23.397 (1.125)	120	2902725			0.00- 98.23	49.24
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	5651142	50.0000	57.660	80.00- 120.00	100.00
24.033	24.033 (1.156)	120	2609535			0.00- 94.91	46.18
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	3854517	50.0000	54.719	80.00- 120.00	100.00
24.586	24.586 (1.182)	148	2445415			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	1597557			0.00- 91.36	41.45
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	3989830	50.0000	55.044	80.00- 120.00	100.00
24.724	24.724 (1.189)	148	2558342			16.09- 116.09	64.12
24.724	24.724 (1.189)	111	1588487			0.00- 90.13	39.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	6094704	50.0000	58.156	80.00- 120.00	100.00
24.945	24.945 (1.199)	126	1159566			0.00- 69.28	19.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3731728	50.0000	54.382	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2389973			14.04- 114.04	64.04
25.360	25.360 (1.219)	111	1609999			0.00- 93.14	43.14
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2605257	50.0000	49.778	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2481668			45.26- 145.26	95.26
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2507104	50.0000	47.598	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1586646			12.90- 112.90	63.29
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	3679681	50.0000	50.798	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	456187			0.00- 62.74	12.40
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	1202086	50.0000	52.229	80.00- 120.00	100.00
8.273	8.273 (0.596)	57	925144			27.67- 127.67	76.96
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	202494	50.0000	50.813	80.00- 120.00	100.00
6.807	6.807 (0.490)	43	1448086			666.74- 766.74	715.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	2027281	50.0000	55.915	80.00- 120.00	100.00
16.347	16.347 (1.177)	98	929334			0.00- 95.22	45.84
16.347	16.347 (1.177)	55	1420992			20.82- 120.82	70.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.803)	59	2143464	50.0000	56.780	80.00- 120.00	100.00
11.148	11.148 (0.803)	41	454380			0.00- 72.85	21.20
11.148	11.148 (0.803)	57	220666			0.00- 59.93	10.29

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020611.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	355997	0.00
97 1,4-Difluorobenze	1372567	823540	1921594	1372567	0.00
126 Chlorobenzene-d5	1227265	736359	1718171	1227265	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Date : 06-FEB-2008 17:13
Client ID: Level 5
Sample Info: 50ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

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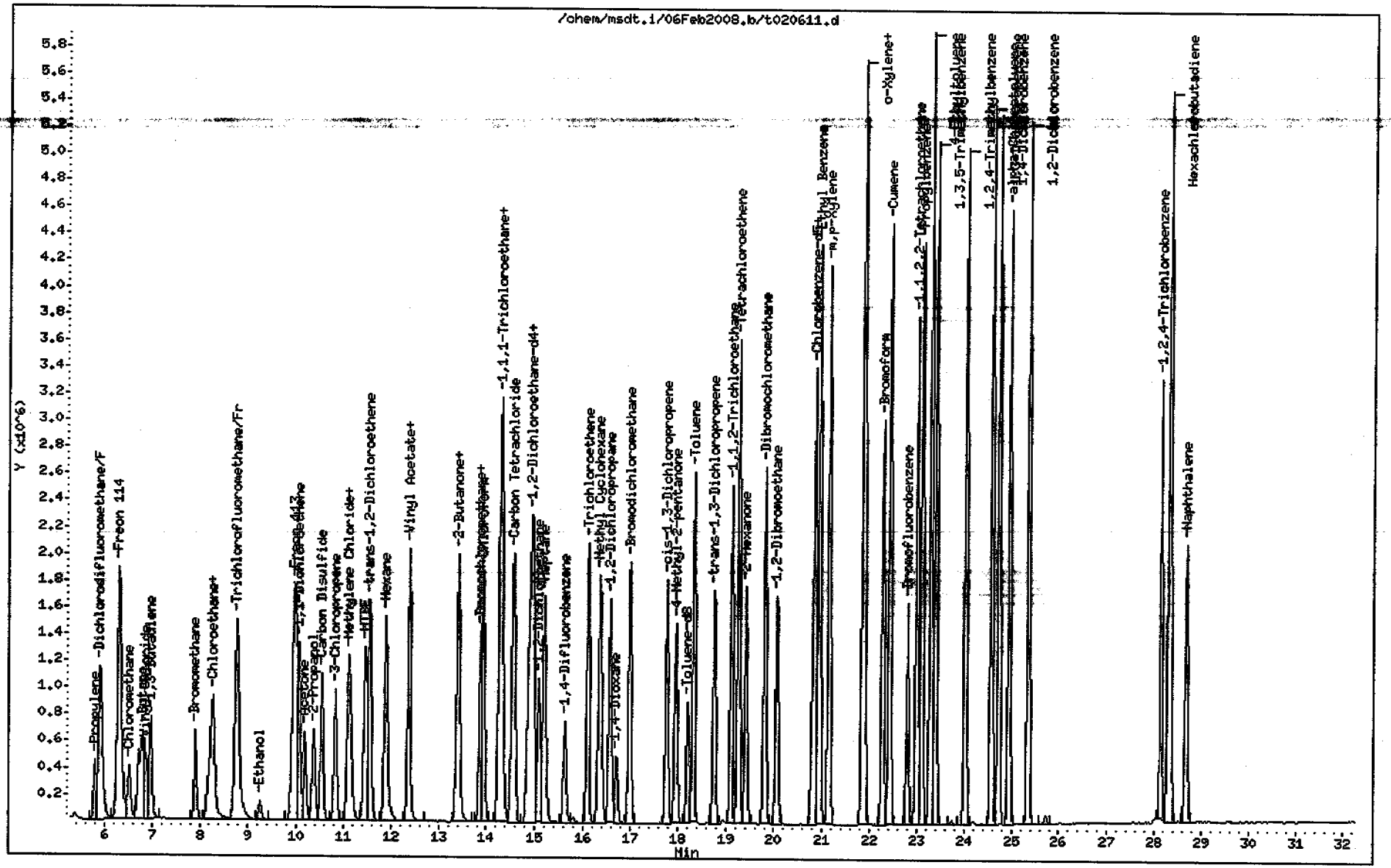

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022109.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 21-FEB-2008 17:00
Operator : ACT
Inst ID: msdt.i
Smp Info : 100ml #1576-299
Misc Info : 200ppbv -> 100(600 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 17:23 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	288174	25.0000		50.00- 150.00		100.00
13.865	13.865 (1.000)	128	220761			26.37- 126.37		76.61
13.865	13.865 (1.000)	49	347475			67.71- 167.71		120.58
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1171320	25.0000		50.00- 150.00		100.00
15.635	15.635 (1.000)	88	190746			0.00- 66.38		16.28
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1094664	25.0000		50.00- 150.00		100.00
20.805	20.805 (1.000)	82	635295			7.58- 107.58		58.04
6 Freon142b						CAS #: 75-68-3		
6.436	6.436 (0.464)	65	4107153	100.000	103.68	50.00- 150.00		100.00
6.436	6.436 (0.464)	45	857004			0.00- 71.32		20.87
9 Freon 13						CAS #: 75-72-9		
5.394	5.394 (0.389)	69	4121833	100.000	103.77	50.00- 150.00		100.00
5.394	5.394 (0.389)	85	1350133			0.00- 81.50		32.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.394	5.394 (0.389)	87	420390			0.00- 60.31	10.20
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	1821922	100.000	102.81	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	1498909			32.62- 132.62	82.27
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	956248	100.000	100.21	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	1646695			127.07- 227.07	172.20
5.844	5.844 (0.422)	47	421265			0.00- 93.51	44.05
17 Freon 22					CAS #: 75-45-6		
6.013	6.013 (0.434)	67	468972	100.000	104.17	50.00- 150.00	100.00
6.013	6.013 (0.434)	51	2312207			463.95- 563.95	493.04
6.013	6.013 (0.434)	85	43026			0.00- 65.76	9.17
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	1144222	600.000	475.68	50.00- 150.00	100.00
7.534	7.534 (0.543)	32	937390			65.11- 165.11	81.92
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.745	8.745 (0.631)	67	2763507	100.000	97.618	50.00- 150.00	100.00
8.745	8.745 (0.631)	69	889530			0.00- 82.56	32.19
8.717	8.717 (0.629)	35	151899			0.00- 55.48	5.50
40 Freon123a					CAS #: 354-23-4		
9.579	9.579 (0.691)	67	2203976	100.000	100.92	50.00- 150.00	100.00
9.579	9.579 (0.691)	117	1652565			22.27- 122.27	74.98
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	270148	100.000	105.31	50.00- 150.00	100.00
9.718	9.718 (0.701)	133	48575			0.00- 70.21	17.98
9.579	9.579 (0.691)	85	1081620			280.12- 380.12	400.38
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	5051767	100.000	106.98	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	1583002			0.00- 80.78	31.34
12.289	12.289 (0.886)	59	584960			0.00- 62.00	11.58
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	274499	100.000	110.63	50.00- 150.00	100.00
12.400	12.400 (0.894)	59	409753			82.09- 182.09	149.27
12.289	12.289 (0.886)	41	1051376			321.23- 421.23	383.02
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	5658094	100.000	112.47	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	2427830			0.00- 93.06	42.91
12.925	12.925 (0.932)	41	925298			0.00- 69.68	16.35
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	512702	100.000	100.64	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	583515			52.94- 152.94	113.81
13.395	13.395 (0.966)	43	3653067			599.75- 699.75	712.51
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	5274523	100.000	110.84	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	1278528			0.00- 73.24	24.24
14.999	14.999 (1.082)	55	1254977			0.00- 75.20	23.79
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	3028001	100.000	121.23	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	4317169			90.45- 190.45	142.57
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	957040	100.000	125.47	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	635428			29.27- 129.27	66.40
15.801	15.801 (1.011)	43	476111			9.88- 109.88	49.75
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	1853300	100.000	116.48	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	759103			0.00- 93.48	40.96
19.533	19.533 (1.249)	43	4210731			175.62- 275.62	227.20
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	2182811	100.000	120.34	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	1114420			0.39- 100.39	51.05
22.741	22.741 (1.093)	42	1409787			13.24- 113.24	64.59
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	5714491	100.000	118.25	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	5408511			45.10- 145.10	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msdt.i/21Feb2008.b/t022109.d
Report Date: 21-Feb-2008 17:23

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022109.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 100(600 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	288174	-9.42
97 1,4-Difluorobenze	1251468	750881	1752055	1171320	-6.40
126 Chlorobenzene-d5	1150991	690595	1611387	1094664	-4.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022109.d
Date : 21-FEB-2008 17:00
Client ID: Level 6
Sample Info: 100ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

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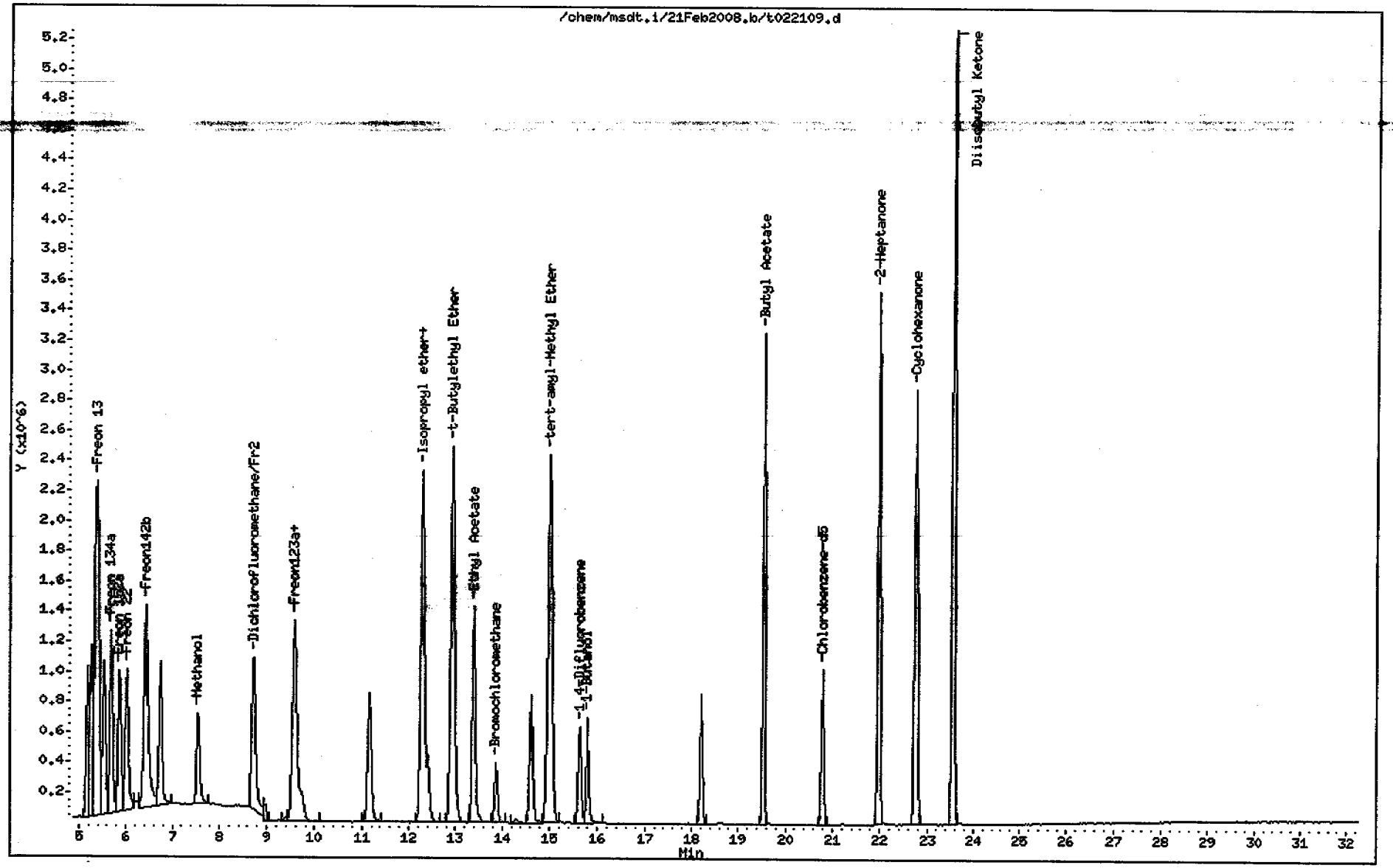


Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020612.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 06-FEB-2008 17:51
Operator : sjr
Inst ID: msdt.i
Smp Info : 100ml #1576-261
Misc Info : 200ppbv -> 100ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:51
Cal File: t020612.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5	
13.886	13.886 (1.000)	130	351121	25.0000		50.00- 150.00	100.00
13.886	13.886 (1.000)	128	271306			26.39- 126.39	77.27
13.886	13.886 (1.000)	49	815040			99.95- 199.95	232.13
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.628	15.628 (1.000)	114	1413120	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	227247			0.00- 66.12	16.08
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.798	20.798 (1.000)	117	1281401	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	729950			6.72- 106.72	56.96
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
14.936	14.936 (1.076)	65	598616	25.0000	26.495	50.00- 150.00	100.00
14.936	14.936 (1.076)	67	374153			3.57- 103.57	62.50
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.199	18.199 (1.165)	98	1378362	25.0000	25.322	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	155982			0.00- 61.29	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950822			18.71- 118.71	68.98
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	834025	25.0000	25.163	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1057330			75.58- 175.58	126.77
22.789	22.789 (1.096)	176	808445			47.41- 147.41	96.93
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	1111571	100.000	96.790	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	742893			17.96- 117.96	66.83
5.812	5.812 (0.419)	39	910586			33.44- 133.44	81.92
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	7101370	100.000	103.58	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	2261049			0.00- 82.13	31.84
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	4672190	100.000	103.09	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	1488571			0.00- 81.89	31.86
18 Chloromethane					CAS #: 74-87-3		
6.559	6.559 (0.472)	50	1551411	100.000	103.64	50.00- 150.00	100.00
6.559	6.559 (0.472)	52	504098			0.00- 83.62	32.49
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	2106034	100.000	102.48	50.00- 150.00	100.00
6.890	6.890 (0.496)	64	674245			0.00- 89.61	32.01
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	1598698	100.000	103.37	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	1537145			53.33- 153.33	96.15
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	2093115	100.000	102.87	50.00- 150.00	100.00
7.913	7.913 (0.570)	96	1963372			43.69- 143.69	93.80
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	1136847	100.000	106.07	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	285724			0.00- 76.71	25.13
8.190	8.190 (0.590)	66	371225			0.00- 83.02	32.65
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.798 (0.634)	101	7920716	100.000	102.05	50.00- 150.00	100.00
8.798	8.798 (0.634)	103	5133859			13.52- 113.52	64.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	613723	100.000	103.34	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	142073			0.00- 75.24	23.15
9.241	9.241 (0.665)	46	227563			0.00- 89.78	37.08
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	3629218	100.000	101.54	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	2313395			14.28- 114.28	63.74
9.960	9.960 (0.717)	101	4699952			80.55- 180.55	129.50
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	3447769	100.000	107.17	50.00- 150.00	100.00
10.042	10.042 (0.723)	96	2078953			13.15- 113.15	60.30
10.042	10.042 (0.723)	98	1334772			0.00- 88.14	38.71
45 Acetone					CAS #: 67-64-1		
10.208	10.208 (0.735)	58	994047	100.000	99.703	50.00- 150.00	100.00
10.208	10.208 (0.735)	43	3108431			267.82- 367.82	312.70
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	3640217	100.000	106.54	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	863734			0.00- 76.64	23.73
10.374	10.374 (0.747)	59	147169			0.00- 54.31	4.04
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	6420269	100.000	105.51	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	1094455	100.000	104.45	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	2383503			173.84- 273.84	217.78
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	2036666	100.000	100.12	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	1809101			36.08- 136.08	88.83
11.121	11.121 (0.801)	51	661270			0.00- 83.83	32.47
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	7138212	100.000	122.23	50.00- 150.00	100.00
11.480	11.480 (0.827)	57	1352795			0.00- 69.02	18.95
11.480	11.480 (0.827)	41	1292674			0.00- 70.47	18.11
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	2556418	100.000	106.93	50.00- 150.00	100.00
11.563	11.563 (0.833)	61	3579783			95.77- 195.77	140.03
11.563	11.563 (0.833)	98	1640927			16.26- 116.26	64.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	3632485	100.000	115.14	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	2065967			9.30- 109.30	56.87
11.923	11.923 (0.859)	86	658618			0.00- 66.83	18.13
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	672864	100.000	108.78	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	6026628			832.23- 932.23	895.67
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.393	12.393 (0.892)	63	4709578	100.000	106.69	50.00- 150.00	100.00
12.393	12.393 (0.892)	65	1524086			0.00- 82.79	32.36
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	1295858	100.000	115.39	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	4285726			275.22- 375.22	330.72
13.388	13.388 (0.964)	57	374753			0.00- 79.56	28.92
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	3264442	100.000	109.91	50.00- 150.00	100.00
13.443	13.443 (0.968)	96	2561204			27.39- 127.39	78.46
13.443	13.443 (0.968)	98	1649626			0.96- 100.96	50.53
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	2158829	100.000	113.97	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	1140379			0.00- 99.16	52.82
13.858	13.858 (0.998)	72	1229303			2.04- 102.04	56.94
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	5696174	100.000	111.70	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	3706989			16.43- 116.43	65.08
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.300	14.300 (1.030)	97	6204791	100.000	110.00	50.00- 150.00	100.00
14.300	14.300 (1.030)	99	3996930			17.45- 117.45	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	3475704	100.000	115.08	50.00- 150.00	100.00
14.300	14.300 (1.030)	56	3413020			47.55- 147.55	98.20
14.300	14.300 (1.030)	41	1767727			5.12- 105.12	50.86
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	5873936	100.000	108.41	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	6261936			53.78- 153.78	106.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	7425750	100.000	105.12	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	1684308			0.00- 73.50	22.68
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	8406637	100.000	114.16	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	2694876			0.00- 82.82	32.06
14.881	14.881 (1.072)	41	2162132			0.00- 78.43	25.72
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	3636322	100.000	105.51	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	1159994			0.00- 84.23	31.90
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	2253769	100.000	112.70	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	3040625			85.70- 185.70	134.91
15.185	15.185 (0.972)	57	1858665			28.72- 128.72	82.47
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	3240461	100.000	107.10	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	3002867			42.94- 142.94	92.67
16.098	16.098 (1.030)	97	2081303			13.25- 113.25	64.23
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	2564982	100.000	107.61	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	1813519			21.32- 121.32	70.70
16.568	16.568 (1.060)	41	1389352			8.96- 108.96	54.17
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	1832861	100.000	105.05	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	1060731			9.36- 109.36	57.87
16.706	16.706 (1.069)	57	366016			0.00- 71.19	19.97
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	5845831	100.000	107.96	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	3735941			13.51- 113.51	63.91
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	4117666	100.000	113.37	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	1315173			0.00- 84.89	31.94
17.784	17.784 (1.138)	39	1808488			0.00- 97.13	43.92
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	1980151	100.000	119.99	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	4495780			175.34- 275.34	227.04
17.978	17.978 (1.150)	85	994822			0.64- 100.64	50.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	8178178	100.000	108.57	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	5020495			11.62- 111.62	61.39
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	4461556	100.000	110.16	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	1428254			0.00- 81.86	32.01
18.752	18.752 (0.902)	39	1829158			0.00- 91.58	41.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	3125317	100.000	107.07	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	1954568			13.21- 113.21	62.54
19.111	19.111 (0.919)	83	2655080			35.76- 135.76	84.95
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	4180011	100.000	106.87	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	2861461			19.36- 119.36	68.46
19.277	19.277 (0.927)	131	2744125			16.43- 116.43	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	2723514	100.000	111.43	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	4527762			124.96- 224.96	166.25
19.416	19.416 (0.934)	100	574524			0.00- 71.71	21.09
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	5492645	100.000	110.52	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	4234044			28.82- 128.82	77.09
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	5153001	100.000	110.99	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	4771126			46.68- 146.68	92.59
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	7115170	100.000	105.59	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	2236590			0.00- 82.06	31.43
20.853	20.853 (1.003)	77	4380652			22.53- 122.53	61.57
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	3790191	100.000	108.56	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	12275568			269.96- 369.96	323.88
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	4868391	100.000	111.19	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	9871195			149.87- 249.87	201.93
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	4653159	100.000	111.26	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	9908020			160.81- 260.81	212.93
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	7633035	100.000	119.13	50.00- 150.00	100.00
21.876	21.876 (1.052)	78	3882867			9.02- 109.02	50.87
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	5972775	100.000	111.96	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	3039652			1.83- 101.83	50.89
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	13155481	100.000	114.04	50.00- 150.00	100.00
22.429	22.429 (1.078)	120	3375500			0.00- 77.62	25.66
22.429	22.429 (1.078)	51	1109718			0.00- 58.75	8.44
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	7307878	100.000	108.94	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	4726894			16.89- 116.89	64.68
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	16695425	100.000	111.64	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	3572191			0.00- 71.63	21.40
23.121	23.121 (1.112)	105	593757			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	14420605	100.000	113.28	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	4223785			0.00- 79.69	29.29
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	12029525	100.000	110.77	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	5822272			0.00- 98.23	48.40
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	11520943	100.000	112.58	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	5255599			0.00- 94.91	45.62
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	7765843	100.000	105.59	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	4936822			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	3180420			0.00- 91.36	40.95
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	8019783	100.000	105.97	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	5124641			16.09- 116.09	63.90
24.724	24.724 (1.189)	111	3205038			0.00- 90.13	39.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	12583883	100.000	115.00	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	2367422			0.00- 69.28	18.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	7525703	100.000	105.04	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	4832431			15.85- 115.85	64.21
25.360	25.360 (1.219)	111	3270866			0.00- 94.46	43.46
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	5462712	100.000	99.966	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	5139467			44.78- 144.78	94.08
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	5122789	100.000	93.148	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	3213957			12.90- 112.90	62.74
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	7794932	100.000	103.06	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	944387			0.00- 62.74	12.12
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	2307164	100.000	101.64	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	1786691			27.67- 127.67	77.44
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	400970	100.000	102.02	50.00- 150.00	100.00
6.807	6.807 (0.490)	43	2768800			666.74- 766.74	690.53
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	4123768	100.000	115.32	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	1845682			0.00- 95.22	44.76
16.347	16.347 (1.177)	55	2869124			20.82- 120.82	69.58
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.176	11.176 (0.805)	59	3860609	100.000	103.69	50.00- 150.00	100.00
11.148	11.148 (0.803)	41	796567			0.00- 72.85	20.63
11.176	11.176 (0.805)	57	392034			0.00- 59.93	10.15

Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020612.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 100ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	351121	-1.37
97 1,4-Difluorobenze	1372567	823540	1921594	1413120	2.95
126 Chlorobenzene-d5	1227265	736359	1718171	1281401	4.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

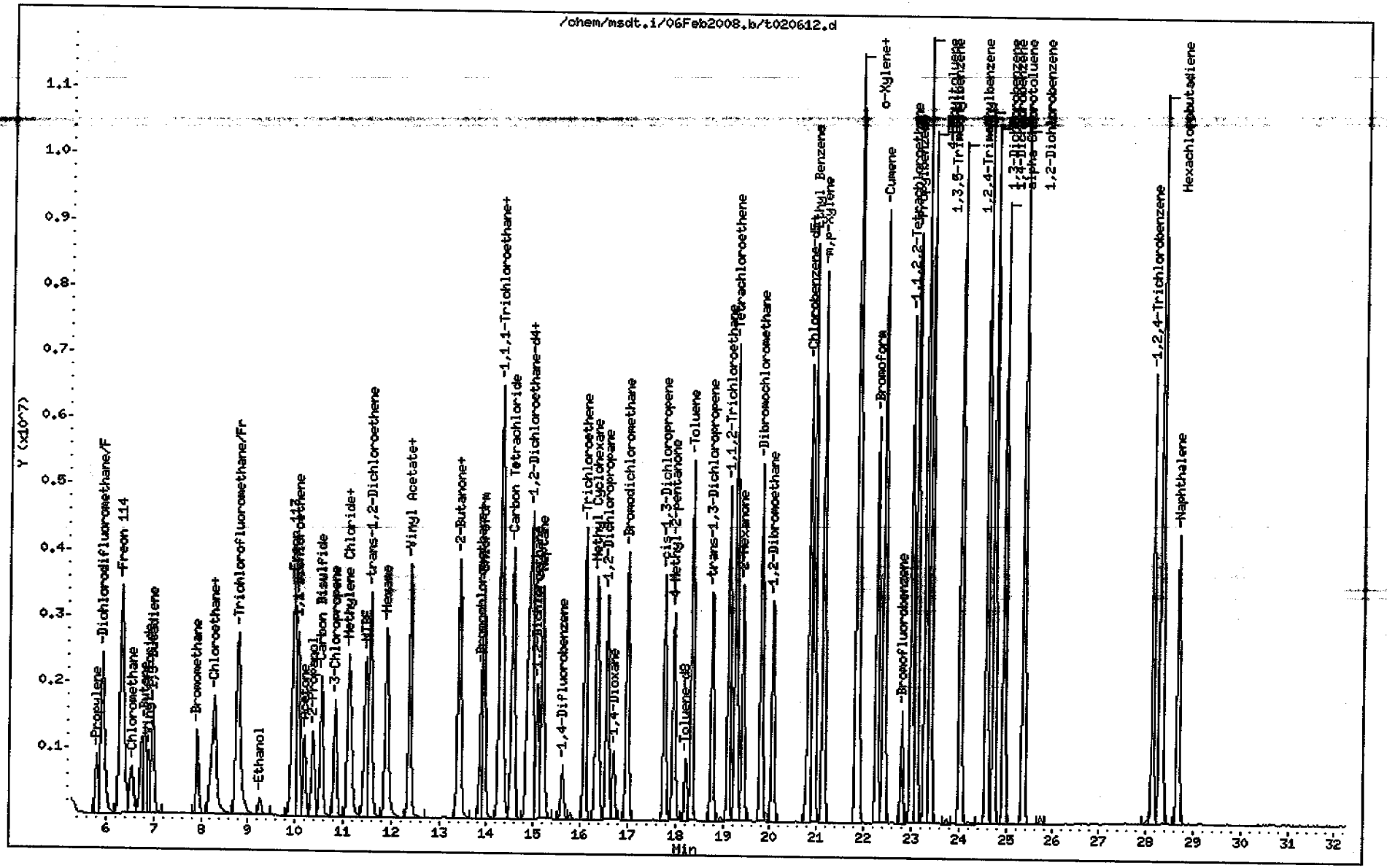
Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Date : 06-FEB-2008 17:51
Client ID: Level 6
Sample Info: 100ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0154



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/28Feb2008.b/t022806.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 28-FEB-2008 15:24
Operator : sjr
Inst ID: msdt.i
Smp Info : 200ml #1576-304
Misc Info : 200ppbv -> 200ppbv
Comment :
Method : /chem/msdt.i/28Feb2008.b/t14q206c.m
Meth Date : 28-Feb-2008 16:07 sruth
Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24
Cal File: t022806.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp12c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	13.886	13.886 (1.000)	130	307559	25.0000		50.00- 150.00	100.00
	13.886	13.886 (1.000)	128	238348			26.19- 126.19	77.50
	13.858	13.858 (1.000)	49	374513			67.56- 167.56	121.77
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.628	15.628 (1.000)	114	1161608	25.0000		50.00- 150.00	100.00
	15.628	15.628 (1.000)	88	189206			0.00- 66.34	16.29
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.798	20.798 (1.000)	117	1101886	25.0000		50.00- 150.00	100.00
	20.798	20.798 (1.000)	82	634798			7.65- 107.65	57.61
	21 Isobutane					CAS #: 75-28-5		
	6.337	6.337 (0.456)	43	4129108	200.000	167.56	50.00- 150.00	100.00(A)
	6.337	6.337 (0.456)	42	1383130			0.00- 86.63	33.50
	6.337	6.337 (0.456)	58	120715			0.00- 52.93	2.92
	35 1-Pentene					CAS #: 109-67-1		
	8.798	8.798 (0.634)	55	2773068	200.000	157.34	50.00- 150.00	100.00(A)

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
35 1-Pentene (continued)								
8.798	8.798	(0.634)	42	2956684			56.59- 156.59	106.62
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00
44 Acrolein						CAS #: 107-02-8		
9.904	9.904	(0.713)	55	790730	200.000	140.75	50.00- 150.00	100.00(A)
9.904	9.904	(0.713)	56	1112318			92.43- 192.43	140.67
48 Ethyl acrylate						CAS #: 140-88-5		
16.153	16.153	(1.034)	99	529742	200.000	194.76	50.00- 150.00	100.00(A)
16.153	16.153	(1.034)	45	512086			60.54- 160.54	96.67
16.153	16.153	(1.034)	55	6089802			1235.80-1335.80	1149.58
49 Iodomethane						CAS #: 74-88-4		
10.429	10.429	(0.751)	142	7275968	200.000	169.31	50.00- 150.00	100.00(A)
10.429	10.429	(0.751)	127	3271921			0.00- 95.19	44.97
50 Methyl Methacrylate						CAS #: 80-62-6		
16.568	16.568	(1.060)	41	3530839	200.000	179.91	50.00- 150.00	100.00(A)
16.568	16.568	(1.060)	69	3333359			45.56- 145.56	94.41
16.568	16.568	(1.060)	100	1277841			0.00- 82.77	36.19
52 Acetonitrile						CAS #: 75-05-8		
10.899	10.899	(0.785)	40	1020218	200.000	149.70	50.00- 150.00	100.00(A)
10.899	10.899	(0.785)	41	1905016			146.13- 246.13	186.73
10.899	10.899	(0.785)	38	277597			0.00- 78.90	27.21
56 Cyclopentane						CAS #: 287-92-3		
11.121	11.121	(0.801)	70	1881903	200.000	159.04	50.00- 150.00	100.00(A)
11.121	11.121	(0.801)	55	2221255			66.73- 166.73	118.03
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00
62 Acrylonitrile						CAS #: 107-13-1		
11.646	11.646	(0.839)	53	1907047	200.000	148.75	50.00- 150.00	100.00(A)
11.646	11.646	(0.839)	52	1551375			38.74- 138.74	81.35
63 2-Pentanone						CAS #: 107-87-9		
16.374	16.374	(1.048)	43	6457349	200.000	179.06	50.00- 150.00	100.00(A)
16.374	16.374	(1.048)	58	579021			0.00- 58.83	8.97
16.374	16.374	(1.048)	86	1437686			0.00- 71.75	22.26
66 1-Hexene						CAS #: 592-41-6		
11.784	11.784	(0.849)	55	1930141	200.000	168.92	50.00- 150.00	100.00(A)
11.784	11.784	(0.849)	41	2712816			98.04- 198.04	140.55
11.784	11.784	(0.849)	84	883820			0.00- 96.48	45.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
105 Dibromomethane					CAS #: 74-95-3		
16.789	16.789 (1.074)	174	3539867	200.000	170.30	50.00- 150.00	100.00(A)
16.789	16.789 (1.074)	93	3693104			55.32- 155.32	104.33
16.789	16.789 (1.074)	95	3059791			35.19- 135.19	86.44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022806.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/28Feb2008.b/t14q206c.m
Misc Info: 200ppbv -> 200ppbv

Calibration Date: 28-FEB-2008
Calibration Time: 14:33
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	284844	170906	398782	307559	7.97
97 1,4-Difluorobenze	1138044	682826	1593262	1161608	2.07
126 Chlorobenzene-d5	1084863	650918	1518808	1101886	1.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

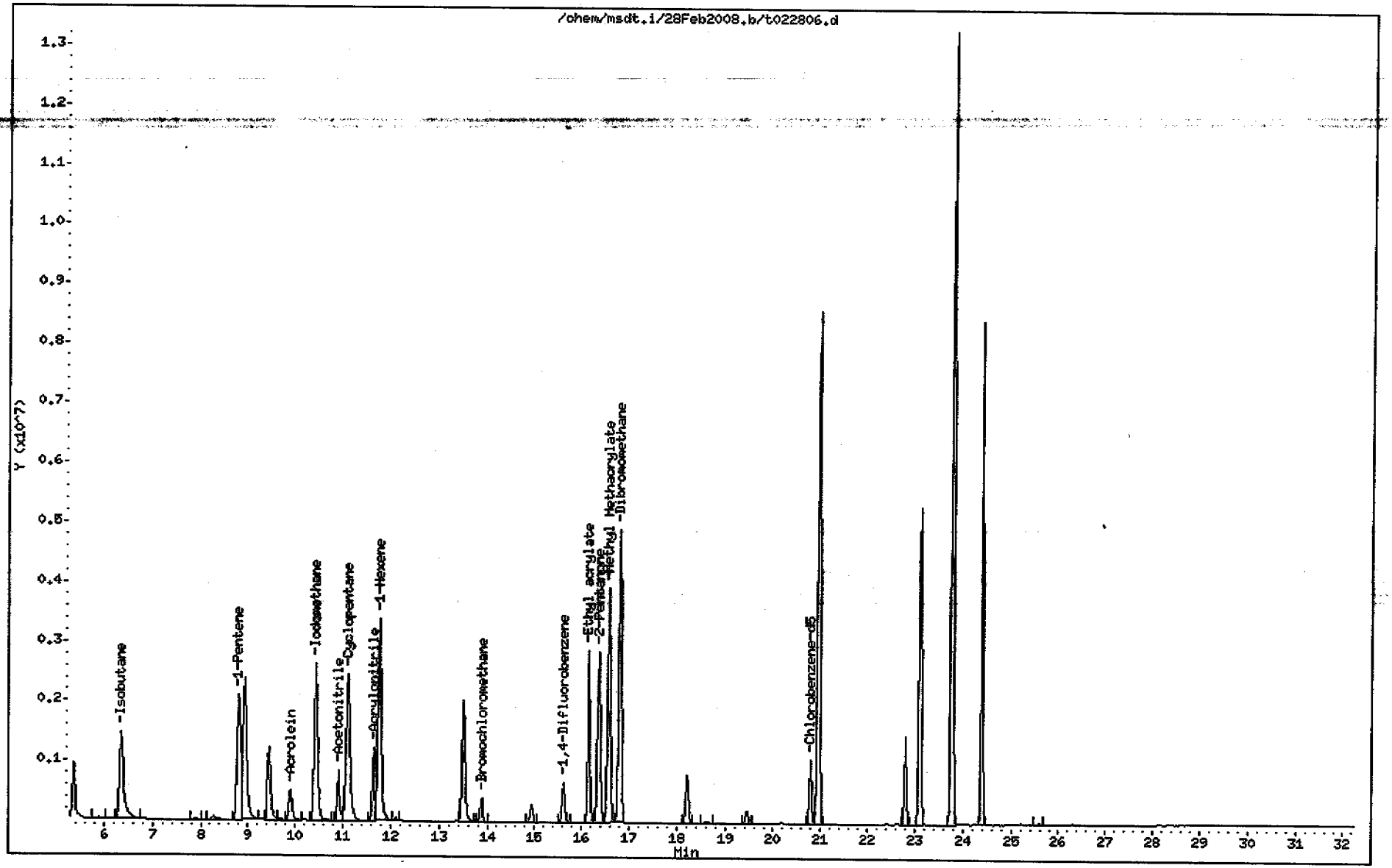
Data File: /chem/msdt.i/28Feb2008.b/t022806.d
Date : 28-FEB-2008 15:24
Client ID: Level 7
Sample Info: 200ml #1576-304

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0159



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022105.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 21-FEB-2008 12:05
Operator : sjr Inst ID: msdt.i
Smp Info : 200ml #1576-299
Misc Info : 200ppbv -> 200(1200 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05 Cal File: t022105.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	269864	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	209729			26.48- 126.48	77.72
13.865	13.865 (1.000)	49	322466			86.30- 186.30	119.49
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1144695	25.0000		50.00- 150.00	100.00
15.635	15.635 (1.000)	88	194086			0.00- 66.34	16.96
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1083328	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	629336			7.40- 107.40	58.09
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	8148778	200.000	221.71	50.00- 150.00	100.00(A)
6.436	6.436 (0.464)	45	1691785			0.00- 71.47	20.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	8146947	200.000	221.11	50.00- 150.00	100.00(A)
5.422	5.422 (0.391)	85	2570358			0.00- 81.18	31.55

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.422	5.422	(0.391)	87	[illegible]			0.00- 60.34	10.00
13 Freon 134a						CAS #: 811-97-2		
5.703	5.703	(0.411)	83	[illegible]	200.000	225.99	50.00- 150.00	100.00(A)
5.703	5.703	(0.411)	69	[illegible]			32.70- 132.70	82.43
15 Freon 152a						CAS #: 75-37-6		
5.872	5.872	(0.424)	65	[illegible]	200.000	224.33	50.00- 150.00	100.00(A)
5.872	5.872	(0.424)	51	[illegible]			128.28- 228.28	174.05
5.872	5.872	(0.424)	47	[illegible]			0.00- 93.38	44.91
17 Freon 22						CAS #: 75-45-6		
6.013	6.013	(0.434)	67	[illegible]	200.000	232.53	50.00- 150.00	100.00(A)
6.013	6.013	(0.434)	51	[illegible]			470.91- 570.91	503.12
6.041	6.041	(0.436)	85	[illegible]			0.00- 67.96	9.63
26 Methanol						CAS #: 67-56-1		
7.562	7.562	(0.545)	31	2557267	1200.00	696.25	50.00- 150.00	100.00
7.562	7.562	(0.545)	32	1919231			76.17- 176.17	75.05
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.745	8.745	(0.631)	67	[illegible]	200.000	188.54	50.00- 150.00	100.00
8.745	8.745	(0.631)	69	[illegible]			0.00- 82.68	32.54
8.745	8.745	(0.631)	35	[illegible]			0.00- 55.48	5.50
40 Freon123a						CAS #: 354-23-4		
9.579	9.579	(0.691)	67	[illegible]	200.000	212.59	50.00- 150.00	100.00(A)
9.579	9.579	(0.691)	117	[illegible]			21.37- 121.37	74.82
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	[illegible]	200.000	208.15	50.00- 150.00	100.00(A)
9.718	9.718	(0.701)	133	[illegible]			0.00- 70.95	19.97
9.579	9.579	(0.691)	85	[illegible]			256.69- 356.69	430.99
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	[illegible]	200.000	235.34	50.00- 150.00	100.00(A)
12.289	12.289	(0.886)	87	3206082			0.00- 80.60	31.35
12.289	12.289	(0.886)	59	1210316			0.00- 62.14	11.84
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	[illegible]	200.000	241.57	50.00- 150.00	100.00(A)
12.400	12.400	(0.894)	59	812840			76.36- 176.36	148.76
12.400	12.400	(0.894)	41	409141			317.31- 417.31	74.88
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	11387679	200.000	249.51	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	4879790			0.00- 93.11	42.85
12.925	12.925 (0.932)	41	1834928			0.00- 70.78	16.11
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	1071026	200.000	224.86	50.00- 150.00	100.00(A)
13.395	13.395 (0.966)	61	1194611			49.32- 149.32	111.54
13.395	13.395 (0.966)	43	7515065			578.83- 678.83	701.67
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	10712367	200.000	247.09	50.00- 150.00	100.00(A)
14.999	14.999 (1.082)	87	2553285			0.00- 72.90	23.83
14.999	14.999 (1.082)	55	2463404			0.00- 75.66	23.00
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	6201169	200.000	279.98	50.00- 150.00	100.00(A)
21.966	21.966 (1.584)	43	8699246			89.74- 189.74	140.28
98 1-Butanol					CAS #: 71-36-3		
15.773	15.773 (1.009)	56	2091144	200.000	299.60	50.00- 150.00	100.00(A)
15.773	15.773 (1.009)	41	1373797			33.56- 133.56	65.70
15.773	15.773 (1.009)	43	1050969			13.25- 113.25	50.26
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	3683588	200.000	247.07	50.00- 150.00	100.00(A)
19.533	19.533 (1.249)	73	1516521			0.00- 94.32	41.17
19.533	19.533 (1.249)	43	8438836			175.09- 275.09	229.09
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	4560256	200.000	267.64	50.00- 150.00	100.00(A)
22.741	22.741 (1.093)	98	2305489			0.23- 100.23	50.56
22.741	22.741 (1.093)	42	2923443			12.90- 112.90	64.11
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	11522324	200.000	252.45	50.00- 150.00	100.00(A)
23.570	23.570 (1.133)	85	10838919			45.26- 145.26	94.08
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msdt.i/21Feb2008.b/t022105.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022105.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 200(1200 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	269864	-13.58
97 1,4-Difluorobenze	1266888	760133	1773643	1144695	-9.65
126 Chlorobenzene-d5	1159473	695684	1623262	1083328	-6.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

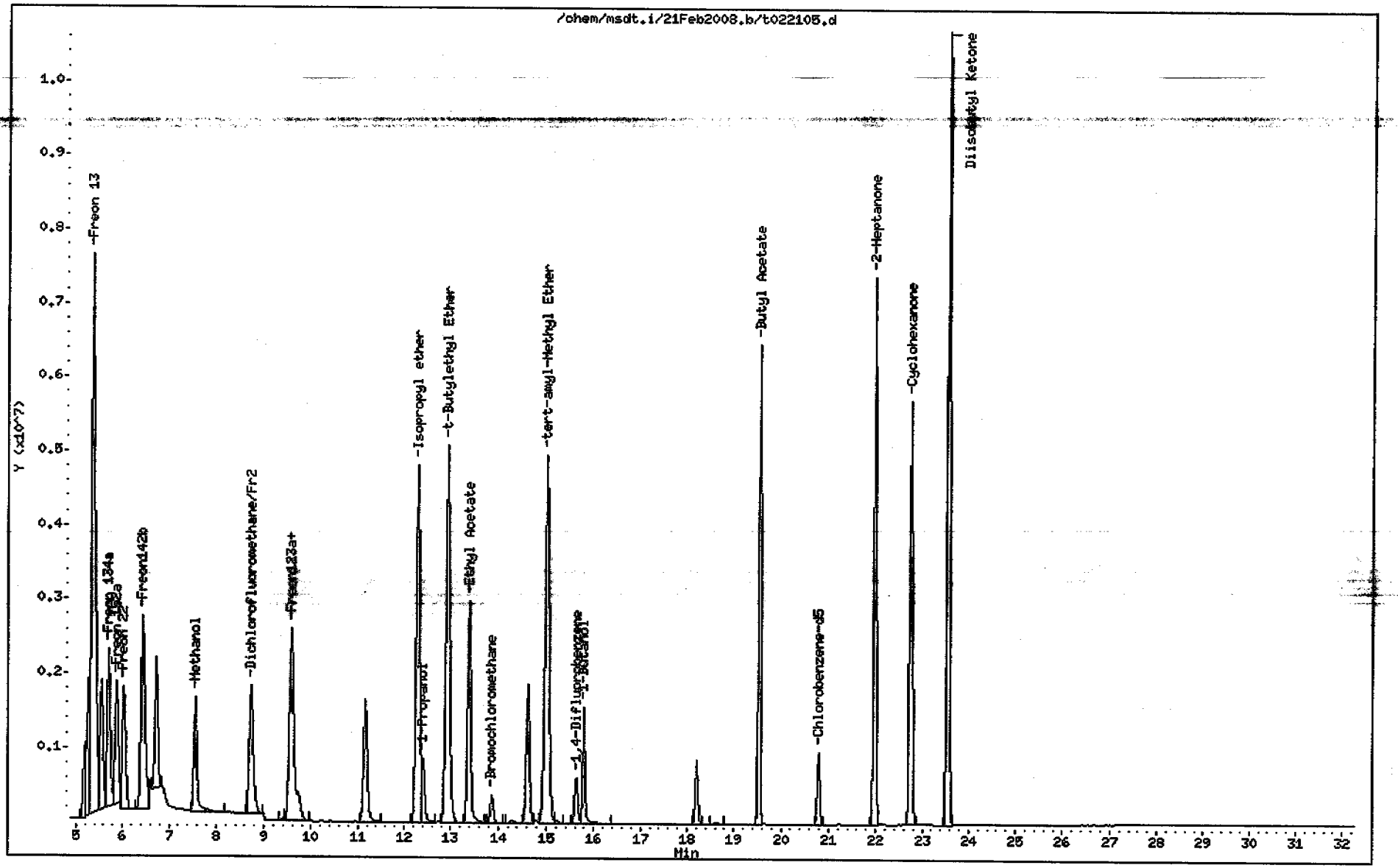
Data File: /chem/msdt.i/21Feb2008.b/t022105.d
Date : 21-FEB-2008 12:05
Client ID: Level 7
Sample Info: 200ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0164



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020613.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 06-FEB-2008 19:41
Operator : srs
Inst ID: msdt.i
Smp Info : 200ml #1576-261
Misc Info : 200ppbv -> 200ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 19:41
Cal File: t020613.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	350438	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	265413			26.39- 126.39	75.74
13.941	13.941 (1.000)	49	1193106			99.95- 199.95	340.46
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1410298	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	224026			0.00- 66.12	15.89
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1300571	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	741297			6.72- 106.72	57.00
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	620117	25.0000	27.500	50.00- 150.00	100.00
14.936	14.936 (1.078)	67	455931			3.57- 103.57	73.52
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1394007	25.0000	25.661	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	165109			0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950357			18.71- 118.71	68.17
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	848605	25.0000	25.226	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1070463			75.58- 175.58	126.14
22.789	22.789 (1.096)	176	830556			47.41- 147.41	97.87
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	2244809	200.000	195.86	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	1546399			17.96- 117.96	68.88
5.812	5.812 (0.419)	39	1826180			33.44- 133.44	81.35
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	13829436	200.000	202.10	50.00- 150.00	100.00(A)
5.923	5.923 (0.427)	87	4400174			0.00- 82.13	31.82
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	9245837	200.000	204.40	50.00- 150.00	100.00(A)
6.282	6.282 (0.453)	137	2950383			0.00- 81.89	31.91
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	3061437	200.000	204.92	50.00- 150.00	100.00(A)
6.531	6.531 (0.471)	52	1030836			0.00- 83.62	33.67
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	4186766	200.000	204.12	50.00- 150.00	100.00(A)
6.863	6.863 (0.495)	64	1330162			0.00- 89.61	31.77
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	3136692	200.000	203.21	50.00- 150.00	100.00(A)
6.946	6.946 (0.501)	39	3057782			53.33- 153.33	97.48
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	4285901	200.000	211.04	50.00- 150.00	100.00(A)
7.913	7.913 (0.571)	96	3953378			43.69- 143.69	92.24
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.591)	64	2243653	200.000	209.74	50.00- 150.00	100.00(A)
8.162	8.162 (0.589)	49	567495			0.00- 76.71	25.29
8.190	8.190 (0.591)	66	737238			0.00- 83.02	32.86
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.633)	101	15419021	200.000	199.04	50.00- 150.00	100.00
8.771	8.771 (0.633)	103	9913225			13.52- 113.52	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	1266709	200.000	214.06	50.00- 150.00	100.00(A)
9.241	9.241 (0.667)	43	285639			0.00- 75.24	22.51
9.241	9.241 (0.667)	46	473438			0.00- 89.78	37.32
42 Freon 113					CAS #: 76-13-1		
9.959	9.959 (0.719)	151	7037148	200.000	197.28	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	4532081			14.28- 114.28	64.40
9.932	9.932 (0.717)	101	9194511			80.55- 180.55	130.66
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	6864445	200.000	213.80	50.00- 150.00	100.00(A)
10.042	10.042 (0.725)	96	4161445			13.15- 113.15	60.62
10.042	10.042 (0.725)	98	2679049			0.00- 88.14	39.03
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	1929807	200.000	193.94	50.00- 150.00	100.00
10.181	10.181 (0.735)	43	6078502			267.82- 367.82	314.98
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	7110783	200.000	208.76	50.00- 150.00	100.00(A)
10.374	10.374 (0.749)	43	1603518			0.00- 76.64	22.53
10.374	10.374 (0.749)	59	298669			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	12911334	200.000	212.60	50.00- 150.00	100.00(A)
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	2138311	200.000	204.18	50.00- 150.00	100.00(A)
10.817	10.817 (0.781)	41	4667211			173.84- 273.84	218.57
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	4043623	200.000	199.16	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	3657876			36.08- 136.08	90.46
11.093	11.093 (0.800)	51	1301400			0.00- 83.83	32.18
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.826)	73	14127149	200.000	242.38	50.00- 150.00	100.00(A)
11.453	11.453 (0.826)	57	2668532			0.00- 69.02	18.89
11.453	11.453 (0.826)	41	2471765			0.00- 70.47	17.50
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	4995106	200.000	209.34	50.00- 150.00	100.00(A)
11.535	11.535 (0.832)	61	6882664			95.77- 195.77	137.79
11.535	11.535 (0.832)	98	3205496			16.26- 116.26	64.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	7233259	200.000	229.72	50.00- 150.00	100.00(A)
11.895	11.895 (0.858)	43	4071333			9.30- 109.30	56.29
11.895	11.895 (0.858)	86	1297193			0.00- 66.83	17.93
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	1342153	200.000	217.41	50.00- 150.00	100.00(A)
12.337	12.337 (0.890)	43	12158868			832.23- 932.23	905.92
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	9074032	200.000	205.97	50.00- 150.00	100.00(A)
12.365	12.365 (0.892)	65	2933179			0.00- 82.79	32.32
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	2599379	200.000	231.91	50.00- 150.00	100.00(A)
13.388	13.388 (0.966)	43	8515666			275.22- 375.22	327.60
13.388	13.388 (0.966)	57	765435			0.00- 79.56	29.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	6245688	200.000	210.70	50.00- 150.00	100.00(A)
13.416	13.416 (0.968)	96	4941404			27.39- 127.39	79.12
13.416	13.416 (0.968)	98	3177917			0.96- 100.96	50.88
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	4241211	200.000	224.34	50.00- 150.00	100.00(A)
13.858	13.858 (1.000)	71	2262935			0.00- 99.16	53.36
13.858	13.858 (1.000)	72	2415736			2.04- 102.04	56.96
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	10890508	200.000	213.97	50.00- 150.00	100.00(A)
13.941	13.941 (1.006)	85	7079254			16.43- 116.43	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	12157336	200.000	215.95	50.00- 150.00	100.00(A)
14.273	14.273 (1.030)	99	7830263			17.45- 117.45	64.41
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	6882951	200.000	228.34	50.00- 150.00	100.00(A)
14.300	14.300 (1.032)	56	6804949			47.55- 147.55	98.87
14.300	14.300 (1.032)	41	3514830			5.12- 105.12	51.07
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	11440648	200.000	211.56	50.00- 150.00	100.00(A)
14.522	14.522 (1.048)	117	12169445			53.78- 153.78	106.37
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	14800821	200.000	209.93	50.00- 150.00	100.00(A)

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)								
14.964	14.964	(0.958)	77	3350560			0.00- 73.50	22.64
89 2,2,4-Trimethylpentane						CAS #: 540-84-1		
14.881	14.881	(1.074)	57	17411392	200.000	236.90	50.00- 150.00	100.00(A)
14.881	14.881	(1.074)	56	5614080			0.00- 82.82	32.24
14.881	14.881	(1.074)	41	4444106			0.00- 78.43	25.52
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.075	15.075	(0.965)	62	6990152	200.000	203.22	50.00- 150.00	100.00(A)
15.075	15.075	(0.965)	64	2256443			0.00- 84.23	32.28
94 Heptane						CAS #: 142-82-5		
15.185	15.185	(0.972)	71	4422042	200.000	221.58	50.00- 150.00	100.00(A)
15.185	15.185	(0.972)	43	6011920			85.70- 185.70	135.95
15.185	15.185	(0.972)	57	3678586			28.72- 128.72	83.19
101 Trichloroethene						CAS #: 79-01-6		
16.070	16.070	(1.028)	95	6441042	200.000	213.30	50.00- 150.00	100.00(A)
16.070	16.070	(1.028)	130	5805098			42.94- 142.94	90.13
16.070	16.070	(1.028)	97	4097149			13.25- 113.25	63.61
104 1,2-Dichloropropane						CAS #: 78-87-5		
16.568	16.568	(1.060)	63	5092409	200.000	214.08	50.00- 150.00	100.00(A)
16.568	16.568	(1.060)	62	3626964			21.32- 121.32	71.22
16.568	16.568	(1.060)	41	2709468			8.96- 108.96	53.21
106 1,4-Dioxane						CAS #: 123-91-1		
16.678	16.678	(1.067)	88	3666409	200.000	210.57	50.00- 150.00	100.00(A)
16.678	16.678	(1.067)	58	2113895			9.36- 109.36	57.65
16.678	16.678	(1.067)	57	748945			0.00- 71.19	20.43
107 Bromodichloromethane						CAS #: 75-27-4		
16.982	16.982	(1.087)	83	11426189	200.000	211.43	50.00- 150.00	100.00(A)
16.982	16.982	(1.087)	85	7386832			13.51- 113.51	64.39
110 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
17.784	17.784	(1.138)	75	8131434	200.000	224.33	50.00- 150.00	100.00(A)
17.784	17.784	(1.138)	77	2681563			0.00- 84.89	31.75
17.784	17.784	(1.138)	39	3559732			0.00- 97.13	43.78
111 4-Methyl-2-pentanone						CAS #: 108-10-1		
17.950	17.950	(1.149)	58	4047096	200.000	245.73	50.00- 150.00	100.00(A)
17.950	17.950	(1.149)	43	9172795			175.34- 275.34	226.65
17.978	17.978	(1.150)	85	2017083			0.64- 100.64	49.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	16544347	200.000	220.07	50.00- 150.00	100.00(A)
18.337	18.337 (1.173)	92	9944276			11.62- 111.62	60.11
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	[illegible]	200.000	215.39	50.00- 150.00	100.00(A)
18.752	18.752 (0.902)	77	[illegible]			0.00- 81.86	31.63
18.752	18.752 (0.902)	39	3605430			0.00- 91.58	40.72
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	6145241	200.000	207.43	50.00- 150.00	100.00(A)
19.111	19.111 (0.919)	99	3885491			13.21- 113.21	63.23
19.111	19.111 (0.919)	83	5273029			35.76- 135.76	85.81
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	8171986	200.000	205.86	50.00- 150.00	100.00(A)
19.277	19.277 (0.927)	129	5618493			19.36- 119.36	68.75
19.277	19.277 (0.927)	131	5327701			16.43- 116.43	65.19
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	5507463	200.000	222.01	50.00- 150.00	100.00(A)
19.416	19.416 (0.934)	43	9126801			124.96- 224.96	165.72
19.416	19.416 (0.934)	100	1159888			0.00- 71.71	21.06
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	10771050	200.000	213.53	50.00- 150.00	100.00(A)
19.803	19.803 (0.952)	127	8255102			28.82- 128.82	76.64
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	[illegible]	200.000	218.05	50.00- 150.00	100.00(A)
20.051	20.051 (0.964)	109	[illegible]			46.68- 146.68	92.34
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	14309057	200.000	209.22	50.00- 150.00	100.00(A)
20.853	20.853 (1.003)	114	4444592			0.00- 82.06	31.06
20.853	20.853 (1.003)	77	8909067			22.53- 122.53	62.82
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	7668400	200.000	216.40	50.00- 150.00	100.00(A)
20.936	20.936 (1.007)	91	25064309			269.96- 369.96	326.85
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	9936021	200.000	222.67	50.00- 150.00	100.00(A)
21.130	21.130 (1.016)	91	20223905			149.87- 249.87	203.54
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	9402725	200.000	221.52	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	20307931			160.81- 260.81	215.98
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	15871642	200.000	244.07	50.00- 150.00	100.00(A)
21.876	21.876 (1.052)	78	8023544			9.02- 109.02	50.55
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12026424	200.000	222.10	50.00- 150.00	100.00(A)
22.291	22.291 (1.072)	171	6154800			1.83- 101.83	51.18
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	26972899	200.000	230.37	50.00- 150.00	100.00(A)
22.429	22.429 (1.078)	120	6825383			0.00- 77.62	25.30
22.402	22.402 (1.077)	51	2239931			0.00- 58.75	8.30
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15030605	200.000	220.75	50.00- 150.00	100.00(A)
23.010	23.010 (1.106)	85	9664787			16.89- 116.89	64.30
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	31493566	200.000	207.49	50.00- 150.00	100.00(A)
23.121	23.121 (1.112)	120	7318775			0.00- 71.63	23.24
23.121	23.121 (1.112)	105	1221513			0.00- 53.71	3.88
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.286 (1.120)	105	26455136	200.000	204.75	50.00- 150.00	100.00(A)
23.286	23.286 (1.120)	120	8661852			0.00- 79.69	32.74
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	24464891	200.000	221.96	50.00- 150.00	100.00(A)
23.397	23.397 (1.125)	120	11830853			0.00- 98.23	48.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	23660053	200.000	227.80	50.00- 150.00	100.00(A)
24.033	24.033 (1.156)	120	10670397			0.00- 94.91	45.10
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	15896139	200.000	212.94	50.00- 150.00	100.00(A)
24.586	24.586 (1.182)	148	10085107			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	6558811			0.00- 91.36	41.26
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	16485506	200.000	214.62	50.00- 150.00	100.00(A)
24.724	24.724 (1.189)	148	10467681			16.09- 116.09	63.50
24.724	24.724 (1.189)	111	6472835			0.00- 90.13	39.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	24668642	200.000	222.12	50.00- 150.00	100.00(A)
24.945	24.945 (1.199)	126	4886072			0.00- 69.28	19.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	15599304	200.000	214.51	50.00- 150.00	100.00(A)
25.360	25.360 (1.219)	148	9883137			15.85- 115.85	63.36
25.360	25.360 (1.219)	111	6587185			0.00- 94.46	42.23
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	11415493	200.000	205.82	50.00- 150.00	100.00(A)
28.153	28.153 (1.354)	182	10826368			44.78- 144.78	94.84
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	10769723	200.000	192.94	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	6684925			12.90- 112.90	62.07
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	16502797	200.000	214.98	50.00- 150.00	100.00(A)
28.678	28.678 (1.379)	127	2006009			0.00- 62.74	12.16
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.597)	43	4503444	200.000	198.77	50.00- 150.00	100.00
8.273	8.273 (0.597)	57	3514272			27.67- 127.67	78.04
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	770238	200.000	196.35	50.00- 150.00	100.00
6.807	6.807 (0.491)	43	5480338			666.74- 766.74	711.51
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	8362325	200.000	234.30	50.00- 150.00	100.00(A)
16.346	16.346 (1.180)	98	3725362			0.00- 95.22	44.55
16.346	16.346 (1.180)	55	5813657			20.82- 120.82	69.52
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	7340816	200.000	197.53	50.00- 150.00	100.00
11.148	11.148 (0.804)	41	1467413			0.00- 72.85	19.99
11.148	11.148 (0.804)	57	744700			0.00- 59.93	10.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020613.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 200ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	350438	-1.56
97 1,4-Difluorobenze	1372567	823540	1921594	1410298	2.75
126 Chlorobenzene-d5	1227265	736359	1718171	1300571	5.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.86	-0.20
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

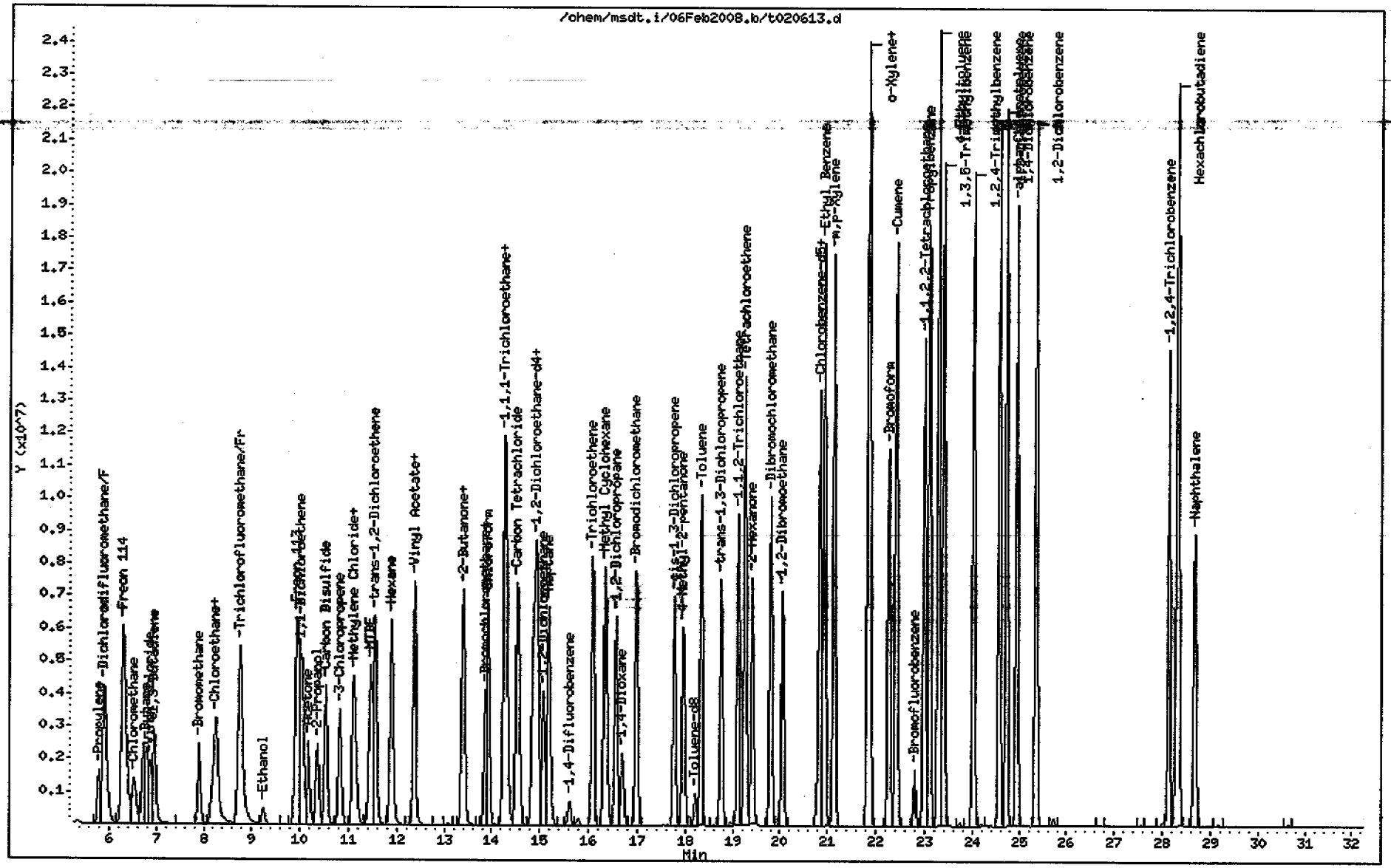
0174

Data File: /chem/msdt.i/06Feb2008.b/t020613.d
Date : 06-FEB-2008 19:41
Client ID: Level 7
Sample Info: 200ml #1576-261

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

Column phase: RTx-624



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802422-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	%Recovery
Freon 12	110
Freon 114	103
Chloromethane	113
Vinyl Chloride	108
1,3-Butadiene	105
Bromomethane	106
Chloroethane	110
Freon 11	105
Ethanol	111
Freon 113	101
1,1-Dichloroethene	109
Acetone	105
2-Propanol	104
Carbon Disulfide	108
Methylene Chloride	105
Methyl tert-butyl ether	131 Q
trans-1,2-Dichloroethene	105
Hexane	111
1,1-Dichloroethane	107
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	110
Tetrahydrofuran	114
Chloroform	111
1,1,1-Trichloroethane	112
Cyclohexane	114
Carbon Tetrachloride	111
Benzene	105
1,2-Dichloroethane	107
Heptane	113
Trichloroethene	107
1,2-Dichloropropane	108
1,4-Dioxane	106
Bromodichloromethane	109
cis-1,3-Dichloropropene	116
4-Methyl-2-pentanone	121
Toluene	114
trans-1,3-Dichloropropene	111
1,1,2-Trichloroethane	108
Tetrachloroethene	108

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802422-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	113
Dibromochloromethane	112
1,2-Dibromoethane (EDB)	112
Chlorobenzene	109
Ethyl Benzene	112
m,p-Xylene	115
o-Xylene	115
Styrene	124
Bromoform	115
1,1,2,2-Tetrachloroethane	112
4-Ethyltoluene	123
1,3,5-Trimethylbenzene	112
1,2,4-Trimethylbenzene	114
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	111
alpha-Chlorotoluene	119
1,2-Dichlorobenzene	108
1,2,4-Trichlorobenzene	89
Hexachlorobutadiene	91
Chlorodifluoromethane	103
Methanol	133
n-Butanol	126
Propylene	104

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	103	70-130

0176

Data File: /chem/msdt.i/03Mar2008.b/t030304.d
Report Date: 03-Mar-2008 14:31

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t030304.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/03Mar2008.b/t14q206c.m

Injection Date: 03-MAR-2008 12:22
Init. Cal. Date(s): 06-FEB-2008 28-FEB-2008
Init. Cal. Times: 14:27 15:24
Quant Type: ISTD

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.78081	0.010	-10.70255	30.00000	Averaged
$ 113 Toluene-d8	0.96300	1.02911	0.010	-6.86504	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.66564	0.010	-2.93667	30.00000	Averaged
11 Propylene	0.81770	0.85455	0.010	-4.50689	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	4.88168	5.39519	0.010	-10.51913	30.00000	Averaged
16 Freon 114	3.22698	3.31180	0.010	-2.62854	30.00000	Averaged
18 Chloromethane	1.06576	1.20842	0.010	-13.38649	30.00000	Averaged
20 Vinyl Chloride	1.46323	1.58888	0.010	-8.58653	30.00000	Averaged
22 1,3-Butadiene	1.10115	1.15904	0.010	-5.25707	30.00000	Averaged
25 Bromomethane	1.44878	1.52975	0.010	-5.58918	30.00000	Averaged
27 Chloroethane	0.76312	0.83763	0.010	-9.76278	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	5.52640	5.79792	0.010	-4.91326	30.00000	Averaged
38 Ethanol	0.42283	0.46959	0.010	-11.05984	30.00000	Averaged
42 Freon 113	2.54471	2.57211	0.010	-1.07650	30.00000	Averaged
43 1,1-Dichloroethene	2.29053	2.49546	0.010	-8.94682	30.00000	Averaged
45 Acetone	0.70987	0.74341	0.010	-4.72468	30.00000	Averaged
46 2-Propanol	2.43274	2.54128	0.010	-4.46149	30.00000	Averaged
47 Carbon Disulfide	4.33254	4.69511	0.010	-8.36859	30.00000	Averaged
51 3-Chloropropene	0.74606	0.76209	0.010	-2.14966	30.00000	Averaged
54 Methylene Chloride	1.44840	1.52776	0.010	-5.47907	30.00000	Averaged
57 tert-Butyl-Alcohol	2.65102	3.20279	0.010	-20.81373	40.00000	Averaged
60 MTBE	4.15810	5.45189	0.010	-31.11498	30.00000	Averaged <-
61 trans-1,2-Dichloroethene	1.70224	1.79472	0.010	-5.43309	30.00000	Averaged
65 Hexane	2.24629	2.49217	0.010	-10.94623	30.00000	Averaged
69 Vinyl Acetate	0.44040	0.42946	0.010	2.48396	30.00000	Averaged
70 1,1-Dichloroethane	3.14283	3.35069	0.010	-6.61367	30.00000	Averaged
75 2-Butanone	0.79961	0.86995	0.010	-8.79628	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.11467	2.32167	0.010	-9.78840	30.00000	Averaged
80 Tetrahydrofuran	1.34868	1.54434	0.010	-14.50736	30.00000	Averaged
82 Chloroform	3.63101	4.03785	0.010	-11.20479	30.00000	Averaged
83 1,1,1-Trichloroethane	4.01616	4.50663	0.010	-12.21241	30.00000	Averaged
85 Cyclohexane	2.15044	2.45253	0.010	-14.04761	30.00000	Averaged
87 Carbon Tetrachloride	3.85789	4.29074	0.010	-11.22000	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.24329	6.67308	0.010	-27.26891	30.00000	Averaged
91 Benzene	1.24979	1.31411	0.010	-5.14640	30.00000	Averaged
93 1,2-Dichloroethane	0.60974	0.65262	0.010	-7.03212	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t030304.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/03Mar2008.b/t14q206c.m

Injection Date: 03-MAR-2008 12:22
Init. Cal. Date(s): 06-FEB-2008 28-FEB-2008
Init. Cal. Times: 14:27 15:24
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RFSO	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.35378	0.40108	0.010	-13.37184	30.00000	Averaged
101 Trichloroethene	0.53529	0.57149	0.010	-6.76280	30.00000	Averaged
104 1,2-Dichloropropane	0.42168	0.45498	0.010	-7.89582	30.00000	Averaged
106 1,4-Dioxane	0.30866	0.32625	0.010	-5.70066	30.00000	Averaged
107 Bromodichloromethane	0.95798	1.04808	0.010	-9.40502	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.64255	0.74736	0.010	-16.31107	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29195	0.35281	0.010	-20.84479	30.00000	Averaged
114 Toluene	1.33263	1.52498	0.010	-14.43423	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.79014	0.87777	0.010	-11.09084	30.00000	Averaged
117 1,1,2-Trichloroethane	0.56947	0.61770	0.010	-8.46942	30.00000	Averaged
120 Tetrachloroethene	0.76308	0.82719	0.010	-8.40097	30.00000	Averaged
121 2-Hexanone	0.47685	0.53763	0.010	-12.74533	30.00000	Averaged
122 Dibromochloromethane	0.96963	1.08286	0.010	-11.67744	30.00000	Averaged
123 1,2-Dibromoethane	0.90581	1.01003	0.010	-11.50596	30.00000	Averaged
127 Chlorobenzene	1.31466	1.42838	0.010	-8.65007	30.00000	Averaged
128 Ethyl Benzene	0.68116	0.76168	0.010	-11.82081	30.00000	Averaged
129 m,p-Xylene	0.85774	0.98830	0.010	-15.22239	30.00000	Averaged
130 o-Xylene	0.81592	0.93561	0.010	-14.66979	30.00000	Averaged
131 Styrene	1.25002	1.54778	0.010	-23.82008	30.00000	Averaged
133 Bromoform	1.04080	1.19944	0.010	-15.24231	30.00000	Averaged
134 Cumene	2.25068	2.61790	0.010	-16.31591	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.30880	1.46605	0.010	-12.01496	30.00000	Averaged
142 Propylbenzene	2.91760	3.42018	0.010	-17.22582	30.00000	Averaged
145 4-Ethyltoluene	2.48367	3.06118	0.010	-23.25205	30.00000	Averaged
147 1,3,5-Trimethylbenzene	2.11868	2.38175	0.010	-12.41670	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.99645	2.27672	0.010	-14.03797	30.00000	Averaged
155 1,3-Dichlorobenzene	1.43495	1.56868	0.010	-9.31954	30.00000	Averaged
156 1,4-Dichlorobenzene	1.47654	1.64328	0.010	-11.29306	30.00000	Averaged
159 alpha-Chlorotoluene	2.13483	2.53985	0.010	-18.97221	30.00000	Averaged
161 1,2-Dichlorobenzene	1.39783	1.51721	0.010	-8.53998	30.00000	Averaged
165 1,2,4-Trichlorobenzene	1.06613	0.94632	0.010	11.23782	30.00000	Averaged
166 Hexachlorobutadiene	1.07297	0.97542	0.010	9.09159	30.00000	Averaged
29 Isopentane	1.61629	1.64971	0.010	-2.06809	30.00000	Averaged
19 Butane	0.27985	0.30009	0.010	-7.23322	30.00000	Averaged
102 Methyl Cyclohexane	2.54614	3.00832	0.010	-18.15239	30.00000	Averaged
167 Naphthalene	1.47559	1.30318	0.010	11.68470	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/03Mar2008.b/t030304.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 03-MAR-2008 12:22
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/03Mar2008.b/t14q206c.m
Meth Date : 03-Mar-2008 14:31 sruth Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24 Cal File: t022806.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane					CAS #: 74-97-5			
13.865	13.865 (1.000)	130	278947	25.0000		80.00- 120.00		100.00
13.865	13.865 (1.000)	128	218986			28.50- 128.50		78.50
13.865	13.865 (1.000)	49	510510			133.01- 233.01		183.01
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
15.635	15.635 (1.000)	114	1137525	25.0000		80.00- 120.00		100.00
15.607	15.607 (1.000)	88	190987			0.00- 66.79		16.79
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
20.805	20.805 (1.000)	117	1055616	25.0000		80.00- 120.00		100.00
20.805	20.805 (1.000)	82	621273			7.65- 107.65		58.85
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
14.943	14.943 (1.078)	65	496752	25.0000	27.676	80.00- 120.00		100.00
14.943	14.943 (1.078)	67	273810			3.57- 103.57		55.12
$ 113 Toluene-d8					CAS #: 2037-26-5			
18.206	18.206 (1.164)	98	1170639	25.0000	26.716	80.00- 120.00		100.00
18.206	18.206 (1.164)	70	134307			0.00- 61.29		11.47

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	779483			18.71- 118.71	66.59
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	702661	25.0000	25.734	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	871980			74.10- 174.10	124.10
22.796	22.796 (1.096)	176	673731			45.88- 145.88	95.88
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	476747	50.0000	52.253	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	312672			17.96- 117.96	65.58
5.816	5.816 (0.419)	39	386608			33.44- 133.44	81.09
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.929 (0.428)	85	3009943	50.0000	55.260	80.00- 120.00	100.00
5.929	5.929 (0.428)	87	968355			0.00- 82.13	32.17
16 Freon 114					CAS #: 76-14-2		
6.323	6.323 (0.456)	135	1847635	50.0000	51.314	80.00- 120.00	100.00
6.323	6.323 (0.456)	137	593165			0.00- 81.89	32.10
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	674173	50.0000	56.693	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	225860			0.00- 83.62	33.50
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	886424	50.0000	54.293	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	290381			0.00- 89.61	32.76
22 1,3-Butadiene					CAS #: 106-99-0		
6.999	6.999 (0.505)	54	646621	50.0000	52.628	80.00- 120.00	100.00
6.999	6.999 (0.505)	39	642588			53.33- 153.33	99.38
25 Bromomethane					CAS #: 74-83-9		
7.928	7.928 (0.572)	94	853440	50.0000	52.794	80.00- 120.00	100.00
7.928	7.928 (0.572)	96	809818			44.89- 144.89	94.89
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	467307	50.0000	54.881	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	120536			0.00- 76.71	25.79
8.210	8.210 (0.592)	66	154104			0.00- 83.02	32.98
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.801	8.801 (0.635)	101	3234627	50.0000	52.457	80.00- 120.00	100.00
8.801	8.801 (0.635)	103	2106528			15.12- 115.12	65.12

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.248	9.248 (0.667)	45	261982	50.0000	55.530	80.00- 120.00	100.00
9.248	9.248 (0.667)	43	57971			0.00- 75.24	22.13
9.248	9.248 (0.667)	46	97794			0.00- 89.78	37.33
42 Freon 113					CAS #: 76-13-1		
9.966	9.966 (0.719)	151	1434962	50.0000	50.538	80.00- 120.00	100.00
9.966	9.966 (0.719)	153	906534			13.17- 113.17	63.17
9.966	9.966 (0.719)	101	1861365			79.72- 179.72	129.72
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.049 (0.725)	61	1392204	50.0000	54.473	80.00- 120.00	100.00
10.049	10.049 (0.725)	96	810711			8.23- 108.23	58.23
10.049	10.049 (0.725)	98	524935			0.00- 87.71	37.71
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	414745	50.0000	52.362	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	1297714			267.82- 367.82	312.89
46 2-Propanol					CAS #: 67-63-0		
10.381	10.381 (0.749)	45	1417764	50.0000	52.231	80.00- 120.00	100.00
10.381	10.381 (0.749)	43	355617			0.00- 76.64	25.08
10.381	10.381 (0.749)	59	60405			0.00- 54.31	4.26
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	2619375	50.0000	54.184	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.824	10.824 (0.781)	76	425167	50.0000	51.075	80.00- 120.00	100.00
10.824	10.824 (0.781)	41	964799			173.84- 273.84	226.92
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	852327	50.0000	52.740	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	732956			35.99- 135.99	85.99
11.100	11.100 (0.801)	51	281056			0.00- 83.83	32.98
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.155	11.155 (0.805)	59	1786820	50.0000	60.407	80.00- 120.00	100.00
11.155	11.155 (0.805)	41	368122			0.00- 72.85	20.60
11.155	11.155 (0.805)	57	180014			0.00- 59.93	10.07
60 MTBE					CAS #: 1634-04-4		
11.460	11.460 (0.826)	73	3041575	50.0000	65.557	80.00- 120.00	100.00
11.460	11.460 (0.826)	57	575360			0.00- 68.92	18.92
11.460	11.460 (0.826)	41	559290			0.00- 70.47	18.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1001264	50.0000	52.716	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1439253			93.74- 193.74	143.74
11.543	11.543 (0.832)	98	637918			16.26- 116.26	63.71
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1390366	50.0000	55.473	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	809582			9.30- 109.30	58.23
11.902	11.902 (0.858)	86	240842			0.00- 66.83	17.32
69 Vinyl Acetate					CAS #: 108-05-4		
12.372	12.372 (0.892)	86	239592	50.0000	48.758	80.00- 120.00	100.00
12.372	12.372 (0.892)	43	2309142			832.23- 932.23	963.78
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	1869330	50.0000	53.307	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	602109			0.00- 82.21	32.21
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	485339	50.0000	54.398	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1658420			291.70- 391.70	341.70
13.395	13.395 (0.966)	57	145110			0.00- 79.56	29.90
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1295243	50.0000	54.894	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	984005			25.97- 125.97	75.97
13.423	13.423 (0.968)	98	644491			0.00- 99.76	49.76
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	861580	50.0000	57.254	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	445451			1.70- 101.70	51.70
13.865	13.865 (1.000)	72	476842			2.04- 102.04	55.35
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2252694	50.0000	55.602	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1469115			15.22- 115.22	65.22
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2514221	50.0000	56.106	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1626626			14.70- 114.70	64.70
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.307 (1.032)	84	1368250	50.0000	57.024	80.00- 120.00	100.00
14.307	14.307 (1.032)	56	1379362			50.81- 150.81	100.81
14.307	14.307 (1.032)	41	734895			3.71- 103.71	53.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2393779	50.0000	55.610	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2544345			56.29- 156.29	106.29
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	3722869	50.0000	63.634	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1201622			0.00- 82.82	32.28
14.888	14.888 (1.074)	41	994225			0.00- 78.43	26.71
91 Benzene					CAS #: 71-43-2		
14.971	14.971 (0.958)	78	2989655	50.0000	52.573	80.00- 120.00	100.00
14.971	14.971 (0.958)	77	686732			0.00- 73.50	22.97
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	1484740	50.0000	53.516	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	479419			0.00- 84.23	32.29
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.972)	71	912488	50.0000	56.686	80.00- 120.00	100.00
15.192	15.192 (0.972)	43	1302422			85.70- 185.70	142.73
15.192	15.192 (0.972)	57	777407			28.72- 128.72	85.20
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1300171	50.0000	53.381	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1188695			41.43- 141.43	91.43
16.077	16.077 (1.028)	97	831822			13.98- 113.98	63.98
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.060)	63	1035094	50.0000	53.948	80.00- 120.00	100.00
16.575	16.575 (1.060)	62	749676			22.43- 122.43	72.43
16.547	16.547 (1.058)	41	609184			8.85- 108.85	58.85
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.067)	88	742239	50.0000	52.850	80.00- 120.00	100.00
16.685	16.685 (1.067)	58	432472			8.27- 108.27	58.27
16.685	16.685 (1.067)	57	150087			0.00- 71.19	20.22
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.087)	83	2384430	50.0000	54.702	80.00- 120.00	100.00
16.989	16.989 (1.087)	85	1534601			14.36- 114.36	64.36
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.138)	75	1700282	50.0000	58.156	80.00- 120.00	100.00
17.791	17.791 (1.138)	77	540235			0.00- 81.77	31.77
17.764	17.764 (1.136)	39	769712			0.00- 95.27	45.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.149)	58	802659	50.0000	60.422	80.00- 120.00	100.00
17.957	17.957 (1.149)	43	1865017			175.34- 275.34	232.35
17.957	17.957 (1.149)	85	397668			0.64- 100.64	49.54
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.172)	91	3469405	50.0000	57.217	80.00- 120.00	100.00
18.317	18.317 (1.172)	92	2104295			10.65- 110.65	60.65
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1853182	50.0000	55.545	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	587563			0.00- 81.71	31.71
18.759	18.759 (0.902)	39	778129			0.00- 91.99	41.99
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.118	19.118 (0.919)	97	1304107	50.0000	54.235	80.00- 120.00	100.00
19.118	19.118 (0.919)	99	820620			12.93- 112.93	62.93
19.091	19.091 (0.918)	83	1121722			36.01- 136.01	86.01
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1746381	50.0000	54.200	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1207017			19.12- 119.12	69.12
19.284	19.284 (0.927)	131	1149111			15.80- 115.80	65.80
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1135059	50.0000	56.373	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	1939053			120.83- 220.83	170.83
19.423	19.423 (0.934)	100	239476			0.00- 71.71	21.10
122 Dibromochloromethane					CAS #: 124-48-1		
19.810	19.810 (0.952)	129	2286174	50.0000	55.839	80.00- 120.00	100.00
19.810	19.810 (0.952)	127	1742731			28.82- 128.82	76.23
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2132412	50.0000	55.753	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	1987090			43.19- 143.19	93.19
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3015635	50.0000	54.325	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	942197			0.00- 81.24	31.24
20.833	20.833 (1.001)	77	1833442			10.80- 110.80	60.80
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1608088	50.0000	55.910	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5238035			269.96- 369.96	325.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2086540	50.0000	57.611	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4280704			149.87- 249.87	205.16
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	1975296	50.0000	57.335	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4256705			165.50- 265.50	215.50
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3267718	50.0000	61.910	80.00- 120.00	100.00
21.856	21.856 (1.050)	78	1708273			2.28- 102.28	52.28
133 Bromoform					CAS #: 75-25-2		
22.270	22.270 (1.070)	173	2532300	50.0000	57.621	80.00- 120.00	100.00
22.270	22.270 (1.070)	171	1295366			1.15- 101.15	51.15
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	5527000	50.0000	58.158	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1411281			0.00- 77.62	25.53
22.409	22.409 (1.077)	51	502930			0.00- 58.75	9.10
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3095181	50.0000	56.007	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2011721			15.00- 115.00	65.00
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	7220801	50.0000	58.613	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1543602			0.00- 71.63	21.38
23.100	23.100 (1.110)	105	266090			0.00- 53.71	3.69
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	6462853	50.0000	61.626	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	1904865			0.00- 79.47	29.47
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.376	23.376 (1.124)	105	5028437	50.0000	56.208	80.00- 120.00	100.00
23.376	23.376 (1.124)	120	2398527			0.00- 98.23	47.70
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	4806676	50.0000	57.019	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2155640			0.00- 94.91	44.85
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3311838	50.0000	54.660	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2120867			14.68- 114.68	64.04
24.593	24.593 (1.182)	111	1393324			0.00- 91.36	42.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3469353	50.0000	55.646	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2210337			16.09- 116.09	63.71
24.731	24.731 (1.189)	111	1373812			0.00- 90.13	39.60
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.952	24.952 (1.199)	91	5362219	50.0000	59.486	80.00- 120.00	100.00
24.952	24.952 (1.199)	126	984794			0.00- 69.28	18.37
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3203178	50.0000	54.270	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2041805			13.74- 113.74	63.74
25.367	25.367 (1.219)	111	1392101			0.00- 93.46	43.46
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	1997901	50.0000	44.381	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	1893932			44.80- 144.80	94.80
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2059341	50.0000	45.454	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1271980			12.90- 112.90	61.77
29 Isopentane					CAS #: 78-78-4		
8.294	8.294 (0.598)	43	920364	50.0000	51.034	80.00- 120.00	100.00
8.294	8.294 (0.598)	57	710234			27.67- 127.67	77.17
19 Butane					CAS #: 106-97-8		
6.830	6.830 (0.493)	58	167421	50.0000	53.617	80.00- 120.00	100.00
6.830	6.830 (0.493)	43	1159918			666.74- 766.74	692.82
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1678324	50.0000	59.076	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	754609			0.00- 95.22	44.96
16.354	16.354 (1.179)	55	1200517			20.82- 120.82	71.53
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	2751307	50.0000	44.158	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	337050			0.00- 62.74	12.25

Data File: /chem/msdt.i/03Mar2008.b/t030304.d
Report Date: 03-Mar-2008 14:31

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t030304.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 03-MAR-2008
Calibration Time: 10:06
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	241110	144666	337554	278947	15.69
97 1,4-Difluorobenze	991635	594981	1388289	1137525	14.71
126 Chlorobenzene-d5	941728	565037	1318419	1055616	12.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

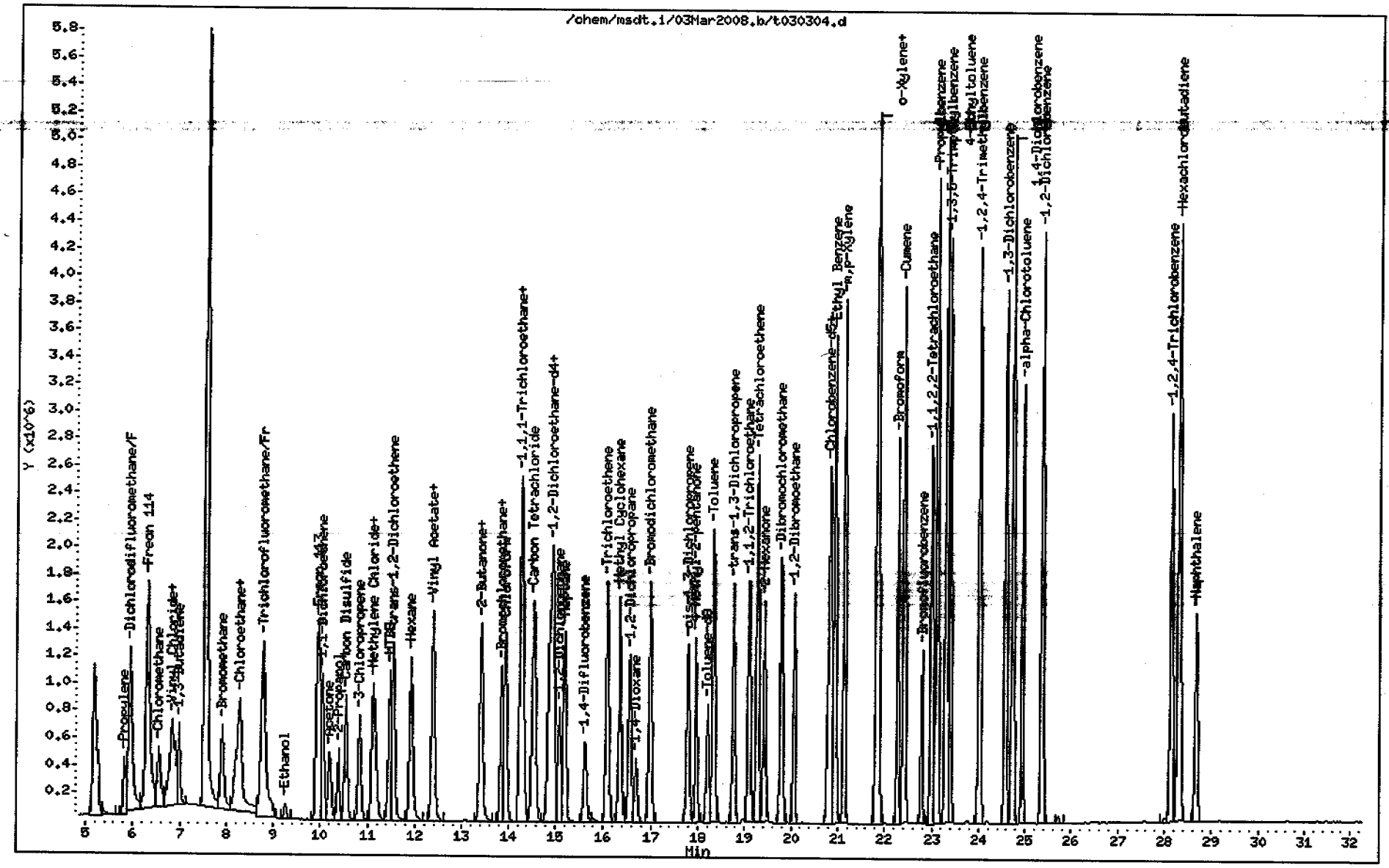
Data File: /chem/msdt.i/03Mar2008.b/t030304.d
Date : 03-MAR-2008 12:22
Client ID: CCV-1
Sample Info: 50mL #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0188



Report Date: 03-Mar-2008 13:38

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i Injection Date: 03-MAR-2008 13:14
Lab File ID: t030305.d Init. Cal. Date(s): 06-FEB-2008 28-FEB-2008
Analysis Type: AIR Init. Cal. Times: 14:27 15:24
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdt.i/03Mar2008.b/t14q206c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.69923	0.010	-5.63115	30.000000	Averaged
$ 113 Toluene-d8	0.96300	0.97509	0.010	-1.25535	30.000000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.68283	0.010	-5.59552	30.000000	Averaged
6 Freon142b	3.43649	3.65931	0.010	-6.48375	40.000000	Averaged
9 Freon 13	3.44586	3.19744	0.010	7.20918	40.000000	Averaged
13 Freon 134a	1.53736	1.53603	0.010	0.08628	40.000000	Averaged
15 Freon 152a	0.82784	0.77428	0.010	6.47021	40.000000	Averaged
17 Freon 22	0.39055	0.40132	0.010	-2.75912	40.000000	Averaged
26 Methanol	0.20868	0.27715	0.010	-32.80915	40.000000	Averaged
34 Dichlorofluoromethane/Fr21	2.45592	2.71866	0.010	-10.69809	40.000000	Averaged
40 Freon123a	1.89468	1.91980	0.010	-1.32575	40.000000	Averaged
41 Freon123	0.22255	0.22978	0.010	-3.24984	40.000000	Averaged
68 Isopropyl ether	4.09678	4.18345	0.010	-2.11551	40.000000	Averaged
71 1-Propanol	0.21526	0.25012	0.010	-16.19494	40.000000	Averaged
73 t-Butylethyl Ether	4.36418	4.77797	0.010	-9.48168	40.000000	Averaged
77 Ethyl Acetate	0.44196	0.44682	0.010	-1.10030	40.000000	Averaged
92 tert-amyl-Methyl Ether	4.12820	4.41536	0.010	-6.95593	40.000000	Averaged
96 2-Heptanone	2.16686	2.42607	0.010	-11.96248	40.000000	Averaged
98 1-Butanol	0.16280	0.20439	0.010	-25.54485	40.000000	Averaged
119 Butyl Acetate	0.33960	0.36821	0.010	-8.42481	40.000000	Averaged
135 Cyclohexanone	0.41426	0.51785	0.010	-25.00370	40.000000	Averaged
146 Diisobutyl Ketone	1.10363	1.23210	0.010	-11.64070	40.000000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/03Mar2008.b/t030305.d
Lab Smp Id: CCV Client Smp ID: CCVsp
Inj Date : 03-MAR-2008 13:14
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-299
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/03Mar2008.b/t14q206c.m
Meth Date : 03-Mar-2008 13:38 sruth Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24 Cal File: t022806.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22bCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	284231	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	219643			27.28- 127.28	77.28
13.865	13.865 (1.000)	49	340018			69.63- 169.63	119.63
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1137989	25.0000		80.00- 120.00	100.00
15.607	15.607 (1.000)	88	193261			0.00- 66.98	16.98
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1026892	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	608977			7.65- 107.65	59.30
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	482974	25.0000	26.408	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	248292			3.57- 103.57	51.41
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1109592	25.0000	25.314	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	129481			0.00- 61.29	11.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	755793			18.71- 118.71	68.11
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	701197	25.0000	26.399	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	901445			78.56- 178.56	128.56
22.796	22.796 (1.096)	176	679997			46.98- 146.98	96.98
6 Freon142b					CAS #: 75-68-3		
6.407	6.407 (0.462)	65	2080176	50.0000	53.242	80.00- 120.00	100.00
6.407	6.407 (0.462)	45	424345			0.00- 71.32	20.40
9 Freon 13					CAS #: 75-72-9		
5.394	5.394 (0.389)	69	1817623	50.0000	46.395	80.00- 120.00	100.00
5.394	5.394 (0.389)	85	597493			0.00- 81.50	32.87
5.394	5.394 (0.389)	87	191735			0.00- 60.31	10.55
13 Freon 134a					CAS #: 811-97-2		
5.647	5.647 (0.407)	83	873177	50.0000	49.957	80.00- 120.00	100.00
5.647	5.647 (0.407)	69	711086			32.62- 132.62	81.44
15 Freon 152a					CAS #: 75-37-6		
5.816	5.816 (0.419)	65	440146	50.0000	46.765	80.00- 120.00	100.00
5.816	5.816 (0.419)	51	767177			127.07- 227.07	174.30
5.816	5.816 (0.419)	47	196790			0.00- 93.51	44.71
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	228136	50.0000	51.380	80.00- 120.00	100.00
5.985	5.985 (0.432)	51	1158510			463.95- 563.95	507.82
5.985	5.985 (0.432)	85	21159			0.00- 65.76	9.27
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	945279	300.000	398.43	80.00- 120.00	100.00
7.534	7.534 (0.543)	32	845798			39.48- 139.48	89.48
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	1545456	50.0000	55.349	80.00- 120.00	100.00
8.717	8.717 (0.629)	69	500520			0.00- 82.56	32.39
8.717	8.717 (0.629)	35	89352			0.00- 55.48	5.78
40 Freon123a					CAS #: 354-23-4		
9.552	9.552 (0.689)	67	1091331	50.0000	50.663	80.00- 120.00	100.00
9.579	9.579 (0.691)	117	809163			22.27- 122.27	74.14
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	130623	50.0000	51.625	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)							
9.718	9.718 (0.701)	133	29684			0.00- 70.21	22.72
9.690	9.690 (0.699)	85	107488			280.12- 380.12	82.29
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	2378131	50.0000	51.058	80.00- 120.00	100.00
12.289	12.289 (0.886)	87	733287			0.00- 80.78	30.83
12.289	12.289 (0.886)	59	272064			0.00- 62.00	11.44
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	142184	50.0000	58.097	80.00- 120.00	100.00
12.400	12.400 (0.894)	59	207026			82.09- 182.09	145.60
12.400	12.400 (0.894)	41	142197			321.23- 421.23	100.01
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	2716096	50.0000	54.741	80.00- 120.00	100.00
12.925	12.925 (0.932)	87	1146412			0.00- 93.06	42.21
12.925	12.925 (0.932)	41	458048			0.00- 69.68	16.86
77 Ethyl Acetate					CAS #: 141-78-6		
13.367	13.367 (0.964)	45	254000	50.0000	50.550	80.00- 120.00	100.00
13.367	13.367 (0.964)	61	276437			52.94- 152.94	108.83
13.367	13.367 (0.964)	43	1776489			599.75- 699.75	699.41
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	2509962	50.0000	53.478	80.00- 120.00	100.00
14.999	14.999 (1.082)	87	596990			0.00- 73.24	23.78
14.999	14.999 (1.082)	55	595805			0.00- 75.20	23.74
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	1379128	50.0000	55.981	80.00- 120.00	100.00
21.966	21.966 (1.584)	43	1948459			90.45- 190.45	141.28
98 1-Butanol					CAS #: 71-36-3		
15.773	15.773 (1.009)	56	465172	50.0000	62.772	80.00- 120.00	100.00
15.773	15.773 (1.009)	41	314441			29.27- 129.27	67.60
15.773	15.773 (1.009)	43	240122			9.88- 109.88	51.62
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	838007	50.0000	54.212	80.00- 120.00	100.00
19.533	19.533 (1.249)	73	343258			0.00- 90.96	40.96
19.533	19.533 (1.249)	43	1947329			182.38- 282.38	232.38
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	1063545	50.0000	62.502	80.00- 120.00	100.00
22.741	22.741 (1.093)	98	535151			0.39- 100.39	50.32

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)								
22.741	22.741	(1.093)	42	697216			13.24- 113.24	65.56
146 Diisobutyl Ketone						CAS #: 108-83-8		
23.542	23.542	(1.132)	57	2530466	50.0000	55.820	80.00- 120.00	100.00
23.542	23.542	(1.132)	85	2373937			43.81- 143.81	93.81
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t030305.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 03-MAR-2008
Calibration Time: 12:22
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	278947	167368	390526	284231	1.89
97 1,4-Difluorobenze	1137525	682515	1592535	1137939	0.04
126 Chlorobenzene-d5	1055616	633370	1477862	1026892	-2.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

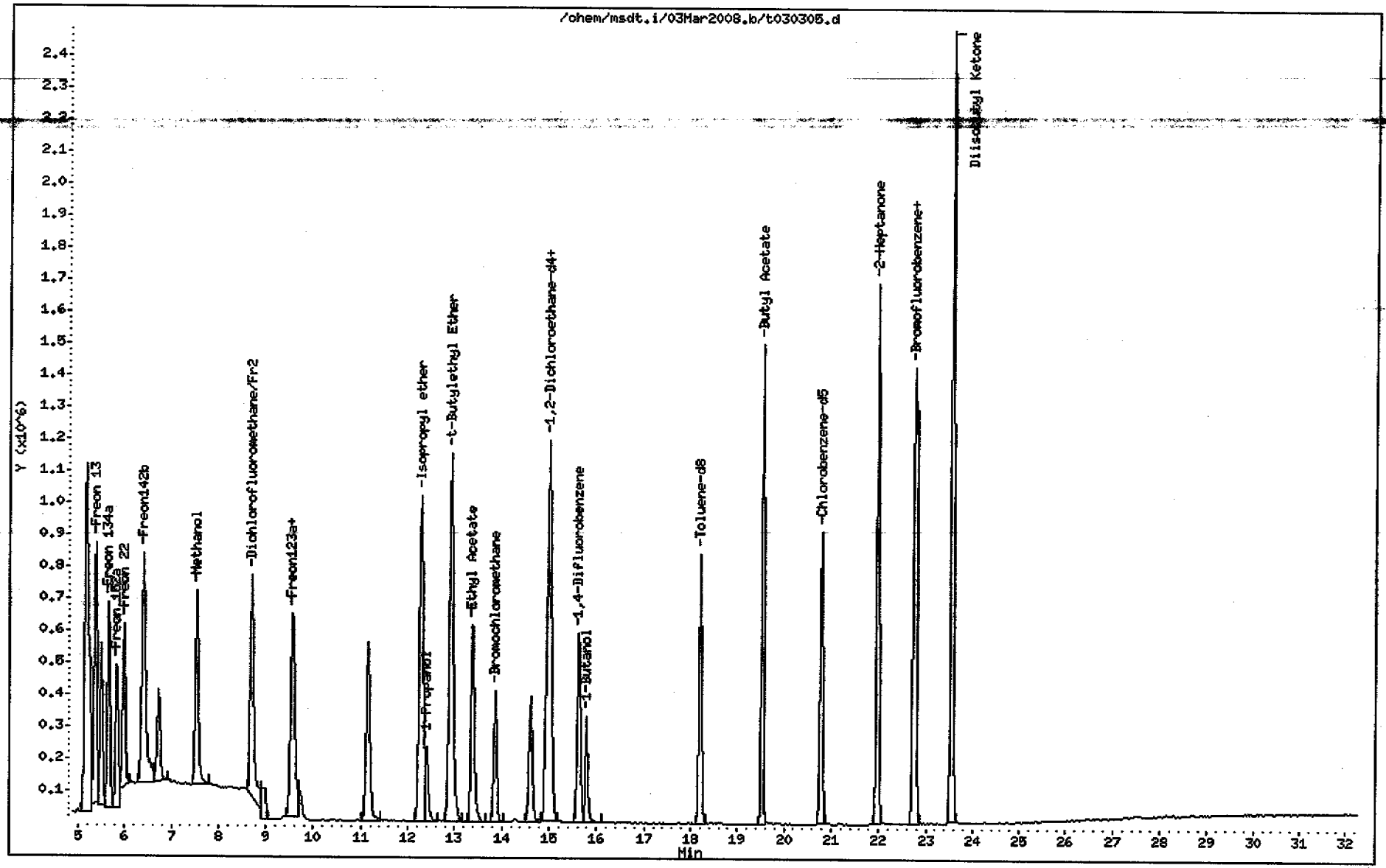
Data File: /chem/msdt.i/03Mar2008.b/t030305.d
Date : 03-MAR-2008 13:14
Client ID: CCVsp
Sample Info: 50mL #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0195



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802422-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	105
Freon 114	98
Chloromethane	109
Vinyl Chloride	105
1,3-Butadiene	100
Bromomethane	102
Chloroethane	104
Freon 11	101
Ethanol	108
Freon 113	106
1,1-Dichloroethene	118
Acetone	96
2-Propanol	105
Carbon Disulfide	104
Methylene Chloride	112
Methyl tert-butyl ether	127
trans-1,2-Dichloroethene	103
Hexane	111
1,1-Dichloroethane	110
2-Butanone (Methyl Ethyl Ketone)	108
cis-1,2-Dichloroethene	111
Tetrahydrofuran	111
Chloroform	112
1,1,1-Trichloroethane	112
Cyclohexane	109
Carbon Tetrachloride	110
Benzene	104
1,2-Dichloroethane	112
Heptane	110
Trichloroethene	107
1,2-Dichloropropane	108
1,4-Dioxane	99
Bromodichloromethane	111
cis-1,3-Dichloropropene	113
4-Methyl-2-pentanone	115
Toluene	115
trans-1,3-Dichloropropene	111
1,1,2-Trichloroethane	108
Tetrachloroethene	110

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802422-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	113
1,2-Dibromoethane (EDB)	107
Chlorobenzene	106
Ethyl Benzene	108
m,p-Xylene	113
o-Xylene	114
Styrene	119
Bromoform	114
1,1,2,2-Tetrachloroethane	111
4-Ethyltoluene	124
1,3,5-Trimethylbenzene	110
1,2,4-Trimethylbenzene	113
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	110
alpha-Chlorotoluene	116
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	95
Hexachlorobutadiene	93
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	104	70-130

0197

Data File: /chem/msdt.i/03Mar2008.b/t030303.d
Report Date: 03-Mar-2008 12:46

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 03Mar2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	52.497	104.99	70-130
16 Freon 114	50.000	49.199	98.40	70-130
18 Chloromethane	50.000	54.562	109.12	70-130
20 Vinyl Chloride	50.000	52.691	105.38	70-130
22 1,3-Butadiene	50.000	49.888	99.78	60-140
25 Bromomethane	50.000	50.755	101.51	70-130
27 Chloroethane	50.000	52.192	104.38	70-130
31 Trichlorofluoromet	50.000	50.568	101.14	70-130
38 Ethanol	50.000	53.868	107.74	60-140
42 Freon 113	50.000	53.134	106.27	70-130
43 1,1-Dichloroethene	50.000	58.915	117.83	70-130
45 Acetone	50.000	48.283	96.57	60-140
47 Carbon Disulfide	50.000	51.973	103.95	60-140
46 2-Propanol	50.000	52.340	104.68	60-140
54 Methylene Chloride	50.000	56.098	112.20	70-130
57 tert-Butyl-Alcohol	50.000	57.153	114.31	60-140
60 MTBE	50.000	63.456	126.91	60-140
61 trans-1,2-Dichloro	50.000	51.418	102.84	60-140
65 Hexane	50.000	55.588	111.18	60-140
69 Vinyl Acetate	50.000	49.694	99.39	60-140
70 1,1-Dichloroethane	50.000	54.832	109.66	70-130
76 cis-1,2-Dichloroet	50.000	55.358	110.72	70-130
75 2-Butanone	50.000	54.076	108.15	60-140
80 Tetrahydrofuran	50.000	55.315	110.63	60-140
82 Chloroform	50.000	56.196	112.39	70-130
85 Cyclohexane	50.000	54.595	109.19	60-140
83 1,1,1-Trichloroeth	50.000	55.858	111.72	70-130
87 Carbon Tetrachlori	50.000	55.072	110.14	70-130
91 Benzene	50.000	51.963	103.93	70-130
93 1,2-Dichloroethane	50.000	55.859	111.72	70-130
94 Heptane	50.000	54.950	109.90	60-140
101 Trichloroethene	50.000	53.665	107.33	70-130
104 1,2-Dichloropropan	50.000	54.279	108.56	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
106 1,4-Dioxane	50.000	49.728	99.46	60-140
107 Bromodichlorometha	50.000	55.442	110.88	60-140
110 cis-1,3-Dichloropr	50.000	56.645	113.29	70-130
111 4-Methyl-2-pentano	50.000	57.655	115.31	60-140
114 Toluene	50.000	57.636	115.27	70-130
116 trans-1,3-Dichloro	50.000	55.638	111.28	70-130
117 1,1,2-Trichloroeth	50.000	53.893	107.79	70-130
120 Tetrachloroethene	50.000	54.869	109.74	70-130
121 2-Hexanone	50.000	53.372	106.74	60-140
122 Dibromochlorometha	50.000	56.388	112.78	60-140
123 1,2-Dibromoethane	50.000	53.534	107.07	70-130
127 Chlorobenzene	50.000	53.122	106.24	70-130
128 Ethyl Benzene	50.000	54.014	108.03	70-130
129 m,p-Xylene	50.000	56.389	112.78	70-130
130 o-Xylene	50.000	57.179	114.36	70-130
131 Styrene	50.000	59.642	119.28	70-130
133 Bromoform	50.000	56.817	113.63	60-140
140 1,1,2,2-Tetrachlor	50.000	55.583	111.17	70-130
145 4-Ethyltoluene	50.000	61.767	123.53	60-140
147 1,3,5-Trimethylben	50.000	55.057	110.11	70-130
150 1,2,4-Trimethylben	50.000	56.508	113.02	70-130
155 1,3-Dichlorobenzen	50.000	54.372	108.75	70-130
156 1,4-Dichlorobenzen	50.000	54.828	109.66	70-130
159 alpha-Chlorotoluen	50.000	58.287	116.57	70-130
161 1,2-Dichlorobenzen	50.000	53.482	106.96	70-130
165 1,2,4-Trichloroben	50.000	47.552	95.10	70-130
166 Hexachlorobutadien	50.000	46.402	92.80	70-130
142 Propylbenzene	50.000	58.952	117.90	60-140
134 Cumene	50.000	59.311	118.62	60-140
51 3-Chloropropene	50.000	50.082	100.16	60-140
89 2,2,4-Trimethylpen	50.000	59.962	119.92	60-140
19 Butane	50.000	49.845	99.69	70-130
29 Isopentane	50.000	49.367	98.73	70-130
102 Methyl Cyclohexane	50.000	57.191	114.38	70-130
11 Propylene	50.000	52.509	105.02	60-140
167 Naphthalene	50.000	47.605	95.21	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.704	110.81	70-130
$ 113 Toluene-d8	25.000	25.990	103.96	70-130
$ 137 Bromofluorobenzene	25.000	26.049	104.20	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/03Mar2008.b/t030303.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 03-MAR-2008 11:12
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/03Mar2008.b/t14q206c.m
Meth Date : 03-Mar-2008 12:44 sruth Quant Type: ISTD
Cal Date : 28-FEB-2008 15:24 Cal File: t022806.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	279468	25.0000		80.00- 120.00		100.00
13.865	13.865 (1.000)	128	214207			28.50- 128.50		76.65
13.865	13.865 (1.000)	49	511242			133.01- 233.01		182.93
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.607	15.635 (1.000)	114	[illegible]	25.0000		80.00- 120.00		100.00
15.607	15.607 (1.000)	88	186518			0.00- 66.79		16.68
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1016572	25.0000		80.00- 120.00		100.00
20.805	20.805 (1.000)	82	602530			7.65- 107.65		59.27
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	498184	27.7037	27.704	80.00- 120.00		100.00
14.943	14.943 (1.078)	67	277094			3.57- 103.57		55.62
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206 (1.167)	98	1119204	25.9897	25.990	80.00- 120.00		100.00
18.206	18.206 (1.167)	70	128419			0.00- 61.29		11.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.167)	100	763032			18.71- 118.71	68.18
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	684961	26.0494	26.049	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	880050			74.10- 174.10	128.48
22.796	22.796 (1.096)	176	680880			45.88- 145.88	99.40
11 Propylene					CAS #: 115-07-1		
5.788	5.816 (0.417)	41	479975	52.5092	52.509	80.00- 120.00	100.00
5.788	5.816 (0.417)	42	333994			17.96- 117.96	69.59
5.788	5.816 (0.417)	39	389426			33.44- 133.44	81.13
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.901	5.929 (0.426)	85	2864826	52.4973	52.497	80.00- 120.00	100.00
5.901	5.929 (0.426)	87	902280			0.00- 82.13	31.50
16 Freon 114					CAS #: 76-14-2		
6.295	6.323 (0.454)	135	1774771	49.1987	49.199	80.00- 120.00	100.00
6.295	6.323 (0.454)	137	568317			0.00- 81.89	32.02
18 Chloromethane					CAS #: 74-87-3		
6.520	6.548 (0.470)	50	650043	54.5622	54.562	80.00- 120.00	100.00
6.520	6.548 (0.470)	52	210950			0.00- 83.62	32.45
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	861879	52.6915	52.691	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	274325			0.00- 89.61	31.83
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.999 (0.503)	54	614098	49.8883	49.888	80.00- 120.00	100.00
6.971	6.999 (0.503)	39	612779			53.33- 153.33	99.79
25 Bromomethane					CAS #: 74-83-9		
7.900	7.928 (0.570)	94	822004	50.7551	50.755	80.00- 120.00	100.00
7.900	7.928 (0.570)	96	767870			44.89- 144.89	93.41
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	445240	52.1923	52.192	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	116916			0.00- 76.71	26.26
8.182	8.210 (0.590)	66	145303			0.00- 83.02	32.63
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.773	8.801 (0.633)	101	3124022	50.5685	50.568	80.00- 120.00	100.00
8.773	8.801 (0.633)	103	2010768			15.12- 115.12	64.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.220	9.248 (0.665)	45	254615	53.8678	53.868	80.00- 120.00	100.00
9.220	9.248 (0.665)	43	58128			0.00- 75.24	22.83
9.248	9.248 (0.667)	46	89967			0.00- 89.78	35.33
42 Freon 113					CAS #: 76-13-1		
9.939	9.966 (0.717)	151	1511498	53.1345	53.134	80.00- 120.00	100.00
9.939	9.966 (0.717)	153	964243			13.17- 113.17	63.79
9.939	9.966 (0.717)	101	1997108			79.72- 179.72	132.13
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.022	10.049 (0.723)	61	1508528	58.9148	58.915	80.00- 120.00	100.00
10.049	10.049 (0.725)	96	861907			8.23- 108.23	57.14
10.049	10.049 (0.725)	98	563655			0.00- 87.71	37.36
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	383149	48.2831	48.283	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	1321793			267.82- 367.82	344.98
46 2-Propanol					CAS #: 67-63-0		
10.381	10.381 (0.749)	45	1423397	52.3405	52.340	80.00- 120.00	100.00
10.381	10.381 (0.749)	43	355651			0.00- 76.64	24.99
10.381	10.381 (0.749)	59	60022			0.00- 54.31	4.22
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	2517189	51.9734	51.973	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.824	10.824 (0.781)	76	417679	50.0818	50.082	80.00- 120.00	100.00
10.824	10.824 (0.781)	41	945357			173.84- 273.84	226.34
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	908294	56.0978	56.098	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	761479			35.99- 135.99	83.84
11.100	11.100 (0.801)	51	286232			0.00- 83.83	31.51
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.155	11.155 (0.805)	59	1693727	57.1529	57.153	80.00- 120.00	100.00
11.155	11.155 (0.805)	41	366458			0.00- 72.85	21.64
11.155	11.155 (0.805)	57	172718			0.00- 59.93	10.20
60 MTBE					CAS #: 1634-04-4		
11.460	11.460 (0.826)	73	2949574	63.4560	63.456	80.00- 120.00	100.00
11.460	11.460 (0.826)	57	557763			0.00- 68.92	18.91
11.460	11.460 (0.826)	41	545017			0.00- 70.47	18.48

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	978431	51.4184	51.418	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1430771			93.74- 193.74	146.23
11.543	11.543 (0.832)	98	625318			16.26- 116.26	63.91
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1395847	55.5880	55.588	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	805233			9.30- 109.30	57.69
11.902	11.902 (0.858)	86	238876			0.00- 66.83	17.11
69 Vinyl Acetate					CAS #: 108-05-4		
12.344	12.372 (0.890)	86	244647	49.6939	49.694	80.00- 120.00	100.00
12.344	12.372 (0.890)	43	2339463			832.23- 932.23	956.26
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	1926421	54.8325	54.832	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	619698			0.00- 82.21	32.17
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	483362	54.0756	54.076	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1673370			291.70- 391.70	346.19
13.395	13.395 (0.966)	57	142365			0.00- 79.56	29.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1308639	55.3585	55.358	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	989794			25.97- 125.97	75.64
13.423	13.423 (0.968)	98	647079			0.00- 99.76	49.45
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	833964	55.3152	55.315	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	433033			1.70- 101.70	51.92
13.865	13.865 (1.000)	72	465805			2.04- 102.04	55.85
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2280993	56.1959	56.196	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1484016			15.22- 115.22	65.06
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2507769	55.8579	55.858	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1622930			14.70- 114.70	64.72
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.307 (1.032)	84	1312416	54.5949	54.595	80.00- 120.00	100.00
14.307	14.307 (1.032)	56	1332946			50.81- 150.81	101.56
14.280	14.307 (1.030)	41	717704			3.71- 103.71	54.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2375027	55.0715	55.072	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2479840			56.29- 156.29	104.41
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	3514554	59.9618	59.962	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1145436			0.00- 82.82	32.59
14.888	14.888 (1.074)	41	967774			0.00- 78.43	27.54
91 Benzene					CAS #: 71-43-2		
14.943	14.971 (0.957)	78	2904124	51.9635	51.963	80.00- 120.00	100.00
14.943	14.971 (0.957)	77	673844			0.00- 73.50	23.20
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.966)	62	1523064	55.8588	55.859	80.00- 120.00	100.00
15.082	15.082 (0.966)	64	484101			0.00- 84.23	31.78
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.973)	71	869316	54.9497	54.950	80.00- 120.00	100.00
15.165	15.192 (0.972)	43	1226289			85.70- 185.70	141.06
15.192	15.192 (0.973)	57	733005			28.72- 128.72	84.32
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.030)	95	1284575	53.6647	53.665	80.00- 120.00	100.00
16.077	16.077 (1.030)	130	1174581			41.43- 141.43	91.44
16.077	16.077 (1.030)	97	829322			13.98- 113.98	64.56
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.547	16.575 (1.060)	63	1023526	54.2792	54.279	80.00- 120.00	100.00
16.547	16.575 (1.060)	62	729779			22.43- 122.43	71.30
16.547	16.547 (1.060)	41	586330			8.85- 108.85	57.29
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.069)	88	686370	49.7281	49.728	80.00- 120.00	100.00
16.685	16.685 (1.069)	58	397479			8.27- 108.27	57.91
16.685	16.685 (1.069)	57	146746			0.00- 71.19	21.38
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.089)	83	2375062	55.4418	55.442	80.00- 120.00	100.00
16.989	16.989 (1.089)	85	1508444			14.36- 114.36	63.51
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.140)	75	1627611	56.6449	56.645	80.00- 120.00	100.00
17.791	17.791 (1.140)	77	517664			0.00- 81.77	31.81
17.764	17.764 (1.138)	39	742900			0.00- 95.27	45.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.151)	58	752717	57.6552	57.655	80.00- 120.00	100.00
17.957	17.957 (1.151)	43	1753810			175.34- 275.34	233.00
17.957	17.957 (1.151)	85	372486			0.64- 100.64	49.49
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.174)	91	3434637	57.6357	57.636	80.00- 120.00	100.00
18.317	18.317 (1.174)	92	2063854			10.65- 110.65	60.09
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1787632	55.6386	55.638	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	575432			0.00- 81.71	32.19
18.759	18.759 (0.902)	39	762163			0.00- 91.99	42.64
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.091	19.118 (0.918)	97	1247954	53.8928	53.893	80.00- 120.00	100.00
19.119	19.118 (0.919)	99	779363			12.93- 112.93	62.45
19.091	19.091 (0.918)	83	1065165			36.01- 136.01	85.35
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1702530	54.8690	54.869	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1169517			19.12- 119.12	68.69
19.284	19.284 (0.927)	131	1108585			15.80- 115.80	65.11
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1034890	53.3718	53.372	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	1772469			120.83- 220.83	171.27
19.423	19.423 (0.934)	100	216453			0.00- 71.71	20.92
122 Dibromochloromethane					CAS #: 124-48-1		
19.782	19.810 (0.951)	129	2223282	56.3882	56.388	80.00- 120.00	100.00
19.782	19.810 (0.951)	127	1713036			28.82- 128.82	77.05
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	1971807	53.5339	53.534	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	1835456			43.19- 143.19	93.08
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	2839768	53.1217	53.122	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	899176			0.00- 81.24	31.66
20.833	20.833 (1.001)	77	1712287			10.80- 110.80	60.30
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1496096	54.0145	54.014	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	4862112			269.96- 369.96	324.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	1966746	56.3892	56.389	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4018734			149.87- 249.87	204.33
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	1897056	57.1788	57.179	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4039947			165.50- 265.50	212.96
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3031571	59.6420	59.642	80.00- 120.00	100.00
21.856	21.856 (1.050)	78	1592082			2.28- 102.28	52.52
133 Bromoform					CAS #: 75-25-2		
22.271	22.270 (1.070)	173	2404591	56.8167	56.817	80.00- 120.00	100.00
22.271	22.270 (1.070)	171	1233250			1.15- 101.15	51.29
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	5428143	59.3115	59.311	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1396337			0.00- 77.62	25.72
22.409	22.409 (1.077)	51	483644			0.00- 58.75	8.91
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	2958088	55.5826	55.583	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	1910266			15.00- 115.00	64.58
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	6993968	58.9521	58.952	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1503803			0.00- 71.63	21.50
23.100	23.100 (1.110)	105	263442			0.00- 53.71	3.77
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	6238065	61.7672	61.767	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	1861835			0.00- 79.47	29.85
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.376 (1.124)	105	4743248	55.0569	55.057	80.00- 120.00	100.00
23.377	23.376 (1.124)	120	2293667			0.00- 98.23	48.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	4587446	56.5085	56.508	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2081850			0.00- 94.91	45.38
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3172586	54.3726	54.372	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2044014			14.68- 114.68	64.43
24.593	24.593 (1.182)	111	1327312			0.00- 91.36	41.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3291865	54.8276	54.828	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2092326			16.09- 116.09	63.56
24.731	24.731 (1.189)	111	1296063			0.00- 90.13	39.37
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.952 (1.199)	91	5059813	58.2872	58.287	80.00- 120.00	100.00
24.953	24.952 (1.199)	126	936986			0.00- 69.28	18.52
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3039941	53.4825	53.482	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	1966646			13.74- 113.74	64.69
25.367	25.367 (1.219)	111	1341636			0.00- 93.46	44.13
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2061476	47.5521	47.552	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	1955078			44.80- 144.80	94.84
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2024525	46.4020	46.402	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1262781			12.90- 112.90	62.37
29 Isopentane					CAS #: 78-78-4		
8.266	8.294 (0.596)	43	891959	49.3668	49.367	80.00- 120.00	100.00
8.266	8.294 (0.596)	57	660248			27.67- 127.67	74.02
19 Butane					CAS #: 106-97-8		
6.802	6.830 (0.491)	58	155936	49.8454	49.845	80.00- 120.00	100.00
6.802	6.830 (0.491)	43	1144825			666.74- 766.74	734.16
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1627801	57.1910	57.191	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	723876			0.00- 95.22	44.47
16.354	16.354 (1.179)	55	1158028			20.82- 120.82	71.14
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	2856391	47.6050	47.605	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	347260			0.00- 62.74	12.16

Data File: /chem/msdt.i/03Mar2008.b/t030303.d
Report Date: 03-Mar-2008 12:46

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t030303.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/03Mar2008.b/t14q206c.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 03-MAR-2008
Calibration Time: 12:22
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	278947	167368	390526	279468	0.19
97 1,4-Difluorobenze	1137525	682515	1592535	1117947	-1.72
126 Chlorobenzene-d5	1055616	633370	1477862	1016572	-3.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.61	-0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

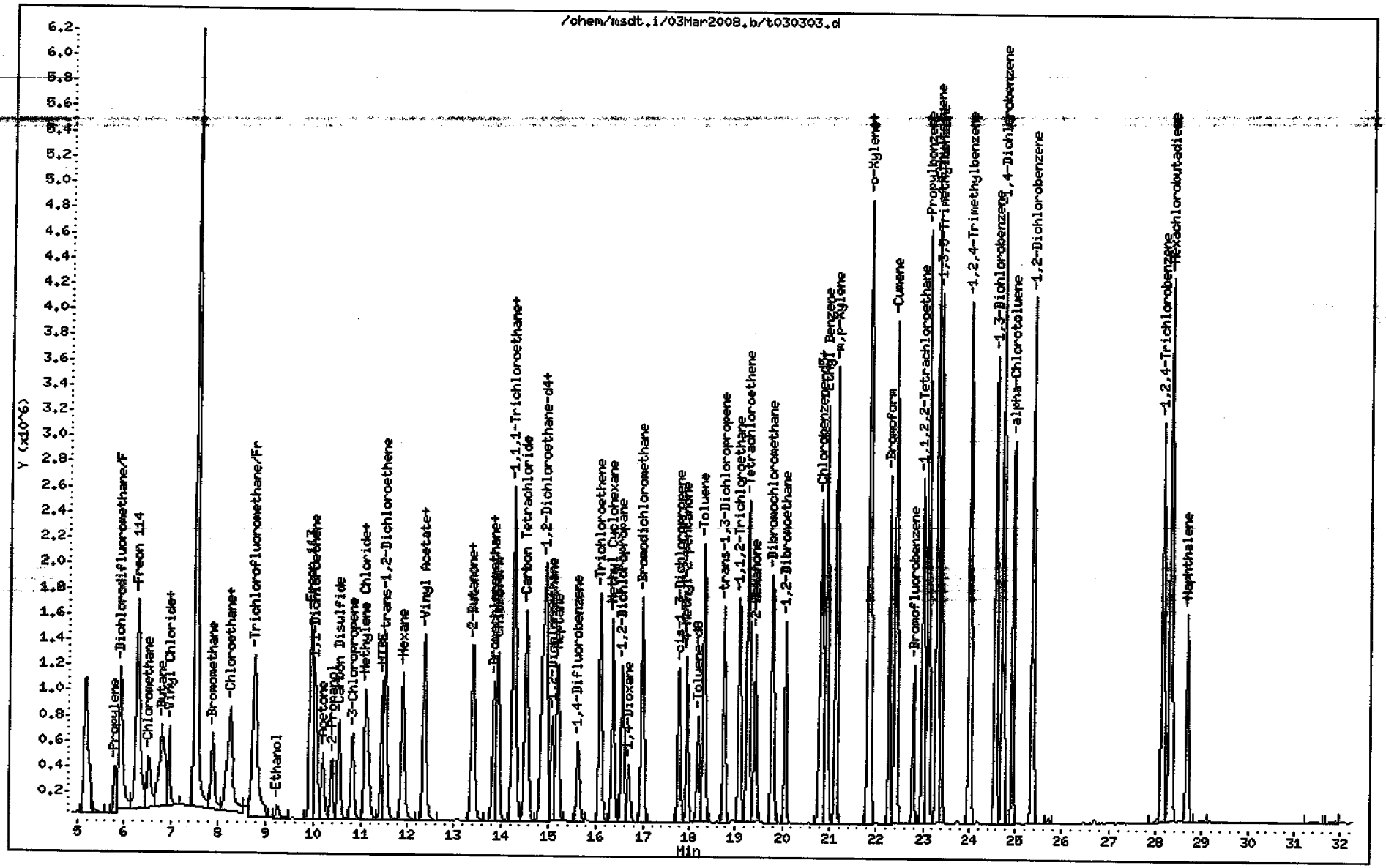
Data File: /chem/msdt.i/03Mar2008.b/t030303.d
Date : 03-MAR-2008 11:12
Client ID: LCS-1
Sample Info: 50mL #1576-255

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0210



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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	21.62
75	30.0 – 60.0% of mass 95	55.08
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.45
173	Less than 2.0% of mass 174	(0.86)[1]
174	Greater than 50.0% of mass 95	67.24
175	5.0 – 9.0% of mass 174	(7.38)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(95.97)[1]
~~177~~	~~5.0 – 9.0% of mass 176~~	~~( )[2]~~

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 3/3/08

BFB Injection Time: 0919

BFB File ID: B030301

Tekmar Purge Flow: 20.5mL/min

Vacuum: 4.26e-5

IS/S Std.#:	1443-398	Exp. Date: 3/28/08
BCM	278947	
1,4-DFB	1137525	
CB-d5	1055616	

Verified CCV IS vs ICAL mid-point (+ 40%D)

Verify 176/174 m/z Ratio: 841297/876608 x100 = 95.97

NOAH Cart #: NA File #: NA

0211

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc_{IS}}{RRF} = \frac{(1170639)}{(1137525)} \times \frac{(25.0)}{(0.96300)} = 26.716$

File ID:	T030304
Compound:	Tol-d8
Initials:	

Reported Result 26.716

MeOH method

	Lab	Field	Sample (Client Name)	Can #	Pressure	Inlet Location	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	T030301	BFB Tune Check	NIK-III	50psig	Inlet	1.00	3/3/08	0919		
2	X ✓	02	CCV-1 (200ppbv)	1376-261	50psig	50mL			1006		
3	✓	03	LCS-1	1376-253					1112		0 out
4	✓	04	CCV-1	1376-261					1232		meet <40
5	✓	05	CCV2	1376-299					1314		go 22b CCV
6	✓	06	Lab blank	33668	Humidified	200mL			1410		
7	✓	07	0802422-01A	14871	7"Hg-5psig	200mL	1.75		1518	Acr/PO	
8	✓	08	↓ -02A	9940	30"Hg-5psig	200mL	1.75		1606	Acr/PO	
9	✓	09	0803005 -01A	1L Bag	AD-022308	100mL	2.00	↓	1705	Acr/PO	

Signature

3/3/08
Date

Air Toxics Ltd.

Data file : /chem/msdt.i/06Feb2008.b/t020605.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 06-FEB-2008 12:26
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/06Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.137	8.228	-0.091	95	1779728			100.00- 100.00	100.00
8.137	8.228	-0.091	50	339425			15.00- 40.00	19.07
8.137	8.228	-0.091	75	907414			30.00- 60.00	50.99
8.137	8.228	-0.091	96	114946			5.00- 9.00	6.46
8.137	8.228	-0.091	173	10246			0.00- 2.00	0.76
8.137	8.228	-0.091	174	1351956			50.00- 100.00	75.96
8.137	8.228	-0.091	175	95866			5.00- 9.00	7.09
8.137	8.228	-0.091	176	1308292			95.00- 101.00	96.77
8.137	8.228	-0.091	177	83826			5.00- 9.00	6.41

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

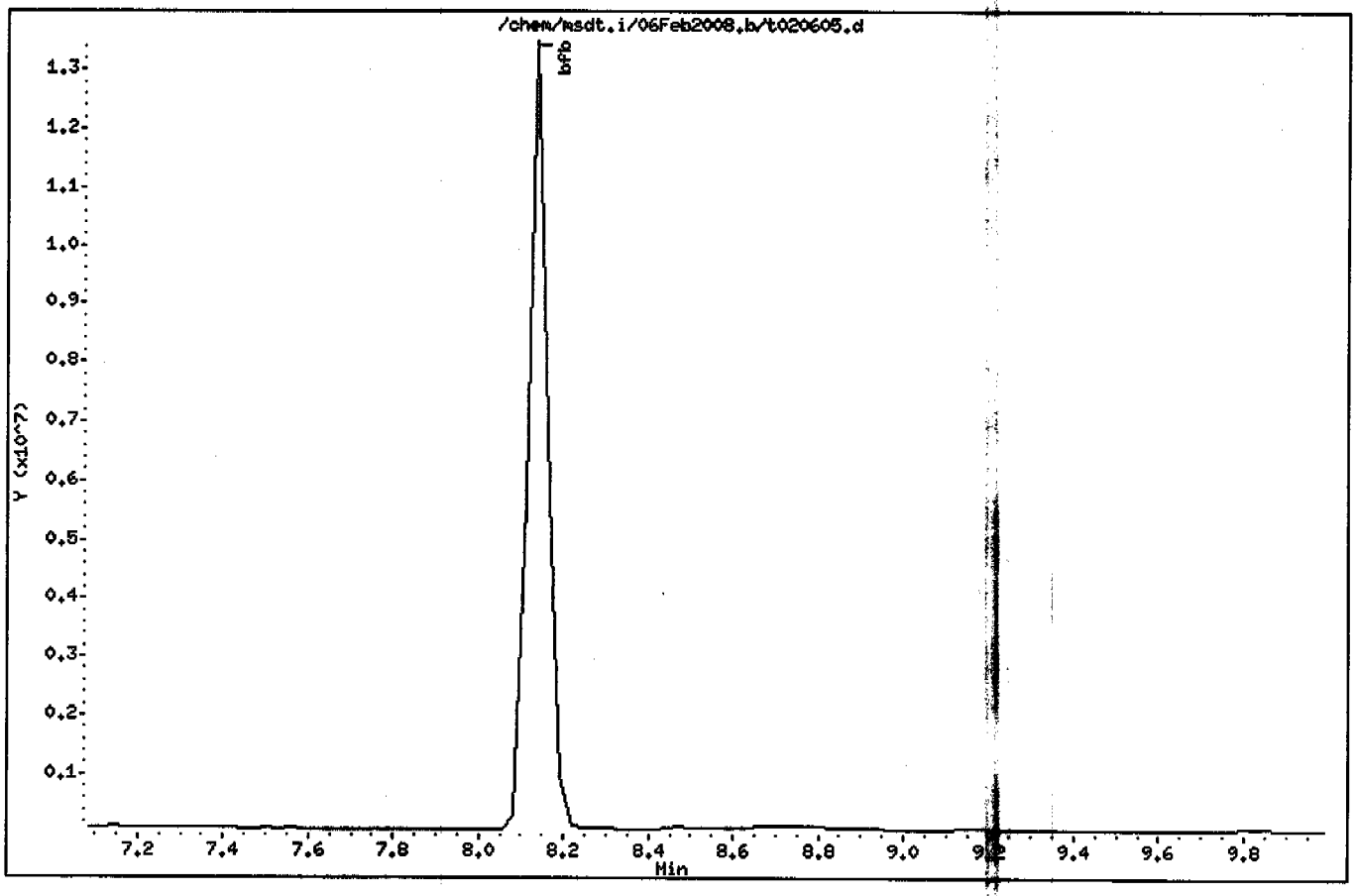
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

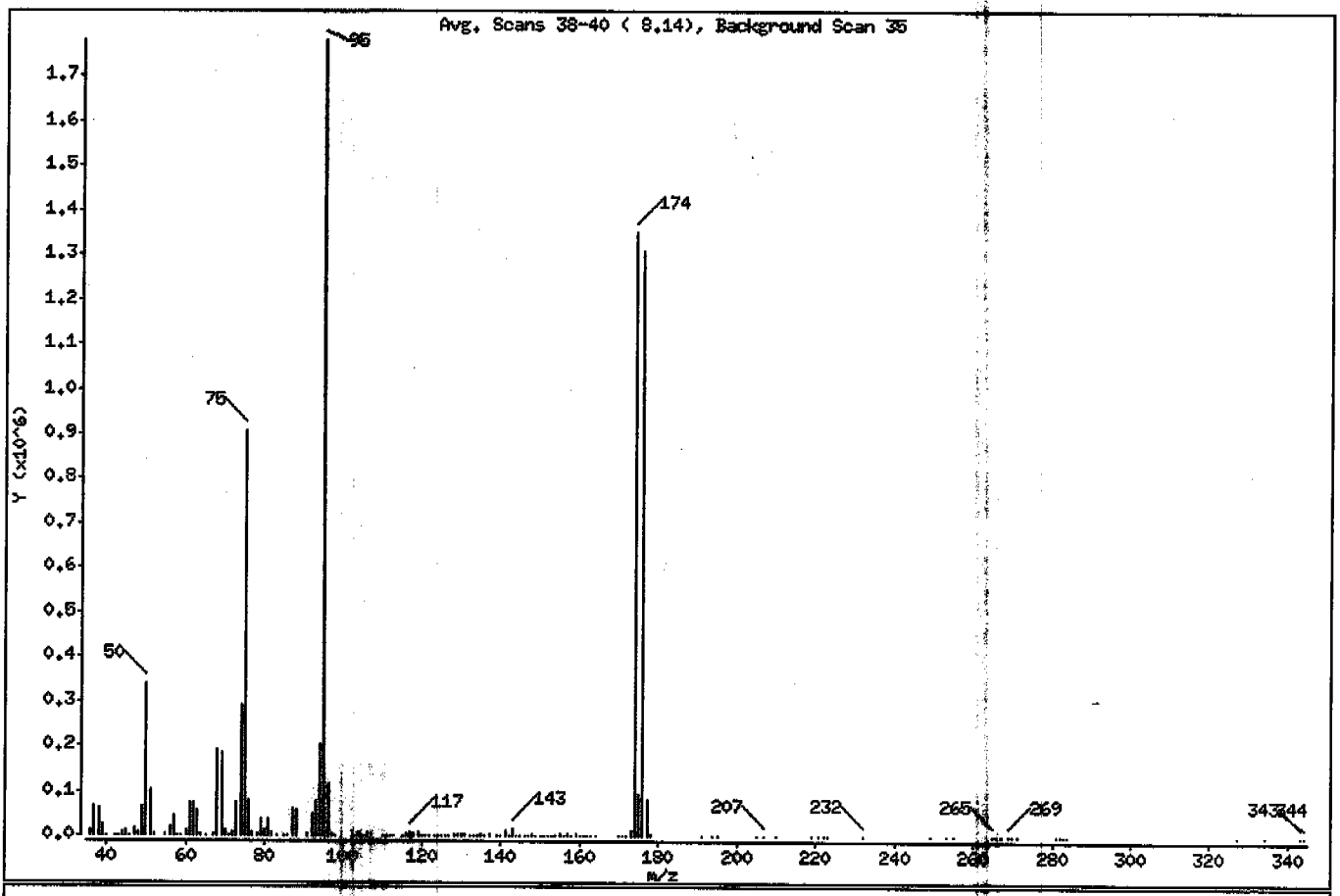
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.07
75	30.00 - 60.00% of mass 95	50.99
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.58 (0.76)
174	50.00 - 100.00% of mass 95	76.96
175	5.00 - 9.00% of mass 174	5.39 (7.09)
176	95.00 - 101.00% of mass 174	73.51 (96.77)
177	5.00 - 9.00% of mass 176	4.71 (6.41)

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8.14), Background Scan 35

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11868	78.00	4902	126.00	750	170.00	394
37.00	67456	79.00	35568	127.00	256	171.00	366
38.00	61864	80.00	11217	128.00	5303	172.00	313
39.00	24408	81.00	38600	129.00	2849	173.00	10946
40.00	809	82.00	7818	130.00	5374	174.00	135[illegible]90
42.00	116	83.00	1089	131.00	2614	175.00	9[illegible]64
43.00	208	85.00	368	132.00	426	176.00	130[illegible]60
44.00	6973	86.00	1391	133.00	378	177.00	83[illegible]24
45.00	14172	87.00	61776	134.00	371	178.00	2[illegible]17
46.00	678	88.00	57896	135.00	2350	191.00	[illegible]31
47.00	14763	91.00	5052	136.00	674	194.00	[illegible]64
48.00	8336	92.00	48008	137.00	2553	195.00	[illegible]68
49.00	65200	93.00	76000	139.00	471	205.00	[illegible]14
50.00	329392	94.00	203584	140.00	1013	207.00	1[illegible]94
51.00	101208	95.00	1779712	141.00	14090	210.00	77
52.00	4346	96.00	114944	142.00	1551	219.00	[illegible]46
55.00	3726	97.00	3201	143.00	14923	221.00	[illegible]84
56.00	22448	98.00	120	144.00	1084	222.00	[illegible]14
57.00	48672	103.00	848	145.00	1323	223.00	[illegible]96
58.00	1907	104.00	6301	146.00	1960	232.00	[illegible]83
59.00	141	105.00	1991	147.00	922	249.00	71
60.00	13906	106.00	6238	148.00	3718	253.00	[illegible]95
61.00	74068	107.00	1653	149.00	1138	255.00	[illegible]57
62.00	76568	110.00	676	150.00	1852	265.00	[illegible]54
63.00	59016	111.00	1074	151.00	180	266.00	[illegible]03
64.00	5017	112.00	907	152.00	749	267.00	[illegible]60
65.00	653	113.00	1008	153.00	1310	269.00	[illegible]83
67.00	4121	115.00	1360	154.00	1010	270.00	93
68.00	191296	116.00	5195	155.00	3899	271.00	44
69.00	186112	117.00	9431	156.00	765	281.00	[illegible]31
70.00	13146	118.00	5275	157.00	2711	282.00	44
71.00	775	119.00	7182	158.00	303	283.00	[illegible]95
72.00	8386	120.00	494	159.00	2153	284.00	[illegible]44
73.00	72864	121.00	110	160.00	132	327.00	7
74.00	290560	122.00	399	161.00	2043	334.00	[illegible]23

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8.14), Background Scan 35

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	907392	123.00	589	162.00	100	343.00	53
76.00	77416	124.00	1026	163.00	110	344.00	409
77.00	8506	125.00	679	164.00	137		

Air Toxics Ltd.

Data file : /chem/msdt.i/07Feb2008.b/t020701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 07-FEB-2008 09:18
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/07Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	MASS	RESPONSE				
1 bfb						CAS #: 460-00-4		
8.110	8.228	-0.118	95	1992852			100.00- 100.00	100.00
8.110	8.228	-0.118	50	375252			15.00- 40.00	18.83
8.110	8.228	-0.118	75	1012006			30.00- 60.00	50.78
8.110	8.228	-0.118	96	126643			5.00- 9.00	6.35
8.110	8.228	-0.118	173	11883			0.00- 2.00	0.80
8.110	8.228	-0.118	174	1477051			50.00- 100.00	74.12
8.110	8.228	-0.118	175	107416			5.00- 9.00	7.27
8.110	8.228	-0.118	176	1426273			95.00- 101.00	96.56
8.110	8.228	-0.118	177	92340			5.00- 9.00	6.47

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

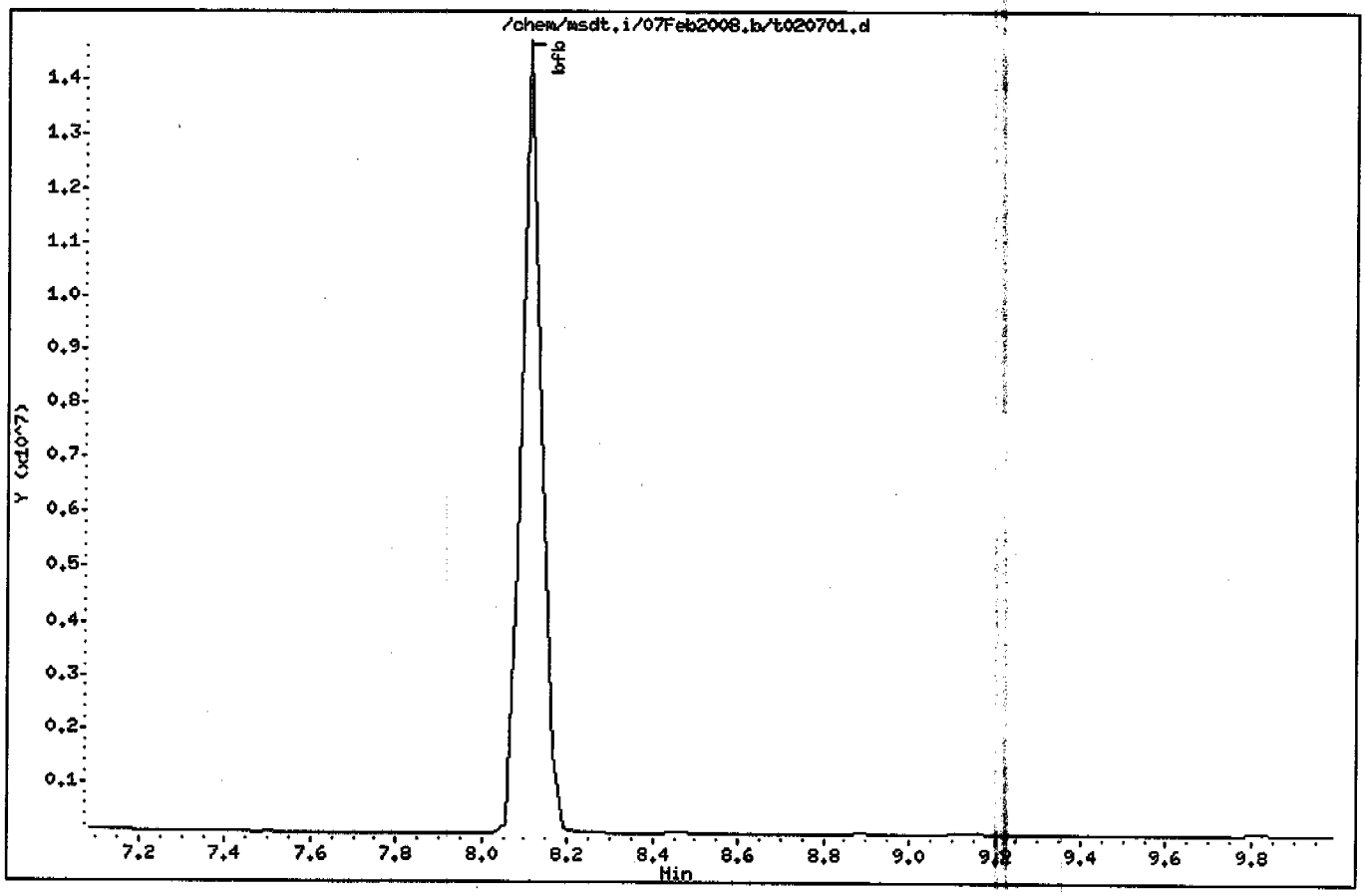
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

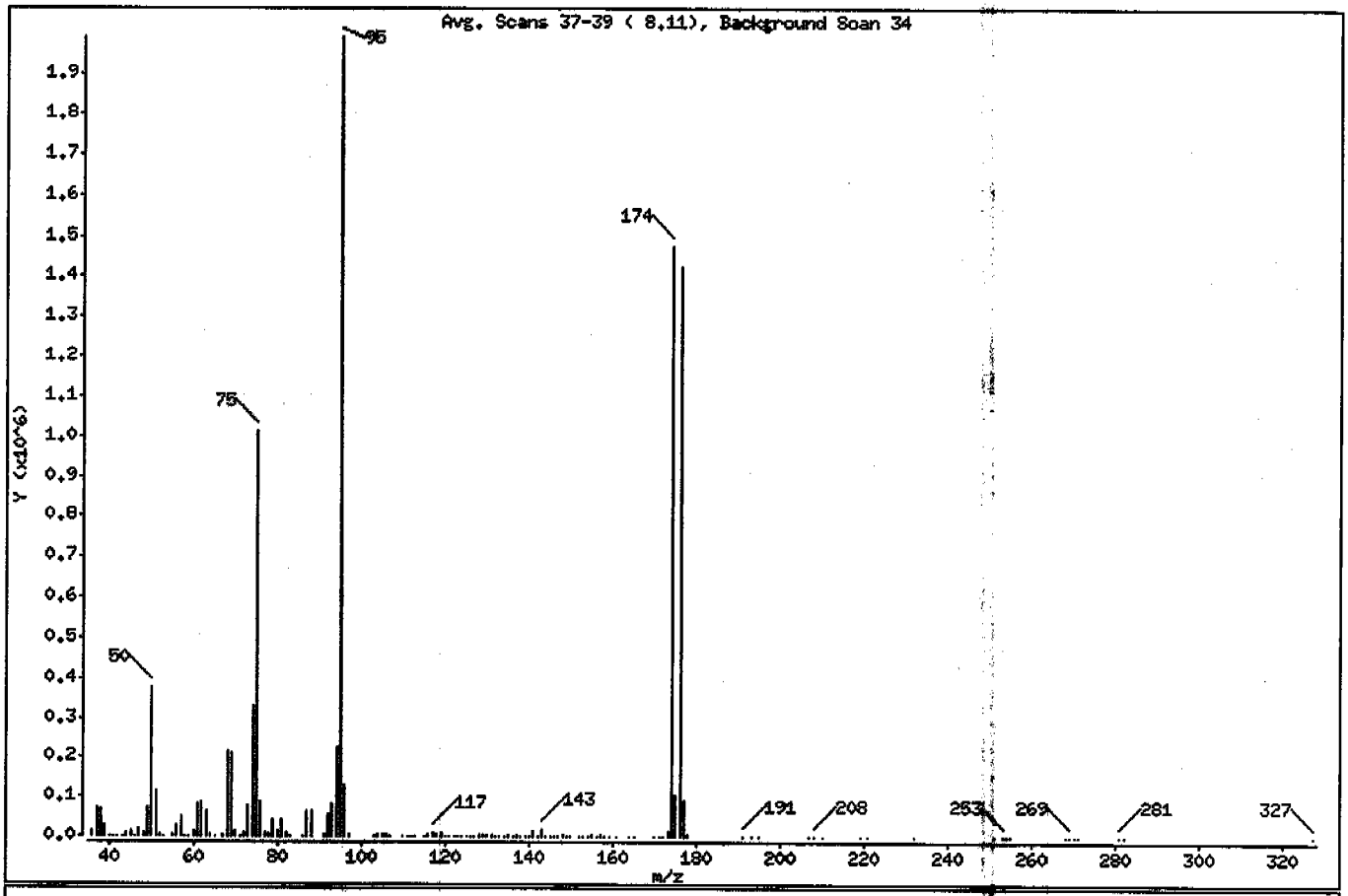
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.83
75	30.00 - 60.00% of mass 95	60.78
96	5.00 - 9.00% of mass 95	6.35
173	Less than 2.00% of mass 174	0.60 (0.80)
174	50.00 - 100.00% of mass 95	74.12
175	5.00 - 9.00% of mass 174	5.39 (7.27)
176	95.00 - 101.00% of mass 174	71.57 (96.56)
177	5.00 - 9.00% of mass 176	4.63 (6.47)

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12590	74.00	328320	122.00	327	159.00	2819
37.00	74864	75.00	1011968	123.00	458	161.00	1796
38.00	68272	76.00	86624	124.00	864	164.00	900
39.00	27184	77.00	9661	125.00	646	165.00	880
40.00	898	78.00	5681	126.00	450	170.00	824
41.00	146	79.00	41696	127.00	490	171.00	944
42.00	52	80.00	13412	128.00	5690	172.00	1538
43.00	354	81.00	42840	129.00	3168	173.00	11883
44.00	7813	82.00	9164	130.00	6014	174.00	147[illegible]08
45.00	15073	83.00	949	131.00	2682	175.00	107416
46.00	1296	86.00	1438	132.00	366	176.00	142[illegible]20
47.00	17736	87.00	66264	133.00	117	177.00	9[illegible]36
48.00	9775	88.00	62928	134.00	619	178.00	[illegible]49
49.00	72104	91.00	5391	135.00	2471	191.00	896
50.00	376232	92.00	53016	136.00	656	193.00	749
51.00	113264	93.00	82608	137.00	2437	196.00	863
52.00	4648	94.00	224704	138.00	122	207.00	779
53.00	189	95.00	1992704	139.00	626	208.00	838
55.00	4474	96.00	126640	140.00	1092	210.00	943
56.00	25416	97.00	3779	141.00	15389	219.00	852
57.00	50472	103.00	578	142.00	1643	221.00	240
58.00	1976	104.00	6737	143.00	16333	232.00	76
59.00	71	105.00	2463	144.00	980	251.00	807
60.00	15410	106.00	6556	145.00	1475	253.00	898
61.00	82160	107.00	2074	146.00	2283	264.00	900
62.00	86144	110.00	909	147.00	1251	265.00	805
63.00	65960	111.00	1186	148.00	4141	268.00	820
64.00	5791	112.00	905	149.00	912	269.00	803
65.00	857	113.00	1014	150.00	1708	270.00	811
67.00	4448	115.00	1419	152.00	888	271.00	949
68.00	213696	116.00	5788	153.00	1322	281.00	88
69.00	209280	117.00	9607	154.00	1107	282.00	21
70.00	14643	118.00	5909	155.00	4174	327.00	121
71.00	664	119.00	8235	156.00	709		
72.00	9006	120.00	397	157.00	2884		

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	79208	121.00	106	158.00	325		

Air Toxics Ltd.

Data file : /chem/msdt.i/21Feb2008.b/t022101.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 21-FEB-2008 08:30
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/21Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.082	8.228	-0.146	95	1820880			100.00- 100.00	100.00
8.082	8.228	-0.146	50	350549			15.00- 40.00	19.25
8.082	8.228	-0.146	75	924575			30.00- 60.00	50.78
8.082	8.228	-0.146	96	117792			5.00- 9.00	6.47
8.082	8.228	-0.146	173	9781			0.00- 2.00	0.76
8.082	8.228	-0.146	174	1294506			50.00- 100.00	71.09
8.082	8.228	-0.146	175	93327			5.00- 9.00	7.21
8.082	8.228	-0.146	176	1244707			95.00- 101.00	96.15
8.082	8.228	-0.146	177	79913			5.00- 9.00	6.42

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

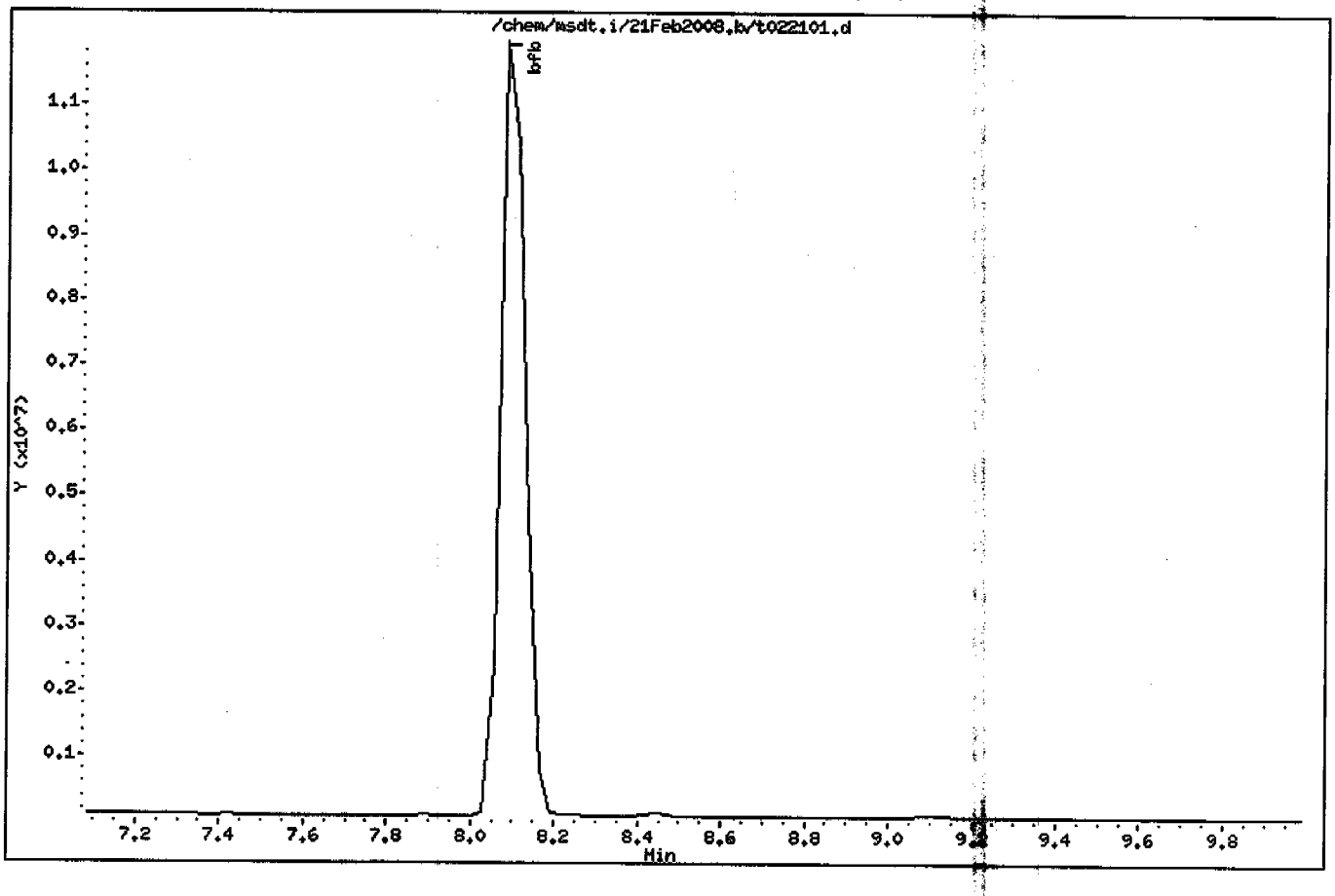
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

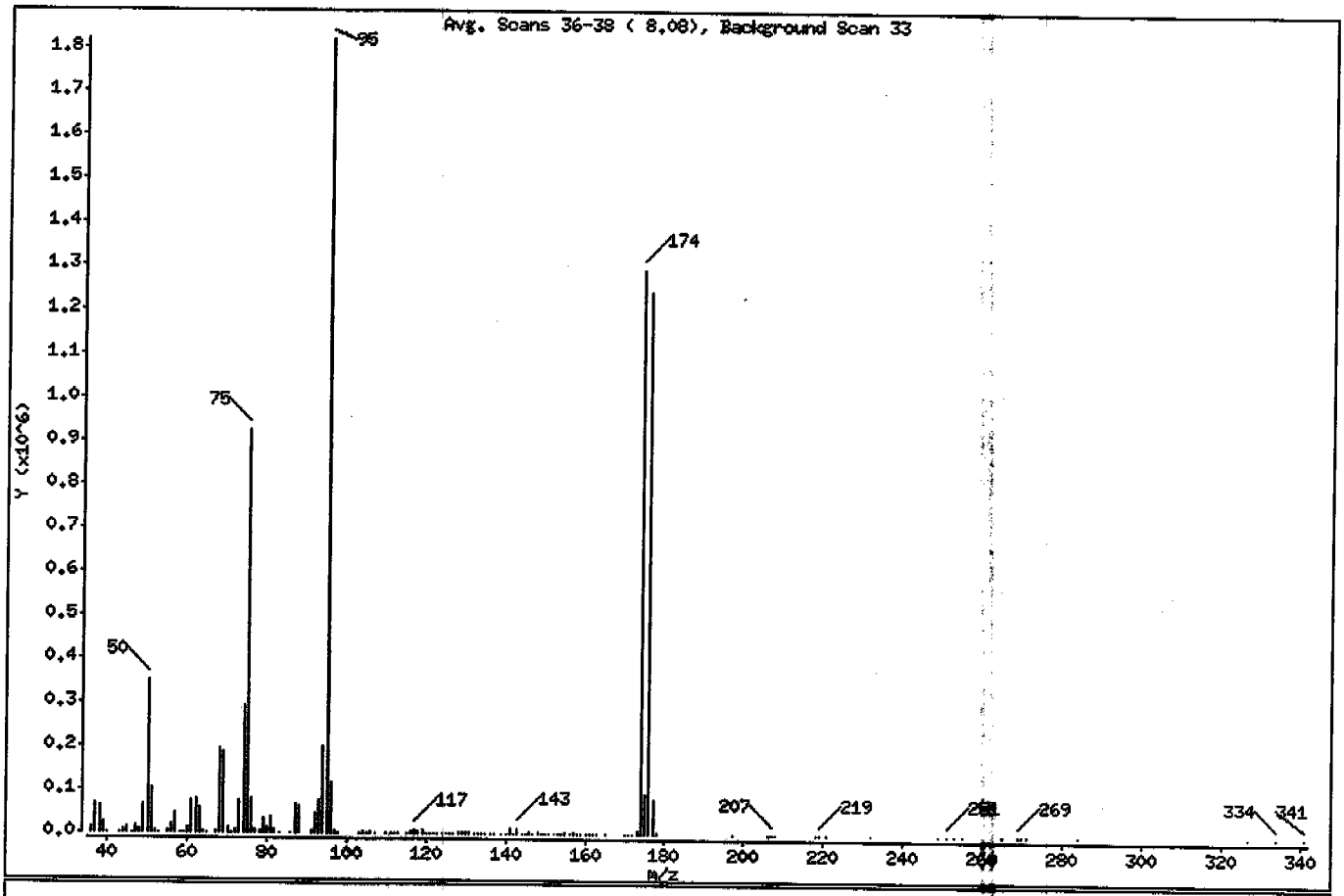
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.25
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.47
173	Less than 2.00% of mass 174	0.54 (0.76)
174	50.00 - 100.00% of mass 95	71.09
175	5.00 - 9.00% of mass 174	5.13 (7.21)
176	95.00 - 101.00% of mass 174	68.36 (96.15)
177	5.00 - 9.00% of mass 176	4.39 (6.42)

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12312	76.00	78792	123.00	414	160.00	108
37.00	69032	77.00	9068	124.00	775	161.00	1938
38.00	64704	78.00	5285	125.00	617	162.00	405
39.00	26984	79.00	34864	126.00	834	163.00	116
40.00	577	80.00	11065	127.00	249	165.00	27
43.00	373	81.00	36768	128.00	5066	170.00	208
44.00	7153	82.00	7962	129.00	2566	171.00	991
45.00	14309	83.00	752	130.00	5090	172.00	721
46.00	766	86.00	1306	131.00	2176	173.00	981
47.00	16656	87.00	66488	132.00	329	174.00	129436
48.00	8666	88.00	61120	133.00	29	176.00	93820
49.00	65160	91.00	5107	134.00	338	176.00	124472
50.00	350628	92.00	47664	135.00	1758	177.00	79912
51.00	104888	93.00	75816	136.00	587	178.00	2896
52.00	4313	94.00	201344	137.00	2046	197.00	811
53.00	298	95.00	1820672	139.00	434	206.00	812
55.00	3609	96.00	117792	140.00	817	207.00	1825
56.00	22192	97.00	2776	141.00	11673	208.00	63
57.00	45794	98.00	128	142.00	1444	218.00	814
58.00	1883	103.00	395	143.00	12062	219.00	858
59.00	189	104.00	5835	144.00	764	221.00	63
60.00	14519	105.00	2027	145.00	1149	232.00	9
61.00	76712	106.00	5397	146.00	2179	249.00	109
62.00	77644	107.00	1801	147.00	982	251.00	284
63.00	58962	110.00	649	148.00	3247	253.00	81
64.00	5084	111.00	1031	149.00	1040	255.00	150
65.00	915	112.00	581	150.00	1486	265.00	63
67.00	4190	113.00	895	151.00	376	269.00	389
68.00	194688	115.00	1247	152.00	798	270.00	26
69.00	189888	116.00	4613	153.00	1088	271.00	14
70.00	13410	117.00	8446	154.00	965	284.00	184
71.00	482	118.00	4706	155.00	3563	327.00	85
72.00	8310	119.00	7194	156.00	626	334.00	48
73.00	74384	120.00	307	157.00	2589	341.00	102
74.00	294912	121.00	269	158.00	152		

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	924544	122.00	498	159.00	1646		

Air Toxics Ltd.

Data file : /chem/msdt.i/28Feb2008.b/t022801.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 28-FEB-2008 08:35
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/28Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.110	8.228	-0.118	95	1602287			100.00- 100.00	100.00
8.110	8.228	-0.118	50	304640			15.00- 40.00	19.01
8.110	8.228	-0.118	75	822566			30.00- 60.00	51.34
8.110	8.228	-0.118	96	104157			5.00- 9.00	6.50
8.110	8.228	-0.118	173	9377			0.00- 2.00	0.76
8.110	8.228	-0.118	174	1231218			50.00- 100.00	76.84
8.110	8.228	-0.118	175	88218			5.00- 9.00	7.17
8.110	8.228	-0.118	176	1188562			95.00- 101.00	96.54
8.110	8.228	-0.118	177	77563			5.00- 9.00	6.53

Data File: /chem/msdt.i/28Feb2008.b/t022801.d

Date : 28-FEB-2008 08:35

Client ID: BFB

Instrument: msdt.i

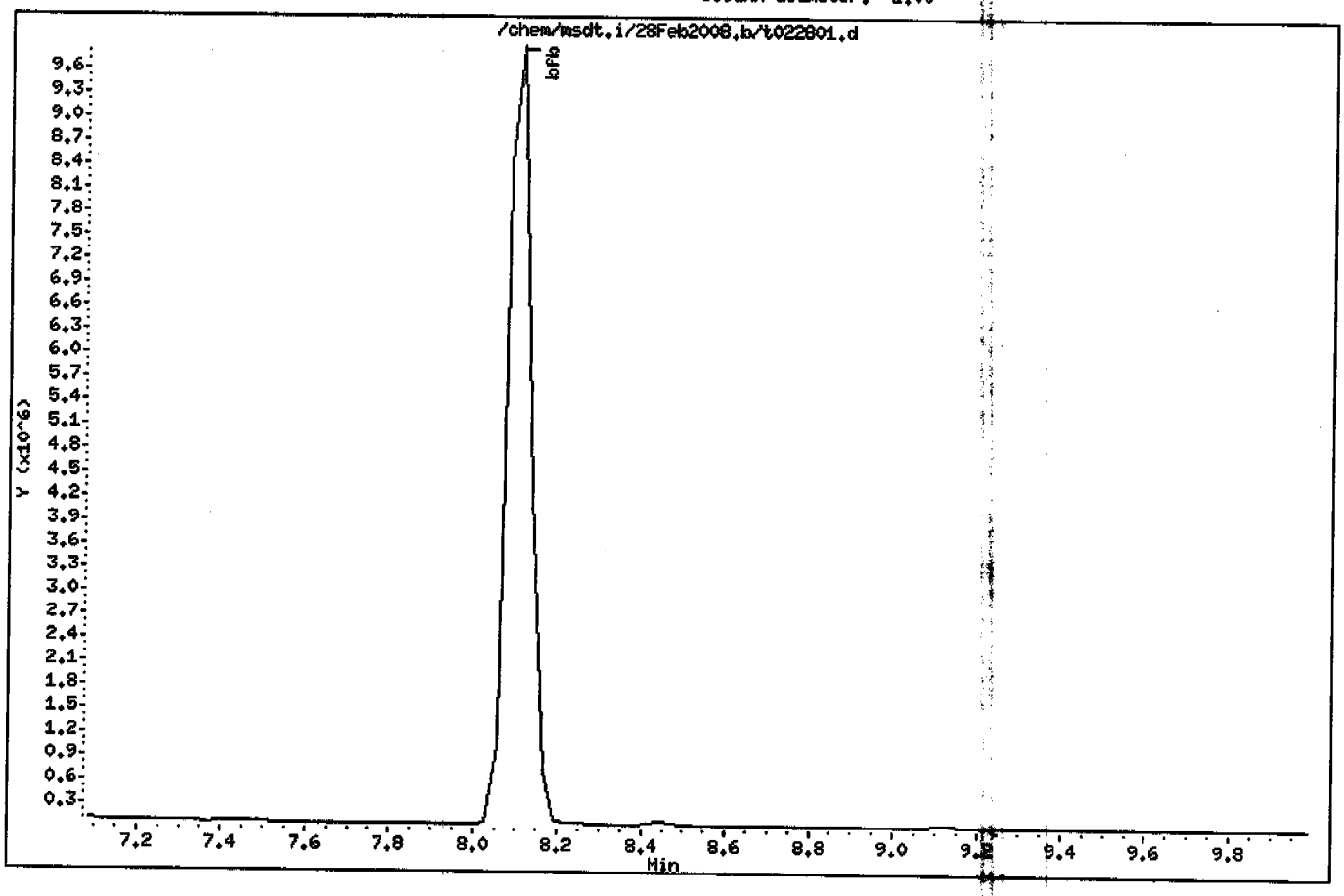
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /ohem/msdt.i/28Feb2008.b/t022801.d

Date : 28-FEB-2008 08:35

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

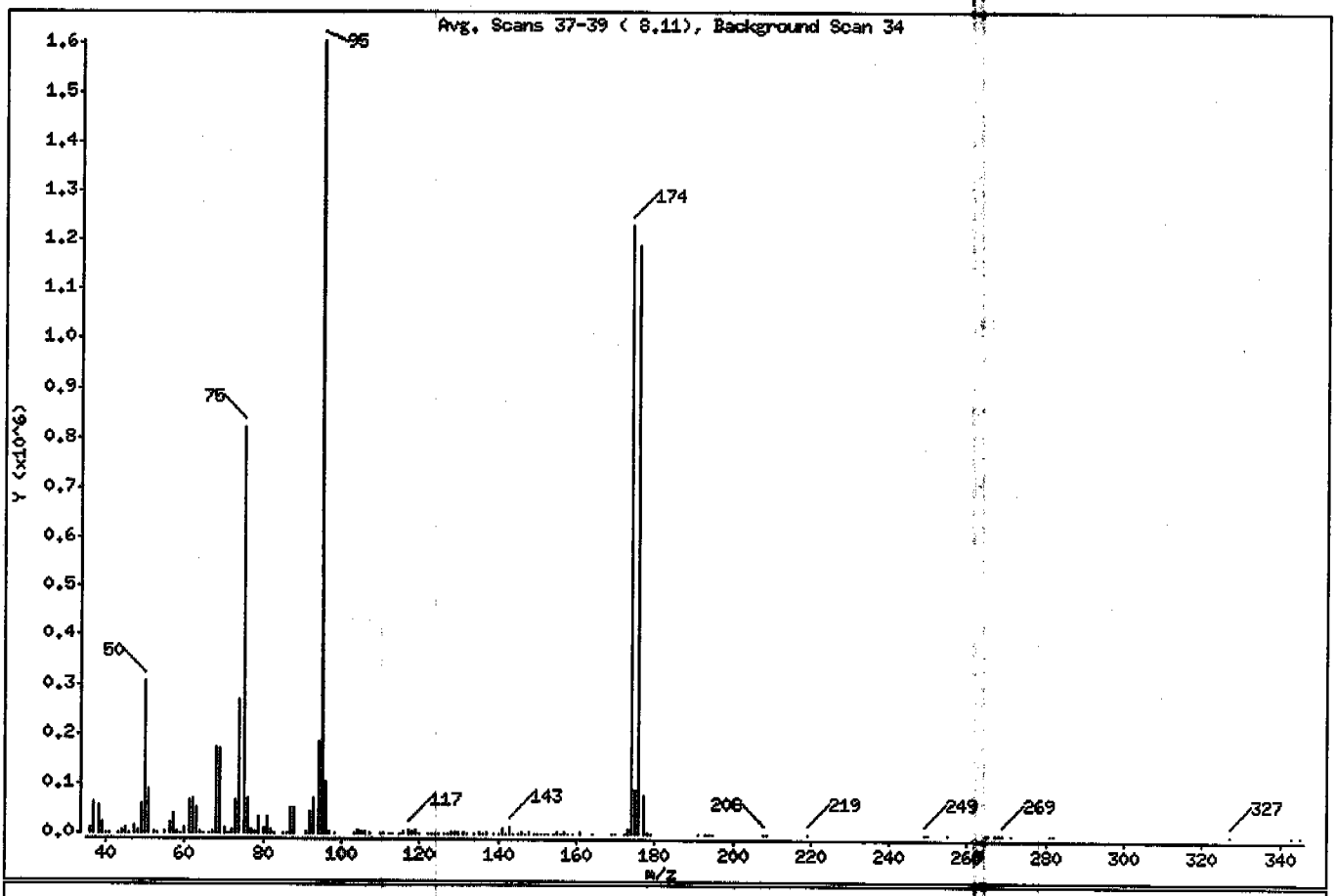
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.01
75	30.00 - 60.00% of mass 95	51.34
96	5.00 - 9.00% of mass 95	6.50
173	Less than 2.00% of mass 174	0.59 (0.76)
174	50.00 - 100.00% of mass 95	76.84
175	5.00 - 9.00% of mass 174	5.51 (7.17)
176	95.00 - 101.00% of mass 174	74.18 (96.54)
177	5.00 - 9.00% of mass 176	4.84 (6.53)

Data File: /chem/msdt.i/28Feb2008.b/t022801.d

Date : 28-FEB-2008 08:35

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022801.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11034	74.00	269668	120.00	270	159.00	1891
37.00	61272	75.00	822528	122.00	272	161.00	1874
38.00	55208	76.00	70112	123.00	458	164.00	131
39.00	22066	77.00	7490	124.00	875	169.00	103
40.00	770	78.00	4079	125.00	224	170.00	146
41.00	113	79.00	33440	126.00	565	172.00	1465
43.00	316	80.00	10925	127.00	584	173.00	9677
44.00	6785	81.00	34552	128.00	4605	174.00	1230048
45.00	11889	82.00	7278	129.00	2320	175.00	98816
46.00	674	83.00	748	130.00	4958	176.00	1168852
47.00	14290	85.00	126	131.00	2179	177.00	77860
48.00	7734	86.00	1163	132.00	269	178.00	2885
49.00	68304	87.00	52920	134.00	669	179.00	152
50.00	304640	88.00	51032	135.00	2261	191.00	946
51.00	89880	91.00	4208	136.00	8	193.00	213
52.00	4362	92.00	44296	137.00	2303	194.00	237
53.00	112	93.00	68448	139.00	357	195.00	125
55.00	3617	94.00	183104	140.00	889	208.00	880
56.00	20424	95.00	1602048	141.00	12711	209.00	66
57.00	40072	96.00	104152	142.00	1454	219.00	103
58.00	1940	97.00	2993	143.00	12964	249.00	248
59.00	35	98.00	144	144.00	878	250.00	304
60.00	12741	103.00	476	145.00	1123	255.00	318
61.00	67736	104.00	5761	146.00	1952	265.00	242
62.00	69784	105.00	2023	147.00	654	267.00	230
63.00	52520	106.00	5487	148.00	3361	268.00	311
64.00	4801	107.00	1738	149.00	1004	269.00	513
65.00	748	110.00	641	150.00	1579	271.00	321
66.00	106	111.00	849	151.00	226	281.00	26
67.00	4032	112.00	545	152.00	727	282.00	410
68.00	174208	113.00	848	153.00	928	327.00	361
69.00	168612	115.00	1002	154.00	858	343.00	54
70.00	12206	116.00	4438	155.00	3479	345.00	509
71.00	364	117.00	7903	156.00	626		
72.00	7893	118.00	4332	157.00	2671		

Data File: /chem/msdt.i/28Feb2008.b/t022801.d

Date : 28-FEB-2008 08:35

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022801.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 96.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	66472	119.00	6348	158.00	262		

Air Toxics Ltd.

Data file : /chem/msdt.i/03Mar2008.b/t030301.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 03-MAR-2008 09:19
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/03Mar2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.082	8.228	-0.146	95	1303605			100.00- 100.00	100.00
8.082	8.228	-0.146	50	281816			15.00- 40.00	21.62
8.082	8.228	-0.146	75	718011			30.00- 60.00	55.08
8.082	8.228	-0.146	96	84110			5.00- 9.00	6.45
8.082	8.228	-0.146	173	7509			0.00- 2.00	0.86
8.082	8.228	-0.146	174	876608			50.00- 100.00	67.24
8.082	8.228	-0.146	175	64675			5.00- 9.00	7.38
8.082	8.228	-0.146	176	841297			95.00- 101.00	95.97
8.082	8.228	-0.146	177	54120			5.00- 9.00	6.43

Data File: /chem/msdt.i/03Mar2008.b/t030301.d

Date : 03-MAR-2008 09:19

Client ID: BFB

Instrument: msdt.i

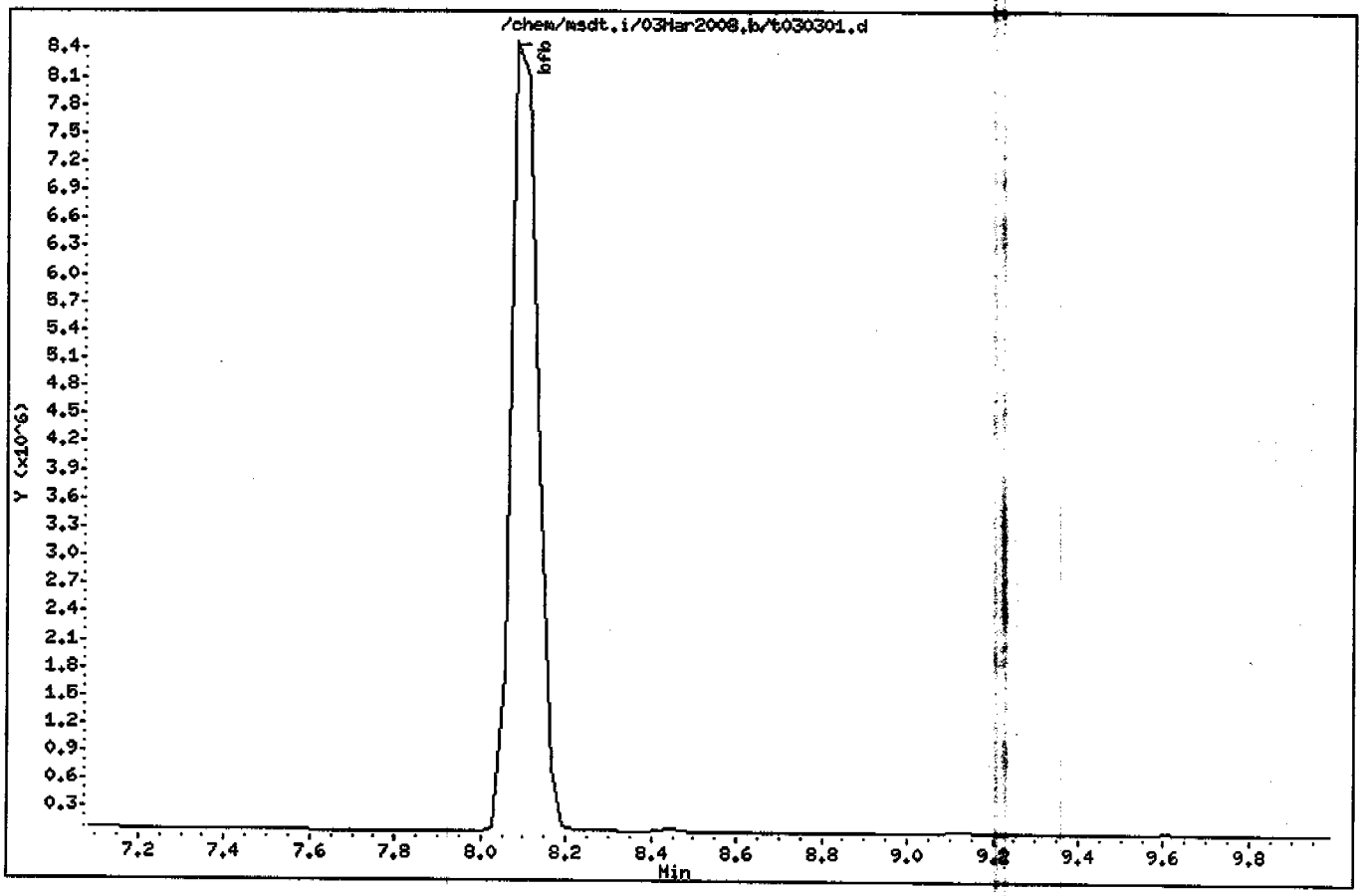
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/03Mar2008.b/t030301.d

Date : 03-MAR-2008 09:19

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

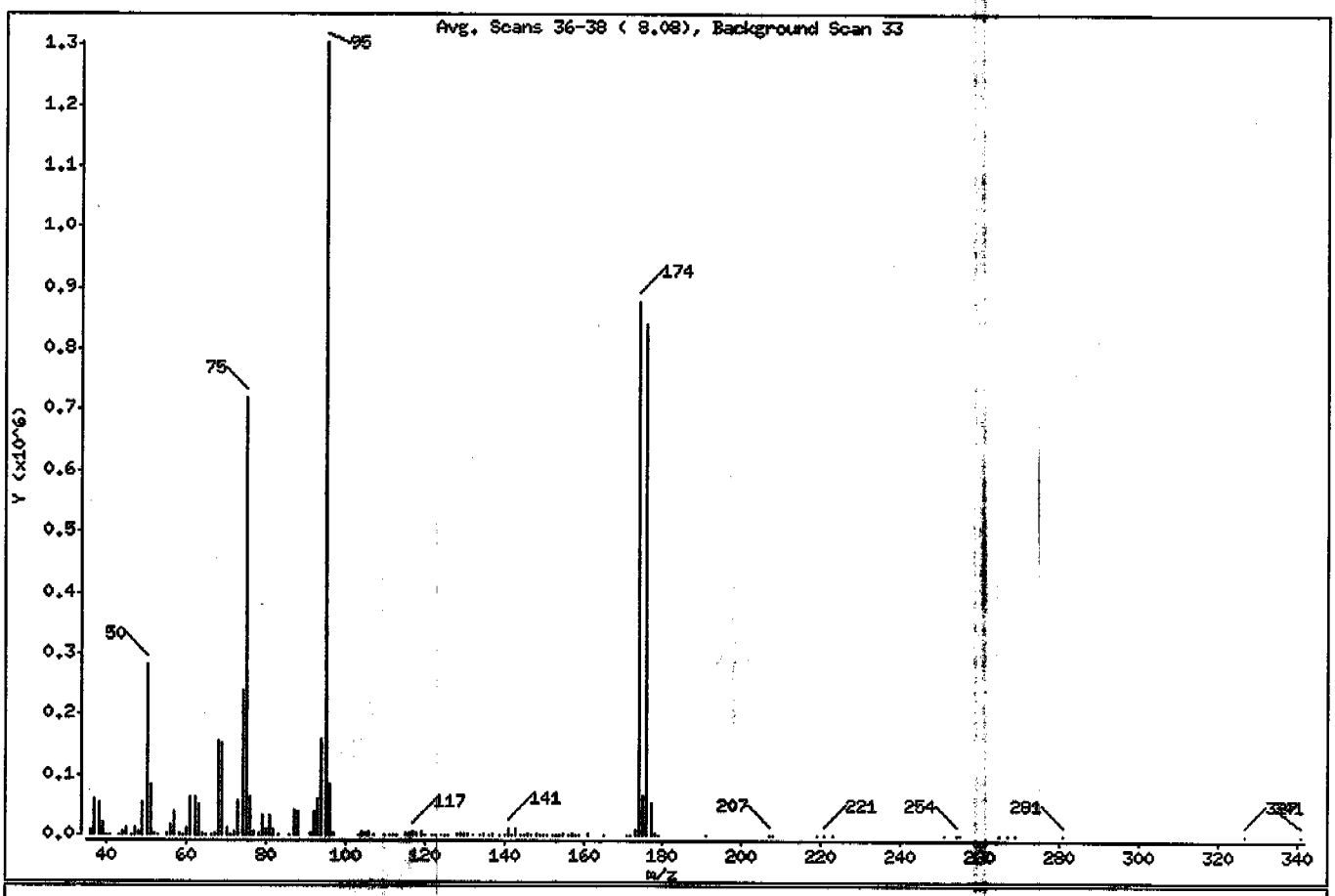
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.62
75	30.00 - 60.00% of mass 95	55.08
96	5.00 - 9.00% of mass 95	6.45
173	Less than 2.00% of mass 174	0.58 (0.86)
174	50.00 - 100.00% of mass 95	67.24
175	5.00 - 9.00% of mass 174	4.96 (7.38)
176	95.00 - 101.00% of mass 174	64.54 (95.97)
177	5.00 - 9.00% of mass 176	4.15 (6.43)

Data File: /chem/msdt.i/03Mar2008.b/t030301.d

Date : 03-MAR-2008 09:19

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t030301.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 96.00

Number of points: 132

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10259	72.00	6631	118.00	4137	156.00	491
37.00	58856	73.00	57712	119.00	5443	157.00	3945
38.00	53616	74.00	238272	120.00	316	158.00	491
39.00	21120	75.00	717952	122.00	285	159.00	1948
40.00	377	76.00	62512	123.00	251	161.00	1902
41.00	211	77.00	6631	124.00	630	165.00	754
43.00	420	78.00	3512	125.00	311	171.00	172
44.00	5460	79.00	31480	126.00	416	172.00	1695
45.00	11429	80.00	9787	128.00	4242	173.00	7999
46.00	971	81.00	33040	129.00	2055	174.00	870008
47.00	12190	82.00	7568	130.00	3863	175.00	64672
48.00	7289	83.00	631	131.00	1996	176.00	841890
49.00	55408	86.00	851	132.00	238	177.00	54420
50.00	281792	87.00	41592	134.00	70	178.00	1947
51.00	85336	88.00	39784	135.00	1699	179.00	238
52.00	3485	91.00	4163	136.00	422	191.00	901
53.00	172	92.00	38584	137.00	1850	207.00	1878
55.00	3083	93.00	59544	139.00	368	208.00	118
56.00	19264	94.00	158016	140.00	636	219.00	316
57.00	38008	95.00	1303552	141.00	11955	221.00	373
58.00	1737	96.00	84104	142.00	1403	223.00	122
59.00	48	97.00	2673	143.00	11843	251.00	132
60.00	11361	103.00	344	144.00	643	254.00	241
61.00	61656	104.00	5323	145.00	1117	255.00	306
62.00	62936	105.00	1908	146.00	1853	265.00	822
63.00	49512	106.00	4573	147.00	978	267.00	139
64.00	4403	107.00	1388	148.00	2802	269.00	494
65.00	1245	110.00	507	149.00	1053	281.00	442
66.00	206	111.00	915	150.00	1376	327.00	319
67.00	2960	112.00	510	151.00	227	341.00	649
68.00	154752	113.00	789	152.00	475		
69.00	152768	115.00	1507	153.00	743		
70.00	10703	116.00	4031	154.00	789		
71.00	347	117.00	7407	155.00	2799		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY:	Los Alamos National Laboratories
ATTENTION:	Mr. Keith Greene
FAX #:	505-665-8855
FROM:	Sample Receiving
Workorder #:	0802422
# of pages (Including Cover):	1

3/6/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0802422

Wednesday, February 20, 2008

REQUEST NUMBER: 08-646

0238

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-646
Per Agreement Number:TIPS#24266
Project Cost Code: MR9R032NFB00

Please analyse the enc osed samples
according to the schedule indicated:

SHIP DATE: 2/20/2008
TURNAROUND/REPORT DUE: 3/12/2008
TURNAROUND REQ'D: 21 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SWO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10517	GAS	2/19/2008		
		02A	1	MD21-08-10526	GAS	2/19/2008		

Final Page of REQUEST NUMBER 08-646

Wednesday, February 20, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-646C

REQUEST NUMBER: 08-646

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/12/2008
TURNAROUND REQD: 21

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10517	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10526	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/20/08	1700	Printed Name	Signature	2/21/08	845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: Date Time Remarks:

Printed Name Signature

Fed Ex 7209 7843 7457

CUSTODY SEAL INTACT? Y
FROM TEMP N/A

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0802422

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: R6

Date Promised: 03/06/08
Date Completed: 3/5/08
Date Received: 2/21/08
PO#: 47247-001-07
Project#: 08-646

Total $: $ 600.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-10517	Modified TO-15	2/19/2008	7.0 "Hg	$205.00
02A	MD21-08-10525	Modified TO-15	2/19/2008	7.0 "Hg	$205.00
03A	Lab Blank	Modified TO-15	NA	NA	$0.00
04A	CCV	Modified TO-15	NA	NA	$0.00
05A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (2) @ $60.00 each., Shipment 57815	$120.00
CVP (2) @ $20.00 each.	$40.00
Client Specific EDD (2) @ $5.00 each.	$10.00
eCVP (2) @ $10.00 each.	$20.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	[illegible]	2.05
1.0	1.39	1.74	2.09
1.5	1.41	[illegible]	2.13
2.0	1.44	1.80	2.16
2.5	1.46	[illegible]	2.20
3.0	1.49	1.87	2.24
3.5	1.52	[illegible]	2.29
4.0	1.55	1.94	2.33
4.5	1.58	[illegible]	2.38
5.0	1.61	2.02	2.42
5.5	1.64	[illegible]	2.47
6.0	1.68	2.10	2.53
6.5	1.71	[illegible]	2.58
7.0	1.75	2.19	2.64
7.5	1.79	[illegible]	2.69
8.0	1.83	2.29	2.76
8.5	1.87	[illegible]	2.82
9.0	1.91	2.40	2.89
9.5	1.96	[illegible]	2.96
10.0	2.01	2.52	3.03
10.5	2.06	[illegible]	3.11
11.0	2.12	2.65	3.19
11.5	2.17	[illegible]	3.28
12.0	2.23	2.80	3.37
12.5	2.30	[illegible]	3.46
13.0	2.36	2.97	3.57
13.5	2.44	[illegible]	3.67
14.0	2.51	3.15	3.79
14.5	2.59	[illegible]	3.91
15.0	2.68	3.36	4.04
15.5	2.77	[illegible]	4.18
16.0	2.87	3.60	4.33
16.5	2.98	[illegible]	4.49
17.0	3.09	3.88	4.66
17.5	3.22	[illegible]	4.85
18.0	3.35	4.20	5.05
18.5	3.50	[illegible]	5.27
19.0	3.65	4.58	5.51
19.5	3.83	[illegible]	5.77
20.0	4.02	5.04	6.06
20.5	4.23	[illegible]	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	[illegible]	5.60	6.73
21.5	[illegible]	5.93	7.13
22.0	[illegible]	6.30	7.58
22.5	[illegible]	6.72	8.08
23.0	[illegible]	7.20	8.66
23.5	[illegible]	7.76	9.32
24.0	6.70	8.40	10.10
24.5	[illegible]	9.17	11.02
25.0	[illegible]	10.08	12.12
25.5	[illegible]	11.20	13.47
26.0	[illegible]	12.60	15.15
26.5	[illegible]	14.40	17.32
27.0	[illegible]	16.80	20.20
27.5	[illegible]	20.16	24.24
28.0	[illegible]	25.20	30.31
28.5	[illegible]	33.61	40.41
29.0	[illegible]	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	[illegible]	1.68	2.02
0.2	[illegible]	1.66	1.99
0.4	[illegible]	1.64	1.97
0.6	[illegible]	1.61	1.94
0.8	1.27	1.59	1.92
1.0	[illegible]	1.57	1.89
1.2	[illegible]	1.55	1.87
1.4	[illegible]	1.53	1.84
1.6	[illegible]	1.52	1.82
1.8	[illegible]	1.50	1.80
2.0	[illegible]	1.48	1.78
2.2	[illegible]	1.46	1.76
2.4	[illegible]	1.44	1.74
2.6	[illegible]	1.43	1.72
2.8	[illegible]	1.41	1.70
3.0	[illegible]	1.40	1.68
3.2	[illegible]	1.38	1.66
3.4	[illegible]	1.36	1.64
3.6	[illegible]	1.35	1.62
3.8	[illegible]	1.34	1.61
4.0	[illegible]	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.39	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.21	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order#: 0802422

A	R/T	M	Q	
☑	☑	☐	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (ie. 100% Dups, J-Flag to MDL, etc)
	☑	☑	☐	The final report has the correct reporting list, special units, and header info.
	☑	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	NA	☐	☐	Corrective Action issued - #
☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* ***CIRCLE (YES / NO)***

☑	☐	☐	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	Hold time is met for all samples
	☐	☐	☐	Appropriate data qualifier flags are applied
	☐	☐	☐	Manual integrations for samples and QC are properly documented
☑	☐		☐	Samples analyzed within the project or method specific clock
	☐			Retention times have been verified
☑	☐		☐	Appropriate ICAL(s) included
	☐	☐	☐	At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐	☐	Dilution factor correctly calculated (sample lead volume, syringe and bag dilutions, can pressurization(s))
☑	☑			Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐		Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
	NA	☐		TICs reasonable reference spectra
		☐		TICs between duplicate samples are consistent
NA		☐	☐	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☑	☐		Special units for all samples in the final report are correctly calculated
	☑	☐	☐	Manually entered results checked (i.e. special CCV compounds)
	NA	☐	☑	TPH/Fingerprint (verify calculations and correct reference compound used)
	☑			Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☑			Samples pressurized w/ appropriate gas (N_2 or He) ☐ Tedlar Bag only
☑	☑			Final pressure consistent with canister size (6L vs. 1L)
☑	☑			Verify receipt pressures against logbook and Target
☑	☑			Verify canister ID #'s
	NA	☐		Extra printed copies are provided per client profile
	☑	☐		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☑	☐	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: *(to include: noting samples with QA/QC problems, Blanks with positive hits, narratives etc.)*

A/R: 1 out CCV, 0 out LCS

CCV from multiple files

M/O:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
CB 3/4/08	R: JO 3/5/08	3/5/08	

T:

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 08/29/05

Thursday, February 14, 2008

REQUEST NUMBER: 08-631

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-631
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/14/2008
TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10511	GAS	2/14/2008		
		1	MD21-08-10512	GAS	2/14/2008		
		1	MD21-08-10513	GAS	2/14/2008		
		1	MD21-08-10514	GAS	2/14/2008		
		1	MD21-08-10515	GAS	2/14/2008		
		1	MD21-08-10516	GAS	2/14/2008		

Final Page of REQUEST NUMBER 08-631

Thursday, February 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-631C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-631

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10515	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10514	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10512	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10513	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10511	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10516	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10511

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008
TIME COLLECTED (HH:MM)		0927
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-25264	↓
LOCATION TYPE:	BH	↓
TOP DEPTH:	0	67.5 ft
BOTTOM DEPTH:	0	72.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		Port #1
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.2\ \%$

$CO_2 = 20.2\ \%$

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kenn Reid

RELINQUISHED BY (Printed Name) Kenn Reid (Signature) Kenn Reid	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10512

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		port # 2

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.2\ \%$

$CO_2 = 20.2\ \%$

COLLECTED BY (PRINT) ~~Erik Stein~~

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY (Printed Name) K Reid (Signature)	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10513

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0940	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.1\ \%$

$CO_2 = 20.3\ \%$

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) K. Read (Signature) [signature]	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature) [signature]	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10514

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328.0 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.7\%$

$CO_2 = 20.4\%$

COLLECTED BY (PRINT) Phil Stoms **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Read	2/14/08 1050	(Printed Name)	2/14/08 10:50
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10515

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		Port # 5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port # 5

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.6\%$

$CO_2 = 20.6\%$

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) K. Reid (Signature) [signature]	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature) [signature]	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10516

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-10515

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.6\%$

$CO_2 = 20.6\%$

COLLECTED BY (PRINT) ~~Bill Grant~~

REVIEWED BY (PRINT) Kevin Reed

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Reed	2/14/08	(Printed Name)	2/14/08
(Signature) Kevin Reed	1050	(Signature)	10:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-631 VALIDATION DATE: 3/26/08 LAB CODE: ARS

CONTRACT LABORATORY NAME: American Radiation Services, Inc

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☒ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. It should be noted that no Matrix Spike (MS) / MS Duplicate or Duplicate samples were analyzed. However, a Laboratory Control Sample (LCS) and LCS Duplicate were analyzed and, thus, no sample data were qualified, based on professional judgment.

Reviewed By: KAS **Level:** I **Date:** 3/26/08

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 3/26/08

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☒	☐	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☒	☐	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☐	☒	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☐	☒	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☐	☒	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☒	☐	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10511
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-001
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1541.737	211.009	188.340	92.471		pCi/L	ARS-054/ EPA 906.0	3/13/08 4:26	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/26/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10512
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-002
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	60699.917	6244.712	191.754	94.147		pCi/L	ARS-054/ EPA 906.0	3/13/08 7:02	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsey
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/26/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10513
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-003
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	35183.926	3630.365	188.505	92.552		pCi/L	ARS-054/ EPA 906.0	3/13/08 9:39	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoeique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/26/08

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10514
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-004
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1397.546	198.429	188.304	92.453		pCi/L	ARS-054/ EPA 906.0	3/13/08 12:15	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamaigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/26/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10515
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-005
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	805.354	152.015	190.198	93.383		pCi/L	ARS-054/ EPA 906.0	3/13/08 14:52	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ransegne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/26/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10516
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-006
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	982.557	167.235	194.474	95.482		pCi/L	ARS-054/ EPA 906.0	3/13/08 17:28	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/26/08

Thursday, February 14, 2008

REQUEST NUMBER: 08-631

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-631
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/14/2008
TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10511	GAS	2/14/2008		
		1	MD21-08-10512	GAS	2/14/2008		
		1	MD21-08-10513	GAS	2/14/2008		
		1	MD21-08-10514	GAS	2/14/2008		
		1	MD21-08-10515	GAS	2/14/2008		
		1	MD21-08-10516	GAS	2/14/2008		

Final Page of REQUEST NUMBER 08-631

Thursday, February 14, 2008

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-631C

REQUEST NUMBER: 08-631

TURNAROUND/REPORT DUE: 3/15/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10515	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10514	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10512	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10513	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10511	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10516	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name / Signature — 3/14/08 1400 — Printed Name / Signature — 2-15-08 09:54

Printed Name / Signature — Printed Name / Signature

Printed Name / Signature — Printed Name / Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name / Signature

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-631

ARS
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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-631

Original COC

Thursday, February 14, 2008

REQUEST NUMBER: 08-631

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-631

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/14/2008

TURNAROUND/REPORT DUE: 3/15/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10511	GAS	2/14/2008		
		1	MD21-08-10512	GAS	2/14/2008		
		1	MD21-08-10513	GAS	2/14/2008		
		1	MD21-08-10514	GAS	2/14/2008		
		1	MD21-08-10515	GAS	2/14/2008		
		1	MD21-08-10516	GAS	2/14/2008		

Final Page of REQUEST NUMBER 08-631

Thursday, February 14, 2008

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-631C

REQUEST NUMBER: 08-631

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10515	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10514	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10512	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10513	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10511	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10516	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
		2/14/08	1400			2-15-08	09:54
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory Request Number: 08-631

Case Narrative

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

March 15, 2008

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-631
LANL Sample ID: MD21-08-10511, MD21-08-10512, MD21-08-10513, MD21-08-10514, MD21-08-10515, MD21-08-10516

Dear Mr. Greene:

On February 15, 2008, American Radiation Services (ARS) received six Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet quality control parameters for counting equipment were within acceptance criteria and statistical sound detection limits.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

for Virgena Mulligan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-631	MD21-08-10511	ARS1-08-00341-001
08-631	MD21-08-10512	ARS1-08-00341-002
08-631	MD21-08-10513	ARS1-08-00341-003
08-631	MD21-08-10514	ARS1-08-00341-004
08-631	MD21-08-10515	ARS1-08-00341-005
08-631	MD21-08-10516	ARS1-08-00341-006

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicate that the activity is below the MDC.

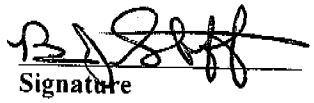
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."



Signature

Lab Manager/Technical Director, American Radiation Services
Title

3-14-08
Date

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10511
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-001
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1541.737	211.009	188.340	92.471		pCi/L	ARS-054/ EPA 906.0	3/13/08 4:26	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10512
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-002
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	60699.917	6244.712	191.754	94.147		pCi/L	ARS-054/ EPA 906.0	3/13/08 7:02	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ranseigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10513
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-003
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	35183.926	3630.365	188.505	92.552		pCi/L	ARS-054/ EPA 906.0	3/13/08 9:39	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rabelais
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10514
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-004
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1397.546	198.429	188.304	92.453		pCi/L	ARS-054/ EPA 906.0	3/13/08 12:15	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanseigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10515
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-005
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	805.354	152.015	190.198	93.383		pCi/L	ARS-054/ EPA 906.0	3/13/08 14:52	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10516
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-006
Date Received: 2/15/2008
Report Date: 03/14/08 10:39

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	982.557	167.235	194.474	95.482		pCi/L	ARS-054/ EPA 906.0	3/13/08 17:28	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerigne
Project Manager Review

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ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-08-00341
Date Received: 2/15/2008

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B08-00504	LCS	H3	729.561	141.362	179.629	1186.892		pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS	61	50%-150%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B08-00504	MBL	H3	-137.554	103.083	179.774	NA	U	pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B08-00504	LCSD	H3	729.561	141.362	882.353	151.886		pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS	0.52	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B08-00504	LCSD	H3	729.561	141.362	882.353	151.886		pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS	1.47	< 3

Lindsay Lanseigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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2609 North River Road • Port Allen, Louisiana 70767
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

ARS AMERICAN RADIATION SERVICES, INC.

LSC Instrument Data Transfer Report

\\Packard3170\Results\H3 Results\Tritium for Protocol

LSC 1

Base Sample ID													
ARS1-B08-00504						14		14					
LSC Batch Sample ID	LSC Vial No.	LSC Vial ID	LSC Vial No.	LSC Vial ID	LSC Count Date	LSC CPM	LSC DPM	LSC Count Time	LSC Vial Vol	Original Batch	Recount Batch	Recount No.
BKG	5		1	BACKGROUND	03/12/08 04:58	6.70	411.48	49.4900	150.00	ARS1-B08-00504		
ARS1-B08-00504-01	5		2	B08-00504-01	03/12/08 07:34	10.76	416.15	49.8700	150.00	ARS1-B08-00504		
ARS1-B08-00504-02	5		3	B08-00504-02	03/12/08 10:11	11.65	421.04	50.2700	150.00	ARS1-B08-00504		
ARS1-B08-00504-03	5		4	B08-00504-03	03/12/08 12:47	5.93	415.39	49.8100	150.00	ARS1-B08-00504		
ARS1-B08-00504-04	5		5	B08-00504-04	03/12/08 15:23	9.69	389.18	47.6200	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-05	5		6	B08-00504-05	03/12/08 18:00	10.88	397.01	48.3100	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-06	5		7	B08-00504-06	03/12/08 20:36	96.83	390.37	47.7300	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-07	5		8	B08-00504-07	03/12/08 23:13	7.85	389.37	47.6400	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-08	5		9	B08-00504-08	03/13/08 01:49	63.89	393.75	48.0400	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-09	5		10	B08-00504-09	03/13/08 04:25	14.89	393.13	47.9800	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-10	5		11	B08-00504-10	03/13/08 07:02	323.60	376.41	46.4500	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-11	5		12	B08-00504-11	03/13/08 09:38	193.55	388.52	47.5600	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-12	5		13	B08-00504-12	03/13/08 12:15	14.13	389.37	47.6400	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-13	5		14	B08-00504-13	03/13/08 14:51	10.94	385.25	47.2600	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-14	5		15	B08-00504-14	03/13/08 17:28	11.75	373.57	46.1900	150.00	ARS1-B08-00504	ARS1-08-00341	1

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.762000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.498700
Sample Aliquot	5.034000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/12/08 7:35 AM
Count Date (t2)	3/12/08 7:35 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	729.561354	729.561354	OK
CU	119.978142	119.978142	OK
TPU	141.362458	141.362458	OK
MDA	179.629047	179.629047	OK
DL	88.193675	88.193675	OK
Net Count Rate	4.066000	4.066000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005573	0.005573	OK
K MDA	0.835982	0.835982	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-01
Analysis Code	
SDG	ARS1-08-00341
Fraction	006
Run Number	
Client	QC Sample
Client Profile	
Client ID	BLA QC Sample
Instr File Name	84
Instr Detector	LB S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.652000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.502700
Sample Aliquot	5.033000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/12/08 10:11 AM
Count Date (t2)	3/12/08 10:11 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	[illegible]	VBA	V/V
ACT	882.353286	882.353286	OK
CU	122.043883	122.043883	OK
TPU	151.885665	151.885665	OK
MDA	178.235139	178.235139	OK
DL	87.509299	87.509299	OK
Net Count Rate	4.956000	4.956000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005617	0.005617	OK
K MDA	0.842520	0.842520	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-02
Analysis Code	
SDG	ARS1-08-00341
Fraction	006
Run Number	
Client	QC Sample
Client Profile	
Client ID	QC Sample
Instr File Name	84
Instr Detector	LS-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	5.930000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.498100
Sample Aliquot	5.036000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/12/08 12:47 PM
Count Date (t2)	3/12/08 12:47 PM
Activity Units = pCi --> UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	-137.554098	-137.554098	OK
CU	102.114660	102.114660	OK
TPU	103.082835	103.082835	OK
MDA	179.774000	179.774000	OK
DL	88.264843	88.264843	OK
Net Count Rate	-0.766000	-0.766000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005569	0.005569	OK
K MDA	0.835308	0.835308	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-03
Analysis Code	
SDG	ARS1-08-00341
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	GeS-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	9.693000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.476200
Sample Aliquot	5.050000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 3:24 PM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	563.806477	563.806477	OK
CU	121.879310	121.879310	OK
TPU	134.878465	134.878465	OK
MDA	188.332572	188.332572	OK
DL	92.466903	92.466903	OK
Net Count Rate	2.997000	2.997000	OK
D t 1 (t2 - t1)	28.058333	28.058333	OK
DF	0.995687	0.995687	OK
Sys Err	0.052280	0.052280	OK
K	0.005316	0.005316	OK
K MDA	0.797348	0.797348	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-04
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	001
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	0421-08-10504
Instr File Name	84
Instr Detector	5-S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.883000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.483100
Sample Aliquot	5.032000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 6:00 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	779.213781	779.213781	OK
CU	124.870885	124.870885	OK
TPU	148.215752	148.215752	OK
MDA	186.309836	186.309836	OK
DL	91.473787	91.473787	OK
Net Count Rate	4.187000	4.187000	OK
D t 1 (t2 - t1)	28.166667	28.166667	OK
DF	0.995671	0.995671	OK
Sys Err	0.052280	0.052280	OK
K	0.005373	0.005373	OK
K MDA	0.806005	0.806005	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-05
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	002
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	LA21-08-10505
Instr File Name	84
Instr Detector	5-S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	96.828000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.477300
Sample Aliquot	5.033000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 8:37 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	16974.589137	16974.589132	OK
CU	306.655831	306.655831	OK
TPU	1766.181887	1766.181887	OK
MDA	188.539514	188.539514	OK
DL	92.568506	92.568506	OK
Net Count Rate	90.132000	90.132000	OK
D t 1 (t2 - t1)	28.275694	28.275694	OK
DF	0.995654	0.995654	OK
Sys Err	0.052280	0.052280	OK
K	0.005310	0.005310	OK
K MDA	0.796473	0.796473	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-06
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	003
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	D21-08-10506
Instr File Name	84
Instr Detector	6-S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.850000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.476400
Sample Aliquot	5.034000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 11:13 PM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	217.704156	217.704156	OK
CU	115.144486	115.144486	OK
TPU	117.285502	117.285502	OK
MDA	188.861325	188.861325	OK
DL	92.726508	92.726508	OK
Net Count Rate	1.154000	1.154000	OK
D t 1 (t2 - t1)	28.384028	28.384028	OK
DF	0.995637	0.995637	OK
Sys Err	0.052280	0.052280	OK
K	0.005301	0.005301	OK
K MDA	0.795116	0.795116	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-07
Analysis Code	LSC-A-001
SDG	ARS1-B08-00342
Fraction	004
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	LA21-B08-10507
Instr File Name	84
Instr Detector	LC-S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	63.894000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.480400
Sample Aliquot	5.024000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/13/08 1:49 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	10722.136617	10722.136614	OK
CU	252.047576	252.047576	OK
TPU	1127.218933	1127.218932	OK
MDA	187.664710	187.664710	OK
DL	92.138998	92.138998	OK
Net Count Rate	57.198000	57.198000	OK
D t 1 (t2 - t1)	28.492361	28.492361	OK
DF	0.995621	0.995621	OK
Sys Err	0.052280	0.052280	OK
K	0.005335	0.005335	OK
K MDA	0.800186	0.800186	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-08
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	005
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	0921-08-10508
Instr File Name	84
Instr Detector	LS-S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	14.891000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.479800
Sample Aliquot	5.012000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 4:26 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1541.736641	1541.736640	OK
CU	139.883929	139.883929	OK
TPU	211.009228	211.009228	OK
MDA	188.340343	188.340343	OK
DL	92.470718	92.470718	OK
Net Count Rate	8.195000	8.195000	OK
D t 1 (t2 - t1)	28.184722	28.184722	OK
DF	0.995668	0.995668	OK
Sys Err	0.052280	0.052280	OK
K	0.005315	0.005315	OK
K MDA	0.797315	0.797315	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-09
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	001
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	D21-08-10511
Instr File Name	84
Instr Detector	LS-S-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	323.598000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.464500
Sample Aliquot	5.085000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 7:02 AM
Activity Units = pCi ~ - UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	EXCEL	VBA	V/V
ACT	60699.916521	60699.916504	OK
CU	557.088121	557.088121	OK
TPU	6244.712473	6244.712471	OK
MDA	191.754354	191.754354	OK
DL	94.146918	94.146918	OK
Net Count Rate	316.902000	316.902000	OK
D t 1 (t2 - t1)	28.293056	28.293056	OK
DF	0.995651	0.995651	OK
Sys Err	0.052280	0.052280	OK
K	0.005221	0.005221	OK
K MDA	0.783120	0.783120	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-10
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	002
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	0221-08-10512
Instr File Name	84
Instr Detector	5-S-11
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	193.550000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.475600
Sample Aliquot	5.052000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 9:39 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	35183.925672	35183.925662	OK
CU	426.416756	426.416756	OK
TPU	3630.365271	3630.365270	OK
MDA	188.505495	188.505495	OK
DL	92.551804	92.551804	OK
Net Count Rate	186.854000	186.854000	OK
D t 1 (t2 - t1)	28.402083	28.402083	OK
DF	0.995635	0.995635	OK
Sys Err	0.052280	0.052280	OK
K	0.005311	0.005311	OK
K MDA	0.796617	0.796617	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-11
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	003
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	D21-08-10513
Instr File Name	84
Instr Detector	LSS-12
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	14.126000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.476400
Sample Aliquot	5.049000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 12:15 PM
Activity Units = pCi --> uCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1397.545708	1397.545707	OK
CU	137.356391	137.356390	OK
TPU	198.429283	198.429283	OK
MDA	188.303905	188.303905	OK
DL	92.452828	92.452828	OK
Net Count Rate	7.430000	7.430000	OK
D t 1 (t2 - t1)	28.510417	28.510417	OK
DF	0.995618	0.995618	OK
Sys Err	0.052280	0.052280	OK
K	0.005316	0.005316	OK
K MDA	0.797469	0.797469	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-12
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	004
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	021-08-10514
Instr File Name	84
Instr Detector	5-S-13
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.935000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.472600
Sample Aliquot	5.039000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 2:52 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	805.354269	805.354269	OK
CU	127.665180	127.665180	OK
TPU	152.014747	152.014747	OK
MDA	190.197879	190.197879	OK
DL	93.382725	93.382725	OK
Net Count Rate	4.239000	4.239000	OK
D t 1 (t2 - t1)	28.619444	28.619444	OK
DF	0.995601	0.995601	OK
Sys Err	0.052280	0.052280	OK
K	0.005264	0.005264	OK
K MDA	0.789528	0.789528	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-13
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	005
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	321-08-10515
Instr File Name	84
Instr Detector	LS-S-14
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.754000
Sample Count Mins	180.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.461900
Sample Aliquot	5.042000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 2:00 PM
Count Date (t2)	3/13/08 5:28 PM
Activity Units = pCi --- DPM =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	982.557260	982.557260	OK
CU	133.532712	133.532712	OK
TPU	167.235262	167.235262	OK
MDA	194.473828	194.473828	OK
DL	95.482116	95.482116	OK
Net Count Rate	5.058000	5.058000	OK
D t 1 (t2 - t1)	28.144444	28.144444	OK
DF	0.995674	0.995674	OK
Sys Err	0.052280	0.052280	OK
K	0.005148	0.005148	OK
K MDA	0.772169	0.772169	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-14
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	006
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	0021-08-10516
Instr File Name	84
Instr Detector	LS-15
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453\20080312_0453.results
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453\H3 Results.rtf
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.1sa\20080312_0453\H3 Results.csv

Count Conditions-

Nuclide: H-3 Normal
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3 Normal
Count Time (min): 150.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	6.696	13.53	411.48	49.49	150.00	3/12/2008	4:58:20 AM	
5	2	B08-00504-01	10.762	21.58	416.15	49.87	150.00	3/12/2008	7:34:40 AM	
5	3	B08-00504-02	11.652	23.18	421.04	50.27	150.00	3/12/2008	10:11:01 AM	
5	4	B08-00504-03	5.930	11.91	415.39	49.81	150.00	3/12/2008	12:47:24 PM	
5	5	B08-00504-04	9.693	20.35	389.18	47.62	150.00	3/12/2008	3:23:49 PM	
5	6	B08-00504-05	10.883	22.53	397.01	48.31	150.00	3/12/2008	6:00:09 PM	
5	7	B08-00504-06	96.828	202.88	390.37	47.73	150.00	3/12/2008	8:36:32 PM	
5	8	B08-00504-07	7.850	16.48	389.37	47.64	150.00	3/12/2008	11:13:00 PM	
5	9	B08-00504-08	63.894	133.01	393.75	48.04	150.00	3/13/2008	1:49:23 AM	
5	10	B08-00504-09	14.891	31.04	393.13	47.98	150.00	3/13/2008	4:25:46 AM	
5	11	B08-00504-10	323.598	696.62	376.41	46.45	150.00	3/13/2008	7:02:07 AM	
5	12	B08-00504-11	193.550	406.97	388.52	47.56	150.00	3/13/2008	9:38:43 AM	
5	13	B08-00504-12	14.126	29.65	389.37	47.64	150.00	3/13/2008	12:15:27 PM	
5	14	B08-00504-13	10.935	23.14	385.25	47.26	150.00	3/13/2008	2:51:57 PM	
5	15	B08-00504-14	11.754	25.45	373.57	46.19	150.00	3/13/2008	5:28:21 PM	

ARS
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Laboratory Records

Analysis Batch Report

Analysis Batch ID **ARS1-B08-00504**

Method **ARS-054** **Matrix** **AQ**

Description **TRITIUM IN WATER**

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3
ARS1-B08-00504-01	LCS	B-04548		
ARS1-B08-00504-02	LCSD	B-04549		
ARS1-B08-00504-03	MBL			
ARS1-B08-00504-04	TRG			
ARS1-B08-00504-05	TRG			
ARS1-B08-00504-06	TRG			
ARS1-B08-00504-07	TRG			
ARS1-B08-00504-08	TRG			
ARS1-B08-00504-09	TRG			
ARS1-B08-00504-10	TRG			
ARS1-B08-00504-11	TRG			
ARS1-B08-00504-12	TRG			
ARS1-B08-00504-13	TRG			
ARS1-B08-00504-14	TRG			

SDG	1	FR	Client ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-08-00342	1	001	MD21-08-10504	03/14/08	03/11/08	LSC-A-001
ARS1-08-00342	1	002	MD21-08-10505	03/14/08	03/11/08	LSC-A-001
ARS1-08-00342	1	003	MD21-08-10506	03/14/08	03/11/08	LSC-A-001
ARS1-08-00342	1	004	MD21-08-10507	03/14/08	03/11/08	LSC-A-001
ARS1-08-00342	1	005	MD21-08-10508	03/14/08	03/11/08	LSC-A-001
ARS1-08-00341	1	001	MD21-08-10511	03/15/08	03/11/08	LSC-A-001
ARS1-08-00341	1	002	MD21-08-10512	03/15/08	03/11/08	LSC-A-001
ARS1-08-00341	1	003	MD21-08-10513	03/15/08	03/11/08	LSC-A-001
ARS1-08-00341	1	004	MD21-08-10514	03/15/08	03/11/08	LSC-A-001
ARS1-08-00341	1	005	MD21-08-10515	03/15/08	03/11/08	LSC-A-001
ARS1-08-00341	1	006	MD21-08-10516	03/15/08	03/11/08	LSC-A-001

Expected Value Calculations

LANL

ARS Batch Number: ARS1-B08 - 00504

LCS

CALCULATED EXPECTED VALUE = 1186.892

Range 593.446 - 1780.338

LCSD

CALCULATED EXPECTED VALUE = 1186.892

Range 593.446 - 1780.338

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	ACT	CU	TPU	DL	MDA	BP_DL	BP_MDA	Sb	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	EFF	ALIQ	UCF	CF	GrossCountRate
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516	729.5613536	119.9781421	141.3624584	88.19367	179.62905				0.07175	150.00000	0.04464	150.00000	0.49870	5.03400	2.22000	1.96000	10.76200
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516	882.3532865	122.0438832	151.8856648	87.50930	178.23514				0.07768	150.00000	0.04464	150.00000	0.50270	5.03300	2.22000	1.96000	11.65200
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516	-137.5540976	102.1146602	103.0828347	88.26484	179.77400				0.03953	150.00000	0.04464	150.00000	0.49810	5.03600	2.22000	1.96000	5.93000
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504	563.8064765	121.87931	134.8784652	92.46690	188.33257				0.06462	150.00000	0.04464	150.00000	0.47620	5.05000	2.22000	1.96000	9.69300
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505	779.2137813	124.8708848	148.2157523	91.47379	186.30984				0.07255	150.00000	0.04464	150.00000	0.48310	5.03200	2.22000	1.96000	10.88300
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506	16974.58913	306.6558308	1766.181887	92.56851	188.53951				0.64552	150.00000	0.04464	150.00000	0.47730	5.03300	2.22000	1.96000	96.82800
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507	217.704156	115.1444858	117.2855017	92.72651	188.86132				0.05233	150.00000	0.04464	150.00000	0.47640	5.03400	2.22000	1.96000	7.85000
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508	10722.13661	252.0475764	1127.218932	92.13900	187.66471				0.42596	150.00000	0.04464	150.00000	0.48040	5.02400	2.22000	1.96000	63.89400
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511	1541.73664	139.8839295	211.0092279	92.47072	188.34034				0.09927	150.00000	0.04464	150.00000	0.47980	5.01200	2.22000	1.96000	14.89100
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512	60699.9165	557.0881207	6244.712471	94.14692	191.75435				2.15732	150.00000	0.04464	150.00000	0.46450	5.08500	2.22000	1.96000	323.59800
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513	35183.92566	426.4167559	3630.36527	92.55180	188.50550				1.29033	150.00000	0.04464	150.00000	0.47560	5.05200	2.22000	1.96000	193.55000
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514	1397.545707	137.3563905	198.4292833	92.45283	188.30391				0.09417	150.00000	0.04464	150.00000	0.47640	5.04900	2.22000	1.96000	14.12600
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515	805.3542689	127.6651803	152.0147474	93.38272	190.19788				0.07290	150.00000	0.04464	150.00000	0.47260	5.03900	2.22000	1.96000	10.93500
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516	982.5572596	133.5327124	167.2352622	95.48212	194.47383				0.07836	150.00000	0.04464	150.00000	0.46190	5.04200	2.22000	1.96000	11.75400

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516	6.69600	4.06600							3/14/08 7:47	3/12/08 7:35	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516	6.69600	4.95600							3/14/08 7:47	3/12/08 10:11	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516	6.69600	-0.76600							3/14/08 7:47	3/12/08 12:47	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504	6.69600	2.99700							2/13/08 14:00	3/12/08 15:24	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505	6.69600	4.18700							2/13/08 14:00	3/12/08 18:00	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506	6.69600	90.13200							2/13/08 14:00	3/12/08 20:37	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507	6.69600	1.15400							2/13/08 14:00	3/12/08 23:13	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508	6.69600	57.19800							2/13/08 14:00	3/13/08 1:49	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511	6.69600	8.19500							2/14/08 0:00	3/13/08 4:26	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512	6.69600	316.90200							2/14/08 0:00	3/13/08 7:02	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513	6.69600	186.85400							2/14/08 0:00	3/13/08 9:39	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514	6.69600	7.43000							2/14/08 0:00	3/13/08 12:15	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515	6.69600	4.23900							2/14/08 0:00	3/13/08 14:52	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516	6.69600	5.05800							2/14/08 14:00	3/13/08 17:28	4499.80000		

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_1	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentkeV
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00557	0.83598	84	P-5-S-2	
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00562	0.84252	84	P-5-S-3	
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00557	0.83531	84	P-5-S-4	
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.05833						0.99569					0.05228	0.00532	0.79735	84	P-5-S-5	
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.16567						0.99567					0.05228	0.00537	0.80600	84	P-5-S-6	
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.27569						0.99565					0.05228	0.00531	0.79647	84	P-5-S-7	
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.38403						0.99564					0.05228	0.00530	0.79512	84	P-5-S-8	
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.49236						0.99562					0.05228	0.00533	0.80019	84	P-5-S-9	
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.18472						0.99567					0.05228	0.00532	0.79732	84	P-5-S-10	
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.29306						0.99565					0.05228	0.00522	0.78312	84	P-5-S-11	
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.40208						0.99563					0.05228	0.00531	0.79662	84	P-5-S-12	
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.51042						0.99562					0.05228	0.00532	0.79747	84	P-5-S-13	
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.61944						0.99560					0.05228	0.00526	0.78953	84	P-5-S-14	
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.14444						0.99567					0.05228	0.00515	0.77217	84	P-5-S-15	

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516					ARS1-08-00341	1	006		BSTEFFENS	3/14/08 7:46
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516					ARS1-08-00341	1	005		BSTEFFENS	3/14/08 7:46
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516					ARS1-08-00341	1	006		BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504					ARS1-08-00342	1	001	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505					ARS1-08-00342	1	002	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506					ARS1-08-00342	1	003	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507					ARS1-08-00342	1	004	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508					ARS1-08-00342	1	005	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511					ARS1-08-00341	1	001	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512					ARS1-08-00341	1	002	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513					ARS1-08-00341	1	003	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514					ARS1-08-00341	1	004	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515					ARS1-08-00341	1	005	LSC-A-001	BSTEFFENS	3/14/08 7:48
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516					ARS1-08-00341	1	006	LSC-A-001	BSTEFFENS	3/14/08 7:48

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
276	ARS1-B08-00504	ARS1-B08-00504-01		0	g	5.034	g	BSTEFFENS	3/11/2008
277	ARS1-B08-00504	ARS1-B08-00504-02		0	g	5.033	g	BSTEFFENS	3/11/2008
278	ARS1-B08-00504	ARS1-B08-00504-03		0	g	5.036	g	BSTEFFENS	3/11/2008
279	ARS1-B08-00504	ARS1-B08-00504-04	MD21-08-10504	0	g	5.05	g	BSTEFFENS	3/11/2008
280	ARS1-B08-00504	ARS1-B08-00504-05	MD21-08-10505	0	g	5.032	g	BSTEFFENS	3/11/2008
281	ARS1-B08-00504	ARS1-B08-00504-06	MD21-08-10506	0	g	5.033	g	BSTEFFENS	3/11/2008
282	ARS1-B08-00504	ARS1-B08-00504-07	MD21-08-10507	0	g	5.034	g	BSTEFFENS	3/11/2008
283	ARS1-B08-00504	ARS1-B08-00504-08	MD21-08-10508	0	g	5.024	g	BSTEFFENS	3/11/2008
284	ARS1-B08-00504	ARS1-B08-00504-09	MD21-08-10511	0	g	5.012	g	BSTEFFENS	3/11/2008
285	ARS1-B08-00504	ARS1-B08-00504-10	MD21-08-10512	0	g	5.085	g	BSTEFFENS	3/11/2008
286	ARS1-B08-00504	ARS1-B08-00504-11	MD21-08-10513	0	g	5.052	g	BSTEFFENS	3/11/2008
287	ARS1-B08-00504	ARS1-B08-00504-12	MD21-08-10514	0	g	5.049	g	BSTEFFENS	3/11/2008
288	ARS1-B08-00504	ARS1-B08-00504-13	MD21-08-10515	0	g	5.039	g	BSTEFFENS	3/11/2008
289	ARS1-B08-00504	ARS1-B08-00504-14	MD21-08-10516	0	g	5.042	g	BSTEFFENS	3/11/2008

LCS Report
Analytical Batch: ARS1-B08-00504

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
4523	B-04548	ARS1-B08-00504	ARS1-B08-00504-01	B-H3	S-0156	H-3	5	1.186887798	0	1	1	BSTEFFENS	3/10/2008
4524	B-04549	ARS1-B08-00504	ARS1-B08-00504-02	B-H3	S-0156	H-3	5	1.186887798	0	1	1	BSTEFFENS	3/10/2008

American Radiation Services
Baton Rouge Laboratory

ARS AMERICAN RADIATION SERVICES, INC.

Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0001	Am-241	S	06/07/07	06/07/08	OK	0?/16/06	[illegible]	51.7719?	[illegible]	S-0069		[illegible]
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	114.9737	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	Ra-226	S	05/29/07	05/29/08	OK	02/01/06	6.5915E+01?	64.9555	5.840E+05	S-0105		[illegible]
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.0192	5.053E+01	S-0109		
A	S-0023	Pu-23?	S	11/02/05	11/02/06	EXP	11/01/05	1.1652E+01?	11.4421	[illegible]	S-0079?		[illegible]
A	S-0024	Pu-239	S	04/17/07	04/17/08	OK	10/26/05	1.1412E+01	11.4113	8.807E+06	S-0073		
A	S-0027	Tc-99	SLC	09/01/06?	09/01/07	EXP	10/18/05	9.4141E+03	9414.0659?	7.710E+07	S-0113		[illegible]
A	S-0028	U-238	S	06/18/07	06/18/08	OK	10/26/05	3.4935E+01	34.9349	1.632E+12	S-0063		
A	S-0032	H-3	SL	[illegible]	04/05/08?	OK	09/01/06	[illegible]	3072.1668	4.500E+03	S-0031?		[illegible]
A	S-0033	Tc-99	SLC	10/18/05	10/18/06	EXP	10/18/05	1.9470E+02	194.6957	7.710E+07	S-0027	04/25/06	S-0033 Working level dilution - Information entered from dilution reco
A	S-0037	Ra-226	SC	02/15/06?	02/15/07	EXP	01/03/97	6.4930E+02	646.4198	5.840E+05	S-0104		[illegible]
A	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6543	2.692E+06	S-0067		S-0038 Entered from dilution documention. Density from certificate use
A	S-0039	Tc-99	SC	05/03/07	05/03/08	OK	03/30/06	[illegible]	11140.2687?	[illegible]	S-0114		[illegible]
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.5222	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions -
A	S-0063	U-238	P			Not Ver	08/01/97	2.4200E+02	242.0000	1.632E+12			[illegible]
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0036 Information entered on 4/4/2006 RTS Density entered based on m
A	S-0067	Am-243	PT			Not Ver	10/20/05	3.6240E+01?	36.2319?	2.692E+06			[illegible]
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records Dilution incorre
A	S-0071	Pu-239?	PL			Not Ver	11/15/02?	[illegible]	28.8782?	[illegible]			[illegible]
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2306	8.807E+06			S-0024 Information entered from dilution records
A	S-0074	Pu-239?	SL			Not Ver	10/26/05	[illegible]	[illegible]	8.807E+06	S-0073		[illegible]
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	S-0077	U-232	PT			Not Ver	07/01/02	[illegible]	136.0926?	2.516E+04			S-0025 Information entered from dilution records
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E+12			NIST 4321 - uranium standard for use as total uranium standard)also I
A	S-0103	U-nat	SC	06/18/07	06/18/08	OK	10/26/05	7.0226E+01	70.2265	1.632E+12	S-0102		[illegible]
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8219	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	01/01/93	1.1900E+01	11.8219	5.840E+05			[illegible]
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	371560.2754	4.500E+03			Primary for S-0029 - Information entered from dilution records - 4/18/
A	S-0108	Sr-90	PLC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0109	Sr-89	PLC			Not Ver	01/24/05	3.9414E+05	0.0628	5.053E+01			Activity concentration calculated per certificate information - 2.018E
A	S-0111	H-3	PC			Not Ver	04/01/06	[illegible]	[illegible]	4.500E+03			Primary
A	S-0112	H-3	SC	04/27/07	04/27/08	OK	04/18/06	1.1410E+04	10256.7200	4.500E+03	S-0111		Solution for use as calibration stock standard - Entered from dilution
A	S-0113	Tc-99	PLC			Not Ver	08/01/96	[illegible]	32608.7664	7.710E+07			Primary solution
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	S-0115	Cs-137	PL			Not Ver	01/23/98	2.9000E+01?	21.4274	1.098E+04			[illegible]
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4333	5.840E+05	S-0105		S-0003 - Information entered from dilution records - 4/19/2006 RTS
A	S-0117	Sr-90	PLCT			Not Ver	07/01/95	4.0100E+03	2944.9544	1.041E+04			[illegible]
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0186	1.098E+04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	04/19/06	04/19/07	EXP	04/03/06	1.1622E+04?	11113.8883	1.098E+04	S-0118		Solution for use as calibration stock standard
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9545	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	09/14/07	09/14/08	OK	03/31/06	1.1282E+04	10760.9851	1.041E+04	S-0120		Solution for use as calibration stock standard
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0985	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	04/24/06	04/24/07	EXP	04/03/06	1.1632E+04	11395.9536?	1.579E+05	S-0122		Solution for use as calibration stock standard
A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	01/27/06	1.0413E+04	10412.8314	2.753E+07	S-0124		[illegible]

Standards Report

A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	84733.1084	2.100E+03			Primary Ra-228 Standard
A	S-0127	Ra-226	SC	05/10/06	05/10/07	EXP	05/10/06	1.1222E+04	9039.0919	2.100E+03	S-0126		
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0503	7.710E+07	S-0039		Solution diluted per plan and as documented in measurements above exce
A	S-0129	Sr-90	PL			Not Ver	07/07/06	2.0100E+03	7944.0548	1.041E+04			
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	36.1444	2.100E+03	S-0127		Dilution performed as stated above by B Steffens on 5/10/2006. Measure
A	S-0134	Sr-90	SL			Not Ver	05/26/03	5.7998E+01	52.9412	1.041E+04	S-0129		
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	52.9412	1.041E+04	S-0134		Original standard ID# was T11c-1/S-0017. Information entered from dat
A	S-0137	Th-229	ST			Not Ver	12/08/03	6.0889E+02	608.6768	2.681E+06	S-0137		
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6768	2.681E+06	S-0137		Used as an intermediate standard for creating tracer stock solutions.
A	S-0139	C-14	PL			Not Ver	08/15/07	4.7320E+05	473080.5332	2.090E+06			
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5303	3.726E+04	S-0139		Primary Po-209 standard
A	S-0141	Ra-226	PC			Not Ver	07/07/06	2.7418E+04	26245.2659	5.840E+05			
A	S-0142	Ra-226	SC	04/03/07	04/03/08	OK	07/21/06	6.5210E+02	651.6350	5.840E+05	S-0141		Solution for use as calibration stock. Dilution performed as stated ab
A	S-0143	Pb-210	P			Not Ver	07/18/06	1.6961E+01	16.1136	8.130E+03	S-0143		
A	S-0144	Pb-210	S	10/24/07	10/24/08	OK	07/18/06	1.6961E+01	16.1136	8.130E+03	S-0143		ARS-WRM-091
A	S-0145	Th-229	ST			Not Ver	01/26/05	5.9588E+02	119.3464	2.681E+06	S-0135		7/18/2006 ARS-WRM-091 10 gamma spectroscopy measurements average net
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9794	2.681E+06	S-0145		
A	S-0147	Th-99	SC	05/01/07	05/01/08	EXP	05/09/06	2.5001E+02	232.0321	7.710E+07	S-0039		Information gathered from existing dilution records created on 4/28/20
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473080.5341	2.090E+06			Primary C-14 standard
A	S-0151	Sr-89	PLC			Not Yet	10/17/06	2.4389E+05	243899.6846	5.290E+05			
A	S-0152	H-3	P	04/02/08	04/02/09	OK	09/03/98	2.0090E+00	1.1761	4.500E+03			Liquid in a 500-ml borosilicate-glass media bottle with teflon-lined s
A	S-0153	C-14	S	03/12/07	03/12/08	OK	10/13/06	1.7245E+02	172.4207	2.090E+06	S-0148		
A	S-0155	Ra-226	SC	04/24/07	04/24/08	OK	07/21/06	6.5210E+01	65.1635	5.840E+05	S-0141		LCS standard for C-14. Originally logged as S-0150. See parent comment
A	S-0156	H-3	S	05/18/07	05/18/08	OK	04/27/07	2.7672E+00	2.6349	4.500E+03	S-0032		
A	S-0157	Sr-90	S			Not Ver	05/15/07	7.8040E+03	7483.6058	1.041E+04			Normal level tritium LCS standard. Dilution performed as stated above
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	825.5096	2.516E+04			Primary Sr-90 LCS standard
A	S-0159	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	286.1613	5.053E+01			Primary U-232 standard
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4437.2350	1.041E+04	S-0157		Primary Sr-89 standard.
A	S-0161	U-232	ST	06/18/07	06/18/08	OK	06/06/07	9.8656E+00	9.7909	2.516E+04	S-0161		Intermediate standard for creating LCS standards. Dilution performed a
A	S-0163	Sr-89	S	07/16/07	07/16/08	OK	06/12/07	7.4078E+01	66.9683	1.041E+04	S-0158		Dilution performed as stated above by GSteffens on 6/8/2007. -BJS 6/8/
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	286.1613	5.053E+01			
A	S-0165	Sr-89	SC	04/19/07	04/19/08	OK	05/05/07	1.2966E+03	122.6733	5.053E+01	S-0164		Primary Sr-89 calibration standard.
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6491	2.681E+06	S-0145		
A	S-0168	Pu-242	ST			Not Yet	08/07/07	2.2210E+01	20.3093	1.365E+08			Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS
A	S-0169	Pu-242	ST	12/27/07	12/27/08	OK	12/17/07	7.6719E+00	7.6719	1.365E+08	S-0168		Primary Pu-242 standard
A	S-0170	Th-230	PL			Not Yet	09/10/07	7.7823E+03	7923.4526	2.753E+07			Pu-242 tracer stock solution. Dilution performed as stated above by Ka
A	S-0171	Th-229	PT			Not Yet	09/10/07	7.7817E+01	77.8137	2.681E+06			Primary Th-230 standard.
A	S-0172	Th-230	S	02/21/08	02/21/09	OK	02/05/08	4.7041E+03	4704.0843	2.753E+07	S-0170		Primary Th-229 standard.
A	S-0173	Th-230	S	02/21/08	02/21/09	OK	02/05/08	1.2638E+01	12.6383	2.753E+07	S-0172		
A	S-0174	H-3	S			Not Yet	02/07/08	2.4435E+00	0.4445	4.500E+01	S-0152		Th-230 standard for use as LCS stock solution. Dilution performed as s
A	S-0175	H-3	S	02/11/08	02/11/09	OK	02/11/08	7.0455E-02	0.0702	4.500E+03	S-0152		
A	S-0176	H-3	S	02/20/08	02/20/09	OK	02/20/08	7.0279E-02	0.0701	4.500E+03	S-0152		Low level tritium LCS solution. Dilution performed as stated above by
I	S-0025	Pu-242	ST	04/17/07	04/17/08	OK	10/24/05	7.6328E+00	7.6328	1.365E+08	S-0075	01/09/08	S-0025 Information entered from dilution records
I	S-0026	U-232	ST	05/19/07	05/19/07	EXP	10/24/05	1.0854E+01	10.5978	2.516E+04	S-0077	06/12/07	S-0026 Information entered from dilution records

Standards Report

I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4123	4.500E+03			Tritium in Oil
I	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4895	2.753E+07	S-0065	02/22/08	Empirical data collected over 2 mos. for S-0836 indicated that the oil
I	S-0131	Sr-90	SL			Not Ver	02/02/06	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2036E+01	47.4991	1.041E+04	S-0134	07/17/07	Original standard ID# was T11c-1/S-0017. Dilution information entered
I	S-0150	C-14	SL			Not Ver	10/13/06	8.6764E+02	867.4964	2.090E+06	S-0149	03/16/07	LCS standard for C-14 in water. Dilution performed as stated above. -S

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B08-00504
SDG's: ARS1-08-00342,341

LCS	729.5614	**CSU**	141.3625
LCSD	882.3533	**CSU-D**	151.8857

DER = $\dfrac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\dfrac{152.7919}{103.7456}$ = 1.472756 **< 3**

% RPD= $\dfrac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\dfrac{152.7919}{805.9573}$ *100 = 18.95782 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\dfrac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\dfrac{152.7919329}{293.2481}$ 0.521033 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-137.5541	103.0828	179.774
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
3-10-08	17:09	B08-00519-10	B08-00519	1833	
↓	↓	B08-00519-11	↓	↓	
↓	↓	B08-00519-12	↓	↓	
↓	↓	B08-00519-13	↓	↓	
↓	↓	B08-00519-14	↓	↓	
3-11-08	15:17	SNC	QA	QA	
↓	↓	Background	B08-00504	0453	
↓	↓	B08-00504-01	↓	↓	
↓	↓	B08-00504-02	↓	↓	
↓	↓	B08-00504-03	↓	↓	
↓	↓	B08-00504-04	↓	↓	
↓	↓	B08-00504-05	↓	↓	
↓	↓	B08-00504-06	↓	↓	
↓	↓	B08-00504-07	↓	↓	
↓	↓	B08-00504-08	↓	↓	
↓	↓	B08-00504-09	↓	↓	
↓	↓	B08-00504-10	↓	↓	
↓	↓	B08-00504-11	↓	↓	
↓	↓	B08-00504-12	↓	↓	
↓	↓	B08-00504-13	↓	↓	

Reviewed By: _____ Date: 3-14-08
Initials

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
3-11-08	15:17	B08-00504-14	B08-00504	0453	
3-13-08	10:51	SNC	QA	QA	
↓	↓	Background	B08-00526	0453	
↓	↓	B08-00526-01	↓	↓	
↓	↓	B08-00526-01S	↓	↓	
↓	↓	B08-00526-02	↓	↓	
↓	↓	B08-00526-02S	↓	↓	
↓	↓	B08-00526-03	↓	↓	
↓	↓	B08-00526-03S	↓	↓	
↓	↓	B08-00526-04	↓	↓	
↓	↓	B08-00526-04S	↓	↓	
↓	↓	B08-00526-05	↓	↓	
↓	↓	B08-00526-05S	↓	↓	
				NA	3-14-08
					3-14-08
					3-14-08

Reviewed By: _____ Date: 3-14-08
Initials

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American Radiation Services Analytical Reports

for

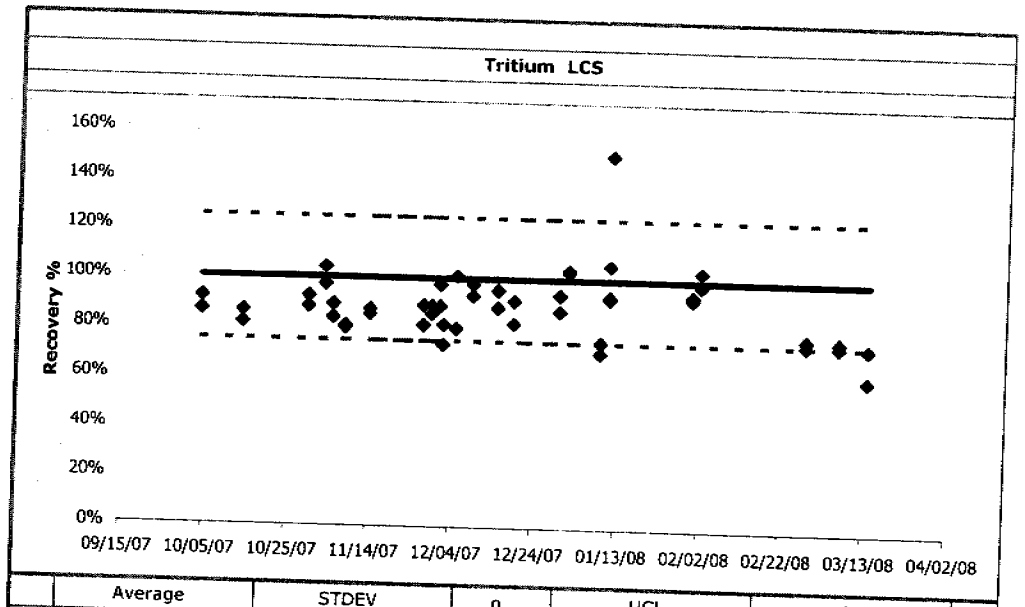
Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Control Charts

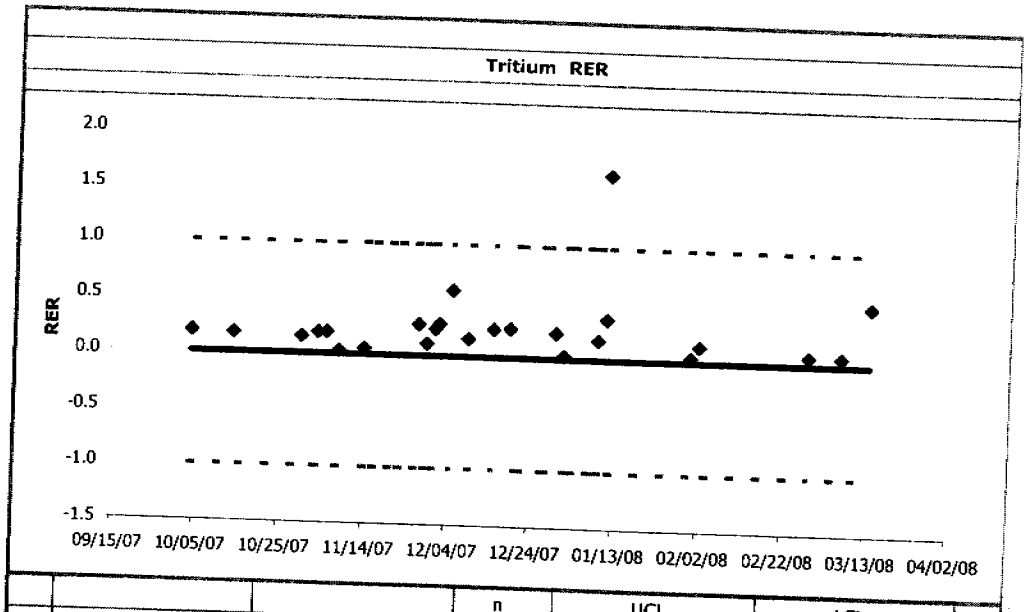
American Radiation Services
Baton Rouge Laboratory

QC Chart

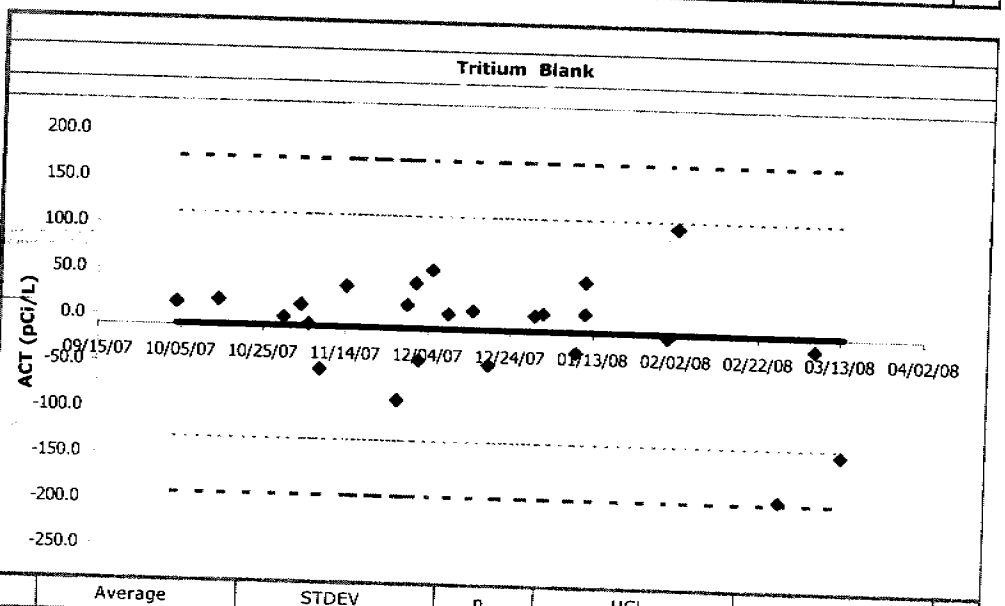
Printed: 3/14/2008 11:06 AM



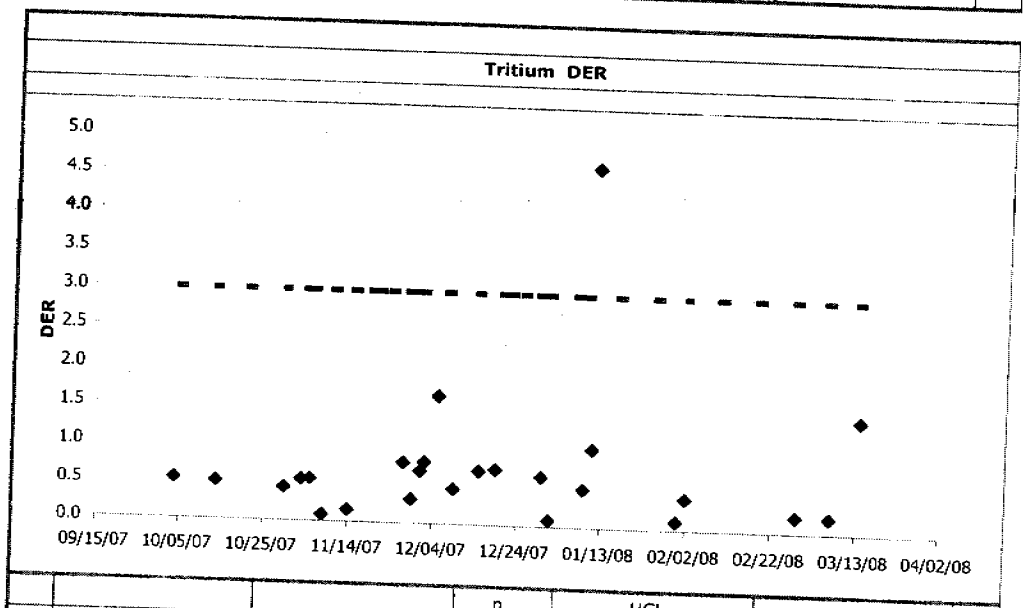
Average	STDEV	n	UCL	LCL
0.8916	0.1322	25	1.2500	0.7500



n	UCL	LCL
25	1.0000	-1.0000



Average	STDEV	n	UCL	LCL
-9.1688	60.8636	25	173.4220	-191.7597



n	UCL
25	3.0000

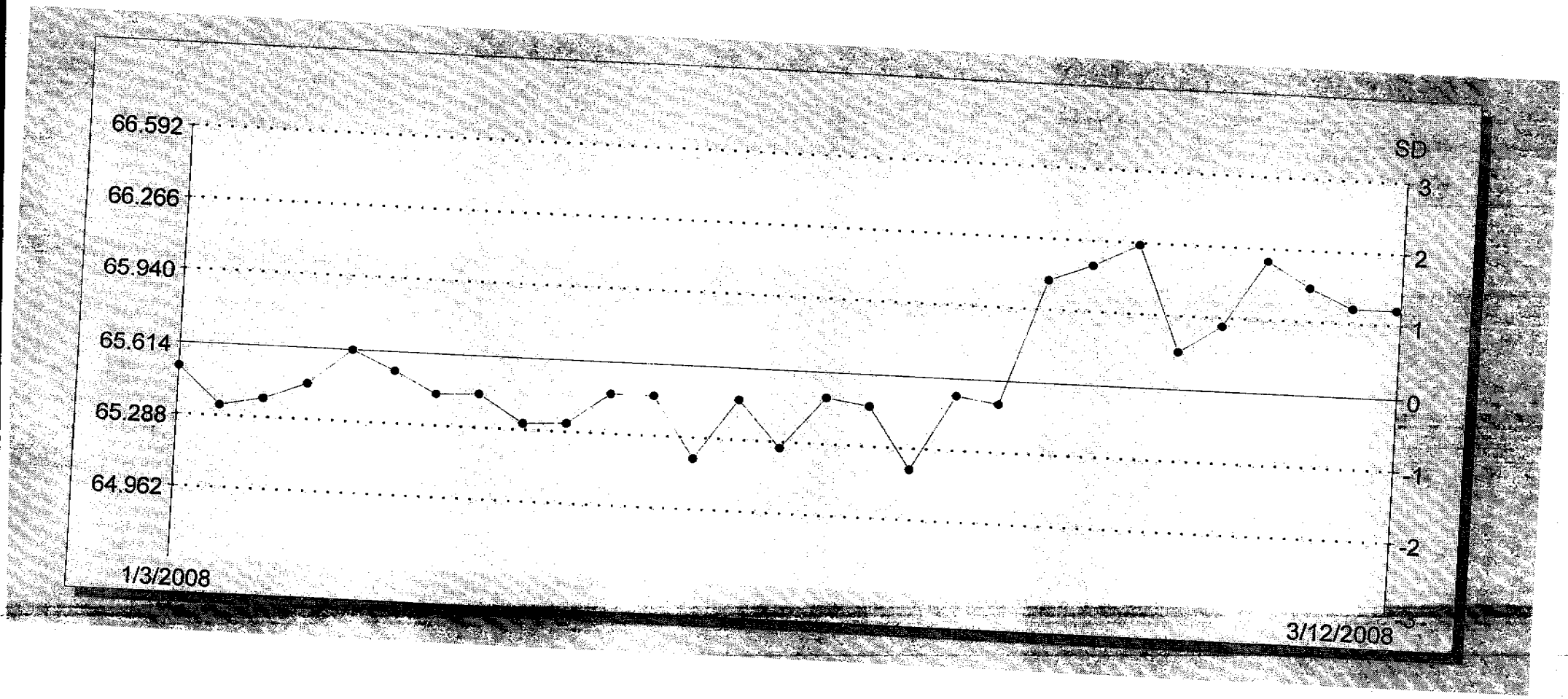
3H Efficiency

Total # pts	: 4142
Valid # pts	: 29
Mean	: 65.61
SD	: 0.33

Date	Value	Valid Pt
Jan 03, 2008	65.50	X
Jan 04, 2008	65.33	X
Jan 08, 2008	65.37	X
Jan 17, 2008	65.45	X
Jan 17, 2008	65.61	X
Jan 17, 2008	65.52	X
Jan 17, 2008	65.43	X
Jan 17, 2008	65.44	X
Jan 17, 2008	65.32	X
Jan 18, 2008	65.32	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.46	X
Jan 18, 2008	65.19	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.25	X
Jan 18, 2008	65.50	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.19	X
Jan 18, 2008	65.54	X
Jan 18, 2008	65.51	X
Jan 30, 2008	66.07	X
Jan 30, 2008	66.16	X
Feb 04, 2008	66.26	X
Feb 08, 2008	65.79	X
Feb 21, 2008	65.90	X
Feb 28, 2008	66.21	X
Mar 05, 2008	66.10	X
Mar 10, 2008	66.01	X
Mar 12, 2008	66.01	X

3H Efficiency

Total # pts	: 4142
Valid # pts	: 29
Mean	: 65.61
SD	: 0.33



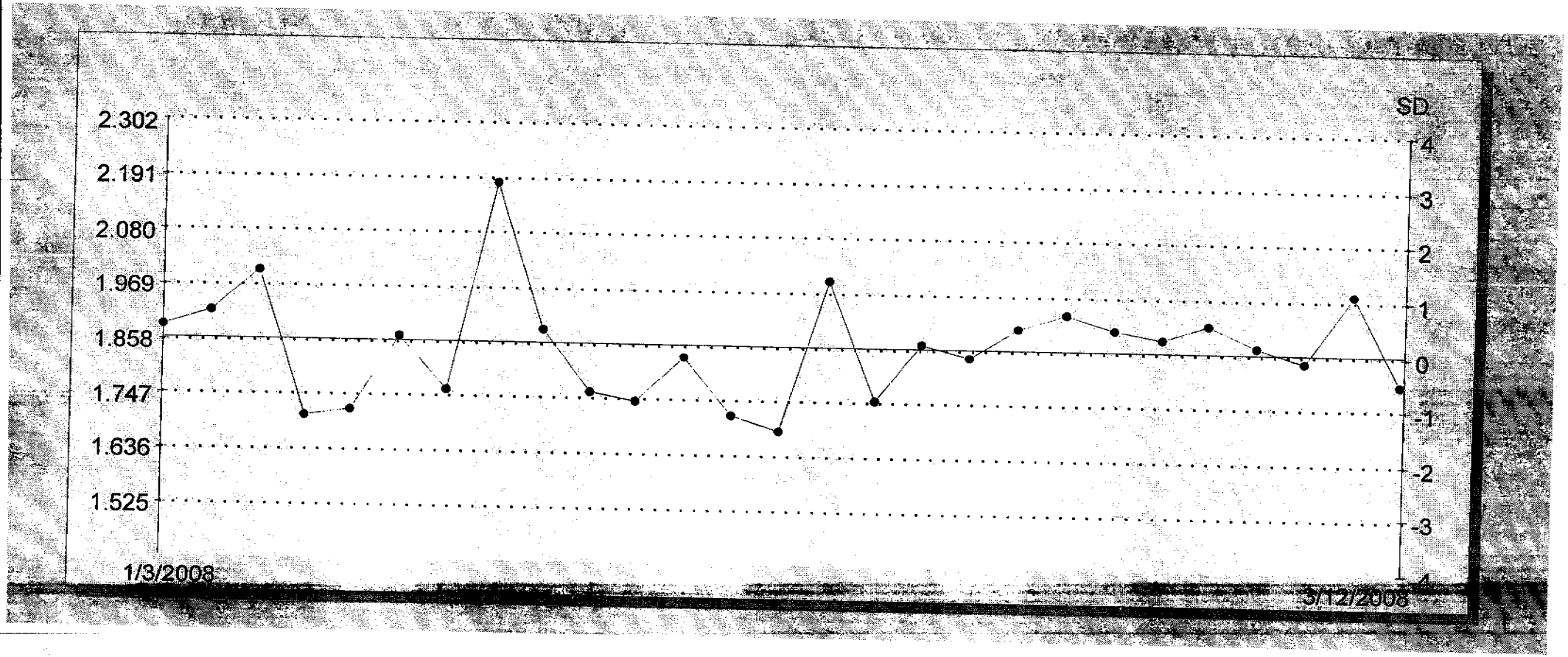
3H Background

Total # pts : 4092
Valid # pts : 27
Mean : 1.86
SD : 0.11

Date	Value	Valid Pt
Jan 03, 2008	1.89	X
Jan 04, 2008	1.92	X
Jan 08, 2008	2.00	X
Jan 17, 2008	1.70	X
Jan 17, 2008	1.72	X
Jan 17, 2008	1.87	X
Jan 17, 2008	1.76	X
Jan 17, 2008	2.19	X
Jan 17, 2008	1.89	X
Jan 18, 2008	1.76	X
Jan 18, 2008	1.75	X
Jan 18, 2008	1.84	X
Jan 18, 2008	1.72	X
Jan 18, 2008	1.69	X
Jan 18, 2008	2.00	X
Jan 18, 2008	1.75	X
Jan 18, 2008	1.87	X
Jan 18, 2008	1.84	X
Jan 18, 2008	1.90	X
Jan 18, 2008	1.94	X
Feb 04, 2008	1.90	X
Feb 08, 2008	1.89	X
Feb 21, 2008	1.92	X
Feb 28, 2008	1.88	X
Mar 05, 2008	1.84	X
Mar 10, 2008	1.98	X
Mar 12, 2008	1.80	X

3H Background

Total # pts	: 4092
Valid # pts	: 27
Mean	: 1.86
SD	: 0.11



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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Create a dilution of S-0032 for use as LCS stock solution**
Target dpm/g (on dil. date)	**2.76**
Target Final volume mL	**2000**
Appx mass g of Parent Sol'n	[redacted]
Appx vol ml of Parent Sol'n	[redacted]
Expected Addition for Analysis g	**5**
Standards Preparation / Dilution	
Secondary Solution #	[redacted]
Dilution Date (New Ref Date)	**04/27/2007 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[redacted]
Transfer Container, empty (g)	**17.8583**
Container Plus Solution (g)	**19.5702**
Net Wt Transferred (g)	[redacted]
DPM Xferred on 04/27/2007 00:00	[redacted]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[redacted]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**1997**
Dilution Final Volume ml (if measured)	**2000**
Final Dilution Density (g/mL)	[redacted]
Final Dilution Measured Mass g	[redacted]
Comments	**Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007**
Final Dilution dpm/g	[redacted]
Final Dil New Ref Date/Time	[redacted]

Parent Standard Data	
Parent Solution Reference #	[redacted]
Parent Solution #	[redacted]
Parent Principal Radionuclide	[redacted]
Half Life (Days)	[redacted]
Parent Reference Date	[redacted]
Parent Certified Act	[redacted]
Certi Act/Vol Units	dpm / g
Parent Cert Act Uncert 1 Sigma	[redacted]
Parent Sp. Gravity G/Ml	[redacted]
Parent Supplier	[redacted]
Parent Date Recvd	[redacted]
Parent Received By	[redacted]
Parent Cert Exp Date	[redacted]
Parent Matrix	[redacted]
Certified dpm/g At Ref Date	[redacted]
Certified dpm/g on 04/27/2007 00:00	[redacted]
Parent Comments	[redacted]
Parent Tech	[redacted]
Is_Primary	[redacted]
Is_LCS	[redacted]
Is_Tracer	[redacted]
Is_Calib	[redacted]

ARS AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION- Rev 1

VERIFICATION DATE 5/18/2007 0:00
SOLUTION REFERENCE # [redacted]

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.232E+01	4.500E+03

Radionuclide H-3 **Primary Dilution Reference Date** 4/27/2007 0:00

Primary Dilution Activity	1.25 pCi per gram ===> dpm/g	2.78
Verif. Date Decay Corrected	1.25 pCi per gram ===> dpm/g	2.77

Verification Trials

Trial ID#		
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000

Trial ID#		
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000

Trial ID	Count Time (min)	Count Cycles	Detector	Efficiency	Background	Net Counts	Activity Result (dpm/g)	Activity Result (pCi/g)
S-0156-1	12.198	1	LSC	0.4395	6.143	5.0100	2.75	1.24
S-0156-2	11.748	1	LSC	0.4325	6.143	5.0100	2.59	1.17
S-0156-3	11.822	1	LSC	0.434	6.143	5.0000	2.62	1.18

Average	2.65	1.19
Two Sigma Uncertainty	0.17	0.08
Standard Deviation percent of known concentration	3.14%	3.14%
Target Activity	2.77	1.25
% Diff	-4.15	-4.15

Prepared & Counted By [signature] **Verification Expiration Date:** May 17, 2008
Date: 5/18/2007 0:00

Verified & Approved By [signature]
Date: 5-18-07

QC Approval [signature]
Date: 5-18-07

Verifier's Name: Tony Byrd **Date:** 4/30/2007

Pipettor ID: CH84078

Pipettor ID:

Pipettor ID: CH80870

Standard ID: S-0112

Standard ID: S-0032 (S-0156)

	Weight of Standard		
15mL of Ultima Gold added to standard	S-0156-1	5.01 g	**Balance ID:** H1331122173560P
	S-0156-2	5.01 g	
	S-0156-3	5.00 g	
		g	
		g	
15mL of Ultima Gold added to standard	S-0112-1	1.03 g	**Balance ID:** H1331122173560P
	S-0112-2	1.08 g	
	S-0112-3	1.00 g	
		g	
		g	

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\20070517_1143.results
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.rtf
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for protocol 6.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

Protocol# 6 - Tritium for protocol 6.lsa

User: H3 Results

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
6	1	BACKGROUND	6.143	13.99	433.79	43.91	90.00	5/17/2007	11:48:37 AM	
6	2	~~S-0156-1 S-0032-1~~	12.198	27.76	434.24	43.95	90.00	5/17/2007	1:24:20 PM	
6	3	~~S-0156-2 S-0032-2~~	11.748	27.16	426.06	43.25	90.00	5/17/2007	3:00:09 PM	
6	4	~~S-0156-3 S-0032-3~~	11.822	27.24	427.76	43.40	90.00	5/17/2007	4:35:56 PM	

5-18-07

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Nancy M. Trahey, Chief
Standard Reference Materials Program

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g•mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq•g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol•L^{-1})	Mass Fraction (g•g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πβ gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πβ liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100.	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 and 6.

STD ID: S-0032

AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Dilute S-0031 to form intermediate level solution for controls**
Target dpm/g (on dil. date)	**3367**
Target Final volume mL	**200**
Appx mass g of Parent Sol'n	[redacted]
Appx vol ml of Parent Sol'n	[redacted]
Expected Addition for Analysis g	
Standards Preparation / Dilution	
Secondary Solution #	[redacted]
Dilution Date (New Ref Date)	**03/01/2006 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[redacted]
Transfer Container, empty (g)	**0**
Container Plus Solution (g)	**1.1544**
Net Wt Transferred (g)	[redacted]
DPM Xferred on 03/01/2006 00:00	[redacted]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[redacted]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**200.64**
Dilution Final Volume ml (if measured)	**200**
Final Dilution Density (g/mL)	[redacted]
Final Dilution Measured Mass g	[redacted]
Comments	**S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU**
Final Dilution dpm/g	[redacted]
Final Dil New Ref Date/Time	[redacted]

Parent Standard Data				
Parent Solution Reference #	[redacted]			
Parent Solution #	[redacted]			
Parent Principal Radionuclide	[redacted]	Half Life (Days)	[redacted]	
Parent Reference Date	[redacted]			
Parent Certified Act	[redacted]	Certi Act/Vol Units	dpm	g
Parent Cert Act Uncert 1 Sigma	[redacted]			
Parent Sp. Gravity G/Ml	[redacted]			
Parent Supplier	[redacted]			
Parent Date Recvd	[redacted]			
Parent Received By	[redacted]			
Parent Cert Exp Date				
Parent Matrix	[redacted]			
Certified dpm/g At Ref Date	[redacted]			
Certified dpm/g on 03/01/2006 00:00	[redacted]			
Parent Comments	[redacted]			
Parent Tech	[redacted]			
Is_Primary	[redacted]			
Is_LCS	[redacted]			
Is_Tracer	[redacted]			
Is_Calib	[redacted]			

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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10511
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-001
Date Received: 2/15/2008
Report Date: 03/14/08 10:45

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.200	NA	NA	NA		%	Moisture	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10512
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-002
Date Received: 2/15/2008
Report Date: 03/14/08 10:45

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	14.267	NA	NA	NA		%	Moisture	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamaigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10513
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-003
Date Received: 2/15/2008
Report Date: 03/14/08 10:45

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.582	NA	NA	NA		%	Moisture	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10514
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-004
Date Received: 2/15/2008
Report Date: 03/14/08 10:45

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.442	NA	NA	NA		%	Moisture	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanseigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10515
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-005
Date Received: 2/15/2008
Report Date: 03/14/08 10:45

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.618	NA	NA	NA		%	Moisture	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00341
Client Sample ID: MD21-08-10516
Sample Collection Date: 2/14/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-631
ARS Sample ID: ARS1-08-00341-006
Date Received: 2/15/2008
Report Date: 03/14/08 10:45

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.092	NA	NA	NA		%	Moisture	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoeigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10504
Sample Collection Date: 2/13/2008
Sample Matrix: Aqueous

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-001
Date Received: 2/14/2008
Report Date: 03/14/08 10:58

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.447	NA	NA	NA		%	ARS-054/ EPA 906.0	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerigne
Project Manager Review

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-00342, 00343
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-10504	ARS1-08-00342-001	604	455	149	20.036	5.05	**13.4469799**
MD21-08-10505	ARS1-08-00342-002	604	456	148	14.708	5.032	**9.93783784**
MD21-08-10506	ARS1-08-00342-003	608	455	153	18.019	5.033	**11.7771242**
MD21-08-10507	ARS1-08-00342-004	607	452	155	21.881	5.034	**14.1167742**
MD21-08-10508	ARS1-08-00342-005	603	455	147	18.986	5.024	**12.9156463**
MD21-08-10511	ARS1-08-00341-001	618	455	163	19.886	5.012	**12.2**
MD21-08-10512	ARS1-08-00341-002	614	461	153	21.829	5.085	**14.2673203**
MD21-08-10513	ARS1-08-00341-003	619	450	169	22.953	5.052	**13.5816568**
MD21-08-10514	ARS1-08-00341-004	619	454	165	22.18	5.049	**13.4424242**
MD21-08-10515	ARS1-08-00341-005	625	458	167	22.742	5.039	**13.6179641**
MD21-08-10516	ARS1-08-00341-006	610	456	155	20.292	5.042	**13.0916129**

Balance ID: 0102/1125183449
Pipettor ID: U66049

Signature [signature] Date/ Time 3-16-08

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for

Los Alamos National Laboratory

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ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 08-00341 Client Name: LANL Sample Matrix: AQ

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Ramsey 3-14-08
Report Generator Signature Date

Management Review Signature 3-14-08
Date

ARS AMERICAN RADIATION SERVICES, INC.

LSC
Technical Review Checklist

ARS SDG 08-00341

Sample Matrix: Silica Gel **Aliquot** (Circle One) : Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) (LCS) (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): **Batch A:** B08-00504 **Batch B:** _____ **Batch C:** _____

Test(s): LSC-A-001 _____ _____

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	Yes No (N/A)	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) **NCR #** (If initiated): _____

B. Bell 3-11-08
Chemist Signature **Date**

_____ _____
Analyst Signature **Date**

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	(Yes) No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) **NCR #** (If initiated): _____

B. Bell 3-14-08
Analyst Signature **Date**

Lindsay Ramsey 3-14-08
Project Manager Signature **Date**

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: B08-00534

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)
7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated):		
Lindsay Romeigne 3-14-08 Project Manager Signature Date	A Dailey 3/14/08 QA Officer Signature Date	

GENERAL COMMENTS

American Radiation Services
Baton Rouge Laboratory

DQO Report for SDG

ARS1-08-00341

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_UL	RER	RPD	DilutionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

Sample Check In Report
Samples

SDG **ARS1-08-00341**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	Level	2	
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	2/15/2008	COC No 1		
Project Type	Environmental		Client Deadline	3/15/2008	COC No 2		
Comments	REQ No 08-631		Internal Deadline	3/13/2008	COC No 3		
			Lab Deadline	3/11/2008	COC No 4		
			Workdays	FALSE			

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-10510	1	AQ	02/14/08 00:00	02/14/08 00:00	B1	H	90	5
002	MD21-08-10512	1	AQ	02/14/08 00:00	02/14/08 00:00	B1	H	90	5
003	MD21-08-10513	1	AQ	02/14/08 00:00	02/14/08 00:00	B1	H	90	5
004	MD21-08-10514	1	AQ	02/14/08 00:00	02/14/08 00:00	B1	H	90	5
005	MD21-08-10515	1	AQ	02/14/08 00:00	02/14/08 00:00	B1	H	90	5
006	MD21-08-10516	1	AQ	02/14/08 00:00	02/14/08 14:00	B1	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00341
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00341**

Fraction	Client ID	Comments
001	MD21-08-10511	
002	MD21-08-10512	
003	MD21-08-10513	
004	MD21-08-10514	
005	MD21-08-10515	
006	MD21-08-10516	

Sample Check In Report
Samples

SDG **ARS1-08-00341**

Client Code	114	Los Alamos National Laboratory	TAT Days	30			
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	2/15/2008		Level	2
Project Type	Environmental		Client Deadline	3/15/2008		COC No 1	
Comments	REQ No 08-631		Internal Deadline	3/13/2008		COC No 2	
			Lab Deadline	3/11/2008		COC No 3	
			Workdays	FALSE		COC No 4	

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-10510	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
002	MD21-10512	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
003	MD21-10513	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
004	MD21-10514	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
005	MD21-10515	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
006	MD21-10516	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00341
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00341**

Fraction	Client ID	Comments
001	MD21-10511	
002	MD21-10512	
003	MD21-10513	
004	MD21-10514	
005	MD21-10515	
006	MD21-10516	

Sample Check In Report
Samples

SDG **ARS1-08-00341**

Client Code	**114**	**Los Alamos National Laboratory**	TAT Days	**30**	Level	**2**	
Profile Number	**PN-00157**	**Location: New Mexico**	Date Received	**2/15/2008**			
Project Type	**Environmental**		Client Deadline	**3/15/2008**	COC No 1		
Comments	**REQ No 08-631**		Internal Deadline	**3/13/2008**	COC No 2		
			Lab Deadline	**3/11/2008**	COC No 3		
			Workdays	**FALSE**	COC No 4		

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-10511	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
002	MD21-10512	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
003	MD21-10513	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
004	MD21-10514	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
005	MD21-10515	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5
006	MD21-10516	1	AQ	02/14/08 14:00	02/14/08 14:00	B1	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00341
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00341**

Fraction	Client ID	Comments
001	MD21-10511	
002	MD21-10512	
003	MD21-10513	
004	MD21-10514	
005	MD21-10515	
006	MD21-10516	

ARS FILE TRACKING SHEET

SDG: **08-00341**

Task	Date / Time	Initials
Date & Time Received	2-15-08 / 09:54	RT
Storage Location: B1	2-27-08 / 11:25	RT
Chain of Custody Completed	2-27-08 / 11:25	RT
Report Written	3-14-08 / 11:21	LML
Laboratory Supervisor Checks Performed	See batch	NA
Quality Assurance Checks Performed on Report	3-14-08 / 1335	
Laboratory Director Check Performed on Report	3-14-08 15:17	
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 02/27/08 Shipper's Name: LANL

Technician Performing Inspection: Russell Thomas Initials: RT

SDG: **08-00341**

External and Internal Surveys

Exposure Rate Meter: 44-2 104898 Serial No: 013681 Calibration. Due Date: 05-21-08

Count Rate Meter: 44-9 109043 Serial No: 108796 Calibration. Due Date: 05-21-08

Background Exposure Rate (μR/hr) 15 Background Count Rate (cpm): 50

Max. Exposure Rate on Shipping Containers Externals (Including Background): 18

Max. Removable Count Rate on Shipping Container Externals (Including Background): 60

Max. Removable Count Rate on Shipping Container Internals (Including Background): 60

Max. Removable Count Rate on Sample Container Externals (Including Background): 60

Max. Exposure Rate on Sample Containers Externals (Including Background): 17

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? No If yes, were the seals intact? N/A

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 6

Was the pH of Aqueous Samples < 2? ____

If no, was the sample(s) checked for acid reactivity? ____ Was the sample(s) acidified to a pH < 2? ____

Matrix of Samples: AQ

Volume of Each Sample Container: 620

Brief Description of Sample Material: ____

Inspectors' Comments

ARS-062-001 r0

ARS LABEL SHEET

SDG: 08-00341

Analysis

ARS1-08-00341 **LSC-A-001**

Los Alamos National Laboratory

Tritium in (Water [Aqueous, AQ])

This Test Requires 6 of 6 Samples

Scan Analysis Code Here	Dates for This Test	
	Rcvd	2/15/2008
	Due	3/15/2008

SAMPLE CHECK-IN COMMENT SHEET

SDG: 08-00341

NOTES

COMPANY NAME: LANL SDG:

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

Shipping Container Survey

Outside 18 µR/hr 60 cpm

Inside 60 cpm

Rcv'd By

Date Rcv'd

Time Rcv'd

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☐ Yes	☑ No
Radioactive	☐ Yes	☑ No
# Samples Rcv	6	
pH < 2	☐ Yes	☐ No
If No... Acid Rxt	☐ Yes	☐ No
Acid'fd < 2	☐ Yes	☐ No

Intact ☑ Yes ☐ No

Matrix [AF , AQ , BI , FE , LT , SI , SO , UR , VG]

Record Sample Label, Exposure Rate and Count Rate for EACH SAMPLE in the area below:

Sample Lable/Comments/Notes	Weight/ Volume	µR/hr	cpm
MD21-08-10511	620	17	60
MD21-08-10512	620	17	60
MD21-08-10513	620	17	60
MD21-08-10514	620	17	60
MD21-08-10515	620	17	60
MD21-08-10516	620	17	60

Surveyors' Name: [signature] Date/Time Surveyed 2-27-08 11:05

ıursday, February 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-631C

REQUEST NUMBER: 08-631

OS ALAMOS

ATIONAL LABORATORY

ITN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/15/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

AMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
D21-08-10515	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10514	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10512	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10513	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10511	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10516	1	SILICA GEL TUBE	H3	None	GAS

elinquished By:		Date	Time	Received By:		Date	Time
		2/14/08	1400			2-15-8	09:59
rinted Name	Signature			Printed Name	Signature		
rinted Name	Signature			Printed Name	Signature		
rinted Name	Signature			Printed Name	Signature		

ieceived for DISPOSAL By:		Date	Time	Remarks:
rinted Name	Signature			

ıursday, February 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-631C

OS ALAMOS

REQUEST NUMBER: 08-631

ATIONAL LABORATORY

TTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/15/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

AMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
D21-08-10515	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10514	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10512	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10513	1	SILICA GEL TUBE	H3	None	GAS
D21-08-10511	1	SILICA GEL TUBE	H3	None	GAS
.D21-08-10516	1	SILICA GEL TUBE	H3	None	GAS

elinquished By:		Date	Time	Received By:		Date	Time
	3/14/08		1400		2-15-8		09:54
rinted Name	Signature			Printed Name	Signature		
rinted Name	Signature			Printed Name	Signature		
rinted Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
rinted Name	Signature			

Thursday, February 14, 2008

REQUEST NUMBER: 08-630

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-630
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/14/2008
TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-10511	GAS	2/14/2008		
		1	MD21-08-10512	GAS	2/14/2008		
		1	MD21-08-10513	GAS	2/14/2008		
		1	MD21-08-10514	GAS	2/14/2008		
		1	MD21-08-10515	GAS	2/14/2008		
		1	MD21-08-10516	GAS	2/14/2008		

Final Page of REQUEST NUMBER 08-630

Thursday, February 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-630C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-630

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/15/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10515	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10514	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10512	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10513	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10511	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10516	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature	2/14/08	1400	Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10511

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0927	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.2\ \%$

$CO_2 = 20.2\ \%$

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kenn Reid

RELINQUISHED BY (Printed Name) Kenn Reid (Signature) Kenn Reid	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10512

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0935	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	155.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:		port # 2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.2\ \%$

$CO_2 = 20.2\ \%$

COLLECTED BY (PRINT) ~~Eric Gruetz~~

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K Reid	2/14/08	(Printed Name)	2/14/08
(Signature)	1050	(Signature)	10:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10513

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0940	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 1.1\ \%$

$CO_2 = 20.3\ \%$

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Read	2/14/08	(Printed Name)	2/14/08
(Signature) [signature]	1050	(Signature) [signature]	10:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10514

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	328.0 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.7\%$

$O_2 = 20.4\%$

~~COLLECTED BY~~ (PRINT) Dial Stem

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Read	2/14/08 1058	(Printed Name)	2/14/08 10:50
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10515

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.6\%$

$CO_2 = 20.6\%$

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) K. Reid (Signature) [signature]	**Date/Time** 2/14/08 1050	**RECEIVED BY** (Printed Name) (Signature) [signature]	**Date/Time** 2/14/08 10:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10516

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/14/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0955	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-10515

SAMPLE COMMENTS:

LOCATION DESC:

port #5

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 0.6\%$

$CO_2 = 20.6\%$

COLLECTED BY (PRINT) ~~B. Grant~~

REVIEWED BY (PRINT) Kevin Reed

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) K. Reed	2/14/08	(Printed Name)	2/14/08
(Signature) Kevin Reed	1050	(Signature)	10:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-630 VALIDATION DATE: 3/14/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): VOC (TO-15)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The ICAL curve for methanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. The tetrahydrofuran mass spectrum for sample MD21-08-10513 did not meet method specifications. The associated sample result was a detect and, thus, was qualified U,V8. It should be noted that the cyclohexane mass spectra for samples -10512 and -10513 contained contamination from a co-eluting target analyte. No sample data were qualified as a result, based on professional judgment.
3. The ICAL %RSDs were >30% for methanol, methyl tert-butyl ether, n-butanol, and 4-methyl-2-pentanone. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
4. The CCV %D was >30% for methanol. The associated sample results were NDs and, thus, were qualified UJ,V7c.
5. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Data Validation Cover Sheet

Los Alamos NATIONAL LABORATORY

6. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

Reviewed By: KAS **Level:** I **Date:** 3/16/08

VALIDATOR'S SIGNATURE: Eric T. Mik DATE: 3/14/08

Form 5114-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☒	☐	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10511

Lab ID#: 0802328-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022127**	**Date of Collection:**	**2/14/08**
Dil. Factor:	**3.28**	**Date of Analysis:**	**2/22/08 07:49 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		1.6	2.7	8.1	13
Freon 114		1.6	Not Detected	11	Not Detected
Chloromethane		6.6	Not Detected	14	Not Detected
Vinyl Chloride		1.6	Not Detected	4.2	Not Detected
1,3-Butadiene		1.6	Not Detected	3.6	Not Detected
Bromomethane		1.6	Not Detected	6.4	Not Detected
Chloroethane		1.6	Not Detected	4.3	Not Detected
Freon 11		1.6	Not Detected	9.2	Not Detected
Ethanol		6.6	Not Detected	12	Not Detected
Freon 113		1.6	Not Detected	12	Not Detected
1,1-Dichloroethene		1.6	Not Detected	6.5	Not Detected
Acetone		6.6	Not Detected	16	Not Detected
2-Propanol		6.6	Not Detected	16	Not Detected
Carbon Disulfide		1.6	Not Detected	5.1	Not Detected
Methylene Chloride		1.6	10	5.7	36
Methyl tert-butyl ether	UJ,V7a	1.6	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene		1.6	Not Detected	6.5	Not Detected
Hexane		1.6	Not Detected	5.8	Not Detected
1,1-Dichloroethane		1.6	Not Detected	6.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)		1.6	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene		1.6	Not Detected	6.5	Not Detected
Tetrahydrofuran		1.6	Not Detected	4.8	Not Detected
Chloroform		1.6	84	8.0	410
1,1,1-Trichloroethane		1.6	5.4	8.9	29
Cyclohexane		1.6	Not Detected	5.6	Not Detected
Carbon Tetrachloride		1.6	25	10	160
Benzene		1.6	Not Detected	5.2	Not Detected
1,2-Dichloroethane		1.6	Not Detected	6.6	Not Detected
Heptane		1.6	Not Detected	6.7	Not Detected
Trichloroethene		1.6	180	8.8	980
1,2-Dichloropropane		1.6	Not Detected	7.6	Not Detected
1,4-Dioxane		6.6	Not Detected	24	Not Detected
Bromodichloromethane		1.6	Not Detected	11	Not Detected
cis-1,3-Dichloropropene		1.6	Not Detected	7.4	Not Detected
4-Methyl-2-pentanone	UJ,V7a	1.6	Not Detected	6.7	Not Detected
Toluene		1.6	Not Detected	6.2	Not Detected
trans-1,3-Dichloropropene		1.6	Not Detected	7.4	Not Detected
1,1,2-Trichloroethane		1.6	Not Detected	8.9	Not Detected
Tetrachloroethene		1.6	370	11	2500

0007

ETM
3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10511

Lab ID#: 0802328-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022127**	**Date of Collection: 2/14/08**	
Dil. Factor:	**3.28**	**Date of Analysis: 2/22/08 07:49 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		6.6	Not Detected	27	Not Detected
Dibromochloromethane		1.6	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)		1.6	Not Detected	13	Not Detected
Chlorobenzene		1.6	Not Detected	7.6	Not Detected
Ethyl Benzene		1.6	Not Detected	7.1	Not Detected
m,p-Xylene		1.6	Not Detected	7.1	Not Detected
o-Xylene		1.6	Not Detected	7.1	Not Detected
Styrene		1.6	Not Detected	7.0	Not Detected
Bromoform		1.6	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane		1.6	Not Detected	11	Not Detected
4-Ethyltoluene		1.6	Not Detected	8.1	Not Detected
1,3,5-Trimethylbenzene		1.6	Not Detected	8.1	Not Detected
1,2,4-Trimethylbenzene		1.6	Not Detected	8.1	Not Detected
1,3-Dichlorobenzene		1.6	Not Detected	9.9	Not Detected
1,4-Dichlorobenzene		1.6	Not Detected	9.9	Not Detected
alpha-Chlorotoluene		1.6	Not Detected	8.5	Not Detected
1,2-Dichlorobenzene		1.6	Not Detected	9.9	Not Detected
1,2,4-Trichlorobenzene		6.6	Not Detected	49	Not Detected
Hexachlorobutadiene		6.6	Not Detected	70	Not Detected
Chlorodifluoromethane		6.6	Not Detected	23	Not Detected
Methanol	UJ,V7a	160	Not Detected	210	Not Detected
n-Butanol	UJ,V7a	6.6	Not Detected	20	Not Detected
Propylene		6.6	Not Detected	11	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	105	70-130

0008 ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10512

Lab ID#: 0802328-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022206**	**Date of Collection:**	**2/14/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/22/08 02:31 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	2.0	4.2	10
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene		0.84	Not Detected	1.8	Not Detected
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	0.92	6.4	7.0
1,1-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Acetone		3.4	4.9	8.0	12
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	1.8	2.6	5.7
Methylene Chloride		0.84	64	2.9	220
Methyl tert-butyl ether	UJ,V7a	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran		0.84	Not Detected	2.5	Not Detected
Chloroform		0.84	74	4.1	360
1,1,1-Trichloroethane		0.84	4.5	4.6	24
Cyclohexane		0.84	1.6	2.9	5.4
Carbon Tetrachloride		0.84	27	5.3	170
Benzene		0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane		0.84	Not Detected	3.4	Not Detected
Heptane		0.84	Not Detected	3.4	Not Detected
Trichloroethene		0.84	98	4.5	520
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.84	Not Detected	3.4	Not Detected
Toluene		0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	Not Detected	4.6	Not Detected
Tetrachloroethene		0.84	65	5.7	440

0022

ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10512

Lab ID#: 0802328-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022206**	**Date of Collection:**	**2/14/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/22/08 02:31 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	84	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	105	70-130

0023

ETM
3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10513

Lab ID#: 0802328-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022208**	**Date of Collection: 2/14/08**	
Dil. Factor:	**1.68**	**Date of Analysis: 2/22/08 04:44 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	2.0	4.2	9.9
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene		0.84	Not Detected	1.8	Not Detected
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	1.2	6.4	9.0
1,1-Dichloroethene		0.84	1.2	3.3	5.0
Acetone		3.4	Not Detected	8.0	Not Detected
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	1.9	2.6	6.0
Methylene Chloride		0.84	180	2.9	640
Methyl tert-butyl ether	UJ,V7a	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	U,V8	0.84	0.94	2.5	2.8
Chloroform		0.84	91	4.1	450
1,1,1-Trichloroethane		0.84	3.8	4.6	21
Cyclohexane		0.84	1.6	2.9	5.6
Carbon Tetrachloride		0.84	49	5.3	310
Benzene		0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane		0.84	2.3	3.4	9.3
Heptane		0.84	Not Detected	3.4	Not Detected
Trichloroethene		0.84	120	4.5	620
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	0.90	5.6	6.0
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.84	Not Detected	3.4	Not Detected
Toluene		0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	0.83 J	4.6	4.6
Tetrachloroethene		0.84	28	5.7	190

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ETM
3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10513

Lab ID#: 0802328-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022208**	**Date of Collection: 2/14/08**	
Dil. Factor:	**1.68**	**Date of Analysis: 2/22/08 04:44 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	84	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.8	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

0063 ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10514

Lab ID#: 0802328-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022211**	**Date of Collection:**	**2/14/08**
Dil. Factor:	**2.24**	**Date of Analysis:**	**2/22/08 06:40 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		1.1	1.4	5.5	7.0
Freon 114		1.1	Not Detected	7.8	Not Detected
Chloromethane		4.5	Not Detected	9.2	Not Detected
Vinyl Chloride		1.1	Not Detected	2.9	Not Detected
1,3-Butadiene		1.1	Not Detected	2.5	Not Detected
Bromomethane		1.1	Not Detected	4.3	Not Detected
Chloroethane		1.1	Not Detected	3.0	Not Detected
Freon 11		1.1	Not Detected	6.3	Not Detected
Ethanol		4.5	Not Detected	8.4	Not Detected
Freon 113		1.1	1.4	8.6	10
1,1-Dichloroethene		1.1	2.1	4.4	8.3
Acetone		4.5	Not Detected	11	Not Detected
2-Propanol		4.5	Not Detected	11	Not Detected
Carbon Disulfide		1.1	Not Detected	3.5	Not Detected
Methylene Chloride		1.1	360	3.9	1200
Methyl tert-butyl ether	UJ,V7a	1.1	Not Detected	4.0	Not Detected
trans-1,2-Dichloroethene		1.1	Not Detected	4.4	Not Detected
Hexane		1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane		1.1	Not Detected	4.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		1.1	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene		1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran		1.1	Not Detected	3.3	Not Detected
Chloroform		1.1	110	5.5	540
1,1,1-Trichloroethane		1.1	1.7	6.1	9.3
Cyclohexane		1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride		1.1	58	7.0	370
Benzene		1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane		1.1	3.0	4.5	12
Heptane		1.1	Not Detected	4.6	Not Detected
Trichloroethene		1.1	120	6.0	620
1,2-Dichloropropane		1.1	Not Detected	5.2	Not Detected
1,4-Dioxane		4.5	Not Detected	16	Not Detected
Bromodichloromethane		1.1	Not Detected	7.5	Not Detected
cis-1,3-Dichloropropene		1.1	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	UJ,V7a	1.1	Not Detected	4.6	Not Detected
Toluene		1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene		1.1	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane		1.1	Not Detected	6.1	Not Detected
Tetrachloroethene		1.1	12	7.6	81

0086

ETM
3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10514

Lab ID#: 0802328-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022211**	**Date of Collection: 2/14/08**	
Dil. Factor:	**2.24**	**Date of Analysis: 2/22/08 06:40 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		4.5	Not Detected	18	Not Detected
Dibromochloromethane		1.1	Not Detected	9.5	Not Detected
1,2-Dibromoethane (EDB)		1.1	Not Detected	8.6	Not Detected
Chlorobenzene		1.1	Not Detected	5.2	Not Detected
Ethyl Benzene		1.1	Not Detected	4.9	Not Detected
m,p-Xylene		1.1	Not Detected	4.9	Not Detected
o-Xylene		1.1	Not Detected	4.9	Not Detected
Styrene		1.1	Not Detected	4.8	Not Detected
Bromoform		1.1	Not Detected	12	Not Detected
1,1,2,2-Tetrachloroethane		1.1	Not Detected	7.7	Not Detected
4-Ethyltoluene		1.1	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene		1.1	Not Detected	5.5	Not Detected
1,2,4-Trimethylbenzene		1.1	Not Detected	5.5	Not Detected
1,3-Dichlorobenzene		1.1	Not Detected	6.7	Not Detected
1,4-Dichlorobenzene		1.1	Not Detected	6.7	Not Detected
alpha-Chlorotoluene		1.1	Not Detected	5.8	Not Detected
1,2-Dichlorobenzene		1.1	Not Detected	6.7	Not Detected
1,2,4-Trichlorobenzene		4.5	Not Detected	33	Not Detected
Hexachlorobutadiene		4.5	Not Detected	48	Not Detected
Chlorodifluoromethane		4.5	Not Detected	16	Not Detected
Methanol	UJ,V7a	110	Not Detected	150	Not Detected
n-Butanol	UJ,V7a	4.5	Not Detected	14	Not Detected
Propylene		4.5	Not Detected	7.7	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	102	70-130

0087 ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10515

Lab ID#: 0802328-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022212**	**Date of Collection:**	**2/14/08**
Dil. Factor:	**3.36**	**Date of Analysis:**	**2/22/08 07:19 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		1.7	Not Detected	8.3	Not Detected
Freon 114		1.7	Not Detected	12	Not Detected
Chloromethane		6.7	Not Detected	14	Not Detected
Vinyl Chloride		1.7	Not Detected	4.3	Not Detected
1,3-Butadiene		1.7	Not Detected	3.7	Not Detected
Bromomethane		1.7	Not Detected	6.5	Not Detected
Chloroethane		1.7	Not Detected	4.4	Not Detected
Freon 11		1.7	Not Detected	9.4	Not Detected
Ethanol		6.7	Not Detected	13	Not Detected
Freon 113		1.7	Not Detected	13	Not Detected
1,1-Dichloroethene		1.7	3.9	6.7	15
Acetone		6.7	Not Detected	16	Not Detected
2-Propanol		6.7	Not Detected	16	Not Detected
Carbon Disulfide		1.7	Not Detected	5.2	Not Detected
Methylene Chloride		1.7	680	5.8	2400
Methyl tert-butyl ether	UJ,V7a	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene		1.7	Not Detected	6.7	Not Detected
Hexane		1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane		1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)		1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene		1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran		1.7	Not Detected	5.0	Not Detected
Chloroform		1.7	220	8.2	1000
1,1,1-Trichloroethane		1.7	Not Detected	9.2	Not Detected
Cyclohexane		1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride		1.7	73	10	460
Benzene		1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane		1.7	7.3	6.8	30
Heptane		1.7	Not Detected	6.9	Not Detected
Trichloroethene		1.7	170	9.0	890
1,2-Dichloropropane		1.7	Not Detected	7.8	Not Detected
1,4-Dioxane		6.7	Not Detected	24	Not Detected
Bromodichloromethane		1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene		1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	UJ,V7a	1.7	Not Detected	6.9	Not Detected
Toluene		1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene		1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane		1.7	Not Detected	9.2	Not Detected
Tetrachloroethene		1.7	5.0	11	34

0105 ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10515

Lab ID#: 0802328-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022212**	**Date of Collection: 2/14/08**	
Dil. Factor:	**3.36**	**Date of Analysis: 2/22/08 07:19 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		6.7	Not Detected	28	Not Detected
Dibromochloromethane		1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)		1.7	Not Detected	13	Not Detected
Chlorobenzene		1.7	Not Detected	7.7	Not Detected
Ethyl Benzene		1.7	Not Detected	7.3	Not Detected
m,p-Xylene		1.7	Not Detected	7.3	Not Detected
o-Xylene		1.7	Not Detected	7.3	Not Detected
Styrene		1.7	Not Detected	7.2	Not Detected
Bromoform		1.7	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane		1.7	Not Detected	12	Not Detected
4-Ethyltoluene		1.7	Not Detected	8.2	Not Detected
1,3,5-Trimethylbenzene		1.7	Not Detected	8.2	Not Detected
1,2,4-Trimethylbenzene		1.7	Not Detected	8.2	Not Detected
1,3-Dichlorobenzene		1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene		1.7	Not Detected	10	Not Detected
alpha-Chlorotoluene		1.7	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene		1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene		6.7	Not Detected	50	Not Detected
Hexachlorobutadiene		6.7	Not Detected	72	Not Detected
Chlorodifluoromethane		6.7	Not Detected	24	Not Detected
Methanol	UJ,V7a	170	Not Detected	220	Not Detected
n-Butanol	UJ,V7a	6.7	Not Detected	20	Not Detected
Propylene		6.7	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	98	70-130

0106 ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10516

Lab ID#: 0802328-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022216**	**Date of Collection: 2/14/08**	
Dil. Factor:	**4.56**	**Date of Analysis: 2/22/08 09:53 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		2.3	Not Detected	11	Not Detected
Freon 114		2.3	Not Detected	16	Not Detected
Chloromethane		9.1	Not Detected	19	Not Detected
Vinyl Chloride		2.3	Not Detected	5.8	Not Detected
1,3-Butadiene		2.3	Not Detected	5.0	Not Detected
Bromomethane		2.3	Not Detected	8.8	Not Detected
Chloroethane		2.3	Not Detected	6.0	Not Detected
Freon 11		2.3	Not Detected	13	Not Detected
Ethanol		9.1	Not Detected	17	Not Detected
Freon 113		2.3	Not Detected	17	Not Detected
1,1-Dichloroethene		2.3	3.6	9.0	14
Acetone		9.1	Not Detected	22	Not Detected
2-Propanol		9.1	Not Detected	22	Not Detected
Carbon Disulfide		2.3	Not Detected	7.1	Not Detected
Methylene Chloride		2.3	700	7.9	2400
Methyl tert-butyl ether	UJ,V7a	2.3	Not Detected	8.2	Not Detected
trans-1,2-Dichloroethene		2.3	Not Detected	9.0	Not Detected
Hexane		2.3	Not Detected	8.0	Not Detected
1,1-Dichloroethane		2.3	Not Detected	9.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)		2.3	Not Detected	6.7	Not Detected
cis-1,2-Dichloroethene		2.3	Not Detected	9.0	Not Detected
Tetrahydrofuran		2.3	Not Detected	6.7	Not Detected
Chloroform		2.3	220	11	1100
1,1,1-Trichloroethane		2.3	Not Detected	12	Not Detected
Cyclohexane		2.3	Not Detected	7.8	Not Detected
Carbon Tetrachloride		2.3	74	14	470
Benzene		2.3	Not Detected	7.3	Not Detected
1,2-Dichloroethane		2.3	7.2	9.2	29
Heptane		2.3	Not Detected	9.3	Not Detected
Trichloroethene		2.3	170	12	890
1,2-Dichloropropane		2.3	Not Detected	10	Not Detected
1,4-Dioxane		9.1	Not Detected	33	Not Detected
Bromodichloromethane		2.3	Not Detected	15	Not Detected
cis-1,3-Dichloropropene		2.3	Not Detected	10	Not Detected
4-Methyl-2-pentanone	UJ,V7a	2.3	Not Detected	9.3	Not Detected
Toluene		2.3	Not Detected	8.6	Not Detected
trans-1,3-Dichloropropene		2.3	Not Detected	10	Not Detected
1,1,2-Trichloroethane		2.3	Not Detected	12	Not Detected
Tetrachloroethene		2.3	4.8	15	32

0120

ETM
3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10516

Lab ID#: 0802328-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022216**	**Date of Collection: 2/14/08**	
Dil. Factor:	**4.56**	**Date of Analysis: 2/22/08 09:53 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		9.1	Not Detected	37	Not Detected
Dibromochloromethane		2.3	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)		2.3	Not Detected	18	Not Detected
Chlorobenzene		2.3	Not Detected	10	Not Detected
Ethyl Benzene		2.3	Not Detected	9.9	Not Detected
m,p-Xylene		2.3	Not Detected	9.9	Not Detected
o-Xylene		2.3	Not Detected	9.9	Not Detected
Styrene		2.3	Not Detected	9.7	Not Detected
Bromoform		2.3	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane		2.3	Not Detected	16	Not Detected
4-Ethyltoluene		2.3	Not Detected	11	Not Detected
1,3,5-Trimethylbenzene		2.3	Not Detected	11	Not Detected
1,2,4-Trimethylbenzene		2.3	Not Detected	11	Not Detected
1,3-Dichlorobenzene		2.3	Not Detected	14	Not Detected
1,4-Dichlorobenzene		2.3	Not Detected	14	Not Detected
alpha-Chlorotoluene		2.3	Not Detected	12	Not Detected
1,2-Dichlorobenzene		2.3	Not Detected	14	Not Detected
1,2,4-Trichlorobenzene		9.1	Not Detected	68	Not Detected
Hexachlorobutadiene		9.1	Not Detected	97	Not Detected
Chlorodifluoromethane		9.1	Not Detected	32	Not Detected
Methanol	UJ,V7a	230	Not Detected	300	Not Detected
n-Butanol	UJ,V7a	9.1	Not Detected	28	Not Detected
Propylene		9.1	Not Detected	16	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	105	70-130

0121

ETM
3/13/08

0802228

Thursday, February 14, 2008

REQUEST NUMBER: 08-630

0379

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-630
Per Agreement Number:TIPS#24256
Project Cost Code: MR3R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/14/2008
TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10511	GAS	2/14/2008		
		02A	1	MD21-08-10512	GAS	2/14/2008		
		03A	1	MD21-08-10513	GAS	2/14/2008		
		04A	1	MD21-08-10514	GAS	2/14/2008		
		05A	1	MD21 08 10515	GAS	2/14/2008		
		06A	1	MD21-08-10516	GAS	2/14/2008		

Final Page of REQUEST NUMBER 08-630

Thursday, February 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-630C

REQUEST NUMBER: 08-630

0802328

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/15/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10515	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10514	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10512	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10513	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10511	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10516	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]		2/14/08	1400				
Printed Name	Signature			Printed Name	Signature		
				Monica Gregson	ATL	2/15/08	845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Fed Ex
9363 3642 6819

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Request # 08-630

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

RECD MAR 03 2008

Work Order #: 0802328

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Comments:

Completed by:

Kara McKiernan | Kara McKiernan / Document Control | 3/3/08

(Signature) | (Print Name & Title) | (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0802328

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-630
DATE RECEIVED:	02/15/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	02/29/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-10511	Modified TO-15	5.5 "Hg	5 psi
02A	MD21-08-10512	Modified TO-15	6.0 "Hg	5 psi
02AA	MD21-08-10512 Lab Duplicate	Modified TO-15	6.0 "Hg	5 psi
03A	MD21-08-10513	Modified TO-15	6.0 "Hg	5 psi
04A	MD21-08-10514	Modified TO-15	6.0 "Hg	5 psi
05A	MD21-08-10515	Modified TO-15	6.0 "Hg	5 psi
06A	MD21-08-10516	Modified TO-15	6.5 "Hg	5 psi
07A	Lab Blank	Modified TO-15	NA	NA
07B	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
08B	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA
09B	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda A. Frumarc DATE: 02/29/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0802328

LUMEN DATA VALIDATED

Six 6 Liter Summa Canister samples were received on February 15, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

0002

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-08-10511	0802328-01A	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
MD21-08-10512	0802328-02A	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
MD21-08-10512 Lab Dup	0802328-02AA	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
MD21-08-10513	0802328-03A	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
MD21-08-10514	0802328-04A	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
MD21-08-10515	0802328-05A	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
MD21-08-10516	0802328-06A	2/14/2008	2/15/2008	NA	8	2/22/2008	NA	Good
Lab Blank	0802328-07A	NA	NA	NA	NA	2/21/2008	NA	Good
Lab Blank	0802328-07B	NA	NA	NA	NA	2/22/2008	NA	Good
CCV	0802328-08A	NA	NA	NA	NA	2/21/2008	NA	Good
CCV	0802328-08B	NA	NA	NA	NA	2/22/2008	NA	Good
LCS	0802328-09A	NA	NA	NA	NA	2/21/2008	NA	Good
LCS	0802328-09B	NA	NA	NA	NA	2/22/2008	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10511

Lab ID#: 0802328-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.6	2.7	8.1	13
Methylene Chloride	1.6	10	5.7	36
Chloroform	1.6	84	8.0	410
1,1,1-Trichloroethane	1.6	5.4	8.9	29
Carbon Tetrachloride	1.6	25	10	160
Trichloroethene	1.6	180	8.8	980
Tetrachloroethene	1.6	370	11	2500

0006

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10511

Lab ID#: 0802328-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.6	2.7	8.1	13
Freon 114	1.6	Not Detected	11	Not Detected
Chloromethane	6.6	Not Detected	14	Not Detected
Vinyl Chloride	1.6	Not Detected	4.2	Not Detected
1,3-Butadiene	1.6	Not Detected	3.6	Not Detected
Bromomethane	1.6	Not Detected	6.4	Not Detected
Chloroethane	1.6	Not Detected	4.3	Not Detected
Freon 11	1.6	Not Detected	9.2	Not Detected
Ethanol	6.6	Not Detected	12	Not Detected
Freon 113	1.6	Not Detected	12	Not Detected
1,1-Dichloroethene	1.6	Not Detected	6.5	Not Detected
Acetone	6.6	Not Detected	16	Not Detected
2-Propanol	6.6	Not Detected	16	Not Detected
Carbon Disulfide	1.6	Not Detected	5.1	Not Detected
Methylene Chloride	1.6	10	5.7	36
Methyl tert-butyl ether	1.6	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.6	Not Detected	6.5	Not Detected
Hexane	1.6	Not Detected	5.8	Not Detected
1,1-Dichloroethane	1.6	Not Detected	6.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.6	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.6	Not Detected	6.5	Not Detected
Tetrahydrofuran	1.6	Not Detected	4.8	Not Detected
Chloroform	1.6	84	8.0	410
1,1,1-Trichloroethane	1.6	5.4	8.9	29
Cyclohexane	1.6	Not Detected	5.6	Not Detected
Carbon Tetrachloride	1.6	25	10	160
Benzene	1.6	Not Detected	5.2	Not Detected
1,2-Dichloroethane	1.6	Not Detected	6.6	Not Detected
Heptane	1.6	Not Detected	6.7	Not Detected
Trichloroethene	1.6	180	8.8	980
1,2-Dichloropropane	1.6	Not Detected	7.6	Not Detected
1,4-Dioxane	6.6	Not Detected	24	Not Detected
Bromodichloromethane	1.6	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.6	Not Detected	7.4	Not Detected
4-Methyl-2-pentanone	1.6	Not Detected	6.7	Not Detected
Toluene	1.6	Not Detected	6.2	Not Detected
trans-1,3-Dichloropropene	1.6	Not Detected	7.4	Not Detected
1,1,2-Trichloroethane	1.6	Not Detected	8.9	Not Detected
Tetrachloroethene	1.6	370	11	2500

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10511

Lab ID#: 0802328-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.6	Not Detected	27	Not Detected
Dibromochloromethane	1.6	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.6	Not Detected	13	Not Detected
Chlorobenzene	1.6	Not Detected	7.6	Not Detected
Ethyl Benzene	1.6	Not Detected	7.1	Not Detected
m,p-Xylene	1.6	Not Detected	7.1	Not Detected
o-Xylene	1.6	Not Detected	7.1	Not Detected
Styrene	1.6	Not Detected	7.0	Not Detected
Bromoform	1.6	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane	1.6	Not Detected	11	Not Detected
4-Ethyltoluene	1.6	Not Detected	8.1	Not Detected
1,3,5-Trimethylbenzene	1.6	Not Detected	8.1	Not Detected
1,2,4-Trimethylbenzene	1.6	Not Detected	8.1	Not Detected
1,3-Dichlorobenzene	1.6	Not Detected	9.9	Not Detected
1,4-Dichlorobenzene	1.6	Not Detected	9.9	Not Detected
alpha-Chlorotoluene	1.6	Not Detected	8.5	Not Detected
1,2-Dichlorobenzene	1.6	Not Detected	9.9	Not Detected
1,2,4-Trichlorobenzene	6.6	Not Detected	49	Not Detected
Hexachlorobutadiene	6.6	Not Detected	70	Not Detected
Chlorodifluoromethane	6.6	Not Detected	23	Not Detected
Methanol	160	Not Detected	210	Not Detected
n-Butanol	6.6	Not Detected	20	Not Detected
Propylene	6.6	Not Detected	11	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	105	70-130

0008

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AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022127.d
Lab Smp Id: 0802328-01A
Inj Date : 22-FEB-2008 07:49
Operator : JP Inst ID: msdt.i
Smp Info : 100mL #12666
Misc Info : 5.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 3.28000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	237892	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	187460			27.38- 127.38	78.80
13.893	13.865 (1.000)	49	369099			131.81- 231.81	155.15
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	922059	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	148503			0.00- 66.79	16.11
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	899038	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	515565			7.58- 107.58	57.35
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.943 (1.076)	65	411588	26.8883	26.888	80.00- 120.00	100.00
14.944	14.943 (1.076)	67	199106			3.57- 103.57	48.38
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	929848	26.1798	26.180	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	111579			0.00- 61.29	12.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	639189			18.71- 118.71	68.74
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	610533	26.2544	26.254	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	762970			76.46- 176.46	124.97
22.796	22.796 (1.096)	176	578501			48.22- 148.22	94.75
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	37698	0.81154	2.662	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	12541			0.00- 82.13	33.27
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	43880	3.18375	10.443	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	38024			38.51- 138.51	86.65
11.128	11.100 (0.801)	51	14954			0.00- 83.83	34.08
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	883223	25.5625	83.845	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	581950			14.81- 114.81	65.89
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.308	14.280 (1.030)	97	62406	1.63296	5.356	80.00- 120.00	100.00
14.308	14.280 (1.030)	99	38319			14.28- 114.28	61.40
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	276444	7.53040	24.700	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	292453			56.24- 156.24	105.79
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	1097717	55.6009	182.37	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	1015984			39.09- 139.09	92.55
16.105	16.077 (1.030)	97	702472			12.68- 112.68	63.99
120 Tetrachloroethene					CAS #: 127-18-4		
19.285	19.284 (0.927)	166	3097109	112.862	370.19	80.00- 120.00	100.00
19.285	19.284 (0.927)	129	2240763			18.51- 118.51	72.35
19.285	19.284 (0.927)	131	2084254			15.29- 115.29	67.30

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022127.d
Lab Smp Id: 0802328-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: JP
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	237892	-25.23
97 1,4-Difluorobenze	1251468	750881	1752055	922059	-26.32
126 Chlorobenzene-d5	1150991	690595	1611387	899038	-21.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802328-01A
Level: LOW
Operator: JP
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.888	107.55	70-130
$ 113 Toluene-d8	25.000	26.180	104.72	70-130
$ 137 Bromofluorobenzene	25.000	26.254	105.02	70-130

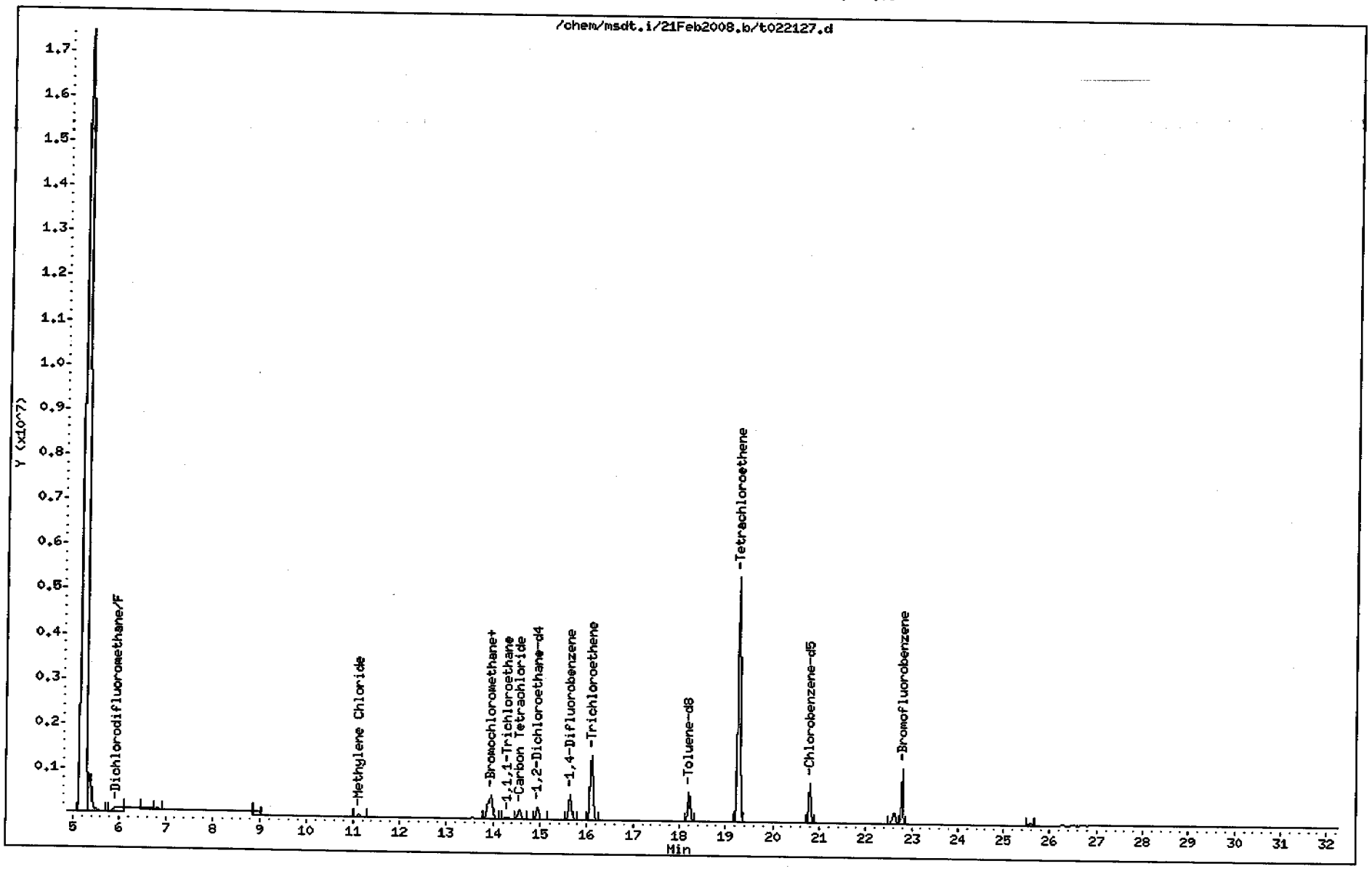
Data File: /chem/msdt.i/21Feb2008.b/t022127.d
Date : 22-FEB-2008 07:49
Client ID:
Sample Info: 100mL #12666

Column phase: RTx-624

Instrument: msdt.i

Operator: JP
Column diameter: 0.53

0013



Data File: /chem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Instrument: msdt.i

Sample Info: 100mL #12666

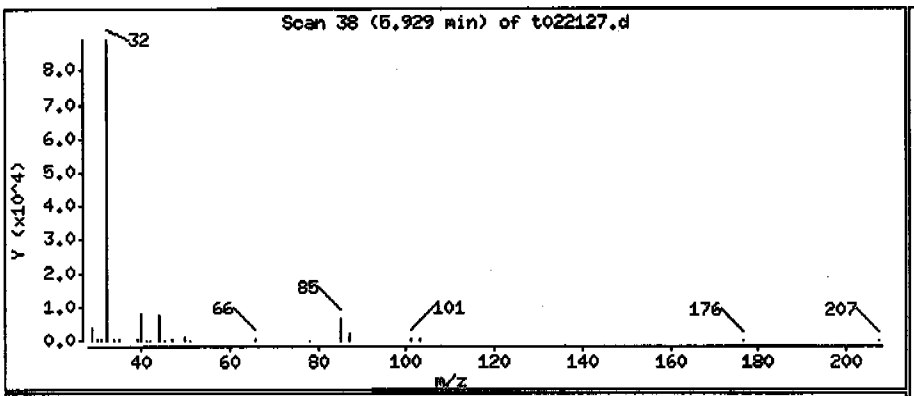
Operator: JP

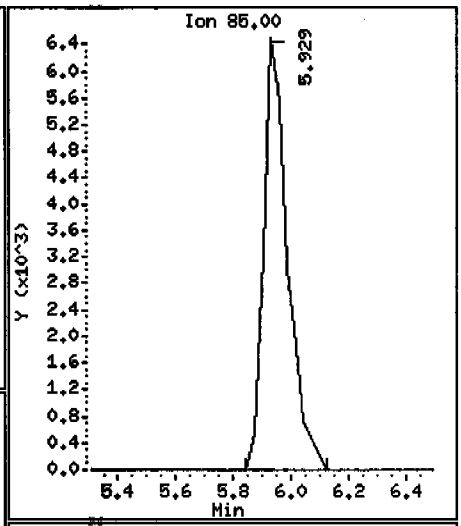
Column phase: RTx-624

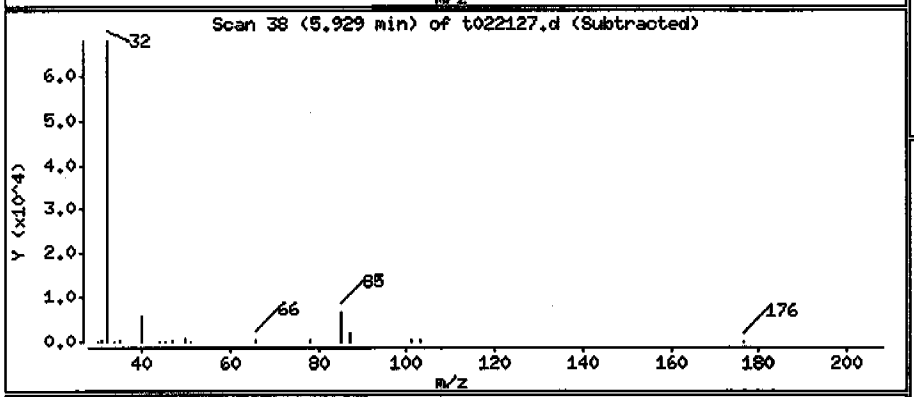
Column diameter: 0.53

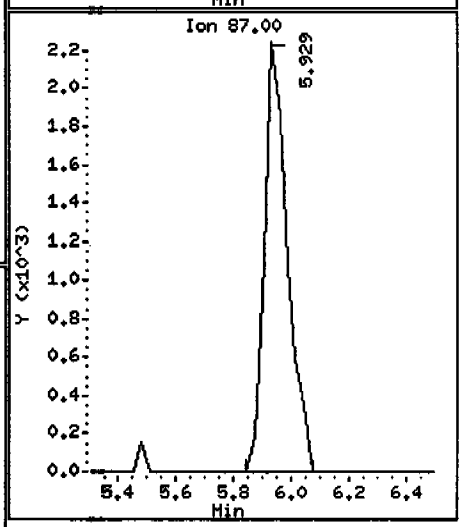
12 Dichlorodifluoromethane/Fr12

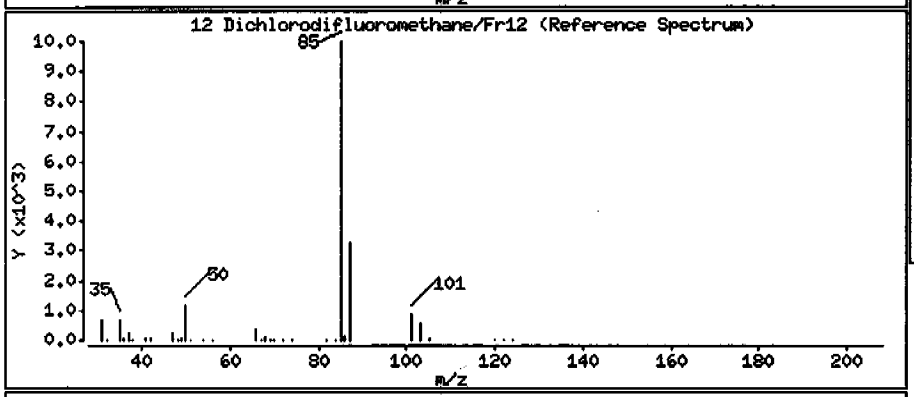
Concentration: 2.662 PPBV

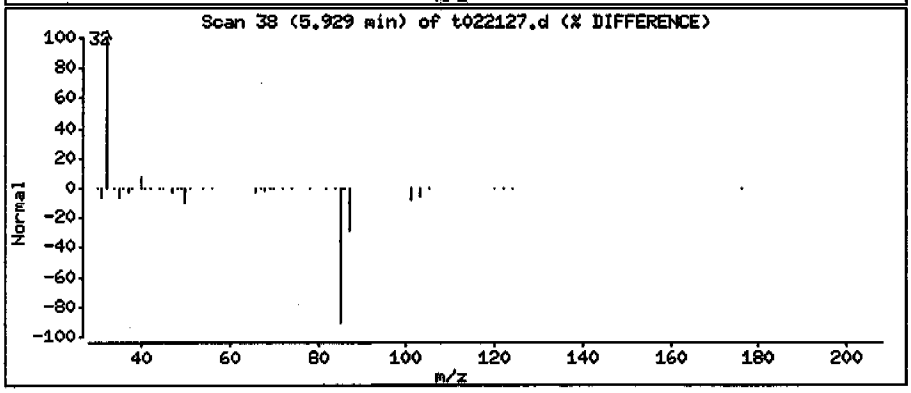












Data File: /chem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Instrument: msdt.i

Sample Info: 100mL #12666

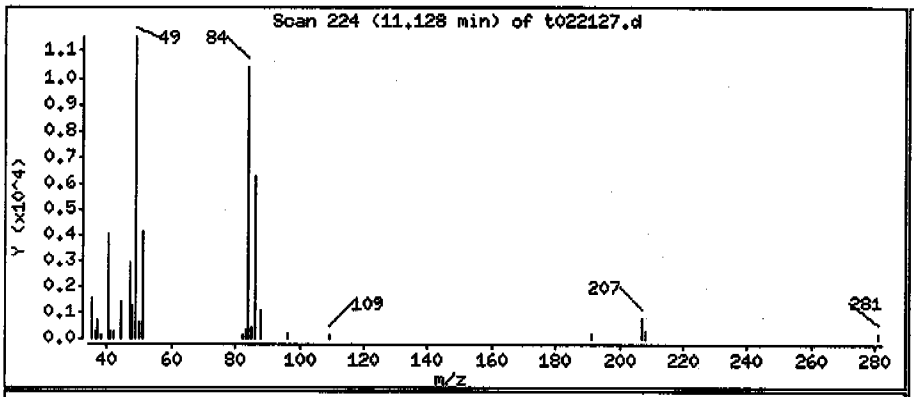
Operator: JP

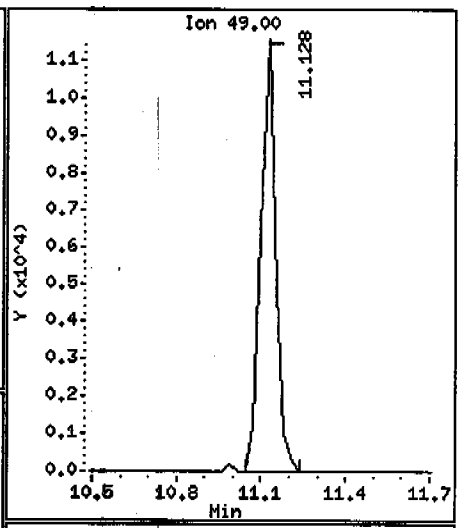
Column phase: RTx-624

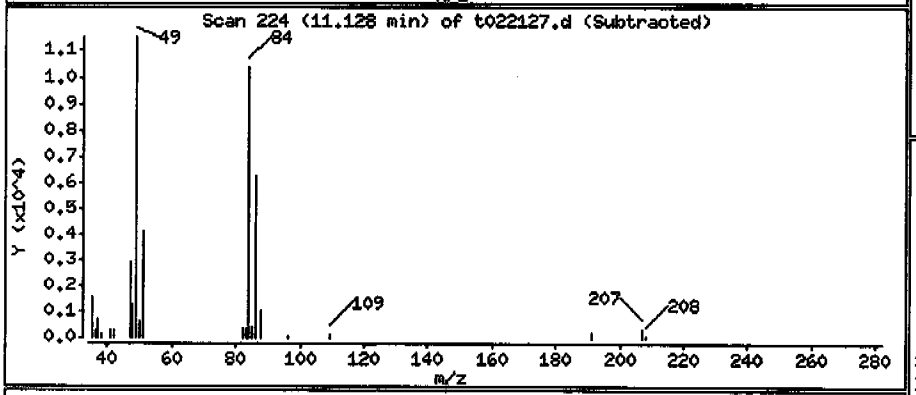
Column diameter: 0.53

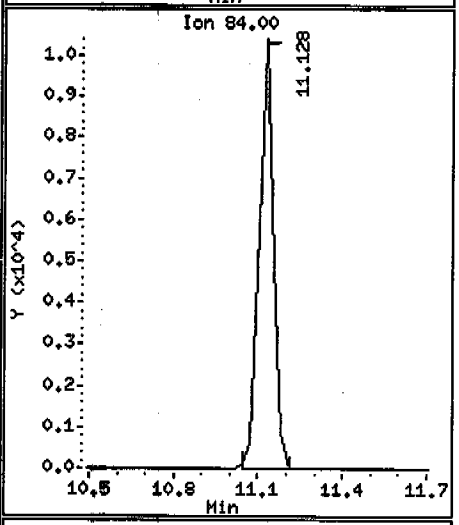
54 Methylene Chloride

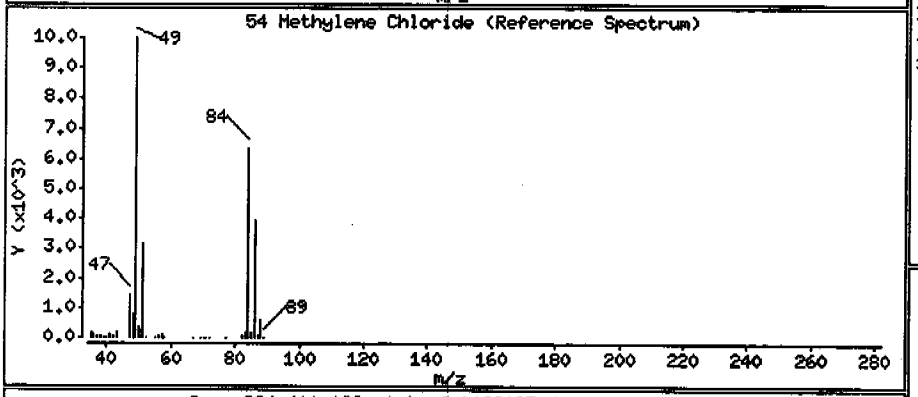
Concentration: 10.443 PPBV

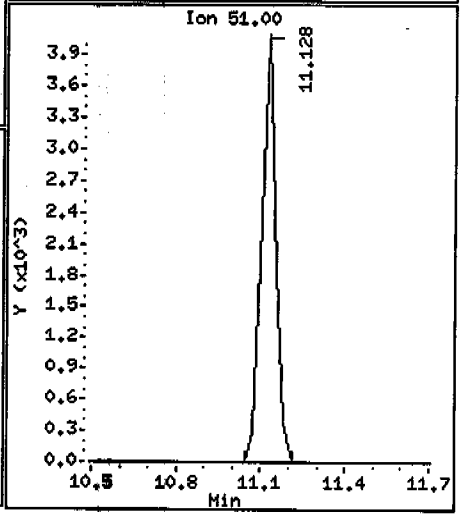


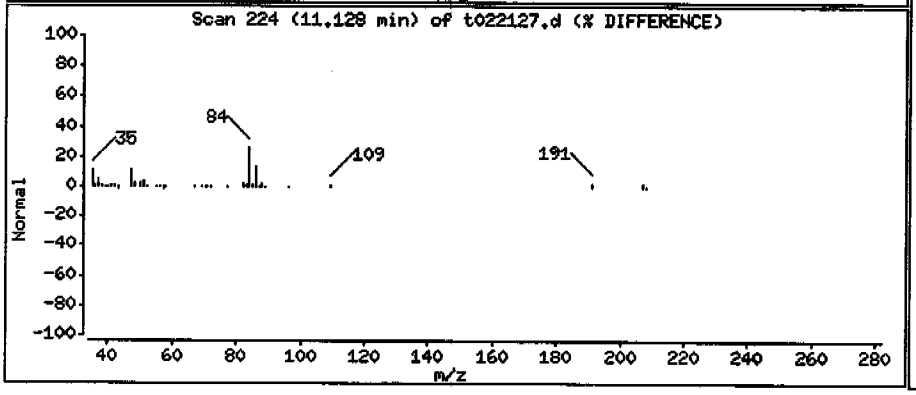












Data File: /chem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Instrument: msdt.i

Sample Info: 100mL #12666

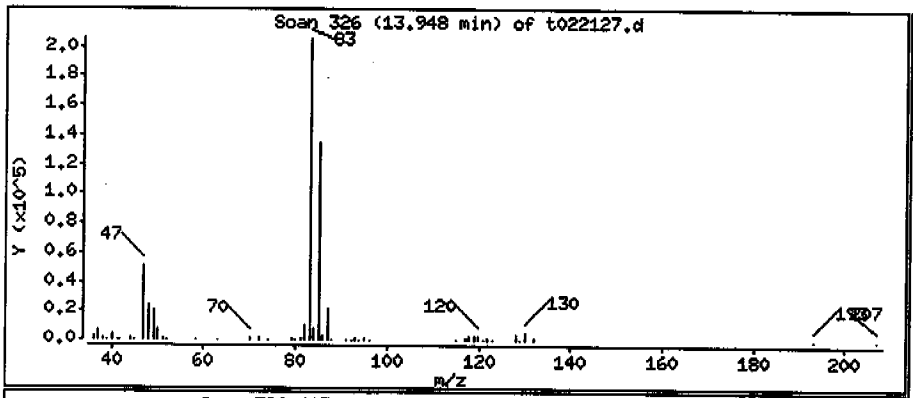
Operator: JP

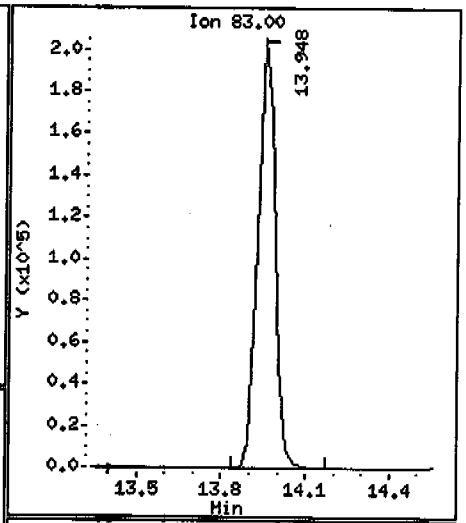
Column phase: RTx-624

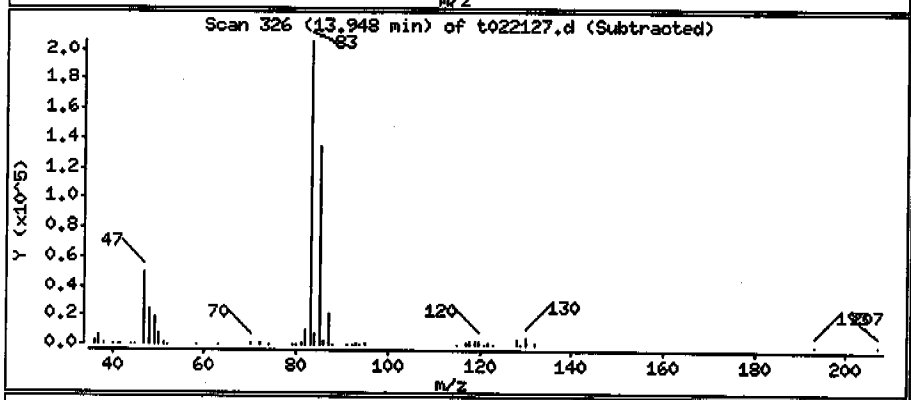
Column diameter: 0.53

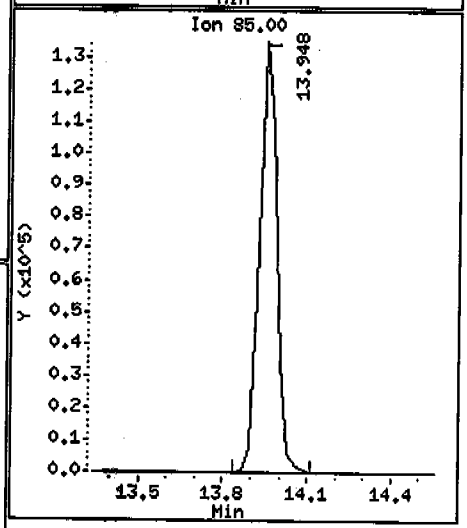
82 Chloroform

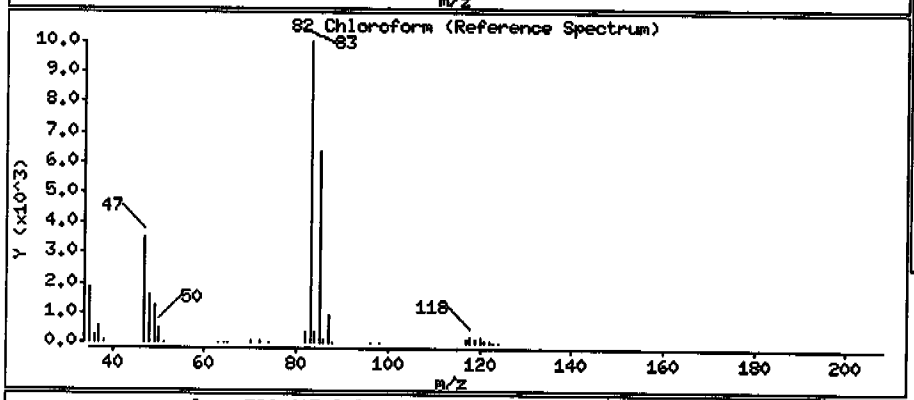
Concentration: 83.845 PPBV

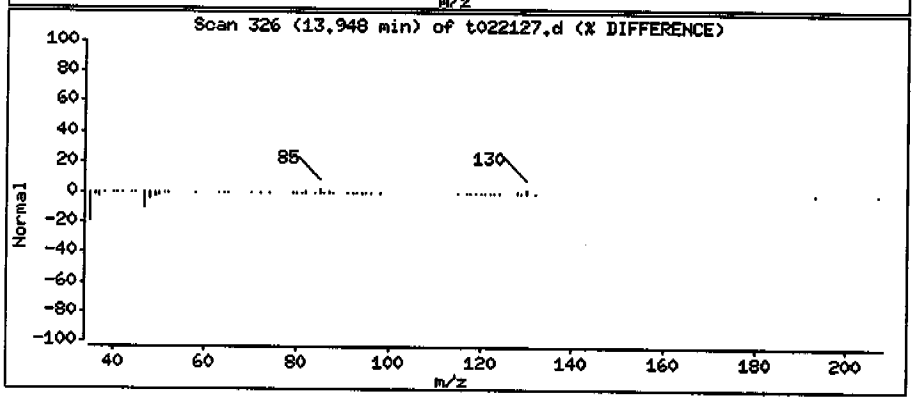












Data File: /ohem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Sample Info: 100mL #12666

Instrument: msdt.i

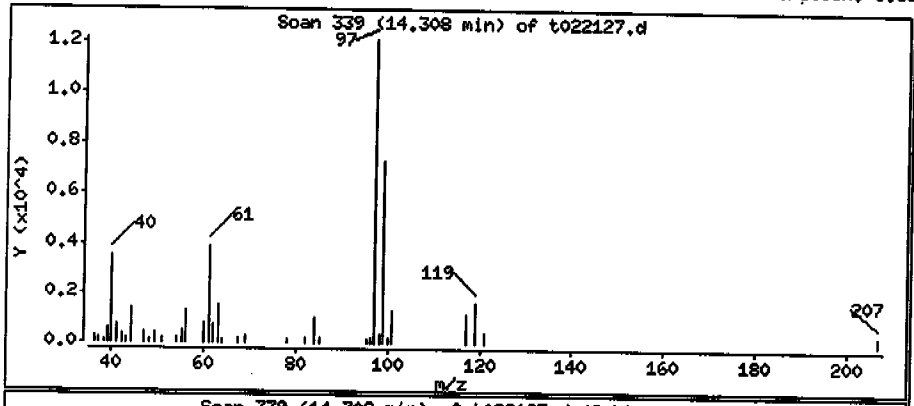
Operator: JP

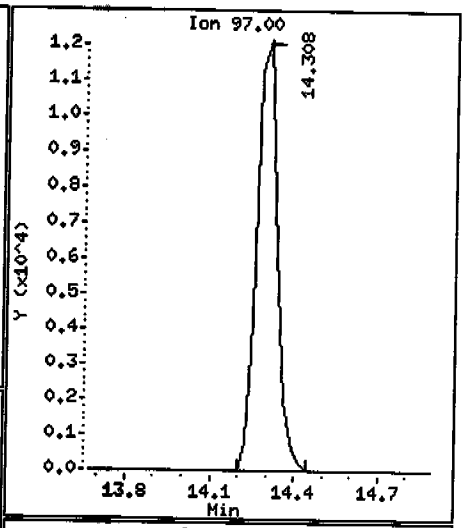
Column phase: RTx-624

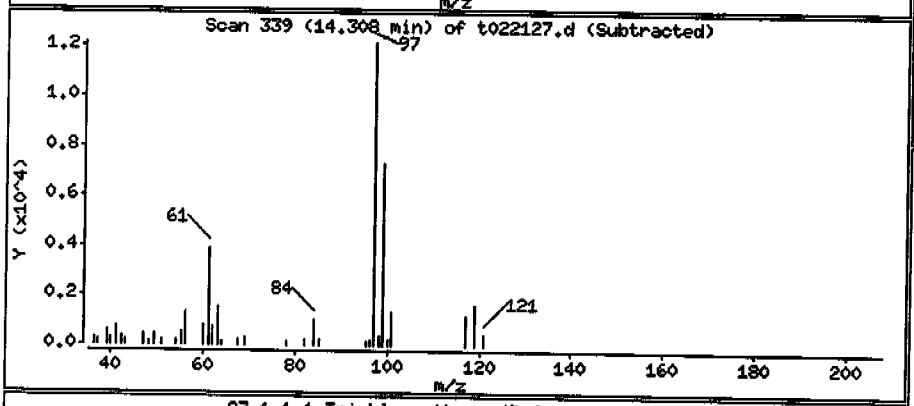
Column diameter: 0.53

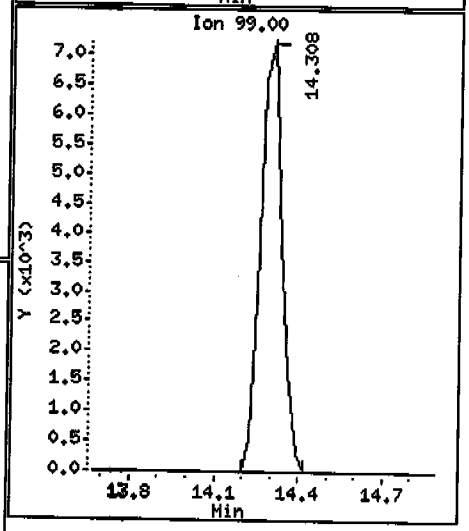
83 1,1,1-Trichloroethane

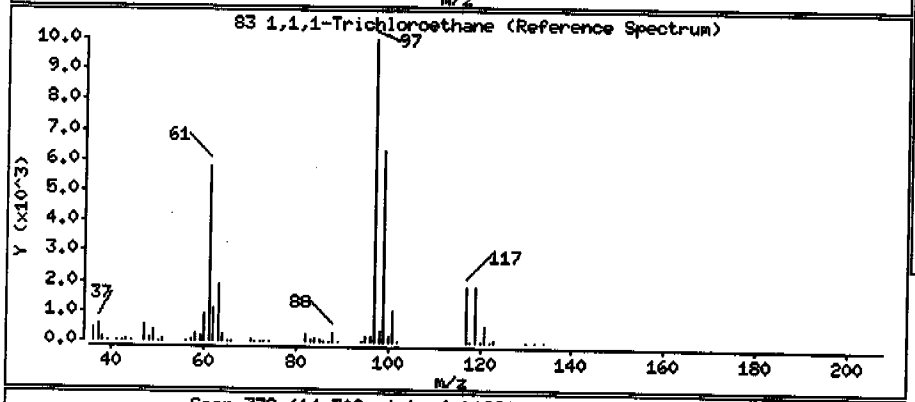
Concentration: 5.356 PPBV

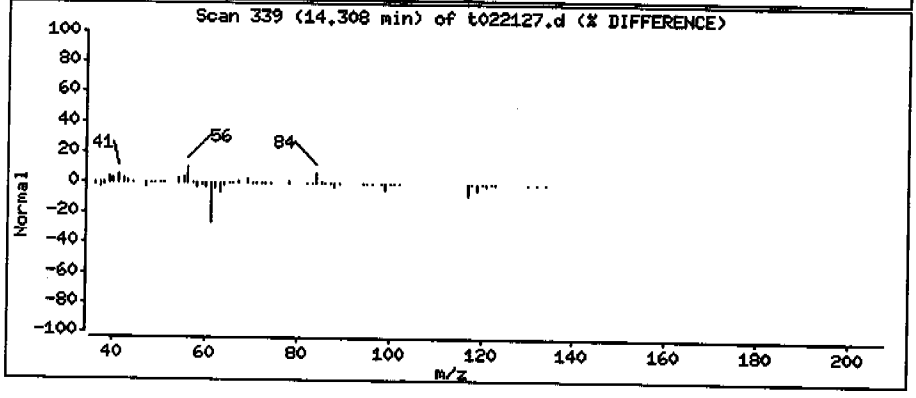












Data File: /chem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Sample Info: 100mL #12666

Instrument: msdt.i

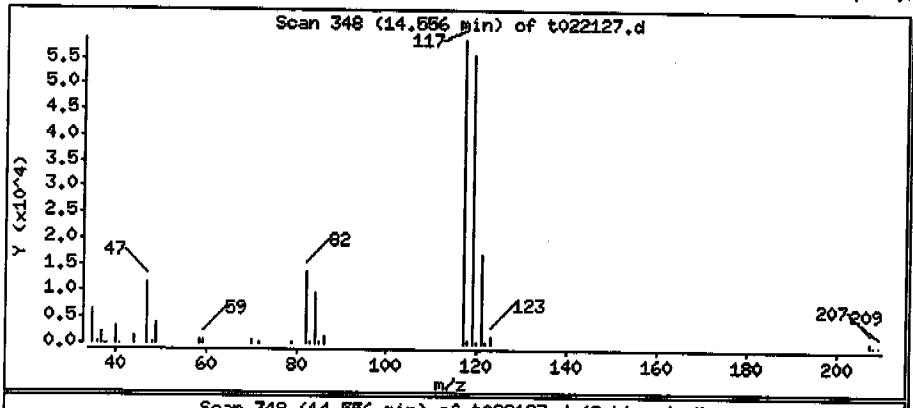
Operator: JP

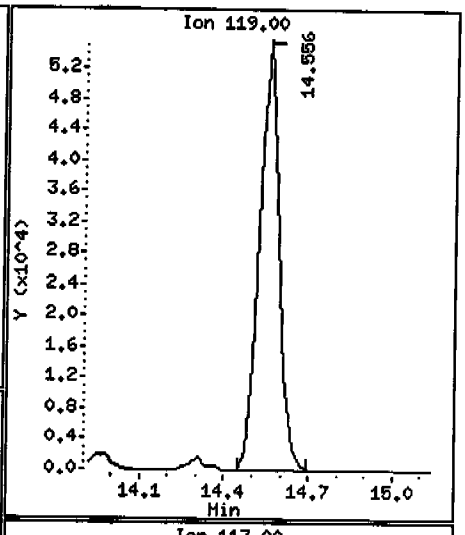
Column phase: RTx-624

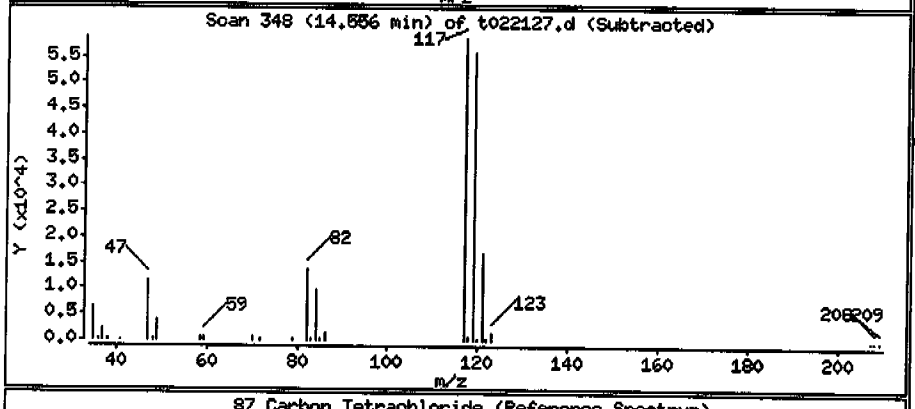
Column diameter: 0.53

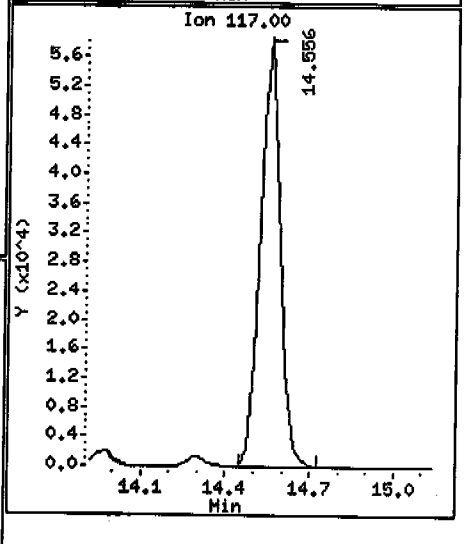
87 Carbon Tetrachloride

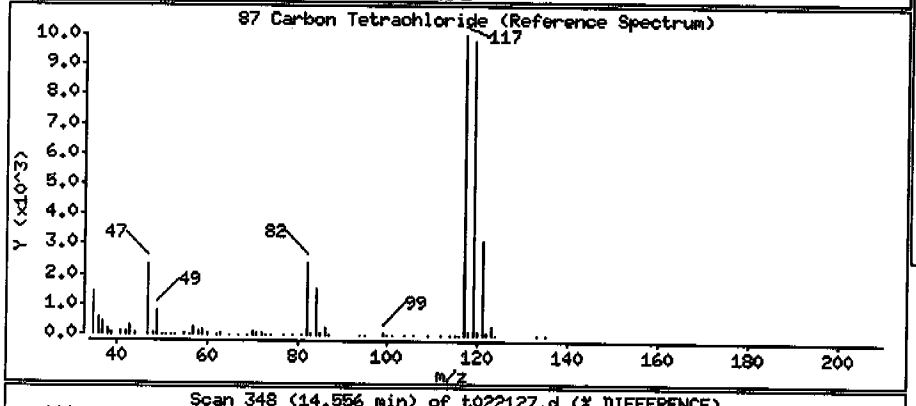
Concentration: 24.700 PPBV

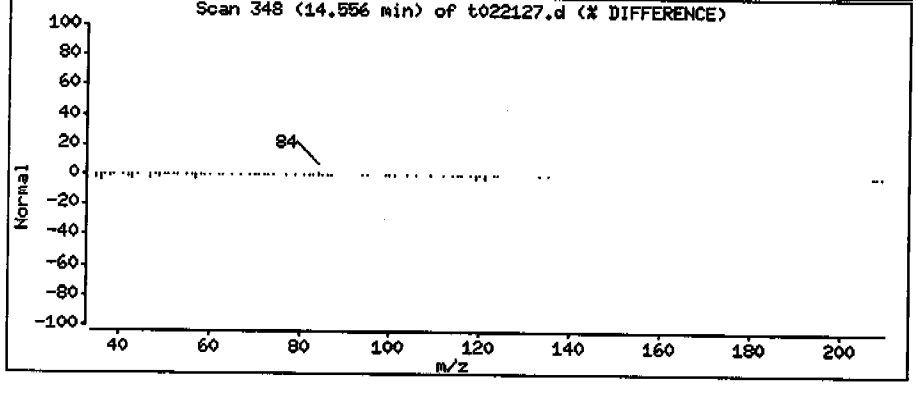












Data File: /chem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Instrument: msdt.i

Sample Info: 100mL #12666

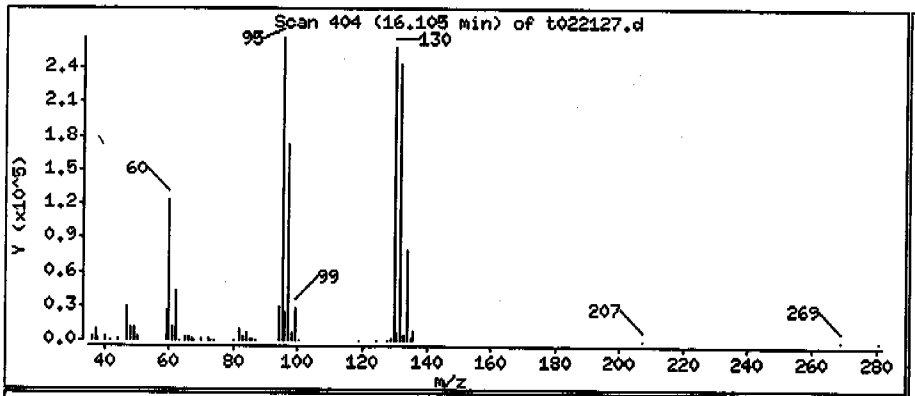
Operator: JP

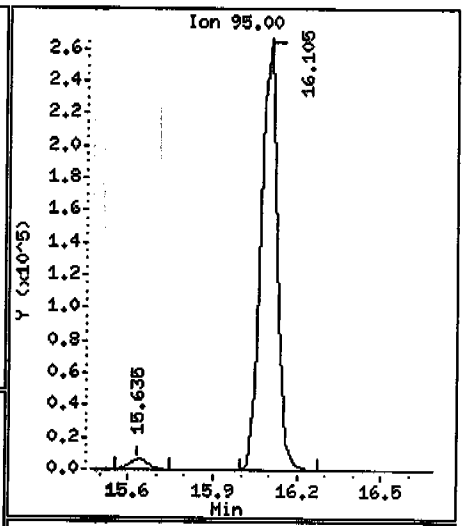
Column phase: RTx-624

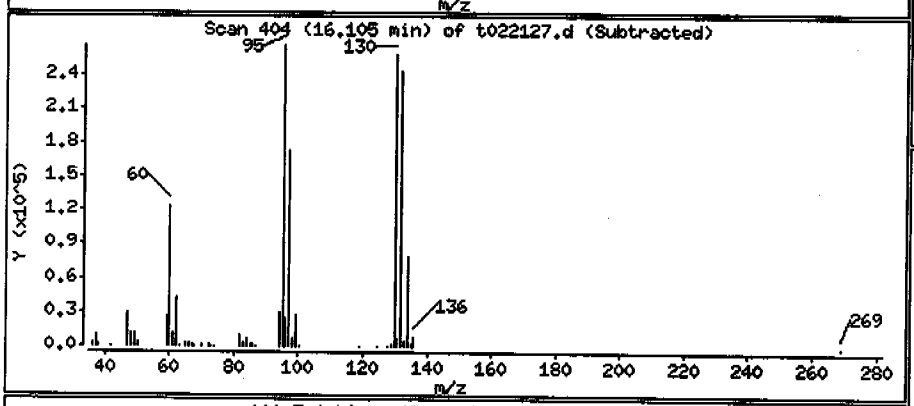
Column diameter: 0.53

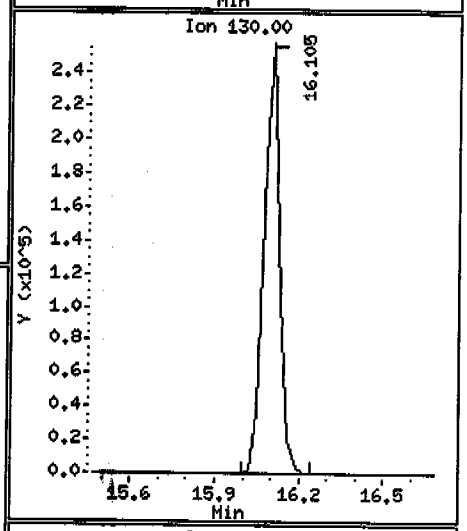
101 Trichloroethene

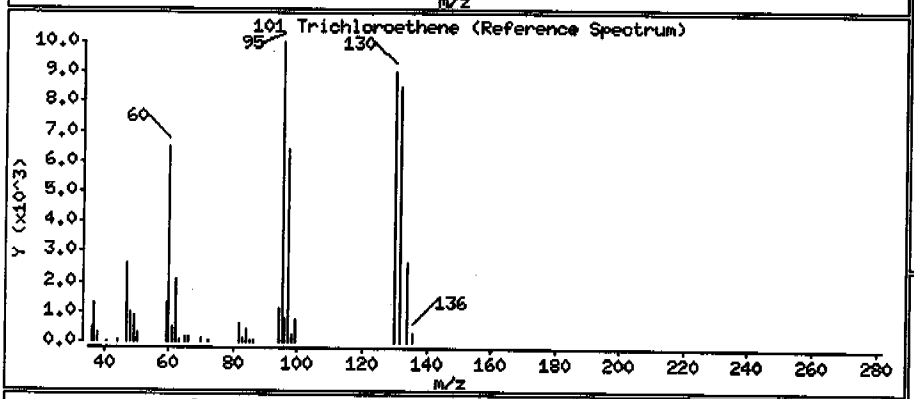
Concentration: 182.37 PPBV

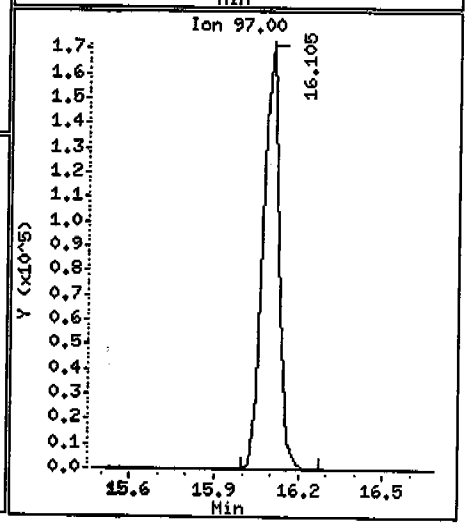


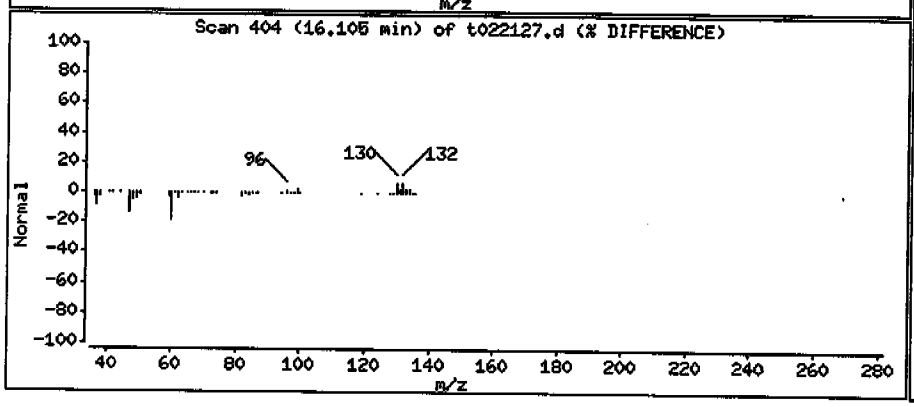












Data File: /chem/msdt.i/21Feb2008.b/t022127.d

Date : 22-FEB-2008 07:49

Client ID:

Sample Info: 100mL #12666

Instrument: msdt.i

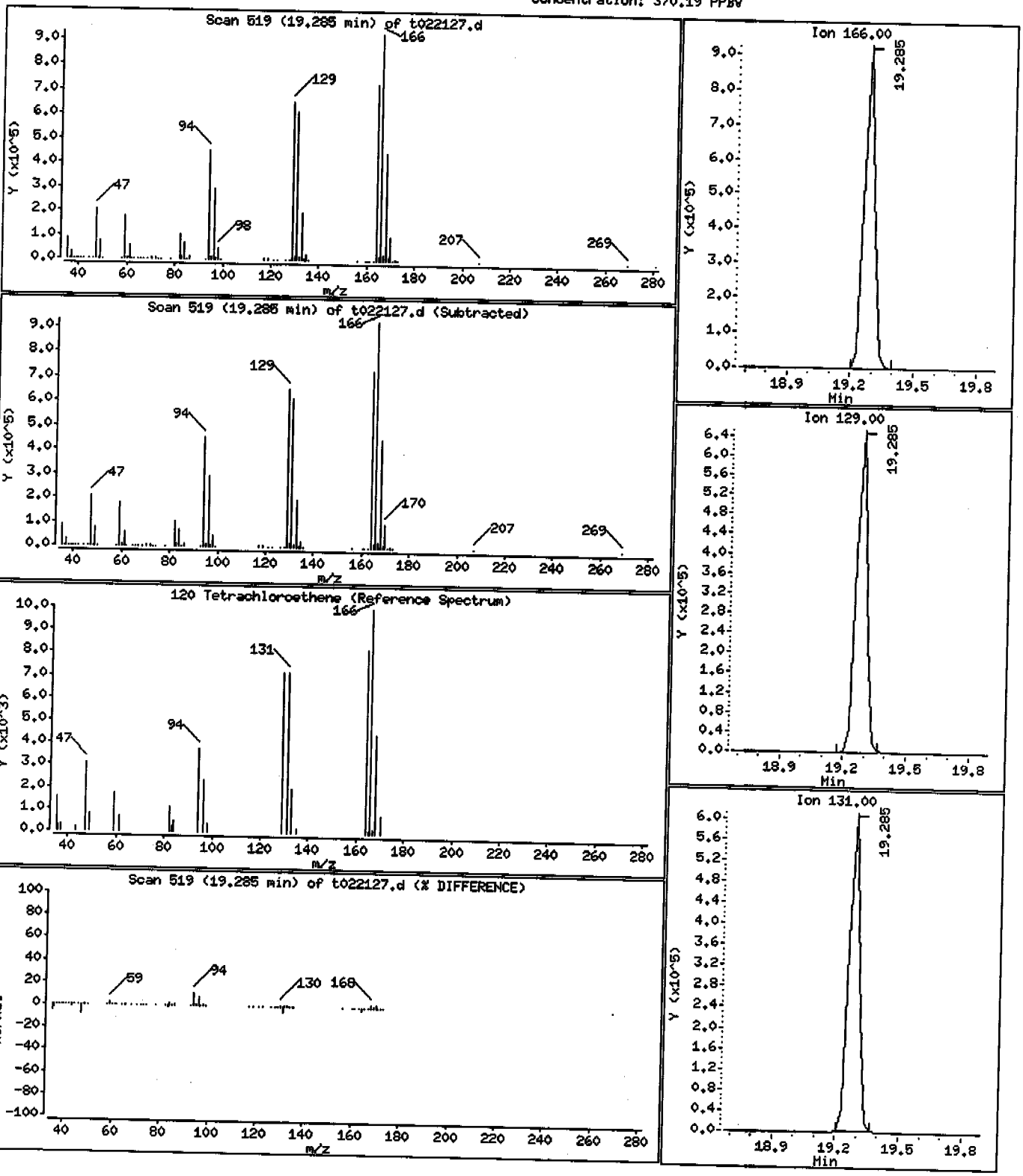
Operator: JP

Column phase: RTx-624

Column diameter: 0.53

120 Tetrachloroethene

Concentration: 370.19 PPBV



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10512

Lab ID#: 0802328-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	2.0	4.2	10
Freon 113	0.84	0.92	6.4	7.0
Acetone	3.4	4.9	8.0	12
Carbon Disulfide	0.84	1.8	2.6	5.7
Methylene Chloride	0.84	64	2.9	220
Chloroform	0.84	74	4.1	360
1,1,1-Trichloroethane	0.84	4.5	4.6	24
Cyclohexane	0.84	1.6	2.9	5.4
Carbon Tetrachloride	0.84	27	5.3	170
Trichloroethene	0.84	98	4.5	520
Tetrachloroethene	0.84	65	5.7	440

0021

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10512

Lab ID#: 0802328-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	2.0	4.2	10
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	0.92	6.4	7.0
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	3.4	4.9	8.0	12
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	1.8	2.6	5.7
Methylene Chloride	0.84	64	2.9	220
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	74	4.1	360
1,1,1-Trichloroethane	0.84	4.5	4.6	24
Cyclohexane	0.84	1.6	2.9	5.4
Carbon Tetrachloride	0.84	27	5.3	170
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	98	4.5	520
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	65	5.7	440

0022

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10512

Lab ID#: 0802328-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	105	70-130

0023

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022206.d
Lab Smp Id: 0802328-02A
Inj Date : 22-FEB-2008 14:31
Operator : sjr Inst ID: msdt.i
Smp Info : 200mL #35984
Misc Info : 6.0"Hg -> 5.0psi
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 16:12 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	269141	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	213402			26.57- 126.57	79.29
13.865	13.865 (1.000)	49	452644			139.07- 239.07	168.18
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1021439	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	164086			0.00- 66.77	16.06
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	940288	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	543866			7.58- 107.58	57.84
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.944 (1.076)	65	429382	24.7938	24.794	80.00- 120.00	100.00
14.944	14.944 (1.076)	67	214938			3.57- 103.57	50.06
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1010115	25.6727	25.673	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	119428			0.00- 61.29	11.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	683939			18.71- 118.71	67.71
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	638567	26.2552	26.255	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	777236			77.79- 177.79	121.72
22.796	22.796 (1.096)	176	618537			48.42- 148.42	96.86
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	64072	1.21916	2.048	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	21519			0.00- 82.13	33.59
42 Freon 113					CAS #: 76-13-1		
9.967	9.939 (0.717)	151	14922	0.54469	0.9151	80.00- 120.00	100.00
9.967	9.939 (0.717)	153	8834			13.23- 113.23	59.20
9.967	9.939 (0.717)	101	21357			83.10- 183.10	143.12
45 Acetone					CAS #: 67-64-1		
10.215	10.188 (0.735)	58	22147	2.89797	4.868	80.00- 120.00	100.00
10.215	10.188 (0.735)	43	80275			267.82- 367.82	362.46
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	51002	1.09346	1.837	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	594082	38.0994	64.007	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	516020			32.18- 132.18	86.86
11.128	11.100 (0.801)	51	181645			0.00- 83.83	30.58
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	1731599	44.2976	74.420	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1119036			14.26- 114.26	64.62
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.028)	97	115468	2.67061	4.487	80.00- 120.00	100.00
14.280	14.280 (1.028)	99	78173			14.90- 114.90	67.70
85 Cyclohexane					CAS #: 110-82-7		
14.308	14.308 (1.030)	84	21643	0.93487	1.570	80.00- 120.00	100.00
14.308	14.308 (1.030)	56	21985			52.96- 152.96	101.58
14.308	14.308 (1.030)	41	17271			6.25- 106.25	79.80
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.046)	119	673304	16.2115	27.235	80.00- 120.00	100.00
14.529	14.529 (1.046)	117	707460			56.33- 156.33	105.07

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1269816	58.0602	97.541	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1152832			42.34- 142.34	90.79
16.077	16.077 (1.028)	97	801537			13.74- 113.74	63.12
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1108480	38.6222	64.885	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	775000			20.52- 120.52	69.92
19.284	19.284 (0.927)	131	736408			16.74- 116.74	66.43

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022206.d
Lab Smp Id: 0802328-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Calibration Date: 22-FEB-2008
Calibration Time: 09:47
Level: LOW
Sample Type: AIR
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	269141	-1.42
97 1,4-Difluorobenze	1067226	640336	1494116	1021439	-4.29
126 Chlorobenzene-d5	999102	599461	1398743	940288	-5.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 22Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802328-02A
Level: LOW
Operator: sjr
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.794	99.18	70-130
$ 113 Toluene-d8	25.000	25.673	102.69	70-130
$ 137 Bromofluorobenzene	25.000	26.255	105.02	70-130

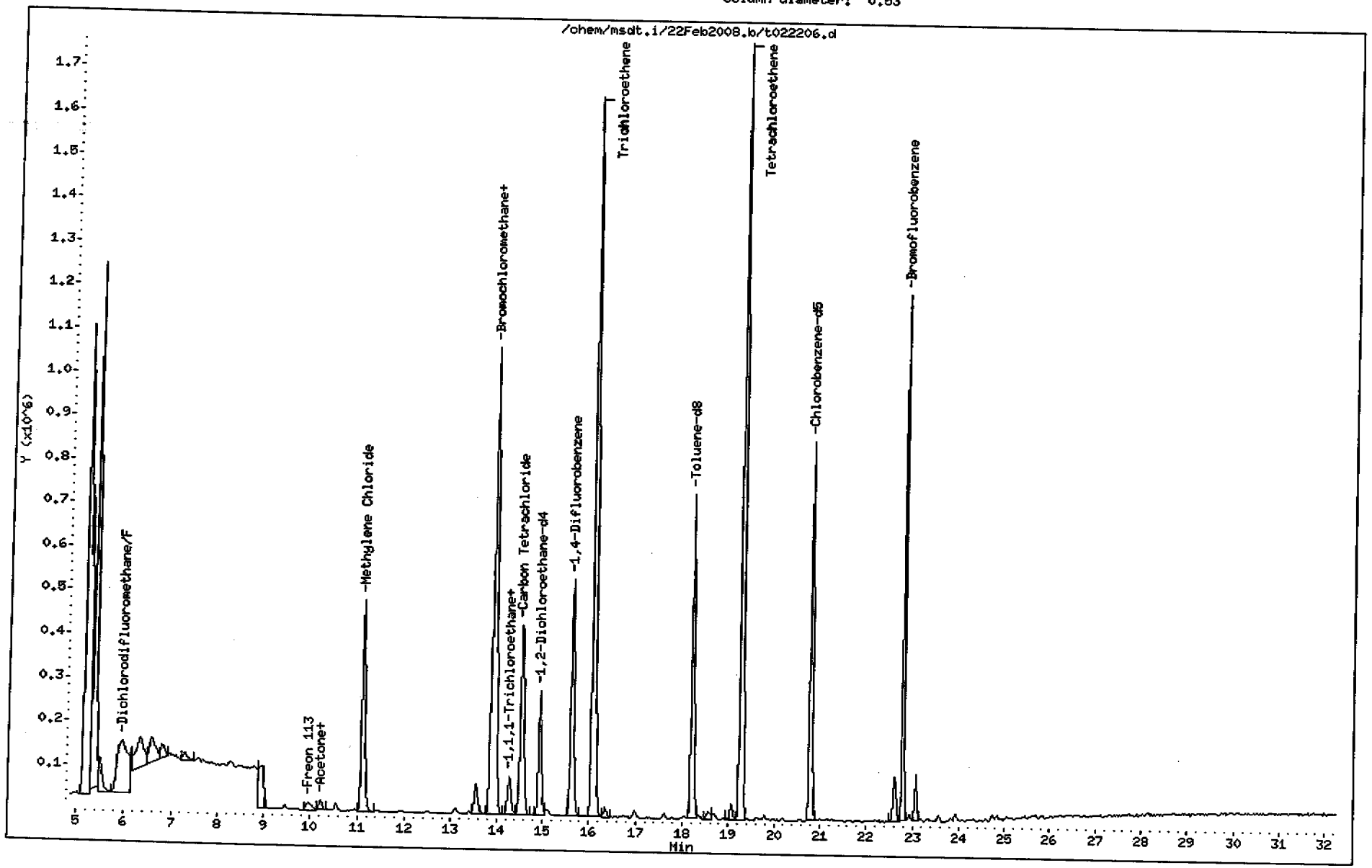
Data File: /chem/msdt.i/22Feb2008.b/t022206.d
Date : 22-FEB-2008 14:31
Client ID:
Sample Info: 200mL #35984

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624

0029



Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

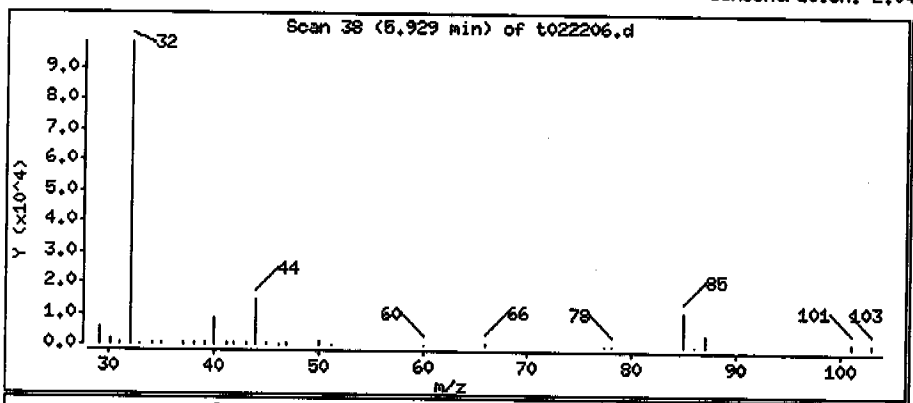
Operator: sjr

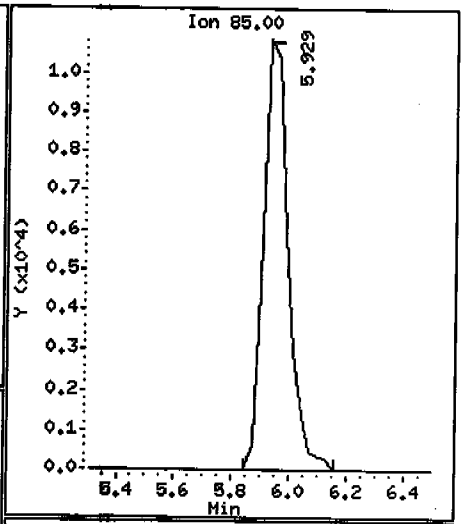
Column phase: RTx-624

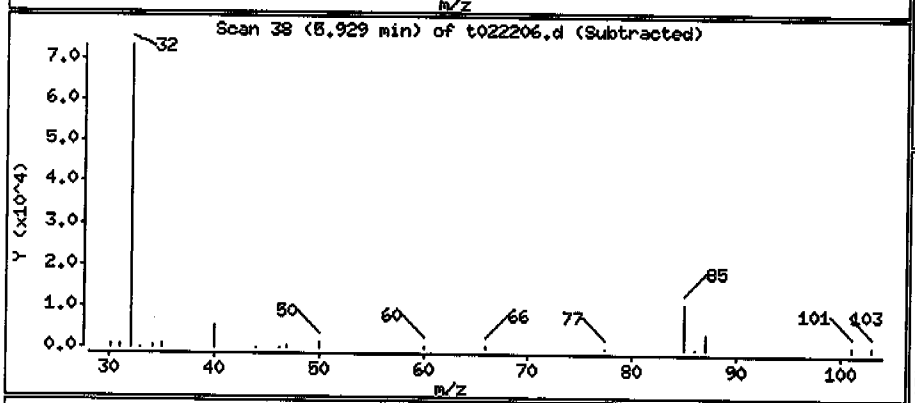
Column diameter: 0.53

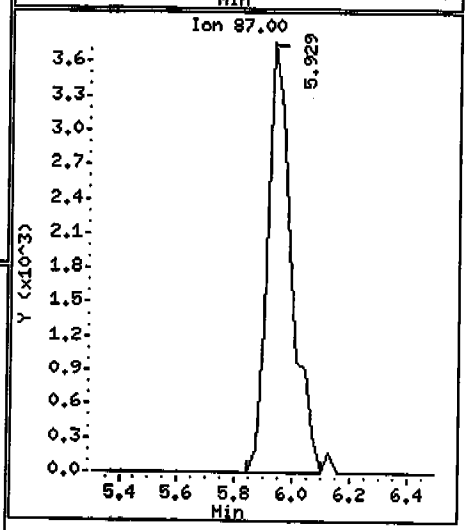
12 Dichlorodifluoromethane/Fr12

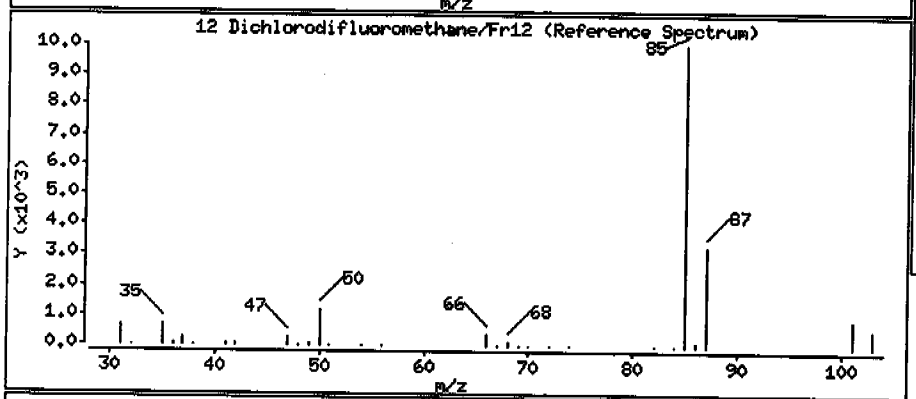
Concentration: 2.048 PPBV

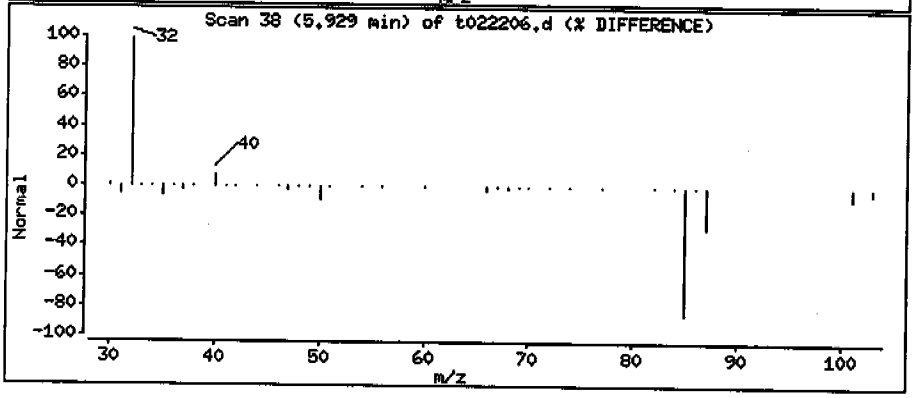












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

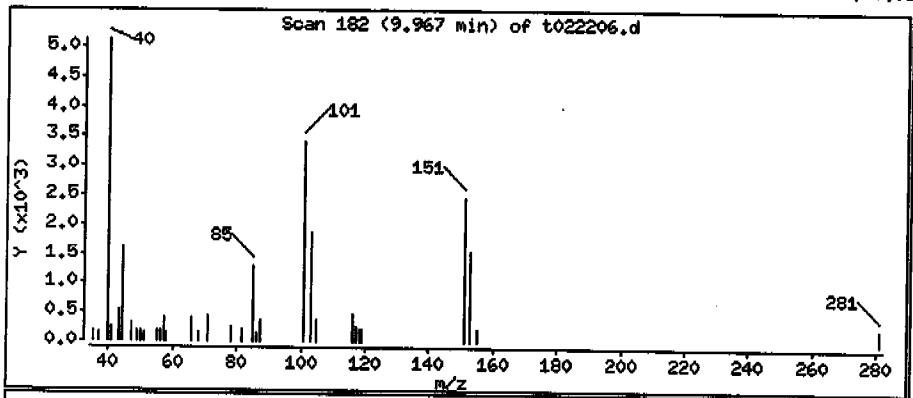
Operator: sjr

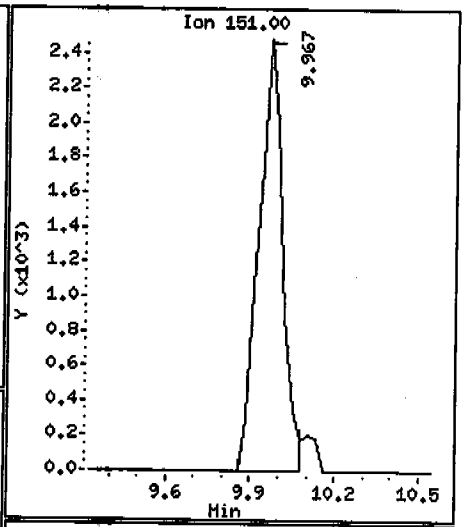
Column phase: RTx-624

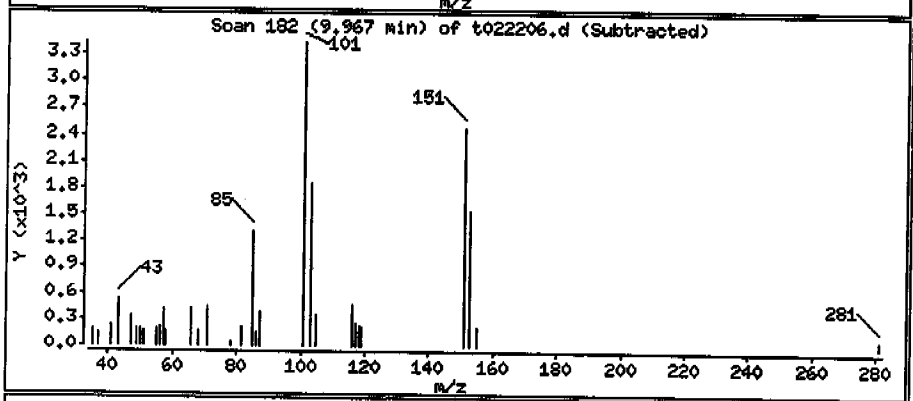
Column diameter: 0.53

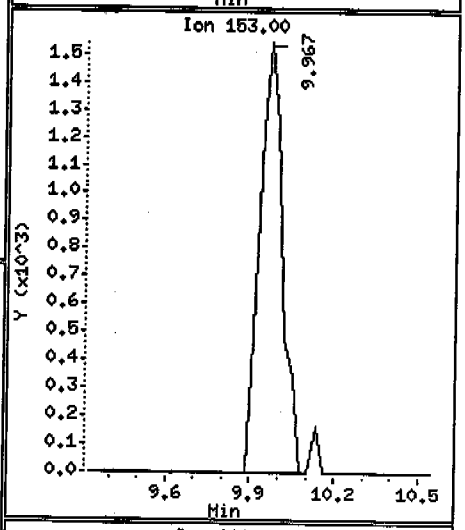
42 Freon 113

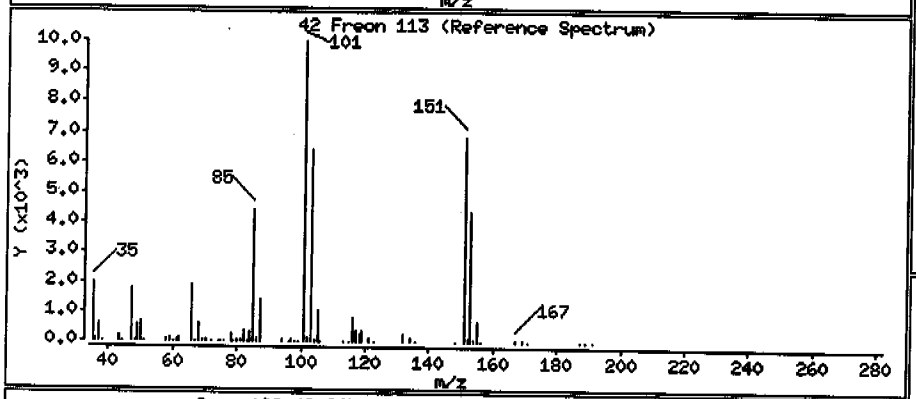
Concentration: 0.9151 PPBV

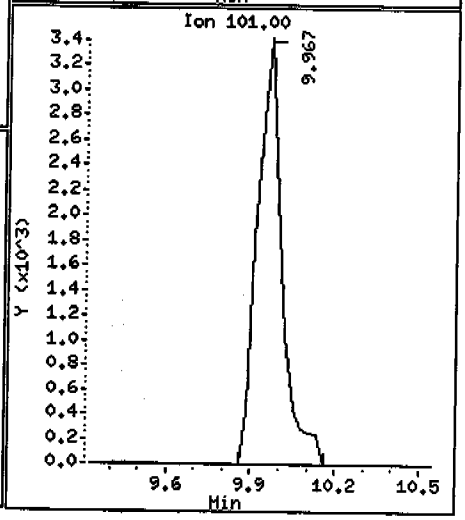


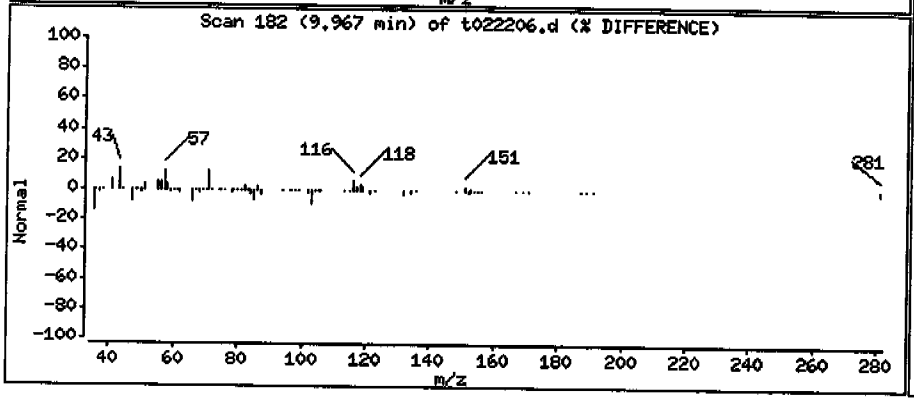












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

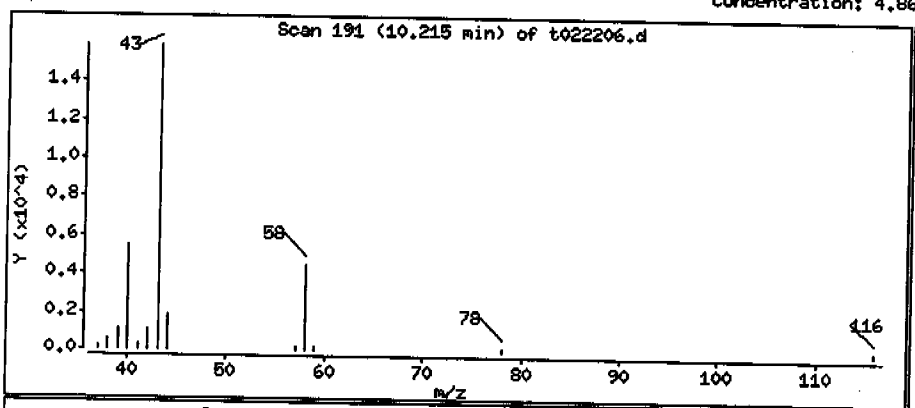
Operator: sjr

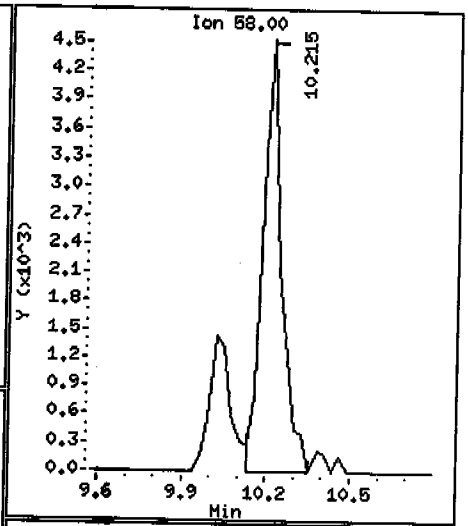
Column phase: RTx-624

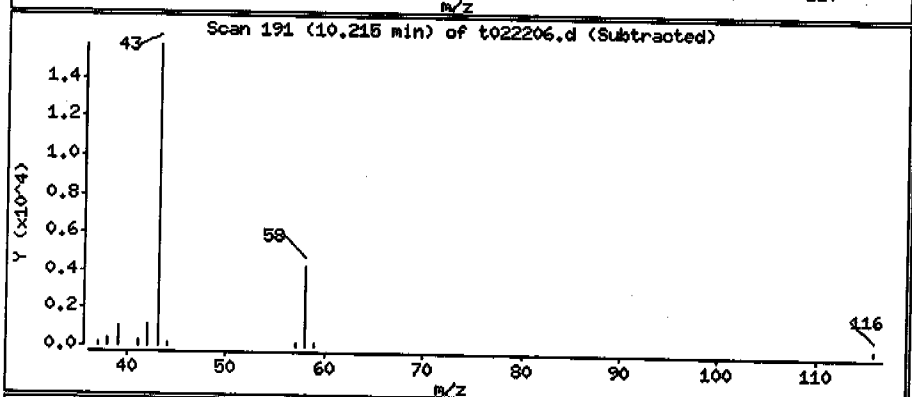
Column diameter: 0.53

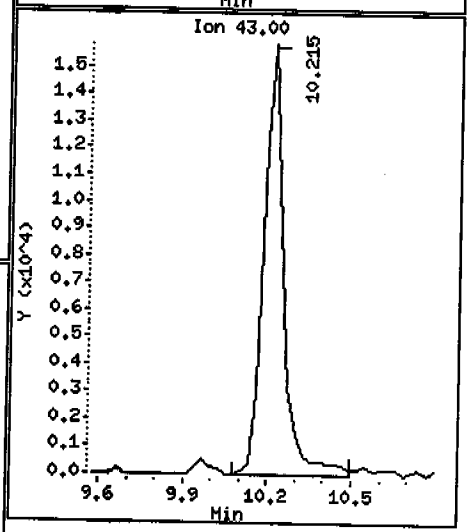
45 Acetone

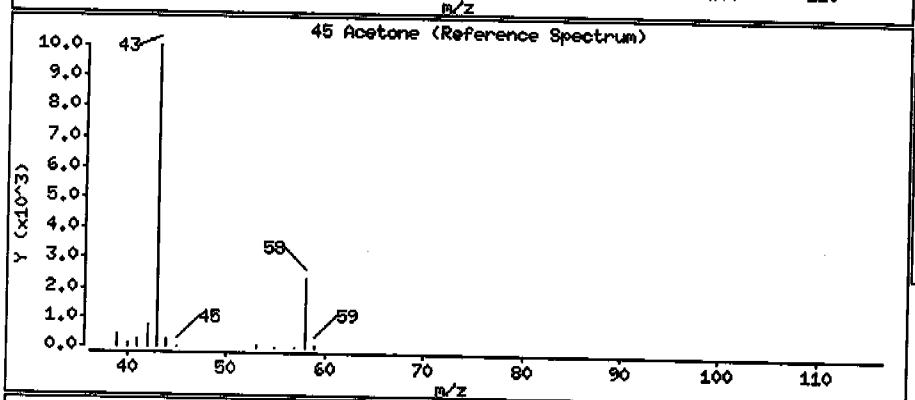
Concentration: 4.868 PPBV

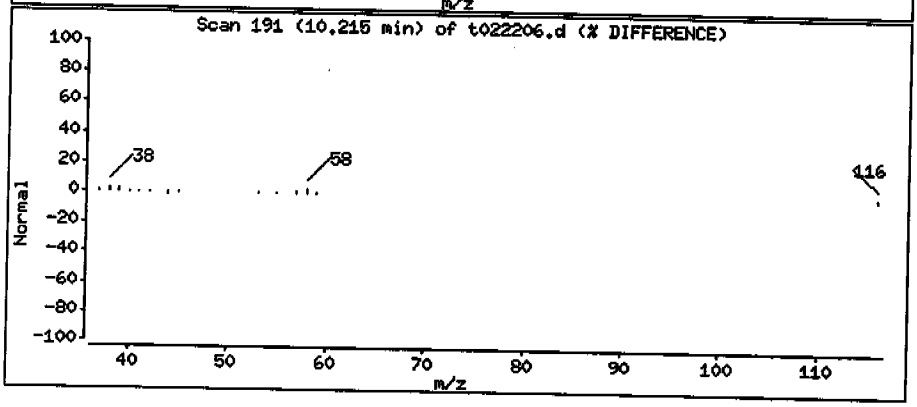












0032

Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

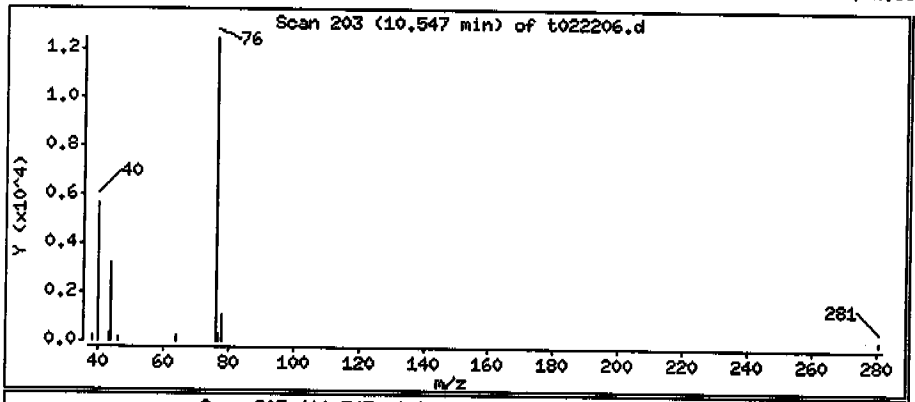
Operator: sjr

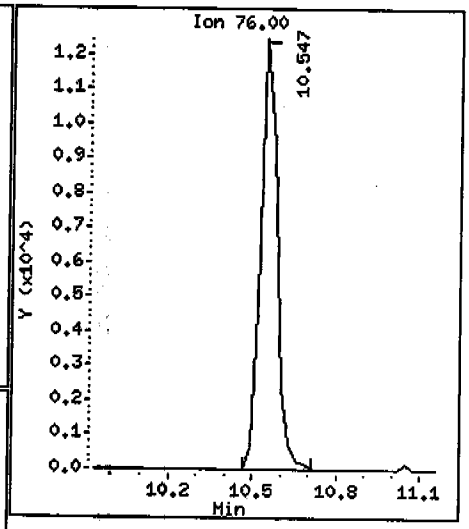
Column phase: RTx-624

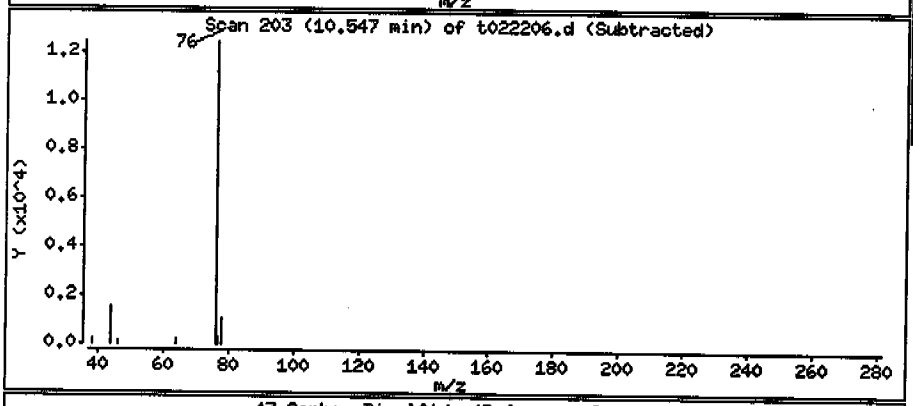
Column diameter: 0.53

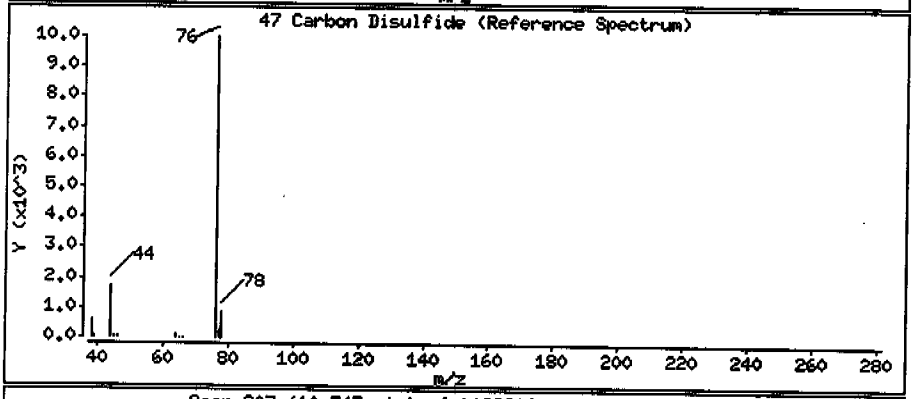
47 Carbon Disulfide

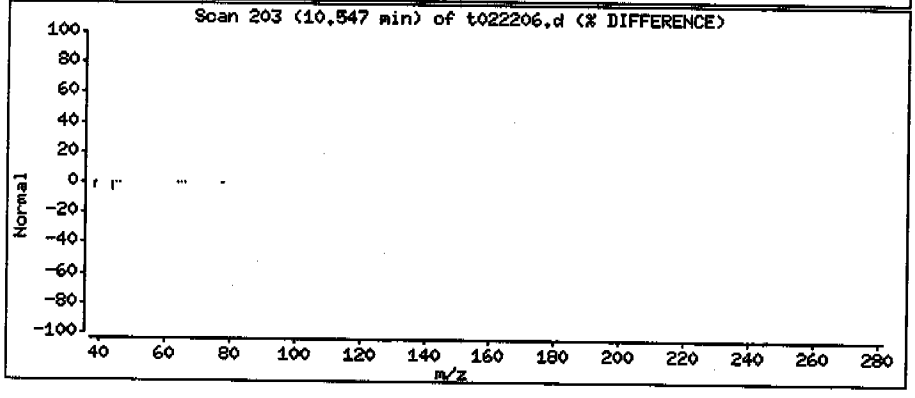
Concentration: 1.837 PPBV











Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Page 6

Date : 22-FEB-2008 14:31

Client ID:

Instrument: msdt.i

Sample Info: 200mL #38984

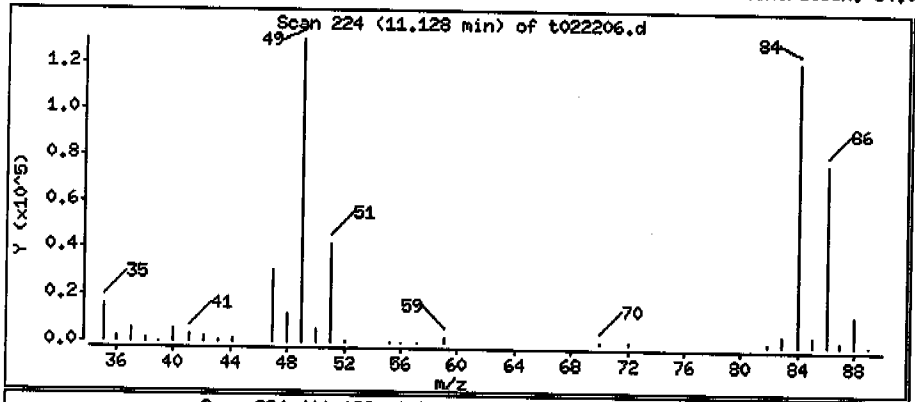
Operator: sjr

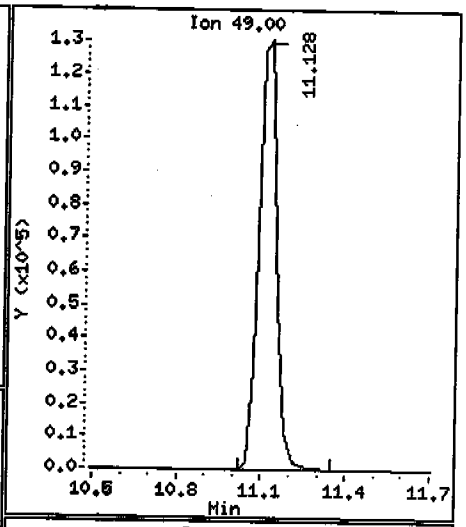
Column phase: RTx-624

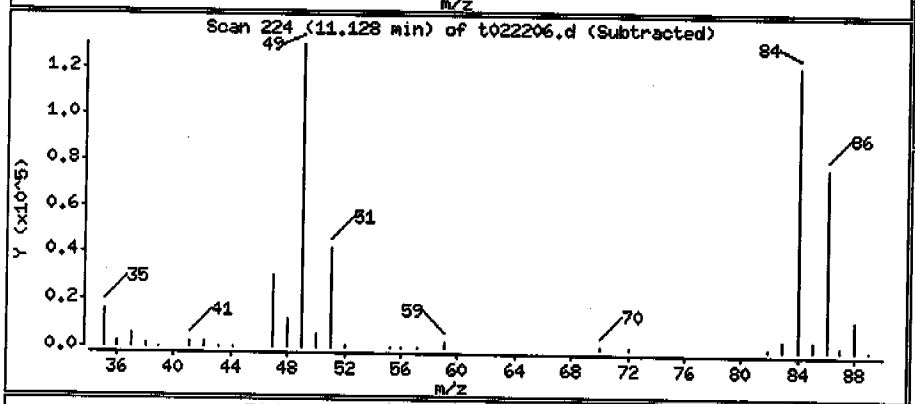
Column diameter: 0.53

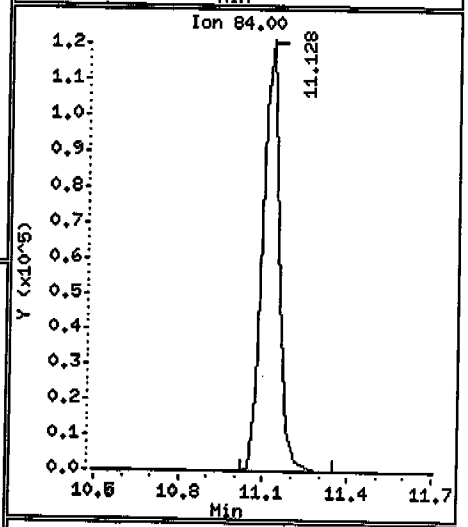
54 Methylene Chloride

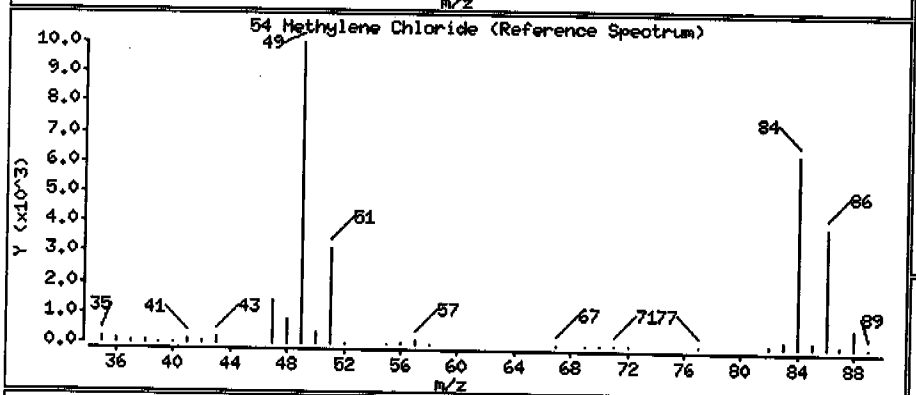
Concentration: 64.007 PPBV

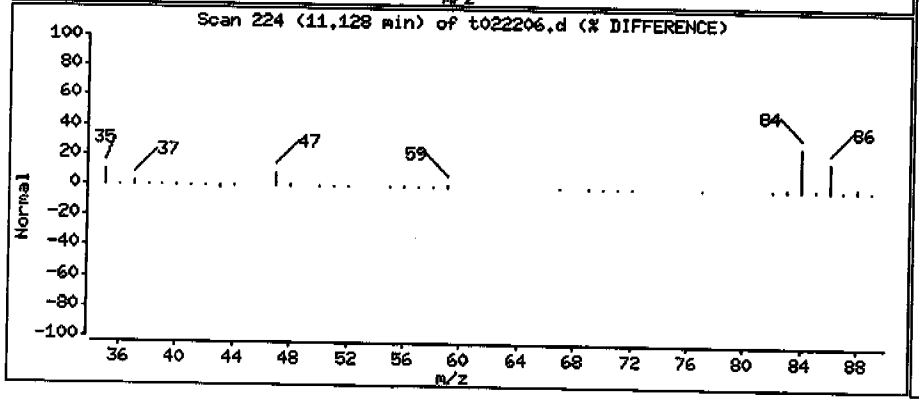


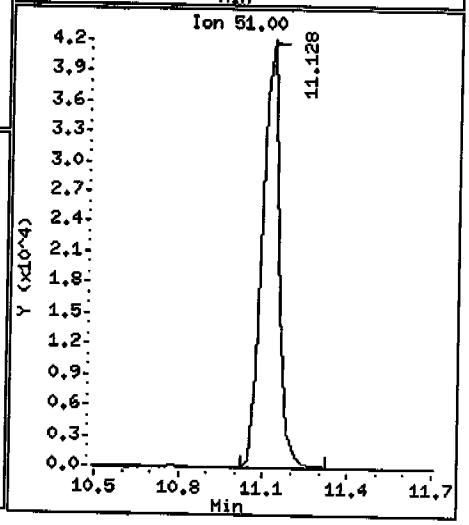












0034

Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

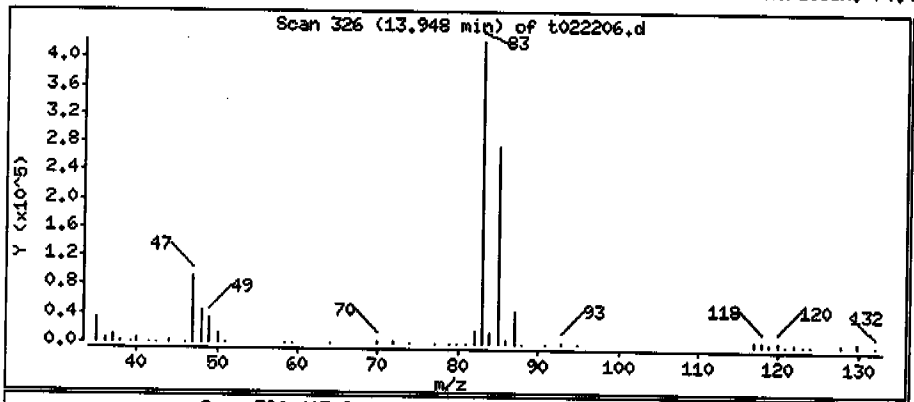
Operator: sjr

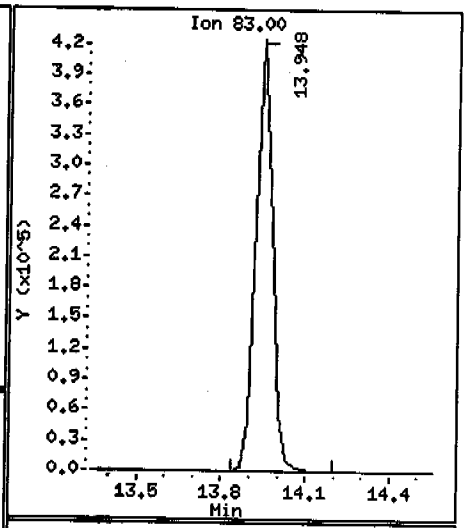
Column phase: RTx-624

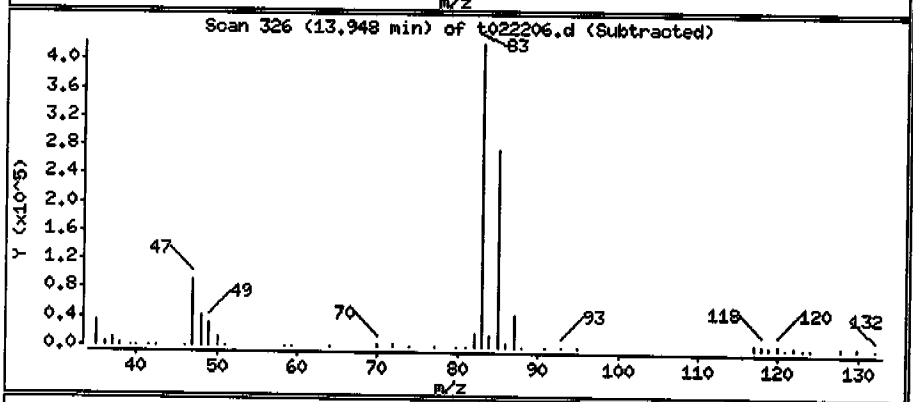
Column diameter: 0.53

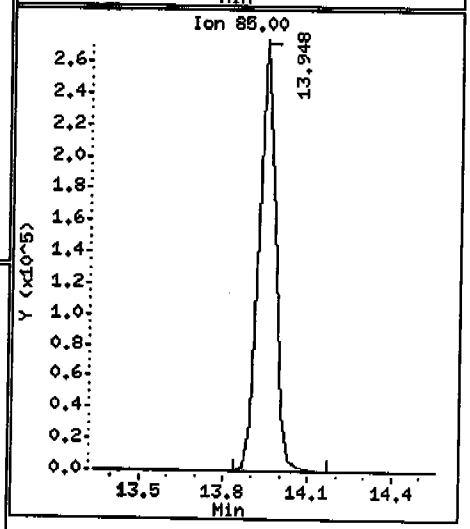
82 Chloroform

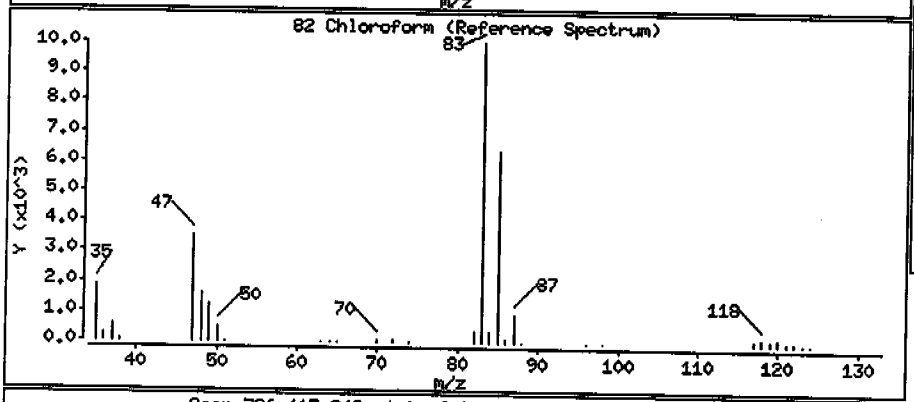
Concentration: 74.420 PPBV

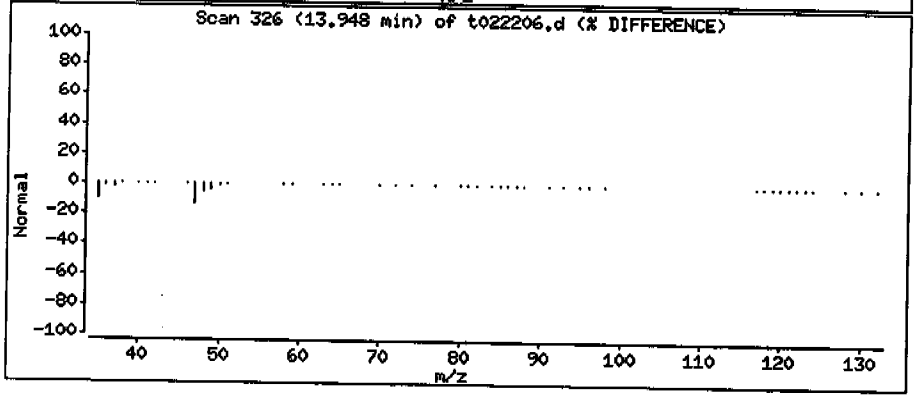












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35984

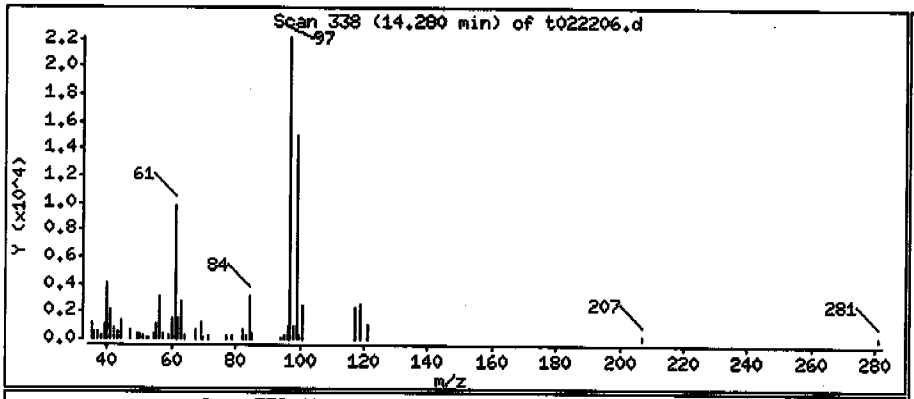
Operator: sjr

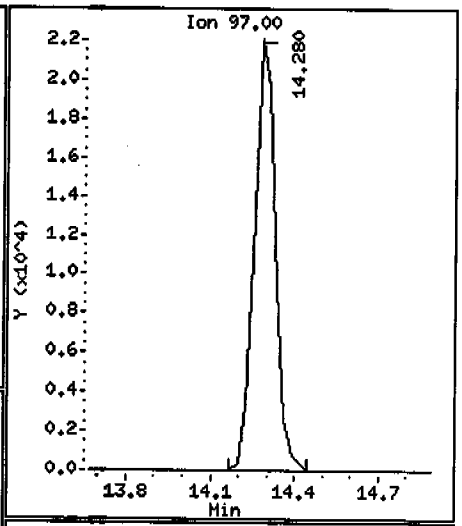
Column phase: RTx-624

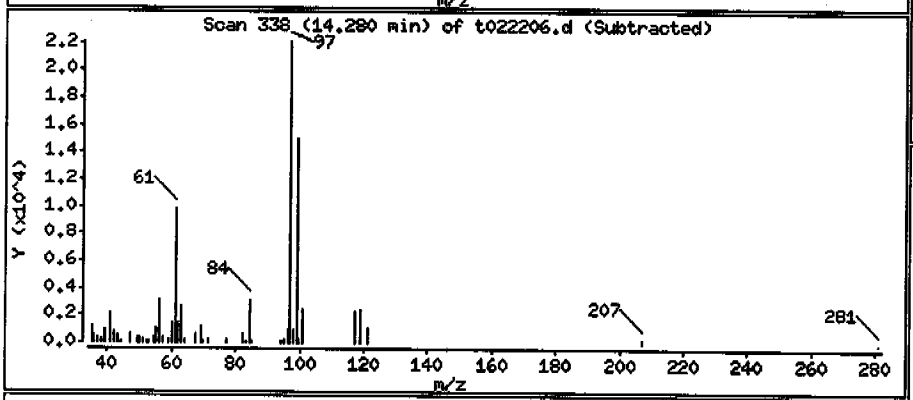
Column diameter: 0.53

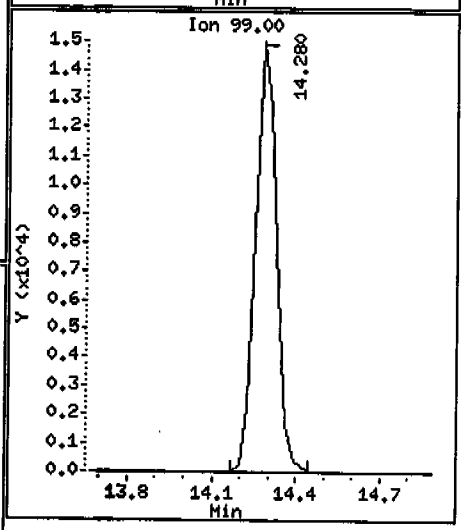
83 1,1,1-Trichloroethane

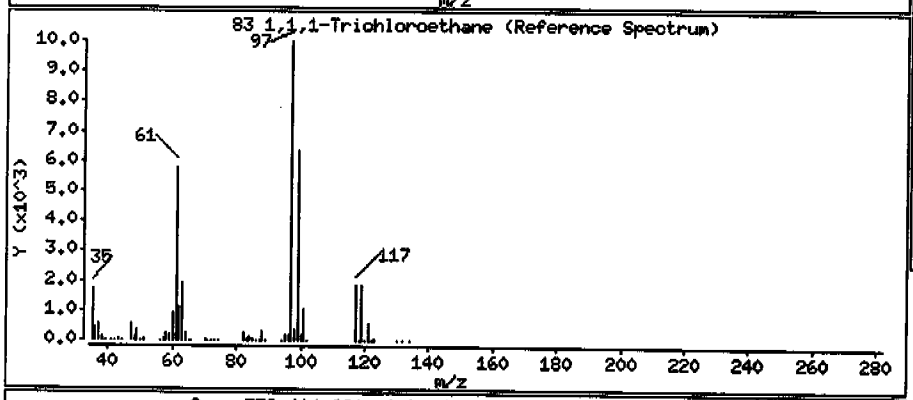
Concentration: 4.487 PPBV

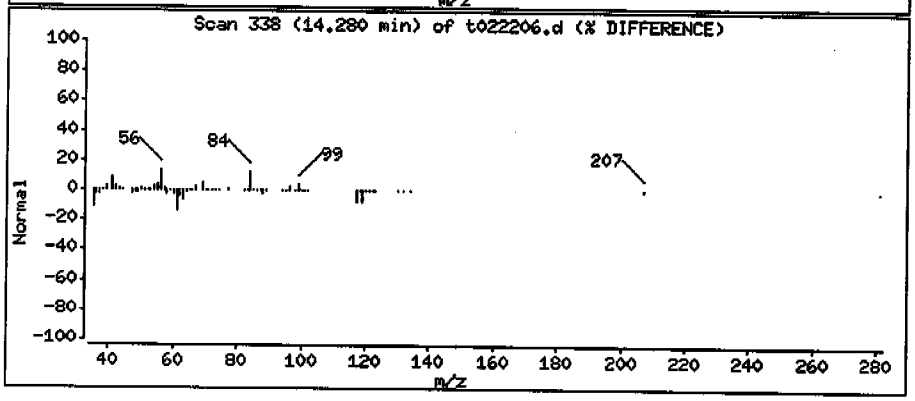












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

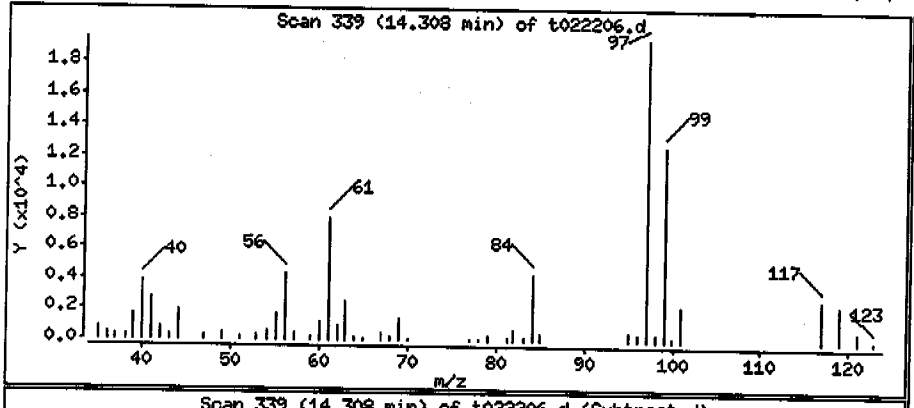
Operator: sjr

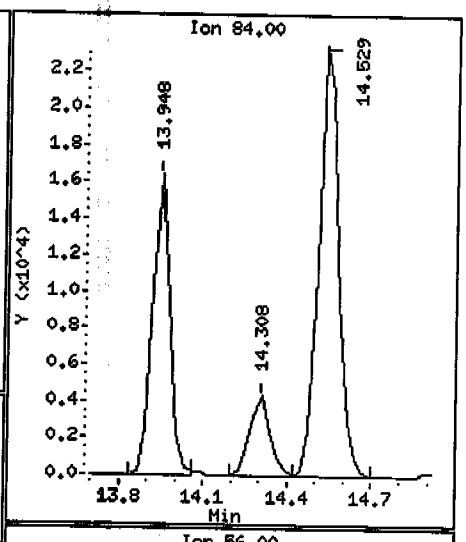
Column phase: RTx-624

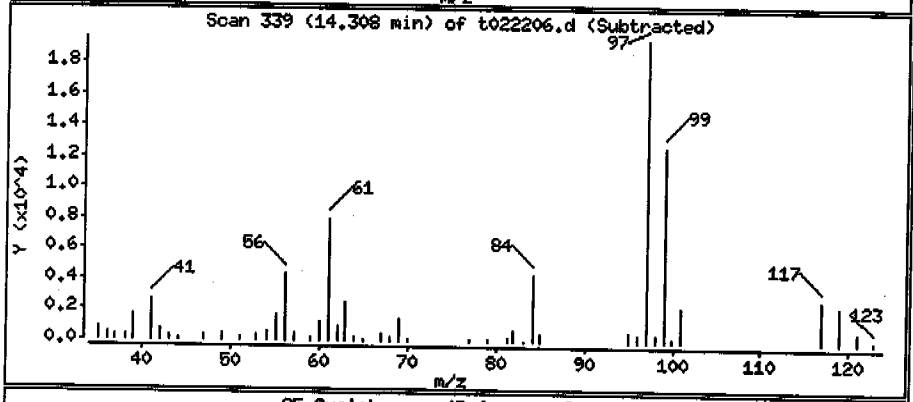
Column diameter: 0.53

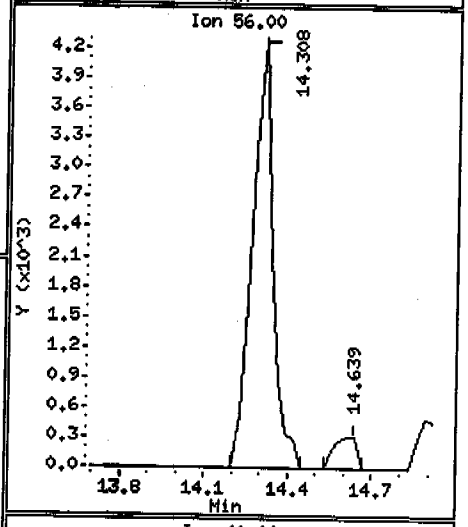
85 Cyclohexane

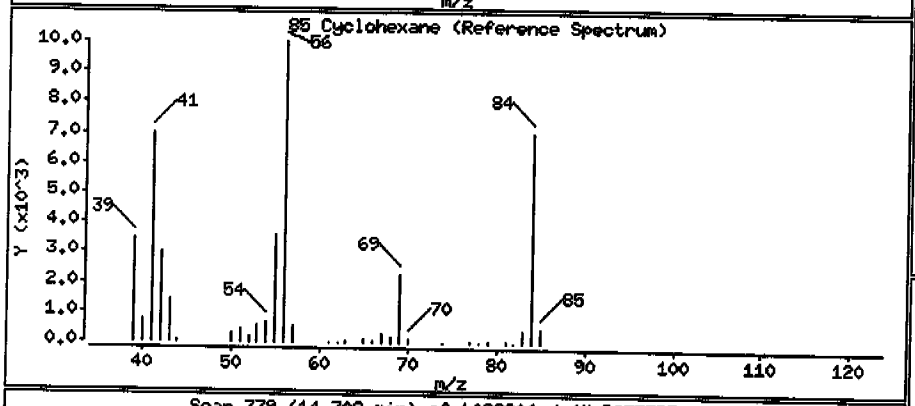
Concentration: 1.570 PPBV

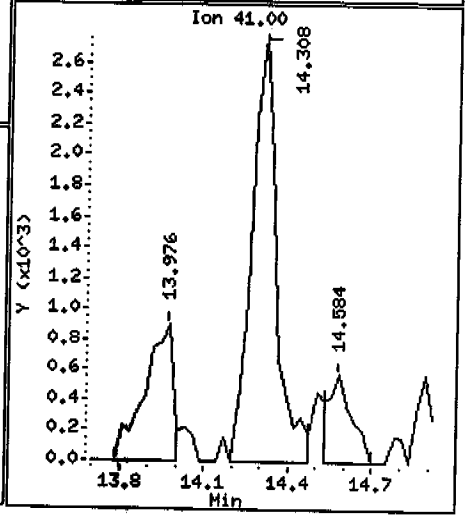


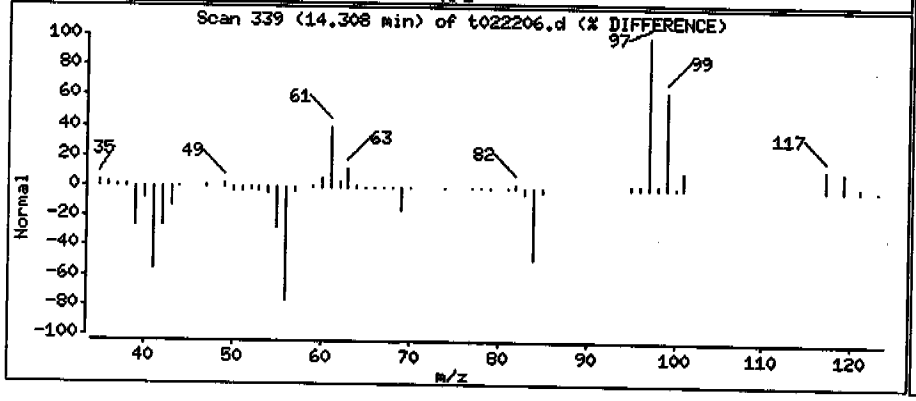












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

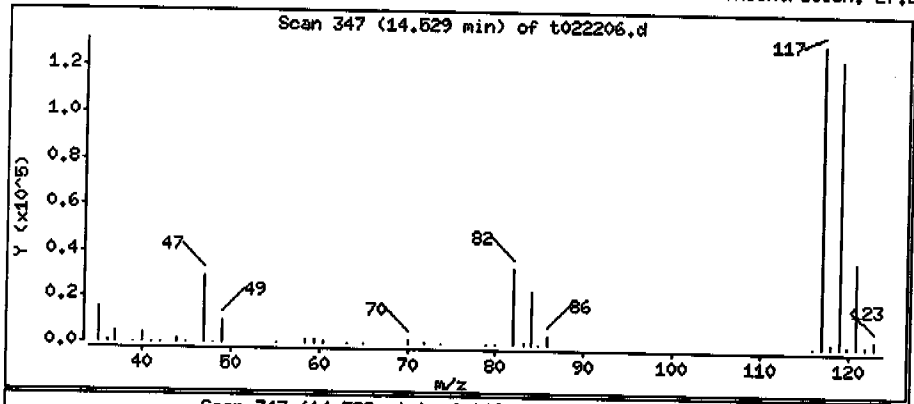
Operator: sjr

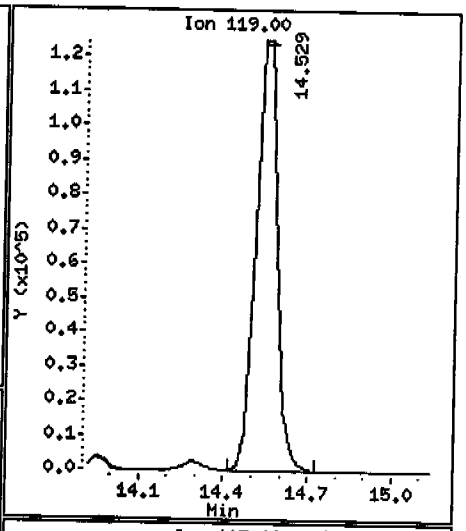
Column phase: RTx-624

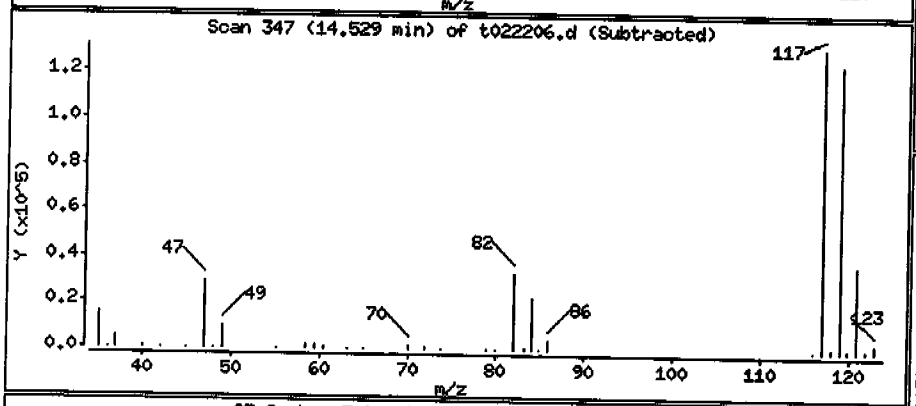
Column diameter: 0.53

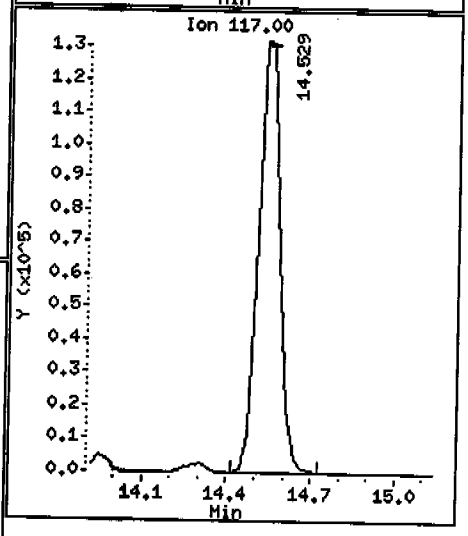
87 Carbon Tetrachloride

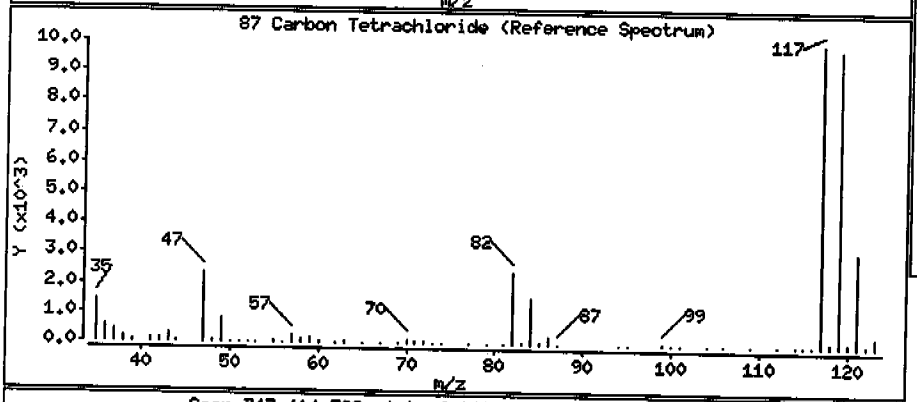
Concentration: 27.235 PPBV

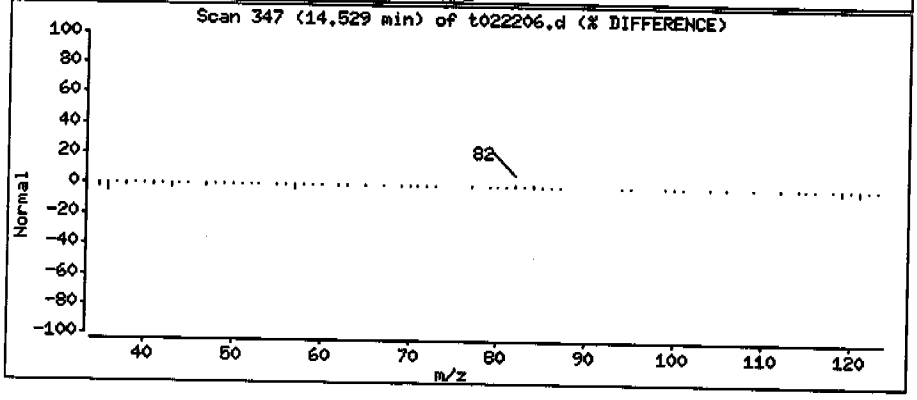












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

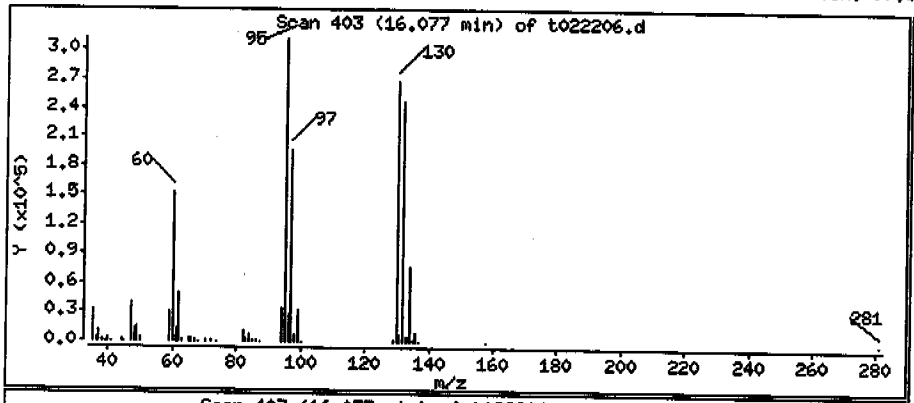
Operator: sjr

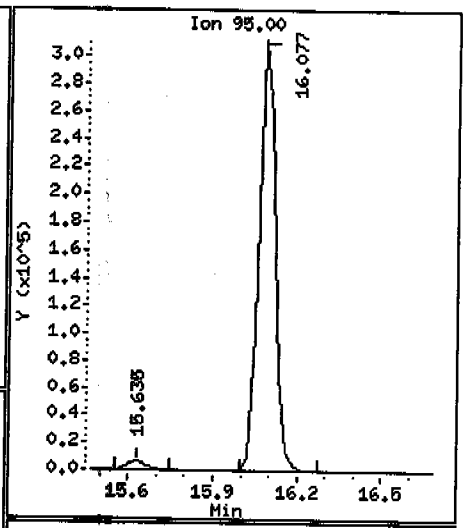
Column phase: RTx-624

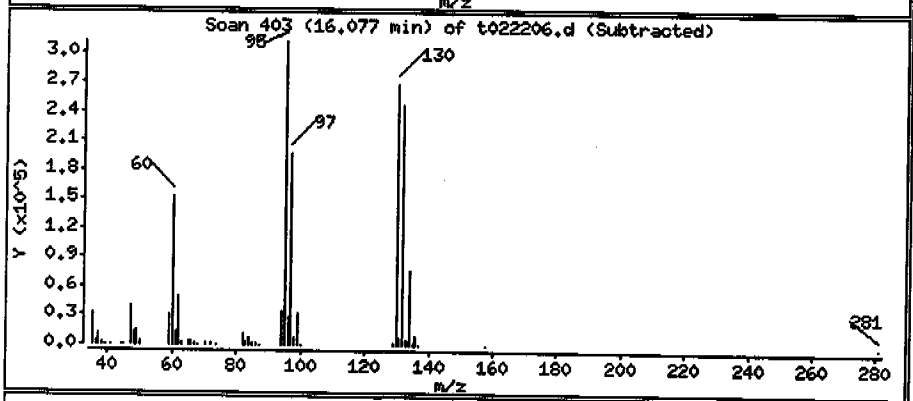
Column diameter: 0.53

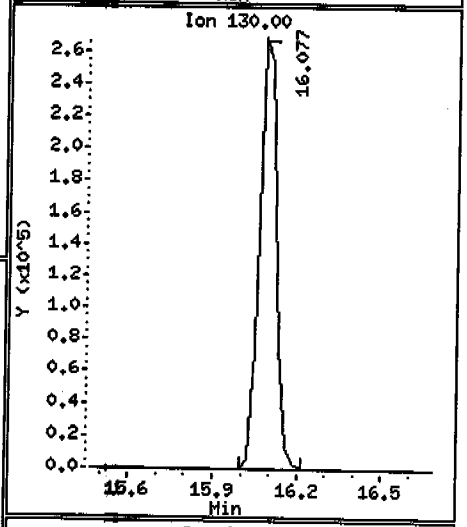
101 Trichloroethene

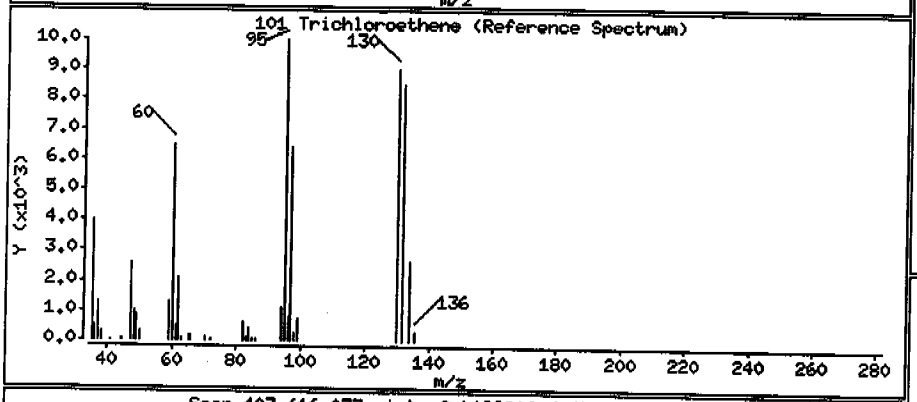
Concentration: 97.541 PPBV

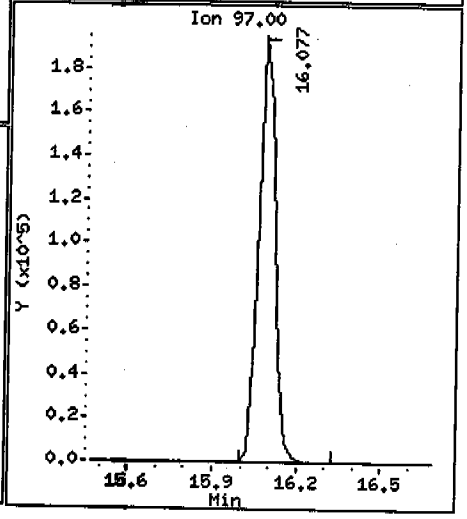


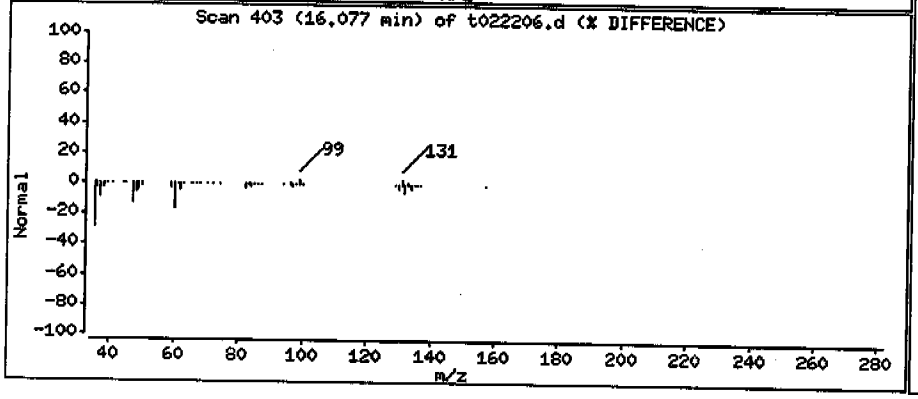












Data File: /chem/msdt.i/22Feb2008.b/t022206.d

Date : 22-FEB-2008 14:31

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

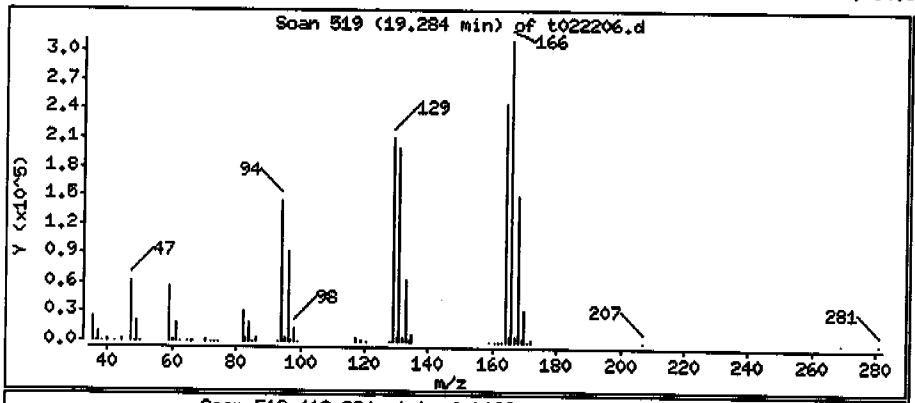
Operator: sjr

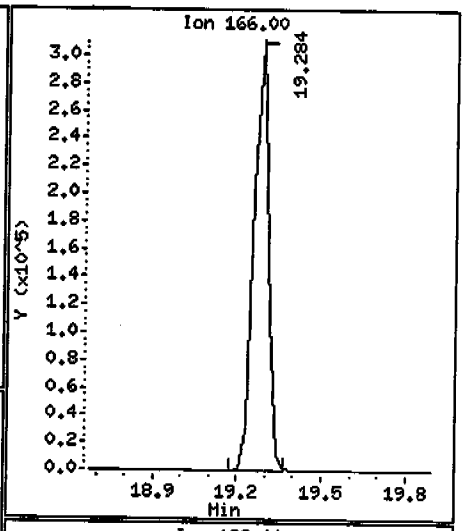
Column phase: RTx-624

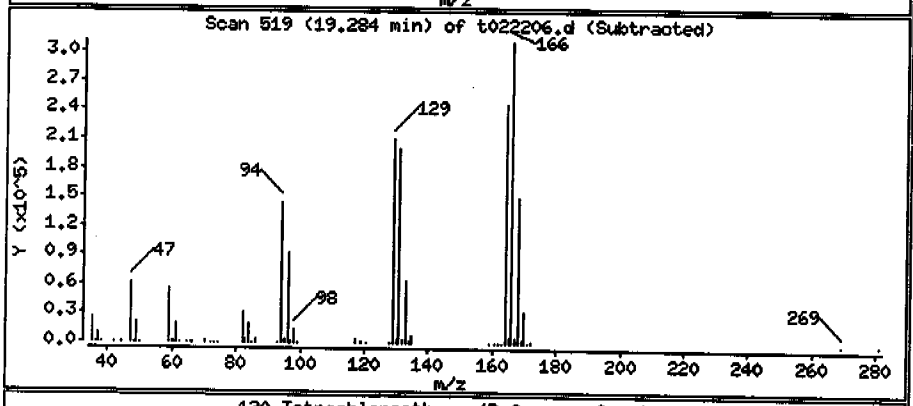
Column diameter: 0.53

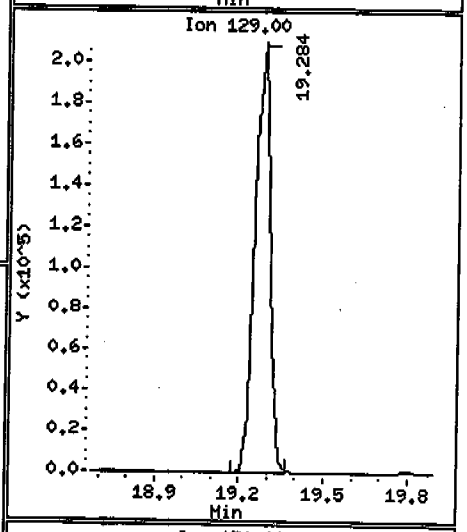
120 Tetrachloroethene

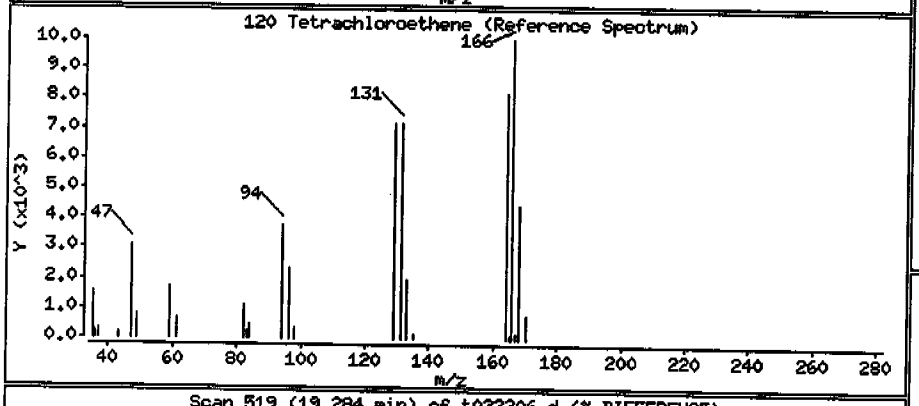
Concentration: 64.885 PPBV

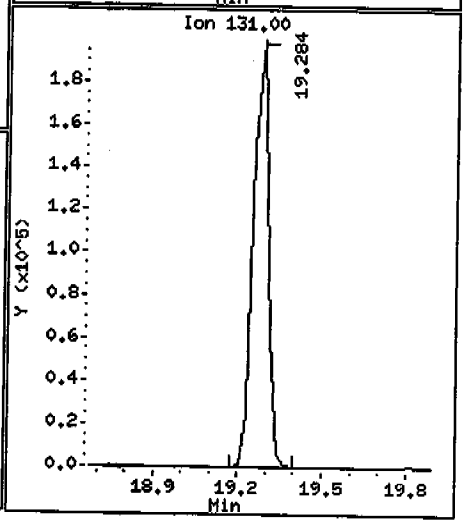


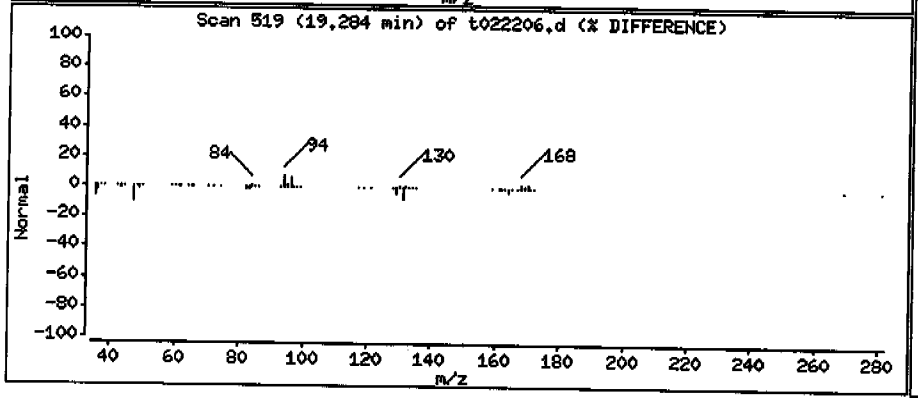












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10512 Lab Duplicate

Lab ID#: 0802328-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	2.1	4.2	11
Freon 113	0.84	1.0	6.4	7.6
Acetone	3.4	4.6	8.0	11
Carbon Disulfide	0.84	1.8	2.6	5.5
Methylene Chloride	0.84	64	2.9	220
Chloroform	0.84	73	4.1	360
1,1,1-Trichloroethane	0.84	4.5	4.6	25
Cyclohexane	0.84	1.7	2.9	5.8
Carbon Tetrachloride	0.84	27	5.3	170
Trichloroethene	0.84	96	4.5	520
Tetrachloroethene	0.84	63	5.7	430

0041

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10512 Lab Duplicate

Lab ID#: 0802328-02AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	2.1	4.2	11
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	1.0	6.4	7.6
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	3.4	4.6	8.0	11
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	1.8	2.6	5.5
Methylene Chloride	0.84	64	2.9	220
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	73	4.1	360
1,1,1-Trichloroethane	0.84	4.5	4.6	25
Cyclohexane	0.84	1.7	2.9	5.8
Carbon Tetrachloride	0.84	27	5.3	170
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	96	4.5	520
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	63	5.7	430

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10512 Lab Duplicate

Lab ID#: 0802328-02AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022207.d
Lab Smp Id: 0802328-02AA
Inj Date : 22-FEB-2008 15:29
Operator : sjr
Inst ID: msdt.i
Smp Info : 200mL #35984
Misc Info : 6.0"Hg -> 5.0psi
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 16:12 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	263809	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	211041			26.57- 126.57	80.00
13.865	13.865 (1.000)	49	457752			139.07- 239.07	173.52
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	999388	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	163675			0.00- 66.77	16.38
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	945487	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	553016			7.58- 107.58	58.49
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.944 (1.076)	65	423564	24.9522	24.952	80.00- 120.00	100.00
14.943	14.944 (1.076)	67	208390			3.57- 103.57	49.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1012743	26.3075	26.307	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	112458			0.00- 61.29	11.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	677510			18.71- 118.71	66.90
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	633434	25.9010	25.901	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	790992			77.79- 177.79	124.87
22.796	22.796 (1.096)	176	603718			48.42- 148.42	95.31
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	65909	1.27946	2.149	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	20081			0.00- 82.13	30.47
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	15944	0.59376	0.9975	80.00- 120.00	100.00
9.939	9.939 (0.715)	153	9472			13.23- 113.23	59.41
9.939	9.939 (0.715)	101	20918			83.10- 183.10	131.19
45 Acetone					CAS #: 67-64-1		
10.215	10.188 (0.735)	58	20358	2.71772	4.566	80.00- 120.00	100.00
10.215	10.188 (0.735)	43	75071			267.82- 367.82	368.76
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	47925	1.04826	1.761	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.799)	49	581250	38.0299	63.890	80.00- 120.00	100.00
11.100	11.100 (0.799)	84	494815			32.18- 132.18	85.13
11.100	11.100 (0.799)	51	181553			0.00- 83.83	31.24
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	1674871	43.7124	73.437	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1081888			14.26- 114.26	64.60
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.028)	97	114652	2.70534	4.545	80.00- 120.00	100.00
14.280	14.280 (1.028)	99	72865			14.90- 114.90	63.55
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.308 (1.030)	84	22769	1.00338	1.686	80.00- 120.00	100.00
14.307	14.308 (1.030)	56	22801			52.96- 152.96	100.14
14.307	14.308 (1.030)	41	15253			6.25- 106.25	66.99
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.046)	119	656474	16.1257	27.091	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	689420			56.33- 156.33	105.02

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1227685	57.3724	96.386	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1148164			42.34- 142.34	93.52
16.077	16.077 (1.028)	97	790247			13.74- 113.74	64.37
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1079808	37.4163	62.859	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	759073			20.52- 120.52	70.30
19.284	19.284 (0.927)	131	719539			16.74- 116.74	66.64

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022207.d
Lab Smp Id: 0802328-02AA
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Calibration Date: 22-FEB-2008
Calibration Time: 09:47

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	263809	-3.37
97 1,4-Difluorobenze	1067226	640336	1494116	999388	-6.36
126 Chlorobenzene-d5	999102	599461	1398743	945487	-5.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802328-02AA
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Client SDG: 22Feb2008
Fraction: VOA

Operator: sjr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.952	99.81	70-130
$ 113 Toluene-d8	25.000	26.307	105.23	70-130
$ 137 Bromofluorobenzene	25.000	25.901	103.60	70-130

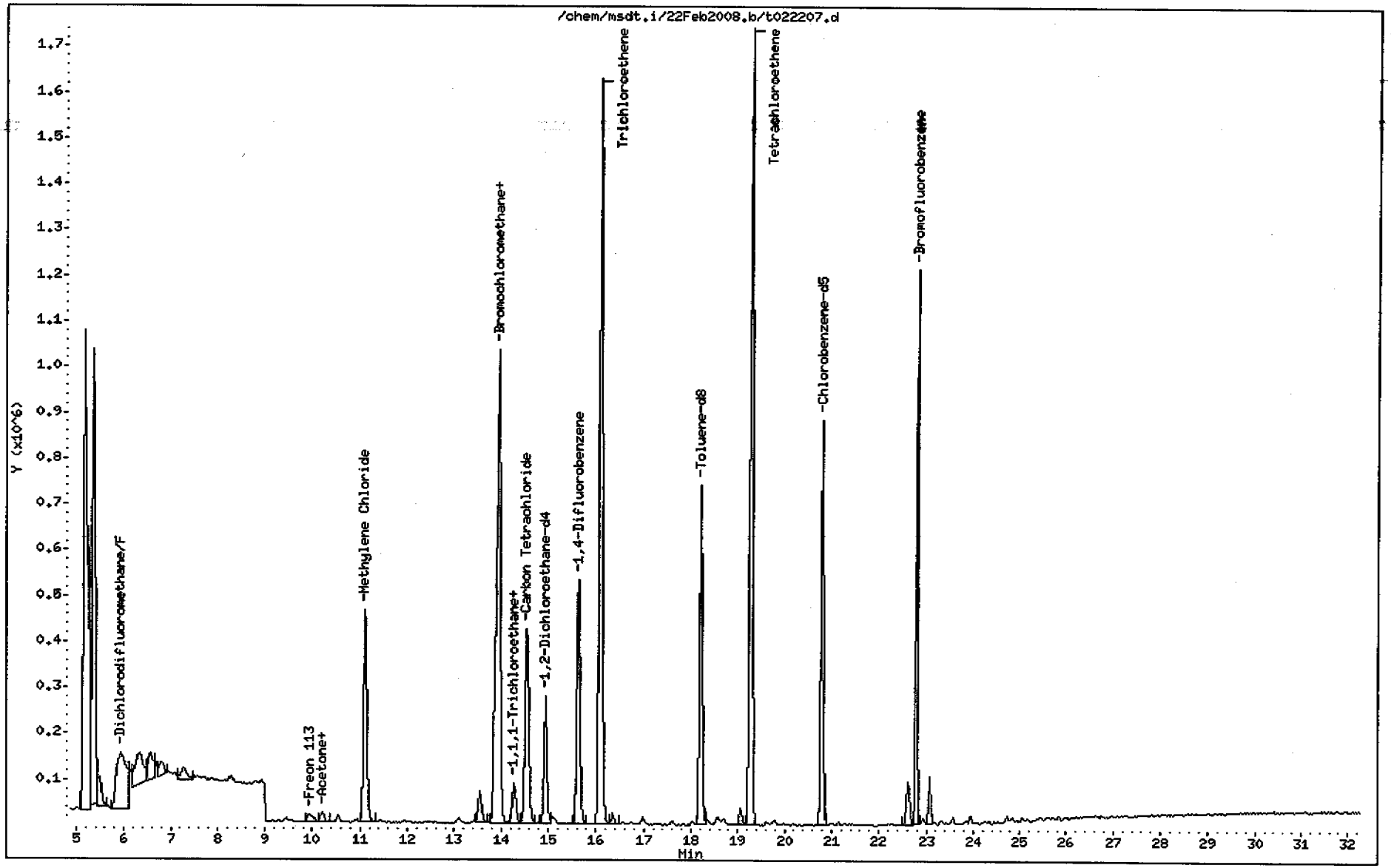
Data File: /chem/msdt.i/22Feb2008.b/t022207.d
Date : 22-FEB-2008 15:29
Client ID:
Sample Info: 200mL #35984

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0049



Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

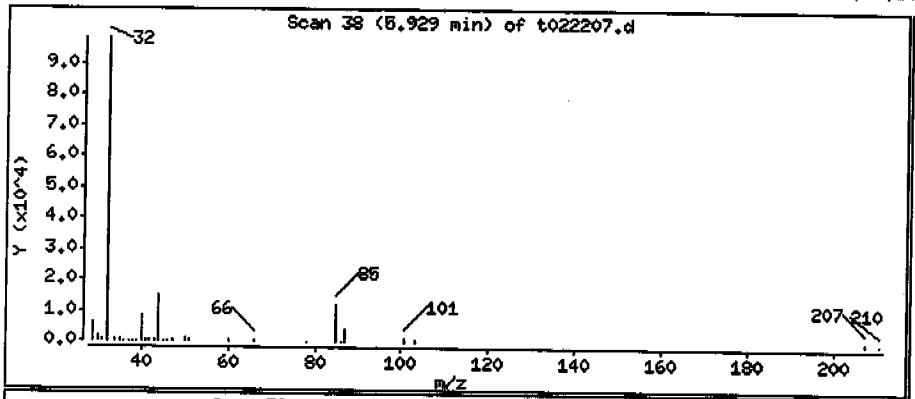
Operator: sjr

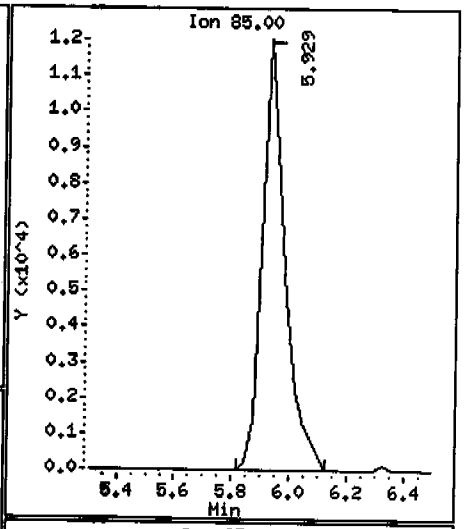
Column phase: RTx-624

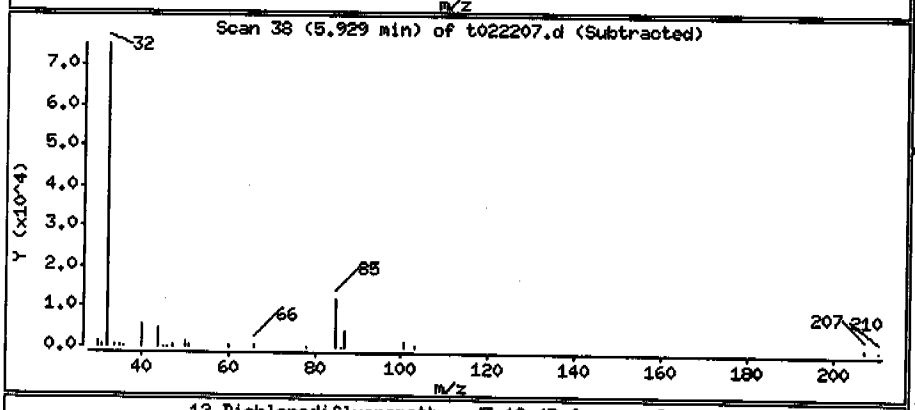
Column diameter: 0.53

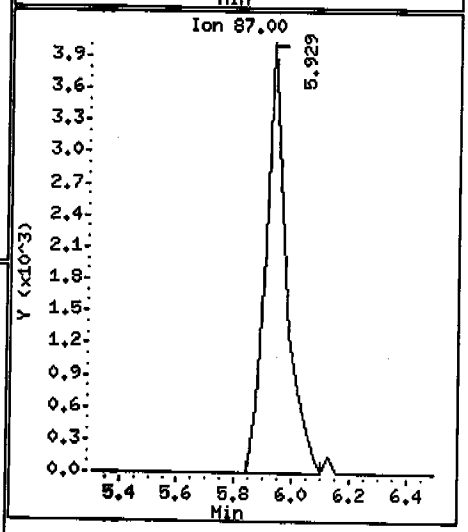
12 Dichlorodifluoromethane/Fr12

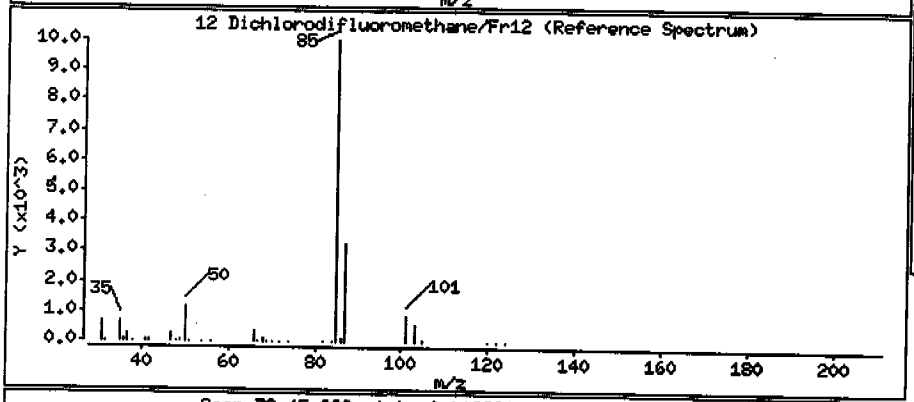
Concentration: 2.149 PPBV

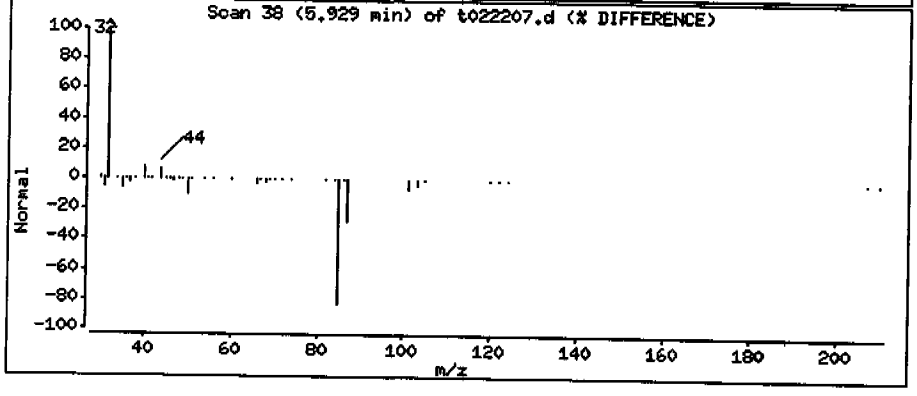












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

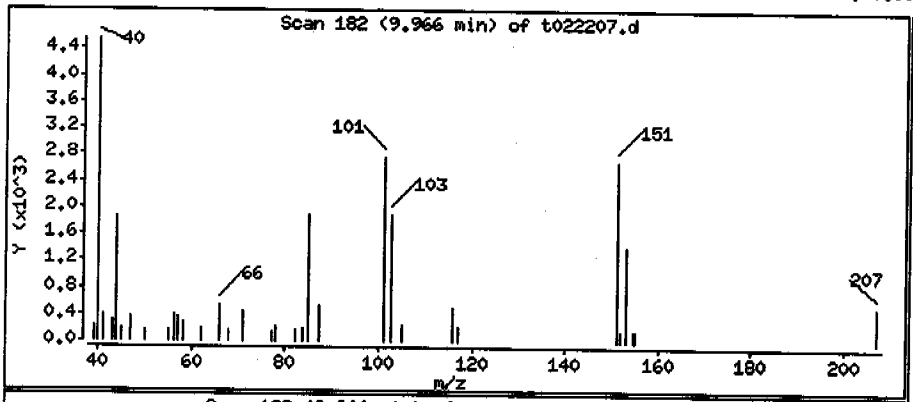
Operator: sjr

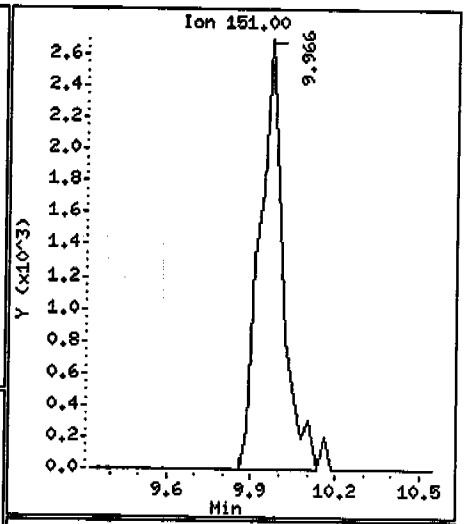
Column phase: RTx-624

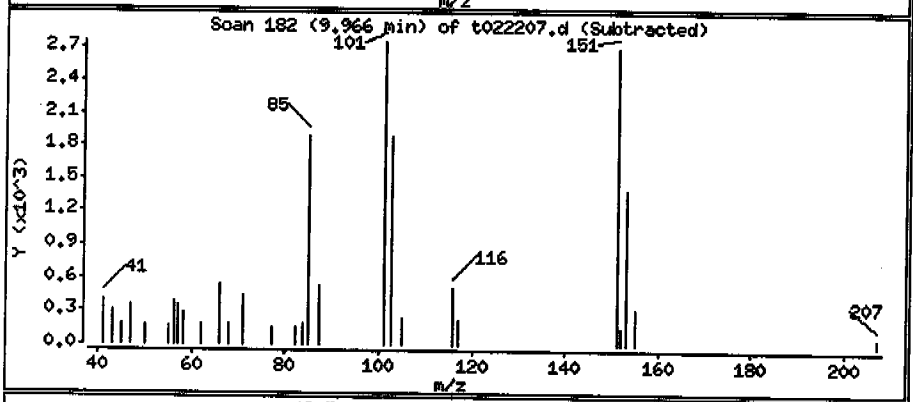
Column diameter: 0.53

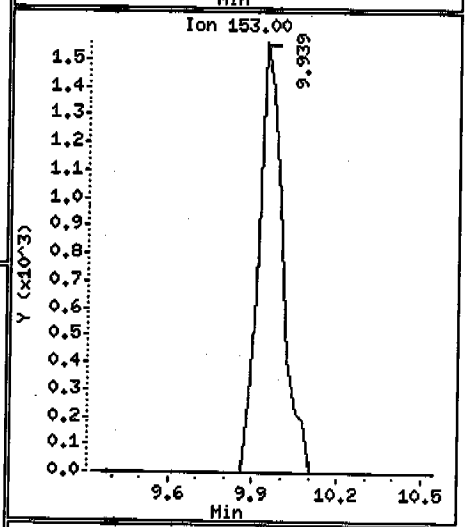
42 Freon 113

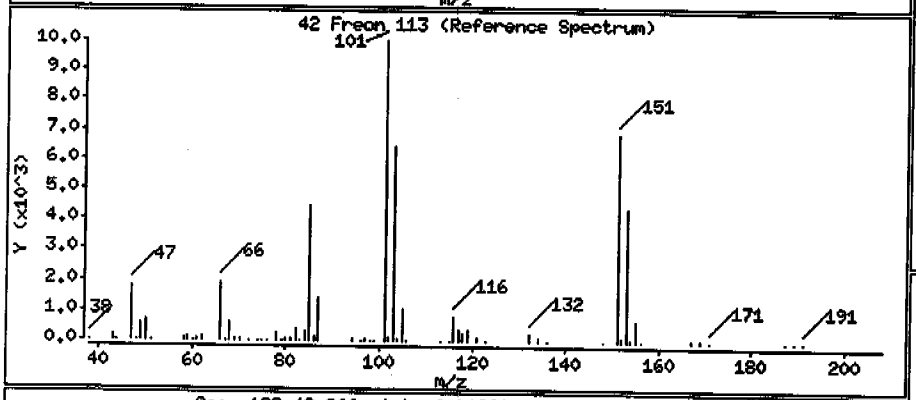
Concentration: 0.9975 PPBV

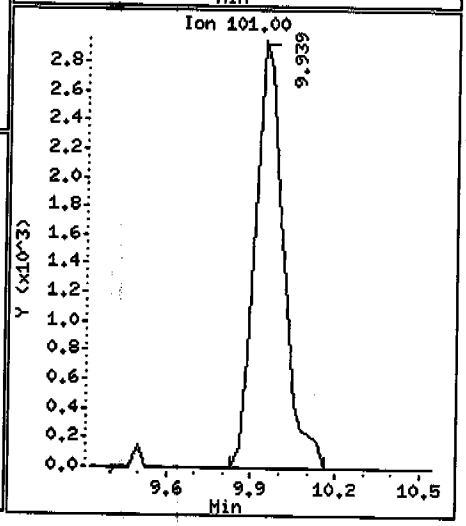


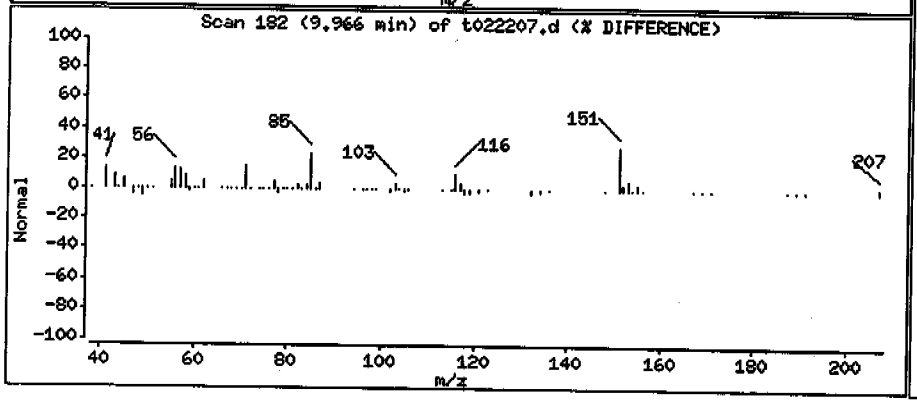












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

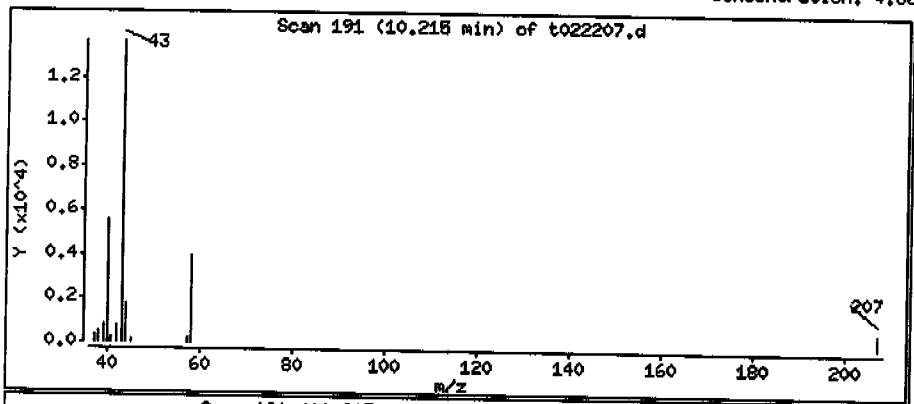
Operator: sjr

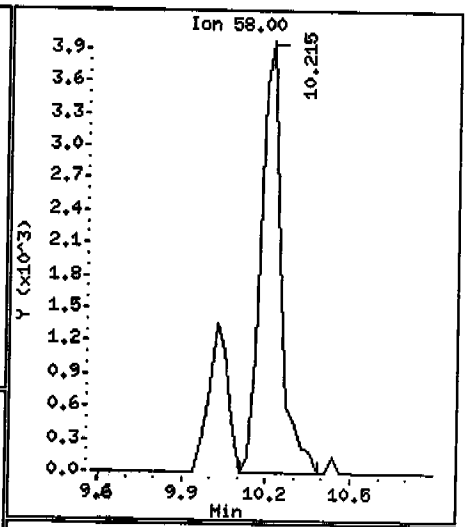
Column phase: RTx-624

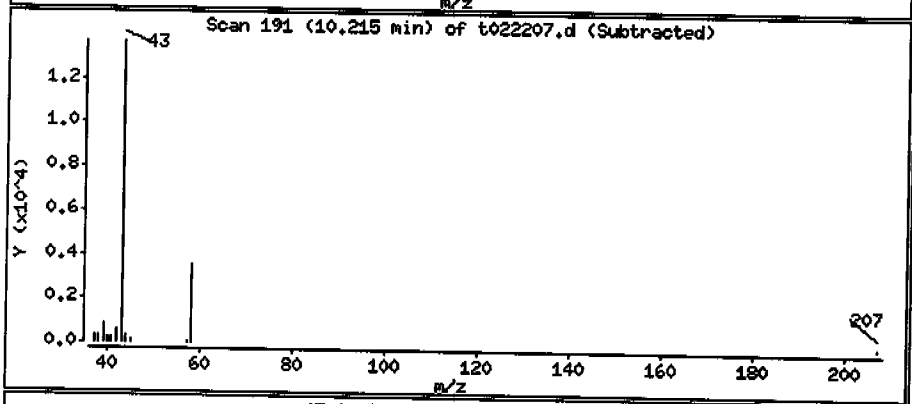
Column diameter: 0.53

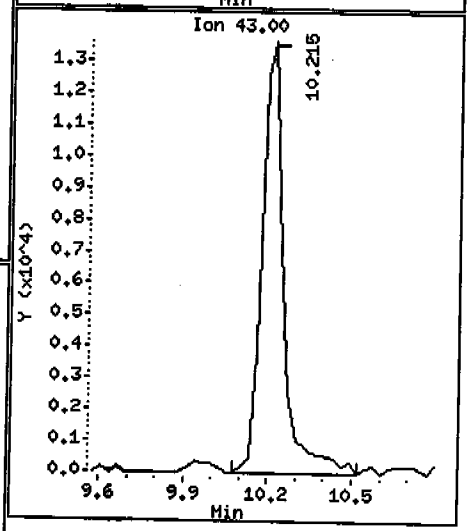
45 Acetone

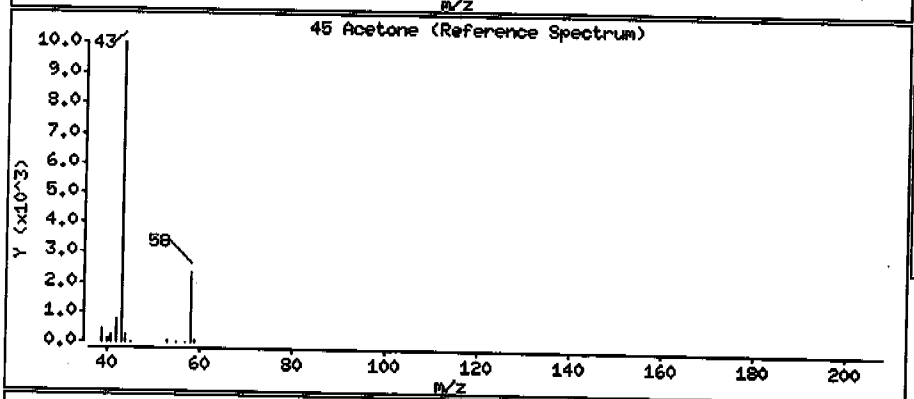
Concentration: 4.566 PPBV

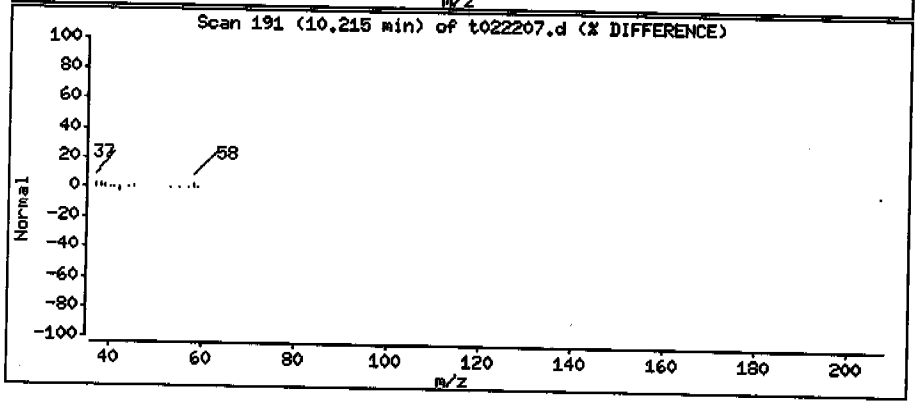












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

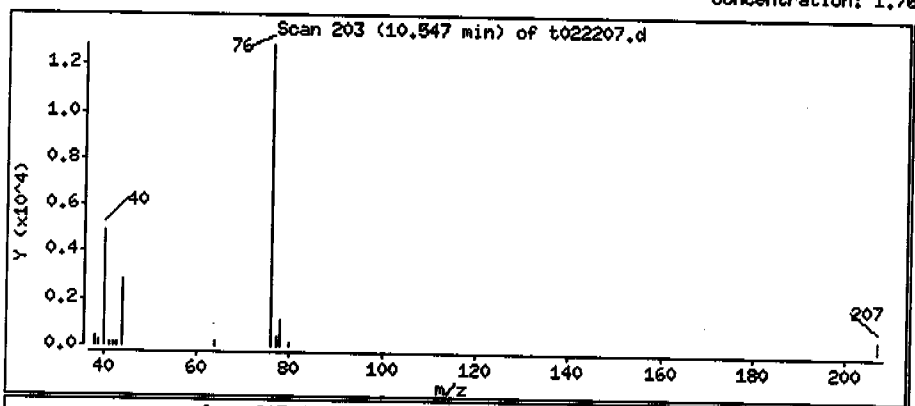
Operator: sjr

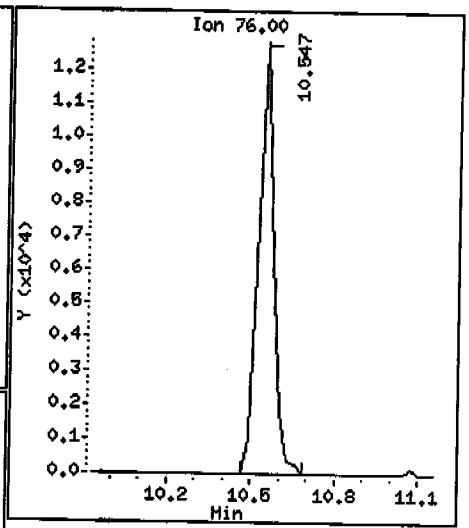
Column phase: RTx-624

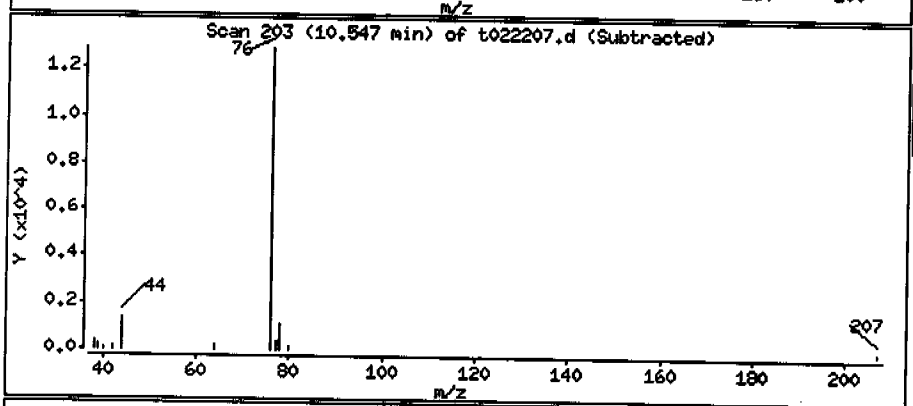
Column diameter: 0.53

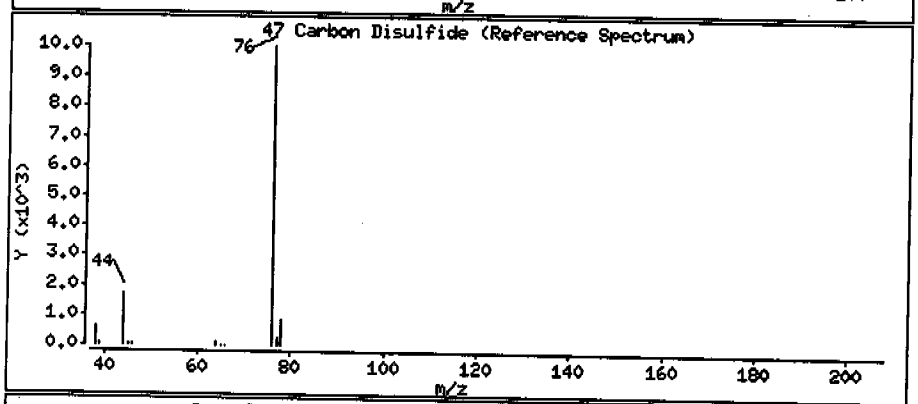
47 Carbon Disulfide

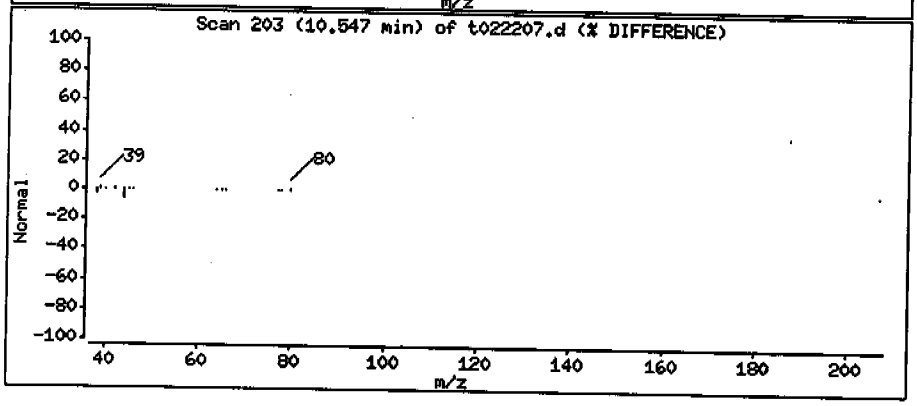
Concentration: 1.761 PPBV











Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

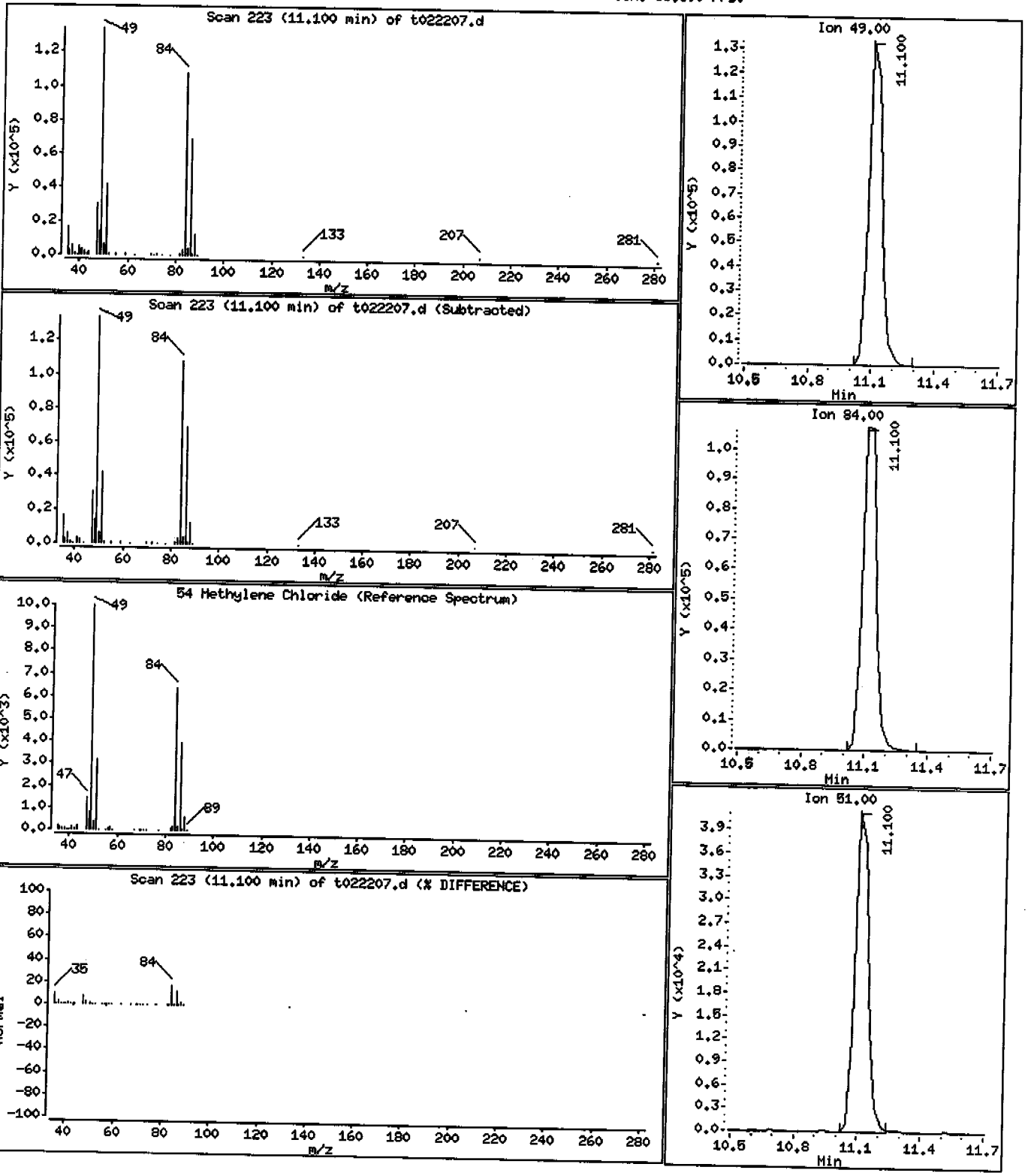
Operator: sjr

Column phase: RTx-624

Column diameter: 0.53

54 Methylene Chloride

Concentration: 63.890 PPBV



Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

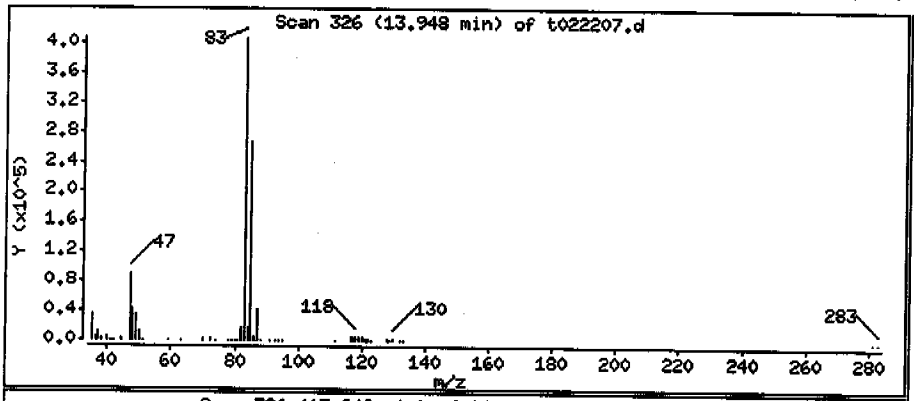
Operator: sjr

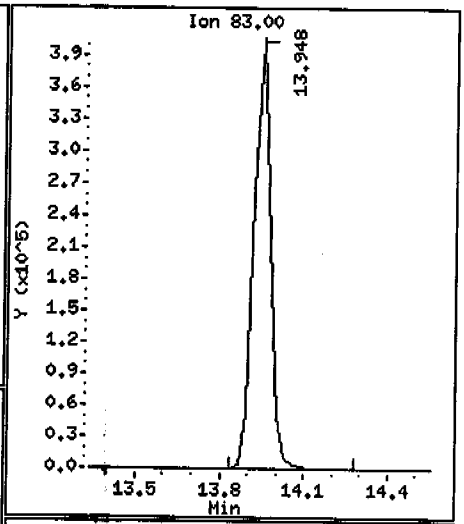
Column phase: RTx-624

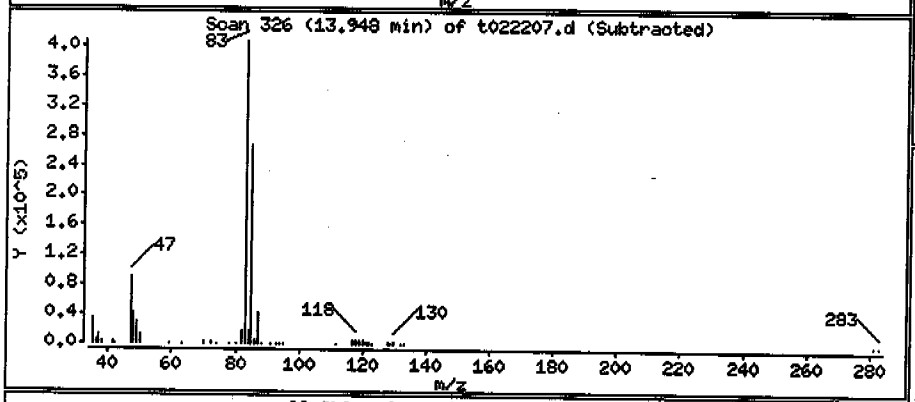
Column diameter: 0.53

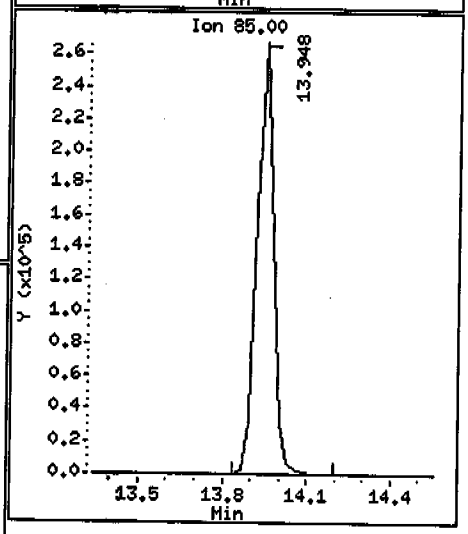
82 Chloroform

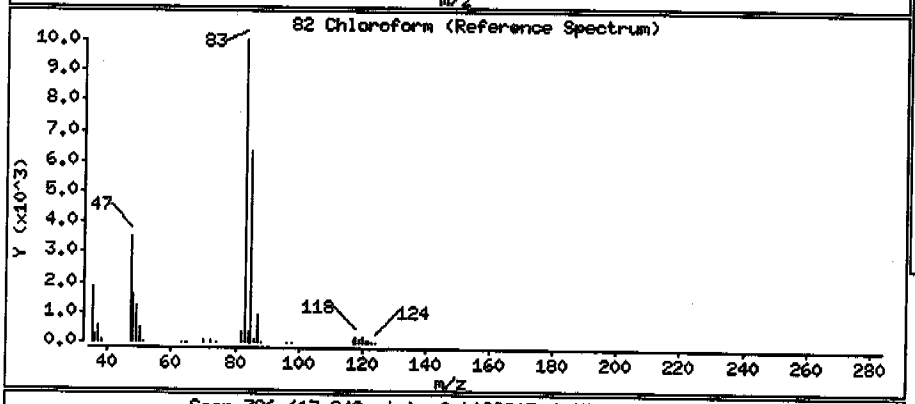
Concentration: 73.437 PPBV

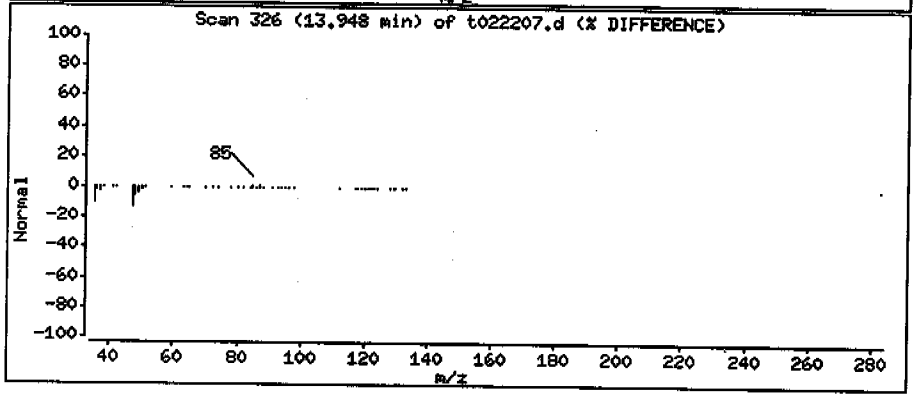












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35984

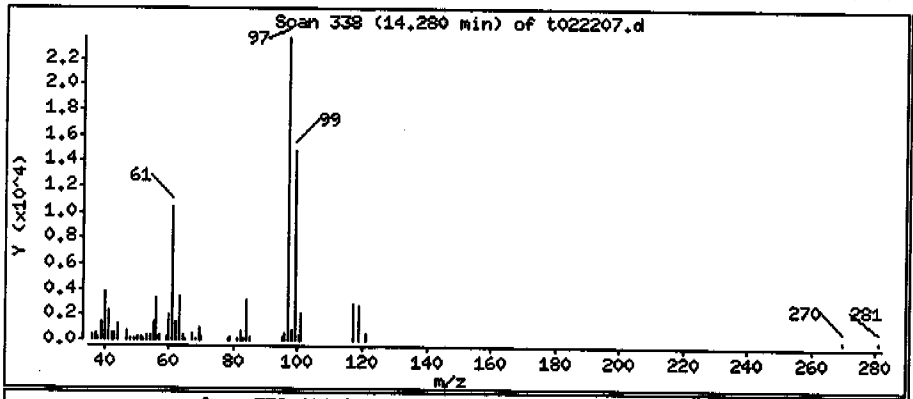
Operator: sjr

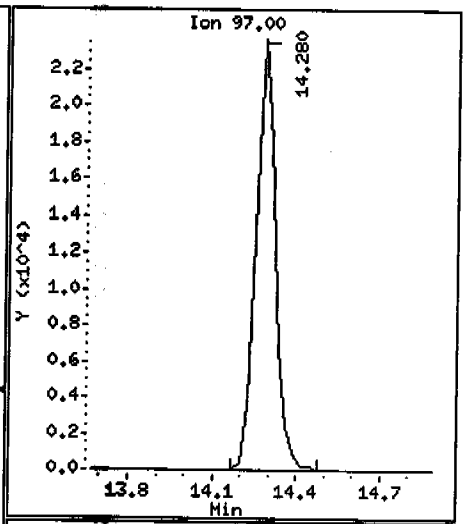
Column phase: RTx-624

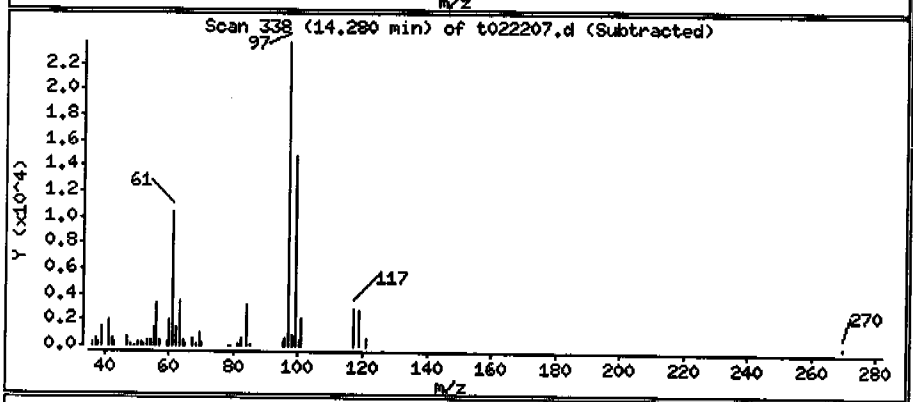
Column diameter: 0.53

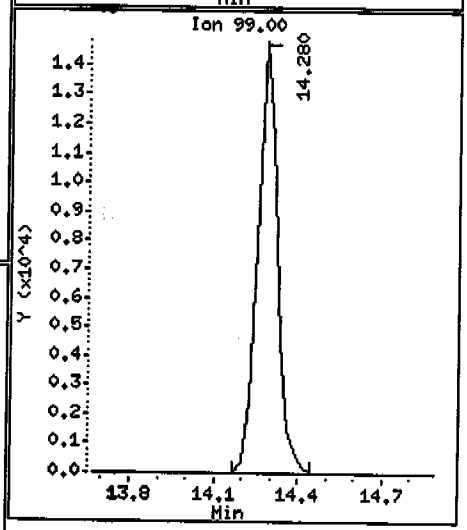
83 1,1,1-Trichloroethane

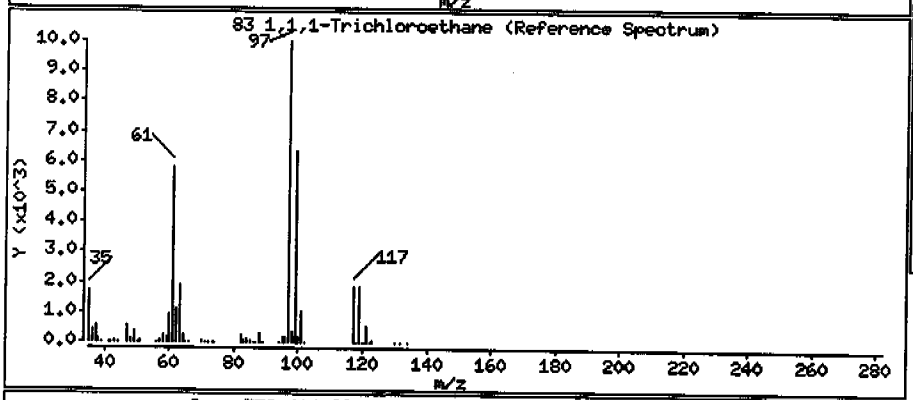
Concentration: 4.545 PPBV

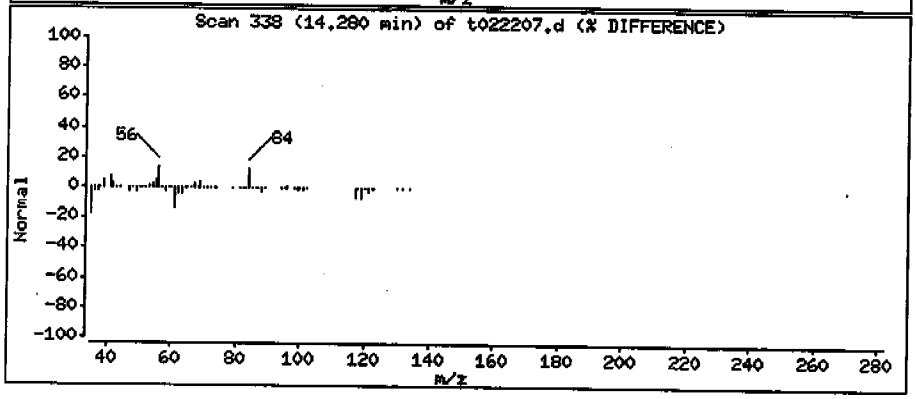












0056

Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35984

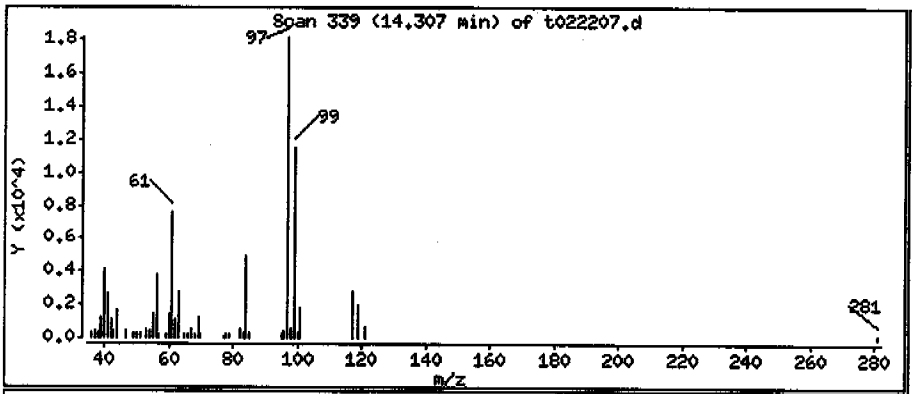
Operator: sjr

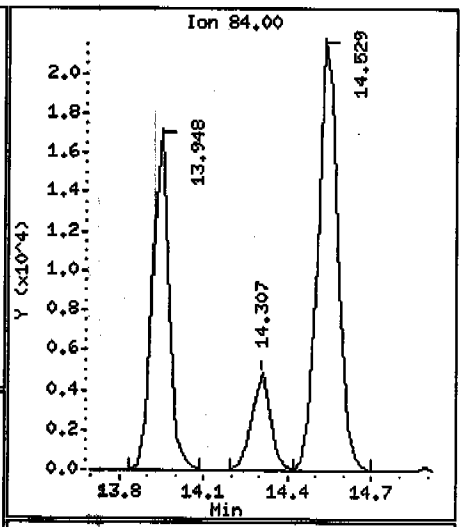
Column phase: RTx-624

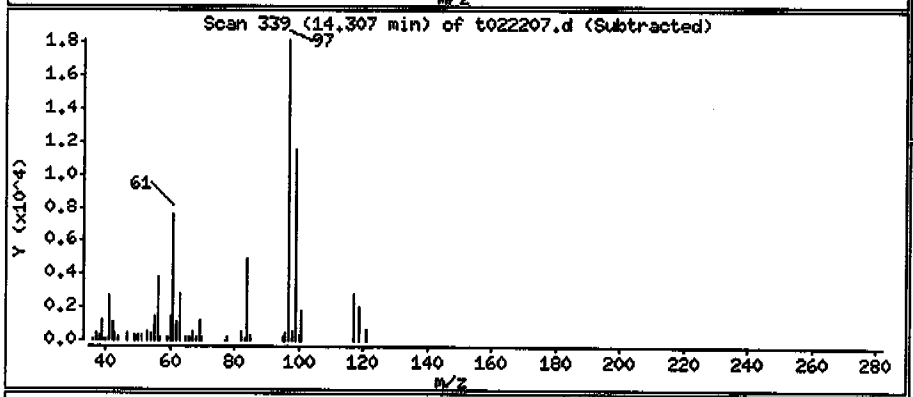
Column diameter: 0.53

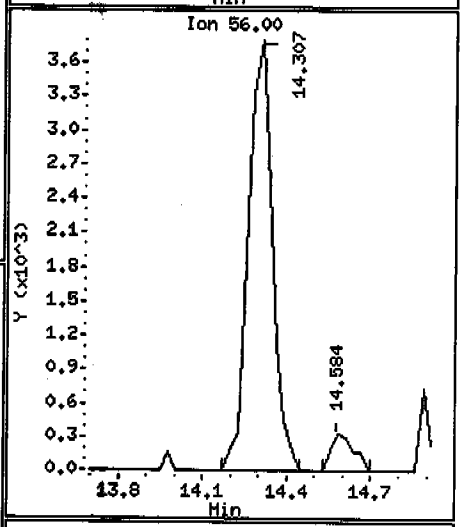
85 Cyclohexane

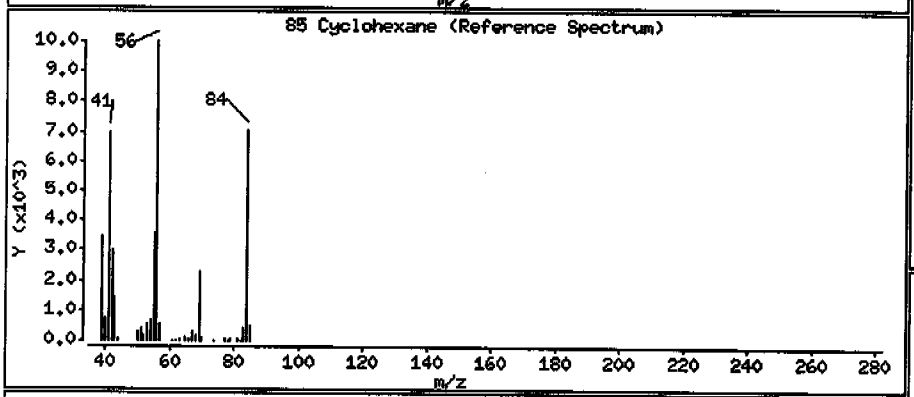
Concentration: 1.686 PPBV

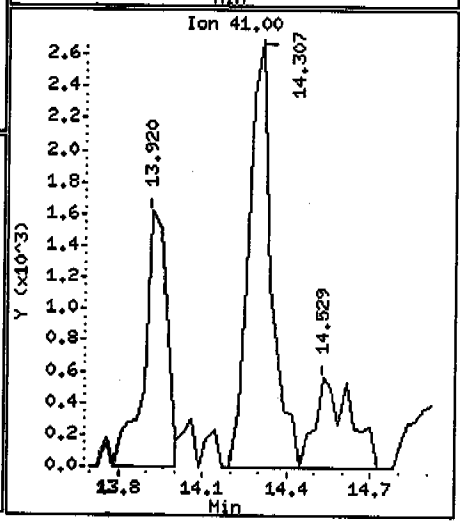


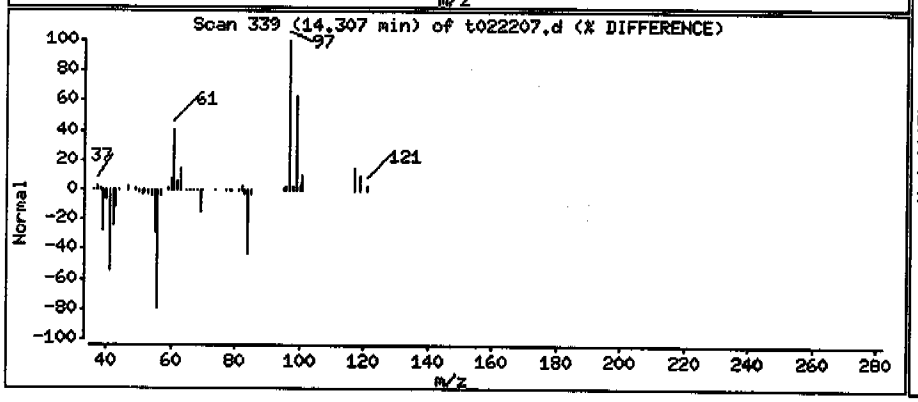












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35984

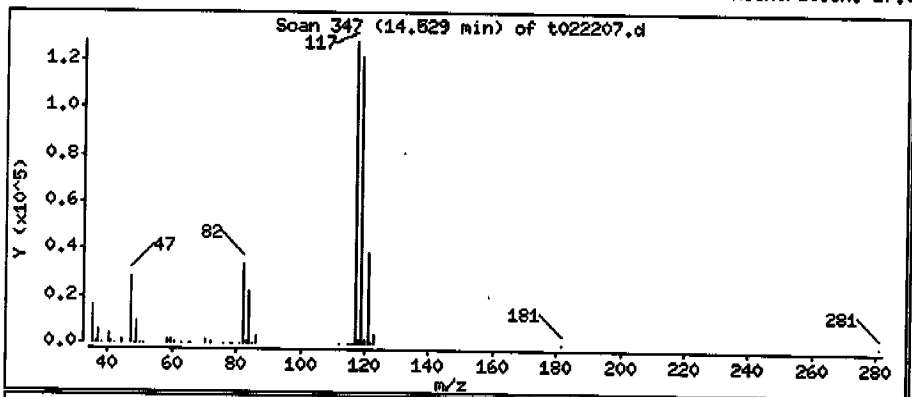
Operator: sjr

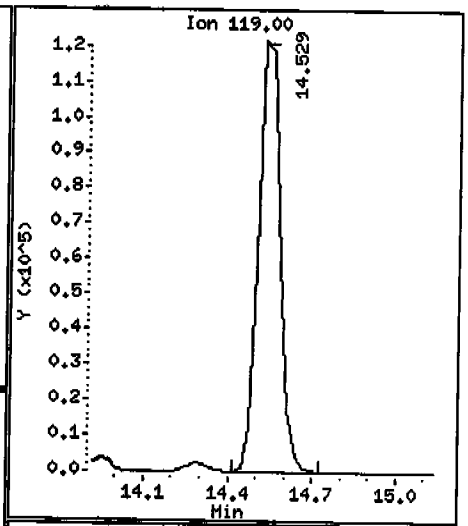
Column phase: RTx-624

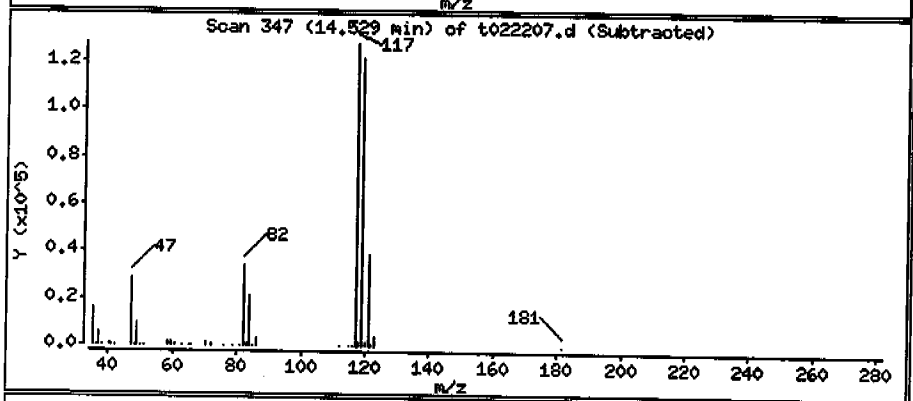
Column diameter: 0.53

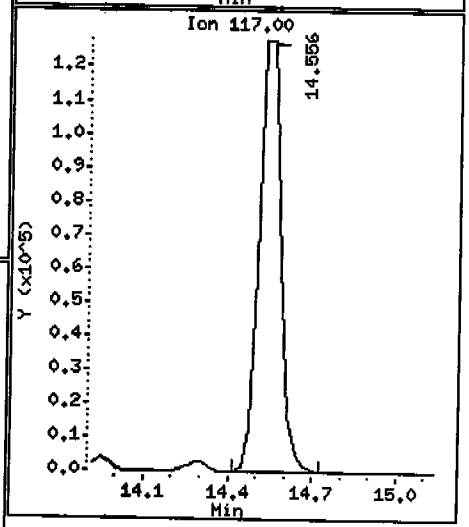
87 Carbon Tetrachloride

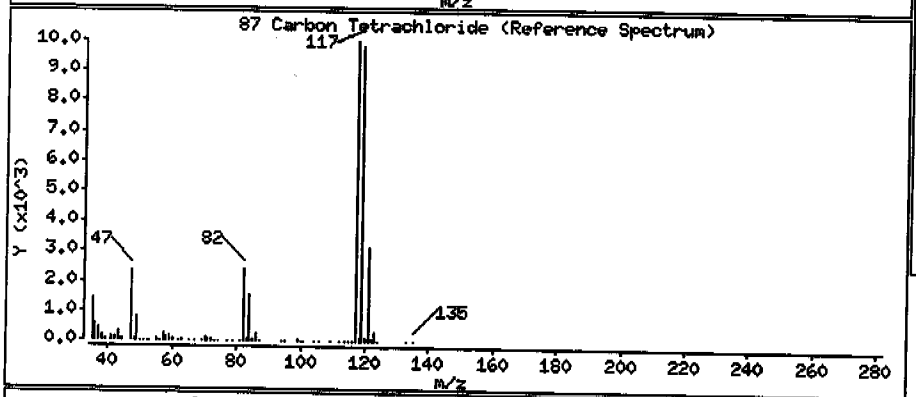
Concentration: 27.091 PPBV

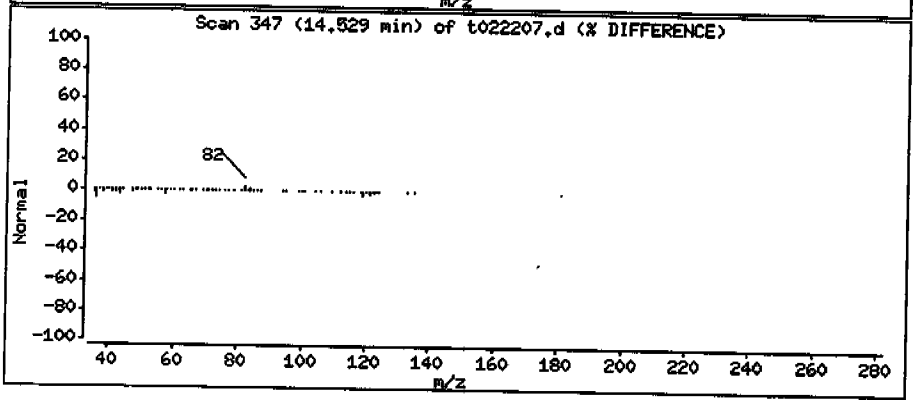












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Sample Info: 200mL #35984

Instrument: msdt.i

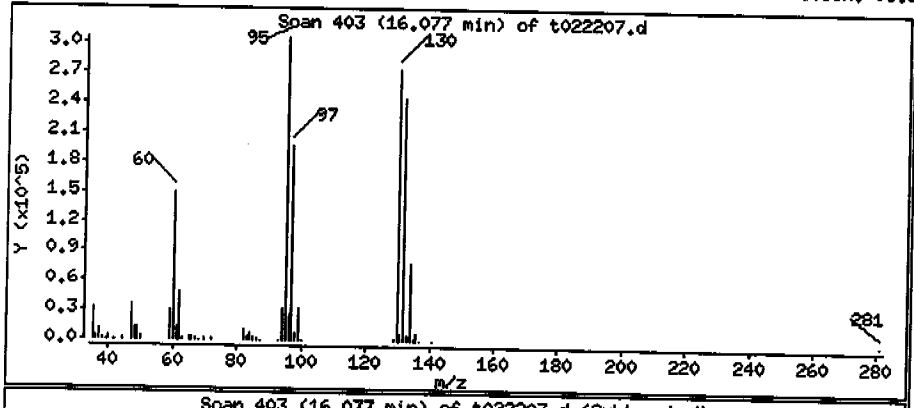
Operator: sjr

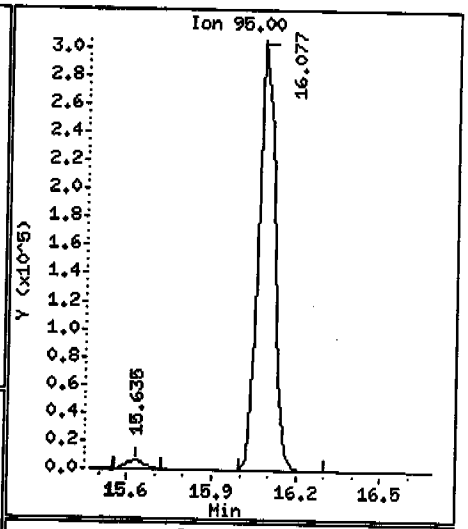
Column phase: RTx-624

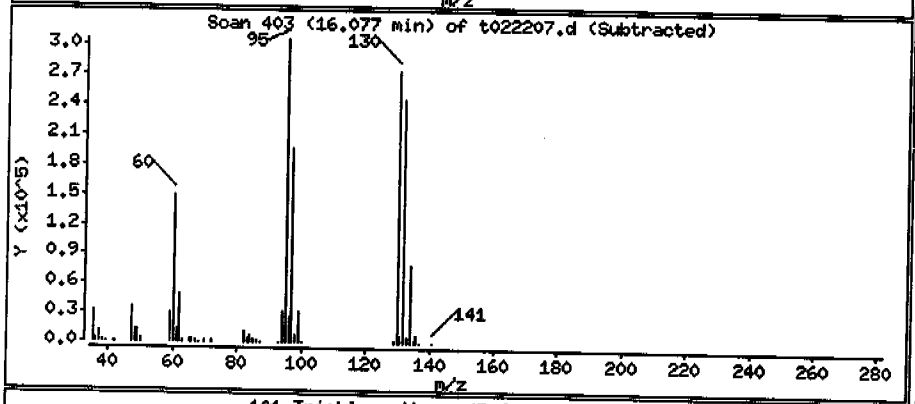
Column diameter: 0.53

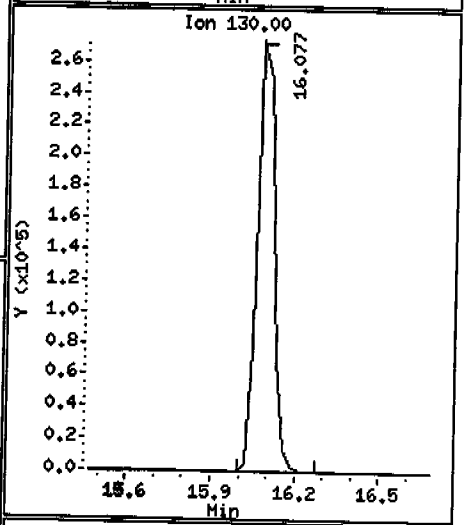
101 Trichloroethene

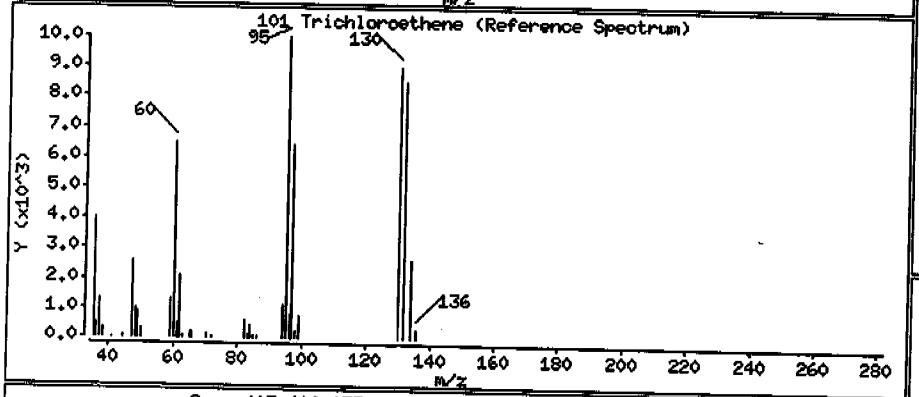
Concentration: 96.386 PPBV

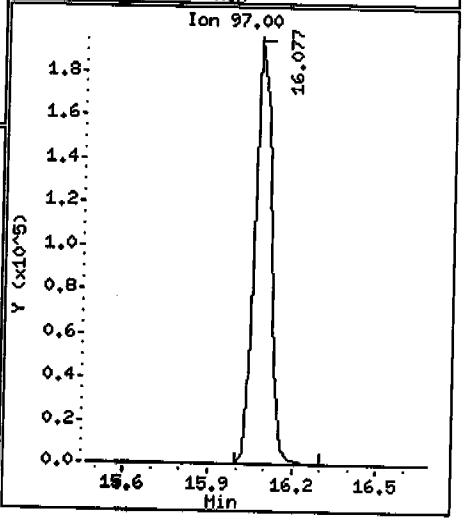


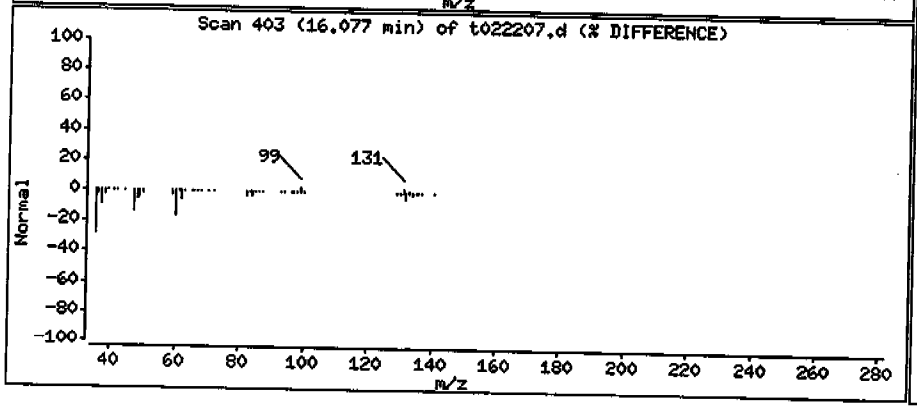












Data File: /chem/msdt.i/22Feb2008.b/t022207.d

Date : 22-FEB-2008 15:29

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35984

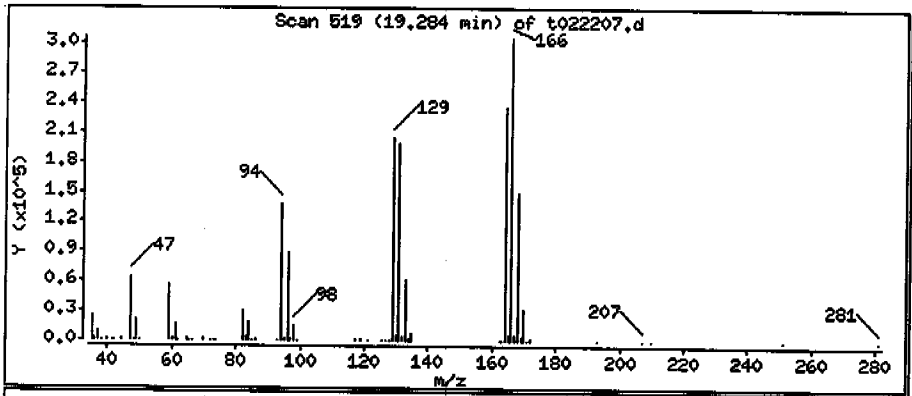
Operator: sjr

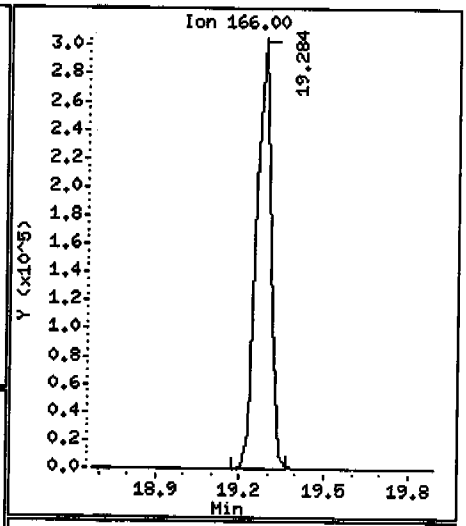
Column phase: RTx-624

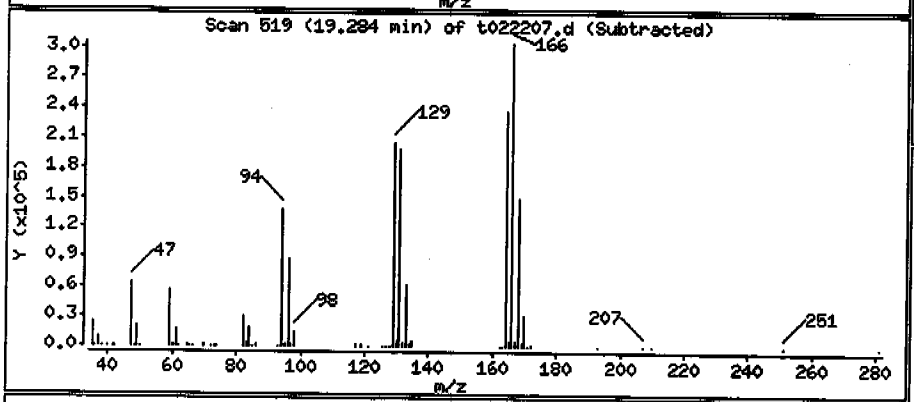
Column diameter: 0.53

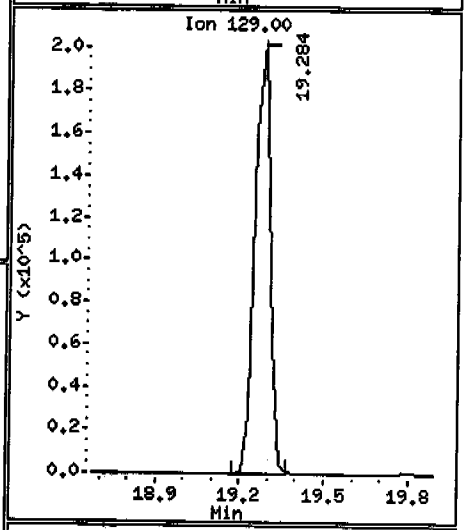
120 Tetrachloroethene

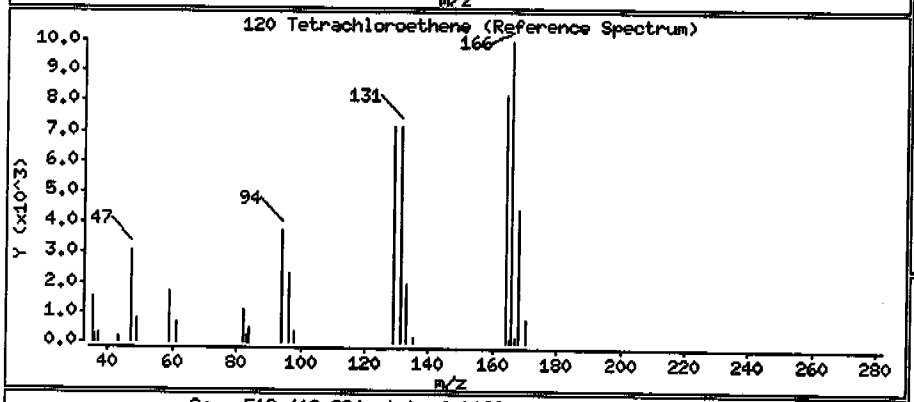
Concentration: 62.859 PPBV

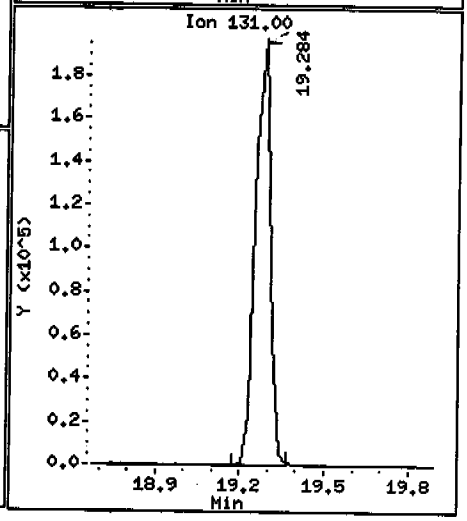


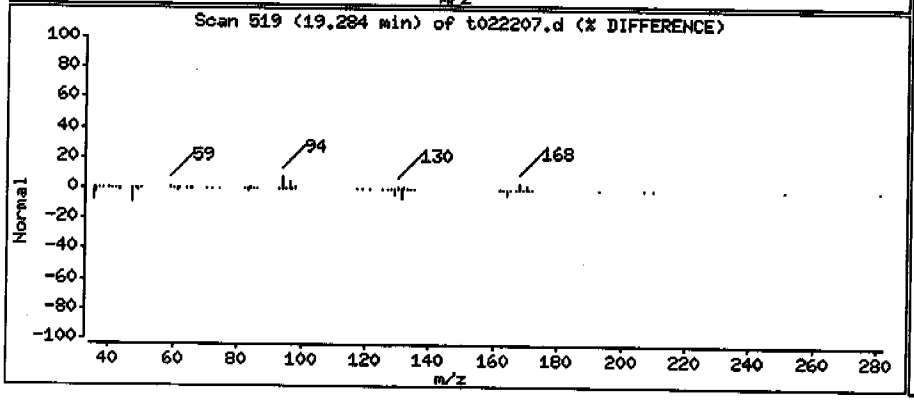












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10513

Lab ID#: 0802328-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	2.0	4.2	9.9
Freon 113	0.84	1.2	6.4	9.0
1,1-Dichloroethene	0.84	1.2	3.3	5.0
Carbon Disulfide	0.84	1.9	2.6	6.0
Methylene Chloride	0.84	180	2.9	640
Tetrahydrofuran	0.84	0.94	2.5	2.8
Chloroform	0.84	91	4.1	450
1,1,1-Trichloroethane	0.84	3.8	4.6	21
Cyclohexane	0.84	1.6	2.9	5.6
Carbon Tetrachloride	0.84	49	5.3	310
1,2-Dichloroethane	0.84	2.3	3.4	9.3
Trichloroethene	0.84	120	4.5	620
Bromodichloromethane	0.84	0.90	5.6	6.0
1,1,2-Trichloroethane	0.84	0.83 J	4.6	4.6
Tetrachloroethene	0.84	28	5.7	190

0061

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10513

Lab ID#: 0802328-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	2.0	4.2	9.9
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	1.2	6.4	9.0
1,1-Dichloroethene	0.84	1.2	3.3	5.0
Acetone	3.4	Not Detected	8.0	Not Detected
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	1.9	2.6	6.0
Methylene Chloride	0.84	180	2.9	640
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	0.94	2.5	2.8
Chloroform	0.84	91	4.1	450
1,1,1-Trichloroethane	0.84	3.8	4.6	21
Cyclohexane	0.84	1.6	2.9	5.6
Carbon Tetrachloride	0.84	49	5.3	310
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	2.3	3.4	9.3
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	120	4.5	620
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	0.90	5.6	6.0
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	0.83 J	4.6	4.6
Tetrachloroethene	0.84	28	5.7	190

0062

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10513

Lab ID#: 0802328-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

0063

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022208.d
Lab Smp Id: 0802328-03A
Inj Date : 22-FEB-2008 16:44
Operator : ACT
Inst ID: msdt.i
Smp Info : 200mL #14118
Misc Info : 6.0"Hg -> 5.0psi
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 16:12 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
13.893	13.865 (1.000)	130	266239	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	208592			26.57- 126.57	78.35
13.865	13.865 (1.000)	49	481816			139.07- 239.07	180.97
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.635	15.607 (1.000)	114	1000693	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	161213			0.00- 66.77	16.11
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.805	20.805 (1.000)	117	950482	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	560026			7.58- 107.58	58.92
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
14.944	14.944 (1.076)	65	421030	24.5766	24.576	80.00- 120.00	100.00
14.944	14.944 (1.076)	67	213631			3.57- 103.57	50.74
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.206	18.206 (1.164)	98	1004559	26.0608	26.061	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	113395			0.00- 61.29	11.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	682482			18.71- 118.71	67.94
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	634857	25.8227	25.823	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	805316			77.79- 177.79	126.85
22.796	22.796 (1.096)	176	615155			48.42- 148.42	96.90
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	62094	1.19440	2.006	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	17816			0.00- 82.13	28.69
42 Freon 113					CAS #: 76-13-1		
9.967	9.939 (0.717)	151	18849	0.69553	1.168	80.00- 120.00	100.00
9.967	9.939 (0.717)	153	14239			13.23- 113.23	75.54
9.967	9.939 (0.717)	101	28563			83.10- 183.10	151.53
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.723)	61	18215	0.74673	1.254	80.00- 120.00	100.00
10.050	10.050 (0.723)	96	11173			4.93- 104.93	61.34
10.077	10.050 (0.725)	98	7634			0.00- 85.66	41.91
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	52920	1.14695	1.927	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	1696306	109.973	184.75	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	1448427			32.18- 132.18	85.39
11.128	11.100 (0.801)	51	514593			0.00- 83.83	30.34
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (0.998)	42	8031	0.55915	0.9394	80.00- 120.00	100.00
13.865	13.865 (0.998)	71	3802			0.00- 99.44	47.35
13.948	13.865 (1.004)	72	14514			2.04- 102.04	180.73
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	2103852	54.4072	91.404	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1370307			14.26- 114.26	65.13
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.028)	97	97822	2.28715	3.842	80.00- 120.00	100.00
14.280	14.280 (1.028)	99	67128			14.90- 114.90	68.62
85 Cyclohexane					CAS #: 110-82-7		
14.308	14.308 (1.030)	84	22034	0.96213	1.616	80.00- 120.00	100.00
14.308	14.308 (1.030)	56	30230			52.96- 152.96	137.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 Cyclohexane (continued)							
14.308	14.308 (1.030)	41	22340			6.25- 106.25	101.39
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	1199897	29.2054	49.065	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	1259481			56.33- 156.33	104.97
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	33340	1.36603	2.295	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	12956			0.00- 84.23	38.86
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1483862	69.2537	116.35	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1345810			42.34- 142.34	90.70
16.077	16.077 (1.028)	97	949262			13.74- 113.74	63.97
107 Bromodichloromethane					CAS #: 75-27-4		
16.990	16.990 (1.087)	83	20523	0.53521	0.8992	80.00- 120.00	100.00
16.990	16.990 (1.087)	85	12351			14.53- 114.53	60.18
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.119	19.119 (0.919)	97	10758	0.49689	0.8348	80.00- 120.00	100.00(a)
19.119	19.119 (0.919)	99	4761			12.54- 112.54	44.26
19.119	19.119 (0.919)	83	8963			35.47- 135.47	83.32
120 Tetrachloroethene					CAS #: 127-18-4		
19.285	19.284 (0.927)	166	490864	16.9195	28.425	80.00- 120.00	100.00
19.285	19.284 (0.927)	129	351873			20.52- 120.52	71.68
19.285	19.284 (0.927)	131	326569			16.74- 116.74	66.53

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022208.d
Lab Smp Id: 0802328-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Calibration Date: 22-FEB-2008
Calibration Time: 09:47

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	266239	-2.48
97 1,4-Difluorobenze	1067226	640336	1494116	1000693	-6.23
126 Chlorobenzene-d5	999102	599461	1398743	950482	-4.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 22Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802328-03A
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.576	98.31	70-130
$ 113 Toluene-d8	25.000	26.061	104.24	70-130
$ 137 Bromofluorobenzene	25.000	25.823	103.29	70-130

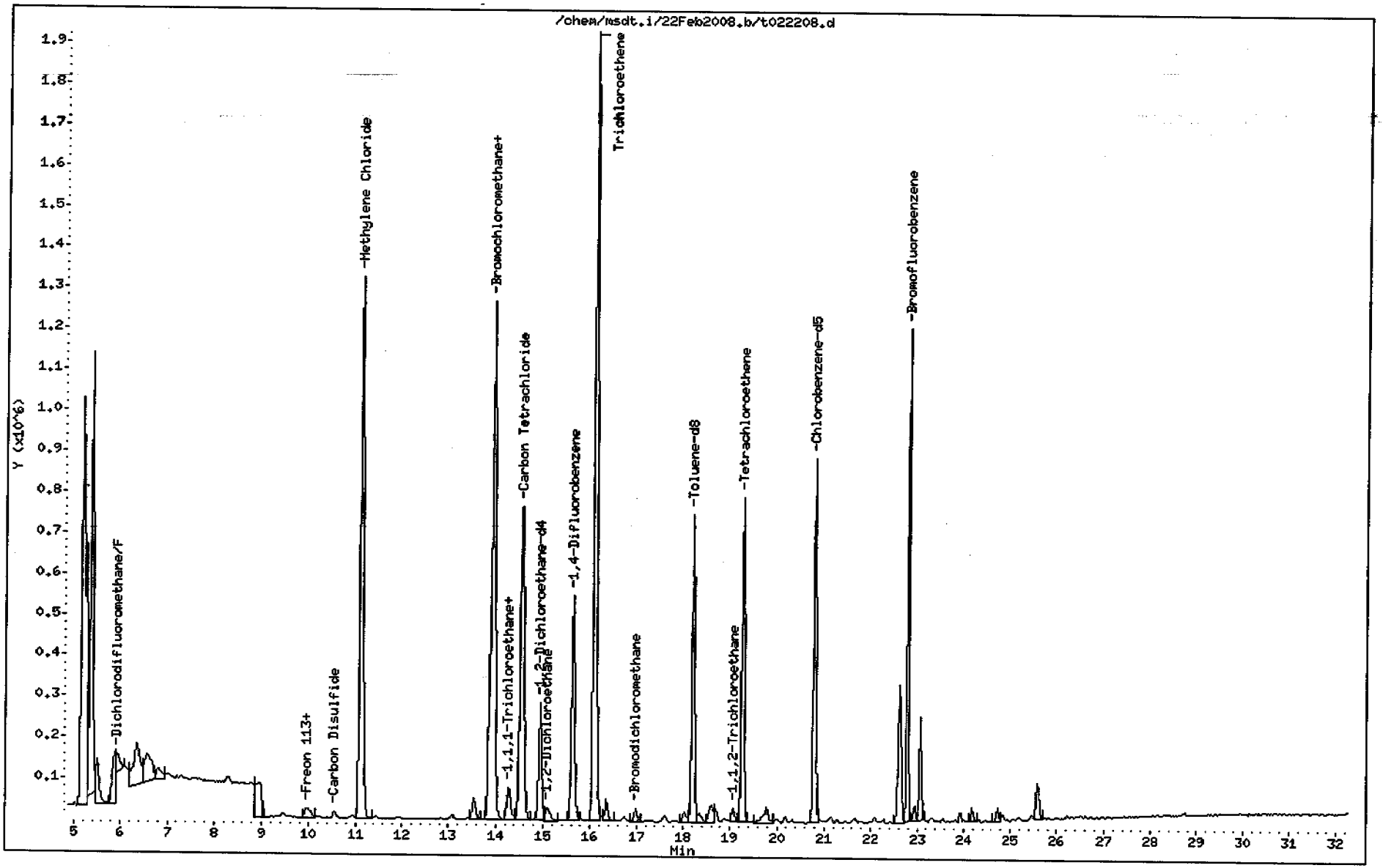
Data File: /chem/msdt.i/22Feb2008.b/t022208.d
Date : 22-FEB-2008 16:44
Client ID:
Sample Info: 200mL #14118

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0069



Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

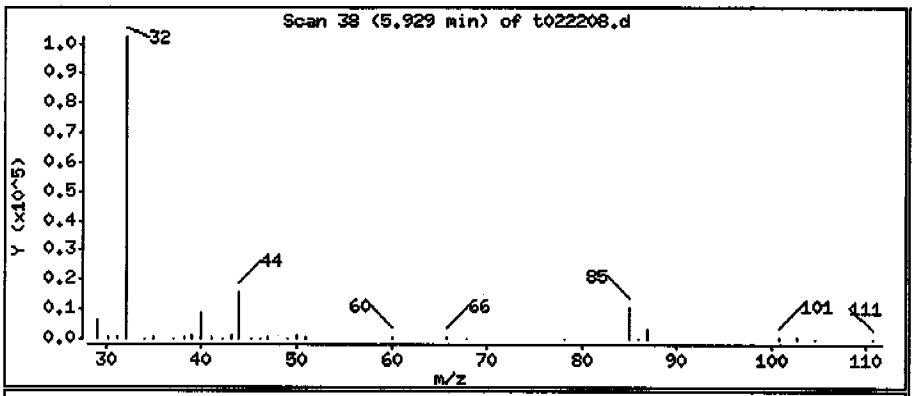
Operator: ACT

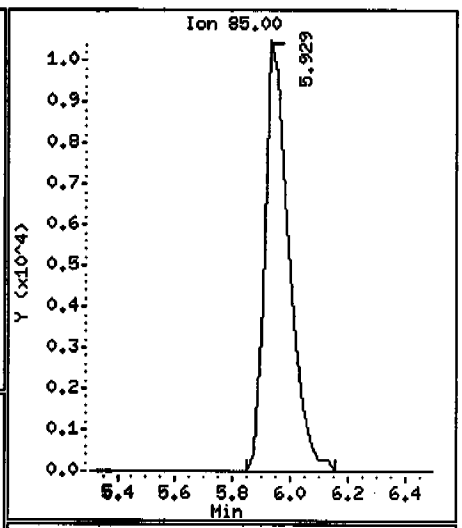
Column phase: RTx-624

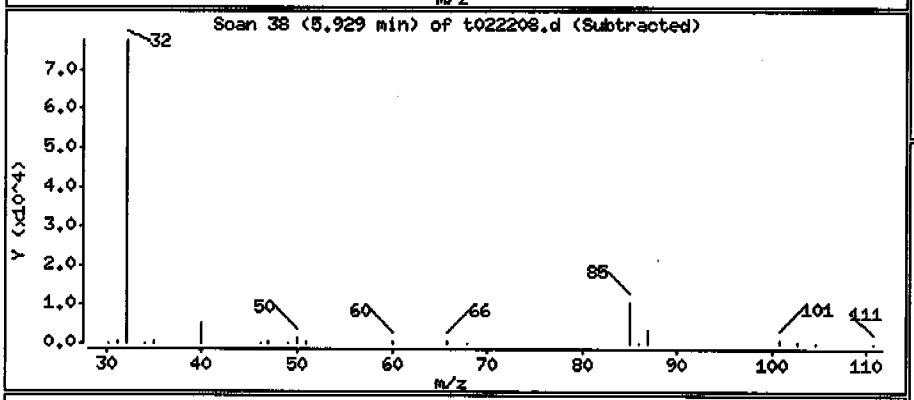
Column diameter: 0.53

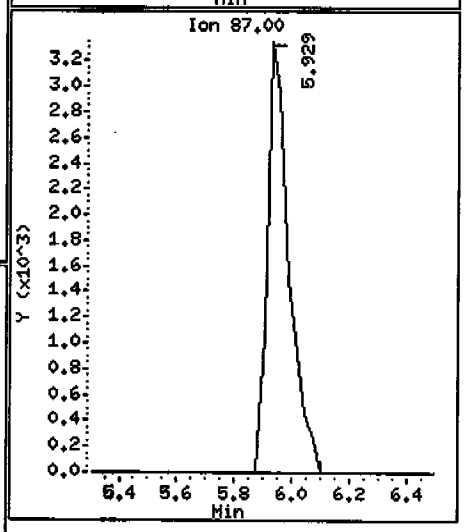
12 Dichlorodifluoromethane/Fr12

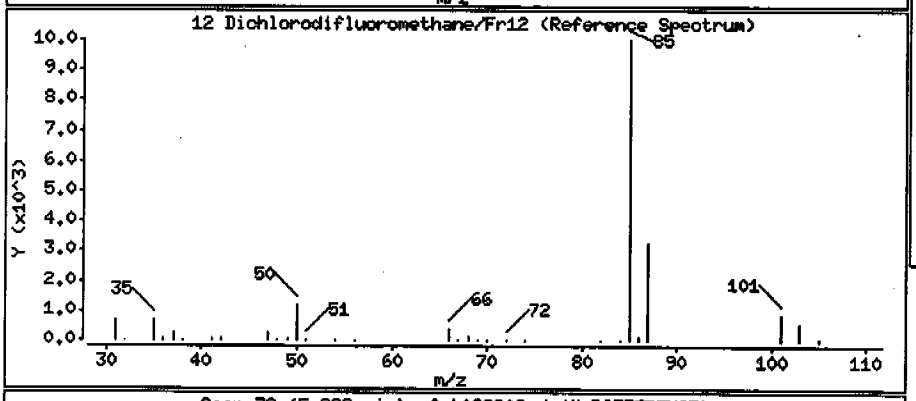
Concentration: 2.006 PPBV

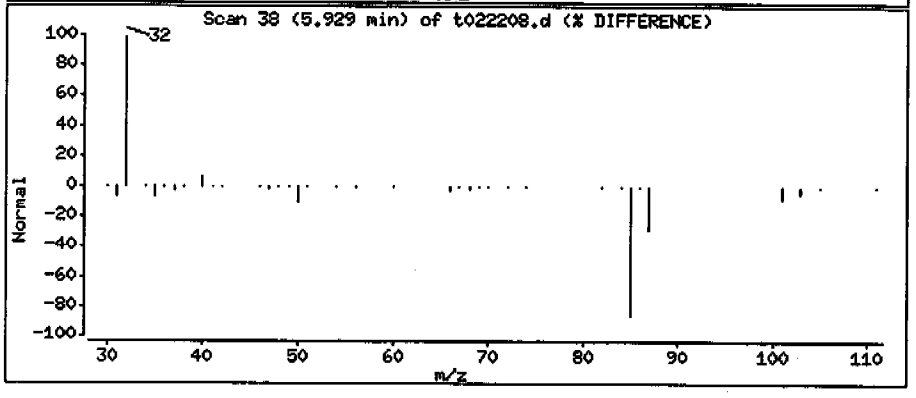












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

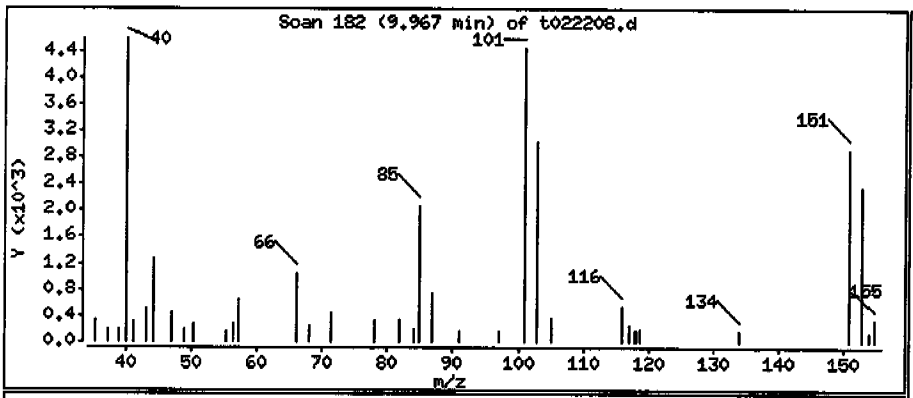
Operator: ACT

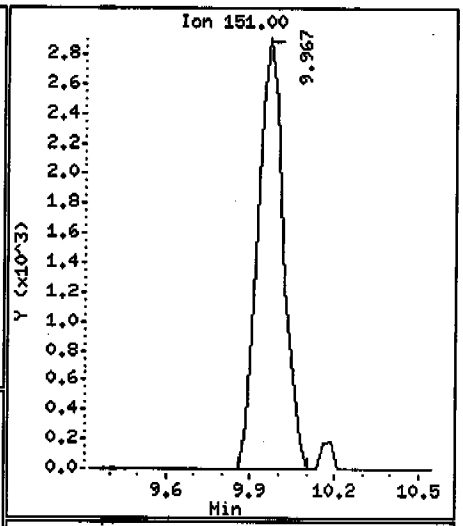
Column phase: RTx-624

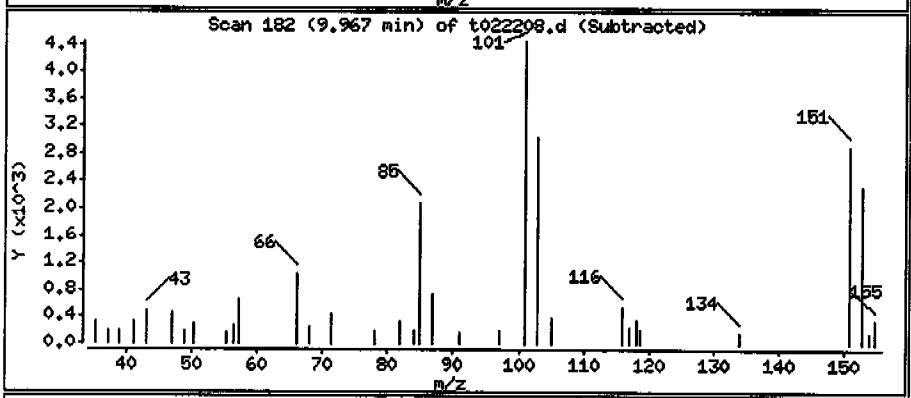
Column diameter: 0.53

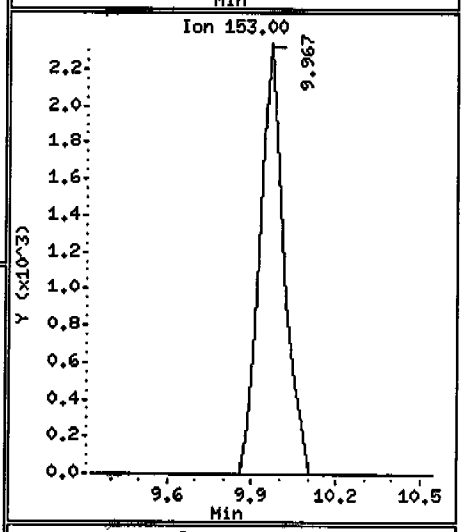
42 Freon 113

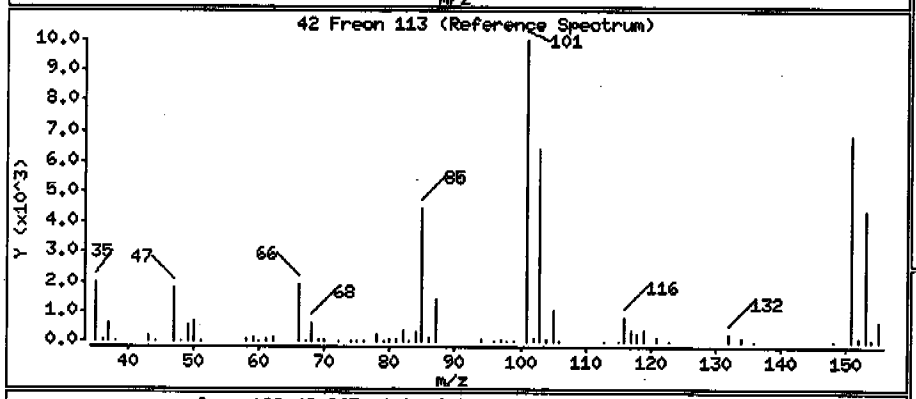
Concentration: 1.168 PPBV

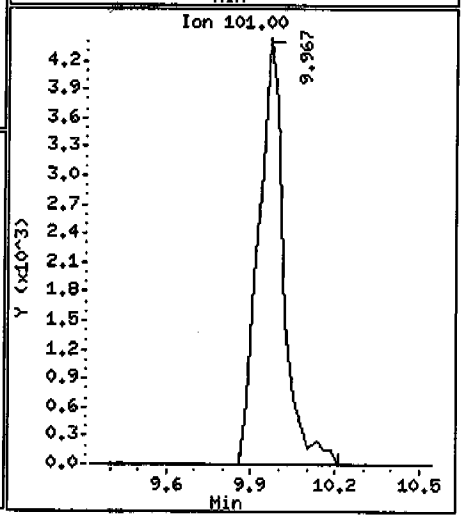


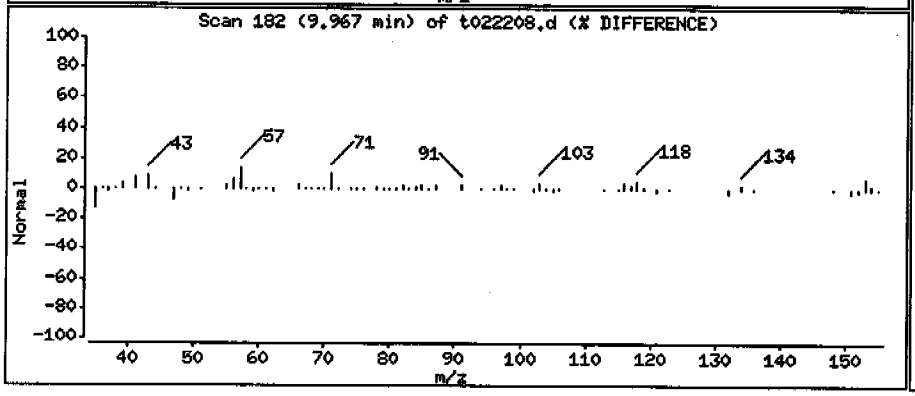












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

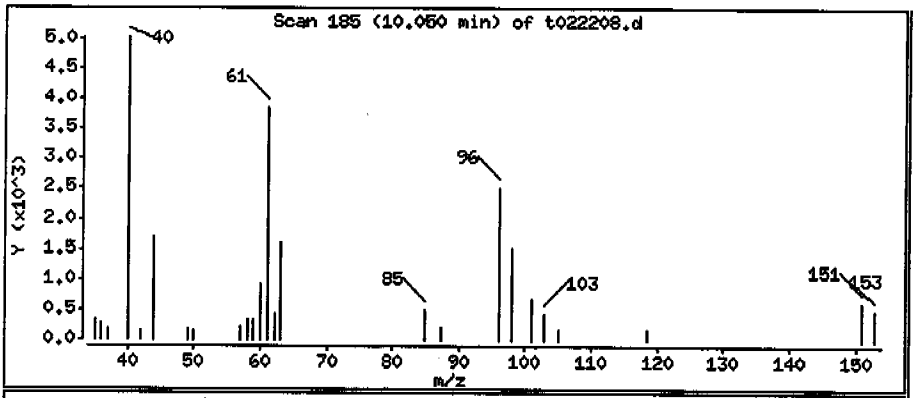
Operator: ACT

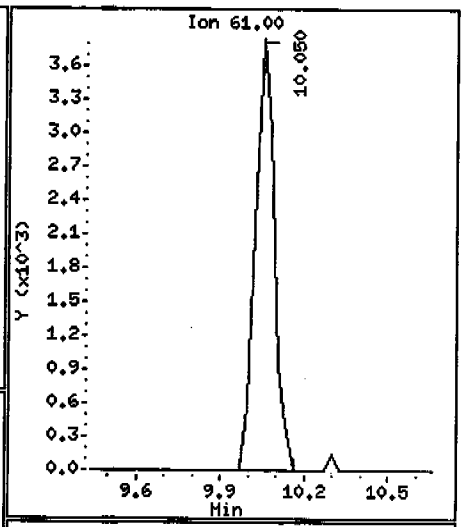
Column phase: RTx-624

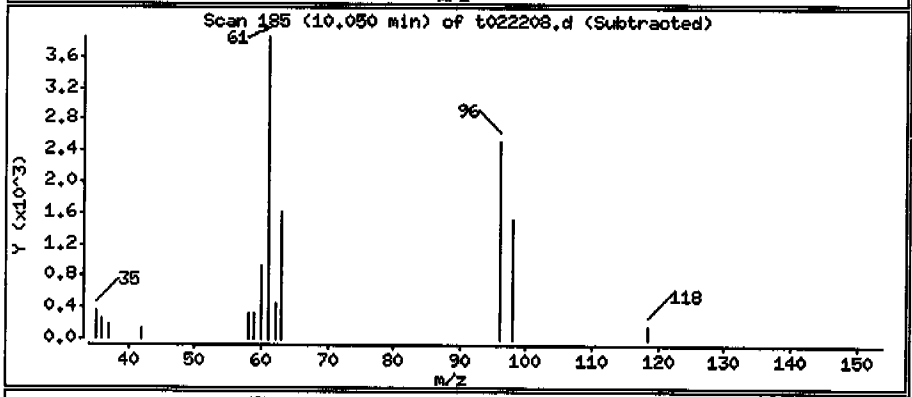
Column diameter: 0.53

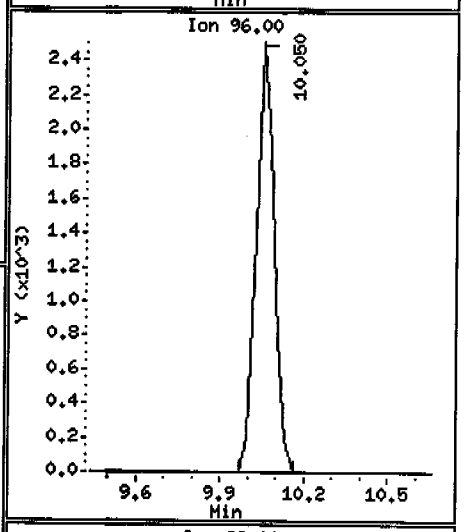
43 1,1-Dichloroethene

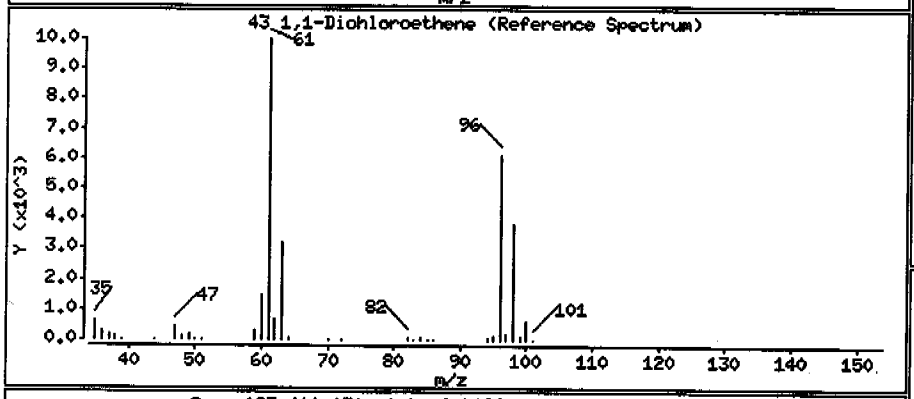
Concentration: 1.254 PPBV

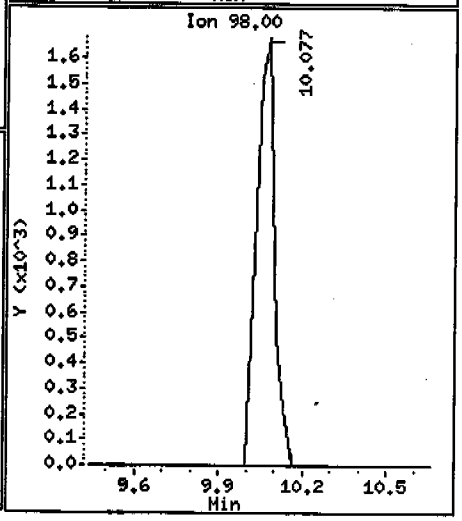


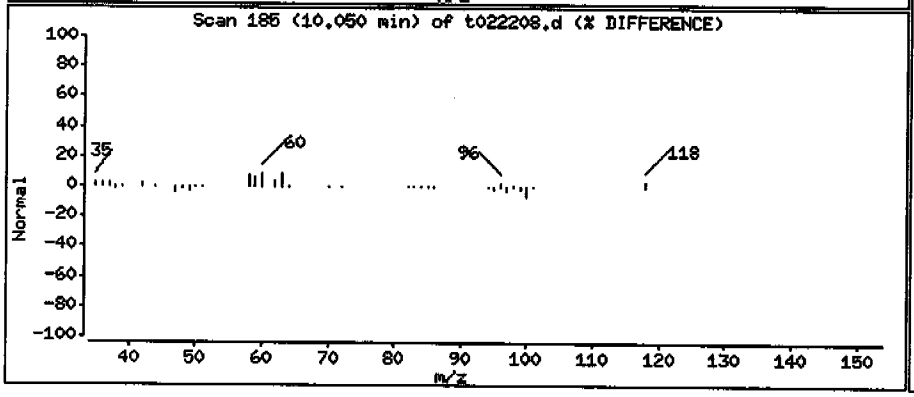












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

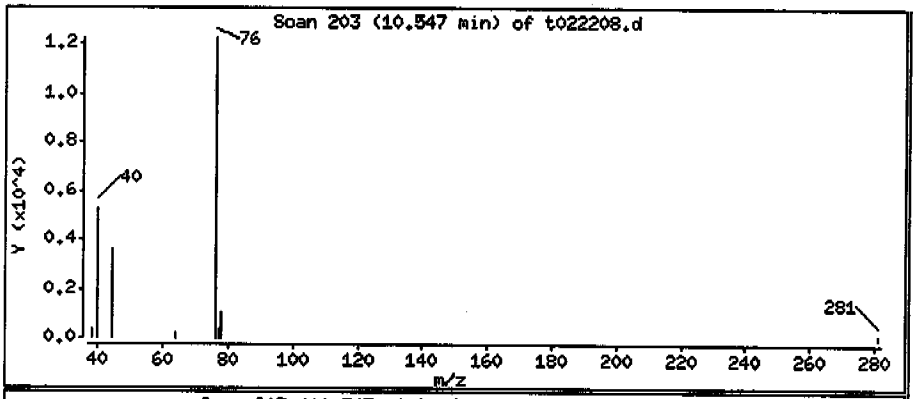
Operator: ACT

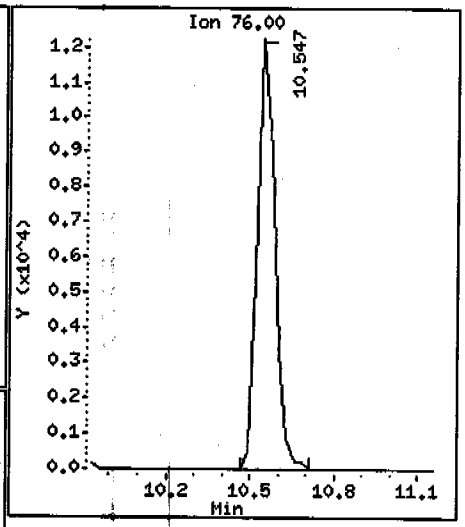
Column phase: RTx-624

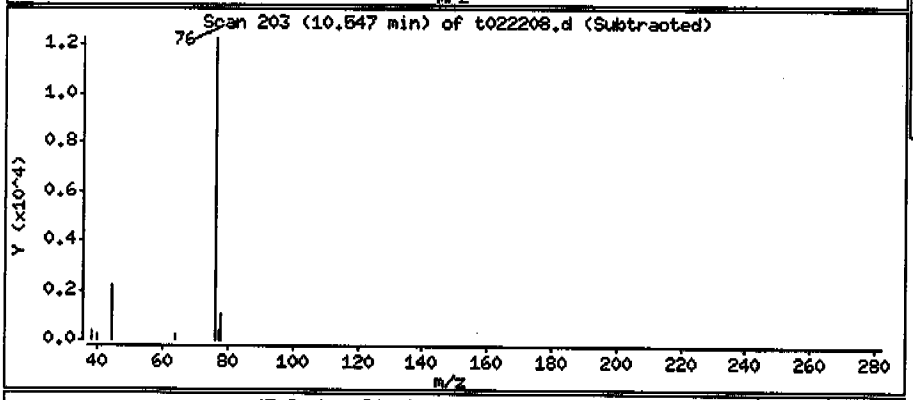
Column diameter: 0.53

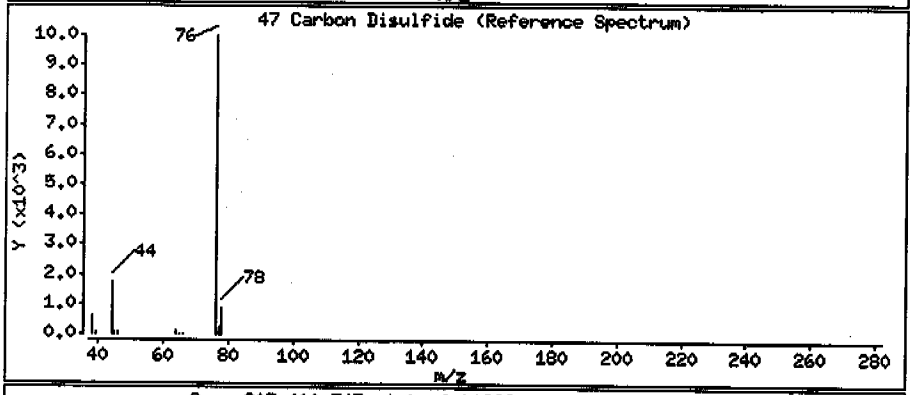
47 Carbon Disulfide

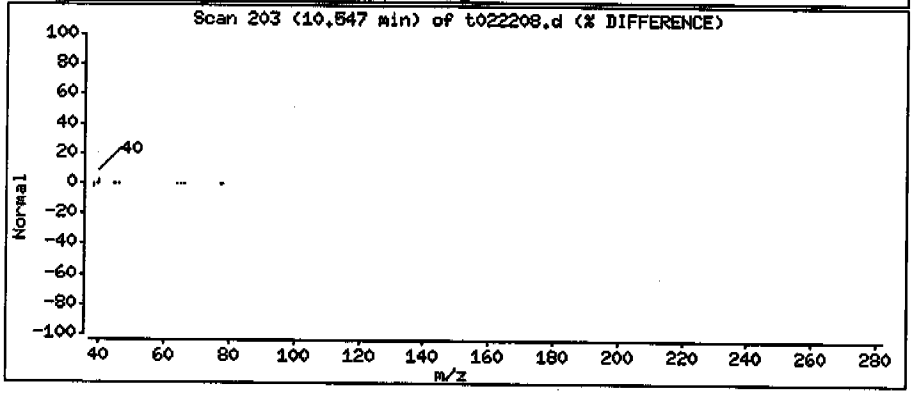
Concentration: 1.927 PPBV











Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

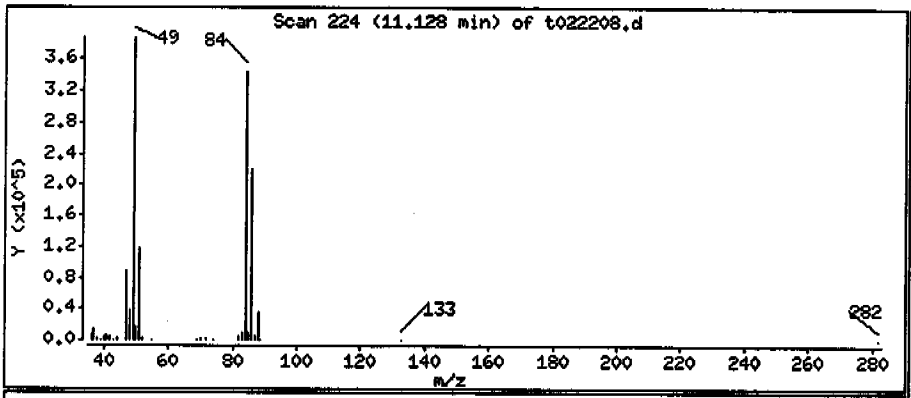
Operator: ACT

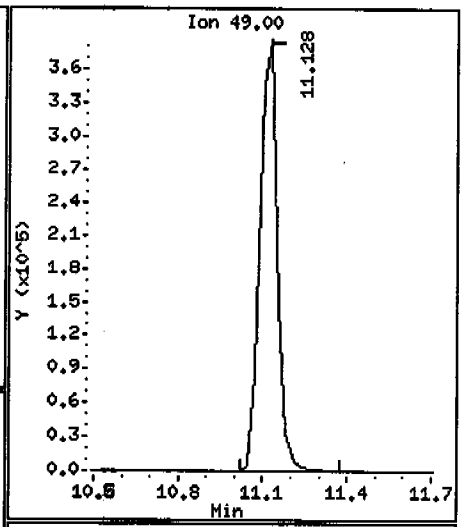
Column phase: RTx-624

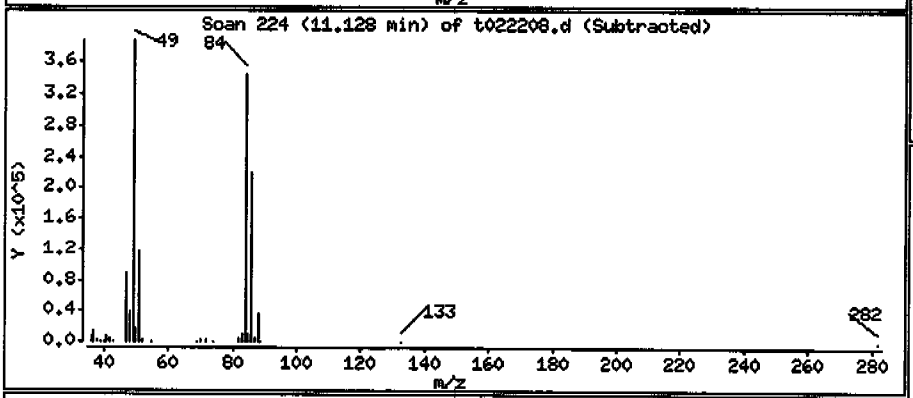
Column diameter: 0.53

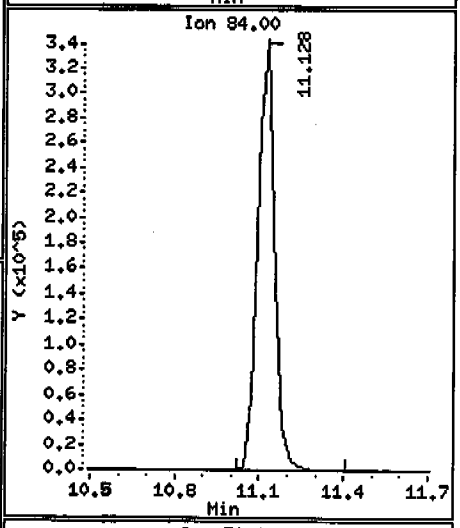
54 Methylene Chloride

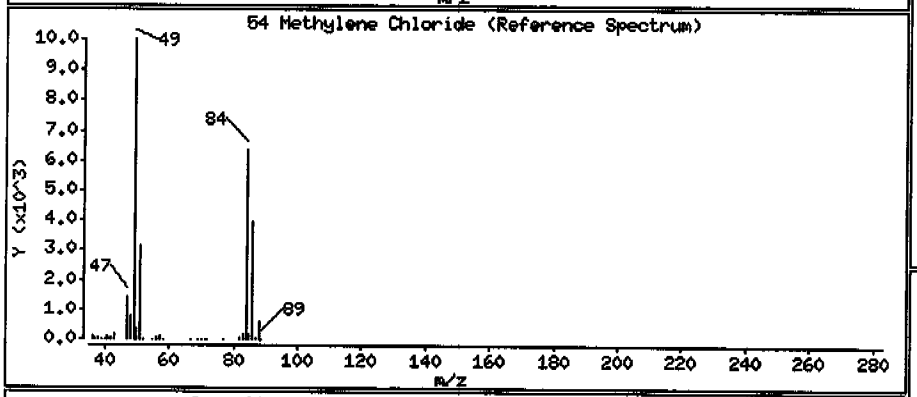
Concentration: 184.75 PPBV

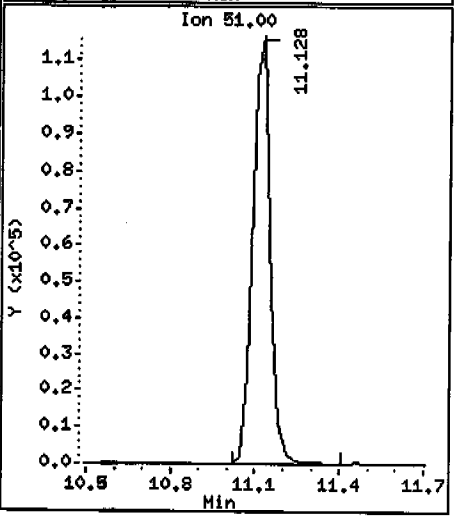


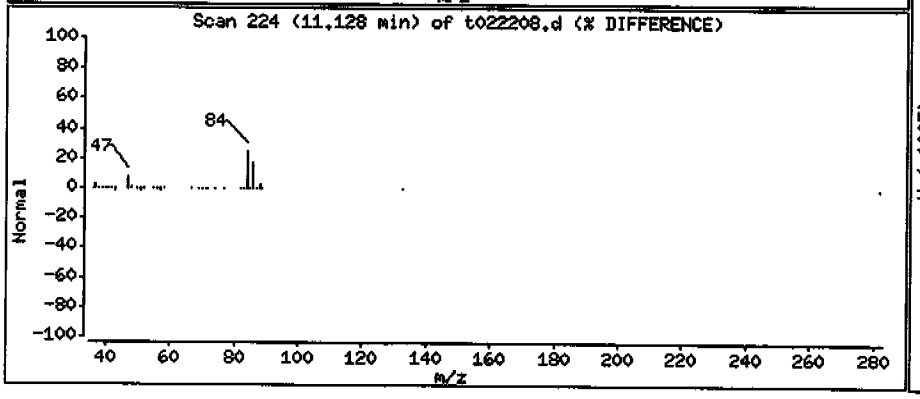












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

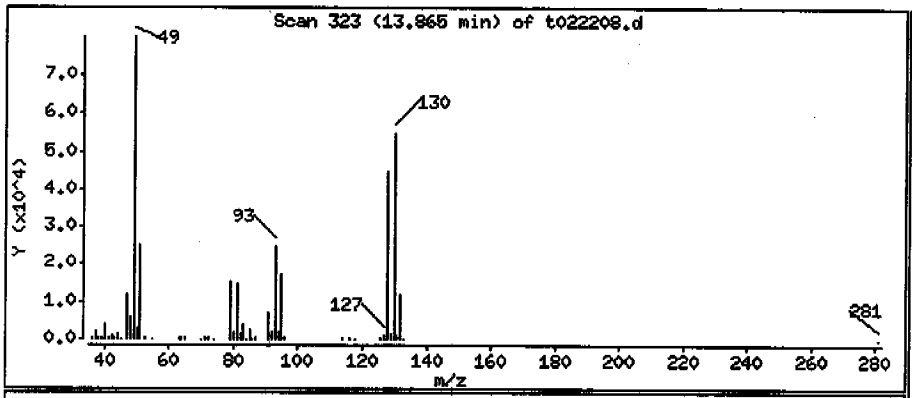
Operator: ACT

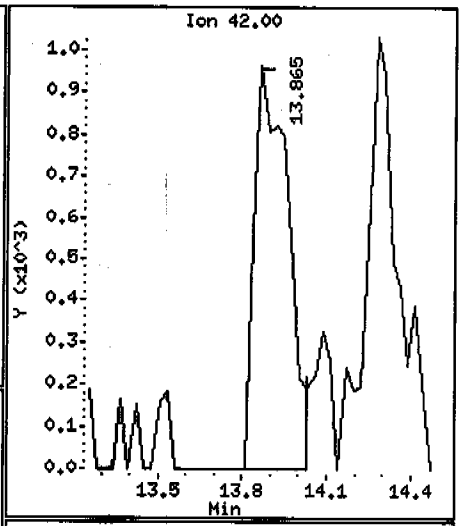
Column phase: RTx-624

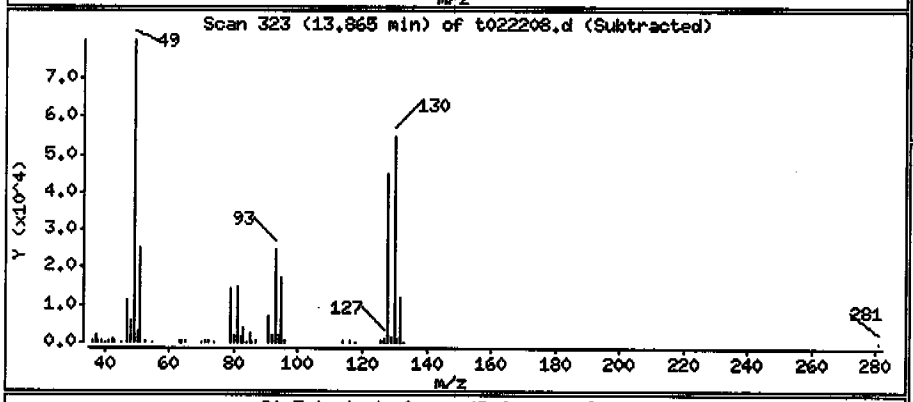
Column diameter: 0.53

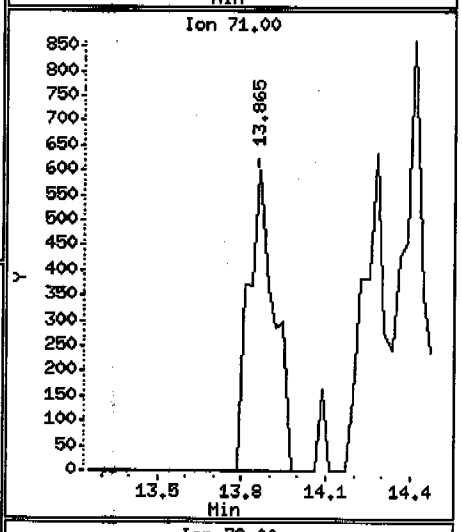
80 Tetrahydrofuran

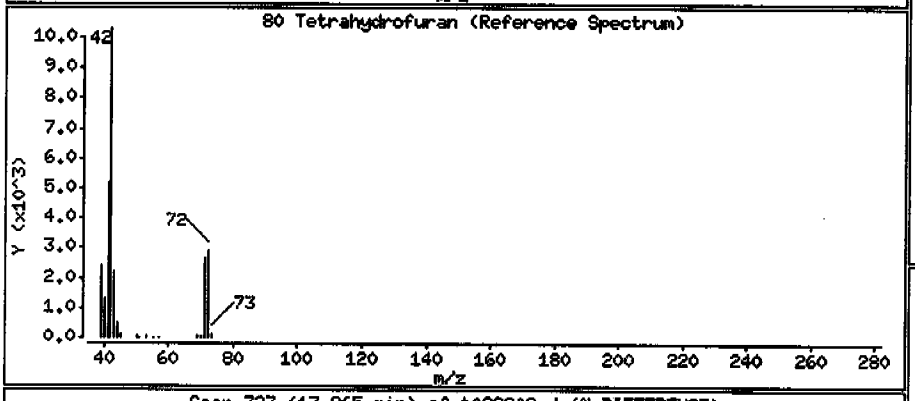
Concentration: 0.9394 PPBV

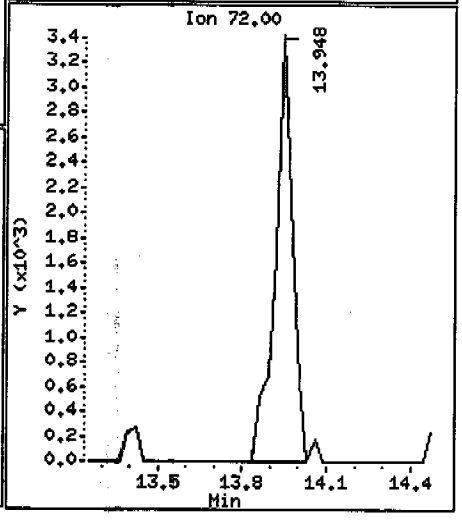


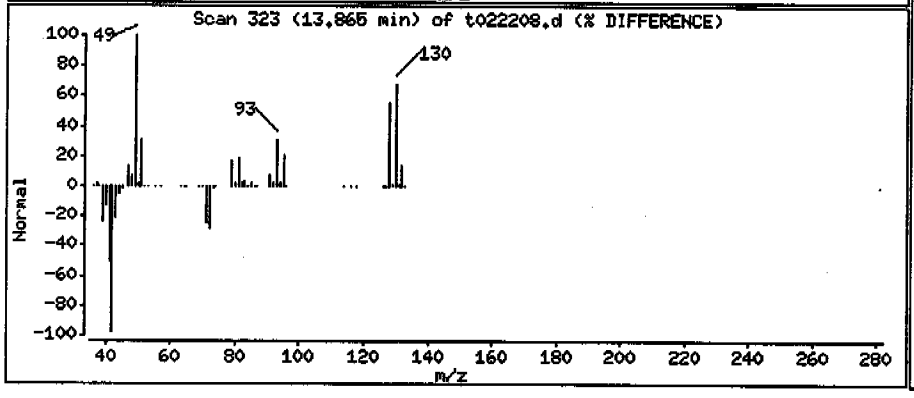












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

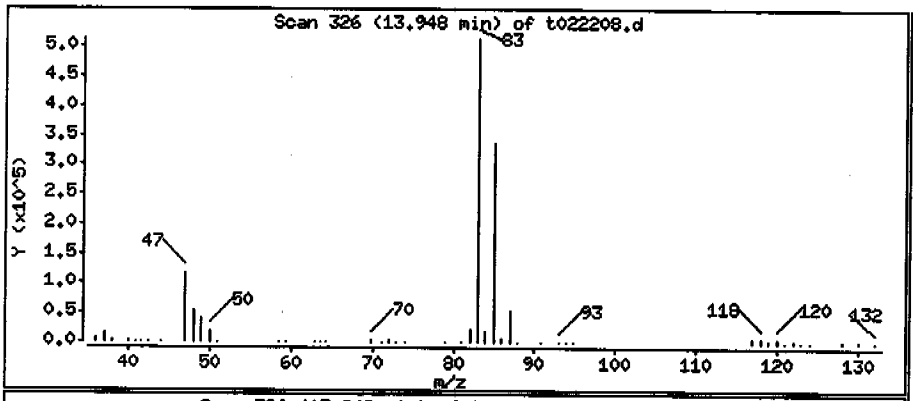
Operator: ACT

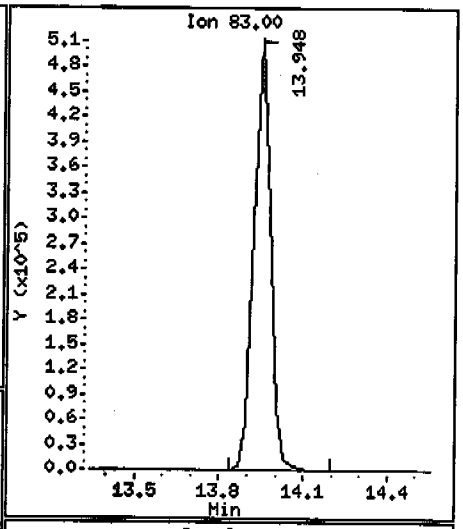
Column phase: RTx-624

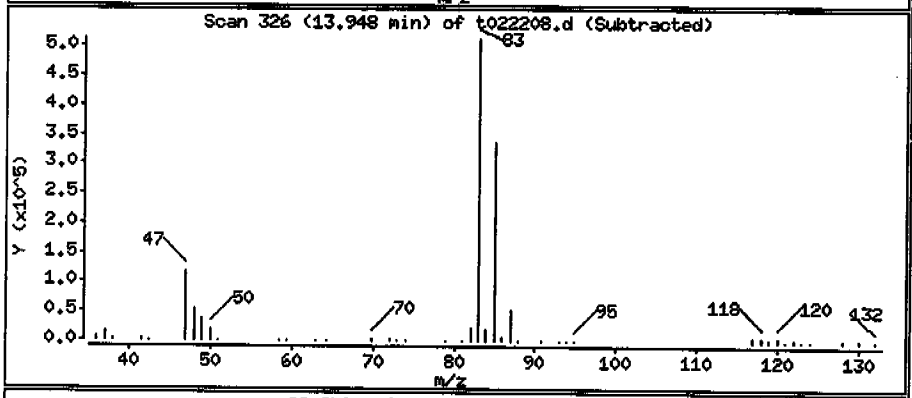
Column diameter: 0.53

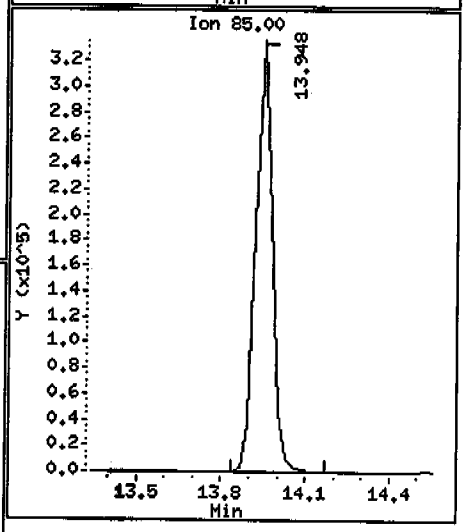
82 Chloroform

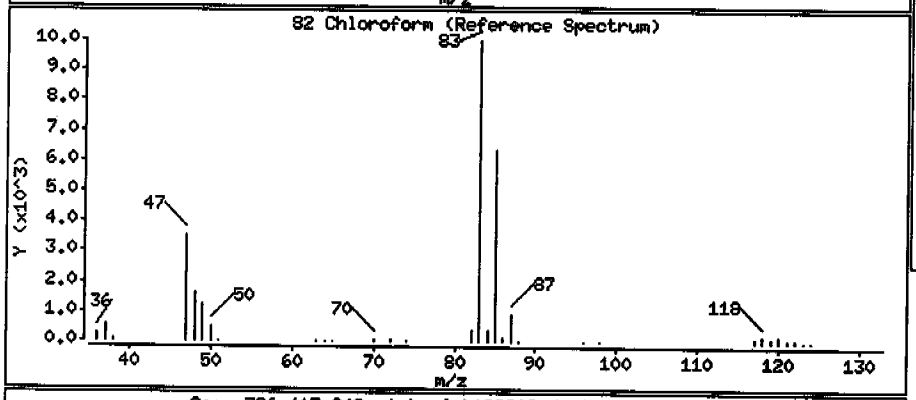
Concentration: 91.404 PPBV

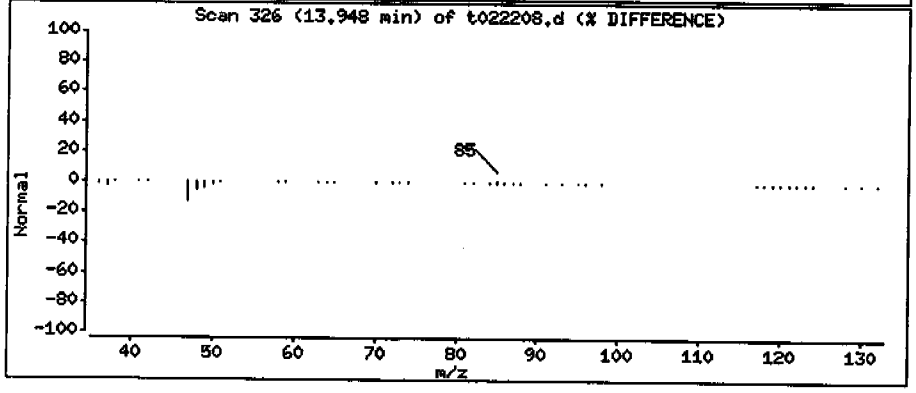












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

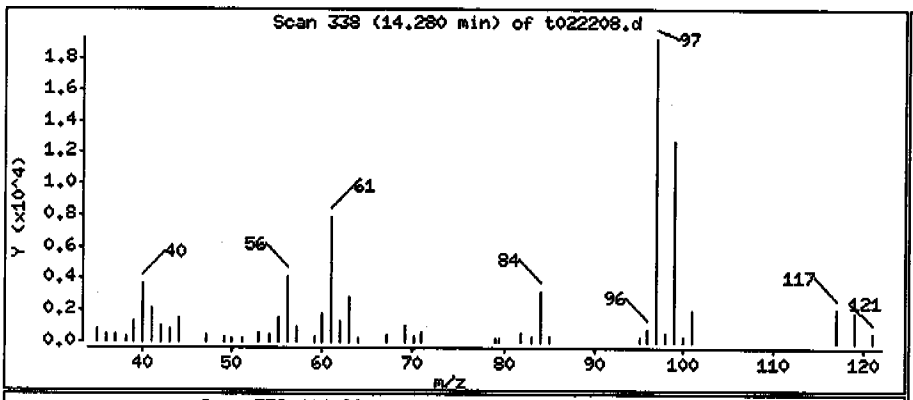
Operator: ACT

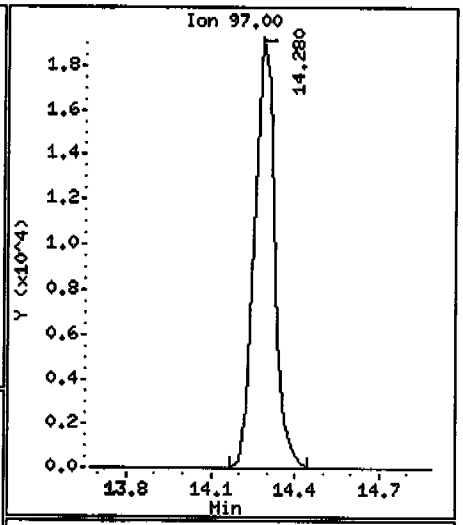
Column phase: RTx-624

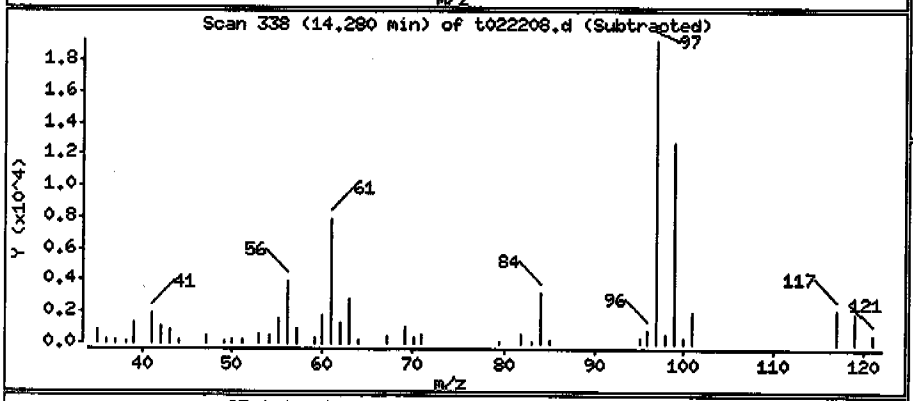
Column diameter: 0.53

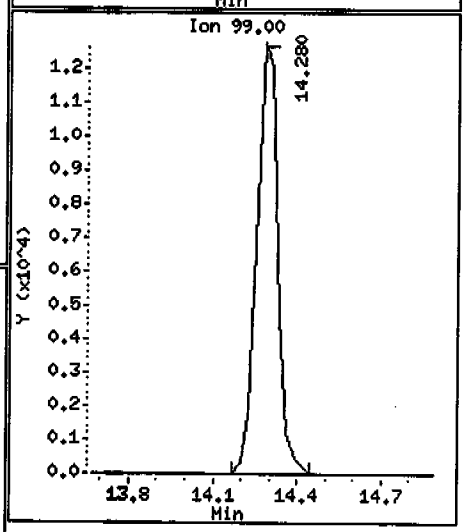
83 1,1,1-Trichloroethane

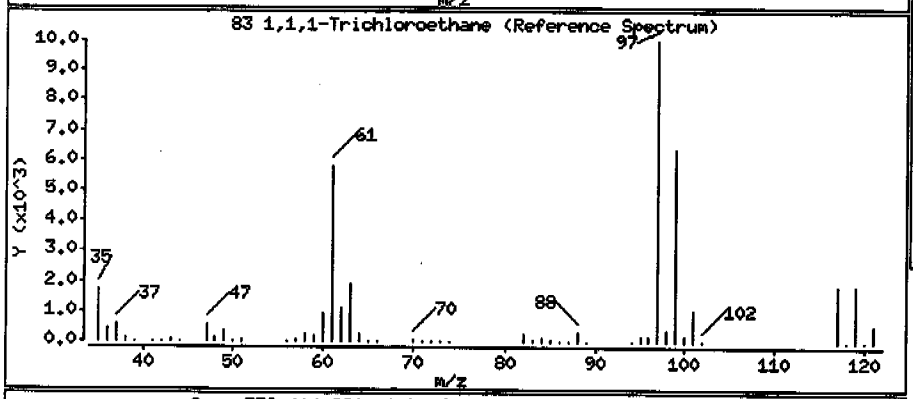
Concentration: 3.842 PPBV

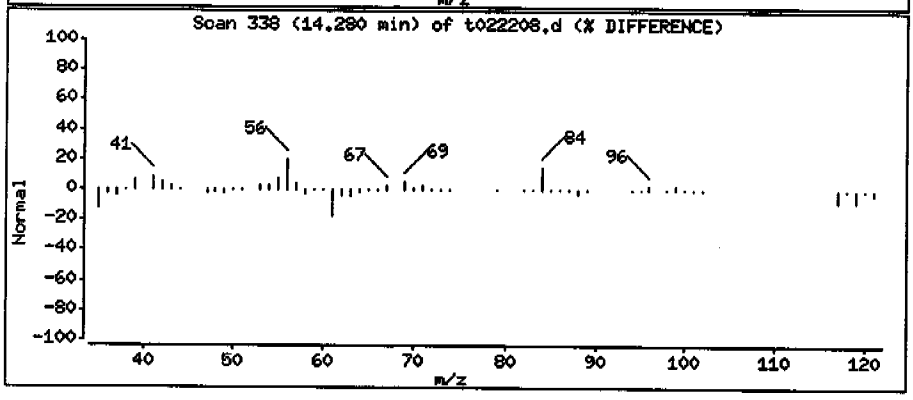












Data File: /ohem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

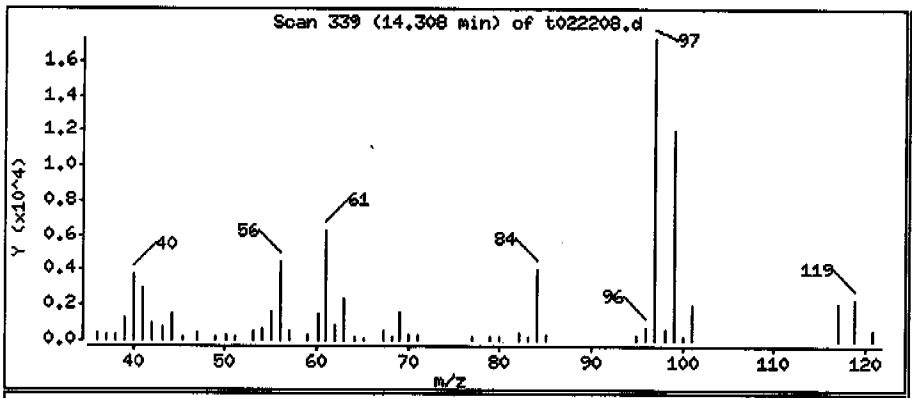
Operator: ACT

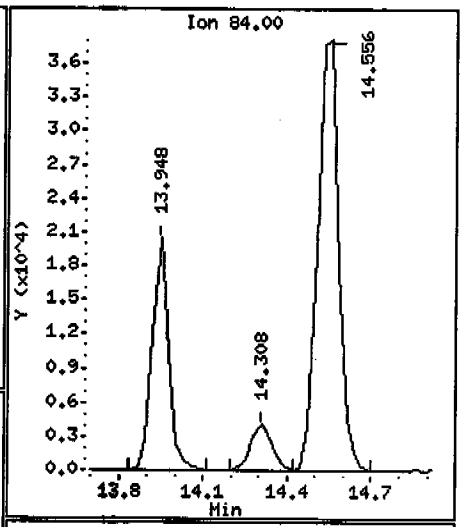
Column phase: RTx-624

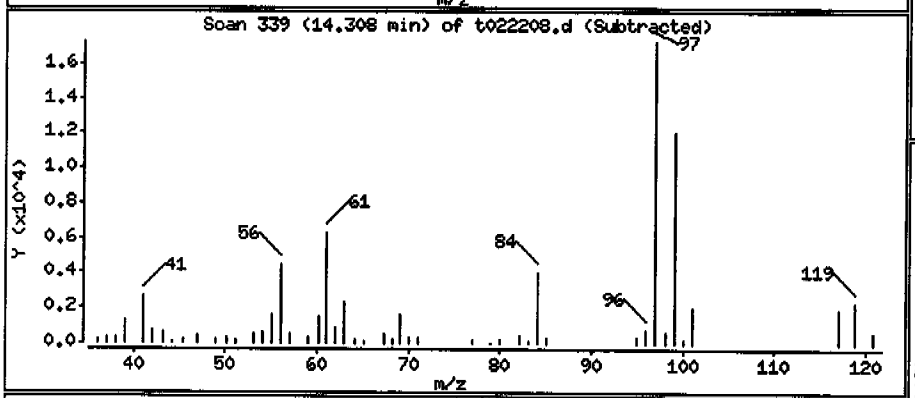
Column diameter: 0.53

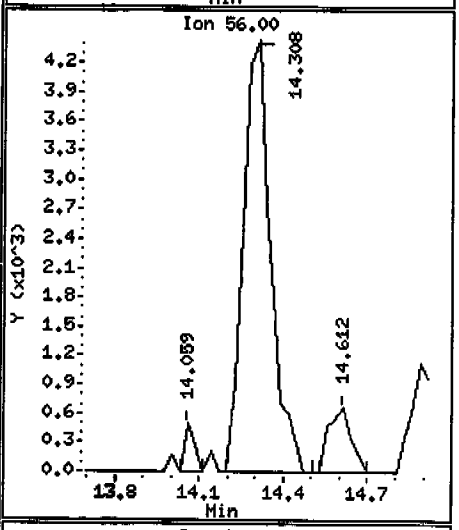
85 Cyclohexane

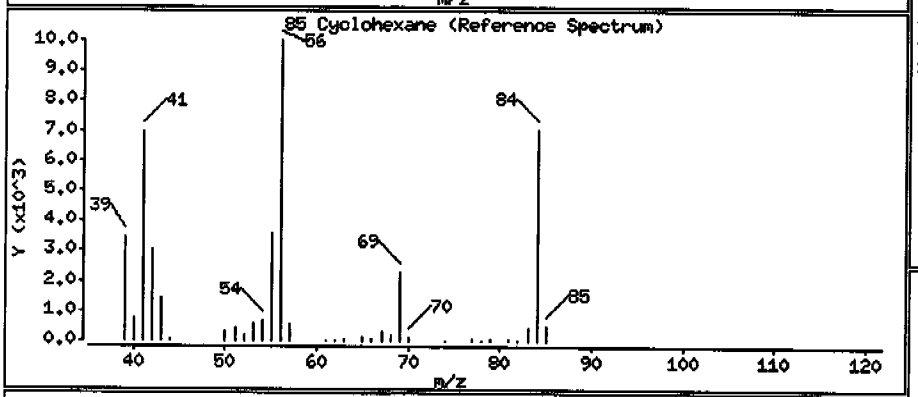
Concentration: 1.616 PPBV

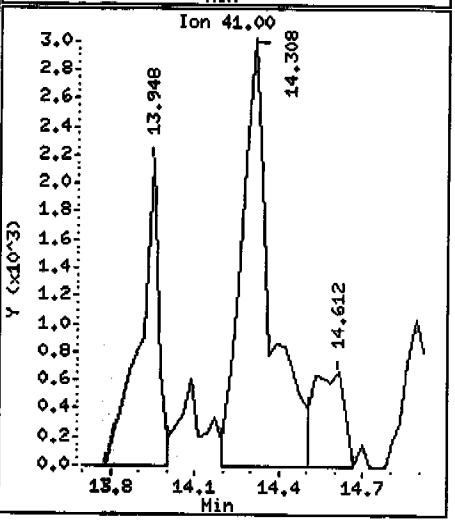


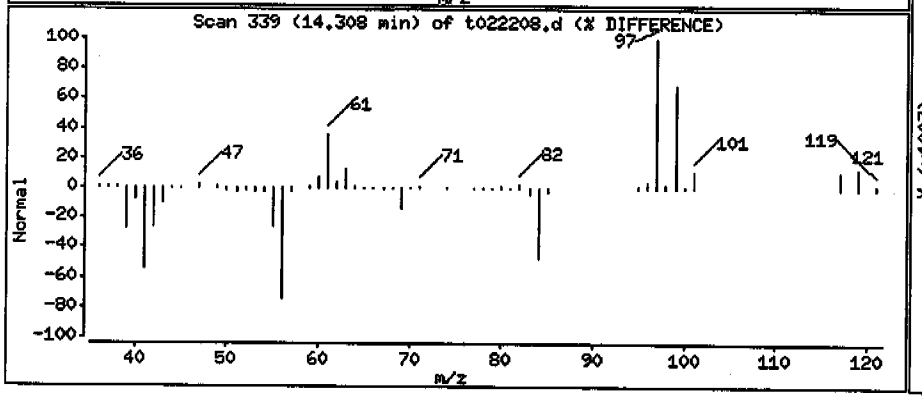












0078

Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

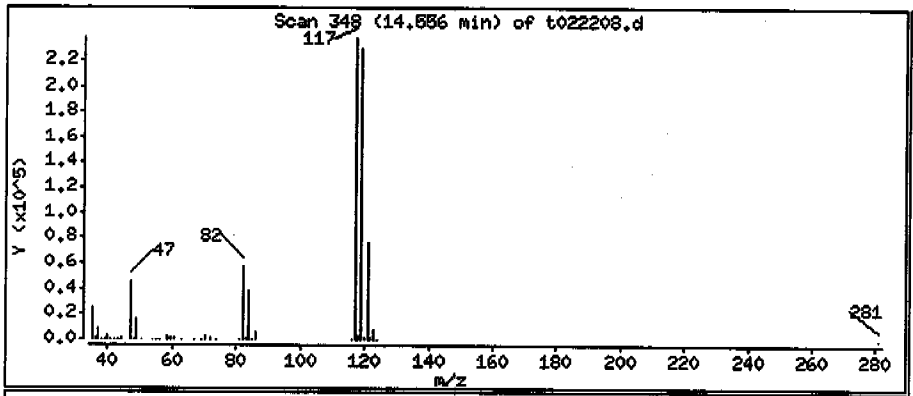
Operator: ACT

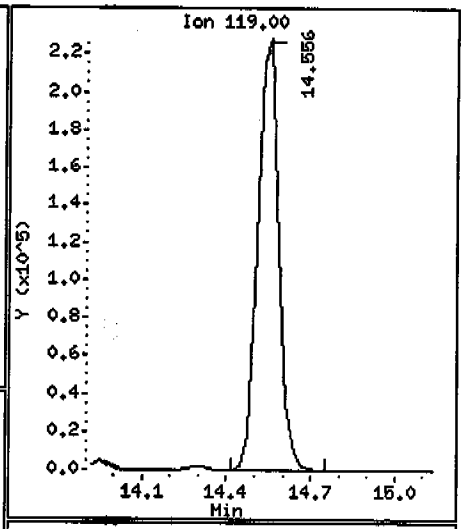
Column phase: RTx-624

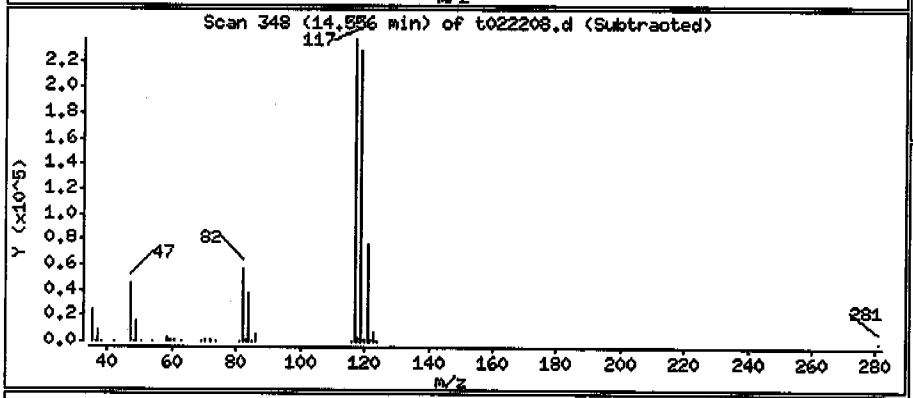
Column diameter: 0.53

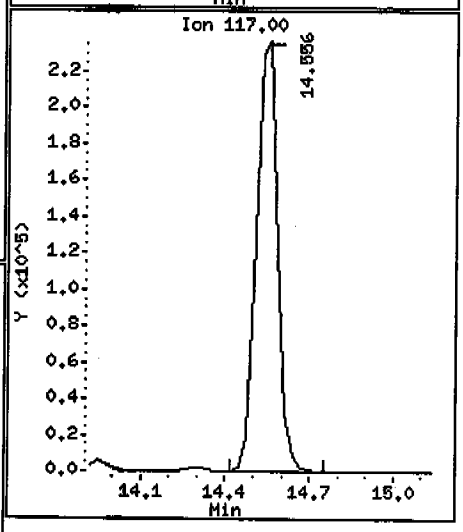
87 Carbon Tetrachloride

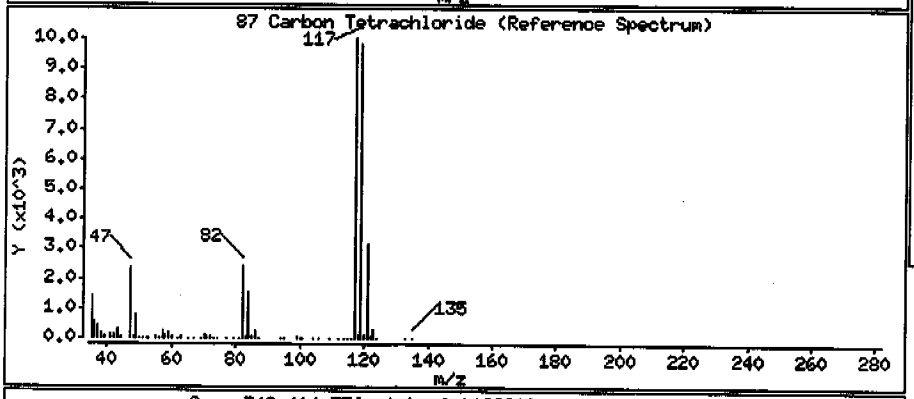
Concentration: 49.065 PPBV

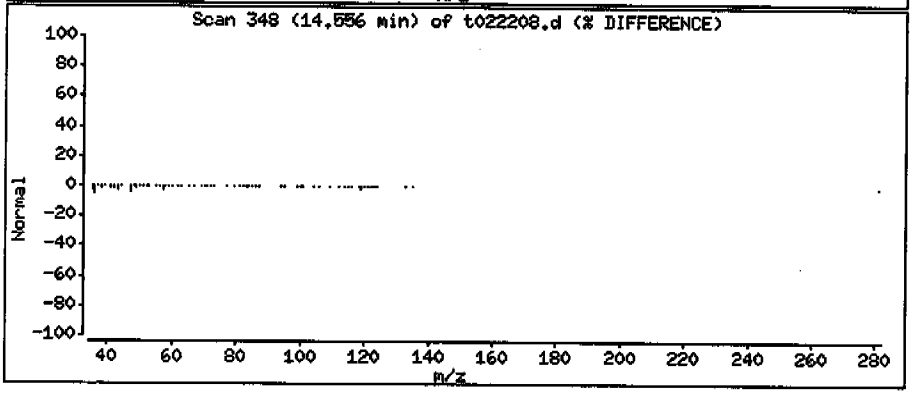












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

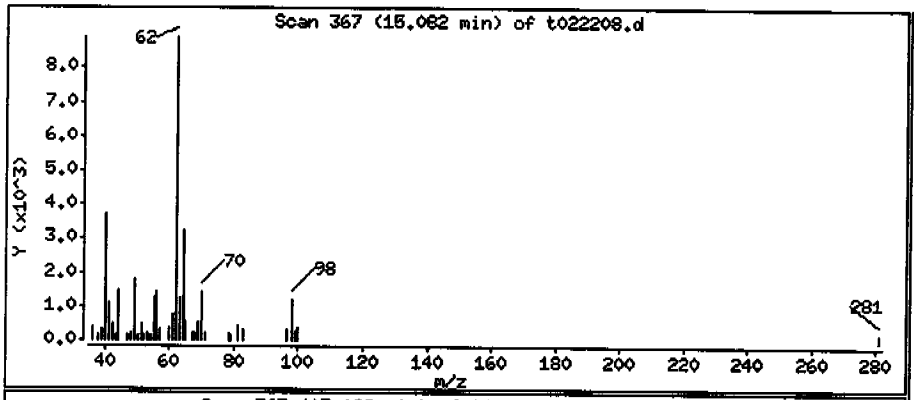
Operator: ACT

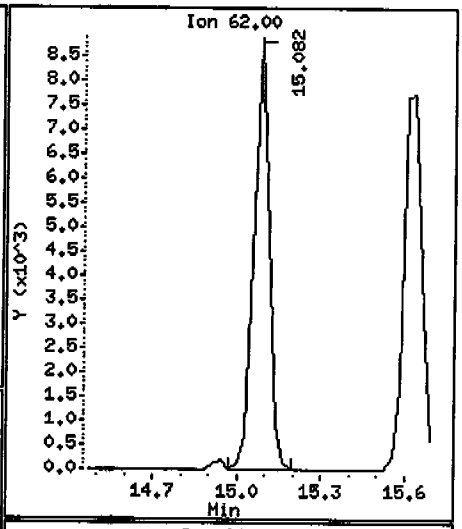
Column phase: RTx-624

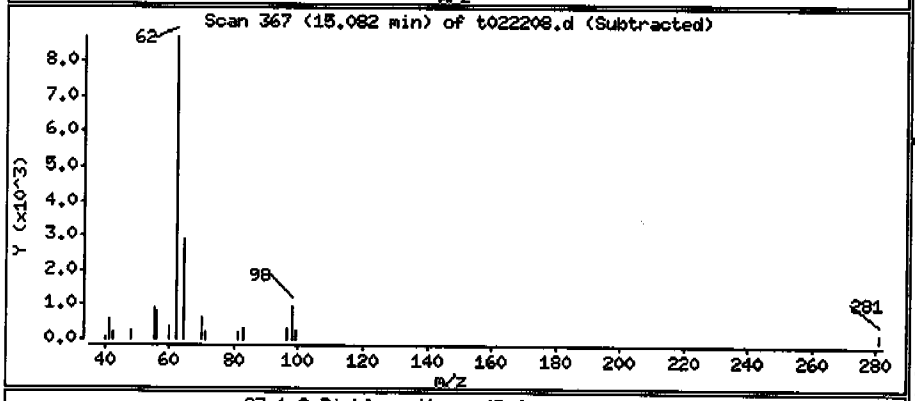
Column diameter: 0.53

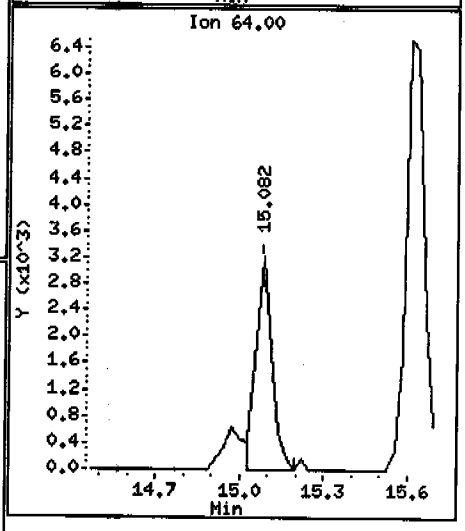
93 1,2-Dichloroethane

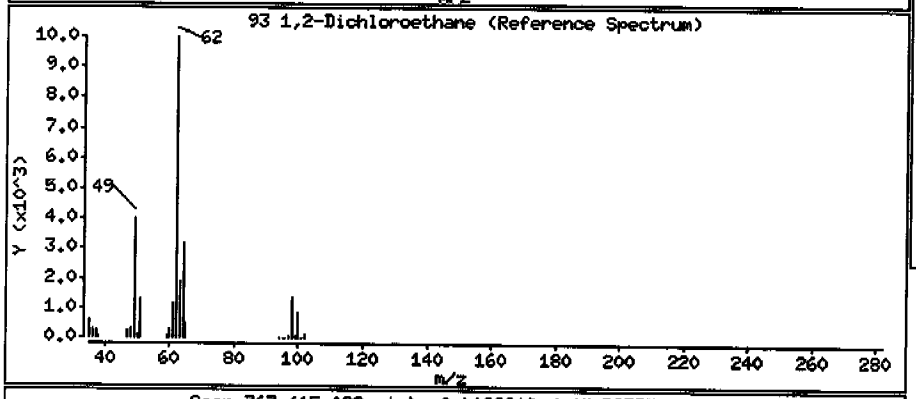
Concentration: 2.296 PPBV

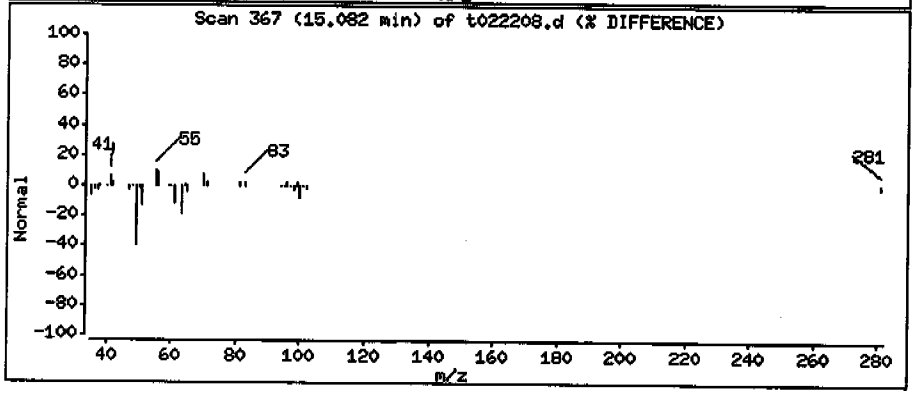












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

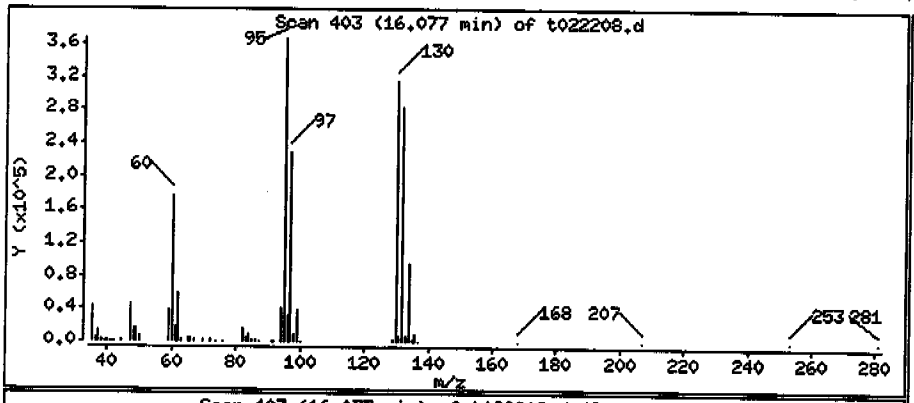
Operator: ACT

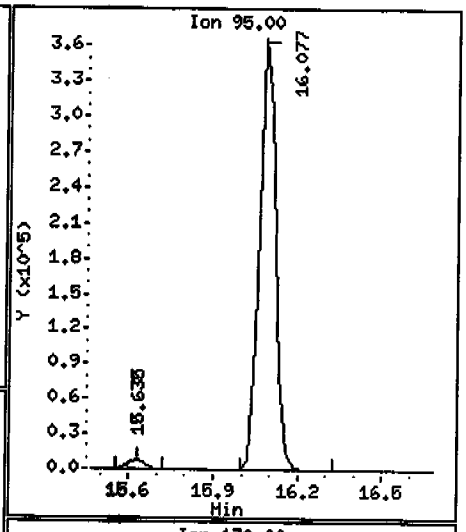
Column phase: RTx-624

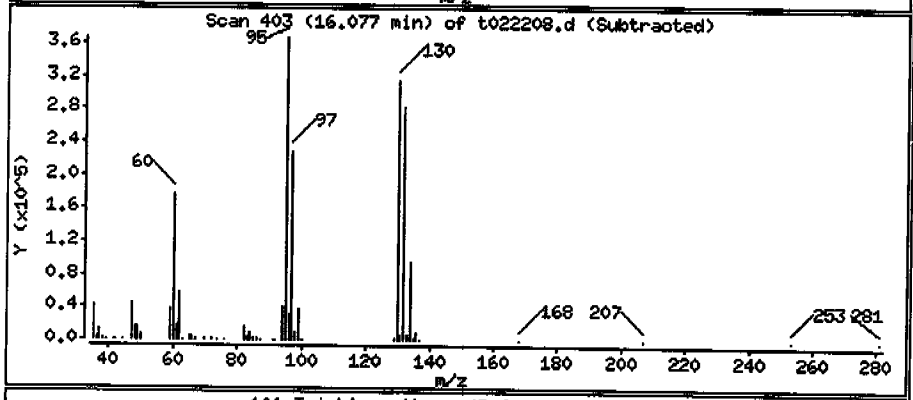
Column diameter: 0.53

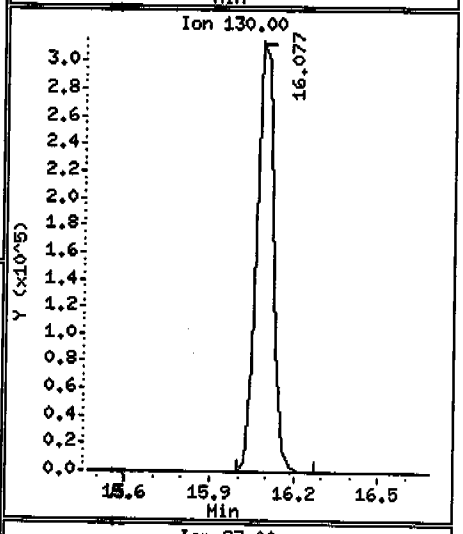
101 Trichloroethene

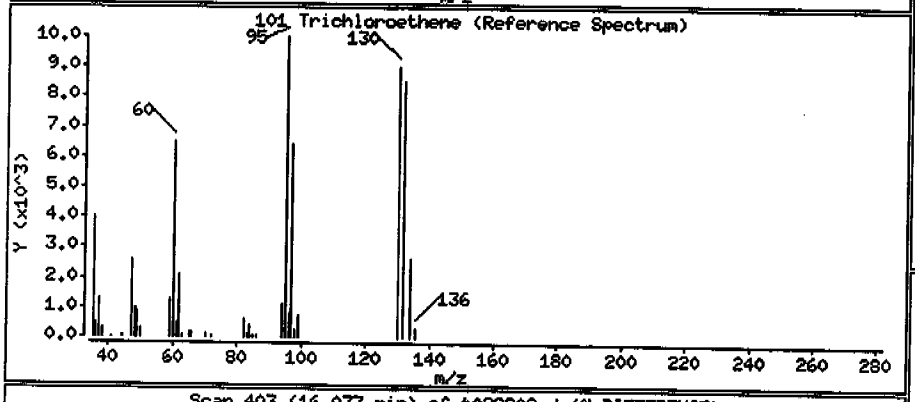
Concentration: 116.35 PPBV

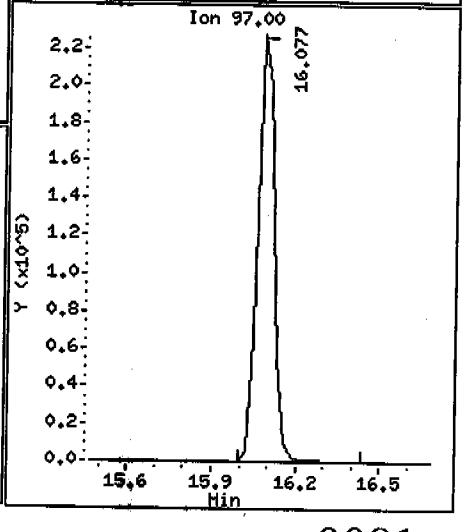


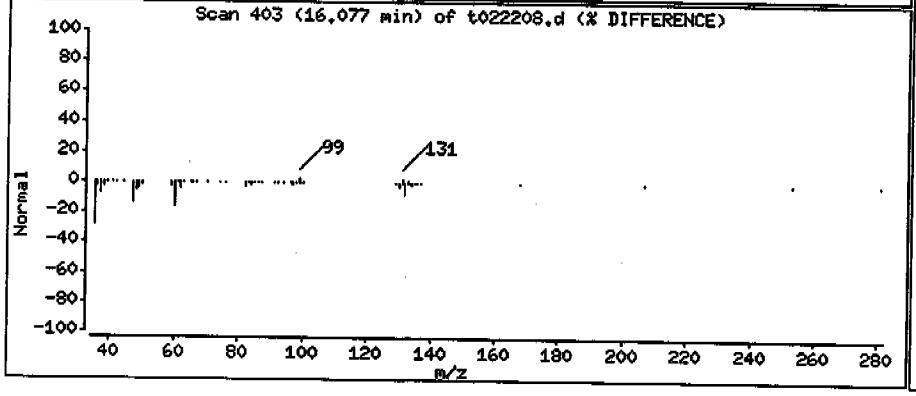












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

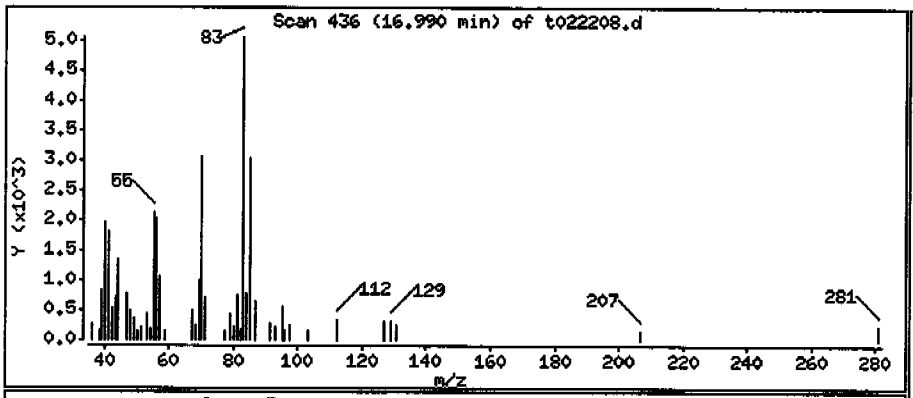
Operator: ACT

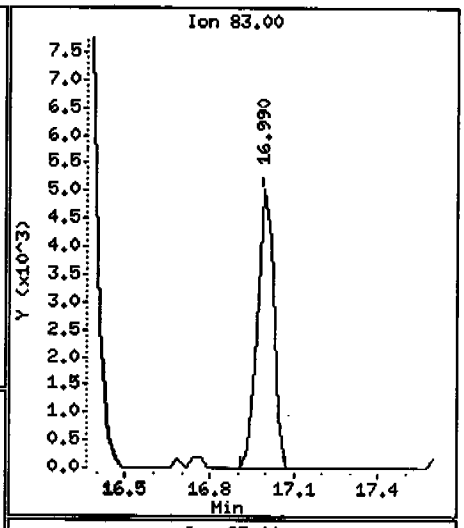
Column phase: RTx-624

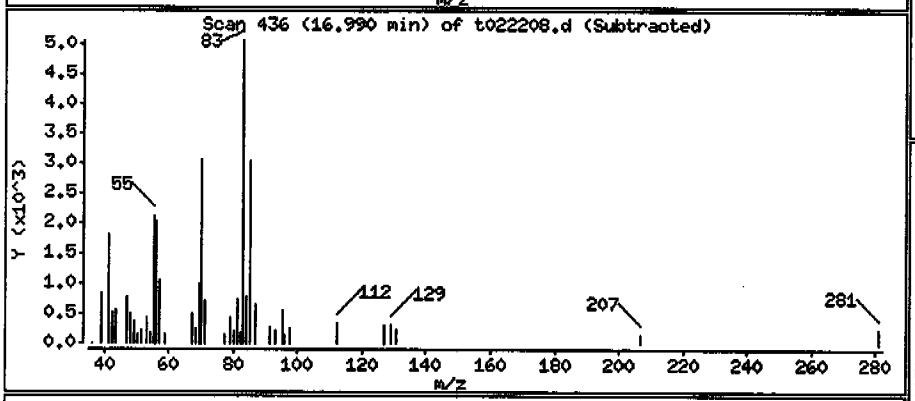
Column diameter: 0.53

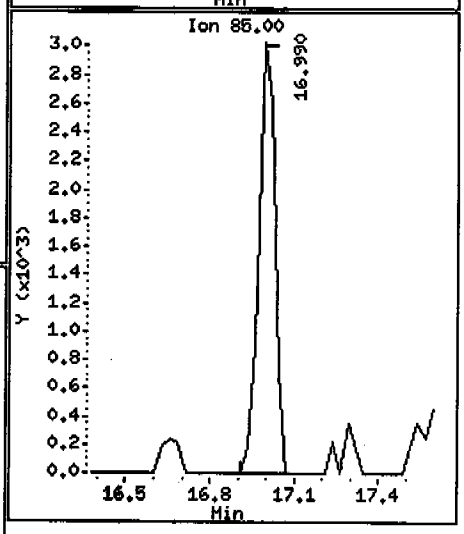
107 Bromodichloromethane

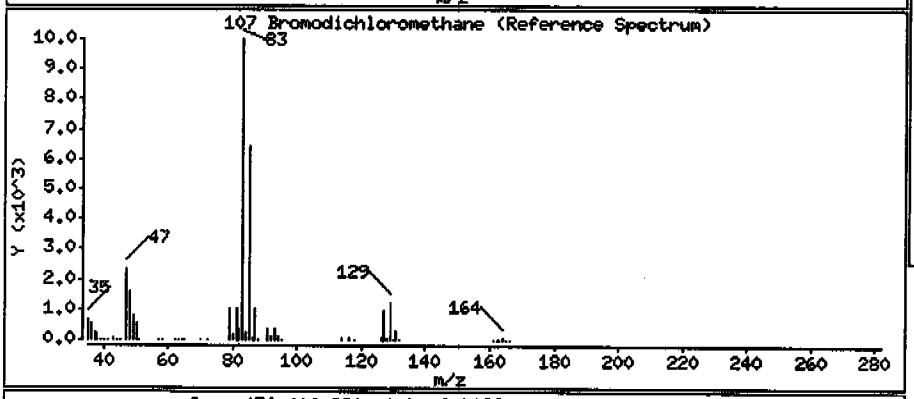
Concentration: 0.8992 PPBV

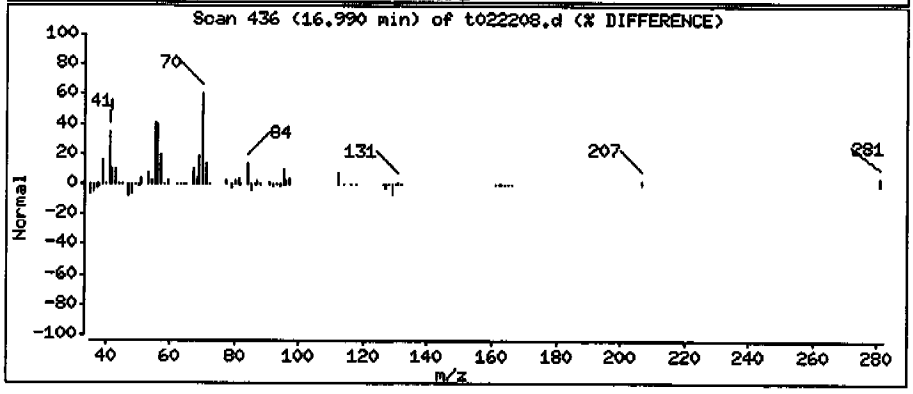












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

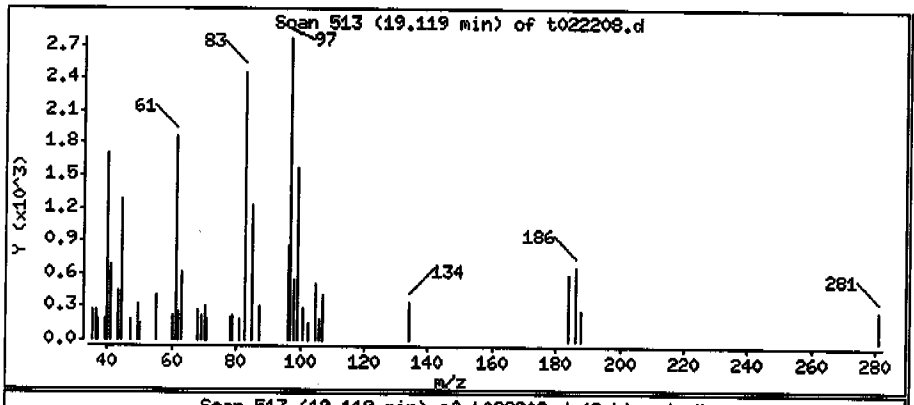
Operator: ACT

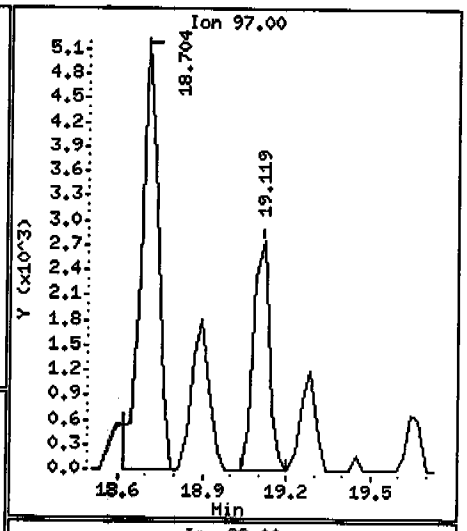
Column phase: RTx-624

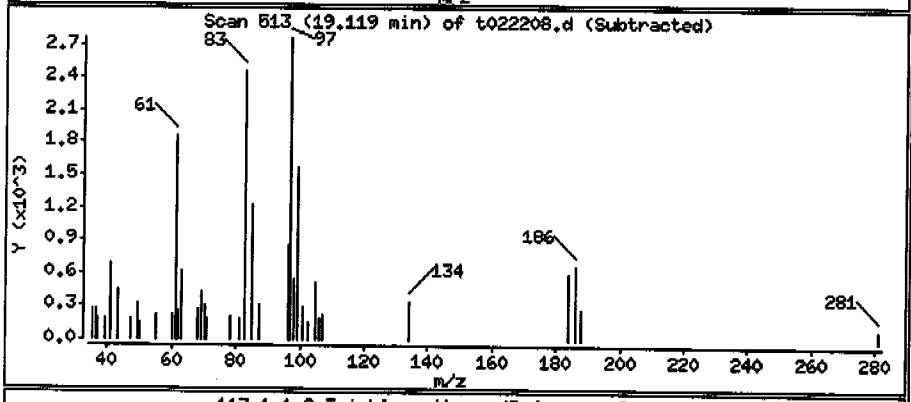
Column diameter: 0.53

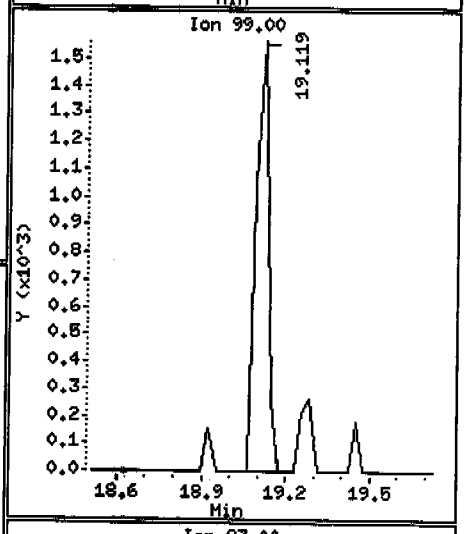
117 1,1,2-Trichloroethane

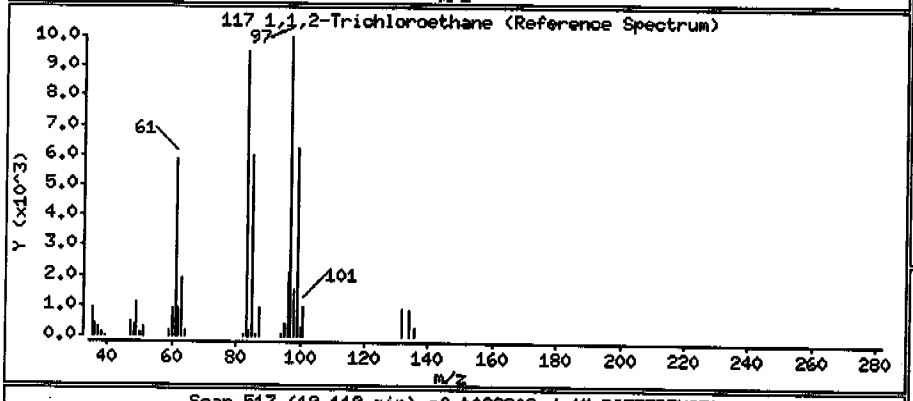
Concentration: 0.8348 PPBV

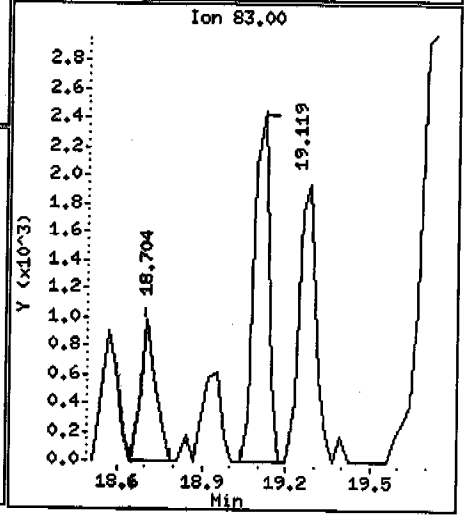


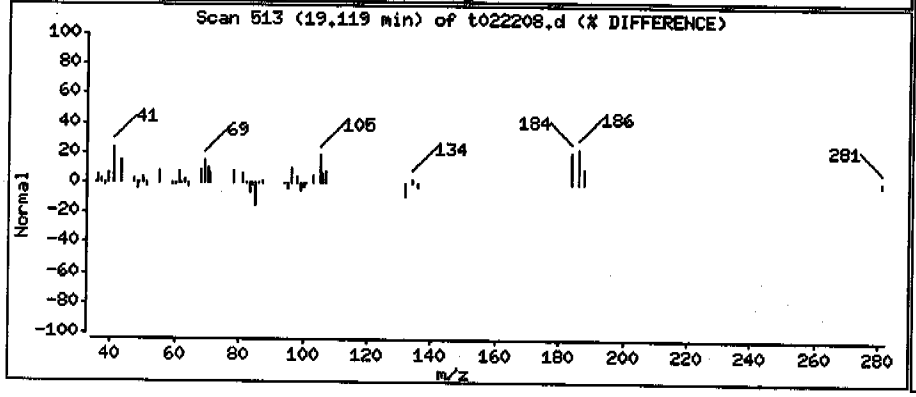












Data File: /chem/msdt.i/22Feb2008.b/t022208.d

Date : 22-FEB-2008 16:44

Client ID:

Instrument: msdt.i

Sample Info: 200mL #14118

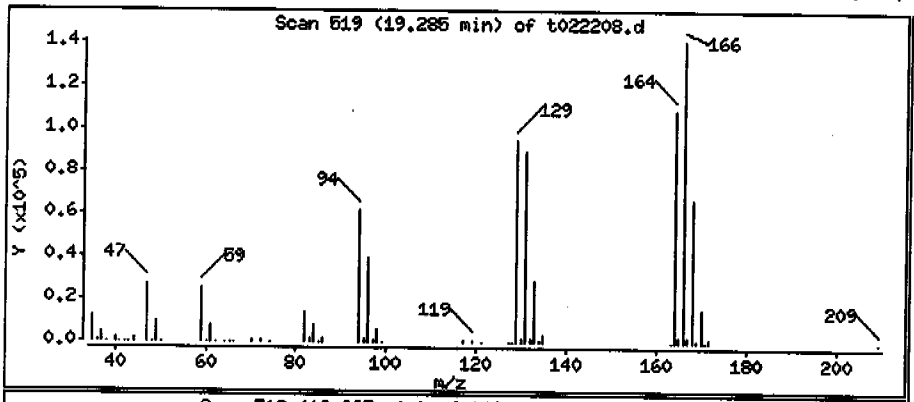
Operator: ACT

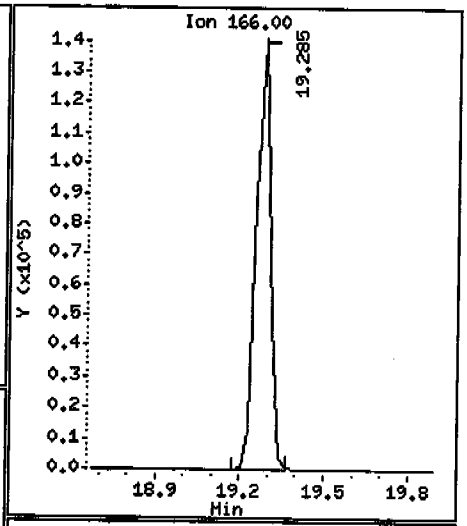
Column phase: RTx-624

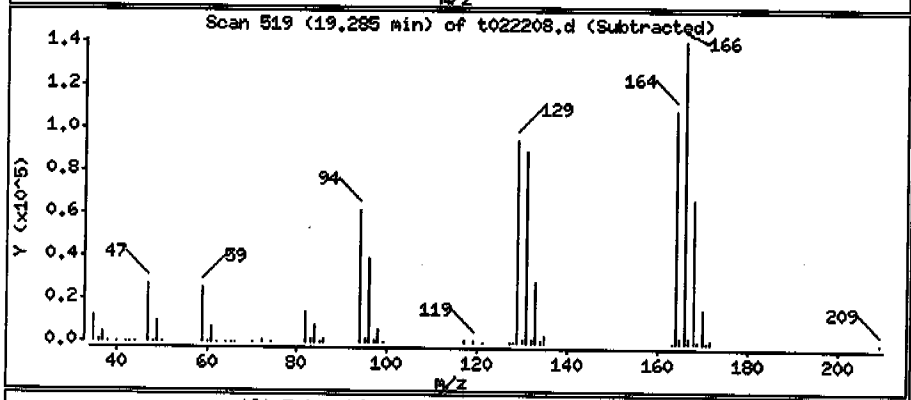
Column diameter: 0.53

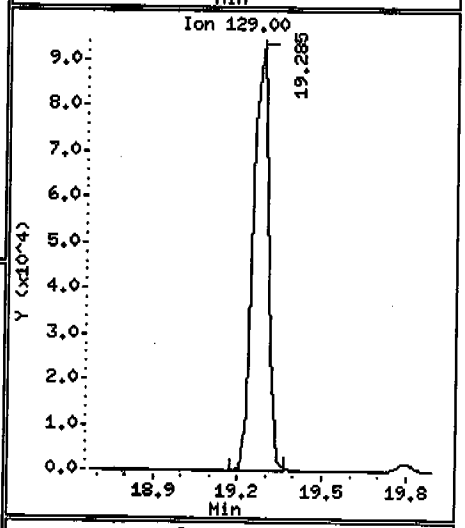
120 Tetrachloroethene

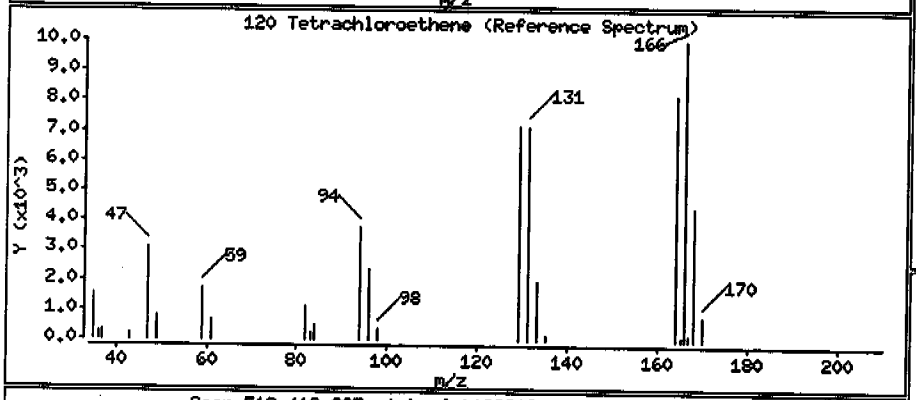
Concentration: 28.425 PPBV

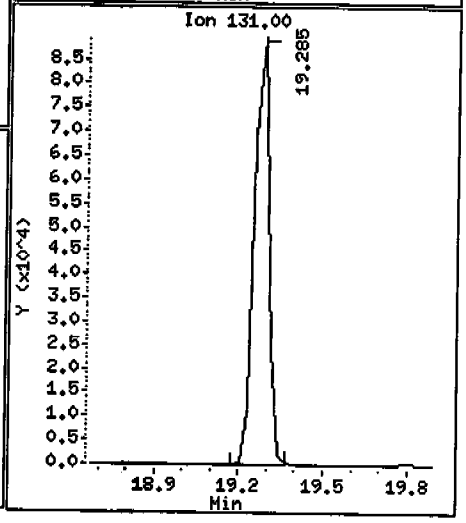


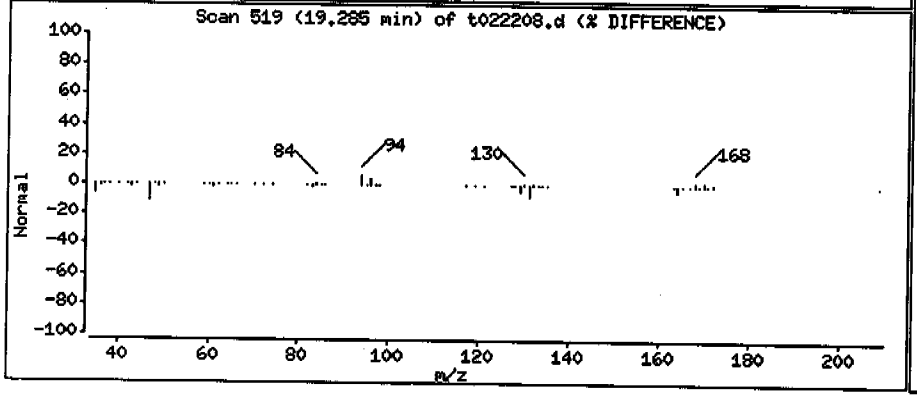












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10514

Lab ID#: 0802328-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	1.4	5.5	7.0
Freon 113	1.1	1.4	8.6	10
1,1-Dichloroethene	1.1	2.1	4.4	8.3
Methylene Chloride	1.1	360	3.9	1200
Chloroform	1.1	110	5.5	540
1,1,1-Trichloroethane	1.1	1.7	6.1	9.3
Carbon Tetrachloride	1.1	58	7.0	370
1,2-Dichloroethane	1.1	3.0	4.5	12
Trichloroethene	1.1	120	6.0	620
Tetrachloroethene	1.1	12	7.6	81

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10514

Lab ID#: 0802328-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	1.4	5.5	7.0
Freon 114	1.1	Not Detected	7.8	Not Detected
Chloromethane	4.5	Not Detected	9.2	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	1.1	Not Detected	4.3	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	1.1	Not Detected	6.3	Not Detected
Ethanol	4.5	Not Detected	8.4	Not Detected
Freon 113	1.1	1.4	8.6	10
1,1-Dichloroethene	1.1	2.1	4.4	8.3
Acetone	4.5	Not Detected	11	Not Detected
2-Propanol	4.5	Not Detected	11	Not Detected
Carbon Disulfide	1.1	Not Detected	3.5	Not Detected
Methylene Chloride	1.1	360	3.9	1200
Methyl tert-butyl ether	1.1	Not Detected	4.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Chloroform	1.1	110	5.5	540
1,1,1-Trichloroethane	1.1	1.7	6.1	9.3
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	58	7.0	370
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	3.0	4.5	12
Heptane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	120	6.0	620
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.5	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Toluene	1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Tetrachloroethene	1.1	12	7.6	81

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10514

Lab ID#: 0802328-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	4.5	Not Detected	18	Not Detected
Dibromochloromethane	1.1	Not Detected	9.5	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.6	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.7	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.8	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	33	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
Chlorodifluoromethane	4.5	Not Detected	16	Not Detected
Methanol	110	Not Detected	150	Not Detected
n-Butanol	4.5	Not Detected	14	Not Detected
Propylene	4.5	Not Detected	7.7	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	102	70-130

0087

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022211.d
Lab Smp Id: 0802328-04A
Inj Date : 22-FEB-2008 18:40
Operator : ACT Inst ID: msdt.i
Smp Info : 150mL #TO-1594
Misc Info : 6.0"Hg -> 5.0psi
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 16:12 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 2.24000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	246431	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	191138			26.57- 126.57	77.56
13.893	13.865 (1.000)	49	446186			139.07- 239.07	181.06
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	943587	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	160951			0.00- 66.77	17.06
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	891813	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	537799			7.58- 107.58	60.30
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.944 (1.076)	65	411712	25.9644	25.964	80.00- 120.00	100.00
14.944	14.944 (1.076)	67	200538			3.57- 103.57	48.71
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	946698	26.0461	26.046	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	105738			0.00- 61.29	11.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	639295			18.71- 118.71	67.53
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	585640	25.3879	25.388	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	743441			77.79- 177.79	126.94
22.796	22.796 (1.096)	176	577572			48.42- 148.42	98.62
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	30556	0.63500	1.422	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	9566			0.00- 82.13	31.31
42 Freon 113					CAS #: 76-13-1		
9.967	9.939 (0.717)	151	15382	0.61322	1.374	80.00- 120.00	100.00
9.994	9.939 (0.719)	153	10348			13.23- 113.23	67.28
9.967	9.939 (0.717)	101	20594			83.10- 183.10	133.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.077	10.050 (0.725)	61	21011	0.93058	2.084	80.00- 120.00	100.00
10.050	10.050 (0.723)	96	12729			4.93- 104.93	60.58
10.050	10.050 (0.723)	98	7779			0.00- 85.66	37.02
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	2272585	159.176	356.55	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	1879687			32.18- 132.18	82.71
11.128	11.100 (0.801)	51	697437			0.00- 83.83	30.69
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	1779458	49.7171	111.37	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1175016			14.26- 114.26	66.03
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.308	14.280 (1.030)	97	30216	0.76326	1.710	80.00- 120.00	100.00
14.308	14.280 (1.030)	99	17736			14.90- 114.90	58.70
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	989683	26.0250	58.296	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	1053464			56.33- 156.33	106.44
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	31384	1.36371	3.055	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	10466			0.00- 84.23	33.35
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	1037437	51.3488	115.02	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	951778			42.34- 142.34	91.74

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)								
16.105	16.077	(1.030)	97	664225			13.74- 113.74	64.03
120 Tetrachloroethene						CAS #: 127-18-4		
19.285	19.284	(0.927)	166	145420	5.34220	11.966	80.00- 120.00	100.00
19.285	19.284	(0.927)	129	105150			20.52- 120.52	72.31
19.285	19.284	(0.927)	131	100412			16.74- 116.74	69.05

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022211.d
Lab Smp Id: 0802328-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Calibration Date: 22-FEB-2008
Calibration Time: 09:47

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	246431	-9.74
97 1,4-Difluorobenze	1067226	640336	1494116	943587	-11.59
126 Chlorobenzene-d5	999102	599461	1398743	891813	-10.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802328-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Client SDG: 22Feb2008
Fraction: VOA

Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.964	103.86	70-130
$ 113 Toluene-d8	25.000	26.046	104.18	70-130
$ 137 Bromofluorobenzene	25.000	25.388	101.55	70-130

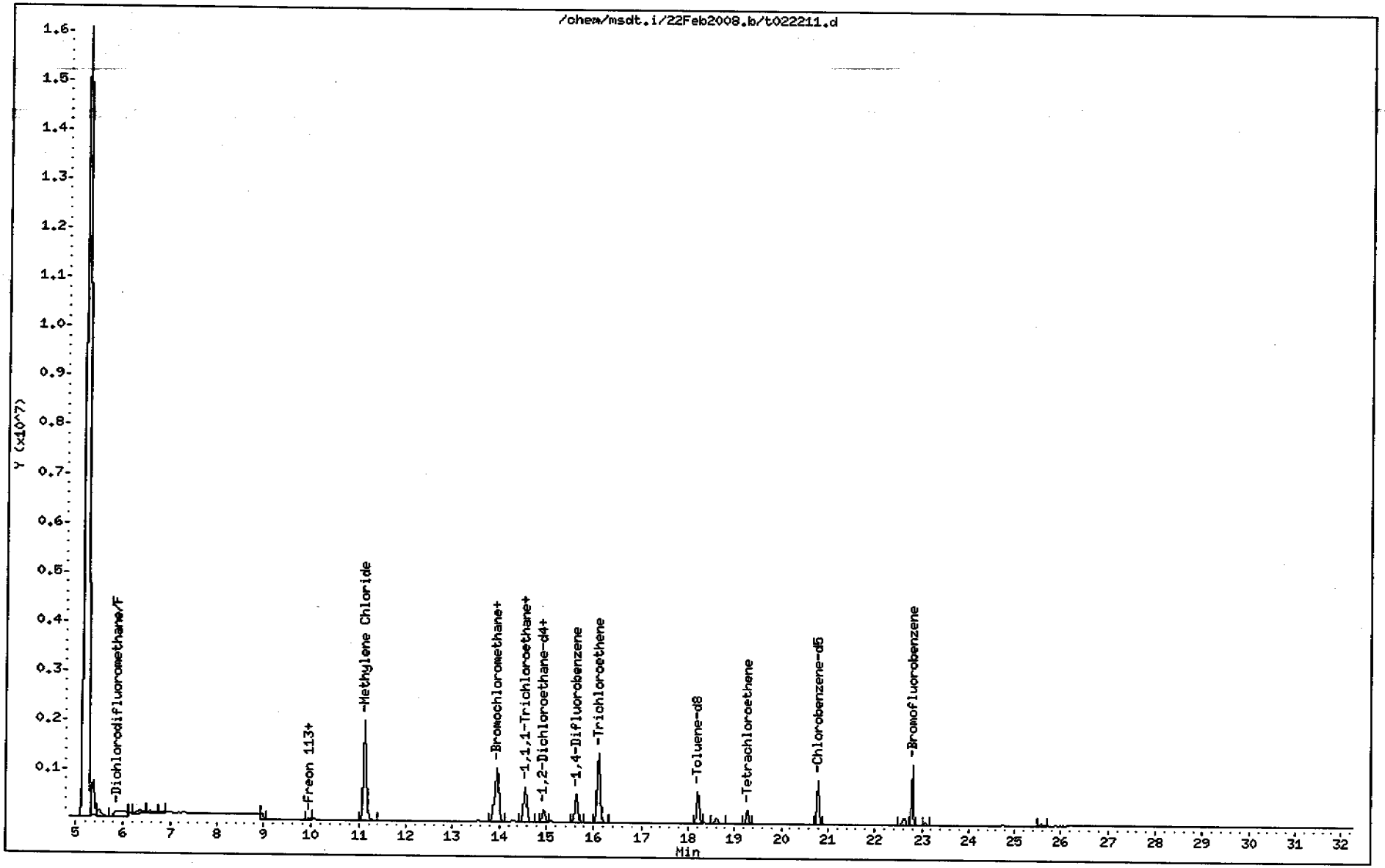
Data File: /chem/msdt.i/22Feb2008.b/t022211.d
Date : 22-FEB-2008 18:40
Client ID:
Sample Info: 150mL #TO-1594

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0093



Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

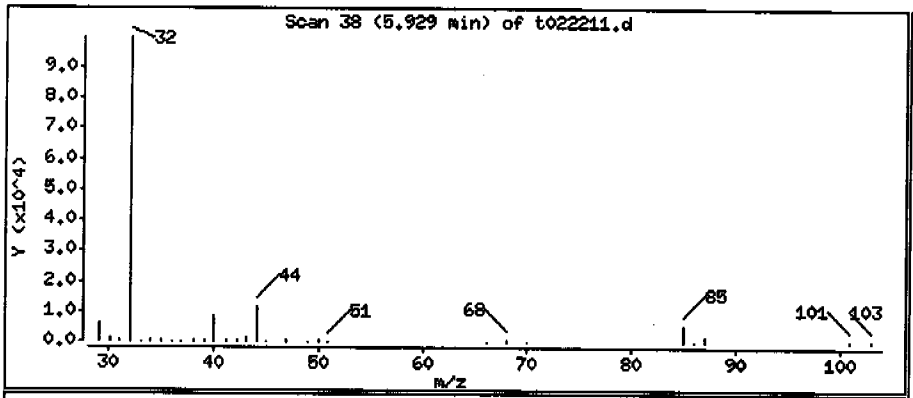
Operator: ACT

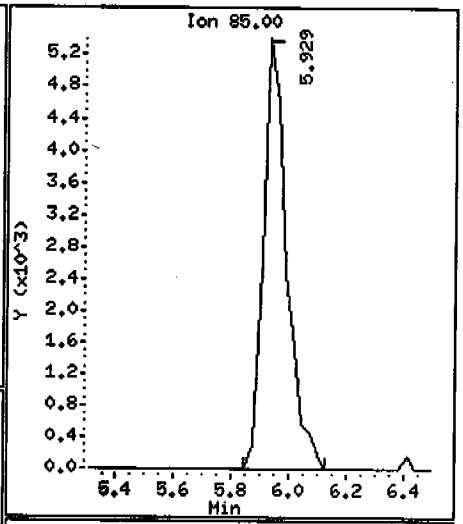
Column phase: RTx-624

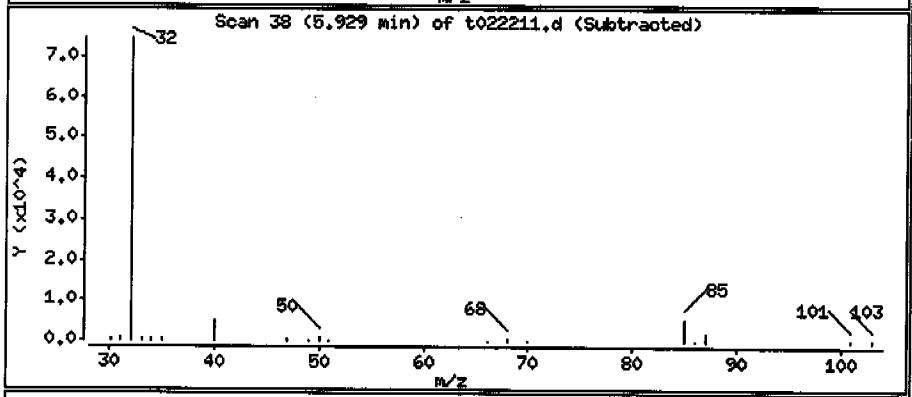
Column diameter: 0.53

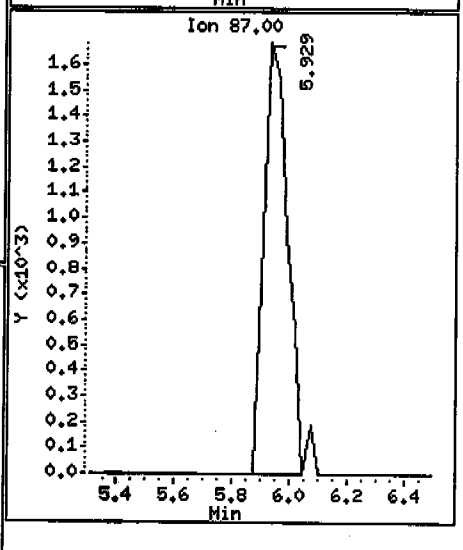
12 Dichlorodifluoromethane/Fr12

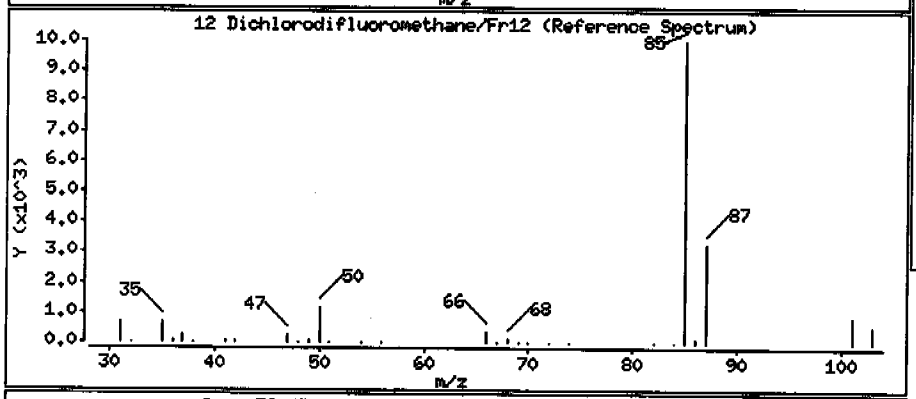
Concentration: 1.422 PPBV

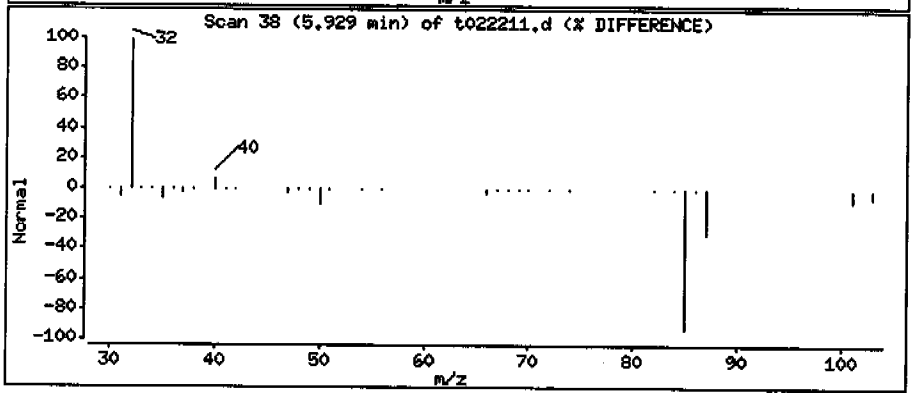












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

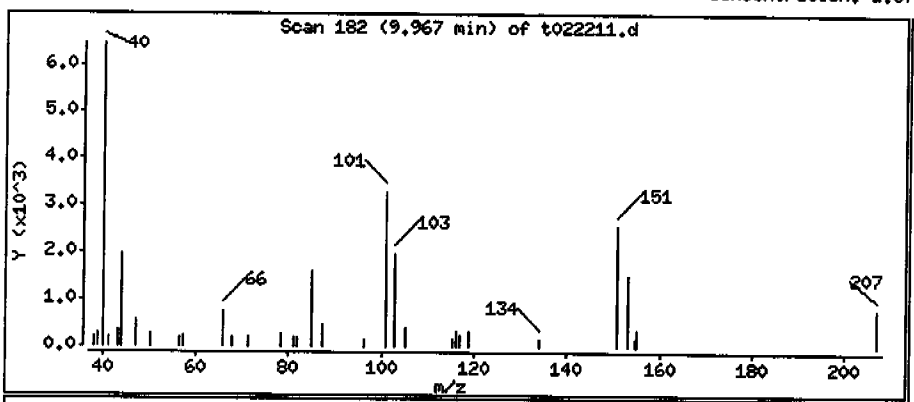
Operator: ACT

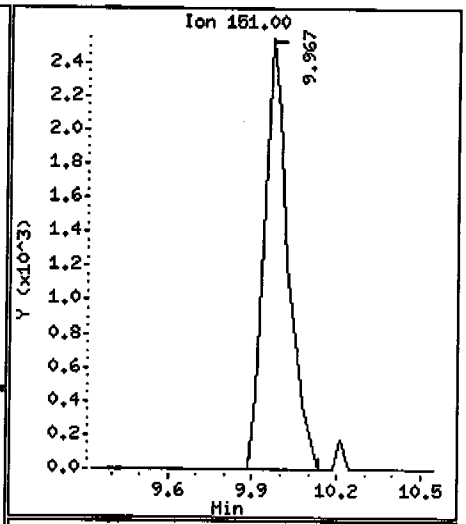
Column phase: RTx-624

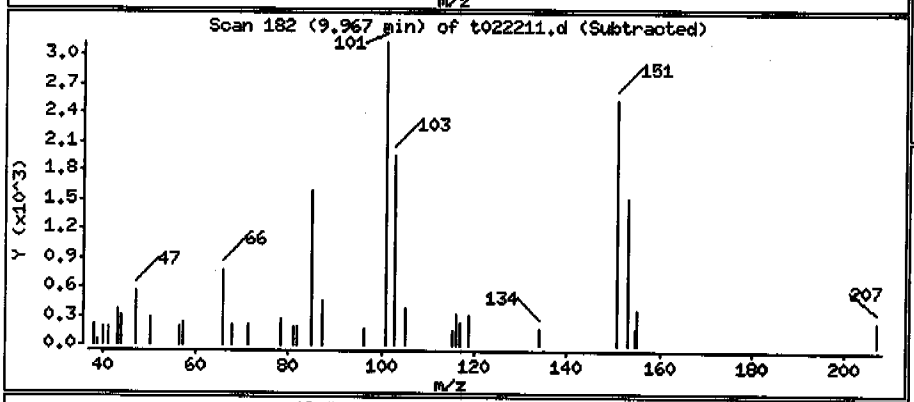
Column diameter: 0.53

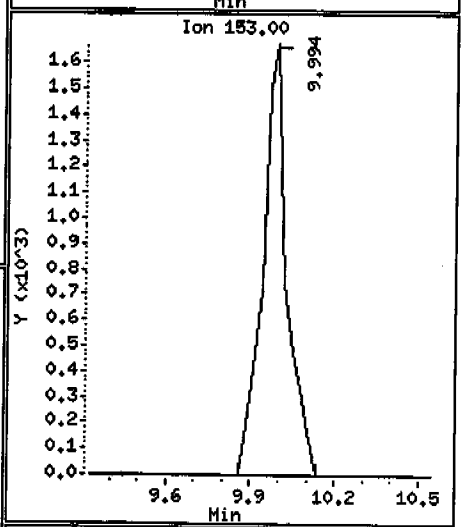
42 Freon 113

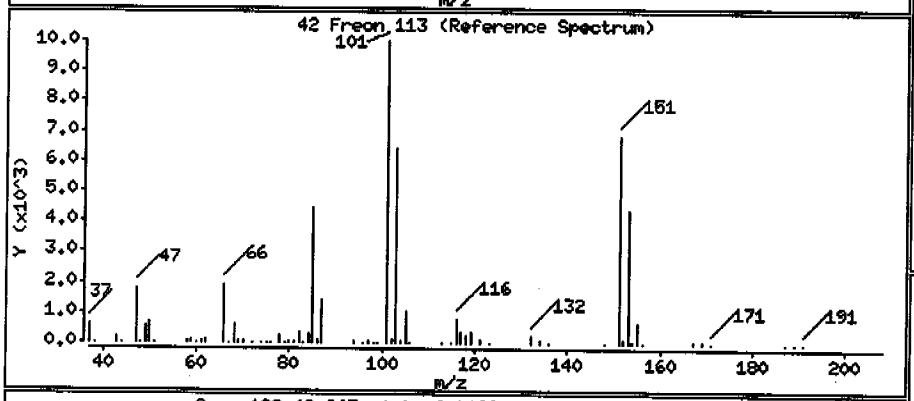
Concentration: 1.374 PPBV

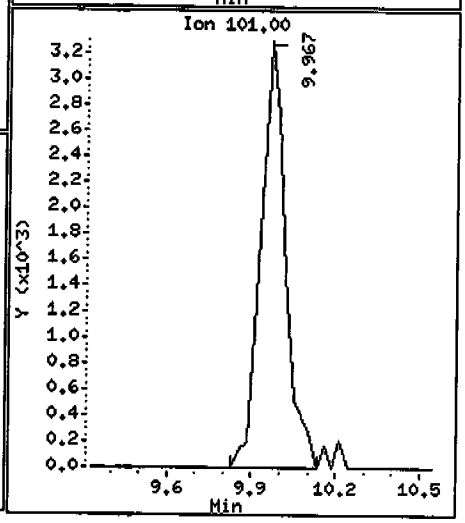


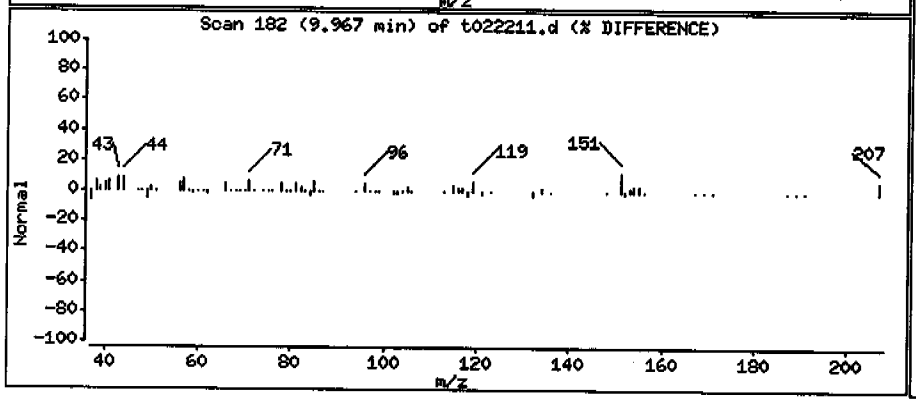












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

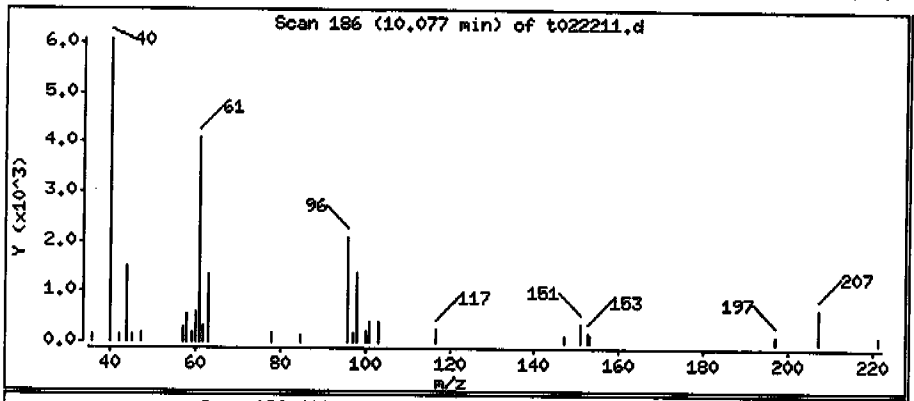
Operator: ACT

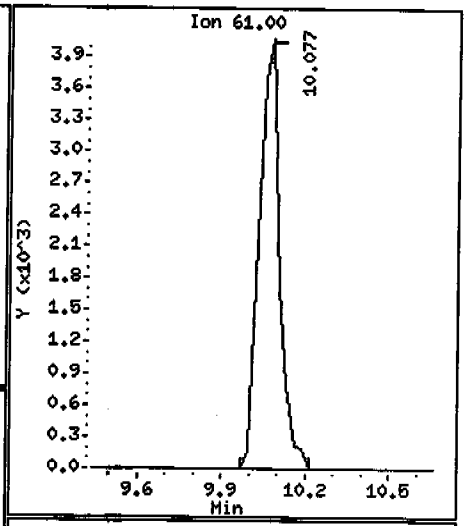
Column phase: RTx-624

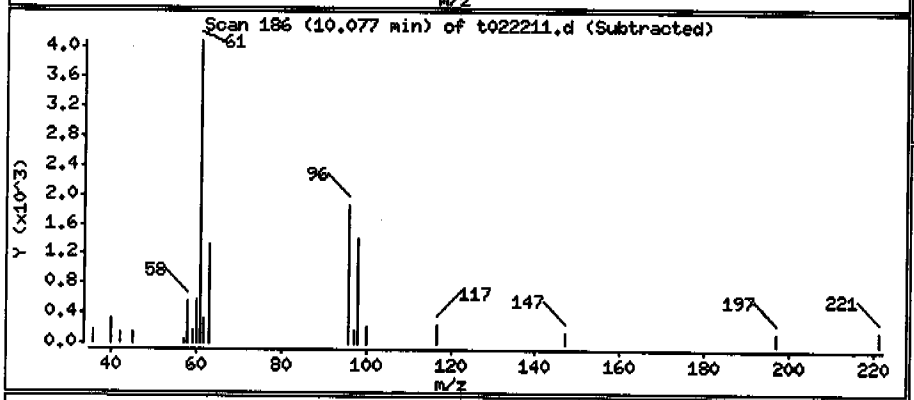
Column diameter: 0.53

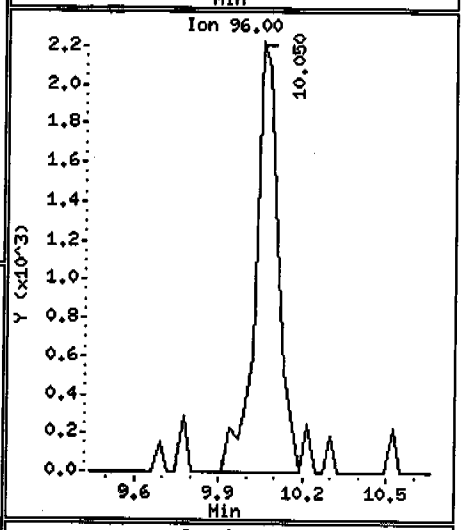
43 1,1-Dichloroethene

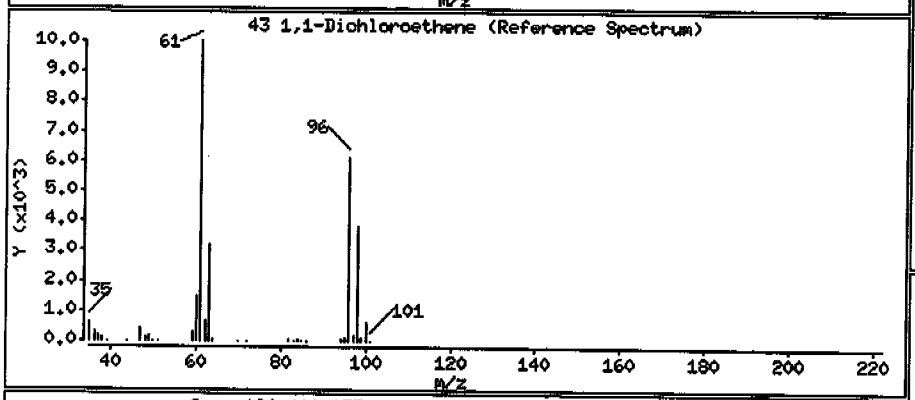
Concentration: 2.084 PPBV

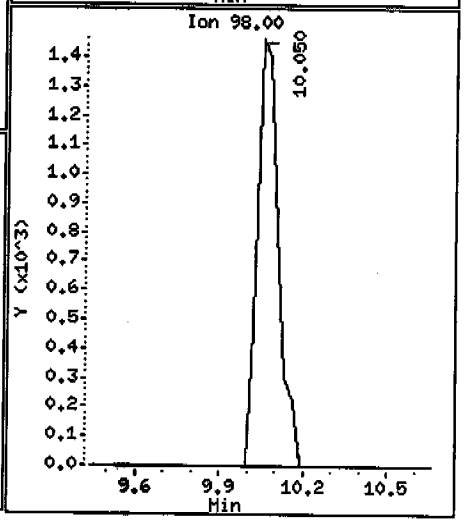


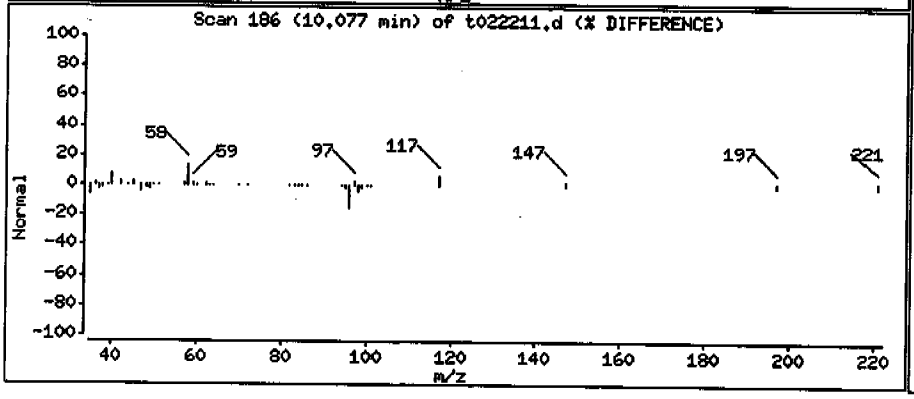












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

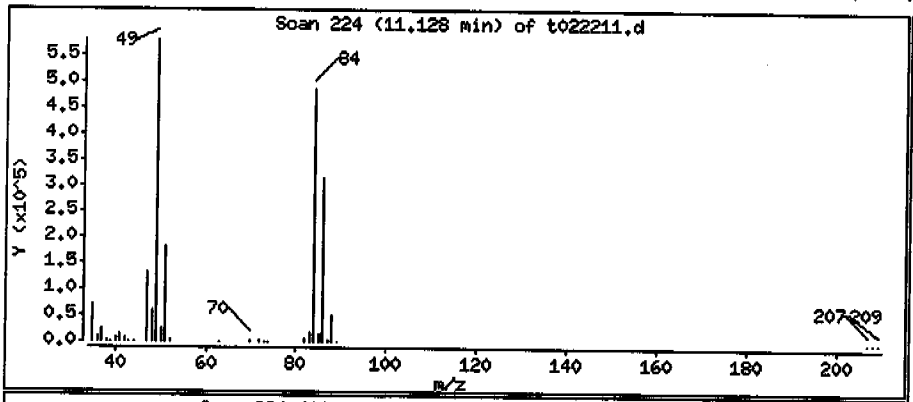
Operator: ACT

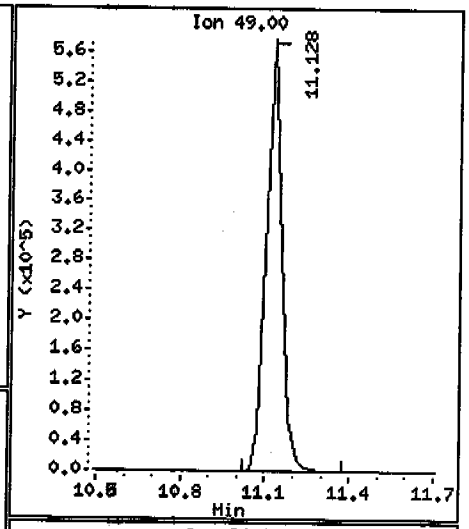
Column phase: RTx-624

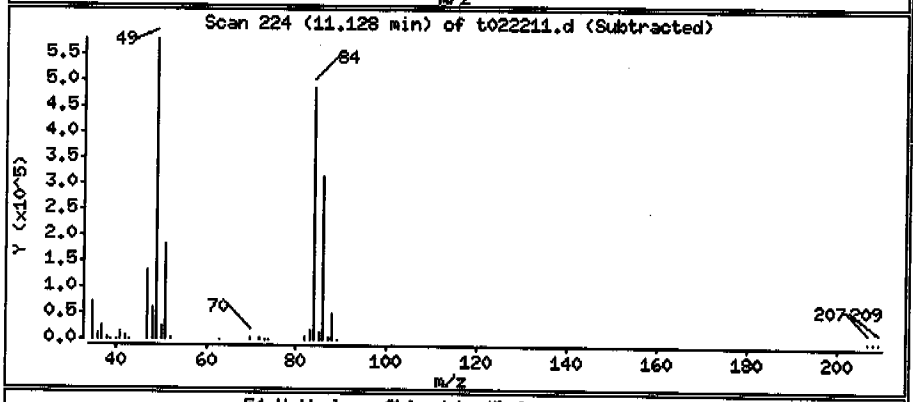
Column diameter: 0.53

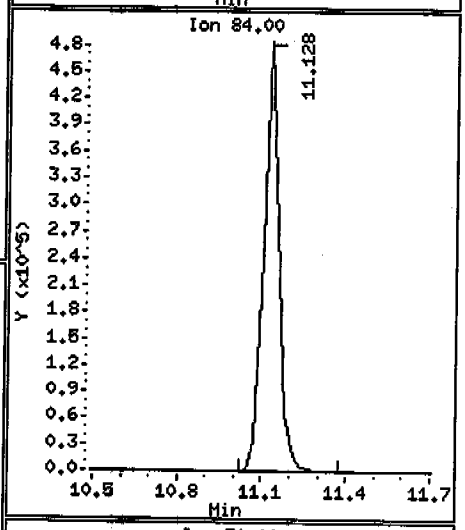
54 Methylene Chloride

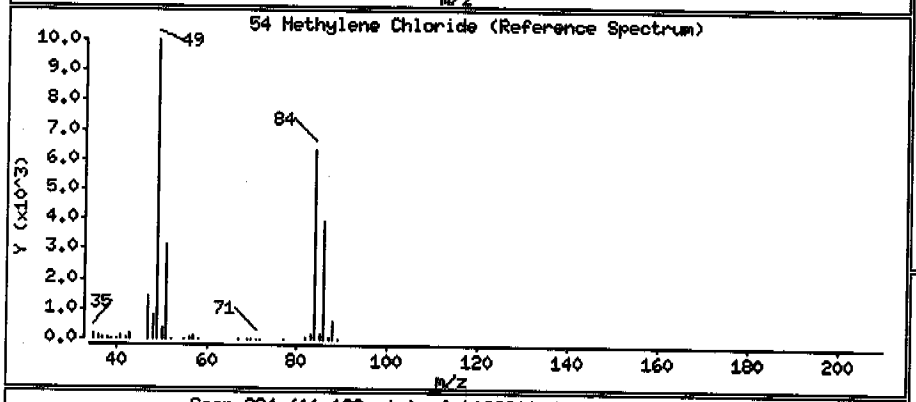
Concentration: 356.55 PPBV

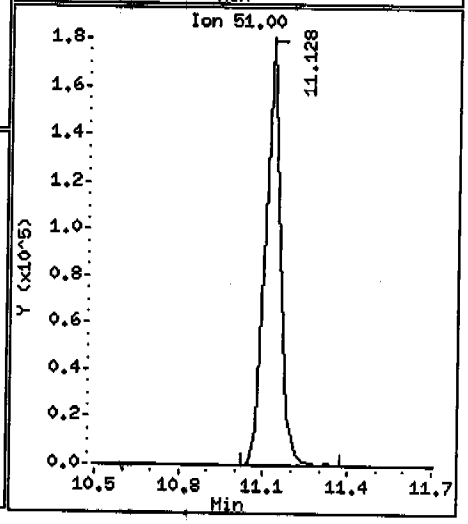


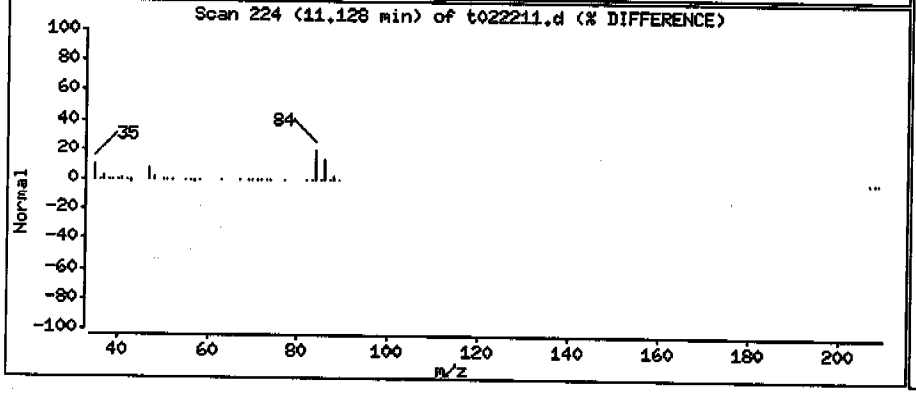












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

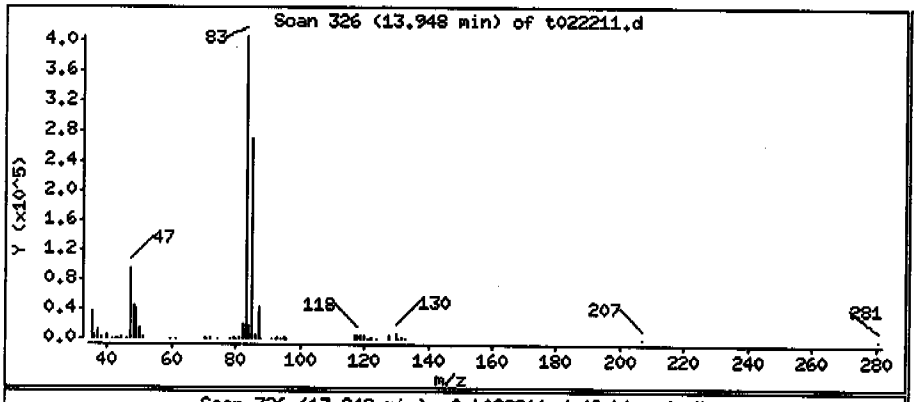
Operator: ACT

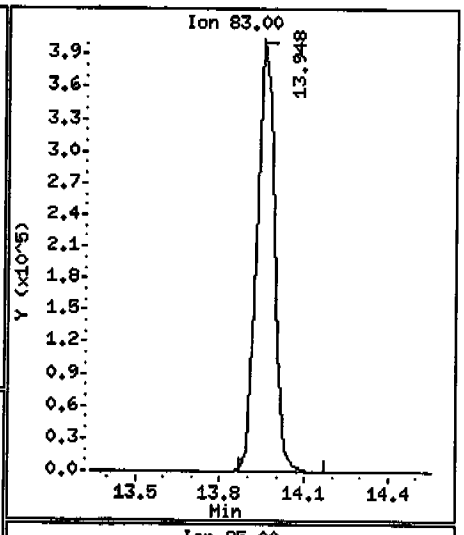
Column phase: RTx-624

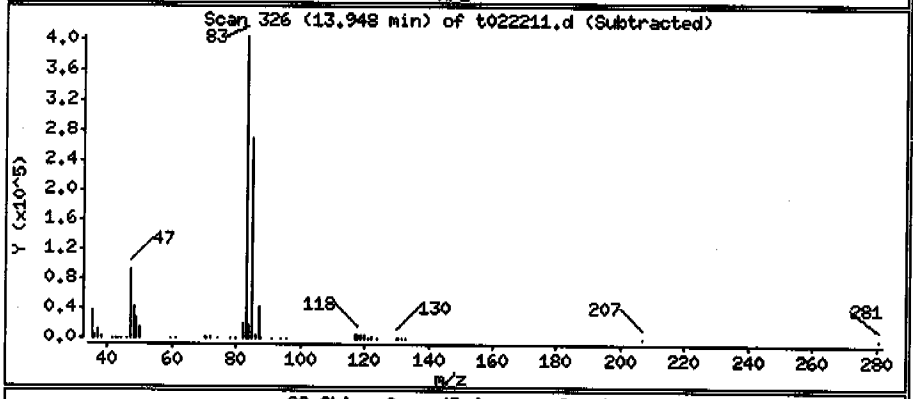
Column diameter: 0.53

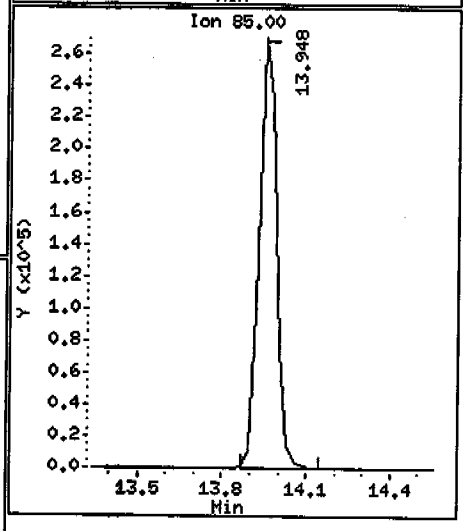
82 Chloroform

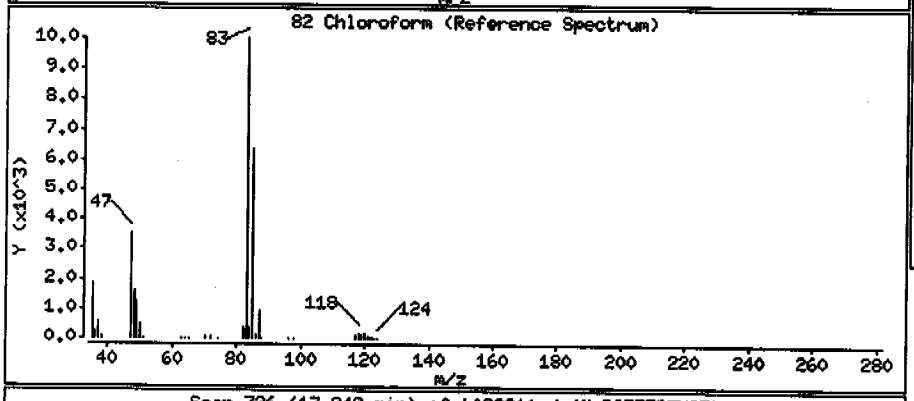
Concentration: 111.37 PPBV

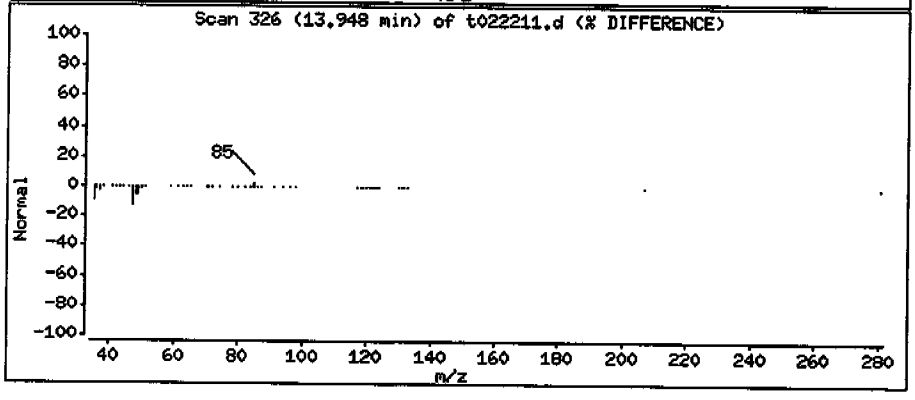












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Sample Info: 150mL #TO-1594

Instrument: msdt.i

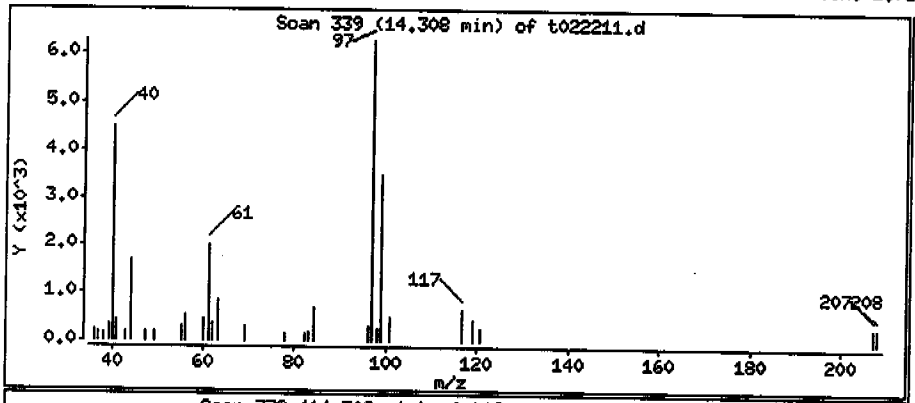
Operator: ACT

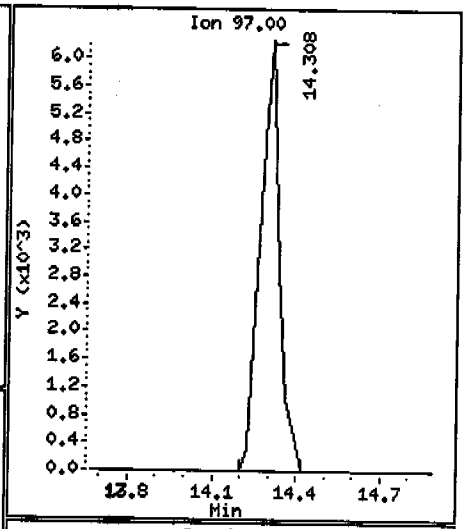
Column phase: RTx-624

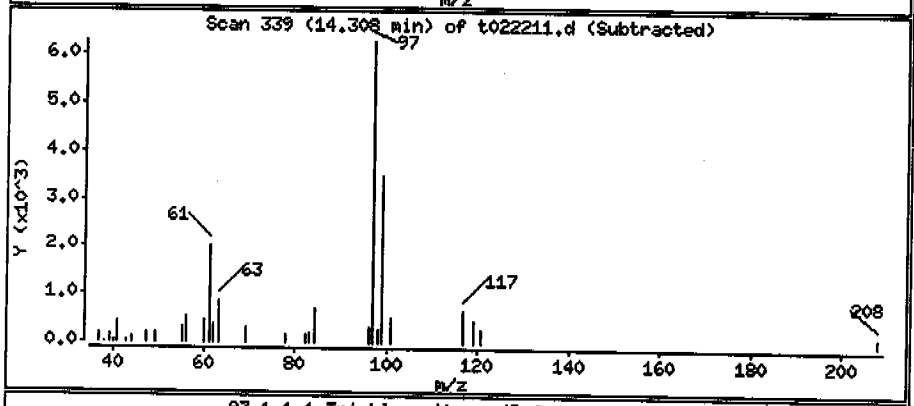
Column diameter: 0.53

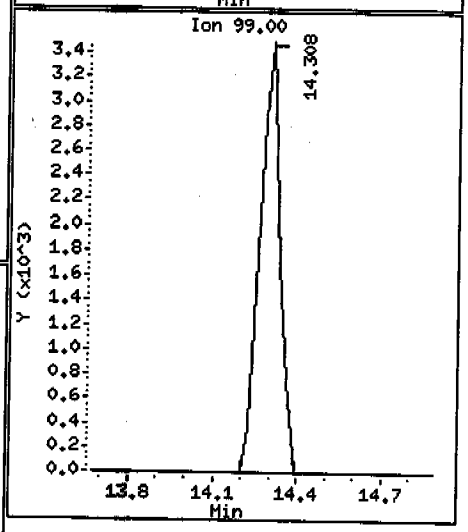
83 1,1,1-Trichloroethane

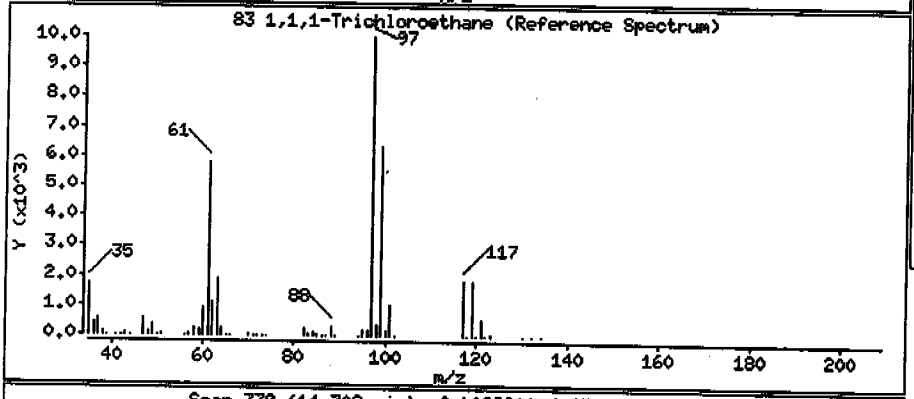
Concentration: 1.710 PPBV

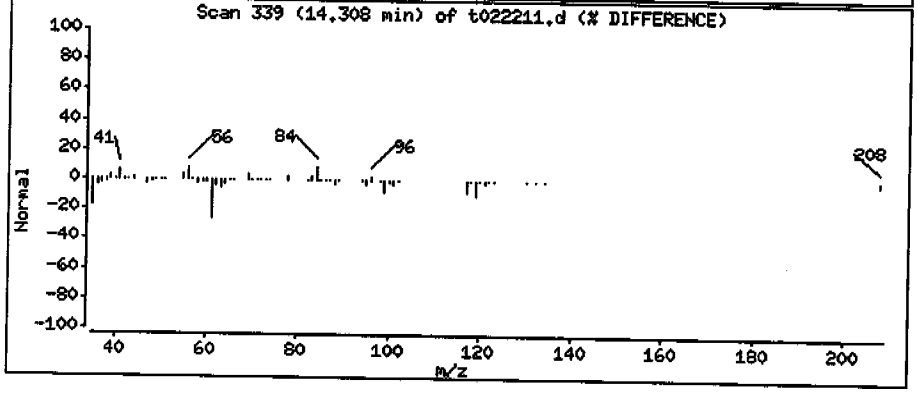












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

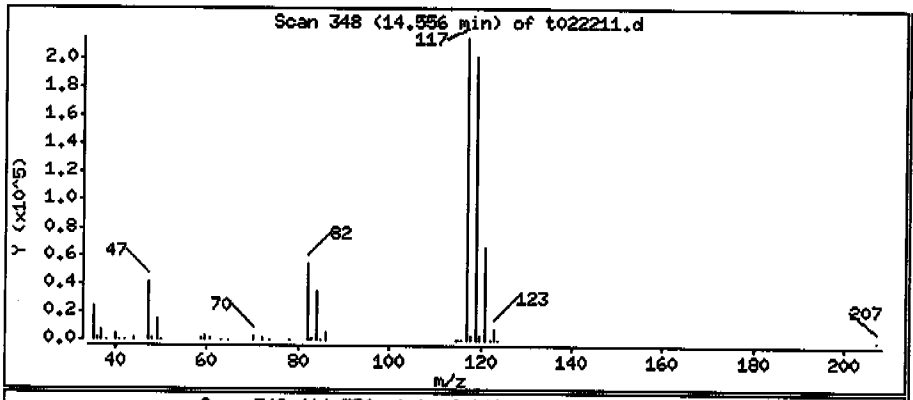
Operator: ACT

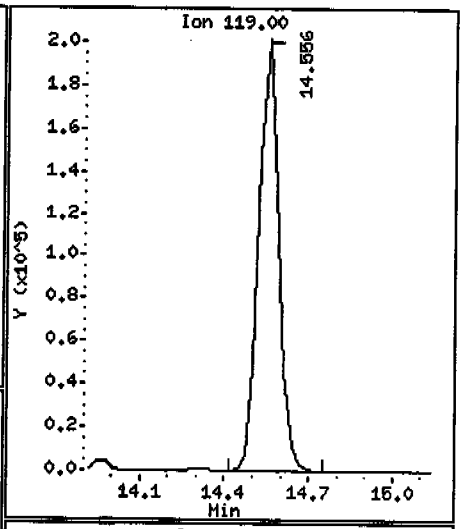
Column phase: RTx-624

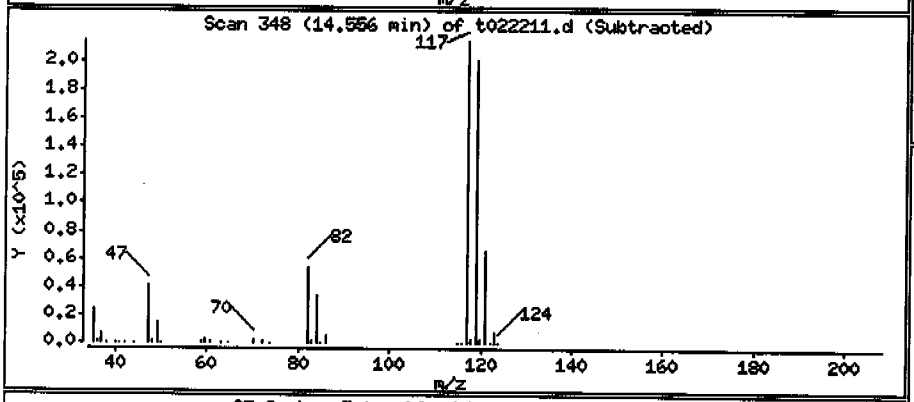
Column diameter: 0.53

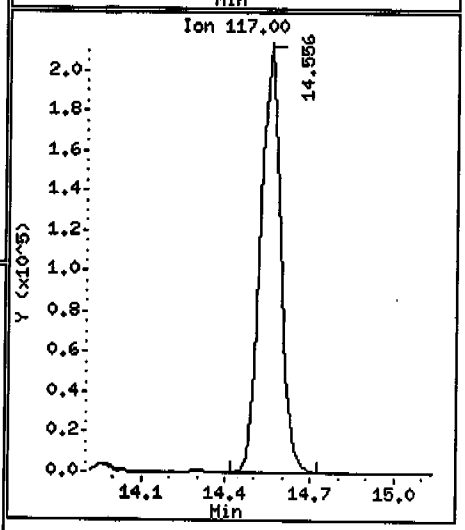
87 Carbon Tetrachloride

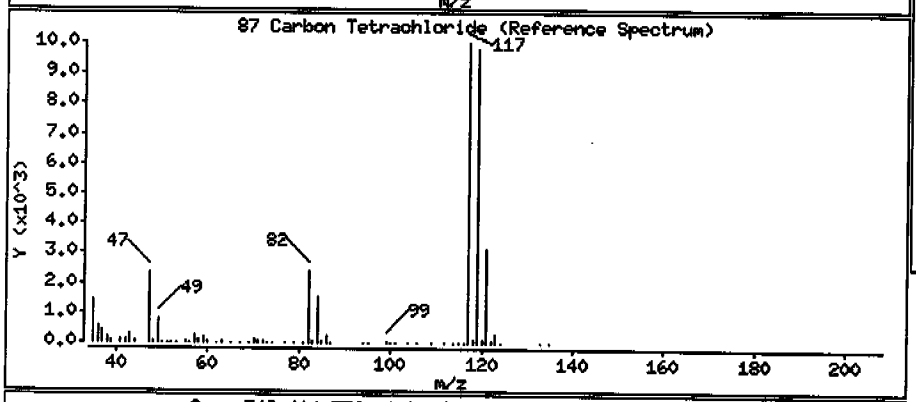
Concentration: 58.296 PPBV

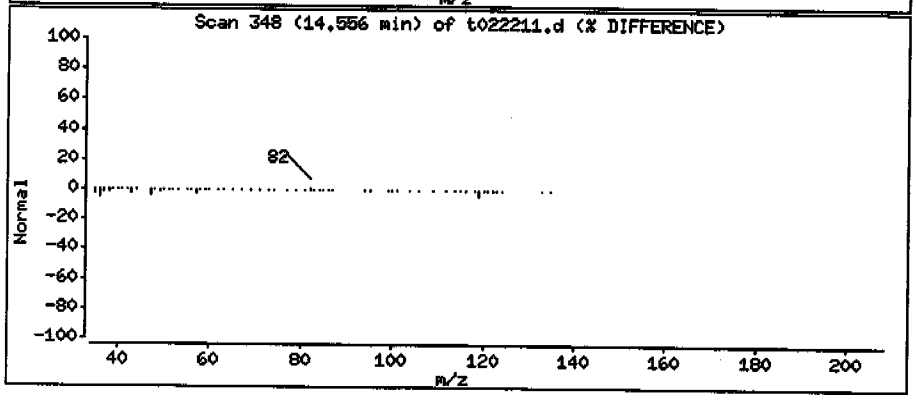












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

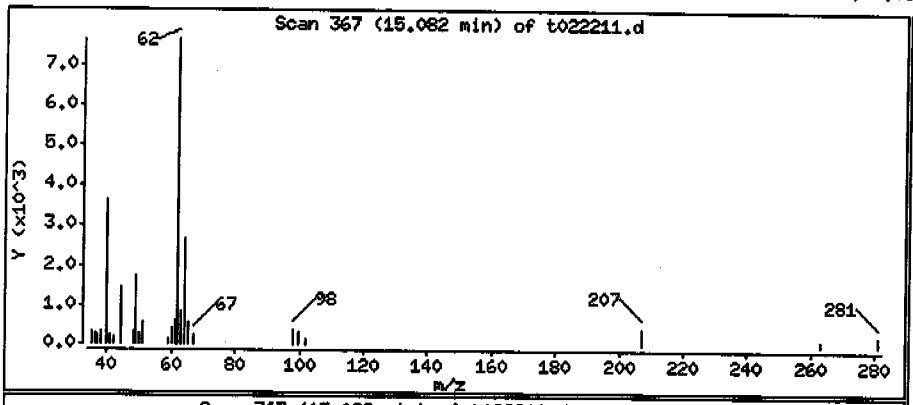
Operator: ACT

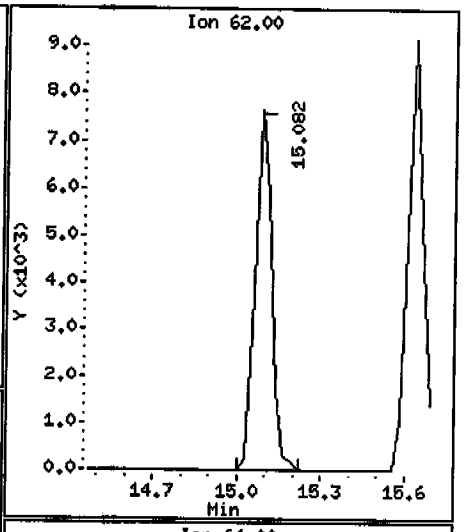
Column phase: RTx-624

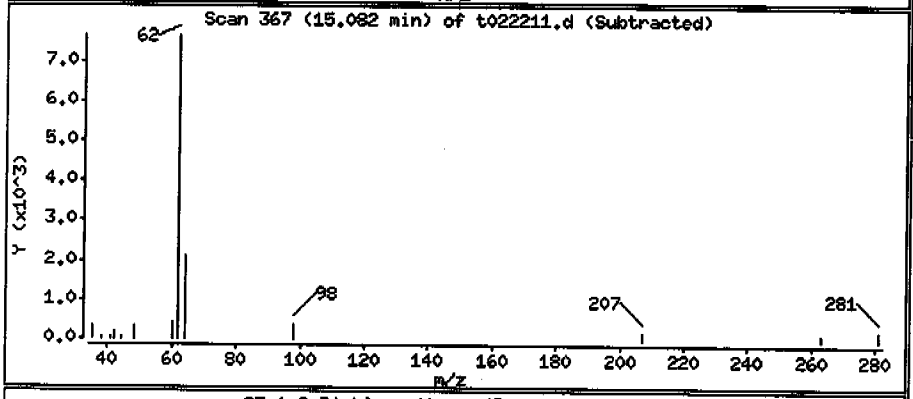
Column diameter: 0.53

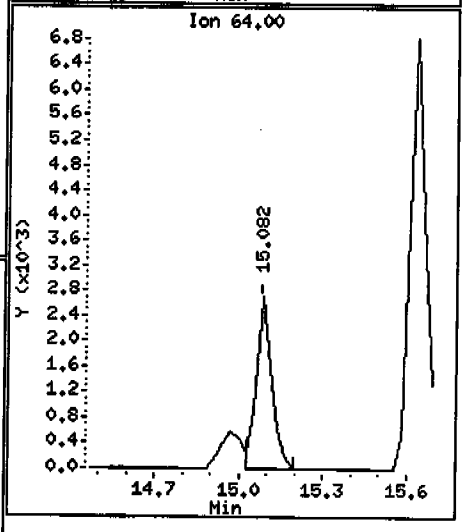
93 1,2-Dichloroethane

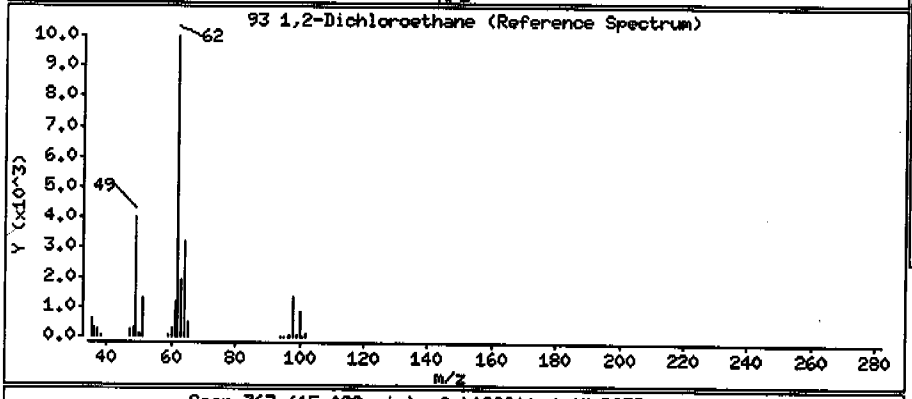
Concentration: 3.055 PPBV

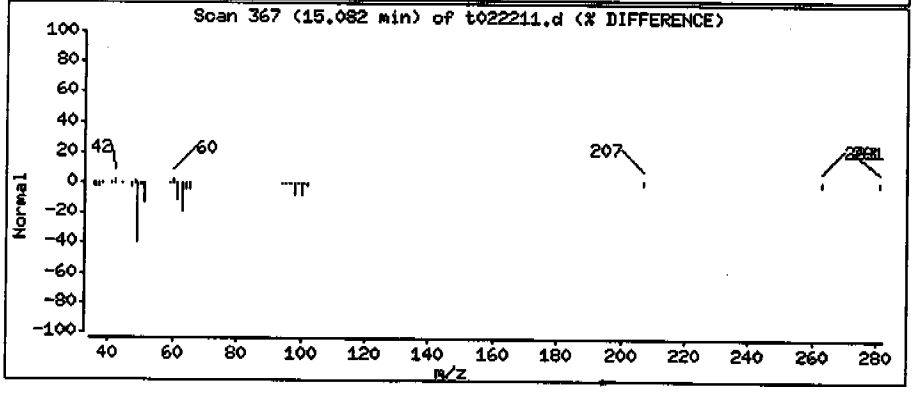












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

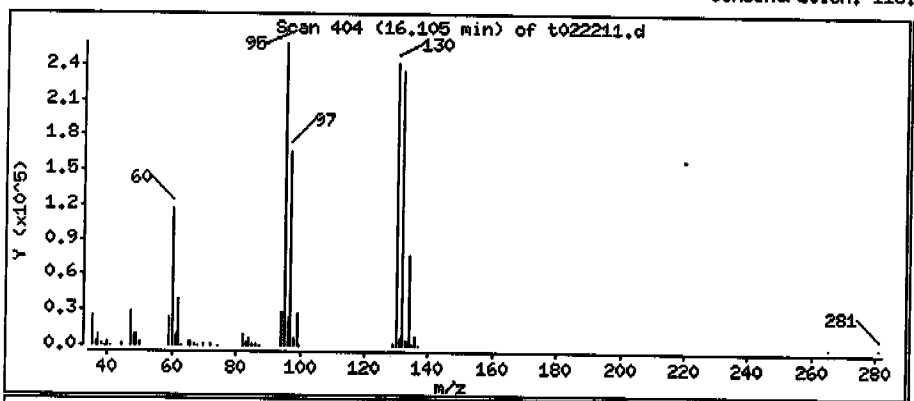
Operator: ACT

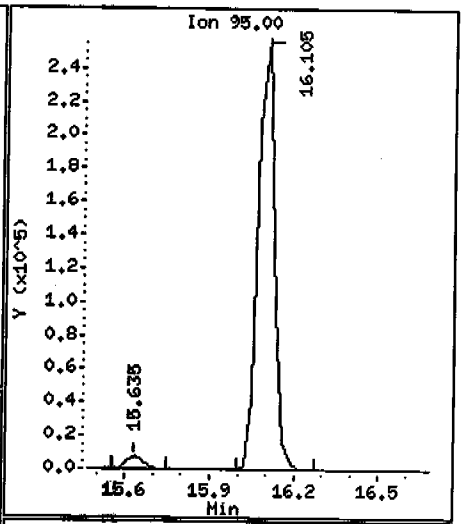
Column phase: RTx-624

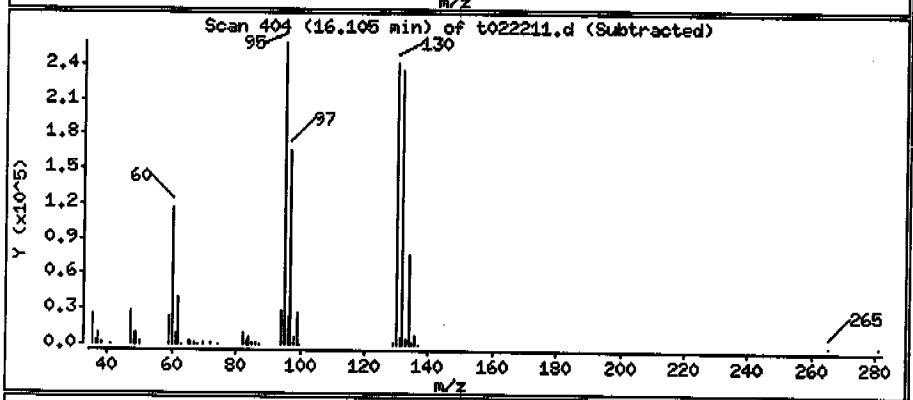
Column diameter: 0.53

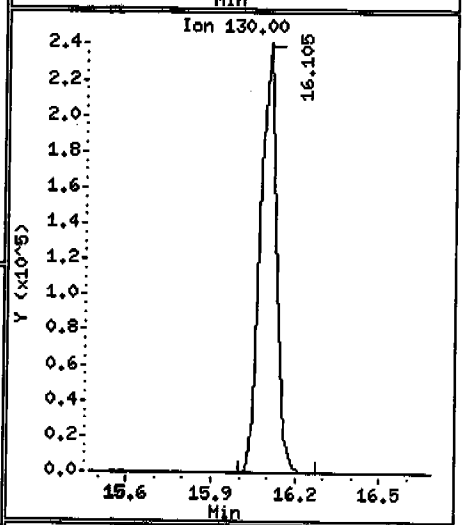
101 Trichloroethene

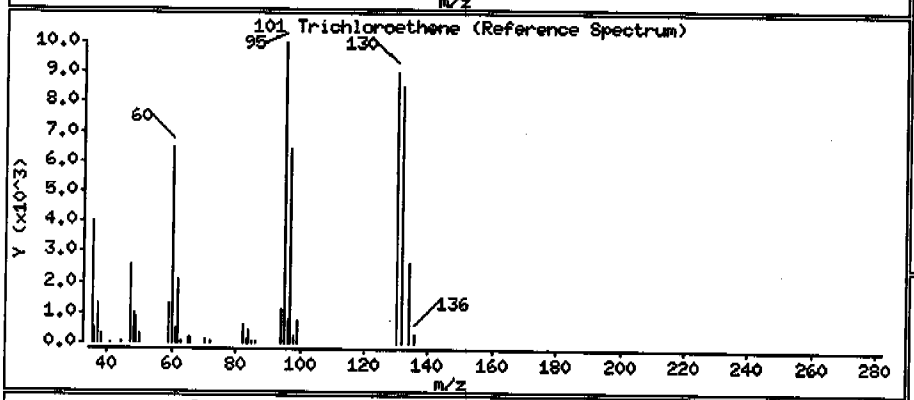
Concentration: 115.02 PPBV

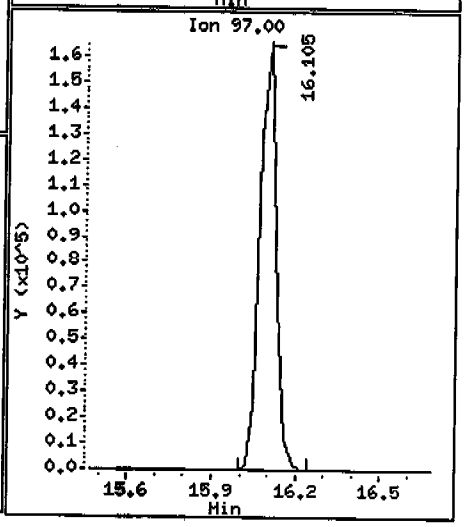


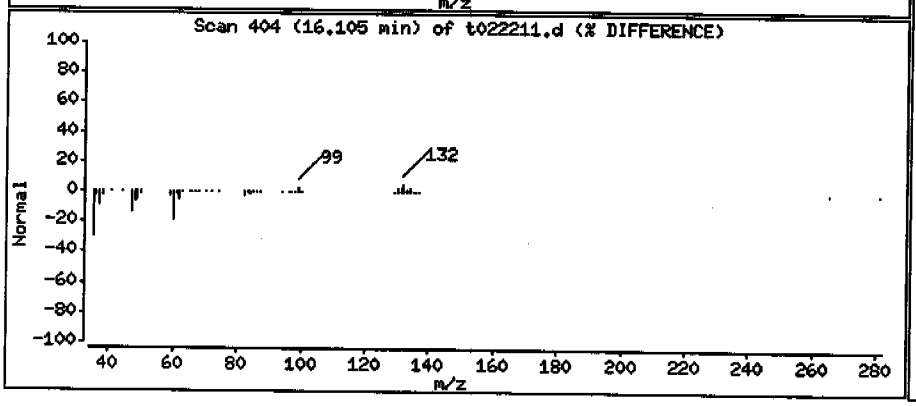












Data File: /chem/msdt.i/22Feb2008.b/t022211.d

Date : 22-FEB-2008 18:40

Client ID:

Instrument: msdt.i

Sample Info: 150mL #TO-1594

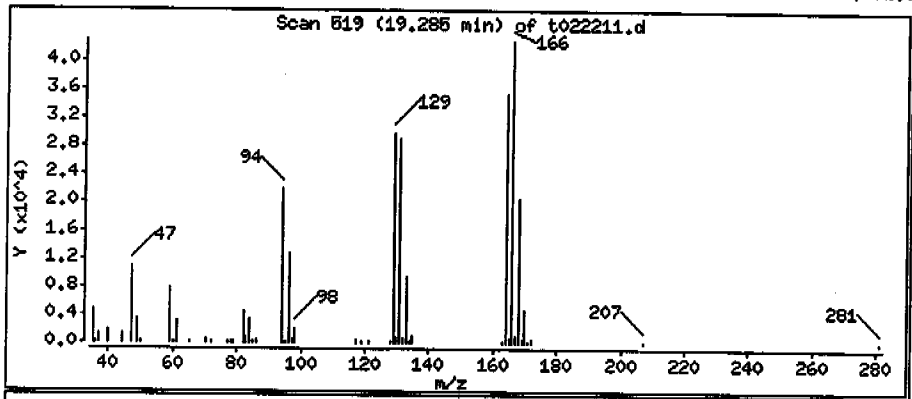
Operator: ACT

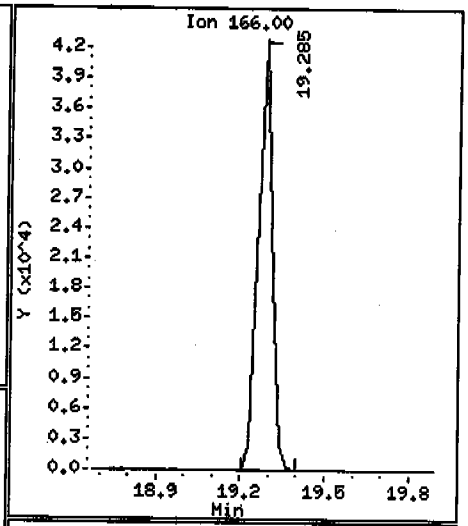
Column phase: RTx-624

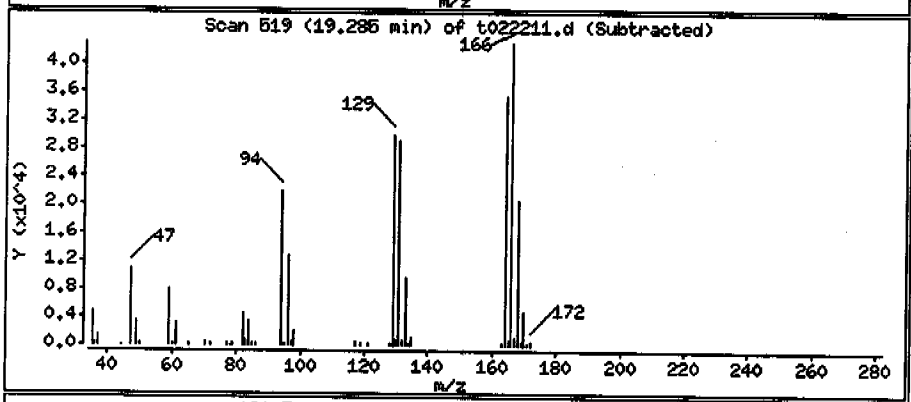
Column diameter: 0.53

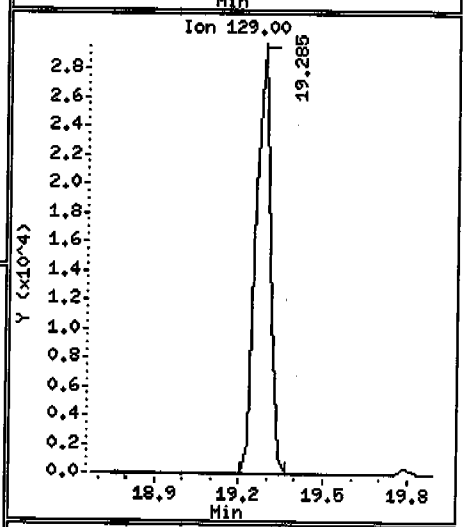
120 Tetrachloroethene

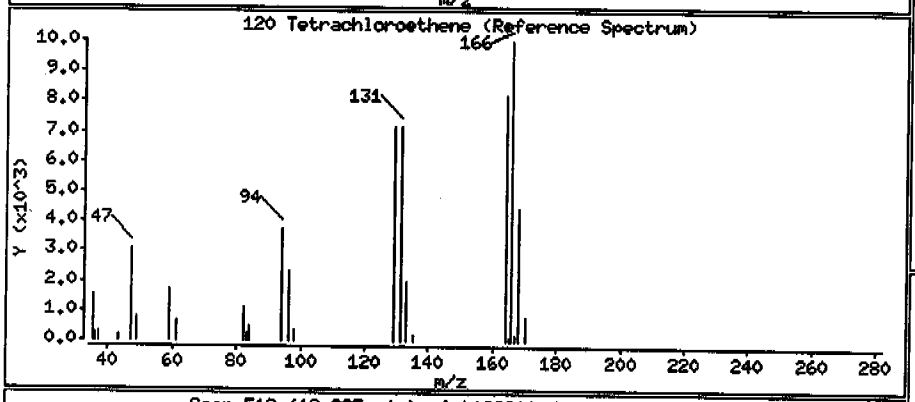
Concentration: 11.966 PPBV

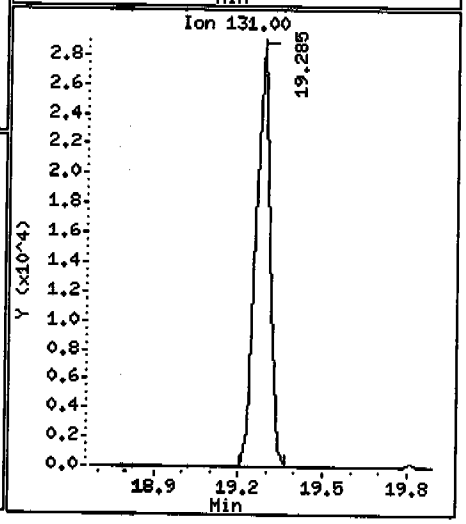


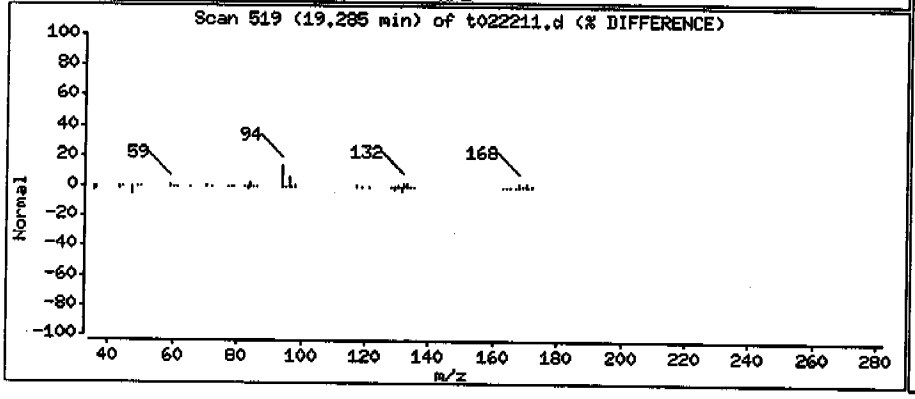












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10515

Lab ID#: 0802328-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	1.7	3.9	6.7	15
Methylene Chloride	1.7	680	5.8	2400
Chloroform	1.7	220	8.2	1000
Carbon Tetrachloride	1.7	73	10	460
1,2-Dichloroethane	1.7	7.3	6.8	30
Trichloroethene	1.7	170	9.0	890
Tetrachloroethene	1.7	5.0	11	34

0104

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10515

Lab ID#: 0802328-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	Not Detected	8.3	Not Detected
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.7	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.3	Not Detected
1,3-Butadiene	1.7	Not Detected	3.7	Not Detected
Bromomethane	1.7	Not Detected	6.5	Not Detected
Chloroethane	1.7	Not Detected	4.4	Not Detected
Freon 11	1.7	Not Detected	9.4	Not Detected
Ethanol	6.7	Not Detected	13	Not Detected
Freon 113	1.7	Not Detected	13	Not Detected
1,1-Dichloroethene	1.7	3.9	6.7	15
Acetone	6.7	Not Detected	16	Not Detected
2-Propanol	6.7	Not Detected	16	Not Detected
Carbon Disulfide	1.7	Not Detected	5.2	Not Detected
Methylene Chloride	1.7	680	5.8	2400
Methyl tert-butyl ether	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Hexane	1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran	1.7	Not Detected	5.0	Not Detected
Chloroform	1.7	220	8.2	1000
1,1,1-Trichloroethane	1.7	Not Detected	9.2	Not Detected
Cyclohexane	1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride	1.7	73	10	460
Benzene	1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane	1.7	7.3	6.8	30
Heptane	1.7	Not Detected	6.9	Not Detected
Trichloroethene	1.7	170	9.0	890
1,2-Dichloropropane	1.7	Not Detected	7.8	Not Detected
1,4-Dioxane	6.7	Not Detected	24	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	6.9	Not Detected
Toluene	1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane	1.7	Not Detected	9.2	Not Detected
Tetrachloroethene	1.7	5.0	11	34

0105

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10515

Lab ID#: 0802328-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.7	Not Detected	28	Not Detected
Dibromochloromethane	1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected
Chlorobenzene	1.7	Not Detected	7.7	Not Detected
Ethyl Benzene	1.7	Not Detected	7.3	Not Detected
m,p-Xylene	1.7	Not Detected	7.3	Not Detected
o-Xylene	1.7	Not Detected	7.3	Not Detected
Styrene	1.7	Not Detected	7.2	Not Detected
Bromoform	1.7	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected
4-Ethyltoluene	1.7	Not Detected	8.2	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene	1.7	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.7	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	6.7	Not Detected	50	Not Detected
Hexachlorobutadiene	6.7	Not Detected	72	Not Detected
Chlorodifluoromethane	6.7	Not Detected	24	Not Detected
Methanol	170	Not Detected	220	Not Detected
n-Butanol	6.7	Not Detected	20	Not Detected
Propylene	6.7	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	98	70-130

0106

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022212.d
Lab Smp Id: 0802328-05A
Inj Date : 22-FEB-2008 19:19
Operator : ACT Inst ID: msdt.i
Smp Info : 100mL #34203
Misc Info : 6.0"Hg -> 5.0psi
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 16:12 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 3.36000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	247204	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	188346			26.57- 126.57	76.19
13.865	13.865 (1.000)	49	480700			139.07- 239.07	194.45
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	933992	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	152244			0.00- 66.77	16.30
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	884099	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	513686			7.58- 107.58	58.10
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.944 (1.076)	65	425073	26.7232	26.723	80.00- 120.00	100.00
14.944	14.944 (1.076)	67	200914			3.57- 103.57	47.27
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	925695	25.7299	25.730	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	111431			0.00- 61.29	12.04

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	632077			18.71- 118.71	68.28
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	558625	24.4281	24.428	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	717819			77.79- 177.79	128.50
22.796	22.796 (1.096)	176	546094			48.42- 148.42	97.76
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.723)	61	26101	1.15240	3.872	80.00- 120.00	100.00
10.050	10.050 (0.723)	96	16014			4.93- 104.93	61.36
10.050	10.050 (0.723)	98	8679			0.00- 85.66	33.25
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	2922625	204.065	685.66	80.00- 120.00	100.00(A)
11.128	11.100 (0.801)	84	2392236			32.18- 132.18	81.85
11.128	11.100 (0.801)	51	898445			0.00- 83.83	30.74
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	2297665	63.9947	215.02	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1509407			14.26- 114.26	65.69
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	831631	21.8005	73.250	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	885370			56.33- 156.33	106.46
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	49489	2.17250	7.300	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	16150			0.00- 84.23	32.63
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	990640	49.5363	166.44	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	917831			42.34- 142.34	92.65
16.105	16.077 (1.030)	97	634609			13.74- 113.74	64.06
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	40304	1.49354	5.018	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	29470			20.52- 120.52	73.12
19.284	19.284 (0.927)	131	26659			16.74- 116.74	66.14

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022212.d
Lab Smp Id: 0802328-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Calibration Date: 22-FEB-2008
Calibration Time: 09:47

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	247204	-9.46
97 1,4-Difluorobenze	1067226	640336	1494116	933992	-12.48
126 Chlorobenzene-d5	999102	599461	1398743	884099	-11.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802328-05A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg -> 5.0psi

Client SDG: 22Feb2008
Fraction: VOA

Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.723	106.89	70-130
$ 113 Toluene-d8	25.000	25.730	102.92	70-130
$ 137 Bromofluorobenzene	25.000	24.428	97.71	70-130

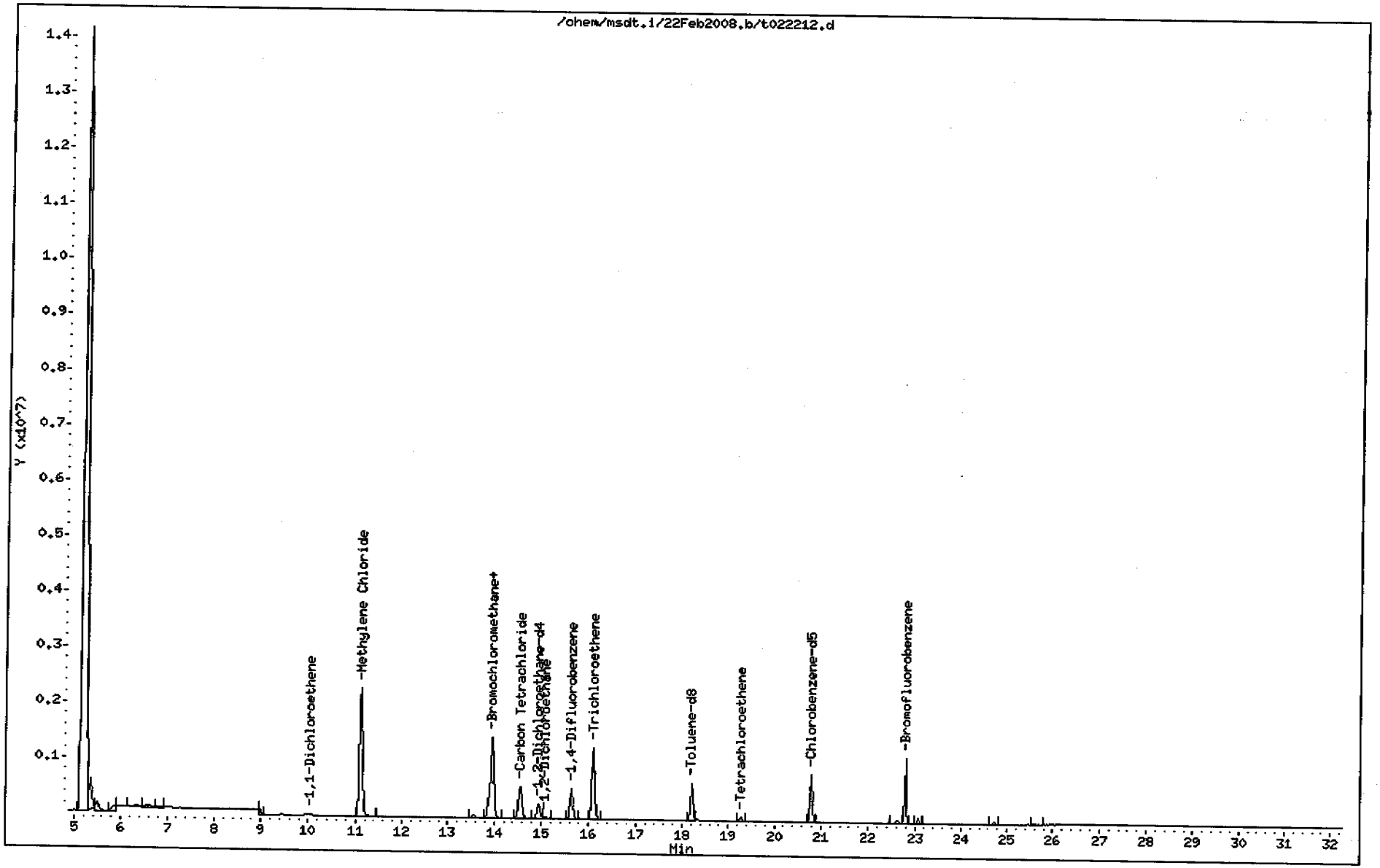
Data File: /chem/msdt.i/22Feb2008.b/t022212.d
Date : 22-FEB-2008 19:19
Client ID:
Sample Info: 100mL #34203

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0111



Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34203

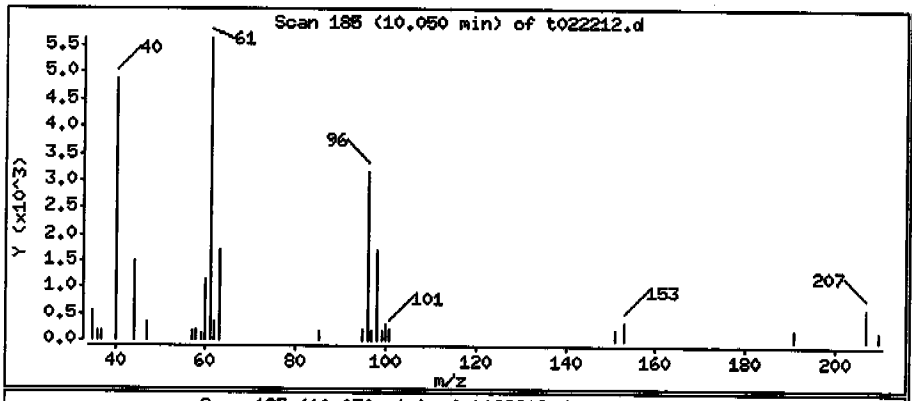
Operator: ACT

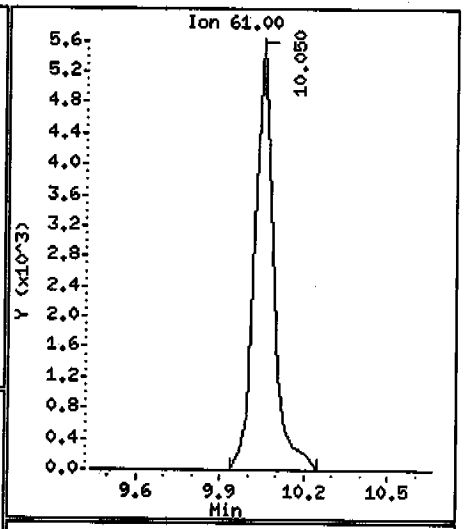
Column phase: RTx-624

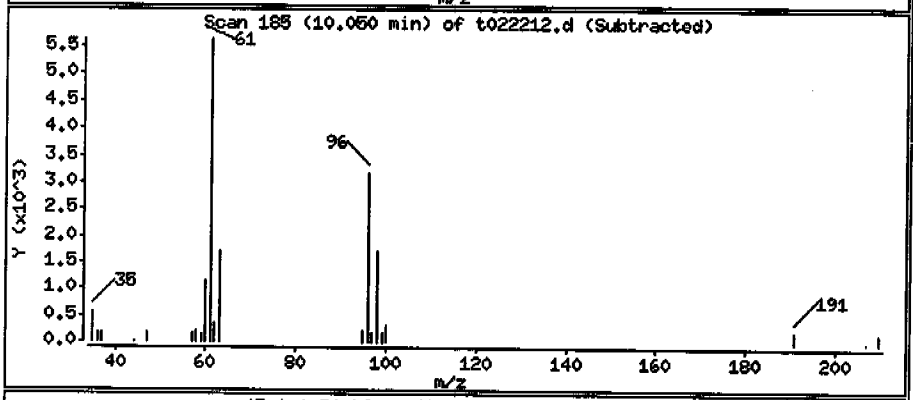
Column diameter: 0.53

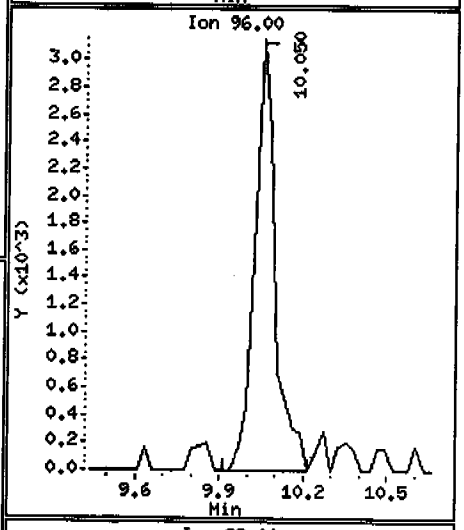
43 1,1-Dichloroethene

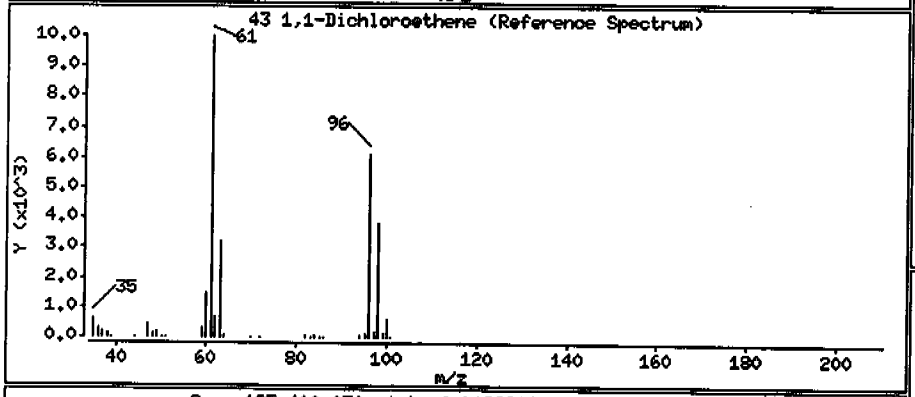
Concentration: 3.872 PPBV

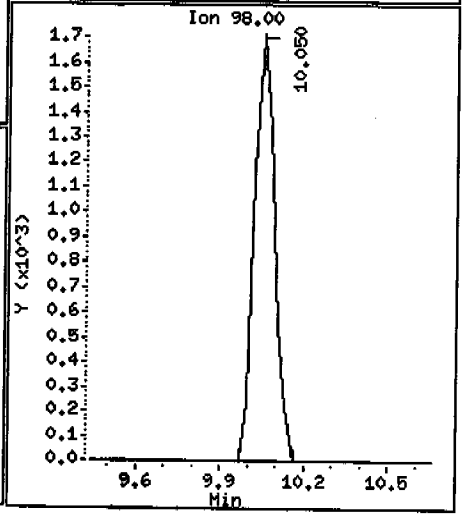


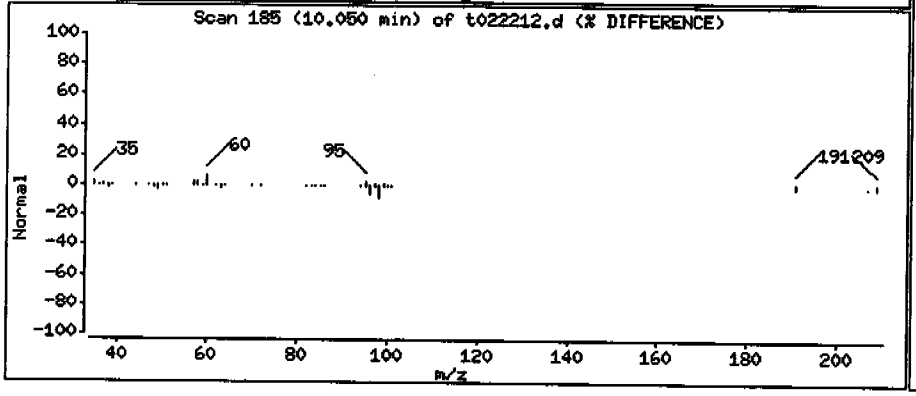












Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34203

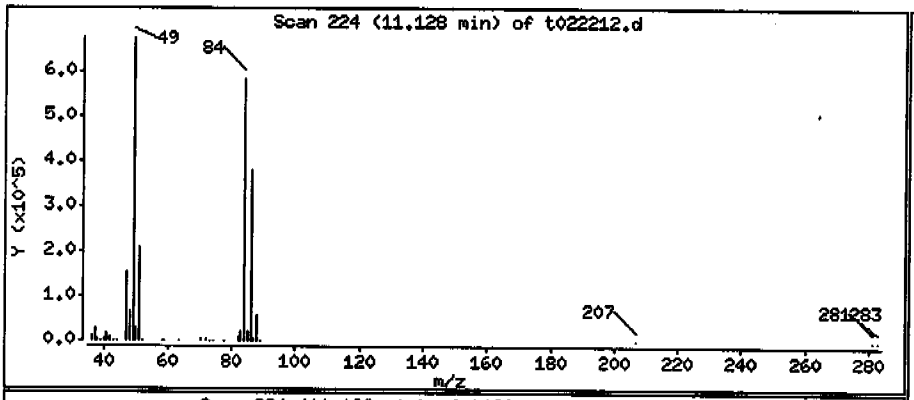
Operator: ACT

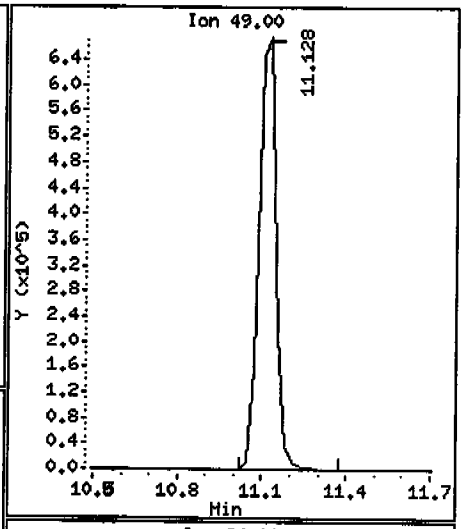
Column phase: RTx-624

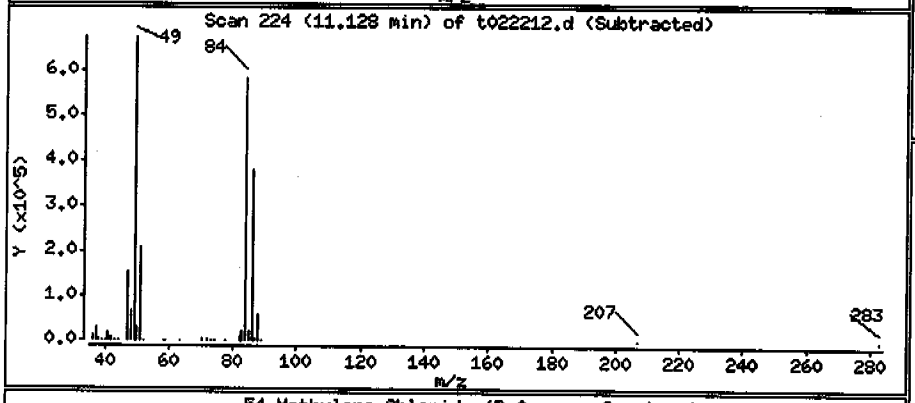
Column diameter: 0.53

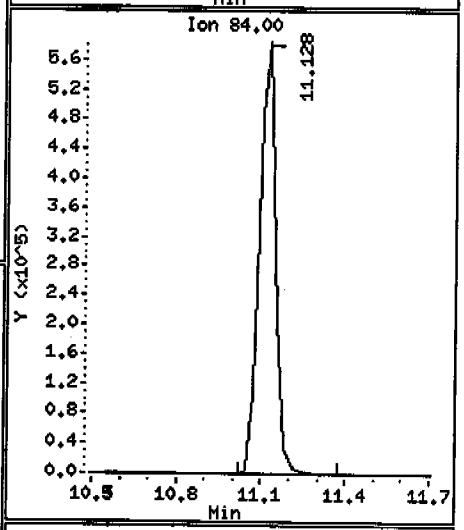
54 Methylene Chloride

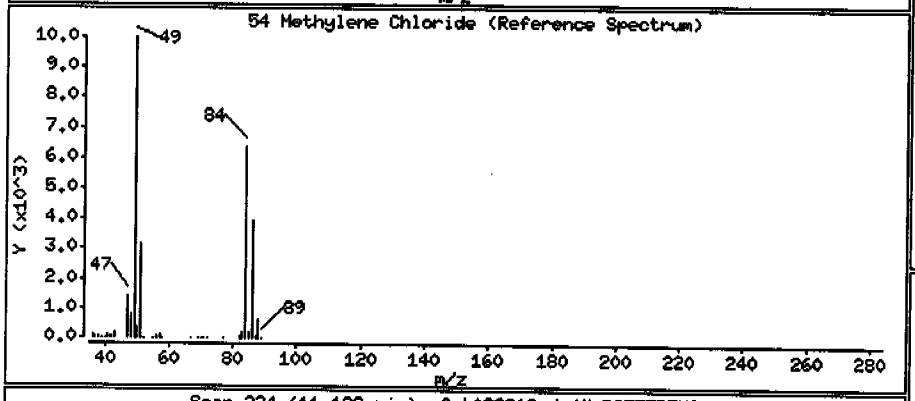
Concentration: 685.66 PPBV

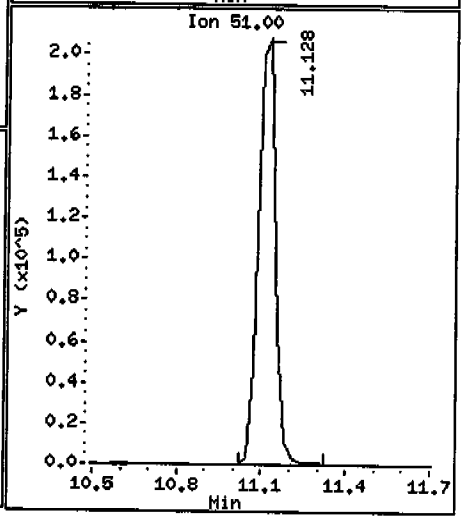


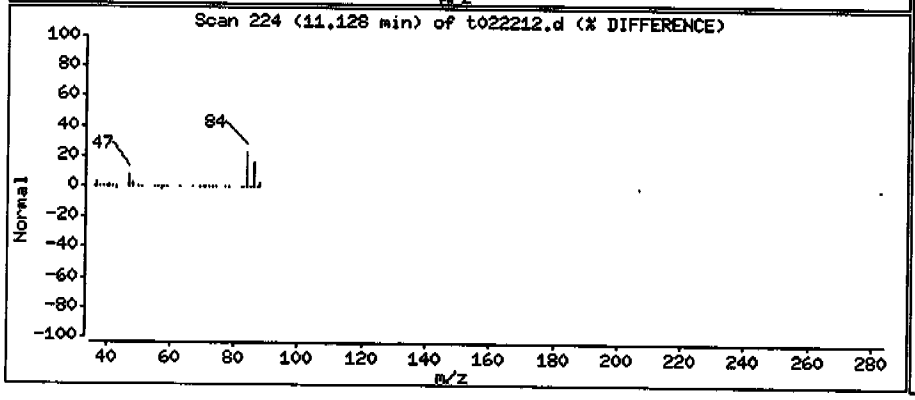












Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34203

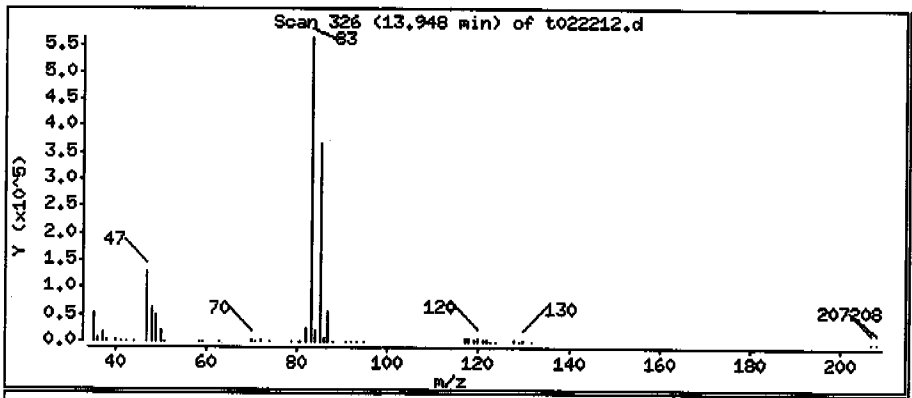
Operator: ACT

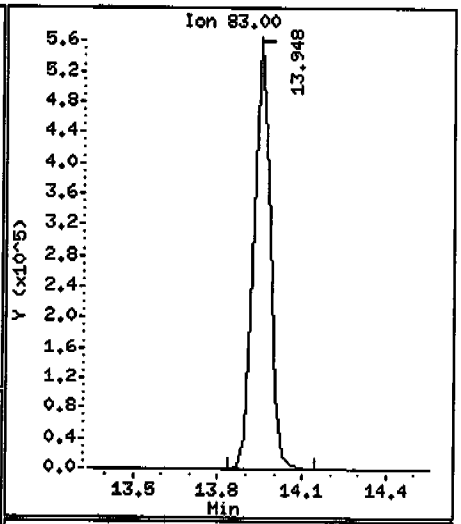
Column phase: RTx-624

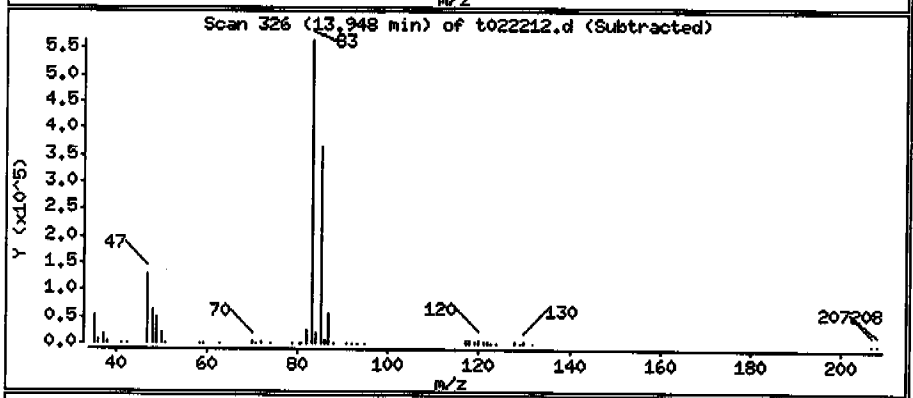
Column diameter: 0.53

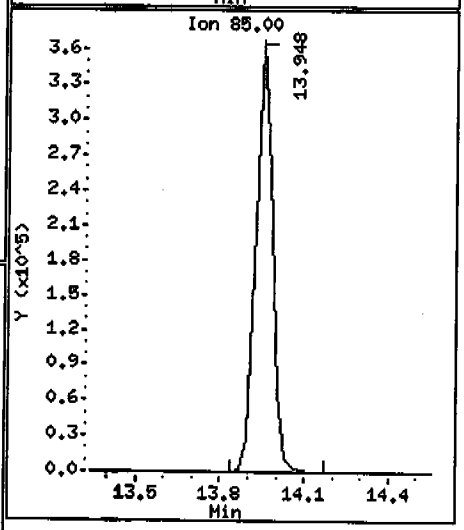
82 Chloroform

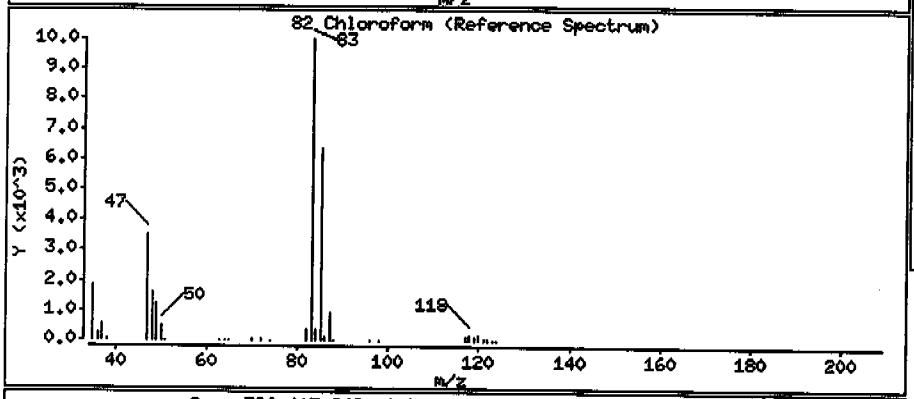
Concentration: 215.02 PPBV

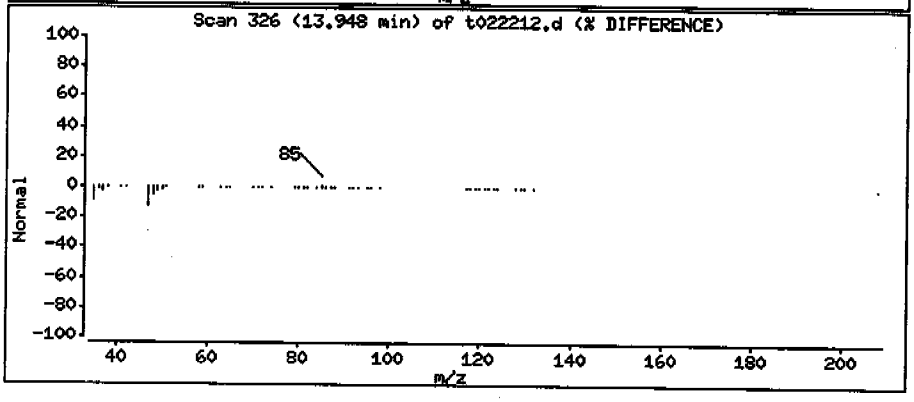












Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Sample Info: 100mL #34203

Instrument: msdt.i

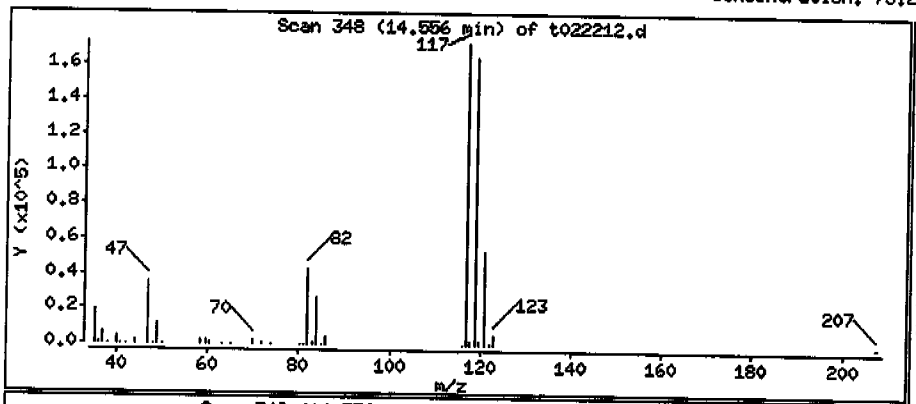
Operator: ACT

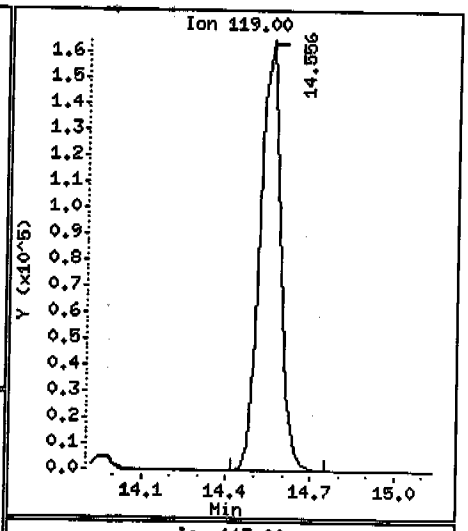
Column phase: RTx-624

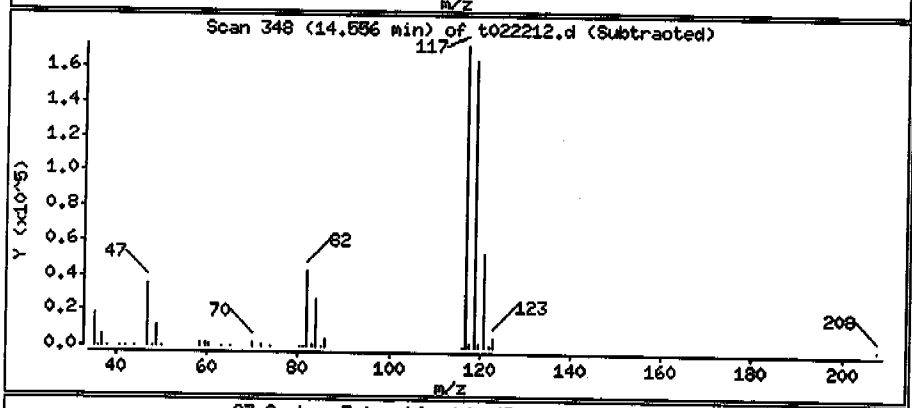
Column diameter: 0.53

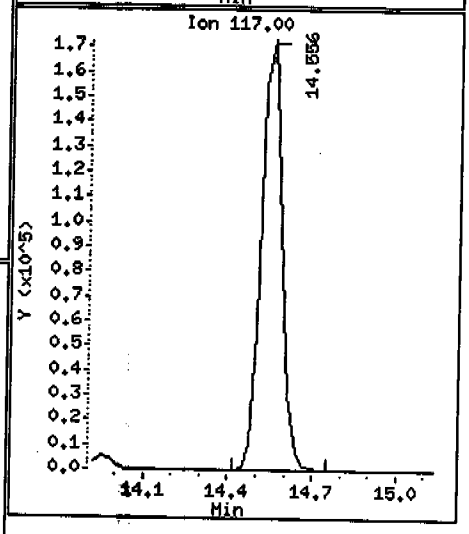
87 Carbon Tetrachloride

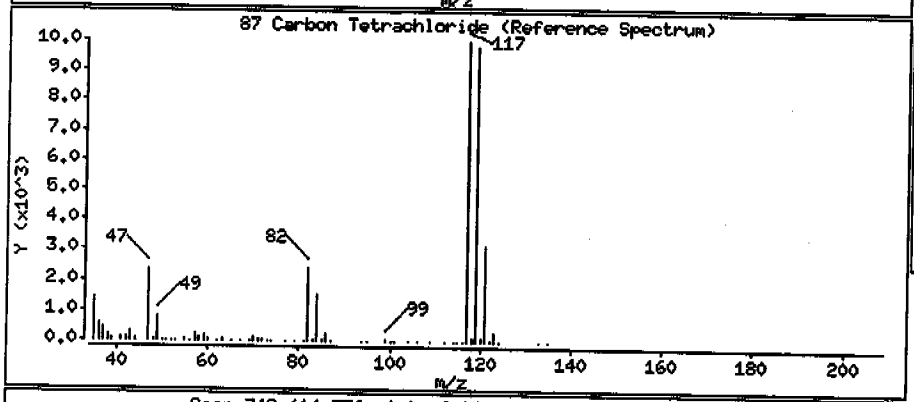
Concentration: 73.250 PPBV

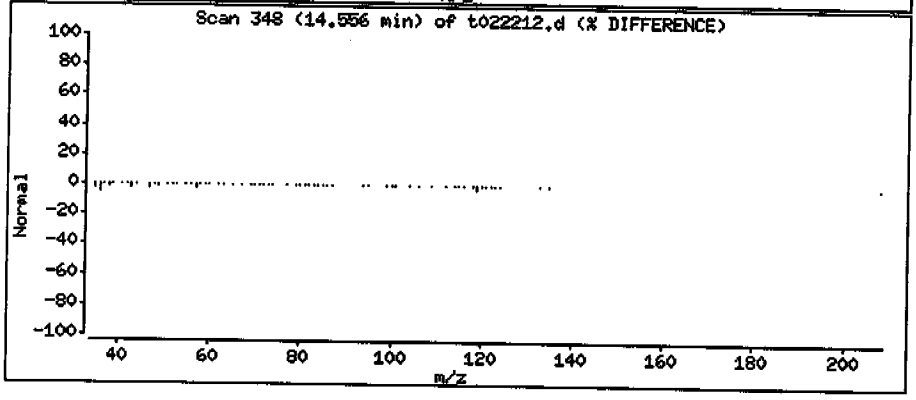












Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34203

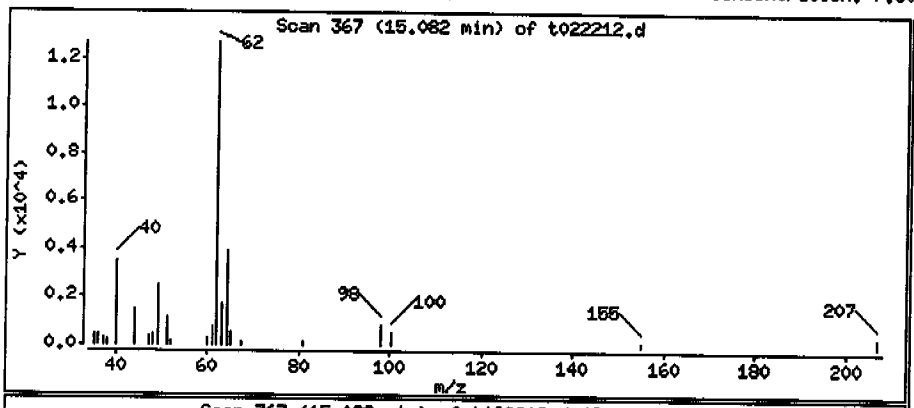
Operator: ACT

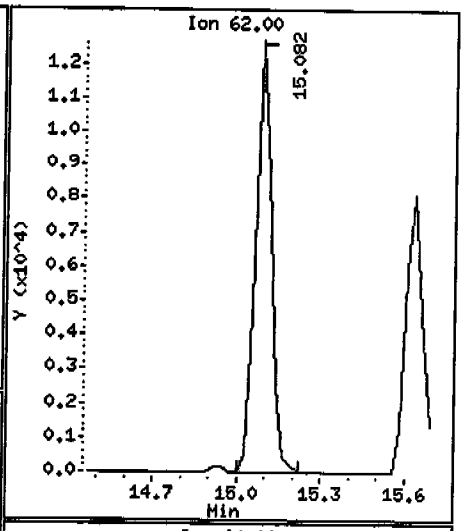
Column phase: RTx-624

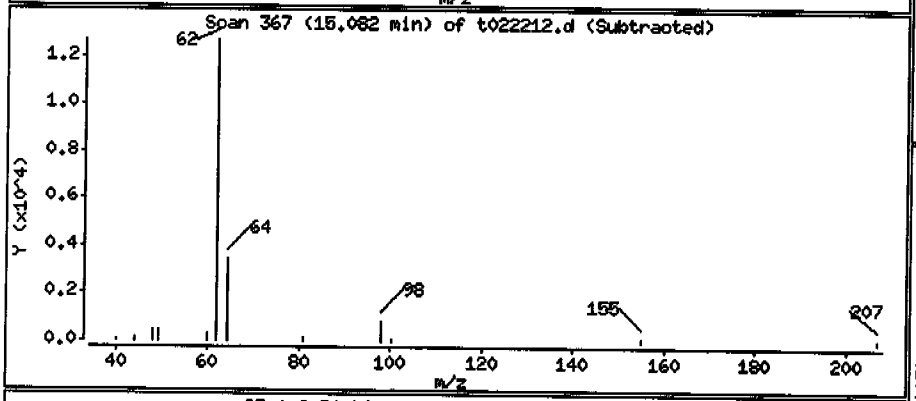
Column diameter: 0.53

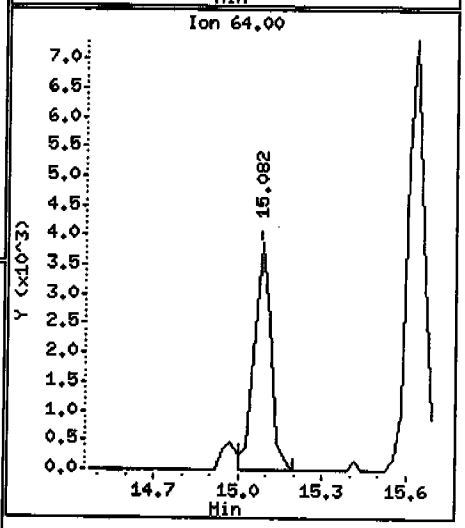
93 1,2-Dichloroethane

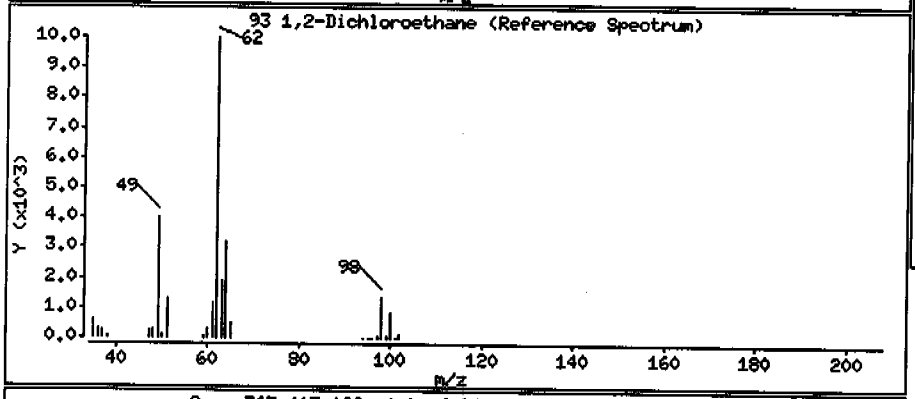
Concentration: 7.300 PPBV

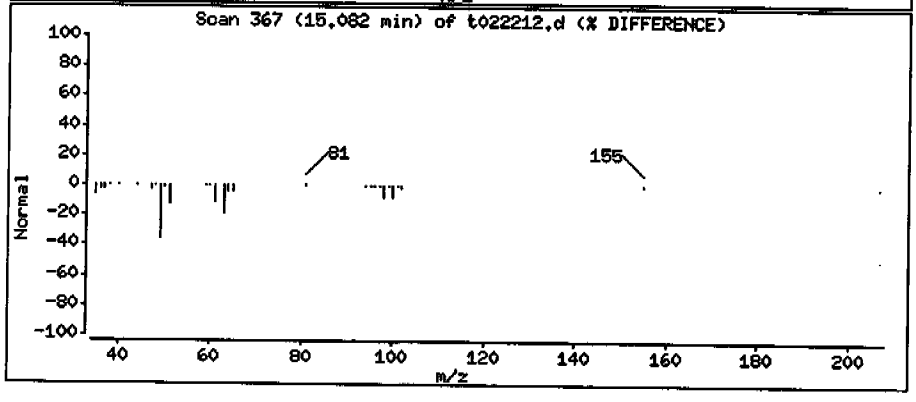












Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Sample Info: 100mL #34203

Instrument: msdt.i

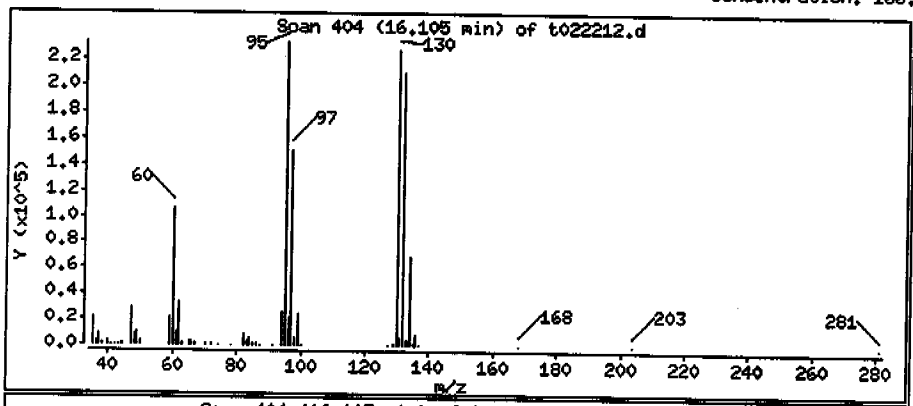
Operator: ACT

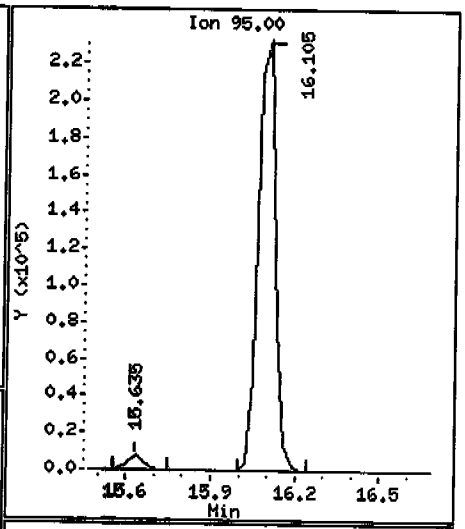
Column phase: RTx-624

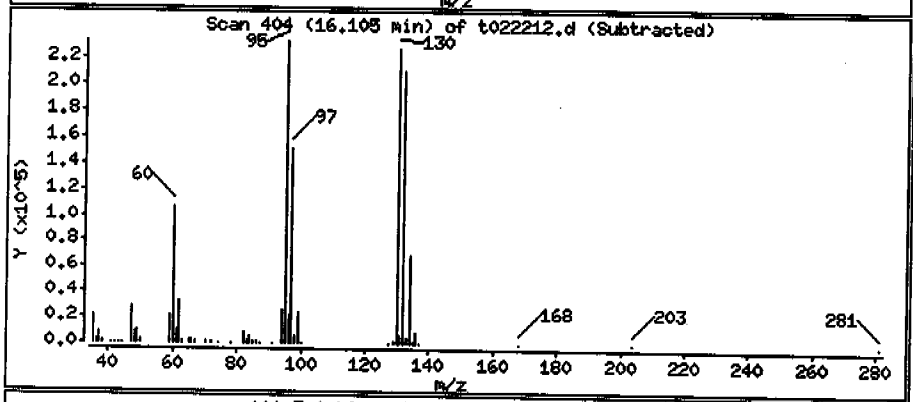
Column diameter: 0.53

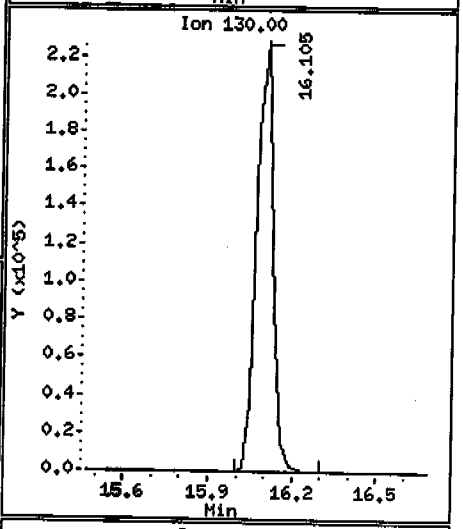
101 Trichloroethene

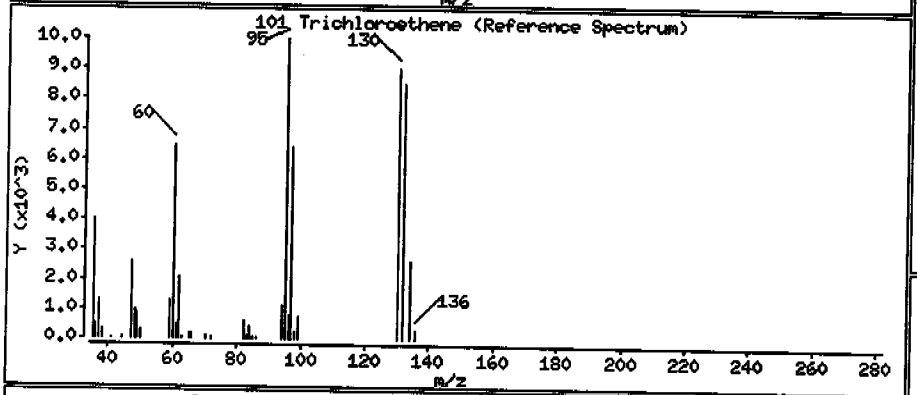
Concentration: 166.44 PPBV

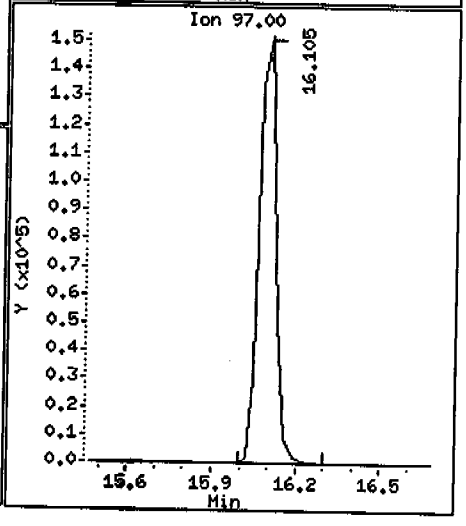


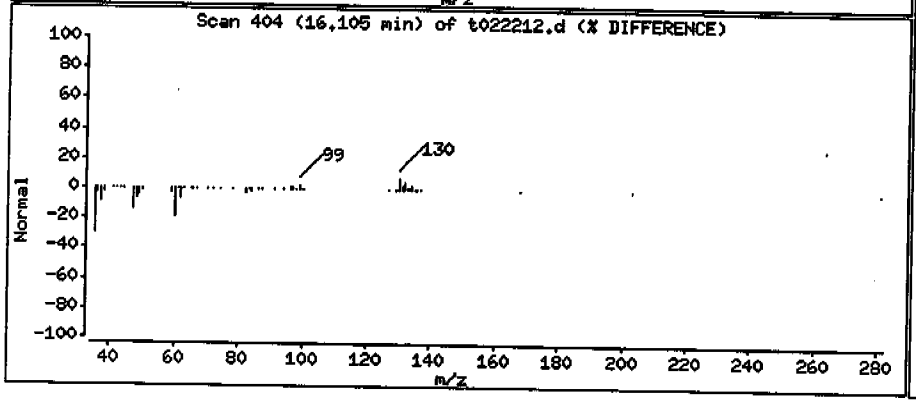












Data File: /chem/msdt.i/22Feb2008.b/t022212.d

Date : 22-FEB-2008 19:19

Client ID:

Sample Info: 100mL #34203

Instrument: msdt.i

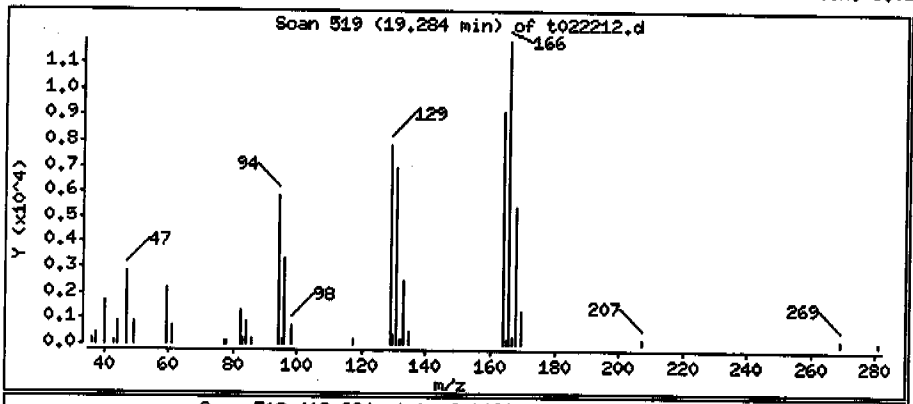
Operator: ACT

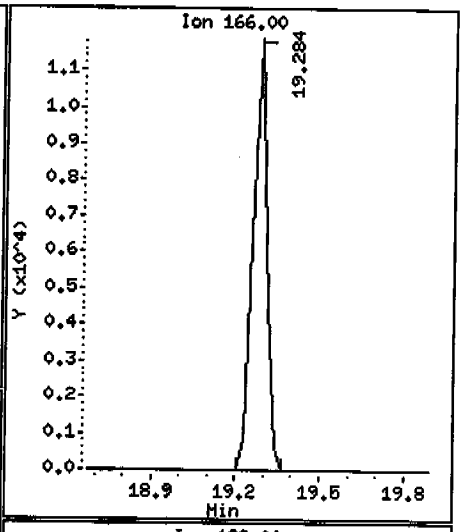
Column phase: RTx-624

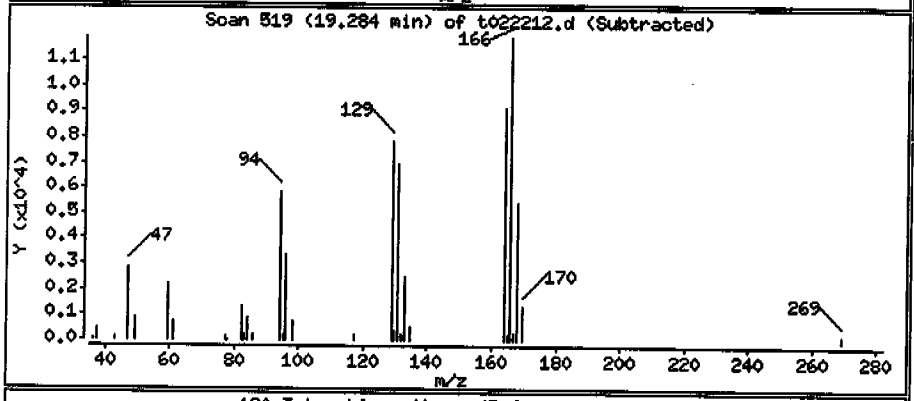
Column diameter: 0.53

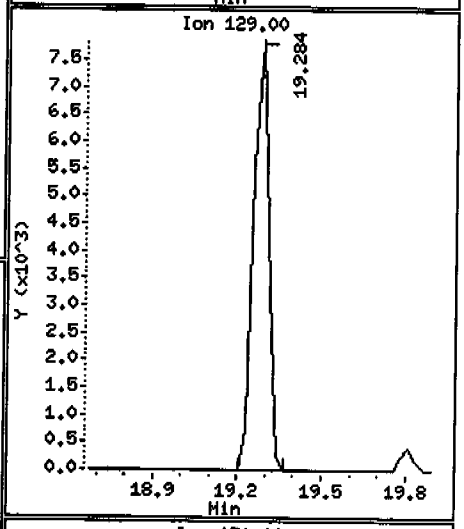
120 Tetrachloroethene

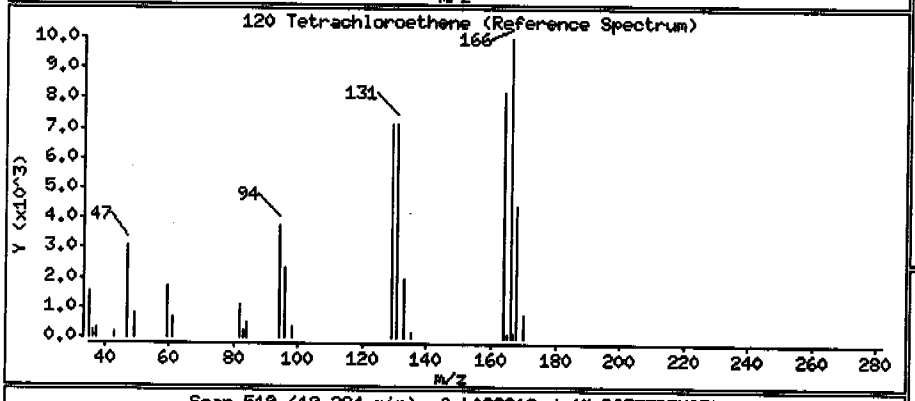
Concentration: 5.018 PPBV

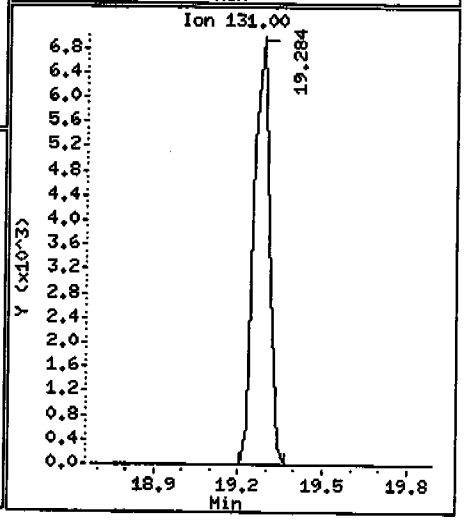


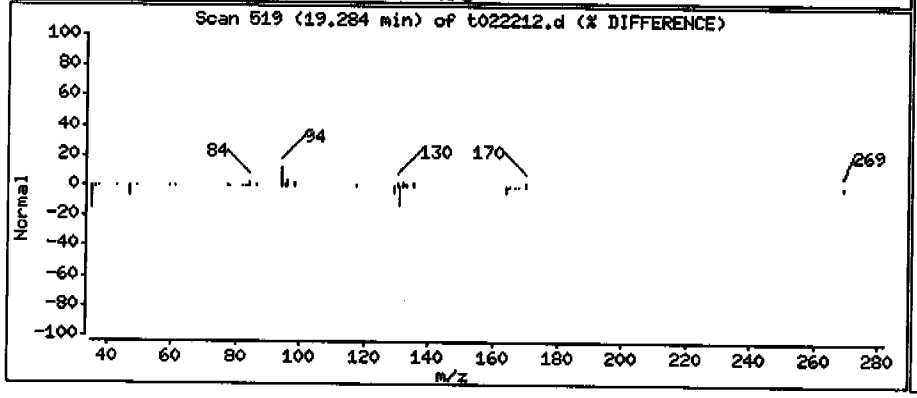












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10516

Lab ID#: 0802328-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	2.3	3.6	9.0	14
Methylene Chloride	2.3	700	7.9	2400
Chloroform	2.3	220	11	1100
Carbon Tetrachloride	2.3	74	14	470
1,2-Dichloroethane	2.3	7.2	9.2	29
Trichloroethene	2.3	170	12	890
Tetrachloroethene	2.3	4.8	15	32

0119

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10516

Lab ID#: 0802328-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	2.3	Not Detected	11	Not Detected
Freon 114	2.3	Not Detected	16	Not Detected
Chloromethane	9.1	Not Detected	19	Not Detected
Vinyl Chloride	2.3	Not Detected	5.8	Not Detected
1,3-Butadiene	2.3	Not Detected	5.0	Not Detected
Bromomethane	2.3	Not Detected	8.8	Not Detected
Chloroethane	2.3	Not Detected	6.0	Not Detected
Freon 11	2.3	Not Detected	13	Not Detected
Ethanol	9.1	Not Detected	17	Not Detected
Freon 113	2.3	Not Detected	17	Not Detected
1,1-Dichloroethene	2.3	3.6	9.0	14
Acetone	9.1	Not Detected	22	Not Detected
2-Propanol	9.1	Not Detected	22	Not Detected
Carbon Disulfide	2.3	Not Detected	7.1	Not Detected
Methylene Chloride	2.3	700	7.9	2400
Methyl tert-butyl ether	2.3	Not Detected	8.2	Not Detected
trans-1,2-Dichloroethene	2.3	Not Detected	9.0	Not Detected
Hexane	2.3	Not Detected	8.0	Not Detected
1,1-Dichloroethane	2.3	Not Detected	9.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.3	Not Detected	6.7	Not Detected
cis-1,2-Dichloroethene	2.3	Not Detected	9.0	Not Detected
Tetrahydrofuran	2.3	Not Detected	6.7	Not Detected
Chloroform	2.3	220	11	1100
1,1,1-Trichloroethane	2.3	Not Detected	12	Not Detected
Cyclohexane	2.3	Not Detected	7.8	Not Detected
Carbon Tetrachloride	2.3	74	14	470
Benzene	2.3	Not Detected	7.3	Not Detected
1,2-Dichloroethane	2.3	7.2	9.2	29
Heptane	2.3	Not Detected	9.3	Not Detected
Trichloroethene	2.3	170	12	890
1,2-Dichloropropane	2.3	Not Detected	10	Not Detected
1,4-Dioxane	9.1	Not Detected	33	Not Detected
Bromodichloromethane	2.3	Not Detected	15	Not Detected
cis-1,3-Dichloropropene	2.3	Not Detected	10	Not Detected
4-Methyl-2-pentanone	2.3	Not Detected	9.3	Not Detected
Toluene	2.3	Not Detected	8.6	Not Detected
trans-1,3-Dichloropropene	2.3	Not Detected	10	Not Detected
1,1,2-Trichloroethane	2.3	Not Detected	12	Not Detected
Tetrachloroethene	2.3	4.8	15	32

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10516

Lab ID#: 0802328-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	9.1	Not Detected	37	Not Detected
Dibromochloromethane	2.3	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)	2.3	Not Detected	18	Not Detected
Chlorobenzene	2.3	Not Detected	10	Not Detected
Ethyl Benzene	2.3	Not Detected	9.9	Not Detected
m,p-Xylene	2.3	Not Detected	9.9	Not Detected
o-Xylene	2.3	Not Detected	9.9	Not Detected
Styrene	2.3	Not Detected	9.7	Not Detected
Bromoform	2.3	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	2.3	Not Detected	16	Not Detected
4-Ethyltoluene	2.3	Not Detected	11	Not Detected
1,3,5-Trimethylbenzene	2.3	Not Detected	11	Not Detected
1,2,4-Trimethylbenzene	2.3	Not Detected	11	Not Detected
1,3-Dichlorobenzene	2.3	Not Detected	14	Not Detected
1,4-Dichlorobenzene	2.3	Not Detected	14	Not Detected
alpha-Chlorotoluene	2.3	Not Detected	12	Not Detected
1,2-Dichlorobenzene	2.3	Not Detected	14	Not Detected
1,2,4-Trichlorobenzene	9.1	Not Detected	68	Not Detected
Hexachlorobutadiene	9.1	Not Detected	97	Not Detected
Chlorodifluoromethane	9.1	Not Detected	32	Not Detected
Methanol	230	Not Detected	300	Not Detected
n-Butanol	9.1	Not Detected	28	Not Detected
Propylene	9.1	Not Detected	16	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	105	70-130

0121

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022216.d
Lab Smp Id: 0802328-06A
Inj Date : 22-FEB-2008 21:53
Operator : ACT Inst ID: msdt.i
Smp Info : 75mL #34278
Misc Info : 6.5"Hg -> 5.0psi
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 16:12 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 4.56000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	========	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	243957	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	187040			26.57- 126.57	76.67
13.865	13.865 (1.000)	49	432443			139.07- 239.07	177.26
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	950691	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	157741			0.00- 66.77	16.59
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	882226	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	521340			7.58- 107.58	59.09
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.944 (1.078)	65	425825	27.1267	27.127	80.00- 120.00	100.00
14.943	14.944 (1.078)	67	208123			3.57- 103.57	48.88
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	953251	26.0304	26.030	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	111129			0.00- 61.29	11.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	641666			18.71- 118.71	67.31
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	601830	26.3733	26.373	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	766658			77.79- 177.79	127.39
22.796	22.796 (1.096)	176	575351			48.42- 148.42	95.60
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.725)	61	17489	0.78245	3.568	80.00- 120.00	100.00
10.049	10.050 (0.725)	96	10494			4.93- 104.93	60.01
10.049	10.050 (0.725)	98	5552			0.00- 85.66	31.75
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	2159258	152.772	696.64	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	1767601			32.18- 132.18	81.86
11.100	11.100 (0.801)	51	660646			0.00- 83.83	30.60
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	1732008	48.8821	222.90	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1114642			14.26- 114.26	64.36
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.050)	119	612124	16.2599	74.145	80.00- 120.00	100.00
14.556	14.529 (1.050)	117	647072			56.33- 156.33	105.71
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	36391	1.56946	7.157	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	11946			0.00- 84.23	32.83
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	741269	36.4156	166.05	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	678892			42.34- 142.34	91.59
16.077	16.077 (1.028)	97	480129			13.74- 113.74	64.77
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	28320	1.05168	4.796	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	20870			20.52- 120.52	73.69
19.284	19.284 (0.927)	131	19569			16.74- 116.74	69.10

Data File: /chem/msdt.i/22Feb2008.b/t022216.d
Report Date: 28-Feb-2008 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022216.d
Lab Smp Id: 0802328-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg -> 5.0psi

Calibration Date: 22-FEB-2008
Calibration Time: 09:47

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	243957	-10.64
97 1,4-Difluorobenze	1067226	640336	1494116	950691	-10.92
126 Chlorobenzene-d5	999102	599461	1398743	882226	-11.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802328-06A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg -> 5.0psi

Client SDG: 22Feb2008
Fraction: VOA

Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.127	108.51	70-130
$ 113 Toluene-d8	25.000	26.030	104.12	70-130
$ 137 Bromofluorobenzene	25.000	26.373	105.49	70-130

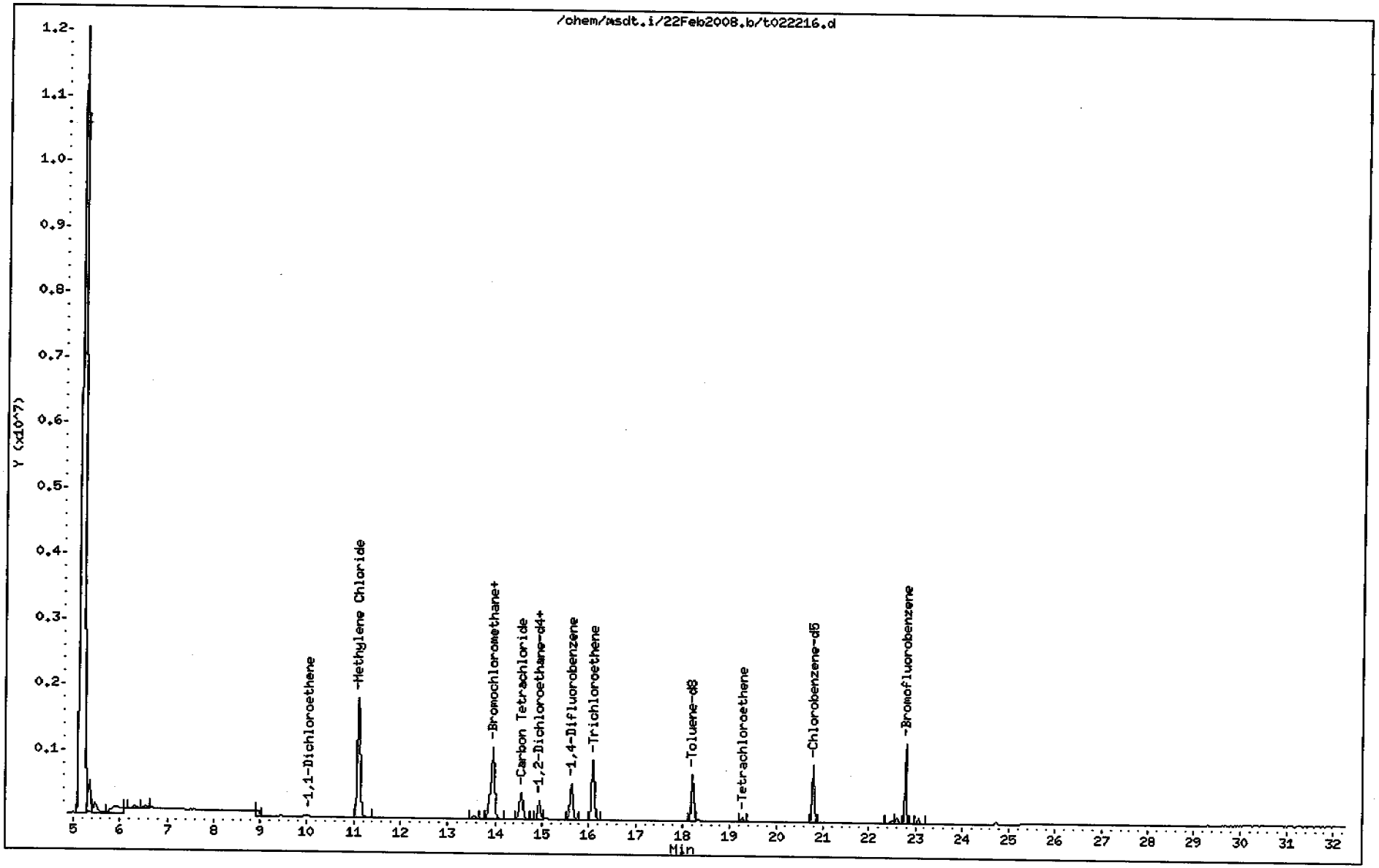
Data File: /chem/msdt.i/22Feb2008.b/t022216.d
Date : 22-FEB-2008 21:53
Client ID:
Sample Info: 75mL #34278

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0126



Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Sample Info: 75mL #34278

Instrument: msdt.i

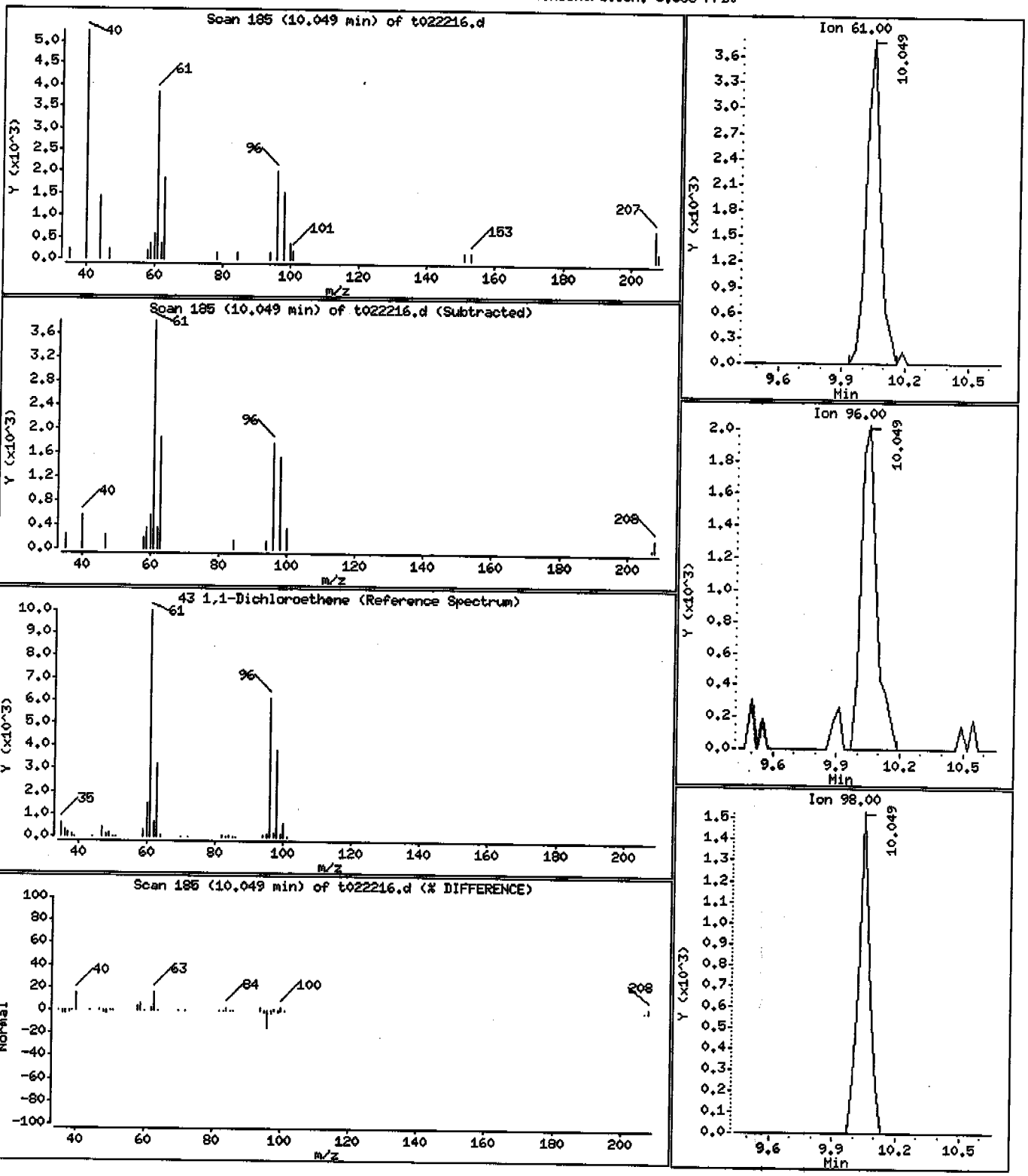
Operator: ACT

Column phase: RTx-624

Column diameter: 0.53

43 1,1-Dichloroethene

Concentration: 3.568 PPBV



Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Sample Info: 75mL #34278

Instrument: msdt.i

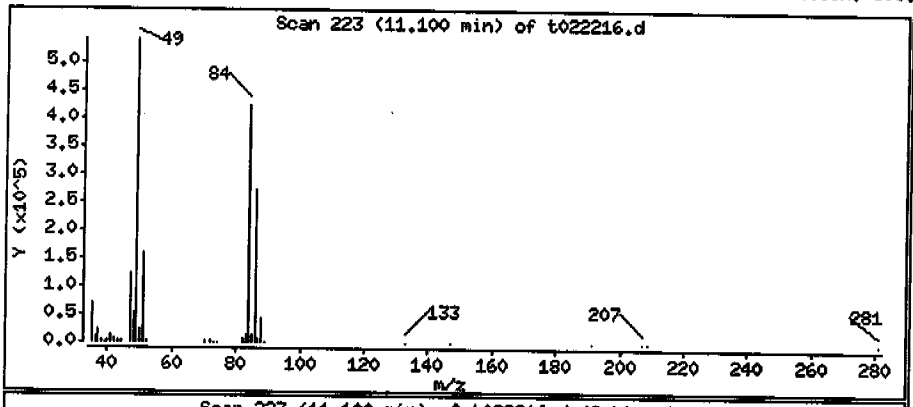
Operator: ACT

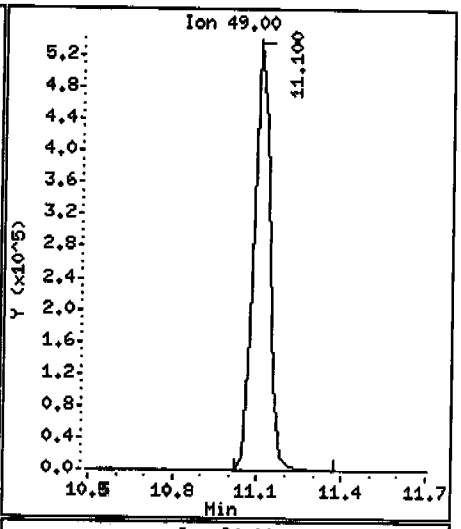
Column phase: RTx-624

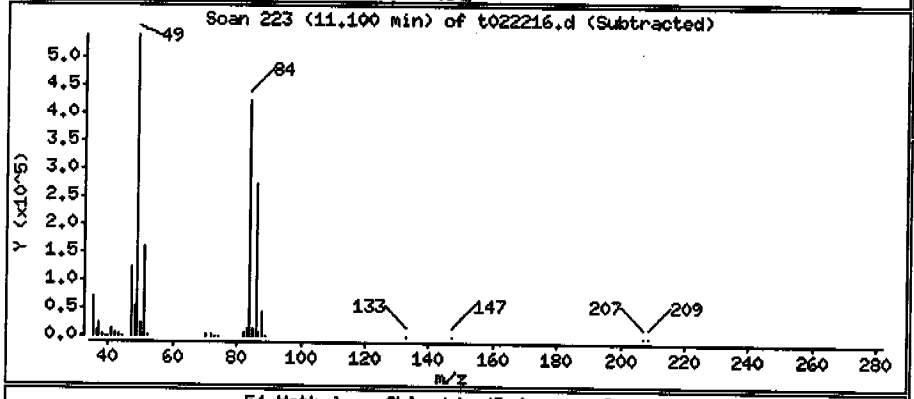
Column diameter: 0.53

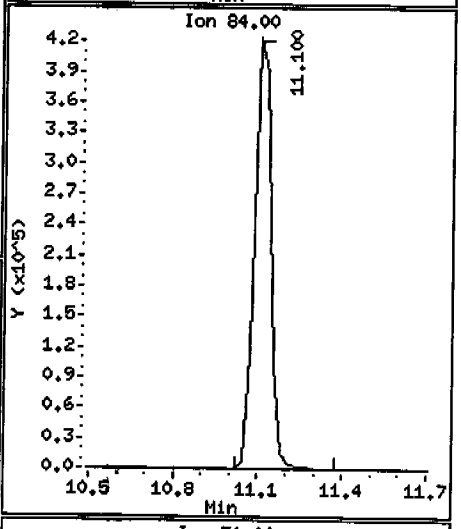
54 Methylene Chloride

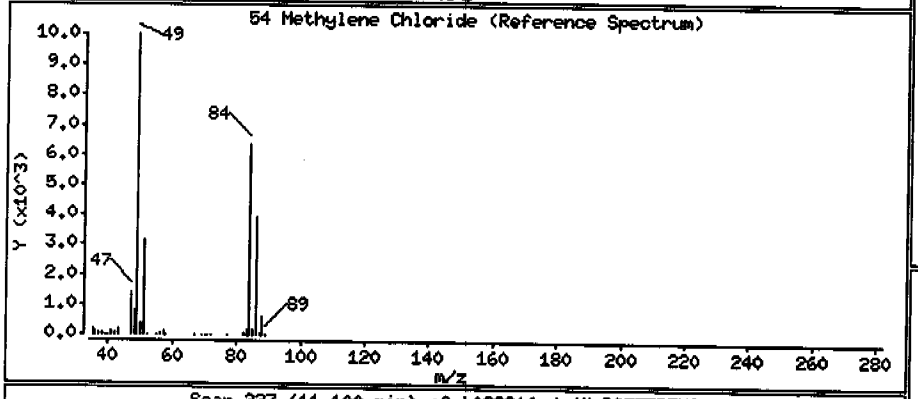
Concentration: 696.64 PPBV

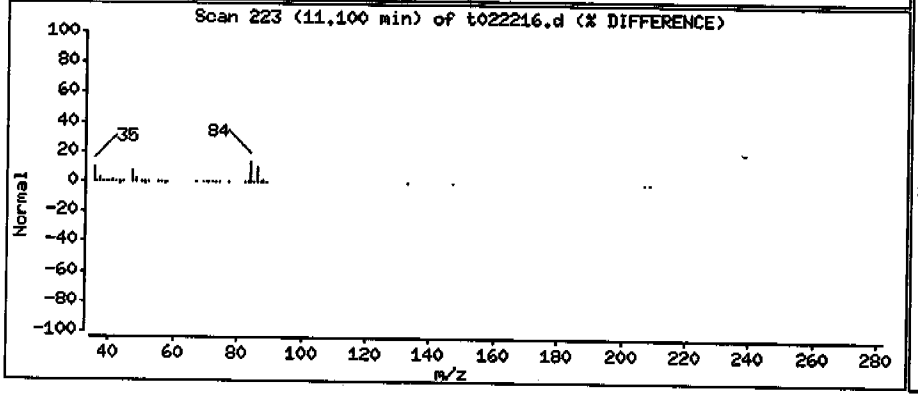


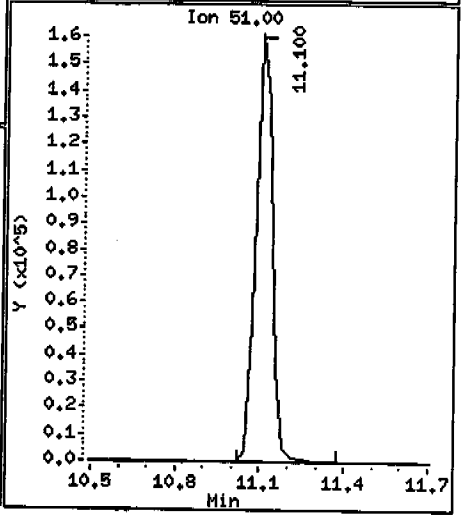












Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Sample Info: 75mL #34278

Instrument: msdt.i

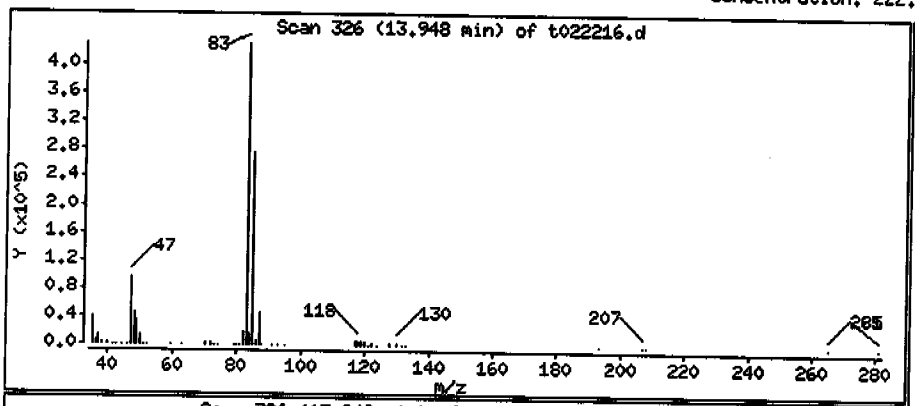
Operator: ACT

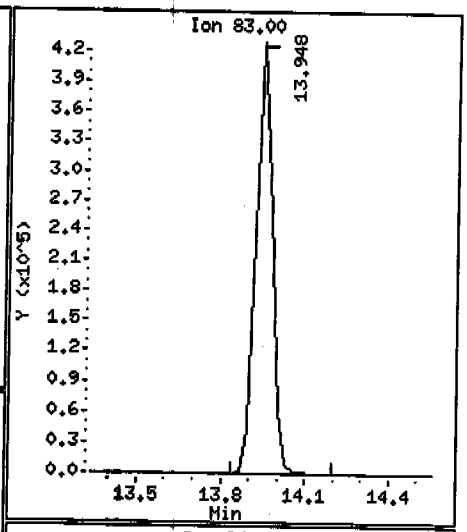
Column phase: RTx-624

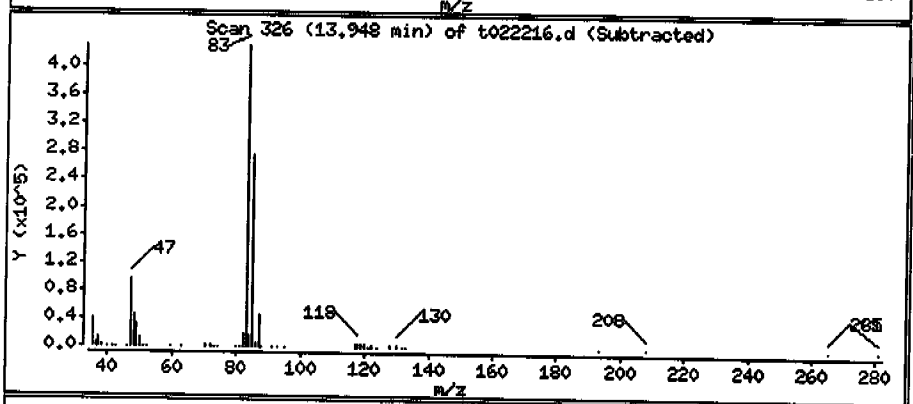
Column diameter: 0.53

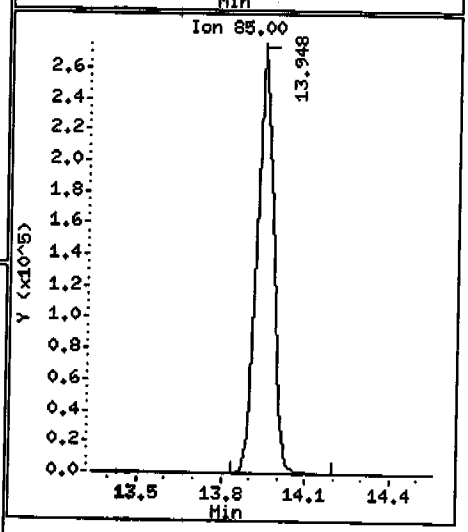
82 Chloroform

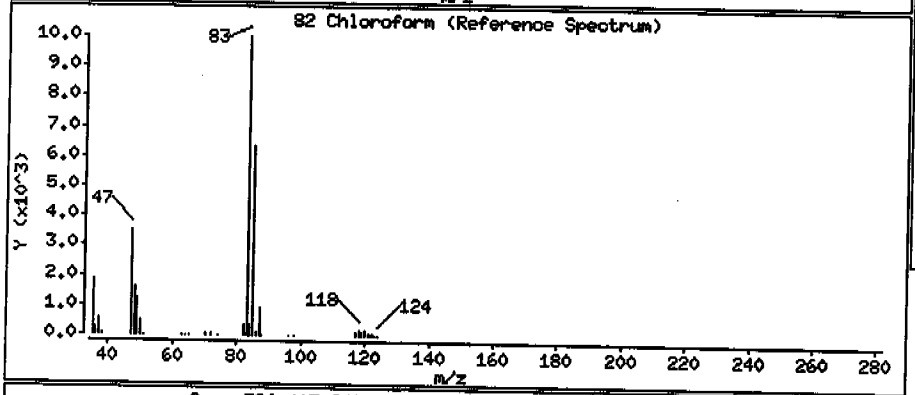
Concentration: 222.90 PPBV

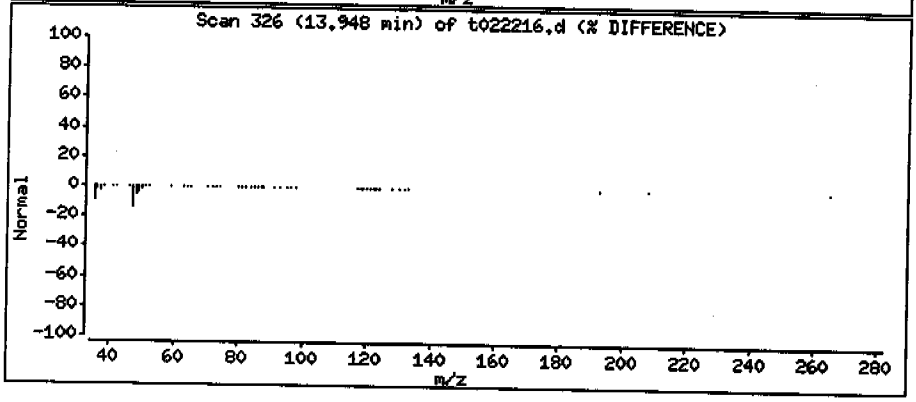












Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Instrument: msdt.i

Sample Info: 75mL #34278

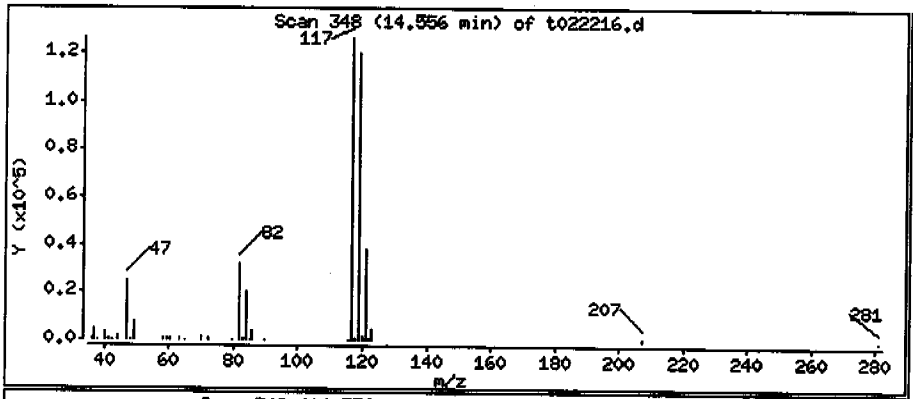
Operator: ACT

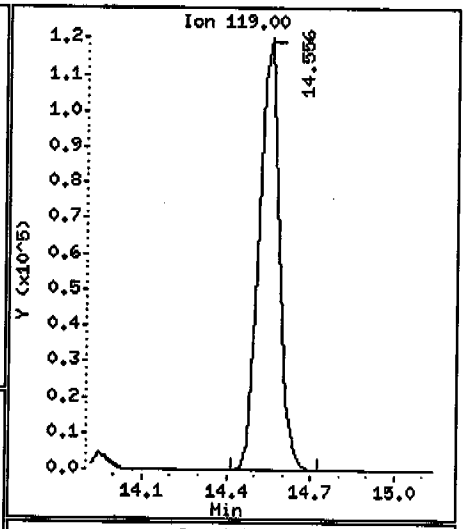
Column phase: RTx-624

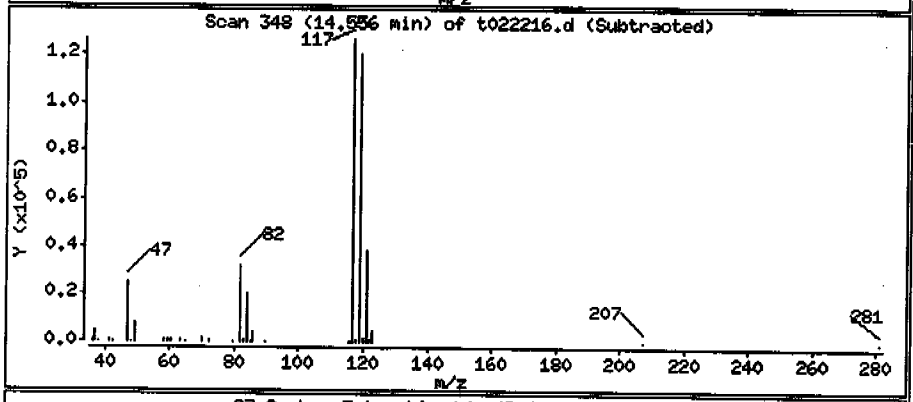
Column diameter: 0.53

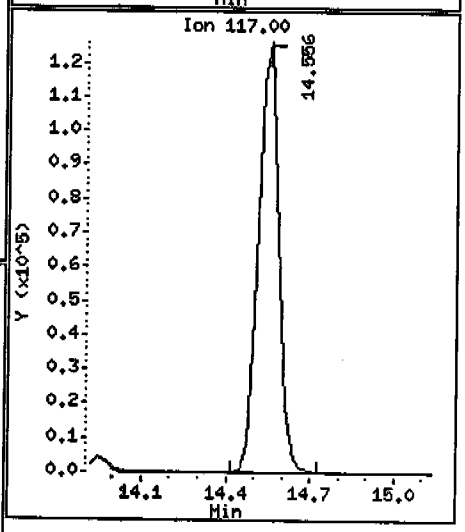
87 Carbon Tetrachloride

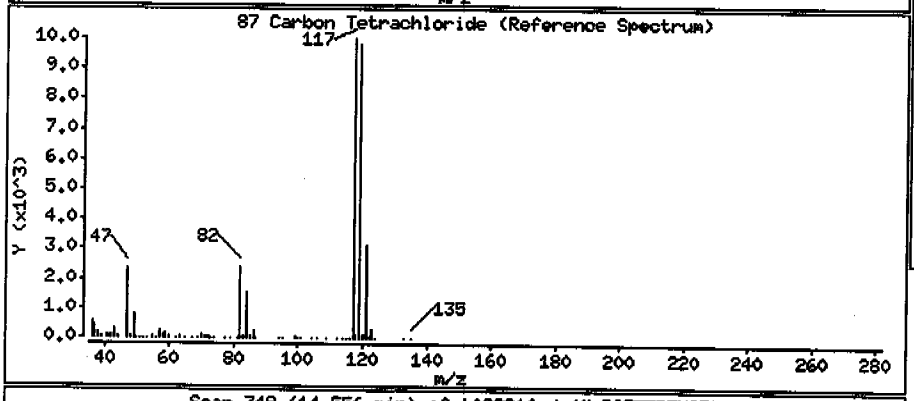
Concentration: 74.145 PPBV

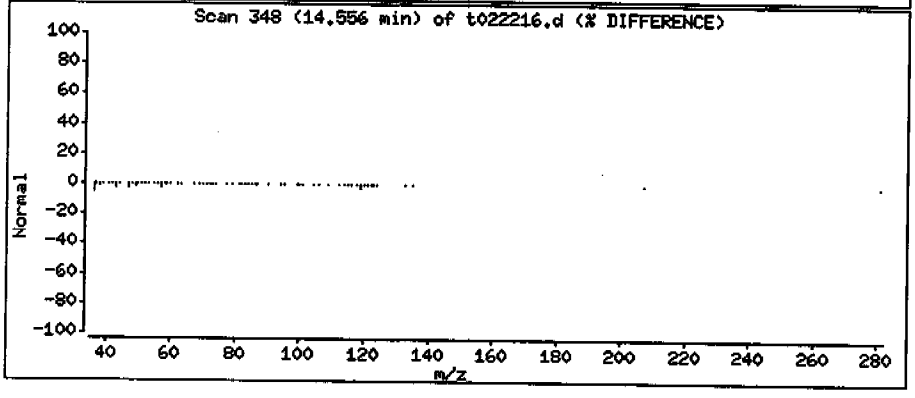












Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Instrument: msdt.i

Sample Info: 75mL #34278

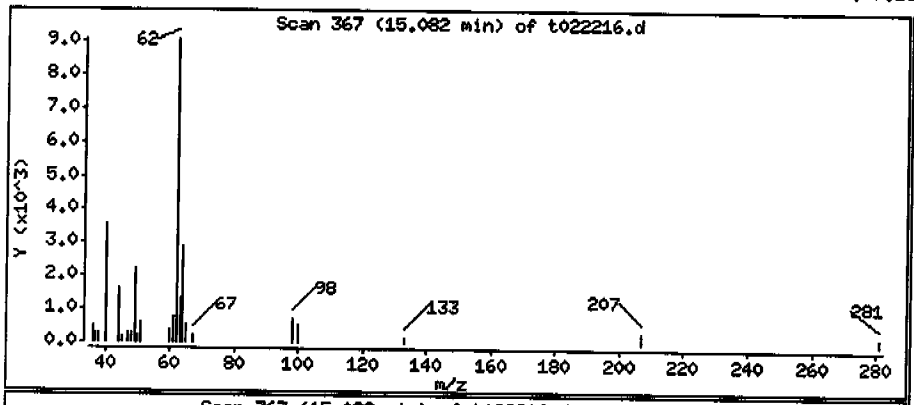
Operator: ACT

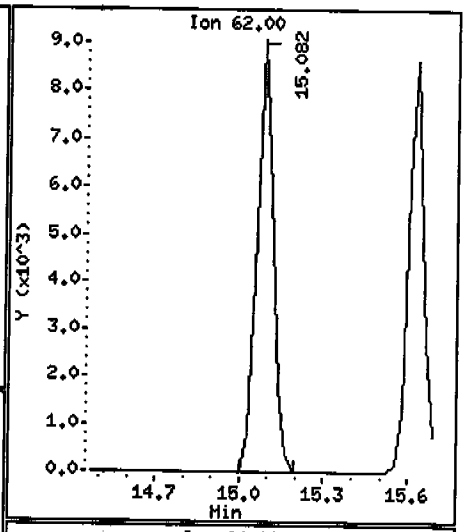
Column phase: RTx-624

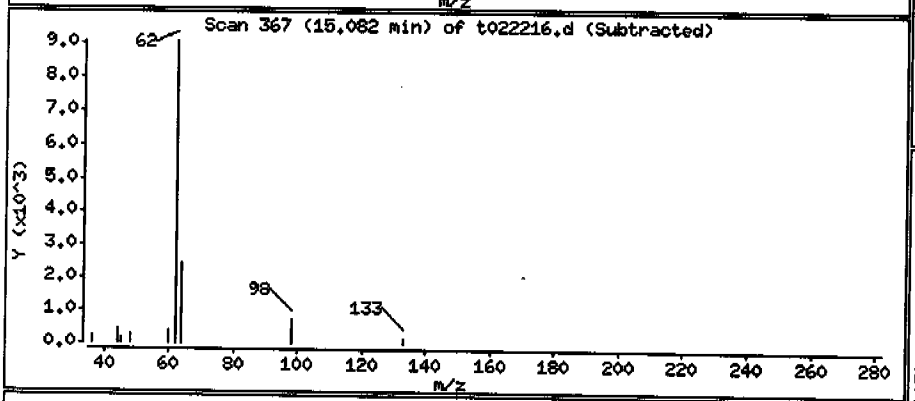
Column diameter: 0.53

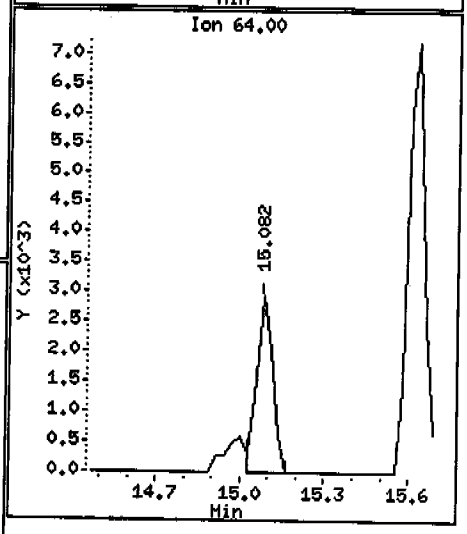
93 1,2-Dichloroethane

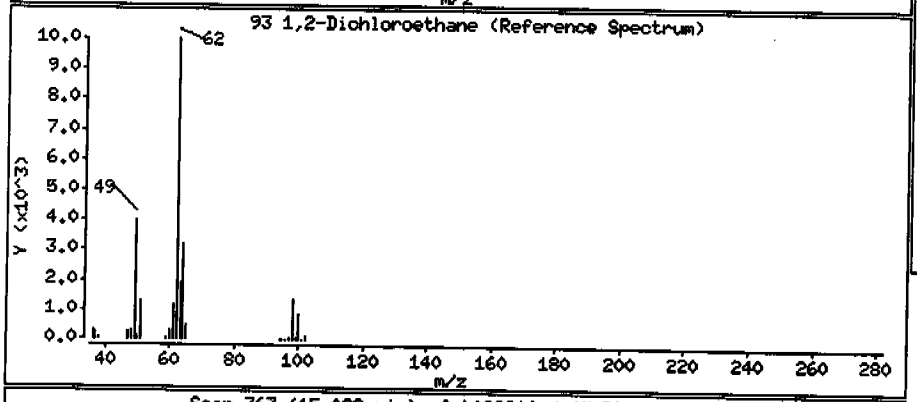
Concentration: 7.157 PPBV

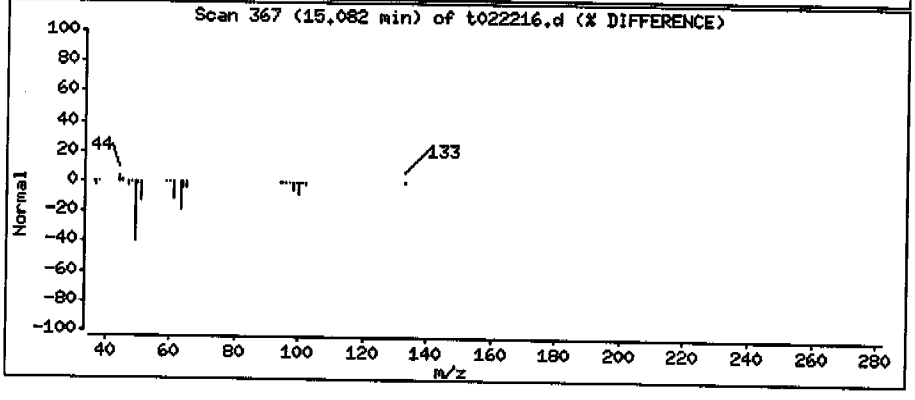












Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Instrument: msdt.i

Sample Info: 75mL #34278

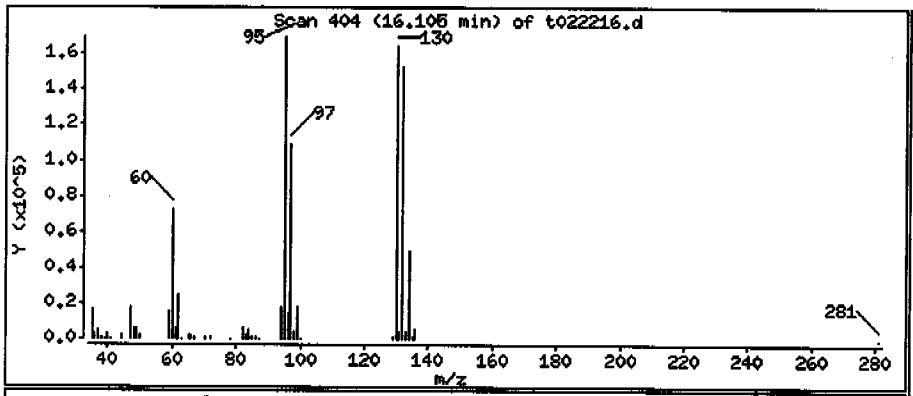
Operator: ACT

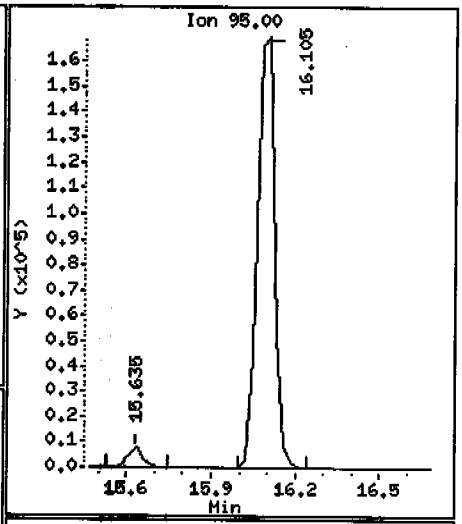
Column phase: RTx-624

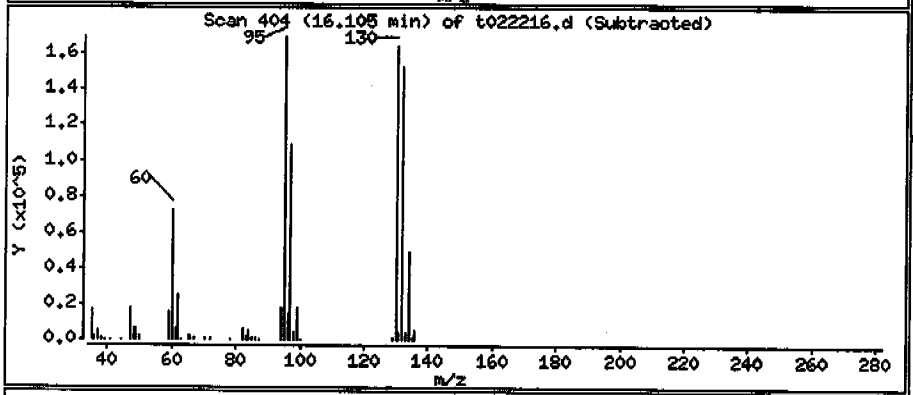
Column diameter: 0.53

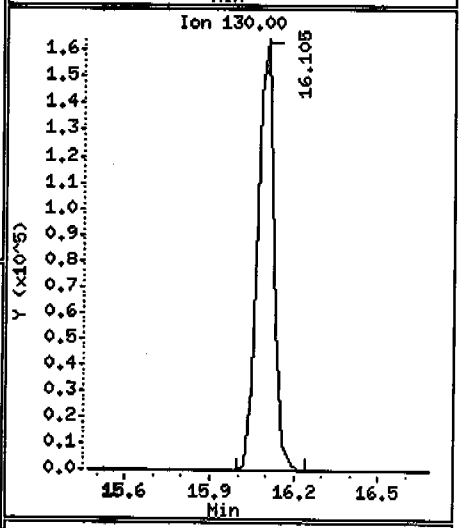
101 Trichloroethene

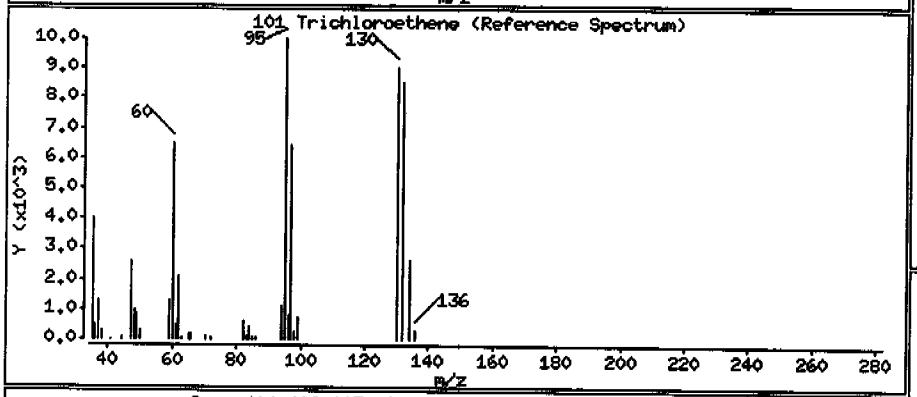
Concentration: 166.05 PPBV

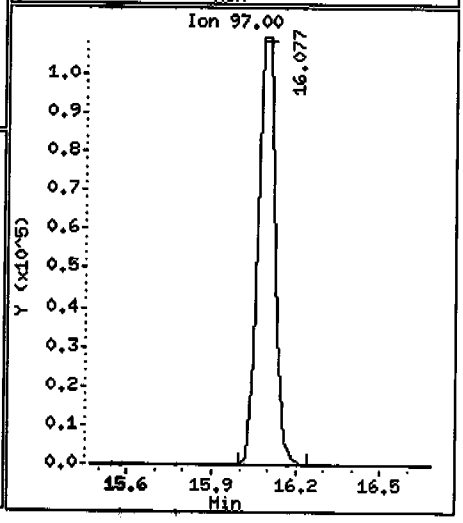


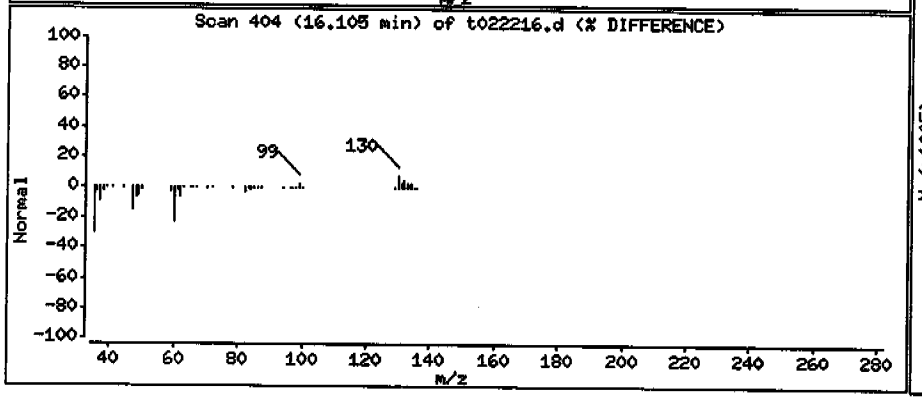












Data File: /chem/msdt.i/22Feb2008.b/t022216.d

Date : 22-FEB-2008 21:53

Client ID:

Sample Info: 75mL #34278

Instrument: msdt.i

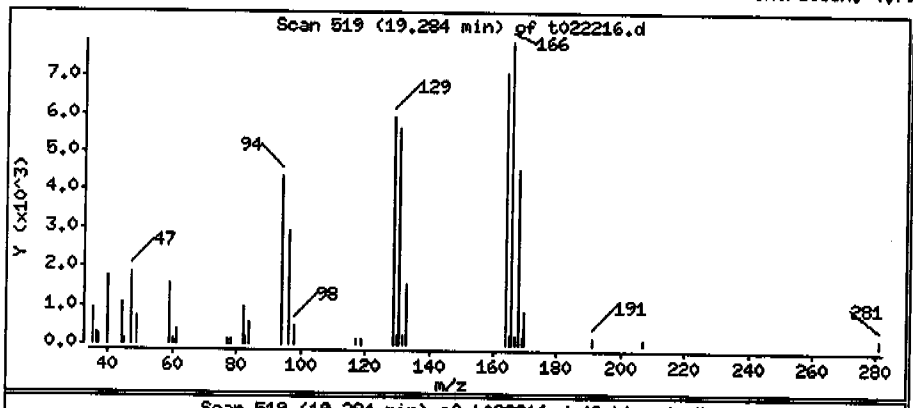
Operator: ACT

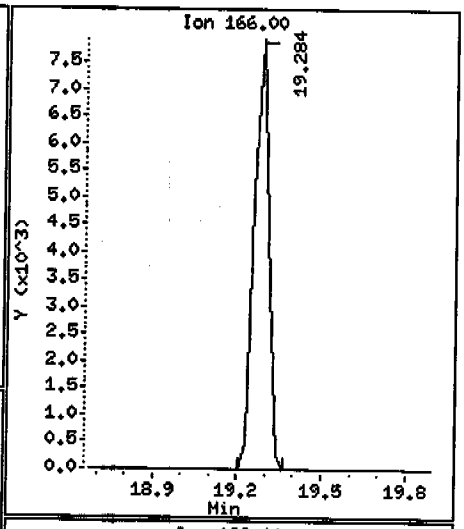
Column phase: RTx-624

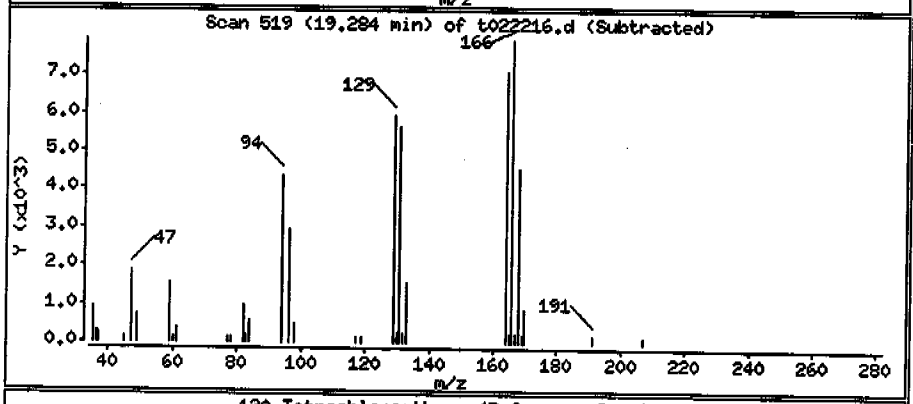
Column diameter: 0.53

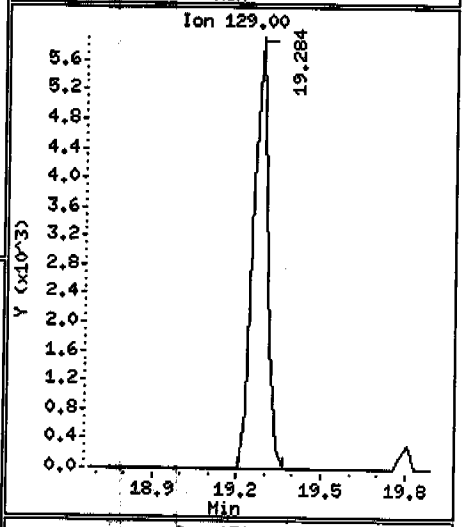
120 Tetrachloroethene

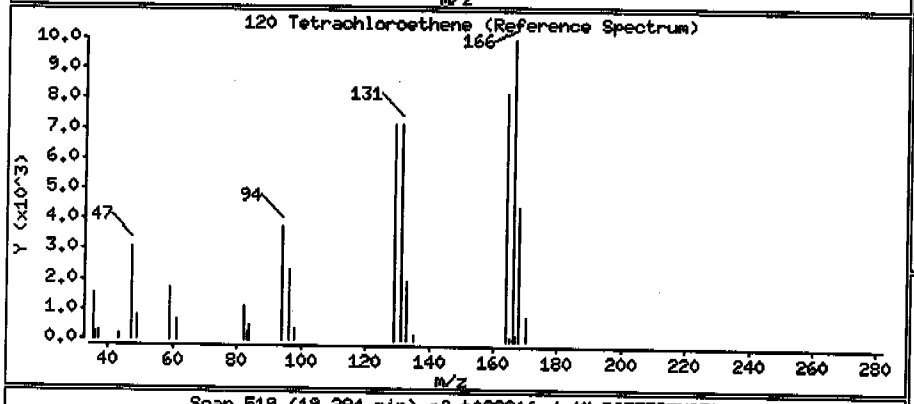
Concentration: 4.796 PPBV

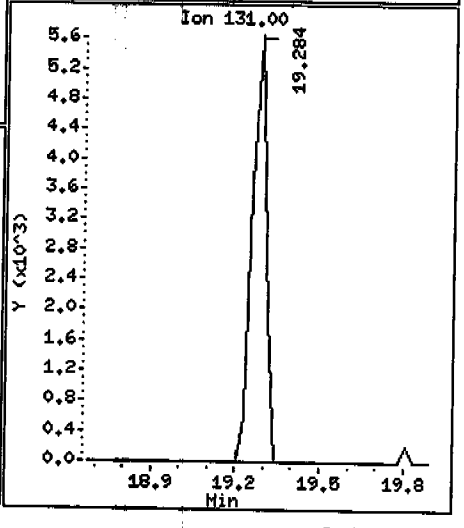


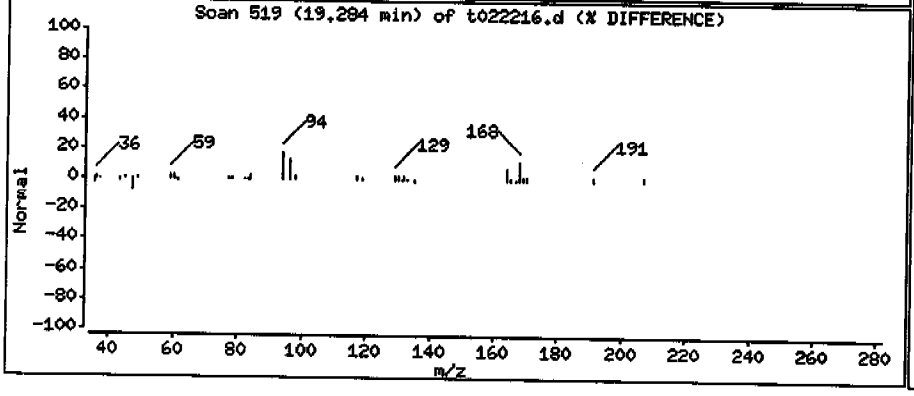












QC Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802328-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802328-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022110.d
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Inj Date : 21-FEB-2008 17:55
Operator : ACT
Inst ID: msdt.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04ENSRpb.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5	
13.865	13.865 (1.000)	130	292848	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	222896			27.38- 127.38	76.11
13.865	13.865 (1.000)	49	351217			131.81- 231.81	119.93
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.635	15.607 (1.000)	114	1116553	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	184715			0.00- 66.79	16.54
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.805	20.805 (1.000)	117	1046968	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	616977			7.58- 107.58	58.93
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
14.944	14.943 (1.078)	65	454622	24.1261	24.126	80.00- 120.00	100.00
14.944	14.943 (1.078)	67	223090			3.57- 103.57	49.07
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.206	18.206 (1.164)	98	1131340	26.3043	26.304	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	133927			0.00- 61.29	11.84

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	752849			18.71- 118.71	66.54
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	690744	25.5067	25.507	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	865759			76.46- 176.46	125.34
22.796	22.796	(1.096)	176	670013			48.22- 148.22	97.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022110.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: Humid

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	292848	-7.96
97 1,4-Difluorobenze	1251468	750881	1752055	1116553	-10.78
126 Chlorobenzene-d5	1150991	690595	1611387	1046968	-9.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSRpb.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: Humid

Client SDG: 21Feb2008
Fraction: VOA
Client Smp ID: Lab Blank
Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.126	96.50	70-130
$ 113 Toluene-d8	25.000	26.304	105.22	70-130
$ 137 Bromofluorobenzene	25.000	25.507	102.03	70-130

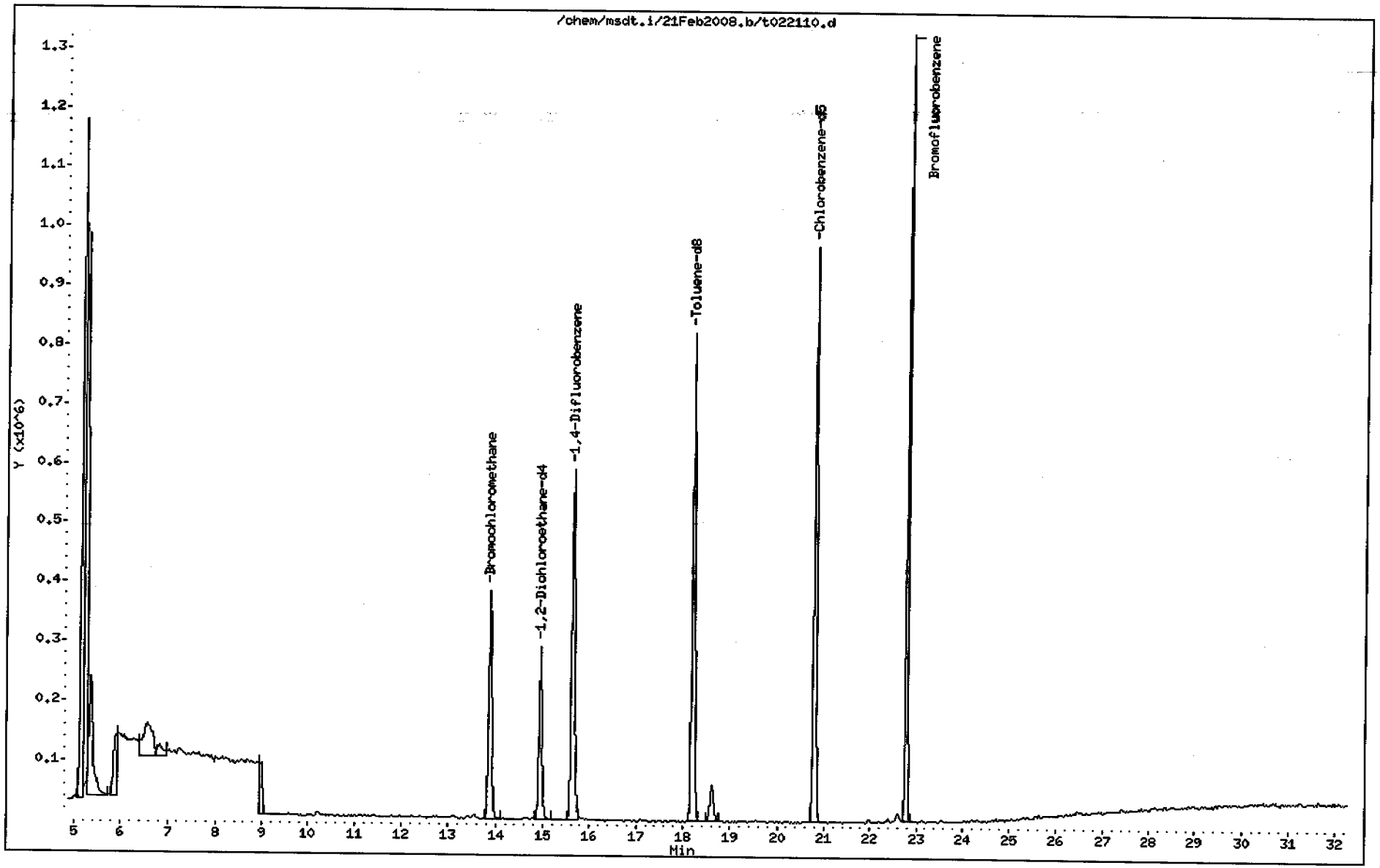
Data File: /chem/msdt.i/21Feb2008.b/t022110.d
Date : 21-FEB-2008 17:55
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0141



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802328-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802328-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022205.d
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Inj Date : 22-FEB-2008 13:16
Operator : sjr
Inst ID: msdt.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 12:32 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04ENSRpb.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	261368	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	207544			26.57- 126.57	79.41
13.865	13.865 (1.000)	49	316280			139.07- 239.07	121.01
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1016105	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	170422			0.00- 66.77	16.77
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	938430	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	535390			7.58- 107.58	57.05
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.944 (1.078)	65	418547	24.8869	24.887	80.00- 120.00	100.00
14.943	14.944 (1.078)	67	211856			3.57- 103.57	50.62
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	987661	25.2338	25.234	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	113508			0.00- 61.29	11.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	654219			18.71- 118.71	66.24
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	639237	26.3348	26.335	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	798408			77.79- 177.79	124.90
22.796	22.796 (1.096)	176	614754			48.42- 148.42	96.17

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022205.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: Humid

Calibration Date: 22-FEB-2008
Calibration Time: 09:47
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	261368	-4.27
97 1,4-Difluorobenze	1067226	640336	1494116	1016105	-4.79
126 Chlorobenzene-d5	999102	599461	1398743	938430	-6.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSRpb.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: Humid

Client SDG: 22Feb2008
Fraction: VOA
Client Smp ID: Lab Blank
Operator: sjr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.887	99.55	70-130
$ 113 Toluene-d8	25.000	25.234	100.94	70-130
$ 137 Bromofluorobenzene	25.000	26.335	105.34	70-130

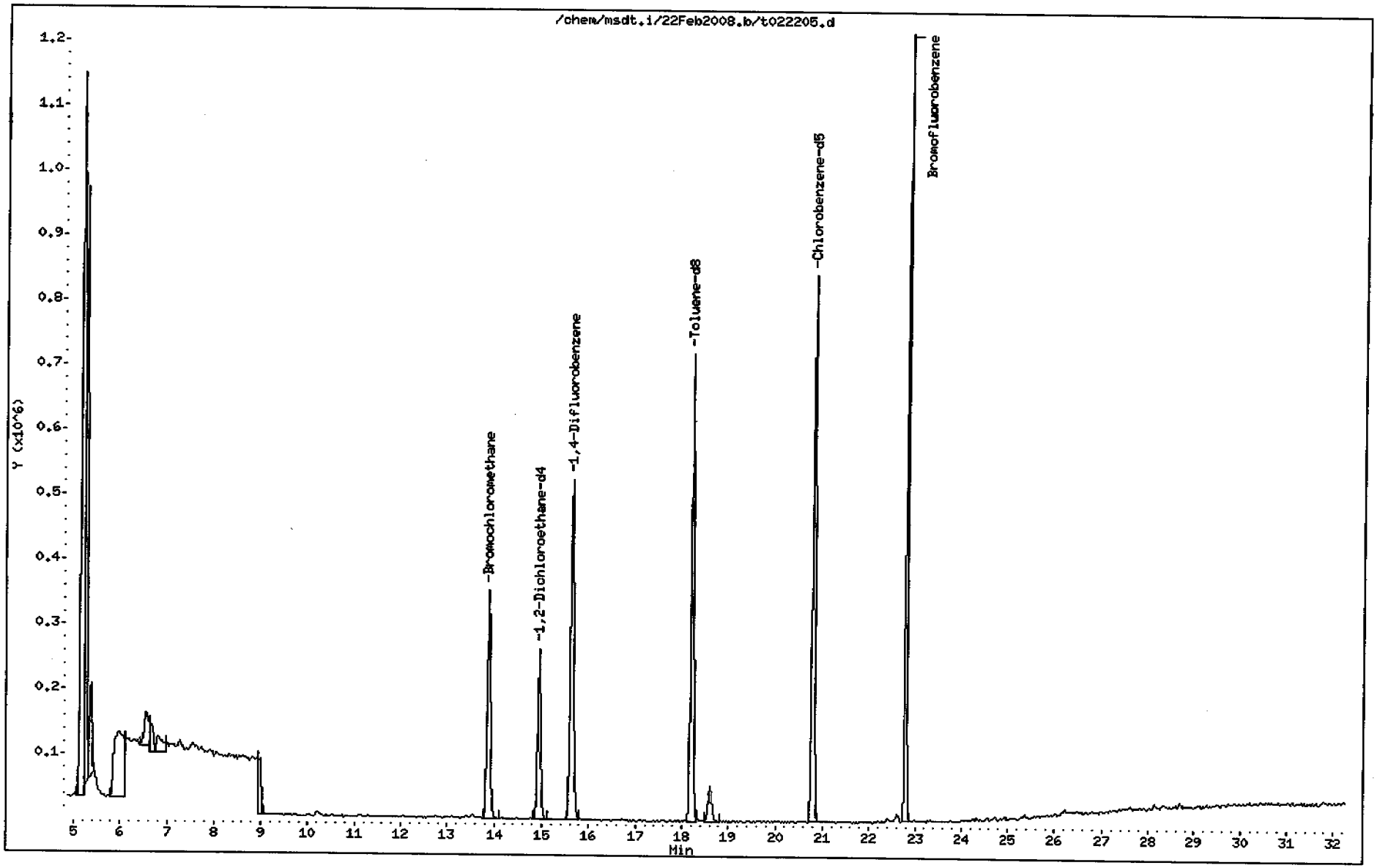
Data File: /chem/msdt.i/22Feb2008.b/t022205.d
Date : 22-FEB-2008 13:16
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0148



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0802328

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-10511	108		105		105				0
02	MD21-08-10512	99		103		105				0
03	MD21-08-10512 Lab Duplicate	100		105		104				0
04	MD21-08-10513	98		104		103				0
05	MD21-08-10514	104		104		102				0
06	MD21-08-10515	107		103		98				0
07	MD21-08-10516	108		104		105				0
08	Lab Blank	96		105		102				0
09	Lab Blank	100		101		105				0
10	CCV	106		105		102				0
11	CCV	111		106		102				0
12	LCS	105		106		101				0
13	LCS	109		105		106				0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0802328
Lab File ID: t022106.d
Date Analyzed: 02/21/2008
Instrument ID: msdt.i
Time Analyzed: 02:36 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1150991		20.81		1251468		15.61		318158		13.87	
	UPPER LIMIT	1611387		21.14		1752055		15.94		445421		14.20	
	LOWER LIMIT	690595		20.48		750881		15.28		190895		13.54	
	CLIENT SAMPLE NO												
01	MD21-08-10511	899038		20.81		922059		15.63		237892		13.89	
02	MD21-08-10512	940288		20.81		1021439		15.63		269141		13.89	
03	Lab Blank	1046968		20.81		1116553		15.63		292848		13.87	
04	Lab Blank	938430		20.81		1016105		15.63		261368		13.87	
05	CCV	1150991		20.81		1251468		15.61		318158		13.87	
06	CCV	999102		20.81		1067226		15.61		273018		13.87	
07	LCS	1155810		20.81		1249796		15.63		310710		13.87	
08	LCS	996814		20.81		1096726		15.63		274415		13.87	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

0150

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
Lab File ID: t022202.d
Instrument ID: msdt.i

SDG No: 0802328
Date Analyzed: 02/22/2008
Time Analyzed: 09:47 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	999102		20.81		1067226		15.61		273018		13.87	
	UPPER LIMIT	1398743		21.14		1494116		15.94		382225		14.20	
	LOWER LIMIT	599461		20.48		640336		15.28		163811		13.54	
	CLIENT SAMPLE NO												
01	MD21-08-10512	940288		20.81		1021439		15.63		269141		13.89	
02	MD21-08-10512 Lab Duplicate	945487		20.81		999388		15.63		263809		13.89	
03	MD21-08-10513	950482		20.81		1000693		15.63		266239		13.89	
04	MD21-08-10514	891813		20.81		943587		15.63		246431		13.89	
05	MD21-08-10515	884099		20.81		933992		15.63		247204		13.89	
06	MD21-08-10516	882226		20.81		950691		15.63		243957		13.86	
07	Lab Blank	938430		20.81		1016105		15.63		261368		13.87	
08	CCV	999102		20.81		1067226		15.61		273018		13.87	
09	LCS	996814		20.81		1096726		15.63		274415		13.87	
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

0151

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: t022207.d & t022206.d

Lab Sample ID: 02A & 02AA

Dilution: 1.68 & 1.68

Client Sample ID: &

Date Analyzed: 2/22/08 & 2/22/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	4.487		4.545		1.3
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	ND	U	ND	U	0
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	ND	U	ND	U	0
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	ND	U	ND	U	0
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	ND	U	ND	U	0
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	U	ND	U	0
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	4.868		4.566		6.4
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	ND	U	ND	U	0
75-27-4	Bromodichloromethane	ND	U	ND	U	0
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	1.837		1.761		4.2
56-23-5	Carbon Tetrachloride	27.235		27.091		0.53
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	74.42		73.437		1.3
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	1.57		1.686		7.1
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	0.9151		0.9975		8.6
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	2.048		2.149		4.8
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: t022207.d & t022206.d

Lab Sample ID: 02A & 02AA

Dilution: 1.68 & 1.68

Client Sample ID: &

Date Analyzed: 2/22/08 & 2/22/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	64.007		63.89		0.18
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	ND	U	ND	U	0
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	64.885		62.859		3.2
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	ND	U	ND	U	0
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	97.541		96.386		1.2
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdt.i/06Feb2008.b/t020607.d
Level 2: /chem/msdt.i/06Feb2008.b/t020615.d
Level 3: /chem/msdt.i/21Feb2008.b/t022102.d
Level 4: /chem/msdt.i/21Feb2008.b/t022103.d
Level 5: /chem/msdt.i/21Feb2008.b/t022104.d
Level 6: /chem/msdt.i/21Feb2008.b/t022109.d
Level 7: /chem/msdt.i/21Feb2008.b/t022105.d

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon142b	+++++	+++++	3.08434	3.14708	3.61347	3.56308	3.77448	3.43649	8.842

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Freon 13	+++++	+++++	3.23618	3.29433	3.34933	3.57582	3.77364	3.44586	6.498
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 134a	+++++	+++++	1.43136	1.41603	1.53392	1.58057	1.72491	1.53736	8.164
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Propylene	+++++	+++++	0.84673	0.85060	0.79894	0.79144	0.80075	0.81770	3.488
15 Freon 152a	+++++	+++++	0.83463	0.73405	0.81286	0.82958	0.92807	0.82784	8.351
12 Dichlorodifluoromethane/Fr12	+++++	4.16310	4.59106	5.40232	5.14446	5.05621	4.93291	4.88168	9.041
17 Freon 22	+++++	+++++	0.34699	0.36399	0.38557	0.40685	0.44934	0.39055	10.202

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Freon 114	+++++	2.99040	2.92556	3.49436	3.32698	3.32662	3.29796	3.22698	6.836
18 Chloromethane	+++++	+++++	0.98827	1.10944	1.03446	1.10461	1.09200	1.06576	4.941
21 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Vinyl Chloride	+++++	1.42862	1.28255	1.59625	1.47907	1.49951	1.49340	1.46323	7.103
19 Butane	+++++	+++++	0.25023	0.30439	0.28440	0.28549	0.27474	0.27985	7.053
22 1,3-Butadiene	+++++	0.97057	1.02558	1.21355	1.14007	1.13828	1.11885	1.10115	7.979
26 Methanol	+++++	+++++	+++++	0.32872	0.14314	0.16544	0.19742	0.20868	39.806
25 Bromomethane	+++++	1.36425	1.28940	1.56898	1.45095	1.49031	1.52877	1.44878	7.247
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
27 Chloroethane	+++++	0.65321	0.67403	0.83510	0.80667	0.80944		
	0.80030						0.76312	10.255
29 Isopentane	+++++	+++++	1.41966	1.72435	1.68834	1.64271		
	1.60636						1.61629	7.342
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.46115	2.48121	2.61085	2.39743		
	2.32898						2.45592	4.280
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	4.83077	5.16410	6.19720	5.82682	5.63959		
	5.49991						5.52640	8.749
37 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
38 Ethanol	+++++	+++++	0.30720	0.46457	0.45284	0.43697	0.45254	0.42283	15.461
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 Freon123a	+++++	+++++	1.67093	1.80792	2.07320	1.91202	2.00931	1.89468	8.465
41 Freon123	+++++	+++++	0.20549	0.20922	0.23514	0.23436	0.22855	0.22255	6.365
44 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Freon 113	+++++	2.32343	2.43842	2.80201	2.61026	2.58402	2.51013	2.54471	6.421
43 1,1-Dichloroethene	+++++	1.89819	1.96458	2.53705	2.44002	2.45483	2.44852	2.29053	12.275
45 Acetone	+++++	+++++	0.64513	0.75269	0.75542	0.70777	0.68836	0.70987	6.519
46 2-Propanol	+++++	+++++	1.84353	2.56755	2.62153	2.59185	2.53924	2.43274	13.597
48 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
47 Carbon Disulfide	+++++	3.75552	3.89953	4.70232	4.46118	4.57127		
	4.60543						4.33254	9.262
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
51 3-Chloropropene	+++++	+++++	0.57241	0.83863	0.77832	0.77926		
	0.76166						0.74606	13.589
52 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	1.42542	1.38589	1.54346	1.44317	1.45012		
	1.44235						1.44840	3.593

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
57 tert-Butyl-Alcohol	+++++	+++++	1.82841	3.04910	3.01051	2.74877			
	2.61830						2.65102	18.624	
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
60 MTBE	+++++	1.74667	2.48598	5.35404	5.24034	5.08244			
	5.03910						4.15810	38.544	<-
61 trans-1,2-Dichloroethene	+++++	1.37259	1.40223	1.98489	1.85179	1.82018			
	1.78174						1.70224	14.889	
62 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
66 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
63 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
65 Hexane	+++++	1.32672	1.77918	2.62091	2.58448	2.58635			
	2.58008						2.24629	24.751	

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 Isopropyl ether	+++++	+++++	3.46151	3.51777	4.38551	4.38257	4.73654	4.09678	13.986
69 Vinyl Acetate	+++++	+++++	0.32869	0.45891	0.45656	0.47908	0.47874	0.44040	14.383
70 1,1-Dichloroethane	+++++	2.38432	2.79344	3.61652	3.47281	3.35324	3.23668	3.14283	14.814
71 1-Propanol	+++++	+++++	0.15996	0.23615	0.18897	0.23814	0.25309	0.21526	18.202
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.22964	3.53835	4.86959	4.90857	5.27473	4.36417	20.970
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 Ethyl Acetate	+++++	+++++	0.43635	0.37272	0.45984	0.44479	0.49610	0.44196	10.172

Air Toxics Ltd.

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
78 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
75 2-Butanone	+++++	0.54840	0.64439	0.87500	0.88005	0.92266		
	0.92719						0.79961	20.225
76 cis-1,2-Dichloroethene	+++++	1.50980	1.82949	2.43792	2.35871	2.32430		
	2.22781						2.11467	17.285
79 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
80 Tetrahydrofuran	+++++	0.86924	1.09182	1.54446	1.53666	1.53710		
	1.51283						1.34868	21.793
82 Chloroform	2.87970	2.73754	3.43045	4.29177	4.13727	4.05571		
	3.88461						3.63101	17.201
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.56837	3.64494	4.67327	4.45606	4.41784		
	4.33648						4.01616	19.679
85 Cyclohexane	+++++	1.36064	1.71484	2.48744	2.40989	2.47472		
	2.45512						2.15044	22.709
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
88 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Carbon Tetrachloride	+++++	2.69834	3.44710	4.47510	4.26367	4.18227		
	4.08084						3.85789	17.248
99 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
89 2,2,4-Trimethylpentane	+++++	3.17139	4.19445	6.10478	5.79296	5.98557		
	6.21058						5.24329	24.009
91 Benzene	1.30575	0.88191	1.17697	1.40059	1.35772	1.31372		
	1.31185						1.24979	14.092
92 tert-amyl-Methyl Ether	+++++	+++++	3.16063	3.41817	4.52447	4.57581		
	4.96193						4.12820	19.123
96 2-Heptanone	+++++	+++++	1.27450	1.66153	2.39901	2.62689		
	2.87236						2.16686	31.086
93 1,2-Dichloroethane	+++++	0.44681	0.57569	0.69764	0.67542	0.64331		
	0.61956						0.60974	14.846
94 Heptane	+++++	0.22192	0.29435	0.41861	0.39712	0.39872		
	0.39194						0.35378	22.068
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
98 1-Butanol	+++++	+++++	0.09734	0.14280	0.14126	0.20427		
	0.22835						0.16280	32.451
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
101 Trichloroethene	+++++	0.34601	0.49463	0.62804	0.59888	0.57328		
	0.57089						0.53529	19.204
102 Methyl Cyclohexane	+++++	1.53385	2.04963	2.92705	2.84733	2.93614		
	2.98281						2.54614	23.889
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
104 1,2-Dichloropropane	+++++	0.29580	0.38067	0.47917	0.46930	0.45378		
	0.45136						0.42168	16.773
106 1,4-Dioxane	+++++	+++++	0.24229	0.32501	0.32675	0.32426		
	0.32497						0.30866	12.023
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
107 Bromodichloromethane	+++++	0.61966	0.87952	1.12677	1.07497	1.03421		
	1.01275						0.95798	19.338
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD	
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 cis-1,3-Dichloropropene	+++++	0.38794	0.53248	0.74519	0.74052	0.72847	0.72072	0.64255	23.143	
111 4-Methyl-2-pentanone	+++++	0.14029	0.20868	0.34424	0.34948	0.35032	0.35871	0.29195	32.073	<-
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
114 Toluene	+++++	0.81092	1.24660	1.54307	1.48194	1.44683	1.46639	1.33263	20.608	
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 trans-1,3-Dichloropropene	+++++	0.47967	0.69609	0.94114	0.90256	0.87044	0.85094	0.79014	21.981	
117 1,1,2-Trichloroethane	+++++	0.34939	0.54719	0.67788	0.64198	0.60975	0.59063	0.56947	20.481	
120 Tetrachloroethene	+++++	0.49262	0.70999	0.91885	0.85607	0.81552	0.78542	0.76308	19.624	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
121 2-Hexanone	+++++	+++++	0.25507	0.52868	0.53983	0.53135		
	0.52933						0.47685	26.017
118 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
119 Butyl Acetate	+++++	+++++	0.24369	0.28185	0.37466	0.39556		
	0.40225						0.33960	21.243
122 Dibromochloromethane	+++++	0.53953	0.85628	1.18704	1.12813	1.07161		
	1.03522						0.96963	24.619
123 1,2-Dibromoethane	0.84179	0.55970	0.80137	1.10140	1.04350	1.00535		
	0.98755						0.90581	20.585
127 Chlorobenzene	+++++	0.89505	1.25385	1.53453	1.44109	1.38816		
	1.37527						1.31466	17.116
124 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 Ethyl Benzene	+++++	0.41019	0.61882	0.81504	0.76644	0.73946		
	0.73702						0.68116	21.679
125 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
129 m,p-Xylene	+++++	0.45061	0.77115	1.03224	0.98373	0.95372		
	0.95497						0.85774	25.449

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Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
130 o-Xylene	+++++	0.44049	0.71861	0.99008	0.93480	0.90783			
	0.90371						0.81592	25.179	
131 Styrene	1.03326	0.59334	1.00313	1.58534	1.52043	1.48920			
	1.52545						1.25002	30.248	<-
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
133 Bromoform	+++++	0.55412	0.90763	1.25794	1.20404	1.16528			
	1.15578						1.04080	25.677	
134 Cumene	2.06305	1.21611	1.95934	2.74683	2.61042	2.56662			
	2.59241						2.25068	24.218	
135 Cyclohexanone	+++++	+++++	0.27258	0.41193	0.36212	0.49851			
	0.52619						0.41426	24.859	
140 1,1,2,2-Tetrachloroethane	+++++	0.66388	1.29422	1.55449	1.46984	1.42576			
	1.44462						1.30880	24.983	
136 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
138 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
142 Propylbenzene	+++++	1.65274	2.71658	3.50920	3.34294	3.25726			
	3.02690						2.91760	23.239	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
145 4-Ethyltoluene	+++++	1.20333	2.36567	3.05246	2.92449	2.81345		
	2.54265						2.48367	27.208
141 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
147 1,3,5-Trimethylbenzene	+++++	1.09055	1.94838	2.57321	2.40165	2.34695		
	2.35136						2.11868	25.670
143 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
146 Diisobutyl Ketone	+++++	+++++	0.72243	0.92643	1.23471	1.30508		
	1.32951						1.10363	24.207
148 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
150 1,2,4-Trimethylbenzene	+++++	0.93406	1.80498	2.41563	2.30233	2.24772		
	2.27401						1.99645	28.110
201 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
152 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
149 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
151 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
153 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
155 1,3-Dichlorobenzene	+++++	0.82952	1.50140	1.66547	1.57037	1.51511		
	1.52780						1.43495	21.080
154 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
156 1,4-Dichlorobenzene	+++++	0.86046	1.50599	1.71817	1.62550	1.56465		
	1.58445						1.47654	20.993
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
159 alpha-Chlorotoluene	+++++	1.02357	1.93206	2.54425	2.48304	2.45510		
	2.37094						2.13483	27.499
158 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.79871	1.48339	1.61702	1.52034	1.46826	1.49927	1.39783	21.332
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 1,2,4-Trichlorobenzene	+++++	+++++	1.02280	1.08351	1.06141	1.06577	1.09716	1.06613	2.638
166 Hexachlorobutadiene	+++++	+++++	1.24188	1.06702	1.02142	0.99945	1.03510	1.07297	9.091
167 Naphthalene	+++++	+++++	1.26860	1.50335	1.49914	1.52078	1.58611	1.47559	8.191
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.52060	1.52978	1.50295	1.59264	1.64012	1.70487		
	1.76955						1.60865	6.296
$ 113 Toluene-d8	0.94316	0.95996	0.94937	0.96424	0.96043	0.97540		
	0.98845						0.96300	1.585
$ 137 Bromofluorobenzene	0.65286	0.64773	0.63223	0.63637	0.65401	0.65087		
	0.65249						0.64665	1.353

Calibration History

Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Start Cal Date: 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-FEB-2008 14:27	AFCEElow	/chem/msdt.i/06Feb2008.b/t020607.d
Cal Level: 2 , Cal Amount: 0.50000		
06-FEB-2008 22:02	AT04low+ENSR	/chem/msdt.i/06Feb2008.b/t020615.d
Cal Level: 3 , Cal Amount: 2.00000		
21-FEB-2008 09:41	sp22b	/chem/msdt.i/21Feb2008.b/t022102.d
06-FEB-2008 15:52	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020609.d
Cal Level: 4 , Cal Amount: 25.00000		
21-FEB-2008 10:21	sp22b	/chem/msdt.i/21Feb2008.b/t022103.d
06-FEB-2008 16:33	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020610.d
Cal Level: 5 , Cal Amount: 50.00000		
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d
06-FEB-2008 17:13	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020611.d
Cal Level: 6 , Cal Amount: 100.00000		
21-FEB-2008 17:00	sp22b	/chem/msdt.i/21Feb2008.b/t022109.d
06-FEB-2008 17:51	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020612.d
Cal Level: 7 , Cal Amount: 200.00000		
21-FEB-2008 12:05	sp22b	/chem/msdt.i/21Feb2008.b/t022105.d
06-FEB-2008 19:41	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020613.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
21-FEB-2008 14:36	AT04ENSR	/chem/msdt.i/21Feb2008.b/t022106.d
Ccal Level: 5 , Ccal Amount: 50.000		
21-FEB-2008 11:03	sp22bCCV	/chem/msdt.i/21Feb2008.b/t022104a.d
Ccal Level: 5 , Ccal Amount: 50.000		
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d

Initial Calibration Narrative

A 7 point initial calibration was analyzed on MSD-T on February 6, 2008.

The following compounds used 0.2ppbv as the lowest calibration concentration:

Chloroform, Benzene, Styrene, Cumene, and 1,2-Dibromoethane.

As noted on the accompanying analytical run log, the following point, 0.5ppbv, was re-analyzed due to:

a. anomalous unacceptable linearity for various compounds

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.07
75	30.0 – 60.0% of mass 95	50.99
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.46
173	Less than 2.0% of mass 174	(0.76) [1]
174	Greater than 50.0% of mass 95	75.96
175	5.0 – 9.0% of mass 174	(7.09) [1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.77) [1]
177	5.0 – 9.0% of mass 176	(6.41) [2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/6/08

BFB Injection Time: 1326

BFB File ID: t020605

Tekmar Purge Flow: ——

Vacuum: 2.16e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM	355997
1,4-DFB	1372567
CB-d5	1227265

Verified CCV IS vs ICAL mid-point (- 40%D) SM (initials)

Verify 176/174 m/z Ratio: 1308292/135196 x 100 = 96.77

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1318253)}{(1372567)} \times \frac{(25.0)}{(0.96300)} = 24.933$

File ID:	t020611
Compound:	Tol-d8
Initials:	SM

Reported Result 24.933

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t020605	BFB Tune Check	14765	50ng	2uL	1.00	2/6/08	1326	SM	
2	✓	06	System Blank	13668	Humid	300mL			1303	SM	
3	✓	07	ICAL Level 1	15761	0.2ppbv	0.2mL			1427	LO	t14g206a
4	X	08	2		0.5ppbv	0.5mL			1512	LO	
5	✓	09	3		2.0ppbv	2.0mL			1552	LO	
6	✓	10	4		25ppbv	25mL			1633	LO	
7	✓	11	5		50ppbv	50mL			1713	LO	
8	✓	12	6		100ppbv	100mL			1751	LO	
9	✓	13	7		200ppbv	200mL	↓	↓	1941	LO	

Cal 2/7/08

Signature

2/6/08

Date

0175

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MSD-T

Logbook #: 1599

10	✓	TO2O Cal4	System Blank	338168	Humid	200ml	1.00	2/6/08	2019	SG	
11	✓	15	ICAL Level 2	1576-362	0.5ppbv	0.5ml	1.00		2202	RO	
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											

0176

Sgm 2/7/08

Comments: Flow controller # AA98123220

Flow meter #200-7744; exp 8/27/08

	Actual	Nominal
	25 mL/min	229 mL/min

Signature

2/7/08
Date

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.83
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.35
173	Less than 2.0% of mass 174	(0.80)[1]
174	Greater than 50.0% of mass 95	74.12
175	5.0 – 9.0% of mass 174	(7.27)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.56)[1]
177	5.0 – 9.0% of mass 176	(6.47)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 2/7/08
BFB Injection Time: 0918
BFB File ID: t020701
Tekmar Purge Flow: 19.5mL/min
Vacuum: 4.24e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM	357541
1,4-DFB	1413414
CB-d5	1290063

Verified CCV IS vs ICAL mid-point (- 40%D) SM (initials)

Verify 176/174 m/z Ratio: 1426273/1477051 x100 = 96.56 **NOAH Cart #:** NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1382401)}{(1413414)} \times \frac{(25.0)}{(0.96300)} = 25.391$

Reported Result 25.391

File ID:	t020702
Compound:	Tol-d8
Initials:	SM

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Reviewed	Comments
1	✓	t020701	BFB Tune Check	1476-65	50psig	2mL	1.00	2/7/08	0918	SM	
2	✓	02	CCV-1 (20ppbv)	1576-26	50psig	50mL			0941	SM	ϕ out
3	✓	03	LCS-1	1576-25					1041	SM	ϕ out ICAL LCS
4	—	04	Gas Std (50ppmv)	1576-14A	750psig	10mL					
5											
6											
7											
8								SM	2/7/08		
9											

Signature

2/7/08
Date

0177

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76)[1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.15)[1]
177	5.0 – 9.0% of mass 176	(6.42)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08
BFB Injection Time: 0830
BFB File ID: t022101
Tekmar Purge Flow: ——
Vacuum: 3.99e-5

IS/S Std.#:	1443-398 Exp. Date: 3/28/08
BCM	318158
1,4-DFB	1251468
CB-d5	1150991

Verified CCV IS vs ICAL mid-point (- 40%D) SJM (initials)

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15 **NOAH Cart #:** NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1267119)}{(1251468)} \times \frac{(75.0)}{(0.96300)} = 26.285$

File ID:	t022106
Compound:	Tol-d8
Initials:	SJM

Reported Result 26.285

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t022101	BFB Tune Check	1476-274	50psig	2mL	1.00	2/21/08	0830	SJM	
2	✓	02	ICAL Level 3	1576-299	2ppbv/12ppbv	20mL			0941	SJM	t14g206b
3	✓	03	4		3ppbv/48ppbv	8.0mL			1021	SJM	MeOH0221A
4	✓	04	5		50ppbv/300ppbv	50mL			1103	SJM	sp22b
5	✓	05	7		200ppbv/1200ppbv	200mL			1205	SJM	
6	✓	06	CCV-1 (200ppbv)	1576-261	50ppbv	50mL			1436	SJM	Ø ost
7	~~✓~~	~~07~~	~~ICAL Level 6~~	1576-299	100ppbv/600ppbv	100mL			SJM 2/21/08		not loaded
8	✓	07	LCS-1 (200ppbv)	1576-254	50ppbv	50mL	1.00		1525	SJM	Ø ost
9	✓	08	System blank	33668	Humid	200mL			1617	SJM	

Signature

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Date

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MSD-T

Logbook #: 1599

10	✓	+022109	ICAL Level 6	1536-739	100ppb/100ppb	100 mL	1.00	2/21/08	1700	Act/		0179
11	✓	10	Lab Blank	33668	Humid	200 mL	↓		1755	Act/		
12	✓	11	0802200 -01A	33942	6.0"Hg→5psi		1.68		1847	Act/		
13	✓	12	-02A	33943	7.5"Hg→5psi		1.79		PR16	Act/		
14	✓	13	-01AA	33942	6.0"Hg→5psi		1.68		2005	Act/		
15	✓	14	-02AA	33943	7.5"Hg→5psi		1.79		2043	Act/		
16	✓	15	-03A	SC1116	6.5"Hg→5psi		1.71		2122	Act/		
17	✓	16	-04A	9945	↓		↓		2201	Act/		
18	✓	17	-05A	34306	↓		↓		2239	Act/	↓	
19	✓	18	-06A	R-4	6.0"Hg→5psi		1.68	↓	2338	or/		
20	✓	19	0802283 -01A	22497	1	↓	1	2/22/08	0017	or/		
21	✓	20	01A	34438	5.5"Hg→5.5psi	25mL	1.64		0134	or/		
22	✓	21	03A	23996	5.5"Hg→5.5psi	200mL	1.64		0221	or/		
23	X	22	04A	35171	6.5"Hg→5.5psi	200mL	1.71		0308	or/		MeCl ϕ
24	X	23	05A	34746	6.0"Hg→5.5psi	200mL	1.68		0351	or/		MeCl ϕ
25	X	24	0802328-01A ~~0604~~	12666	5.5"Hg→5.5psi	200mL	1.64		0432	or/		PCE ϕ
26	✓	25	0802283 -04A	35171	6.5"Hg→5.5psi	~~200mL~~ 100mL	3.42		0510	or/		
27	✓	26	1 05A	34746	6.0"Hg→5.5psi	~~200mL~~ 100mL	3.36		0711			
28	✓	27	0802328 - 01A	12666	5.5"Hg→5.5psi	~~200mL~~ 100mL	3.25		0749			
29												
30												
31			ϕ 2/22/08									
32												

Comments:

Laura Dessmyer
Signature

2/22/08
Date

Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15 Low Level
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/07Feb2008.b/t020703.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 07-FEB-2008 10:41
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/07Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 10:17 sruth Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02 Cal File: t020615.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
13.858	13.858 (1.000)	130	364188	25.0000		80.00- 120.00	100.00
13.858	13.858 (1.000)	128	282636			26.53- 126.53	77.61
13.858	13.858 (1.000)	49	642409			128.17- 228.17	176.39
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.627	15.628 (1.000)	114	1439060	25.0000		80.00- 120.00	100.00
15.627	15.628 (1.000)	88	235739			0.00- 66.52	16.38
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.798	20.798 (1.000)	117	1292442	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	752973			6.72- 106.72	58.26
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
14.936	14.937 (1.078)	65	592767	25.2952	25.295	80.00- 120.00	100.00
14.936	14.937 (1.078)	67	339519			3.57- 103.57	57.28
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.199	18.199 (1.165)	98	1388717	25.0524	25.052	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	157888			0.00- 61.29	11.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	938828			18.71- 118.71	67.60
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	875940	26.2019	26.202	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	1106906			72.28- 172.28	126.37
22.789	22.789 (1.096)	176	852956			45.76- 145.76	97.38
11 Propylene					CAS #: 115-07-1		
5.812	5.785 (0.419)	41	613591	51.5112	51.511	80.00- 120.00	100.00
5.812	5.785 (0.419)	42	426221			17.96- 117.96	69.46
5.812	5.785 (0.419)	39	492845			33.44- 133.44	80.32
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.895 (0.427)	85	3630724	51.0550	51.055	80.00- 120.00	100.00
5.923	5.895 (0.427)	87	1142768			0.00- 82.13	31.47
16 Freon 114					CAS #: 76-14-2		
6.310	6.282 (0.455)	135	2403733	51.1334	51.133	80.00- 120.00	100.00
6.310	6.282 (0.455)	137	762741			0.00- 81.89	31.73
18 Chloromethane					CAS #: 74-87-3		
6.558	6.531 (0.473)	50	747784	48.1651	48.165	80.00- 120.00	100.00
6.558	6.531 (0.473)	52	249680			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.863 (0.497)	62	1087955	51.0401	51.040	80.00- 120.00	100.00
6.890	6.863 (0.497)	64	353730			0.00- 89.61	32.51
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.946 (0.503)	54	820317	51.1387	51.139	80.00- 120.00	100.00
6.973	6.946 (0.503)	39	782893			53.33- 153.33	95.44
25 Bromomethane					CAS #: 74-83-9		
7.913	7.886 (0.571)	94	1069630	50.6811	50.681	80.00- 120.00	100.00
7.913	7.886 (0.571)	96	989108			42.77- 142.77	92.47
27 Chloroethane					CAS #: 75-00-3		
8.190	8.162 (0.591)	64	588665	52.9526	52.952	80.00- 120.00	100.00
8.190	8.162 (0.591)	49	150442			0.00- 76.71	25.56
8.190	8.162 (0.591)	66	190911			0.00- 83.02	32.43
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.771 (0.635)	101	4126874	51.2618	51.262	80.00- 120.00	100.00
8.798	8.771 (0.635)	103	2651802			14.63- 114.63	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.240	9.213 (0.667)	45	334932	54.3761	54.376	80.00- 120.00	100.00
9.240	9.213 (0.667)	43	78044			0.00- 75.24	23.30
9.240	9.213 (0.667)	46	130611			0.00- 89.78	39.00
42 Freon 113					CAS #: 76-13-1		
9.959	9.932 (0.719)	151	2155060	58.1347	58.135	80.00- 120.00	100.00
9.959	9.932 (0.719)	153	1372575			14.76- 114.76	63.69
9.959	9.932 (0.719)	101	2781208			80.58- 180.58	129.05
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.015 (0.725)	61	1971376	59.0809	59.081	80.00- 120.00	100.00
10.042	10.043 (0.725)	96	1202804			10.93- 110.93	61.01
10.042	10.043 (0.725)	98	780821			0.00- 89.40	39.61
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	560983	54.2480	54.248	80.00- 120.00	100.00
10.181	10.181 (0.735)	43	1718440			267.82- 367.82	306.33
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	1942177	54.8034	54.803	80.00- 120.00	100.00
10.374	10.374 (0.749)	43	475790			0.00- 76.64	24.50
10.374	10.374 (0.749)	59	81347			0.00- 54.31	4.19
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	3305899	52.3795	52.380	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.816	10.817 (0.781)	76	597711	54.9965	54.996	80.00- 120.00	100.00
10.816	10.817 (0.781)	41	1275321			173.84- 273.84	213.37
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	1145006	54.2668	54.267	80.00- 120.00	100.00
11.121	11.093 (0.802)	84	1034033			40.82- 140.82	90.31
11.093	11.093 (0.800)	51	377986			0.00- 83.83	33.01
60 MTBE					CAS #: 1634-04-4		
11.452	11.453 (0.826)	73	3774615	62.3150	62.315	80.00- 120.00	100.00
11.452	11.453 (0.826)	57	719078			0.00- 69.06	19.05
11.452	11.453 (0.826)	41	687732			0.00- 70.47	18.22
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.536 (0.834)	96	1387532	55.9548	55.955	80.00- 120.00	100.00
11.535	11.536 (0.832)	61	1901887			88.49- 188.49	137.07
11.563	11.536 (0.834)	98	891584			16.26- 116.26	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	1891161	57.7934	57.793	80.00- 120.00	100.00
11.895	11.895 (0.858)	43	1080305			9.30- 109.30	57.12
11.895	11.895 (0.858)	86	341505			0.00- 66.83	18.06
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	348239	54.2809	54.281	80.00- 120.00	100.00
12.365	12.337 (0.892)	43	3106079			832.23- 932.23	891.94
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	2630332	57.4518	57.452	80.00- 120.00	100.00
12.365	12.365 (0.892)	65	853608			0.00- 82.30	32.45
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	646558	55.5063	55.506	80.00- 120.00	100.00
13.388	13.388 (0.966)	43	2171765			282.56- 382.56	335.90
13.388	13.388 (0.966)	57	194672			0.00- 79.56	30.11
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	1740573	56.5020	56.502	80.00- 120.00	100.00
13.416	13.416 (0.968)	96	1385696			31.20- 131.20	79.61
13.416	13.416 (0.968)	98	895062			1.78- 101.78	51.42
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	1101132	56.0458	56.046	80.00- 120.00	100.00
13.858	13.858 (1.000)	71	583896			2.70- 102.70	53.03
13.858	13.858 (1.000)	72	619526			2.04- 102.04	56.26
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	3047174	57.6082	57.608	80.00- 120.00	100.00
13.941	13.941 (1.006)	85	2012329			15.21- 115.21	66.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	3228969	55.1909	55.191	80.00- 120.00	100.00
14.273	14.273 (1.030)	99	2060721			14.57- 114.57	63.82
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.301 (1.032)	84	1772344	56.5763	56.576	80.00- 120.00	100.00
14.300	14.301 (1.032)	56	1739685			49.56- 149.56	98.16
14.300	14.301 (1.032)	41	902671			1.20- 101.20	50.93
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.522 (1.050)	119	2960464	52.6774	52.677	80.00- 120.00	100.00
14.549	14.522 (1.050)	117	3142043			57.09- 157.09	106.13
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	4200762	54.9970	54.997	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
14.881	14.881 (1.074)	56	1354857			0.00- 82.82	32.25
14.881	14.881 (1.074)	41	1075995			0.00- 78.43	25.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3843383	53.4243	53.424	80.00- 120.00	100.00
14.964	14.964 (0.958)	77	887809			0.00- 73.50	23.10
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1887283	53.7716	53.772	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	614030			0.00- 84.23	32.54
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1130162	55.4972	55.497	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1515301			85.70- 185.70	134.08
15.185	15.185 (0.972)	57	927126			28.72- 128.72	82.03
101 Trichloroethene					CAS #: 79-01-6		
16.070	16.070 (1.028)	95	1648538	53.5021	53.502	80.00- 120.00	100.00
16.098	16.070 (1.030)	130	1512857			41.36- 141.36	91.77
16.070	16.070 (1.028)	97	1054939			13.70- 113.70	63.99
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1289567	53.1277	53.128	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	932367			22.07- 122.07	72.30
16.568	16.568 (1.060)	41	714853			6.80- 106.80	55.43
106 1,4-Dioxane					CAS #: 123-91-1		
16.678	16.678 (1.067)	88	909360	51.1825	51.182	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	520290			7.38- 107.38	57.21
16.678	16.678 (1.067)	57	184864			0.00- 71.19	20.33
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.983 (1.087)	83	2955752	53.6010	53.601	80.00- 120.00	100.00
16.982	16.983 (1.087)	85	1906864			14.75- 114.75	64.51
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2055925	55.5852	55.585	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	662734			0.00- 81.51	32.24
17.784	17.784 (1.138)	39	920517			0.00- 94.39	44.77
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.950	17.950 (1.149)	58	970511	57.7496	57.750	80.00- 120.00	100.00
17.950	17.950 (1.149)	43	2207573			175.34- 275.34	227.47
17.978	17.978 (1.150)	85	478187			0.64- 100.64	49.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4390035	57.2296	57.230	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2652998			10.63- 110.63	60.43
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2209362	54.0869	54.087	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	716340			0.00- 81.36	32.42
18.752	18.752 (0.902)	39	915171			0.00- 91.03	41.42
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.112 (0.919)	97	1580720	53.6925	53.692	80.00- 120.00	100.00
19.111	19.112 (0.919)	99	997611			14.06- 114.06	63.11
19.111	19.112 (0.919)	83	1366879			35.72- 135.72	86.47
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2122005	53.7905	53.790	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1462582			18.51- 118.51	68.92
19.277	19.277 (0.927)	131	1396687			15.23- 115.23	65.82
121 2-Hexanone					CAS #: 591-78-6		
19.415	19.416 (0.934)	58	1306064	52.9797	52.980	80.00- 120.00	100.00
19.415	19.416 (0.934)	43	2176893			117.36- 217.36	166.68
19.415	19.416 (0.934)	100	281719			0.00- 71.71	21.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2715281	54.1671	54.167	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2100341			28.82- 128.82	77.35
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.052 (0.964)	107	2456852	52.4651	52.465	80.00- 120.00	100.00
20.051	20.052 (0.964)	109	2268304			42.74- 142.74	92.33
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3552960	52.2765	52.276	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1108333			0.00- 81.00	31.19
20.853	20.853 (1.003)	77	2210378			12.54- 112.54	62.21
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1878900	53.3558	53.356	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6014846			269.96- 369.96	320.13
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414838	54.4582	54.458	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4845879			149.87- 249.87	200.67
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2323688	55.0883	55.088	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	4908221			163.91- 263.91	211.23
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	3755676	58.1165	58.116	80.00- 120.00	100.00
21.876	21.876 (1.052)	78	1922908			0.81- 100.81	51.20
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	2946351	54.7578	54.758	80.00- 120.00	100.00
22.291	22.291 (1.072)	171	1505628			1.45- 101.45	51.10
134 Cumene					CAS #: 98-82-8		
22.429	22.430 (1.078)	105	6696362	57.5511	57.551	80.00- 120.00	100.00
22.429	22.430 (1.078)	120	1712846			0.00- 77.62	25.58
22.402	22.402 (1.077)	51	569801			0.00- 58.75	8.51
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	3679813	54.3852	54.385	80.00- 120.00	100.00
23.010	23.010 (1.106)	85	2370044			14.60- 114.60	64.41
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	8483170	56.2420	56.242	80.00- 120.00	100.00
23.120	23.121 (1.112)	120	1809726			0.00- 71.63	21.33
23.120	23.121 (1.112)	105	307547			0.00- 53.71	3.63
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.287 (1.120)	105	7219729	56.2284	56.228	80.00- 120.00	100.00
23.286	23.287 (1.120)	120	2130209			0.00- 79.51	29.51
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	5917601	54.0267	54.027	80.00- 120.00	100.00
23.397	23.397 (1.125)	120	2884828			0.00- 98.23	48.75
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	5720909	55.4287	55.429	80.00- 120.00	100.00
24.033	24.033 (1.156)	120	2603971			0.00- 94.91	45.52
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	3870355	52.1728	52.173	80.00- 120.00	100.00
24.586	24.586 (1.182)	148	2460421			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	1598480			0.00- 91.36	41.30
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	3937785	51.5866	51.586	80.00- 120.00	100.00
24.724	24.724 (1.189)	148	2521733			16.09- 116.09	64.04
24.724	24.724 (1.189)	111	1553706			0.00- 90.13	39.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.946 (1.199)	91	6230172	56.4503	56.450	80.00- 120.00	100.00
24.945	24.946 (1.199)	126	1164614			0.00- 69.28	18.69
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3752105	51.9217	51.922	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2421672			14.02- 114.02	64.54
25.360	25.360 (1.219)	111	1612191			0.00- 92.17	42.97
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2788156	50.5867	50.587	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2645129			44.12- 144.12	94.87
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2570482	46.3399	46.340	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1603808			12.90- 112.90	62.39
29 Isopentane					CAS #: 78-78-4		
8.273	8.245 (0.597)	43	1190271	50.5525	50.552	80.00- 120.00	100.00
8.273	8.245 (0.597)	57	941476			27.67- 127.67	79.10
19 Butane					CAS #: 106-97-8		
6.807	6.780 (0.491)	58	209961	51.5020	51.502	80.00- 120.00	100.00
6.807	6.780 (0.491)	43	1472102			666.74- 766.74	701.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.347 (1.180)	83	2075922	55.9685	55.968	80.00- 120.00	100.00
16.346	16.347 (1.180)	98	946654			0.00- 95.22	45.60
16.346	16.347 (1.180)	55	1458457			20.82- 120.82	70.26
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	4181723	54.8172	54.817	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	514318			0.00- 62.74	12.30

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020703.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 07-FEB-2008
Calibration Time: 09:41
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	357541	214525	500557	364188	1.86
97 1,4-Difluorobenze	1413414	848048	1978780	1439060	1.81
126 Chlorobenzene-d5	1290063	774038	1806088	1292442	0.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

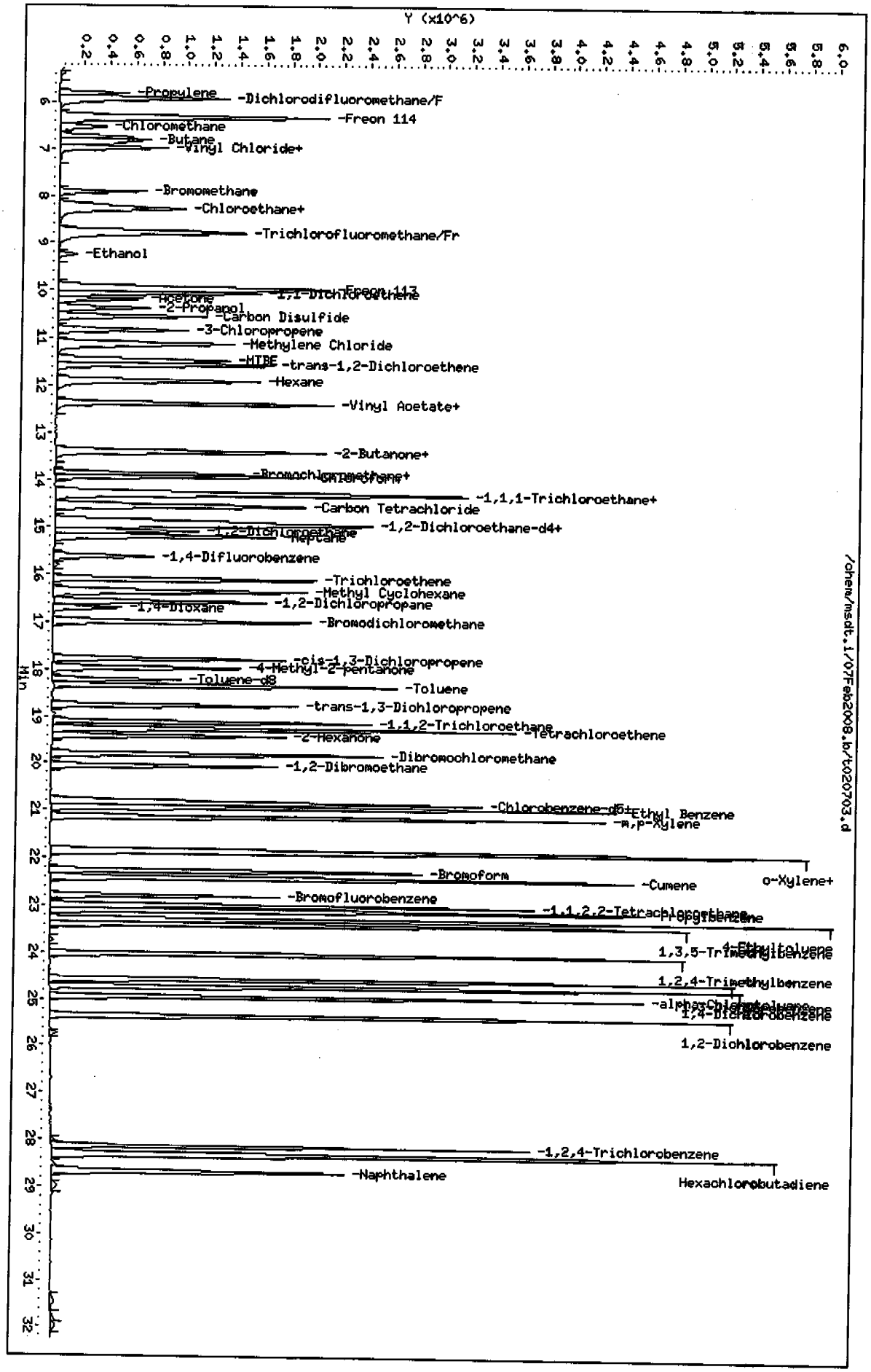
Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 07Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	51.055	102.11	70-130
16 Freon 114	50.000	51.133	102.27	70-130
18 Chloromethane	50.000	48.165	96.33	70-130
20 Vinyl Chloride	50.000	51.040	102.08	70-130
22 1,3-Butadiene	50.000	51.139	102.28	60-140
25 Bromomethane	50.000	50.681	101.36	70-130
27 Chloroethane	50.000	52.952	105.91	70-130
31 Trichlorofluoromet	50.000	51.262	102.52	70-130
38 Ethanol	50.000	54.376	108.75	60-140
42 Freon 113	50.000	58.135	116.27	70-130
43 1,1-Dichloroethene	50.000	59.081	118.16	70-130
45 Acetone	50.000	54.248	108.50	60-140
47 Carbon Disulfide	50.000	52.380	104.76	60-140
46 2-Propanol	50.000	54.803	109.61	60-140
54 Methylene Chloride	50.000	54.267	108.53	70-130
60 MTBE	50.000	62.315	124.63	60-140
61 trans-1,2-Dichloro	50.000	55.955	111.91	60-140
65 Hexane	50.000	57.793	115.59	60-140
69 Vinyl Acetate	50.000	54.281	108.56	60-140
70 1,1-Dichloroethane	50.000	57.452	114.90	70-130
76 cis-1,2-Dichloroet	50.000	56.502	113.00	70-130
75 2-Butanone	50.000	55.506	111.01	60-140
80 Tetrahydrofuran	50.000	56.046	112.09	60-140
82 Chloroform	50.000	57.608	115.22	70-130
85 Cyclohexane	50.000	56.576	113.15	60-140
83 1,1,1-Trichloroeth	50.000	55.191	110.38	70-130
87 Carbon Tetrachlori	50.000	52.677	105.35	70-130
91 Benzene	50.000	53.424	106.85	70-130
93 1,2-Dichloroethane	50.000	53.772	107.54	70-130
94 Heptane	50.000	55.497	110.99	60-140
101 Trichloroethene	50.000	53.502	107.00	70-130
104 1,2-Dichloropropan	50.000	53.128	106.26	70-130
106 1,4-Dioxane	50.000	51.182	102.37	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	53.601	107.20	60-140
110 cis-1,3-Dichloropr	50.000	55.585	111.17	70-130
111 4-Methyl-2-pentano	50.000	57.750	115.50	60-140
114 Toluene	50.000	57.230	114.46	70-130
116 trans-1,3-Dichloro	50.000	54.087	108.17	70-130
117 1,1,2-Trichloroeth	50.000	53.692	107.39	70-130
120 Tetrachloroethene	50.000	53.790	107.58	70-130
121 2-Hexanone	50.000	52.980	105.96	60-140
122 Dibromochlorometha	50.000	54.167	108.33	60-140
123 1,2-Dibromoethane	50.000	52.465	104.93	70-130
127 Chlorobenzene	50.000	52.276	104.55	70-130
128 Ethyl Benzene	50.000	53.356	106.71	70-130
129 m,p-Xylene	50.000	54.458	108.92	70-130
130 o-Xylene	50.000	55.088	110.18	70-130
131 Styrene	50.000	58.116	116.23	70-130
133 Bromoform	50.000	54.758	109.52	60-140
140 1,1,2,2-Tetrachlor	50.000	54.385	108.77	70-130
145 4-Ethyltoluene	50.000	56.228	112.46	60-140
147 1,3,5-Trimethylben	50.000	54.027	108.05	70-130
150 1,2,4-Trimethylben	50.000	55.429	110.86	70-130
155 1,3-Dichlorobenzen	50.000	52.173	104.35	70-130
156 1,4-Dichlorobenzen	50.000	51.586	103.17	70-130
159 alpha-Chlorotoluen	50.000	56.450	112.90	70-130
161 1,2-Dichlorobenzen	50.000	51.922	103.84	70-130
165 1,2,4-Trichloroben	50.000	50.587	101.17	70-130
166 Hexachlorobutadien	50.000	46.340	92.68	70-130
142 Propylbenzene	50.000	56.242	112.48	60-140
134 Cumene	50.000	57.551	115.10	60-140
51 3-Chloropropene	50.000	54.996	109.99	60-140
89 2,2,4-Trimethylpen	50.000	54.997	109.99	60-140
19 Butane	50.000	51.502	103.00	70-130
29 Isopentane	50.000	50.552	101.10	70-130
102 Methyl Cyclohexane	50.000	55.968	111.94	70-130
11 Propylene	50.000	51.511	103.02	60-140
167 Naphthalene	50.000	54.817	109.63	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.295	101.18	70-130
$ 113 Toluene-d8	25.000	25.052	100.21	70-130
$ 137 Bromofluorobenzene	25.000	26.202	104.81	70-130



Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Date : 07-FEB-2008 10:41
Client ID: LCS-1
Sample Info: 50mL #1576-255

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr

Column diameter: 0.53

/chem/msdt.i/07Feb2008.b/t020703.d

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020607.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 06-FEB-2008 14:27
Operator : sjr
Inst ID: msdt.i
Smp Info : 0.2ml #1576-261
Misc Info : 200ppbv -> 0.2ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 14:27
Cal File: t020607.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		============	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.858	13.858 (1.000)	130	332370	25.0000			50.00- 150.00	100.00
13.858	13.858 (1.000)	128	254115				26.39- 126.39	76.46
13.858	13.858 (1.000)	49	379355				99.95- 199.95	114.14
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1144843	25.0000			50.00- 150.00	100.00
15.628	15.628 (1.000)	88	188070				0.00- 66.12	16.43
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1006037	25.0000			50.00- 150.00	100.00
20.798	20.798 (1.000)	82	576806				6.72- 106.72	57.33
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.937	14.937 (1.078)	65	505401	25.0000	23.632		50.00- 150.00	100.00
14.937	14.937 (1.078)	67	247783				3.57- 103.57	49.03
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1079766	25.0000	24.485		50.00- 150.00	100.00
18.199	18.199 (1.165)	70	125347				0.00- 61.29	11.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	742258			18.71- 118.71	68.74
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	656799	25.0000	25.240	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	812697			75.58- 175.58	123.74
22.789	22.789 (1.096)	176	634912			47.41- 147.41	96.67
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	7657	0.20000	0.1586	50.00- 150.00	100.00(a)
13.941	13.941 (1.006)	85	5855			16.43- 116.43	76.47
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	11959	0.20000	0.2090	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	2943			0.00- 73.50	24.61
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	8316	0.20000	0.1653	50.00- 150.00	100.00(a)
21.877	21.877 (1.052)	78	6770			9.02- 109.02	81.41
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	16604	0.20000	0.1833	50.00- 150.00	100.00(a)
22.430	22.430 (1.078)	120	5207			0.00- 77.62	31.36
22.430	22.430 (1.078)	51	1333			0.00- 58.75	8.03
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	6775	0.20000	0.1859	50.00- 150.00	100.00(a)
20.052	20.052 (0.964)	109	7462			46.68- 146.68	110.14

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020607.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr

Calibration Date: 06-FEB-2008
Calibration Time: 14:27
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.2ppbv

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	332370	199422	465318	332370	0.00
97 1,4-Difluorobenze	1144843	686906	1602780	1144843	0.00
126 Chlorobenzene-d5	1006037	603622	1408452	1006037	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

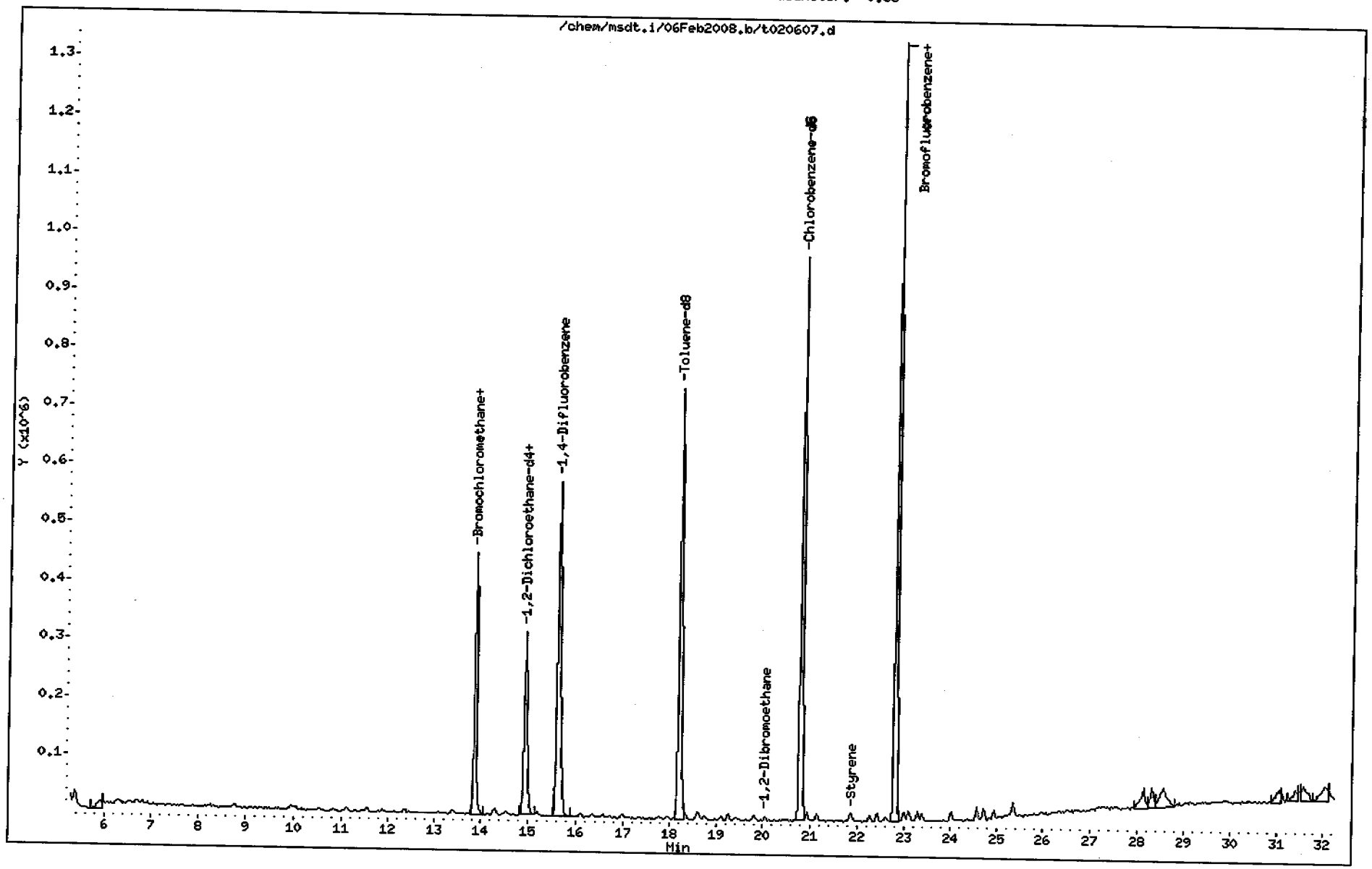
Data File: /chem/msdt.i/06Feb2008.b/t020607.d
Date : 06-FEB-2008 14:27
Client ID: Level 1
Sample Info: 0.2ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0196



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020615.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 06-FEB-2008 22:02
Operator : srs
Inst ID: msdt.i
Smp Info : 0.5mL #1576-261
Misc Info : 200ppbv -> 0.5ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:40 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02
Cal File: t020615.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886 (1.000)	130	359684	25.0000			50.00- 150.00	100.00
13.886	13.886 (1.000)	128	275976				26.39- 126.39	76.73
13.858	13.858 (1.000)	49	409784				99.95- 199.95	113.93
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1311527	25.0000			50.00- 150.00	100.00
15.628	15.628 (1.000)	88	209950				0.00- 66.12	16.01
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1165188	25.0000			50.00- 150.00	100.00
20.798	20.798 (1.000)	82	664676				6.72- 106.72	57.04
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	550238	25.0000	23.774		50.00- 150.00	100.00
14.936	14.936 (1.076)	67	270699				3.57- 103.57	49.20
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1259013	25.0000	24.921		50.00- 150.00	100.00
18.199	18.199 (1.165)	70	132880				0.00- 61.29	10.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	855222			18.71- 118.71	67.93
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	754728	25.0000	25.042	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	954528			75.58- 175.58	126.47
22.789	22.789 (1.096)	176	726618			47.41- 147.41	96.28
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	29948	0.50000	0.4264	50.00- 150.00	100.00(a)
5.923	5.923 (0.427)	87	9731			0.00- 82.13	32.49
16 Freon 114					CAS #: 76-14-2		
6.337	6.337 (0.456)	135	21512	0.50000	0.4633	50.00- 150.00	100.00(a)
6.310	6.310 (0.454)	137	6108			0.00- 81.89	28.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	10277	0.50000	0.4882	50.00- 150.00	100.00(a)
6.890	6.890 (0.496)	64	5846			0.00- 89.61	56.88
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	6982	0.50000	0.4407	50.00- 150.00	100.00(a)
6.973	6.973 (0.502)	39	9131			53.33- 153.33	130.78
25 Bromomethane					CAS #: 74-83-9		
7.941	7.941 (0.572)	94	9814	0.50000	0.4708	50.00- 150.00	100.00(a)
7.941	7.941 (0.572)	96	8139			43.69- 143.69	82.93
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	4699	0.50000	0.4280	50.00- 150.00	100.00(a)
8.190	8.190 (0.590)	49	1473			0.00- 76.71	31.35
8.190	8.190 (0.590)	66	1459			0.00- 83.02	31.05
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	34751	0.50000	0.4371	50.00- 150.00	100.00(a)
8.771	8.771 (0.632)	103	20296			13.52- 113.52	58.40
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	16714	0.50000	0.4565	50.00- 150.00	100.00(a)
9.932	9.932 (0.715)	153	11029			14.28- 114.28	65.99
9.960	9.960 (0.717)	101	20956			80.55- 180.55	125.38
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	13655	0.50000	0.4144	50.00- 150.00	100.00(a)
10.042	10.042 (0.723)	96	9202			13.15- 113.15	67.39
10.042	10.042 (0.723)	98	4439			0.00- 88.14	32.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	27016	0.50000	0.4334	50.00- 150.00	100.00(a)
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	10254	0.50000	0.4921	50.00- 150.00	100.00(a)
11.121	11.121 (0.801)	84	8021			36.08- 136.08	78.22
11.093	11.093 (0.799)	51	3950			0.00- 83.83	38.52
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	12565	0.50000	0.2100	50.00- 150.00	100.00(a)
11.425	11.425 (0.823)	57	2521			0.00- 69.02	20.06
11.480	11.480 (0.827)	41	3603			0.00- 70.47	28.67
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.536	11.536 (0.831)	96	9874	0.50000	0.4032	50.00- 150.00	100.00(a)
11.563	11.563 (0.833)	61	14614			95.77- 195.77	148.00
11.563	11.563 (0.833)	98	6468			16.26- 116.26	65.51
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	9544	0.50000	0.2953	50.00- 150.00	100.00(a)
11.923	11.923 (0.859)	43	6284			9.30- 109.30	65.84
11.923	11.923 (0.859)	86	1121			0.00- 66.83	11.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	17152	0.50000	0.3793	50.00- 150.00	100.00(a)
12.365	12.365 (0.890)	65	6222			0.00- 82.79	36.28
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	3945	0.50000	0.3429	50.00- 150.00	100.00(a)
13.388	13.388 (0.964)	43	12276			275.22- 375.22	311.18
0.000	1.000 (0.000)	57	0			0.00- 79.56	0.00
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	10861	0.50000	0.3570	50.00- 150.00	100.00(a)
13.416	13.416 (0.966)	96	7530			27.39- 127.39	69.33
13.443	13.443 (0.968)	98	5683			0.96- 100.96	52.32
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	6253	0.50000	0.3222	50.00- 150.00	100.00(a)
13.858	13.858 (0.998)	71	2426			0.00- 99.16	38.80
13.858	13.858 (0.998)	72	2304			2.04- 102.04	36.85
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	19693	0.50000	0.3770	50.00- 150.00	100.00(a)
13.941	13.941 (1.004)	85	12570			16.43- 116.43	63.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	18476	0.50000	0.3198	50.00- 150.00	100.00(a)
14.300	14.300 (1.030)	99	14551			17.45- 117.45	78.76
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	9788	0.50000	0.3164	50.00- 150.00	100.00(a)
14.328	14.328 (1.032)	56	9199			47.55- 147.55	93.98
14.300	14.300 (1.030)	41	6425			5.12- 105.12	65.64
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.522	14.522 (1.046)	119	19411	0.50000	0.3497	50.00- 150.00	100.00(a)
14.549	14.549 (1.048)	117	18547			53.78- 153.78	95.55
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	23133	0.50000	0.3528	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	5786			0.00- 73.50	25.01
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	22814	0.50000	0.3024	50.00- 150.00	100.00(a)
14.881	14.881 (1.072)	56	7722			0.00- 82.82	33.85
14.881	14.881 (1.072)	41	7717			0.00- 78.43	33.83
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	11720	0.50000	0.3664	50.00- 150.00	100.00(a)
15.075	15.075 (0.965)	64	4807			0.00- 84.23	41.02
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	5821	0.50000	0.3136	50.00- 150.00	100.00(a)
15.185	15.185 (0.972)	43	7881			85.70- 185.70	135.39
15.185	15.185 (0.972)	57	4021			28.72- 128.72	69.08
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	9076	0.50000	0.3232	50.00- 150.00	100.00(a)
16.098	16.098 (1.030)	130	8832			42.94- 142.94	97.31
16.098	16.098 (1.030)	97	5670			13.25- 113.25	62.47
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	7759	0.50000	0.3507	50.00- 150.00	100.00(a)
16.568	16.568 (1.060)	62	5454			21.32- 121.32	70.29
16.568	16.568 (1.060)	41	5773			8.96- 108.96	74.40
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	16254	0.50000	0.3234	50.00- 150.00	100.00(a)
16.983	16.983 (1.087)	85	9643			13.51- 113.51	59.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	10176	0.50000	0.3019	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
17.784	17.784 (1.138)	77	4424			0.00- 84.89	43.47
17.784	17.784 (1.138)	39	5484			0.00- 97.13	53.89
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	3680	0.50000	0.2403	50.00- 150.00	100.00(a)
17.978	17.978 (1.150)	43	7232			175.34- 275.34	196.52
17.950	17.950 (1.149)	85	1899			0.64- 100.64	51.60
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	21271	0.50000	0.3042	50.00- 150.00	100.00(a)
18.337	18.337 (1.173)	92	13947			11.62- 111.62	65.57
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	11178	0.50000	0.3035	50.00- 150.00	100.00(a)
18.780	18.780 (0.903)	77	3382			0.00- 81.86	30.26
18.780	18.780 (0.903)	39	4867			0.00- 91.58	43.54
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	8142	0.50000	0.3068	50.00- 150.00	100.00(a)
19.111	19.111 (0.919)	99	5361			13.21- 113.21	65.84
19.111	19.111 (0.919)	83	7611			35.76- 135.76	93.48
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	11480	0.50000	0.3228	50.00- 150.00	100.00(a)
19.277	19.277 (0.927)	129	7435			19.36- 119.36	64.76
19.277	19.277 (0.927)	131	7336			16.43- 116.43	63.90
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	12573	0.50000	0.2782	50.00- 150.00	100.00(a)
19.803	19.803 (0.952)	127	10083			28.82- 128.82	80.20
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.079	20.079 (0.965)	107	13043	0.50000	0.3089	50.00- 150.00	100.00(a)
20.079	20.079 (0.965)	109	12513			46.68- 146.68	95.94
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	20858	0.50000	0.3404	50.00- 150.00	100.00(a)
20.853	20.853 (1.003)	114	7591			0.00- 82.06	36.39
20.853	20.853 (1.003)	77	22391			22.53- 122.53	107.35
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	9559	0.50000	0.3011	50.00- 150.00	100.00(a)
20.936	20.936 (1.007)	91	30384			269.96- 369.96	317.86
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	10501	0.50000	0.2627	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.130	21.130 (1.016)	91	21263			149.87- 249.87	202.49
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	10265	0.50000	0.2699	50.00- 150.00	100.00(a)
21.849	21.849 (1.051)	91	22643			160.81- 260.81	220.58
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	13827	0.50000	0.2373	50.00- 150.00	100.00(a)
21.876	21.876 (1.052)	78	8943			9.02- 109.02	64.68
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12913	0.50000	0.2662	50.00- 150.00	100.00(a)
22.291	22.291 (1.072)	171	6556			1.83- 101.83	50.77
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	28340	0.50000	0.2702	50.00- 150.00	100.00(a)
22.429	22.429 (1.078)	120	8960			0.00- 77.62	31.62
22.402	22.402 (1.077)	51	3140			0.00- 58.75	11.08
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15471	0.50000	0.2536	50.00- 150.00	100.00(a)
23.010	23.010 (1.106)	85	11730			16.89- 116.89	75.82
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	38515	0.50000	0.2832	50.00- 150.00	100.00(a)
23.121	23.121 (1.112)	120	8217			0.00- 71.63	21.33
23.121	23.121 (1.112)	105	1592			0.00- 53.71	4.13
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	28042	0.50000	0.2422	50.00- 150.00	100.00(a)
23.287	23.287 (1.120)	120	8426			0.00- 79.69	30.05
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	25414	0.50000	0.2574	50.00- 150.00	100.00(a)
23.397	23.397 (1.125)	120	11861			0.00- 98.23	46.67
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	21767	0.50000	0.2339	50.00- 150.00	100.00(a)
24.033	24.033 (1.156)	120	9142			0.00- 94.91	42.00
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	19331	0.50000	0.2890	50.00- 150.00	100.00(a)
24.586	24.586 (1.182)	148	12995			14.68- 114.68	67.22
24.586	24.586 (1.182)	111	8206			0.00- 91.36	42.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	20052	0.50000	0.2914	50.00- 150.00	100.00(a)
24.724	24.724 (1.189)	148	14332			16.09- 116.09	71.47
24.724	24.724 (1.189)	111	8007			0.00- 90.13	39.93
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	23853	0.50000	0.2397	50.00- 150.00	100.00(a)
24.946	24.946 (1.199)	126	4759			0.00- 69.28	19.95
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	18613	0.50000	0.2857	50.00- 150.00	100.00(a)
25.360	25.360 (1.219)	148	12636			15.85- 115.85	67.89
25.360	25.360 (1.219)	111	8799			0.00- 94.46	47.27
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	11034	0.50000	0.3012	50.00- 150.00	100.00(a)
16.347	16.347 (1.177)	98	5077			0.00- 95.22	46.01
16.347	16.347 (1.177)	55	8471			20.82- 120.82	76.77

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020615.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.5ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	359684	1.04
97 1,4-Difluorobenze	1372567	823540	1921594	1311527	-4.45
126 Chlorobenzene-d5	1227265	736359	1718171	1165188	-5.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

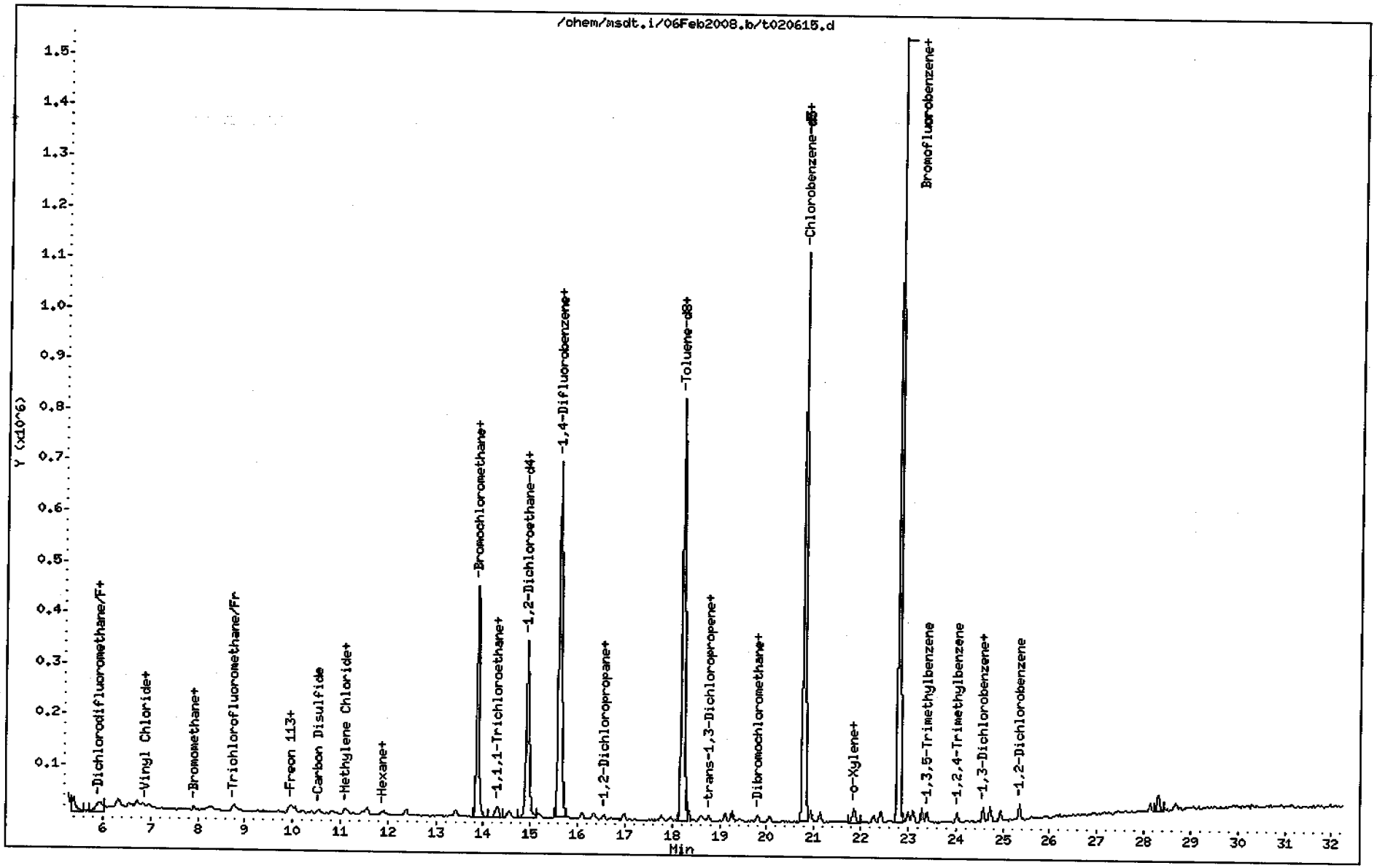
Data File: /chem/msdt.i/06Feb2008.b/t020615.d
Date : 06-FEB-2008 22:02
Client ID: Level 2
Sample Info: 0.5mL #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

0205



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022102.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 21-FEB-2008 09:41
Operator : sjr
Inst ID: msdt.i
Smp Info : 2.0ml #1576-299
Misc Info : 200ppbv -> 2.0(12.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 09:41
Cal File: t022102.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	323136	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	248884			26.66- 126.66	77.02
13.865	13.865 (1.000)	49	384478			100.22- 200.22	118.98
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1233520	25.0000		50.00- 150.00	100.00
15.607	15.607 (1.000)	88	206796			0.00- 66.22	16.76
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1168316	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	676739			7.02- 107.02	57.92
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	79733	2.00000	2.000	50.00- 150.00	100.00
6.407	6.407 (0.462)	45	18145			0.00- 72.76	22.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	83658	2.00000	2.000	50.00- 150.00	100.00
5.422	5.422 (0.391)	85	25442			0.00- 80.41	30.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.422	5.422 (0.391)	87	9056			0.00- 60.83	10.83
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	37002	2.00000	2.000	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	29504			29.74- 129.74	79.74
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	21576	2.00000	2.000	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	40829			139.23- 239.23	189.23
5.844	5.844 (0.422)	47	9103			0.00- 92.19	42.19
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	8970	2.00000	2.000	50.00- 150.00	100.00
5.985	5.985 (0.432)	51	50505			513.04- 613.04	563.04
5.985	5.985 (0.432)	85	2799			0.00- 81.20	31.20
26 Methanol					CAS #: 67-56-1		
7.562	7.562 (0.545)	31	107293	12.0000	12.000	50.00- 150.00	100.00(a)
7.562	7.562 (0.545)	32	159991			99.12- 199.12	149.12
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	63623	2.00000	2.000	50.00- 150.00	100.00
8.717	8.717 (0.629)	69	20718			0.00- 82.56	32.56
8.688	8.688 (0.627)	35	3460			0.00- 55.44	5.44
40 Freon123a					CAS #: 354-23-4		
9.579	9.579 (0.691)	67	43195	2.00000	2.000	50.00- 150.00	100.00
9.579	9.579 (0.691)	117	30046			19.56- 119.56	69.56
41 Freon123					CAS #: 306-83-2		
9.690	9.690 (0.699)	83	5312	2.00000	2.000	50.00- 150.00	100.00
9.745	9.745 (0.703)	133	1071			0.00- 70.16	20.16
9.579	9.579 (0.691)	85	21678			358.09- 458.09	408.09
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	89483	2.00000	2.000	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	25084			0.00- 78.03	28.03
12.289	12.289 (0.886)	59	11599			0.00- 62.96	12.96
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	4135	2.00000	2.000	50.00- 150.00	100.00
12.427	12.427 (0.896)	59	3892			44.12- 144.12	94.12
12.289	12.289 (0.886)	41	23097			508.57- 608.57	558.57
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	83489	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	36614			0.00- 93.85	43.85
12.925	12.925 (0.932)	41	21913			0.00- 76.25	26.25
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	11280	2.00000	2.000	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	9228			31.81- 131.81	81.81
13.395	13.395 (0.966)	43	57387			458.75- 558.75	508.75
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	81705	2.00000	2.000	50.00- 150.00	100.00
15.026	15.026 (1.084)	87	18497			0.00- 72.64	22.64
14.999	14.999 (1.082)	55	21377			0.00- 76.16	26.16
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	32947	2.00000	2.000	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	45146			87.03- 187.03	137.03
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	9606	2.00000	2.000	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	10253			56.74- 156.74	106.74
15.801	15.801 (1.011)	43	8257			35.96- 135.96	85.96
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	24048	2.00000	2.000	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	11636			0.00- 98.39	48.39
19.533	19.533 (1.249)	43	54116			175.03- 275.03	225.03
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	25477	2.00000	2.000	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	12571			0.00- 99.34	49.34
22.741	22.741 (1.093)	42	15548			11.03- 111.03	61.03
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	67522	2.00000	2.000	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	63912			44.65- 144.65	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022102.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 2.0(12.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 09:41
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	323136	193882	452390	323136	0.00
97 1,4-Difluorobenze	1233520	740112	1726928	1233520	0.00
126 Chlorobenzene-d5	1168316	700990	1635642	1168316	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

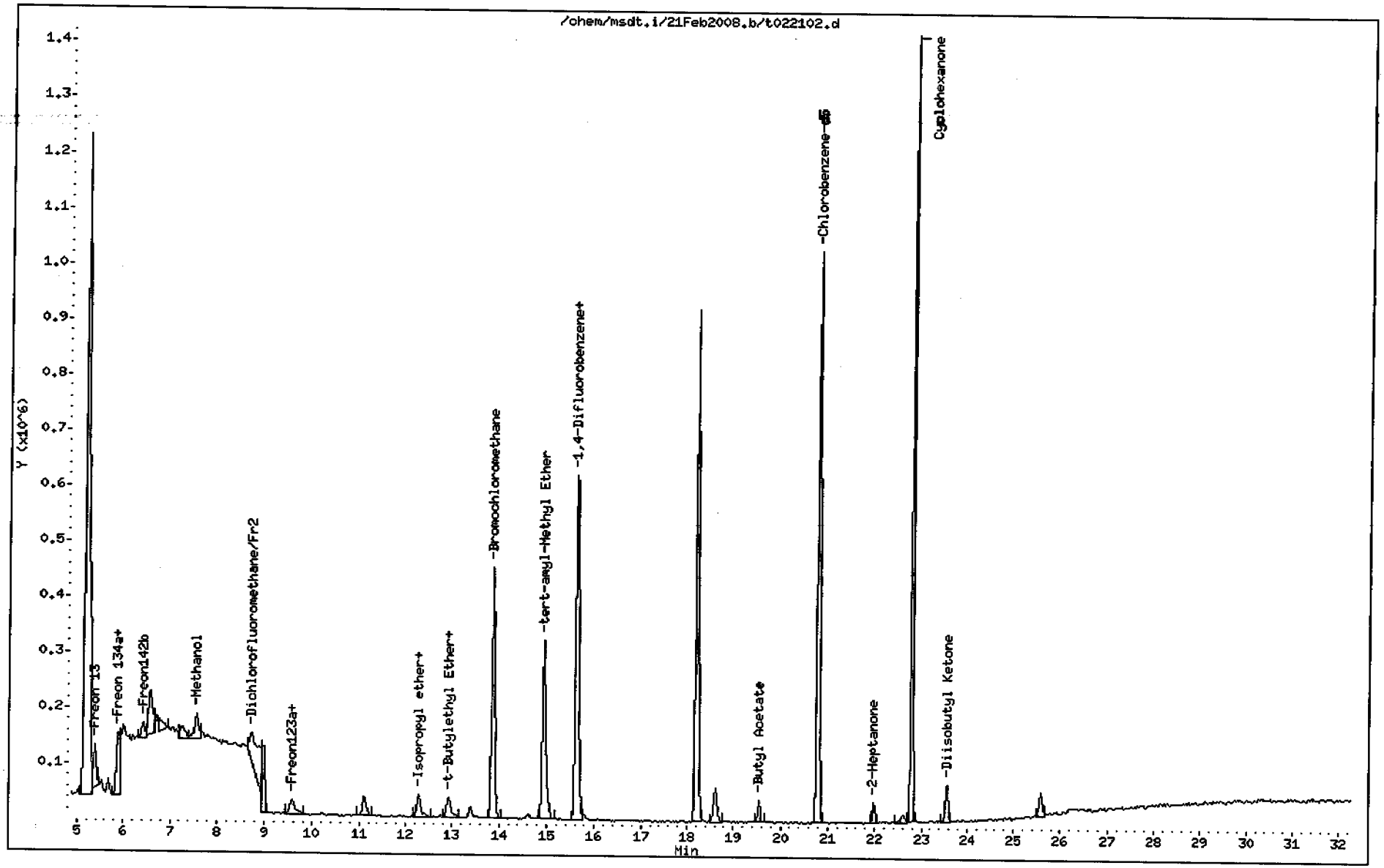
Data File: /chem/msdt.i/21Feb2008.b/t022102.d
Date : 21-FEB-2008 09:41
Client ID: Level 3
Sample Info: 2.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0210



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020609.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 06-FEB-2008 15:52
Operator : sjr
Inst ID: msdt.i
Smp Info : 2.0ml #1576-261
Misc Info : 200ppbv -> 2.0ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 15:52
Cal File: t020609.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
**	======= ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.858	13.858 (1.000)	130	335688	25.0000			50.00- 150.00	100.00
13.858	13.858 (1.000)	128	253015				26.39- 126.39	75.37
13.858	13.858 (1.000)	49	393871				99.95- 199.95	117.33
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1208496	25.0000			50.00- 150.00	100.00
15.628	15.628 (1.000)	88	195592				0.00- 66.12	16.18
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1074623	25.0000			50.00- 150.00	100.00
20.798	20.798 (1.000)	82	603306				6.72- 106.72	56.14
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	504523	25.0000	23.357		50.00- 150.00	100.00
14.936	14.936 (1.078)	67	255336				3.57- 103.57	50.61
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1147306	25.0000	24.646		50.00- 150.00	100.00
18.199	18.199 (1.165)	70	135898				0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	787197			18.71- 118.71	68.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	679408	25.0000	24.442	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	860445			75.58- 175.58	126.65
22.789	22.789 (1.096)	176	670526			47.41- 147.41	98.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	22739	2.00000	2.071	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	15435			17.96- 117.96	67.88
5.784	5.784 (0.417)	39	20226			33.44- 133.44	88.95
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	123293	2.00000	1.881	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	38794			0.00- 82.13	31.46
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	78566	2.00000	1.813	50.00- 150.00	100.00
6.282	6.282 (0.453)	137	26889			0.00- 81.89	34.22
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	26540	2.00000	1.854	50.00- 150.00	100.00(a)
6.531	6.531 (0.471)	52	9438			0.00- 83.62	35.56
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	34443	2.00000	1.753	50.00- 150.00	100.00
6.863	6.863 (0.495)	64	15275			0.00- 89.61	44.35
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	27542	2.00000	1.863	50.00- 150.00	100.00
6.946	6.946 (0.501)	39	26577			53.33- 153.33	96.50
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	34627	2.00000	1.780	50.00- 150.00	100.00
7.913	7.913 (0.571)	96	36867			43.69- 143.69	106.47
27 Chloroethane					CAS #: 75-00-3		
8.162	8.162 (0.589)	64	18101	2.00000	1.766	50.00- 150.00	100.00
8.162	8.162 (0.589)	49	4451			0.00- 76.71	24.59
8.162	8.162 (0.589)	66	6377			0.00- 83.02	35.23
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.770	8.770 (0.633)	101	138682	2.00000	1.869	50.00- 150.00	100.00
8.770	8.770 (0.633)	103	89495			13.52- 113.52	64.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	8250	2.00000	1.453	50.00- 150.00	100.00(a)
9.241	9.241 (0.667)	43	2392			0.00- 75.24	28.99
9.241	9.241 (0.667)	46	4013			0.00- 89.78	48.64
42 Freon 113					CAS #: 76-13-1		
9.932	9.932 (0.717)	151	65484	2.00000	1.916	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	41750			14.28- 114.28	63.76
9.932	9.932 (0.717)	101	88957			80.55- 180.55	135.85
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	52759	2.00000	1.715	50.00- 150.00	100.00
10.042	10.042 (0.725)	96	35580			13.15- 113.15	67.44
10.042	10.042 (0.725)	98	22419			0.00- 88.14	42.49
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	17325	2.00000	1.818	50.00- 150.00	100.00(a)
10.181	10.181 (0.735)	43	56147			267.82- 367.82	324.08
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	49508	2.00000	1.516	50.00- 150.00	100.00(a)
10.374	10.374 (0.749)	43	15582			0.00- 76.64	31.47
10.374	10.374 (0.749)	59	2412			0.00- 54.31	4.87
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	104722	2.00000	1.800	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	15372	2.00000	1.534	50.00- 150.00	100.00
10.817	10.817 (0.781)	41	36495			173.84- 273.84	237.41
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	37218	2.00000	1.914	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	31883			36.08- 136.08	85.67
11.093	11.093 (0.800)	51	11885			0.00- 83.83	31.93
60 MTBE					CAS #: 1634-04-4		
11.452	11.452 (0.826)	73	66761	2.00000	1.196	50.00- 150.00	100.00
11.452	11.452 (0.826)	57	12002			0.00- 69.02	17.98
11.452	11.452 (0.826)	41	12228			0.00- 70.47	18.32
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	37657	2.00000	1.648	50.00- 150.00	100.00
11.535	11.535 (0.832)	61	60152			95.77- 195.77	159.74
11.535	11.535 (0.832)	98	27454			16.26- 116.26	72.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	47780	2.00000	1.584	50.00- 150.00	100.00
11.895	11.895 (0.858)	43	27530			9.30- 109.30	57.62
11.895	11.895 (0.858)	86	8949			0.00- 66.83	18.73
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	8827	2.00000	1.493	50.00- 150.00	100.00(a)
12.365	12.365 (0.892)	43	72295			832.23- 932.23	819.02
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	75018	2.00000	1.778	50.00- 150.00	100.00
12.365	12.365 (0.892)	65	22968			0.00- 82.79	30.62
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	17305	2.00000	1.612	50.00- 150.00	100.00
13.388	13.388 (0.966)	43	54370			275.22- 375.22	314.19
13.388	13.388 (0.966)	57	5456			0.00- 79.56	31.53
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	49131	2.00000	1.730	50.00- 150.00	100.00
13.416	13.416 (0.968)	96	40888			27.39- 127.39	83.22
13.416	13.416 (0.968)	98	25507			0.96- 100.96	51.92
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	29321	2.00000	1.619	50.00- 150.00	100.00
13.886	13.886 (1.002)	71	14128			0.00- 99.16	48.18
13.858	13.858 (1.000)	72	15805			2.04- 102.04	53.90
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	92125	2.00000	1.890	50.00- 150.00	100.00
13.941	13.941 (1.006)	85	57968			16.43- 116.43	62.92
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	97885	2.00000	1.815	50.00- 150.00	100.00
14.273	14.273 (1.030)	99	63207			17.45- 117.45	64.57
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	46052	2.00000	1.595	50.00- 150.00	100.00
14.300	14.300 (1.032)	56	44767			47.55- 147.55	97.21
14.300	14.300 (1.032)	41	25199			5.12- 105.12	54.72
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	92572	2.00000	1.787	50.00- 150.00	100.00
14.549	14.549 (1.050)	117	96223			53.78- 153.78	103.94
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	113789	2.00000	1.883	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	26346			0.00- 73.50	23.15
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	112642	2.00000	1.600	50.00- 150.00	100.00
14.881	14.881 (1.074)	56	37981			0.00- 82.82	33.72
14.881	14.881 (1.074)	41	33953			0.00- 78.43	30.14
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	55658	2.00000	1.888	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	18886			0.00- 84.23	33.93
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	28458	2.00000	1.664	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	38964			85.70- 185.70	136.92
15.185	15.185 (0.972)	57	22207			28.72- 128.72	78.03
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	47821	2.00000	1.848	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	44019			42.94- 142.94	92.05
16.098	16.098 (1.030)	97	30818			13.25- 113.25	64.44
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	36803	2.00000	1.805	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	26650			21.32- 121.32	72.41
16.568	16.568 (1.060)	41	20186			8.96- 108.96	54.85
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	23425	2.00000	1.570	50.00- 150.00	100.00(a)
16.678	16.678 (1.067)	58	14454			9.36- 109.36	61.70
16.706	16.706 (1.069)	57	5506			0.00- 71.19	23.50
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	85032	2.00000	1.836	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	56563			13.51- 113.51	66.52
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	51480	2.00000	1.657	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	17678			0.00- 84.89	34.34
17.784	17.784 (1.138)	39	24641			0.00- 97.13	47.87
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	20175	2.00000	1.430	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	50030			175.34- 275.34	247.98
17.978	17.978 (1.150)	85	10629			0.64- 100.64	52.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	120521	2.00000	1.871	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	71179			11.62- 111.62	59.06
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	59843	2.00000	1.762	50.00- 150.00	100.00
18.752	18.752 (0.902)	77	20118			0.00- 81.86	33.62
18.752	18.752 (0.902)	39	25251			0.00- 91.58	42.20
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	47042	2.00000	1.922	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	29057			13.21- 113.21	61.77
19.111	19.111 (0.919)	83	38865			35.76- 135.76	82.62
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	61038	2.00000	1.861	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	45046			19.36- 119.36	73.80
19.277	19.277 (0.927)	131	43125			16.43- 116.43	70.65
121 2-Hexanone					CAS #: 591-78-6		
19.443	19.443 (0.935)	58	21928	2.00000	1.070	50.00- 150.00	100.00(a)
19.416	19.416 (0.934)	43	43343			124.96- 224.96	197.66
19.443	19.443 (0.935)	100	5059			0.00- 71.71	23.07
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	73614	2.00000	1.766	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	61421			28.82- 128.82	83.44
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	68894	2.00000	1.769	50.00- 150.00	100.00
20.051	20.051 (0.964)	109	66726			46.68- 146.68	96.85
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	107793	2.00000	1.907	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	32353			0.00- 82.06	30.01
20.853	20.853 (1.003)	77	75346			22.53- 122.53	69.90
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	53200	2.00000	1.817	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	171345			269.96- 369.96	322.08
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	66296	2.00000	1.798	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	127807			149.87- 249.87	192.78
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	61779	2.00000	1.761	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	123534			160.81- 260.81	199.96
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	86239	2.00000	1.605	50.00- 150.00	100.00
21.876	21.876 (1.052)	78	46667			9.02- 109.02	54.11
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	78029	2.00000	1.744	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	43129			1.83- 101.83	55.27
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	168444	2.00000	1.741	50.00- 150.00	100.00
22.429	22.429 (1.078)	120	43006			0.00- 77.62	25.53
22.429	22.429 (1.078)	51	12970			0.00- 58.75	7.70
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	111264	2.00000	1.978	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	71555			16.89- 116.89	64.31
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	233544	2.00000	1.862	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	50752			0.00- 71.63	21.73
23.121	23.121 (1.112)	105	8175			0.00- 53.71	3.50
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.286 (1.120)	105	203376	2.00000	1.905	50.00- 150.00	100.00
23.286	23.286 (1.120)	120	60019			0.00- 79.69	29.51
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	167502	2.00000	1.839	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	80768			0.00- 98.23	48.22
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	155174	2.00000	1.808	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	68143			0.00- 94.91	43.91
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	129075	2.00000	2.093	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	83042			14.68- 114.68	64.34
24.586	24.586 (1.182)	111	51936			0.00- 91.36	40.24
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	129470	2.00000	2.040	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	86858			16.09- 116.09	67.09
24.724	24.724 (1.189)	111	52523			0.00- 90.13	40.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	166099	2.00000	1.810	50.00- 150.00	100.00
24.945	24.945 (1.199)	126	32450			0.00- 69.28	19.54
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	127527	2.00000	2.122	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	87225			15.85- 115.85	68.40
25.360	25.360 (1.219)	111	57743			0.00- 94.46	45.28
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	87930	2.00000	1.919	50.00- 150.00	100.00(a)
28.153	28.153 (1.354)	182	83811			44.78- 144.78	95.32
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	106764	2.00000	2.315	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	66440			12.90- 112.90	62.23
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	109061	2.00000	1.719	50.00- 150.00	100.00(a)
28.678	28.678 (1.379)	127	15349			0.00- 62.74	14.07
29 Isopentane					CAS #: 78-78-4		
8.245	8.245 (0.595)	43	38125	2.00000	1.757	50.00- 150.00	100.00(a)
8.273	8.273 (0.597)	57	29545			27.67- 127.67	77.50
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	6720	2.00000	1.788	50.00- 150.00	100.00(a)
6.780	6.780 (0.489)	43	51151			666.74- 766.74	761.18
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	55043	2.00000	1.610	50.00- 150.00	100.00
16.346	16.346 (1.180)	98	24267			0.00- 95.22	44.09
16.346	16.346 (1.180)	55	36926			20.82- 120.82	67.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	49102	2.00000	1.379	50.00- 150.00	100.00(a)
11.148	11.148 (0.804)	41	11220			0.00- 72.85	22.85
11.148	11.148 (0.804)	57	4875			0.00- 59.93	9.93

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020609.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 2.0ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 15:52
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	335688	201413	469963	335688	0.00
97 1,4-Difluorobenze	1208496	725098	1691894	1208496	0.00
126 Chlorobenzene-d5	1074623	644774	1504472	1074623	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

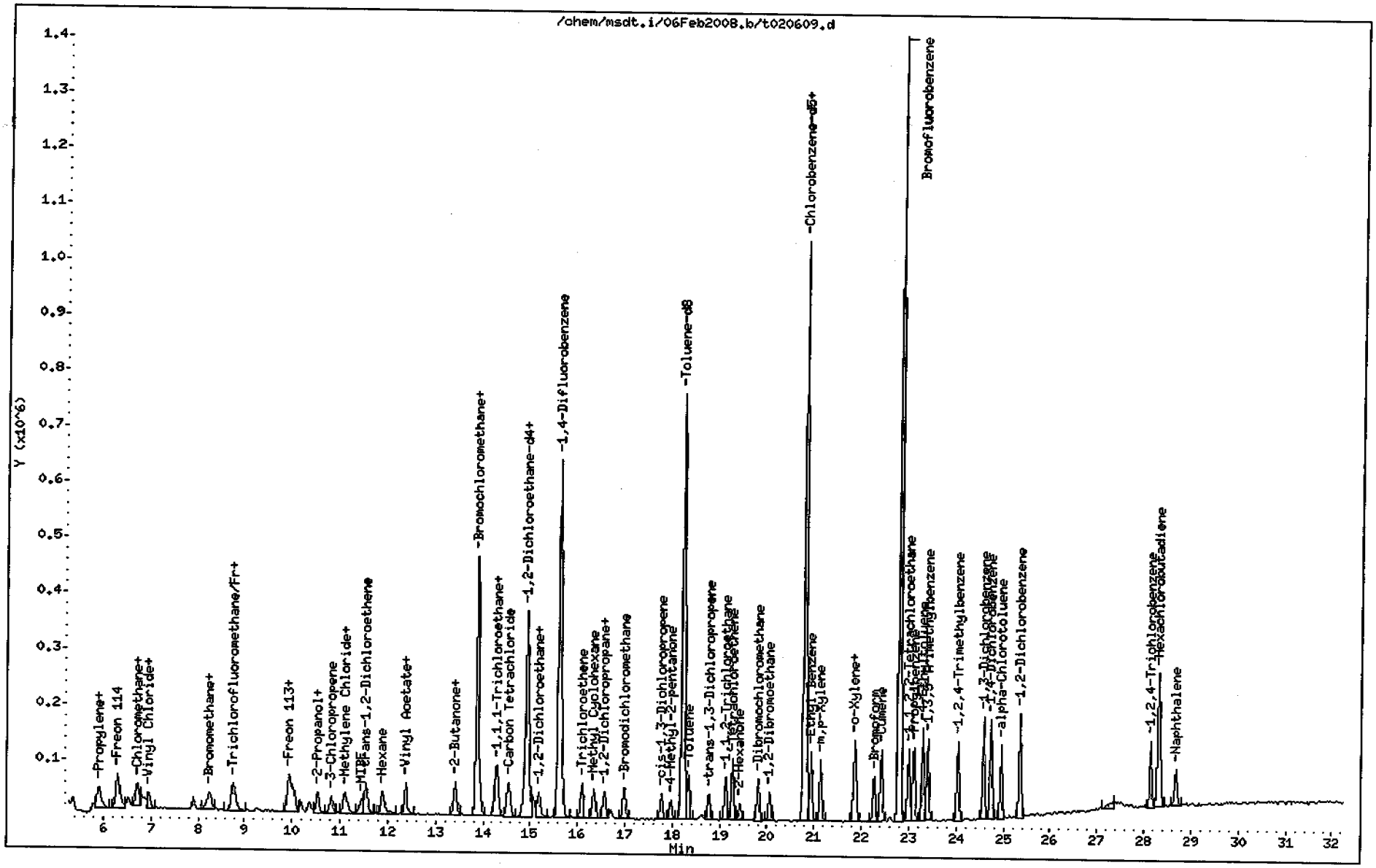
Data File: /chem/msdt.i/06Feb2008.b/t020609.d
Date : 06-FEB-2008 15:52
Client ID: Level 3
Sample Info: 2.0ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0220



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022103.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 21-FEB-2008 10:21
Operator : sjr
Inst ID: msdt.i
Smp Info : 8.0ml #1576-299
Misc Info : 200ppbv -> 8.0(48.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 10:21
Cal File: t022103.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312185	25.0000			50.00- 150.00	100.00
13.865	13.865 (1.000)	128	236346				26.53- 126.53	75.71
13.865	13.865 (1.000)	49	371766				95.42- 195.42	119.09
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1223661	25.0000			50.00- 150.00	100.00
15.635	15.635 (1.000)	88	198736				0.00- 66.25	16.24
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1150030	25.0000			50.00- 150.00	100.00
20.805	20.805 (1.000)	82	661640				7.16- 107.16	57.53
6 Freon142b						CAS #: 75-68-3		
6.408	6.408 (0.462)	65	314391	8.00000	8.080		50.00- 150.00	100.00
6.408	6.408 (0.462)	45	67573				0.00- 72.13	21.49
9 Freon 13						CAS #: 75-72-9		
5.394	5.394 (0.389)	69	329101	8.00000	8.071		50.00- 150.00	100.00
5.394	5.394 (0.389)	85	99340				0.00- 80.30	30.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.394	5.394 (0.389)	87	34120			0.00- 60.60	10.37
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	141460	8.00000	7.957	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	121869			32.94- 132.94	86.15
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	73331	8.00000	7.487	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	133000			135.30- 235.30	181.37
5.844	5.844 (0.422)	47	31133			0.00- 92.32	42.46
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	36362	8.00000	8.191	50.00- 150.00	100.00
5.985	5.985 (0.432)	51	183210			483.45- 583.45	503.85
5.985	5.985 (0.432)	85	4459			0.00- 71.73	12.26
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	197031	48.0000	30.924	50.00- 150.00	100.00(a)
7.534	7.534 (0.543)	32	284448			96.74- 196.74	144.37
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	247871	8.00000	8.032	50.00- 150.00	100.00
8.717	8.717 (0.629)	69	81283			0.00- 82.68	32.79
8.717	8.717 (0.629)	35	14325			0.00- 55.61	5.78
40 Freon123a					CAS #: 354-23-4		
9.580	9.580 (0.691)	67	180610	8.00000	8.315	50.00- 150.00	100.00
9.580	9.580 (0.691)	117	129025			20.50- 120.50	71.44
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	20901	8.00000	8.072	50.00- 150.00	100.00
9.745	9.745 (0.703)	133	4660			0.00- 71.23	22.30
9.580	9.580 (0.691)	85	89551			368.27- 468.27	428.45
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	351422	8.00000	8.064	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	111725			0.00- 79.91	31.79
12.289	12.289 (0.886)	59	41310			0.00- 62.36	11.76
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	23591	8.00000	9.539	50.00- 150.00	100.00
12.400	12.400 (0.894)	59	31738			64.33- 164.33	134.53
12.400	12.400 (0.894)	41	18558			268.62- 368.62	78.67
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	353478	8.00000	8.365	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	151766			0.00- 93.39	42.94
12.925	12.925 (0.932)	41	69691			0.00- 72.98	19.72
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	37234	8.00000	7.371	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	39315			43.70- 143.70	105.59
13.395	13.395 (0.966)	43	256151			548.35- 648.35	687.95
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	341472	8.00000	8.313	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	75821			0.00- 72.42	22.20
14.999	14.999 (1.082)	55	93846			0.00- 76.82	27.48
96 2-Heptanone					CAS #: 110-43-0		
21.994	21.994 (1.586)	58	165986	8.00000	9.054	50.00- 150.00	100.00
21.967	21.967 (1.584)	43	236874			89.87- 189.87	142.71
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	55918	8.00000	9.514	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	42576			41.44- 141.44	76.14
15.801	15.801 (1.011)	43	29218			19.10- 119.10	52.25
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	110364	8.00000	8.581	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	48409			0.00- 96.12	43.86
19.533	19.533 (1.249)	43	247267			174.54- 274.54	224.05
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	151594	8.00000	9.628	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	75635			0.00- 99.62	49.89
22.741	22.741 (1.093)	42	93458			11.34- 111.34	61.65
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	340934	8.00000	8.990	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	328214			45.46- 145.46	96.27
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022103.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 8.0(48.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 10:21
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312185	187311	437059	312185	0.00
97 1,4-Difluorobenze	1223661	734197	1713125	1223661	0.00
126 Chlorobenzene-d5	1150030	690018	1610042	1150030	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

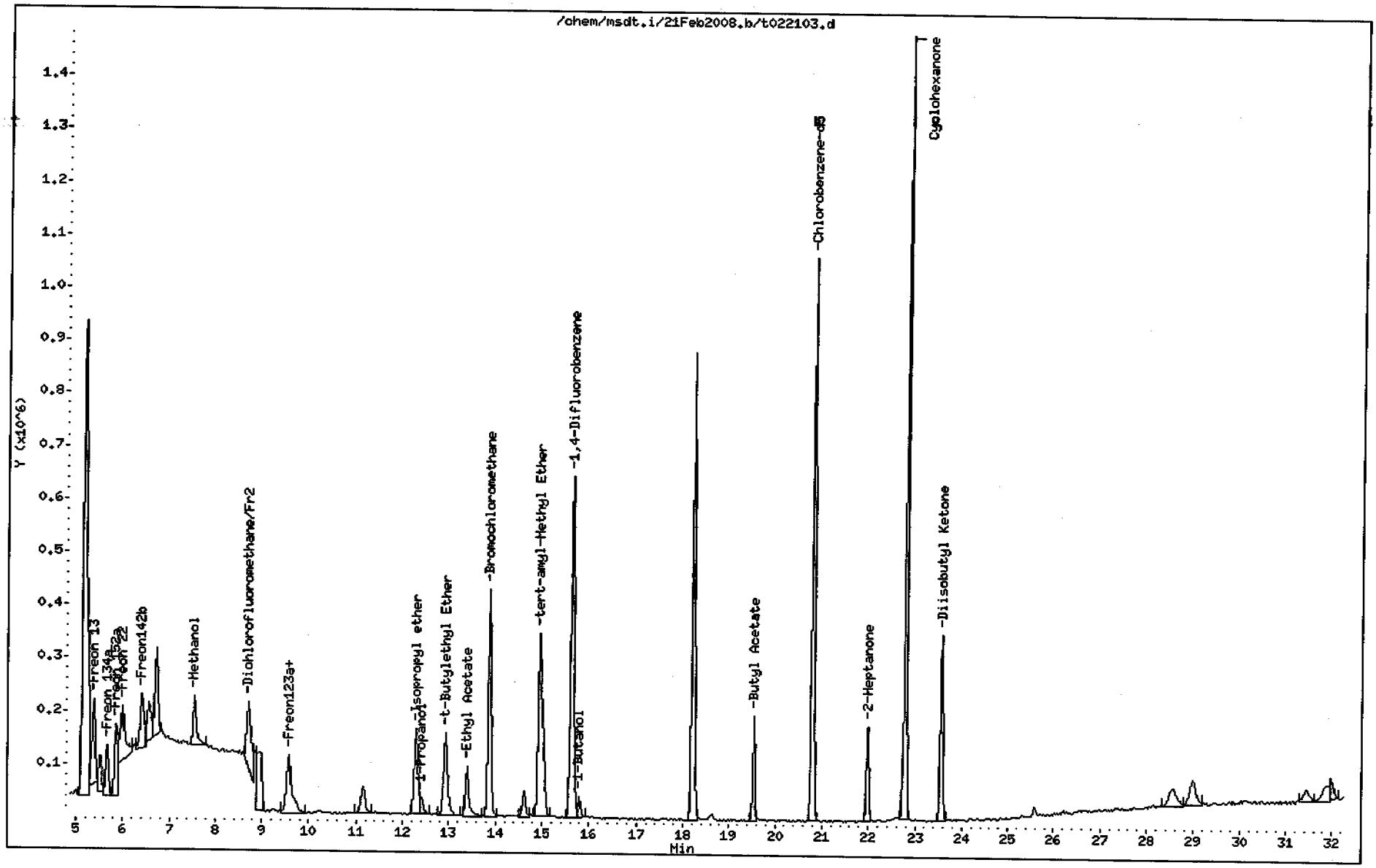
Data File: /chem/msdt.i/21Feb2008.b/t022103.d
Date : 21-FEB-2008 10:21
Client ID: Level 4
Sample Info: 8.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0225



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020610.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 06-FEB-2008 16:33
Operator : sjr
Inst ID: msdt.i
Smp Info : 25ml #1576-261
Misc Info : 200ppbv -> 25ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 16:33
Cal File: t020610.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	334218	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	255710			26.39- 126.39	76.51
13.858	13.858 (1.000)	49	494332			99.95- 199.95	147.91
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1289398	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	207335			0.00- 66.12	16.08
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1136429	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	643863			6.72- 106.72	56.66
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.937	14.937 (1.076)	65	532290	25.0000	24.751	50.00- 150.00	100.00
14.937	14.937 (1.076)	67	283909			3.57- 103.57	53.34
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1243286	25.0000	25.032	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	135082			0.00- 61.29	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	859790			18.71- 118.71	69.15
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	723188	25.0000	24.602	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	908149			75.58- 175.58	125.58
22.789	22.789 (1.096)	176	710103			47.41- 147.41	98.19
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	284287	25.0000	26.006	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	196485			17.96- 117.96	69.12
5.812	5.812 (0.419)	39	232847			33.44- 133.44	81.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	1805554	25.0000	27.666	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	593653			0.00- 82.13	32.88
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	1167878	25.0000	27.071	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	380476			0.00- 81.89	32.58
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	370794	25.0000	26.025	50.00- 150.00	100.00
6.531	6.531 (0.470)	52	124290			0.00- 83.62	33.52
20 Vinyl Chloride					CAS #: 75-01-4		
6.891	6.891 (0.496)	62	533497	25.0000	27.273	50.00- 150.00	100.00
6.891	6.891 (0.496)	64	172106			0.00- 89.61	32.26
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	405591	25.0000	27.552	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	386988			53.33- 153.33	95.41
25 Bromomethane					CAS #: 74-83-9		
7.914	7.914 (0.570)	94	524382	25.0000	27.074	50.00- 150.00	100.00
7.914	7.914 (0.570)	96	479513			43.69- 143.69	91.44
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	279105	25.0000	27.358	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	74678			0.00- 76.71	26.76
8.190	8.190 (0.590)	66	91110			0.00- 83.02	32.64
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	2071216	25.0000	28.034	50.00- 150.00	100.00
8.771	8.771 (0.632)	103	1351487			13.52- 113.52	65.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	155269	25.0000	27.468	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	37536			0.00- 75.24	24.17
9.241	9.241 (0.665)	46	55946			0.00- 89.78	36.03
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	936482	25.0000	27.528	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	599235			14.28- 114.28	63.99
9.960	9.960 (0.717)	101	1225808			80.55- 180.55	130.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.043	10.043 (0.723)	61	847928	25.0000	27.691	50.00- 150.00	100.00
10.043	10.043 (0.723)	96	515431			13.15- 113.15	60.79
10.043	10.043 (0.723)	98	326894			0.00- 88.14	38.55
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	251564	25.0000	26.508	50.00- 150.00	100.00
10.181	10.181 (0.733)	43	818668			267.82- 367.82	325.43
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	858121	25.0000	26.385	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	230141			0.00- 76.64	26.82
10.374	10.374 (0.747)	59	35435			0.00- 54.31	4.13
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	1571599	25.0000	27.134	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	280286	25.0000	28.102	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	605264			173.84- 273.84	215.95
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	515852	25.0000	26.641	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	457155			36.08- 136.08	88.62
11.093	11.093 (0.799)	51	169738			0.00- 83.83	32.90
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	1789417	25.0000	32.190	50.00- 150.00	100.00
11.453	11.453 (0.825)	57	342391			0.00- 69.02	19.13
11.453	11.453 (0.825)	41	333822			0.00- 70.47	18.66
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	663385	25.0000	29.151	50.00- 150.00	100.00
11.536	11.536 (0.831)	61	928452			95.77- 195.77	139.96
11.563	11.563 (0.833)	98	425861			16.26- 116.26	64.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	875954	25.0000	29.169	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	512217			9.30- 109.30	58.48
11.895	11.895 (0.857)	86	154784			0.00- 66.83	17.67
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	153376	25.0000	26.051	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	1371221			832.23- 932.23	894.03
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	1208705	25.0000	28.768	50.00- 150.00	100.00
12.365	12.365 (0.890)	65	387741			0.00- 82.79	32.08
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	292440	25.0000	27.357	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	970748			275.22- 375.22	331.95
13.388	13.388 (0.964)	57	81299			0.00- 79.56	27.80
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	814797	25.0000	28.821	50.00- 150.00	100.00
13.416	13.416 (0.966)	96	629811			27.39- 127.39	77.30
13.416	13.416 (0.966)	98	405600			0.96- 100.96	49.78
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	516188	25.0000	28.629	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	270836			0.00- 99.16	52.47
13.858	13.858 (0.998)	72	286491			2.04- 102.04	55.50
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	1434387	25.0000	29.549	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	936553			16.43- 116.43	65.29
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	1561890	25.0000	29.090	50.00- 150.00	100.00
14.273	14.273 (1.028)	99	1011367			17.45- 117.45	64.75
85 Cyclohexane					CAS #: 110-82-7		
14.301	14.301 (1.030)	84	831348	25.0000	28.918	50.00- 150.00	100.00
14.301	14.301 (1.030)	56	822590			47.55- 147.55	98.95
14.301	14.301 (1.030)	41	437816			5.12- 105.12	52.66
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	1495659	25.0000	29.000	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	1593507			53.78- 153.78	106.54
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	1805921	25.0000	28.017	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	415076			0.00- 73.50	22.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	2040326	25.0000	29.108	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	651578			0.00- 82.82	31.93
14.881	14.881 (1.072)	41	527319			0.00- 78.43	25.84
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	899538	25.0000	28.604	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	287058			0.00- 84.23	31.91
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	539758	25.0000	29.582	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	725497			85.70- 185.70	134.41
15.185	15.185 (0.972)	57	433724			28.72- 128.72	80.36
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	809796	25.0000	29.332	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	736330			42.94- 142.94	90.93
16.098	16.098 (1.030)	97	502564			13.25- 113.25	62.06
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	617846	25.0000	28.408	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	449048			21.32- 121.32	72.68
16.568	16.568 (1.060)	41	350593			8.96- 108.96	56.74
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	419073	25.0000	26.325	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	248796			9.36- 109.36	59.37
16.706	16.706 (1.069)	57	87940			0.00- 71.19	20.98
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	1452860	25.0000	29.405	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	925446			13.51- 113.51	63.70
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	960843	25.0000	28.993	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	311058			0.00- 84.89	32.37
17.784	17.784 (1.138)	39	433889			0.00- 97.13	45.16
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	443863	25.0000	29.477	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	1012229			175.34- 275.34	228.05
17.978	17.978 (1.150)	85	219633			0.64- 100.64	49.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	1989625	25.0000	28.948	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	1214679			11.62- 111.62	61.05
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	1069541	25.0000	29.778	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	338491			0.00- 81.86	31.65
18.752	18.752 (0.902)	39	431851			0.00- 91.58	40.38
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.112	19.112 (0.919)	97	770359	25.0000	29.759	50.00- 150.00	100.00
19.112	19.112 (0.919)	99	476886			13.21- 113.21	61.90
19.112	19.112 (0.919)	83	637669			35.76- 135.76	82.78
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	1044211	25.0000	30.103	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	733649			19.36- 119.36	70.26
19.277	19.277 (0.927)	131	692279			16.43- 116.43	66.30
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	600804	25.0000	27.717	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	1022657			124.96- 224.96	170.21
19.416	19.416 (0.934)	100	132839			0.00- 71.71	22.11
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	1348982	25.0000	30.605	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	1034685			28.82- 128.82	76.70
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	1251667	25.0000	30.398	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	1153749			46.68- 146.68	92.18
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	1743887	25.0000	29.181	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	545791			0.00- 82.06	31.30
20.853	20.853 (1.003)	77	1078189			22.53- 122.53	61.83
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	926234	25.0000	29.913	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	2920081			269.96- 369.96	315.26
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	1173062	25.0000	30.086	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	2352767			149.87- 249.87	200.57
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	1125158	25.0000	30.336	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	2362887			160.81- 260.81	210.00
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	1801628	25.0000	31.706	50.00- 150.00	100.00
21.877	21.877 (1.052)	78	925547			9.02- 109.02	51.37
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	1429561	25.0000	30.216	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	734724			1.83- 101.83	51.40
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	3121582	25.0000	30.511	50.00- 150.00	100.00
22.430	22.430 (1.078)	120	803583			0.00- 77.62	25.74
22.430	22.430 (1.078)	51	269302			0.00- 58.75	8.63
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	1766566	25.0000	29.693	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	1142101			16.89- 116.89	64.65
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	3987959	25.0000	30.069	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	870154			0.00- 71.63	21.82
23.121	23.121 (1.112)	105	149480			0.00- 53.71	3.75
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	3468899	25.0000	30.725	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	1046336			0.00- 79.69	30.16
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	2924272	25.0000	30.363	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	1422059			0.00- 98.23	48.63
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	2745190	25.0000	30.249	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	1286024			0.00- 94.91	46.85
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	1892688	25.0000	29.016	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	1226520			14.68- 114.68	64.80
24.586	24.586 (1.182)	111	789350			0.00- 91.36	41.71
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	1952581	25.0000	29.091	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	1247055			16.09- 116.09	63.87
24.724	24.724 (1.189)	111	788240			0.00- 90.13	40.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	2891364	25.0000	29.794	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	551882			0.00- 69.28	19.09
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	1837629	25.0000	28.920	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	1188804			15.85- 115.85	64.69
25.360	25.360 (1.219)	111	792947			0.00- 94.46	43.15
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	1231331	25.0000	25.408	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	1163126			44.78- 144.78	94.46
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	1212587	25.0000	24.861	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	768070			12.90- 112.90	63.34
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	1708446	25.0000	25.470	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	211414			0.00- 62.74	12.37
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	576310	25.0000	26.672	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	453950			27.67- 127.67	78.77
19 Butane					CAS #: 106-97-8		
6.808	6.808 (0.490)	58	101733	25.0000	27.192	50.00- 150.00	100.00
6.808	6.808 (0.490)	43	712263			666.74- 766.74	700.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	978273	25.0000	28.740	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	444120			0.00- 95.22	45.40
16.347	16.347 (1.177)	55	690170			20.82- 120.82	70.55
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.149	11.149 (0.803)	59	1019065	25.0000	28.754	50.00- 150.00	100.00
11.149	11.149 (0.803)	41	225570			0.00- 72.85	22.13
11.149	11.149 (0.803)	57	106009			0.00- 59.93	10.40

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

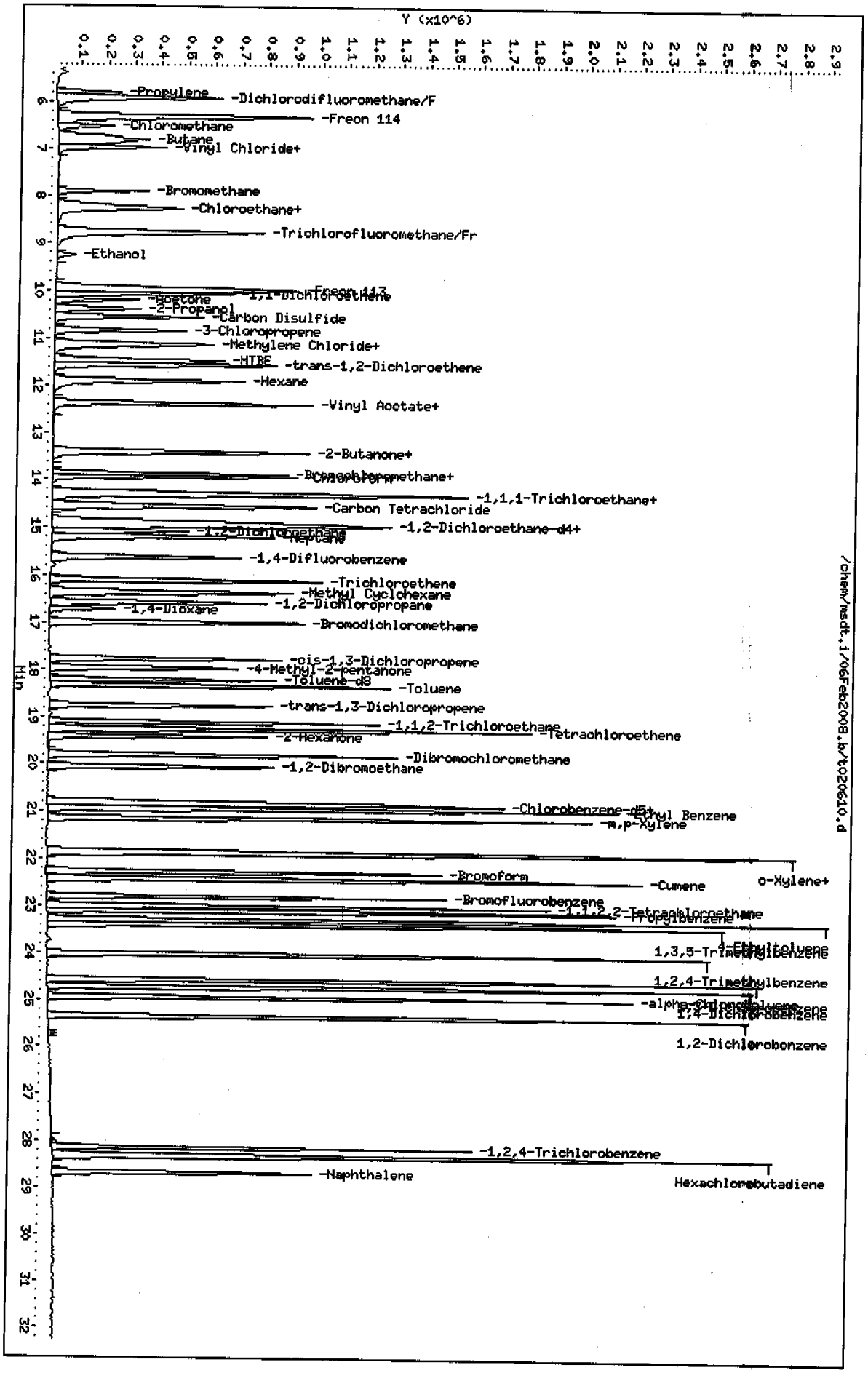
Instrument ID: msdt.i
Lab File ID: t020610.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 25ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 16:33
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	334218	200531	467905	334218	0.00
97 1,4-Difluorobenze	1289398	773639	1805157	1289398	0.00
126 Chlorobenzene-d5	1136429	681857	1591001	1136429	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msdt.i/06Feb2008.b/t020610.d
Date : 06-FEB-2008 16:33
Client ID: Level 4
Sample Info: 25ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr

Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 21-FEB-2008 11:03
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 11:03
Cal File: t022104.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
13.865	13.865 (1.000)	130	312258	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	236420			25.71- 125.71	75.71
13.865	13.865 (1.000)	49	373343			69.56- 169.56	119.56
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.635	15.635 (1.000)	114	1266888	25.0000		80.00- 120.00	100.00
15.635	15.635 (1.000)	88	209470			0.00- 66.53	16.53
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.805	20.805 (1.000)	117	1159473	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	667973			7.40- 107.40	57.61
6 Freon142b						CAS #: 75-68-3	
6.408	6.408 (0.462)	65	2256667	50.0000	55.056	80.00- 120.00	100.00
6.408	6.408 (0.462)	45	455198			0.00- 71.47	20.17
9 Freon 13						CAS #: 75-72-9	
5.366	5.366 (0.387)	69	2091709	50.0000	50.851	80.00- 120.00	100.00
5.366	5.366 (0.387)	85	681331			0.00- 81.06	32.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.366	5.366 (0.387)	87	212271			0.00- 60.45	10.15
13 Freon 134a					CAS #: 811-97-2		
5.647	5.647 (0.407)	83	957959	50.0000	52.516	80.00- 120.00	100.00
5.647	5.647 (0.407)	69	790194			32.79- 132.79	82.49
15 Freon 152a					CAS #: 75-37-6		
5.816	5.816 (0.419)	65	507647	50.0000	51.198	80.00- 120.00	100.00
5.816	5.816 (0.419)	51	855266			129.69- 229.69	168.48
5.816	5.816 (0.419)	47	223144			0.00- 92.87	43.96
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	240792	50.0000	52.743	80.00- 120.00	100.00
5.985	5.985 (0.432)	51	1193969			470.91- 570.91	495.85
5.985	5.985 (0.432)	85	25075			0.00- 67.96	10.41
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	536359	300.000	110.71	80.00- 120.00	100.00
7.534	7.534 (0.543)	32	456083			35.03- 135.03	85.03
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	1630517	50.0000	51.849	80.00- 120.00	100.00
8.717	8.717 (0.629)	69	532919			0.00- 82.68	32.68
8.717	8.717 (0.629)	35	85037			0.00- 55.48	5.22
40 Freon123a					CAS #: 354-23-4		
9.552	9.552 (0.689)	67	1294749	50.0000	56.012	80.00- 120.00	100.00
9.552	9.552 (0.689)	117	946703			21.37- 121.37	73.12
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	146846	50.0000	54.275	80.00- 120.00	100.00
9.718	9.718 (0.701)	133	29959			0.00- 70.95	20.40
9.718	9.718 (0.701)	85	122663			256.69- 356.69	83.53
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	2738824	50.0000	57.883	80.00- 120.00	100.00
12.289	12.289 (0.886)	87	875522			0.00- 80.60	31.97
12.289	12.289 (0.886)	59	320352			0.00- 62.14	11.70
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	118012	50.0000	48.447	80.00- 120.00	100.00
12.400	12.400 (0.894)	59	177514			76.36- 176.36	150.42
12.289	12.289 (0.886)	41	548379			317.31- 417.31	464.68
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	3041136	50.0000	62.766	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	1293560			0.00- 93.11	42.54
12.925	12.925 (0.932)	41	498322			0.00- 70.78	16.39
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	287177	50.0000	54.359	80.00- 120.00	100.00
13.395	13.395 (0.966)	61	317488			49.32- 149.32	110.55
13.395	13.395 (0.966)	43	1980955			578.83- 678.83	689.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	2825604	50.0000	61.124	80.00- 120.00	100.00
14.999	14.999 (1.082)	87	674366			0.00- 72.90	23.87
14.999	14.999 (1.082)	55	659557			0.00- 75.66	23.34
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	1498222	50.0000	67.450	80.00- 120.00	100.00
21.966	21.966 (1.584)	43	2089626			89.74- 189.74	139.47
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	357913	50.0000	55.554	80.00- 120.00	100.00
15.801	15.801 (1.011)	41	242656			33.56- 133.56	67.80
15.801	15.801 (1.011)	43	184494			13.25- 113.25	51.55
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	949314	50.0000	62.430	80.00- 120.00	100.00
19.533	19.533 (1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533 (1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	839726	50.0000	51.897	80.00- 120.00	100.00
22.741	22.741 (1.093)	98	429311			0.12- 100.12	51.13
22.741	22.741 (1.093)	42	544268			12.50- 112.50	64.81
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.543	23.543 (1.132)	57	2863217	50.0000	64.228	80.00- 120.00	100.00
23.570	23.570 (1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	312258	0.00
97 1,4-Difluorobenze	1266888	760133	1773643	1266888	0.00
126 Chlorobenzene-d5	1159473	695684	1623262	1159473	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

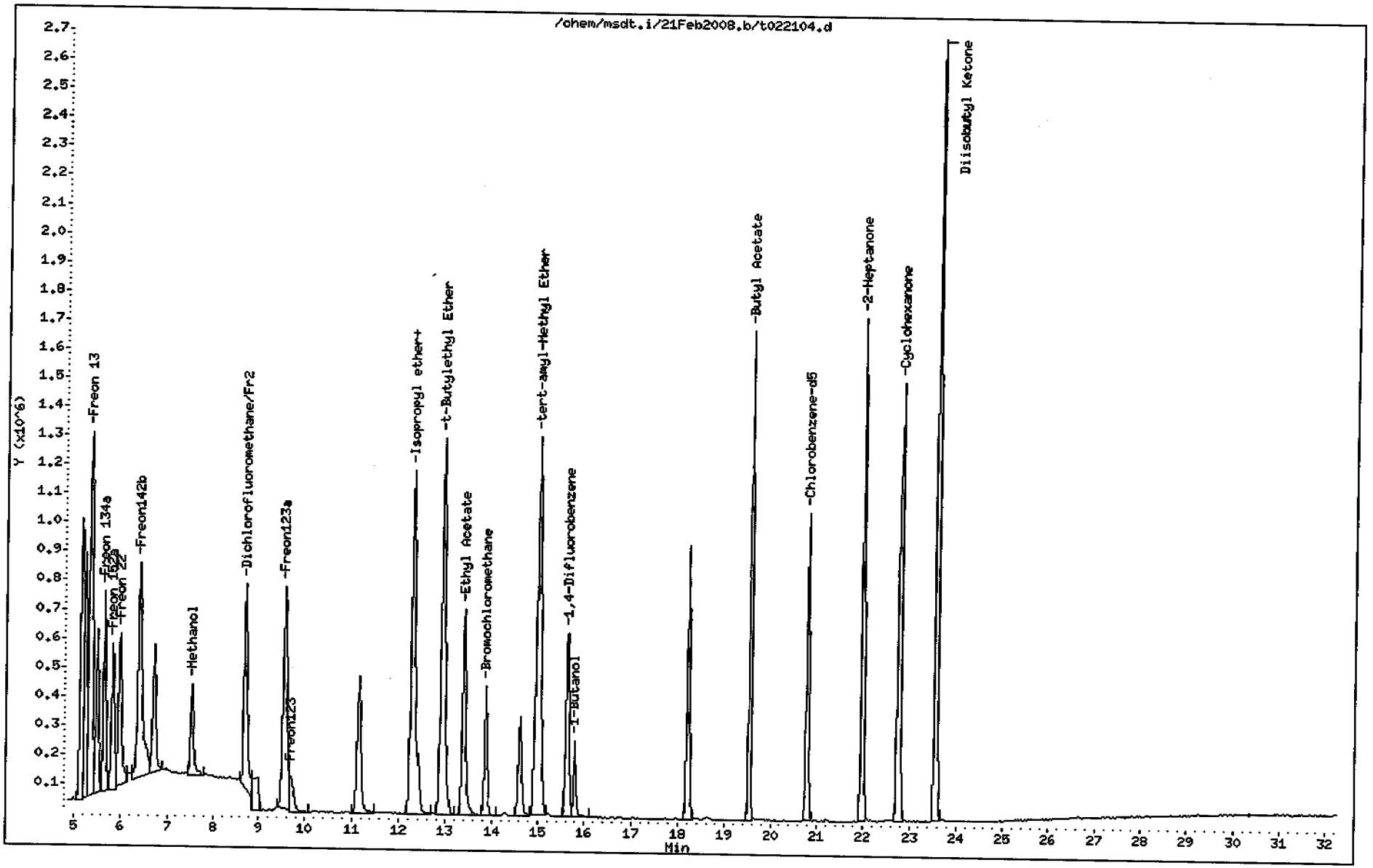
Data File: /chem/msdt.i/21Feb2008.b/t022104.d
Date : 21-FEB-2008 11:03
Client ID: Level 5
Sample Info: 50ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0240



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020611.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 06-FEB-2008 17:13
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:13
Cal File: t020611.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886 (1.000)	130	355997	25.0000			80.00- 120.00	100.00
13.886	13.886 (1.000)	128	270515				25.99- 125.99	75.99
13.858	13.858 (1.000)	49	620343				124.26- 224.26	174.26
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1372567	25.0000			80.00- 120.00	100.00
15.628	15.628 (1.000)	88	218941				0.00- 65.95	15.95
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1227265	25.0000			80.00- 120.00	100.00
20.798	20.798 (1.000)	82	689313				6.72- 106.72	56.17
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	583879	25.0000	25.489		80.00- 120.00	100.00
14.936	14.936 (1.076)	67	331459				3.57- 103.57	56.77
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1318253	25.0000	24.933		80.00- 120.00	100.00
18.199	18.199 (1.165)	70	152530				0.00- 61.29	11.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	907157			18.71- 118.71	68.82
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	802647	25.0000	25.285	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	997548			74.28- 174.28	124.28
22.789	22.789 (1.096)	176	784103			47.69- 147.69	97.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	568844	50.0000	48.853	80.00- 120.00	100.00
5.812	5.812 (0.419)	42	386786			17.96- 117.96	68.00
5.812	5.812 (0.419)	39	460707			33.44- 133.44	80.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	3662828	50.0000	52.692	80.00- 120.00	100.00
5.895	5.895 (0.425)	87	1170633			0.00- 82.13	31.96
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.452)	135	2368790	50.0000	51.549	80.00- 120.00	100.00
6.282	6.282 (0.452)	137	767760			0.00- 81.89	32.41
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	736532	50.0000	48.532	80.00- 120.00	100.00
6.531	6.531 (0.470)	52	242289			0.00- 83.62	32.90
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.494)	62	1053090	50.0000	50.541	80.00- 120.00	100.00
6.863	6.863 (0.494)	64	342558			0.00- 89.61	32.53
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	811723	50.0000	51.767	80.00- 120.00	100.00
6.973	6.973 (0.502)	39	793975			53.33- 153.33	97.81
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	1033071	50.0000	50.075	80.00- 120.00	100.00
7.913	7.913 (0.570)	96	968870			43.79- 143.79	93.79
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	574342	50.0000	52.853	80.00- 120.00	100.00
8.162	8.162 (0.588)	49	147684			0.00- 76.71	25.71
8.162	8.162 (0.588)	66	193610			0.00- 83.02	33.71
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	4148660	50.0000	52.718	80.00- 120.00	100.00
8.771	8.771 (0.632)	103	2679418			14.59- 114.59	64.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	322418	50.0000	53.549	80.00- 120.00	100.00
9.241	9.241 (0.665)	43	79459			0.00- 75.24	24.64
9.241	9.241 (0.665)	46	120478			0.00- 89.78	37.37
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	1858487	50.0000	51.288	80.00- 120.00	100.00
9.960	9.960 (0.717)	153	1188101			13.93- 113.93	63.93
9.960	9.960 (0.717)	101	2437243			81.14- 181.14	131.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	1737278	50.0000	53.263	80.00- 120.00	100.00
10.042	10.042 (0.723)	96	1039511			9.84- 109.84	59.84
10.042	10.042 (0.723)	98	667871			0.00- 88.44	38.44
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	537852	50.0000	53.208	80.00- 120.00	100.00
10.181	10.181 (0.733)	43	1662243			267.82- 367.82	309.05
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	1866517	50.0000	53.880	80.00- 120.00	100.00
10.374	10.374 (0.747)	43	458202			0.00- 76.64	24.55
10.374	10.374 (0.747)	59	78354			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	3176334	50.0000	51.484	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	554160	50.0000	52.162	80.00- 120.00	100.00
10.817	10.817 (0.779)	41	1242594			173.84- 273.84	224.23
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	1027528	50.0000	49.819	80.00- 120.00	100.00
11.121	11.121 (0.801)	84	915087			39.06- 139.06	89.06
11.093	11.093 (0.799)	51	342626			0.00- 83.83	33.34
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	3731089	50.0000	63.014	80.00- 120.00	100.00
11.453	11.453 (0.825)	57	708379			0.00- 68.99	18.99
11.453	11.453 (0.825)	41	693527			0.00- 70.47	18.59
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	1318462	50.0000	54.393	80.00- 120.00	100.00
11.536	11.536 (0.831)	61	1860568			91.12- 191.12	141.12
11.563	11.563 (0.833)	98	850578			16.26- 116.26	64.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	1840132	50.0000	57.528	80.00- 120.00	100.00
11.895	11.895 (0.857)	43	1061185			9.30- 109.30	57.67
11.895	11.895 (0.857)	86	329230			0.00- 66.83	17.89
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	325069	50.0000	51.835	80.00- 120.00	100.00
12.365	12.365 (0.890)	43	2991357			832.23- 932.23	920.22
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	2472619	50.0000	55.250	80.00- 120.00	100.00
12.365	12.365 (0.890)	65	805934			0.00- 82.59	32.59
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	626587	50.0000	55.030	80.00- 120.00	100.00
13.388	13.388 (0.964)	43	2118345			288.08- 388.08	338.08
13.388	13.388 (0.964)	57	187831			0.00- 79.56	29.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	1679389	50.0000	55.770	80.00- 120.00	100.00
13.416	13.416 (0.966)	96	1321033			28.66- 128.66	78.66
13.416	13.416 (0.966)	98	843715			0.24- 100.24	50.24
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	1094094	50.0000	56.969	80.00- 120.00	100.00
13.858	13.858 (0.998)	71	585510			3.52- 103.52	53.52
13.858	13.858 (0.998)	72	623609			2.04- 102.04	57.00
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	2945710	50.0000	56.971	80.00- 120.00	100.00
13.941	13.941 (1.004)	85	1913887			14.97- 114.97	64.97
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	3172686	50.0000	55.477	80.00- 120.00	100.00
14.273	14.273 (1.028)	99	2055059			14.77- 114.77	64.77
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	1715824	50.0000	56.032	80.00- 120.00	100.00
14.300	14.300 (1.030)	56	1705812			49.42- 149.42	99.42
14.300	14.300 (1.030)	41	887756			1.74- 101.74	51.74
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	3035706	50.0000	55.259	80.00- 120.00	100.00
14.549	14.549 (1.048)	117	3225264			56.24- 156.24	106.24
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3727114	50.0000	54.318	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	840170			0.00- 73.50	22.54
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	4124554	50.0000	55.242	80.00- 120.00	100.00
14.881	14.881 (1.072)	56	1342557			0.00- 82.82	32.55
14.881	14.881 (1.072)	41	1097372			0.00- 78.43	26.61
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1854128	50.0000	55.386	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	600236			0.00- 84.23	32.37
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1090153	50.0000	56.126	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1492099			85.70- 185.70	136.87
15.185	15.185 (0.972)	57	911942			28.72- 128.72	83.65
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	1644017	50.0000	55.940	80.00- 120.00	100.00
16.098	16.098 (1.030)	130	1508329			41.75- 141.75	91.75
16.098	16.098 (1.030)	97	1036281			13.03- 113.03	63.03
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1288303	50.0000	55.647	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	908468			20.52- 120.52	70.52
16.568	16.568 (1.060)	41	703834			4.63- 104.63	54.63
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	896963	50.0000	52.930	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	524585			8.48- 108.48	58.48
16.706	16.706 (1.069)	57	181915			0.00- 71.19	20.28
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	2950939	50.0000	56.106	80.00- 120.00	100.00
17.010	17.010 (1.088)	85	1891495			14.10- 114.10	64.10
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2032815	50.0000	57.623	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	657095			0.00- 82.32	32.32
17.784	17.784 (1.138)	39	911517			0.00- 94.84	44.84
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	959360	50.0000	59.852	80.00- 120.00	100.00
17.978	17.978 (1.150)	43	2178902			175.34- 275.34	227.12
17.978	17.978 (1.150)	85	471816			0.64- 100.64	49.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4068135	50.0000	55.602	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2482867			11.03- 111.03	61.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2215353	50.0000	57.114	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	703689			0.00- 81.76	31.76
18.752	18.752 (0.902)	39	903343			0.00- 90.78	40.78
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	1575767	50.0000	56.367	80.00- 120.00	100.00
19.111	19.111 (0.919)	99	1008005			13.97- 113.97	63.97
19.111	19.111 (0.919)	83	1339264			34.99- 134.99	84.99
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2101247	50.0000	56.093	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1460862			19.52- 119.52	69.52
19.277	19.277 (0.927)	131	1379543			15.65- 115.65	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	1325035	50.0000	56.604	80.00- 120.00	100.00
19.416	19.416 (0.934)	43	2195972			115.73- 215.73	165.73
19.416	19.416 (0.934)	100	272545			0.00- 71.71	20.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2769035	50.0000	58.173	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2123510			28.82- 128.82	76.69
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	2561313	50.0000	57.601	80.00- 120.00	100.00
20.052	20.052 (0.964)	109	2365543			42.36- 142.36	92.36
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3537203	50.0000	54.809	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1102906			0.00- 81.18	31.18
20.853	20.853 (1.003)	77	2193657			12.02- 112.02	62.02
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1881257	50.0000	56.260	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6033553			269.96- 369.96	320.72
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414591	50.0000	57.344	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4867839			149.87- 249.87	201.60
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2294486	50.0000	57.285	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	4831196			160.56- 260.56	210.56
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	3731947	50.0000	60.816	80.00- 120.00	100.00
21.876	21.876 (1.052)	78	1927539			1.65- 101.65	51.65
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	2955362	50.0000	57.842	80.00- 120.00	100.00
22.291	22.291 (1.072)	171	1502352			0.83- 100.83	50.83
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	6407360	50.0000	57.992	80.00- 120.00	100.00
22.429	22.429 (1.078)	120	1652751			0.00- 77.62	25.79
22.429	22.429 (1.078)	51	552478			0.00- 58.75	8.62
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	3607778	50.0000	56.152	80.00- 120.00	100.00
23.010	23.010 (1.106)	85	2344026			14.97- 114.97	64.97
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	8205341	50.0000	57.289	80.00- 120.00	100.00
23.121	23.121 (1.112)	120	1793463			0.00- 71.63	21.86
23.121	23.121 (1.112)	105	296421			0.00- 53.71	3.61
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	7178250	50.0000	58.874	80.00- 120.00	100.00
23.287	23.287 (1.120)	120	2114319			0.00- 79.45	29.45
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	5894923	50.0000	56.678	80.00- 120.00	100.00
23.397	23.397 (1.125)	120	2902725			0.00- 98.23	49.24
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	5651142	50.0000	57.660	80.00- 120.00	100.00
24.033	24.033 (1.156)	120	2609535			0.00- 94.91	46.18
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	3854517	50.0000	54.719	80.00- 120.00	100.00
24.586	24.586 (1.182)	148	2445415			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	1597557			0.00- 91.36	41.45
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	3989830	50.0000	55.044	80.00- 120.00	100.00
24.724	24.724 (1.189)	148	2558342			16.09- 116.09	64.12
24.724	24.724 (1.189)	111	1588487			0.00- 90.13	39.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	6094704	50.0000	58.156	80.00- 120.00	100.00
24.945	24.945 (1.199)	126	1159566			0.00- 69.28	19.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3731728	50.0000	54.382	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2389973			14.04- 114.04	64.04
25.360	25.360 (1.219)	111	1609999			0.00- 93.14	43.14
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2605257	50.0000	49.778	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2481668			45.26- 145.26	95.26
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2507104	50.0000	47.598	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1586646			12.90- 112.90	63.29
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	3679681	50.0000	50.798	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	456187			0.00- 62.74	12.40
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	1202086	50.0000	52.229	80.00- 120.00	100.00
8.273	8.273 (0.596)	57	925144			27.67- 127.67	76.96
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	202494	50.0000	50.813	80.00- 120.00	100.00
6.807	6.807 (0.490)	43	1448086			666.74- 766.74	715.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	2027281	50.0000	55.915	80.00- 120.00	100.00
16.347	16.347 (1.177)	98	929334			0.00- 95.22	45.84
16.347	16.347 (1.177)	55	1420992			20.82- 120.82	70.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.803)	59	2143464	50.0000	56.780	80.00- 120.00	100.00
11.148	11.148 (0.803)	41	454380			0.00- 72.85	21.20
11.148	11.148 (0.803)	57	220666			0.00- 59.93	10.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

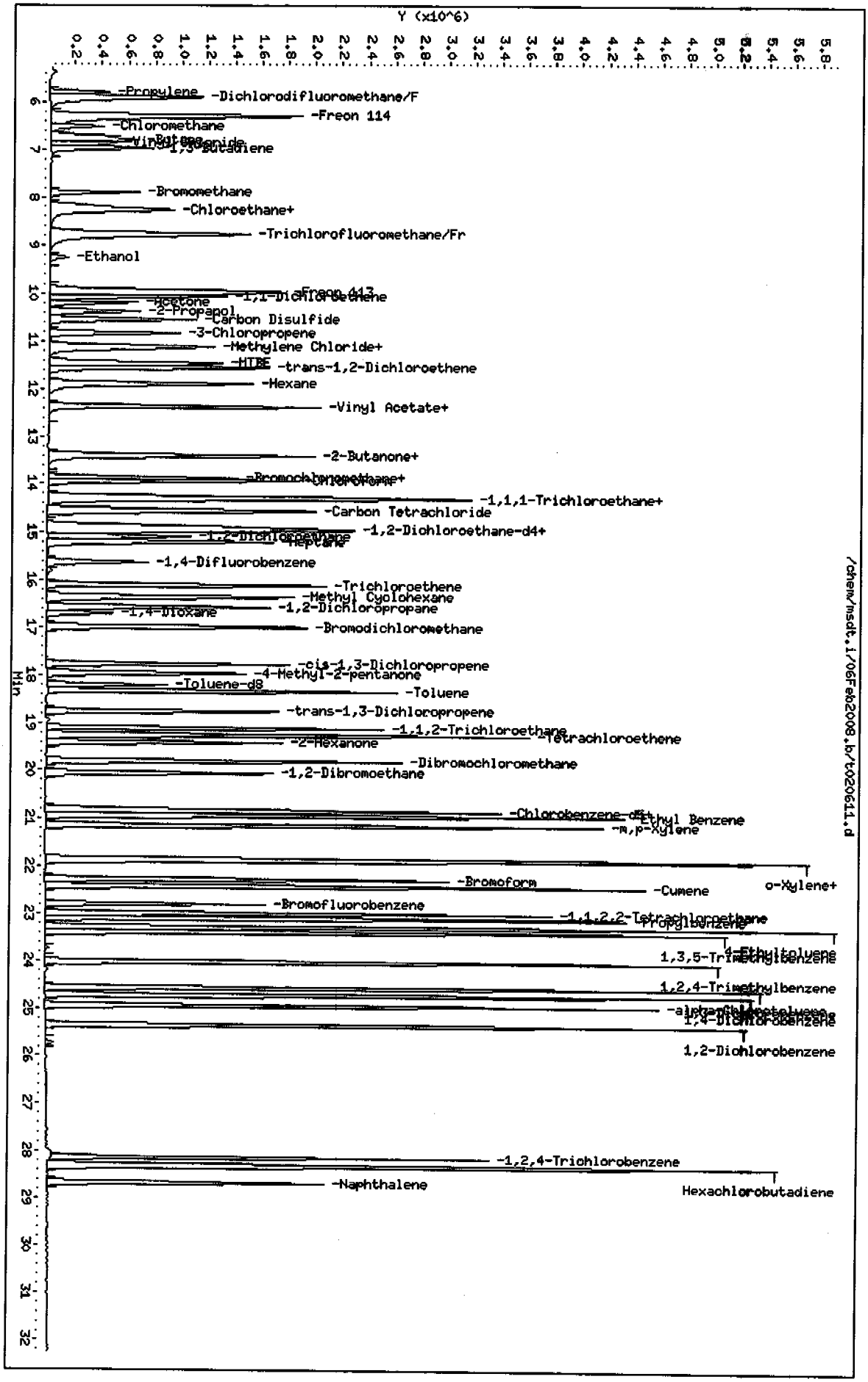
Instrument ID: msdt.i
Lab File ID: t020611.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	355997	0.00
97 1,4-Difluorobenze	1372567	823540	1921594	1372567	0.00
126 Chlorobenzene-d5	1227265	736359	1718171	1227265	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Date : 06-FEB-2008 17:13
Client ID: Level 5
Sample Info: 50ml #1576-261
Column phase: RTx-624

/chem/msdt.i/06Feb2008.b/t020611.d

Instrument: msdt.i
Operator: sjr
Column diameter: 0.53

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022109.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 21-FEB-2008 17:00
Operator : ACT
Inst ID: msdt.i
Smp Info : 100ml #1576-299
Misc Info : 200ppbv -> 100(600 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 17:23 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865	(1.000)	130	288174	25.0000		50.00- 150.00	100.00
13.865	13.865	(1.000)	128	220761			26.37- 126.37	76.61
13.865	13.865	(1.000)	49	347475			67.71- 167.71	120.58
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635	(1.000)	114	1171320	25.0000		50.00- 150.00	100.00
15.635	15.635	(1.000)	88	190746			0.00- 66.38	16.28
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805	(1.000)	117	1094664	25.0000		50.00- 150.00	100.00
20.805	20.805	(1.000)	82	635295			7.58- 107.58	58.04
6 Freon142b						CAS #: 75-68-3		
6.436	6.436	(0.464)	65	4107153	100.000	103.68	50.00- 150.00	100.00
6.436	6.436	(0.464)	45	857004			0.00- 71.32	20.87
9 Freon 13						CAS #: 75-72-9		
5.394	5.394	(0.389)	69	4121833	100.000	103.77	50.00- 150.00	100.00
5.394	5.394	(0.389)	85	1350133			0.00- 81.50	32.76

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.394	5.394	(0.389)	87	420390			0.00- 60.31	10.20
13 Freon 134a						CAS #: 811-97-2		
5.675	5.675	(0.409)	83	1821922	100.000	102.81	50.00- 150.00	100.00
5.675	5.675	(0.409)	69	1498909			32.62- 132.62	82.27
15 Freon 152a						CAS #: 75-37-6		
5.844	5.844	(0.422)	65	956248	100.000	100.21	50.00- 150.00	100.00
5.844	5.844	(0.422)	51	1646695			127.07- 227.07	172.20
5.844	5.844	(0.422)	47	421265			0.00- 93.51	44.05
17 Freon 22						CAS #: 75-45-6		
6.013	6.013	(0.434)	67	468972	100.000	104.17	50.00- 150.00	100.00
6.013	6.013	(0.434)	51	2312207			463.95- 563.95	493.04
6.013	6.013	(0.434)	85	43026			0.00- 65.76	9.17
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	1144222	600.000	475.68	50.00- 150.00	100.00
7.534	7.534	(0.543)	32	937390			65.11- 165.11	81.92
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.745	8.745	(0.631)	67	2763507	100.000	97.618	50.00- 150.00	100.00
8.745	8.745	(0.631)	69	889530			0.00- 82.56	32.19
8.717	8.717	(0.629)	35	151899			0.00- 55.48	5.50
40 Freon123a						CAS #: 354-23-4		
9.579	9.579	(0.691)	67	2203976	100.000	100.92	50.00- 150.00	100.00
9.579	9.579	(0.691)	117	1652565			22.27- 122.27	74.98
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	270148	100.000	105.31	50.00- 150.00	100.00
9.718	9.718	(0.701)	133	48575			0.00- 70.21	17.98
9.579	9.579	(0.691)	85	1081620			280.12- 380.12	400.38
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	5051767	100.000	106.98	50.00- 150.00	100.00
12.289	12.289	(0.886)	87	1583002			0.00- 80.78	31.34
12.289	12.289	(0.886)	59	584960			0.00- 62.00	11.58
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	274499	100.000	110.63	50.00- 150.00	100.00
12.400	12.400	(0.894)	59	409753			82.09- 182.09	149.27
12.289	12.289	(0.886)	41	1051376			321.23- 421.23	383.02
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	5658094	100.000	112.47	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	2427830			0.00- 93.06	42.91
12.925	12.925 (0.932)	41	925298			0.00- 69.68	16.35
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	512702	100.000	100.64	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	583515			52.94- 152.94	113.81
13.395	13.395 (0.966)	43	3653067			599.75- 699.75	712.51
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	5274523	100.000	110.84	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	1278528			0.00- 73.24	24.24
14.999	14.999 (1.082)	55	1254977			0.00- 75.20	23.79
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	3028001	100.000	121.23	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	4317169			90.45- 190.45	142.57
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	957040	100.000	125.47	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	635428			29.27- 129.27	66.40
15.801	15.801 (1.011)	43	476111			9.88- 109.88	49.75
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	1853300	100.000	116.48	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	759103			0.00- 93.48	40.96
19.533	19.533 (1.249)	43	4210731			175.62- 275.62	227.20
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	2182811	100.000	120.34	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	1114420			0.39- 100.39	51.05
22.741	22.741 (1.093)	42	1409787			13.24- 113.24	64.59
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	5714491	100.000	118.25	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	5408511			45.10- 145.10	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022109.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 100(600 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	288174	-9.42
97 1,4-Difluorobenze	1251468	750881	1752055	1171320	-6.40
126 Chlorobenzene-d5	1150991	690595	1611387	1094664	-4.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

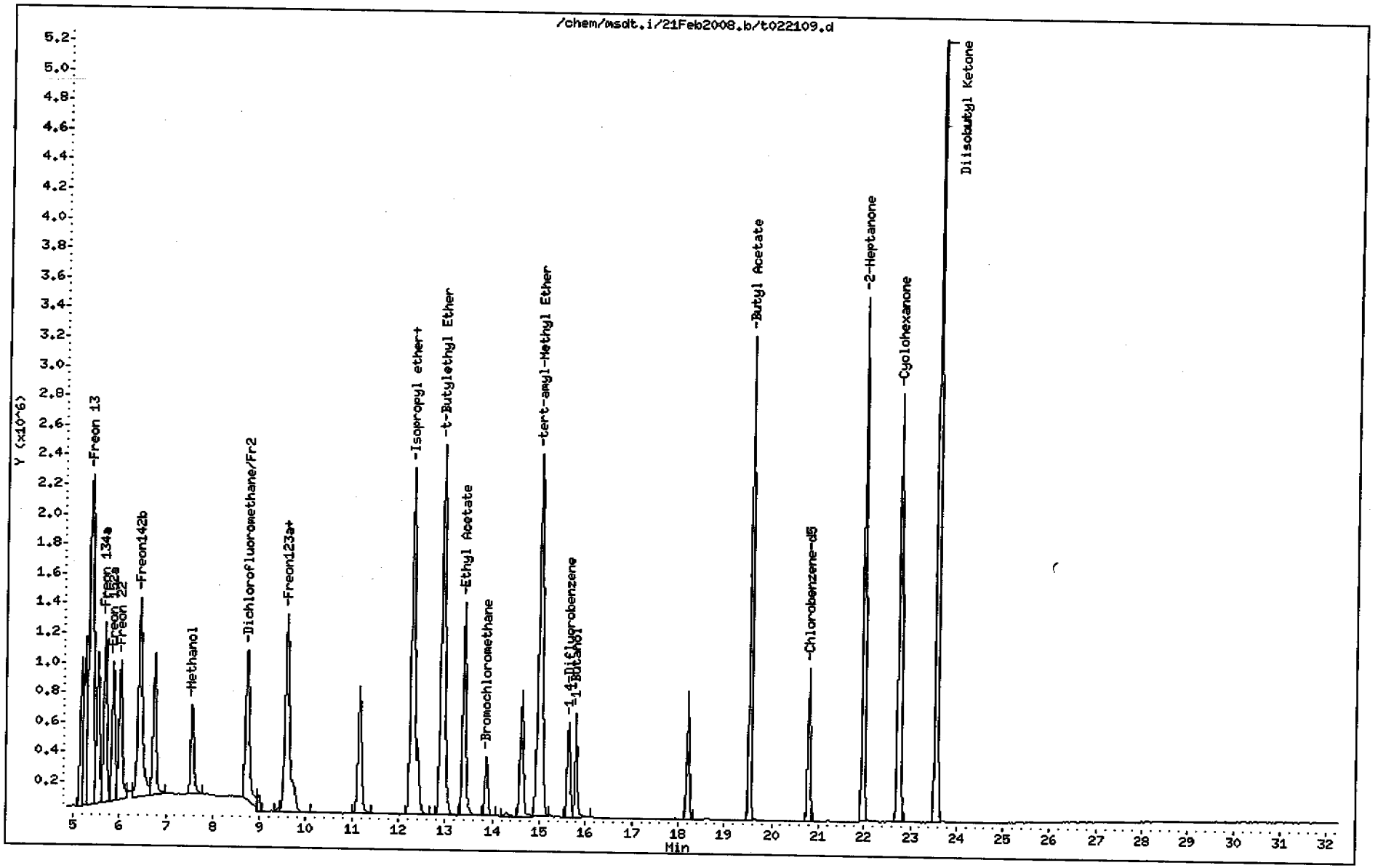
Data File: /chem/msdt.i/21Feb2008.b/t022109.d
Date : 21-FEB-2008 17:00
Client ID: Level 6
Sample Info: 100ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0255



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020612.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 06-FEB-2008 17:51
Operator : sjr
Inst ID: msdt.i
Smp Info : 100ml #1576-261
Misc Info : 200ppbv -> 100ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:51
Cal File: t020612.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886 (1.000)	130	351121	25.0000			50.00- 150.00	100.00
13.886	13.886 (1.000)	128	271306				26.39- 126.39	77.27
13.886	13.886 (1.000)	49	815040				99.95- 199.95	232.13
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1413120	25.0000			50.00- 150.00	100.00
15.628	15.628 (1.000)	88	227247				0.00- 66.12	16.08
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1281401	25.0000			50.00- 150.00	100.00
20.798	20.798 (1.000)	82	729950				6.72- 106.72	56.96
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	598616	25.0000	26.495		50.00- 150.00	100.00
14.936	14.936 (1.076)	67	374153				3.57- 103.57	62.50
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1378362	25.0000	25.322		50.00- 150.00	100.00
18.199	18.199 (1.165)	70	155982				0.00- 61.29	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950822			18.71- 118.71	68.98
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	834025	25.0000	25.163	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1057330			75.58- 175.58	126.77
22.789	22.789 (1.096)	176	808445			47.41- 147.41	96.93
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	1111571	100.000	96.790	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	742893			17.96- 117.96	66.83
5.812	5.812 (0.419)	39	910586			33.44- 133.44	81.92
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	7101370	100.000	103.58	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	2261049			0.00- 82.13	31.84
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	4672190	100.000	103.09	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	1488571			0.00- 81.89	31.86
18 Chloromethane					CAS #: 74-87-3		
6.559	6.559 (0.472)	50	1551411	100.000	103.64	50.00- 150.00	100.00
6.559	6.559 (0.472)	52	504098			0.00- 83.62	32.49
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	2106034	100.000	102.48	50.00- 150.00	100.00
6.890	6.890 (0.496)	64	674245			0.00- 89.61	32.01
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	1598698	100.000	103.37	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	1537145			53.33- 153.33	96.15
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	2093115	100.000	102.87	50.00- 150.00	100.00
7.913	7.913 (0.570)	96	1963372			43.69- 143.69	93.80
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	1136847	100.000	106.07	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	285724			0.00- 76.71	25.13
8.190	8.190 (0.590)	66	371225			0.00- 83.02	32.65
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.798 (0.634)	101	7920716	100.000	102.05	50.00- 150.00	100.00
8.798	8.798 (0.634)	103	5133859			13.52- 113.52	64.82

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.241	9.241	(0.665)	45	613723	100.000	103.34	50.00- 150.00	100.00
9.241	9.241	(0.665)	43	142073			0.00- 75.24	23.15
9.241	9.241	(0.665)	46	227563			0.00- 89.78	37.08
42 Freon 113						CAS #: 76-13-1		
9.960	9.960	(0.717)	151	3629218	100.000	101.54	50.00- 150.00	100.00
9.960	9.960	(0.717)	153	2313395			14.28- 114.28	63.74
9.960	9.960	(0.717)	101	4699952			80.55- 180.55	129.50
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.042	10.042	(0.723)	61	3447769	100.000	107.17	50.00- 150.00	100.00
10.042	10.042	(0.723)	96	2078953			13.15- 113.15	60.30
10.042	10.042	(0.723)	98	1334772			0.00- 88.14	38.71
45 Acetone						CAS #: 67-64-1		
10.208	10.208	(0.735)	58	994047	100.000	99.703	50.00- 150.00	100.00
10.208	10.208	(0.735)	43	3108431			267.82- 367.82	312.70
46 2-Propanol						CAS #: 67-63-0		
10.374	10.374	(0.747)	45	3640217	100.000	106.54	50.00- 150.00	100.00
10.374	10.374	(0.747)	43	863734			0.00- 76.64	23.73
10.374	10.374	(0.747)	59	147169			0.00- 54.31	4.04
47 Carbon Disulfide						CAS #: 75-15-0		
10.540	10.540	(0.759)	76	6420269	100.000	105.51	50.00- 150.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
10.817	10.817	(0.779)	76	1094455	100.000	104.45	50.00- 150.00	100.00
10.817	10.817	(0.779)	41	2383503			173.84- 273.84	217.78
54 Methylene Chloride						CAS #: 75-09-2		
11.121	11.121	(0.801)	49	2036666	100.000	100.12	50.00- 150.00	100.00
11.121	11.121	(0.801)	84	1809101			36.08- 136.08	88.83
11.121	11.121	(0.801)	51	661270			0.00- 83.83	32.47
60 MTBE						CAS #: 1634-04-4		
11.480	11.480	(0.827)	73	7138212	100.000	122.23	50.00- 150.00	100.00
11.480	11.480	(0.827)	57	1352795			0.00- 69.02	18.95
11.480	11.480	(0.827)	41	1292674			0.00- 70.47	18.11
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.563	11.563	(0.833)	96	2556418	100.000	106.93	50.00- 150.00	100.00
11.563	11.563	(0.833)	61	3579783			95.77- 195.77	140.03
11.563	11.563	(0.833)	98	1640927			16.26- 116.26	64.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	3632485	100.000	115.14	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	2065967			9.30- 109.30	56.87
11.923	11.923 (0.859)	86	658618			0.00- 66.83	18.13
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	672864	100.000	108.78	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	6026628			832.23- 932.23	895.67
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.393	12.393 (0.892)	63	4709578	100.000	106.69	50.00- 150.00	100.00
12.393	12.393 (0.892)	65	1524086			0.00- 82.79	32.36
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	1295858	100.000	115.39	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	4285726			275.22- 375.22	330.72
13.388	13.388 (0.964)	57	374753			0.00- 79.56	28.92
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	3264442	100.000	109.91	50.00- 150.00	100.00
13.443	13.443 (0.968)	96	2561204			27.39- 127.39	78.46
13.443	13.443 (0.968)	98	1649626			0.96- 100.96	50.53
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	2158829	100.000	113.97	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	1140379			0.00- 99.16	52.82
13.858	13.858 (0.998)	72	1229303			2.04- 102.04	56.94
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	5696174	100.000	111.70	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	3706989			16.43- 116.43	65.08
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.300	14.300 (1.030)	97	6204791	100.000	110.00	50.00- 150.00	100.00
14.300	14.300 (1.030)	99	3996930			17.45- 117.45	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	3475704	100.000	115.08	50.00- 150.00	100.00
14.300	14.300 (1.030)	56	3413020			47.55- 147.55	98.20
14.300	14.300 (1.030)	41	1767727			5.12- 105.12	50.86
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	5873936	100.000	108.41	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	6261936			53.78- 153.78	106.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	7425750	100.000	105.12	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	1684308			0.00- 73.50	22.68
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	8406637	100.000	114.16	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	2694876			0.00- 82.82	32.06
14.881	14.881 (1.072)	41	2162132			0.00- 78.43	25.72
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	3636322	100.000	105.51	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	1159994			0.00- 84.23	31.90
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	2253769	100.000	112.70	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	3040625			85.70- 185.70	134.91
15.185	15.185 (0.972)	57	1858665			28.72- 128.72	82.47
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	3240461	100.000	107.10	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	3002867			42.94- 142.94	92.67
16.098	16.098 (1.030)	97	2081303			13.25- 113.25	64.23
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	2564982	100.000	107.61	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	1813519			21.32- 121.32	70.70
16.568	16.568 (1.060)	41	1389352			8.96- 108.96	54.17
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	1832861	100.000	105.05	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	1060731			9.36- 109.36	57.87
16.706	16.706 (1.069)	57	366016			0.00- 71.19	19.97
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	5845831	100.000	107.96	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	3735941			13.51- 113.51	63.91
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	4117666	100.000	113.37	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	1315173			0.00- 84.89	31.94
17.784	17.784 (1.138)	39	1808488			0.00- 97.13	43.92
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	1980151	100.000	119.99	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	4495780			175.34- 275.34	227.04
17.978	17.978 (1.150)	85	994822			0.64- 100.64	50.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	8178178	100.000	108.57	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	5020495			11.62- 111.62	61.39
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	4461556	100.000	110.16	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	1428254			0.00- 81.86	32.01
18.752	18.752 (0.902)	39	1829158			0.00- 91.58	41.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	3125317	100.000	107.07	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	1954568			13.21- 113.21	62.54
19.111	19.111 (0.919)	83	2655080			35.76- 135.76	84.95
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	4180011	100.000	106.87	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	2861461			19.36- 119.36	68.46
19.277	19.277 (0.927)	131	2744125			16.43- 116.43	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	2723514	100.000	111.43	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	4527762			124.96- 224.96	166.25
19.416	19.416 (0.934)	100	574524			0.00- 71.71	21.09
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	5492645	100.000	110.52	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	4234044			28.82- 128.82	77.09
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	5153001	100.000	110.99	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	4771126			46.68- 146.68	92.59
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	7115170	100.000	105.59	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	2236590			0.00- 82.06	31.43
20.853	20.853 (1.003)	77	4380652			22.53- 122.53	61.57
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	3790191	100.000	108.56	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	12275568			269.96- 369.96	323.88
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	4888391	100.000	111.19	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	9871195			149.87- 249.87	201.93
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	4653159	100.000	111.26	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	9908020			160.81- 260.81	212.93
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	7633035	100.000	119.13	50.00- 150.00	100.00
21.876	21.876 (1.052)	78	3882867			9.02- 109.02	50.87
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	5972775	100.000	111.96	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	3039652			1.83- 101.83	50.89
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	13155481	100.000	114.04	50.00- 150.00	100.00
22.429	22.429 (1.078)	120	3375500			0.00- 77.62	25.66
22.429	22.429 (1.078)	51	1109718			0.00- 58.75	8.44
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	7307878	100.000	108.94	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	4726894			16.89- 116.89	64.68
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	16695425	100.000	111.64	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	3572151			0.00- 71.63	21.40
23.121	23.121 (1.112)	105	593757			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	14420605	100.000	113.28	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	4223785			0.00- 79.69	29.29
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	12029525	100.000	110.77	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	5822272			0.00- 98.23	48.40
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	11520943	100.000	112.58	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	5255599			0.00- 94.91	45.62
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	7765843	100.000	105.59	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	4936822			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	3180420			0.00- 91.36	40.95
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	8019783	100.000	105.97	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	5124641			16.09- 116.09	63.90
24.724	24.724 (1.189)	111	3205038			0.00- 90.13	39.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	12583883	100.000	115.00	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	2367422			0.00- 69.28	18.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	7525703	100.000	105.04	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	4832431			15.85- 115.85	64.21
25.360	25.360 (1.219)	111	3270866			0.00- 94.46	43.46
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	5462712	100.000	99.966	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	5139467			44.78- 144.78	94.08
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	5122789	100.000	93.148	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	3213957			12.90- 112.90	62.74
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	7794932	100.000	103.06	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	944387			0.00- 62.74	12.12
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	2307164	100.000	101.64	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	1786691			27.67- 127.67	77.44
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	400970	100.000	102.02	50.00- 150.00	100.00
6.807	6.807 (0.490)	43	2768800			666.74- 766.74	690.53
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	4123768	100.000	115.32	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	1845682			0.00- 95.22	44.76
16.347	16.347 (1.177)	55	2869124			20.82- 120.82	69.58
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.176	11.176 (0.805)	59	3860609	100.000	103.69	50.00- 150.00	100.00
11.148	11.148 (0.803)	41	796567			0.00- 72.85	20.63
11.176	11.176 (0.805)	57	392034			0.00- 59.93	10.15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020612.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 100ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	351121	-1.37
97 1,4-Difluorobenze	1372567	823540	1921594	1413120	2.95
126 Chlorobenzene-d5	1227265	736359	1718171	1281401	4.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

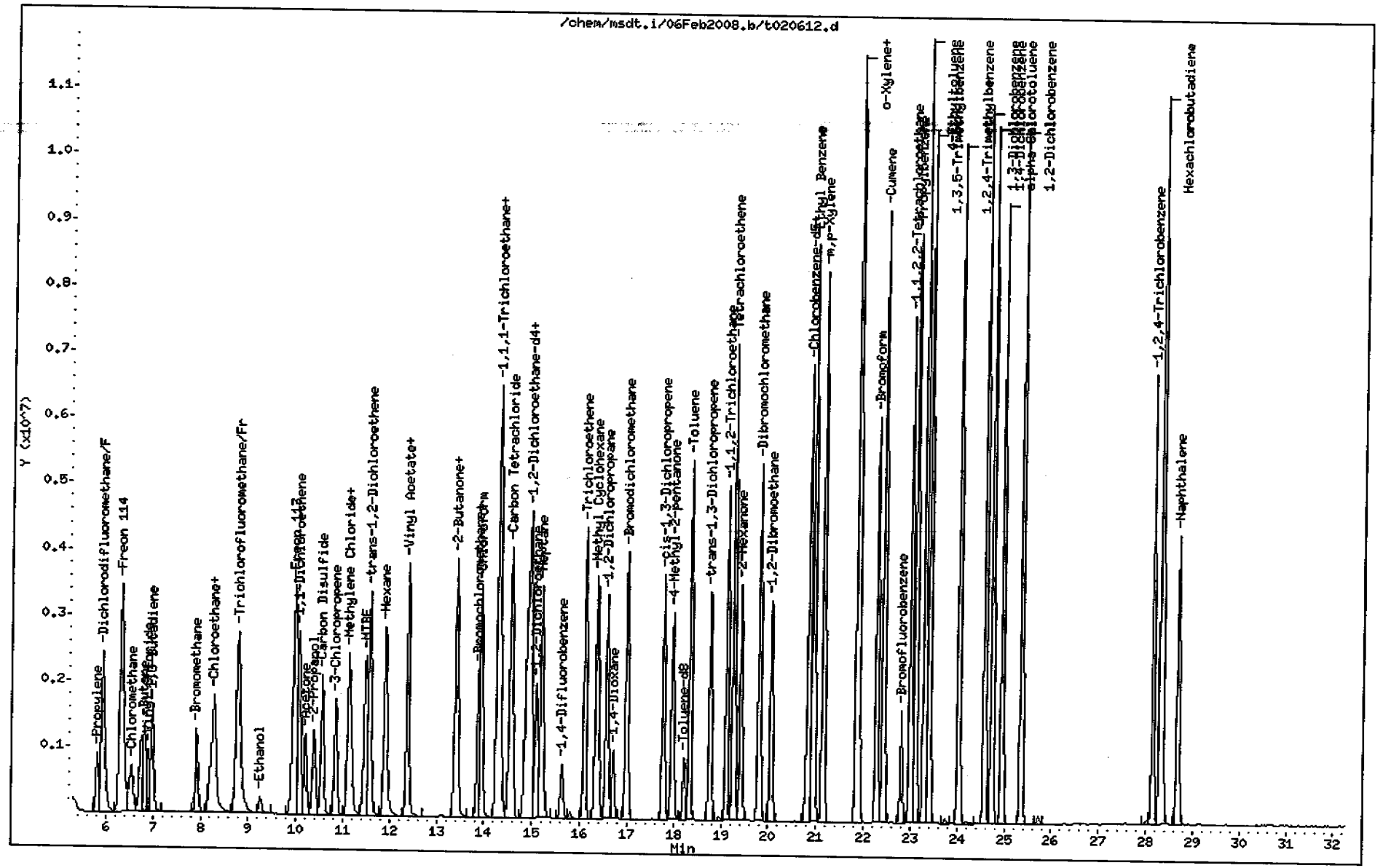
0265

Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Date : 06-FEB-2008 17:51
Client ID: Level 6
Sample Info: 100ml #1576-261

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022105.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 21-FEB-2008 12:05
Operator : sjr
Inst ID: msdt.i
Smp Info : 200ml #1576-299
Misc Info : 200ppbv -> 200(1200 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05
Cal File: t022105.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	269864	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	209729			26.48- 126.48	77.72
13.865	13.865 (1.000)	49	322466			86.30- 186.30	119.49
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1144695	25.0000		50.00- 150.00	100.00
15.635	15.635 (1.000)	88	194086			0.00- 66.34	16.96
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1083328	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	629336			7.40- 107.40	58.09
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	8148778	200.000	221.71	50.00- 150.00	100.00(A)
6.436	6.436 (0.464)	45	1691785			0.00- 71.47	20.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	8146947	200.000	221.11	50.00- 150.00	100.00(A)
5.422	5.422 (0.391)	85	2570358			0.00- 81.18	31.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.422	5.422 (0.391)	87	814934			0.00- 60.34	10.00
13 Freon 134a					CAS #: 811-97-2		
5.703	5.703 (0.411)	83	3723939	200.000	225.99	50.00- 150.00	100.00(A)
5.703	5.703 (0.411)	69	3069798			32.70- 132.70	82.43
15 Freon 152a					CAS #: 75-37-6		
5.872	5.872 (0.424)	65	2003615	200.000	224.33	50.00- 150.00	100.00(A)
5.872	5.872 (0.424)	51	3487199			128.28- 228.28	174.05
5.872	5.872 (0.424)	47	899889			0.00- 93.38	44.91
17 Freon 22					CAS #: 75-45-6		
6.013	6.013 (0.434)	67	970082	200.000	232.53	50.00- 150.00	100.00(A)
6.013	6.013 (0.434)	51	4880646			470.91- 570.91	503.12
6.041	6.041 (0.436)	85	93377			0.00- 67.96	9.63
26 Methanol					CAS #: 67-56-1		
7.562	7.562 (0.545)	31	2557267	1200.00	696.25	50.00- 150.00	100.00
7.562	7.562 (0.545)	32	1919231			76.17- 176.17	75.05
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.745	8.745 (0.631)	67	5028065	200.000	188.54	50.00- 150.00	100.00
8.745	8.745 (0.631)	69	1636219			0.00- 82.68	32.54
8.745	8.745 (0.631)	35	276322			0.00- 55.48	5.50
40 Freon123a					CAS #: 354-23-4		
9.579	9.579 (0.691)	67	4337927	200.000	212.59	50.00- 150.00	100.00(A)
9.579	9.579 (0.691)	117	3245483			21.37- 121.37	74.82
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	493416	200.000	208.15	50.00- 150.00	100.00(A)
9.718	9.718 (0.701)	133	98549			0.00- 70.95	19.97
9.579	9.579 (0.691)	85	2126591			256.69- 356.69	430.99
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	10225783	200.000	235.34	50.00- 150.00	100.00(A)
12.289	12.289 (0.886)	87	3206082			0.00- 80.60	31.35
12.289	12.289 (0.886)	59	1210316			0.00- 62.14	11.84
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	546401	200.000	241.57	50.00- 150.00	100.00(A)
12.400	12.400 (0.894)	59	812840			76.36- 176.36	148.76
12.400	12.400 (0.894)	41	409141			317.31- 417.31	74.88
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	11387679	200.000	249.51	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	4879790			0.00- 93.11	42.85
12.925	12.925 (0.932)	41	1834928			0.00- 70.78	16.11
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	1071026	200.000	224.86	50.00- 150.00	100.00(A)
13.395	13.395 (0.966)	61	1194611			49.32- 149.32	111.54
13.395	13.395 (0.966)	43	7515065			578.83- 678.83	701.67
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	10712367	200.000	247.09	50.00- 150.00	100.00(A)
14.999	14.999 (1.082)	87	2553285			0.00- 72.90	23.83
14.999	14.999 (1.082)	55	2463404			0.00- 75.66	23.00
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	6201169	200.000	279.98	50.00- 150.00	100.00(A)
21.966	21.966 (1.584)	43	8699246			89.74- 189.74	140.28
98 1-Butanol					CAS #: 71-36-3		
15.773	15.773 (1.009)	56	2091144	200.000	299.60	50.00- 150.00	100.00(A)
15.773	15.773 (1.009)	41	1373797			33.56- 133.56	65.70
15.773	15.773 (1.009)	43	1050969			13.25- 113.25	50.26
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	3683588	200.000	247.07	50.00- 150.00	100.00(A)
19.533	19.533 (1.249)	73	1516521			0.00- 94.32	41.17
19.533	19.533 (1.249)	43	8438836			175.09- 275.09	229.09
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	4560256	200.000	267.64	50.00- 150.00	100.00(A)
22.741	22.741 (1.093)	98	2305489			0.23- 100.23	50.56
22.741	22.741 (1.093)	42	2923443			12.90- 112.90	64.11
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	11522324	200.000	252.45	50.00- 150.00	100.00(A)
23.570	23.570 (1.133)	85	10839919			45.26- 145.26	94.08
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022105.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 200(1200 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	269864	-13.58
97 1,4-Difluorobenze	1266888	760133	1773643	1144695	-9.65
126 Chlorobenzene-d5	1159473	695684	1623262	1083328	-6.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

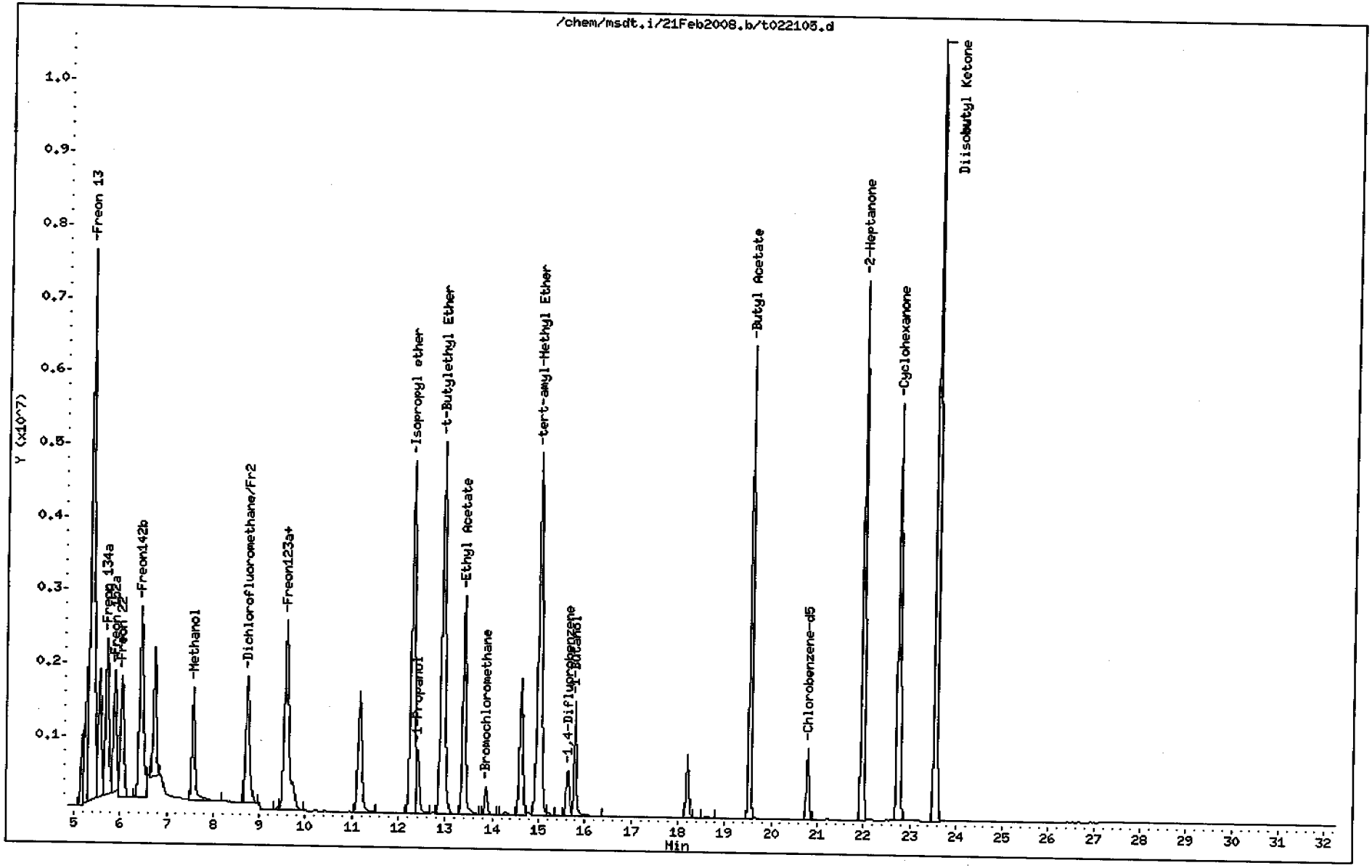
Data File: /chem/msdt.i/21Feb2008.b/t022105.d
Date : 21-FEB-2008 12:05
Client ID: Level 7
Sample Info: 200ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0270



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020613.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 06-FEB-2008 19:41
Operator : srs
Inst ID: msdt.i
Smp Info : 200ml #1576-261
Misc Info : 200ppbv -> 200ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 19:41
Cal File: t020613.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	350438	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	265413			26.39- 126.39	75.74
13.941	13.941 (1.000)	49	1193106			99.95- 199.95	340.46
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1410298	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	224026			0.00- 66.12	15.89
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1300571	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	741297			6.72- 106.72	57.00
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	620117	25.0000	27.500	50.00- 150.00	100.00
14.936	14.936 (1.078)	67	455931			3.57- 103.57	73.52
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1394007	25.0000	25.661	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	165109			0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950357			18.71- 118.71	68.17
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	848605	25.0000	25.226	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1070463			75.58- 175.58	126.14
22.789	22.789 (1.096)	176	830556			47.41- 147.41	97.87
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	2244909	200.000	195.86	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	1546399			17.96- 117.96	68.88
5.812	5.812 (0.419)	39	1826180			33.44- 133.44	81.35
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	13829436	200.000	202.10	50.00- 150.00	100.00(A)
5.923	5.923 (0.427)	87	4400174			0.00- 82.13	31.82
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	9245837	200.000	204.40	50.00- 150.00	100.00(A)
6.282	6.282 (0.453)	137	2950383			0.00- 81.89	31.91
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	3061437	200.000	204.92	50.00- 150.00	100.00(A)
6.531	6.531 (0.471)	52	1030836			0.00- 83.62	33.67
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	4186766	200.000	204.12	50.00- 150.00	100.00(A)
6.863	6.863 (0.495)	64	1330162			0.00- 89.61	31.77
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	3136692	200.000	203.21	50.00- 150.00	100.00(A)
6.946	6.946 (0.501)	39	3057782			53.33- 153.33	97.48
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	4285901	200.000	211.04	50.00- 150.00	100.00(A)
7.913	7.913 (0.571)	96	3953378			43.69- 143.69	92.24
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.591)	64	2243653	200.000	209.74	50.00- 150.00	100.00(A)
8.162	8.162 (0.589)	49	567495			0.00- 76.71	25.29
8.190	8.190 (0.591)	66	737238			0.00- 83.02	32.86
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.633)	101	15419021	200.000	199.04	50.00- 150.00	100.00
8.771	8.771 (0.633)	103	9913225			13.52- 113.52	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	1268709	200.000	214.06	50.00- 150.00	100.00(A)
9.241	9.241 (0.667)	43	285639			0.00- 75.24	22.51
9.241	9.241 (0.667)	46	473438			0.00- 89.78	37.32
42 Freon 113					CAS #: 76-13-1		
9.959	9.959 (0.719)	151	7037148	200.000	197.28	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	4532081			14.28- 114.28	64.40
9.932	9.932 (0.717)	101	9194511			80.55- 180.55	130.66
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	6864445	200.000	213.80	50.00- 150.00	100.00(A)
10.042	10.042 (0.725)	96	4161445			13.15- 113.15	60.62
10.042	10.042 (0.725)	98	2679049			0.00- 88.14	39.03
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	1929807	200.000	193.94	50.00- 150.00	100.00
10.181	10.181 (0.735)	43	6078502			267.82- 367.82	314.98
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	7118783	200.000	208.76	50.00- 150.00	100.00(A)
10.374	10.374 (0.749)	43	1603518			0.00- 76.64	22.53
10.374	10.374 (0.749)	59	298669			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	12911334	200.000	212.60	50.00- 150.00	100.00(A)
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	2135311	200.000	204.18	50.00- 150.00	100.00(A)
10.817	10.817 (0.781)	41	4667211			173.84- 273.84	218.57
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	4043623	200.000	199.16	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	3657876			36.08- 136.08	90.46
11.093	11.093 (0.800)	51	1301400			0.00- 83.83	32.18
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.826)	73	14127149	200.000	242.38	50.00- 150.00	100.00(A)
11.453	11.453 (0.826)	57	2668532			0.00- 69.02	18.89
11.453	11.453 (0.826)	41	2471765			0.00- 70.47	17.50
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	4995106	200.000	209.34	50.00- 150.00	100.00(A)
11.535	11.535 (0.832)	61	6882664			95.77- 195.77	137.79
11.535	11.535 (0.832)	98	3205496			16.26- 116.26	64.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	7233259	200.000	229.72	50.00- 150.00	100.00(A)
11.895	11.895 (0.858)	43	4071333			9.30- 109.30	56.29
11.895	11.895 (0.858)	86	1297193			0.00- 66.83	17.93
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	1342153	200.000	217.41	50.00- 150.00	100.00(A)
12.337	12.337 (0.890)	43	12158868			832.23- 932.23	905.92
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	9074032	200.000	205.97	50.00- 150.00	100.00(A)
12.365	12.365 (0.892)	65	2933179			0.00- 82.79	32.32
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	2599379	200.000	231.91	50.00- 150.00	100.00(A)
13.388	13.388 (0.966)	43	8515666			275.22- 375.22	327.60
13.388	13.388 (0.966)	57	765435			0.00- 79.56	29.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	6245688	200.000	210.70	50.00- 150.00	100.00(A)
13.416	13.416 (0.968)	96	4941404			27.39- 127.39	79.12
13.416	13.416 (0.968)	98	3177917			0.96- 100.96	50.88
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	4241211	200.000	224.34	50.00- 150.00	100.00(A)
13.858	13.858 (1.000)	71	2262935			0.00- 99.16	53.36
13.858	13.858 (1.000)	72	2415736			2.04- 102.04	56.96
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	10890508	200.000	213.97	50.00- 150.00	100.00(A)
13.941	13.941 (1.006)	85	7079254			16.43- 116.43	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	12157336	200.000	215.95	50.00- 150.00	100.00(A)
14.273	14.273 (1.030)	99	7830263			17.45- 117.45	64.41
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	6882951	200.000	228.34	50.00- 150.00	100.00(A)
14.300	14.300 (1.032)	56	6804949			47.55- 147.55	98.87
14.300	14.300 (1.032)	41	3514830			5.12- 105.12	51.07
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	11440648	200.000	211.56	50.00- 150.00	100.00(A)
14.522	14.522 (1.048)	117	12169445			53.78- 153.78	106.37
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	14800821	200.000	209.93	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	3350560			0.00- 73.50	22.64
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	17411392	200.000	236.90	50.00- 150.00	100.00(A)
14.881	14.881 (1.074)	56	5614080			0.00- 82.82	32.24
14.881	14.881 (1.074)	41	4444106			0.00- 78.43	25.52
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	6990152	200.000	203.22	50.00- 150.00	100.00(A)
15.075	15.075 (0.965)	64	2256443			0.00- 84.23	32.28
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	4422042	200.000	221.58	50.00- 150.00	100.00(A)
15.185	15.185 (0.972)	43	6011920			85.70- 185.70	135.95
15.185	15.185 (0.972)	57	3678586			28.72- 128.72	83.19
101 Trichloroethene					CAS #: 79-01-6		
16.070	16.070 (1.028)	95	6441042	200.000	213.30	50.00- 150.00	100.00(A)
16.070	16.070 (1.028)	130	5805098			42.94- 142.94	90.13
16.070	16.070 (1.028)	97	4097149			13.25- 113.25	63.61
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	5092409	200.000	214.08	50.00- 150.00	100.00(A)
16.568	16.568 (1.060)	62	3626964			21.32- 121.32	71.22
16.568	16.568 (1.060)	41	2709468			8.96- 108.96	53.21
106 1,4-Dioxane					CAS #: 123-91-1		
16.678	16.678 (1.067)	88	3666409	200.000	210.57	50.00- 150.00	100.00(A)
16.678	16.678 (1.067)	58	2113855			9.36- 109.36	57.65
16.678	16.678 (1.067)	57	748945			0.00- 71.19	20.43
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	11426189	200.000	211.43	50.00- 150.00	100.00(A)
16.982	16.982 (1.087)	85	7356832			13.51- 113.51	64.39
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	8131434	200.000	224.33	50.00- 150.00	100.00(A)
17.784	17.784 (1.138)	77	2581563			0.00- 84.89	31.75
17.784	17.784 (1.138)	39	3559732			0.00- 97.13	43.78
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.950	17.950 (1.149)	58	4047096	200.000	245.73	50.00- 150.00	100.00(A)
17.950	17.950 (1.149)	43	9172795			175.34- 275.34	226.65
17.978	17.978 (1.150)	85	2017083			0.64- 100.64	49.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	16544347	200.000	220.07	50.00- 150.00	100.00(A)
18.337	18.337 (1.173)	92	9944276			11.62- 111.62	60.11
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	8853621	200.000	215.39	50.00- 150.00	100.00(A)
18.752	18.752 (0.902)	77	2800007			0.00- 81.86	31.63
18.752	18.752 (0.902)	39	3605430			0.00- 91.58	40.72
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	6145241	200.000	207.43	50.00- 150.00	100.00(A)
19.111	19.111 (0.919)	99	3885491			13.21- 113.21	63.23
19.111	19.111 (0.919)	83	5273029			35.76- 135.76	85.81
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	8171986	200.000	205.86	50.00- 150.00	100.00(A)
19.277	19.277 (0.927)	129	5618493			19.36- 119.36	68.75
19.277	19.277 (0.927)	131	5327701			16.43- 116.43	65.19
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	5507463	200.000	222.01	50.00- 150.00	100.00(A)
19.416	19.416 (0.934)	43	9126801			124.96- 224.96	165.72
19.416	19.416 (0.934)	100	1159888			0.00- 71.71	21.06
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	10771050	200.000	213.53	50.00- 150.00	100.00(A)
19.803	19.803 (0.952)	127	8255102			28.82- 128.82	76.64
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	10275074	200.000	218.05	50.00- 150.00	100.00(A)
20.051	20.051 (0.964)	109	9488081			46.68- 146.68	92.34
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	14309057	200.000	209.22	50.00- 150.00	100.00(A)
20.853	20.853 (1.003)	114	4444592			0.00- 82.06	31.06
20.853	20.853 (1.003)	77	8989067			22.53- 122.53	62.82
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	7668400	200.000	216.40	50.00- 150.00	100.00(A)
20.936	20.936 (1.007)	91	25064309			269.96- 369.96	326.85
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	9936021	200.000	222.67	50.00- 150.00	100.00(A)
21.130	21.130 (1.016)	91	20223905			149.87- 249.87	203.54
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	9402725	200.000	221.52	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	20307931			160.81- 260.81	215.98
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	15871642	200.000	244.07	50.00- 150.00	100.00(A)
21.876	21.876 (1.052)	78	8023544			9.02- 109.02	50.55
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12025424	200.000	222.10	50.00- 150.00	100.00(A)
22.291	22.291 (1.072)	171	6154800			1.83- 101.83	51.18
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	26972899	200.000	230.37	50.00- 150.00	100.00(A)
22.429	22.429 (1.078)	120	6825383			0.00- 77.62	25.30
22.402	22.402 (1.077)	51	2239931			0.00- 58.75	8.30
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15030605	200.000	220.75	50.00- 150.00	100.00(A)
23.010	23.010 (1.106)	85	9664787			16.89- 116.89	64.30
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	31493566	200.000	207.49	50.00- 150.00	100.00(A)
23.121	23.121 (1.112)	120	7318775			0.00- 71.63	23.24
23.121	23.121 (1.112)	105	1221513			0.00- 53.71	3.88
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.286 (1.120)	105	26455136	200.000	204.75	50.00- 150.00	100.00(A)
23.286	23.286 (1.120)	120	8661852			0.00- 79.69	32.74
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	24464891	200.000	221.96	50.00- 150.00	100.00(A)
23.397	23.397 (1.125)	120	11830853			0.00- 98.23	48.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	23660053	200.000	227.80	50.00- 150.00	100.00(A)
24.033	24.033 (1.156)	120	10670397			0.00- 94.91	45.10
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	15896139	200.000	212.94	50.00- 150.00	100.00(A)
24.586	24.586 (1.182)	148	10085107			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	6558811			0.00- 91.36	41.26
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	16485506	200.000	214.62	50.00- 150.00	100.00(A)
24.724	24.724 (1.189)	148	10467681			16.09- 116.09	63.50
24.724	24.724 (1.189)	111	6472835			0.00- 90.13	39.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	24668642	200.000	222.12	50.00- 150.00	100.00(A)
24.945	24.945 (1.199)	126	4886072			0.00- 69.28	19.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	15599304	200.000	214.51	50.00- 150.00	100.00(A)
25.360	25.360 (1.219)	148	9883137			15.85- 115.85	63.36
25.360	25.360 (1.219)	111	6587185			0.00- 94.46	42.23
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	11415493	200.000	205.82	50.00- 150.00	100.00(A)
28.153	28.153 (1.354)	182	10826368			44.78- 144.78	94.84
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	10769723	200.000	192.94	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	6684925			12.90- 112.90	62.07
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	16502797	200.000	214.98	50.00- 150.00	100.00(A)
28.678	28.678 (1.379)	127	2006009			0.00- 62.74	12.16
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.597)	43	4503444	200.000	198.77	50.00- 150.00	100.00
8.273	8.273 (0.597)	57	3514272			27.67- 127.67	78.04
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	770238	200.000	196.35	50.00- 150.00	100.00
6.807	6.807 (0.491)	43	5480338			666.74- 766.74	711.51
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	8362325	200.000	234.30	50.00- 150.00	100.00(A)
16.346	16.346 (1.180)	98	3725362			0.00- 95.22	44.55
16.346	16.346 (1.180)	55	5813657			20.82- 120.82	69.52
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	7340416	200.000	197.53	50.00- 150.00	100.00
11.148	11.148 (0.804)	41	1467413			0.00- 72.85	19.99
11.148	11.148 (0.804)	57	744700			0.00- 59.93	10.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020613.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 200ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	350438	-1.56
97 1,4-Difluorobenze	1372567	823540	1921594	1410298	2.75
126 Chlorobenzene-d5	1227265	736359	1718171	1300571	5.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.86	-0.20
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

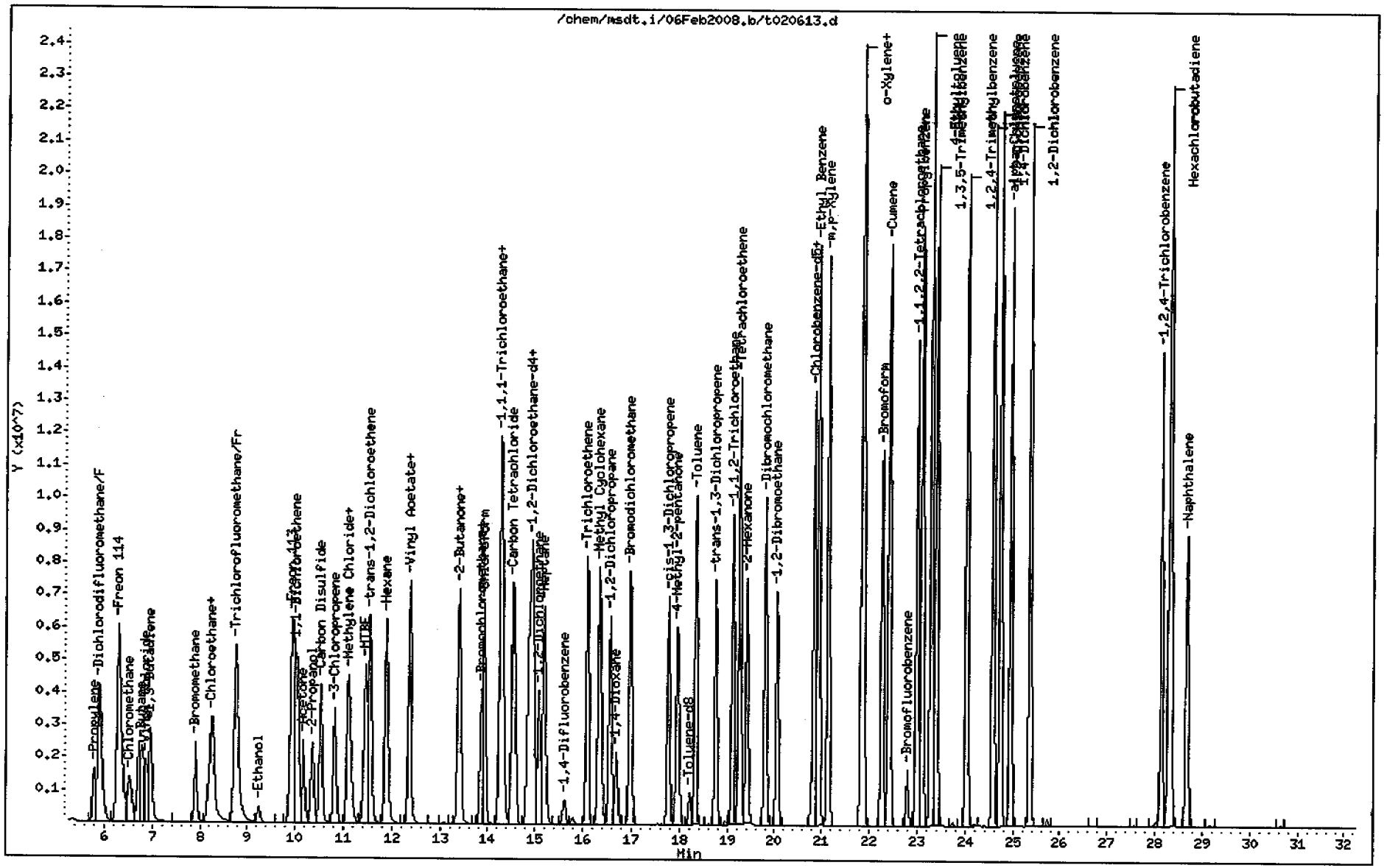
Data File: /chem/msdt.i/06Feb2008.b/t020613.d
Date : 06-FEB-2008 19:41
Client ID: Level 7
Sample Info: 200ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

0280



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802328-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	108
Freon 114	105
Chloromethane	110
Vinyl Chloride	109
1,3-Butadiene	111
Bromomethane	99
Chloroethane	114
Freon 11	106
Ethanol	113
Freon 113	104
1,1-Dichloroethene	112
Acetone	112
2-Propanol	111
Carbon Disulfide	110
Methylene Chloride	107
Methyl tert-butyl ether	125
trans-1,2-Dichloroethene	112
Hexane	118
1,1-Dichloroethane	113
2-Butanone (Methyl Ethyl Ketone)	116
cis-1,2-Dichloroethene	114
Tetrahydrofuran	119
Chloroform	115
1,1,1-Trichloroethane	112
Cyclohexane	117
Carbon Tetrachloride	109
Benzene	111
1,2-Dichloroethane	111
Heptane	120
Trichloroethene	113
1,2-Dichloropropane	116
1,4-Dioxane	110
Bromodichloromethane	112
cis-1,3-Dichloropropene	120
4-Methyl-2-pentanone	128
Toluene	118
trans-1,3-Dichloropropene	113
1,1,2-Trichloroethane	112
Tetrachloroethene	112

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802328-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	%Recovery
2-Hexanone	118
Dibromochloromethane	113
1,2-Dibromoethane (EDB)	115
Chlorobenzene	111
Ethyl Benzene	114
m,p-Xylene	117
o-Xylene	117
Styrene	126
Bromoform	114
1,1,2,2-Tetrachloroethane	116
4-Ethyltoluene	126
1,3,5-Trimethylbenzene	115
1,2,4-Trimethylbenzene	117
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	120
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	101
Hexachlorobutadiene	97
Chlorodifluoromethane	99
Methanol	69
n-Butanol	87
Propylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022106.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 14:36
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RFSO	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.70022	0.010	-5.69254	30.00000	Averaged
$ 113 Toluene-d8	0.96300	1.01251	0.010	-5.14080	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.65685	0.010	-1.57665	30.00000	Averaged
11 Propylene	0.81770	0.82811	0.010	-1.27338	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	4.88168	5.25422	0.010	-7.63139	30.00000	Averaged
16 Freon 114	3.22698	3.38754	0.010	-4.97539	30.00000	Averaged
18 Chloromethane	1.06576	1.16937	0.010	-9.72214	30.00000	Averaged
20 Vinyl Chloride	1.46323	1.59367	0.010	-8.91391	30.00000	Averaged
22 1,3-Butadiene	1.10115	1.22045	0.010	-10.83421	30.00000	Averaged
25 Bromomethane	1.44878	1.42857	0.010	1.39505	30.00000	Averaged
27 Chloroethane	0.76312	0.86759	0.010	-13.68969	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	5.52640	5.85374	0.010	-5.92321	30.00000	Averaged
38 Ethanol	0.42283	0.47615	0.010	-12.61149	30.00000	Averaged
42 Freon 113	2.54471	2.65791	0.010	-4.44835	30.00000	Averaged
43 1,1-Dichloroethene	2.29053	2.55632	0.010	-11.60382	30.00000	Averaged
45 Acetone	0.70987	0.79415	0.010	-11.87277	30.00000	Averaged
46 2-Propanol	2.43274	2.70645	0.010	-11.25105	30.00000	Averaged
47 Carbon Disulfide	4.33254	4.76642	0.010	-10.01437	30.00000	Averaged
51 3-Chloropropene	0.74606	0.80127	0.010	-7.40135	30.00000	Averaged
54 Methylene Chloride	1.44840	1.54828	0.010	-6.89580	30.00000	Averaged
57 tert-Butyl-Alcohol	2.65102	2.86550	0.010	-8.09048	40.00000	Averaged
60 MTBE	4.15810	5.19312	0.010	-24.89172	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.70224	1.89871	0.010	-11.54219	30.00000	Averaged
65 Hexane	2.24629	2.64168	0.010	-17.60214	30.00000	Averaged
69 Vinyl Acetate	0.44040	0.47672	0.010	-8.24753	30.00000	Averaged
70 1,1-Dichloroethane	3.14283	3.56590	0.010	-13.46119	30.00000	Averaged
75 2-Butanone	0.79961	0.92761	0.010	-16.00687	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.11467	2.41047	0.010	-13.98790	30.00000	Averaged
80 Tetrahydrofuran	1.34868	1.61024	0.010	-19.39305	30.00000	Averaged
82 Chloroform	3.63101	4.19059	0.010	-15.41128	30.00000	Averaged
83 1,1,1-Trichloroethane	4.01616	4.51032	0.010	-12.30441	30.00000	Averaged
85 Cyclohexane	2.15044	2.50978	0.010	-16.71021	30.00000	Averaged
87 Carbon Tetrachloride	3.85789	4.20512	0.010	-9.00068	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.24329	6.67184	0.010	-27.24532	30.00000	Averaged
91 Benzene	1.24979	1.39302	0.010	-11.46044	30.00000	Averaged
93 1,2-Dichloroethane	0.60974	0.67814	0.010	-11.21701	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022106.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 14:36
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.35378	0.42423	0.010	-19.91305	30.00000	Averaged
101 Trichloroethene	0.53529	0.60428	0.010	-12.88844	30.00000	Averaged
104 1,2-Dichloropropane	0.42168	0.48802	0.010	-15.73171	30.00000	Averaged
106 1,4-Dioxane	0.30866	0.33834	0.010	-9.61652	30.00000	Averaged
107 Bromodichloromethane	0.95798	1.07226	0.010	-11.92965	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.64255	0.76943	0.010	-19.74613	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29195	0.37343	0.010	-27.90609	30.00000	Averaged
114 Toluene	1.33263	1.56979	0.010	-17.79679	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.79014	0.89609	0.010	-13.40846	30.00000	Averaged
117 1,1,2-Trichloroethane	0.56947	0.63848	0.010	-12.11871	30.00000	Averaged
120 Tetrachloroethene	0.76308	0.85382	0.010	-11.89086	30.00000	Averaged
121 2-Hexanone	0.47685	0.56229	0.010	-17.91760	30.00000	Averaged
122 Dibromochloromethane	0.96963	1.09583	0.010	-13.01431	30.00000	Averaged
123 1,2-Dibromoethane	0.90581	1.03895	0.010	-14.69806	30.00000	Averaged
127 Chlorobenzene	1.31466	1.46341	0.010	-11.31466	30.00000	Averaged
128 Ethyl Benzene	0.68116	0.77863	0.010	-14.30821	30.00000	Averaged
129 m,p-Xylene	0.85774	1.00147	0.010	-16.75736	30.00000	Averaged
130 o-Xylene	0.81592	0.95204	0.010	-16.68328	30.00000	Averaged
131 Styrene	1.25002	1.57407	0.010	-25.92315	30.00000	Averaged
133 Bromoform	1.04080	1.19165	0.010	-14.49322	30.00000	Averaged
134 Cumene	2.25068	2.67499	0.010	-18.85249	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.30880	1.51835	0.010	-16.01039	30.00000	Averaged
142 Propylbenzene	2.91760	3.50585	0.010	-20.16213	30.00000	Averaged
145 4-Ethyltoluene	2.48367	3.12512	0.010	-25.82667	30.00000	Averaged
147 1,3,5-Trimethylbenzene	2.11868	2.43336	0.010	-14.85261	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.99645	2.33850	0.010	-17.13269	30.00000	Averaged
155 1,3-Dichlorobenzene	1.43495	1.60550	0.010	-11.88613	30.00000	Averaged
156 1,4-Dichlorobenzene	1.47654	1.66764	0.010	-12.94240	30.00000	Averaged
159 alpha-Chlorotoluene	2.13483	2.56150	0.010	-19.98639	30.00000	Averaged
161 1,2-Dichlorobenzene	1.39783	1.55288	0.010	-11.09203	30.00000	Averaged
165 1,2,4-Trichlorobenzene	1.06613	1.08055	0.010	-1.35224	30.00000	Averaged
166 Hexachlorobutadiene	1.07297	1.03914	0.010	3.15270	30.00000	Averaged
29 Isopentane	1.61629	1.71656	0.010	-6.20427	30.00000	Averaged
19 Butane	0.27985	0.30041	0.010	-7.34721	30.00000	Averaged
102 Methyl Cyclohexane	2.54614	3.02461	0.010	-18.79230	30.00000	Averaged
167 Naphthalene	1.47559	1.51283	0.010	-2.52329	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022106.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 21-FEB-2008 14:36
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 08:59 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
13.865	13.865 (1.000)	130	318158	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	246182			27.38- 127.38	77.38
13.865	13.865 (1.000)	49	578443			131.81- 231.81	181.81
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.607	15.607 (1.000)	114	1251468	25.0000		80.00- 120.00	100.00
15.607	15.607 (1.000)	88	210099			0.00- 66.79	16.79
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.805	20.805 (1.000)	117	1150991	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	670354			7.58- 107.58	58.24
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
14.943	14.943 (1.078)	65	540938	25.0000	26.423	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	315254			3.57- 103.57	58.28
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.206	18.206 (1.167)	98	1267119	25.0000	26.285	80.00- 120.00	100.00
18.206	18.206 (1.167)	70	149192			0.00- 61.29	11.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.167)	100	857857			18.71- 118.71	67.70
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	756024	25.0000	25.394	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	956094			76.46- 176.46	126.46
22.796	22.796 (1.096)	176	742540			48.22- 148.22	98.22
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	526938	50.0000	50.637	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	364415			17.96- 117.96	69.16
5.816	5.816 (0.419)	39	439605			33.44- 133.44	83.43
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.901	5.901 (0.426)	85	3343343	50.0000	53.816	80.00- 120.00	100.00
5.901	5.901 (0.426)	87	1081993			0.00- 82.13	32.36
16 Freon 114					CAS #: 76-14-2		
6.295	6.295 (0.454)	135	2155543	50.0000	52.488	80.00- 120.00	100.00
6.295	6.295 (0.454)	137	702541			0.00- 81.89	32.59
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	744090	50.0000	54.861	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	248435			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	1014075	50.0000	54.457	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	330395			0.00- 89.61	32.58
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	776593	50.0000	55.417	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	743424			53.33- 153.33	95.73
25 Bromomethane					CAS #: 74-83-9		
7.900	7.900 (0.570)	94	909020	50.0000	49.302	80.00- 120.00	100.00
7.900	7.900 (0.570)	96	844418			42.89- 142.89	92.89
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	552064	50.0000	56.845	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	141544			0.00- 76.71	25.64
8.182	8.182 (0.590)	66	182354			0.00- 83.02	33.03
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.773	8.773 (0.633)	101	3724827	50.0000	52.962	80.00- 120.00	100.00
8.773	8.773 (0.633)	103	2396325			14.33- 114.33	64.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.220	9.220 (0.665)	45	302983	50.0000	56.306	80.00- 120.00	100.00
9.220	9.220 (0.665)	43	73782			0.00- 75.24	24.35
9.220	9.220 (0.665)	46	109328			0.00- 89.78	36.08
42 Freon 113					CAS #: 76-13-1		
9.939	9.939 (0.717)	151	1691270	50.0000	52.224	80.00- 120.00	100.00
9.939	9.939 (0.717)	153	1073315			13.46- 113.46	63.46
9.939	9.939 (0.717)	101	2237538			82.30- 182.30	132.30
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.725)	61	1626629	50.0000	55.802	80.00- 120.00	100.00
10.050	10.050 (0.725)	96	968823			9.56- 109.56	59.56
10.050	10.050 (0.725)	98	625066			0.00- 88.43	38.43
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	505333	50.0000	55.936	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	1554337			267.82- 367.82	307.59
46 2-Propanol					CAS #: 67-63-0		
10.381	10.381 (0.749)	45	1722158	50.0000	55.626	80.00- 120.00	100.00
10.354	10.354 (0.747)	43	421429			0.00- 76.64	24.47
10.381	10.381 (0.749)	59	72747			0.00- 54.31	4.22
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	3032947	50.0000	55.007	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.824	10.824 (0.781)	76	509863	50.0000	53.701	80.00- 120.00	100.00
10.824	10.824 (0.781)	41	1102660			173.84- 273.84	216.27
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	985194	50.0000	53.448	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	872021			38.51- 138.51	88.51
11.100	11.100 (0.801)	51	315682			0.00- 83.83	32.04
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.155	11.155 (0.805)	59	1823363	50.0000	54.045	80.00- 120.00	100.00
11.155	11.155 (0.805)	41	401105			0.00- 72.85	22.00
11.155	11.155 (0.805)	57	180846			0.00- 59.93	9.92
60 MTBE					CAS #: 1634-04-4		
11.460	11.460 (0.826)	73	3304464	50.0000	62.446	80.00- 120.00	100.00
11.460	11.460 (0.826)	57	621550			0.00- 68.81	18.81
11.460	11.460 (0.826)	41	601662			0.00- 70.47	18.21

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1208181	50.0000	55.771	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1697687			90.52- 190.52	140.52
11.543	11.543 (0.832)	98	777161			16.26- 116.26	64.32
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1680943	50.0000	58.801	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	954156			9.30- 109.30	56.76
11.902	11.902 (0.858)	86	294358			0.00- 66.83	17.51
69 Vinyl Acetate					CAS #: 108-05-4		
12.344	12.344 (0.890)	86	303344	50.0000	54.124	80.00- 120.00	100.00
12.344	12.344 (0.890)	43	2767678			832.23- 932.23	912.39
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	2269037	50.0000	56.730	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	727416			0.00- 82.06	32.06
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	590250	50.0000	58.003	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1965986			283.08- 383.08	333.08
13.395	13.395 (0.966)	57	172513			0.00- 79.56	29.23
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1533821	50.0000	56.994	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	1189937			27.58- 127.58	77.58
13.423	13.423 (0.968)	98	769256			0.15- 100.15	50.15
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	1024619	50.0000	59.696	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	532427			1.96- 101.96	51.96
13.865	13.865 (1.000)	72	569307			2.04- 102.04	55.56
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2666540	50.0000	57.706	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1728112			14.81- 114.81	64.81
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2869991	50.0000	56.152	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1844940			14.28- 114.28	64.28
85 Cyclohexane					CAS #: 110-82-7		
14.308	14.308 (1.032)	84	1597016	50.0000	58.355	80.00- 120.00	100.00
14.308	14.308 (1.032)	56	1643322			52.90- 152.90	102.90
14.280	14.280 (1.030)	41	840301			2.62- 102.62	52.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2675787	50.0000	54.500	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2842852			56.24- 156.24	106.24
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	4245398	50.0000	63.623	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1366221			0.00- 82.82	32.18
14.888	14.888 (1.074)	41	1099520			0.00- 78.43	25.90
91 Benzene					CAS #: 71-43-2		
14.943	14.943 (0.957)	78	3486633	50.0000	55.730	80.00- 120.00	100.00
14.943	14.943 (0.957)	77	801927			0.00- 73.50	23.00
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.966)	62	1697330	50.0000	55.608	80.00- 120.00	100.00
15.082	15.082 (0.966)	64	546262			0.00- 84.23	32.18
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.973)	71	1061811	50.0000	59.956	80.00- 120.00	100.00
15.165	15.165 (0.972)	43	1477551			85.70- 185.70	139.15
15.192	15.192 (0.973)	57	897771			28.72- 128.72	84.55
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.030)	95	1512477	50.0000	56.444	80.00- 120.00	100.00
16.077	16.077 (1.030)	130	1347441			39.09- 139.09	89.09
16.077	16.077 (1.030)	97	948086			12.68- 112.68	62.68
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.547	16.547 (1.060)	63	1221480	50.0000	57.866	80.00- 120.00	100.00
16.547	16.547 (1.060)	62	872315			21.41- 121.41	71.41
16.547	16.547 (1.060)	41	683266			5.94- 105.94	55.94
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.069)	88	846839	50.0000	54.808	80.00- 120.00	100.00
16.685	16.685 (1.069)	58	498819			8.90- 108.90	58.90
16.685	16.685 (1.069)	57	169035			0.00- 71.19	19.96
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.089)	83	2683807	50.0000	55.965	80.00- 120.00	100.00
16.989	16.989 (1.089)	85	1739046			14.80- 114.80	64.80
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.140)	75	1925840	50.0000	59.873	80.00- 120.00	100.00
17.791	17.791 (1.140)	77	612275			0.00- 81.79	31.79
17.764	17.764 (1.138)	39	865616			0.00- 94.95	44.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.151)	58	934659	50.0000	63.953	80.00- 120.00	100.00
17.957	17.957 (1.151)	43	2136582			175.34- 275.34	228.59
17.957	17.957 (1.151)	85	467489			0.64- 100.64	50.02
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.174)	91	3929084	50.0000	58.898	80.00- 120.00	100.00
18.317	18.317 (1.174)	92	2370989			10.34- 110.34	60.34
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	2062772	50.0000	56.704	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	659970			0.00- 81.99	31.99
18.759	18.759 (0.902)	39	866394			0.00- 92.00	42.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.091	19.091 (0.918)	97	1469772	50.0000	56.059	80.00- 120.00	100.00
19.119	19.119 (0.919)	99	941163			14.03- 114.03	64.03
19.091	19.091 (0.918)	83	1264285			36.02- 136.02	86.02
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1965470	50.0000	55.945	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1346530			18.51- 118.51	68.51
19.284	19.284 (0.927)	131	1283290			15.29- 115.29	65.29
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1294388	50.0000	58.959	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	2178950			118.34- 218.34	168.34
19.423	19.423 (0.934)	100	262644			0.00- 71.71	20.29
122 Dibromochloromethane					CAS #: 124-48-1		
19.782	19.782 (0.951)	129	2522570	50.0000	56.507	80.00- 120.00	100.00
19.782	19.782 (0.951)	127	1937721			28.82- 128.82	76.82
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2391636	50.0000	57.349	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	2209703			42.39- 142.39	92.39
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3368737	50.0000	55.657	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	1067600			0.00- 81.69	31.69
20.833	20.833 (1.001)	77	2048529			10.81- 110.81	60.81
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1792382	50.0000	57.154	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5847127			269.96- 369.96	326.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2305367	50.0000	58.379	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4765497			149.87- 249.87	206.71
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	2191582	50.0000	58.342	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4739766			166.27- 266.27	216.27
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3623473	50.0000	62.962	80.00- 120.00	100.00
21.856	21.856 (1.050)	78	1878729			1.85- 101.85	51.85
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2743146	50.0000	57.247	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1394523			0.84- 100.84	50.84
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	6157786	50.0000	59.426	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1572325			0.00- 77.62	25.53
22.409	22.409 (1.077)	51	545484			0.00- 58.75	8.86
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3495207	50.0000	58.005	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2266238			14.84- 114.84	64.84
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	8070412	50.0000	60.081	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1687647			0.00- 71.63	20.91
23.100	23.100 (1.110)	105	292151			0.00- 53.71	3.62
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	7193973	50.0000	62.913	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	2126419			0.00- 79.56	29.56
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	5601560	50.0000	57.426	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2683613			0.00- 98.23	47.91
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	5383187	50.0000	58.566	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2430595			0.00- 94.91	45.15
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3695843	50.0000	55.943	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2349664			14.68- 114.68	63.58
24.593	24.593 (1.182)	111	1535129			0.00- 91.36	41.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3838870	50.0000	56.471	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2444832			16.09- 116.09	63.69
24.731	24.731 (1.189)	111	1534132			0.00- 90.13	39.96
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5896536	50.0000	59.993	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	1088979			0.00- 69.28	18.47
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3574705	50.0000	55.546	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2274797			13.64- 113.64	63.64
25.367	25.367 (1.219)	111	1564073			0.00- 93.75	43.75
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2487398	50.0000	50.676	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2350738			44.51- 144.51	94.51
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2392091	50.0000	48.424	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1501376			12.90- 112.90	62.76
29 Isopentane					CAS #: 78-78-4		
8.266	8.266 (0.596)	43	1092277	50.0000	53.102	80.00- 120.00	100.00
8.266	8.266 (0.596)	57	849757			27.67- 127.67	77.80
19 Butane					CAS #: 106-97-8		
6.802	6.802 (0.491)	58	191158	50.0000	53.674	80.00- 120.00	100.00
6.802	6.802 (0.491)	43	1343696			666.74- 766.74	702.92
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1924610	50.0000	59.396	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	861593			0.00- 95.22	44.77
16.354	16.354 (1.179)	55	1372394			20.82- 120.82	71.31
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3482504	50.0000	51.262	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	420675			0.00- 62.74	12.08

Air Toxics Ltd.

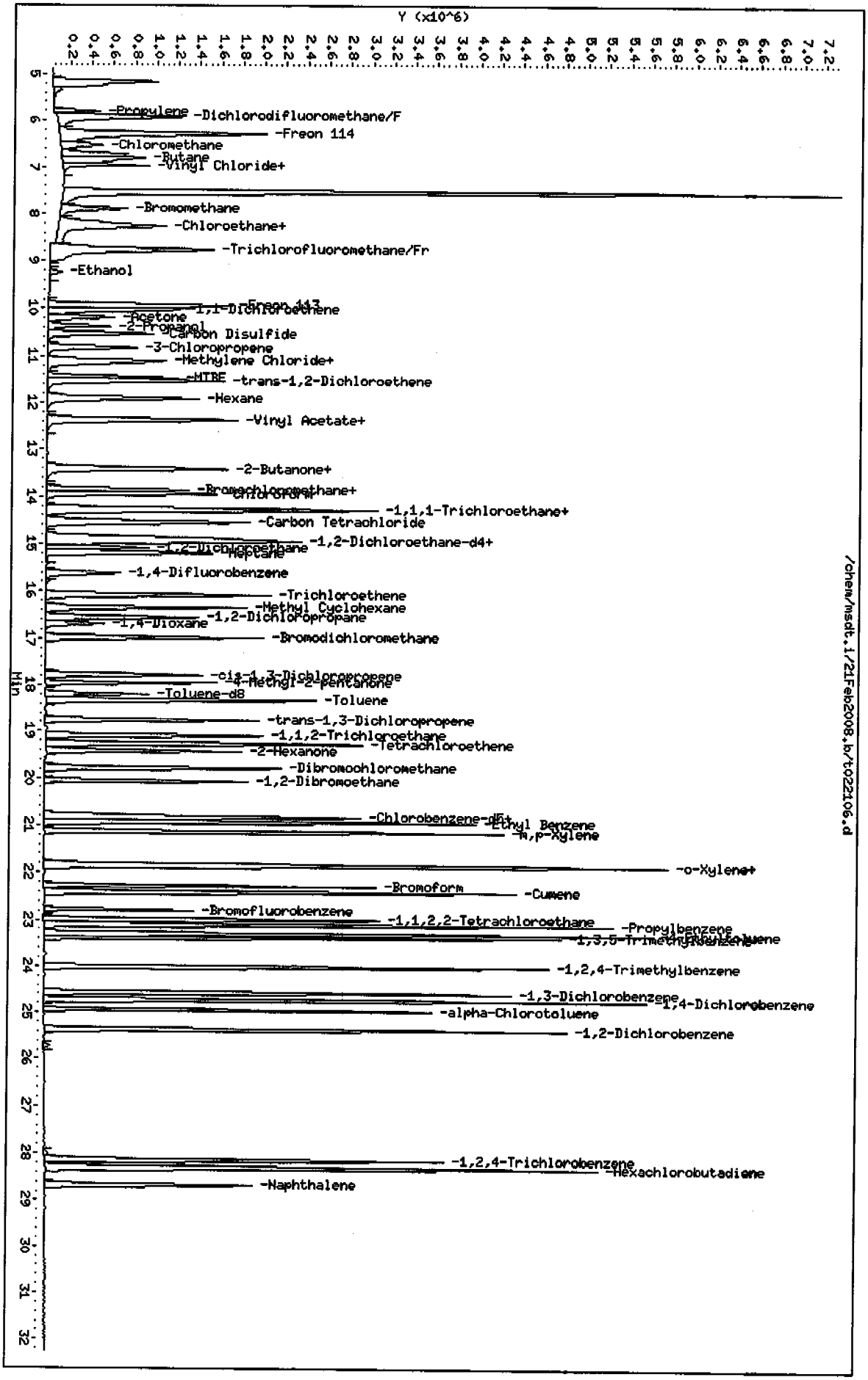
INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022106.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	318158	1.89
97 1,4-Difluorobenze	1266888	760133	1773643	1251468	-1.22
126 Chlorobenzene-d5	1159473	695684	1623262	1150991	-0.73

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.61	-0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msdt.i/21Feb2008.b/to22106.d
Date : 21-FEB-2008 14:36
Client ID: CCV-1
Sample Info: 50mL #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr

Column diameter: 0.53

Report Date: 22-Feb-2008 08:56

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i Injection Date: 21-FEB-2008 11:03
Lab File ID: t022104a.d Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Analysis Type: AIR Init. Cal. Times: 14:27 17:00
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.66318	0.010	-3.39005	30.00000	Averaged
$ 113 Toluene-d8	0.96300	0.98983	0.010	-2.78600	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.68094	0.010	-5.30252	30.00000	Averaged
6 Freon142b	3.43649	3.61347	0.010	-5.14990	40.00000	Averaged
9 Freon 13	3.44586	3.35030	0.010	2.77297	40.00000	Averaged
13 Freon 134a	1.53736	1.53392	0.010	0.22358	40.00000	Averaged
15 Freon 152a	0.82784	0.81286	0.010	1.80867	40.00000	Averaged
17 Freon 22	0.39055	0.38557	0.010	1.27508	40.00000	Averaged
26 Methanol	0.20868	0.14314	0.010	31.40888	40.00000	Averaged
34 Dichlorofluoromethane/Fr21	2.45592	2.61432	0.010	-6.44947	40.00000	Averaged
40 Freon123a	1.89468	2.07320	0.010	-9.42261	40.00000	Averaged
41 Freon123	0.22255	0.23514	0.010	-5.65497	40.00000	Averaged
68 Isopropyl ether	4.09678	4.38551	0.010	-7.04792	40.00000	Averaged
71 1-Propanol	0.21526	0.18897	0.010	12.21495	40.00000	Averaged
73 t-Butylethyl Ether	4.36417	4.86959	0.010	-11.58103	40.00000	Averaged
77 Ethyl Acetate	0.44196	0.45984	0.010	-4.04626	40.00000	Averaged
92 tert-amyl-Methyl Ether	4.12820	4.52447	0.010	-9.59915	40.00000	Averaged
96 2-Heptanone	2.16686	2.39901	0.010	-10.71394	40.00000	Averaged
98 1-Butanol	0.16280	0.14126	0.010	13.23519	40.00000	Averaged
119 Butyl Acetate	0.33960	0.37466	0.010	-10.32443	40.00000	Averaged
135 Cyclohexanone	0.41426	0.36212	0.010	12.58846	40.00000	Averaged
146 Diisobutyl Ketone	1.10363	1.23471	0.010	-11.87692	40.00000	Averaged

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AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104a.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 21-FEB-2008 11:03
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 08:56 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22bCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312258	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	236420			25.71- 125.71	75.71
13.865	13.865 (1.000)	49	373343			69.56- 169.56	119.56
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1266888	25.0000		80.00- 120.00	100.00
15.635	15.635 (1.000)	88	209470			0.00- 66.53	16.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1159473	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	667968			7.58- 107.58	57.61
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.944 (1.078)	65	519341	25.0000	25.848	80.00- 120.00	100.00
14.944	14.944 (1.078)	67	267067			3.57- 103.57	51.42
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1254003	25.0000	25.696	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	147578			0.00- 61.29	11.77

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	856417			18.71- 118.71	68.29
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	789531	25.0000	26.326	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	999365			76.58- 176.58	126.58
22.796	22.796	(1.096)	176	761084			46.40- 146.40	96.40
6 Freon142b						CAS #: 75-68-3		
6.408	6.408	(0.462)	65	2256667	50.0000	52.575	80.00- 120.00	100.00
6.408	6.408	(0.462)	45	455198			0.00- 71.32	20.17
9 Freon 13						CAS #: 75-72-9		
5.366	5.366	(0.387)	69	2092318	50.0000	48.614	80.00- 120.00	100.00
5.366	5.366	(0.387)	85	681331			0.00- 81.50	32.56
5.366	5.366	(0.387)	87	212271			0.00- 60.31	10.15
13 Freon 134a						CAS #: 811-97-2		
5.647	5.647	(0.407)	83	957959	50.0000	49.888	80.00- 120.00	100.00
5.647	5.647	(0.407)	69	790194			32.62- 132.62	82.49
15 Freon 152a						CAS #: 75-37-6		
5.816	5.816	(0.419)	65	507647	50.0000	49.096	80.00- 120.00	100.00
5.816	5.816	(0.419)	51	855266			127.07- 227.07	168.48
5.816	5.816	(0.419)	47	223144			0.00- 93.51	43.96
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	240792	50.0000	49.362	80.00- 120.00	100.00
5.985	5.985	(0.432)	51	1193401			463.95- 563.95	495.61
5.985	5.985	(0.432)	85	25075			0.00- 65.76	10.41
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	536342	300.000	205.77	80.00- 120.00	100.00
7.534	7.534	(0.543)	32	456083			35.04- 135.04	85.04
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	1632683	50.0000	53.225	80.00- 120.00	100.00
8.717	8.717	(0.629)	69	532919			0.00- 82.56	32.64
8.717	8.717	(0.629)	35	85037			0.00- 55.48	5.21
40 Freon123a						CAS #: 354-23-4		
9.552	9.552	(0.689)	67	1294749	50.0000	54.711	80.00- 120.00	100.00
9.552	9.552	(0.689)	117	946703			22.27- 122.27	73.12
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	146846	50.0000	52.827	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)							
9.718	9.718 (0.701)	133	29959			0.00- 70.21	20.40
9.718	9.718 (0.701)	85	122663			280.12- 380.12	83.53
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	2738824	50.0000	53.524	80.00- 120.00	100.00
12.289	12.289 (0.886)	87	875522			0.00- 80.78	31.97
12.289	12.289 (0.886)	59	320352			0.00- 62.00	11.70
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	118012	50.0000	43.892	80.00- 120.00	100.00
12.400	12.400 (0.894)	59	177518			82.09- 182.09	150.42
12.289	12.289 (0.886)	41	548379			321.23- 421.23	464.68
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	3041136	50.0000	55.790	80.00- 120.00	100.00
12.925	12.925 (0.932)	87	1293560			0.00- 93.06	42.54
12.925	12.925 (0.932)	41	498322			0.00- 69.68	16.39
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	287177	50.0000	52.023	80.00- 120.00	100.00
13.395	13.395 (0.966)	61	317488			52.94- 152.94	110.55
13.395	13.395 (0.966)	43	1980955			599.75- 699.75	689.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	2825604	50.0000	54.800	80.00- 120.00	100.00
14.999	14.999 (1.082)	87	674366			0.00- 73.24	23.87
14.999	14.999 (1.082)	55	659557			0.00- 75.20	23.34
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	1498222	50.0000	55.357	80.00- 120.00	100.00
21.966	21.966 (1.584)	43	2089626			90.45- 190.45	139.47
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	357913	50.0000	43.382	80.00- 120.00	100.00
15.801	15.801 (1.011)	41	242656			29.27- 129.27	67.80
15.801	15.801 (1.011)	43	184494			9.88- 109.88	51.55
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	949314	50.0000	55.162	80.00- 120.00	100.00
19.533	19.533 (1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533 (1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	839726	50.0000	43.706	80.00- 120.00	100.00
22.741	22.741 (1.093)	98	429311			0.39- 100.39	51.13

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)								
22.741	22.741	(1.093)	42	544268			13.24- 113.24	64.81
146 Diisobutyl Ketone						CAS #: 108-83-8		
23.543	23.543	(1.132)	57	2863217	50.0000	55.938	80.00- 120.00	100.00
23.570	23.570	(1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104a.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	312258	-1.85
97 1,4-Difluorobenze	1251468	750881	1752055	1266888	1.23
126 Chlorobenzene-d5	1150991	690595	1611387	1159473	0.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

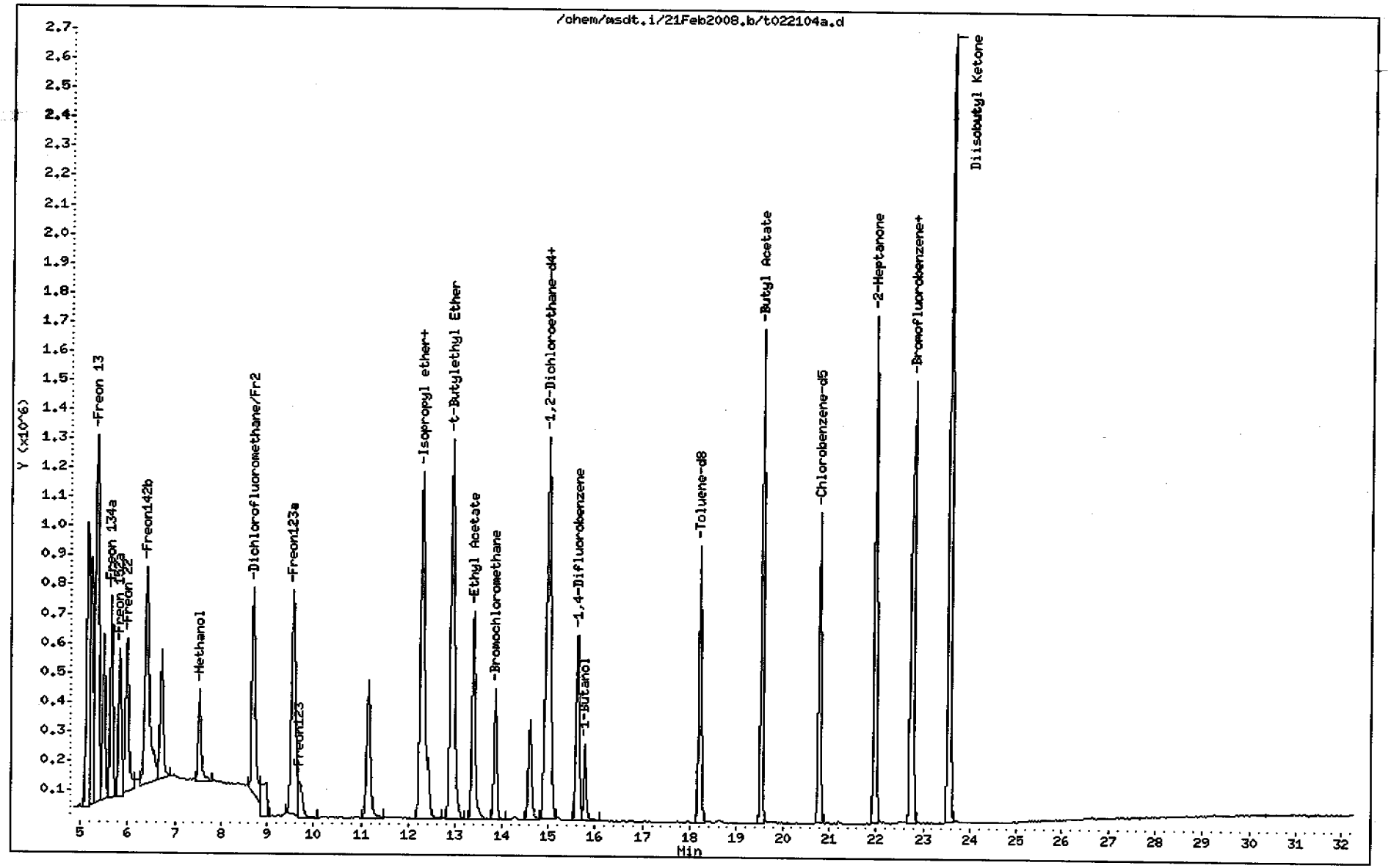
Data File: /chem/msdt.i/21Feb2008.b/t022104a.d
Date : 21-FEB-2008 11:03
Client ID: CCVsp
Sample Info: 50ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0301



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802328-08B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	%Recovery
Freon 12	112
Freon 114	107
Chloromethane	112
Vinyl Chloride	106
1,3-Butadiene	109
Bromomethane	99
Chloroethane	105
Freon 11	110
Ethanol	108
Freon 113	98
1,1-Dichloroethene	108
Acetone	98
2-Propanol	107
Carbon Disulfide	103
Methylene Chloride	108
Methyl tert-butyl ether	125
trans-1,2-Dichloroethene	103
Hexane	113
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	107
cis-1,2-Dichloroethene	112
Tetrahydrofuran	118
Chloroform	115
1,1,1-Trichloroethane	117
Cyclohexane	111
Carbon Tetrachloride	119
Benzene	110
1,2-Dichloroethane	118
Heptane	117
Trichloroethene	114
1,2-Dichloropropane	116
1,4-Dioxane	108
Bromodichloromethane	116
cis-1,3-Dichloropropene	119
4-Methyl-2-pentanone	124
Toluene	117
trans-1,3-Dichloropropene	117
1,1,2-Trichloroethane	112
Tetrachloroethene	114

0302

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802328-08B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	114
Dibromochloromethane	121
1,2-Dibromoethane (EDB)	117
Chlorobenzene	111
Ethyl Benzene	115
m,p-Xylene	117
o-Xylene	116
Styrene	125
Bromoform	119
1,1,2,2-Tetrachloroethane	114
4-Ethyltoluene	126
1,3,5-Trimethylbenzene	116
1,2,4-Trimethylbenzene	119
1,3-Dichlorobenzene	114
1,4-Dichlorobenzene	115
alpha-Chlorotoluene	120
1,2-Dichlorobenzene	113
1,2,4-Trichlorobenzene	99
Hexachlorobutadiene	98
Chlorodifluoromethane	106
Methanol	111
n-Butanol	114
Propylene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	102	70-130

0303

Data File: /chem/msdt.i/22Feb2008.b/t022202.d
Report Date: 22-Feb-2008 11:02

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022202.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/22Feb2008.b/t14q206b.m

Injection Date: 22-FEB-2008 09:47
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.78588	0.010	-11.01778	30.00000	Averaged
$ 113 Toluene-d8	0.96300	1.02070	0.010	-5.99133	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.66321	0.010	-2.56070	30.00000	Averaged
11 Propylene	0.81770	0.84364	0.010	-3.17343	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	4.88168	5.47154	0.010	-12.08323	30.00000	Averaged
16 Freon 114	3.22698	3.44140	0.010	-6.64474	30.00000	Averaged
18 Chloromethane	1.06576	1.19440	0.010	-12.07030	30.00000	Averaged
20 Vinyl Chloride	1.46323	1.55551	0.010	-6.30648	30.00000	Averaged
22 1,3-Butadiene	1.10115	1.20379	0.010	-9.32097	30.00000	Averaged
25 Bromomethane	1.44878	1.43402	0.010	1.01885	30.00000	Averaged
27 Chloroethane	0.76312	0.80440	0.010	-5.40840	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	5.52640	6.05597	0.010	-9.58254	30.00000	Averaged
38 Ethanol	0.42283	0.45710	0.010	-8.10522	30.00000	Averaged
42 Freon 113	2.54471	2.50163	0.010	1.69305	30.00000	Averaged
43 1,1-Dichloroethene	2.29053	2.47476	0.010	-8.04295	30.00000	Averaged
45 Acetone	0.70987	0.69330	0.010	2.33453	30.00000	Averaged
46 2-Propanol	2.43274	2.60296	0.010	-6.99690	30.00000	Averaged
47 Carbon Disulfide	4.33254	4.44833	0.010	-2.67260	30.00000	Averaged
51 3-Chloropropene	0.74606	0.73617	0.010	1.32457	30.00000	Averaged
54 Methylene Chloride	1.44840	1.56493	0.010	-8.04535	30.00000	Averaged
57 tert-Butyl-Alcohol	2.65102	3.02184	0.010	-13.98791	40.00000	Averaged
60 MTBE	4.15810	5.18204	0.010	-24.62520	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.70224	1.75690	0.010	-3.21151	30.00000	Averaged
65 Hexane	2.24629	2.54185	0.010	-13.15780	30.00000	Averaged
69 Vinyl Acetate	0.44040	0.44300	0.010	-0.59186	30.00000	Averaged
70 1,1-Dichloroethane	3.14283	3.41128	0.010	-8.54161	30.00000	Averaged
75 2-Butanone	0.79961	0.85523	0.010	-6.95527	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.11467	2.36341	0.010	-11.76238	30.00000	Averaged
80 Tetrahydrofuran	1.34868	1.58477	0.010	-17.50464	30.00000	Averaged
82 Chloroform	3.63101	4.19232	0.010	-15.45892	30.00000	Averaged
83 1,1,1-Trichloroethane	4.01616	4.69197	0.010	-16.82724	30.00000	Averaged
85 Cyclohexane	2.15044	2.39758	0.010	-11.49256	30.00000	Averaged
87 Carbon Tetrachloride	3.85789	4.60045	0.010	-19.24801	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.24329	6.39614	0.010	-21.98727	30.00000	Averaged
91 Benzene	1.24979	1.37341	0.010	-9.89176	30.00000	Averaged
93 1,2-Dichloroethane	0.60974	0.71759	0.010	-17.68781	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022202.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/22Feb2008.b/t14q206b.m

Injection Date: 22-FEB-2008 09:47
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.35378	0.41300	0.010	-16.73960	30.00000	Averaged
101 Trichloroethene	0.53529	0.60879	0.010	-13.73006	30.00000	Averaged
104 1,2-Dichloropropane	0.42168	0.48839	0.010	-15.81984	30.00000	Averaged
106 1,4-Dioxane	0.30866	0.33446	0.010	-8.35898	30.00000	Averaged
107 Bromodichloromethane	0.95798	1.11633	0.010	-16.53008	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.64255	0.76715	0.010	-19.39145	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29195	0.36219	0.010	-24.05621	30.00000	Averaged
114 Toluene	1.33263	1.56539	0.010	-17.46634	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.79014	0.92219	0.010	-16.71281	30.00000	Averaged
117 1,1,2-Trichloroethane	0.56947	0.63955	0.010	-12.30647	30.00000	Averaged
120 Tetrachloroethene	0.76308	0.87297	0.010	-14.40030	30.00000	Averaged
121 2-Hexanone	0.47685	0.54258	0.010	-13.78317	30.00000	Averaged
122 Dibromochloromethane	0.96963	1.17335	0.010	-21.00932	30.00000	Averaged
123 1,2-Dibromoethane	0.90581	1.05975	0.010	-16.99465	30.00000	Averaged
127 Chlorobenzene	1.31466	1.46155	0.010	-11.17309	30.00000	Averaged
128 Ethyl Benzene	0.68116	0.78320	0.010	-14.98034	30.00000	Averaged
129 m,p-Xylene	0.85774	1.00511	0.010	-17.18134	30.00000	Averaged
130 o-Xylene	0.81592	0.94311	0.010	-15.58839	30.00000	Averaged
131 Styrene	1.25002	1.56555	0.010	-25.24210	30.00000	Averaged
133 Bromoform	1.04080	1.24119	0.010	-19.25391	30.00000	Averaged
134 Cumene	2.25068	2.69743	0.010	-19.84917	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.30880	1.49810	0.010	-14.46314	30.00000	Averaged
142 Propylbenzene	2.91760	3.50323	0.010	-20.07207	30.00000	Averaged
145 4-Ethyltoluene	2.48367	3.12650	0.010	-25.88213	30.00000	Averaged
147 1,3,5-Trimethylbenzene	2.11868	2.46360	0.010	-16.27964	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.99645	2.38092	0.010	-19.25731	30.00000	Averaged
155 1,3-Dichlorobenzene	1.43495	1.63637	0.010	-14.03703	30.00000	Averaged
156 1,4-Dichlorobenzene	1.47654	1.69934	0.010	-15.08977	30.00000	Averaged
159 alpha-Chlorotoluene	2.13483	2.57204	0.010	-20.48002	30.00000	Averaged
161 1,2-Dichlorobenzene	1.39783	1.58358	0.010	-13.28837	30.00000	Averaged
165 1,2,4-Trichlorobenzene	1.06613	1.05459	0.010	1.08285	30.00000	Averaged
166 Hexachlorobutadiene	1.07297	1.05172	0.010	1.98101	30.00000	Averaged
29 Isopentane	1.61629	1.68179	0.010	-4.05271	30.00000	Averaged
19 Butane	0.27985	0.29994	0.010	-7.17859	30.00000	Averaged
102 Methyl Cyclohexane	2.54614	2.97083	0.010	-16.67993	30.00000	Averaged
167 Naphthalene	1.47559	1.47389	0.010	0.11567	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022202.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 22-FEB-2008 09:47
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 11:01 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865	(1.000)	130	273018	25.0000		80.00- 120.00	100.00
13.865	13.865	(1.000)	128	209063			26.57- 126.57	76.57
13.865	13.865	(1.000)	49	516192			139.07- 239.07	189.07
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.607	15.607	(1.000)	114	1067226	25.0000		80.00- 120.00	100.00
15.607	15.607	(1.000)	88	179006			0.00- 66.77	16.77
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805	(1.000)	117	999102	25.0000		80.00- 120.00	100.00
20.805	20.805	(1.000)	82	569290			7.58- 107.58	56.98
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.944	14.944	(1.078)	65	487578	25.0000	27.754	80.00- 120.00	100.00
14.944	14.944	(1.078)	67	272745			3.57- 103.57	55.94
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206	(1.167)	98	1089314	25.0000	26.498	80.00- 120.00	100.00
18.206	18.206	(1.167)	70	125855			0.00- 61.29	11.55

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.167)	100	736559			18.71- 118.71	67.62
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	662614	25.0000	25.640	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	846727			77.79- 177.79	127.79
22.796	22.796	(1.096)	176	652128			48.42- 148.42	98.42
11 Propylene						CAS #: 115-07-1		
5.816	5.816	(0.419)	41	460660	50.0000	51.587	80.00- 120.00	100.00
5.816	5.816	(0.419)	42	317568			17.96- 117.96	68.94
5.816	5.816	(0.419)	39	383500			33.44- 133.44	83.25
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.901	5.901	(0.426)	85	2987659	50.0000	56.042	80.00- 120.00	100.00
5.901	5.901	(0.426)	87	966717			0.00- 82.13	32.36
16 Freon 114						CAS #: 76-14-2		
6.295	6.295	(0.454)	135	1879131	50.0000	53.322	80.00- 120.00	100.00
6.295	6.295	(0.454)	137	586593			0.00- 81.89	31.22
18 Chloromethane						CAS #: 74-87-3		
6.520	6.520	(0.470)	50	652184	50.0000	56.035	80.00- 120.00	100.00
6.548	6.548	(0.472)	52	211436			0.00- 83.62	32.42
20 Vinyl Chloride						CAS #: 75-01-4		
6.886	6.886	(0.497)	62	849366	50.0000	53.153	80.00- 120.00	100.00
6.886	6.886	(0.497)	64	270059			0.00- 89.61	31.80
22 1,3-Butadiene						CAS #: 106-99-0		
6.971	6.971	(0.503)	54	657312	50.0000	54.660	80.00- 120.00	100.00
6.971	6.971	(0.503)	39	655166			53.33- 153.33	99.67
25 Bromomethane						CAS #: 74-83-9		
7.900	7.900	(0.570)	94	783025	50.0000	49.490	80.00- 120.00	100.00
7.900	7.900	(0.570)	96	719571			41.90- 141.90	91.90
27 Chloroethane						CAS #: 75-00-3		
8.182	8.182	(0.590)	64	439230	50.0000	52.704	80.00- 120.00	100.00
8.182	8.182	(0.590)	49	126683			0.00- 76.71	28.84
8.182	8.182	(0.590)	66	146201			0.00- 83.02	33.29
31 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.773	8.773	(0.633)	101	3306776	50.0000	54.791	80.00- 120.00	100.00
8.773	8.773	(0.633)	103	2144958			14.87- 114.87	64.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.220	9.220 (0.665)	45	249592	50.0000	54.053	80.00- 120.00	100.00
9.220	9.220 (0.665)	43	64949			0.00- 75.24	26.02
9.220	9.220 (0.665)	46	93038			0.00- 89.78	37.28
42 Freon 113					CAS #: 76-13-1		
9.939	9.939 (0.717)	151	1365979	50.0000	49.153	80.00- 120.00	100.00
9.939	9.939 (0.717)	153	863685			13.23- 113.23	63.23
9.939	9.939 (0.717)	101	1818058			83.10- 183.10	133.10
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.725)	61	1351308	50.0000	54.021	80.00- 120.00	100.00
10.050	10.050 (0.725)	96	742234			4.93- 104.93	54.93
10.050	10.050 (0.725)	98	481870			0.00- 85.66	35.66
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	378567	50.0000	48.833	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	1319301			267.82- 367.82	348.50
46 2-Propanol					CAS #: 67-63-0		
10.381	10.381 (0.749)	45	1421309	50.0000	53.498	80.00- 120.00	100.00
10.381	10.381 (0.749)	43	376680			0.00- 76.64	26.50
10.381	10.381 (0.749)	59	59184			0.00- 54.31	4.16
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	2428949	50.0000	51.336	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.824	10.824 (0.781)	76	401977	50.0000	49.338	80.00- 120.00	100.00
10.824	10.824 (0.781)	41	950130			173.84- 273.84	236.36
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	854507	50.0000	54.023	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	702204			32.18- 132.18	82.18
11.100	11.100 (0.801)	51	272819			0.00- 83.83	31.93
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.156	11.156 (0.805)	59	1650034	50.0000	56.994	80.00- 120.00	100.00
11.156	11.156 (0.805)	41	374839			0.00- 72.85	22.72
11.156	11.156 (0.805)	57	174531			0.00- 59.93	10.58
60 MTBE					CAS #: 1634-04-4		
11.460	11.460 (0.826)	73	2829578	50.0000	62.313	80.00- 120.00	100.00
11.460	11.460 (0.826)	57	545264			0.00- 69.27	19.27
11.460	11.460 (0.826)	41	570790			0.00- 70.47	20.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	959333	50.0000	51.606	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1431839			99.25- 199.25	149.25
11.543	11.543 (0.832)	98	608469			16.26- 116.26	63.43
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1387940	50.0000	56.579	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	817468			9.30- 109.30	58.90
11.902	11.902 (0.858)	86	240649			0.00- 66.83	17.34
69 Vinyl Acetate					CAS #: 108-05-4		
12.344	12.344 (0.890)	86	241896	50.0000	50.296	80.00- 120.00	100.00
12.344	12.344 (0.890)	43	2325783			832.23- 932.23	961.48
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	1862683	50.0000	54.271	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	601661			0.00- 82.30	32.30
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	466985	50.0000	53.478	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1676353			308.97- 408.97	358.97
13.395	13.395 (0.966)	57	144160			0.00- 79.56	30.87
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1290506	50.0000	55.881	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	968525			25.05- 125.05	75.05
13.423	13.423 (0.968)	98	617380			0.00- 97.84	47.84
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	865340	50.0000	58.752	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	427832			0.00- 99.44	49.44
13.865	13.865 (1.000)	72	463456			2.04- 102.04	53.56
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2289158	50.0000	57.729	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1471112			14.26- 114.26	64.26
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2561983	50.0000	58.414	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1662624			14.90- 114.90	64.90
85 Cyclohexane					CAS #: 110-82-7		
14.308	14.308 (1.032)	84	1309166	50.0000	55.746	80.00- 120.00	100.00
14.308	14.308 (1.032)	56	1347857			52.96- 152.96	102.96
14.280	14.280 (1.030)	41	736413			6.25- 106.25	56.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2512013	50.0000	59.624	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2671131			56.33- 156.33	106.33
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	3492525	50.0000	60.994	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1128416			0.00- 82.82	32.31
14.888	14.888 (1.074)	41	975743			0.00- 78.43	27.94
91 Benzene					CAS #: 71-43-2		
14.944	14.944 (0.957)	78	2931482	50.0000	54.946	80.00- 120.00	100.00
14.944	14.944 (0.957)	77	679907			0.00- 73.50	23.19
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.966)	62	1531663	50.0000	58.844	80.00- 120.00	100.00
15.082	15.082 (0.966)	64	499845			0.00- 84.23	32.63
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.973)	71	881527	50.0000	58.370	80.00- 120.00	100.00
15.192	15.192 (0.973)	43	1258059			85.70- 185.70	142.71
15.192	15.192 (0.973)	57	745411			28.72- 128.72	84.56
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.030)	95	1299425	50.0000	56.865	80.00- 120.00	100.00
16.077	16.077 (1.030)	130	1199865			42.34- 142.34	92.34
16.077	16.077 (1.030)	97	828282			13.74- 113.74	63.74
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.062)	63	1042446	50.0000	57.910	80.00- 120.00	100.00
16.575	16.575 (1.062)	62	750796			22.02- 122.02	72.02
16.547	16.547 (1.060)	41	619508			9.43- 109.43	59.43
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.069)	88	713882	50.0000	54.179	80.00- 120.00	100.00
16.685	16.685 (1.069)	58	416166			8.30- 108.30	58.30
16.685	16.685 (1.069)	57	147881			0.00- 71.19	20.72
107 Bromodichloromethane					CAS #: 75-27-4		
16.990	16.990 (1.089)	83	2382763	50.0000	58.265	80.00- 120.00	100.00
16.990	16.990 (1.089)	85	1537649			14.53- 114.53	64.53
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.140)	75	1637452	50.0000	59.696	80.00- 120.00	100.00
17.791	17.791 (1.140)	77	523447			0.00- 81.97	31.97
17.764	17.764 (1.138)	39	776159			0.00- 97.40	47.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.151)	58	773067	50.0000	62.028	80.00- 120.00	100.00
17.957	17.957 (1.151)	43	1821143			175.34- 275.34	235.57
17.957	17.957 (1.151)	85	378248			0.64- 100.64	48.93
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.174)	91	3341242	50.0000	58.733	80.00- 120.00	100.00
18.317	18.317 (1.174)	92	2003109			9.95- 109.95	59.95
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1842732	50.0000	58.356	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	591934			0.00- 82.12	32.12
18.759	18.759 (0.902)	39	791998			0.00- 92.98	42.98
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.119	19.119 (0.919)	97	1277952	50.0000	56.153	80.00- 120.00	100.00
19.119	19.119 (0.919)	99	799171			12.54- 112.54	62.54
19.119	19.119 (0.919)	83	1092256			35.47- 135.47	85.47
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1744363	50.0000	57.200	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1230082			20.52- 120.52	70.52
19.284	19.284 (0.927)	131	1164272			16.74- 116.74	66.74
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1084181	50.0000	56.892	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	1861306			121.68- 221.68	171.68
19.423	19.423 (0.934)	100	227598			0.00- 71.71	20.99
122 Dibromochloromethane					CAS #: 124-48-1		
19.810	19.810 (0.952)	129	2344588	50.0000	60.505	80.00- 120.00	100.00
19.810	19.810 (0.952)	127	1810325			28.82- 128.82	77.21
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2117595	50.0000	58.497	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	1935734			41.41- 141.41	91.41
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	2920467	50.0000	55.586	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	920132			0.00- 81.51	31.51
20.833	20.833 (1.001)	77	1734914			9.41- 109.41	59.41
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1565001	50.0000	57.490	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5002490			269.96- 369.96	319.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2008409	50.0000	58.591	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4090763			149.87- 249.87	203.68
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	1884522	50.0000	57.794	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4074067			166.19- 266.19	216.19
131 Styrene					CAS #: 100-42-5		
21.884	21.884 (1.052)	104	3128295	50.0000	62.621	80.00- 120.00	100.00
21.856	21.856 (1.050)	78	1646963			2.65- 102.65	52.65
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2480160	50.0000	59.627	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1266061			1.05- 101.05	51.05
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	5390006	50.0000	59.924	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1392582			0.00- 77.62	25.84
22.409	22.409 (1.077)	51	481048			0.00- 58.75	8.92
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.990	22.990 (1.105)	83	2993502	50.0000	57.232	80.00- 120.00	100.00
22.990	22.990 (1.105)	85	1946370			15.02- 115.02	65.02
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	7000160	50.0000	60.036	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1514984			0.00- 71.63	21.64
23.100	23.100 (1.110)	105	255099			0.00- 53.71	3.64
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	6247382	50.0000	62.941	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	1887311			0.00- 80.21	30.21
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	4922772	50.0000	58.140	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2394579			0.00- 98.23	48.64
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.013	24.013 (1.154)	105	4757560	50.0000	59.629	80.00- 120.00	100.00
24.013	24.013 (1.154)	120	2162830			0.00- 94.91	45.46
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3269799	50.0000	57.018	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2088710			14.68- 114.68	63.88
24.593	24.593 (1.182)	111	1361703			0.00- 91.36	41.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3395635	50.0000	57.545	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2176833			16.09- 116.09	64.11
24.731	24.731 (1.189)	111	1368368			0.00- 90.13	40.30
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5139465	50.0000	60.240	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	963651			0.00- 69.28	18.75
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3164321	50.0000	56.644	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2018621			13.79- 113.79	63.79
25.367	25.367 (1.219)	111	1371783			0.00- 93.35	43.35
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2107276	50.0000	49.458	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2008955			45.33- 145.33	95.33
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2101543	50.0000	49.009	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1321808			12.90- 112.90	62.90
29 Isopentane					CAS #: 78-78-4		
8.266	8.266 (0.596)	43	918317	50.0000	52.026	80.00- 120.00	100.00
8.266	8.266 (0.596)	57	681021			27.67- 127.67	74.16
19 Butane					CAS #: 106-97-8		
6.802	6.802 (0.491)	58	163779	50.0000	53.589	80.00- 120.00	100.00
6.802	6.802 (0.491)	43	1185475			666.74- 766.74	723.83
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1622180	50.0000	58.340	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	734625			0.00- 95.22	45.29
16.354	16.354 (1.179)	55	1164891			20.82- 120.82	71.81
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	2945129	50.0000	49.942	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	356145			0.00- 62.74	12.09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

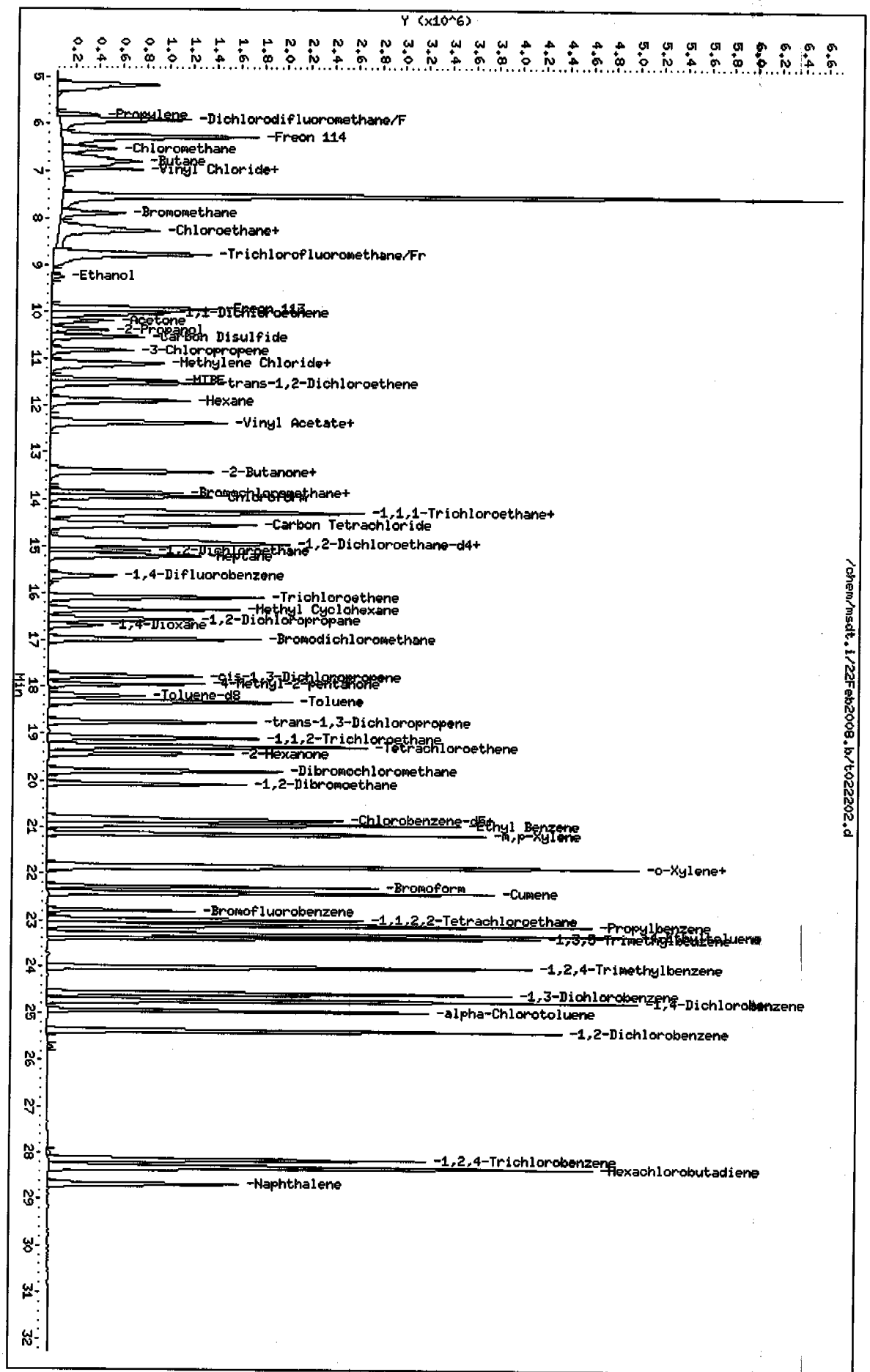
Instrument ID: msdt.i
Lab File ID: t022202.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 22-FEB-2008
Calibration Time: 10:26
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	271711	163027	380395	273018	0.48
97 1,4-Difluorobenze	1113186	667912	1558460	1067226	-4.13
126 Chlorobenzene-d5	973103	583862	1362344	999102	2.67

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.61	-0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msdt.i/22Feb2008.b/t022202.d
Date : 22-FEB-2008 09:47
Client ID: CCV-1
Sample Info: 50mL #1576-261

Column phase: RTx-624

/chem/msdt.i/22Feb2008.b/t022202.d

Instrument: msdt.i
Operator: sjr
Column diameter: 0.53

Data File: /chem/msdt.i/22Feb2008.b/t022203.d
Report Date: 22-Feb-2008 10:58

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022203.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msdt.i/22Feb2008.b/t14q206b.m

Injection Date: 22-FEB-2008 10:26
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.77699	0.010	-10.46529	30.00000	Averaged
$ 113 Toluene-d8	0.96300	0.93403	0.010	3.00806	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.70870	0.010	-9.59483	30.00000	Averaged
6 Freon142b	3.43649	3.83662	0.010	-11.64364	40.00000	Averaged
9 Freon 13	3.44586	3.46115	0.010	-0.44395	40.00000	Averaged
13 Freon 134a	1.53736	1.67182	0.010	-8.74646	40.00000	Averaged
15 Freon 152a	0.82784	0.79911	0.010	3.47062	40.00000	Averaged
17 Freon 22	0.39055	0.41215	0.010	-5.53074	40.00000	Averaged
26 Methanol	0.20868	0.23246	0.010	-11.39438	40.00000	Averaged
34 Dichlorofluoromethane/Fr21	2.45592	2.69024	0.010	-9.54098	40.00000	Averaged
40 Freon123a	1.89468	2.02059	0.010	-6.64577	40.00000	Averaged
41 Freon123	0.22255	0.23702	0.010	-6.50258	40.00000	Averaged
68 Isopropyl ether	4.09678	4.31379	0.010	-5.29710	40.00000	Averaged
71 1-Propanol	0.21526	0.24586	0.010	-14.21679	40.00000	Averaged
73 t-Butylethyl Ether	4.36417	4.80375	0.010	-10.07239	40.00000	Averaged
77 Ethyl Acetate	0.44196	0.45631	0.010	-3.24774	40.00000	Averaged
92 tert-amyl-Methyl Ether	4.12820	4.47872	0.010	-8.49087	40.00000	Averaged
96 2-Heptanone	2.16686	2.41633	0.010	-11.51321	40.00000	Averaged
98 1-Butanol	0.16280	0.18556	0.010	-13.97557	40.00000	Averaged
119 Butyl Acetate	0.33960	0.36342	0.010	-7.01302	40.00000	Averaged
135 Cyclohexanone	0.41426	0.48249	0.010	-16.46981	40.00000	Averaged
146 Diisobutyl Ketone	1.10363	1.27426	0.010	-15.46134	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022203.d
Lab Smp Id: CCV Client Smp ID: CCVsp
Inj Date : 22-FEB-2008 10:26
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-299
Misc Info : 200/1200ppbv -> 50/300ppbv
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 10:58 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22bCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	271711	25.0000		80.00- 120.00		100.00
13.865	13.865 (1.000)	128	215117			29.17- 129.17		79.17
13.865	13.865 (1.000)	49	337223			74.11- 174.11		124.11
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1113186	25.0000		80.00- 120.00		100.00
15.635	15.635 (1.000)	88	179914			0.00- 66.16		16.16
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	973103	25.0000		80.00- 120.00		100.00
20.805	20.805 (1.000)	82	567883			7.58- 107.58		58.36
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.944	14.944 (1.078)	65	482829	25.0000	27.616	80.00- 120.00		100.00
14.944	14.944 (1.078)	67	246283			3.57- 103.57		51.01
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1039752	25.0000	24.248	80.00- 120.00		100.00
18.206	18.206 (1.164)	70	118101			0.00- 61.29		11.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	709710			18.71- 118.71	68.26
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	689634	25.0000	27.399	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	877008			77.17- 177.17	127.17
22.796	22.796 (1.096)	176	678048			48.32- 148.32	98.32
6 Freon142b					CAS #: 75-68-3		
6.407	6.407 (0.462)	65	2084905	50.0000	55.822	80.00- 120.00	100.00
6.407	6.407 (0.462)	45	428922			0.00- 71.32	20.57
9 Freon 13					CAS #: 75-72-9		
5.366	5.366 (0.387)	69	1880867	50.0000	50.222	80.00- 120.00	100.00
5.366	5.366 (0.387)	85	627576			0.00- 81.50	33.37
5.366	5.366 (0.387)	87	203723			0.00- 60.31	10.83
13 Freon 134a					CAS #: 811-97-2		
5.647	5.647 (0.407)	83	908506	50.0000	54.373	80.00- 120.00	100.00
5.647	5.647 (0.407)	69	693991			32.62- 132.62	76.39
15 Freon 152a					CAS #: 75-37-6		
5.816	5.816 (0.419)	65	434252	50.0000	48.265	80.00- 120.00	100.00
5.816	5.816 (0.419)	51	760846			127.07- 227.07	175.21
5.816	5.816 (0.419)	47	204013			0.00- 93.51	46.98
17 Freon 22					CAS #: 75-45-6		
5.957	5.957 (0.430)	67	223969	50.0000	52.765	80.00- 120.00	100.00
5.957	5.957 (0.430)	51	1102529			463.95- 563.95	492.27
5.957	5.957 (0.430)	85	23242			0.00- 65.76	10.38
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	757933	300.000	334.18	80.00- 120.00	100.00
7.534	7.534 (0.543)	32	669898			38.38- 138.38	88.38
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	1461937	50.0000	54.770	80.00- 120.00	100.00
8.717	8.717 (0.629)	69	479692			0.00- 82.56	32.81
8.717	8.717 (0.629)	35	88397			0.00- 55.48	6.05
40 Freon123a					CAS #: 354-23-4		
9.552	9.552 (0.689)	67	1098034	50.0000	53.323	80.00- 120.00	100.00
9.579	9.579 (0.691)	117	807579			22.27- 122.27	73.55
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	128803	50.0000	53.251	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)								
9.718	9.718	(0.701)	133	30361			0.00- 70.21	23.57
9.579	9.579	(0.691)	85	533964			280.12- 380.12	414.56
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	2344207	50.0000	52.648	80.00- 120.00	100.00
12.289	12.289	(0.886)	87	708214			0.00- 80.78	30.21
12.289	12.289	(0.886)	59	262840			0.00- 62.00	11.21
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	133607	50.0000	57.108	80.00- 120.00	100.00
12.400	12.400	(0.894)	59	193661			82.09- 182.09	144.95
12.289	12.289	(0.886)	41	527497			321.23- 421.23	394.81
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	2610463	50.0000	55.036	80.00- 120.00	100.00
12.925	12.925	(0.932)	87	1128956			0.00- 93.06	43.25
12.925	12.925	(0.932)	41	473672			0.00- 69.68	18.15
77 Ethyl Acetate						CAS #: 141-78-6		
13.395	13.395	(0.966)	45	247969	50.0000	51.624	80.00- 120.00	100.00
13.395	13.395	(0.966)	61	269215			52.94- 152.94	108.57
13.395	13.395	(0.966)	43	1745093			599.75- 699.75	703.75
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
14.999	14.999	(1.082)	73	2433834	50.0000	54.245	80.00- 120.00	100.00
14.999	14.999	(1.082)	87	587817			0.00- 73.24	24.15
14.999	14.999	(1.082)	55	604820			0.00- 75.20	24.85
96 2-Heptanone						CAS #: 110-43-0		
21.966	21.966	(1.584)	58	1313088	50.0000	55.757	80.00- 120.00	100.00
21.966	21.966	(1.584)	43	1888100			90.45- 190.45	143.79
98 1-Butanol						CAS #: 71-36-3		
15.801	15.801	(1.011)	56	413119	50.0000	56.988	80.00- 120.00	100.00
15.801	15.801	(1.011)	41	287368			29.27- 129.27	69.56
15.801	15.801	(1.011)	43	217745			9.88- 109.88	52.71
119 Butyl Acetate						CAS #: 123-86-4		
19.533	19.533	(1.249)	56	809104	50.0000	53.506	80.00- 120.00	100.00
19.533	19.533	(1.249)	73	330326			0.00- 90.83	40.83
19.533	19.533	(1.249)	43	1860624			179.96- 279.96	229.96
135 Cyclohexanone						CAS #: 108-94-1		
22.741	22.741	(1.093)	55	939032	50.0000	58.235	80.00- 120.00	100.00
22.741	22.741	(1.093)	98	479046			0.39- 100.39	51.01

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)								
22.741	22.741	(1.093)	42	607782			13.24- 113.24	64.72
146 Diisobutyl Ketone						CAS #: 108-83-8		
23.542	23.542	(1.132)	57	2479982	50.0000	57.731	80.00- 120.00	100.00
23.570	23.570	(1.133)	85	2309935			43.14- 143.14	93.14
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022203.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 200/1200ppbv -> 50/300ppbv

Calibration Date: 22-FEB-2008
Calibration Time: 09:47
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	271711	-0.48
97 1,4-Difluorobenze	1067226	640336	1494116	1113186	4.31
126 Chlorobenzene-d5	999102	599461	1398743	973103	-2.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

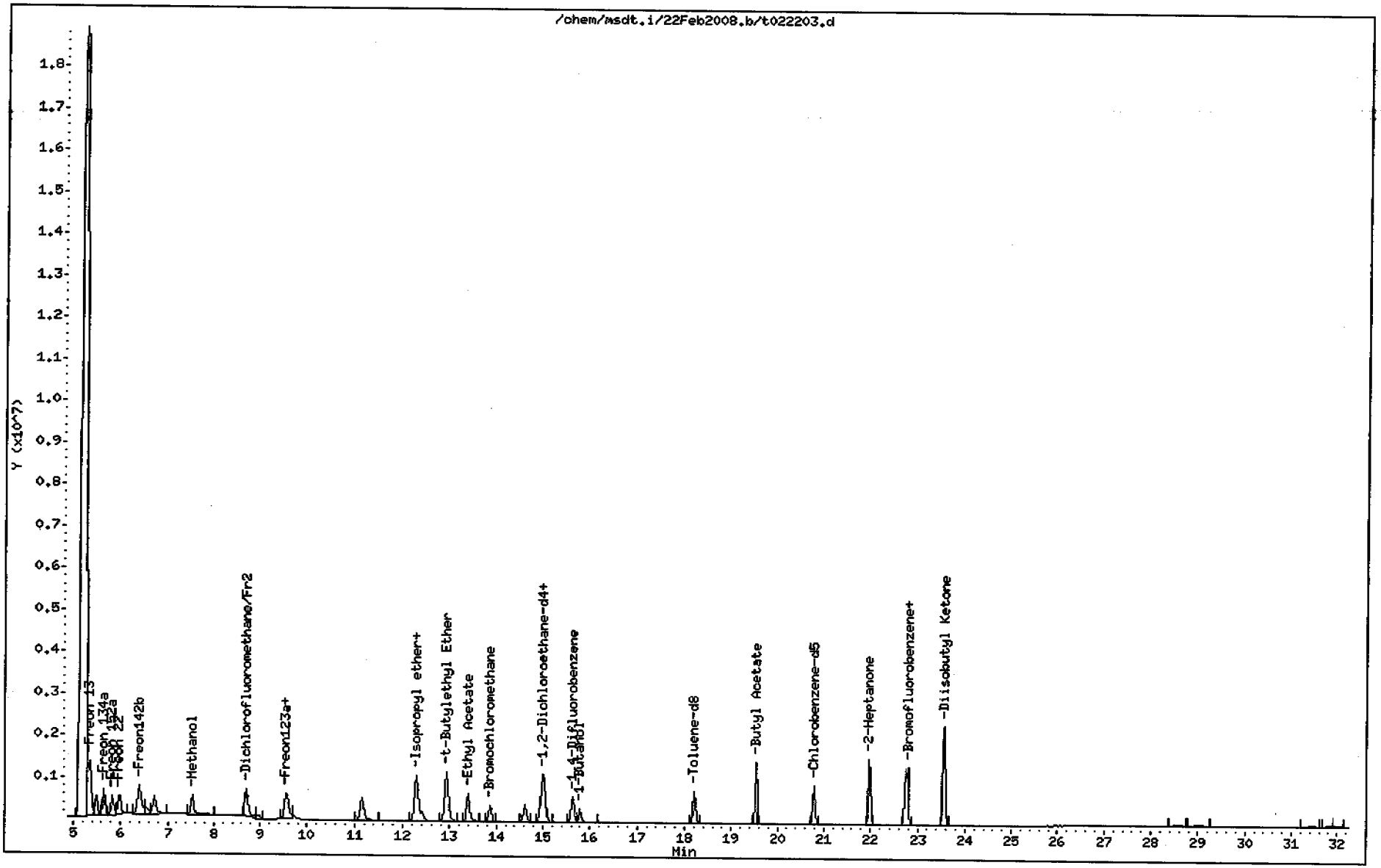
Data File: /chem/msdt.i/22Feb2008.b/t022203.d
Date : 22-FEB-2008 10:26
Client ID: CCVsp
Sample Info: 50mL #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0322



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802328-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	105
Freon 114	100
Chloromethane	107
Vinyl Chloride	107
1,3-Butadiene	102
Bromomethane	101
Chloroethane	109
Freon 11	100
Ethanol	109
Freon 113	111
1,1-Dichloroethene	122
Acetone	105
2-Propanol	106
Carbon Disulfide	109
Methylene Chloride	112
Methyl tert-butyl ether	123
trans-1,2-Dichloroethene	108
Hexane	116
1,1-Dichloroethane	111
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	111
Tetrahydrofuran	113
Chloroform	111
1,1,1-Trichloroethane	109
Cyclohexane	114
Carbon Tetrachloride	104
Benzene	108
1,2-Dichloroethane	108
Heptane	117
Trichloroethene	107
1,2-Dichloropropane	109
1,4-Dioxane	104
Bromodichloromethane	109
cis-1,3-Dichloropropene	114
4-Methyl-2-pentanone	122
Toluene	119
trans-1,3-Dichloropropene	109
1,1,2-Trichloroethane	108
Tetrachloroethene	107

0323

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802328-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	%Recovery
2-Hexanone	110
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	106
Chlorobenzene	107
Ethyl Benzene	108
m,p-Xylene	111
o-Xylene	112
Styrene	119
Bromoform	110
1,1,2,2-Tetrachloroethane	113
4-Ethyltoluene	120
1,3,5-Trimethylbenzene	109
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	108
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	114
1,2-Dichlorobenzene	105
1,2,4-Trichlorobenzene	100
Hexachlorobutadiene	94
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Client SDG: 21Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	52.688	105.38	70-130
16 Freon 114	50.000	49.899	99.80	70-130
18 Chloromethane	50.000	53.680	107.36	70-130
20 Vinyl Chloride	50.000	53.573	107.15	70-130
22 1,3-Butadiene	50.000	51.092	102.18	60-140
25 Bromomethane	50.000	50.644	101.29	70-130
27 Chloroethane	50.000	54.719	109.44	70-130
31 Trichlorofluoromet	50.000	49.925	99.85	70-130
38 Ethanol	50.000	54.725	109.45	60-140
42 Freon 113	50.000	55.688	111.38	70-130
43 1,1-Dichloroethene	50.000	60.879	121.76	70-130
45 Acetone	50.000	52.372	104.74	60-140
47 Carbon Disulfide	50.000	54.734	109.47	60-140
46 2-Propanol	50.000	53.115	106.23	60-140
54 Methylene Chloride	50.000	55.781	111.56	70-130
57 tert-Butyl-Alcohol	50.000	51.628	103.26	70-130
60 MTBE	50.000	61.621	123.24	60-140
61 trans-1,2-Dichloro	50.000	54.016	108.03	60-140
65 Hexane	50.000	57.947	115.89	60-140
69 Vinyl Acetate	50.000	52.533	105.07	60-140
70 1,1-Dichloroethane	50.000	55.533	111.07	70-130
76 cis-1,2-Dichloroet	50.000	55.563	111.13	70-130
75 2-Butanone	50.000	55.703	111.41	60-140
80 Tetrahydrofuran	50.000	56.528	113.06	60-140
82 Chloroform	50.000	55.370	110.74	70-130
85 Cyclohexane	50.000	56.927	113.85	60-140
83 1,1,1-Trichloroeth	50.000	54.607	109.21	70-130
87 Carbon Tetrachlori	50.000	52.262	104.52	70-130
91 Benzene	50.000	53.822	107.64	70-130
93 1,2-Dichloroethane	50.000	53.891	107.78	70-130
94 Heptane	50.000	58.589	117.18	60-140
101 Trichloroethene	50.000	53.732	107.47	70-130
104 1,2-Dichloropropan	50.000	54.714	109.43	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
106 1,4-Dioxane	50.000	51.948	103.90	60-140
107 Bromodichlorometha	50.000	54.371	108.74	60-140
110 cis-1,3-Dichloropr	50.000	56.980	113.96	70-130
111 4-Methyl-2-pentano	50.000	61.297	122.59	60-140
114 Toluene	50.000	59.494	118.99	70-130
116 trans-1,3-Dichloro	50.000	54.372	108.74	70-130
117 1,1,2-Trichloroeth	50.000	53.778	107.56	70-130
120 Tetrachloroethene	50.000	53.601	107.20	70-130
121 2-Hexanone	50.000	55.044	110.09	60-140
122 Dibromochlorometha	50.000	54.149	108.30	60-140
123 1,2-Dibromoethane	50.000	52.889	105.78	70-130
127 Chlorobenzene	50.000	53.413	106.83	70-130
128 Ethyl Benzene	50.000	53.952	107.90	70-130
129 m,p-Xylene	50.000	55.654	111.31	70-130
130 o-Xylene	50.000	56.229	112.46	70-130
131 Styrene	50.000	59.677	119.35	70-130
133 Bromoform	50.000	54.852	109.70	60-140
140 1,1,2,2-Tetrachlor	50.000	56.309	112.62	70-130
145 4-Ethyltoluene	50.000	60.045	120.09	60-140
147 1,3,5-Trimethylben	50.000	54.401	108.80	70-130
150 1,2,4-Trimethylben	50.000	55.800	111.60	70-130
155 1,3-Dichlorobenzen	50.000	53.897	107.79	70-130
156 1,4-Dichlorobenzen	50.000	53.090	106.18	70-130
159 alpha-Chlorotoluen	50.000	57.198	114.40	70-130
161 1,2-Dichlorobenzen	50.000	52.665	105.33	70-130
165 1,2,4-Trichloroben	50.000	49.922	99.84	70-130
166 Hexachlorobutadien	50.000	46.762	93.52	70-130
142 Propylbenzene	50.000	58.762	117.52	60-140
134 Cumene	50.000	58.874	117.75	60-140
51 3-Chloropropene	50.000	52.504	105.01	60-140
89 2,2,4-Trimethylpen	50.000	62.852	125.70	60-140
19 Butane	50.000	50.961	101.92	70-130
29 Isopentane	50.000	49.640	99.28	70-130
102 Methyl Cyclohexane	50.000	58.904	117.81	70-130
11 Propylene	50.000	52.880	105.76	60-140
167 Naphthalene	50.000	51.826	103.65	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.177	104.71	70-130
$ 113 Toluene-d8	25.000	26.376	105.50	70-130
$ 137 Bromofluorobenzene	25.000	25.231	100.92	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022107.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 21-FEB-2008 15:25
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 16:02 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05 Cal File: t022105.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	310710	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	238333			27.38- 127.38	76.71
13.865	13.865 (1.000)	49	559036			131.81- 231.81	179.92
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1249796	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	218055			0.00- 66.79	17.45
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1155810	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	681028			7.40- 107.40	58.92
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	523356	26.1771	26.177	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	297458			3.57- 103.57	56.84
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1269798	26.3760	26.376	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	146167			0.00- 61.29	11.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	853963			18.71- 118.71	67.25
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	754315	25.2311	25.231	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	975722			76.46- 176.46	129.35
22.796	22.796 (1.096)	176	749597			48.22- 148.22	99.37
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	537401	52.8801	52.880	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	365992			17.96- 117.96	68.10
5.816	5.816 (0.419)	39	443025			33.44- 133.44	82.44
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.428)	85	3196688	52.6885	52.688	80.00- 120.00	100.00
5.929	5.901 (0.428)	87	1007739			0.00- 82.13	31.52
16 Freon 114					CAS #: 76-14-2		
6.323	6.295 (0.456)	135	2001246	49.8987	49.899	80.00- 120.00	100.00
6.323	6.295 (0.456)	137	630507			0.00- 81.89	31.51
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	711030	53.6802	53.680	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	237230			0.00- 83.62	33.36
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	974260	53.5730	53.573	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	310797			0.00- 89.61	31.90
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	699221	51.0919	51.092	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	665520			53.33- 153.33	95.18
25 Bromomethane					CAS #: 74-83-9		
7.928	7.900 (0.572)	94	911905	50.6445	50.644	80.00- 120.00	100.00
7.928	7.900 (0.572)	96	836997			42.89- 142.89	91.79
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	518978	54.7190	54.719	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	130501			0.00- 76.71	25.15
8.182	8.182 (0.590)	66	168624			0.00- 83.02	32.49
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.801	8.773 (0.635)	101	3429046	49.9248	49.925	80.00- 120.00	100.00
8.801	8.773 (0.635)	103	2193256			14.33- 114.33	63.96

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.248	9.220	(0.667)	45	287582	54.7247	54.725	80.00- 120.00	100.00
9.248	9.220	(0.667)	43	61998			0.00- 75.24	21.56
9.248	9.220	(0.667)	46	108384			0.00- 89.78	37.69
42 Freon 113						CAS #: 76-13-1		
9.967	9.939	(0.719)	151	1761246	55.6886	55.688	80.00- 120.00	100.00
9.967	9.939	(0.719)	153	1122986			13.46- 113.46	63.76
9.967	9.939	(0.719)	101	2322380			82.30- 182.30	131.86
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.049	10.050	(0.725)	61	1733084	60.8790	60.879	80.00- 120.00	100.00
10.049	10.050	(0.725)	96	1028402			9.56- 109.56	59.34
10.049	10.050	(0.725)	98	669978			0.00- 88.43	38.66
45 Acetone						CAS #: 67-64-1		
10.188	10.188	(0.735)	58	462053	52.3716	52.372	80.00- 120.00	100.00
10.188	10.188	(0.735)	43	1451780			267.82- 367.82	314.20
46 2-Propanol						CAS #: 67-63-0		
10.381	10.381	(0.749)	45	1605941	53.1151	53.115	80.00- 120.00	100.00
10.381	10.381	(0.749)	43	410138			0.00- 76.64	25.54
10.381	10.381	(0.749)	59	68466			0.00- 54.31	4.26
47 Carbon Disulfide						CAS #: 75-15-0		
10.547	10.547	(0.761)	76	2947210	54.7335	54.734	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
10.824	10.824	(0.781)	76	486830	52.5039	52.504	80.00- 120.00	100.00
10.824	10.824	(0.781)	41	1061044			173.84- 273.84	217.95
54 Methylene Chloride						CAS #: 75-09-2		
11.100	11.100	(0.801)	49	1004132	55.7811	55.781	80.00- 120.00	100.00
11.100	11.100	(0.801)	84	895576			38.51- 138.51	89.19
11.100	11.100	(0.801)	51	327544			0.00- 83.83	32.62
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.155	11.155	(0.805)	59	1701032	51.6279	51.628	80.00- 120.00	100.00
11.155	11.155	(0.805)	41	364201			0.00- 72.85	21.41
11.155	11.155	(0.805)	57	171988			0.00- 59.93	10.11
60 MTBE						CAS #: 1634-04-4		
11.460	11.460	(0.826)	73	3184472	61.6209	61.621	80.00- 120.00	100.00
11.460	11.460	(0.826)	57	600134			0.00- 68.81	18.85
11.460	11.460	(0.826)	41	579258			0.00- 70.47	18.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1142777	54.0165	54.016	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1605495			90.52- 190.52	140.49
11.543	11.543 (0.832)	98	726496			16.26- 116.26	63.57
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1617761	57.9474	57.947	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	899054			9.30- 109.30	55.57
11.902	11.902 (0.858)	86	289209			0.00- 66.83	17.88
69 Vinyl Acetate					CAS #: 108-05-4		
12.372	12.344 (0.892)	86	287536	52.5330	52.533	80.00- 120.00	100.00
12.372	12.344 (0.892)	43	2581350			832.23- 932.23	897.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	2169140	55.5330	55.533	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	700477			0.00- 82.06	32.29
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	553569	55.7028	55.703	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1847332			283.08- 383.08	333.71
13.395	13.395 (0.966)	57	159235			0.00- 79.56	28.77
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1460316	55.5634	55.563	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	1140826			27.58- 127.58	78.12
13.423	13.423 (0.968)	98	729483			0.15- 100.15	49.95
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	947529	56.5284	56.528	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	498381			1.96- 101.96	52.60
13.865	13.865 (1.000)	72	532243			2.04- 102.04	56.17
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2498696	55.3696	55.370	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1634644			14.81- 114.81	65.42
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2725692	54.6073	54.607	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1760138			14.28- 114.28	64.58
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.308 (1.032)	84	1521460	56.9269	56.927	80.00- 120.00	100.00
14.307	14.308 (1.032)	56	1515546			52.90- 152.90	99.61
14.307	14.308 (1.032)	41	798230			2.62- 102.62	52.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2505823	52.2620	52.262	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2669012			56.24- 156.24	106.51
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	4095764	62.8515	62.852	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1316313			0.00- 82.82	32.14
14.888	14.888 (1.074)	41	1059624			0.00- 78.43	25.87
91 Benzene					CAS #: 71-43-2		
14.971	14.943 (0.958)	78	3362746	53.8219	53.822	80.00- 120.00	100.00
14.971	14.943 (0.958)	77	764594			0.00- 73.50	22.74
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	1642724	53.8915	53.891	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	532274			0.00- 84.23	32.40
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.972)	71	1036211	58.5893	58.589	80.00- 120.00	100.00
15.192	15.192 (0.972)	43	1424255			85.70- 185.70	137.45
15.192	15.192 (0.972)	57	866448			28.72- 128.72	83.62
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1437891	53.7325	53.732	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1288664			39.09- 139.09	89.62
16.077	16.077 (1.028)	97	916609			12.68- 112.68	63.75
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.547 (1.060)	63	1153414	54.7144	54.714	80.00- 120.00	100.00
16.575	16.547 (1.060)	62	836262			21.41- 121.41	72.50
16.575	16.547 (1.060)	41	641023			5.94- 105.94	55.58
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.067)	88	801574	51.9481	51.948	80.00- 120.00	100.00
16.685	16.685 (1.067)	58	469815			8.90- 108.90	58.61
16.685	16.685 (1.067)	57	165145			0.00- 71.19	20.60
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.087)	83	2603905	54.3713	54.371	80.00- 120.00	100.00
16.989	16.989 (1.087)	85	1674806			14.80- 114.80	64.32
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.138)	75	1830328	56.9798	56.980	80.00- 120.00	100.00
17.791	17.791 (1.138)	77	591194			0.00- 81.79	32.30
17.791	17.791 (1.138)	39	822910			0.00- 94.95	44.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.149)	58	894640	61.2967	61.297	80.00- 120.00	100.00
17.957	17.957 (1.149)	43	2048666			175.34- 275.34	228.99
17.957	17.957 (1.149)	85	446806			0.64- 100.64	49.94
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.172)	91	3963523	59.4941	59.494	80.00- 120.00	100.00
18.317	18.317 (1.172)	92	2385072			10.34- 110.34	60.18
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1986211	54.3720	54.372	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	633875			0.00- 81.99	31.91
18.759	18.759 (0.902)	39	816853			0.00- 92.00	41.13
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.119	19.091 (0.919)	97	1415856	53.7778	53.778	80.00- 120.00	100.00
19.119	19.091 (0.919)	99	888361			14.03- 114.03	62.74
19.119	19.091 (0.919)	83	1221981			36.02- 136.02	86.31
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1890997	53.6012	53.601	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1304180			18.51- 118.51	68.97
19.284	19.284 (0.927)	131	1223116			15.29- 115.29	64.68
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1213492	55.0436	55.044	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	2034182			118.34- 218.34	167.63
19.423	19.423 (0.934)	100	256574			0.00- 71.71	21.14
122 Dibromochloromethane					CAS #: 124-48-1		
19.810	19.782 (0.952)	129	2427410	54.1488	54.149	80.00- 120.00	100.00
19.810	19.782 (0.952)	127	1863480			28.82- 128.82	76.77
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2214859	52.8887	52.889	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	2057233			42.39- 142.39	92.88
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3246418	53.4128	53.413	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	1008620			0.00- 81.69	31.07
20.860	20.860 (1.003)	77	1978793			10.81- 110.81	60.95
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1699041	53.9518	53.952	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5591441			269.96- 369.96	329.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2206972	55.6540	55.654	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4531231			149.87- 249.87	205.31
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	2121082	56.2294	56.229	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4566005			166.27- 266.27	215.27
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3448817	59.6769	59.677	80.00- 120.00	100.00
21.883	21.883 (1.052)	78	1794468			1.85- 101.85	52.03
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2639409	54.8521	54.852	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1357053			0.84- 100.84	51.42
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	6126076	58.8737	58.874	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1539671			0.00- 77.62	25.13
22.409	22.409 (1.077)	51	538853			0.00- 58.75	8.80
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3407224	56.3093	56.309	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2196507			14.84- 114.84	64.47
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	7926254	58.7618	58.762	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1669834			0.00- 71.63	21.07
23.100	23.100 (1.110)	105	281882			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	6894744	60.0451	60.045	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	2037479			0.00- 79.56	29.55
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	5328724	54.4015	54.401	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2571330			0.00- 98.23	48.25
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	5150348	55.7996	55.800	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2329479			0.00- 94.91	45.23
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3575597	53.8973	53.897	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2272738			14.68- 114.68	63.56
24.593	24.593 (1.182)	111	1459744			0.00- 91.36	40.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3624112	53.0898	53.090	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2338820			16.09- 116.09	64.53
24.731	24.731 (1.189)	111	1454855			0.00- 90.13	40.14
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5645389	57.1985	57.198	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	1040390			0.00- 69.28	18.43
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3403460	52.6646	52.665	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2191776			13.64- 113.64	64.40
25.367	25.367 (1.219)	111	1450581			0.00- 93.75	42.62
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2460635	49.9219	49.922	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2330186			44.51- 144.51	94.70
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2319687	46.7622	46.762	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1453033			12.90- 112.90	62.64
29 Isopentane					CAS #: 78-78-4		
8.294	8.266 (0.598)	43	997168	49.6404	49.640	80.00- 120.00	100.00
8.294	8.266 (0.598)	57	775820			27.67- 127.67	77.80
19 Butane					CAS #: 106-97-8		
6.830	6.802 (0.493)	58	177248	50.9609	50.961	80.00- 120.00	100.00
6.830	6.802 (0.493)	43	1270782			666.74- 766.74	716.95
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1863986	58.9041	58.904	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	831588			0.00- 95.22	44.61
16.354	16.354 (1.179)	55	1343712			20.82- 120.82	72.09
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3535572	51.8258	51.826	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	430895			0.00- 62.74	12.19

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

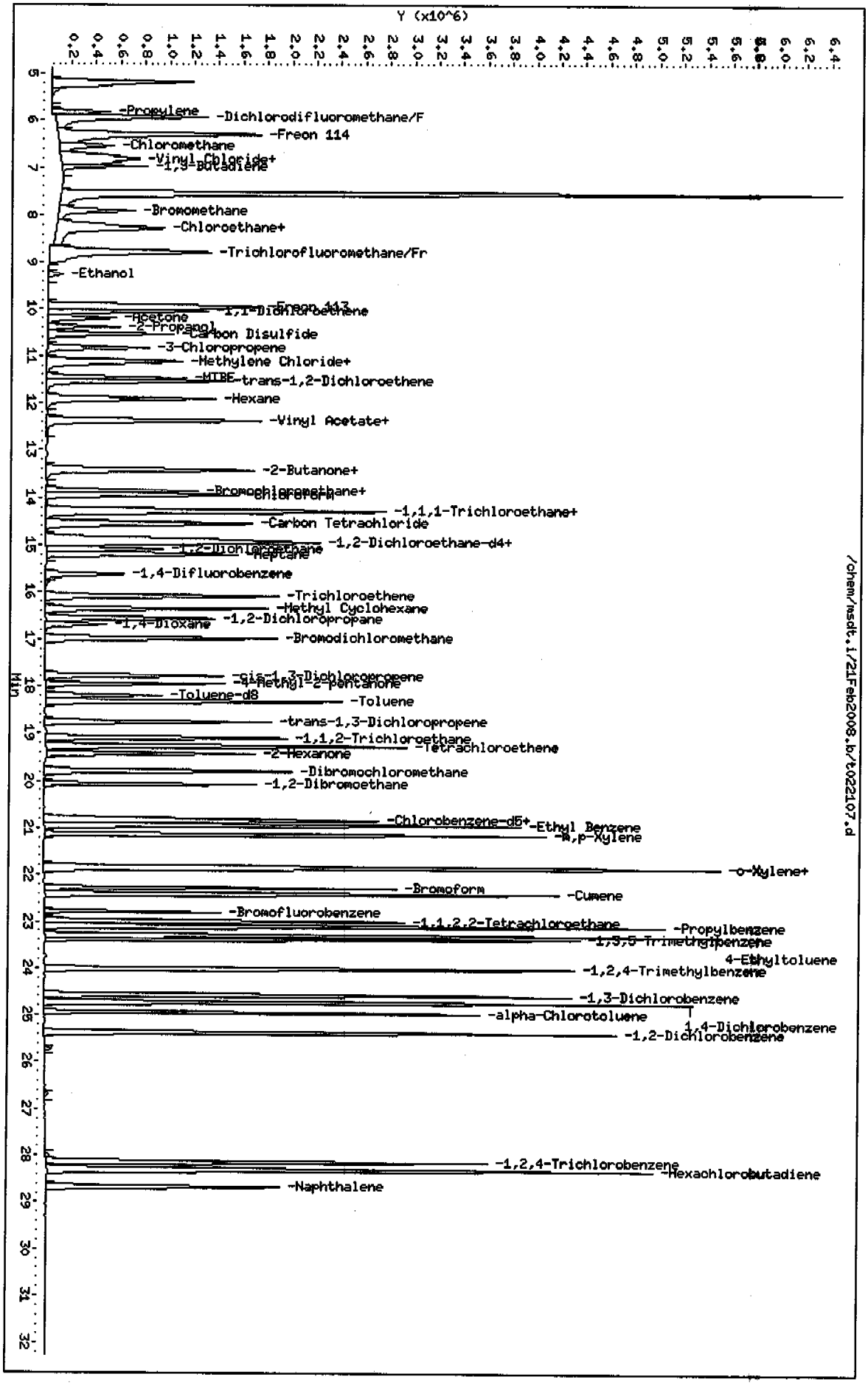
Instrument ID: msdt.i
Lab File ID: t022107.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	310710	-2.34
97 1,4-Difluorobenze	1251468	750881	1752055	1249796	-0.13
126 Chlorobenzene-d5	1150991	690595	1611387	1155810	0.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Date : 21-FEB-2008 15:25
Client ID: LCS-1
Sample Info: 50mL #1576-255
Instrument: msdt.i
Column phase: RTx-624
Operator: sjr
Column diameter: 0.53

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802328-09B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	%Recovery
Freon 12	106
Freon 114	99
Chloromethane	107
Vinyl Chloride	103
1,3-Butadiene	100
Bromomethane	100
Chloroethane	106
Freon 11	102
Ethanol	102
Freon 113	108
1,1-Dichloroethene	117
Acetone	102
2-Propanol	103
Carbon Disulfide	103
Methylene Chloride	113
Methyl tert-butyl ether	122
trans-1,2-Dichloroethene	103
Hexane	111
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	110
cis-1,2-Dichloroethene	110
Tetrahydrofuran	110
Chloroform	112
1,1,1-Trichloroethane	112
Cyclohexane	110
Carbon Tetrachloride	112
Benzene	105
1,2-Dichloroethane	111
Heptane	113
Trichloroethene	107
1,2-Dichloropropane	108
1,4-Dioxane	100
Bromodichloromethane	111
cis-1,3-Dichloropropene	113
4-Methyl-2-pentanone	116
Toluene	117
trans-1,3-Dichloropropene	112
1,1,2-Trichloroethane	109
Tetrachloroethene	112

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802328-09B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	115
1,2-Dibromoethane (EDB)	110
Chlorobenzene	108
Ethyl Benzene	110
m,p-Xylene	116
o-Xylene	115
Styrene	123
Bromoform	116
1,1,2,2-Tetrachloroethane	113
4-Ethyltoluene	125
1,3,5-Trimethylbenzene	113
1,2,4-Trimethylbenzene	115
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	112
alpha-Chlorotoluene	118
1,2-Dichlorobenzene	110
1,2,4-Trichlorobenzene	103
Hexachlorobutadiene	97
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	106	70-130

Data File: /chem/msdt.i/22Feb2008.b/t022204.d
Report Date: 22-Feb-2008 12:34

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 22Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	52.874	105.75	70-130
16 Freon 114	50.000	49.562	99.12	70-130
18 Chloromethane	50.000	53.721	107.44	70-130
20 Vinyl Chloride	50.000	51.740	103.48	70-130
22 1,3-Butadiene	50.000	49.989	99.98	60-140
25 Bromomethane	50.000	50.118	100.24	70-130
27 Chloroethane	50.000	52.763	105.53	70-130
31 Trichlorofluoromet	50.000	50.783	101.57	70-130
38 Ethanol	50.000	51.123	102.25	60-140
42 Freon 113	50.000	54.057	108.11	70-130
43 1,1-Dichloroethene	50.000	58.393	116.79	70-130
45 Acetone	50.000	51.031	102.06	60-140
47 Carbon Disulfide	50.000	51.714	103.43	60-140
46 2-Propanol	50.000	51.423	102.85	60-140
54 Methylene Chloride	50.000	56.704	113.41	70-130
57 tert-Butyl-Alcohol	50.000	52.761	105.52	70-130
60 MTBE	50.000	61.220	122.44	60-140
61 trans-1,2-Dichloro	50.000	51.582	103.16	60-140
65 Hexane	50.000	55.379	110.76	60-140
69 Vinyl Acetate	50.000	49.454	98.91	60-140
70 1,1-Dichloroethane	50.000	54.198	108.40	70-130
76 cis-1,2-Dichloroet	50.000	55.100	110.20	70-130
75 2-Butanone	50.000	54.862	109.72	60-140
80 Tetrahydrofuran	50.000	55.224	110.45	60-140
82 Chloroform	50.000	55.860	111.72	70-130
85 Cyclohexane	50.000	54.756	109.51	60-140
83 1,1,1-Trichloroeth	50.000	55.911	111.82	70-130
87 Carbon Tetrachlori	50.000	56.135	112.27	70-130
91 Benzene	50.000	52.503	105.01	70-130
93 1,2-Dichloroethane	50.000	55.708	111.42	70-130
94 Heptane	50.000	56.561	113.12	60-140
101 Trichloroethene	50.000	53.588	107.18	70-130
104 1,2-Dichloropropan	50.000	53.818	107.64	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
106 1,4-Dioxane	50.000	50.017	100.03	60-140
107 Bromodichlorometha	50.000	55.309	110.62	60-140
110 cis-1,3-Dichloropr	50.000	56.647	113.29	70-130
111 4-Methyl-2-pentano	50.000	58.168	116.34	60-140
114 Toluene	50.000	58.604	117.21	70-130
116 trans-1,3-Dichloro	50.000	56.084	112.17	70-130
117 1,1,2-Trichloroeth	50.000	54.622	109.24	70-130
120 Tetrachloroethene	50.000	55.783	111.57	70-130
121 2-Hexanone	50.000	53.692	107.38	60-140
122 Dibromochlorometha	50.000	57.734	115.47	60-140
123 1,2-Dibromoethane	50.000	54.968	109.94	70-130
127 Chlorobenzene	50.000	54.088	108.18	70-130
128 Ethyl Benzene	50.000	54.881	109.76	70-130
129 m,p-Xylene	50.000	57.858	115.72	70-130
130 o-Xylene	50.000	57.489	114.98	70-130
131 Styrene	50.000	61.724	123.45	70-130
133 Bromoform	50.000	58.128	116.26	60-140
140 1,1,2,2-Tetrachlor	50.000	56.447	112.89	70-130
145 4-Ethyltoluene	50.000	62.342	124.68	60-140
147 1,3,5-Trimethylben	50.000	56.397	112.79	70-130
150 1,2,4-Trimethylben	50.000	57.736	115.47	70-130
155 1,3-Dichlorobenzen	50.000	55.926	111.85	70-130
156 1,4-Dichlorobenzen	50.000	55.924	111.85	70-130
159 alpha-Chlorotoluen	50.000	59.257	118.51	70-130
161 1,2-Dichlorobenzen	50.000	55.141	110.28	70-130
165 1,2,4-Trichloroben	50.000	51.325	102.65	70-130
166 Hexachlorobutadien	50.000	48.715	97.43	70-130
142 Propylbenzene	50.000	60.295	120.59	60-140
134 Cumene	50.000	60.385	120.77	60-140
51 3-Chloropropene	50.000	48.692	97.38	60-140
89 2,2,4-Trimethylpen	50.000	60.245	120.49	60-140
19 Butane	50.000	50.889	101.78	70-130
29 Isopentane	50.000	49.316	98.63	70-130
102 Methyl Cyclohexane	50.000	57.819	115.64	70-130
11 Propylene	50.000	51.419	102.84	60-140
167 Naphthalene	50.000	52.930	105.86	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.174	108.70	70-130
$ 113 Toluene-d8	25.000	26.300	105.20	70-130
$ 137 Bromofluorobenzene	25.000	26.558	106.23	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/22Feb2008.b/t022204.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 22-FEB-2008 11:24
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/22Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 12:32 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	274415	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	214729			26.57- 126.57	78.25
13.865	13.865 (1.000)	49	504760			139.07- 239.07	183.94
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1096726	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	181527			0.00- 66.77	16.55
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	996814	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	582496			7.58- 107.58	58.44
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.944 (1.078)	65	479830	27.1744	27.174	80.00- 120.00	100.00
14.943	14.944 (1.078)	67	272799			3.57- 103.57	56.85
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1111057	26.2998	26.300	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	125686			0.00- 61.29	11.31

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	743315			18.71- 118.71	66.90
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	684767	26.5582	26.558	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	876419			77.79- 177.79	127.99
22.796	22.796 (1.096)	176	660814			48.42- 148.42	96.50
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	461513	51.4191	51.419	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	322787			17.96- 117.96	69.94
5.816	5.816 (0.419)	39	392371			33.44- 133.44	85.02
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.428)	85	2833223	52.8742	52.874	80.00- 120.00	100.00
5.929	5.901 (0.428)	87	906821			0.00- 82.13	32.01
16 Freon 114					CAS #: 76-14-2		
6.323	6.295 (0.456)	135	1755535	49.5616	49.562	80.00- 120.00	100.00
6.323	6.295 (0.456)	137	561058			0.00- 81.89	31.96
18 Chloromethane					CAS #: 74-87-3		
6.548	6.520 (0.472)	50	628452	53.7212	53.721	80.00- 120.00	100.00
6.548	6.520 (0.472)	52	213152			0.00- 83.62	33.92
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	831017	51.7402	51.740	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	262068			0.00- 89.61	31.54
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	604214	49.9892	49.989	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	603026			53.33- 153.33	99.80
25 Bromomethane					CAS #: 74-83-9		
7.928	7.900 (0.572)	94	797005	50.1177	50.118	80.00- 120.00	100.00
7.928	7.900 (0.572)	96	723678			41.90- 141.90	90.80
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	441971	52.7631	52.763	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	115803			0.00- 76.71	26.20
8.182	8.182 (0.590)	66	146537			0.00- 83.02	33.16
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.773	8.773 (0.633)	101	3080555	50.7831	50.783	80.00- 120.00	100.00
8.801	8.773 (0.635)	103	2008903			14.87- 114.87	65.21

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.248	9.220	(0.667)	45	237272	51.1230	51.123	80.00- 120.00	100.00
9.248	9.220	(0.667)	43	61737			0.00- 75.24	26.02
9.248	9.220	(0.667)	46	88236			0.00- 89.78	37.19
42 Freon 113						CAS #: 76-13-1		
9.966	9.939	(0.719)	151	1509945	54.0574	54.057	80.00- 120.00	100.00
9.966	9.939	(0.719)	153	952305			13.23- 113.23	63.07
9.966	9.939	(0.719)	101	1982796			83.10- 183.10	131.32
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.049	10.050	(0.725)	61	1468138	58.3932	58.393	80.00- 120.00	100.00
10.049	10.050	(0.725)	96	852975			4.93- 104.93	58.10
10.049	10.050	(0.725)	98	544685			0.00- 85.66	37.10
45 Acetone						CAS #: 67-64-1		
10.188	10.188	(0.735)	58	397635	51.0313	51.031	80.00- 120.00	100.00
10.188	10.188	(0.735)	43	1262485			267.82- 367.82	317.50
46 2-Propanol						CAS #: 67-63-0		
10.381	10.381	(0.749)	45	1373153	51.4227	51.423	80.00- 120.00	100.00
10.381	10.381	(0.749)	43	359238			0.00- 76.64	26.16
10.381	10.381	(0.749)	59	58025			0.00- 54.31	4.23
47 Carbon Disulfide						CAS #: 75-15-0		
10.547	10.547	(0.761)	76	2459348	51.7142	51.714	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
10.824	10.824	(0.781)	76	398748	48.6922	48.692	80.00- 120.00	100.00
10.824	10.824	(0.781)	41	935981			173.84- 273.84	234.73
54 Methylene Chloride						CAS #: 75-09-2		
11.100	11.100	(0.801)	49	901515	56.7044	56.704	80.00- 120.00	100.00
11.100	11.100	(0.801)	84	752771			32.18- 132.18	83.50
11.100	11.100	(0.801)	51	291063			0.00- 83.83	32.29
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.155	11.156	(0.805)	59	1535309	52.7613	52.761	80.00- 120.00	100.00
11.155	11.156	(0.805)	41	338557			0.00- 72.85	22.05
11.155	11.156	(0.805)	57	165549			0.00- 59.93	10.78
60 MTBE						CAS #: 1634-04-4		
11.460	11.460	(0.826)	73	2794166	61.2195	61.220	80.00- 120.00	100.00
11.460	11.460	(0.826)	57	532062			0.00- 69.27	19.04
11.460	11.460	(0.826)	41	533268			0.00- 70.47	19.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	963801	51.5822	51.582	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1390907			99.25- 199.25	144.31
11.543	11.543 (0.832)	98	602516			16.26- 116.26	62.51
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1365453	55.3789	55.379	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	792109			9.30- 109.30	58.01
11.902	11.902 (0.858)	86	232487			0.00- 66.83	17.03
69 Vinyl Acetate					CAS #: 108-05-4		
12.372	12.344 (0.892)	86	239062	49.4536	49.454	80.00- 120.00	100.00
12.344	12.344 (0.890)	43	2250713			832.23- 932.23	941.48
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	1869690	54.1976	54.198	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	599374			0.00- 82.30	32.06
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	481524	54.8619	54.862	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1599104			308.97- 408.97	332.09
13.395	13.395 (0.966)	57	143962			0.00- 79.56	29.90
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1278976	55.1000	55.100	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	965010			25.05- 125.05	75.45
13.423	13.423 (0.968)	98	621216			0.00- 97.84	48.57
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	817543	55.2246	55.224	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	415680			0.00- 99.44	50.85
13.865	13.865 (1.000)	72	440549			2.04- 102.04	53.89
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2226376	55.8604	55.860	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1434437			14.26- 114.26	64.43
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2464786	55.9114	55.911	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1596043			14.90- 114.90	64.75
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.308 (1.032)	84	1292503	54.7566	54.756	80.00- 120.00	100.00
14.307	14.308 (1.032)	56	1311250			52.96- 152.96	101.45
14.307	14.308 (1.032)	41	707089			6.25- 106.25	54.71

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2377113	56.1348	56.135	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2517695			56.33- 156.33	105.91
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	3467315	60.2451	60.245	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1114355			0.00- 82.82	32.14
14.888	14.888 (1.074)	41	944014			0.00- 78.43	27.23
91 Benzene					CAS #: 71-43-2		
14.971	14.944 (0.958)	78	2878601	52.5034	52.503	80.00- 120.00	100.00
14.971	14.944 (0.958)	77	662381			0.00- 73.50	23.01
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	1490113	55.7078	55.708	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	475310			0.00- 84.23	31.90
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.972)	71	877823	56.5611	56.561	80.00- 120.00	100.00
15.192	15.192 (0.972)	43	1234487			85.70- 185.70	140.63
15.192	15.192 (0.972)	57	733394			28.72- 128.72	83.55
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1258384	53.5877	53.588	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1154518			42.34- 142.34	91.75
16.077	16.077 (1.028)	97	806350			13.74- 113.74	64.08
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.575 (1.060)	63	995562	53.8178	53.818	80.00- 120.00	100.00
16.575	16.575 (1.060)	62	712126			22.02- 122.02	71.53
16.547	16.575 (1.058)	41	588522			9.43- 109.43	59.11
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.067)	88	677259	50.0174	50.017	80.00- 120.00	100.00
16.685	16.685 (1.067)	58	392468			8.30- 108.30	57.95
16.685	16.685 (1.067)	57	138596			0.00- 71.19	20.46
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.990 (1.087)	83	2324390	55.3088	55.309	80.00- 120.00	100.00
16.989	16.990 (1.087)	85	1495319			14.53- 114.53	64.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.138)	75	1596790	56.6475	56.647	80.00- 120.00	100.00
17.791	17.791 (1.138)	77	499707			0.00- 81.97	31.29
17.791	17.791 (1.138)	39	720485			0.00- 97.40	45.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.149)	58	744997	58.1680	58.168	80.00- 120.00	100.00
17.957	17.957 (1.149)	43	1742125			175.34- 275.34	233.84
17.957	17.957 (1.149)	85	370555			0.64- 100.64	49.74
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.172)	91	3426060	58.6042	58.604	80.00- 120.00	100.00
18.317	18.317 (1.172)	92	2077157			9.95- 109.95	60.63
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1766911	56.0837	56.084	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	560511			0.00- 82.12	31.72
18.759	18.759 (0.902)	39	745536			0.00- 92.98	42.19
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.118	19.119 (0.919)	97	1240256	54.6220	54.622	80.00- 120.00	100.00
19.118	19.119 (0.919)	99	786104			12.54- 112.54	63.38
19.118	19.119 (0.919)	83	1062083			35.47- 135.47	85.63
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1697258	55.7833	55.783	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1172544			20.52- 120.52	69.08
19.284	19.284 (0.927)	131	1133475			16.74- 116.74	66.78
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1020872	53.6925	53.692	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	1752765			121.68- 221.68	171.69
19.423	19.423 (0.934)	100	211492			0.00- 71.71	20.72
122 Dibromochloromethane					CAS #: 124-48-1		
19.810	19.810 (0.952)	129	2232081	57.7335	57.734	80.00- 120.00	100.00
19.810	19.810 (0.952)	127	1714198			28.82- 128.82	76.80
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	1985278	54.9680	54.968	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	1826354			41.41- 141.41	91.99
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	2835209	54.0877	54.088	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	887593			0.00- 81.51	31.31
20.860	20.860 (1.003)	77	1704410			9.41- 109.41	60.12
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1490553	54.8810	54.881	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	4848183			269.96- 369.96	325.26

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene						CAS #: 108-38-3		
21.137	21.137	(1.016)	106	1978760	57.8582	57.858	80.00- 120.00	100.00
21.137	21.137	(1.016)	91	3995592			149.87- 249.87	201.92
130 o-Xylene						CAS #: 95-47-6		
21.856	21.828	(1.050)	106	1870270	57.4888	57.489	80.00- 120.00	100.00
21.828	21.828	(1.049)	91	4029989			166.19- 266.19	215.48
131 Styrene						CAS #: 100-42-5		
21.883	21.884	(1.052)	104	3076446	61.7245	61.724	80.00- 120.00	100.00
21.883	21.884	(1.052)	78	1589028			2.65- 102.65	51.65
133 Bromoform						CAS #: 75-25-2		
22.270	22.271	(1.070)	173	2412290	58.1284	58.128	80.00- 120.00	100.00
22.270	22.271	(1.070)	171	1231087			1.05- 101.05	51.03
134 Cumene						CAS #: 98-82-8		
22.409	22.409	(1.077)	105	5418993	60.3851	60.385	80.00- 120.00	100.00
22.409	22.409	(1.077)	120	1383656			0.00- 77.62	25.53
22.409	22.409	(1.077)	51	480990			0.00- 58.75	8.88
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
22.989	22.990	(1.105)	83	2945727	56.4474	56.447	80.00- 120.00	100.00
23.017	22.990	(1.106)	85	1909424			15.02- 115.02	64.82
142 Propylbenzene						CAS #: 103-65-1		
23.100	23.100	(1.110)	91	7014245	60.2949	60.295	80.00- 120.00	100.00
23.100	23.100	(1.110)	120	1508517			0.00- 71.63	21.51
23.100	23.100	(1.110)	105	256261			0.00- 53.71	3.65
145 4-Ethyltoluene						CAS #: 622-96-8		
23.294	23.294	(1.120)	105	6173797	62.3425	62.342	80.00- 120.00	100.00
23.294	23.294	(1.120)	120	1818030			0.00- 80.21	29.45
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.376	23.377	(1.124)	105	4764266	56.3970	56.397	80.00- 120.00	100.00
23.376	23.377	(1.124)	120	2316597			0.00- 98.23	48.62
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.012	24.013	(1.154)	105	4595979	57.7357	57.736	80.00- 120.00	100.00
24.012	24.013	(1.154)	120	2079836			0.00- 94.91	45.25
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
24.593	24.593	(1.182)	146	3199826	55.9264	55.926	80.00- 120.00	100.00
24.593	24.593	(1.182)	148	2032703			14.68- 114.68	63.53
24.593	24.593	(1.182)	111	1337628			0.00- 91.36	41.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3292414	55.9237	55.924	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2093331			16.09- 116.09	63.58
24.731	24.731 (1.189)	111	1337878			0.00- 90.13	40.64
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.952	24.953 (1.199)	91	5044052	59.2574	59.257	80.00- 120.00	100.00
24.952	24.953 (1.199)	126	946043			0.00- 69.28	18.76
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3073295	55.1410	55.141	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	1966291			13.79- 113.79	63.98
25.367	25.367 (1.219)	111	1333862			0.00- 93.35	43.40
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2181795	51.3251	51.325	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2071582			45.33- 145.33	94.95
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2084122	48.7148	48.715	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1302296			12.90- 112.90	62.49
29 Isopentane					CAS #: 78-78-4		
8.266	8.266 (0.596)	43	874940	49.3165	49.316	80.00- 120.00	100.00
8.294	8.266 (0.598)	57	654213			27.67- 127.67	74.77
19 Butane					CAS #: 106-97-8		
6.802	6.802 (0.491)	58	156323	50.8893	50.889	80.00- 120.00	100.00
6.802	6.802 (0.491)	43	1116918			666.74- 766.74	714.49
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1615930	57.8193	57.819	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	732664			0.00- 95.22	45.34
16.354	16.354 (1.179)	55	1158210			20.82- 120.82	71.67
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3114161	52.9297	52.930	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	378694			0.00- 62.74	12.16

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022204.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/22Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 22-FEB-2008
Calibration Time: 09:47
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	273018	163811	382225	274415	0.51
97 1,4-Difluorobenze	1067226	640336	1494116	1096726	2.76
126 Chlorobenzene-d5	999102	599461	1398743	996814	-0.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

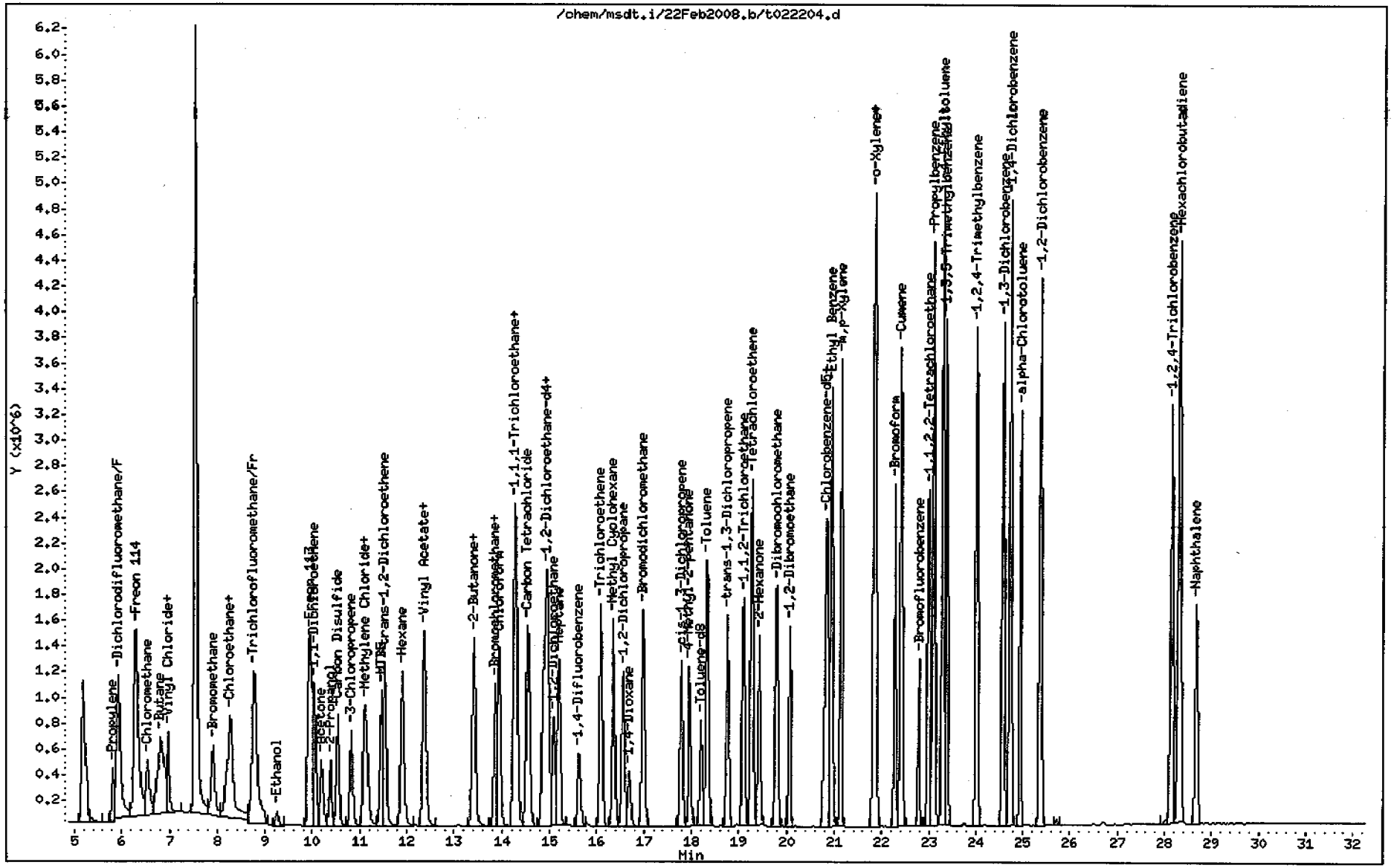
Data File: /chem/msdt.i/22Feb2008.b/t022204.d
Date : 22-FEB-2008 11:24
Client ID: LCS-1
Sample Info: 50mL #1576-255

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624

0352



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MSD-T

Logbook #: 1599

0353

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76) [1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21) [1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.15) [1]
177	5.0 – 9.0% of mass 176	(6.42) [2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08

BFB Injection Time: 0830

BFB File ID: t022101

Tekmar Purge Flow: ____

Vacuum: 3.99e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM 318158	
1,4-DFB 1251468	
CB-d5 1150997	

Verified CCV IS vs ICAL mid-point (- 40%D) SJM initials

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15 **NOAH Cart #:** NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1267119)}{(1251468)} \times \frac{(75.0)}{(0.96300)} = 26.285$

File ID:	t022106
Compound:	Tol-d8
Initials:	SJM

Reported Result 26.285

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t022101	BFB Tune Check	1476-277	50psig	2mL	1.00	2/21/08	0830	SJM	
2	✓	02	ICAL Level 3	1576-299	2psig/12psig	2.0mL			0941	SJM	t14g206b
3	✓	03	4		8psig/48psig	8.0mL			1021	SJM	MeOH0221A
4	✓	04	5		50psig/20psig	50mL			1103	SJM	sp22b
5	✓	05	7		20psig/120psig	200mL			1205	SJM	
6	✓	06	CCV-1 (200ppbv)	1576-261	50psig	50mL			1436	SJM	0 air
7	~~✓~~	~~07~~	ICAL Level 6	1576-277	100psig/150psig	100mL			SJM 2/21/08		not loaded
8	✓	07	LCS-1 (200ppbv)	1576-255	50psig	50mL	1.00		1525	SJM	0 air
9	✓	08	System blank	3366B	Humid	200mL		↓	1607	SJM	0 air

SJM

Signature

2/21/08

Date

@ Air Toxics Ltd. **MSD-T** **Logbook #: 1599**

10	✓	022109	ICAL Level 6	1538-298	100ppb/100ppb	100 mL	1.00	2/2/08	1700	Acc			
11	✓	10	Lab Blank	33d68	Humid	200 mL	↓		1755	Acc			
12	✓	11	0802200 -01A	33942	60"Hg→5psi		1.68		1847	Acc			
13	✓	12	-02A	33943	75"Hg→5psi		1.79		1910	Acc			
14	✓	13	-01AA	33942	60"Hg→5psi		1.68		2005	Acc			
15	✓	14	-02AA	33943	75"Hg→5psi		1.79		2043	Acc			
16	✓	15	-03A	5C116	65"Hg→5psi		1.71		2122	Acc			
17	✓	16	-04A	9915					2201	Acc			
18	✓	17	-05A	34306					2239	Acc			
19	✓	18	-06A	B-4	60"Hg→5psi		1.68		2338	Acc			
20	✓	19	0802283 -01A	22497	1		1	2/22/08	0017	Acc			
21	✓	20	-01AA	34438	55"Hg→5psi	250mL	1.64		0134	Acc			
22	✓	21	-03A	23956	55"Hg→5psi	200mL	1.64		0221	Acc			
23	✓	22	-04A	35171	65"Hg→5psi	200mL	1.71		0338	Acc			MeCl+
24	X	23	-05A	34746	60"Hg→5psi	200mL	1.68		0357	Acc			MeCl+
25	X	24	0802328-01A ~~-04A~~	12666	55"Hg→5psi	200mL	1.64		0432	Acc			PCE+
26	✓	25	0802283 -04A	35171	65"Hg→5psi	~~200mL~~ 100mL	3.42		0510	Acc			
27	✓	26	1 -05A	34746	60"Hg→5psi	~~200mL~~ 100mL	3.36		0711				
28	✓	27	0802328 - 01A	12666	55"Hg→5psi	~~200mL~~ 100mL	3.28		0749				
29													
30													
31			2/22/08										
32													

03.54

Comments:

Laura Dessmyer
Signature

2/22/08
Date

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	21.47
75	30.0 – 60.0% of mass 95	54.56
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.44
173	Less than 2.0% of mass 174	(0.87)[1]
174	Greater than 50.0% of mass 95	70.30
175	5.0 - 9.0% of mass 174	(7.25)[1]
~~176~~	~~Greater than 95.0% but less than 101.0% of mass 174~~	(96.72)[1]
177	5.0 – 9.0% of mass 176	(6.44)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 2/22/08
BFB Injection Time: 0806
BFB File ID: t022201
Tekmar Purge Flow:
Vacuum: 2.60e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM 273018	
1,4-DFB 106 7226	
CB-d5 999102	

Verified CCV IS vs ICAL mid-point (- 40%D) SJR initials

0355

Verify 176/174 m/z Ratio: 899605/930133 x100 = 96.72

NOAH Cart #: NA File #: NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1089314)}{(106\,7226)} \times \frac{(25.0)}{(0.96300)} = 26.498$

Reported Result 26.498

File ID:	t022202
Compound:	Tol-d8
Initials:	SJR

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t022201	BFB Tune Check	1476-174	50psig	2mL	1.00	2/22/08	0806	SJR	
2	✓	02	CCV-1 (200ppbv)	1576-261	50psig	50mL			0947	SJR	@ ant
3	✓	03	CCV-2 (200/200ppbv)	1576-299	50psig	50mL			1026	SJR	sp 22 CCV
4	✓	04	LCS-1 (200ppbv)	1576-255	50psig	50mL			1124	SJR	@ ant
5	✓	05	Lab blank	33668	Humidified	200mL			1316	SJR	
6	✓	06	0802328-02A	35984	6"Hg-5psig	200mL	1.68		1431	SJR	
7	✓	07	-02AA						1529	SJR	
8	✓	08	-03A	14118					1644	Ace	180
9	X	09	-04A	TO-1594				↓	1723	Ace	blank ↑

Signature

2/22/08
Date

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

10	X	+022210	080723SB	-05A	34203	6.0"Hg→5psi	200mL	1.68	2/22/08	1902	Act/—	$MeCl_2$↑	
11	✓	11		-04A	TO-1594		150mL	2.24		1840	Act/FO		
12	✓	12		-05A	34203		100mL	3.30		1919	Act/FO		
13	X	13		-04A	34278	6.5"Hg→5psi	100mL	3.12		1957	Act/—	$MeCl_2$↑	
14	✓	14	080724HD	-01A	1L Bag	SP-1	200mL	1.00		2026	Act/FO		
15	✓	15	↓	-02A	↓	SP-3	↓	↓		2114	Act/		
16	✓	16	080723SB	-04A	34278	6.5"Hg→5psi	75mL	4.50		2153	Act/		
17	✓	17	080725OA	-01A	12374	3.5"Hg→15psi	200mL	2.29		2231	Act/		
18	✓	18		-02A	25202	2.5"Hg→15psi	↓	2.20		2312	Act/		
19	✓	19		-03A	25283	0.5"Hg→15psi		2.05	✓	2351	MM/		
20	X	20		04A	3i#48	2.0"Hg→15psi	6.0mL	3.77	2/23/08	0040	MM/—	IF=#20	
21	✓	21		04A	#6	↓	200mL	2.16		0212	MM/FO		
22	✓	22		04AA	34148	2.0"Hg→15psi	165mL	2.62		0305	MM/		
23	✓	23	080725SA	-01A	4343	12.5"Hg→5psi	200mL	2.30		0343	MM/		
24	✓	24	↓	02A	03111	10.0"Hg→5psi	↓	2.01		0432	MM/		
25	X	25	080724SA	-01A	1LBag	Nortech Tier	1.0mL	200		0552	MM/—	VV @ 3mL	
26	✓	26	↓	01A	↓	↓	7.0mL	2.06	↓	0643	NC		
27													
28													
29													
30													
31													
32													

0356

Comments:

AT 2/24/08

Signature

2/24/08
Date

Air Toxics Ltd.

Data file : /chem/msdt.i/06Feb2008.b/t020605.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 06-FEB-2008 12:26
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/06Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.137	8.228	-0.091	95	1779728			100.00- 100.00	100.00
8.137	8.228	-0.091	50	339425			15.00- 40.00	19.07
8.137	8.228	-0.091	75	907414			30.00- 60.00	50.99
8.137	8.228	-0.091	96	114946			5.00- 9.00	6.46
8.137	8.228	-0.091	173	10246			0.00- 2.00	0.76
8.137	8.228	-0.091	174	1351956			50.00- 100.00	75.96
8.137	8.228	-0.091	175	95866			5.00- 9.00	7.09
8.137	8.228	-0.091	176	1308292			95.00- 101.00	96.77
8.137	8.228	-0.091	177	83826			5.00- 9.00	6.41

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

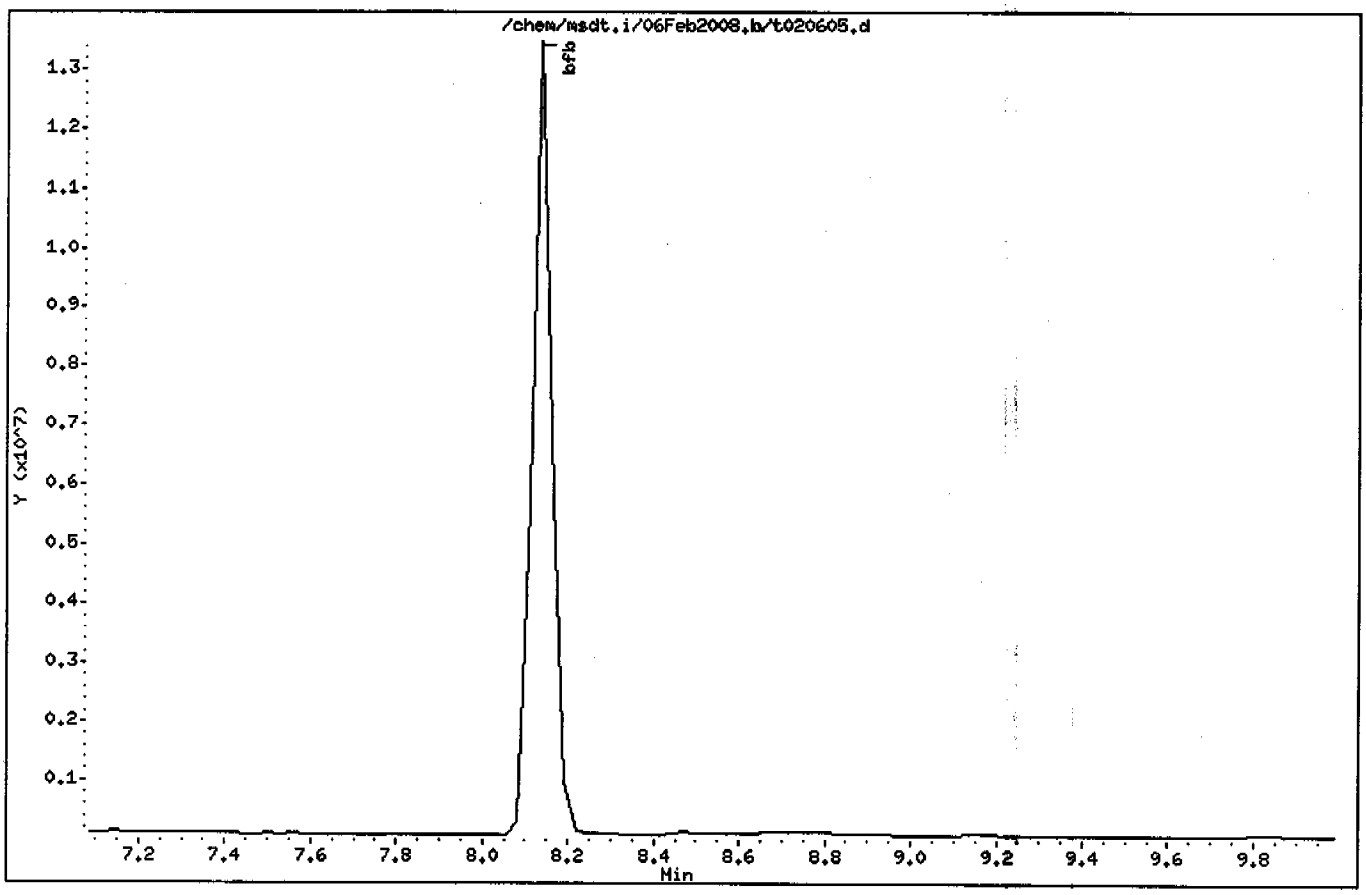
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

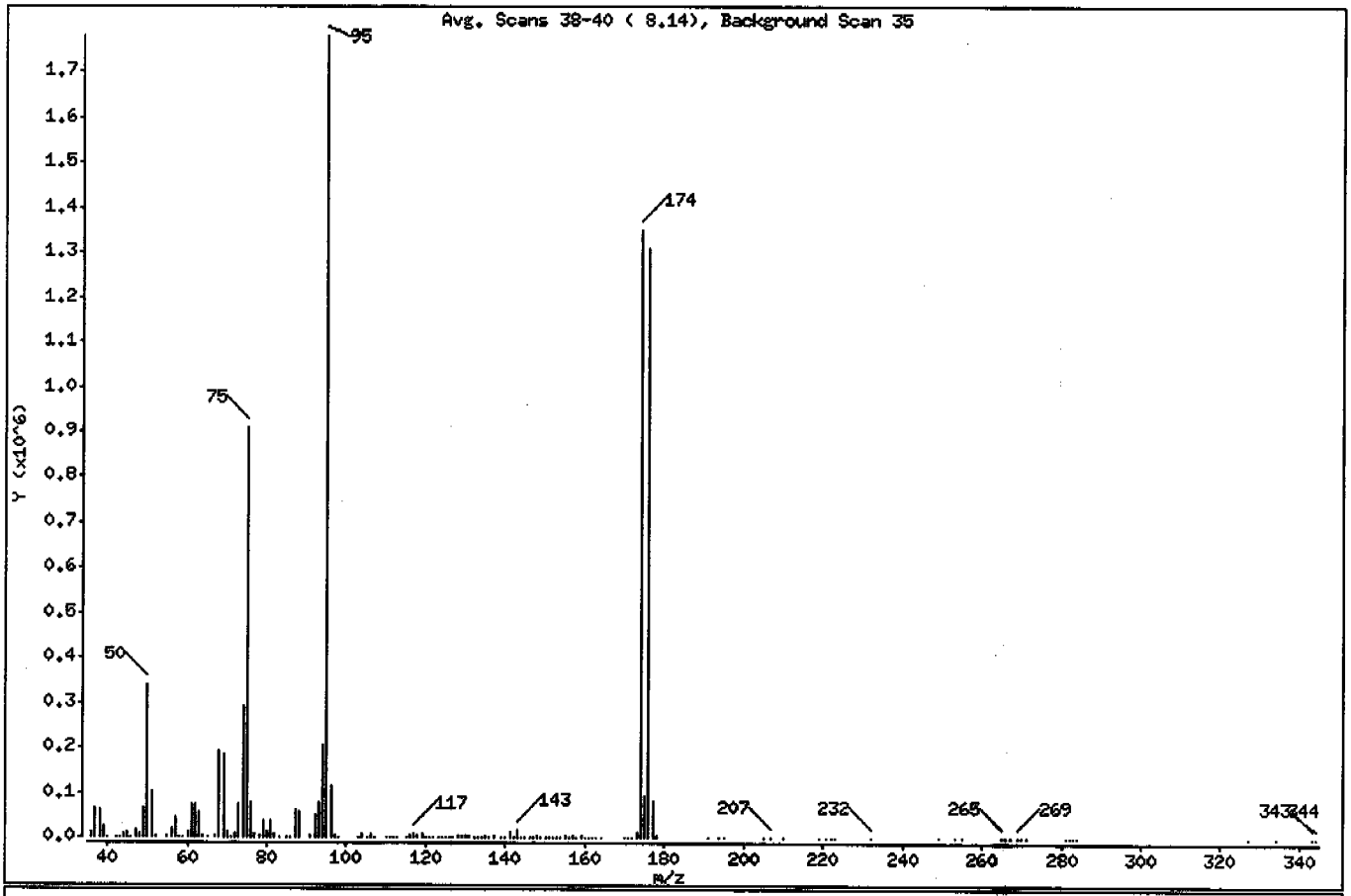
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.07
75	30.00 - 60.00% of mass 95	50.99
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.58 (0.76)
174	50.00 - 100.00% of mass 95	76.96
175	5.00 - 9.00% of mass 174	5.39 (7.09)
176	95.00 - 101.00% of mass 174	73.51 (96.77)
177	5.00 - 9.00% of mass 176	4.71 (6.41)

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d
Spectrum: Avg. Scans 38-40 (8.14), Background Scan 35
Location of Maximum: 95.00
Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11868	78.00	4902	126.00	750	170.00	394
37.00	67456	79.00	35568	127.00	256	171.00	386
38.00	61864	80.00	11217	128.00	5303	172.00	313
39.00	24408	81.00	38600	129.00	2849	173.00	10346
40.00	809	82.00	7818	130.00	5374	174.00	1351680
42.00	116	83.00	1089	131.00	2614	175.00	96864
43.00	208	85.00	368	132.00	426	176.00	1308160
44.00	6973	86.00	1391	133.00	378	177.00	83824
45.00	14172	87.00	61776	134.00	371	178.00	2817
46.00	678	88.00	57896	135.00	2350	191.00	131
47.00	14753	91.00	5052	136.00	674	194.00	264
48.00	8336	92.00	48008	137.00	2553	195.00	558
49.00	65200	93.00	76000	139.00	471	205.00	114
50.00	339392	94.00	203584	140.00	1013	207.00	1194
51.00	101208	95.00	1779712	141.00	14090	210.00	77
52.00	4346	96.00	114944	142.00	1551	219.00	145
55.00	3726	97.00	3201	143.00	14923	221.00	334
56.00	22448	98.00	120	144.00	1084	222.00	114
57.00	45672	103.00	848	145.00	1323	223.00	286
58.00	1907	104.00	6301	146.00	1960	232.00	523
59.00	141	105.00	1991	147.00	922	249.00	71
60.00	13906	106.00	6238	148.00	3718	253.00	196
61.00	74088	107.00	1653	149.00	1138	255.00	137
62.00	75568	110.00	675	150.00	1852	265.00	364
63.00	59016	111.00	1074	151.00	180	266.00	103
64.00	5017	112.00	907	152.00	749	267.00	160
65.00	653	113.00	1008	153.00	1310	269.00	383
67.00	4121	115.00	1360	154.00	1010	270.00	93
68.00	191296	116.00	5195	155.00	3899	271.00	44
69.00	186112	117.00	9431	156.00	765	281.00	131
70.00	13146	118.00	5275	157.00	2711	282.00	44
71.00	775	119.00	7182	158.00	303	283.00	296
72.00	8386	120.00	494	159.00	2153	284.00	164
73.00	72864	121.00	110	160.00	132	327.00	7
74.00	290560	122.00	399	161.00	2043	334.00	23

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8.14), Background Scan 35

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	907392	123.00	589	162.00	100	343.00	53
76.00	77416	124.00	1026	163.00	110	344.00	409
77.00	8505	125.00	679	164.00	137		

Air Toxics Ltd.

Data file : /chem/msdt.i/07Feb2008.b/t020701.d
Lab Smp Id: Client Smp ID: **BFB**
Inj Date : 07-FEB-2008 09:18
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/07Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: **WATER**
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.110	8.228	-0.118	95	1992852			100.00- 100.00	100.00
8.110	8.228	-0.118	50	375252			15.00- 40.00	18.83
8.110	8.228	-0.118	75	1012006			30.00- 60.00	50.78
8.110	8.228	-0.118	96	126643			5.00- 9.00	6.35
8.110	8.228	-0.118	173	11883			0.00- 2.00	0.80
8.110	8.228	-0.118	174	1477051			50.00- 100.00	74.12
8.110	8.228	-0.118	175	107416			5.00- 9.00	7.27
8.110	8.228	-0.118	176	1426273			95.00- 101.00	96.56
8.110	8.228	-0.118	177	92340			5.00- 9.00	6.47

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

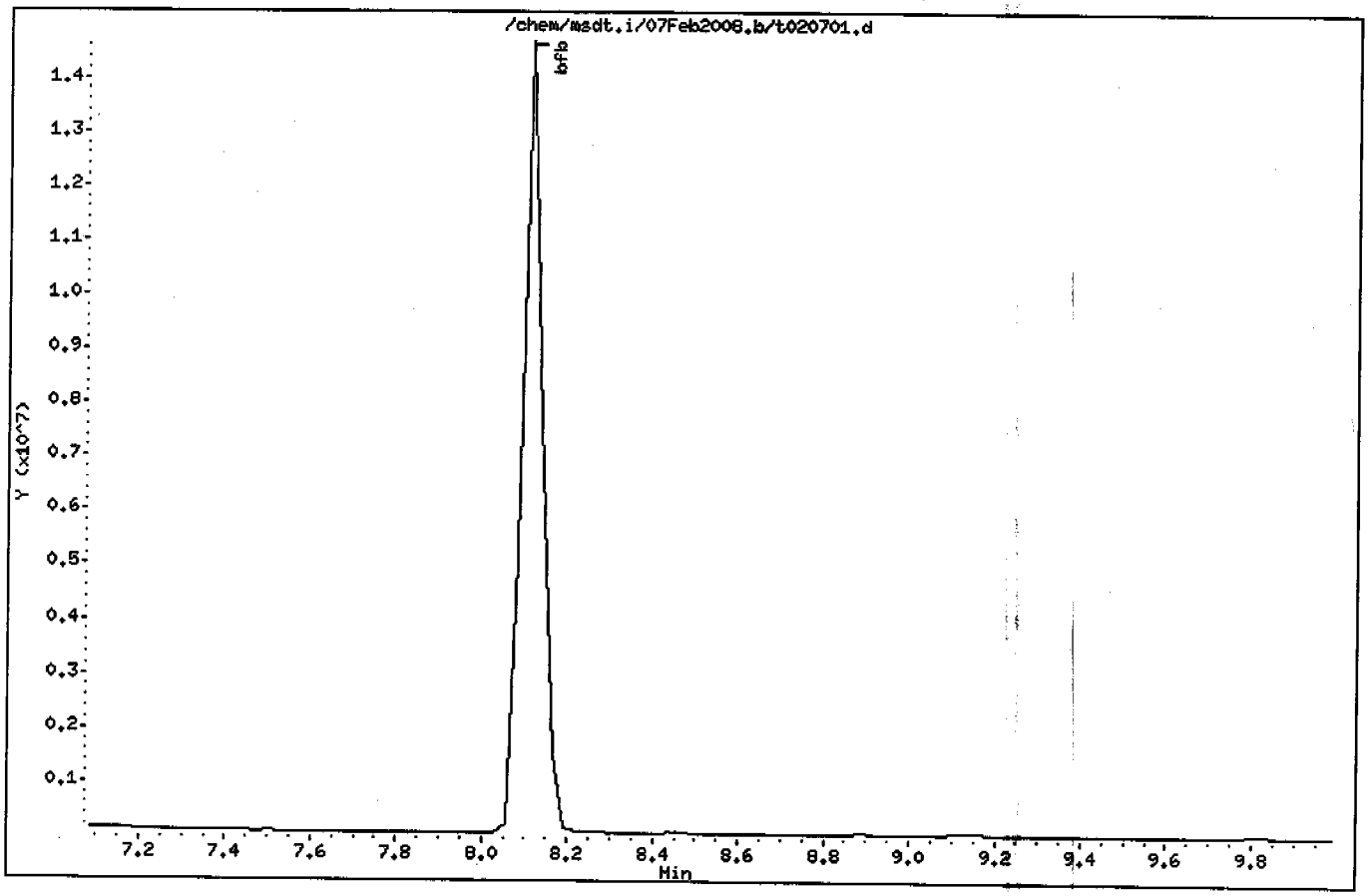
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

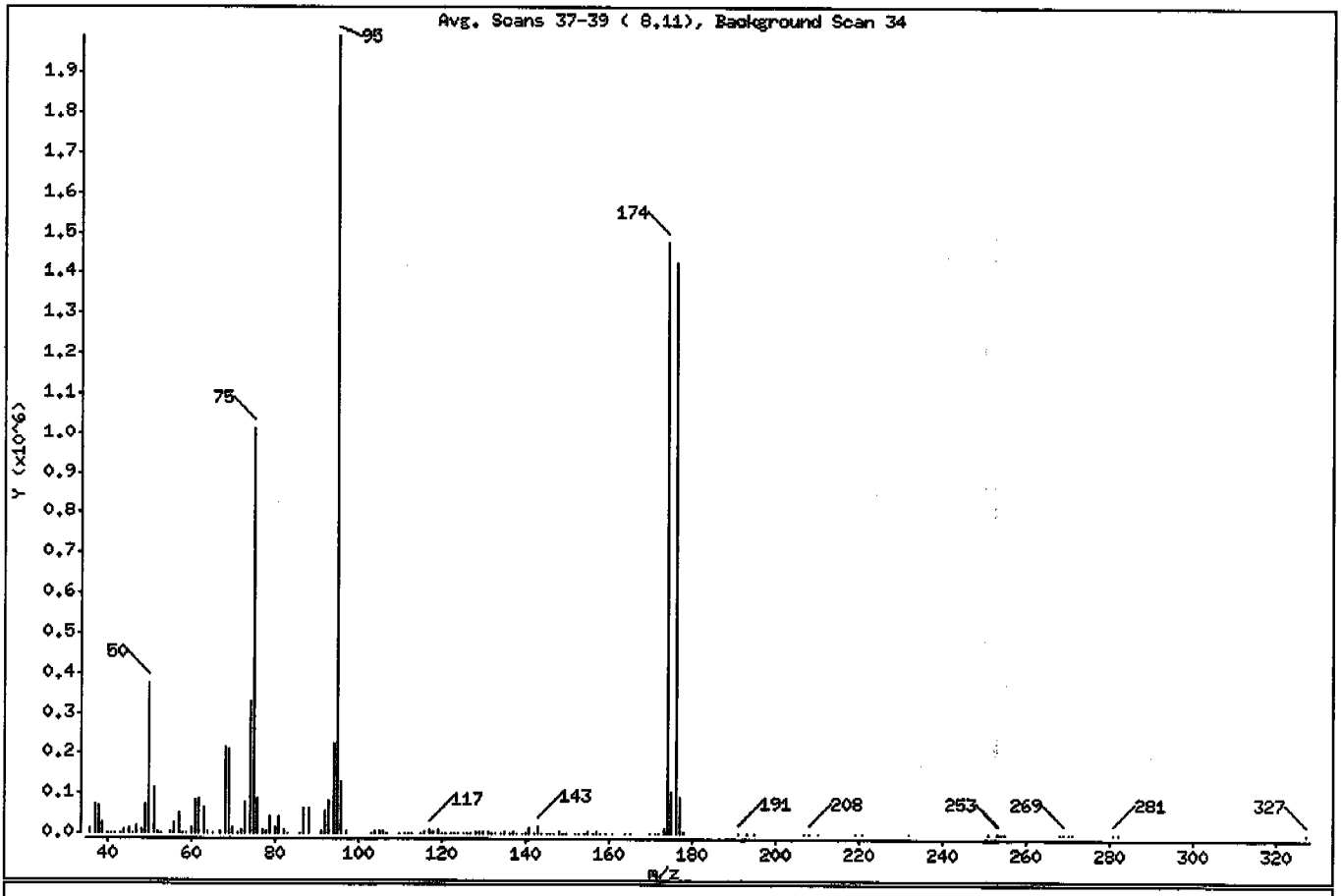
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.83
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.35
173	Less than 2.00% of mass 174	0.60 (0.80)
174	50.00 - 100.00% of mass 95	74.12
175	5.00 - 9.00% of mass 174	5.39 (7.27)
176	95.00 - 101.00% of mass 174	71.57 (96.56)
177	5.00 - 9.00% of mass 176	4.63 (6.47)

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12590	74.00	328320	122.00	327	169.00	2019
37.00	74864	75.00	1011968	123.00	458	161.00	1796
38.00	68272	76.00	86624	124.00	864	164.00	100
39.00	27184	77.00	9661	125.00	646	165.00	280
40.00	898	78.00	5581	126.00	450	170.00	224
41.00	146	79.00	41696	127.00	490	171.00	344
42.00	52	80.00	13412	128.00	5690	172.00	1138
43.00	354	81.00	42840	129.00	3168	173.00	11883
44.00	7813	82.00	9164	130.00	6014	174.00	1476608
45.00	15073	83.00	949	131.00	2682	175.00	107416
46.00	1296	86.00	1438	132.00	366	176.00	1428920
47.00	17736	87.00	66264	133.00	117	177.00	92386
48.00	9775	88.00	62928	134.00	619	178.00	2849
49.00	72104	91.00	5391	135.00	2471	191.00	386
50.00	375232	92.00	53016	136.00	656	193.00	49
51.00	113264	93.00	82608	137.00	2437	195.00	163
52.00	4548	94.00	224704	138.00	122	207.00	79
53.00	189	95.00	1992704	139.00	626	208.00	538
55.00	4474	96.00	126640	140.00	1092	210.00	143
56.00	25416	97.00	3779	141.00	15389	219.00	282
57.00	50472	103.00	678	142.00	1643	221.00	240
58.00	1976	104.00	6737	143.00	16333	232.00	76
59.00	71	105.00	2463	144.00	980	251.00	107
60.00	15410	106.00	6556	145.00	1475	253.00	238
61.00	82160	107.00	2074	146.00	2283	254.00	100
62.00	85144	110.00	909	147.00	1251	255.00	105
63.00	65960	111.00	1186	148.00	4141	268.00	120
64.00	5791	112.00	905	149.00	912	269.00	308
65.00	887	113.00	1014	150.00	1708	270.00	11
67.00	4448	115.00	1419	152.00	888	271.00	149
68.00	213696	116.00	5788	153.00	1322	281.00	88
69.00	209280	117.00	9607	154.00	1107	282.00	21
70.00	14643	118.00	5909	155.00	4174	327.00	131
71.00	664	119.00	8235	156.00	709		
72.00	9006	120.00	397	157.00	2884		

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	79208	121.00	106	158.00	325		

Air Toxics Ltd.

Data file : /chem/msdt.i/21Feb2008.b/t022101.d
Lab Smp Id: Client Smp ID: **BFB**
Inj Date : 21-FEB-2008 08:30
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/21Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: **WATER**
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.082	8.228	-0.146	95	1820880			100.00- 100.00	100.00
8.082	8.228	-0.146	50	350549			15.00- 40.00	19.25
8.082	8.228	-0.146	75	924575			30.00- 60.00	50.78
8.082	8.228	-0.146	96	117792			5.00- 9.00	6.47
8.082	8.228	-0.146	173	9781			0.00- 2.00	0.76
8.082	8.228	-0.146	174	1294506			50.00- 100.00	71.09
8.082	8.228	-0.146	175	93327			5.00- 9.00	7.21
8.082	8.228	-0.146	176	1244707			95.00- 101.00	96.15
8.082	8.228	-0.146	177	79913			5.00- 9.00	6.42

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

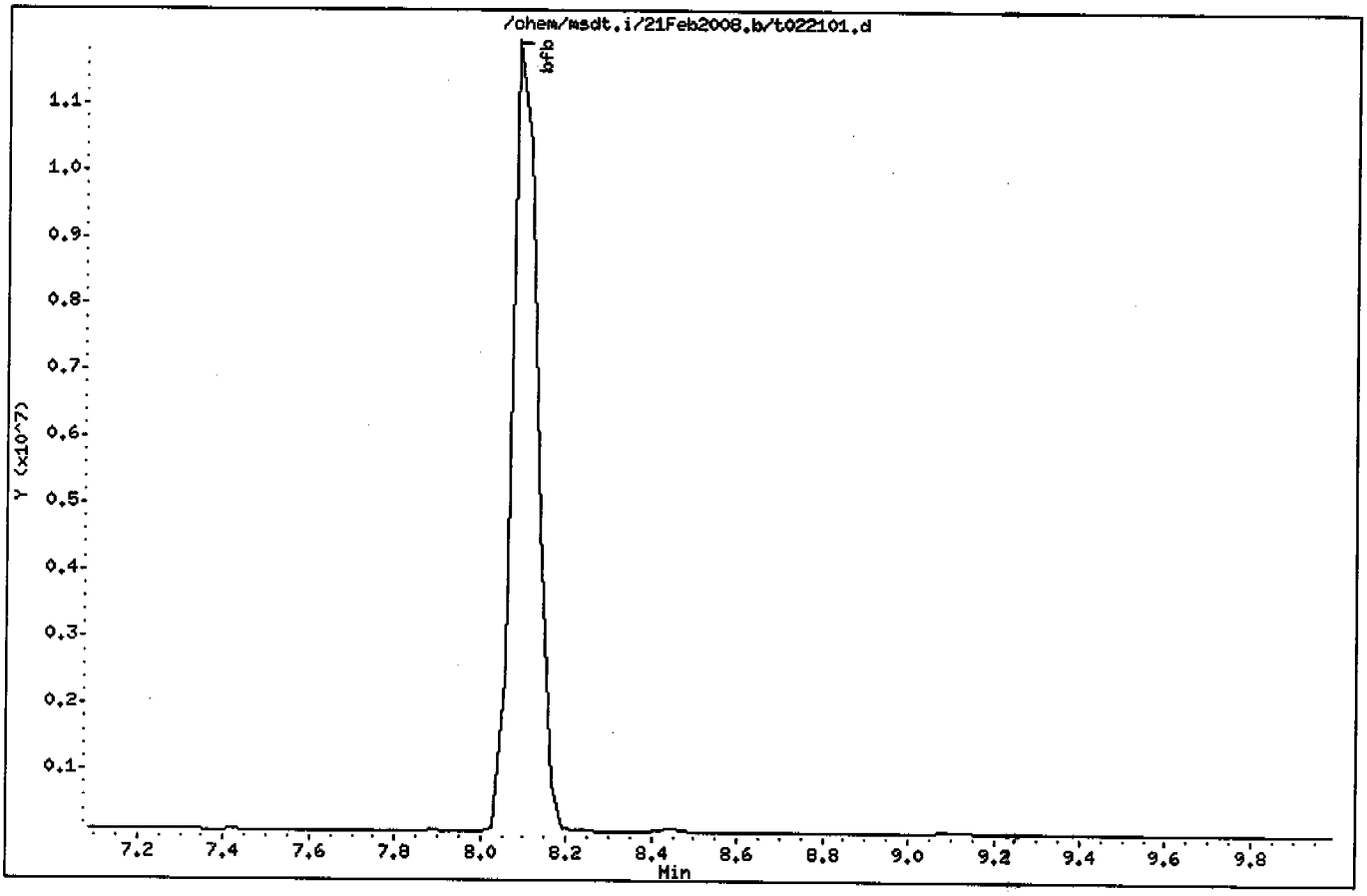
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

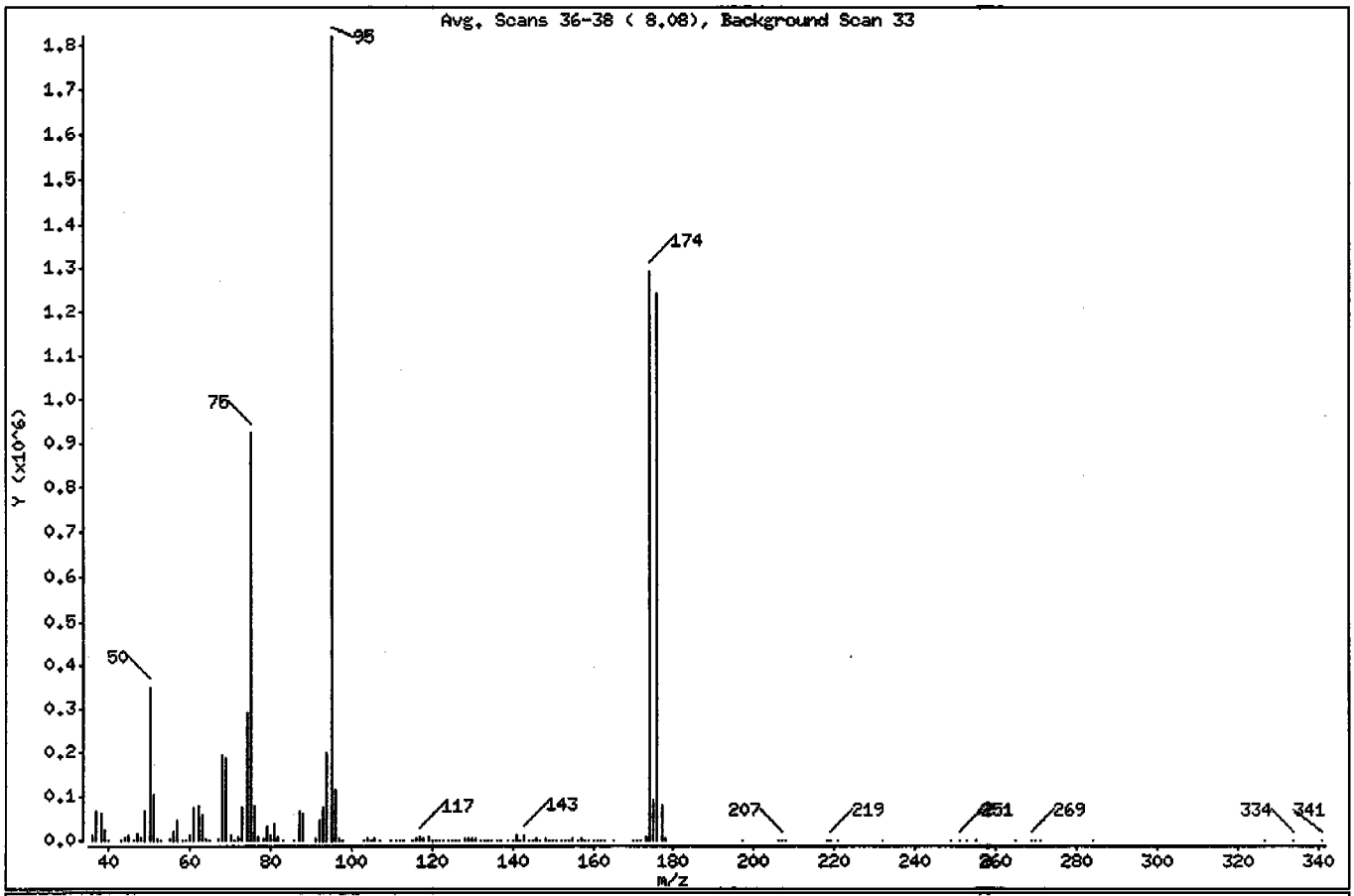
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.25
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.47
173	Less than 2.00% of mass 174	0.54 (0.76)
174	50.00 - 100.00% of mass 95	71.09
175	5.00 - 9.00% of mass 174	5.13 (7.21)
176	95.00 - 101.00% of mass 174	68.36 (96.15)
177	5.00 - 9.00% of mass 176	4.39 (6.42)

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12312	76.00	78792	123.00	414	160.00	108
37.00	69032	77.00	9068	124.00	775	161.00	1568
38.00	64704	78.00	5285	125.00	617	162.00	105
39.00	26984	79.00	34864	126.00	834	163.00	116
40.00	577	80.00	11065	127.00	249	165.00	27
43.00	373	81.00	35768	128.00	5066	170.00	308
44.00	7153	82.00	7962	129.00	2566	171.00	591
45.00	14309	83.00	752	130.00	5090	172.00	721
46.00	755	86.00	1306	131.00	2175	173.00	9781
47.00	16656	87.00	66488	132.00	329	174.00	1294336
48.00	8666	88.00	61120	133.00	29	175.00	93320
49.00	65160	91.00	5107	134.00	338	176.00	1244672
50.00	350528	92.00	47664	135.00	1758	177.00	79912
51.00	104888	93.00	75816	136.00	587	178.00	2496
52.00	4313	94.00	201344	137.00	2046	197.00	111
53.00	298	95.00	1820672	139.00	434	206.00	112
55.00	3609	96.00	117792	140.00	817	207.00	1425
56.00	22192	97.00	2776	141.00	11673	208.00	63
57.00	48784	98.00	128	142.00	1444	218.00	114
58.00	1883	103.00	395	143.00	12062	219.00	258
59.00	189	104.00	5835	144.00	764	221.00	63
60.00	14519	105.00	2027	145.00	1149	232.00	9
61.00	75712	106.00	5397	146.00	2179	249.00	199
62.00	77644	107.00	1801	147.00	982	251.00	334
63.00	58952	110.00	649	148.00	3247	253.00	81
64.00	5084	111.00	1031	149.00	1040	255.00	150
65.00	915	112.00	581	150.00	1486	265.00	63
67.00	4190	113.00	895	151.00	376	269.00	189
68.00	194688	115.00	1247	152.00	798	270.00	26
69.00	189888	116.00	4613	153.00	1088	271.00	14
70.00	13410	117.00	8446	154.00	965	284.00	104
71.00	482	118.00	4706	155.00	3563	327.00	45
72.00	8310	119.00	7194	156.00	626	334.00	48
73.00	74384	120.00	307	157.00	2889	341.00	142
74.00	294912	121.00	269	158.00	152		

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	924544	122.00	498	159.00	1646	.	

Air Toxics Ltd.

Data file : /chem/msdt.i/22Feb2008.b/t022201.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 22-FEB-2008 09:06
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/22Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.110	8.228	-0.118	95	1323132			100.00- 100.00	100.00
8.110	8.228	-0.118	50	284072			15.00- 40.00	21.47
8.110	8.228	-0.118	75	721873			30.00- 60.00	54.56
8.110	8.228	-0.118	96	85163			5.00- 9.00	6.44
8.110	8.228	-0.118	173	8070			0.00- 2.00	0.87
8.110	8.228	-0.118	174	930133			50.00- 100.00	70.30
8.110	8.228	-0.118	175	67480			5.00- 9.00	7.25
8.110	8.228	-0.118	176	899605			95.00- 101.00	96.72
8.110	8.228	-0.118	177	57935			5.00- 9.00	6.44

Data File: /chem/msdt.i/22Feb2008.b/t022201.d

Date : 22-FEB-2008 09:06

Client ID: BFB

Instrument: msdt.i

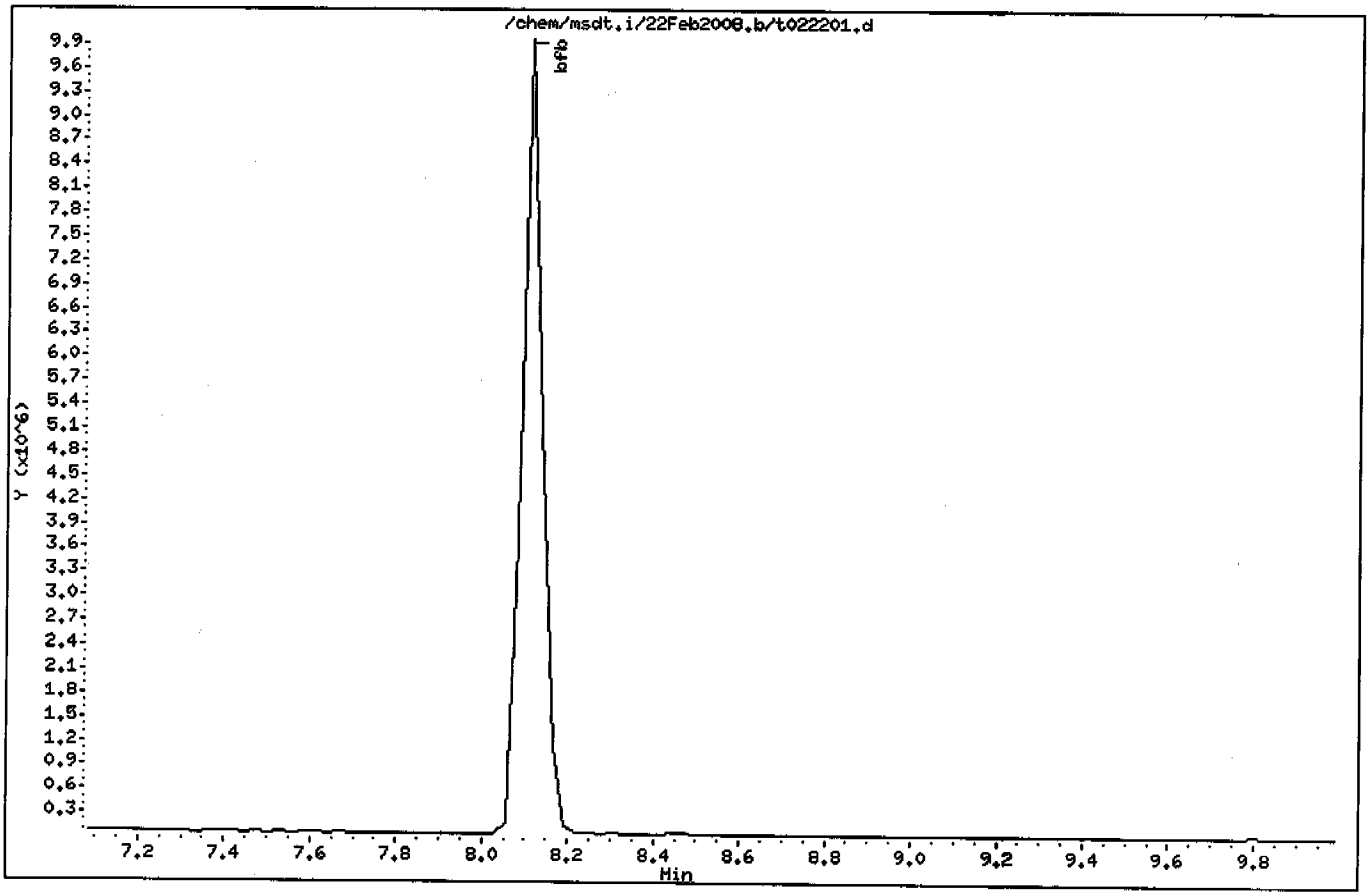
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/22Feb2008.b/t022201.d

Date : 22-FEB-2008 09:06

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

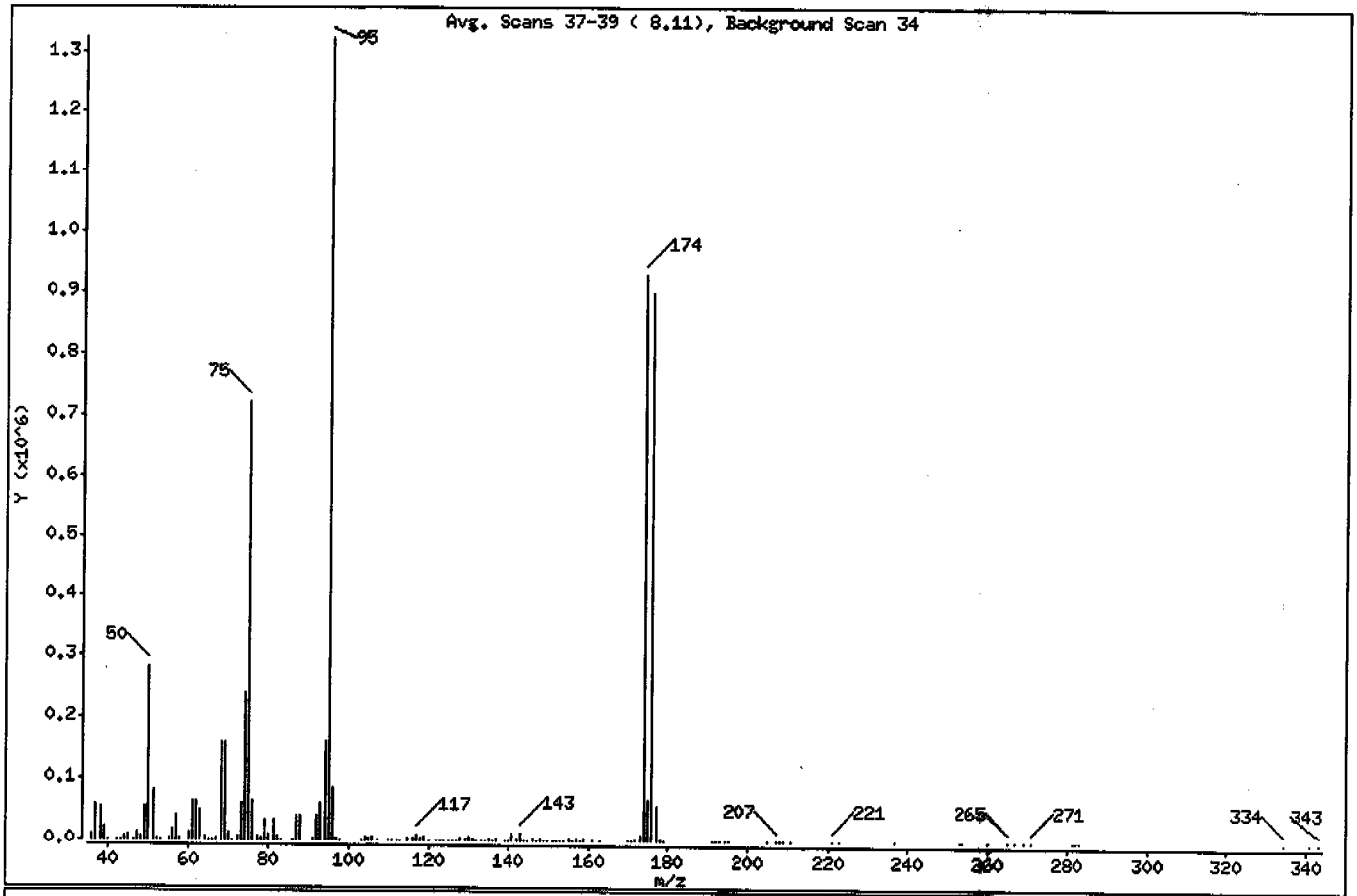
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.47
75	30.00 - 60.00% of mass 95	54.56
96	5.00 - 9.00% of mass 95	6.44
173	Less than 2.00% of mass 174	0.61 (0.87)
174	50.00 - 100.00% of mass 95	70.30
175	5.00 - 9.00% of mass 174	5.10 (7.25)
176	95.00 - 101.00% of mass 174	67.99 (96.72)
177	5.00 - 9.00% of mass 176	4.38 (6.44)

Data File: /chem/msdt.i/22Feb2008.b/t022201.d

Date : 22-FEB-2008 09:06

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022201.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 146

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10332	76.00	62784	125.00	430	171.00	129
37.00	59200	77.00	6868	126.00	650	172.00	1824
38.00	53728	78.00	3538	127.00	471	173.00	8070
39.00	22048	79.00	32112	128.00	4137	174.00	930112
40.00	226	80.00	10308	129.00	2295	175.00	67480
42.00	318	81.00	34584	130.00	4676	176.00	899584
43.00	556	82.00	7419	131.00	1935	177.00	57928
44.00	6147	83.00	856	132.00	210	178.00	1647
45.00	10502	86.00	981	133.00	321	179.00	109
46.00	1152	87.00	40280	134.00	273	191.00	253
47.00	12449	88.00	38912	135.00	2161	192.00	481
48.00	6975	91.00	4539	136.00	321	193.00	581
49.00	54464	92.00	39272	137.00	1888	194.00	104
50.00	284032	93.00	59760	139.00	356	195.00	240
51.00	83240	94.00	161280	140.00	715	205.00	103
52.00	3839	95.00	1323008	141.00	12415	207.00	1356
53.00	304	96.00	85160	142.00	1598	208.00	425
55.00	3728	97.00	2279	143.00	13317	209.00	51
56.00	18872	98.00	112	144.00	819	211.00	129
57.00	38120	103.00	494	145.00	1398	221.00	122
58.00	1667	104.00	5210	146.00	1838	223.00	119
60.00	11766	105.00	2001	147.00	769	237.00	105
61.00	63032	106.00	5177	148.00	2502	253.00	130
62.00	62968	107.00	1423	149.00	669	254.00	341
63.00	49736	110.00	538	150.00	1318	260.00	59
64.00	4567	111.00	1048	151.00	114	265.00	353
65.00	1372	112.00	893	152.00	565	267.00	259
66.00	141	113.00	819	153.00	842	269.00	2
67.00	3391	115.00	1536	154.00	815	271.00	340
68.00	157824	116.00	4035	155.00	2961	281.00	221
69.00	156800	117.00	7709	156.00	759	282.00	177
70.00	11582	118.00	4195	157.00	2237	283.00	148
71.00	311	119.00	6306	158.00	402	334.00	220
72.00	6567	120.00	294	159.00	1657	341.00	148
73.00	59800	122.00	368	161.00	1617	343.00	77

Data File: /chem/msdt.i/22Feb2008.b/t022201.d

Date : 22-FEB-2008 09:06

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022201.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 146

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	240256	123.00	338	163.00	13		
75.00	721856	124.00	774	170.00	114		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0802328
# of pages (Including Cover): 1

3/3/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0802228

0379

Thursday, February 14, 2008

REQUEST NUMBER: 08-630

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-630
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/14/2008
TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10511	GAS	2/14/2008		
		02A	1	MD21-08-10512	GAS	2/14/2008		
		03A	1	MD21-08-10513	GAS	2/14/2008		
		04A	1	MD21-08-10514	GAS	2/14/2008		
		05A	1	MD21 08 10515	GAS	2/14/2008		
		06A	1	MD21-08-10516	GAS	2/14/2008		

Final Page of REQUEST NUMBER 08-630

Thursday, February 14, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-630C

REQUEST NUMBER: 08-630

0802328

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/15/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10515	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10514	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10512	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10513	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10511	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10516	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]		2/14/08	1400				
Printed Name	Signature			Printed Name	Signature		
				Monica Gregson	ASL	2/15/08	845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Fed Ex
9363 3642 6819

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0802328

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Sales Rep: R6

Phone

505-665-9966

Fax

505-665-8855

Date Promised: 03/03/08
Date Completed: 2/29/08
Date Received: 2/15/08
PO#: 47247-001-07
Project#: 08-630

Total $: $ 1,800.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-10511	Modified TO-15	2/14/2008	5.5 "Hg	$205.00
02A	MD21-08-10512	Modified TO-15	2/14/2008	6.0 "Hg	$205.00
02AA	MD21-08-10512 Lab Duplicate	Modified TO-15	2/14/2008	6.0 "Hg	$0.00
03A	MD21-08-10513	Modified TO-15	2/14/2008	6.0 "Hg	$205.00
04A	MD21-08-10514	Modified TO-15	2/14/2008	6.0 "Hg	$205.00
05A	MD21-08-10515	Modified TO-15	2/14/2008	6.0 "Hg	$205.00
06A	MD21-08-10516	Modified TO-15	2/14/2008	6.5 "Hg	$205.00
07A	Lab Blank	Modified TO-15	NA	NA	$0.00
07B	Lab Blank	Modified TO-15	NA	NA	$0.00
08A	CCV	Modified TO-15	NA	NA	$0.00
08B	CCV	Modified TO-15	NA	NA	$0.00
09A	LCS	Modified TO-15	NA	NA	$0.00
09B	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (1) @ $60.00 each., Shipment 57359	$60.00
6 Liter Summa Canister (5) @ $60.00 each., Shipment 57382	$300.00
CVP (6) @ $20.00 each.	$120.00
Client Specific EDD (6) @ $5.00 each.	$30.00
eCVP (6) @ $10.00 each.	$60.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

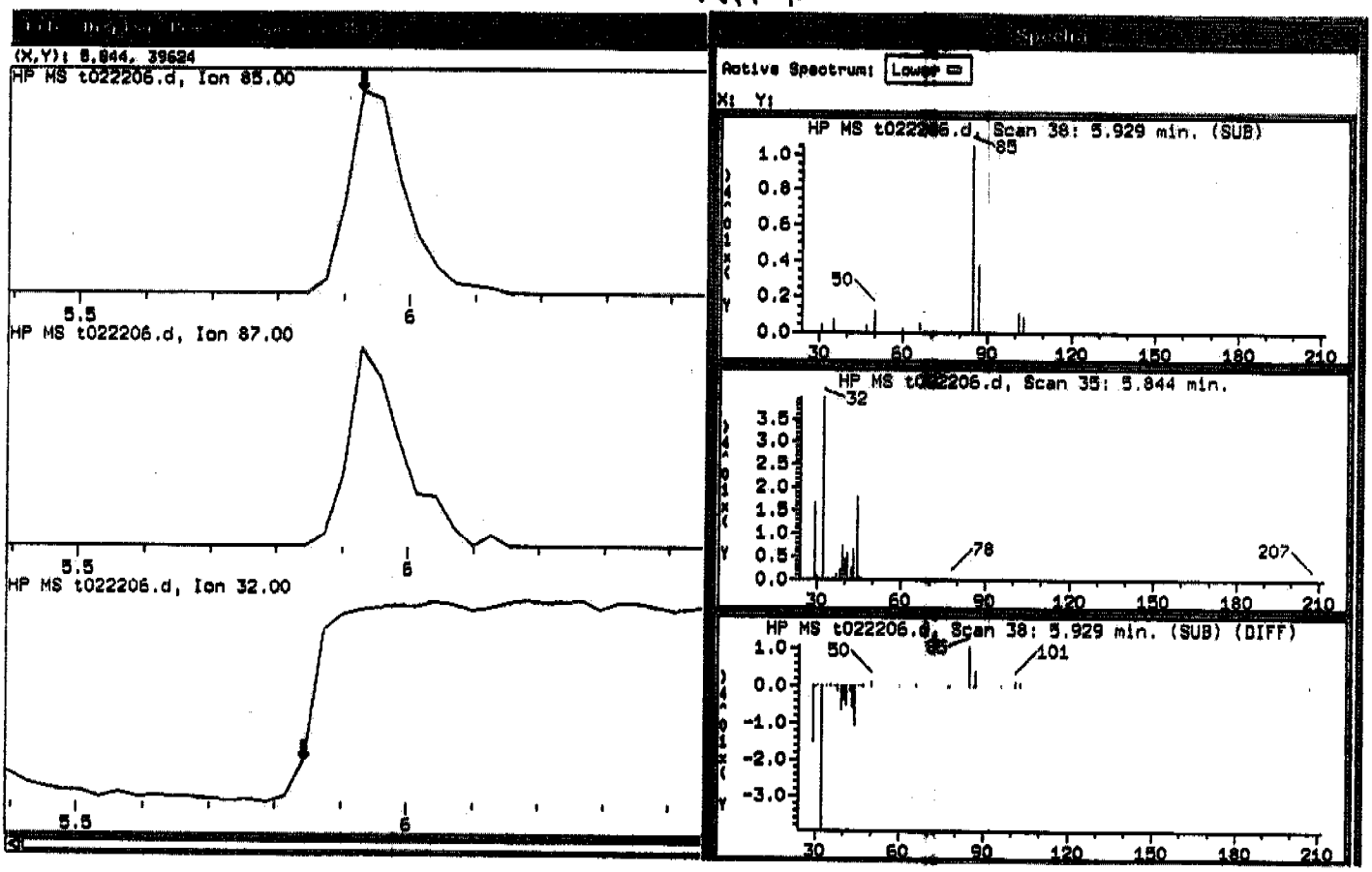
Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

Team VOC

Date / Initial	2-29-08 C-7
Poor Integration	
Split Peak	
Peak Tailing	
Background Contamination	X
Zoom In	
Missed Peak	
Merged Peaks	

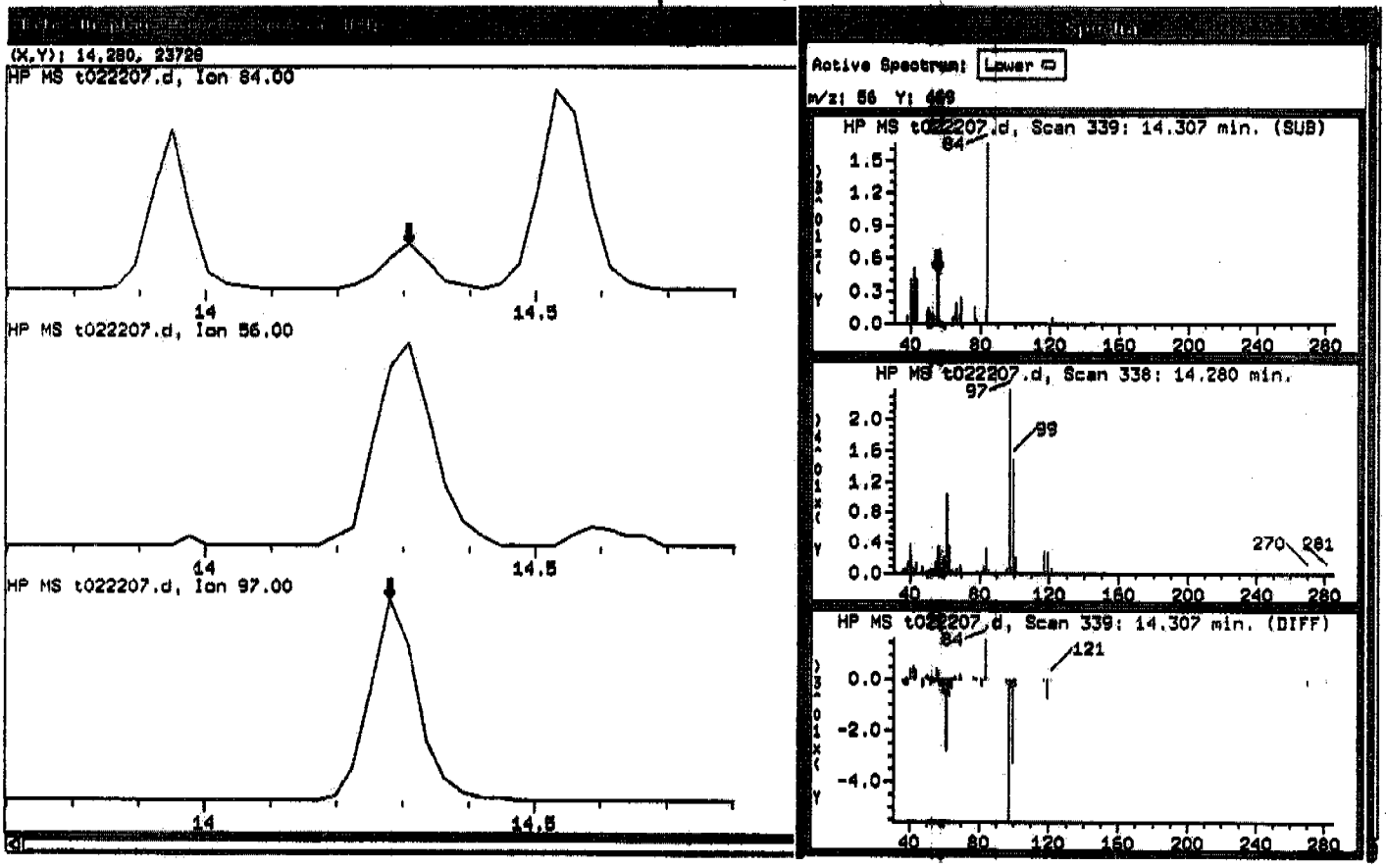
02A Freon 12



Team VOC

Date / Initial	2-28-07
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	X
Zoom In	
Missed Peak	
Merged Peaks	

02AA Cyclohexane



DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	[illegible]73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	[illegible]56	6.72	8.08
23.0	5.74	7.20	8.66
23.5	[illegible]19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	[illegible]31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	[illegible]93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	[illegible]49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	[illegible]08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	[illegible]80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	[illegible]32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	[illegible]29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	[illegible]25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	[illegible]22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	[illegible]19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	[illegible]17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	[illegible]14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	[illegible]11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	[illegible]09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	[illegible]06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0802328

A	R	T	M	Q	
☑	☐	☐	☐	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
☐	☐	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
☐	☐	☐	☐	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
☐	☐	☐	☐	☑	Corrective Action issued - #
☑	☐	☐	☐	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — *CIRCLE (YES / NO)*

☑	☐	☐	☐	☐ Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	☐ Hold time is met for all samples
	☐	☐	☐	☐ Appropriate data qualifier flags are applied
	☐	☐	☐	☐ Manual integrations for samples and QC are properly documented
☑	☐	☐		☐ Samples analyzed within the project or method specific clock
	☐	☐		Retention times have been verified
☑	☐	☐		☐ Appropriate ICAL(s) included
	☐	☐	☐	☐ At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐		☐ Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑	☐		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐		Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
NA	☑	☐		TICs resemble reference spectra
	☑	☐		TICs between duplicate samples are consistent
NA	☐	☐	☐	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☐		☐	Special units for all samples in the final report are correctly calculated
NA	☐	☐		Manually entered results checked (i.e. special CCV compounds)
	☑	☐	☐	TPH/NMOC (verify calculations and correct reference compound used)
	☑			Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☐			Samples pressurized w/ appropriate gas (N2 or He) ☐ Tedlar Bag only
☑	☐			Final pressure consistent with canister size (6L vs. 1L)
☑	☐			Verify receipt pressures against logbook and Target
NA	☑			Verify canister ID #'s
	☐	☑		Extra printed copies are provided per client profile
	☐	☑		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☐	☑	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: MTBE 38%, 4M2P 32% in ICAL, 0 out in CCV & LCS from 2/21/08 & 2/22/08. CCV from multiple files. Dup on sample 02A.

M/O:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
2/26/08	R: Taylor 2-29-08	RS 2-29-08	

T:

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 3 (10/29/05

Wednesday, February 13, 2008

REQUEST NUMBER: 08-624

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-624

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/13/2008

TURNAROUND/REPORT DUE: 3/14/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10504	GAS	2/13/2008		
		1	MD21-08-10505	GAS	2/13/2008		
		1	MD21-08-10506	GAS	2/13/2008		
		1	MD21-08-10507	GAS	2/13/2008		
		1	MD21-08-10508	GAS	2/13/2008		

Final Page of REQUEST NUMBER 08-624

Wednesday, February 13, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-624C

REQUEST NUMBER: 08-624

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/14/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10507	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10504	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10505	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10506	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature 2/13/08 1100 Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10504

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0915	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

North MDA T Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 1.7 % PID = 0.2 ppm

O_2 19.9 %

COLLECTED BY (PRINT) Bill Stone **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 1145 2/13/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/13/08 11:45
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10505

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	160.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	165.5 ft	SCREEN/PORT DESC:		Port #2
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 0.7 (%) PID = 0.4 ppm

O_2 20.2(%)

~~COLLECTED BY (PRINT)~~ [illegible]

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature)	2/13/08	(Signature)	11:45
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10506

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0919	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222.0 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 1.3 % PID= 0.8 ppm

O_2 20.4 %

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature) [signature]	2/13/08	(Signature) [signature]	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10507

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0921	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.3\ \%$ PID = 1.0 ppm

$O_2 = 20.5\ \%$

COLLECTED BY (PRINT) Bill Stenmark **REVIEWED BY (PRINT)** Kevin Reed

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	2/13/08	(Printed Name)	2/13/08
(Signature) Kevin Reed	1145	(Signature)	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10508

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0923	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9$ ppm PID = 0.7 ppm

$O_2 = 20.6$ ppm

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature) [signature]	2/13/08	(Signature) [signature]	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5119-1

Records Use only

Los Alamos NATIONAL LABORATORY

Data Validation Cover Sheet

Section I.

REQUEST NUMBER: 08-624 VALIDATION DATE: 3/25/08 LAB CODE: ARS

CONTRACT LABORATORY NAME: American Radiation Services, Inc

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☒ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The result for sample MD21-08-10507 was > the Minimum Detectable Concentration but ≤3X the 1-sigma Total Propagated Uncertainty and, thus, was qualified U,R11.
2. It should be noted that no Matrix Spike (MS) / MS Duplicate or Duplicate samples were analyzed. However, a Laboratory Control Sample (LCS) and LCS Duplicate were analyzed and, thus, no sample data were qualified, based on professional judgment.

Reviewed By: KAS **Level:** 1 **Date:** 3/26/08

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 3/25/08

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☐	☒	☐	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☒	☐	☐	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☐	☒	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☐	☒	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☐	☒	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☒	☐	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10504
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-001
Date Received: 2/14/2008
Report Date: 03/14/08 10:48

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	563.806	134.878	188.333	92.467		pCi/L	ARS-054/ EPA 906.0	3/12/08 15:24	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rameigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/25/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10505
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-002
Date Received: 2/14/2008
Report Date: 03/14/08 10:48

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	779.214	148.216	186.310	91.474		pCi/L	ARS-054/ EPA 906.0	3/12/08 18:00	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/25/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10506
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-003
Date Received: 2/14/2008
Report Date: 03/14/08 10:49

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	16974.589	1766.182	188.540	92.569		pCi/L	ARS-054/ EPA 906.0	3/12/08 20:37	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanzeigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/25/08

AMERICAN RADIATION SERVICES, INC.

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10507
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-004
Date Received: 2/14/2008
Report Date: 03/14/08 10:49

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R11	217.704	117.286	188.861	92.727		pCi/L	ARS-054/ EPA 906.0	3/12/08 23:13	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ranseigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/25/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-00342	**Request or PO Number:**	08-624
Client Sample ID:	MD21-08-10508	**ARS Sample ID:**	ARS1-08-00342-005
Sample Collection Date:	2/13/2008	**Date Received:**	2/14/2008
Sample Matrix:	Air/Gel	**Report Date:**	03/14/08 10:49

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	10722.137	1127.219	187.665	92.139		pCi/L	ARS-054/ EPA 906.0	3/13/08 1:49	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoiqne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/25/08

Wednesday, February 13, 2008

REQUEST NUMBER: 08-624

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-624
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/13/2008
TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10504	GAS	2/13/2008		
		1	MD21-08-10505	GAS	2/13/2008		
		1	MD21-08-10506	GAS	2/13/2008		
		1	MD21-08-10507	GAS	2/13/2008		
		1	MD21-08-10508	GAS	2/13/2008		

Final Page of REQUEST NUMBER 08-624

Wednesday, February 13, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-624C

REQUEST NUMBER: 08-624

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10507	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10504	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10505	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10506	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/13/08	4:00	Printed Name	Signature	2-14-08	13:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-624

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory Request Number: 08-624

Original COC

Wednesday, February 13, 2008

REQUEST NUMBER: 08-624

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-624

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/13/2008

TURNAROUND/REPORT DUE: 3/14/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10504	GAS	2/13/2008		
		1	MD21-08-10505	GAS	2/13/2008		
		1	MD21-08-10506	GAS	2/13/2008		
		1	MD21-08-10507	GAS	2/13/2008		
		1	MD21-08-10508	GAS	2/13/2008		

Final Page of REQUEST NUMBER 08-624

Wednesday, February 13, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-624C

REQUEST NUMBER: 08-624

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/14/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10507	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10504	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10505	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10506	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature	2/13/08	1400	Printed Name	Signature	2-14-08	13:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-624

Case Narrative

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

March 14, 2008

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-624
LANL Sample ID: MD21-08-10504, MD21-08-10505, MD21-08-10506, MD21-08-10507, MD21-08-10508

Dear Mr. Greene:

On February 14, 2008, American Radiation Services (ARS) received five Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet quality control parameters for counting equipment were within acceptance criteria and statistical sound detection limits.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

[signature] for Virgene Mulligan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-624	MD21-08-10504	ARS1-08-00342-001
08-624	MD21-08-10505	ARS1-08-00342-002
08-624	MD21-08-10506	ARS1-08-00342-003
08-624	MD21-08-10507	ARS1-08-00342-004
08-624	MD21-08-10508	ARS1-08-00342-005

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicate that the activity is below the MDC.

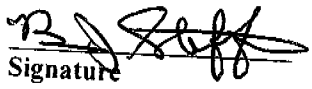
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."



Signature

Lab Manager/Technical Director, American Radiation Services
Title

3-14-08
Date

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10504
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-001
Date Received: 2/14/2008
Report Date: 03/14/08 10:48

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	563.806	134.878	188.333	92.467		pCi/L	ARS-054/ EPA 906.0	3/12/08 15:24	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10505
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-002
Date Received: 2/14/2008
Report Date: 03/14/08 10:48

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	779.214	148.216	186.310	91.474		pCi/L	ARS-054/ EPA 906.0	3/12/08 18:00	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanseigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10506
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-003
Date Received: 2/14/2008
Report Date: 03/14/08 10:49

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	16974.589	1766.182	188.540	92.569		pCi/L	ARS-054/ EPA 906.0	3/12/08 20:37	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10507
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-004
Date Received: 2/14/2008
Report Date: 03/14/08 10:49

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	217.704	117.286	188.861	92.727		pCi/L	ARS-054/ EPA 906.0	3/12/08 23:13	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ranseigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10508
Sample Collection Date: 2/13/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-005
Date Received: 2/14/2008
Report Date: 03/14/08 10:49

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	10722.137	1127.219	187.665	92.139		pCi/L	ARS-054/ EPA 906.0	3/13/08 1:49	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanesigne
Project Manager Review

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1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-08-00342
Date Received: 2/15/2008

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B08-00504	LCS	H3	729.561	141.362	179.629	1186.892		pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS	61	50%-150%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B08-00504	MBL	H3	-137.554	103.083	179.774	NA	U	pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B08-00504	LCSD	H3	729.561	141.362	882.353	151.886		pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS	0.52	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B08-00504	LCSD	H3	729.561	141.362	882.353	151.886		pCi/L	ARS-055/EPA 906.0	3/12/08 7:34	BJS	1.47	< 3

Lindsay Lansaigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

LSC Instrument Data Transfer Report

\\Packard3170\Results\#3 Results\Tritium for Protocol

ARS1-B08-00504 | 14 | 14 | LSC 1

BKG												
BKG	5		1	BACKGROUND	03/12/08 04:58	6.70	411.48	49.4900	150.00	ARS1-B08-00504		
ARS1-B08-00504-01	5		2	B08-00504-01	03/12/08 07:34	10.76	416.15	49.8700	150.00	ARS1-B08-00504		
ARS1-B08-00504-02	5		3	B08-00504-02	03/12/08 10:11	11.65	421.04	50.2700	150.00	ARS1-B08-00504		
ARS1-B08-00504-03	5		4	B08-00504-03	03/12/08 12:47	5.93	415.39	49.8100	150.00	ARS1-B08-00504		
ARS1-B08-00504-04	5		5	B08-00504-04	03/12/08 15:23	9.69	389.18	47.6200	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-05	5		6	B08-00504-05	03/12/08 18:00	10.88	397.01	48.3100	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-06	5		7	B08-00504-06	03/12/08 20:36	96.83	390.37	47.7300	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-07	5		8	B08-00504-07	03/12/08 23:13	7.85	389.37	47.6400	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-08	5		9	B08-00504-08	03/13/08 01:49	63.89	393.75	48.0400	150.00	ARS1-B08-00504	ARS1-08-00342	1
ARS1-B08-00504-09	5		10	B08-00504-09	03/13/08 04:25	14.89	393.13	47.9800	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-10	5		11	B08-00504-10	03/13/08 07:02	323.60	376.41	46.4500	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-11	5		12	B08-00504-11	03/13/08 09:38	193.55	388.52	47.5600	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-12	5		13	B08-00504-12	03/13/08 12:15	14.13	389.37	47.6400	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-13	5		14	B08-00504-13	03/13/08 14:51	10.94	385.25	47.2600	150.00	ARS1-B08-00504	ARS1-08-00341	1
ARS1-B08-00504-14	5		15	B08-00504-14	03/13/08 17:28	11.75	373.57	46.1900	150.00	ARS1-B08-00504	ARS1-08-00341	1

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.762000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.498700
Sample Aliquot	5.034000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/12/08 7:35 AM
Count Date (t2)	3/12/08 7:35 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values		VBA	V/V
ACT	729.561354	729.561354	OK
CU	119.978142	119.978142	OK
TPU	141.362458	141.362458	OK
MDA	179.629047	179.629047	OK
DL	88.193675	88.193675	OK
Net Count Rate	4.066000	4.066000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005573	0.005573	OK
K MDA	0.835982	0.835982	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-01
Analysis Code	
SDG	ARS1-08-00341
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	P-5-S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.652000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.502700
Sample Aliquot	5.033000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/12/08 10:11 AM
Count Date (t2)	3/12/08 10:11 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values		VBA	V/V
ACT	882.353286	882.353286	OK
CU	122.043883	122.043883	OK
TPU	151.885665	151.885665	OK
MDA	178.235139	178.235139	OK
DL	87.509299	87.509299	OK
Net Count Rate	4.956000	4.956000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005617	0.005617	OK
K MDA	0.842520	0.842520	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-02
Analysis Code	
SDG	ARS1-08-00341
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	P-5-S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	5.930000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.498100
Sample Aliquot	5.036000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/12/08 12:47 PM
Count Date (t2)	3/12/08 12:47 PM
Activity Units = pCi --> UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	-137.554098	-137.554098	OK
CU	102.114660	102.114660	OK
TPU	103.082835	103.082835	OK
MDA	179.774000	179.774000	OK
DL	88.264843	88.264843	OK
Net Count Rate	-0.766000	-0.766000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005569	0.005569	OK
K MDA	0.835308	0.835308	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-03
Analysis Code	
SDG	ARS1-08-00341
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	P-5-S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	9.693000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.476200
Sample Aliquot	5.050000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 3:24 PM
Activity Units = pCi --- BCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	563.806477	563.806477	OK
cU	121.879310	121.879310	OK
TPU	134.878465	134.878465	OK
MDA	188.332572	188.332572	OK
DL	92.466903	92.466903	OK
Net Count Rate	2.997000	2.997000	OK
D t 1 (t2 - t1)	28.058333	28.058333	OK
DF	0.995687	0.995687	OK
Sys Err	0.052280	0.052280	OK
K	0.005316	0.005316	OK
K MDA	0.797348	0.797348	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-04
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10504
Instr File Name	84
Instr Detector	P-5 S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.883000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.483100
Sample Aliquot	5.032000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 6:00 PM
Activity Units = pCi -- uCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	EXCEL	VBA	V/V
ACT	779.213781	779.213781	OK
CU	124.870885	124.870885	OK
TPU	148.215752	148.215752	OK
MDA	186.309836	186.309836	OK
DL	91.473787	91.473787	OK
Net Count Rate	4.187000	4.187000	OK
D t 1 (t2 - t1)	28.166667	28.166667	OK
DF	0.995671	0.995671	OK
Sys Err	0.052280	0.052280	OK
K	0.005373	0.005373	OK
K MDA	0.806005	0.806005	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-05
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	002
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10505
Instr File Name	84
Instr Detector	P-5-S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	96.828000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.477300
Sample Aliquot	5.033000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 8:37 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	16974.589137	16974.589132	OK
CU	306.655831	306.655831	OK
TPU	1766.181887	1766.181887	OK
MDA	188.539514	188.539514	OK
DL	92.568506	92.568506	OK
Net Count Rate	90.132000	90.132000	OK
D t 1 (t2 - t1)	28.275694	28.275694	OK
DF	0.995654	0.995654	OK
Sys Err	0.052280	0.052280	OK
K	0.005310	0.005310	OK
K MDA	0.796473	0.796473	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-06
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	003
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10506
Instr File Name	84
Instr Detector	P-5-S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.850000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.476400
Sample Aliquot	5.034000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/12/08 11:13 PM
Activity Units -- pCi --- DCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	217.704156	217.704156	OK
CU	115.144486	115.144486	OK
TPU	117.285502	117.285502	OK
MDA	188.861325	188.861325	OK
DL	92.726508	92.726508	OK
Net Count Rate	1.154000	1.154000	OK
D t 1 (t2 - t1)	28.384028	28.384028	OK
DF	0.995637	0.995637	OK
Sys Err	0.052280	0.052280	OK
K	0.005301	0.005301	OK
K MDA	0.795116	0.795116	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-07
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	004
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10507
Instr File Name	84
Instr Detector	P-5-S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	63.894000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.480400
Sample Aliquot	5.024000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/13/08 2:00 PM
Count Date (t2)	3/13/08 1:49 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	10722.136617	10722.136614	OK
CU	252.047576	252.047576	OK
TPU	1127.218933	1127.218932	OK
MDA	187.664710	187.664710	OK
DL	92.138998	92.138998	OK
Net Count Rate	57.198000	57.198000	OK
D t 1 (t2 - t1)	28.492361	28.492361	OK
DF	0.995621	0.995621	OK
Sys Err	0.052280	0.052280	OK
K	0.005335	0.005335	OK
K MDA	0.800186	0.800186	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-08
Analysis Code	LSC-A-001
SDG	ARS1-08-00342
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10508
Instr File Name	84
Instr Detector	P-5-S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UNL Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	14.891000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.479800
Sample Aliquot	5.012000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 4:26 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	CCC	VBA	V/V
ACT	1541.736641	1541.736640	OK
CU	139.883929	139.883929	OK
TPU	211.009228	211.009228	OK
MDA	188.340343	188.340343	OK
DL	92.470718	92.470718	OK
Net Count Rate	8.195000	8.195000	OK
D t 1 (t2 - t1)	28.184722	28.184722	OK
DF	0.995668	0.995668	OK
Sys Err	0.052280	0.052280	OK
K	0.005315	0.005315	OK
K MDA	0.797315	0.797315	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-09
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MDZ1-08-10511
Instr File Name	84
Instr Detector	P-5-S-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	323.598000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.464500
Sample Aliquot	5.085000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 7:02 AM
Activity Units = pCi -- DCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	60699.916521	60699.916504	OK
CU	557.088121	557.088121	OK
TPU	6244.712473	6244.712471	OK
MDA	191.754354	191.754354	OK
DL	94.146918	94.146918	OK
Net Count Rate	316.902000	316.902000	OK
D t 1 (t2 - t1)	28.293056	28.293056	OK
DF	0.995651	0.995651	OK
Sys Err	0.052280	0.052280	OK
K	0.005221	0.005221	OK
K MDA	0.783120	0.783120	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-10
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	002
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10512
Instr File Name	84
Instr Detector	P-5 S-11
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	193.550000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.475600
Sample Aliquot	5.052000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 9:39 AM
Activity Units = pCi --> UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	35183.925672	35183.925662	OK
CU	426.416756	426.416756	OK
TPU	3630.365271	3630.365270	OK
MDA	188.505495	188.505495	OK
DL	92.551804	92.551804	OK
Net Count Rate	186.854000	186.854000	OK
D t 1 (t2 - t1)	28.402083	28.402083	OK
DF	0.995635	0.995635	OK
Sys Err	0.052280	0.052280	OK
K	0.005311	0.005311	OK
K MDA	0.796617	0.796617	OK
Batch Identifiers and Other Related Information			
Batch	ARS1-B08-00504		
Batch ID	ARS1-B08-00504-11		
Analysis Code	LSC-A-001		
SDG	ARS1-08-00341		
Fraction	003		
Run Number	1		
Client	Los Alamos National Laboratory		
Client Profile	Keith Greene		
Client ID	MD21-08-10513		
Instr File Name	84		
Instr Detector	P-5-S-12		
Instr keV			
Version/Date	1.0 -- 11/18/2005		

Reviewed by: UML **Date:** 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	14.126000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.476400
Sample Aliquot	5.049000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 12:15 PM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1397.545708	1397.545707	OK
CU	137.356391	137.356390	OK
TPU	198.429283	198.429283	OK
MDA	188.303905	188.303905	OK
DL	92.452828	92.452828	OK
Net Count Rate	7.430000	7.430000	OK
D t 1 (t2 - t1)	28.510417	28.510417	OK
DF	0.995618	0.995618	OK
Sys Err	0.052280	0.052280	OK
K	0.005316	0.005316	OK
K MDA	0.797469	0.797469	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-12
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	004
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10514
Instr File Name	84
Instr Detector	P-5-S-13
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.935000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.472600
Sample Aliquot	5.039000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 12:00 AM
Count Date (t2)	3/13/08 2:52 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	805.354269	805.354269	OK
CU	127.665180	127.665180	OK
TPU	152.014747	152.014747	OK
MDA	190.197879	190.197879	OK
DL	93.382725	93.382725	OK
Net Count Rate	4.239000	4.239000	OK
D t 1 (t2 - t1)	28.619444	28.619444	OK
DF	0.995601	0.995601	OK
Sys Err	0.052280	0.052280	OK
K	0.005264	0.005264	OK
K MDA	0.789528	0.789528	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-13
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10515
Instr File Name	84
Instr Detector	P-5-S-14
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.754000
Sample Count Mins	150.000000
BKG Count Rate	6.696000
BKG Count Mins	150.000000
Instrument Efficiency	0.461900
Sample Aliquot	5.042000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/14/08 2:00 PM
Count Date (t2)	3/13/08 5:28 PM
Activity Units = pCi -- MCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	ESQ	VBA	V/V
ACT	982.557260	982.557260	OK
CU	133.532712	133.532712	OK
TPU	167.235262	167.235262	OK
MDA	194.473828	194.473828	OK
DL	95.482116	95.482116	OK
Net Count Rate	5.058000	5.058000	OK
D t 1 (t2 - t1)	28.144444	28.144444	OK
DF	0.995674	0.995674	OK
Sys Err	0.052280	0.052280	OK
K	0.005148	0.005148	OK
K MDA	0.772169	0.772169	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00504
Batch ID	ARS1-B08-00504-14
Analysis Code	LSC-A-001
SDG	ARS1-08-00341
Fraction	006
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21-08-10516
Instr File Name	84
Instr Detector	P-5-S-15
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 3-14-08

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453\20080312_0453.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080312_0453\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.lsa

Count Conditions-

Nuclide: H-3 Normal
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3 Normal
Count Time (min): 150.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nuc1 In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	6.696	13.53	411.48	49.49	150.00	3/12/2008	4:58:20 AM	
5	2	B08-00504-01	10.762	21.58	416.15	49.87	150.00	3/12/2008	7:34:40 AM	
5	3	B08-00504-02	11.652	23.18	421.04	50.27	150.00	3/12/2008	10:11:01 AM	
5	4	B08-00504-03	5.930	11.91	415.39	49.81	150.00	3/12/2008	12:47:24 PM	
5	5	B08-00504-04	9.693	20.35	389.18	47.62	150.00	3/12/2008	3:23:49 PM	
5	6	B08-00504-05	10.883	22.53	397.01	48.31	150.00	3/12/2008	6:00:09 PM	
5	7	B08-00504-06	96.828	202.88	390.37	47.73	150.00	3/12/2008	8:36:32 PM	
5	8	B08-00504-07	7.850	16.48	389.37	47.64	150.00	3/12/2008	11:13:00 PM	
5	9	B08-00504-08	63.894	133.01	393.75	48.04	150.00	3/13/2008	1:49:23 AM	
5	10	B08-00504-09	14.891	31.04	393.13	47.98	150.00	3/13/2008	4:25:46 AM	
5	11	B08-00504-10	323.598	696.62	376.41	46.45	150.00	3/13/2008	7:02:07 AM	
5	12	B08-00504-11	193.550	406.97	388.52	47.56	150.00	3/13/2008	9:38:43 AM	
5	13	B08-00504-12	14.126	29.65	389.37	47.64	150.00	3/13/2008	12:15:27 PM	
5	14	B08-00504-13	10.935	23.14	385.25	47.26	150.00	3/13/2008	2:51:57 PM	
5	15	B08-00504-14	11.754	25.45	373.57	46.19	150.00	3/13/2008	5:28:21 PM	

Assay Definition-

Assay Description:
Low Low Level Tritium

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\ARS\Low Low Level Tritium\20080311_1655
Raw Results Path: C:\Packard\Tricarb\Results\ARS\Low Low Level Tritium\20080311_1655
RTF File Name: C:\Packard\Tricarb\Results\ARS\Low Low Level Tritium\20080311_1655\20080311_1655.results
Comma-Delimited File Name: C:\Packard\Tricarb\Results\ARS\Low Low Level Tritium\20080311_1655\Report1.rtf
Assay File Name: C:\Packard\TriCarb\Assays\Low Low Level Tritium.lsa

Count Conditions-

Nuclide: H-3 LL
Quench Indicator: tSIE
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H3 Low Lvl
Count Time (min): 240.00
Count Mode: Low Level
Assay Count Cycles: 1
#Vials/Sample: 1
Repeat Sample Count: 1
Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.25
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On
Colored Samples: Off
Coincidence Time (nsec): 18
Luminescence Correction: Off
Heterogeneity Monitor: Off
Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

ARS
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Laboratory Records

Analysis Batch Report

Analysis Batch ID ARS1-B08-00504

Method ARS-054 **Matrix** AQ

Description TRITIUM IN WATER

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3	SDG	I	FR	Client ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-B08-00504-01	LCS	B-04548			ARS1-08-00342	1	001	MD21-08-10504	03/14/08	03/11/08	LSC-A-001
ARS1-B08-00504-02	LCSD	B-04549			ARS1-08-00342	1	002	MD21-08-10505	03/14/08	03/11/08	LSC-A-001
ARS1-B08-00504-03	MBL				ARS1-08-00342	1	003	MD21-08-10506	03/14/08	03/11/08	LSC-A-001
ARS1-B08-00504-04	TRG				ARS1-08-00342	1	004	MD21-08-10507	03/14/08	03/11/08	LSC-A-001
ARS1-B08-00504-05	TRG				ARS1-08-00342	1	005	MD21-08-10508	03/14/08	03/11/08	LSC-A-001
ARS1-B08-00504-06	TRG				ARS1-08-00341	1	001	MD21-08-10511	03/15/08	03/11/08	LSC-A-001
ARS1-B08-00504-07	TRG				ARS1-08-00341	1	002	MD21-08-10512	03/15/08	03/11/08	LSC-A-001
ARS1-B08-00504-08	TRG				ARS1-08-00341	1	003	MD21-08-10513	03/15/08	03/11/08	LSC-A-001
ARS1-B08-00504-09	TRG				ARS1-08-00341	1	004	MD21-08-10514	03/15/08	03/11/08	LSC-A-001
ARS1-B08-00504-10	TRG				ARS1-08-00341	1	005	MD21-08-10515	03/15/08	03/11/08	LSC-A-001
ARS1-B08-00504-11	TRG				ARS1-08-00341	1	006	MD21-08-10516	03/15/08	03/11/08	LSC-A-001
ARS1-B08-00504-12	TRG										
ARS1-B08-00504-13	TRG										
ARS1-B08-00504-14	TRG										

Expected Value Calculations

LANL

ARS Batch Number: ARS1-B08 - 00504

LCS

CALCULATED EXPECTED VALUE = 1186.892

Range 593.446 – 1780.338

LCSD

CALCULATED EXPECTED VALUE = 1186.892

Range 593.446 – 1780.338

ABatch	ABatchSampleID	Isotope	ClientID	ACT	CU	TPU	DL	MDA	BP_DL	BP_MDA	Sb	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	EFF	ALIQ	UCF	CF	GrossCountRate
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516	729.5613536	119.9781421	141.3624584	88.19367	179.62905				0.07175	150.00000	0.04464	150.00000	0.49870	5.03400	2.22000	1.96000	10.76200
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516	882.3532865	122.0438832	151.8856648	87.50930	178.23514				0.07768	150.00000	0.04464	150.00000	0.50270	5.03300	2.22000	1.96000	11.65200
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516	-137.5540976	102.1146602	103.0828347	88.26484	179.77400				0.03953	150.00000	0.04464	150.00000	0.49810	5.03600	2.22000	1.96000	5.93000
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504	563.8064765	121.87931	134.8784652	92.46690	188.33257				0.06462	150.00000	0.04464	150.00000	0.47620	5.05000	2.22000	1.96000	9.69300
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505	779.2137813	124.8708848	148.2157523	91.47379	186.30984				0.07255	150.00000	0.04464	150.00000	0.48310	5.03200	2.22000	1.96000	10.88300
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506	16974.58913	306.6558308	1766.181887	92.56851	188.53951				0.64552	150.00000	0.04464	150.00000	0.47730	5.03300	2.22000	1.96000	96.82800
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507	217.704156	115.1444858	117.2855017	92.72651	188.86132				0.05233	150.00000	0.04464	150.00000	0.47640	5.03400	2.22000	1.96000	7.85000
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508	10722.13661	252.0475764	1127.218932	92.13900	187.66471				0.42596	150.00000	0.04464	150.00000	0.48040	5.02400	2.22000	1.96000	63.89400
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511	1541.73664	139.8839295	211.0092279	92.47072	188.34034				0.09927	150.00000	0.04464	150.00000	0.47980	5.01200	2.22000	1.96000	14.89100
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512	60699.9165	557.0881207	6244.712471	94.14692	191.75435				2.15732	150.00000	0.04464	150.00000	0.46450	5.08500	2.22000	1.96000	323.59800
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513	35163.92566	426.4167559	3630.36527	92.55180	188.50550				1.29033	150.00000	0.04464	150.00000	0.47560	5.05200	2.22000	1.96000	193.55000
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514	1397.545707	137.3563905	198.4292833	92.45283	188.30391				0.09417	150.00000	0.04464	150.00000	0.47640	5.04900	2.22000	1.96000	14.12600
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515	805.3542689	127.6651803	152.0147474	93.38272	190.19788				0.07290	150.00000	0.04464	150.00000	0.47260	5.03900	2.22000	1.96000	10.93500
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516	982.5572596	133.5327124	167.2352622	95.48212	194.47383				0.07836	150.00000	0.04464	150.00000	0.46190	5.04200	2.22000	1.96000	11.75400

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516	6.69600	4.06600							3/14/08 7:47	3/12/08 7:35	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516	6.69600	4.95600							3/14/08 7:47	3/12/08 10:11	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516	6.69600	-0.76600							3/14/08 7:47	3/12/08 12:47	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504	6.69600	2.99700							2/13/08 14:00	3/12/08 15:24	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505	6.69600	4.18700							2/13/08 14:00	3/12/08 18:00	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506	6.69600	90.13200							2/13/08 14:00	3/12/08 20:37	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507	6.69600	1.15400							2/13/08 14:00	3/12/08 23:13	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508	6.69600	57.19800							2/13/08 14:00	3/13/08 1:49	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511	6.69600	8.19500							2/14/08 0:00	3/13/08 4:26	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512	6.69600	316.90200							2/14/08 0:00	3/13/08 7:02	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513	6.69600	186.85400							2/14/08 0:00	3/13/08 9:39	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514	6.69600	7.43000							2/14/08 0:00	3/13/08 12:15	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515	6.69600	4.23900							2/14/08 0:00	3/13/08 14:52	4499.80000		
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516	6.69600	5.05800							2/14/08 14:00	3/13/08 17:28	4499.80000		

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_1	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentkeV
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00557	0.83598	84	P-5-S-2	
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00562	0.84252	84	P-5-S-3	
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00557	0.83531	84	P-5-S-4	
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.05833						0.99569					0.05228	0.00532	0.79735	84	P-5-S-5	
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.16667						0.99567					0.05228	0.00537	0.80600	84	P-5-S-6	
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.27569						0.99565					0.05228	0.00531	0.79647	84	P-5-S-7	
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.38403						0.99564					0.05228	0.00530	0.79512	84	P-5-S-8	
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.49236						0.99562					0.05228	0.00533	0.80019	84	P-5-S-9	
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.18472						0.99567					0.05228	0.00532	0.79732	84	P-5-S-10	
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.29306						0.99565					0.05228	0.00522	0.78312	84	P-5-S-11	
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.40208						0.99563					0.05228	0.00531	0.79662	84	P-5-S-12	
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.51042						0.99562					0.05228	0.00532	0.79747	84	P-5-S-13	
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.61944						0.99560					0.05228	0.00526	0.78953	84	P-5-S-14	
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	28.14444						0.99567					0.05228	0.00515	0.77217	84	P-5-S-15	

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B08-00504	ARS1-B08-00504-01	H-3	MD21-08-10516					ARS1-08-00341	1	006		BSTEFFENS	3/14/08 7:46
ARS1-B08-00504	ARS1-B08-00504-02	H-3	MD21-08-10516					ARS1-08-00341	1	006		BSTEFFENS	3/14/08 7:46
ARS1-B08-00504	ARS1-B08-00504-03	H-3	MD21-08-10516					ARS1-08-00341	1	006		BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-04	H-3	MD21-08-10504					ARS1-08-00342	1	001	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-05	H-3	MD21-08-10505					ARS1-08-00342	1	002	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-06	H-3	MD21-08-10506					ARS1-08-00342	1	003	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-07	H-3	MD21-08-10507					ARS1-08-00342	1	004	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-08	H-3	MD21-08-10508					ARS1-08-00342	1	005	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-09	H-3	MD21-08-10511					ARS1-08-00341	1	002	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-10	H-3	MD21-08-10512					ARS1-08-00341	1	003	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-11	H-3	MD21-08-10513					ARS1-08-00341	1	004	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-12	H-3	MD21-08-10514					ARS1-08-00341	1	005	LSC-A-001	BSTEFFENS	3/14/08 7:47
ARS1-B08-00504	ARS1-B08-00504-13	H-3	MD21-08-10515					ARS1-08-00341	1	006	LSC-A-001	BSTEFFENS	3/14/08 7:48
ARS1-B08-00504	ARS1-B08-00504-14	H-3	MD21-08-10516										

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
276	ARS1-B08-00504	ARS1-B08-00504-01		0	g	5.034	g	BSTEFFENS	3/11/2008
277	ARS1-B08-00504	ARS1-B08-00504-02		0	g	5.033	g	BSTEFFENS	3/11/2008
278	ARS1-B08-00504	ARS1-B08-00504-03		0	g	5.036	g	BSTEFFENS	3/11/2008
279	ARS1-B08-00504	ARS1-B08-00504-04	MD21-08-10504	0	g	5.05	g	BSTEFFENS	3/11/2008
280	ARS1-B08-00504	ARS1-B08-00504-05	MD21-08-10505	0	g	5.032	g	BSTEFFENS	3/11/2008
281	ARS1-B08-00504	ARS1-B08-00504-06	MD21-08-10506	0	g	5.033	g	BSTEFFENS	3/11/2008
282	ARS1-B08-00504	ARS1-B08-00504-07	MD21-08-10507	0	g	5.034	g	BSTEFFENS	3/11/2008
283	ARS1-B08-00504	ARS1-B08-00504-08	MD21-08-10508	0	g	5.024	g	BSTEFFENS	3/11/2008
284	ARS1-B08-00504	ARS1-B08-00504-09	MD21-08-10511	0	g	5.012	g	BSTEFFENS	3/11/2008
285	ARS1-B08-00504	ARS1-B08-00504-10	MD21-08-10512	0	g	5.085	g	BSTEFFENS	3/11/2008
286	ARS1-B08-00504	ARS1-B08-00504-11	MD21-08-10513	0	g	5.052	g	BSTEFFENS	3/11/2008
287	ARS1-B08-00504	ARS1-B08-00504-12	MD21-08-10514	0	g	5.049	g	BSTEFFENS	3/11/2008
288	ARS1-B08-00504	ARS1-B08-00504-13	MD21-08-10515	0	g	5.039	g	BSTEFFENS	3/11/2008
289	ARS1-B08-00504	ARS1-B08-00504-14	MD21-08-10516	0	g	5.042	g	BSTEFFENS	3/11/2008

LCS Report
Analytical Batch: ARS1-B08-00504

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
4523	B-04548	ARS1-B08-00504	ARS1-B08-00504-01	B-H3	S-0156	H-3	5	1.186887798	0	1	1	BSTEFFENS	3/10/2008
4524	B-04549	ARS1-B08-00504	ARS1-B08-00504-02	B-H3	S-0156	H-3	5	1.186887798	0	1	1	BSTEFFENS	3/10/2008

Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0001	[illegible]	S	[illegible]	[illegible]	OK	[illegible]	[illegible]	51.2716	[illegible]	S-0089		[illegible]
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	114.9737	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	Ra-226	S	[illegible]	[illegible]	OK	[illegible]	[illegible]	64.9555	[illegible]	S-0105		[illegible]
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.0192	5.053E+01	S-0109		
A	S-0023	[illegible]	S	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	S-0073		[illegible]
A	S-0024	Pu-239	S	04/17/07	04/17/08	OK	10/26/05	1.1412E+01	11.4113	8.807E+06	S-0073		
A	S-0027	Tc-99	SLC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0028	U-238	S	06/18/07	06/18/08	OK	10/26/05	3.4935E+01	34.9349	1.632E+12	S-0063		
A	S-0032	H-3	SL	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	S-0094		[illegible]
A	S-0033	Tc-99	SLC	10/18/05	10/18/06	EXP	10/18/05	1.9470E+02	194.6957	7.710E+07	S-0027	04/25/06	S-0033 Working level dilution - Information entered from dilution reco
A	S-0037	Ra-226	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	646.4198	[illegible]	S-0104		[illegible]
A	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6543	2.692E+06	S-0067		S-0038 Entered from dilution documentation. Density from certificate use
A	S-0039	Tc-99	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	11146.2687	[illegible]	[illegible]		[illegible]
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.5222	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions -
A	S-0063	[illegible]	P			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0026 Information entered on 4/6/2006 RTS Density entered based on a
A	S-0067	[illegible]	PT			Not Ver	[illegible]	[illegible]	36.2319	[illegible]			[illegible]
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records Dilution records
A	S-0071	[illegible]	PL			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2306	8.807E+06			S-0024 Information entered from dilution records
A	S-0074	[illegible]	SL			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]	S-0075		[illegible]
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	S-0077	[illegible]	PT			Not Ver	[illegible]	[illegible]	356.0926	[illegible]			[illegible]
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E+12			NIST 4321 - uranium standard for use as total uranium standard [illegible]
A	S-0103	U-nat	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	70.2265	[illegible]	S-0102		[illegible]
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8219	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	[illegible]	[illegible]	11.8219	[illegible]			[illegible]
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	371560.2754	4.500E+03			Primary for S-0029 - Information entered from dilution records - 4/18/
A	S-0108	[illegible]	[illegible]			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0109	Sr-89	PLC			Not Ver	01/24/05	3.9414E+05	0.0628	5.053E+01			Activity concentration calculated per certificate information - 2.018E
A	S-0111	H-3	PC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			Primary
A	S-0112	H-3	SC	04/27/07	04/27/08	OK	04/18/06	1.1410E+04	10256.7200	4.500E+03	S-0111		Solution for use as calibration stock standard - Entered from dilution
A	S-0113	[illegible]	PLC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			Primary solution
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	S-0115	Cs-137	PL			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4333	5.840E+05	S-0105		S-0003 - Information entered from dilution records - 4/19/2006 RTS
A	S-0117	[illegible]	PLCT			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0186	1.098E+04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	S-0118		[illegible]
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9545	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	S-0120		[illegible]
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0985	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	11595.9536	[illegible]	S-0122		[illegible]
A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	2.753E+07	S-0124		[illegible]

Standards Report

A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	84733.1084	2.100E+03			Primary Ra-228 Standard
[illegible]													
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0503	7.710E+07	S-0039		Solution diluted per plan and as documented in measurements above once
[illegible]													
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	36.1444	2.100E+03	S-0127		Dilution performed as stated above by B Steffens on 5/10/2006. Measure
[illegible]													
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	52.9412	1.041E+04	S-0134		Original Standard ID# was T11o-1/S-0417. Information entered from dilu
[illegible]													
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6768	2.681E+06	S-0137		Used as an intermediate standard for creating tracer stock solutions.
[illegible]													
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5303	3.726E+04	S-0139		
[illegible]													
A	S-0142	Ra-226	SC	04/03/07	04/03/08	OK	07/21/06	6.5210E+02	651.6350	5.840E+05	S-0141		Solution for use as calibration stock. Dilution performed as stated ab
[illegible]													
A	S-0144	Pb-210	S	10/24/07	10/24/08	OK	07/18/06	1.6961E+01	16.1136	8.130E+03	S-0143		7/18/2006 ARS-VRVH-001 20 gamma spectroscopy measurements average act
[illegible]													
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9794	2.681E+06	S-0145		Information gathered from existing dilution records created on 4/25/20-
[illegible]													
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473080.5341	2.090E+06			Primary C-14 standard. The certified activity in dpm/g was derived by
[illegible]													
A	S-0152	H-3	P	04/02/08	04/02/09	OK	09/03/98	2.0090E+00	1.1761	4.500E+03			Liquid in a 500-ml borosilicate-glass made bottle with teflon-lined s
[illegible]													
A	S-0154	C-14	S	03/12/07	03/12/08	OK	10/13/06	1.7245E+02	172.4207	2.090E+06	S-0153		LCS standard for C-14. Originally logged as S-0150. See parent comment
[illegible]													
A	S-0156	H-3	S	05/18/07	05/18/08	OK	04/27/07	2.7672E+00	2.6349	4.500E+03	S-0032		Normal level tritium LCS standard. Dilution performed as stated above
[illegible]													
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	825.5096	2.516E+04			Primary U-232 standard
[illegible]													
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4437.2350	1.041E+04	S-0157		Intermediate standard for creating LCS standards. Dilution performed a
[illegible]													
A	S-0162	U-232	ST	06/18/07	06/18/08	OK	06/08/07	9.8656E+00	9.7909	2.516E+04	S-0161		Dilution performed as stated above by BSteffens on 6/8/2007. -BJS 6/8/
[illegible]													
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	286.1613	5.053E+01			Primary Sr-89 calibration standard.
[illegible]													
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6491	2.681E+06	S-0145		Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS
[illegible]													
A	S-0169	Pu-242	ST	12/27/07	12/27/08	OK	12/17/07	7.6719E+00	7.6719	1.365E+08	S-0168		Pu-242 tracer stock solution. Dilution performed as stated above by Ka
[illegible]													
A	S-0171	Th-229	PT			Not Ver	09/10/07	7.7817E+01	77.8137	2.681E+06			Primary Th-229 standard.
[illegible]													
A	S-0173	Th-230	S	02/21/08	02/21/09	OK	02/05/08	1.2638E+01	12.6383	2.753E+07	S-0172		Th-230 standard for use as LCS stock solution. Dilution performed as s
[illegible]													
A	S-0175	H-3	S	02/11/08	02/11/09	OK	02/11/08	7.0455E-02	0.0702	4.500E+03	S-0152		Low level tritium LCS solution. Dilution performed as stated above by
[illegible]													
I	S-0025	Pu-242	ST	04/17/07	04/17/08	OK	10/24/05	7.6328E+00	7.6328	1.365E+08	S-0075	01/09/08	S-0025 Information entered from dilution records-
[illegible]													

Standards Report

I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4123	4.500E+03			Tritium in Oil
I	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4895	2.753E+07	S-0065	02/22/08	Empirical data collected over 2 mos. for S-0036 indicated that the oil
I	S-0131	Sr-90	SL			Not Ver	02/02/06	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2036E+01	47.4991	1.041E+04	S-0134	07/17/07	Original standard ID# was 7310-1/2-0817. Dilution information entered
I	S-0150	C-14	SL			Not Ver	10/13/06	8.6764E+02	867.4964	2.090E+06	S-0149	03/16/07	LCS standard for C-14 in water. Dilution performed as stated above. -B

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B08-00504
SDG's: ARS1-08-00342,341

LCS	729.5614	**CSU**	141.3625
LCSD	882.3533	**CSU-D**	151.8857

DER = $\dfrac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\dfrac{152.7919}{103.7456}$ = 1.472756 **< 3**

% RPD= $\dfrac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\dfrac{152.7919}{805.9573}$ *100 = 18.95782 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\dfrac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\dfrac{152.7919329}{293.2481}$ 0.521033 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-137.5541	103.0828	179.774
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? **NO**

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
3-10-08	17:09	B08-00519-10	B08-00519	1833	
"	"	B08-00519-11	"	"	
"	"	B08-00519-12	"	"	
"	"	B08-00519-13	"	"	
"	"	B08-00519-14	"	"	
3-11-08	15:17	SNC	QA	QA	
"	"	Background	B08-00504	0453	
"	"	B08-00504-01	"	"	
"	"	B08-00504-02	"	"	
"	"	B08-00504-03	"	"	
"	"	B08-00504-04	"	"	
"	"	B08-00504-05	"	"	
"	"	B08-00504-06	"	"	
"	"	B08-00504-07	"	"	
"	"	B08-00504-08	"	"	
"	"	B08-00504-09	"	"	
"	"	B08-00504-10	"	"	
"	"	B08-00504-11	"	"	
"	"	B08-00504-12	"	"	
"	"	B08-00504-13	"	"	

Reviewed By: _____ Date: 3-14-08
Initials

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
3-11-08	15:17	B08-00504-14	B08-00504	0453	
3-13-08	10:51	SNC	QA	QA	
"	"	Background	B08-00526	0453	
"	"	B08-00526-01	"	"	
"	"	B08-00526-01S	"	"	
"	"	B08-00526-02	"	"	
"	"	B08-00526-02S	"	"	
"	"	B08-00526-03	"	"	
"	"	B08-00526-03S	"	"	
"	"	B08-00526-04	"	"	
"	"	B08-00526-04S	"	"	
"	"	B08-00526-05	"	"	
"	"	B08-00526-05S	"	"	

3-14-08

Reviewed By: _____ Date: 3-14-08
Initials

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American Radiation Services Analytical Reports

for

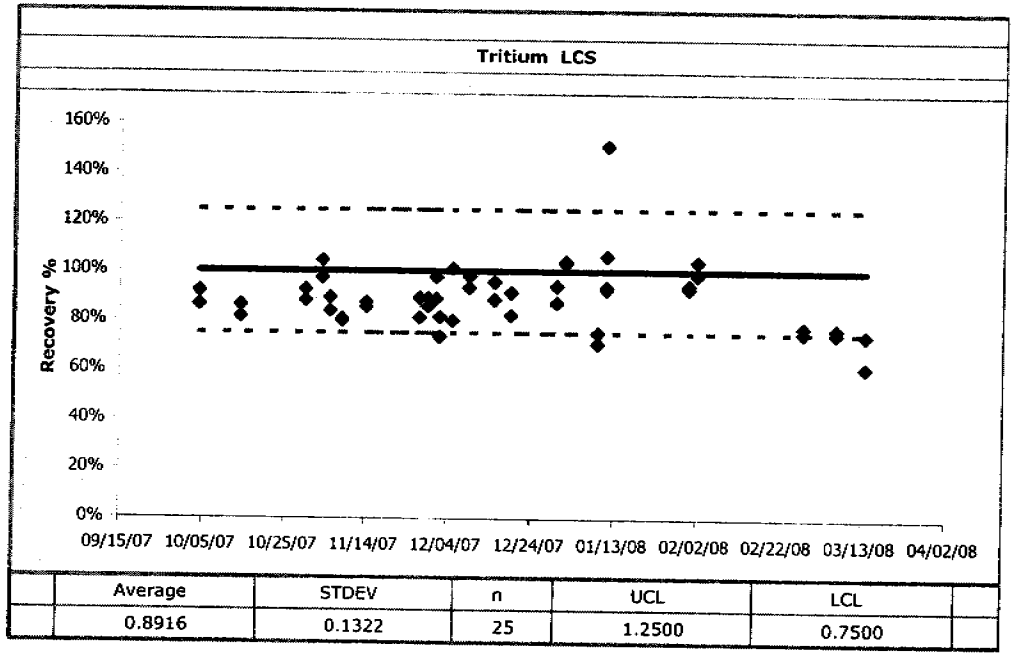
Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Control Charts

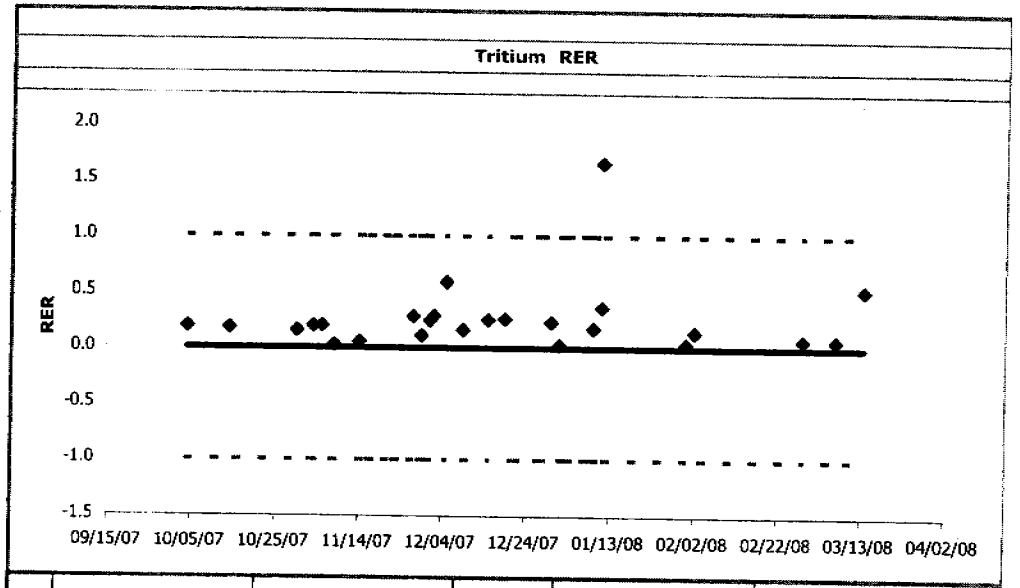
American Radiation Services
Baton Rouge Laboratory

QC Chart

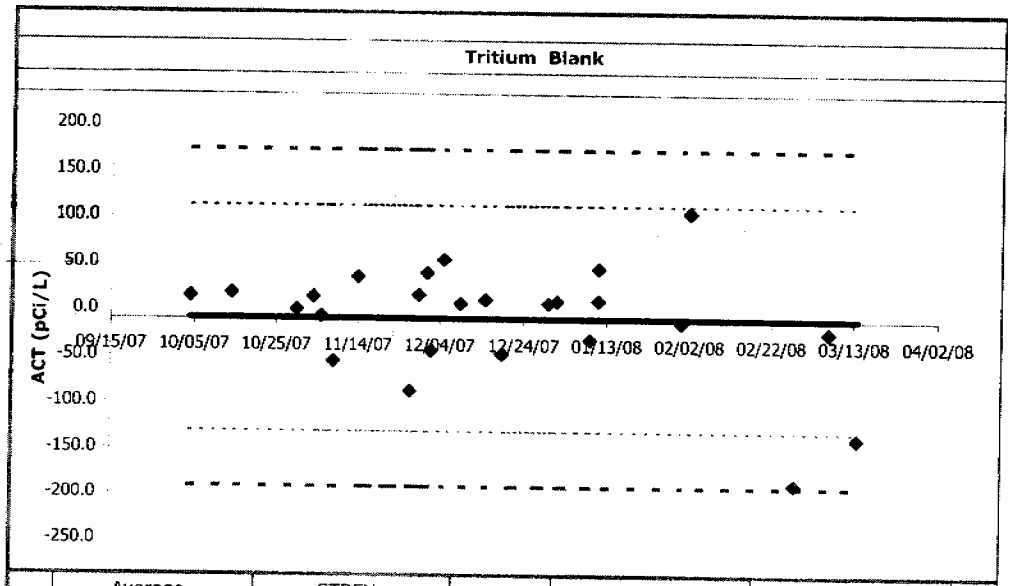
Printed: 3/14/2008 11:07 AM



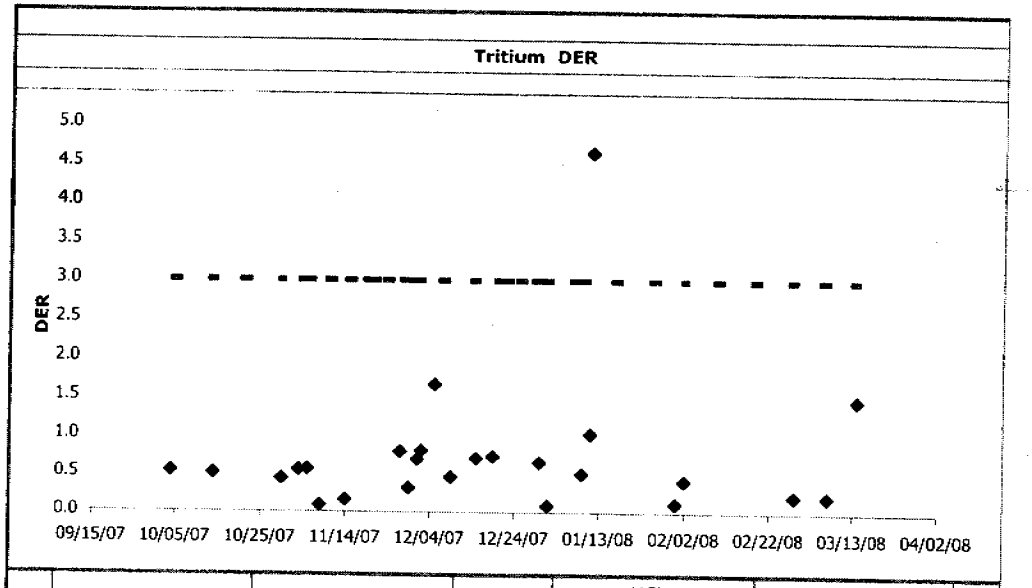
Average	STDEV	n	UCL	LCL
0.8916	0.1322	25	1.2500	0.7500



n	UCL	LCL
25	1.0000	-1.0000



Average	STDEV	n	UCL	LCL
-9.1688	60.8636	25	173.4220	-191.7597



n	UCL
25	3.0000

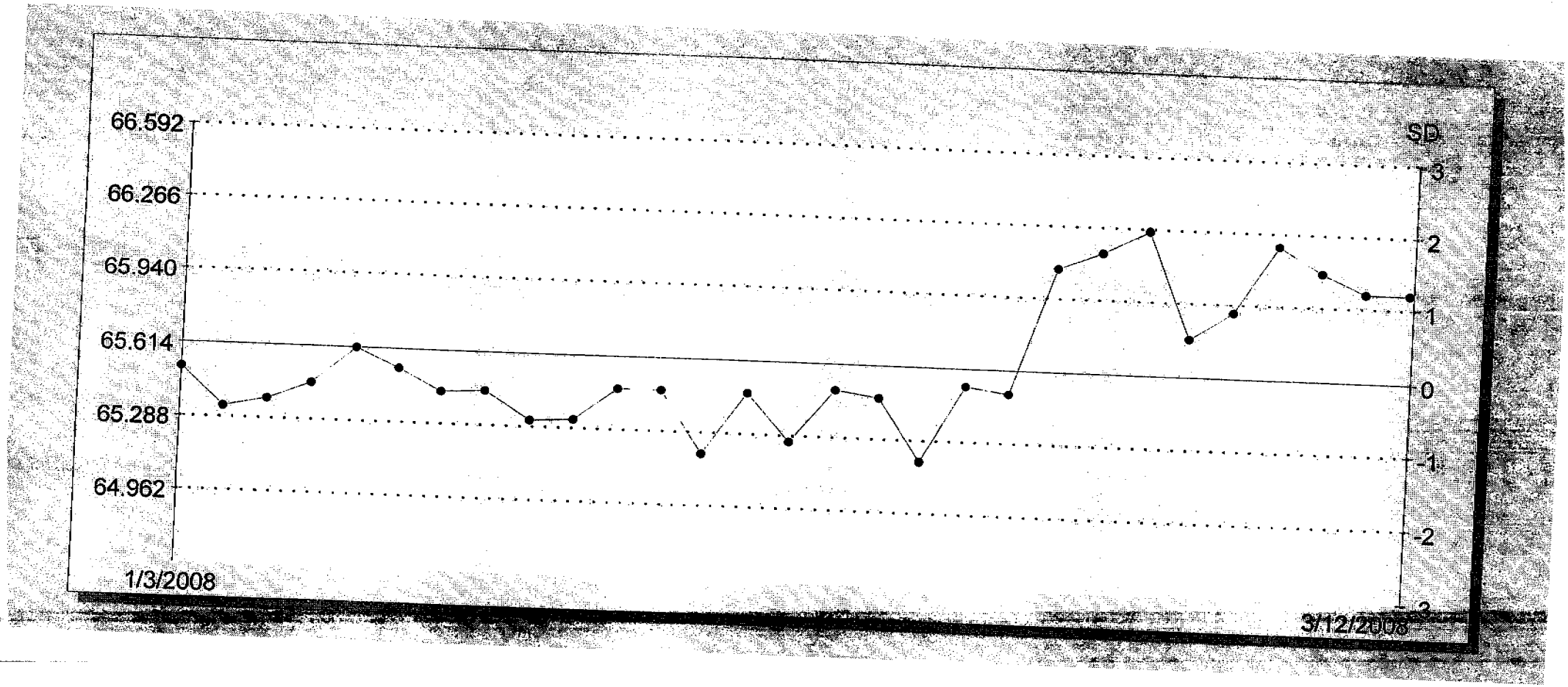
3H Efficiency

Total # pts	: 4142
Valid # pts	: 29
Mean	: 65.61
SD	: 0.33

Date	Value	Valid Pt
Jan 03, 2008	65.50	X
Jan 04, 2008	65.33	X
Jan 08, 2008	65.37	X
Jan 17, 2008	65.45	X
Jan 17, 2008	65.61	X
Jan 17, 2008	65.52	X
Jan 17, 2008	65.43	X
Jan 17, 2008	65.44	X
Jan 17, 2008	65.32	X
Jan 18, 2008	65.32	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.46	X
Jan 18, 2008	65.19	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.25	X
Jan 18, 2008	65.50	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.19	X
Jan 18, 2008	65.54	X
Jan 18, 2008	65.51	X
Jan 30, 2008	66.07	X
Jan 30, 2008	66.16	X
Feb 04, 2008	66.26	X
Feb 08, 2008	65.79	X
Feb 21, 2008	65.90	X
Feb 28, 2008	66.21	X
Mar 05, 2008	66.10	X
Mar 10, 2008	66.01	X
Mar 12, 2008	66.01	X

3H Efficiency

Total # pts	: 4142
Valid # pts	: 29
Mean	: 65.61
SD	: 0.33



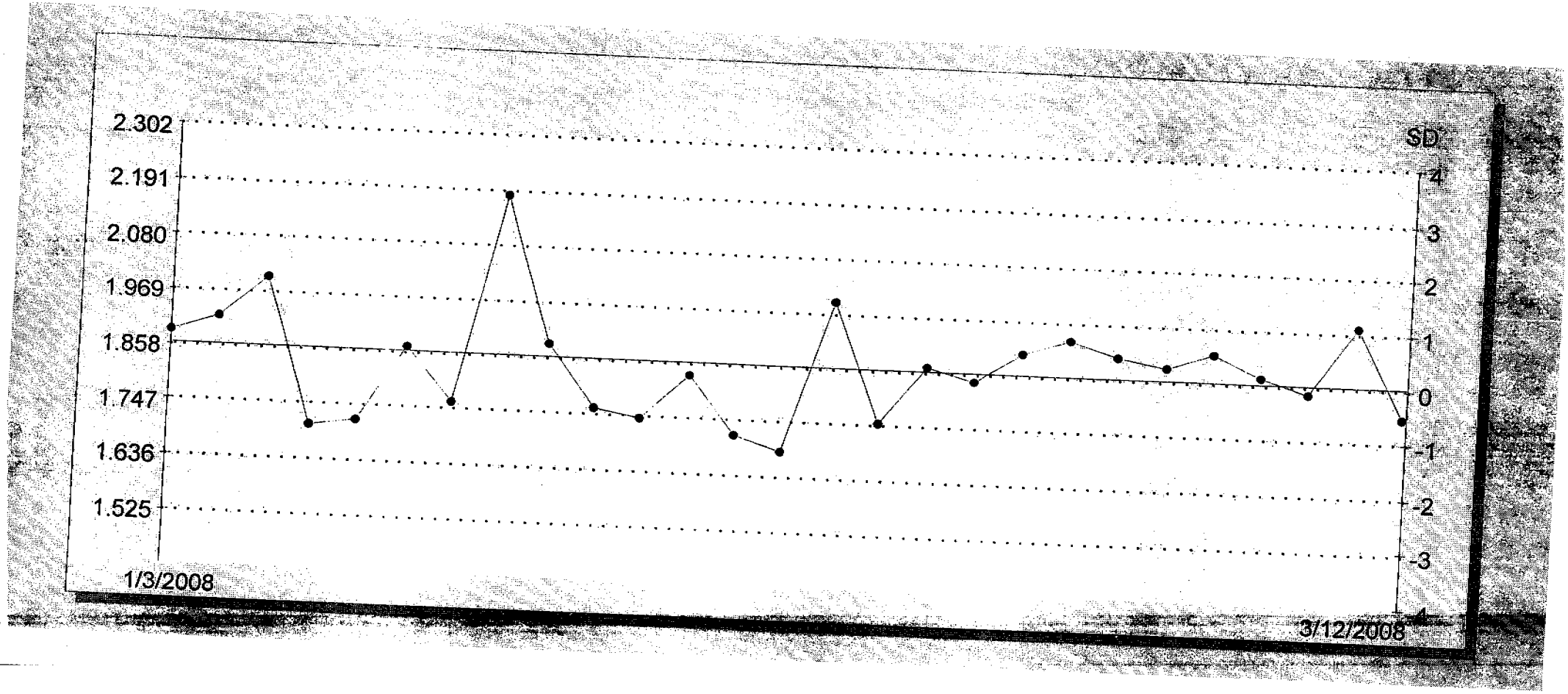
3H Background

Total # pts	: 4092
Valid # pts	: 27
Mean	: 1.86
SD	: 0.11

Date	Value	Valid Pt
Jan 03, 2008	1.89	X
Jan 04, 2008	1.92	X
Jan 08, 2008	2.00	X
Jan 17, 2008	1.70	X
Jan 17, 2008	1.72	X
Jan 17, 2008	1.87	X
Jan 17, 2008	1.76	X
Jan 17, 2008	2.19	X
Jan 17, 2008	1.89	X
Jan 18, 2008	1.76	X
Jan 18, 2008	1.75	X
Jan 18, 2008	1.84	X
Jan 18, 2008	1.72	X
Jan 18, 2008	1.69	X
Jan 18, 2008	2.00	X
Jan 18, 2008	1.75	X
Jan 18, 2008	1.87	X
Jan 18, 2008	1.84	X
Jan 18, 2008	1.90	X
Jan 18, 2008	1.94	X
Feb 04, 2008	1.90	X
Feb 08, 2008	1.89	X
Feb 21, 2008	1.92	X
Feb 28, 2008	1.88	X
Mar 05, 2008	1.84	X
Mar 10, 2008	1.98	X
Mar 12, 2008	1.80	X

3H Background

Total # pts	: 4092
Valid # pts	: 27
Mean	: 1.86
SD	: 0.11



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AMERICAN RADIATION SERVICES, INC.
2609 North River Road • Port Allen, Louisiana 70767
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Create a dilution of S-0032 for use as LCS stock solution**
Target dpm/g (on dil. date)	**2.76**
Target Final volume mL	**2000**
Appx mass g of Parent Sol'n	[redacted]
Appx vol ml of Parent Sol'n	[redacted]
Expected Addition for Analysis g	**5**
Standards Preparation / Dilution	
Secondary Solution #	[redacted]
Dilution Date (New Ref Date)	**04/27/2007 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[redacted]
Transfer Container, empty (g)	**17.8583**
Container Plus Solution (g)	**19.5702**
Net Wt Transferred (g)	[redacted]
DPM Xferred on 04/27/2007 00:00	[redacted]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[redacted]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**1997**
Dilution Final Volume ml (if measured)	**2000**
Final Dilution Density (g/mL)	[redacted]
Final Dilution Measured Mass g	[redacted]
Comments	**Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007**
Final Dilution dpm/g	[redacted]
Final Dil New Ref Date/Time	[redacted]

Parent Standard Data			
Parent Solution Reference #	[redacted]		
Parent Solution #	[redacted]		
Parent Principal Radionuclide	[redacted]	Half Life (Days)	4499.8000000
Parent Reference Date	[redacted]		
Parent Certified Act	[redacted]	Certi Act/Vol Units	dpm / g
Parent Cert Act Uncert 1 Sigma	[redacted]		
Parent Sp. Gravity G/Ml	[redacted]		
Parent Supplier	[redacted]		
Parent Date Recvd	[redacted]		
Parent Received By	[redacted]		
Parent Cert Exp Date	[redacted]		
Parent Matrix	[redacted]		
Certified dpm/g At Ref Date	[redacted]		
Certified dpm/g on 04/27/2007 00:00	[redacted]		
Parent Comments	[redacted]		
Parent Tech	[redacted]		
Is_Primary	[redacted]		
Is_LCS	[redacted]		
Is_Tracer	[redacted]		
Is_Calib	[redacted]		

ARS AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION- Rev 1

VERIFICATION DATE 5/18/2007 0:00
SOLUTION REFERENCE # [redacted]

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.232E+01	4.500E+03

Radionuclide H-3 **Primary Dilution Reference Date** 4/27/2007 0:00

Primary Dilution Activity	1.25 pCi per gram ===> dpm/g	2.78
Verif. Date Decay Corrected	1.25 pCi per gram ===> dpm/g	2.77

Verification Trials

Trial ID#

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

Trial ID#

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

Trial ID	Sample Count Time (min)	Count Trials	Detector	Efficiency	Background (cpm)	Target Activity (dpm/g)	Activity Result (dpm/g)	Activity Result (pCi/g)
S-0156-1	12.198	1	LSC	0.4395	6.143	5.0100	2.75	1.24
S-0156-2	11.748	1	LSC	0.4325	6.143	5.0100	2.59	1.17
S-0156-3	11.822	1	LSC	0.434	6.143	5.0000	2.62	1.18

Average	2.65	1.19
Two Sigma Uncertainty	0.17	0.08
Standard Deviation percent of known concentration	3.14%	3.14%
Target Activity	2.77	1.25
% Diff	-4.15	-4.15

Prepared & Counted By Jon Boyd

Verification Expiration Date: May 17, 2008

Date: 5/18/2007 0:00

Verified & Approved By Marlene Mellegan

Date: 5-18-07

QC Approval [signature]

Date: 5-18-07

Verifier's Name: Tony Byrd **Date:** 4/30/2007

Pipettor ID: CH84078

Pipettor ID:

Pipettor ID: CH80870

Standard ID: S-0112

Standard ID: S-0032 (S-0161)

	Weight of Standard		
15mL of Ultima Gold added to standard	S-0156-1	5.01 g	**Balance ID:** H1331122173560P
	S-0156-2	5.01 g	
	S-0156-3	5.00 g	
		g	
		g	
15mL of Ultima Gold added to standard	S-0112-1	1.03 g	**Balance ID:** H1331122173560P
	S-0112-2	1.08 g	
	S-0112-3	1.00 g	
		g	
		g	

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\20070517_1143.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for protocol 6.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

Protocol# 6 - Tritium for protocol 6.lsa

User: H3 Results

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
6	1	BACKGROUND	6.143	13.99	433.79	43.91	90.00	5/17/2007	11:48:37 AM	
6	2	S-0156-1 S-0032-1	12.198	27.76	434.24	43.95	90.00	5/17/2007	1:24:20 PM	
6	3	S-0156-2 S-0032-2	11.748	27.16	426.06	43.25	90.00	5/17/2007	3:00:09 PM	
6	4	S-0156-3 S-0032-3	11.822	27.24	427.76	43.40	90.00	5/17/2007	4:35:56 PM	

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Nancy M. Trahey, Chief
Standard Reference Materials Program

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πß gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πß liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 and 6.

STD ID: S-0032

ARS American Radiation Services, Inc.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Dilute S-0031 to form intermediate level solution for controls**
Target dpm/g (on dil. date)	**3367**
Target Final volume mL	**200**
Appx mass g of Parent Sol'n	
Appx vol ml of Parent Sol'n	
Expected Addition for Analysis g	
Standards Preparation / Dilution	
Secondary Solution #	
Dilution Date (New Ref Date)	**03/01/2006 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	**0**
Container Plus Solution (g)	**1.1544**
Net Wt Transferred (g)	
DPM Xferred on 03/01/2006 00:00	
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**200.64**
Dilution Final Volume ml (if measured)	**200**
Final Dilution Density (g/mL)	
Final Dilution Measured Mass g	
Comments	**S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU**
Final Dilution dpm/g	
Final Dil New Ref Date/Time	

Parent Standard Data				
Parent Solution Reference #				
Parent Solution #				
Parent Principal Radionuclide		Half Life (Days)		
Parent Reference Date				
Parent Certified Act		Certi Act/Vol Units	dpm	g
Parent Cert Act Uncert 1 Sigma				
Parent Sp. Gravity G/Ml				
Parent Supplier				
Parent Date Recvd				
Parent Received By				
Parent Cert Exp Date				
Parent Matrix				
Certified dpm/g At Ref Date				
Certified dpm/g on 03/01/2006 00:00				
Parent Comments				
Parent Tech				
Is_Primary				
Is_LCS				
Is_Tracer				
Is_Calib				

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10505
Sample Collection Date: 2/13/2008
Sample Matrix: Aqueous

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-002
Date Received: 2/14/2008
Report Date: 03/14/08 10:58

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	9.938	NA	NA	NA		%	ARS-054/ EPA 906.0	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10506
Sample Collection Date: 2/13/2008
Sample Matrix: Aqueous

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-003
Date Received: 2/14/2008
Report Date: 03/14/08 10:58

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.777	NA	NA	NA		%	ARS-054/ EPA 906.0	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsey
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10507
Sample Collection Date: 2/13/2008
Sample Matrix: Aqueous

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-004
Date Received: 2/14/2008
Report Date: 03/14/08 10:58

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	14.117	NA	NA	NA		%	ARS-054/ EPA 906.0	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamoreigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00342
Client Sample ID: MD21-08-10508
Sample Collection Date: 2/13/2008
Sample Matrix: Aqueous

Request or PO Number: 08-624
ARS Sample ID: ARS1-08-00342-005
Date Received: 2/14/2008
Report Date: 03/14/08 10:59

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.916	NA	NA	NA		%	ARS-054/ EPA 906.0	3/11/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lasseigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-00342, 00343
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-10504	ARS1-08-00342-001	604	455	149	20.036	5.05	**13.4469799**
MD21-08-10505	ARS1-08-00342-002	604	456	148	14.708	5.032	**9.93783784**
MD21-08-10506	ARS1-08-00342-003	608	455	153	18.019	5.033	**11.7771242**
MD21-08-10507	ARS1-08-00342-004	607	452	155	21.881	5.034	**14.1167742**
MD21-08-10508	ARS1-08-00342-005	603	455	147	18.986	5.024	**12.9156463**
MD21-08-10511	ARS1-08-00341-001	618	455	163	19.886	5.012	**12.2**
MD21-08-10512	ARS1-08-00341-002	614	461	153	21.829	5.085	**14.2673203**
MD21-08-10513	ARS1-08-00341-003	619	450	169	22.953	5.052	**13.5816568**
MD21-08-10514	ARS1-08-00341-004	619	454	165	22.18	5.049	**13.4424242**
MD21-08-10515	ARS1-08-00341-005	625	458	167	22.742	5.039	**13.6179641**
MD21-08-10516	ARS1-08-00341-006	610	456	155	20.292	5.042	**13.0916129**

Balance ID: 0102/1125183449
Pipettor ID: U66049

Signature B J Bell

Date/ Time 3-16-08

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Folder Duplicate

Report Completeness Checklist

ARS SDG: 08-00342 Client Name: LANL Sample Matrix: AQ

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Report Generator Signature 3-14-08 Date

Management Review Signature 3-14-08 Date

LSC
Technical Review Checklist

ARS SDG D8-00342

Sample Matrix: Silica Gel **Aliquot** (Circle One) : Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) (LCS) (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): **Batch A:** BCS-00504 **Batch B:** _____ **Batch C:** _____

Test(s): LSC-A-001 _____ _____

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	Yes No (N/A)	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) **NCR #** (If initiated): _____

Chemist Signature _____ Date 3-11-08

Analyst Signature N/A Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	(Yes) No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) **NCR #** (If initiated): _____

Analyst Signature _____ Date 3-14-08

Project Manager Signature Lindsay Lanoigne 3-14-08 Date

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: B08-00504

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)
7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated):		

Lindsay Lamoreaux 3-14-08
Project Manager Signature Date

QA Officer Signature 3-14-08
Date

GENERAL COMMENTS

American Radiation Services
Baton Rouge Laboratory

DQO Report for SDG

ARS1-08-00342

Printed: 2/27/2008 1:53 PM

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_UL	RER	RPD	DilutionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

Sample Check In Report
Samples

SDG **ARS1-08-00342**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	Level	2	
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	2/14/2008			
Project Type	Environmental		Client Deadline	3/14/2008	COC No 1		
Comments	Req No 08-624		Internal Deadline	3/13/2008	COC No 2		
			Lab Deadline	3/11/2008	COC No 3		
			Workdays	FALSE	COC No 4		

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-10504	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
002	MD21-08-10505	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
003	MD21-08-10506	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
004	MD21-08-10507	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
005	MD21-08-10508	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00342
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	5
001	X
002	X
003	X
004	X
005	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00342**

Fraction	Client ID	Comments
001	MD21-08-10504	
002	MD21-08-10505	
003	MD21-08-10506	
004	MD21-08-10507	
005	MD21-08-10508	

American Radiation Services
Baton Rouge Laboratory

Sample Check In Report
Samples

SDG **ARS1-08-00342**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	Level	2
Profile Number	PN-00157	Location: New Mexico	Date Received	2/14/2008	COC No 1	
Project Type	Environmental		Client Deadline	3/14/2008	COC No 2	
Comments	Req No 08-624		Internal Deadline	3/13/2008	COC No 3	
			Lab Deadline	3/11/2008	COC No 4	
			Workdays	FALSE		

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-10504	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
002	MD21-08-10505	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
003	MD21-08-10506	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
004	MD21-08-10507	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5
005	MD21-08-10508	1	AQ	02/13/08 14:00	02/13/08 14:00	B1	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00342
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	5
001	X
002	X
003	X
004	X
005	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00342**

Fraction	Client ID	Comments
001	MD21-08-10504	
002	MD21-08-10505	
003	MD21-08-10506	
004	MD21-08-10507	
005	MD21-08-10508	

ARS FILE TRACKING SHEET

SDG: **08-00342**

Task	Date / Time	Initials
Date & Time Received	2-14-08 / 13:00	RT
Storage Location: B1	2-27-08 / 12:11	RT
Chain of Custody Completed	2-27-08 / 12:02	RT
Report Written	3-14-08 13:25	LML
Laboratory Supervisor Checks Performed	see batch	N/A
Quality Assurance Checks Performed on Report	3-14-08 1336	
Laboratory Director Check Performed on Report	3-14-08 15:02	JS
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 02/27/08 Shipper's Name: LANL

Technician Performing Inspection: Russell Thomas Initials: RT

SDG: **08-00342**

External and Internal Surveys

Exposure Rate Meter: 44-2 104898 Serial No: 013681 Calibration. Due Date: 05-21-08

Count Rate Meter: 44-9 109043 Serial No: 108796 Calibration. Due Date: 05-21-08

Background Exposure Rate (µR/hr) 15 Background Count Rate (cpm): 50

Max. Exposure Rate on Shipping Containers Externals (Including Background): 18

Max. Removable Count Rate on Shipping Container Externals (Including Background): 60

Max. Removable Count Rate on Shipping Container Internals (Including Background): 60

Max. Removable Count Rate on Sample Container Externals (Including Background): 60

Max. Exposure Rate on Sample Containers Externals (Including Background): 16

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? No If yes, were the seals intact? N/A

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 5

Was the pH of Aqueous Samples < 2? ____

If no, was the sample(s) checked for acid reactivity? ____ Was the sample(s) acidified to a pH < 2? ____

Matrix of Samples: AQ

Volume of Each Sample Container: 600

Brief Description of Sample Material: ____

Inspectors' Comments

ARS-062-001 r0

ARS LABEL SHEET

SDG: 08-00342

Analysis

ARS1-08-00342 **LSC-A-001**

Los Alamos National Laboratory

Tritium in (Water [Aqueous, AQ])

This Test Requires 5 of 5 Samples

Scan Analysis Code Here	Dates for This Test
	Rcvd 2/14/2008
	Due 3/14/2008

SAMPLE CHECK-IN COMMENT SHEET

SDG: 08-00342

NOTES

COMPANY NAME: LANL **SDG:** _____

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

Shipping Container Survey

Outside 21 µR/hr 60 cpm

Inside 60 cpm

Rcv'd By _____

Date Rcv'd _____

Time Rcv'd _____

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☐ Yes	☑ No
Radioactive	☐ Yes	☑ No
# Samples Rcv	5	
pH < 2	☐ Yes	☐ No
If No... Acid Rxt	☐ Yes	☐ No
Acid'fd < 2	☐ Yes	☐ No

Intact ☑ Yes ☐ No

Matrix [AF , (AQ) , BI , FE , LT , SI , SO , UR , VG]

Record Sample Label, Exposure Rate and Count Rate for EACH SAMPLE in the area below:

Sample Lable/Comments/Notes	Weight/ Volume	µR/hr	cpm
MD21-08-10508	600	16	60
MD21-08-10507	600	16	60
MD21-08-10506	600	16	60
MD21-08-10505	600	16	60
MD21-08-10504	600	16	60
~~MD21-08-105~~ RT 2-27-08			

Surveyors' Name: _____ Date/Time Surveyed 2-27-08 11:50

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-624C

REQUEST NUMBER: 08-624

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10507	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10504	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10505	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10506	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature 2/13/08 4:00 Printed Name Signature 2-14-08 13:00

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Wednesday, February 13, 2008

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-624C
REQUEST NUMBER: 08-624

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10507	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10504	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10505	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10506	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/13/08	4:00	Printed Name	Signature	2/14/08	13:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Wednesday, February 13, 2008

REQUEST NUMBER: 08-623

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-623
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/13/2008
TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-10504	GAS	2/13/2008		
		1	MD21-08-10505	GAS	2/13/2008		
		1	MD21-08-10506	GAS	2/13/2008		
		1	MD21-08-10507	GAS	2/13/2008		
		1	MD21-08-10508	GAS	2/13/2008		

Final Page of REQUEST NUMBER 08-623

Wednesday, February 13, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-623C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-623

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND REPORT DUE: 3/14/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10507	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10504	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10505	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10506	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By: Date Time — **Received By:** Date Time

Printed Name Signature — Printed Name Signature

Printed Name Signature — Printed Name Signature

Printed Name Signature — Printed Name Signature

Received for DISPOSAL By: Date Time — **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10504

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0915	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VDST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	REV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

North of MDA T Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 1.7 % PID = 0.2 ppm

O_2 19.9 %

COLLECTED BY (PRINT) Bill Stein **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	1145	(Printed Name)	2/13/08
(Signature) Kevin Read	2/13/08	(Signature)	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10505

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	160.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	165.5 ft	SCREEN/PORT DESC:		Port #2
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 0.7 (%) PID = 0.4 ppm

O_2 20.2 (%)

COLLECTED BY (PRINT) [illegible]

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature)	2/13/08	(Signature)	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10506

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0919	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222.0 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 1.3 % PID= 0.8 ppm

O_2 20.4 %

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	1145	(Printed Name)	2/13/08
(Signature) [signature]	2/13/08	(Signature) [signature]	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10507

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0921	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 1.3\%$ PID = 1.0 ppm

$O_2 = 20.5\%$

COLLECTED BY (PRINT) ~~Bill Stenmark~~ **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	2/13/08	(Printed Name)	2/13/08
(Signature) Kevin Read	1145	(Signature)	11:45
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10508

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/13/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		0923	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VDST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9$ ppm PID = 0.7 ppm

$O_2 = 20.6$ ppm

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Kevin Reid (Signature) [signature]	**Date/Time** 1145 2/13/08	**RECEIVED BY** (Printed Name) (Signature) [signature]	**Date/Time** 2/13/08 11:45
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-623 VALIDATION DATE: 3/12/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxic Ltd

VALIDATOR: Jessica Jorvig ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): VOC by TO-15

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The ICAL curve for methanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. The ICAL %RSDs for methanol, methyl tert-butyl ether, n-butanol and 4-methyl-2-pentanone were > the method specified limit. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
3. The CCV %D for methanol was > the method specified limit. All associated sample results were NDs and, thus, were qualified UJ,V7c.
4. The tetrahydrofuran and 1,2,4-trimethylbenzene mass spectra for sample MD21-08-10505, and the benzene mass spectrum for sample -10506 did not meet method specifications. The associated sample results were detects and, thus, were qualified U,V8.
5. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Data Validation Cover Sheet

Los Alamos NATIONAL LABORATORY

6. A duplicate sample was not reported in the data package. No sample data were qualified as a result.
7. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

Reviewed: By: ETM **Level:** I **Date:** 3/13/08

VALIDATOR'S SIGNATURE: _____ DATE: 3/12/08

Form 5114-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☒	☐	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10504

Lab ID#: 0802283-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022119**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/22/08 12:17 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	1.1	4.2	5.5
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene		0.84	Not Detected	1.8	Not Detected
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	0.93	6.4	7.2
1,1-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Acetone		3.4	Not Detected	8.0	Not Detected
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	0.86	2.6	2.7
Methylene Chloride		0.84	1.5	2.9	5.1
Methyl tert-butyl ether	UJ,V7a	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran		0.84	Not Detected	2.5	Not Detected
Chloroform		0.84	110	4.1	540
1,1,1-Trichloroethane		0.84	4.9	4.6	26
Cyclohexane		0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.84	12	5.3	78
Benzene		0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane		0.84	Not Detected	3.4	Not Detected
Heptane		0.84	Not Detected	3.4	Not Detected
Trichloroethene		0.84	64	4.5	340
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.84	Not Detected	3.4	Not Detected
Toluene		0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	Not Detected	4.6	Not Detected
Tetrachloroethene		0.84	110	5.7	750

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3/12/08 0007

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10504

Lab ID#: 0802283-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022119**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/22/08 12:17 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	84	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	103	70-130

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3/12/08 0008

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10505

Lab ID#: 0802283-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t022120	**Date of Collection:**	2/13/08
Dil. Factor:	1.64	**Date of Analysis:**	2/22/08 01:34 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.82	1.6	4.0	7.8
Freon 114		0.82	Not Detected	5.7	Not Detected
Chloromethane		3.3	Not Detected	6.8	Not Detected
Vinyl Chloride		0.82	Not Detected	2.1	Not Detected
1,3-Butadiene		0.82	Not Detected	1.8	Not Detected
Bromomethane		0.82	Not Detected	3.2	Not Detected
Chloroethane		0.82	Not Detected	2.2	Not Detected
Freon 11		0.82	Not Detected	4.6	Not Detected
Ethanol		3.3	Not Detected	6.2	Not Detected
Freon 113		0.82	2.1	6.3	16
1,1-Dichloroethene		0.82	1.0	3.2	4.1
Acetone		3.3	8.8	7.8	21
2-Propanol		3.3	Not Detected	8.1	Not Detected
Carbon Disulfide		0.82	3.1	2.6	9.7
Methylene Chloride		0.82	34	2.8	120
Methyl tert-butyl ether	UJ,V7a	0.82	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.82	Not Detected	3.2	Not Detected
Hexane		0.82	Not Detected	2.9	Not Detected
1,1-Dichloroethane		0.82	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.82	4.4	2.4	13
cis-1,2-Dichloroethene		0.82	Not Detected	3.2	Not Detected
Tetrahydrofuran	U,V8	0.82	3.5	2.4	10
Chloroform		0.82	140	4.0	680
1,1,1-Trichloroethane		0.82	7.0	4.5	38
Cyclohexane		0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride		0.82	38	5.2	240
Benzene		0.82	Not Detected	2.6	Not Detected
1,2-Dichloroethane		0.82	Not Detected	3.3	Not Detected
Heptane		0.82	Not Detected	3.4	Not Detected
Trichloroethene		0.82	120	4.4	640
1,2-Dichloropropane		0.82	Not Detected	3.8	Not Detected
1,4-Dioxane		3.3	Not Detected	12	Not Detected
Bromodichloromethane		0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene		0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.82	Not Detected	3.4	Not Detected
Toluene		0.82	Not Detected	3.1	Not Detected
trans-1,3-Dichloropropene		0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane		0.82	Not Detected	4.5	Not Detected
Tetrachloroethene		0.82	60	5.6	410

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10505

Lab ID#: 0802283-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022120**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**1.64**	**Date of Analysis:**	**2/22/08 01:34 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.3	Not Detected	13	Not Detected
Dibromochloromethane		0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)		0.82	Not Detected	6.3	Not Detected
Chlorobenzene		0.82	Not Detected	3.8	Not Detected
Ethyl Benzene		0.82	Not Detected	3.6	Not Detected
m,p-Xylene		0.82	Not Detected	3.6	Not Detected
o-Xylene		0.82	Not Detected	3.6	Not Detected
Styrene		0.82	Not Detected	3.5	Not Detected
Bromoform		0.82	Not Detected	8.5	Not Detected
1,1,2,2-Tetrachloroethane		0.82	Not Detected	5.6	Not Detected
4-Ethyltoluene		0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene		0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.82	1.4	4.0	6.8
1,3-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene		0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene		3.3	Not Detected	24	Not Detected
Hexachlorobutadiene		3.3	Not Detected	35	Not Detected
Chlorodifluoromethane		3.3	Not Detected	12	Not Detected
Methanol	UJ,V7a	82	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.3	Not Detected	9.9	Not Detected
Propylene		3.3	28	5.6	49

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	109	70-130

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3/12/08 0025

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10506

Lab ID#: 0802283-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022121**	**Date of Collection: 2/13/08**	
Dil. Factor:	**1.64**	**Date of Analysis: 2/22/08 02:21 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.82	1.4	4.0	7.2
Freon 114		0.82	Not Detected	5.7	Not Detected
Chloromethane		3.3	Not Detected	6.8	Not Detected
Vinyl Chloride		0.82	Not Detected	2.1	Not Detected
1,3-Butadiene		0.82	Not Detected	1.8	Not Detected
Bromomethane		0.82	Not Detected	3.2	Not Detected
Chloroethane		0.82	Not Detected	2.2	Not Detected
Freon 11		0.82	Not Detected	4.6	Not Detected
Ethanol		3.3	Not Detected	6.2	Not Detected
Freon 113		0.82	3.2	6.3	24
1,1-Dichloroethene		0.82	2.4	3.2	9.5
Acetone		3.3	Not Detected	7.8	Not Detected
2-Propanol		3.3	Not Detected	8.1	Not Detected
Carbon Disulfide		0.82	1.3	2.6	4.1
Methylene Chloride		0.82	120	2.8	430
Methyl tert-butyl ether	UJ,V7a	0.82	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.82	Not Detected	3.2	Not Detected
Hexane		0.82	Not Detected	2.9	Not Detected
1,1-Dichloroethane		0.82	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.82	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene		0.82	Not Detected	3.2	Not Detected
Tetrahydrofuran		0.82	Not Detected	2.4	Not Detected
Chloroform		0.82	140	4.0	690
1,1,1-Trichloroethane		0.82	6.1	4.5	33
Cyclohexane		0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride		0.82	61	5.2	380
Benzene	U,V8	0.82	0.93	2.6	3.0
1,2-Dichloroethane		0.82	1.5	3.3	6.0
Heptane		0.82	Not Detected	3.4	Not Detected
Trichloroethene		0.82	150	4.4	830
1,2-Dichloropropane		0.82	Not Detected	3.8	Not Detected
1,4-Dioxane		3.3	Not Detected	12	Not Detected
Bromodichloromethane		0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene		0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.82	Not Detected	3.4	Not Detected
Toluene		0.82	3.8	3.1	14
trans-1,3-Dichloropropene		0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane		0.82	Not Detected	4.5	Not Detected
Tetrachloroethene		0.82	32	5.6	220

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10506

Lab ID#: 0802283-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t022121	**Date of Collection:**	2/13/08
Dil. Factor:	1.64	**Date of Analysis:**	2/22/08 02:21 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.3	Not Detected	13	Not Detected
Dibromochloromethane		0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)		0.82	Not Detected	6.3	Not Detected
Chlorobenzene		0.82	Not Detected	3.8	Not Detected
Ethyl Benzene		0.82	Not Detected	3.6	Not Detected
m,p-Xylene		0.82	Not Detected	3.6	Not Detected
o-Xylene		0.82	Not Detected	3.6	Not Detected
Styrene		0.82	Not Detected	3.5	Not Detected
Bromoform		0.82	Not Detected	8.5	Not Detected
1,1,2,2-Tetrachloroethane		0.82	Not Detected	5.6	Not Detected
4-Ethyltoluene		0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene		0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene		0.82	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene		0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene		3.3	Not Detected	24	Not Detected
Hexachlorobutadiene		3.3	Not Detected	35	Not Detected
Chlorodifluoromethane		3.3	Not Detected	12	Not Detected
Methanol	UJ,V7a	82	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.3	Not Detected	9.9	Not Detected
Propylene		3.3	Not Detected	5.6	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	102	70-130

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3/12/08 0049

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10507

Lab ID#: 0802283-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022125**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**3.42**	**Date of Analysis:**	**2/22/08 05:10 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		1.7	1.9	8.4	9.4
Freon 114		1.7	Not Detected	12	Not Detected
Chloromethane		6.8	Not Detected	14	Not Detected
Vinyl Chloride		1.7	Not Detected	4.4	Not Detected
1,3-Butadiene		1.7	Not Detected	3.8	Not Detected
Bromomethane		1.7	Not Detected	6.6	Not Detected
Chloroethane		1.7	Not Detected	4.5	Not Detected
Freon 11		1.7	Not Detected	9.6	Not Detected
Ethanol		6.8	Not Detected	13	Not Detected
Freon 113		1.7	5.6	13	43
1,1-Dichloroethene		1.7	4.8	6.8	19
Acetone		6.8	Not Detected	16	Not Detected
2-Propanol		6.8	Not Detected	17	Not Detected
Carbon Disulfide		1.7	2.3	5.3	7.1
Methylene Chloride		1.7	420	5.9	1500
Methyl tert-butyl ether	UJ,V7a	1.7	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene		1.7	Not Detected	6.8	Not Detected
Hexane		1.7	Not Detected	6.0	Not Detected
1,1-Dichloroethane		1.7	Not Detected	6.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)		1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene		1.7	Not Detected	6.8	Not Detected
Tetrahydrofuran		1.7	Not Detected	5.0	Not Detected
Chloroform		1.7	240	8.3	1200
1,1,1-Trichloroethane		1.7	7.4	9.3	40
Cyclohexane		1.7	Not Detected	5.9	Not Detected
Carbon Tetrachloride		1.7	120	11	760
Benzene		1.7	Not Detected	5.5	Not Detected
1,2-Dichloroethane		1.7	Not Detected	6.9	Not Detected
Heptane		1.7	Not Detected	7.0	Not Detected
Trichloroethene		1.7	270	9.2	1500
1,2-Dichloropropane		1.7	Not Detected	7.9	Not Detected
1,4-Dioxane		6.8	Not Detected	25	Not Detected
Bromodichloromethane		1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene		1.7	Not Detected	7.8	Not Detected
4-Methyl-2-pentanone	UJ,V7a	1.7	Not Detected	7.0	Not Detected
Toluene		1.7	Not Detected	6.4	Not Detected
trans-1,3-Dichloropropene		1.7	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane		1.7	8.2	9.3	45
Tetrachloroethene		1.7	27	12	180

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10507

Lab ID#: 0802283-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022125**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**3.42**	**Date of Analysis:**	**2/22/08 05:10 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		6.8	Not Detected	28	Not Detected
Dibromochloromethane		1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)		1.7	Not Detected	13	Not Detected
Chlorobenzene		1.7	Not Detected	7.9	Not Detected
Ethyl Benzene		1.7	Not Detected	7.4	Not Detected
m,p-Xylene		1.7	Not Detected	7.4	Not Detected
o-Xylene		1.7	Not Detected	7.4	Not Detected
Styrene		1.7	Not Detected	7.3	Not Detected
Bromoform		1.7	Not Detected	18	Not Detected
1,1,2,2-Tetrachloroethane		1.7	Not Detected	12	Not Detected
4-Ethyltoluene		1.7	Not Detected	8.4	Not Detected
1,3,5-Trimethylbenzene		1.7	Not Detected	8.4	Not Detected
1,2,4-Trimethylbenzene		1.7	Not Detected	8.4	Not Detected
1,3-Dichlorobenzene		1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene		1.7	2.0	10	12
alpha-Chlorotoluene		1.7	Not Detected	8.8	Not Detected
1,2-Dichlorobenzene		1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene		6.8	Not Detected	51	Not Detected
Hexachlorobutadiene		6.8	Not Detected	73	Not Detected
Chlorodifluoromethane		6.8	Not Detected	24	Not Detected
Methanol	UJ,V7a	170	Not Detected	220	Not Detected
n-Butanol	UJ,V7a	6.8	Not Detected	21	Not Detected
Propylene		6.8	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	103	70-130

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3/12/08 0071

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10508

Lab ID#: 0802283-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022126**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**3.36**	**Date of Analysis:**	**2/22/08 07:11 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		1.7	Not Detected	8.3	Not Detected
Freon 114		1.7	Not Detected	12	Not Detected
Chloromethane		6.7	Not Detected	14	Not Detected
Vinyl Chloride		1.7	Not Detected	4.3	Not Detected
1,3-Butadiene		1.7	Not Detected	3.7	Not Detected
Bromomethane		1.7	Not Detected	6.5	Not Detected
Chloroethane		1.7	Not Detected	4.4	Not Detected
Freon 11		1.7	Not Detected	9.4	Not Detected
Ethanol		6.7	Not Detected	13	Not Detected
Freon 113		1.7	3.4	13	26
1,1-Dichloroethene		1.7	3.9	6.7	15
Acetone		6.7	Not Detected	16	Not Detected
2-Propanol		6.7	Not Detected	16	Not Detected
Carbon Disulfide		1.7	Not Detected	5.2	Not Detected
Methylene Chloride		1.7	540	5.8	1900
Methyl tert-butyl ether	UJ,V7a	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene		1.7	Not Detected	6.7	Not Detected
Hexane		1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane		1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)		1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene		1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran		1.7	Not Detected	5.0	Not Detected
Chloroform		1.7	220	8.2	1000
1,1,1-Trichloroethane		1.7	2.2	9.2	12
Cyclohexane		1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride		1.7	84	10	530
Benzene		1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane		1.7	5.9	6.8	24
Heptane		1.7	Not Detected	6.9	Not Detected
Trichloroethene		1.7	170	9.0	930
1,2-Dichloropropane		1.7	Not Detected	7.8	Not Detected
1,4-Dioxane		6.7	Not Detected	24	Not Detected
Bromodichloromethane		1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene		1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	UJ,V7a	1.7	Not Detected	6.9	Not Detected
Toluene		1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene		1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane		1.7	4.8	9.2	26
Tetrachloroethene		1.7	11	11	76

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10508

Lab ID#: 0802283-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022126**	**Date of Collection:**	**2/13/08**
Dil. Factor:	**3.36**	**Date of Analysis:**	**2/22/08 07:11 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		6.7	Not Detected	28	Not Detected
Dibromochloromethane		1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)		1.7	Not Detected	13	Not Detected
Chlorobenzene		1.7	Not Detected	7.7	Not Detected
Ethyl Benzene		1.7	Not Detected	7.3	Not Detected
m,p-Xylene		1.7	Not Detected	7.3	Not Detected
o-Xylene		1.7	Not Detected	7.3	Not Detected
Styrene		1.7	Not Detected	7.2	Not Detected
Bromoform		1.7	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane		1.7	Not Detected	12	Not Detected
4-Ethyltoluene		1.7	Not Detected	8.2	Not Detected
1,3,5-Trimethylbenzene		1.7	Not Detected	8.2	Not Detected
1,2,4-Trimethylbenzene		1.7	Not Detected	8.2	Not Detected
1,3-Dichlorobenzene		1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene		1.7	2.3	10	14
alpha-Chlorotoluene		1.7	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene		1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene		6.7	Not Detected	50	Not Detected
Hexachlorobutadiene		6.7	Not Detected	72	Not Detected
Chlorodifluoromethane		6.7	Not Detected	24	Not Detected
Methanol	UJ,V7a	170	Not Detected	220	Not Detected
n-Butanol	UJ,V7a	6.7	Not Detected	20	Not Detected
Propylene		6.7	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

JEJ
3/12/08 0092

Wednesday, February 13, 2008

REQUEST NUMBER: 08-623

0802283

0302

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-623
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/13/2008
TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

CUSTODY SEAL INTACT?
Y N NONE TEMP

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10504	GAS	2/13/2008		
		02A	1	MD21-08-10505	GAS	2/13/2008		
		03A	1	MD21-08-10506	GAS	2/13/2008		
		04A	1	MD21-08-10507	GAS	2/13/2008		
		05A	1	MD21-08-10508	GAS	2/13/2008		

Final Page of REQUEST NUMBER 08-623

Wednesday, February 13, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-623C

REQUEST NUMBER: 08-623

0802283

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10608	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10607	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10604	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10605	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10606	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/13/08	1400	Monica Gregson	AIT	2/14/08	0900
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Fed Ex

CUSTODY SEAL INTACT?
Y N NONE TEMP N/A

7209 7843 7207

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Request #08-623

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0802283

REC'D MAR 03 2008

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Comments:

Completed by:

Kara McKiernan | Kara McKiernan / Document Control | 2/29/08

(Signature) | (Print Name & Title) | (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0802283

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-623
DATE RECEIVED:	02/14/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	02/26/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-10504	Modified TO-15	6.0 "Hg	5 psi
02A	MD21-08-10505	Modified TO-15	5.5 "Hg	5 psi
03A	MD21-08-10506	Modified TO-15	5.5 "Hg	5 psi
04A	MD21-08-10507	Modified TO-15	6.5 "Hg	5 psi
05A	MD21-08-10508	Modified TO-15	6.0 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda J. Fruman DATE: 02/28/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

0001

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0802283

LUMEN DATA VALIDATED

Five 6 Liter Summa Canister samples were received on February 14, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

0002

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-08-10504	0802283-01A	2/13/2008	2/14/2008	NA	9	2/22/2008	NA	Good
MD21-08-10505	0802283-02A	2/13/2008	2/14/2008	NA	9	2/22/2008	NA	Good
MD21-08-10506	0802283-03A	2/13/2008	2/14/2008	NA	9	2/22/2008	NA	Good
MD21-08-10507	0802283-04A	2/13/2008	2/14/2008	NA	9	2/22/2008	NA	Good
MD21-08-10508	0802283-05A	2/13/2008	2/14/2008	NA	9	2/22/2008	NA	Good
Lab Blank	0802283-06A	NA	NA	NA	NA	2/21/2008	NA	Good
CCV	0802283-07A	NA	NA	NA	NA	2/21/2008	NA	Good
LCS	0802283-08A	NA	NA	NA	NA	2/21/2008	NA	Good

Sample Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10504

Lab ID#: 0802283-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.1	4.2	5.5
Freon 113	0.84	0.93	6.4	7.2
Carbon Disulfide	0.84	0.86	2.6	2.7
Methylene Chloride	0.84	1.5	2.9	5.1
Chloroform	0.84	110	4.1	540
1,1,1-Trichloroethane	0.84	4.9	4.6	26
Carbon Tetrachloride	0.84	12	5.3	78
Trichloroethene	0.84	64	4.5	340
Tetrachloroethene	0.84	110	5.7	750

0006

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10504

Lab ID#: 0802283-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.1	4.2	5.5
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	0.93	6.4	7.2
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	3.4	Not Detected	8.0	Not Detected
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	0.86	2.6	2.7
Methylene Chloride	0.84	1.5	2.9	5.1
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	110	4.1	540
1,1,1-Trichloroethane	0.84	4.9	4.6	26
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	12	5.3	78
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	64	4.5	340
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	110	5.7	750

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10504

Lab ID#: 0802283-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	103	70-130

0008

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022119.d
Lab Smp Id: 0802283-01A
Inj Date : 22-FEB-2008 00:17
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #22497
Misc Info : 6.0"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	253165	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	200184			27.38- 127.38	79.07
13.893	13.865 (1.000)	49	488028			131.81- 231.81	192.77
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	956359	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	153550			0.00- 66.79	16.06
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	915281	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	536334			7.58- 107.58	58.82
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.943 (1.076)	65	410524	25.2008	25.201	80.00- 120.00	100.00
14.944	14.943 (1.076)	67	201508			3.57- 103.57	49.09
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	947188	25.7116	25.712	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	111786			0.00- 61.29	11.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	642379			18.71- 118.71	67.82
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	609959	25.7642	25.764	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	797539			76.46- 176.46	130.75
22.796	22.796 (1.096)	176	591100			48.22- 148.22	96.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	32799	0.66348	1.115	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	11543			0.00- 82.13	35.19
42 Freon 113					CAS #: 76-13-1		
9.994	9.939 (0.719)	151	14317	0.55558	0.9334	80.00- 120.00	100.00
9.967	9.939 (0.717)	153	8902			13.46- 113.46	62.18
9.967	9.939 (0.717)	101	18427			82.30- 182.30	128.71
47 Carbon Disulfide					CAS #: 75-15-0		
10.575	10.547 (0.761)	76	22360	0.50964	0.8562	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	12867	0.87725	1.474	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	11898			38.51- 138.51	92.47
11.128	11.100 (0.801)	51	4062			0.00- 83.83	31.57
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	2424802	65.9456	110.79	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1572819			14.81- 114.81	64.86
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.308	14.280 (1.030)	97	117837	2.89739	4.868	80.00- 120.00	100.00
14.308	14.280 (1.030)	99	76292			14.28- 114.28	64.74
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	287113	7.34919	12.347	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	302633			56.24- 156.24	105.41
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	783120	38.2435	64.249	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	723821			39.09- 139.09	92.43
16.105	16.077 (1.030)	97	506220			12.68- 112.68	64.64
120 Tetrachloroethene					CAS #: 127-18-4		
19.285	19.284 (0.927)	166	1847109	66.1162	111.08	80.00- 120.00	100.00
19.285	19.284 (0.927)	129	1309135			18.51- 118.51	70.87
19.285	19.284 (0.927)	131	1249918			15.29- 115.29	67.67

Data File: /chem/msdt.i/21Feb2008.b/t022119.d
Report Date: 27-Feb-2008 14:44

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022119.d
Lab Smp Id: 0802283-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	253165	-20.43
97 1,4-Difluorobenze	1251468	750881	1752055	956359	-23.58
126 Chlorobenzene-d5	1150991	690595	1611387	915281	-20.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802283-01A
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.201	100.80	70-130
$ 113 Toluene-d8	25.000	25.712	102.85	70-130
$ 137 Bromofluorobenzene	25.000	25.764	103.06	70-130

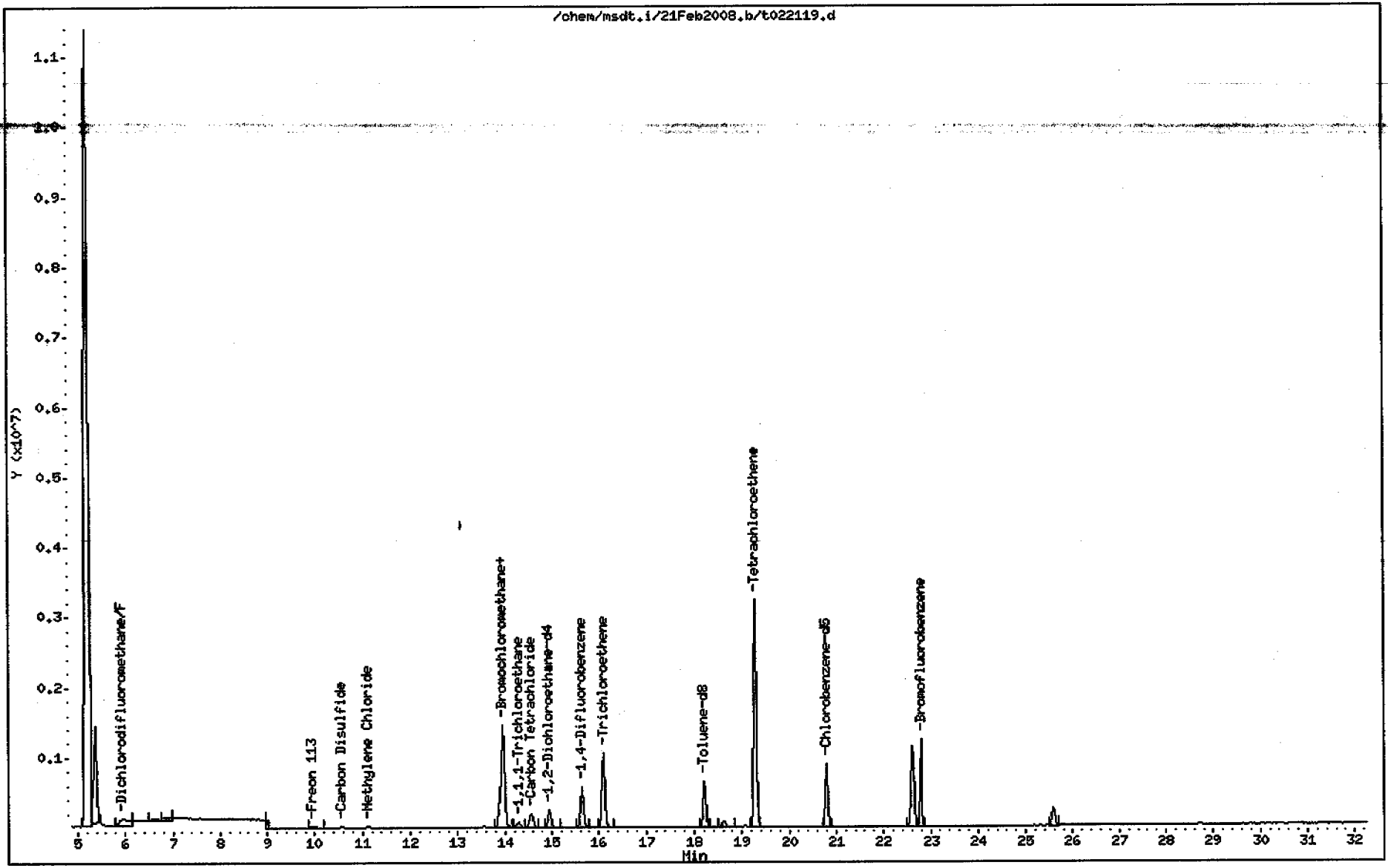
0013

Data File: /chem/msdt.i/21Feb2008.b/t022119.d
Date : 22-FEB-2008 00:17
Client ID:
Sample Info: 200mL #22497

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

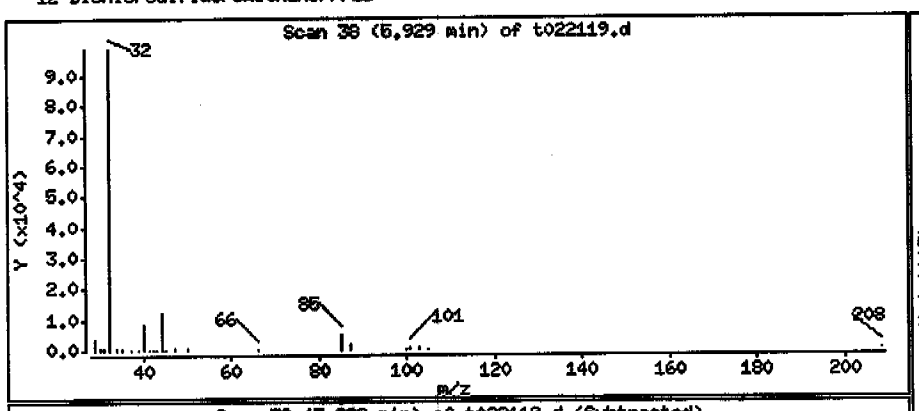
Operator: ACT

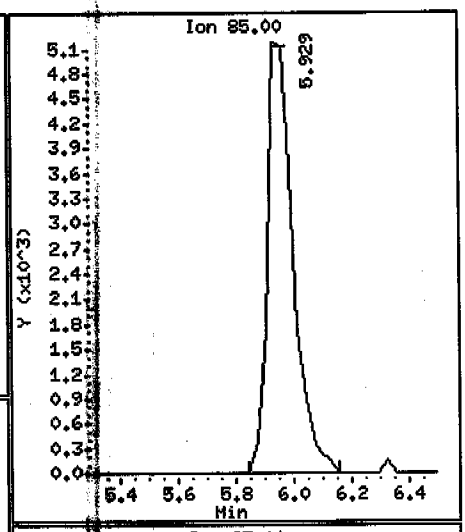
Column phase: RTx-624

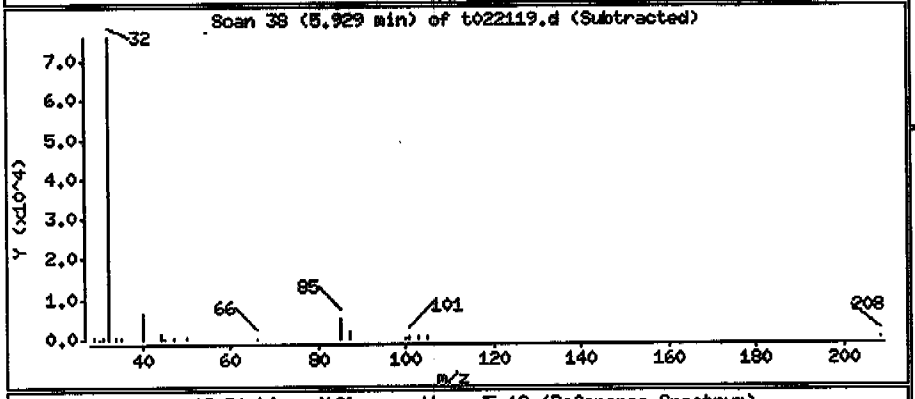
Column diameter: 0.53

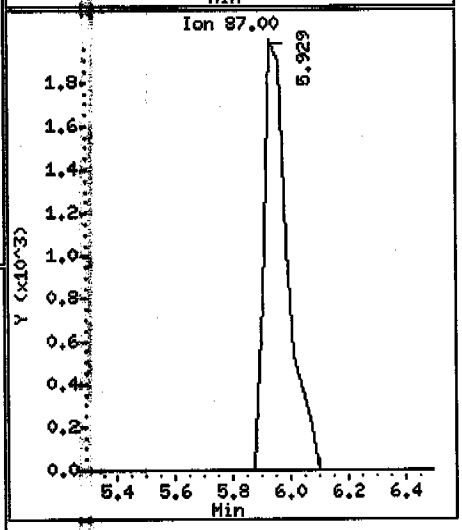
12 Dichlorodifluoromethane/Fr12

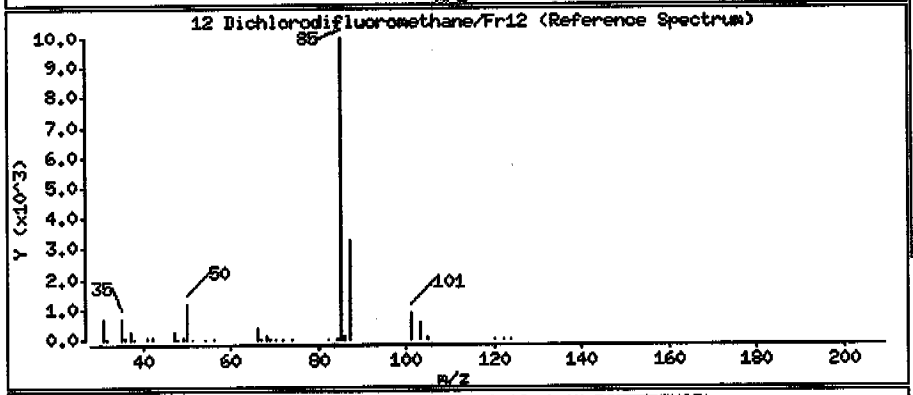
Concentration: 1.115 PPBV

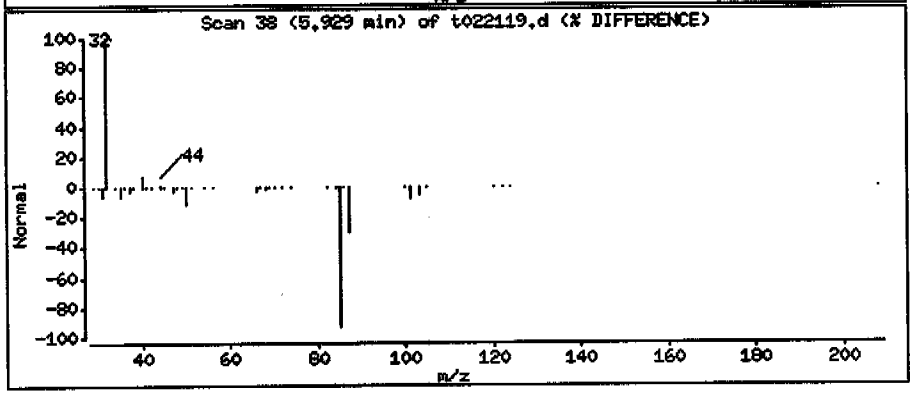












Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

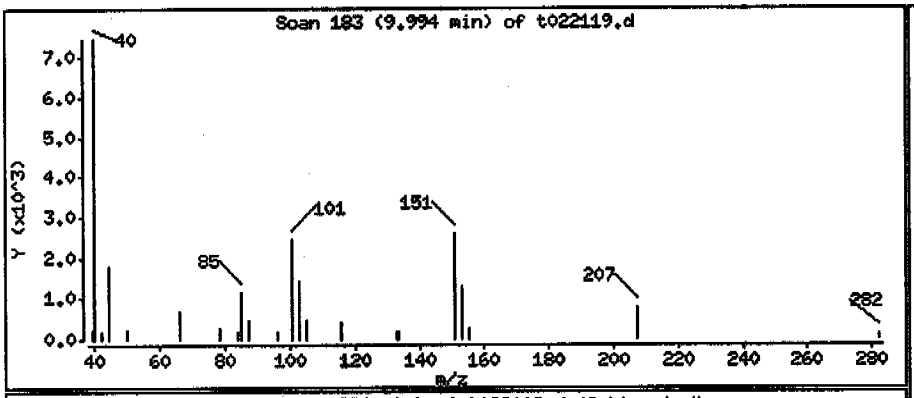
Operator: ACT

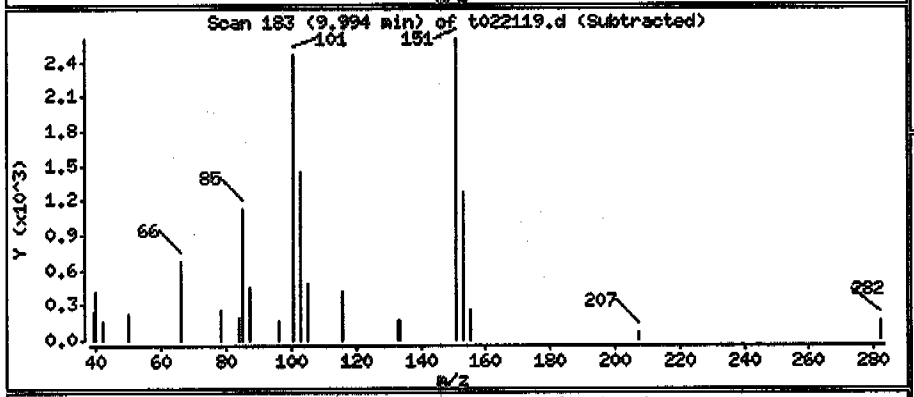
Column phase: RTx-624

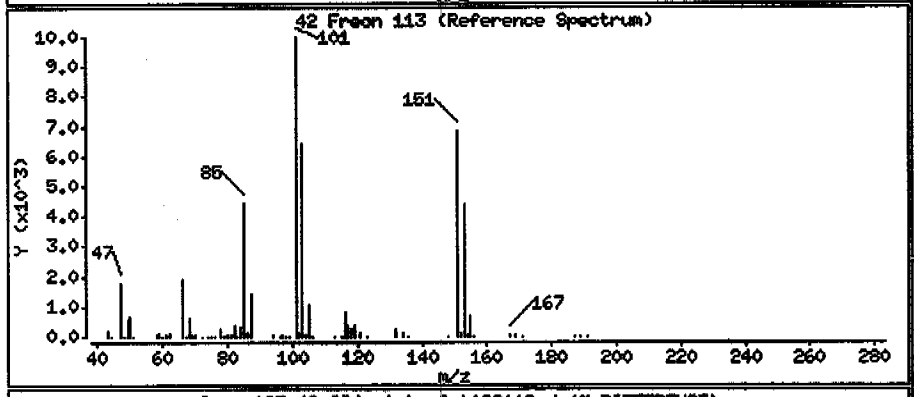
Column diameter: 0.53

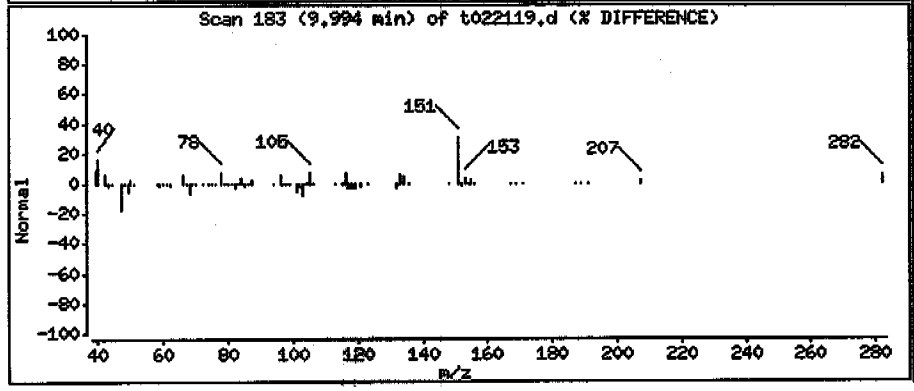
42 Freon 113

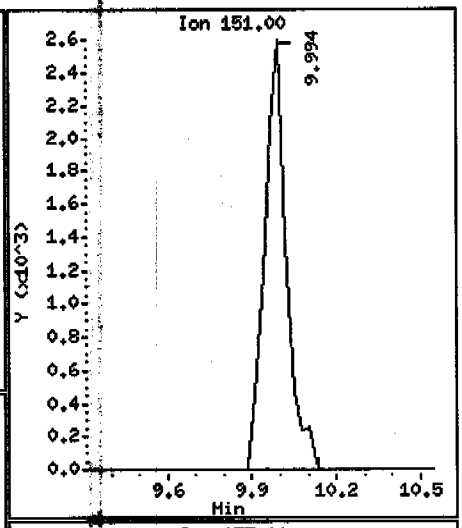
Concentration: 0.9334 PPBV

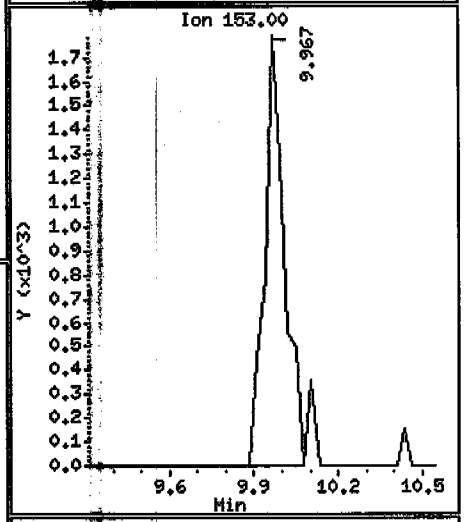


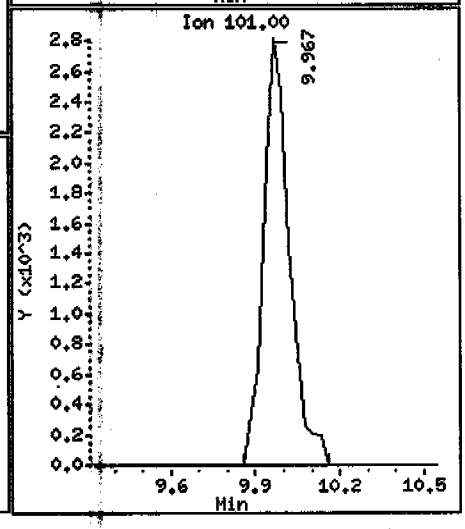












Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

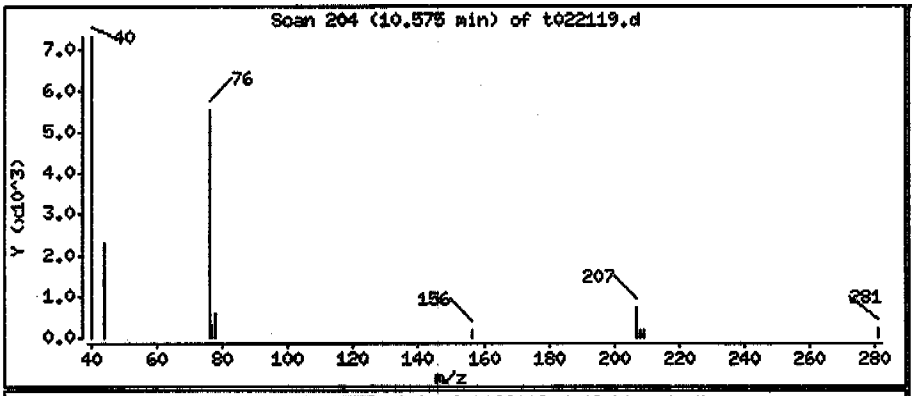
Operator: ACT

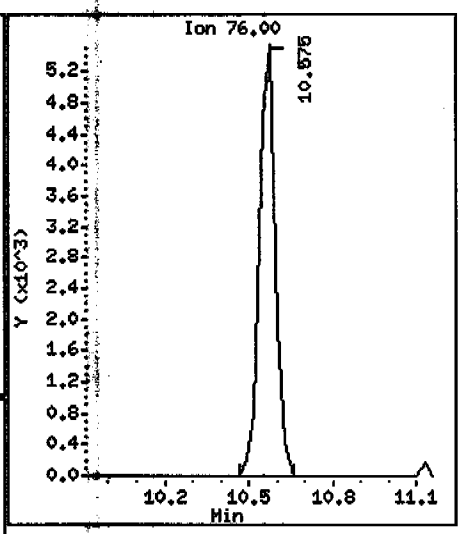
Column phase: RTx-624

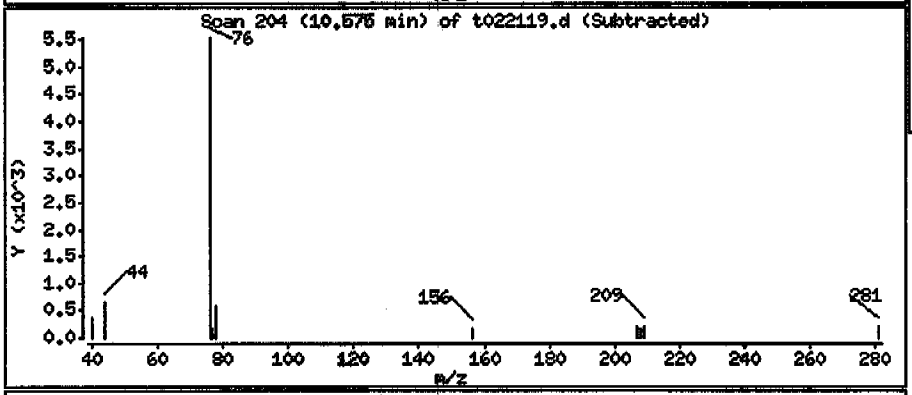
Column diameter: 0.53

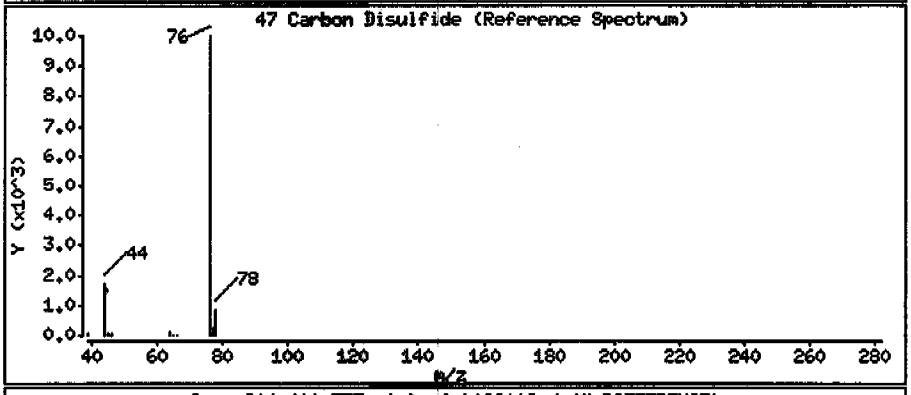
47 Carbon Disulfide

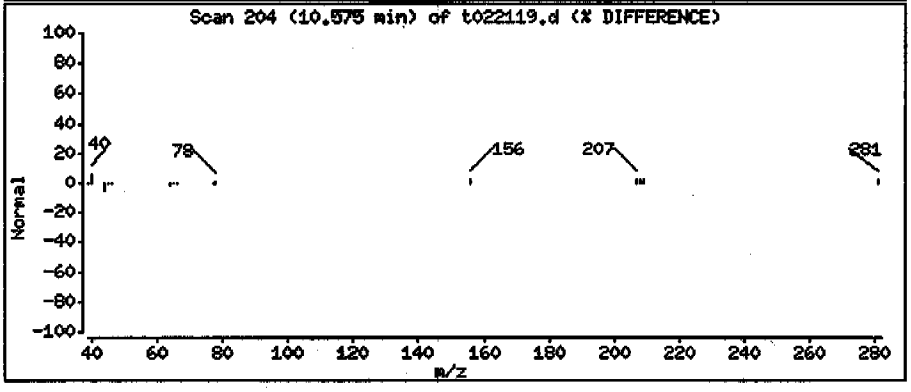
Concentration: 0.8562 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

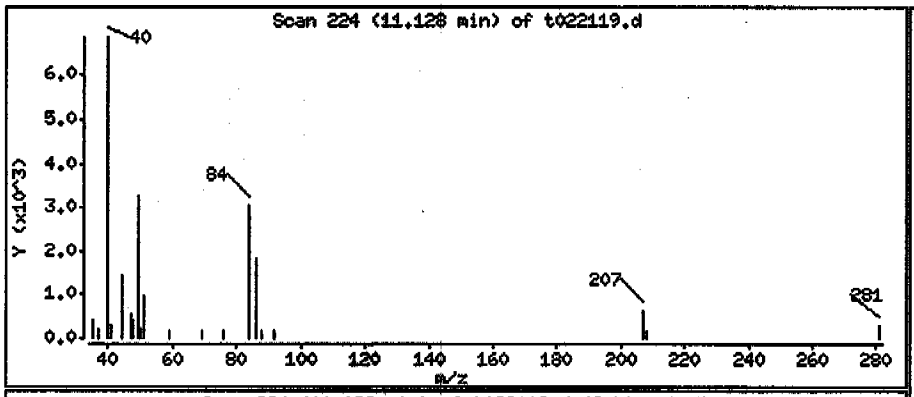
Operator: ACT

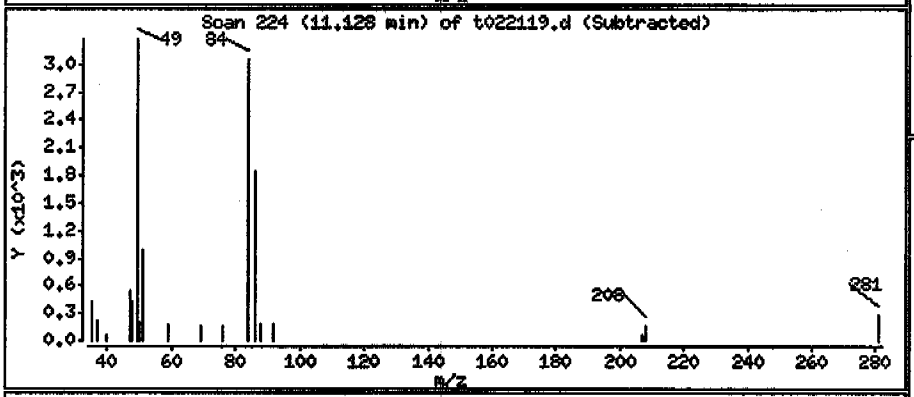
Column phase: RTx-624

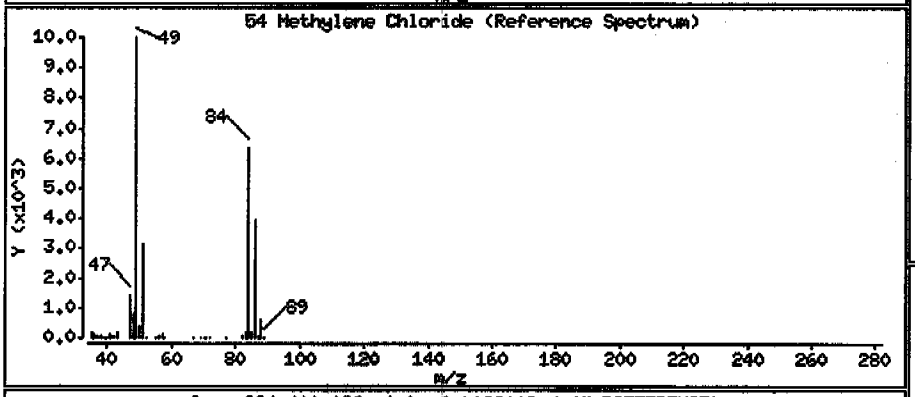
Column diameter: 0.53

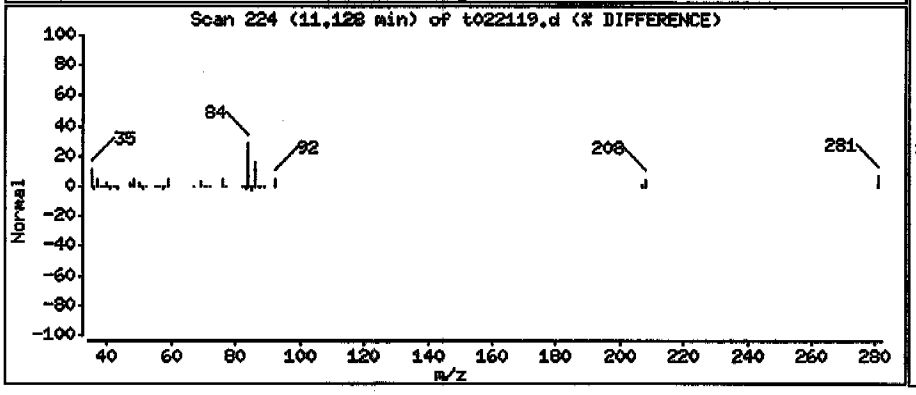
54 Methylene Chloride

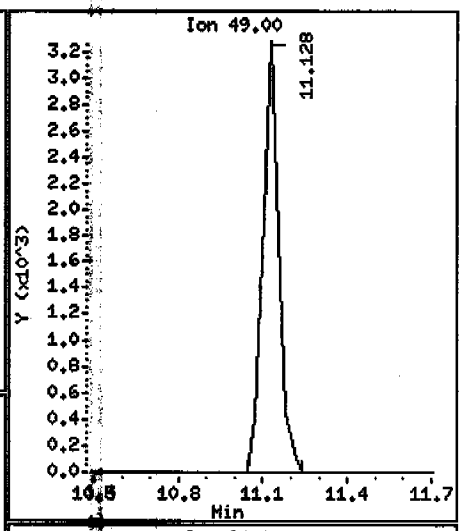
Concentration: 1.474 PPBV

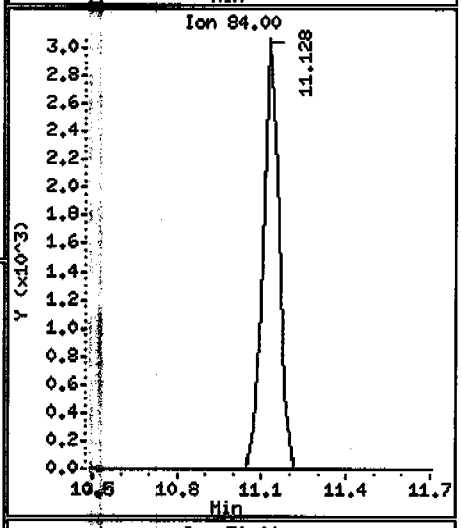


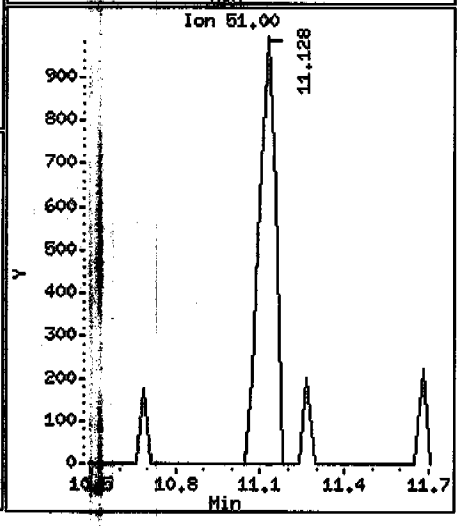












Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

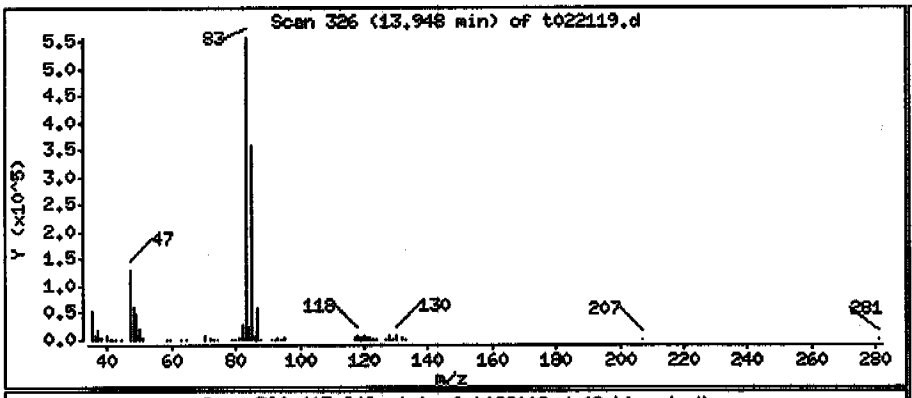
Operator: ACT

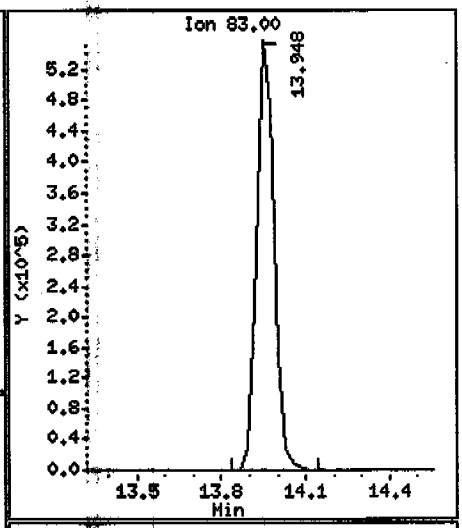
Column phase: RTx-624

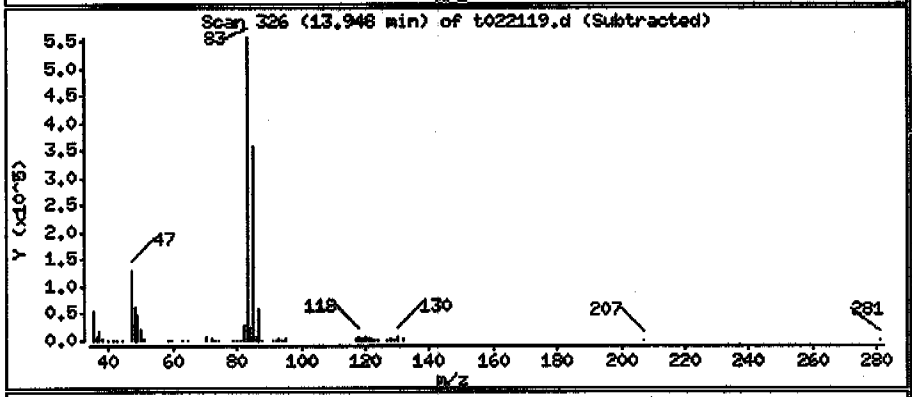
Column diameter: 0.53

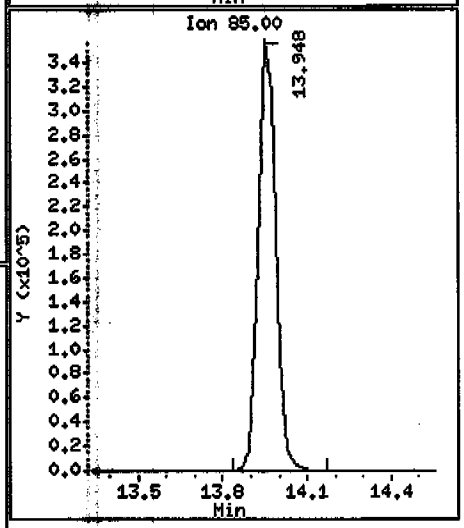
82 Chloroform

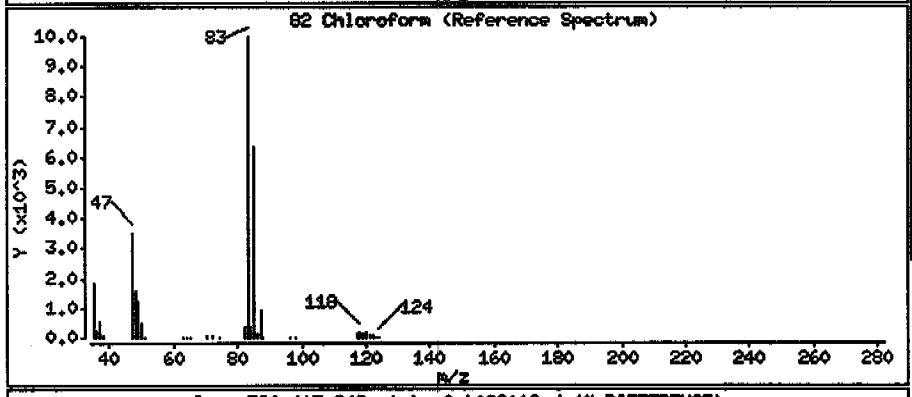
Concentration: 110.79 PPBV

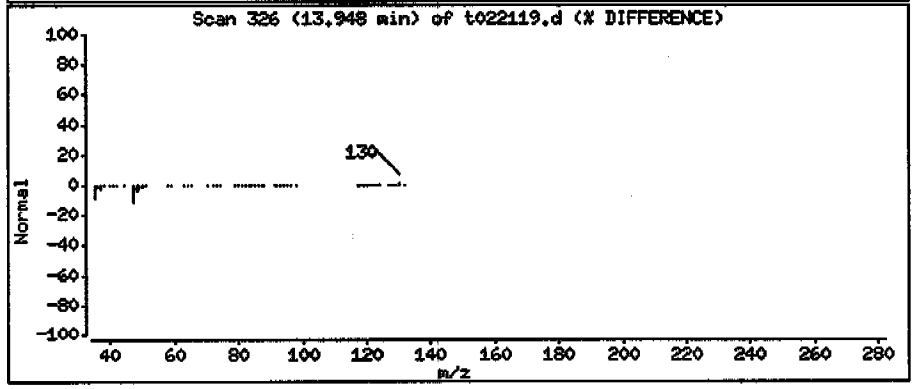












Data File: /ohem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

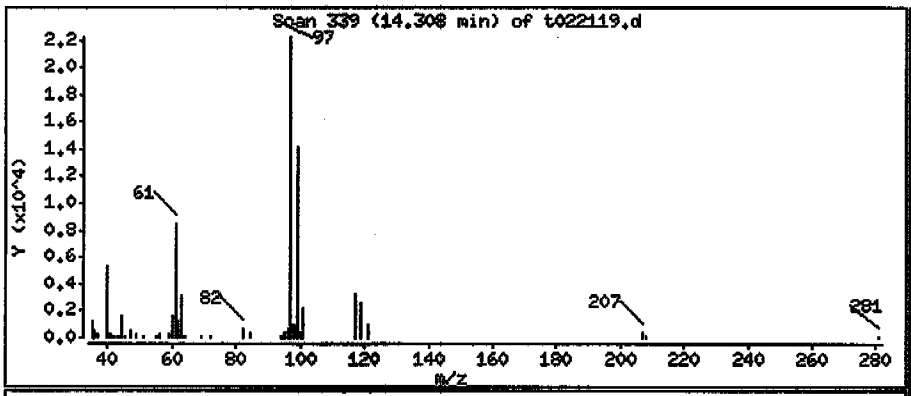
Operator: ACT

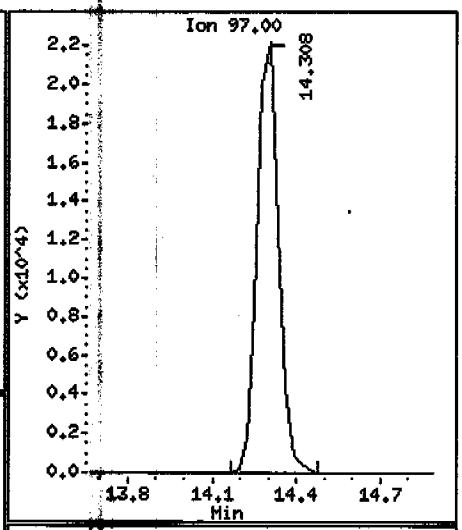
Column phase: RTx-624

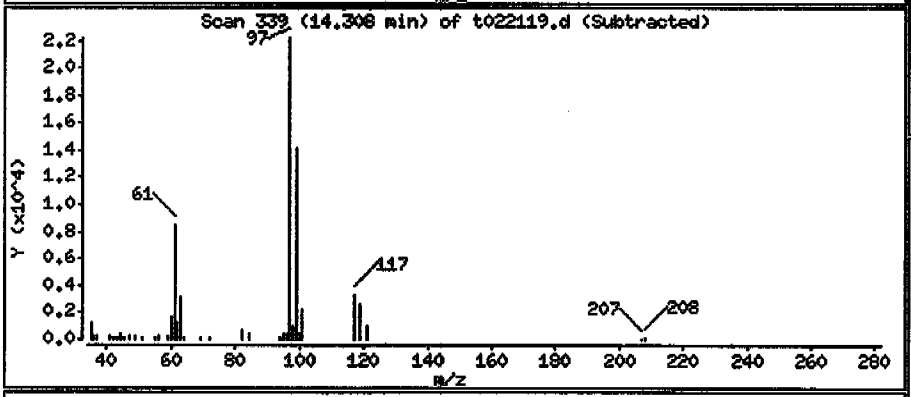
Column diameter: 0.53

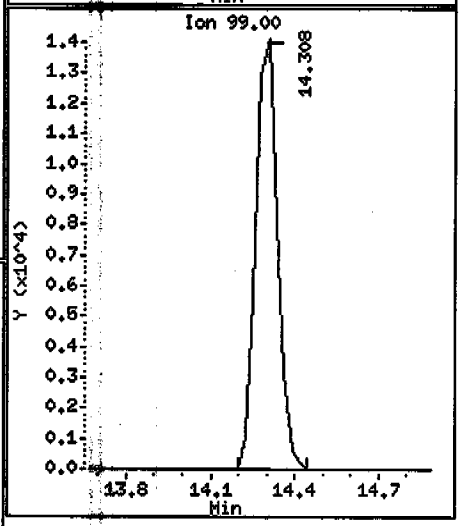
83 1,1,1-Trichloroethane

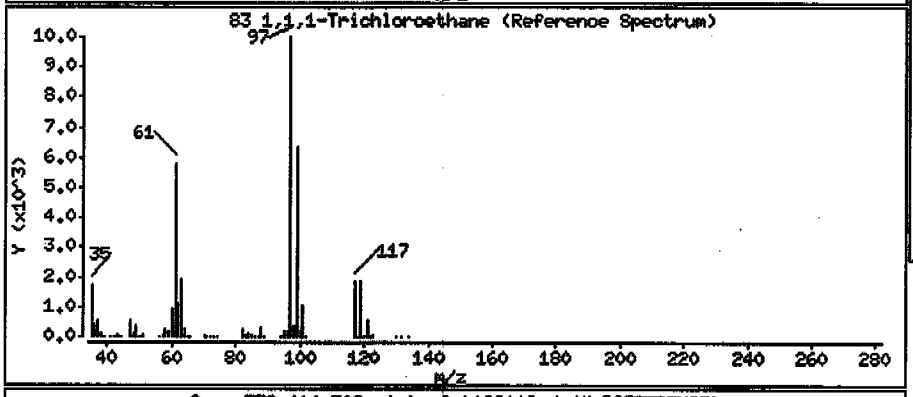
Concentration: 4.868 PPBV

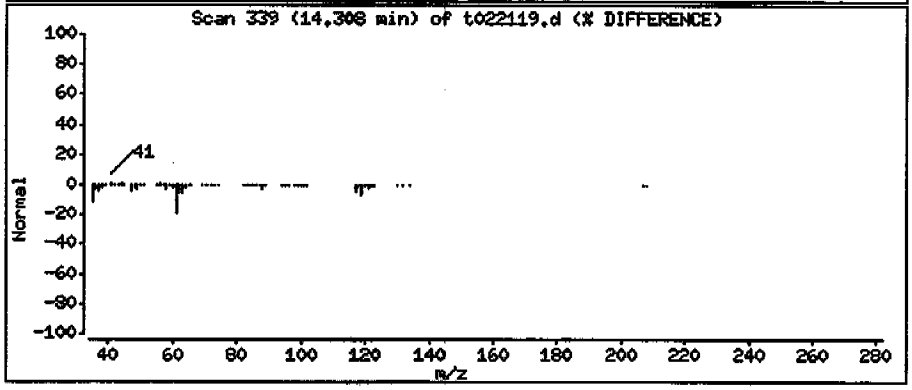












Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

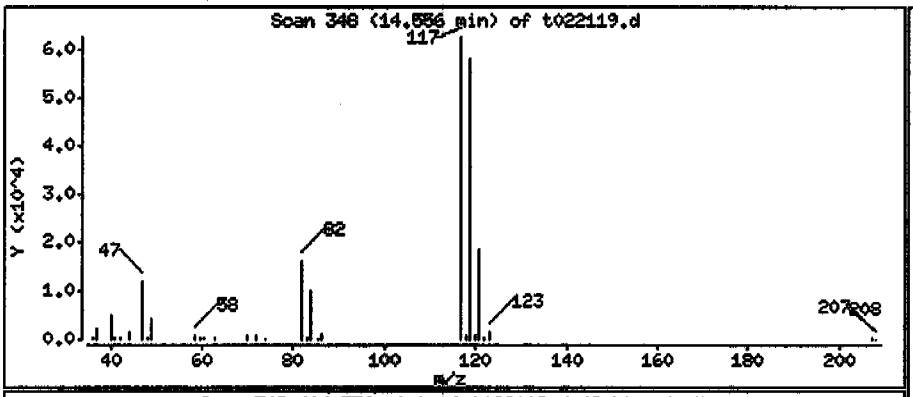
Operator: ACT

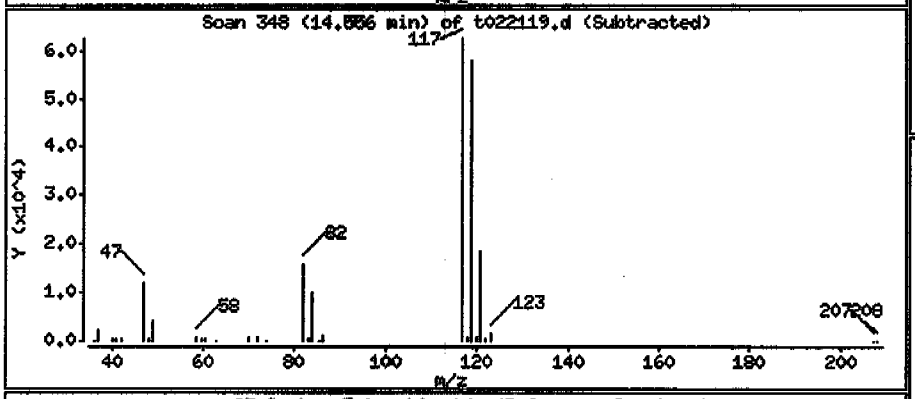
Column phase: RTx-624

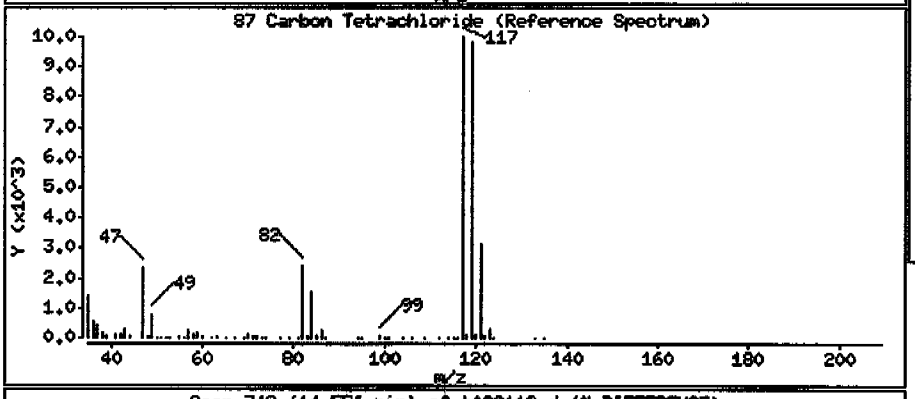
Column diameter: 0.53

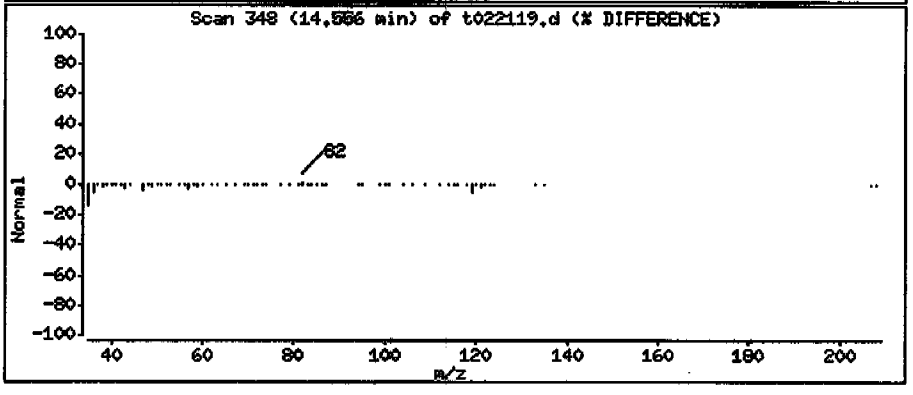
87 Carbon Tetrachloride

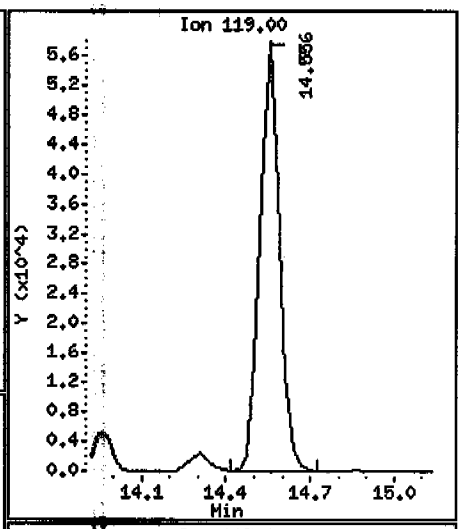
Concentration: 12.347 PPBV

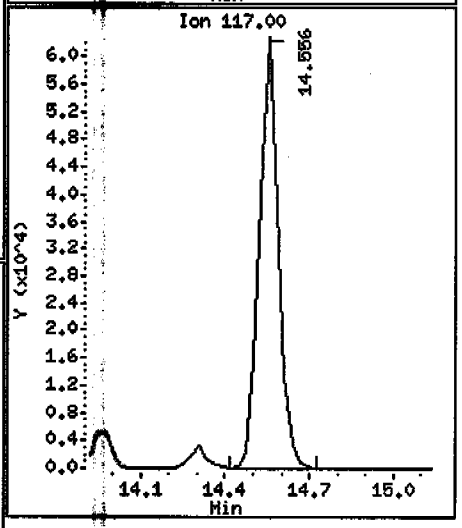












Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

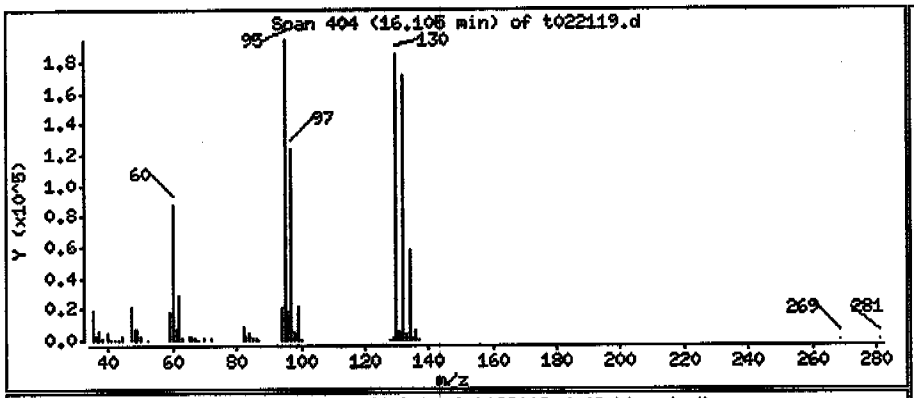
Operator: ACT

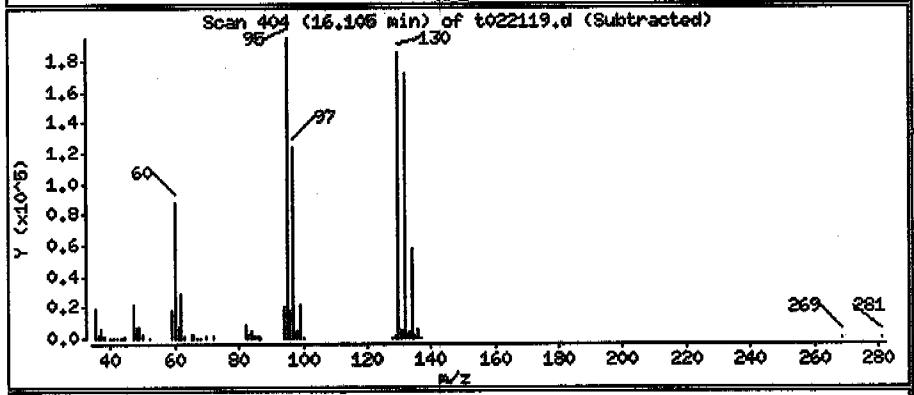
Column phase: RTx-624

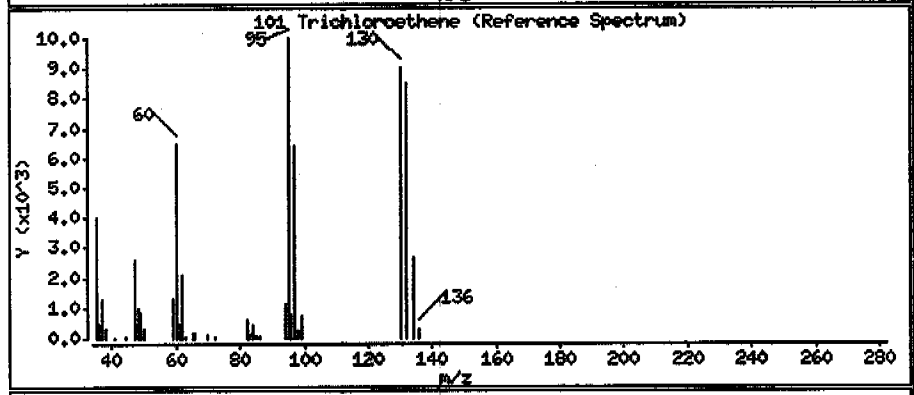
Column diameter: 0.53

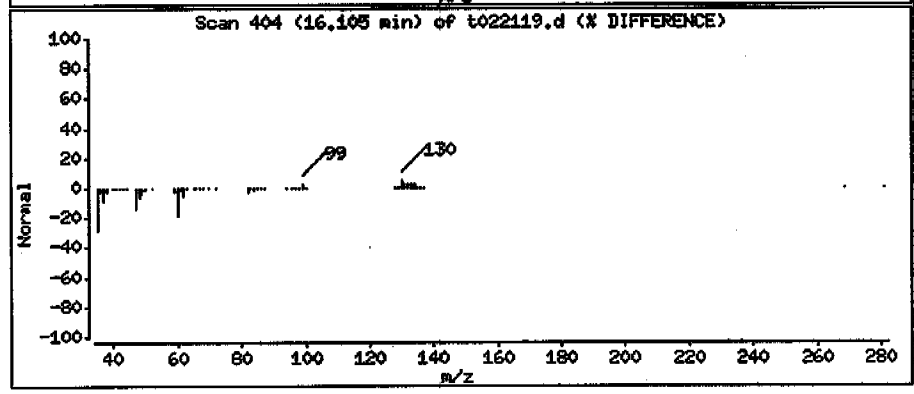
101 Trichloroethene

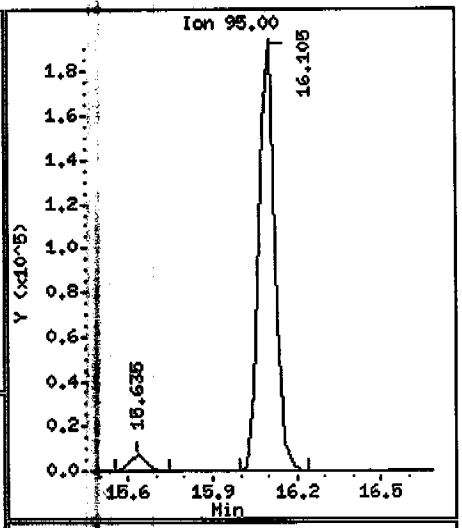
Concentration: 64.249 PPBV

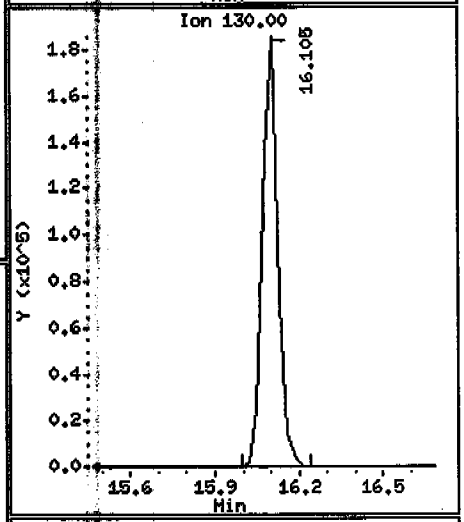


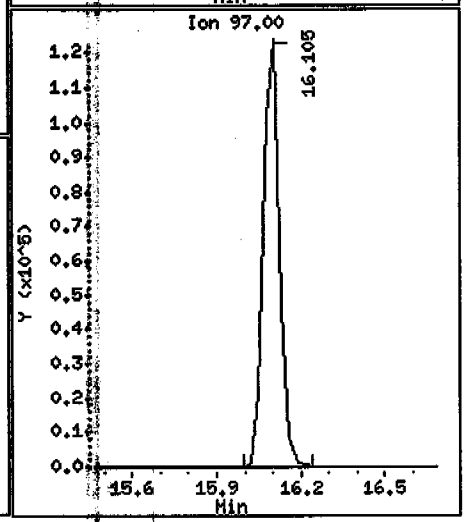












Data File: /chem/msdt.i/21Feb2008.b/t022119.d

Date : 22-FEB-2008 00:17

Client ID:

Instrument: msdt.i

Sample Info: 200mL #22497

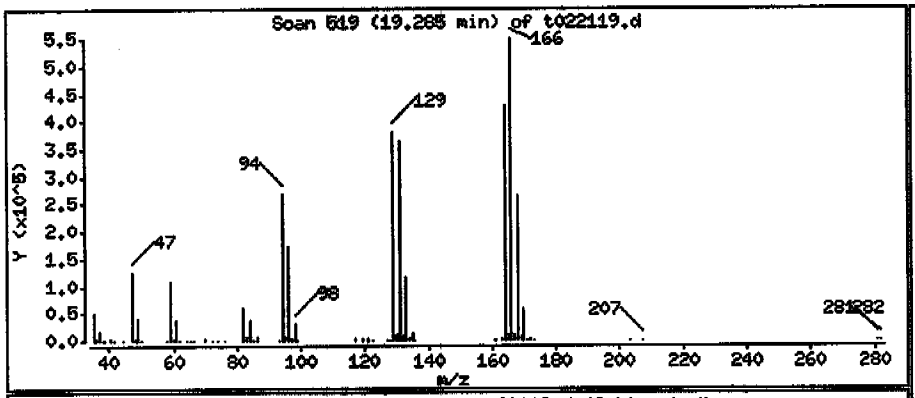
Operator: ACT

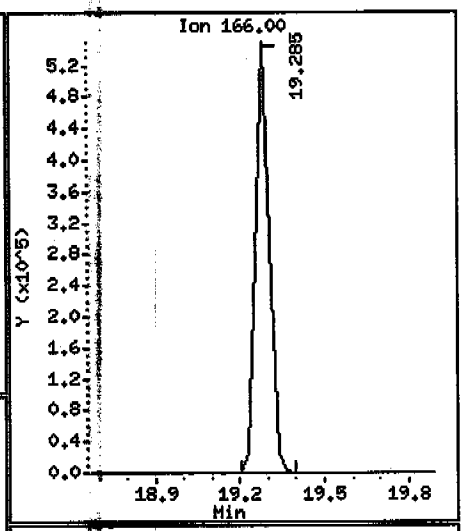
Column phase: RTx-624

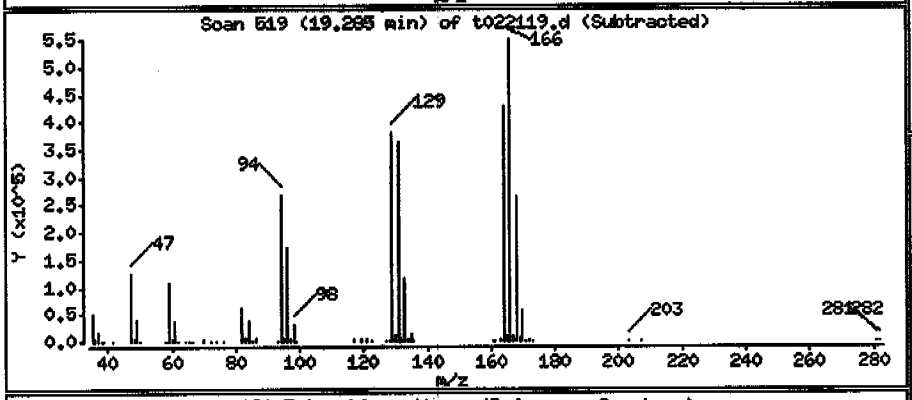
Column diameter: 0.53

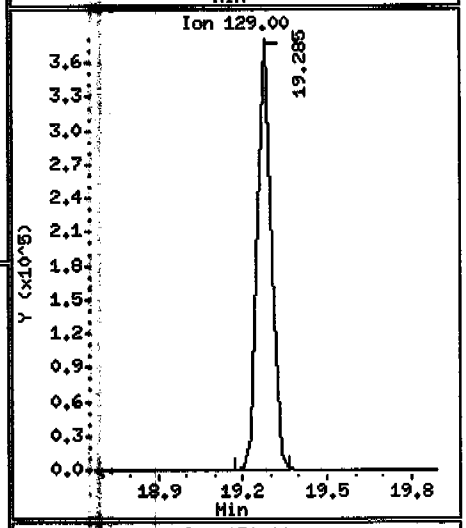
120 Tetrachloroethene

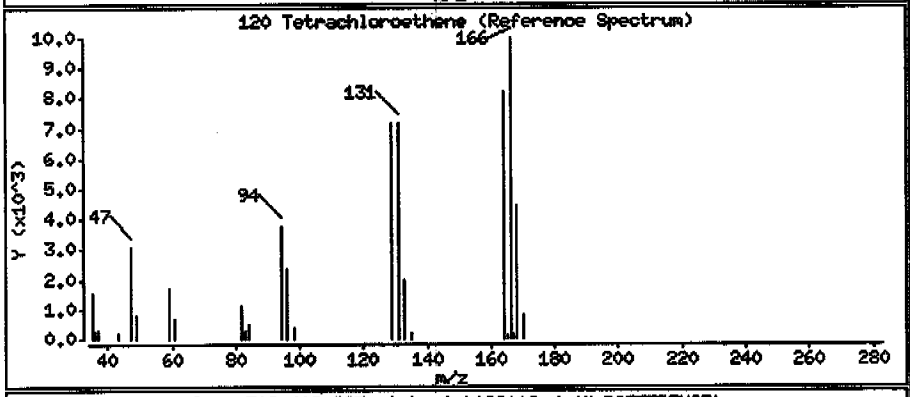
Concentration: 111.08 PPBV

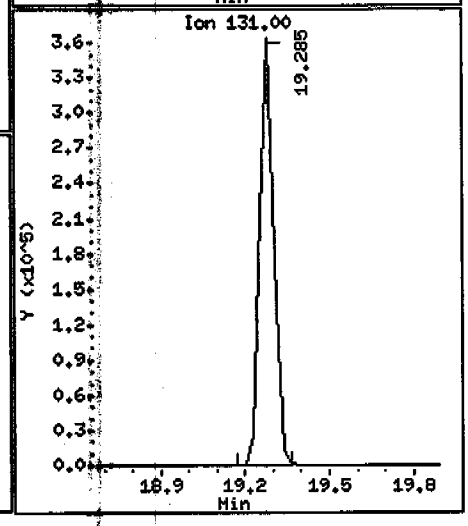


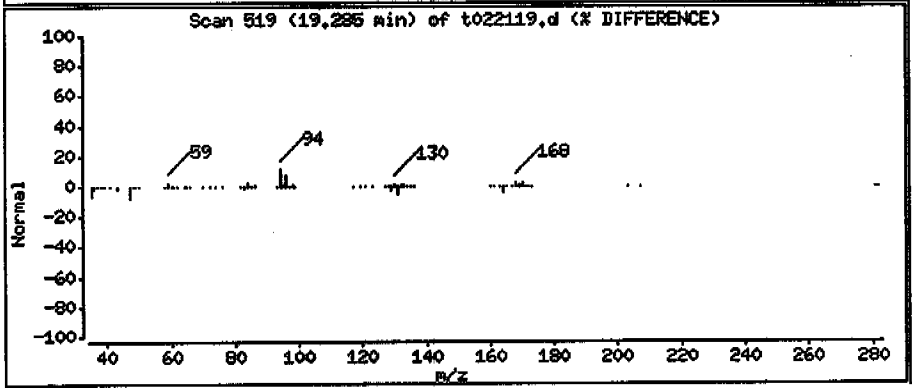












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10505

Lab ID#: 0802283-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.82	1.6	4.0	7.8
Freon 113	0.82	2.1	6.3	16
1,1-Dichloroethene	0.82	1.0	3.2	4.1
Acetone	3.3	8.8	7.8	21
Carbon Disulfide	0.82	3.1	2.6	9.7
Methylene Chloride	0.82	34	2.8	120
2-Butanone (Methyl Ethyl Ketone)	0.82	4.4	2.4	13
Tetrahydrofuran	0.82	3.5	2.4	10
Chloroform	0.82	140	4.0	680
1,1,1-Trichloroethane	0.82	7.0	4.5	38
Carbon Tetrachloride	0.82	38	5.2	240
Trichloroethene	0.82	120	4.4	640
Tetrachloroethene	0.82	60	5.6	410
1,2,4-Trimethylbenzene	0.82	1.4	4.0	6.8
Propylene	3.3	28	5.6	49

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10505

Lab ID#: 0802283-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.82	1.6	4.0	7.8
Freon 114	0.82	Not Detected	5.7	Not Detected
Chloromethane	3.3	Not Detected	6.8	Not Detected
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
1,3-Butadiene	0.82	Not Detected	1.8	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.82	Not Detected	4.6	Not Detected
Ethanol	3.3	Not Detected	6.2	Not Detected
Freon 113	0.82	2.1	6.3	16
1,1-Dichloroethene	0.82	1.0	3.2	4.1
Acetone	3.3	8.8	7.8	21
2-Propanol	3.3	Not Detected	8.1	Not Detected
Carbon Disulfide	0.82	3.1	2.6	9.7
Methylene Chloride	0.82	34	2.8	120
Methyl tert-butyl ether	0.82	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Hexane	0.82	Not Detected	2.9	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	4.4	2.4	13
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.82	3.5	2.4	10
Chloroform	0.82	140	4.0	680
1,1,1-Trichloroethane	0.82	7.0	4.5	38
Cyclohexane	0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.82	38	5.2	240
Benzene	0.82	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.82	Not Detected	3.3	Not Detected
Heptane	0.82	Not Detected	3.4	Not Detected
Trichloroethene	0.82	120	4.4	640
1,2-Dichloropropane	0.82	Not Detected	3.8	Not Detected
1,4-Dioxane	3.3	Not Detected	12	Not Detected
Bromodichloromethane	0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	0.82	Not Detected	3.4	Not Detected
Toluene	0.82	Not Detected	3.1	Not Detected
trans-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Tetrachloroethene	0.82	60	5.6	410

0024

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10505

Lab ID#: 0802283-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.3	Not Detected	13	Not Detected
Dibromochloromethane	0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)	0.82	Not Detected	6.3	Not Detected
Chlorobenzene	0.82	Not Detected	3.8	Not Detected
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
m,p-Xylene	0.82	Not Detected	3.6	Not Detected
o-Xylene	0.82	Not Detected	3.6	Not Detected
Styrene	0.82	Not Detected	3.5	Not Detected
Bromoform	0.82	Not Detected	8.5	Not Detected
1,1,2,2-Tetrachloroethane	0.82	Not Detected	5.6	Not Detected
4-Ethyltoluene	0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.82	1.4	4.0	6.8
1,3-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene	0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene	3.3	Not Detected	24	Not Detected
Hexachlorobutadiene	3.3	Not Detected	35	Not Detected
Chlorodifluoromethane	3.3	Not Detected	12	Not Detected
Methanol	82	Not Detected	110	Not Detected
n-Butanol	3.3	Not Detected	9.9	Not Detected
Propylene	3.3	28	5.6	49

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	109	70-130

0025

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022120.d
Lab Smp Id: 0802283-02A
Inj Date : 22-FEB-2008 01:34
Operator : JP Inst ID: msdt.i
Smp Info : 200mL #34438
Misc Info : 5.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.64000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	248801	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	192203			27.38- 127.38	77.25
13.865	13.865 (1.000)	49	542045			131.81- 231.81	217.86
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	943657	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	154642			0.00- 66.79	16.39
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	927636	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	542388			7.58- 107.58	58.47
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	401365	25.0707	25.071	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	199435			3.57- 103.57	49.69
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	944168	25.9746	25.974	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	113150			0.00- 61.29	11.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	644433			18.71- 118.71	68.25
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	656742	27.3708	27.371	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	822293			76.46- 176.46	125.21
22.796	22.796 (1.096)	176	632256			48.22- 148.22	96.27
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.900	5.901 (0.426)	85	47031	0.96806	1.588	80.00- 120.00	100.00
5.900	5.901 (0.426)	87	15119			0.00- 82.13	32.15
42 Freon 113					CAS #: 76-13-1		
9.939	9.939 (0.717)	151	32944	1.30085	2.133	80.00- 120.00	100.00
9.966	9.939 (0.719)	153	19596			13.46- 113.46	59.48
9.939	9.939 (0.717)	101	43198			82.30- 182.30	131.13
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.725)	61	14260	0.62556	1.026	80.00- 120.00	100.00
10.049	10.050 (0.725)	96	8396			9.56- 109.56	58.88
10.022	10.050 (0.723)	98	5436			0.00- 88.43	38.12
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	37833	5.35523	8.782	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	146072			267.82- 367.82	386.10
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	81586	1.89217	3.103	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	303048	21.0238	34.479	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	250165			38.51- 138.51	82.55
11.100	11.100 (0.801)	51	89075			0.00- 83.83	29.39
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	21138	2.65627	4.356	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	78502			283.08- 383.08	371.38
13.395	13.395 (0.966)	57	6365			0.00- 79.56	30.11
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	28949	2.15681	3.537	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	12118			1.96- 101.96	41.86
13.948	13.865 (1.006)	72	31135			2.04- 102.04	107.55
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	3090891	85.5351	140.28	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
82 Chloroform (continued)								
13.948	13.948	(1.006)	85	1983954			14.81- 114.81	64.19
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.280	14.280	(1.030)	97	171804	4.29843	7.049	80.00- 120.00	100.00
14.280	14.280	(1.030)	99	117866			14.28- 114.28	68.60
87 Carbon Tetrachloride						CAS #: 56-23-5		
14.529	14.529	(1.048)	119	892277	23.2401	38.114	80.00- 120.00	100.00
14.529	14.529	(1.048)	117	945564			56.24- 156.24	105.97
101 Trichloroethene						CAS #: 79-01-6		
16.077	16.077	(1.028)	95	1458838	72.2010	118.41	80.00- 120.00	100.00
16.077	16.077	(1.028)	130	1349062			39.09- 139.09	92.48
16.077	16.077	(1.028)	97	928227			12.68- 112.68	63.63
120 Tetrachloroethene						CAS #: 127-18-4		
19.284	19.284	(0.927)	166	1041052	36.7676	60.299	80.00- 120.00	100.00
19.284	19.284	(0.927)	129	743054			18.51- 118.51	71.38
19.284	19.284	(0.927)	131	703278			15.29- 115.29	67.55
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.012	24.012	(1.154)	105	62287	0.84081	1.379	80.00- 120.00	100.00
24.040	24.012	(1.155)	120	14476			0.00- 94.91	23.24
11 Propylene						CAS #: 115-07-1		
5.816	5.816	(0.419)	41	141709	17.4138	28.559	80.00- 120.00	100.00
5.816	5.816	(0.419)	42	83239			17.96- 117.96	58.74
5.816	5.816	(0.419)	39	137363			33.44- 133.44	96.93

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022120.d
Lab Smp Id: 0802283-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: JP
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	248801	-21.80
97 1,4-Difluorobenze	1251468	750881	1752055	943657	-24.60
126 Chlorobenzene-d5	1150991	690595	1611387	927636	-19.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802283-02A
Level: LOW
Operator: JP
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.071	100.28	70-130
$ 113 Toluene-d8	25.000	25.974	103.90	70-130
$ 137 Bromofluorobenzene	25.000	27.371	109.48	70-130

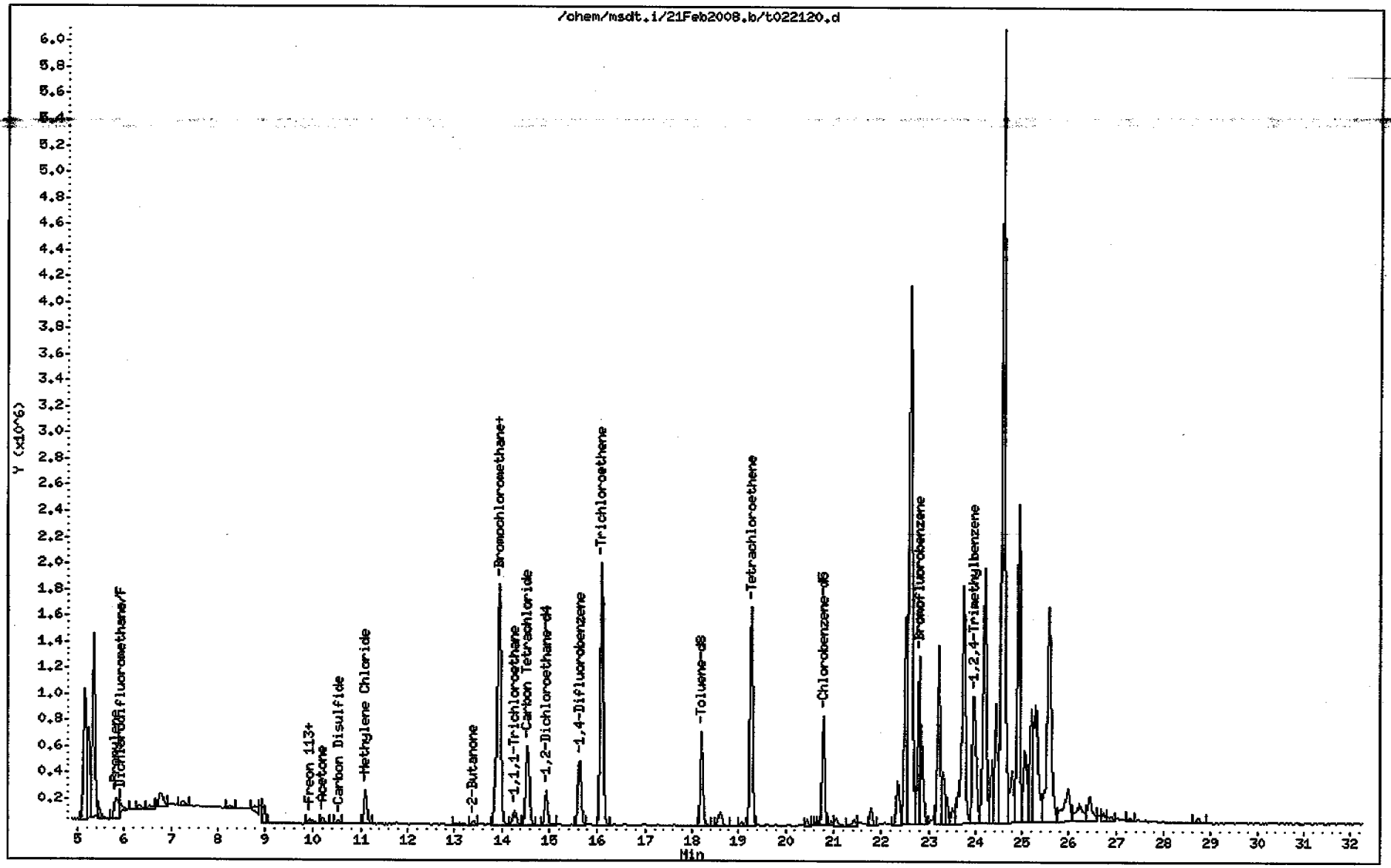
Data File: /chem/msdt.i/21Feb2008.b/t022120.d
Date : 22-FEB-2008 01:34
Client ID:
Sample Info: 200mL #34438

Column phase: RTx-624

Instrument: msdt.i

Operator: JP
Column diameter: 0.53

0031



Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

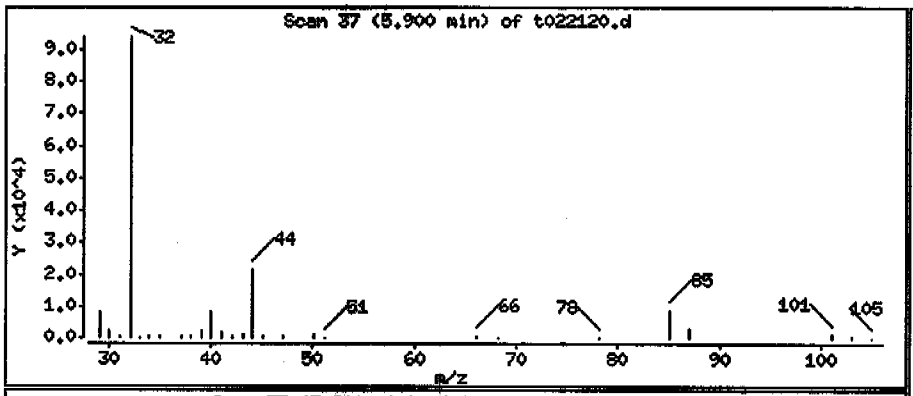
Operator: JP

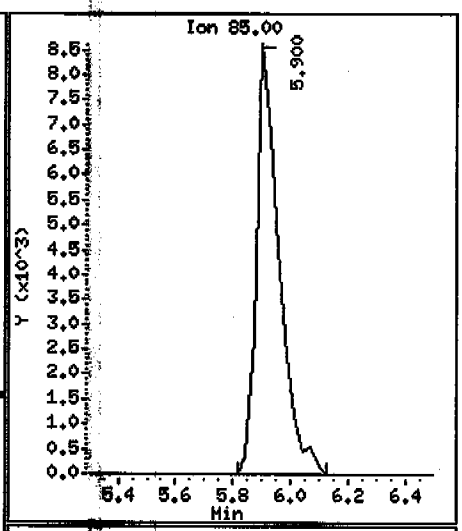
Column phase: RTx-624

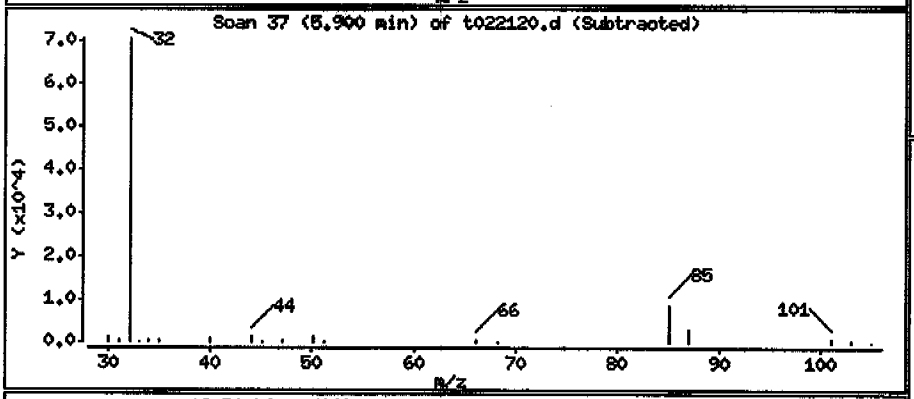
Column diameter: 0.53

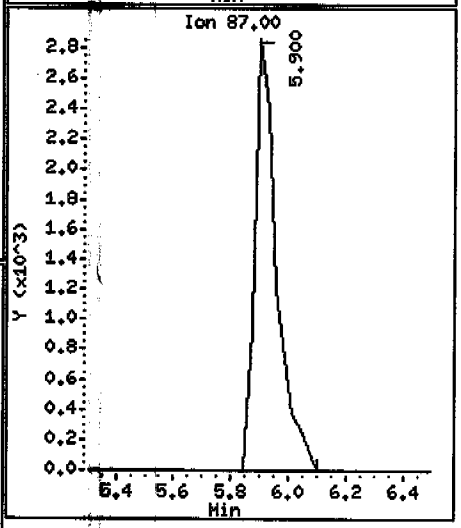
12 Dichlorodifluoromethane/Fr12

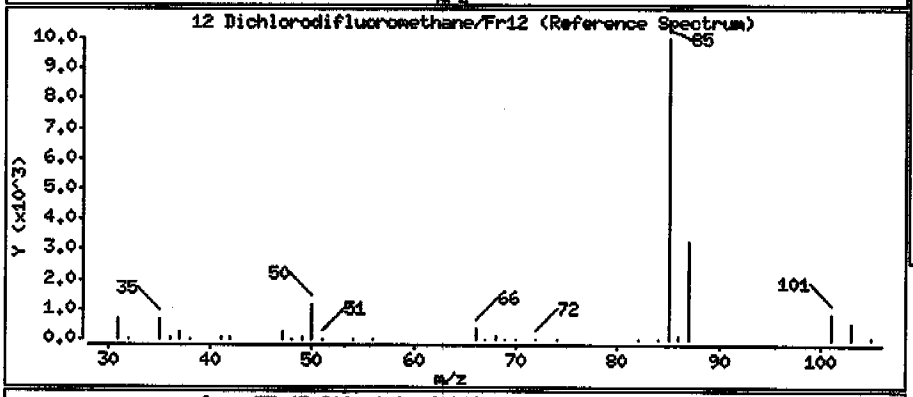
Concentration: 1.588 PPBV

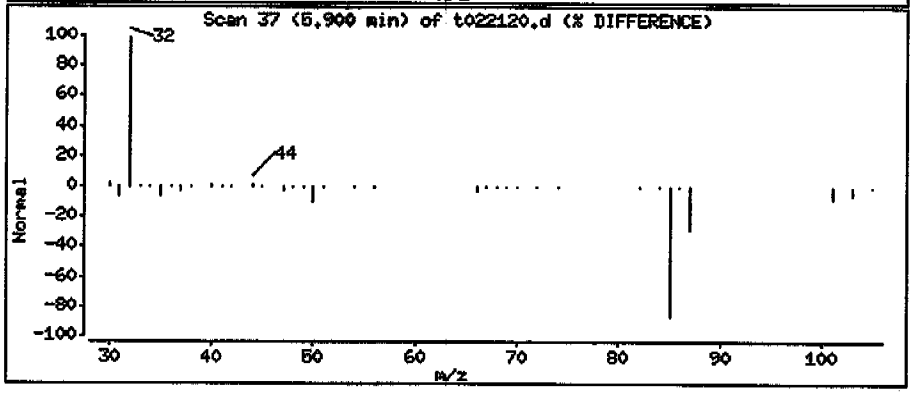












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

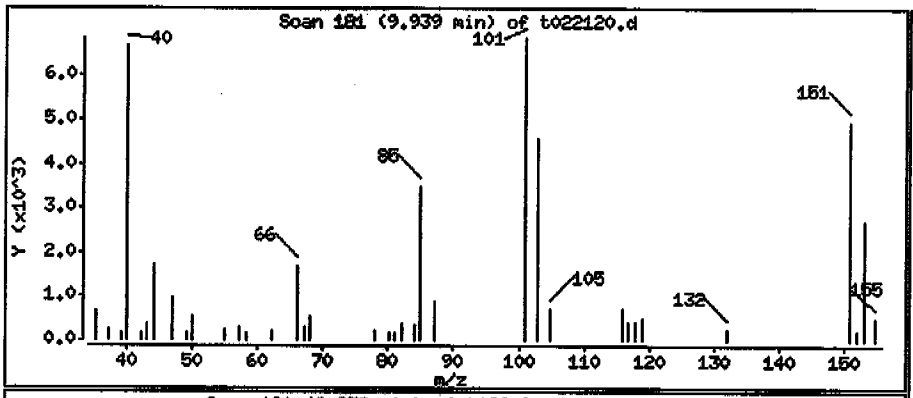
Operator: JP

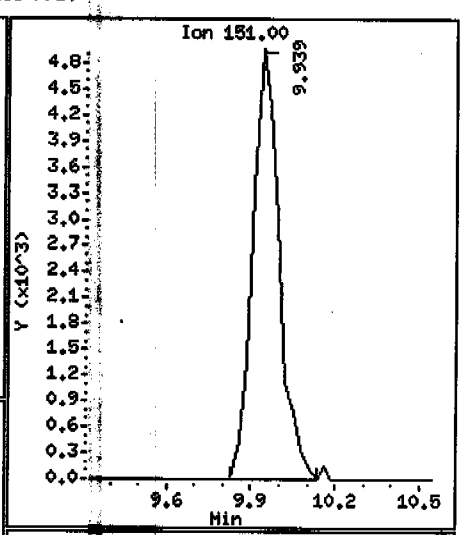
Column phase: RTx-624

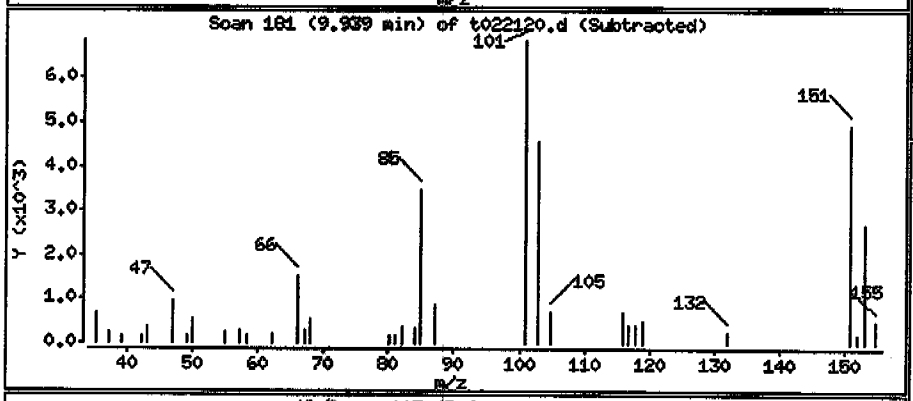
Column diameter: 0.53

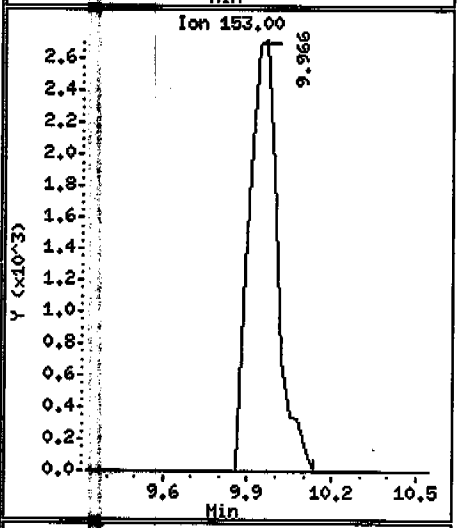
42 Freon 113

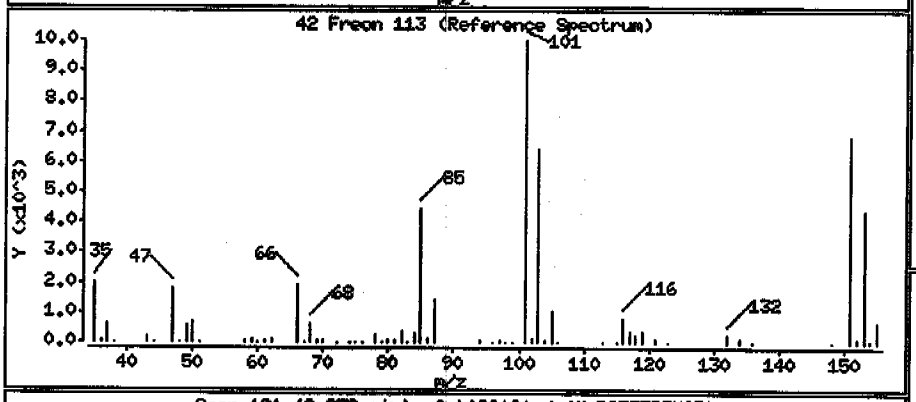
Concentration: 2.133 PPBV

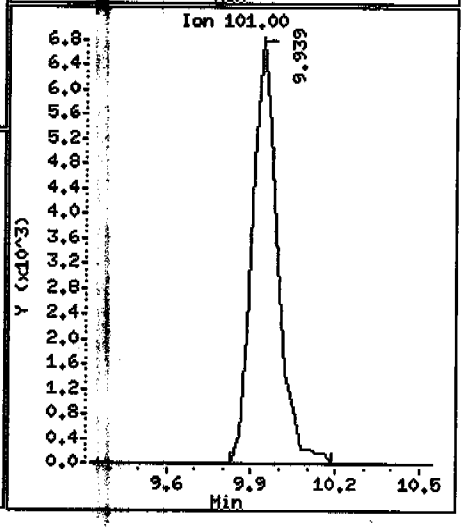


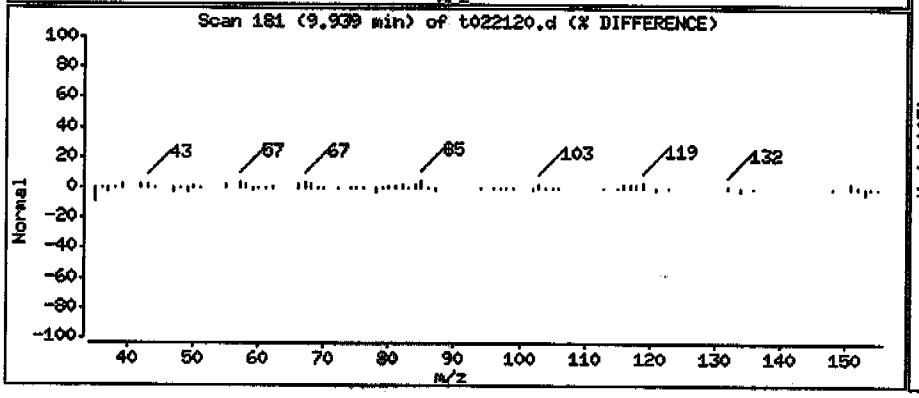












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

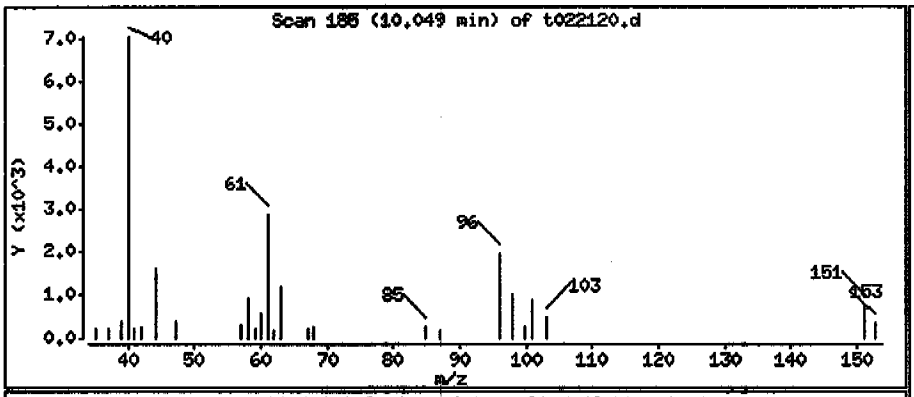
Operator: JP

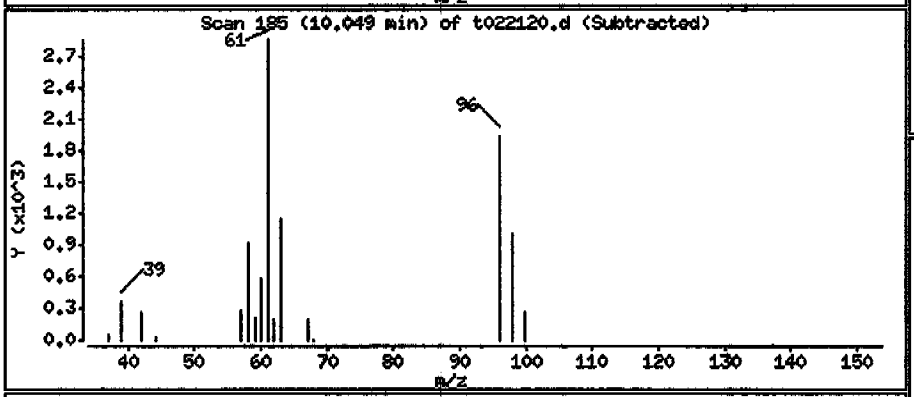
Column phase: RTx-624

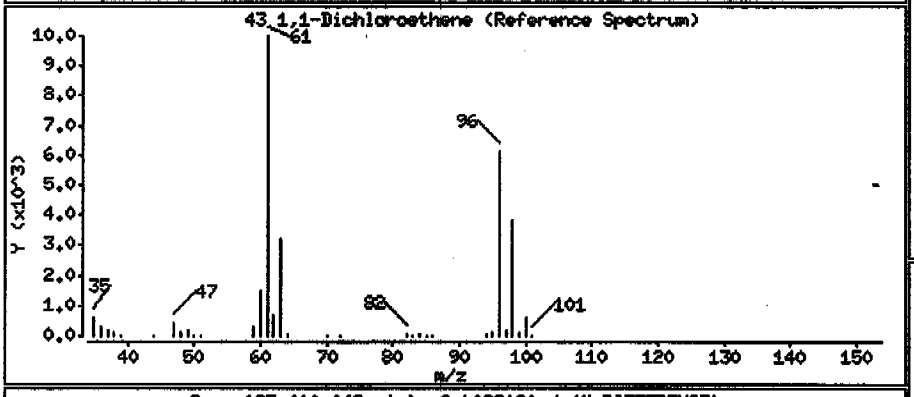
Column diameter: 0.53

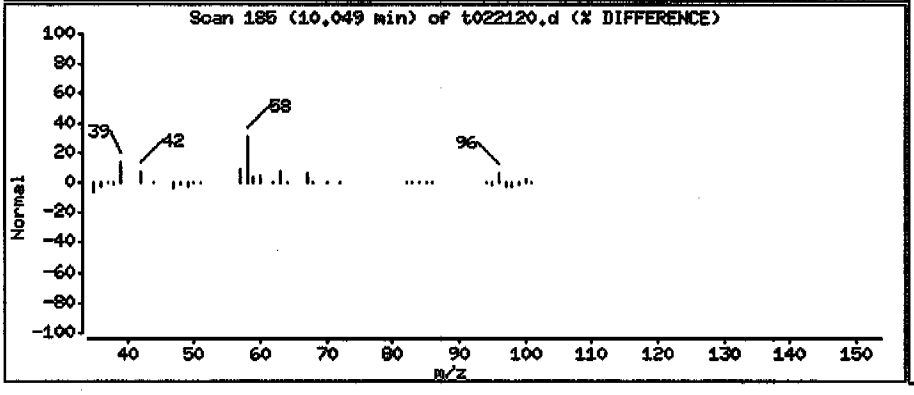
43 1,1-Dichloroethene

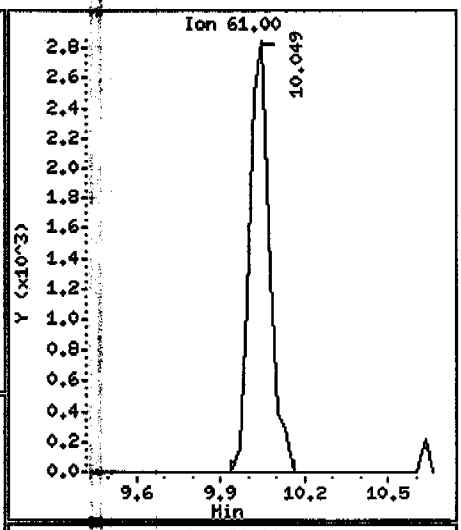
Concentration: 1.026 PPBV

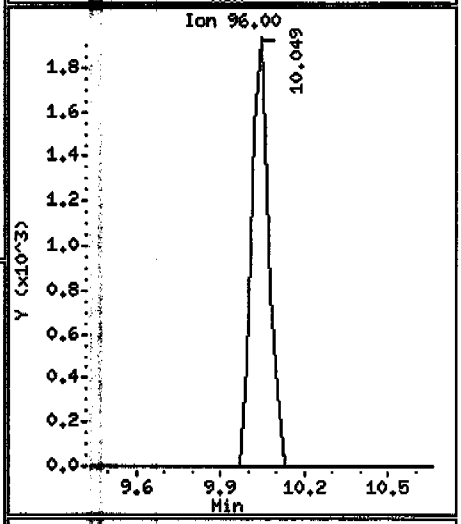


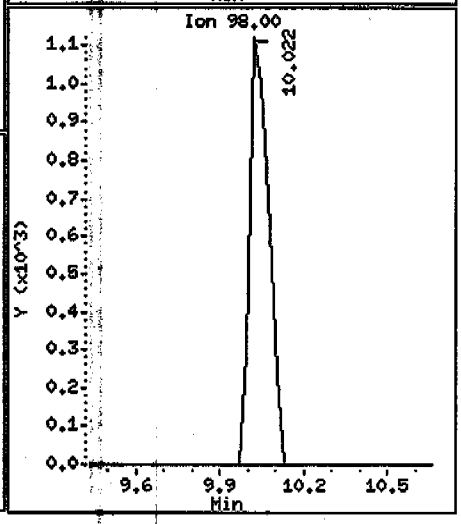












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

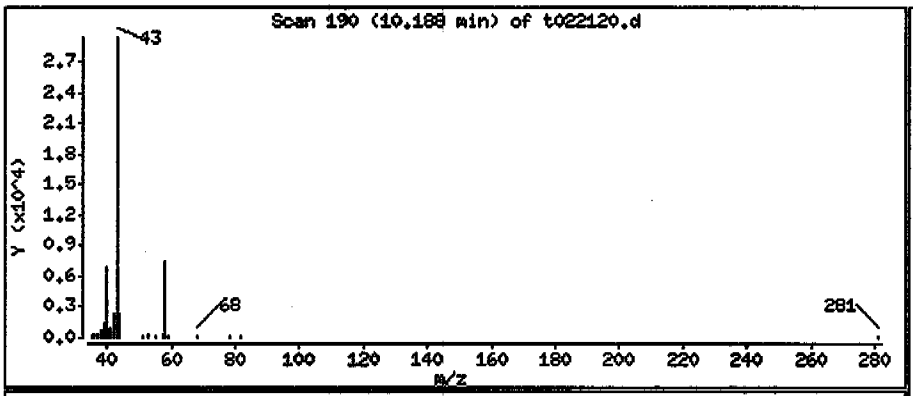
Operator: JP

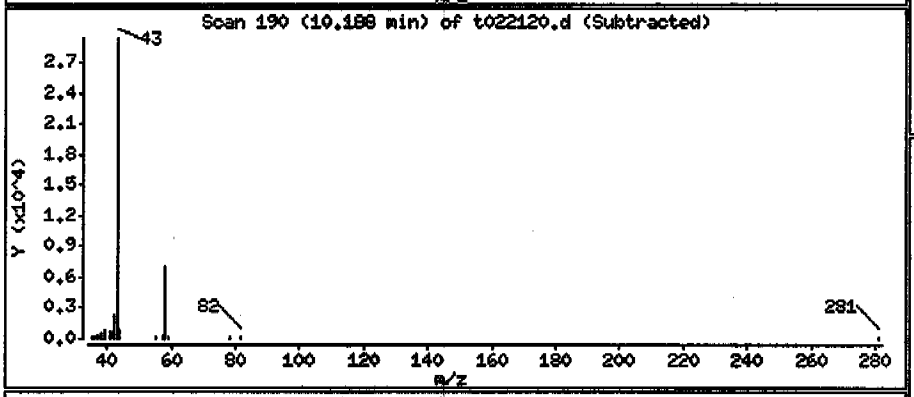
Column phase: RTx-624

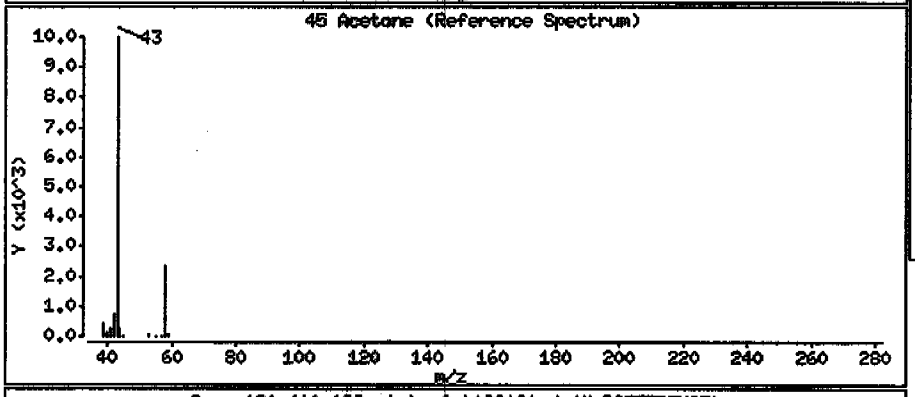
Column diameter: 0.53

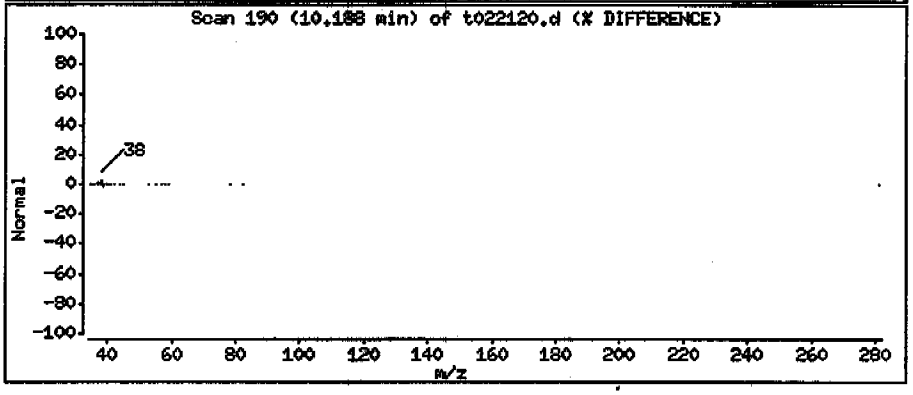
45 Acetone

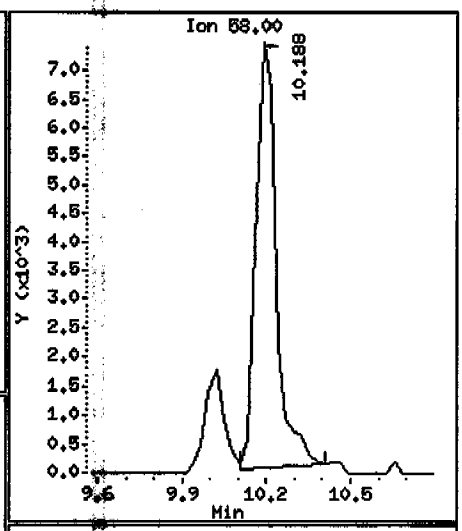
Concentration: 8.782 PPBV

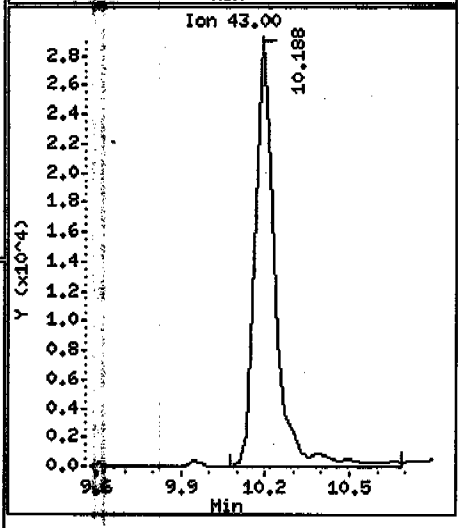












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

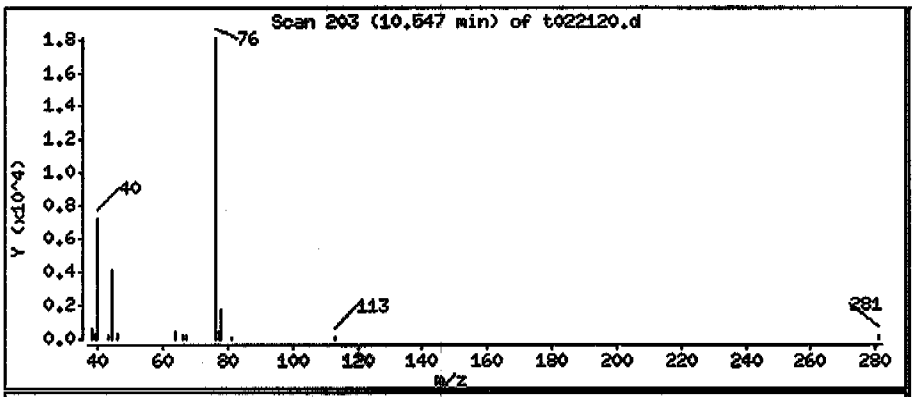
Operator: JP

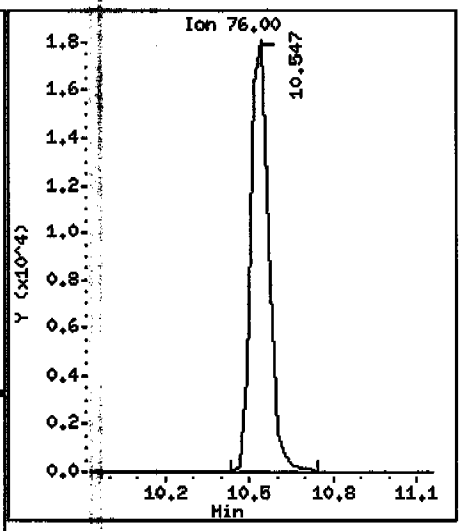
Column phase: RTx-624

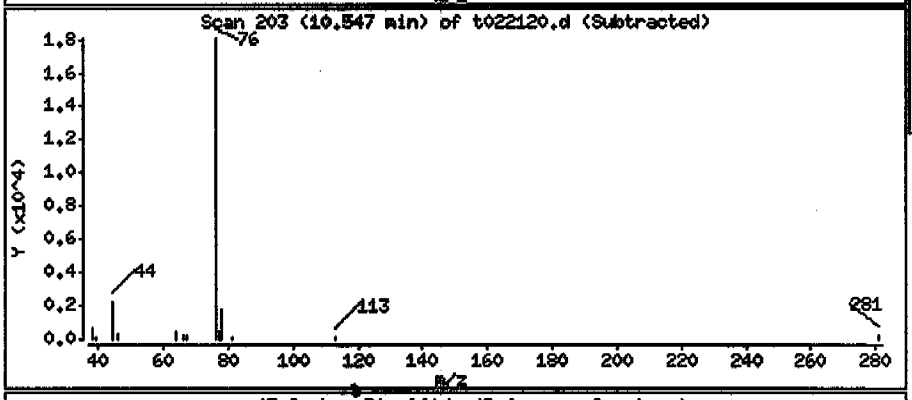
Column diameter: 0.53

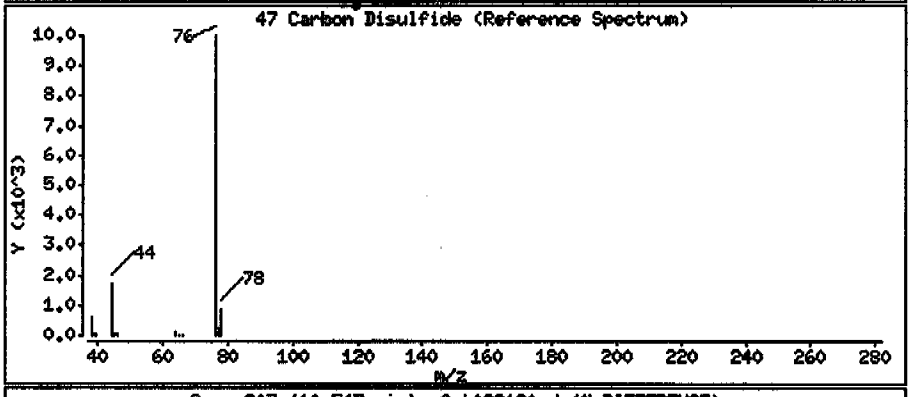
47 Carbon Disulfide

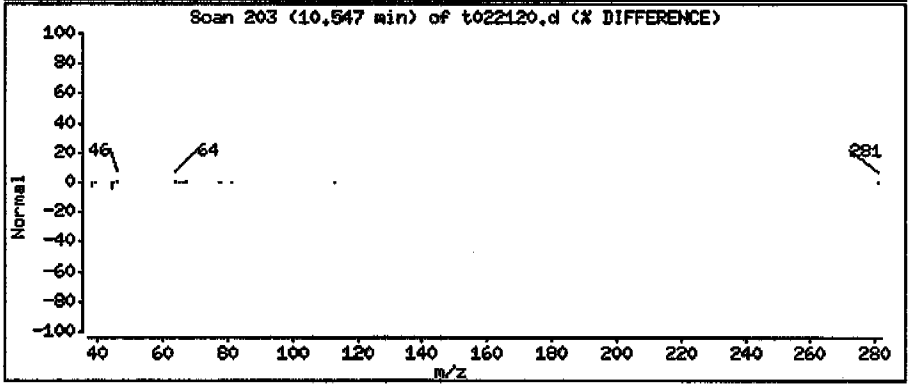
Concentration: 3.103 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

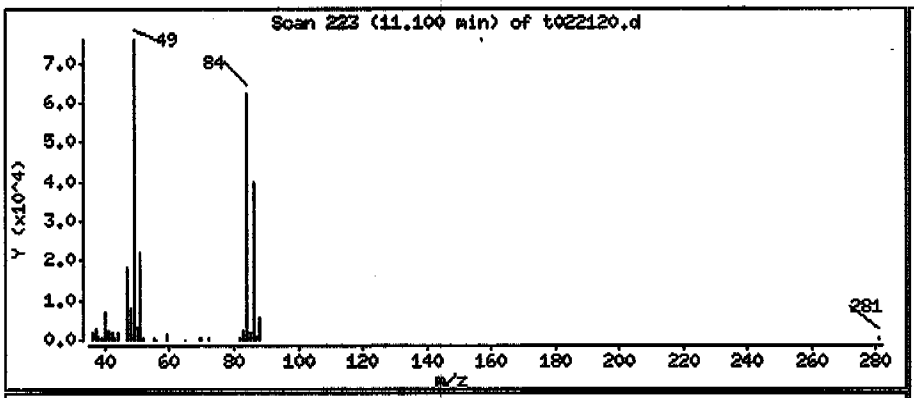
Operator: JP

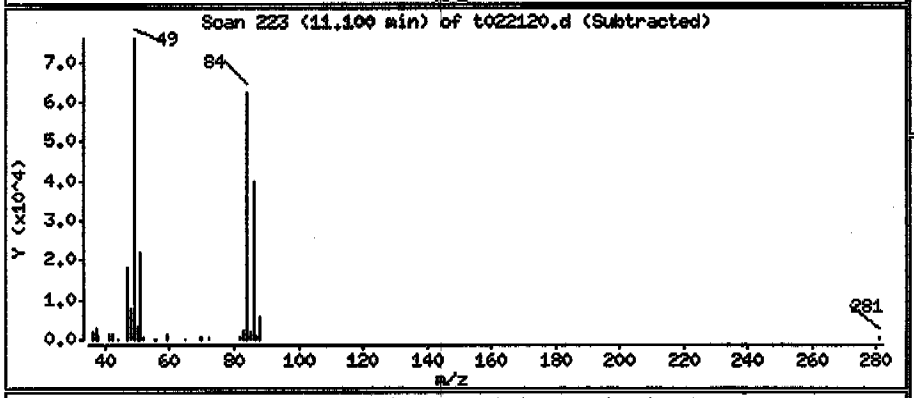
Column phase: RTx-624

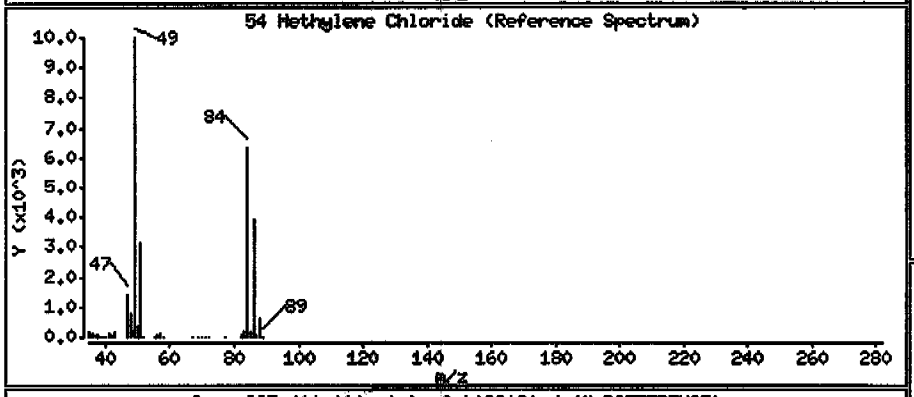
Column diameter: 0.53

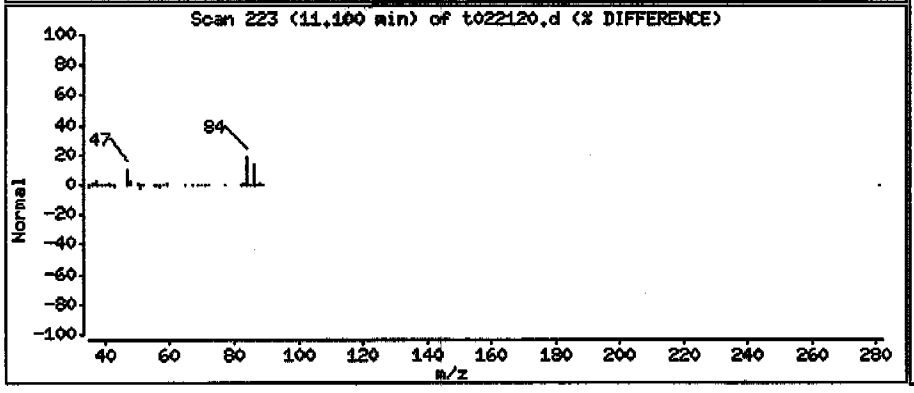
54 Methylene Chloride

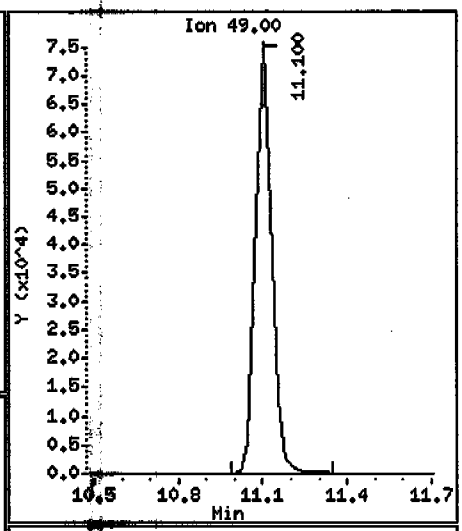
Concentration: 34.479 PPBV

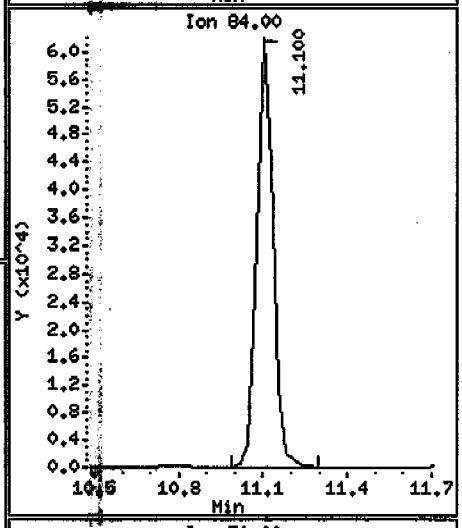


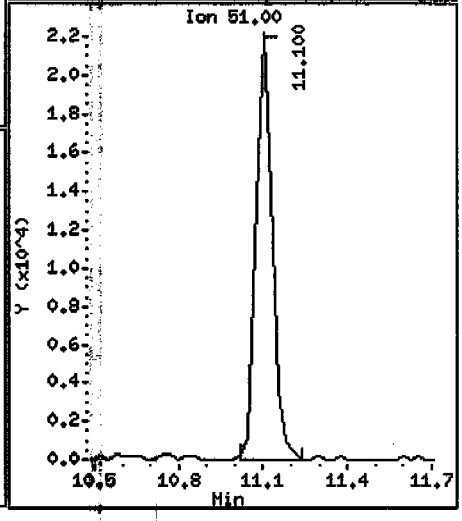












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34439

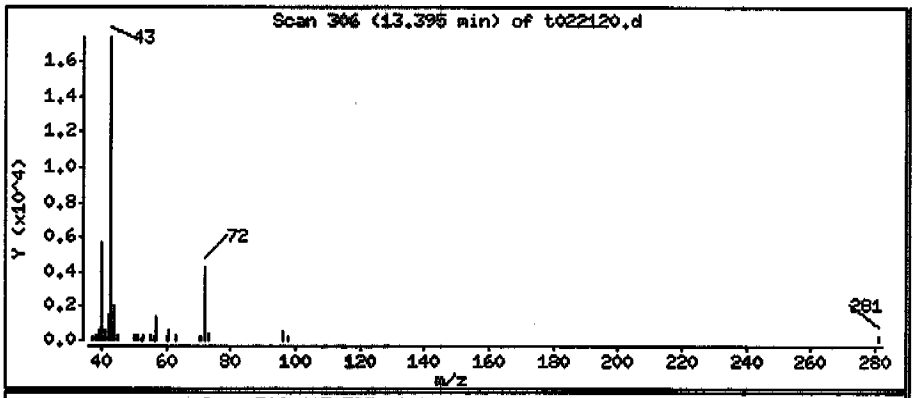
Operator: JP

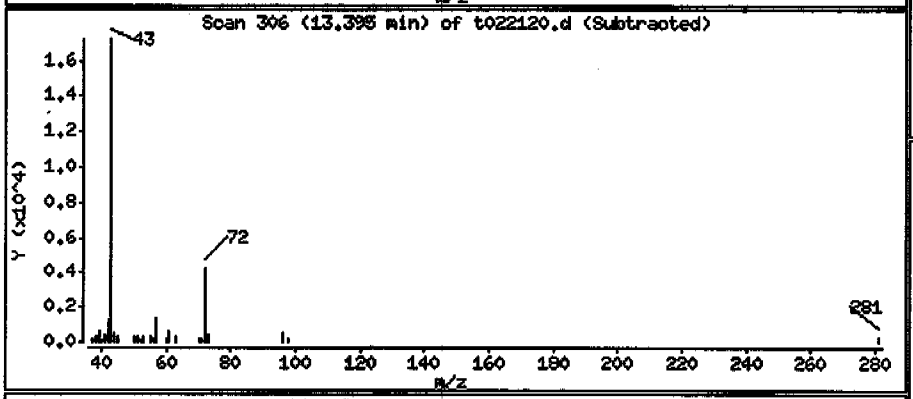
Column phase: RTx-624

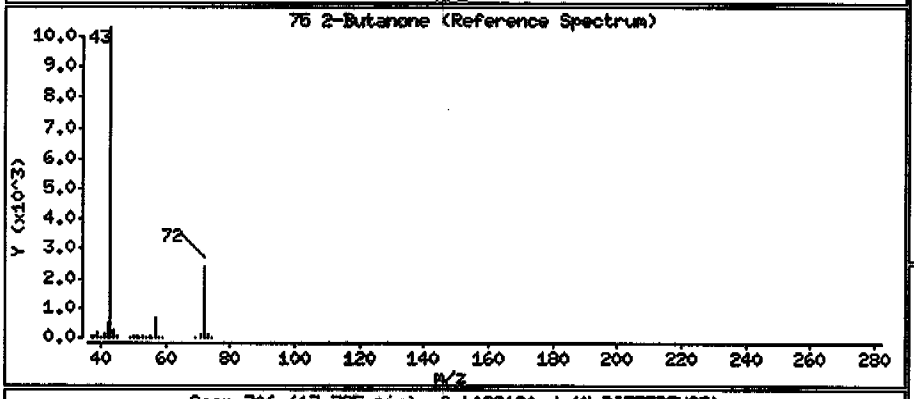
Column diameter: 0.53

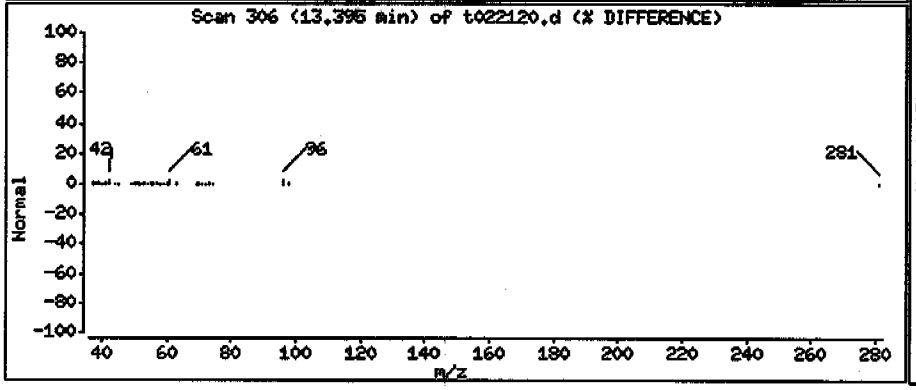
75 2-Butanone

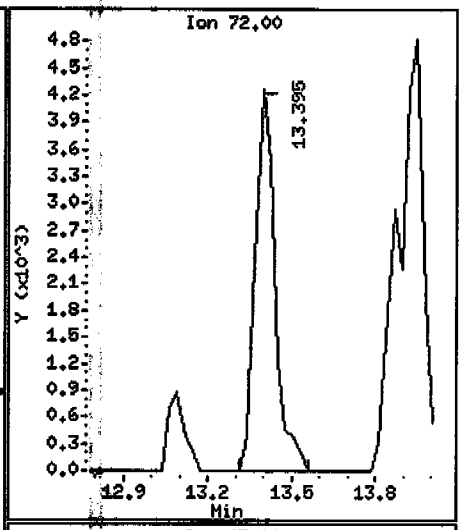
Concentration: 4.356 PPBV

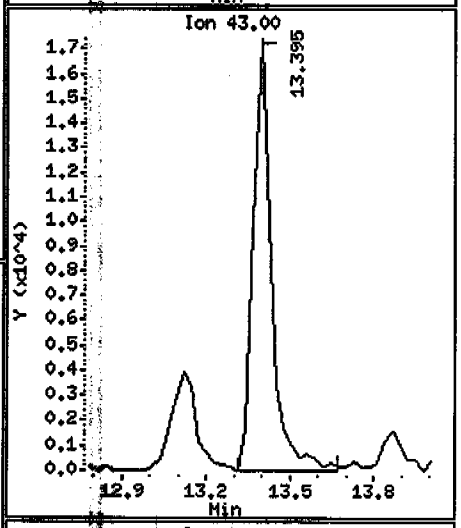


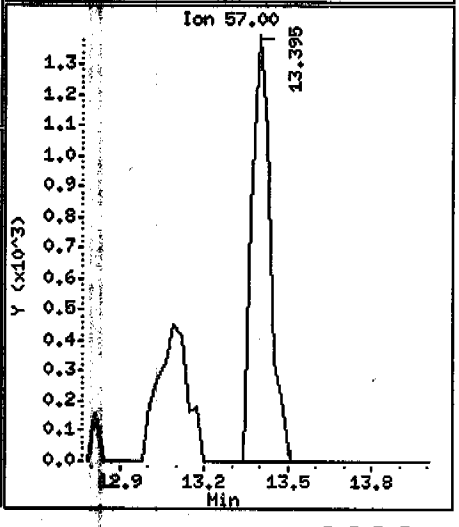












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

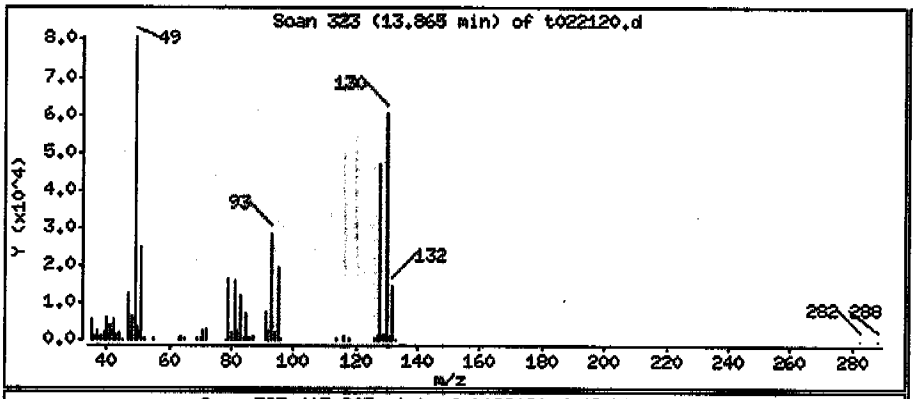
Operator: JP

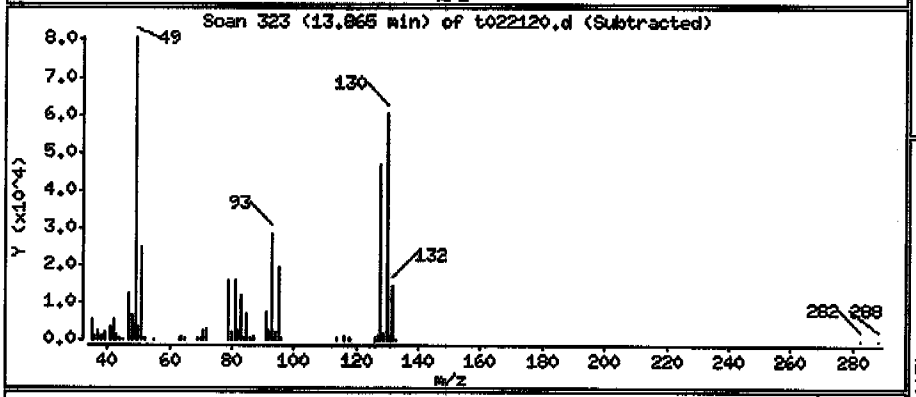
Column phase: RTx-624

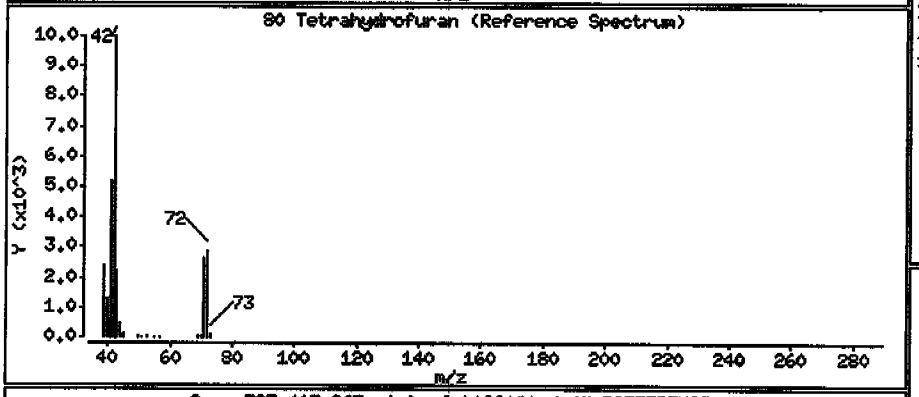
Column diameter: 0.53

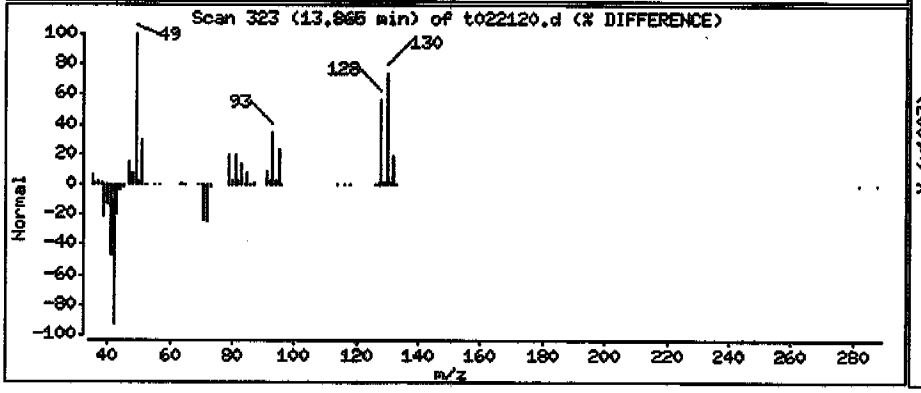
80 Tetrahydrofuran

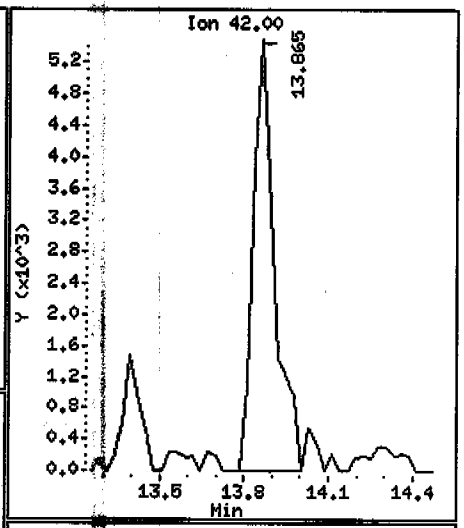
Concentration: 3.537 PPBV

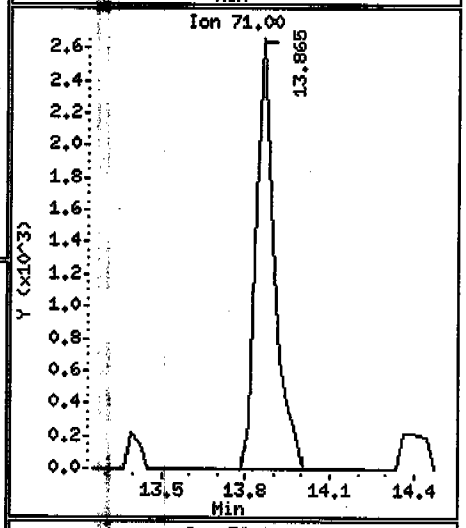


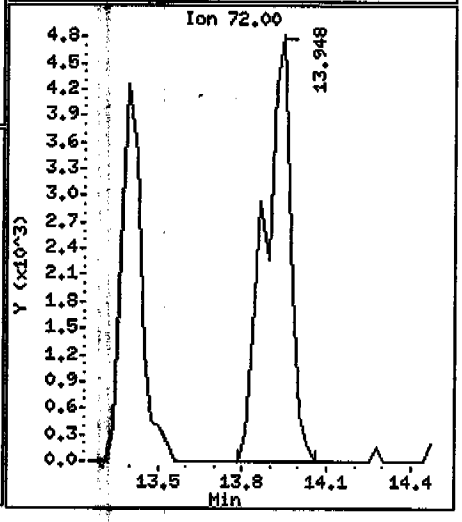












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

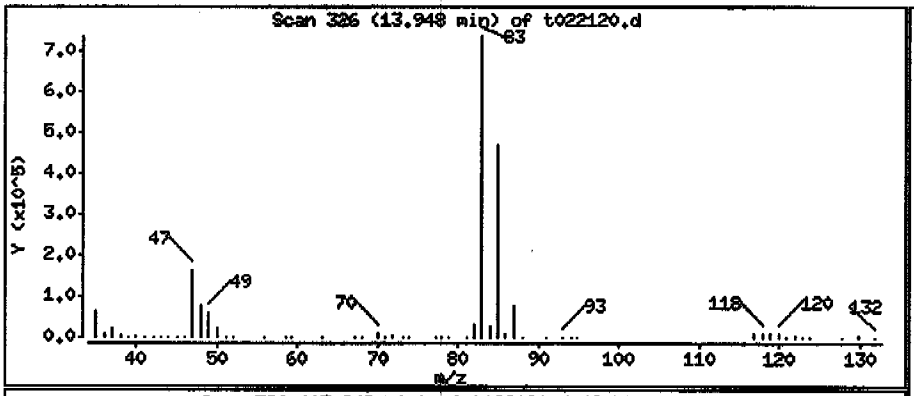
Operator: JP

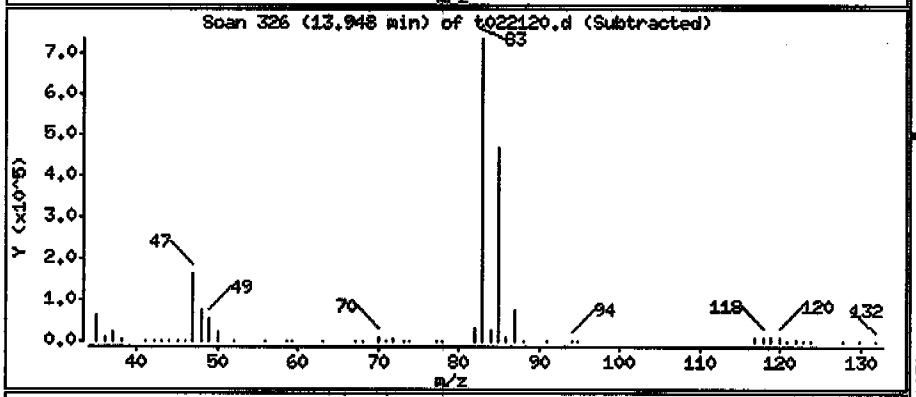
Column phase: RTx-624

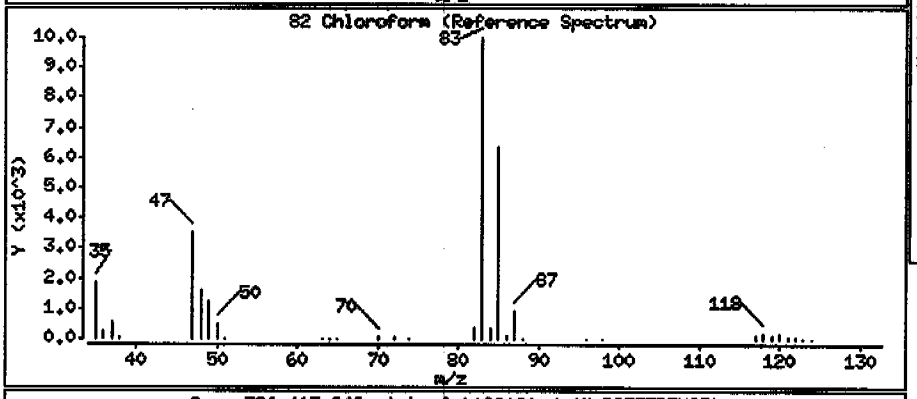
Column diameter: 0.53

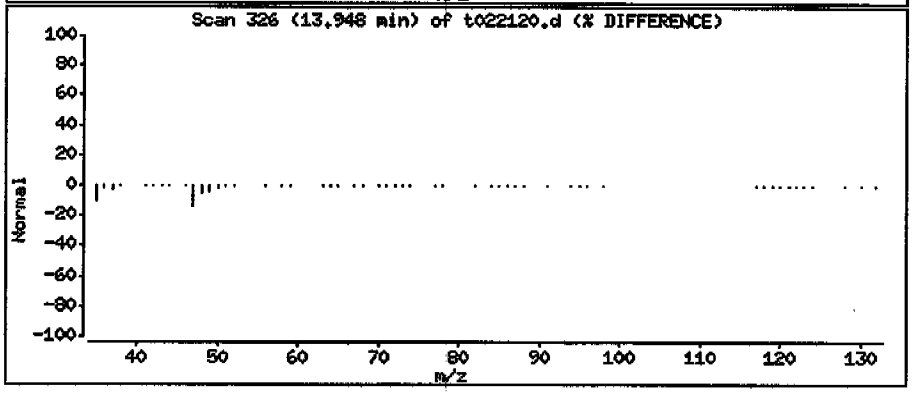
82 Chloroform

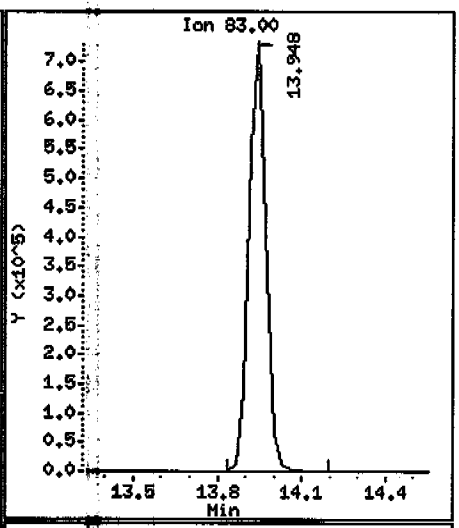
Concentration: 140.28 PPBV

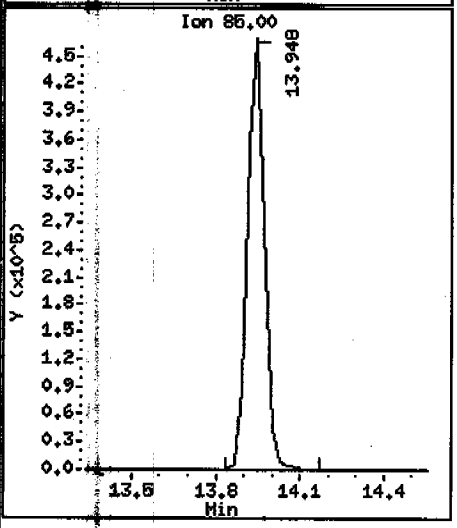












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

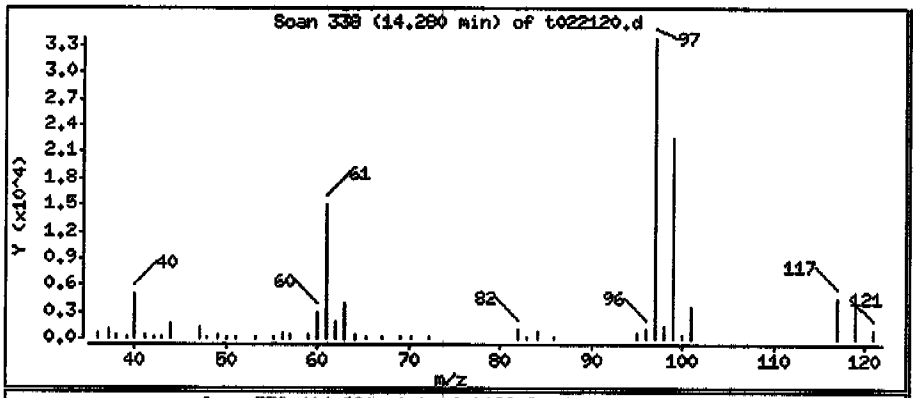
Operator: JP

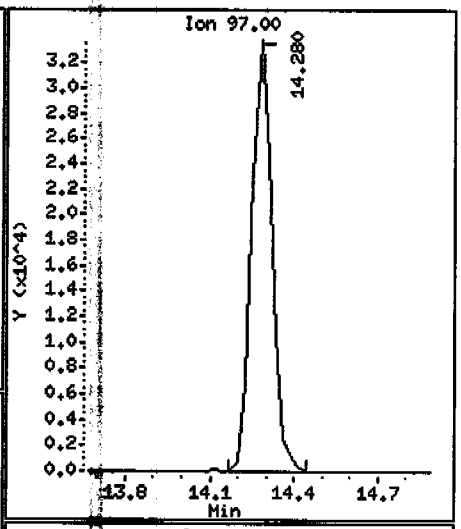
Column phase: RTx-624

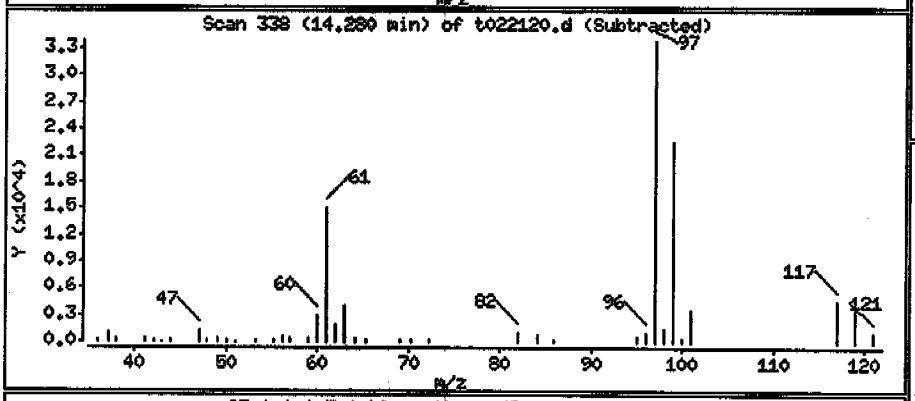
Column diameter: 0.53

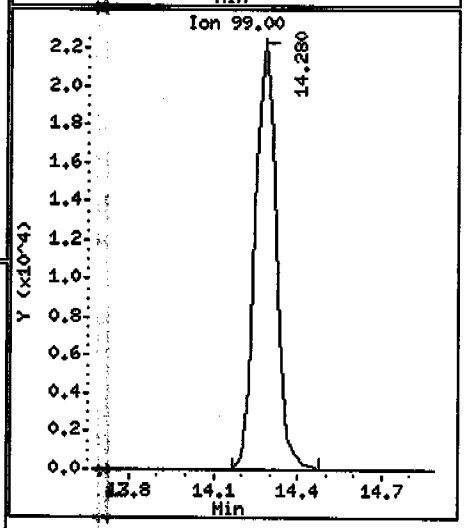
83 1,1,1-Trichloroethane

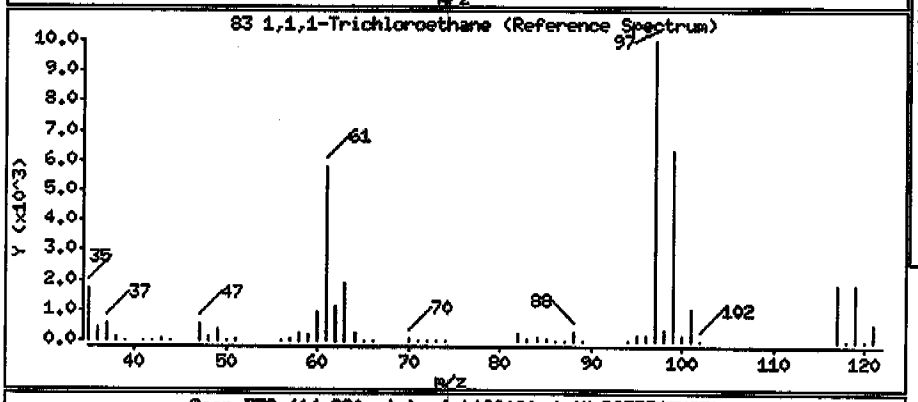
Concentration: 7.049 PPBV

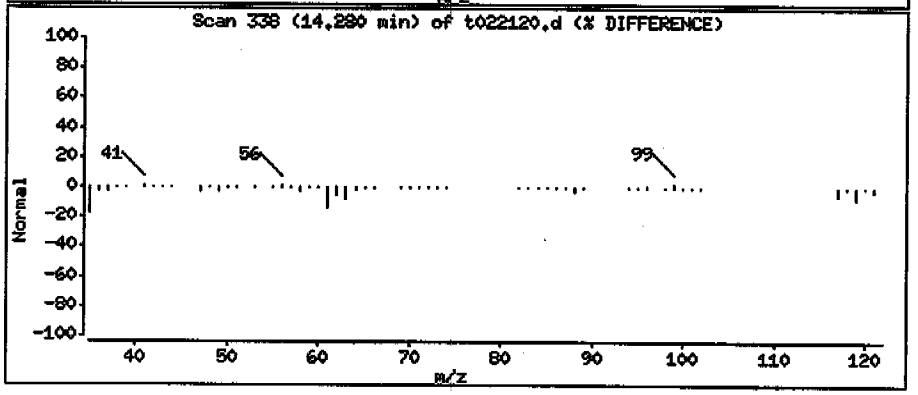












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

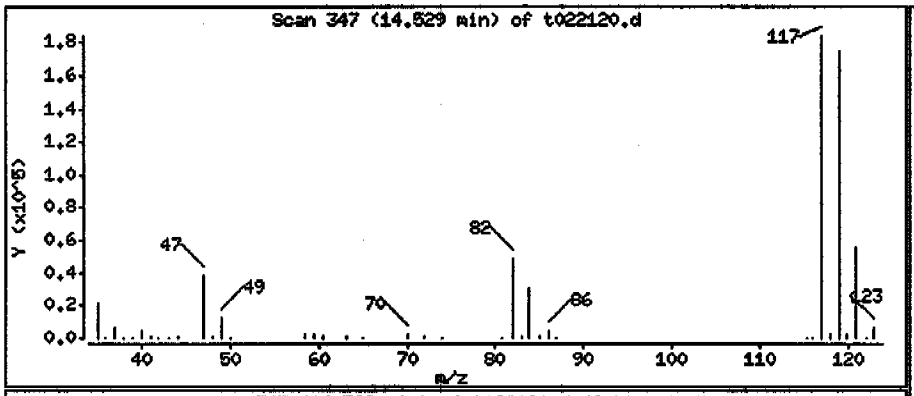
Operator: JP

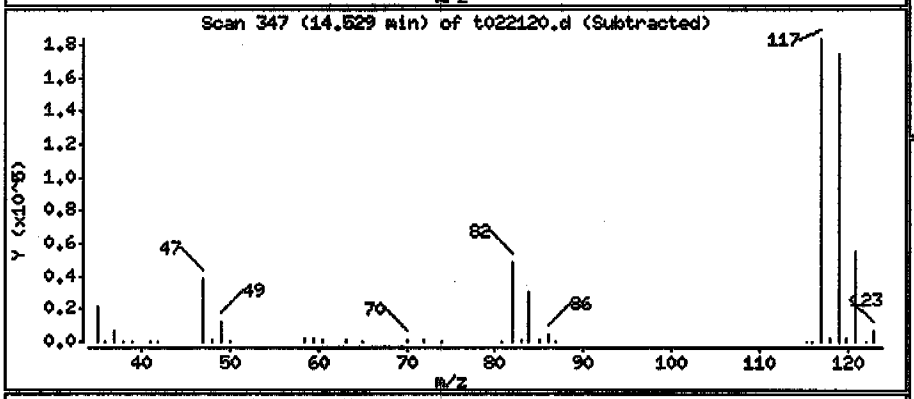
Column phase: RTx-624

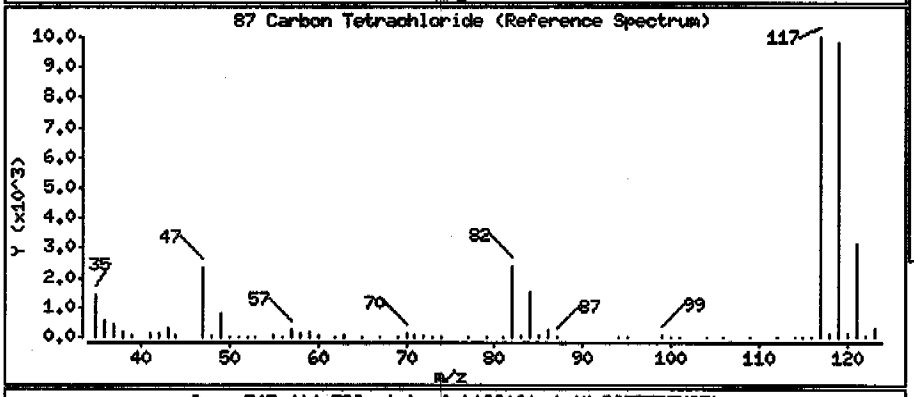
Column diameter: 0.53

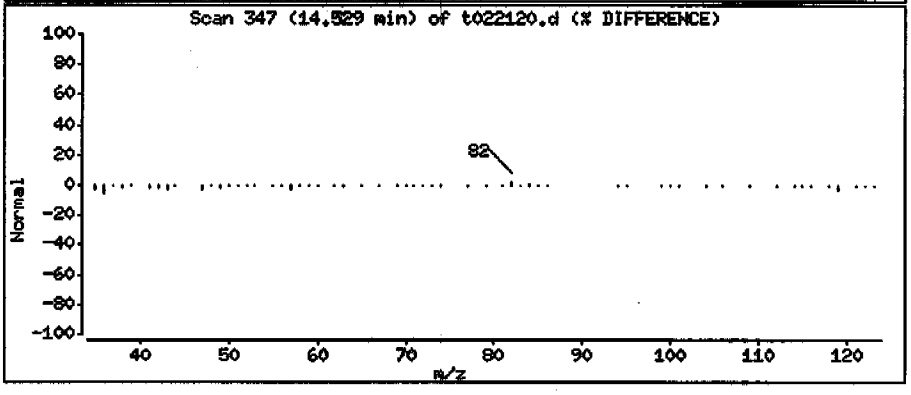
87 Carbon Tetrachloride

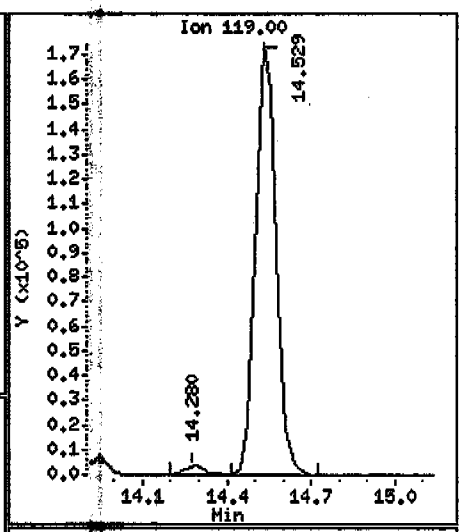
Concentration: 38.114 PPBV

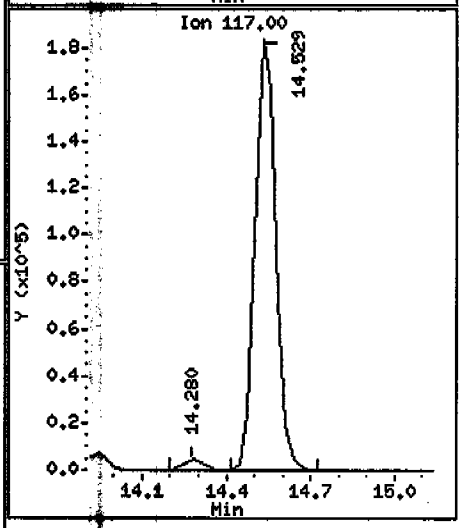












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

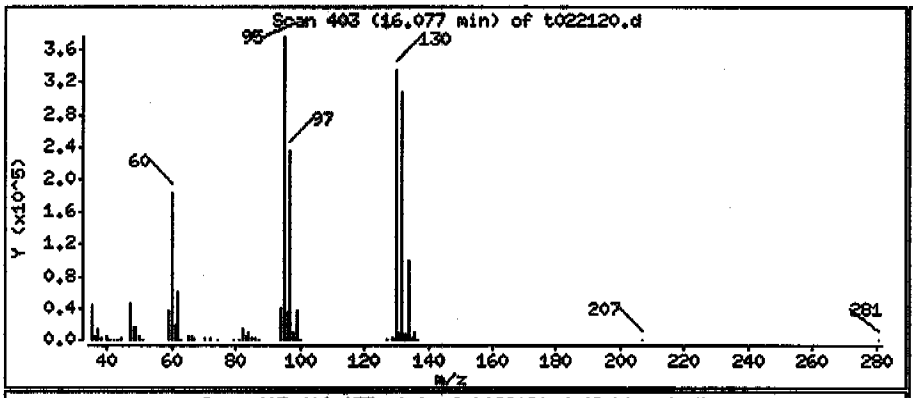
Operator: JP

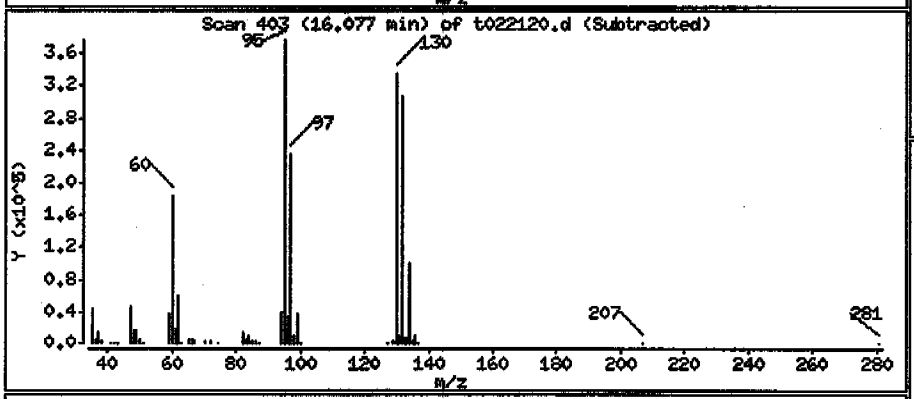
Column phase: RTx-624

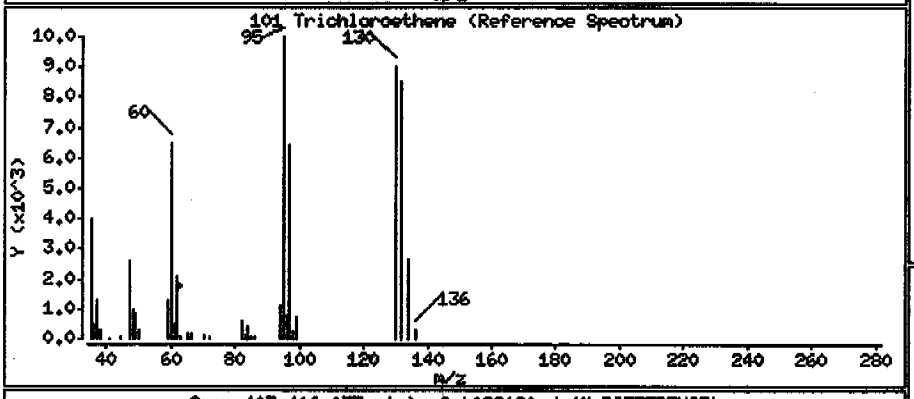
Column diameter: 0.53

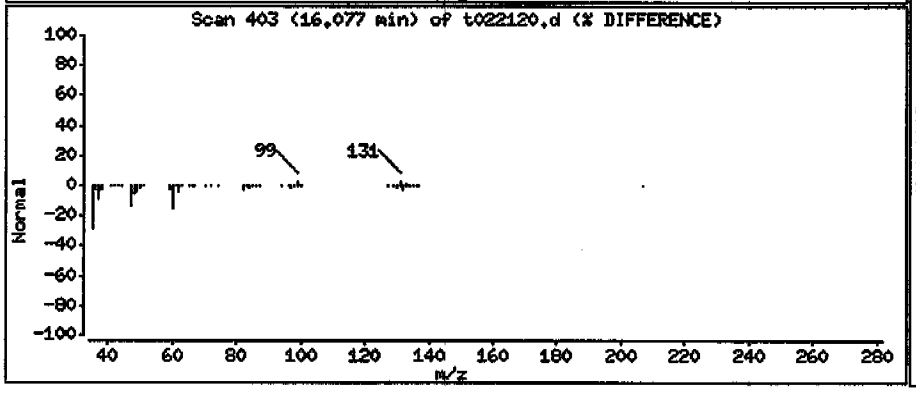
101 Trichloroethene

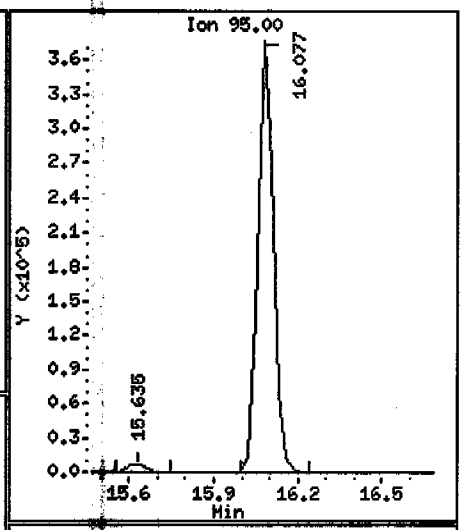
Concentration: 118.41 PPBV

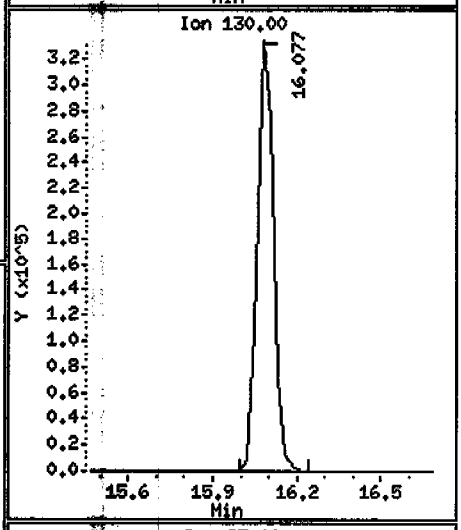


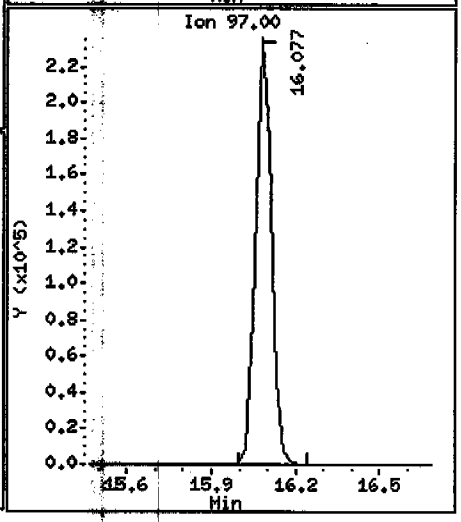












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34439

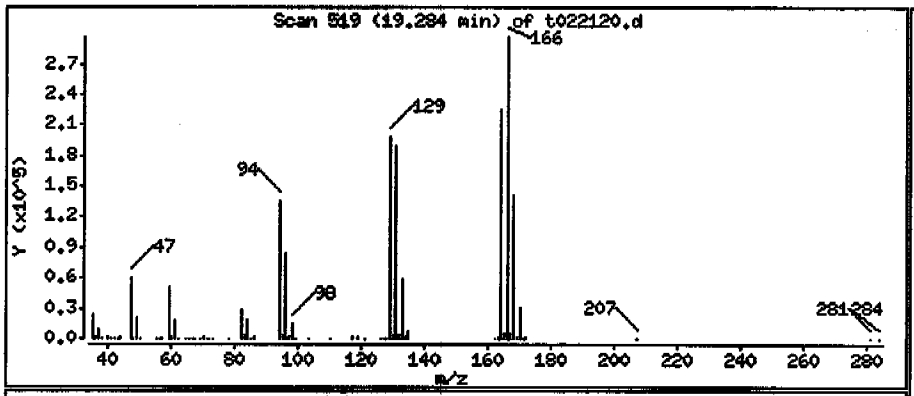
Operator: JP

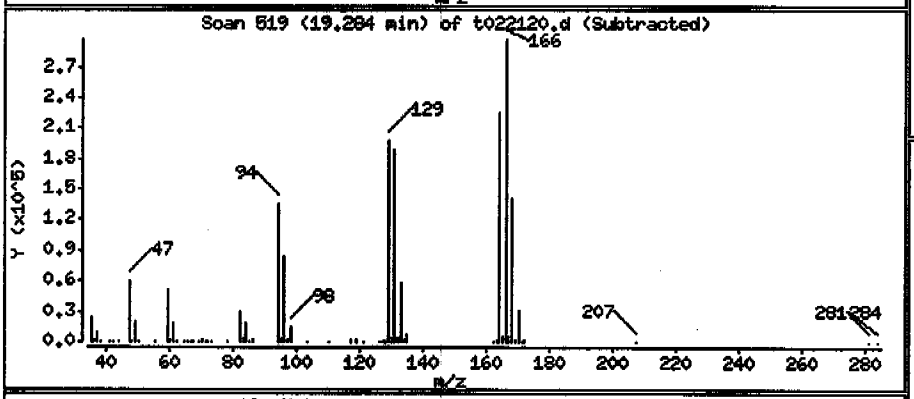
Column phase: RTx-624

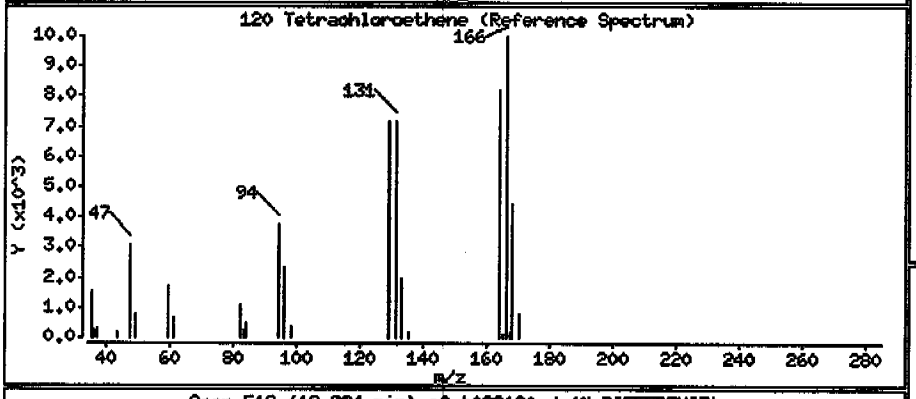
Column diameter: 0.53

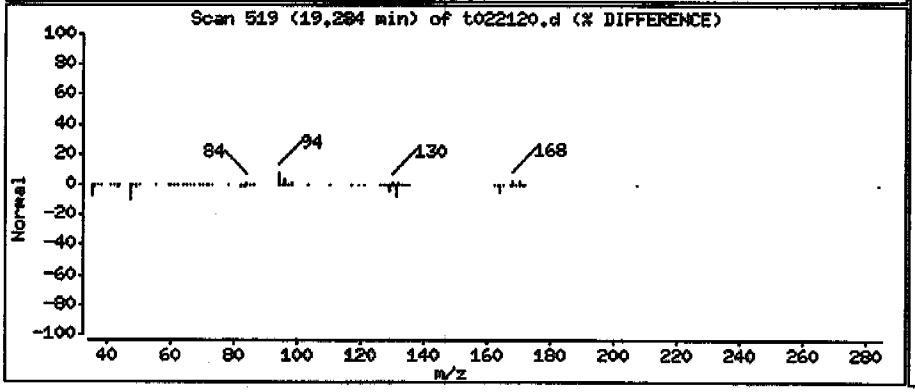
120 Tetrachloroethene

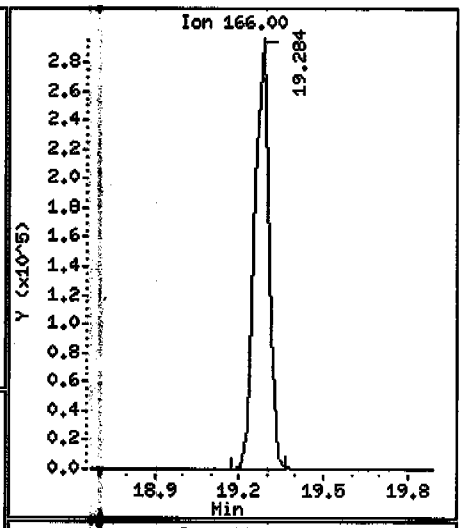
Concentration: 60.299 PPBV

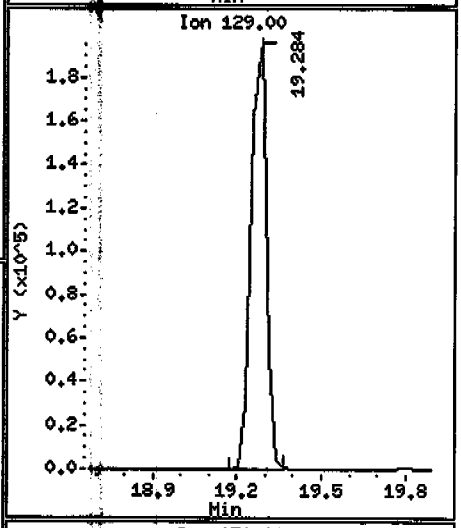


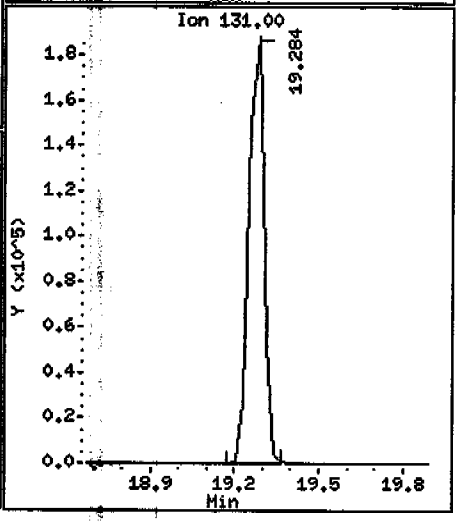












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

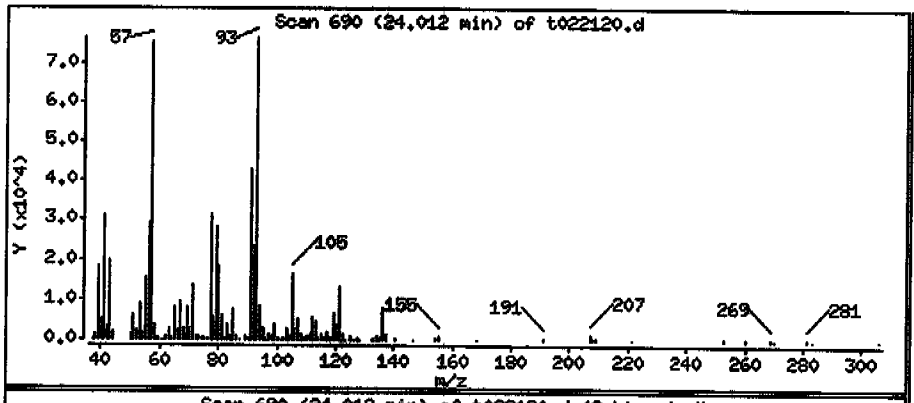
Operator: JP

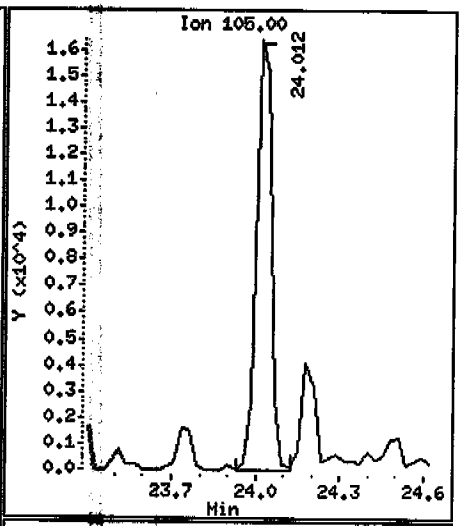
Column phase: RTx-624

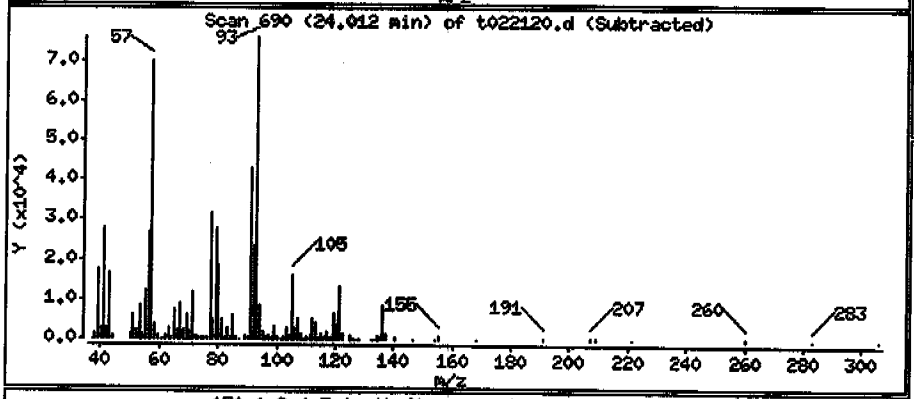
Column diameter: 0.53

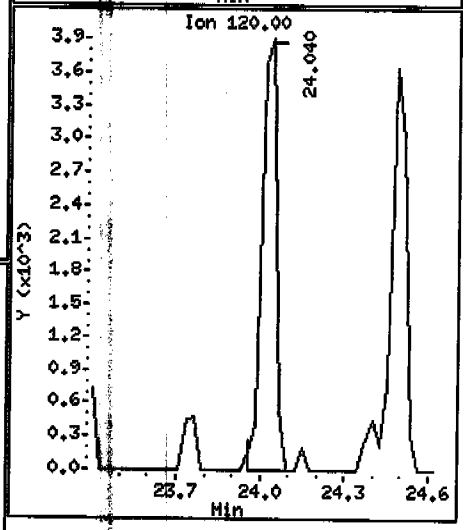
150 1,2,4-Trimethylbenzene

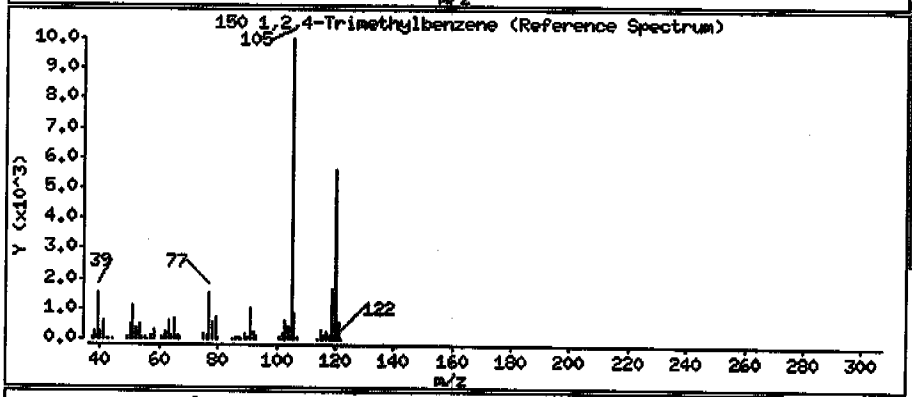
Concentration: 1.379 PPBV

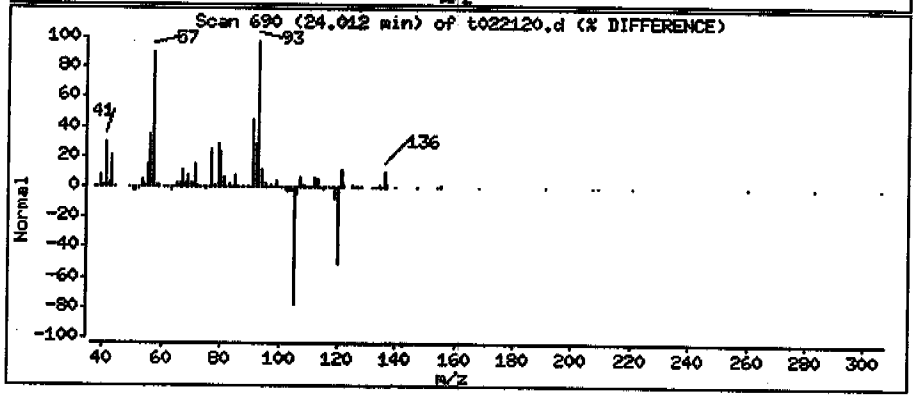












Data File: /chem/msdt.i/21Feb2008.b/t022120.d

Date : 22-FEB-2008 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34438

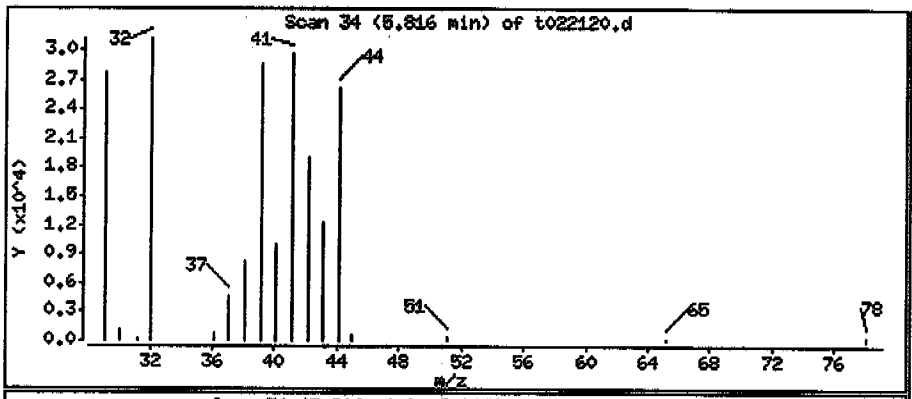
Operator: JP

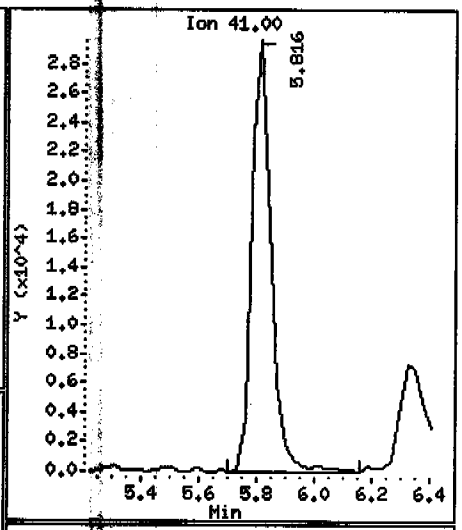
Column phase: RTx-624

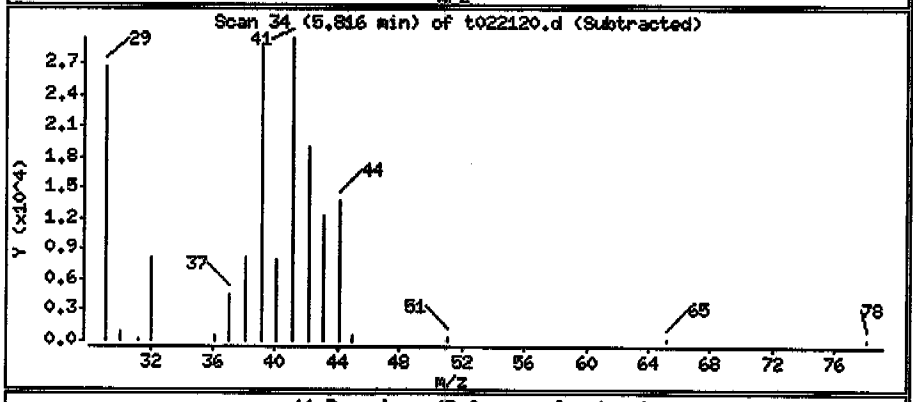
Column diameter: 0.53

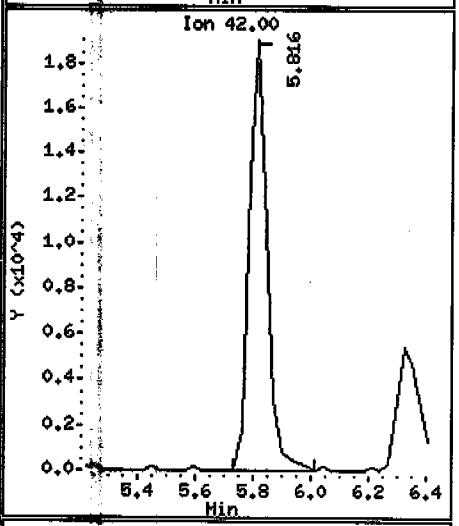
11 Propylene

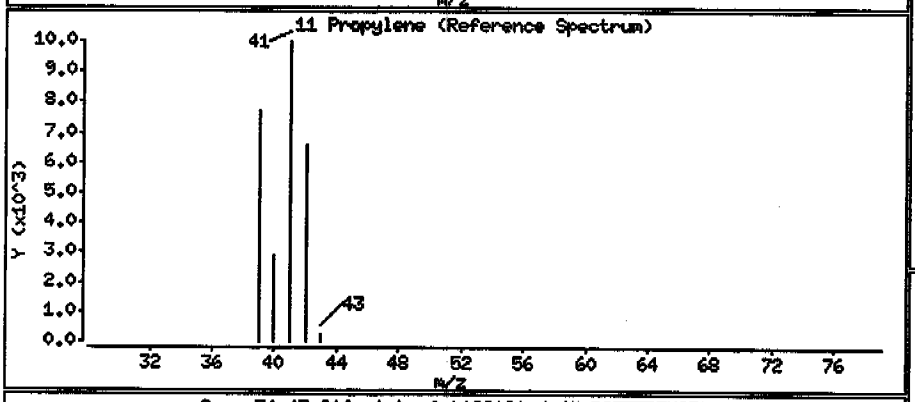
Concentration: 28.559 PPBV

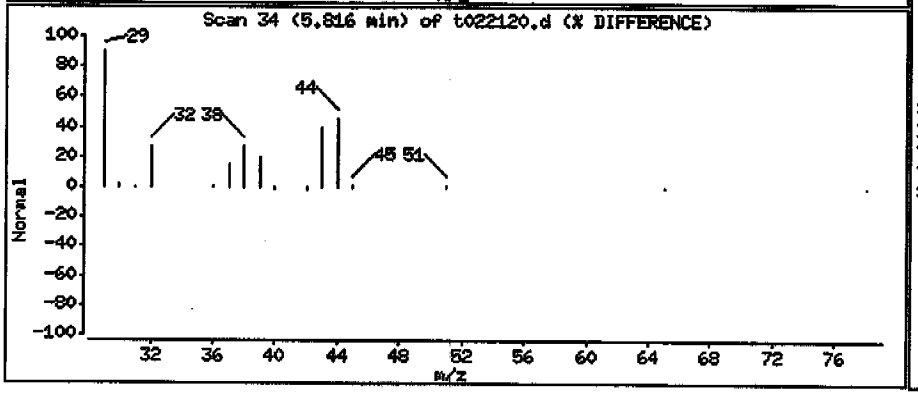


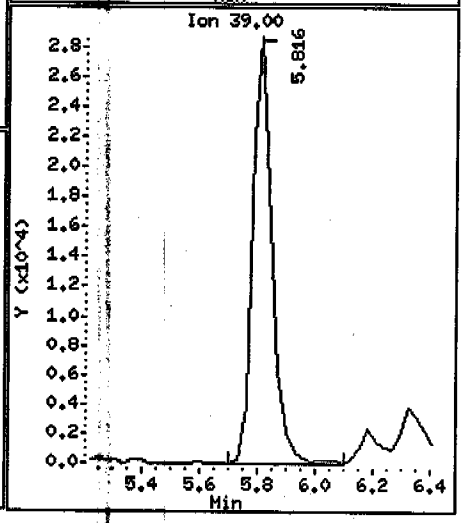












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10506

Lab ID#: 0802283-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.82	1.4	4.0	7.2
Freon 113	0.82	3.2	6.3	24
1,1-Dichloroethene	0.82	2.4	3.2	9.5
Carbon Disulfide	0.82	1.3	2.6	4.1
Methylene Chloride	0.82	120	2.8	430
Chloroform	0.82	140	4.0	690
1,1,1-Trichloroethane	0.82	6.1	4.5	33
Carbon Tetrachloride	0.82	61	5.2	380
Benzene	0.82	0.93	2.6	3.0
1,2-Dichloroethane	0.82	1.5	3.3	6.0
Trichloroethene	0.82	150	4.4	830
Toluene	0.82	3.8	3.1	14
Tetrachloroethene	0.82	32	5.6	220

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10506

Lab ID#: 0802283-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.82	1.4	4.0	7.2
Freon 114	0.82	Not Detected	5.7	Not Detected
Chloromethane	3.3	Not Detected	6.8	Not Detected
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
1,3-Butadiene	0.82	Not Detected	1.8	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.82	Not Detected	4.6	Not Detected
Ethanol	3.3	Not Detected	6.2	Not Detected
Freon 113	0.82	3.2	6.3	24
1,1-Dichloroethene	0.82	2.4	3.2	9.5
Acetone	3.3	Not Detected	7.8	Not Detected
2-Propanol	3.3	Not Detected	8.1	Not Detected
Carbon Disulfide	0.82	1.3	2.6	4.1
Methylene Chloride	0.82	120	2.8	430
Methyl tert-butyl ether	0.82	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Hexane	0.82	Not Detected	2.9	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.82	Not Detected	2.4	Not Detected
Chloroform	0.82	140	4.0	690
1,1,1-Trichloroethane	0.82	6.1	4.5	33
Cyclohexane	0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.82	61	5.2	380
Benzene	0.82	0.93	2.6	3.0
1,2-Dichloroethane	0.82	1.5	3.3	6.0
Heptane	0.82	Not Detected	3.4	Not Detected
Trichloroethene	0.82	150	4.4	830
1,2-Dichloropropane	0.82	Not Detected	3.8	Not Detected
1,4-Dioxane	3.3	Not Detected	12	Not Detected
Bromodichloromethane	0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	0.82	Not Detected	3.4	Not Detected
Toluene	0.82	3.8	3.1	14
trans-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Tetrachloroethene	0.82	32	5.6	220

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10506

Lab ID#: 0802283-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.3	Not Detected	13	Not Detected
Dibromochloromethane	0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)	0.82	Not Detected	6.3	Not Detected
Chlorobenzene	0.82	Not Detected	3.8	Not Detected
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
m,p-Xylene	0.82	Not Detected	3.6	Not Detected
o-Xylene	0.82	Not Detected	3.6	Not Detected
Styrene	0.82	Not Detected	3.5	Not Detected
Bromoform	0.82	Not Detected	8.5	Not Detected
1,1,2,2-Tetrachloroethane	0.82	Not Detected	5.6	Not Detected
4-Ethyltoluene	0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene	0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene	3.3	Not Detected	24	Not Detected
Hexachlorobutadiene	3.3	Not Detected	35	Not Detected
Chlorodifluoromethane	3.3	Not Detected	12	Not Detected
Methanol	82	Not Detected	110	Not Detected
n-Butanol	3.3	Not Detected	9.9	Not Detected
Propylene	3.3	Not Detected	5.6	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022121.d
Lab Smp Id: 0802283-03A
Inj Date : 22-FEB-2008 02:21
Operator : JP Inst ID: msdt.i
Smp Info : 200mL #23996
Misc Info : 5.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.64000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	276143	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	212313			27.38- 127.38	76.89
13.893	13.865 (1.000)	49	584167			131.81- 231.81	211.55
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1018317	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	167411			0.00- 66.79	16.44
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	958089	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	559547			7.58- 107.58	58.40
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.076)	65	430897	24.2504	24.250	80.00- 120.00	100.00
14.943	14.943 (1.076)	67	220738			3.57- 103.57	51.23
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1001131	25.5224	25.522	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	118127			0.00- 61.29	11.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	683945			18.71- 118.71	68.32
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	629386	25.3969	25.397	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	799984			76.46- 176.46	127.11
22.796	22.796 (1.096)	176	612453			48.22- 148.22	97.31
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	47575	0.88230	1.447	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	15942			0.00- 82.13	33.51
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	54182	1.92762	3.161	80.00- 120.00	100.00
9.966	9.939 (0.717)	153	33511			13.46- 113.46	61.85
9.966	9.939 (0.717)	101	70188			82.30- 182.30	129.54
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.723)	61	36980	1.46163	2.397	80.00- 120.00	100.00
10.049	10.050 (0.723)	96	23033			9.56- 109.56	62.29
10.049	10.050 (0.723)	98	14192			0.00- 88.43	38.38
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	38208	0.79839	1.309	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	1204602	75.2942	123.48	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	1045075			38.51- 138.51	86.76
11.128	11.100 (0.801)	51	370392			0.00- 83.83	30.75
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	3449674	86.0116	141.06	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	2246488			14.81- 114.81	65.12
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.028)	97	165817	3.73787	6.130	80.00- 120.00	100.00
14.307	14.280 (1.030)	99	109422			14.28- 114.28	65.99
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	1583719	37.1650	60.951	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	1661640			56.24- 156.24	104.92
91 Benzene					CAS #: 71-43-2		
14.971	14.943 (0.958)	78	28813	0.56599	0.9282	80.00- 120.00	100.00
14.971	14.943 (0.958)	77	6884			0.00- 73.50	23.89

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.082	15.082	(0.965)	62	22660	0.91237	1.496	80.00- 120.00	100.00
15.082	15.082	(0.965)	64	8334			0.00- 84.23	36.78
101 Trichloroethene						CAS #: 79-01-6		
16.077	16.077	(1.028)	95	2057174	94.3493	154.73	80.00- 120.00	100.00
16.105	16.077	(1.030)	130	1899408			39.09- 139.09	92.33
16.077	16.077	(1.028)	97	1310406			12.68- 112.68	63.70
114 Toluene						CAS #: 108-88-3		
18.344	18.317	(1.173)	91	127296	2.34511	3.846	80.00- 120.00	100.00
18.344	18.317	(1.173)	92	75811			10.34- 110.34	59.55
120 Tetrachloroethene						CAS #: 127-18-4		
19.284	19.284	(0.927)	166	571293	19.5354	32.038	80.00- 120.00	100.00
19.284	19.284	(0.927)	129	413893			18.51- 118.51	72.45
19.284	19.284	(0.927)	131	399785			15.29- 115.29	69.98

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022121.d
Lab Smp Id: 0802283-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: JP
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	276143	-13.21
97 1,4-Difluorobenze	1251468	750881	1752055	1018317	-18.63
126 Chlorobenzene-d5	1150991	690595	1611387	958089	-16.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022121.d
Report Date: 27-Feb-2008 14:44

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802283-03A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

Client SDG: 21Feb2008
Fraction: VOA

Operator: JP
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.250	97.00	70-130
$ 113 Toluene-d8	25.000	25.522	102.09	70-130
$ 137 Bromofluorobenzene	25.000	25.397	101.59	70-130

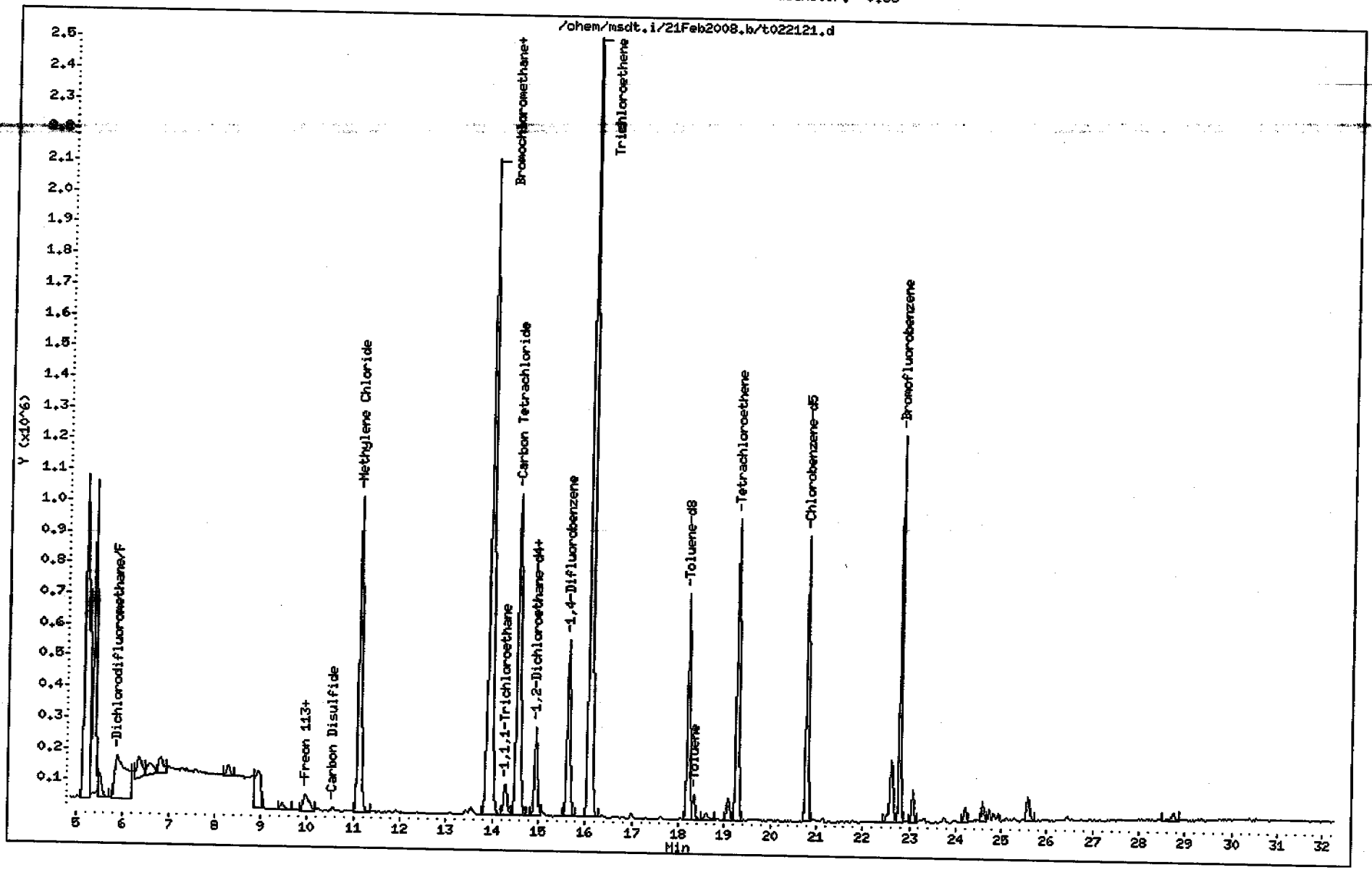
Data File: /chem/msdt.i/21Feb2008.b/t022121.d
Date : 22-FEB-2008 02:21
Client ID:
Sample Info: 200mL #23996

Column phase: RTx-624

Instrument: msdt.i

Operator: JP
Column diameter: 0.53

0055



Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Sample Info: 200mL #23996

Instrument: msdt.i

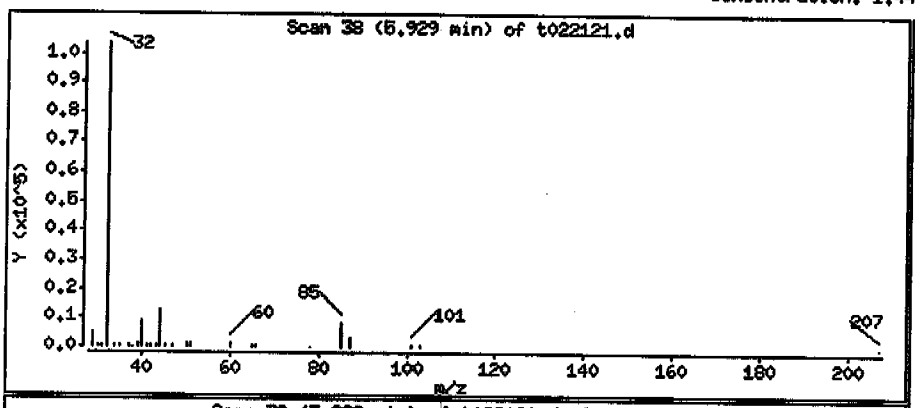
Operator: JP

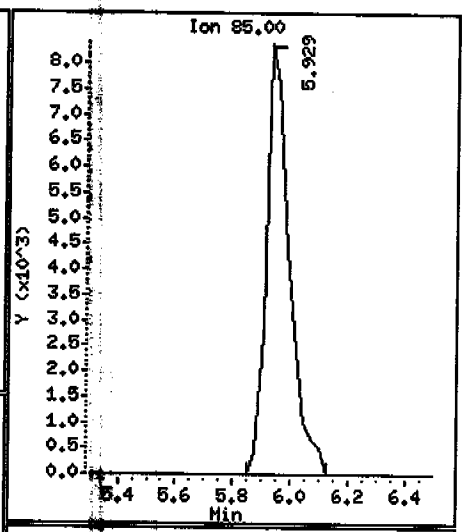
Column phase: RTx-624

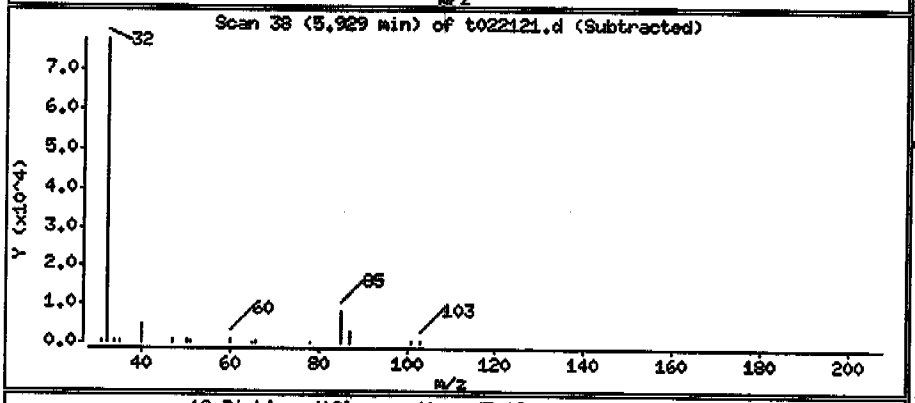
Column diameter: 0.53

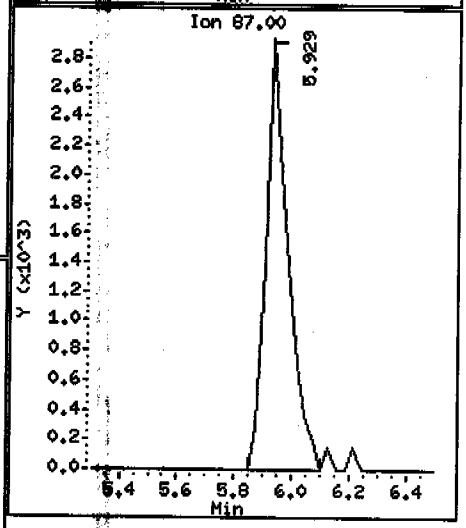
12 Dichlorodifluoromethane/Fr12

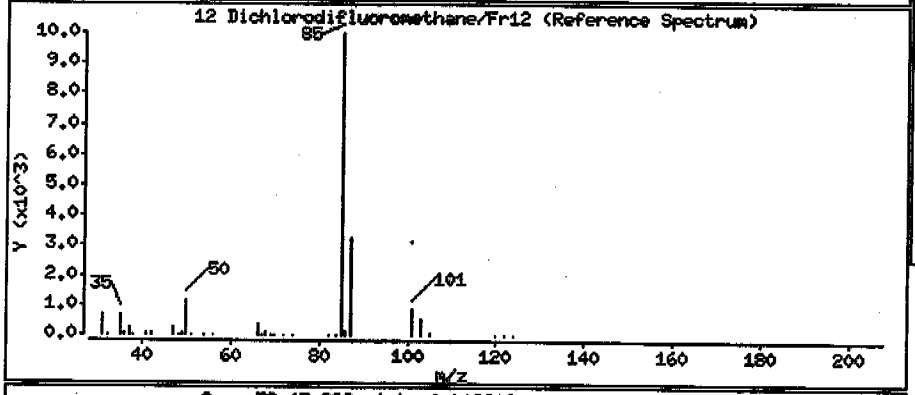
Concentration: 1.447 PPBV

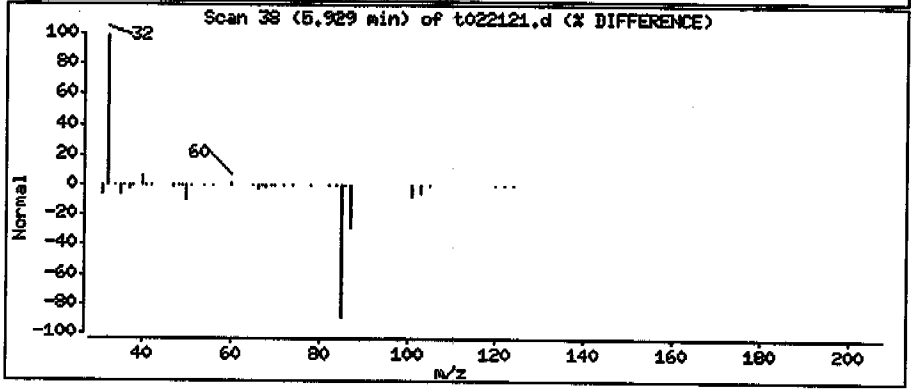












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

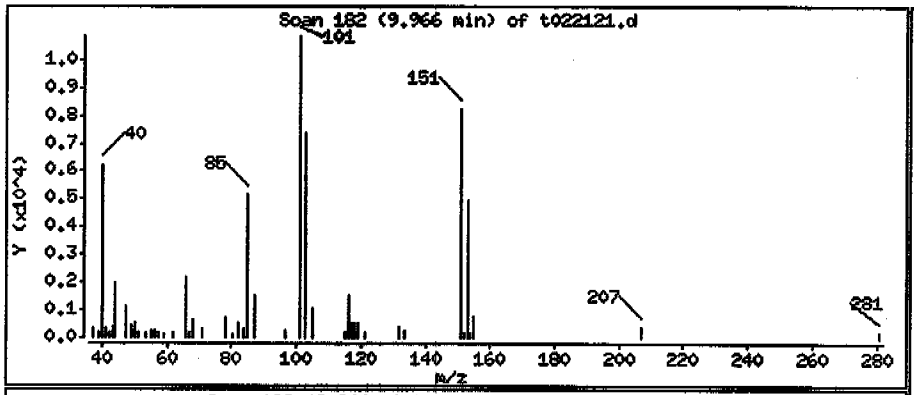
Operator: JP

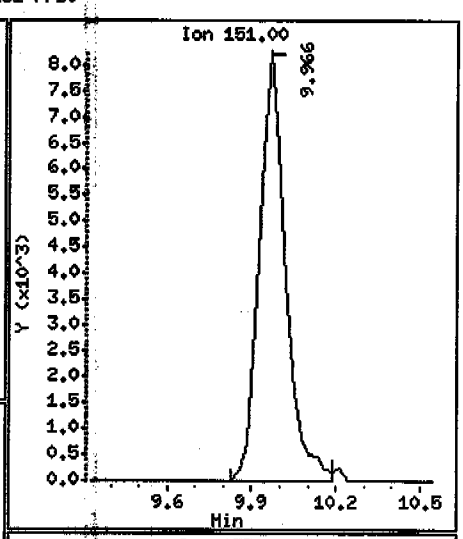
Column phase: RTx-624

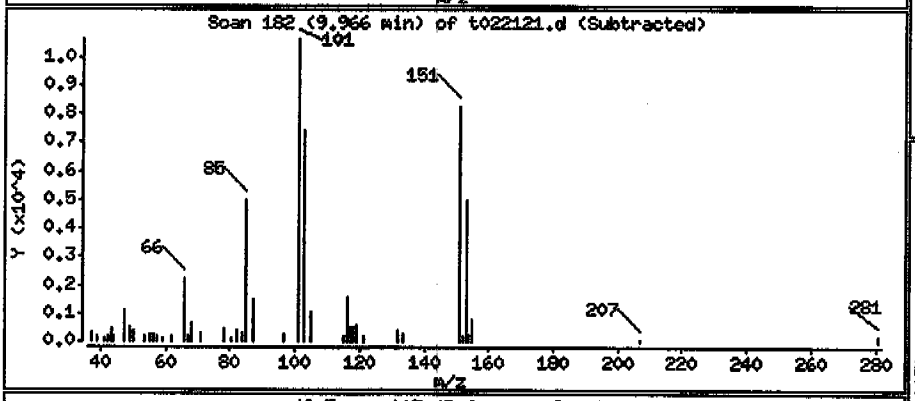
Column diameter: 0.53

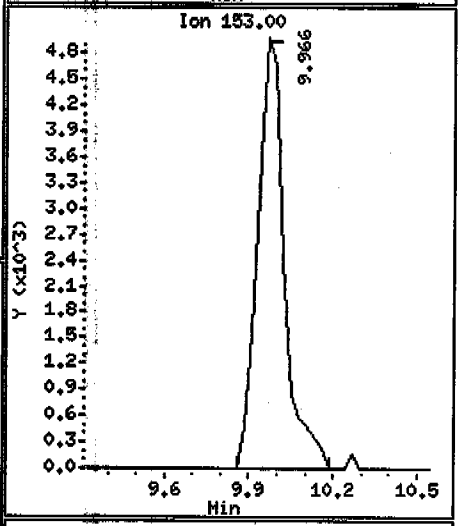
42 Freon 113

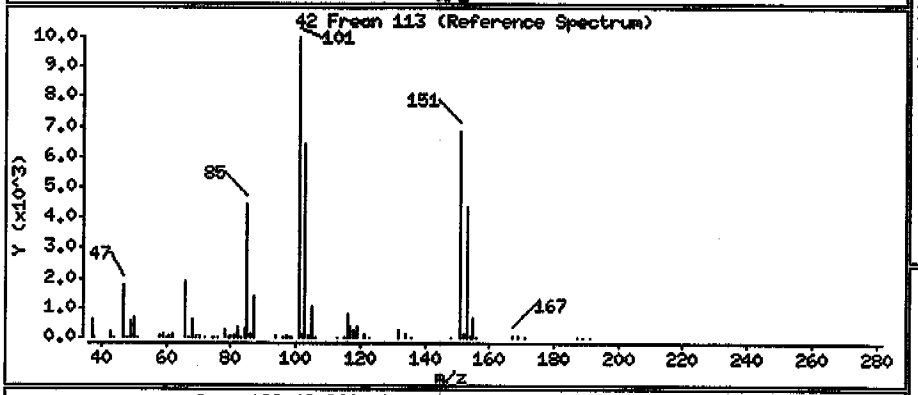
Concentration: 3.161 PPBV

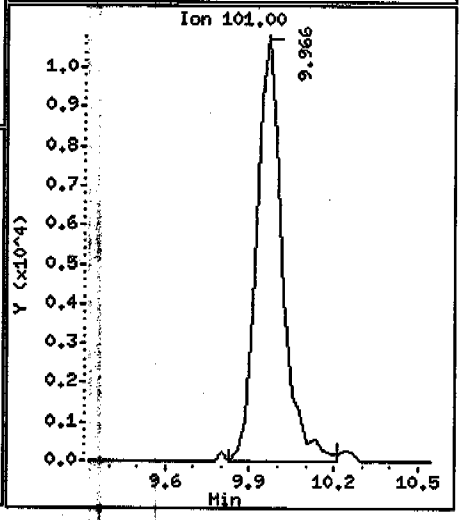


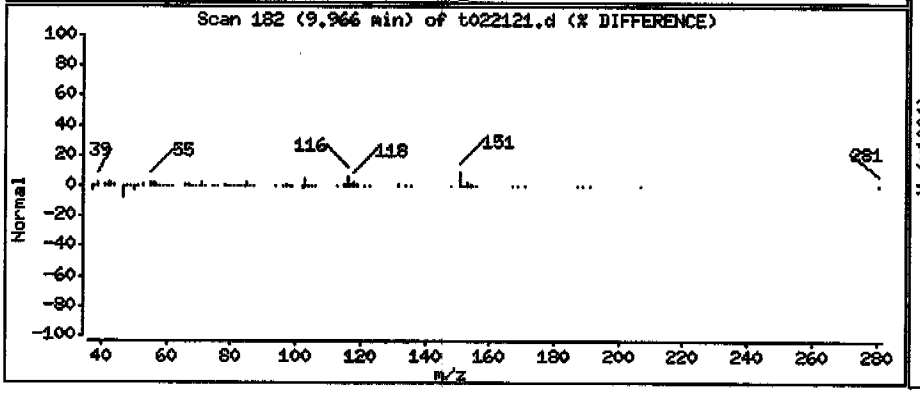












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

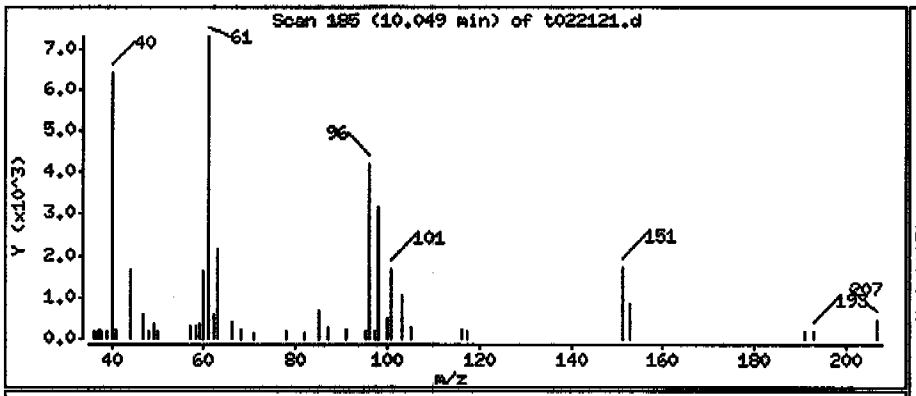
Operator: JP

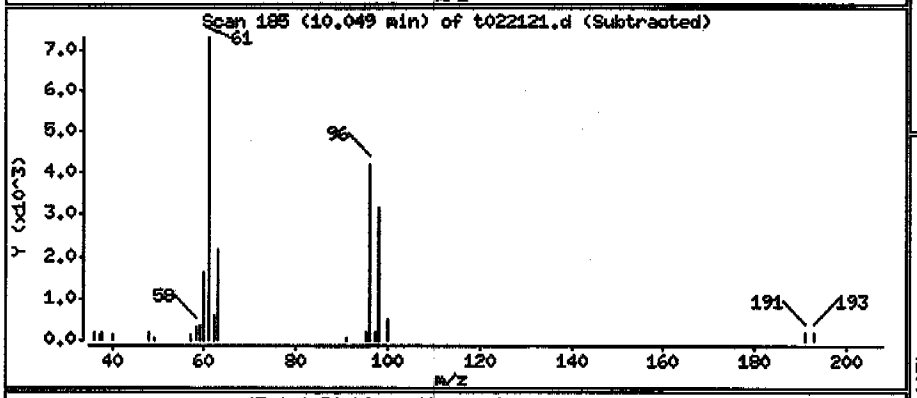
Column phase: RTx-624

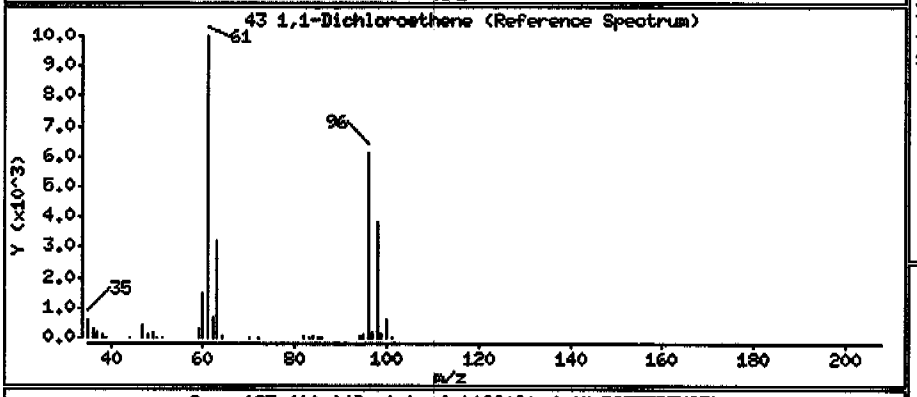
Column diameter: 0.53

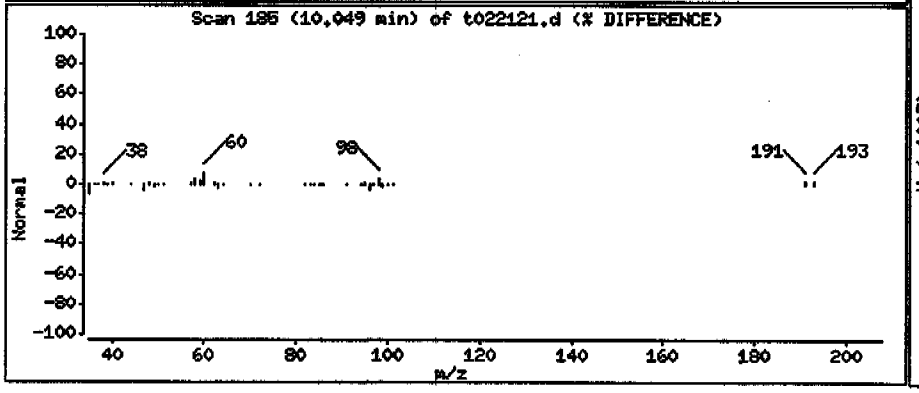
43 1,1-Dichloroethene

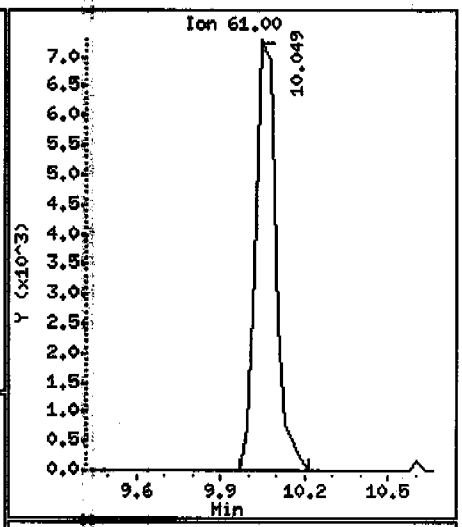
Concentration: 2.397 PPBV

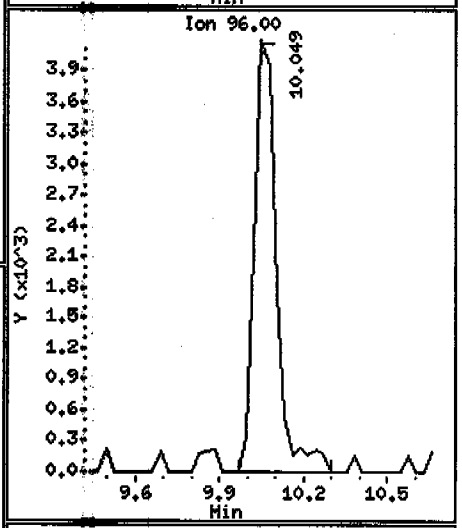


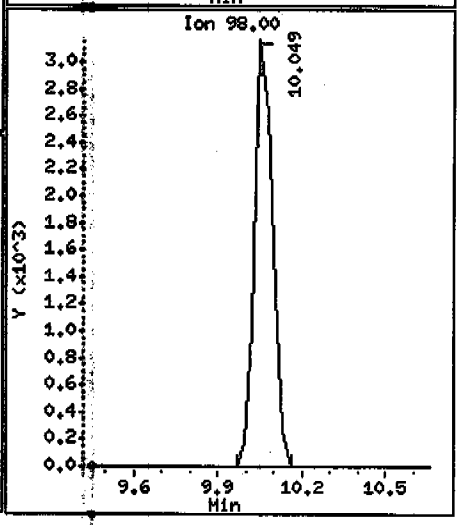












Data File: /ohem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

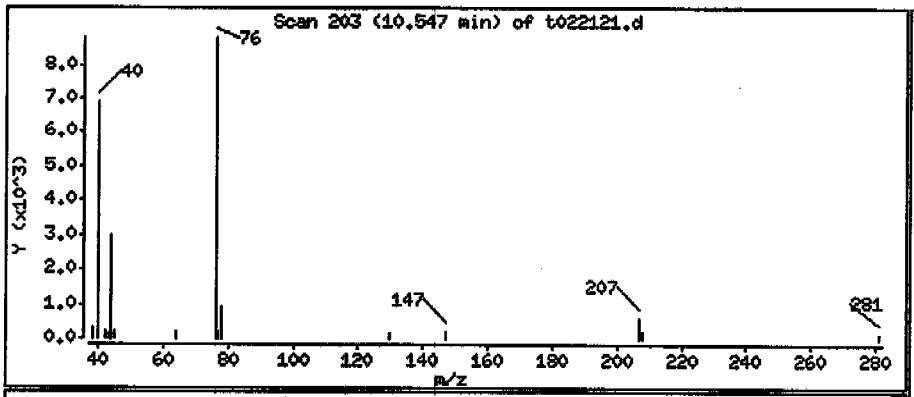
Operator: JP

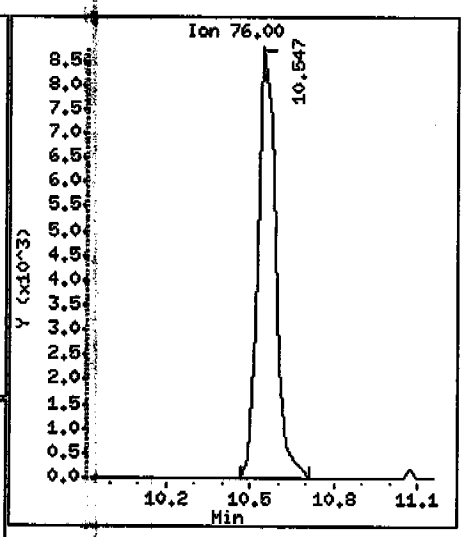
Column phase: RTx-624

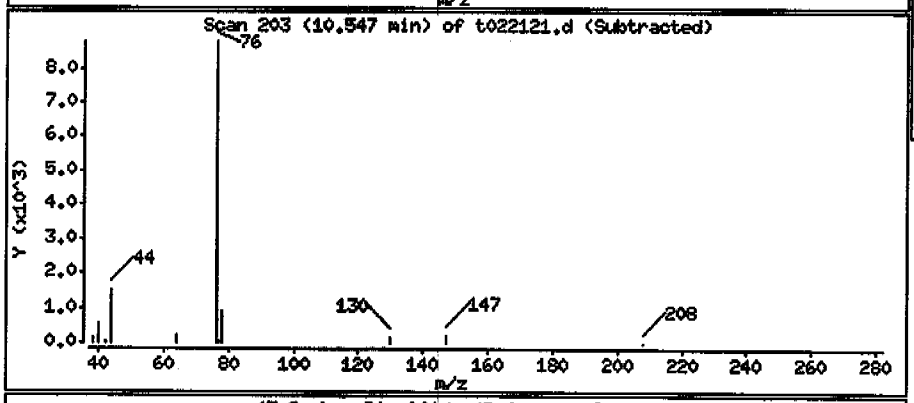
Column diameter: 0.53

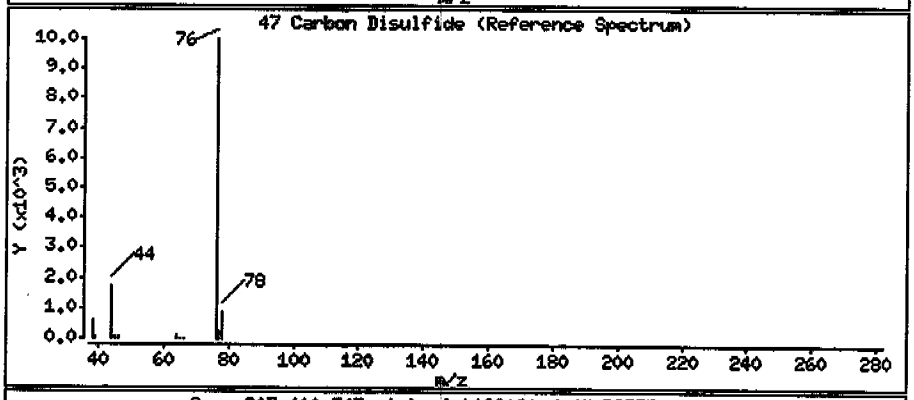
47 Carbon Disulfide

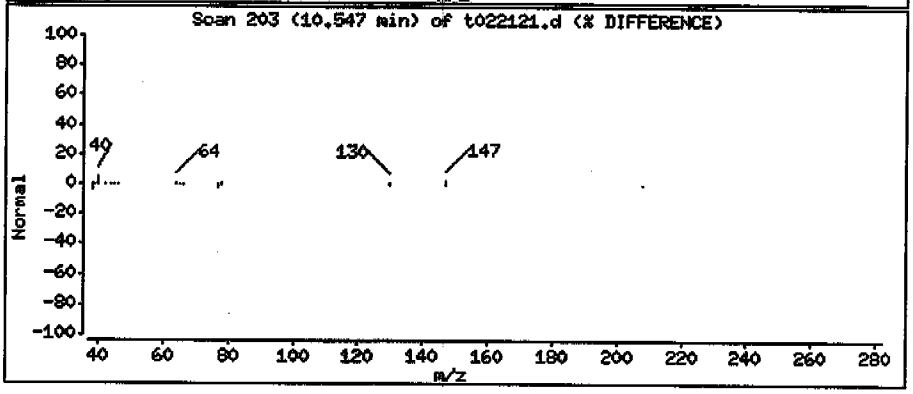
Concentration: 1.309 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

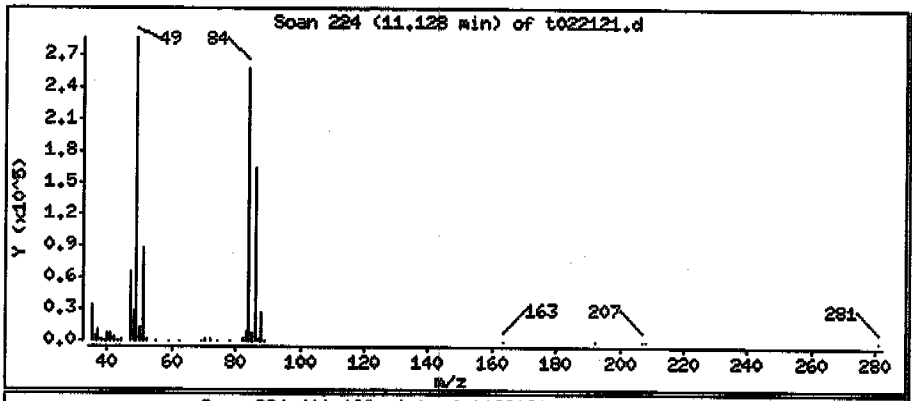
Operator: JP

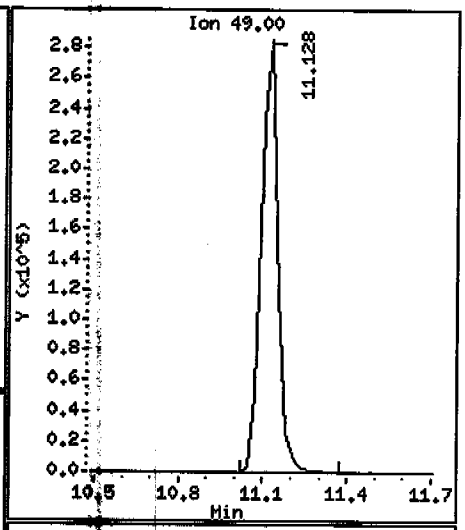
Column phase: RTx-624

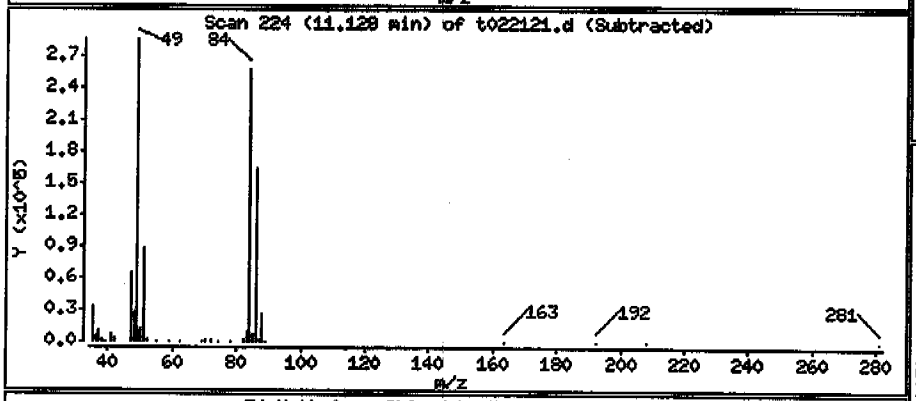
Column diameter: 0.53

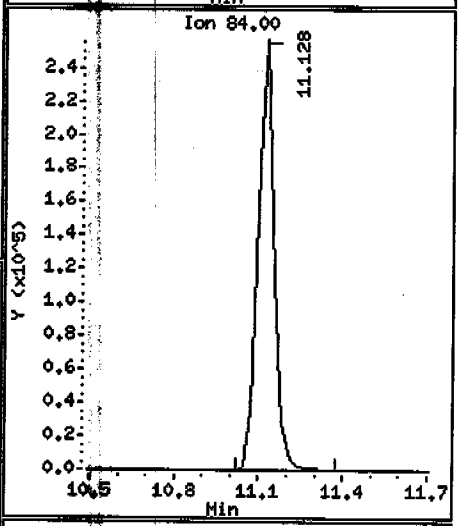
54 Methylene Chloride

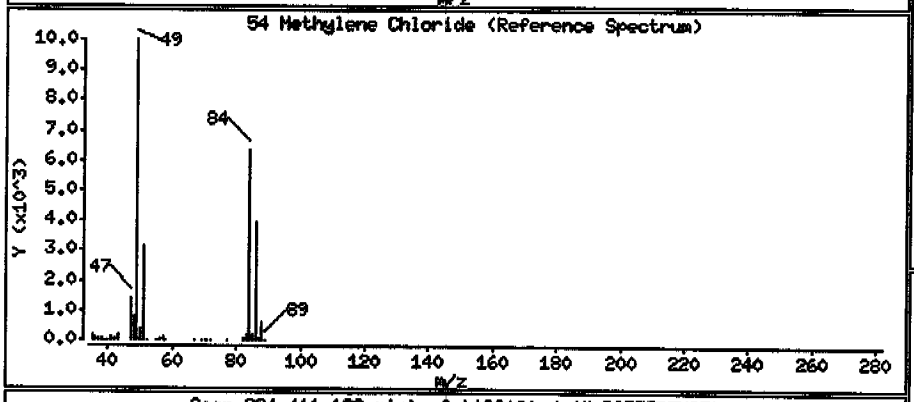
Concentration: 123.48 PPBV

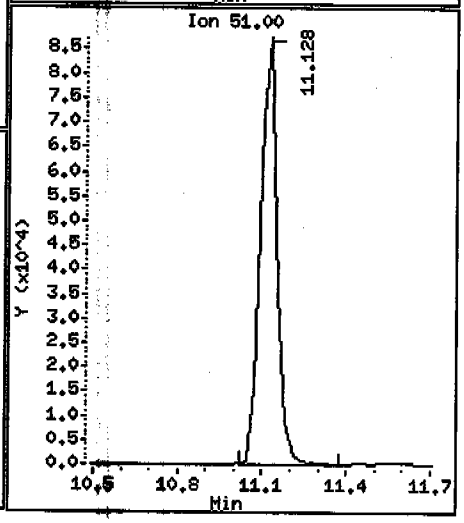


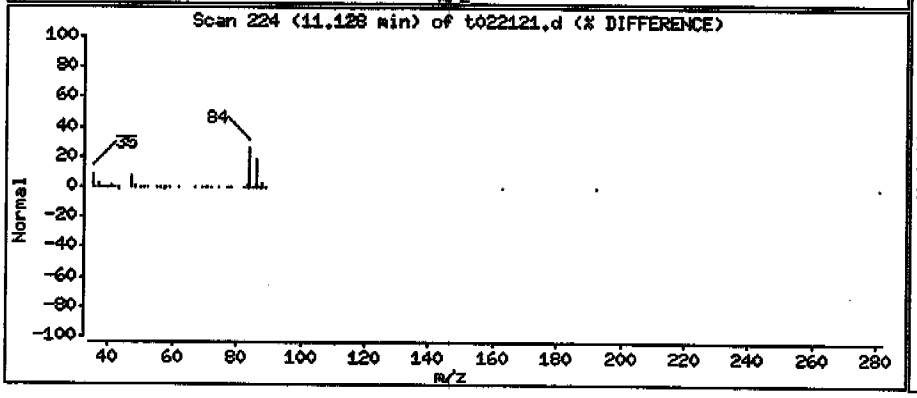












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

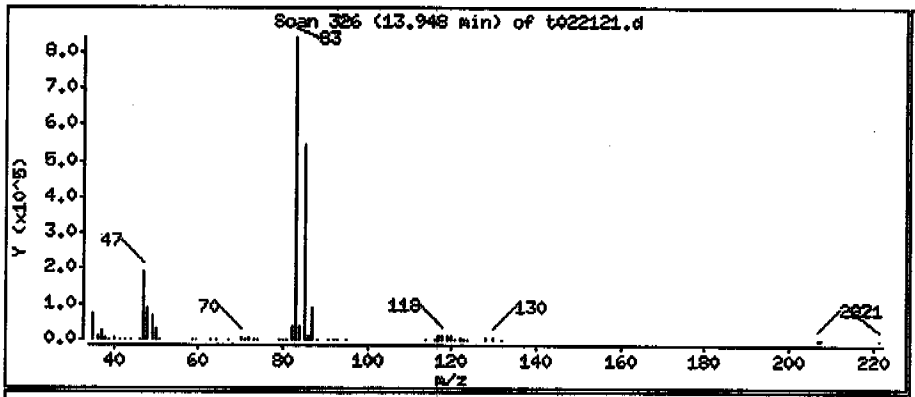
Operator: JP

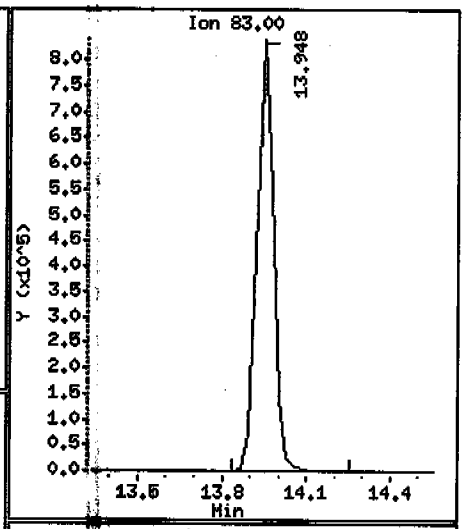
Column phase: RTx-624

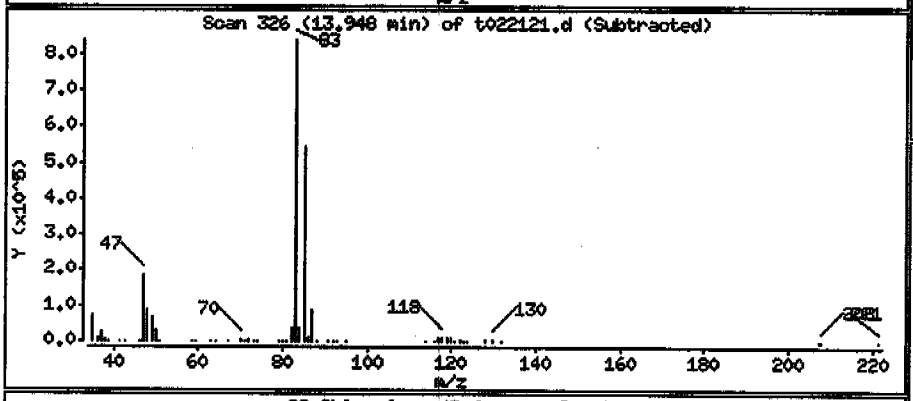
Column diameter: 0.53

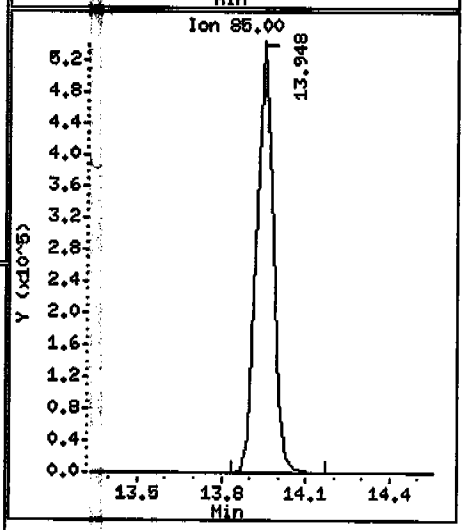
82 Chloroform

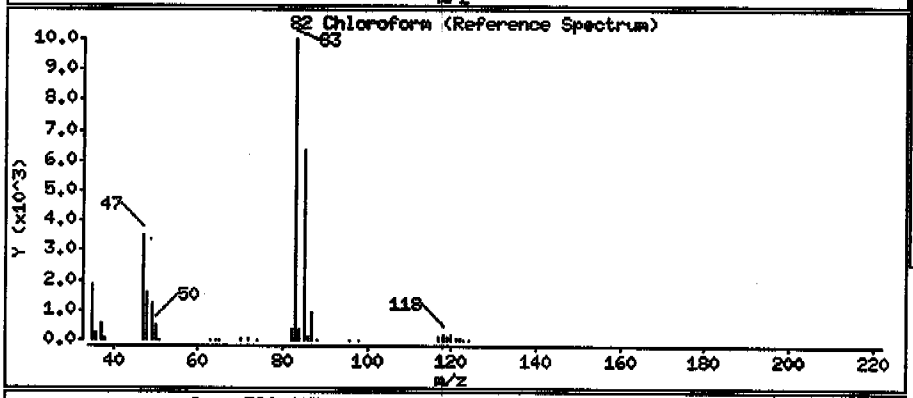
Concentration: 141.06 PPBV

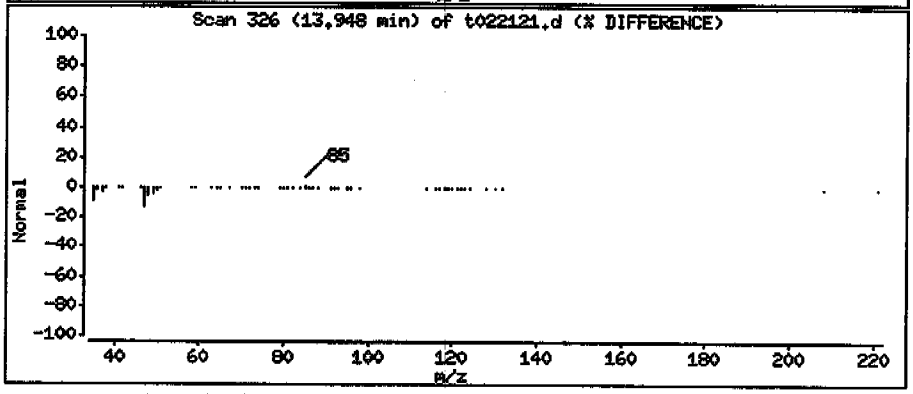












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

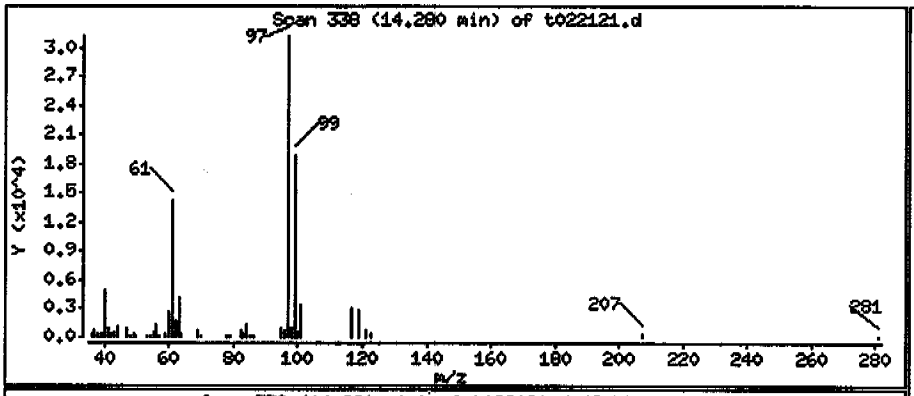
Operator: JP

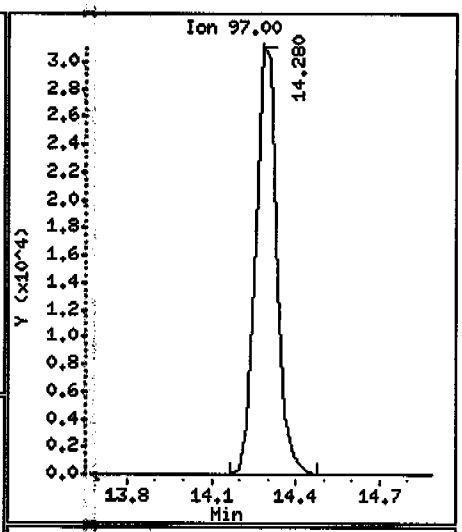
Column phase: RTx-624

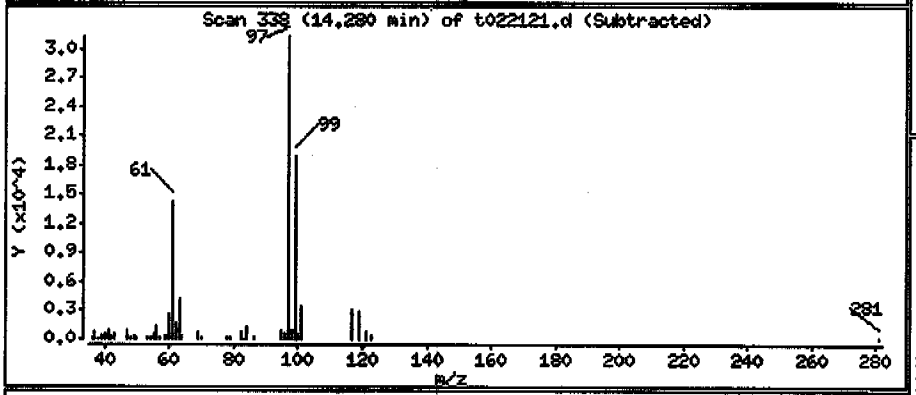
Column diameter: 0.53

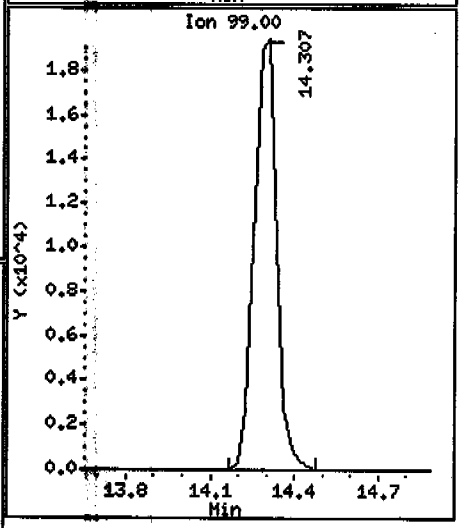
83 1,1,1-Trichloroethane

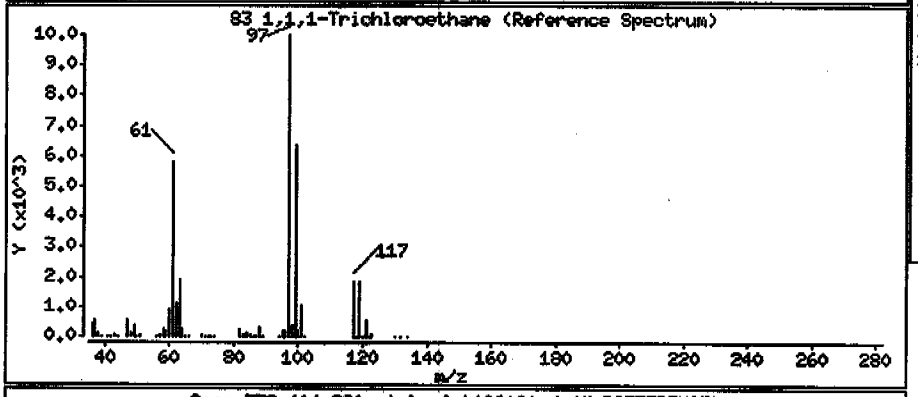
Concentration: 6.130 PPBV

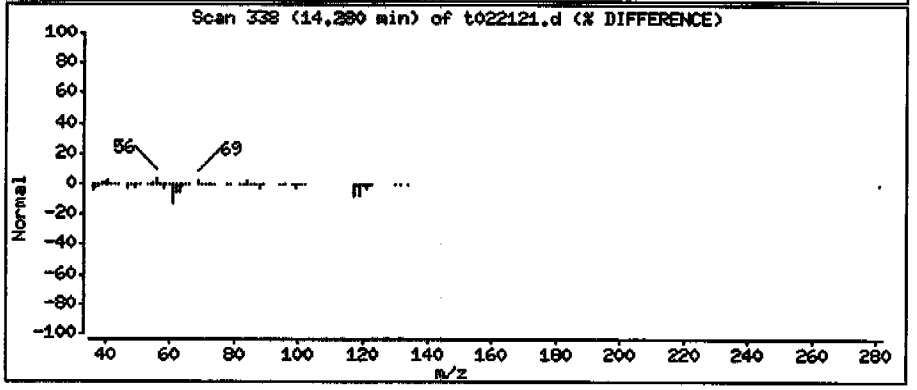












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

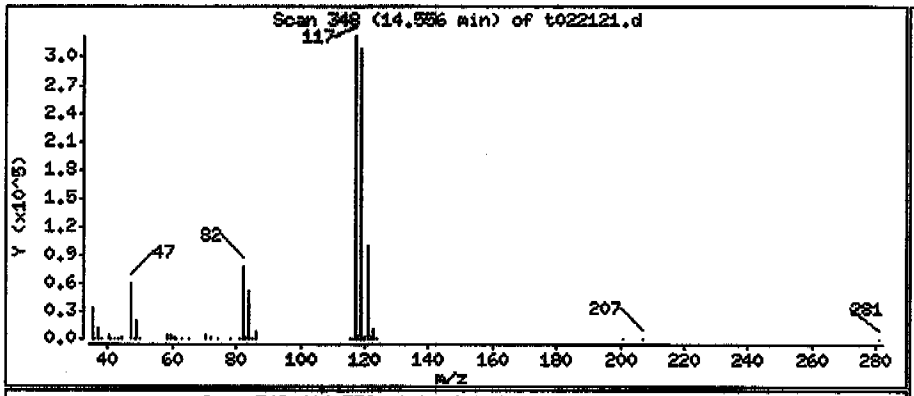
Operator: JP

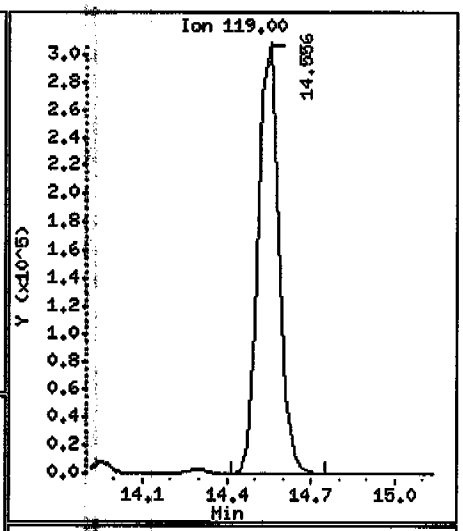
Column phase: RTx-624

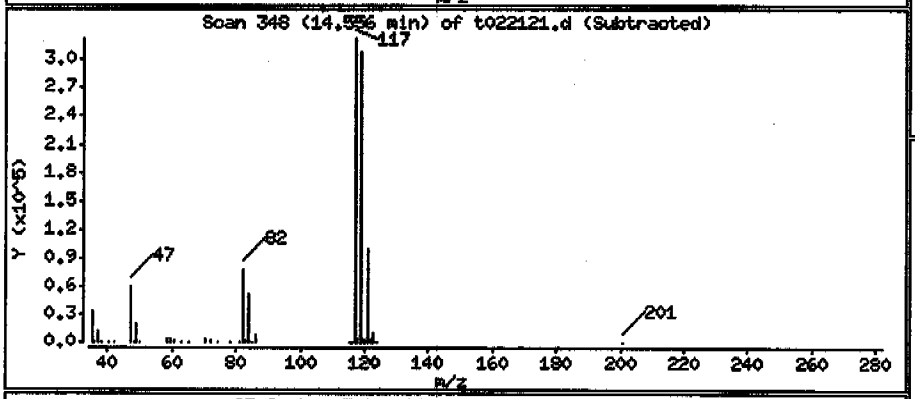
Column diameter: 0.53

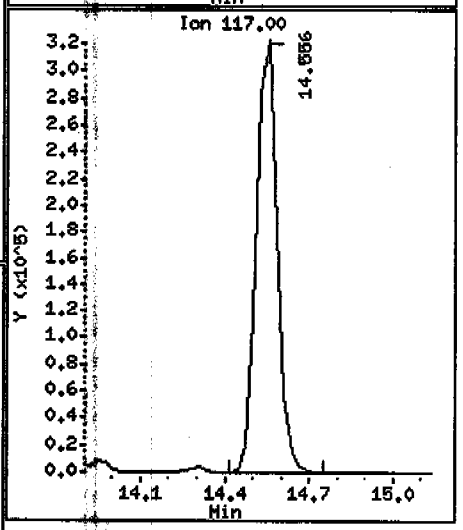
87 Carbon Tetrachloride

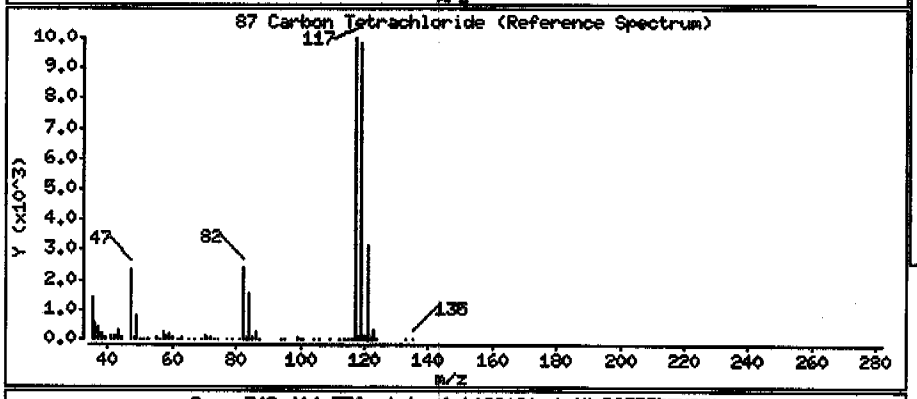
Concentration: 60.951 PPBV

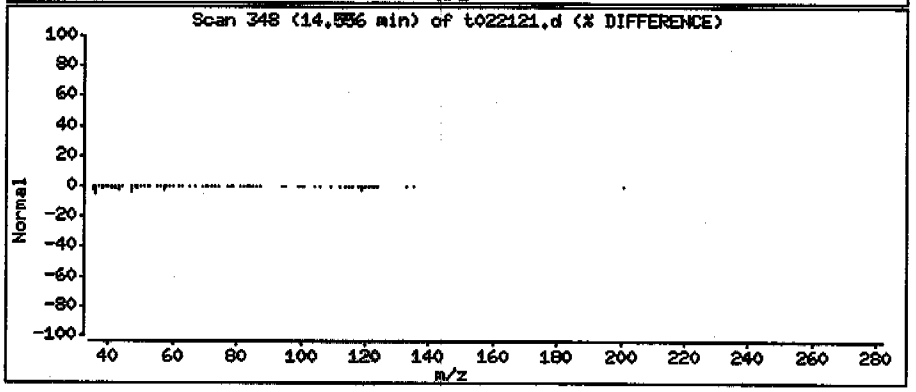












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

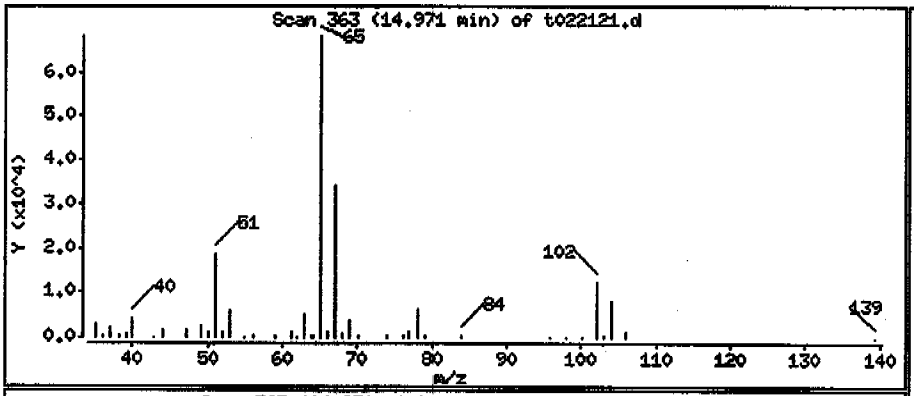
Operator: JP

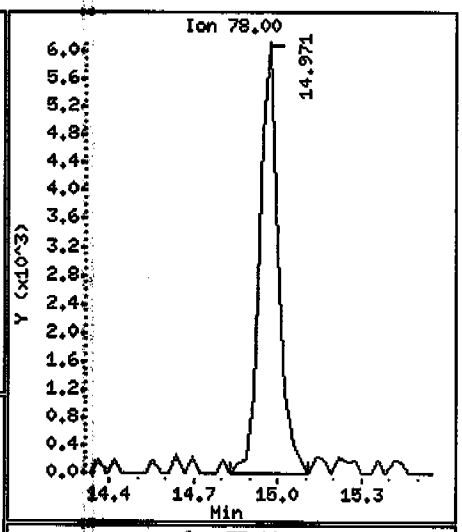
Column phase: RTx-624

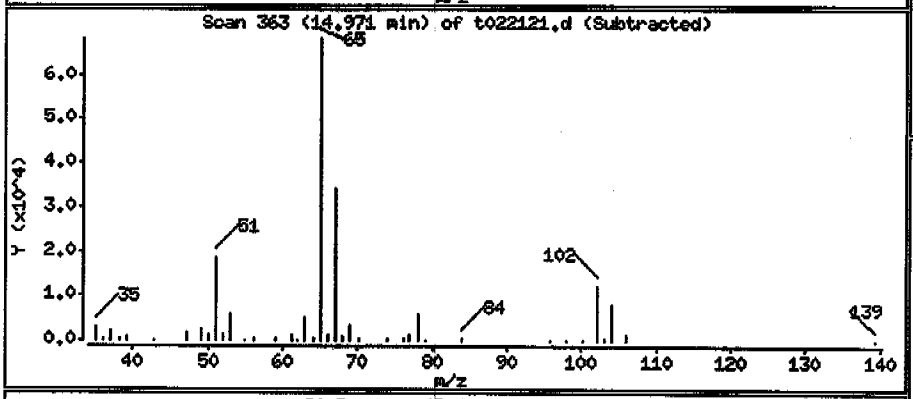
Column diameter: 0.53

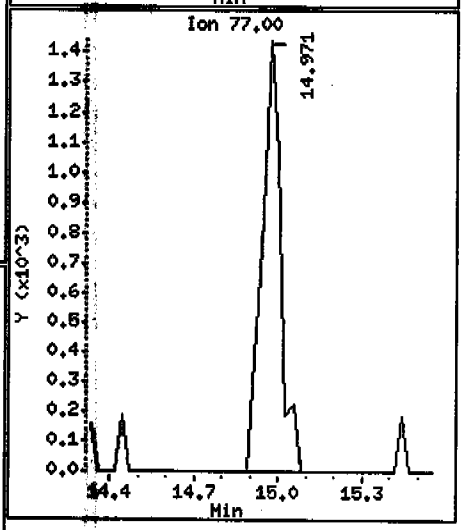
91 Benzene

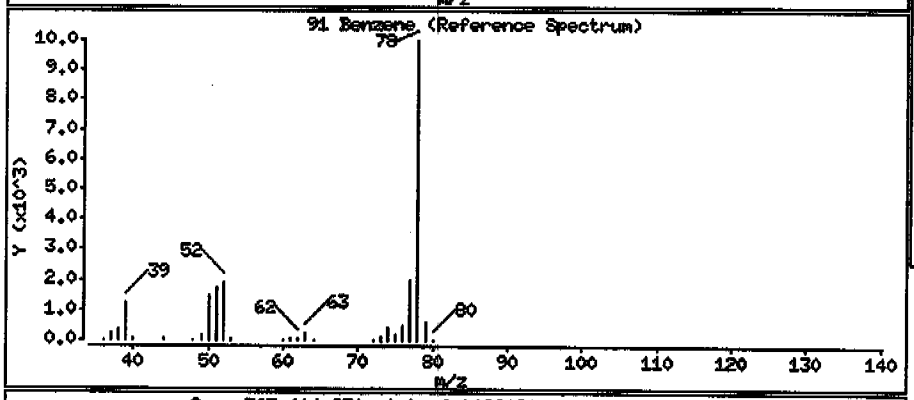
Concentration: 0.9282 PPBV

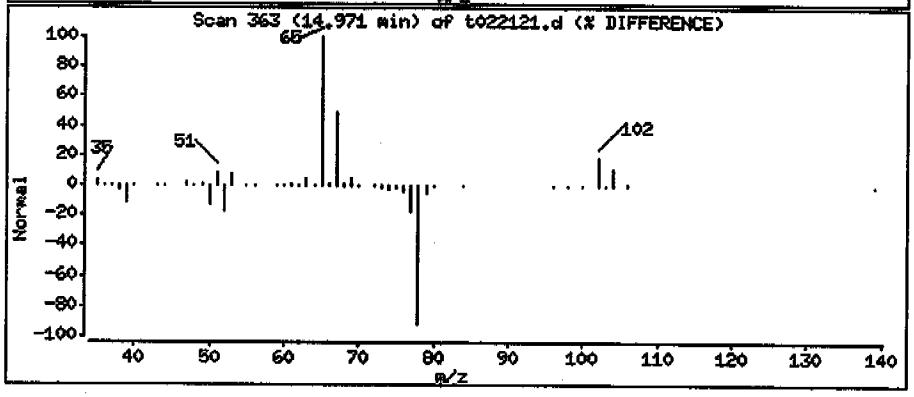












Data File: /ohem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

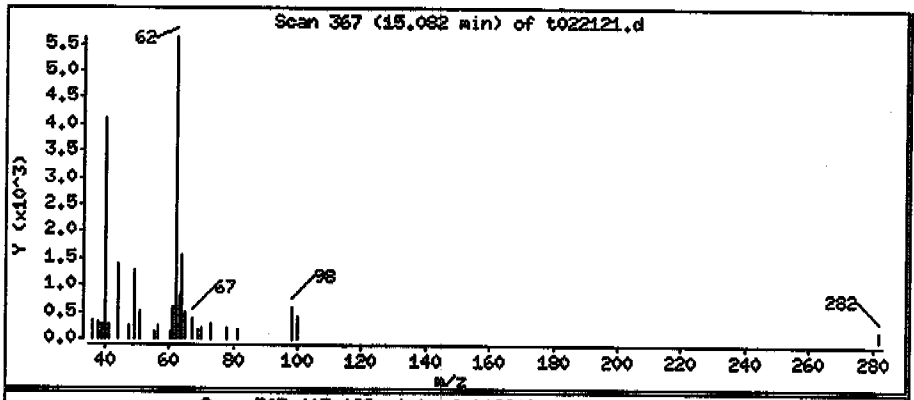
Operator: JP

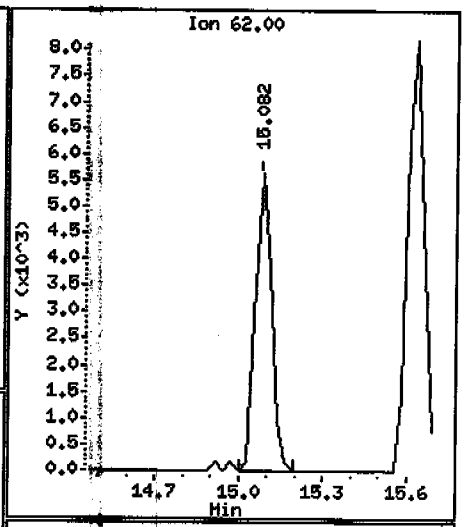
Column phase: RTx-624

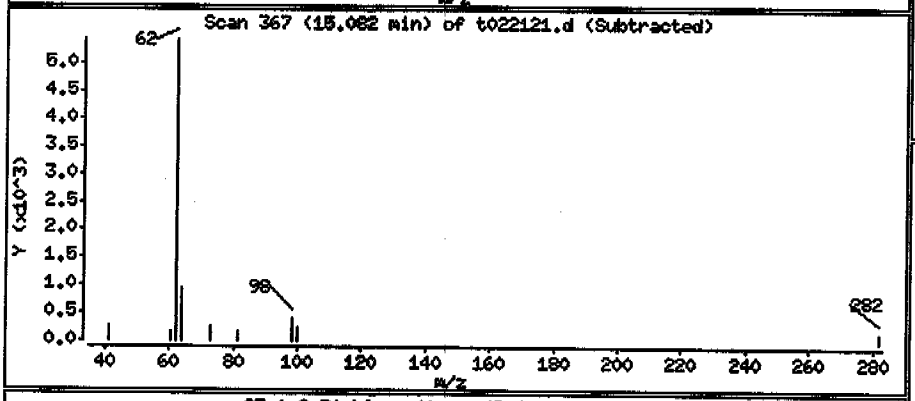
Column diameter: 0.53

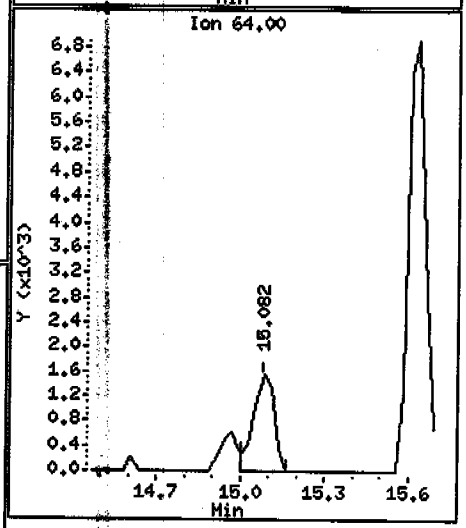
93 1,2-Dichloroethane

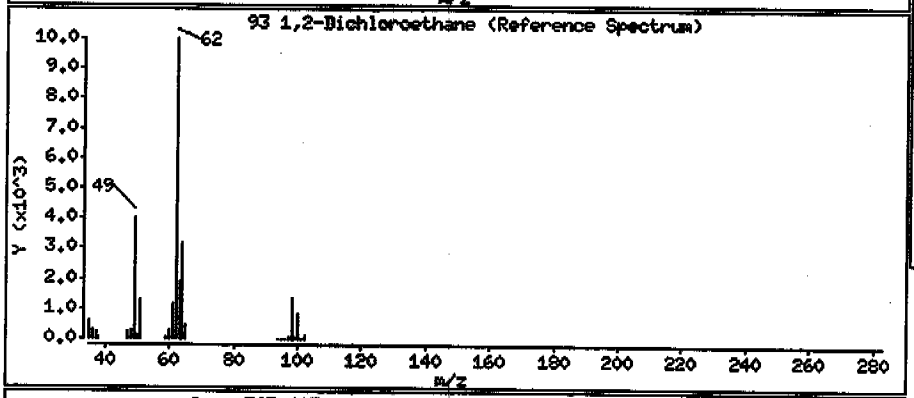
Concentration: 1.496 PPBV

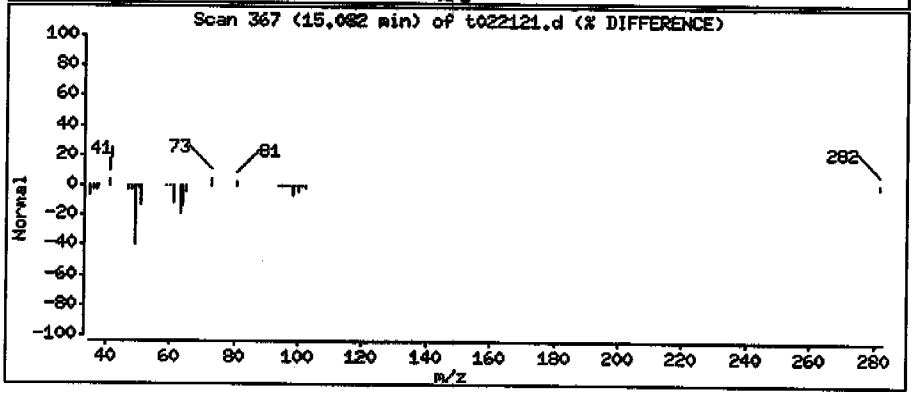












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

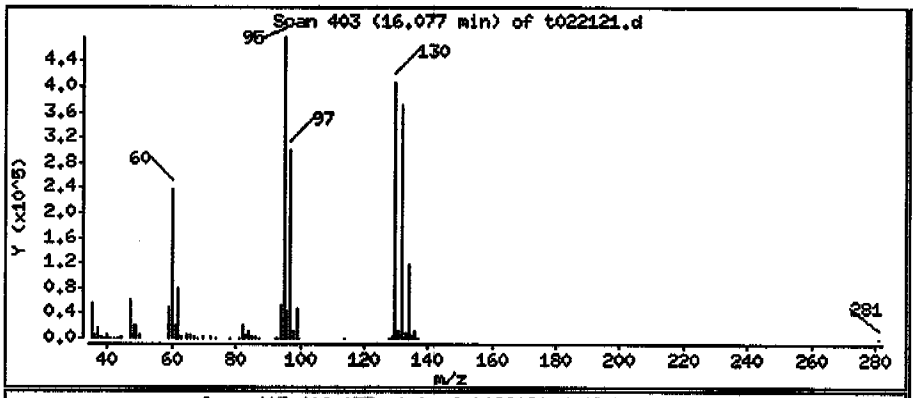
Operator: JP

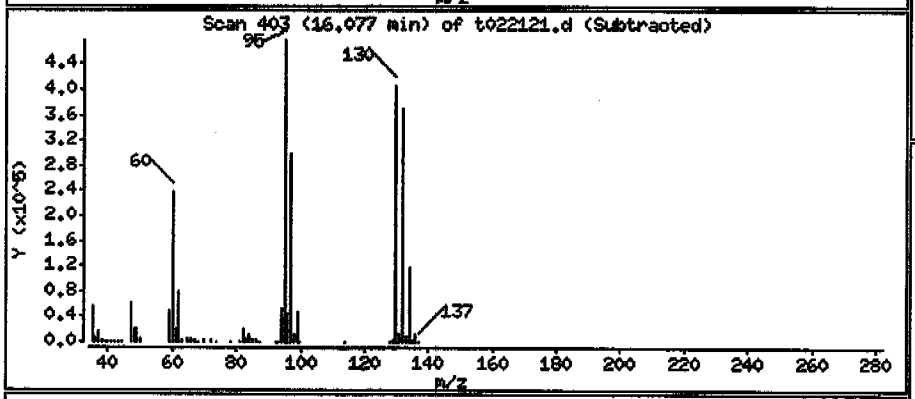
Column phase: RTx-624

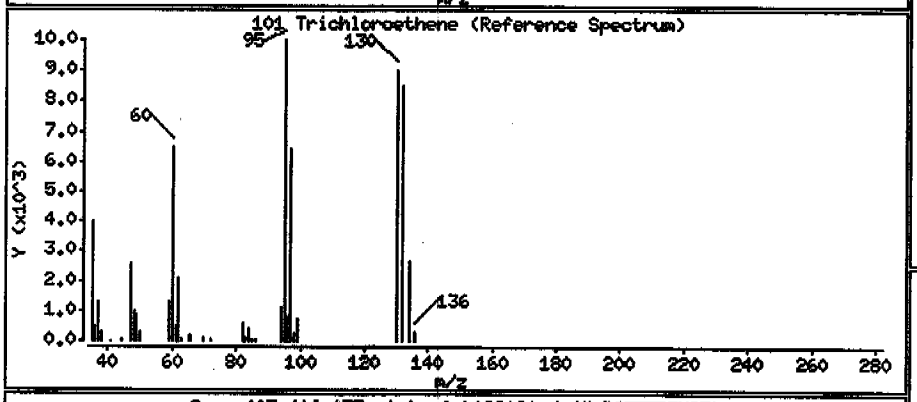
Column diameter: 0.53

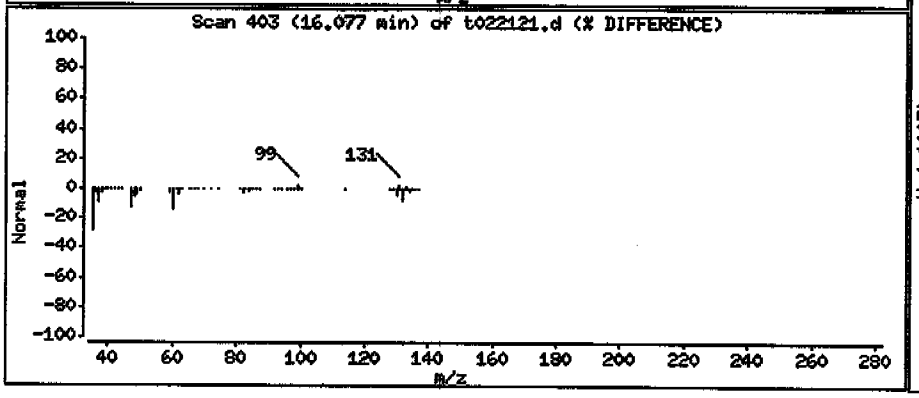
101 Trichloroethene

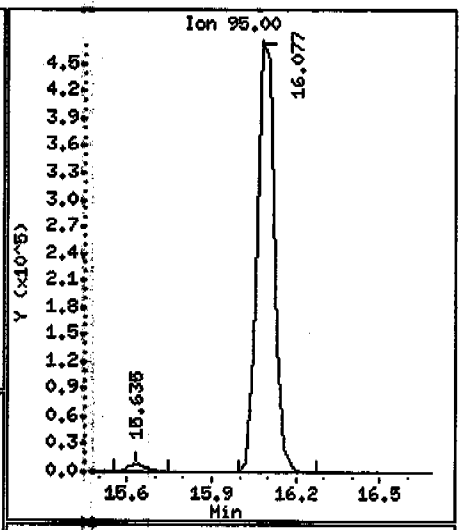
Concentration: 154.73 PPBV

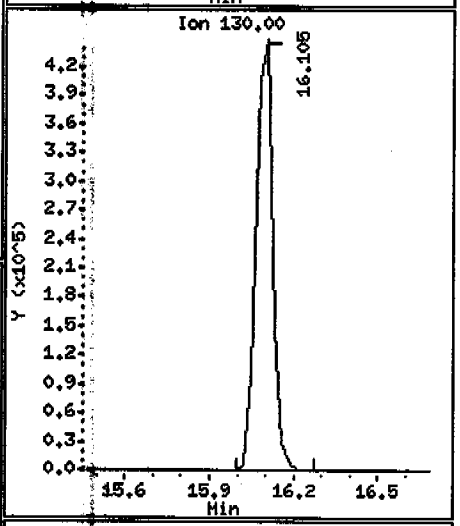


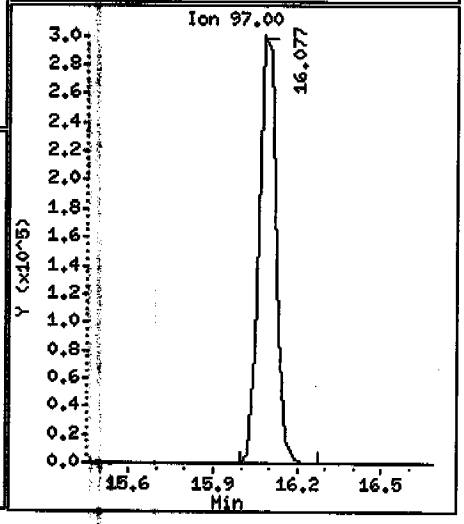












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Instrument: msdt.i

Sample Info: 200mL #23996

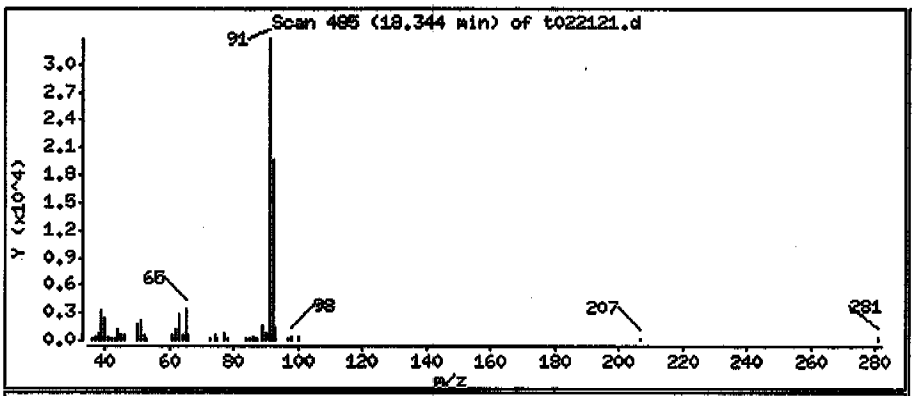
Operator: JP

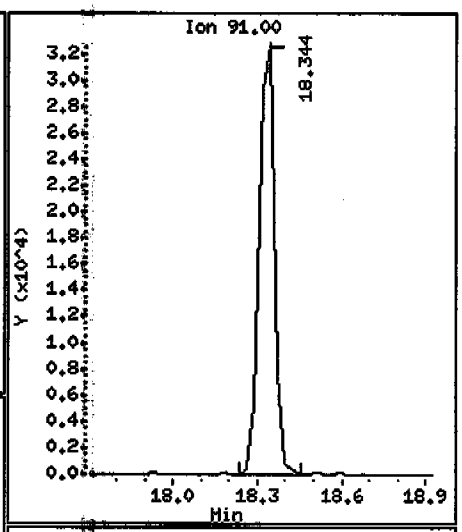
Column phase: RTx-624

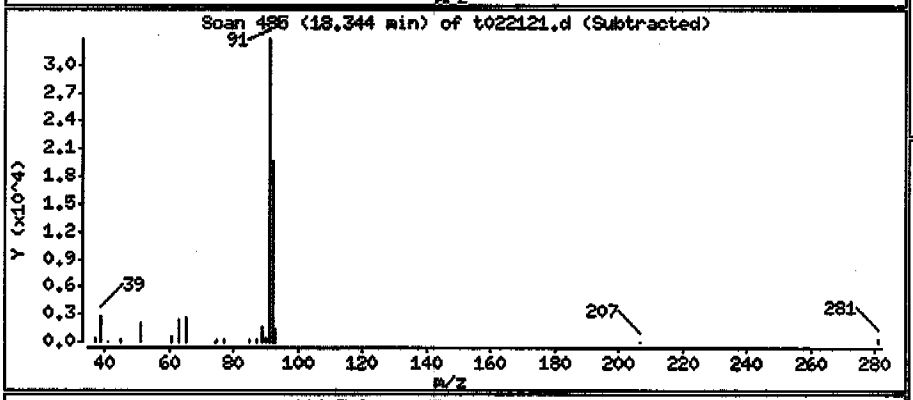
Column diameter: 0.53

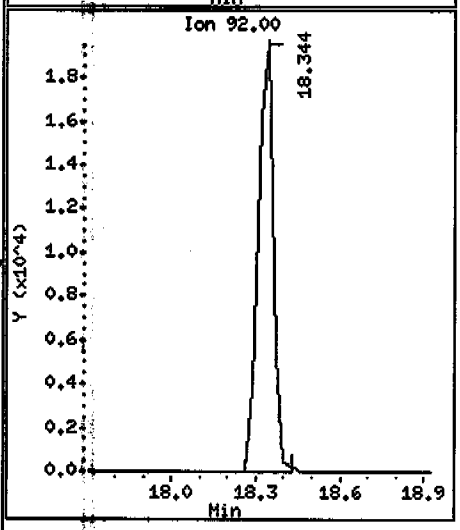
114 Toluene

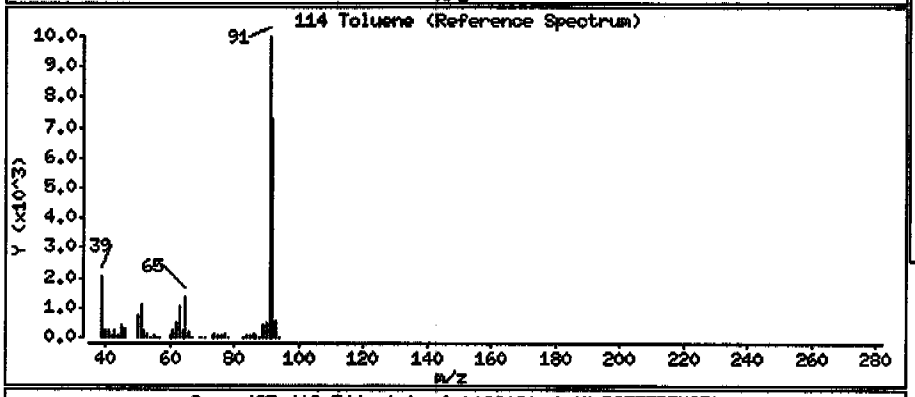
Concentration: 3.846 PPBV

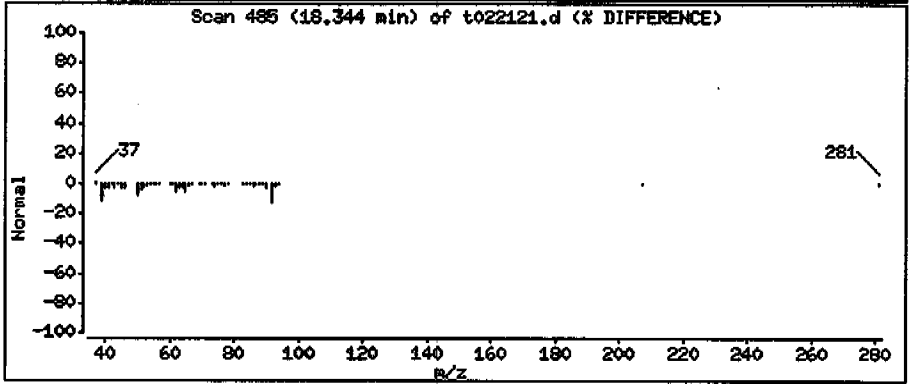












Data File: /chem/msdt.i/21Feb2008.b/t022121.d

Date : 22-FEB-2008 02:21

Client ID:

Sample Info: 200mL #23996

Instrument: msdt.i

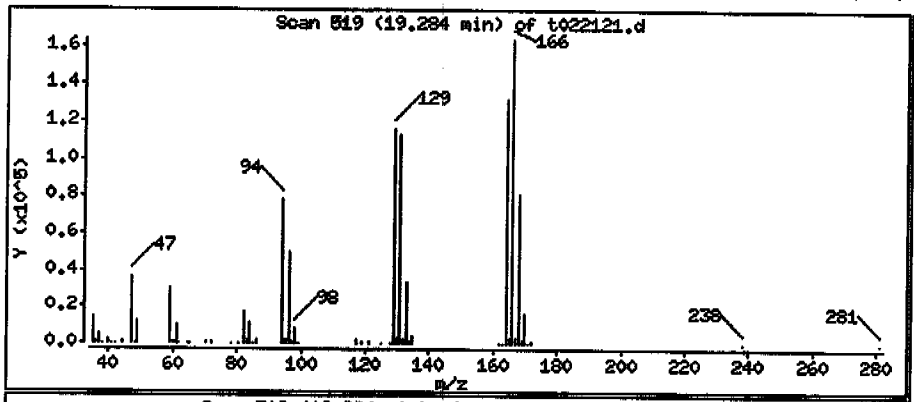
Operator: JP

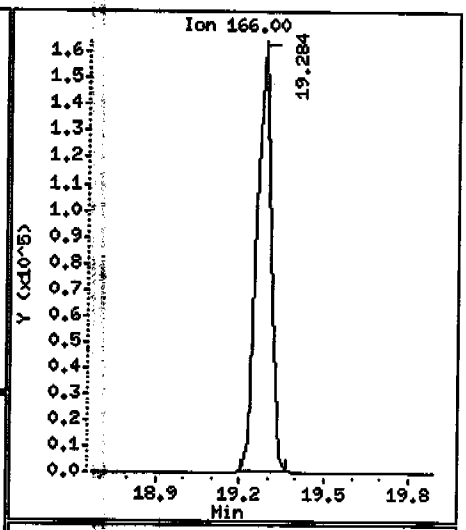
Column phase: RTx-624

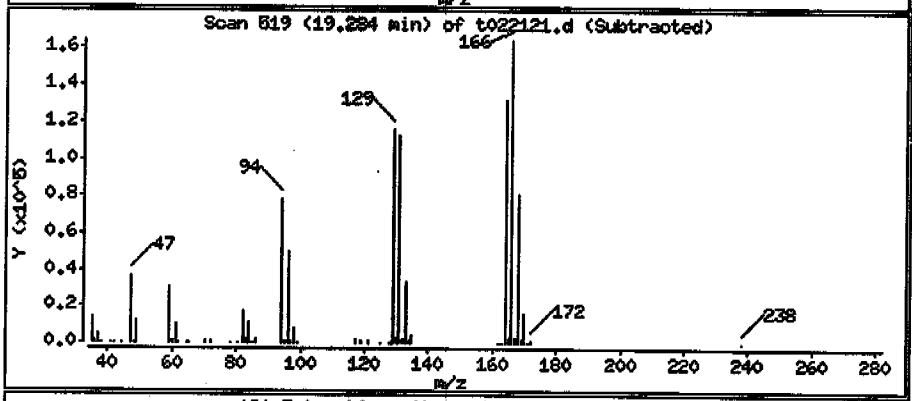
Column diameter: 0.53

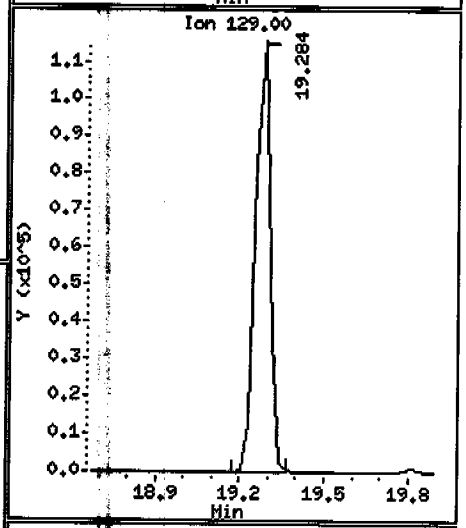
120 Tetrachloroethene

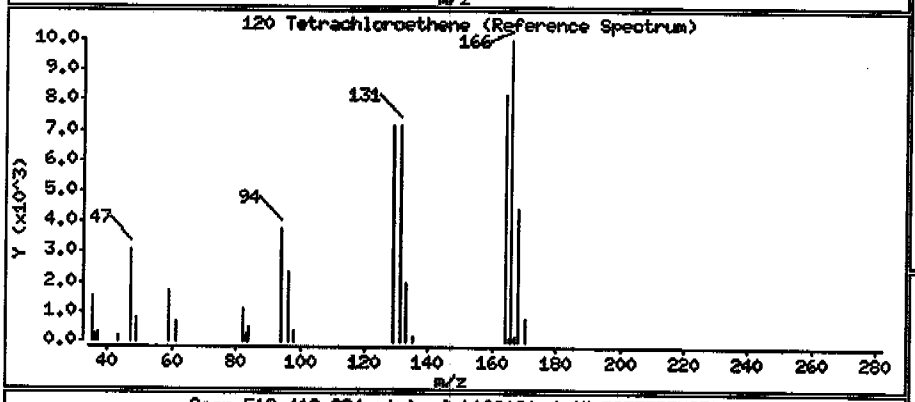
Concentration: 32.038 PPBV

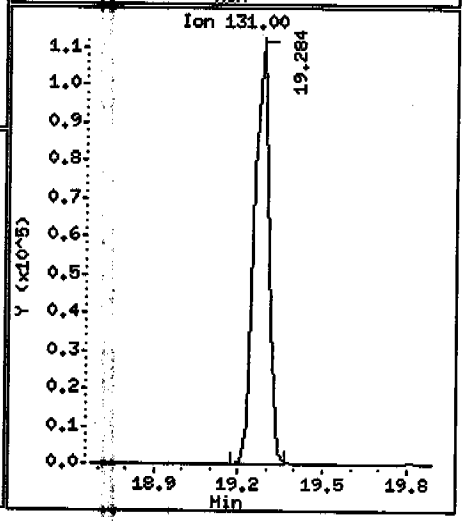


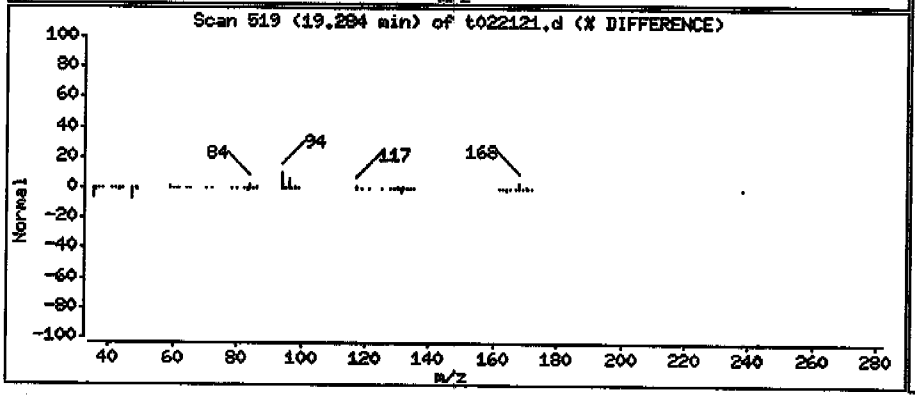












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10507

Lab ID#: 0802283-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	1.9	8.4	9.4
Freon 113	1.7	5.6	13	43
1,1-Dichloroethene	1.7	4.8	6.8	19
Carbon Disulfide	1.7	2.3	5.3	7.1
Methylene Chloride	1.7	420	5.9	1500
Chloroform	1.7	240	8.3	1200
1,1,1-Trichloroethane	1.7	7.4	9.3	40
Carbon Tetrachloride	1.7	120	11	760
Trichloroethene	1.7	270	9.2	1500
1,1,2-Trichloroethane	1.7	8.2	9.3	45
Tetrachloroethene	1.7	27	12	180
1,4-Dichlorobenzene	1.7	2.0	10	12

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10507

Lab ID#: 0802283-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	1.9	8.4	9.4
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.8	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.4	Not Detected
1,3-Butadiene	1.7	Not Detected	3.8	Not Detected
Bromomethane	1.7	Not Detected	6.6	Not Detected
Chloroethane	1.7	Not Detected	4.5	Not Detected
Freon 11	1.7	Not Detected	9.6	Not Detected
Ethanol	6.8	Not Detected	13	Not Detected
Freon 113	1.7	5.6	13	43
1,1-Dichloroethene	1.7	4.8	6.8	19
Acetone	6.8	Not Detected	16	Not Detected
2-Propanol	6.8	Not Detected	17	Not Detected
Carbon Disulfide	1.7	2.3	5.3	7.1
Methylene Chloride	1.7	420	5.9	1500
Methyl tert-butyl ether	1.7	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Hexane	1.7	Not Detected	6.0	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Tetrahydrofuran	1.7	Not Detected	5.0	Not Detected
Chloroform	1.7	240	8.3	1200
1,1,1-Trichloroethane	1.7	7.4	9.3	40
Cyclohexane	1.7	Not Detected	5.9	Not Detected
Carbon Tetrachloride	1.7	120	11	760
Benzene	1.7	Not Detected	5.5	Not Detected
1,2-Dichloroethane	1.7	Not Detected	6.9	Not Detected
Heptane	1.7	Not Detected	7.0	Not Detected
Trichloroethene	1.7	270	9.2	1500
1,2-Dichloropropane	1.7	Not Detected	7.9	Not Detected
1,4-Dioxane	6.8	Not Detected	25	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.8	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	7.0	Not Detected
Toluene	1.7	Not Detected	6.4	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.7	8.2	9.3	45
Tetrachloroethene	1.7	27	12	180

0070

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10507

Lab ID#: 0802283-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.8	Not Detected	28	Not Detected
Dibromochloromethane	1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected
Chlorobenzene	1.7	Not Detected	7.9	Not Detected
Ethyl Benzene	1.7	Not Detected	7.4	Not Detected
m,p-Xylene	1.7	Not Detected	7.4	Not Detected
o-Xylene	1.7	Not Detected	7.4	Not Detected
Styrene	1.7	Not Detected	7.3	Not Detected
Bromoform	1.7	Not Detected	18	Not Detected
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected
4-Ethyltoluene	1.7	Not Detected	8.4	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene	1.7	2.0	10	12
alpha-Chlorotoluene	1.7	Not Detected	8.8	Not Detected
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	6.8	Not Detected	51	Not Detected
Hexachlorobutadiene	6.8	Not Detected	73	Not Detected
Chlorodifluoromethane	6.8	Not Detected	24	Not Detected
Methanol	170	Not Detected	220	Not Detected
n-Butanol	6.8	Not Detected	21	Not Detected
Propylene	6.8	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	103	70-130

0071

Data File: /chem/msdt.i/21Feb2008.b/t022125.d
Report Date: 27-Feb-2008 14:44

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022125.d
Lab Smp Id: 0802283-04A
Inj Date : 22-FEB-2008 05:10
Operator : JP Inst ID: msdt.i
Smp Info : 100mL #35171
Misc Info : 5.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 3.42000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	241834	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	187158			27.38- 127.38	77.39
13.893	13.865 (1.000)	49	497925			131.81- 231.81	205.90
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	943008	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	156694			0.00- 66.79	16.62
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	908844	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	524385			7.58- 107.58	57.70
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.943 (1.076)	65	420423	27.0177	27.018	80.00- 120.00	100.00
14.944	14.943 (1.076)	67	205868			3.57- 103.57	48.97
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	954029	26.2639	26.264	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	106910			0.00- 61.29	11.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	653707			18.71- 118.71	68.52
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	605742	25.7673	25.767	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	766759			76.46- 176.46	126.58
22.796	22.796 (1.096)	176	574070			48.22- 148.22	94.77
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	26225	0.55535	1.899	80.00- 120.00	100.00
5.957	5.901 (0.429)	87	7343			0.00- 82.13	28.00
42 Freon 113					CAS #: 76-13-1		
9.967	9.939 (0.717)	151	40064	1.62757	5.566	80.00- 120.00	100.00
9.967	9.939 (0.717)	153	23221			13.46- 113.46	57.96
9.967	9.939 (0.717)	101	48444			82.30- 182.30	120.92
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.723)	61	30885	1.39391	4.767	80.00- 120.00	100.00
10.077	10.050 (0.725)	96	17208			9.56- 109.56	55.72
10.077	10.050 (0.725)	98	10828			0.00- 88.43	35.06
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	27928	0.66638	2.279	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	1729996	123.475	422.28	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	1441385			38.51- 138.51	83.32
11.128	11.100 (0.801)	51	526352			0.00- 83.83	30.43
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	2525670	71.9072	245.92	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1649328			14.81- 114.81	65.30
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.308	14.280 (1.030)	97	83597	2.15180	7.359	80.00- 120.00	100.00
14.308	14.280 (1.030)	99	49755			14.28- 114.28	59.52
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	1312070	35.1585	120.24	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	1377385			56.24- 156.24	104.98
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	1622370	80.3498	274.80	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	1493829			39.09- 139.09	92.08
16.105	16.077 (1.030)	97	1034806			12.68- 112.68	63.78

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.119	19.091	(0.919)	97	49541	2.39302	8.184	80.00- 120.00	100.00
19.119	19.091	(0.919)	99	31857			14.03- 114.03	64.30
19.119	19.091	(0.919)	83	40909			36.02- 136.02	82.58
120 Tetrachloroethene						CAS #: 127-18-4		
19.284	19.284	(0.927)	166	219613	7.91660	27.075	80.00- 120.00	100.00
19.284	19.284	(0.927)	129	154192			18.51- 118.51	70.21
19.284	19.284	(0.927)	131	148103			15.29- 115.29	67.44
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
24.731	24.731	(1.189)	146	31416	0.58527	2.002	80.00- 120.00	100.00
24.731	24.731	(1.189)	148	19901			16.09- 116.09	63.35
24.731	24.731	(1.189)	111	13069			0.00- 90.13	41.60

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022125.d
Lab Smp Id: 0802283-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: JP
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	241834	-23.99
97 1,4-Difluorobenze	1251468	750881	1752055	943008	-24.65
126 Chlorobenzene-d5	1150991	690595	1611387	908844	-21.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802283-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 5.5"Hg->5.0psi

Client SDG: 21Feb2008
Fraction: VOA

Operator: JP
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.018	108.07	70-130
$ 113 Toluene-d8	25.000	26.264	105.06	70-130
$ 137 Bromofluorobenzene	25.000	25.767	103.07	70-130

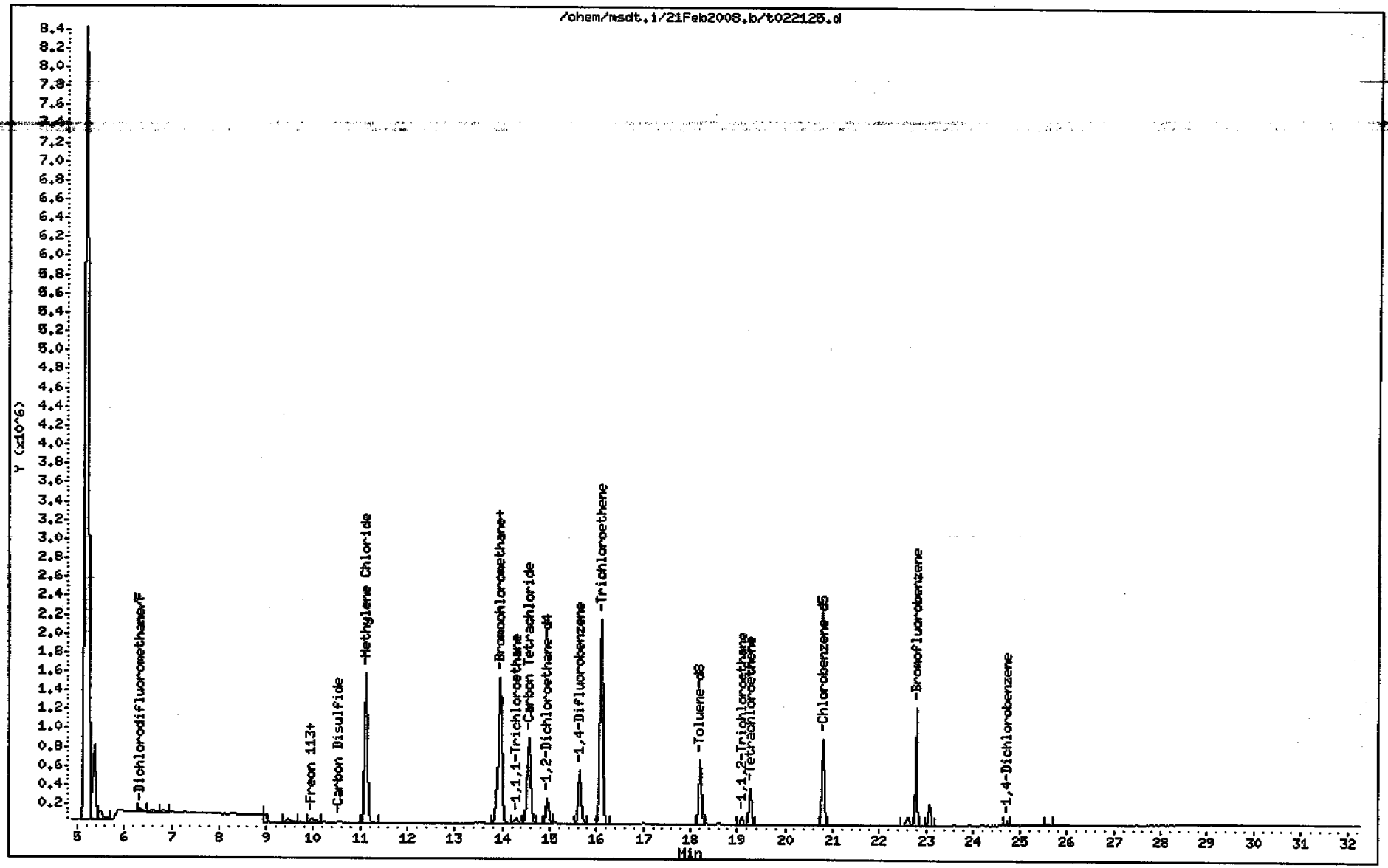
Data File: /chem/msdt.i/21Feb2008.b/t022125.d
Date : 22-FEB-2008 05:10
Client ID:
Sample Info: 100mL #35171

Column phase: RTx-624

Instrument: msdt.i

Operator: JP
Column diameter: 0.53

0077



Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

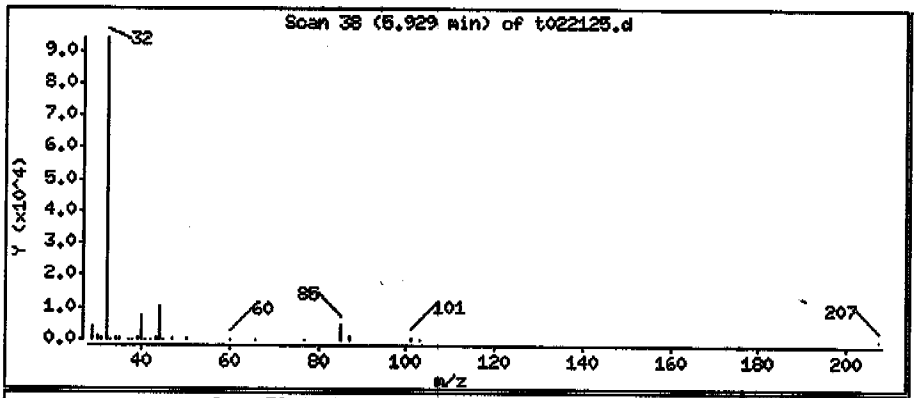
Operator: JP

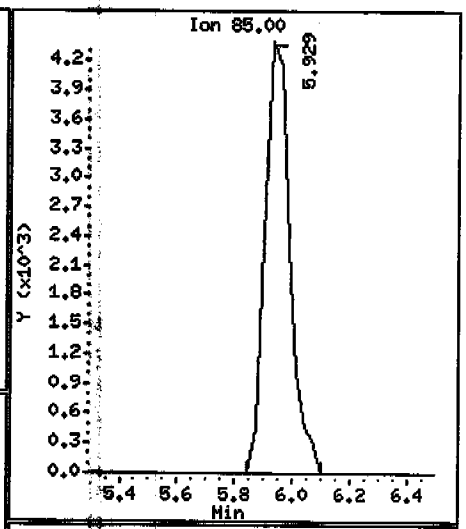
Column phase: RTx-624

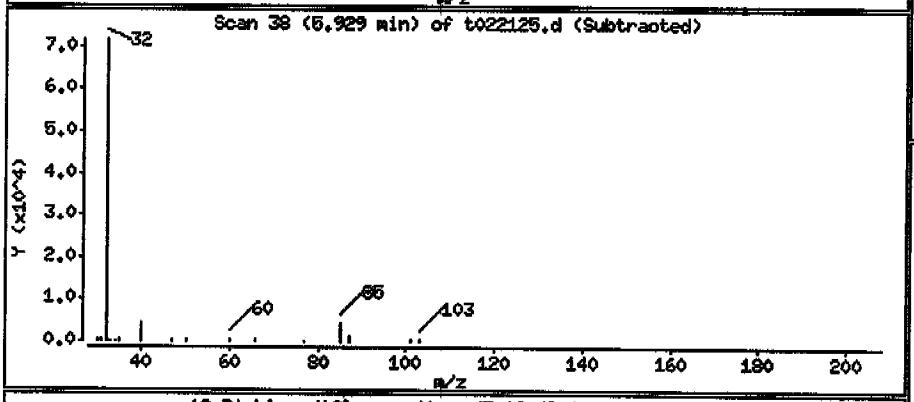
Column diameter: 0.53

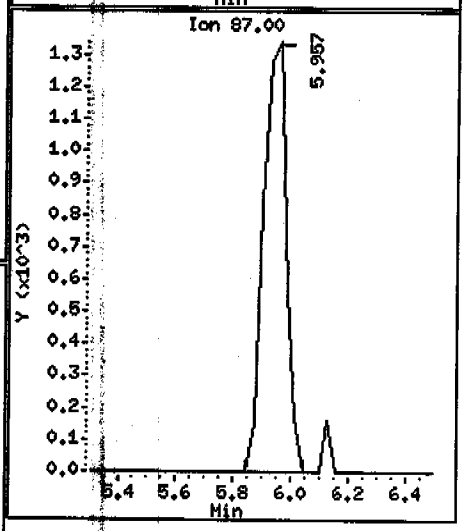
12 Dichlorodifluoromethane/Fr12

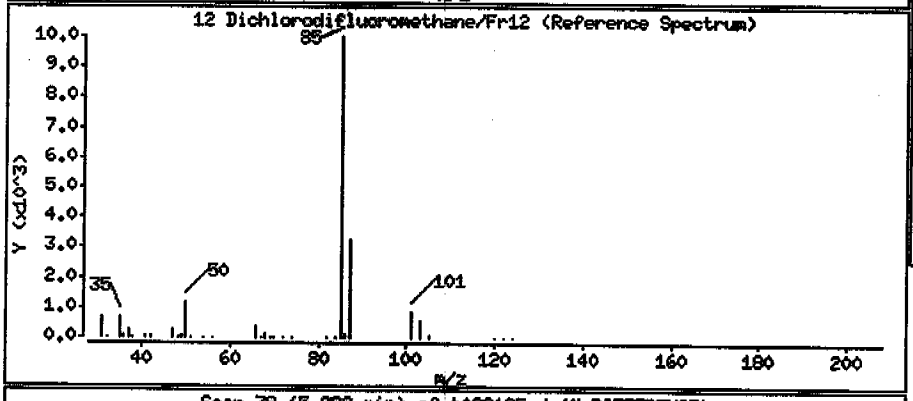
Concentration: 1.899 PPBV

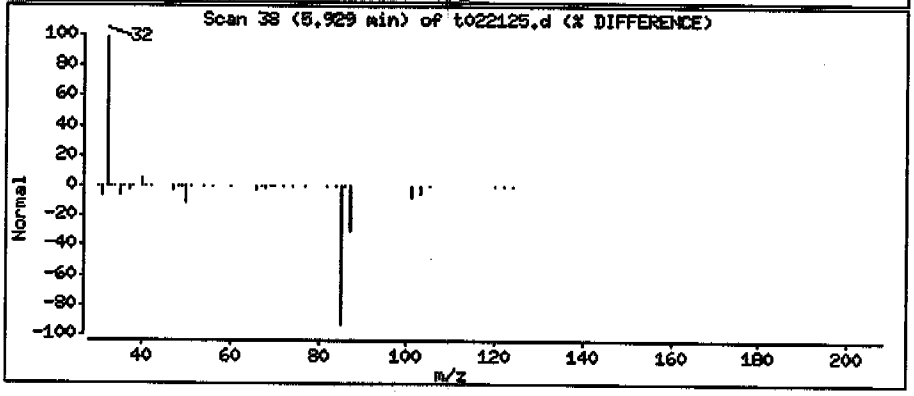












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

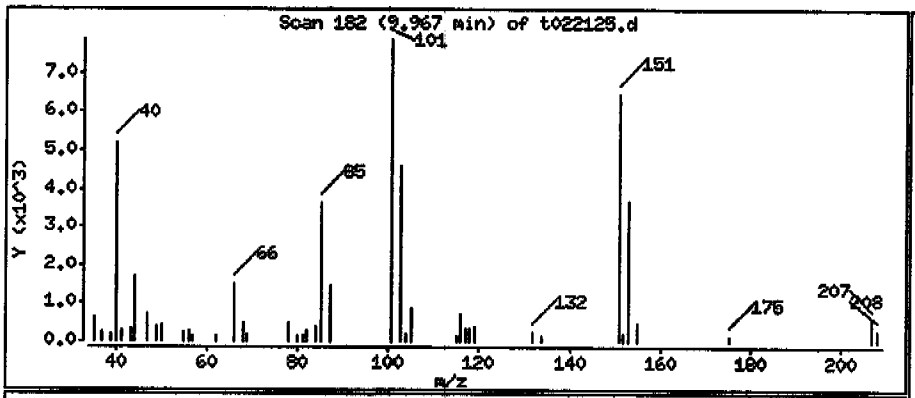
Operator: JP

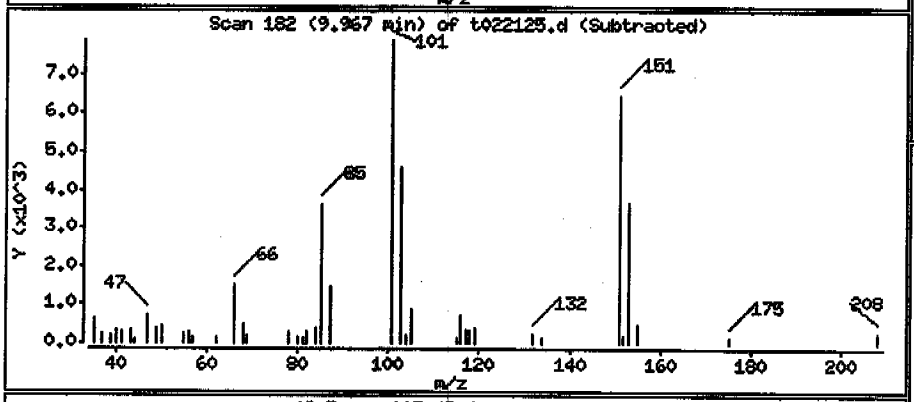
Column phase: RTx-624

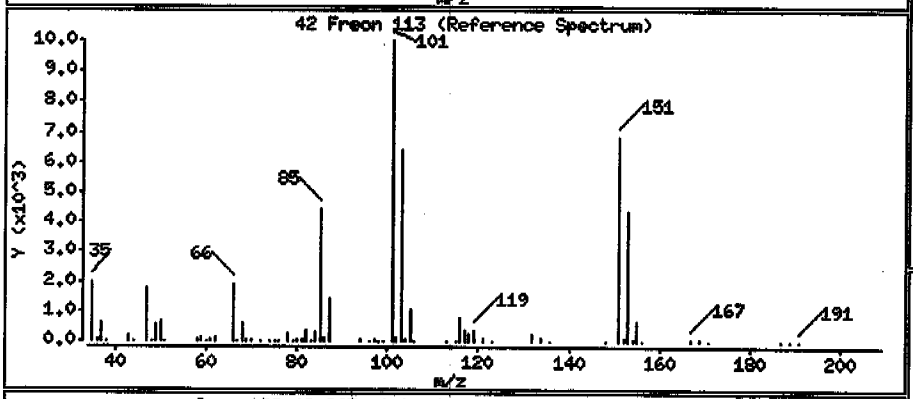
Column diameter: 0.53

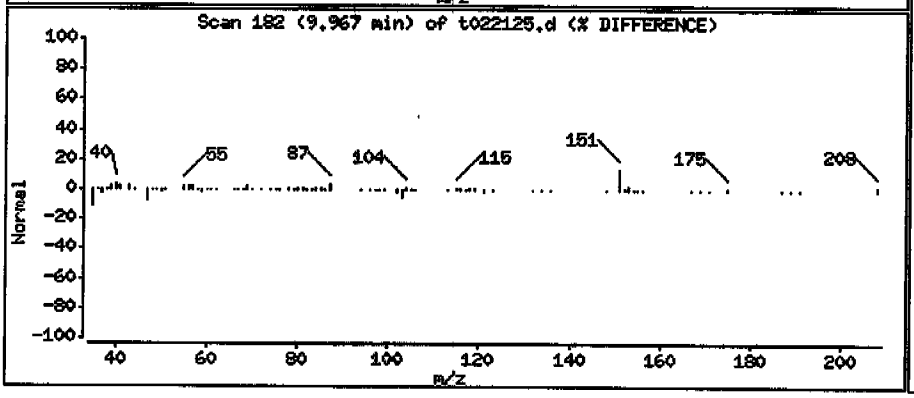
42 Freon 113

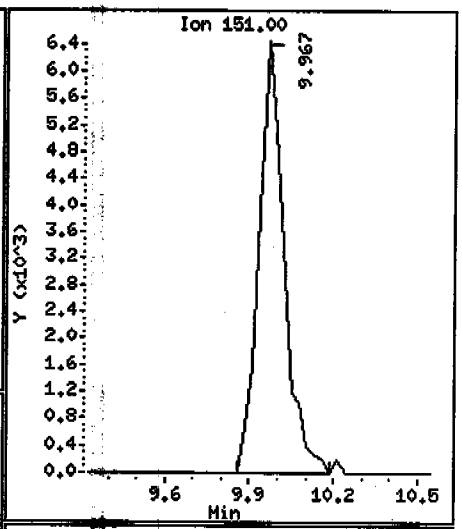
Concentration: 5.566 PPBV

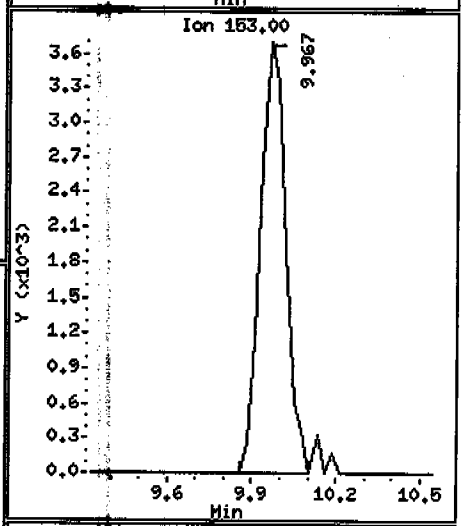


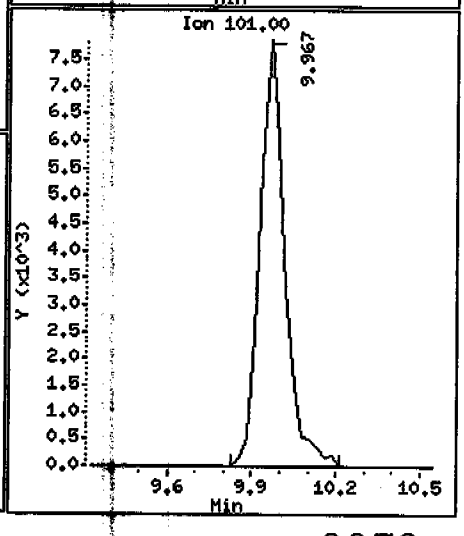












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

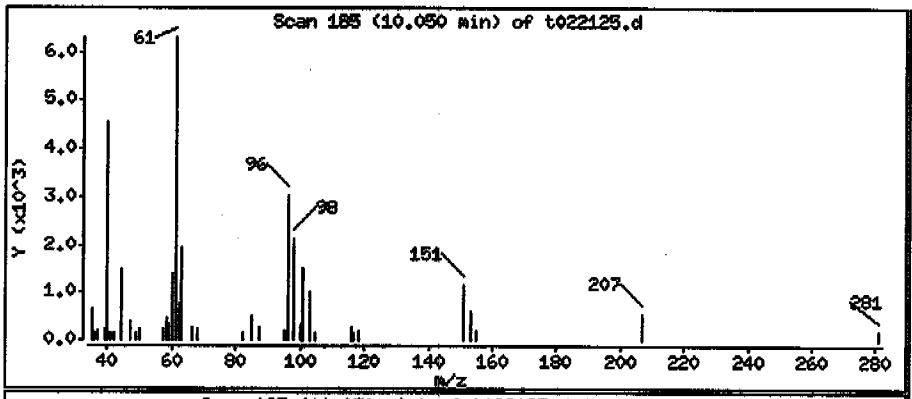
Operator: JP

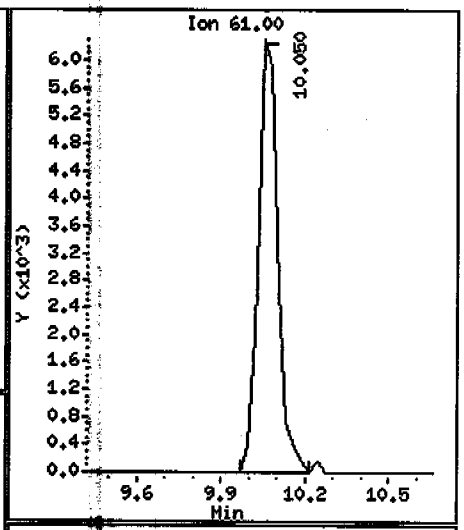
Column phase: RTx-624

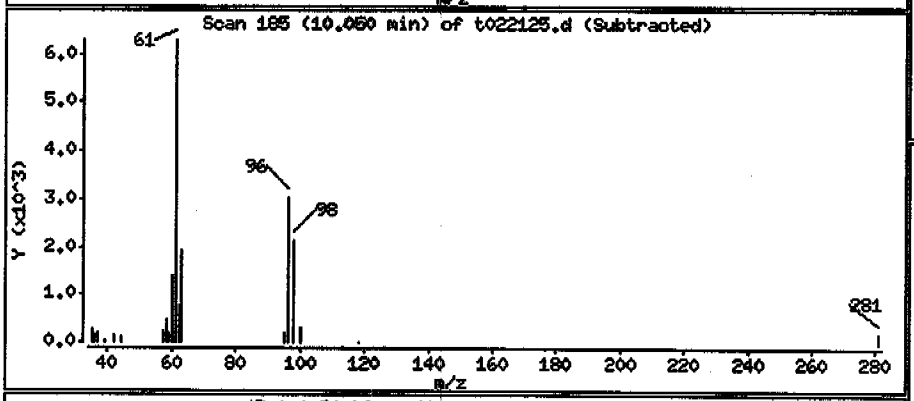
Column diameter: 0.53

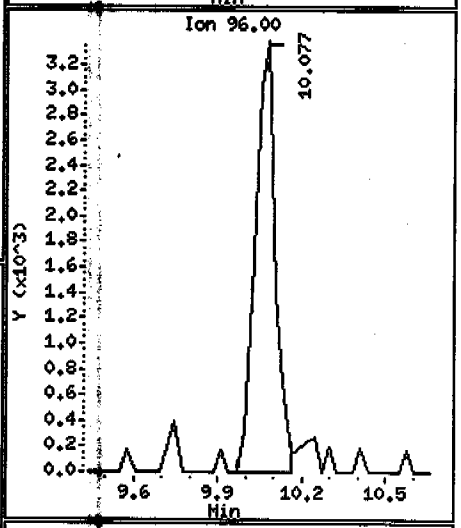
43 1,1-Dichloroethene

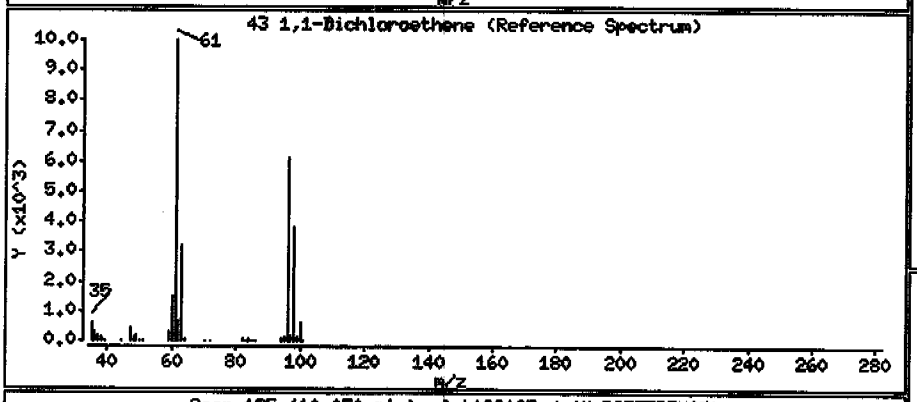
Concentration: 4.767 PPBV

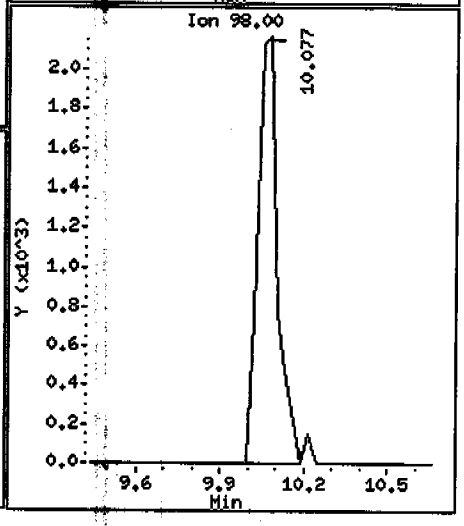


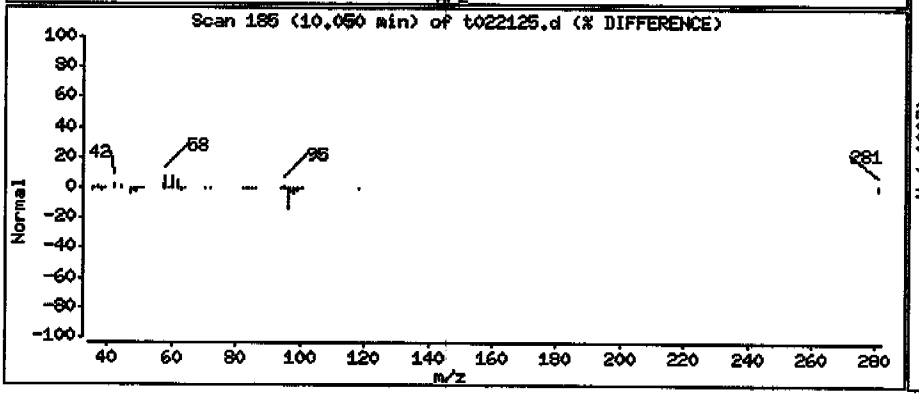












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

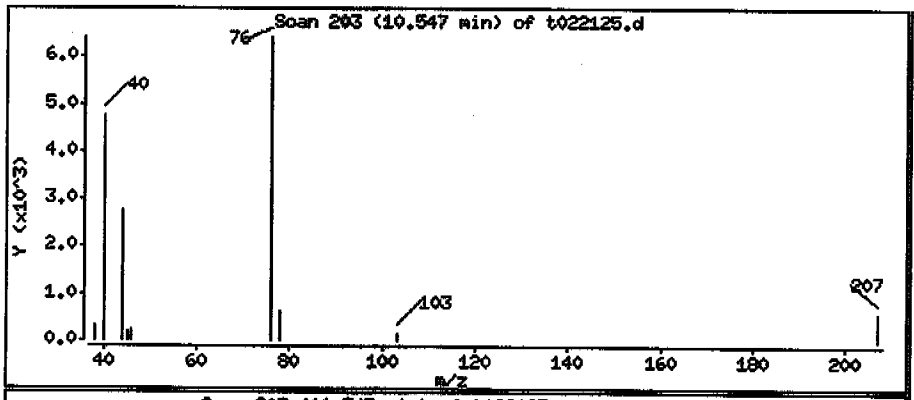
Operator: JP

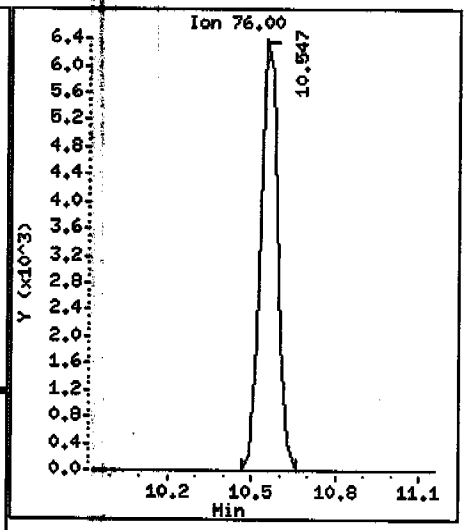
Column phase: RTx-624

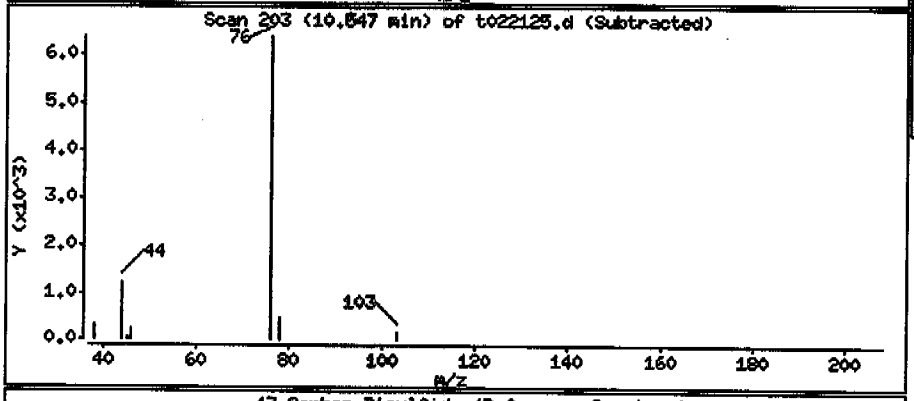
Column diameter: 0.53

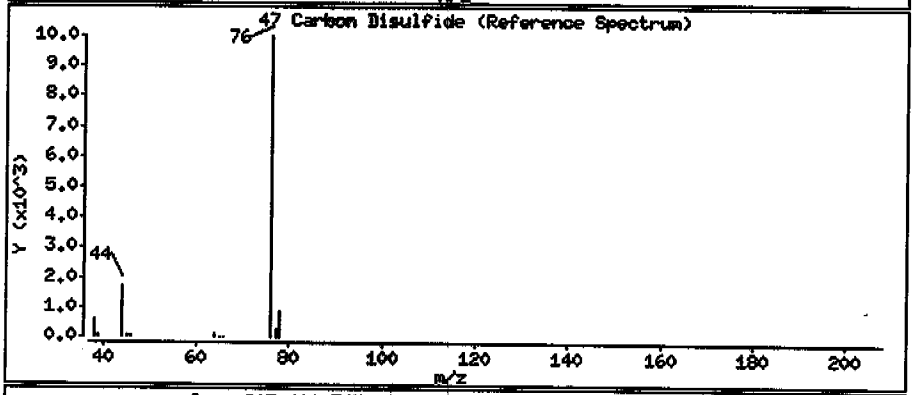
47 Carbon Disulfide

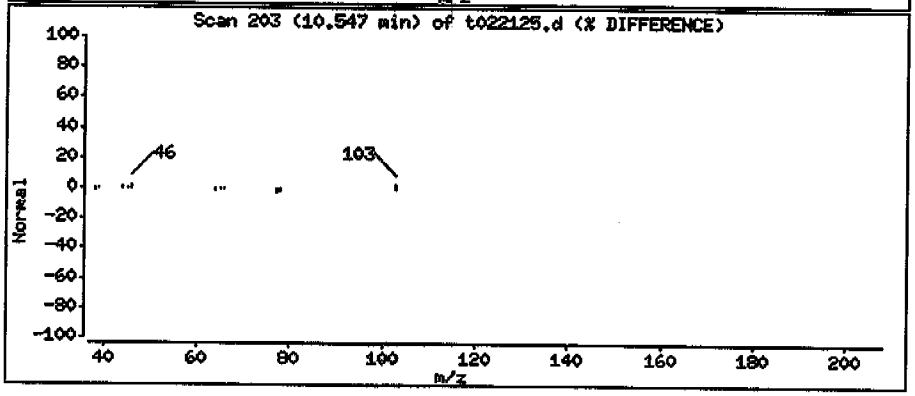
Concentration: 2.279 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

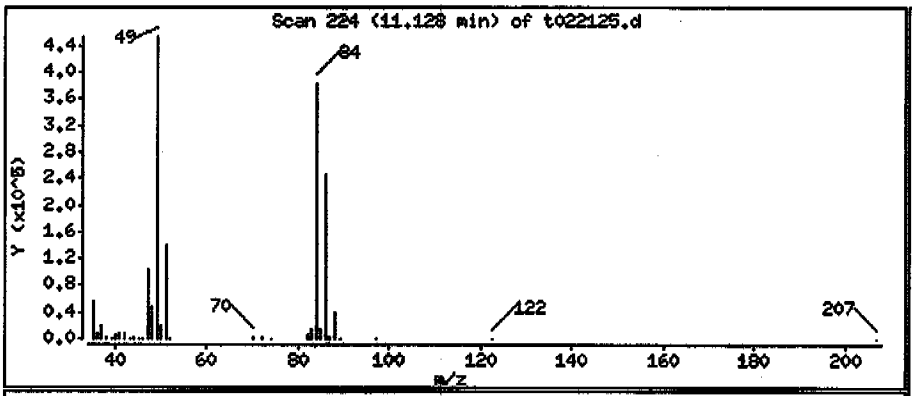
Operator: JP

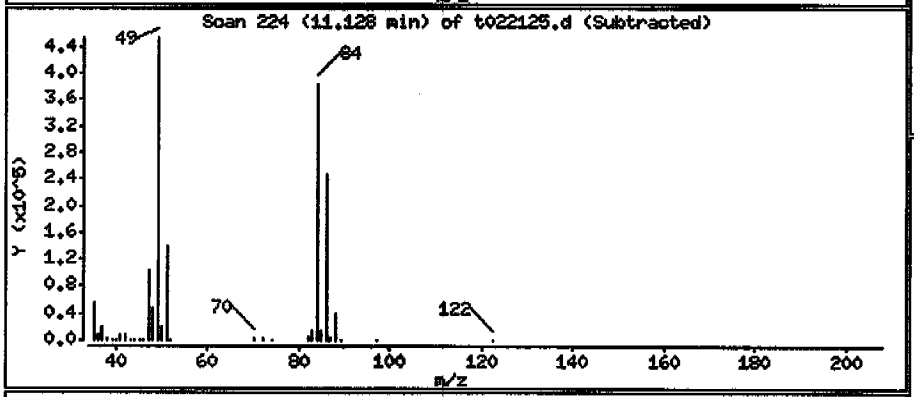
Column phase: RTx-624

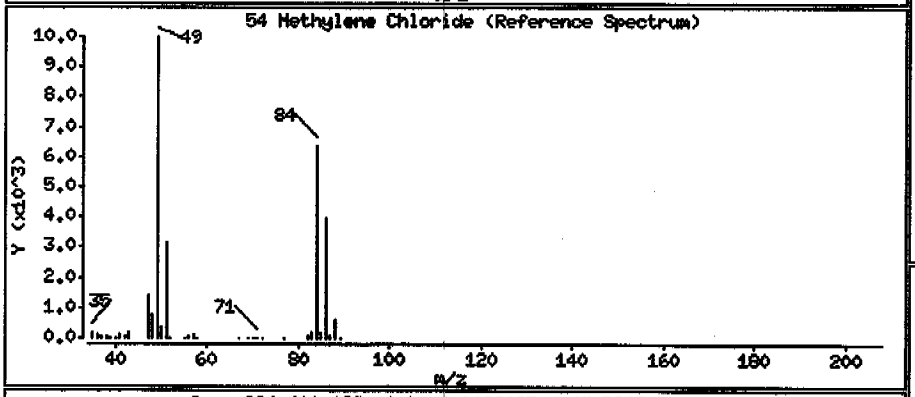
Column diameter: 0.53

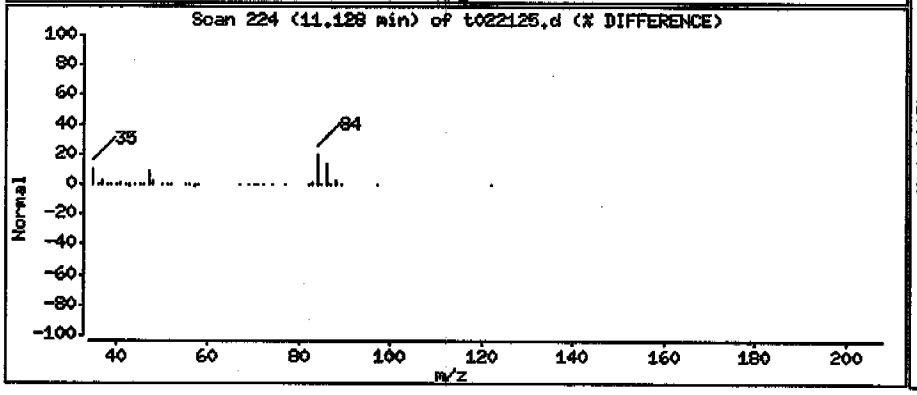
54 Methylene Chloride

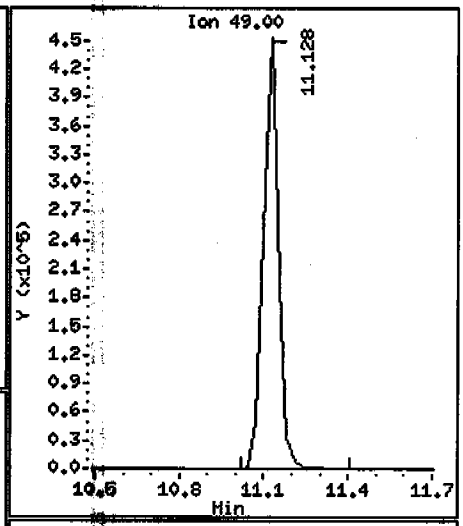
Concentration: 422.28 PPBV

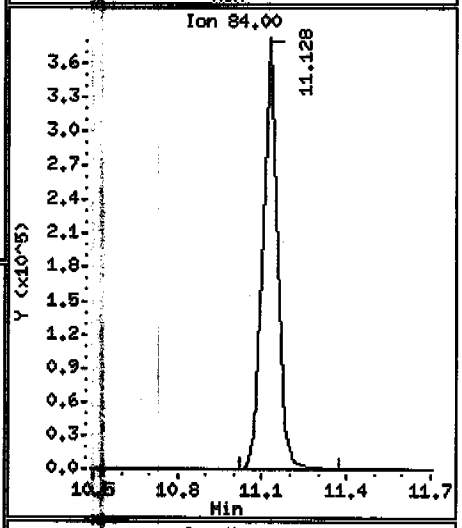


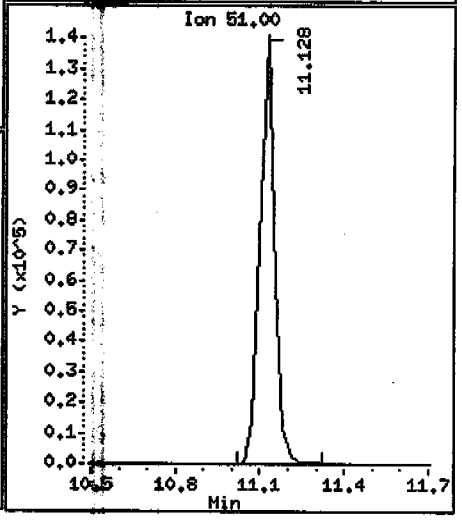












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

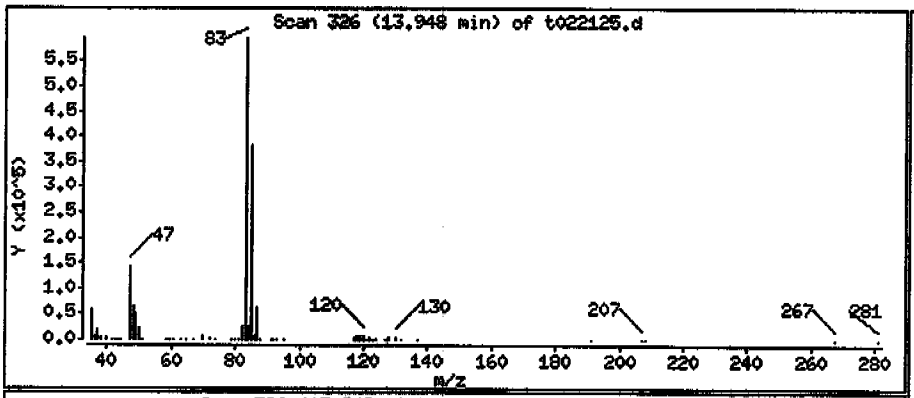
Operator: JP

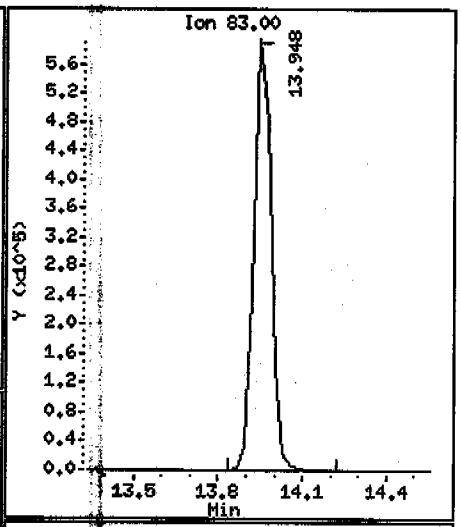
Column phase: RTx-624

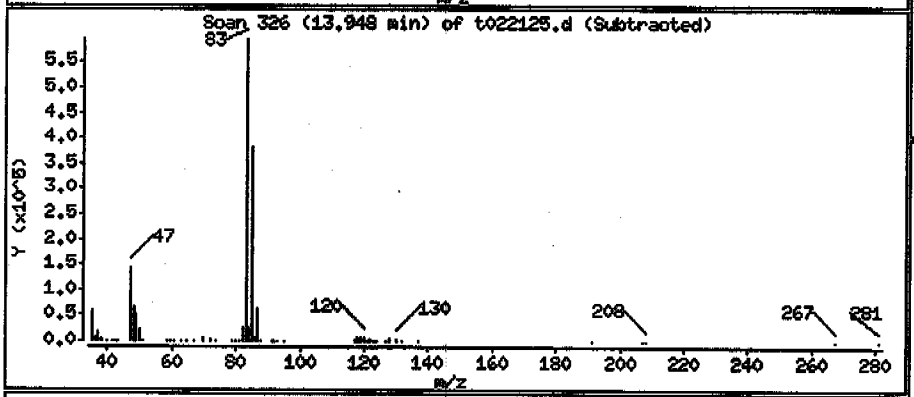
Column diameter: 0.53

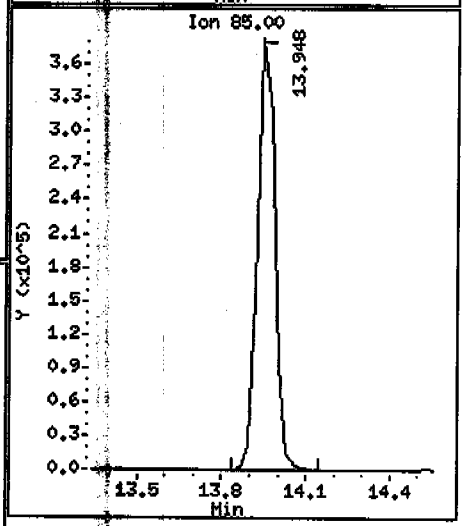
82 Chloroform

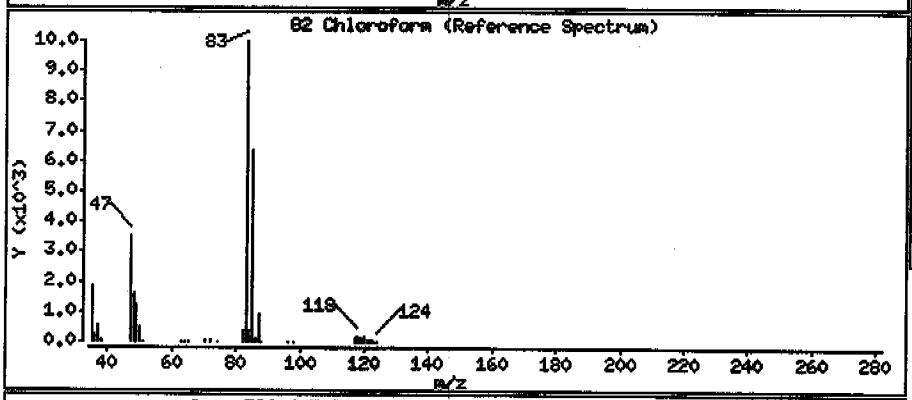
Concentration: 245.92 PPBV

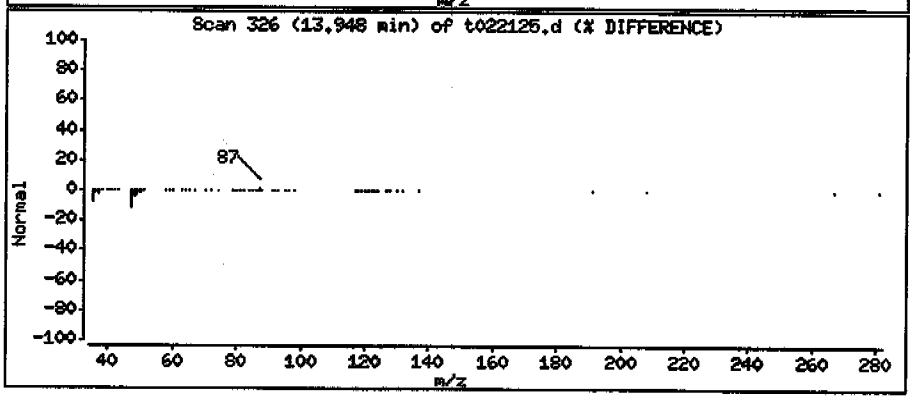












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Sample Info: 100mL #36171

Instrument: msdt.i

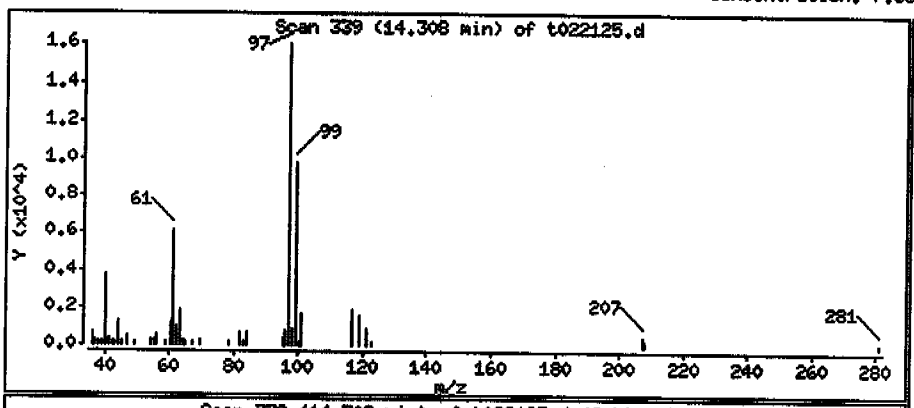
Operator: JP

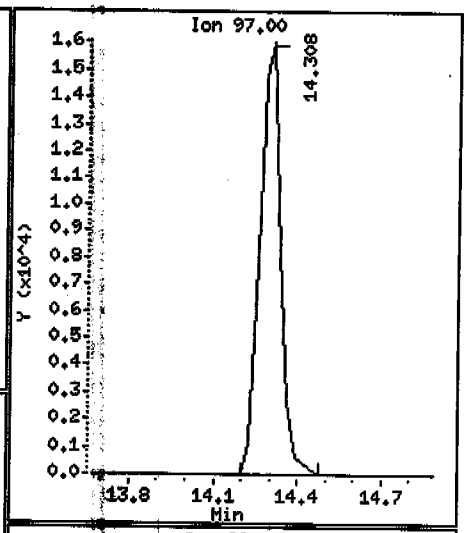
Column phase: RTx-624

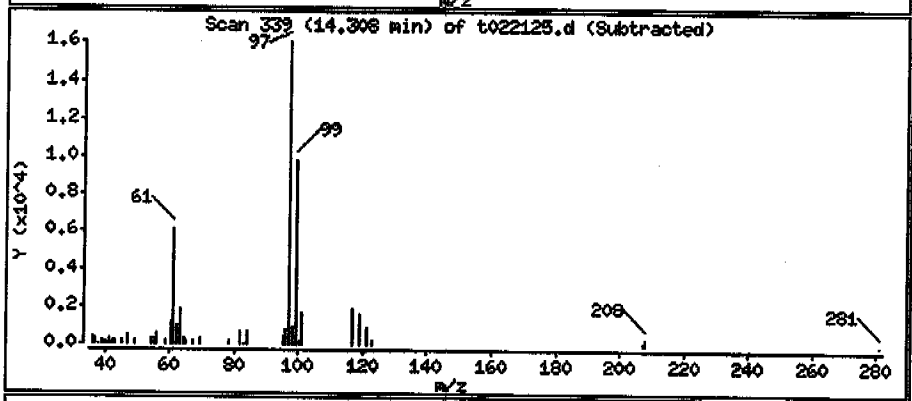
Column diameter: 0.53

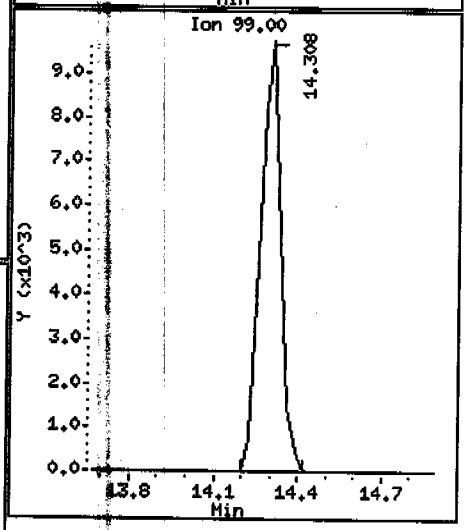
83 1,1,1-Trichloroethane

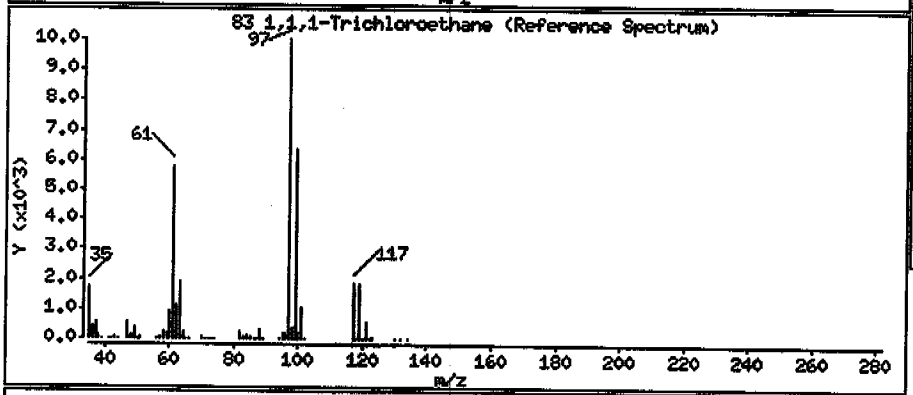
Concentration: 7.359 PPBV

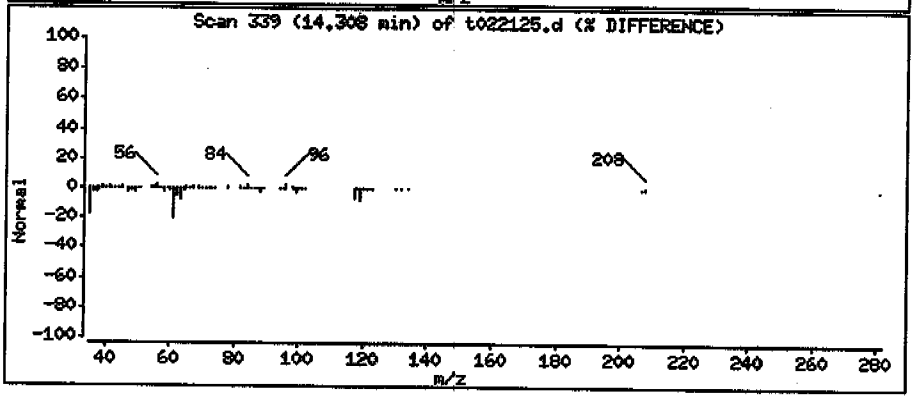












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

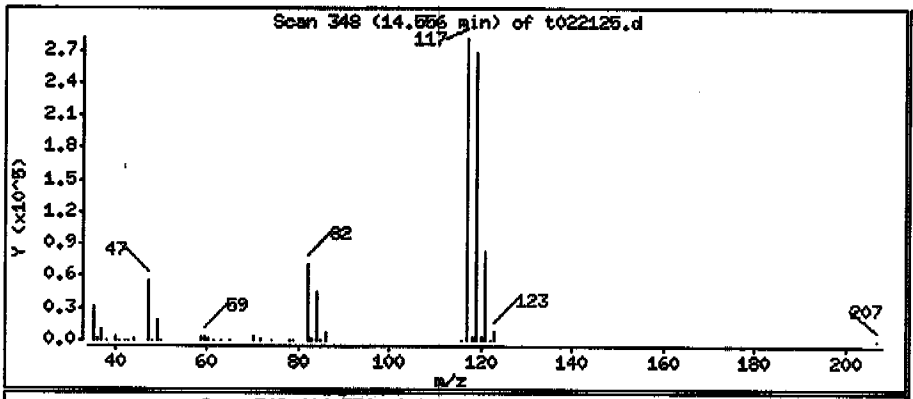
Operator: JP

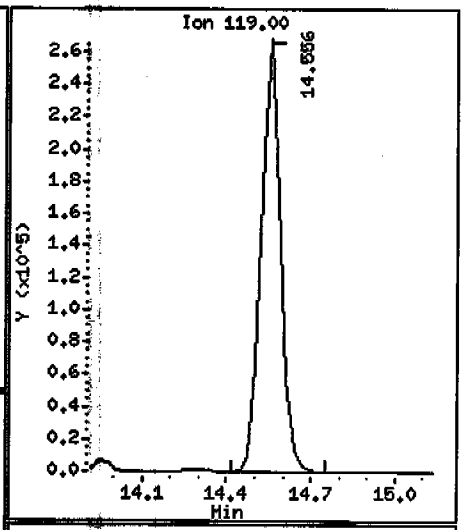
Column phase: RTx-624

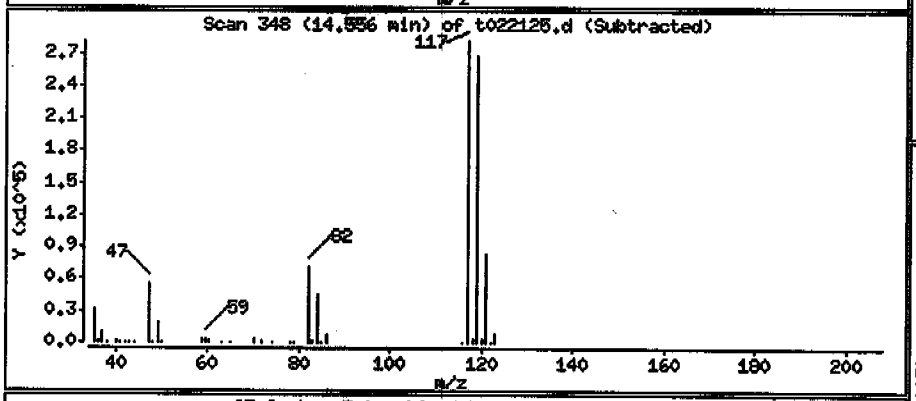
Column diameter: 0.53

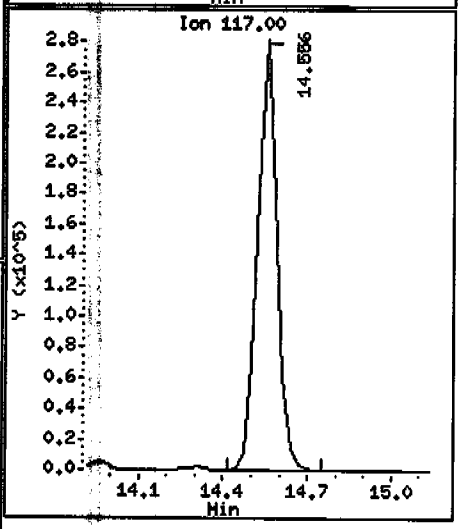
87 Carbon Tetrachloride

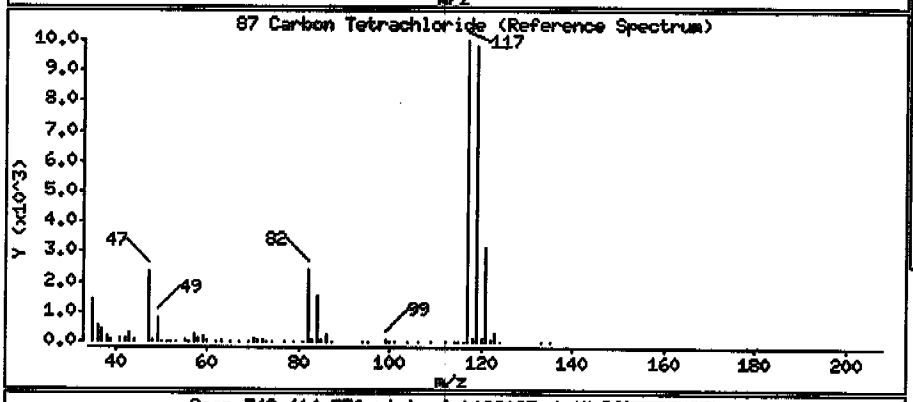
Concentration: 120.24 PPBV

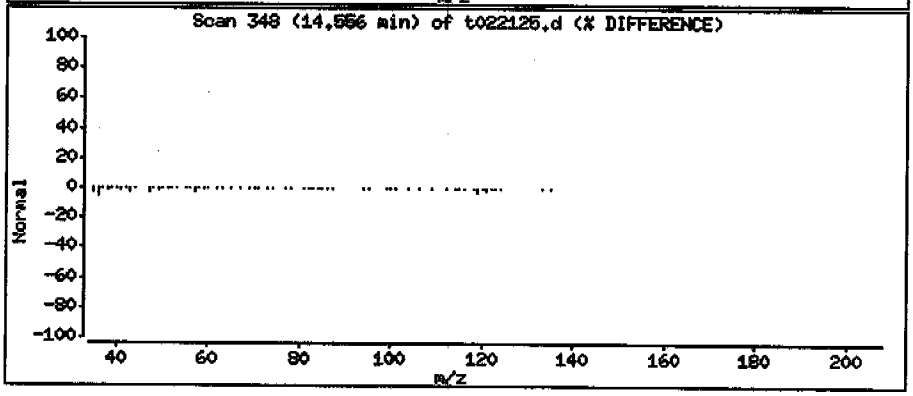












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

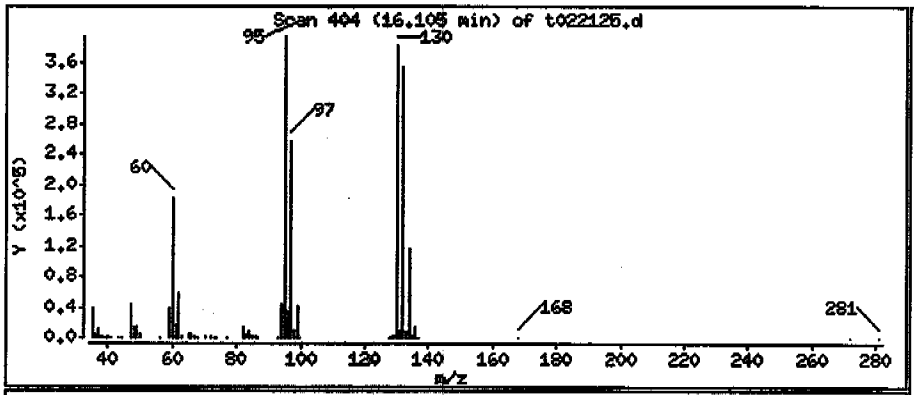
Operator: JP

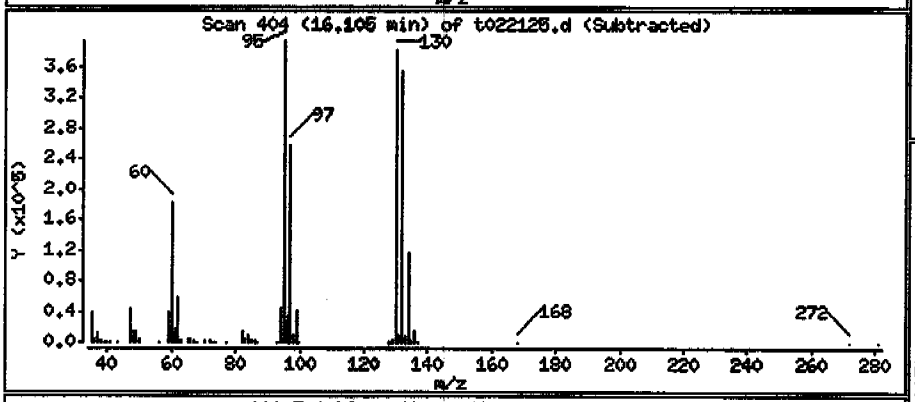
Column phase: RTx-624

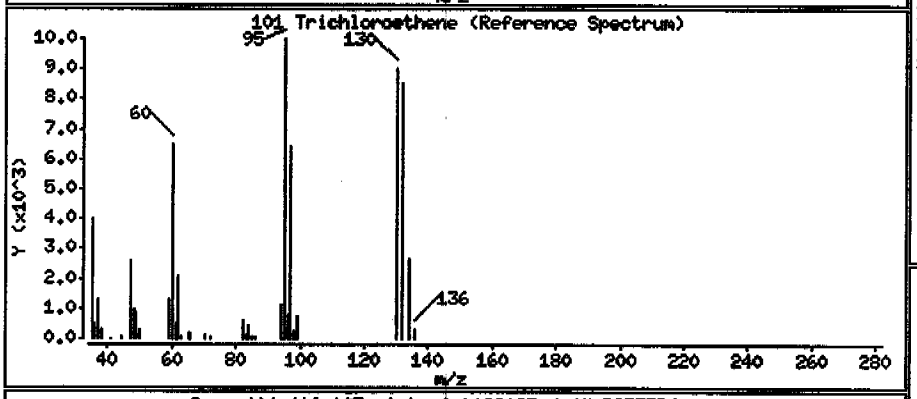
Column diameter: 0.53

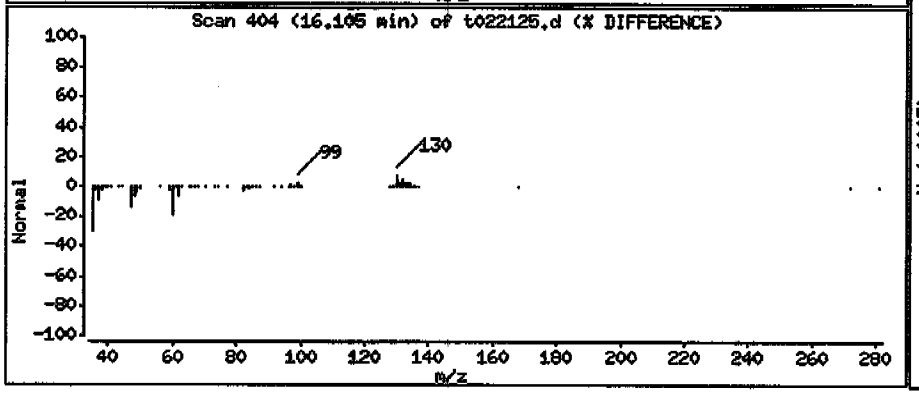
101 Trichloroethene

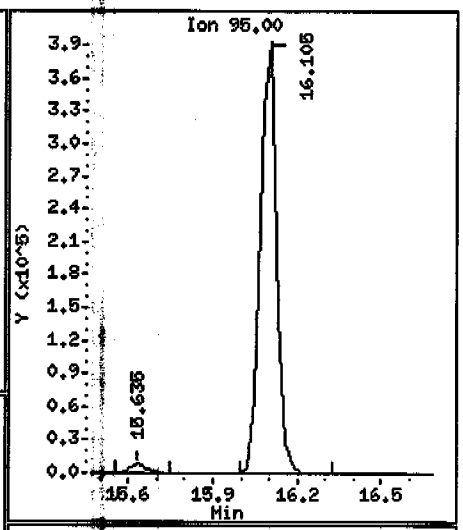
Concentration: 274.80 PPBV

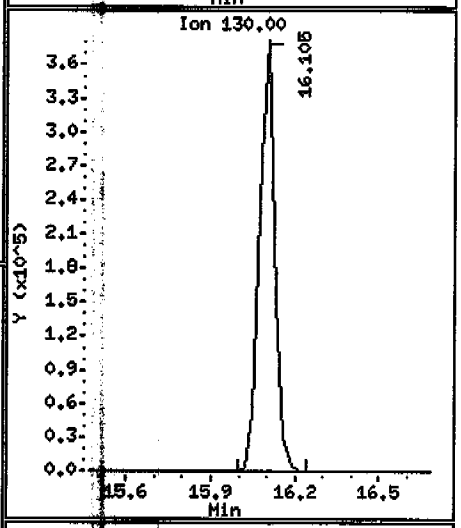


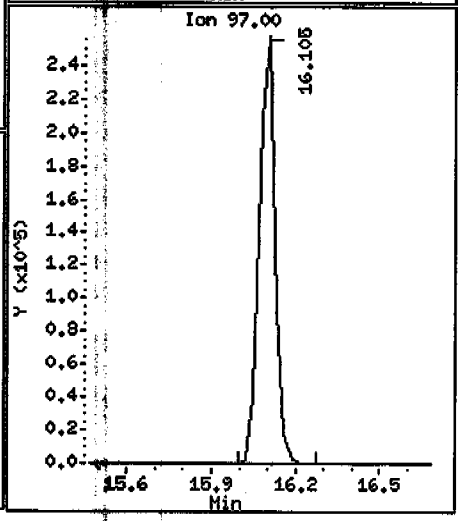












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

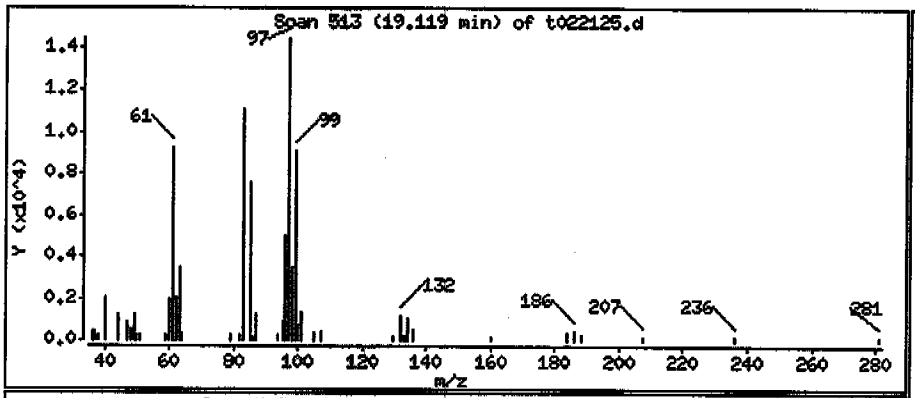
Operator: JP

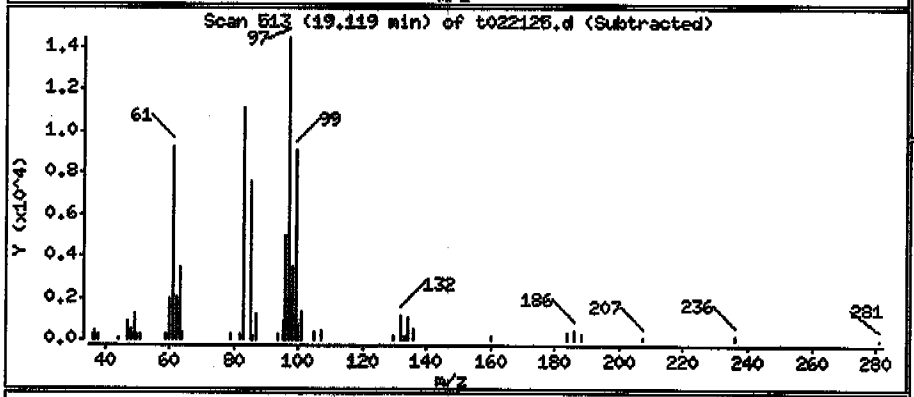
Column phase: RTx-624

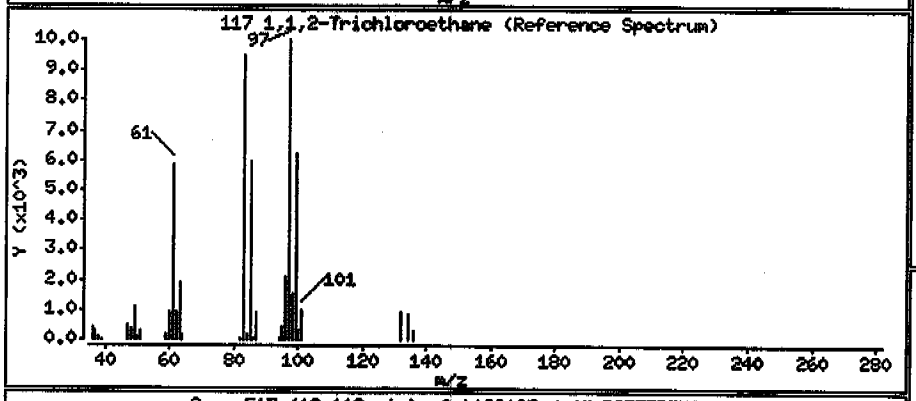
Column diameter: 0.53

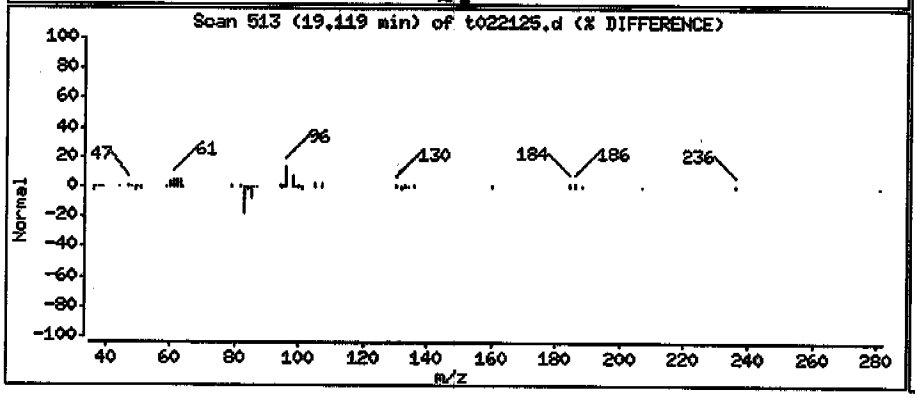
117 1,1,2-Trichloroethane

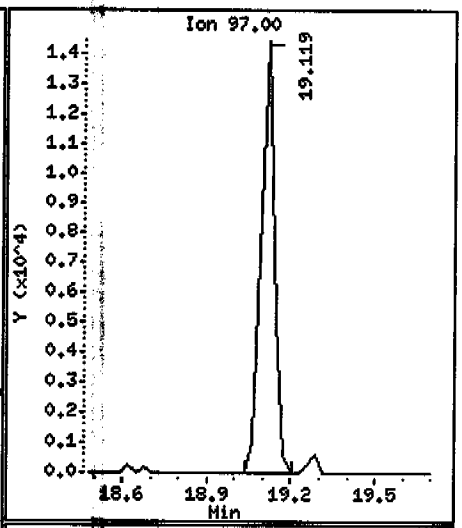
Concentration: 8.184 PPBV

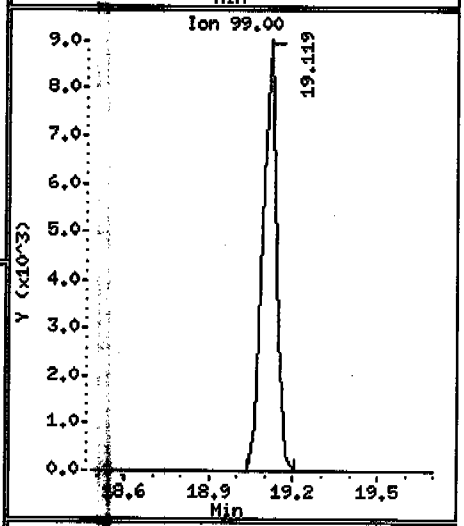


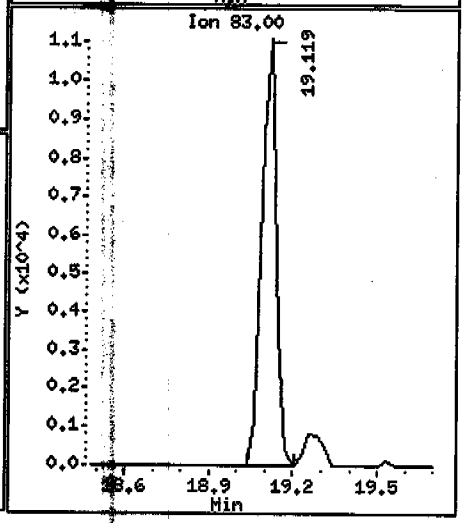












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

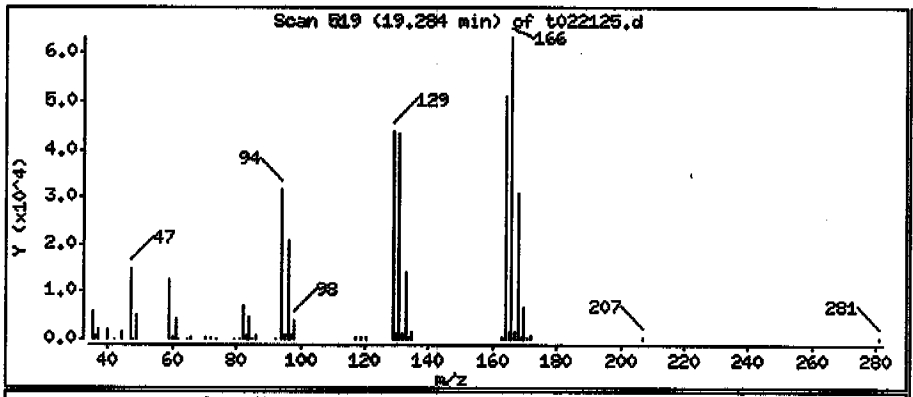
Operator: JP

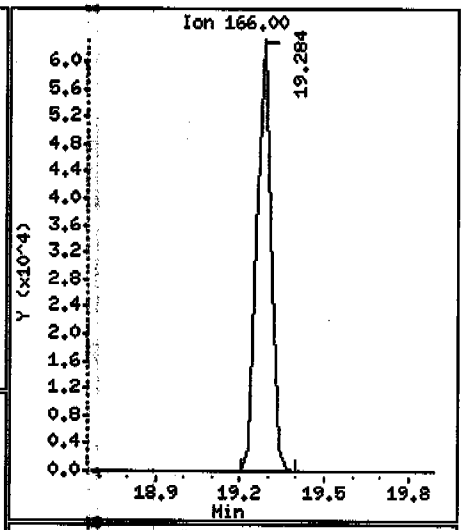
Column phase: RTx-624

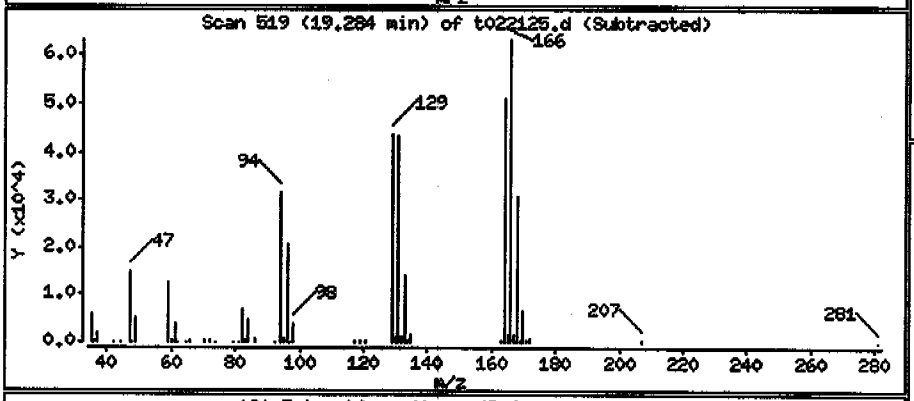
Column diameter: 0.53

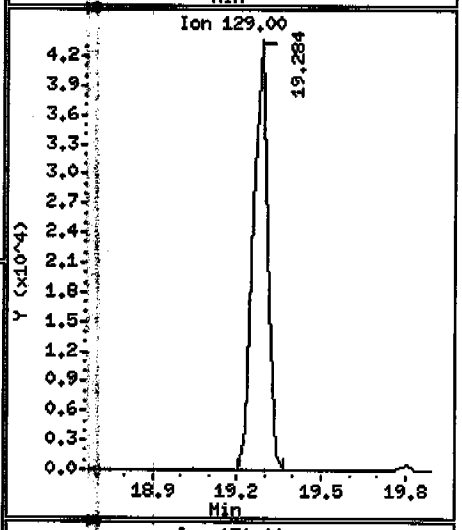
120 Tetrachloroethene

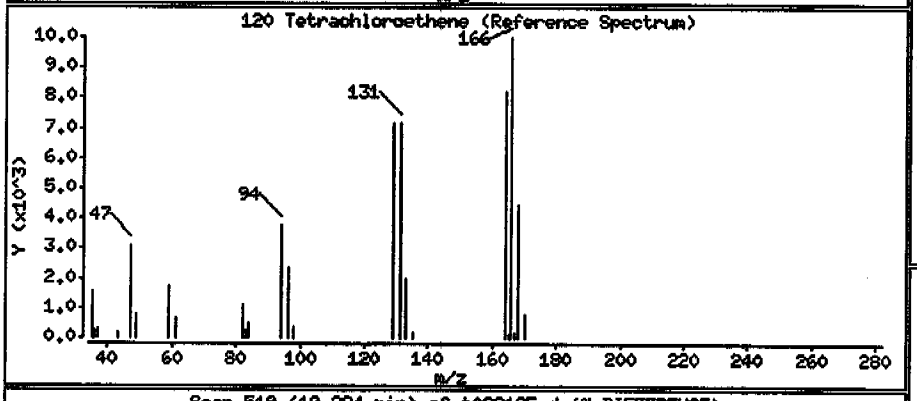
Concentration: 27.075 PPBV

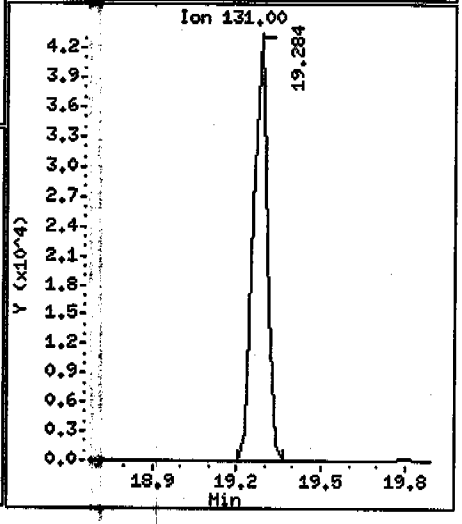


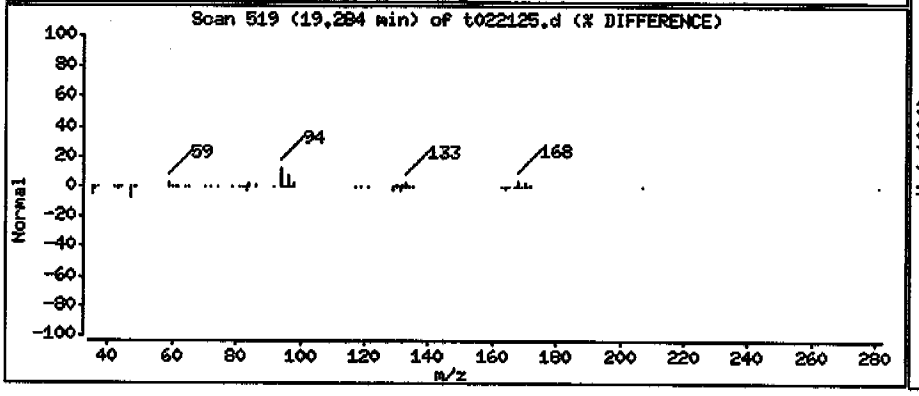












Data File: /chem/msdt.i/21Feb2008.b/t022125.d

Date : 22-FEB-2008 05:10

Client ID:

Instrument: msdt.i

Sample Info: 100mL #35171

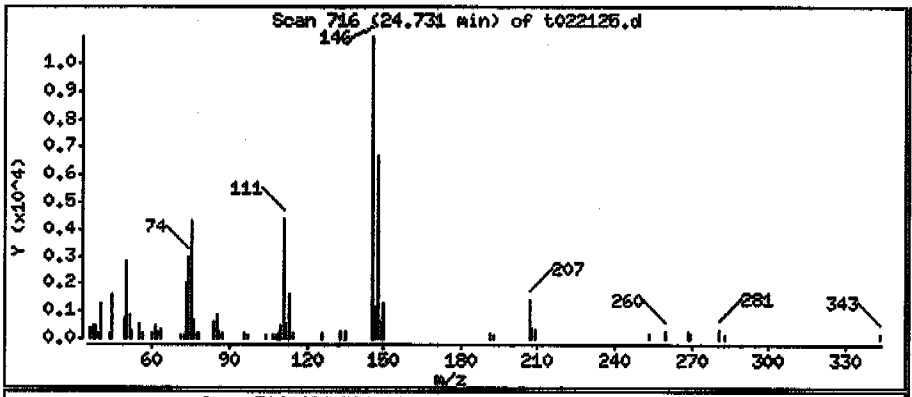
Operator: JP

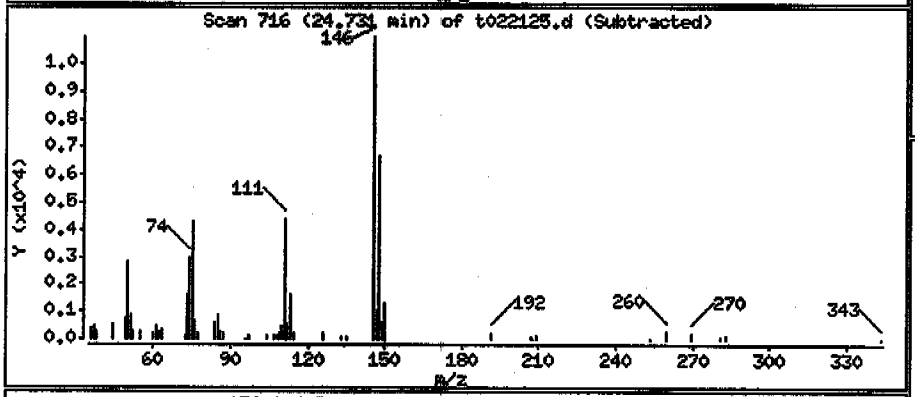
Column phase: RTx-624

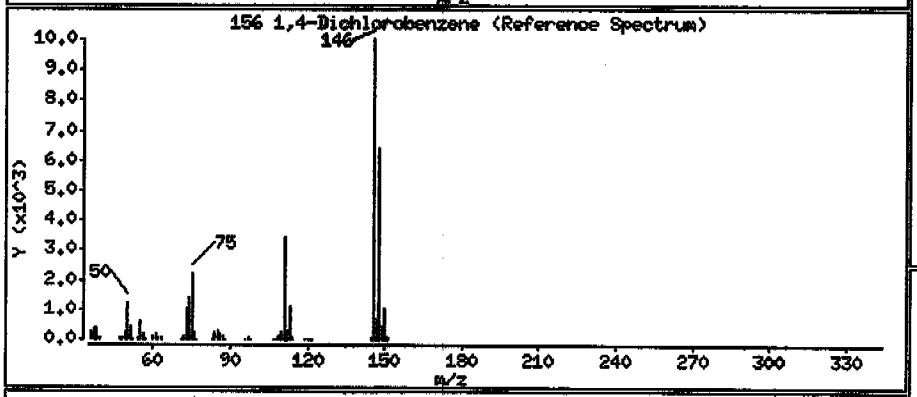
Column diameter: 0.53

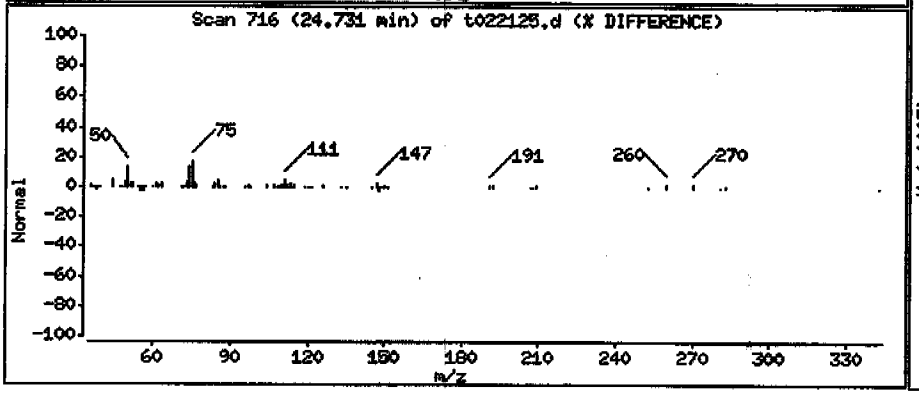
156 1,4-Dichlorobenzene

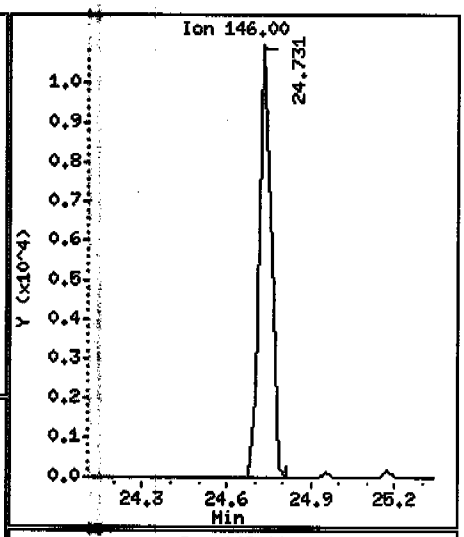
Concentration: 2.002 PPBV

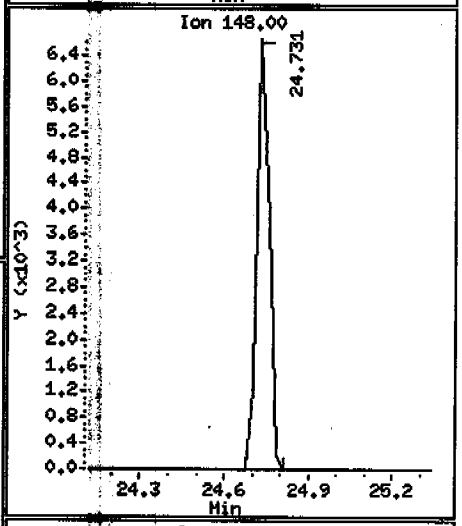


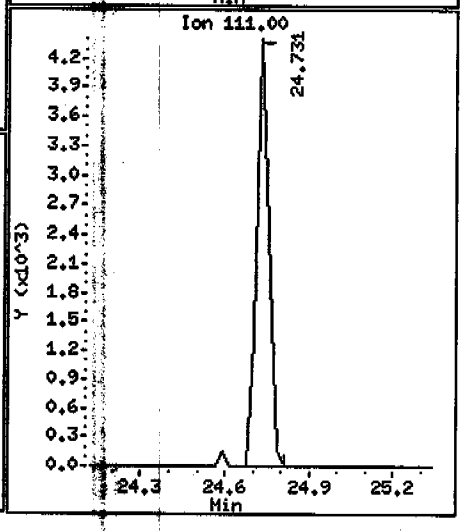












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10508

Lab ID#: 0802283-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	1.7	3.4	13	26
1,1-Dichloroethene	1.7	3.9	6.7	15
Methylene Chloride	1.7	540	5.8	1900
Chloroform	1.7	220	8.2	1000
1,1,1-Trichloroethane	1.7	2.2	9.2	12
Carbon Tetrachloride	1.7	84	10	530
1,2-Dichloroethane	1.7	5.9	6.8	24
Trichloroethene	1.7	170	9.0	930
1,1,2-Trichloroethane	1.7	4.8	9.2	26
Tetrachloroethene	1.7	11	11	76
1,4-Dichlorobenzene	1.7	2.3	10	14

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10508

Lab ID#: 0802283-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	Not Detected	8.3	Not Detected
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.7	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.3	Not Detected
1,3-Butadiene	1.7	Not Detected	3.7	Not Detected
Bromomethane	1.7	Not Detected	6.5	Not Detected
Chloroethane	1.7	Not Detected	4.4	Not Detected
Freon 11	1.7	Not Detected	9.4	Not Detected
Ethanol	6.7	Not Detected	13	Not Detected
Freon 113	1.7	3.4	13	26
1,1-Dichloroethene	1.7	3.9	6.7	15
Acetone	6.7	Not Detected	16	Not Detected
2-Propanol	6.7	Not Detected	16	Not Detected
Carbon Disulfide	1.7	Not Detected	5.2	Not Detected
Methylene Chloride	1.7	540	5.8	1900
Methyl tert-butyl ether	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Hexane	1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran	1.7	Not Detected	5.0	Not Detected
Chloroform	1.7	220	8.2	1000
1,1,1-Trichloroethane	1.7	2.2	9.2	12
Cyclohexane	1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride	1.7	84	10	530
Benzene	1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane	1.7	5.9	6.8	24
Heptane	1.7	Not Detected	6.9	Not Detected
Trichloroethene	1.7	170	9.0	930
1,2-Dichloropropane	1.7	Not Detected	7.8	Not Detected
1,4-Dioxane	6.7	Not Detected	24	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	6.9	Not Detected
Toluene	1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane	1.7	4.8	9.2	26
Tetrachloroethene	1.7	11	11	76

0091

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10508

Lab ID#: 0802283-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.7	Not Detected	28	Not Detected
Dibromochloromethane	1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected
Chlorobenzene	1.7	Not Detected	7.7	Not Detected
Ethyl Benzene	1.7	Not Detected	7.3	Not Detected
m,p-Xylene	1.7	Not Detected	7.3	Not Detected
o-Xylene	1.7	Not Detected	7.3	Not Detected
Styrene	1.7	Not Detected	7.2	Not Detected
Bromoform	1.7	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected
4-Ethyltoluene	1.7	Not Detected	8.2	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene	1.7	2.3	10	14
alpha-Chlorotoluene	1.7	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	6.7	Not Detected	50	Not Detected
Hexachlorobutadiene	6.7	Not Detected	72	Not Detected
Chlorodifluoromethane	6.7	Not Detected	24	Not Detected
Methanol	170	Not Detected	220	Not Detected
n-Butanol	6.7	Not Detected	20	Not Detected
Propylene	6.7	Not Detected	12	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

0092

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022126.d
Lab Smp Id: 0802283-05A
Inj Date : 22-FEB-2008 07:11
Operator : JP Inst ID: msdt.i
Smp Info : 100mL #34746
Misc Info : 6.0"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 3.36000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
* 81 Bromochloromethane							CAS #: 74-97-5	
13.865	13.865 (1.000)	130	236542	25.0000			80.00- 120.00	100.00
13.865	13.865 (1.000)	128	181341				27.38- 127.38	76.66
13.865	13.865 (1.000)	49	464717				131.81- 231.81	196.46
* 97 1,4-Difluorobenzene							CAS #: 540-36-3	
15.635	15.607 (1.000)	114	979191	25.0000			80.00- 120.00	100.00
15.635	15.607 (1.000)	88	162588				0.00- 66.79	16.60
* 126 Chlorobenzene-d5							CAS #: 3114-55-4	
20.805	20.805 (1.000)	117	955880	25.0000			80.00- 120.00	100.00
20.805	20.805 (1.000)	82	565035				7.58- 107.58	59.11
$ 90 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
14.943	14.943 (1.078)	65	399389	26.2402		26.240	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	192430				3.57- 103.57	48.18
$ 113 Toluene-d8							CAS #: 2037-26-5	
18.206	18.206 (1.164)	98	999121	26.4889		26.489	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	118117				0.00- 61.29	11.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	685400			18.71- 118.71	68.60
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	622171	25.1638	25.164	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	771342			76.46- 176.46	123.98
22.796	22.796 (1.096)	176	602431			48.22- 148.22	96.83
42 Freon 113					CAS #: 76-13-1		
9.939	9.939 (0.717)	151	24168	1.00377	3.373	80.00- 120.00	100.00
9.939	9.939 (0.717)	153	15184			13.46- 113.46	62.83
9.939	9.939 (0.717)	101	30560			82.30- 182.30	126.45
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.725)	61	25065	1.15655	3.886	80.00- 120.00	100.00
10.050	10.050 (0.725)	96	15261			9.56- 109.56	60.89
10.050	10.050 (0.725)	98	8275			0.00- 88.43	33.01
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	2198790	160.445	539.10	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	1813929			38.51- 138.51	82.50
11.100	11.100 (0.801)	51	673142			0.00- 83.83	30.61
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2213353	64.4251	216.47	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1446069			14.81- 114.81	65.33
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	24491	0.64451	2.166	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	16140			14.28- 114.28	65.90
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	913149	25.0163	84.055	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	966793			56.24- 156.24	105.87
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	42286	1.77061	5.949	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	14172			0.00- 84.23	33.51
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1081848	51.5999	173.38	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1005904			39.09- 139.09	92.98
16.077	16.077 (1.028)	97	695525			12.68- 112.68	64.29
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.119	19.091 (0.919)	97	31326	1.43870	4.834	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
117 1,1,2-Trichloroethane (continued)							
19.119	19.091 (0.919)	99	19551			14.03- 114.03	62.41
19.091	19.091 (0.918)	83	26278			36.02- 136.02	83.89
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	96671	3.31332	11.133	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	70895			18.51- 118.51	73.34
19.284	19.284 (0.927)	131	68680			15.29- 115.29	71.05
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	39024	0.69123	2.322	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	27945			16.09- 116.09	71.61
24.731	24.731 (1.189)	111	17218			0.00- 90.13	44.12

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022126.d
Lab Smp Id: 0802283-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: JP
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	236542	-25.65
97 1,4-Difluorobenze	1251468	750881	1752055	979191	-21.76
126 Chlorobenzene-d5	1150991	690595	1611387	955880	-16.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802283-05A
Level: LOW
Operator: JP
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.240	104.96	70-130
$ 113 Toluene-d8	25.000	26.489	105.96	70-130
$ 137 Bromofluorobenzene	25.000	25.164	100.66	70-130

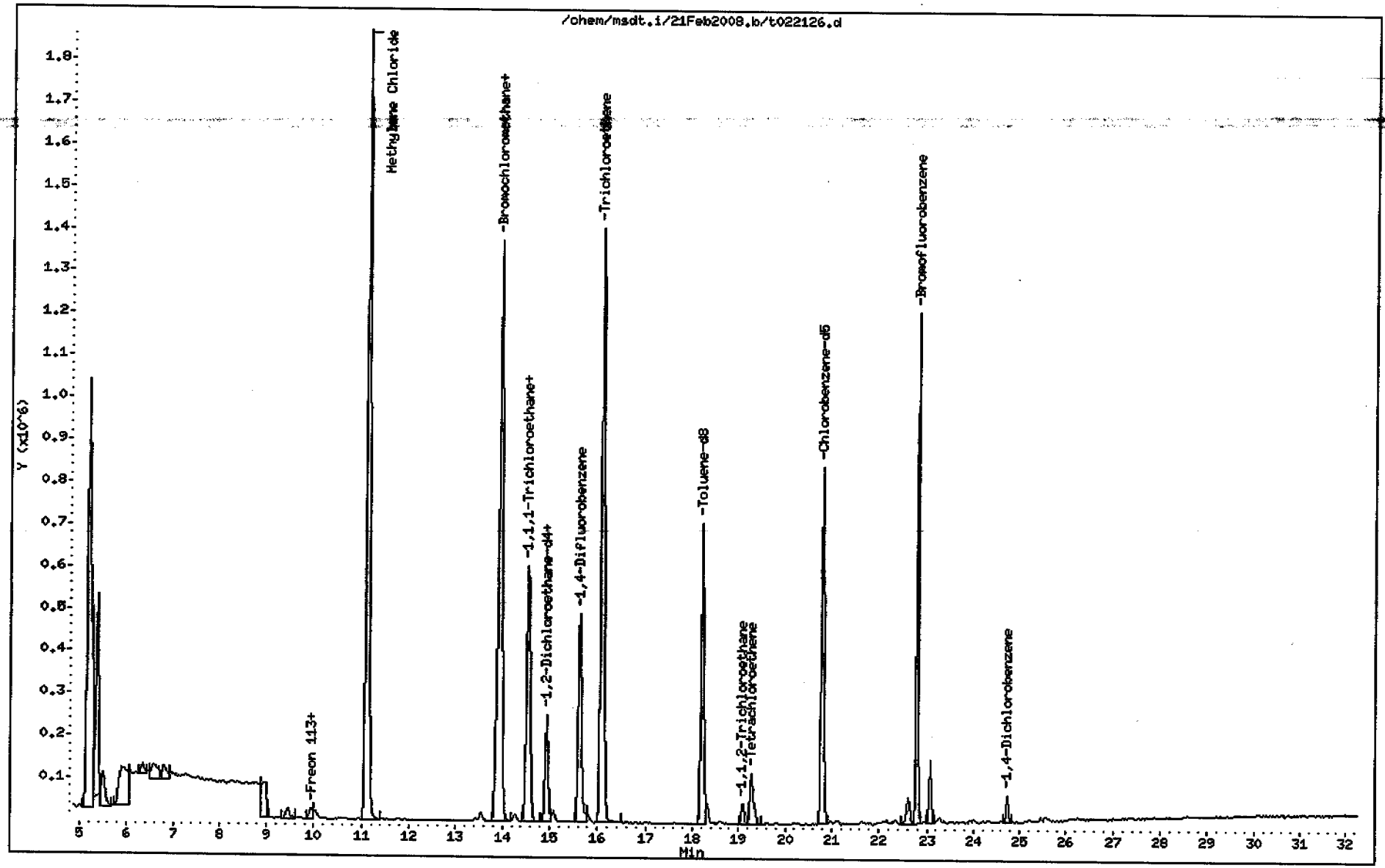
Data File: /ohem/msdt.i/21Feb2008.b/t022126.d
Date : 22-FEB-2008 07:11
Client ID:
Sample Info: 100mL #34746

Column phase: RTx-624

Instrument: msdt.i

Operator: JP
Column diameter: 0.53

0098



Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

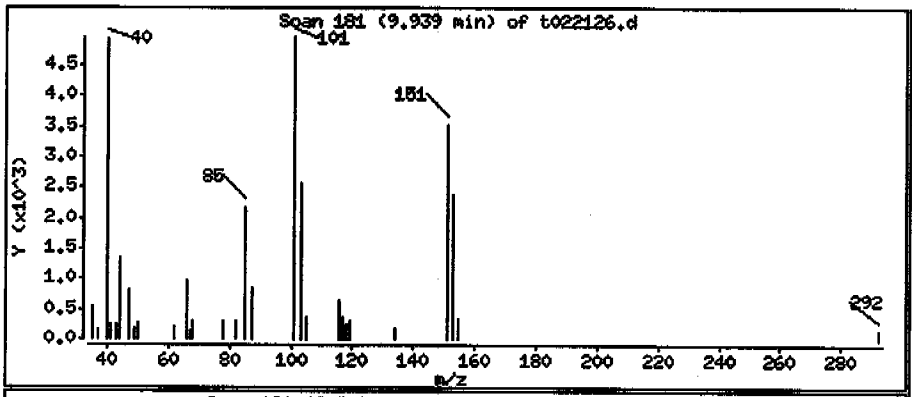
Operator: JP

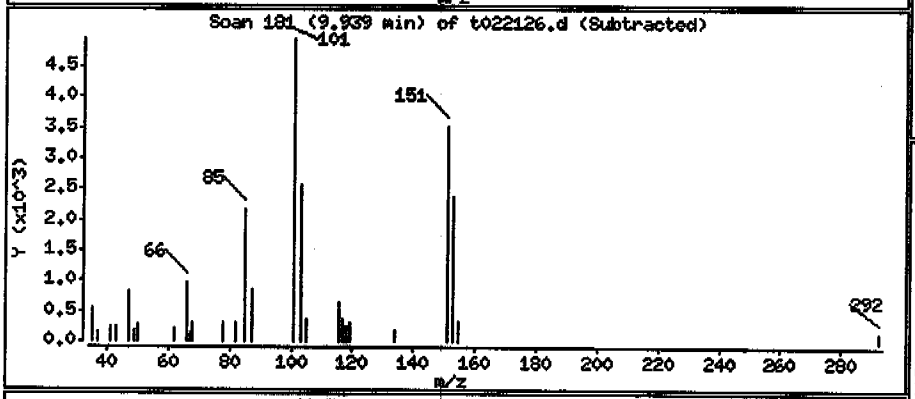
Column phase: RTx-624

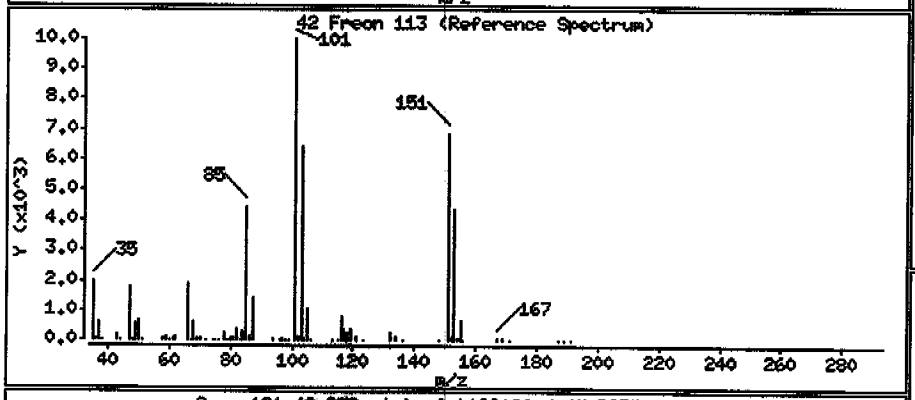
Column diameter: 0.53

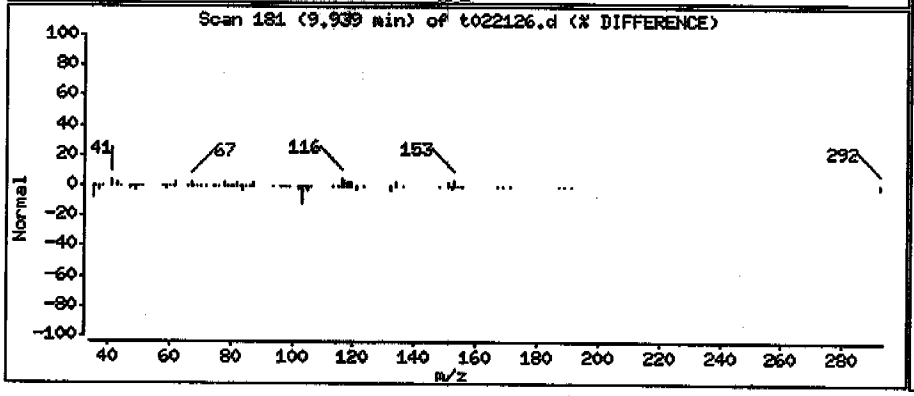
42 Freon 113

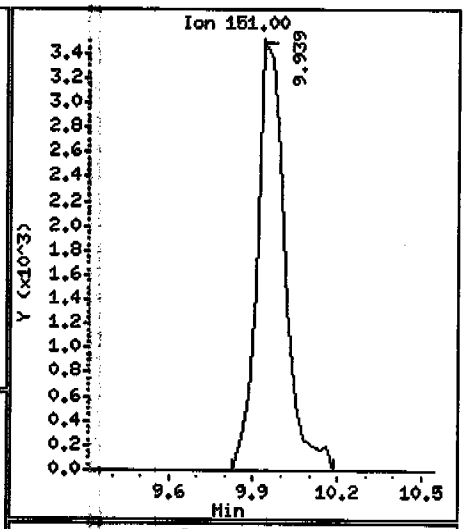
Concentration: 3.373 PPBV

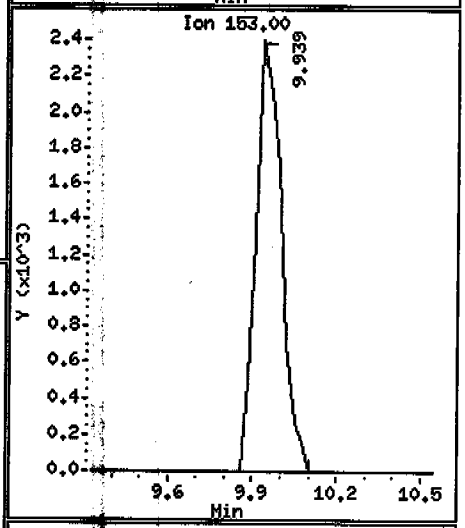


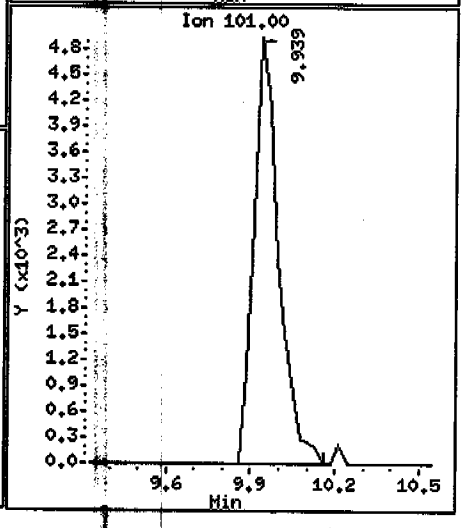












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

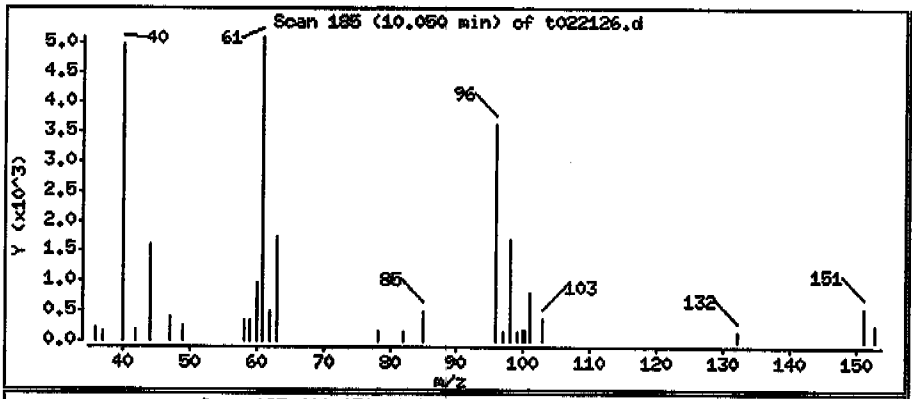
Operator: JP

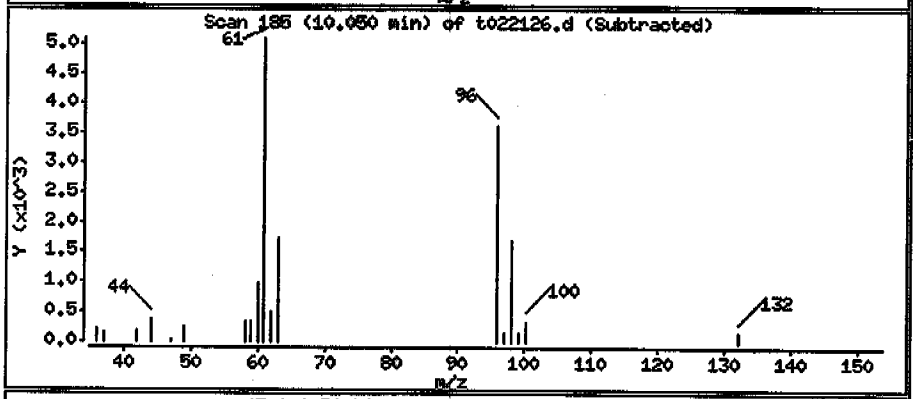
Column phase: RTx-624

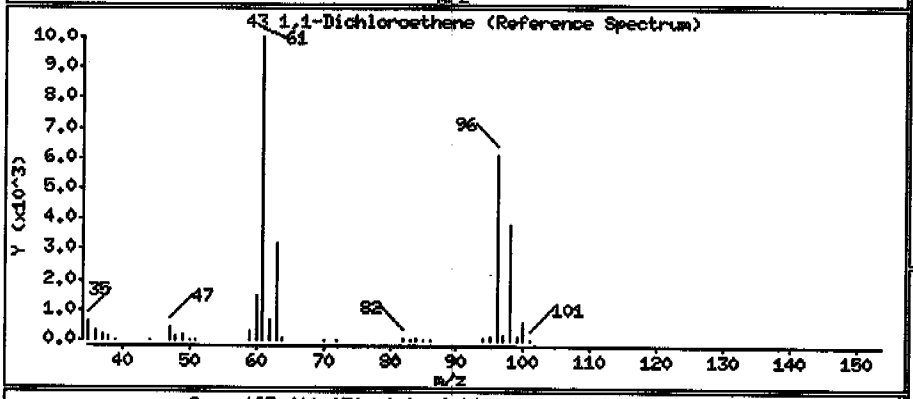
Column diameter: 0.53

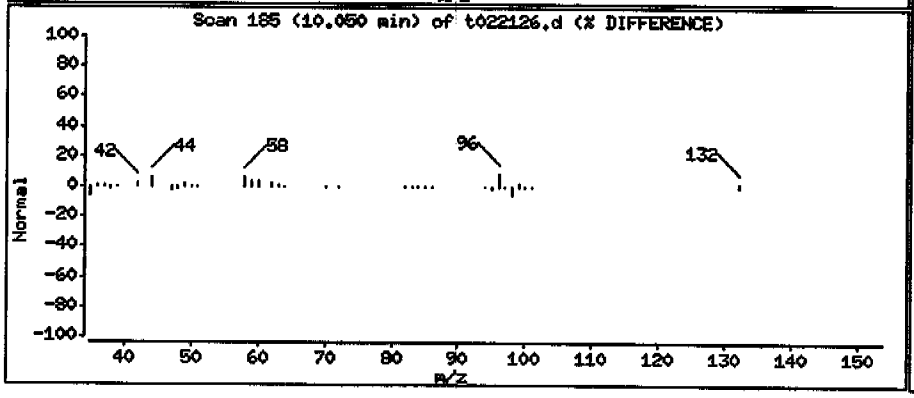
43 1,1-Dichloroethene

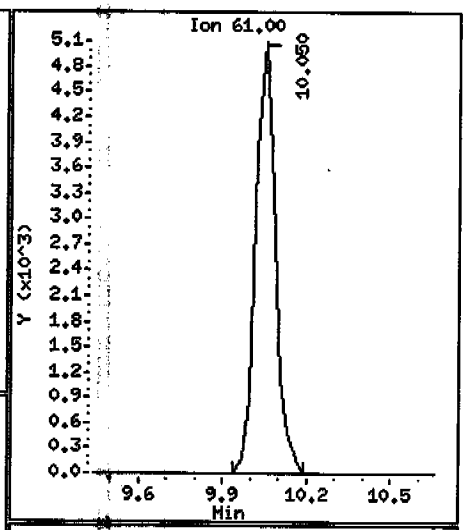
Concentration: 3.886 PPBV

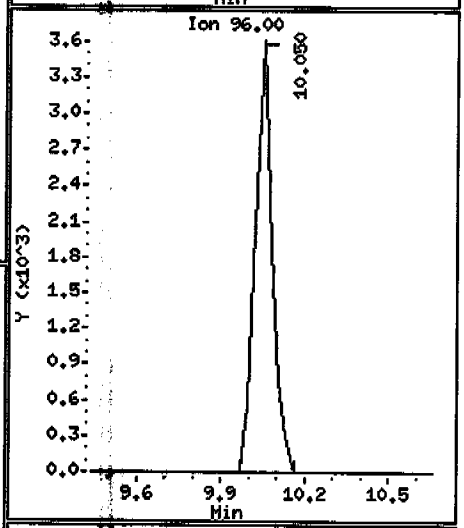


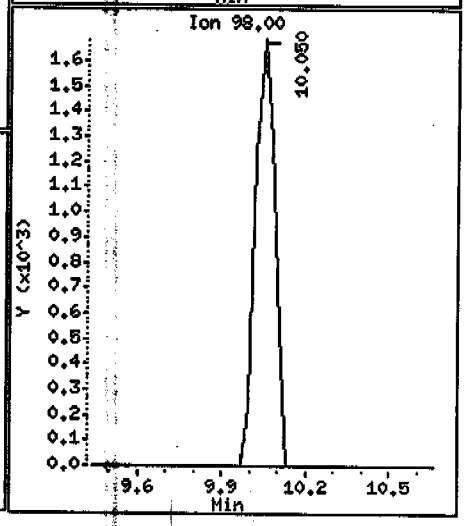












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

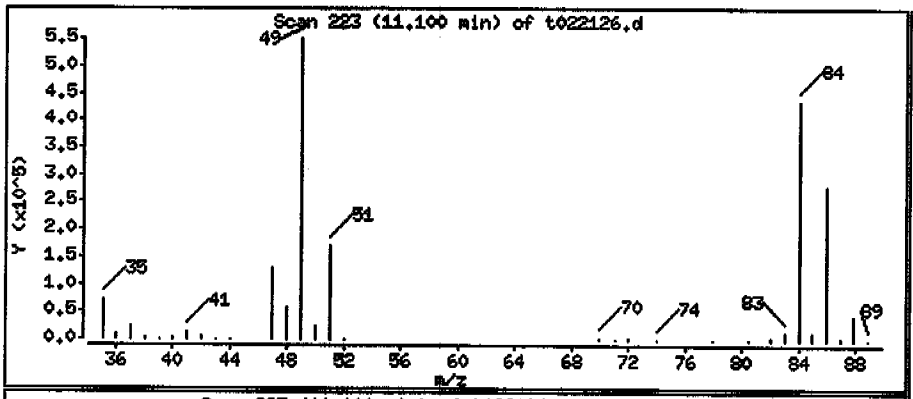
Operator: JP

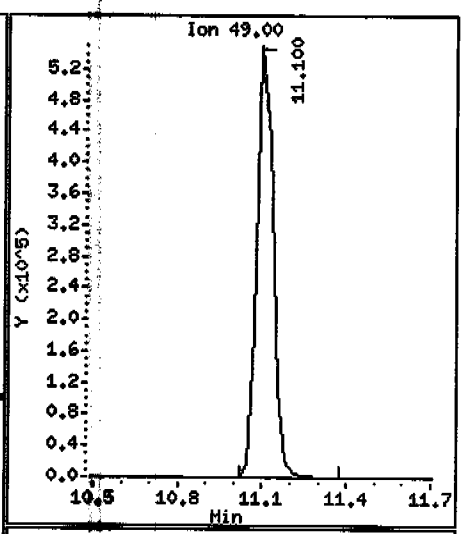
Column phase: RTx-624

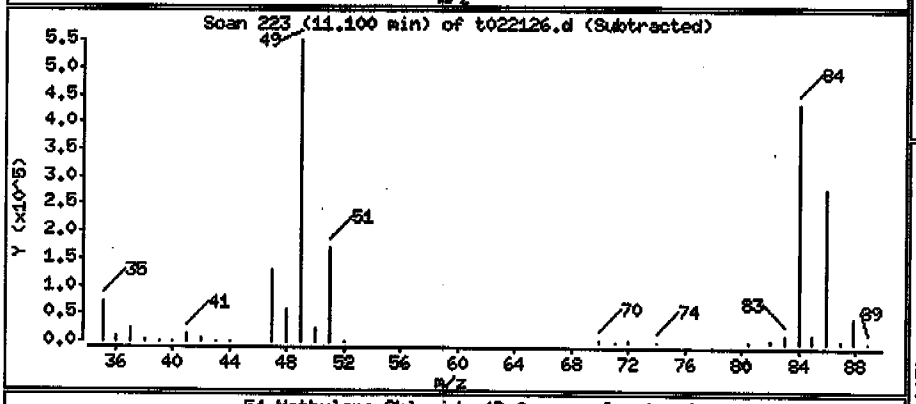
Column diameter: 0.53

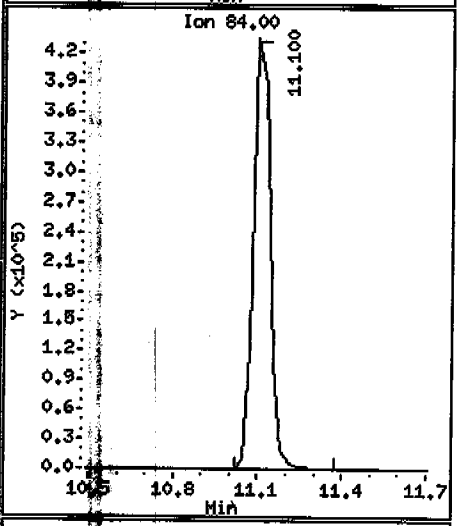
54 Methylene Chloride

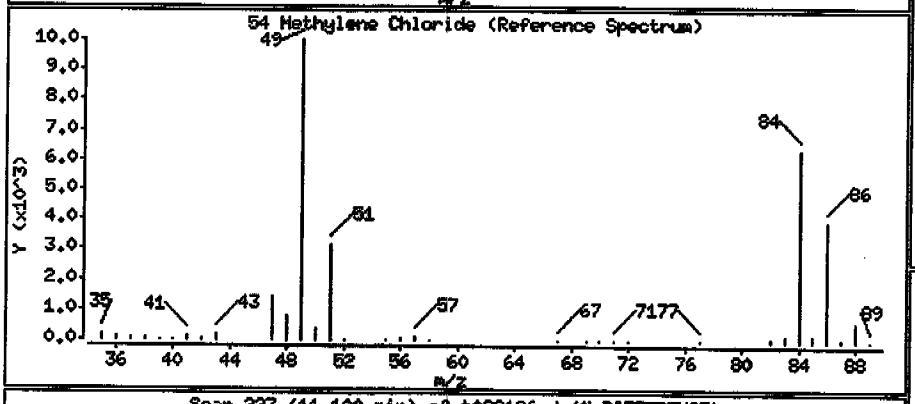
Concentration: 539.10 PPBV

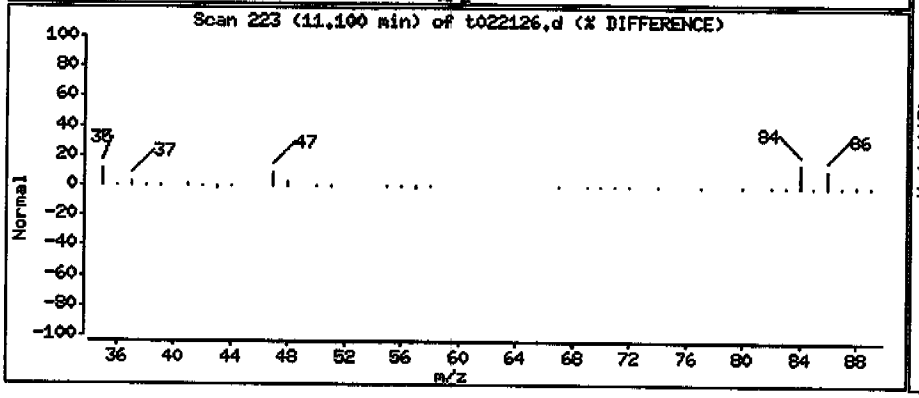


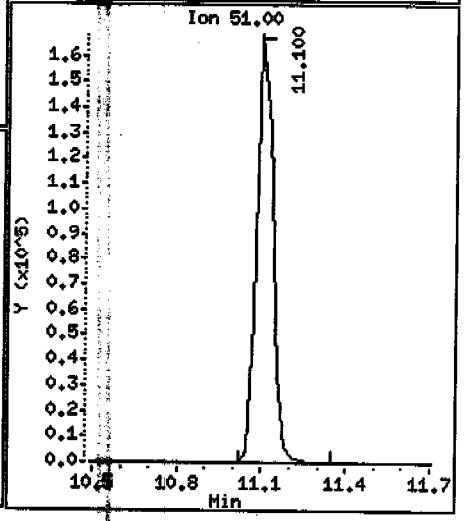












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

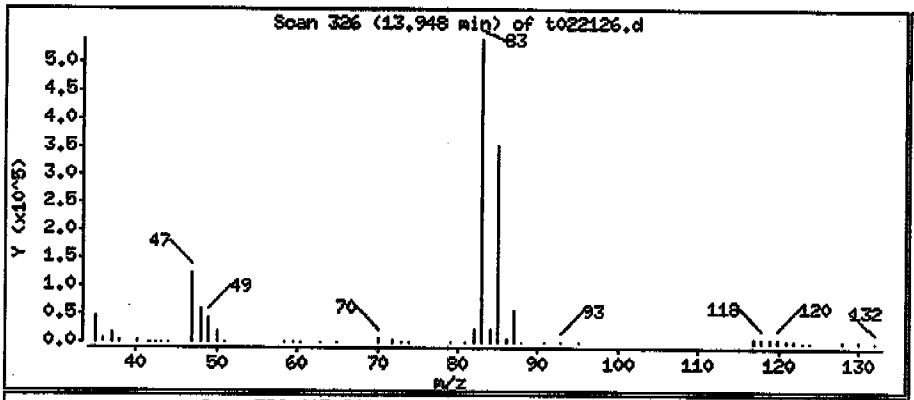
Operator: JP

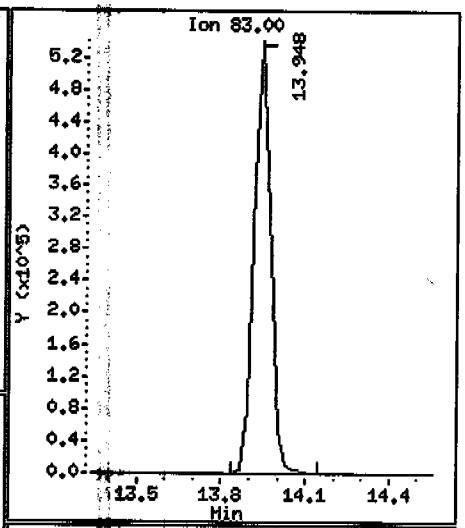
Column phase: RTx-624

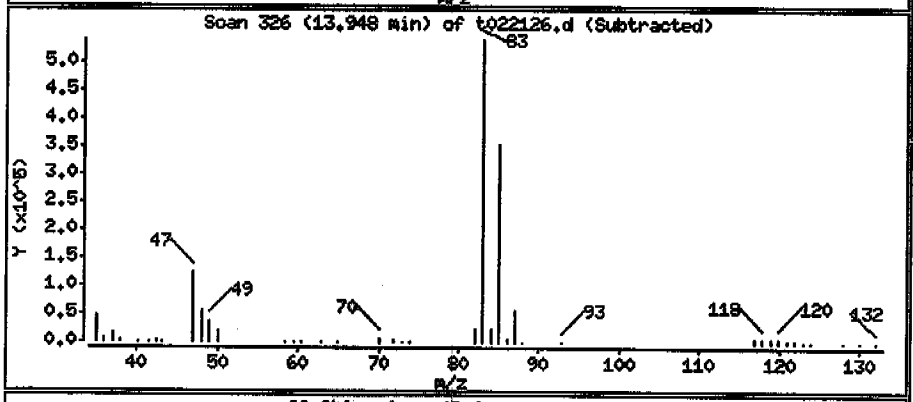
Column diameter: 0.53

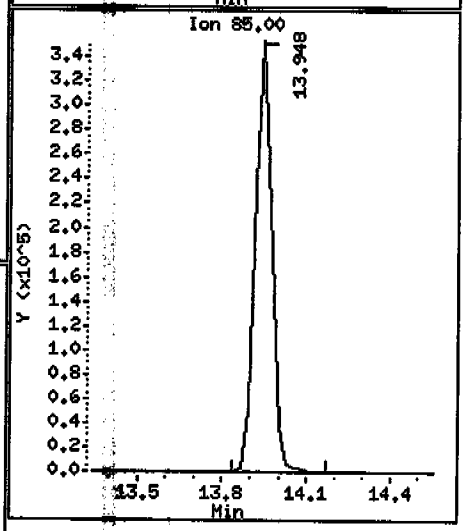
82 Chloroform

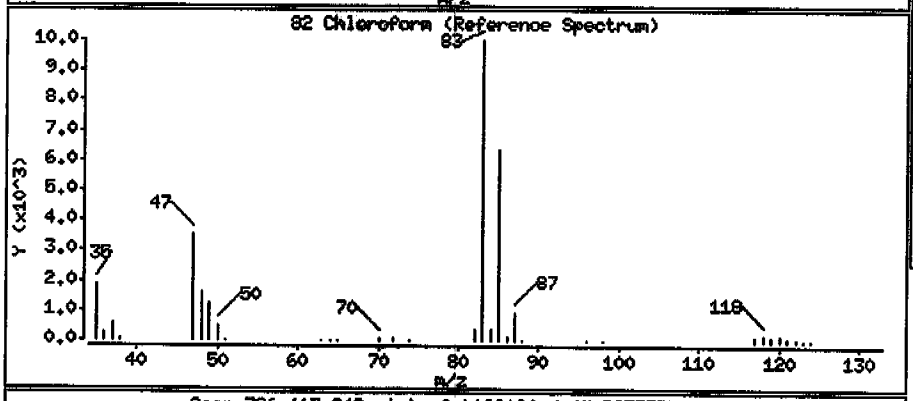
Concentration: 216.47 PPBV

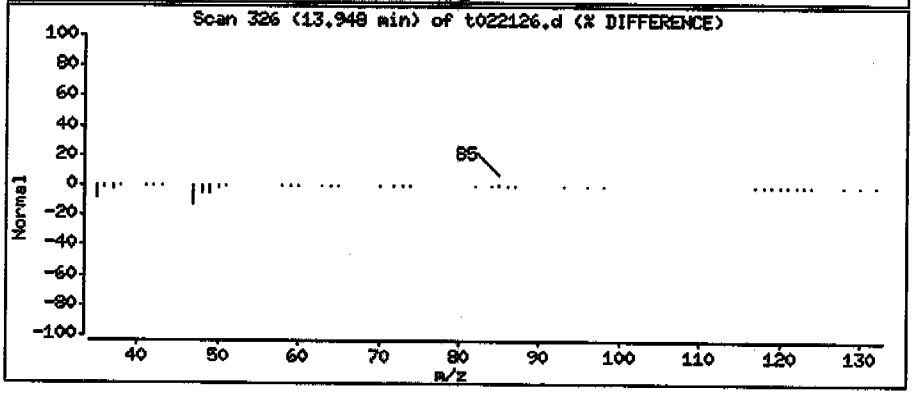












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

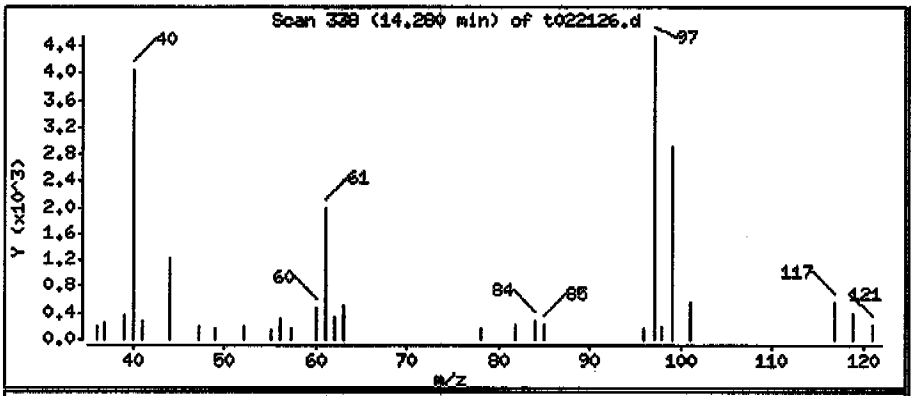
Operator: JP

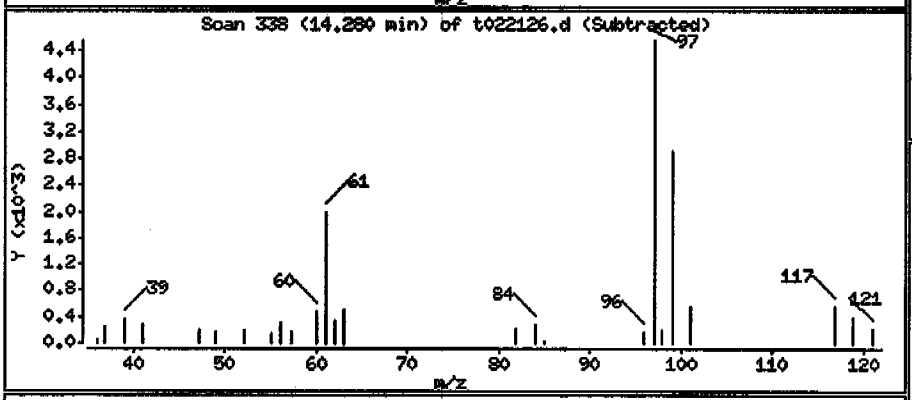
Column phase: RTx-624

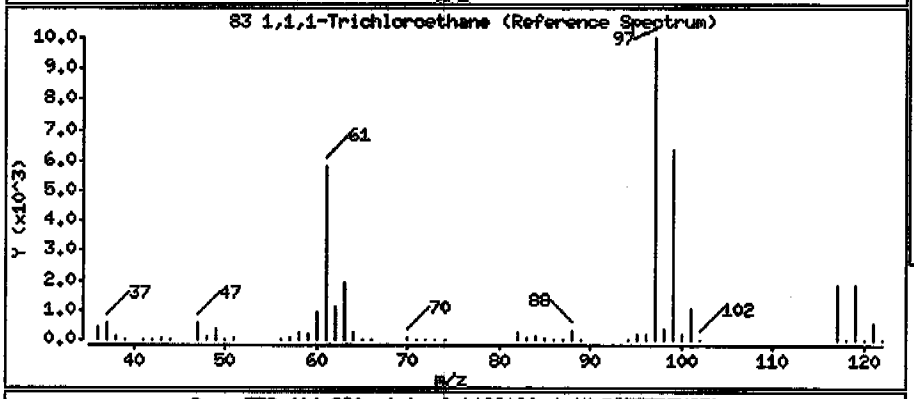
Column diameter: 0.53

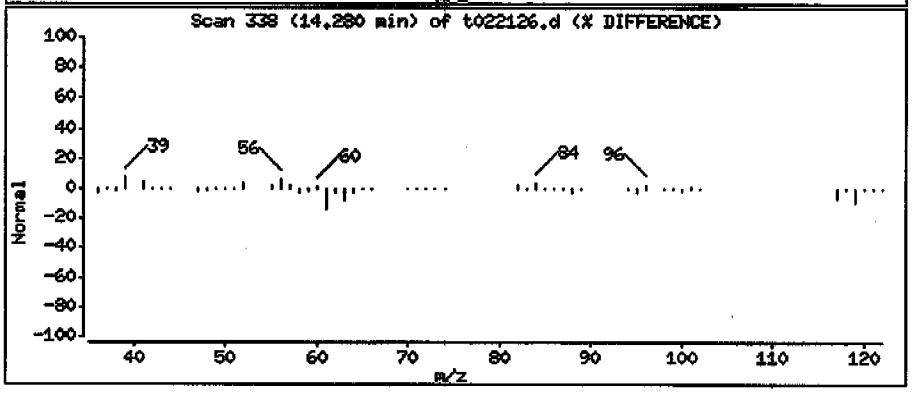
83 1,1,1-Trichloroethane

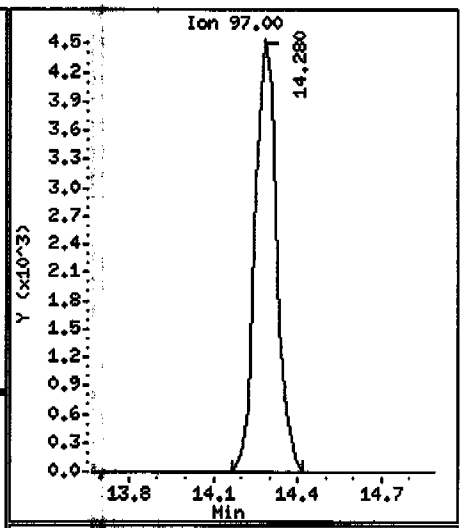
Concentration: 2.166 PPBV

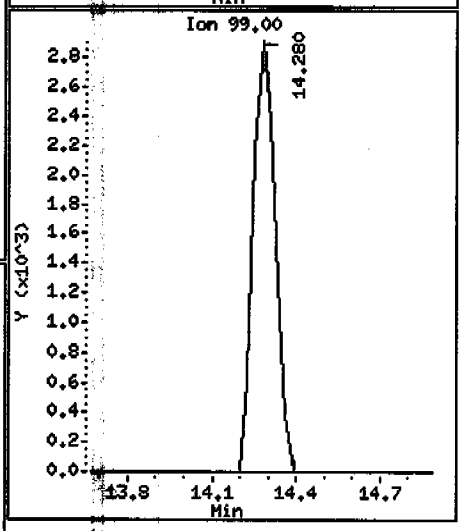












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

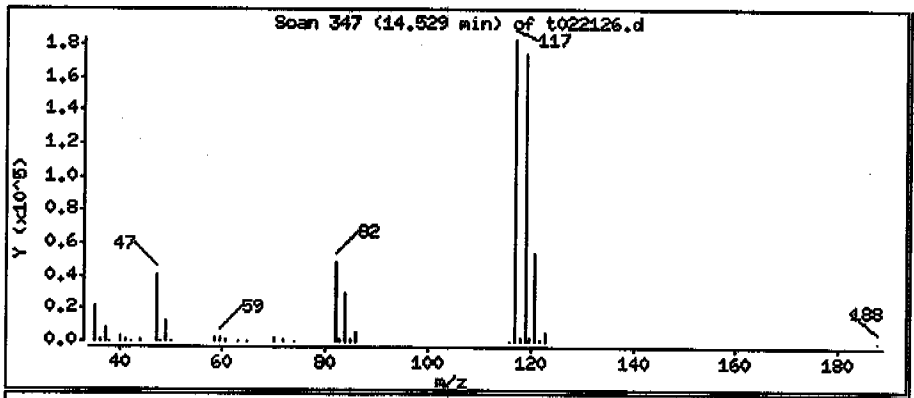
Operator: JP

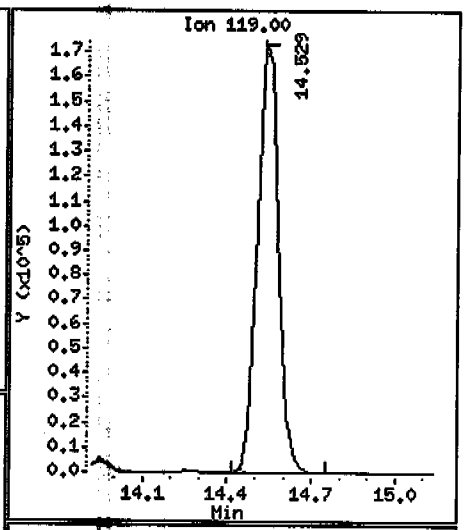
Column phase: RTx-624

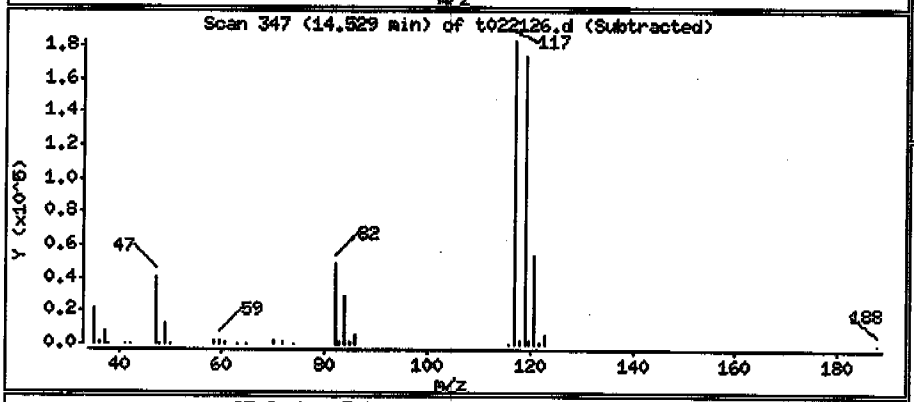
Column diameter: 0.53

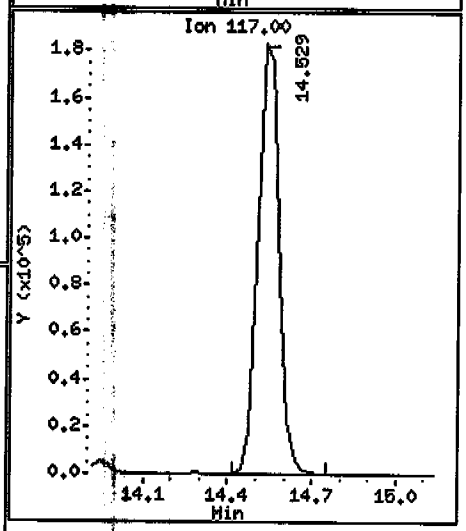
87 Carbon Tetrachloride

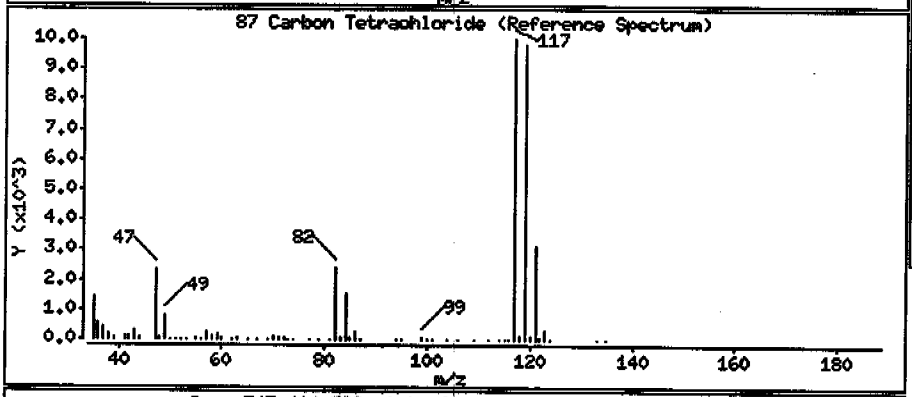
Concentration: 84.055 PPBV

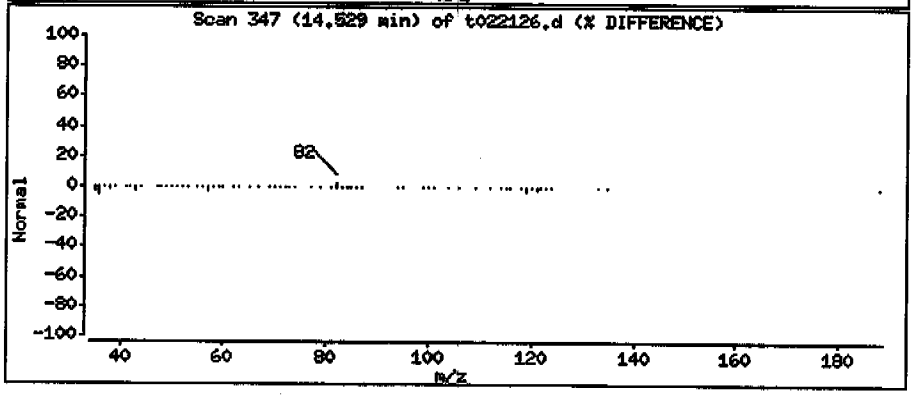












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

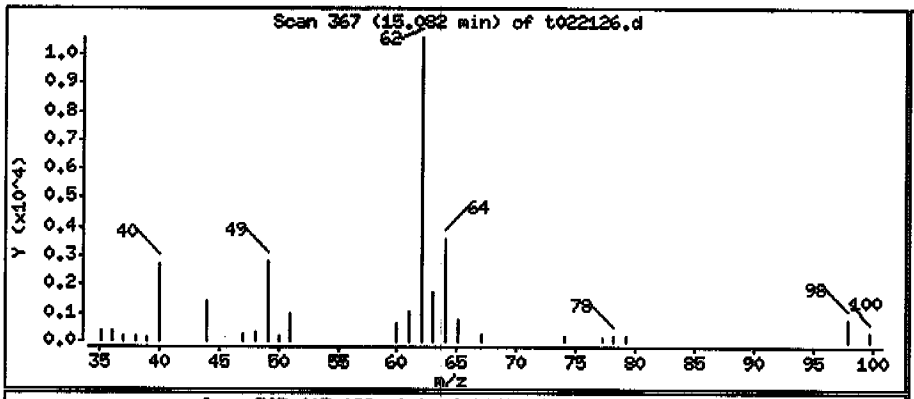
Operator: JP

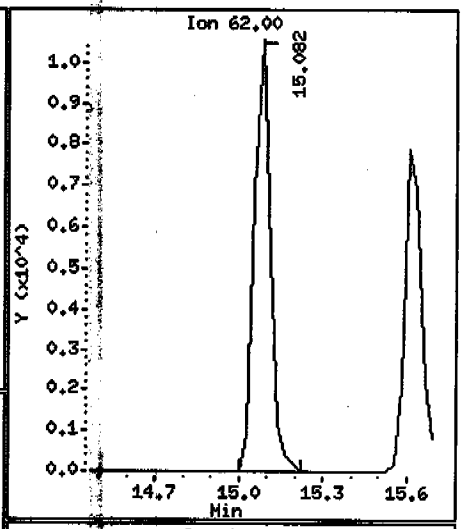
Column phase: RTx-624

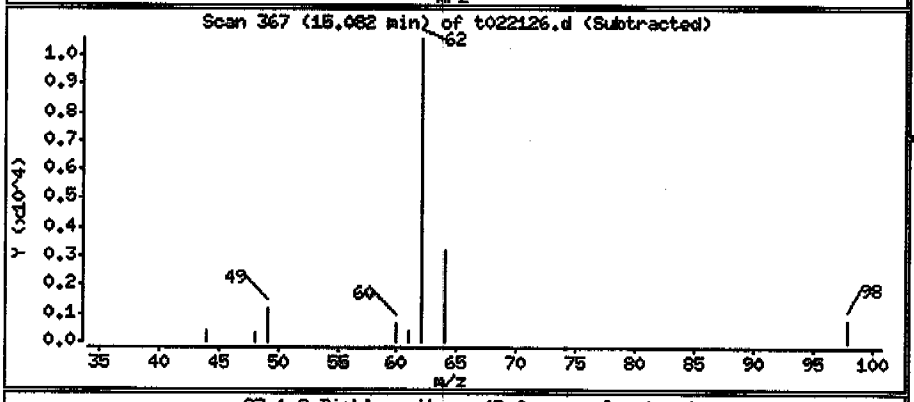
Column diameter: 0.53

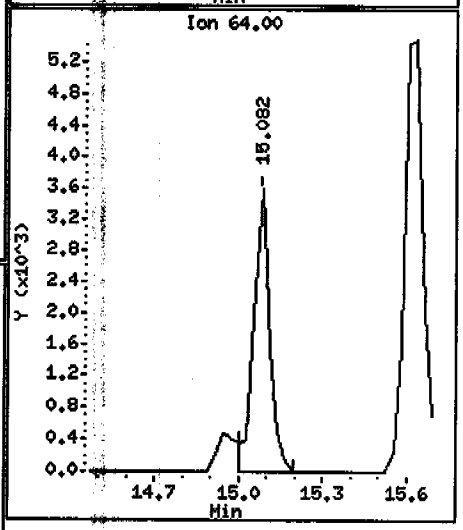
93 1,2-Dichloroethane

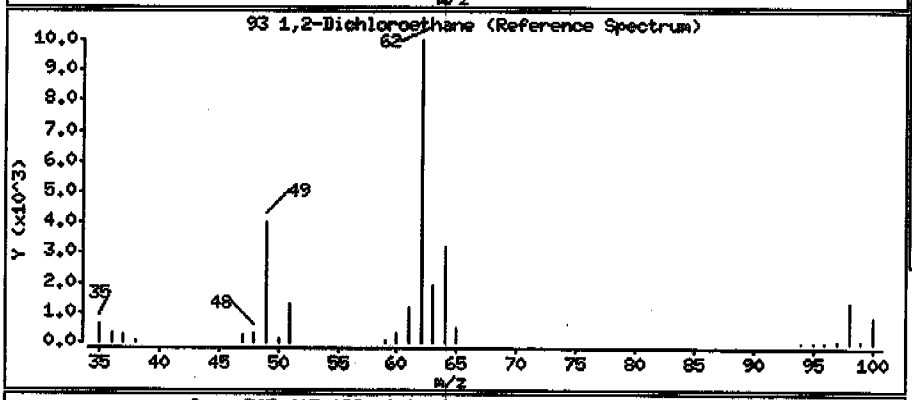
Concentration: 5.949 PPBV

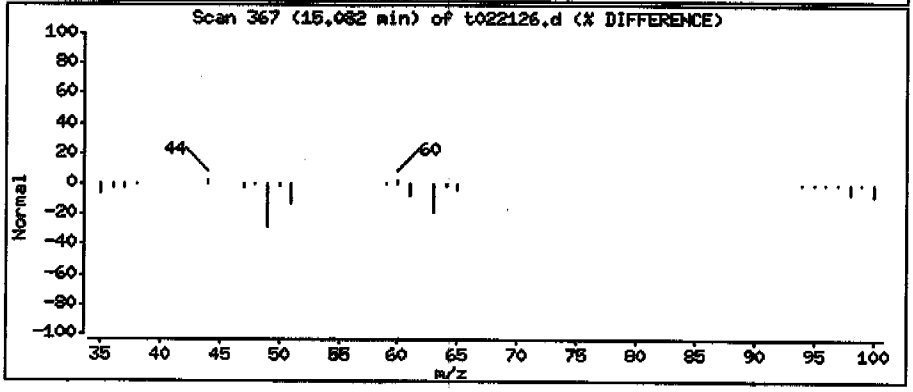












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

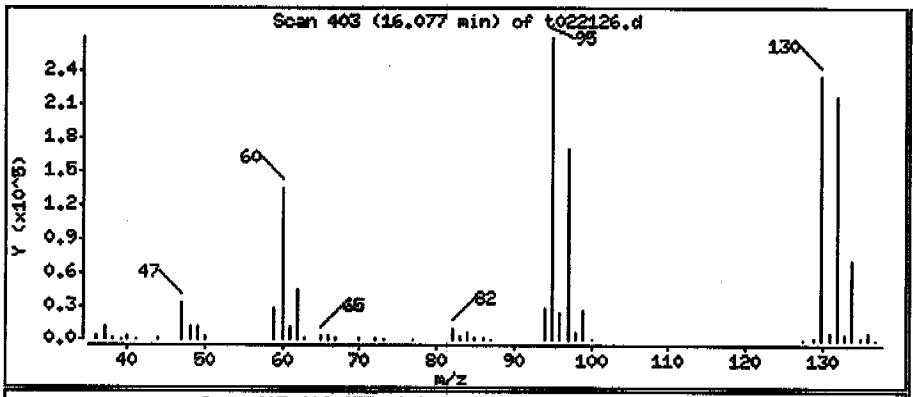
Operator: JP

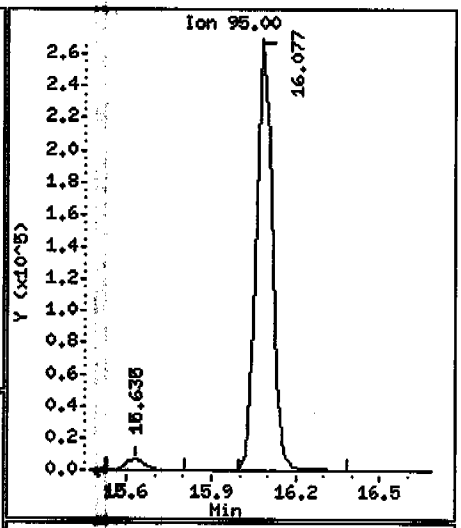
Column phase: RTx-624

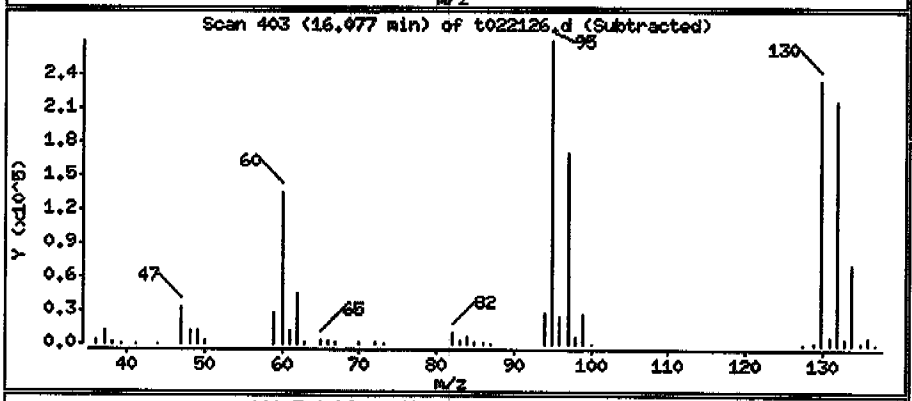
Column diameter: 0.53

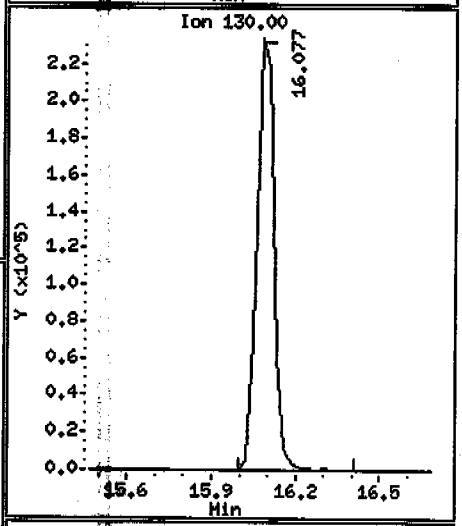
101 Trichloroethene

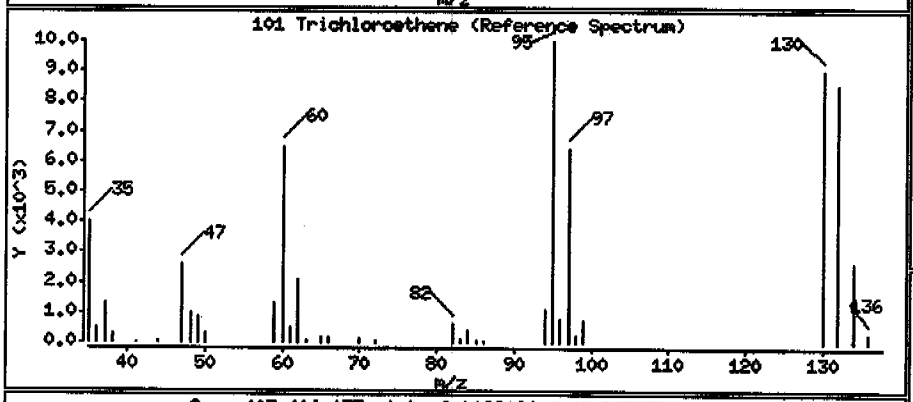
Concentration: 173.38 PPBV

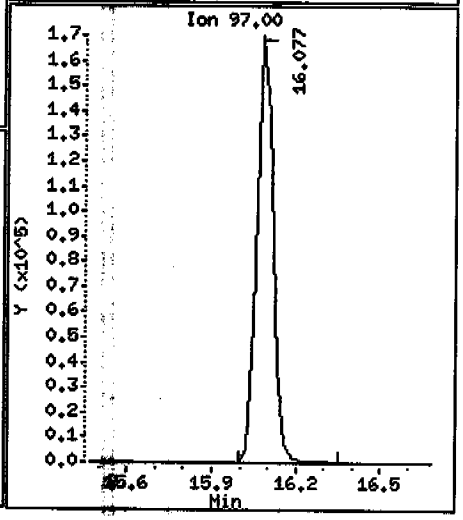


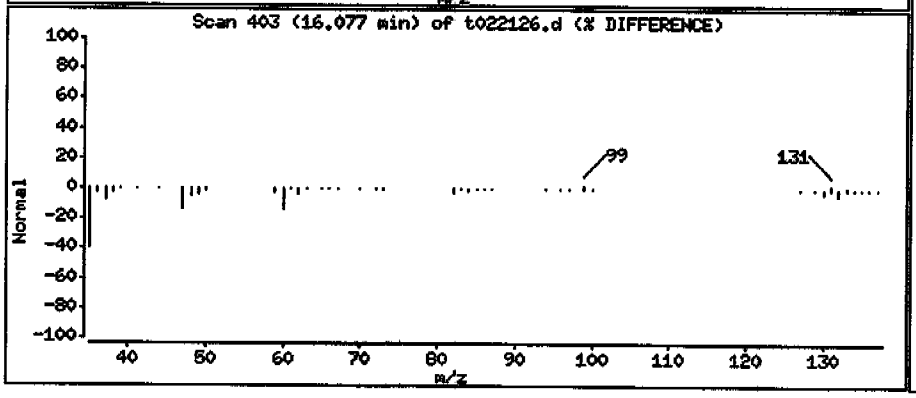












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

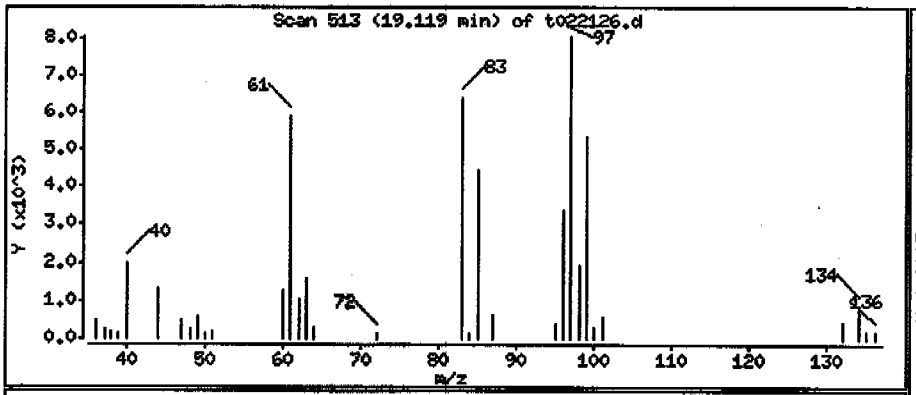
Operator: JP

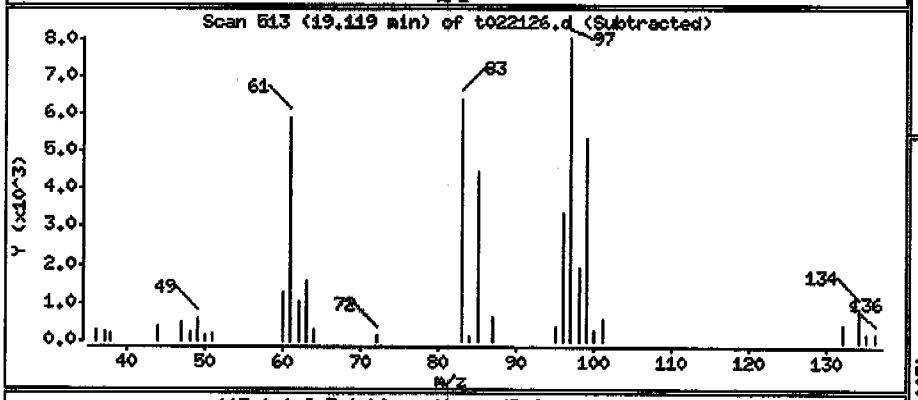
Column phase: RTx-624

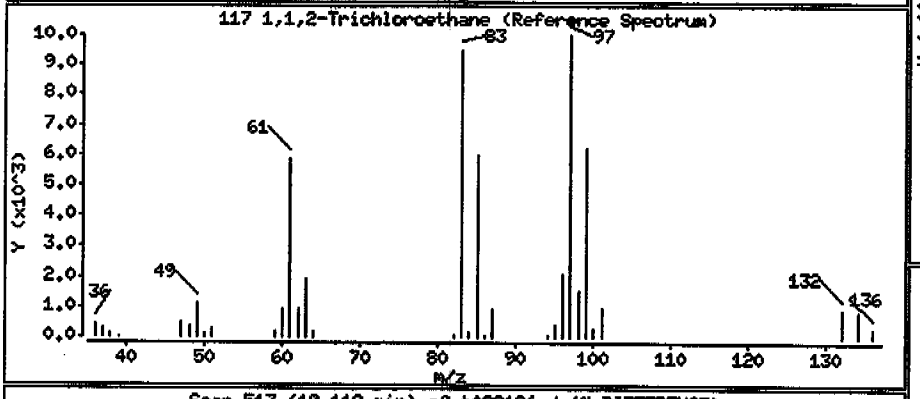
Column diameter: 0.53

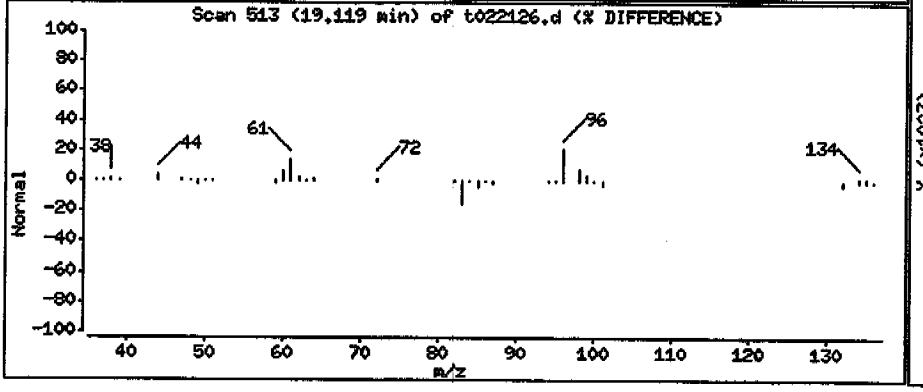
117 1,1,2-Trichloroethane

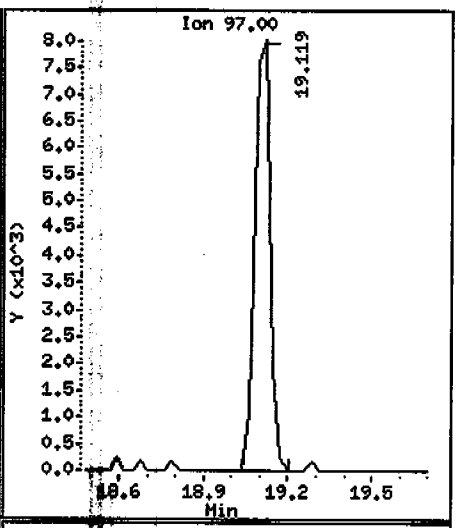
Concentration: 4.834 PPBV

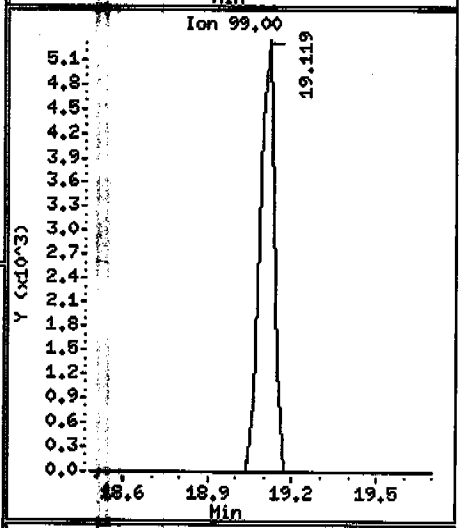


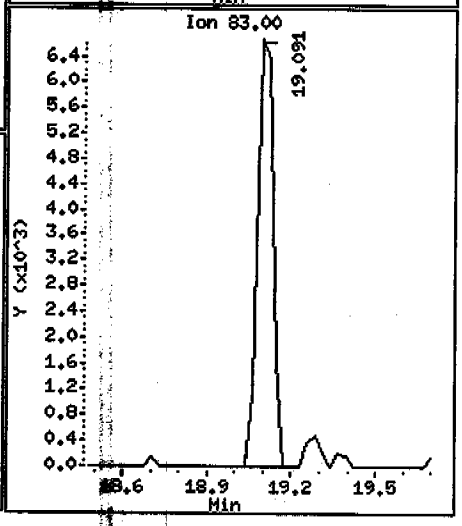












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

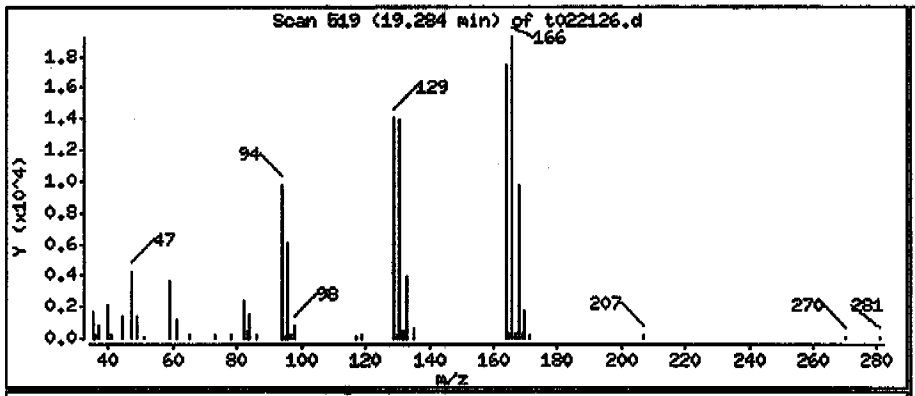
Operator: JP

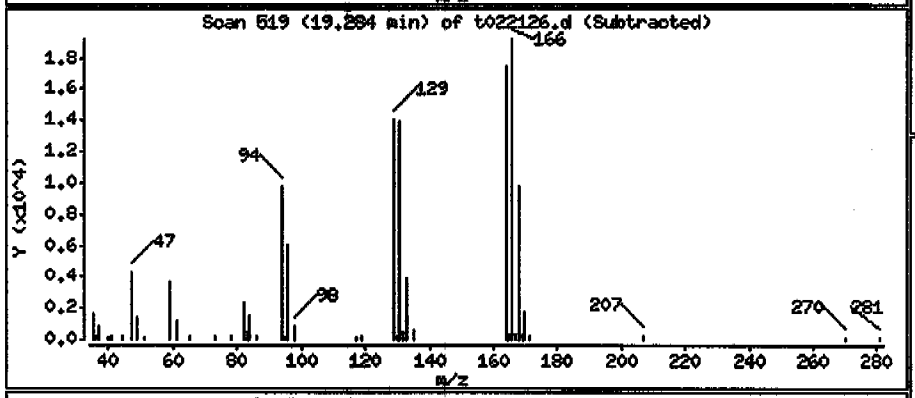
Column phase: RTx-624

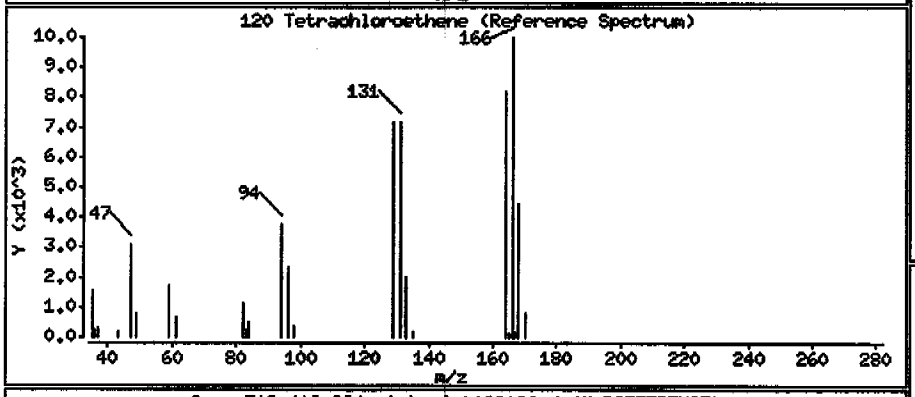
Column diameter: 0.53

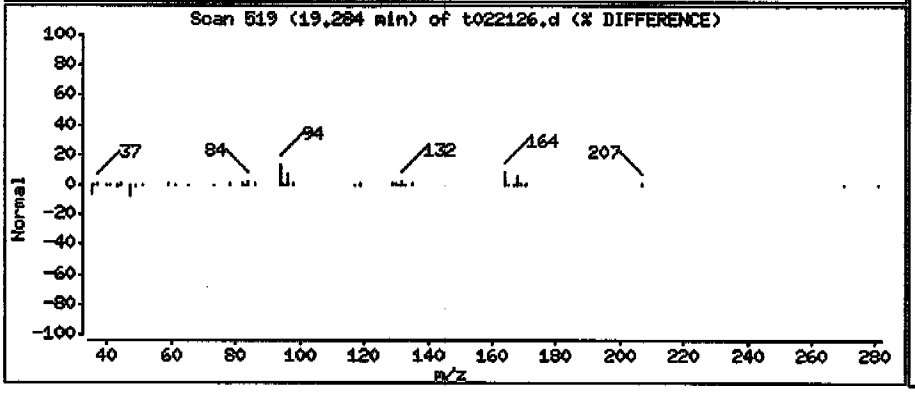
120 Tetrachloroethene

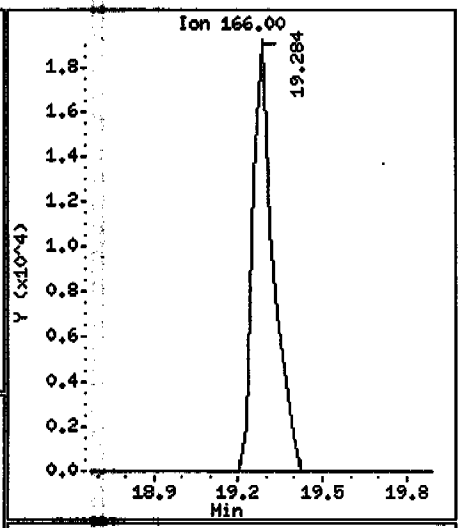
Concentration: 11.133 PPBV

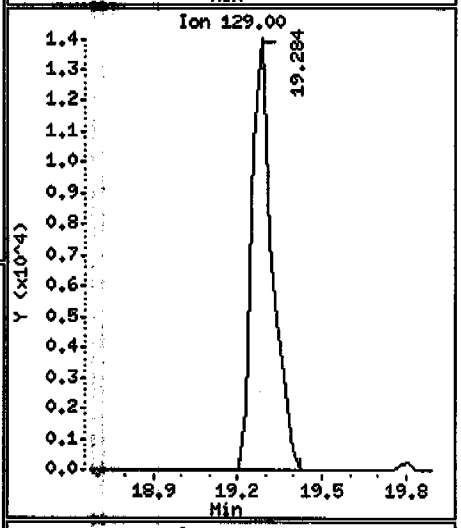


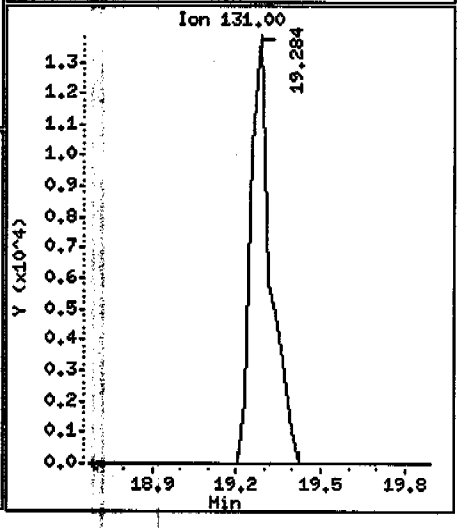












Data File: /chem/msdt.i/21Feb2008.b/t022126.d

Date : 22-FEB-2008 07:11

Client ID:

Instrument: msdt.i

Sample Info: 100mL #34746

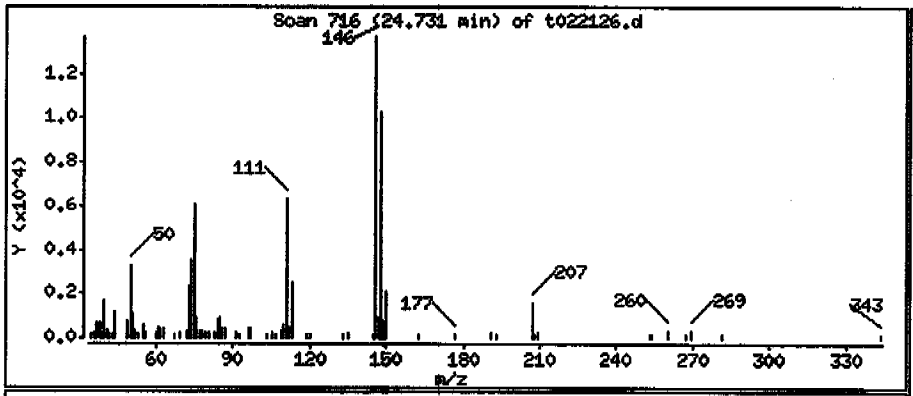
Operator: JP

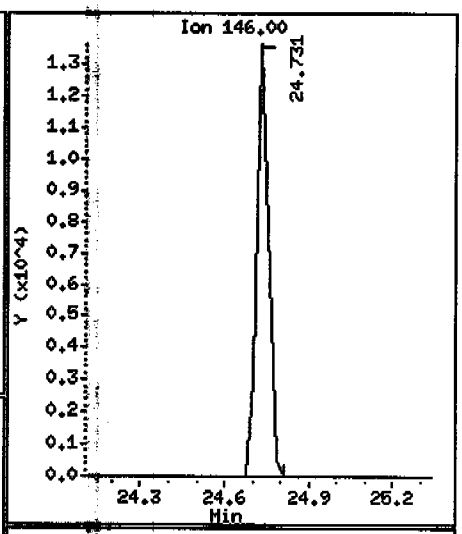
Column phase: RTx-624

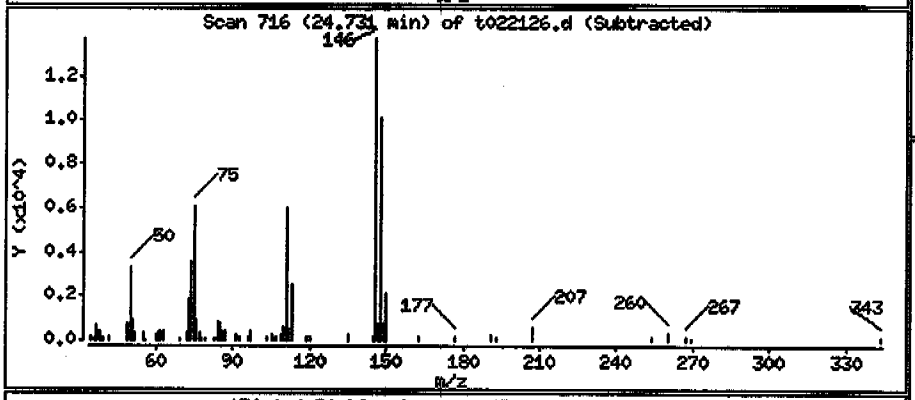
Column diameter: 0.53

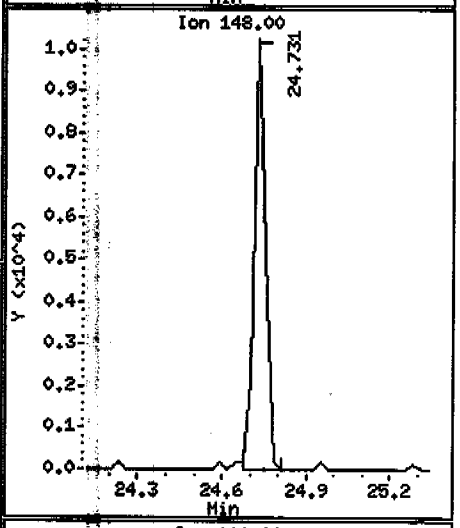
156 1,4-Dichlorobenzene

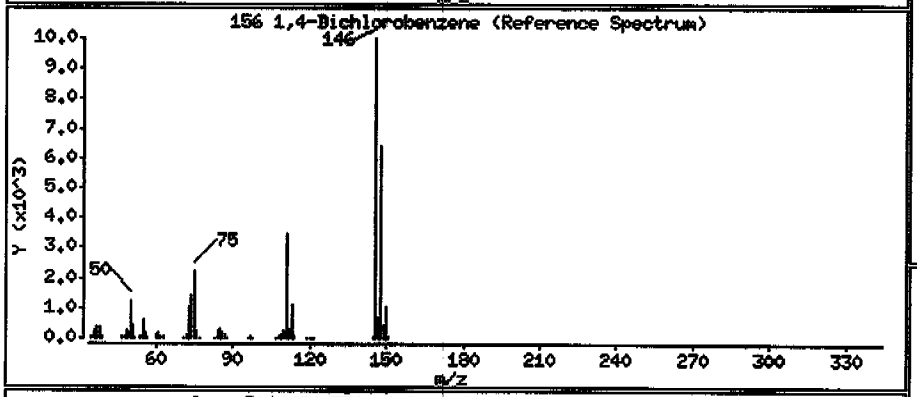
Concentration: 2.322 PPBV

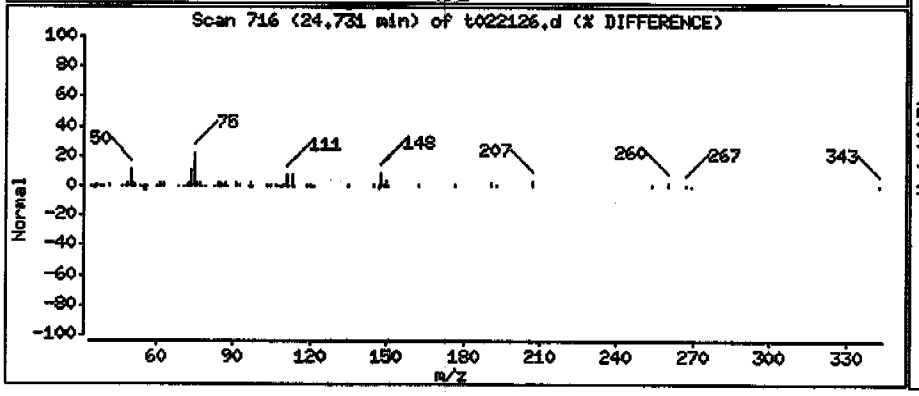


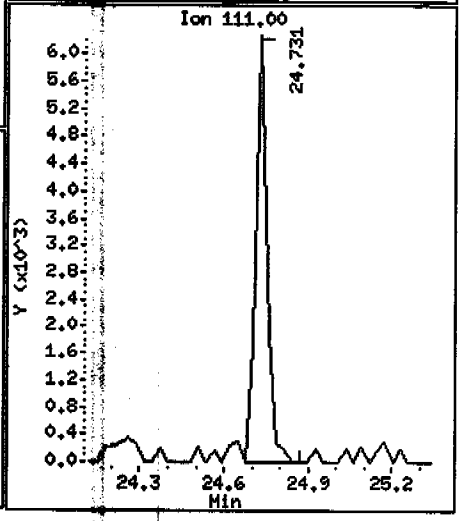












QC Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802283-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802283-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	102	70-130

0112

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022110.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 21-FEB-2008 17:55
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSRpb.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	292848	25.0000			80.00- 120.00	100.00
13.865	13.865 (1.000)	128	222896				27.38- 127.38	76.11
13.865	13.865 (1.000)	49	351217				131.81- 231.81	119.93
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1116553	25.0000			80.00- 120.00	100.00
15.635	15.607 (1.000)	88	184715				0.00- 66.79	16.54
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1046968	25.0000			80.00- 120.00	100.00
20.805	20.805 (1.000)	82	616977				7.58- 107.58	58.93
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.944	14.943 (1.078)	65	454622	24.1261	24.126		80.00- 120.00	100.00
14.944	14.943 (1.078)	67	223090				3.57- 103.57	49.07
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1131340	26.3043	26.304		80.00- 120.00	100.00
18.206	18.206 (1.164)	70	133927				0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	752849			18.71- 118.71	66.54
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	690744	25.5067	25.507	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	865759			76.46- 176.46	125.34
22.796	22.796 (1.096)	176	670013			48.22- 148.22	97.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022110.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: Humid

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	292848	-7.96
97 1,4-Difluorobenze	1251468	750881	1752055	1116553	-10.78
126 Chlorobenzene-d5	1150991	690595	1611387	1046968	-9.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022110.d
Report Date: 27-Feb-2008 14:43

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSRpb.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: Humid

Client SDG: 21Feb2008
Fraction: VOA
Client Smp ID: Lab Blank
Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.126	96.50	70-130
$ 113 Toluene-d8	25.000	26.304	105.22	70-130
$ 137 Bromofluorobenzene	25.000	25.507	102.03	70-130

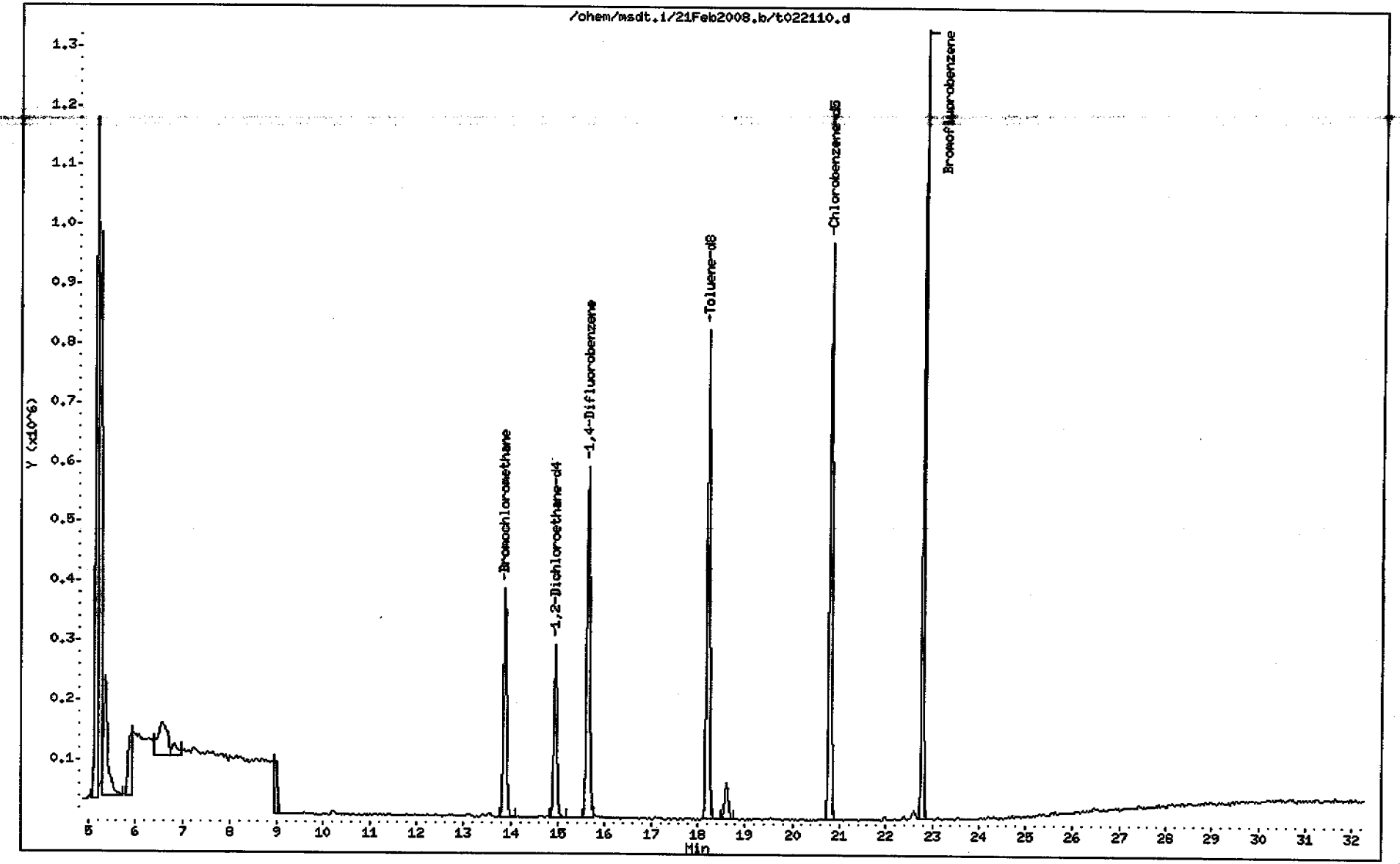
Data File: /chem/msdt.i/21Feb2008.b/t022110.d
Date : 21-FEB-2008 17:55
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0117



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0802283

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-10504	101		103		103				0
02	MD21-08-10505	100		104		103				0
03	MD21-08-10506	97		102		102				0
04	MD21-08-10507	108		105		103				0
05	MD21-08-10508	105		106		101				0
06	Lab Blank	96		105		102				0
07	CCV	106		105		102				0
08	LCS	105		106		101				0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0802283

Lab File ID: t022106.d
Date Analyzed: 02/21/2008

Instrument ID: msdt.i
Time Analyzed: 02:36 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1150991		20.81		1251468		15.61		318158		13.87	
	UPPER LIMIT	1611387		21.14		1752055		15.94		445421		14.20	
	LOWER LIMIT	690595		20.48		750881		15.28		190895		13.54	
	CLIENT SAMPLE NO												
01	MD21-08-10504	915281		20.81		956359		15.63		253165		13.89	
02	MD21-08-10505	927636		20.81		943657		15.63		248801		13.87	
03	MD21-08-10506	958089		20.81		1018317		15.63		276143		13.89	
04	MD21-08-10507	908844		20.81		943008		15.63		241834		13.89	
05	MD21-08-10508	955880		20.81		979191		15.63		236542		13.87	
06	Lab Blank	1046968		20.81		1116553		15.63		292848		13.87	
07	CCV	1150991		20.81		1251468		15.61		318158		13.87	
08	LCS	1155810		20.81		1249796		15.63		310710		13.87	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdt.i/06Feb2008.b/t020607.d
Level 2: /chem/msdt.i/06Feb2008.b/t020615.d
Level 3: /chem/msdt.i/21Feb2008.b/t022102.d
Level 4: /chem/msdt.i/21Feb2008.b/t022103.d
Level 5: /chem/msdt.i/21Feb2008.b/t022104.d
Level 6: /chem/msdt.i/21Feb2008.b/t022109.d
Level 7: /chem/msdt.i/21Feb2008.b/t022105.d

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
204 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
5 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
6 Freon142b	+++++	+++++	3.08434	3.14708	3.61347	3.56308		
	3.77448						3.43649	8.842

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 13	+++++	+++++	3.23618	3.29433	3.34933	3.57582		
	3.77364						3.44586	6.498
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
13 Freon 134a	+++++	+++++	1.43136	1.41603	1.53392	1.58057		
	1.72491						1.53736	8.164
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Propylene	+++++	+++++	0.84673	0.85060	0.79894	0.79324		
	0.80075						0.81770	3.488
15 Freon 152a	+++++	+++++	0.83463	0.73405	0.81286	0.82858		
	0.92807						0.82784	8.351
12 Dichlorodifluoromethane/Fr12	+++++	4.16310	4.59106	5.40232	5.14446	5.05821		
	4.93291						4.88168	9.041
17 Freon 22	+++++	+++++	0.34699	0.36399	0.38557	0.40685		
	0.44934						0.39055	10.202

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Freon 114	+++++	2.99040	2.92556	3.49436	3.32698	3.32662	3.29796	3.22698	6.836
18 Chloromethane	+++++	+++++	0.98827	1.10944	1.03446	1.10461	1.09200	1.06576	4.941
21 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Vinyl Chloride	+++++	1.42862	1.28255	1.59625	1.47907	1.49351	1.49340	1.46323	7.103
19 Butane	+++++	+++++	0.25023	0.30439	0.28440	0.28049	0.27474	0.27985	7.053
22 1,3-Butadiene	+++++	0.97057	1.02558	1.21355	1.14007	1.13828	1.11885	1.10115	7.979
26 Methanol	+++++	+++++	+++++	0.32872	0.14314	0.16544	0.19742	0.20868	39.806
25 Bromomethane	+++++	1.36425	1.28940	1.56898	1.45095	1.49031	1.52877	1.44878	7.247
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
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Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
27 Chloroethane	+++++	0.65321	0.67403	0.83510	0.80667	0.80944	0.80030	0.76312	10.255
29 Isopentane	+++++	+++++	1.41966	1.72435	1.68834	1.64271	1.60636	1.61629	7.342
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.46115	2.48121	2.61085	2.39743	2.32898	2.45592	4.280
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	4.83077	5.16410	6.19720	5.82682	5.63989	5.49991	5.52640	8.749
37 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
38 Ethanol	+++++	+++++	0.30720	0.46457	0.45284	0.43697		
	0.45254						0.42283	15.461
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
40 Freon123a	+++++	+++++	1.67093	1.80792	2.07320	1.91202		
	2.00931						1.89468	8.465
41 Freon123	+++++	+++++	0.20549	0.20922	0.23514	0.23436		
	0.22855						0.22255	6.365
44 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
42 Freon 113	+++++	2.32343	2.43842	2.80201	2.61026	2.58402		
	2.51013						2.54471	6.421
43 1,1-Dichloroethene	+++++	1.89819	1.96458	2.53705	2.44002	2.45483		
	2.44852						2.29053	12.275
45 Acetone	+++++	+++++	0.64513	0.75269	0.75542	0.70777		
	0.68836						0.70987	6.519
46 2-Propanol	+++++	+++++	1.84353	2.56755	2.62153	2.59186		
	2.53924						2.43274	13.597
48 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
47 Carbon Disulfide	+++++	3.75552	3.89953	4.70232	4.46118	4.57127		
	4.60543						4.33254	9.262
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
51 3-Chloropropene	+++++	+++++	0.57241	0.83863	0.77832	0.77986		
	0.76166						0.74606	13.589
52 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	1.42542	1.38589	1.54346	1.44317	1.45012		
	1.44235						1.44840	3.593

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD	
57 tert-Butyl-Alcohol	+++++	+++++	1.82841	3.04910	3.01051	2.74877	2.61830	2.65102	18.624	
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 MTBE	+++++	1.74667	2.48598	5.35404	5.24034	5.08244	5.03910	4.15810	38.544	<-
61 trans-1,2-Dichloroethene	+++++	1.37259	1.40223	1.98489	1.85179	1.82008	1.78174	1.70224	14.889	
62 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
66 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 Hexane	+++++	1.32672	1.77918	2.62091	2.58448	2.58635	2.58008	2.24629	24.751	

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 Isopropyl ether	+++++	+++++	3.46151	3.51777	4.38551	4.38257	4.73654	4.09678	13.986
69 Vinyl Acetate	+++++	+++++	0.32869	0.45891	0.45656	0.47908	0.47874	0.44040	14.383
70 1,1-Dichloroethane	+++++	2.38432	2.79344	3.61652	3.47281	3.35324	3.23668	3.14283	14.814
71 1-Propanol	+++++	+++++	0.15996	0.23615	0.18897	0.23814	0.25309	0.21526	18.202
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.22964	3.53835	4.86959	4.90857	5.27473	4.36417	20.970
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 Ethyl Acetate	+++++	+++++	0.43635	0.37272	0.45984	0.44879	0.49610	0.44196	10.172

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Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
78 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.54840	0.64439	0.87500	0.88005	0.92566	0.92719	0.79961	20.225
76 cis-1,2-Dichloroethene	+++++	1.50980	1.82949	2.43792	2.35871	2.32480	2.22781	2.11467	17.285
79 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 Tetrahydrofuran	+++++	0.86924	1.09182	1.54446	1.53666	1.53710	1.51283	1.34868	21.793
82 Chloroform	2.87970	2.73754	3.43045	4.29177	4.13727	4.05571	3.88461	3.63101	17.201
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.56837	3.64494	4.67327	4.45606	4.41764	4.33648	4.01616	19.679
85 Cyclohexane	+++++	1.36064	1.71484	2.48744	2.40989	2.47472	2.45512	2.15044	22.709
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
88 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Carbon Tetrachloride	+++++	2.69834	3.44710	4.47510	4.26367	4.18287		
	4.08084						3.85789	17.248
99 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
89 2,2,4-Trimethylpentane	+++++	3.17139	4.19445	6.10478	5.79296	5.98557		
	6.21058						5.24329	24.009
91 Benzene	1.30575	0.88191	1.17697	1.40059	1.35772	1.31372		
	1.31185						1.24979	14.092
92 tert-amyl-Methyl Ether	+++++	+++++	3.16063	3.41817	4.52447	4.57581		
	4.96193						4.12820	19.123
96 2-Heptanone	+++++	+++++	1.27450	1.66153	2.39901	2.62689		
	2.87236						2.16686	31.086
93 1,2-Dichloroethane	+++++	0.44681	0.57569	0.69764	0.67542	0.64331		
	0.61956						0.60974	14.846
94 Heptane	+++++	0.22192	0.29435	0.41861	0.39712	0.39872		
	0.39194						0.35378	22.068
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
98 1-Butanol	+++++	+++++	0.09734	0.14280	0.14126	0.20427		
	0.22835						0.16280	32.451
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
101 Trichloroethene	+++++	0.34601	0.49463	0.62804	0.59888	0.57328		
	0.57089						0.53529	19.204
102 Methyl Cyclohexane	+++++	1.53385	2.04963	2.92705	2.84733	2.93614		
	2.98281						2.54614	23.889
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
104 1,2-Dichloropropane	+++++	0.29580	0.38067	0.47917	0.46930	0.45318		
	0.45136						0.42168	16.773
106 1,4-Dioxane	+++++	+++++	0.24229	0.32501	0.32675	0.32426		
	0.32497						0.30866	12.023
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
107 Bromodichloromethane	+++++	0.61966	0.87952	1.12677	1.07497	1.03421		
	1.01275						0.95798	19.338
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD	
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 cis-1,3-Dichloropropene	+++++	0.38794	0.53248	0.74519	0.74052	0.72847	0.72072	0.64255	23.143	
111 4-Methyl-2-pentanone	+++++	0.14029	0.20868	0.34424	0.34948	0.35032	0.35871	0.29195	32.073	<-
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
114 Toluene	+++++	0.81092	1.24660	1.54307	1.48194	1.44883	1.46639	1.33263	20.608	
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 trans-1,3-Dichloropropene	+++++	0.47967	0.69609	0.94114	0.90256	0.87944	0.85094	0.79014	21.981	
117 1,1,2-Trichloroethane	+++++	0.34939	0.54719	0.67788	0.64198	0.60875	0.59063	0.56947	20.481	
120 Tetrachloroethene	+++++	0.49262	0.70999	0.91885	0.85607	0.81552	0.78542	0.76308	19.624	

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
121 2-Hexanone	+++++	+++++	0.25507	0.52868	0.53983	0.53135		
	0.52933						0.47685	26.017
118 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
119 Butyl Acetate	+++++	+++++	0.24369	0.28185	0.37466	0.39556		
	0.40225						0.33960	21.243
122 Dibromochloromethane	+++++	0.53953	0.85628	1.18704	1.12813	1.07161		
	1.03522						0.96963	24.619
123 1,2-Dibromoethane	0.84179	0.55970	0.80137	1.10140	1.04350	1.00935		
	0.98755						0.90581	20.585
127 Chlorobenzene	+++++	0.89505	1.25385	1.53453	1.44109	1.38816		
	1.37527						1.31466	17.116
124 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 Ethyl Benzene	+++++	0.41019	0.61882	0.81504	0.76644	0.73946		
	0.73702						0.68116	21.679
125 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
129 m,p-Xylene	+++++	0.45061	0.77115	1.03224	0.98373	0.95372		
	0.95497						0.85774	25.449

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	200.000 Level 7								
130 o-Xylene	+++++	0.44049	0.71861	0.99008	0.93480	0.90783			
	0.90371						0.81592	25.179	
131 Styrene	1.03326	0.59334	1.00313	1.58534	1.52043	1.48820			
	1.52545						1.25002	30.248	<-
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
133 Bromoform	+++++	0.55412	0.90763	1.25794	1.20404	1.16528			
	1.15578						1.04080	25.677	
134 Cumene	2.06305	1.21611	1.95934	2.74683	2.61042	2.56662			
	2.59241						2.25068	24.218	
135 Cyclohexanone	+++++	+++++	0.27258	0.41193	0.36212	0.49851			
	0.52619						0.41426	24.859	
140 1,1,2,2-Tetrachloroethane	+++++	0.66388	1.29422	1.55449	1.46984	1.42576			
	1.44462						1.30880	24.983	
136 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
138 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
142 Propylbenzene	+++++	1.65274	2.71658	3.50920	3.34294	3.25726			
	3.02690						2.91760	23.239	

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Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++	1.20333	2.36567	3.05246	2.92449	2.81345	2.54265	2.48367	27.208
141 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 1,3,5-Trimethylbenzene	+++++	1.09055	1.94838	2.57321	2.40165	2.34695	2.35136	2.11868	25.670
143 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Diisobutyl Ketone	+++++	+++++	0.72243	0.92643	1.23471	1.30508	1.32951	1.10363	24.207
148 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 1,2,4-Trimethylbenzene	+++++	0.93406	1.80498	2.41563	2.30233	2.24772	2.27401	1.99645	28.110
201 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
152 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
149 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
151 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
153 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
155 1,3-Dichlorobenzene	+++++	0.82952	1.50140	1.66547	1.57037	1.51[illegible]1		
	1.52780						1.43495	21.080
154 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
156 1,4-Dichlorobenzene	+++++	0.86046	1.50599	1.71817	1.62550	1.56[illegible]5		
	1.58445						1.47654	20.993
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
159 alpha-Chlorotoluene	+++++	1.02357	1.93206	2.54425	2.48304	2.45[illegible]0		
	2.37094						2.13483	27.499
158 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.79871	1.48339	1.61702	1.52034	1.46826		
	1.49927						1.39783	21.332
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
165 1,2,4-Trichlorobenzene	+++++	+++++	1.02280	1.08351	1.06141	1.06577		
	1.09716						1.06613	2.638
166 Hexachlorobutadiene	+++++	+++++	1.24188	1.06702	1.02142	0.99985		
	1.03510						1.07297	9.091
167 Naphthalene	+++++	+++++	1.26860	1.50335	1.49914	1.52078		
	1.58611						1.47559	8.191
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.52060	1.52978	1.50295	1.59264	1.64012	1.70087		
	1.76955						1.60865	6.296
$ 113 Toluene-d8	0.94316	0.95996	0.94937	0.96424	0.96043	0.97340		
	0.98845						0.96300	1.585
$ 137 Bromofluorobenzene	0.65286	0.64773	0.63223	0.63637	0.65401	0.65887		
	0.65249						0.64665	1.353

Calibration History

Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Start Cal Date: 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-FEB-2008 14:27	AFCEElow	/chem/msdt.i/06Feb2008.b/t020607.d
Cal Level: 2 , Cal Amount: 0.50000		
06-FEB-2008 22:02	AT04low+ENSR	/chem/msdt.i/06Feb2008.b/t020615.d
Cal Level: 3 , Cal Amount: 2.00000		
21-FEB-2008 09:41	sp22b	/chem/msdt.i/21Feb2008.b/t022102.d
06-FEB-2008 15:52	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020609.d
Cal Level: 4 , Cal Amount: 25.00000		
21-FEB-2008 10:21	sp22b	/chem/msdt.i/21Feb2008.b/t022103.d
06-FEB-2008 16:33	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020610.d
Cal Level: 5 , Cal Amount: 50.00000		
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d
06-FEB-2008 17:13	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020611.d
Cal Level: 6 , Cal Amount: 100.00000		
21-FEB-2008 17:00	sp22b	/chem/msdt.i/21Feb2008.b/t022109.d
06-FEB-2008 17:51	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020612.d
Cal Level: 7 , Cal Amount: 200.00000		
21-FEB-2008 12:05	sp22b	/chem/msdt.i/21Feb2008.b/t022105.d
06-FEB-2008 19:41	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020613.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
21-FEB-2008 14:36	AT04ENSR	/chem/msdt.i/21Feb2008.b/t022106.d
Ccal Level: 5 , Ccal Amount: 50.000		
21-FEB-2008 11:03	sp22bCCV	/chem/msdt.i/21Feb2008.b/t022104a.d
Ccal Level: 5 , Ccal Amount: 50.000		
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d

Initial Calibration Narrative

A 7 point initial calibration was analyzed on MSD-T on February 6, 2008.

The following compounds used 0.2ppbv as the lowest calibration concentration:

Chloroform, Benzene, Styrene, Cumene, and 1,2-Dibromoethane.

As noted on the accompanying analytical run log, the following point, 0.5ppbv, was re-analyzed due to:

a. anomalous unacceptable linearity for various compounds

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.07
75	30.0 – 60.0% of mass 95	50.99
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.46
173	Less than 2.0% of mass 174	(0.76)[1]
174	Greater than 50.0% of mass 95	75.96
175	5.0 – 9.0% of mass 174	(7.09)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.77)[1]
177	5.0 – 9.0% of mass 176	(6.41)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 2/6/08
BFB Injection Time: 1326
BFB File ID: t020605
Tekmar Purge Flow:
Vacuum: 2.16e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM	355997
1,4-DFB	1372567
CB-d5	1327765

Verified CCV IS vs ICAL mid-point (- 40%D) GM (initials)

0141

Verify 176/174 m/z Ratio: 1308292/1351956 x100 = 96.77

NOAH Cart #: NA File #: NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1318253)}{(1372567)} \times \frac{(25.0)}{(0.96300)} = 24.933$

File ID:	t020611
Compound:	TCE-d8
Initials:	GM

Reported Result 24.933

	Use	File#	Sample / Client Name	Can #	Pressure	Amt Drawn	DF	Date Analyzed	Time Analyzed	Reviewer Init.	Comments
1	✓	t020605	BFB Tune Check	14765	50mg	2mL	1.00	2/6/08	1326	GM	
2	✓	06	System Blank	3368	Humid	200mL			1303	GM	
3	✓	07	ICAL Level 1	1576-261	0.2ppbv	0.2mL			1427	LO	t14g206a
4	X	08	2		0.5ppbv	0.5mL			1512	LO	
5	✓	09	3		2.0ppbv	2.0mL			1552	LO	
6	✓	10	4		25ppbv	25mL			1633	LO	
7	✓	11	5		50ppbv	50mL			1713	LO	
8	✓	12	6		100ppbv	100mL			1751	LO	
9	✓	13	7		200ppbv	200mL	↓	↓	1941	LO	

Signature

2/6/08
Date

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MSD-T

Logbook #: 1599

10	✓	TO20 6214	System Blank	338658	Humid	200ml	1.00	2/6/08	2019	SG	
11	✓	1 15	ICAL Level 2	1576-262	0.5ppbv	0.5ml	1.00	1	2202	RO	
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											

0142

SG 2/7/08

Comments: Flow controller # AA98123220 — Actual 25 mL/min — Nominal 22.9 mL/min

Flow meter #200-7744 ; exp 8/27/08

Signature

2/7/08
Date

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.83
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.35
173	Less than 2.0% of mass 174	(0.80)[1]
174	Greater than 50.0% of mass 95	74.12
175	5.0 – 9.0% of mass 174	(7.27)[1]
~~176~~	~~Greater than 95.0%~~ but less than 101.0% of mass 174	(96.56)[1]
177	5.0 – 9.0% of mass 176	(6.47)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/7/08

BFB Injection Time: 0918

BFB File ID: t020701

Tekmar Purge Flow: 19.5mL/min

Vacuum: 4.24e-5

IS/S Std.#:	1443-398	Exp. Date: 3/28/08
BCM	357541	
1,4-DFB	1413414	
CB-d5	1290063	

Verified CCV IS vs ICAL mid-point (- 40%D) _____ *Initials*

Verify 176/174 m/z Ratio: 1426273/1477051 x100 = 96.56

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1382401)}{(1413414)} \times \frac{(25.0)}{(0.96300)} = 25.391$

File ID:	t020702
Compound:	Tol-d8
Initials:	

Reported Result 25.391

	Use	File#	Sample / Client Name	Can#	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	t020701	BFB Tune Check	1476-65	50psig	2mL	1.00	2/7/08	0918		
2	✓	02	CCV-1 (20ppbv)	1576-26	50ppbv	50mL			0941		ϕ out
3	✓	03	LCS-1	1576-25					1041		ϕ out ICAL LCS
4	—	04	Gas Std (50ppmv)	1576-14	250ppbv	10mL					
5											
6											
7											
8											
9											

2/7/08

Signature

2/7/08

Date

Revision 08/2007

0143

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MSD-T

Logbook #: 1599

0144

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76) [1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21) [1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.15) [1]
177	5.0 – 9.0% of mass 176	(6.42) [2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08

BFB Injection Time: 0830

BFB File ID: t022101

Tekmar Purge Flow: ——

Vacuum: 3.99e-5

IS/S Std.#: 1443-378	Exp. Date: 3/28/08
BCM	318158
1,4-DFB	1251468
CB-d5	1130777

Verified CCV IS vs ICAL mid-point (- 40%D) SPM initials

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15 **NOAH Cart #:** NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1267119)}{(1251468)} \times \frac{(25.0)}{(0.96300)} = 26.285$

File ID:	t022106
Compound:	Tol-d8
Initials:	SPM

Reported Result 26.285

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t022101	BFB Tune Check	1476-274	50psig	2mL	1.00	2/21/08	0830	SPM	
2	✓	02	ICAL Level 3	1576-299	2psig/13psig	20mL			0941	SPM	t14g206b
3	✓	03	4		3psig/45psig	9.0mL			1021	SPM	MeOH022IA
4	✓	04	5		5psig/30psig	50mL			1103	SPM	sp22b
5	✓	05	7		20psig/120psig	200mL			1205	SPM	
6	✓	06	CCV-1 (200ppbv)	1576-261	50ppbv	50mL			1436	SPM	Ø ost
7	✓	07	ICAL Level 6	1576-299	10psig/150psig	100mL				SPM 2/21/08	not loaded
8	✓	07	LCS-1 (200ppbv)	1576-255	50ppbv	50mL	1.00		1525	SPM	Ø ost
9	✓	08	System Blank	3366	Humid	200mL			1617	SPM	

Signature

2/21/08 Date

@ Air Toxics Ltd.

MSD-T

Logbook #: 1599

10	✓	+022109	ICAL Level 6	15%-299	100psi/100cc/psi	100 mL	1.00	2/2/08	1700	Act			
11	✓	10	Lab Blank	336068	Humid	200 mL	↓		1755	Act			
12	✓	11	0802200 -01A	33942	6.0"Hg→5psi		1.68		1847	Act			
13	✓	12	-02A	33943	7.5"Hg→5psi		1.79		1926	Act			
14	✓	13	-01AA	33942	6.0"Hg→5psi		1.68		2005	Act			
15	✓	14	-02AA	33943	7.5"Hg→5psi		1.79		2043	Act			
16	✓	15	-03A	SC4116	6.5"Hg→5psi		1.71		2122	Act			
17	✓	16	-04A	9945					2201	Act			
18	✓	17	-05A	343046					2239	Act			
19	✓	18	-06A	R-4	6.0"Hg→5psi		1.68		2338	or			
20	✓	19	0802283 -01A	22197	1		1	2/22/08	0017	or			
21	✓	20	01A1	34438	5.5"Hg→5.0psi	250mL	1.64		0134	or			
22	✓	21	03A	23996	5.5"Hg→5.0psi	200mL	1.64		0221	or			
23	X	22	04A	35171	6.5"Hg→5.0psi	200mL	1.71		0308	or			MeCl ↑
24	X	23	05A	34746	6.0"Hg→5.0psi	200mL	1.68		0351	or			MeCl ↑
25	X	24	0802328-01A ~~04A~~	12666	5.5"Hg→5.0psi	200mL	1.64		0432	or			PCE ↑
26	✓	25	0802283 -04A	35171	6.5"Hg→5.0psi	~~200mL~~ 100mL	3.42		0510	or			
27	✓	26	1 05A	34746	6.0"Hg→5.0psi	~~200mL~~ 100mL	3.36		0711				
28	✓	27	0802328 - 01A	12666	5.5"Hg→5.0psi	~~200mL~~ 100mL	3.28		0749				
29													
30													
31			2/22/08										
32													

0145

Comments:

Laura Dessuyer
Signature

2/22/08
Date

Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15 Low Level
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/07Feb2008.b/t020703.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 07-FEB-2008 10:41
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/07Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 10:17 sruth Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02 Cal File: t020615.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	364188	25.0000		80.00- 120.00	100.00
13.858	13.858 (1.000)	128	282636			26.53- 126.53	77.61
13.858	13.858 (1.000)	49	642409			128.17- 228.17	176.39
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.627	15.628 (1.000)	114	1439060	25.0000		80.00- 120.00	100.00
15.627	15.628 (1.000)	88	235739			0.00- 66.52	16.38
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1292442	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	752973			6.72- 106.72	58.26
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.937 (1.078)	65	592767	25.2952	25.295	80.00- 120.00	100.00
14.936	14.937 (1.078)	67	339519			3.57- 103.57	57.28
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1388717	25.0524	25.052	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	157888			0.00- 61.29	11.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	938828			18.71- 118.71	67.60
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	875940	26.2019	26.202	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	1106906			72.28- 172.28	126.37
22.789	22.789 (1.096)	176	852956			45.76- 145.76	97.38
11 Propylene					CAS #: 115-07-1		
5.812	5.785 (0.419)	41	613591	51.5112	51.511	80.00- 120.00	100.00
5.812	5.785 (0.419)	42	426221			17.96- 117.96	69.46
5.812	5.785 (0.419)	39	492845			33.44- 133.44	80.32
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.895 (0.427)	85	3630724	51.0550	51.055	80.00- 120.00	100.00
5.923	5.895 (0.427)	87	1142768			0.00- 82.13	31.47
16 Freon 114					CAS #: 76-14-2		
6.310	6.282 (0.455)	135	2403733	51.1334	51.133	80.00- 120.00	100.00
6.310	6.282 (0.455)	137	762741			0.00- 81.89	31.73
18 Chloromethane					CAS #: 74-87-3		
6.558	6.531 (0.473)	50	747784	48.1651	48.165	80.00- 120.00	100.00
6.558	6.531 (0.473)	52	249680			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.863 (0.497)	62	1087955	51.0401	51.040	80.00- 120.00	100.00
6.890	6.863 (0.497)	64	353730			0.00- 89.61	32.51
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.946 (0.503)	54	820317	51.1387	51.139	80.00- 120.00	100.00
6.973	6.946 (0.503)	39	782893			53.33- 153.33	95.44
25 Bromomethane					CAS #: 74-83-9		
7.913	7.886 (0.571)	94	1069630	50.6811	50.681	80.00- 120.00	100.00
7.913	7.886 (0.571)	96	989108			42.77- 142.77	92.47
27 Chloroethane					CAS #: 75-00-3		
8.190	8.162 (0.591)	64	588665	52.9526	52.952	80.00- 120.00	100.00
8.190	8.162 (0.591)	49	150442			0.00- 76.71	25.56
8.190	8.162 (0.591)	66	190911			0.00- 83.02	32.43
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.771 (0.635)	101	4126874	51.2618	51.262	80.00- 120.00	100.00
8.798	8.771 (0.635)	103	2651802			14.63- 114.63	64.26

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.240	9.213	(0.667)	45	334932	54.3761	54.376	80.00- 120.00	100.00
9.240	9.213	(0.667)	43	78044			0.00- 75.24	23.30
9.240	9.213	(0.667)	46	130611			0.00- 89.78	39.00
42 Freon 113						CAS #: 76-13-1		
9.959	9.932	(0.719)	151	2155060	58.1347	58.135	80.00- 120.00	100.00
9.959	9.932	(0.719)	153	1372575			14.76- 114.76	63.69
9.959	9.932	(0.719)	101	2781208			80.58- 180.58	129.05
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.042	10.015	(0.725)	61	1971376	59.0809	59.081	80.00- 120.00	100.00
10.042	10.043	(0.725)	96	1202804			10.93- 110.93	61.01
10.042	10.043	(0.725)	98	780821			0.00- 89.40	39.61
45 Acetone						CAS #: 67-64-1		
10.181	10.181	(0.735)	58	560983	54.2480	54.248	80.00- 120.00	100.00
10.181	10.181	(0.735)	43	1718440			267.82- 367.82	306.33
46 2-Propanol						CAS #: 67-63-0		
10.374	10.374	(0.749)	45	1942177	54.8034	54.803	80.00- 120.00	100.00
10.374	10.374	(0.749)	43	475790			0.00- 76.64	24.50
10.374	10.374	(0.749)	59	81347			0.00- 54.31	4.19
47 Carbon Disulfide						CAS #: 75-15-0		
10.540	10.540	(0.761)	76	3305899	52.3795	52.380	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
10.816	10.817	(0.781)	76	597711	54.9965	54.996	80.00- 120.00	100.00
10.816	10.817	(0.781)	41	1275321			173.84- 273.84	213.37
54 Methylene Chloride						CAS #: 75-09-2		
11.093	11.093	(0.800)	49	1145006	54.2668	54.267	80.00- 120.00	100.00
11.121	11.093	(0.802)	84	1034033			40.82- 140.82	90.31
11.093	11.093	(0.800)	51	377986			0.00- 83.83	33.01
60 MTBE						CAS #: 1634-04-4		
11.452	11.453	(0.826)	73	3774615	62.3150	62.315	80.00- 120.00	100.00
11.452	11.453	(0.826)	57	719078			0.00- 69.06	19.05
11.452	11.453	(0.826)	41	687732			0.00- 70.47	18.22
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.563	11.536	(0.834)	96	1387532	55.9548	55.955	80.00- 120.00	100.00
11.535	11.536	(0.832)	61	1901887			88.49- 188.49	137.07
11.563	11.536	(0.834)	98	891584			16.26- 116.26	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	1891161	57.7934	57.793	80.00- 120.00	100.00
11.895	11.895 (0.858)	43	1080305			9.30- 109.30	57.12
11.895	11.895 (0.858)	86	341505			0.00- 66.83	18.06
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	348239	54.2809	54.281	80.00- 120.00	100.00
12.365	12.337 (0.892)	43	3106079			832.23- 932.23	891.94
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	2630332	57.4518	57.452	80.00- 120.00	100.00
12.365	12.365 (0.892)	65	853608			0.00- 82.30	32.45
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	646558	55.5063	55.506	80.00- 120.00	100.00
13.388	13.388 (0.966)	43	2171765			282.56- 382.56	335.90
13.388	13.388 (0.966)	57	194672			0.00- 79.56	30.11
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	1740573	56.5020	56.502	80.00- 120.00	100.00
13.416	13.416 (0.968)	96	1385696			31.20- 131.20	79.61
13.416	13.416 (0.968)	98	895062			1.78- 101.78	51.42
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	1101132	56.0458	56.046	80.00- 120.00	100.00
13.858	13.858 (1.000)	71	583896			2.70- 102.70	53.03
13.858	13.858 (1.000)	72	619526			2.04- 102.04	56.26
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	3047174	57.6082	57.608	80.00- 120.00	100.00
13.941	13.941 (1.006)	85	2012329			15.21- 115.21	66.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	3228969	55.1909	55.191	80.00- 120.00	100.00
14.273	14.273 (1.030)	99	2060721			14.57- 114.57	63.82
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.301 (1.032)	84	1772344	56.5763	56.576	80.00- 120.00	100.00
14.300	14.301 (1.032)	56	1739685			49.56- 149.56	98.16
14.300	14.301 (1.032)	41	902671			1.20- 101.20	50.93
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.522 (1.050)	119	2960464	52.6774	52.677	80.00- 120.00	100.00
14.549	14.522 (1.050)	117	3142043			57.09- 157.09	106.13
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	4200762	54.9970	54.997	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
14.881	14.881 (1.074)	56	1354857			0.00- 82.82	32.25
14.881	14.881 (1.074)	41	1075995			0.00- 78.43	25.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3843383	53.4243	53.424	80.00- 120.00	100.00
14.964	14.964 (0.958)	77	887809			0.00- 73.50	23.10
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1887283	53.7716	53.772	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	614030			0.00- 84.23	32.54
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1130162	55.4972	55.497	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1515301			85.70- 185.70	134.08
15.185	15.185 (0.972)	57	927126			28.72- 128.72	82.03
101 Trichloroethene					CAS #: 79-01-6		
16.070	16.070 (1.028)	95	1648538	53.5021	53.502	80.00- 120.00	100.00
16.098	16.070 (1.030)	130	1512857			41.36- 141.36	91.77
16.070	16.070 (1.028)	97	1054939			13.70- 113.70	63.99
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1289567	53.1277	53.128	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	932367			22.07- 122.07	72.30
16.568	16.568 (1.060)	41	714853			6.80- 106.80	55.43
106 1,4-Dioxane					CAS #: 123-91-1		
16.678	16.678 (1.067)	88	909360	51.1825	51.182	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	520290			7.38- 107.38	57.21
16.678	16.678 (1.067)	57	184864			0.00- 71.19	20.33
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.983 (1.087)	83	2955752	53.6010	53.601	80.00- 120.00	100.00
16.982	16.983 (1.087)	85	1906864			14.75- 114.75	64.51
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2055925	55.5852	55.585	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	662734			0.00- 81.51	32.24
17.784	17.784 (1.138)	39	920517			0.00- 94.39	44.77
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.950	17.950 (1.149)	58	970511	57.7496	57.750	80.00- 120.00	100.00
17.950	17.950 (1.149)	43	2207573			175.34- 275.34	227.47
17.978	17.978 (1.150)	85	478187			0.64- 100.64	49.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4390035	57.2296	57.230	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2652998			10.63- 110.63	60.43
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2209362	54.0869	54.087	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	716340			0.00- 81.36	32.42
18.752	18.752 (0.902)	39	915171			0.00- 91.03	41.42
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.112 (0.919)	97	1580720	53.6925	53.692	80.00- 120.00	100.00
19.111	19.112 (0.919)	99	997611			14.06- 114.06	63.11
19.111	19.112 (0.919)	83	1366879			35.72- 135.72	86.47
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2122005	53.7905	53.790	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1462582			18.51- 118.51	68.92
19.277	19.277 (0.927)	131	1396687			15.23- 115.23	65.82
121 2-Hexanone					CAS #: 591-78-6		
19.415	19.416 (0.934)	58	1306064	52.9797	52.980	80.00- 120.00	100.00
19.415	19.416 (0.934)	43	2176893			117.36- 217.36	166.68
19.415	19.416 (0.934)	100	281719			0.00- 71.71	21.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2715281	54.1671	54.167	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2100341			28.82- 128.82	77.35
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.052 (0.964)	107	2456852	52.4651	52.465	80.00- 120.00	100.00
20.051	20.052 (0.964)	109	2268304			42.74- 142.74	92.33
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3552960	52.2765	52.276	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1108333			0.00- 81.00	31.19
20.853	20.853 (1.003)	77	2210378			12.54- 112.54	62.21
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1878900	53.3558	53.356	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6014846			269.96- 369.96	320.13
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414838	54.4582	54.458	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4845879			149.87- 249.87	200.67
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2323688	55.0883	55.088	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	4908221			163.91- 263.91	211.23
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	3755676	58.1165	58.116	80.00- 120.00	100.00
21.876	21.876 (1.052)	78	1922908			0.81- 100.81	51.20
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	2946351	54.7578	54.758	80.00- 120.00	100.00
22.291	22.291 (1.072)	171	1585628			1.45- 101.45	51.10
134 Cumene					CAS #: 98-82-8		
22.429	22.430 (1.078)	105	6696362	57.5511	57.551	80.00- 120.00	100.00
22.429	22.430 (1.078)	120	1712846			0.00- 77.62	25.58
22.402	22.402 (1.077)	51	569801			0.00- 58.75	8.51
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	3679813	54.3852	54.385	80.00- 120.00	100.00
23.010	23.010 (1.106)	85	2370044			14.60- 114.60	64.41
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	8483170	56.2420	56.242	80.00- 120.00	100.00
23.120	23.121 (1.112)	120	1809726			0.00- 71.63	21.33
23.120	23.121 (1.112)	105	307547			0.00- 53.71	3.63
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.287 (1.120)	105	7219729	56.2284	56.228	80.00- 120.00	100.00
23.286	23.287 (1.120)	120	2130209			0.00- 79.51	29.51
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	5917601	54.0267	54.027	80.00- 120.00	100.00
23.397	23.397 (1.125)	120	2884828			0.00- 98.23	48.75
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	5720909	55.4287	55.429	80.00- 120.00	100.00
24.033	24.033 (1.156)	120	2603971			0.00- 94.91	45.52
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	3870355	52.1728	52.173	80.00- 120.00	100.00
24.586	24.586 (1.182)	148	2460421			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	1598480			0.00- 91.36	41.30
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	3937785	51.5866	51.586	80.00- 120.00	100.00
24.724	24.724 (1.189)	148	2521733			16.09- 116.09	64.04
24.724	24.724 (1.189)	111	1553706			0.00- 90.13	39.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.946 (1.199)	91	6230172	56.4503	56.450	80.00- 120.00	100.00
24.945	24.946 (1.199)	126	1164614			0.00- 69.28	18.69
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3752105	51.9217	51.922	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2421672			14.02- 114.02	64.54
25.360	25.360 (1.219)	111	1612191			0.00- 92.17	42.97
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2788156	50.5867	50.587	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2645129			44.12- 144.12	94.87
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2570482	46.3399	46.340	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1603808			12.90- 112.90	62.39
29 Isopentane					CAS #: 78-78-4		
8.273	8.245 (0.597)	43	1190271	50.5525	50.552	80.00- 120.00	100.00
8.273	8.245 (0.597)	57	941476			27.67- 127.67	79.10
19 Butane					CAS #: 106-97-8		
6.807	6.780 (0.491)	58	209961	51.5020	51.502	80.00- 120.00	100.00
6.807	6.780 (0.491)	43	1472102			666.74- 766.74	701.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.347 (1.180)	83	2075922	55.9685	55.968	80.00- 120.00	100.00
16.346	16.347 (1.180)	98	946654			0.00- 95.22	45.60
16.346	16.347 (1.180)	55	1458457			20.82- 120.82	70.26
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	4181723	54.8172	54.817	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	514318			0.00- 62.74	12.30

Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Report Date: 07-Feb-2008 11:09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020703.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 07-FEB-2008
Calibration Time: 09:41
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	357541	214525	500557	364188	1.86
97 1,4-Difluorobenze	1413414	848048	1978780	1439060	1.81
126 Chlorobenzene-d5	1290063	774038	1806088	1292442	0.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Report Date: 07-Feb-2008 11:09

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 07Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	51.055	102.11	70-130
16 Freon 114	50.000	51.133	102.27	70-130
18 Chloromethane	50.000	48.165	96.33	70-130
20 Vinyl Chloride	50.000	51.040	102.08	70-130
22 1,3-Butadiene	50.000	51.139	102.28	60-140
25 Bromomethane	50.000	50.681	101.36	70-130
27 Chloroethane	50.000	52.952	105.91	70-130
31 Trichlorofluoromet	50.000	51.262	102.52	70-130
38 Ethanol	50.000	54.376	108.75	60-140
42 Freon 113	50.000	58.135	116.27	70-130
43 1,1-Dichloroethene	50.000	59.081	118.16	70-130
45 Acetone	50.000	54.248	108.50	60-140
47 Carbon Disulfide	50.000	52.380	104.76	60-140
46 2-Propanol	50.000	54.803	109.61	60-140
54 Methylene Chloride	50.000	54.267	108.53	70-130
60 MTBE	50.000	62.315	124.63	60-140
61 trans-1,2-Dichloro	50.000	55.955	111.91	60-140
65 Hexane	50.000	57.793	115.59	60-140
69 Vinyl Acetate	50.000	54.281	108.56	60-140
70 1,1-Dichloroethane	50.000	57.452	114.90	70-130
76 cis-1,2-Dichloroet	50.000	56.502	113.00	70-130
75 2-Butanone	50.000	55.506	111.01	60-140
80 Tetrahydrofuran	50.000	56.046	112.09	60-140
82 Chloroform	50.000	57.608	115.22	70-130
85 Cyclohexane	50.000	56.576	113.15	60-140
83 1,1,1-Trichloroeth	50.000	55.191	110.38	70-130
87 Carbon Tetrachlori	50.000	52.677	105.35	70-130
91 Benzene	50.000	53.424	106.85	70-130
93 1,2-Dichloroethane	50.000	53.772	107.54	70-130
94 Heptane	50.000	55.497	110.99	60-140
101 Trichloroethene	50.000	53.502	107.00	70-130
104 1,2-Dichloropropan	50.000	53.128	106.26	70-130
106 1,4-Dioxane	50.000	51.182	102.37	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	53.601	107.20	60-140
110 cis-1,3-Dichloropr	50.000	55.585	111.17	70-130
111 4-Methyl-2-pentano	50.000	57.750	115.50	60-140
114 Toluene	50.000	57.230	114.46	70-130
116 trans-1,3-Dichloro	50.000	54.087	108.17	70-130
117 1,1,2-Trichloroeth	50.000	53.692	107.39	70-130
120 Tetrachloroethene	50.000	53.790	107.58	70-130
121 2-Hexanone	50.000	52.980	105.96	60-140
122 Dibromochlorometha	50.000	54.167	108.33	60-140
123 1,2-Dibromoethane	50.000	52.465	104.93	70-130
127 Chlorobenzene	50.000	52.276	104.55	70-130
128 Ethyl Benzene	50.000	53.356	106.71	70-130
129 m,p-Xylene	50.000	54.458	108.92	70-130
130 o-Xylene	50.000	55.088	110.18	70-130
131 Styrene	50.000	58.116	116.23	70-130
133 Bromoform	50.000	54.758	109.52	60-140
140 1,1,2,2-Tetrachlor	50.000	54.385	108.77	70-130
145 4-Ethyltoluene	50.000	56.228	112.46	60-140
147 1,3,5-Trimethylben	50.000	54.027	108.05	70-130
150 1,2,4-Trimethylben	50.000	55.429	110.86	70-130
155 1,3-Dichlorobenzen	50.000	52.173	104.35	70-130
156 1,4-Dichlorobenzen	50.000	51.586	103.17	70-130
159 alpha-Chlorotoluen	50.000	56.450	112.90	70-130
161 1,2-Dichlorobenzen	50.000	51.922	103.84	70-130
165 1,2,4-Trichloroben	50.000	50.587	101.17	70-130
166 Hexachlorobutadien	50.000	46.340	92.68	70-130
142 Propylbenzene	50.000	56.242	112.48	60-140
134 Cumene	50.000	57.551	115.10	60-140
51 3-Chloropropene	50.000	54.996	109.99	60-140
89 2,2,4-Trimethylpen	50.000	54.997	109.99	60-140
19 Butane	50.000	51.502	103.00	70-130
29 Isopentane	50.000	50.552	101.10	70-130
102 Methyl Cyclohexane	50.000	55.968	111.94	70-130
11 Propylene	50.000	51.511	103.02	60-140
167 Naphthalene	50.000	54.817	109.63	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.295	101.18	70-130
$ 113 Toluene-d8	25.000	25.052	100.21	70-130
$ 137 Bromofluorobenzene	25.000	26.202	104.81	70-130

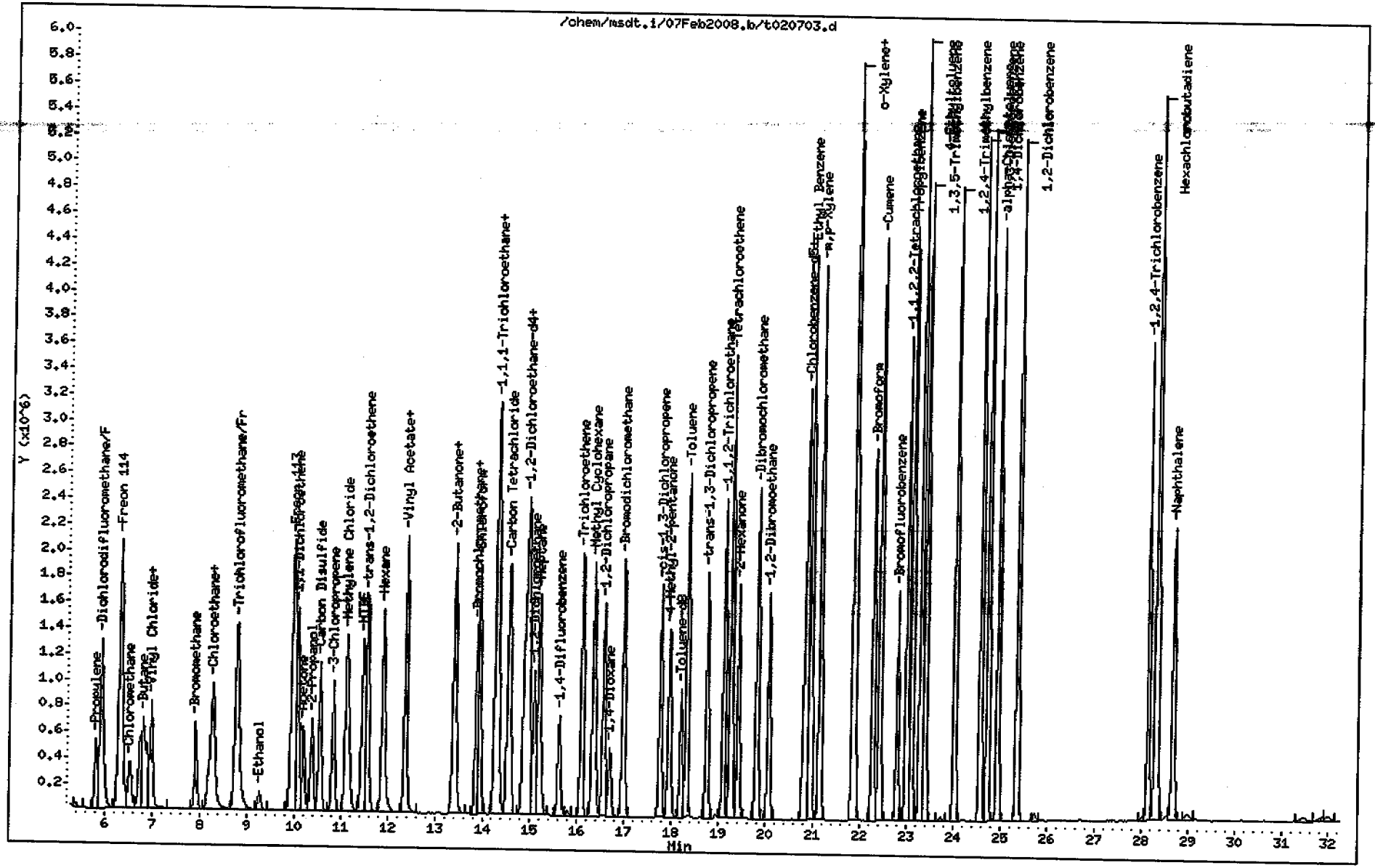
Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Date : 07-FEB-2008 10:41
Client ID: LCS-1
Sample Info: 50mL #1576-255

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0158



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020607.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 06-FEB-2008 14:27
Operator : sjr
Inst ID: msdt.i
Smp Info : 0.2ml #1576-261
Misc Info : 200ppbv -> 0.2ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 14:27
Cal File: t020607.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.858	13.858 (1.000)	130	332370	25.0000		50.00- 150.00		100.00
13.858	13.858 (1.000)	128	254115			26.39- 126.39		76.46
13.858	13.858 (1.000)	49	379355			99.95- 199.95		114.14
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1144843	25.0000		50.00- 150.00		100.00
15.628	15.628 (1.000)	88	188070			0.00- 66.12		16.43
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1006037	25.0000		50.00- 150.00		100.00
20.798	20.798 (1.000)	82	576806			6.72- 106.72		57.33
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.937	14.937 (1.078)	65	505401	25.0000	23.632	50.00- 150.00		100.00
14.937	14.937 (1.078)	67	247783			3.57- 103.57		49.03
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1079766	25.0000	24.485	50.00- 150.00		100.00
18.199	18.199 (1.165)	70	125347			0.00- 61.29		11.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	742258			18.71- 118.71	68.74
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	656799	25.0000	25.240	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	812697			75.58- 175.58	123.74
22.789	22.789 (1.096)	176	634912			47.41- 147.41	96.67
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	7657	0.20000	0.1586	50.00- 150.00	100.00(a)
13.941	13.941 (1.006)	85	5855			16.43- 116.43	76.47
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	11959	0.20000	0.2090	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	2943			0.00- 73.50	24.61
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	8316	0.20000	0.1653	50.00- 150.00	100.00(a)
21.877	21.877 (1.052)	78	6770			9.02- 109.02	81.41
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	16604	0.20000	0.1833	50.00- 150.00	100.00(a)
22.430	22.430 (1.078)	120	5207			0.00- 77.62	31.36
22.430	22.430 (1.078)	51	1333			0.00- 58.75	8.03
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	6775	0.20000	0.1859	50.00- 150.00	100.00(a)
20.052	20.052 (0.964)	109	7462			46.68- 146.68	110.14

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/06Feb2008.b/t020607.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020607.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.2ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 14:27
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	332370	199422	465318	332370	0.00
97 1,4-Difluorobenze	1144843	686906	1602780	1144843	0.00
126 Chlorobenzene-d5	1006037	603622	1408452	1006037	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

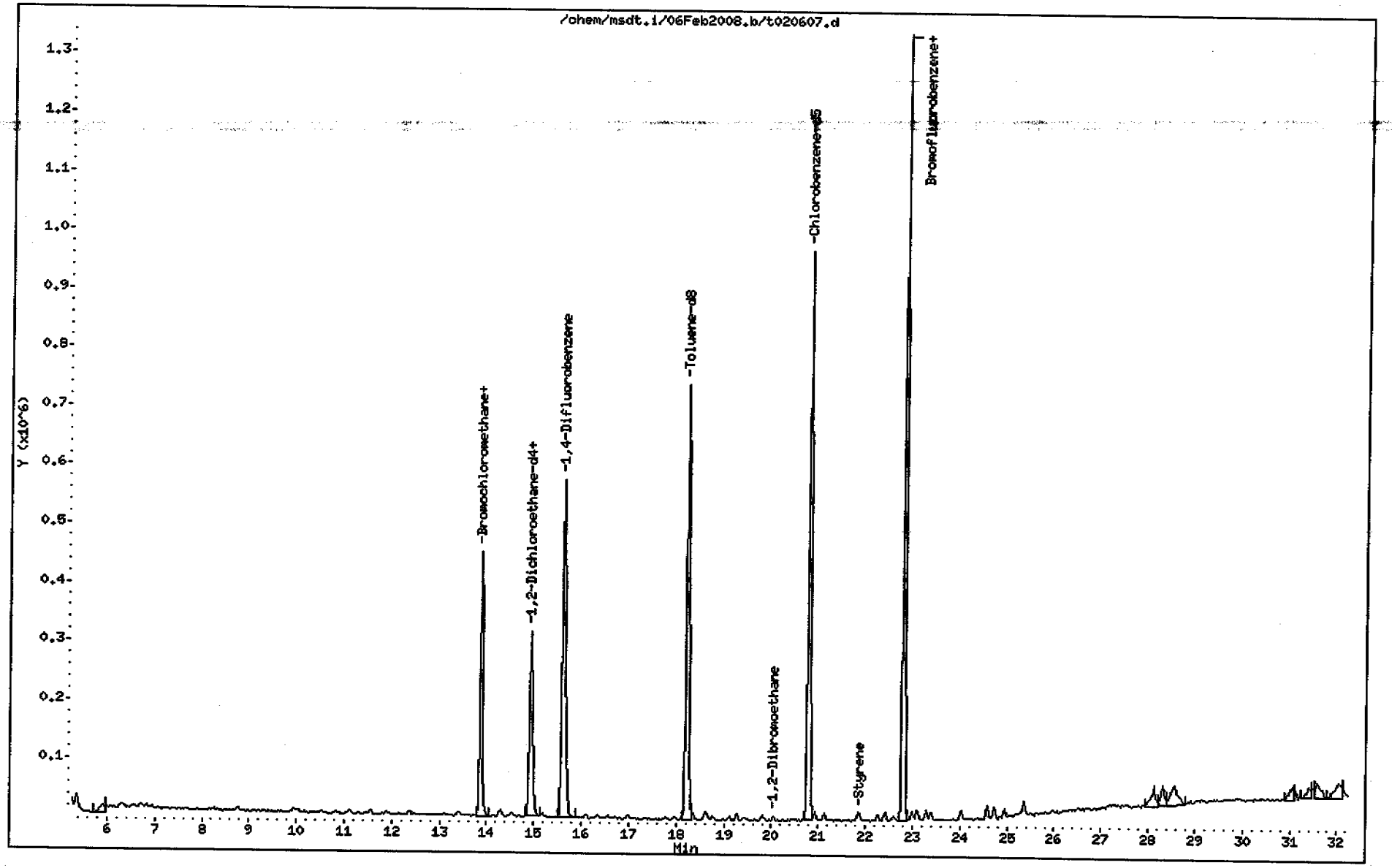
Data File: /chem/msdt.i/06Feb2008.b/t020607.d
Date : 06-FEB-2008 14:27
Client ID: Level 1
Sample Info: 0.2ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0162



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020615.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 06-FEB-2008 22:02
Operator : srs
Inst ID: msdt.i
Smp Info : 0.5mL #1576-261
Misc Info : 200ppbv -> 0.5ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:40 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02
Cal File: t020615.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886 (1.000)	130	359684	25.0000		50.00- 150.00		100.00
13.886	13.886 (1.000)	128	275976			26.39- 126.39		76.73
13.858	13.858 (1.000)	49	409784			99.95- 199.95		113.93
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1311527	25.0000		50.00- 150.00		100.00
15.628	15.628 (1.000)	88	209950			0.00- 66.12		16.01
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1165188	25.0000		50.00- 150.00		100.00
20.798	20.798 (1.000)	82	664676			6.72- 106.72		57.04
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	550238	25.0000	23.774	50.00- 150.00		100.00
14.936	14.936 (1.076)	67	270699			3.57- 103.57		49.20
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1259013	25.0000	24.921	50.00- 150.00		100.00
18.199	18.199 (1.165)	70	132880			0.00- 61.29		10.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	855222			18.71- 118.71	67.93
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	754728	25.0000	25.042	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	954528			75.58- 175.58	126.47
22.789	22.789 (1.096)	176	726618			47.41- 147.41	96.28
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	29948	0.50000	0.4264	50.00- 150.00	100.00(a)
5.923	5.923 (0.427)	87	9731			0.00- 82.13	32.49
16 Freon 114					CAS #: 76-14-2		
6.337	6.337 (0.456)	135	21512	0.50000	0.4633	50.00- 150.00	100.00(a)
6.310	6.310 (0.454)	137	6108			0.00- 81.89	28.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	10277	0.50000	0.4882	50.00- 150.00	100.00(a)
6.890	6.890 (0.496)	64	5846			0.00- 89.61	56.88
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	6982	0.50000	0.4407	50.00- 150.00	100.00(a)
6.973	6.973 (0.502)	39	9131			53.33- 153.33	130.78
25 Bromomethane					CAS #: 74-83-9		
7.941	7.941 (0.572)	94	9814	0.50000	0.4708	50.00- 150.00	100.00(a)
7.941	7.941 (0.572)	96	8139			43.69- 143.69	82.93
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	4699	0.50000	0.4280	50.00- 150.00	100.00(a)
8.190	8.190 (0.590)	49	1473			0.00- 76.71	31.35
8.190	8.190 (0.590)	66	1459			0.00- 83.02	31.05
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	34751	0.50000	0.4371	50.00- 150.00	100.00(a)
8.771	8.771 (0.632)	103	20296			13.52- 113.52	58.40
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	16714	0.50000	0.4565	50.00- 150.00	100.00(a)
9.932	9.932 (0.715)	153	11029			14.28- 114.28	65.99
9.960	9.960 (0.717)	101	20956			80.55- 180.55	125.38
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	13655	0.50000	0.4144	50.00- 150.00	100.00(a)
10.042	10.042 (0.723)	96	9202			13.15- 113.15	67.39
10.042	10.042 (0.723)	98	4439			0.00- 88.14	32.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	27016	0.50000	0.4334	50.00- 150.00	100.00(a)
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	10254	0.50000	0.4921	50.00- 150.00	100.00(a)
11.121	11.121 (0.801)	84	8021			36.08- 136.08	78.22
11.093	11.093 (0.799)	51	3950			0.00- 83.83	38.52
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	12565	0.50000	0.2100	50.00- 150.00	100.00(a)
11.425	11.425 (0.823)	57	2521			0.00- 69.02	20.06
11.480	11.480 (0.827)	41	3603			0.00- 70.47	28.67
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.536	11.536 (0.831)	96	9874	0.50000	0.4032	50.00- 150.00	100.00(a)
11.563	11.563 (0.833)	61	14614			95.77- 195.77	148.00
11.563	11.563 (0.833)	98	6468			16.26- 116.26	65.51
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	9544	0.50000	0.2953	50.00- 150.00	100.00(a)
11.923	11.923 (0.859)	43	6284			9.30- 109.30	65.84
11.923	11.923 (0.859)	86	1121			0.00- 66.83	11.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	17152	0.50000	0.3793	50.00- 150.00	100.00(a)
12.365	12.365 (0.890)	65	6222			0.00- 82.79	36.28
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	3945	0.50000	0.3429	50.00- 150.00	100.00(a)
13.388	13.388 (0.964)	43	12276			275.22- 375.22	311.18
0.000	1.000 (0.000)	57	0			0.00- 79.56	0.00
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	10861	0.50000	0.3570	50.00- 150.00	100.00(a)
13.416	13.416 (0.966)	96	7530			27.39- 127.39	69.33
13.443	13.443 (0.968)	98	5683			0.96- 100.96	52.32
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	6253	0.50000	0.3222	50.00- 150.00	100.00(a)
13.858	13.858 (0.998)	71	2426			0.00- 99.16	38.80
13.858	13.858 (0.998)	72	2304			2.04- 102.04	36.85
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	19693	0.50000	0.3770	50.00- 150.00	100.00(a)
13.941	13.941 (1.004)	85	12570			16.43- 116.43	63.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	18476	0.50000	0.3198	50.00- 150.00	100.00(a)
14.300	14.300 (1.030)	99	14551			17.45- 117.45	78.76
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	9788	0.50000	0.3164	50.00- 150.00	100.00(a)
14.328	14.328 (1.032)	56	9199			47.55- 147.55	93.98
14.300	14.300 (1.030)	41	6425			5.12- 105.12	65.64
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.522	14.522 (1.046)	119	19411	0.50000	0.3497	50.00- 150.00	100.00(a)
14.549	14.549 (1.048)	117	18547			53.78- 153.78	95.55
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	23133	0.50000	0.3528	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	5786			0.00- 73.50	25.01
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	22814	0.50000	0.3024	50.00- 150.00	100.00(a)
14.881	14.881 (1.072)	56	7722			0.00- 82.82	33.85
14.881	14.881 (1.072)	41	7717			0.00- 78.43	33.83
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	11720	0.50000	0.3664	50.00- 150.00	100.00(a)
15.075	15.075 (0.965)	64	4807			0.00- 84.23	41.02
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	5821	0.50000	0.3136	50.00- 150.00	100.00(a)
15.185	15.185 (0.972)	43	7881			85.70- 185.70	135.39
15.185	15.185 (0.972)	57	4021			28.72- 128.72	69.08
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	9076	0.50000	0.3232	50.00- 150.00	100.00(a)
16.098	16.098 (1.030)	130	8832			42.94- 142.94	97.31
16.098	16.098 (1.030)	97	5670			13.25- 113.25	62.47
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	7759	0.50000	0.3507	50.00- 150.00	100.00(a)
16.568	16.568 (1.060)	62	5454			21.32- 121.32	70.29
16.568	16.568 (1.060)	41	5773			8.96- 108.96	74.40
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	16254	0.50000	0.3234	50.00- 150.00	100.00(a)
16.983	16.983 (1.087)	85	9643			13.51- 113.51	59.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	10176	0.50000	0.3019	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
17.784	17.784 (1.138)	77	4424			0.00- 84.89	43.47
17.784	17.784 (1.138)	39	5484			0.00- 97.13	53.89
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	3680	0.50000	0.2403	50.00- 150.00	100.00(a)
17.978	17.978 (1.150)	43	7232			175.34- 275.34	196.52
17.950	17.950 (1.149)	85	1899			0.64- 100.64	51.60
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	21271	0.50000	0.3042	50.00- 150.00	100.00(a)
18.337	18.337 (1.173)	92	13947			11.62- 111.62	65.57
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	11178	0.50000	0.3035	50.00- 150.00	100.00(a)
18.780	18.780 (0.903)	77	3382			0.00- 81.86	30.26
18.780	18.780 (0.903)	39	4867			0.00- 91.58	43.54
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	8142	0.50000	0.3068	50.00- 150.00	100.00(a)
19.111	19.111 (0.919)	99	5361			13.21- 113.21	65.84
19.111	19.111 (0.919)	83	7611			35.76- 135.76	93.48
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	11480	0.50000	0.3228	50.00- 150.00	100.00(a)
19.277	19.277 (0.927)	129	7435			19.36- 119.36	64.76
19.277	19.277 (0.927)	131	7336			16.43- 116.43	63.90
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	12573	0.50000	0.2782	50.00- 150.00	100.00(a)
19.803	19.803 (0.952)	127	10083			28.82- 128.82	80.20
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.079	20.079 (0.965)	107	13043	0.50000	0.3089	50.00- 150.00	100.00(a)
20.079	20.079 (0.965)	109	12513			46.68- 146.68	95.94
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	20858	0.50000	0.3404	50.00- 150.00	100.00(a)
20.853	20.853 (1.003)	114	7591			0.00- 82.06	36.39
20.853	20.853 (1.003)	77	22391			22.53- 122.53	107.35
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	9559	0.50000	0.3011	50.00- 150.00	100.00(a)
20.936	20.936 (1.007)	91	30384			269.96- 369.96	317.86
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	10501	0.50000	0.2627	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.130	21.130 (1.016)	91	21263			149.87- 249.87	202.49
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	10265	0.50000	0.2699	50.00- 150.00	100.00(a)
21.849	21.849 (1.051)	91	22643			160.81- 260.81	220.58
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	13827	0.50000	0.2373	50.00- 150.00	100.00(a)
21.876	21.876 (1.052)	78	8943			9.02- 109.02	64.68
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12913	0.50000	0.2662	50.00- 150.00	100.00(a)
22.291	22.291 (1.072)	171	6556			1.83- 101.83	50.77
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	28340	0.50000	0.2702	50.00- 150.00	100.00(a)
22.429	22.429 (1.078)	120	8960			0.00- 77.62	31.62
22.402	22.402 (1.077)	51	3140			0.00- 58.75	11.08
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15471	0.50000	0.2536	50.00- 150.00	100.00(a)
23.010	23.010 (1.106)	85	11730			16.89- 116.89	75.82
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	38515	0.50000	0.2832	50.00- 150.00	100.00(a)
23.121	23.121 (1.112)	120	8217			0.00- 71.63	21.33
23.121	23.121 (1.112)	105	1592			0.00- 53.71	4.13
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	28042	0.50000	0.2422	50.00- 150.00	100.00(a)
23.287	23.287 (1.120)	120	8426			0.00- 79.69	30.05
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	25414	0.50000	0.2574	50.00- 150.00	100.00(a)
23.397	23.397 (1.125)	120	11861			0.00- 98.23	46.67
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	21767	0.50000	0.2339	50.00- 150.00	100.00(a)
24.033	24.033 (1.156)	120	9142			0.00- 94.91	42.00
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	19331	0.50000	0.2890	50.00- 150.00	100.00(a)
24.586	24.586 (1.182)	148	12995			14.68- 114.68	67.22
24.586	24.586 (1.182)	111	8206			0.00- 91.36	42.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	20052	0.50000	0.2914	50.00- 150.00	100.00(a)
24.724	24.724 (1.189)	148	14332			16.09- 116.09	71.47
24.724	24.724 (1.189)	111	8007			0.00- 90.13	39.93
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	23853	0.50000	0.2397	50.00- 150.00	100.00(a)
24.946	24.946 (1.199)	126	4759			0.00- 69.28	19.95
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	18613	0.50000	0.2857	50.00- 150.00	100.00(a)
25.360	25.360 (1.219)	148	12636			15.85- 115.85	67.89
25.360	25.360 (1.219)	111	8799			0.00- 94.46	47.27
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	11034	0.50000	0.3012	50.00- 150.00	100.00(a)
16.347	16.347 (1.177)	98	5077			0.00- 95.22	46.01
16.347	16.347 (1.177)	55	8471			20.82- 120.82	76.77

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020615.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.5ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	359684	1.04
97 1,4-Difluorobenze	1372567	823540	1921594	1311527	-4.45
126 Chlorobenzene-d5	1227265	736359	1718171	1165188	-5.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

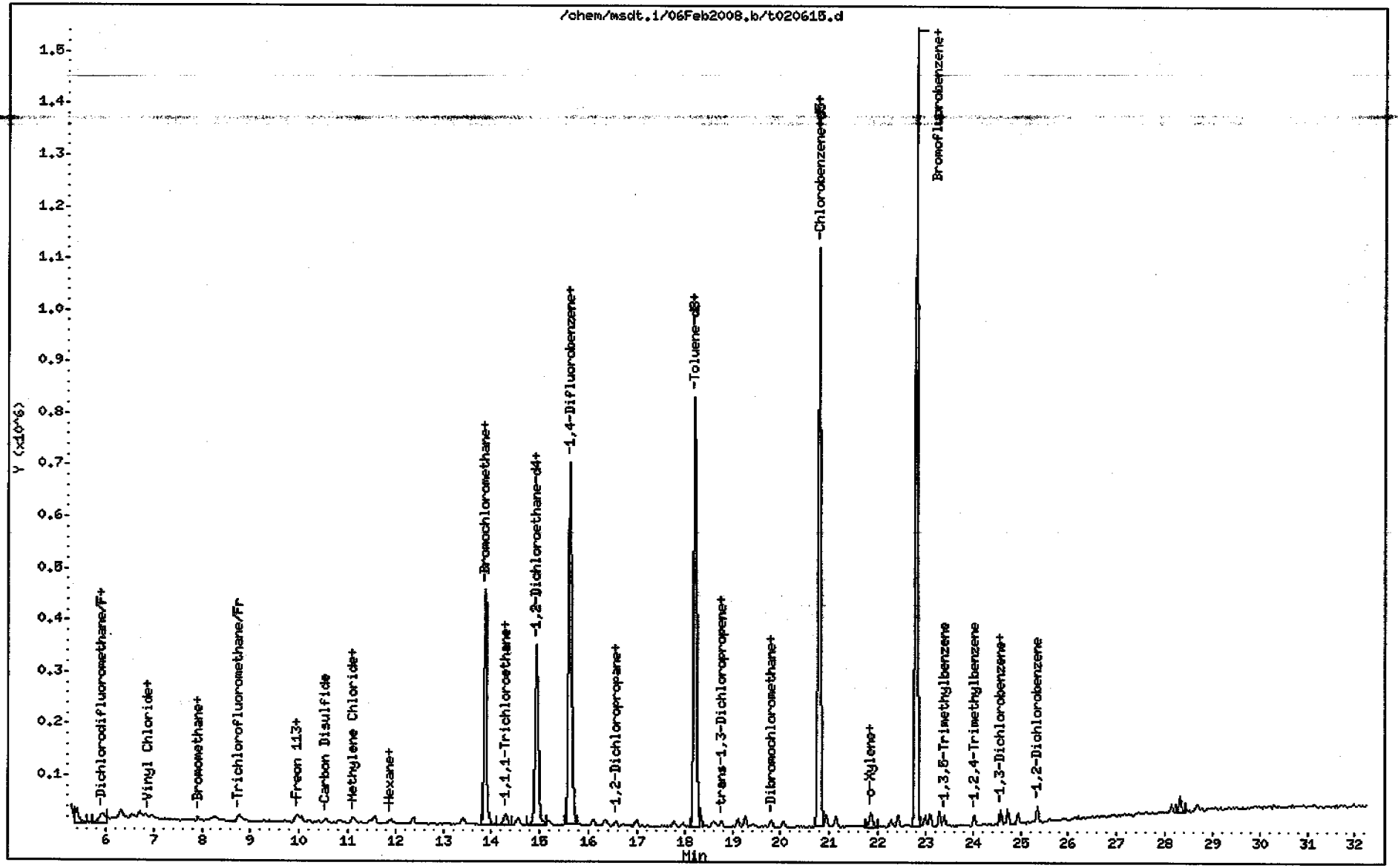
Data File: /chem/msdt.i/06Feb2008.b/t020615.d
Date : 06-FEB-2008 22:02
Client ID: Level 2
Sample Info: 0.5mL #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

0171



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022102.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 21-FEB-2008 09:41
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0ml #1576-299
Misc Info : 200ppbv -> 2.0(12.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 09:41 Cal File: t022102.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	323136	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	248884			26.66- 126.66	77.02
13.865	13.865 (1.000)	49	384478			100.22- 200.22	118.98
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1233520	25.0000		50.00- 150.00	100.00
15.607	15.607 (1.000)	88	206796			0.00- 66.22	16.76
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1168316	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	676739			7.02- 107.02	57.92
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	79733	2.00000	2.000	50.00- 150.00	100.00
6.407	6.407 (0.462)	45	18145			0.00- 72.76	22.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	83658	2.00000	2.000	50.00- 150.00	100.00
5.422	5.422 (0.391)	85	25442			0.00- 80.41	30.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.422	5.422 (0.391)	87	9056			0.00- 60.83	10.83
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	37002	2.00000	2.000	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	29504			29.74- 129.74	79.74
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	21576	2.00000	2.000	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	40829			139.23- 239.23	189.23
5.844	5.844 (0.422)	47	9103			0.00- 92.19	42.19
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	8970	2.00000	2.000	50.00- 150.00	100.00
5.985	5.985 (0.432)	51	50505			513.04- 613.04	563.04
5.985	5.985 (0.432)	85	2799			0.00- 81.20	31.20
26 Methanol					CAS #: 67-56-1		
7.562	7.562 (0.545)	31	107293	12.0000	12.000	50.00- 150.00	100.00(a)
7.562	7.562 (0.545)	32	159991			99.12- 199.12	149.12
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	63623	2.00000	2.000	50.00- 150.00	100.00
8.717	8.717 (0.629)	69	20718			0.00- 82.56	32.56
8.688	8.688 (0.627)	35	3460			0.00- 55.44	5.44
40 Freon123a					CAS #: 354-23-4		
9.579	9.579 (0.691)	67	43195	2.00000	2.000	50.00- 150.00	100.00
9.579	9.579 (0.691)	117	30046			19.56- 119.56	69.56
41 Freon123					CAS #: 306-83-2		
9.690	9.690 (0.699)	83	5312	2.00000	2.000	50.00- 150.00	100.00
9.745	9.745 (0.703)	133	1071			0.00- 70.16	20.16
9.579	9.579 (0.691)	85	21678			358.09- 458.09	408.09
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	89483	2.00000	2.000	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	25084			0.00- 78.03	28.03
12.289	12.289 (0.886)	59	11599			0.00- 62.96	12.96
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	4135	2.00000	2.000	50.00- 150.00	100.00
12.427	12.427 (0.896)	59	3892			44.12- 144.12	94.12
12.289	12.289 (0.886)	41	23097			508.57- 608.57	558.57
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	83489	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	36614			0.00- 93.85	43.85
12.925	12.925 (0.932)	41	21913			0.00- 76.25	26.25
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	11280	2.00000	2.000	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	9228			31.81- 131.81	81.81
13.395	13.395 (0.966)	43	57387			458.75- 558.75	508.75
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	81705	2.00000	2.000	50.00- 150.00	100.00
15.026	15.026 (1.084)	87	18497			0.00- 72.64	22.64
14.999	14.999 (1.082)	55	21377			0.00- 76.16	26.16
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	32947	2.00000	2.000	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	45146			87.03- 187.03	137.03
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	9606	2.00000	2.000	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	10253			56.74- 156.74	106.74
15.801	15.801 (1.011)	43	8257			35.96- 135.96	85.96
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	24048	2.00000	2.000	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	11636			0.00- 98.39	48.39
19.533	19.533 (1.249)	43	54116			175.03- 275.03	225.03
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	25477	2.00000	2.000	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	12571			0.00- 99.34	49.34
22.741	22.741 (1.093)	42	15548			11.03- 111.03	61.03
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	67522	2.00000	2.000	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	63912			44.65- 144.65	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022102.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Calibration Date: 21-FEB-2008
Calibration Time: 09:41
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 2.0(12.0 MeOH)ppbv

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	323136	193882	452390	323136	0.00
97 1,4-Difluorobenze	1233520	740112	1726928	1233520	0.00
126 Chlorobenzene-d5	1168316	700990	1635642	1168316	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

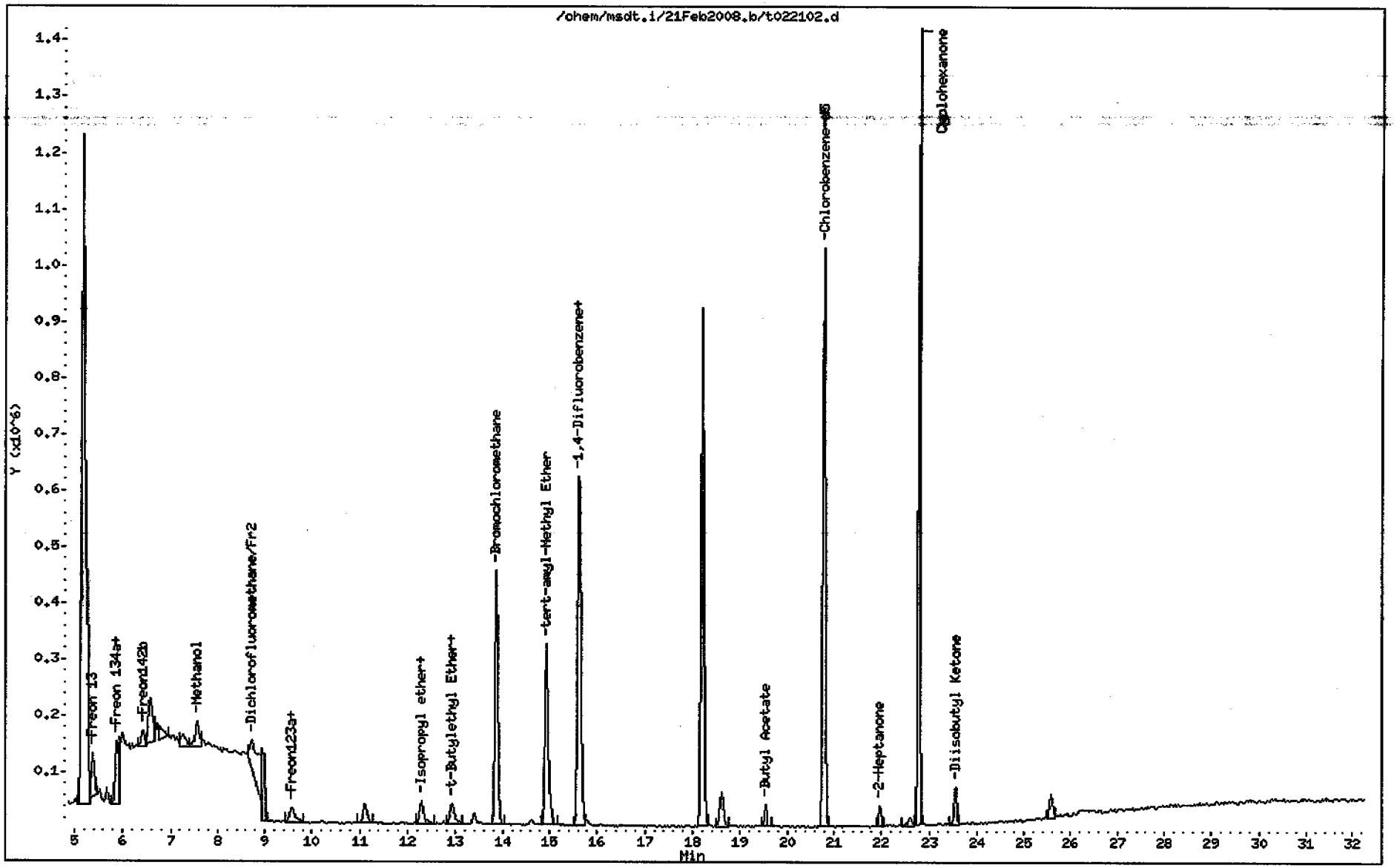
Data File: /chem/msdt.i/21Feb2008.b/t022102.d
Date : 21-FEB-2008 09:41
Client ID: Level 3
Sample Info: 2.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0176



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020609.d
Lab Smp Id: ICAL — Client Smp ID: Level 3
Inj Date : 06-FEB-2008 15:52
Operator : sjr — Inst ID: msdt.i
Smp Info : 2.0ml #1576-261
Misc Info : 200ppbv -> 2.0ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth — Quant Type: ISTD
Cal Date : 06-FEB-2008 15:52 — Cal File: t020609.d
Als bottle: 1 — Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	======= ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.858	13.858 (1.000)	130	335688	25.0000			50.00- 150.00	100.00
13.858	13.858 (1.000)	128	253015				26.39- 126.39	75.37
13.858	13.858 (1.000)	49	393871				99.95- 199.95	117.33
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1208496	25.0000			50.00- 150.00	100.00
15.628	15.628 (1.000)	88	195592				0.00- 66.12	16.18
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1074623	25.0000			50.00- 150.00	100.00
20.798	20.798 (1.000)	82	603306				6.72- 106.72	56.14
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	504523	25.0000	23.357		50.00- 150.00	100.00
14.936	14.936 (1.078)	67	255336				3.57- 103.57	50.61
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1147306	25.0000	24.646		50.00- 150.00	100.00
18.199	18.199 (1.165)	70	135898				0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	787197			18.71- 118.71	68.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	679408	25.0000	24.442	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	860445			75.58- 175.58	126.65
22.789	22.789 (1.096)	176	670526			47.41- 147.41	98.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	22739	2.00000	2.071	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	15435			17.96- 117.96	67.88
5.784	5.784 (0.417)	39	20226			33.44- 133.44	88.95
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	123293	2.00000	1.881	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	38794			0.00- 82.13	31.46
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	78566	2.00000	1.813	50.00- 150.00	100.00
6.282	6.282 (0.453)	137	26889			0.00- 81.89	34.22
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	26540	2.00000	1.854	50.00- 150.00	100.00(a)
6.531	6.531 (0.471)	52	9438			0.00- 83.62	35.56
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	34443	2.00000	1.753	50.00- 150.00	100.00
6.863	6.863 (0.495)	64	15275			0.00- 89.61	44.35
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	27542	2.00000	1.863	50.00- 150.00	100.00
6.946	6.946 (0.501)	39	26577			53.33- 153.33	96.50
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	34627	2.00000	1.780	50.00- 150.00	100.00
7.913	7.913 (0.571)	96	36867			43.69- 143.69	106.47
27 Chloroethane					CAS #: 75-00-3		
8.162	8.162 (0.589)	64	18101	2.00000	1.766	50.00- 150.00	100.00
8.162	8.162 (0.589)	49	4451			0.00- 76.71	24.59
8.162	8.162 (0.589)	66	6377			0.00- 83.02	35.23
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.770	8.770 (0.633)	101	138682	2.00000	1.869	50.00- 150.00	100.00
8.770	8.770 (0.633)	103	89495			13.52- 113.52	64.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	8250	2.00000	1.453	50.00- 150.00	100.00(a)
9.241	9.241 (0.667)	43	2392			0.00- 75.24	28.99
9.241	9.241 (0.667)	46	4013			0.00- 89.78	48.64
42 Freon 113					CAS #: 76-13-1		
9.932	9.932 (0.717)	151	65484	2.00000	1.916	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	41750			14.28- 114.28	63.76
9.932	9.932 (0.717)	101	88957			80.55- 180.55	135.85
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	52759	2.00000	1.715	50.00- 150.00	100.00
10.042	10.042 (0.725)	96	35580			13.15- 113.15	67.44
10.042	10.042 (0.725)	98	22419			0.00- 88.14	42.49
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	17325	2.00000	1.818	50.00- 150.00	100.00(a)
10.181	10.181 (0.735)	43	56147			267.82- 367.82	324.08
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	49508	2.00000	1.516	50.00- 150.00	100.00(a)
10.374	10.374 (0.749)	43	15582			0.00- 76.64	31.47
10.374	10.374 (0.749)	59	2412			0.00- 54.31	4.87
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	104722	2.00000	1.800	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	15372	2.00000	1.534	50.00- 150.00	100.00
10.817	10.817 (0.781)	41	36495			173.84- 273.84	237.41
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	37218	2.00000	1.914	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	31883			36.08- 136.08	85.67
11.093	11.093 (0.800)	51	11885			0.00- 83.83	31.93
60 MTBE					CAS #: 1634-04-4		
11.452	11.452 (0.826)	73	66761	2.00000	1.196	50.00- 150.00	100.00
11.452	11.452 (0.826)	57	12002			0.00- 69.02	17.98
11.452	11.452 (0.826)	41	12228			0.00- 70.47	18.32
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	37657	2.00000	1.648	50.00- 150.00	100.00
11.535	11.535 (0.832)	61	60152			95.77- 195.77	159.74
11.535	11.535 (0.832)	98	27454			16.26- 116.26	72.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	47780	2.00000	1.584	50.00- 150.00	100.00
11.895	11.895 (0.858)	43	27530			9.30- 109.30	57.62
11.895	11.895 (0.858)	86	8949			0.00- 66.83	18.73
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	8827	2.00000	1.493	50.00- 150.00	100.00(a)
12.365	12.365 (0.892)	43	72295			832.23- 932.23	819.02
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	75018	2.00000	1.778	50.00- 150.00	100.00
12.365	12.365 (0.892)	65	22968			0.00- 82.79	30.62
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	17305	2.00000	1.612	50.00- 150.00	100.00
13.388	13.388 (0.966)	43	54370			275.22- 375.22	314.19
13.388	13.388 (0.966)	57	5456			0.00- 79.56	31.53
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	49131	2.00000	1.730	50.00- 150.00	100.00
13.416	13.416 (0.968)	96	40888			27.39- 127.39	83.22
13.416	13.416 (0.968)	98	25507			0.96- 100.96	51.92
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	29321	2.00000	1.619	50.00- 150.00	100.00
13.886	13.886 (1.002)	71	14128			0.00- 99.16	48.18
13.858	13.858 (1.000)	72	15805			2.04- 102.04	53.90
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	92125	2.00000	1.890	50.00- 150.00	100.00
13.941	13.941 (1.006)	85	57968			16.43- 116.43	62.92
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	97885	2.00000	1.815	50.00- 150.00	100.00
14.273	14.273 (1.030)	99	63207			17.45- 117.45	64.57
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	46052	2.00000	1.595	50.00- 150.00	100.00
14.300	14.300 (1.032)	56	44767			47.55- 147.55	97.21
14.300	14.300 (1.032)	41	25199			5.12- 105.12	54.72
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	92572	2.00000	1.787	50.00- 150.00	100.00
14.549	14.549 (1.050)	117	96223			53.78- 153.78	103.94
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	113789	2.00000	1.883	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	26346			0.00- 73.50	23.15
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	112642	2.00000	1.600	50.00- 150.00	100.00
14.881	14.881 (1.074)	56	37981			0.00- 82.82	33.72
14.881	14.881 (1.074)	41	33953			0.00- 78.43	30.14
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	55658	2.00000	1.888	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	18886			0.00- 84.23	33.93
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	28458	2.00000	1.664	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	38964			85.70- 185.70	136.92
15.185	15.185 (0.972)	57	22207			28.72- 128.72	78.03
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	47621	2.00000	1.848	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	44019			42.94- 142.94	92.05
16.098	16.098 (1.030)	97	30818			13.25- 113.25	64.44
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	36803	2.00000	1.805	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	26650			21.32- 121.32	72.41
16.568	16.568 (1.060)	41	20186			8.96- 108.96	54.85
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	23425	2.00000	1.570	50.00- 150.00	100.00(a)
16.678	16.678 (1.067)	58	14454			9.36- 109.36	61.70
16.706	16.706 (1.069)	57	5506			0.00- 71.19	23.50
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	35932	2.00000	1.836	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	56563			13.51- 113.51	66.52
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	51480	2.00000	1.657	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	17678			0.00- 84.89	34.34
17.784	17.784 (1.138)	39	24641			0.00- 97.13	47.87
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	20175	2.00000	1.430	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	50030			175.34- 275.34	247.98
17.978	17.978 (1.150)	85	10629			0.64- 100.64	52.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	120521	2.00000	1.871	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	71179			11.62- 111.62	59.06
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	59843	2.00000	1.762	50.00- 150.00	100.00
18.752	18.752 (0.902)	77	20118			0.00- 81.86	33.62
18.752	18.752 (0.902)	39	25251			0.00- 91.58	42.20
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	47042	2.00000	1.922	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	29057			13.21- 113.21	61.77
19.111	19.111 (0.919)	83	38865			35.76- 135.76	82.62
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	61038	2.00000	1.861	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	45046			19.36- 119.36	73.80
19.277	19.277 (0.927)	131	43125			16.43- 116.43	70.65
121 2-Hexanone					CAS #: 591-78-6		
19.443	19.443 (0.935)	58	21928	2.00000	1.070	50.00- 150.00	100.00(a)
19.416	19.416 (0.934)	43	43343			124.96- 224.96	197.66
19.443	19.443 (0.935)	100	5059			0.00- 71.71	23.07
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	73614	2.00000	1.766	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	61421			28.82- 128.82	83.44
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	68894	2.00000	1.769	50.00- 150.00	100.00
20.051	20.051 (0.964)	109	66726			46.68- 146.68	96.85
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	107793	2.00000	1.907	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	32353			0.00- 82.06	30.01
20.853	20.853 (1.003)	77	75346			22.53- 122.53	69.90
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	53200	2.00000	1.817	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	171345			269.96- 369.96	322.08
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	66296	2.00000	1.798	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	127807			149.87- 249.87	192.78
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	61779	2.00000	1.761	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
21.849	21.849	(1.051)	91	123534			160.81- 260.81	199.96
131 Styrene						CAS #: 100-42-5		
21.876	21.876	(1.052)	104	86239	2.00000	1.605	50.00- 150.00	100.00
21.876	21.876	(1.052)	78	46667			9.02- 109.02	54.11
133 Bromoform						CAS #: 75-25-2		
22.291	22.291	(1.072)	173	78029	2.00000	1.744	50.00- 150.00	100.00
22.291	22.291	(1.072)	171	43129			1.83- 101.83	55.27
134 Cumene						CAS #: 98-82-8		
22.429	22.429	(1.078)	105	168444	2.00000	1.741	50.00- 150.00	100.00
22.429	22.429	(1.078)	120	43006			0.00- 77.62	25.53
22.429	22.429	(1.078)	51	12970			0.00- 58.75	7.70
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.010	23.010	(1.106)	83	111264	2.00000	1.978	50.00- 150.00	100.00
23.010	23.010	(1.106)	85	71555			16.89- 116.89	64.31
142 Propylbenzene						CAS #: 103-65-1		
23.121	23.121	(1.112)	91	233544	2.00000	1.862	50.00- 150.00	100.00
23.121	23.121	(1.112)	120	50752			0.00- 71.63	21.73
23.121	23.121	(1.112)	105	8175			0.00- 53.71	3.50
145 4-Ethyltoluene						CAS #: 622-96-8		
23.286	23.286	(1.120)	105	203376	2.00000	1.905	50.00- 150.00	100.00
23.286	23.286	(1.120)	120	60019			0.00- 79.69	29.51
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.397	23.397	(1.125)	105	167502	2.00000	1.839	50.00- 150.00	100.00
23.397	23.397	(1.125)	120	80768			0.00- 98.23	48.22
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.033	24.033	(1.156)	105	155174	2.00000	1.808	50.00- 150.00	100.00
24.033	24.033	(1.156)	120	68143			0.00- 94.91	43.91
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
24.586	24.586	(1.182)	146	129075	2.00000	2.093	50.00- 150.00	100.00
24.586	24.586	(1.182)	148	83042			14.68- 114.68	64.34
24.586	24.586	(1.182)	111	51936			0.00- 91.36	40.24
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
24.724	24.724	(1.189)	146	129470	2.00000	2.040	50.00- 150.00	100.00
24.724	24.724	(1.189)	148	86858			16.09- 116.09	67.09
24.724	24.724	(1.189)	111	52523			0.00- 90.13	40.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	166099	2.00000	1.810	50.00- 150.00	100.00
24.945	24.945 (1.199)	126	32450			0.00- 69.28	19.54
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	127527	2.00000	2.122	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	87225			15.85- 115.85	68.40
25.360	25.360 (1.219)	111	57743			0.00- 94.46	45.28
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	87930	2.00000	1.919	50.00- 150.00	100.00(a)
28.153	28.153 (1.354)	182	83811			44.78- 144.78	95.32
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	106764	2.00000	2.315	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	66440			12.90- 112.90	62.23
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	109061	2.00000	1.719	50.00- 150.00	100.00(a)
28.678	28.678 (1.379)	127	15349			0.00- 62.74	14.07
29 Isopentane					CAS #: 78-78-4		
8.245	8.245 (0.595)	43	38125	2.00000	1.757	50.00- 150.00	100.00(a)
8.273	8.273 (0.597)	57	29545			27.67- 127.67	77.50
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	6720	2.00000	1.788	50.00- 150.00	100.00(a)
6.780	6.780 (0.489)	43	51151			666.74- 766.74	761.18
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	55043	2.00000	1.610	50.00- 150.00	100.00
16.346	16.346 (1.180)	98	24267			0.00- 95.22	44.09
16.346	16.346 (1.180)	55	36926			20.82- 120.82	67.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	49102	2.00000	1.379	50.00- 150.00	100.00(a)
11.148	11.148 (0.804)	41	11220			0.00- 72.85	22.85
11.148	11.148 (0.804)	57	4875			0.00- 59.93	9.93

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/06Feb2008.b/t020609.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020609.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 2.0ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 15:52
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	335688	201413	469963	335688	0.00
97 1,4-Difluorobenze	1208496	725098	1691894	1208496	0.00
126 Chlorobenzene-d5	1074623	644774	1504472	1074623	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

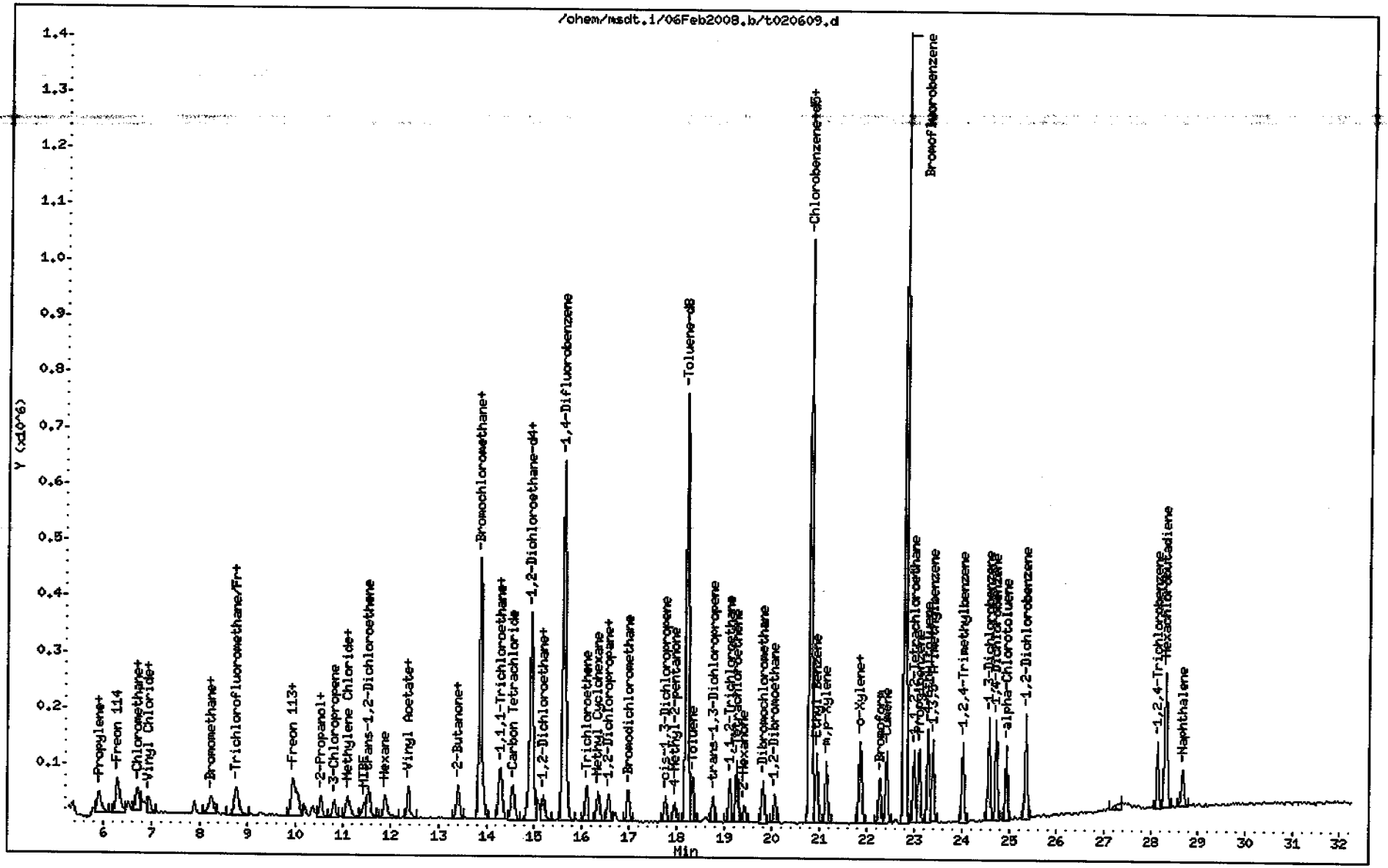
Data File: /chem/msdt.i/06Feb2008.b/t020609.d
Date : 06-FEB-2008 15:52
Client ID: Level 3
Sample Info: 2.0ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0186



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022103.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 21-FEB-2008 10:21
Operator : sjr
Inst ID: msdt.i
Smp Info : 8.0ml #1576-299
Misc Info : 200ppbv -> 8.0(48.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 10:21
Cal File: t022103.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5	
13.865	13.865 (1.000)	130	312185	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	236346			26.53- 126.53	75.71
13.865	13.865 (1.000)	49	371766			95.42- 195.42	119.09
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.635	15.635 (1.000)	114	1223661	25.0000		50.00- 150.00	100.00
15.635	15.635 (1.000)	88	198736			0.00- 66.25	16.24
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.805	20.805 (1.000)	117	1150030	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	661640			7.16- 107.16	57.53
6 Freon142b						CAS #: 75-68-3	
6.408	6.408 (0.462)	65	314391	8.00000	8.080	50.00- 150.00	100.00
6.408	6.408 (0.462)	45	67573			0.00- 72.13	21.49
9 Freon 13						CAS #: 75-72-9	
5.394	5.394 (0.389)	69	329101	8.00000	8.071	50.00- 150.00	100.00
5.394	5.394 (0.389)	85	99340			0.00- 80.30	30.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.394	5.394 (0.389)	87	34120			0.00- 60.60	10.37
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	141460	8.00000	7.957	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	121869			32.94- 132.94	86.15
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	73331	8.00000	7.487	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	133000			135.30- 235.30	181.37
5.844	5.844 (0.422)	47	31133			0.00- 92.32	42.46
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	36362	8.00000	8.191	50.00- 150.00	100.00
5.985	5.985 (0.432)	51	183210			483.45- 583.45	503.85
5.985	5.985 (0.432)	85	4459			0.00- 71.73	12.26
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	197031	48.0000	30.924	50.00- 150.00	100.00(a)
7.534	7.534 (0.543)	32	284448			96.74- 196.74	144.37
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	247871	8.00000	8.032	50.00- 150.00	100.00
8.717	8.717 (0.629)	69	81283			0.00- 82.68	32.79
8.717	8.717 (0.629)	35	14325			0.00- 55.61	5.78
40 Freon123a					CAS #: 354-23-4		
9.580	9.580 (0.691)	67	180610	8.00000	8.315	50.00- 150.00	100.00
9.580	9.580 (0.691)	117	129025			20.50- 120.50	71.44
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	20901	8.00000	8.072	50.00- 150.00	100.00
9.745	9.745 (0.703)	133	4660			0.00- 71.23	22.30
9.580	9.580 (0.691)	85	89551			368.27- 468.27	428.45
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	351422	8.00000	8.064	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	111725			0.00- 79.91	31.79
12.289	12.289 (0.886)	59	41310			0.00- 62.36	11.76
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	23591	8.00000	9.539	50.00- 150.00	100.00
12.400	12.400 (0.894)	59	31738			64.33- 164.33	134.53
12.400	12.400 (0.894)	41	18558			268.62- 368.62	78.67
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	353478	8.00000	8.365	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	151766			0.00- 93.39	42.94
12.925	12.925 (0.932)	41	69691			0.00- 72.98	19.72
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	37234	8.00000	7.371	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	39315			43.70- 143.70	105.59
13.395	13.395 (0.966)	43	256151			548.35- 648.35	687.95
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	341472	8.00000	8.313	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	75821			0.00- 72.42	22.20
14.999	14.999 (1.082)	55	93846			0.00- 76.82	27.48
96 2-Heptanone					CAS #: 110-43-0		
21.994	21.994 (1.586)	58	165986	8.00000	9.054	50.00- 150.00	100.00
21.967	21.967 (1.584)	43	236874			89.87- 189.87	142.71
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	55918	8.00000	9.514	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	42576			41.44- 141.44	76.14
15.801	15.801 (1.011)	43	29218			19.10- 119.10	52.25
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	110364	8.00000	8.581	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	48409			0.00- 96.12	43.86
19.533	19.533 (1.249)	43	247267			174.54- 274.54	224.05
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	151594	8.00000	9.628	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	75635			0.00- 99.62	49.89
22.741	22.741 (1.093)	42	93458			11.34- 111.34	61.65
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	340934	8.00000	8.990	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	328214			45.46- 145.46	96.27
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/21Feb2008.b/t022103.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022103.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 8.0(48.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 10:21
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312185	187311	437059	312185	0.00
97 1,4-Difluorobenze	1223661	734197	1713125	1223661	0.00
126 Chlorobenzene-d5	1150030	690018	1610042	1150030	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

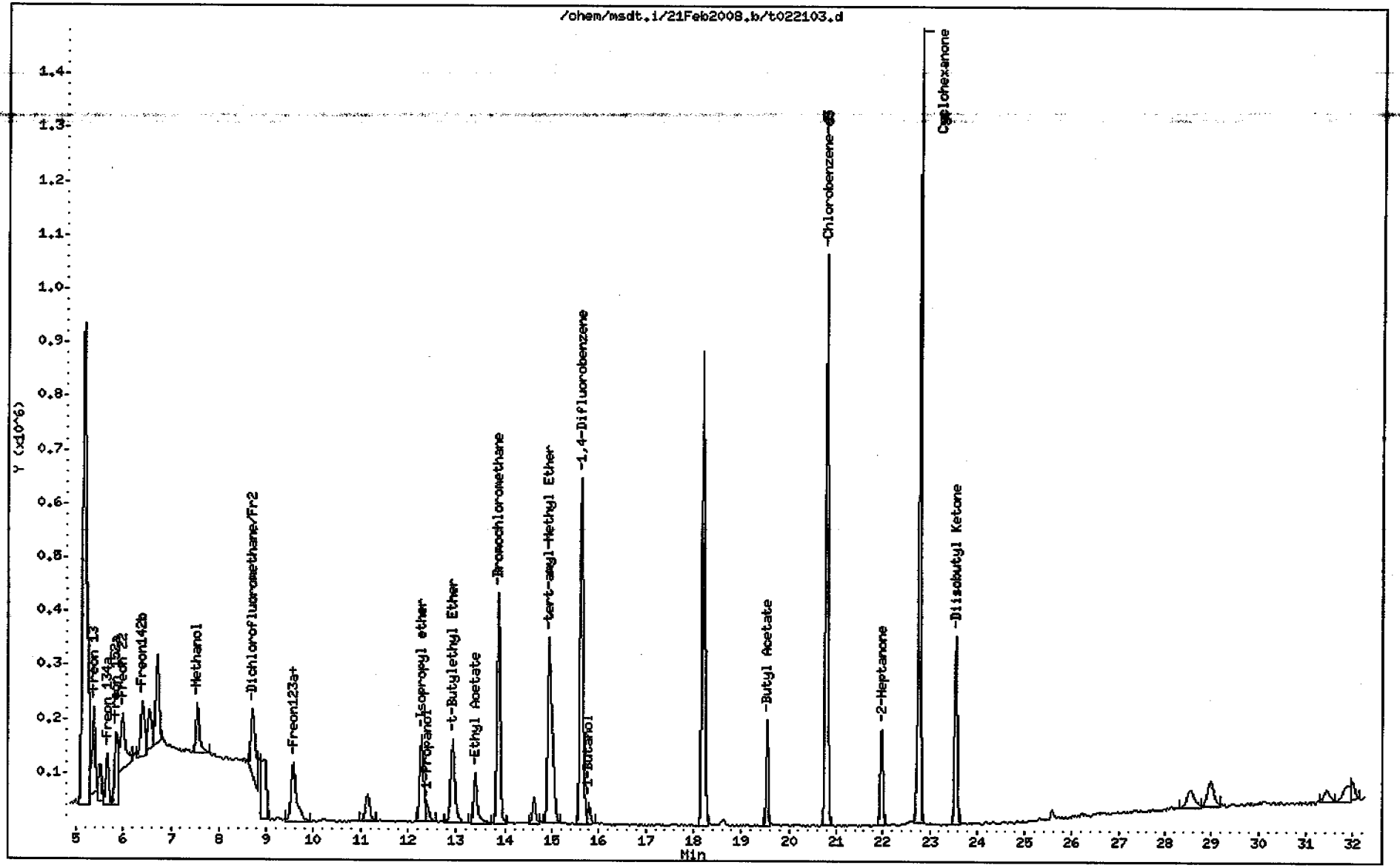
0191

Data File: /ohem/msdt.i/21Feb2008.b/t022103.d
Date : 21-FEB-2008 10:21
Client ID: Level 4
Sample Info: 8.0ml #1576-299

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020610.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 06-FEB-2008 16:33
Operator : sjr
Inst ID: msdt.i
Smp Info : 25ml #1576-261
Misc Info : 200ppbv -> 25ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 16:33
Cal File: t020610.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886	(1.000)	130	334218	25.0000		50.00- 150.00	100.00
13.858	13.858	(1.000)	128	255710			26.39- 126.39	76.51
13.858	13.858	(1.000)	49	494332			99.95- 199.95	147.91
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628	(1.000)	114	1289398	25.0000		50.00- 150.00	100.00
15.628	15.628	(1.000)	88	207335			0.00- 66.12	16.08
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798	(1.000)	117	1136429	25.0000		50.00- 150.00	100.00
20.798	20.798	(1.000)	82	643863			6.72- 106.72	56.66
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.937	14.937	(1.076)	65	532290	25.0000	24.751	50.00- 150.00	100.00
14.937	14.937	(1.076)	67	283909			3.57- 103.57	53.34
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199	(1.165)	98	1243286	25.0000	25.032	50.00- 150.00	100.00
18.199	18.199	(1.165)	70	135082			0.00- 61.29	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	859790			18.71- 118.71	69.15
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	723188	25.0000	24.602	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	908149			75.58- 175.58	125.58
22.789	22.789 (1.096)	176	710103			47.41- 147.41	98.19
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	284287	25.0000	26.006	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	196485			17.96- 117.96	69.12
5.812	5.812 (0.419)	39	232847			33.44- 133.44	81.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	1805554	25.0000	27.666	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	593653			0.00- 82.13	32.88
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	1167878	25.0000	27.071	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	380476			0.00- 81.89	32.58
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	370794	25.0000	26.025	50.00- 150.00	100.00
6.531	6.531 (0.470)	52	124290			0.00- 83.62	33.52
20 Vinyl Chloride					CAS #: 75-01-4		
6.891	6.891 (0.496)	62	533497	25.0000	27.273	50.00- 150.00	100.00
6.891	6.891 (0.496)	64	172106			0.00- 89.61	32.26
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	405591	25.0000	27.552	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	386988			53.33- 153.33	95.41
25 Bromomethane					CAS #: 74-83-9		
7.914	7.914 (0.570)	94	524382	25.0000	27.074	50.00- 150.00	100.00
7.914	7.914 (0.570)	96	479513			43.69- 143.69	91.44
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	279105	25.0000	27.358	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	74678			0.00- 76.71	26.76
8.190	8.190 (0.590)	66	91110			0.00- 83.02	32.64
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	2071216	25.0000	28.034	50.00- 150.00	100.00
8.771	8.771 (0.632)	103	1351487			13.52- 113.52	65.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	155269	25.0000	27.468	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	37536			0.00- 75.24	24.17
9.241	9.241 (0.665)	46	55946			0.00- 89.78	36.03
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	936482	25.0000	27.528	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	599235			14.28- 114.28	63.99
9.960	9.960 (0.717)	101	1225808			80.55- 180.55	130.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.043	10.043 (0.723)	61	847928	25.0000	27.691	50.00- 150.00	100.00
10.043	10.043 (0.723)	96	515431			13.15- 113.15	60.79
10.043	10.043 (0.723)	98	326894			0.00- 88.14	38.55
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	251564	25.0000	26.508	50.00- 150.00	100.00
10.181	10.181 (0.733)	43	818668			267.82- 367.82	325.43
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	858121	25.0000	26.385	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	230141			0.00- 76.64	26.82
10.374	10.374 (0.747)	59	35435			0.00- 54.31	4.13
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	1571599	25.0000	27.134	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	280286	25.0000	28.102	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	605264			173.84- 273.84	215.95
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	515852	25.0000	26.641	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	457155			36.08- 136.08	88.62
11.093	11.093 (0.799)	51	169738			0.00- 83.83	32.90
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	1789417	25.0000	32.190	50.00- 150.00	100.00
11.453	11.453 (0.825)	57	342391			0.00- 69.02	19.13
11.453	11.453 (0.825)	41	333822			0.00- 70.47	18.66
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	663385	25.0000	29.151	50.00- 150.00	100.00
11.536	11.536 (0.831)	61	928452			95.77- 195.77	139.96
11.563	11.563 (0.833)	98	425861			16.26- 116.26	64.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	875954	25.0000	29.169	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	512217			9.30- 109.30	58.48
11.895	11.895 (0.857)	86	154784			0.00- 66.83	17.67
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	153376	25.0000	26.051	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	1371221			832.23- 932.23	894.03
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	1208705	25.0000	28.768	50.00- 150.00	100.00
12.365	12.365 (0.890)	65	387741			0.00- 82.79	32.08
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	292440	25.0000	27.357	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	970748			275.22- 375.22	331.95
13.388	13.388 (0.964)	57	81299			0.00- 79.56	27.80
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	814797	25.0000	28.821	50.00- 150.00	100.00
13.416	13.416 (0.966)	96	629811			27.39- 127.39	77.30
13.416	13.416 (0.966)	98	405600			0.96- 100.96	49.78
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	516188	25.0000	28.629	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	270836			0.00- 99.16	52.47
13.858	13.858 (0.998)	72	286491			2.04- 102.04	55.50
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	1434387	25.0000	29.549	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	936553			16.43- 116.43	65.29
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	1561890	25.0000	29.090	50.00- 150.00	100.00
14.273	14.273 (1.028)	99	1011367			17.45- 117.45	64.75
85 Cyclohexane					CAS #: 110-82-7		
14.301	14.301 (1.030)	84	831348	25.0000	28.918	50.00- 150.00	100.00
14.301	14.301 (1.030)	56	822590			47.55- 147.55	98.95
14.301	14.301 (1.030)	41	437816			5.12- 105.12	52.66
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	1495659	25.0000	29.000	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	1593507			53.78- 153.78	106.54
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	1805921	25.0000	28.017	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	415076			0.00- 73.50	22.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	2040326	25.0000	29.108	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	651578			0.00- 82.82	31.93
14.881	14.881 (1.072)	41	527319			0.00- 78.43	25.84
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	899538	25.0000	28.604	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	287058			0.00- 84.23	31.91
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	539758	25.0000	29.582	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	725497			85.70- 185.70	134.41
15.185	15.185 (0.972)	57	433724			28.72- 128.72	80.36
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	809796	25.0000	29.332	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	736330			42.94- 142.94	90.93
16.098	16.098 (1.030)	97	502564			13.25- 113.25	62.06
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	617846	25.0000	28.408	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	449048			21.32- 121.32	72.68
16.568	16.568 (1.060)	41	350593			8.96- 108.96	56.74
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	419073	25.0000	26.325	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	248796			9.36- 109.36	59.37
16.706	16.706 (1.069)	57	87940			0.00- 71.19	20.98
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	1452860	25.0000	29.405	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	925446			13.51- 113.51	63.70
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	960843	25.0000	28.993	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	311058			0.00- 84.89	32.37
17.784	17.784 (1.138)	39	433889			0.00- 97.13	45.16
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	443863	25.0000	29.477	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	1012229			175.34- 275.34	228.05
17.978	17.978 (1.150)	85	219633			0.64- 100.64	49.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	1989625	25.0000	28.948	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	1214679			11.62- 111.62	61.05
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	1069541	25.0000	29.778	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	338491			0.00- 81.86	31.65
18.752	18.752 (0.902)	39	431851			0.00- 91.58	40.38
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.112	19.112 (0.919)	97	770359	25.0000	29.759	50.00- 150.00	100.00
19.112	19.112 (0.919)	99	476886			13.21- 113.21	61.90
19.112	19.112 (0.919)	83	637669			35.76- 135.76	82.78
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	1044211	25.0000	30.103	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	733649			19.36- 119.36	70.26
19.277	19.277 (0.927)	131	692279			16.43- 116.43	66.30
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	600804	25.0000	27.717	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	1022657			124.96- 224.96	170.21
19.416	19.416 (0.934)	100	132839			0.00- 71.71	22.11
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	1348982	25.0000	30.605	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	1034685			28.82- 128.82	76.70
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	1251667	25.0000	30.398	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	1153749			46.68- 146.68	92.18
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	1743887	25.0000	29.181	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	545791			0.00- 82.06	31.30
20.853	20.853 (1.003)	77	1078189			22.53- 122.53	61.83
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	926234	25.0000	29.913	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	2920081			269.96- 369.96	315.26
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	1173062	25.0000	30.086	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	2352767			149.87- 249.87	200.57
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	1125158	25.0000	30.336	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	2362887			160.81- 260.81	210.00
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	1801628	25.0000	31.706	50.00- 150.00	100.00
21.877	21.877 (1.052)	78	925547			9.02- 109.02	51.37
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	1429561	25.0000	30.216	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	734724			1.83- 101.83	51.40
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	3121582	25.0000	30.511	50.00- 150.00	100.00
22.430	22.430 (1.078)	120	803583			0.00- 77.62	25.74
22.430	22.430 (1.078)	51	269302			0.00- 58.75	8.63
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	1766566	25.0000	29.693	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	1142101			16.89- 116.89	64.65
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	3987959	25.0000	30.069	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	870154			0.00- 71.63	21.82
23.121	23.121 (1.112)	105	149480			0.00- 53.71	3.75
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	3468899	25.0000	30.725	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	1046336			0.00- 79.69	30.16
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	2924272	25.0000	30.363	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	1422059			0.00- 98.23	48.63
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	2745190	25.0000	30.249	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	1286024			0.00- 94.91	46.85
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	1892688	25.0000	29.016	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	1226520			14.68- 114.68	64.80
24.586	24.586 (1.182)	111	789350			0.00- 91.36	41.71
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	1952581	25.0000	29.091	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	1247055			16.09- 116.09	63.87
24.724	24.724 (1.189)	111	788240			0.00- 90.13	40.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	2891364	25.0000	29.794	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	551882			0.00- 69.28	19.09
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	1837629	25.0000	28.920	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	1188804			15.85- 115.85	64.69
25.360	25.360 (1.219)	111	792947			0.00- 94.46	43.15
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	1231331	25.0000	25.408	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	1163126			44.78- 144.78	94.46
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	1212587	25.0000	24.861	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	768070			12.90- 112.90	63.34
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	1708446	25.0000	25.470	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	211414			0.00- 62.74	12.37
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	576310	25.0000	26.672	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	453950			27.67- 127.67	78.77
19 Butane					CAS #: 106-97-8		
6.808	6.808 (0.490)	58	101733	25.0000	27.192	50.00- 150.00	100.00
6.808	6.808 (0.490)	43	712263			666.74- 766.74	700.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	978273	25.0000	28.740	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	444120			0.00- 95.22	45.40
16.347	16.347 (1.177)	55	690170			20.82- 120.82	70.55
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.149	11.149 (0.803)	59	1019065	25.0000	28.754	50.00- 150.00	100.00
11.149	11.149 (0.803)	41	225570			0.00- 72.85	22.13
11.149	11.149 (0.803)	57	106009			0.00- 59.93	10.40

Data File: /chem/msdt.i/06Feb2008.b/t020610.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020610.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 25ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 16:33
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	334218	200531	467905	334218	0.00
97 1,4-Difluorobenze	1289398	773639	1805157	1289398	0.00
126 Chlorobenzene-d5	1136429	681857	1591001	1136429	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

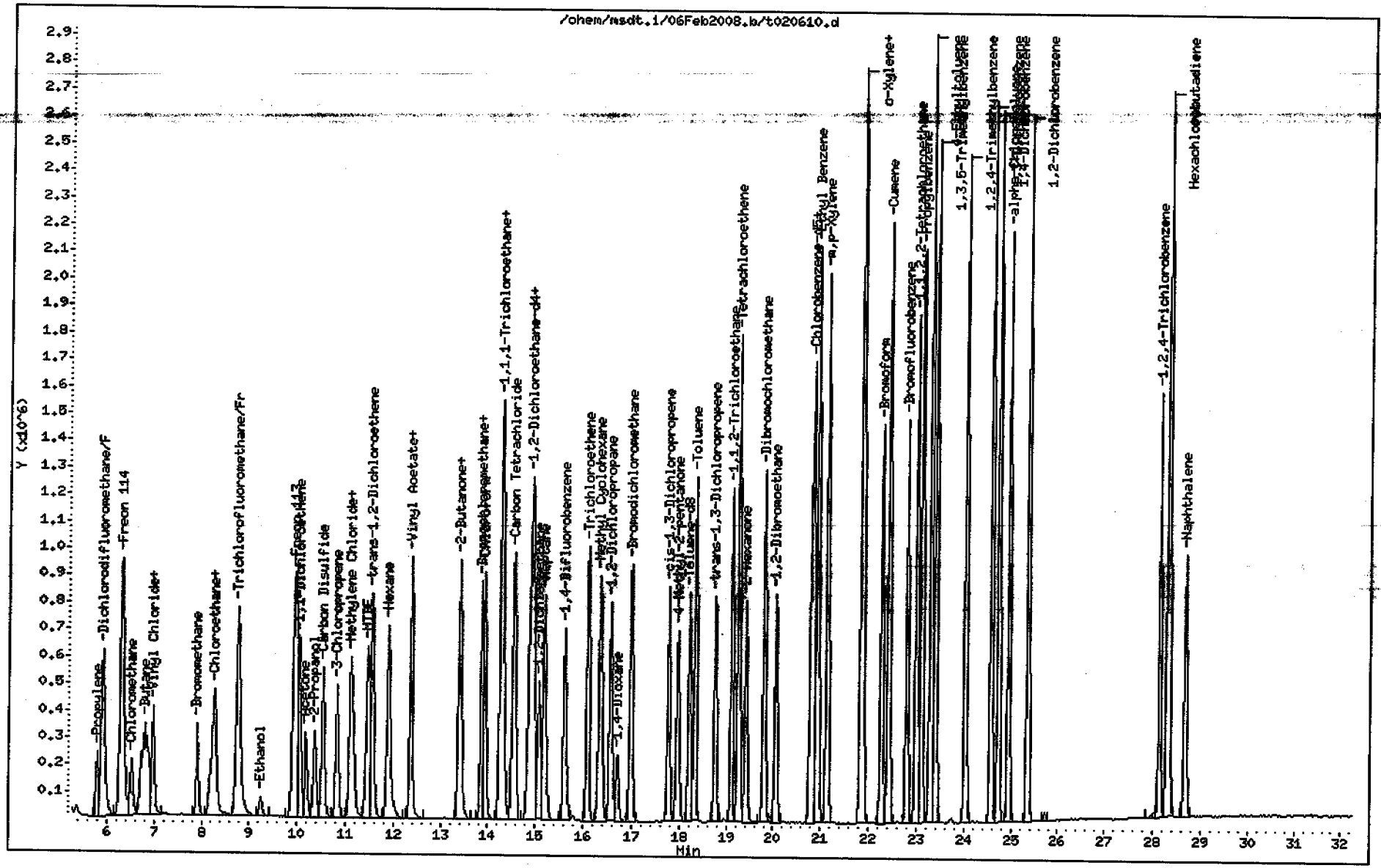
0201

Data File: /ohem/msdt.i/06Feb2008.b/t020610.d
Date : 06-FEB-2008 16:33
Client ID: Level 4
Sample Info: 25ml #1576-261

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 21-FEB-2008 11:03
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 11:03
Cal File: t022104.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312258	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	236420			25.71- 125.71	75.71
13.865	13.865 (1.000)	49	373343			69.56- 169.56	119.56
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1266888	25.0000		80.00- 120.00	100.00
15.635	15.635 (1.000)	88	209470			0.00- 66.53	16.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1159473	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	667973			7.40- 107.40	57.61
6 Freon142b					CAS #: 75-68-3		
6.408	6.408 (0.462)	65	2256667	50.0000	55.056	80.00- 120.00	100.00
6.408	6.408 (0.462)	45	455198			0.00- 71.47	20.17
9 Freon 13					CAS #: 75-72-9		
5.366	5.366 (0.387)	69	2091709	50.0000	50.851	80.00- 120.00	100.00
5.366	5.366 (0.387)	85	681331			0.00- 81.06	32.57

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.366	5.366	(0.387)	87	212271			0.00- 60.45	10.15
13 Freon 134a						CAS #: 811-97-2		
5.647	5.647	(0.407)	83	957959	50.0000	52.516	80.00- 120.00	100.00
5.647	5.647	(0.407)	69	790194			32.79- 132.79	82.49
15 Freon 152a						CAS #: 75-37-6		
5.816	5.816	(0.419)	65	507647	50.0000	51.198	80.00- 120.00	100.00
5.816	5.816	(0.419)	51	855266			129.69- 229.69	168.48
5.816	5.816	(0.419)	47	223144			0.00- 92.87	43.96
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	240792	50.0000	52.743	80.00- 120.00	100.00
5.985	5.985	(0.432)	51	1193969			470.91- 570.91	495.85
5.985	5.985	(0.432)	85	25075			0.00- 67.96	10.41
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	536359	300.000	110.71	80.00- 120.00	100.00
7.534	7.534	(0.543)	32	456083			35.03- 135.03	85.03
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	1630517	50.0000	51.849	80.00- 120.00	100.00
8.717	8.717	(0.629)	69	532919			0.00- 82.68	32.68
8.717	8.717	(0.629)	35	85037			0.00- 55.48	5.22
40 Freon123a						CAS #: 354-23-4		
9.552	9.552	(0.689)	67	1294749	50.0000	56.012	80.00- 120.00	100.00
9.552	9.552	(0.689)	117	946703			21.37- 121.37	73.12
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	146846	50.0000	54.275	80.00- 120.00	100.00
9.718	9.718	(0.701)	133	29959			0.00- 70.95	20.40
9.718	9.718	(0.701)	85	122663			256.69- 356.69	83.53
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	2738824	50.0000	57.883	80.00- 120.00	100.00
12.289	12.289	(0.886)	87	875522			0.00- 80.60	31.97
12.289	12.289	(0.886)	59	320352			0.00- 62.14	11.70
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	118012	50.0000	48.447	80.00- 120.00	100.00
12.400	12.400	(0.894)	59	177514			76.36- 176.36	150.42
12.289	12.289	(0.886)	41	548379			317.31- 417.31	464.68
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	3041136	50.0000	62.766	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	1293560			0.00- 93.11	42.54
12.925	12.925 (0.932)	41	498322			0.00- 70.78	16.39
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	287177	50.0000	54.359	80.00- 120.00	100.00
13.395	13.395 (0.966)	61	317488			49.32- 149.32	110.55
13.395	13.395 (0.966)	43	1980955			578.83- 678.83	689.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	2825604	50.0000	61.124	80.00- 120.00	100.00
14.999	14.999 (1.082)	87	674366			0.00- 72.90	23.87
14.999	14.999 (1.082)	55	659557			0.00- 75.66	23.34
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	1498222	50.0000	67.450	80.00- 120.00	100.00
21.966	21.966 (1.584)	43	2089626			89.74- 189.74	139.47
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	357913	50.0000	55.554	80.00- 120.00	100.00
15.801	15.801 (1.011)	41	242656			33.56- 133.56	67.80
15.801	15.801 (1.011)	43	184494			13.25- 113.25	51.55
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	949314	50.0000	62.430	80.00- 120.00	100.00
19.533	19.533 (1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533 (1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	839726	50.0000	51.897	80.00- 120.00	100.00
22.741	22.741 (1.093)	98	429311			0.12- 100.12	51.13
22.741	22.741 (1.093)	42	544268			12.50- 112.50	64.81
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.543	23.543 (1.132)	57	2863217	50.0000	64.228	80.00- 120.00	100.00
23.570	23.570 (1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	312258	0.00
97 1,4-Difluorobenze	1266888	760133	1773643	1266888	0.00
126 Chlorobenzene-d5	1159473	695684	1623262	1159473	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

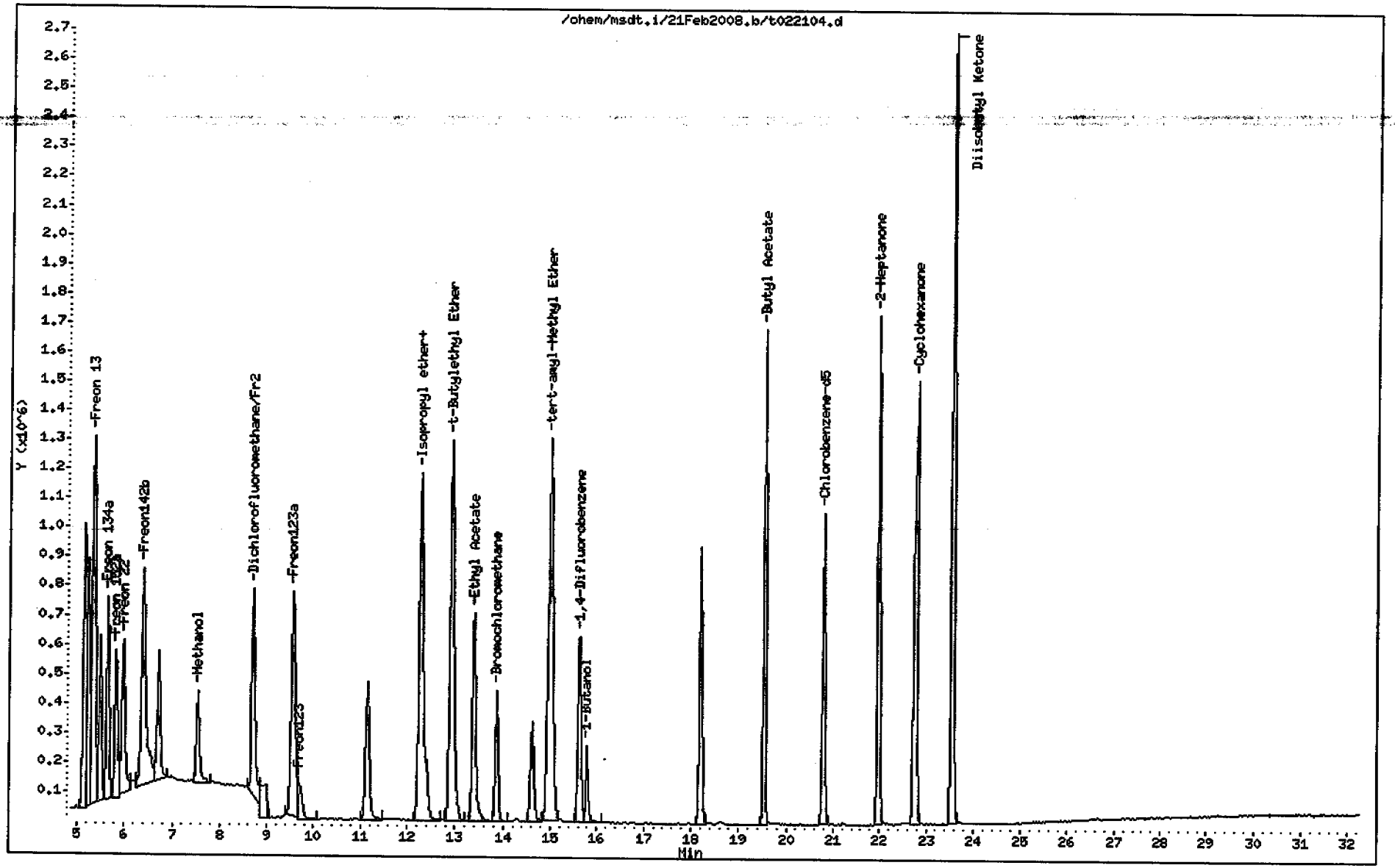
Data File: /ohem/msdt.i/21Feb2008.b/t022104.d
Date : 21-FEB-2008 11:03
Client ID: Level 5
Sample Info: 50ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0206



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020611.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 06-FEB-2008 17:13
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:13
Cal File: t020611.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	============	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	355997	25.0000		80.00- 120.00	100.00
13.886	13.886 (1.000)	128	270515			25.99- 125.99	75.99
13.858	13.858 (1.000)	49	620343			124.26- 224.26	174.26
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1372567	25.0000		80.00- 120.00	100.00
15.628	15.628 (1.000)	88	218941			0.00- 65.95	15.95
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1227265	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	689313			6.72- 106.72	56.17
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	583879	25.0000	25.489	80.00- 120.00	100.00
14.936	14.936 (1.076)	67	331459			3.57- 103.57	56.77
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1318253	25.0000	24.933	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	152530			0.00- 61.29	11.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	907157			18.71- 118.71	68.82
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	802647	25.0000	25.285	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	997548			74.28- 174.28	124.28
22.789	22.789 (1.096)	176	784103			47.69- 147.69	97.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	568844	50.0000	48.853	80.00- 120.00	100.00
5.812	5.812 (0.419)	42	386786			17.96- 117.96	68.00
5.812	5.812 (0.419)	39	460707			33.44- 133.44	80.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	3662828	50.0000	52.692	80.00- 120.00	100.00
5.895	5.895 (0.425)	87	1170633			0.00- 82.13	31.96
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.452)	135	2368790	50.0000	51.549	80.00- 120.00	100.00
6.282	6.282 (0.452)	137	767760			0.00- 81.89	32.41
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	736532	50.0000	48.532	80.00- 120.00	100.00
6.531	6.531 (0.470)	52	242289			0.00- 83.62	32.90
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.494)	62	1053090	50.0000	50.541	80.00- 120.00	100.00
6.863	6.863 (0.494)	64	342558			0.00- 89.61	32.53
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	811723	50.0000	51.767	80.00- 120.00	100.00
6.973	6.973 (0.502)	39	793975			53.33- 153.33	97.81
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	1033071	50.0000	50.075	80.00- 120.00	100.00
7.913	7.913 (0.570)	96	968870			43.79- 143.79	93.79
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	574342	50.0000	52.853	80.00- 120.00	100.00
8.162	8.162 (0.588)	49	147684			0.00- 76.71	25.71
8.162	8.162 (0.588)	66	193610			0.00- 83.02	33.71
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	4148660	50.0000	52.718	80.00- 120.00	100.00
8.771	8.771 (0.632)	103	2679418			14.59- 114.59	64.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	322418	50.0000	53.549	80.00- 120.00	100.00
9.241	9.241 (0.665)	43	79459			0.00- 75.24	24.64
9.241	9.241 (0.665)	46	120478			0.00- 89.78	37.37
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	1858487	50.0000	51.288	80.00- 120.00	100.00
9.960	9.960 (0.717)	153	1188101			13.93- 113.93	63.93
9.960	9.960 (0.717)	101	2437243			81.14- 181.14	131.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	1737278	50.0000	53.263	80.00- 120.00	100.00
10.042	10.042 (0.723)	96	1039511			9.84- 109.84	59.84
10.042	10.042 (0.723)	98	667871			0.00- 88.44	38.44
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	537852	50.0000	53.208	80.00- 120.00	100.00
10.181	10.181 (0.733)	43	1662243			267.82- 367.82	309.05
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	1866517	50.0000	53.880	80.00- 120.00	100.00
10.374	10.374 (0.747)	43	458202			0.00- 76.64	24.55
10.374	10.374 (0.747)	59	78354			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	3176334	50.0000	51.484	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	554160	50.0000	52.162	80.00- 120.00	100.00
10.817	10.817 (0.779)	41	1242594			173.84- 273.84	224.23
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	1027528	50.0000	49.819	80.00- 120.00	100.00
11.121	11.121 (0.801)	84	915087			39.06- 139.06	89.06
11.093	11.093 (0.799)	51	342626			0.00- 83.83	33.34
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	3731089	50.0000	63.014	80.00- 120.00	100.00
11.453	11.453 (0.825)	57	708379			0.00- 68.99	18.99
11.453	11.453 (0.825)	41	693527			0.00- 70.47	18.59
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	1318462	50.0000	54.393	80.00- 120.00	100.00
11.536	11.536 (0.831)	61	1860568			91.12- 191.12	141.12
11.563	11.563 (0.833)	98	850578			16.26- 116.26	64.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	1840132	50.0000	57.528	80.00- 120.00	100.00
11.895	11.895 (0.857)	43	1061185			9.30- 109.30	57.67
11.895	11.895 (0.857)	86	329230			0.00- 66.83	17.89
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	325069	50.0000	51.835	80.00- 120.00	100.00
12.365	12.365 (0.890)	43	2991357			832.23- 932.23	920.22
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	2472619	50.0000	55.250	80.00- 120.00	100.00
12.365	12.365 (0.890)	65	805934			0.00- 82.59	32.59
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	626587	50.0000	55.030	80.00- 120.00	100.00
13.388	13.388 (0.964)	43	2118345			288.08- 388.08	338.08
13.388	13.388 (0.964)	57	187831			0.00- 79.56	29.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	1679389	50.0000	55.770	80.00- 120.00	100.00
13.416	13.416 (0.966)	96	1321033			28.66- 128.66	78.66
13.416	13.416 (0.966)	98	843715			0.24- 100.24	50.24
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	1094094	50.0000	56.969	80.00- 120.00	100.00
13.858	13.858 (0.998)	71	585510			3.52- 103.52	53.52
13.858	13.858 (0.998)	72	623609			2.04- 102.04	57.00
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	2945710	50.0000	56.971	80.00- 120.00	100.00
13.941	13.941 (1.004)	85	1913887			14.97- 114.97	64.97
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	3172686	50.0000	55.477	80.00- 120.00	100.00
14.273	14.273 (1.028)	99	2055059			14.77- 114.77	64.77
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	1715824	50.0000	56.032	80.00- 120.00	100.00
14.300	14.300 (1.030)	56	1705812			49.42- 149.42	99.42
14.300	14.300 (1.030)	41	887756			1.74- 101.74	51.74
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	3035706	50.0000	55.259	80.00- 120.00	100.00
14.549	14.549 (1.048)	117	3225264			56.24- 156.24	106.24
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3727114	50.0000	54.318	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	840170			0.00- 73.50	22.54
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	4124554	50.0000	55.242	80.00- 120.00	100.00
14.881	14.881 (1.072)	56	1342557			0.00- 82.82	32.55
14.881	14.881 (1.072)	41	1097372			0.00- 78.43	26.61
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1854128	50.0000	55.386	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	600236			0.00- 84.23	32.37
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1090153	50.0000	56.126	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1492099			85.70- 185.70	136.87
15.185	15.185 (0.972)	57	911942			28.72- 128.72	83.65
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	1644017	50.0000	55.940	80.00- 120.00	100.00
16.098	16.098 (1.030)	130	1508329			41.75- 141.75	91.75
16.098	16.098 (1.030)	97	1036281			13.03- 113.03	63.03
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1288303	50.0000	55.647	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	908468			20.52- 120.52	70.52
16.568	16.568 (1.060)	41	703834			4.63- 104.63	54.63
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	896963	50.0000	52.930	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	524585			8.48- 108.48	58.48
16.706	16.706 (1.069)	57	181915			0.00- 71.19	20.28
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	2950939	50.0000	56.106	80.00- 120.00	100.00
17.010	17.010 (1.088)	85	1891495			14.10- 114.10	64.10
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2032815	50.0000	57.623	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	657095			0.00- 82.32	32.32
17.784	17.784 (1.138)	39	911517			0.00- 94.84	44.84
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	959360	50.0000	59.852	80.00- 120.00	100.00
17.978	17.978 (1.150)	43	2178902			175.34- 275.34	227.12
17.978	17.978 (1.150)	85	471816			0.64- 100.64	49.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4068135	50.0000	55.602	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2482867			11.03- 111.03	61.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2215353	50.0000	57.114	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	703689			0.00- 81.76	31.76
18.752	18.752 (0.902)	39	903343			0.00- 90.78	40.78
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	1575767	50.0000	56.367	80.00- 120.00	100.00
19.111	19.111 (0.919)	99	1008005			13.97- 113.97	63.97
19.111	19.111 (0.919)	83	1339264			34.99- 134.99	84.99
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2101247	50.0000	56.093	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1460862			19.52- 119.52	69.52
19.277	19.277 (0.927)	131	1379543			15.65- 115.65	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	1325035	50.0000	56.604	80.00- 120.00	100.00
19.416	19.416 (0.934)	43	2195972			115.73- 215.73	165.73
19.416	19.416 (0.934)	100	272545			0.00- 71.71	20.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2769035	50.0000	58.173	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2123510			28.82- 128.82	76.69
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	2561313	50.0000	57.601	80.00- 120.00	100.00
20.052	20.052 (0.964)	109	2365543			42.36- 142.36	92.36
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3537203	50.0000	54.809	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1102906			0.00- 81.18	31.18
20.853	20.853 (1.003)	77	2193657			12.02- 112.02	62.02
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1881257	50.0000	56.260	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6033553			269.96- 369.96	320.72
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414591	50.0000	57.344	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4867839			149.87- 249.87	201.60
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2294486	50.0000	57.285	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
21.849	21.849	(1.051)	91	4831196			160.56- 260.56	210.56
131 Styrene						CAS #: 100-42-5		
21.876	21.876	(1.052)	104	3731947	50.0000	60.816	80.00- 120.00	100.00
21.876	21.876	(1.052)	78	1927539			1.65- 101.65	51.65
133 Bromoform						CAS #: 75-25-2		
22.291	22.291	(1.072)	173	2955362	50.0000	57.842	80.00- 120.00	100.00
22.291	22.291	(1.072)	171	1502352			0.83- 100.83	50.83
134 Cumene						CAS #: 98-82-8		
22.429	22.429	(1.078)	105	6407360	50.0000	57.992	80.00- 120.00	100.00
22.429	22.429	(1.078)	120	1652751			0.00- 77.62	25.79
22.429	22.429	(1.078)	51	552478			0.00- 58.75	8.62
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.010	23.010	(1.106)	83	3607778	50.0000	56.152	80.00- 120.00	100.00
23.010	23.010	(1.106)	85	2344026			14.97- 114.97	64.97
142 Propylbenzene						CAS #: 103-65-1		
23.121	23.121	(1.112)	91	8205341	50.0000	57.289	80.00- 120.00	100.00
23.121	23.121	(1.112)	120	1793463			0.00- 71.63	21.86
23.121	23.121	(1.112)	105	296421			0.00- 53.71	3.61
145 4-Ethyltoluene						CAS #: 622-96-8		
23.287	23.287	(1.120)	105	7178250	50.0000	58.874	80.00- 120.00	100.00
23.287	23.287	(1.120)	120	2114319			0.00- 79.45	29.45
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.397	23.397	(1.125)	105	5894923	50.0000	56.678	80.00- 120.00	100.00
23.397	23.397	(1.125)	120	2902725			0.00- 98.23	49.24
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.033	24.033	(1.156)	105	5651142	50.0000	57.660	80.00- 120.00	100.00
24.033	24.033	(1.156)	120	2609535			0.00- 94.91	46.18
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
24.586	24.586	(1.182)	146	3854517	50.0000	54.719	80.00- 120.00	100.00
24.586	24.586	(1.182)	148	2445415			14.68- 114.68	63.44
24.586	24.586	(1.182)	111	1597557			0.00- 91.36	41.45
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
24.724	24.724	(1.189)	146	3989830	50.0000	55.044	80.00- 120.00	100.00
24.724	24.724	(1.189)	148	2558342			16.09- 116.09	64.12
24.724	24.724	(1.189)	111	1588487			0.00- 90.13	39.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	6094704	50.0000	58.156	80.00- 120.00	100.00
24.945	24.945 (1.199)	126	1159566			0.00- 69.28	19.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3731728	50.0000	54.382	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2389973			14.04- 114.04	64.04
25.360	25.360 (1.219)	111	1609999			0.00- 93.14	43.14
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2605257	50.0000	49.778	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2481668			45.26- 145.26	95.26
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2507104	50.0000	47.598	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1586646			12.90- 112.90	63.29
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	3679681	50.0000	50.798	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	456187			0.00- 62.74	12.40
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	1202086	50.0000	52.229	80.00- 120.00	100.00
8.273	8.273 (0.596)	57	925144			27.67- 127.67	76.96
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	202494	50.0000	50.813	80.00- 120.00	100.00
6.807	6.807 (0.490)	43	1448086			666.74- 766.74	715.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	2027281	50.0000	55.915	80.00- 120.00	100.00
16.347	16.347 (1.177)	98	929334			0.00- 95.22	45.84
16.347	16.347 (1.177)	55	1420992			20.82- 120.82	70.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.803)	59	2143464	50.0000	56.780	80.00- 120.00	100.00
11.148	11.148 (0.803)	41	454380			0.00- 72.85	21.20
11.148	11.148 (0.803)	57	220666			0.00- 59.93	10.29

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020611.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	355997	0.00
97 1,4-Difluorobenze	1372567	823540	1921594	1372567	0.00
126 Chlorobenzene-d5	1227265	736359	1718171	1227265	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

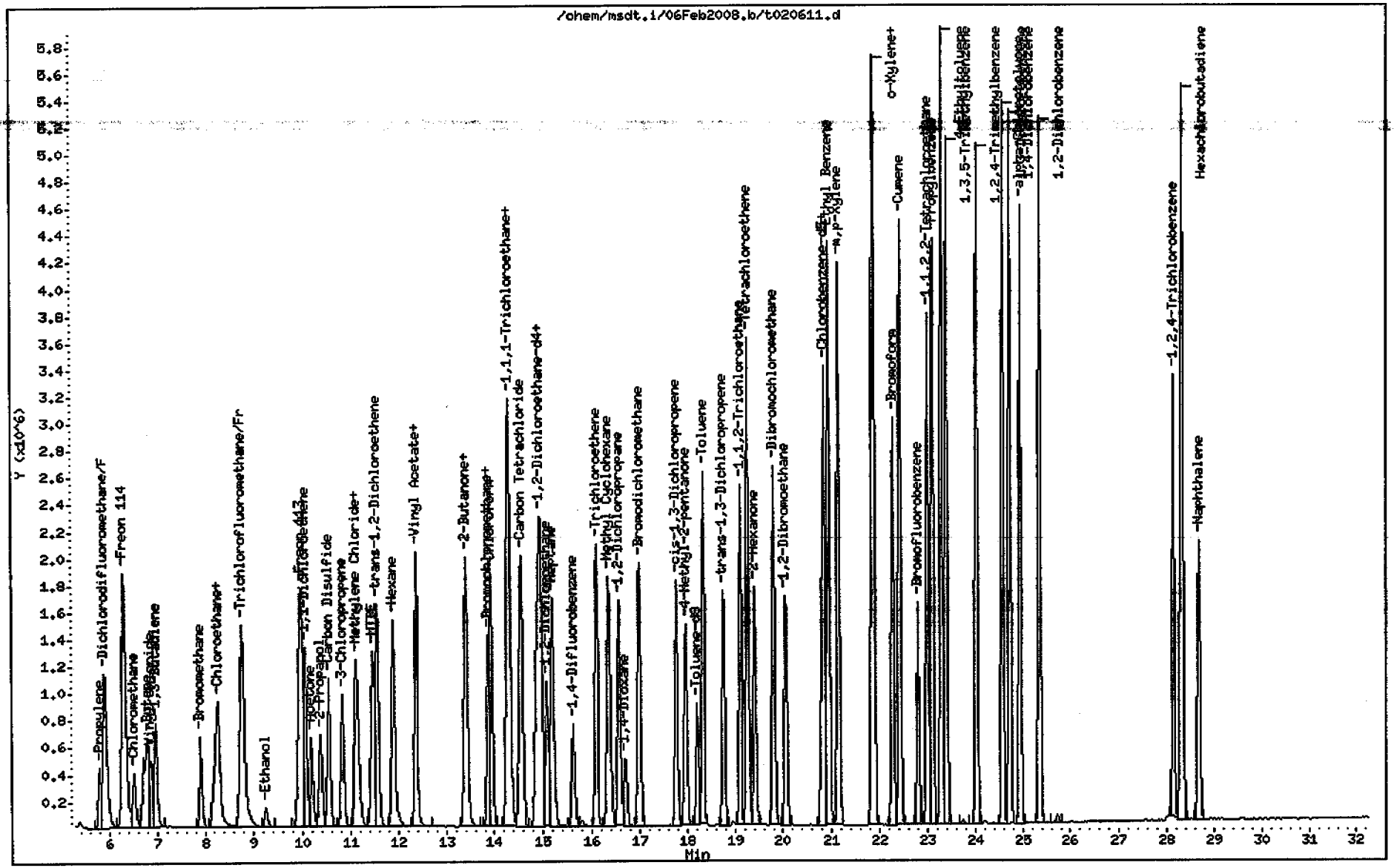
0216

Data File: /ohem/msdt.i/06Feb2008.b/t020611.d
Date : 06-FEB-2008 17:13
Client ID: Level 5
Sample Info: 50ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022109.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 21-FEB-2008 17:00
Operator : ACT
Inst ID: msdt.i
Smp Info : 100ml #1576-299
Misc Info : 200ppbv -> 100(600 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 17:23 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========		=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	288174	25.0000			50.00- 150.00	100.00
13.865	13.865 (1.000)	128	220761				26.37- 126.37	76.61
13.865	13.865 (1.000)	49	347475				67.71- 167.71	120.58
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1171320	25.0000			50.00- 150.00	100.00
15.635	15.635 (1.000)	88	190746				0.00- 66.38	16.28
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1094664	25.0000			50.00- 150.00	100.00
20.805	20.805 (1.000)	82	635295				7.58- 107.58	58.04
6 Freon142b						CAS #: 75-68-3		
6.436	6.436 (0.464)	65	4107153	100.000	103.68		50.00- 150.00	100.00
6.436	6.436 (0.464)	45	857004				0.00- 71.32	20.87
9 Freon 13						CAS #: 75-72-9		
5.394	5.394 (0.389)	69	4121833	100.000	103.77		50.00- 150.00	100.00
5.394	5.394 (0.389)	85	1350133				0.00- 81.50	32.76

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.394	5.394	(0.389)	87	420390			0.00- 60.31	10.20
13 Freon 134a						CAS #: 811-97-2		
5.675	5.675	(0.409)	83	1821922	100.000	102.81	50.00- 150.00	100.00
5.675	5.675	(0.409)	69	1498909			32.62- 132.62	82.27
15 Freon 152a						CAS #: 75-37-6		
5.844	5.844	(0.422)	65	956248	100.000	100.21	50.00- 150.00	100.00
5.844	5.844	(0.422)	51	1646695			127.07- 227.07	172.20
5.844	5.844	(0.422)	47	421265			0.00- 93.51	44.05
17 Freon 22						CAS #: 75-45-6		
6.013	6.013	(0.434)	67	468972	100.000	104.17	50.00- 150.00	100.00
6.013	6.013	(0.434)	51	2312207			463.95- 563.95	493.04
6.013	6.013	(0.434)	85	43026			0.00- 65.76	9.17
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	1144222	600.000	475.68	50.00- 150.00	100.00
7.534	7.534	(0.543)	32	937390			65.11- 165.11	81.92
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.745	8.745	(0.631)	67	2763507	100.000	97.618	50.00- 150.00	100.00
8.745	8.745	(0.631)	69	889530			0.00- 82.56	32.19
8.717	8.717	(0.629)	35	151899			0.00- 55.48	5.50
40 Freon123a						CAS #: 354-23-4		
9.579	9.579	(0.691)	67	2203976	100.000	100.92	50.00- 150.00	100.00
9.579	9.579	(0.691)	117	1652565			22.27- 122.27	74.98
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	270148	100.000	105.31	50.00- 150.00	100.00
9.718	9.718	(0.701)	133	48575			0.00- 70.21	17.98
9.579	9.579	(0.691)	85	1081620			280.12- 380.12	400.38
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	5051767	100.000	106.98	50.00- 150.00	100.00
12.289	12.289	(0.886)	87	1583002			0.00- 80.78	31.34
12.289	12.289	(0.886)	59	584960			0.00- 62.00	11.58
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	274499	100.000	110.63	50.00- 150.00	100.00
12.400	12.400	(0.894)	59	409753			82.09- 182.09	149.27
12.289	12.289	(0.886)	41	1051376			321.23- 421.23	383.02
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	5658094	100.000	112.47	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	2427830			0.00- 93.06	42.91
12.925	12.925 (0.932)	41	925298			0.00- 69.68	16.35
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	512702	100.000	100.64	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	583515			52.94- 152.94	113.81
13.395	13.395 (0.966)	43	3653067			599.75- 699.75	712.51
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	5274523	100.000	110.84	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	1278528			0.00- 73.24	24.24
14.999	14.999 (1.082)	55	1254977			0.00- 75.20	23.79
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	3028001	100.000	121.23	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	4317169			90.45- 190.45	142.57
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	957040	100.000	125.47	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	635428			29.27- 129.27	66.40
15.801	15.801 (1.011)	43	476111			9.88- 109.88	49.75
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	1853300	100.000	116.48	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	759103			0.00- 93.48	40.96
19.533	19.533 (1.249)	43	4210731			175.62- 275.62	227.20
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	2182811	100.000	120.34	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	1114420			0.39- 100.39	51.05
22.741	22.741 (1.093)	42	1409787			13.24- 113.24	64.59
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	5714491	100.000	118.25	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	5408511			45.10- 145.10	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msdt.i/21Feb2008.b/t022109.d
Report Date: 21-Feb-2008 17:23

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022109.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 100(600 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	288174	-9.42
97 1,4-Difluorobenze	1251468	750881	1752055	1171320	-6.40
126 Chlorobenzene-d5	1150991	690595	1611387	1094664	-4.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

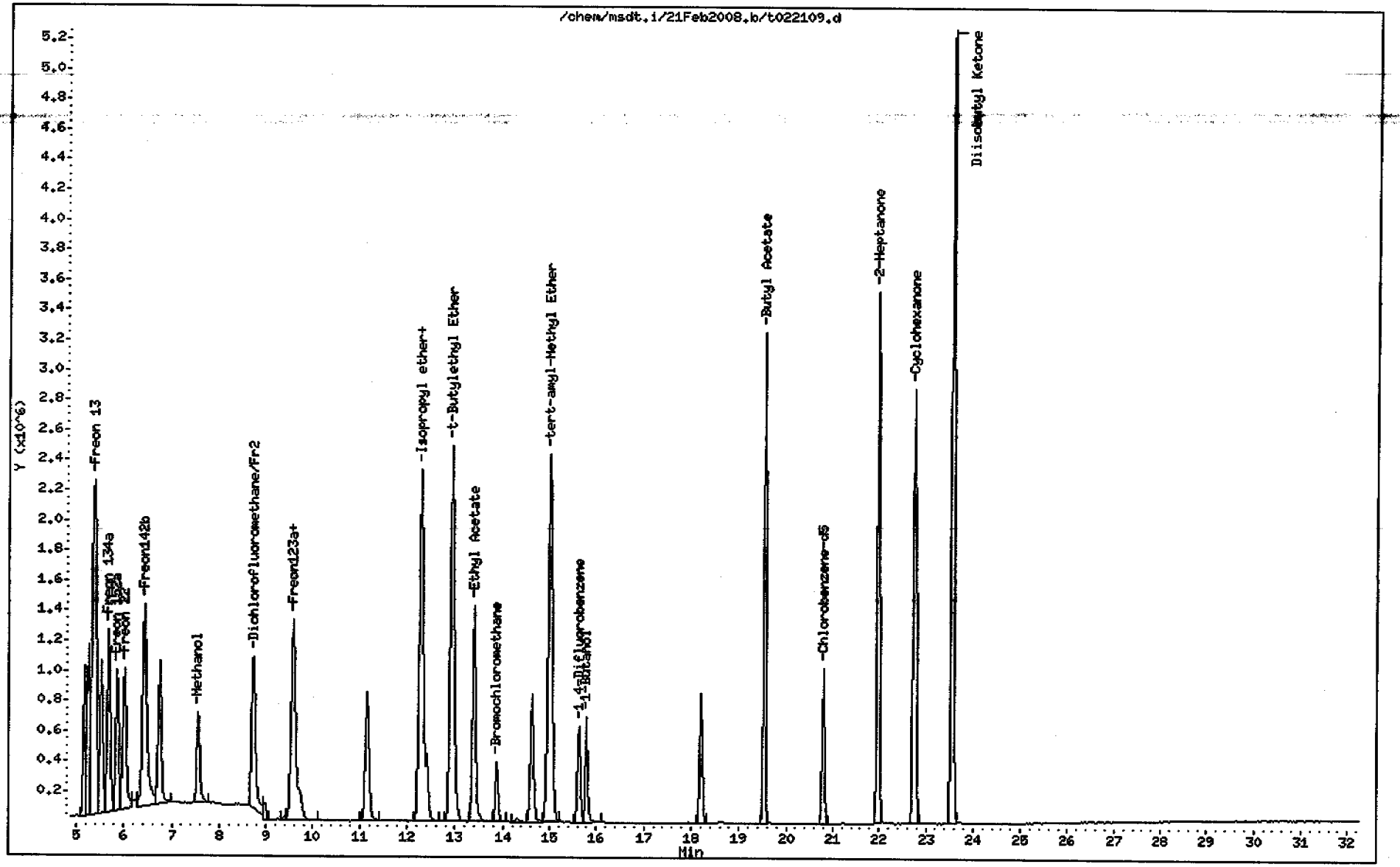
Data File: /chem/msdt.i/21Feb2008.b/t022109.d
Date : 21-FEB-2008 17:00
Client ID: Level 6
Sample Info: 100ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0221



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020612.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 06-FEB-2008 17:51
Operator : sjr
Inst ID: msdt.i
Smp Info : 100ml #1576-261
Misc Info : 200ppbv -> 100ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:51
Cal File: t020612.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	351121	25.0000		50.00- 150.00	100.00
13.886	13.886 (1.000)	128	271306			26.39- 126.39	77.27
13.886	13.886 (1.000)	49	815040			99.95- 199.95	232.13
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1413120	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	227247			0.00- 66.12	16.08
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1281401	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	729950			6.72- 106.72	56.96
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	598616	25.0000	26.495	50.00- 150.00	100.00
14.936	14.936 (1.076)	67	374153			3.57- 103.57	62.50
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1378362	25.0000	25.322	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	155982			0.00- 61.29	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950822			18.71- 118.71	68.98
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	834025	25.0000	25.163	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1057330			75.58- 175.58	126.77
22.789	22.789 (1.096)	176	808445			47.41- 147.41	96.93
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	1111571	100.000	96.790	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	742893			17.96- 117.96	66.83
5.812	5.812 (0.419)	39	910586			33.44- 133.44	81.92
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	7101370	100.000	103.58	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	2261049			0.00- 82.13	31.84
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	4672190	100.000	103.09	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	1488571			0.00- 81.89	31.86
18 Chloromethane					CAS #: 74-87-3		
6.559	6.559 (0.472)	50	1551411	100.000	103.64	50.00- 150.00	100.00
6.559	6.559 (0.472)	52	504098			0.00- 83.62	32.49
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	2106034	100.000	102.48	50.00- 150.00	100.00
6.890	6.890 (0.496)	64	674245			0.00- 89.61	32.01
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	1598698	100.000	103.37	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	1537145			53.33- 153.33	96.15
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	2093115	100.000	102.87	50.00- 150.00	100.00
7.913	7.913 (0.570)	96	1963372			43.69- 143.69	93.80
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	1136847	100.000	106.07	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	285724			0.00- 76.71	25.13
8.190	8.190 (0.590)	66	371225			0.00- 83.02	32.65
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.798 (0.634)	101	7920716	100.000	102.05	50.00- 150.00	100.00
8.798	8.798 (0.634)	103	5133859			13.52- 113.52	64.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	613723	100.000	103.34	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	142073			0.00- 75.24	23.15
9.241	9.241 (0.665)	46	227563			0.00- 89.78	37.08
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	3629218	100.000	101.54	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	2313395			14.28- 114.28	63.74
9.960	9.960 (0.717)	101	4699952			80.55- 180.55	129.50
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	3447769	100.000	107.17	50.00- 150.00	100.00
10.042	10.042 (0.723)	96	2078953			13.15- 113.15	60.30
10.042	10.042 (0.723)	98	1334772			0.00- 88.14	38.71
45 Acetone					CAS #: 67-64-1		
10.208	10.208 (0.735)	58	994047	100.000	99.703	50.00- 150.00	100.00
10.208	10.208 (0.735)	43	3108431			267.82- 367.82	312.70
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	3640217	100.000	106.54	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	863734			0.00- 76.64	23.73
10.374	10.374 (0.747)	59	147169			0.00- 54.31	4.04
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	6420269	100.000	105.51	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	1094455	100.000	104.45	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	2383503			173.84- 273.84	217.78
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	2036666	100.000	100.12	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	1809101			36.08- 136.08	88.83
11.121	11.121 (0.801)	51	661270			0.00- 83.83	32.47
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	7138212	100.000	122.23	50.00- 150.00	100.00
11.480	11.480 (0.827)	57	1352795			0.00- 69.02	18.95
11.480	11.480 (0.827)	41	1292674			0.00- 70.47	18.11
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	2556418	100.000	106.93	50.00- 150.00	100.00
11.563	11.563 (0.833)	61	3579783			95.77- 195.77	140.03
11.563	11.563 (0.833)	98	1640927			16.26- 116.26	64.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	3632485	100.000	115.14	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	2065967			9.30- 109.30	56.87
11.923	11.923 (0.859)	86	658618			0.00- 66.83	18.13
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	672864	100.000	108.78	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	6026628			832.23- 932.23	895.67
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.393	12.393 (0.892)	63	4709578	100.000	106.69	50.00- 150.00	100.00
12.393	12.393 (0.892)	65	1524086			0.00- 82.79	32.36
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	1295858	100.000	115.39	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	4285726			275.22- 375.22	330.72
13.388	13.388 (0.964)	57	374753			0.00- 79.56	28.92
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	3264442	100.000	109.91	50.00- 150.00	100.00
13.443	13.443 (0.968)	96	2561204			27.39- 127.39	78.46
13.443	13.443 (0.968)	98	1649626			0.96- 100.96	50.53
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	2158829	100.000	113.97	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	1140379			0.00- 99.16	52.82
13.858	13.858 (0.998)	72	1229303			2.04- 102.04	56.94
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	5696174	100.000	111.70	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	3706989			16.43- 116.43	65.08
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.300	14.300 (1.030)	97	6204791	100.000	110.00	50.00- 150.00	100.00
14.300	14.300 (1.030)	99	3996930			17.45- 117.45	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	3475704	100.000	115.08	50.00- 150.00	100.00
14.300	14.300 (1.030)	56	3413020			47.55- 147.55	98.20
14.300	14.300 (1.030)	41	1767727			5.12- 105.12	50.86
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	5873936	100.000	108.41	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	6261936			53.78- 153.78	106.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	7425750	100.000	105.12	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	1684308			0.00- 73.50	22.68
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	8406637	100.000	114.16	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	2694876			0.00- 82.82	32.06
14.881	14.881 (1.072)	41	2162132			0.00- 78.43	25.72
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	3636322	100.000	105.51	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	1159994			0.00- 84.23	31.90
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	2253769	100.000	112.70	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	3040625			85.70- 185.70	134.91
15.185	15.185 (0.972)	57	1858665			28.72- 128.72	82.47
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	3240461	100.000	107.10	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	3002867			42.94- 142.94	92.67
16.098	16.098 (1.030)	97	2081303			13.25- 113.25	64.23
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	2564982	100.000	107.61	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	1813519			21.32- 121.32	70.70
16.568	16.568 (1.060)	41	1389352			8.96- 108.96	54.17
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	1832861	100.000	105.05	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	1060731			9.36- 109.36	57.87
16.706	16.706 (1.069)	57	366016			0.00- 71.19	19.97
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	5845831	100.000	107.96	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	3735941			13.51- 113.51	63.91
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	4117666	100.000	113.37	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	1315173			0.00- 84.89	31.94
17.784	17.784 (1.138)	39	1808488			0.00- 97.13	43.92
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	1980151	100.000	119.99	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	4495780			175.34- 275.34	227.04
17.978	17.978 (1.150)	85	994822			0.64- 100.64	50.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	8178178	100.000	108.57	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	5020495			11.62- 111.62	61.39
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	4461556	100.000	110.16	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	1428254			0.00- 81.86	32.01
18.752	18.752 (0.902)	39	1829158			0.00- 91.58	41.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	3125317	100.000	107.07	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	1954568			13.21- 113.21	62.54
19.111	19.111 (0.919)	83	2655080			35.76- 135.76	84.95
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	4180011	100.000	106.87	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	2861461			19.36- 119.36	68.46
19.277	19.277 (0.927)	131	2744125			16.43- 116.43	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	2723514	100.000	111.43	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	4527762			124.96- 224.96	166.25
19.416	19.416 (0.934)	100	574524			0.00- 71.71	21.09
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	5492645	100.000	110.52	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	4234044			28.82- 128.82	77.09
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	5153001	100.000	110.99	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	4771126			46.68- 146.68	92.59
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	7115170	100.000	105.59	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	2236590			0.00- 82.06	31.43
20.853	20.853 (1.003)	77	4380652			22.53- 122.53	61.57
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	3790191	100.000	108.56	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	12275568			269.96- 369.96	323.88
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	4888391	100.000	111.19	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	9871195			149.87- 249.87	201.93
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	4653159	100.000	111.26	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	9908020			160.81- 260.81	212.93
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	7633035	100.000	119.13	50.00- 150.00	100.00
21.876	21.876 (1.052)	78	3882867			9.02- 109.02	50.87
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	5972775	100.000	111.96	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	3039652			1.83- 101.83	50.89
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	13155481	100.000	114.04	50.00- 150.00	100.00
22.429	22.429 (1.078)	120	3375500			0.00- 77.62	25.66
22.429	22.429 (1.078)	51	1109718			0.00- 58.75	8.44
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	7307878	100.000	108.94	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	4726894			16.89- 116.89	64.68
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	16695425	100.000	111.64	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	3572151			0.00- 71.63	21.40
23.121	23.121 (1.112)	105	593757			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	14420605	100.000	113.28	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	4223785			0.00- 79.69	29.29
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	12029525	100.000	110.77	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	5822272			0.00- 98.23	48.40
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	11520943	100.000	112.58	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	5255599			0.00- 94.91	45.62
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	7765843	100.000	105.59	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	4936822			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	3180420			0.00- 91.36	40.95
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	8019783	100.000	105.97	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	5124641			16.09- 116.09	63.90
24.724	24.724 (1.189)	111	3205038			0.00- 90.13	39.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	12583883	100.000	115.00	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	2367822			0.00- 69.28	18.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	7525703	100.000	105.04	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	4832431			15.85- 115.85	64.21
25.360	25.360 (1.219)	111	3270866			0.00- 94.46	43.46
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	5462712	100.000	99.966	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	5139467			44.78- 144.78	94.08
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	5122789	100.000	93.148	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	3213957			12.90- 112.90	62.74
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	7794932	100.000	103.06	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	944387			0.00- 62.74	12.12
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	2307164	100.000	101.64	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	1786691			27.67- 127.67	77.44
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	400970	100.000	102.02	50.00- 150.00	100.00
6.807	6.807 (0.490)	43	2768800			666.74- 766.74	690.53
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	4123768	100.000	115.32	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	1845682			0.00- 95.22	44.76
16.347	16.347 (1.177)	55	2869124			20.82- 120.82	69.58
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.176	11.176 (0.805)	59	3860609	100.000	103.69	50.00- 150.00	100.00
11.148	11.148 (0.803)	41	796567			0.00- 72.85	20.63
11.176	11.176 (0.805)	57	392034			0.00- 59.93	10.15

Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020612.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 100ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	351121	-1.37
97 1,4-Difluorobenze	1372567	823540	1921594	1413120	2.95
126 Chlorobenzene-d5	1227265	736359	1718171	1281401	4.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

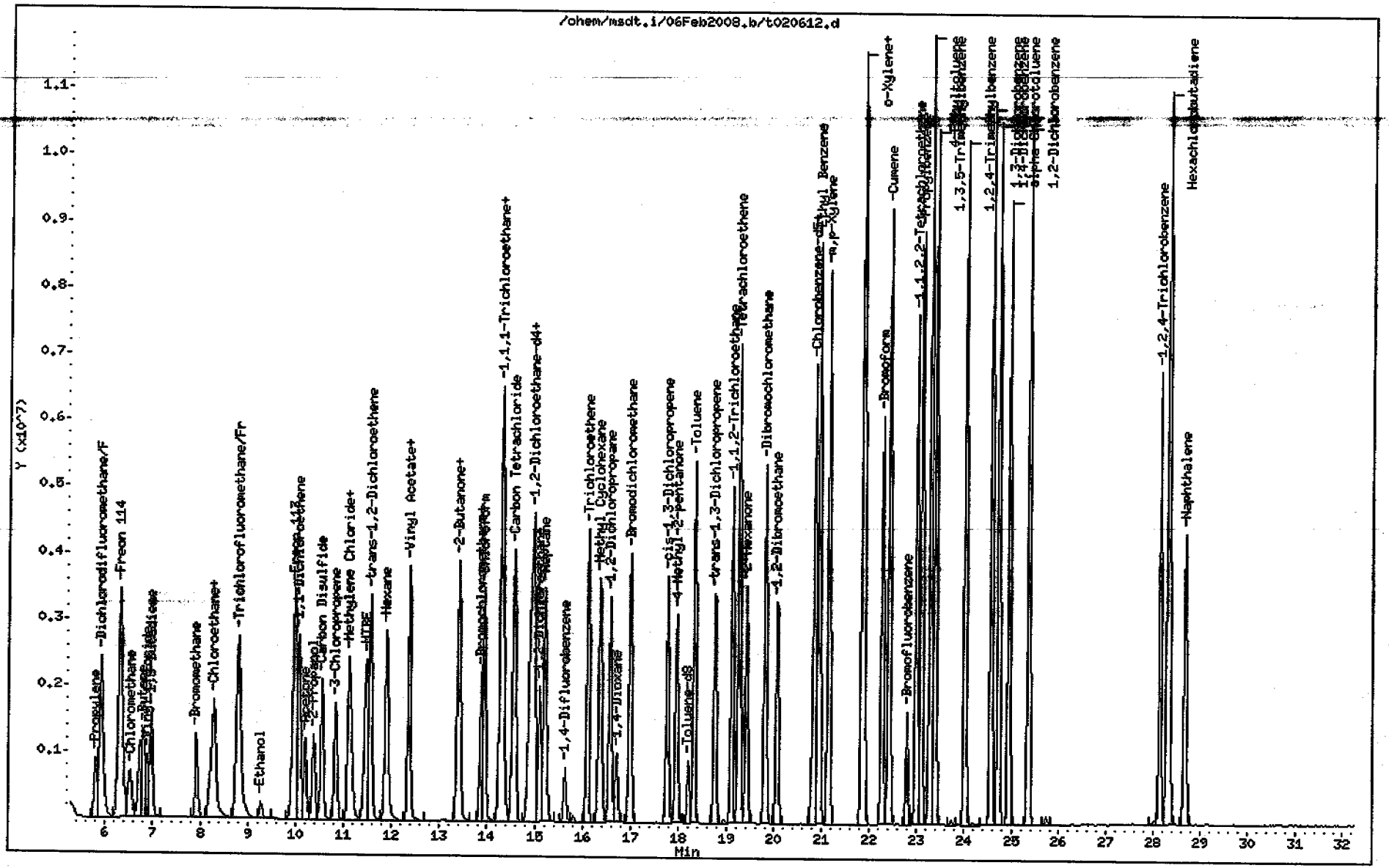
Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Date : 06-FEB-2008 17:51
Client ID: Level 6
Sample Info: 100ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0231



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022105.d
Lab Smp Id: ICAL — Client Smp ID: Level 7
Inj Date : 21-FEB-2008 12:05
Operator : sjr — Inst ID: msdt.i
Smp Info : 200ml #1576-299
Misc Info : 200ppbv -> 200(1200 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth — Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05 — Cal File: t022105.d
Als bottle: 1 — Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: sp22b.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	269864	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	209729			26.48- 126.48	77.72
13.865	13.865 (1.000)	49	322466			86.30- 186.30	119.49
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1144695	25.0000		50.00- 150.00	100.00
15.635	15.635 (1.000)	88	194086			0.00- 66.34	16.96
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1083328	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	629336			7.40- 107.40	58.09
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	8148778	200.000	221.71	50.00- 150.00	100.00(A)
6.436	6.436 (0.464)	45	1691785			0.00- 71.47	20.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	8146947	200.000	221.11	50.00- 150.00	100.00(A)
5.422	5.422 (0.391)	85	2570358			0.00- 81.18	31.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.422	5.422 (0.391)	87	814934			0.00- 60.34	10.00
13 Freon 134a					CAS #: 811-97-2		
5.703	5.703 (0.411)	83	3723939	200.000	225.99	50.00- 150.00	100.00(A)
5.703	5.703 (0.411)	69	3069798			32.70- 132.70	82.43
15 Freon 152a					CAS #: 75-37-6		
5.872	5.872 (0.424)	65	2003615	200.000	224.33	50.00- 150.00	100.00(A)
5.872	5.872 (0.424)	51	3487199			128.28- 228.28	174.05
5.872	5.872 (0.424)	47	899889			0.00- 93.38	44.91
17 Freon 22					CAS #: 75-45-6		
6.013	6.013 (0.434)	67	970082	200.000	232.53	50.00- 150.00	100.00(A)
6.013	6.013 (0.434)	51	4880646			470.91- 570.91	503.12
6.041	6.041 (0.436)	85	93377			0.00- 67.96	9.63
26 Methanol					CAS #: 67-56-1		
7.562	7.562 (0.545)	31	2557267	1200.00	696.25	50.00- 150.00	100.00
7.562	7.562 (0.545)	32	1919231			76.17- 176.17	75.05
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.745	8.745 (0.631)	67	5028065	200.000	188.54	50.00- 150.00	100.00
8.745	8.745 (0.631)	69	1636219			0.00- 82.68	32.54
8.745	8.745 (0.631)	35	276322			0.00- 55.48	5.50
40 Freon123a					CAS #: 354-23-4		
9.579	9.579 (0.691)	67	4337927	200.000	212.59	50.00- 150.00	100.00(A)
9.579	9.579 (0.691)	117	3245483			21.37- 121.37	74.82
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	493416	200.000	208.15	50.00- 150.00	100.00(A)
9.718	9.718 (0.701)	133	98549			0.00- 70.95	19.97
9.579	9.579 (0.691)	85	2126591			256.69- 356.69	430.99
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	10225783	200.000	235.34	50.00- 150.00	100.00(A)
12.289	12.289 (0.886)	87	3206082			0.00- 80.60	31.35
12.289	12.289 (0.886)	59	1210316			0.00- 62.14	11.84
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	546401	200.000	241.57	50.00- 150.00	100.00(A)
12.400	12.400 (0.894)	59	812840			76.36- 176.36	148.76
12.400	12.400 (0.894)	41	409141			317.31- 417.31	74.88
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	11387679	200.000	249.51	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	4879790			0.00- 93.11	42.85
12.925	12.925 (0.932)	41	1834928			0.00- 70.78	16.11
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	1071026	200.000	224.86	50.00- 150.00	100.00(A)
13.395	13.395 (0.966)	61	1194611			49.32- 149.32	111.54
13.395	13.395 (0.966)	43	7515065			578.83- 678.83	701.67
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	10712367	200.000	247.09	50.00- 150.00	100.00(A)
14.999	14.999 (1.082)	87	2553285			0.00- 72.90	23.83
14.999	14.999 (1.082)	55	2463404			0.00- 75.66	23.00
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	6201169	200.000	279.98	50.00- 150.00	100.00(A)
21.966	21.966 (1.584)	43	8699246			89.74- 189.74	140.28
98 1-Butanol					CAS #: 71-36-3		
15.773	15.773 (1.009)	56	2091144	200.000	299.60	50.00- 150.00	100.00(A)
15.773	15.773 (1.009)	41	1373797			33.56- 133.56	65.70
15.773	15.773 (1.009)	43	1050969			13.25- 113.25	50.26
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	3683588	200.000	247.07	50.00- 150.00	100.00(A)
19.533	19.533 (1.249)	73	1516521			0.00- 94.32	41.17
19.533	19.533 (1.249)	43	8438836			175.09- 275.09	229.09
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	4560256	200.000	267.64	50.00- 150.00	100.00(A)
22.741	22.741 (1.093)	98	2305489			0.23- 100.23	50.56
22.741	22.741 (1.093)	42	2923443			12.90- 112.90	64.11
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	11522324	200.000	252.45	50.00- 150.00	100.00(A)
23.570	23.570 (1.133)	85	10839919			45.26- 145.26	94.08
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msdt.i/21Feb2008.b/t022105.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022105.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 200(1200 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	269864	-13.58
97 1,4-Difluorobenze	1266888	760133	1773643	1144695	-9.65
126 Chlorobenzene-d5	1159473	695684	1623262	1083328	-6.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

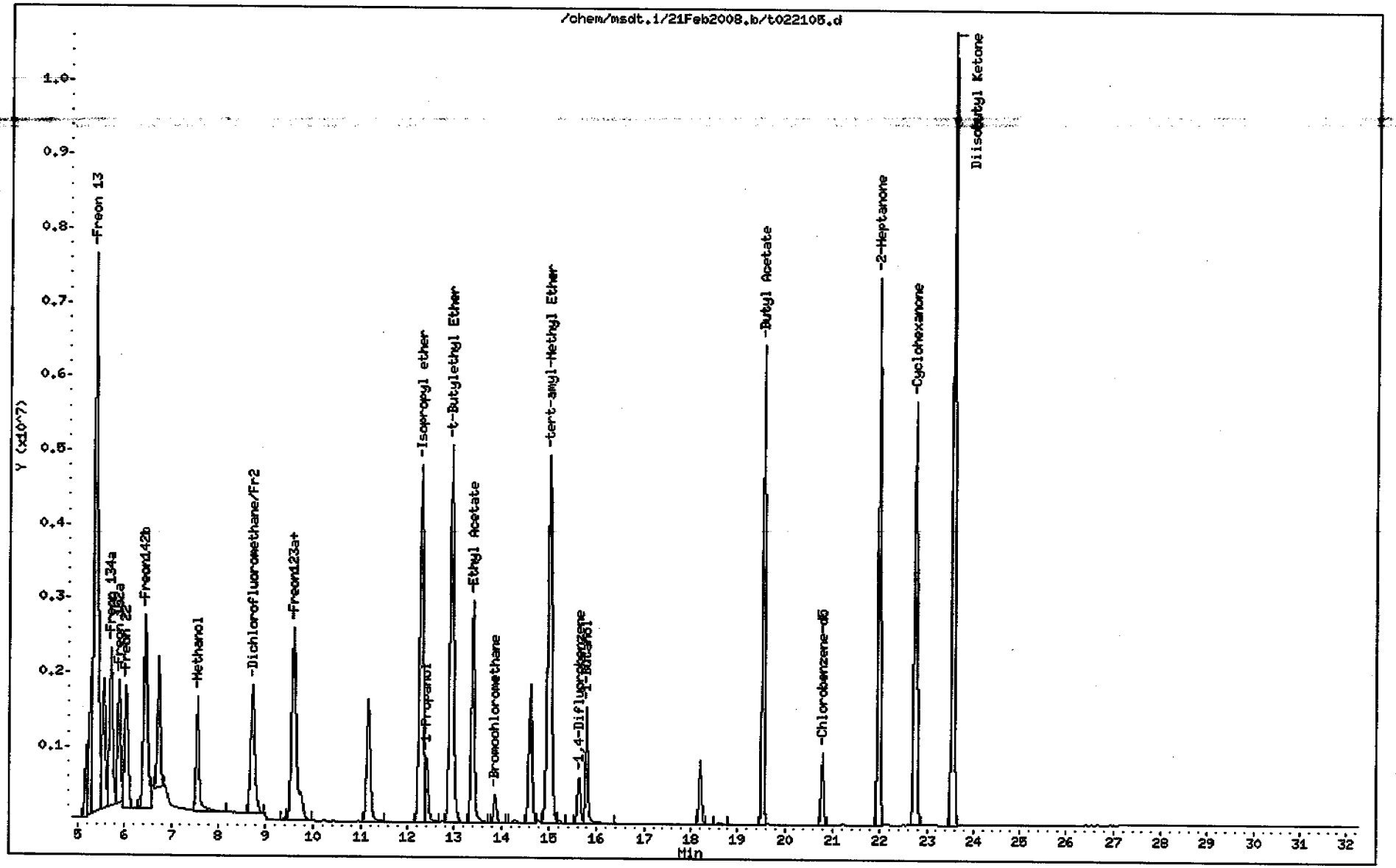
Data File: /chem/msdt.i/21Feb2008.b/t022105.d
Date : 21-FEB-2008 12:05
Client ID: Level 7
Sample Info: 200ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0236



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020613.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 06-FEB-2008 19:41
Operator : srs
Inst ID: msdt.i
Smp Info : 200ml #1576-261
Misc Info : 200ppbv -> 200ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 19:41
Cal File: t020613.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	350438	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	265413			26.39- 126.39	75.74
13.941	13.941 (1.000)	49	1193106			99.95- 199.95	340.46
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1410298	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	224026			0.00- 66.12	15.89
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1300571	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	741297			6.72- 106.72	57.00
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	620117	25.0000	27.500	50.00- 150.00	100.00
14.936	14.936 (1.078)	67	455931			3.57- 103.57	73.52
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1394007	25.0000	25.661	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	165109			0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950357			18.71- 118.71	68.17
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	848605	25.0000	25.226	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1070463			75.58- 175.58	126.14
22.789	22.789 (1.096)	176	830556			47.41- 147.41	97.87
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	2244909	200.000	195.86	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	1546399			17.96- 117.96	68.88
5.812	5.812 (0.419)	39	1826180			33.44- 133.44	81.35
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	13829436	200.000	202.10	50.00- 150.00	100.00(A)
5.923	5.923 (0.427)	87	4400174			0.00- 82.13	31.82
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	9245837	200.000	204.40	50.00- 150.00	100.00(A)
6.282	6.282 (0.453)	137	2950383			0.00- 81.89	31.91
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	3061437	200.000	204.92	50.00- 150.00	100.00(A)
6.531	6.531 (0.471)	52	1030836			0.00- 83.62	33.67
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	4186766	200.000	204.12	50.00- 150.00	100.00(A)
6.863	6.863 (0.495)	64	1330162			0.00- 89.61	31.77
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	3136692	200.000	203.21	50.00- 150.00	100.00(A)
6.946	6.946 (0.501)	39	3057782			53.33- 153.33	97.48
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	4285901	200.000	211.04	50.00- 150.00	100.00(A)
7.913	7.913 (0.571)	96	3953378			43.69- 143.69	92.24
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.591)	64	2243653	200.000	209.74	50.00- 150.00	100.00(A)
8.162	8.162 (0.589)	49	567495			0.00- 76.71	25.29
8.190	8.190 (0.591)	66	737238			0.00- 83.02	32.86
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.633)	101	15419021	200.000	199.04	50.00- 150.00	100.00
8.771	8.771 (0.633)	103	9913225			13.52- 113.52	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	1268709	200.000	214.06	50.00- 150.00	100.00(A)
9.241	9.241 (0.667)	43	285639			0.00- 75.24	22.51
9.241	9.241 (0.667)	46	473438			0.00- 89.78	37.32
42 Freon 113					CAS #: 76-13-1		
9.959	9.959 (0.719)	151	7037148	200.000	197.28	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	4532081			14.28- 114.28	64.40
9.932	9.932 (0.717)	101	9194511			80.55- 180.55	130.66
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	6864445	200.000	213.80	50.00- 150.00	100.00(A)
10.042	10.042 (0.725)	96	4161445			13.15- 113.15	60.62
10.042	10.042 (0.725)	98	2679049			0.00- 88.14	39.03
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	1929807	200.000	193.94	50.00- 150.00	100.00
10.181	10.181 (0.735)	43	6078502			267.82- 367.82	314.98
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	7118783	200.000	208.76	50.00- 150.00	100.00(A)
10.374	10.374 (0.749)	43	1603518			0.00- 76.64	22.53
10.374	10.374 (0.749)	59	298669			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	12911334	200.000	212.60	50.00- 150.00	100.00(A)
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	2135311	200.000	204.18	50.00- 150.00	100.00(A)
10.817	10.817 (0.781)	41	4667211			173.84- 273.84	218.57
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	4043623	200.000	199.16	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	3657876			36.08- 136.08	90.46
11.093	11.093 (0.800)	51	1301400			0.00- 83.83	32.18
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.826)	73	14127149	200.000	242.38	50.00- 150.00	100.00(A)
11.453	11.453 (0.826)	57	2668532			0.00- 69.02	18.89
11.453	11.453 (0.826)	41	2471765			0.00- 70.47	17.50
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	4995106	200.000	209.34	50.00- 150.00	100.00(A)
11.535	11.535 (0.832)	61	6882664			95.77- 195.77	137.79
11.535	11.535 (0.832)	98	3205496			16.26- 116.26	64.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	7233259	200.000	229.72	50.00- 150.00	100.00(A)
11.895	11.895 (0.858)	43	4071333			9.30- 109.30	56.29
11.895	11.895 (0.858)	86	1297193			0.00- 66.83	17.93
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	1342153	200.000	217.41	50.00- 150.00	100.00(A)
12.337	12.337 (0.890)	43	12158868			832.23- 932.23	905.92
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	9074032	200.000	205.97	50.00- 150.00	100.00(A)
12.365	12.365 (0.892)	65	2933179			0.00- 82.79	32.32
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	2599379	200.000	231.91	50.00- 150.00	100.00(A)
13.388	13.388 (0.966)	43	8515666			275.22- 375.22	327.60
13.388	13.388 (0.966)	57	765435			0.00- 79.56	29.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	6245688	200.000	210.70	50.00- 150.00	100.00(A)
13.416	13.416 (0.968)	96	4941404			27.39- 127.39	79.12
13.416	13.416 (0.968)	98	3177917			0.96- 100.96	50.88
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	4241211	200.000	224.34	50.00- 150.00	100.00(A)
13.858	13.858 (1.000)	71	2262935			0.00- 99.16	53.36
13.858	13.858 (1.000)	72	2415736			2.04- 102.04	56.96
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	10890508	200.000	213.97	50.00- 150.00	100.00(A)
13.941	13.941 (1.006)	85	7079254			16.43- 116.43	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	12157336	200.000	215.95	50.00- 150.00	100.00(A)
14.273	14.273 (1.030)	99	7830263			17.45- 117.45	64.41
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	6882951	200.000	228.34	50.00- 150.00	100.00(A)
14.300	14.300 (1.032)	56	6804949			47.55- 147.55	98.87
14.300	14.300 (1.032)	41	3514830			5.12- 105.12	51.07
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	11440648	200.000	211.56	50.00- 150.00	100.00(A)
14.522	14.522 (1.048)	117	12169445			53.78- 153.78	106.37
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	14800821	200.000	209.93	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	3350560			0.00- 73.50	22.64
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	17411392	200.000	236.90	50.00- 150.00	100.00(A)
14.881	14.881 (1.074)	56	5614080			0.00- 82.82	32.24
14.881	14.881 (1.074)	41	4444106			0.00- 78.43	25.52
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	6990152	200.000	203.22	50.00- 150.00	100.00(A)
15.075	15.075 (0.965)	64	2256443			0.00- 84.23	32.28
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	4422042	200.000	221.58	50.00- 150.00	100.00(A)
15.185	15.185 (0.972)	43	6011920			85.70- 185.70	135.95
15.185	15.185 (0.972)	57	3678586			28.72- 128.72	83.19
101 Trichloroethene					CAS #: 79-01-6		
16.070	16.070 (1.028)	95	6441042	200.000	213.30	50.00- 150.00	100.00(A)
16.070	16.070 (1.028)	130	5805098			42.94- 142.94	90.13
16.070	16.070 (1.028)	97	4097149			13.25- 113.25	63.61
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	5092409	200.000	214.08	50.00- 150.00	100.00(A)
16.568	16.568 (1.060)	62	3626964			21.32- 121.32	71.22
16.568	16.568 (1.060)	41	2709468			8.96- 108.96	53.21
106 1,4-Dioxane					CAS #: 123-91-1		
16.678	16.678 (1.067)	88	3666409	200.000	210.57	50.00- 150.00	100.00(A)
16.678	16.678 (1.067)	58	2113855			9.36- 109.36	57.65
16.678	16.678 (1.067)	57	748945			0.00- 71.19	20.43
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	11426189	200.000	211.43	50.00- 150.00	100.00(A)
16.982	16.982 (1.087)	85	7356832			13.51- 113.51	64.39
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	8131434	200.000	224.33	50.00- 150.00	100.00(A)
17.784	17.784 (1.138)	77	2581563			0.00- 84.89	31.75
17.784	17.784 (1.138)	39	3559732			0.00- 97.13	43.78
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.950	17.950 (1.149)	58	4047096	200.000	245.73	50.00- 150.00	100.00(A)
17.950	17.950 (1.149)	43	9172795			175.34- 275.34	226.65
17.978	17.978 (1.150)	85	2017083			0.64- 100.64	49.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	16544347	200.000	220.07	50.00- 150.00	100.00(A)
18.337	18.337 (1.173)	92	9944276			11.62- 111.62	60.11
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	8853621	200.000	215.39	50.00- 150.00	100.00(A)
18.752	18.752 (0.902)	77	2800007			0.00- 81.86	31.63
18.752	18.752 (0.902)	39	3605430			0.00- 91.58	40.72
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	6145241	200.000	207.43	50.00- 150.00	100.00(A)
19.111	19.111 (0.919)	99	3885491			13.21- 113.21	63.23
19.111	19.111 (0.919)	83	5273029			35.76- 135.76	85.81
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	8171986	200.000	205.86	50.00- 150.00	100.00(A)
19.277	19.277 (0.927)	129	5618493			19.36- 119.36	68.75
19.277	19.277 (0.927)	131	5327701			16.43- 116.43	65.19
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	5507463	200.000	222.01	50.00- 150.00	100.00(A)
19.416	19.416 (0.934)	43	9126801			124.96- 224.96	165.72
19.416	19.416 (0.934)	100	1159888			0.00- 71.71	21.06
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	10771050	200.000	213.53	50.00- 150.00	100.00(A)
19.803	19.803 (0.952)	127	8255102			28.82- 128.82	76.64
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	10275074	200.000	218.05	50.00- 150.00	100.00(A)
20.051	20.051 (0.964)	109	9488081			46.68- 146.68	92.34
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	14309057	200.000	209.22	50.00- 150.00	100.00(A)
20.853	20.853 (1.003)	114	4444592			0.00- 82.06	31.06
20.853	20.853 (1.003)	77	8989067			22.53- 122.53	62.82
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	7668400	200.000	216.40	50.00- 150.00	100.00(A)
20.936	20.936 (1.007)	91	25064309			269.96- 369.96	326.85
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	9936021	200.000	222.67	50.00- 150.00	100.00(A)
21.130	21.130 (1.016)	91	20223905			149.87- 249.87	203.54
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	9402725	200.000	221.52	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	20307931			160.81- 260.81	215.98
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	15871642	200.000	244.07	50.00- 150.00	100.00(A)
21.876	21.876 (1.052)	78	8023544			9.02- 109.02	50.55
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12025424	200.000	222.10	50.00- 150.00	100.00(A)
22.291	22.291 (1.072)	171	6154800			1.83- 101.83	51.18
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	26972899	200.000	230.37	50.00- 150.00	100.00(A)
22.429	22.429 (1.078)	120	6825383			0.00- 77.62	25.30
22.402	22.402 (1.077)	51	2239931			0.00- 58.75	8.30
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15030605	200.000	220.75	50.00- 150.00	100.00(A)
23.010	23.010 (1.106)	85	9664787			16.89- 116.89	64.30
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	31493566	200.000	207.49	50.00- 150.00	100.00(A)
23.121	23.121 (1.112)	120	7318775			0.00- 71.63	23.24
23.121	23.121 (1.112)	105	1221513			0.00- 53.71	3.88
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.286 (1.120)	105	26455136	200.000	204.75	50.00- 150.00	100.00(A)
23.286	23.286 (1.120)	120	8661852			0.00- 79.69	32.74
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	24464891	200.000	221.96	50.00- 150.00	100.00(A)
23.397	23.397 (1.125)	120	11830853			0.00- 98.23	48.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	23660053	200.000	227.80	50.00- 150.00	100.00(A)
24.033	24.033 (1.156)	120	10670397			0.00- 94.91	45.10
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	15896139	200.000	212.94	50.00- 150.00	100.00(A)
24.586	24.586 (1.182)	148	10085107			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	6558811			0.00- 91.36	41.26
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	16485506	200.000	214.62	50.00- 150.00	100.00(A)
24.724	24.724 (1.189)	148	10467681			16.09- 116.09	63.50
24.724	24.724 (1.189)	111	6472835			0.00- 90.13	39.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	24668642	200.000	222.12	50.00- 150.00	100.00(A)
24.945	24.945 (1.199)	126	4886072			0.00- 69.28	19.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	15599304	200.000	214.51	50.00- 150.00	100.00(A)
25.360	25.360 (1.219)	148	9883137			15.85- 115.85	63.36
25.360	25.360 (1.219)	111	6587185			0.00- 94.46	42.23
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	11415493	200.000	205.82	50.00- 150.00	100.00(A)
28.153	28.153 (1.354)	182	10826368			44.78- 144.78	94.84
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	10769723	200.000	192.94	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	6684925			12.90- 112.90	62.07
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	16502797	200.000	214.98	50.00- 150.00	100.00(A)
28.678	28.678 (1.379)	127	2006009			0.00- 62.74	12.16
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.597)	43	4503444	200.000	198.77	50.00- 150.00	100.00
8.273	8.273 (0.597)	57	3514272			27.67- 127.67	78.04
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	770238	200.000	196.35	50.00- 150.00	100.00
6.807	6.807 (0.491)	43	5480338			666.74- 766.74	711.51
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	8362325	200.000	234.30	50.00- 150.00	100.00(A)
16.346	16.346 (1.180)	98	3725362			0.00- 95.22	44.55
16.346	16.346 (1.180)	55	5813657			20.82- 120.82	69.52
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	7340416	200.000	197.53	50.00- 150.00	100.00
11.148	11.148 (0.804)	41	1467413			0.00- 72.85	19.99
11.148	11.148 (0.804)	57	744700			0.00- 59.93	10.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msdt.i/06Feb2008.b/t020613.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020613.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 200ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	350438	-1.56
97 1,4-Difluorobenze	1372567	823540	1921594	1410298	2.75
126 Chlorobenzene-d5	1227265	736359	1718171	1300571	5.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.86	-0.20
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

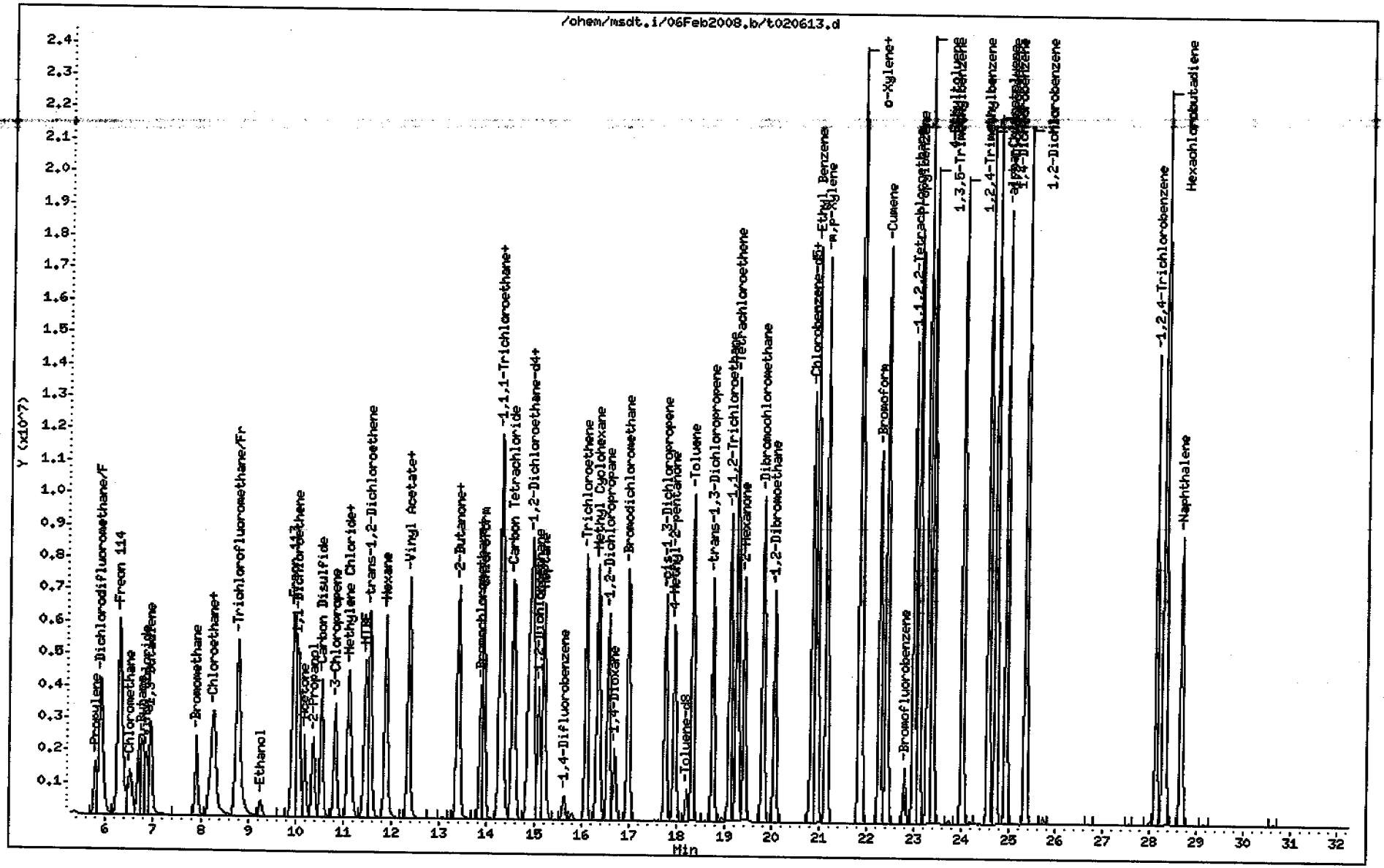
0246

Data File: /ohem/msdt.i/06Feb2008.b/t020613.d
Date : 06-FEB-2008 19:41
Client ID: Level 7
Sample Info: 200ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: srs
Column diameter: 0.53



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802283-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	108
Freon 114	105
Chloromethane	110
Vinyl Chloride	109
1,3-Butadiene	111
Bromomethane	99
Chloroethane	114
Freon 11	106
Ethanol	113
Freon 113	104
1,1-Dichloroethene	112
Acetone	112
2-Propanol	111
Carbon Disulfide	110
Methylene Chloride	107
Methyl tert-butyl ether	125
trans-1,2-Dichloroethene	112
Hexane	118
1,1-Dichloroethane	113
2-Butanone (Methyl Ethyl Ketone)	116
cis-1,2-Dichloroethene	114
Tetrahydrofuran	119
Chloroform	115
1,1,1-Trichloroethane	112
Cyclohexane	117
Carbon Tetrachloride	109
Benzene	111
1,2-Dichloroethane	111
Heptane	120
Trichloroethene	113
1,2-Dichloropropane	116
1,4-Dioxane	110
Bromodichloromethane	112
cis-1,3-Dichloropropene	120
4-Methyl-2-pentanone	128
Toluene	118
trans-1,3-Dichloropropene	113
1,1,2-Trichloroethane	112
Tetrachloroethene	112

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802283-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	118
Dibromochloromethane	113
1,2-Dibromoethane (EDB)	115
Chlorobenzene	111
Ethyl Benzene	114
m,p-Xylene	117
o-Xylene	117
Styrene	126
Bromoform	114
1,1,2,2-Tetrachloroethane	116
4-Ethyltoluene	126
1,3,5-Trimethylbenzene	115
1,2,4-Trimethylbenzene	117
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	120
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	101
Hexachlorobutadiene	97
Chlorodifluoromethane	99
Methanol	68
n-Butanol	87
Propylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	102	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022106.d
Report Date: 22-Feb-2008 08:59

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022106.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 14:36
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.70022	0.010	-5.69254	30.00000	Averaged
$ 113 Toluene-d8	0.96300	1.01251	0.010	-5.14080	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.65685	0.010	-1.57665	30.00000	Averaged
11 Propylene	0.81770	0.82811	0.010	-1.27338	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	4.88168	5.25422	0.010	-7.63139	30.00000	Averaged
16 Freon 114	3.22698	3.38754	0.010	-4.97539	30.00000	Averaged
18 Chloromethane	1.06576	1.16937	0.010	-9.72214	30.00000	Averaged
20 Vinyl Chloride	1.46323	1.59367	0.010	-8.91391	30.00000	Averaged
22 1,3-Butadiene	1.10115	1.22045	0.010	-10.83421	30.00000	Averaged
25 Bromomethane	1.44878	1.42857	0.010	1.39505	30.00000	Averaged
27 Chloroethane	0.76312	0.86759	0.010	-13.68969	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	5.52640	5.85374	0.010	-5.92321	30.00000	Averaged
38 Ethanol	0.42283	0.47615	0.010	-12.61149	30.00000	Averaged
42 Freon 113	2.54471	2.65791	0.010	-4.44835	30.00000	Averaged
43 1,1-Dichloroethene	2.29053	2.55632	0.010	-11.60382	30.00000	Averaged
45 Acetone	0.70987	0.79415	0.010	-11.87277	30.00000	Averaged
46 2-Propanol	2.43274	2.70645	0.010	-11.25105	30.00000	Averaged
47 Carbon Disulfide	4.33254	4.76642	0.010	-10.01437	30.00000	Averaged
51 3-Chloropropene	0.74606	0.80127	0.010	-7.40135	30.00000	Averaged
54 Methylene Chloride	1.44840	1.54828	0.010	-6.89580	30.00000	Averaged
57 tert-Butyl-Alcohol	2.65102	2.86550	0.010	-8.09048	40.00000	Averaged
60 MTBE	4.15810	5.19312	0.010	-24.89172	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.70224	1.89871	0.010	-11.54219	30.00000	Averaged
65 Hexane	2.24629	2.64168	0.010	-17.60214	30.00000	Averaged
69 Vinyl Acetate	0.44040	0.47672	0.010	-8.24753	30.00000	Averaged
70 1,1-Dichloroethane	3.14283	3.56590	0.010	-13.46119	30.00000	Averaged
75 2-Butanone	0.79961	0.92761	0.010	-16.00687	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.11467	2.41047	0.010	-13.98790	30.00000	Averaged
80 Tetrahydrofuran	1.34868	1.61024	0.010	-19.39305	30.00000	Averaged
82 Chloroform	3.63101	4.19059	0.010	-15.41128	30.00000	Averaged
83 1,1,1-Trichloroethane	4.01616	4.51032	0.010	-12.30441	30.00000	Averaged
85 Cyclohexane	2.15044	2.50978	0.010	-16.71021	30.00000	Averaged
87 Carbon Tetrachloride	3.85789	4.20512	0.010	-9.00068	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.24329	6.67184	0.010	-27.24532	30.00000	Averaged
91 Benzene	1.24979	1.39302	0.010	-11.46044	30.00000	Averaged
93 1,2-Dichloroethane	0.60974	0.67814	0.010	-11.21701	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022106.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 14:36
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.35378	0.42423	0.010	-19.91305	30.00000	Averaged
101 Trichloroethene	0.53529	0.60428	0.010	-12.88844	30.00000	Averaged
104 1,2-Dichloropropane	0.42168	0.48802	0.010	-15.73171	30.00000	Averaged
106 1,4-Dioxane	0.30866	0.33834	0.010	-9.61652	30.00000	Averaged
107 Bromodichloromethane	0.95798	1.07226	0.010	-11.92965	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.64255	0.76943	0.010	-19.74613	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29195	0.37343	0.010	-27.90609	30.00000	Averaged
114 Toluene	1.33263	1.56979	0.010	-17.79679	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.79014	0.89609	0.010	-13.40846	30.00000	Averaged
117 1,1,2-Trichloroethane	0.56947	0.63848	0.010	-12.11871	30.00000	Averaged
120 Tetrachloroethene	0.76308	0.85382	0.010	-11.89086	30.00000	Averaged
121 2-Hexanone	0.47685	0.56229	0.010	-17.91760	30.00000	Averaged
122 Dibromochloromethane	0.96963	1.09583	0.010	-13.01431	30.00000	Averaged
123 1,2-Dibromoethane	0.90581	1.03895	0.010	-14.69806	30.00000	Averaged
127 Chlorobenzene	1.31466	1.46341	0.010	-11.31466	30.00000	Averaged
128 Ethyl Benzene	0.68116	0.77863	0.010	-14.30821	30.00000	Averaged
129 m,p-Xylene	0.85774	1.00147	0.010	-16.75736	30.00000	Averaged
130 o-Xylene	0.81592	0.95204	0.010	-16.68328	30.00000	Averaged
131 Styrene	1.25002	1.57407	0.010	-25.92315	30.00000	Averaged
133 Bromoform	1.04080	1.19165	0.010	-14.49322	30.00000	Averaged
134 Cumene	2.25068	2.67499	0.010	-18.85249	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.30880	1.51835	0.010	-16.01039	30.00000	Averaged
142 Propylbenzene	2.91760	3.50585	0.010	-20.16213	30.00000	Averaged
145 4-Ethyltoluene	2.48367	3.12512	0.010	-25.82667	30.00000	Averaged
147 1,3,5-Trimethylbenzene	2.11868	2.43336	0.010	-14.85261	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.99645	2.33850	0.010	-17.13269	30.00000	Averaged
155 1,3-Dichlorobenzene	1.43495	1.60550	0.010	-11.88613	30.00000	Averaged
156 1,4-Dichlorobenzene	1.47654	1.66764	0.010	-12.94240	30.00000	Averaged
159 alpha-Chlorotoluene	2.13483	2.56150	0.010	-19.98639	30.00000	Averaged
161 1,2-Dichlorobenzene	1.39783	1.55288	0.010	-11.09203	30.00000	Averaged
165 1,2,4-Trichlorobenzene	1.06613	1.08055	0.010	-1.35224	30.00000	Averaged
166 Hexachlorobutadiene	1.07297	1.03914	0.010	3.15270	30.00000	Averaged
29 Isopentane	1.61629	1.71656	0.010	-6.20427	30.00000	Averaged
19 Butane	0.27985	0.30041	0.010	-7.34721	30.00000	Averaged
102 Methyl Cyclohexane	2.54614	3.02461	0.010	-18.79230	30.00000	Averaged
167 Naphthalene	1.47559	1.51283	0.010	-2.52329	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022106.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 21-FEB-2008 14:36
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 08:59 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	318158	25.0000		80.00- 120.00		100.00
13.865	13.865 (1.000)	128	246182			27.38- 127.38		77.38
13.865	13.865 (1.000)	49	578443			131.81- 231.81		181.81
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.607	15.607 (1.000)	114	1251468	25.0000		80.00- 120.00		100.00
15.607	15.607 (1.000)	88	210099			0.00- 66.79		16.79
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1150991	25.0000		80.00- 120.00		100.00
20.805	20.805 (1.000)	82	670354			7.58- 107.58		58.24
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	540938	25.0000	26.423	80.00- 120.00		100.00
14.943	14.943 (1.078)	67	315254			3.57- 103.57		58.28
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206 (1.167)	98	1267119	25.0000	26.285	80.00- 120.00		100.00
18.206	18.206 (1.167)	70	149192			0.00- 61.29		11.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.167)	100	857857			18.71- 118.71	67.70
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	756024	25.0000	25.394	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	956094			76.46- 176.46	126.46
22.796	22.796 (1.096)	176	742540			48.22- 148.22	98.22
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	526938	50.0000	50.637	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	364415			17.96- 117.96	69.16
5.816	5.816 (0.419)	39	439605			33.44- 133.44	83.43
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.901	5.901 (0.426)	85	3343343	50.0000	53.816	80.00- 120.00	100.00
5.901	5.901 (0.426)	87	1081993			0.00- 82.13	32.36
16 Freon 114					CAS #: 76-14-2		
6.295	6.295 (0.454)	135	2155543	50.0000	52.488	80.00- 120.00	100.00
6.295	6.295 (0.454)	137	702541			0.00- 81.89	32.59
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	744090	50.0000	54.861	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	248435			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	1014075	50.0000	54.457	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	330395			0.00- 89.61	32.58
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	776593	50.0000	55.417	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	743424			53.33- 153.33	95.73
25 Bromomethane					CAS #: 74-83-9		
7.900	7.900 (0.570)	94	909020	50.0000	49.302	80.00- 120.00	100.00
7.900	7.900 (0.570)	96	844418			42.89- 142.89	92.89
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	552064	50.0000	56.845	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	141544			0.00- 76.71	25.64
8.182	8.182 (0.590)	66	182354			0.00- 83.02	33.03
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.773	8.773 (0.633)	101	3724827	50.0000	52.962	80.00- 120.00	100.00
8.773	8.773 (0.633)	103	2396325			14.33- 114.33	64.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.220	9.220 (0.665)	45	302983	50.0000	56.306	80.00- 120.00	100.00
9.220	9.220 (0.665)	43	73782			0.00- 75.24	24.35
9.220	9.220 (0.665)	46	109328			0.00- 89.78	36.08
42 Freon 113					CAS #: 76-13-1		
9.939	9.939 (0.717)	151	1691270	50.0000	52.224	80.00- 120.00	100.00
9.939	9.939 (0.717)	153	1073315			13.46- 113.46	63.46
9.939	9.939 (0.717)	101	2237538			82.30- 182.30	132.30
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.725)	61	1626629	50.0000	55.802	80.00- 120.00	100.00
10.050	10.050 (0.725)	96	968823			9.56- 109.56	59.56
10.050	10.050 (0.725)	98	625066			0.00- 88.43	38.43
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	505333	50.0000	55.936	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	1554337			267.82- 367.82	307.59
46 2-Propanol					CAS #: 67-63-0		
10.381	10.381 (0.749)	45	1722158	50.0000	55.626	80.00- 120.00	100.00
10.354	10.354 (0.747)	43	421429			0.00- 76.64	24.47
10.381	10.381 (0.749)	59	72747			0.00- 54.31	4.22
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	3032947	50.0000	55.007	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.824	10.824 (0.781)	76	509863	50.0000	53.701	80.00- 120.00	100.00
10.824	10.824 (0.781)	41	1102660			173.84- 273.84	216.27
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	985194	50.0000	53.448	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	872021			38.51- 138.51	88.51
11.100	11.100 (0.801)	51	315682			0.00- 83.83	32.04
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.155	11.155 (0.805)	59	1823363	50.0000	54.045	80.00- 120.00	100.00
11.155	11.155 (0.805)	41	401105			0.00- 72.85	22.00
11.155	11.155 (0.805)	57	180846			0.00- 59.93	9.92
60 MTBE					CAS #: 1634-04-4		
11.460	11.460 (0.826)	73	3304464	50.0000	62.446	80.00- 120.00	100.00
11.460	11.460 (0.826)	57	621550			0.00- 68.81	18.81
11.460	11.460 (0.826)	41	601662			0.00- 70.47	18.21

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1208181	50.0000	55.771	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1697687			90.52- 190.52	140.52
11.543	11.543 (0.832)	98	777161			16.26- 116.26	64.32
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1680943	50.0000	58.801	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	954156			9.30- 109.30	56.76
11.902	11.902 (0.858)	86	294358			0.00- 66.83	17.51
69 Vinyl Acetate					CAS #: 108-05-4		
12.344	12.344 (0.890)	86	303344	50.0000	54.124	80.00- 120.00	100.00
12.344	12.344 (0.890)	43	2767678			832.23- 932.23	912.39
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	2269037	50.0000	56.730	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	727416			0.00- 82.06	32.06
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	590250	50.0000	58.003	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1965986			283.08- 383.08	333.08
13.395	13.395 (0.966)	57	172513			0.00- 79.56	29.23
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1533821	50.0000	56.994	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	1189937			27.58- 127.58	77.58
13.423	13.423 (0.968)	98	769256			0.15- 100.15	50.15
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	1024619	50.0000	59.696	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	532427			1.96- 101.96	51.96
13.865	13.865 (1.000)	72	569307			2.04- 102.04	55.56
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2666540	50.0000	57.706	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1728112			14.81- 114.81	64.81
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2869991	50.0000	56.152	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1844940			14.28- 114.28	64.28
85 Cyclohexane					CAS #: 110-82-7		
14.308	14.308 (1.032)	84	1597016	50.0000	58.355	80.00- 120.00	100.00
14.308	14.308 (1.032)	56	1643322			52.90- 152.90	102.90
14.280	14.280 (1.030)	41	840301			2.62- 102.62	52.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2675787	50.0000	54.500	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2842852			56.24- 156.24	106.24
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	4245398	50.0000	63.623	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1366221			0.00- 82.82	32.18
14.888	14.888 (1.074)	41	1099520			0.00- 78.43	25.90
91 Benzene					CAS #: 71-43-2		
14.943	14.943 (0.957)	78	3486633	50.0000	55.730	80.00- 120.00	100.00
14.943	14.943 (0.957)	77	801927			0.00- 73.50	23.00
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.966)	62	1697330	50.0000	55.608	80.00- 120.00	100.00
15.082	15.082 (0.966)	64	546262			0.00- 84.23	32.18
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.973)	71	1061811	50.0000	59.956	80.00- 120.00	100.00
15.165	15.165 (0.972)	43	1477551			85.70- 185.70	139.15
15.192	15.192 (0.973)	57	897771			28.72- 128.72	84.55
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.030)	95	1512477	50.0000	56.444	80.00- 120.00	100.00
16.077	16.077 (1.030)	130	1347441			39.09- 139.09	89.09
16.077	16.077 (1.030)	97	948086			12.68- 112.68	62.68
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.547	16.547 (1.060)	63	1221480	50.0000	57.866	80.00- 120.00	100.00
16.547	16.547 (1.060)	62	872315			21.41- 121.41	71.41
16.547	16.547 (1.060)	41	683266			5.94- 105.94	55.94
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.069)	88	846839	50.0000	54.808	80.00- 120.00	100.00
16.685	16.685 (1.069)	58	498819			8.90- 108.90	58.90
16.685	16.685 (1.069)	57	169035			0.00- 71.19	19.96
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.089)	83	2683807	50.0000	55.965	80.00- 120.00	100.00
16.989	16.989 (1.089)	85	1739046			14.80- 114.80	64.80
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.140)	75	1925840	50.0000	59.873	80.00- 120.00	100.00
17.791	17.791 (1.140)	77	612275			0.00- 81.79	31.79
17.764	17.764 (1.138)	39	865616			0.00- 94.95	44.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.151)	58	934659	50.0000	63.953	80.00- 120.00	100.00
17.957	17.957 (1.151)	43	2136582			175.34- 275.34	228.59
17.957	17.957 (1.151)	85	467489			0.64- 100.64	50.02
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.174)	91	3929084	50.0000	58.898	80.00- 120.00	100.00
18.317	18.317 (1.174)	92	2370989			10.34- 110.34	60.34
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	2062772	50.0000	56.704	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	659970			0.00- 81.99	31.99
18.759	18.759 (0.902)	39	866394			0.00- 92.00	42.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.091	19.091 (0.918)	97	1469772	50.0000	56.059	80.00- 120.00	100.00
19.119	19.119 (0.919)	99	941163			14.03- 114.03	64.03
19.091	19.091 (0.918)	83	1264285			36.02- 136.02	86.02
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1965470	50.0000	55.945	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1346530			18.51- 118.51	68.51
19.284	19.284 (0.927)	131	1283290			15.29- 115.29	65.29
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1294388	50.0000	58.959	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	2178950			118.34- 218.34	168.34
19.423	19.423 (0.934)	100	262644			0.00- 71.71	20.29
122 Dibromochloromethane					CAS #: 124-48-1		
19.782	19.782 (0.951)	129	2522570	50.0000	56.507	80.00- 120.00	100.00
19.782	19.782 (0.951)	127	1937721			28.82- 128.82	76.82
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2391636	50.0000	57.349	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	2209703			42.39- 142.39	92.39
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3368737	50.0000	55.657	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	1067600			0.00- 81.69	31.69
20.833	20.833 (1.001)	77	2048529			10.81- 110.81	60.81
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1792382	50.0000	57.154	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5847127			269.96- 369.96	326.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2305367	50.0000	58.379	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4765497			149.87- 249.87	206.71
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	2191582	50.0000	58.342	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4739766			166.27- 266.27	216.27
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3623473	50.0000	62.962	80.00- 120.00	100.00
21.856	21.856 (1.050)	78	1878729			1.85- 101.85	51.85
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2743146	50.0000	57.247	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1394523			0.84- 100.84	50.84
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	6157786	50.0000	59.426	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1572325			0.00- 77.62	25.53
22.409	22.409 (1.077)	51	545484			0.00- 58.75	8.86
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3495207	50.0000	58.005	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2266238			14.84- 114.84	64.84
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	8070412	50.0000	60.081	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1687647			0.00- 71.63	20.91
23.100	23.100 (1.110)	105	292151			0.00- 53.71	3.62
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	7193973	50.0000	62.913	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	2126419			0.00- 79.56	29.56
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	5601560	50.0000	57.426	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2683613			0.00- 98.23	47.91
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	5383187	50.0000	58.566	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2430595			0.00- 94.91	45.15
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3695843	50.0000	55.943	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2349664			14.68- 114.68	63.58
24.593	24.593 (1.182)	111	1535129			0.00- 91.36	41.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3838870	50.0000	56.471	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2444832			16.09- 116.09	63.69
24.731	24.731 (1.189)	111	1534132			0.00- 90.13	39.96
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5896536	50.0000	59.993	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	1088979			0.00- 69.28	18.47
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3574705	50.0000	55.546	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2274797			13.64- 113.64	63.64
25.367	25.367 (1.219)	111	1564073			0.00- 93.75	43.75
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2487398	50.0000	50.676	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2350738			44.51- 144.51	94.51
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2392091	50.0000	48.424	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1501376			12.90- 112.90	62.76
29 Isopentane					CAS #: 78-78-4		
8.266	8.266 (0.596)	43	1092277	50.0000	53.102	80.00- 120.00	100.00
8.266	8.266 (0.596)	57	849757			27.67- 127.67	77.80
19 Butane					CAS #: 106-97-8		
6.802	6.802 (0.491)	58	191158	50.0000	53.674	80.00- 120.00	100.00
6.802	6.802 (0.491)	43	1343696			666.74- 766.74	702.92
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1924610	50.0000	59.396	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	861593			0.00- 95.22	44.77
16.354	16.354 (1.179)	55	1372394			20.82- 120.82	71.31
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3482504	50.0000	51.262	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	420675			0.00- 62.74	12.08

Data File: /chem/msdt.i/21Feb2008.b/t022106.d
Report Date: 22-Feb-2008 08:59

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022106.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	318158	1.89
97 1,4-Difluorobenze	1266888	760133	1773643	1251468	-1.22
126 Chlorobenzene-d5	1159473	695684	1623262	1150991	-0.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.61	-0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

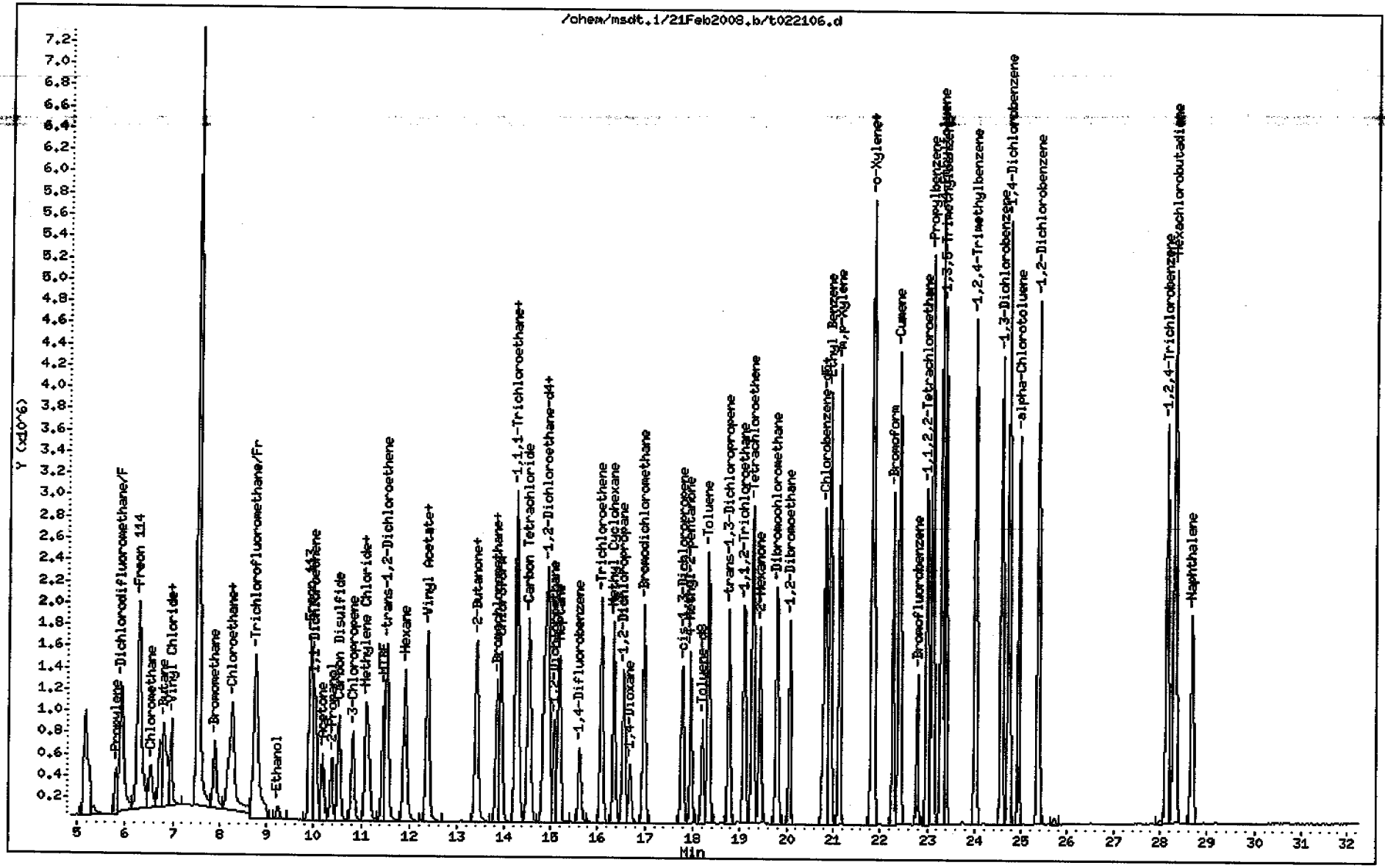
0260

Data File: /chem/msdt.i/21Feb2008.b/t022106.d
Date : 21-FEB-2008 14:36
Client ID: CCV-1
Sample Info: 50mL #1576-261

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msdt.i/21Feb2008.b/t022104a.d
Report Date: 22-Feb-2008 08:56

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022104a.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 11:03
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.66318	0.010	-3.39005	30.00000	Averaged
$ 113 Toluene-d8	0.96300	0.98983	0.010	-2.78600	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.68094	0.010	-5.30252	30.00000	Averaged
6 Freon142b	3.43649	3.61347	0.010	-5.14990	40.00000	Averaged
9 Freon 13	3.44586	3.35030	0.010	2.77297	40.00000	Averaged
13 Freon 134a	1.53736	1.53392	0.010	0.22358	40.00000	Averaged
15 Freon 152a	0.82784	0.81286	0.010	1.80867	40.00000	Averaged
17 Freon 22	0.39055	0.38557	0.010	1.27508	40.00000	Averaged
26 Methanol	0.20868	0.14314	0.010	31.40888	40.00000	Averaged
34 Dichlorofluoromethane/Fr21	2.45592	2.61432	0.010	-6.44947	40.00000	Averaged
40 Freon123a	1.89468	2.07320	0.010	-9.42261	40.00000	Averaged
41 Freon123	0.22255	0.23514	0.010	-5.65497	40.00000	Averaged
68 Isopropyl ether	4.09678	4.38551	0.010	-7.04792	40.00000	Averaged
71 1-Propanol	0.21526	0.18897	0.010	12.21495	40.00000	Averaged
73 t-Butylethyl Ether	4.36417	4.86959	0.010	-11.58103	40.00000	Averaged
77 Ethyl Acetate	0.44196	0.45984	0.010	-4.04626	40.00000	Averaged
92 tert-amyl-Methyl Ether	4.12820	4.52447	0.010	-9.59915	40.00000	Averaged
96 2-Heptanone	2.16686	2.39901	0.010	-10.71394	40.00000	Averaged
98 1-Butanol	0.16280	0.14126	0.010	13.23519	40.00000	Averaged
119 Butyl Acetate	0.33960	0.37466	0.010	-10.32443	40.00000	Averaged
135 Cyclohexanone	0.41426	0.36212	0.010	12.58846	40.00000	Averaged
146 Diisobutyl Ketone	1.10363	1.23471	0.010	-11.87692	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104a.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 21-FEB-2008 11:03
Operator : sjr
Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 08:56 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22bCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312258	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	236420			25.71- 125.71	75.71
13.865	13.865 (1.000)	49	373343			69.56- 169.56	119.56
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1266888	25.0000		80.00- 120.00	100.00
15.635	15.635 (1.000)	88	209470			0.00- 66.53	16.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1159473	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	667968			7.58- 107.58	57.61
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.944 (1.078)	65	519341	25.0000	25.848	80.00- 120.00	100.00
14.944	14.944 (1.078)	67	267067			3.57- 103.57	51.42
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1254003	25.0000	25.696	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	147578			0.00- 61.29	11.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	856417			18.71- 118.71	68.29
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	789531	25.0000	26.326	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	999365			76.58- 176.58	126.58
22.796	22.796 (1.096)	176	761084			46.40- 146.40	96.40
6 Freon142b					CAS #: 75-68-3		
6.408	6.408 (0.462)	65	2256667	50.0000	52.575	80.00- 120.00	100.00
6.408	6.408 (0.462)	45	455198			0.00- 71.32	20.17
9 Freon 13					CAS #: 75-72-9		
5.366	5.366 (0.387)	69	2092318	50.0000	48.614	80.00- 120.00	100.00
5.366	5.366 (0.387)	85	681331			0.00- 81.50	32.56
5.366	5.366 (0.387)	87	212271			0.00- 60.31	10.15
13 Freon 134a					CAS #: 811-97-2		
5.647	5.647 (0.407)	83	957959	50.0000	49.888	80.00- 120.00	100.00
5.647	5.647 (0.407)	69	790194			32.62- 132.62	82.49
15 Freon 152a					CAS #: 75-37-6		
5.816	5.816 (0.419)	65	507647	50.0000	49.096	80.00- 120.00	100.00
5.816	5.816 (0.419)	51	855266			127.07- 227.07	168.48
5.816	5.816 (0.419)	47	223144			0.00- 93.51	43.96
17 Freon 22					CAS #: 75-45-6		
5.985	5.985 (0.432)	67	240792	50.0000	49.362	80.00- 120.00	100.00
5.985	5.985 (0.432)	51	1193401			463.95- 563.95	495.61
5.985	5.985 (0.432)	85	25075			0.00- 65.76	10.41
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	536342	300.000	205.77	80.00- 120.00	100.00
7.534	7.534 (0.543)	32	456083			35.04- 135.04	85.04
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.717	8.717 (0.629)	67	1632683	50.0000	53.225	80.00- 120.00	100.00
8.717	8.717 (0.629)	69	532919			0.00- 82.56	32.64
8.717	8.717 (0.629)	35	85037			0.00- 55.48	5.21
40 Freon123a					CAS #: 354-23-4		
9.552	9.552 (0.689)	67	1294749	50.0000	54.711	80.00- 120.00	100.00
9.552	9.552 (0.689)	117	946703			22.27- 122.27	73.12
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	146846	50.0000	52.827	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)								
9.718	9.718	(0.701)	133	29959			0.00- 70.21	20.40
9.718	9.718	(0.701)	85	122663			280.12- 380.12	83.53
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	2738824	50.0000	53.524	80.00- 120.00	100.00
12.289	12.289	(0.886)	87	875522			0.00- 80.78	31.97
12.289	12.289	(0.886)	59	320352			0.00- 62.00	11.70
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	118012	50.0000	43.892	80.00- 120.00	100.00
12.400	12.400	(0.894)	59	177518			82.09- 182.09	150.42
12.289	12.289	(0.886)	41	548379			321.23- 421.23	464.68
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	3041136	50.0000	55.790	80.00- 120.00	100.00
12.925	12.925	(0.932)	87	1293560			0.00- 93.06	42.54
12.925	12.925	(0.932)	41	498322			0.00- 69.68	16.39
77 Ethyl Acetate						CAS #: 141-78-6		
13.395	13.395	(0.966)	45	287177	50.0000	52.023	80.00- 120.00	100.00
13.395	13.395	(0.966)	61	317488			52.94- 152.94	110.55
13.395	13.395	(0.966)	43	1980955			599.75- 699.75	689.80
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
14.999	14.999	(1.082)	73	2825604	50.0000	54.800	80.00- 120.00	100.00
14.999	14.999	(1.082)	87	674366			0.00- 73.24	23.87
14.999	14.999	(1.082)	55	659557			0.00- 75.20	23.34
96 2-Heptanone						CAS #: 110-43-0		
21.966	21.966	(1.584)	58	1498222	50.0000	55.357	80.00- 120.00	100.00
21.966	21.966	(1.584)	43	2089626			90.45- 190.45	139.47
98 1-Butanol						CAS #: 71-36-3		
15.801	15.801	(1.011)	56	357913	50.0000	43.382	80.00- 120.00	100.00
15.801	15.801	(1.011)	41	242656			29.27- 129.27	67.80
15.801	15.801	(1.011)	43	184494			9.88- 109.88	51.55
119 Butyl Acetate						CAS #: 123-86-4		
19.533	19.533	(1.249)	56	949314	50.0000	55.162	80.00- 120.00	100.00
19.533	19.533	(1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533	(1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone						CAS #: 108-94-1		
22.741	22.741	(1.093)	55	839726	50.0000	43.706	80.00- 120.00	100.00
22.741	22.741	(1.093)	98	429311			0.39- 100.39	51.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)							
22.741	22.741 (1.093)	42	544268			13.24- 113.24	64.81
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.543	23.543 (1.132)	57	2863217	50.0000	55.938	80.00- 120.00	100.00
23.570	23.570 (1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104a.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	312258	-1.85
97 1,4-Difluorobenze	1251468	750881	1752055	1266888	1.23
126 Chlorobenzene-d5	1150991	690595	1611387	1159473	0.74

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

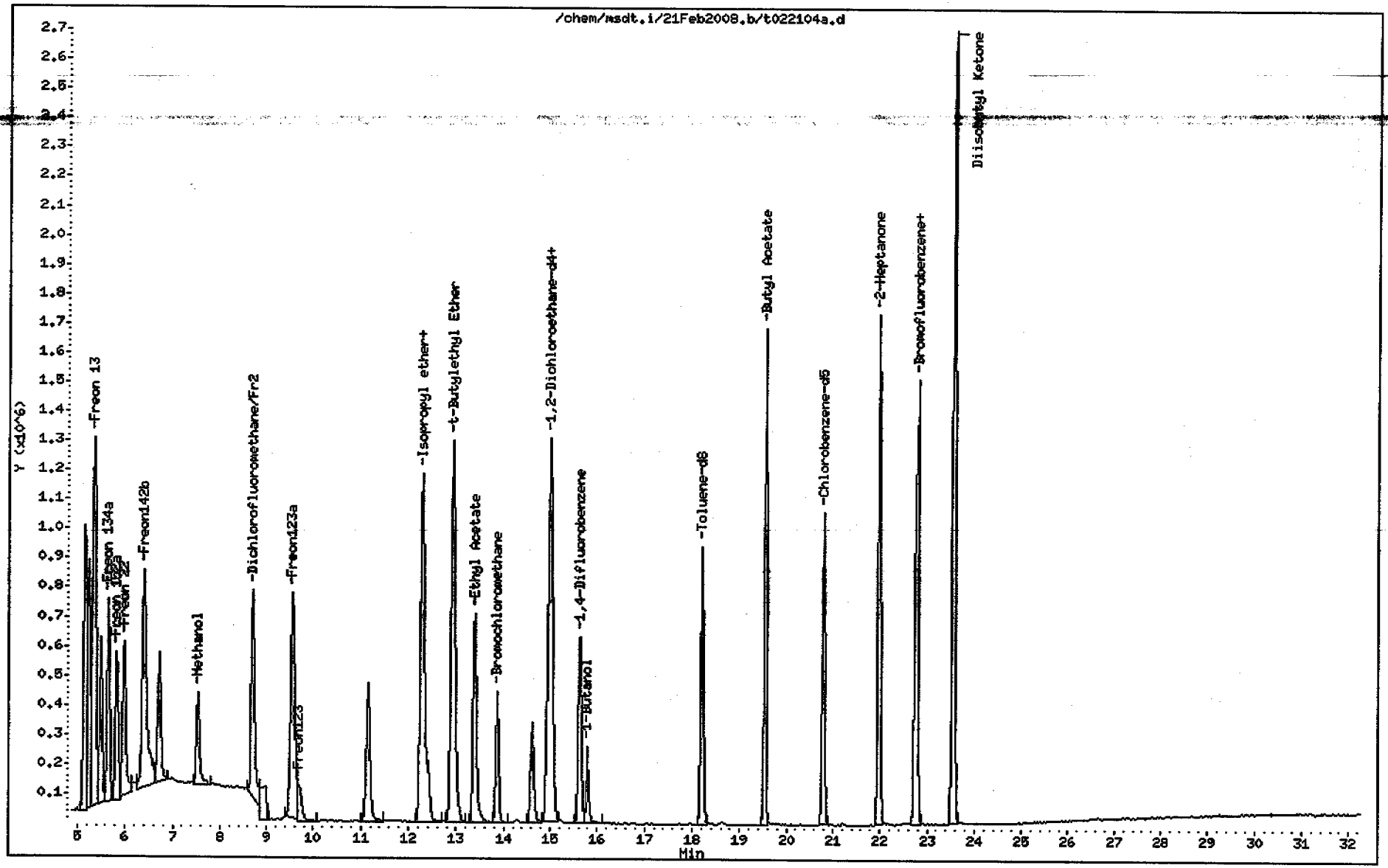
Data File: /chem/msdt.i/21Feb2008.b/t022104a.d
Date : 21-FEB-2008 11:03
Client ID: CCVsp
Sample Info: 50ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0267



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802283-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	105
Freon 114	100
Chloromethane	107
Vinyl Chloride	107
1,3-Butadiene	102
Bromomethane	101
Chloroethane	109
Freon 11	100
Ethanol	109
Freon 113	111
1,1-Dichloroethene	122
Acetone	105
2-Propanol	106
Carbon Disulfide	109
Methylene Chloride	112
Methyl tert-butyl ether	123
trans-1,2-Dichloroethene	108
Hexane	116
1,1-Dichloroethane	111
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	111
Tetrahydrofuran	113
Chloroform	111
1,1,1-Trichloroethane	109
Cyclohexane	114
Carbon Tetrachloride	104
Benzene	108
1,2-Dichloroethane	108
Heptane	117
Trichloroethene	107
1,2-Dichloropropane	109
1,4-Dioxane	104
Bromodichloromethane	109
cis-1,3-Dichloropropene	114
4-Methyl-2-pentanone	122
Toluene	119
trans-1,3-Dichloropropene	109
1,1,2-Trichloroethane	108
Tetrachloroethene	107

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802283-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	110
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	106
Chlorobenzene	107
Ethyl Benzene	108
m,p-Xylene	111
o-Xylene	112
Styrene	119
Bromoform	110
1,1,2,2-Tetrachloroethane	113
4-Ethyltoluene	120
1,3,5-Trimethylbenzene	109
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	108
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	114
1,2-Dichlorobenzene	105
1,2,4-Trichlorobenzene	100
Hexachlorobutadiene	94
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Report Date: 21-Feb-2008 16:02

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 21Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	52.688	105.38	70-130
16 Freon 114	50.000	49.899	99.80	70-130
18 Chloromethane	50.000	53.680	107.36	70-130
20 Vinyl Chloride	50.000	53.573	107.15	70-130
22 1,3-Butadiene	50.000	51.092	102.18	60-140
25 Bromomethane	50.000	50.644	101.29	70-130
27 Chloroethane	50.000	54.719	109.44	70-130
31 Trichlorofluoromet	50.000	49.925	99.85	70-130
38 Ethanol	50.000	54.725	109.45	60-140
42 Freon 113	50.000	55.688	111.38	70-130
43 1,1-Dichloroethene	50.000	60.879	121.76	70-130
45 Acetone	50.000	52.372	104.74	60-140
47 Carbon Disulfide	50.000	54.734	109.47	60-140
46 2-Propanol	50.000	53.115	106.23	60-140
54 Methylene Chloride	50.000	55.781	111.56	70-130
57 tert-Butyl-Alcohol	50.000	51.628	103.26	70-130
60 MTBE	50.000	61.621	123.24	60-140
61 trans-1,2-Dichloro	50.000	54.016	108.03	60-140
65 Hexane	50.000	57.947	115.89	60-140
69 Vinyl Acetate	50.000	52.533	105.07	60-140
70 1,1-Dichloroethane	50.000	55.533	111.07	70-130
76 cis-1,2-Dichloroet	50.000	55.563	111.13	70-130
75 2-Butanone	50.000	55.703	111.41	60-140
80 Tetrahydrofuran	50.000	56.528	113.06	60-140
82 Chloroform	50.000	55.370	110.74	70-130
85 Cyclohexane	50.000	56.927	113.85	60-140
83 1,1,1-Trichloroeth	50.000	54.607	109.21	70-130
87 Carbon Tetrachlori	50.000	52.262	104.52	70-130
91 Benzene	50.000	53.822	107.64	70-130
93 1,2-Dichloroethane	50.000	53.891	107.78	70-130
94 Heptane	50.000	58.589	117.18	60-140
101 Trichloroethene	50.000	53.732	107.47	70-130
104 1,2-Dichloropropan	50.000	54.714	109.43	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
106 1,4-Dioxane	50.000	51.948	103.90	60-140
107 Bromodichlorometha	50.000	54.371	108.74	60-140
110 cis-1,3-Dichloropr	50.000	56.980	113.96	70-130
111 4-Methyl-2-pentano	50.000	61.297	122.59	60-140
114 Toluene	50.000	59.494	118.99	70-130
116 trans-1,3-Dichloro	50.000	54.372	108.74	70-130
117 1,1,2-Trichloroeth	50.000	53.778	107.56	70-130
120 Tetrachloroethene	50.000	53.601	107.20	70-130
121 2-Hexanone	50.000	55.044	110.09	60-140
122 Dibromochlorometha	50.000	54.149	108.30	60-140
123 1,2-Dibromoethane	50.000	52.889	105.78	70-130
127 Chlorobenzene	50.000	53.413	106.83	70-130
128 Ethyl Benzene	50.000	53.952	107.90	70-130
129 m,p-Xylene	50.000	55.654	111.31	70-130
130 o-Xylene	50.000	56.229	112.46	70-130
131 Styrene	50.000	59.677	119.35	70-130
133 Bromoform	50.000	54.852	109.70	60-140
140 1,1,2,2-Tetrachlor	50.000	56.309	112.62	70-130
145 4-Ethyltoluene	50.000	60.045	120.09	60-140
147 1,3,5-Trimethylben	50.000	54.401	108.80	70-130
150 1,2,4-Trimethylben	50.000	55.800	111.60	70-130
155 1,3-Dichlorobenzen	50.000	53.897	107.79	70-130
156 1,4-Dichlorobenzen	50.000	53.090	106.18	70-130
159 alpha-Chlorotoluen	50.000	57.198	114.40	70-130
161 1,2-Dichlorobenzen	50.000	52.665	105.33	70-130
165 1,2,4-Trichloroben	50.000	49.922	99.84	70-130
166 Hexachlorobutadien	50.000	46.762	93.52	70-130
142 Propylbenzene	50.000	58.762	117.52	60-140
134 Cumene	50.000	58.874	117.75	60-140
51 3-Chloropropene	50.000	52.504	105.01	60-140
89 2,2,4-Trimethylpen	50.000	62.852	125.70	60-140
19 Butane	50.000	50.961	101.92	70-130
29 Isopentane	50.000	49.640	99.28	70-130
102 Methyl Cyclohexane	50.000	58.904	117.81	70-130
11 Propylene	50.000	52.880	105.76	60-140
167 Naphthalene	50.000	51.826	103.65	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.177	104.71	70-130
$ 113 Toluene-d8	25.000	26.376	105.50	70-130
$ 137 Bromofluorobenzene	25.000	25.231	100.92	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022107.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 21-FEB-2008 15:25
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 16:02 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05 Cal File: t022105.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	310710	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	238333			27.38- 127.38	76.71
13.865	13.865 (1.000)	49	559036			131.81- 231.81	179.92
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1249796	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	218055			0.00- 66.79	17.45
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1155810	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	681028			7.40- 107.40	58.92
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	523356	26.1771	26.177	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	297458			3.57- 103.57	56.84
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1269798	26.3760	26.376	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	146167			0.00- 61.29	11.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	853963			18.71- 118.71	67.25
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	754315	25.2311	25.231	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	975722			76.46- 176.46	129.35
22.796	22.796 (1.096)	176	749597			48.22- 148.22	99.37
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	537401	52.8801	52.880	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	365992			17.96- 117.96	68.10
5.816	5.816 (0.419)	39	443025			33.44- 133.44	82.44
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.428)	85	3196688	52.6885	52.688	80.00- 120.00	100.00
5.929	5.901 (0.428)	87	1007739			0.00- 82.13	31.52
16 Freon 114					CAS #: 76-14-2		
6.323	6.295 (0.456)	135	2001246	49.8987	49.899	80.00- 120.00	100.00
6.323	6.295 (0.456)	137	630507			0.00- 81.89	31.51
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	711030	53.6802	53.680	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	237230			0.00- 83.62	33.36
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	974260	53.5730	53.573	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	310797			0.00- 89.61	31.90
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	699221	51.0919	51.092	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	665520			53.33- 153.33	95.18
25 Bromomethane					CAS #: 74-83-9		
7.928	7.900 (0.572)	94	911905	50.6445	50.644	80.00- 120.00	100.00
7.928	7.900 (0.572)	96	836997			42.89- 142.89	91.79
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	518978	54.7190	54.719	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	130501			0.00- 76.71	25.15
8.182	8.182 (0.590)	66	168624			0.00- 83.02	32.49
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.801	8.773 (0.635)	101	3429046	49.9248	49.925	80.00- 120.00	100.00
8.801	8.773 (0.635)	103	2193256			14.33- 114.33	63.96

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.248	9.220	(0.667)	45	287582	54.7247	54.725	80.00- 120.00	100.00
9.248	9.220	(0.667)	43	61998			0.00- 75.24	21.56
9.248	9.220	(0.667)	46	108384			0.00- 89.78	37.69
42 Freon 113						CAS #: 76-13-1		
9.967	9.939	(0.719)	151	1761246	55.6886	55.688	80.00- 120.00	100.00
9.967	9.939	(0.719)	153	1122986			13.46- 113.46	63.76
9.967	9.939	(0.719)	101	2322380			82.30- 182.30	131.86
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.049	10.050	(0.725)	61	1733084	60.8790	60.879	80.00- 120.00	100.00
10.049	10.050	(0.725)	96	1028402			9.56- 109.56	59.34
10.049	10.050	(0.725)	98	669978			0.00- 88.43	38.66
45 Acetone						CAS #: 67-64-1		
10.188	10.188	(0.735)	58	462053	52.3716	52.372	80.00- 120.00	100.00
10.188	10.188	(0.735)	43	1451780			267.82- 367.82	314.20
46 2-Propanol						CAS #: 67-63-0		
10.381	10.381	(0.749)	45	1605941	53.1151	53.115	80.00- 120.00	100.00
10.381	10.381	(0.749)	43	410138			0.00- 76.64	25.54
10.381	10.381	(0.749)	59	68466			0.00- 54.31	4.26
47 Carbon Disulfide						CAS #: 75-15-0		
10.547	10.547	(0.761)	76	2947210	54.7335	54.734	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
10.824	10.824	(0.781)	76	486830	52.5039	52.504	80.00- 120.00	100.00
10.824	10.824	(0.781)	41	1061044			173.84- 273.84	217.95
54 Methylene Chloride						CAS #: 75-09-2		
11.100	11.100	(0.801)	49	1004132	55.7811	55.781	80.00- 120.00	100.00
11.100	11.100	(0.801)	84	895576			38.51- 138.51	89.19
11.100	11.100	(0.801)	51	327544			0.00- 83.83	32.62
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.155	11.155	(0.805)	59	1701032	51.6279	51.628	80.00- 120.00	100.00
11.155	11.155	(0.805)	41	364201			0.00- 72.85	21.41
11.155	11.155	(0.805)	57	171988			0.00- 59.93	10.11
60 MTBE						CAS #: 1634-04-4		
11.460	11.460	(0.826)	73	3184472	61.6209	61.621	80.00- 120.00	100.00
11.460	11.460	(0.826)	57	600134			0.00- 68.81	18.85
11.460	11.460	(0.826)	41	579258			0.00- 70.47	18.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1142777	54.0165	54.016	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1605495			90.52- 190.52	140.49
11.543	11.543 (0.832)	98	726496			16.26- 116.26	63.57
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1617761	57.9474	57.947	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	899054			9.30- 109.30	55.57
11.902	11.902 (0.858)	86	289209			0.00- 66.83	17.88
69 Vinyl Acetate					CAS #: 108-05-4		
12.372	12.344 (0.892)	86	287536	52.5330	52.533	80.00- 120.00	100.00
12.372	12.344 (0.892)	43	2581350			832.23- 932.23	897.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	2169140	55.5330	55.533	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	700477			0.00- 82.06	32.29
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	553569	55.7028	55.703	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1847332			283.08- 383.08	333.71
13.395	13.395 (0.966)	57	159235			0.00- 79.56	28.77
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1460316	55.5634	55.563	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	1140826			27.58- 127.58	78.12
13.423	13.423 (0.968)	98	729483			0.15- 100.15	49.95
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	947529	56.5284	56.528	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	498381			1.96- 101.96	52.60
13.865	13.865 (1.000)	72	532243			2.04- 102.04	56.17
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2498696	55.3696	55.370	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1634644			14.81- 114.81	65.42
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2725692	54.6073	54.607	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1760138			14.28- 114.28	64.58
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.308 (1.032)	84	1521460	56.9269	56.927	80.00- 120.00	100.00
14.307	14.308 (1.032)	56	1515546			52.90- 152.90	99.61
14.307	14.308 (1.032)	41	798230			2.62- 102.62	52.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2505823	52.2620	52.262	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2669012			56.24- 156.24	106.51
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	4095764	62.8515	62.852	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1316313			0.00- 82.82	32.14
14.888	14.888 (1.074)	41	1059624			0.00- 78.43	25.87
91 Benzene					CAS #: 71-43-2		
14.971	14.943 (0.958)	78	3362746	53.8219	53.822	80.00- 120.00	100.00
14.971	14.943 (0.958)	77	764594			0.00- 73.50	22.74
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	1642724	53.8915	53.891	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	532274			0.00- 84.23	32.40
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.972)	71	1036211	58.5893	58.589	80.00- 120.00	100.00
15.192	15.192 (0.972)	43	1424255			85.70- 185.70	137.45
15.192	15.192 (0.972)	57	866448			28.72- 128.72	83.62
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1437891	53.7325	53.732	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1288664			39.09- 139.09	89.62
16.077	16.077 (1.028)	97	916609			12.68- 112.68	63.75
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.547 (1.060)	63	1153414	54.7144	54.714	80.00- 120.00	100.00
16.575	16.547 (1.060)	62	836262			21.41- 121.41	72.50
16.575	16.547 (1.060)	41	641023			5.94- 105.94	55.58
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.067)	88	801574	51.9481	51.948	80.00- 120.00	100.00
16.685	16.685 (1.067)	58	469815			8.90- 108.90	58.61
16.685	16.685 (1.067)	57	165145			0.00- 71.19	20.60
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.087)	83	2603905	54.3713	54.371	80.00- 120.00	100.00
16.989	16.989 (1.087)	85	1674806			14.80- 114.80	64.32
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.138)	75	1830328	56.9798	56.980	80.00- 120.00	100.00
17.791	17.791 (1.138)	77	591194			0.00- 81.79	32.30
17.791	17.791 (1.138)	39	822910			0.00- 94.95	44.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.149)	58	894640	61.2967	61.297	80.00- 120.00	100.00
17.957	17.957 (1.149)	43	2048666			175.34- 275.34	228.99
17.957	17.957 (1.149)	85	446806			0.64- 100.64	49.94
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.172)	91	3963523	59.4941	59.494	80.00- 120.00	100.00
18.317	18.317 (1.172)	92	2385072			10.34- 110.34	60.18
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1986211	54.3720	54.372	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	633875			0.00- 81.99	31.91
18.759	18.759 (0.902)	39	816853			0.00- 92.00	41.13
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.119	19.091 (0.919)	97	1415856	53.7778	53.778	80.00- 120.00	100.00
19.119	19.091 (0.919)	99	888361			14.03- 114.03	62.74
19.119	19.091 (0.919)	83	1221981			36.02- 136.02	86.31
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1890997	53.6012	53.601	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1304180			18.51- 118.51	68.97
19.284	19.284 (0.927)	131	1223116			15.29- 115.29	64.68
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1213492	55.0436	55.044	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	2034182			118.34- 218.34	167.63
19.423	19.423 (0.934)	100	256574			0.00- 71.71	21.14
122 Dibromochloromethane					CAS #: 124-48-1		
19.810	19.782 (0.952)	129	2427410	54.1488	54.149	80.00- 120.00	100.00
19.810	19.782 (0.952)	127	1863480			28.82- 128.82	76.77
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2214859	52.8887	52.889	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	2057233			42.39- 142.39	92.88
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3246418	53.4128	53.413	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	1008620			0.00- 81.69	31.07
20.860	20.860 (1.003)	77	1978793			10.81- 110.81	60.95
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1699041	53.9518	53.952	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5591441			269.96- 369.96	329.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2206972	55.6540	55.654	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4531231			149.87- 249.87	205.31
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	2121082	56.2294	56.229	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4566005			166.27- 266.27	215.27
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3448817	59.6769	59.677	80.00- 120.00	100.00
21.883	21.883 (1.052)	78	1794468			1.85- 101.85	52.03
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2639409	54.8521	54.852	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1357053			0.84- 100.84	51.42
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	6126076	58.8737	58.874	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1539671			0.00- 77.62	25.13
22.409	22.409 (1.077)	51	538853			0.00- 58.75	8.80
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3407224	56.3093	56.309	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2196507			14.84- 114.84	64.47
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	7926254	58.7618	58.762	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1669834			0.00- 71.63	21.07
23.100	23.100 (1.110)	105	281882			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	6894744	60.0451	60.045	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	2037479			0.00- 79.56	29.55
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	5328724	54.4015	54.401	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2571330			0.00- 98.23	48.25
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	5150348	55.7996	55.800	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2329479			0.00- 94.91	45.23
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3575597	53.8973	53.897	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2272738			14.68- 114.68	63.56
24.593	24.593 (1.182)	111	1459744			0.00- 91.36	40.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3624112	53.0898	53.090	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2338820			16.09- 116.09	64.53
24.731	24.731 (1.189)	111	1454855			0.00- 90.13	40.14
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5645389	57.1985	57.198	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	1040390			0.00- 69.28	18.43
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3403460	52.6646	52.665	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2191776			13.64- 113.64	64.40
25.367	25.367 (1.219)	111	1450581			0.00- 93.75	42.62
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2460635	49.9219	49.922	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2330186			44.51- 144.51	94.70
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2319687	46.7622	46.762	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1453033			12.90- 112.90	62.64
29 Isopentane					CAS #: 78-78-4		
8.294	8.266 (0.598)	43	997168	49.6404	49.640	80.00- 120.00	100.00
8.294	8.266 (0.598)	57	775820			27.67- 127.67	77.80
19 Butane					CAS #: 106-97-8		
6.830	6.802 (0.493)	58	177248	50.9609	50.961	80.00- 120.00	100.00
6.830	6.802 (0.493)	43	1270782			666.74- 766.74	716.95
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1863986	58.9041	58.904	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	831588			0.00- 95.22	44.61
16.354	16.354 (1.179)	55	1343712			20.82- 120.82	72.09
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3535572	51.8258	51.826	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	430895			0.00- 62.74	12.19

Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Report Date: 21-Feb-2008 16:02

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022107.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	310710	-2.34
97 1,4-Difluorobenze	1251468	750881	1752055	1249796	-0.13
126 Chlorobenzene-d5	1150991	690595	1611387	1155810	0.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

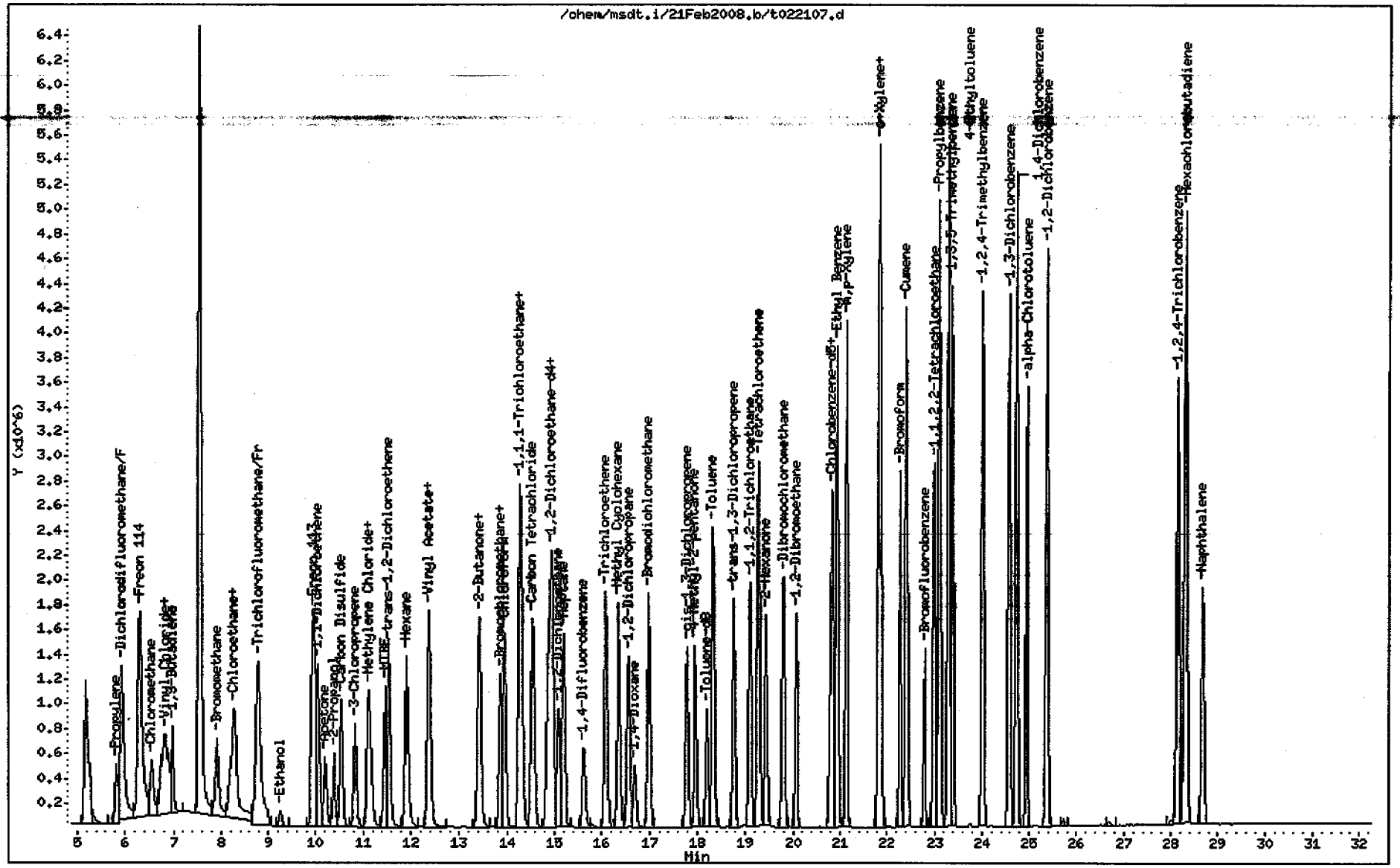
Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Date : 21-FEB-2008 15:25
Client ID: LCS-1
Sample Info: 50mL #1576-255

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624

0282



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MSD-T

Logbook #: 1599

0283

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76) [1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21) [1]
176	~~Greater than 95.0% but less than 101.0% of mass 174~~	~~(98.19)~~ [1]
177	5.0 – 9.0% of mass 176	(6.42) [2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08

BFB Injection Time: 0830

BFB File ID: t022101

Tekmar Purge Flow:

Vacuum: 3.99e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM 318158	
1,4-DFB 1251468	
CS-45 1130997	

Verified CCV IS vs ICAL mid-point (- 40%D) initials

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15

NOAH Cart #: NA File #: NA

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1267119)}{(1251468)} \times \frac{(25.0)}{(0.96300)} = 26.285$$

File ID:	t022106
Compound:	Tol-d8
Initials:	JM

Reported Result 26.285

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt	DF	Date	Time	Review	
1	✓	t022101	BFB Tune Check	1476-278	50psig	2mL	1.00	2/21/08	0830	JM	
2	✓	02	ICAL Level 3	1576-288	2nd fill 20psig	20mL			0941	JM	t14g206b
3	✓	03	4		3rd fill 30psig	30mL			1021	JM	MeOH022IA
4	✓	04	5		4th fill 40psig	50mL			1103	JM	sp22b
5	✓	05	7		5th fill 50psig	200mL			1205	JM	
6	✓	06	CCV-1 (200ppbv)	1576-261	50psig	50mL			1436	JM	0 air
7	✓	07	ICAL Level 6	1576-277	10psig/12psig	100mL			JM 2/22/08		not loaded
8	✓	07	LCS-1 (200ppbv)	1576-255	50psig	50mL	1.00		1525	JM	0 air
9	/	08	System Blank	3346	Humid.	200mL			1607	JM	

Signature

2/21/08
Date

MSD-T

Logbook #: 1599

0284

10	✓	+022109	ICAL Level 6		1536-299	[illegible]	100 mL	1.00	2/21/08	1700	Act / [illegible]	
11	✓	10	Lab Blank		33608	Humid	200 mL	↓		1755	Act / [illegible]	
12	✓	11	0802200	-01A	33942	6.0"Hg→5psi		1.68		1847	Act	
13	✓	12		-02A	33943	7.5"Hg→5psi		1.79		1926	Act	
14	✓	13		-01AA	33942	6.0"Hg→5psi		1.68		2005	Act	
15	✓	14		-02AA	33943	7.5"Hg→5psi		1.79		2043	Act	
16	✓	15		-03A	SC446	6.5"Hg→5psi		1.71		2122	Act	
17	✓	16		-04A	9445					2201	Act	
18	✓	17		-05A	31306	↓		↓		2239	Act ↓	
19	✓	18	↓	-06A	R-4	6.0"Hg→5psi		1.68	↓	2338	[illegible]	
20	✓	19	0802283	-01A	22497	|	↓	|	2/22/08	0017	[illegible]	
21	✓	20		02A	34438	5.5"Hg→5psi	200mL	1.64		0134	[illegible]	
22	✓	21		03A	23996	5.5"Hg→5psi	200mL	1.64		0221	[illegible]	
23	X	22		04A	35171	6.5"Hg→5psi	200mL	1.71		0318	[illegible]	MeCl↑
24	X	23	↓	05A	34746	6.0"Hg→5psi	200mL	1.68		0357	[illegible]	MeCl↑
25	X ✓	24	0802328-01A	[illegible]	12666	5.5"Hg→5.0psi	200mL	1.64		0432	[illegible] ↓	PCE↑
26	✓	25	0802283	-04A	35171	6.5"Hg→5.0psi	100 [illegible]	3.42 [illegible]		0510	[illegible]	
27	✓	26	|	05A	34746	6.0"Hg→5.0psi	100 [illegible]	3.36 [illegible]		0711	[illegible]	
28	✓	27	0802328 -	01A	12666	5.5"Hg→5.0psi	100 mL	3.25 [illegible]	↓	0749	[illegible]	
29												
30												
31			[illegible] 2/22/08									
32												

Comments:

Signature: [signature]

Date: 2/22/08

Air Toxics Ltd.

Data file : /chem/msdt.i/06Feb2008.b/t020605.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 06-FEB-2008 12:26
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/06Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: EST
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.137	8.228	-0.091	95	1779728			100.00- 100.00	100.00
8.137	8.228	-0.091	50	339425			15.00- 40.00	19.07
8.137	8.228	-0.091	75	907414			30.00- 60.00	50.99
8.137	8.228	-0.091	96	114946			5.00- 9.00	6.46
8.137	8.228	-0.091	173	10246			0.00- 2.00	0.76
8.137	8.228	-0.091	174	1351956			50.00- 100.00	75.96
8.137	8.228	-0.091	175	95866			5.00- 9.00	7.09
8.137	8.228	-0.091	176	1308292			95.00- 101.00	96.77
8.137	8.228	-0.091	177	83826			5.00- 9.00	6.41

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

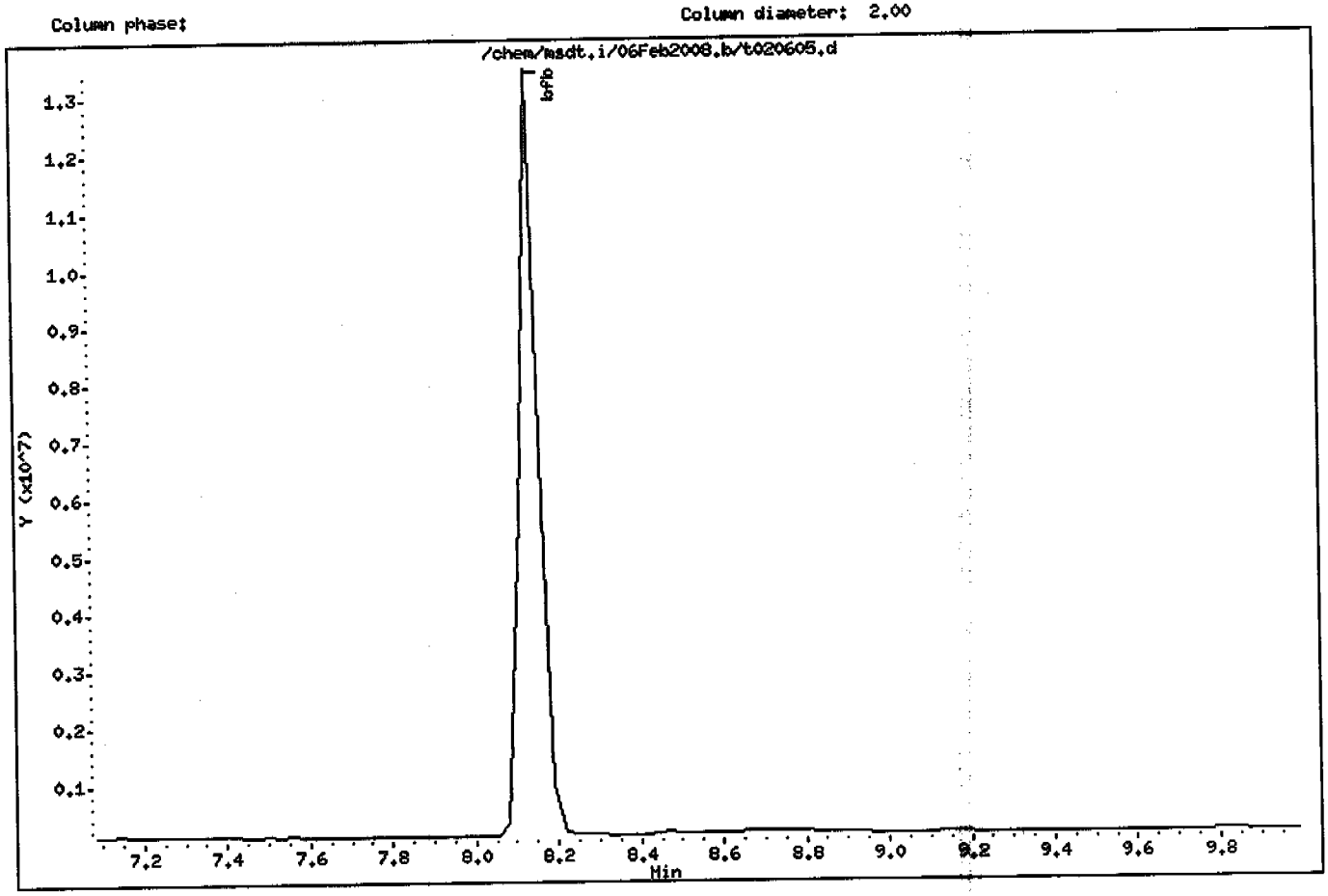
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

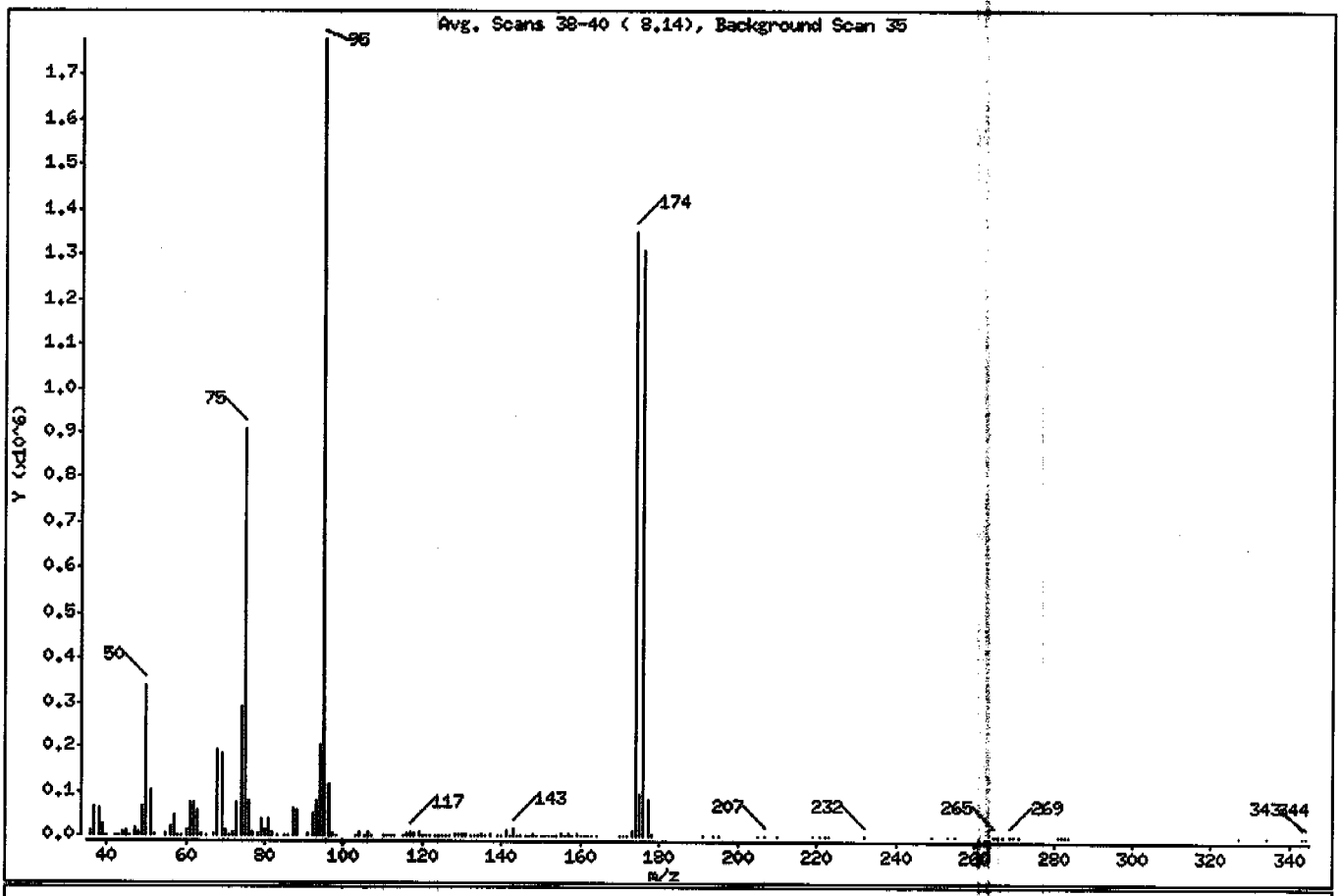
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.07
75	30.00 - 60.00% of mass 95	50.99
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.58 (0.76)
174	50.00 - 100.00% of mass 95	75.96
176	5.00 - 9.00% of mass 174	5.39 (7.09)
176	95.00 - 101.00% of mass 174	73.61 (96.77)
177	5.00 - 9.00% of mass 176	4.71 (6.41)

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8.14), Background Scan 35

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11868	78.00	4902	126.00	750	170.00	[illegible]
37.00	67456	79.00	35568	127.00	256	171.00	[illegible]
38.00	61864	80.00	11217	128.00	5303	172.00	[illegible]
39.00	24408	81.00	38600	129.00	2849	173.00	10[illegible]
40.00	809	82.00	7818	130.00	5374	174.00	1351[illegible]
42.00	116	83.00	1089	131.00	2614	175.00	98[illegible]
43.00	208	85.00	368	132.00	426	176.00	1308[illegible]
44.00	6973	86.00	1391	133.00	378	177.00	83[illegible]
45.00	14172	87.00	61776	134.00	371	178.00	28[illegible]
46.00	678	88.00	57896	135.00	2350	191.00	1[illegible]
47.00	14753	91.00	5052	136.00	674	194.00	[illegible]
48.00	8336	92.00	48008	137.00	2663	195.00	[illegible]
49.00	65200	93.00	76000	139.00	471	205.00	[illegible]
50.00	339392	94.00	203584	140.00	1013	207.00	1[illegible]
51.00	101208	95.00	1779712	141.00	14090	210.00	[illegible]
52.00	4346	96.00	114944	142.00	1551	219.00	[illegible]
55.00	3726	97.00	3201	143.00	14923	221.00	[illegible]
56.00	22448	98.00	120	144.00	1084	222.00	[illegible]
57.00	46672	103.00	848	145.00	1323	223.00	[illegible]
58.00	1907	104.00	6301	146.00	1960	232.00	[illegible]
59.00	141	105.00	1991	147.00	922	249.00	[illegible]
60.00	13906	106.00	6238	148.00	3718	253.00	[illegible]
61.00	74088	107.00	1653	149.00	1138	255.00	[illegible]
62.00	75568	110.00	675	150.00	1852	265.00	[illegible]
63.00	59016	111.00	1074	151.00	180	266.00	[illegible]
64.00	5017	112.00	907	152.00	749	267.00	[illegible]
65.00	653	113.00	1008	153.00	1310	269.00	[illegible]
67.00	4121	115.00	1360	154.00	1010	270.00	[illegible]
68.00	191296	116.00	5195	155.00	3899	271.00	[illegible]
69.00	186112	117.00	9431	156.00	765	281.00	[illegible]
70.00	13146	118.00	5275	157.00	2711	282.00	[illegible]
71.00	775	119.00	7182	158.00	303	283.00	[illegible]
72.00	8396	120.00	494	159.00	2153	284.00	[illegible]
73.00	72864	121.00	110	160.00	132	327.00	[illegible]
74.00	290560	122.00	399	161.00	2043	334.00	[illegible]

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8,14), Background Scan 35

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	907392	123.00	589	162.00	100	343.00	53
76.00	77416	124.00	1026	163.00	110	344.00	109
77.00	8505	125.00	679	164.00	137		

Air Toxics Ltd.

Data file : /chem/msdt.i/07Feb2008.b/t020701.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 07-FEB-2008 09:18
Operator : sjr
Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/07Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.110	8.228	-0.118	95	1992852			100.00- 100.00	100.00
8.110	8.228	-0.118	50	375252			15.00- 40.00	18.83
8.110	8.228	-0.118	75	1012006			30.00- 60.00	50.78
8.110	8.228	-0.118	96	126643			5.00- 9.00	6.35
8.110	8.228	-0.118	173	11883			0.00- 2.00	0.80
8.110	8.228	-0.118	174	1477051			50.00- 100.00	74.12
8.110	8.228	-0.118	175	107416			5.00- 9.00	7.27
8.110	8.228	-0.118	176	1426273			95.00- 101.00	96.56
8.110	8.228	-0.118	177	92340			5.00- 9.00	6.47

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

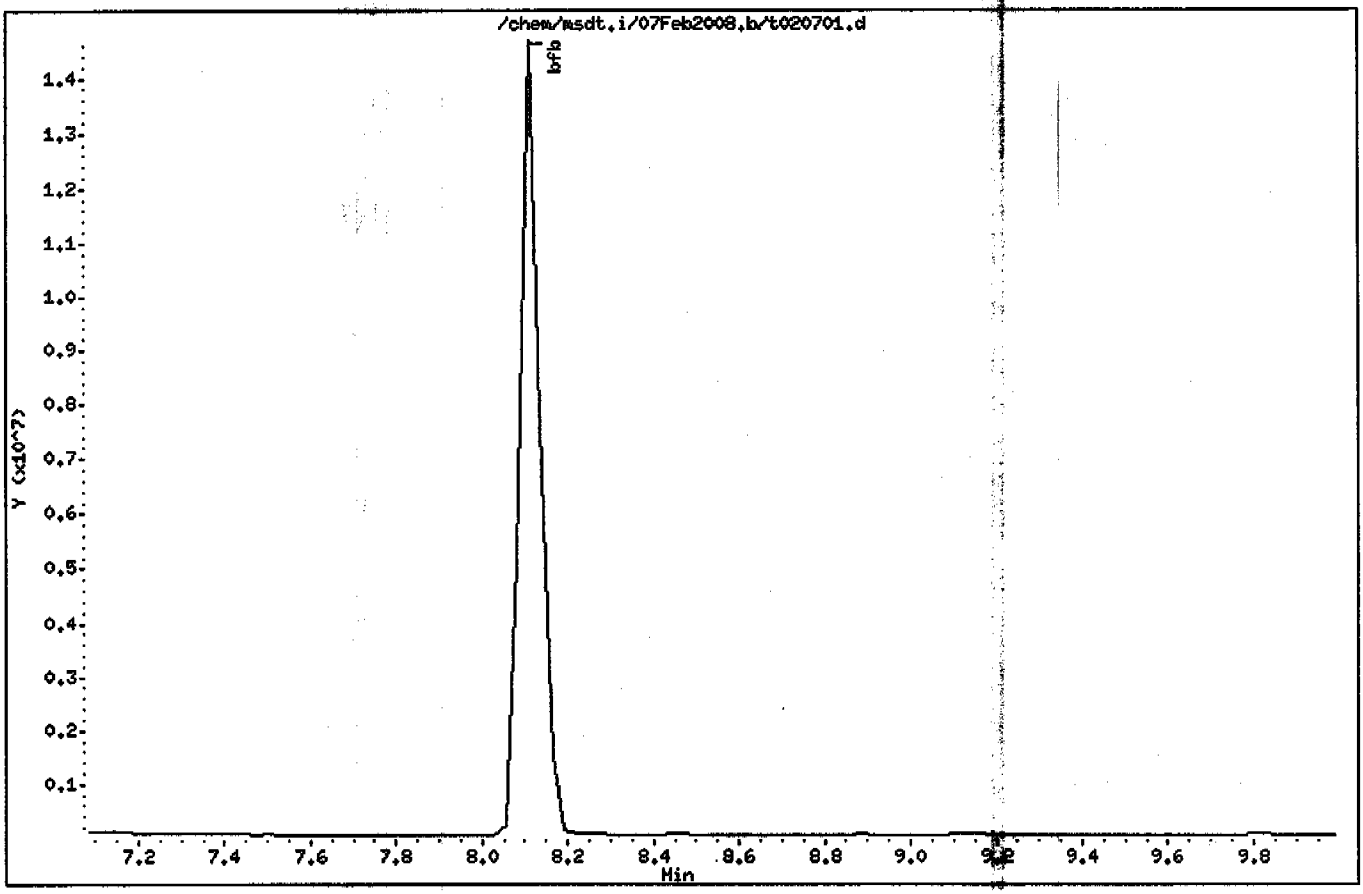
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

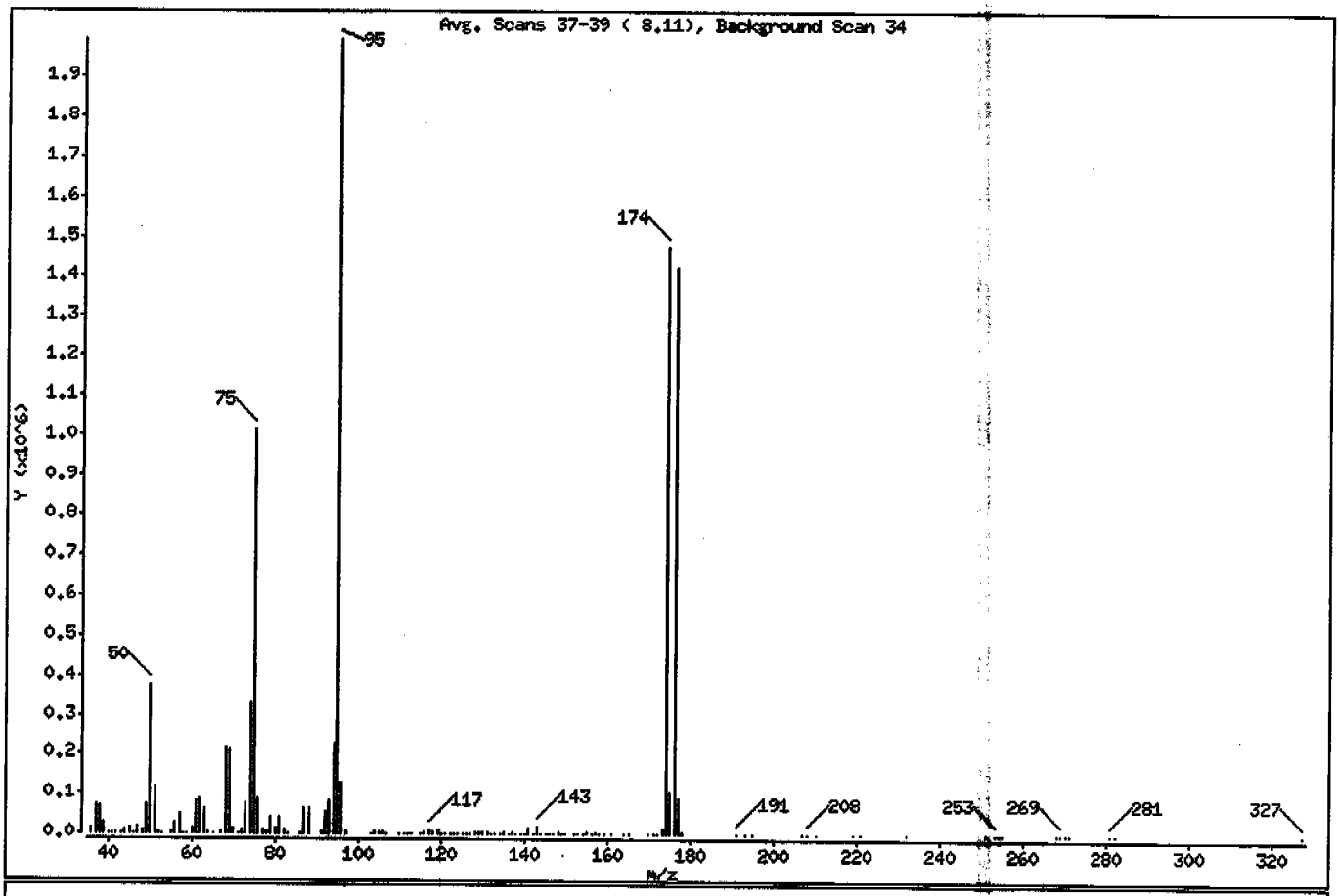
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.83
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.35
173	Less than 2.00% of mass 174	0.60 (0.80)
174	50.00 - 100.00% of mass 95	74.12
175	5.00 - 9.00% of mass 174	5.39 (7.27)
176	95.00 - 101.00% of mass 174	71.57 (96.56)
177	5.00 - 9.00% of mass 176	4.63 (6.47)

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12590	74.00	328320	122.00	327	159.00	2819
37.00	74864	75.00	1011968	123.00	458	161.00	1796
38.00	68272	76.00	86624	124.00	864	164.00	400
39.00	27184	77.00	9661	125.00	646	165.00	330
40.00	898	78.00	5581	126.00	450	170.00	324
41.00	146	79.00	41696	127.00	490	171.00	314
42.00	52	80.00	13412	128.00	5690	172.00	1
43.00	354	81.00	42840	129.00	3168	173.00	11
44.00	7813	82.00	9164	130.00	6014	174.00	1476
45.00	15073	83.00	949	131.00	2682	175.00	107
46.00	1296	86.00	1438	132.00	366	176.00	1426
47.00	17736	87.00	66264	133.00	117	177.00	92
48.00	9775	88.00	62928	134.00	619	178.00	2
49.00	72104	91.00	5391	135.00	2471	191.00	3
50.00	375232	92.00	53016	136.00	656	193.00	9
51.00	113264	93.00	82608	137.00	2437	196.00	1
52.00	4548	94.00	224704	138.00	122	207.00	7
53.00	189	95.00	1992704	139.00	626	208.00	5
55.00	4474	96.00	126640	140.00	1092	210.00	1
56.00	25416	97.00	3779	141.00	15389	219.00	2
57.00	50472	103.00	578	142.00	1643	221.00	2
58.00	1976	104.00	6737	143.00	16333	232.00	7
59.00	71	105.00	2463	144.00	980	251.00	1
60.00	15410	106.00	6556	145.00	1475	253.00	2
61.00	82160	107.00	2074	146.00	2283	254.00	1
62.00	85144	110.00	909	147.00	1251	255.00	1
63.00	65960	111.00	1186	148.00	4141	268.00	1
64.00	5791	112.00	905	149.00	912	269.00	3
65.00	857	113.00	1014	150.00	1708	270.00	1
67.00	4448	115.00	1419	152.00	888	271.00	1
68.00	213696	116.00	5788	153.00	1322	281.00	8
69.00	209280	117.00	9607	154.00	1107	282.00	2
70.00	14643	118.00	5909	155.00	4174	327.00	1
71.00	664	119.00	8235	156.00	709		
72.00	9006	120.00	397	157.00	2884		

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-66;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	79208	121.00	106	158.00	325		

Air Toxics Ltd.

Data file : /chem/msdt.i/21Feb2008.b/t022101.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 21-FEB-2008 08:30
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/21Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.082	8.228	-0.146	95	1820880			100.00- 100.00	100.00
8.082	8.228	-0.146	50	350549			15.00- 40.00	19.25
8.082	8.228	-0.146	75	924575			30.00- 60.00	50.78
8.082	8.228	-0.146	96	117792			5.00- 9.00	6.47
8.082	8.228	-0.146	173	9781			0.00- 2.00	0.76
8.082	8.228	-0.146	174	1294506			50.00- 100.00	71.09
8.082	8.228	-0.146	175	93327			5.00- 9.00	7.21
8.082	8.228	-0.146	176	1244707			95.00- 101.00	96.15
8.082	8.228	-0.146	177	79913			5.00- 9.00	6.42

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

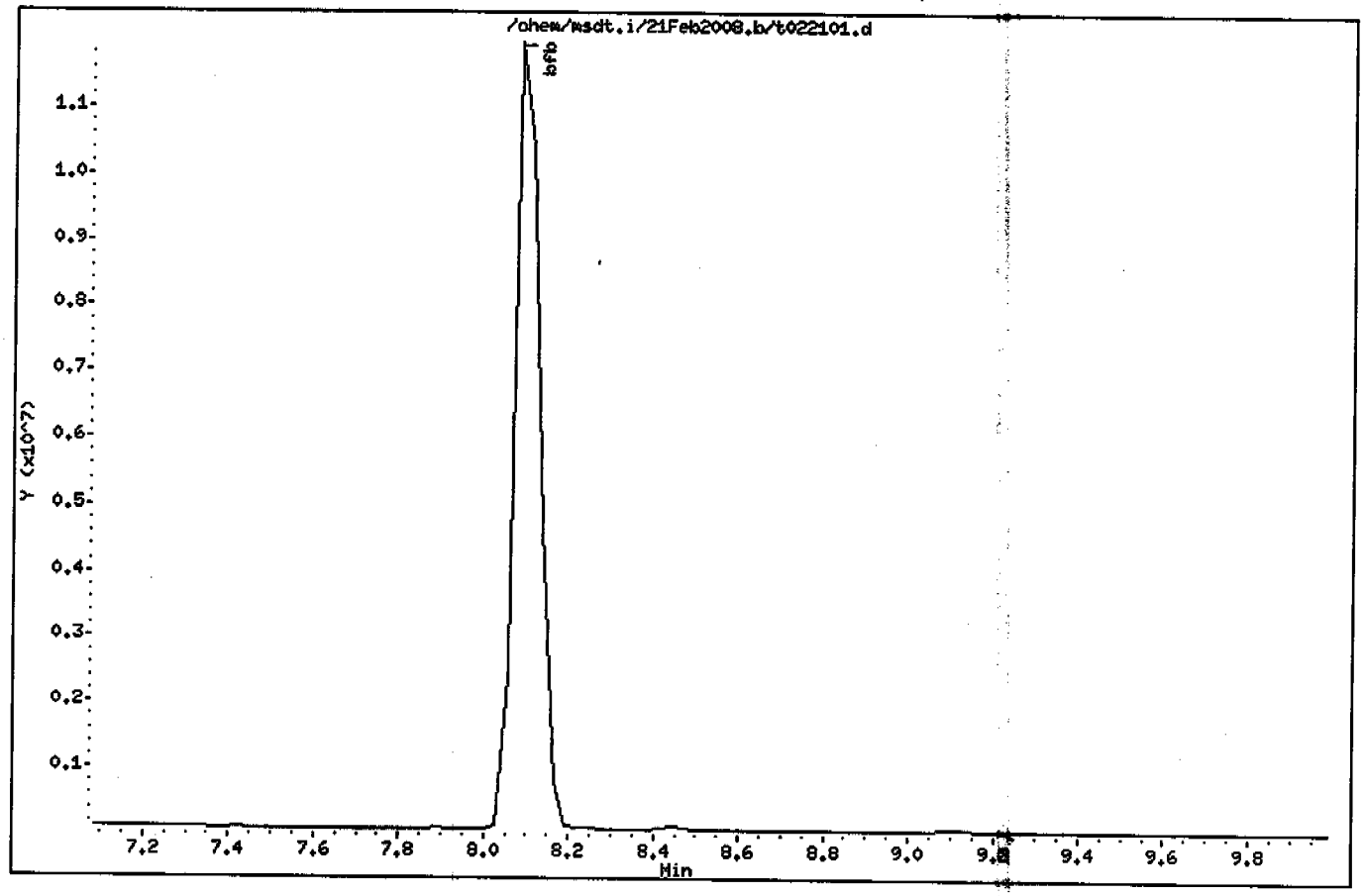
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

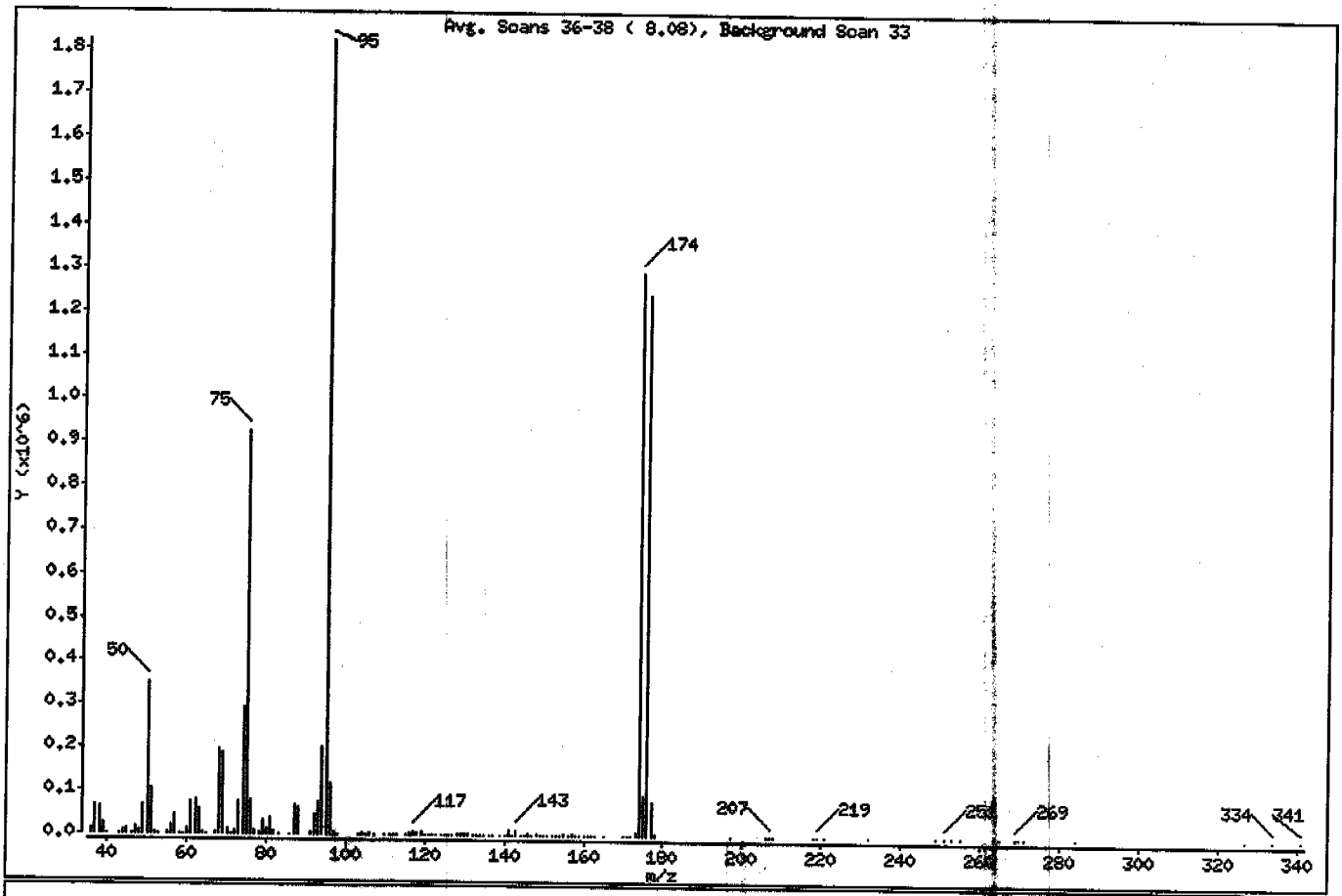
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.26
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.47
173	Less than 2.00% of mass 174	0.54 (0.76)
174	50.00 - 100.00% of mass 95	71.09
175	5.00 - 9.00% of mass 174	5.13 (7.21)
176	95.00 - 101.00% of mass 174	68.36 (96.15)
177	5.00 - 9.00% of mass 176	4.39 (6.42)

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 96.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12312	76.00	78792	123.00	414	160.00	108
37.00	69032	77.00	9068	124.00	775	161.00	1559
38.00	64704	78.00	5285	125.00	617	162.00	105
39.00	26984	79.00	34864	126.00	834	163.00	116
40.00	577	80.00	11065	127.00	249	165.00	27
43.00	373	81.00	35768	128.00	5066	170.00	308
44.00	7153	82.00	7962	129.00	2566	171.00	591
45.00	14309	83.00	752	130.00	5090	172.00	781
46.00	766	86.00	1306	131.00	2175	173.00	9781
47.00	16656	87.00	66488	132.00	329	174.00	1294386
48.00	8666	88.00	61120	133.00	29	175.00	93220
49.00	65160	91.00	5107	134.00	338	176.00	1244672
50.00	350528	92.00	47664	135.00	1768	177.00	79912
51.00	104888	93.00	75816	136.00	587	178.00	2496
52.00	4313	94.00	201344	137.00	2046	197.00	111
53.00	298	95.00	1820672	139.00	434	206.00	112
55.00	3609	96.00	117792	140.00	817	207.00	1485
56.00	22192	97.00	2776	141.00	11673	208.00	63
57.00	45784	98.00	128	142.00	1444	218.00	114
58.00	1883	103.00	395	143.00	12062	219.00	298
59.00	189	104.00	5835	144.00	764	221.00	63
60.00	14519	105.00	2027	145.00	1149	232.00	9
61.00	75712	106.00	5397	146.00	2179	249.00	199
62.00	77544	107.00	1801	147.00	982	251.00	394
63.00	58962	110.00	649	148.00	3247	253.00	81
64.00	5084	111.00	1031	149.00	1040	255.00	190
65.00	915	112.00	581	150.00	1486	265.00	63
67.00	4190	113.00	895	151.00	376	269.00	189
68.00	194688	115.00	1247	152.00	798	270.00	86
69.00	139888	116.00	4613	153.00	1088	271.00	14
70.00	13410	117.00	8446	154.00	965	284.00	104
71.00	482	118.00	4706	155.00	3563	327.00	45
72.00	8310	119.00	7194	156.00	626	334.00	46
73.00	74384	120.00	307	157.00	2589	341.00	142
74.00	294912	121.00	269	158.00	152		

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	924544	122.00	498	159.00	1646		

Shipping/ Receiving Documents

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0802283
# of pages (Including Cover): 1

2/29/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

Wednesday, February 13, 2008

REQUEST NUMBER: 08-623

LOS ALAMOS
NATIONAL LABORATORY

0802283

0302

ATTN: Lisa Arganto
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-623
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/13/2008
TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

CUSTODY SEAL INTACT?
Y N NONE TEMP

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPATO15	01A	1	MD21-08-10504	GAS	2/13/2008		
		02A	1	MD21-08-10505	GAS	2/13/2008		
		03A	1	MD21-08-10506	GAS	2/13/2008		
		04A	1	MD21-08-10507	GAS	2/13/2008		
		05A	1	MD21-08-10508	GAS	2/13/2008		

Final Page of REQUEST NUMBER 08-623

Wednesday, February 13, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-623C

REQUEST NUMBER: 08-623

LOS ALAMOS
NATIONAL LABORATORY

080228

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/14/2008
TURNAROUND REQD: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10508	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10507	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10504	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10505	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10506	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]		2/13/08	1400	Monica Gregson	ATL	2/14/08	900
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: Date Time Remarks:

Printed Name Signature

Fed Ex

CUSTODY SEAL INTACT?
Y N NONE TEMP NT

7269 7843 7507

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0802283

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: R6

Date Promised: 02/29/08
Date Completed: 2/28/08
Date Received: 2/14/08
PO#: 47247-001-07
Project#: 08-623

Total $: $ 1,500.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-10504	Modified TO-15	2/13/2008	6.0 "Hg	$205.00
02A	MD21-08-10505	Modified TO-15	2/13/2008	5.5 "Hg	$205.00
03A	MD21-08-10506	Modified TO-15	2/13/2008	5.5 "Hg	$205.00
04A	MD21-08-10507	Modified TO-15	2/13/2008	6.5 "Hg	$205.00
05A	MD21-08-10508	Modified TO-15	2/13/2008	6.0 "Hg	$205.00
06A	Lab Blank	Modified TO-15	NA	NA	$0.00
07A	CCV	Modified TO-15	NA	NA	$0.00
08A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (5) @ $60.00 each., Shipment 57382	$300.00
CVP (5) @ $20.00 each.	$100.00
Client Specific EDD (5) @ $5.00 each.	$25.00
eCVP (5) @ $10.00 each.	$50.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.38	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.18	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.34	9.17	11.02
25.0	8.14	10.08	12.12
25.5	9.18	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.81	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.28	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.33	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.12	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.37	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0802283

A	R	T	M	Q	
☑	☐	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☐	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
NA	☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
☐	☑	☑	☑	☐	Corrective Action issued - #
☐	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — *CIRCLE (YES / NO)*

☑	☐	☐	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	Hold time is met for all samples
	☐	☐	☐	Appropriate data qualifier flags are applied
	☐	☐	☐	Manual integrations for samples and QC are properly documented
☑	☐	☐	☐	Samples analyzed within the project or method specific clock
	☐	☐		Retention times have been verified
☑	☐	☐	☐	Appropriate ICAL(s) included
	☐	☐	☑	At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐	☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑	☐		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐		Spectra verified - documentation of spectral defense included (Section 9A of eCVP pkg)
	☑	☑		TICs resemble reference spectra
	☑	☐		TICs between duplicate samples are consistent
NA	☐	☐	☑	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☐	☑		Special units for all samples in the final report are correctly calculated
	☐	☑		Manually entered results checked (i.e. special CCV compounds)
	☐	☑		TPH/NMOC (verify calculations and correct reference compound used)
	☑			Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☑			Samples pressurized w/ appropriate gas (N or He) ☐ Tedlar Bag only
☑	☑			Final pressure consistent with canister size (6L vs. 1L)
☑	☑			Verify receipt pressures against logbook and Target
☑	☑			Verify canister ID #'s
	☑	☑		Extra printed copies are provided per client profile
	☑	☐		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☑	☑	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: MTBE 38%, 4M2P 32% in ICAL. 8 outlier in CCV & LCS. CCV from multiple BKs.

M/Q:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
2/22/08	R: NL 2/27/08.	2/28/08	
	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 03/29/05

Friday, February 08, 2008

REQUEST NUMBER: 08-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-605
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/8/2008
TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10518	GAS	2/6/2008		
		1	MD21-08-10519	GAS	2/8/2008		
		1	MD21-08-10520	GAS	2/6/2008		
		1	MD21-08-10521	GAS	2/6/2008		
		1	MD21-08-10522	GAS	2/8/2008		
		1	MD21-08-10524	GAS	2/6/2008		

Final Page of REQUEST NUMBER 08-605

Friday, February 08, 2008

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-605C
REQUEST NUMBER: 08-605

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10518	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10520	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10522	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10519	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10524	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10521	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

2/8/08 3:00

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10522

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/8/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		10:42	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08; Summa collected 2/8/08 10:42

LOCATION DESC:

Port #6

FIELD SCREENING/MEASUREMENT RESULTS:

summa Canister #

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	13:23	(Printed Name)	2/8/08
(Signature)	2/8/08	(Signature)	1:23
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10519

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/8/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		12:34	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** Vertical **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08 – 2/7/08; summa collected 2/8/08

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

Summa canister # 33943

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) ~~D. Stevens~~	13:23	(Printed Name)	2/8/08
(Signature)	2/8/08	(Signature)	1:23
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10524

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1555	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Port # 1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of MD 21-08-10518

SAMPLE COMMENTS:

Duplicate from Port #1, Tritium column collected 2/6/08, Summa collected 2/8/08

LOCATION DESC:

12:42

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # R4

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	13:23	(Printed Name)	2/8/08
(Signature)	2/8/08	(Signature)	1:23
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10520

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1550	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium Column collected; summa collected 2/8/08 12:25

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # SC416

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	13:23	(Printed Name)	2/8/08
(Signature)	2/8/08	(Signature)	1:23
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10521

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1600	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:	Port #5	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08, Summa collected 2/8/08 12:17

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canist # 9945

COLLECTED BY (PRINT) Brian Stump **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Brian Stump (Signature)	**Date/Time** 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10518

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1555	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08 – 2/7/08, Summa collected 2/8/08 12:41

LOCATION DESC:

Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # 33942

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 18:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

DATA VALIDATION COVER SHEET

5119-1 Data Validation Cover Sheet	Records Use only Los Alamos

Section I.

REQUEST NUMBER: 08-605 VALIDATION DATE: 3/18/08 LAB CODE: ARS

CONTRACT LABORATORY NAME: American Radiation Services, Inc

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☒ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The result for sample MD21-08-10524 was < the MDC and, thus, was qualified U,R5.
2. The result for sample -10519 was > the MDC but ≤3X the 1-sigma TPU and, thus, was qualified U,R11.
3. It should be noted that no MS/MSD or DUP samples were analyzed. However, an LCS and LCSD were analyzed and, thus, no sample data were qualified, based on professional judgment.

Reviewed By: KAS **Level:** I **Date:** 3/18/08

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 3/18/08

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☒	☐	☐	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☒	☐	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☒	☐	☐	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☐	☒	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☐	☒	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☐	☒	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☒	☐	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10518
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-001
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	565.450	127.913	176.378	86.740		pCi/L	ARS-054/EPA 906.0	3/6/08 5:50	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lameignere
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/18/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10520
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-002
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	719.504	137.688	175.541	86.328		pCi/L	ARS-054/EPA 906.0	3/6/08 8:59	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamarque
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/18/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10522
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-003
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1496.792	200.819	176.208	86.656		pCi/L	ARS-054/EPA 906.0	3/6/08 12:09	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoiqne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/18/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10519
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-004
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	YPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R11	264.361	111.308	175.498	86.307		pCi/L	ARS-054/EPA 906.0	3/6/08 15:16	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658 NELAP Certificate # E87558

ETM
3/18/08

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10524
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-005
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	174.430	110.315	179.955	88.499	U	pCi/L	ARS-054/EPA 906.0	3/6/08 18:24	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/18/08

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10521
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-006
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	438.300	120.268	176.113	86.609		pCi/L	ARS-054/EPA 906.0	3/6/08 21:33	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
3/18/08

Friday, February 08, 2008

REQUEST NUMBER: 08-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-605
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/8/2008
TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10518	GAS	2/6/2008		
		1	MD21-08-10519	GAS	2/8/2008		
		1	MD21-08-10520	GAS	2/6/2008		
		1	MD21-08-10521	GAS	2/6/2008		
		1	MD21-08-10522	GAS	2/8/2008		
		1	MD21-08-10524	GAS	2/6/2008		

Final Page of REQUEST NUMBER 08-605

Friday, February 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-605C

REQUEST NUMBER: 08-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10518	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10520	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10522	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10519	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10524	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10521	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		2/8/08	3:00			2-11-08	12:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

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AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-605

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SERVICES, INC.

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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-605

Original COC

Friday, February 08, 2008

REQUEST NUMBER: 08-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-605

Per Agreement Number:126310041

Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/8/2008

TURNAROUND/REPORT DUE: 3/9/2008

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-10518	GAS	2/6/2008		
		1	MD21-08-10519	GAS	2/8/2008		
		1	MD21-08-10520	GAS	2/6/2008		
		1	MD21-08-10521	GAS	2/6/2008		
		1	MD21-08-10522	GAS	2/8/2008		
		1	MD21-08-10524	GAS	2/6/2008		

Final Page of REQUEST NUMBER 08-605

Friday, February 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-605C

REQUEST NUMBER: 08-605

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/9/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10518	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10520	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10522	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10519	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10524	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-10521	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
		2/8/08	3:00			2-11-08	12:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-605

Case Narrative

ARS
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1 (800) 401-4277 • Fax (225) 381-2996

March 9, 2008

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-605
LANL Sample ID: MD21-08-10518, MD21-08-10519, MD21-08-10520, MD21-08-10521,MD21-08-10522,MD21-08-10524

Dear Mr. Greene:

On February 11, 2008, American Radiation Services (ARS) received six Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet quality control parameters for counting equipment were within acceptance criteria and statistical sound detection limits.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

Eugene Mullegan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-605	MD21-08-10518	ARS1-08-00340-001
08-605	MD21-08-10520	ARS1-08-00340-002
08-605	MD21-08-10522	ARS1-08-00340-003
08-605	MD21-08-10519	ARS1-08-00340-004
08-605	MD21-08-10524	ARS1-08-00340-005
08-605	MD21-08-10521	ARS1-08-00340-006

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water"**.

ANALYTICAL RESULTS

The result data that are flagged with "U" indicate that the activity is below the MDC.

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."

Eugene Mulligan — Lab Manager/Technical Director, American Radiation Services — 3-7-08
Signature **Title** **Date**

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SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10518
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-001
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	565.450	127.913	176.378	86.740		pCi/L	ARS-054/EPA 906.0	3/6/08 5:50	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsigue
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10520
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-002
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	719.504	137.688	175.541	86.328		pCi/L	ARS-054/EPA 906.0	3/6/08 8:59	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lanoiqne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10522
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-003
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1496.792	200.819	176.208	86.656		pCi/L	ARS-054/EPA 906.0	3/6/08 12:09	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lavergne
Project Manager Review

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2609 North River Road, Port Allen, Louisiana 70767

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ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10519
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-004
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	264.361	111.308	175.498	86.307		pCi/L	ARS-054/EPA 906.0	3/6/08 15:16	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10524
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-005
Date Received: 2/11/2008
Report Date: 03/07/08 13:11

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	174.430	110.315	179.955	88.499	U	pCi/L	ARS-054/EPA 906.0	3/6/08 18:24	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

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1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-08-00340

Date Received: 2/11/2008

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B08-00446	LCS	H3	912.7972	147.5577	166.2499	1188.1530		pCi/L	ARS-055/EPA 906.0	3/5/08 20:30	BJS	77	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B08-00446	MBL	H3	-23.4233	97.7955	167.6458	NA	U	pCi/L	ARS-055/EPA 906.0	3/5/08 20:30	BJS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B08-00446	LCSD	H3	912.7972	147.5577	891.5689	145.6891		pCi/L	ARS-055/EPA 906.0	3/5/08 20:30	BJS	0.07	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B08-00446	LCSD	H3	912.7972	147.5577	891.5689	145.6891		pCi/L	ARS-055/EPA 906.0	3/5/08 20:30	BJS	0.20	< 3

Lindsay Ramsigne

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

LSC Instrument Data Transfer Report

\\Packard3170\Results\H3 Results\Tritium for Protocol

ARS1-B08-00446 | 9 | 9 | LSC 1

BKG	5		1	BACKGROUND	03/05/08 17:23	6.75	414.24	49.6700	180.00	ARS1-B08-00446		
ARS1-B08-00446-01	5		2	B08-00446-01	03/05/08 20:30	11.78	409.40	49.2700	180.00	ARS1-B08-00446		
ARS1-B08-00446-02	5		3	B08-00446-02	03/05/08 23:36	11.68	411.24	49.4200	180.00	ARS1-B08-00446		
ARS1-B08-00446-03	5		4	B08-00446-03	03/06/08 02:43	6.62	409.86	49.3100	180.00	ARS1-B08-00446		
ARS1-B08-00446-04	5		5	B08-00446-04	03/06/08 05:50	9.69	380.57	45.7900	180.00	ARS1-B08-00446	ARS1-08-00340	1
ARS1-B08-00446-05	5		6	B08-00446-05	03/06/08 08:59	10.51	382.15	46.9300	180.00	ARS1-B08-00446	ARS1-08-00340	1
ARS1-B08-00446-06	5		7	B08-00446-06	03/06/08 12:08	14.53	382.27	46.9400	180.00	ARS1-B08-00446	ARS1-08-00340	1
ARS1-B08-00446-07	5		8	B08-00446-07	03/06/08 15:15	8.13	382.85	46.9900	180.00	ARS1-B08-00446	ARS1-08-00340	1
ARS1-B08-00446-08	5		9	B08-00446-08	03/06/08 18:23	7.64	369.77	45.8000	180.00	ARS1-B08-00446	ARS1-08-00340	1
ARS1-B08-00446-09	5		10	B08-00446-09	03/06/08 21:33	9.03	379.30	46.6700	180.00	ARS1-B08-00446	ARS1-08-00340	1

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.781000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.492700
Sample Aliquot	5.038000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/5/08 8:30 PM
Count Date (t2)	3/5/08 8:30 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	[illegible]	VBA	V/V
ACT	912.797170	912.797170	OK
CU	114.126701	114.126701	OK
TPU	147.557700	147.557700	OK
MDA	166.249927	166.249927	OK
DL	81.758893	81.758893	OK
Net Count Rate	5.030000	5.030000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005511	0.005511	OK
K MDA	0.991896	0.991896	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-01
Analysis Code	
SDG	ARS1-08-00340
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	MB QC Sample
Instr File Name	84
Instr Detector	P-[illegible]S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: IML Date: 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.678000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.494200
Sample Aliquot	5.037000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/5/08 11:37 PM
Count Date (t2)	3/5/08 11:37 PM
Activity Units = pCi --- UCP =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	891.568869	891.568869	OK
CU	113.486196	113.486196	OK
TPU	145.689084	145.689084	OK
MDA	165.778229	165.778229	OK
DL	81.526920	81.526920	OK
Net Count Rate	4.927000	4.927000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005526	0.005526	OK
K MDA	0.994718	0.994718	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-02
Analysis Code	
SDG	ARS1-08-00340
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	P-[illegible]S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UNL Date: 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.623000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.493100
Sample Aliquot	4.992000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	3/6/08 2:44 AM
Count Date (t2)	3/6/08 2:44 AM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Exact	VBA	V/V
ACT	-23.423264	-23.423264	OK
CU	97.766018	97.766018	OK
TPU	97.795475	97.795475	OK
MDA	167.645773	167.645773	OK
DL	82.445347	82.445347	OK
Net Count Rate	-0.128000	-0.128000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.005465	0.005465	OK
K MDA	0.983637	0.983637	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-03
Analysis Code	
SDG	ARS1-08-00340
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	MB QC Sample
Instr File Name	84
Instr Detector	P-6-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMC Date: 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	9.688000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.467900
Sample Aliquot	5.021000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/8/08 1:00 PM
Count Date (t2)	3/6/08 5:50 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Error	VBA	V/V
ACT	**565.449714**	**565.449714**	**OK**
CU	**114.037466**	**114.037466**	**OK**
TPU	**127.912711**	**127.912711**	**OK**
MDA	**176.378321**	**176.378321**	**OK**
DL	**86.739865**	**86.739865**	**OK**
Net Count Rate	**2.937000**	**2.937000**	**OK**
D t 1 (t2 - t1)	**26.701389**	**26.701389**	**OK**
DF	**0.995895**	**0.995895**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.005194**	**0.005194**	**OK**
K MDA	**0.934937**	**0.934937**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-04
Analysis Code	LSC-A-001
SDG	ARS1-08-00340
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	NM01-08-10518
Instr File Name	84
Instr Detector	PSS-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML **Date:** 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.506000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.469300
Sample Aliquot	5.030000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/8/08 1:00 PM
Count Date (t2)	3/6/08 8:59 AM
Activity Units = pCi --- uCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	719.504462	719.504462	OK
CU	116.285622	116.285622	OK
TPU	137.687770	137.687770	OK
MDA	175.541058	175.541058	OK
DL	86.328114	86.328114	OK
Net Count Rate	3.755000	3.755000	OK
D t 1 (t2 - t1)	26.832639	26.832639	OK
DF	0.995875	0.995875	OK
Sys Err	0.052280	0.052280	OK
K	0.005219	0.005219	OK
K MDA	0.939397	0.939397	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-05
Analysis Code	LSC-A-001
SDG	ARS1-08-00340
Fraction	002
Run Number	1
Client	LANL Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MAS1-08-10520
Instr File Name	84
Instr Detector	PACKARD-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	14.533000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.469400
Sample Aliquot	5.010000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/8/08 1:00 PM
Count Date (t2)	3/6/08 12:09 PM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	[illegible]	VBA	V/V
ACT	1496.791581	1496.791581	OK
CU	129.633292	129.633292	OK
TPU	200.818959	200.818959	OK
MDA	176.207856	176.207856	OK
DL	86.656034	86.656034	OK
Net Count Rate	7.782000	7.782000	OK
D t 1 (t2 - t1)	26.964583	26.964583	OK
DF	0.995855	0.995855	OK
Sys Err	0.052280	0.052280	OK
K	0.005199	0.005199	OK
K MDA	0.935842	0.935842	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-06
Analysis Code	LSC-A-001
SDG	ARS1-08-00340
Fraction	003
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MS21-08-10522
Instr File Name	84
Instr Detector	PACKS-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	8.131000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.469900
Sample Aliquot	5.025000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/8/08 1:00 PM
Count Date (t2)	3/6/08 3:16 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	**264.360874**	**264.360874**	**OK**
CU	**107.961413**	**107.961413**	**OK**
TPU	**111.307946**	**111.307946**	**OK**
MDA	**175.498438**	**175.498438**	**OK**
DL	**86.307154**	**86.307154**	**OK**
Net Count Rate	**1.380000**	**1.380000**	**OK**
D t 1 (t2 - t1)	**27.094444**	**27.094444**	**OK**
DF	**0.995835**	**0.995835**	**OK**
Sys Err	**0.052280**	**0.052280**	**OK**
K	**0.005220**	**0.005220**	**OK**
K MDA	**0.939625**	**0.939625**	**OK**

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-07
Analysis Code	LSC-A-001
SDG	ARS1-08-00340
Fraction	004
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	M1-08-10519
Instr File Name	84
Instr Detector	PRC-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML **Date:** 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.639000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.458000
Sample Aliquot	5.028000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/8/08 4:00 PM
Count Date (t2)	3/6/08 6:24 PM
Activity Units = pCi -- DCF =	22.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.900000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.200000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	174.429749	174.429749	OK
CU	108.857362	108.857362	OK
TPU	110.314948	110.314948	OK
MDA	179.954517	179.954517	OK
DL	88.498578	88.498578	OK
Net Count Rate	0.888000	0.888000	OK
D t 1 (t2 - t1)	27.225000	27.225000	OK
DF	0.995815	0.995815	OK
Sys Err	0.052280	0.052280	OK
K	0.005091	0.005091	OK
K MDA	0.916357	0.916357	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-08
Analysis Code	LSC-A-001
SDG	ARS1-08-00340
Fraction	005
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	LANL-08-10524
Instr File Name	84
Instr Detector	PACKARD-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UNL Date: 3-7-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	9.031000
Sample Count Mins	180.000000
BKG Count Rate	6.751000
BKG Count Mins	180.000000
Instrument Efficiency	0.466700
Sample Aliquot	5.042000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	2/8/08 1:00 PM
Count Date (t2)	3/6/08 9:33 PM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Base	VBA	V/V
ACT	438.299851	438.299851	OK
CU	111.567401	111.567401	OK
TPU	120.267852	120.267852	OK
MDA	176.113090	176.113090	OK
DL	86.609429	86.609429	OK
Net Count Rate	2.280000	2.280000	OK
D t 1 (t2 - t1)	27.356250	27.356250	OK
DF	0.995795	0.995795	OK
Sys Err	0.052280	0.052280	OK
K	0.005202	0.005202	OK
K MDA	0.936345	0.936345	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-00446
Batch ID	ARS1-B08-00446-09
Analysis Code	LSC-A-001
SDG	ARS1-08-00340
Fraction	006
Run Number	1
Client	LLNL Lawrence Livermore National Laboratory
Client Profile	Keith Greene
Client ID	MLLNL-08-10521
Instr File Name	84
Instr Detector	PE 3-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UML Date: 3-7-08

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080305_1718
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080305_1718\20080305_1718.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080305_1718\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20080305_1718\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.lsa

Count Conditions-

Nuclide: H-3 Normal
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set:
  Low Energy: H-3 Normal
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nuc1 In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	6.751	13.59	414.24	49.67	180.00	3/5/2008	5:23:41 PM	
5	2	B08-00446-01	11.781	23.91	409.40	49.27	180.00	3/5/2008	8:30:21 PM	
5	3	B08-00446-02	11.678	23.63	411.24	49.42	180.00	3/5/2008	11:36:55 PM	
5	4	B08-00446-03	6.623	13.43	409.86	49.31	180.00	3/6/2008	2:43:34 AM	
5	5	B08-00446-04	9.688	20.71	380.57	46.79	180.00	3/6/2008	5:50:08 AM	
5	6	B08-00446-05	10.506	22.39	382.15	46.93	180.00	3/6/2008	8:59:22 AM	
5	7	B08-00446-06	14.533	30.96	382.27	46.94	180.00	3/6/2008	12:08:30 PM	
5	8	B08-00446-07	8.131	17.30	382.85	46.99	180.00	3/6/2008	3:15:42 PM	
5	9	B08-00446-08	7.639	16.68	369.77	45.80	180.00	3/6/2008	6:23:50 PM	
5	10	B08-00446-09	9.031	19.35	379.30	46.67	180.00	3/6/2008	9:33:09 PM	

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
2-28-08	10:23	S-0147-V5	N/A	1140	
3-5-08	16:03	SNC	QA	QA	
"	16:48	Background	BOS-00446	1718	
"	"	BOS-00446-01	"	"	
"	"	BOS-00446-02	"	"	
"	"	BOS-00446-03	"	"	
"	"	BOS-00446-04	"	"	
"	"	BOS-00446-05	"	"	
"	"	BOS-00446-06	"	"	
"	"	BOS-00446-07	"	"	
"	"	BOS-00446-08	"	"	
"	"	BOS-00446-09	"	"	
			NA 3-708		

Reviewed By: _____ Date: 3-708
Initials

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Laboratory Records

Analysis Batch Report

Analysis Batch ID **ARS1-B08-00446**

				Method	**ARS-054**			**Matrix**	**AQ**		
				Description	**TRITIUM IN WATER**						
ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3							
ARS1-B08-00446-01	LCS	B-04542									
ARS1-B08-00446-02	LCSD	B-04543									
ARS1-B08-00446-03	MBL				SDG	1	FR	Client ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-B08-00446-04	TRG				**ARS1-08-00340**	1	001	MD21-08-10518	03/09/08	03/06/08	LSC-A-001
ARS1-B08-00446-05	TRG				**ARS1-08-00340**	1	002	MD21-08-10520	03/09/08	03/06/08	LSC-A-001
ARS1-B08-00446-06	TRG				**ARS1-08-00340**	1	003	MD21-08-10522	03/09/08	03/06/08	LSC-A-001
ARS1-B08-00446-07	TRG				**ARS1-08-00340**	1	004	MD21-08-10519	03/09/08	03/06/08	LSC-A-001
ARS1-B08-00446-08	TRG				**ARS1-08-00340**	1	005	MD21-08-10524	03/09/08	03/06/08	LSC-A-001
ARS1-B08-00446-09	TRG				**ARS1-08-00340**	1	006	MD21-08-10521	03/09/08	03/06/08	LSC-A-001

Expected Value Calculations

LANL

ARS Batch Number: ARS1-B08 - 00446

LCS

CALCULATED EXPECTED VALUE = 1188.153

Range 594.077 - 1782.230

LCSD

CALCULATED EXPECTED VALUE = 1188.153

Range 594.077 - 1782.230

ABatch	ABatchSampleID	Isotope	ClientID	ACT	CU	TPU	DL	MDA	BP_DL	BP_MDA	Sb	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	EFF	ALIQ	UCF	CF	GrossCountRate
ARS1-B08-00446	ARS1-B08-00446-01	H-3	MD21-08-10521	912.7971705	114.1267013	147.5576998	81.75689	166.24993				0.06545	180.00000	0.03751	180.00000	0.49270	5.03800	2.22000	1.96000	11.78100
ARS1-B08-00446	ARS1-B08-00446-02	H-3	MD21-08-10521	891.5688693	113.4861956	145.6890842	81.52692	165.77823				0.06488	180.00000	0.03751	180.00000	0.49420	5.03700	2.22000	1.96000	11.67800
ARS1-B08-00446	ARS1-B08-00446-03	H-3	MD21-08-10521	-23.42326415	97.76601751	97.79547461	82.44535	167.64577				0.03679	180.00000	0.03751	180.00000	0.49310	4.99200	2.22000	1.96000	6.62300
ARS1-B08-00446	ARS1-B08-00446-04	H-3	MD21-08-10518	565.4497143	114.0374662	127.9127107	86.73987	176.37832				0.05382	180.00000	0.03751	180.00000	0.46790	5.02100	2.22000	1.96000	9.68800
ARS1-B08-00446	ARS1-B08-00446-05	H-3	MD21-08-10520	719.504462	116.2856216	137.6877703	86.32811	175.54106				0.05837	180.00000	0.03751	180.00000	0.46930	5.03000	2.22000	1.96000	10.50600
ARS1-B08-00446	ARS1-B08-00446-06	H-3	MD21-08-10522	1496.791581	129.6332918	200.8189593	86.65603	176.20786				0.08074	180.00000	0.03751	180.00000	0.46940	5.01000	2.22000	1.96000	14.53300
ARS1-B08-00446	ARS1-B08-00446-07	H-3	MD21-08-10519	264.3608741	107.9614134	111.3079457	86.30715	175.49844				0.04517	180.00000	0.03751	180.00000	0.46990	5.02500	2.22000	1.96000	8.13100
ARS1-B08-00446	ARS1-B08-00446-08	H-3	MD21-08-10524	174.4297493	108.8573623	110.3149478	88.49858	179.95452				0.04244	180.00000	0.03751	180.00000	0.45800	5.02800	2.22000	1.96000	7.63900
ARS1-B08-00446	ARS1-B08-00446-09	H-3	MD21-08-10521	438.299851	121.5674005	120.2678519	86.60943	176.11309				0.05017	180.00000	0.03751	180.00000	0.46670	5.04200	2.22000	1.96000	9.03100

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3
ARS1-B08-00446	ARS1-B08-00446-01	H-3	MD21-08-10521	6.75100	5.03000							3/7/08 11:51	3/5/08 20:30	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-02	H-3	MD21-08-10521	6.75100	4.92700							3/7/08 11:51	3/5/08 23:37	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-03	H-3	MD21-08-10521	6.75100	-0.12600							3/7/08 11:51	3/6/08 2:44	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-04	H-3	MD21-08-10518	6.75100	2.93700							2/8/08 13:00	3/6/08 5:50	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-05	H-3	MD21-08-10520	6.75100	3.75500							2/8/08 13:00	3/6/08 8:59	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-06	H-3	MD21-08-10522	6.75100	7.78200							2/8/08 13:00	3/6/08 12:09	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-07	H-3	MD21-08-10519	6.75100	1.38000							2/8/08 13:00	3/6/08 15:16	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-08	H-3	MD21-08-10524	6.75100	0.88800							2/8/08 13:00	3/6/08 18:24	4499.80000		
ARS1-B08-00446	ARS1-B08-00446-09	H-3	MD21-08-10521	6.75100	2.28000							2/8/08 13:00	3/6/08 21:33	4499.80000		

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_1	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentkeV
ARS1-B08-00446	ARS1-B08-00446-01	H-3	MD21-08-10521	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00551	0.99190	84	P-5-S-2	
ARS1-B08-00446	ARS1-B08-00446-02	H-3	MD21-08-10521	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00553	0.99472	84	P-5-S-3	
ARS1-B08-00446	ARS1-B08-00446-03	H-3	MD21-08-10521	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00546	0.98364	84	P-5-S-4	
ARS1-B08-00446	ARS1-B08-00446-04	H-3	MD21-08-10518	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	26.70139						0.99590					0.05228	0.00519	0.93494	84	P-5-S-5	
ARS1-B08-00446	ARS1-B08-00446-05	H-3	MD21-08-10520	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	26.83264						0.99588					0.05228	0.00522	0.93940	84	P-5-S-6	
ARS1-B08-00446	ARS1-B08-00446-06	H-3	MD21-08-10522	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	26.96458						0.99586					0.05228	0.00520	0.93584	84	P-5-S-7	
ARS1-B08-00446	ARS1-B08-00446-07	H-3	MD21-08-10519	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	27.09444						0.99584					0.05228	0.00522	0.93962	84	P-5-S-8	
ARS1-B08-00446	ARS1-B08-00446-08	H-3	MD21-08-10524	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	27.22500						0.99582					0.05228	0.00509	0.91636	84	P-5-S-9	
ARS1-B08-00446	ARS1-B08-00446-09	H-3	MD21-08-10521	0.04133	0.02000	0.00000	0.02500	0.00000	0.00000	27.35625						0.99579					0.05228	0.00520	0.93635	84	P-5-S-10	

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B08-00446	ARS1-B08-00446-01	H-3	MD21-08-10521					ARS1-08-00340	1	006		BSTEFFENS	3/7/08 11:50
ARS1-B08-00446	ARS1-B08-00446-02	H-3	MD21-08-10521					ARS1-08-00340	1	006		BSTEFFENS	3/7/08 11:50
ARS1-B08-00446	ARS1-B08-00446-03	H-3	MD21-08-10521					ARS1-08-00340	1	006		BSTEFFENS	3/7/08 11:50
ARS1-B08-00446	ARS1-B08-00446-04	H-3	MD21-08-10518					ARS1-08-00340	1	001	LSC-A-001	BSTEFFENS	3/7/08 11:50
ARS1-B08-00446	ARS1-B08-00446-05	H-3	MD21-08-10520					ARS1-08-00340	1	002	LSC-A-001	BSTEFFENS	3/7/08 11:50
ARS1-B08-00446	ARS1-B08-00446-06	H-3	MD21-08-10522					ARS1-08-00340	1	003	LSC-A-001	BSTEFFENS	3/7/08 11:51
ARS1-B08-00446	ARS1-B08-00446-07	H-3	MD21-08-10519					ARS1-08-00340	1	004	LSC-A-001	BSTEFFENS	3/7/08 11:51
ARS1-B08-00446	ARS1-B08-00446-08	H-3	MD21-08-10524					ARS1-08-00340	1	005	LSC-A-001	BSTEFFENS	3/7/08 11:51
ARS1-B08-00446	ARS1-B08-00446-09	H-3	MD21-08-10521					ARS1-08-00340	1	006	LSC-A-001	BSTEFFENS	3/7/08 11:51

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
267	ARS1-B08-00446	ARS1-B08-00446-01		0	g	5.038	g	BSTEFFENS	3/5/2008
268	ARS1-B08-00446	ARS1-B08-00446-02		0	g	5.037	g	BSTEFFENS	3/5/2008
269	ARS1-B08-00446	ARS1-B08-00446-03		0	g	4.992	g	BSTEFFENS	3/5/2008
270	ARS1-B08-00446	ARS1-B08-00446-04	MD21-08-10518	0	g	5.021	g	BSTEFFENS	3/5/2008
271	ARS1-B08-00446	ARS1-B08-00446-05	MD21-08-10520	0	g	5.03	g	BSTEFFENS	3/5/2008
272	ARS1-B08-00446	ARS1-B08-00446-06	MD21-08-10522	0	g	5.01	g	BSTEFFENS	3/5/2008
273	ARS1-B08-00446	ARS1-B08-00446-07	MD21-08-10519	0	g	5.025	g	BSTEFFENS	3/5/2008
274	ARS1-B08-00446	ARS1-B08-00446-08	MD21-08-10524	0	g	5.028	g	BSTEFFENS	3/5/2008
275	ARS1-B08-00446	ARS1-B08-00446-09	MD21-08-10521	0	g	5.042	g	BSTEFFENS	3/5/2008

American Radiation Services
Baton Rouge Laboratory

LCS Report
Analytical Batch: ARS1-B08-00446

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
4517	B-04542	ARS1-B08-00446	ARS1-B08-00446-01	B-H3	S-0156	H-3	5	1.188168282	0	1	1	BSTEFFENS	3/3/2008
4518	B-04543	ARS1-B08-00446	ARS1-B08-00446-02	B-H3	S-0156	H-3	5	1.188168282	0	1	1	BSTEFFENS	3/3/2008

ARS American Radiation Services, Inc.

Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0001	Am-241	S	06/07/07	06/07/08	OK	03/10/06	5.1937E+01	51.7732	1.579E+05	S-0069		[illegible]
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	115.0245	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	Ra-226	S	05/29/07	05/29/08	OK	02/01/06	6.5015E+01	64.9560	5.840E+05	S-0105		[illegible]
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.0212	5.053E+01	S-0109		
A	S-0023	Pu-238	S	11/02/05	11/02/06	EXP	11/01/05	1.1657E+01	11.4438	3.204E+04	S-0071		S-0023 Entered information from dilution records
A	S-0024	Pu-239	S	04/17/07	04/17/08	OK	10/26/05	1.1412E+01	11.4113	8.807E+06	S-0073		
A	S-0027	Tc-99	SLC	09/01/06	09/01/07	EXP	10/18/05	9.4141E+03	9414.0865	7.710E+07	S-0113		[illegible]
A	S-0028	U-238	S	06/18/07	06/18/08	OK	10/26/05	3.4935E+01	34.9349	1.632E+12	S-0063		
A	S-0032	H-3	SL	04/02/07	04/02/08	OK	03/01/06	3.4431E+03	3075.4812	4.500E+03	S-0031		[illegible]
A	S-0033	Tc-99	SLC	10/18/05	10/18/06	EXP	10/18/05	1.9470E+02	194.6957	7.710E+07	S-0027	04/25/06	S-0033 Working level dilution - Information entered from dilution reco
A	S-0037	Ra-226	SC	02/13/06	02/13/07	EXP	01/03/97	6.4956E+02	646.4251	5.840E+05	S-0104		[illegible]
A	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6543	2.692E+06	S-0067		S-0036 Entered from dilution documentation. Density from certificate use
A	S-0039	Tc-99	SC	08/03/07	08/03/08	OK	03/30/06	1.1146E+04	11146.2694	7.710E+07	S-0114		[illegible]
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.5249	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions -
A	S-0063	U-238	P			Not Ver	08/01/97	2.4200E+02	242.0000	1.632E+12			S-0028 Entered from dilution records on 4/5/2006 RTS
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0016 Information entered on 4/6/2006 RTS Density entered based on [illegible]
A	S-0067	Am-243	PT			Not Ver	10/20/05	3.6240E+01	36.2319	2.692E+06			[illegible]
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records Dilution incorre
A	S-0071	Pu-238	PL			Not Ver	11/15/99	4.1520E+01	38.8846	3.204E+04			[illegible]
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2306	8.807E+06			S-0024 Information entered from dilution records
A	S-0074	Pu-239	SL			Not Ver	10/26/05	1.1412E+01	11.4113	8.807E+06	S-0073		
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	S-0077	U-232	PT			Not Ver	07/01/02	3.6220E+01	36.0996	2.516E+04			S-0025 Information entered from dilution records
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E+12			NIST 4321 - uranium standard for use as total uranium standard)also I
A	S-0103	U-nat	SC	06/18/07	06/18/08	OK	10/26/05	7.0226E+01	70.2265	1.632E+12	S-0102		[illegible]
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8220	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	01/01/93	1.1900E+01	11.8220	5.840E+05			[illegible]
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	371961.1362	4.500E+03			Primary for S-0029 - Information entered from dilution records - 4/18/
A	S-0108	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0109	Sr-89	PLC			Not Ver	01/24/05	3.9414E+05	0.0692	5.053E+01			Activity concentration calculated per certificate information - 2.018E
A	S-0111	H-3	PC			Not Ver	04/01/06	[illegible]	[illegible]	4.500E+03			Primary
A	S-0112	H-3	SC	04/27/07	04/27/08	OK	04/18/06	1.1410E+04	10267.7855	4.500E+03	S-0111		Solution for use as calibration stock standard - Entered from dilution
A	S-0113	Tc-99	PLC			Not Ver	09/01/96	3.2610E+04	32608.7685	7.710E+07			Primary solution
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	S-0115	Cs-137	PL			Not Ver	01/23/95	2.9000E+01	21.4368	1.098E+04			[illegible]
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4338	5.840E+05	S-0105		S-0003 - Information entered from dilution records - 4/19/2006 RTS
A	S-0117	Sr-90	PLCT			Not Ver	07/01/95	4.0100E+03	2946.3274	1.041E+04			[illegible]
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0195	1.098E+04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	04/19/06	04/19/07	EXP	04/03/06	1.1621E+04	11118.7994	[illegible]	S-0118		Solution for use as calibration stock standard.
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9554	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	09/14/07	09/14/08	OK	03/31/06	1.1282E+04	10765.9520	[illegible]	S-0120		Solution for use as calibration stock standard.
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0985	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	04/24/06	04/24/07	EXP	04/03/06	1.1632E+04	11596.3100	1.579E+05	S-0122		Solution for use as calibration stock standard.
A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	03/27/06	1.0413E+04	10412.8335	[illegible]	S-0124		Solution for use as calibration stock standard - Entered from dilution

Standards Report

A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	84929.1098	2.100E+03			Primary Ra-228 Standard
A	S-0127	Ra-228	SL	05/10/06	05/10/07	EXP	05/10/06	1.1274E+04	9057.9962	2.100E+03	S-0126		[illegible]
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0506	7.710E+07	S-0039		Solution diluted per plan and as documented in measurements above exce
A	S-0129	Sr-90	PL			Not Ver	07/01/95	4.0100E+03	2946.3274	1.041E+04			
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	36.2280	2.100E+03	S-0127		Dilution performed as stated above by B Steffens on 5/10/2006. Measure
A	S-0134	Sr-90	SL			Not Ver	09/26/03	4.7747E+02	428.6419	1.041E+04	S-0129		[illegible]
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	52.9659	1.041E+04	S-0134		Original standard ID# was T11c-1/S-0017. Information entered from dilu
A	S-0137	Th-229	PT			Not Ver	12/05/03	1.2294E+05	122690.7390	2.681E+06			Primary Th-229 standard.
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6779	2.681E+06	S-0137		Used as an intermediate standard for creating tracer stock solutions.
A	S-0139	Po-209	P			Not Ver	01/15/94	5.1252E+03	4664.0902	3.726E+04			Primary Po-209 standard.
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5318	3.726E+04	S-0139		
A	S-0141	Ra-226	PC			Not Ver	01/21/93	2.6418E+04	26245.4839	5.840E+05			Primary solution for creating calibration stock
A	S-0142	Ra-226	SC	04/03/07	04/03/08	OK	07/21/06	6.5210E+02	651.6404	5.840E+05	S-0141		Solution for use as calibration stock. Dilution performed as stated ab
A	S-0143	Pb-210	P			Not Ver	07/18/06	7.6400E+00	7.2627	8.130E+03			ARS-WRM-001
A	S-0144	Pb-210	S	10/24/07	10/24/08	OK	07/18/06	1.6961E+01	16.1232	8.130E+03	S-0143		7/18/2006 ARS-WRM-001 20 gamma spectroscopy measurements average act
A	S-0145	Th-229	ST			Not Ver	01/28/05	1.1938E+02	119.3486	2.681E+06	S-0138		[illegible]
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9794	2.681E+06	S-0145		Information gathered from existing dilution records created on 4/28/20
A	S-0147	Tc-99	SC	09/01/06	09/01/07	EXP	08/08/06	2.3201E+02	232.0121	7.710E+07	S-0027		Tc-99 LCS standard. -BJS 9/1/2006
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473081.6324	2.090E+06			Primary C-14 standard. The certified activity in dpm/g was derived by
A	S-0151	I-129	PLC			Not Ver	10/12/06	2.4390E+05	243899.9850	5.750E+09			Primary I-129 standard
A	S-0152	H-3	P	04/02/08	04/02/09	OK	09/03/98	2.0090E+00	1.1774	4.500E+03			Liquid in a 500-ml borosilicate-glass media bottle with teflon-lined s
A	S-0153	C-14	S	[illegible]		Not Ver	10/18/06	1.1834E+04	11834.5791	2.090E+06	S-0148		[illegible]
A	S-0154	C-14	S	03/12/07	03/12/08	OK	10/13/06	1.7245E+02	172.4211	2.090E+06	S-0153		LCS standard for C-14. Originally logged as S-0150. See parent comment
A	S-0155	Ra-226	SC	04/03/07	04/03/08	OK	03/20/07	5.9902E+01	59.8776	5.840E+05	S-0142		[illegible]
A	S-0156	H-3	S	05/18/07	05/18/08	OK	04/27/07	2.7672E+00	2.6377	4.500E+03	S-0032		Normal level tritium LCS standard. Dilution performed as stated above
A	S-0157	Sr-90	P			Not Ver	05/15/07	7.6040E+03	7457.0836	1.041E+04			Primary Sr-90 LCS standard
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	825.6688	2.516E+04			Primary U-232 standard
A	S-0159	Sr-89	PC			Not Ver	05/15/07	1.7538E+04	315.0940	5.053E+01			Primary Sr-89 standard
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4439.3037	1.041E+04	S-0157		Intermediate standard for creating LCS standards. Dilution performed a
A	S-0161	U-232	ST	06/18/07	06/18/08	OK	06/06/07	5.1903E+02	515.1648	2.516E+04	S-0158		[illegible]
A	S-0162	U-232	ST	06/18/07	06/18/08	OK	06/08/07	9.8656E+00	9.7928	2.516E+04	S-0161		Dilution performed as stated above by BSteffens on 6/8/2007. -BJS 6/8/
A	S-0163	Sr-90	S	07/16/07	07/16/08	OK	06/12/07	4.7407E+01	46.5776	1.041E+04	S-0160		[illegible]
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	315.0018	5.053E+01			Primary Sr-89 calibration standard.
A	S-0165	Sr-89	SC	08/10/07	04/18/08	OK	08/08/07	3.2567E+03	190.0761	5.053E+01	S-0164		[illegible]
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6492	2.681E+06	S-0145		Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS
A	S-0168	Pu-242	PT			Not Ver	06/07/94	2.6310E+01	26.3093	1.365E+08			Primary Pu-242 standard
A	S-0169	Pu-242	ST	12/27/07	12/27/08	OK	12/17/07	7.6719E+00	7.6719	1.365E+08	S-0168		Pu-242 tracer stock solution. Dilution performed as stated above by Ka
A	S-0170	Th-230	PL			Not Ver	09/10/07	7.9235E+03	7923.4640	2.753E+07			Primary Th-230 standard.
A	S-0171	Th-229	PT			Not Ver	09/10/07	7.7817E+01	77.8139	2.681E+06			Primary Th-229 standard.
A	S-0172	Th-230	S	02/21/08	02/21/09	OK	02/05/08	4.7041E+03	4704.0851	2.753E+07	S-0170		[illegible]
A	S-0173	Th-230	S	02/21/08	02/21/09	OK	02/05/08	1.2638E+01	12.6383	2.753E+07	S-0172		Th-230 standard for use as LCS stock solution. Dilution performed as s
A	S-0174	H-3	S			Not Ver	02/07/08	4.4669E-01	0.4450	4.500E+03	S-0152		[illegible]
A	S-0175	H-3	S	02/11/08	02/11/09	OK	02/11/08	7.0455E-02	0.0702	4.500E+03	S-0152		Low level tritium LCS solution. Dilution performed as stated above by
A	S-0176	H-3	S	02/20/08	02/20/09	OK	02/20/08	7.0273E-02	0.0701	4.500E+03	S-0152		[illegible]
I	S-0025	Pu-242	ST	04/17/07	04/17/08	OK	10/24/05	7.6328E+00	7.6328	1.365E+08	S-0075	01/09/08	S-0025 Information entered from dilution records
I	S-0026	U-232	ST	06/19/06	06/19/07	EXP	10/26/05	1.0854E+01	10.5998	2.516E+04	S-0077	06/21/07	S-0026 Information entered from dilution records

Standards Report

I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4127	4.500E+03			Tritium in Oil
I	S-0031	H-3	S	10/26/05	10/26/06	EXP	10/19/05	6.0777E+05	531868.9698	4.500E+03	S-0107		[illegible]
I	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4895	2.753E+07	S-0065	02/22/08	Empirical data collected over 2 mos. for S-0036 indicated that the ori
I	S-0130	Sr-90	SL			Not Ver	09/26/03	5.3620E+02	481.3741	1.041E+04	S-0120	05/26/06	[illegible]
I	S-0131	Sr-90	SL			Not Ver	02/02/06	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	
I	S-0133	Sr-90	SL	01/09/06	01/09/07	EXP	06/09/04	5.8400E+01	53.2672	1.041E+04	S-0120	05/26/06	[illegible]
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2036E+01	47.5213	1.041E+04	S-0134	07/17/07	Original standard ID# was T11c-1/S-0017. Dilution information entered
I	S-0149	C-14	SL			Not Ver	10/13/06	5.5533E+04	50543.0490	2.090E+06	S-0148	03/16/07	[illegible]
I	S-0150	C-14	SL			Not Ver	10/13/06	8.6764E+02	867.4984	2.090E+06	S-0149	03/16/07	LCS standard for C-14 in water. Dilution performed as stated above. -B
I	S-0167	Th-229	ST			Not Ver	08/27/07	5.6494E+03	5.6492	2.60E+06	S-0123	08/28/07	[illegible]

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B08-00446
SDG's: ARS1-08-00340

LCS	912.7972	**CSU**	147.5577
LCSD	891.5689	**CSU-D**	145.6891

DER = $\dfrac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\dfrac{21.2283}{103.6805}$ = 0.204747 **< 3**

% RPD= $\dfrac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\dfrac{21.2283}{902.183}$ *100 = 2.352993 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\dfrac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\dfrac{21.2283012}{293.2468}$ 0.072391 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-23.42326	97.79547	167.6458
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

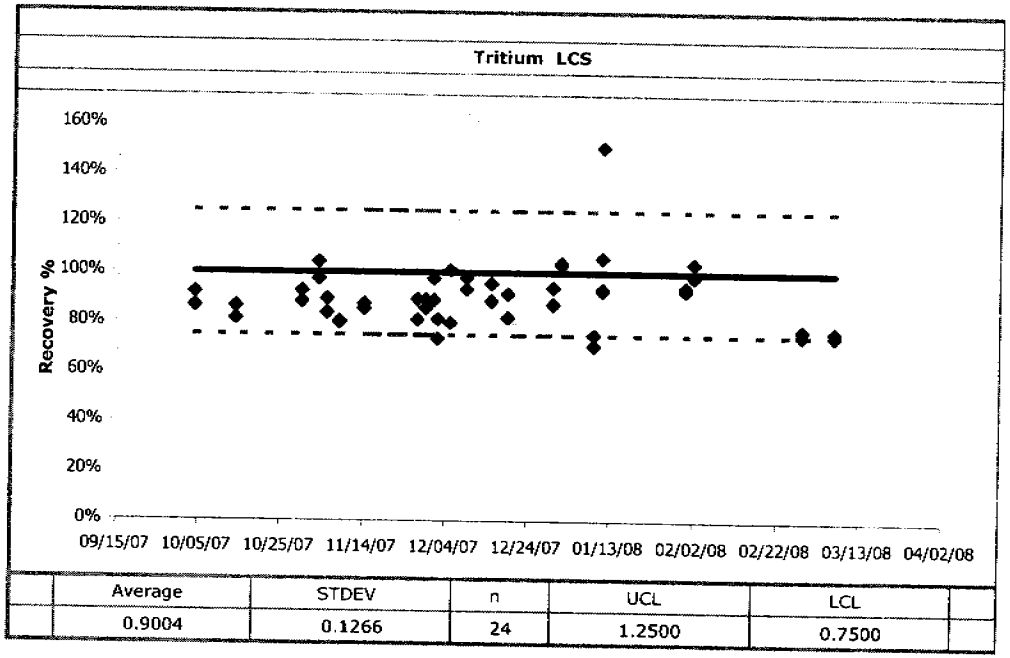
Tritium by Low Level Liquid Scintillation Counting

Control Charts

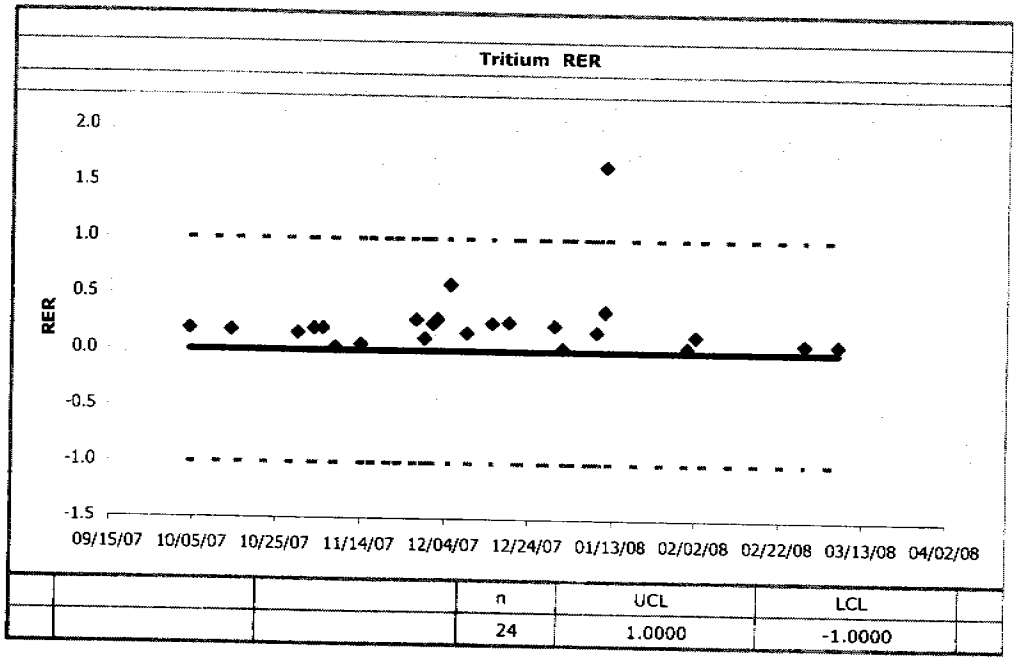
American Radiation Services
Baton Rouge Laboratory

QC Chart

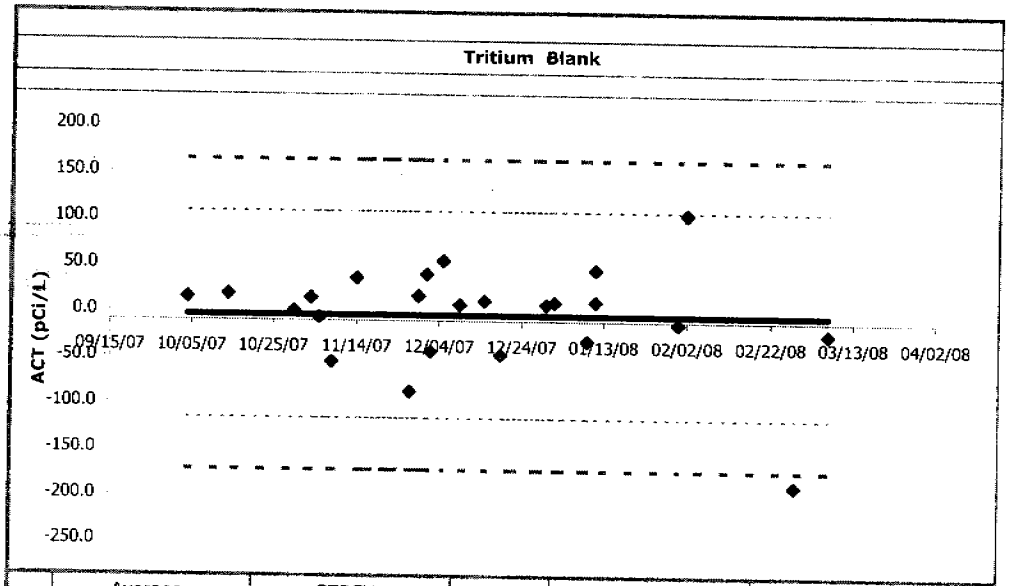
Printed: 3/7/2008 2:00 PM



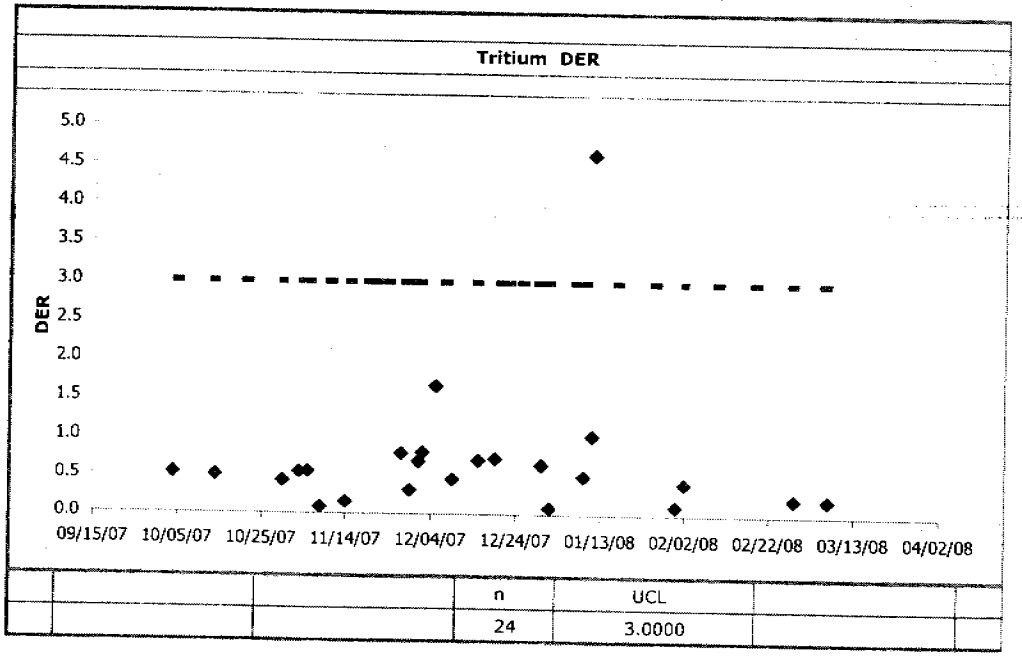
Average	STDEV	n	UCL	LCL
0.9004	0.1266	24	1.2500	0.7500



n	UCL	LCL
24	1.0000	-1.0000



Average	STDEV	n	UCL	LCL
-4.0334	55.8939	24	163.6482	-171.7150



n	UCL
24	3.0000

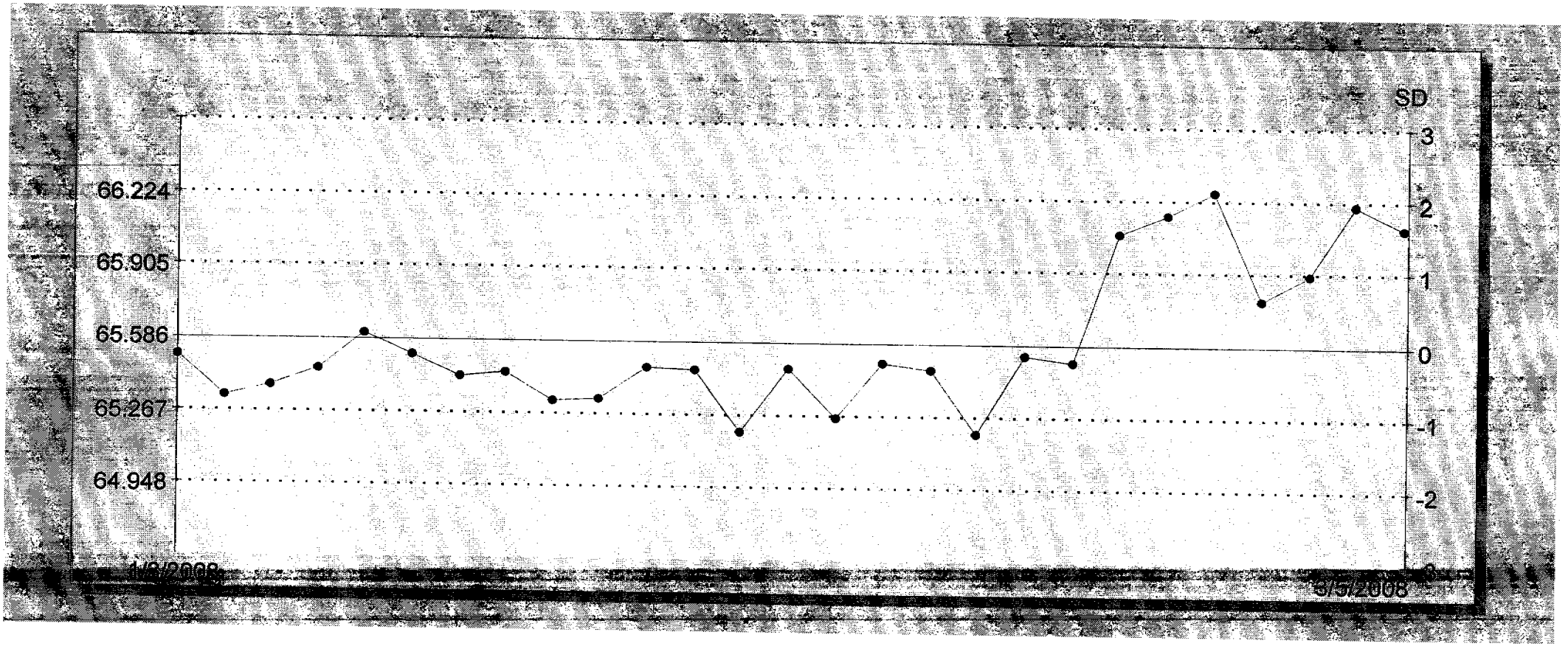
3H Efficiency

Total # pts : 4140
Valid # pts : 27
Mean : 65.59
SD : 0.32

Date	Value	Valid Pt
Jan 03, 2008	65.50	X
Jan 04, 2008	65.33	X
Jan 08, 2008	65.37	X
Jan 17, 2008	65.45	X
Jan 17, 2008	65.61	X
Jan 17, 2008	65.52	X
Jan 17, 2008	65.43	X
Jan 17, 2008	65.44	X
Jan 17, 2008	65.32	X
Jan 18, 2008	65.32	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.46	X
Jan 18, 2008	65.19	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.25	X
Jan 18, 2008	65.50	X
Jan 18, 2008	65.47	X
Jan 18, 2008	65.19	X
Jan 18, 2008	65.54	X
Jan 18, 2008	65.51	X
Jan 30, 2008	66.07	X
Jan 30, 2008	66.16	X
Feb 04, 2008	66.26	X
Feb 08, 2008	65.79	X
Feb 21, 2008	65.90	X
Feb 28, 2008	66.21	X
Mar 05, 2008	66.10	X

3H Efficiency

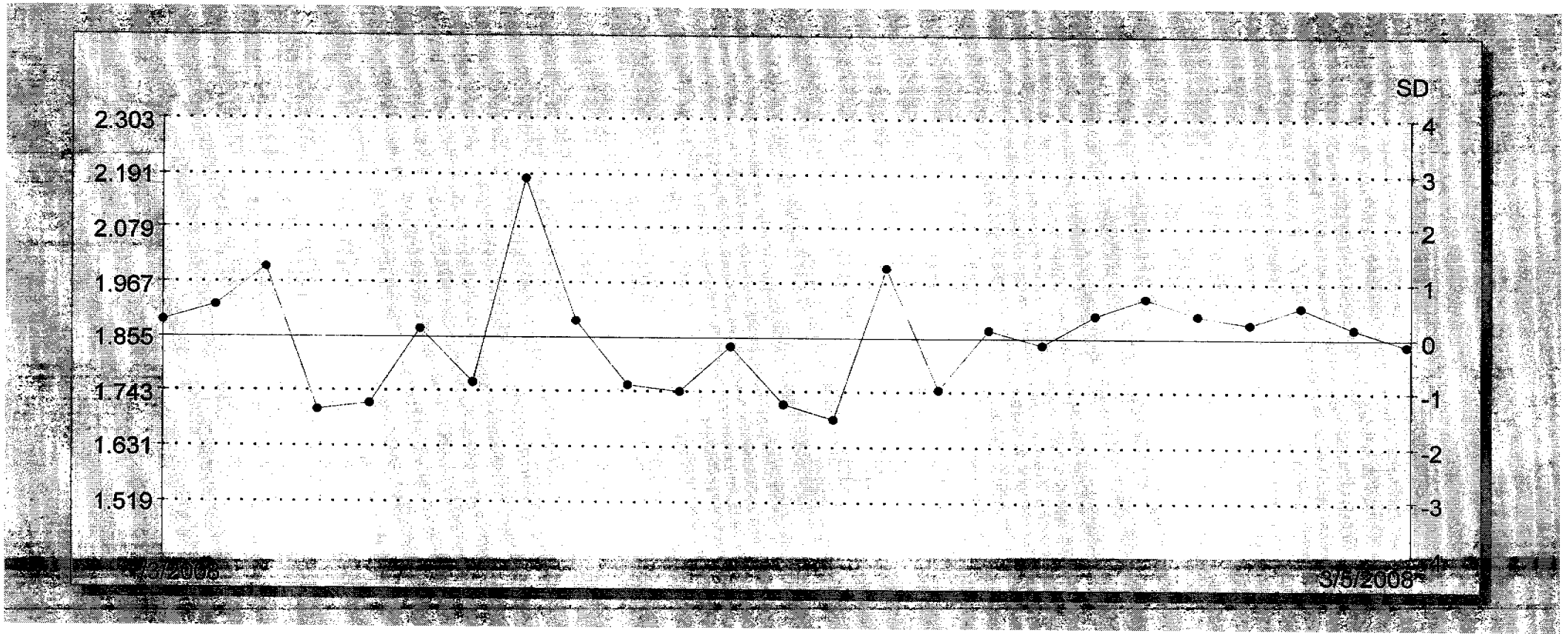
Total # pts	: 4140
Valid # pts	: 27
Mean	: 65.59
SD	: 0.32



3H Background
Total # pts : 4090
Valid # pts : 25
Mean : 1.86
SD : 0.11

Date	Value	Valid Pt
Jan 03, 2008	1.89	X
Jan 04, 2008	1.92	X
Jan 08, 2008	2.00	X
Jan 17, 2008	1.70	X
Jan 17, 2008	1.72	X
Jan 17, 2008	1.87	X
Jan 17, 2008	1.76	X
Jan 17, 2008	2.19	X
Jan 17, 2008	1.89	X
Jan 18, 2008	1.76	X
Jan 18, 2008	1.75	X
Jan 18, 2008	1.84	X
Jan 18, 2008	1.72	X
Jan 18, 2008	1.69	X
Jan 18, 2008	2.00	X
Jan 18, 2008	1.75	X
Jan 18, 2008	1.87	X
Jan 18, 2008	1.84	X
Jan 18, 2008	1.90	X
Jan 18, 2008	1.94	X
Feb 04, 2008	1.90	X
Feb 08, 2008	1.89	X
Feb 21, 2008	1.92	X
Feb 28, 2008	1.88	X
Mar 05, 2008	1.84	X

3H Background
Total # pts : 4090
Valid # pts : 25
Mean : 1.86
SD : 0.11



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for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Create a dilution of S-0032 for use as LCS stock solution**
Target dpm/g (on dil. date)	**2.76**
Target Final volume mL	**2000**
Appx mass g of Parent Sol'n	[redacted]
Appx vol ml of Parent Sol'n	[redacted]
Expected Addition for Analysis g	**5**
Standards Preparation / Dilution	
Secondary Solution #	[redacted]
Dilution Date (New Ref Date)	**04/27/2007 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[redacted]
Transfer Container, empty (g)	**17.8583**
Container Plus Solution (g)	**19.5702**
Net Wt Transferred (g)	[redacted]
DPM Xferred on 04/27/2007 00:00	[redacted]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[redacted]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**1997**
Dilution Final Volume ml (if measured)	**2000**
Final Dilution Density (g/mL)	[redacted]
Final Dilution Measured Mass g	[redacted]
Comments	**Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007**
Final Dilution dpm/g	[redacted]
Final Dil New Ref Date/Time	[redacted]

Parent Standard Data					
Parent Solution Reference #	[redacted]				
Parent Solution #	[redacted]				
Parent Principal Radionuclide	[redacted]	Half Life (Days)	4499.8000000		
Parent Reference Date	[redacted]				
Parent Certified Act	[redacted]	Certi Act/Vol Units	dpm	g	
Parent Cert Act Uncert 1 Sigma	[redacted]				
Parent Sp. Gravity G/Ml	[redacted]				
Parent Supplier	[redacted]				
Parent Date Recvd	[redacted]				
Parent Received By	[redacted]				
Parent Cert Exp Date	[redacted]				
Parent Matrix	[redacted]				
Certified dpm/g At Ref Date	[redacted]				
Certified dpm/g on 04/27/2007 00:00	[redacted]				
Parent Comments	[redacted]				
Parent Tech	[redacted]				
Is_Primary	[redacted]				
Is_LCS	[redacted]				
Is_Tracer	[redacted]				
Is_Calib	[redacted]				

ARS AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION- Rev 1

VERIFICATION DATE 5/18/2007 0:00
SOLUTION REFERENCE # [redacted]

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.232E+01	4.500E+03

Radionuclide H-3 **Primary Dilution Reference Date** 4/27/2007 0:00

Primary Dilution Activity	1.25 pCi per gram ===> dpm/g	2.78
Verif. Date Decay Corrected	1.25 pCi per gram ===> dpm/g	2.77

Verification Trials

Trial ID# [redacted]

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

Trial ID# [redacted]

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

[redacted]

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

[redacted]

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

[redacted]

Gross Weight	2.0000
Tare Weight	1.0000
Net Weight	1.0000

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Activity Result (dpm/g)	Activity Result (pCi/g)
S-0156-1	12.198	1	LSC	0.4395	6.143	5.0100	2.75	1.24
S-0156-2	11.748	1	LSC	0.4325	6.143	5.0100	2.59	1.17
S-0156-3	11.822	1	LSC	0.434	6.143	5.0000	2.62	1.18

Average	2.65	1.19
Two Sigma Uncertainty	0.17	0.08
Standard Deviation percent of known concentration	3.14%	3.14%
Target Activity	2.77	1.25
% Diff	-4.15	-4.15

Prepared & Counted By [signature] **Verification Expiration Date:** May 17, 2008
Date: 5/18/2007 0:00

Verified & Approved By [signature]
Date: 5-18-07

QC Approval [signature]
Date: 5-18-07

Verifier's Name: Tony Byrd **Date:** 4/30/2007

Pipettor ID: CH84078

Pipettor ID:

Pipettor ID: CH80870

Standard ID: S-0112

Standard ID: S-0032 (S-0156)

	Weight of Standard		
15mL of Ultima Gold added to standard	S-0156-1	5.01 g	**Balance ID:** H1331122173560P
	S-0156-2	5.01 g	
	S-0156-3	5.00 g	
		g	
		g	
15mL of Ultima Gold added to standard	S-0112-1	1.03 g	**Balance ID:** H1331122173560P
	S-0112-2	1.08 g	
	S-0112-3	1.00 g	
		g	
		g	

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\20070517_1143.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for protocol 6.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
6	1	BACKGROUND	6.143	13.99	433.79	43.91	90.00	5/17/2007	11:48:37 AM	
6	2	S-0156-1 S-0032-1	12.198	27.76	434.24	43.95	90.00	5/17/2007	1:24:20 PM	
6	3	S-0156-2 S-0032-2	11.748	27.16	426.06	43.25	90.00	5/17/2007	3:00:09 PM	
6	4	S-0156-3 S-0032-3	11.822	27.24	427.76	43.40	90.00	5/17/2007	4:35:56 PM	

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Nancy M. Trahey, Chief
Standard Reference Materials Program

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πβ gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πβ liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100.	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 and 6.

STD ID: S-0032

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Dilute S-0031 to form intermediate level solution for controls**
Target dpm/g (on dil. date)	**3367**
Target Final volume mL	**200**
Appx mass g of Parent Sol'n	
Appx vol ml of Parent Sol'n	
Expected Addition for Analysis g	
Standards Preparation / Dilution	
Secondary Solution #	
Dilution Date (New Ref Date)	**03/01/2006 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	**0**
Container Plus Solution (g)	**1.1544**
Net Wt Transferred (g)	
DPM Xferred on 03/01/2006 00:00	
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (If measured)	**200.64**
Dilution Final Volume ml (if measured)	**200**
Final Dilution Density (g/mL)	
Final Dilution Measured Mass g	
Comments	**S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU**
Final Dilution dpm/g	
Final Dil New Ref Date/Time	

Parent Standard Data			
Parent Solution Reference #			
Parent Solution #			
Parent Principal Radionuclide		Half Life (Days)	4499.8000000
Parent Reference Date			
Parent Certified Act		Certi Act/Vol Units	dpm / g
Parent Cert Act Uncert 1 Sigma			
Parent Sp. Gravity G/Ml			
Parent Supplier			
Parent Date Recvd			
Parent Received By			
Parent Cert Exp Date			
Parent Matrix			
Certified dpm/g At Ref Date			
Certified dpm/g on 03/01/2006 00:00			
Parent Comments	"Intermediate dilution" Information entered from dilution records - 4/19/2006 RTS		
Parent Tech			
Is_Primary	FALSE		
Is_LCS	FALSE		
Is_Tracer	FALSE		
Is_Calib	FALSE		

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

AMERICAN RADIATION SERVICES, INC.

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ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10518
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-001
Date Received: 2/11/2008
Report Date: 03/07/08 13:15

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	5.738	NA	NA	NA		%	Moisture	3/5/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10520
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-002
Date Received: 2/11/2008
Report Date: 03/07/08 13:15

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	5.236	NA	NA	NA		%	Moisture	3/5/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamerique
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10522
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-003
Date Received: 2/11/2008
Report Date: 03/07/08 13:15

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	8.671	NA	NA	NA		%	Moisture	3/5/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamelgue
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10519
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-004
Date Received: 2/11/2008
Report Date: 03/07/08 13:15

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	5.644	NA	NA	NA		%	Moisture	3/5/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsaye
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10524
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-005
Date Received: 2/11/2008
Report Date: 03/07/08 13:15

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	6.193	NA	NA	NA	U	%	Moisture	3/5/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamoigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-00340
Client Sample ID: MD21-08-10521
Sample Collection Date: 02/08/08 13:00
Sample Matrix: Air/Gel

Request or PO Number: 08-605
ARS Sample ID: ARS1-08-00340-006
Date Received: 2/11/2008
Report Date: 03/07/08 13:15

Analysis Description	Analysis Results	TPU	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	8.425	NA	NA	NA		%	Moisture	3/5/2008	BJS	NA

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Lamoigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-00340
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-10518	ARS1-08-00340-001	584	436	149	8.55	5.021	**5.738255**
MD21-08-10520	ARS1-08-00340-002	596	460	137	7.173	5.03	**5.235766**
MD21-08-10522	ARS1-08-00340-003	594	452	140	12.139	5.01	**8.670714**
MD21-08-10519	ARS1-08-00340-004	597	456	140	7.902	5.025	**5.644286**
MD21-08-10524	ARS1-08-00340-005	589	455	134	8.299	5.028	**6.193284**
MD21-08-10521	ARS1-08-00340-006	599	452	147	12.385	5.042	**8.42517**

Balance ID: 0102/H1331122173560P
Pipettor ID: V97676

Signature _____ Date/ Time 5-5-08

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Folder Duplicate

ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 08-00340 Client Name: LANL Sample Matrix: AQ

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Lamoigne 3-7-08
Report Generator Signature Date

Dwayne McMorgan 3-7-08
Management Review Signature Date

ARS AMERICAN RADIATION SERVICES, INC.

LSC
Technical Review Checklist

ARS SDG 08-00340

Sample Matrix: Silica Gel **Aliquot** (Circle One) : Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) LCS (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): **Batch A:** B08-004446 **Batch B:** _____ **Batch C:** _____

Test(s): LSC-A-001 _____ _____

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	Yes No (N/A)	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) **NCR #** (If initiated): _____

Chemist Signature 3-5-08 Date

Analyst Signature N/A Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	(Yes) No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) **NCR #** (If initiated): _____

Analyst Signature 3-7-08 Date

Project Manager Signature Lindsay Lavoie 3-7-08 Date

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: B08-00446

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)

7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated): _____

Lindsay Lamoigne 3-7-08
Project Manager Signature Date

QA Officer Signature 3-7-08
Date

GENERAL COMMENTS

DQO Report for SDG

ARS1-08-00340

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DiltionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

Sample Check In Report
Samples

SDG **ARS1-08-00340**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	Level 2
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	2/11/2008	COC No 1
Project Type	Environmental		Client Deadline	3/9/2008	COC No 2
Comments	REQ No 08-605		Internal Deadline	3/7/2008	COC No 3
			Lab Deadline	3/6/2008	COC No 4
			Workdays	TRUE	

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-10518	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
002	MD21-08-10520	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
003	MD21-08-10522	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
004	MD21-08-10519	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
005	MD21-08-10524	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
006	MD21-08-10521	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00340
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00340**

Fraction	Client ID	Comments
001	MD21-08-10518	
002	MD21-08-10520	
003	MD21-08-10522	
004	MD21-08-10519	
005	MD21-08-10523	
006	MD21-08-10521	

Sample Check In Report
Samples

SDG **ARS1-08-00340**

Client Code	405	Los Alamos Technical Associates, Inc.	TAT Days	30	
Profile Number	PN-00457	Location: Los Alamos, NM	Date Received	2/11/2008	Level 2
Project Type	Environmental		Client Deadline	3/9/2008	COC No 1
Comments	REQ No 08-605		Internal Deadline	3/7/2008	COC No 2
			Lab Deadline	3/6/2008	COC No 3
			Workdays	TRUE	COC No 4

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-10518	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
002	MD21-08-10520	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
003	MD21-08-10522	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
004	MD21-08-10519	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
005	MD21-08-10524	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
006	MD21-08-10521	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00340
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00340**

Fraction	Client ID	Comments
001	MD21-08-10518	
002	MD21-08-10520	
003	MD21-08-10522	
004	MD21-08-10519	
005	MD21-08-10524	
006	MD21-08-10521	

Sample Check In Report
Samples

SDG **ARS1-08-00340**

Client Code	405	Los Alamos Technical Associates, Inc.	TAT Days	30	Level	2	
Profile Number	PN-00457	Location: Los Alamos, NM	Date Received	2/11/2008			
Project Type	Environmental		Client Deadline	3/24/2008 3.9.08	COC No 1		
Comments	REQ No 08-605		Internal Deadline	3/21/2008 3.7.08	COC No 2		
			Lab Deadline	3/19/2008 3.6.08	COC No 3		
			Workdays	TRUE	COC No 4		

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-08-10518	1	AQ	2.6.08 02/08/08 13:00	02/08/08 13:00	B1	H	30	5
002	MD21-08-10520	1	AQ	2.6.08 02/08/08 13:00	02/08/08 13:00	B1	H	30	5
003	MD21-08-10522	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
004	MD21-08-10519	1	AQ	02/08/08 13:00	02/08/08 13:00	B1	H	30	5
005	MD21-08-10524	1	AQ	2.6.08 02/08/08 13:00	02/08/08 13:00	B1	H	30	5
006	MD21-08-10521	1	AQ	2.6.08 02/08/08 13:00	02/08/08 13:00	B1	H	30	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-00340
Analyses per Sample

Printed 2/27/2008 10:46 AM

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-08-00340**

Fraction	Client ID	Comments
001	MD21-08-10518	
002	MD21-08-10520	
003	MD21-08-10522	
004	MD21-08-10519	
005	MD21-08-10524	
006	MD21-08-10521	

ARS FILE TRACKING SHEET

SDG: **08-00340**

Task	Date / Time	Initials
Date & Time Received	2-11-08 / 12:00	RT
Storage Location: B1	2-27-08 / 10:46	RT
Chain of Custody Completed	2-27-08 / 10:46	RT
Report Written	3-7-08 | 14:01	LMC
Laboratory Supervisor Checks Performed	SEE BATCH	NA
Quality Assurance Checks Performed on Report	3-7-08 | 1505	[illegible]
Laboratory Director Check Performed on Report	3-7-08 | 1531	VJM
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 02/27/08 Shipper's Name: LANL

Technician Performing Inspection: Russell Thomas Initials: RT

SDG: **08-00340**

External and Internal Surveys

Exposure Rate Meter: 44-2 104898 Serial No: 013681 Calibration. Due Date: 05-21-08

Count Rate Meter: 44-9 109043 Serial No: 108796 Calibration. Due Date: 05-21-08

Background Exposure Rate (μR/hr)	15
Background Count Rate (cpm):	50
Max. Exposure Rate on Shipping Containers Externals (Including Background):	20
Max. Removable Count Rate on Shipping Container Externals (Including Background):	60
Max. Removable Count Rate on Shipping Container Internals (Including Background):	60
Max. Removable Count Rate on Sample Container Externals (Including Background):	60
Max. Exposure Rate on Sample Containers Externals (Including Background):	22

Shipping Container

Was the Shipping Container received in good condition?	Yes
Was the Shipping Container marked "Radioactive"?	No
Was UN2910 marked on the outside of the Shipping Container?	No
Were security seals utilized on the shipping container?	Yes
If yes, were the seals intact?	Yes
Was a Chain of Custody Form included with the sample shipment?	Yes
Were air bills or bills of lading included with the sample shipment?	No

Samples

Were samples received in good condition?	Yes
Were security seals utilized on the sample container?	No
If yes, were the seals intact?	N/A
Were the sample containers marked "Radioactive"?	No
Number of Samples Received in the Shipment:	6
Was the pH of Aqueous Samples < 2?	

If no, was the sample(s) checked for acid reactivity? _____ Was the sample(s) acidified to a pH < 2? _____

Matrix of Samples: AQ

Volume of Each Sample Container: 585

Brief Description of Sample Material: _____

Inspectors' Comments

ARS-062-001 r0

ARS LABEL SHEET

SDG: 08-00340

Analysis

ARS1-08-00340 **LSC-A-001**

Los Alamos National Laboratory

Tritium in (Water [Aqueous, AQ])

This Test Requires 6 of 6 Samples

Scan Analysis Code Here	Dates for This Test
	Rcvd 2/11/2008
	Due 3/9/2008

ARS-062-006 r0

SAMPLE CHECK-IN COMMENT SHEET

SDG: 08-00340

NOTES

COMPANY NAME: Los Alamos **SDG:**

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

Shipping Container Survey

Outside 20 µR/hr 60 cpm

Inside 60 cpm

Rcv'd By

Date Rcv'd

Time Rcv'd

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☐ Yes	☑ No
Radioactive	☐ Yes	☑ No
# Samples Rcv	6	
pH < 2	☐ Yes	☐ No
If No... Acid Rxt	☐ Yes	☐ No
Acid'fd < 2	☐ Yes	☐ No

Intact ☑ Yes ☐ No

Matrix [AF , AQ , BI , FE , LT , SI , SO , UR , VG]

Record Sample Label, Exposure Rate and Count Rate for EACH SAMPLE in the area below:

Sample Lable/Comments/Notes	Weight/ Volume	µR/hr	cpm
MD21-08-10518	585	22	60
MD21-08-10520	585	22	60
MD21-08-10522	585	22	60
MD21-08-10519	585	22	60
MD21-08-10524	585	22	60
MD21-08-10521	585	22	60

Surveyors' Name: _____ Date/Time Surveyed 2-27-08 10:35

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-605C

REQUEST NUMBER: 08-605

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
ID21-08-10518	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10520	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10522	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10519	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10524	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10521	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/8/08	3:00	Printed Name	Signature	2-11-08	12:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Friday, February 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-605C

REQUEST NUMBER: 08-605

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 3/9/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
ID21-08-10518	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10520	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10522	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10519	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10524	1	SILICA GEL TUBE	H3	None	GAS
ID21-08-10521	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	2/8/08	3:00	Printed Name	Signature	2-11-08	12:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Friday, February 08, 2008

REQUEST NUMBER: 08-604

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-604
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/8/2008
TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-08-10518	GAS	2/6/2008		
		1	MD21-08-10519	GAS	2/8/2008		
		1	MD21-08-10520	GAS	2/6/2008		
		1	MD21-08-10521	GAS	2/6/2008		
		1	MD21-08-10522	GAS	2/8/2008		
		1	MD21-08-10524	GAS	2/6/2008		

Final Page of REQUEST NUMBER 08-604

Friday, February 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-604C

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 08-604

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/9/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10518	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10520	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10522	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10519	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10524	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10521	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		2/8/08	3:00				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10523

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/8/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		10:42	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		Port #6

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA

BOREHOLE: (YES) NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA WATER FLOWING: YES / (NO) / NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08; Summa collected 2/8/08 10:42

LOCATION DESC:

Port #6

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister #

COLLECTED BY (PRINT) Bill Stewart REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	Date/Time 13:23 2/8/08	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10519

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		2/8/08	MEDIA:	NA	
TIME COLLECTED (HH:MM)		12:34	SUB-MEDIA:	OTHER	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08 – 2/7/08; summa collected 2/8/08

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

Summa canister # 33943

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) (Signature)	Date/Time 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10524

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1555	SUB-MEDIA:	OTHER	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of MD 21-08-10518

SAMPLE COMMENTS:

Duplicate from Port #1, Tritium sample collected 2/6/08, Summa collected 2/8/08 12:42

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister #RY

COLLECTED BY (PRINT) Bill Stenk REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) Bill Stenk (Signature)	Date/Time 13:23 2/8/08	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10520

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1550	SUB-MEDIA:	OTHER	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium Column collected; summa collected 2/8/08 12:25

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # SC416

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT):** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340 **EVENT NAME:** Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10521

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1600	SUB-MEDIA:	OTHER	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA

WATER FLOWING: YES / NO / NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08, Summa collected 2/8/08 12:17

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # 9945

COLLECTED BY (PRINT) Bill Stump **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Bill Stump (Signature)	**Date/Time** 13:23 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 340

EVENT NAME: Phase II MDA T, 21-016(a)-99, Second round of pore gas samples.

SAMPLE ID: MD21-08-10518

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/06/2008	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1555	SUB-MEDIA:	OTHER	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	NV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		Port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: Vertical BOREHOLE DIRECTION: NA WATER FLOWING: YES / (NO) / NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

Tritium column collected 2/6/08 – 2/7/08, Summa collected 2/8/08 12:41

LOCATION DESC:

Port #1

FIELD SCREENING/MEASUREMENT RESULTS:

Summa Canister # 5394

COLLECTED BY (PRINT) Bill Stewart

REVIEWED BY (PRINT) Kevin Rent

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 13:28 2/8/08	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 2/8/08 1:23
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-604 VALIDATION DATE: 3/13/08 LAB CODE: ATL

CONTRACT LABORATORY NAME: Air Toxics Ltd.

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☒ OTHER (DESCRIBE): VOC (TO-15)

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☒	☐	☐	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. In the ICAL, the curve for methanol contained less than five calibration points. No sample data were qualified, per client instructions.
2. It should be noted that the benzene mass spectra for sample MD21-08-10520 contained contamination from a co-eluting surrogate. No sample data were qualified as a result, based on professional judgment.
3. In the ICAL, the %RSDs were >30% for methanol, methyl tert-butyl ether, n-butanol, and 4-methyl-2-pentanone. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
4. In the CCV, the %D was >30% for methanol. The associated sample results were NDs and, thus, were qualified UJ,V7c.
5. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.

DATA VALIDATION COVER SHEET

5114-1

Records Use only

Data Validation Cover Sheet

Los Alamos NATIONAL LABORATORY

6. A DUP was reported in the data package and was within criteria. No sample data were qualified as a result.
7. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

Reviewed by: JEJ Level: 1 Date: 3/14/08

VALIDATOR'S SIGNATURE: Eric T. Mik DATE: 3/13/08

Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos
NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☒	☐	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☒	☐	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☒	☐	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☒	☐	☐	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
☒	☐	☐	7. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, V7a	J, V7a
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).	N/A	J, V4a
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
☐	☒	☐	19. The quantitating IS are count is <10% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
☐	☒	☐	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
☐	☒	☐	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
☐	☐	☒	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☐	☒	24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
☐	☐	☒	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
☐	☐	☒	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
☐	☐	☒	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
☐	☒	☐	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
5114-2 Volatile Organic Compound (VOC) Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☒	☐	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	36. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, V19	J, R, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10518

Lab ID#: 0802200-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022111**	**Date of Collection:**	**2/6/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/21/08 06:47 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	1.0	4.2	5.1
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene		0.84	Not Detected	1.8	Not Detected
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	0.90	6.4	6.9
1,1-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Acetone		3.4	Not Detected	8.0	Not Detected
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	0.92	2.6	2.8
Methylene Chloride		0.84	1.2	2.9	4.2
Methyl tert-butyl ether	UJ,V7a	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran		0.84	Not Detected	2.5	Not Detected
Chloroform		0.84	160	4.1	800
1,1,1-Trichloroethane		0.84	3.5	4.6	19
Cyclohexane		0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.84	9.2	5.3	58
Benzene		0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane		0.84	Not Detected	3.4	Not Detected
Heptane		0.84	Not Detected	3.4	Not Detected
Trichloroethene		0.84	130	4.5	700
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.84	Not Detected	3.4	Not Detected
Toluene		0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	Not Detected	4.6	Not Detected
Tetrachloroethene		0.84	200	5.7	1400

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10518

Lab ID#: 0802200-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t022111	**Date of Collection:**	2/6/08
Dil. Factor:	1.68	**Date of Analysis:**	2/21/08 06:47 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	84	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	104	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10519

Lab ID#: 0802200-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022112**	**Date of Collection:**	**2/8/08**
Dil. Factor:	**1.79**	**Date of Analysis:**	**2/21/08 07:26 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.90	1.4	4.4	7.1
Freon 114		0.90	Not Detected	6.2	Not Detected
Chloromethane		3.6	Not Detected	7.4	Not Detected
Vinyl Chloride		0.90	Not Detected	2.3	Not Detected
1,3-Butadiene		0.90	Not Detected	2.0	Not Detected
Bromomethane		0.90	Not Detected	3.5	Not Detected
Chloroethane		0.90	Not Detected	2.4	Not Detected
Freon 11		0.90	Not Detected	5.0	Not Detected
Ethanol		3.6	Not Detected	6.7	Not Detected
Freon 113		0.90	2.0	6.8	15
1,1-Dichloroethene		0.90	1.6	3.5	6.2
Acetone		3.6	Not Detected	8.5	Not Detected
2-Propanol		3.6	Not Detected	8.8	Not Detected
Carbon Disulfide		0.90	1.1	2.8	3.5
Methylene Chloride		0.90	7.0	3.1	24
Methyl tert-butyl ether	UJ,V7a	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Hexane		0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane		0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.90	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.90	Not Detected	2.6	Not Detected
Chloroform		0.90	120	4.4	570
1,1,1-Trichloroethane		0.90	5.0	4.9	28
Cyclohexane		0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride		0.90	22	5.6	140
Benzene		0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane		0.90	Not Detected	3.6	Not Detected
Heptane		0.90	Not Detected	3.7	Not Detected
Trichloroethene		0.90	86	4.8	460
1,2-Dichloropropane		0.90	Not Detected	4.1	Not Detected
1,4-Dioxane		3.6	Not Detected	13	Not Detected
Bromodichloromethane		0.90	1.0	6.0	7.0
cis-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.90	Not Detected	3.7	Not Detected
Toluene		0.90	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane		0.90	Not Detected	4.9	Not Detected
Tetrachloroethene		0.90	48	6.1	320

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10519

Lab ID#: 0802200-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022112**	**Date of Collection: 2/8/08**	
Dil. Factor:	**1.79**	**Date of Analysis: 2/21/08 07:26 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.6	Not Detected	15	Not Detected
Dibromochloromethane		0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)		0.90	Not Detected	6.9	Not Detected
Chlorobenzene		0.90	Not Detected	4.1	Not Detected
Ethyl Benzene		0.90	Not Detected	3.9	Not Detected
m,p-Xylene		0.90	Not Detected	3.9	Not Detected
o-Xylene		0.90	Not Detected	3.9	Not Detected
Styrene		0.90	Not Detected	3.8	Not Detected
Bromoform		0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane		0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene		0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene		0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene		0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene		0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene		3.6	Not Detected	26	Not Detected
Hexachlorobutadiene		3.6	Not Detected	38	Not Detected
Chlorodifluoromethane		3.6	Not Detected	13	Not Detected
Methanol	UJ,V7a	90	Not Detected	120	Not Detected
n-Butanol	UJ,V7a	3.6	Not Detected	11	Not Detected
Propylene		3.6	Not Detected	6.2	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	106	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10520

Lab ID#: 0802200-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t022115	**Date of Collection:**	2/6/08
Dil. Factor:	1.71	**Date of Analysis:**	2/21/08 09:22 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.86	0.97	4.2	4.8
Freon 114		0.86	Not Detected	6.0	Not Detected
Chloromethane		3.4	Not Detected	7.1	Not Detected
Vinyl Chloride		0.86	Not Detected	2.2	Not Detected
1,3-Butadiene		0.86	Not Detected	1.9	Not Detected
Bromomethane		0.86	Not Detected	3.3	Not Detected
Chloroethane		0.86	Not Detected	2.2	Not Detected
Freon 11		0.86	Not Detected	4.8	Not Detected
Ethanol		3.4	Not Detected	6.4	Not Detected
Freon 113		0.86	1.6	6.6	12
1,1-Dichloroethene		0.86	1.4	3.4	5.7
Acetone		3.4	4.6	8.1	11
2-Propanol		3.4	Not Detected	8.4	Not Detected
Carbon Disulfide		0.86	0.87	2.7	2.7
Methylene Chloride		0.86	6.6	3.0	23
Methyl tert-butyl ether	UJ,V7a	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Hexane		0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran		0.86	Not Detected	2.5	Not Detected
Chloroform		0.86	68	4.2	330
1,1,1-Trichloroethane		0.86	2.5	4.7	14
Cyclohexane		0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.86	23	5.4	140
Benzene		0.86	0.90	2.7	2.9
1,2-Dichloroethane		0.86	Not Detected	3.5	Not Detected
Heptane		0.86	Not Detected	3.5	Not Detected
Trichloroethene		0.86	57	4.6	300
1,2-Dichloropropane		0.86	Not Detected	4.0	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.86	Not Detected	3.5	Not Detected
Toluene		0.86	3.4	3.2	13
trans-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane		0.86	Not Detected	4.7	Not Detected
Tetrachloroethene		0.86	18	5.8	120

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10520

Lab ID#: 0802200-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022115**	**Date of Collection: 2/6/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/21/08 09:22 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)		0.86	Not Detected	6.6	Not Detected
Chlorobenzene		0.86	Not Detected	3.9	Not Detected
Ethyl Benzene		0.86	Not Detected	3.7	Not Detected
m,p-Xylene		0.86	Not Detected	3.7	Not Detected
o-Xylene		0.86	Not Detected	3.7	Not Detected
Styrene		0.86	Not Detected	3.6	Not Detected
Bromoform		0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane		0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene		0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene		0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	86	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	105	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10521

Lab ID#: 0802200-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022116**	**Date of Collection:**	**2/6/08**
Dil. Factor:	**1.71**	**Date of Analysis:**	**2/21/08 10:01 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.86	2.0	4.2	9.8
Freon 114		0.86	Not Detected	6.0	Not Detected
Chloromethane		3.4	Not Detected	7.1	Not Detected
Vinyl Chloride		0.86	Not Detected	2.2	Not Detected
1,3-Butadiene		0.86	Not Detected	1.9	Not Detected
Bromomethane		0.86	Not Detected	3.3	Not Detected
Chloroethane		0.86	Not Detected	2.2	Not Detected
Freon 11		0.86	Not Detected	4.8	Not Detected
Ethanol		3.4	Not Detected	6.4	Not Detected
Freon 113		0.86	6.7	6.6	51
1,1-Dichloroethene		0.86	6.6	3.4	26
Acetone		3.4	Not Detected	8.1	Not Detected
2-Propanol		3.4	Not Detected	8.4	Not Detected
Carbon Disulfide		0.86	1.2	2.7	3.7
Methylene Chloride		0.86	96	3.0	330
Methyl tert-butyl ether	UJ,V7a	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Hexane		0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.86	0.98	3.4	3.9
Tetrahydrofuran		0.86	Not Detected	2.5	Not Detected
Chloroform		0.86	140	4.2	660
1,1,1-Trichloroethane		0.86	5.0	4.7	27
Cyclohexane		0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.86	110	5.4	670
Benzene		0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane		0.86	1.3	3.5	5.4
Heptane		0.86	Not Detected	3.5	Not Detected
Trichloroethene		0.86	220	4.6	1200
1,2-Dichloropropane		0.86	Not Detected	4.0	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.86	1.4	5.7	9.6
cis-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.86	Not Detected	3.5	Not Detected
Toluene		0.86	1.2	3.2	4.6
trans-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane		0.86	4.3	4.7	24
Tetrachloroethene		0.86	27	5.8	180

0103

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10521

Lab ID#: 0802200-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022116**	**Date of Collection:**	**2/6/08**
Dil. Factor:	**1.71**	**Date of Analysis:**	**2/21/08 10:01 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)		0.86	Not Detected	6.6	Not Detected
Chlorobenzene		0.86	Not Detected	3.9	Not Detected
Ethyl Benzene		0.86	Not Detected	3.7	Not Detected
m,p-Xylene		0.86	Not Detected	3.7	Not Detected
o-Xylene		0.86	Not Detected	3.7	Not Detected
Styrene		0.86	Not Detected	3.6	Not Detected
Bromoform		0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane		0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene		0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene		0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	86	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	107	70-130

0104

ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10522

Lab ID#: 0802200-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t022117	**Date of Collection:**	2/8/08
Dil. Factor:	1.71	**Date of Analysis:**	2/21/08 10:39 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.86	Not Detected	4.2	Not Detected
Freon 114		0.86	Not Detected	6.0	Not Detected
Chloromethane		3.4	Not Detected	7.1	Not Detected
Vinyl Chloride		0.86	Not Detected	2.2	Not Detected
1,3-Butadiene		0.86	Not Detected	1.9	Not Detected
Bromomethane		0.86	Not Detected	3.3	Not Detected
Chloroethane		0.86	Not Detected	2.2	Not Detected
Freon 11		0.86	Not Detected	4.8	Not Detected
Ethanol		3.4	Not Detected	6.4	Not Detected
Freon 113		0.86	3.2	6.6	24
1,1-Dichloroethene		0.86	13	3.4	52
Acetone		3.4	3.9	8.1	9.4
2-Propanol		3.4	Not Detected	8.4	Not Detected
Carbon Disulfide		0.86	1.1	2.7	3.4
Methylene Chloride		0.86	260	3.0	920
Methyl tert-butyl ether	UJ,V7a	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Hexane		0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.86	1.5	3.4	5.9
Tetrahydrofuran		0.86	Not Detected	2.5	Not Detected
Chloroform		0.86	150	4.2	750
1,1,1-Trichloroethane		0.86	2.6	4.7	14
Cyclohexane		0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.86	92	5.4	580
Benzene		0.86	1.0	2.7	3.4
1,2-Dichloroethane		0.86	3.9	3.5	16
Heptane		0.86	Not Detected	3.5	Not Detected
Trichloroethene		0.86	240	4.6	1300
1,2-Dichloropropane		0.86	Not Detected	4.0	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.86	1.7	5.7	12
cis-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.86	Not Detected	3.5	Not Detected
Toluene		0.86	2.1	3.2	7.9
trans-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane		0.86	22	4.7	120
Tetrachloroethene		0.86	16	5.8	110

ETM
0127 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10522

Lab ID#: 0802200-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022117**	**Date of Collection: 2/8/08**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/21/08 10:39 PM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)		0.86	Not Detected	6.6	Not Detected
Chlorobenzene		0.86	Not Detected	3.9	Not Detected
Ethyl Benzene		0.86	Not Detected	3.7	Not Detected
m,p-Xylene		0.86	Not Detected	3.7	Not Detected
o-Xylene		0.86	Not Detected	3.7	Not Detected
Styrene		0.86	Not Detected	3.6	Not Detected
Bromoform		0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane		0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene		0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene		0.86	1.2	5.1	7.0
alpha-Chlorotoluene		0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	86	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	107	70-130

0128 ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10524

Lab ID#: 0802200-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t022118**	**Date of Collection:**	**2/6/08**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/21/08 11:38 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	1.0	4.2	5.0
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene		0.84	Not Detected	1.8	Not Detected
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	Not Detected	6.4	Not Detected
1,1-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Acetone		3.4	4.0	8.0	9.6
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	0.85	2.6	2.6
Methylene Chloride		0.84	1.1	2.9	4.0
Methyl tert-butyl ether	UJ,V7a	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran		0.84	Not Detected	2.5	Not Detected
Chloroform		0.84	160	4.1	800
1,1,1-Trichloroethane		0.84	3.5	4.6	19
Cyclohexane		0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.84	9.8	5.3	62
Benzene		0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane		0.84	Not Detected	3.4	Not Detected
Heptane		0.84	Not Detected	3.4	Not Detected
Trichloroethene		0.84	130	4.5	700
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	UJ,V7a	0.84	Not Detected	3.4	Not Detected
Toluene		0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	Not Detected	4.6	Not Detected
Tetrachloroethene		0.84	200	5.7	1400

ETM 3/13/08

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10524

Lab ID#: 0802200-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t022118	**Date of Collection:**	2/6/08
Dil. Factor:	1.68	**Date of Analysis:**	2/21/08 11:38 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene		3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol	UJ,V7a	84	Not Detected	110	Not Detected
n-Butanol	UJ,V7a	3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	104	70-130

0154 ETM 3/13/08

0802200

Page 1 of 1

Friday, February 08, 2008

REQUEST NUMBER: 08-604

0365

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-604
Per Agreement Number:TPS#24256
Project Cost Code: MR8R032NF800

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/8/2008
TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10518	GAS	2/6/2008		
		02A	1	MD21-08-10519	GAS	2/6/2008		
		03A	1	MD21-08-10520	GAS	2/6/2008		
		04A	1	MD21-08-10521	GAS	2/6/2008		
		05A	1	MD21-08-10522	GAS	2/6/2008		
		06A	1	MD21-08-10524	GAS	2/6/2008		

Final Page of REQUEST NUMBER 08-604

0802200

Friday, February 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-604C

REQUEST NUMBER: 08-604

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10518	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10520	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10522	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10519	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10524	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21 08-10521	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		2/8/08	3:00	Theresa Striepeke	Theresa Striepeke AIL	2/9/08	9:3
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Request #080604

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0802200

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-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
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Comments:

Completed by:

Kara McKiernan | Kara McKiernan / Document Control | 2/27/08

(Signature) | (Print Name & Title) | (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0802200

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-604
DATE RECEIVED:	02/09/2008	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	02/26/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MD21-08-10518	Modified TO-15	6.0 "Hg	5 psi
01AA	MD21-08-10518 Lab Duplicate	Modified TO-15	6.0 "Hg	5 psi
02A	MD21-08-10519	Modified TO-15	7.5 "Hg	5 psi
02AA	MD21-08-10519 Lab Duplicate	Modified TO-15	7.5 "Hg	5 psi
03A	MD21-08-10520	Modified TO-15	6.5 "Hg	5 psi
04A	MD21-08-10521	Modified TO-15	6.5 "Hg	5 psi
05A	MD21-08-10522	Modified TO-15	6.5 "Hg	5 psi
06A	MD21-08-10524	Modified TO-15	6.0 "Hg	5 psi
07A	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda J. Frumarc DATE: 02/26/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

0001

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0802200

LUMEN DATA VALIDATED

Six 6 Liter Summa Canister samples were received on February 09, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Extract Sample Condition
MD21-08-10518	0802200-01A	2/ 6/2008	2/ 9/2008	NA	15	2/21/2008	NA	Good
MD21-08-10518 Lab Dup	0802200-01AA	2/ 6/2008	2/ 9/2008	NA	15	2/21/2008	NA	Good
MD21-08-10519	0802200-02A	2/ 8/2008	2/ 9/2008	NA	13	2/21/2008	NA	Good
MD21-08-10519 Lab Dup	0802200-02AA	2/ 8/2008	2/ 9/2008	NA	13	2/21/2008	NA	Good
MD21-08-10520	0802200-03A	2/ 6/2008	2/ 9/2008	NA	15	2/21/2008	NA	Good
MD21-08-10521	0802200-04A	2/ 6/2008	2/ 9/2008	NA	15	2/21/2008	NA	Good
MD21-08-10522	0802200-05A	2/ 8/2008	2/ 9/2008	NA	13	2/21/2008	NA	Good
MD21-08-10524	0802200-06A	2/ 6/2008	2/ 9/2008	NA	15	2/21/2008	NA	Good
Lab Blank	0802200-07A	NA	NA	NA	NA	2/21/2008	NA	Good
CCV	0802200-08A	NA	NA	NA	NA	2/21/2008	NA	Good
LCS	0802200-09A	NA	NA	NA	NA	2/21/2008	NA	Good

Sample Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10518

Lab ID#: 0802200-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.0	4.2	5.1
Freon 113	0.84	0.90	6.4	6.9
Carbon Disulfide	0.84	0.92	2.6	2.8
Methylene Chloride	0.84	1.2	2.9	4.2
Chloroform	0.84	160	4.1	800
1,1,1-Trichloroethane	0.84	3.5	4.6	19
Carbon Tetrachloride	0.84	9.2	5.3	58
Trichloroethene	0.84	130	4.5	700
Tetrachloroethene	0.84	200	5.7	1400

0006

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10518

Lab ID#: 0802200-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.0	4.2	5.1
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	0.90	6.4	6.9
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	3.4	Not Detected	8.0	Not Detected
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	0.92	2.6	2.8
Methylene Chloride	0.84	1.2	2.9	4.2
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	160	4.1	800
1,1,1-Trichloroethane	0.84	3.5	4.6	19
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	9.2	5.3	58
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	130	4.5	700
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	200	5.7	1400

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10518

Lab ID#: 0802200-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	104	70-130

0008

Data File: /chem/msdt.i/21Feb2008.b/t022111.d
Report Date: 25-Feb-2008 14:59

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022111.d
Lab Smp Id: 0802200-01A
Inj Date : 21-FEB-2008 18:47
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #33942
Misc Info : 6.0"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	295535	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	225058			27.38- 127.38	76.15
13.865	13.865 (1.000)	49	653295			131.81- 231.81	221.06
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1103667	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	180993			0.00- 66.79	16.40
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1036589	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	605156			7.58- 107.58	58.38
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	454740	23.9130	23.913	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	223437			3.57- 103.57	49.14
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1103369	25.9535	25.954	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	129710			0.00- 61.29	11.76

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	746712			18.71- 118.71	67.68
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	700978	26.1438	26.144	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	881852			76.46- 176.46	125.80
22.796	22.796	(1.096)	176	676694			48.22- 148.22	96.54
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.929	5.901	(0.428)	85	35444	0.61419	1.032	80.00- 120.00	100.00
5.900	5.901	(0.426)	87	11381			0.00- 82.13	32.11
42 Freon 113						CAS #: 76-13-1		
9.966	9.939	(0.719)	151	16052	0.53361	0.8965	80.00- 120.00	100.00
9.966	9.939	(0.719)	153	9972			13.46- 113.46	62.12
9.966	9.939	(0.719)	101	19710			82.30- 182.30	122.79
47 Carbon Disulfide						CAS #: 75-15-0		
10.547	10.547	(0.761)	76	27984	0.54638	0.9179	80.00- 120.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.100	11.100	(0.801)	49	12464	0.72795	1.223	80.00- 120.00	100.00
11.100	11.100	(0.801)	84	9950			38.51- 138.51	79.83
11.100	11.100	(0.801)	51	3983			0.00- 83.83	31.96
82 Chloroform						CAS #: 67-66-3		
13.948	13.948	(1.006)	83	4195778	97.7500	164.22	80.00- 120.00	100.00
13.948	13.948	(1.006)	85	2743476			14.81- 114.81	65.39
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.280	14.280	(1.030)	97	100133	2.10910	3.543	80.00- 120.00	100.00
14.280	14.280	(1.030)	99	64628			14.28- 114.28	64.54
87 Carbon Tetrachloride						CAS #: 56-23-5		
14.529	14.529	(1.048)	119	248881	5.45724	9.168	80.00- 120.00	100.00
14.529	14.529	(1.048)	117	267316			56.24- 156.24	107.41
101 Trichloroethene						CAS #: 79-01-6		
16.077	16.077	(1.028)	95	1827206	77.3214	129.90	80.00- 120.00	100.00
16.077	16.077	(1.028)	130	1652772			39.09- 139.09	90.45
16.077	16.077	(1.028)	97	1166198			12.68- 112.68	63.82
120 Tetrachloroethene						CAS #: 127-18-4		
19.284	19.284	(0.927)	166	3812229	120.488	202.42	80.00- 120.00	100.00
19.284	19.284	(0.927)	129	2641126			18.51- 118.51	69.28
19.284	19.284	(0.927)	131	2507878			15.29- 115.29	65.79

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022111.d
Lab Smp Id: 0802200-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	295535	-7.11
97 1,4-Difluorobenze	1251468	750881	1752055	1103667	-11.81
126 Chlorobenzene-d5	1150991	690595	1611387	1036589	-9.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802200-01A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

Client SDG: 21Feb2008
Fraction: VOA

Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.913	95.65	70-130
$ 113 Toluene-d8	25.000	25.954	103.81	70-130
$ 137 Bromofluorobenzene	25.000	26.144	104.58	70-130

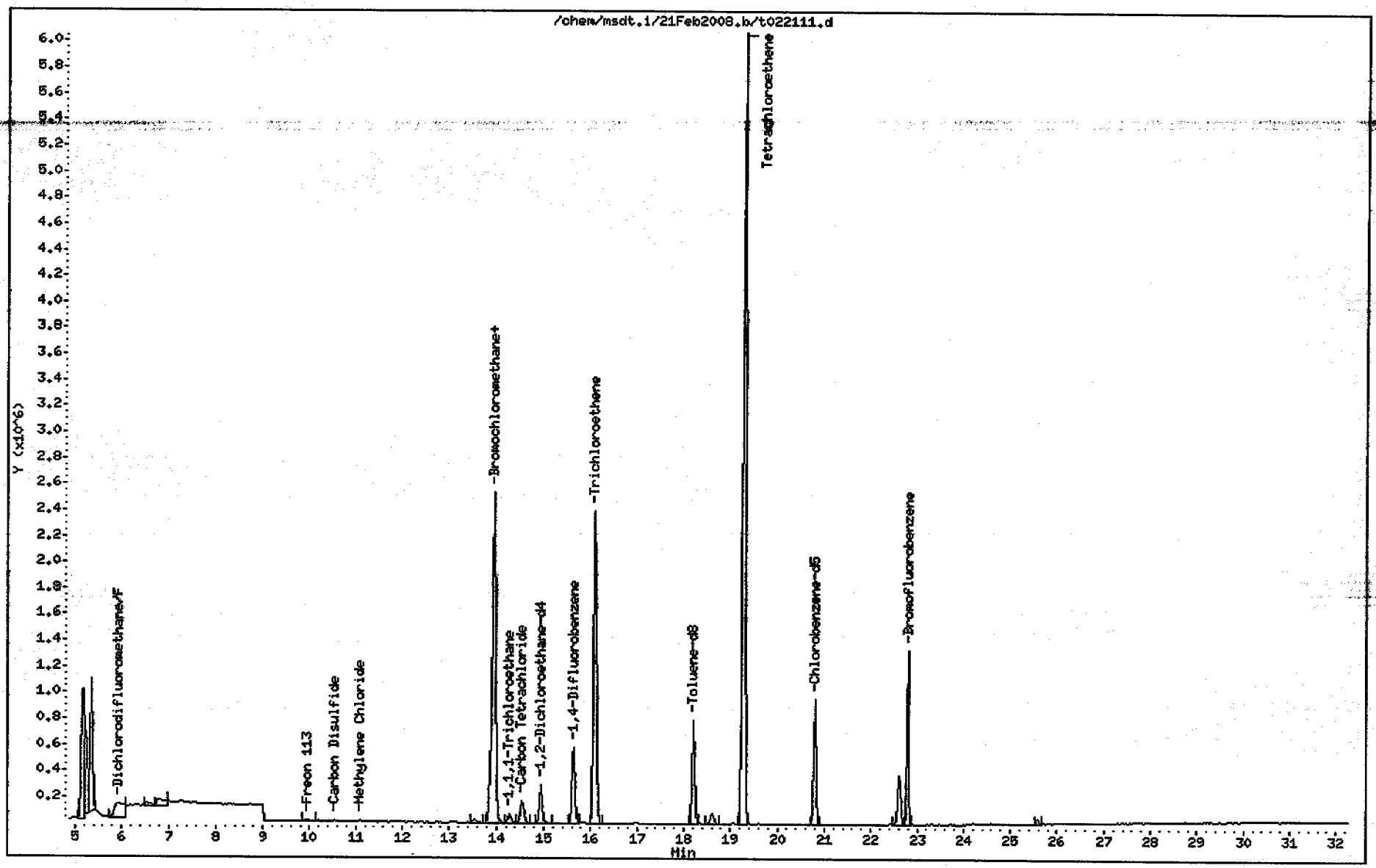
Data File: /chem/msdt.i/21Feb2008.b/t022111.d
Date : 21-FEB-2008 18:47
Client ID:
Sample Info: 200mL #33942

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0013



Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

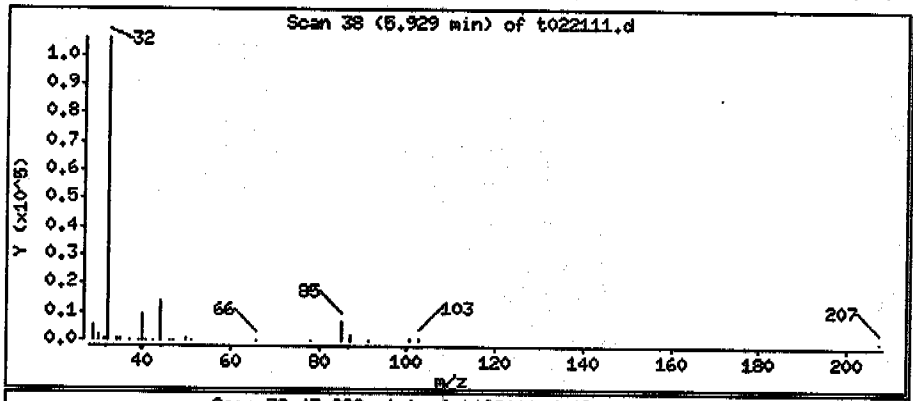
Operator: ACT

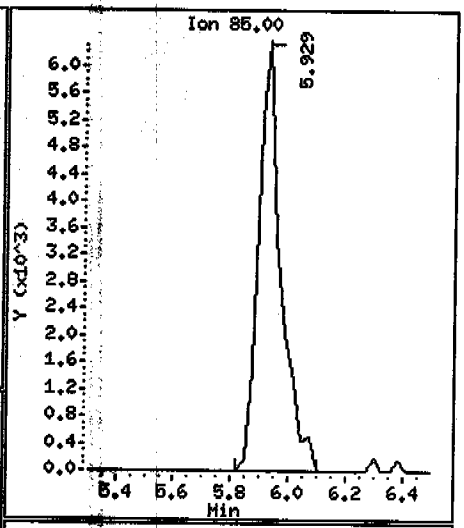
Column phase: RTx-624

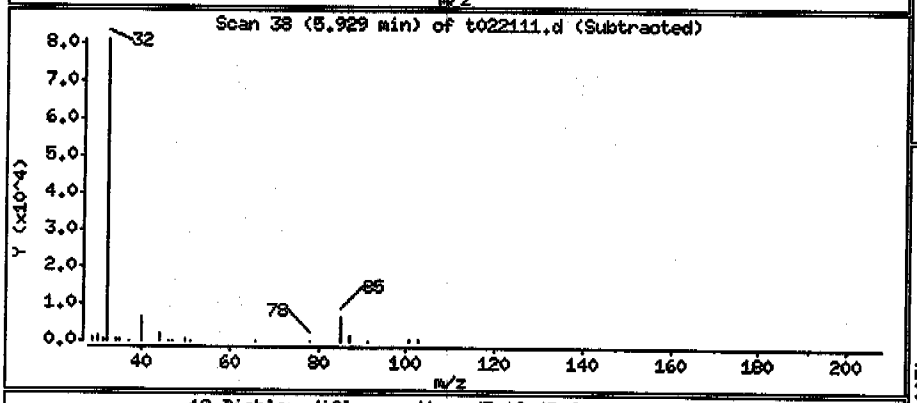
Column diameter: 0.53

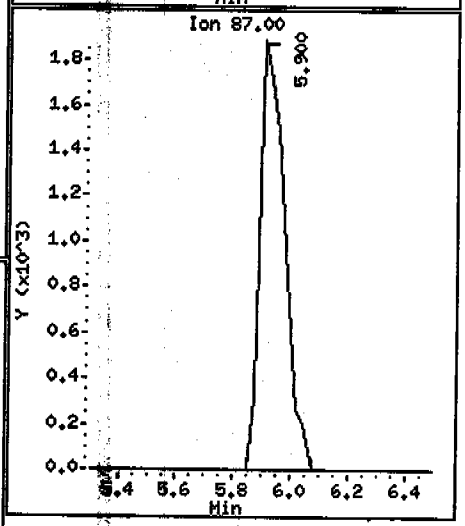
12 Dichlorodifluoromethane/Fr12

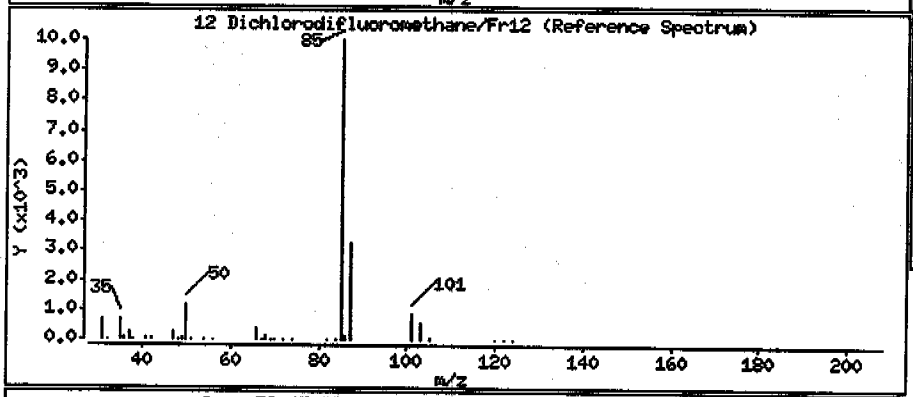
Concentration: 1.032 PPBV

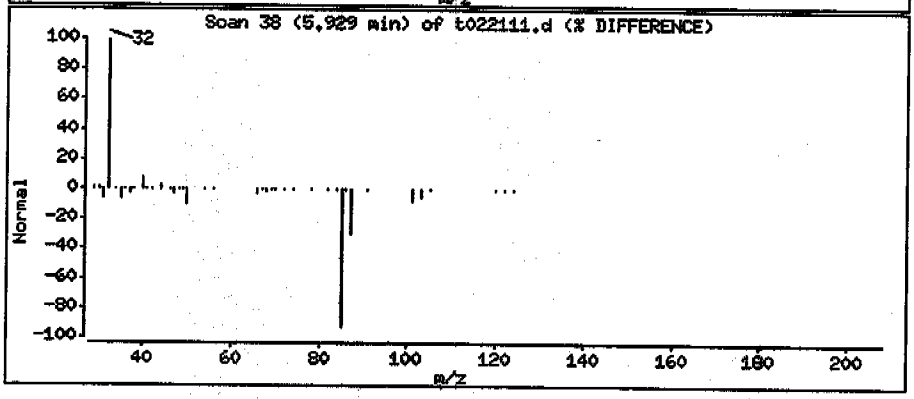












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

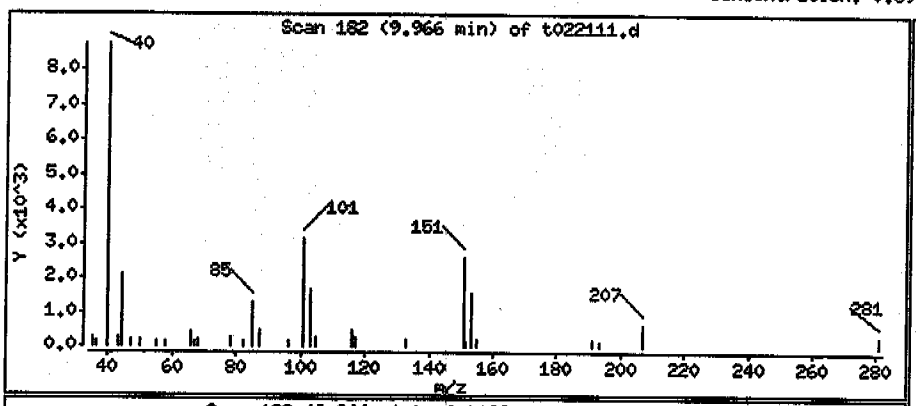
Operator: ACT

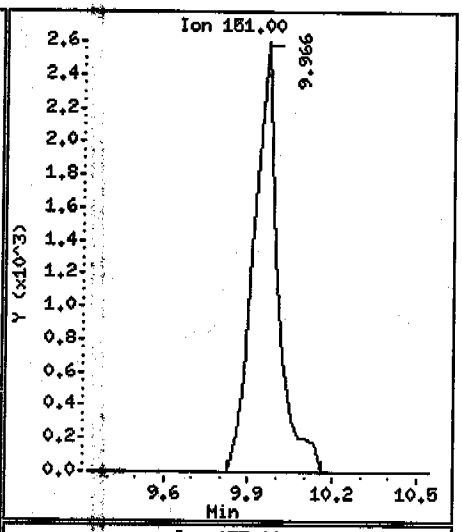
Column phase: RTx-624

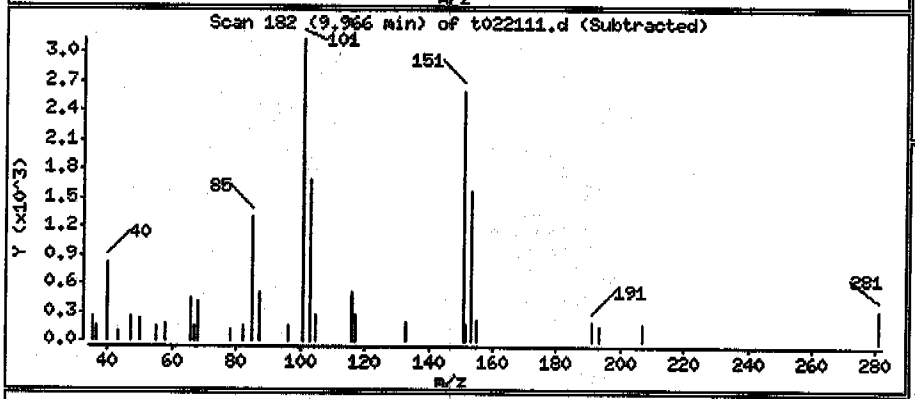
Column diameter: 0.53

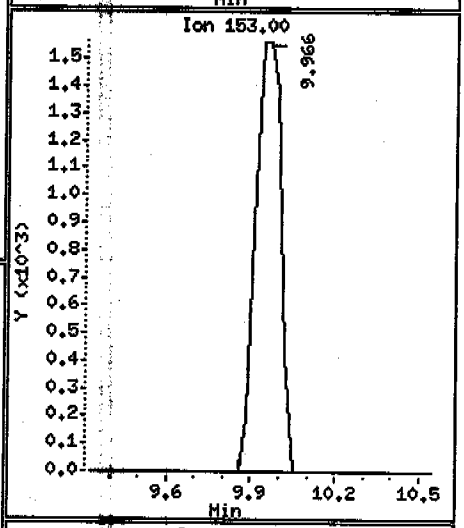
42 Freon 113

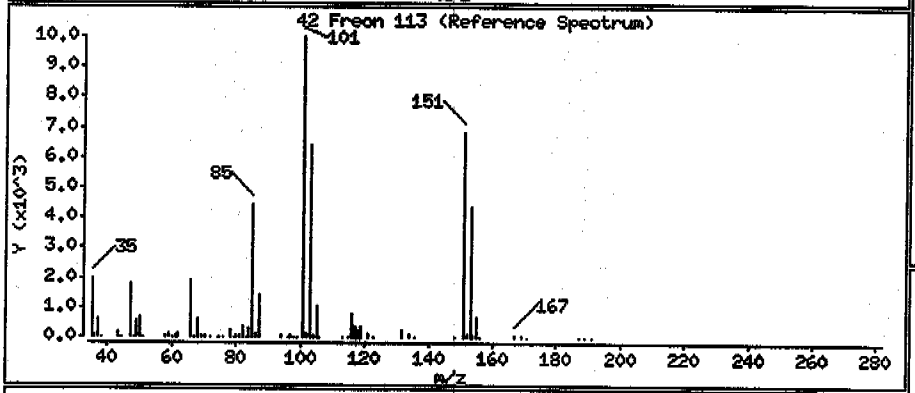
Concentration: 0.8965 PPBV

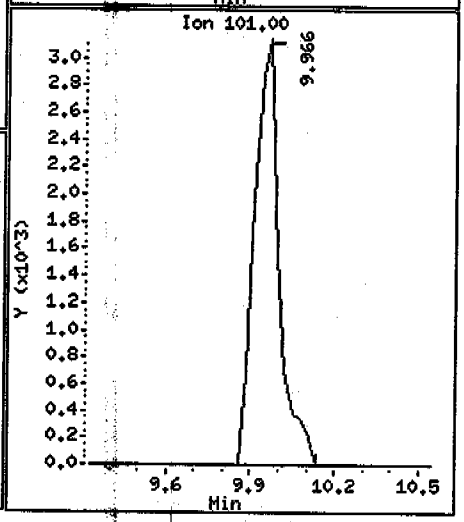


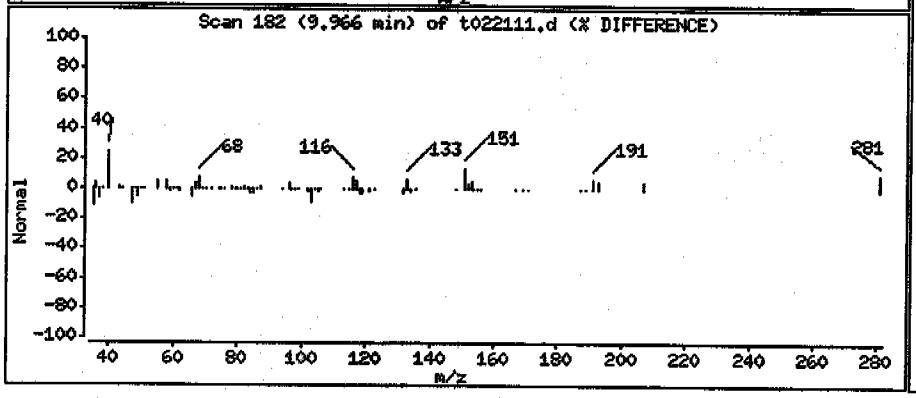












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

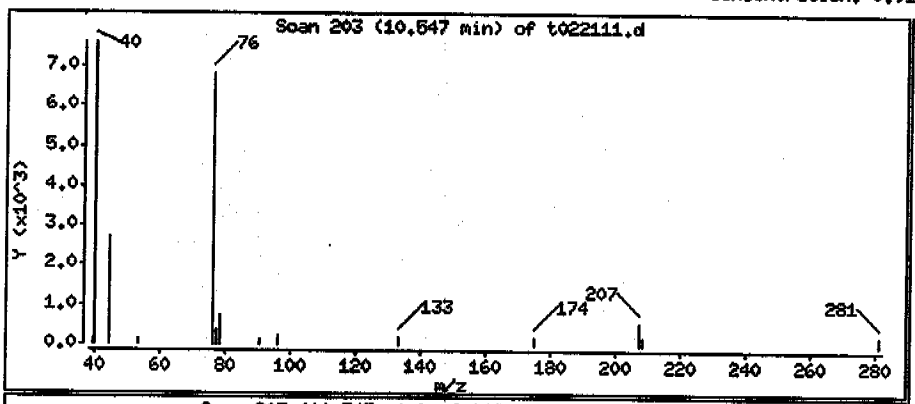
Operator: ACT

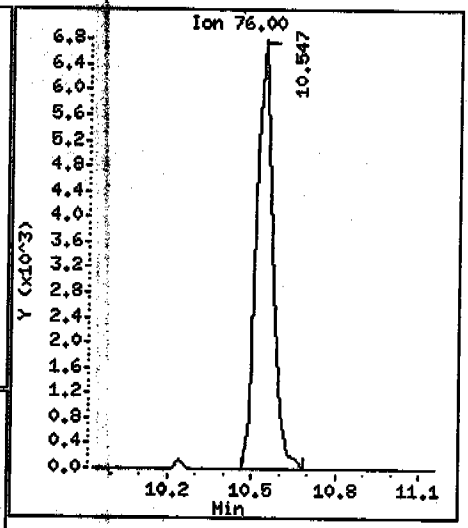
Column phase: RTx-624

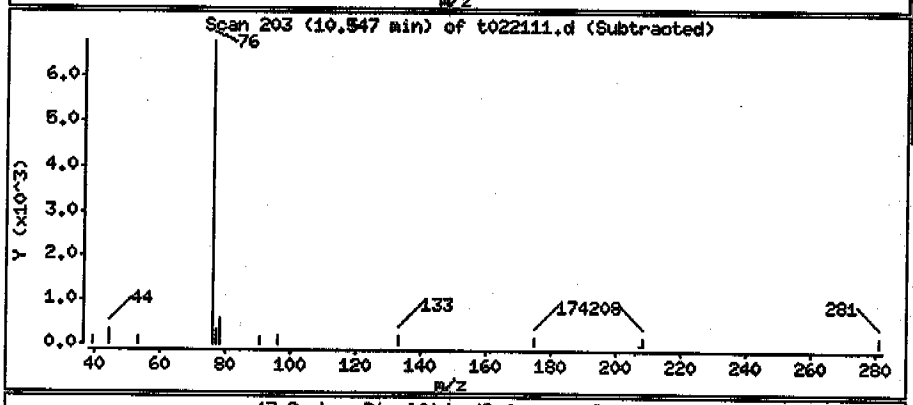
Column diameter: 0.53

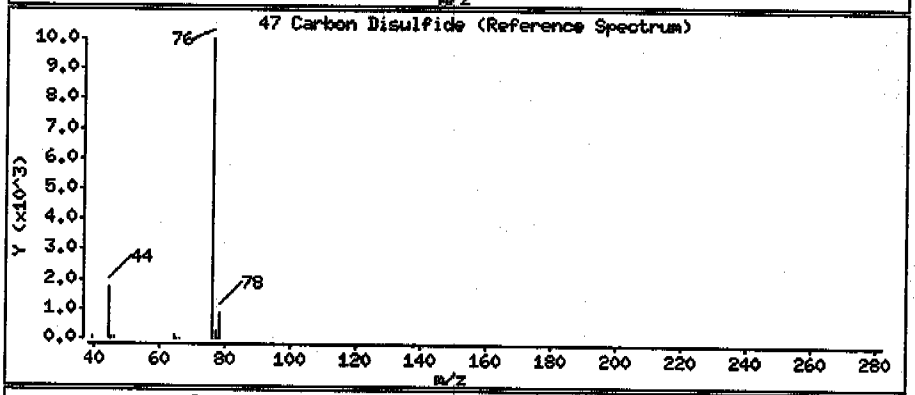
47 Carbon Disulfide

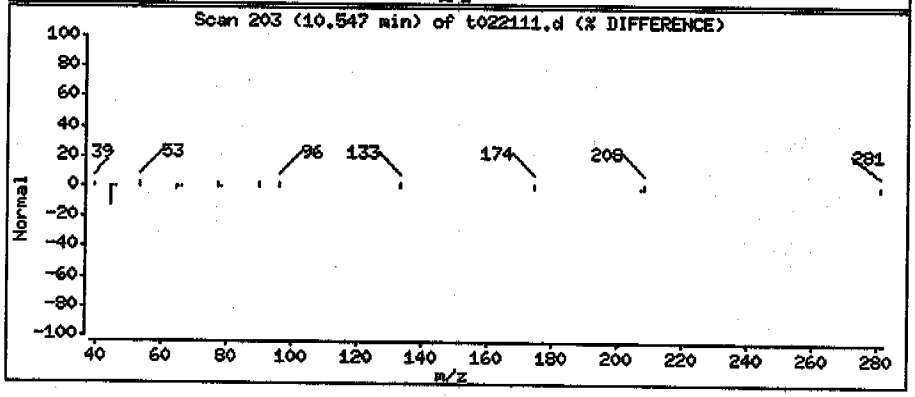
Concentration: 0.9179 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

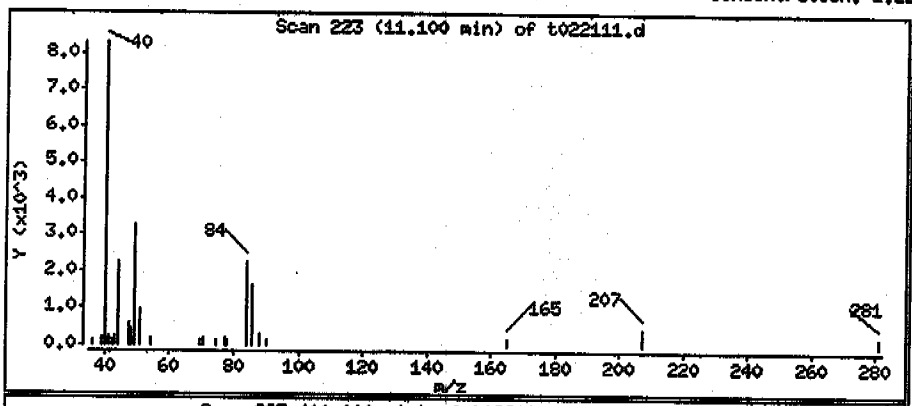
Operator: ACT

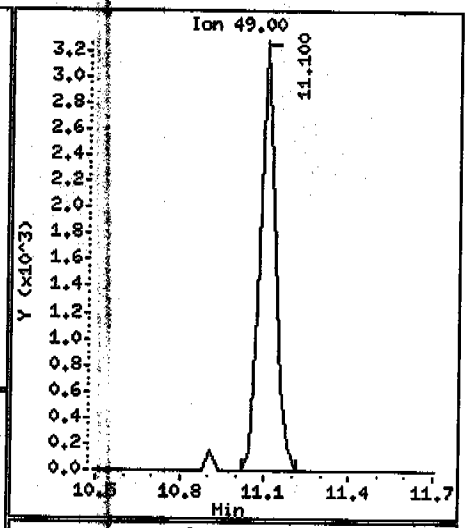
Column phase: RTx-624

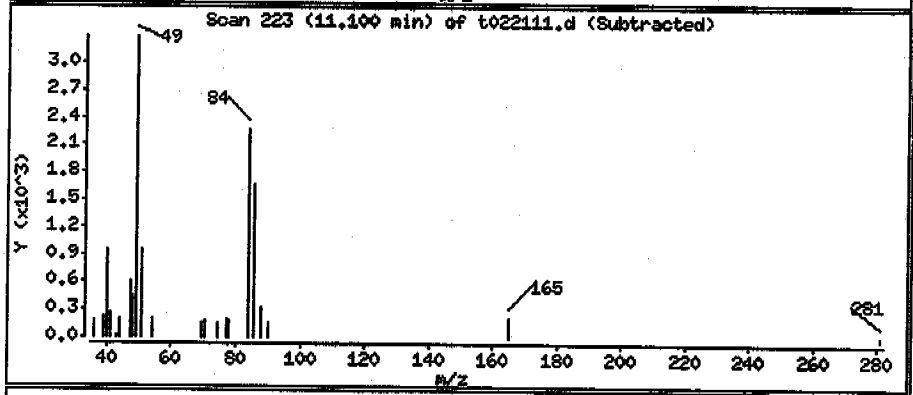
Column diameter: 0.53

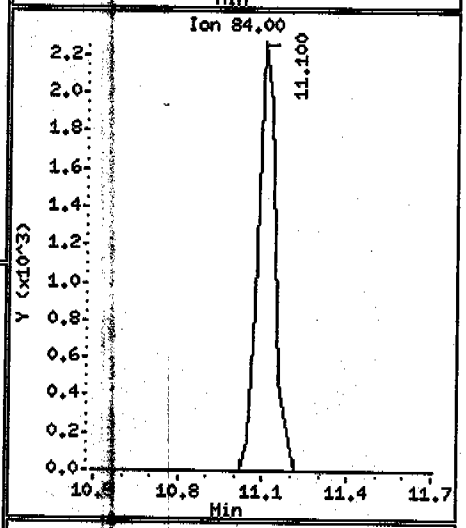
54 Methylene Chloride

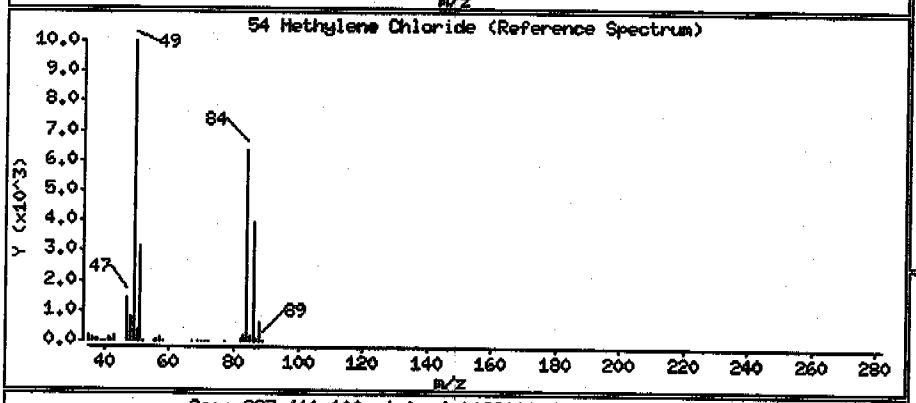
Concentration: 1.223 PPBV

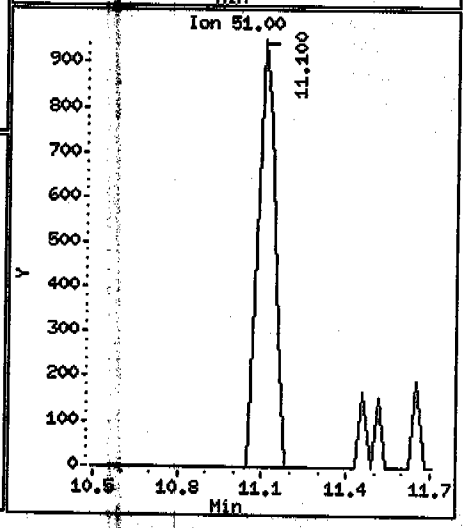


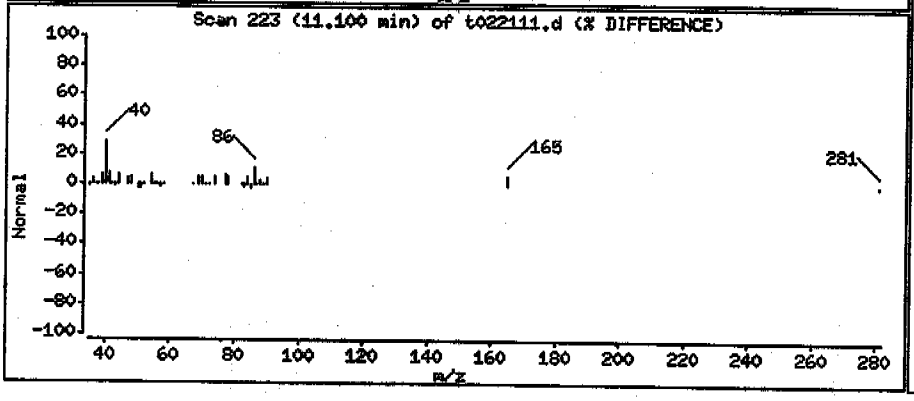












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

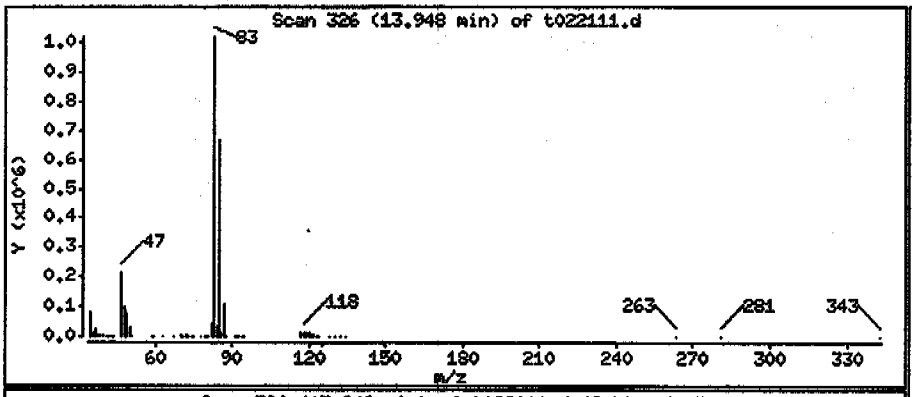
Operator: ACT

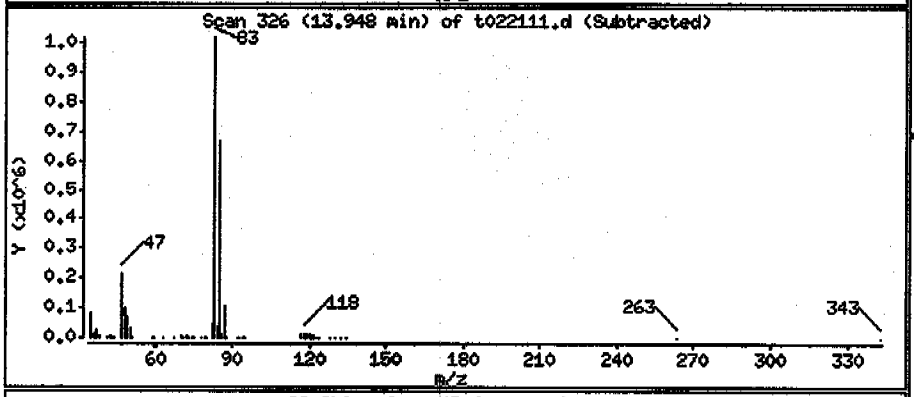
Column phase: RTx-624

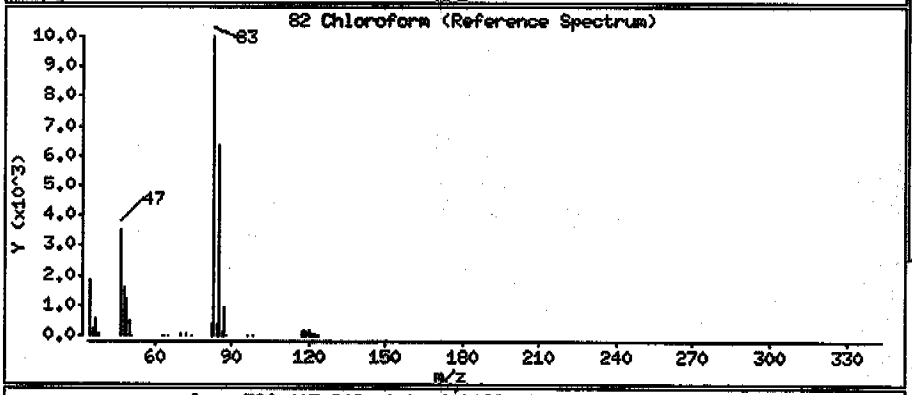
Column diameter: 0.53

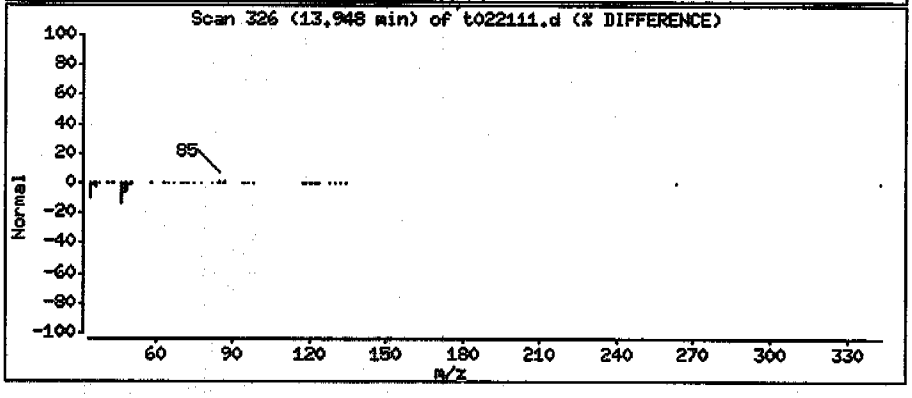
82 Chloroform

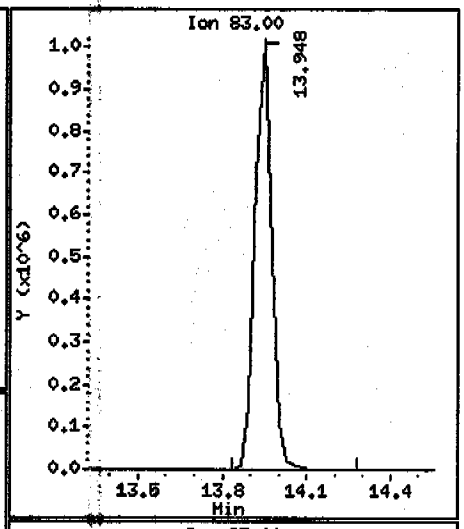
Concentration: 164.22 PPBV

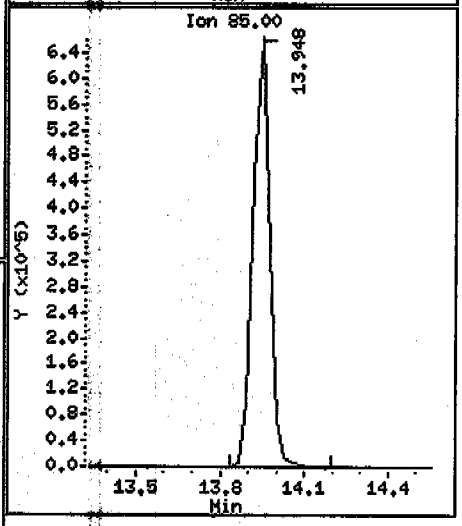












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

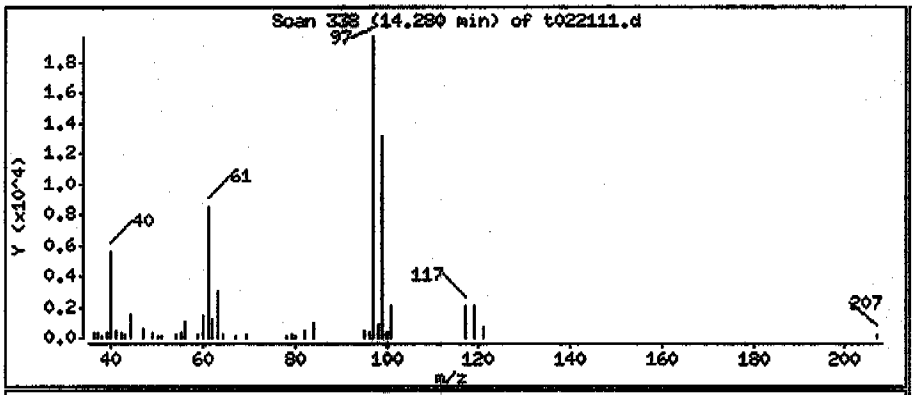
Operator: ACT

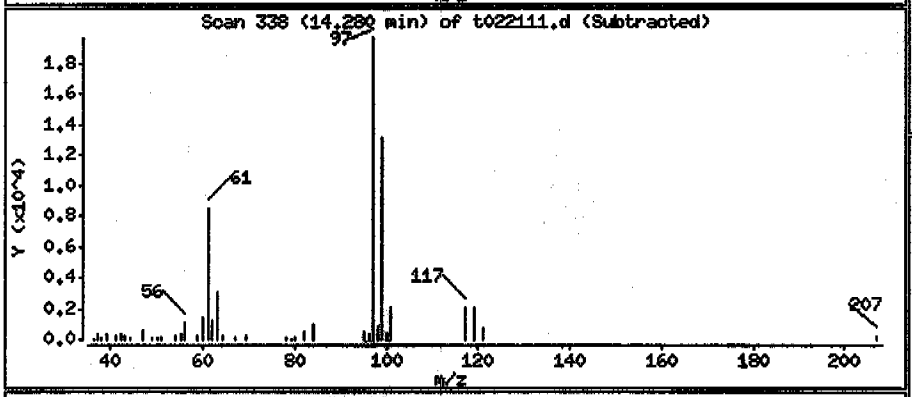
Column phase: RTx-624

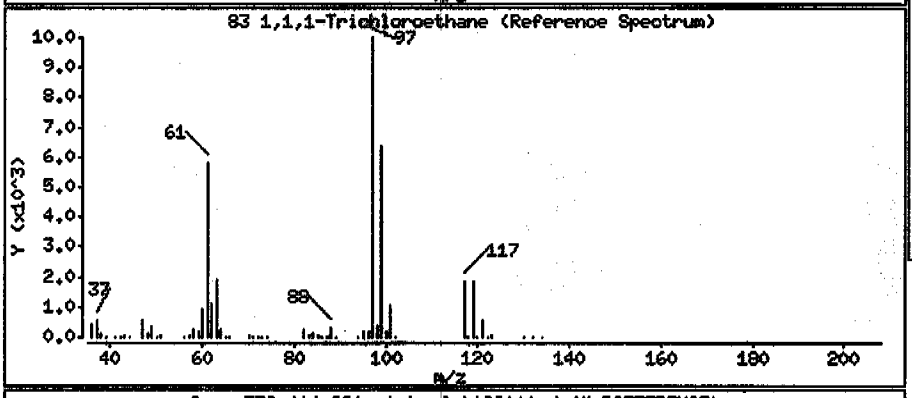
Column diameter: 0.53

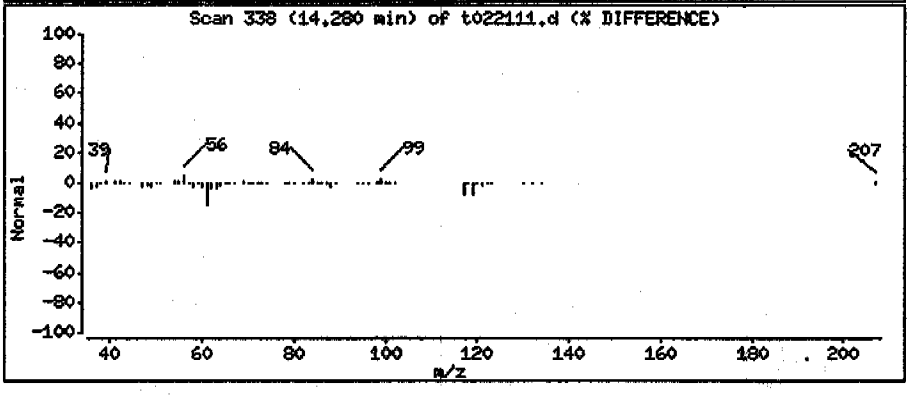
83 1,1,1-Trichloroethane

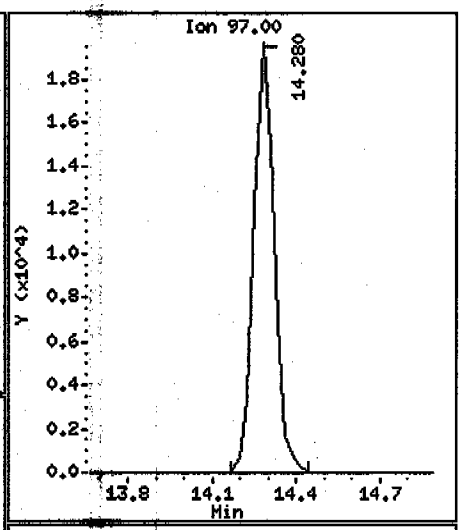
Concentration: 3.543 PPBV

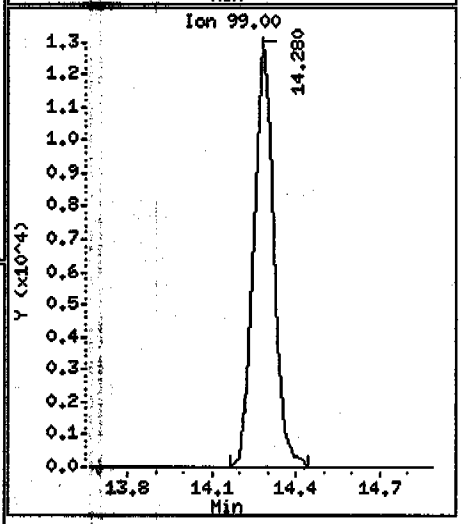












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

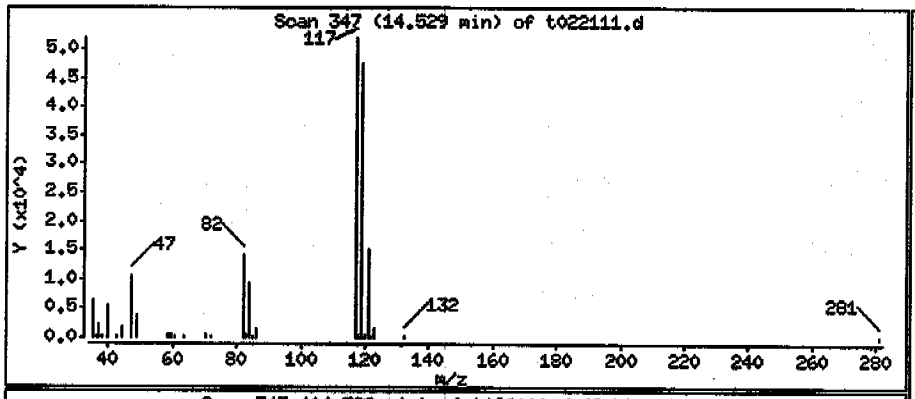
Operator: ACT

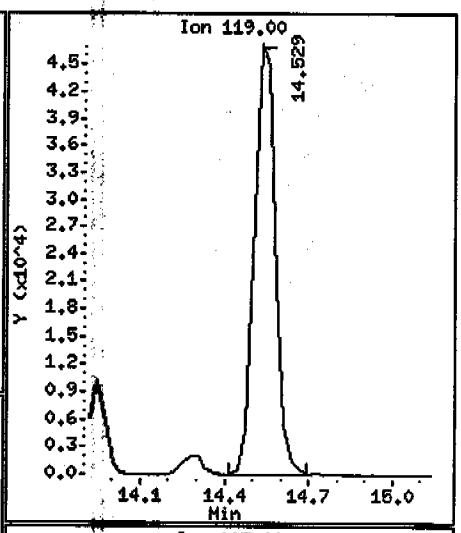
Column phase: RTx-624

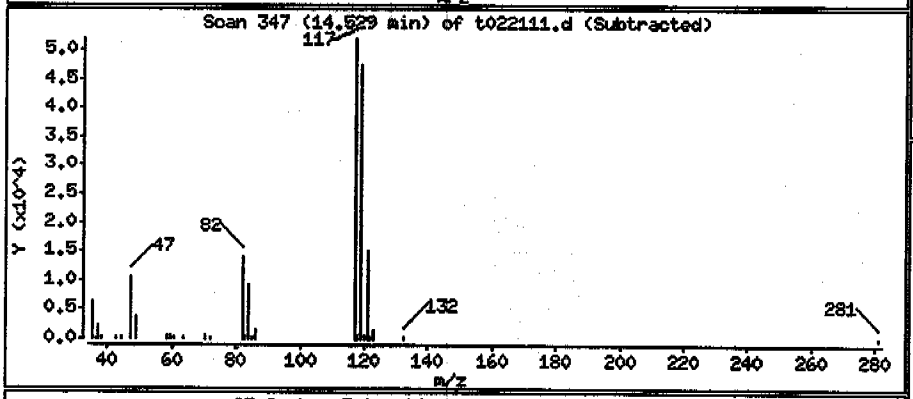
Column diameter: 0.53

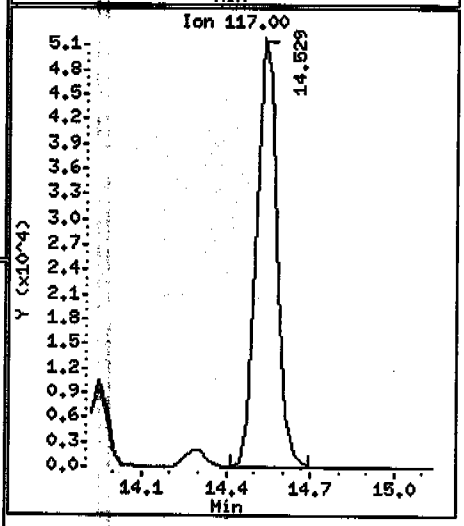
87 Carbon Tetrachloride

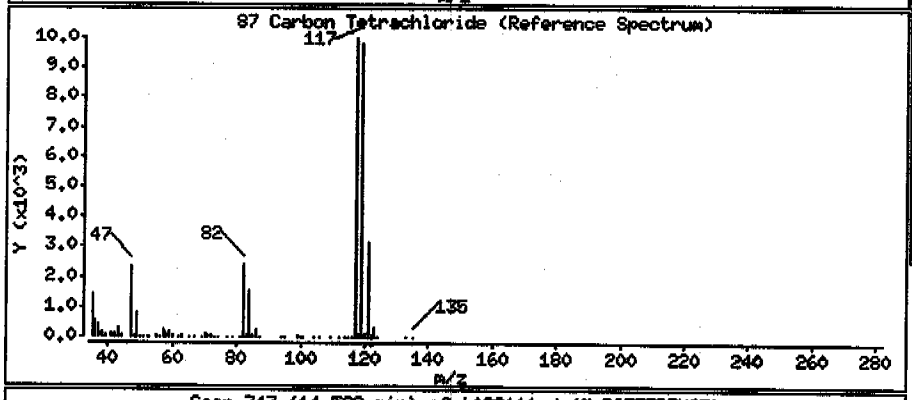
Concentration: 9.168 PPBV

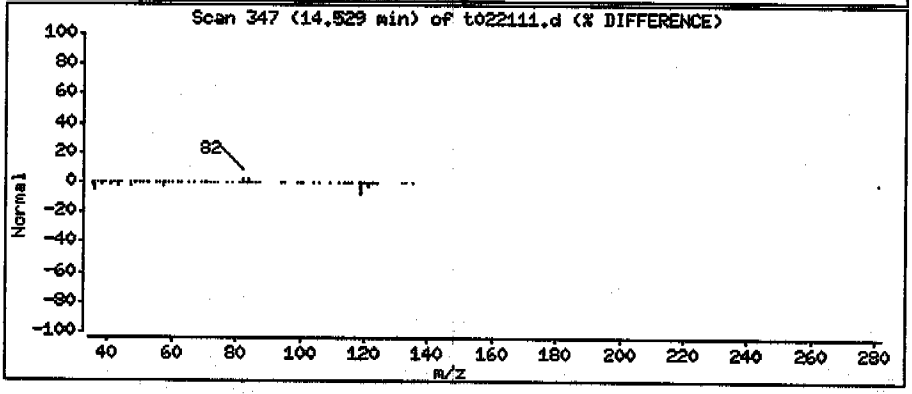












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

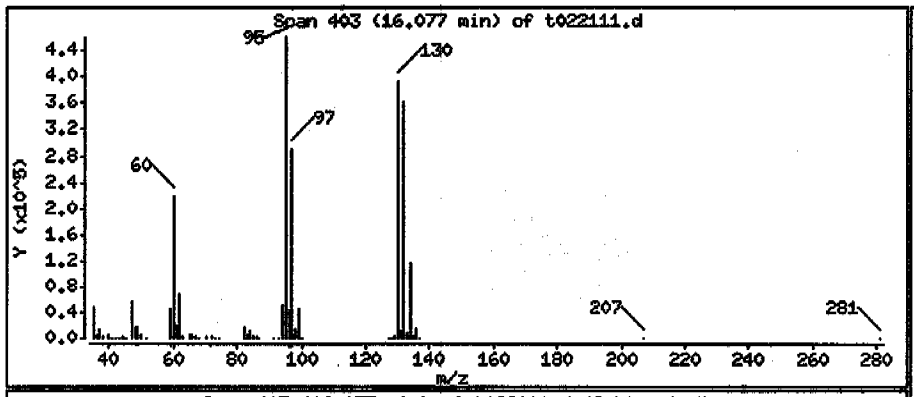
Operator: ACT

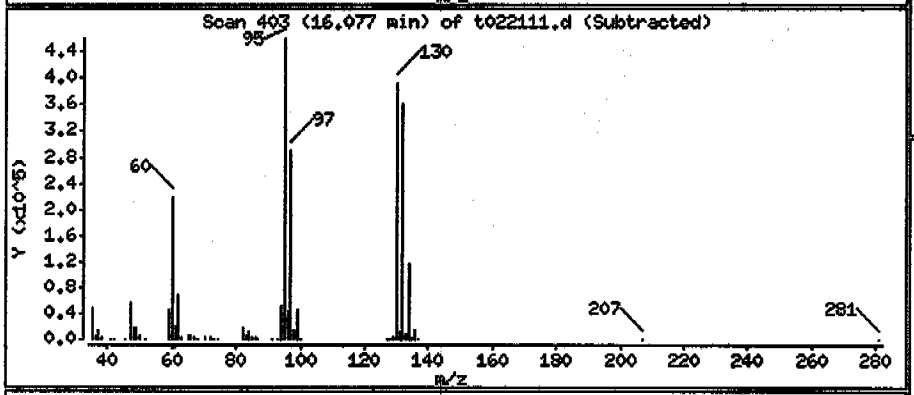
Column phase: RTx-624

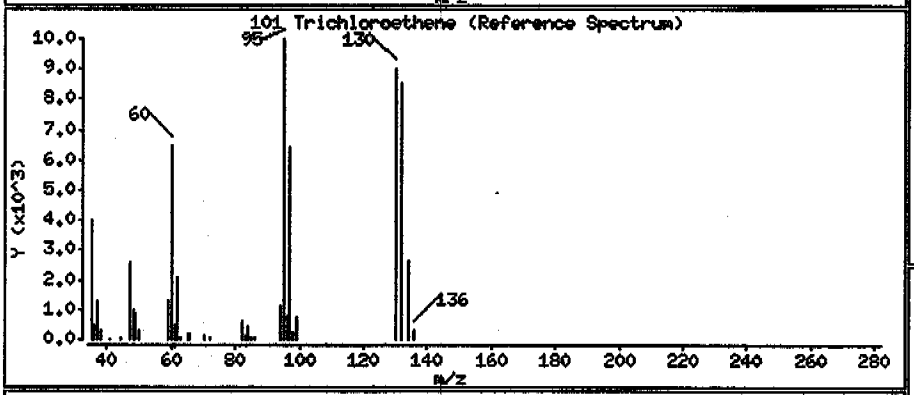
Column diameter: 0.53

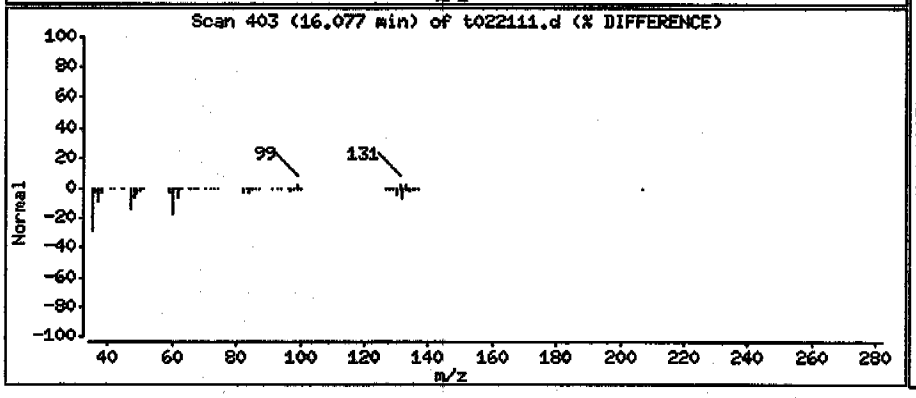
101 Trichloroethene

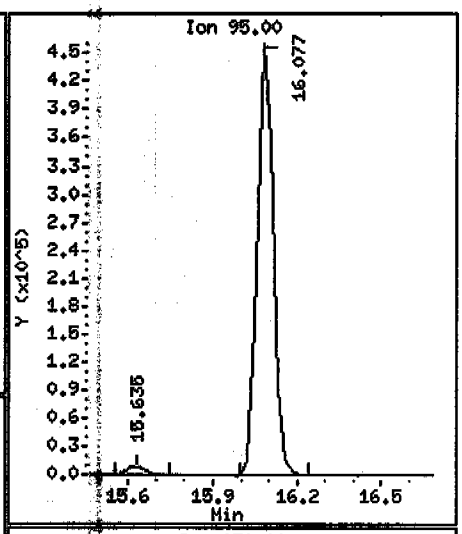
Concentration: 129.90 PPBV

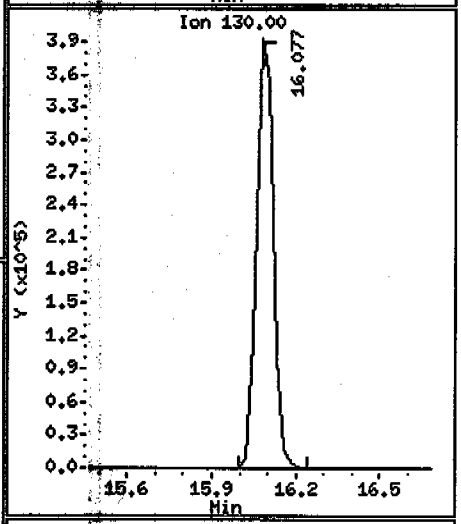


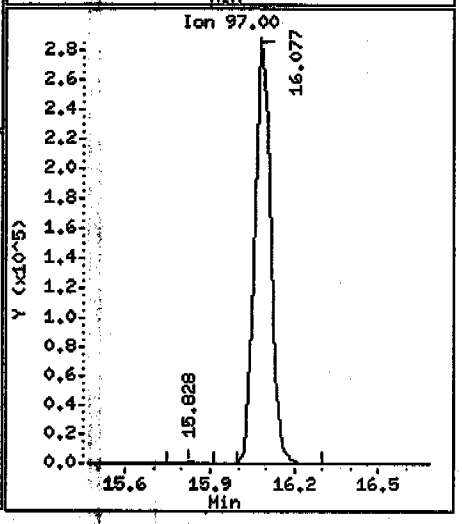












Data File: /chem/msdt.i/21Feb2008.b/t022111.d

Date : 21-FEB-2008 18:47

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

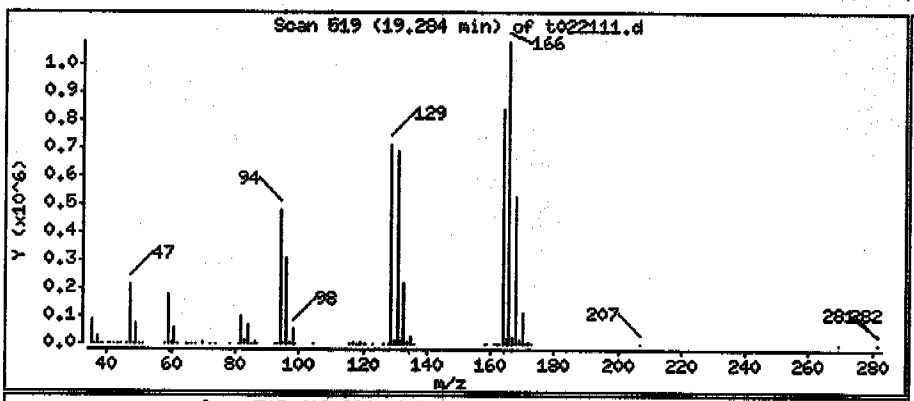
Operator: ACT

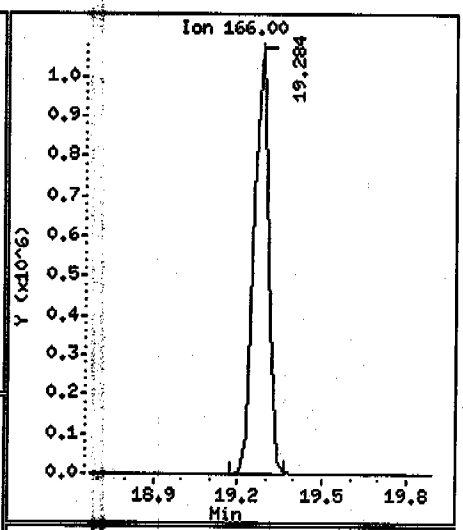
Column phase: RTx-624

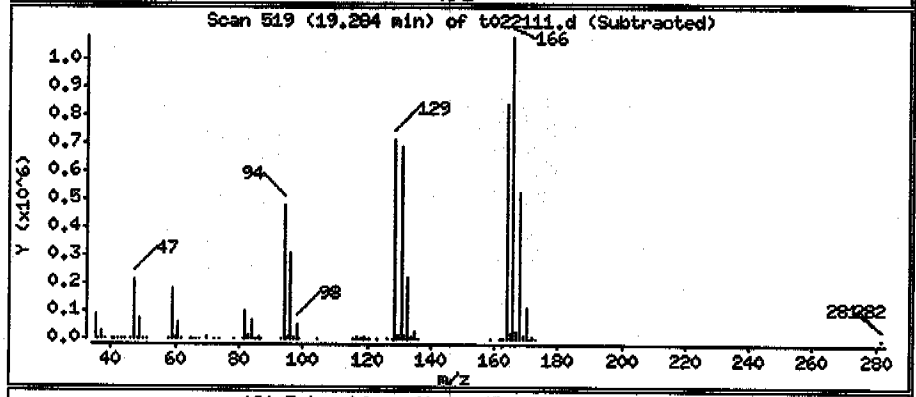
Column diameter: 0.53

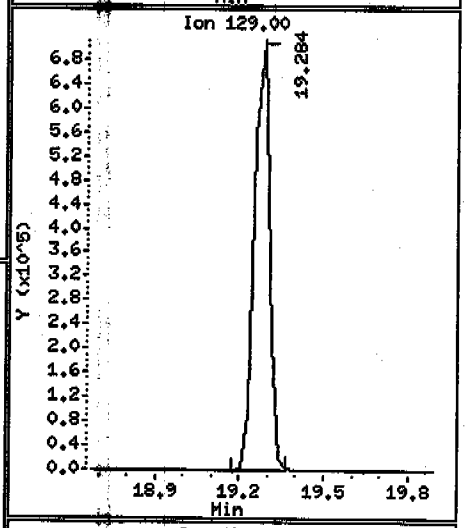
120 Tetrachloroethene

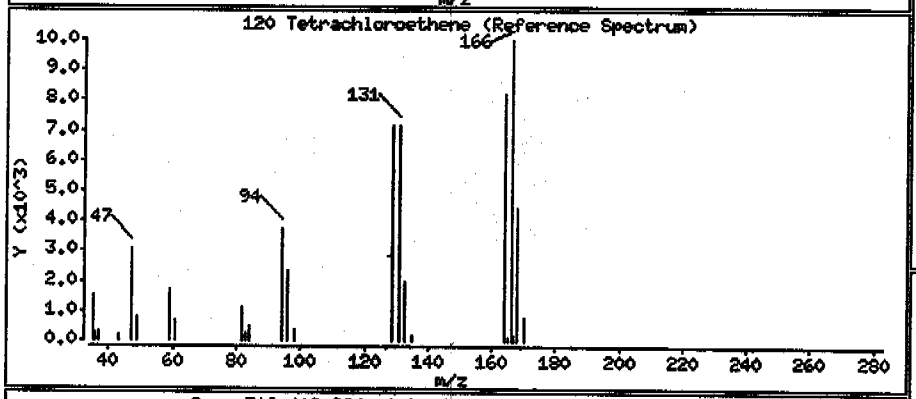
Concentration: 202.42 PPBV

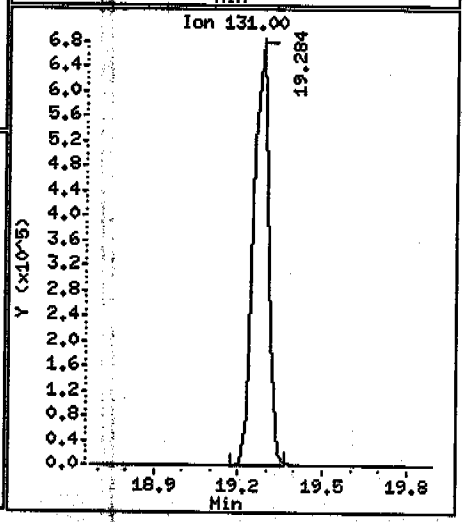


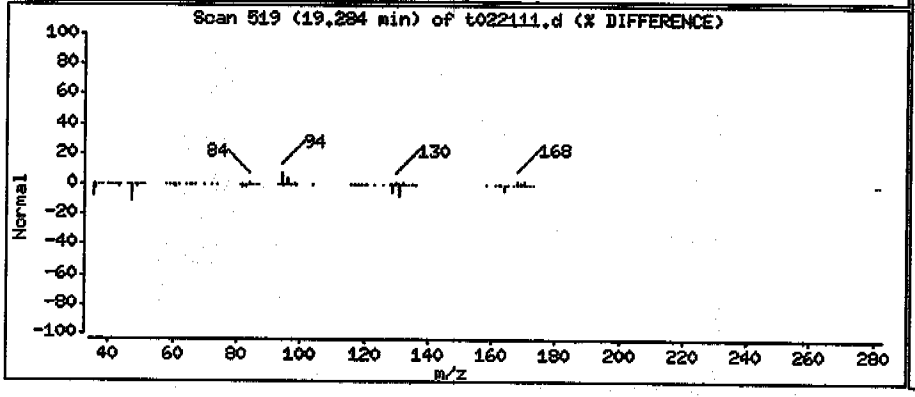












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10518 Lab Duplicate

Lab ID#: 0802200-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.1	4.2	5.2
Freon 113	0.84	0.87	6.4	6.7
Carbon Disulfide	0.84	0.84	2.6	2.6
Methylene Chloride	0.84	1.0	2.9	3.6
Chloroform	0.84	160	4.1	800
1,1,1-Trichloroethane	0.84	3.5	4.6	19
Carbon Tetrachloride	0.84	9.2	5.3	58
Trichloroethene	0.84	130	4.5	680
Tetrachloroethene	0.84	200	5.7	1400

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10518 Lab Duplicate

Lab ID#: 0802200-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.1	4.2	5.2
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	0.87	6.4	6.7
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	3.4	Not Detected	8.0	Not Detected
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	0.84	2.6	2.6
Methylene Chloride	0.84	1.0	2.9	3.6
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	160	4.1	800
1,1,1-Trichloroethane	0.84	3.5	4.6	19
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	9.2	5.3	58
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	130	4.5	680
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	200	5.7	1400

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10518 Lab Duplicate

Lab ID#: 0802200-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022113.d
Lab Smp Id: 0802200-01AA
Inj Date : 21-FEB-2008 20:05
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #33942
Misc Info : 6.0"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	280827	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	228006			27.38- 127.38	81.19
13.893	13.865 (1.000)	49	638089			131.81- 231.81	227.22
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1061326	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	168005			0.00- 66.79	15.83
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	996928	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	581036			7.58- 107.58	58.28
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.076)	65	436680	24.1660	24.166	80.00- 120.00	100.00
14.943	14.943 (1.076)	67	215394			3.57- 103.57	49.33
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1047475	25.6217	25.622	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	120317			0.00- 61.29	11.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	715139			18.71- 118.71	68.27
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	672955	26.0971	26.097	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	855669			76.46- 176.46	127.15
22.796	22.796 (1.096)	176	651071			48.22- 148.22	96.75
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	34621	0.63135	1.061	80.00- 120.00	100.00
5.957	5.901 (0.429)	87	11089			0.00- 82.13	32.03
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	14803	0.51786	0.8700	80.00- 120.00	100.00
9.966	9.939 (0.717)	153	7803			13.46- 113.46	52.71
9.966	9.939 (0.717)	101	17889			82.30- 182.30	120.85
47 Carbon Disulfide					CAS #: 75-15-0		
10.575	10.547 (0.761)	76	24452	0.50243	0.8441	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	9988	0.61389	1.031	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	9169			38.51- 138.51	91.80
11.128	11.100 (0.801)	51	3059			0.00- 83.83	30.63
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	3959131	97.0675	163.07	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	2549939			14.81- 114.81	64.41
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.307	14.280 (1.030)	97	94626	2.09749	3.524	80.00- 120.00	100.00
14.307	14.280 (1.030)	99	62122			14.28- 114.28	65.65
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	237877	5.48914	9.222	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	249480			56.24- 156.24	104.88
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	1724037	75.8662	127.46	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	1579814			39.09- 139.09	91.63
16.105	16.077 (1.030)	97	1089747			12.68- 112.68	63.21
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	3623914	119.092	200.08	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	2526106			18.51- 118.51	69.71
19.284	19.284 (0.927)	131	2401626			15.29- 115.29	66.27

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022113.d
Lab Smp Id: 0802200-01AA
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	280827	-11.73
97 1,4-Difluorobenze	1251468	750881	1752055	1061326	-15.19
126 Chlorobenzene-d5	1150991	690595	1611387	996928	-13.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802200-01AA
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.166	96.66	70-130
$ 113 Toluene-d8	25.000	25.622	102.49	70-130
$ 137 Bromofluorobenzene	25.000	26.097	104.39	70-130

Data File: /ohem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Sample Info: 200mL #33942

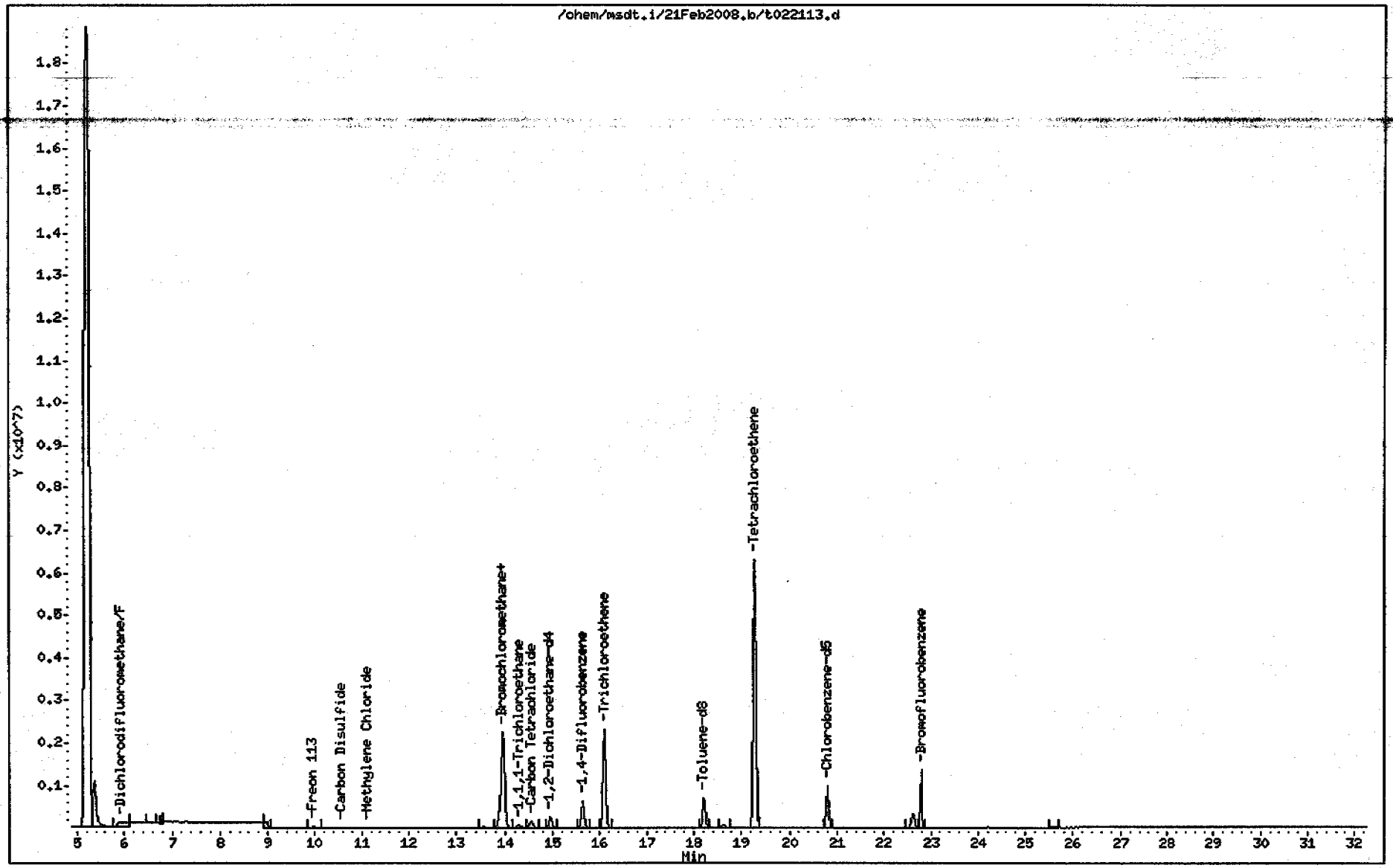
Column phase: RTx-624

Instrument: msdt.i

Operator: ACT

Column diameter: 0.53

0030



Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

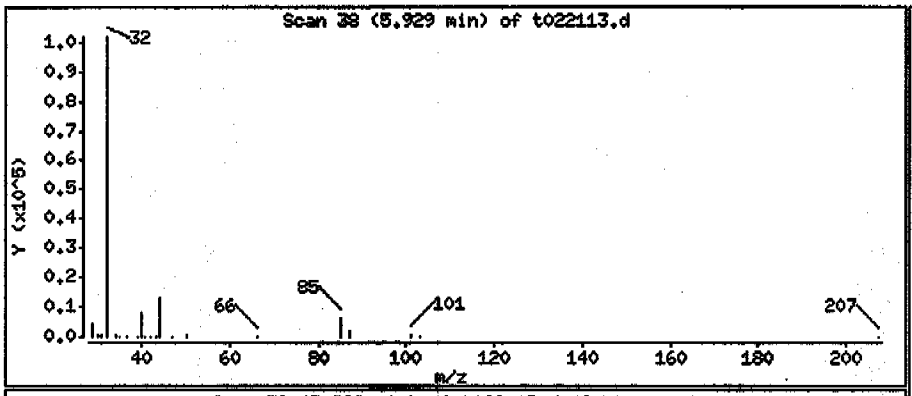
Operator: ACT

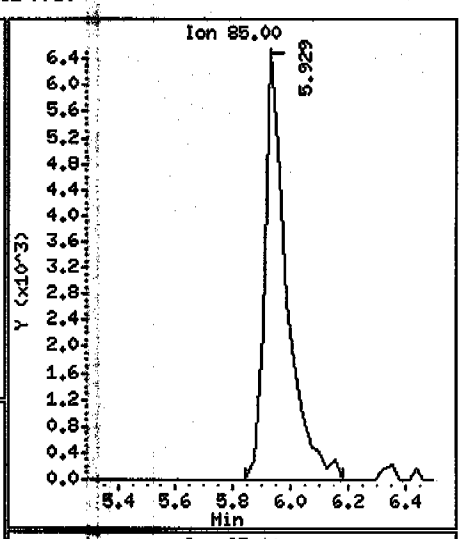
Column phase: RTx-624

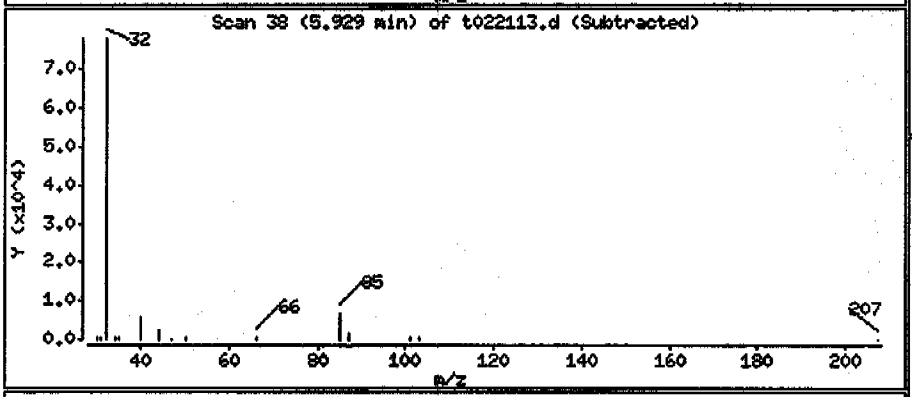
Column diameter: 0.53

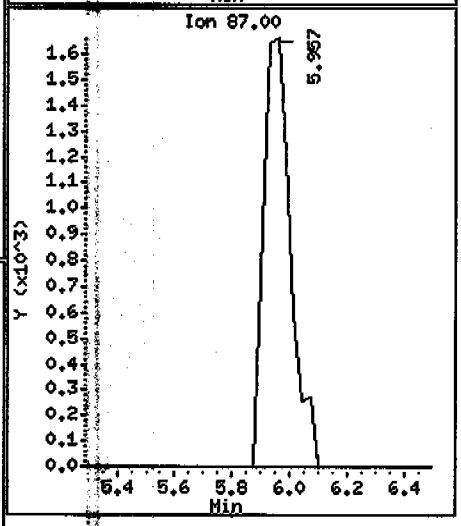
12 Dichlorodifluoromethane/Fr12

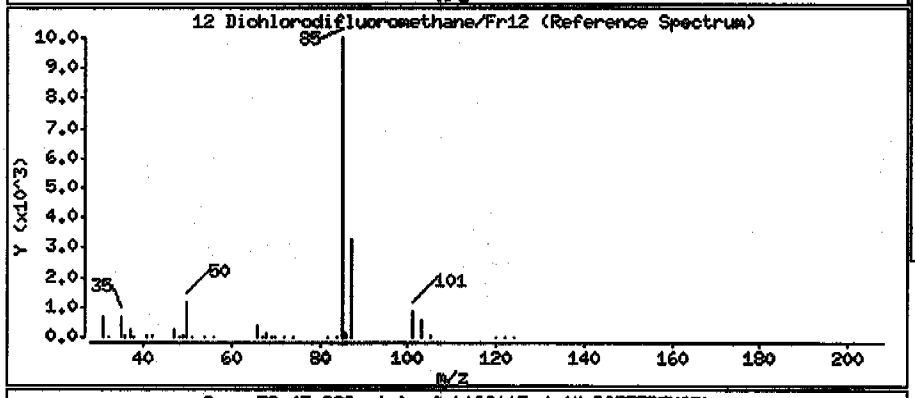
Concentration: 1.061 PPBV

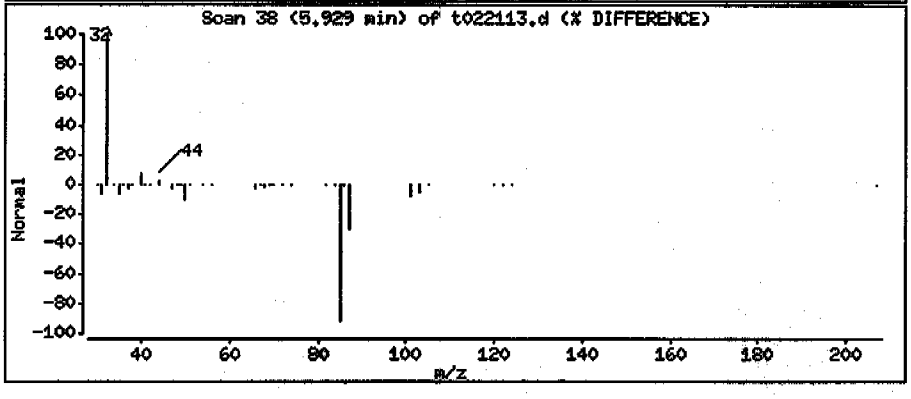












Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

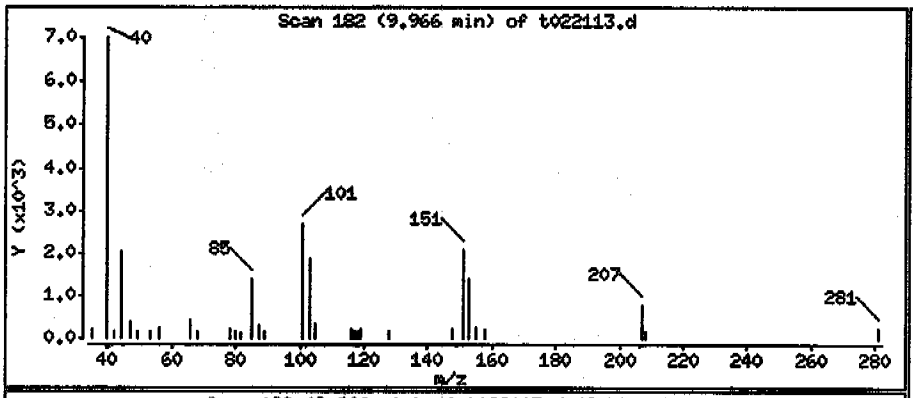
Operator: ACT

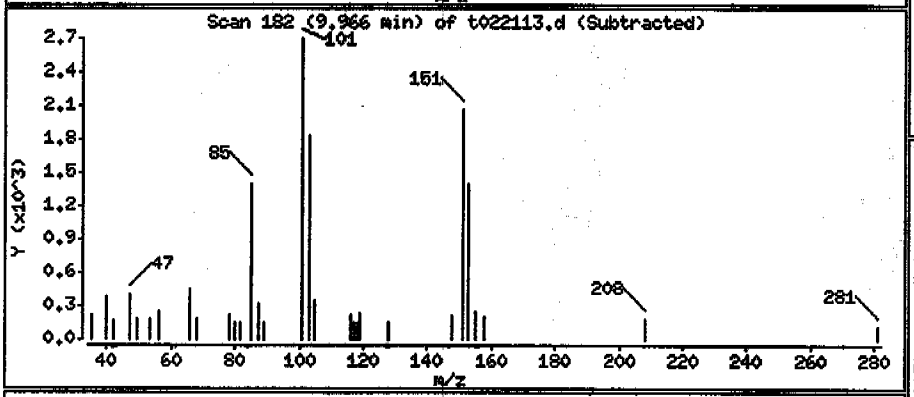
Column phase: RTx-624

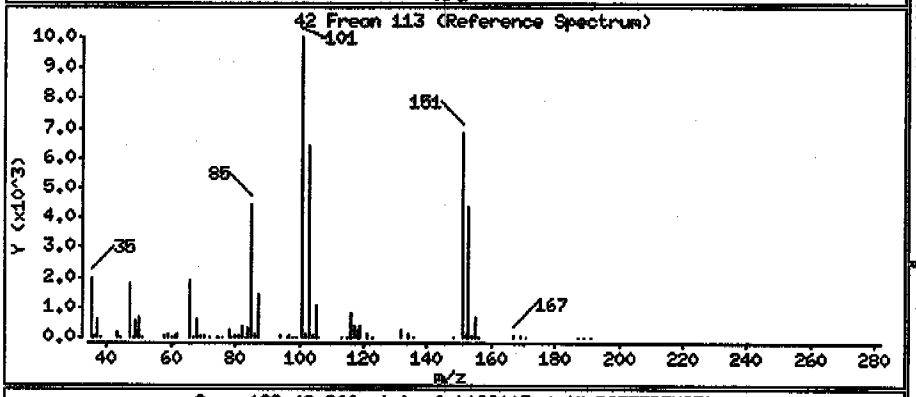
Column diameter: 0.53

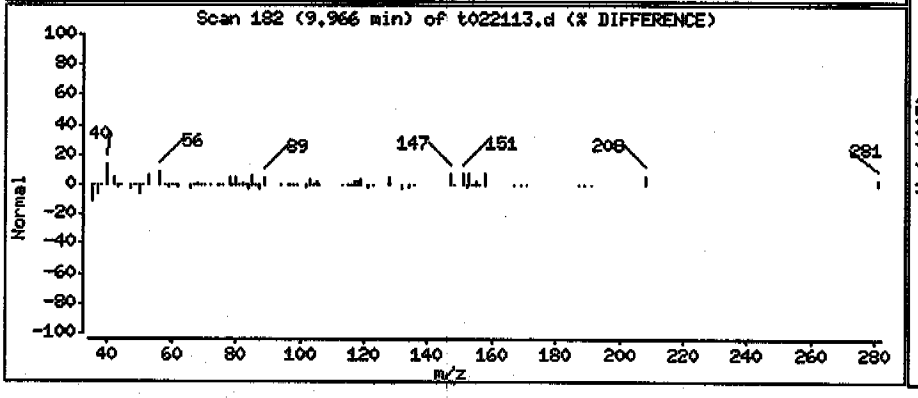
42 Freon 113

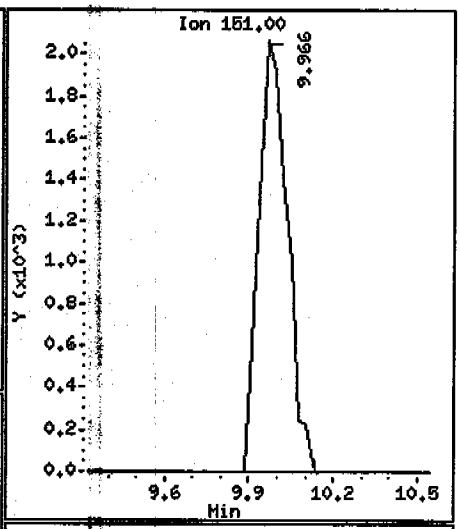
Concentration: 0.8700 PPBV

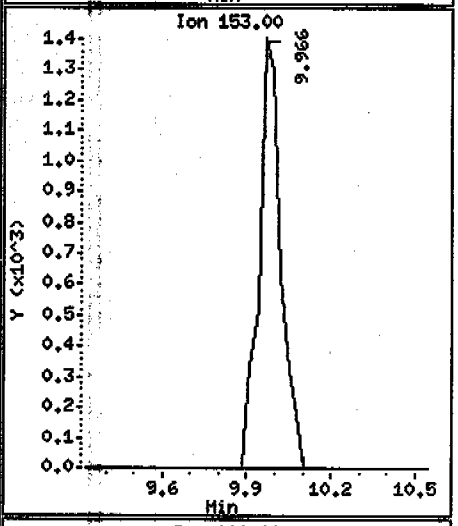


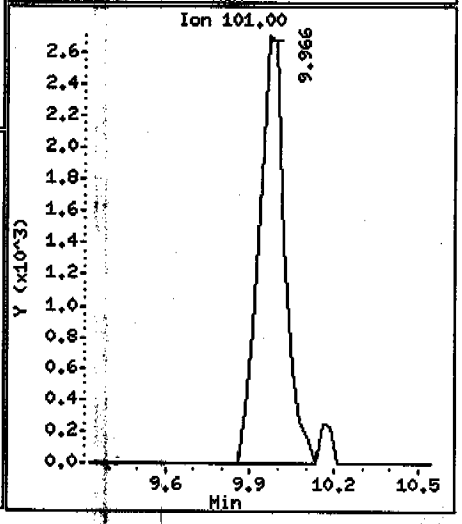












Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

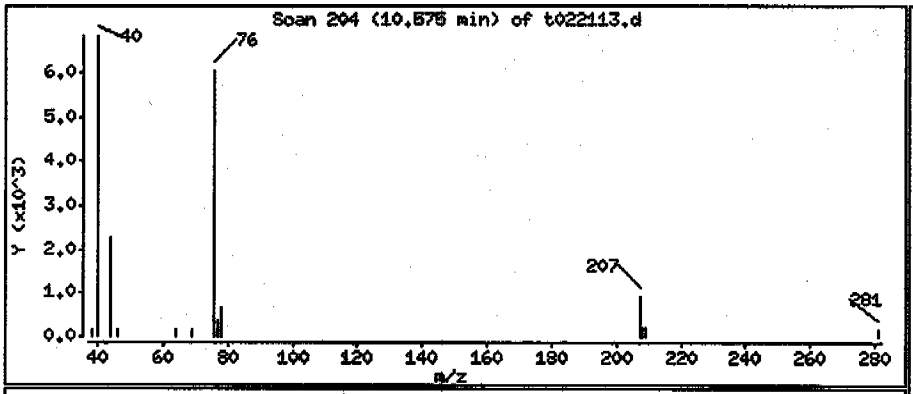
Operator: ACT

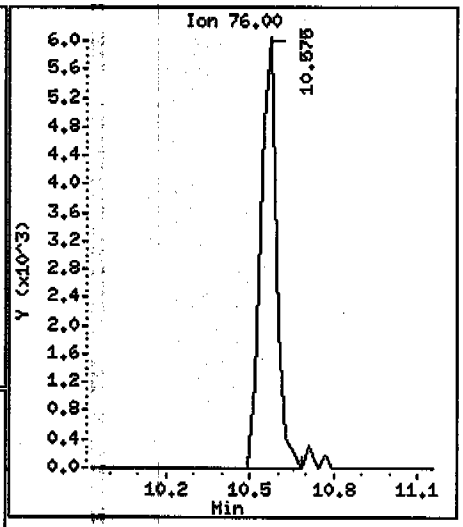
Column phase: RTx-624

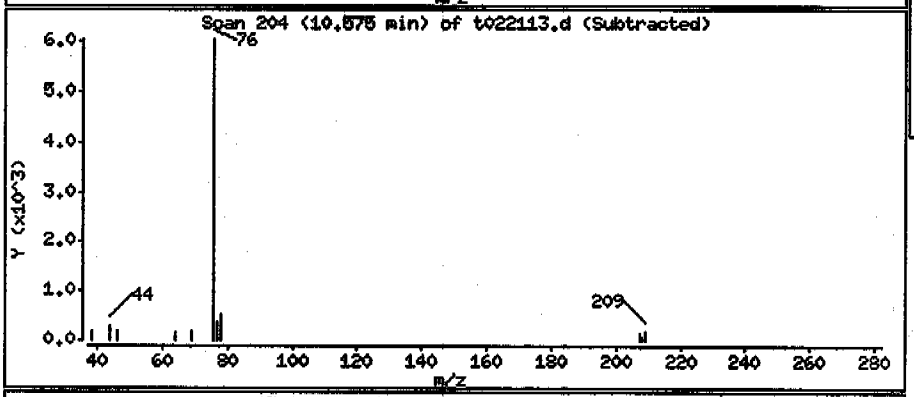
Column diameter: 0.53

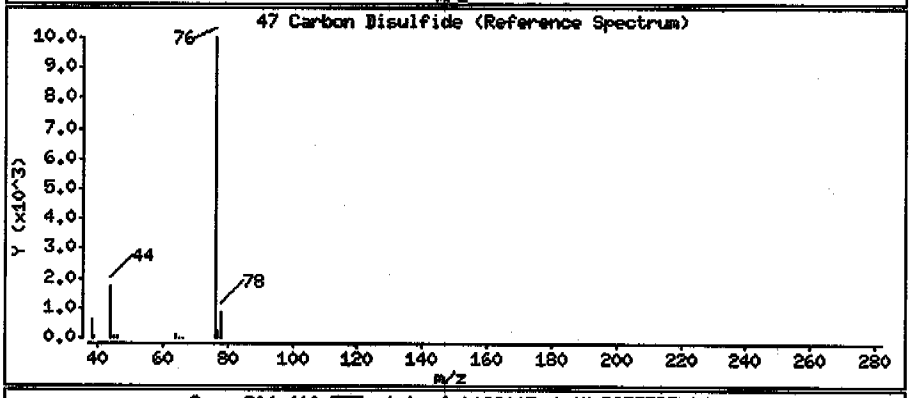
47 Carbon Disulfide

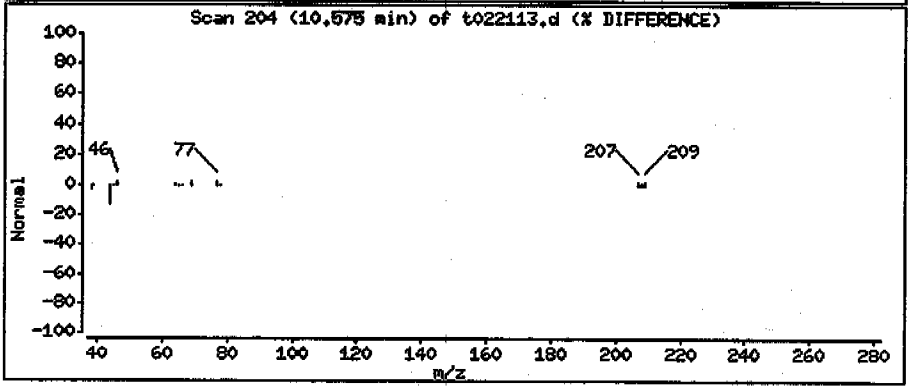
Concentration: 0.8441 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:06

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

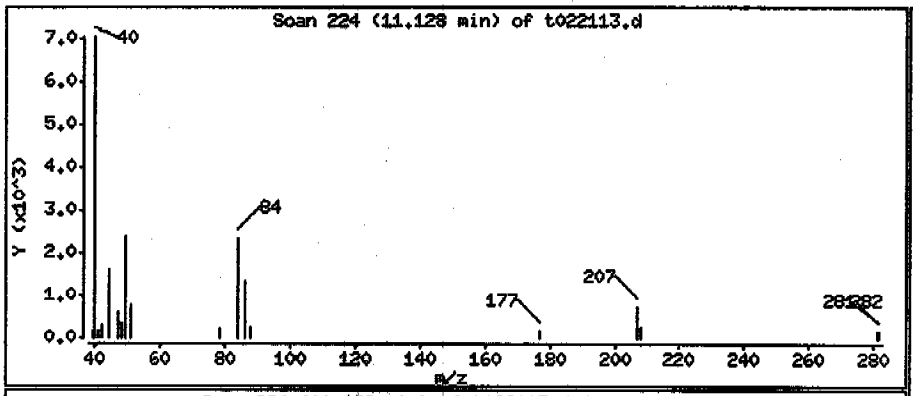
Operator: ACT

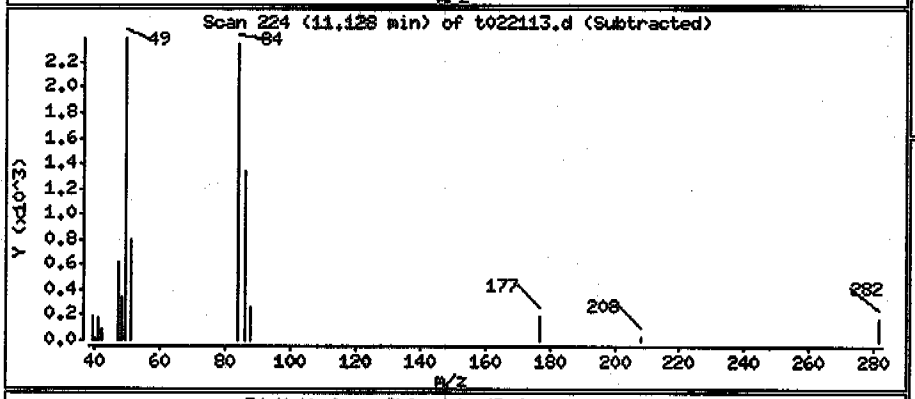
Column phase: RTx-624

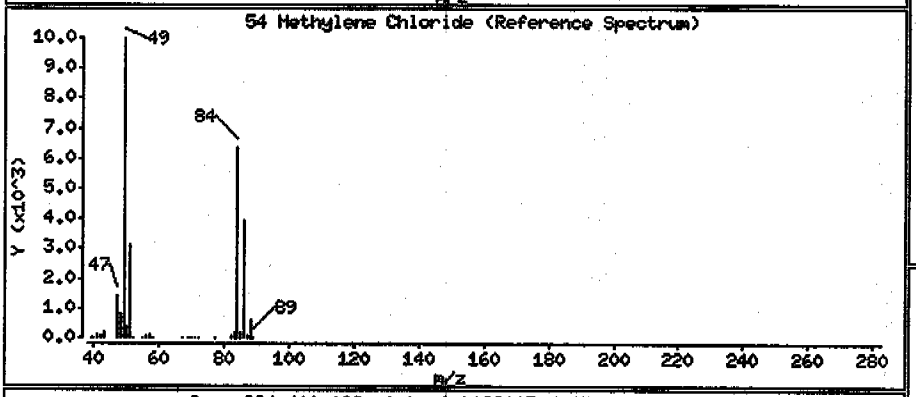
Column diameter: 0.53

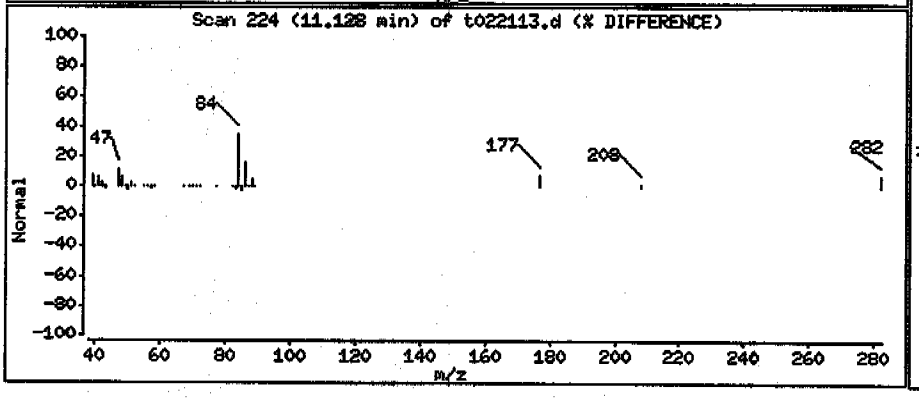
54 Methylene Chloride

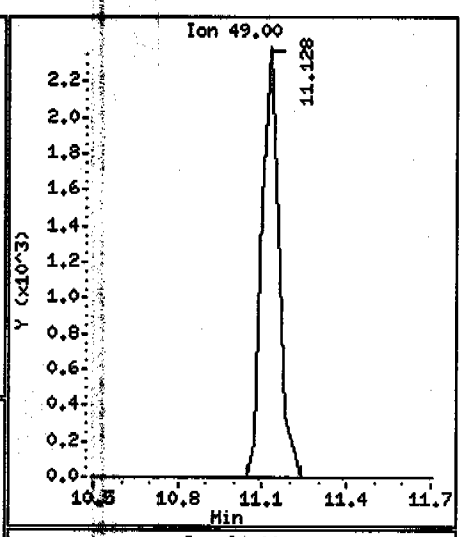
Concentration: 1.031 PPBV

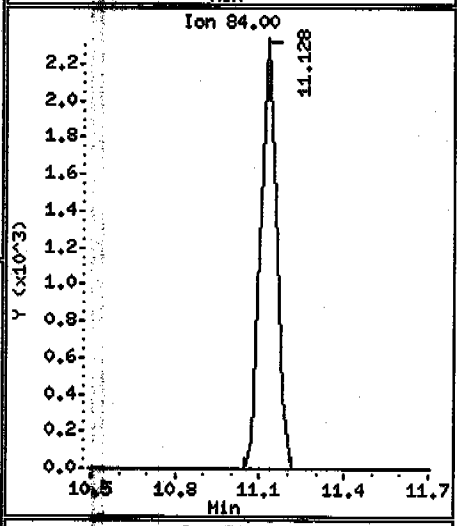


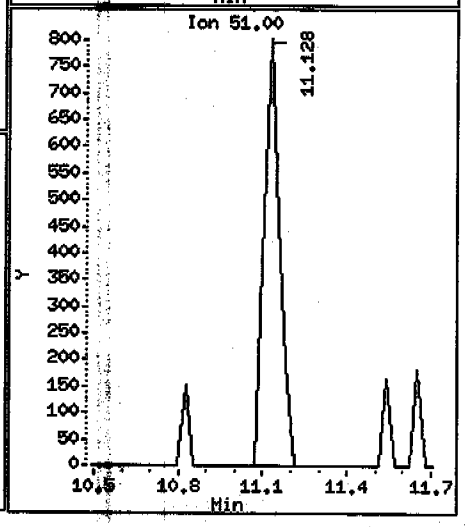












Data File: /ohem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

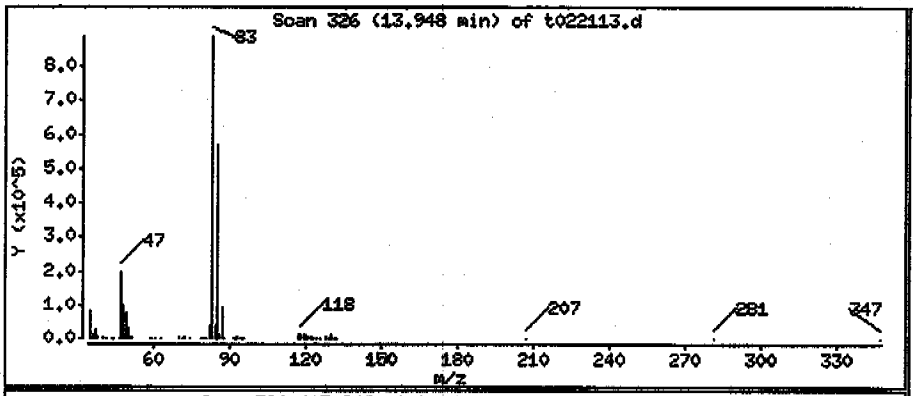
Operator: ACT

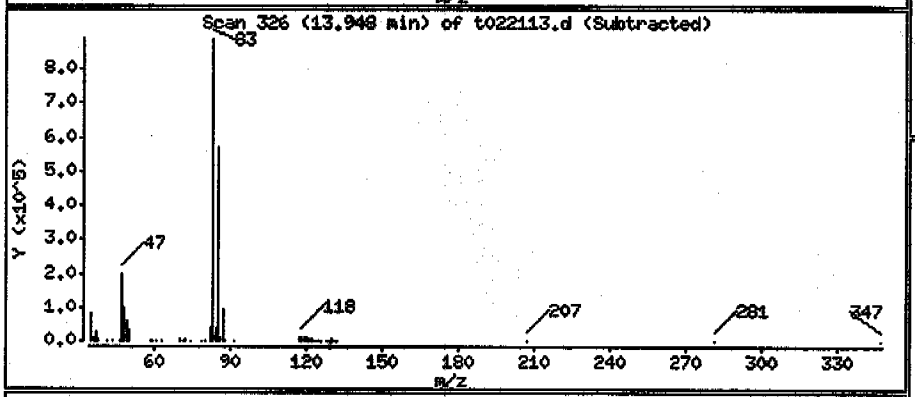
Column phase: RTx-624

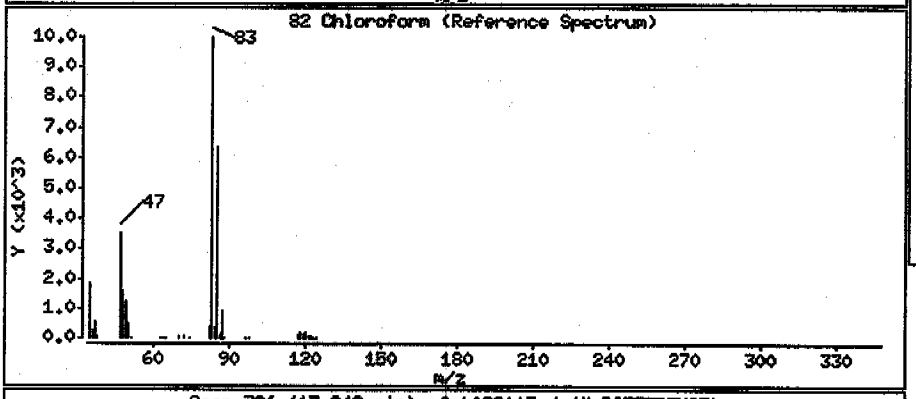
Column diameter: 0.53

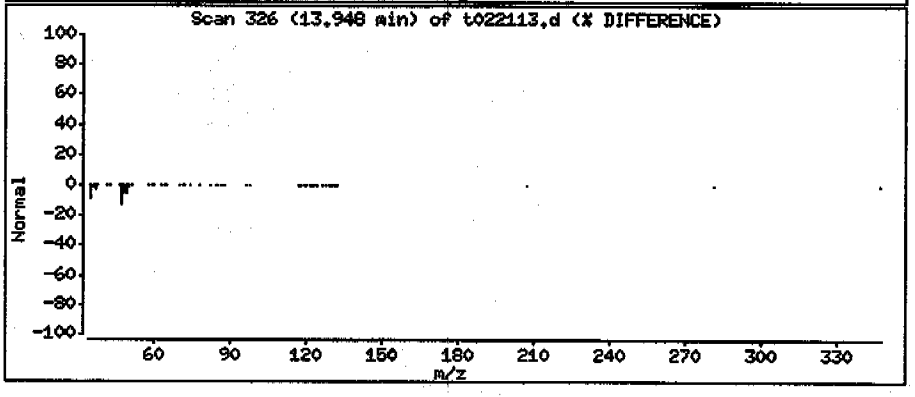
82 Chloroform

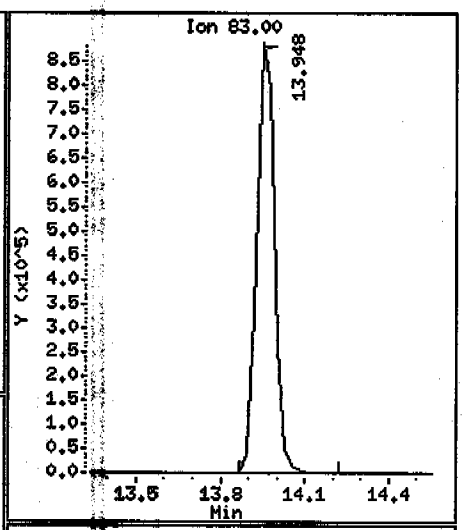
Concentration: 163.07 PPBV

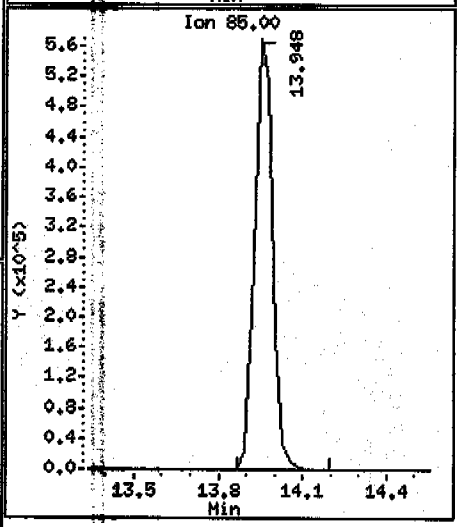












Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:06

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

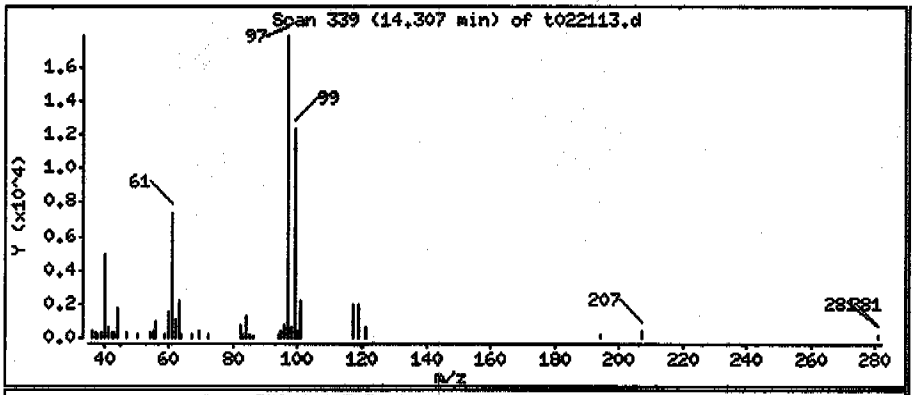
Operator: ACT

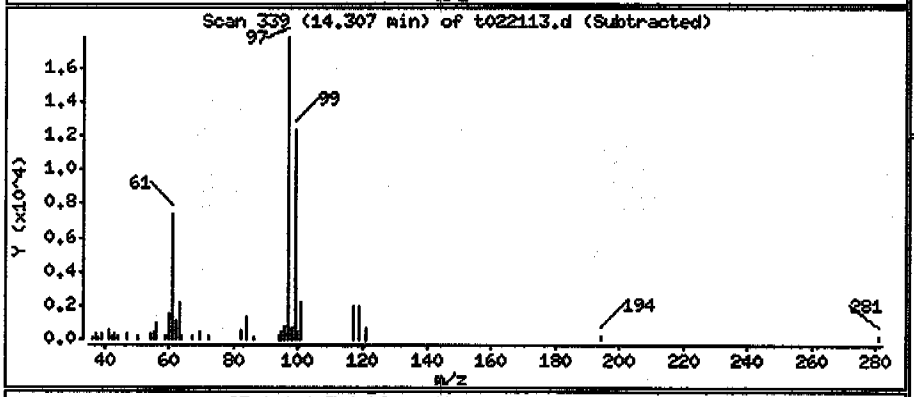
Column phase: RTx-624

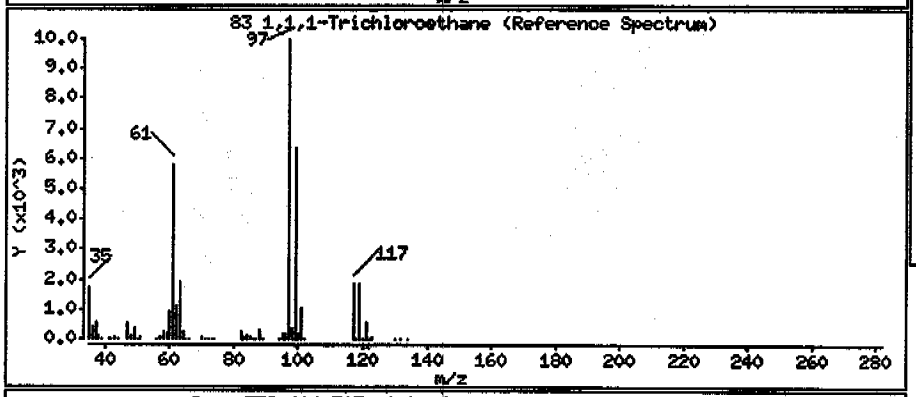
Column diameter: 0.53

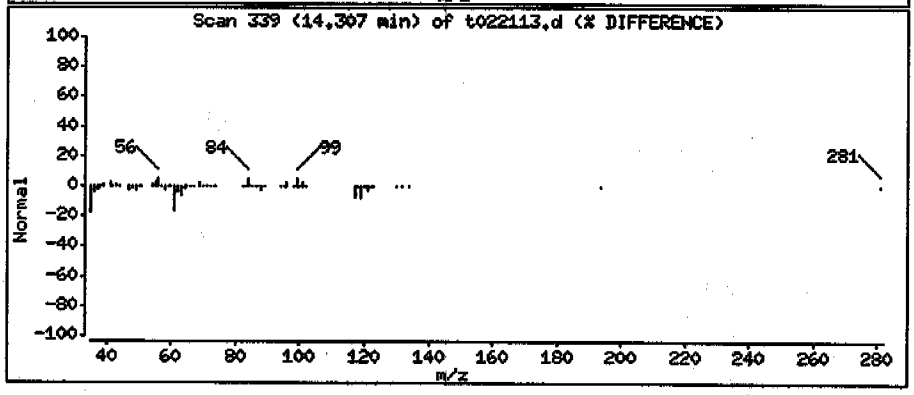
83 1,1,1-Trichloroethane

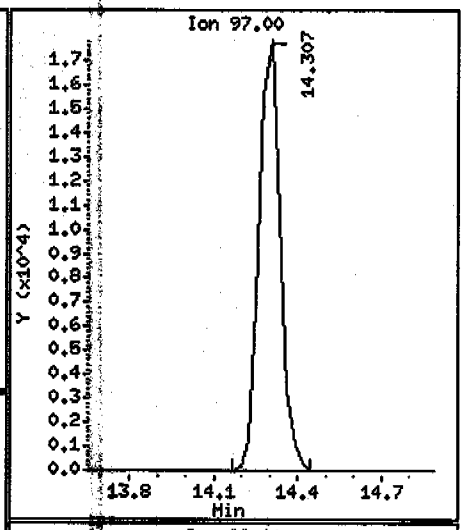
Concentration: 3.524 PPBV

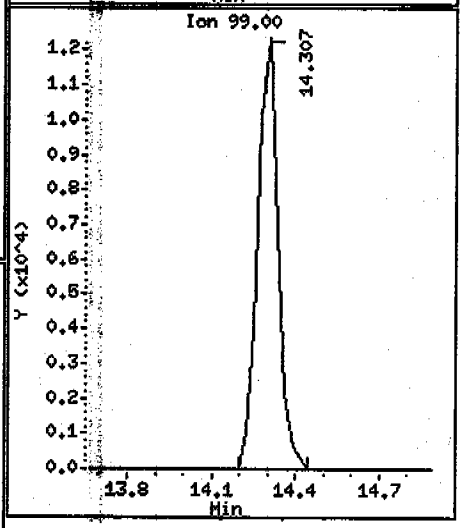












Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:06

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

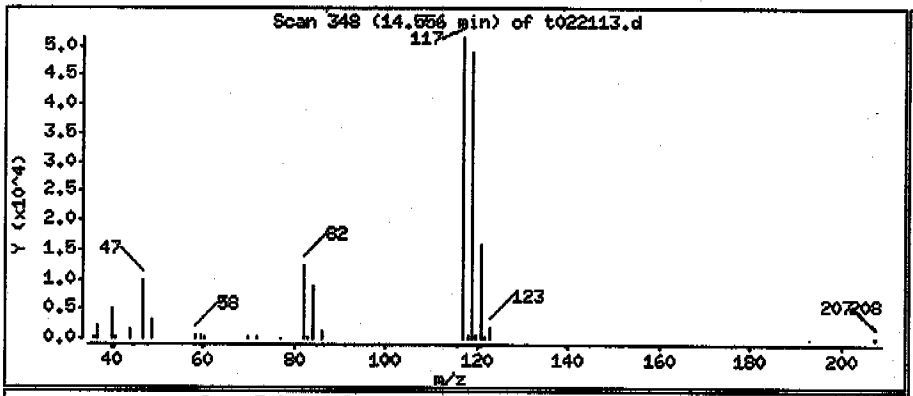
Operator: ACT

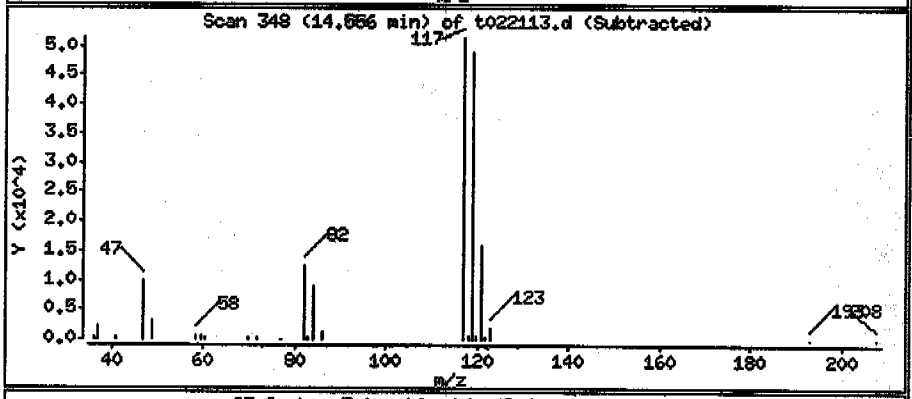
Column phase: RTx-624

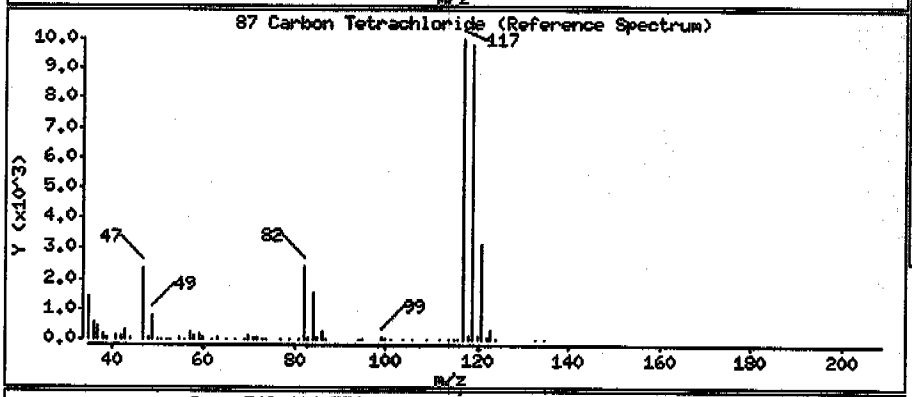
Column diameter: 0.53

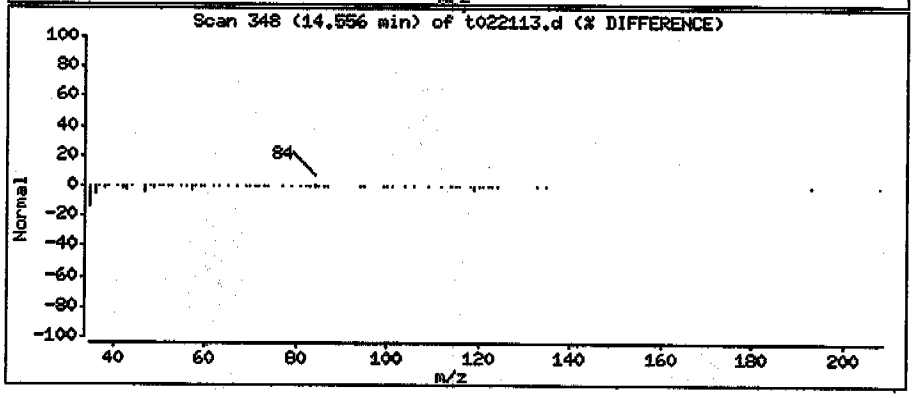
87 Carbon Tetrachloride

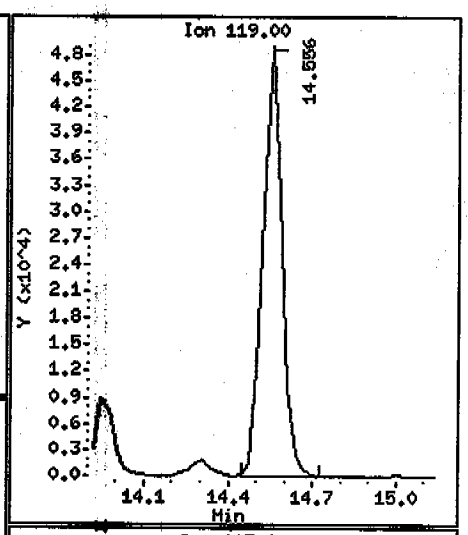
Concentration: 9.222 PPBV

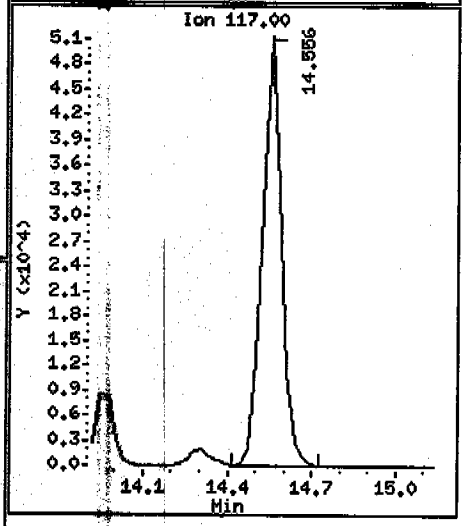












Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

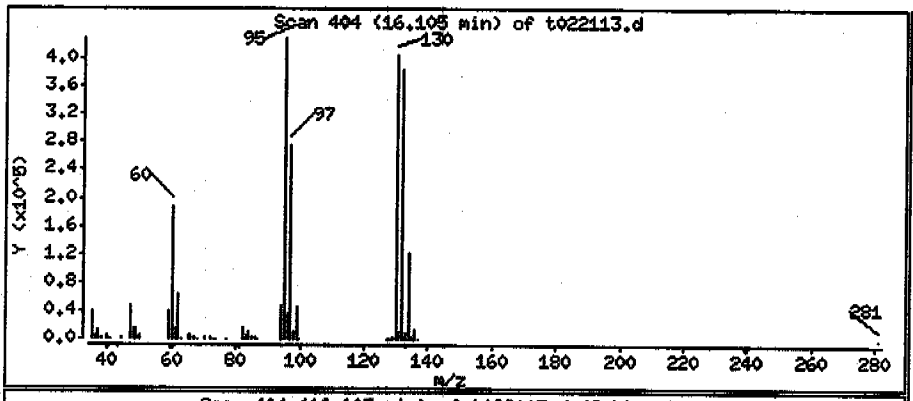
Operator: ACT

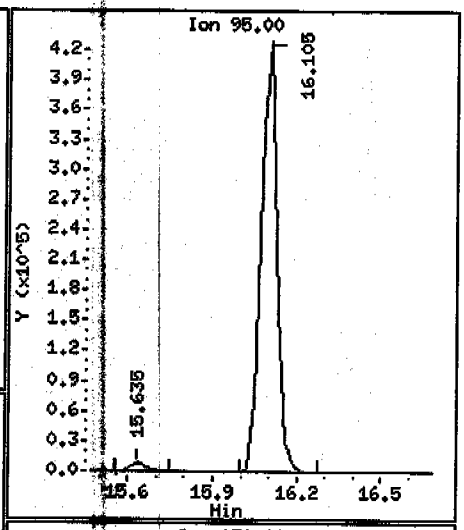
Column phase: RTx-624

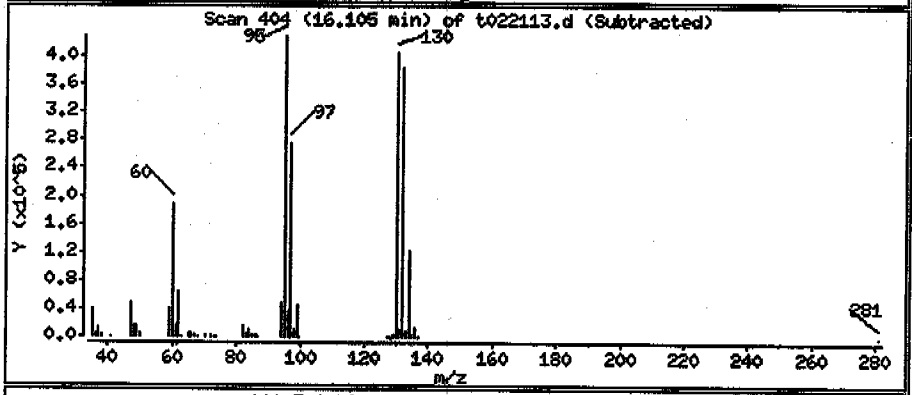
Column diameter: 0.53

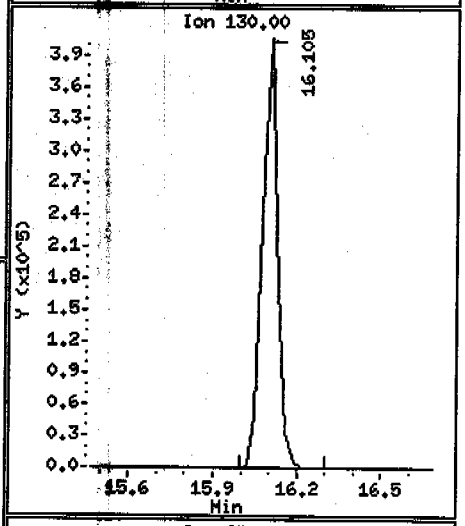
101 Trichloroethene

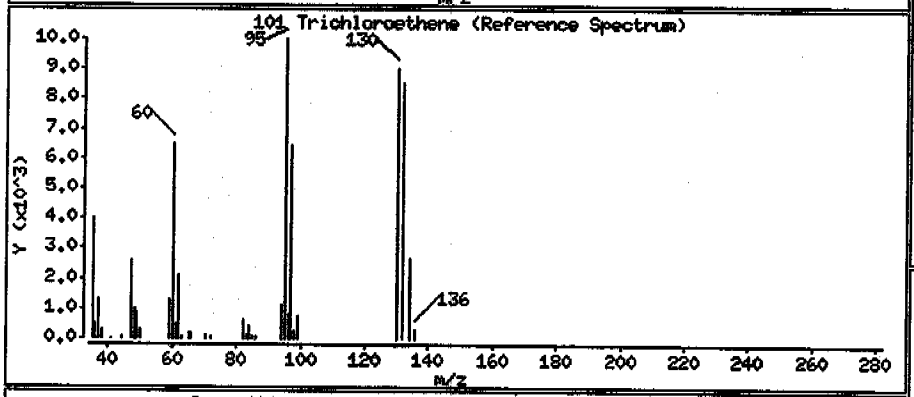
Concentration: 127.46 PPBV

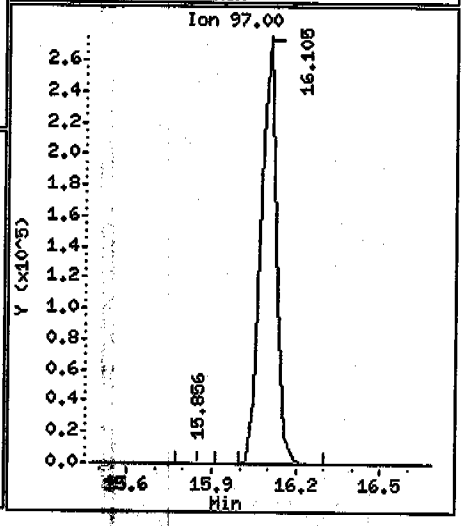


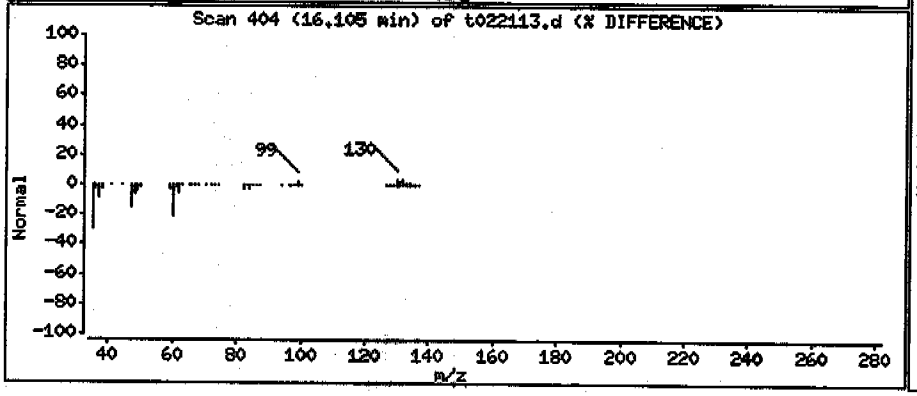












Data File: /chem/msdt.i/21Feb2008.b/t022113.d

Date : 21-FEB-2008 20:05

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33942

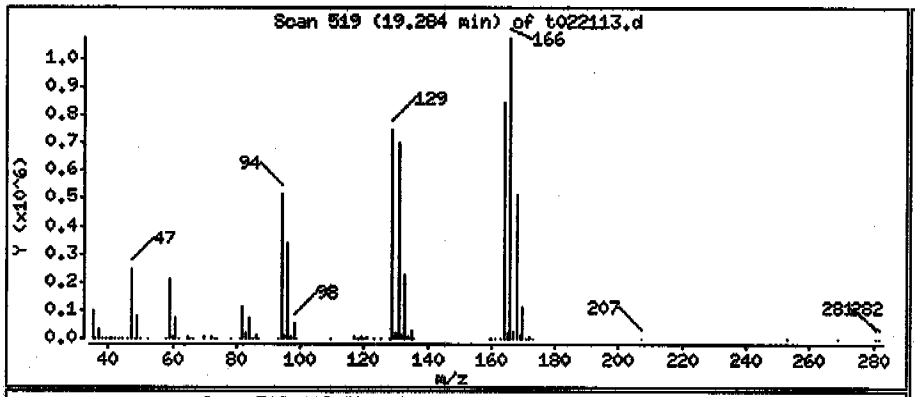
Operator: ACT

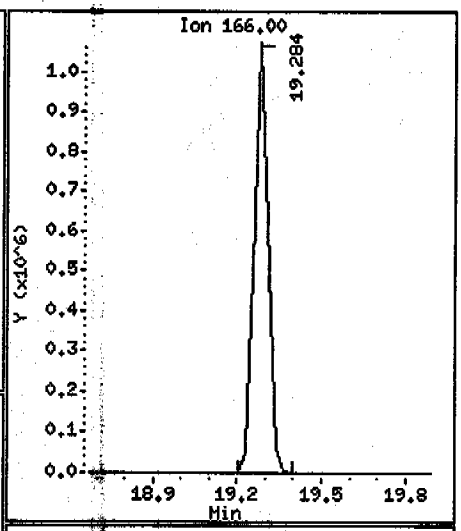
Column phase: RTx-624

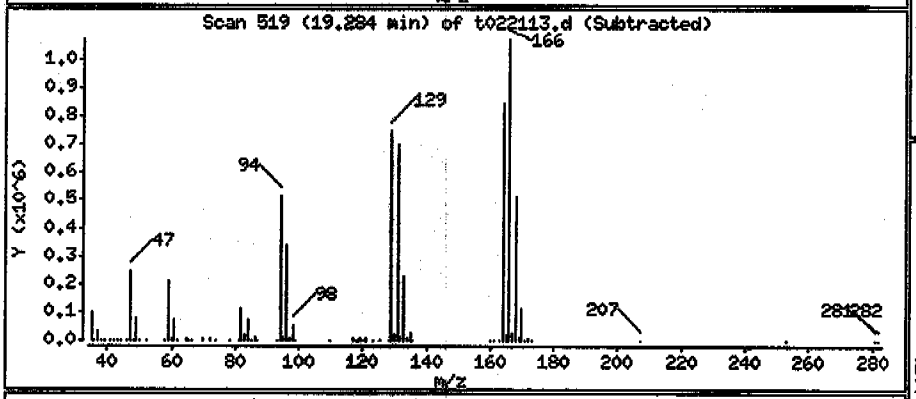
Column diameter: 0.53

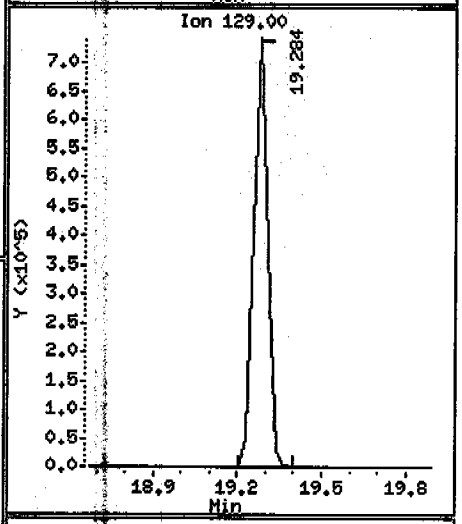
120 Tetrachloroethene

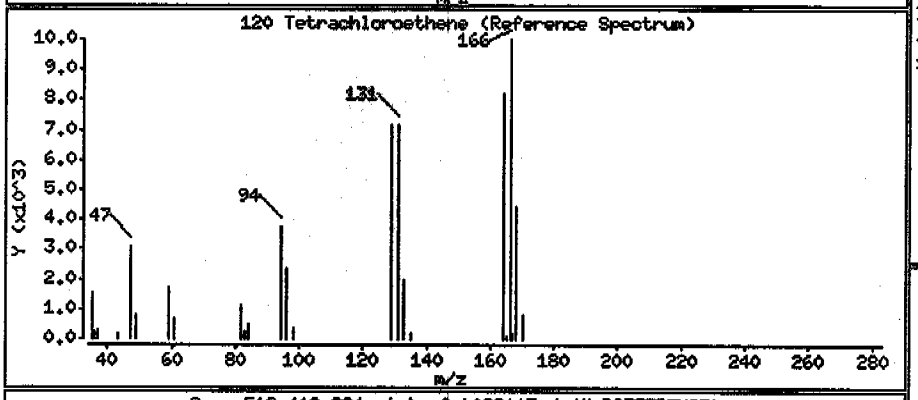
Concentration: 200.08 PPBV

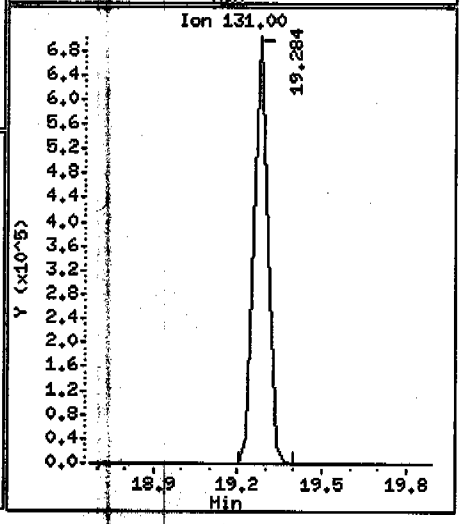


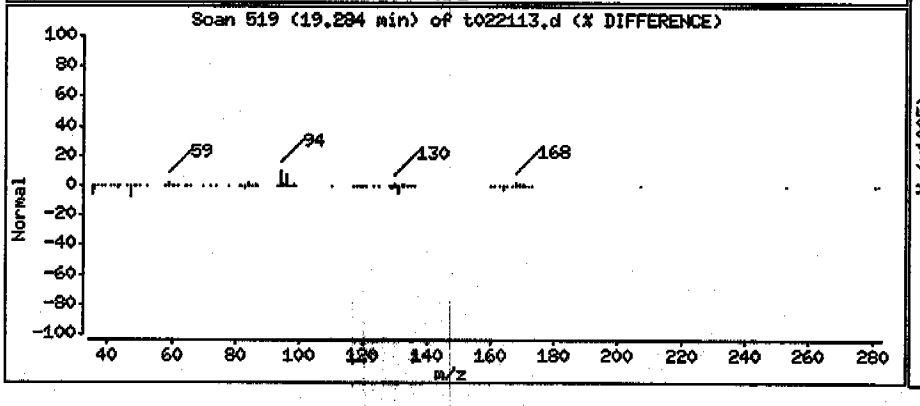












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10519

Lab ID#: 0802200-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.4	4.4	7.1
Freon 113	0.90	2.0	6.8	15
1,1-Dichloroethene	0.90	1.6	3.5	6.2
Carbon Disulfide	0.90	1.1	2.8	3.5
Methylene Chloride	0.90	7.0	3.1	24
Chloroform	0.90	120	4.4	570
1,1,1-Trichloroethane	0.90	5.0	4.9	28
Carbon Tetrachloride	0.90	22	5.6	140
Trichloroethene	0.90	86	4.8	460
Bromodichloromethane	0.90	1.0	6.0	7.0
Tetrachloroethene	0.90	48	6.1	320

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10519

Lab ID#: 0802200-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.4	4.4	7.1
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	2.0	6.8	15
1,1-Dichloroethene	0.90	1.6	3.5	6.2
Acetone	3.6	Not Detected	8.5	Not Detected
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	1.1	2.8	3.5
Methylene Chloride	0.90	7.0	3.1	24
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	120	4.4	570
1,1,1-Trichloroethane	0.90	5.0	4.9	28
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	22	5.6	140
Benzene	0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	86	4.8	460
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	1.0	6.0	7.0
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	48	6.1	320

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10519

Lab ID#: 0802200-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	Not Detected	6.2	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	106	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022112.d
Report Date: 25-Feb-2008 14:59

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022112.d
Lab Smp Id: 0802200-02A
Inj Date : 21-FEB-2008 19:26
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #33943
Misc Info : 7.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	291200	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	225262			27.38- 127.38	77.36
13.893	13.865 (1.000)	49	554154			131.81- 231.81	190.30
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1107566	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	183485			0.00- 66.79	16.57
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1021501	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	595904			7.58- 107.58	58.34
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.076)	65	446509	23.8297	23.830	80.00- 120.00	100.00
14.943	14.943 (1.076)	67	224155			3.57- 103.57	50.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1094961	25.6651	25.665	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	128151			0.00- 61.29	11.70

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	733274			18.71- 118.71	66.97
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	697244	26.3886	26.388	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	876419			76.46- 176.46	125.70
22.796	22.796 (1.096)	176	676249			48.22- 148.22	96.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.900	5.901 (0.425)	85	45520	0.80054	1.433	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	13929			0.00- 82.13	30.60
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	33314	1.12392	2.012	80.00- 120.00	100.00
9.966	9.939 (0.717)	153	22207			13.46- 113.46	66.66
9.966	9.939 (0.717)	101	47916			82.30- 182.30	143.83
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.723)	61	23431	0.87822	1.572	80.00- 120.00	100.00
10.049	10.050 (0.723)	96	14090			9.56- 109.56	60.13
10.049	10.050 (0.723)	98	9324			0.00- 88.43	39.79
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	32075	0.63558	1.138	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.799)	49	66026	3.91359	7.005	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	60913			38.51- 138.51	92.26
11.128	11.100 (0.801)	51	21323			0.00- 83.83	32.29
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	2745374	64.9117	116.19	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1790381			14.81- 114.81	65.21
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.028)	97	132104	2.82393	5.055	80.00- 120.00	100.00
14.280	14.280 (1.028)	99	84743			14.28- 114.28	64.15
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	557319	12.4023	22.200	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	591758			56.24- 156.24	106.18
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	1146583	48.3489	86.544	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	1040362			39.09- 139.09	90.74
16.105	16.077 (1.030)	97	729578			12.68- 112.68	63.63

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
107 Bromodichloromethane						CAS #: 75-27-4		
16.989	16.989	(1.087)	83	24687	0.58168	1.041	80.00- 120.00	100.00
17.017	16.989	(1.088)	85	17903			14.80- 114.80	72.52
120 Tetrachloroethene						CAS #: 127-18-4		
19.284	19.284	(0.927)	166	832605	26.7036	47.800	80.00- 120.00	100.00
19.284	19.284	(0.927)	129	581184			18.51- 118.51	69.80
19.284	19.284	(0.927)	131	552488			15.29- 115.29	66.36

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022112.d
Lab Smp Id: 0802200-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 7.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	291200	-8.47
97 1,4-Difluorobenze	1251468	750881	1752055	1107566	-11.50
126 Chlorobenzene-d5	1150991	690595	1611387	1021501	-11.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022112.d
Report Date: 25-Feb-2008 14:59

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802200-02A
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 7.5"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.830	95.32	70-130
$ 113 Toluene-d8	25.000	25.665	102.66	70-130
$ 137 Bromofluorobenzene	25.000	26.388	105.55	70-130

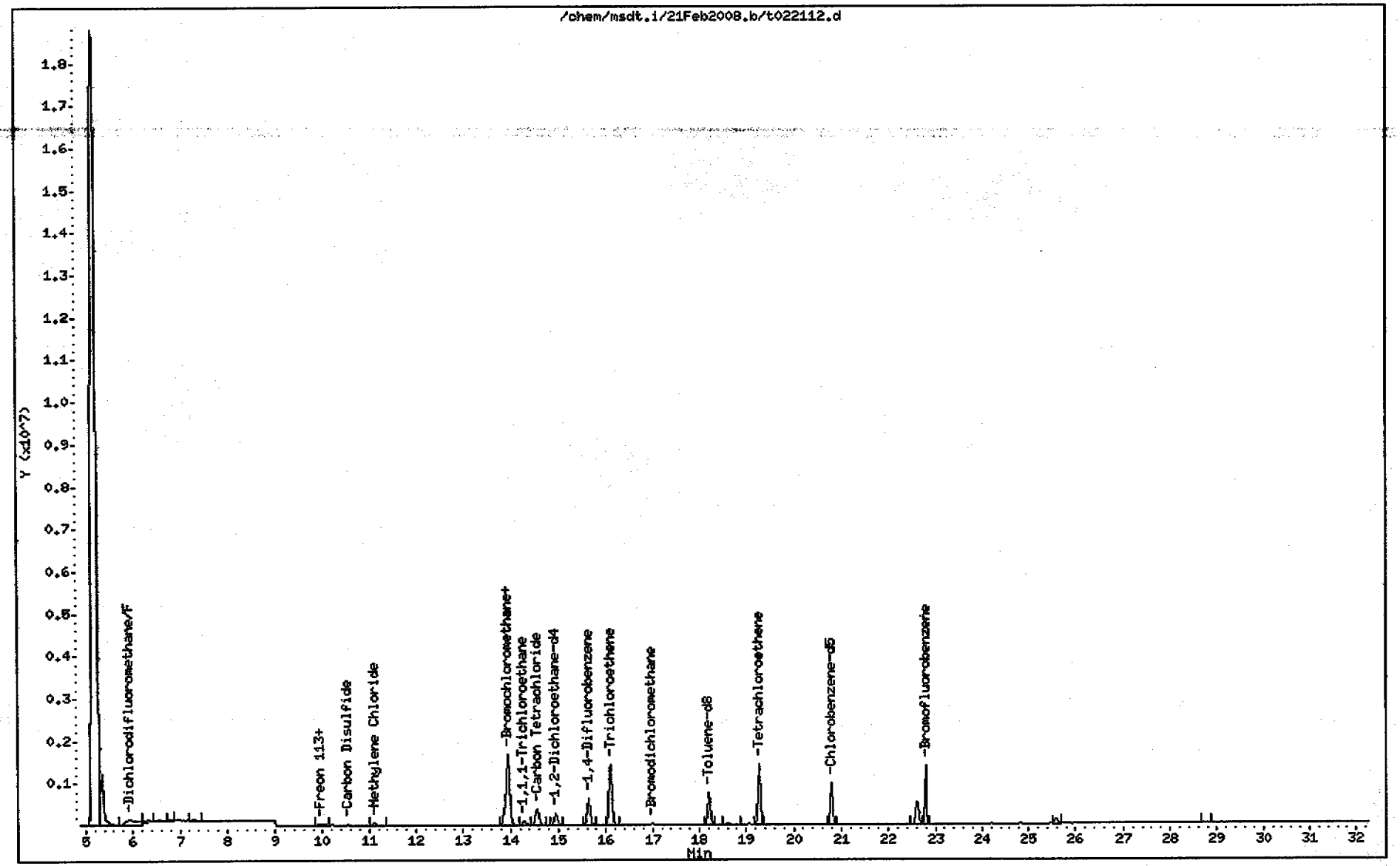
0048

Data File: /chem/msdt.i/21Feb2008.b/t022112.d
Date : 21-FEB-2008 19:26
Client ID:
Sample Info: 200mL #33943

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

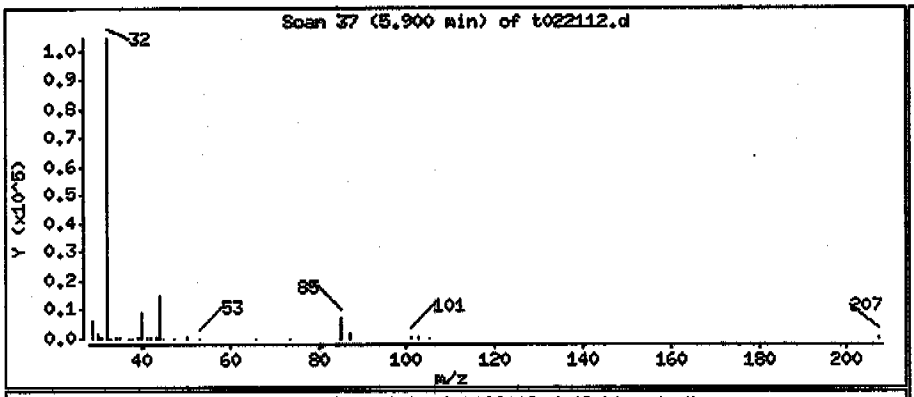
Operator: ACT

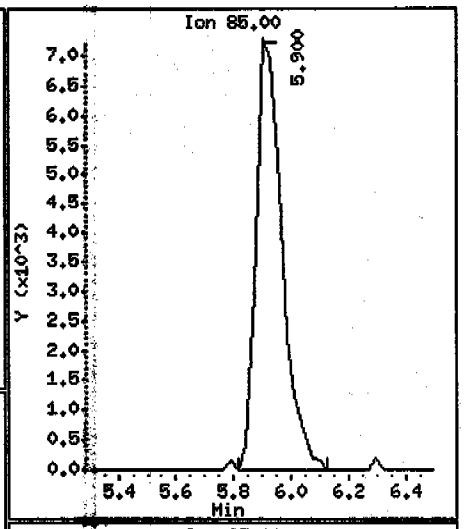
Column phase: RTx-624

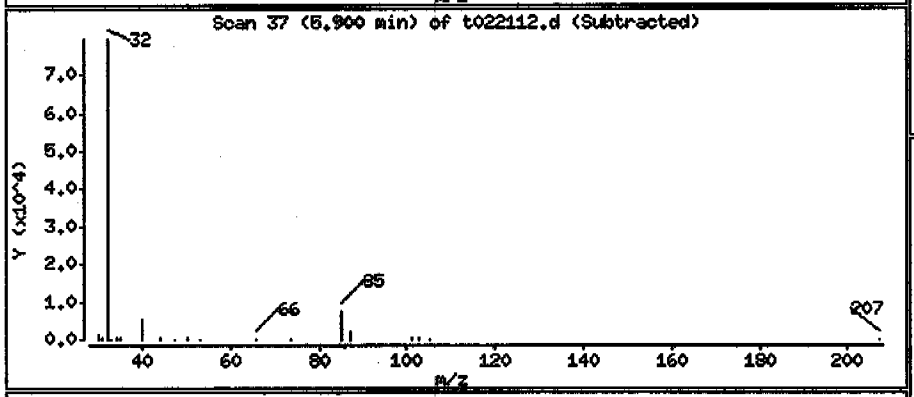
Column diameter: 0.53

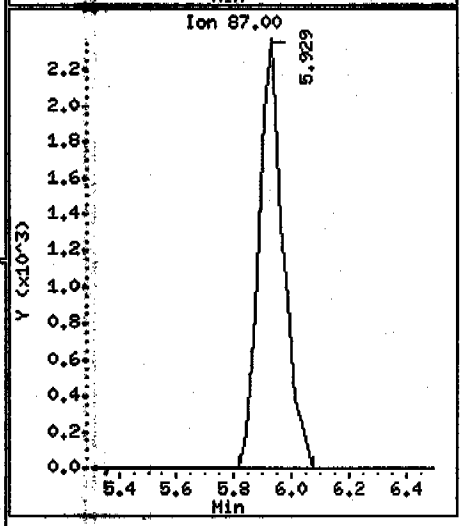
12 Dichlorodifluoromethane/Fr12

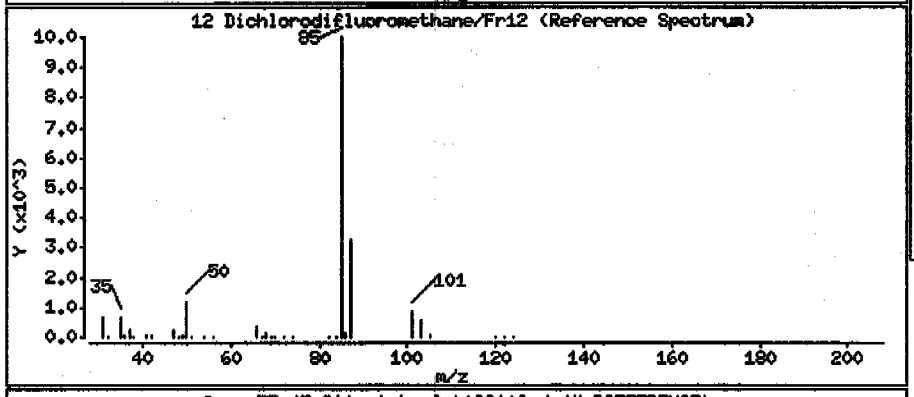
Concentration: 1.433 PPBV

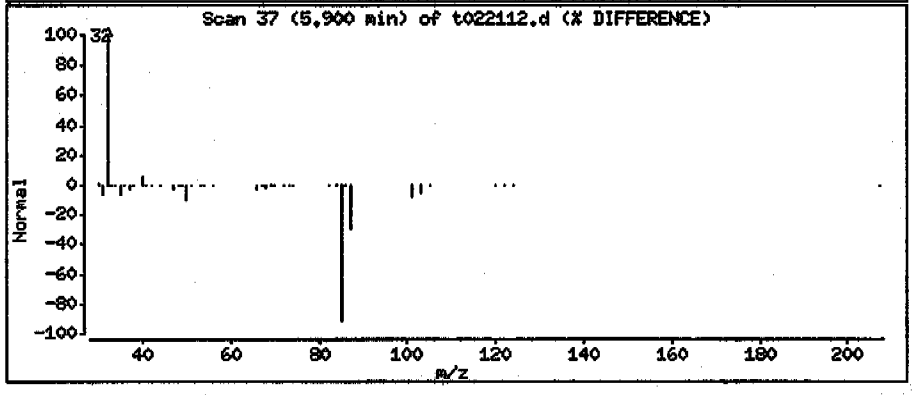












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

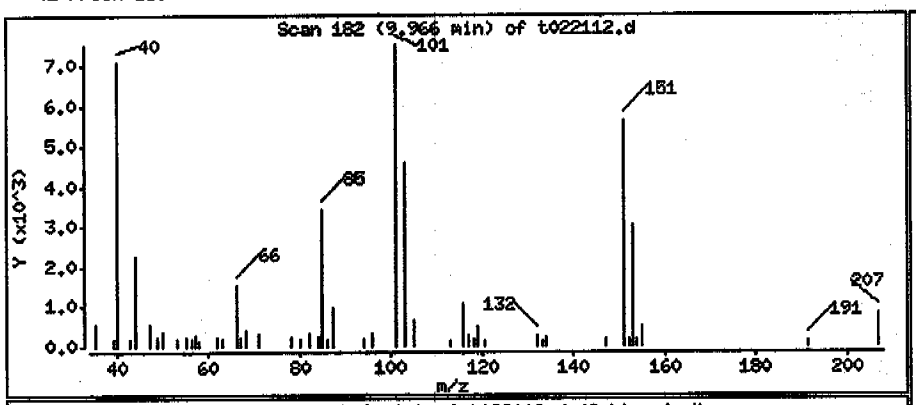
Operator: ACT

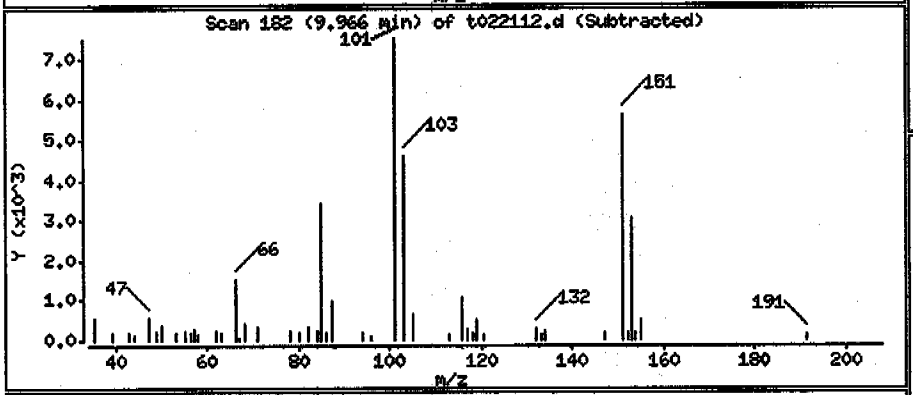
Column phase: RTx-624

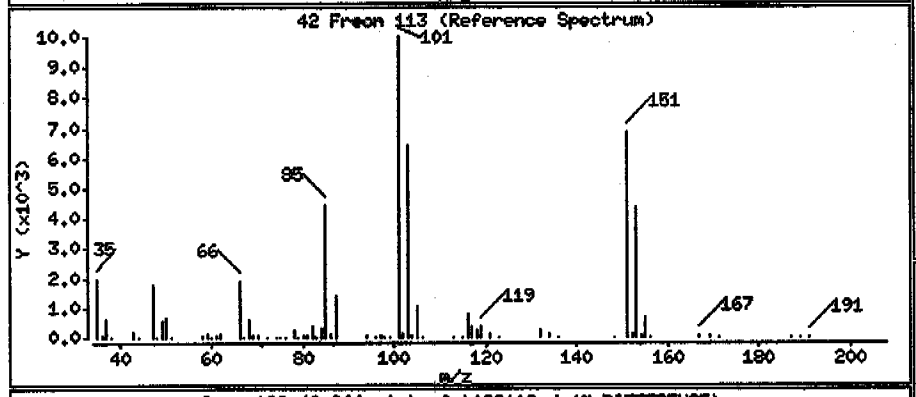
Column diameter: 0.53

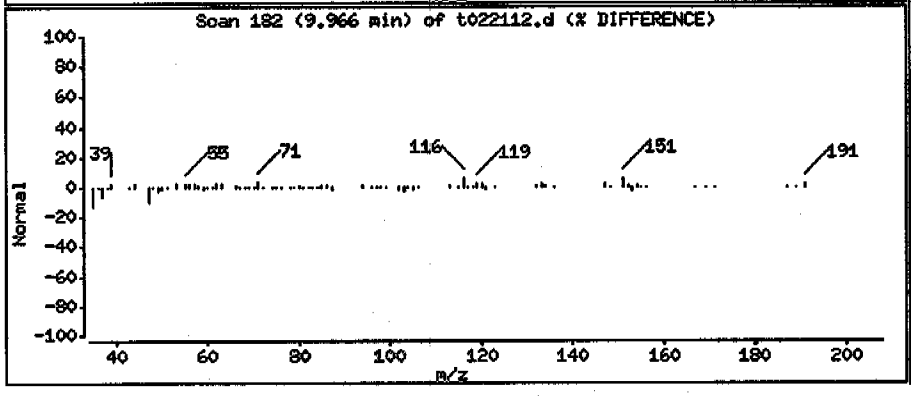
42 Freon 113

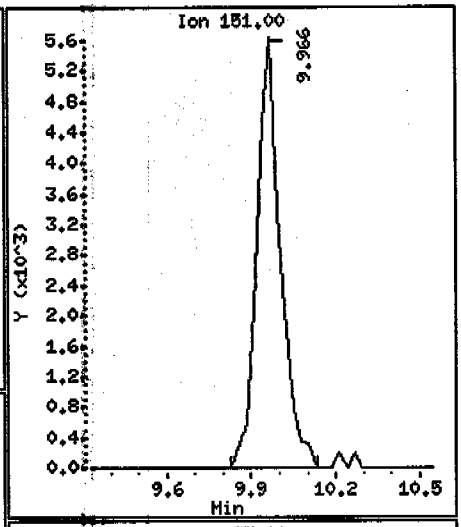
Concentration: 2.012 PPBV

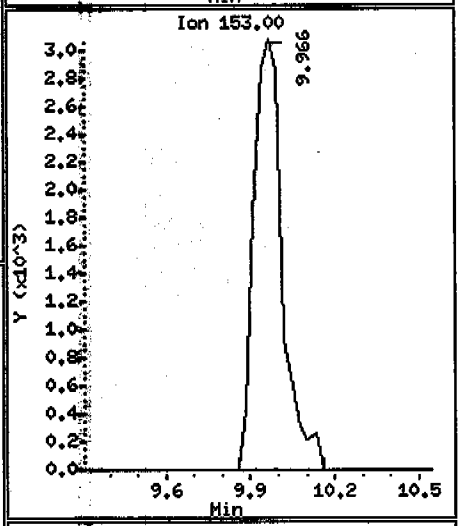


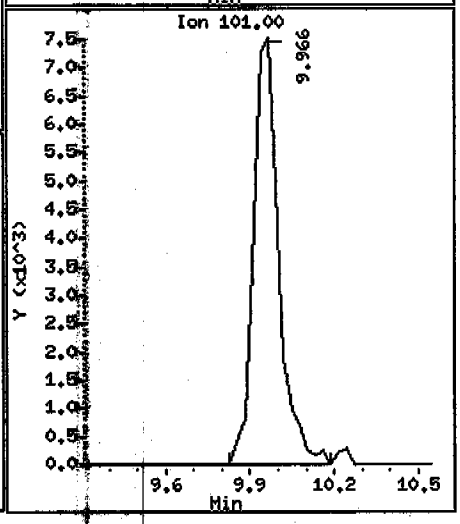












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Sample Info: 200mL #33943

Instrument: msdt.i

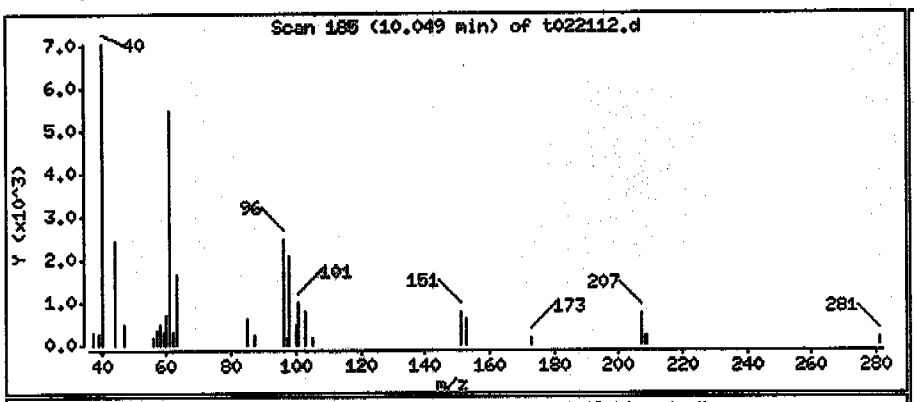
Operator: ACT

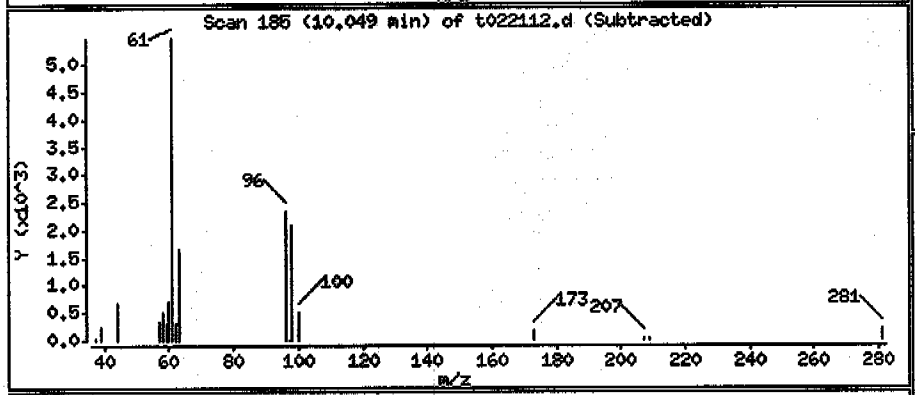
Column phase: RTx-624

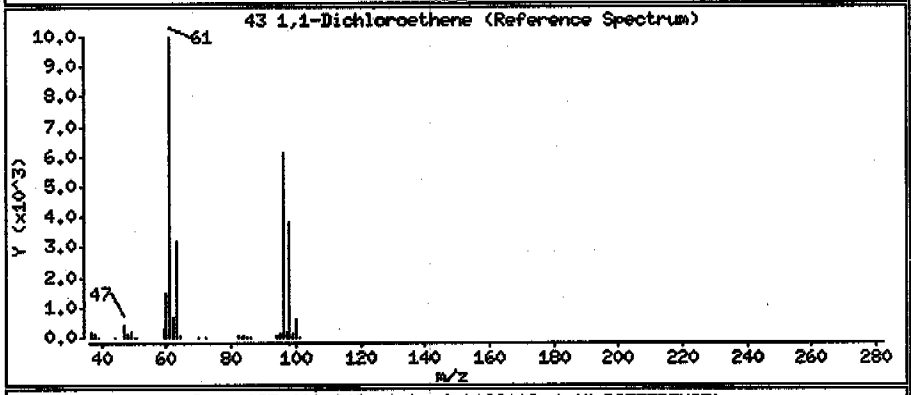
Column diameter: 0.53

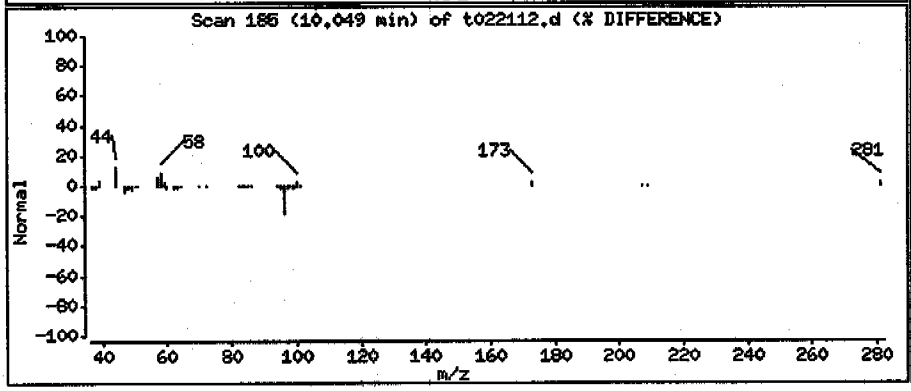
43 1,1-Dichloroethene

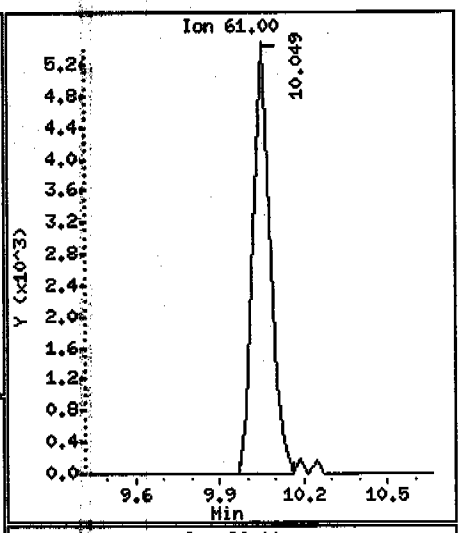
Concentration: 1.572 PPBV

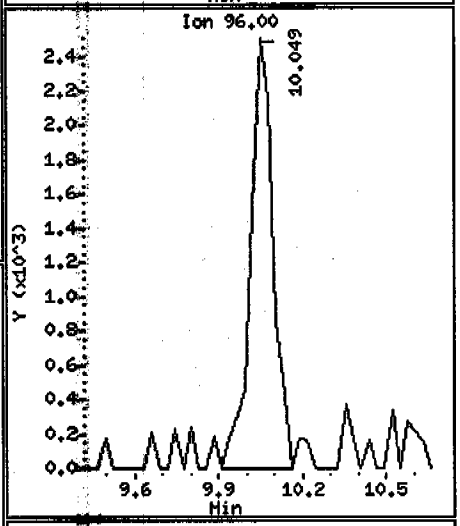


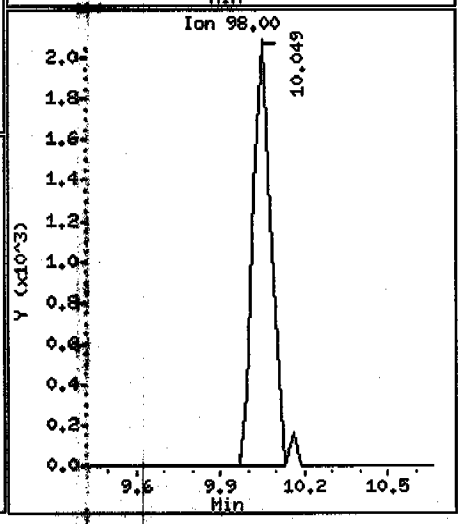












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

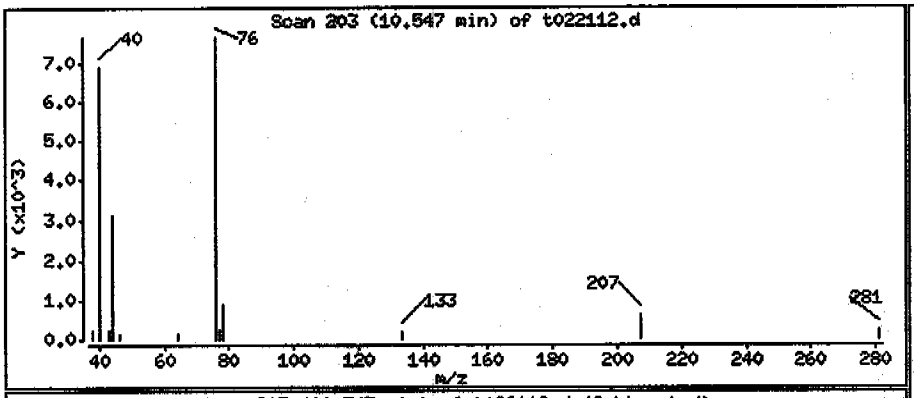
Operator: ACT

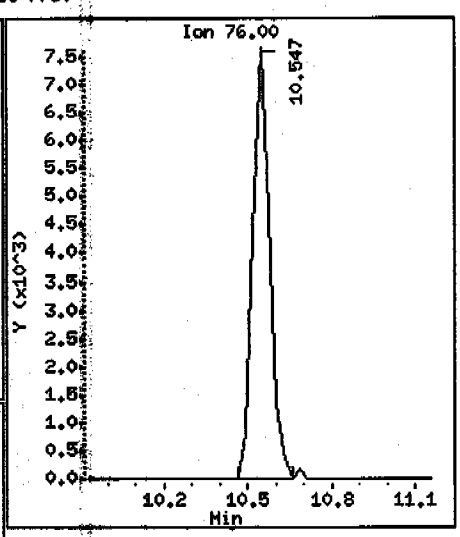
Column phase: RTx-624

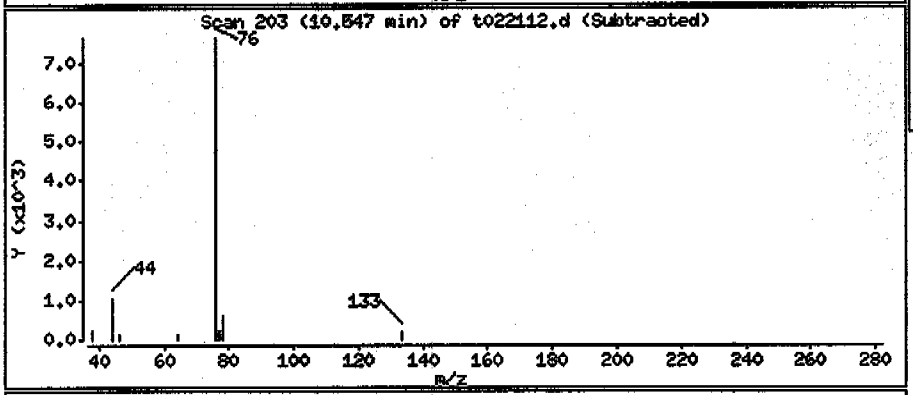
Column diameter: 0.53

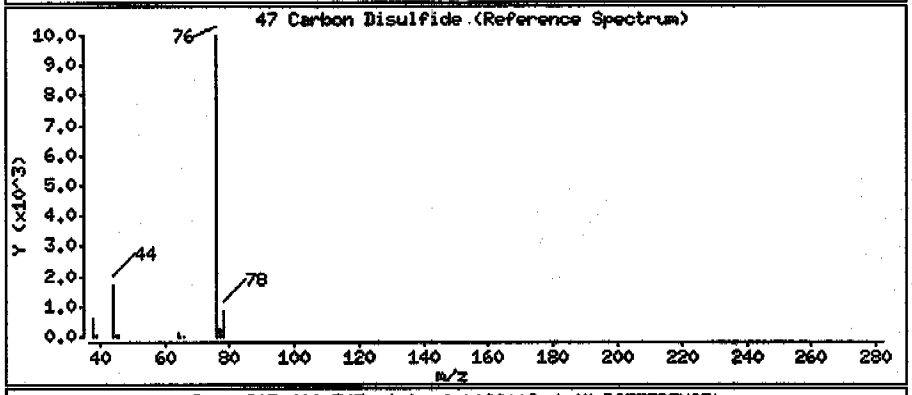
47 Carbon Disulfide

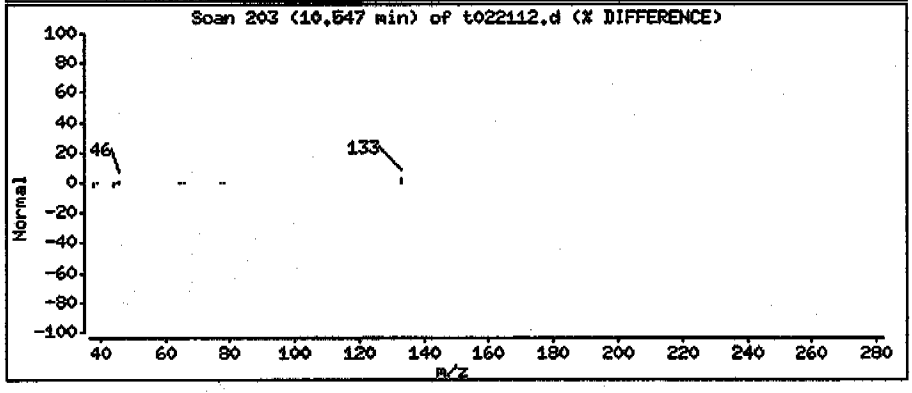
Concentration: 1.138 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

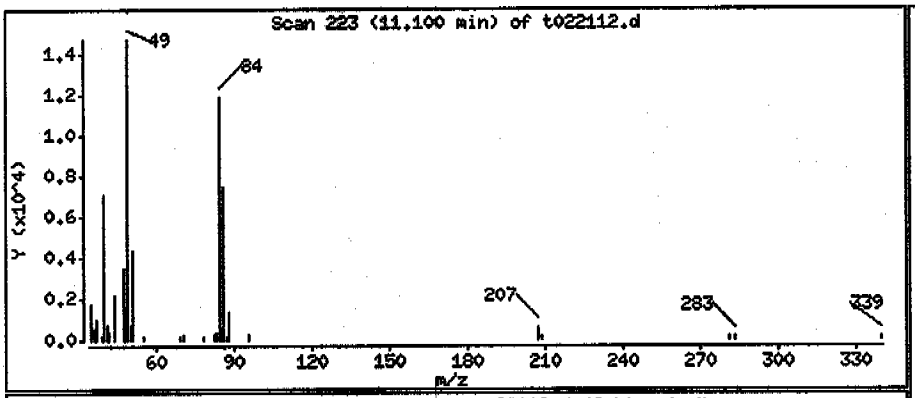
Operator: ACT

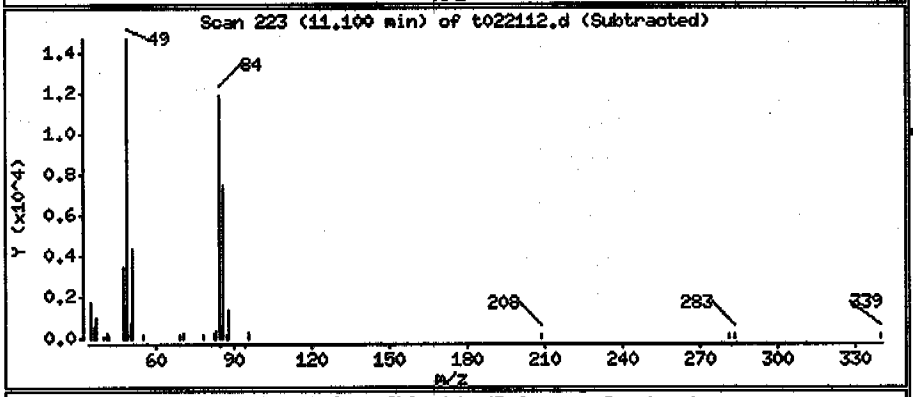
Column phase: RTx-624

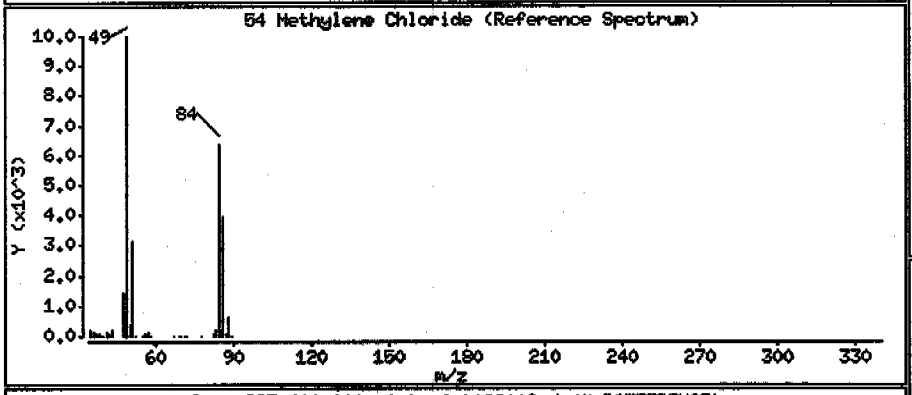
Column diameter: 0.53

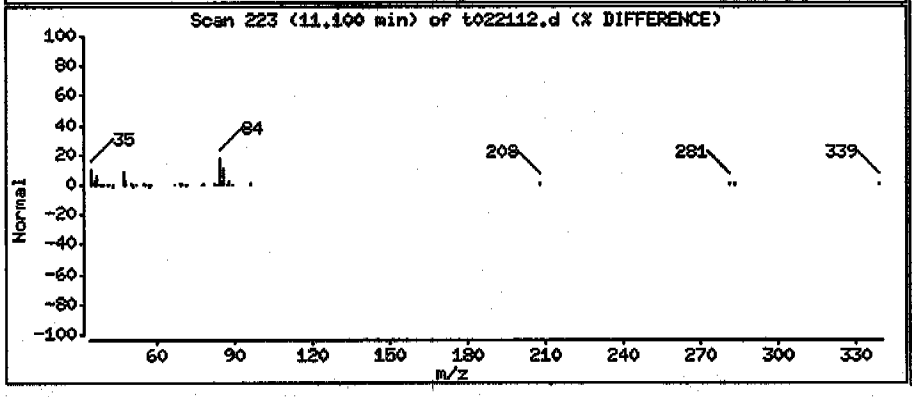
54 Methylene Chloride

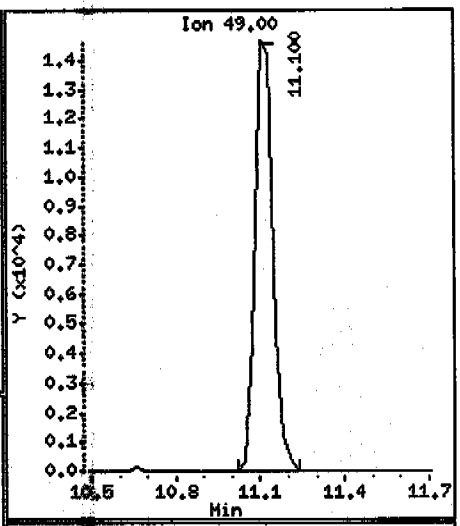
Concentration: 7.005 PPBV

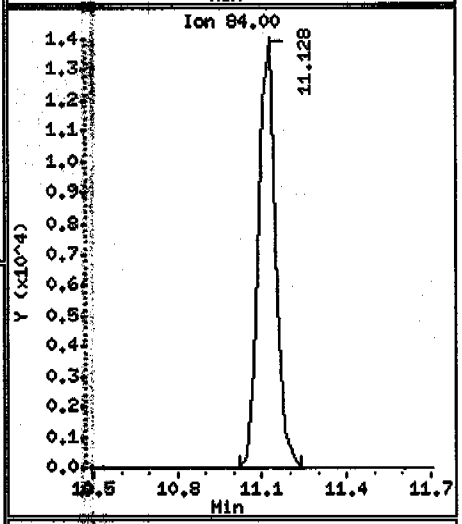


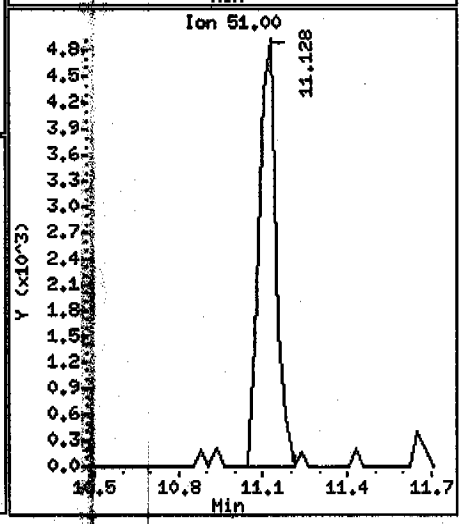












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

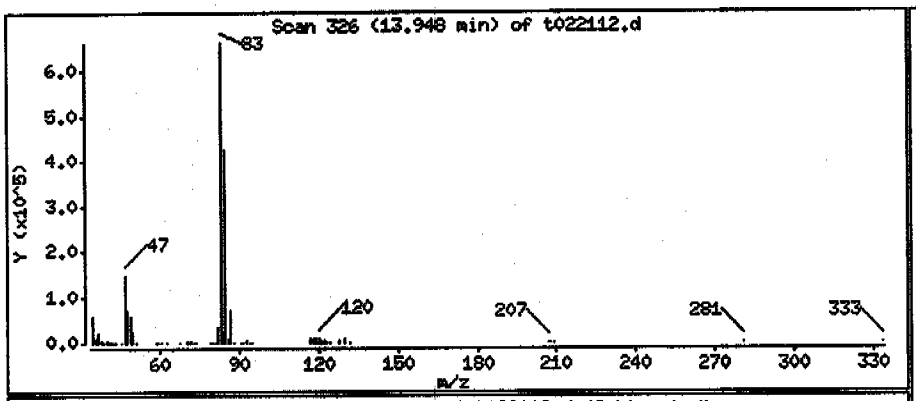
Operator: ACT

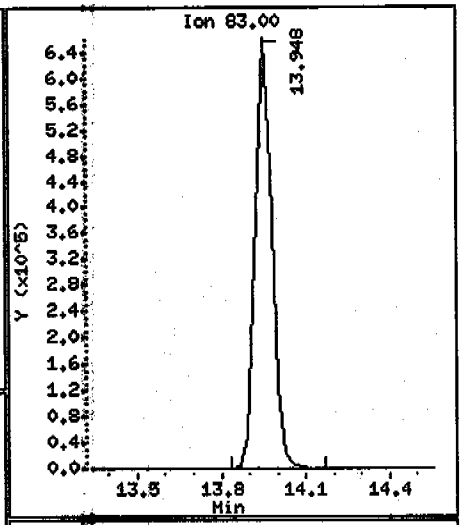
Column phase: RTx-624

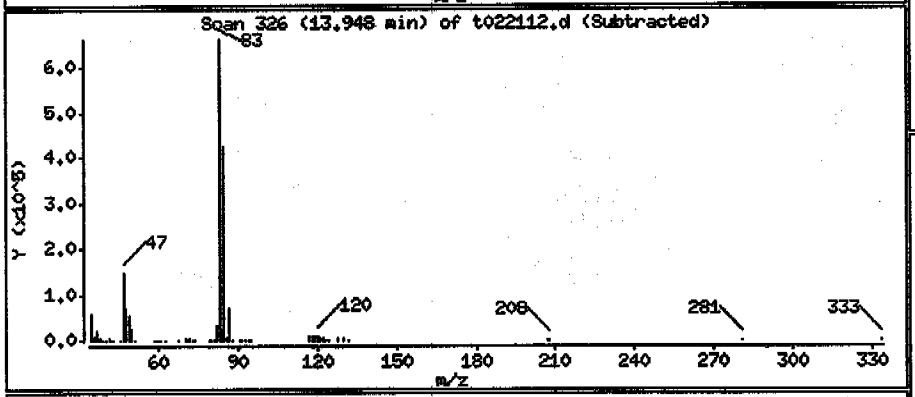
Column diameter: 0.53

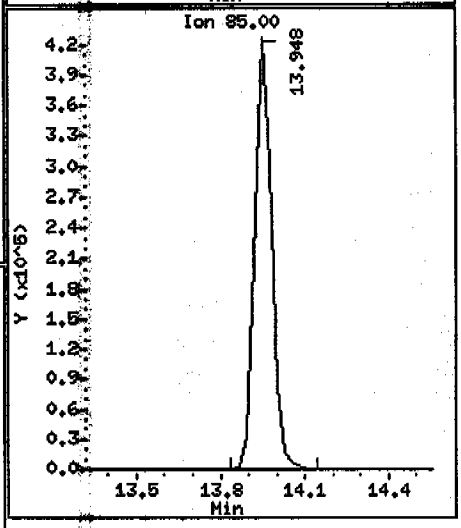
82 Chloroform

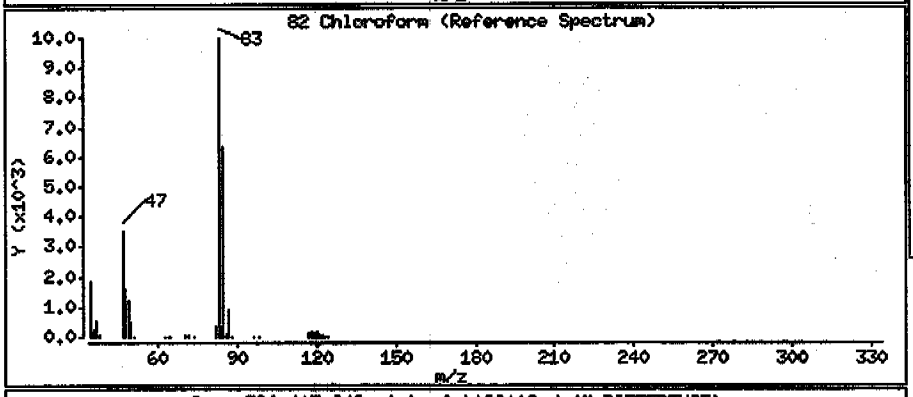
Concentration: 116.19 PPBV

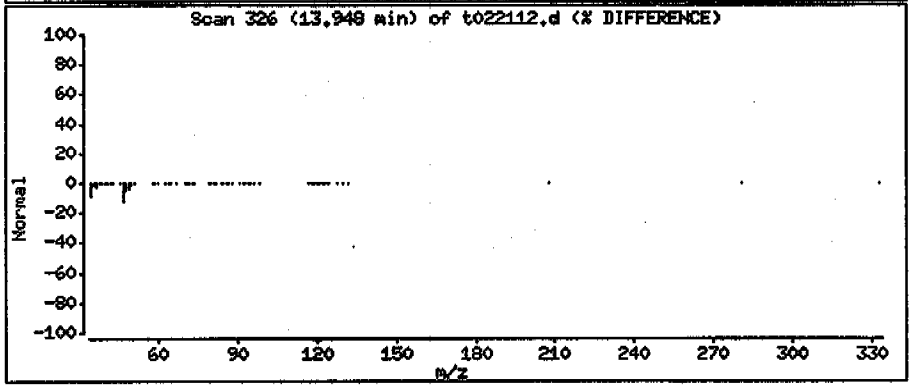












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

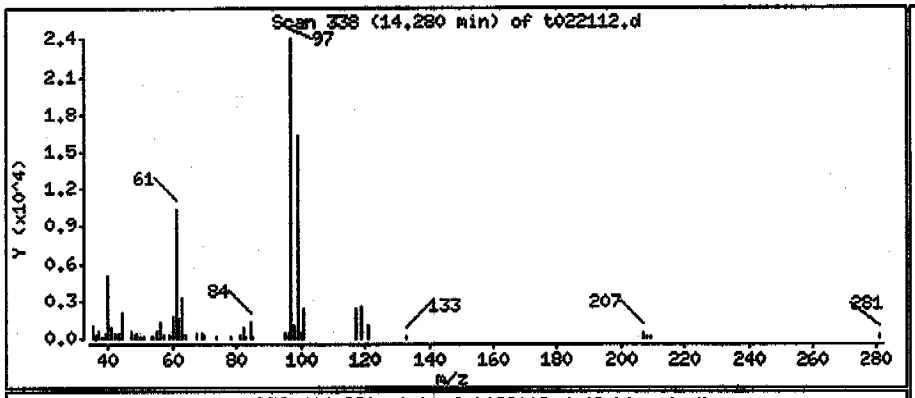
Operator: ACT

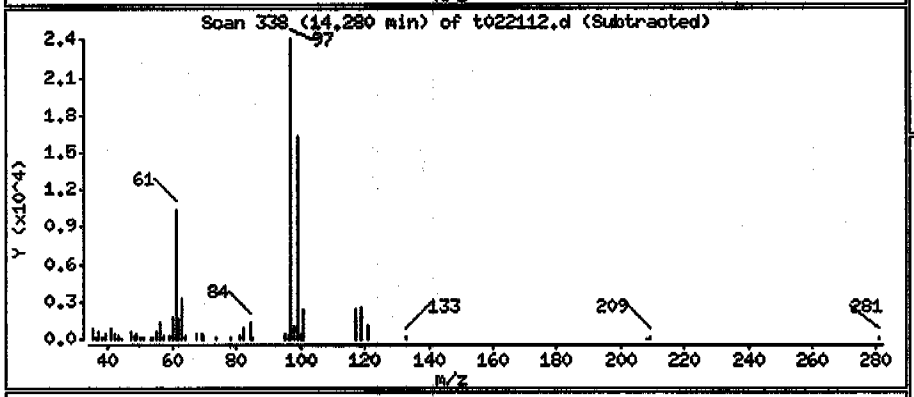
Column phase: RTx-624

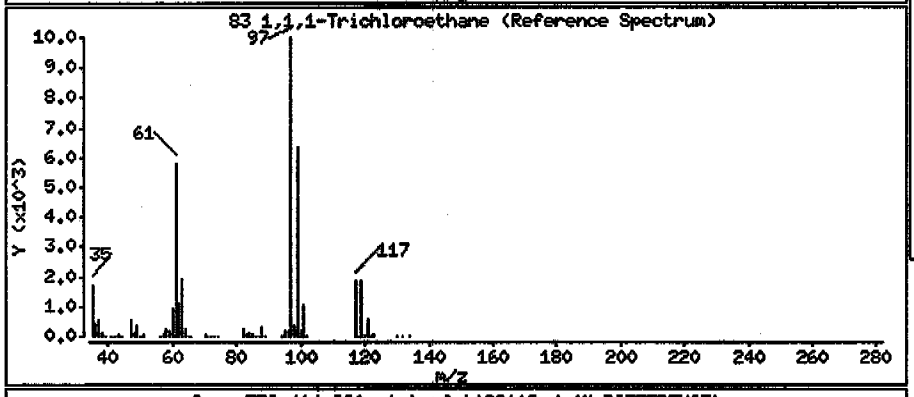
Column diameter: 0.53

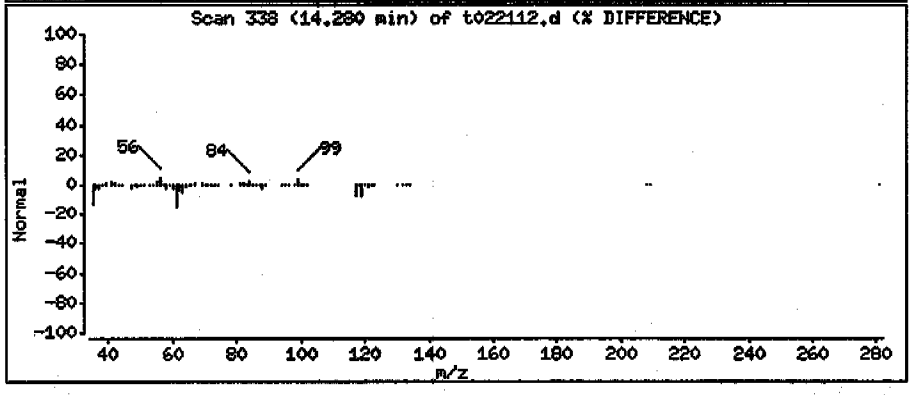
83 1,1,1-Trichloroethane

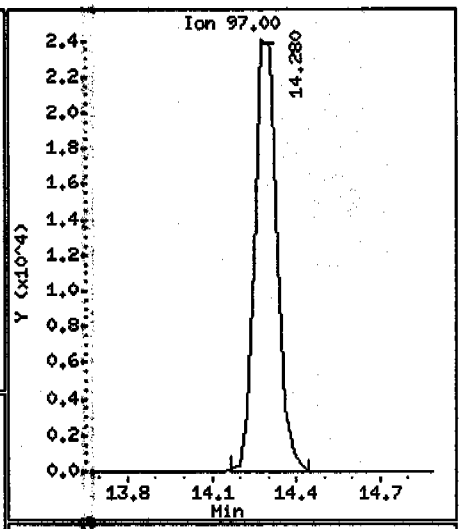
Concentration: 5.055 PPBV

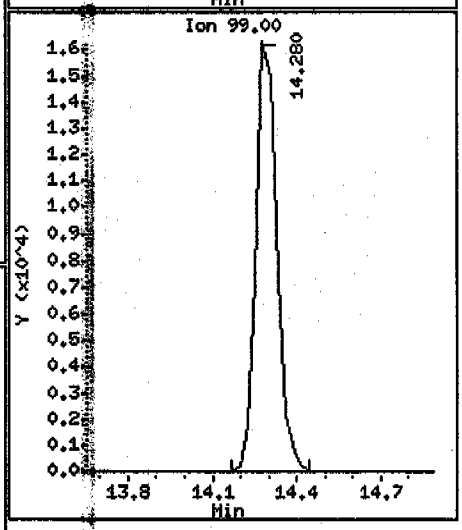












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Sample Info: 200mL #33943

Instrument: msdt.i

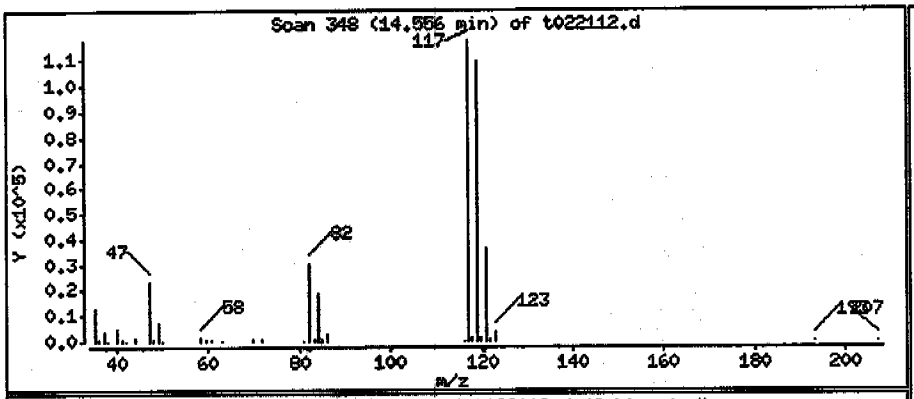
Operator: ACT

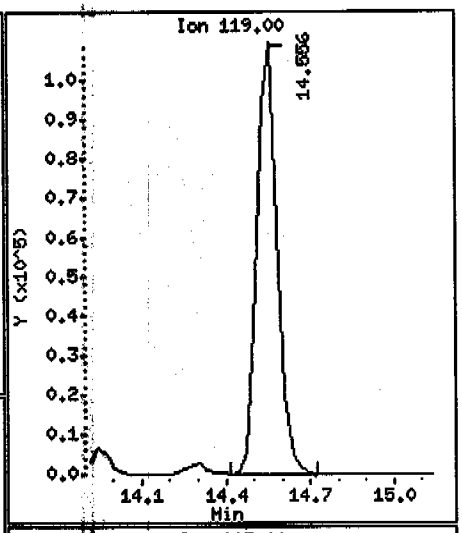
Column phase: RTx-624

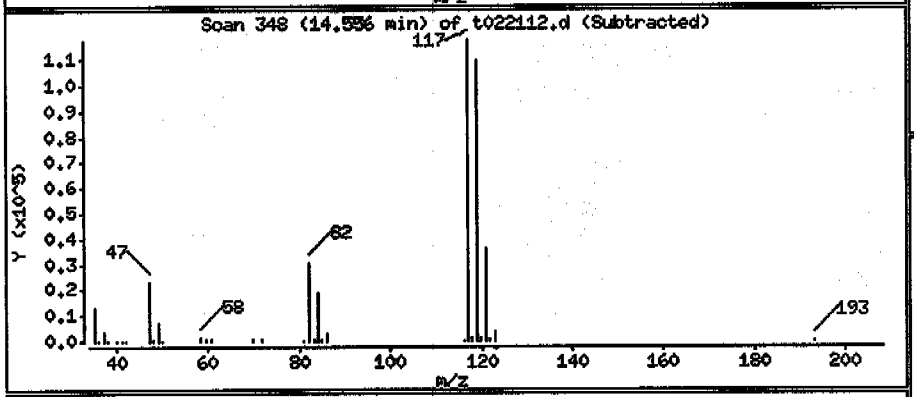
Column diameter: 0.53

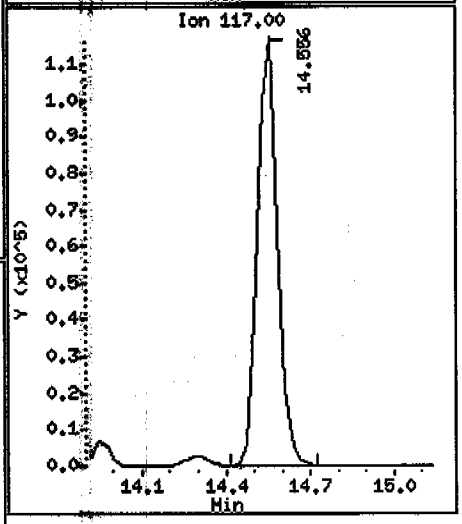
87 Carbon Tetrachloride

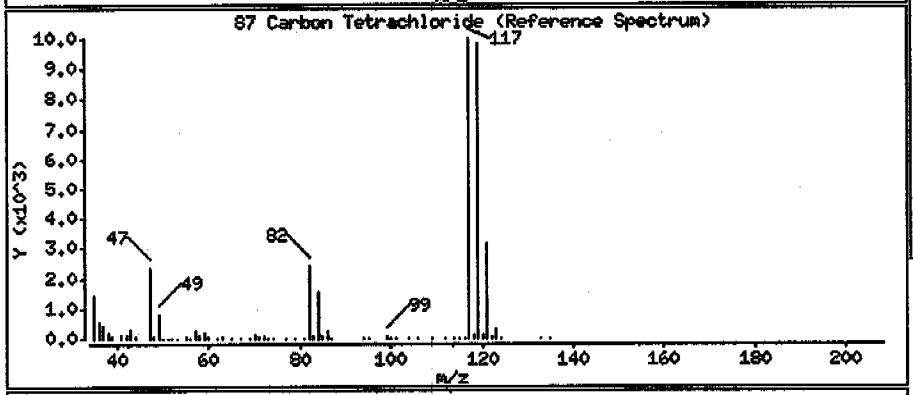
Concentration: 22.200 PPBV

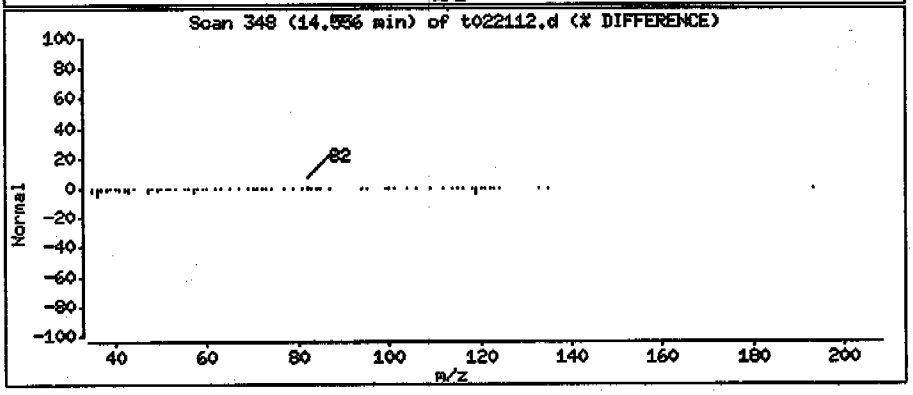












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

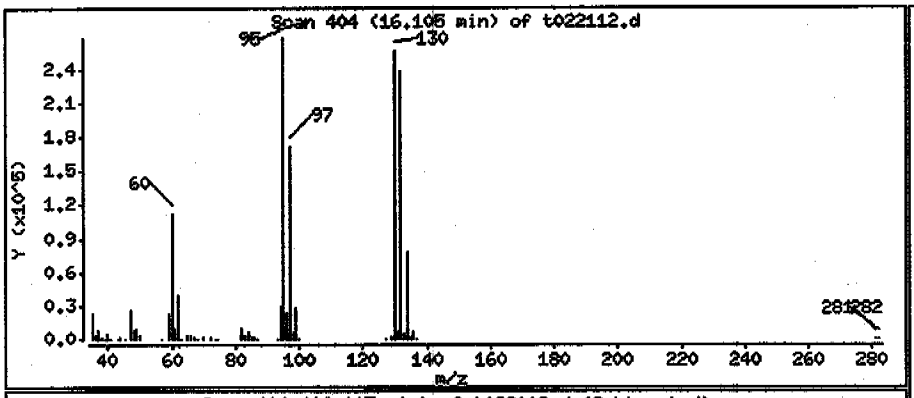
Operator: ACT

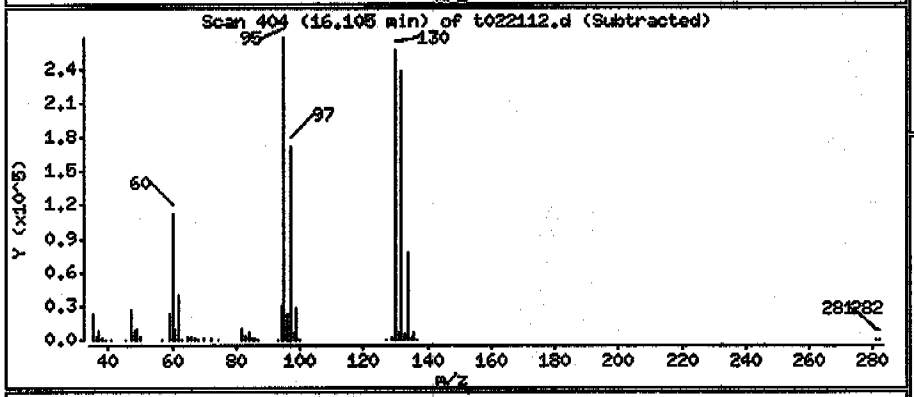
Column phase: RTx-624

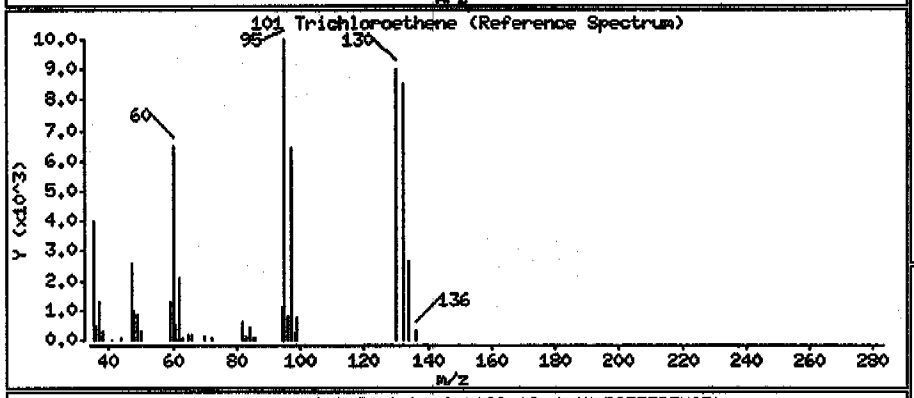
Column diameter: 0.53

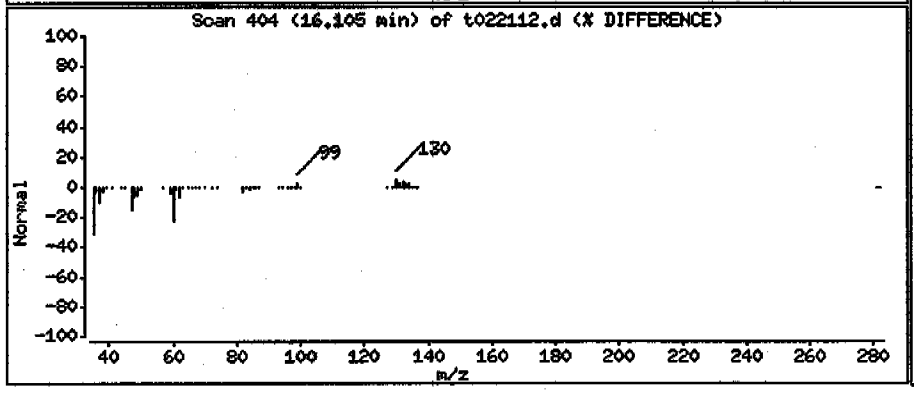
101 Trichloroethene

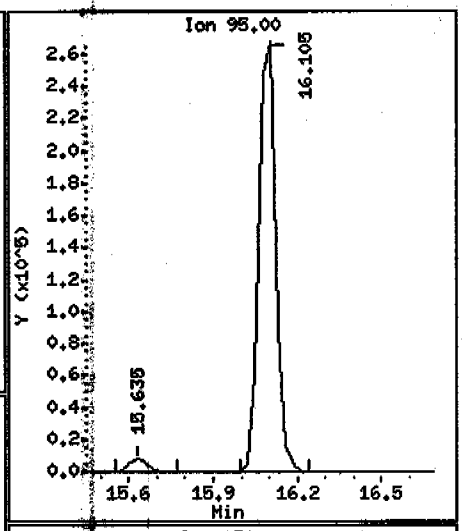
Concentration: 86.544 PPBV

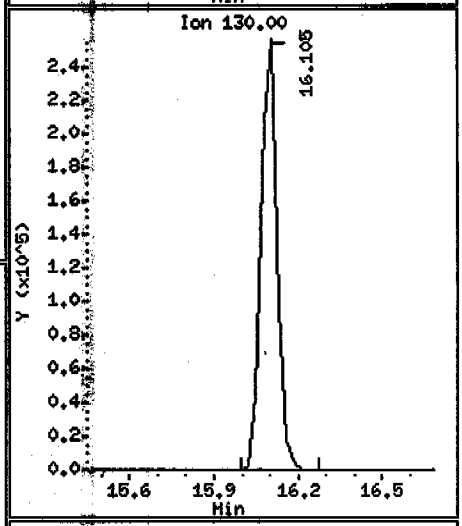


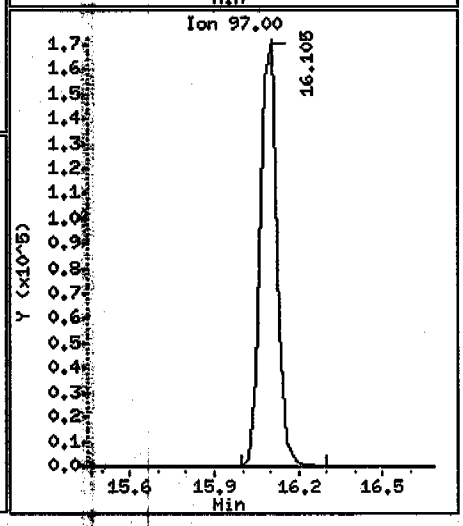












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

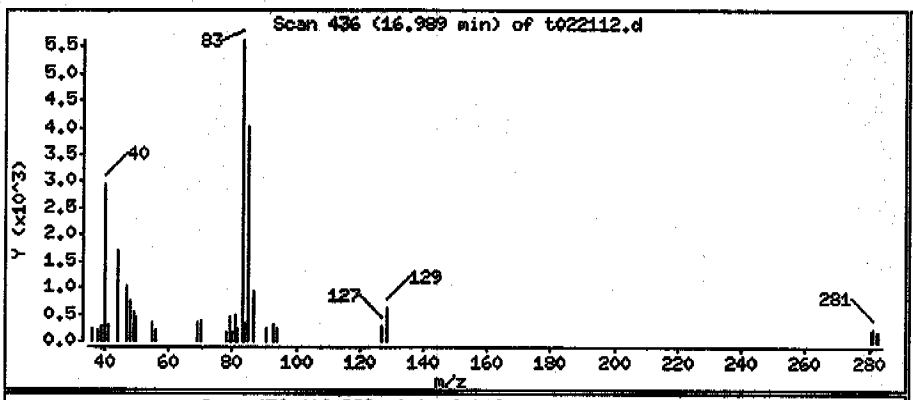
Operator: ACT

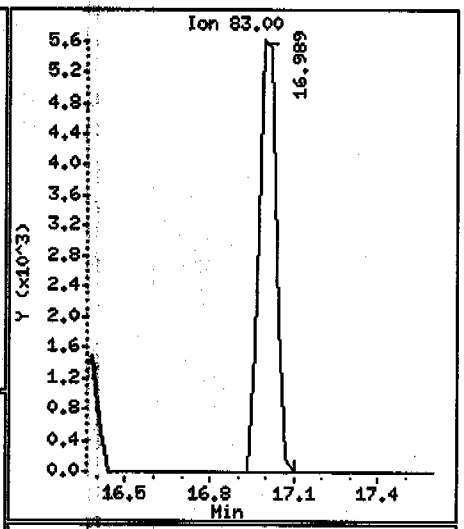
Column phase: RTx-624

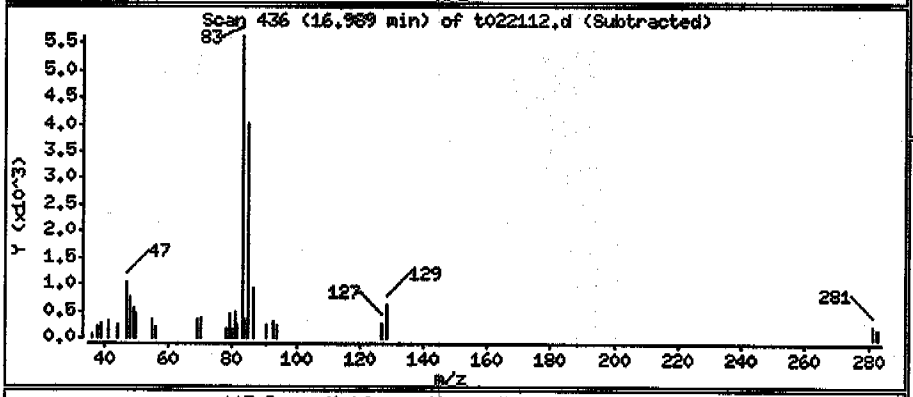
Column diameter: 0.53

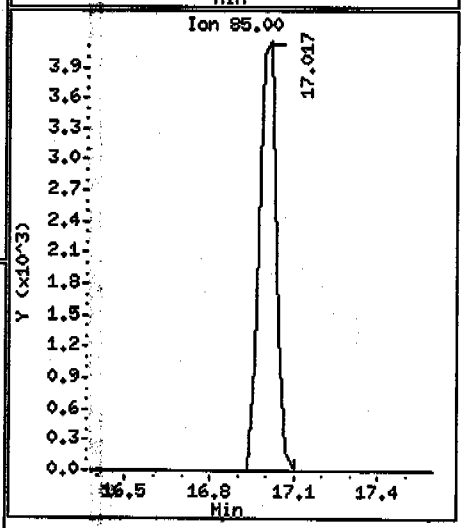
107 Bromodichloromethane

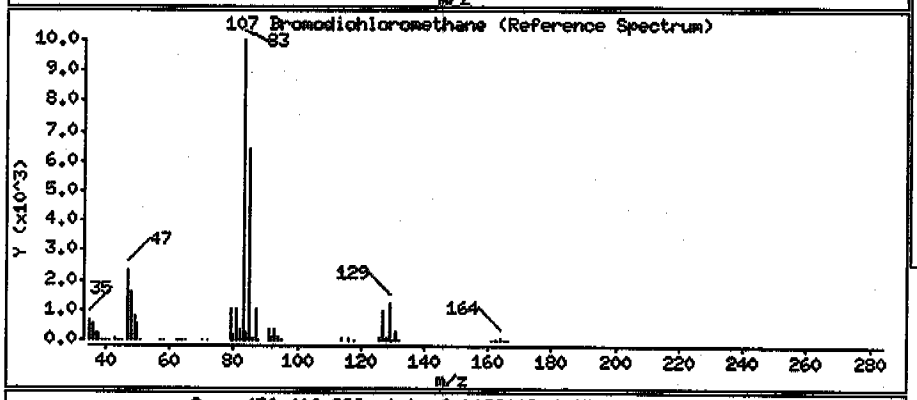
Concentration: 1.041 PPBV

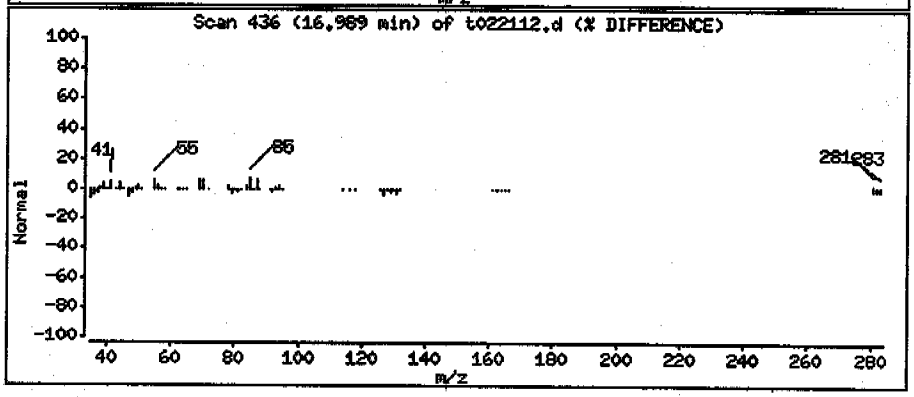












Data File: /chem/msdt.i/21Feb2008.b/t022112.d

Date : 21-FEB-2008 19:26

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

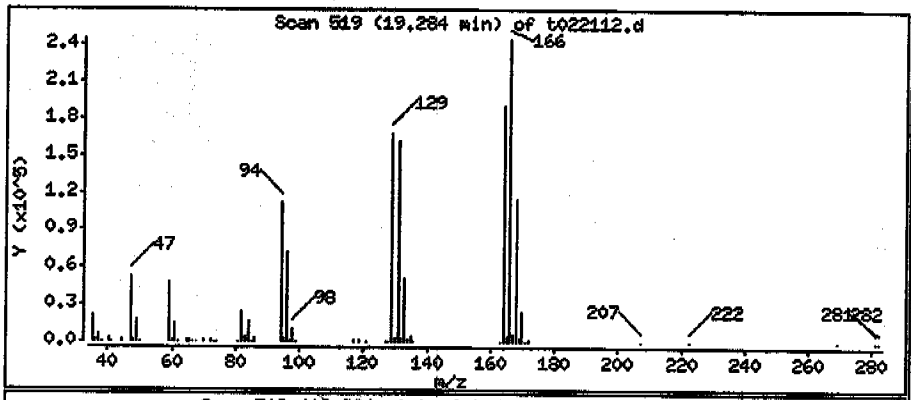
Operator: ACT

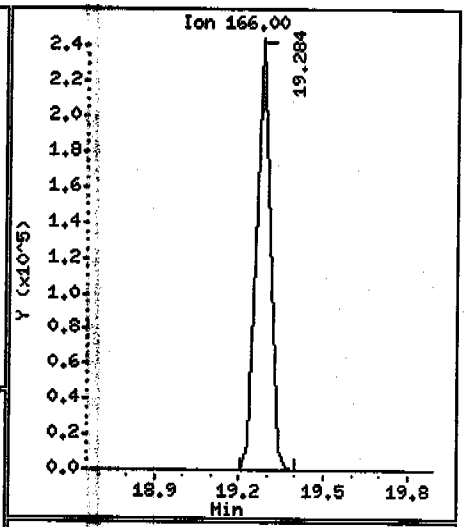
Column phase: RTx-624

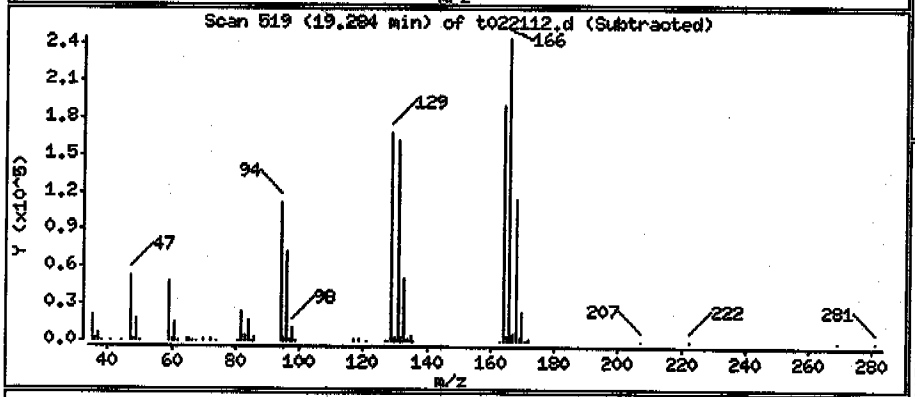
Column diameter: 0.53

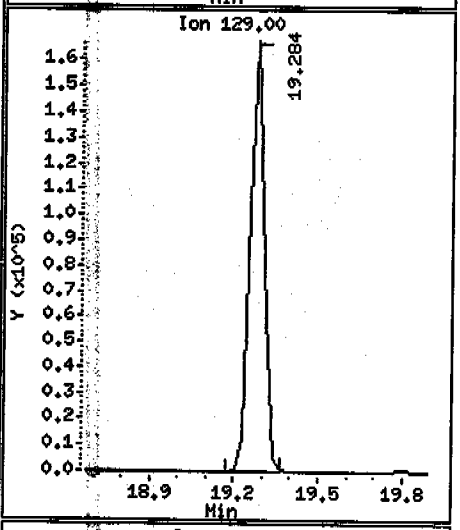
120 Tetrachloroethene

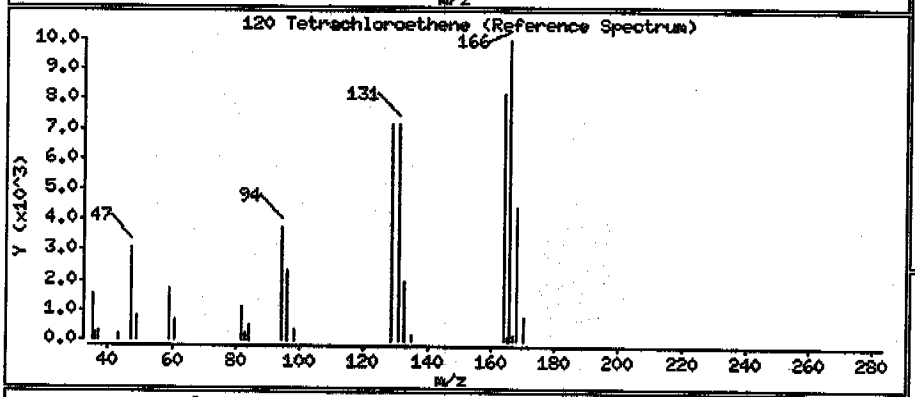
Concentration: 47.800 PPBV

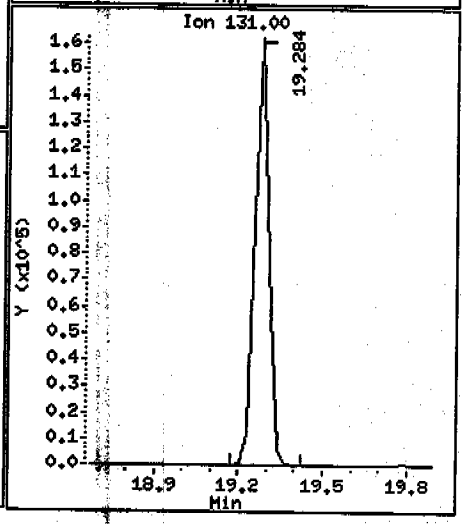


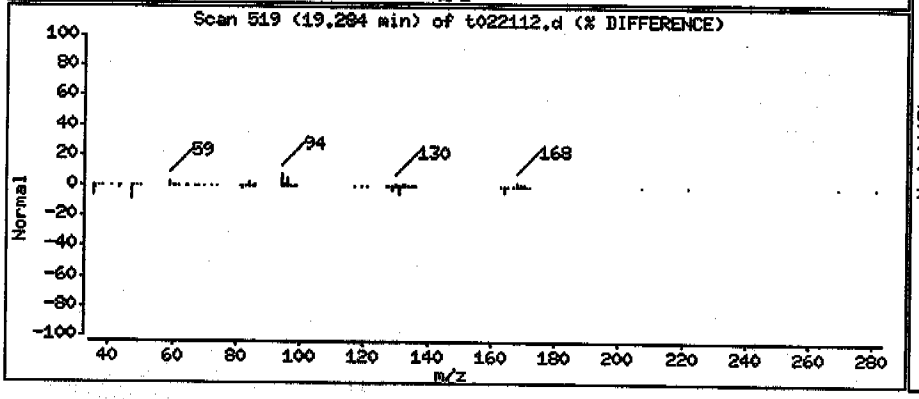












AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10519 Lab Duplicate

Lab ID#: 0802200-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.4	4.4	7.0
Freon 113	0.90	2.1	6.8	16
1,1-Dichloroethene	0.90	1.4	3.5	5.6
Carbon Disulfide	0.90	1.2	2.8	3.7
Methylene Chloride	0.90	7.6	3.1	26
Chloroform	0.90	120	4.4	570
1,1,1-Trichloroethane	0.90	5.1	4.9	28
Carbon Tetrachloride	0.90	23	5.6	140
Trichloroethene	0.90	86	4.8	460
Bromodichloromethane	0.90	1.0	6.0	7.0
Tetrachloroethene	0.90	48	6.1	320

0060

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10519 Lab Duplicate

Lab ID#: 0802200-02AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.4	4.4	7.0
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	2.1	6.8	16
1,1-Dichloroethene	0.90	1.4	3.5	5.6
Acetone	3.6	Not Detected	8.5	Not Detected
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	1.2	2.8	3.7
Methylene Chloride	0.90	7.6	3.1	26
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	120	4.4	570
1,1,1-Trichloroethane	0.90	5.1	4.9	28
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	23	5.6	140
Benzene	0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	86	4.8	460
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	1.0	6.0	7.0
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	48	6.1	320

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10519 Lab Duplicate

Lab ID#: 0802200-02AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	Not Detected	6.2	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	106	70-130

0062

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022114.d
Lab Smp Id: 0802200-02AA
Inj Date : 21-FEB-2008 20:43
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #33943
Misc Info : 7.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	282511	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	210960			27.38- 127.38	74.67
13.893	13.865 (1.000)	49	525211			131.81- 231.81	185.91
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1040017	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	172897			0.00- 66.79	16.62
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	955690	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	548196			7.58- 107.58	57.36
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.076)	65	429193	23.6101	23.610	80.00- 120.00	100.00
14.943	14.943 (1.076)	67	215519			3.57- 103.57	50.21
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	993828	24.8076	24.808	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	113341			0.00- 61.29	11.40

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	673427			18.71- 118.71	67.76
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	653062	26.4185	26.418	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	826354			76.46- 176.46	126.54
22.796	22.796 (1.096)	176	639293			48.22- 148.22	97.89
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	43989	0.79741	1.427	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	13366			0.00- 82.13	30.38
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	34065	1.18461	2.120	80.00- 120.00	100.00
9.966	9.939 (0.717)	153	18555			13.46- 113.46	54.47
9.966	9.939 (0.717)	101	46710			82.30- 182.30	137.12
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.723)	61	20287	0.78376	1.403	80.00- 120.00	100.00
10.049	10.050 (0.723)	96	14113			9.56- 109.56	69.57
10.049	10.050 (0.723)	98	8250			0.00- 88.43	40.67
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	32753	0.66898	1.197	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	69747	4.26130	7.628	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	52655			38.51- 138.51	75.49
11.128	11.100 (0.801)	51	19111			0.00- 83.83	27.40
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	2659831	64.8234	116.03	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1716330			14.81- 114.81	64.53
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.307	14.280 (1.030)	97	128875	2.83963	5.083	80.00- 120.00	100.00
14.307	14.280 (1.030)	99	77609			14.28- 114.28	60.22
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	553321	12.6921	22.719	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	583085			56.24- 156.24	105.38
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	1071994	48.1396	86.170	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	984811			39.09- 139.09	91.87
16.105	16.077 (1.030)	97	680064			12.68- 112.68	63.44

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
107 Bromodichloromethane					CAS #: 75-27-4		
17.017	16.989 (1.088)	83	23219	0.58262	1.043	80.00- 120.00	100.00
17.017	16.989 (1.088)	85	14926			14.80- 114.80	64.28
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	777489	26.6531	47.709	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	551759			18.51- 118.51	70.97
19.284	19.284 (0.927)	131	524035			15.29- 115.29	67.40

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022114.d
Lab Smp Id: 0802200-02AA
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 7.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	282511	-11.20
97 1,4-Difluorobenze	1251468	750881	1752055	1040017	-16.90
126 Chlorobenzene-d5	1150991	690595	1611387	955690	-16.97

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 21Feb2008
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0802200-02AA
Level: LOW Operator: ACT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 7.5"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.610	94.44	70-130
$ 113 Toluene-d8	25.000	24.808	99.23	70-130
$ 137 Bromofluorobenzene	25.000	26.418	105.67	70-130

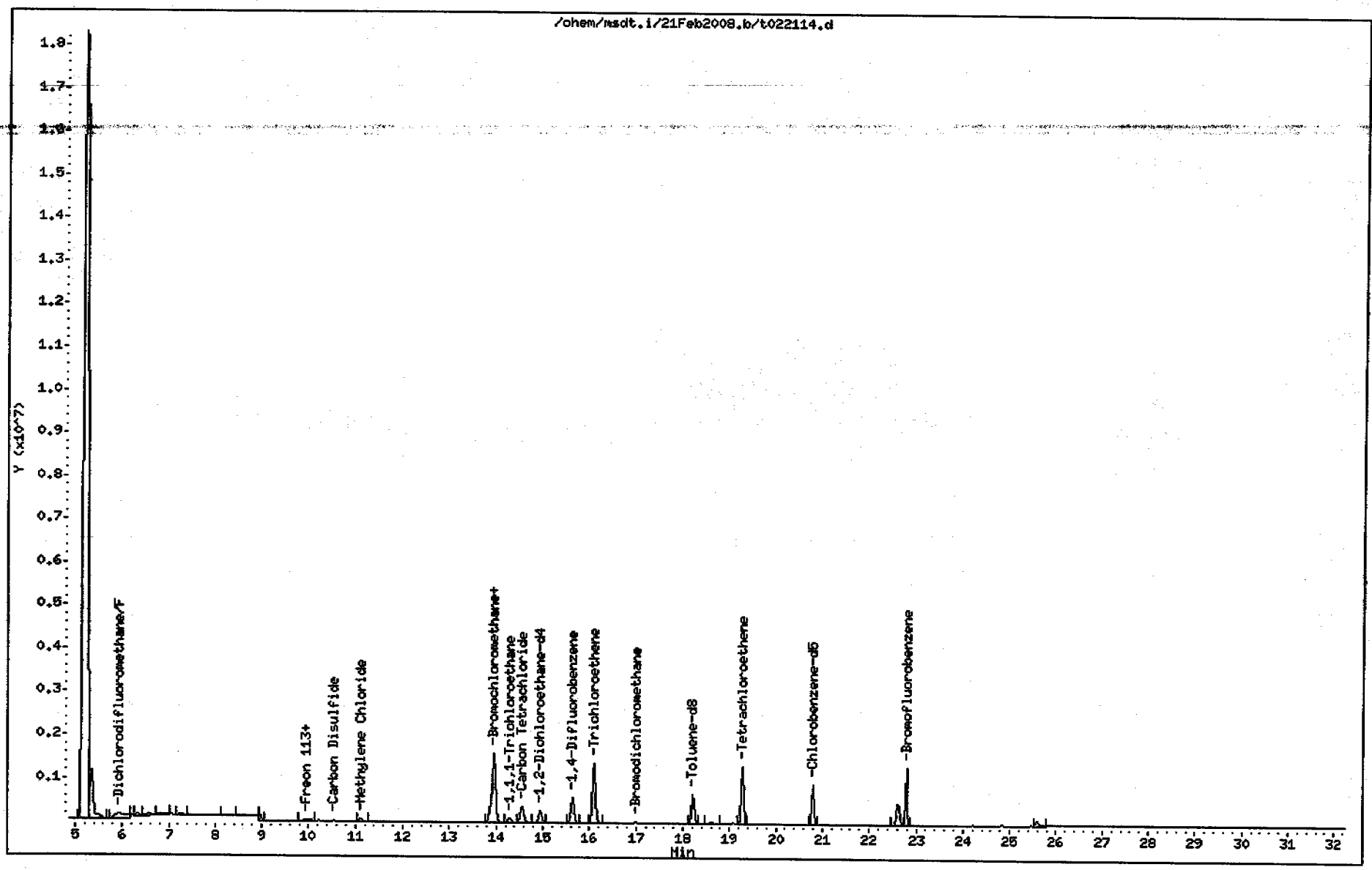
Data File: /ohem/msdt.i/21Feb2008.b/t022114.d
Date : 21-FEB-2008 20:43
Client ID:
Sample Info: 200mL #33943

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0068



Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

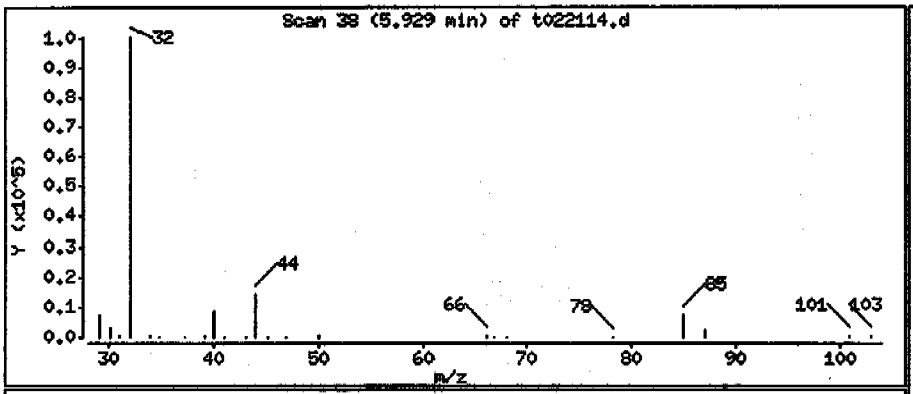
Operator: ACT

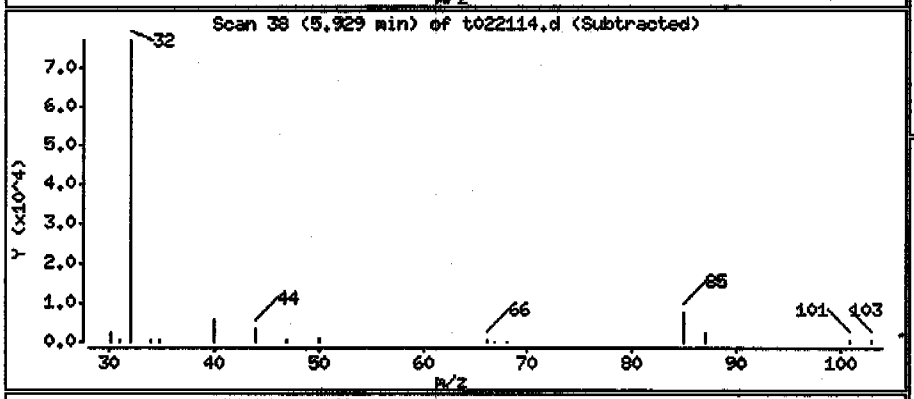
Column phase: RTx-624

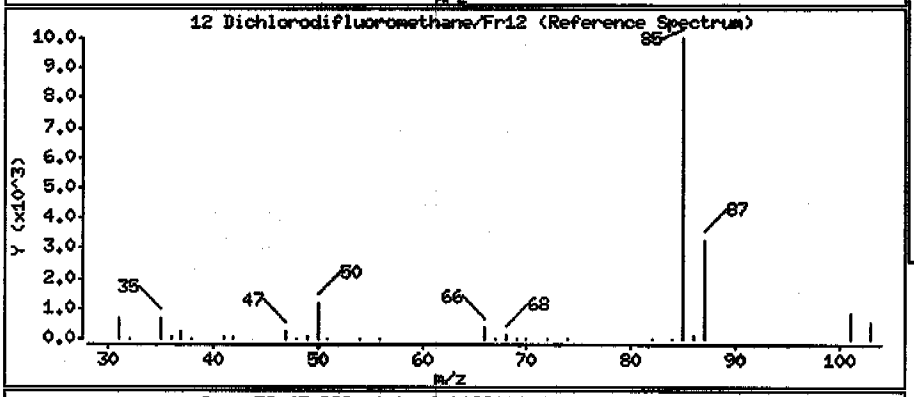
Column diameter: 0.53

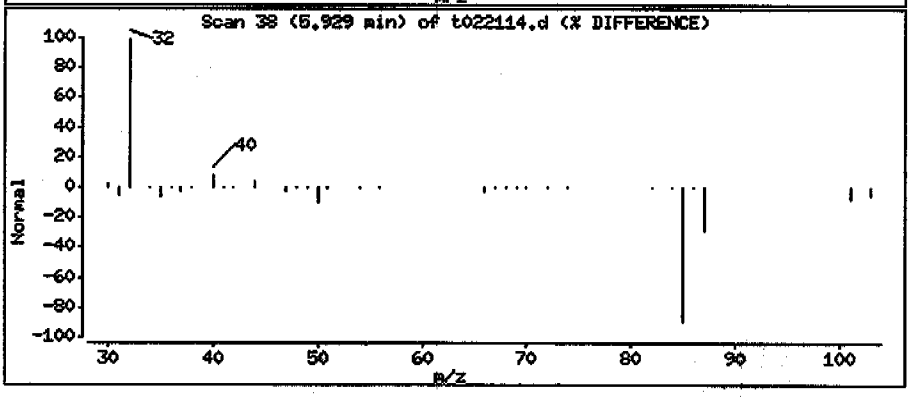
12 Dichlorodifluoromethane/Fr12

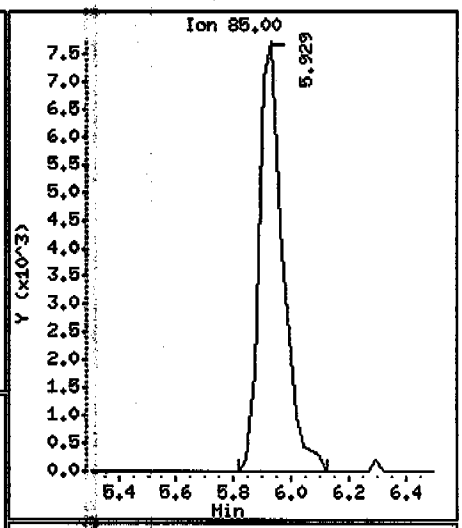
Concentration: 1.427 PPBV

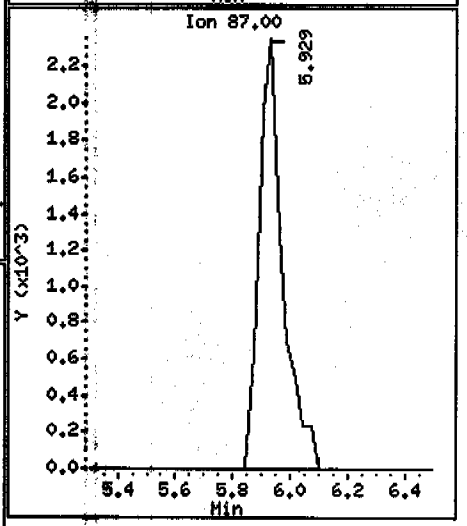












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

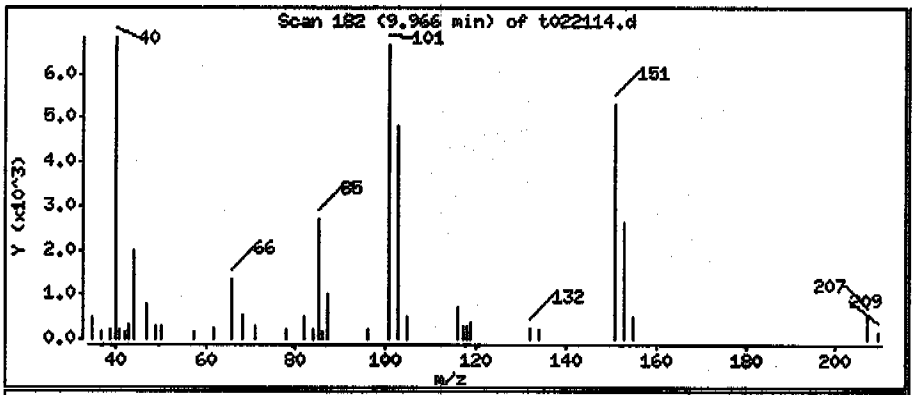
Operator: ACT

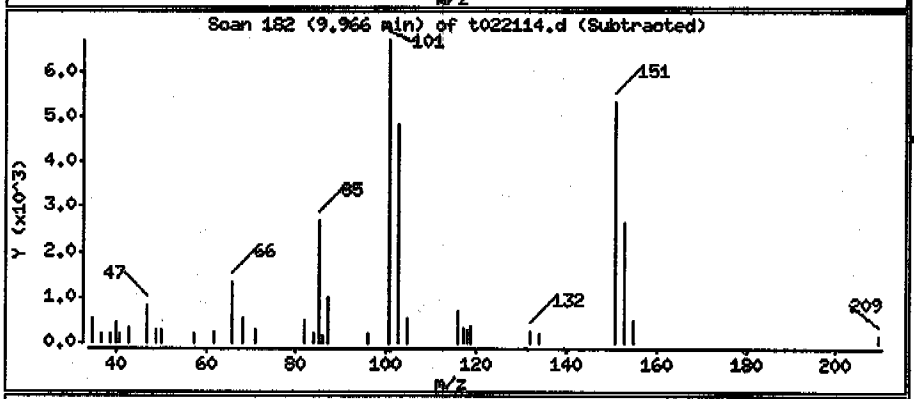
Column phase: RTx-624

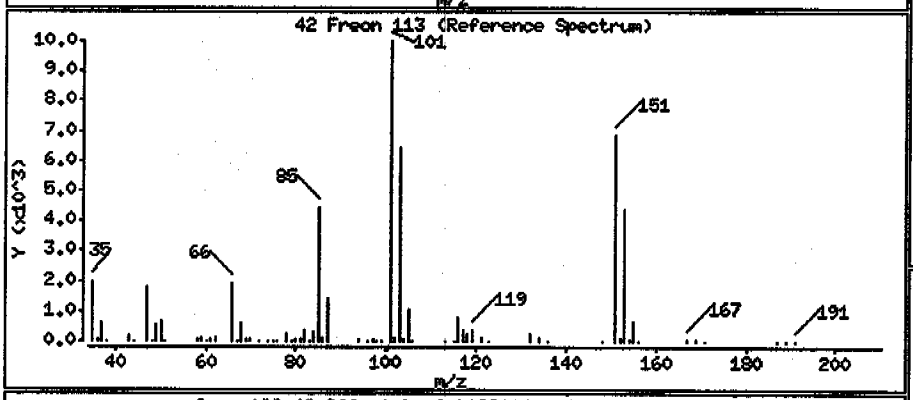
Column diameter: 0.53

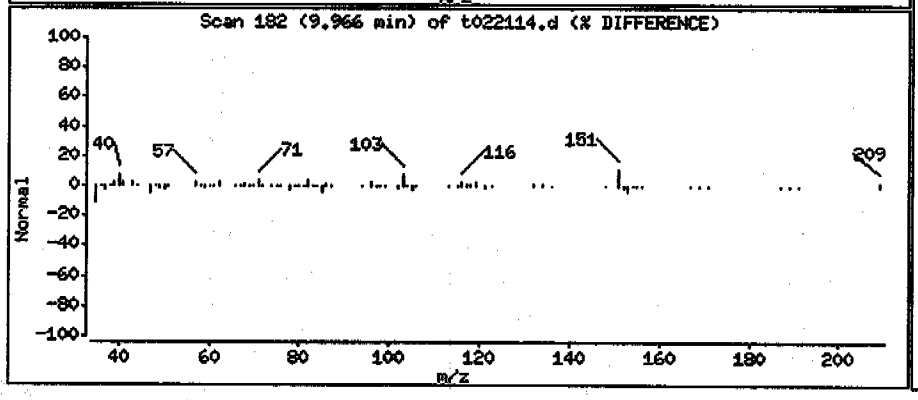
42 Freon 113

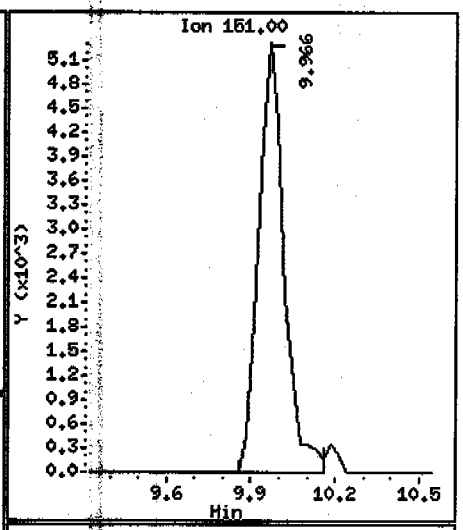
Concentration: 2.120 PPBV

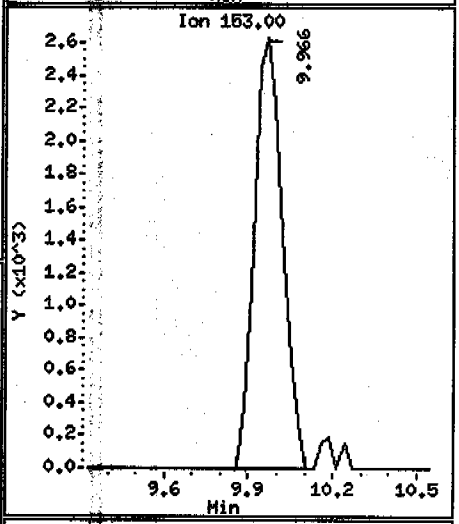


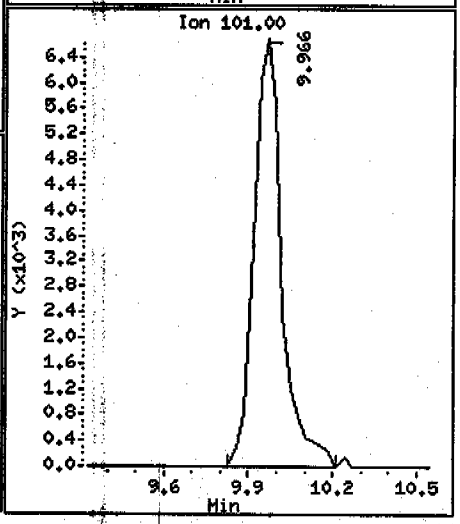












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

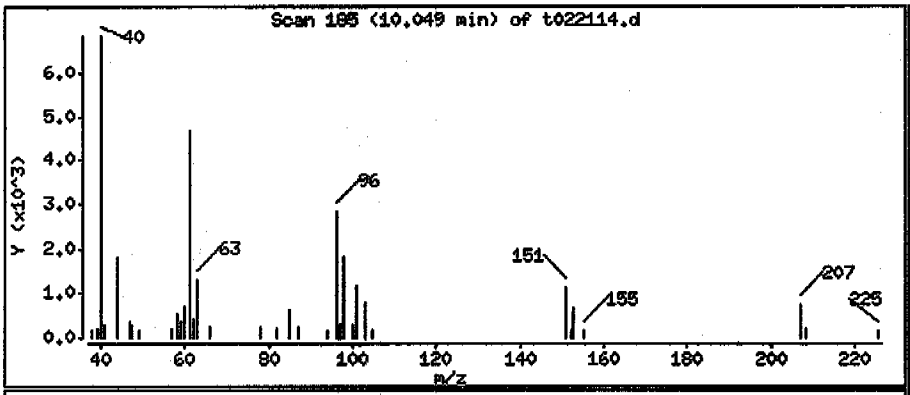
Operator: ACT

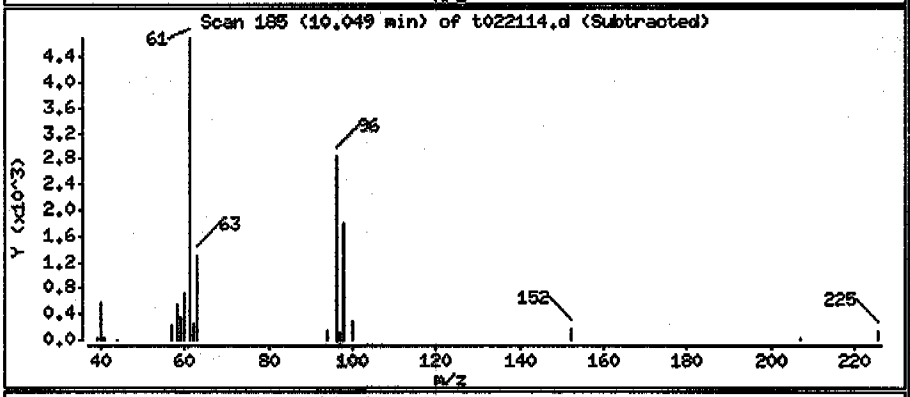
Column phase: RTx-624

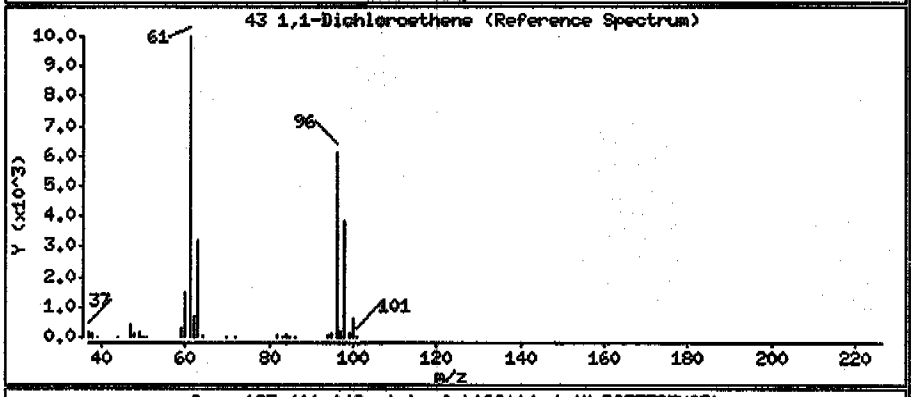
Column diameter: 0.53

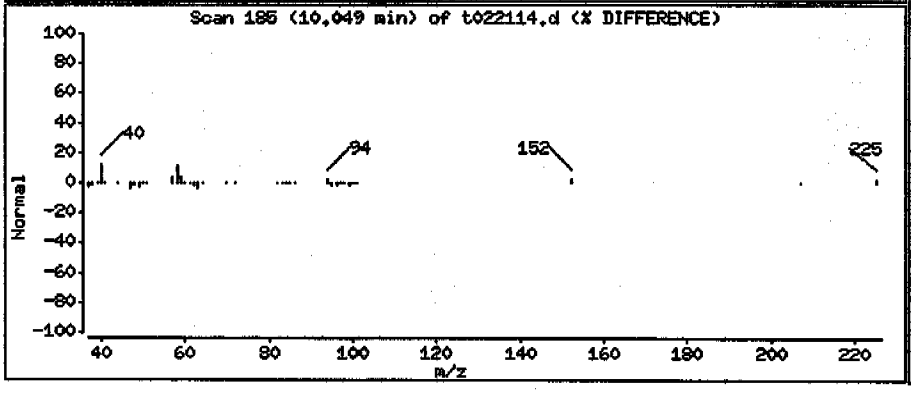
43 1,1-Dichloroethene

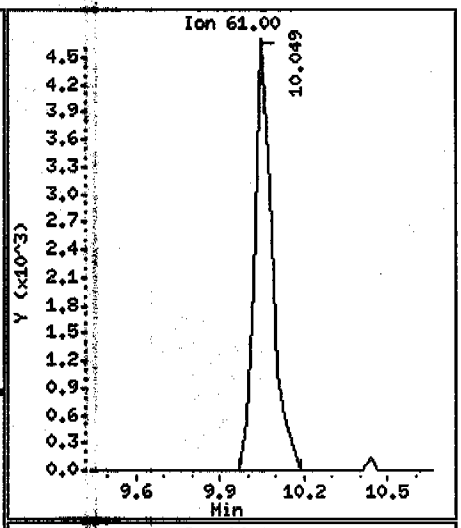
Concentration: 1.403 PPBV

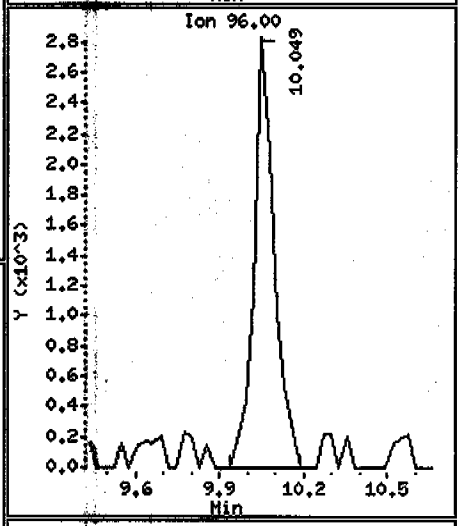


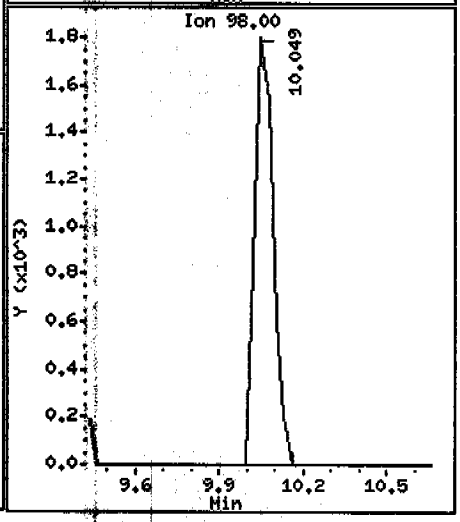












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

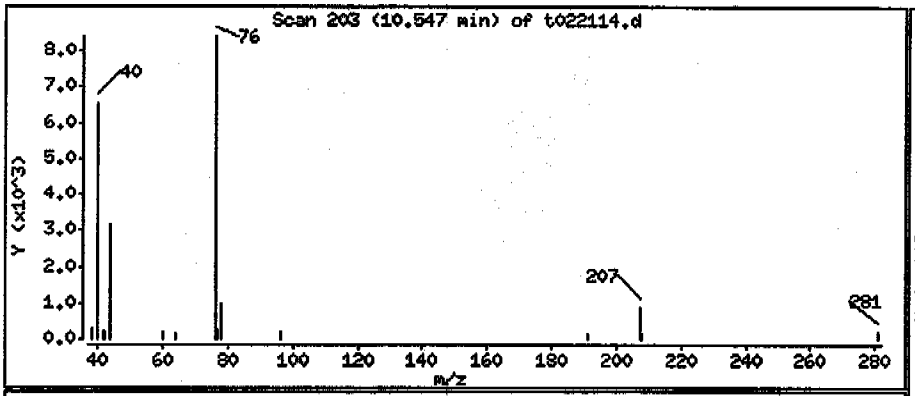
Operator: ACT

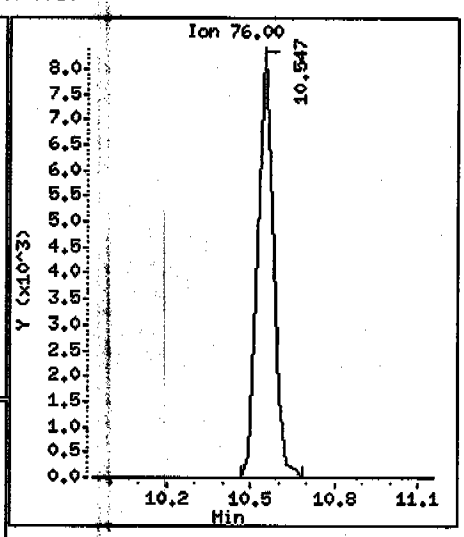
Column phase: RTx-624

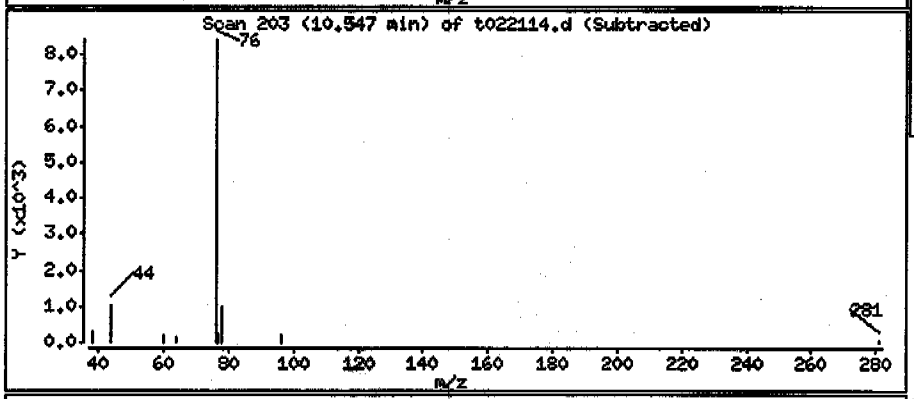
Column diameter: 0.53

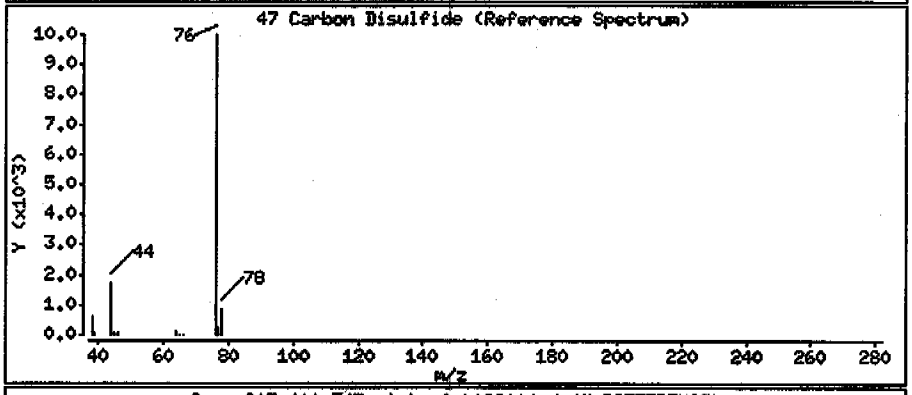
47 Carbon Disulfide

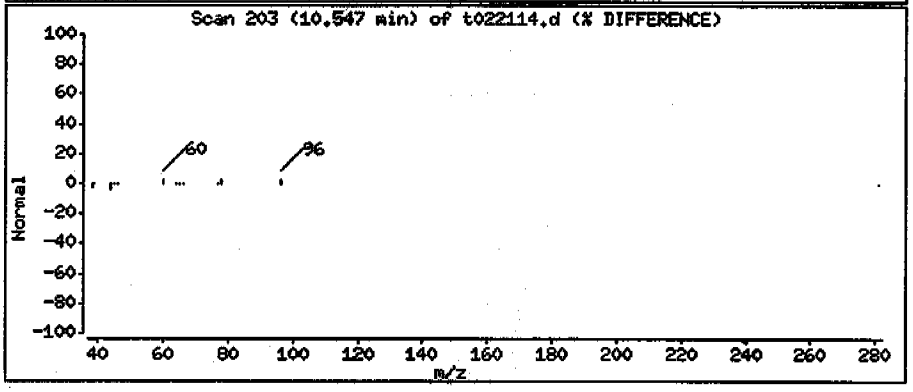
Concentration: 1.197 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

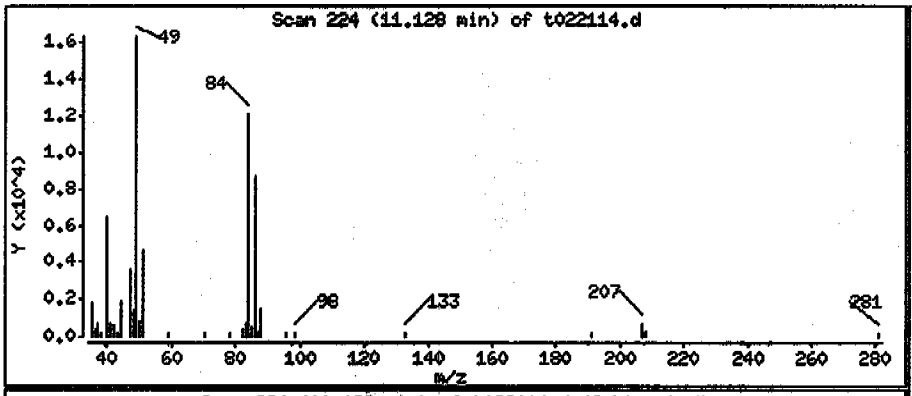
Operator: ACT

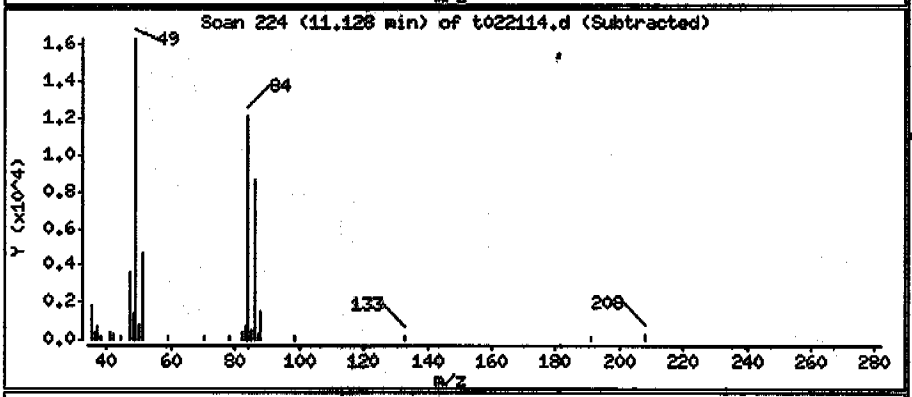
Column phase: RTx-624

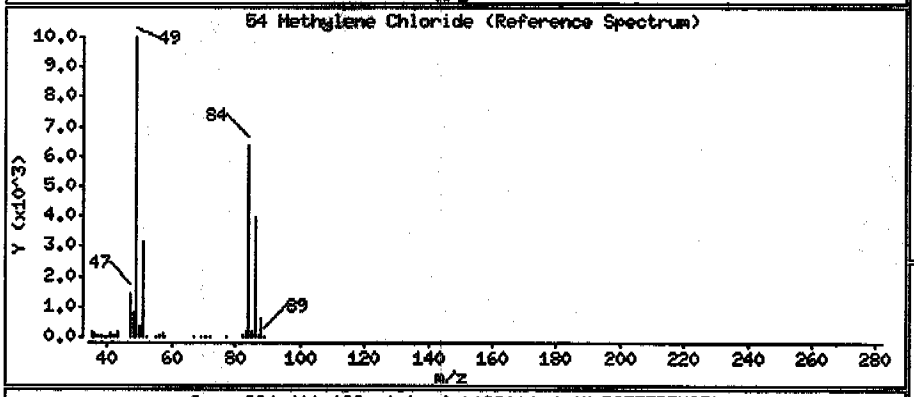
Column diameter: 0.53

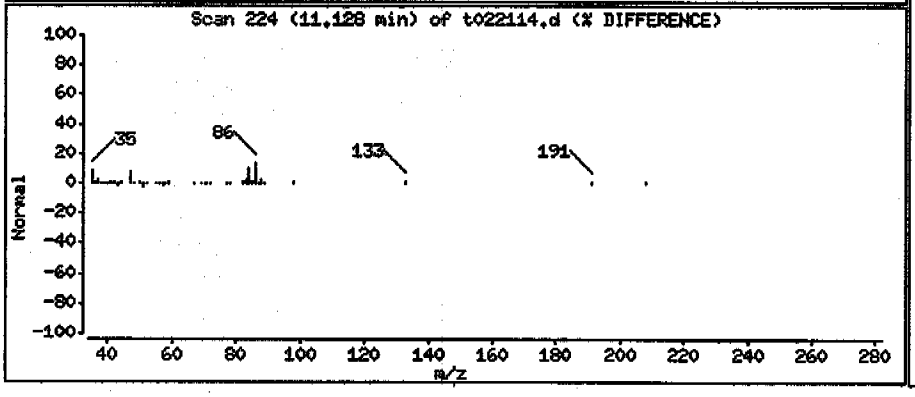
54 Methylene Chloride

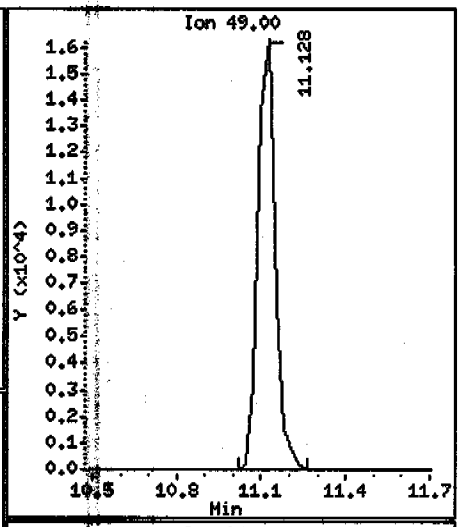
Concentration: 7.628 PPBV

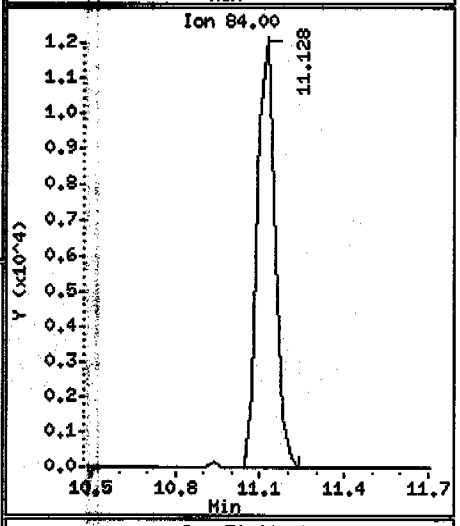


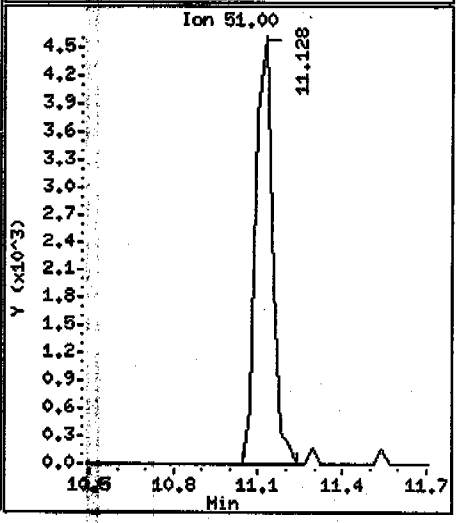












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

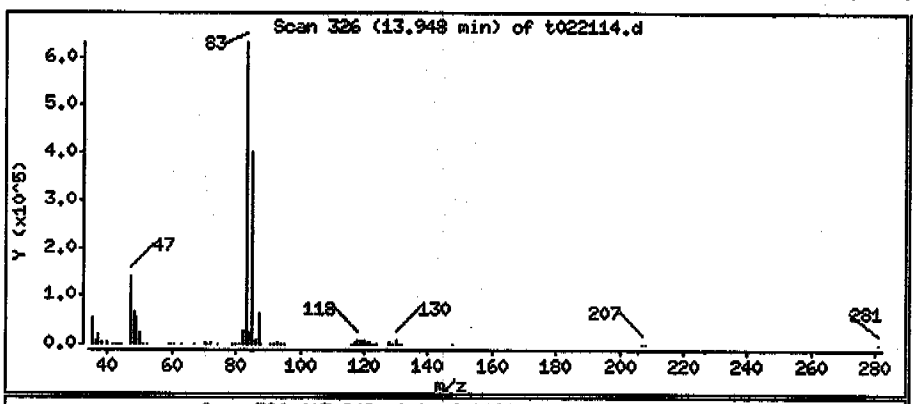
Operator: ACT

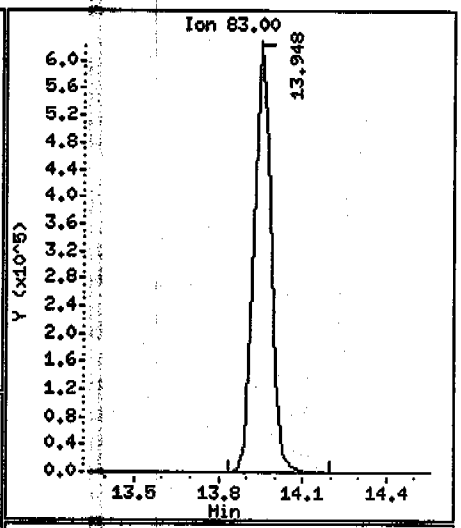
Column phase: RTx-624

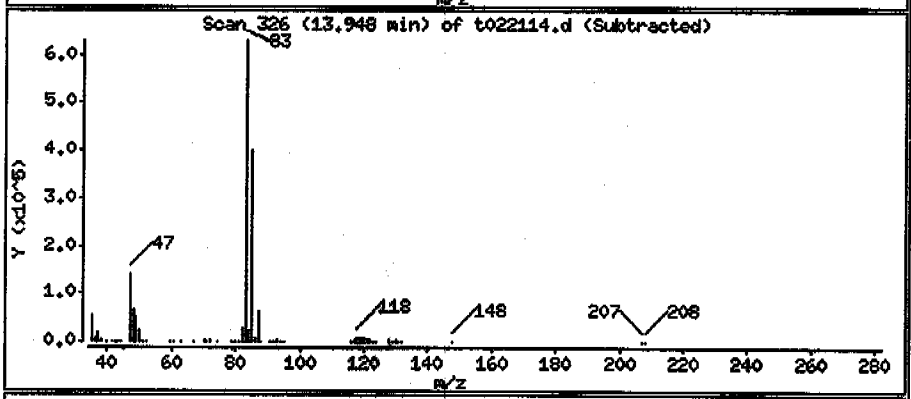
Column diameter: 0.53

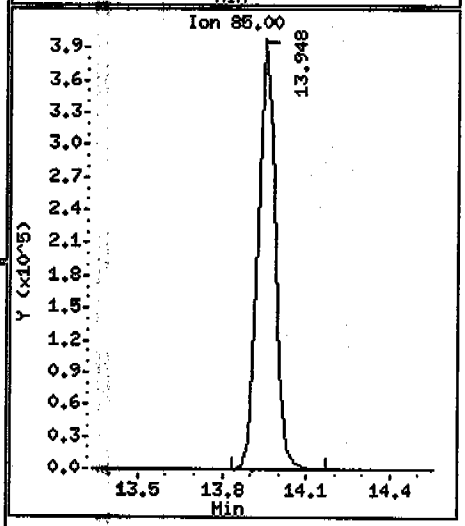
82 Chloroform

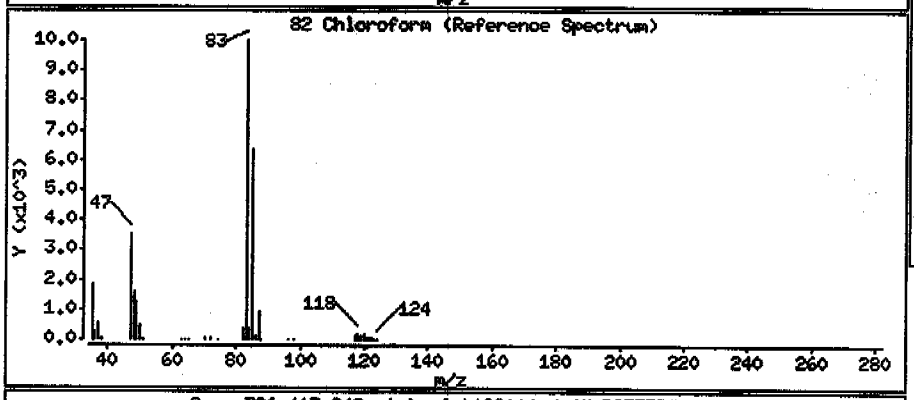
Concentration: 116.03 PPBV

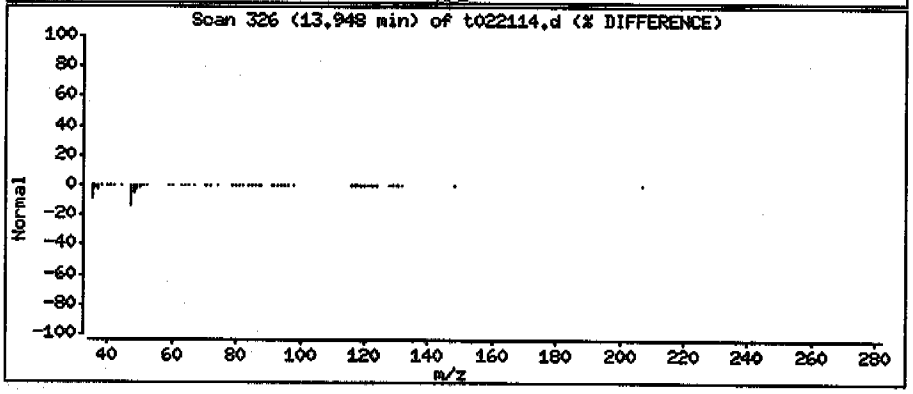












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

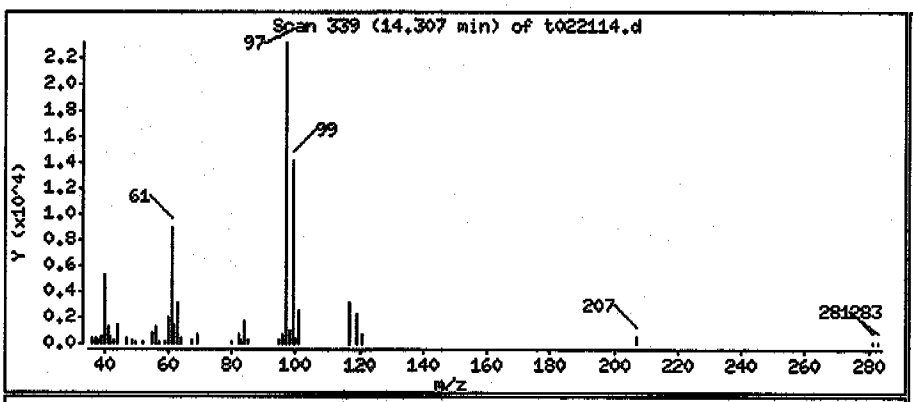
Operator: ACT

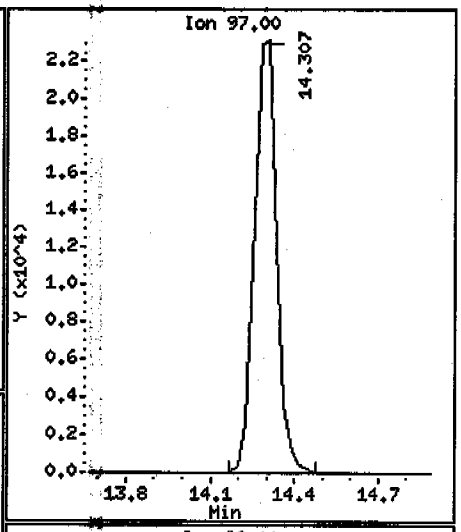
Column phase: RTx-624

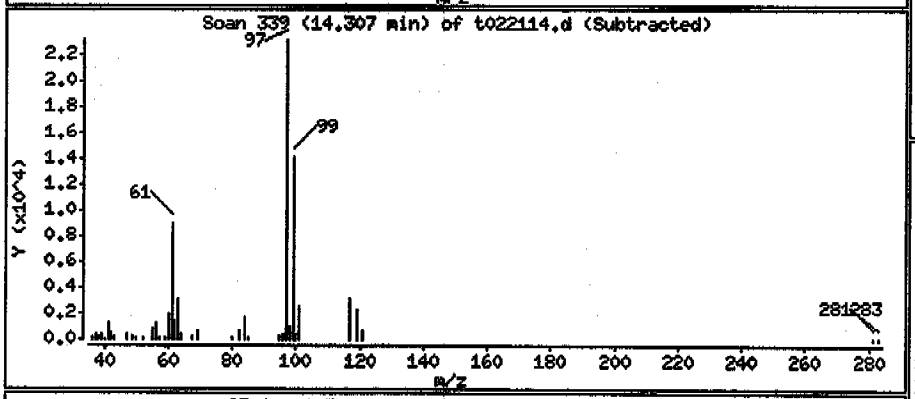
Column diameter: 0.53

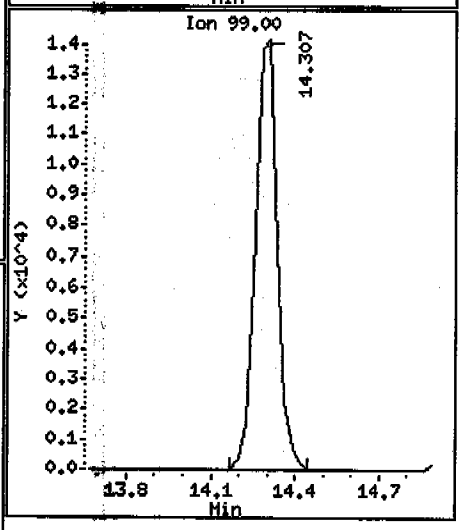
83 1,1,1-Trichloroethane

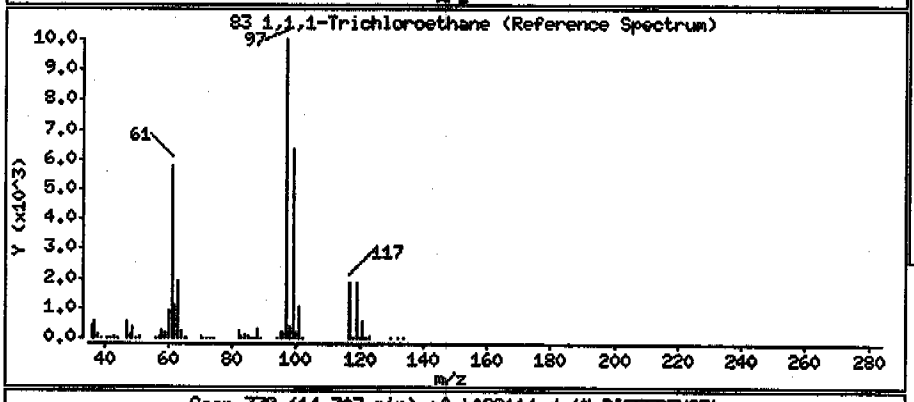
Concentration: 5.083 PPBV

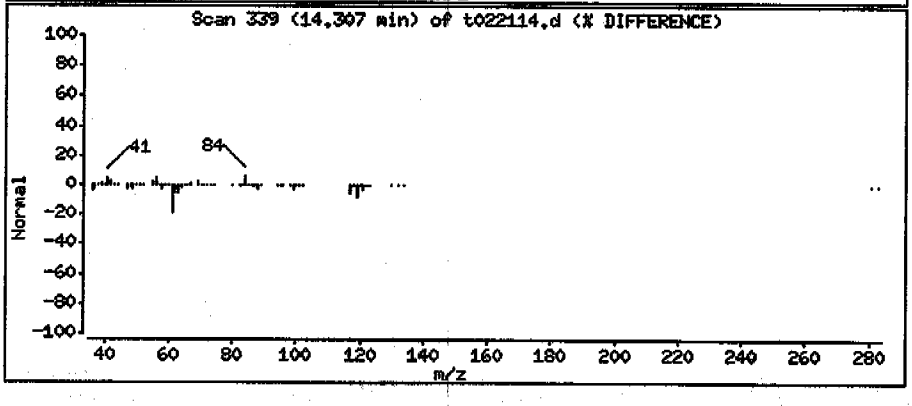












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

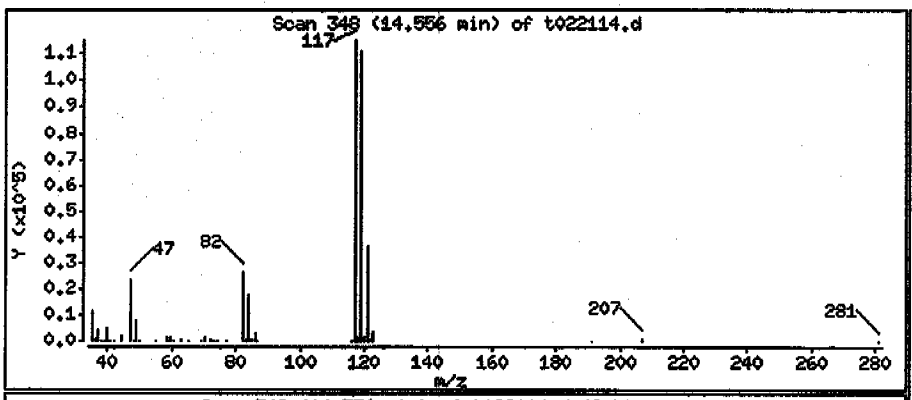
Operator: ACT

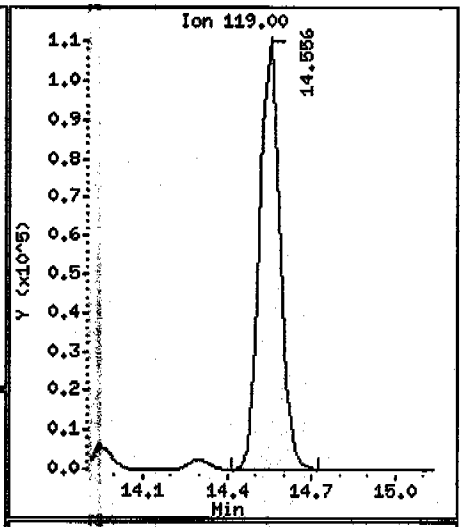
Column phase: RTx-624

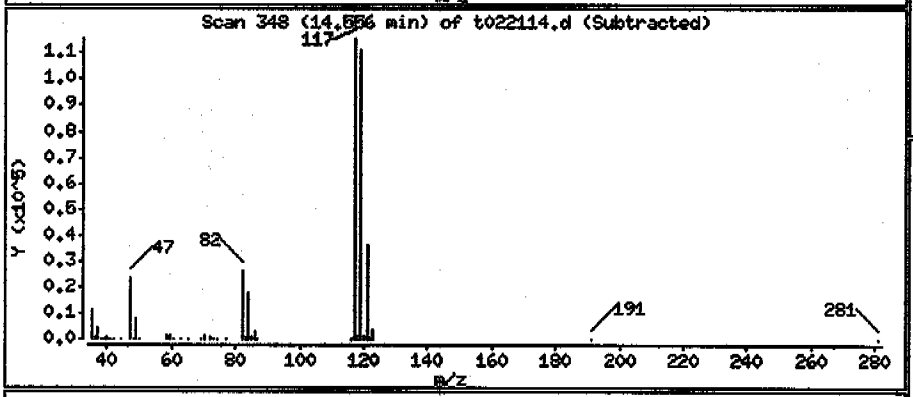
Column diameter: 0.53

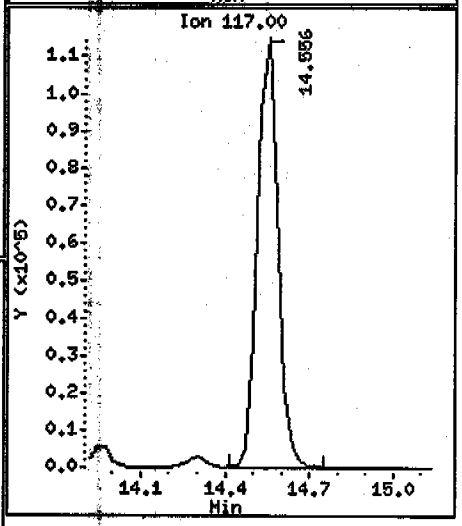
87 Carbon Tetrachloride

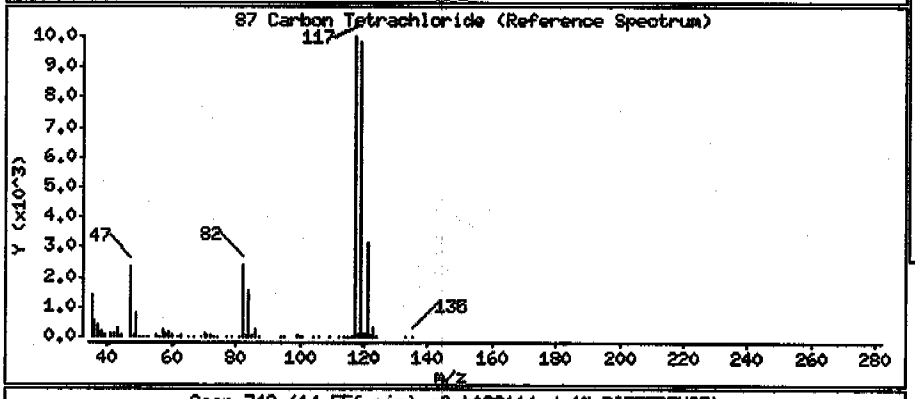
Concentration: 22.719 PPBV

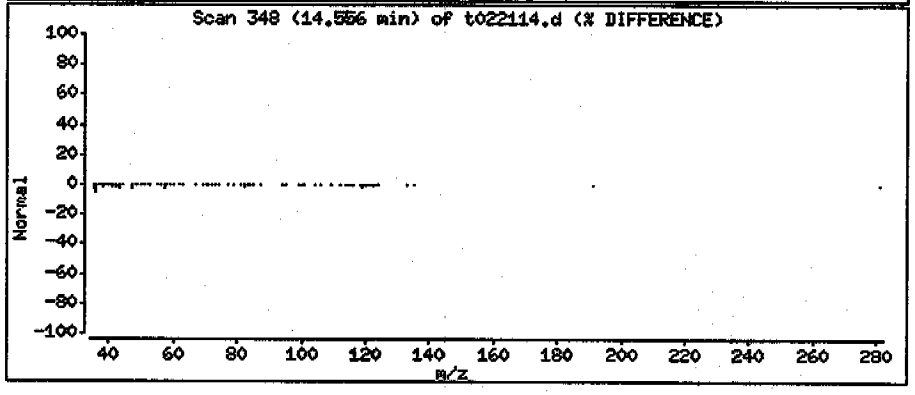












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

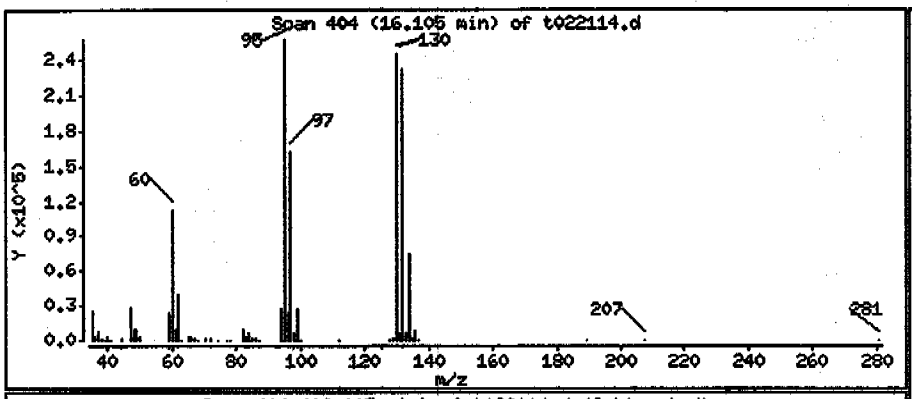
Operator: ACT

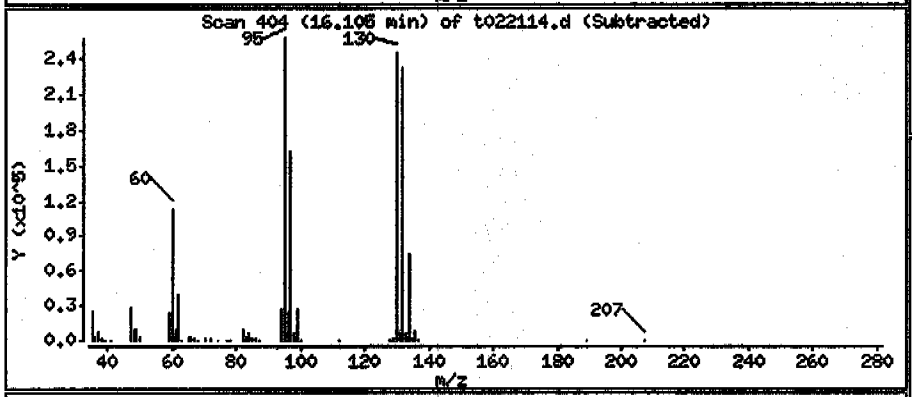
Column phase: RTx-624

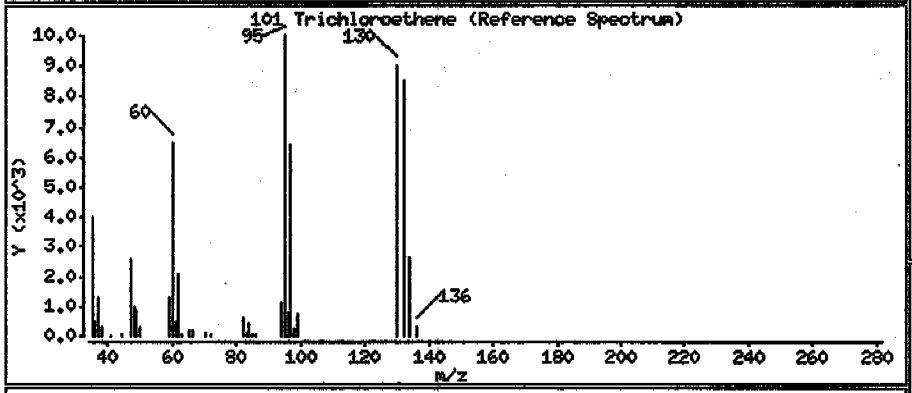
Column diameter: 0.53

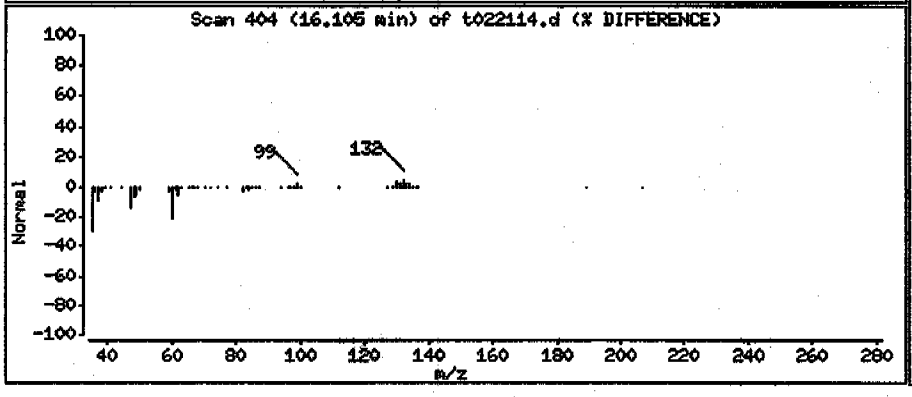
101 Trichloroethene

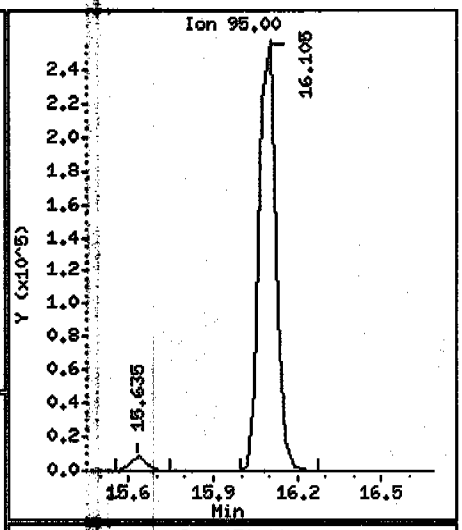
Concentration: 86.170 PPBV

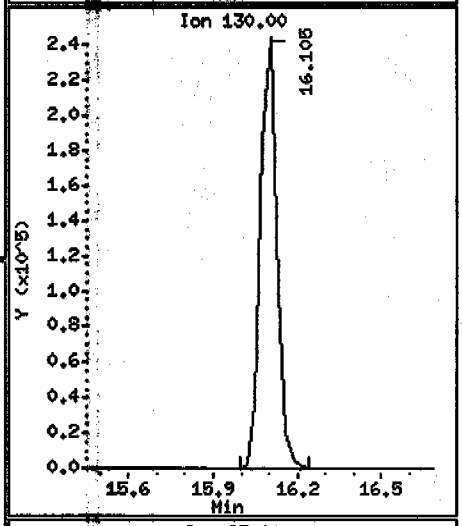


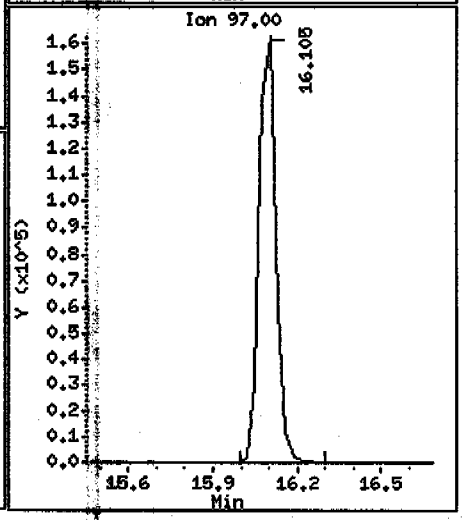












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

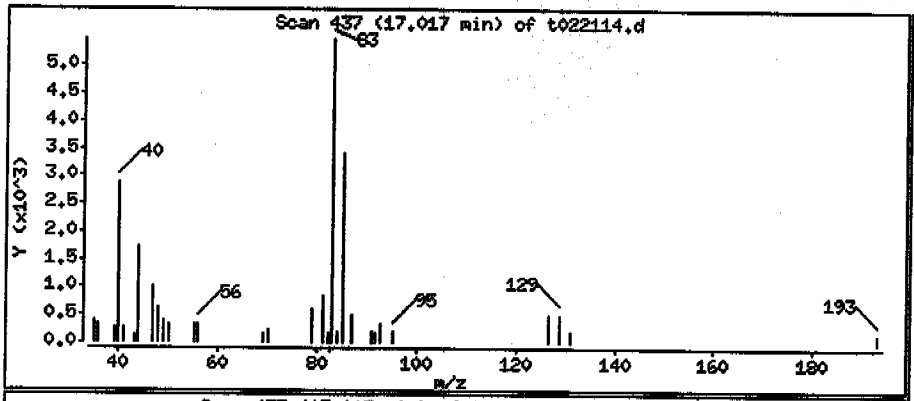
Operator: ACT

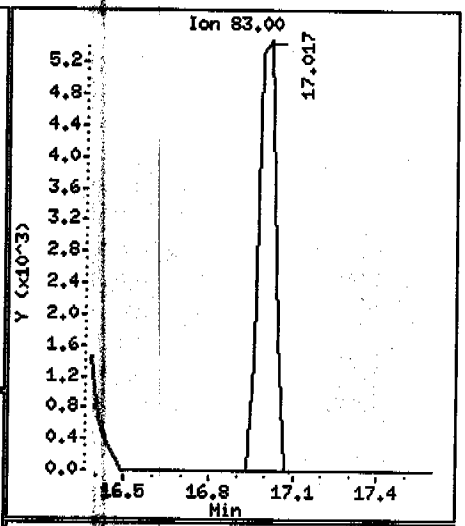
Column phase: RTx-624

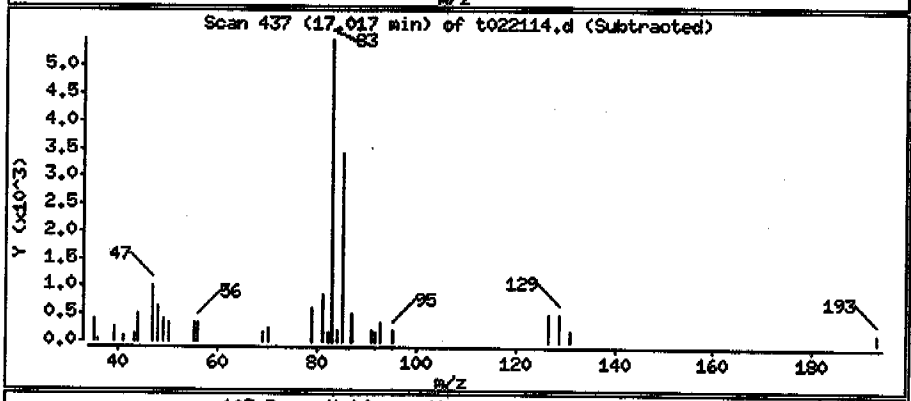
Column diameter: 0.53

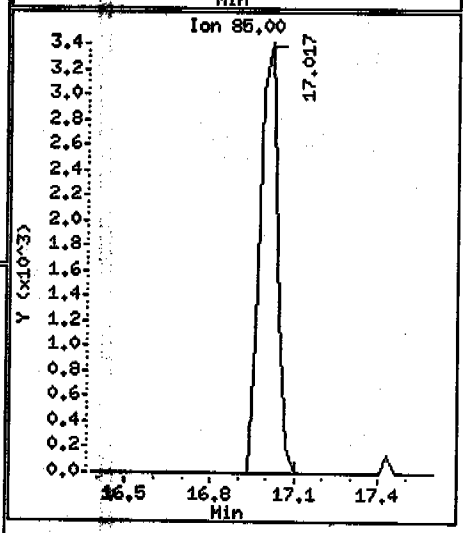
107 Bromodichloromethane

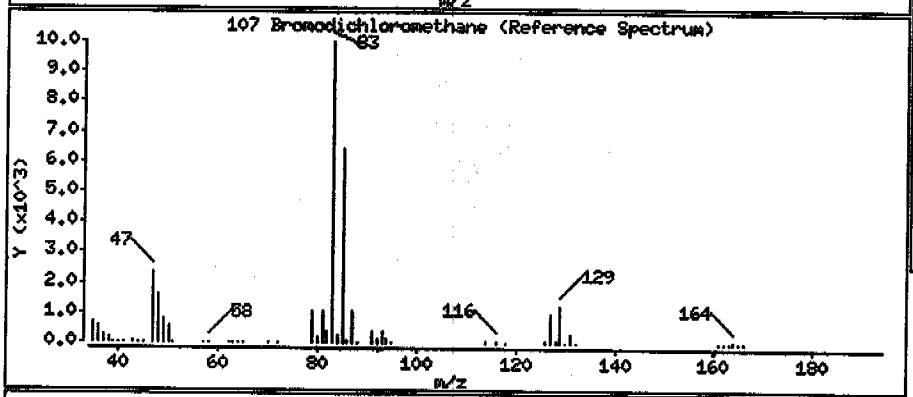
Concentration: 1.043 PPBV

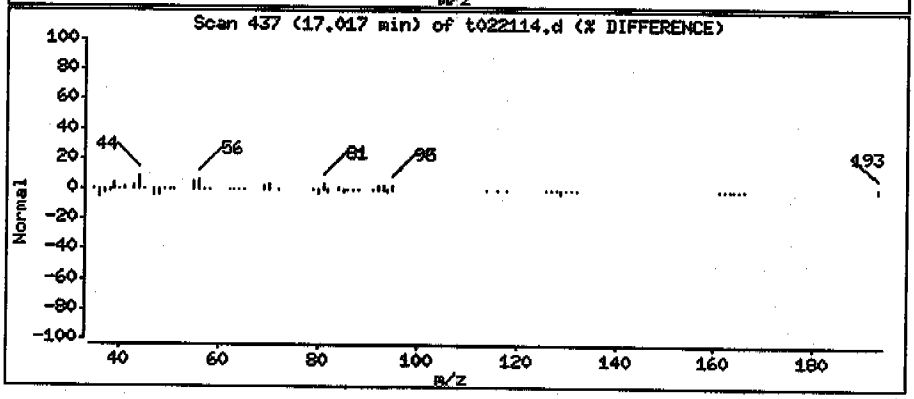












Data File: /chem/msdt.i/21Feb2008.b/t022114.d

Date : 21-FEB-2008 20:43

Client ID:

Instrument: msdt.i

Sample Info: 200mL #33943

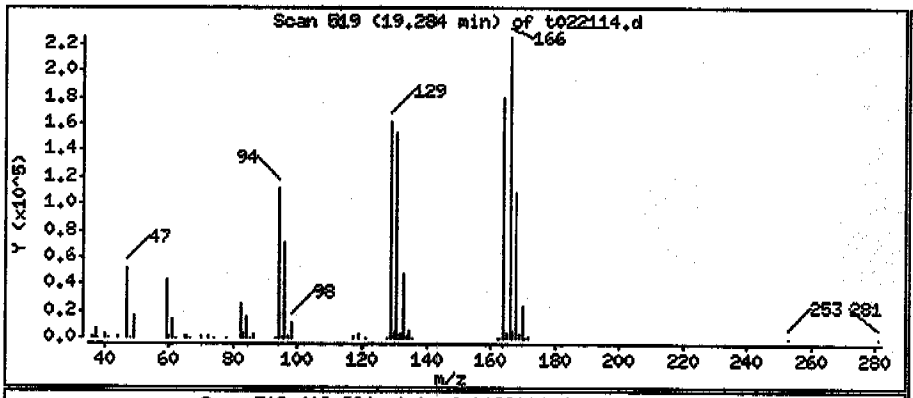
Operator: ACT

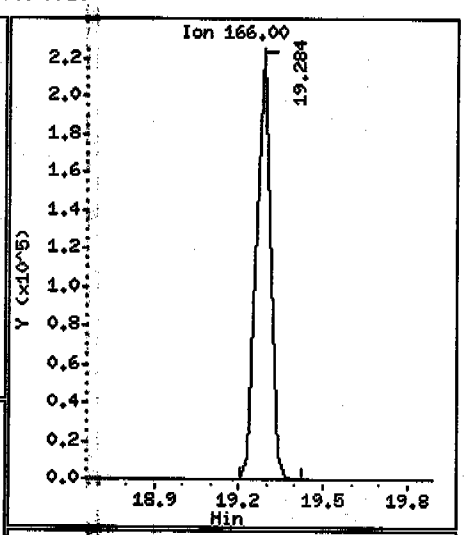
Column phase: RTx-624

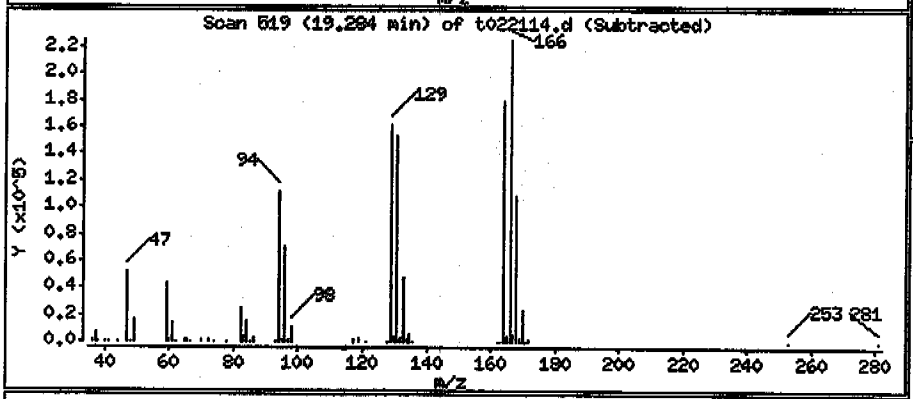
Column diameter: 0.53

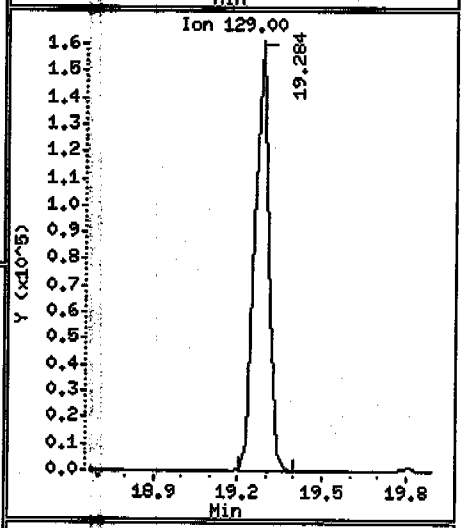
120 Tetrachloroethene

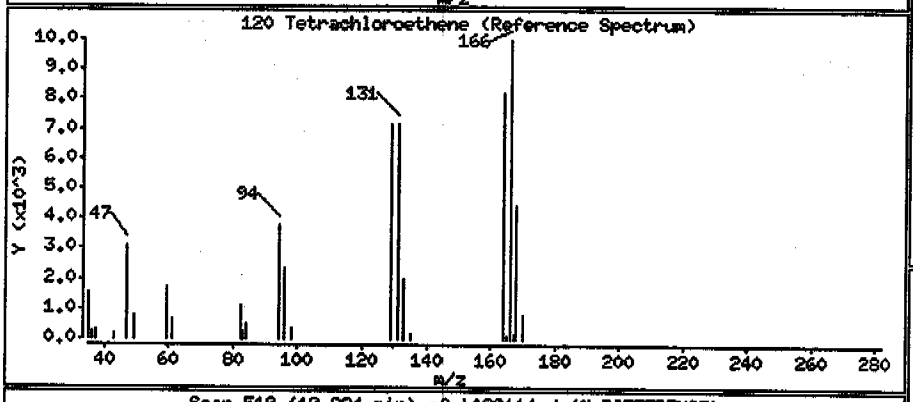
Concentration: 47.709 PPBV

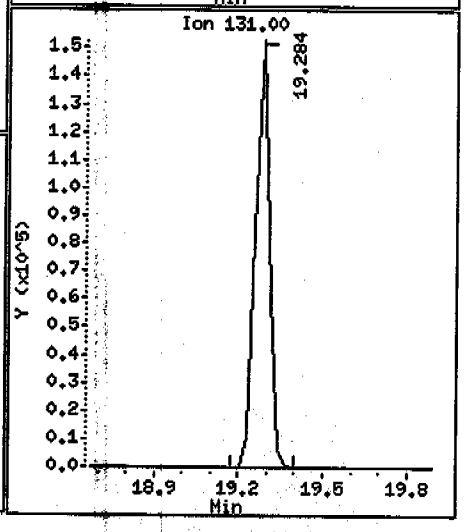


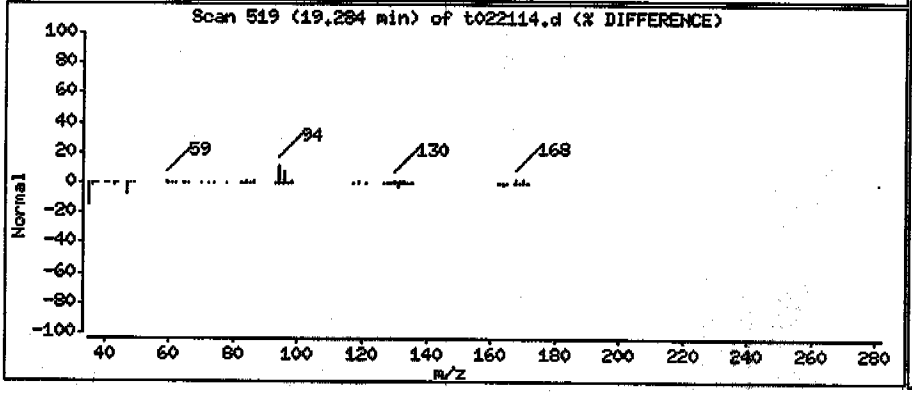












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10520

Lab ID#: 0802200-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	0.97	4.2	4.8
Freon 113	0.86	1.6	6.6	12
1,1-Dichloroethene	0.86	1.4	3.4	5.7
Acetone	3.4	4.6	8.1	11
Carbon Disulfide	0.86	0.87	2.7	2.7
Methylene Chloride	0.86	6.6	3.0	23
Chloroform	0.86	68	4.2	330
1,1,1-Trichloroethane	0.86	2.5	4.7	14
Carbon Tetrachloride	0.86	23	5.4	140
Benzene	0.86	0.90	2.7	2.9
Trichloroethene	0.86	57	4.6	300
Toluene	0.86	3.4	3.2	13
Tetrachloroethene	0.86	18	5.8	120

0080

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10520

Lab ID#: 0802200-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	0.97	4.2	4.8
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	1.6	6.6	12
1,1-Dichloroethene	0.86	1.4	3.4	5.7
Acetone	3.4	4.6	8.1	11
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	0.87	2.7	2.7
Methylene Chloride	0.86	6.6	3.0	23
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	68	4.2	330
1,1,1-Trichloroethane	0.86	2.5	4.7	14
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	23	5.4	140
Benzene	0.86	0.90	2.7	2.9
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	57	4.6	300
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	3.4	3.2	13
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	18	5.8	120

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10520

Lab ID#: 0802200-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	105	70-130

0082

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022115.d
Lab Smp Id: 0802200-03A
Inj Date : 21-FEB-2008 21:22
Operator : ACT
Inst ID: msdt.i
Smp Info : 200mL #SC416
Misc Info : 6.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	13.893	13.865 (1.000)	130	272153	25.0000		80.00- 120.00	100.00
	13.893	13.865 (1.000)	128	207782			27.38- 127.38	76.35
	13.893	13.865 (1.000)	49	440443			131.81- 231.81	161.84
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.635	15.607 (1.000)	114	1009307	25.0000		80.00- 120.00	100.00
	15.635	15.607 (1.000)	88	165058			0.00- 66.79	16.35
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.805	20.805 (1.000)	117	948685	25.0000		80.00- 120.00	100.00
	20.805	20.805 (1.000)	82	542552			7.58- 107.58	57.19
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	14.943	14.943 (1.076)	65	429921	24.5502	24.550	80.00- 120.00	100.00
	14.943	14.943 (1.076)	67	212939			3.57- 103.57	49.53
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.206	18.206 (1.164)	98	1010131	25.9817	25.982	80.00- 120.00	100.00
	18.206	18.206 (1.164)	70	133907			0.00- 61.29	13.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	691703			18.71- 118.71	68.48
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	644531	26.2659	26.266	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	822721			76.46- 176.46	127.65
22.796	22.796 (1.096)	176	626076			48.22- 148.22	97.14
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	30130	0.56697	0.9695	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	8728			0.00- 82.13	28.97
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	25850	0.93314	1.596	80.00- 120.00	100.00
9.994	9.939 (0.719)	153	18746			13.46- 113.46	72.52
9.966	9.939 (0.717)	101	36695			82.30- 182.30	141.95
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.723)	61	20956	0.84042	1.437	80.00- 120.00	100.00
10.049	10.050 (0.723)	96	14660			9.56- 109.56	69.96
10.049	10.050 (0.723)	98	8147			0.00- 88.43	38.88
45 Acetone					CAS #: 67-64-1		
10.215	10.188 (0.735)	58	20793	2.69069	4.601	80.00- 120.00	100.00
10.215	10.188 (0.735)	43	79837			267.82- 367.82	383.96
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	24118	0.51136	0.8744	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	60667	3.84761	6.579	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	52051			38.51- 138.51	85.80
11.128	11.100 (0.801)	51	19513			0.00- 83.83	32.16
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	1562429	39.5276	67.592	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	1014264			14.81- 114.81	64.92
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.307	14.280 (1.030)	97	64168	1.46769	2.510	80.00- 120.00	100.00
14.280	14.280 (1.028)	99	41367			14.28- 114.28	64.47
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	563402	13.4152	22.940	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	585825			56.24- 156.24	103.98

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
91 Benzene						CAS #: 71-43-2		
14.971	14.943	(0.958)	78	26580	0.52679	0.9008	80.00- 120.00	100.00
14.971	14.943	(0.958)	77	6708			0.00- 73.50	25.24
101 Trichloroethene						CAS #: 79-01-6		
16.105	16.077	(1.030)	95	715344	33.1011	56.603	80.00- 120.00	100.00
16.105	16.077	(1.030)	130	663122			39.09- 139.09	92.70
16.105	16.077	(1.030)	97	460483			12.68- 112.68	64.37
114 Toluene						CAS #: 108-88-3		
18.344	18.317	(1.173)	91	107843	2.00447	3.428	80.00- 120.00	100.00
18.344	18.317	(1.173)	92	62025			10.34- 110.34	57.51
120 Tetrachloroethene						CAS #: 127-18-4		
19.284	19.284	(0.927)	166	302576	10.4492	17.868	80.00- 120.00	100.00
19.284	19.284	(0.927)	129	215328			18.51- 118.51	71.16
19.284	19.284	(0.927)	131	204063			15.29- 115.29	67.44

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022115.d
Lab Smp Id: 0802200-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	272153	-14.46
97 1,4-Difluorobenze	1251468	750881	1752055	1009307	-19.35
126 Chlorobenzene-d5	1150991	690595	1611387	948685	-17.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802200-03A
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.550	98.20	70-130
$ 113 Toluene-d8	25.000	25.982	103.93	70-130
$ 137 Bromofluorobenzene	25.000	26.266	105.06	70-130

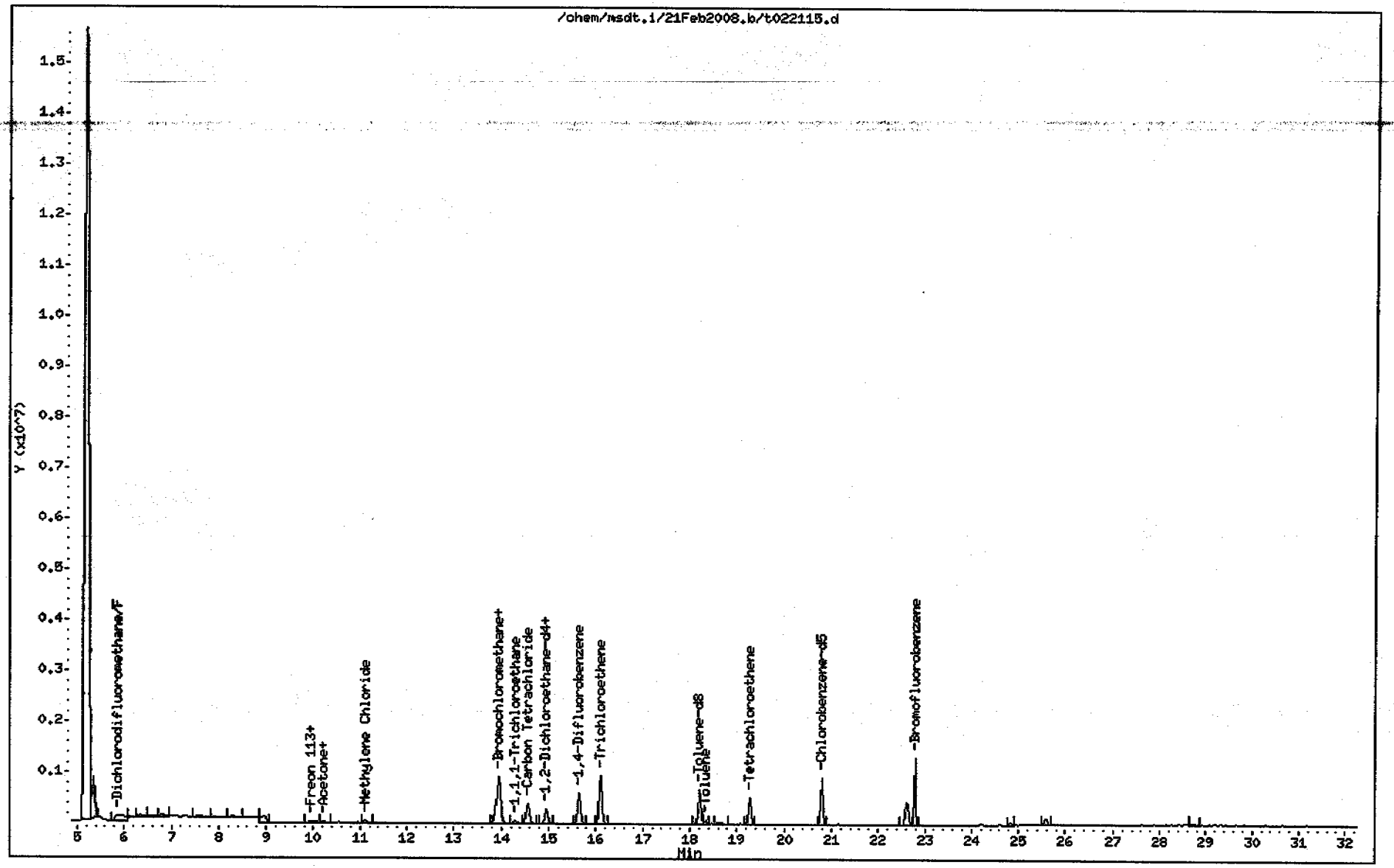
Data File: /ohem/msdt.i/21Feb2008.b/t022115.d
Date : 21-FEB-2008 21:22
Client ID:
Sample Info: 200mL #SC416

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0088



Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

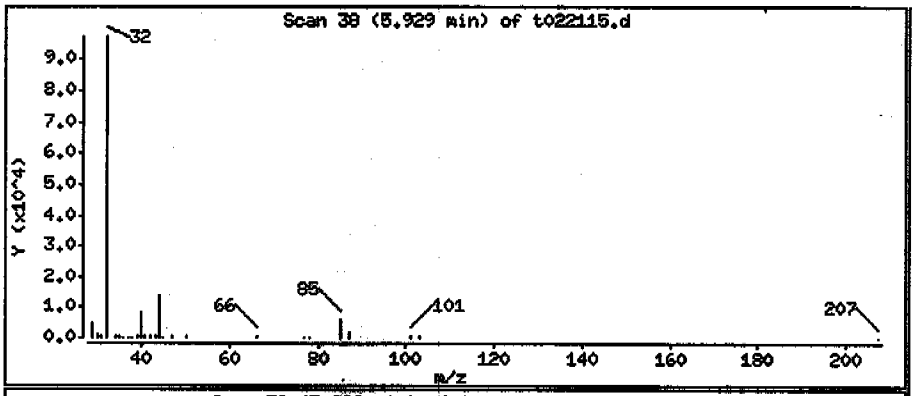
Operator: ACT

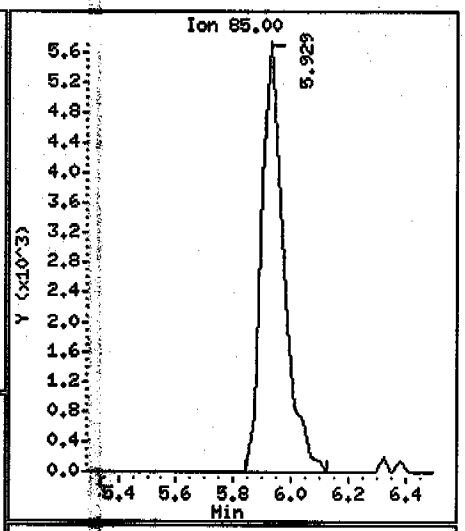
Column phase: RTx-624

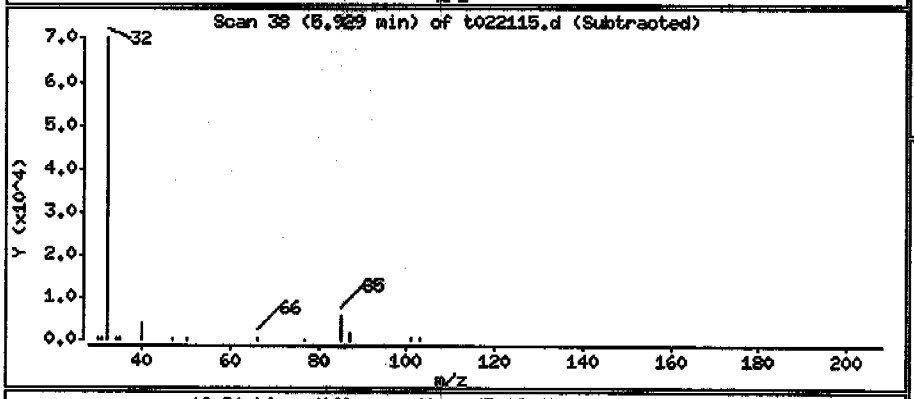
Column diameter: 0.53

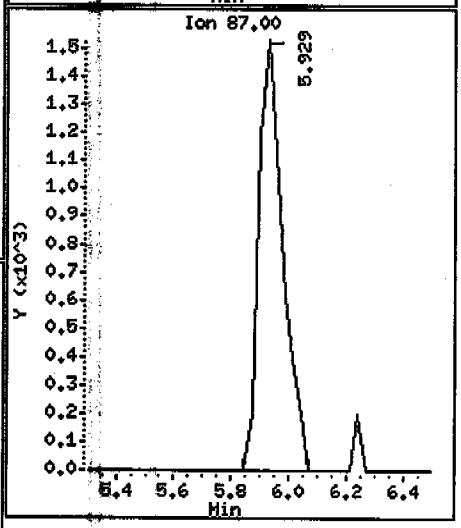
12 Dichlorodifluoromethane/Fr12

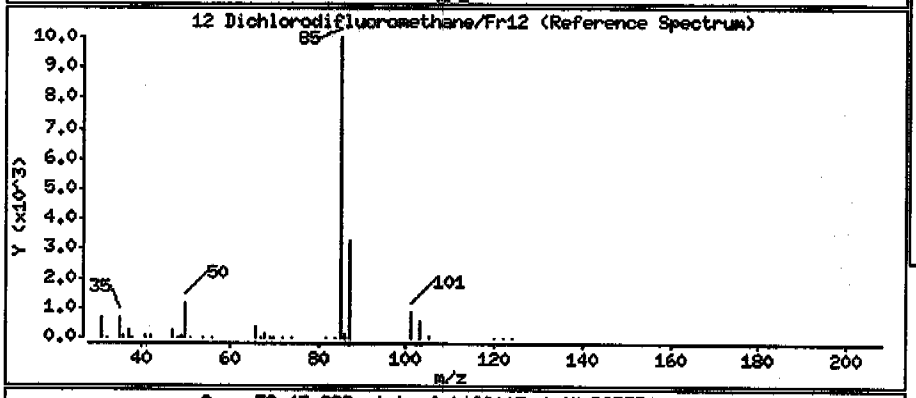
Concentration: 0.9695 PPBV

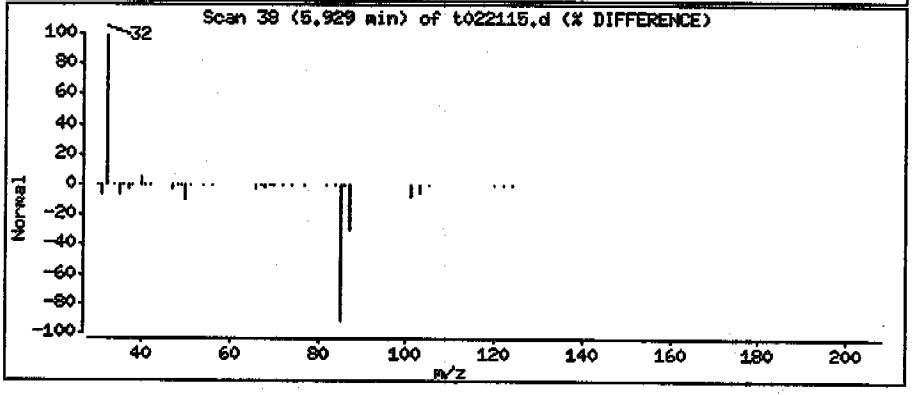












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Sample Info: 200mL #SC416

Instrument: msdt.i

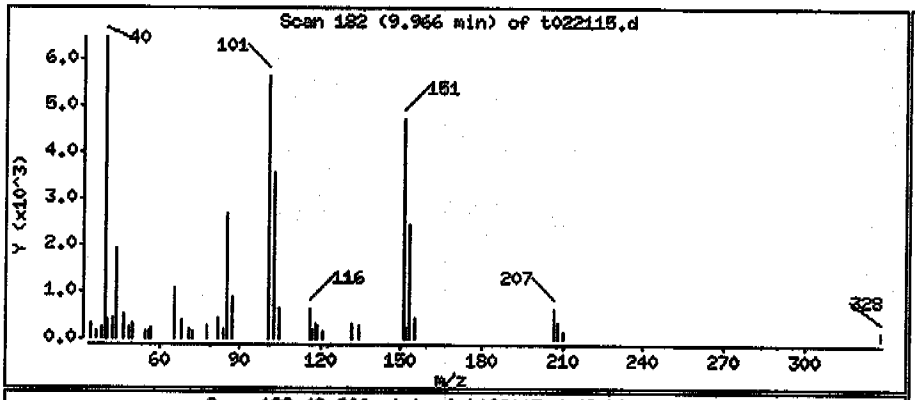
Operator: ACT

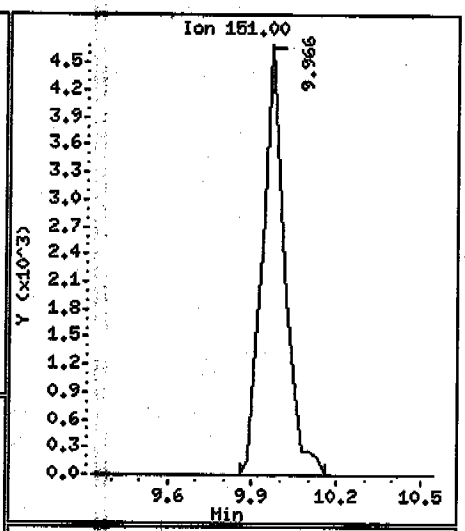
Column phase: RTx-624

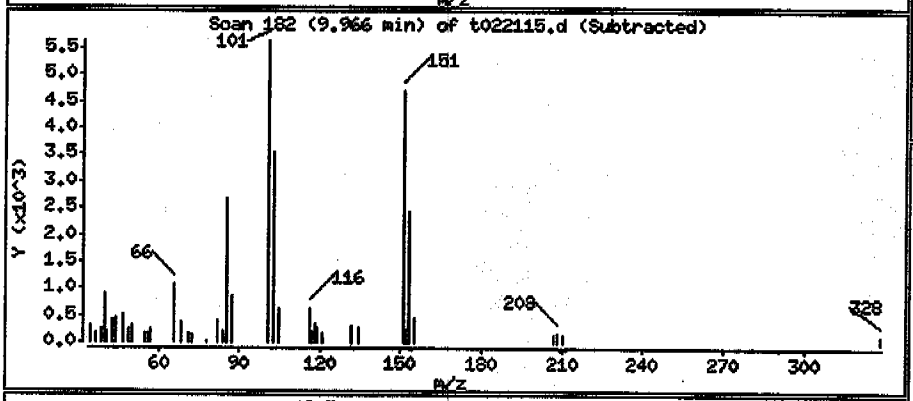
Column diameter: 0.53

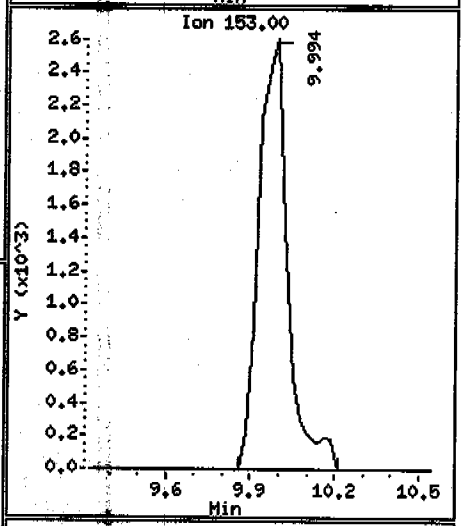
42 Freon 113

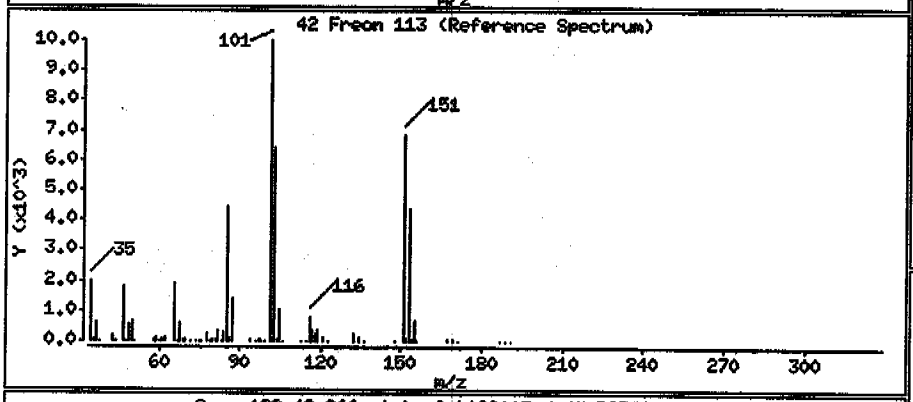
Concentration: 1.596 PPBV

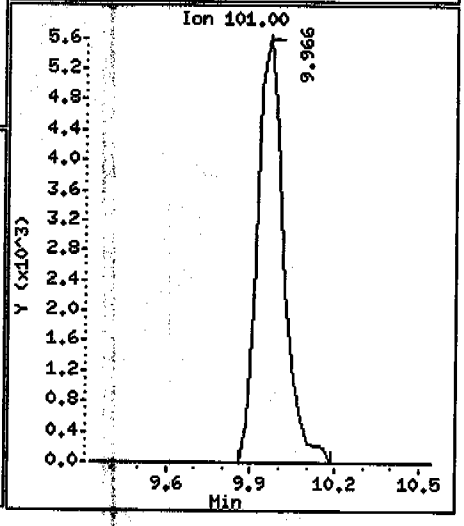


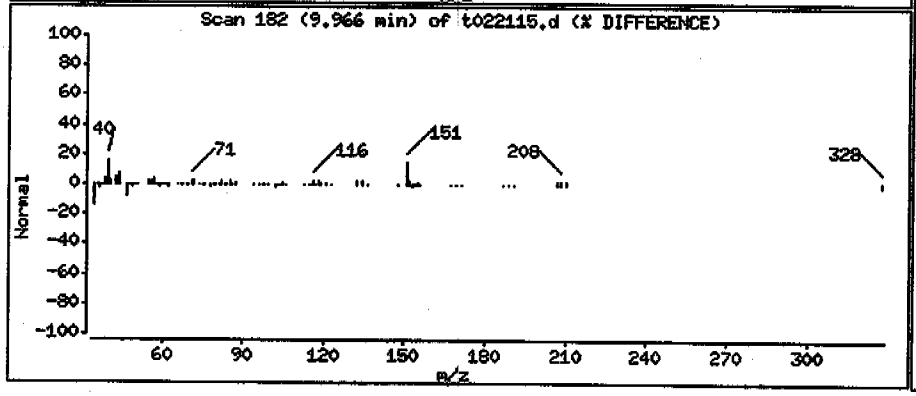












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

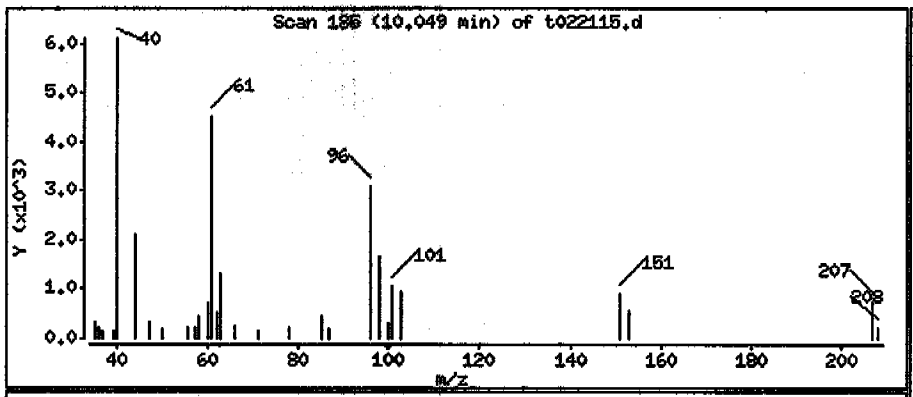
Operator: ACT

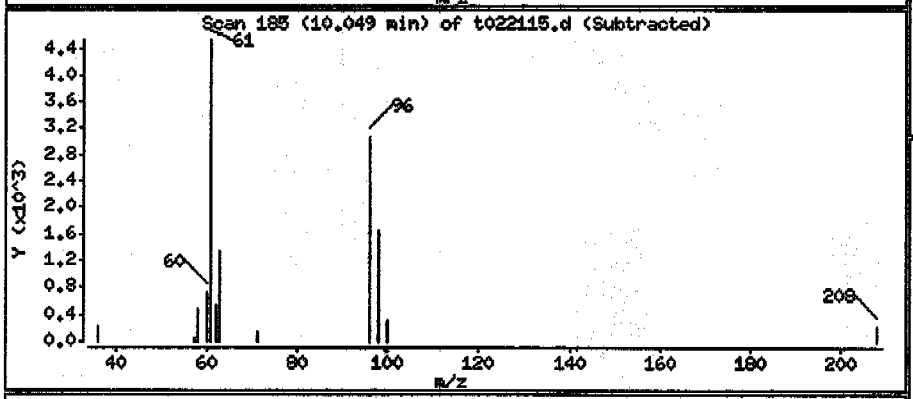
Column phase: RTx-624

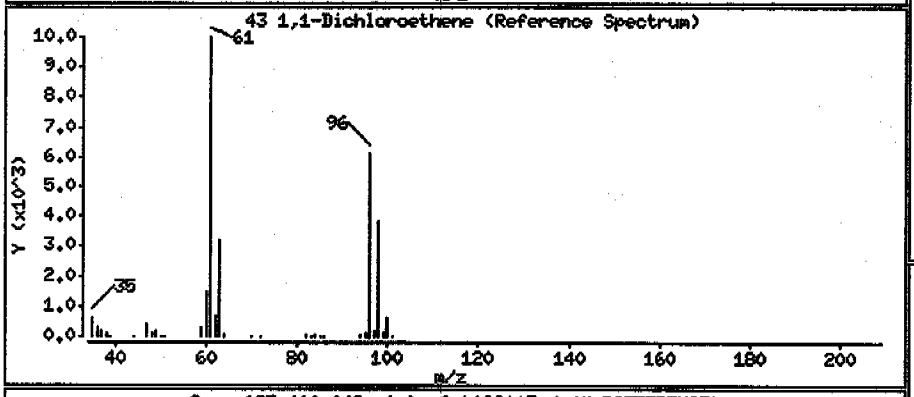
Column diameter: 0.53

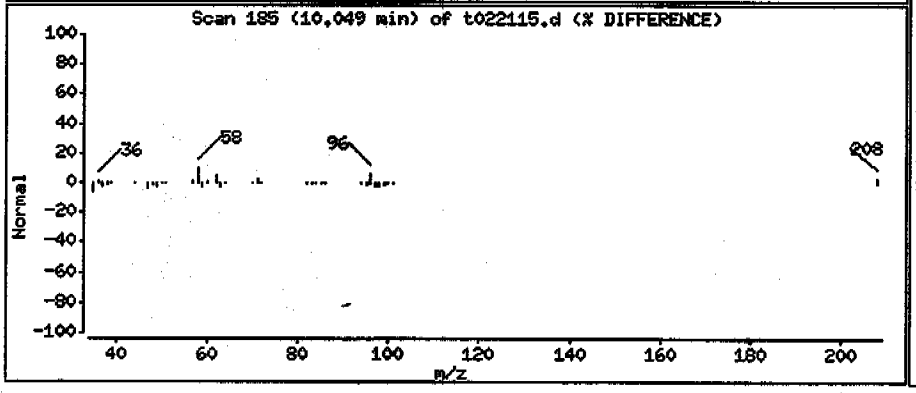
43 1,1-Dichloroethene

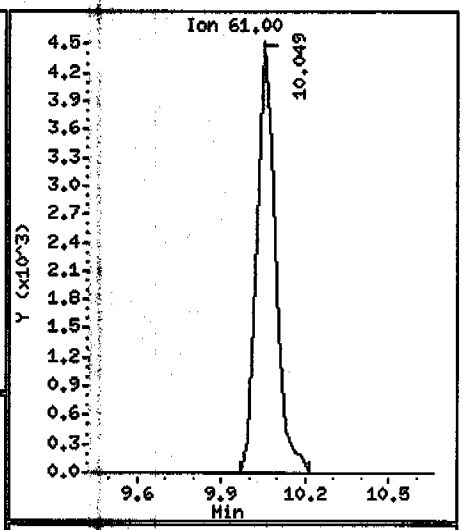
Concentration: 1.437 PPBV

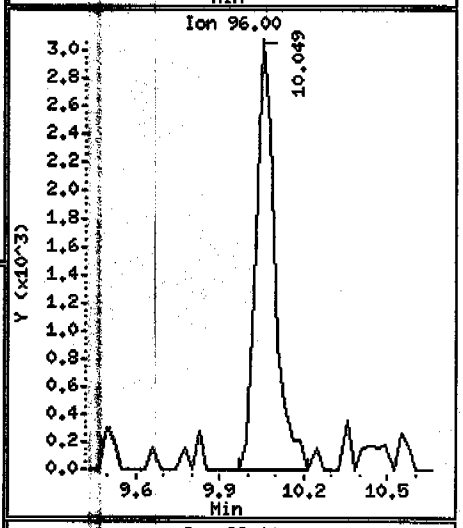


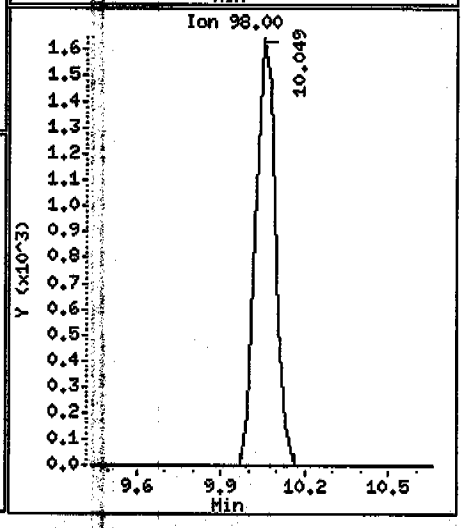












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

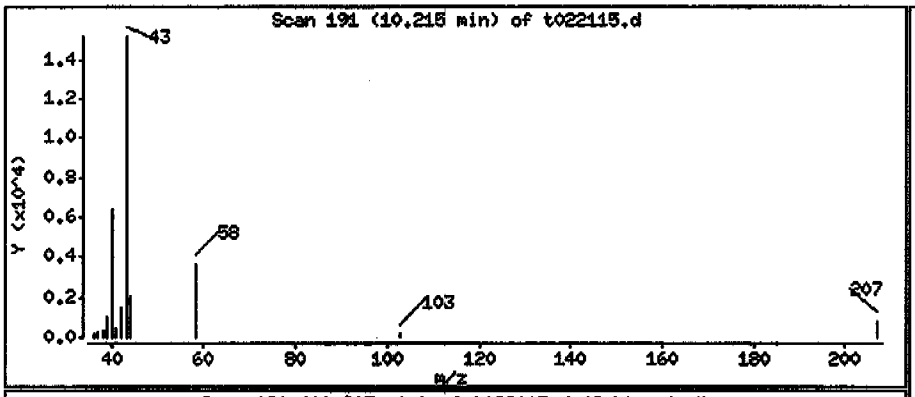
Operator: ACT

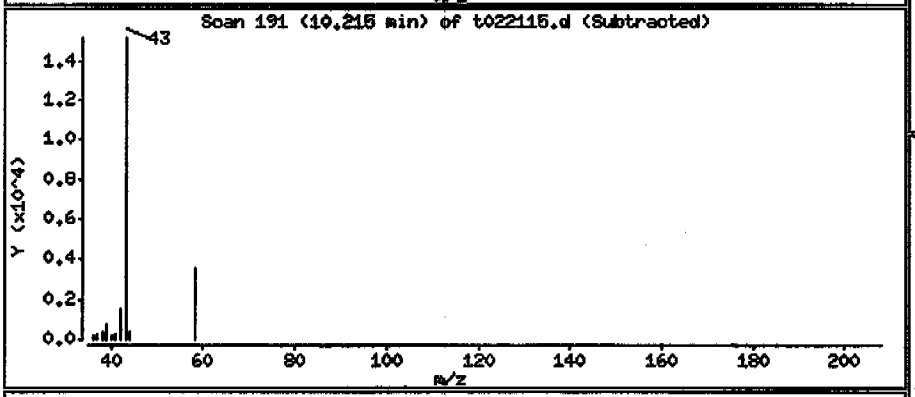
Column phase: RTx-624

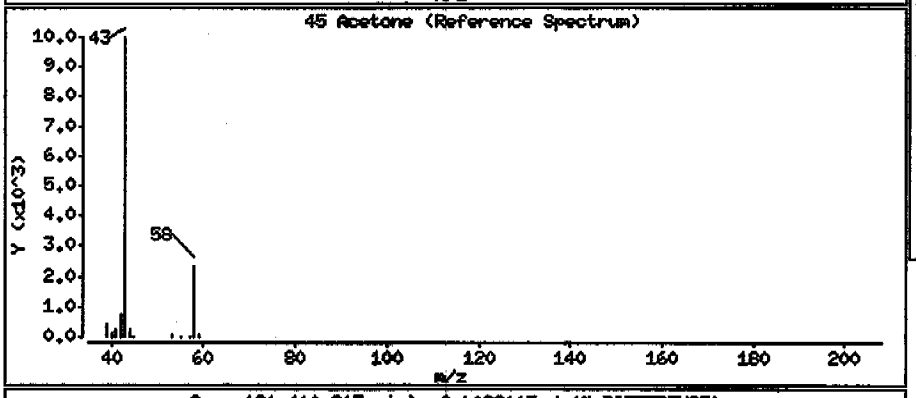
Column diameter: 0.53

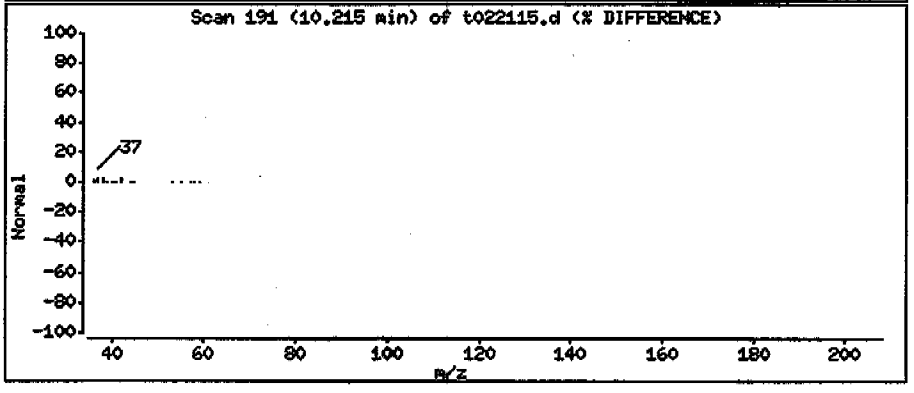
45 Acetone

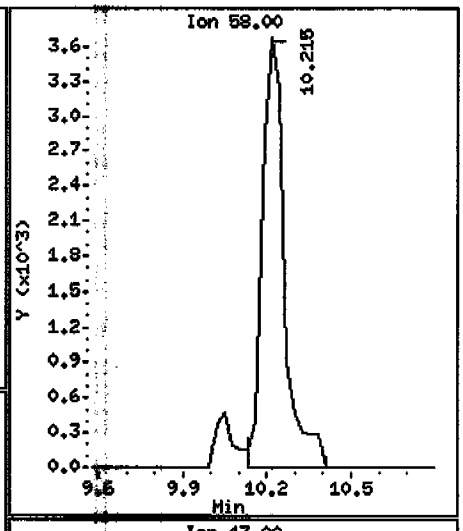
Concentration: 4.601 PPBV

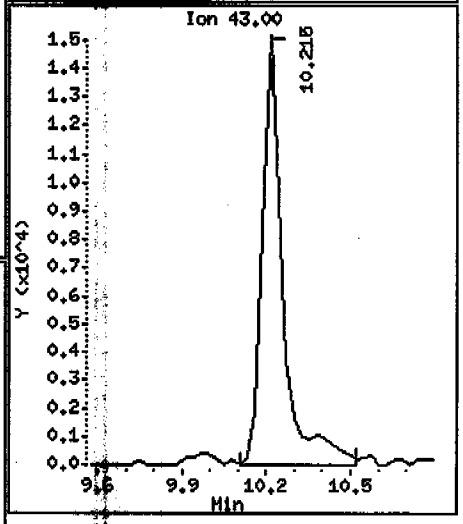












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

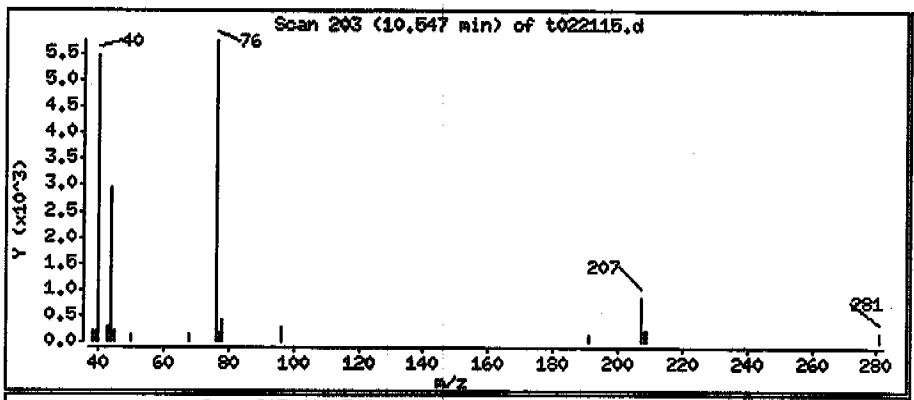
Operator: ACT

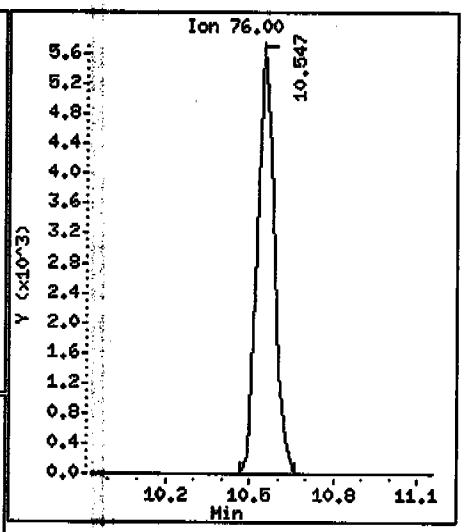
Column phase: RTx-624

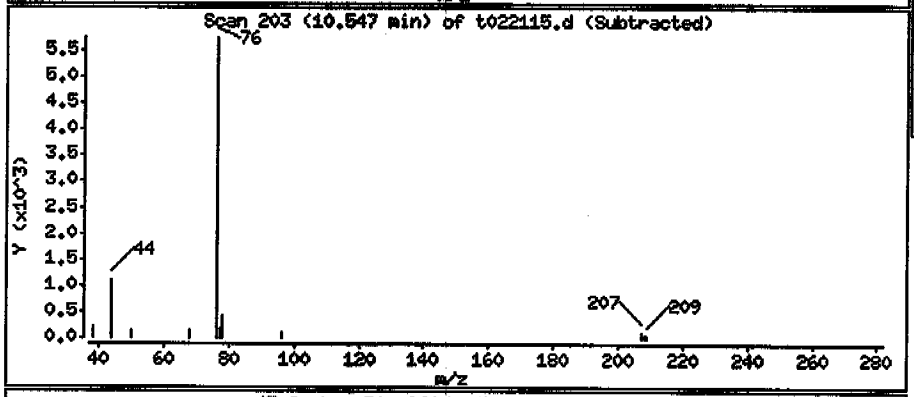
Column diameter: 0.53

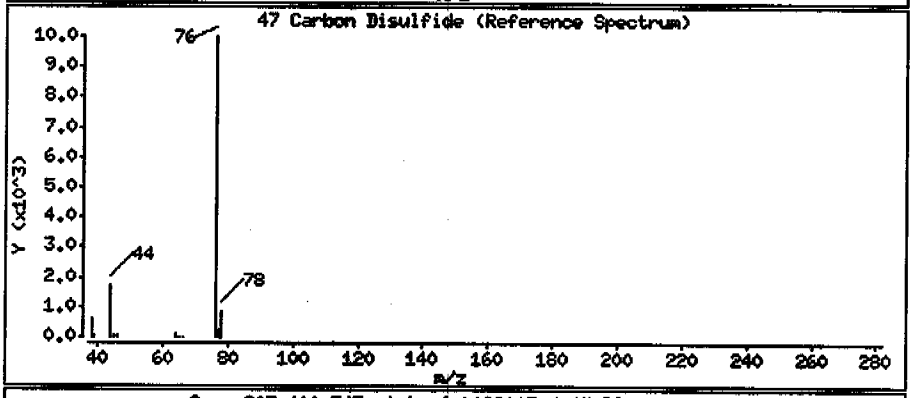
47 Carbon Disulfide

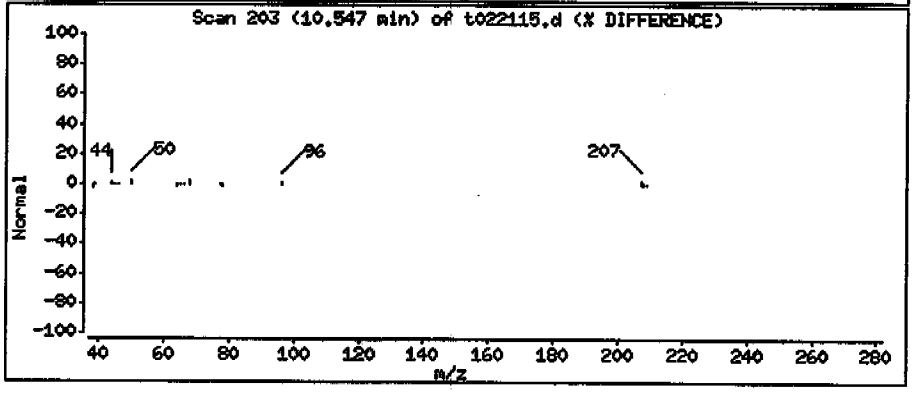
Concentration: 0.8744 PPBV











Data File: /ohem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

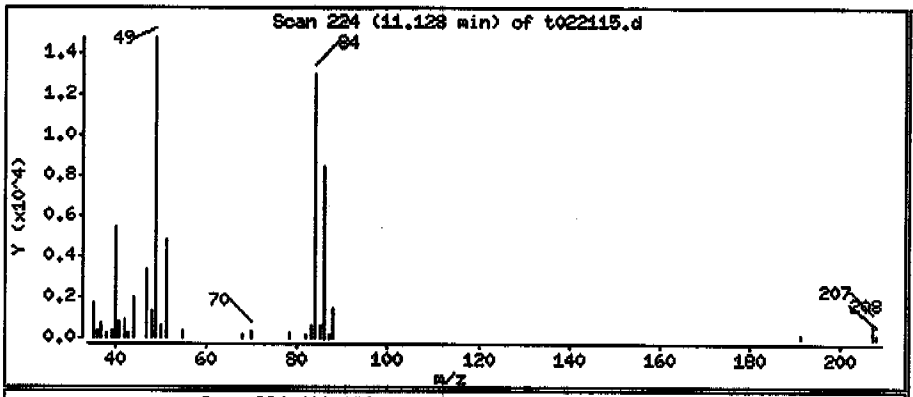
Operator: ACT

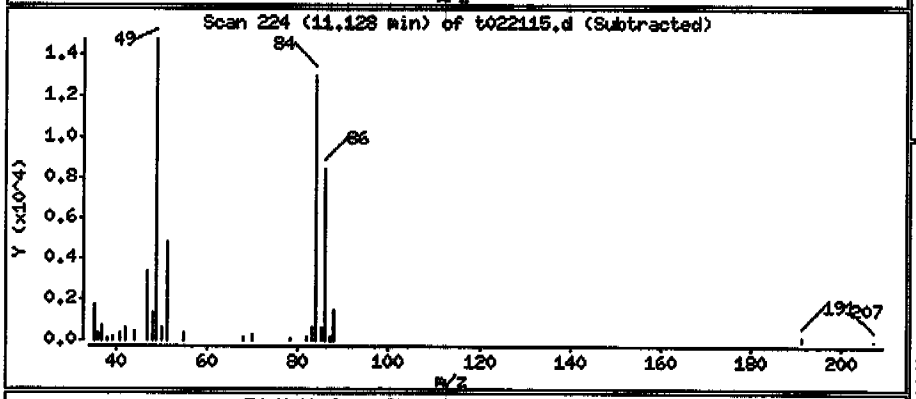
Column phase: RTx-624

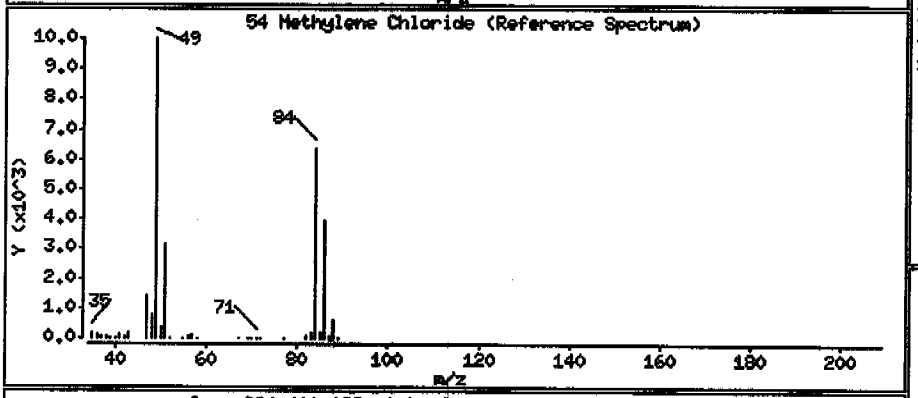
Column diameter: 0.53

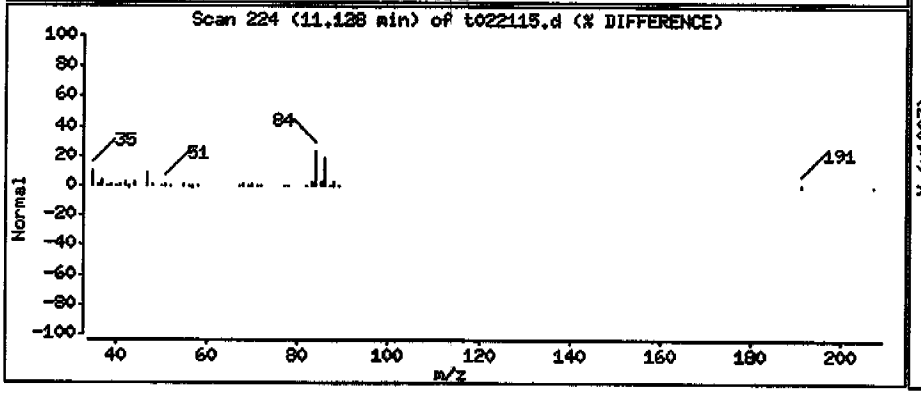
54 Methylene Chloride

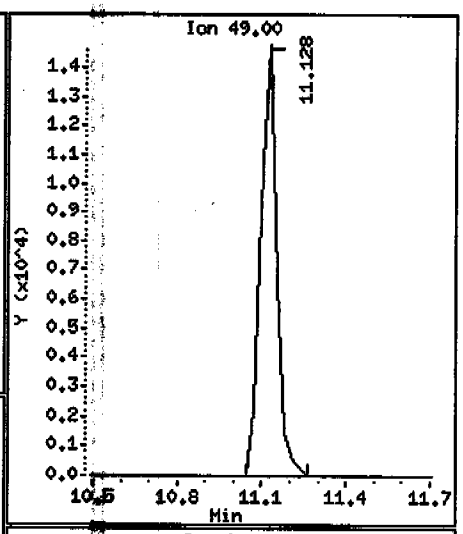
Concentration: 6.579 PPBV

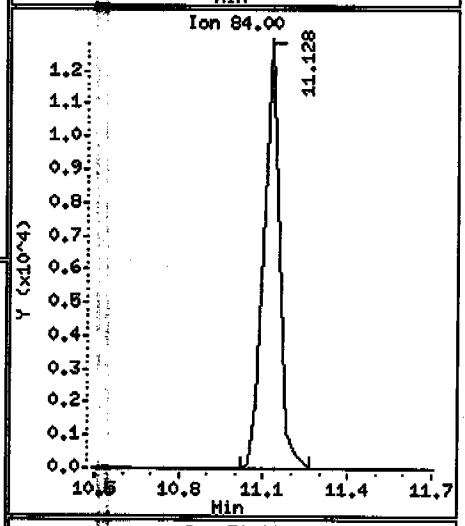


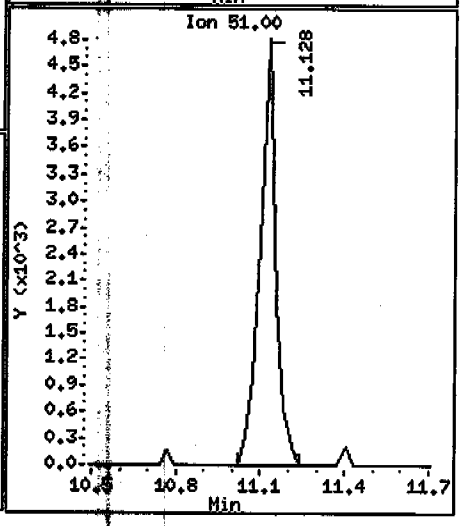












Data File: /ohem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

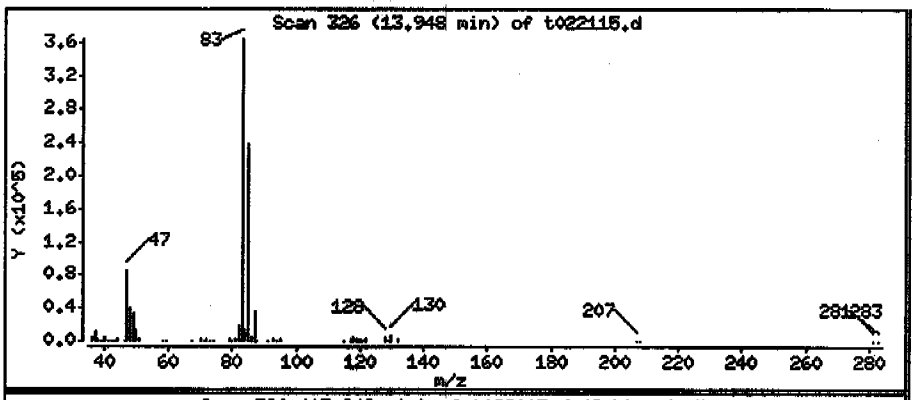
Operator: ACT

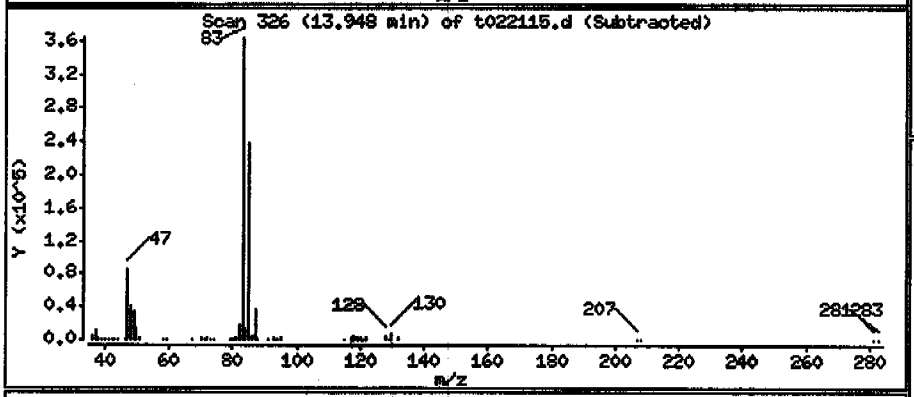
Column phase: RTx-624

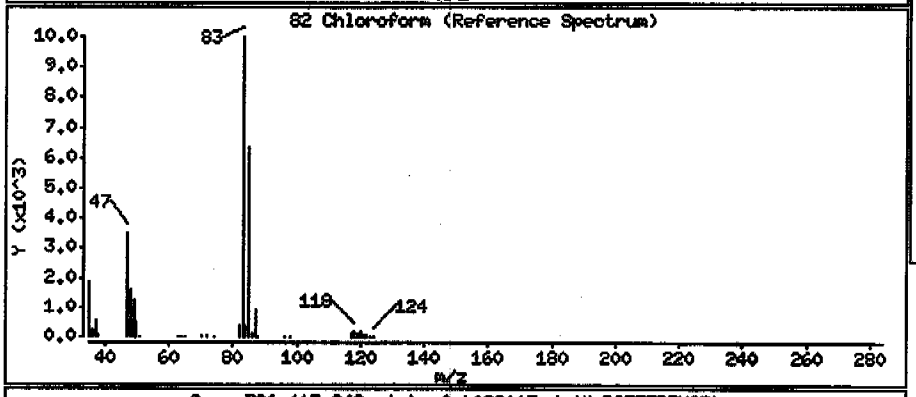
Column diameter: 0.53

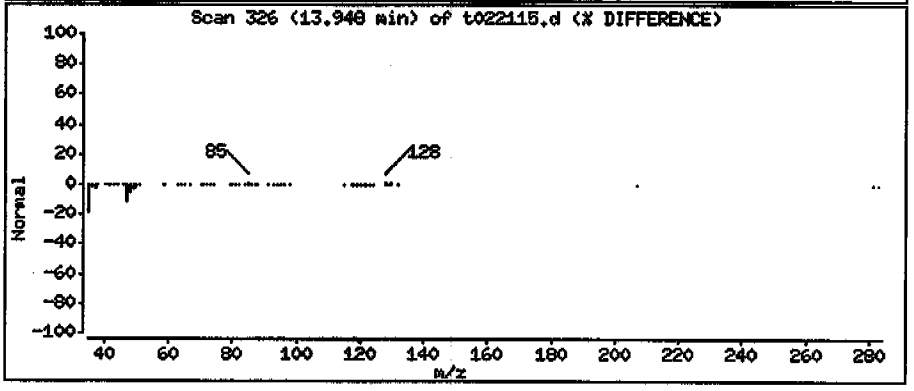
82 Chloroform

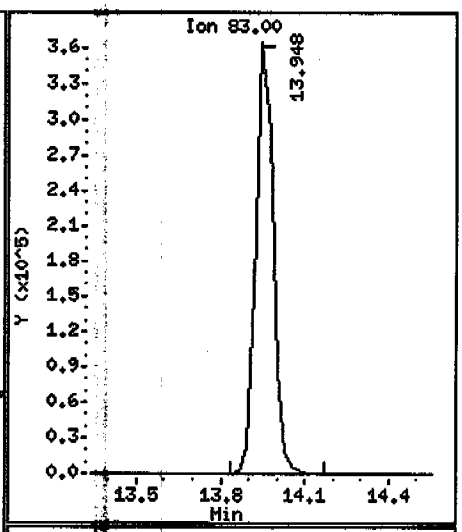
Concentration: 67.592 PPBV

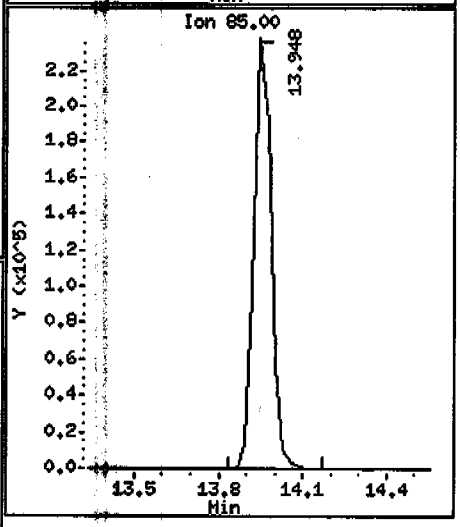












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

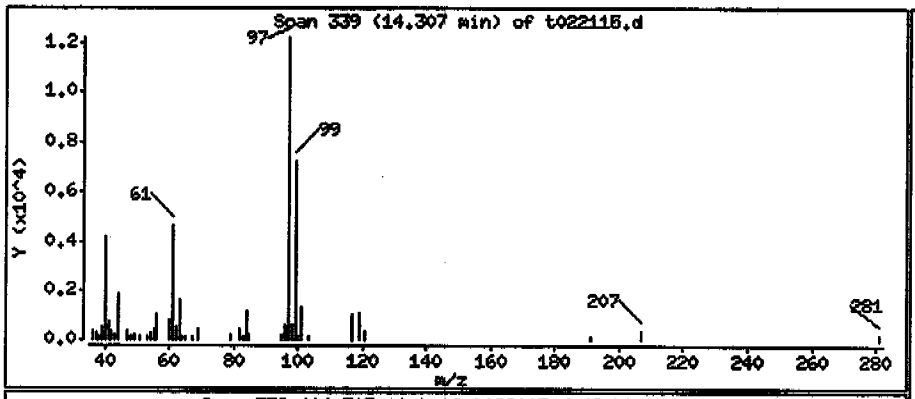
Operator: ACT

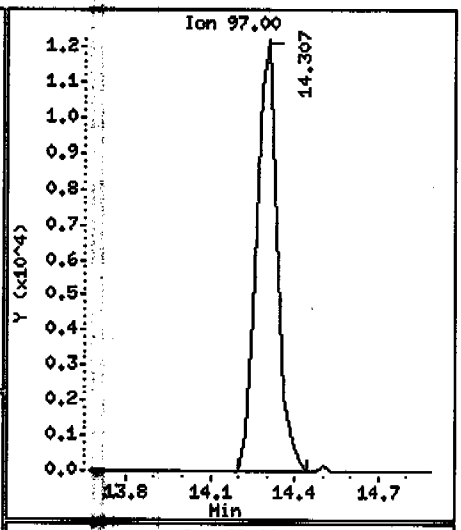
Column phase: RTx-624

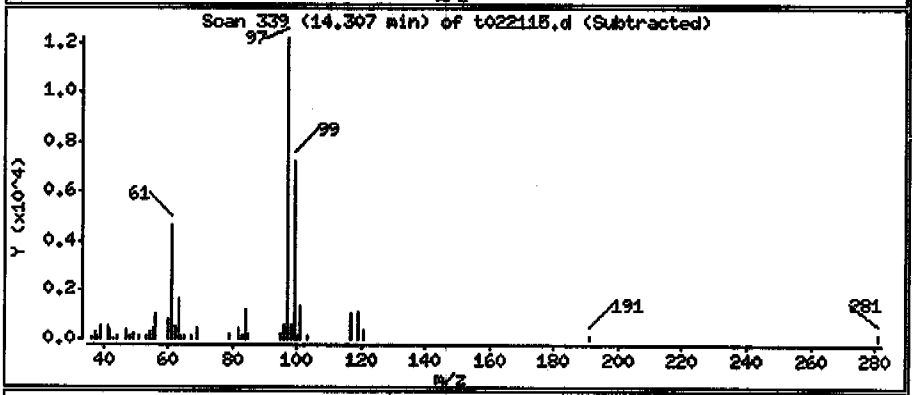
Column diameter: 0.53

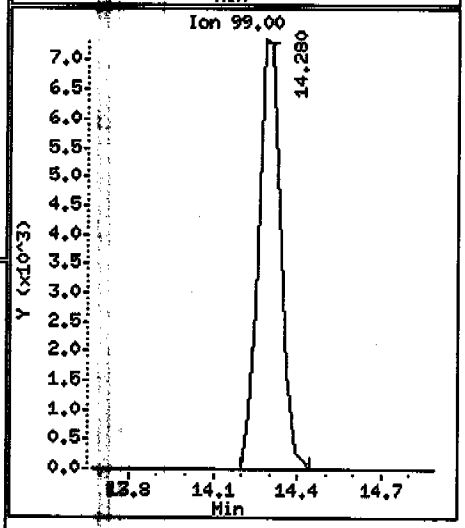
83 1,1,1-Trichloroethane

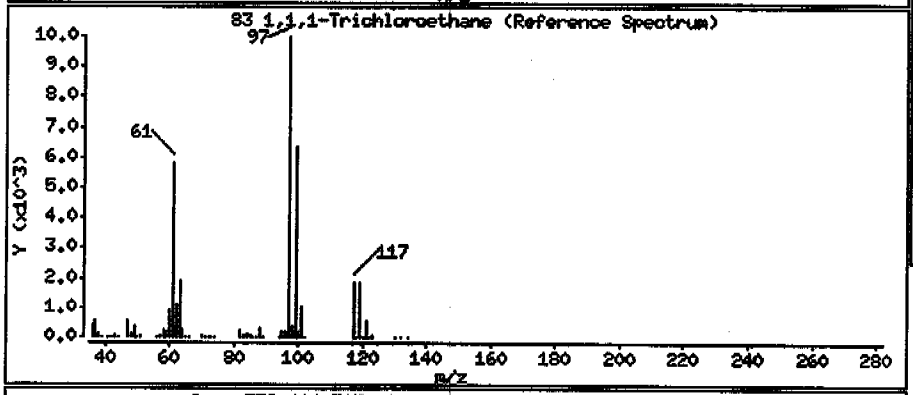
Concentration: 2,510 PPBV

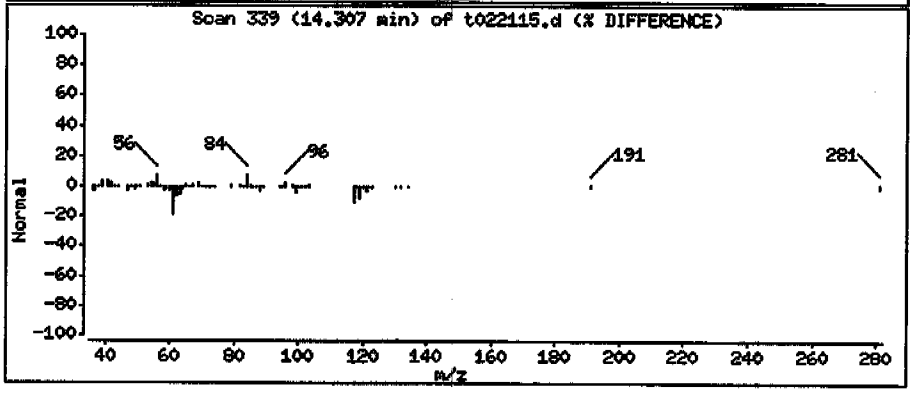












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

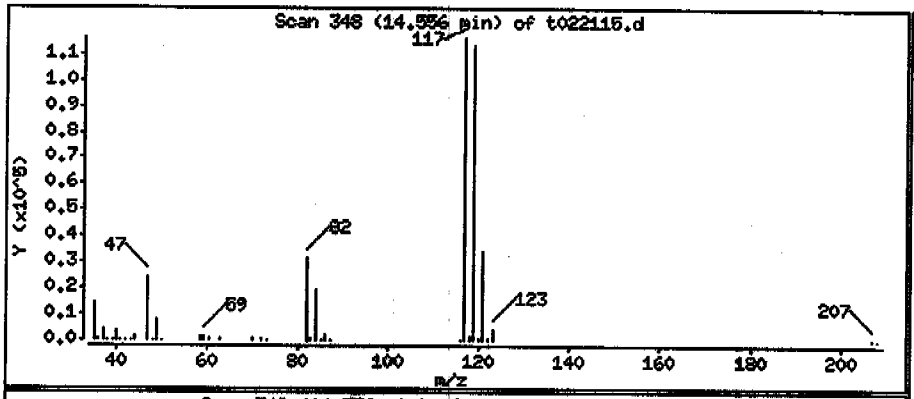
Operator: ACT

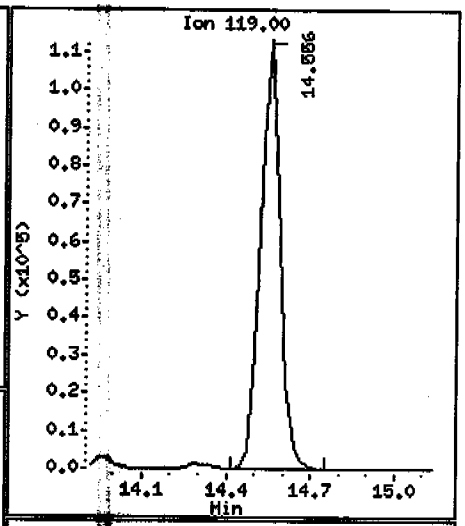
Column phase: RTx-624

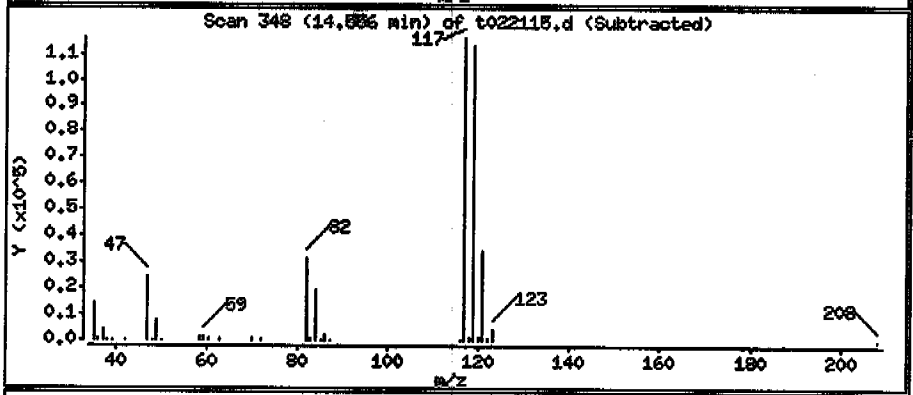
Column diameter: 0.53

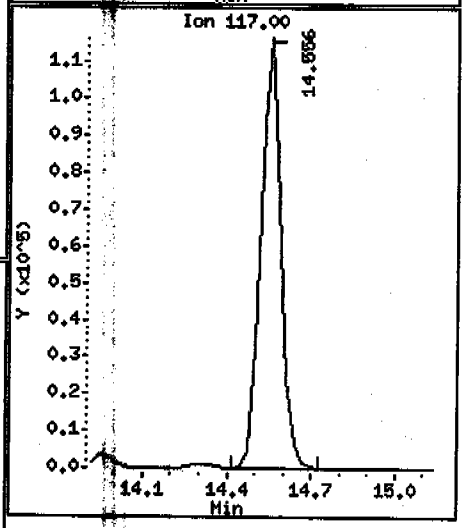
87 Carbon Tetrachloride

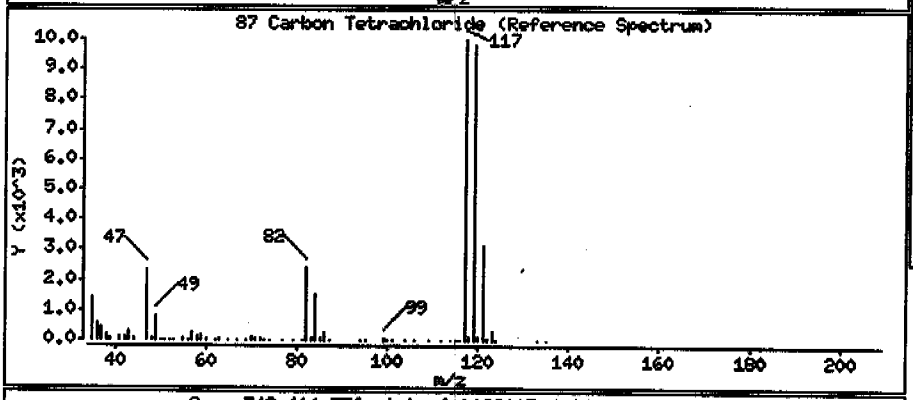
Concentration: 22,940 PPBV

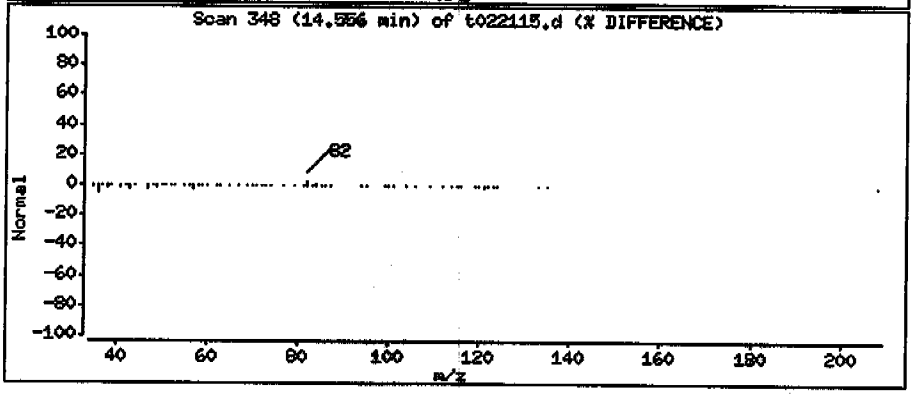












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

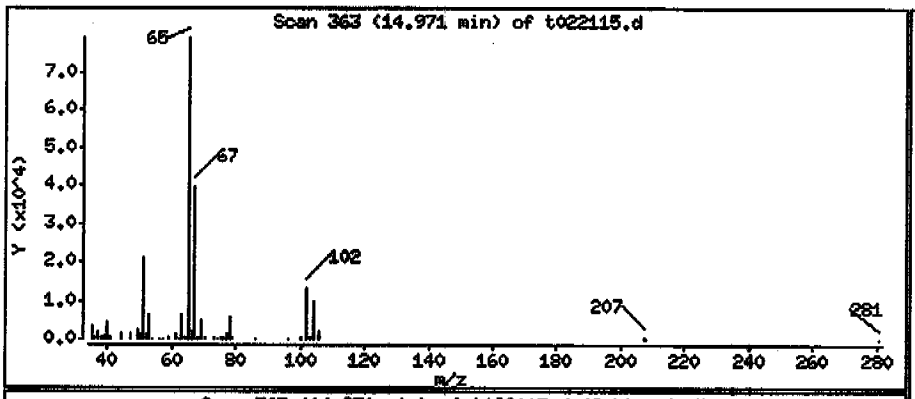
Operator: ACT

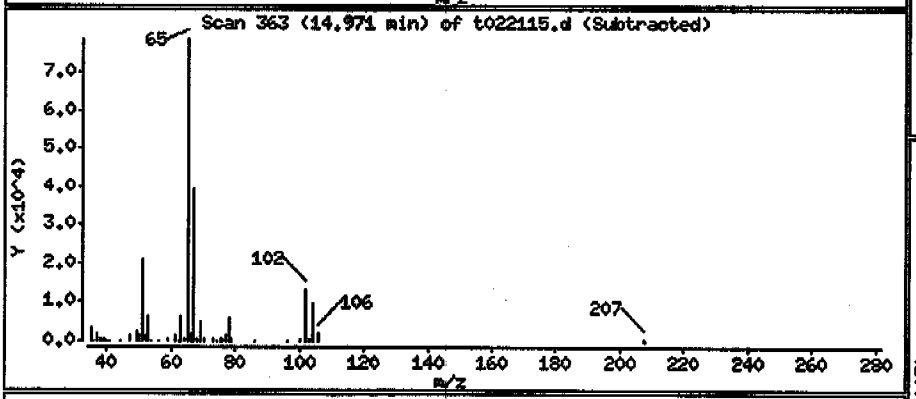
Column phase: RTx-624

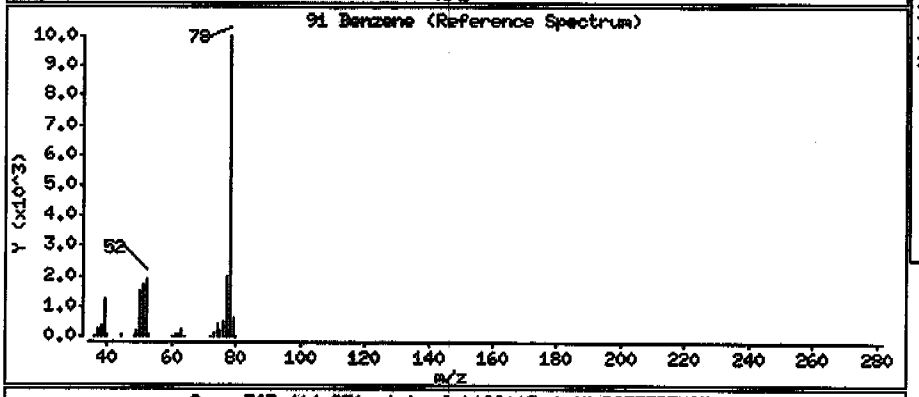
Column diameter: 0.53

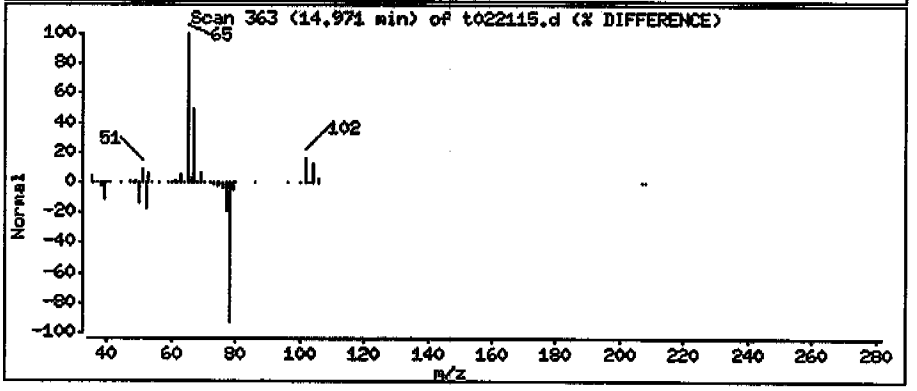
91 Benzene

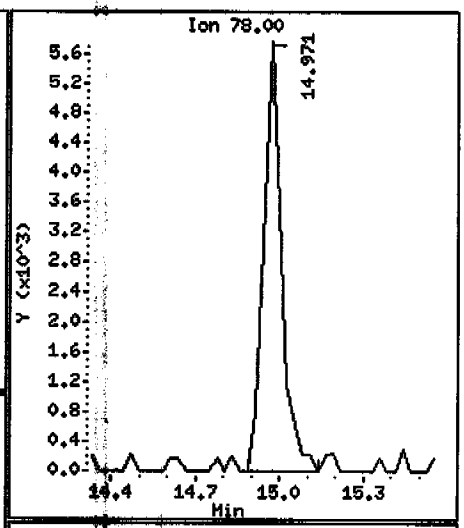
Concentration: 0.9008 PPBV

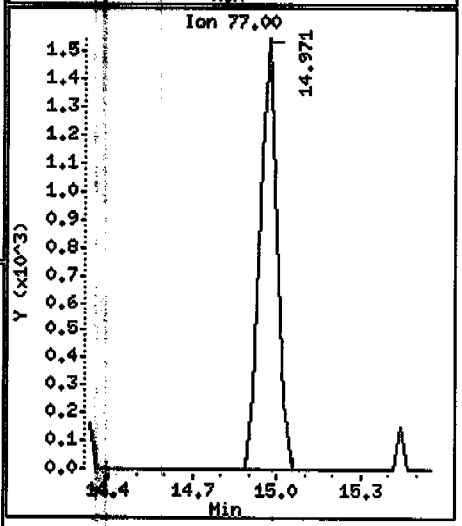












Data File: /ohem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

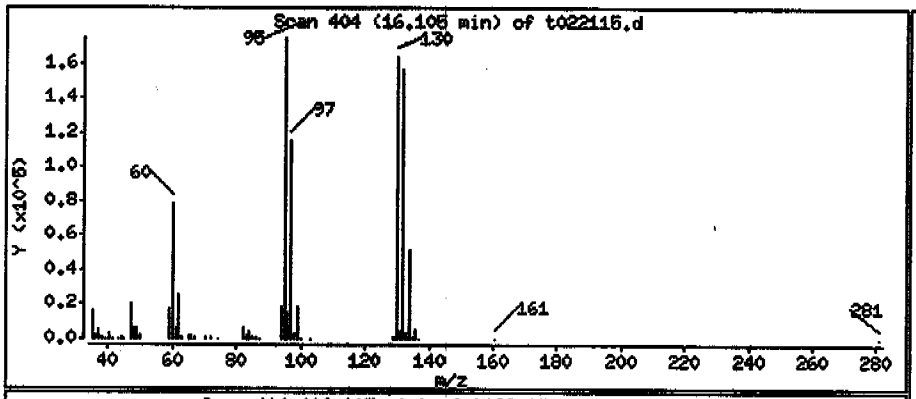
Operator: ACT

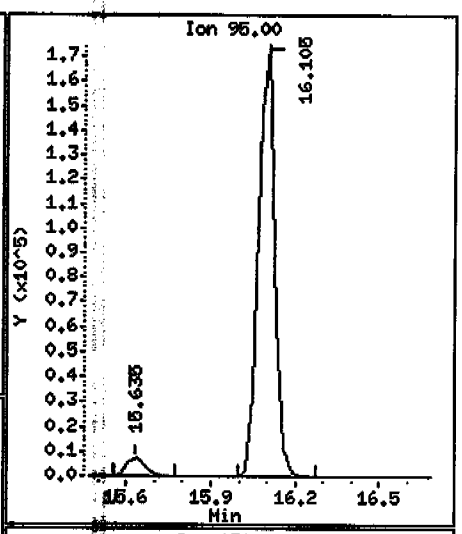
Column phase: RTx-624

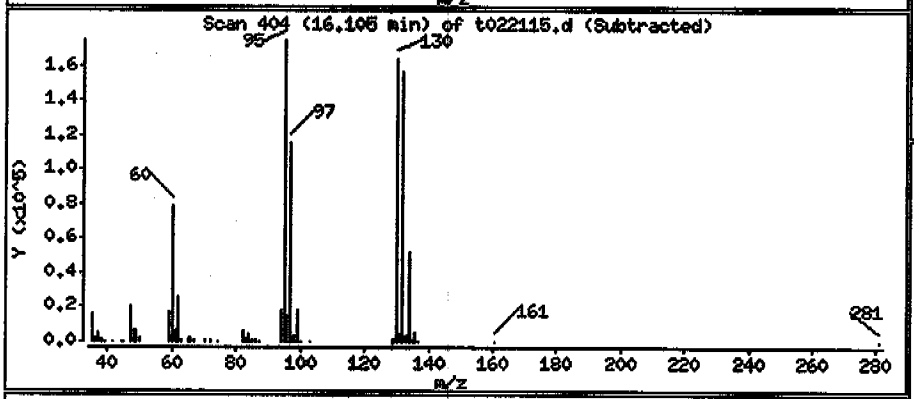
Column diameter: 0.53

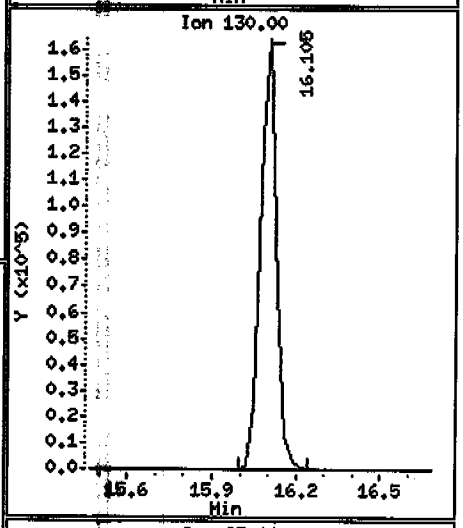
101 Trichloroethene

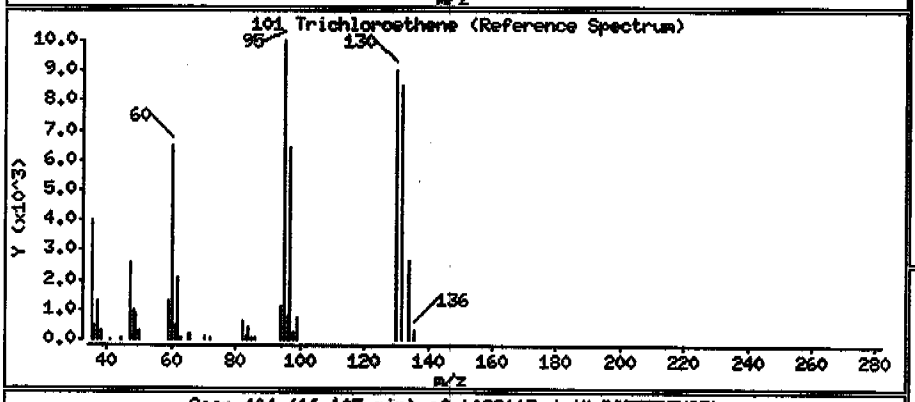
Concentration: 56.603 PPBV

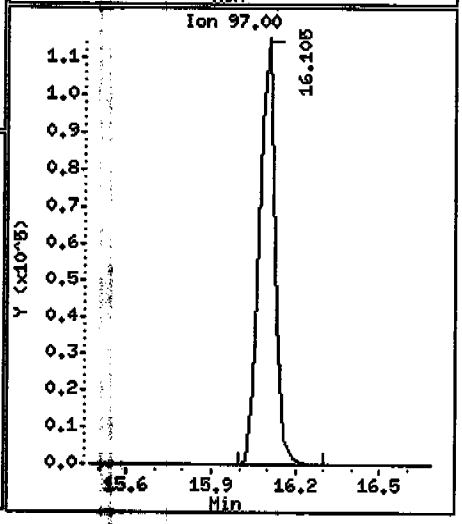


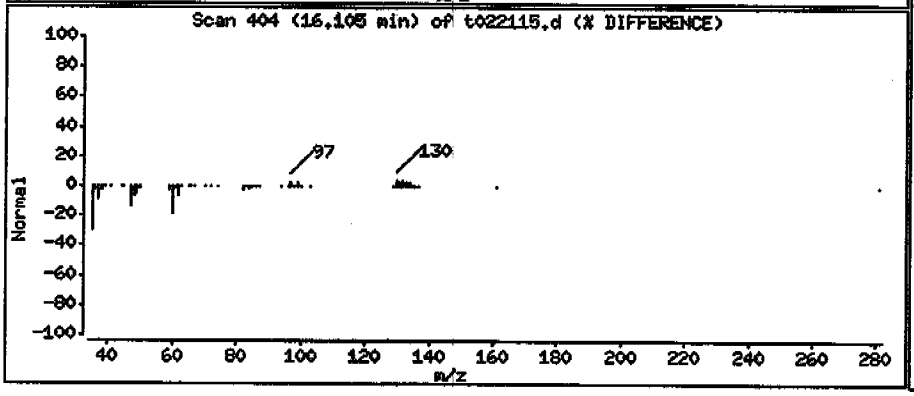












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

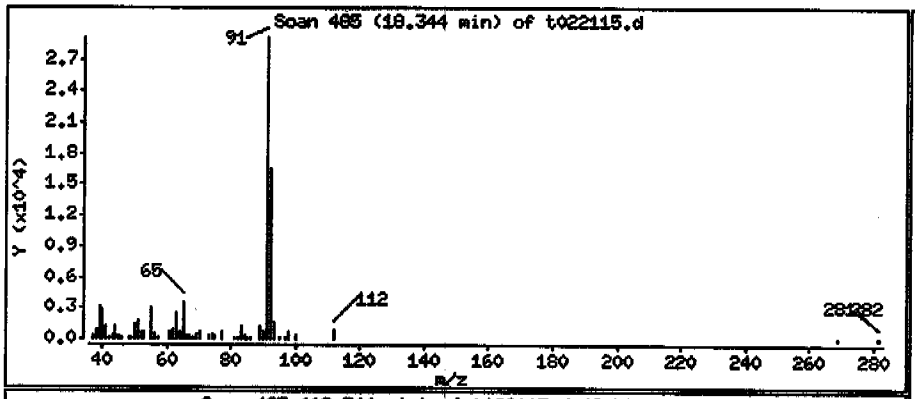
Operator: ACT

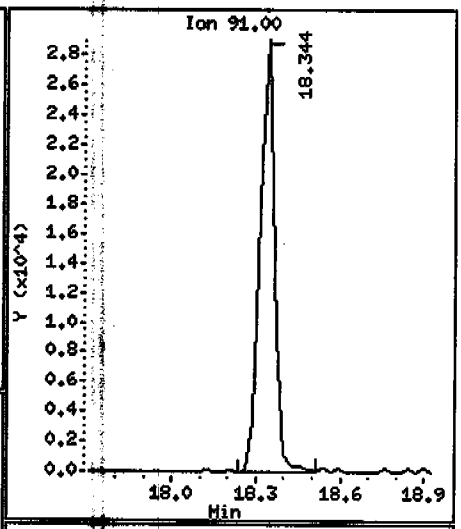
Column phase: RTx-624

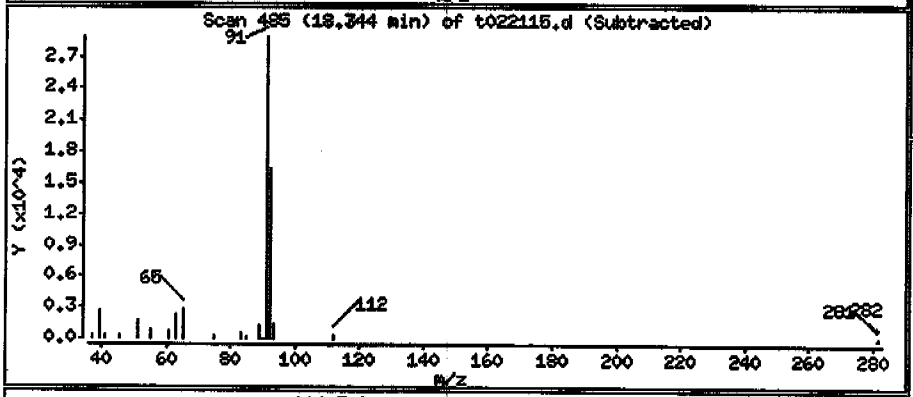
Column diameter: 0.53

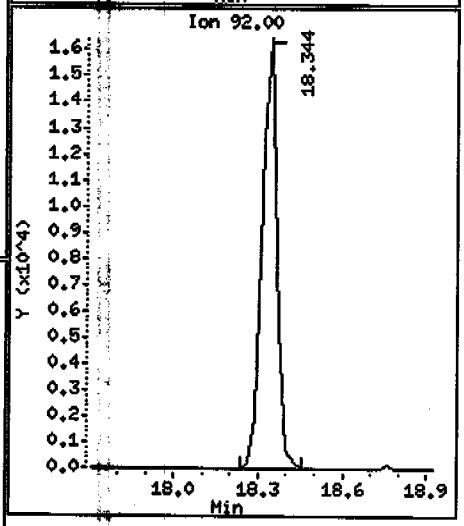
114 Toluene

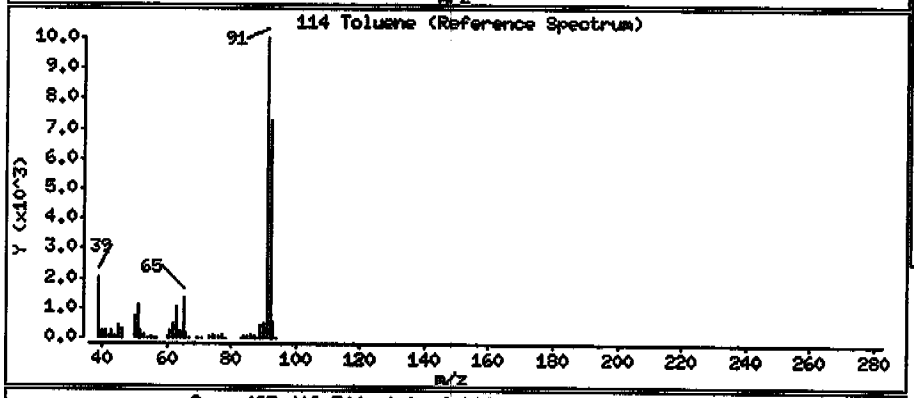
Concentration: 3.428 PPBV

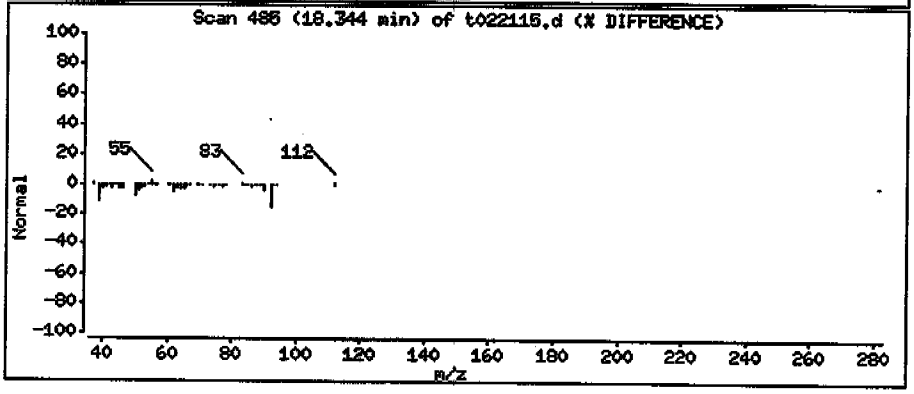












Data File: /chem/msdt.i/21Feb2008.b/t022115.d

Date : 21-FEB-2008 21:22

Client ID:

Instrument: msdt.i

Sample Info: 200mL #SC416

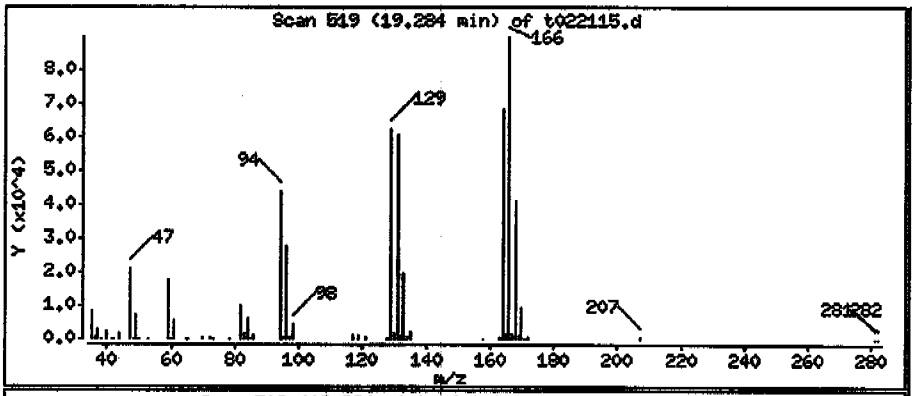
Operator: ACT

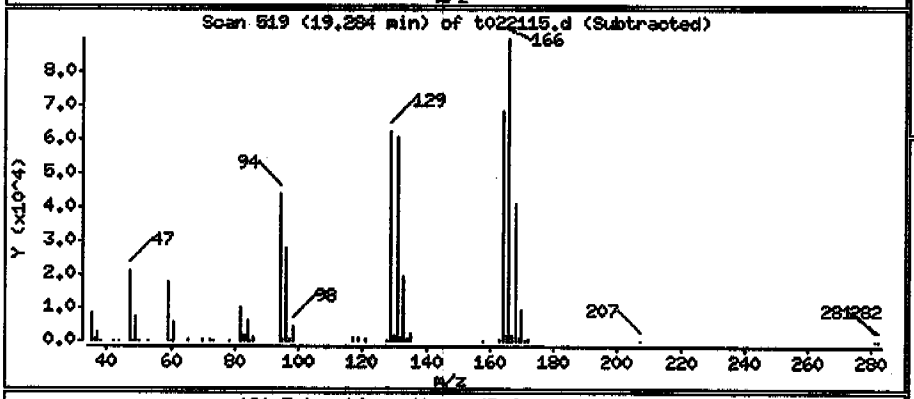
Column phase: RTx-624

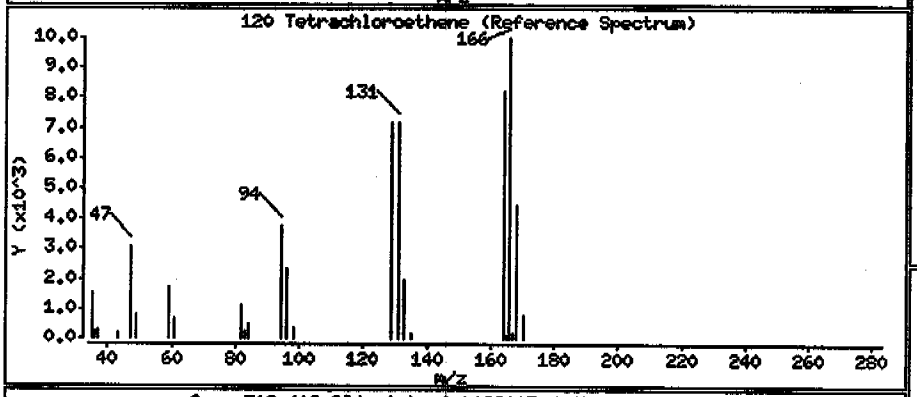
Column diameter: 0.53

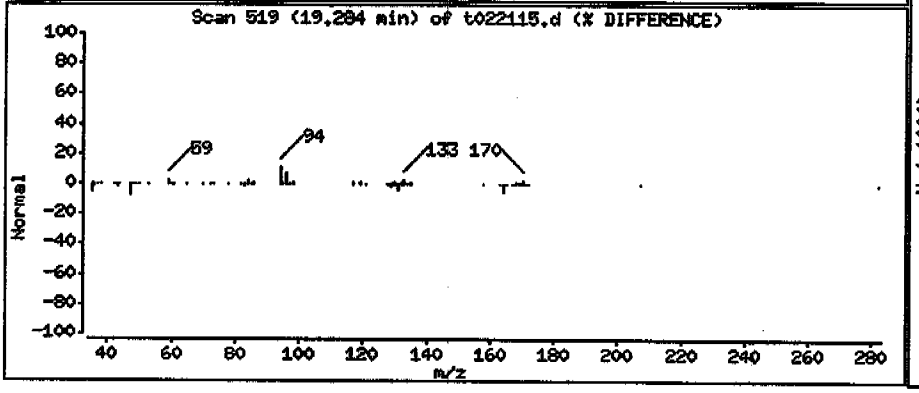
120 Tetrachloroethene

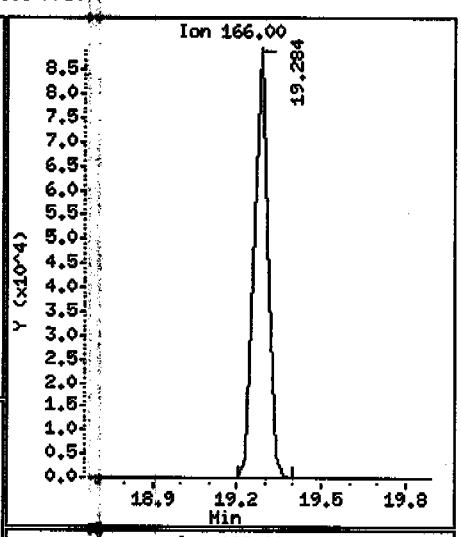
Concentration: 17.868 PPBV

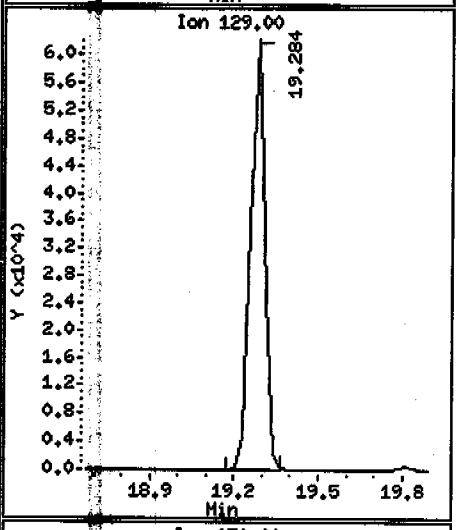


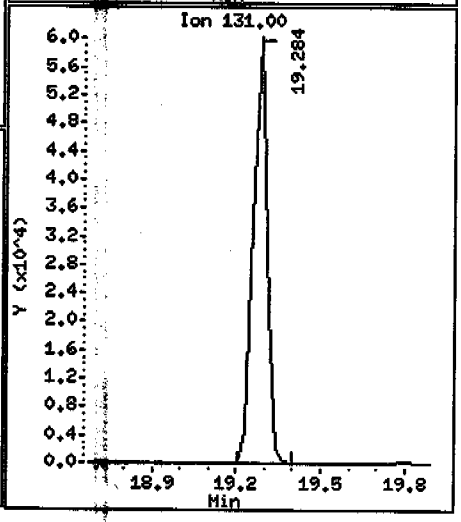












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10521

Lab ID#: 0802200-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	2.0	4.2	9.8
Freon 113	0.86	6.7	6.6	51
1,1-Dichloroethene	0.86	6.6	3.4	26
Carbon Disulfide	0.86	1.2	2.7	3.7
Methylene Chloride	0.86	96	3.0	330
cis-1,2-Dichloroethene	0.86	0.98	3.4	3.9
Chloroform	0.86	140	4.2	660
1,1,1-Trichloroethane	0.86	5.0	4.7	27
Carbon Tetrachloride	0.86	110	5.4	670
1,2-Dichloroethane	0.86	1.3	3.5	5.4
Trichloroethene	0.86	220	4.6	1200
Bromodichloromethane	0.86	1.4	5.7	9.6
Toluene	0.86	1.2	3.2	4.6
1,1,2-Trichloroethane	0.86	4.3	4.7	24
Tetrachloroethene	0.86	27	5.8	180

0102

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10521

Lab ID#: 0802200-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	2.0	4.2	9.8
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	6.7	6.6	51
1,1-Dichloroethene	0.86	6.6	3.4	26
Acetone	3.4	Not Detected	8.1	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	1.2	2.7	3.7
Methylene Chloride	0.86	96	3.0	330
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	0.98	3.4	3.9
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	140	4.2	660
1,1,1-Trichloroethane	0.86	5.0	4.7	27
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	110	5.4	670
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	1.3	3.5	5.4
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	220	4.6	1200
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.4	5.7	9.6
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	1.2	3.2	4.6
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	4.3	4.7	24
Tetrachloroethene	0.86	27	5.8	180

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10521

Lab ID#: 0802200-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	107	70-130

0104

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022116.d
Lab Smp Id: 0802200-04A
Inj Date : 21-FEB-2008 22:01
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #9945
Misc Info : 6.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	269689	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	208366			27.38- 127.38	77.26
13.893	13.865 (1.000)	49	557643			131.81- 231.81	206.77
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1003993	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	161132			0.00- 66.79	16.05
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	931614	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	533645			7.58- 107.58	57.28
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.076)	65	428410	24.6874	24.687	80.00- 120.00	100.00
14.943	14.943 (1.076)	67	211349			3.57- 103.57	49.33
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	981913	25.3896	25.390	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	119162			0.00- 61.29	12.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	670473			18.71- 118.71	68.28
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	646976	26.8486	26.849	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	817747			76.46- 176.46	126.40
22.796	22.796 (1.096)	176	631486			48.22- 148.22	97.61
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.427)	85	61210	1.16233	1.988	80.00- 120.00	100.00
5.929	5.901 (0.427)	87	19842			0.00- 82.13	32.42
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	107289	3.90835	6.683	80.00- 120.00	100.00
9.966	9.939 (0.717)	153	69764			13.46- 113.46	65.02
9.966	9.939 (0.717)	101	143198			82.30- 182.30	133.47
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.723)	61	94845	3.83844	6.564	80.00- 120.00	100.00
10.077	10.050 (0.725)	96	57670			9.56- 109.56	60.80
10.077	10.050 (0.725)	98	33490			0.00- 88.43	35.31
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	32184	0.68861	1.178	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	880019	56.3223	96.311	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	744144			38.51- 138.51	84.56
11.128	11.100 (0.801)	51	264718			0.00- 83.83	30.08
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.966)	61	13061	0.57255	0.9790	80.00- 120.00	100.00
13.450	13.423 (0.968)	96	11334			27.58- 127.58	86.78
13.423	13.423 (0.966)	98	5859			0.15- 100.15	44.86
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	3093607	78.9796	135.06	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	2011773			14.81- 114.81	65.03
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.028)	97	126918	2.92947	5.009	80.00- 120.00	100.00
14.307	14.280 (1.030)	99	81848			14.28- 114.28	64.49
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	2595940	62.3766	106.66	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	2760622			56.24- 156.24	106.34

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	19143	0.78176	1.337	80.00- 120.00	100.00
15.109	15.082 (0.966)	64	6579			0.00- 84.23	34.37
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	2771770	128.937	220.48	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	2589733			39.09- 139.09	93.43
16.105	16.077 (1.030)	97	1800321			12.68- 112.68	64.95
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.087)	83	32262	0.83858	1.434	80.00- 120.00	100.00
17.017	16.989 (1.088)	85	22570			14.80- 114.80	69.96
114 Toluene					CAS #: 108-88-3		
18.344	18.317 (1.173)	91	38301	0.71567	1.224	80.00- 120.00	100.00
18.344	18.317 (1.173)	92	24241			10.34- 110.34	63.29
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.118	19.091 (0.919)	97	53834	2.53683	4.338	80.00- 120.00	100.00
19.118	19.091 (0.919)	99	33146			14.03- 114.03	61.57
19.118	19.091 (0.919)	83	43712			36.02- 136.02	81.20
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	444688	15.6383	26.741	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	303392			18.51- 118.51	68.23
19.284	19.284 (0.927)	131	290894			15.29- 115.29	65.42

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022116.d
Lab Smp Id: 0802200-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	269689	-15.23
97 1,4-Difluorobenze	1251468	750881	1752055	1003993	-19.77
126 Chlorobenzene-d5	1150991	690595	1611387	931614	-19.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0802200-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg->5.0psi

Client SDG: 21Feb2008
Fraction: VOA

Operator: ACT
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.687	98.75	70-130
$ 113 Toluene-d8	25.000	25.390	101.56	70-130
$ 137 Bromofluorobenzene	25.000	26.849	107.39	70-130

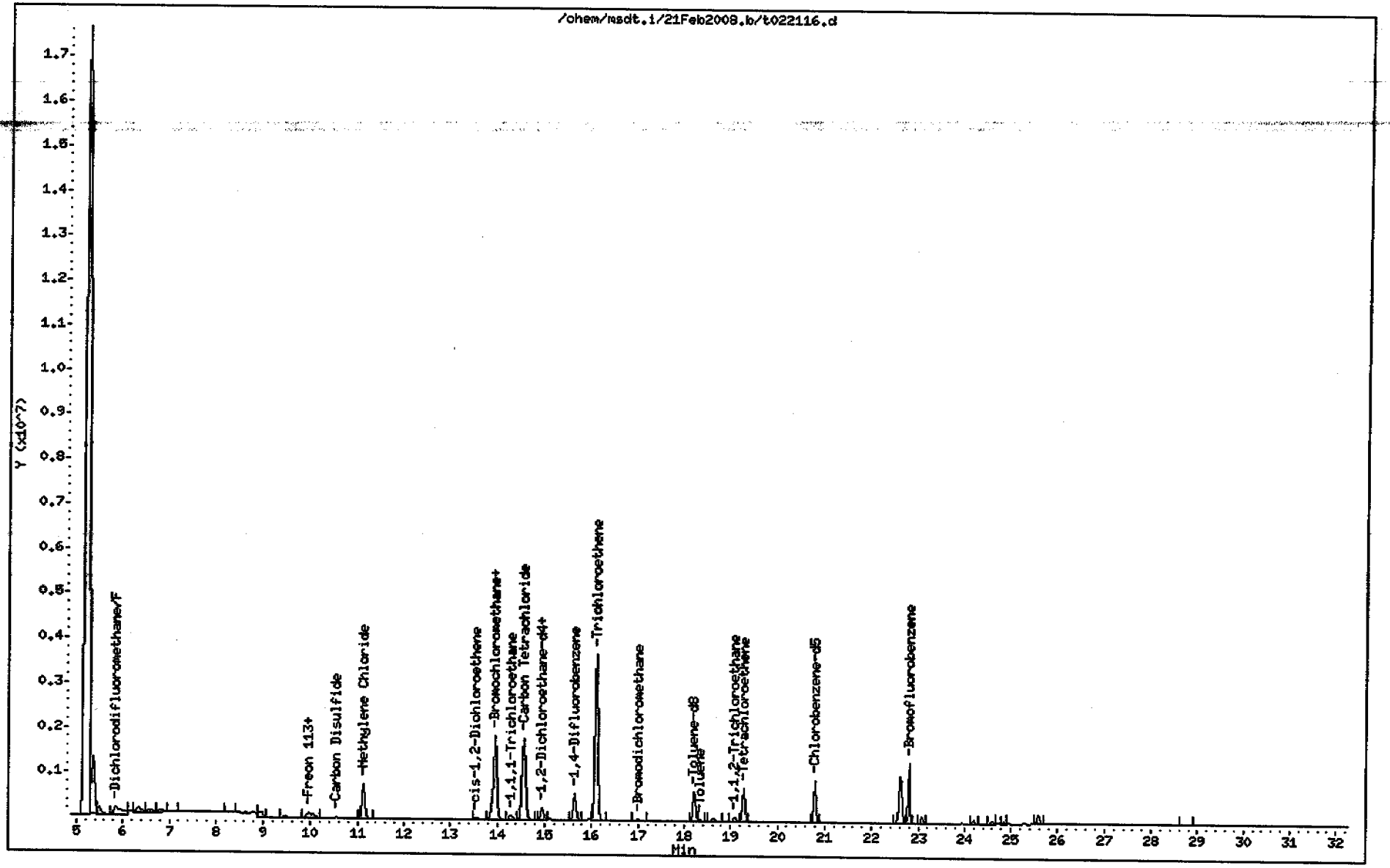
Data File: /ohem/msdt.i/21Feb2008.b/t022116.d
Date : 21-FEB-2008 22:01
Client ID:
Sample Info: 200mL #9945

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0110



Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

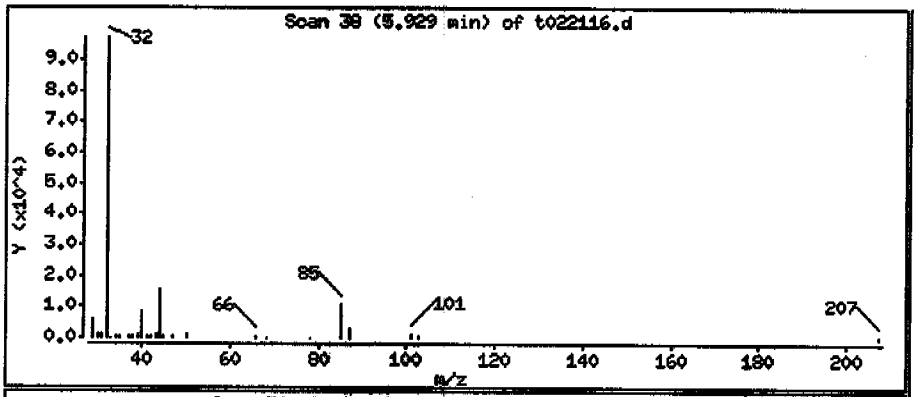
Operator: ACT

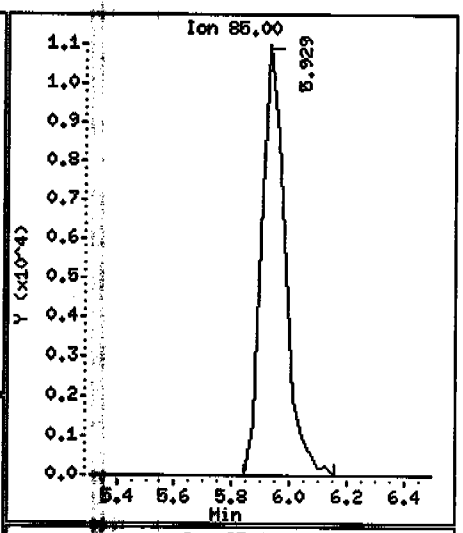
Column phase: RTx-624

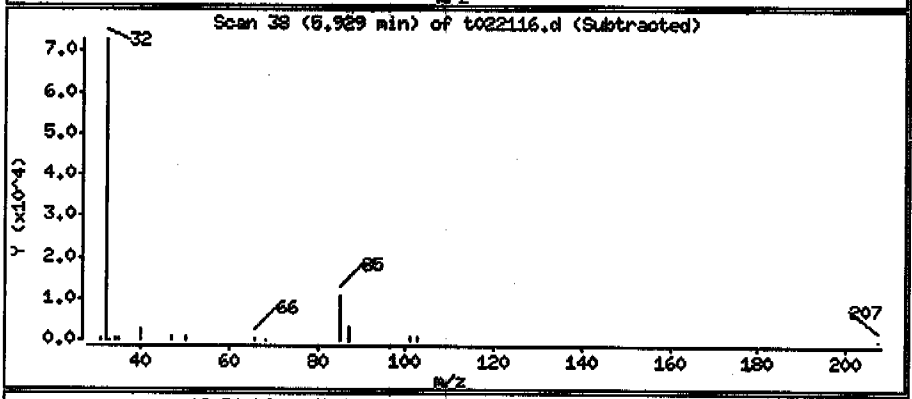
Column diameter: 0.53

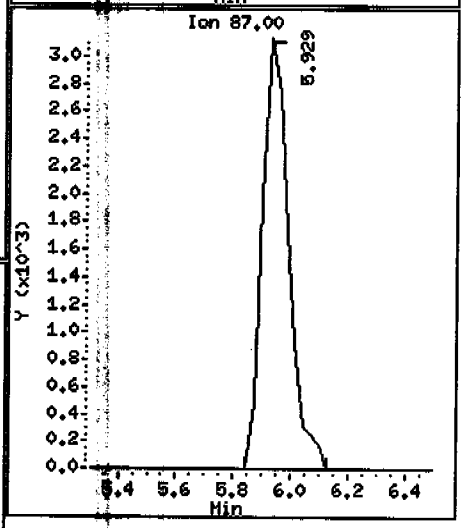
12 Dichlorodifluoromethane/Fr12

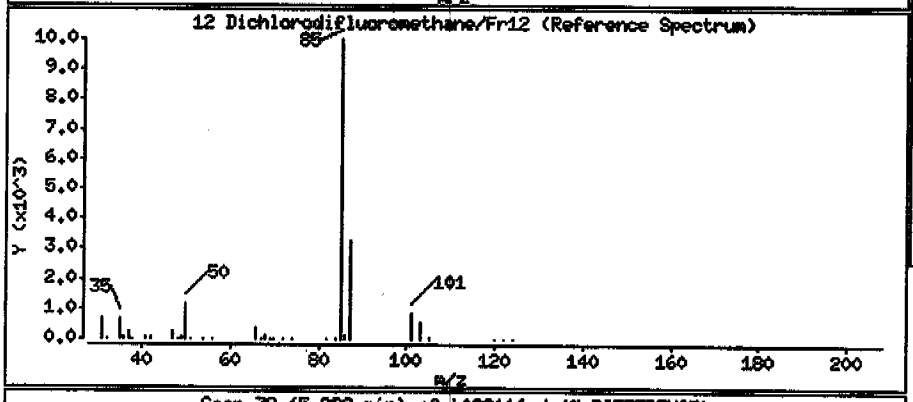
Concentration: 1.988 PPBV

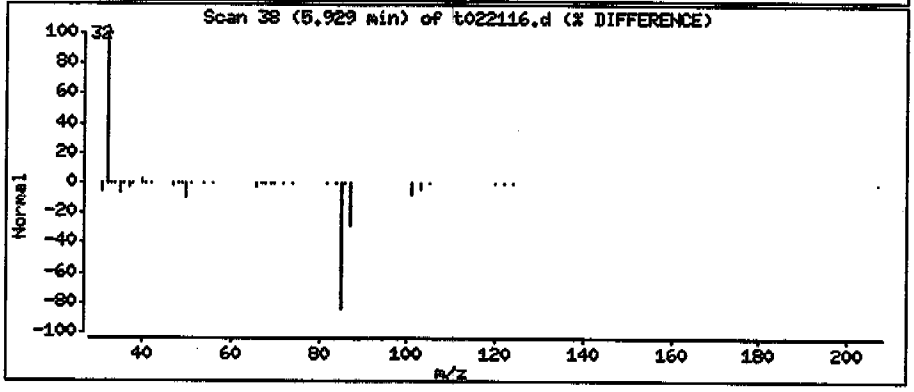












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

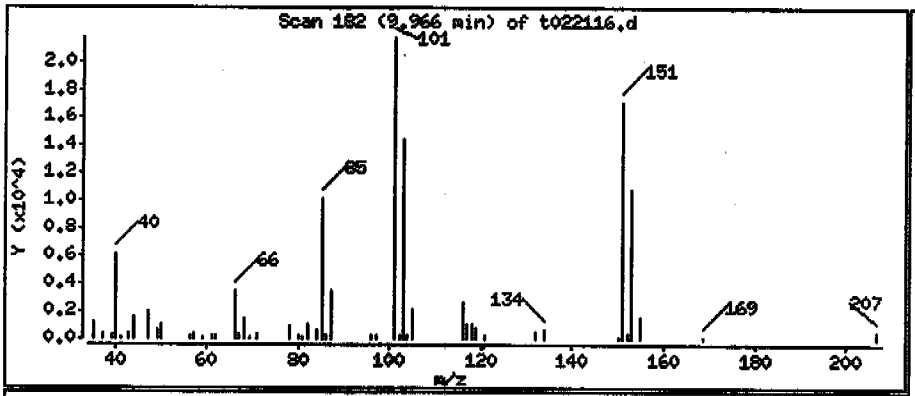
Operator: ACT

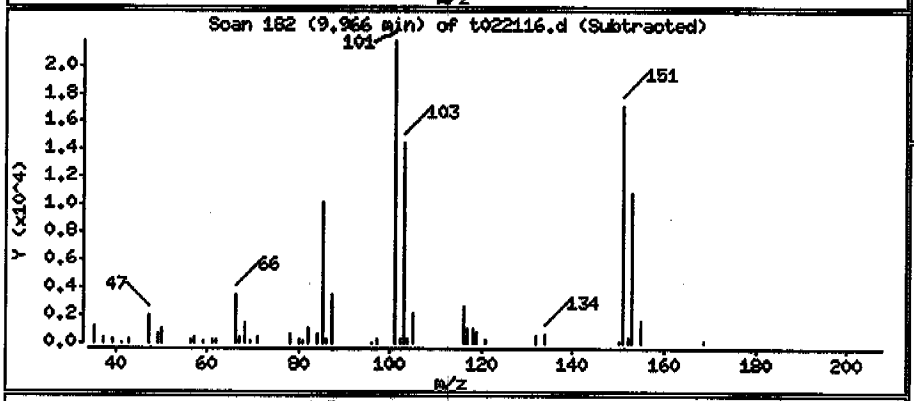
Column phase: RTx-624

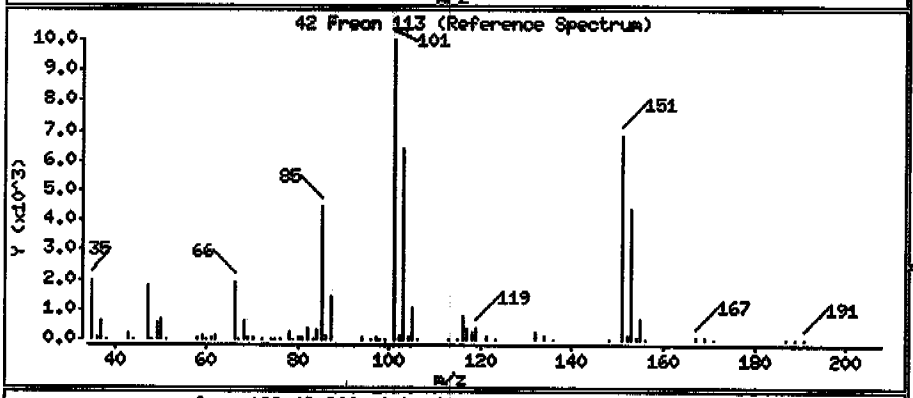
Column diameter: 0.53

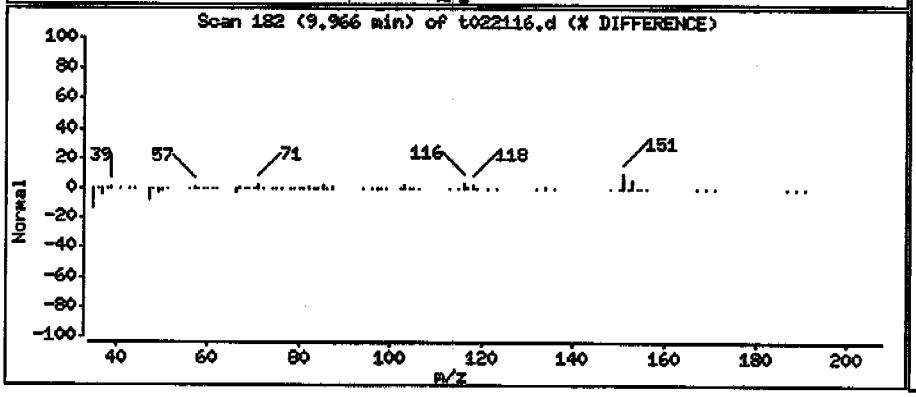
42 Freon 113

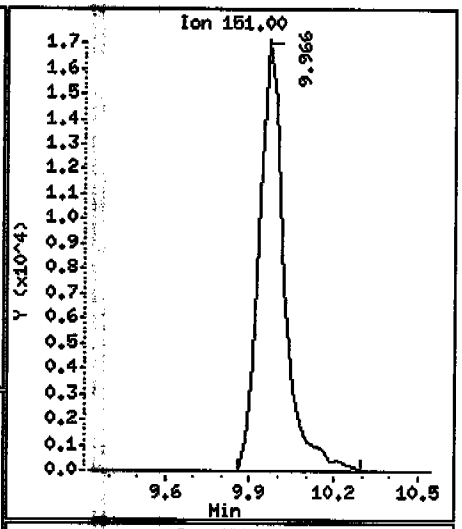
Concentration: 6,683 PPBV

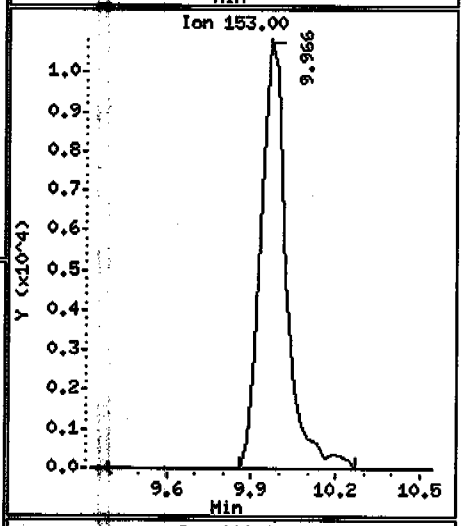


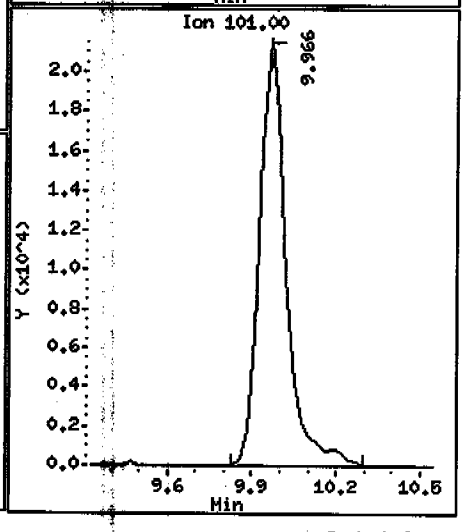












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

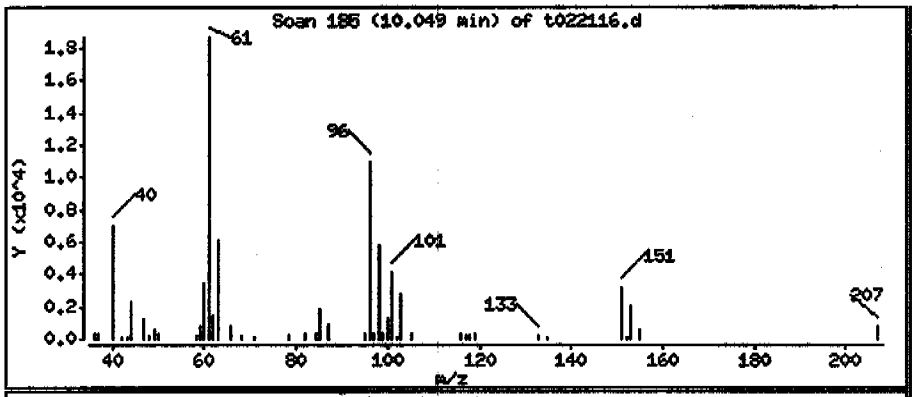
Operator: ACT

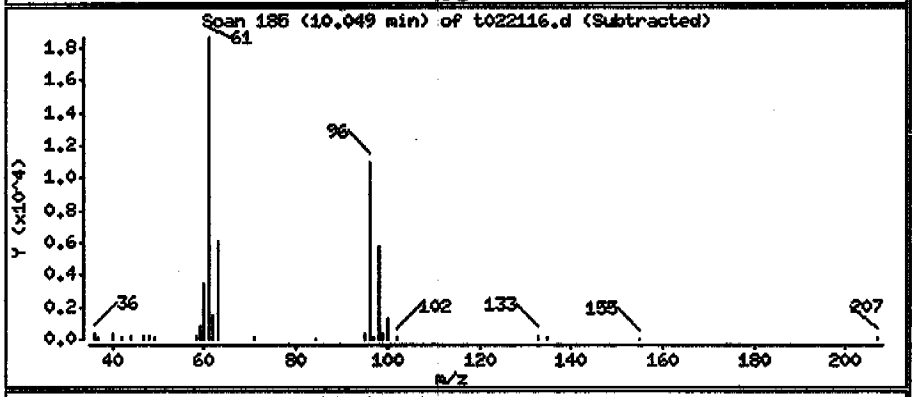
Column phase: RTx-624

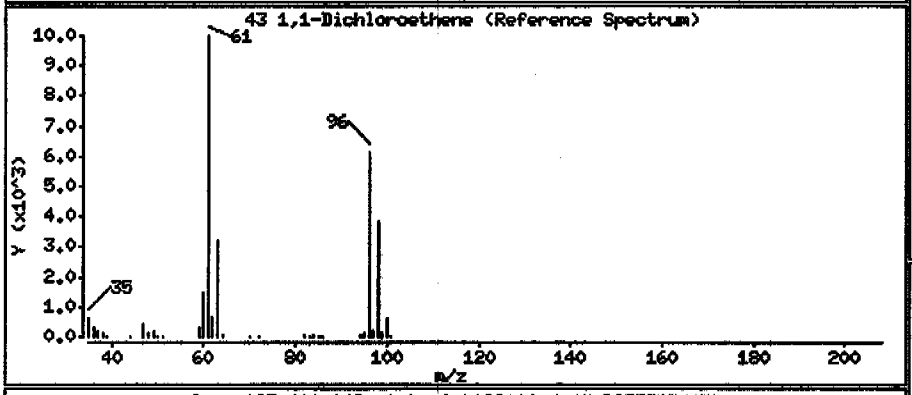
Column diameter: 0.53

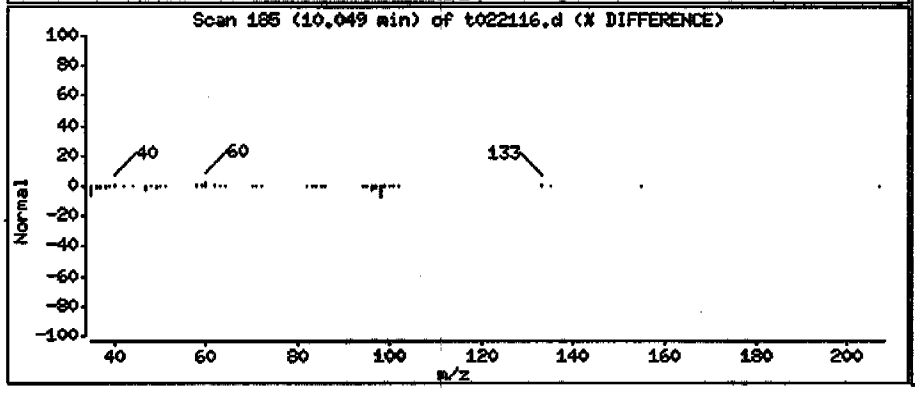
43 1,1-Dichloroethene

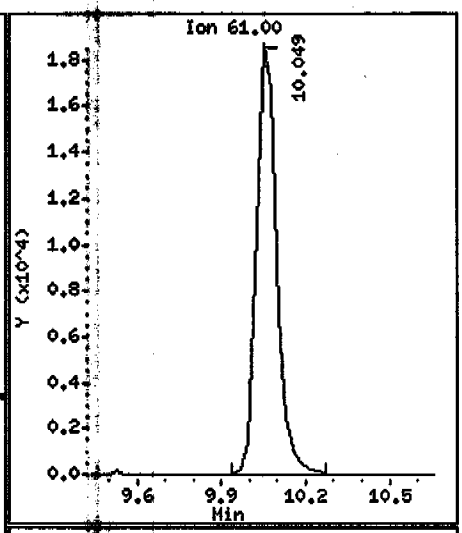
Concentration: 6.564 PPBV

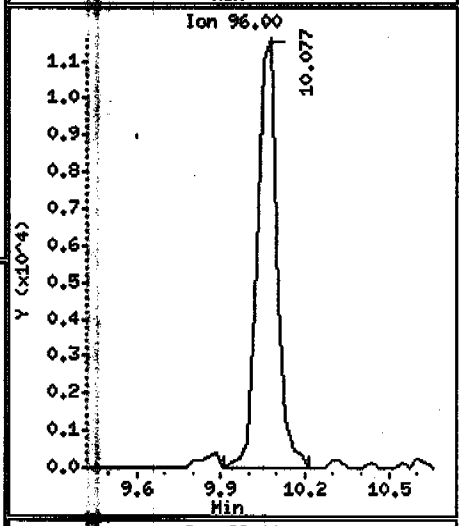


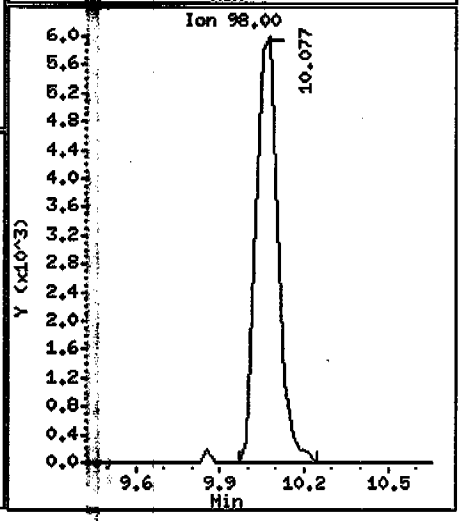












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

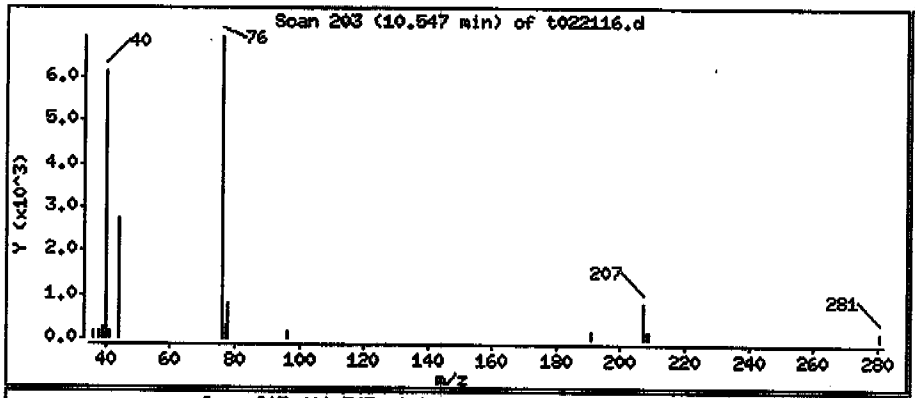
Operator: ACT

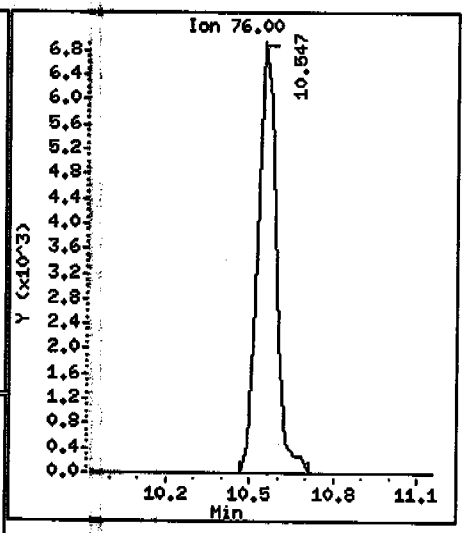
Column phase: RTx-624

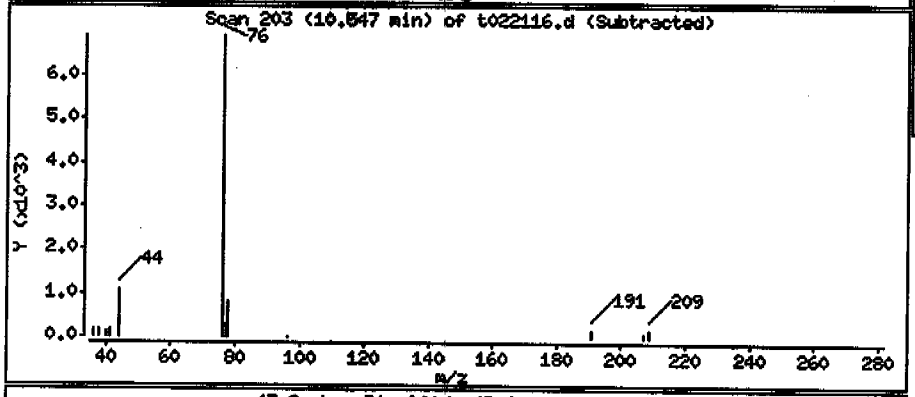
Column diameter: 0.53

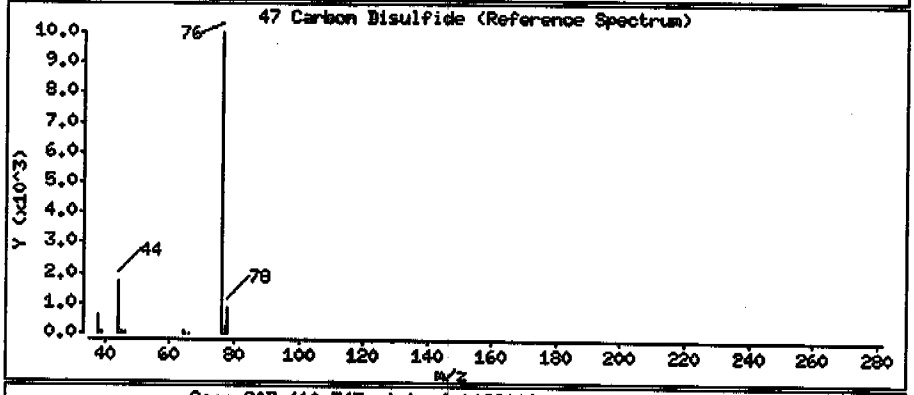
47 Carbon Disulfide

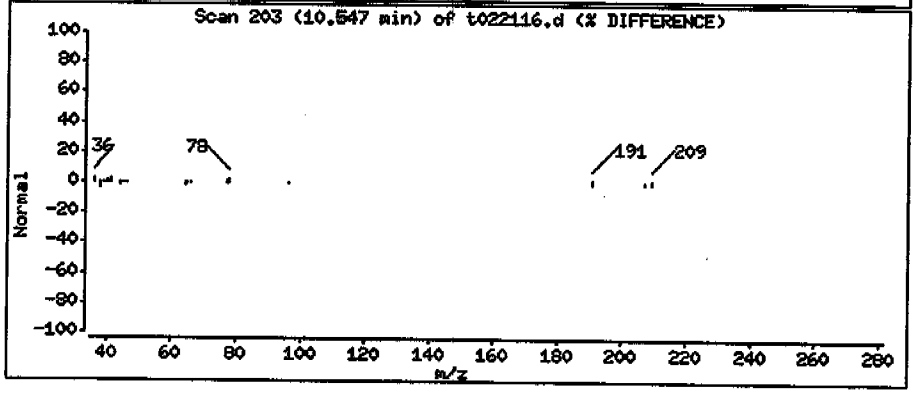
Concentration: 1.178 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

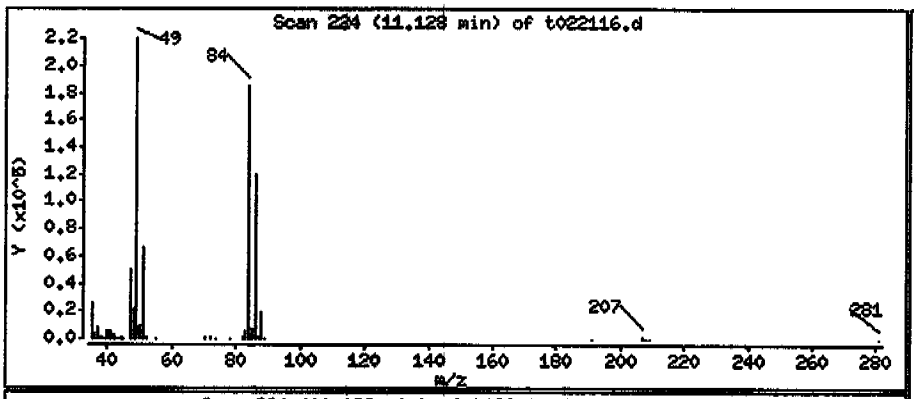
Operator: ACT

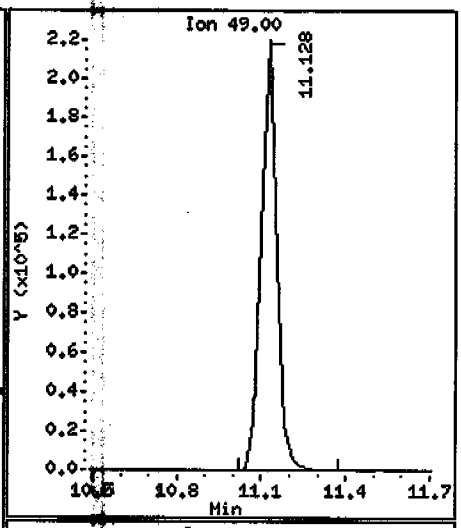
Column phase: RTx-624

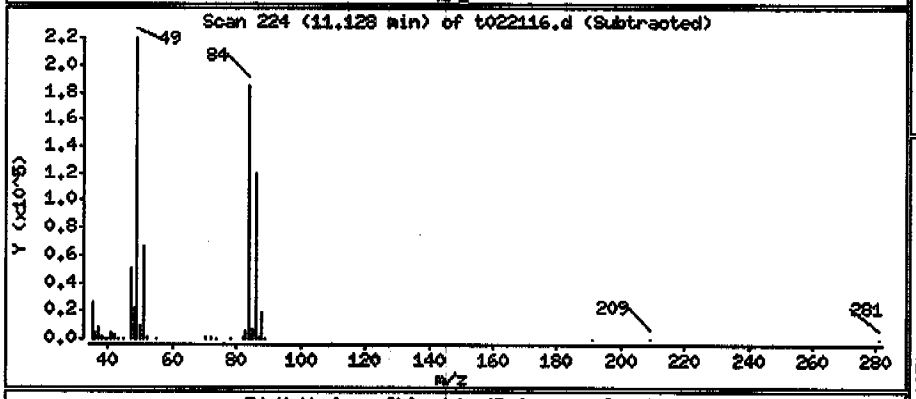
Column diameter: 0.53

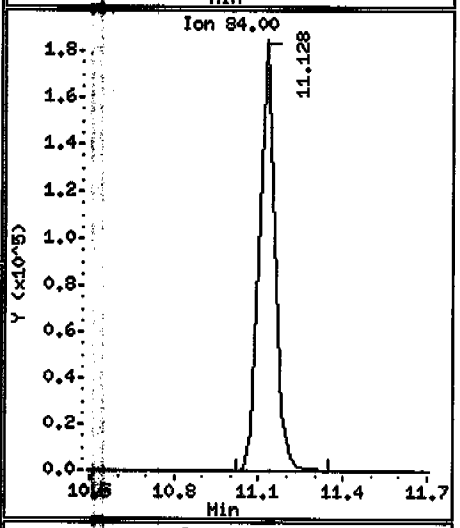
54 Methylene Chloride

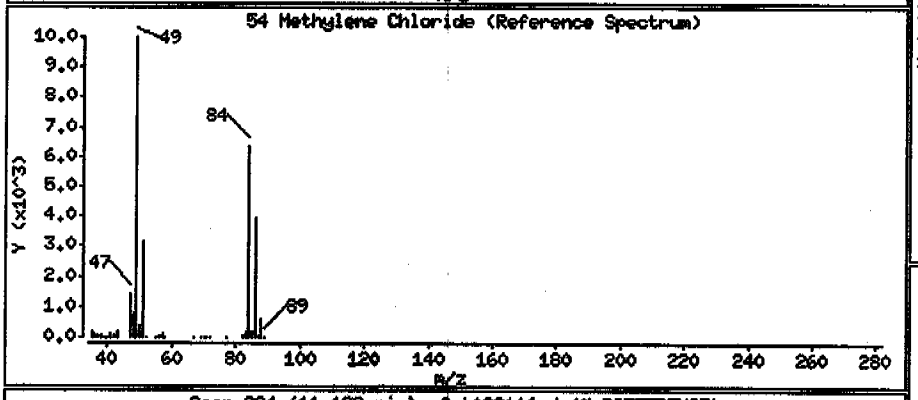
Concentration: 96.311 PPBV

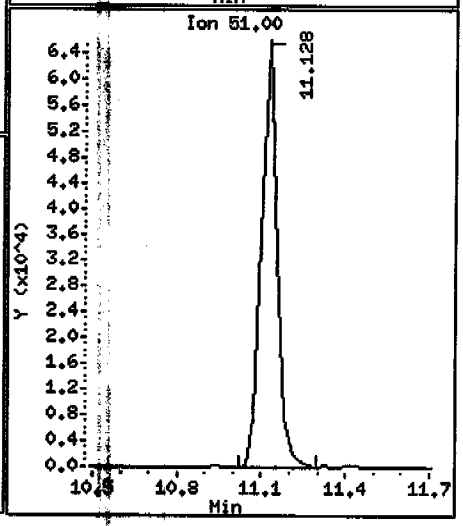


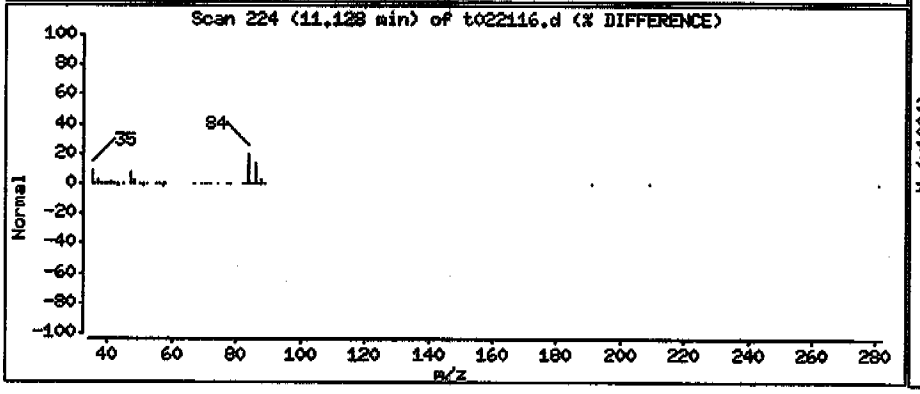












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

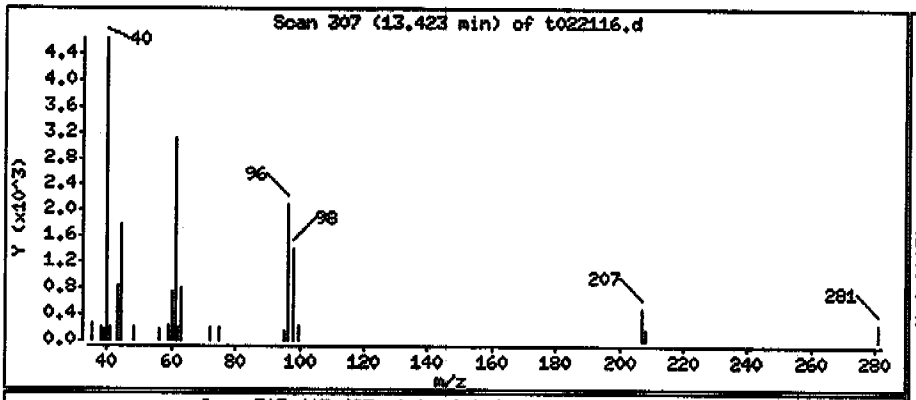
Operator: ACT

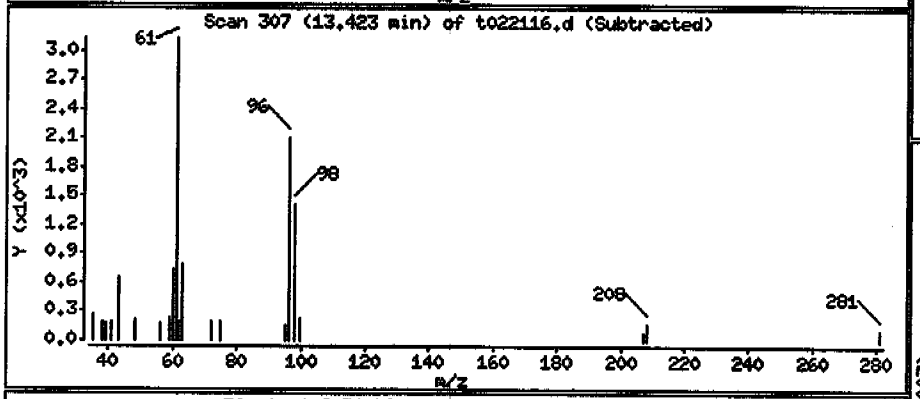
Column phase: RTx-624

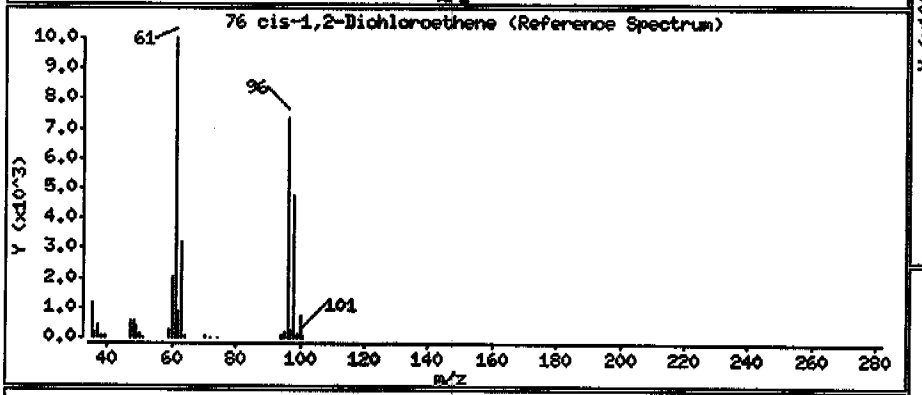
Column diameter: 0.53

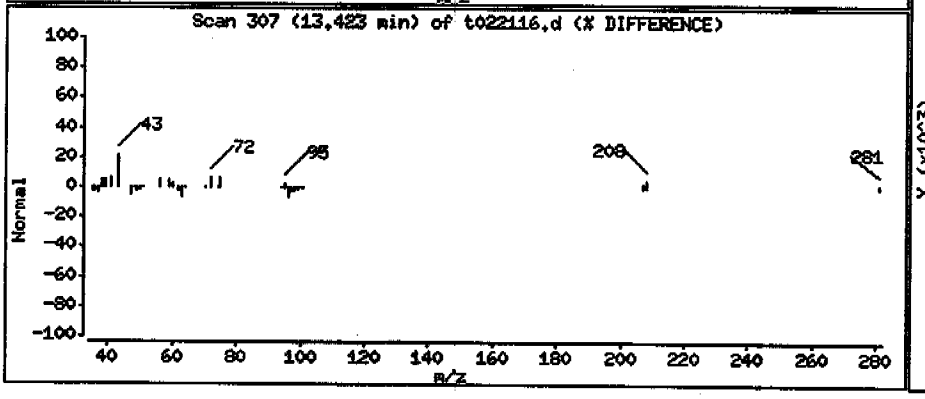
76 cis-1,2-Dichloroethene

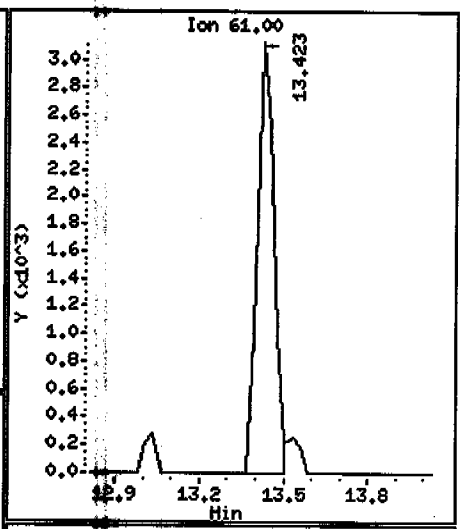
Concentration: 0.9790 PPBV

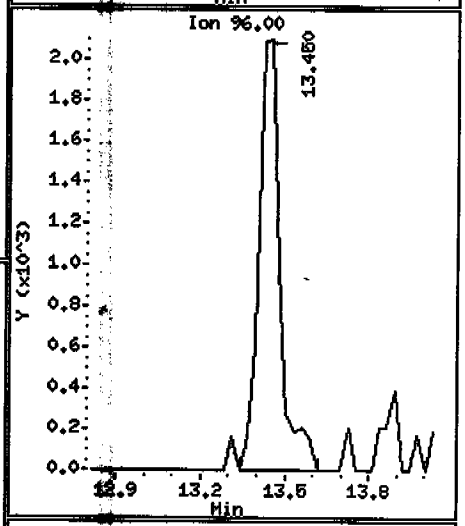


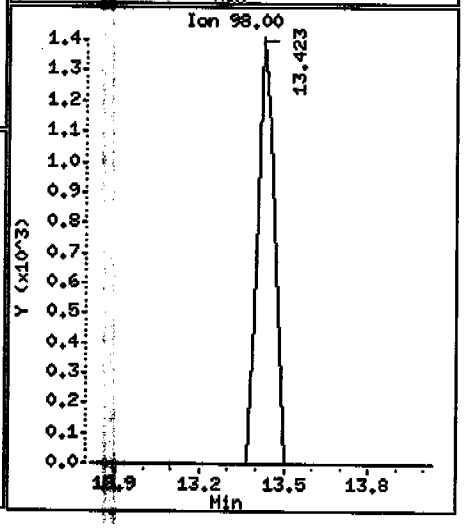












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

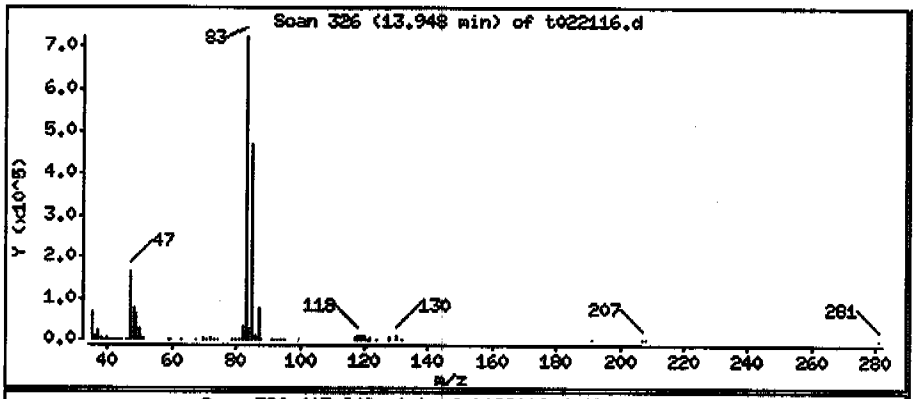
Operator: ACT

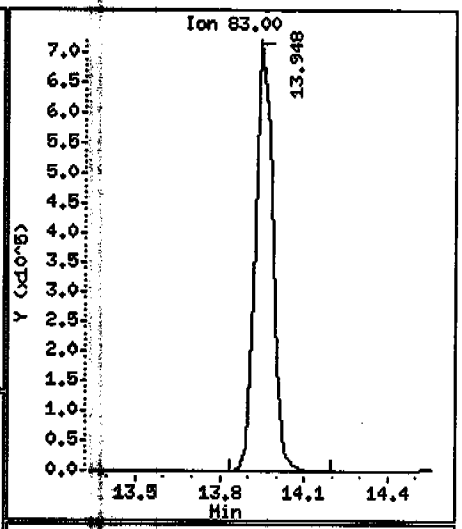
Column phase: RTx-624

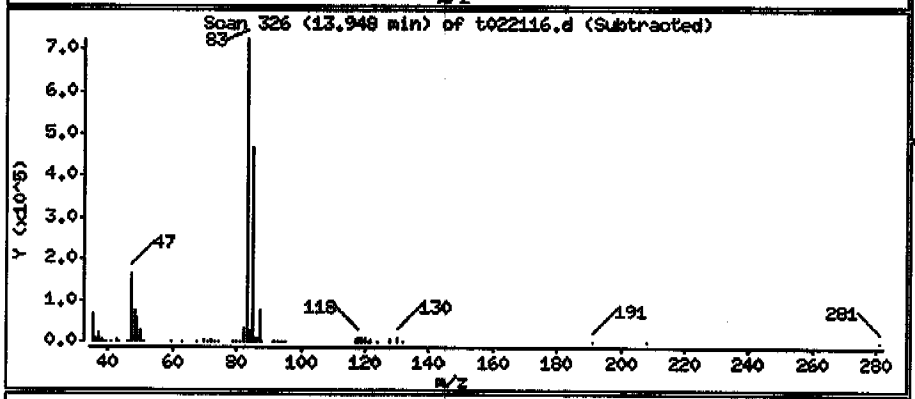
Column diameter: 0.53

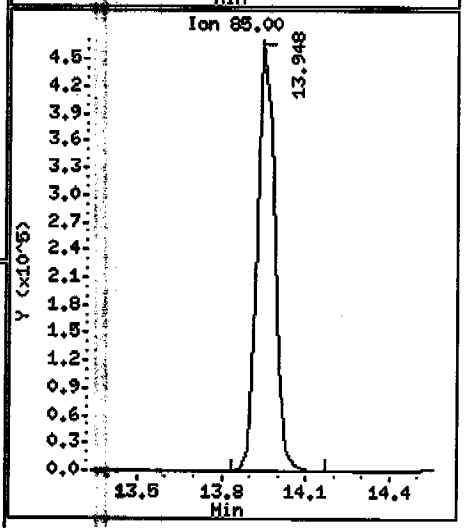
82 Chloroform

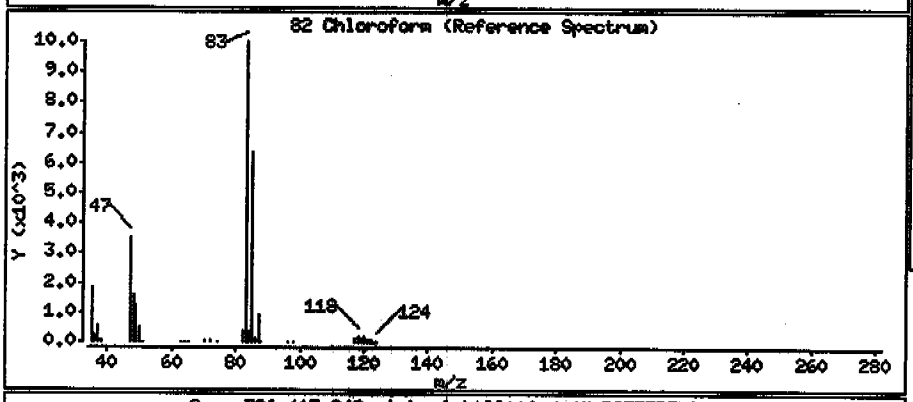
Concentration: 136.06 PPBV

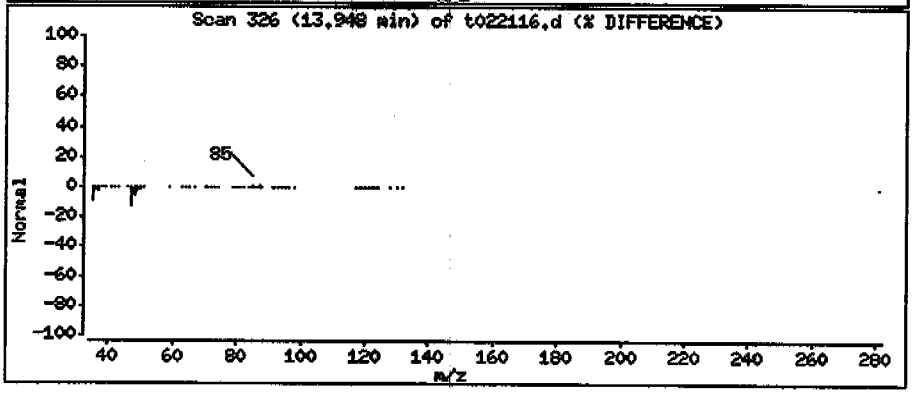












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

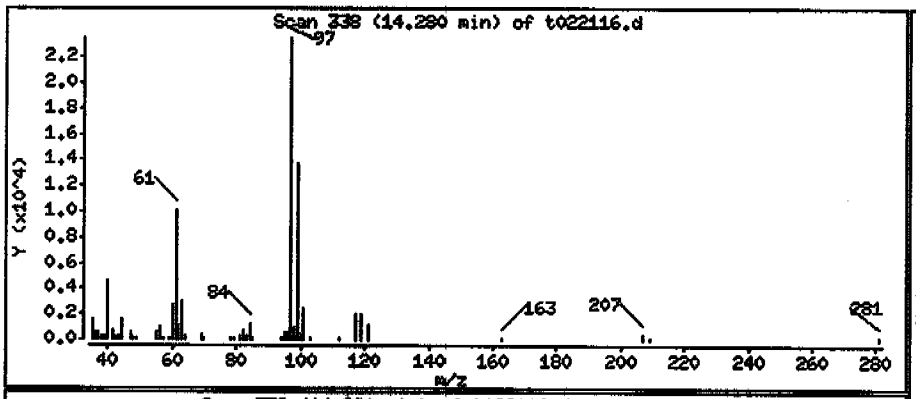
Operator: ACT

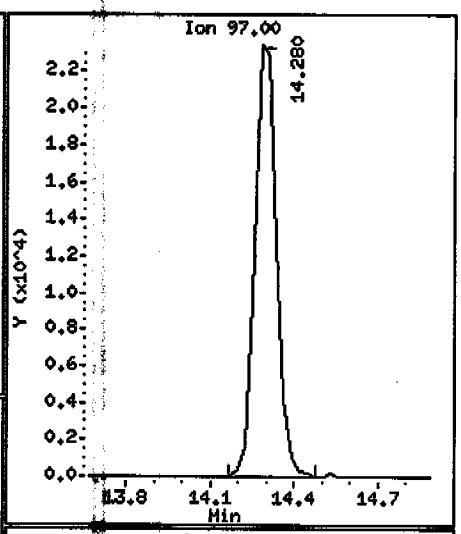
Column phase: RTx-624

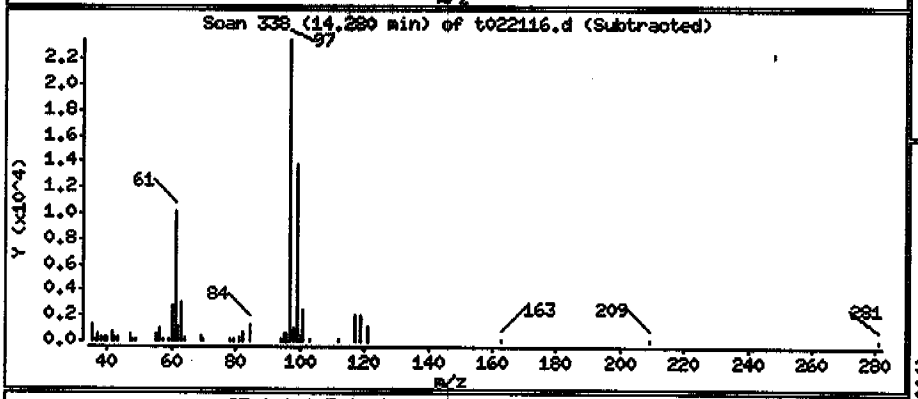
Column diameter: 0.53

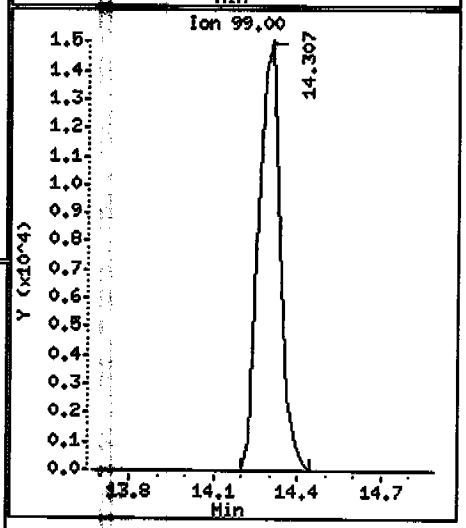
83 1,1,1-Trichloroethane

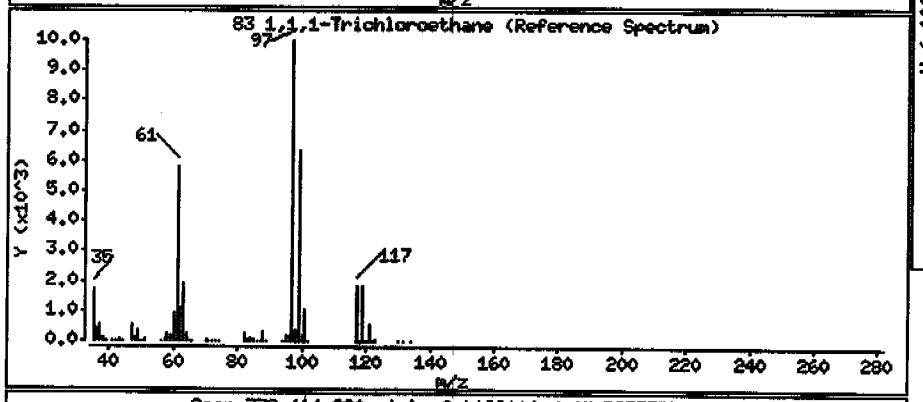
Concentration: 5.009 PPBV

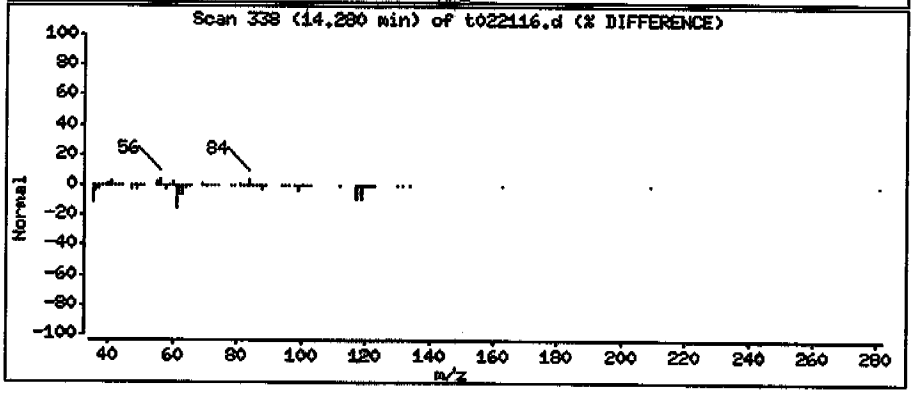












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

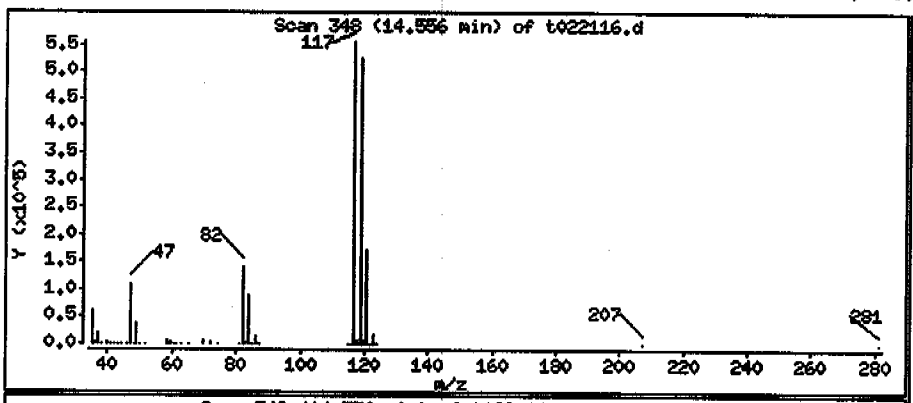
Operator: ACT

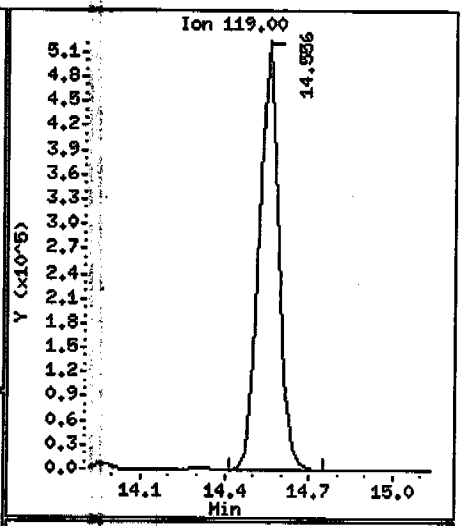
Column phase: RTx-624

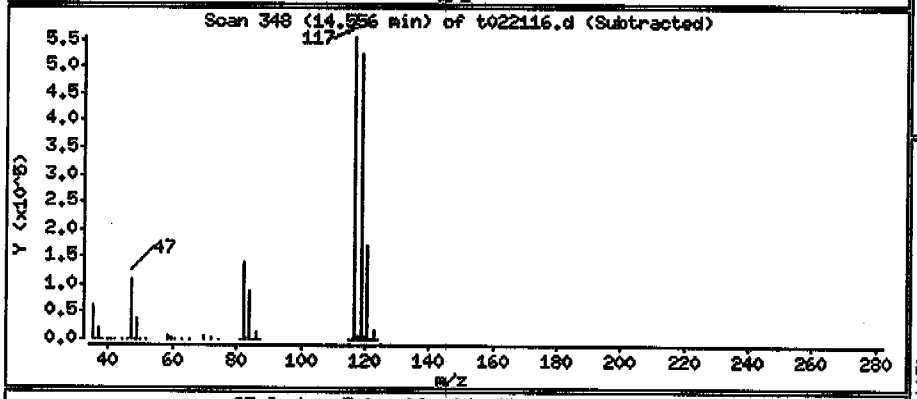
Column diameter: 0.53

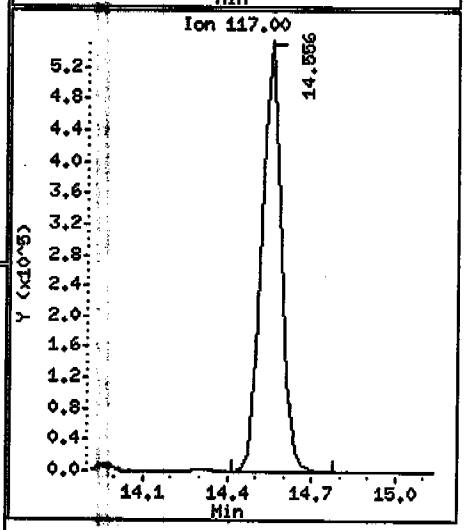
87 Carbon Tetrachloride

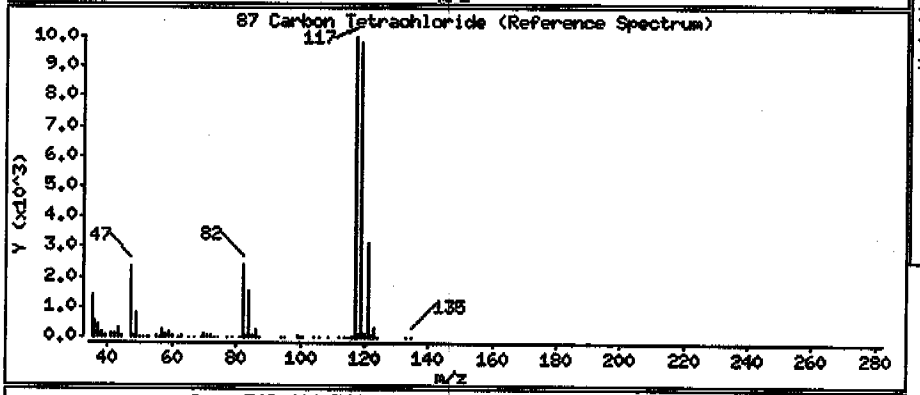
Concentration: 106.66 PPBV

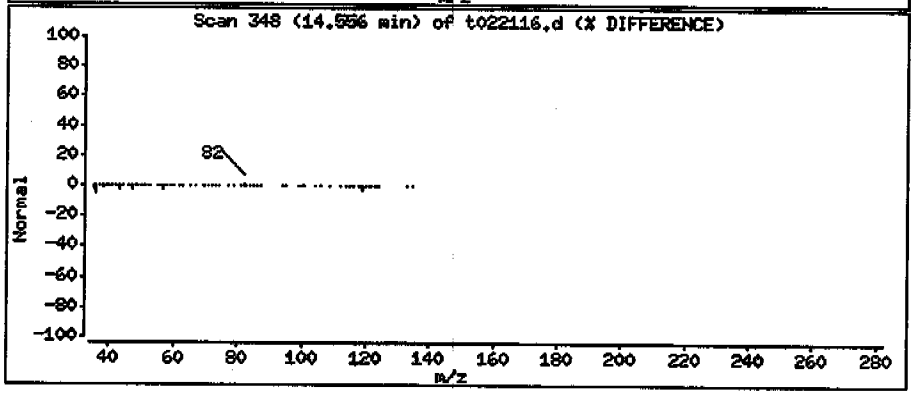












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

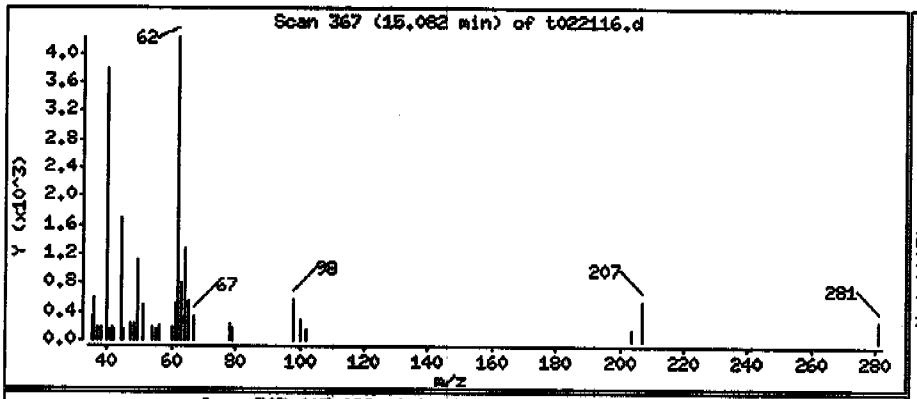
Operator: ACT

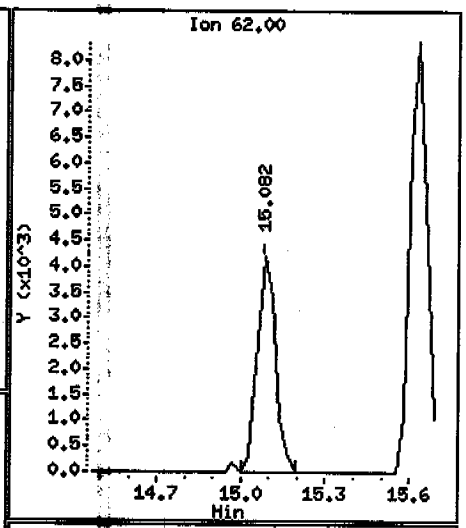
Column phase: RTx-624

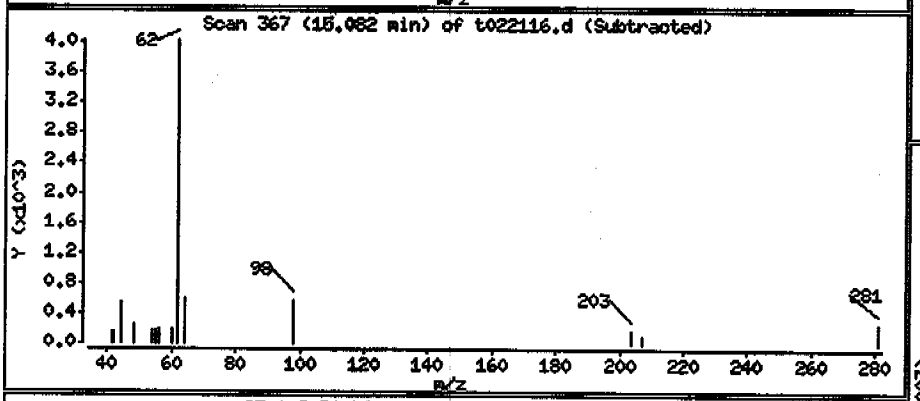
Column diameter: 0.53

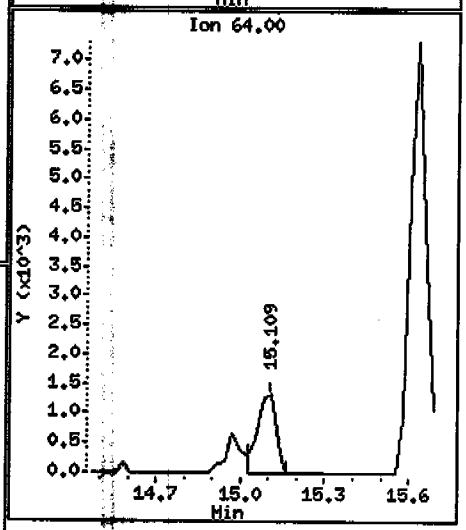
93 1,2-Dichloroethane

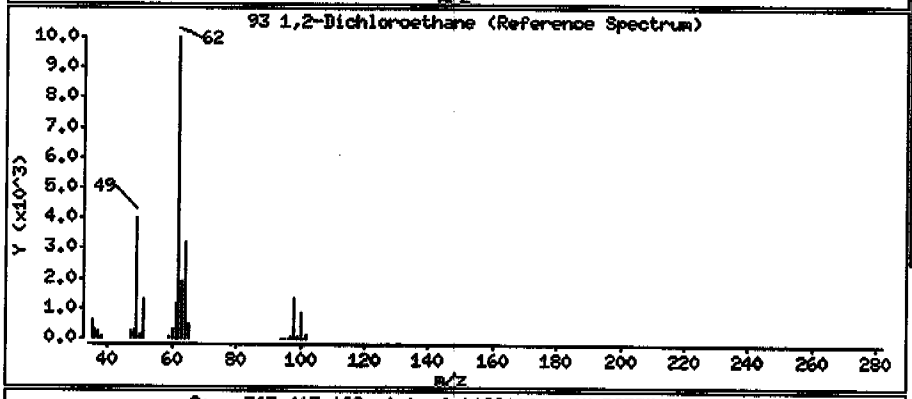
Concentration: 1.337 PPBV

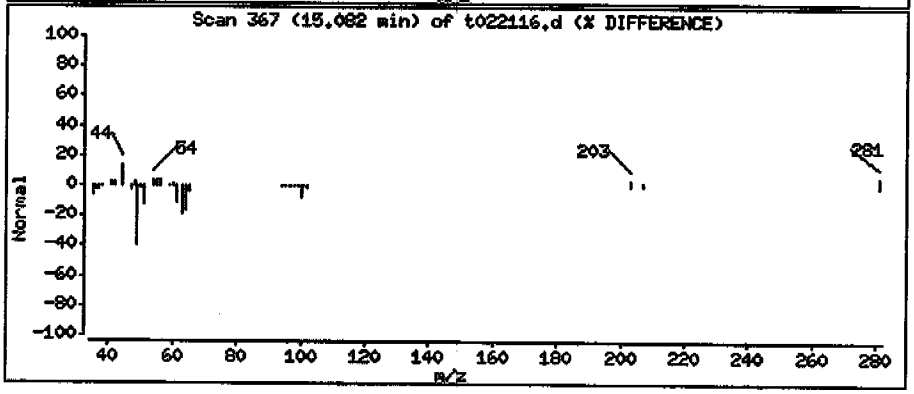












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

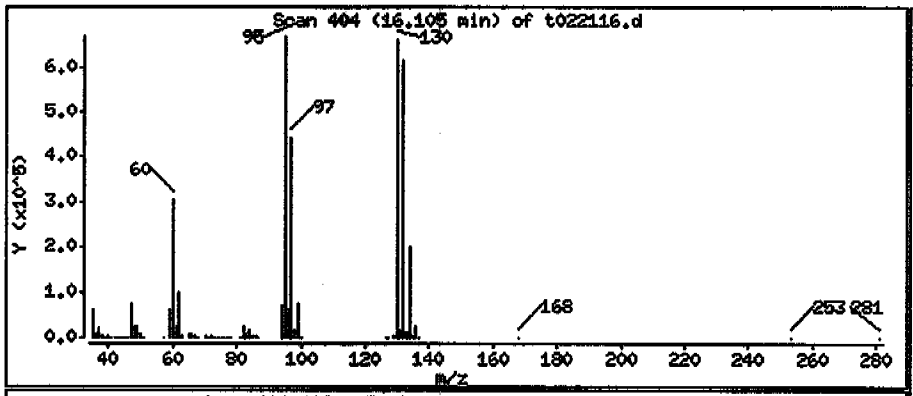
Operator: ACT

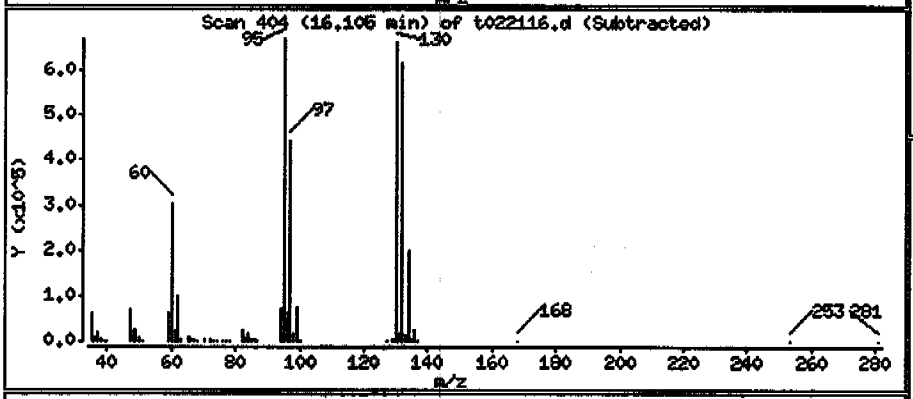
Column phase: RTx-624

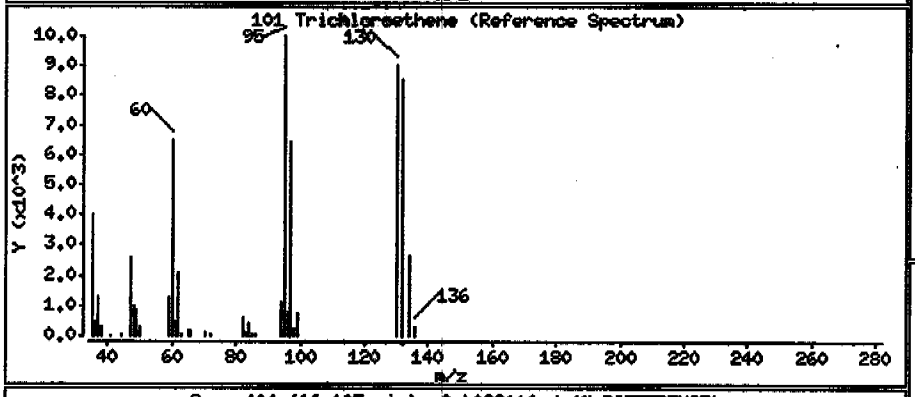
Column diameter: 0.53

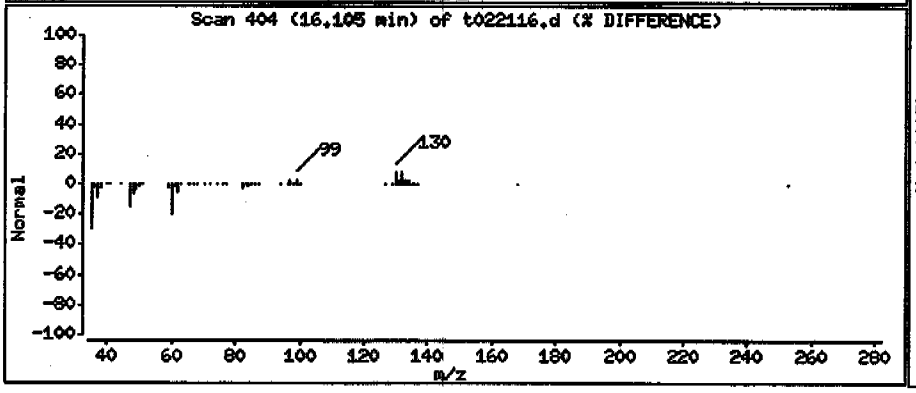
101 Trichloroethene

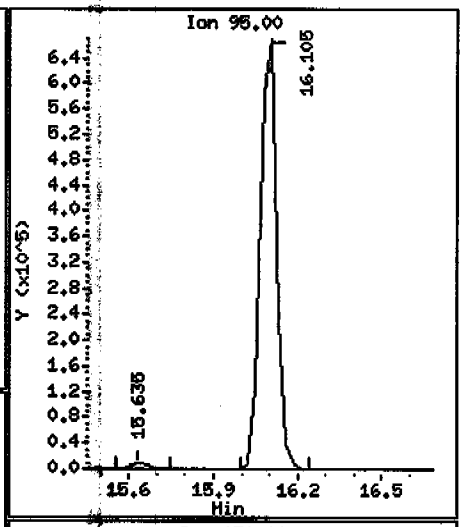
Concentration: 220.48 PPBV

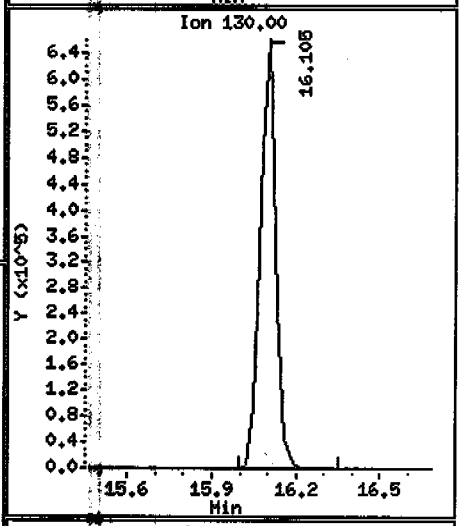


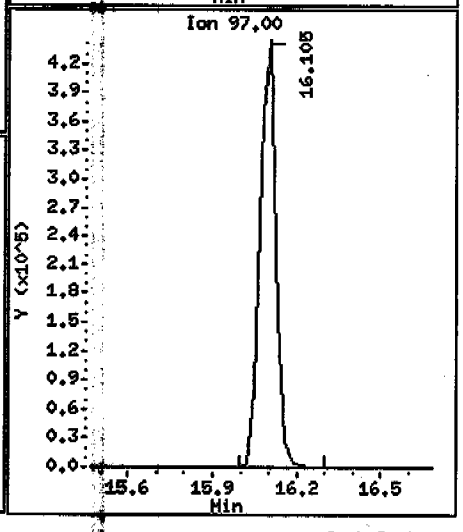












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

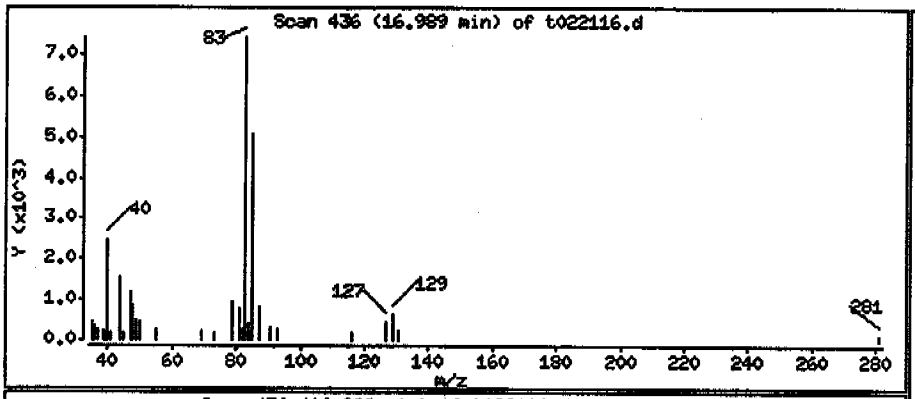
Operator: ACT

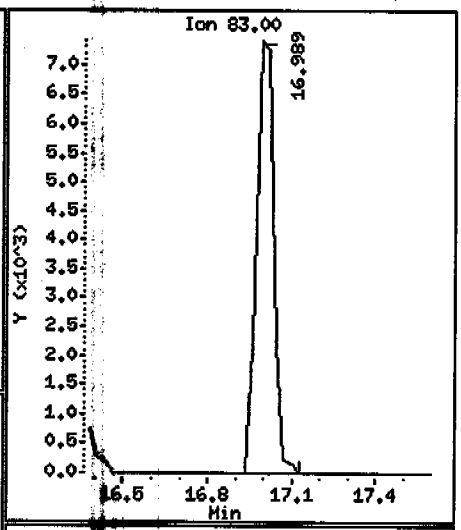
Column phase: RTx-624

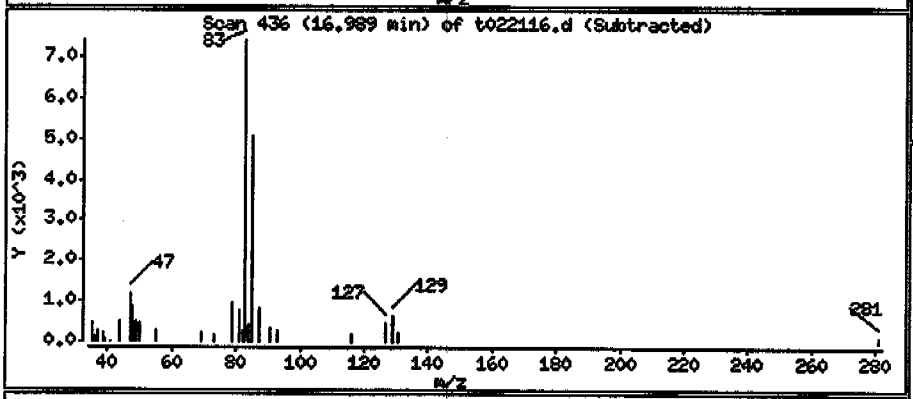
Column diameter: 0.53

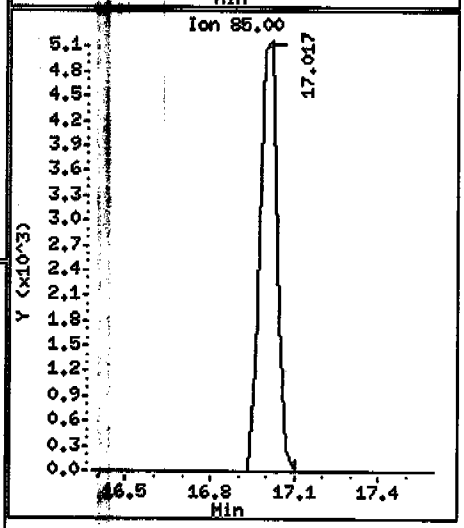
107 Bromodichloromethane

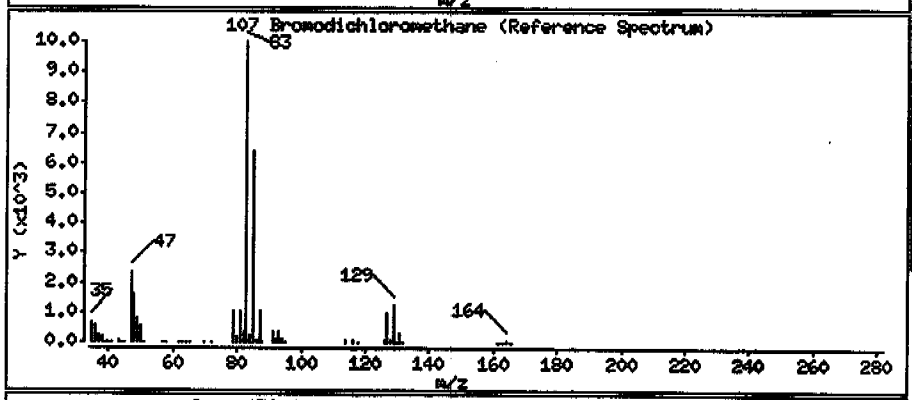
Concentration: 1.434 PPBV

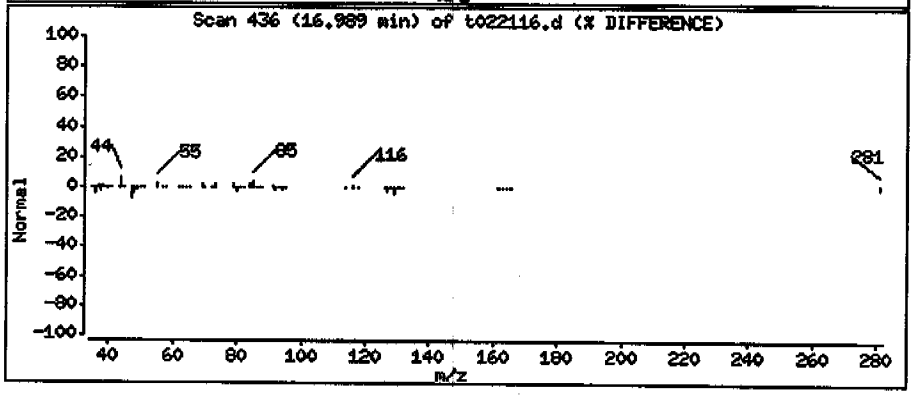












Data File: /ohem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

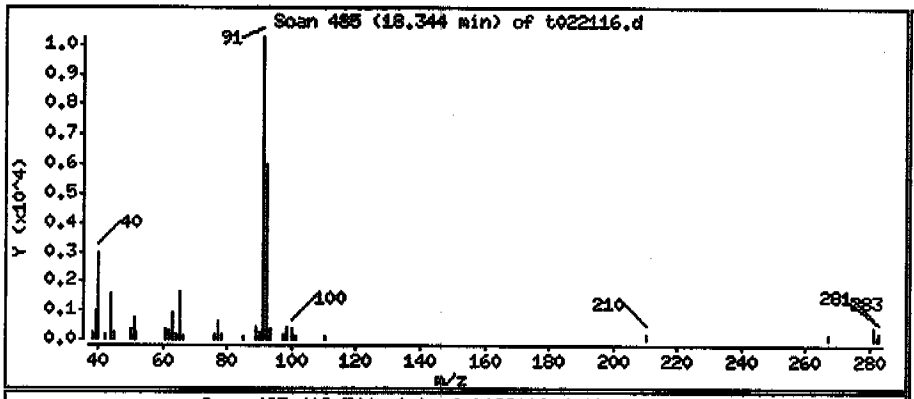
Operator: ACT

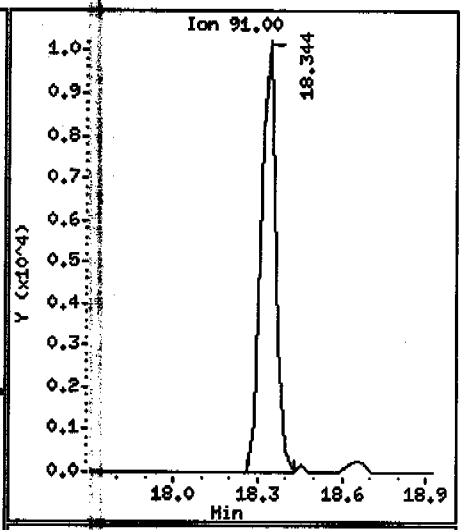
Column phase: RTx-624

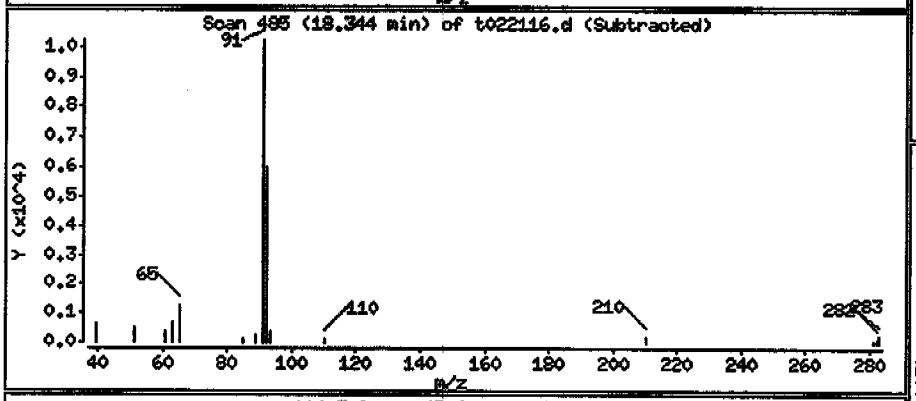
Column diameter: 0.53

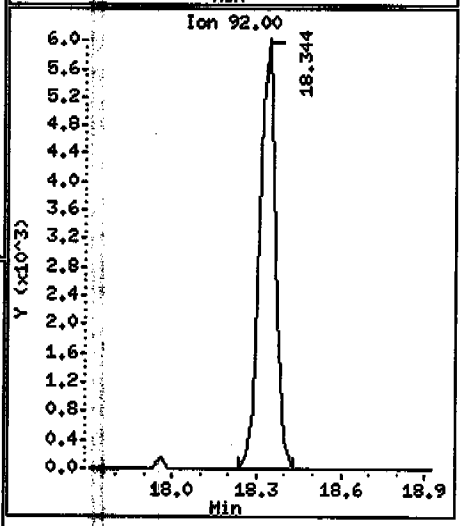
114 Toluene

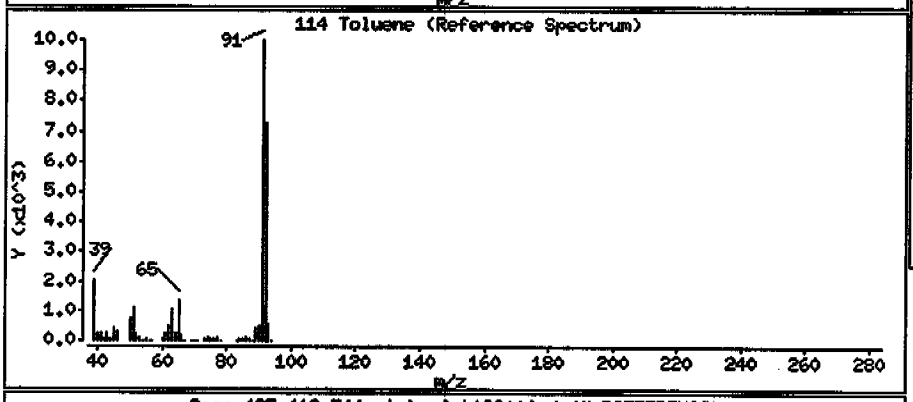
Concentration: 1.224 PPBV

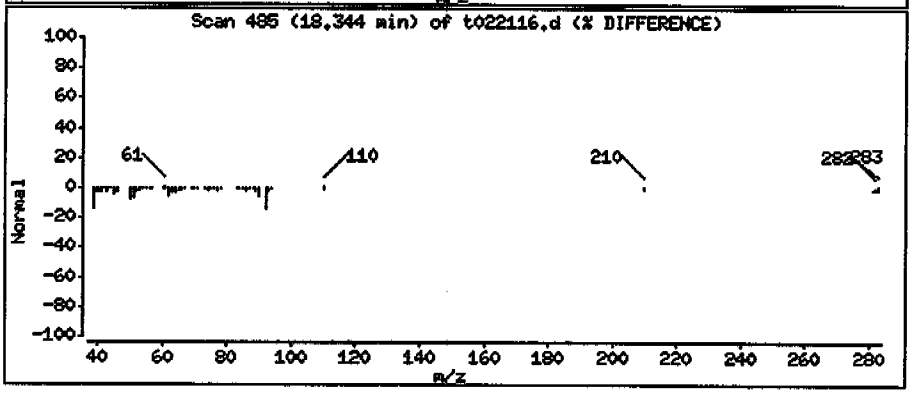












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Instrument: msdt.i

Sample Info: 200mL #9945

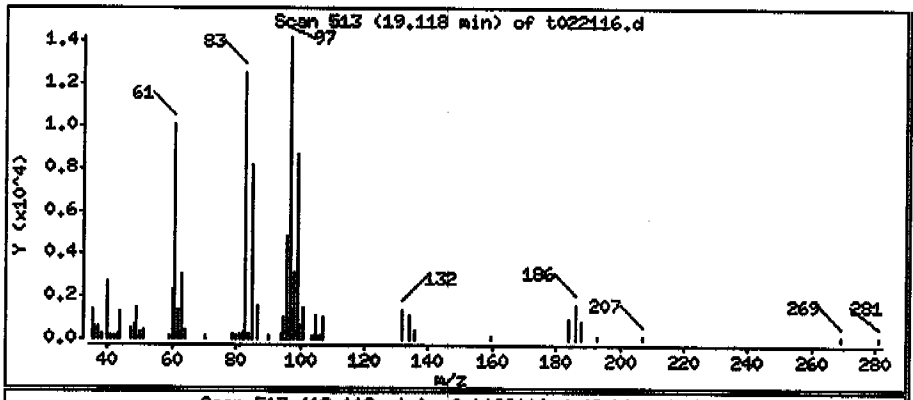
Operator: ACT

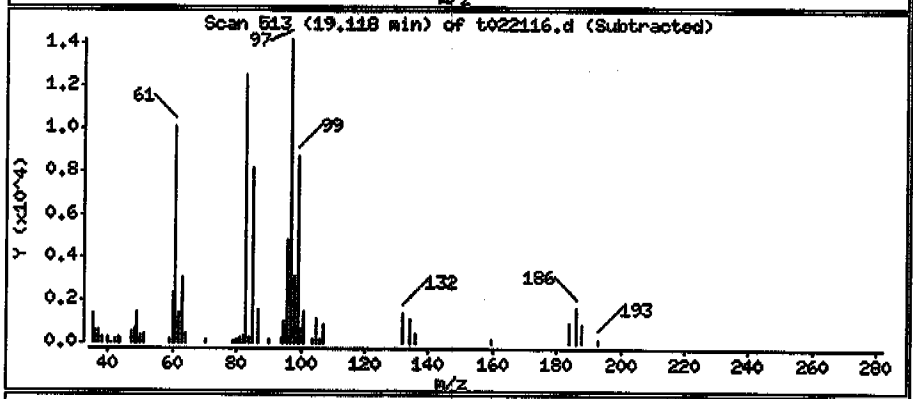
Column phase: RTx-624

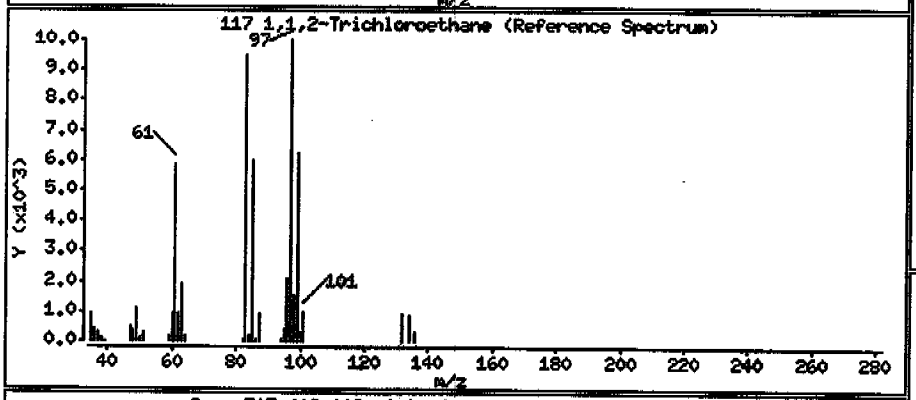
Column diameter: 0.53

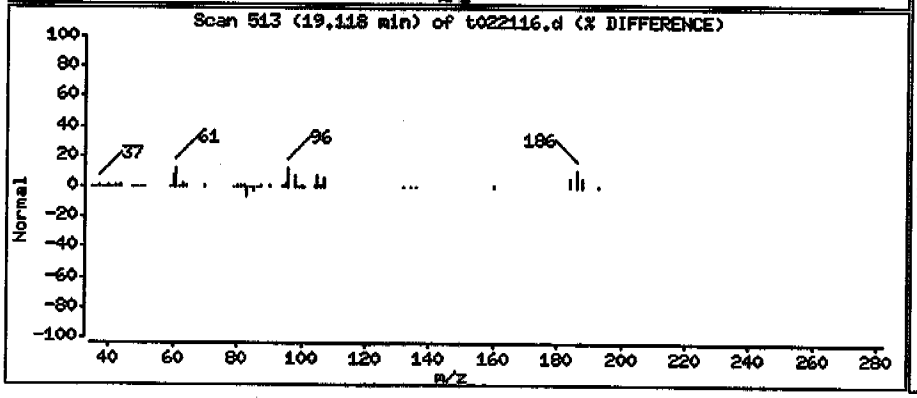
117 1,1,2-Trichloroethane

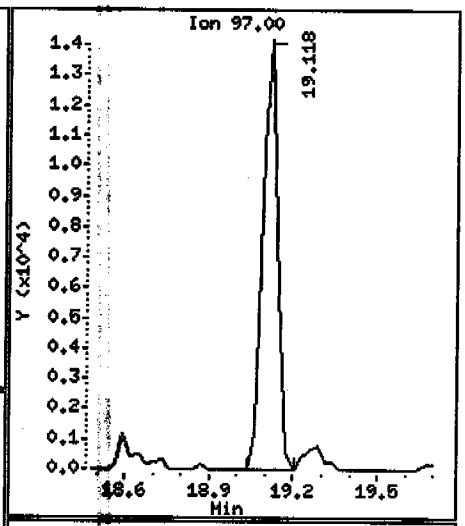
Concentration: 4.338 PPBV

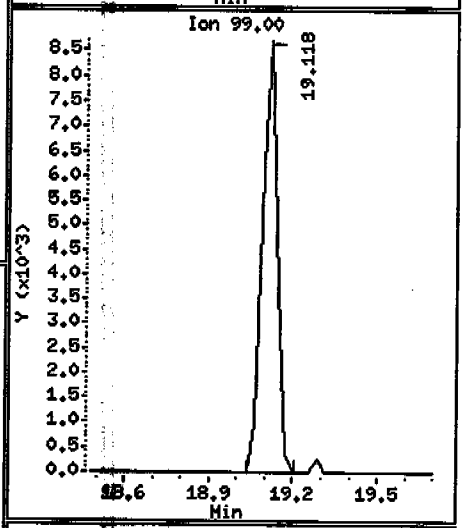


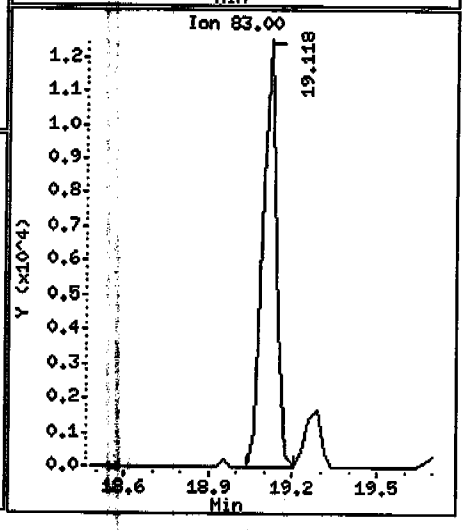












Data File: /chem/msdt.i/21Feb2008.b/t022116.d

Date : 21-FEB-2008 22:01

Client ID:

Sample Info: 200mL #9945

Instrument: msdt.i

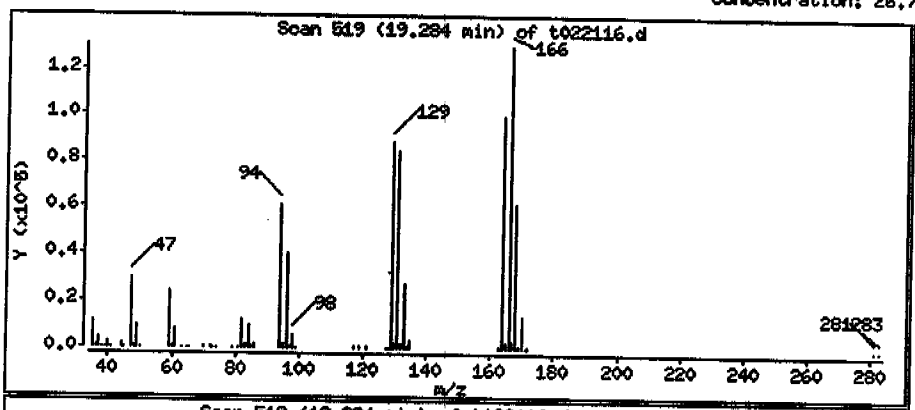
Operator: ACT

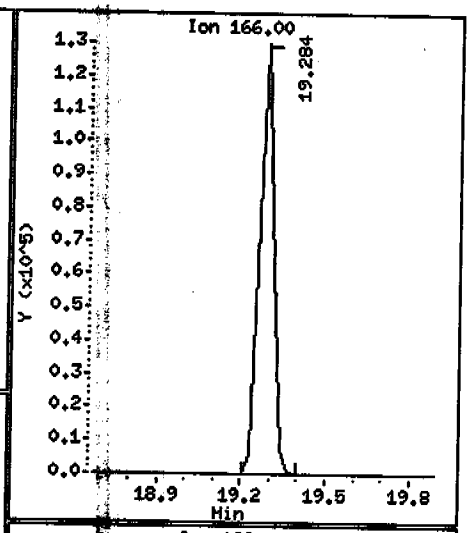
Column phase: RTx-624

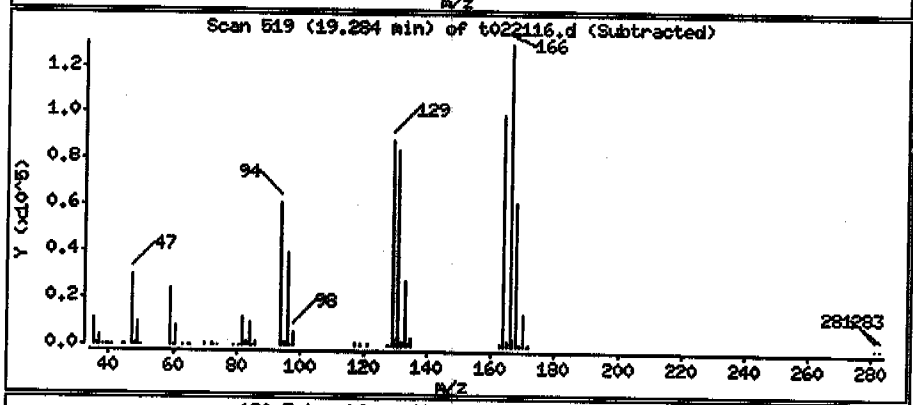
Column diameter: 0.53

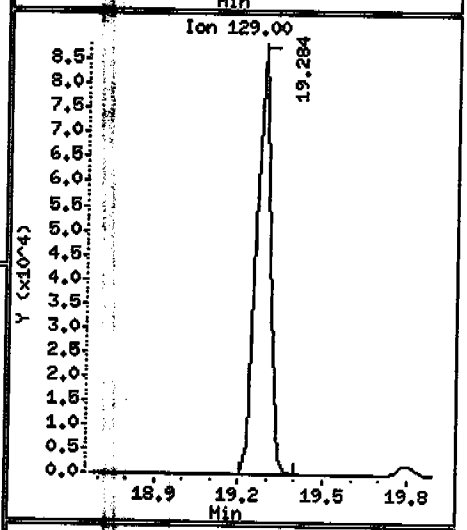
120 Tetrachloroethene

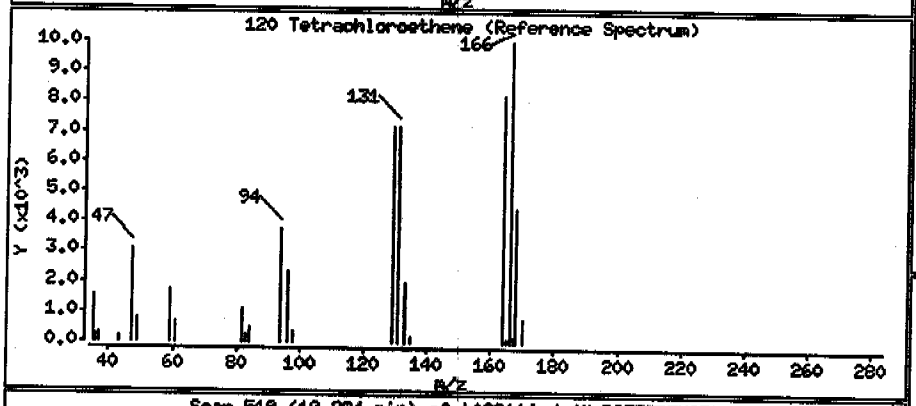
Concentration: 26.741 PPBV

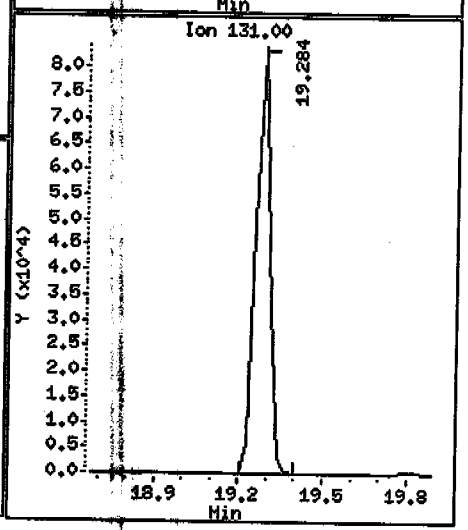


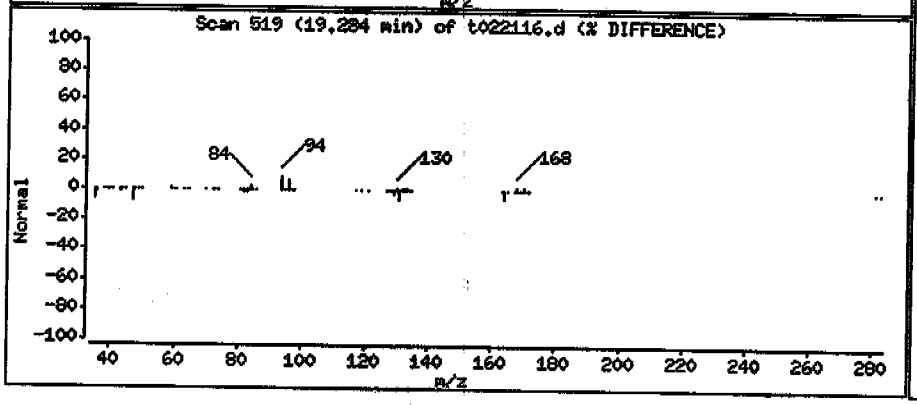












AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10522

Lab ID#: 0802200-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	0.86	3.2	6.6	24
1,1-Dichloroethene	0.86	13	3.4	52
Acetone	3.4	3.9	8.1	9.4
Carbon Disulfide	0.86	1.1	2.7	3.4
Methylene Chloride	0.86	260	3.0	920
cis-1,2-Dichloroethene	0.86	1.5	3.4	5.9
Chloroform	0.86	150	4.2	750
1,1,1-Trichloroethane	0.86	2.6	4.7	14
Carbon Tetrachloride	0.86	92	5.4	580
Benzene	0.86	1.0	2.7	3.4
1,2-Dichloroethane	0.86	3.9	3.5	16
Trichloroethene	0.86	240	4.6	1300
Bromodichloromethane	0.86	1.7	5.7	12
Toluene	0.86	2.1	3.2	7.9
1,1,2-Trichloroethane	0.86	22	4.7	120
Tetrachloroethene	0.86	16	5.8	110
1,4-Dichlorobenzene	0.86	1.2	5.1	7.0

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10522

Lab ID#: 0802200-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	3.2	6.6	24
1,1-Dichloroethene	0.86	13	3.4	52
Acetone	3.4	3.9	8.1	9.4
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	1.1	2.7	3.4
Methylene Chloride	0.86	260	3.0	920
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.86	1.5	3.4	5.9
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	150	4.2	750
1,1,1-Trichloroethane	0.86	2.6	4.7	14
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	92	5.4	580
Benzene	0.86	1.0	2.7	3.4
1,2-Dichloroethane	0.86	3.9	3.5	16
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	240	4.6	1300
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.7	5.7	12
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	2.1	3.2	7.9
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	22	4.7	120
Tetrachloroethene	0.86	16	5.8	110

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10522

Lab ID#: 0802200-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	1.2	5.1	7.0
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022117.d
Lab Smp Id: 0802200-05A
Inj Date : 21-FEB-2008 22:39
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #34306
Misc Info : 6.5"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	276664	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	212974			27.38- 127.38	76.98
13.893	13.865 (1.000)	49	615265			131.81- 231.81	222.39
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1023841	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	167779			0.00- 66.79	16.39
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	946802	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	545862			7.58- 107.58	57.65
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.076)	65	432209	24.2784	24.278	80.00- 120.00	100.00
14.943	14.943 (1.076)	67	214100			3.57- 103.57	49.54
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	995555	25.2433	25.243	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	111941			0.00- 61.29	11.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	673144			18.71- 118.71	67.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	653552	26.6865	26.686	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	839059			76.46- 176.46	128.38
22.796	22.796 (1.096)	176	629920			48.22- 148.22	96.38
42 Freon 113					CAS #: 76-13-1		
9.966	9.939 (0.717)	151	52230	1.85468	3.172	80.00- 120.00	100.00
9.966	9.939 (0.717)	153	31209			13.46- 113.46	59.75
9.966	9.939 (0.717)	101	66515			82.30- 182.30	127.35
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.049	10.050 (0.723)	61	194997	7.69270	13.154	80.00- 120.00	100.00
10.049	10.050 (0.723)	96	110423			9.56- 109.56	56.63
10.049	10.050 (0.723)	98	71418			0.00- 88.43	36.63
45 Acetone					CAS #: 67-64-1		
10.215	10.188 (0.735)	58	18126	2.30733	3.946	80.00- 120.00	100.00
10.215	10.188 (0.735)	43	62510			267.82- 367.82	344.86
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.759)	76	31033	0.64724	1.107	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.128	11.100 (0.801)	49	2470283	154.115	263.54	80.00- 120.00	100.00
11.128	11.100 (0.801)	84	2080909			38.51- 138.51	84.24
11.128	11.100 (0.801)	51	754576			0.00- 83.83	30.55
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.966)	61	20329	0.86868	1.485	80.00- 120.00	100.00
13.423	13.423 (0.966)	96	15413			27.58- 127.58	75.82
13.450	13.423 (0.968)	98	8854			0.15- 100.15	43.55
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.004)	83	3626283	90.2448	154.32	80.00- 120.00	100.00
13.948	13.948 (1.004)	85	2362688			14.81- 114.81	65.15
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.307	14.280 (1.030)	97	66875	1.50467	2.573	80.00- 120.00	100.00
14.280	14.280 (1.028)	99	40529			14.28- 114.28	60.60
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.556	14.529 (1.048)	119	2303028	53.9432	92.243	80.00- 120.00	100.00
14.556	14.529 (1.048)	117	2434811			56.24- 156.24	105.72

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
91 Benzene					CAS #: 71-43-2		
14.971	14.943 (0.958)	78	31638	0.61813	1.057	80.00- 120.00	100.00
14.971	14.943 (0.958)	77	6800			0.00- 73.50	21.49
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	57124	2.28760	3.912	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	18577			0.00- 84.23	32.52
101 Trichloroethene					CAS #: 79-01-6		
16.105	16.077 (1.030)	95	3082026	140.590	240.41	80.00- 120.00	100.00
16.105	16.077 (1.030)	130	2809128			39.09- 139.09	91.15
16.105	16.077 (1.030)	97	1959082			12.68- 112.68	63.56
107 Bromodichloromethane					CAS #: 75-27-4		
17.017	16.989 (1.088)	83	39759	1.01341	1.733	80.00- 120.00	100.00
16.989	16.989 (1.087)	85	25541			14.80- 114.80	64.24
114 Toluene					CAS #: 108-88-3		
18.344	18.317 (1.173)	91	67182	1.23098	2.105	80.00- 120.00	100.00
18.344	18.317 (1.173)	92	37826			10.34- 110.34	56.30
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.118	19.091 (0.919)	97	277635	12.8732	22.013	80.00- 120.00	100.00
19.118	19.091 (0.919)	99	175532			14.03- 114.03	63.22
19.118	19.091 (0.919)	83	235720			36.02- 136.02	84.90
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	275603	9.53663	16.308	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	196749			18.51- 118.51	71.39
19.284	19.284 (0.927)	131	191957			15.29- 115.29	69.65
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	37843	0.67674	1.157	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	24680			16.09- 116.09	65.22
24.731	24.731 (1.189)	111	15914			0.00- 90.13	42.05

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022117.d
Lab Smp Id: 0802200-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	276664	-13.04
97 1,4-Difluorobenze	1251468	750881	1752055	1023841	-18.19
126 Chlorobenzene-d5	1150991	690595	1611387	946802	-17.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022117.d
Report Date: 25-Feb-2008 15:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802200-05A
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.5"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.278	97.11	70-130
$ 113 Toluene-d8	25.000	25.243	100.97	70-130
$ 137 Bromofluorobenzene	25.000	26.686	106.75	70-130

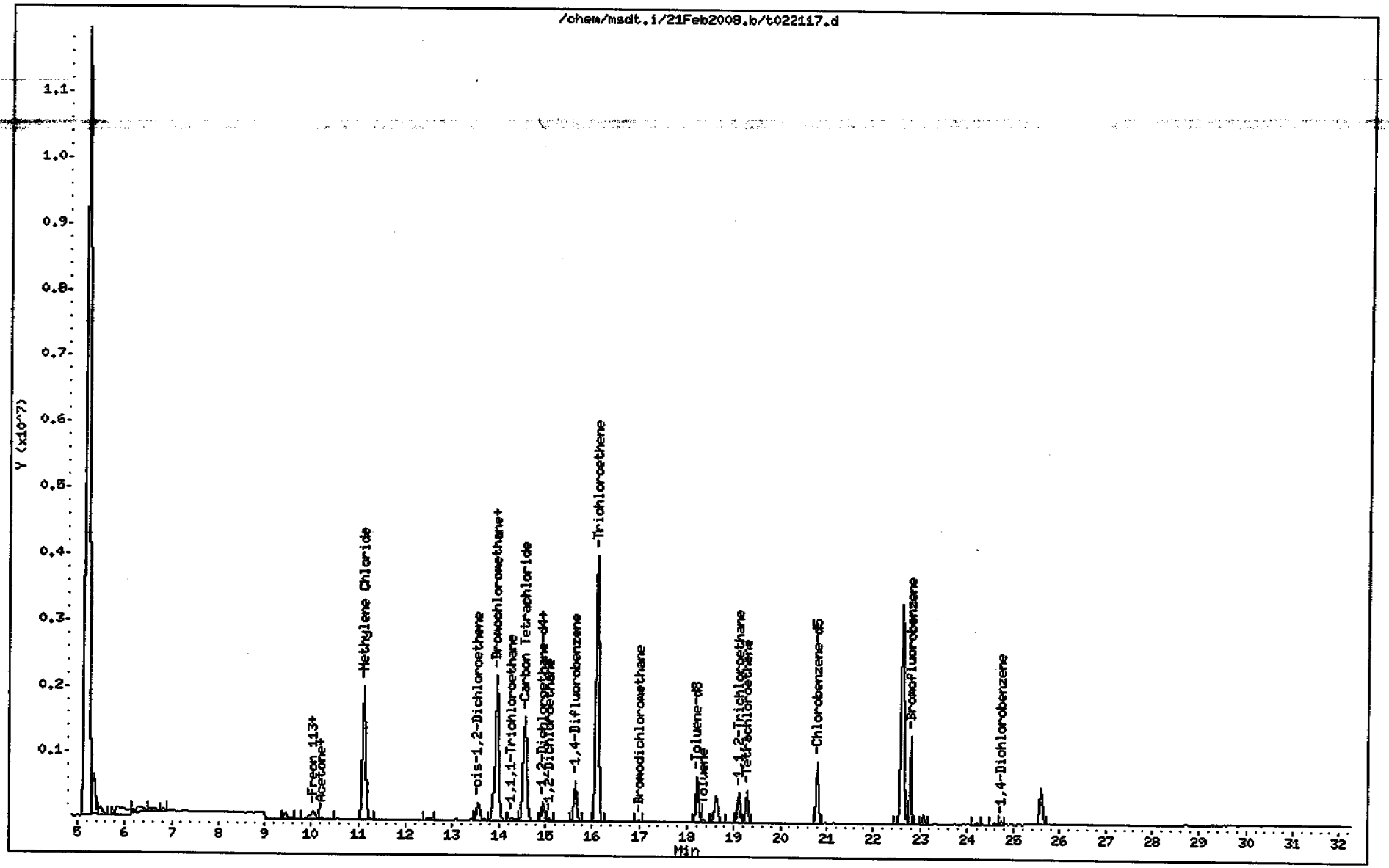
Data File: /chem/msdt.i/21Feb2008.b/t022117.d
Date : 21-FEB-2008 22:39
Client ID:
Sample Info: 200mL #34306

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0134



Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

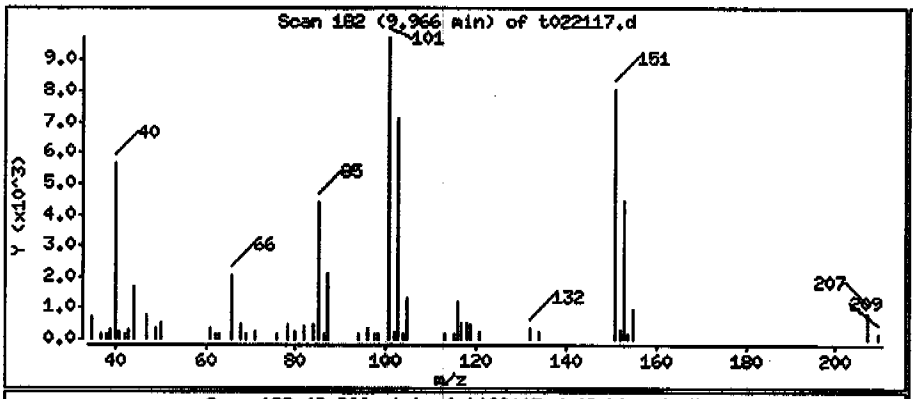
Operator: ACT

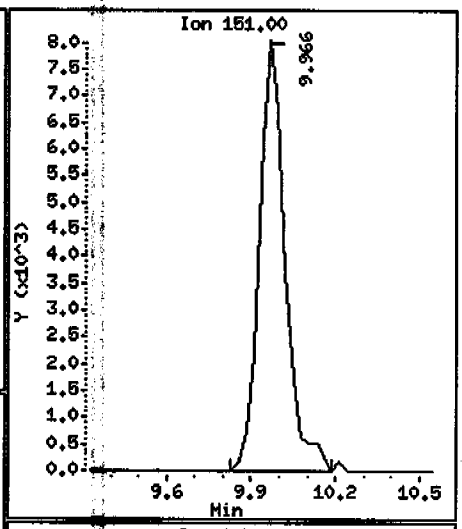
Column phase: RTx-624

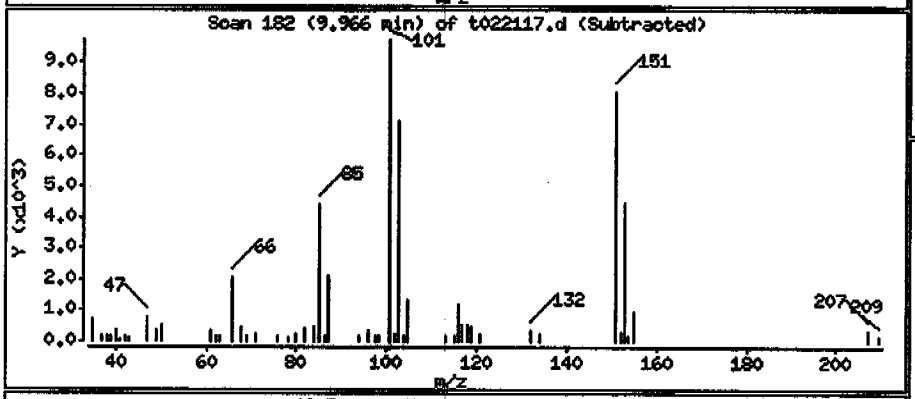
Column diameter: 0.53

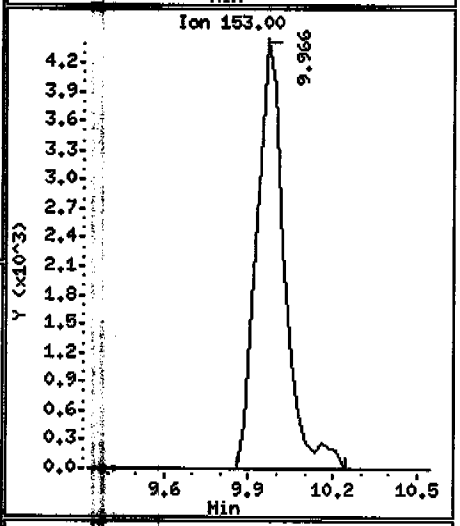
42 Freon 113

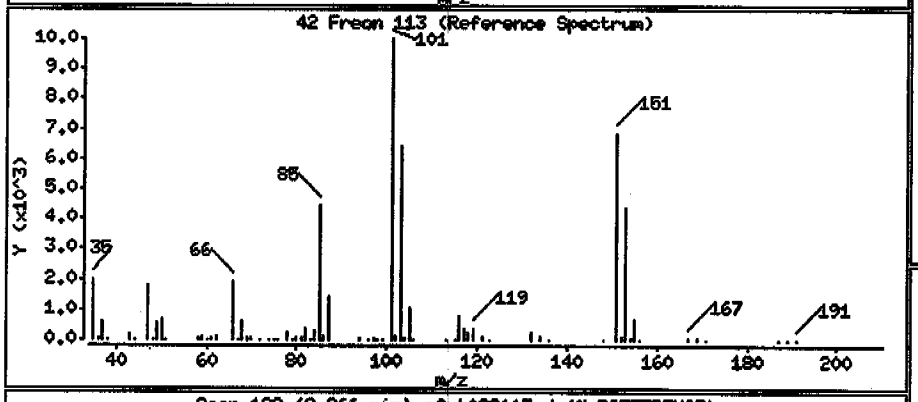
Concentration: 3.172 PPBV

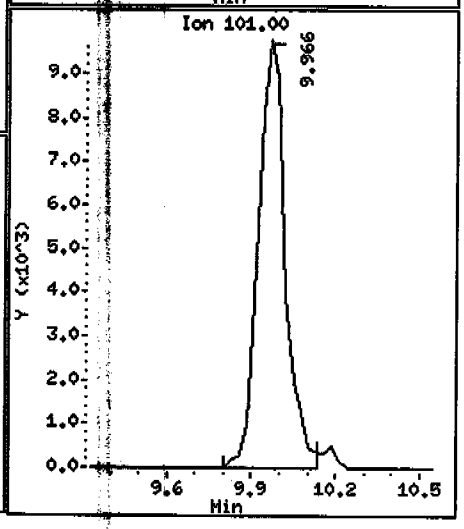


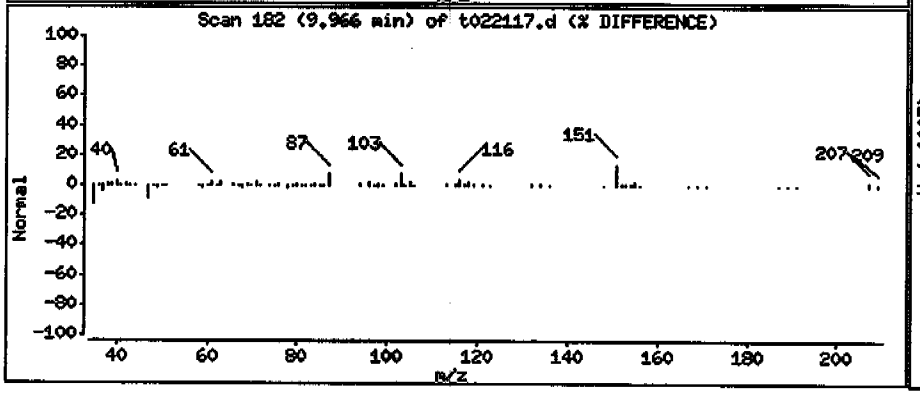












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

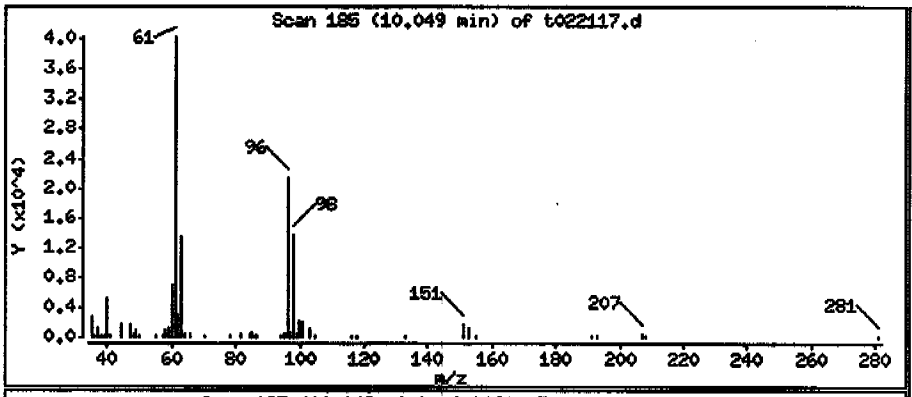
Operator: ACT

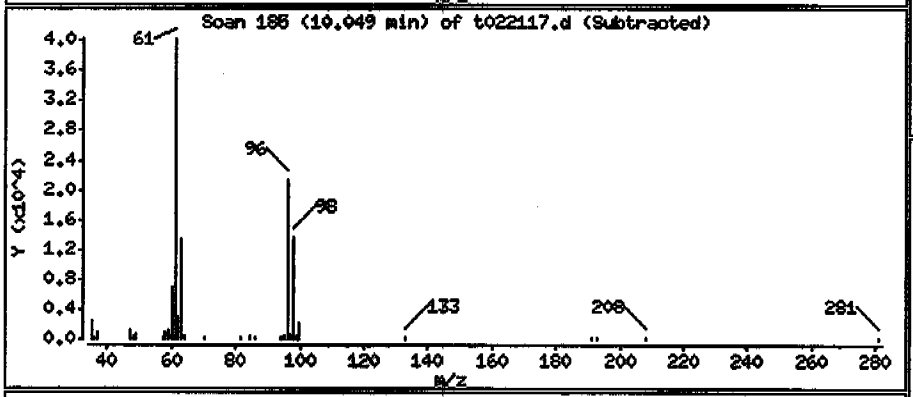
Column phase: RTx-624

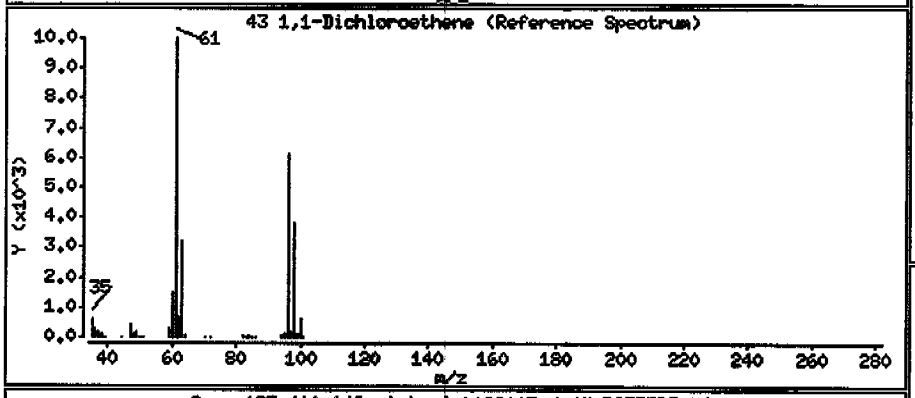
Column diameter: 0.53

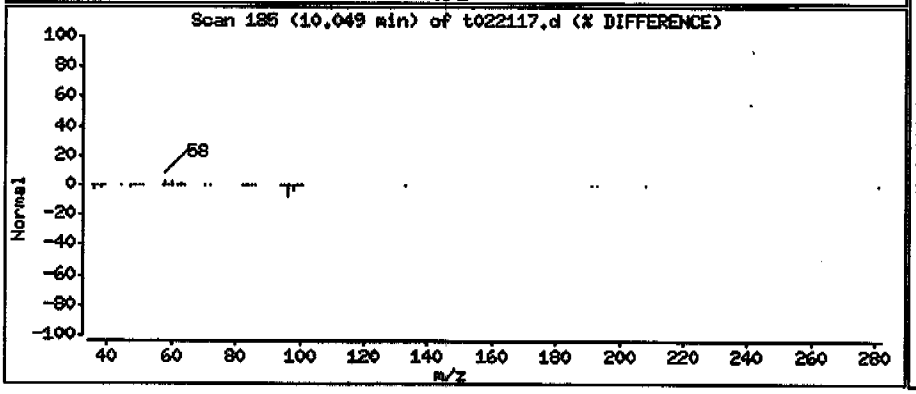
43 1,1-Dichloroethene

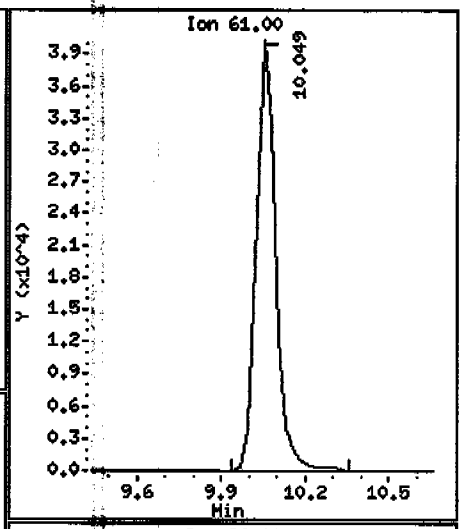
Concentration: 13.154 PPBV

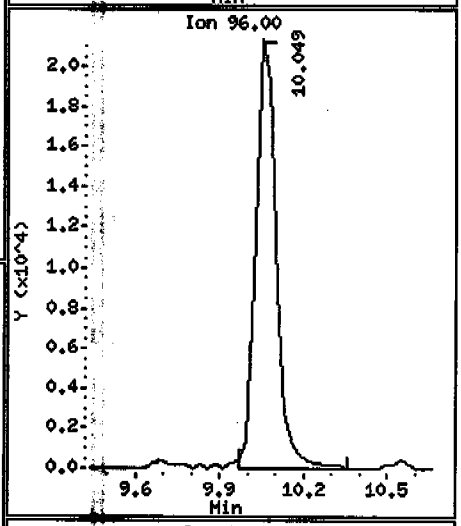


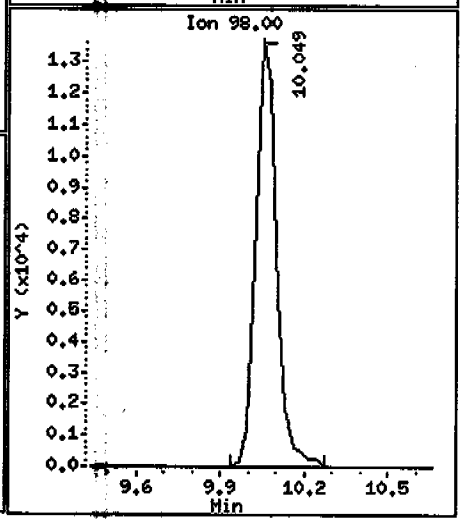












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

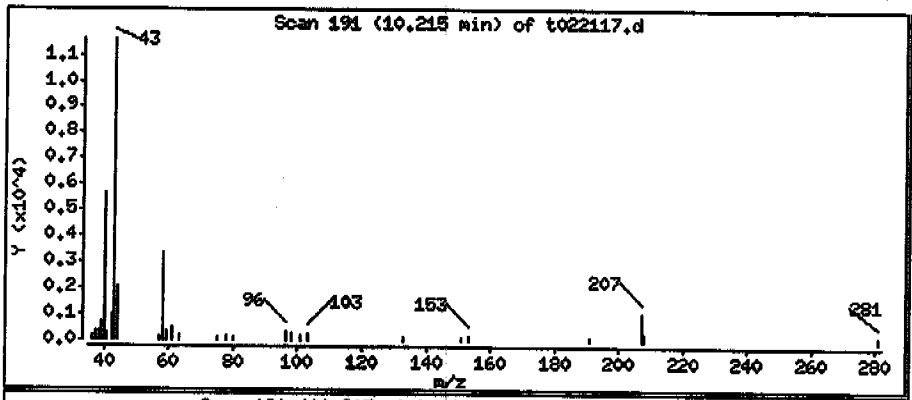
Operator: ACT

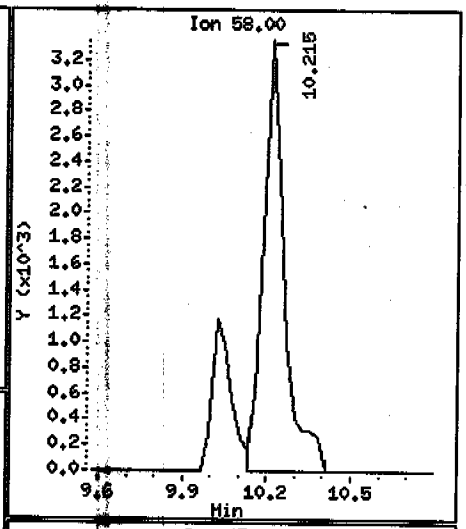
Column phase: RTx-624

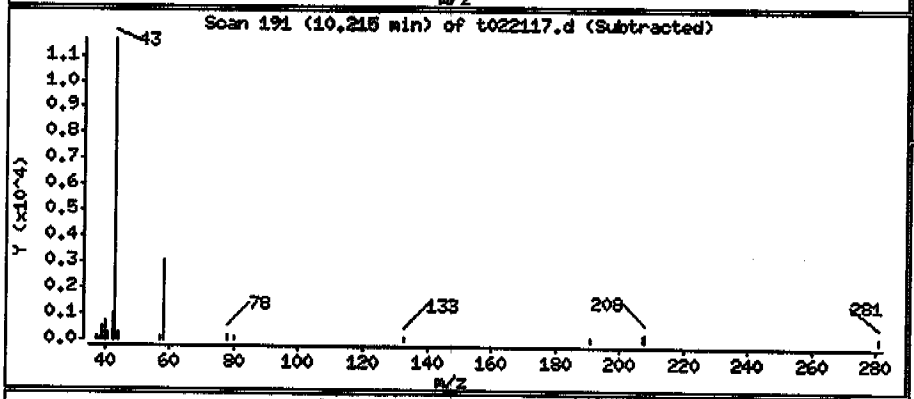
Column diameter: 0.53

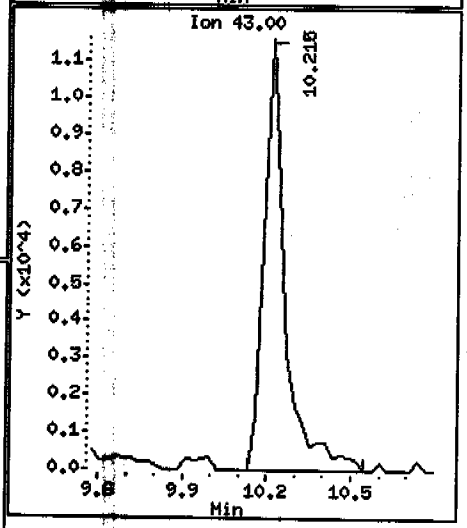
45 Acetone

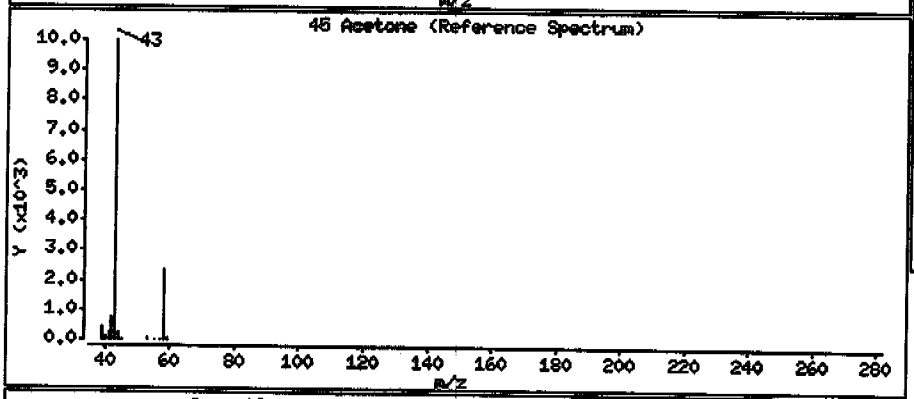
Concentration: 3.946 PPBV

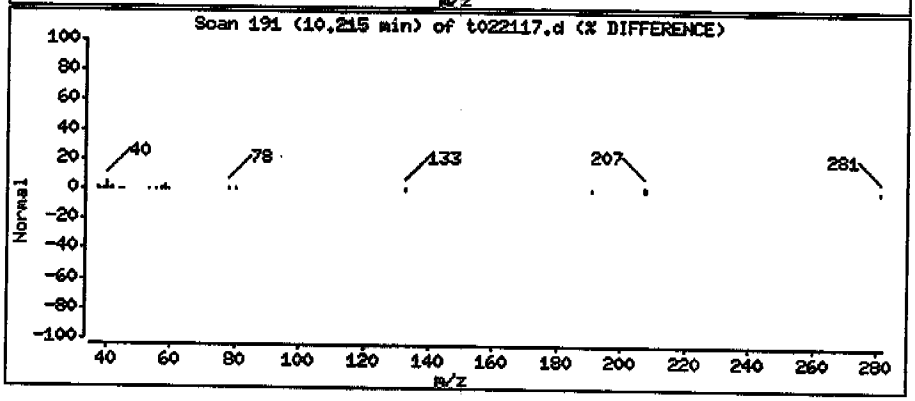












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Sample Info: 200mL #34306

Instrument: msdt.i

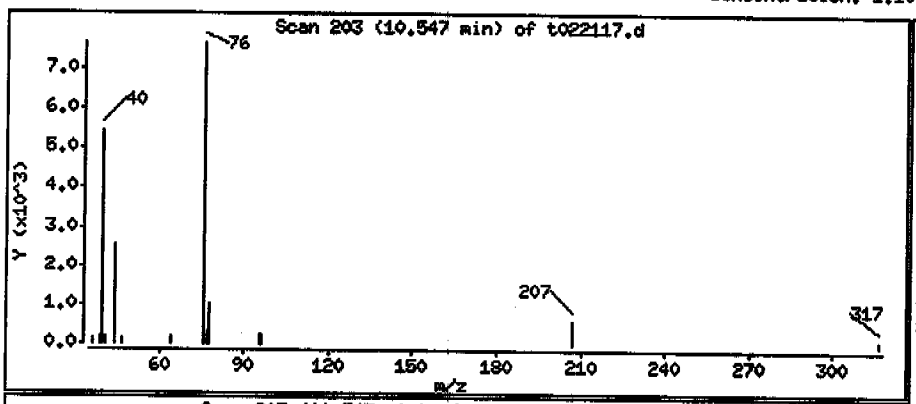
Operator: ACT

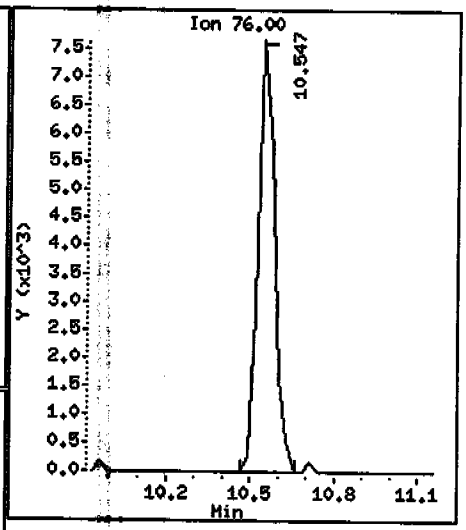
Column phase: RTx-624

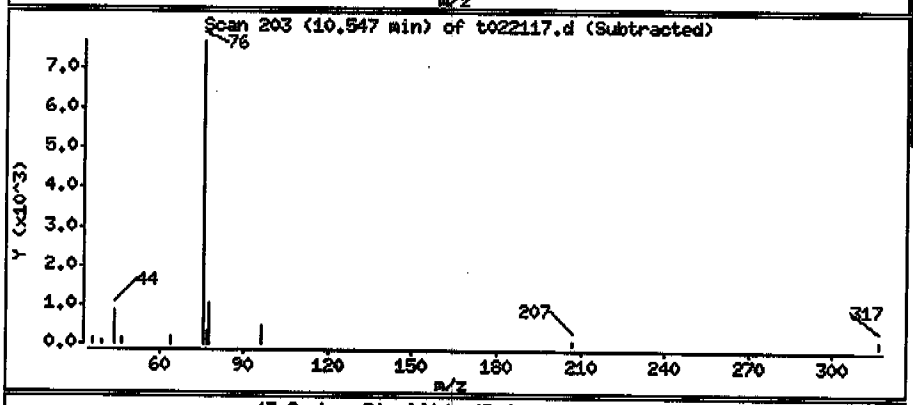
Column diameter: 0.53

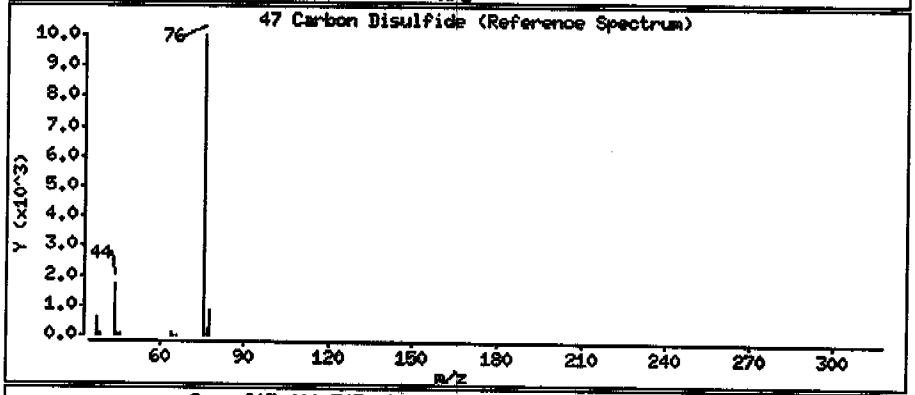
47 Carbon Disulfide

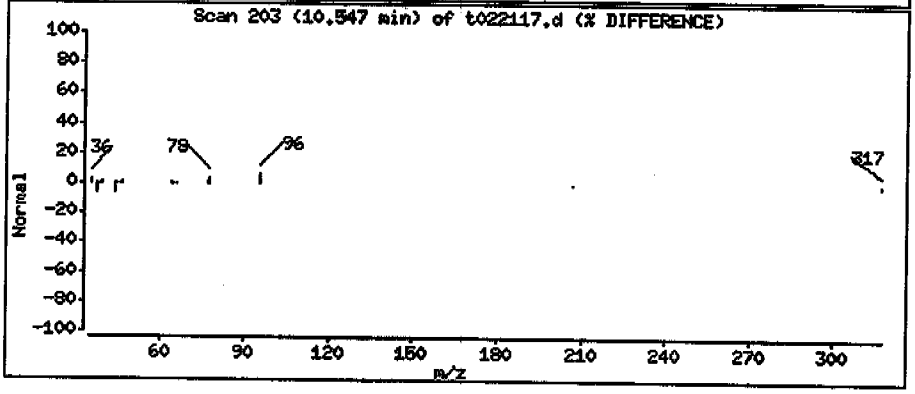
Concentration: 1.107 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

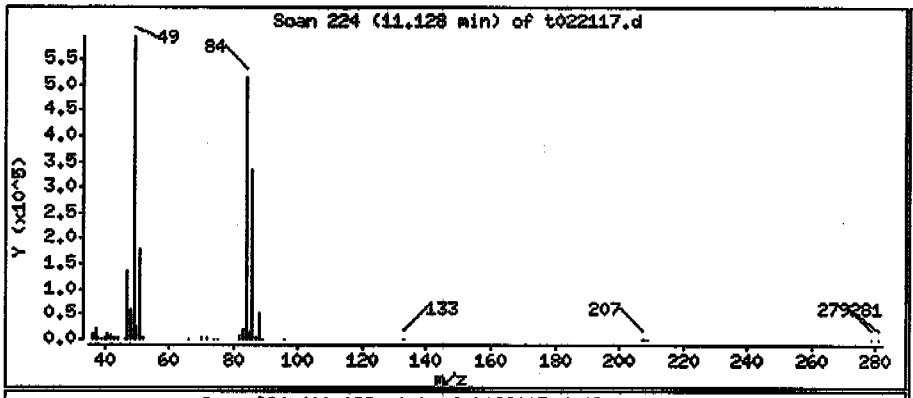
Operator: ACT

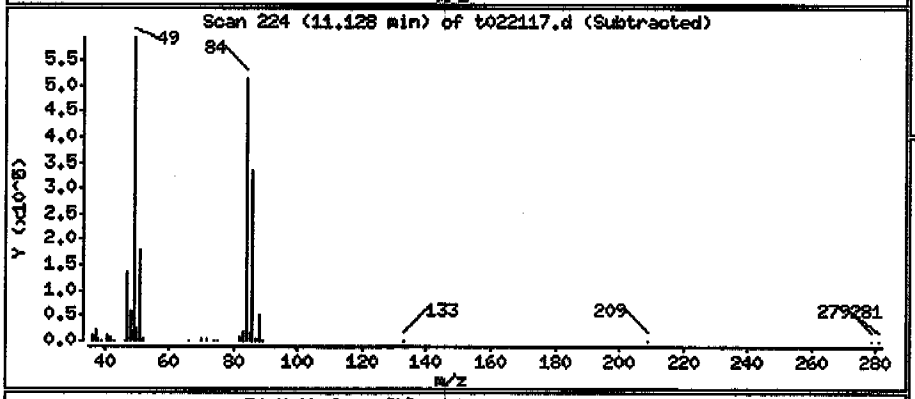
Column phase: RTx-624

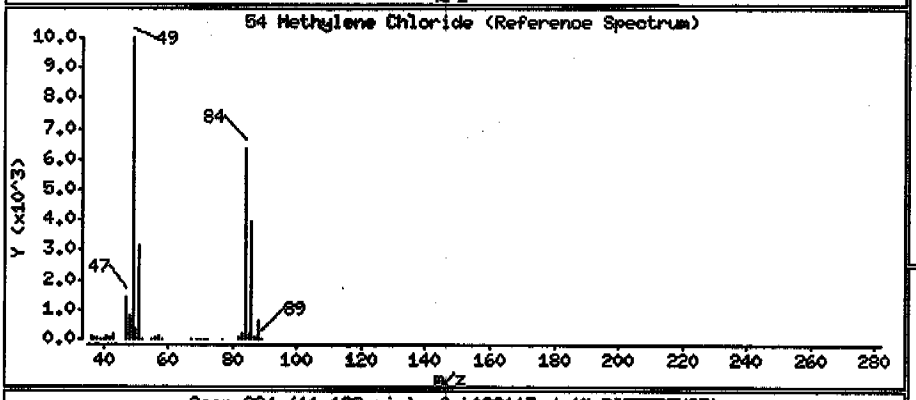
Column diameter: 0.53

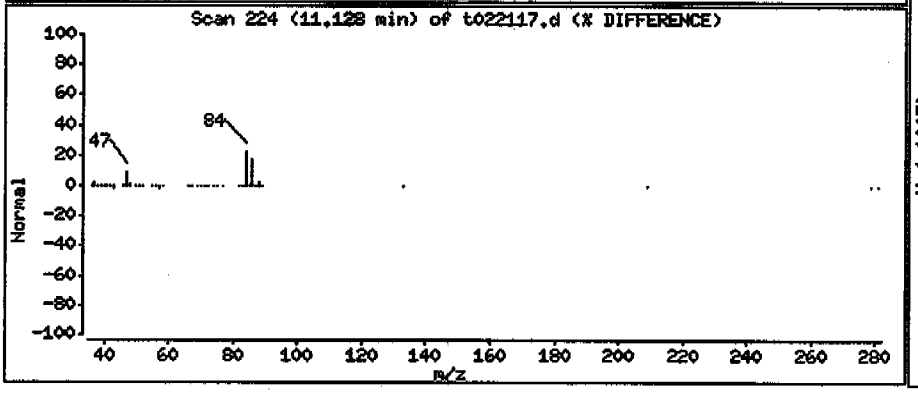
54 Methylene Chloride

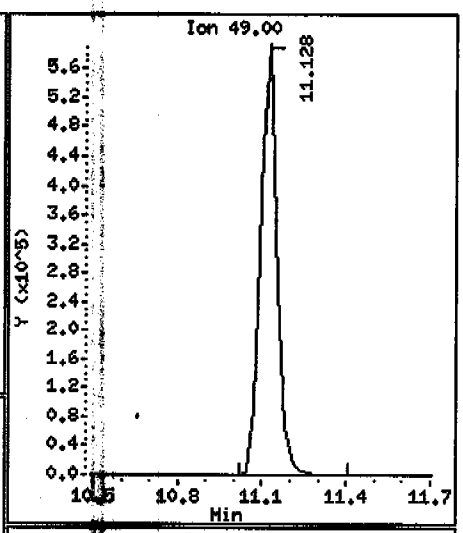
Concentration: 263.54 PPBV

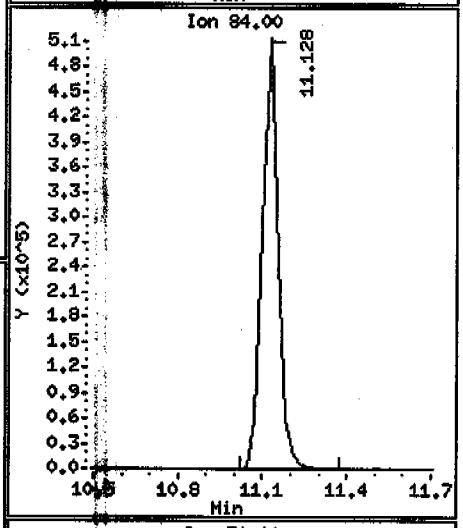


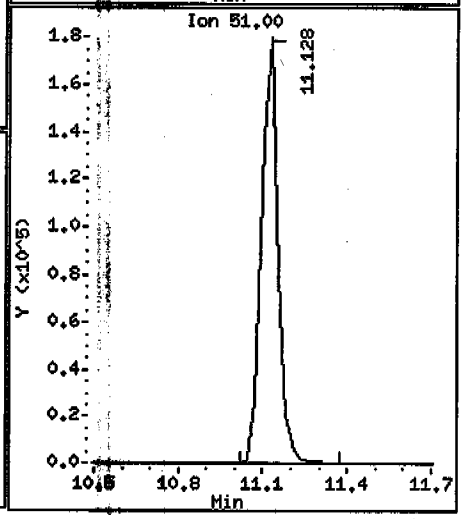












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

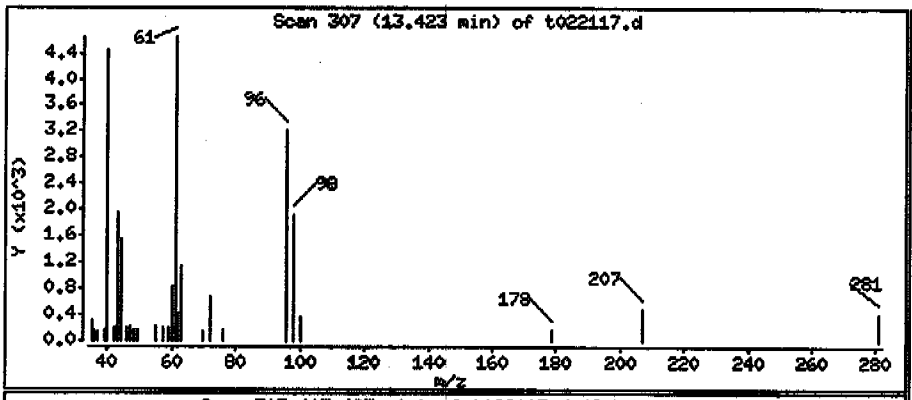
Operator: ACT

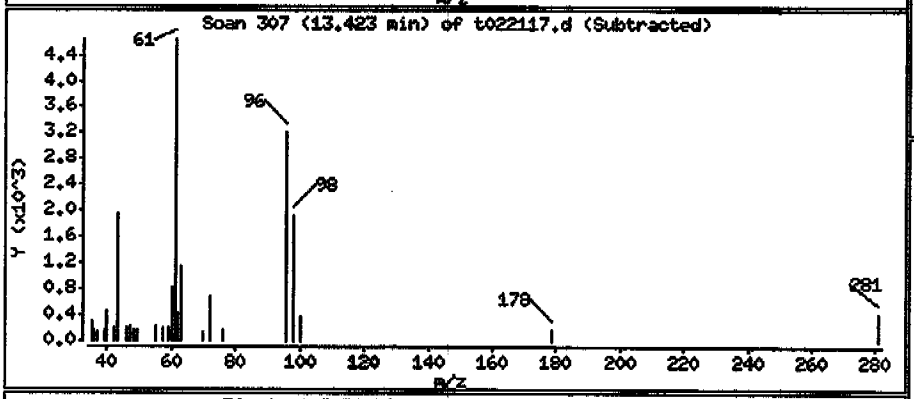
Column phase: RTx-624

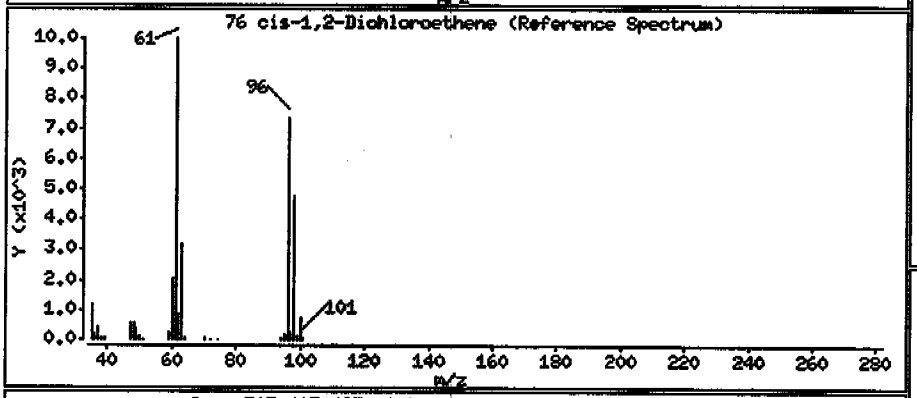
Column diameter: 0.53

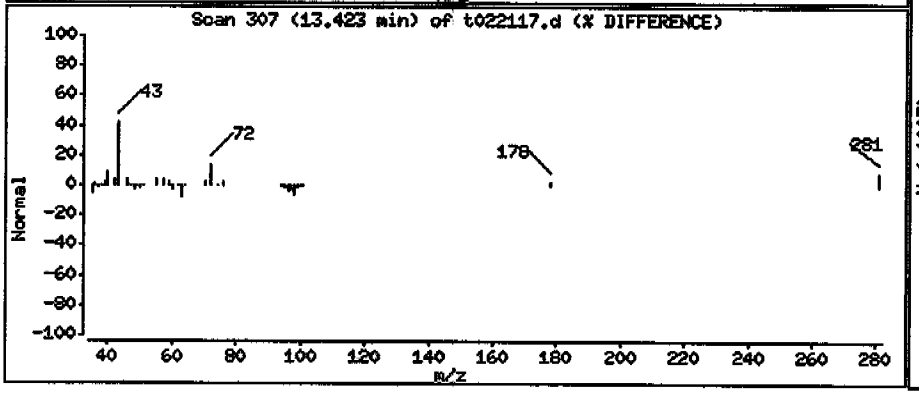
76 cis-1,2-Dichloroethene

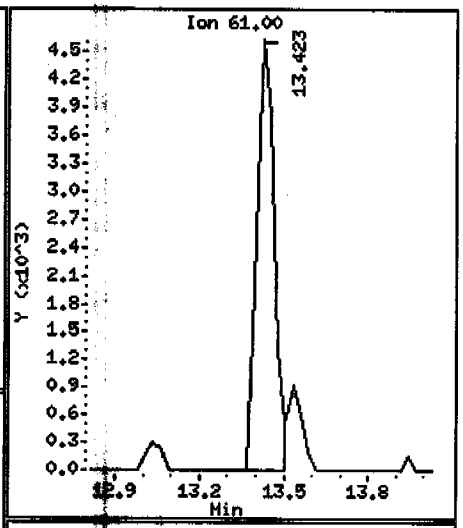
Concentration: 1.488 PPBV

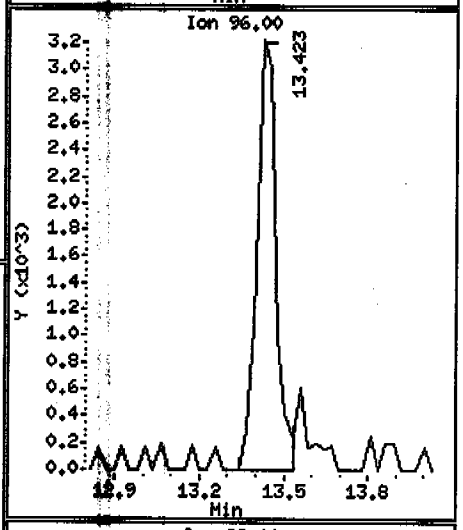


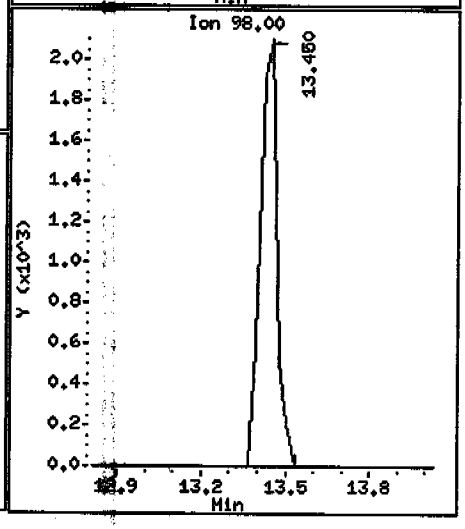












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

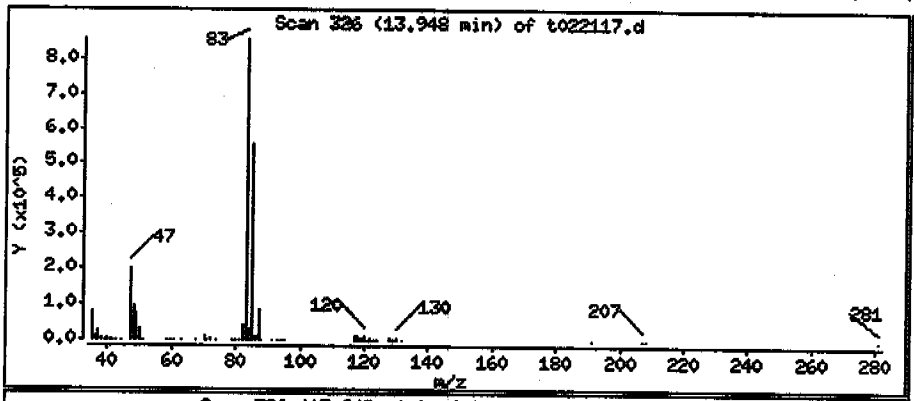
Operator: ACT

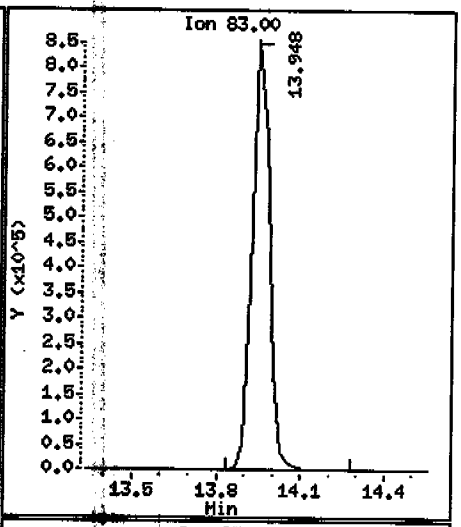
Column phase: RTx-624

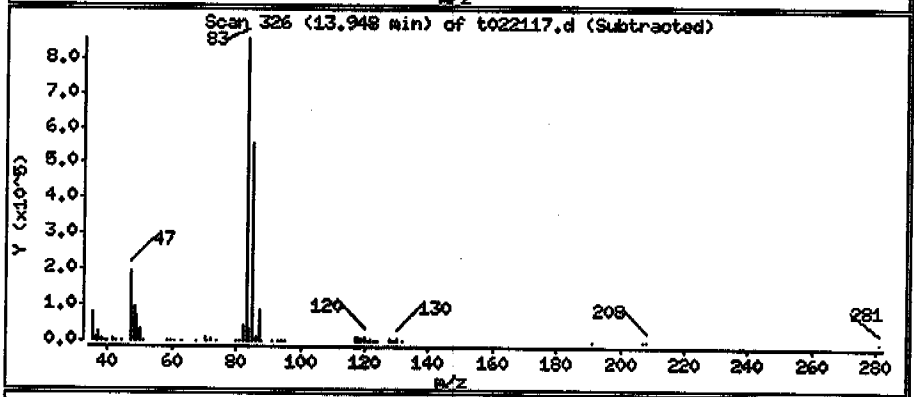
Column diameter: 0.53

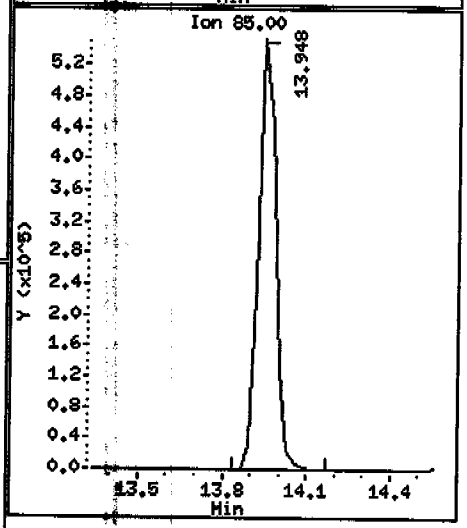
82 Chloroform

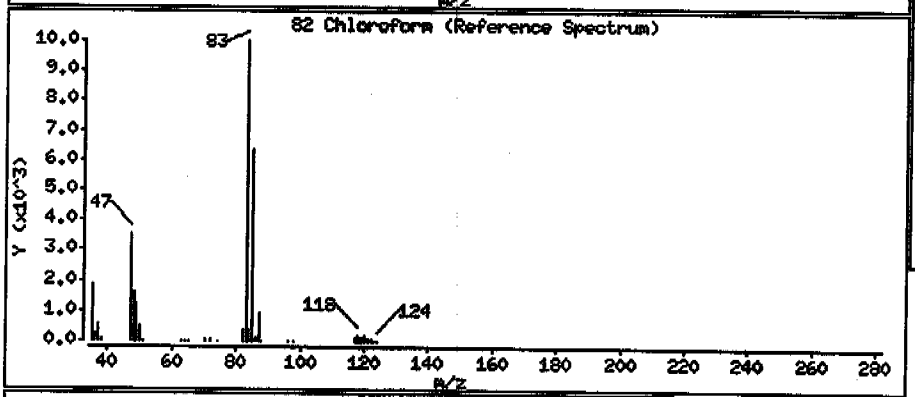
Concentration: 154.32 PPBV

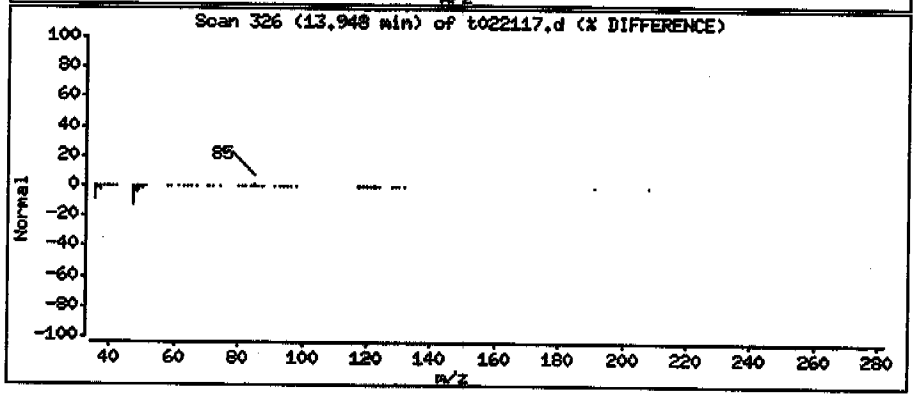












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

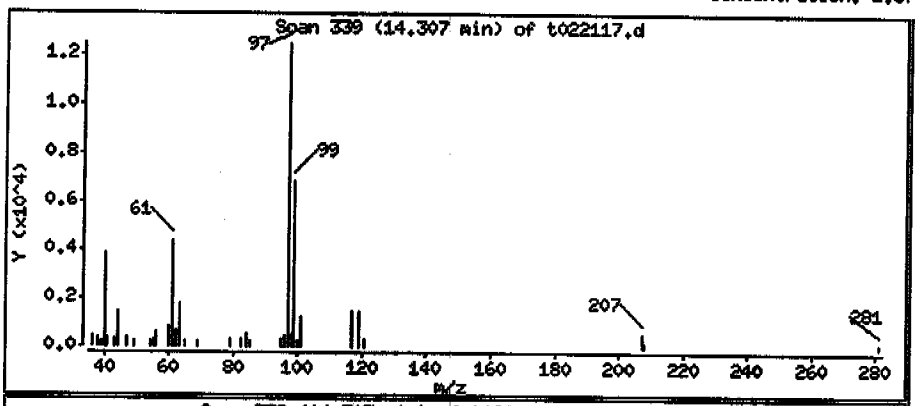
Operator: ACT

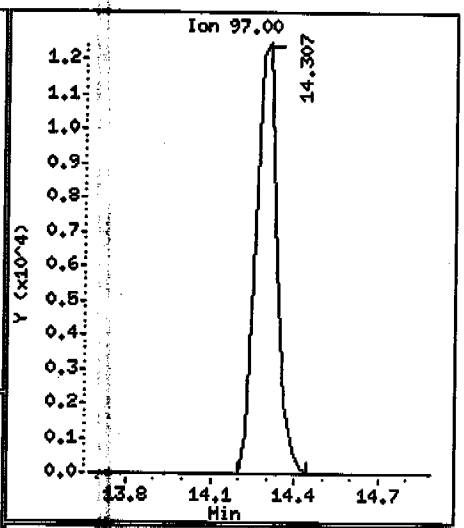
Column phase: RTx-624

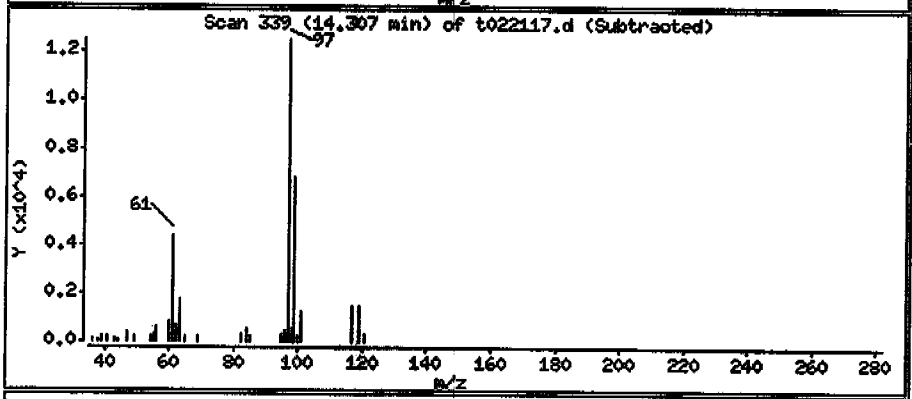
Column diameter: 0.53

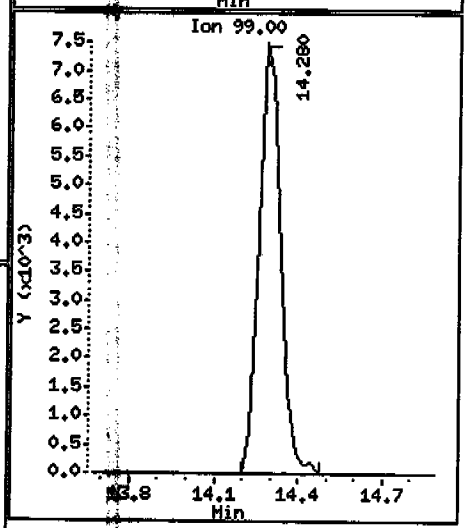
83 1,1,1-Trichloroethane

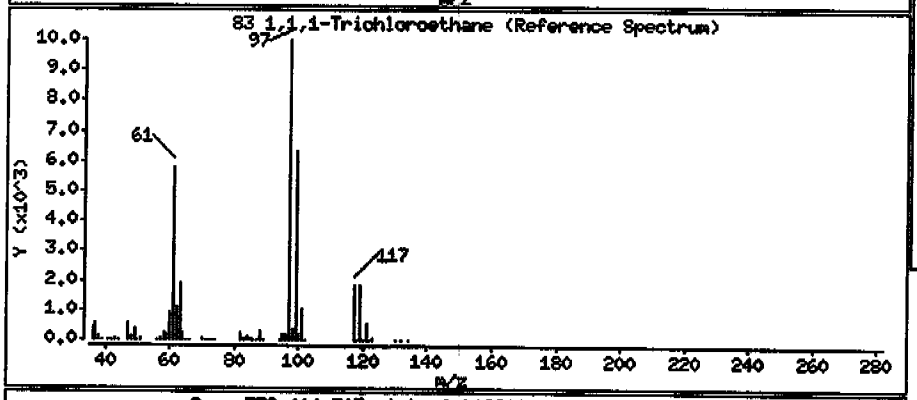
Concentration: 2.573 PPBV

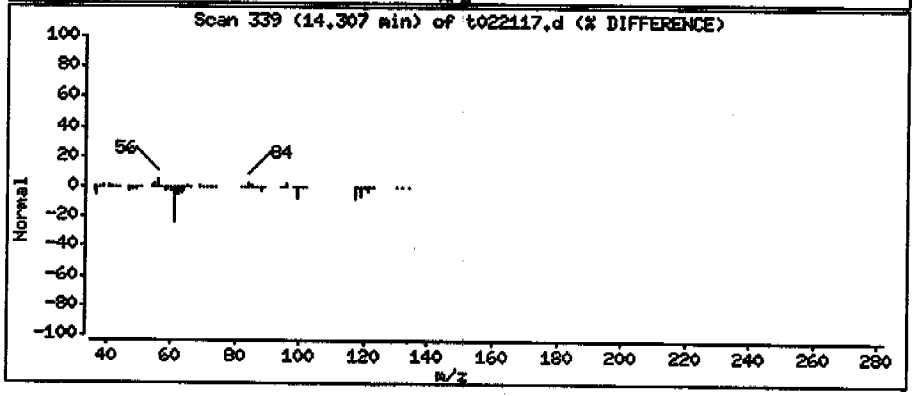












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

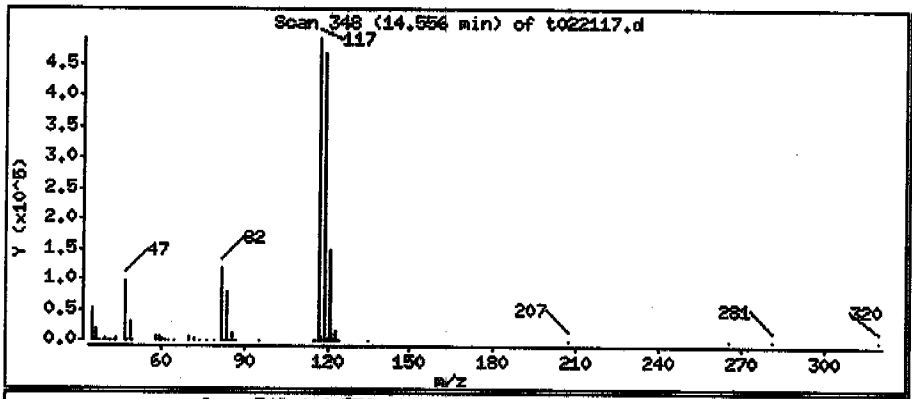
Operator: ACT

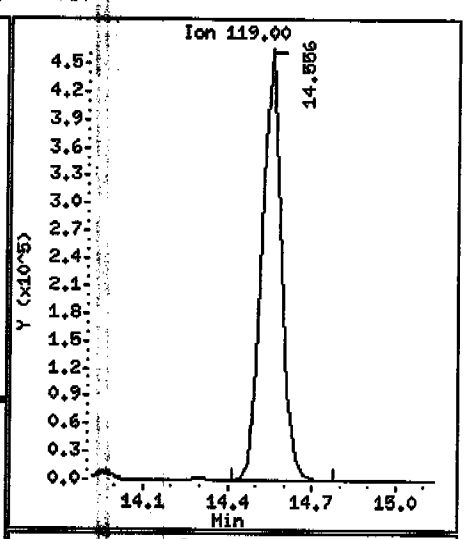
Column phase: RTx-624

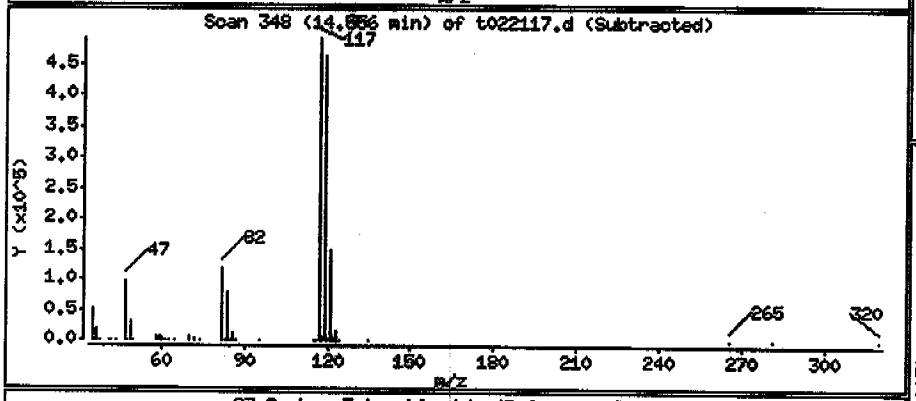
Column diameter: 0.53

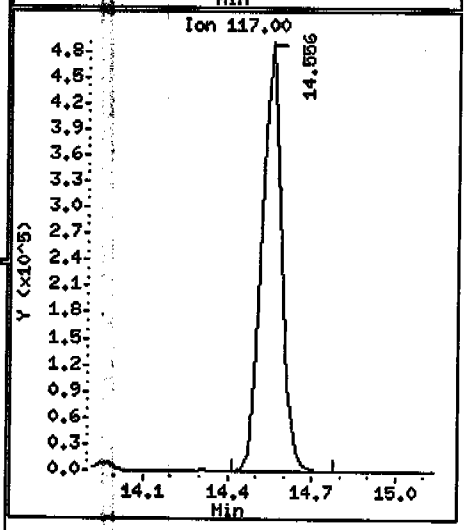
87 Carbon Tetrachloride

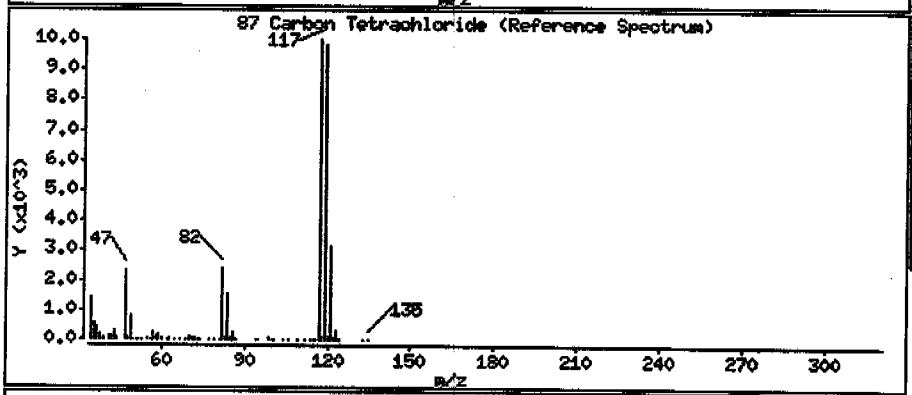
Concentration: 92.243 PPBV

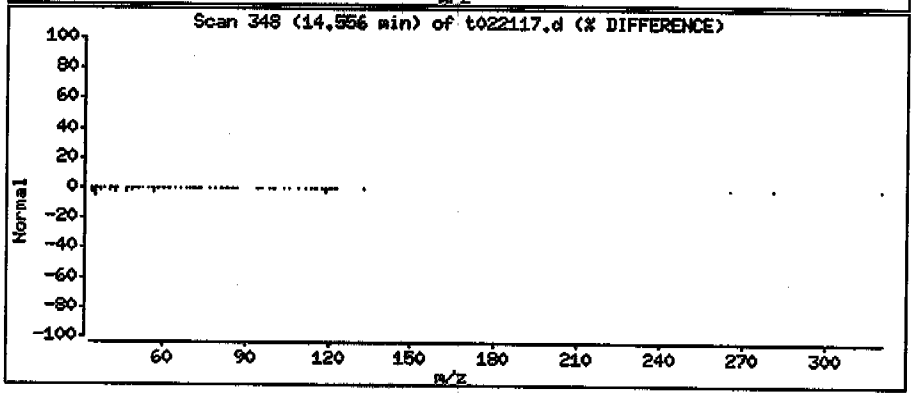












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

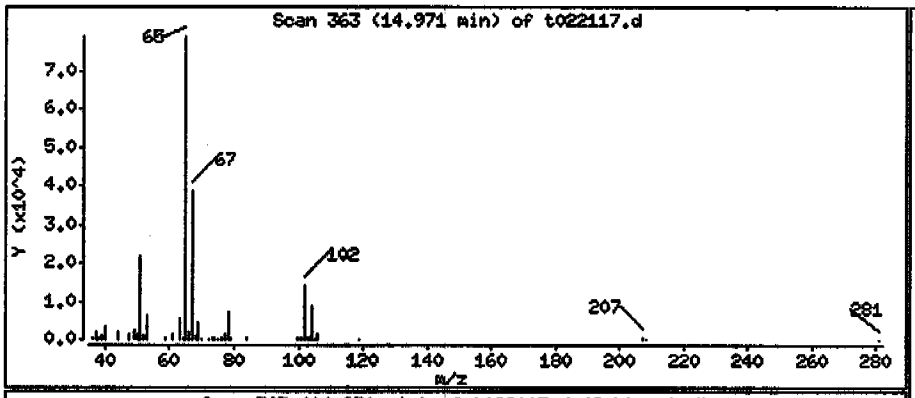
Operator: ACT

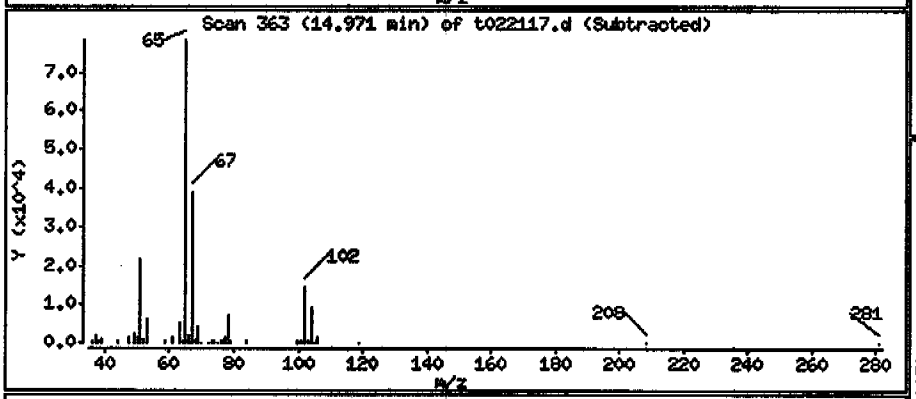
Column phase: RTx-624

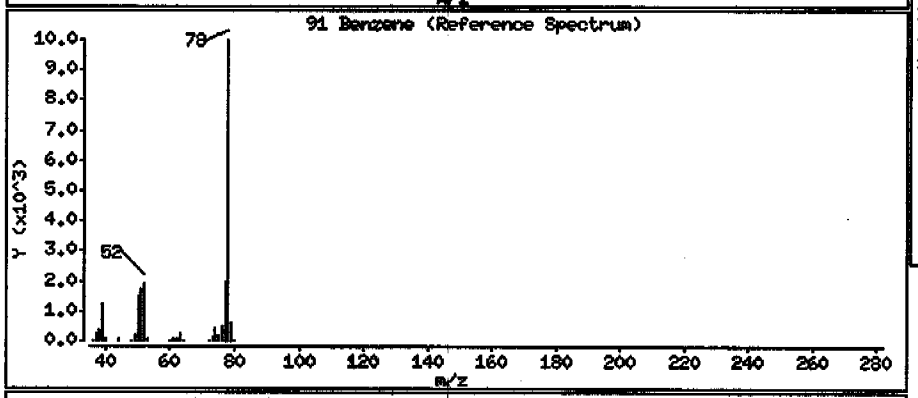
Column diameter: 0.53

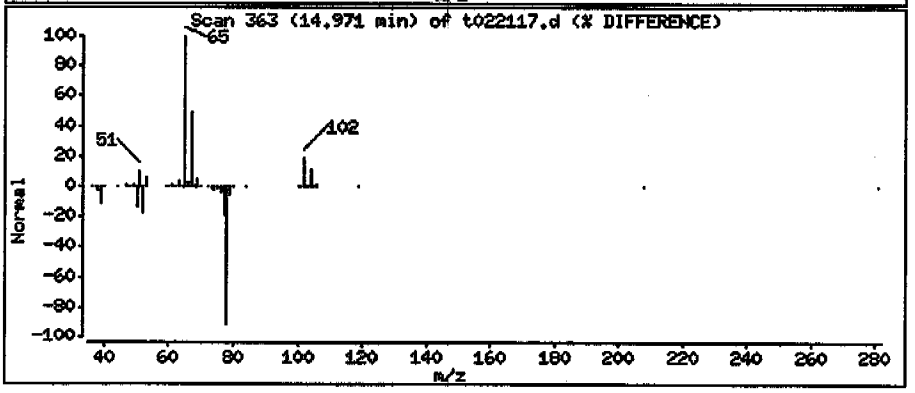
91 Benzene

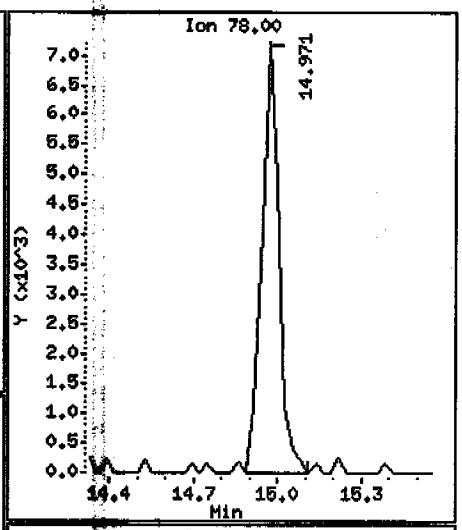
Concentration: 1.057 PPBV

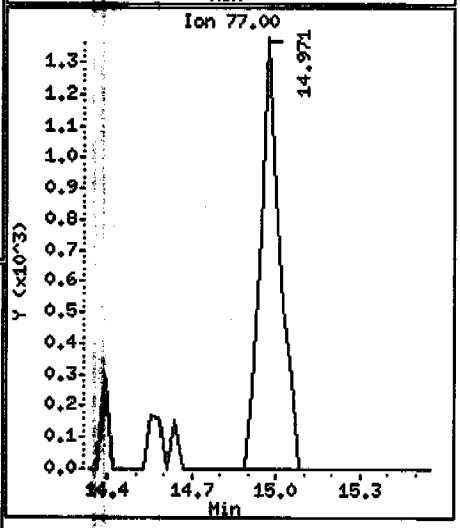












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

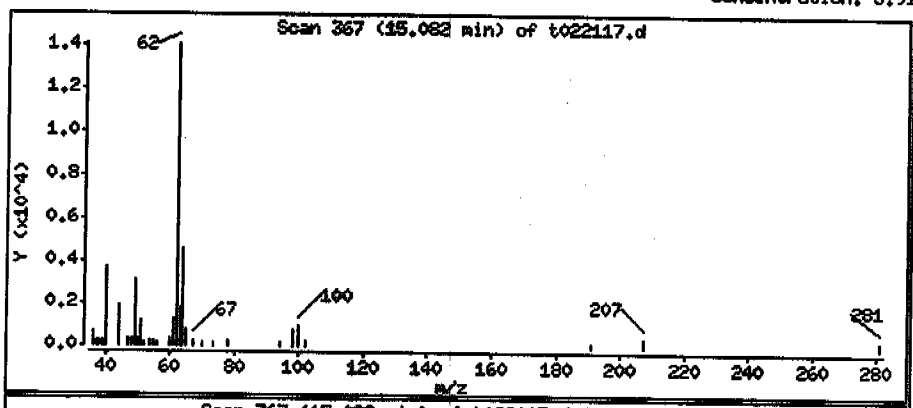
Operator: ACT

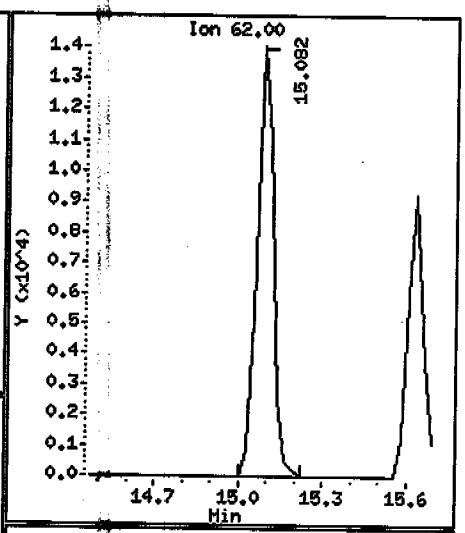
Column phase: RTx-624

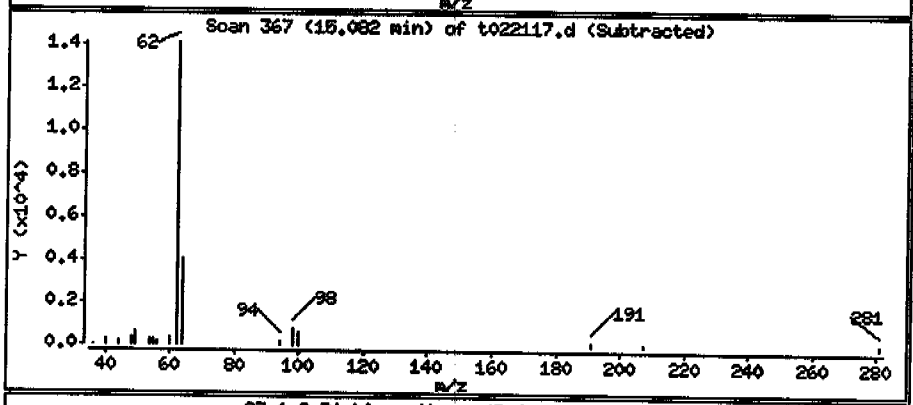
Column diameter: 0.53

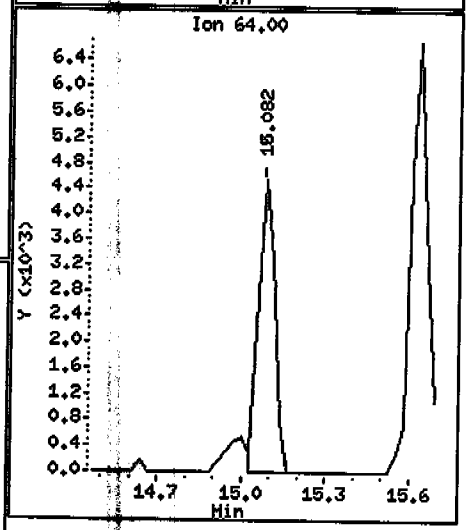
93 1,2-Dichloroethane

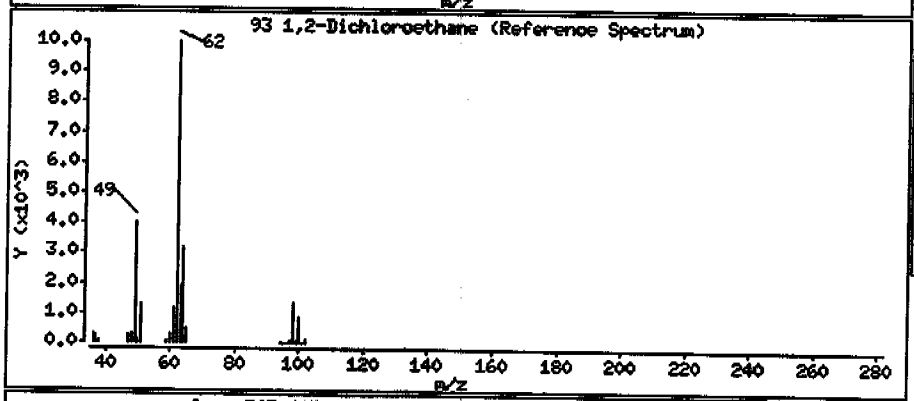
Concentration: 3.912 PPBV

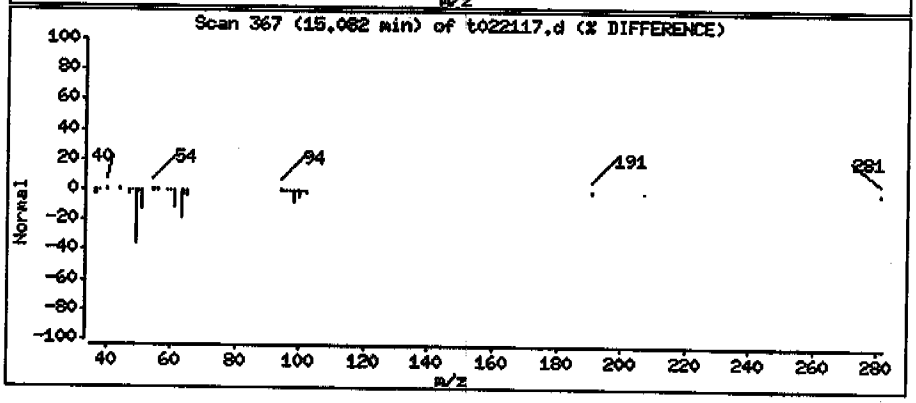












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

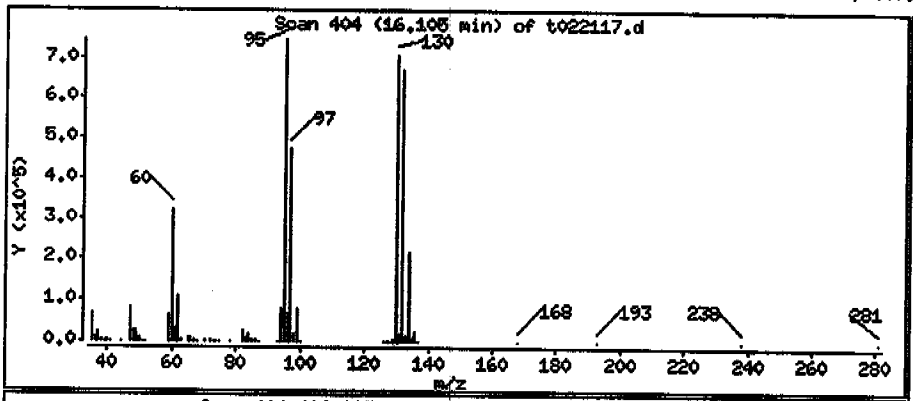
Operator: ACT

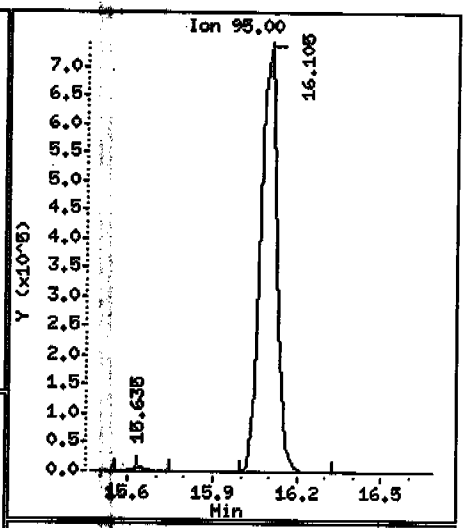
Column phase: RTx-624

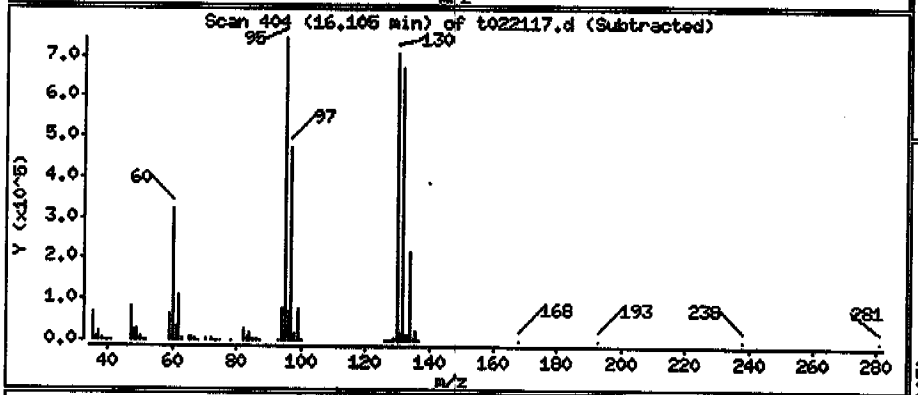
Column diameter: 0.53

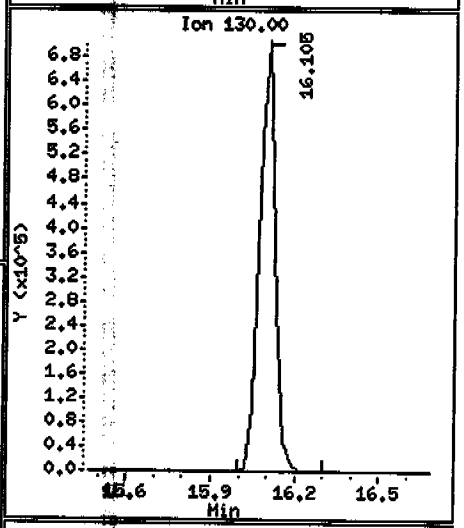
101 Trichloroethene

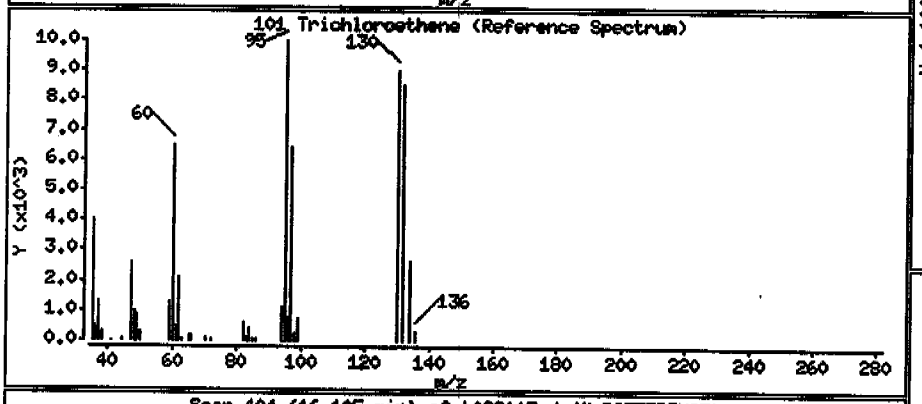
Concentration: 240.41 PPBV

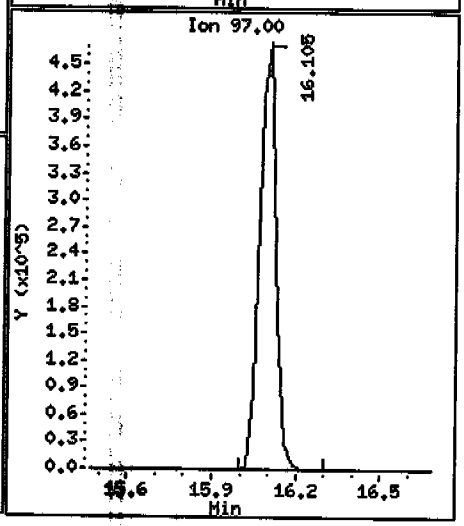


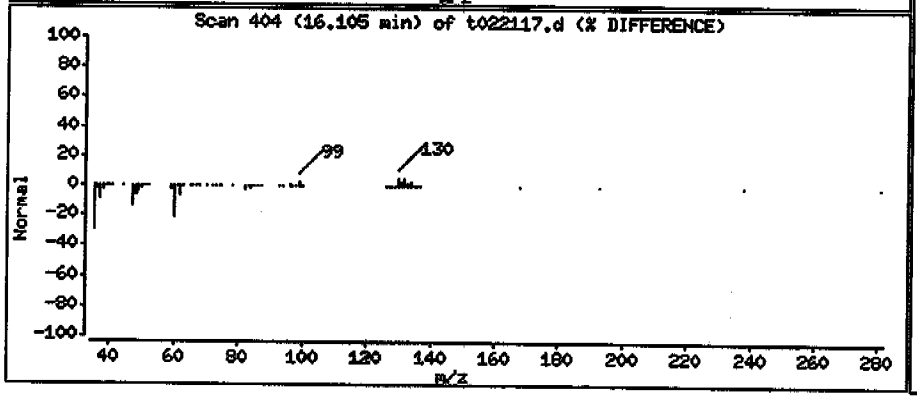












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

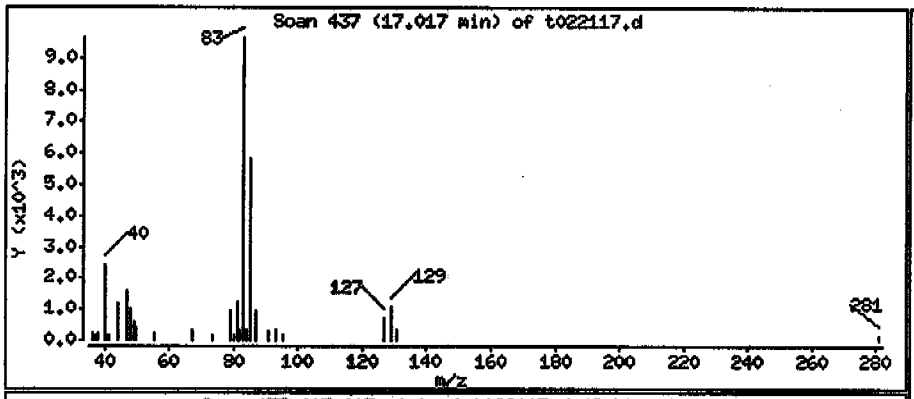
Operator: ACT

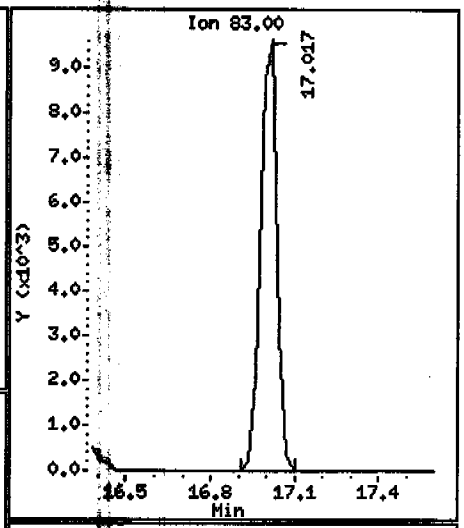
Column phase: RTx-624

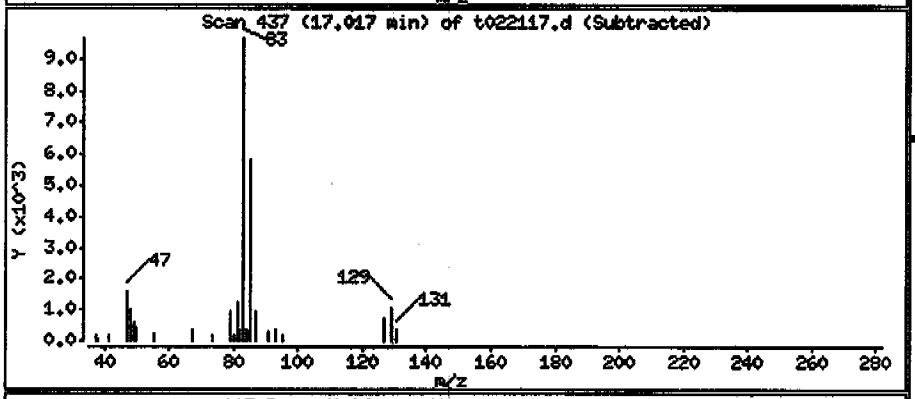
Column diameter: 0.53

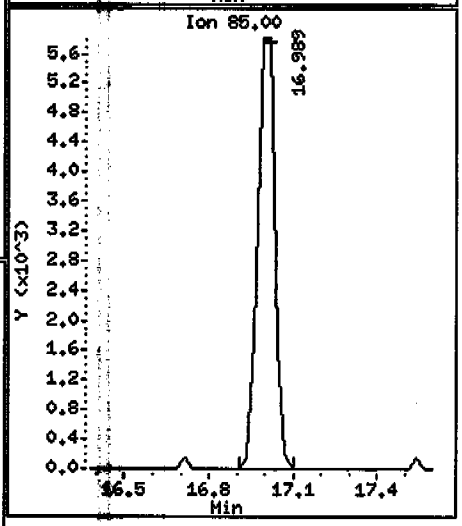
107 Bromodichloromethane

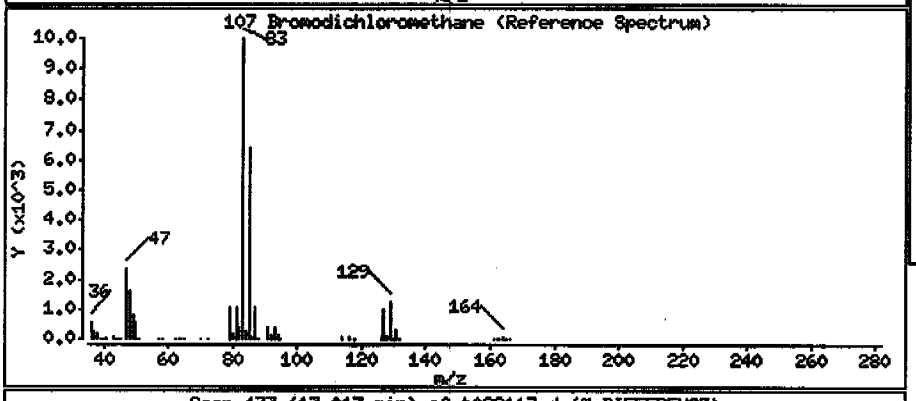
Concentration: 1.733 PPBV

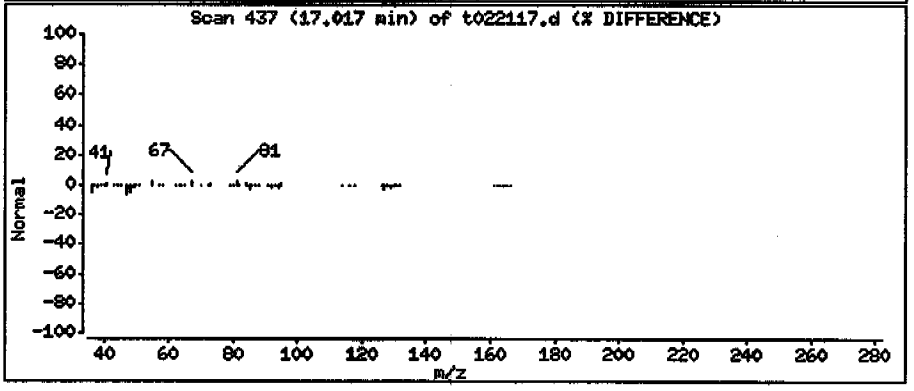












Data File: /ohem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

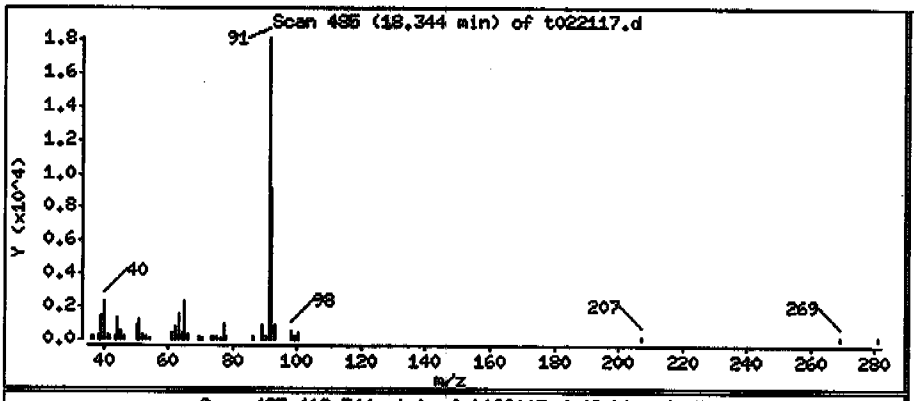
Operator: ACT

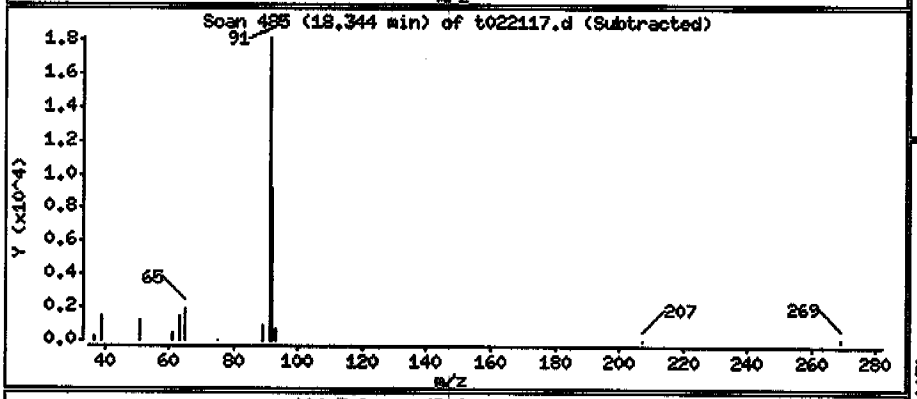
Column phase: RTx-624

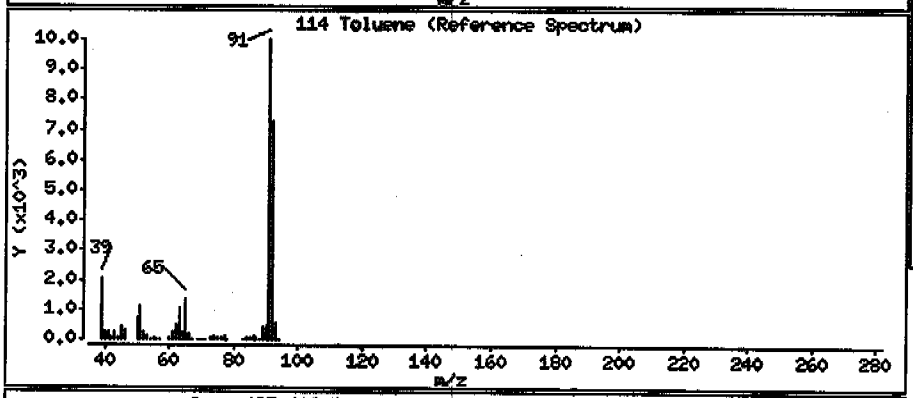
Column diameter: 0.53

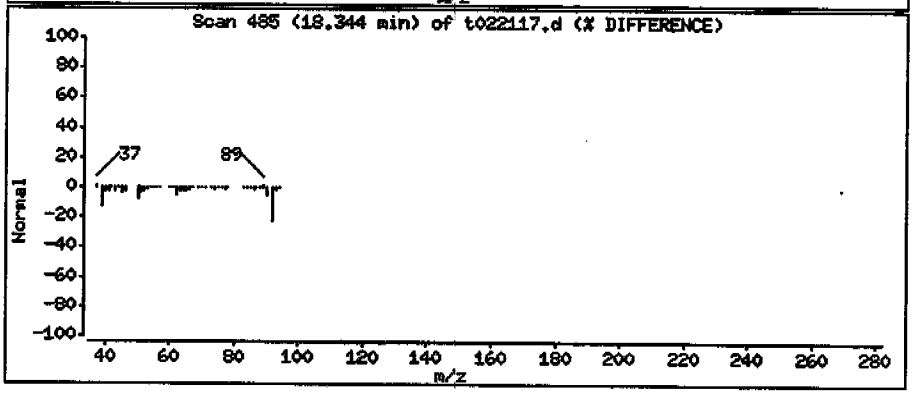
114 Toluene

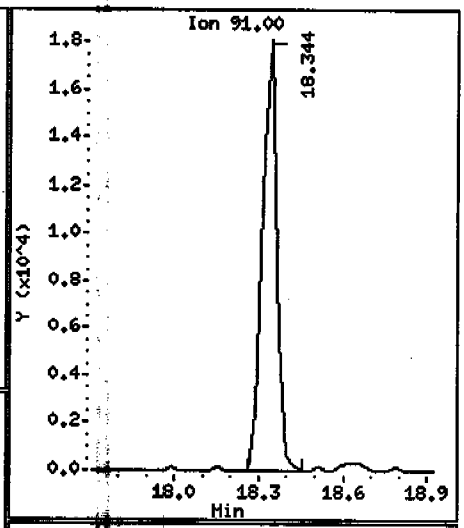
Concentration: 2.105 PPBV

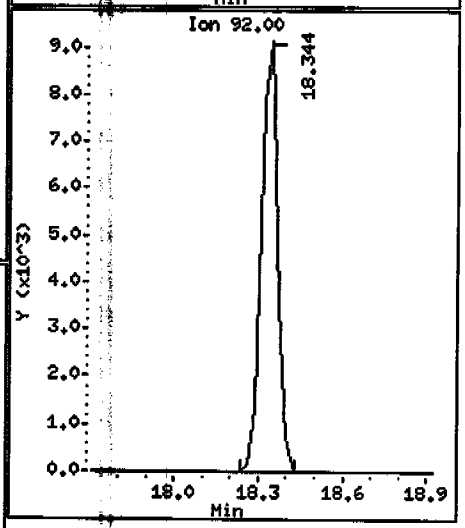












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

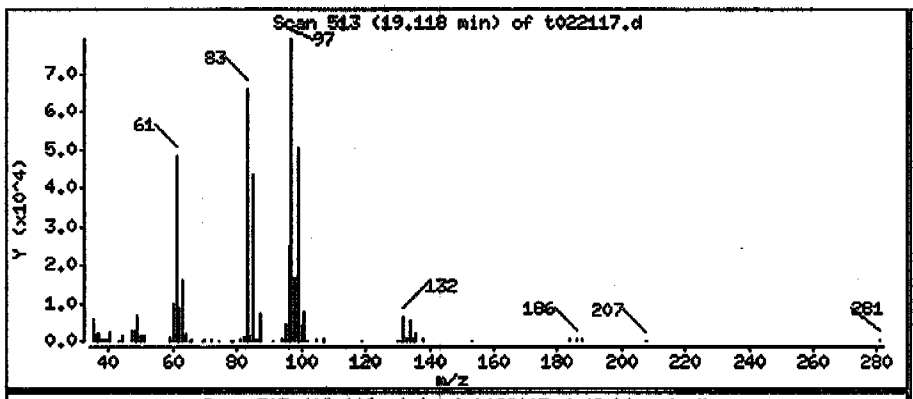
Operator: ACT

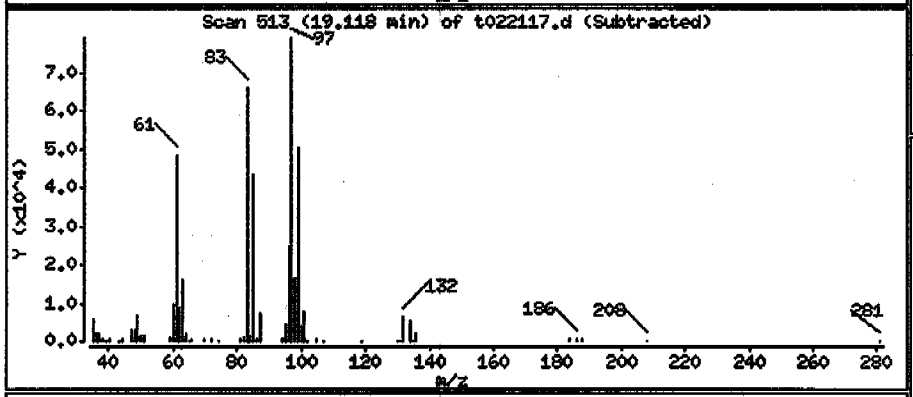
Column phase: RTx-624

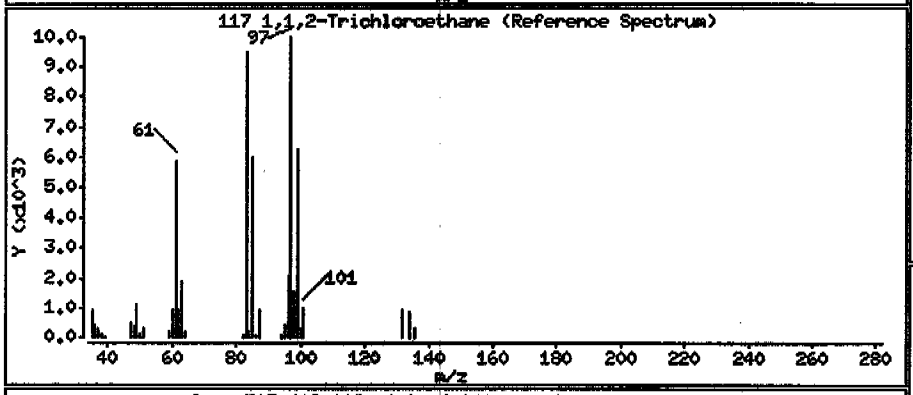
Column diameter: 0.53

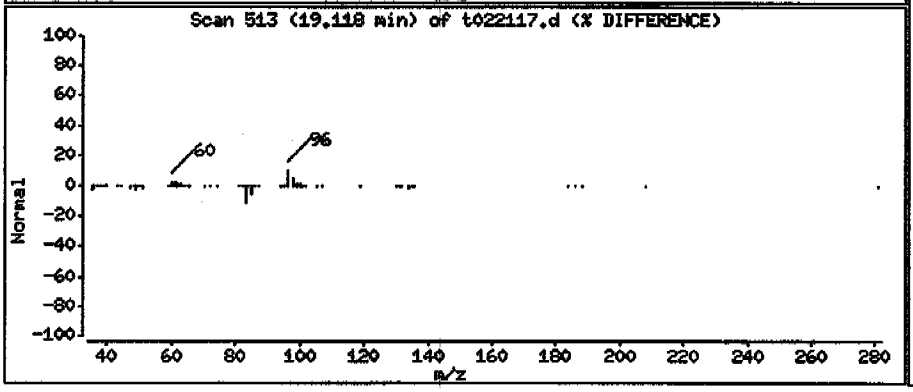
117 1,1,2-Trichloroethane

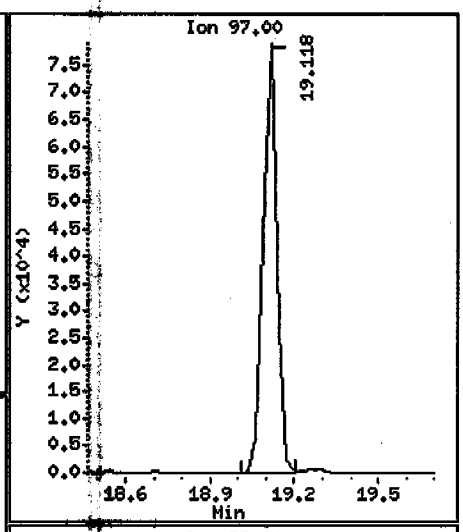
Concentration: 22.013 PPBV

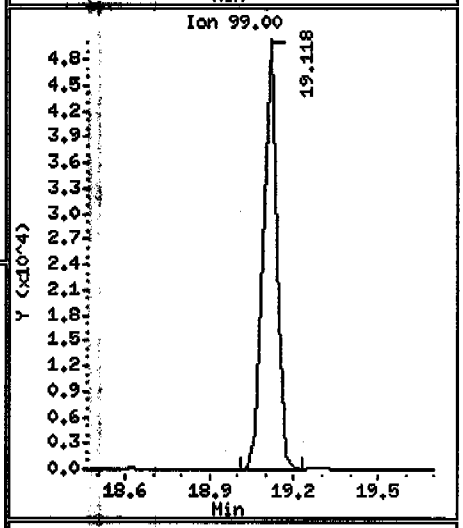


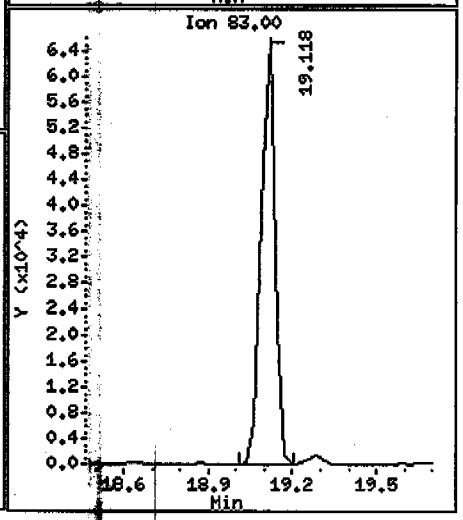












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

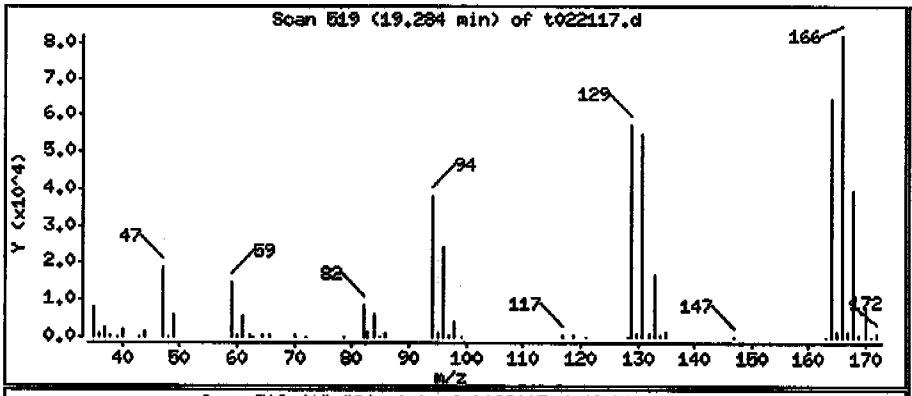
Operator: ACT

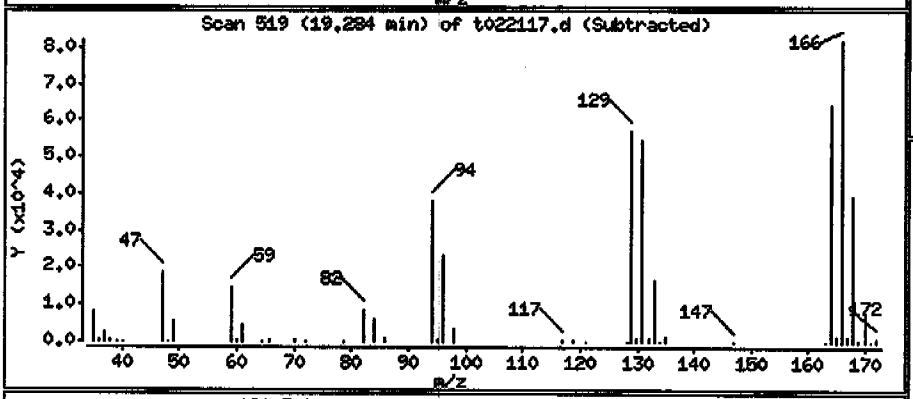
Column phase: RTx-624

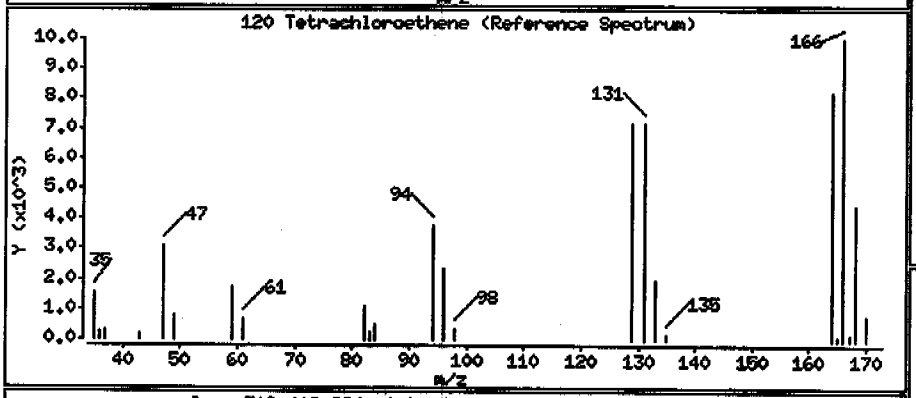
Column diameter: 0.53

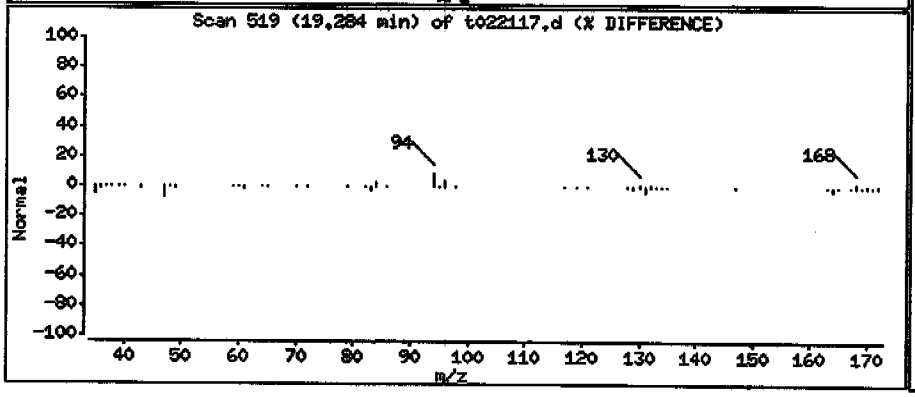
120 Tetrachloroethene

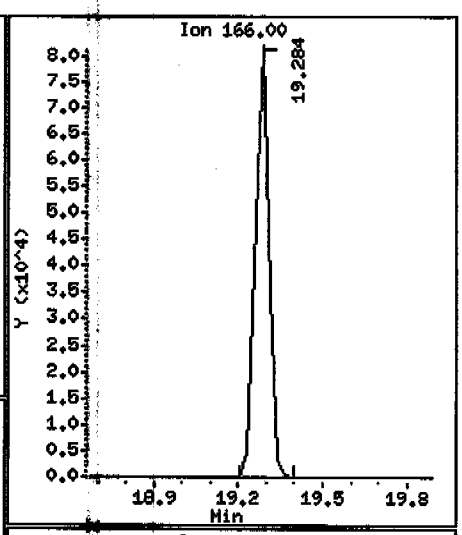
Concentration: 16.308 PPBV

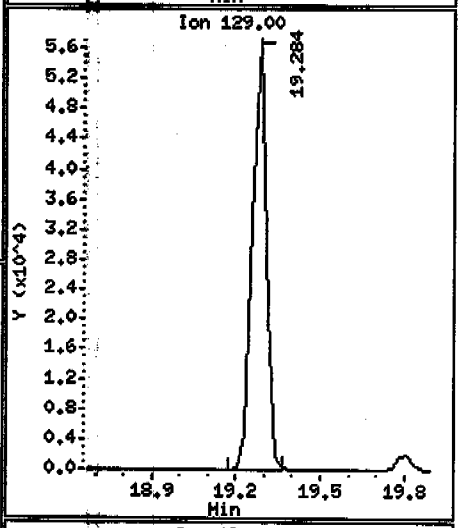


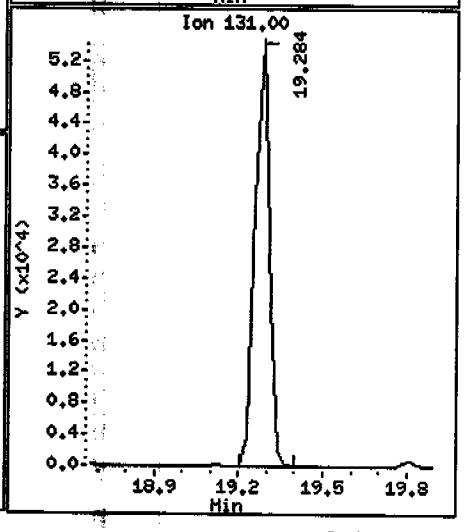












Data File: /chem/msdt.i/21Feb2008.b/t022117.d

Date : 21-FEB-2008 22:39

Client ID:

Instrument: msdt.i

Sample Info: 200mL #34306

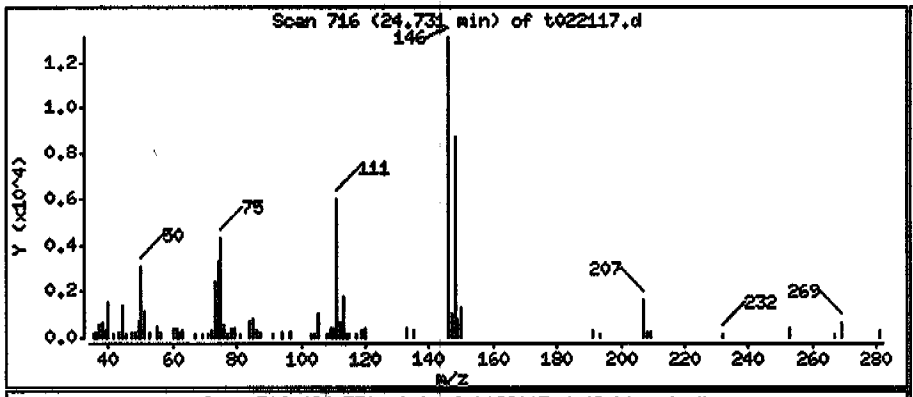
Operator: ACT

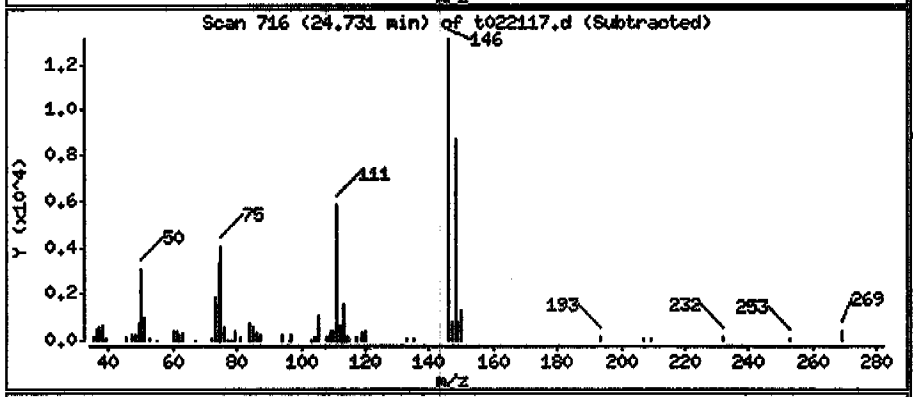
Column phase: RTx-624

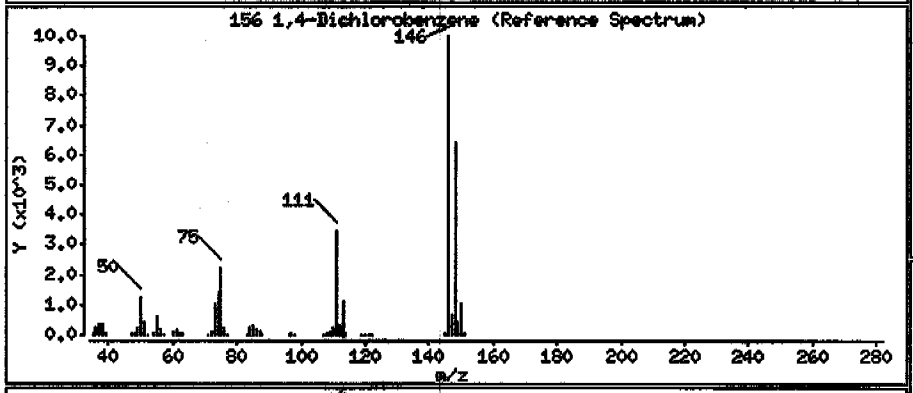
Column diameter: 0.53

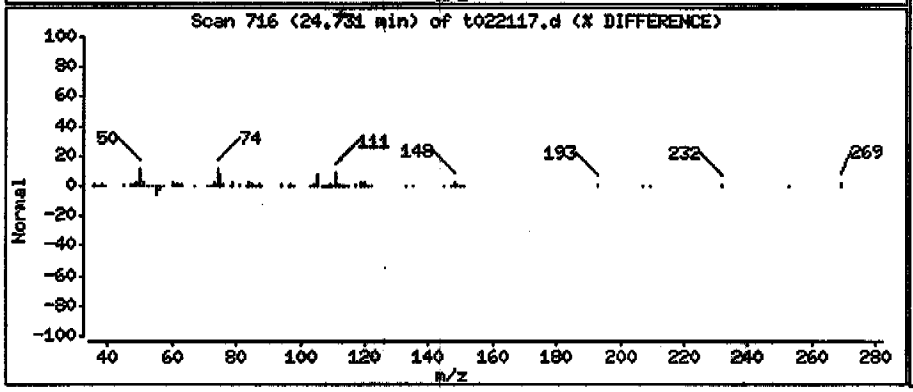
156 1,4-Dichlorobenzene

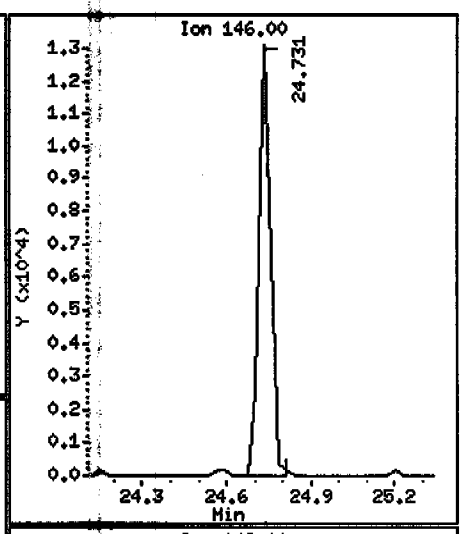
Concentration: 1.157 PPBV

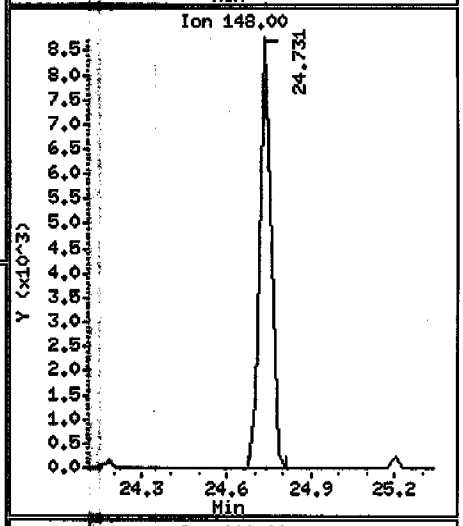


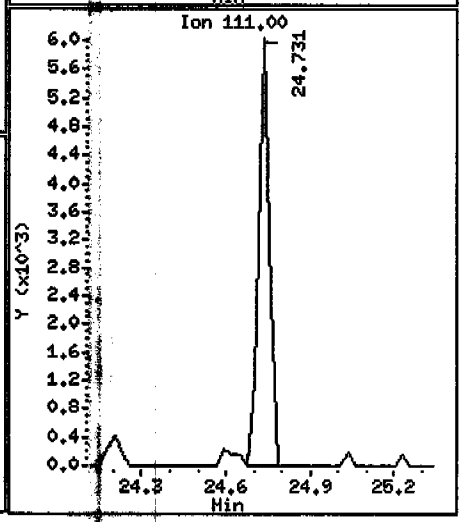












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-10524

Lab ID#: 0802200-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.0	4.2	5.0
Acetone	3.4	4.0	8.0	9.6
Carbon Disulfide	0.84	0.85	2.6	2.6
Methylene Chloride	0.84	1.1	2.9	4.0
Chloroform	0.84	160	4.1	800
1,1,1-Trichloroethane	0.84	3.5	4.6	19
Carbon Tetrachloride	0.84	9.8	5.3	62
Trichloroethene	0.84	130	4.5	700
Tetrachloroethene	0.84	200	5.7	1400

0152

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10524

Lab ID#: 0802200-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.0	4.2	5.0
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	Not Detected	6.4	Not Detected
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Acetone	3.4	4.0	8.0	9.6
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	0.85	2.6	2.6
Methylene Chloride	0.84	1.1	2.9	4.0
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	160	4.1	800
1,1,1-Trichloroethane	0.84	3.5	4.6	19
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	9.8	5.3	62
Benzene	0.84	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.84	Not Detected	3.4	Not Detected
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	130	4.5	700
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Tetrachloroethene	0.84	200	5.7	1400

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-10524

Lab ID#: 0802200-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	104	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022118.d
Report Date: 25-Feb-2008 15:00

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022118.d
Lab Smp Id: 0802200-06A
Inj Date : 21-FEB-2008 23:38
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #R-4
Misc Info : 6.0"Hg->5.0psi
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:18 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.893	13.865 (1.000)	130	261798	25.0000		80.00- 120.00	100.00
13.893	13.865 (1.000)	128	202293			27.38- 127.38	77.27
13.865	13.865 (1.000)	49	596240			131.81- 231.81	227.75
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	959290	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	155845			0.00- 66.79	16.25
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	925771	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	534534			7.58- 107.58	57.74
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.943 (1.076)	65	416858	24.7458	24.746	80.00- 120.00	100.00
14.944	14.943 (1.076)	67	206569			3.57- 103.57	49.55
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	962737	26.0538	26.054	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	110072			0.00- 61.29	11.43

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	645698			18.71- 118.71	67.07
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	626098	26.1462	26.146	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	786860			76.46- 176.46	125.68
22.796	22.796	(1.096)	176	602588			48.22- 148.22	96.24
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.929	5.901	(0.427)	85	31080	0.60797	1.021	80.00- 120.00	100.00
5.929	5.901	(0.427)	87	10441			0.00- 82.13	33.59
45 Acetone						CAS #: 67-64-1		
10.216	10.188	(0.735)	58	17799	2.39436	4.022	80.00- 120.00	100.00
10.216	10.188	(0.735)	43	64866			267.82- 367.82	364.44
47 Carbon Disulfide						CAS #: 75-15-0		
10.547	10.547	(0.759)	76	22909	0.50494	0.8483	80.00- 120.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.128	11.100	(0.801)	49	10353	0.68258	1.147	80.00- 120.00	100.00
11.100	11.100	(0.799)	84	10048			38.51- 138.51	97.05
11.128	11.100	(0.801)	51	3455			0.00- 83.83	33.37
82 Chloroform						CAS #: 67-66-3		
13.948	13.948	(1.004)	83	3718734	97.8007	164.30	80.00- 120.00	100.00
13.948	13.948	(1.004)	85	2416693			14.81- 114.81	64.99
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.280	14.280	(1.028)	97	88272	2.09887	3.526	80.00- 120.00	100.00
14.280	14.280	(1.028)	99	53685			14.28- 114.28	60.82
87 Carbon Tetrachloride						CAS #: 56-23-5		
14.556	14.529	(1.048)	119	235286	5.82399	9.784	80.00- 120.00	100.00
14.556	14.529	(1.048)	117	250401			56.24- 156.24	106.42
101 Trichloroethene						CAS #: 79-01-6		
16.077	16.077	(1.028)	95	1602819	78.0342	131.10	80.00- 120.00	100.00
16.077	16.077	(1.028)	130	1484343			39.09- 139.09	92.61
16.077	16.077	(1.028)	97	1025784			12.68- 112.68	64.00
120 Tetrachloroethene						CAS #: 127-18-4		
19.285	19.284	(0.927)	166	3428054	121.315	203.81	80.00- 120.00	100.00
19.285	19.284	(0.927)	129	2412205			18.51- 118.51	70.37
19.285	19.284	(0.927)	131	2309243			15.29- 115.29	67.36

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022118.d
Lab Smp Id: 0802200-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

Calibration Date: 21-FEB-2008
Calibration Time: 14:36

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	261798	-17.71
97 1,4-Difluorobenze	1251468	750881	1752055	959290	-23.35
126 Chlorobenzene-d5	1150991	690595	1611387	925771	-19.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.89	0.20
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022118.d
Report Date: 25-Feb-2008 15:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0802200-06A
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 6.0"Hg->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.746	98.98	70-130
$ 113 Toluene-d8	25.000	26.054	104.22	70-130
$ 137 Bromofluorobenzene	25.000	26.146	104.58	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Sample Info: 200mL #R-4

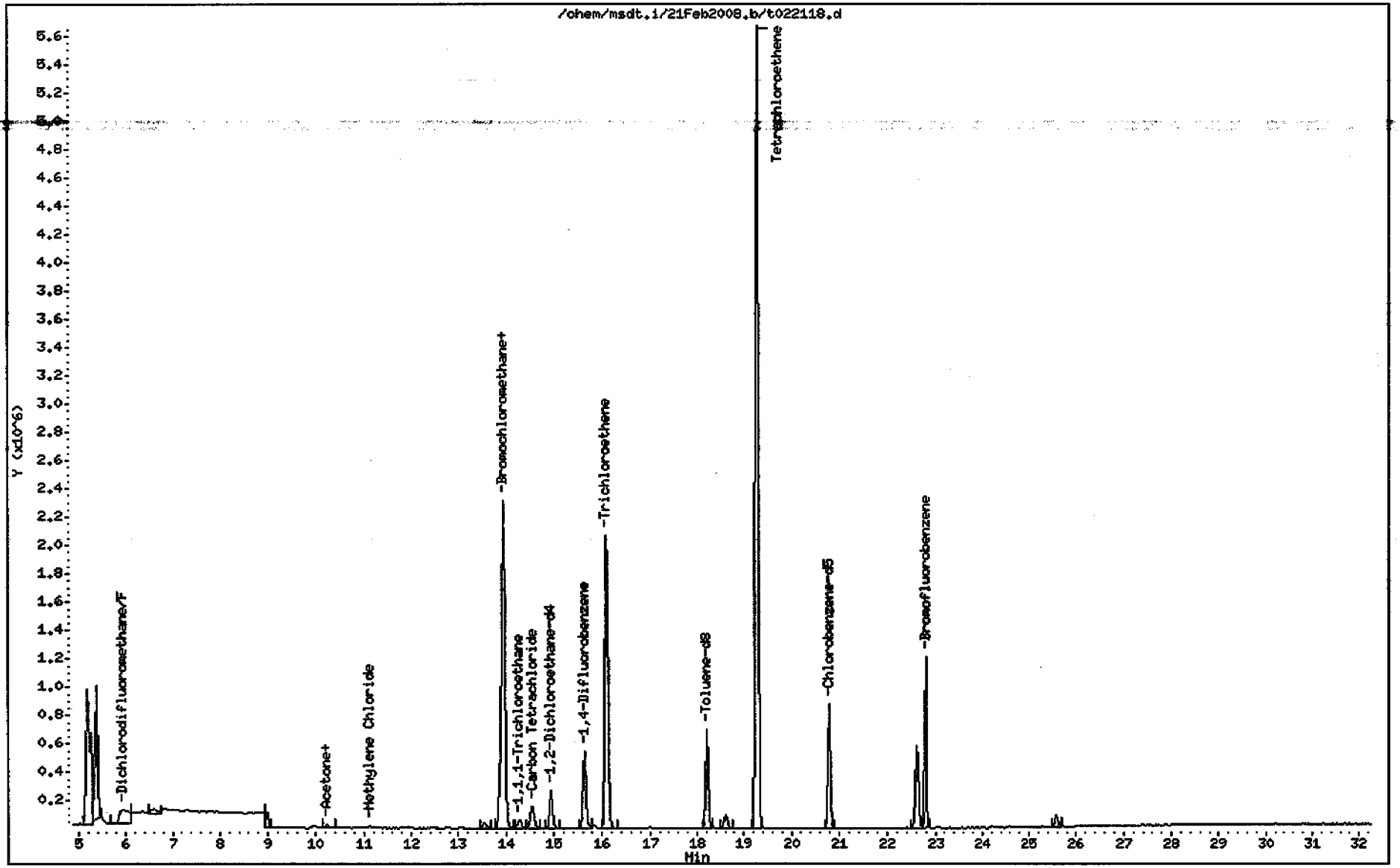
Column phase: RTx-624

Instrument: msdt.i

Operator: ACT

Column diameter: 0.53

0159



Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

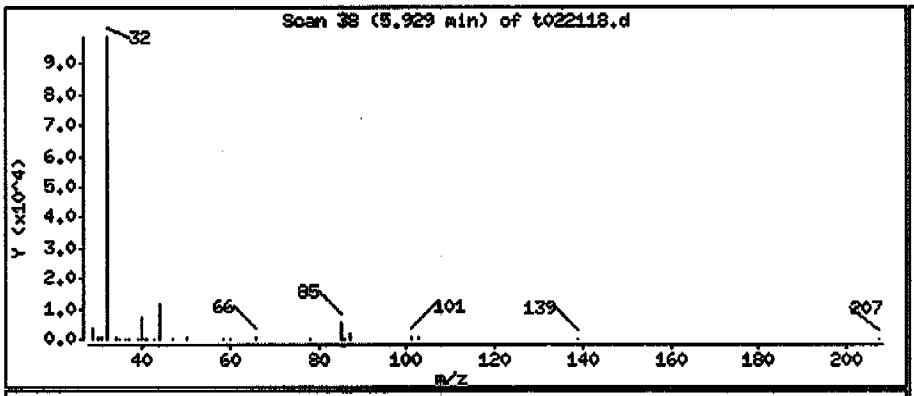
Operator: ACT

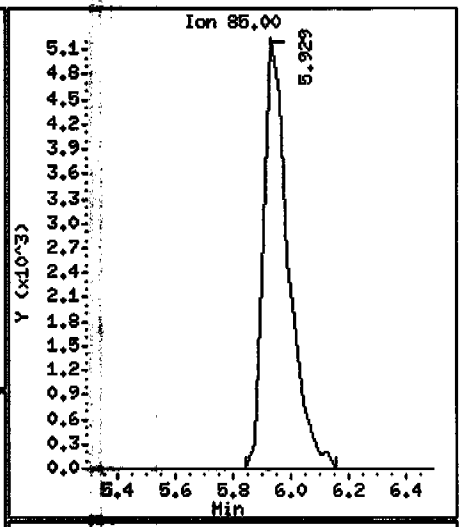
Column phase: RTx-624

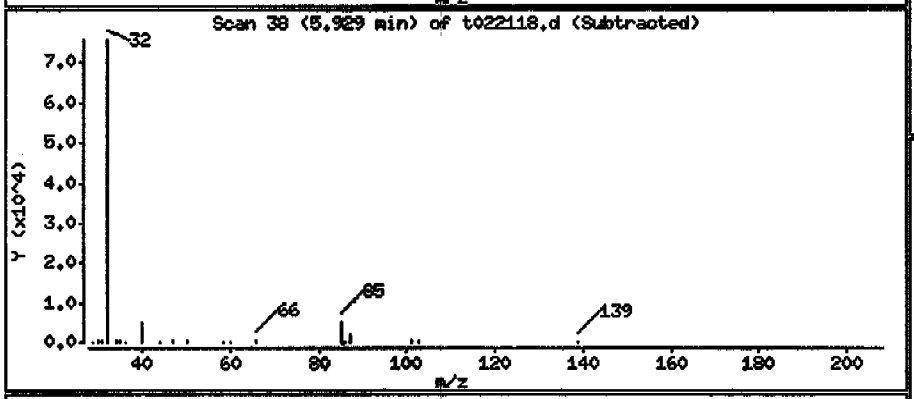
Column diameter: 0.53

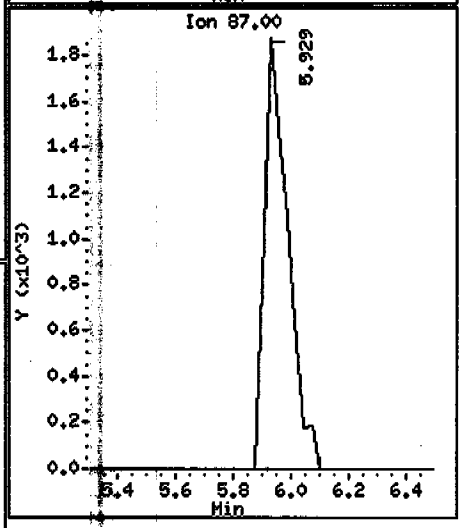
12 Dichlorodifluoromethane/Fr12

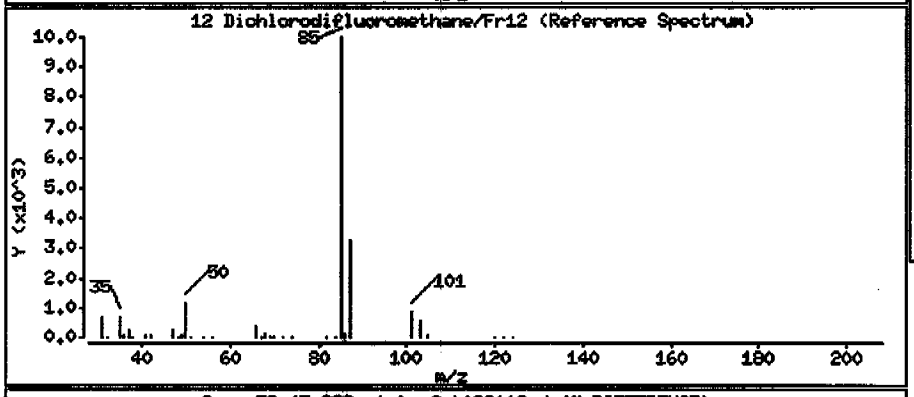
Concentration: 1.021 PPBV

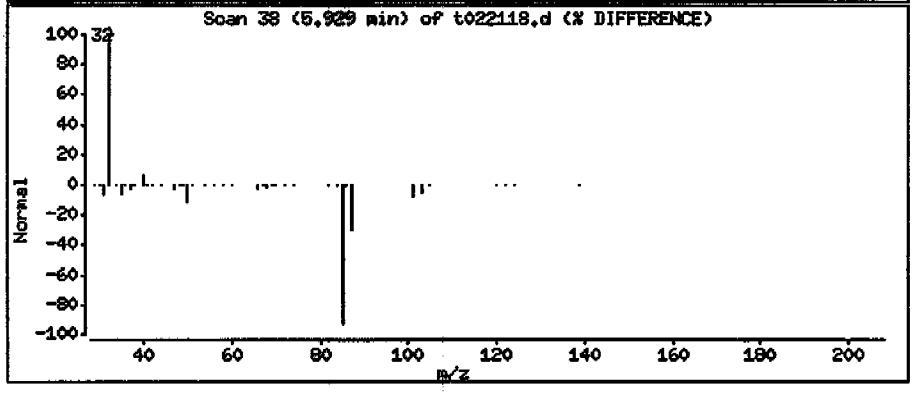












Data File: /chem/msdt.i/21Feb2006.b/t022118.d

Date : 21-FEB-2006 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

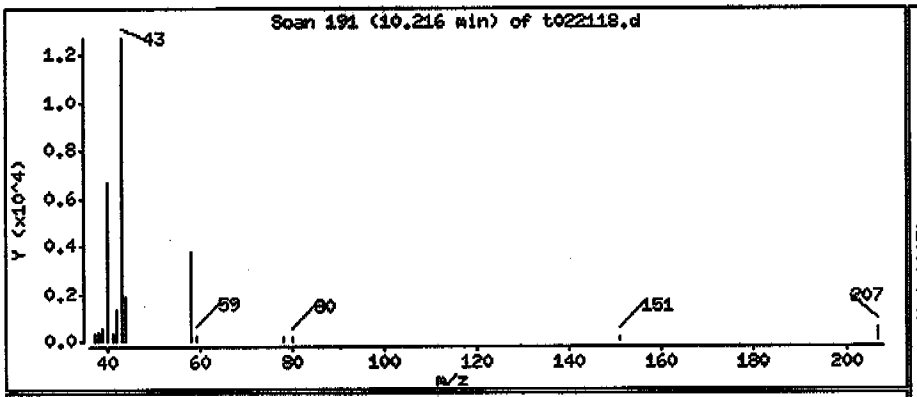
Operator: ACT

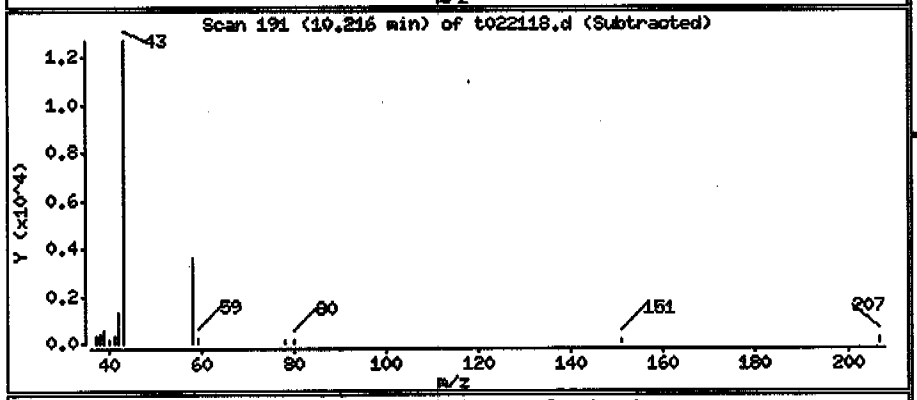
Column phase: RTx-624

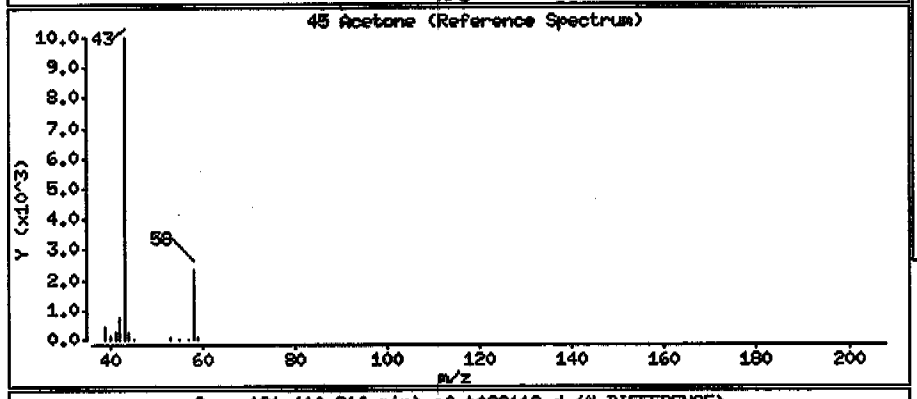
Column diameter: 0.53

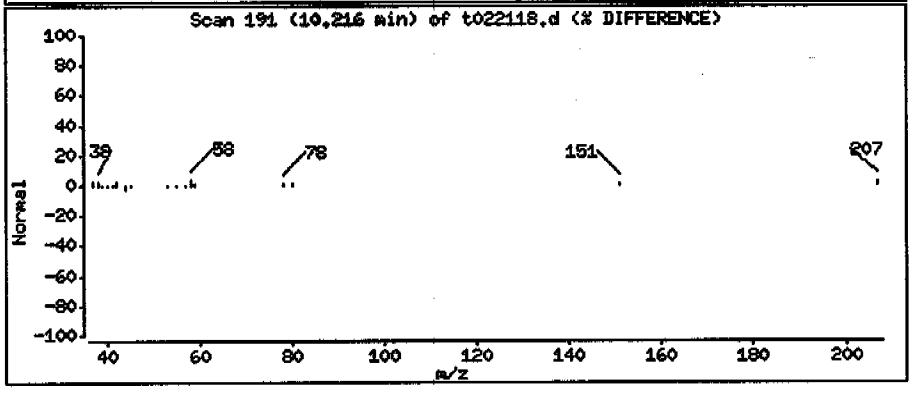
45 Acetone

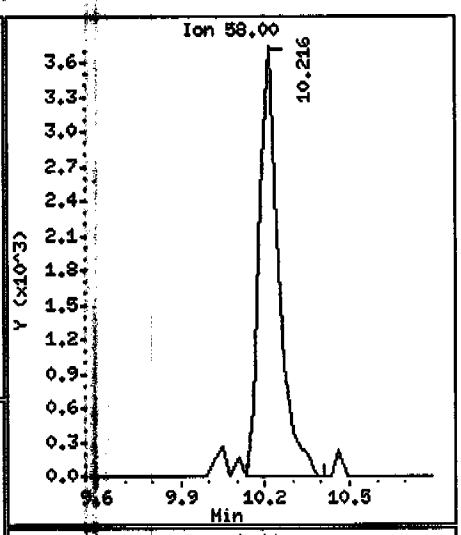
Concentration: 4.022 PPBV

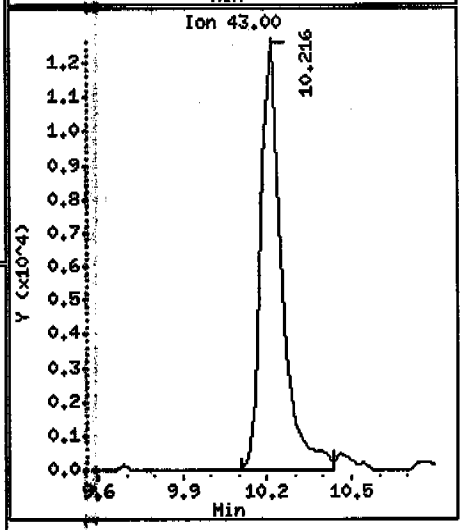












Data File: /ohem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

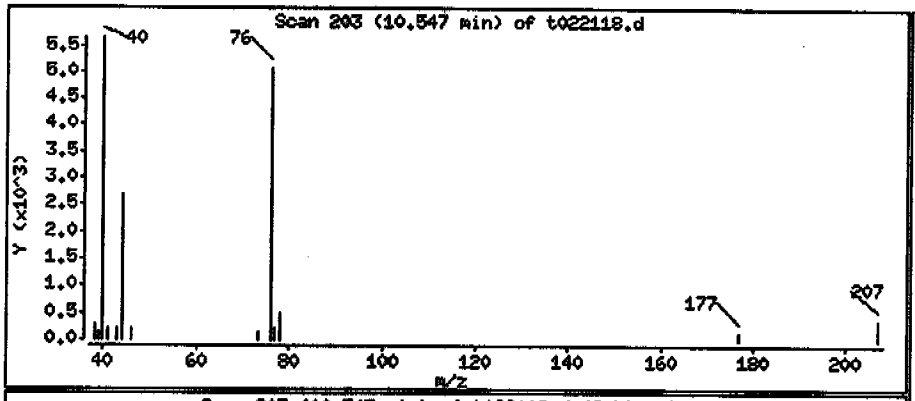
Operator: ACT

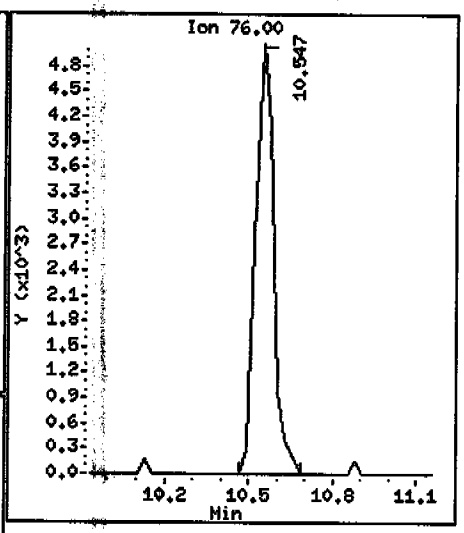
Column phase: RTx-624

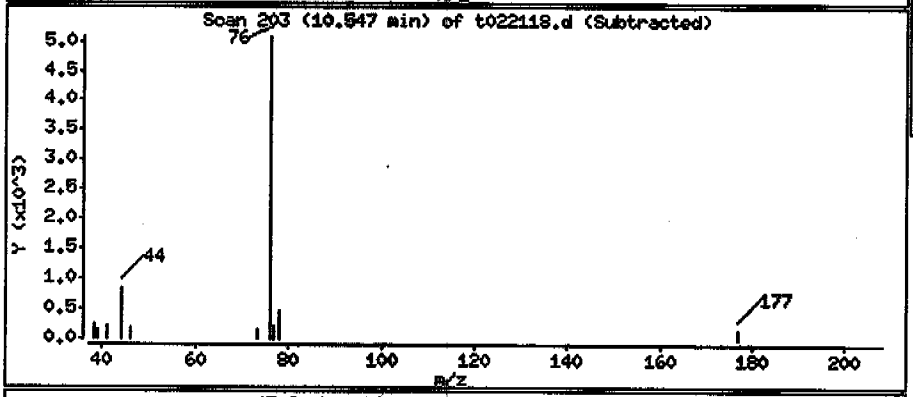
Column diameter: 0.53

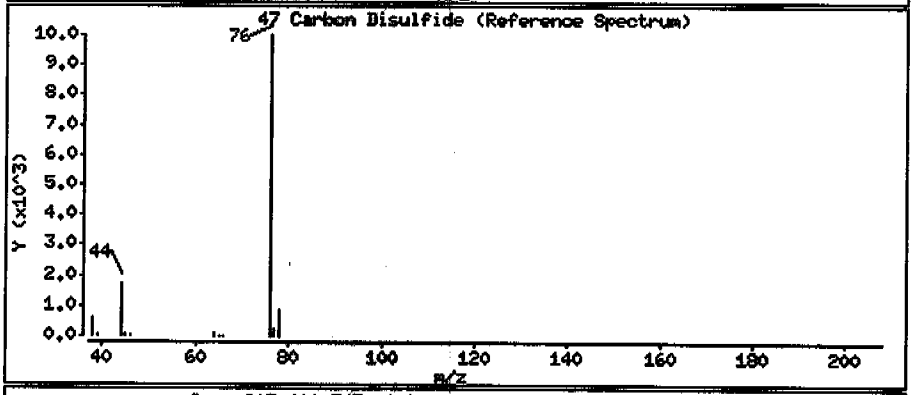
47 Carbon Disulfide

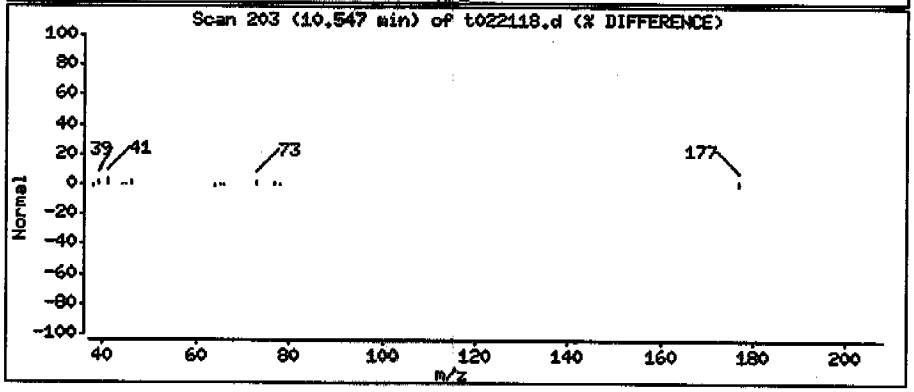
Concentration: 0.8483 PPBV











Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

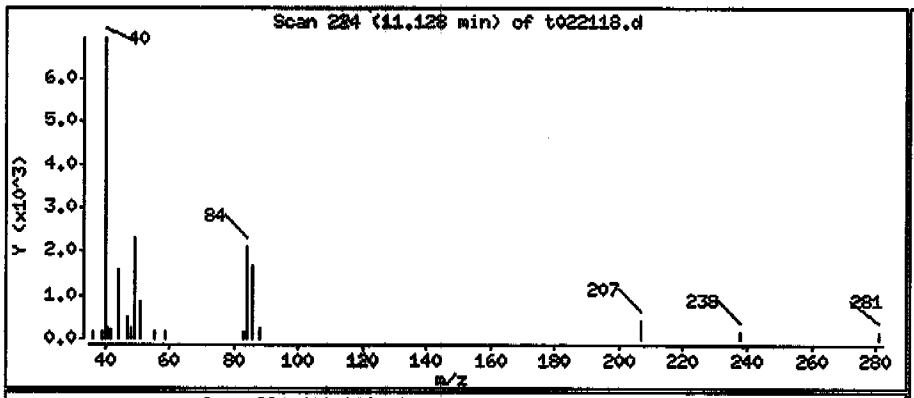
Operator: ACT

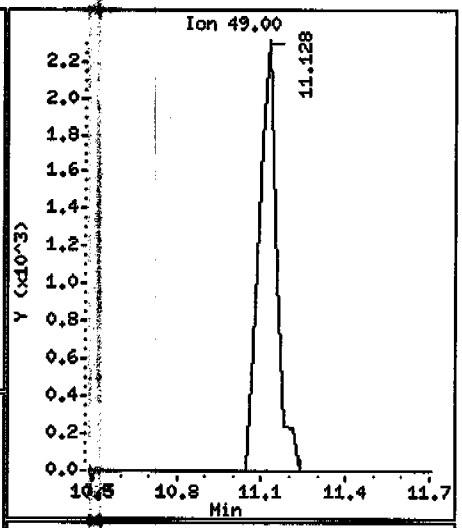
Column phase: RTx-624

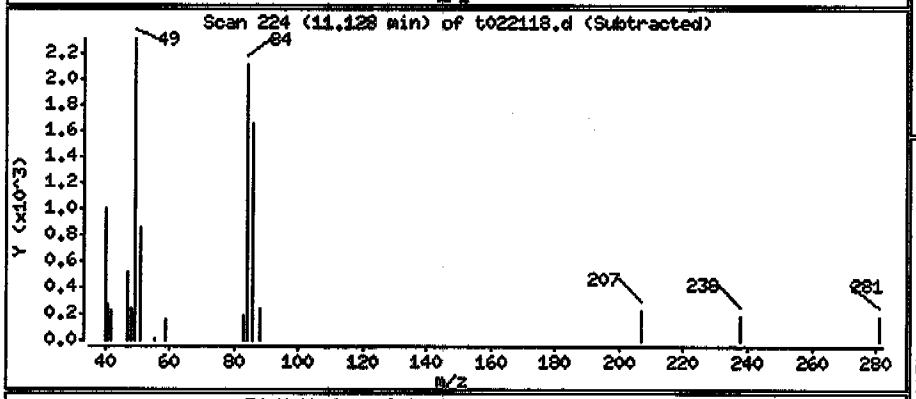
Column diameter: 0.53

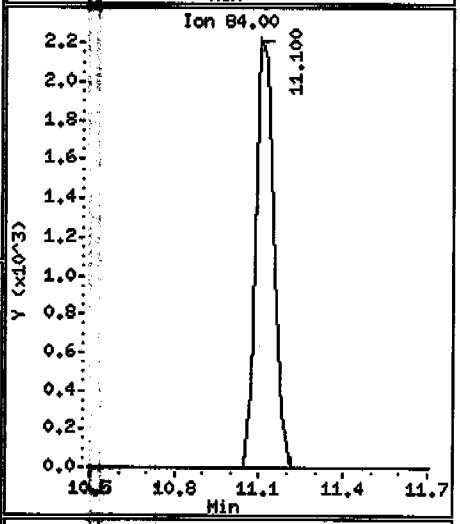
54 Methylene Chloride

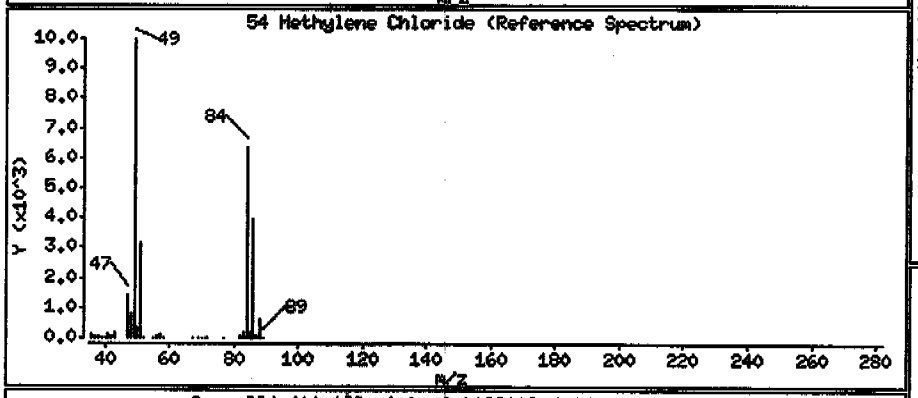
Concentration: 1.147 PPBV

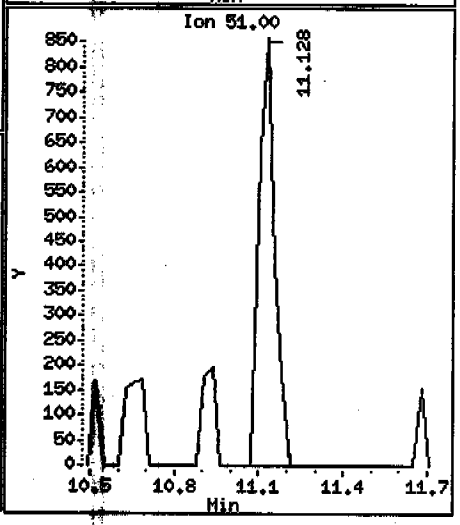


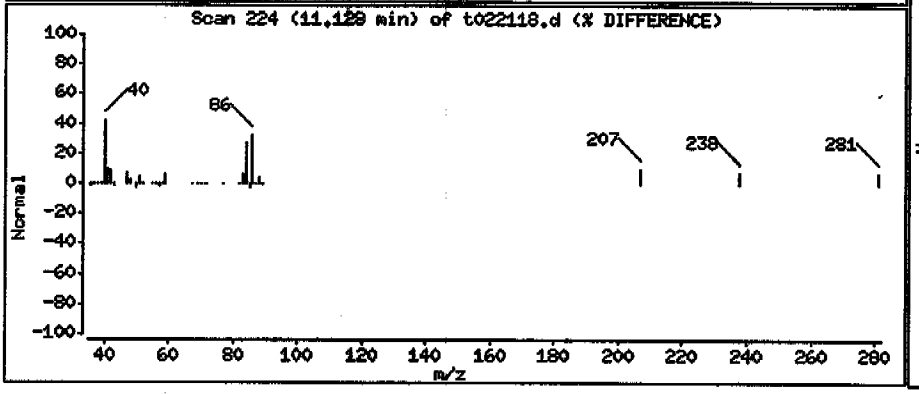












Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

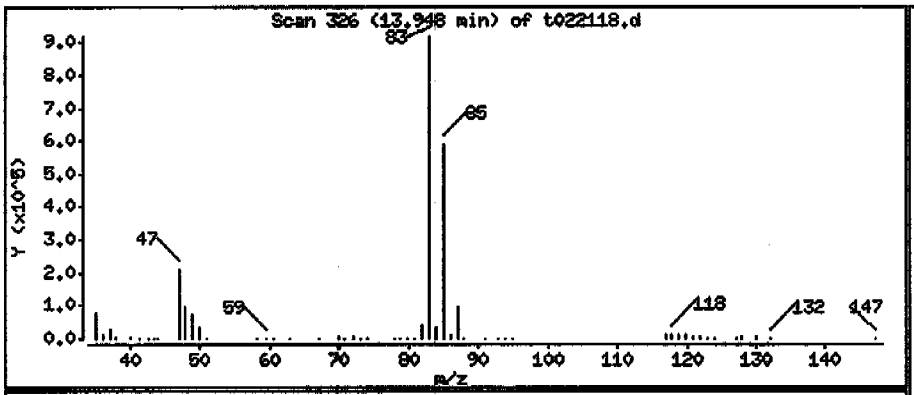
Operator: ACT

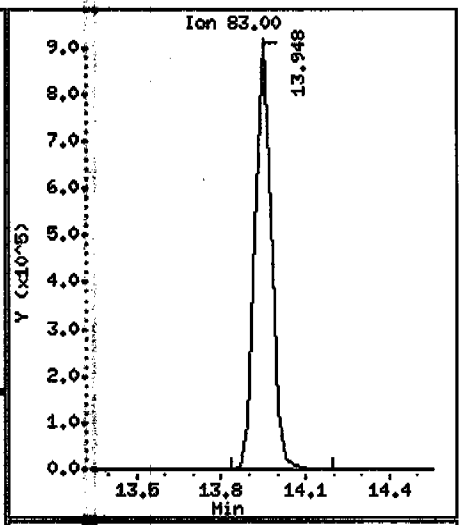
Column phase: RTx-624

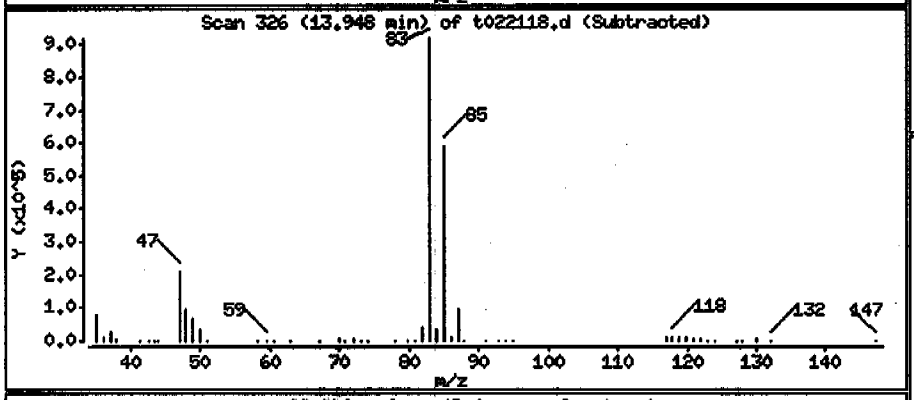
Column diameter: 0.53

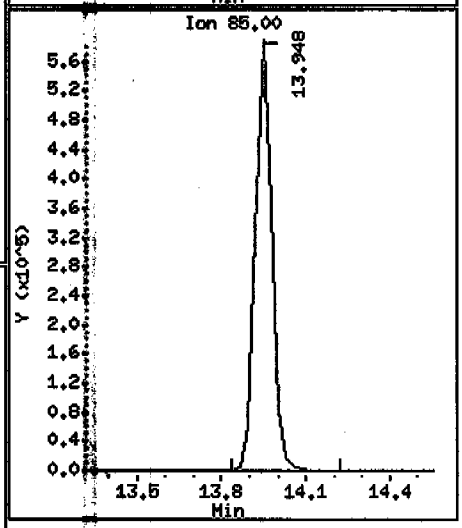
82 Chloroform

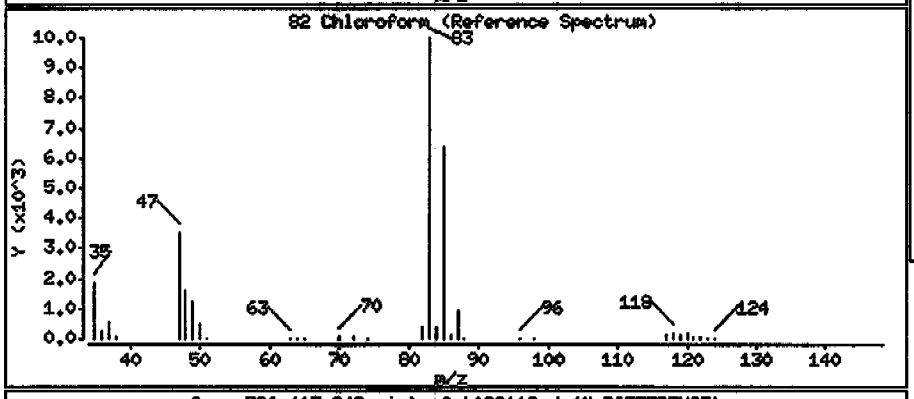
Concentration: 164.30 PPBV

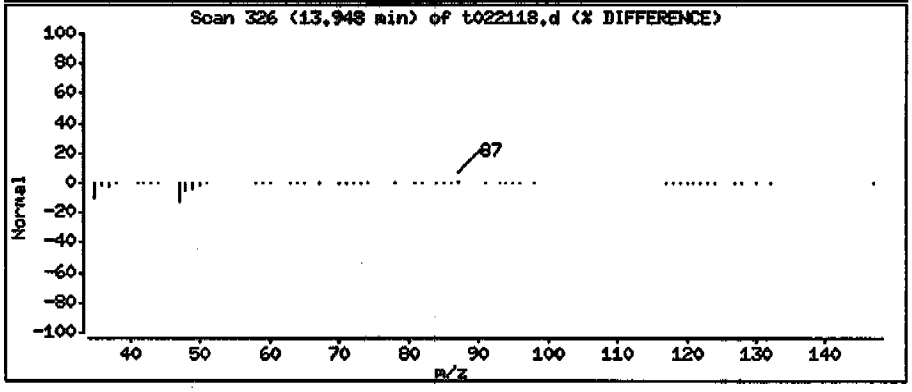












Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL MR-4

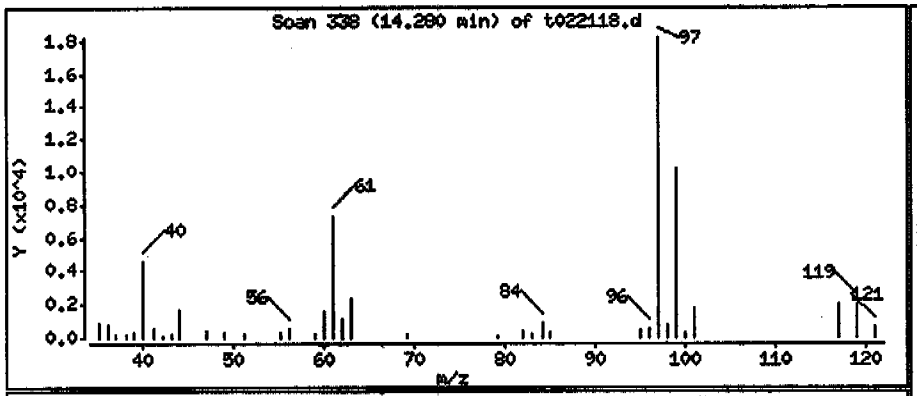
Operator: ACT

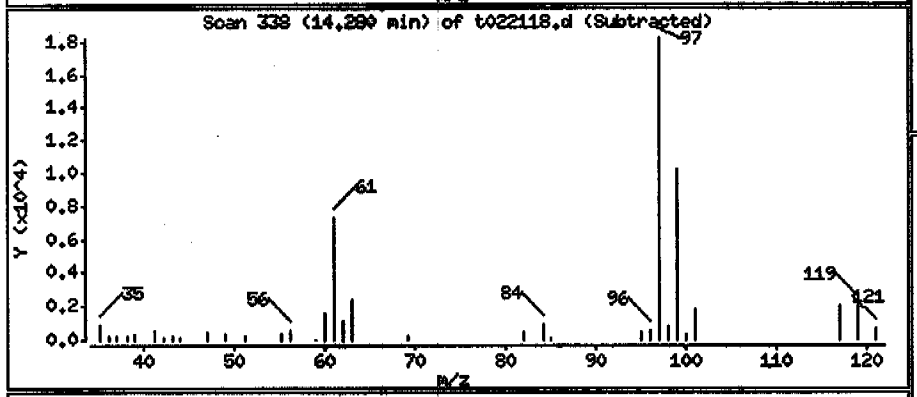
Column phase: RTx-624

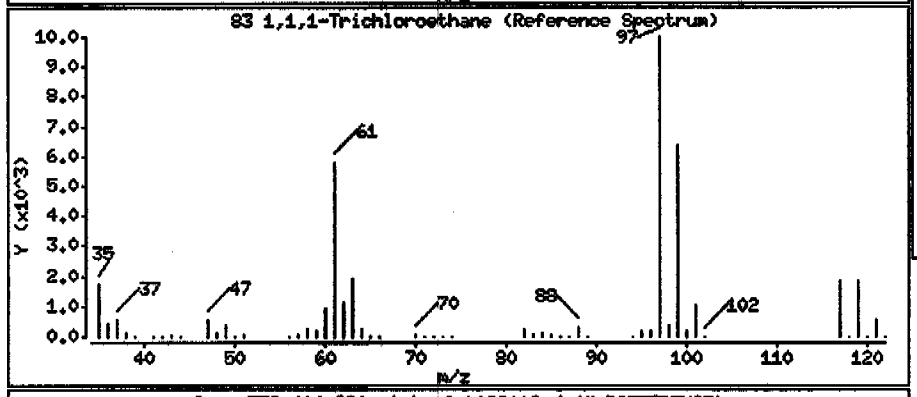
Column diameter: 0.53

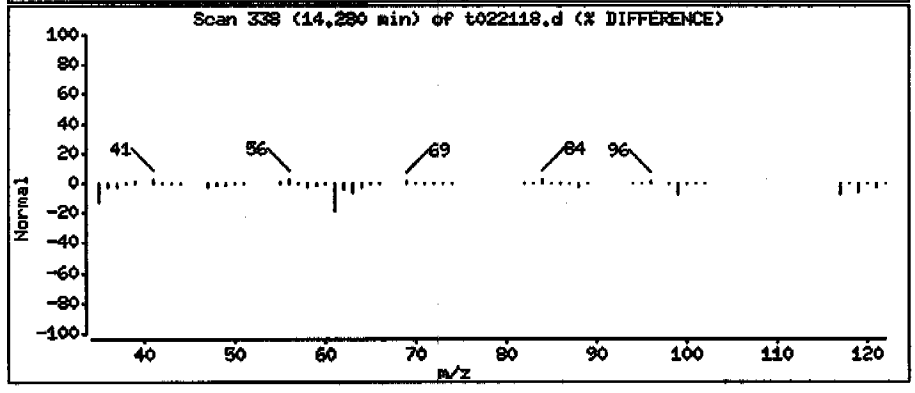
83 1,1,1-Trichloroethane

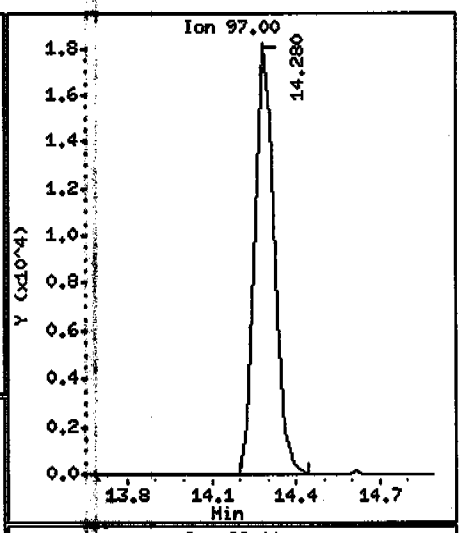
Concentration: 3.526 PPBV

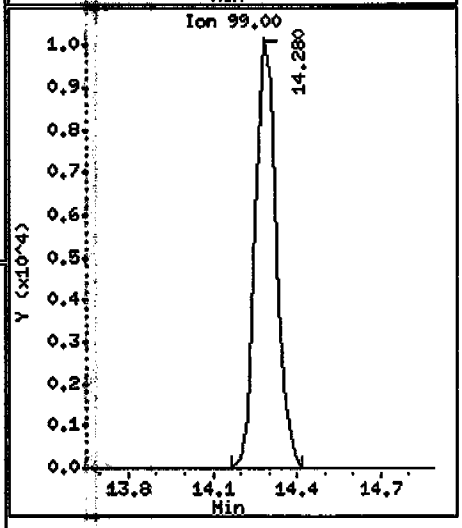












Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Sample Info: 200mL #R-4

Instrument: msdt.i

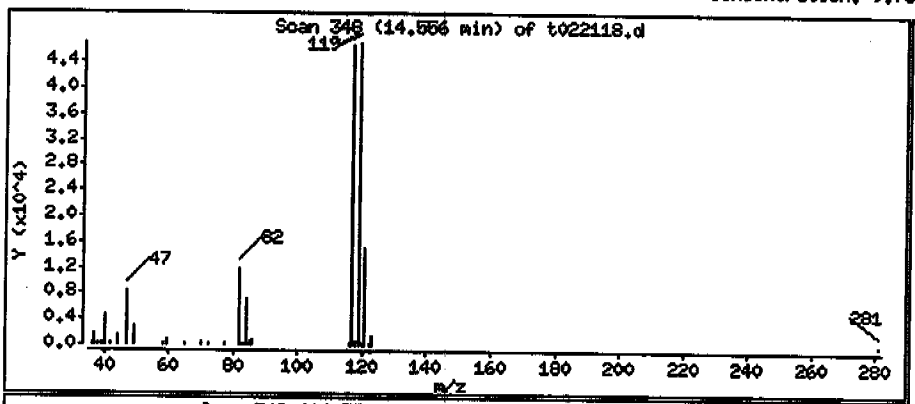
Operator: ACT

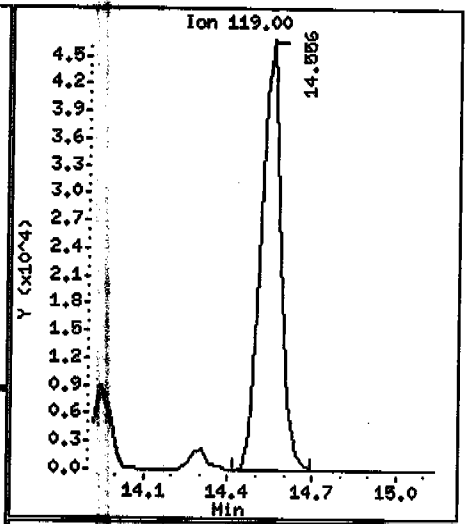
Column phase: RTx-624

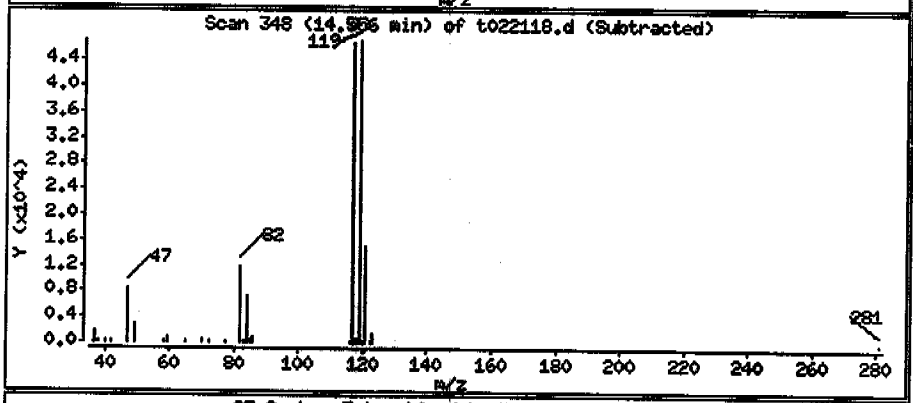
Column diameter: 0.53

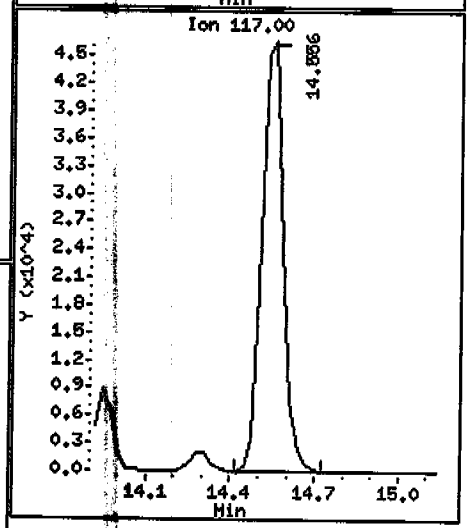
87 Carbon Tetrachloride

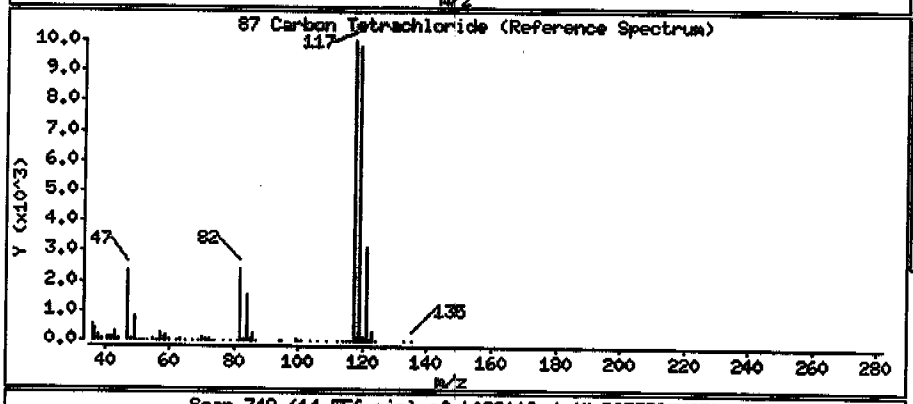
Concentration: 9.784 PPBV

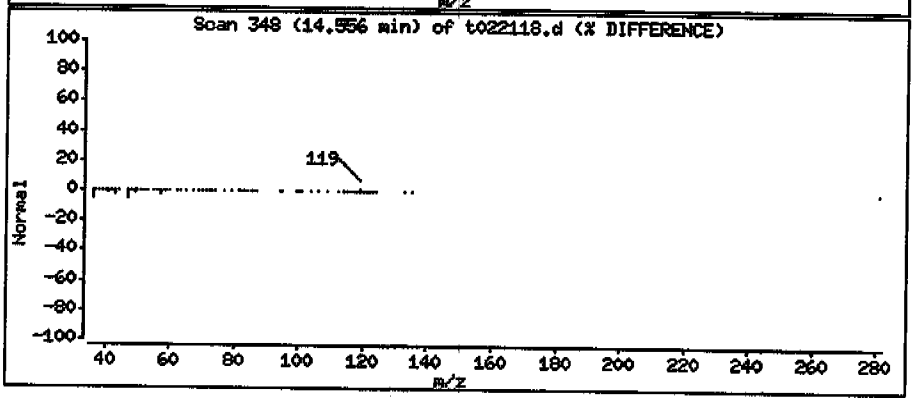












Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

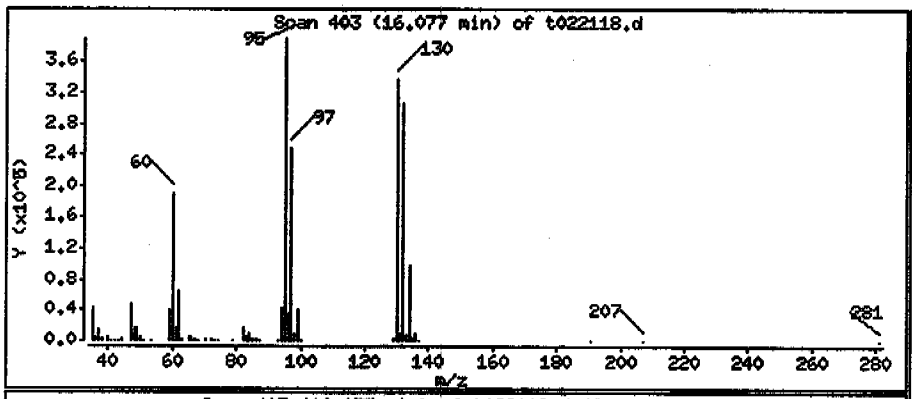
Operator: ACT

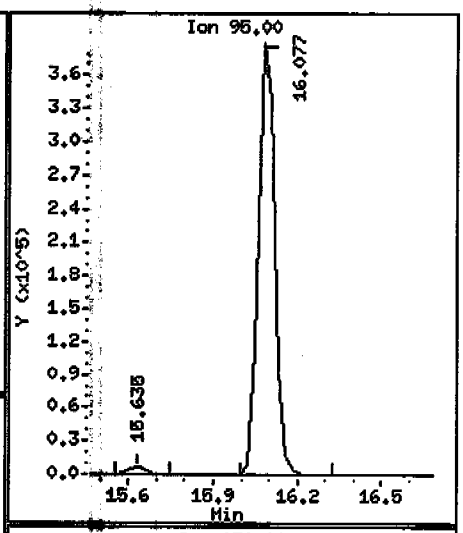
Column phase: RTx-624

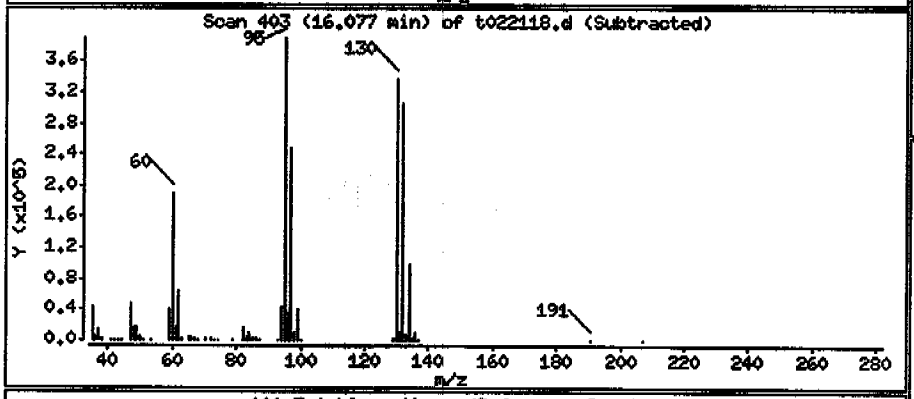
Column diameter: 0.53

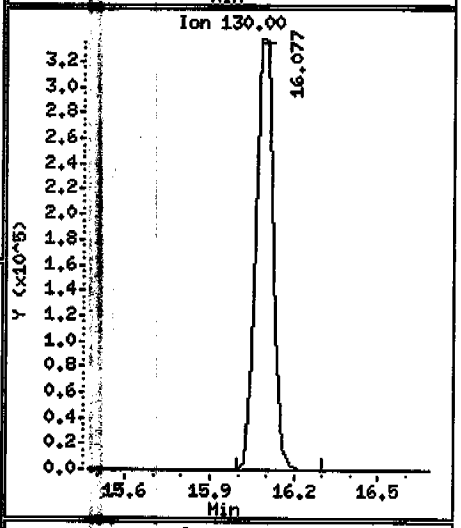
101 Trichloroethene

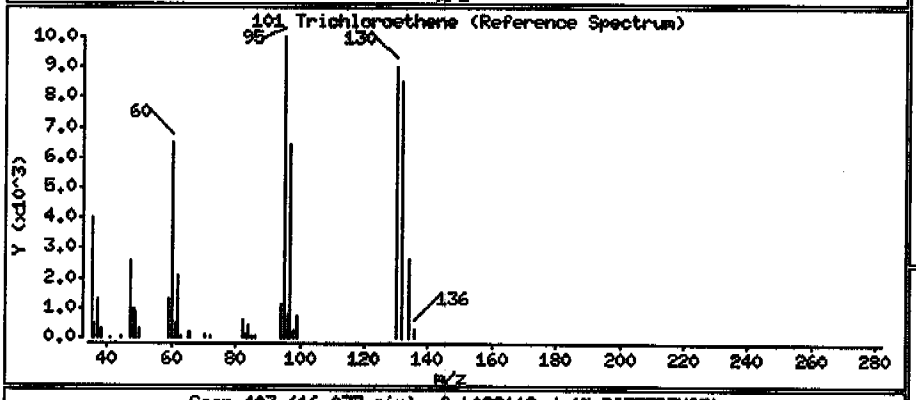
Concentration: 131.10 PPBV

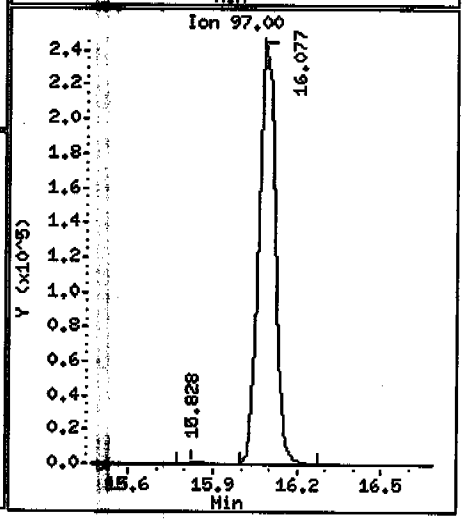


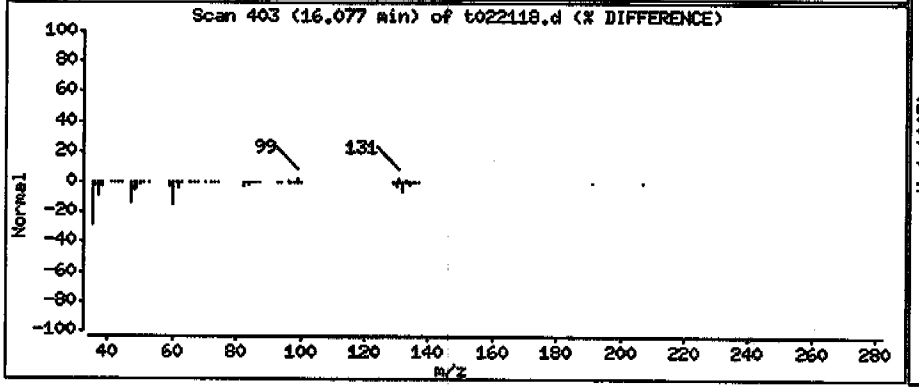












Data File: /chem/msdt.i/21Feb2008.b/t022118.d

Date : 21-FEB-2008 23:38

Client ID:

Instrument: msdt.i

Sample Info: 200mL #R-4

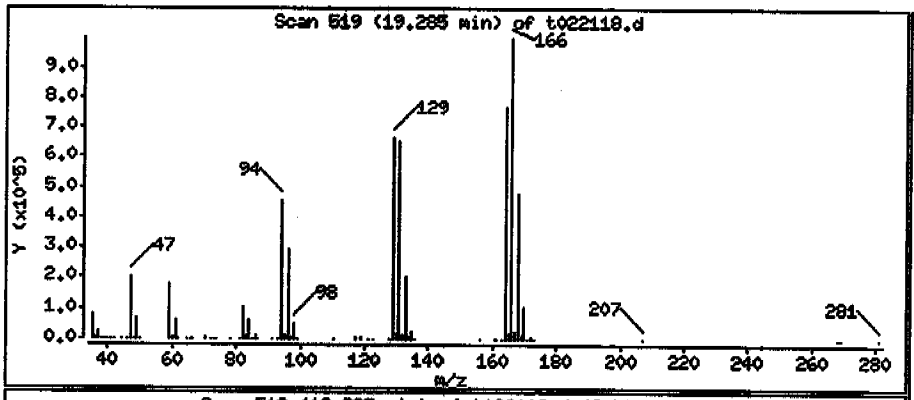
Operator: ACT

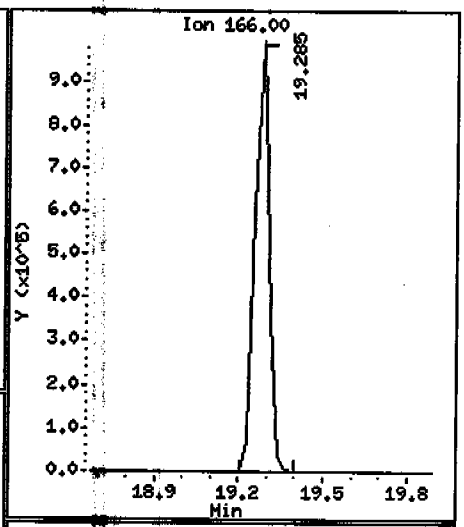
Column phase: RTx-624

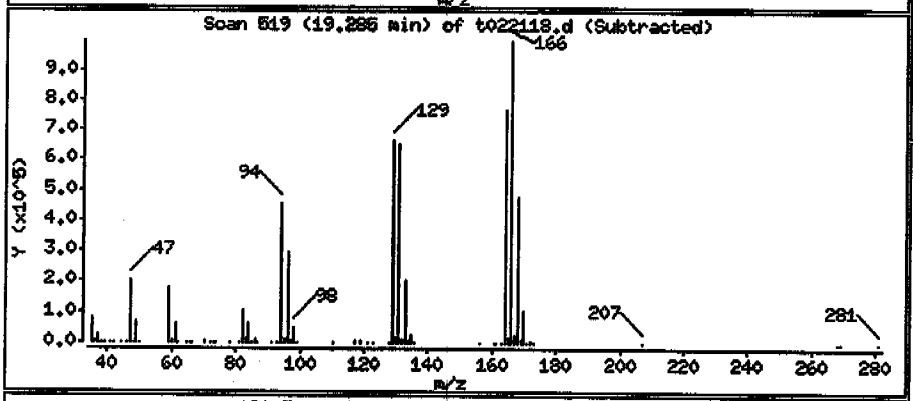
Column diameter: 0.53

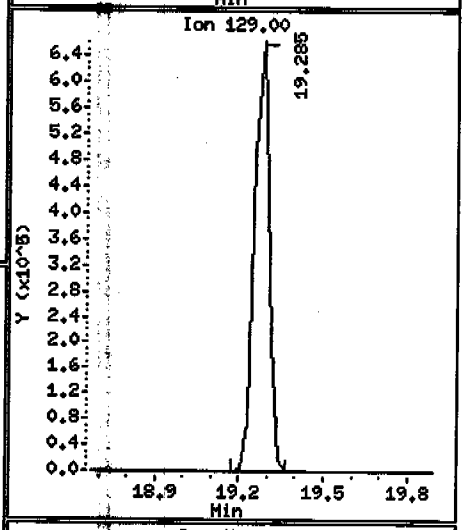
120 Tetrachloroethene

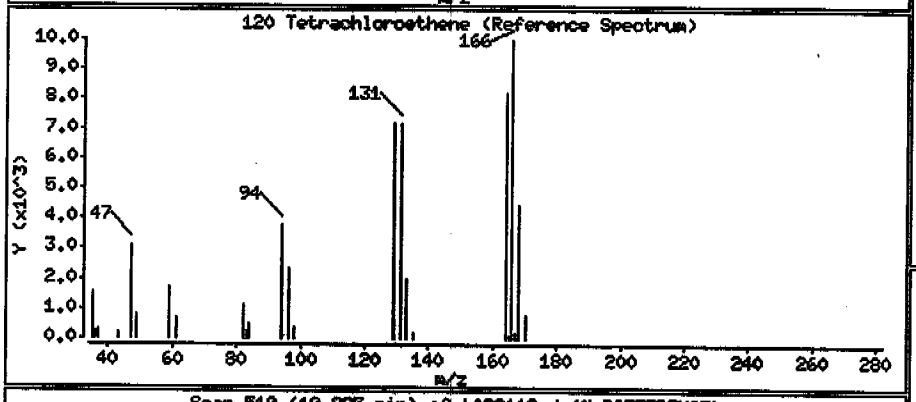
Concentration: 203.81 PPBV

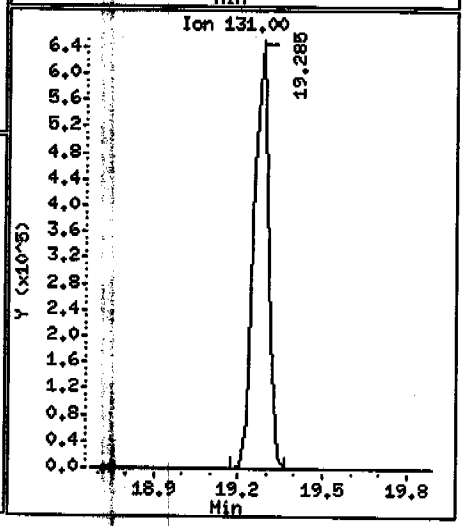


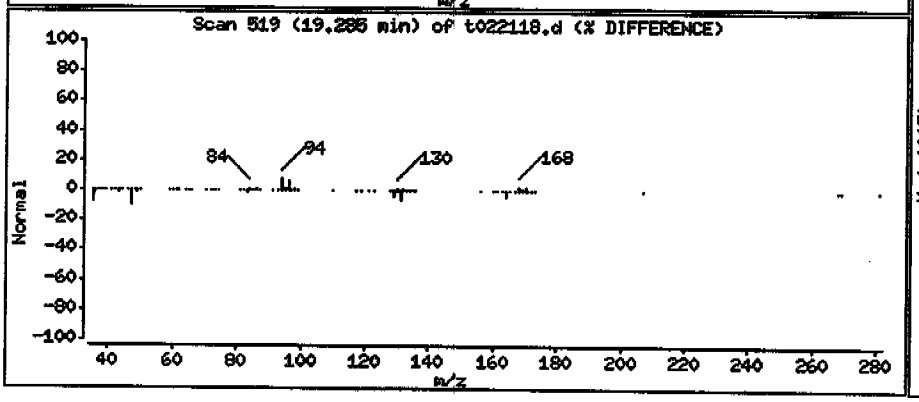












QC Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802200-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0802200-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	102	70-130

0171

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022110.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 21-FEB-2008 17:55
Operator : ACT Inst ID: msdt.i
Smp Info : 200mL #33668
Misc Info : Humid
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 09:04 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSRpb.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	292848	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	222896			27.38- 127.38	76.11
13.865	13.865 (1.000)	49	351217			131.81- 231.81	119.93
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1116553	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	184715			0.00- 66.79	16.54
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1046968	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	616977			7.58- 107.58	58.93
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.944	14.943 (1.078)	65	454622	24.1261	24.126	80.00- 120.00	100.00
14.944	14.943 (1.078)	67	223090			3.57- 103.57	49.07
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1131340	26.3043	26.304	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	133927			0.00- 61.29	11.84

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	752849			18.71- 118.71	66.54
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	690744	25.5067	25.507	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	865759			76.46- 176.46	125.34
22.796	22.796	(1.096)	176	670013			48.22- 148.22	97.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022110.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: Humid

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	292848	-7.96
97 1,4-Difluorobenze	1251468	750881	1752055	1116553	-10.78
126 Chlorobenzene-d5	1150991	690595	1611387	1046968	-9.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Feb2008.b/t022110.d
Report Date: 22-Feb-2008 09:08

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 21Feb2008
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: ACT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT04ENSRpb.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.126	96.50	70-130
$ 113 Toluene-d8	25.000	26.304	105.22	70-130
$ 137 Bromofluorobenzene	25.000	25.507	102.03	70-130

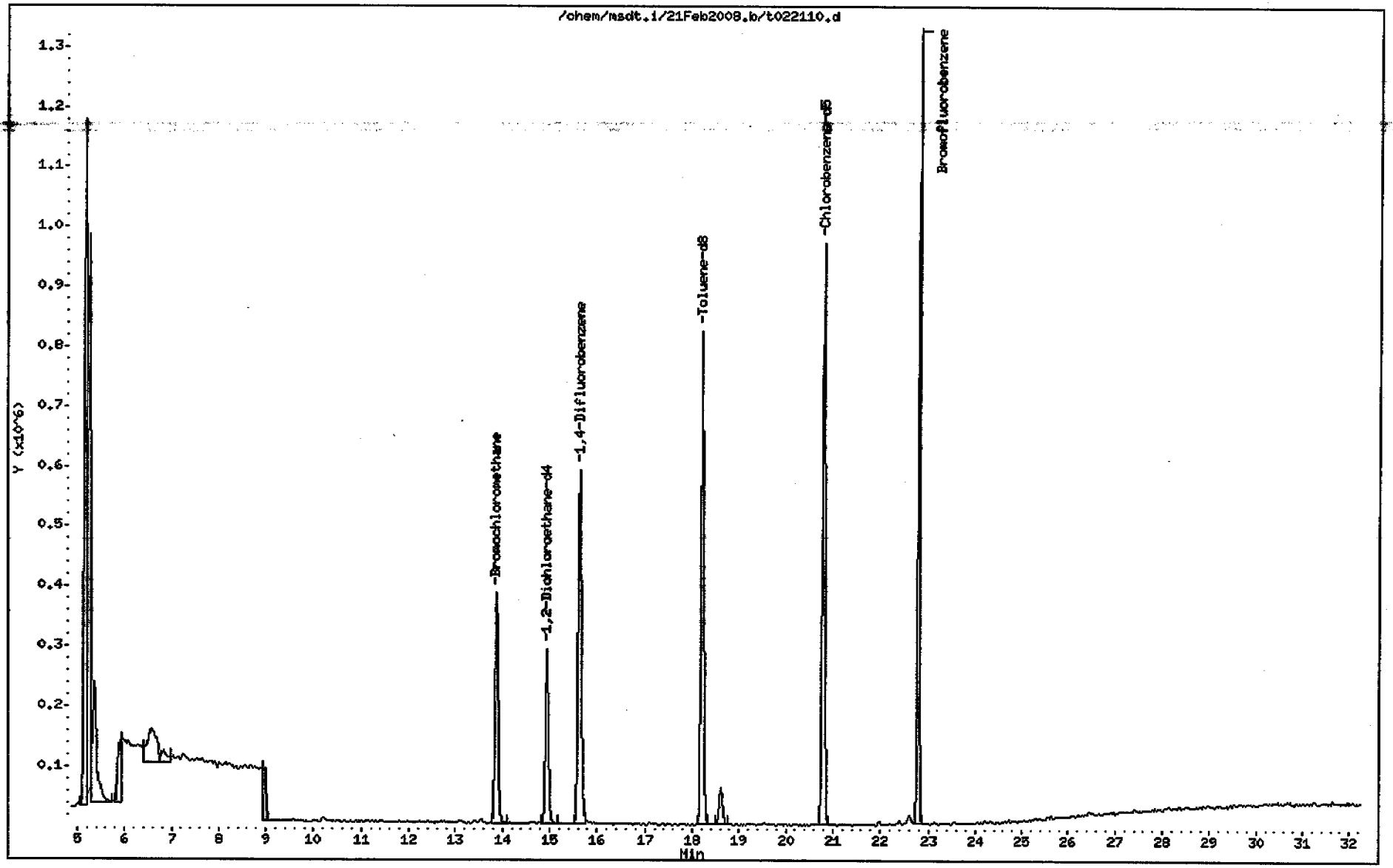
Data File: /chem/msdt.i/21Feb2008.b/t022110.d
Date : 21-FEB-2008 17:55
Client ID: Lab Blank
Sample Info: 200mL #33668

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53

0176



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0802200

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-08-10518	96		104		104				0
02	MD21-08-10518 Lab Duplicate	97		102		104				0
03	MD21-08-10519	95		103		106				0
04	MD21-08-10519 Lab Duplicate	94		99		106				0
05	MD21-08-10520	98		104		105				0
06	MD21-08-10521	99		102		107				0
07	MD21-08-10522	97		101		107				0
08	MD21-08-10524	99		104		104				0
09	Lab Blank	96		105		102				0
10	CCV	106		105		102				0
11	LCS	105		106		101				0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0802200

Lab File ID: t022106.d
Date Analyzed: 02/21/2008

Instrument ID: msdt.i
Time Analyzed: 02:36 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1150991		20.81		1251468		15.61		318158		13.87	
	UPPER LIMIT	1611387		21.14		1752055		15.94		445421		14.20	
	LOWER LIMIT	690595		20.48		750881		15.28		190895		13.54	
	CLIENT SAMPLE NO												
01	MD21-08-10518	1036589		20.81		1103667		15.63		295535		13.86	
02	MD21-08-10518 Lab Duplicate	996928		20.81		1061326		15.63		280827		13.89	
03	MD21-08-10519	1021501		20.81		1107566		15.63		291200		13.89	
04	MD21-08-10519 Lab Duplicate	955690		20.81		1040017		15.63		282511		13.89	
05	MD21-08-10520	948685		20.81		1009307		15.63		272153		13.89	
06	MD21-08-10521	931614		20.81		1003993		15.63		269689		13.89	
07	MD21-08-10522	946802		20.81		1023841		15.63		276664		13.89	
08	MD21-08-10524	925771		20.81		959290		15.63		261798		13.89	
09	Lab Blank	1046968		20.81		1116553		15.63		292848		13.87	
10	CCV	1150991		20.81		1251468		15.61		318158		13.87	
11	LCS	1155810		20.81		1249796		15.63		310710		13.87	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: t022113.d & t022111.d
Lab Sample ID: 01A & 01AA
Dilution: 1.68 & 1.68
Client Sample ID: &
Date Analyzed: 2/21/08 & 2/21/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	3.543		3.524		0.54
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	ND	U	ND	U	0
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	ND	U	ND	U	0
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	ND	U	ND	U	0
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	ND	U	ND	U	0
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	U	ND	U	0
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	ND	U	ND	U	0
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	ND	U	ND	U	0
75-27-4	Bromodichloromethane	ND	U	ND	U	0
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	0.9179		0.8441		8.4
56-23-5	Carbon Tetrachloride	9.168		9.222		0.59
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	164.22		163.07		0.70
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	0.8965		0.87		3.0
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	1.032		1.061		2.8
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: t022113.d & t022111.d
Lab Sample ID: 01A & 01AA
Dilution: 1.68 & 1.68
Client Sample ID: &
Date Analyzed: 2/21/08 & 2/21/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	1.223		1.031		17
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	ND	U	ND	U	0
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	202.42		200.08		1.2
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	ND	U	ND	U	0
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	129.9		127.46		1.9
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: t022114.d & t022112.d
Lab Sample ID: 02A & 02AA
Dilution: 1.79 & 1.79
Client Sample ID: &
Date Analyzed: 2/21/08 & 2/21/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	5.055		5.083		0.55
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	ND	U	ND	U	0
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	1.572		1.403		11
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	ND	U	ND	U	0
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	ND	U	ND	U	0
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	U	ND	U	0
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	ND	U	ND	U	0
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	ND	U	ND	U	0
75-27-4	Bromodichloromethane	1.041		1.043		0.19
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	1.138		1.197		5.0
56-23-5	Carbon Tetrachloride	22.2		22.719		2.3
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	116.19		116.03		0.14
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	2.012		2.12		5.2
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	1.433		1.427		0.42
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

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SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: t022114.d & t022112.d
Lab Sample ID: 02A & 02AA
Dilution: 1.79 & 1.79
Client Sample ID: &
Date Analyzed: 2/21/08 & 2/21/08

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	7.005		7.628		8.5
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	ND	U	ND	U	0
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	47.8		47.709		0.19
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	ND	U	ND	U	0
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	86.544		86.17		0.43
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdt.i/06Feb2008.b/t020607.d
Level 2: /chem/msdt.i/06Feb2008.b/t020615.d
Level 3: /chem/msdt.i/21Feb2008.b/t022102.d
Level 4: /chem/msdt.i/21Feb2008.b/t022103.d
Level 5: /chem/msdt.i/21Feb2008.b/t022104.d
Level 6: /chem/msdt.i/21Feb2008.b/t022109.d
Level 7: /chem/msdt.i/21Feb2008.b/t022105.d

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
204 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
5 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
6 Freon142b	+++++	+++++	3.08434	3.14708	3.61347	3.56308		
	3.77448						3.43649	8.842

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 13	+++++	+++++	3.23618	3.29433	3.34933	3.57682		
	3.77364						3.44586	6.498
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
13 Freon 134a	+++++	+++++	1.43136	1.41603	1.53392	1.58057		
	1.72491						1.53736	8.164
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Propylene	+++++	+++++	0.84673	0.85060	0.79894	0.79144		
	0.80075						0.81770	3.488
15 Freon 152a	+++++	+++++	0.83463	0.73405	0.81286	0.82968		
	0.92807						0.82784	8.351
12 Dichlorodifluoromethane/Fr12	+++++	4.16310	4.59106	5.40232	5.14446	5.05621		
	4.93291						4.88168	9.041
17 Freon 22	+++++	+++++	0.34699	0.36399	0.38557	0.40685		
	0.44934						0.39055	10.202

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Freon 114	+++++	2.99040	2.92556	3.49436	3.32698	3.32662	3.29796	3.22698	6.836
18 Chloromethane	+++++	+++++	0.98827	1.10944	1.03446	1.10461	1.09200	1.06576	4.941
21 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Vinyl Chloride	+++++	1.42862	1.28255	1.59625	1.47907	1.49951	1.49340	1.46323	7.103
19 Butane	+++++	+++++	0.25023	0.30439	0.28440	0.28549	0.27474	0.27985	7.053
22 1,3-Butadiene	+++++	0.97057	1.02558	1.21355	1.14007	1.13828	1.11885	1.10115	7.979
26 Methanol	+++++	+++++	+++++	0.32872	0.14314	0.16944	0.19742	0.20868	39.806
25 Bromomethane	+++++	1.36425	1.28940	1.56898	1.45095	1.49831	1.52877	1.44878	7.247
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
27 Chloroethane	+++++	0.65321	0.67403	0.83510	0.80667	0.80344	0.80030	0.76312	10.255
29 Isopentane	+++++	+++++	1.41966	1.72435	1.68834	1.64871	1.60636	1.61629	7.342
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.46115	2.48121	2.61085	2.39783	2.32898	2.45592	4.280
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	4.83077	5.16410	6.19720	5.82682	5.63959	5.49991	5.52640	8.749
37 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
38 Ethanol	+++++	+++++	0.30720	0.46457	0.45284	0.43697		
	0.45254						0.42283	15.461
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
40 Freon123a	+++++	+++++	1.67093	1.80792	2.07320	1.91202		
	2.00931						1.89468	8.465
41 Freon123	+++++	+++++	0.20549	0.20922	0.23514	0.23426		
	0.22855						0.22255	6.365
44 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
42 Freon 113	+++++	2.32343	2.43842	2.80201	2.61026	2.58482		
	2.51013						2.54471	6.421
43 1,1-Dichloroethene	+++++	1.89819	1.96458	2.53705	2.44002	2.45483		
	2.44852						2.29053	12.275
45 Acetone	+++++	+++++	0.64513	0.75269	0.75542	0.70777		
	0.68836						0.70987	6.519
46 2-Propanol	+++++	+++++	1.84353	2.56755	2.62153	2.59185		
	2.53924						2.43274	13.597
48 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
47 Carbon Disulfide	+++++	3.75552	3.89953	4.70232	4.46118	4.57127		
	4.60543						4.33254	9.262
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
51 3-Chloropropene	+++++	+++++	0.57241	0.83863	0.77832	0.77926		
	0.76166						0.74606	13.589
52 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	1.42542	1.38589	1.54346	1.44317	1.45912		
	1.44235						1.44840	3.593

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
57 tert-Butyl-Alcohol	+++++	+++++	1.82841	3.04910	3.01051	2.74077			
	2.61830						2.65102	18.624	
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
60 MTBE	+++++	1.74667	2.48598	5.35404	5.24034	5.08244			
	5.03910						4.15810	38.544	<-
61 trans-1,2-Dichloroethene	+++++	1.37259	1.40223	1.98489	1.85179	1.82018			
	1.78174						1.70224	14.889	
62 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
66 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
63 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
65 Hexane	+++++	1.32672	1.77918	2.62091	2.58448	2.58035			
	2.58008						2.24629	24.751	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
68 Isopropyl ether	+++++	+++++	3.46151	3.51777	4.38551	4.38257		
	4.73654						4.09678	13.986
69 Vinyl Acetate	+++++	+++++	0.32869	0.45891	0.45656	0.47988		
	0.47874						0.44040	14.383
70 1,1-Dichloroethane	+++++	2.38432	2.79344	3.61652	3.47281	3.35324		
	3.23668						3.14283	14.814
71 1-Propanol	+++++	+++++	0.15996	0.23615	0.18897	0.23844		
	0.25309						0.21526	18.202
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.22964	3.53835	4.86959	4.90827		
	5.27473						4.36417	20.970
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
77 Ethyl Acetate	+++++	+++++	0.43635	0.37272	0.45984	0.44490		
	0.49610						0.44196	10.172

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
78 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.54840	0.64439	0.87500	0.88005	0.92856	0.92719	0.79961	20.225
76 cis-1,2-Dichloroethene	+++++	1.50980	1.82949	2.43792	2.35871	2.32880	2.22781	2.11467	17.285
79 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 Tetrahydrofuran	+++++	0.86924	1.09182	1.54446	1.53666	1.53710	1.51283	1.34868	21.793
82 Chloroform	2.87970	2.73754	3.43045	4.29177	4.13727	4.05571	3.88461	3.63101	17.201
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 1,1,1-Trichloroethane	+++++	2.56837	3.64494	4.67327	4.45606	4.41784	4.33648	4.01616	19.679
85 Cyclohexane	+++++	1.36064	1.71484	2.48744	2.40989	2.47472	2.45512	2.15044	22.709
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
88 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Carbon Tetrachloride	+++++	2.69834	3.44710	4.47510	4.26367	4.18227	4.08084	3.85789	17.248
99 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89 2,2,4-Trimethylpentane	+++++	3.17139	4.19445	6.10478	5.79296	5.98557	6.21058	5.24329	24.009
91 Benzene	1.30575	0.88191	1.17697	1.40059	1.35772	1.31872	1.31185	1.24979	14.092
92 tert-amyl-Methyl Ether	+++++	+++++	3.16063	3.41817	4.52447	4.57581	4.96193	4.12820	19.123
96 2-Heptanone	+++++	+++++	1.27450	1.66153	2.39901	2.62389	2.87236	2.16686	31.086
93 1,2-Dichloroethane	+++++	0.44681	0.57569	0.69764	0.67542	0.64391	0.61956	0.60974	14.846
94 Heptane	+++++	0.22192	0.29435	0.41861	0.39712	0.39872	0.39194	0.35378	22.068
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
98 1-Butanol	+++++	+++++	0.09734	0.14280	0.14126	0.20427	0.22835	0.16280	32.451
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Trichloroethene	+++++	0.34601	0.49463	0.62804	0.59888	0.57328	0.57089	0.53529	19.204
102 Methyl Cyclohexane	+++++	1.53385	2.04963	2.92705	2.84733	2.93614	2.98281	2.54614	23.889
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
104 1,2-Dichloropropane	+++++	0.29580	0.38067	0.47917	0.46930	0.45378	0.45136	0.42168	16.773
106 1,4-Dioxane	+++++	+++++	0.24229	0.32501	0.32675	0.32426	0.32497	0.30866	12.023
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107 Bromodichloromethane	+++++	0.61966	0.87952	1.12677	1.07497	1.03481	1.01275	0.95798	19.338
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
110 cis-1,3-Dichloropropene	+++++	0.38794	0.53248	0.74519	0.74052	0.72847			
	0.72072						0.64255	23.143	
111 4-Methyl-2-pentanone	+++++	0.14029	0.20868	0.34424	0.34948	0.35082			
	0.35871						0.29195	32.073	<-
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
114 Toluene	+++++	0.81092	1.24660	1.54307	1.48194	1.44603			
	1.46639						1.33263	20.608	
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
116 trans-1,3-Dichloropropene	+++++	0.47967	0.69609	0.94114	0.90256	0.87044			
	0.85094						0.79014	21.981	
117 1,1,2-Trichloroethane	+++++	0.34939	0.54719	0.67788	0.64198	0.60975			
	0.59063						0.56947	20.481	
120 Tetrachloroethene	+++++	0.49262	0.70999	0.91885	0.85607	0.81582			
	0.78542						0.76308	19.624	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
121 2-Hexanone	+++++	+++++	0.25507	0.52868	0.53983	0.53135		
	0.52933						0.47685	26.017
118 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
119 Butyl Acetate	+++++	+++++	0.24369	0.28185	0.37466	0.39956		
	0.40225						0.33960	21.243
122 Dibromochloromethane	+++++	0.53953	0.85628	1.18704	1.12813	1.07161		
	1.03522						0.96963	24.619
123 1,2-Dibromoethane	0.84179	0.55970	0.80137	1.10140	1.04350	1.00535		
	0.98755						0.90581	20.585
127 Chlorobenzene	+++++	0.89505	1.25385	1.53453	1.44109	1.38846		
	1.37527						1.31466	17.116
124 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 Ethyl Benzene	+++++	0.41019	0.61882	0.81504	0.76644	0.73986		
	0.73702						0.68116	21.679
125 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
129 m,p-Xylene	+++++	0.45061	0.77115	1.03224	0.98373	0.95378		
	0.95497						0.85774	25.449

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 LevelI 7								
130 o-Xylene	+++++	0.44049	0.71861	0.99008	0.93480	0.90783			
	0.90371						0.81592	25.179	
131 Styrene	1.03326	0.59334	1.00313	1.58534	1.52043	1.48980			
	1.52545						1.25002	30.248	<-
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
133 Bromoform	+++++	0.55412	0.90763	1.25794	1.20404	1.16528			
	1.15578						1.04080	25.677	
134 Cumene	2.06305	1.21611	1.95934	2.74683	2.61042	2.56042			
	2.59241						2.25068	24.218	
135 Cyclohexanone	+++++	+++++	0.27258	0.41193	0.36212	0.49851			
	0.52619						0.41426	24.859	
140 1,1,2,2-Tetrachloroethane	+++++	0.66388	1.29422	1.55449	1.46984	1.42576			
	1.44462						1.30880	24.983	
136 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
138 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
142 Propylbenzene	+++++	1.65274	2.71658	3.50920	3.34294	3.25726			
	3.02690						2.91760	23.239	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++	1.20333	2.36567	3.05246	2.92449	2.81345	2.54265	2.48367	27.208
141 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 1,3,5-Trimethylbenzene	+++++	1.09055	1.94838	2.57321	2.40165	2.34595	2.35136	2.11868	25.670
143 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Diisobutyl Ketone	+++++	+++++	0.72243	0.92643	1.23471	1.30508	1.32951	1.10363	24.207
148 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 1,2,4-Trimethylbenzene	+++++	0.93406	1.80498	2.41563	2.30233	2.24772	2.27401	1.99645	28.110
201 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
152 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
149 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
151 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
153 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
155 1,3-Dichlorobenzene	+++++	0.82952	1.50140	1.66547	1.57037	1.51511		
	1.52780						1.43495	21.080
154 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
156 1,4-Dichlorobenzene	+++++	0.86046	1.50599	1.71817	1.62550	1.56485		
	1.58445						1.47654	20.993
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
159 alpha-Chlorotoluene	+++++	1.02357	1.93206	2.54425	2.48304	2.45540		
	2.37094						2.13483	27.499
158 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.79871	1.48339	1.61702	1.52034	1.46826		
	1.49927						1.39783	21.332
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
165 1,2,4-Trichlorobenzene	+++++	+++++	1.02280	1.08351	1.06141	1.06577		
	1.09716						1.06613	2.638
166 Hexachlorobutadiene	+++++	+++++	1.24188	1.06702	1.02142	0.99945		
	1.03510						1.07297	9.091
167 Naphthalene	+++++	+++++	1.26860	1.50335	1.49914	1.52078		
	1.58611						1.47559	8.191
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 06-FEB-2008 14:27
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/21Feb2008.b/t14q206b.m
Cal Date : 22-Feb-2008 09:18 sruth
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.52060	1.52978	1.50295	1.59264	1.64012	1.70467	1.76955	1.60865	6.296
$ 113 Toluene-d8	0.94316	0.95996	0.94937	0.96424	0.96043	0.97540	0.98845	0.96300	1.585
$ 137 Bromofluorobenzene	0.65286	0.64773	0.63223	0.63637	0.65401	0.65087	0.65249	0.64665	1.353

Calibration History

Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Start Cal Date: 06-FEB-2008 14:27
End Cal Date : 21-FEB-2008 17:00

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-FEB-2008 14:27	AFCEElow	/chem/msdt.i/06Feb2008.b/t020607.d
Cal Level: 2 , Cal Amount: 0.50000		
06-FEB-2008 22:02	AT04low+ENSR	/chem/msdt.i/06Feb2008.b/t020615.d
Cal Level: 3 , Cal Amount: 2.00000		
21-FEB-2008 09:41	sp22b	/chem/msdt.i/21Feb2008.b/t022102.d
06-FEB-2008 15:52	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020609.d
Cal Level: 4 , Cal Amount: 25.00000		
21-FEB-2008 10:21	sp22b	/chem/msdt.i/21Feb2008.b/t022103.d
06-FEB-2008 16:33	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020610.d
Cal Level: 5 , Cal Amount: 50.00000		
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d
06-FEB-2008 17:13	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020611.d
Cal Level: 6 , Cal Amount: 100.00000		
21-FEB-2008 17:00	sp22b	/chem/msdt.i/21Feb2008.b/t022109.d
06-FEB-2008 17:51	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020612.d
Cal Level: 7 , Cal Amount: 200.00000		
21-FEB-2008 12:05	sp22b	/chem/msdt.i/21Feb2008.b/t022105.d
06-FEB-2008 19:41	AT04mdl+ENSR	/chem/msdt.i/06Feb2008.b/t020613.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000			
21-FEB-2008 14:36	AT04ENSR	/chem/msdt.i/21Feb2008.b/t022106.d	
Ccal Level: 5 , Ccal Amount: 50.000			
21-FEB-2008 11:03	sp22bCCV	/chem/msdt.i/21Feb2008.b/t022104a.d	
Ccal Level: 5 , Ccal Amount: 50.000			
21-FEB-2008 11:03	sp22b	/chem/msdt.i/21Feb2008.b/t022104.d	

Initial Calibration Narrative

A 7 point initial calibration was analyzed on MSD-T on February 6, 2008.

The following compounds used 0.2ppbv as the lowest calibration concentration:

Chloroform, Benzene, Styrene, Cumene, and 1,2-Dibromoethane.

As noted on the accompanying analytical run log, the following point, 0.5ppbv, was re-analyzed due to:

a. anomalous unacceptable linearity for various compounds

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.07
75	30.0 – 60.0% of mass 95	50.99
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.46
173	Less than 2.0% of mass 174	(0.76)[1]
174	Greater than 50.0% of mass 95	75.96
175	5.0 – 9.0% of mass 174	(7.09)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.77)[1]
177	5.0 – 9.0% of mass 176	(6.41)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/6/08

BFB Injection Time: 1326

BFB File ID: t020605

Tekmar Purge Flow: ——

Vacuum: 2.16e-5

IS/S Std.#:	1443-398 Exp. Date: 3/28/08
BCM	355997
1,4-DFB	1372567
CB-d5	1327265

Verified CCV IS vs ICAL mid-point (- 40%D) ——— *initials*

Verify 176/174 m/z Ratio: 1308292 / 135196 x 100 = 96.77

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1318253)}{(1372567)} \times \frac{(25.0)}{(0.96300)} = 24.933$

File ID:	t020611
Compound:	Tol-d8
Initials:	

Reported Result 24.933

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init	Comments
1	✓	t020605	BFB Tune Check	14765	50psig	2mL	1.00	2/6/08	1326		
2	✓	06	System Blank	3368	Humid	200mL			1303		
3	✓	07	ICAL level 1	1576-26	0.2ppbv	0.2mL			1427		t14q206a
4	X	08	2		0.5ppbv	0.5mL			1512		
5	X ✓	09	3		2.0ppbv	2.0mL			1552		
6	✓	10	4		25ppbv	25mL			1633		
7	✓	11	5		50ppbv	50mL			1713		
8	✓	12	6		100ppbv	100mL			1751		
9	✓	13	7		200ppbv	200mL	↓		1941		

Signature

2/6/08
Date

0204

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MSD-T

Logbook #: 1599

10	✓	TO20 @14	System Blank	336168	Humid	200ml	1.00	2/6/08	2019	SG		0205
11	✓	1 15	2CAL Level 2	1576-260	0.5ppbv	0.5ml	1.00	1	2202	SG		
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
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28												
29												
30												
31												
32												

SG 2/7/08

Comments: Flow controller # AA98123220 Actual Nominal

Flow meter #200-7744 ; exp 8/27/08 25 mL/min 229 mL/min

Signature

2/7/08
Date

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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.83
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.35
173	Less than 2.0% of mass 174	(0.80)[1]
174	Greater than 50.0% of mass 95	74.12
175	5.0 – 9.0% of mass 174	(7.27)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.56)[1]
177	5.0 – 9.0% of mass 176	(6.47)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/7/08

BFB Injection Time: 0918

BFB File ID: t020701

Tekmar Purge Flow: 19.5mL/min

Vacuum: 4.24e-5

IS/S Std.#:	1443-398	Exp. Date: 3/28/08
BCM	357541	
1,4-DFB	1413414	
CB-d5	1290063	

Verified CCV IS vs ICAL mid-point (- 40%D) initials

Verify 176/174 m/z Ratio: 1426273/1477051 x100 = 96.56 **NOAH Cart #:** NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1382401)}{(1413414)} \times \frac{(25.0)}{(0.96300)} = 25.391$

File ID:	t020702
Compound:	Tol-d8
Initials:	

Reported Result 25.391

	Rev	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Reviewed Initials	Comments
1	✓	t020701	BFB Tune Check	1476-65	50psig	3mL	1.00	2/7/08	0918		
2	✓	02	CCV-1 (20ppbv)	1576-26	50ppbv	50mL			0941		6 out
3	✓	03	LCS-1	1576-25					1041		6 out ICAL LCS
4	—	04	Cont. Std (50ppmv)	1576-14A	250ppbv	10mL					
5											
6											
7											
8									2/7/08		
9											

Signature

2/7/08
Date

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MSD-T

Logbook #: 1599

0207

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76) [1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21) [1]
176	~~Greater than 95.0% but less than 101.0% of mass 174~~	(96.15) [1]
177	5.0 – 9.0% of mass 176	(6.42) [2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08

BFB Injection Time: 0830

BFB File ID: t022101

Tekmar Purge Flow: ——

Vacuum: 3.99e-5

IS/S Std.#: 1443-398	Exp. Date: 3/28/08
BCM 318158	
1,4-DFB 1251468	
CB-d5 1150997	

Verified CCV IS vs ICAL mid-point (- 40%D) SJM (initials)

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15 **NOAH Cart #:** NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1267119)}{(1251468)} \times \frac{(75.0)}{(0.96300)} = 26.285$

File ID:	t022106
Compound:	Tol-d8
Initials:	SJM

Reported Result 26.285

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt. Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	t022101	BFB Tune Check	1476-274	50psig	2mL	1.00	2/21/08	0830	SJM	
2	✓	02	ICAL Level 3	1576-299	2ppbv/12ppbv	20mL			0941	SJM	t14g206b
3	✓	03	4		3ppbv/45ppbv	8.0mL			1021	SJM	MeOH022IA
4	✓	04	5		50ppbv/200ppbv	50mL			1103	SJM	sp22b
5	✓	05	7		200ppbv/1200ppbv	200mL			1205	SJM	
6	✓	06	CCV-1 (200ppbv)	1576-261	50ppbv	50mL			1436	SJM	ℓ ost
7	~~✓~~	~~07~~	~~ICAL Level 6~~	1576-299	~~100ppbv/600ppbv~~	~~100mL~~			SJM 2/21/08		not loaded
8	✓	07	LCS-1 (200ppbv)	1576-253	50ppbv	50mL	1.00		1525	SJM	ℓ ost
9	✓	08	System blank	3346	Humid	200mL		↓	1617	SJM	

Signature

2/21/08
Date

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MSD-T

Logbook #: 1599

10	✓	022109	ICAL Level 6	15Xe-289	100ppb/100ppb	100 mL	1.00	2/2/08	1700	Act			
11	✓	10	Lab Blank	33d08	Humid	200 mL	↓		1755	Act			
12	✓	11	0802200 -01A	33942	6.0"Hg→5psi		1.68		1847	Act			
13	✓	12	-02A	33943	7.5"Hg→5psi		1.79		PRG	Act			
14	✓	13	-01AA	33942	6.0"Hg→5psi		1.68		2005	Act			
15	✓	14	-02AA	33943	7.5"Hg→5psi		1.79		2043	Act			
16	✓	15	-03A	SC116	6.5"Hg→5psi		1.71		2122	Act			
17	✓	~~16~~	~~-04A~~	9945	↓		↓		2201	Act			
18	✓	17	-05A	34306	↓		↓		2239	Act	↓		
19	✓	18	-06A	R-4	6.0"Hg→5psi		1.68	↓	0538	or			
20	✓	19	0802283 -01A	22197	↓	↓	↓	2/22/08	0017	or			
21	✓	20	01A	34438	5.5"Hg→5.0psi	200mL	1.64		0134	or			
22	✓	21	03A	23956	5.5"Hg→5.0psi	200mL	1.64		0221	or			
23	✓	22	04A	35171	6.5"Hg→5.0psi	200mL	1.71		0308	or			MeCl ↑
24	X	23	05A	34746	6.0"Hg→5.0psi	200mL	1.68		0351	or			MeCl ↑
25	X	24	0802328-01A ~~06A~~	12666	5.5"Hg→5.0psi	200mL	1.64		0432	or	↓		PCE ↑
26	✓	25	0802283 -04A	35171	6.5"Hg→5.0psi	~~200mL~~ 100 ml under 200mL	3.42 (1.71 x 2)		0510	or			
27	✓	26	1 05A	34746	6.0"Hg→5.0psi	~~200mL~~ 100 under 200mL	3.36 (1.68 x 2)		0711				
28	✓	27	0802328 - 01A	12666	5.5"Hg→5.0psi	~~200mL~~ 100 under 200mL	3.28 (1.64 x 2)		0749				
29													
30													
31			LO 2/22/08										
32													

Comments:

Laura Oresmyn
Signature

2/22/08
Date

0208

Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15 Low Level

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

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AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/07Feb2008.b/t020703.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 07-FEB-2008 10:41
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/07Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 10:17 sruth Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02 Cal File: t020615.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	364188	25.0000		80.00- 120.00	100.00
13.858	13.858 (1.000)	128	282636			26.53- 126.53	77.61
13.858	13.858 (1.000)	49	642409			128.17- 228.17	176.39
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.627	15.628 (1.000)	114	1439060	25.0000		80.00- 120.00	100.00
15.627	15.628 (1.000)	88	235739			0.00- 66.52	16.38
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1292442	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	752973			6.72- 106.72	58.26
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.937 (1.078)	65	592767	25.2952	25.295	80.00- 120.00	100.00
14.936	14.937 (1.078)	67	339519			3.57- 103.57	57.28
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1388717	25.0524	25.052	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	157888			0.00- 61.29	11.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	938828			18.71- 118.71	67.60
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	875940	26.2019	26.202	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	1106906			72.28- 172.28	126.37
22.789	22.789 (1.096)	176	852956			45.76- 145.76	97.38
11 Propylene					CAS #: 115-07-1		
5.812	5.785 (0.419)	41	613591	51.5112	51.511	80.00- 120.00	100.00
5.812	5.785 (0.419)	42	426221			17.96- 117.96	69.46
5.812	5.785 (0.419)	39	492845			33.44- 133.44	80.32
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.895 (0.427)	85	3630724	51.0550	51.055	80.00- 120.00	100.00
5.923	5.895 (0.427)	87	1142768			0.00- 82.13	31.47
16 Freon 114					CAS #: 76-14-2		
6.310	6.282 (0.455)	135	2403733	51.1334	51.133	80.00- 120.00	100.00
6.310	6.282 (0.455)	137	762741			0.00- 81.89	31.73
18 Chloromethane					CAS #: 74-87-3		
6.558	6.531 (0.473)	50	747784	48.1651	48.165	80.00- 120.00	100.00
6.558	6.531 (0.473)	52	249680			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.863 (0.497)	62	1087955	51.0401	51.040	80.00- 120.00	100.00
6.890	6.863 (0.497)	64	353730			0.00- 89.61	32.51
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.946 (0.503)	54	820317	51.1387	51.139	80.00- 120.00	100.00
6.973	6.946 (0.503)	39	782893			53.33- 153.33	95.44
25 Bromomethane					CAS #: 74-83-9		
7.913	7.886 (0.571)	94	1069630	50.6811	50.681	80.00- 120.00	100.00
7.913	7.886 (0.571)	96	989108			42.77- 142.77	92.47
27 Chloroethane					CAS #: 75-00-3		
8.190	8.162 (0.591)	64	588665	52.9526	52.952	80.00- 120.00	100.00
8.190	8.162 (0.591)	49	150442			0.00- 76.71	25.56
8.190	8.162 (0.591)	66	190911			0.00- 83.02	32.43
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.771 (0.635)	101	4126674	51.2618	51.262	80.00- 120.00	100.00
8.798	8.771 (0.635)	103	2651802			14.63- 114.63	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.240	9.213 (0.667)	45	334932	54.3761	54.376	80.00- 120.00	100.00
9.240	9.213 (0.667)	43	78044			0.00- 75.24	23.30
9.240	9.213 (0.667)	46	130611			0.00- 89.78	39.00
42 Freon 113					CAS #: 76-13-1		
9.959	9.932 (0.719)	151	2155060	58.1347	58.135	80.00- 120.00	100.00
9.959	9.932 (0.719)	153	1372575			14.76- 114.76	63.69
9.959	9.932 (0.719)	101	2781208			80.58- 180.58	129.05
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.015 (0.725)	61	1971376	59.0809	59.081	80.00- 120.00	100.00
10.042	10.043 (0.725)	96	1202804			10.93- 110.93	61.01
10.042	10.043 (0.725)	98	780821			0.00- 89.40	39.61
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	560983	54.2480	54.248	80.00- 120.00	100.00
10.181	10.181 (0.735)	43	1718440			267.82- 367.82	306.33
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	1942177	54.8034	54.803	80.00- 120.00	100.00
10.374	10.374 (0.749)	43	475790			0.00- 76.64	24.50
10.374	10.374 (0.749)	59	81347			0.00- 54.31	4.19
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	3305899	52.3795	52.380	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.816	10.817 (0.781)	76	597711	54.9965	54.996	80.00- 120.00	100.00
10.816	10.817 (0.781)	41	1275321			173.84- 273.84	213.37
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	1145006	54.2668	54.267	80.00- 120.00	100.00
11.121	11.093 (0.802)	84	1034033			40.82- 140.82	90.31
11.093	11.093 (0.800)	51	377986			0.00- 83.83	33.01
60 MTBE					CAS #: 1634-04-4		
11.452	11.453 (0.826)	73	3774615	62.3150	62.315	80.00- 120.00	100.00
11.452	11.453 (0.826)	57	719078			0.00- 69.06	19.05
11.452	11.453 (0.826)	41	687732			0.00- 70.47	18.22
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.536 (0.834)	96	1387532	55.9548	55.955	80.00- 120.00	100.00
11.535	11.536 (0.832)	61	1901887			88.49- 188.49	137.07
11.563	11.536 (0.834)	98	891584			16.26- 116.26	64.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	1891161	57.7934	57.793	80.00- 120.00	100.00
11.895	11.895 (0.858)	43	1080305			9.30- 109.30	57.12
11.895	11.895 (0.858)	86	341505			0.00- 66.83	18.06
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	348239	54.2809	54.281	80.00- 120.00	100.00
12.365	12.337 (0.892)	43	3106079			832.23- 932.23	891.94
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	2630332	57.4518	57.452	80.00- 120.00	100.00
12.365	12.365 (0.892)	65	853608			0.00- 82.30	32.45
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	646558	55.5063	55.506	80.00- 120.00	100.00
13.388	13.388 (0.966)	43	2171765			282.56- 382.56	335.90
13.388	13.388 (0.966)	57	194672			0.00- 79.56	30.11
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	1740573	56.5020	56.502	80.00- 120.00	100.00
13.416	13.416 (0.968)	96	1385696			31.20- 131.20	79.61
13.416	13.416 (0.968)	98	895062			1.78- 101.78	51.42
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	1101132	56.0458	56.046	80.00- 120.00	100.00
13.858	13.858 (1.000)	71	583896			2.70- 102.70	53.03
13.858	13.858 (1.000)	72	619526			2.04- 102.04	56.26
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	3047174	57.6082	57.608	80.00- 120.00	100.00
13.941	13.941 (1.006)	85	2012329			15.21- 115.21	66.04
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	3228969	55.1909	55.191	80.00- 120.00	100.00
14.273	14.273 (1.030)	99	2060721			14.57- 114.57	63.82
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.301 (1.032)	84	1772344	56.5763	56.576	80.00- 120.00	100.00
14.300	14.301 (1.032)	56	1739685			49.56- 149.56	98.16
14.300	14.301 (1.032)	41	902671			1.20- 101.20	50.93
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.522 (1.050)	119	2960464	52.6774	52.677	80.00- 120.00	100.00
14.549	14.522 (1.050)	117	3142043			57.09- 157.09	106.13
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	4200762	54.9970	54.997	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)								
14.881	14.881	(1.074)	56	1354857			0.00- 82.82	32.25
14.881	14.881	(1.074)	41	1075995			0.00- 78.43	25.61
91 Benzene						CAS #: 71-43-2		
14.964	14.964	(0.958)	78	3843383	53.4243	53.424	80.00- 120.00	100.00
14.964	14.964	(0.958)	77	887809			0.00- 73.50	23.10
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.075	15.075	(0.965)	62	1887283	53.7716	53.772	80.00- 120.00	100.00
15.075	15.075	(0.965)	64	614030			0.00- 84.23	32.54
94 Heptane						CAS #: 142-82-5		
15.185	15.185	(0.972)	71	1130162	55.4972	55.497	80.00- 120.00	100.00
15.185	15.185	(0.972)	43	1515301			85.70- 185.70	134.08
15.185	15.185	(0.972)	57	927126			28.72- 128.72	82.03
101 Trichloroethene						CAS #: 79-01-6		
16.070	16.070	(1.028)	95	1648538	53.5021	53.502	80.00- 120.00	100.00
16.098	16.070	(1.030)	130	1512857			41.36- 141.36	91.77
16.070	16.070	(1.028)	97	1054939			13.70- 113.70	63.99
104 1,2-Dichloropropane						CAS #: 78-87-5		
16.568	16.568	(1.060)	63	1289567	53.1277	53.128	80.00- 120.00	100.00
16.568	16.568	(1.060)	62	932367			22.07- 122.07	72.30
16.568	16.568	(1.060)	41	714853			6.80- 106.80	55.43
106 1,4-Dioxane						CAS #: 123-91-1		
16.678	16.678	(1.067)	88	909360	51.1825	51.182	80.00- 120.00	100.00
16.678	16.678	(1.067)	58	520290			7.38- 107.38	57.21
16.678	16.678	(1.067)	57	184864			0.00- 71.19	20.33
107 Bromodichloromethane						CAS #: 75-27-4		
16.982	16.983	(1.087)	83	2955752	53.6010	53.601	80.00- 120.00	100.00
16.982	16.983	(1.087)	85	1906864			14.75- 114.75	64.51
110 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
17.784	17.784	(1.138)	75	2055925	55.5852	55.585	80.00- 120.00	100.00
17.784	17.784	(1.138)	77	662734			0.00- 81.51	32.24
17.784	17.784	(1.138)	39	920517			0.00- 94.39	44.77
111 4-Methyl-2-pentanone						CAS #: 108-10-1		
17.950	17.950	(1.149)	58	970511	57.7496	57.750	80.00- 120.00	100.00
17.950	17.950	(1.149)	43	2207573			175.34- 275.34	227.47
17.978	17.978	(1.150)	85	478187			0.64- 100.64	49.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4390035	57.2296	57.230	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2652998			10.63- 110.63	60.43
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2209362	54.0869	54.087	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	716340			0.00- 81.36	32.42
18.752	18.752 (0.902)	39	915171			0.00- 91.03	41.42
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.112 (0.919)	97	1580720	53.6925	53.692	80.00- 120.00	100.00
19.111	19.112 (0.919)	99	997611			14.06- 114.06	63.11
19.111	19.112 (0.919)	83	1366879			35.72- 135.72	86.47
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2122005	53.7905	53.790	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1462582			18.51- 118.51	68.92
19.277	19.277 (0.927)	131	1396687			15.23- 115.23	65.82
121 2-Hexanone					CAS #: 591-78-6		
19.415	19.416 (0.934)	58	1306064	52.9797	52.980	80.00- 120.00	100.00
19.415	19.416 (0.934)	43	2176893			117.36- 217.36	166.68
19.415	19.416 (0.934)	100	281719			0.00- 71.71	21.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2715281	54.1671	54.167	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2100341			28.82- 128.82	77.35
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.052 (0.964)	107	2456852	52.4651	52.465	80.00- 120.00	100.00
20.051	20.052 (0.964)	109	2268304			42.74- 142.74	92.33
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3552960	52.2765	52.276	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1108333			0.00- 81.00	31.19
20.853	20.853 (1.003)	77	2210378			12.54- 112.54	62.21
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1878900	53.3558	53.356	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6014846			269.96- 369.96	320.13
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414838	54.4582	54.458	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4845879			149.87- 249.87	200.67
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2323688	55.0883	55.088	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
21.849	21.849	(1.051)	91	4908221			163.91- 263.91	211.23
131 Styrene						CAS #: 100-42-5		
21.876	21.876	(1.052)	104	3755676	58.1165	58.116	80.00- 120.00	100.00
21.876	21.876	(1.052)	78	1922908			0.81- 100.81	51.20
133 Bromoform						CAS #: 75-25-2		
22.291	22.291	(1.072)	173	2946351	54.7578	54.758	80.00- 120.00	100.00
22.291	22.291	(1.072)	171	1505628			1.45- 101.45	51.10
134 Cumene						CAS #: 98-82-8		
22.429	22.430	(1.078)	105	6696362	57.5511	57.551	80.00- 120.00	100.00
22.429	22.430	(1.078)	120	1712846			0.00- 77.62	25.58
22.402	22.402	(1.077)	51	569801			0.00- 58.75	8.51
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.010	23.010	(1.106)	83	3679813	54.3852	54.385	80.00- 120.00	100.00
23.010	23.010	(1.106)	85	2370044			14.60- 114.60	64.41
142 Propylbenzene						CAS #: 103-65-1		
23.093	23.093	(1.110)	91	8483170	56.2420	56.242	80.00- 120.00	100.00
23.120	23.121	(1.112)	120	1809726			0.00- 71.63	21.33
23.120	23.121	(1.112)	105	307547			0.00- 53.71	3.63
145 4-Ethyltoluene						CAS #: 622-96-8		
23.286	23.287	(1.120)	105	7219729	56.2284	56.228	80.00- 120.00	100.00
23.286	23.287	(1.120)	120	2130209			0.00- 79.51	29.51
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.397	23.397	(1.125)	105	5917601	54.0267	54.027	80.00- 120.00	100.00
23.397	23.397	(1.125)	120	2884828			0.00- 98.23	48.75
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.033	24.033	(1.156)	105	5720909	55.4287	55.429	80.00- 120.00	100.00
24.033	24.033	(1.156)	120	2603971			0.00- 94.91	45.52
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
24.586	24.586	(1.182)	146	3870355	52.1728	52.173	80.00- 120.00	100.00
24.586	24.586	(1.182)	148	2460421			14.68- 114.68	63.57
24.586	24.586	(1.182)	111	1598480			0.00- 91.36	41.30
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
24.724	24.724	(1.189)	146	3937785	51.5866	51.586	80.00- 120.00	100.00
24.724	24.724	(1.189)	148	2521733			16.09- 116.09	64.04
24.724	24.724	(1.189)	111	1553706			0.00- 90.13	39.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.946 (1.199)	91	6230172	56.4503	56.450	80.00- 120.00	100.00
24.945	24.946 (1.199)	126	1164614			0.00- 69.28	18.69
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3752105	51.9217	51.922	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2421672			14.02- 114.02	64.54
25.360	25.360 (1.219)	111	1612191			0.00- 92.17	42.97
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2788156	50.5867	50.587	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2645129			44.12- 144.12	94.87
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2570482	46.3399	46.340	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1603808			12.90- 112.90	62.39
29 Isopentane					CAS #: 78-78-4		
8.273	8.245 (0.597)	43	1190271	50.5525	50.552	80.00- 120.00	100.00
8.273	8.245 (0.597)	57	941476			27.67- 127.67	79.10
19 Butane					CAS #: 106-97-8		
6.807	6.780 (0.491)	58	209961	51.5020	51.502	80.00- 120.00	100.00
6.807	6.780 (0.491)	43	1472102			666.74- 766.74	701.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.347 (1.180)	83	2075922	55.9685	55.968	80.00- 120.00	100.00
16.346	16.347 (1.180)	98	946654			0.00- 95.22	45.60
16.346	16.347 (1.180)	55	1458457			20.82- 120.82	70.26
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	4181723	54.8172	54.817	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	514318			0.00- 62.74	12.30

Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Report Date: 07-Feb-2008 11:09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020703.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 07-FEB-2008
Calibration Time: 09:41
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	357541	214525	500557	364188	1.86
97 1,4-Difluorobenze	1413414	848048	1978780	1439060	1.81
126 Chlorobenzene-d5	1290063	774038	1806088	1292442	0.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/07Feb2008.b/t020703.d
Report Date: 07-Feb-2008 11:09

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/07Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 07Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	51.055	102.11	70-130
16 Freon 114	50.000	51.133	102.27	70-130
18 Chloromethane	50.000	48.165	96.33	70-130
20 Vinyl Chloride	50.000	51.040	102.08	70-130
22 1,3-Butadiene	50.000	51.139	102.28	60-140
25 Bromomethane	50.000	50.681	101.36	70-130
27 Chloroethane	50.000	52.952	105.91	70-130
31 Trichlorofluoromet	50.000	51.262	102.52	70-130
38 Ethanol	50.000	54.376	108.75	60-140
42 Freon 113	50.000	58.135	116.27	70-130
43 1,1-Dichloroethene	50.000	59.081	118.16	70-130
45 Acetone	50.000	54.248	108.50	60-140
47 Carbon Disulfide	50.000	52.380	104.76	60-140
46 2-Propanol	50.000	54.803	109.61	60-140
54 Methylene Chloride	50.000	54.267	108.53	70-130
60 MTBE	50.000	62.315	124.63	60-140
61 trans-1,2-Dichloro	50.000	55.955	111.91	60-140
65 Hexane	50.000	57.793	115.59	60-140
69 Vinyl Acetate	50.000	54.281	108.56	60-140
70 1,1-Dichloroethane	50.000	57.452	114.90	70-130
76 cis-1,2-Dichloroet	50.000	56.502	113.00	70-130
75 2-Butanone	50.000	55.506	111.01	60-140
80 Tetrahydrofuran	50.000	56.046	112.09	60-140
82 Chloroform	50.000	57.608	115.22	70-130
85 Cyclohexane	50.000	56.576	113.15	60-140
83 1,1,1-Trichloroeth	50.000	55.191	110.38	70-130
87 Carbon Tetrachlori	50.000	52.677	105.35	70-130
91 Benzene	50.000	53.424	106.85	70-130
93 1,2-Dichloroethane	50.000	53.772	107.54	70-130
94 Heptane	50.000	55.497	110.99	60-140
101 Trichloroethene	50.000	53.502	107.00	70-130
104 1,2-Dichloropropan	50.000	53.128	106.26	70-130
106 1,4-Dioxane	50.000	51.182	102.37	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	53.601	107.20	60-140
110 cis-1,3-Dichloropr	50.000	55.585	111.17	70-130
111 4-Methyl-2-pentano	50.000	57.750	115.50	60-140
114 Toluene	50.000	57.230	114.46	70-130
116 trans-1,3-Dichloro	50.000	54.087	108.17	70-130
117 1,1,2-Trichloroeth	50.000	53.692	107.39	70-130
120 Tetrachloroethene	50.000	53.790	107.58	70-130
121 2-Hexanone	50.000	52.980	105.96	60-140
122 Dibromochlorometha	50.000	54.167	108.33	60-140
123 1,2-Dibromoethane	50.000	52.465	104.93	70-130
127 Chlorobenzene	50.000	52.276	104.55	70-130
128 Ethyl Benzene	50.000	53.356	106.71	70-130
129 m,p-Xylene	50.000	54.458	108.92	70-130
130 o-Xylene	50.000	55.088	110.18	70-130
131 Styrene	50.000	58.116	116.23	70-130
133 Bromoform	50.000	54.758	109.52	60-140
140 1,1,2,2-Tetrachlor	50.000	54.385	108.77	70-130
145 4-Ethyltoluene	50.000	56.228	112.46	60-140
147 1,3,5-Trimethylben	50.000	54.027	108.05	70-130
150 1,2,4-Trimethylben	50.000	55.429	110.86	70-130
155 1,3-Dichlorobenzen	50.000	52.173	104.35	70-130
156 1,4-Dichlorobenzen	50.000	51.586	103.17	70-130
159 alpha-Chlorotoluen	50.000	56.450	112.90	70-130
161 1,2-Dichlorobenzen	50.000	51.922	103.84	70-130
165 1,2,4-Trichloroben	50.000	50.587	101.17	70-130
166 Hexachlorobutadien	50.000	46.340	92.68	70-130
142 Propylbenzene	50.000	56.242	112.48	60-140
134 Cumene	50.000	57.551	115.10	60-140
51 3-Chloropropene	50.000	54.996	109.99	60-140
89 2,2,4-Trimethylpen	50.000	54.997	109.99	60-140
19 Butane	50.000	51.502	103.00	70-130
29 Isopentane	50.000	50.552	101.10	70-130
102 Methyl Cyclohexane	50.000	55.968	111.94	70-130
11 Propylene	50.000	51.511	103.02	60-140
167 Naphthalene	50.000	54.817	109.63	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.295	101.18	70-130
$ 113 Toluene-d8	25.000	25.052	100.21	70-130
$ 137 Bromofluorobenzene	25.000	26.202	104.81	70-130

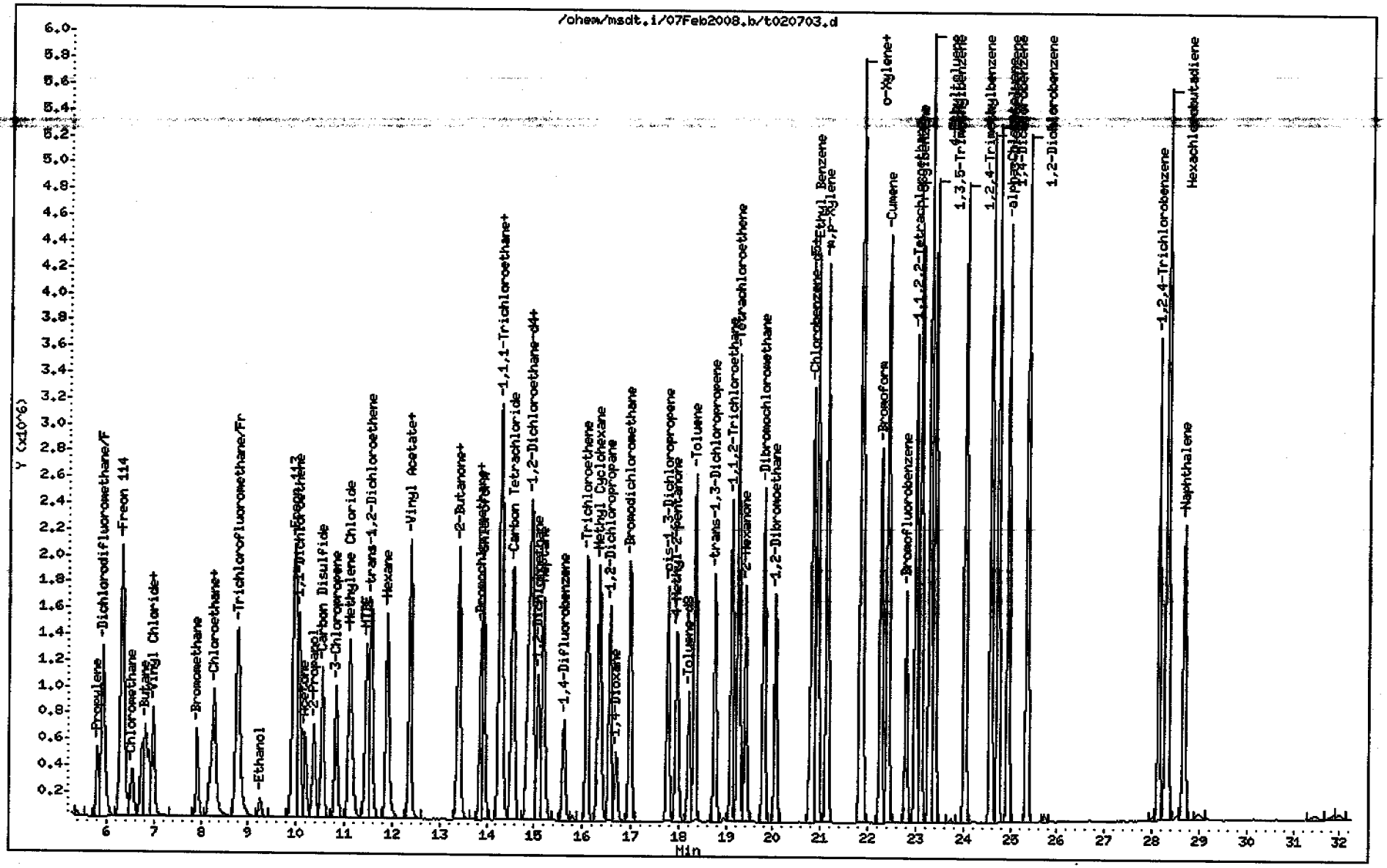
Data File: /ohem/msdt.i/07Feb2008.b/t020703.d
Date : 07-FEB-2008 10:41
Client ID: LCS-1
Sample Info: 50mL #1576-255

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0221



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020607.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 06-FEB-2008 14:27
Operator : sjr
Inst ID: msdt.i
Smp Info : 0.2ml #1576-261
Misc Info : 200ppbv -> 0.2ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 14:27
Cal File: t020607.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	332370	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	254115			26.39- 126.39	76.46
13.858	13.858 (1.000)	49	379355			99.95- 199.95	114.14
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1144843	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	188070			0.00- 66.12	16.43
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1006037	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	576806			6.72- 106.72	57.33
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.937	14.937 (1.078)	65	505401	25.0000	23.632	50.00- 150.00	100.00
14.937	14.937 (1.078)	67	247783			3.57- 103.57	49.03
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1079766	25.0000	24.485	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	125347			0.00- 61.29	11.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	742258			18.71- 118.71	68.74
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	656799	25.0000	25.240	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	812697			75.58- 175.58	123.74
22.789	22.789 (1.096)	176	634912			47.41- 147.41	96.67
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	7657	0.20000	0.1586	50.00- 150.00	100.00(a)
13.941	13.941 (1.006)	85	5855			16.43- 116.43	76.47
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	11959	0.20000	0.2090	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	2943			0.00- 73.50	24.61
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	8316	0.20000	0.1653	50.00- 150.00	100.00(a)
21.877	21.877 (1.052)	78	6770			9.02- 109.02	81.41
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	16604	0.20000	0.1833	50.00- 150.00	100.00(a)
22.430	22.430 (1.078)	120	5207			0.00- 77.62	31.36
22.430	22.430 (1.078)	51	1333			0.00- 58.75	8.03
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	6775	0.20000	0.1859	50.00- 150.00	100.00(a)
20.052	20.052 (0.964)	109	7462			46.68- 146.68	110.14

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020607.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.2ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 14:27
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	332370	199422	465318	332370	0.00
97 1,4-Difluorobenze	1144843	686906	1602780	1144843	0.00
126 Chlorobenzene-d5	1006037	603622	1408452	1006037	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

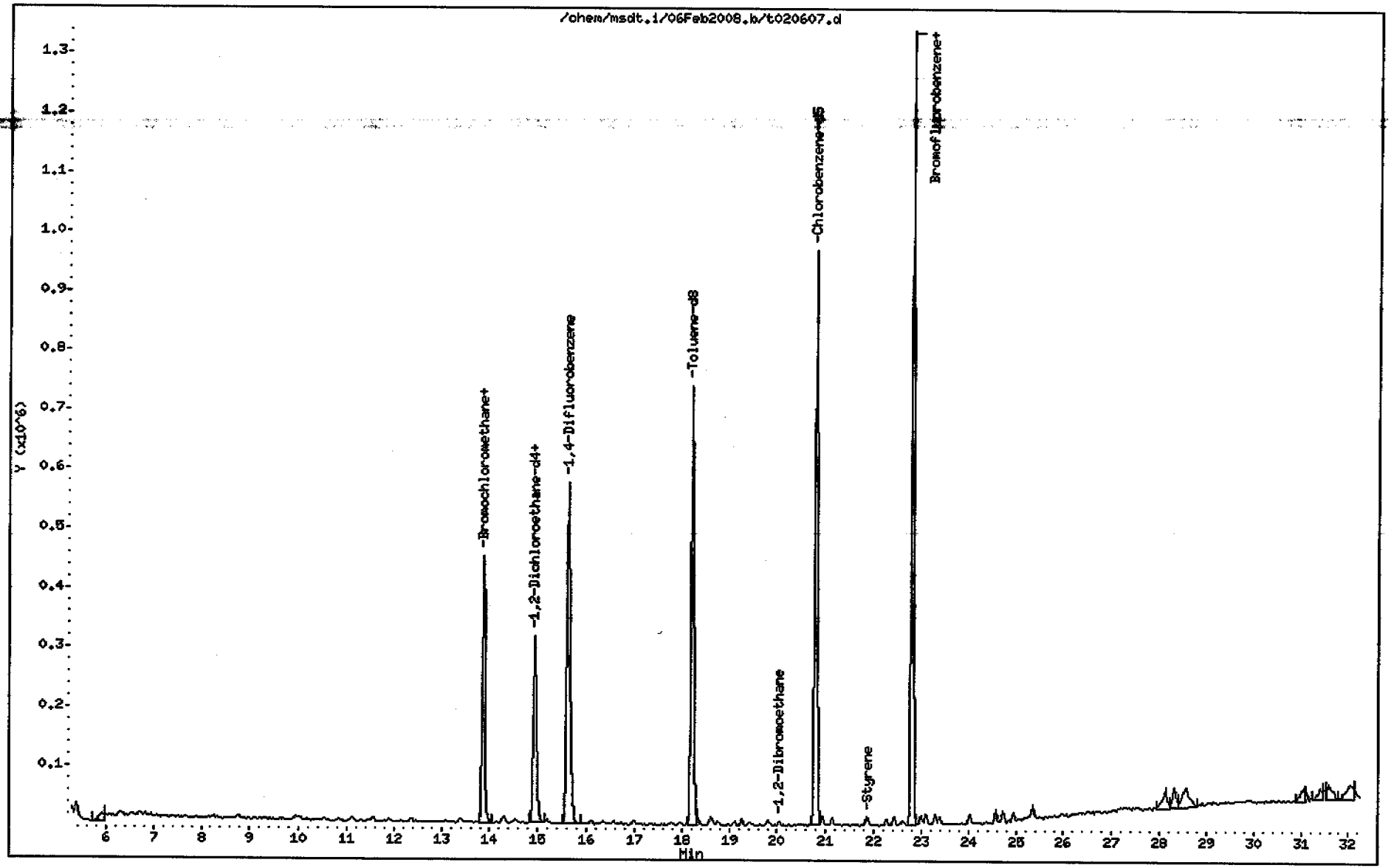
Data File: /chem/msdt.i/06Feb2008.b/t020607.d
Date : 06-FEB-2008 14:27
Client ID: Level 1
Sample Info: 0.2ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0225



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020615.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 06-FEB-2008 22:02
Operator : srs
Inst ID: msdt.i
Smp Info : 0.5mL #1576-261
Misc Info : 200ppbv -> 0.5ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:40 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 22:02
Cal File: t020615.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	359684	25.0000		50.00- 150.00	100.00
13.886	13.886 (1.000)	128	275976			26.39- 126.39	76.73
13.858	13.858 (1.000)	49	409784			99.95- 199.95	113.93
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1311527	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	209950			0.00- 66.12	16.01
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1165188	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	664676			6.72- 106.72	57.04
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	550238	25.0000	23.774	50.00- 150.00	100.00
14.936	14.936 (1.076)	67	270699			3.57- 103.57	49.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1259013	25.0000	24.921	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	132880			0.00- 61.29	10.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	855222			18.71- 118.71	67.93
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	754728	25.0000	25.042	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	954528			75.58- 175.58	126.47
22.789	22.789 (1.096)	176	726618			47.41- 147.41	96.28
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	29948	0.50000	0.4264	50.00- 150.00	100.00(a)
5.923	5.923 (0.427)	87	9731			0.00- 82.13	32.49
16 Freon 114					CAS #: 76-14-2		
6.337	6.337 (0.456)	135	21512	0.50000	0.4633	50.00- 150.00	100.00(a)
6.310	6.310 (0.454)	137	6108			0.00- 81.89	28.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	10277	0.50000	0.4882	50.00- 150.00	100.00(a)
6.890	6.890 (0.496)	64	5846			0.00- 89.61	56.88
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	6982	0.50000	0.4407	50.00- 150.00	100.00(a)
6.973	6.973 (0.502)	39	9131			53.33- 153.33	130.78
25 Bromomethane					CAS #: 74-83-9		
7.941	7.941 (0.572)	94	9814	0.50000	0.4708	50.00- 150.00	100.00(a)
7.941	7.941 (0.572)	96	8139			43.69- 143.69	82.93
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	4699	0.50000	0.4280	50.00- 150.00	100.00(a)
8.190	8.190 (0.590)	49	1473			0.00- 76.71	31.35
8.190	8.190 (0.590)	66	1459			0.00- 83.02	31.05
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	34751	0.50000	0.4371	50.00- 150.00	100.00(a)
8.771	8.771 (0.632)	103	20296			13.52- 113.52	58.40
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	16714	0.50000	0.4565	50.00- 150.00	100.00(a)
9.932	9.932 (0.715)	153	11029			14.28- 114.28	65.99
9.960	9.960 (0.717)	101	20956			80.55- 180.55	125.38
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	13655	0.50000	0.4144	50.00- 150.00	100.00(a)
10.042	10.042 (0.723)	96	9202			13.15- 113.15	67.39
10.042	10.042 (0.723)	98	4439			0.00- 88.14	32.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	27016	0.50000	0.4334	50.00- 150.00	100.00(a)
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	10254	0.50000	0.4921	50.00- 150.00	100.00(a)
11.121	11.121 (0.801)	84	8021			36.08- 136.08	78.22
11.093	11.093 (0.799)	51	3950			0.00- 83.83	38.52
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	12565	0.50000	0.2100	50.00- 150.00	100.00(a)
11.425	11.425 (0.823)	57	2521			0.00- 69.02	20.06
11.480	11.480 (0.827)	41	3603			0.00- 70.47	28.67
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.536	11.536 (0.831)	96	9874	0.50000	0.4032	50.00- 150.00	100.00(a)
11.563	11.563 (0.833)	61	14614			95.77- 195.77	148.00
11.563	11.563 (0.833)	98	6468			16.26- 116.26	65.51
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	9544	0.50000	0.2953	50.00- 150.00	100.00(a)
11.923	11.923 (0.859)	43	6284			9.30- 109.30	65.84
11.923	11.923 (0.859)	86	1121			0.00- 66.83	11.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	17152	0.50000	0.3793	50.00- 150.00	100.00(a)
12.365	12.365 (0.890)	65	6222			0.00- 82.79	36.28
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	3945	0.50000	0.3429	50.00- 150.00	100.00(a)
13.388	13.388 (0.964)	43	12276			275.22- 375.22	311.18
0.000	1.000 (0.000)	57	0			0.00- 79.56	0.00
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	10861	0.50000	0.3570	50.00- 150.00	100.00(a)
13.416	13.416 (0.966)	96	7530			27.39- 127.39	69.33
13.443	13.443 (0.968)	98	5683			0.96- 100.96	52.32
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	6253	0.50000	0.3222	50.00- 150.00	100.00(a)
13.858	13.858 (0.998)	71	2426			0.00- 99.16	38.80
13.858	13.858 (0.998)	72	2304			2.04- 102.04	36.85
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	19693	0.50000	0.3770	50.00- 150.00	100.00(a)
13.941	13.941 (1.004)	85	12570			16.43- 116.43	63.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	18476	0.50000	0.3198	50.00- 150.00	100.00(a)
14.300	14.300 (1.030)	99	14551			17.45- 117.45	78.76
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	9788	0.50000	0.3164	50.00- 150.00	100.00(a)
14.328	14.328 (1.032)	56	9199			47.55- 147.55	93.98
14.300	14.300 (1.030)	41	6425			5.12- 105.12	65.64
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.522	14.522 (1.046)	119	19411	0.50000	0.3497	50.00- 150.00	100.00(a)
14.549	14.549 (1.048)	117	18547			53.78- 153.78	95.55
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	23133	0.50000	0.3528	50.00- 150.00	100.00(a)
14.964	14.964 (0.958)	77	5786			0.00- 73.50	25.01
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	22814	0.50000	0.3024	50.00- 150.00	100.00(a)
14.881	14.881 (1.072)	56	7722			0.00- 82.82	33.85
14.881	14.881 (1.072)	41	7717			0.00- 78.43	33.83
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	11720	0.50000	0.3664	50.00- 150.00	100.00(a)
15.075	15.075 (0.965)	64	4807			0.00- 84.23	41.02
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	5821	0.50000	0.3136	50.00- 150.00	100.00(a)
15.185	15.185 (0.972)	43	7881			85.70- 185.70	135.39
15.185	15.185 (0.972)	57	4021			28.72- 128.72	69.08
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	9076	0.50000	0.3232	50.00- 150.00	100.00(a)
16.098	16.098 (1.030)	130	8832			42.94- 142.94	97.31
16.098	16.098 (1.030)	97	5670			13.25- 113.25	62.47
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	7759	0.50000	0.3507	50.00- 150.00	100.00(a)
16.568	16.568 (1.060)	62	5454			21.32- 121.32	70.29
16.568	16.568 (1.060)	41	5773			8.96- 108.96	74.40
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	16254	0.50000	0.3234	50.00- 150.00	100.00(a)
16.983	16.983 (1.087)	85	9643			13.51- 113.51	59.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	10176	0.50000	0.3019	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
17.784	17.784 (1.138)	77	4424			0.00- 84.89	43.47
17.784	17.784 (1.138)	39	5484			0.00- 97.13	53.89
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	3680	0.50000	0.2403	50.00- 150.00	100.00(a)
17.978	17.978 (1.150)	43	7232			175.34- 275.34	196.52
17.950	17.950 (1.149)	85	1899			0.64- 100.64	51.60
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	21271	0.50000	0.3042	50.00- 150.00	100.00(a)
18.337	18.337 (1.173)	92	13947			11.62- 111.62	65.57
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	11178	0.50000	0.3035	50.00- 150.00	100.00(a)
18.780	18.780 (0.903)	77	3382			0.00- 81.86	30.26
18.780	18.780 (0.903)	39	4867			0.00- 91.58	43.54
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	8142	0.50000	0.3068	50.00- 150.00	100.00(a)
19.111	19.111 (0.919)	99	5361			13.21- 113.21	65.84
19.111	19.111 (0.919)	83	7611			35.76- 135.76	93.48
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	11480	0.50000	0.3228	50.00- 150.00	100.00(a)
19.277	19.277 (0.927)	129	7435			19.36- 119.36	64.76
19.277	19.277 (0.927)	131	7336			16.43- 116.43	63.90
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	12573	0.50000	0.2782	50.00- 150.00	100.00(a)
19.803	19.803 (0.952)	127	10083			28.82- 128.82	80.20
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.079	20.079 (0.965)	107	13043	0.50000	0.3089	50.00- 150.00	100.00(a)
20.079	20.079 (0.965)	109	12513			46.68- 146.68	95.94
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	20858	0.50000	0.3404	50.00- 150.00	100.00(a)
20.853	20.853 (1.003)	114	7591			0.00- 82.06	36.39
20.853	20.853 (1.003)	77	22391			22.53- 122.53	107.35
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	9559	0.50000	0.3011	50.00- 150.00	100.00(a)
20.936	20.936 (1.007)	91	30384			269.96- 369.96	317.86
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	10501	0.50000	0.2627	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.130	21.130 (1.016)	91	21263			149.87- 249.87	202.49
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	10265	0.50000	0.2699	50.00- 150.00	100.00(a)
21.849	21.849 (1.051)	91	22643			160.81- 260.81	220.58
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	13827	0.50000	0.2373	50.00- 150.00	100.00(a)
21.876	21.876 (1.052)	78	8943			9.02- 109.02	64.68
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12913	0.50000	0.2662	50.00- 150.00	100.00(a)
22.291	22.291 (1.072)	171	6556			1.83- 101.83	50.77
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	28340	0.50000	0.2702	50.00- 150.00	100.00(a)
22.429	22.429 (1.078)	120	8960			0.00- 77.62	31.62
22.402	22.402 (1.077)	51	3140			0.00- 58.75	11.08
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15471	0.50000	0.2536	50.00- 150.00	100.00(a)
23.010	23.010 (1.106)	85	11730			16.89- 116.89	75.82
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	38515	0.50000	0.2832	50.00- 150.00	100.00(a)
23.121	23.121 (1.112)	120	8217			0.00- 71.63	21.33
23.121	23.121 (1.112)	105	1592			0.00- 53.71	4.13
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	28042	0.50000	0.2422	50.00- 150.00	100.00(a)
23.287	23.287 (1.120)	120	8426			0.00- 79.69	30.05
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	25414	0.50000	0.2574	50.00- 150.00	100.00(a)
23.397	23.397 (1.125)	120	11861			0.00- 98.23	46.67
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	21767	0.50000	0.2339	50.00- 150.00	100.00(a)
24.033	24.033 (1.156)	120	9142			0.00- 94.91	42.00
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	19331	0.50000	0.2890	50.00- 150.00	100.00(a)
24.586	24.586 (1.182)	148	12995			14.68- 114.68	67.22
24.586	24.586 (1.182)	111	8206			0.00- 91.36	42.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	20052	0.50000	0.2914	50.00- 150.00	100.00(a)
24.724	24.724 (1.189)	148	14332			16.09- 116.09	71.47
24.724	24.724 (1.189)	111	8007			0.00- 90.13	39.93
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	23853	0.50000	0.2397	50.00- 150.00	100.00(a)
24.946	24.946 (1.199)	126	4759			0.00- 69.28	19.95
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	18613	0.50000	0.2857	50.00- 150.00	100.00(a)
25.360	25.360 (1.219)	148	12636			15.85- 115.85	67.89
25.360	25.360 (1.219)	111	8799			0.00- 94.46	47.27
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	11034	0.50000	0.3012	50.00- 150.00	100.00(a)
16.347	16.347 (1.177)	98	5077			0.00- 95.22	46.01
16.347	16.347 (1.177)	55	8471			20.82- 120.82	76.77

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/06Feb2008.b/t020615.d
Report Date: 07-Feb-2008 08:40

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020615.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 0.5ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	359684	1.04
97 1,4-Difluorobenze	1372567	823540	1921594	1311527	-4.45
126 Chlorobenzene-d5	1227265	736359	1718171	1165188	-5.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

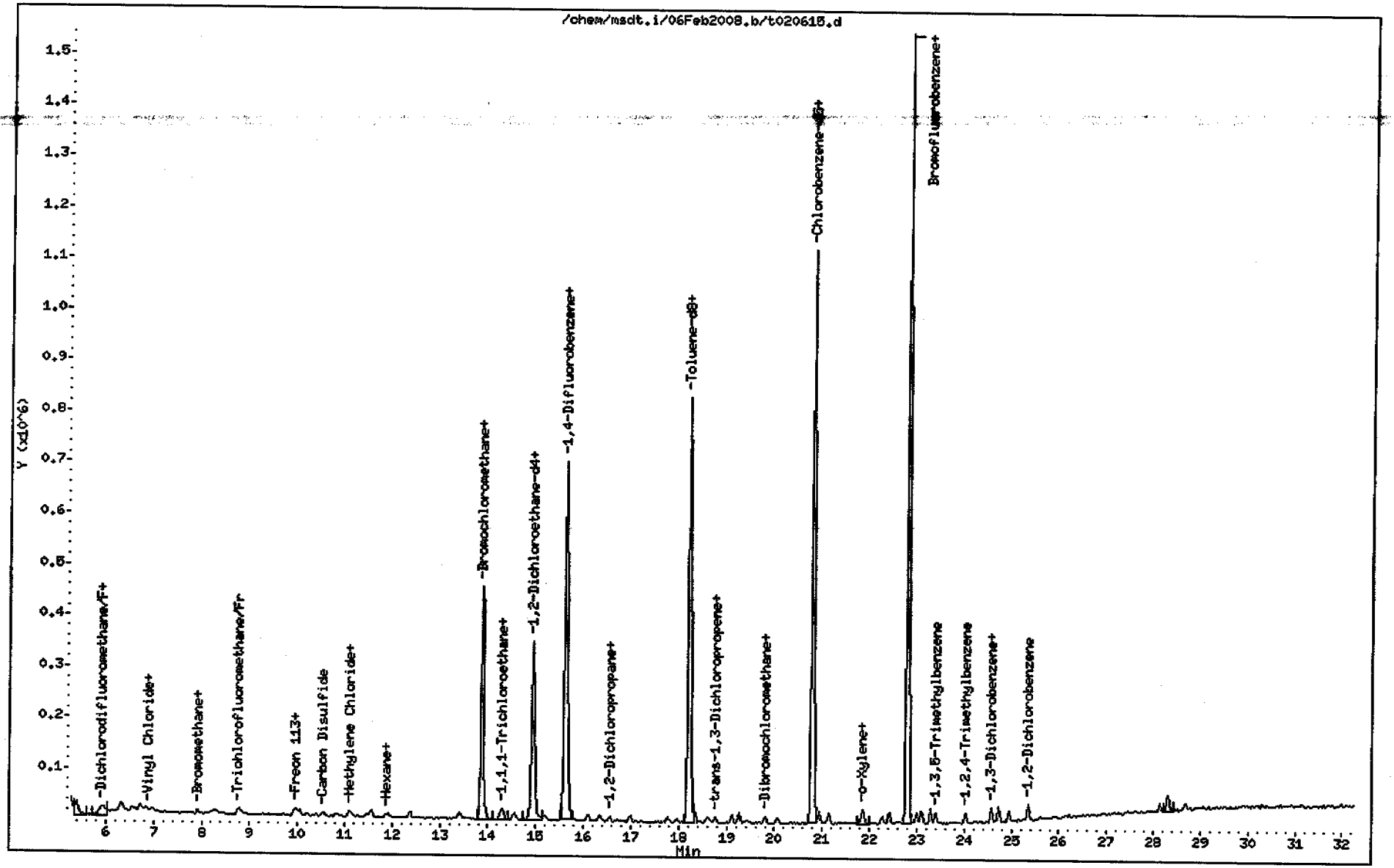
Data File: /chem/msdt.i/06Feb2008.b/t020615.d
Date : 06-FEB-2008 22:02
Client ID: Level 2
Sample Info: 0.5mL #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

0234



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022102.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 21-FEB-2008 09:41
Operator : sjr
Inst ID: msdt.i
Smp Info : 2.0ml #1576-299
Misc Info : 200ppbv -> 2.0(12.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 09:41
Cal File: t022102.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	323136	25.0000		50.00- 150.00	100.00
13.865	13.865 (1.000)	128	248884			26.66- 126.66	77.02
13.865	13.865 (1.000)	49	384478			100.22- 200.22	118.98
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1233520	25.0000		50.00- 150.00	100.00
15.607	15.607 (1.000)	88	206796			0.00- 66.22	16.76
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1168316	25.0000		50.00- 150.00	100.00
20.805	20.805 (1.000)	82	676739			7.02- 107.02	57.92
6 Freon142b					CAS #: 75-68-3		
6.436	6.436 (0.464)	65	79733	2.00000	2.000	50.00- 150.00	100.00
6.407	6.407 (0.462)	45	18145			0.00- 72.76	22.76
9 Freon 13					CAS #: 75-72-9		
5.422	5.422 (0.391)	69	83658	2.00000	2.000	50.00- 150.00	100.00
5.422	5.422 (0.391)	85	25442			0.00- 80.41	30.41

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.422	5.422	(0.391)	87	9056			0.00- 60.83	10.83
13 Freon 134a						CAS #: 811-97-2		
5.675	5.675	(0.409)	83	37002	2.00000	2.000	50.00- 150.00	100.00
5.675	5.675	(0.409)	69	29504			29.74- 129.74	79.74
15 Freon 152a						CAS #: 75-37-6		
5.844	5.844	(0.422)	65	21576	2.00000	2.000	50.00- 150.00	100.00
5.844	5.844	(0.422)	51	40829			139.23- 239.23	189.23
5.844	5.844	(0.422)	47	9103			0.00- 92.19	42.19
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	8970	2.00000	2.000	50.00- 150.00	100.00
5.985	5.985	(0.432)	51	50505			513.04- 613.04	563.04
5.985	5.985	(0.432)	85	2799			0.00- 81.20	31.20
26 Methanol						CAS #: 67-56-1		
7.562	7.562	(0.545)	31	107293	12.0000	12.000	50.00- 150.00	100.00(a)
7.562	7.562	(0.545)	32	159991			99.12- 199.12	149.12
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	63623	2.00000	2.000	50.00- 150.00	100.00
8.717	8.717	(0.629)	69	20718			0.00- 82.56	32.56
8.688	8.688	(0.627)	35	3460			0.00- 55.44	5.44
40 Freon123a						CAS #: 354-23-4		
9.579	9.579	(0.691)	67	43195	2.00000	2.000	50.00- 150.00	100.00
9.579	9.579	(0.691)	117	30046			19.56- 119.56	69.56
41 Freon123						CAS #: 306-83-2		
9.690	9.690	(0.699)	83	5312	2.00000	2.000	50.00- 150.00	100.00
9.745	9.745	(0.703)	133	1071			0.00- 70.16	20.16
9.579	9.579	(0.691)	85	21678			358.09- 458.09	408.09
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	89483	2.00000	2.000	50.00- 150.00	100.00
12.289	12.289	(0.886)	87	25084			0.00- 78.03	28.03
12.289	12.289	(0.886)	59	11599			0.00- 62.96	12.96
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	4135	2.00000	2.000	50.00- 150.00	100.00
12.427	12.427	(0.896)	59	3892			44.12- 144.12	94.12
12.289	12.289	(0.886)	41	23097			508.57- 608.57	558.57
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	83489	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	36614			0.00- 93.85	43.85
12.925	12.925 (0.932)	41	21913			0.00- 76.25	26.25
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	11280	2.00000	2.000	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	9228			31.81- 131.81	81.81
13.395	13.395 (0.966)	43	57387			458.75- 558.75	508.75
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	81705	2.00000	2.000	50.00- 150.00	100.00
15.026	15.026 (1.084)	87	18497			0.00- 72.64	22.64
14.999	14.999 (1.082)	55	21377			0.00- 76.16	26.16
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	32947	2.00000	2.000	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	45146			87.03- 187.03	137.03
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	9606	2.00000	2.000	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	10253			56.74- 156.74	106.74
15.801	15.801 (1.011)	43	8257			35.96- 135.96	85.96
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	24048	2.00000	2.000	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	11636			0.00- 98.39	48.39
19.533	19.533 (1.249)	43	54116			175.03- 275.03	225.03
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	25477	2.00000	2.000	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	12571			0.00- 99.34	49.34
22.741	22.741 (1.093)	42	15548			11.03- 111.03	61.03
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	67522	2.00000	2.000	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	63912			44.65- 144.65	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/21Feb2008.b/t022102.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022102.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 2.0(12.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 09:41
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	323136	193882	452390	323136	0.00
97 1,4-Difluorobenze	1233520	740112	1726928	1233520	0.00
126 Chlorobenzene-d5	1168316	700990	1635642	1168316	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

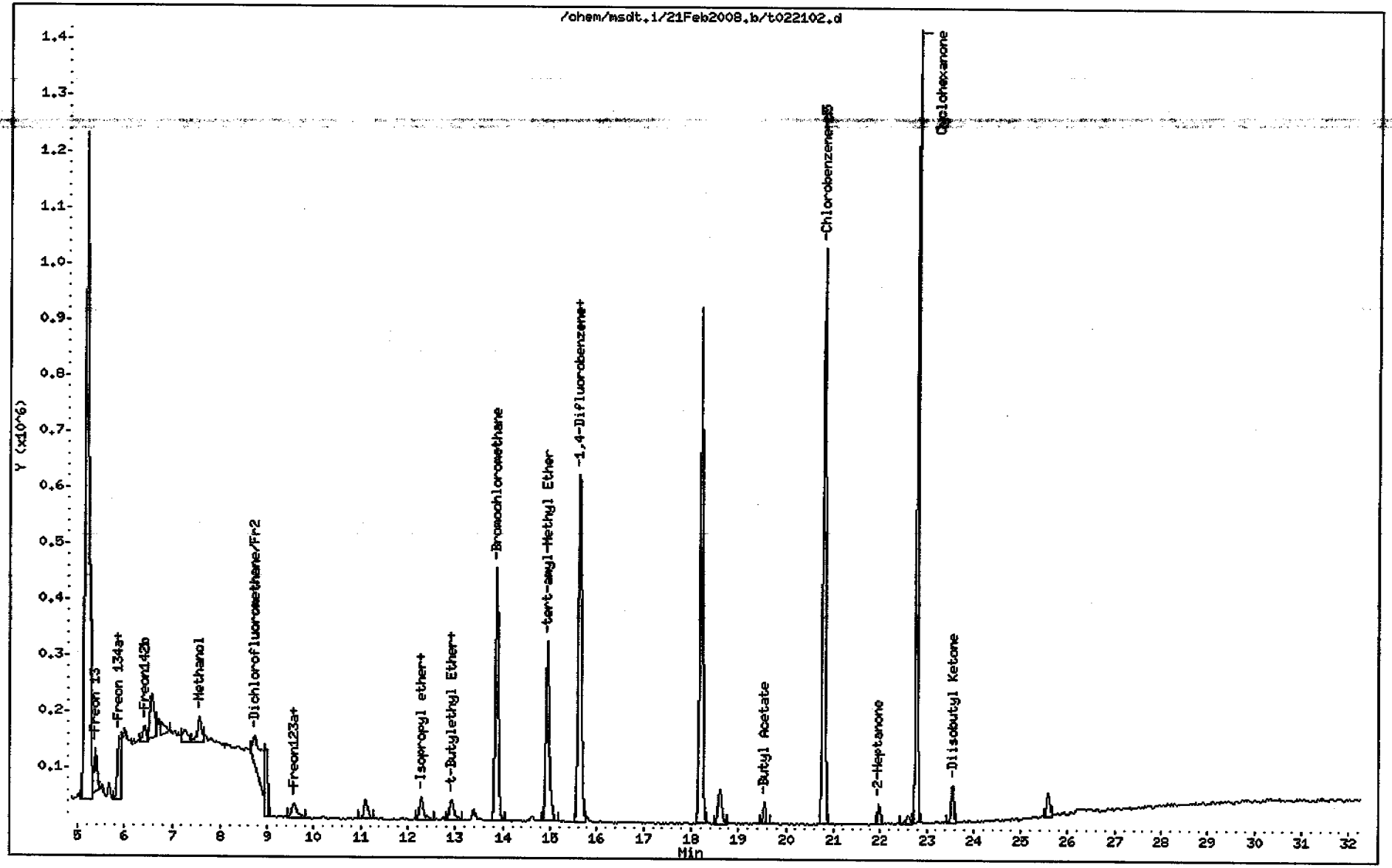
Data File: /ohem/msdt.i/21Feb2008.b/t022102.d
Date : 21-FEB-2008 09:41
Client ID: Level 3
Sample Info: 2.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0239



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020609.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 06-FEB-2008 15:52
Operator : sjr
Inst ID: msdt.i
Smp Info : 2.0ml #1576-261
Misc Info : 200ppbv -> 2.0ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 15:52
Cal File: t020609.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
13.858	13.858 (1.000)	130	335688	25.0000		50.00- 150.00	100.00
13.858	13.858 (1.000)	128	253015			26.39- 126.39	75.37
13.858	13.858 (1.000)	49	393871			99.95- 199.95	117.33
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1208496	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	195592			0.00- 66.12	16.18
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1074623	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	603306			6.72- 106.72	56.14
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.078)	65	504523	25.0000	23.357	50.00- 150.00	100.00
14.936	14.936 (1.078)	67	255336			3.57- 103.57	50.61
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1147306	25.0000	24.646	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	135898			0.00- 61.29	11.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	787197			18.71- 118.71	68.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	679408	25.0000	24.442	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	860445			75.58- 175.58	126.65
22.789	22.789 (1.096)	176	670526			47.41- 147.41	98.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	22739	2.00000	2.071	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	15435			17.96- 117.96	67.88
5.784	5.784 (0.417)	39	20226			33.44- 133.44	88.95
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	123293	2.00000	1.881	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	38794			0.00- 82.13	31.46
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.453)	135	78566	2.00000	1.813	50.00- 150.00	100.00
6.282	6.282 (0.453)	137	26889			0.00- 81.89	34.22
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.471)	50	26540	2.00000	1.854	50.00- 150.00	100.00(a)
6.531	6.531 (0.471)	52	9438			0.00- 83.62	35.56
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.495)	62	34443	2.00000	1.753	50.00- 150.00	100.00
6.863	6.863 (0.495)	64	15275			0.00- 89.61	44.35
22 1,3-Butadiene					CAS #: 106-99-0		
6.946	6.946 (0.501)	54	27542	2.00000	1.863	50.00- 150.00	100.00
6.946	6.946 (0.501)	39	26577			53.33- 153.33	96.50
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.571)	94	34627	2.00000	1.780	50.00- 150.00	100.00
7.913	7.913 (0.571)	96	36867			43.69- 143.69	106.47
27 Chloroethane					CAS #: 75-00-3		
8.162	8.162 (0.589)	64	18101	2.00000	1.766	50.00- 150.00	100.00
8.162	8.162 (0.589)	49	4451			0.00- 76.71	24.59
8.162	8.162 (0.589)	66	6377			0.00- 83.02	35.23
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.770	8.770 (0.633)	101	138682	2.00000	1.869	50.00- 150.00	100.00
8.770	8.770 (0.633)	103	89495			13.52- 113.52	64.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	8250	2.00000	1.453	50.00- 150.00	100.00(a)
9.241	9.241 (0.667)	43	2392			0.00- 75.24	28.99
9.241	9.241 (0.667)	46	4013			0.00- 89.78	48.64
42 Freon 113					CAS #: 76-13-1		
9.932	9.932 (0.717)	151	65484	2.00000	1.916	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	41750			14.28- 114.28	63.76
9.932	9.932 (0.717)	101	88957			80.55- 180.55	135.85
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	52759	2.00000	1.715	50.00- 150.00	100.00
10.042	10.042 (0.725)	96	35580			13.15- 113.15	67.44
10.042	10.042 (0.725)	98	22419			0.00- 88.14	42.49
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	17325	2.00000	1.818	50.00- 150.00	100.00(a)
10.181	10.181 (0.735)	43	56147			267.82- 367.82	324.08
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	49508	2.00000	1.516	50.00- 150.00	100.00(a)
10.374	10.374 (0.749)	43	15582			0.00- 76.64	31.47
10.374	10.374 (0.749)	59	2412			0.00- 54.31	4.87
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	104722	2.00000	1.800	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	15372	2.00000	1.534	50.00- 150.00	100.00
10.817	10.817 (0.781)	41	36495			173.84- 273.84	237.41
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	37218	2.00000	1.914	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	31883			36.08- 136.08	85.67
11.093	11.093 (0.800)	51	11885			0.00- 83.83	31.93
60 MTBE					CAS #: 1634-04-4		
11.452	11.452 (0.826)	73	66761	2.00000	1.196	50.00- 150.00	100.00
11.452	11.452 (0.826)	57	12002			0.00- 69.02	17.98
11.452	11.452 (0.826)	41	12228			0.00- 70.47	18.32
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	37657	2.00000	1.648	50.00- 150.00	100.00
11.535	11.535 (0.832)	61	60152			95.77- 195.77	159.74
11.535	11.535 (0.832)	98	27454			16.26- 116.26	72.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	47780	2.00000	1.584	50.00- 150.00	100.00
11.895	11.895 (0.858)	43	27530			9.30- 109.30	57.62
11.895	11.895 (0.858)	86	8949			0.00- 66.83	18.73
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	8827	2.00000	1.493	50.00- 150.00	100.00(a)
12.365	12.365 (0.892)	43	72295			832.23- 932.23	819.02
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	75018	2.00000	1.778	50.00- 150.00	100.00
12.365	12.365 (0.892)	65	22968			0.00- 82.79	30.62
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	17305	2.00000	1.612	50.00- 150.00	100.00
13.388	13.388 (0.966)	43	54370			275.22- 375.22	314.19
13.388	13.388 (0.966)	57	5456			0.00- 79.56	31.53
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	49131	2.00000	1.730	50.00- 150.00	100.00
13.416	13.416 (0.968)	96	40888			27.39- 127.39	83.22
13.416	13.416 (0.968)	98	25507			0.96- 100.96	51.92
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	29321	2.00000	1.619	50.00- 150.00	100.00
13.886	13.886 (1.002)	71	14128			0.00- 99.16	48.18
13.858	13.858 (1.000)	72	15805			2.04- 102.04	53.90
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	92125	2.00000	1.890	50.00- 150.00	100.00
13.941	13.941 (1.006)	85	57968			16.43- 116.43	62.92
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	97885	2.00000	1.815	50.00- 150.00	100.00
14.273	14.273 (1.030)	99	63207			17.45- 117.45	64.57
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	46052	2.00000	1.595	50.00- 150.00	100.00
14.300	14.300 (1.032)	56	44767			47.55- 147.55	97.21
14.300	14.300 (1.032)	41	25199			5.12- 105.12	54.72
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	92572	2.00000	1.787	50.00- 150.00	100.00
14.549	14.549 (1.050)	117	96223			53.78- 153.78	103.94
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	113789	2.00000	1.883	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	26346			0.00- 73.50	23.15
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	112642	2.00000	1.600	50.00- 150.00	100.00
14.881	14.881 (1.074)	56	37981			0.00- 82.82	33.72
14.881	14.881 (1.074)	41	33953			0.00- 78.43	30.14
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	55658	2.00000	1.888	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	18886			0.00- 84.23	33.93
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	28458	2.00000	1.664	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	38964			85.70- 185.70	136.92
15.185	15.185 (0.972)	57	22207			28.72- 128.72	78.03
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	47821	2.00000	1.848	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	44019			42.94- 142.94	92.05
16.098	16.098 (1.030)	97	30818			13.25- 113.25	64.44
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	36803	2.00000	1.805	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	26650			21.32- 121.32	72.41
16.568	16.568 (1.060)	41	20186			8.96- 108.96	54.85
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	23425	2.00000	1.570	50.00- 150.00	100.00(a)
16.678	16.678 (1.067)	58	14454			9.36- 109.36	61.70
16.706	16.706 (1.069)	57	5506			0.00- 71.19	23.50
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	85032	2.00000	1.836	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	56563			13.51- 113.51	66.52
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	51480	2.00000	1.657	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	17678			0.00- 84.89	34.34
17.784	17.784 (1.138)	39	24641			0.00- 97.13	47.87
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	20175	2.00000	1.430	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	50030			175.34- 275.34	247.98
17.978	17.978 (1.150)	85	10629			0.64- 100.64	52.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	120521	2.00000	1.871	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	71179			11.62- 111.62	59.06
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	59843	2.00000	1.762	50.00- 150.00	100.00
18.752	18.752 (0.902)	77	20118			0.00- 81.86	33.62
18.752	18.752 (0.902)	39	25251			0.00- 91.58	42.20
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	47042	2.00000	1.922	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	29057			13.21- 113.21	61.77
19.111	19.111 (0.919)	83	38865			35.76- 135.76	82.62
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	61038	2.00000	1.861	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	45046			19.36- 119.36	73.80
19.277	19.277 (0.927)	131	43125			16.43- 116.43	70.65
121 2-Hexanone					CAS #: 591-78-6		
19.443	19.443 (0.935)	58	21928	2.00000	1.070	50.00- 150.00	100.00(a)
19.416	19.416 (0.934)	43	43343			124.96- 224.96	197.66
19.443	19.443 (0.935)	100	5059			0.00- 71.71	23.07
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	73614	2.00000	1.766	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	61421			28.82- 128.82	83.44
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	68894	2.00000	1.769	50.00- 150.00	100.00
20.051	20.051 (0.964)	109	66726			46.68- 146.68	96.85
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	107793	2.00000	1.907	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	32353			0.00- 82.06	30.01
20.853	20.853 (1.003)	77	75346			22.53- 122.53	69.90
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	53200	2.00000	1.817	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	171345			269.96- 369.96	322.08
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	66296	2.00000	1.798	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	127807			149.87- 249.87	192.78
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	61779	2.00000	1.761	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	123534			160.81- 260.81	199.96
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	86239	2.00000	1.605	50.00- 150.00	100.00
21.876	21.876 (1.052)	78	46667			9.02- 109.02	54.11
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	78029	2.00000	1.744	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	43129			1.83- 101.83	55.27
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	168444	2.00000	1.741	50.00- 150.00	100.00
22.429	22.429 (1.078)	120	43006			0.00- 77.62	25.53
22.429	22.429 (1.078)	51	12970			0.00- 58.75	7.70
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	111264	2.00000	1.978	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	71555			16.89- 116.89	64.31
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	233544	2.00000	1.862	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	50752			0.00- 71.63	21.73
23.121	23.121 (1.112)	105	8175			0.00- 53.71	3.50
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.286 (1.120)	105	203376	2.00000	1.905	50.00- 150.00	100.00
23.286	23.286 (1.120)	120	60019			0.00- 79.69	29.51
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	167502	2.00000	1.839	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	80768			0.00- 98.23	48.22
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	155174	2.00000	1.808	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	68143			0.00- 94.91	43.91
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	129075	2.00000	2.093	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	83042			14.68- 114.68	64.34
24.586	24.586 (1.182)	111	51936			0.00- 91.36	40.24
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	129470	2.00000	2.040	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	86858			16.09- 116.09	67.09
24.724	24.724 (1.189)	111	52523			0.00- 90.13	40.57

Data File: /chem/msdt.i/06Feb2008.b/t020609.d
Report Date: 07-Feb-2008 08:39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	166099	2.00000	1.810	50.00- 150.00	100.00
24.945	24.945 (1.199)	126	32450			0.00- 69.28	19.54
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	127527	2.00000	2.122	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	87225			15.85- 115.85	68.40
25.360	25.360 (1.219)	111	57743			0.00- 94.46	45.28
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	87930	2.00000	1.919	50.00- 150.00	100.00(a)
28.153	28.153 (1.354)	182	83811			44.78- 144.78	95.32
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	106764	2.00000	2.315	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	66440			12.90- 112.90	62.23
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	109061	2.00000	1.719	50.00- 150.00	100.00(a)
28.678	28.678 (1.379)	127	15349			0.00- 62.74	14.07
29 Isopentane					CAS #: 78-78-4		
8.245	8.245 (0.595)	43	38125	2.00000	1.757	50.00- 150.00	100.00(a)
8.273	8.273 (0.597)	57	29545			27.67- 127.67	77.50
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	6720	2.00000	1.788	50.00- 150.00	100.00(a)
6.780	6.780 (0.489)	43	51151			666.74- 766.74	761.18
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	55043	2.00000	1.610	50.00- 150.00	100.00
16.346	16.346 (1.180)	98	24267			0.00- 95.22	44.09
16.346	16.346 (1.180)	55	36926			20.82- 120.82	67.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	49102	2.00000	1.379	50.00- 150.00	100.00(a)
11.148	11.148 (0.804)	41	11220			0.00- 72.85	22.85
11.148	11.148 (0.804)	57	4875			0.00- 59.93	9.93

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020609.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 2.0ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 15:52
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	335688	201413	469963	335688	0.00
97 1,4-Difluorobenze	1208496	725098	1691894	1208496	0.00
126 Chlorobenzene-d5	1074623	644774	1504472	1074623	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.86	13.53	14.19	13.86	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

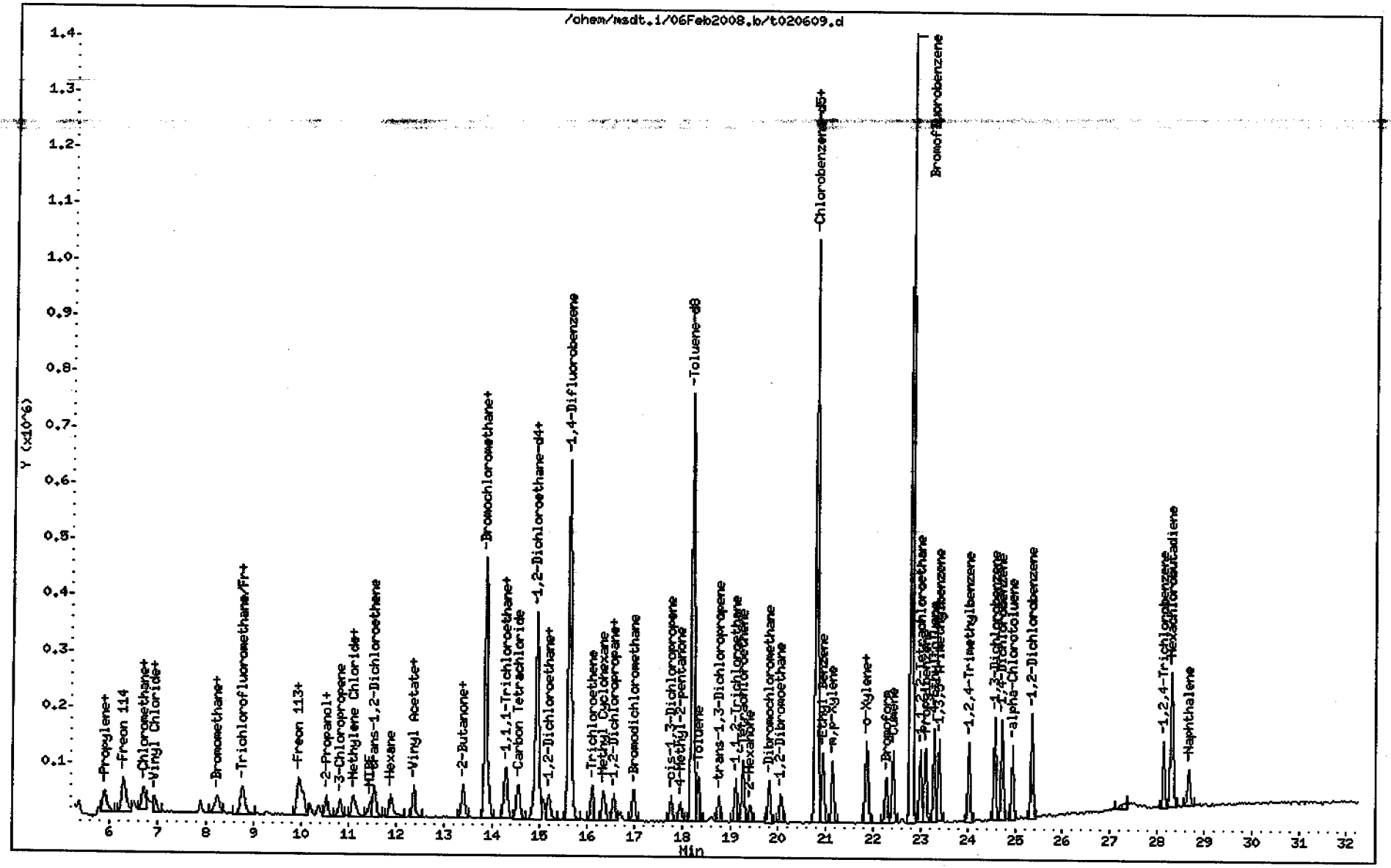
0249

Data File: /chem/msdt.i/06Feb2008.b/t020609.d
Date : 06-FEB-2008 15:52
Client ID: Level 3
Sample Info: 2.0ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022103.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 21-FEB-2008 10:21
Operator : sjr
Inst ID: msdt.i
Smp Info : 8.0ml #1576-299
Misc Info : 200ppbv -> 8.0(48.0 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 10:21
Cal File: t022103.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312185	25.0000		50.00- 150.00		100.00
13.865	13.865 (1.000)	128	236346			26.53- 126.53		75.71
13.865	13.865 (1.000)	49	371766			95.42- 195.42		119.09
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1223661	25.0000		50.00- 150.00		100.00
15.635	15.635 (1.000)	88	198736			0.00- 66.25		16.24
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1150030	25.0000		50.00- 150.00		100.00
20.805	20.805 (1.000)	82	661640			7.16- 107.16		57.53
6 Freon142b						CAS #: 75-68-3		
6.408	6.408 (0.462)	65	314391	8.00000	8.080	50.00- 150.00		100.00
6.408	6.408 (0.462)	45	67573			0.00- 72.13		21.49
9 Freon 13						CAS #: 75-72-9		
5.394	5.394 (0.389)	69	329101	8.00000	8.071	50.00- 150.00		100.00
5.394	5.394 (0.389)	85	99340			0.00- 80.30		30.19

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.394	5.394	(0.389)	87	34120			0.00- 60.60	10.37
13 Freon 134a						CAS #: 811-97-2		
5.675	5.675	(0.409)	83	141460	8.00000	7.957	50.00- 150.00	100.00
5.675	5.675	(0.409)	69	121869			32.94- 132.94	86.15
15 Freon 152a						CAS #: 75-37-6		
5.844	5.844	(0.422)	65	73331	8.00000	7.487	50.00- 150.00	100.00
5.844	5.844	(0.422)	51	133000			135.30- 235.30	181.37
5.844	5.844	(0.422)	47	31133			0.00- 92.32	42.46
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	36362	8.00000	8.191	50.00- 150.00	100.00
5.985	5.985	(0.432)	51	183210			483.45- 583.45	503.85
5.985	5.985	(0.432)	85	4459			0.00- 71.73	12.26
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	197031	48.0000	30.924	50.00- 150.00	100.00(a)
7.534	7.534	(0.543)	32	284448			96.74- 196.74	144.37
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	247871	8.00000	8.032	50.00- 150.00	100.00
8.717	8.717	(0.629)	69	81283			0.00- 82.68	32.79
8.717	8.717	(0.629)	35	14325			0.00- 55.61	5.78
40 Freon123a						CAS #: 354-23-4		
9.580	9.580	(0.691)	67	180610	8.00000	8.315	50.00- 150.00	100.00
9.580	9.580	(0.691)	117	129025			20.50- 120.50	71.44
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	20901	8.00000	8.072	50.00- 150.00	100.00
9.745	9.745	(0.703)	133	4660			0.00- 71.23	22.30
9.580	9.580	(0.691)	85	89551			368.27- 468.27	428.45
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	351422	8.00000	8.064	50.00- 150.00	100.00
12.289	12.289	(0.886)	87	111725			0.00- 79.91	31.79
12.289	12.289	(0.886)	59	41310			0.00- 62.36	11.76
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	23591	8.00000	9.539	50.00- 150.00	100.00
12.400	12.400	(0.894)	59	31738			64.33- 164.33	134.53
12.400	12.400	(0.894)	41	18558			268.62- 368.62	78.67
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	353478	8.00000	8.365	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	151766			0.00- 93.39	42.94
12.925	12.925 (0.932)	41	69691			0.00- 72.98	19.72
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	37234	8.00000	7.371	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	39315			43.70- 143.70	105.59
13.395	13.395 (0.966)	43	256151			548.35- 648.35	687.95
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	341472	8.00000	8.313	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	75821			0.00- 72.42	22.20
14.999	14.999 (1.082)	55	93846			0.00- 76.82	27.48
96 2-Heptanone					CAS #: 110-43-0		
21.994	21.994 (1.586)	58	165986	8.00000	9.054	50.00- 150.00	100.00
21.967	21.967 (1.584)	43	236874			89.87- 189.87	142.71
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	55918	8.00000	9.514	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	42576			41.44- 141.44	76.14
15.801	15.801 (1.011)	43	29218			19.10- 119.10	52.25
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	110364	8.00000	8.581	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	48409			0.00- 96.12	43.86
19.533	19.533 (1.249)	43	247267			174.54- 274.54	224.05
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	151594	8.00000	9.628	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	75635			0.00- 99.62	49.89
22.741	22.741 (1.093)	42	93458			11.34- 111.34	61.65
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.570	23.570 (1.133)	57	340934	8.00000	8.990	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	328214			45.46- 145.46	96.27
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msdt.i/21Feb2008.b/t022103.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022103.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 8.0(48.0 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 10:21
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312185	187311	437059	312185	0.00
97 1,4-Difluorobenze	1223661	734197	1713125	1223661	0.00
126 Chlorobenzene-d5	1150030	690018	1610042	1150030	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

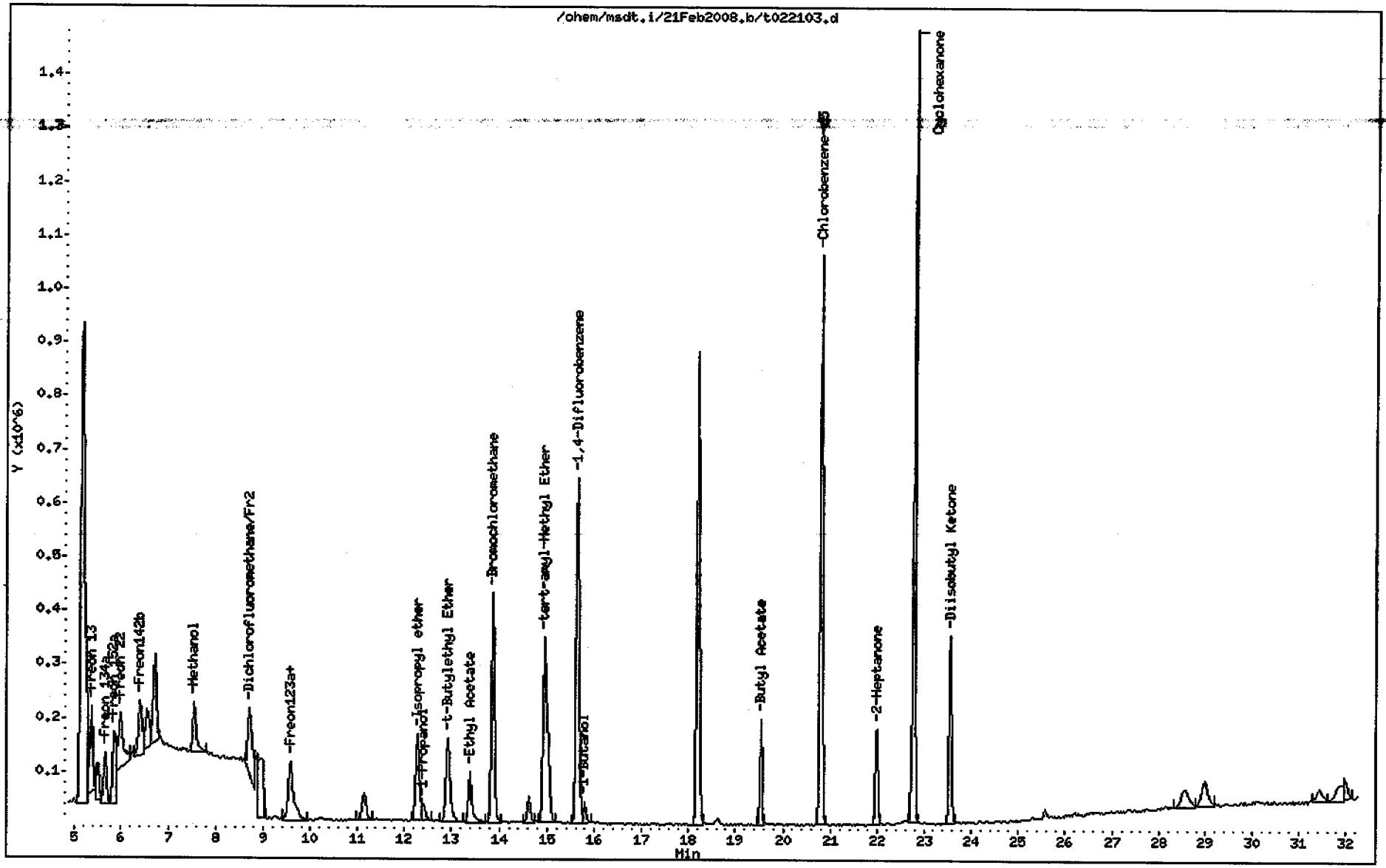
Data File: /chem/msdt.i/21Feb2008.b/t022103.d
Date : 21-FEB-2008 10:21
Client ID: Level 4
Sample Info: 8.0ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0254



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020610.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 06-FEB-2008 16:33
Operator : sjr
Inst ID: msdt.i
Smp Info : 25ml #1576-261
Misc Info : 200ppbv -> 25ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 16:33
Cal File: t020610.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.886	13.886	(1.000)	130	334218	25.0000		50.00- 150.00	100.00
13.858	13.858	(1.000)	128	255710			26.39- 126.39	76.51
13.858	13.858	(1.000)	49	494332			99.95- 199.95	147.91
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.628	15.628	(1.000)	114	1289398	25.0000		50.00- 150.00	100.00
15.628	15.628	(1.000)	88	207335			0.00- 66.12	16.08
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.798	20.798	(1.000)	117	1136429	25.0000		50.00- 150.00	100.00
20.798	20.798	(1.000)	82	643863			6.72- 106.72	56.66
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.937	14.937	(1.076)	65	532290	25.0000	24.751	50.00- 150.00	100.00
14.937	14.937	(1.076)	67	283909			3.57- 103.57	53.34
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.199	18.199	(1.165)	98	1243286	25.0000	25.032	50.00- 150.00	100.00
18.199	18.199	(1.165)	70	135082			0.00- 61.29	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	859790			18.71- 118.71	69.15
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	723188	25.0000	24.602	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	908149			75.58- 175.58	125.58
22.789	22.789 (1.096)	176	710103			47.41- 147.41	98.19
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	284287	25.0000	26.006	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	196485			17.96- 117.96	69.12
5.812	5.812 (0.419)	39	232847			33.44- 133.44	81.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	1805554	25.0000	27.666	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	593653			0.00- 82.13	32.88
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	1167878	25.0000	27.071	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	380476			0.00- 81.89	32.58
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	370794	25.0000	26.025	50.00- 150.00	100.00
6.531	6.531 (0.470)	52	124290			0.00- 83.62	33.52
20 Vinyl Chloride					CAS #: 75-01-4		
6.891	6.891 (0.496)	62	533497	25.0000	27.273	50.00- 150.00	100.00
6.891	6.891 (0.496)	64	172106			0.00- 89.61	32.26
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	405591	25.0000	27.552	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	386988			53.33- 153.33	95.41
25 Bromomethane					CAS #: 74-83-9		
7.914	7.914 (0.570)	94	524382	25.0000	27.074	50.00- 150.00	100.00
7.914	7.914 (0.570)	96	479513			43.69- 143.69	91.44
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	279105	25.0000	27.358	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	74678			0.00- 76.71	26.76
8.190	8.190 (0.590)	66	91110			0.00- 83.02	32.64
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	2071216	25.0000	28.034	50.00- 150.00	100.00
8.771	8.771 (0.632)	103	1351487			13.52- 113.52	65.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	155269	25.0000	27.468	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	37536			0.00- 75.24	24.17
9.241	9.241 (0.665)	46	55946			0.00- 89.78	36.03
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	936482	25.0000	27.528	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	599235			14.28- 114.28	63.99
9.960	9.960 (0.717)	101	1225808			80.55- 180.55	130.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.043	10.043 (0.723)	61	847928	25.0000	27.691	50.00- 150.00	100.00
10.043	10.043 (0.723)	96	515431			13.15- 113.15	60.79
10.043	10.043 (0.723)	98	326894			0.00- 88.14	38.55
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	251564	25.0000	26.508	50.00- 150.00	100.00
10.181	10.181 (0.733)	43	818668			267.82- 367.82	325.43
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	858121	25.0000	26.385	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	230141			0.00- 76.64	26.82
10.374	10.374 (0.747)	59	35435			0.00- 54.31	4.13
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	1571599	25.0000	27.134	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	280286	25.0000	28.102	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	605264			173.84- 273.84	215.95
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	515852	25.0000	26.641	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	457155			36.08- 136.08	88.62
11.093	11.093 (0.799)	51	169738			0.00- 83.83	32.90
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	1789417	25.0000	32.190	50.00- 150.00	100.00
11.453	11.453 (0.825)	57	342391			0.00- 69.02	19.13
11.453	11.453 (0.825)	41	333822			0.00- 70.47	18.66
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	663385	25.0000	29.151	50.00- 150.00	100.00
11.536	11.536 (0.831)	61	928452			95.77- 195.77	139.96
11.563	11.563 (0.833)	98	425861			16.26- 116.26	64.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	875954	25.0000	29.169	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	512217			9.30- 109.30	58.48
11.895	11.895 (0.857)	86	154784			0.00- 66.83	17.67
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	153376	25.0000	26.051	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	1371221			832.23- 932.23	894.03
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	1208705	25.0000	28.768	50.00- 150.00	100.00
12.365	12.365 (0.890)	65	387741			0.00- 82.79	32.08
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	292440	25.0000	27.357	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	970748			275.22- 375.22	331.95
13.388	13.388 (0.964)	57	81299			0.00- 79.56	27.80
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	814797	25.0000	28.821	50.00- 150.00	100.00
13.416	13.416 (0.966)	96	629811			27.39- 127.39	77.30
13.416	13.416 (0.966)	98	405600			0.96- 100.96	49.78
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	516188	25.0000	28.629	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	270836			0.00- 99.16	52.47
13.858	13.858 (0.998)	72	286491			2.04- 102.04	55.50
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	1434387	25.0000	29.549	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	936553			16.43- 116.43	65.29
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	1561890	25.0000	29.090	50.00- 150.00	100.00
14.273	14.273 (1.028)	99	1011367			17.45- 117.45	64.75
85 Cyclohexane					CAS #: 110-82-7		
14.301	14.301 (1.030)	84	831348	25.0000	28.918	50.00- 150.00	100.00
14.301	14.301 (1.030)	56	822590			47.55- 147.55	98.95
14.301	14.301 (1.030)	41	437816			5.12- 105.12	52.66
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	1495659	25.0000	29.000	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	1593507			53.78- 153.78	106.54
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	1805921	25.0000	28.017	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	415076			0.00- 73.50	22.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	2040326	25.0000	29.108	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	651578			0.00- 82.82	31.93
14.881	14.881 (1.072)	41	527319			0.00- 78.43	25.84
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	899538	25.0000	28.604	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	287058			0.00- 84.23	31.91
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	539758	25.0000	29.582	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	725497			85.70- 185.70	134.41
15.185	15.185 (0.972)	57	433724			28.72- 128.72	80.36
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	809796	25.0000	29.332	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	736330			42.94- 142.94	90.93
16.098	16.098 (1.030)	97	502564			13.25- 113.25	62.06
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	617846	25.0000	28.408	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	449048			21.32- 121.32	72.68
16.568	16.568 (1.060)	41	350593			8.96- 108.96	56.74
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	419073	25.0000	26.325	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	248796			9.36- 109.36	59.37
16.706	16.706 (1.069)	57	87940			0.00- 71.19	20.98
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	1452860	25.0000	29.405	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	925446			13.51- 113.51	63.70
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	960843	25.0000	28.993	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	311058			0.00- 84.89	32.37
17.784	17.784 (1.138)	39	433889			0.00- 97.13	45.16
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	443863	25.0000	29.477	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	1012229			175.34- 275.34	228.05
17.978	17.978 (1.150)	85	219633			0.64- 100.64	49.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	1989625	25.0000	28.948	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	1214679			11.62- 111.62	61.05
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	1069541	25.0000	29.778	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	338491			0.00- 81.86	31.65
18.752	18.752 (0.902)	39	431851			0.00- 91.58	40.38
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.112	19.112 (0.919)	97	770359	25.0000	29.759	50.00- 150.00	100.00
19.112	19.112 (0.919)	99	476886			13.21- 113.21	61.90
19.112	19.112 (0.919)	83	637669			35.76- 135.76	82.78
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	1044211	25.0000	30.103	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	733649			19.36- 119.36	70.26
19.277	19.277 (0.927)	131	692279			16.43- 116.43	66.30
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	600804	25.0000	27.717	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	1022657			124.96- 224.96	170.21
19.416	19.416 (0.934)	100	132839			0.00- 71.71	22.11
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	1348982	25.0000	30.605	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	1034685			28.82- 128.82	76.70
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	1251667	25.0000	30.398	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	1153749			46.68- 146.68	92.18
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	1743887	25.0000	29.181	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	545791			0.00- 82.06	31.30
20.853	20.853 (1.003)	77	1078189			22.53- 122.53	61.83
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	926234	25.0000	29.913	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	2920081			269.96- 369.96	315.26
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	1173062	25.0000	30.086	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	2352767			149.87- 249.87	200.57
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	1125158	25.0000	30.336	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	2362887			160.81- 260.81	210.00
131 Styrene					CAS #: 100-42-5		
21.877	21.877 (1.052)	104	1801628	25.0000	31.706	50.00- 150.00	100.00
21.877	21.877 (1.052)	78	925547			9.02- 109.02	51.37
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	1429561	25.0000	30.216	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	734724			1.83- 101.83	51.40
134 Cumene					CAS #: 98-82-8		
22.430	22.430 (1.078)	105	3121582	25.0000	30.511	50.00- 150.00	100.00
22.430	22.430 (1.078)	120	803583			0.00- 77.62	25.74
22.430	22.430 (1.078)	51	269302			0.00- 58.75	8.63
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	1766566	25.0000	29.693	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	1142101			16.89- 116.89	64.65
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	3987959	25.0000	30.069	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	870154			0.00- 71.63	21.82
23.121	23.121 (1.112)	105	149480			0.00- 53.71	3.75
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	3468899	25.0000	30.725	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	1046336			0.00- 79.69	30.16
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	2924272	25.0000	30.363	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	1422059			0.00- 98.23	48.63
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	2745190	25.0000	30.249	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	1286024			0.00- 94.91	46.85
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	1892688	25.0000	29.016	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	1226520			14.68- 114.68	64.80
24.586	24.586 (1.182)	111	789350			0.00- 91.36	41.71
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	1952581	25.0000	29.091	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	1247055			16.09- 116.09	63.87
24.724	24.724 (1.189)	111	788240			0.00- 90.13	40.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	2891364	25.0000	29.794	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	551882			0.00- 69.28	19.09
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	1837629	25.0000	28.920	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	1188804			15.85- 115.85	64.69
25.360	25.360 (1.219)	111	792947			0.00- 94.46	43.15
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	1231331	25.0000	25.408	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	1163126			44.78- 144.78	94.46
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	1212587	25.0000	24.861	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	768070			12.90- 112.90	63.34
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	1708446	25.0000	25.470	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	211414			0.00- 62.74	12.37
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	576310	25.0000	26.672	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	453950			27.67- 127.67	78.77
19 Butane					CAS #: 106-97-8		
6.808	6.808 (0.490)	58	101733	25.0000	27.192	50.00- 150.00	100.00
6.808	6.808 (0.490)	43	712263			666.74- 766.74	700.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	978273	25.0000	28.740	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	444120			0.00- 95.22	45.40
16.347	16.347 (1.177)	55	690170			20.82- 120.82	70.55
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.149	11.149 (0.803)	59	1019065	25.0000	28.754	50.00- 150.00	100.00
11.149	11.149 (0.803)	41	225570			0.00- 72.85	22.13
11.149	11.149 (0.803)	57	106009			0.00- 59.93	10.40

Data File: /chem/msdt.i/06Feb2008.b/t020610.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020610.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 25ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 16:33
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	334218	200531	467905	334218	0.00
97 1,4-Difluorobenze	1289398	773639	1805157	1289398	0.00
126 Chlorobenzene-d5	1136429	681857	1591001	1136429	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/06Feb2008.b/t020610.d

Date : 06-FEB-2008 16:33

Client ID: Level 4

Sample Info: 25ml #1576-261

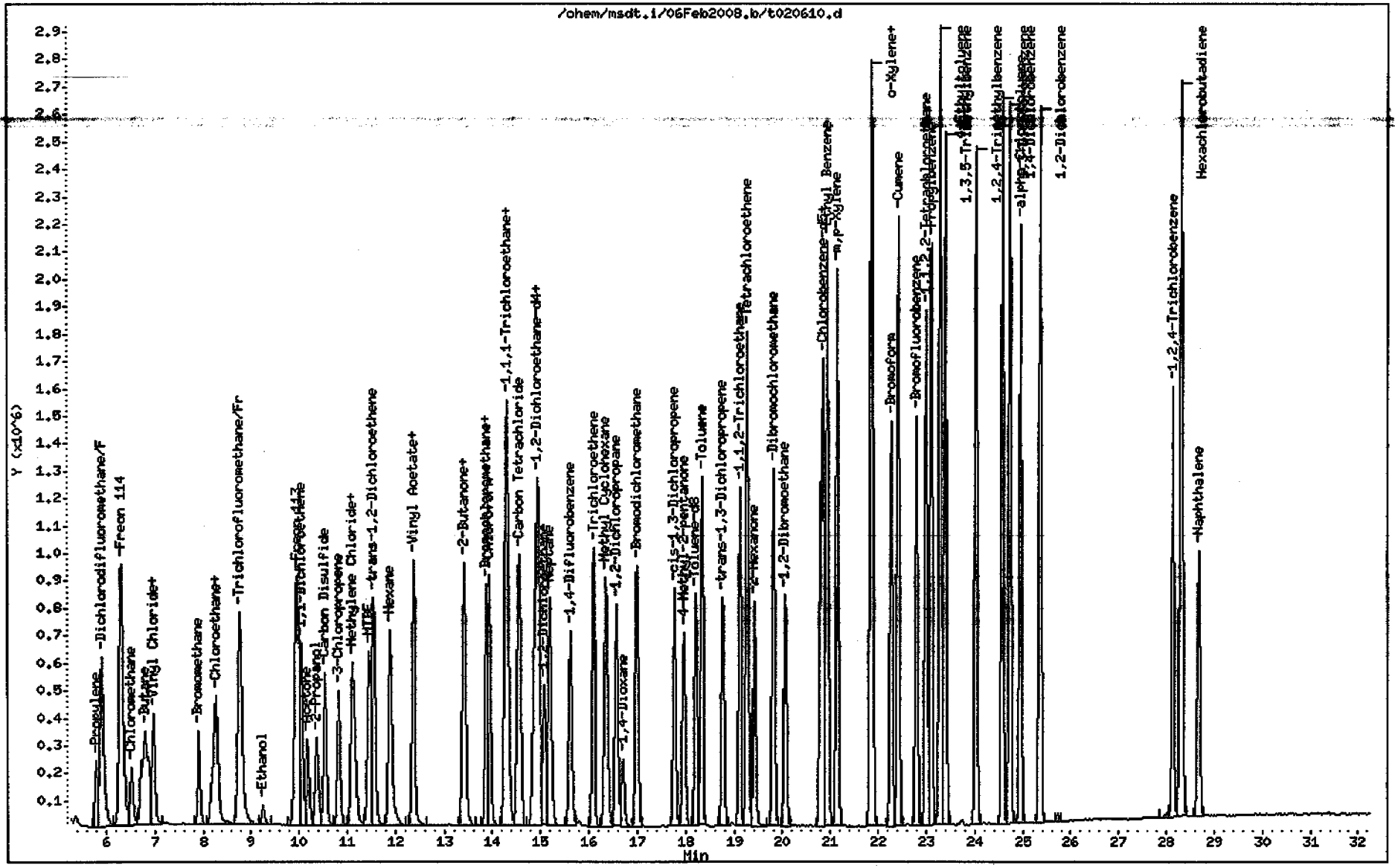
Column phase: RTx-624

Instrument: msdt.i

Operator: sjr

Column diameter: 0.53

0264



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 21-FEB-2008 11:03
Operator : sjr Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 11:03 Cal File: t022104.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865	(1.000)	130	312258	25.0000		80.00- 120.00	100.00
13.865	13.865	(1.000)	128	236420			25.71- 125.71	75.71
13.865	13.865	(1.000)	49	373343			69.56- 169.56	119.56
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635	(1.000)	114	1266888	25.0000		80.00- 120.00	100.00
15.635	15.635	(1.000)	88	209470			0.00- 66.53	16.53
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805	(1.000)	117	1159473	25.0000		80.00- 120.00	100.00
20.805	20.805	(1.000)	82	667973			7.40- 107.40	57.61
6 Freon142b						CAS #: 75-68-3		
6.408	6.408	(0.462)	65	2256667	50.0000	55.056	80.00- 120.00	100.00
6.408	6.408	(0.462)	45	455198			0.00- 71.47	20.17
9 Freon 13						CAS #: 75-72-9		
5.366	5.366	(0.387)	69	2091709	50.0000	50.851	80.00- 120.00	100.00
5.366	5.366	(0.387)	85	681331			0.00- 81.06	32.57

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.366	5.366	(0.387)	87	212271			0.00- 60.45	10.15
13 Freon 134a						CAS #: 811-97-2		
5.647	5.647	(0.407)	83	957959	50.0000	52.516	80.00- 120.00	100.00
5.647	5.647	(0.407)	69	790194			32.79- 132.79	82.49
15 Freon 152a						CAS #: 75-37-6		
5.816	5.816	(0.419)	65	507647	50.0000	51.198	80.00- 120.00	100.00
5.816	5.816	(0.419)	51	855266			129.69- 229.69	168.48
5.816	5.816	(0.419)	47	223144			0.00- 92.87	43.96
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	240792	50.0000	52.743	80.00- 120.00	100.00
5.985	5.985	(0.432)	51	1193969			470.91- 570.91	495.85
5.985	5.985	(0.432)	85	25075			0.00- 67.96	10.41
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	536359	300.000	110.71	80.00- 120.00	100.00
7.534	7.534	(0.543)	32	456083			35.03- 135.03	85.03
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	1630517	50.0000	51.849	80.00- 120.00	100.00
8.717	8.717	(0.629)	69	532919			0.00- 82.68	32.68
8.717	8.717	(0.629)	35	85037			0.00- 55.48	5.22
40 Freon123a						CAS #: 354-23-4		
9.552	9.552	(0.689)	67	1294749	50.0000	56.012	80.00- 120.00	100.00
9.552	9.552	(0.689)	117	946703			21.37- 121.37	73.12
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	146846	50.0000	54.275	80.00- 120.00	100.00
9.718	9.718	(0.701)	133	29959			0.00- 70.95	20.40
9.718	9.718	(0.701)	85	122663			256.69- 356.69	83.53
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	2738824	50.0000	57.883	80.00- 120.00	100.00
12.289	12.289	(0.886)	87	875522			0.00- 80.60	31.97
12.289	12.289	(0.886)	59	320352			0.00- 62.14	11.70
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	118012	50.0000	48.447	80.00- 120.00	100.00
12.400	12.400	(0.894)	59	177514			76.36- 176.36	150.42
12.289	12.289	(0.886)	41	548379			317.31- 417.31	464.68
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	3041136	50.0000	62.766	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	1293560			0.00- 93.11	42.54
12.925	12.925 (0.932)	41	498322			0.00- 70.78	16.39
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	287177	50.0000	54.359	80.00- 120.00	100.00
13.395	13.395 (0.966)	61	317488			49.32- 149.32	110.55
13.395	13.395 (0.966)	43	1980955			578.83- 678.83	689.80
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	2825604	50.0000	61.124	80.00- 120.00	100.00
14.999	14.999 (1.082)	87	674366			0.00- 72.90	23.87
14.999	14.999 (1.082)	55	659557			0.00- 75.66	23.34
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	1498222	50.0000	67.450	80.00- 120.00	100.00
21.966	21.966 (1.584)	43	2089626			89.74- 189.74	139.47
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	357913	50.0000	55.554	80.00- 120.00	100.00
15.801	15.801 (1.011)	41	242656			33.56- 133.56	67.80
15.801	15.801 (1.011)	43	184494			13.25- 113.25	51.55
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	949314	50.0000	62.430	80.00- 120.00	100.00
19.533	19.533 (1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533 (1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	839726	50.0000	51.897	80.00- 120.00	100.00
22.741	22.741 (1.093)	98	429311			0.12- 100.12	51.13
22.741	22.741 (1.093)	42	544268			12.50- 112.50	64.81
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.543	23.543 (1.132)	57	2863217	50.0000	64.228	80.00- 120.00	100.00
23.570	23.570 (1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	312258	0.00
97 1,4-Difluorobenze	1266888	760133	1773643	1266888	0.00
126 Chlorobenzene-d5	1159473	695684	1623262	1159473	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

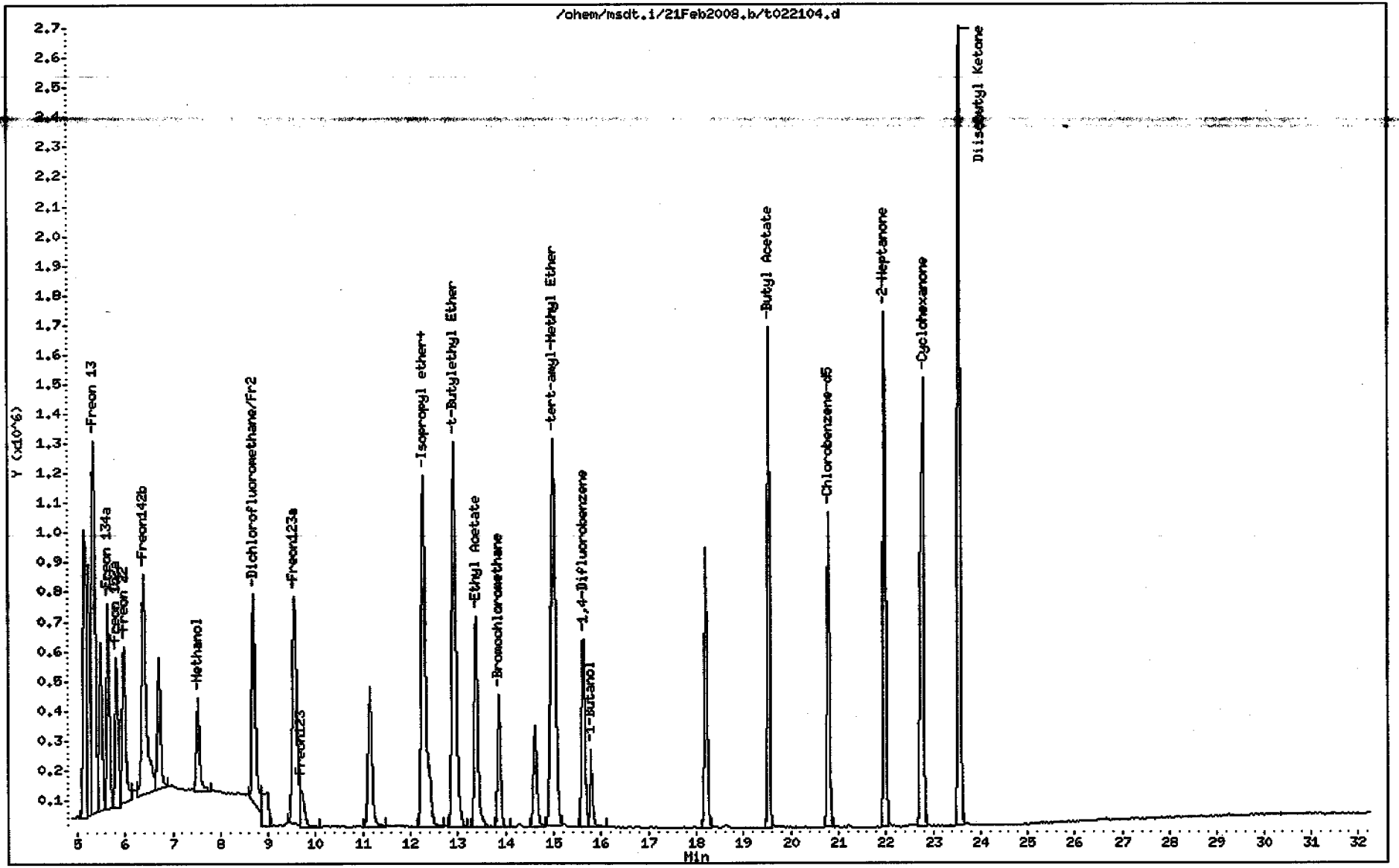
0269

Data File: /ohem/msdt.i/21Feb2008.b/t022104.d
Date : 21-FEB-2008 11:03
Client ID: Level 5
Sample Info: 50ml #1576-299

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020611.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 06-FEB-2008 17:13
Operator : sjr Inst ID: msdt.i
Smp Info : 50ml #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth Quant Type: ISTD
Cal Date : 06-FEB-2008 17:13 Cal File: t020611.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
13.886	13.886 (1.000)	130	355997	25.0000		80.00- 120.00	100.00
13.886	13.886 (1.000)	128	270515			25.99- 125.99	75.99
13.858	13.858 (1.000)	49	620343			124.26- 224.26	174.26
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
15.628	15.628 (1.000)	114	1372567	25.0000		80.00- 120.00	100.00
15.628	15.628 (1.000)	88	218941			0.00- 65.95	15.95
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
20.798	20.798 (1.000)	117	1227265	25.0000		80.00- 120.00	100.00
20.798	20.798 (1.000)	82	689313			6.72- 106.72	56.17
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
14.936	14.936 (1.076)	65	583879	25.0000	25.489	80.00- 120.00	100.00
14.936	14.936 (1.076)	67	331459			3.57- 103.57	56.77
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.199	18.199 (1.165)	98	1318253	25.0000	24.933	80.00- 120.00	100.00
18.199	18.199 (1.165)	70	152530			0.00- 61.29	11.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	907157			18.71- 118.71	68.82
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	802647	25.0000	25.285	80.00- 120.00	100.00
22.789	22.789 (1.096)	95	997548			74.28- 174.28	124.28
22.789	22.789 (1.096)	176	784103			47.69- 147.69	97.69
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	568844	50.0000	48.853	80.00- 120.00	100.00
5.812	5.812 (0.419)	42	386786			17.96- 117.96	68.00
5.812	5.812 (0.419)	39	460707			33.44- 133.44	80.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	3662828	50.0000	52.692	80.00- 120.00	100.00
5.895	5.895 (0.425)	87	1170633			0.00- 82.13	31.96
16 Freon 114					CAS #: 76-14-2		
6.282	6.282 (0.452)	135	2368790	50.0000	51.549	80.00- 120.00	100.00
6.282	6.282 (0.452)	137	767760			0.00- 81.89	32.41
18 Chloromethane					CAS #: 74-87-3		
6.531	6.531 (0.470)	50	736532	50.0000	48.532	80.00- 120.00	100.00
6.531	6.531 (0.470)	52	242289			0.00- 83.62	32.90
20 Vinyl Chloride					CAS #: 75-01-4		
6.863	6.863 (0.494)	62	1053090	50.0000	50.541	80.00- 120.00	100.00
6.863	6.863 (0.494)	64	342558			0.00- 89.61	32.53
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	811723	50.0000	51.767	80.00- 120.00	100.00
6.973	6.973 (0.502)	39	793975			53.33- 153.33	97.81
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	1033071	50.0000	50.075	80.00- 120.00	100.00
7.913	7.913 (0.570)	96	968870			43.79- 143.79	93.79
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	574342	50.0000	52.853	80.00- 120.00	100.00
8.162	8.162 (0.588)	49	147684			0.00- 76.71	25.71
8.162	8.162 (0.588)	66	193610			0.00- 83.02	33.71
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.771	8.771 (0.632)	101	4148660	50.0000	52.718	80.00- 120.00	100.00
8.771	8.771 (0.632)	103	2679418			14.59- 114.59	64.59

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Report Date: 07-Feb-2008 08:39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	322418	50.0000	53.549	80.00- 120.00	100.00
9.241	9.241 (0.665)	43	79459			0.00- 75.24	24.64
9.241	9.241 (0.665)	46	120478			0.00- 89.78	37.37
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	1858487	50.0000	51.288	80.00- 120.00	100.00
9.960	9.960 (0.717)	153	1188101			13.93- 113.93	63.93
9.960	9.960 (0.717)	101	2437243			81.14- 181.14	131.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	1737278	50.0000	53.263	80.00- 120.00	100.00
10.042	10.042 (0.723)	96	1039511			9.84- 109.84	59.84
10.042	10.042 (0.723)	98	667871			0.00- 88.44	38.44
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.733)	58	537852	50.0000	53.208	80.00- 120.00	100.00
10.181	10.181 (0.733)	43	1662243			267.82- 367.82	309.05
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	1866517	50.0000	53.880	80.00- 120.00	100.00
10.374	10.374 (0.747)	43	458202			0.00- 76.64	24.55
10.374	10.374 (0.747)	59	78354			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	3176334	50.0000	51.484	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	554160	50.0000	52.162	80.00- 120.00	100.00
10.817	10.817 (0.779)	41	1242594			173.84- 273.84	224.23
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.799)	49	1027528	50.0000	49.819	80.00- 120.00	100.00
11.121	11.121 (0.801)	84	915087			39.06- 139.06	89.06
11.093	11.093 (0.799)	51	342626			0.00- 83.83	33.34
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.825)	73	3731089	50.0000	63.014	80.00- 120.00	100.00
11.453	11.453 (0.825)	57	708379			0.00- 68.99	18.99
11.453	11.453 (0.825)	41	693527			0.00- 70.47	18.59
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	1318462	50.0000	54.393	80.00- 120.00	100.00
11.536	11.536 (0.831)	61	1860568			91.12- 191.12	141.12
11.563	11.563 (0.833)	98	850578			16.26- 116.26	64.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	1840132	50.0000	57.528	80.00- 120.00	100.00
11.895	11.895 (0.857)	43	1061185			9.30- 109.30	57.67
11.895	11.895 (0.857)	86	329230			0.00- 66.83	17.89
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	325069	50.0000	51.835	80.00- 120.00	100.00
12.365	12.365 (0.890)	43	2991357			832.23- 932.23	920.22
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.890)	63	2472619	50.0000	55.250	80.00- 120.00	100.00
12.365	12.365 (0.890)	65	805934			0.00- 82.59	32.59
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	626587	50.0000	55.030	80.00- 120.00	100.00
13.388	13.388 (0.964)	43	2118345			288.08- 388.08	338.08
13.388	13.388 (0.964)	57	187831			0.00- 79.56	29.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	1679389	50.0000	55.770	80.00- 120.00	100.00
13.416	13.416 (0.966)	96	1321033			28.66- 128.66	78.66
13.416	13.416 (0.966)	98	843715			0.24- 100.24	50.24
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	1094094	50.0000	56.969	80.00- 120.00	100.00
13.858	13.858 (0.998)	71	585510			3.52- 103.52	53.52
13.858	13.858 (0.998)	72	623609			2.04- 102.04	57.00
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	2945710	50.0000	56.971	80.00- 120.00	100.00
13.941	13.941 (1.004)	85	1913887			14.97- 114.97	64.97
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.028)	97	3172686	50.0000	55.477	80.00- 120.00	100.00
14.273	14.273 (1.028)	99	2055059			14.77- 114.77	64.77
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	1715824	50.0000	56.032	80.00- 120.00	100.00
14.300	14.300 (1.030)	56	1705812			49.42- 149.42	99.42
14.300	14.300 (1.030)	41	887756			1.74- 101.74	51.74
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	3035706	50.0000	55.259	80.00- 120.00	100.00
14.549	14.549 (1.048)	117	3225264			56.24- 156.24	106.24
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	3727114	50.0000	54.318	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	840170			0.00- 73.50	22.54
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	4124554	50.0000	55.242	80.00- 120.00	100.00
14.881	14.881 (1.072)	56	1342557			0.00- 82.82	32.55
14.881	14.881 (1.072)	41	1097372			0.00- 78.43	26.61
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	1854128	50.0000	55.386	80.00- 120.00	100.00
15.075	15.075 (0.965)	64	600236			0.00- 84.23	32.37
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	1090153	50.0000	56.126	80.00- 120.00	100.00
15.185	15.185 (0.972)	43	1492099			85.70- 185.70	136.87
15.185	15.185 (0.972)	57	911942			28.72- 128.72	83.65
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	1644017	50.0000	55.940	80.00- 120.00	100.00
16.098	16.098 (1.030)	130	1508329			41.75- 141.75	91.75
16.098	16.098 (1.030)	97	1036281			13.03- 113.03	63.03
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	1288303	50.0000	55.647	80.00- 120.00	100.00
16.568	16.568 (1.060)	62	908468			20.52- 120.52	70.52
16.568	16.568 (1.060)	41	703834			4.63- 104.63	54.63
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	896963	50.0000	52.930	80.00- 120.00	100.00
16.678	16.678 (1.067)	58	524585			8.48- 108.48	58.48
16.706	16.706 (1.069)	57	181915			0.00- 71.19	20.28
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	2950939	50.0000	56.106	80.00- 120.00	100.00
17.010	17.010 (1.088)	85	1891495			14.10- 114.10	64.10
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	2032815	50.0000	57.623	80.00- 120.00	100.00
17.784	17.784 (1.138)	77	657095			0.00- 82.32	32.32
17.784	17.784 (1.138)	39	911517			0.00- 94.84	44.84
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	959360	50.0000	59.852	80.00- 120.00	100.00
17.978	17.978 (1.150)	43	2178902			175.34- 275.34	227.12
17.978	17.978 (1.150)	85	471816			0.64- 100.64	49.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	4068135	50.0000	55.602	80.00- 120.00	100.00
18.337	18.337 (1.173)	92	2482867			11.03- 111.03	61.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	2215353	50.0000	57.114	80.00- 120.00	100.00
18.752	18.752 (0.902)	77	703689			0.00- 81.76	31.76
18.752	18.752 (0.902)	39	903343			0.00- 90.78	40.78
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	1575767	50.0000	56.367	80.00- 120.00	100.00
19.111	19.111 (0.919)	99	1008005			13.97- 113.97	63.97
19.111	19.111 (0.919)	83	1339264			34.99- 134.99	84.99
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	2101247	50.0000	56.093	80.00- 120.00	100.00
19.277	19.277 (0.927)	129	1460862			19.52- 119.52	69.52
19.277	19.277 (0.927)	131	1379543			15.65- 115.65	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	1325035	50.0000	56.604	80.00- 120.00	100.00
19.416	19.416 (0.934)	43	2195972			115.73- 215.73	165.73
19.416	19.416 (0.934)	100	272545			0.00- 71.71	20.57
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	2769035	50.0000	58.173	80.00- 120.00	100.00
19.803	19.803 (0.952)	127	2123510			28.82- 128.82	76.69
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	2561313	50.0000	57.601	80.00- 120.00	100.00
20.052	20.052 (0.964)	109	2365543			42.36- 142.36	92.36
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	3537203	50.0000	54.809	80.00- 120.00	100.00
20.853	20.853 (1.003)	114	1102906			0.00- 81.18	31.18
20.853	20.853 (1.003)	77	2193657			12.02- 112.02	62.02
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	1881257	50.0000	56.260	80.00- 120.00	100.00
20.936	20.936 (1.007)	91	6033553			269.96- 369.96	320.72
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	2414591	50.0000	57.344	80.00- 120.00	100.00
21.130	21.130 (1.016)	91	4867839			149.87- 249.87	201.60
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	2294486	50.0000	57.285	80.00- 120.00	100.00

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Report Date: 07-Feb-2008 08:39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	4831196			160.56- 260.56	210.56
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	3731947	50.0000	60.816	80.00- 120.00	100.00
21.876	21.876 (1.052)	78	1927539			1.65- 101.65	51.65
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	2955362	50.0000	57.842	80.00- 120.00	100.00
22.291	22.291 (1.072)	171	1502352			0.83- 100.83	50.83
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	6407360	50.0000	57.992	80.00- 120.00	100.00
22.429	22.429 (1.078)	120	1652751			0.00- 77.62	25.79
22.429	22.429 (1.078)	51	552478			0.00- 58.75	8.62
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	3607778	50.0000	56.152	80.00- 120.00	100.00
23.010	23.010 (1.106)	85	2344026			14.97- 114.97	64.97
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	8205341	50.0000	57.289	80.00- 120.00	100.00
23.121	23.121 (1.112)	120	1793463			0.00- 71.63	21.86
23.121	23.121 (1.112)	105	296421			0.00- 53.71	3.61
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	7178250	50.0000	58.874	80.00- 120.00	100.00
23.287	23.287 (1.120)	120	2114319			0.00- 79.45	29.45
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	5894923	50.0000	56.678	80.00- 120.00	100.00
23.397	23.397 (1.125)	120	2902725			0.00- 98.23	49.24
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	5651142	50.0000	57.660	80.00- 120.00	100.00
24.033	24.033 (1.156)	120	2609535			0.00- 94.91	46.18
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	3854517	50.0000	54.719	80.00- 120.00	100.00
24.586	24.586 (1.182)	148	2445415			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	1597557			0.00- 91.36	41.45
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	3989830	50.0000	55.044	80.00- 120.00	100.00
24.724	24.724 (1.189)	148	2558342			16.09- 116.09	64.12
24.724	24.724 (1.189)	111	1588487			0.00- 90.13	39.81

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Report Date: 07-Feb-2008 08:39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	6094704	50.0000	58.156	80.00- 120.00	100.00
24.945	24.945 (1.199)	126	1159566			0.00- 69.28	19.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	3731728	50.0000	54.382	80.00- 120.00	100.00
25.360	25.360 (1.219)	148	2389973			14.04- 114.04	64.04
25.360	25.360 (1.219)	111	1609999			0.00- 93.14	43.14
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	2605257	50.0000	49.778	80.00- 120.00	100.00
28.153	28.153 (1.354)	182	2481668			45.26- 145.26	95.26
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	2507104	50.0000	47.598	80.00- 120.00	100.00
28.319	28.319 (1.362)	223	1586646			12.90- 112.90	63.29
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	3679681	50.0000	50.798	80.00- 120.00	100.00
28.678	28.678 (1.379)	127	456187			0.00- 62.74	12.40
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	1202086	50.0000	52.229	80.00- 120.00	100.00
8.273	8.273 (0.596)	57	925144			27.67- 127.67	76.96
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	202494	50.0000	50.813	80.00- 120.00	100.00
6.807	6.807 (0.490)	43	1448086			666.74- 766.74	715.13
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	2027281	50.0000	55.915	80.00- 120.00	100.00
16.347	16.347 (1.177)	98	929334			0.00- 95.22	45.84
16.347	16.347 (1.177)	55	1420992			20.82- 120.82	70.09
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.803)	59	2143464	50.0000	56.780	80.00- 120.00	100.00
11.148	11.148 (0.803)	41	454380			0.00- 72.85	21.20
11.148	11.148 (0.803)	57	220666			0.00- 59.93	10.29

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020611.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	355997	0.00
97 1,4-Difluorobenze	1372567	823540	1921594	1372567	0.00
126 Chlorobenzene-d5	1227265	736359	1718171	1227265	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

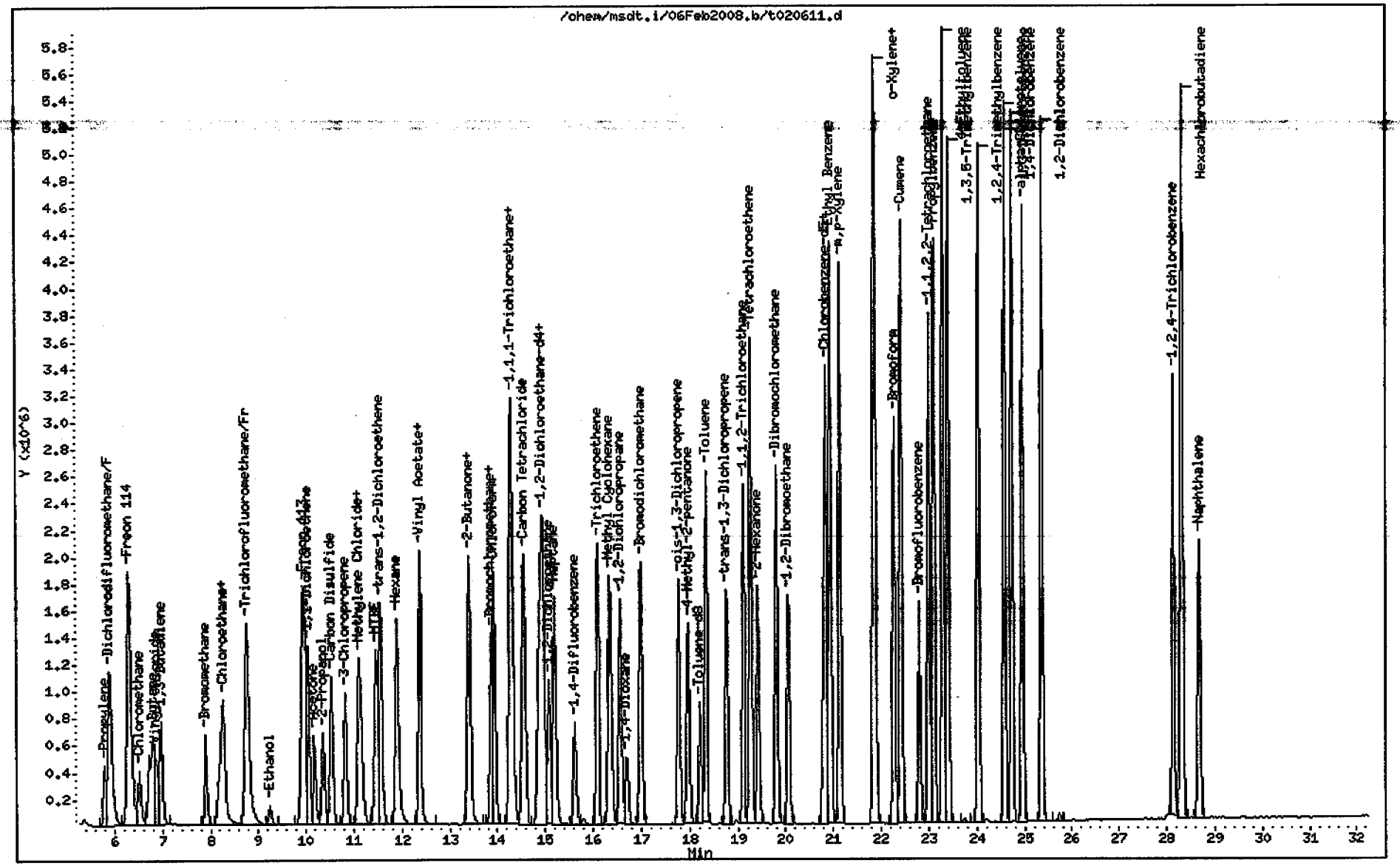
0279

Data File: /chem/msdt.i/06Feb2008.b/t020611.d
Date : 06-FEB-2008 17:13
Client ID: Level 5
Sample Info: 50ml #1576-261

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022109.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 21-FEB-2008 17:00
Operator : ACT
Inst ID: msdt.i
Smp Info : 100ml #1576-299
Misc Info : 200ppbv -> 100(600 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 17:23 sruth
Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00
Cal File: t022109.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865	(1.000)	130	288174	25.0000		50.00- 150.00	100.00
13.865	13.865	(1.000)	128	220761			26.37- 126.37	76.61
13.865	13.865	(1.000)	49	347475			67.71- 167.71	120.58
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635	(1.000)	114	1171320	25.0000		50.00- 150.00	100.00
15.635	15.635	(1.000)	88	190746			0.00- 66.38	16.28
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805	(1.000)	117	1094664	25.0000		50.00- 150.00	100.00
20.805	20.805	(1.000)	82	635295			7.58- 107.58	58.04
6 Freon142b						CAS #: 75-68-3		
6.436	6.436	(0.464)	65	4107153	100.000	103.68	50.00- 150.00	100.00
6.436	6.436	(0.464)	45	857004			0.00- 71.32	20.87
9 Freon 13						CAS #: 75-72-9		
5.394	5.394	(0.389)	69	4121833	100.000	103.77	50.00- 150.00	100.00
5.394	5.394	(0.389)	85	1350133			0.00- 81.50	32.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)							
5.394	5.394 (0.389)	87	420390			0.00- 60.31	10.20
13 Freon 134a					CAS #: 811-97-2		
5.675	5.675 (0.409)	83	1821922	100.000	102.81	50.00- 150.00	100.00
5.675	5.675 (0.409)	69	1498909			32.62- 132.62	82.27
15 Freon 152a					CAS #: 75-37-6		
5.844	5.844 (0.422)	65	956248	100.000	100.21	50.00- 150.00	100.00
5.844	5.844 (0.422)	51	1646695			127.07- 227.07	172.20
5.844	5.844 (0.422)	47	421265			0.00- 93.51	44.05
17 Freon 22					CAS #: 75-45-6		
6.013	6.013 (0.434)	67	468972	100.000	104.17	50.00- 150.00	100.00
6.013	6.013 (0.434)	51	2312207			463.95- 563.95	493.04
6.013	6.013 (0.434)	85	43026			0.00- 65.76	9.17
26 Methanol					CAS #: 67-56-1		
7.534	7.534 (0.543)	31	1144222	600.000	475.68	50.00- 150.00	100.00
7.534	7.534 (0.543)	32	937390			65.11- 165.11	81.92
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.745	8.745 (0.631)	67	2763507	100.000	97.618	50.00- 150.00	100.00
8.745	8.745 (0.631)	69	889530			0.00- 82.56	32.19
8.717	8.717 (0.629)	35	151899			0.00- 55.48	5.50
40 Freon123a					CAS #: 354-23-4		
9.579	9.579 (0.691)	67	2203976	100.000	100.92	50.00- 150.00	100.00
9.579	9.579 (0.691)	117	1652565			22.27- 122.27	74.98
41 Freon123					CAS #: 306-83-2		
9.718	9.718 (0.701)	83	270148	100.000	105.31	50.00- 150.00	100.00
9.718	9.718 (0.701)	133	48575			0.00- 70.21	17.98
9.579	9.579 (0.691)	85	1081620			280.12- 380.12	400.38
68 Isopropyl ether					CAS #: 108-20-3		
12.289	12.289 (0.886)	45	5051767	100.000	106.98	50.00- 150.00	100.00
12.289	12.289 (0.886)	87	1583002			0.00- 80.78	31.34
12.289	12.289 (0.886)	59	584960			0.00- 62.00	11.58
71 1-Propanol					CAS #: 71-23-8		
12.400	12.400 (0.894)	42	274499	100.000	110.63	50.00- 150.00	100.00
12.400	12.400 (0.894)	59	409753			82.09- 182.09	149.27
12.289	12.289 (0.886)	41	1051376			321.23- 421.23	383.02
73 t-Butylethyl Ether					CAS #: 637-92-3		
12.925	12.925 (0.932)	59	5658094	100.000	112.47	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	2427830			0.00- 93.06	42.91
12.925	12.925 (0.932)	41	925298			0.00- 69.68	16.35
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	512702	100.000	100.64	50.00- 150.00	100.00
13.395	13.395 (0.966)	61	583515			52.94- 152.94	113.81
13.395	13.395 (0.966)	43	3653067			599.75- 699.75	712.51
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	5274523	100.000	110.84	50.00- 150.00	100.00
14.999	14.999 (1.082)	87	1278528			0.00- 73.24	24.24
14.999	14.999 (1.082)	55	1254977			0.00- 75.20	23.79
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	3028001	100.000	121.23	50.00- 150.00	100.00
21.966	21.966 (1.584)	43	4317169			90.45- 190.45	142.57
98 1-Butanol					CAS #: 71-36-3		
15.801	15.801 (1.011)	56	957040	100.000	125.47	50.00- 150.00	100.00
15.801	15.801 (1.011)	41	635428			29.27- 129.27	66.40
15.801	15.801 (1.011)	43	476111			9.88- 109.88	49.75
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	1853300	100.000	116.48	50.00- 150.00	100.00
19.533	19.533 (1.249)	73	759103			0.00- 93.48	40.96
19.533	19.533 (1.249)	43	4210731			175.62- 275.62	227.20
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	2182811	100.000	120.34	50.00- 150.00	100.00
22.741	22.741 (1.093)	98	1114420			0.39- 100.39	51.05
22.741	22.741 (1.093)	42	1409787			13.24- 113.24	64.59
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	5714491	100.000	118.25	50.00- 150.00	100.00
23.570	23.570 (1.133)	85	5408511			45.10- 145.10	94.65
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022109.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ACT
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 100(600 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	288174	-9.42
97 1,4-Difluorobenze	1251468	750881	1752055	1171320	-6.40
126 Chlorobenzene-d5	1150991	690595	1611387	1094664	-4.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

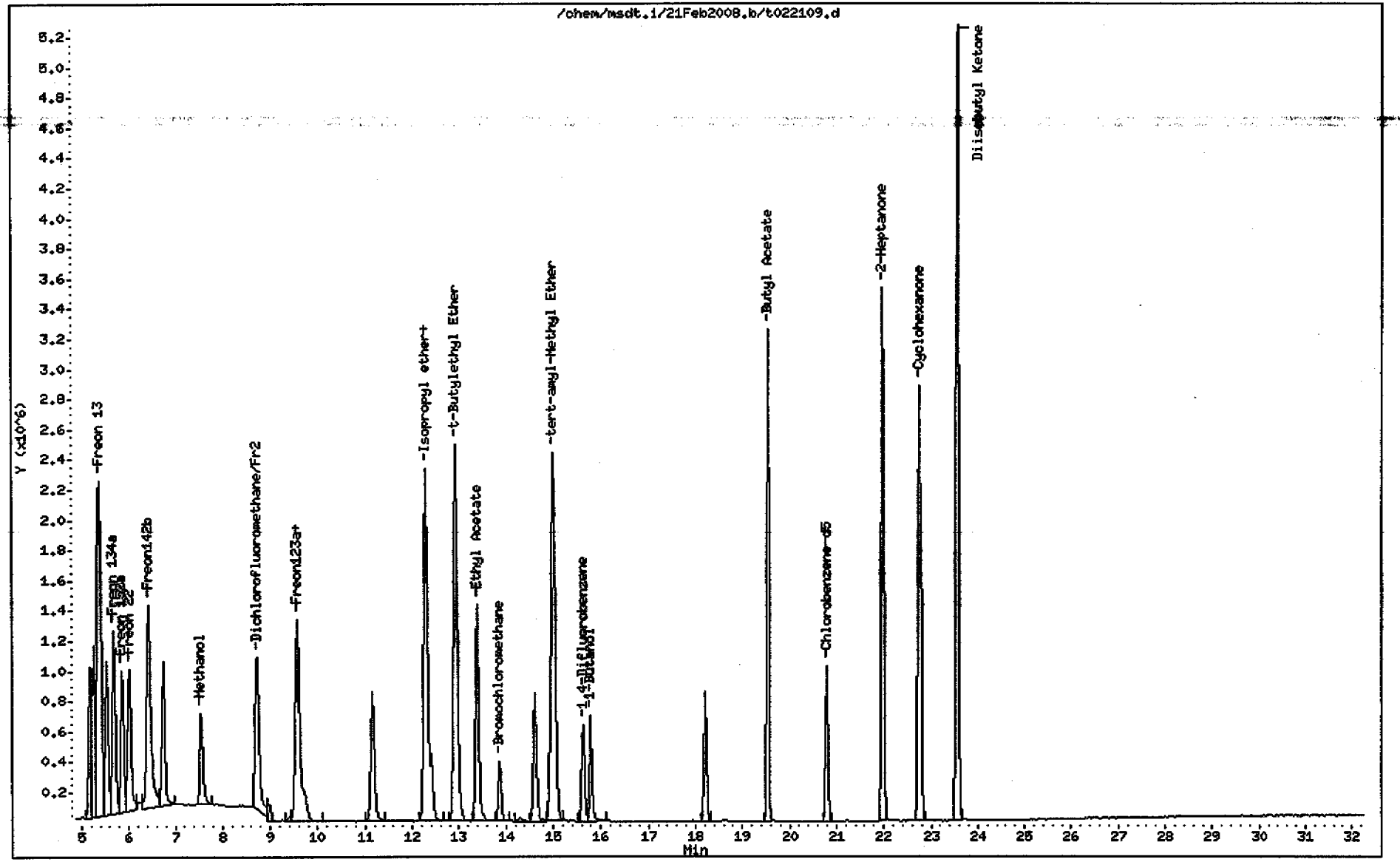
0284

Data File: /chem/msdt.i/21Feb2008.b/t022109.d
Date : 21-FEB-2008 17:00
Client ID: Level 6
Sample Info: 100ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: ACT
Column diameter: 0.53



Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020612.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 06-FEB-2008 17:51
Operator : sjr
Inst ID: msdt.i
Smp Info : 100ml #1576-261
Misc Info : 200ppbv -> 100ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth
Quant Type: ISTD
Cal Date : 06-FEB-2008 17:51
Cal File: t020612.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.886	13.886 (1.000)	130	351121	25.0000		50.00- 150.00	100.00
13.886	13.886 (1.000)	128	271306			26.39- 126.39	77.27
13.886	13.886 (1.000)	49	815040			99.95- 199.95	232.13
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.628	15.628 (1.000)	114	1413120	25.0000		50.00- 150.00	100.00
15.628	15.628 (1.000)	88	227247			0.00- 66.12	16.08
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.798	20.798 (1.000)	117	1281401	25.0000		50.00- 150.00	100.00
20.798	20.798 (1.000)	82	729950			6.72- 106.72	56.96
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.936	14.936 (1.076)	65	598616	25.0000	26.495	50.00- 150.00	100.00
14.936	14.936 (1.076)	67	374153			3.57- 103.57	62.50
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.199	18.199 (1.165)	98	1378362	25.0000	25.322	50.00- 150.00	100.00
18.199	18.199 (1.165)	70	155982			0.00- 61.29	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.199	18.199 (1.165)	100	950822			18.71- 118.71	68.98
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.789	22.789 (1.096)	174	834025	25.0000	25.163	50.00- 150.00	100.00
22.789	22.789 (1.096)	95	1057330			75.58- 175.58	126.77
22.789	22.789 (1.096)	176	808445			47.41- 147.41	96.93
11 Propylene					CAS #: 115-07-1		
5.812	5.812 (0.419)	41	1111571	100.000	96.790	50.00- 150.00	100.00
5.812	5.812 (0.419)	42	742893			17.96- 117.96	66.83
5.812	5.812 (0.419)	39	910586			33.44- 133.44	81.92
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.923	5.923 (0.427)	85	7101370	100.000	103.58	50.00- 150.00	100.00
5.923	5.923 (0.427)	87	2261049			0.00- 82.13	31.84
16 Freon 114					CAS #: 76-14-2		
6.310	6.310 (0.454)	135	4672190	100.000	103.09	50.00- 150.00	100.00
6.310	6.310 (0.454)	137	1488571			0.00- 81.89	31.86
18 Chloromethane					CAS #: 74-87-3		
6.559	6.559 (0.472)	50	1551411	100.000	103.64	50.00- 150.00	100.00
6.559	6.559 (0.472)	52	504098			0.00- 83.62	32.49
20 Vinyl Chloride					CAS #: 75-01-4		
6.890	6.890 (0.496)	62	2106034	100.000	102.48	50.00- 150.00	100.00
6.890	6.890 (0.496)	64	674245			0.00- 89.61	32.01
22 1,3-Butadiene					CAS #: 106-99-0		
6.973	6.973 (0.502)	54	1598698	100.000	103.37	50.00- 150.00	100.00
6.973	6.973 (0.502)	39	1537145			53.33- 153.33	96.15
25 Bromomethane					CAS #: 74-83-9		
7.913	7.913 (0.570)	94	2093115	100.000	102.87	50.00- 150.00	100.00
7.913	7.913 (0.570)	96	1963372			43.69- 143.69	93.80
27 Chloroethane					CAS #: 75-00-3		
8.190	8.190 (0.590)	64	1136847	100.000	106.07	50.00- 150.00	100.00
8.190	8.190 (0.590)	49	285724			0.00- 76.71	25.13
8.190	8.190 (0.590)	66	371225			0.00- 83.02	32.65
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.798	8.798 (0.634)	101	7920716	100.000	102.05	50.00- 150.00	100.00
8.798	8.798 (0.634)	103	5133859			13.52- 113.52	64.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.665)	45	613723	100.000	103.34	50.00- 150.00	100.00
9.241	9.241 (0.665)	43	142073			0.00- 75.24	23.15
9.241	9.241 (0.665)	46	227563			0.00- 89.78	37.08
42 Freon 113					CAS #: 76-13-1		
9.960	9.960 (0.717)	151	3629218	100.000	101.54	50.00- 150.00	100.00
9.960	9.960 (0.717)	153	2313395			14.28- 114.28	63.74
9.960	9.960 (0.717)	101	4699952			80.55- 180.55	129.50
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.723)	61	3447769	100.000	107.17	50.00- 150.00	100.00
10.042	10.042 (0.723)	96	2078953			13.15- 113.15	60.30
10.042	10.042 (0.723)	98	1334772			0.00- 88.14	38.71
45 Acetone					CAS #: 67-64-1		
10.208	10.208 (0.735)	58	994047	100.000	99.703	50.00- 150.00	100.00
10.208	10.208 (0.735)	43	3108431			267.82- 367.82	312.70
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.747)	45	3640217	100.000	106.54	50.00- 150.00	100.00
10.374	10.374 (0.747)	43	863734			0.00- 76.64	23.73
10.374	10.374 (0.747)	59	147169			0.00- 54.31	4.04
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.759)	76	6420269	100.000	105.51	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.779)	76	1094455	100.000	104.45	50.00- 150.00	100.00
10.817	10.817 (0.779)	41	2383503			173.84- 273.84	217.78
54 Methylene Chloride					CAS #: 75-09-2		
11.121	11.121 (0.801)	49	2036666	100.000	100.12	50.00- 150.00	100.00
11.121	11.121 (0.801)	84	1809101			36.08- 136.08	88.83
11.121	11.121 (0.801)	51	661270			0.00- 83.83	32.47
60 MTBE					CAS #: 1634-04-4		
11.480	11.480 (0.827)	73	7138212	100.000	122.23	50.00- 150.00	100.00
11.480	11.480 (0.827)	57	1352795			0.00- 69.02	18.95
11.480	11.480 (0.827)	41	1292674			0.00- 70.47	18.11
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.563	11.563 (0.833)	96	2556418	100.000	106.93	50.00- 150.00	100.00
11.563	11.563 (0.833)	61	3579783			95.77- 195.77	140.03
11.563	11.563 (0.833)	98	1640927			16.26- 116.26	64.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.857)	57	3632485	100.000	115.14	50.00- 150.00	100.00
11.895	11.895 (0.857)	43	2065967			9.30- 109.30	56.87
11.923	11.923 (0.859)	86	658618			0.00- 66.83	18.13
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.890)	86	672864	100.000	108.78	50.00- 150.00	100.00
12.365	12.365 (0.890)	43	6026628			832.23- 932.23	895.67
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.393	12.393 (0.892)	63	4709578	100.000	106.69	50.00- 150.00	100.00
12.393	12.393 (0.892)	65	1524086			0.00- 82.79	32.36
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.964)	72	1295858	100.000	115.39	50.00- 150.00	100.00
13.388	13.388 (0.964)	43	4285726			275.22- 375.22	330.72
13.388	13.388 (0.964)	57	374753			0.00- 79.56	28.92
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.966)	61	3264442	100.000	109.91	50.00- 150.00	100.00
13.443	13.443 (0.968)	96	2561204			27.39- 127.39	78.46
13.443	13.443 (0.968)	98	1649626			0.96- 100.96	50.53
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (0.998)	42	2158829	100.000	113.97	50.00- 150.00	100.00
13.858	13.858 (0.998)	71	1140379			0.00- 99.16	52.82
13.858	13.858 (0.998)	72	1229303			2.04- 102.04	56.94
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.004)	83	5696174	100.000	111.70	50.00- 150.00	100.00
13.941	13.941 (1.004)	85	3706989			16.43- 116.43	65.08
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.300	14.300 (1.030)	97	6204791	100.000	110.00	50.00- 150.00	100.00
14.300	14.300 (1.030)	99	3996930			17.45- 117.45	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.030)	84	3475704	100.000	115.08	50.00- 150.00	100.00
14.300	14.300 (1.030)	56	3413020			47.55- 147.55	98.20
14.300	14.300 (1.030)	41	1767727			5.12- 105.12	50.86
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.048)	119	5873936	100.000	108.41	50.00- 150.00	100.00
14.549	14.549 (1.048)	117	6261936			53.78- 153.78	106.61
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	7425750	100.000	105.12	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	1684308			0.00- 73.50	22.68
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.072)	57	8406637	100.000	114.16	50.00- 150.00	100.00
14.881	14.881 (1.072)	56	2694876			0.00- 82.82	32.06
14.881	14.881 (1.072)	41	2162132			0.00- 78.43	25.72
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	3636322	100.000	105.51	50.00- 150.00	100.00
15.075	15.075 (0.965)	64	1159994			0.00- 84.23	31.90
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	2253769	100.000	112.70	50.00- 150.00	100.00
15.185	15.185 (0.972)	43	3040625			85.70- 185.70	134.91
15.185	15.185 (0.972)	57	1858665			28.72- 128.72	82.47
101 Trichloroethene					CAS #: 79-01-6		
16.098	16.098 (1.030)	95	3240461	100.000	107.10	50.00- 150.00	100.00
16.098	16.098 (1.030)	130	3002867			42.94- 142.94	92.67
16.098	16.098 (1.030)	97	2081303			13.25- 113.25	64.23
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	2564982	100.000	107.61	50.00- 150.00	100.00
16.568	16.568 (1.060)	62	1813519			21.32- 121.32	70.70
16.568	16.568 (1.060)	41	1389352			8.96- 108.96	54.17
106 1,4-Dioxane					CAS #: 123-91-1		
16.706	16.706 (1.069)	88	1832861	100.000	105.05	50.00- 150.00	100.00
16.706	16.706 (1.069)	58	1060731			9.36- 109.36	57.87
16.706	16.706 (1.069)	57	366016			0.00- 71.19	19.97
107 Bromodichloromethane					CAS #: 75-27-4		
17.010	17.010 (1.088)	83	5845831	100.000	107.96	50.00- 150.00	100.00
17.010	17.010 (1.088)	85	3735941			13.51- 113.51	63.91
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	4117666	100.000	113.37	50.00- 150.00	100.00
17.784	17.784 (1.138)	77	1315173			0.00- 84.89	31.94
17.784	17.784 (1.138)	39	1808488			0.00- 97.13	43.92
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.978	17.978 (1.150)	58	1980151	100.000	119.99	50.00- 150.00	100.00
17.978	17.978 (1.150)	43	4495780			175.34- 275.34	227.04
17.978	17.978 (1.150)	85	994822			0.64- 100.64	50.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	8178178	100.000	108.57	50.00- 150.00	100.00
18.337	18.337 (1.173)	92	5020495			11.62- 111.62	61.39
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.780	18.780 (0.903)	75	4461556	100.000	110.16	50.00- 150.00	100.00
18.780	18.780 (0.903)	77	1428254			0.00- 81.86	32.01
18.752	18.752 (0.902)	39	1829158			0.00- 91.58	41.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	3125317	100.000	107.07	50.00- 150.00	100.00
19.111	19.111 (0.919)	99	1954568			13.21- 113.21	62.54
19.111	19.111 (0.919)	83	2655080			35.76- 135.76	84.95
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	4180011	100.000	106.87	50.00- 150.00	100.00
19.277	19.277 (0.927)	129	2861461			19.36- 119.36	68.46
19.277	19.277 (0.927)	131	2744125			16.43- 116.43	65.65
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	2723514	100.000	111.43	50.00- 150.00	100.00
19.416	19.416 (0.934)	43	4527762			124.96- 224.96	166.25
19.416	19.416 (0.934)	100	574524			0.00- 71.71	21.09
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	5492645	100.000	110.52	50.00- 150.00	100.00
19.803	19.803 (0.952)	127	4234044			28.82- 128.82	77.09
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.052	20.052 (0.964)	107	5153001	100.000	110.99	50.00- 150.00	100.00
20.052	20.052 (0.964)	109	4771126			46.68- 146.68	92.59
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	7115170	100.000	105.59	50.00- 150.00	100.00
20.853	20.853 (1.003)	114	2236590			0.00- 82.06	31.43
20.853	20.853 (1.003)	77	4380652			22.53- 122.53	61.57
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	3790191	100.000	108.56	50.00- 150.00	100.00
20.936	20.936 (1.007)	91	12275568			269.96- 369.96	323.88
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	4888391	100.000	111.19	50.00- 150.00	100.00
21.130	21.130 (1.016)	91	9871195			149.87- 249.87	201.93
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	4653159	100.000	111.26	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	9908020			160.81- 260.81	212.93
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	7633035	100.000	119.13	50.00- 150.00	100.00
21.876	21.876 (1.052)	78	3882867			9.02- 109.02	50.87
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	5972775	100.000	111.96	50.00- 150.00	100.00
22.291	22.291 (1.072)	171	3039652			1.83- 101.83	50.89
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	13155481	100.000	114.04	50.00- 150.00	100.00
22.429	22.429 (1.078)	120	3375500			0.00- 77.62	25.66
22.429	22.429 (1.078)	51	1109718			0.00- 58.75	8.44
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	7307878	100.000	108.94	50.00- 150.00	100.00
23.010	23.010 (1.106)	85	4726894			16.89- 116.89	64.68
142 Propylbenzene					CAS #: 103-65-1		
23.121	23.121 (1.112)	91	16695425	100.000	111.64	50.00- 150.00	100.00
23.121	23.121 (1.112)	120	3572151			0.00- 71.63	21.40
23.121	23.121 (1.112)	105	593757			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.287	23.287 (1.120)	105	14420605	100.000	113.28	50.00- 150.00	100.00
23.287	23.287 (1.120)	120	4223785			0.00- 79.69	29.29
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	12029525	100.000	110.77	50.00- 150.00	100.00
23.397	23.397 (1.125)	120	5822272			0.00- 98.23	48.40
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	11520943	100.000	112.58	50.00- 150.00	100.00
24.033	24.033 (1.156)	120	5255599			0.00- 94.91	45.62
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	7765843	100.000	105.59	50.00- 150.00	100.00
24.586	24.586 (1.182)	148	4936822			14.68- 114.68	63.57
24.586	24.586 (1.182)	111	3180420			0.00- 91.36	40.95
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	8019783	100.000	105.97	50.00- 150.00	100.00
24.724	24.724 (1.189)	148	5124641			16.09- 116.09	63.90
24.724	24.724 (1.189)	111	3205038			0.00- 90.13	39.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.946	24.946 (1.199)	91	12583883	100.000	115.00	50.00- 150.00	100.00
24.946	24.946 (1.199)	126	2367422			0.00- 69.28	18.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	7525703	100.000	105.04	50.00- 150.00	100.00
25.360	25.360 (1.219)	148	4832431			15.85- 115.85	64.21
25.360	25.360 (1.219)	111	3270866			0.00- 94.46	43.46
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	5462712	100.000	99.966	50.00- 150.00	100.00
28.153	28.153 (1.354)	182	5139467			44.78- 144.78	94.08
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	5122789	100.000	93.148	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	3213957			12.90- 112.90	62.74
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	7794932	100.000	103.06	50.00- 150.00	100.00
28.678	28.678 (1.379)	127	944387			0.00- 62.74	12.12
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.596)	43	2307164	100.000	101.64	50.00- 150.00	100.00
8.273	8.273 (0.596)	57	1786691			27.67- 127.67	77.44
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.490)	58	400970	100.000	102.02	50.00- 150.00	100.00
6.807	6.807 (0.490)	43	2768800			666.74- 766.74	690.53
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.347	16.347 (1.177)	83	4123768	100.000	115.32	50.00- 150.00	100.00
16.347	16.347 (1.177)	98	1845682			0.00- 95.22	44.76
16.347	16.347 (1.177)	55	2869124			20.82- 120.82	69.58
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.176	11.176 (0.805)	59	3860609	100.000	103.69	50.00- 150.00	100.00
11.148	11.148 (0.803)	41	796567			0.00- 72.85	20.63
11.176	11.176 (0.805)	57	392034			0.00- 59.93	10.15

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020612.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 100ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	351121	-1.37
97 1,4-Difluorobenze	1372567	823540	1921594	1413120	2.95
126 Chlorobenzene-d5	1227265	736359	1718171	1281401	4.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.89	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

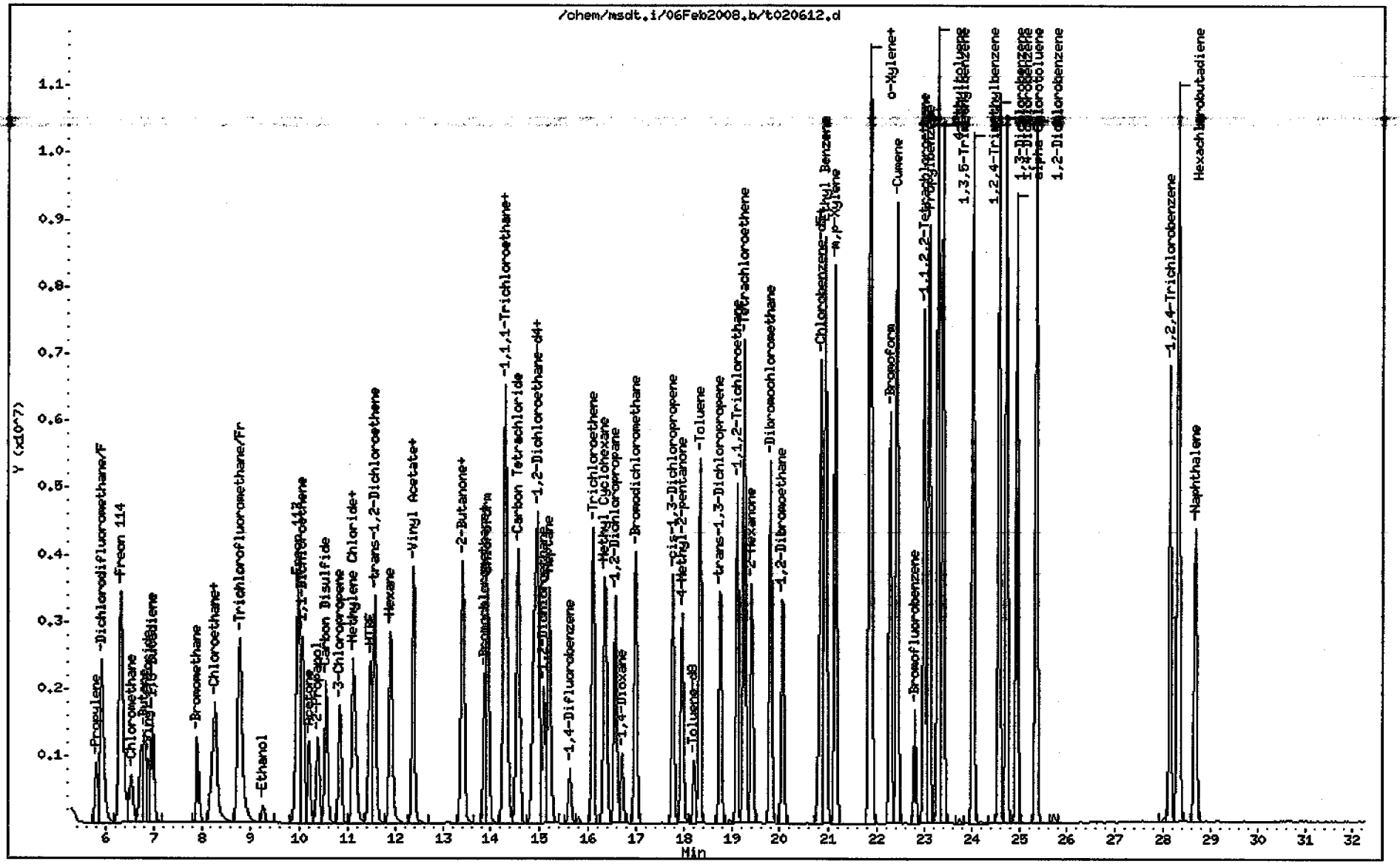
Data File: /chem/msdt.i/06Feb2008.b/t020612.d
Date : 06-FEB-2008 17:51
Client ID: Level 6
Sample Info: 100ml #1576-261

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0294



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AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022105.d
Lab Smp Id: ICAL — Client Smp ID: Level 7
Inj Date : 21-FEB-2008 12:05
Operator : sjr — Inst ID: msdt.i
Smp Info : 200ml #1576-299
Misc Info : 200ppbv -> 200(1200 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 14:28 sruth — Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05 — Cal File: t022105.d
Als bottle: 1 — Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: sp22b.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	269864	25.0000		50.00- 150.00		100.00
13.865	13.865 (1.000)	128	209729			26.48- 126.48		77.72
13.865	13.865 (1.000)	49	322466			86.30- 186.30		119.49
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1144695	25.0000		50.00- 150.00		100.00
15.635	15.635 (1.000)	88	194086			0.00- 66.34		16.96
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1083328	25.0000		50.00- 150.00		100.00
20.805	20.805 (1.000)	82	629336			7.40- 107.40		58.09
6 Freon142b						CAS #: 75-68-3		
6.436	6.436 (0.464)	65	8148778	200.000	221.71	50.00- 150.00		100.00(A)
6.436	6.436 (0.464)	45	1691785			0.00- 71.47		20.76
9 Freon 13						CAS #: 75-72-9		
5.422	5.422 (0.391)	69	8146947	200.000	221.11	50.00- 150.00		100.00(A)
5.422	5.422 (0.391)	85	2570358			0.00- 81.18		31.55

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Freon 13 (continued)								
5.422	5.422	(0.391)	87	814934			0.00- 60.34	10.00
13 Freon 134a						CAS #: 811-97-2		
5.703	5.703	(0.411)	83	3723939	200.000	225.99	50.00- 150.00	100.00(A)
5.703	5.703	(0.411)	69	3069798			32.70- 132.70	82.43
15 Freon 152a						CAS #: 75-37-6		
5.872	5.872	(0.424)	65	2003615	200.000	224.33	50.00- 150.00	100.00(A)
5.872	5.872	(0.424)	51	3487199			128.28- 228.28	174.05
5.872	5.872	(0.424)	47	899889			0.00- 93.38	44.91
17 Freon 22						CAS #: 75-45-6		
6.013	6.013	(0.434)	67	970082	200.000	232.53	50.00- 150.00	100.00(A)
6.013	6.013	(0.434)	51	4880646			470.91- 570.91	503.12
6.041	6.041	(0.436)	85	93377			0.00- 67.96	9.63
26 Methanol						CAS #: 67-56-1		
7.562	7.562	(0.545)	31	2557267	1200.00	696.25	50.00- 150.00	100.00
7.562	7.562	(0.545)	32	1919231			76.17- 176.17	75.05
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.745	8.745	(0.631)	67	5028065	200.000	188.54	50.00- 150.00	100.00
8.745	8.745	(0.631)	69	1636219			0.00- 82.68	32.54
8.745	8.745	(0.631)	35	276322			0.00- 55.48	5.50
40 Freon123a						CAS #: 354-23-4		
9.579	9.579	(0.691)	67	4337927	200.000	212.59	50.00- 150.00	100.00(A)
9.579	9.579	(0.691)	117	3245483			21.37- 121.37	74.82
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	493416	200.000	208.15	50.00- 150.00	100.00(A)
9.718	9.718	(0.701)	133	98549			0.00- 70.95	19.97
9.579	9.579	(0.691)	85	2126591			256.69- 356.69	430.99
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	10225783	200.000	235.34	50.00- 150.00	100.00(A)
12.289	12.289	(0.886)	87	3206082			0.00- 80.60	31.35
12.289	12.289	(0.886)	59	1210316			0.00- 62.14	11.84
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	546401	200.000	241.57	50.00- 150.00	100.00(A)
12.400	12.400	(0.894)	59	812840			76.36- 176.36	148.76
12.400	12.400	(0.894)	41	409141			317.31- 417.31	74.88
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	11387679	200.000	249.51	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether (continued)							
12.925	12.925 (0.932)	87	4879790			0.00- 93.11	42.85
12.925	12.925 (0.932)	41	1834928			0.00- 70.78	16.11
77 Ethyl Acetate					CAS #: 141-78-6		
13.395	13.395 (0.966)	45	1071026	200.000	224.86	50.00- 150.00	100.00(A)
13.395	13.395 (0.966)	61	1194611			49.32- 149.32	111.54
13.395	13.395 (0.966)	43	7515065			578.83- 678.83	701.67
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
14.999	14.999 (1.082)	73	10712367	200.000	247.09	50.00- 150.00	100.00(A)
14.999	14.999 (1.082)	87	2553285			0.00- 72.90	23.83
14.999	14.999 (1.082)	55	2463404			0.00- 75.66	23.00
96 2-Heptanone					CAS #: 110-43-0		
21.966	21.966 (1.584)	58	6201169	200.000	279.98	50.00- 150.00	100.00(A)
21.966	21.966 (1.584)	43	8699246			89.74- 189.74	140.28
98 1-Butanol					CAS #: 71-36-3		
15.773	15.773 (1.009)	56	2091144	200.000	299.60	50.00- 150.00	100.00(A)
15.773	15.773 (1.009)	41	1373797			33.56- 133.56	65.70
15.773	15.773 (1.009)	43	1050969			13.25- 113.25	50.26
119 Butyl Acetate					CAS #: 123-86-4		
19.533	19.533 (1.249)	56	3683588	200.000	247.07	50.00- 150.00	100.00(A)
19.533	19.533 (1.249)	73	1516521			0.00- 94.32	41.17
19.533	19.533 (1.249)	43	8438836			175.09- 275.09	229.09
135 Cyclohexanone					CAS #: 108-94-1		
22.741	22.741 (1.093)	55	4560256	200.000	267.64	50.00- 150.00	100.00(A)
22.741	22.741 (1.093)	98	2305489			0.23- 100.23	50.56
22.741	22.741 (1.093)	42	2923443			12.90- 112.90	64.11
146 Diisobutyl Ketone					CAS #: 108-83-8		
23.542	23.542 (1.132)	57	11522324	200.000	252.45	50.00- 150.00	100.00(A)
23.570	23.570 (1.133)	85	10839919			45.26- 145.26	94.08
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msdt.i/21Feb2008.b/t022105.d
Report Date: 21-Feb-2008 14:28

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022105.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 200(1200 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	269864	-13.58
97 1,4-Difluorobenze	1266888	760133	1773643	1144695	-9.65
126 Chlorobenzene-d5	1159473	695684	1623262	1083328	-6.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

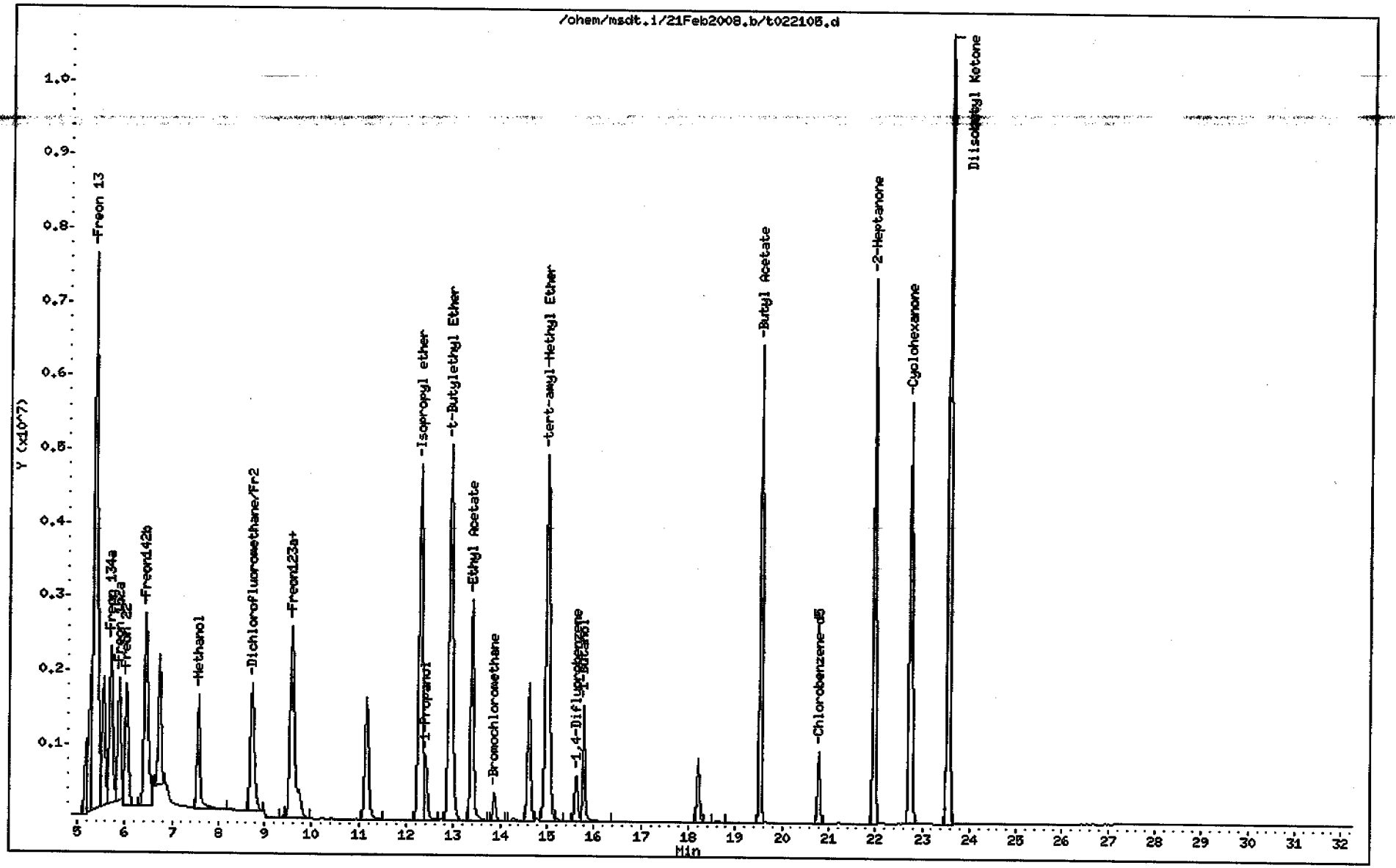
Data File: /ohem/msdt.i/21Feb2008.b/t022105.d
Date : 21-FEB-2008 12:05
Client ID: Level 7
Sample Info: 200ml #1676-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0299



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/06Feb2008.b/t020613.d
Lab Smp Id: ICAL — Client Smp ID: Level 7
Inj Date : 06-FEB-2008 19:41
Operator : srs — Inst ID: msdt.i
Smp Info : 200ml #1576-261
Misc Info : 200ppbv -> 200ppbv
Comment :
Method : /chem/msdt.i/06Feb2008.b/t14q206a.m
Meth Date : 07-Feb-2008 08:39 sruth — Quant Type: ISTD
Cal Date : 06-FEB-2008 19:41 — Cal File: t020613.d
Als bottle: 1 — Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	13.858	13.858 (1.000)	130	350438	25.0000		50.00- 150.00	100.00
	13.858	13.858 (1.000)	128	265413			26.39- 126.39	75.74
	13.941	13.941 (1.000)	49	1193106			99.95- 199.95	340.46
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	15.628	15.628 (1.000)	114	1410298	25.0000		50.00- 150.00	100.00
	15.628	15.628 (1.000)	88	224026			0.00- 66.12	15.89
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	20.798	20.798 (1.000)	117	1300571	25.0000		50.00- 150.00	100.00
	20.798	20.798 (1.000)	82	741297			6.72- 106.72	57.00
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	14.936	14.936 (1.078)	65	620117	25.0000	27.500	50.00- 150.00	100.00
	14.936	14.936 (1.078)	67	455931			3.57- 103.57	73.52
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.199	18.199 (1.165)	98	1394007	25.0000	25.661	50.00- 150.00	100.00
	18.199	18.199 (1.165)	70	165109			0.00- 61.29	11.84

Data File: /chem/msdt.i/06Feb2008.b/t020613.d
Report Date: 07-Feb-2008 08:39

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.199	18.199	(1.165)	100	950357			18.71- 118.71	68.17
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.789	22.789	(1.096)	174	848605	25.0000	25.226	50.00- 150.00	100.00
22.789	22.789	(1.096)	95	1070463			75.58- 175.58	126.14
22.789	22.789	(1.096)	176	830556			47.41- 147.41	97.87
11 Propylene						CAS #: 115-07-1		
5.812	5.812	(0.419)	41	2244909	200.000	195.86	50.00- 150.00	100.00
5.812	5.812	(0.419)	42	1546399			17.96- 117.96	68.88
5.812	5.812	(0.419)	39	1826180			33.44- 133.44	81.35
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.923	5.923	(0.427)	85	13829436	200.000	202.10	50.00- 150.00	100.00(A)
5.923	5.923	(0.427)	87	4400174			0.00- 82.13	31.82
16 Freon 114						CAS #: 76-14-2		
6.282	6.282	(0.453)	135	9245837	200.000	204.40	50.00- 150.00	100.00(A)
6.282	6.282	(0.453)	137	2950383			0.00- 81.89	31.91
18 Chloromethane						CAS #: 74-87-3		
6.531	6.531	(0.471)	50	3061437	200.000	204.92	50.00- 150.00	100.00(A)
6.531	6.531	(0.471)	52	1030836			0.00- 83.62	33.67
20 Vinyl Chloride						CAS #: 75-01-4		
6.863	6.863	(0.495)	62	4186766	200.000	204.12	50.00- 150.00	100.00(A)
6.863	6.863	(0.495)	64	1330162			0.00- 89.61	31.77
22 1,3-Butadiene						CAS #: 106-99-0		
6.946	6.946	(0.501)	54	3136692	200.000	203.21	50.00- 150.00	100.00(A)
6.946	6.946	(0.501)	39	3057782			53.33- 153.33	97.48
25 Bromomethane						CAS #: 74-83-9		
7.913	7.913	(0.571)	94	4285901	200.000	211.04	50.00- 150.00	100.00(A)
7.913	7.913	(0.571)	96	3953378			43.69- 143.69	92.24
27 Chloroethane						CAS #: 75-00-3		
8.190	8.190	(0.591)	64	2243653	200.000	209.74	50.00- 150.00	100.00(A)
8.162	8.162	(0.589)	49	567495			0.00- 76.71	25.29
8.190	8.190	(0.591)	66	737238			0.00- 83.02	32.86
31 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.771	8.771	(0.633)	101	15419021	200.000	199.04	50.00- 150.00	100.00
8.771	8.771	(0.633)	103	9913225			13.52- 113.52	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.241	9.241 (0.667)	45	1268709	200.000	214.06	50.00- 150.00	100.00(A)
9.241	9.241 (0.667)	43	285639			0.00- 75.24	22.51
9.241	9.241 (0.667)	46	473438			0.00- 89.78	37.32
42 Freon 113					CAS #: 76-13-1		
9.959	9.959 (0.719)	151	7037148	200.000	197.28	50.00- 150.00	100.00
9.959	9.959 (0.719)	153	4532081			14.28- 114.28	64.40
9.932	9.932 (0.717)	101	9194511			80.55- 180.55	130.66
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.042	10.042 (0.725)	61	6864445	200.000	213.80	50.00- 150.00	100.00(A)
10.042	10.042 (0.725)	96	4161445			13.15- 113.15	60.62
10.042	10.042 (0.725)	98	2679049			0.00- 88.14	39.03
45 Acetone					CAS #: 67-64-1		
10.181	10.181 (0.735)	58	1929807	200.000	193.94	50.00- 150.00	100.00
10.181	10.181 (0.735)	43	6078502			267.82- 367.82	314.98
46 2-Propanol					CAS #: 67-63-0		
10.374	10.374 (0.749)	45	7118783	200.000	208.76	50.00- 150.00	100.00(A)
10.374	10.374 (0.749)	43	1603518			0.00- 76.64	22.53
10.374	10.374 (0.749)	59	298669			0.00- 54.31	4.20
47 Carbon Disulfide					CAS #: 75-15-0		
10.540	10.540 (0.761)	76	12911334	200.000	212.60	50.00- 150.00	100.00(A)
51 3-Chloropropene					CAS #: 107-05-1		
10.817	10.817 (0.781)	76	2135311	200.000	204.18	50.00- 150.00	100.00(A)
10.817	10.817 (0.781)	41	4667211			173.84- 273.84	218.57
54 Methylene Chloride					CAS #: 75-09-2		
11.093	11.093 (0.800)	49	4043623	200.000	199.16	50.00- 150.00	100.00
11.093	11.093 (0.800)	84	3657876			36.08- 136.08	90.46
11.093	11.093 (0.800)	51	1301400			0.00- 83.83	32.18
60 MTBE					CAS #: 1634-04-4		
11.453	11.453 (0.826)	73	14127149	200.000	242.38	50.00- 150.00	100.00(A)
11.453	11.453 (0.826)	57	2668532			0.00- 69.02	18.89
11.453	11.453 (0.826)	41	2471765			0.00- 70.47	17.50
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.535	11.535 (0.832)	96	4995106	200.000	209.34	50.00- 150.00	100.00(A)
11.535	11.535 (0.832)	61	6882664			95.77- 195.77	137.79
11.535	11.535 (0.832)	98	3205496			16.26- 116.26	64.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
11.895	11.895 (0.858)	57	7233259	200.000	229.72	50.00- 150.00	100.00(A)
11.895	11.895 (0.858)	43	4071333			9.30- 109.30	56.29
11.895	11.895 (0.858)	86	1297193			0.00- 66.83	17.93
69 Vinyl Acetate					CAS #: 108-05-4		
12.365	12.365 (0.892)	86	1342153	200.000	217.41	50.00- 150.00	100.00(A)
12.337	12.337 (0.890)	43	12158868			832.23- 932.23	905.92
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.365	12.365 (0.892)	63	9074032	200.000	205.97	50.00- 150.00	100.00(A)
12.365	12.365 (0.892)	65	2933179			0.00- 82.79	32.32
75 2-Butanone					CAS #: 78-93-3		
13.388	13.388 (0.966)	72	2599379	200.000	231.91	50.00- 150.00	100.00(A)
13.388	13.388 (0.966)	43	8515666			275.22- 375.22	327.60
13.388	13.388 (0.966)	57	765435			0.00- 79.56	29.45
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.416	13.416 (0.968)	61	6245688	200.000	210.70	50.00- 150.00	100.00(A)
13.416	13.416 (0.968)	96	4941404			27.39- 127.39	79.12
13.416	13.416 (0.968)	98	3177917			0.96- 100.96	50.88
80 Tetrahydrofuran					CAS #: 109-99-9		
13.858	13.858 (1.000)	42	4241211	200.000	224.34	50.00- 150.00	100.00(A)
13.858	13.858 (1.000)	71	2262935			0.00- 99.16	53.36
13.858	13.858 (1.000)	72	2415736			2.04- 102.04	56.96
82 Chloroform					CAS #: 67-66-3		
13.941	13.941 (1.006)	83	10890508	200.000	213.97	50.00- 150.00	100.00(A)
13.941	13.941 (1.006)	85	7079254			16.43- 116.43	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.273	14.273 (1.030)	97	12157336	200.000	215.95	50.00- 150.00	100.00(A)
14.273	14.273 (1.030)	99	7830263			17.45- 117.45	64.41
85 Cyclohexane					CAS #: 110-82-7		
14.300	14.300 (1.032)	84	6882951	200.000	228.34	50.00- 150.00	100.00(A)
14.300	14.300 (1.032)	56	6804949			47.55- 147.55	98.87
14.300	14.300 (1.032)	41	3514830			5.12- 105.12	51.07
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.549	14.549 (1.050)	119	11440648	200.000	211.56	50.00- 150.00	100.00(A)
14.522	14.522 (1.048)	117	12169445			53.78- 153.78	106.37
91 Benzene					CAS #: 71-43-2		
14.964	14.964 (0.958)	78	14800821	200.000	209.93	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
14.964	14.964 (0.958)	77	3350560			0.00- 73.50	22.64
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.881	14.881 (1.074)	57	17411392	200.000	236.90	50.00- 150.00	100.00(A)
14.881	14.881 (1.074)	56	5614080			0.00- 82.82	32.24
14.881	14.881 (1.074)	41	4444106			0.00- 78.43	25.52
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.075	15.075 (0.965)	62	6990152	200.000	203.22	50.00- 150.00	100.00(A)
15.075	15.075 (0.965)	64	2256443			0.00- 84.23	32.28
94 Heptane					CAS #: 142-82-5		
15.185	15.185 (0.972)	71	4422042	200.000	221.58	50.00- 150.00	100.00(A)
15.185	15.185 (0.972)	43	6011920			85.70- 185.70	135.95
15.185	15.185 (0.972)	57	3678586			28.72- 128.72	83.19
101 Trichloroethene					CAS #: 79-01-6		
16.070	16.070 (1.028)	95	6441042	200.000	213.30	50.00- 150.00	100.00(A)
16.070	16.070 (1.028)	130	5805098			42.94- 142.94	90.13
16.070	16.070 (1.028)	97	4097149			13.25- 113.25	63.61
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.568	16.568 (1.060)	63	5092409	200.000	214.08	50.00- 150.00	100.00(A)
16.568	16.568 (1.060)	62	3626964			21.32- 121.32	71.22
16.568	16.568 (1.060)	41	2709468			8.96- 108.96	53.21
106 1,4-Dioxane					CAS #: 123-91-1		
16.678	16.678 (1.067)	88	3666409	200.000	210.57	50.00- 150.00	100.00(A)
16.678	16.678 (1.067)	58	2113855			9.36- 109.36	57.65
16.678	16.678 (1.067)	57	748945			0.00- 71.19	20.43
107 Bromodichloromethane					CAS #: 75-27-4		
16.982	16.982 (1.087)	83	11426189	200.000	211.43	50.00- 150.00	100.00(A)
16.982	16.982 (1.087)	85	7356832			13.51- 113.51	64.39
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.784	17.784 (1.138)	75	8131434	200.000	224.33	50.00- 150.00	100.00(A)
17.784	17.784 (1.138)	77	2581563			0.00- 84.89	31.75
17.784	17.784 (1.138)	39	3559732			0.00- 97.13	43.78
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.950	17.950 (1.149)	58	4047096	200.000	245.73	50.00- 150.00	100.00(A)
17.950	17.950 (1.149)	43	9172795			175.34- 275.34	226.65
17.978	17.978 (1.150)	85	2017083			0.64- 100.64	49.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.337	18.337 (1.173)	91	16544347	200.000	220.07	50.00- 150.00	100.00(A)
18.337	18.337 (1.173)	92	9944276			11.62- 111.62	60.11
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.752	18.752 (0.902)	75	8853621	200.000	215.39	50.00- 150.00	100.00(A)
18.752	18.752 (0.902)	77	2800007			0.00- 81.86	31.63
18.752	18.752 (0.902)	39	3605430			0.00- 91.58	40.72
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.111	19.111 (0.919)	97	6145241	200.000	207.43	50.00- 150.00	100.00(A)
19.111	19.111 (0.919)	99	3885491			13.21- 113.21	63.23
19.111	19.111 (0.919)	83	5273029			35.76- 135.76	85.81
120 Tetrachloroethene					CAS #: 127-18-4		
19.277	19.277 (0.927)	166	8171986	200.000	205.86	50.00- 150.00	100.00(A)
19.277	19.277 (0.927)	129	5618493			19.36- 119.36	68.75
19.277	19.277 (0.927)	131	5327701			16.43- 116.43	65.19
121 2-Hexanone					CAS #: 591-78-6		
19.416	19.416 (0.934)	58	5507463	200.000	222.01	50.00- 150.00	100.00(A)
19.416	19.416 (0.934)	43	9126801			124.96- 224.96	165.72
19.416	19.416 (0.934)	100	1159888			0.00- 71.71	21.06
122 Dibromochloromethane					CAS #: 124-48-1		
19.803	19.803 (0.952)	129	10771050	200.000	213.53	50.00- 150.00	100.00(A)
19.803	19.803 (0.952)	127	8255102			28.82- 128.82	76.64
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.051	20.051 (0.964)	107	10275074	200.000	218.05	50.00- 150.00	100.00(A)
20.051	20.051 (0.964)	109	9488081			46.68- 146.68	92.34
127 Chlorobenzene					CAS #: 108-90-7		
20.853	20.853 (1.003)	112	14309057	200.000	209.22	50.00- 150.00	100.00(A)
20.853	20.853 (1.003)	114	4444592			0.00- 82.06	31.06
20.853	20.853 (1.003)	77	8989067			22.53- 122.53	62.82
128 Ethyl Benzene					CAS #: 100-41-4		
20.936	20.936 (1.007)	106	7668400	200.000	216.40	50.00- 150.00	100.00(A)
20.936	20.936 (1.007)	91	25064309			269.96- 369.96	326.85
129 m,p-Xylene					CAS #: 108-38-3		
21.130	21.130 (1.016)	106	9936021	200.000	222.67	50.00- 150.00	100.00(A)
21.130	21.130 (1.016)	91	20223905			149.87- 249.87	203.54
130 o-Xylene					CAS #: 95-47-6		
21.849	21.849 (1.051)	106	9402725	200.000	221.52	50.00- 150.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
21.849	21.849 (1.051)	91	20307931			160.81- 260.81	215.98
131 Styrene					CAS #: 100-42-5		
21.876	21.876 (1.052)	104	15871642	200.000	244.07	50.00- 150.00	100.00(A)
21.876	21.876 (1.052)	78	8023544			9.02- 109.02	50.55
133 Bromoform					CAS #: 75-25-2		
22.291	22.291 (1.072)	173	12025424	200.000	222.10	50.00- 150.00	100.00(A)
22.291	22.291 (1.072)	171	6154800			1.83- 101.83	51.18
134 Cumene					CAS #: 98-82-8		
22.429	22.429 (1.078)	105	26972899	200.000	230.37	50.00- 150.00	100.00(A)
22.429	22.429 (1.078)	120	6825383			0.00- 77.62	25.30
22.402	22.402 (1.077)	51	2239931			0.00- 58.75	8.30
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.010	23.010 (1.106)	83	15030605	200.000	220.75	50.00- 150.00	100.00(A)
23.010	23.010 (1.106)	85	9664787			16.89- 116.89	64.30
142 Propylbenzene					CAS #: 103-65-1		
23.093	23.093 (1.110)	91	31493566	200.000	207.49	50.00- 150.00	100.00(A)
23.121	23.121 (1.112)	120	7318775			0.00- 71.63	23.24
23.121	23.121 (1.112)	105	1221513			0.00- 53.71	3.88
145 4-Ethyltoluene					CAS #: 622-96-8		
23.286	23.286 (1.120)	105	26455136	200.000	204.75	50.00- 150.00	100.00(A)
23.286	23.286 (1.120)	120	8661852			0.00- 79.69	32.74
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.397	23.397 (1.125)	105	24464891	200.000	221.96	50.00- 150.00	100.00(A)
23.397	23.397 (1.125)	120	11830853			0.00- 98.23	48.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.033	24.033 (1.156)	105	23660053	200.000	227.80	50.00- 150.00	100.00(A)
24.033	24.033 (1.156)	120	10670397			0.00- 94.91	45.10
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.586	24.586 (1.182)	146	15896139	200.000	212.94	50.00- 150.00	100.00(A)
24.586	24.586 (1.182)	148	10085107			14.68- 114.68	63.44
24.586	24.586 (1.182)	111	6558811			0.00- 91.36	41.26
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.724	24.724 (1.189)	146	16485506	200.000	214.62	50.00- 150.00	100.00(A)
24.724	24.724 (1.189)	148	10467681			16.09- 116.09	63.50
24.724	24.724 (1.189)	111	6472835			0.00- 90.13	39.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.945	24.945 (1.199)	91	24668642	200.000	222.12	50.00- 150.00	100.00(A)
24.945	24.945 (1.199)	126	4886072			0.00- 69.28	19.81
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.360	25.360 (1.219)	146	15599304	200.000	214.51	50.00- 150.00	100.00(A)
25.360	25.360 (1.219)	148	9883137			15.85- 115.85	63.36
25.360	25.360 (1.219)	111	6587185			0.00- 94.46	42.23
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.153	28.153 (1.354)	180	11415493	200.000	205.82	50.00- 150.00	100.00(A)
28.153	28.153 (1.354)	182	10826368			44.78- 144.78	94.84
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.319	28.319 (1.362)	225	10769723	200.000	192.94	50.00- 150.00	100.00
28.319	28.319 (1.362)	223	6684925			12.90- 112.90	62.07
167 Naphthalene					CAS #: 91-20-3		
28.678	28.678 (1.379)	128	16502797	200.000	214.98	50.00- 150.00	100.00(A)
28.678	28.678 (1.379)	127	2006009			0.00- 62.74	12.16
29 Isopentane					CAS #: 78-78-4		
8.273	8.273 (0.597)	43	4503444	200.000	198.77	50.00- 150.00	100.00
8.273	8.273 (0.597)	57	3514272			27.67- 127.67	78.04
19 Butane					CAS #: 106-97-8		
6.807	6.807 (0.491)	58	770238	200.000	196.35	50.00- 150.00	100.00
6.807	6.807 (0.491)	43	5480338			666.74- 766.74	711.51
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.346	16.346 (1.180)	83	8362325	200.000	234.30	50.00- 150.00	100.00(A)
16.346	16.346 (1.180)	98	3725362			0.00- 95.22	44.55
16.346	16.346 (1.180)	55	5813657			20.82- 120.82	69.52
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.148	11.148 (0.804)	59	7340416	200.000	197.53	50.00- 150.00	100.00
11.148	11.148 (0.804)	41	1467413			0.00- 72.85	19.99
11.148	11.148 (0.804)	57	744700			0.00- 59.93	10.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msdt.i/06Feb2008.b/t020613.d
Report Date: 07-Feb-2008 08:39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t020613.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msdt.i/06Feb2008.b/t14q206a.m
Misc Info: 200ppbv -> 200ppbv

Calibration Date: 06-FEB-2008
Calibration Time: 17:13
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	355997	213598	498396	350438	-1.56
97 1,4-Difluorobenze	1372567	823540	1921594	1410298	2.75
126 Chlorobenzene-d5	1227265	736359	1718171	1300571	5.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.89	13.56	14.22	13.86	-0.20
97 1,4-Difluorobenze	15.63	15.30	15.96	15.63	0.00
126 Chlorobenzene-d5	20.80	20.47	21.13	20.80	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

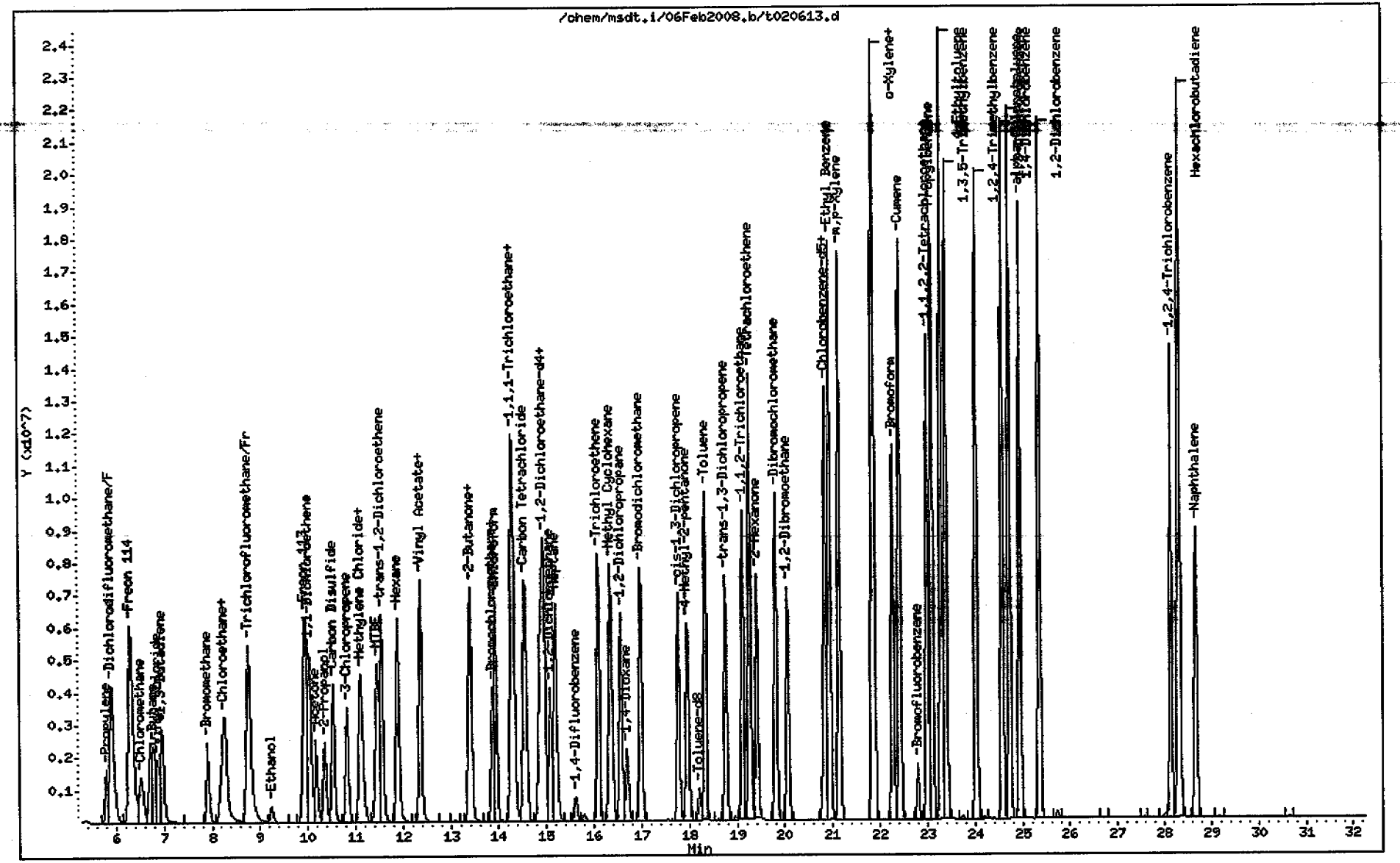
0309

Data File: /chem/msdt.i/06Feb2008.b/t020613.d
Date : 06-FEB-2008 19:41
Client ID: Level 7
Sample Info: 200ml #1576-261

Instrument: msdt.i

Operator: srs
Column diameter: 0.53

Column phase: RTx-624



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0802200-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	108
Freon 114	105
Chloromethane	110
Vinyl Chloride	109
1,3-Butadiene	111
Bromomethane	99
Chloroethane	114
Freon 11	106
Ethanol	113
Freon 113	104
1,1-Dichloroethene	112
Acetone	112
2-Propanol	111
Carbon Disulfide	110
Methylene Chloride	107
Methyl tert-butyl ether	125
trans-1,2-Dichloroethene	112
Hexane	118
1,1-Dichloroethane	113
2-Butanone (Methyl Ethyl Ketone)	116
cis-1,2-Dichloroethene	114
Tetrahydrofuran	119
Chloroform	115
1,1,1-Trichloroethane	112
Cyclohexane	117
Carbon Tetrachloride	109
Benzene	111
1,2-Dichloroethane	111
Heptane	120
Trichloroethene	113
1,2-Dichloropropane	116
1,4-Dioxane	110
Bromodichloromethane	112
cis-1,3-Dichloropropene	120
4-Methyl-2-pentanone	128
Toluene	118
trans-1,3-Dichloropropene	113
1,1,2-Trichloroethane	112
Tetrachloroethene	112

Client Sample ID: CCV

Lab ID#: 0802200-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	118
Dibromochloromethane	113
1,2-Dibromoethane (EDB)	115
Chlorobenzene	111
Ethyl Benzene	114
m,p-Xylene	117
o-Xylene	117
Styrene	126
Bromoform	114
1,1,2,2-Tetrachloroethane	116
4-Ethyltoluene	126
1,3,5-Trimethylbenzene	115
1,2,4-Trimethylbenzene	117
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	120
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	101
Hexachlorobutadiene	97
Chlorodifluoromethane	99
Methanol	69
n-Butanol	87
Propylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	102	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022106.d
Report Date: 22-Feb-2008 08:59

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022106.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 14:36
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.60865	1.70022	0.010	-5.69254	30.00000	Averaged
$ 113 Toluene-d8	0.96300	1.01251	0.010	-5.14080	30.00000	Averaged
$ 137 Bromofluorobenzene	0.64665	0.65685	0.010	-1.57665	30.00000	Averaged
11 Propylene	0.81770	0.82811	0.010	-1.27338	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	4.88168	5.25422	0.010	-7.63139	30.00000	Averaged
16 Freon 114	3.22698	3.38754	0.010	-4.97539	30.00000	Averaged
18 Chloromethane	1.06576	1.16937	0.010	-9.72214	30.00000	Averaged
20 Vinyl Chloride	1.46323	1.59367	0.010	-8.91391	30.00000	Averaged
22 1,3-Butadiene	1.10115	1.22045	0.010	-10.83421	30.00000	Averaged
25 Bromomethane	1.44878	1.42857	0.010	1.39505	30.00000	Averaged
27 Chloroethane	0.76312	0.86759	0.010	-13.68969	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	5.52640	5.85374	0.010	-5.92321	30.00000	Averaged
38 Ethanol	0.42283	0.47615	0.010	-12.61149	30.00000	Averaged
42 Freon 113	2.54471	2.65791	0.010	-4.44835	30.00000	Averaged
43 1,1-Dichloroethene	2.29053	2.55632	0.010	-11.60382	30.00000	Averaged
45 Acetone	0.70987	0.79415	0.010	-11.87277	30.00000	Averaged
46 2-Propanol	2.43274	2.70645	0.010	-11.25105	30.00000	Averaged
47 Carbon Disulfide	4.33254	4.76642	0.010	-10.01437	30.00000	Averaged
51 3-Chloropropene	0.74606	0.80127	0.010	-7.40135	30.00000	Averaged
54 Methylene Chloride	1.44840	1.54828	0.010	-6.89580	30.00000	Averaged
57 tert-Butyl-Alcohol	2.65102	2.86550	0.010	-8.09048	40.00000	Averaged
60 MTBE	4.15810	5.19312	0.010	-24.89172	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.70224	1.89871	0.010	-11.54219	30.00000	Averaged
65 Hexane	2.24629	2.64168	0.010	-17.60214	30.00000	Averaged
69 Vinyl Acetate	0.44040	0.47672	0.010	-8.24753	30.00000	Averaged
70 1,1-Dichloroethane	3.14283	3.56590	0.010	-13.46119	30.00000	Averaged
75 2-Butanone	0.79961	0.92761	0.010	-16.00687	30.00000	Averaged
76 cis-1,2-Dichloroethene	2.11467	2.41047	0.010	-13.98790	30.00000	Averaged
80 Tetrahydrofuran	1.34868	1.61024	0.010	-19.39305	30.00000	Averaged
82 Chloroform	3.63101	4.19059	0.010	-15.41128	30.00000	Averaged
83 1,1,1-Trichloroethane	4.01616	4.51032	0.010	-12.30441	30.00000	Averaged
85 Cyclohexane	2.15044	2.50978	0.010	-16.71021	30.00000	Averaged
87 Carbon Tetrachloride	3.85789	4.20512	0.010	-9.00068	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.24329	6.67184	0.010	-27.24532	30.00000	Averaged
91 Benzene	1.24979	1.39302	0.010	-11.46044	30.00000	Averaged
93 1,2-Dichloroethane	0.60974	0.67814	0.010	-11.21701	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022106.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 14:36
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.35378	0.42423	0.010	-19.91305	30.00000	Averaged
101 Trichloroethene	0.53529	0.60428	0.010	-12.88844	30.00000	Averaged
104 1,2-Dichloropropane	0.42168	0.48802	0.010	-15.73171	30.00000	Averaged
106 1,4-Dioxane	0.30866	0.33834	0.010	-9.61652	30.00000	Averaged
107 Bromodichloromethane	0.95798	1.07226	0.010	-11.92965	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.64255	0.76943	0.010	-19.74613	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29195	0.37343	0.010	-27.90609	30.00000	Averaged
114 Toluene	1.33263	1.56979	0.010	-17.79679	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.79014	0.89609	0.010	-13.40846	30.00000	Averaged
117 1,1,2-Trichloroethane	0.56947	0.63848	0.010	-12.11871	30.00000	Averaged
120 Tetrachloroethene	0.76308	0.85382	0.010	-11.89086	30.00000	Averaged
121 2-Hexanone	0.47685	0.56229	0.010	-17.91760	30.00000	Averaged
122 Dibromochloromethane	0.96963	1.09583	0.010	-13.01431	30.00000	Averaged
123 1,2-Dibromoethane	0.90581	1.03895	0.010	-14.69806	30.00000	Averaged
127 Chlorobenzene	1.31466	1.46341	0.010	-11.31466	30.00000	Averaged
128 Ethyl Benzene	0.68116	0.77863	0.010	-14.30821	30.00000	Averaged
129 m,p-Xylene	0.85774	1.00147	0.010	-16.75736	30.00000	Averaged
130 o-Xylene	0.81592	0.95204	0.010	-16.68328	30.00000	Averaged
131 Styrene	1.25002	1.57407	0.010	-25.92315	30.00000	Averaged
133 Bromoform	1.04080	1.19165	0.010	-14.49322	30.00000	Averaged
134 Cumene	2.25068	2.67499	0.010	-18.85249	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.30880	1.51835	0.010	-16.01039	30.00000	Averaged
142 Propylbenzene	2.91760	3.50585	0.010	-20.16213	30.00000	Averaged
145 4-Ethyltoluene	2.48367	3.12512	0.010	-25.82667	30.00000	Averaged
147 1,3,5-Trimethylbenzene	2.11868	2.43336	0.010	-14.85261	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.99645	2.33850	0.010	-17.13269	30.00000	Averaged
155 1,3-Dichlorobenzene	1.43495	1.60550	0.010	-11.88613	30.00000	Averaged
156 1,4-Dichlorobenzene	1.47654	1.66764	0.010	-12.94240	30.00000	Averaged
159 alpha-Chlorotoluene	2.13483	2.56150	0.010	-19.98639	30.00000	Averaged
161 1,2-Dichlorobenzene	1.39783	1.55288	0.010	-11.09203	30.00000	Averaged
165 1,2,4-Trichlorobenzene	1.06613	1.08055	0.010	-1.35224	30.00000	Averaged
166 Hexachlorobutadiene	1.07297	1.03914	0.010	3.15270	30.00000	Averaged
29 Isopentane	1.61629	1.71656	0.010	-6.20427	30.00000	Averaged
19 Butane	0.27985	0.30041	0.010	-7.34721	30.00000	Averaged
102 Methyl Cyclohexane	2.54614	3.02461	0.010	-18.79230	30.00000	Averaged
167 Naphthalene	1.47559	1.51283	0.010	-2.52329	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022106.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 21-FEB-2008 14:36
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-261
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 08:59 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane					CAS #: 74-97-5			
13.865	13.865 (1.000)	130	318158	25.0000		80.00- 120.00		100.00
13.865	13.865 (1.000)	128	246182			27.38- 127.38		77.38
13.865	13.865 (1.000)	49	578443			131.81- 231.81		181.81
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
15.607	15.607 (1.000)	114	1251468	25.0000		80.00- 120.00		100.00
15.607	15.607 (1.000)	88	210099			0.00- 66.79		16.79
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
20.805	20.805 (1.000)	117	1150991	25.0000		80.00- 120.00		100.00
20.805	20.805 (1.000)	82	670354			7.58- 107.58		58.24
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
14.943	14.943 (1.078)	65	540938	25.0000	26.423	80.00- 120.00		100.00
14.943	14.943 (1.078)	67	315254			3.57- 103.57		58.28
$ 113 Toluene-d8					CAS #: 2037-26-5			
18.206	18.206 (1.167)	98	1267119	25.0000	26.285	80.00- 120.00		100.00
18.206	18.206 (1.167)	70	149192			0.00- 61.29		11.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.167)	100	857857			18.71- 118.71	67.70
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	756024	25.0000	25.394	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	956094			76.46- 176.46	126.46
22.796	22.796 (1.096)	176	742540			48.22- 148.22	98.22
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	526938	50.0000	50.637	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	364415			17.96- 117.96	69.16
5.816	5.816 (0.419)	39	439605			33.44- 133.44	83.43
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.901	5.901 (0.426)	85	3343343	50.0000	53.816	80.00- 120.00	100.00
5.901	5.901 (0.426)	87	1081993			0.00- 82.13	32.36
16 Freon 114					CAS #: 76-14-2		
6.295	6.295 (0.454)	135	2155543	50.0000	52.488	80.00- 120.00	100.00
6.295	6.295 (0.454)	137	702541			0.00- 81.89	32.59
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	744090	50.0000	54.861	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	248435			0.00- 83.62	33.39
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	1014075	50.0000	54.457	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	330395			0.00- 89.61	32.58
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	776593	50.0000	55.417	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	743424			53.33- 153.33	95.73
25 Bromomethane					CAS #: 74-83-9		
7.900	7.900 (0.570)	94	909020	50.0000	49.302	80.00- 120.00	100.00
7.900	7.900 (0.570)	96	844418			42.89- 142.89	92.89
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	552064	50.0000	56.845	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	141544			0.00- 76.71	25.64
8.182	8.182 (0.590)	66	182354			0.00- 83.02	33.03
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.773	8.773 (0.633)	101	3724827	50.0000	52.962	80.00- 120.00	100.00
8.773	8.773 (0.633)	103	2396325			14.33- 114.33	64.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.220	9.220 (0.665)	45	302983	50.0000	56.306	80.00- 120.00	100.00
9.220	9.220 (0.665)	43	73782			0.00- 75.24	24.35
9.220	9.220 (0.665)	46	109328			0.00- 89.78	36.08
42 Freon 113					CAS #: 76-13-1		
9.939	9.939 (0.717)	151	1691270	50.0000	52.224	80.00- 120.00	100.00
9.939	9.939 (0.717)	153	1073315			13.46- 113.46	63.46
9.939	9.939 (0.717)	101	2237538			82.30- 182.30	132.30
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.050	10.050 (0.725)	61	1626629	50.0000	55.802	80.00- 120.00	100.00
10.050	10.050 (0.725)	96	968823			9.56- 109.56	59.56
10.050	10.050 (0.725)	98	625066			0.00- 88.43	38.43
45 Acetone					CAS #: 67-64-1		
10.188	10.188 (0.735)	58	505333	50.0000	55.936	80.00- 120.00	100.00
10.188	10.188 (0.735)	43	1554337			267.82- 367.82	307.59
46 2-Propanol					CAS #: 67-63-0		
10.381	10.381 (0.749)	45	1722158	50.0000	55.626	80.00- 120.00	100.00
10.354	10.354 (0.747)	43	421429			0.00- 76.64	24.47
10.381	10.381 (0.749)	59	72747			0.00- 54.31	4.22
47 Carbon Disulfide					CAS #: 75-15-0		
10.547	10.547 (0.761)	76	3032947	50.0000	55.007	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
10.824	10.824 (0.781)	76	509863	50.0000	53.701	80.00- 120.00	100.00
10.824	10.824 (0.781)	41	1102660			173.84- 273.84	216.27
54 Methylene Chloride					CAS #: 75-09-2		
11.100	11.100 (0.801)	49	985194	50.0000	53.448	80.00- 120.00	100.00
11.100	11.100 (0.801)	84	872021			38.51- 138.51	88.51
11.100	11.100 (0.801)	51	315682			0.00- 83.83	32.04
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.155	11.155 (0.805)	59	1823363	50.0000	54.045	80.00- 120.00	100.00
11.155	11.155 (0.805)	41	401105			0.00- 72.85	22.00
11.155	11.155 (0.805)	57	180846			0.00- 59.93	9.92
60 MTBE					CAS #: 1634-04-4		
11.460	11.460 (0.826)	73	3304464	50.0000	62.446	80.00- 120.00	100.00
11.460	11.460 (0.826)	57	621550			0.00- 68.81	18.81
11.460	11.460 (0.826)	41	601662			0.00- 70.47	18.21

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1208181	50.0000	55.771	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1697687			90.52- 190.52	140.52
11.543	11.543 (0.832)	98	777161			16.26- 116.26	64.32
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1680943	50.0000	58.801	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	954156			9.30- 109.30	56.76
11.902	11.902 (0.858)	86	294358			0.00- 66.83	17.51
69 Vinyl Acetate					CAS #: 108-05-4		
12.344	12.344 (0.890)	86	303344	50.0000	54.124	80.00- 120.00	100.00
12.344	12.344 (0.890)	43	2767678			832.23- 932.23	912.39
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	2269037	50.0000	56.730	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	727416			0.00- 82.06	32.06
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	590250	50.0000	58.003	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1965986			283.08- 383.08	333.08
13.395	13.395 (0.966)	57	172513			0.00- 79.56	29.23
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1533821	50.0000	56.994	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	1189937			27.58- 127.58	77.58
13.423	13.423 (0.968)	98	769256			0.15- 100.15	50.15
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	1024619	50.0000	59.696	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	532427			1.96- 101.96	51.96
13.865	13.865 (1.000)	72	569307			2.04- 102.04	55.56
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2666540	50.0000	57.706	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1728112			14.81- 114.81	64.81
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2869991	50.0000	56.152	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1844940			14.28- 114.28	64.28
85 Cyclohexane					CAS #: 110-82-7		
14.308	14.308 (1.032)	84	1597016	50.0000	58.355	80.00- 120.00	100.00
14.308	14.308 (1.032)	56	1643322			52.90- 152.90	102.90
14.280	14.280 (1.030)	41	840301			2.62- 102.62	52.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2675787	50.0000	54.500	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2842852			56.24- 156.24	106.24
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	4245398	50.0000	63.623	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1366221			0.00- 82.82	32.18
14.888	14.888 (1.074)	41	1099520			0.00- 78.43	25.90
91 Benzene					CAS #: 71-43-2		
14.943	14.943 (0.957)	78	3486633	50.0000	55.730	80.00- 120.00	100.00
14.943	14.943 (0.957)	77	801927			0.00- 73.50	23.00
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.966)	62	1697330	50.0000	55.608	80.00- 120.00	100.00
15.082	15.082 (0.966)	64	546262			0.00- 84.23	32.18
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.973)	71	1061811	50.0000	59.956	80.00- 120.00	100.00
15.165	15.165 (0.972)	43	1477551			85.70- 185.70	139.15
15.192	15.192 (0.973)	57	897771			28.72- 128.72	84.55
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.030)	95	1512477	50.0000	56.444	80.00- 120.00	100.00
16.077	16.077 (1.030)	130	1347441			39.09- 139.09	89.09
16.077	16.077 (1.030)	97	948086			12.68- 112.68	62.68
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.547	16.547 (1.060)	63	1221480	50.0000	57.866	80.00- 120.00	100.00
16.547	16.547 (1.060)	62	872315			21.41- 121.41	71.41
16.547	16.547 (1.060)	41	683266			5.94- 105.94	55.94
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.069)	88	846839	50.0000	54.808	80.00- 120.00	100.00
16.685	16.685 (1.069)	58	498819			8.90- 108.90	58.90
16.685	16.685 (1.069)	57	169035			0.00- 71.19	19.96
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.089)	83	2683807	50.0000	55.965	80.00- 120.00	100.00
16.989	16.989 (1.089)	85	1739046			14.80- 114.80	64.80
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.140)	75	1925840	50.0000	59.873	80.00- 120.00	100.00
17.791	17.791 (1.140)	77	612275			0.00- 81.79	31.79
17.764	17.764 (1.138)	39	865616			0.00- 94.95	44.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.151)	58	934659	50.0000	63.953	80.00- 120.00	100.00
17.957	17.957 (1.151)	43	2136582			175.34- 275.34	228.59
17.957	17.957 (1.151)	85	467489			0.64- 100.64	50.02
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.174)	91	3929084	50.0000	58.898	80.00- 120.00	100.00
18.317	18.317 (1.174)	92	2370989			10.34- 110.34	60.34
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	2062772	50.0000	56.704	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	659970			0.00- 81.99	31.99
18.759	18.759 (0.902)	39	866394			0.00- 92.00	42.00
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.091	19.091 (0.918)	97	1469772	50.0000	56.059	80.00- 120.00	100.00
19.119	19.119 (0.919)	99	941163			14.03- 114.03	64.03
19.091	19.091 (0.918)	83	1264285			36.02- 136.02	86.02
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1965470	50.0000	55.945	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1346530			18.51- 118.51	68.51
19.284	19.284 (0.927)	131	1283290			15.29- 115.29	65.29
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1294388	50.0000	58.959	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	2178950			118.34- 218.34	168.34
19.423	19.423 (0.934)	100	262644			0.00- 71.71	20.29
122 Dibromochloromethane					CAS #: 124-48-1		
19.782	19.782 (0.951)	129	2522570	50.0000	56.507	80.00- 120.00	100.00
19.782	19.782 (0.951)	127	1937721			28.82- 128.82	76.82
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2391636	50.0000	57.349	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	2209703			42.39- 142.39	92.39
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3368737	50.0000	55.657	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	1067600			0.00- 81.69	31.69
20.833	20.833 (1.001)	77	2048529			10.81- 110.81	60.81
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1792382	50.0000	57.154	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5847127			269.96- 369.96	326.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2305367	50.0000	58.379	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4765497			149.87- 249.87	206.71
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	2191582	50.0000	58.342	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4739766			166.27- 266.27	216.27
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3623473	50.0000	62.962	80.00- 120.00	100.00
21.856	21.856 (1.050)	78	1878729			1.85- 101.85	51.85
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2743146	50.0000	57.247	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1394523			0.84- 100.84	50.84
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	6157786	50.0000	59.426	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1572325			0.00- 77.62	25.53
22.409	22.409 (1.077)	51	545484			0.00- 58.75	8.86
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3495207	50.0000	58.005	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2266238			14.84- 114.84	64.84
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	8070412	50.0000	60.081	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1687647			0.00- 71.63	20.91
23.100	23.100 (1.110)	105	292151			0.00- 53.71	3.62
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	7193973	50.0000	62.913	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	2126419			0.00- 79.56	29.56
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	5601560	50.0000	57.426	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2683613			0.00- 98.23	47.91
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	5383187	50.0000	58.566	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2430595			0.00- 94.91	45.15
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3695843	50.0000	55.943	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2349664			14.68- 114.68	63.58
24.593	24.593 (1.182)	111	1535129			0.00- 91.36	41.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3838870	50.0000	56.471	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2444832			16.09- 116.09	63.69
24.731	24.731 (1.189)	111	1534132			0.00- 90.13	39.96
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5896536	50.0000	59.993	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	1088979			0.00- 69.28	18.47
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3574705	50.0000	55.546	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2274797			13.64- 113.64	63.64
25.367	25.367 (1.219)	111	1564073			0.00- 93.75	43.75
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2487398	50.0000	50.676	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2350738			44.51- 144.51	94.51
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2392091	50.0000	48.424	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1501376			12.90- 112.90	62.76
29 Isopentane					CAS #: 78-78-4		
8.266	8.266 (0.596)	43	1092277	50.0000	53.102	80.00- 120.00	100.00
8.266	8.266 (0.596)	57	849757			27.67- 127.67	77.80
19 Butane					CAS #: 106-97-8		
6.802	6.802 (0.491)	58	191158	50.0000	53.674	80.00- 120.00	100.00
6.802	6.802 (0.491)	43	1343696			666.74- 766.74	702.92
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1924610	50.0000	59.396	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	861593			0.00- 95.22	44.77
16.354	16.354 (1.179)	55	1372394			20.82- 120.82	71.31
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3482504	50.0000	51.262	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	420675			0.00- 62.74	12.08

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022106.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 11:03
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	312258	187355	437161	318158	1.89
97 1,4-Difluorobenze	1266888	760133	1773643	1251468	-1.22
126 Chlorobenzene-d5	1159473	695684	1623262	1150991	-0.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.63	15.30	15.96	15.61	-0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /ohem/msdt.i/21Feb2008.b/t022106.d

Date : 21-FEB-2008 14:36

Client ID: CCV-1

Sample Info: 50mL #1576-261

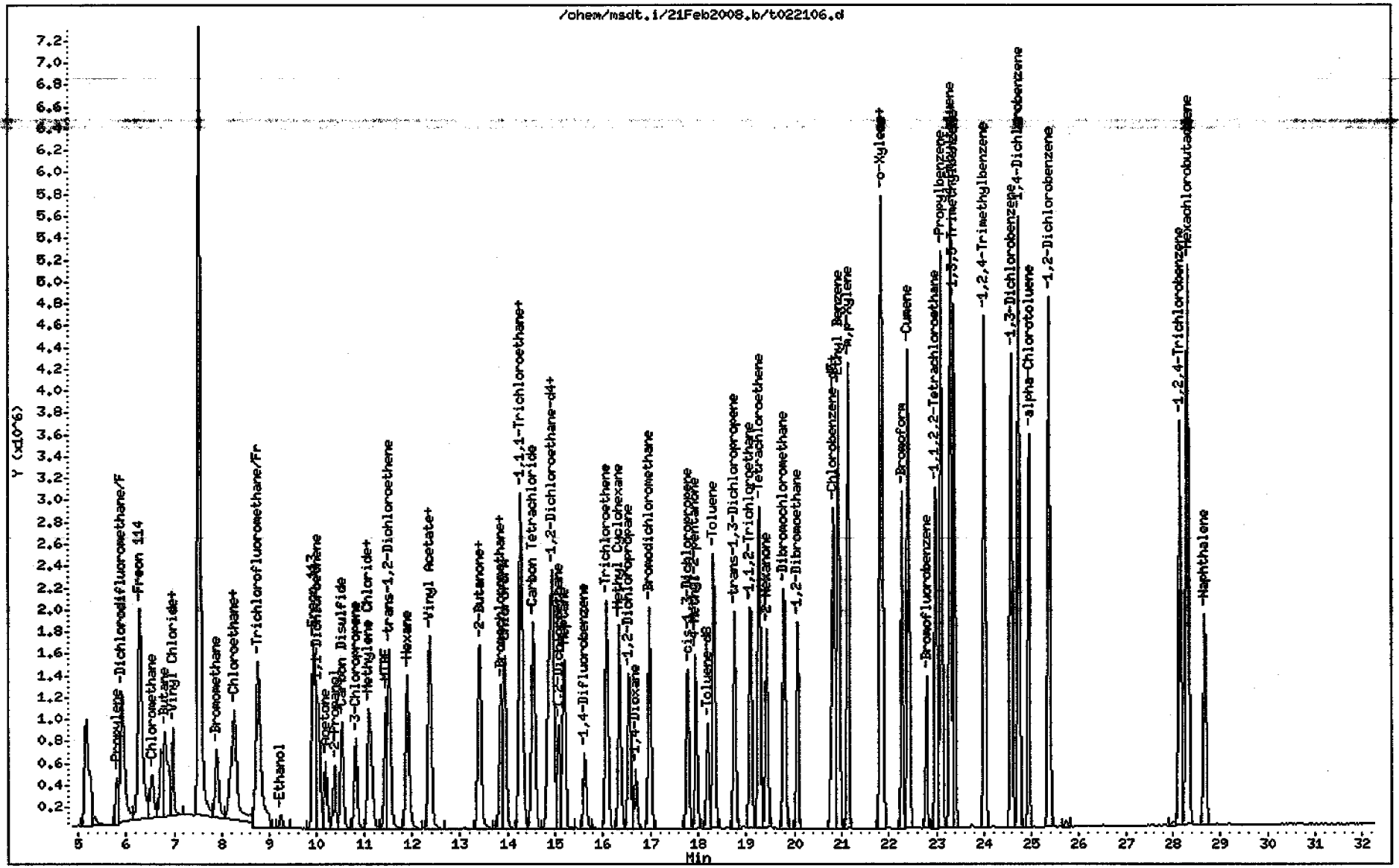
Column phase: RTx-624

Instrument: msdt.i

Operator: sjr

Column diameter: 0.53

0323



Data File: /chem/msdt.i/21Feb2008.b/t022104a.d
Report Date: 22-Feb-2008 08:56

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i
Lab File ID: t022104a.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msdt.i/21Feb2008.b/t14q206b.m

Injection Date: 21-FEB-2008 11:03
Init. Cal. Date(s): 06-FEB-2008 21-FEB-2008
Init. Cal. Times: 14:27 17:00
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	90 1,2-Dichloroethane-d4	1.60865	1.66318	0.010	-3.39005	30.00000	Averaged
$	113 Toluene-d8	0.96300	0.98983	0.010	-2.78600	30.00000	Averaged
$	137 Bromofluorobenzene	0.64665	0.68094	0.010	-5.30252	30.00000	Averaged
	6 Freon142b	3.43649	3.61347	0.010	-5.14990	40.00000	Averaged
	9 Freon 13	3.44586	3.35030	0.010	2.77297	40.00000	Averaged
	13 Freon 134a	1.53736	1.53392	0.010	0.22358	40.00000	Averaged
	15 Freon 152a	0.82784	0.81286	0.010	1.80867	40.00000	Averaged
	17 Freon 22	0.39055	0.38557	0.010	1.27508	40.00000	Averaged
	26 Methanol	0.20868	0.14314	0.010	31.40888	40.00000	Averaged
	34 Dichlorofluoromethane/Fr21	2.45592	2.61432	0.010	-6.44947	40.00000	Averaged
	40 Freon123a	1.89468	2.07320	0.010	-9.42261	40.00000	Averaged
	41 Freon123	0.22255	0.23514	0.010	-5.65497	40.00000	Averaged
	68 Isopropyl ether	4.09678	4.38551	0.010	-7.04792	40.00000	Averaged
	71 1-Propanol	0.21526	0.18897	0.010	12.21495	40.00000	Averaged
	73 t-Butylethyl Ether	4.36417	4.86959	0.010	-11.58103	40.00000	Averaged
	77 Ethyl Acetate	0.44196	0.45984	0.010	-4.04626	40.00000	Averaged
	92 tert-amyl-Methyl Ether	4.12820	4.52447	0.010	-9.59915	40.00000	Averaged
	96 2-Heptanone	2.16686	2.39901	0.010	-10.71394	40.00000	Averaged
	98 1-Butanol	0.16280	0.14126	0.010	13.23519	40.00000	Averaged
	119 Butyl Acetate	0.33960	0.37466	0.010	-10.32443	40.00000	Averaged
	135 Cyclohexanone	0.41426	0.36212	0.010	12.58846	40.00000	Averaged
	146 Diisobutyl Ketone	1.10363	1.23471	0.010	-11.87692	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022104a.d
Lab Smp Id: CCV Client Smp ID: CCVsp
Inj Date : 21-FEB-2008 11:03
Operator : sjr Inst ID: msdt.i
Smp Info : 50ml #1576-299
Misc Info : 200ppbv -> 50(300 MeOH)ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 22-Feb-2008 08:56 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 17:00 Cal File: t022109.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22bCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
13.865	13.865 (1.000)	130	312258	25.0000		80.00- 120.00		100.00
13.865	13.865 (1.000)	128	236420			25.71- 125.71		75.71
13.865	13.865 (1.000)	49	373343			69.56- 169.56		119.56
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
15.635	15.635 (1.000)	114	1266888	25.0000		80.00- 120.00		100.00
15.635	15.635 (1.000)	88	209470			0.00- 66.53		16.53
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1159473	25.0000		80.00- 120.00		100.00
20.805	20.805 (1.000)	82	667968			7.58- 107.58		57.61
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
14.944	14.944 (1.078)	65	519341	25.0000	25.848	80.00- 120.00		100.00
14.944	14.944 (1.078)	67	267067			3.57- 103.57		51.42
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1254003	25.0000	25.696	80.00- 120.00		100.00
18.206	18.206 (1.164)	70	147578			0.00- 61.29		11.77

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.206	18.206	(1.164)	100	856417			18.71- 118.71	68.29
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
22.796	22.796	(1.096)	174	789531	25.0000	26.326	80.00- 120.00	100.00
22.796	22.796	(1.096)	95	999365			76.58- 176.58	126.58
22.796	22.796	(1.096)	176	761084			46.40- 146.40	96.40
6 Freon142b						CAS #: 75-68-3		
6.408	6.408	(0.462)	65	2256667	50.0000	52.575	80.00- 120.00	100.00
6.408	6.408	(0.462)	45	455198			0.00- 71.32	20.17
9 Freon 13						CAS #: 75-72-9		
5.366	5.366	(0.387)	69	2092318	50.0000	48.614	80.00- 120.00	100.00
5.366	5.366	(0.387)	85	681331			0.00- 81.50	32.56
5.366	5.366	(0.387)	87	212271			0.00- 60.31	10.15
13 Freon 134a						CAS #: 811-97-2		
5.647	5.647	(0.407)	83	957959	50.0000	49.888	80.00- 120.00	100.00
5.647	5.647	(0.407)	69	790194			32.62- 132.62	82.49
15 Freon 152a						CAS #: 75-37-6		
5.816	5.816	(0.419)	65	507647	50.0000	49.096	80.00- 120.00	100.00
5.816	5.816	(0.419)	51	855266			127.07- 227.07	168.48
5.816	5.816	(0.419)	47	223144			0.00- 93.51	43.96
17 Freon 22						CAS #: 75-45-6		
5.985	5.985	(0.432)	67	240792	50.0000	49.362	80.00- 120.00	100.00
5.985	5.985	(0.432)	51	1193401			463.95- 563.95	495.61
5.985	5.985	(0.432)	85	25075			0.00- 65.76	10.41
26 Methanol						CAS #: 67-56-1		
7.534	7.534	(0.543)	31	536342	300.000	205.77	80.00- 120.00	100.00
7.534	7.534	(0.543)	32	456083			35.04- 135.04	85.04
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.717	8.717	(0.629)	67	1632683	50.0000	53.225	80.00- 120.00	100.00
8.717	8.717	(0.629)	69	532919			0.00- 82.56	32.64
8.717	8.717	(0.629)	35	85037			0.00- 55.48	5.21
40 Freon123a						CAS #: 354-23-4		
9.552	9.552	(0.689)	67	1294749	50.0000	54.711	80.00- 120.00	100.00
9.552	9.552	(0.689)	117	946703			22.27- 122.27	73.12
41 Freon123						CAS #: 306-83-2		
9.718	9.718	(0.701)	83	146846	50.0000	52.827	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)								
9.718	9.718	(0.701)	133	29959			0.00- 70.21	20.40
9.718	9.718	(0.701)	85	122663			280.12- 380.12	83.53
68 Isopropyl ether						CAS #: 108-20-3		
12.289	12.289	(0.886)	45	2738824	50.0000	53.524	80.00- 120.00	100.00
12.289	12.289	(0.886)	87	875522			0.00- 80.78	31.97
12.289	12.289	(0.886)	59	320352			0.00- 62.00	11.70
71 1-Propanol						CAS #: 71-23-8		
12.400	12.400	(0.894)	42	118012	50.0000	43.892	80.00- 120.00	100.00
12.400	12.400	(0.894)	59	177518			82.09- 182.09	150.42
12.289	12.289	(0.886)	41	548379			321.23- 421.23	464.68
73 t-Butylethyl Ether						CAS #: 637-92-3		
12.925	12.925	(0.932)	59	3041136	50.0000	55.790	80.00- 120.00	100.00
12.925	12.925	(0.932)	87	1293560			0.00- 93.06	42.54
12.925	12.925	(0.932)	41	498322			0.00- 69.68	16.39
77 Ethyl Acetate						CAS #: 141-78-6		
13.395	13.395	(0.966)	45	287177	50.0000	52.023	80.00- 120.00	100.00
13.395	13.395	(0.966)	61	317488			52.94- 152.94	110.55
13.395	13.395	(0.966)	43	1980955			599.75- 699.75	689.80
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
14.999	14.999	(1.082)	73	2825604	50.0000	54.800	80.00- 120.00	100.00
14.999	14.999	(1.082)	87	674366			0.00- 73.24	23.87
14.999	14.999	(1.082)	55	659557			0.00- 75.20	23.34
96 2-Heptanone						CAS #: 110-43-0		
21.966	21.966	(1.584)	58	1498222	50.0000	55.357	80.00- 120.00	100.00
21.966	21.966	(1.584)	43	2089626			90.45- 190.45	139.47
98 1-Butanol						CAS #: 71-36-3		
15.801	15.801	(1.011)	56	357913	50.0000	43.382	80.00- 120.00	100.00
15.801	15.801	(1.011)	41	242656			29.27- 129.27	67.80
15.801	15.801	(1.011)	43	184494			9.88- 109.88	51.55
119 Butyl Acetate						CAS #: 123-86-4		
19.533	19.533	(1.249)	56	949314	50.0000	55.162	80.00- 120.00	100.00
19.533	19.533	(1.249)	73	386537			0.00- 90.72	40.72
19.533	19.533	(1.249)	43	2147265			176.19- 276.19	226.19
135 Cyclohexanone						CAS #: 108-94-1		
22.741	22.741	(1.093)	55	839726	50.0000	43.706	80.00- 120.00	100.00
22.741	22.741	(1.093)	98	429311			0.39- 100.39	51.13

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
135 Cyclohexanone (continued)								
22.741	22.741	(1.093)	42	544268			13.24- 113.24	64.81
146 Diisobutyl Ketone						CAS #: 108-83-8		
23.543	23.543	(1.132)	57	2863217	50.0000	55.938	80.00- 120.00	100.00
23.570	23.570	(1.133)	85	2715599			44.84- 144.84	94.84
0.000	1.000	(0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022104a.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50(300 MeOH)ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	312258	-1.85
97 1,4-Difluorobenze	1251468	750881	1752055	1266888	1.23
126 Chlorobenzene-d5	1150991	690595	1611387	1159473	0.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

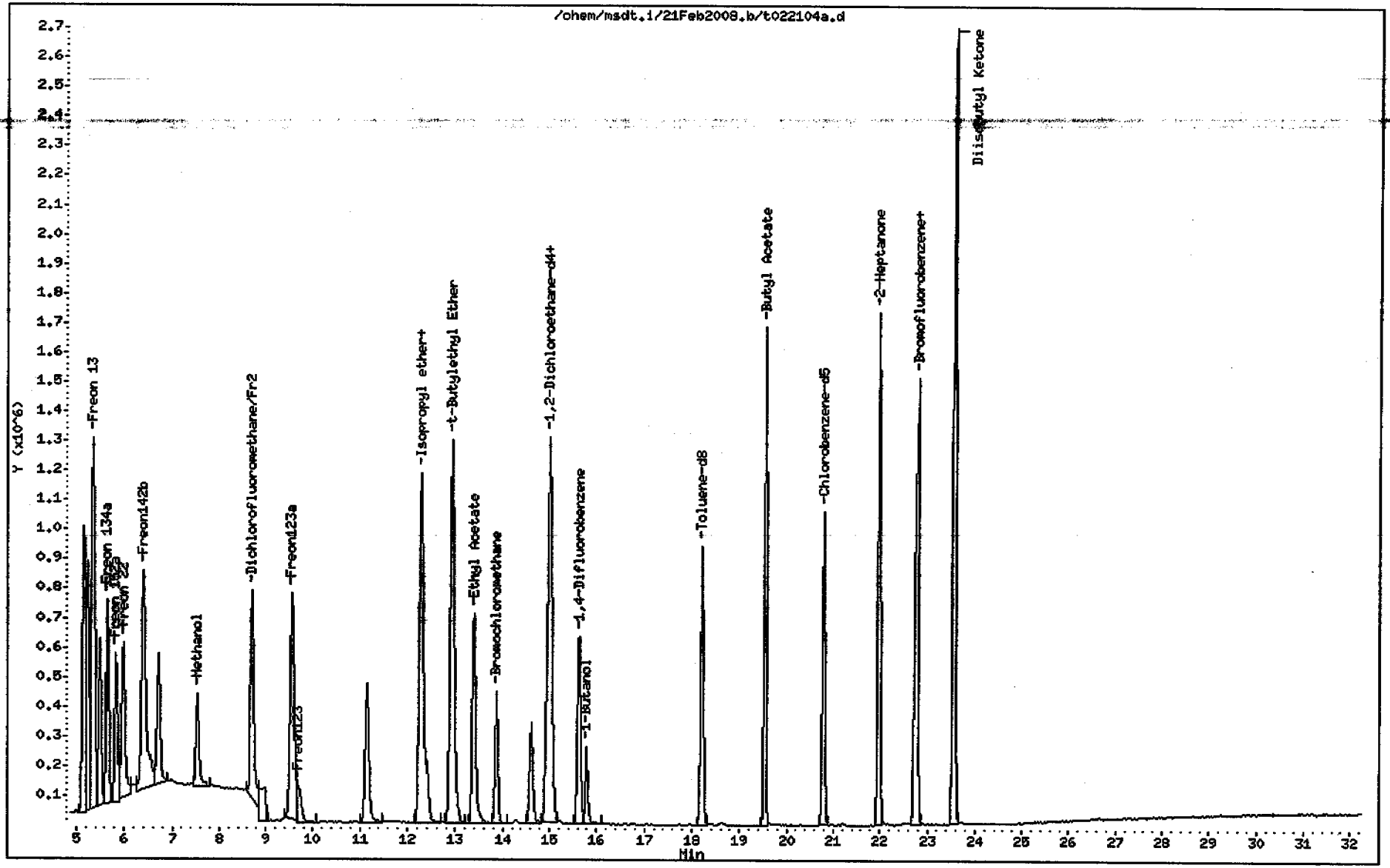
Data File: /ohem/msdt.i/21Feb2008.b/t022104a.d
Date : 21-FEB-2008 11:03
Client ID: CCVsp
Sample Info: 50ml #1576-299

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0330



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802200-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	105
Freon 114	100
Chloromethane	107
Vinyl Chloride	107
1,3-Butadiene	102
Bromomethane	101
Chloroethane	109
Freon 11	100
Ethanol	109
Freon 113	111
1,1-Dichloroethene	122
Acetone	105
2-Propanol	106
Carbon Disulfide	109
Methylene Chloride	112
Methyl tert-butyl ether	123
trans-1,2-Dichloroethene	108
Hexane	116
1,1-Dichloroethane	111
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	111
Tetrahydrofuran	113
Chloroform	111
1,1,1-Trichloroethane	109
Cyclohexane	114
Carbon Tetrachloride	104
Benzene	108
1,2-Dichloroethane	108
Heptane	117
Trichloroethene	107
1,2-Dichloropropane	109
1,4-Dioxane	104
Bromodichloromethane	109
cis-1,3-Dichloropropene	114
4-Methyl-2-pentanone	122
Toluene	119
trans-1,3-Dichloropropene	109
1,1,2-Trichloroethane	108
Tetrachloroethene	107

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0802200-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	110
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	106
Chlorobenzene	107
Ethyl Benzene	108
m,p-Xylene	111
o-Xylene	112
Styrene	119
Bromoform	110
1,1,2,2-Tetrachloroethane	113
4-Ethyltoluene	120
1,3,5-Trimethylbenzene	109
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	108
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	114
1,2-Dichlorobenzene	105
1,2,4-Trichlorobenzene	100
Hexachlorobutadiene	94
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Report Date: 21-Feb-2008 16:02

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926Spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Client SDG: 21Feb2008
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	52.688	105.38	70-130
16 Freon 114	50.000	49.899	99.80	70-130
18 Chloromethane	50.000	53.680	107.36	70-130
20 Vinyl Chloride	50.000	53.573	107.15	70-130
22 1,3-Butadiene	50.000	51.092	102.18	60-140
25 Bromomethane	50.000	50.644	101.29	70-130
27 Chloroethane	50.000	54.719	109.44	70-130
31 Trichlorofluoromet	50.000	49.925	99.85	70-130
38 Ethanol	50.000	54.725	109.45	60-140
42 Freon 113	50.000	55.688	111.38	70-130
43 1,1-Dichloroethene	50.000	60.879	121.76	70-130
45 Acetone	50.000	52.372	104.74	60-140
47 Carbon Disulfide	50.000	54.734	109.47	60-140
46 2-Propanol	50.000	53.115	106.23	60-140
54 Methylene Chloride	50.000	55.781	111.56	70-130
57 tert-Butyl-Alcohol	50.000	51.628	103.26	70-130
60 MTBE	50.000	61.621	123.24	60-140
61 trans-1,2-Dichloro	50.000	54.016	108.03	60-140
65 Hexane	50.000	57.947	115.89	60-140
69 Vinyl Acetate	50.000	52.533	105.07	60-140
70 1,1-Dichloroethane	50.000	55.533	111.07	70-130
76 cis-1,2-Dichloroet	50.000	55.563	111.13	70-130
75 2-Butanone	50.000	55.703	111.41	60-140
80 Tetrahydrofuran	50.000	56.528	113.06	60-140
82 Chloroform	50.000	55.370	110.74	70-130
85 Cyclohexane	50.000	56.927	113.85	60-140
83 1,1,1-Trichloroeth	50.000	54.607	109.21	70-130
87 Carbon Tetrachlori	50.000	52.262	104.52	70-130
91 Benzene	50.000	53.822	107.64	70-130
93 1,2-Dichloroethane	50.000	53.891	107.78	70-130
94 Heptane	50.000	58.589	117.18	60-140
101 Trichloroethene	50.000	53.732	107.47	70-130
104 1,2-Dichloropropan	50.000	54.714	109.43	70-130

SPIKE	COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
106	1,4-Dioxane	50.000	51.948	103.90	60-140
107	Bromodichlorometha	50.000	54.371	108.74	60-140
110	cis-1,3-Dichloropr	50.000	56.980	113.96	70-130
111	4-Methyl-2-pentano	50.000	61.297	122.59	60-140
114	Toluene	50.000	59.494	118.99	70-130
116	trans-1,3-Dichloro	50.000	54.372	108.74	70-130
117	1,1,2-Trichloroeth	50.000	53.778	107.56	70-130
120	Tetrachloroethene	50.000	53.601	107.20	70-130
121	2-Hexanone	50.000	55.044	110.09	60-140
122	Dibromochlorometha	50.000	54.149	108.30	60-140
123	1,2-Dibromoethane	50.000	52.889	105.78	70-130
127	Chlorobenzene	50.000	53.413	106.83	70-130
128	Ethyl Benzene	50.000	53.952	107.90	70-130
129	m,p-Xylene	50.000	55.654	111.31	70-130
130	o-Xylene	50.000	56.229	112.46	70-130
131	Styrene	50.000	59.677	119.35	70-130
133	Bromoform	50.000	54.852	109.70	60-140
140	1,1,2,2-Tetrachlor	50.000	56.309	112.62	70-130
145	4-Ethyltoluene	50.000	60.045	120.09	60-140
147	1,3,5-Trimethylben	50.000	54.401	108.80	70-130
150	1,2,4-Trimethylben	50.000	55.800	111.60	70-130
155	1,3-Dichlorobenzen	50.000	53.897	107.79	70-130
156	1,4-Dichlorobenzen	50.000	53.090	106.18	70-130
159	alpha-Chlorotoluen	50.000	57.198	114.40	70-130
161	1,2-Dichlorobenzen	50.000	52.665	105.33	70-130
165	1,2,4-Trichloroben	50.000	49.922	99.84	70-130
166	Hexachlorobutadien	50.000	46.762	93.52	70-130
142	Propylbenzene	50.000	58.762	117.52	60-140
134	Cumene	50.000	58.874	117.75	60-140
51	3-Chloropropene	50.000	52.504	105.01	60-140
89	2,2,4-Trimethylpen	50.000	62.852	125.70	60-140
19	Butane	50.000	50.961	101.92	70-130
29	Isopentane	50.000	49.640	99.28	70-130
102	Methyl Cyclohexane	50.000	58.904	117.81	70-130
11	Propylene	50.000	52.880	105.76	60-140
167	Naphthalene	50.000	51.826	103.65	60-140

SURROGATE	COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90	1,2-Dichloroethane	25.000	26.177	104.71	70-130
$ 113	Toluene-d8	25.000	26.376	105.50	70-130
$ 137	Bromofluorobenzene	25.000	25.231	100.92	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Feb2008.b/t022107.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 21-FEB-2008 15:25
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-255
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/21Feb2008.b/t14q206b.m
Meth Date : 21-Feb-2008 16:02 sruth Quant Type: ISTD
Cal Date : 21-FEB-2008 12:05 Cal File: t022105.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
13.865	13.865 (1.000)	130	310710	25.0000		80.00- 120.00	100.00
13.865	13.865 (1.000)	128	238333			27.38- 127.38	76.71
13.865	13.865 (1.000)	49	559036			131.81- 231.81	179.92
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
15.635	15.607 (1.000)	114	1249796	25.0000		80.00- 120.00	100.00
15.635	15.607 (1.000)	88	218055			0.00- 66.79	17.45
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
20.805	20.805 (1.000)	117	1155810	25.0000		80.00- 120.00	100.00
20.805	20.805 (1.000)	82	681028			7.40- 107.40	58.92
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
14.943	14.943 (1.078)	65	523356	26.1771	26.177	80.00- 120.00	100.00
14.943	14.943 (1.078)	67	297458			3.57- 103.57	56.84
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.206	18.206 (1.164)	98	1269798	26.3760	26.376	80.00- 120.00	100.00
18.206	18.206 (1.164)	70	146167			0.00- 61.29	11.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.206	18.206 (1.164)	100	853963			18.71- 118.71	67.25
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
22.796	22.796 (1.096)	174	754315	25.2311	25.231	80.00- 120.00	100.00
22.796	22.796 (1.096)	95	975722			76.46- 176.46	129.35
22.796	22.796 (1.096)	176	749597			48.22- 148.22	99.37
11 Propylene					CAS #: 115-07-1		
5.816	5.816 (0.419)	41	537401	52.8801	52.880	80.00- 120.00	100.00
5.816	5.816 (0.419)	42	365992			17.96- 117.96	68.10
5.816	5.816 (0.419)	39	443025			33.44- 133.44	82.44
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.929	5.901 (0.428)	85	3196688	52.6885	52.688	80.00- 120.00	100.00
5.929	5.901 (0.428)	87	1007739			0.00- 82.13	31.52
16 Freon 114					CAS #: 76-14-2		
6.323	6.295 (0.456)	135	2001246	49.8987	49.899	80.00- 120.00	100.00
6.323	6.295 (0.456)	137	630507			0.00- 81.89	31.51
18 Chloromethane					CAS #: 74-87-3		
6.548	6.548 (0.472)	50	711030	53.6802	53.680	80.00- 120.00	100.00
6.548	6.548 (0.472)	52	237230			0.00- 83.62	33.36
20 Vinyl Chloride					CAS #: 75-01-4		
6.886	6.886 (0.497)	62	974260	53.5730	53.573	80.00- 120.00	100.00
6.886	6.886 (0.497)	64	310797			0.00- 89.61	31.90
22 1,3-Butadiene					CAS #: 106-99-0		
6.971	6.971 (0.503)	54	699221	51.0919	51.092	80.00- 120.00	100.00
6.971	6.971 (0.503)	39	665520			53.33- 153.33	95.18
25 Bromomethane					CAS #: 74-83-9		
7.928	7.900 (0.572)	94	911905	50.6445	50.644	80.00- 120.00	100.00
7.928	7.900 (0.572)	96	836997			42.89- 142.89	91.79
27 Chloroethane					CAS #: 75-00-3		
8.182	8.182 (0.590)	64	518978	54.7190	54.719	80.00- 120.00	100.00
8.182	8.182 (0.590)	49	130501			0.00- 76.71	25.15
8.182	8.182 (0.590)	66	168624			0.00- 83.02	32.49
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.801	8.773 (0.635)	101	3429046	49.9248	49.925	80.00- 120.00	100.00
8.801	8.773 (0.635)	103	2193256			14.33- 114.33	63.96

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.248	9.220	(0.667)	45	287582	54.7247	54.725	80.00- 120.00	100.00
9.248	9.220	(0.667)	43	61998			0.00- 75.24	21.56
9.248	9.220	(0.667)	46	108384			0.00- 89.78	37.69
42 Freon 113						CAS #: 76-13-1		
9.967	9.939	(0.719)	151	1761246	55.6886	55.688	80.00- 120.00	100.00
9.967	9.939	(0.719)	153	1122986			13.46- 113.46	63.76
9.967	9.939	(0.719)	101	2322380			82.30- 182.30	131.86
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.049	10.050	(0.725)	61	1733084	60.8790	60.879	80.00- 120.00	100.00
10.049	10.050	(0.725)	96	1028402			9.56- 109.56	59.34
10.049	10.050	(0.725)	98	669978			0.00- 88.43	38.66
45 Acetone						CAS #: 67-64-1		
10.188	10.188	(0.735)	58	462053	52.3716	52.372	80.00- 120.00	100.00
10.188	10.188	(0.735)	43	1451780			267.82- 367.82	314.20
46 2-Propanol						CAS #: 67-63-0		
10.381	10.381	(0.749)	45	1605941	53.1151	53.115	80.00- 120.00	100.00
10.381	10.381	(0.749)	43	410138			0.00- 76.64	25.54
10.381	10.381	(0.749)	59	68466			0.00- 54.31	4.26
47 Carbon Disulfide						CAS #: 75-15-0		
10.547	10.547	(0.761)	76	2947210	54.7335	54.734	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
10.824	10.824	(0.781)	76	486830	52.5039	52.504	80.00- 120.00	100.00
10.824	10.824	(0.781)	41	1061044			173.84- 273.84	217.95
54 Methylene Chloride						CAS #: 75-09-2		
11.100	11.100	(0.801)	49	1004132	55.7811	55.781	80.00- 120.00	100.00
11.100	11.100	(0.801)	84	895576			38.51- 138.51	89.19
11.100	11.100	(0.801)	51	327544			0.00- 83.83	32.62
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.155	11.155	(0.805)	59	1701032	51.6279	51.628	80.00- 120.00	100.00
11.155	11.155	(0.805)	41	364201			0.00- 72.85	21.41
11.155	11.155	(0.805)	57	171988			0.00- 59.93	10.11
60 MTBE						CAS #: 1634-04-4		
11.460	11.460	(0.826)	73	3184472	61.6209	61.621	80.00- 120.00	100.00
11.460	11.460	(0.826)	57	600134			0.00- 68.81	18.85
11.460	11.460	(0.826)	41	579258			0.00- 70.47	18.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.543	11.543 (0.832)	96	1142777	54.0165	54.016	80.00- 120.00	100.00
11.543	11.543 (0.832)	61	1605495			90.52- 190.52	140.49
11.543	11.543 (0.832)	98	726496			16.26- 116.26	63.57
65 Hexane					CAS #: 110-54-3		
11.902	11.902 (0.858)	57	1617761	57.9474	57.947	80.00- 120.00	100.00
11.902	11.902 (0.858)	43	899054			9.30- 109.30	55.57
11.902	11.902 (0.858)	86	289209			0.00- 66.83	17.88
69 Vinyl Acetate					CAS #: 108-05-4		
12.372	12.344 (0.892)	86	287536	52.5330	52.533	80.00- 120.00	100.00
12.372	12.344 (0.892)	43	2581350			832.23- 932.23	897.75
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.372	12.372 (0.892)	63	2169140	55.5330	55.533	80.00- 120.00	100.00
12.372	12.372 (0.892)	65	700477			0.00- 82.06	32.29
75 2-Butanone					CAS #: 78-93-3		
13.395	13.395 (0.966)	72	553569	55.7028	55.703	80.00- 120.00	100.00
13.395	13.395 (0.966)	43	1847332			283.08- 383.08	333.71
13.395	13.395 (0.966)	57	159235			0.00- 79.56	28.77
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.423	13.423 (0.968)	61	1460316	55.5634	55.563	80.00- 120.00	100.00
13.423	13.423 (0.968)	96	1140826			27.58- 127.58	78.12
13.423	13.423 (0.968)	98	729483			0.15- 100.15	49.95
80 Tetrahydrofuran					CAS #: 109-99-9		
13.865	13.865 (1.000)	42	947529	56.5284	56.528	80.00- 120.00	100.00
13.865	13.865 (1.000)	71	498381			1.96- 101.96	52.60
13.865	13.865 (1.000)	72	532243			2.04- 102.04	56.17
82 Chloroform					CAS #: 67-66-3		
13.948	13.948 (1.006)	83	2498696	55.3696	55.370	80.00- 120.00	100.00
13.948	13.948 (1.006)	85	1634644			14.81- 114.81	65.42
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.280	14.280 (1.030)	97	2725692	54.6073	54.607	80.00- 120.00	100.00
14.280	14.280 (1.030)	99	1760138			14.28- 114.28	64.58
85 Cyclohexane					CAS #: 110-82-7		
14.307	14.308 (1.032)	84	1521460	56.9269	56.927	80.00- 120.00	100.00
14.307	14.308 (1.032)	56	1515546			52.90- 152.90	99.61
14.307	14.308 (1.032)	41	798230			2.62- 102.62	52.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride					CAS #: 56-23-5		
14.529	14.529 (1.048)	119	2505823	52.2620	52.262	80.00- 120.00	100.00
14.529	14.529 (1.048)	117	2669012			56.24- 156.24	106.51
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
14.888	14.888 (1.074)	57	4095764	62.8515	62.852	80.00- 120.00	100.00
14.888	14.888 (1.074)	56	1316313			0.00- 82.82	32.14
14.888	14.888 (1.074)	41	1059624			0.00- 78.43	25.87
91 Benzene					CAS #: 71-43-2		
14.971	14.943 (0.958)	78	3362746	53.8219	53.822	80.00- 120.00	100.00
14.971	14.943 (0.958)	77	764594			0.00- 73.50	22.74
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.082	15.082 (0.965)	62	1642724	53.8915	53.891	80.00- 120.00	100.00
15.082	15.082 (0.965)	64	532274			0.00- 84.23	32.40
94 Heptane					CAS #: 142-82-5		
15.192	15.192 (0.972)	71	1036211	58.5893	58.589	80.00- 120.00	100.00
15.192	15.192 (0.972)	43	1424255			85.70- 185.70	137.45
15.192	15.192 (0.972)	57	866448			28.72- 128.72	83.62
101 Trichloroethene					CAS #: 79-01-6		
16.077	16.077 (1.028)	95	1437891	53.7325	53.732	80.00- 120.00	100.00
16.077	16.077 (1.028)	130	1288664			39.09- 139.09	89.62
16.077	16.077 (1.028)	97	916609			12.68- 112.68	63.75
104 1,2-Dichloropropane					CAS #: 78-87-5		
16.575	16.547 (1.060)	63	1153414	54.7144	54.714	80.00- 120.00	100.00
16.575	16.547 (1.060)	62	836262			21.41- 121.41	72.50
16.575	16.547 (1.060)	41	641023			5.94- 105.94	55.58
106 1,4-Dioxane					CAS #: 123-91-1		
16.685	16.685 (1.067)	88	801574	51.9481	51.948	80.00- 120.00	100.00
16.685	16.685 (1.067)	58	469815			8.90- 108.90	58.61
16.685	16.685 (1.067)	57	165145			0.00- 71.19	20.60
107 Bromodichloromethane					CAS #: 75-27-4		
16.989	16.989 (1.087)	83	2603905	54.3713	54.371	80.00- 120.00	100.00
16.989	16.989 (1.087)	85	1674806			14.80- 114.80	64.32
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
17.791	17.791 (1.138)	75	1830328	56.9798	56.980	80.00- 120.00	100.00
17.791	17.791 (1.138)	77	591194			0.00- 81.79	32.30
17.791	17.791 (1.138)	39	822910			0.00- 94.95	44.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
17.957	17.957 (1.149)	58	894640	61.2967	61.297	80.00- 120.00	100.00
17.957	17.957 (1.149)	43	2048666			175.34- 275.34	228.99
17.957	17.957 (1.149)	85	446806			0.64- 100.64	49.94
114 Toluene					CAS #: 108-88-3		
18.317	18.317 (1.172)	91	3963523	59.4941	59.494	80.00- 120.00	100.00
18.317	18.317 (1.172)	92	2385072			10.34- 110.34	60.18
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
18.759	18.759 (0.902)	75	1986211	54.3720	54.372	80.00- 120.00	100.00
18.759	18.759 (0.902)	77	633875			0.00- 81.99	31.91
18.759	18.759 (0.902)	39	816853			0.00- 92.00	41.13
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.119	19.091 (0.919)	97	1415856	53.7778	53.778	80.00- 120.00	100.00
19.119	19.091 (0.919)	99	888361			14.03- 114.03	62.74
19.119	19.091 (0.919)	83	1221981			36.02- 136.02	86.31
120 Tetrachloroethene					CAS #: 127-18-4		
19.284	19.284 (0.927)	166	1890997	53.6012	53.601	80.00- 120.00	100.00
19.284	19.284 (0.927)	129	1304180			18.51- 118.51	68.97
19.284	19.284 (0.927)	131	1223116			15.29- 115.29	64.68
121 2-Hexanone					CAS #: 591-78-6		
19.423	19.423 (0.934)	58	1213492	55.0436	55.044	80.00- 120.00	100.00
19.423	19.423 (0.934)	43	2034182			118.34- 218.34	167.63
19.423	19.423 (0.934)	100	256574			0.00- 71.71	21.14
122 Dibromochloromethane					CAS #: 124-48-1		
19.810	19.782 (0.952)	129	2427410	54.1488	54.149	80.00- 120.00	100.00
19.810	19.782 (0.952)	127	1863480			28.82- 128.82	76.77
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.059	20.059 (0.964)	107	2214859	52.8887	52.889	80.00- 120.00	100.00
20.059	20.059 (0.964)	109	2057233			42.39- 142.39	92.88
127 Chlorobenzene					CAS #: 108-90-7		
20.860	20.860 (1.003)	112	3246418	53.4128	53.413	80.00- 120.00	100.00
20.860	20.860 (1.003)	114	1008620			0.00- 81.69	31.07
20.860	20.860 (1.003)	77	1978793			10.81- 110.81	60.95
128 Ethyl Benzene					CAS #: 100-41-4		
20.943	20.943 (1.007)	106	1699041	53.9518	53.952	80.00- 120.00	100.00
20.943	20.943 (1.007)	91	5591441			269.96- 369.96	329.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene					CAS #: 108-38-3		
21.137	21.137 (1.016)	106	2206972	55.6540	55.654	80.00- 120.00	100.00
21.137	21.137 (1.016)	91	4531231			149.87- 249.87	205.31
130 o-Xylene					CAS #: 95-47-6		
21.828	21.828 (1.049)	106	2121082	56.2294	56.229	80.00- 120.00	100.00
21.828	21.828 (1.049)	91	4566005			166.27- 266.27	215.27
131 Styrene					CAS #: 100-42-5		
21.883	21.883 (1.052)	104	3448817	59.6769	59.677	80.00- 120.00	100.00
21.883	21.883 (1.052)	78	1794468			1.85- 101.85	52.03
133 Bromoform					CAS #: 75-25-2		
22.271	22.271 (1.070)	173	2639409	54.8521	54.852	80.00- 120.00	100.00
22.271	22.271 (1.070)	171	1357053			0.84- 100.84	51.42
134 Cumene					CAS #: 98-82-8		
22.409	22.409 (1.077)	105	6126076	58.8737	58.874	80.00- 120.00	100.00
22.409	22.409 (1.077)	120	1539671			0.00- 77.62	25.13
22.409	22.409 (1.077)	51	538853			0.00- 58.75	8.80
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
22.989	22.989 (1.105)	83	3407224	56.3093	56.309	80.00- 120.00	100.00
22.989	22.989 (1.105)	85	2196507			14.84- 114.84	64.47
142 Propylbenzene					CAS #: 103-65-1		
23.100	23.100 (1.110)	91	7926254	58.7618	58.762	80.00- 120.00	100.00
23.100	23.100 (1.110)	120	1669834			0.00- 71.63	21.07
23.100	23.100 (1.110)	105	281882			0.00- 53.71	3.56
145 4-Ethyltoluene					CAS #: 622-96-8		
23.294	23.294 (1.120)	105	6894744	60.0451	60.045	80.00- 120.00	100.00
23.294	23.294 (1.120)	120	2037479			0.00- 79.56	29.55
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.377	23.377 (1.124)	105	5328724	54.4015	54.401	80.00- 120.00	100.00
23.377	23.377 (1.124)	120	2571330			0.00- 98.23	48.25
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.012	24.012 (1.154)	105	5150348	55.7996	55.800	80.00- 120.00	100.00
24.012	24.012 (1.154)	120	2329479			0.00- 94.91	45.23
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.593	24.593 (1.182)	146	3575597	53.8973	53.897	80.00- 120.00	100.00
24.593	24.593 (1.182)	148	2272738			14.68- 114.68	63.56
24.593	24.593 (1.182)	111	1459744			0.00- 91.36	40.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.731	24.731 (1.189)	146	3624112	53.0898	53.090	80.00- 120.00	100.00
24.731	24.731 (1.189)	148	2338820			16.09- 116.09	64.53
24.731	24.731 (1.189)	111	1454855			0.00- 90.13	40.14
159 alpha-Chlorotoluene					CAS #: 100-44-7		
24.953	24.953 (1.199)	91	5645389	57.1985	57.198	80.00- 120.00	100.00
24.953	24.953 (1.199)	126	1040390			0.00- 69.28	18.43
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.367	25.367 (1.219)	146	3403460	52.6646	52.665	80.00- 120.00	100.00
25.367	25.367 (1.219)	148	2191776			13.64- 113.64	64.40
25.367	25.367 (1.219)	111	1450581			0.00- 93.75	42.62
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.132	28.132 (1.352)	180	2460635	49.9219	49.922	80.00- 120.00	100.00
28.132	28.132 (1.352)	182	2330186			44.51- 144.51	94.70
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.326	28.326 (1.361)	225	2319687	46.7622	46.762	80.00- 120.00	100.00
28.326	28.326 (1.361)	223	1453033			12.90- 112.90	62.64
29 Isopentane					CAS #: 78-78-4		
8.294	8.266 (0.598)	43	997168	49.6404	49.640	80.00- 120.00	100.00
8.294	8.266 (0.598)	57	775820			27.67- 127.67	77.80
19 Butane					CAS #: 106-97-8		
6.830	6.802 (0.493)	58	177248	50.9609	50.961	80.00- 120.00	100.00
6.830	6.802 (0.493)	43	1270782			666.74- 766.74	716.95
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.354	16.354 (1.179)	83	1863986	58.9041	58.904	80.00- 120.00	100.00
16.354	16.354 (1.179)	98	831588			0.00- 95.22	44.61
16.354	16.354 (1.179)	55	1343712			20.82- 120.82	72.09
167 Naphthalene					CAS #: 91-20-3		
28.658	28.658 (1.377)	128	3535572	51.8258	51.826	80.00- 120.00	100.00
28.658	28.658 (1.377)	127	430895			0.00- 62.74	12.19

Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Report Date: 21-Feb-2008 16:02

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t022107.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/21Feb2008.b/t14q206b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 21-FEB-2008
Calibration Time: 14:36
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	318158	190895	445421	310710	-2.34
97 1,4-Difluorobenze	1251468	750881	1752055	1249796	-0.13
126 Chlorobenzene-d5	1150991	690595	1611387	1155810	0.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	13.87	13.54	14.20	13.87	0.00
97 1,4-Difluorobenze	15.61	15.28	15.94	15.63	0.18
126 Chlorobenzene-d5	20.81	20.48	21.14	20.81	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

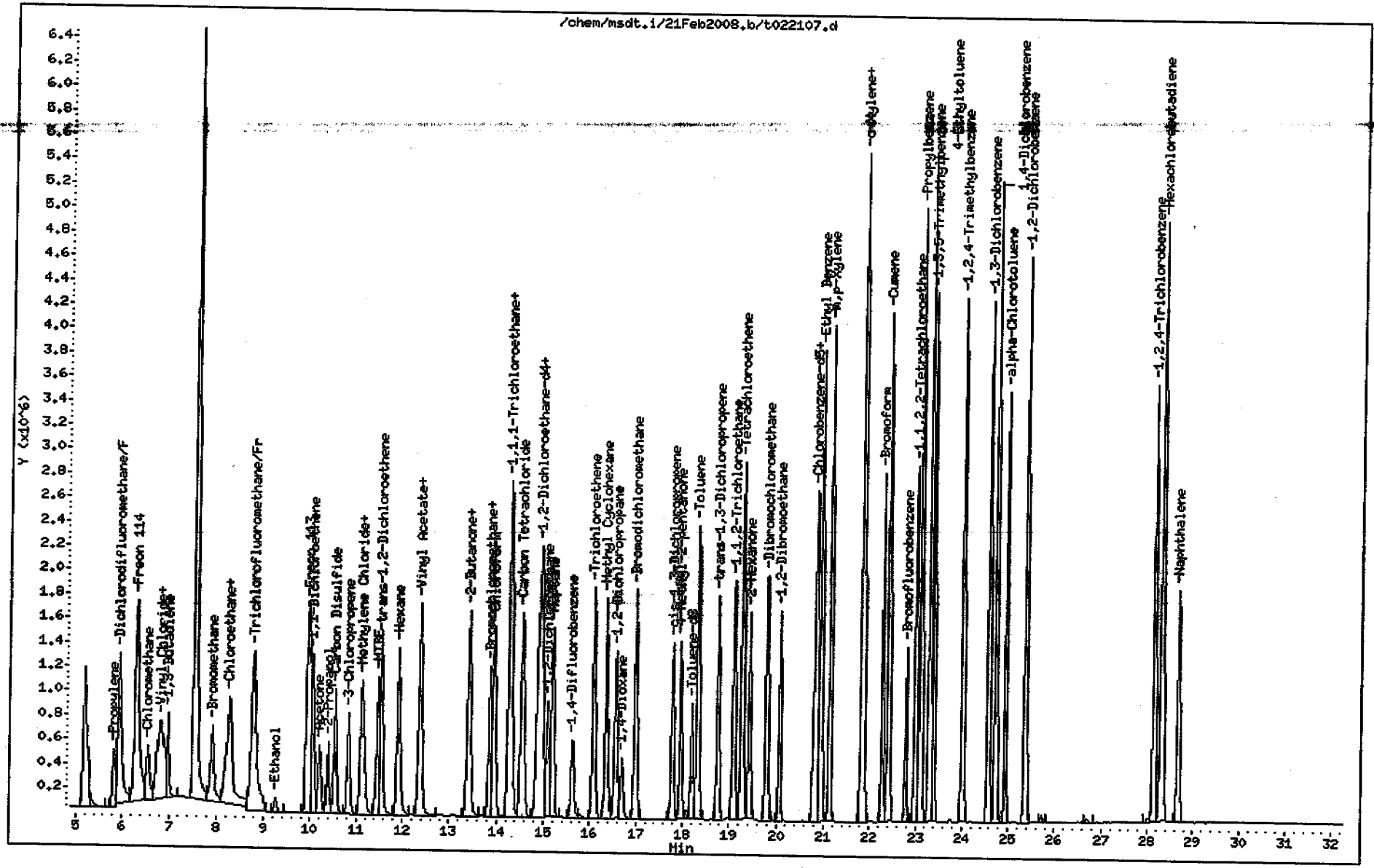
Data File: /chem/msdt.i/21Feb2008.b/t022107.d
Date : 21-FEB-2008 15:25
Client ID: LCS-1
Sample Info: 50mL #1576-255

Column phase: RTx-624

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

0345



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MSD-T

Logbook #: 1599

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.25
75	30.0 – 60.0% of mass 95	50.78
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	(0.76)[1]
174	Greater than 50.0% of mass 95	71.09
175	5.0 – 9.0% of mass 174	(7.21)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	([illegible])[1]
177	5.0 – 9.0% of mass 176	(6.42)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 2/21/08

BFB Injection Time: 0830

BFB File ID: t022101

Tekmar Purge Flow: ——

Vacuum: 3.99e-5

IS/S Std.#:	1443-388	Exp. Date: 3/28/08
BCM	318158	
1,4-DFB	1251468	
[illegible]	[illegible]	

Verified CCV IS vs ICAL mid-point (- 40%D) SPK initials

Verify 176/174 m/z Ratio: 1244707/1294506 x100 = 96.15

NOAH Cart #: NA File #: NA

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1267119)}{(1251468)} \times \frac{(75.0)}{(0.96300)} = 26.285$

File ID:	t022106
Compound:	Tol-d8
Initials:	SPK

Reported Result 26.285

MeOH method

	Use	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Reviewed by	Comments
1	✓	t022101	BFB Tune Check	1576-277	50psig	2mL	1.00	2/21/08	0830	SPK	
2	✓	02	ICAL Level 3	1576-277	2psig/45psig	20mL			0941	SPK	t14g206b
3	✓	03	4		2psig/45psig	9.0mL			1021	SPK	MeOH022IA
4	✓	04	5		10psig/45psig	50mL			1103	SPK	sp22b
5	✓	05	7		20psig/45psig	200mL			1205	SPK	
6	✓	06	CCV-1 (200ppbv)	1576-261	50ppbv	50mL			1436	SPK	
7	✓	07	ICAL Level 6	1576-277	10psig/45psig	100mL			SPK 2/21/08		0 air not loaded
8	✓	07	LCS-1 (200ppbv)	1576-253	50ppbv	50mL	1.00		1525	SPK	0 air
9	✓	08	System blank	3346	Humid	200mL			1607	SPK	

Signature

2/21/08 Date

0346

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MSD-T

Logbook #: 1599

0347

10	✓	t022109	ICAL Level 6	1532-299	inert/atmospheric	100 mL	1.00	2/2/08	1700	Act			
11	✓	10	Lab Blank	33608	Humid	200 mL	↓		1755	Act			
12	✓	11	0802200 -01A	33942	6.0"Hg→5psi		1.68		1847	Act			
13	✓	12	-02A	33943	7.5"Hg→5psi		1.79		1926	Act			
14	✓	13	-01AA	33947	6.0"Hg→5psi		1.68		2005	Act			
15	✓	14	-02AA	33943	7.5"Hg→5psi		1.79		2043	Act			
16	✓	15	-03A	5C486	6.5"Hg→5psi		1.71		2122	Act			
17	✓	16	-04A	33945					2201	Act			
18	✓	17	-05A	31306					2239	Act			
19	✓	18	-06A	R-4	6.0"Hg→5psi		1.68		2338	01			
20	✓	19	0802283 -01A	22497	1	↓	1	2/22/08	0017	01			
21	✓	20	-01A	34438	5.5"Hg→5.0psi	250mL	1.64		0134	01			
22	✓	21	03A	23996	5.5"Hg→5.0psi	200mL	1.64		0221	01			
23	✓	22	04A	35171	6.5"Hg→5.0psi	100mL	1.71		0308	01			MeCl2
24	X	23	05A	34746	6.0"Hg→5.0psi	200mL	1.68		0357	01			MeCl2
25	X	24	0802328-01A	12666	5.5"Hg→5.0psi	200mL	1.64		0432	01			2CE2
26	✓	25	0802283 -04A	35171	6.5"Hg→5.0psi	100mL	3.42		0510	01			
27	✓	26	1 05A	34746	6.0"Hg→5.0psi	100mL	3.36		0711				
28	✓	27	0802328 - 01A	12666	5.5"Hg→5.0psi	100mL	3.28		0749				
29													
30													
31			2/22/08										
32													

Comments:

Laura Dessing
Signature

2/22/08
Date

Air Toxics Ltd.

Data file : /chem/msdt.i/06Feb2008.b/t020605.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 06-FEB-2008 12:26
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/06Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.137	8.228	-0.091	95	1779728			100.00- 100.00	100.00
8.137	8.228	-0.091	50	339425			15.00- 40.00	19.07
8.137	8.228	-0.091	75	907414			30.00- 60.00	50.99
8.137	8.228	-0.091	96	114946			5.00- 9.00	6.46
8.137	8.228	-0.091	173	10246			0.00- 2.00	0.76
8.137	8.228	-0.091	174	1351956			50.00- 100.00	75.96
8.137	8.228	-0.091	175	95866			5.00- 9.00	7.09
8.137	8.228	-0.091	176	1308292			95.00- 101.00	96.77
8.137	8.228	-0.091	177	83826			5.00- 9.00	6.41

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

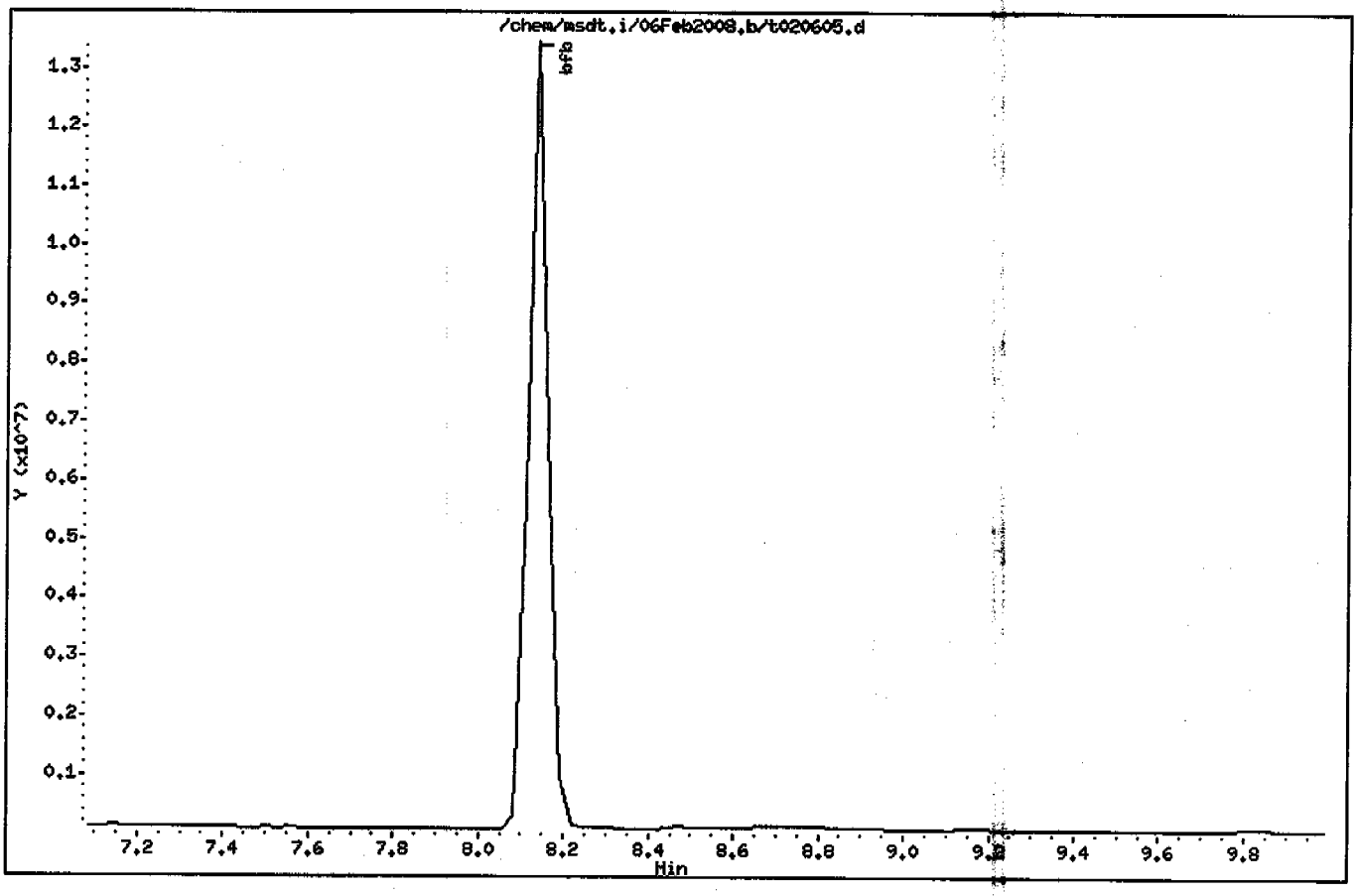
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

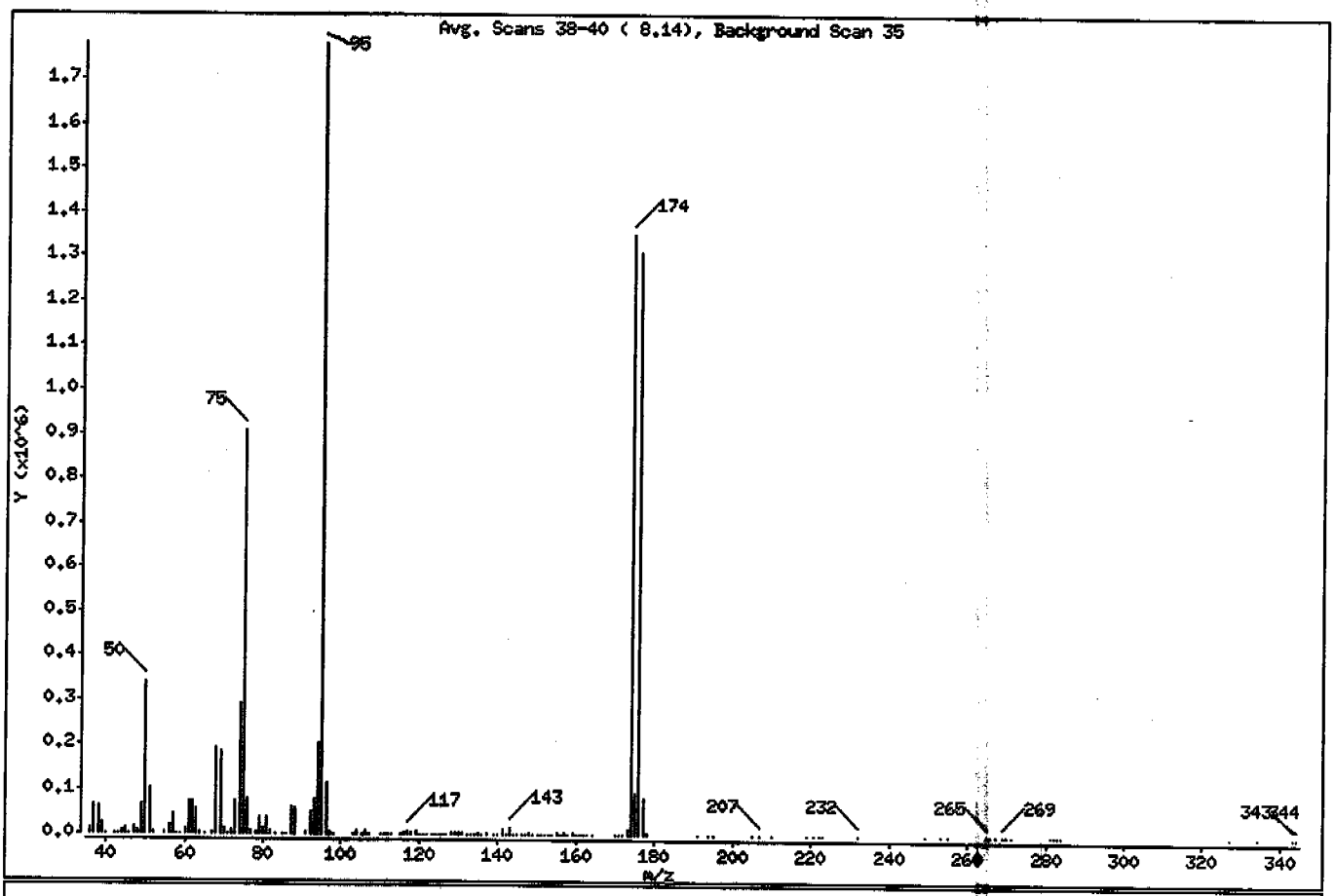
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.07
75	30.00 - 60.00% of mass 95	50.99
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.58 (0.76)
174	50.00 - 100.00% of mass 95	75.96
175	5.00 - 9.00% of mass 174	5.39 (7.09)
176	95.00 - 101.00% of mass 174	73.51 (96.77)
177	5.00 - 9.00% of mass 176	4.71 (6.41)

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL @1476-66;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8.14), Background Scan 36

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11868	78.00	4902	126.00	760	170.00	[illegible]
37.00	67456	79.00	35868	127.00	256	171.00	[illegible]
38.00	61864	80.00	11217	128.00	5303	172.00	[illegible]
39.00	24408	81.00	38600	129.00	2849	173.00	[illegible]
40.00	809	82.00	7818	130.00	5374	174.00	[illegible]
42.00	116	83.00	1089	131.00	2614	175.00	[illegible]
43.00	208	85.00	368	132.00	426	176.00	[illegible]
44.00	6973	86.00	1391	133.00	378	177.00	[illegible]
45.00	14172	87.00	61776	134.00	371	178.00	[illegible]
46.00	678	88.00	57896	135.00	2350	191.00	[illegible]
47.00	14753	91.00	5052	136.00	674	194.00	[illegible]
48.00	8336	92.00	48008	137.00	2553	195.00	[illegible]
49.00	65200	93.00	76000	139.00	471	205.00	[illegible]
50.00	339392	94.00	203584	140.00	1013	207.00	[illegible]
51.00	101208	95.00	1779712	141.00	14090	210.00	[illegible]
52.00	4346	96.00	114944	142.00	1551	219.00	[illegible]
55.00	3726	97.00	3201	143.00	14923	221.00	[illegible]
56.00	22448	98.00	120	144.00	1084	222.00	[illegible]
57.00	48672	103.00	848	145.00	1323	223.00	[illegible]
58.00	1907	104.00	6301	146.00	1960	232.00	[illegible]
59.00	141	105.00	1991	147.00	922	249.00	[illegible]
60.00	13906	106.00	6238	148.00	3718	253.00	[illegible]
61.00	74088	107.00	1653	149.00	1138	255.00	[illegible]
62.00	79568	110.00	675	150.00	1852	265.00	[illegible]
63.00	59016	111.00	1074	151.00	180	266.00	[illegible]
64.00	5017	112.00	907	152.00	749	267.00	[illegible]
65.00	653	113.00	1008	153.00	1310	269.00	[illegible]
67.00	4121	115.00	1360	154.00	1010	270.00	[illegible]
68.00	191296	116.00	5195	155.00	3899	271.00	[illegible]
69.00	186112	117.00	9431	156.00	765	281.00	[illegible]
70.00	13146	118.00	5275	157.00	2711	282.00	[illegible]
71.00	775	119.00	7182	158.00	303	283.00	[illegible]
72.00	8386	120.00	494	159.00	2153	284.00	[illegible]
73.00	72864	121.00	110	160.00	132	327.00	[illegible]
74.00	290660	122.00	399	161.00	2043	334.00	[illegible]

Data File: /chem/msdt.i/06Feb2008.b/t020605.d

Date : 06-FEB-2008 12:26

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020605.d

Spectrum: Avg. Scans 38-40 (8.14), Background Scan 35

Location of Maximum: 95.00

Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	907392	123.00	589	162.00	100	343.00	53
76.00	77416	124.00	1026	163.00	110	344.00	409
77.00	8505	125.00	679	164.00	137		

Air Toxics Ltd.

Data file : /chem/msdt.i/07Feb2008.b/t020701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 07-FEB-2008 09:18
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-65;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/07Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.110	8.228	-0.118	95	1992852			100.00- 100.00	100.00
8.110	8.228	-0.118	50	375252			15.00- 40.00	18.83
8.110	8.228	-0.118	75	1012006			30.00- 60.00	50.78
8.110	8.228	-0.118	96	126643			5.00- 9.00	6.35
8.110	8.228	-0.118	173	11883			0.00- 2.00	0.80
8.110	8.228	-0.118	174	1477051			50.00- 100.00	74.12
8.110	8.228	-0.118	175	107416			5.00- 9.00	7.27
8.110	8.228	-0.118	176	1426273			95.00- 101.00	96.56
8.110	8.228	-0.118	177	92340			5.00- 9.00	6.47

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

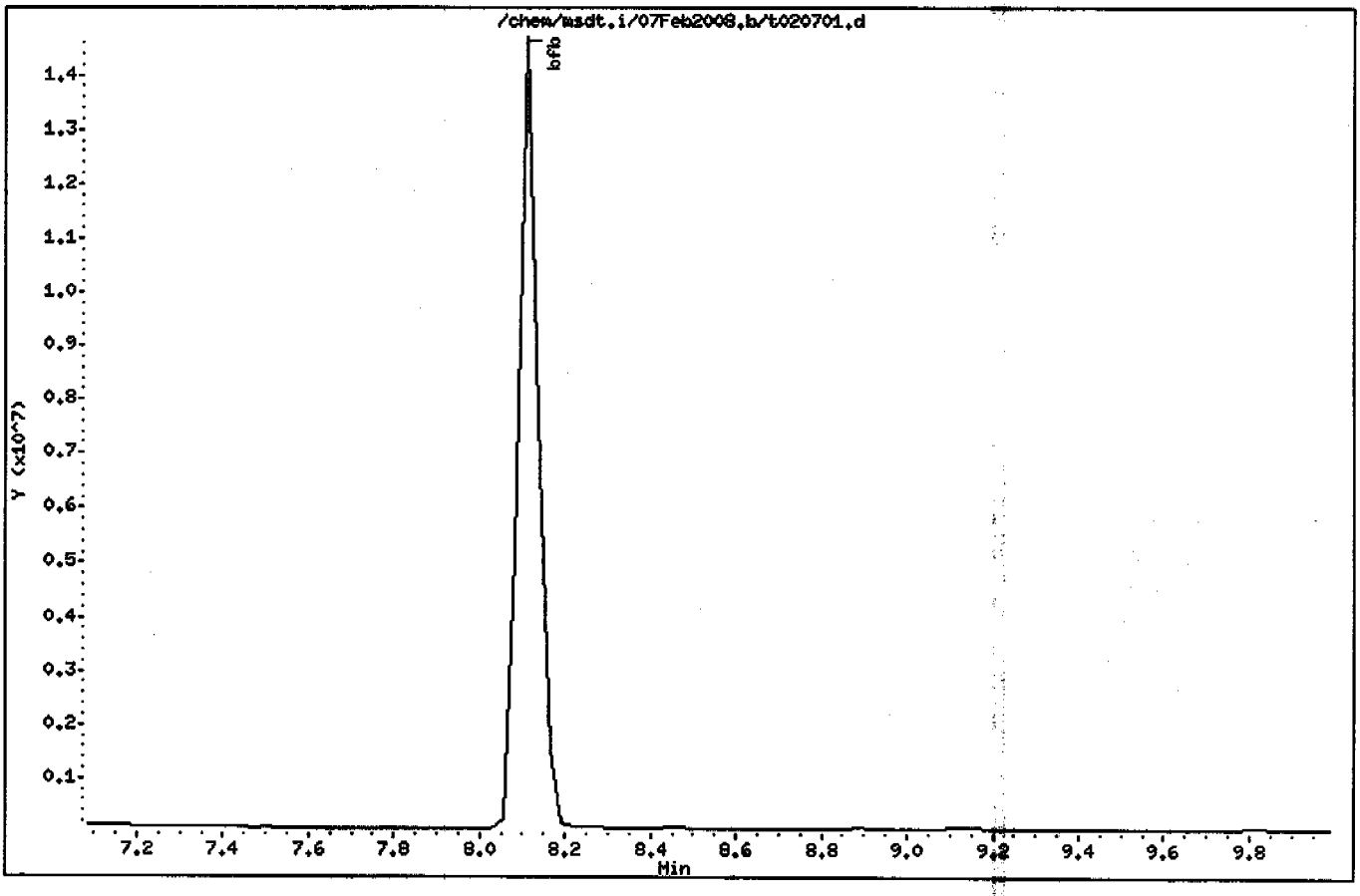
Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

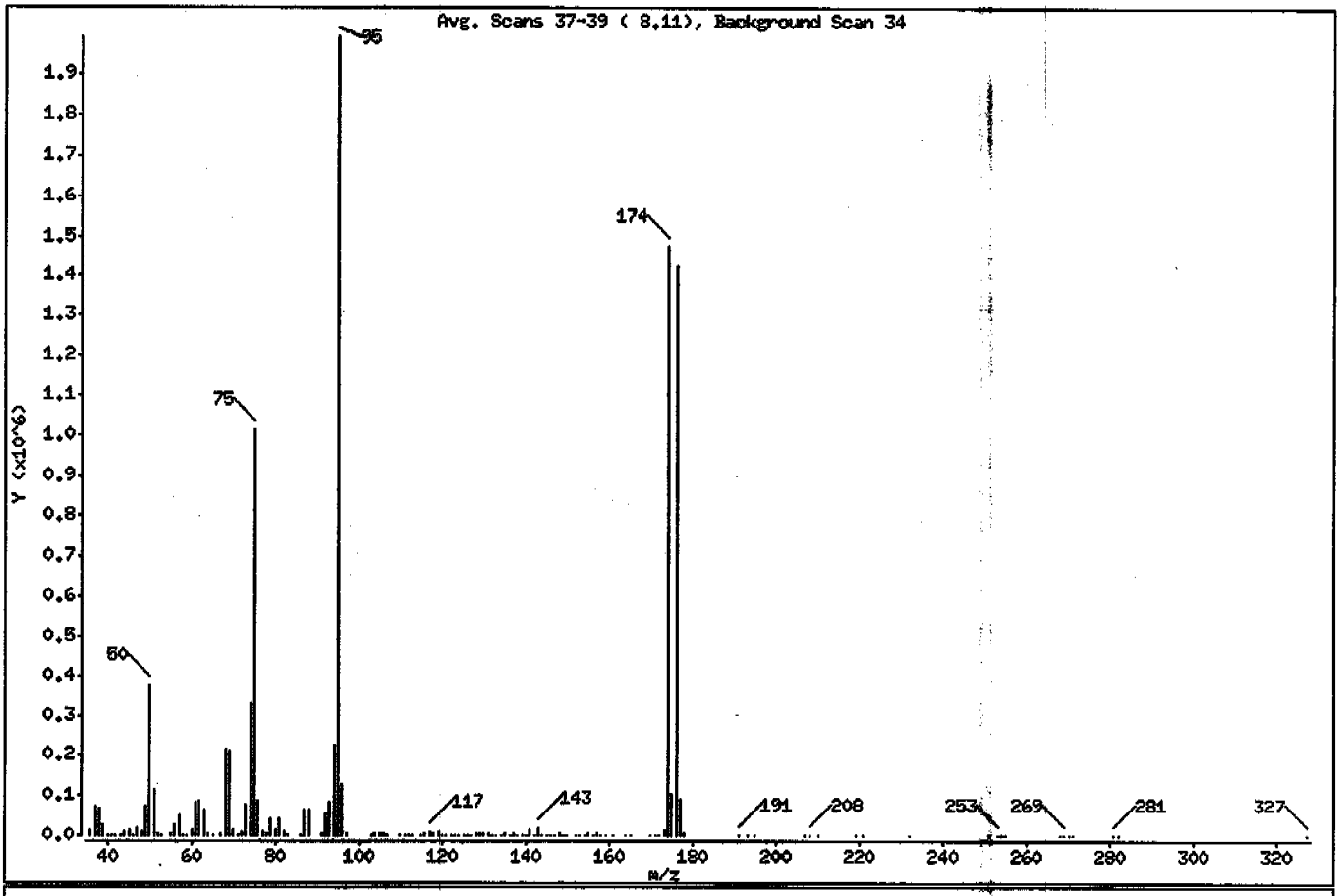
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.83
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.35
173	Less than 2.00% of mass 174	0.60 (0.80)
174	50.00 - 100.00% of mass 95	74.12
175	5.00 - 9.00% of mass 174	5.39 (7.27)
176	95.00 - 101.00% of mass 174	71.57 (96.66)
177	5.00 - 9.00% of mass 176	4.63 (6.47)

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-65;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12590	74.00	328320	122.00	327	159.00	2819
37.00	74864	75.00	1011968	123.00	458	161.00	1796
38.00	68272	76.00	86624	124.00	864	164.00	100
39.00	27184	77.00	9661	125.00	646	165.00	280
40.00	898	78.00	5581	126.00	450	170.00	224
41.00	146	79.00	41696	127.00	490	171.00	844
42.00	52	80.00	13412	128.00	5690	172.00	1138
43.00	354	81.00	42840	129.00	3168	173.00	1[illegible]83
44.00	7813	82.00	9164	130.00	6014	174.00	147[illegible]08
45.00	15073	83.00	949	131.00	2682	175.00	10[illegible]16
46.00	1296	86.00	1438	132.00	366	176.00	142[illegible]20
47.00	17736	87.00	66264	133.00	117	177.00	9[illegible]36
48.00	9775	88.00	62928	134.00	619	178.00	8849
49.00	72104	91.00	5391	135.00	2471	191.00	886
50.00	375232	92.00	53016	136.00	656	193.00	49
51.00	113264	93.00	82608	137.00	2437	195.00	163
52.00	4548	94.00	224704	138.00	122	207.00	79
53.00	189	95.00	1992704	139.00	626	208.00	538
55.00	4474	96.00	126640	140.00	1092	210.00	143
56.00	25416	97.00	3779	141.00	15389	219.00	262
57.00	50472	103.00	578	142.00	1643	221.00	240
58.00	1976	104.00	6737	143.00	16333	232.00	76
59.00	71	105.00	2463	144.00	980	251.00	107
60.00	15410	106.00	6556	145.00	1476	253.00	298
61.00	82160	107.00	2074	146.00	2283	254.00	400
62.00	85144	110.00	909	147.00	1251	255.00	105
63.00	65960	111.00	1186	148.00	4141	268.00	120
64.00	5791	112.00	905	149.00	912	269.00	303
65.00	857	113.00	1014	150.00	1708	270.00	11
67.00	4448	115.00	1419	152.00	888	271.00	149
68.00	213696	116.00	5788	153.00	1322	281.00	88
69.00	209280	117.00	9607	154.00	1107	282.00	21
70.00	14643	118.00	5909	155.00	4174	327.00	131
71.00	664	119.00	8235	156.00	709		
72.00	9006	120.00	397	157.00	2884		

Data File: /chem/msdt.i/07Feb2008.b/t020701.d

Date : 07-FEB-2008 09:18

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-66;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t020701.d

Spectrum: Avg. Scans 37-39 (8.11), Background Scan 34

Location of Maximum: 95.00

Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	79208	121.00	106	158.00	325		

Air Toxics Ltd.

Data file : /chem/msdt.i/21Feb2008.b/t022101.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 21-FEB-2008 08:30
Operator : sjr Inst ID: msdt.i
Smp Info : 2.0uL #1476-274;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/21Feb2008.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.082	8.228	-0.146	95	1820880			100.00- 100.00	100.00
8.082	8.228	-0.146	50	350549			15.00- 40.00	19.25
8.082	8.228	-0.146	75	924575			30.00- 60.00	50.78
8.082	8.228	-0.146	96	117792			5.00- 9.00	6.47
8.082	8.228	-0.146	173	9781			0.00- 2.00	0.76
8.082	8.228	-0.146	174	1294506			50.00- 100.00	71.09
8.082	8.228	-0.146	175	93327			5.00- 9.00	7.21
8.082	8.228	-0.146	176	1244707			95.00- 101.00	96.15
8.082	8.228	-0.146	177	79913			5.00- 9.00	6.42

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

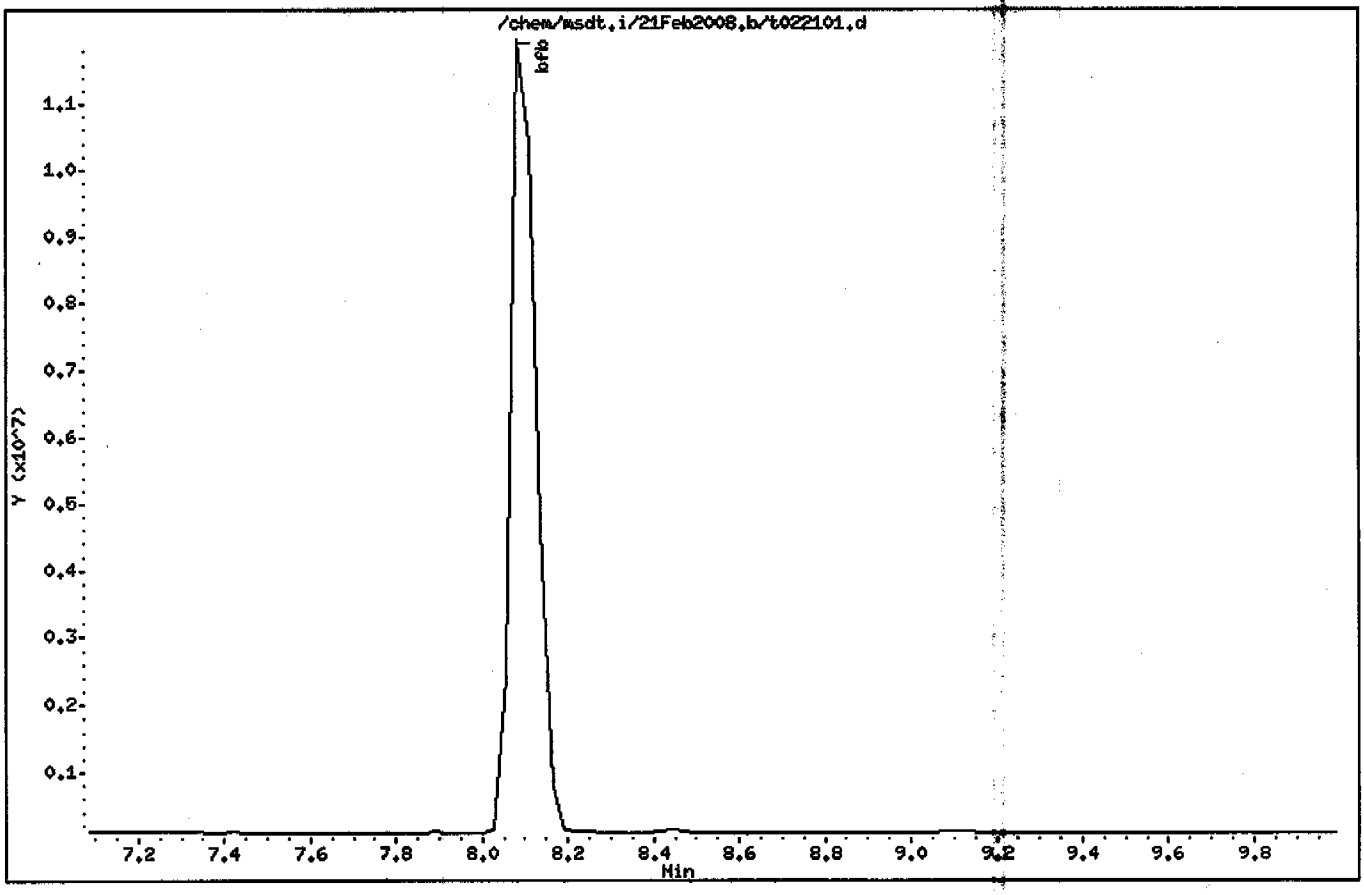
Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

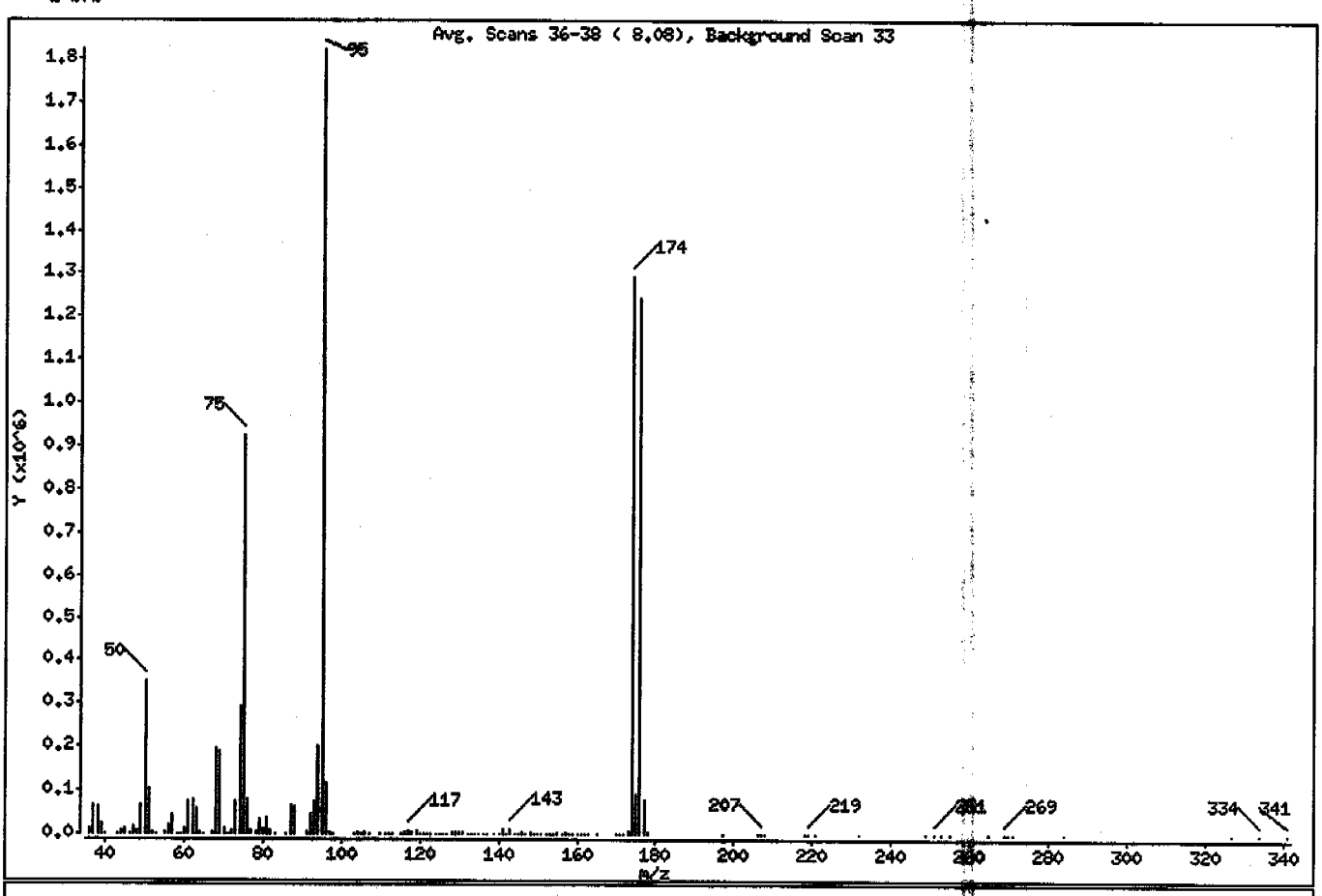
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
96	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.25
75	30.00 - 60.00% of mass 95	50.78
96	5.00 - 9.00% of mass 95	6.47
173	Less than 2.00% of mass 174	0.54 (0.76)
174	50.00 - 100.00% of mass 95	71.09
175	5.00 - 9.00% of mass 174	5.13 (7.21)
176	95.00 - 101.00% of mass 174	68.36 (96.15)
177	5.00 - 9.00% of mass 176	4.39 (6.42)

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	12312	76.00	78792	123.00	414	160.00	208
37.00	69032	77.00	9068	124.00	775	161.00	1[illegible]38
38.00	64704	78.00	5285	125.00	617	162.00	[illegible]05
39.00	26984	79.00	34864	126.00	834	163.00	[illegible]16
40.00	577	80.00	11065	127.00	249	165.00	27
43.00	373	81.00	35768	128.00	5066	170.00	[illegible]08
44.00	7153	82.00	7962	129.00	2566	171.00	[illegible]91
45.00	14309	83.00	752	130.00	5090	172.00	721
46.00	755	86.00	1306	131.00	2176	173.00	[illegible]31
47.00	16656	87.00	66488	132.00	329	174.00	129[illegible]36
48.00	8666	88.00	61120	133.00	29	175.00	9[illegible]20
49.00	65160	91.00	5107	134.00	338	176.00	1244[illegible]72
50.00	[illegible]28	92.00	47664	135.00	1758	177.00	79[illegible]12
51.00	104[illegible]8	93.00	75816	136.00	587	178.00	2[illegible]96
52.00	4313	94.00	201344	137.00	2046	197.00	111
53.00	298	96.00	1820672	139.00	434	206.00	112
55.00	3609	96.00	117792	140.00	817	207.00	1[illegible]25
56.00	22192	97.00	2776	141.00	11673	208.00	63
57.00	45794	98.00	128	142.00	1444	218.00	114
58.00	1983	103.00	395	143.00	12062	219.00	[illegible]98
59.00	189	104.00	5835	144.00	764	221.00	63
60.00	14519	105.00	2027	145.00	1149	232.00	9
61.00	75712	106.00	5397	146.00	2179	249.00	199
62.00	77644	107.00	1801	147.00	982	251.00	334
63.00	58952	110.00	649	148.00	3247	253.00	81
64.00	5084	111.00	1031	149.00	1040	255.00	150
65.00	915	112.00	581	150.00	1486	265.00	63
67.00	4190	113.00	895	151.00	376	269.00	189
68.00	194688	115.00	1247	152.00	798	270.00	26
69.00	189088	116.00	4613	153.00	1088	271.00	14
70.00	13410	117.00	8446	154.00	965	284.00	104
71.00	482	118.00	4706	155.00	3563	327.00	45
72.00	8310	119.00	7194	156.00	626	334.00	48
73.00	74384	120.00	307	157.00	2589	341.00	142
74.00	294912	121.00	269	158.00	152		

Data File: /chem/msdt.i/21Feb2008.b/t022101.d

Date : 21-FEB-2008 08:30

Client ID: BFB

Instrument: msdt.i

Sample Info: 2.0uL #1476-274;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

Data File: t022101.d

Spectrum: Avg. Scans 36-38 (8.08), Background Scan 33

Location of Maximum: 95.00

Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	924544	122.00	498	159.00	1646		

Shipping/ Receiving Documents

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0802200
# of pages (Including Cover): 1

2/27/2008

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0802200

Friday, February 08, 2008

REQUEST NUMBER: 08-604

0365

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-604
Per Agreement Number:TPS#24256
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/8/2008
TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-08-10518	GAS	2/6/2008		
		02A	1	MD21-08-10519	GAS	2/6/2008		
		03A	1	MD21-08-10520	GAS	2/6/2008		
		04A	1	MD21-08-10521	GAS	2/6/2008		
		05A	1	MD21-08-10522	GAS	2/6/2008		
		06A	1	MD21-08-10524	GAS	2/6/2008		

Final Page of REQUEST NUMBER 08-604

802200

Friday, February 08, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-604C

REQUEST NUMBER: 08-604

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 3/9/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-10518	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10520	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10522	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10519	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-10524	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21 08-10521	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		2/8/08	3:00	Theresa Striepeke	Theresa Striepeke AIL	2/9/08	9:3
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: Date Time Remarks:

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0802200

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: R6

Date Promised: 02/26/08
Date Completed: 2/26/08
Date Received: 2/9/08
PO#: 47247-001-07
Project#: 08-604

Total $: $ 1,800.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-08-10518	Modified TO-15	2/6/2008	6.0 "Hg	$205.00
01AA	MD21-08-10518 Lab Duplicate	Modified TO-15	2/6/2008	6.0 "Hg	$0.00
02A	MD21-08-10519	Modified TO-15	2/6/2008	7.5 "Hg	$205.00
02AA	MD21-08-10519 Lab Duplicate	Modified TO-15	2/6/2008	7.5 "Hg	$0.00
03A	MD21-08-10520	Modified TO-15	2/6/2008	6.5 "Hg	$205.00
04A	MD21-08-10521	Modified TO-15	2/6/2008	6.5 "Hg	$205.00
05A	MD21-08-10522	Modified TO-15	2/6/2008	6.5 "Hg	$205.00
06A	MD21-08-10524	Modified TO-15	2/6/2008	6.0 "Hg	$205.00
07A	Lab Blank	Modified TO-15	NA	NA	$0.00
08A	CCV	Modified TO-15	NA	NA	$0.00
09A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (6) @ $60.00 each., Shipment 57359	$360.00
CVP (6) @ $20.00 each.	$120.00
Client Specific EDD (6) @ $5.00 each.	$30.00
eCVP (6) @ $10.00 each.	$60.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.70	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.14	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.45	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.58	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.47	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.30	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.74	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.34	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.18	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.34	9.17	11.02
25.0	8.14	10.08	12.12
25.5	8.94	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.35	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.32	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.29	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.26	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.23	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.20	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.17	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.14	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.07	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.04	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	[illegible]	1.99
0.4	1.30	1.64	1.97
0.6	1.29	[illegible]	1.94
0.8	1.27	1.59	1.92
1.0	1.25	[illegible]	1.89
1.2	1.24	1.55	1.87
1.4	1.22	[illegible]	1.84
1.6	1.21	1.52	1.82
1.8	1.19	[illegible]	1.80
2.0	1.18	1.48	1.78
2.2	1.17	[illegible]	1.76
2.4	1.15	1.44	1.74
2.6	1.14	[illegible]	1.72
2.8	1.13	1.41	1.70
3.0	1.11	[illegible]	1.68
3.2	1.10	1.38	1.66
3.4	1.09	[illegible]	1.64
3.6	1.08	1.35	1.62
3.8	1.06	[illegible]	1.61
4.0	1.05	1.32	1.59
4.2	1.04	[illegible]	1.57
4.4	1.03	1.29	1.55
4.6	1.02	[illegible]	1.54
4.8	1.01	1.27	1.52
5.0	1.00	[illegible]	1.51
5.2	NA	1.24	1.49
5.4	NA	[illegible]	1.48
5.6	NA	1.22	1.46
5.8	NA	[illegible]	1.45
6.0	NA	1.19	1.43
6.2	NA	[illegible]	1.42
6.4	NA	1.17	1.41
6.6	NA	[illegible]	1.39
6.8	NA	1.15	1.38
7.0	NA	[illegible]	1.37
7.2	NA	1.13	1.36
7.4	NA	[illegible]	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	[illegible]	1.10	1.32
8.0	NA	1.09	1.31
8.2	[illegible]	1.08	1.30
8.4	NA	1.07	1.29
8.6	[illegible]	1.06	1.27
8.8	NA	1.05	1.26
9.0	[illegible]	1.04	1.25
9.2	NA	1.03	1.24
9.4	[illegible]	1.02	1.23
9.6	NA	1.02	1.22
9.8	[illegible]	1.01	1.21
10.0	NA	1.00	1.20
10.2	[illegible]	NA	1.19
10.4	NA	NA	1.18
10.6	[illegible]	NA	1.17
10.8	NA	NA	1.16
11.0	[illegible]	NA	1.16
11.2	NA	NA	1.15
11.4	[illegible]	NA	1.14
11.6	NA	NA	1.13
11.8	[illegible]	NA	1.12
12.0	NA	NA	1.11
12.2	[illegible]	NA	1.10
12.4	NA	NA	1.10
12.6	[illegible]	NA	1.09
12.8	NA	NA	1.08
13.0	[illegible]	NA	1.07
13.2	NA	NA	1.06
13.4	[illegible]	NA	1.06
13.6	NA	NA	1.05
13.8	[illegible]	NA	1.04
14.0	NA	NA	1.03
14.2	[illegible]	NA	1.03
14.4	NA	NA	1.02
14.6	[illegible]	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0802200

A	R	T	M	Q	
☑	☐	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
	☑	☐	☐	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
N/A	☐	☐	☑	☐	Corrective Action issued - #
☐	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* — *CIRCLE (YES / NO)*

☑	☐	☐	☐	☐ Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	☐ Hold time is met for all samples
	☐	☐	☐	☐ Appropriate data qualifier flags are applied
	☐	☐	☐	☐ Manual integrations for samples and QC are properly documented
☑	☐	☐		☐ Samples analyzed within the project or method specific clock
	☐	☐		☐ Retention times have been verified
☑	☐	☐		☐ Appropriate ICAL(s) included
	☐	☐	☐	☐ At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐	Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
N/A	☐	☐	TICs resemble reference spectra
	☐	☐	TICs between duplicate samples are consistent
N/A	☐	☐	☐ Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☐	☐	Special units for all samples in the final report are correctly calculated
	☐	☑	Manually entered results checked (i.e. special CCV compounds)
N/A	☐	☑	TPH/NMOC (verify calculations and correct reference compound used)
	☑		Chain of Custody scanned correctly
		☐	Verify sample id's vs. chain of custody
☑	☑		Samples pressurized w/ appropriate gas (N2 or He) ☐ Tedlar Bag only
☑	☑		Final pressure consistent with canister size (6L vs. 1L)
☑	☑		Verify receipt pressures against logbook and Target
☑	☐		Verify canister ID #'s
N/A		☑	Extra printed copies are provided per client profile
	☐	☐	Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☐	☐	☐ Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: MTBE 382, 4M2P 322 in ICAL. Bart in CCV & LCS. CCV from multiple Elks. Dups on Samples 01A & 02A.

M/O:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
2/22/08	R: 2/26/08	2/26/08	

T:

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 08/29/05

Monday, November 05, 2007

REQUEST NUMBER: 08-125

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Barbara Zelenay
American Radiation Services
1903 Central Ave.
Los Alamos, NM 87544

These Samples are on:
LANL Request Number:08-125
Per Agreement Number:126310031
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/5/2007
TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6800	GAS	11/3/2007		
		1	MD21-07-6801	GAS	11/3/2007		
		1	MD21-07-6802	GAS	11/3/2007		
		1	MD21-07-6803	GAS	11/3/2007		
		1	MD21-07-6804	GAS	11/4/2007		
		1	MD21-07-6806	GAS	11/3/2007		
		1	MD21-07-6818	GAS	10/30/2007		
		1	MD21-08-8445	GAS	11/3/2007		

Final Page of REQUEST NUMBER 08-125

Monday, November 05, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-125C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-125

ATTN: Barbara Zelenay

American Radiation Services

1903 Central Ave.

Los Alamos, NM 87544

TURNAROUND/REPORT DUE: 11/9/2007

TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6801	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6802	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6800	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6806	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6804	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-8445	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

11/5/07 1400

Printed Name Signature — Printed Name Signature

Printed Name Signature — Printed Name Signature

Printed Name Signature — Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6800

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	UA	/
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	/
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	/
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	/
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	/
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		J
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		Port #6

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stevens **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 11/3/07 1025	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/3/07 1025
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6801

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0858 ~~0907~~ KR 11/3/07	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft ~~242.5~~ KR 11/3/07	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft ~~247.5~~ KR 11/3/07	SCREEN/PORT DESC:		Port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Reid	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6802

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0907	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21.603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:	port #5	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stevens **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6803

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/07/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0854	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	187.5 FT	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 FT	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stenner **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6804

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/04/2007	MEDIA:	NA	OC
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Reed

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 11/4/07 9:50	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/4/07 9150
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6806

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/03/2007
TIME COLLECTED (HH:MM)		0917
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-25262	21-603059
LOCATION TYPE:	BH	OK
TOP DEPTH:	0	372.5 ft
BOTTOM DEPTH:	0	377.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	UA	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	FD	
FIELD PREP:	NA	
SAMPLE USAGE:	QC	
SCREEN/PORT DESC:		port 6

EXCAVATED: YES / (NO) / NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6800

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stevens **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6818

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1635	SUB-MEDIA:	UA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	OK
LOCATION ID:	21-25264	21-603058	FIELD QC TYPE:	~~FD~~ FB	FB
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		NA

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	1642 10/30/07 Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6811
Nitrogen Field Blank of sample train.
Deionized water Blank of tritium column

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Steen **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-08-8445

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	21-603059	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	"
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-8800
Nitrogen Field Blank of Sample train
Deionized water Blank of tritium column

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stenz **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Reid	1025	(Signature)	10:25
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Attachment C: Data-Validation Cover Sheet

☐ **Rejected Data**

Section I

Request Number: 08-125 Validation Date: 11/9/07 Lab Code: ARS

Contract Laboratory Name: American Radiation Services Validator: Eric T. Mink

Organization: Analytical Quality Associates, Inc.

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

Other (describe):

Section II - Completeness Check

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

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

None

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): **(Page 1 of 1)**

1. The tritium results for samples MD21-07-6804, -6806, -6818, and -8445 were ≤ the MDC and, thus, were qualified U,R5.

Reviewed By: KAS **Level:** I **Date:** 11/9/07

Validator's signature: Eric T. Mink Date: 11/9/07

Attachment D. RAD Checklist

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

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

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-07-01792	**Request or PO Number:**	08-125
Client Sample ID:	MD21-07-6803	**ARS Sample ID:**	ARS1-07-01792-001
Sample Collection Date:	11/3/2007	**Date Received:**	11/06/07 10:15
Sample Matrix:	Aqueous	**Report Date:**	11/08/07 09:15

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	379.253	130.039	199.227	97.962		pCi/L	ARS-054/EPA 906.0	11/7/07 6:27	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6801
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-002
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:15

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1585.582	217.720	198.964	97.832		pCi/L	ARS-054/EPA 906.0	11/7/07 9:34	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2995

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6802
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-003
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	273.951	126.684	201.685	99.170		pCi/L	ARS-054/EPA 906.0	11/7/07 12:41	BS	NA

NOTES: Project Cost Code: MRBR0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2509 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6800
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-004
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	197.900	121.519	197.844	97.282		pCi/L	ARS-054/EPA 906.0	11/7/07 15:47	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MDZ1-07-6806
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-005
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U R5	156.714	120.417	198.405	97.557	U	pCi/L	ARS-054/EPA 906.0	11/7/07 18:54	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6804
Sample Collection Date: 11/4/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-006
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R6	-8.075	115.913	198.121	97.417	U	pCi/L	ARS-054/EPA 906.0	11/7/07 22:01	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review: Lindsay Larsaigne

Notes: American Radiation Services, Inc. Assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2998

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6818
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-007
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:17

Analysis Description		Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	U,R5	20.760	114.254	194.275	95.526	U	pCi/L	ARS-054/EPA 906.0	11/8/07 1:07	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-08-8445
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-008
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:17

Analysis Description		Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	U,R5	27.995	113.386	192.519	94.663	U	pCi/L	ARS-054/EPA 906.0	11/8/07 4:14	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lamoreigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/9/07

Monday, November 05, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-125C

REQUEST NUMBER: 08-125

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Barbara Zelenay

American Radiation Services

1903 Central Ave.

Los Alamos, NM 87544

TURNAROUND/REPORT DUE: 11/9/2007

TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6801	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6802	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6800	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6806	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6804	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-8445	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature	11/5/07	1400	Printed Name	Signature	11/6/07	10:15
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, November 05, 2007

REQUEST NUMBER: 08-125

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Barbara Zelenay
American Radiation Services
1903 Central Ave.
Los Alamos, NM 87544

These Samples are on:
LANL Request Number:08-125
Per Agreement Number:126310031
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/5/2007
TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07 need Results by 11/8 + 11/9

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6800	GAS	11/3/2007		
		1	MD21-07-6801	GAS	11/3/2007		
		1	MD21-07-6802	GAS	11/3/2007		
		1	MD21-07-6803	GAS	11/3/2007		
		1	MD21-07-6804	GAS	11/4/2007		
		1	MD21-07-6806	GAS	11/3/2007		
		1	MD21-07-6818	GAS	10/30/2007		
		1	MD21-08-8445	GAS	11/3/2007		

Final Page of REQUEST NUMBER 08-125

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-125

Case Narrative

ARS
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November 8, 2007

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-125
LANL Sample ID: MD21-07-6803, MD21-07-6801, MD21-07-6802, MD21-07-6800, MD21-07-6806, MD21-07-6804, MD21-07-6818, MD21-08-8445

Dear Mr. Greene:

On November 6, 2007, American Radiation Services (ARS) received 8 Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet a statistical sound detection limits.

Counting equipment Quality Assurance was with in acceptance criteria when the above referenced samples were processed.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

B J Stoff for Virgene Mulligan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

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COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-125	MD21-07-6803	ARS1-07-01792-001
08-125	MD21-07-6801	ARS1-07-01792-002
08-125	MD21-07-6802	ARS1-07-01792-003
08-125	MD21-07-6800	ARS1-07-01792-004
08-125	MD21-07-6806	ARS1-07-01792-005
08-125	MD21-07-6804	ARS1-07-01792-006
08-125	MD21-07-6818	ARS1-07-01792-007
08-125	MD21-08-8445	ARS1-07-01792-008

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicates that the activity is below the MDC.

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American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."

Signature	Lab Manager/Technical Director, American Radiation Services	11-8-07
	Title	**Date**

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6803
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-001
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:15

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	379.253	130.039	199.227	97.962		pCi/L	ARS-054/EPA 906.0	11/7/07 6:27	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lamoigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6801
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-002
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:15

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1585.582	217.720	198.964	97.832		pCi/L	ARS-054/EPA 906.0	11/7/07 9:34	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lassaigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6802
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-003
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	273.951	126.684	201.685	99.170		pCi/L	ARS-054/EPA 906.0	11/7/07 12:41	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ransegne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6800
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-004
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	197.900	121.519	197.844	97.282		pCi/L	ARS-054/EPA 906.0	11/7/07 15:47	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigne
Project Manager Review

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AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6806
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-005
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	156.714	120.417	198.405	97.557	U	pCi/L	ARS-054/EPA 906.0	11/7/07 18:54	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6804
Sample Collection Date: 11/4/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-006
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	-8.075	115.913	198.121	97.417	U	pCi/L	ARS-054/EPA 906.0	11/7/07 22:01	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lanoiegne
Project Manager Review

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6818
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-007
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:17

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	20.760	114.254	194.275	95.526	U	pCi/L	ARS-054/EPA 906.0	11/8/07 1:07	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ranseigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-08-8445
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-008
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:17

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	27.995	113.386	192.519	94.663	U	pCi/L	ARS-054/EPA 906.0	11/8/07 4:14	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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QC Results Report

Sample Delivery Group: ARS1-07-01792

Date Received: 11/6/2007

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B07-03159	LCS	H3	964.84	162.6	189.73729	1209.95		pCi/L	ARS-055/EPA 906.0	11/6/07 21:07	BS	80	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B07-03159	MBL	H3	-55.089	110.42955	190.13992	NA	U	pCi/L	ARS-055/EPA 906.0	11/6/07 21:07	BS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B07-03159	LCSD	H3	964.84	162.6	974.82908	163.8062		pCi/L	ARS-055/EPA 906.0	11/6/07 21:07	BS	0.03	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B07-03159	LCSD	H3	964.84	162.6	974.82908	163.8062		pCi/L	ARS-055/EPA 906.0	11/6/07 21:07	BS	0.09	< 3

Lindsay Lamoigne

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

LSC Instrument Data Transfer Report

\\Packard3170\Results\H3 Results\Tritium for Protocol

Batch Sample ID	Non BKG Samples Transferred	Samples Eligible to Save
ARS1-B07-03159	11	11

ARS Batch Sample ID	LSC P#	LSC R ID	LSC S#	LSC SMPL ID	LSC Count Date	LSC CPMA	LSC tSIE	LSC EFF	LSC Count Dur	Analysis Batch	LCS QC	LCS Run
BKG	5		1	BACKGROUND	11/06/07 18:00	6.63	397.41	41.7300	180.00	ARS1-B07-03159		
ARS1-B07-03159-01	5		2	B07-03159-01	11/06/07 21:07	11.24	411.26	42.5900	180.00	ARS1-B07-03159		
ARS1-B07-03159-02	5		3	B07-03159-02	11/07/07 00:14	11.27	411.53	42.6000	180.00	ARS1-B07-03159		
ARS1-B07-03159-03	5		4	B07-03159-03	11/07/07 03:20	6.36	413.18	42.6600	180.00	ARS1-B07-03159		
ARS1-B07-03159-04	5		5	B07-03159-04	11/07/07 06:27	8.35	385.89	40.8300	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-05	5		6	B07-03159-05	11/07/07 09:33	13.86	385.81	40.8200	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-06	5		7	B07-03159-06	11/07/07 12:40	7.86	379.21	40.3100	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-07	5		8	B07-03159-07	11/07/07 15:47	7.53	388.31	41.0200	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-08	5		9	B07-03159-08	11/07/07 18:53	7.34	387.67	40.9700	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-09	5		10	B07-03159-09	11/07/07 22:00	6.59	387.44	40.9500	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-10	5		11	B07-03159-10	11/08/07 01:07	6.72	399.81	41.9100	180.00	ARS1-B07-03159	ARS1-07-01792	1
ARS1-B07-03159-11	5		12	B07-03159-11	11/08/07 04:14	6.76	391.33	41.2500	180.00	ARS1-B07-03159	ARS1-07-01792	1

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.242000
Sample Count Mins	1440.000000
BKG Count Rate	6.626000
BKG Count Mins	1440.000000
Instrument Efficiency	0.425900
Sample Aliquot	5.060000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/6/07 9:07 PM
Count Date (t2)	11/6/07 9:07 PM
Activity Units = pCi/L or pCi/g	1.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi/L
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	964.838598	964.838598	OK
CU	129.076345	129.076345	OK
TPU	162.588604	162.588604	OK
MDA	189.737290	189.737290	OK
DL	93.295185	93.295185	OK
Net Count Rate	4.616000	4.616000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004784	0.004784	OK
K MDA	0.861160	0.861160	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-01
Analysis Code	
SDG	ARS1-07-01792
Fraction	008
Run Number	
Client	QC Sample
Client Profile	
Client ID	New QC Sample
Instr File Name	84
Instr Detector	PE-- S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.266000
Sample Count Mins	180.000000
BKG Count Rate	6.626000
BKG Count Mins	180.000000
Instrument Efficiency	0.426000
Sample Aliquot	5.053000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/7/07 12:44 AM
Count Date (t2)	11/7/07 12:14 AM
Activity Units - pCi = 1, Bq =	2.22200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041530
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	974.829081	974.829081	OK
CU	129.825427	129.825427	OK
TPU	163.806164	163.806164	OK
MDA	190.710376	190.710376	OK
DL	93.773658	93.773658	OK
Net Count Rate	4.640000	4.640000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004760	0.004760	OK
K MDA	0.856766	0.856766	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-02
Analysis Code	
SDG	ARS1-07-01792
Fraction	008
Run Number	1
Client	QC Sample
Client Profile	
Client ID	NA QC Sample
Instr File Name	84
Instr Detector	P-5 - S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.363000
Sample Count Mins	180.000000
BKG Count Rate	6.626000
BKG Count Mins	180.000000
Instrument Efficiency	0.426600
Sample Aliquot	5.041000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Basis (t1)	11/7/07 3:21 AM
Count Date (t2)	11/7/07 3:21 AM
Activity Units = pCi, 1 DPS =	2.2280
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.011330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	-55.089043	-55.089043	OK
CU	110.285179	110.285179	OK
TPU	110.429550	110.429550	OK
MDA	190.139918	190.139918	OK
DL	93.493160	93.493160	OK
Net Count Rate	-0.263000	-0.263000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004774	0.004774	OK
K MDA	0.859336	0.859336	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-03
Analysis Code	
SDG	ARS1-07-01792
Fraction	008
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	P-[illegible]-S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	8.354000
Sample Count Mins	1800.000000
BKG Count Rate	6.626000
BKG Count Mins	1800.000000
Instrument Efficiency	0.408300
Sample Aliquot	5.030000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/3/07 12:00 AM
Count Date (t2)	11/7/07 6:27 AM
Activity Units = pCi, DPM =	2.22200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	379.252954	379.252954	OK
CU	124.096908	124.096908	OK
TPU	130.039416	130.039416	OK
MDA	199.227396	199.227396	OK
DL	97.961538	97.961538	OK
Net Count Rate	1.728000	1.728000	OK
D t 1 (t2 - t1)	4.268750	4.268750	OK
DF	0.999343	0.999343	OK
Sys Err	0.052280	0.052280	OK
K	0.004556	0.004556	OK
K MDA	0.820139	0.820139	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-04
Analysis Code	LSC-A-001
SDG	ARS1407-01792
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	NM21-07-6803
Instr File Name	84
Instr Detector	P-5 - S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMC Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	13.860000
Sample Count Mins	180.000000
BKG Count Rate	6.626000
BKG Count Mins	180.000000
Instrument Efficiency	0.408200
Sample Aliquot	5.038000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/3/07 12:00 AM
Count Date (t2)	11/7/07 9:34 AM
Activity Units = pCi, uCi =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1585.581708	1585.581708	OK
CU	144.930078	144.930078	OK
TPU	217.719559	217.719559	OK
MDA	198.963746	198.963746	OK
DL	97.831900	97.831900	OK
Net Count Rate	7.234000	7.234000	OK
D t 1 (t2 - t1)	4.398611	4.398611	OK
DF	0.999323	0.999323	OK
Sys Err	0.052280	0.052280	OK
K	0.004562	0.004562	OK
K MDA	0.821225	0.821225	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-05
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	002
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	MES1-07-6801
Instr File Name	84
Instr Detector	P-E-S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.859000
Sample Count Mins	180.000000
BKG Count Rate	6.626000
BKG Count Mins	180.000000
Instrument Efficiency	0.403100
Sample Aliquot	5.033000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date/Time	11/3/07 12:00 AM
Count Date (t2)	11/7/07 12:41 PM
Activity Units = pCi - BCF =	2.22200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.044330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	273.951272	273.951272	OK
CU	123.534799	123.534799	OK
TPU	126.684036	126.684036	OK
MDA	201.685219	201.685219	OK
DL	99.170067	99.170067	OK
Net Count Rate	1.233000	1.233000	OK
D t 1 (t2 - t1)	4.528472	4.528472	OK
DF	0.999303	0.999303	OK
Sys Err	0.052280	0.052280	OK
K	0.004501	0.004501	OK
K MDA	0.810144	0.810144	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-06
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	003
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	MEAD-07-6802
Instr File Name	84
Instr Detector	P4 - S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML **Date:** 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.534000
Sample Count Mins	1800.000000
BKG Count Rate	6.626000
BKG Count Mins	1800.000000
Instrument Efficiency	0.410200
Sample Aliquot	500.2000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/3/07 12:30 AM
Count Date (t2)	11/7/07 3:47 PM
Activity Units = pCi, MDC	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.974530
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	197.900078	197.900078	OK
CU	119.815102	119.815102	OK
TPU	121.519032	121.519032	OK
MDA	197.844482	197.844482	OK
DL	97.281550	97.281550	OK
Net Count Rate	0.908000	0.908000	OK
D t 1 (t2 - t1)	4.657639	4.657639	OK
DF	0.999283	0.999283	OK
Sys Err	0.052280	0.052280	OK
K	0.004588	0.004588	OK
K MDA	0.825871	0.825871	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-07
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	004
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	MS21-07-6800
Instr File Name	84
Instr Detector	PE S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMC Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.343000
Sample Count Mins	1000.000000
BKG Count Rate	6.626000
BKG Count Mins	1000.000000
Instrument Efficiency	0.409700
Sample Aliquot	5.024000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date	11/3/07 12:00 AM
Count Date (t2)	11/7/07 6:54 PM
Activity Units = pCi -- DPF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	156.713815	156.713815	OK
CU	119.341256	119.341256	OK
TPU	120.416780	120.416780	OK
MDA	198.404699	198.404699	OK
DL	97.557012	97.557012	OK
Net Count Rate	0.717000	0.717000	OK
D t 1 (t2 - t1)	4.787500	4.787500	OK
DF	0.999263	0.999263	OK
Sys Err	0.052280	0.052280	OK
K	0.004575	0.004575	OK
K MDA	0.823539	0.823539	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-08
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	MEA-07-6806
Instr File Name	84
Instr Detector	P-3-S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMC Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.589000
Sample Count Mins	180.000000
BKG Count Rate	6.626000
BKG Count Mins	180.000000
Instrument Efficiency	0.409500
Sample Aliquot	5.043000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/4/07 12:00 AM
Count Date (t2)	11/7/07 10:01 PM
Activity Units = pCi = TRUE	1.22200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	-8.075472	-8.075472	OK
CU	115.909657	115.909657	OK
TPU	115.912610	115.912610	OK
MDA	198.120786	198.120786	OK
DL	97.417410	97.417410	OK
Net Count Rate	-0.037000	-0.037000	OK
D t 1 (t2 - t1)	3.917361	3.917361	OK
DF	0.999397	0.999397	OK
Sys Err	0.052280	0.052280	OK
K	0.004582	0.004582	OK
K MDA	0.824720	0.824720	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-09
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	006
Run Number	18
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	MEAS1-07-6804
Instr File Name	84
Instr Detector	PACKARD 2500TR-S-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.723000
Sample Count Mins	180.000000
BKG Count Rate	6.626000
BKG Count Mins	180.000000
Instrument Efficiency	0.419100
Sample Aliquot	5.129000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/30/07 12:00 AM
Count Date (t2)	11/8/07 1:07 AM
Activity Units = pCi * DCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.011330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	DCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	20.759872	20.759872	OK
CU	114.234455	114.234455	OK
TPU	114.254259	114.254259	OK
MDA	194.274927	194.274927	OK
DL	95.526374	95.526374	OK
Net Count Rate	0.097000	0.097000	OK
D t 1 (t2 - t1)	9.046528	9.046528	OK
DF	0.998607	0.998607	OK
Sys Err	0.052280	0.052280	OK
K	0.004672	0.004672	OK
K MDA	0.841046	0.841046	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-10
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	007
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	MES1-07-6818
Instr File Name	84
Instr Detector	P-3 - S-11
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.758000
Sample Count Mins	1800.000000
BKG Count Rate	6.626000
BKG Count Mins	1800.000000
Instrument Efficiency	0.412500
Sample Aliquot	50.53000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/3/07 12:00 AM
Count Date (t2)	11/8/07 4:14 AM
Activity Units = pCi, pCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.111330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	27.995173	27.995173	OK
CU	113.350126	113.350126	OK
TPU	113.386419	113.386419	OK
MDA	192.518757	192.518757	OK
DL	94.662852	94.662852	OK
Net Count Rate	0.132000	0.132000	OK
D t 1 (t2 - t1)	5.176389	5.176389	OK
DF	0.999203	0.999203	OK
Sys Err	0.052280	0.052280	OK
K	0.004715	0.004715	OK
K MDA	0.848718	0.848718	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03159
Batch ID	ARS1-B07-03159-11
Analysis Code	LSC-A-001
SDG	ARS1-07-01792
Fraction	008
Run Number	11
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	NM21108-8445
Instr File Name	84
Instr Detector	PE Tri-Carb 2910TR/AB S-12
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LML Date: 11-8-07

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071106_1755
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071106_1755\20071106_1755.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071106_1755\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071106_1755\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.lsa

Count Conditions-

Nuclide: H3
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set:
  Low Energy: H-3
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nuc1 In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	6.626	15.88	397.41	41.73	180.00	11/6/2007	6:00:20 PM	
5	2	B07-03159-01	11.242	26.39	411.26	42.59	180.00	11/6/2007	9:07:17 PM	
5	3	B07-03159-02	11.266	26.44	411.53	42.60	180.00	11/7/2007	12:14:01 AM	
5	4	B07-03159-03	6.363	14.92	413.18	42.66	180.00	11/7/2007	3:20:40 AM	
5	5	B07-03159-04	8.354	20.46	385.89	40.83	180.00	11/7/2007	6:27:16 AM	
5	6	B07-03159-05	13.860	33.95	385.81	40.82	180.00	11/7/2007	9:33:57 AM	
5	7	B07-03159-06	7.859	19.50	379.21	40.31	180.00	11/7/2007	12:40:40 PM	
5	8	B07-03159-07	7.534	18.37	388.31	41.02	180.00	11/7/2007	3:47:17 PM	
5	9	B07-03159-08	7.343	17.92	387.67	40.97	180.00	11/7/2007	6:53:58 PM	
5	10	B07-03159-09	6.589	16.09	387.44	40.95	180.00	11/7/2007	10:00:40 PM	
5	11	B07-03159-10	6.723	16.04	399.81	41.91	180.00	11/8/2007	1:07:24 AM	
5	12	B07-03159-11	6.758	16.38	391.33	41.25	180.00	11/8/2007	4:14:02 AM	

ARS
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for

Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Laboratory
Records

Analysis Batch Report

Analysis Batch ID **ARS1-B07-03159**

Method ARS-054 **Matrix** AQ

Description TRITIUM IN WATER

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3
ARS1-B07-03159-01	LCS	B-04045		
ARS1-B07-03159-02	LCSD	B-04046		
ARS1-B07-03159-03	MBL			
ARS1-B07-03159-04	TRG			
ARS1-B07-03159-05	TRG			
ARS1-B07-03159-06	TRG			
ARS1-B07-03159-07	TRG			
ARS1-B07-03159-08	TRG			
ARS1-B07-03159-09	TRG			
ARS1-B07-03159-10	TRG			
ARS1-B07-03159-11	TRG			

Lab Batch			QC ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-07-01792	1	001	MD21-07-6803	11/09/07	11/06/07	LSC-A-001
ARS1-07-01792	1	002	MD21-07-6801	11/09/07	11/06/07	LSC-A-001
ARS1-07-01792	1	003	MD21-07-6802	**11/09/07**	**11/06/07**	LSC-A-001
ARS1-07-01792	1	004	MD21-07-6800	11/09/07	11/06/07	LSC-A-001
ARS1-07-01792	1	005	MD21-07-6806	11/09/07	11/06/07	LSC-A-001
ARS1-07-01792	1	006	MD21-07-6804	11/09/07	11/06/07	LSC-A-001
ARS1-07-01792	1	007	MD21-07-6818	11/09/07	11/06/07	LSC-A-001
ARS1-07-01792	1	008	MD21-08-8445	11/09/07	11/06/07	LSC-A-001

LCS Expected = 1209.9549

Range = 604.9775 - 1814.9323

LCSD Expected = 1209.9549

Range = 604.9775 - 1814.9323

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	ACT	BGL	TPU	DL	MDA	BR/DL	BR/MDA	SI	SampleCount	SampleCountTime	BKGCount	BKGCountTime	Eff	AEIC	UCF	CF	GrossCountRate
ARS1-B07-03159	ARS1-B07-03159-01	H-3	MD21-08-8445	964.8385977	129.076345	162.5886045	93.29519	189.73729				0.06246	180.00000	0.03681	180.00000	0.42590	5.06000	2.22000	1.96000	11.24200
ARS1-B07-03159	ARS1-B07-03159-02	H-3	MD21-08-8445	974.8290812	129.825427	163.8061636	93.77366	190.71038				0.06259	180.00000	0.03681	180.00000	0.42600	5.03300	2.22000	1.96000	11.26600
ARS1-B07-03159	ARS1-B07-03159-03	H-3	MD21-08-8445	-55.08904269	110.2851795	110.4295497	93.49316	190.13992				0.03535	180.00000	0.03681	180.00000	0.42660	5.04100	2.22000	1.96000	6.36300
ARS1-B07-03159	ARS1-B07-03159-04	H-3	MD21-07-6803	379.2529536	124.0969075	130.0394161	97.96154	199.22740				0.04641	180.00000	0.03681	180.00000	0.40830	5.03000	2.22000	1.96000	8.35400
ARS1-B07-03159	ARS1-B07-03159-05	H-3	MD21-07-6801	1585.581708	144.9300779	217.7195585	97.83190	198.96375				0.07700	180.00000	0.03681	180.00000	0.40820	5.03800	2.22000	1.96000	13.86000
ARS1-B07-03159	ARS1-B07-03159-06	H-3	MD21-07-6802	273.9512723	123.5347992	126.6840356	99.17007	201.68522				0.04366	180.00000	0.03681	180.00000	0.40310	5.03300	2.22000	1.96000	7.85900
ARS1-B07-03159	ARS1-B07-03159-07	H-3	MD21-07-6800	197.9000782	119.8151023	121.5190324	97.28155	197.84448				0.04186	180.00000	0.03681	180.00000	0.41020	5.04200	2.22000	1.96000	7.53400
ARS1-B07-03159	ARS1-B07-03159-08	H-3	MD21-07-6806	156.7138149	119.3412561	120.4167798	97.55701	198.40470				0.04079	180.00000	0.03681	180.00000	0.40970	5.03400	2.22000	1.96000	7.34300
ARS1-B07-03159	ARS1-B07-03159-09	H-3	MD21-07-6804	-8.075472472	115.9096567	115.9126103	97.41741	198.12079				0.03661	180.00000	0.03681	180.00000	0.40950	5.04300	2.22000	1.96000	6.58900
ARS1-B07-03159	ARS1-B07-03159-10	H-3	MD21-07-6818	20.75987158	114.2344549	114.2542594	95.52637	194.27493				0.03735	180.00000	0.03681	180.00000	0.41910	5.02900	2.22000	1.96000	6.72300
ARS1-B07-03159	ARS1-B07-03159-11	H-3	MD21-08-8445	27.99517291	113.3501256	113.3864187	94.66285	192.51876				0.03754	180.00000	0.03681	180.00000	0.41250	5.15300	2.22000	1.96000	6.75800

ABatch	ABatchSampleID	Isotope	ClientID	BkgCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	HalfLife1	HalfLife2	HalfLife3	TPU
ARS1-B07-03159	ARS1-B07-03159-01	H-3	MD21-08-8445	6.62600	4.61600							11/8/07 7:39	11/6/07 21:07	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-02	H-3	MD21-08-8445	6.62600	4.64000							11/8/07 7:39	11/7/07 0:14	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-03	H-3	MD21-08-8445	6.62600	-0.26300							11/8/07 7:39	11/7/07 3:21	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-04	H-3	MD21-07-6803	6.62600	1.72800							11/3/07 0:00	11/7/07 6:27	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-05	H-3	MD21-07-6801	6.62600	7.23400							11/3/07 0:00	11/7/07 9:34	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-06	H-3	MD21-07-6802	6.62600	1.23300							11/3/07 0:00	11/7/07 12:41	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-07	H-3	MD21-07-6800	6.62600	0.90800							11/3/07 0:00	11/7/07 15:47	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-08	H-3	MD21-07-6806	6.62600	0.71700							11/3/07 0:00	11/7/07 18:54	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-09	H-3	MD21-07-6804	6.62600	-0.03700							11/4/07 0:00	11/7/07 22:01	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-10	H-3	MD21-07-6818	6.62600	0.09700							10/30/07 0:00	11/8/07 1:07	4499.80000			0.0413
ARS1-B07-03159	ARS1-B07-03159-11	H-3	MD21-08-8445	6.62600	0.13200							11/3/07 0:00	11/8/07 4:14	4499.80000			0.0413

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentKeV
ARS1-B07-03159	ARS1-B07-03159-01	H-3	MD21-08-8445	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00478	0.86116	84	P-5 - S-2	
ARS1-B07-03159	ARS1-B07-03159-02	H-3	MD21-08-8445	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00476	0.85677	84	P-5 - S-3	
ARS1-B07-03159	ARS1-B07-03159-03	H-3	MD21-08-8445	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00477	0.85934	84	P-5 - S-4	
ARS1-B07-03159	ARS1-B07-03159-04	H-3	MD21-07-6803	0.02000	0.00000	0.02500	0.00000	0.00000	4.26875						0.99934					0.05228	0.00456	0.82014	84	P-5 - S-5	
ARS1-B07-03159	ARS1-B07-03159-05	H-3	MD21-07-6801	0.02000	0.00000	0.02500	0.00000	0.00000	4.39861						0.99932					0.05228	0.00456	0.82123	84	P-5 - S-6	
ARS1-B07-03159	ARS1-B07-03159-06	H-3	MD21-07-6802	0.02000	0.00000	0.02500	0.00000	0.00000	4.52847						0.99930					0.05228	0.00450	0.81014	84	P-5 - S-7	
ARS1-B07-03159	ARS1-B07-03159-07	H-3	MD21-07-6800	0.02000	0.00000	0.02500	0.00000	0.00000	4.65764						0.99928					0.05228	0.00459	0.82587	84	P-5 - S-8	
ARS1-B07-03159	ARS1-B07-03159-08	H-3	MD21-07-6806	0.02000	0.00000	0.02500	0.00000	0.00000	4.78750						0.99926					0.05228	0.00458	0.82354	84	P-5 - S-9	
ARS1-B07-03159	ARS1-B07-03159-09	H-3	MD21-07-6804	0.02000	0.00000	0.02500	0.00000	0.00000	3.91736						0.99940					0.05228	0.00458	0.82472	84	P-5 - S-10	
ARS1-B07-03159	ARS1-B07-03159-10	H-3	MD21-07-6818	0.02000	0.00000	0.02500	0.00000	0.00000	9.04653						0.99861					0.05228	0.00467	0.84105	84	P-5 - S-11	
ARS1-B07-03159	ARS1-B07-03159-11	H-3	MD21-08-8445	0.02000	0.00000	0.02500	0.00000	0.00000	5.17639						0.99920					0.05228	0.00472	0.84872	84	P-5 - S-12	

ABatch	ABatchSampleID	IsoFrac	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Rep	Fraction	AnalyticCode	UserID	ModDate
ARS1-B07-03159	ARS1-B07-03159-01	H-3	MD21-08-8445					ARS1-07-01792	1	008		BSTEFFENS	11/8/07 7:38
ARS1-B07-03159	ARS1-B07-03159-02	H-3	MD21-08-8445					ARS1-07-01792	1	008		BSTEFFENS	11/8/07 7:38
ARS1-B07-03159	ARS1-B07-03159-03	H-3	MD21-08-8445					ARS1-07-01792	1	008		BSTEFFENS	11/8/07 7:38
ARS1-B07-03159	ARS1-B07-03159-04	H-3	MD21-07-6803					ARS1-07-01792	1	001	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-05	H-3	MD21-07-6801					ARS1-07-01792	1	002	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-06	H-3	MD21-07-6802					ARS1-07-01792	1	003	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-07	H-3	MD21-07-6800					ARS1-07-01792	1	004	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-08	H-3	MD21-07-6806					ARS1-07-01792	1	005	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-09	H-3	MD21-07-6804					ARS1-07-01792	1	006	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-10	H-3	MD21-07-6818					ARS1-07-01792	1	007	LSC-A-001	BSTEFFENS	11/8/07 7:39
ARS1-B07-03159	ARS1-B07-03159-11	H-3	MD21-08-8445					ARS1-07-01792	1	008	LSC-A-001	BSTEFFENS	11/8/07 7:39

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B07-03159
SDG's: ARS1-07-01792

LCS	964.8386	**CSU**	162.5886
LCSD	974.8291	**CSU-D**	163.8062

DER = $\frac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\frac{9.990483}{115.3988}$ = 0.086574 **< 3**

% RPD= $\frac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\frac{9.990483}{969.8338}$ *100 = 1.030123 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\frac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\frac{9.9904835}{326.3948}$ 0.030609 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-55.08904	110.4295	190.1399
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
113	ARS1-B07-03159	ARS1-B07-03159-01		0	g	5.060	g	BSTEFFENS	11/7/2007
114	ARS1-B07-03159	ARS1-B07-03159-02		0	g	5.033	g	BSTEFFENS	11/7/2007
115	ARS1-B07-03159	ARS1-B07-03159-03		0	g	5.041	g	BSTEFFENS	11/7/2007
116	ARS1-B07-03159	ARS1-B07-03159-04	MD21-07-6803	0	g	5.030	g	BSTEFFENS	11/7/2007
117	ARS1-B07-03159	ARS1-B07-03159-05	MD21-07-6801	0	g	5.038	g	BSTEFFENS	11/7/2007
118	ARS1-B07-03159	ARS1-B07-03159-06	MD21-07-6802	0	g	5.033	g	BSTEFFENS	11/7/2007
119	ARS1-B07-03159	ARS1-B07-03159-07	MD21-07-6800	0	g	5.042	g	BSTEFFENS	11/7/2007
120	ARS1-B07-03159	ARS1-B07-03159-08	MD21-07-6806	0	g	5.034	g	BSTEFFENS	11/7/2007
121	ARS1-B07-03159	ARS1-B07-03159-09	MD21-07-6804	0	g	5.043	g	BSTEFFENS	11/7/2007
122	ARS1-B07-03159	ARS1-B07-03159-10	MD21-07-6818	0	g	5.029	g	BSTEFFENS	11/7/2007
123	ARS1-B07-03159	ARS1-B07-03159-11	MD21-08-8445	0	g	5.153	g	BSTEFFENS	11/7/2007

LCS Report
Analytical Batch: ARS1-B07-03159

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
4022	B-04045	ARS1-B07-03159	ARS1-B07-03159-01	B-H3	S-0156	H-3	5	1.20996269	0	1	1	BSTEFFENS	11/6/200
4023	B-04046	ARS1-B07-03159	ARS1-B07-03159-02	B-H3	S-0156	H-3	5	1.20996269	0	1	1	BSTEFFENS	11/6/200

Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	115.8843	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.1069	5.053E+01	S-0109		
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0024	Pu-239	S	04/17/07	04/17/08	OK	10/26/05	1.1412E+01	11.4114	8.807E+06	S-0073		
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0027	Tc-99	SLC	09/01/06	09/01/07	EXP	10/18/05	9.4141E+03	9414.0765	7.710E+07	S-0113		S-0027 - Information entered from dilution records - RTS 4/19/2006
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0032	H-3	SL	04/02/07	04/02/08	OK	03/01/06	3.4431E+03	3131.8944	4.500E+03	S-0031		S-0032 - Intermediate dilution for preparation of control solutions -
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4895	2.753E+07	S-0065		Empirical data collected over 2 mos. for S-0036 indicated that the ori
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6546	2.692E+06	S-0067		S-0038 Entered from dilution documention. Density from certificate use
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.5712	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions -
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0065 Information entered on 4/6/2006 RTS. Density entered based on a
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records Dilution incorre
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2310	8.807E+06			S-0024 Information entered from dilution records
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E+12			NIST 4321 - uranium standard for use as total uranium standard (also I
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8237	5.840E+05			S-0037 Primary solution
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	378783.9685	4.500E+03			Primary for S-0029 - Information entered from dilution records - 4/18/
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0109	Sr-89	PLC			Not Ver	01/24/05	3.9414E+05	0.3490	5.053E+01			Activity concentration calculated per certificate information - 2.018E
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0112	H-3	SC	04/19/06	04/19/07	EXP	04/18/06	1.1410E+04	10456.1261	4.500E+03	S-0111		Solution for use as calibration stock standard - Entered from dilution
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4427	5.840E+05	S-0105		S-0003 - Information entered from dilution records - 4/19/2006 RTS
A	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0346	1.098E+04			Primary Cs-137 Standard
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9709	1.041E+04			Primary Sr-90 Standard
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0996	1.579E+05			Primary Am-241 Standard
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

ARS American Radiation Services, Inc.

Standards Report

A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	03/27/06	1.0413E+04	10412.8642	2.753E+07	S-0124		[illegible]
A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	88302.2127	2.100E+03			Primary Ra-228 Standard
A	S-0127	Ra-228	SL	05/10/06	05/10/07	EXP	05/10/06	[illegible]	9417.7498	2.100E+03	S-0126		[illegible]
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0566	7.710E+07	S-0039		Solution diluted per plan and as documented in measurements above exce
A	S-0129	Sr-90	PL			Not Ver	07/01/95	[illegible]	2969.5687	1.041E+04			
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	37.6669	2.100E+03	S-0127		Dilution performed as stated above by G Steffens on 5/10/2006. Measure
A	S-0134	Sr-90	SL			Not Ver	09/26/03	[illegible]	432.0232	1.041E+04	S-0129		[illegible]
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	53.3837	1.041E+04	S-0134		Original standard ID# was T11c-1/S-0017. Information entered from dilu
A	S-0137	Th-229	PT			Not Ver	[illegible]	[illegible]	122894.4848	2.681E+06			Primary Th-229 Standard
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6965	2.681E+06	S-0137		Used as an intermediate standard for creating tracer stock solutions.
A	S-0139	Po-209	P			Not Ver	[illegible]	[illegible]	[illegible]	3.726E+04			Primary Po-209 standard
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5572	3.726E+04	S-0139		
A	S-0141	Ra-226	PC			Not Ver	01/21/93	2.6418E+04	26249.1599	5.840E+05			[illegible]
A	S-0142	Ra-226	SC	04/03/07	04/03/08	OK	07/21/06	6.5210E+02	651.7317	5.840E+05	S-0141		Solution for use as calibration stock. Dilution performed as stated ab
A	S-0143	Pb-210	P			Not Ver	07/18/06	7.6490E+00	7.3362	8.130E+03			ARS-WRM-001
A	S-0144	Pb-210	S	10/24/07	10/24/08	OK	07/18/06	1.6961E+01	16.2863	8.130E+03	S-0143		7/18/2006 ARS-WRM-001 20 gamma spectroscopy measurements average act
A	S-0145	Th-229	ST			Not Ver	[illegible]	[illegible]	[illegible]	2.681E+06	S-0138		[illegible]
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9796	2.681E+06	S-0145		Information gathered from existing dilution records created on 4/28/20
A	S-0147	Tc-99	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	7.710E+07	S-0027		[illegible]
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473100.1466	2.090E+06			Primary C-14 standard. The certified activity in dpm/g was derived by
A	S-0151	I-129	SLC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			Primary I-129 standard
A	S-0152	H-3	P	12/04/06	12/04/07	OK	09/03/98	2.0090E+00	1.1990	4.500E+03			Liquid in a 500-ml borosilicate-glass media bottle with teflon-lined s
A	S-0153	C-14	S			Not Ver	[illegible]	[illegible]	[illegible]	2.090E+06	S-0148		[illegible]
A	S-0154	C-14	S	03/12/07	03/12/08	OK	10/13/06	1.7245E+02	172.4279	2.090E+06	S-0153		LCS standard for C-14. Originally logged as S-0159. See parent comment
A	S-0155	Ra-226	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	59.8860	5.840E+05	S-0142		[illegible]
A	S-0156	H-3	S	05/18/07	05/18/08	OK	04/27/07	2.7672E+00	2.6861	4.500E+03	S-0032		Normal level tritium LCS standard. Dilution performed as stated above
A	S-0157	Sr-90	P			Not Ver	05/15/07	[illegible]	7515.9068	1.041E+04			Primary Sr-90 LCS standard
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	828.3571	2.516E+04			Primary U-232 standard
A	S-0159	Sr-89	PC			Not Ver	05/15/07	[illegible]	1590.0805	5.053E+01			Primary Sr-89 standard
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4474.3220	1.041E+04	S-0157		Intermediate standard for creating LCS standards. Dilution performed a
A	S-0161	U-232	ST	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0162	U-232	ST	06/18/07	06/18/08	OK	06/08/07	9.8656E+00	9.8247	2.516E+04	S-0161		Dilution performed as stated above by BSteffens on 6/8/2007. -BJS 6/8/
A	S-0163	Sr-90	S	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	1589.6154	5.053E+01			Primary Sr-89 calibration standard.
A	S-0165	Sr-89	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	S-0164		[illegible]
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6493	2.681E+06	S-0145		Th-229 tracer. Dilution performed as stated above by G Steffens. -BJS
I	S-0026	U-232	ST	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4203	4.500E+03			Tritium in Oil
I	S-0031	H-3	S	10/26/05	10/26/06	EXP	[illegible]	[illegible]	[illegible]	4.500E+03	[illegible]		[illegible]
I	S-0130	Sr-90	SL			Not Ver	09/26/03	5.3620E+02	485.1713	1.041E+04	S-0129	05/26/06	Original solution ID# is T11c. Dilution information entered from exist
I	S-0131	Sr-90	SL			Not Ver	[illegible]	0.0000E+00	0.0000	1.041E+04	[illegible]	[illegible]	[illegible]
I	S-0133	Sr-90	SL	01/09/06	01/09/07	EXP	06/09/04	5.8438E+01	53.7884	1.041E+04	S-0130	05/26/06	Original solution ID# was T11c-1/S-0017. Information entered from dilu
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	[illegible]	[illegible]	[illegible]	1.041E+04	[illegible]	[illegible]	[illegible]
I	S-0149	C-14	SL			Not Ver	10/13/06	5.9553E+04	59545.3793	2.090E+06	S-0148	03/16/07	Intermediate standard for creating LCS stock solutions. Dilution perfo
I	S-0150	C-14	SL			Not Ver	10/13/06	[illegible]	867.5224	2.090E+06	S-0149	[illegible]	[illegible]

Standards Report

I	S-0167	Th-229	ST			Not Ver	08/27/07	5.6494E+00	5.6493	2.681E+06	S-0145	08/28/07	Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
11-2-07	16:54	B07-03102-05	07-03102	0305	
11-6-07	16:12	SNC	QA	QA	
↓	↓	Background	07-03159	1755	
↓	↓	B07-03159-01	↓	↓	
↓	↓	B07-03159-02	↓	↓	
↓	↓	B07-03159-03	↓	↓	
↓	↓	B07-03159-04	↓	↓	
↓	↓	B07-03159-05	↓	↓	
↓	↓	B07-03159-06	↓	↓	
↓	↓	B07-03159-07	↓	↓	
↓	↓	B07-03159-08	↓	↓	
↓	↓	B07-03159-09	↓	↓	
↓	↓	B07-03159-10	↓	↓	
↓	↓	B07-03159-11	↓	↓	

Reviewed By: _____ Date: _____
Initials

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

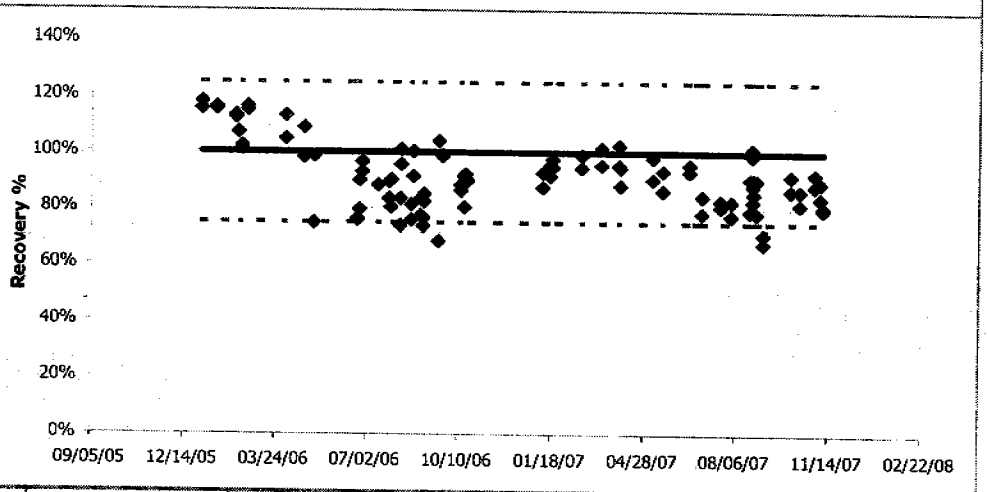
Control Charts

American Radiation Services
Baton Rouge Laboratory

QC Chart

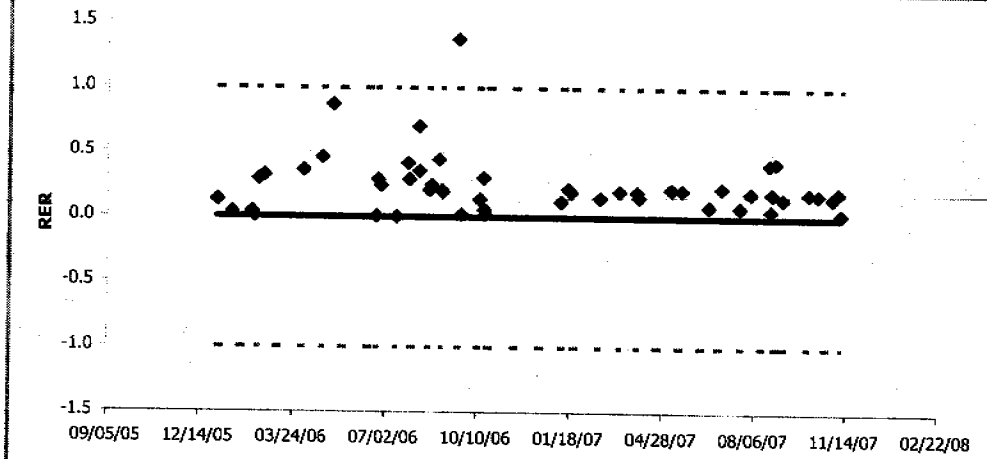
Printed: 11/8/2007 9:36 AM

Tritium LCS



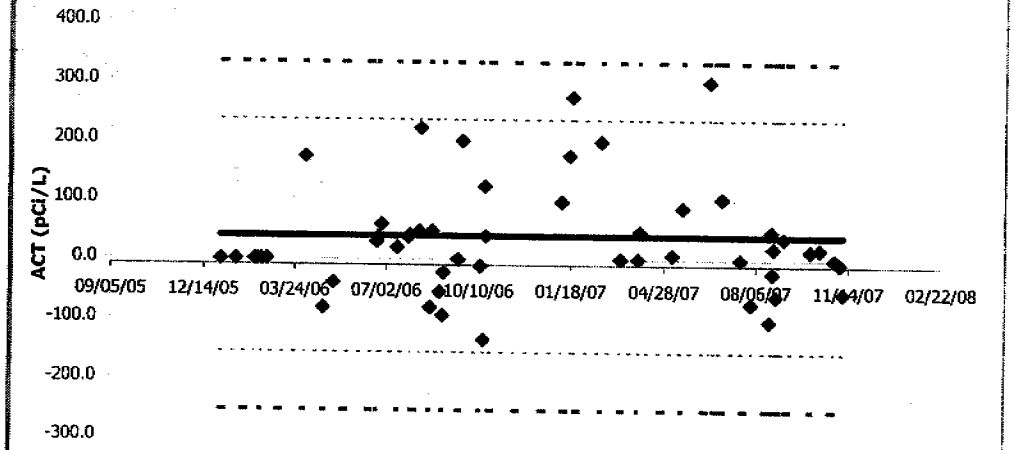
Average	STDEV	n	UCL	LCL
0.9120	0.1145	52	1.2500	0.7500

Tritium RER



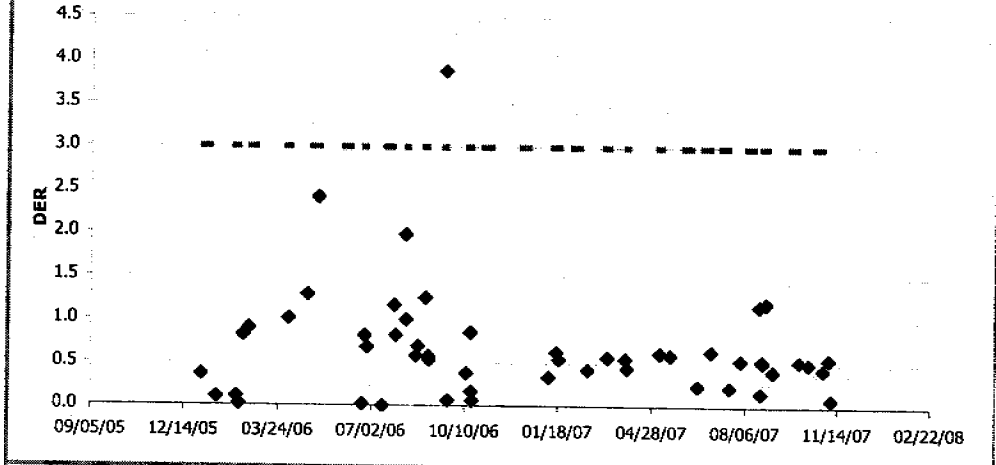
n	UCL	LCL
52	1.0000	-1.0000

Tritium Blank



Average	STDEV	n	UCL	LCL
39.2963	92.8811	52	332.0487	-253.4560

Tritium DER



n	UCL
52	3.0000

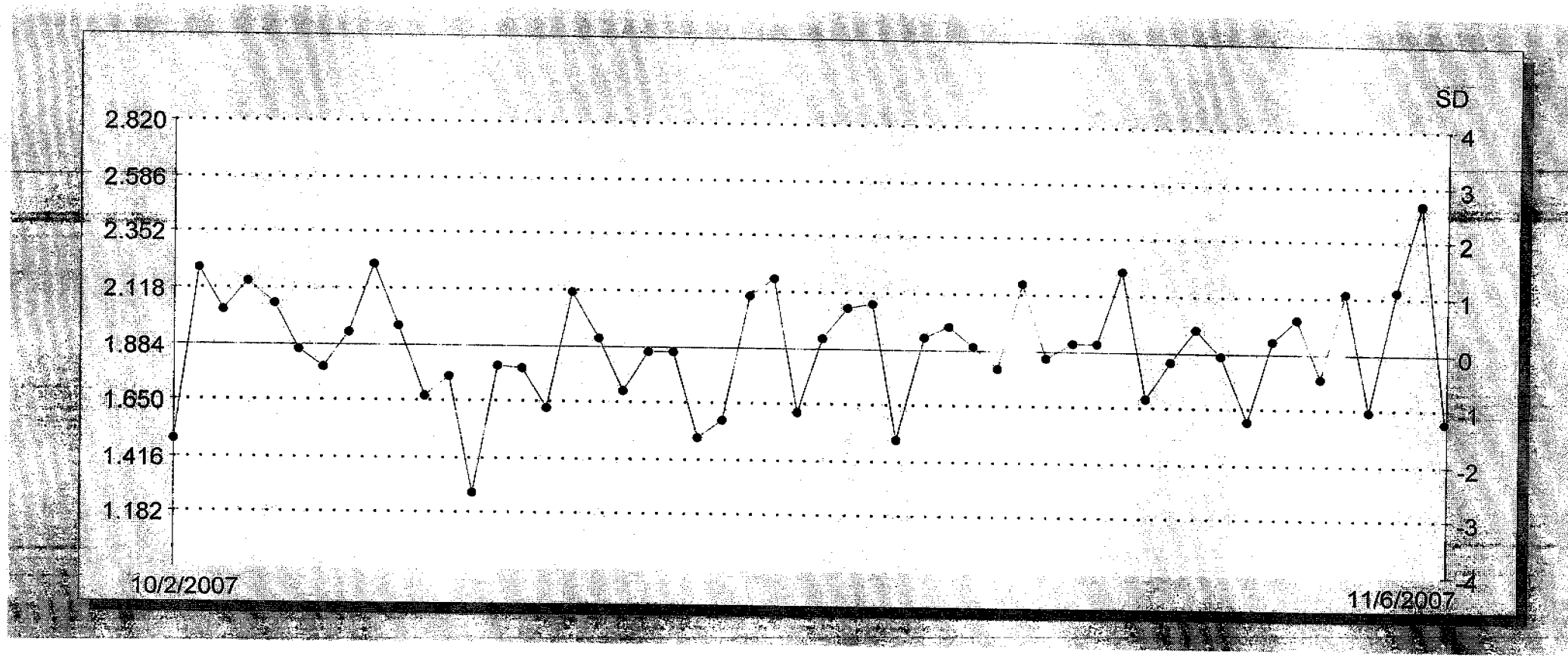
3H Background
Total # pts : 3950
Valid # pts : 52
Mean : 1.89
SD : 0.23

Date	Value	Valid Pt
Oct 02, 2007	1.49	X
Oct 02, 2007	2.20	X
Oct 02, 2007	2.03	X
Oct 02, 2007	2.15	X
Oct 02, 2007	2.05	X
Oct 03, 2007	1.86	X
Oct 03, 2007	1.79	X
Oct 03, 2007	1.93	X
Oct 03, 2007	2.22	X
Oct 03, 2007	1.97	X
Oct 03, 2007	1.67	X
Oct 03, 2007	1.76	X
Oct 03, 2007	1.27	X
Oct 03, 2007	1.80	X
Oct 03, 2007	1.79	X
Oct 04, 2007	1.62	X
Oct 12, 2007	2.11	X
Oct 12, 2007	1.92	X
Oct 24, 2007	1.69	X
Oct 24, 2007	1.87	X
Oct 29, 2007	1.86	X
Oct 29, 2007	1.51	X
Nov 01, 2007	1.58	X
Nov 01, 2007	2.10	X
Nov 03, 2007	2.18	X
Nov 03, 2007	1.62	X
Nov 03, 2007	1.92	X
Nov 03, 2007	2.05	X
Nov 03, 2007	2.07	X
Nov 03, 2007	1.51	X
Nov 03, 2007	1.93	X
Nov 04, 2007	1.99	X
Nov 04, 2007	1.90	X
Nov 04, 2007	1.80	X
Nov 04, 2007	2.16	X
Nov 04, 2007	1.85	X
Nov 04, 2007	1.92	X
Nov 04, 2007	1.92	X
Nov 04, 2007	2.21	X
Nov 04, 2007	1.69	X
Nov 04, 2007	1.85	X
Nov 04, 2007	1.98	X

Nov 04, 2007	1.88	X
Nov 04, 2007	1.60	X
Nov 04, 2007	1.93	X
Nov 04, 2007	2.02	X
Nov 05, 2007	1.78	X
Nov 05, 2007	2.14	X
Nov 05, 2007	1.64	X
Nov 05, 2007	2.15	X
Nov 05, 2007	2.51	X
Nov 06, 2007	1.59	X

3H Background

Total # pts	: 3950
Valid # pts	: 52
Mean	: 1.89
SD	: 0.23



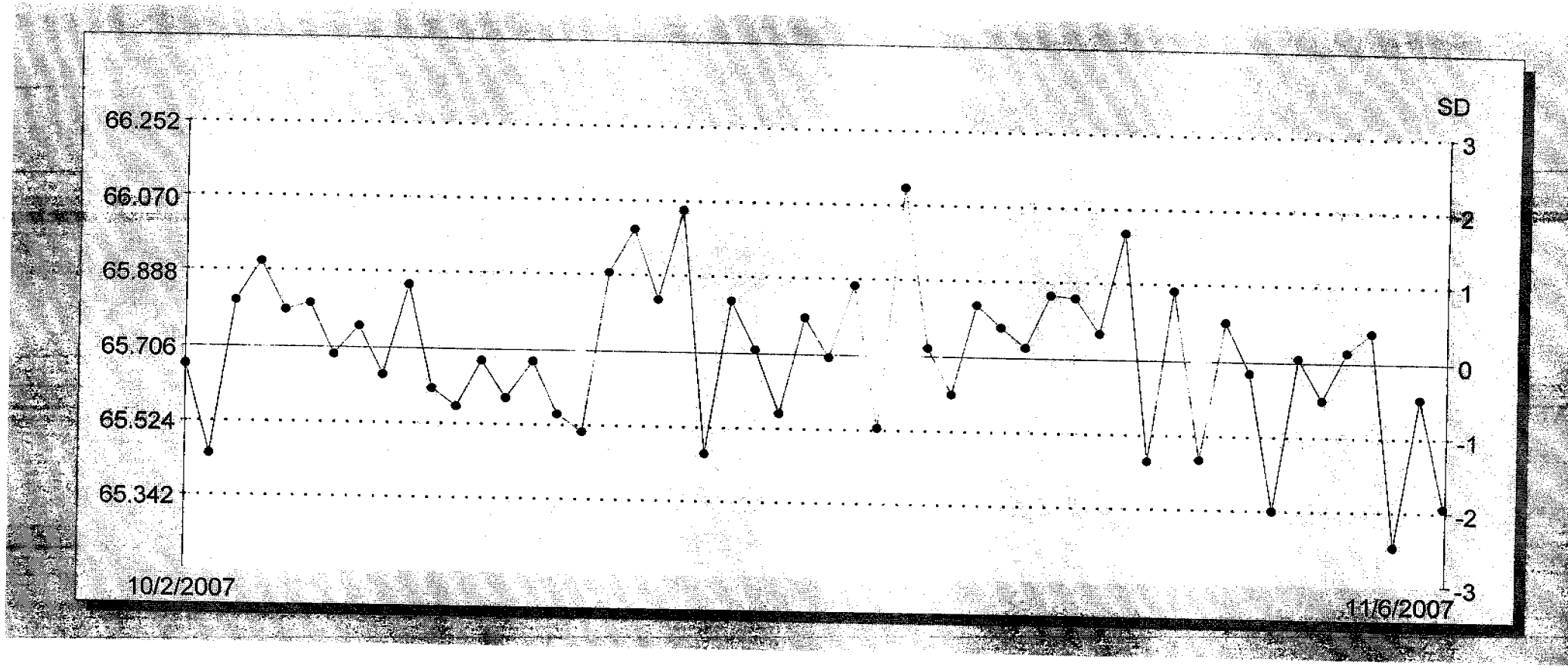
3H Efficiency
Total # pts : 3995
Valid # pts : 52
Mean : 65.71
SD : 0.18

Date	Value	Valid Pt
Oct 02, 2007	65.66	X
Oct 02, 2007	65.45	X
Oct 02, 2007	65.81	X
Oct 02, 2007	65.91	X
Oct 02, 2007	65.79	X
Oct 03, 2007	65.81	X
Oct 03, 2007	65.69	X
Oct 03, 2007	65.76	X
Oct 03, 2007	65.64	X
Oct 03, 2007	65.86	X
Oct 03, 2007	65.61	X
Oct 03, 2007	65.57	X
Oct 03, 2007	65.68	X
Oct 03, 2007	65.58	X
Oct 03, 2007	65.68	X
Oct 04, 2007	65.55	X
Oct 12, 2007	65.51	X
Oct 12, 2007	65.90	X
Oct 24, 2007	66.00	X
Oct 24, 2007	65.84	X
Oct 29, 2007	66.05	X
Oct 29, 2007	65.46	X
Nov 01, 2007	65.83	X
Nov 01, 2007	65.71	X
Nov 03, 2007	65.56	X
Nov 03, 2007	65.79	X
Nov 03, 2007	65.70	X
Nov 03, 2007	65.88	X
Nov 03, 2007	65.53	X
Nov 03, 2007	66.12	X
Nov 03, 2007	65.73	X
Nov 04, 2007	65.61	X
Nov 04, 2007	65.83	X
Nov 04, 2007	65.78	X
Nov 04, 2007	65.73	X
Nov 04, 2007	65.86	X
Nov 04, 2007	65.86	X
Nov 04, 2007	65.77	X
Nov 04, 2007	66.01	X
Nov 04, 2007	65.46	X
Nov 04, 2007	65.88	X
Nov 04, 2007	65.46	X

Nov 04, 2007	65.80	X
Nov 04, 2007	65.68	X
Nov 04, 2007	65.34	X
Nov 04, 2007	65.71	X
Nov 05, 2007	65.61	X
Nov 05, 2007	65.73	X
Nov 05, 2007	65.78	X
Nov 05, 2007	65.26	X
Nov 05, 2007	65.62	X
Nov 06, 2007	65.35	X

3H Efficiency

Total # pts	: 3995
Valid # pts	: 52
Mean	: 65.71
SD	: 0.18



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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

ARS AMERICAN RADIATION SERVICES, INC.

Add/Edit *Secondary Stds*

Planning

Planning Comments	**Create a dilution of S-0032 for use as LCS stock solution**
Target dpm/g (on dil. date)	**2.76**
Target Final volume mL	**2000**
Appx mass g of Parent Sol'n	[redacted]
Appx vol ml of Parent Sol'n	[redacted]
Expected Addition for Analysis g	**5**

Standards Preparation / Dilution

Secondary Solution #	[redacted]
Dilution Date (New Ref Date)	**04/27/2007 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[redacted]
Transfer Container, empty (g)	**17.8583**
Container Plus Solution (g)	**19.5702**
Net Wt Transferred (g)	[redacted]
DPM Xferred on 04/27/2007 00:00	[redacted]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[redacted]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**1997**
Dilution Final Volume ml (if measured)	**2000**
Final Dilution Density (g/mL)	[redacted]
Final Dilution Measured Mass g	[redacted]
Comments	**Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007**
Final Dilution dpm/g	[redacted]
Final Dil New Ref Date/Time	[redacted]

Parent Standard Data

Parent Solution Reference #	[redacted]
Parent Solution #	[redacted]
Parent Principal Radionuclide	[redacted] Half Life (Days) [redacted]
Parent Reference Date	[redacted]
Parent Certified Act	[redacted] Certi Act/Vol Units [redacted]
Parent Cert Act Uncert 1 Sigma	[redacted]
Parent Sp. Gravity G/Ml	[redacted]
Parent Supplier	[redacted]
Parent Date Recvd	[redacted]
Parent Received By	[redacted]
Parent Cert Exp Date	
Parent Matrix	[redacted]
Certified dpm/g At Ref Date	[redacted]
Certified dpm/g on 04/27/2007 00:00	[redacted]
Parent Comments	[redacted]
Parent Tech	[redacted]
Is_Primary	[redacted]
Is_LCS	[redacted]
Is_Tracer	[redacted]
Is_Calib	[redacted]

AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION- Rev 1

VERIFICATION DATE 5/18/2007 0:00
SOLUTION REFERENCE #

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.232E+01	4.500E+03

Radionuclide H-3 **Primary Dilution Reference Date** 4/27/2007 0:00

Primary Dilution Activity	1.25 pCi per gram ===> dpm/g	2.78
Verif. Date Decay Corrected	1.25 pCi per gram ===> dpm/g	2.77

Verification Trials

Trial ID#		
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000

Trial ID#		
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000

[illegible]	Source Counts	Count Time	Detector	Efficiency	[illegible]	[illegible]	Activity Result (dpm/g)	Activity Result (pCi/g)
S-0156-1	12.198	1	LSC	0.4395	6.143	5.0100	2.75	1.24
S-0156-2	11.748	1	LSC	0.4325	6.143	5.0100	2.59	1.17
S-0156-3	11.822	1	LSC	0.434	6.143	5.0000	2.62	1.18

Average	2.65	1.19
Two Sigma Uncertainty	0.17	0.08
Standard Deviation percent of known concentration	3.14%	3.14%
Target Activity	2.77	1.25
% Diff	-4.15	-4.15

Prepared & Counted By [signature]

Verification Expiration Date: May 17, 2008

Date: 5/18/2007 0:00

Verified & Approved By [signature]

Date: 5-18-07

QC Approval [signature]

Date: 5-18-07

Verifier's Name: Tony Byrd **Date:** 4/30/2007

Pipettor ID: CH84078

Pipettor ID:

Pipettor ID: CH80870

Standard ID: S-0112

Standard ID: S-0032 (S-0156)

	Weight of Standard		
15mL of Ultima Gold added to standard	S-0156-1	5.01 g	Balance ID: H1331122173560P
	S-0156-2	5.01 g	
	S-0156-3	5.00 g	
		g	
		g	
15mL of Ultima Gold added to standard	S-0112-1	1.03 g	Balance ID: H1331122173560P
	S-0112-2	1.08 g	
	S-0112-3	1.00 g	
		g	
		g	

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\20070517_1143.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for protocol 6.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
6	1	BACKGROUND	6.143	13.99	433.79	43.91	90.00	5/17/2007	11:48:37 AM	
6	2	S-0156-1 S-0032-1	12.198	27.76	434.24	43.95	90.00	5/17/2007	1:24:20 PM	
6	3	S-0156-2 S-0032-2	11.748	27.16	426.06	43.25	90.00	5/17/2007	3:00:09 PM	
6	4	S-0156-3 S-0032-3	11.822	27.24	427.76	43.40	90.00	5/17/2007	4:35:56 PM	

5-18-07

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Nancy M. Trahey, Chief
Standard Reference Materials Program

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πß gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πß liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, Uy, (%)				0.72

*Notes and references are on pages 5 and 6.

STD ID: S-0032

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Dilute S-0031 to form intermediate level solution for controls**
Target dpm/g (on dil. date)	**3367**
Target Final volume mL	**200**
Appx mass g of Parent Sol'n	[illegible]
Appx vol ml of Parent Sol'n	[illegible]
Expected Addition for Analysis g	
Standards Preparation / Dilution	
Secondary Solution #	S-0032
Dilution Date (New Ref Date)	**03/01/2006 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[illegible]
Transfer Container, empty (g)	**0**
Container Plus Solution (g)	**1.1544**
Net Wt Transferred (g)	[illegible]
DPM Xferred on 03/01/2006 00:00	[illegible]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[illegible]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**200.64**
Dilution Final Volume ml (if measured)	**200**
Final Dilution Density (g/mL)	[illegible]
Final Dilution Measured Mass g	[illegible]
Comments	**S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU**
Final Dilution dpm/g	[illegible]
Final Dil New Ref Date/Time	[illegible]

Parent Standard Data

Parent Solution Reference #	[illegible]		
Parent Solution #	[illegible]		
Parent Principal Radionuclide	[illegible]	Half Life (Days)	4499.8000000
Parent Reference Date	[illegible]		
Parent Certified Act	[illegible]	Certi Act/Vol Units	dpm / g
Parent Cert Act Uncert 1 Sigma	[illegible]		
Parent Sp. Gravity G/Ml	[illegible]		
Parent Supplier	[illegible]		
Parent Date Recvd	[illegible]		
Parent Received By	[illegible]		
Parent Cert Exp Date			
Parent Matrix	[illegible]		
Certified dpm/g At Ref Date	[illegible]		
Certified dpm/g on 03/01/2006 00:00	[illegible]		
Parent Comments	[illegible] intermediate dilution - information entered from [illegible] records 4/19/2006 RTS		
Parent Tech	[illegible]		
Is_Primary	FALSE		
Is_LCS	FALSE		
Is_Tracer	FALSE		
Is_Calib	FALSE		

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6803
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-001
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:23

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	13.497	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Lanoeigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-07-01792	**Request or PO Number:**	08-125
Client Sample ID:	MD21-07-6801	**ARS Sample ID:**	ARS1-07-01792-002
Sample Collection Date:	11/3/2007	**Date Received:**	11/06/07 10:15
Sample Matrix:	Aqueous	**Report Date:**	11/08/07 09:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	10.466	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Lanoigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6802
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-003
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	10.119	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Ramsigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6800
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-004
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	12.277	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Lanerigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6806
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-005
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	13.561	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Lanesigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6804
Sample Collection Date: 11/4/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-006
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:25

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	8.736	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Lasseigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-07-6818
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-007
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:25

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	11.126	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Ranseigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01792
Client Sample ID: MD21-08-8445
Sample Collection Date: 11/3/2007
Sample Matrix: Aqueous

Request or PO Number: 08-125
ARS Sample ID: ARS1-07-01792-008
Date Received: 11/06/07 10:15
Report Date: 11/08/07 09:25

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	11.061	NA	NA	NA		%	Moisture	11/6/2007	BS	NA

NOTES:

Lindsay Lareaigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-07-01792
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD521-07-6803	ARS1-07-01792-001	632	452	180	24.294	5.03	**13.4966667**
MD521-07-6801	ARS1-07-01792-002	605	454	151	15.804	5.038	**10.4662252**
MD521-07-6802	ARS1-07-01792-003	598	454	144	14.572	5.033	**10.1194444**
MD521-07-6800	ARS1-07-01792-004	609	449	161	19.766	5.042	**12.2770186**
MD521-07-6806	ARS1-07-01792-005	626	452	174	23.597	5.034	**13.5614943**
MD521-07-6807	ARS1-07-01792-006	613	454	159	13.891	5.043	**8.73647799**
MD521-07-6818	ARS1-07-01792-007	617	457	160	17.802	5.029	**11.12625**
MD521-07-8445	ARS1-07-01792-008	609	455	155	17.145	5.153	**11.0612903**

Balance ID: 0102/1125183449
Popettor ID: V97701

Signature _____ Date/ Time 11-6-07

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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory

Folder Duplicate

ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 07-01792 **Client Name:** LANL **Sample Matrix:** AQ

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Ravenaugh 11-8-07
Report Generator Signature Date

Management Review Signature 11-8-07
Date

LSC
Technical Review Checklist

ARS SDG 07-01792

Sample Matrix: Silica Gel Aliquot (Circle One): Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) (LCS) (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): Batch A: B07-03159 Batch B: _____ Batch C: _____

Test(s): LSC-A-001 _____ _____

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	Yes No (N/A)	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) NCR # (If initiated): _____

Chemist Signature 11-6-07 Date

N/A
Analyst Signature Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	(Yes) No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) NCR # (If initiated): _____

Analyst Signature 11-8-07 Date

Lindsay Ramsigno 11-8-07
Project Manager Signature Date

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: 07-03159

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)
7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated):		
Lindsay Ramsey 11-8-07 Project Manager Signature Date	B J Bl 11-8-07 QA Officer Signature Date	

GENERAL COMMENTS

DQO Report for SDG
ARS1-07-01792

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DilutionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

ARS FILE TRACKING SHEET

SDG: 07-01792

Task	Date / Time	Initials
Date & Time Received	11-6-07 / 10:15	SMC
Storage Location: E2	11-6-07 / 10:46	SMC
Chain of Custody Completed	11-6-07 / 10:46	SMC
Report Written	11-8-07 9:43	LMC
Laboratory Supervisor Checks Performed	see batch	NA
Quality Assurance Checks Performed on Report	11-8-07 10:02	JS
Laboratory Director Check Performed on Report	11-8-07 10:03	JS
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 11/06/07 Shipper's Name: LANL

Technician Performing Inspection: Shirley Clayton Initials: SMC

SDG: **07-01792**

External and Internal Surveys

Exposure Rate Meter: 44-2 104898 Serial No: 013681 Calibration. Due Date: 05/21/08

Count Rate Meter: 44-9 109043 Serial No: 108796 Calibration. Due Date: 05/21/08

Background Exposure Rate (μR/hr) 12 Background Count Rate (cpm): 50

Max. Exposure Rate on Shipping Containers Externals (Including Background): 17

Max. Removable Count Rate on Shipping Container Externals (Including Background): 50

Max. Removable Count Rate on Shipping Container Internals (Including Background): 60

Max. Removable Count Rate on Sample Container Externals (Including Background): 60

Max. Exposure Rate on Sample Containers Externals (Including Background): 17

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? Yes If yes, were the seals intact? Yes

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 8(eight)

Was the pH of Aqueous Samples < 2? N/A

If no, was the sample(s) checked for acid reactivity? N/A Was the sample(s) acidified to a pH < 2? N/A

Matrix of Samples: AQ

Volume of Each Sample Container: 100

Brief Description of Sample Material:

Inspectors' Comments

American Radiation Services
Baton Rouge Laboratory

Sample Check In Report
Samples

SDG **ARS1-07-01792**

Client Code	114	Los Alamos National Laboratory	TAT Days	3	Level	4
Profile Number	PN-00094	Location: Los Alamos	Date Received	11/6/2007	COC No 1	
Project Type	Environmental		Client Deadline	11/9/2007	COC No 2	
Comments			Internal Deadline	11/8/2007	COC No 3	
			Lab Deadline	11/6/2007	COC No 4	
			Workdays	TRUE		

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-07-6803	1	AQ	11/03/07 00:00	11/03/07 00:00	E2	H	90	5
002	MD21-07-6801	1	AQ	11/03/07 00:00	11/03/07 00:00	E2	H	90	5
003	MD21-07-6802	1	AQ	11/03/07 00:00	11/03/07 00:00	E2	H	90	5
004	MD21-07-6800	1	AQ	11/03/07 00:00	11/03/07 00:00	E2	H	90	5
005	MD21-07-6806	1	AQ	11/03/07 00:00	11/03/07 00:00	E2	H	90	5
006	MD21-07-6804	1	AQ	11/04/07 00:00	11/04/07 00:00	E2	H	90	5
007	MD21-07-6818	1	AQ	10/30/07 00:00	10/30/07 00:00	E2	H	90	5
008	MD21-08-8445	1	AQ	11/03/07 00:00	11/03/07 00:00	E2	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-07-01792
Analyses per Sample

Printed 11/6/2007 10:46 AM

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	8
001	X
002	X
003	X
004	X
005	X
006	X
007	X
008	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-07-01792**

Fraction	Client ID	Comments
001	MD21-07-6803	
002	MD21-07-6801	
003	MD21-07-6802	
004	MD21-07-6800	
005	MD21-07-6806	
006	MD21-07-6804	
007	MD21-07-6818	
008	MD21-08-8445	

ARS LABEL SHEET

SDG: 07-01792

Analysis

ARS1-07-01792 **LSC-A-001**

Los Alamos National Laboratory

Tritium in (Water [Aqueous, AQ])

This Test Requires 8 of 8 Samples

Scan Analysis Code Here	Dates for This Test
	Rcvd 11/6/2007
	Due 11/9/2007

SAMPLE CHECK-IN COMMENT SHEET

SDG: 07-01792

NOTES

COMPANY NAME: LANL SDG: 07-01792

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

Shipping Container Survey

Outside 17 µR/hr 50 cpm

Inside 60 cpm

Rcv'd By

Date Rcv'd

Time Rcv'd

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
# Samples Rcv	8 (eight)	
~~pH < 2~~	☐ Yes	☐ No

Intact ☐ Yes ☐ No

If No... ~~Acid Rxt~~ ☐ Yes ☐ No

Acid'fd < 2 ☐ Yes ☑ ~~No~~

Matrix [AF , (AQ) , BI , FE , LT , SI , SO , UR , VG]

Record Sample Label, Exposure Rate and Count Rate for EACH SAMPLE in the area below:

Sample Lable/Comments/Notes	Weight/ Volume	µR/hr	cpm
MD21-07-16803	100	16	60
16801		15	60
16802		17	60
16800		16	60
16806		17	60
16804		16	60
16818		16	60
MD21-08-8445		15	60

Surveyors' Name: Shirley Clayton Date/Time Surveyed 11-6-07 10:40

Monday, November 05, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-125C

REQUEST NUMBER: 08-125

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Barbara Zelenay
American Radiation Services
1903 Central Ave.
Los Alamos, NM 87544

TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6801	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6802	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6800	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6806	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6804	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-6445	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

[illegible] 11/5/07 1400 — Kaleah Harris [signature] 11/6/07 10:[illegible]

Printed Name Signature — Printed Name Signature

Printed Name Signature — Printed Name Signature

Printed Name Signature — Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, November 05, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-125C

REQUEST NUMBER: 08-125

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Barbara Zelenay

American Radiation Services

1903 Central Ave.

Los Alamos, NM 87544

TURNAROUND/REPORT DUE: 11/9/2007

TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6801	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6802	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6800	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6806	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6804	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-6445	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name: [illegible] Signature: [illegible] 5 Oct 1400

Printed Name: Kaleenah Harris Signature: Kaleenah Harris 11/5/07 1400

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, November 05, 2007

REQUEST NUMBER: 08-124

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-124
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
~~according to the schedule indicated:~~

SHIP DATE: 11/5/2007
TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-07-6800	GAS	11/3/2007		
		1	MD21-07-6801	GAS	11/3/2007		
		1	MD21-07-6802	GAS	11/3/2007		
		1	MD21-07-6803	GAS	11/3/2007		
		1	MD21-07-6804	GAS	11/4/2007		
		1	MD21-07-6806	GAS	11/3/2007		
		1	MD21-07-6818	GAS	10/30/2007		
		1	MD21-08-8445	GAS	11/3/2007		

Final Page of REQUEST NUMBER 08-124

Monday, November 05, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-124C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-124

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6801	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6802	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6800	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6806	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6804	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6818	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-8445	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature	11/5/07	1400	Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6800

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	UA	/
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	/
LOCATION ID:	21-25262	21.603059	FIELD QC TYPE:	NA	/
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	/
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		Port #6
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stevens **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 11/3/07 1025	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/3/07 1025
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6801

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0858 ~~0407~~ 11/3/07	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft ~~292.5~~ KR 11/8/07	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	234.5 ft ~~297.5~~ KR 11/8/07	SCREEN/PORT DESC:		port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 11/3/07 1025	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/3/07 10:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6802

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0907	SUB-MEDIA:	NA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	292.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	297.5 ft	SCREEN/PORT DESC:	Port #5	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6803

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/03/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0854	SUB-MEDIA:	NA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stenner **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Read	1025	(Signature)	10:25
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6804

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/04/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	NA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	11/4/07	(Printed Name)	11/4/07
(Signature) [signature]	9:50	(Signature) [signature]	9150
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6806

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/03/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0917	SUB-MEDIA:	NA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25262	21-603059	FIELD QC TYPE:	SD	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	372.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	377.5 ft	SCREEN/PORT DESC:		port 6
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6800

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 11/3/07 1025	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/3/07 10:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6818

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1635	SUB-MEDIA:	NA	OK
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	OK
LOCATION ID:	21-25264	21-603058	FIELD QC TYPE:	~~FD~~ EB	FB
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	OK
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	OK
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:		NA
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING: YES / (NO) / NA**

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	~~N~~ 11/3/07 Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6811
Nitrogen Field Blank of sample train.
Deionized water Blank of tritium column

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stern **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 11/3/07 1025	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 11/3/07 10:25
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-08-8445

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		11/3/07	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0930	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	21-603059	FIELD QC TYPE:	FB	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	NA	SAMPLE USAGE:	QC	"
BOTTOM DEPTH:	0	NA	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6800
Nitrogen Field Blank of Sample train
Deionized water Blank of tritium column

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stone **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reid	11/3/07	(Printed Name)	11/3/07
(Signature) Kevin Reid	1025	(Signature)	10:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Attachment C: Data-Validation Cover Sheet

☐ **Rejected Data**

Section I

Request Number: 08-124 Validation Date: 11/12/07 Lab Code: ATL

Contract Laboratory Name: Air Toxics Ltd. Validator: Mary Donivan

Organization: Analytical Quality Associates, Inc.

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

Other (describe): TO-15

Section II - Completeness Check

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

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

None

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): **(page 1 of 1)**

1. The ICAL curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, based on professional judgment.
2. The ICAL %RSD was >30% for hexachlorobutadiene. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
3. The mass spectra for 1,3-butadiene for samples MD21-07-6800, -6801, -6803 and -6804 and for 1,2,4-trimethylbenzene in samples-6801— 6804 did not meet method specifications. The associated sample results were detects and, thus, were qualified U,V8. It should be noted that the mass spectra for freon-12 for samples -6801 – 6803; for hexane for -6801, -6803 and -6806; for 2-butanone in -6806; for cis-1,2-dichloroethene in -6801, -6802 and -6806; for tetrahydrofuran in -6801 and -6802; for cyclohexane in -6801 and -6803; for benzene in -6800 — 6804 and -6806; for heptane in -6801, -6803 and -6804 and for ethyl benzene and 1,3,5-trimethylbenzene in -6802 did not meet method specifications due to co-elution with either another target analyte or an IS. No sample data were qualified, based on professional judgment.
4. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.

Reviewed By: JKF **Level:** I **Date:** 11/12/07

Validator's signature: Mary A. Donivan Date: 11/12/07

Attachment D: VOC Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	J, V9	UJ, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	R, V9a
☐	☒	☐	3. The instrument performance check was not present or fails acceptance criteria.	R, V16a	R, V16a
☐	☒	☐	4. The initial calibration was not present.	R, V16	R, V16
☒	☐	☐	5. The initial calibration did not have 5 calibration points and/or a low standard at or below the reporting limit.	R, V7	R, V7
☒	☐	☐	6. The initial calibration analyte %RSD was >30% or r^2 was <0.995.	J, V7a	UJ, V7a
☐	☒	☐	7. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	8. The CCV was not present.	R, V16	R, V16
☐	☒	☐	9. The continuing calibration analyte %D was >25%.	J, V7a	UJ, V7a
☐	☒	☐	10. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	11. The method blank was not reported.	R, V4b	R, V4b
☐	☒	☐	12. The analyte detected in the method blank and sample result for analyte was ≤ 5x/10x the amount in the blank.	U, V4	N/A
☐	☒	☐	13. The analyte detected in the method blank and sample result for analyte was >5x/10x the amount in the method blank.	J, V4a	N/A
☐	☒	☐	14. The IS information was not present.	R, V2a	R, V2a
☐	☐	☒	15. The IS areas in CCV were <50% or >200% of the previous day's IS areas.	J, V1	UJ, V1
☐	☒	☐	16. The IS retention times had shifted by >30 s.	J, V0	UJ, V0
☐	☒	☐	17. The sample IS areas were >200% of the daily CCV IS areas.	J, V1b	N/A
☐	☒	☐	18. The sample IS areas were <50% but are ≥10% of the daily CCV IS areas.	J, V1a	UJ, V1a
☐	☒	☐	19. The sample IS areas were <10% of the daily CCV IS areas.	J, V2	R, V2
☐	☐	☒	20. The surrogate information was not present.	R, V3f	R, V3f
☐	☐	☒	21. The surrogate %R was >UAL.	J+, V3	N/A
☐	☐	☒	22. The surrogate %R was <LAL but ≥10%.	J-, V3a	UJ, V3c
☐	☐	☒	23. The surrogate %R was <10%.	J-, V3b	R, V3d
☐	☐	☒	24. The surrogate recoveries were (1) <LAL and (1) >UAL.	J, V3e	UJ, V3e
☐	☒	☐	25. The LCS information was not present.	R, V12	R, V12
☐	☒	☐	26. The LCS %R was >UAL.	J+, V12d	N/A
☐	☒	☐	27. The LCS %R was <LAL but ≥10%.	J-, V12b	UJ, V12c
☐	☒	☐	28. The LCS %R was <10%.	J-, V12a	R, V12a
☐	☒	☐	29. The mass spectral information was missing.	R, V8a	R, V8a
☒	☐	☐	30. The mass spectrum did not meet method specifications.	U, V8	N/A
☐	☐	☒	31. The TICs were requested but not reported.	R, V11	R, V11
☐	☒	☐	32. The sample was diluted inappropriately.	N/A	UJ, V10
☐	☒	☐	33. Other obvious data-quality issues were identified.	__, V19	__, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6800

Lab ID#: 0711101-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110719**	**Date of Collection:**	**11/3/07**
Dil. Factor:	**1.68**	**Date of Analysis:**	**11/8/07 12:00 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	Not Detected	4.2	Not Detected
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	U,V8	0.84	0.96	1.8	2.1
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	2.1	6.4	16
1,1-Dichloroethene		0.84	8.3	3.3	33
Acetone		3.4	55	8.0	130
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	0.91	2.6	2.8
Methylene Chloride		0.84	210	2.9	720
Methyl tert-butyl ether		0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	1.2	2.5	3.7
cis-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran		0.84	Not Detected	2.5	Not Detected
Chloroform		0.84	110	4.1	540
1,1,1-Trichloroethane		0.84	1.5	4.6	8.2
Cyclohexane		0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.84	56	5.3	350
Benzene		0.84	1.0	2.7	3.3
1,2-Dichloroethane		0.84	2.7	3.4	11
Heptane		0.84	Not Detected	3.4	Not Detected
Trichloroethene		0.84	150	4.5	800
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	1.1	5.6	7.3
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone		0.84	Not Detected	3.4	Not Detected
Toluene		0.84	1.3	3.2	5.1
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	15	4.6	81
Tetrachloroethene		0.84	11	5.7	78

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6800

Lab ID#: 0711101-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110719**	**Date of Collection:**	**11/3/07**
Dil. Factor:	**1.68**	**Date of Analysis:**	**11/8/07 12:00 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	UJ,V7a	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol		84	Not Detected	110	Not Detected
n-Butanol		3.4	Not Detected	10	Not Detected
Propylene		3.4	23	5.8	40

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	95	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6801

Lab ID#: 0711101-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110720	**Date of Collection:**	11/3/07
Dil. Factor:	1.71	**Date of Analysis:**	11/8/07 12:50 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.86	1.5	4.2	7.4
Freon 114		0.86	Not Detected	6.0	Not Detected
Chloromethane		3.4	Not Detected	7.1	Not Detected
Vinyl Chloride		0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	U,V8	0.86	7.4	1.9	16
Bromomethane		0.86	Not Detected	3.3	Not Detected
Chloroethane		0.86	Not Detected	2.2	Not Detected
Freon 11		0.86	Not Detected	4.8	Not Detected
Ethanol		3.4	Not Detected	6.4	Not Detected
Freon 113		0.86	3.9	6.6	30
1,1-Dichloroethene		0.86	3.1	3.4	12
Acetone		3.4	240	8.1	560
2-Propanol		3.4	3.6	8.4	9.0
Carbon Disulfide		0.86	4.9	2.7	15
Methylene Chloride		0.86	20	3.0	68
Methyl tert-butyl ether		0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Hexane		0.86	2.2	3.0	7.7
1,1-Dichloroethane		0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.86	58	2.5	170
cis-1,2-Dichloroethene		0.86	0.92	3.4	3.6
Tetrahydrofuran		0.86	1.2	2.5	3.7
Chloroform		0.86	130	4.2	630
1,1,1-Trichloroethane		0.86	5.7	4.7	31
Cyclohexane		0.86	0.99	2.9	3.4
Carbon Tetrachloride		0.86	46	5.4	290
Benzene		0.86	2.6	2.7	8.2
1,2-Dichloroethane		0.86	Not Detected	3.5	Not Detected
Heptane		0.86	2.8	3.5	12
Trichloroethene		0.86	110	4.6	580
1,2-Dichloropropane		0.86	Not Detected	4.0	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.86	1.2	5.7	7.8
cis-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone		0.86	5.0	3.5	21
Toluene		0.86	6.6	3.2	25
trans-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane		0.86	Not Detected	4.7	Not Detected
Tetrachloroethene		0.86	36	5.8	250

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6801

Lab ID#: 0711101-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110720**	**Date of Collection:**	**11/3/07**
Dil. Factor:	**1.71**	**Date of Analysis:**	**11/8/07 12:50 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	21	14	86
Dibromochloromethane		0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)		0.86	Not Detected	6.6	Not Detected
Chlorobenzene		0.86	Not Detected	3.9	Not Detected
Ethyl Benzene		0.86	2.6	3.7	11
m,p-Xylene		0.86	8.0	3.7	35
o-Xylene		0.86	3.6	3.7	16
Styrene		0.86	Not Detected	3.6	Not Detected
Bromoform		0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane		0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene		0.86	5.0	4.2	24
1,3,5-Trimethylbenzene		0.86	2.3	4.2	11
1,2,4-Trimethylbenzene	U,V8	0.86	11	4.2	53
1,3-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene		0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	UJ,V7a	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol		86	Not Detected	110	Not Detected
n-Butanol		3.4	7.0	10	21
Propylene		3.4	120	5.9	210

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	104	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6802

Lab ID#: 0711101-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110717	Date of Collection:	11/3/07
Dil. Factor:	1.68	Date of Analysis:	11/7/07 10:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.8	4.2	9.2
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	7.1	6.4	55
1,1-Dichloroethene	0.84	6.7	3.3	27
Acetone	3.4	62	8.0	150
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	1.6	2.6	5.1
Methylene Chloride	0.84	110	2.9	380
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.8	2.5	8.4
cis-1,2-Dichloroethene	0.84	1.3	3.3	5.0
Tetrahydrofuran	0.84	0.91	2.5	2.7
Chloroform	0.84	140	4.1	680
1,1,1-Trichloroethane	0.84	4.7	4.6	26
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	99	5.3	620
Benzene	0.84	1.0	2.7	3.2
1,2-Dichloroethane	0.84	1.3	3.4	5.2
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	200	4.5	1100
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	1.4	5.6	9.2
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	1.6	3.2	6.0
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	5.0	4.6	27
Tetrachloroethene	0.84	29	5.7	200

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6802

Lab ID#: 0711101-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110717	**Date of Collection:**	11/3/07
Dil. Factor:	1.68	**Date of Analysis:**	11/7/07 10:25 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	Not Detected	3.6	Not Detected
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.84	0.90	4.1	4.4
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	UJ,V7a	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol		84	Not Detected	110	Not Detected
n-Butanol		3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	99	70-130

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11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6803

Lab ID#: 0711101-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110721	Date of Collection:	11/3/07
Dil. Factor:	1.79	Date of Analysis:	11/8/07 01:31 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.90	1.5	4.4	7.4
Freon 114		0.90	Not Detected	6.2	Not Detected
Chloromethane		3.6	Not Detected	7.4	Not Detected
Vinyl Chloride		0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	U,V8	0.90	5.1	2.0	11
Bromomethane		0.90	Not Detected	3.5	Not Detected
Chloroethane		0.90	Not Detected	2.4	Not Detected
Freon 11		0.90	Not Detected	5.0	Not Detected
Ethanol		3.6	Not Detected	6.7	Not Detected
Freon 113		0.90	2.4	6.8	19
1,1-Dichloroethene		0.90	1.8	3.5	7.4
Acetone		3.6	120	8.5	290
2-Propanol		3.6	4.4	8.8	11
Carbon Disulfide		0.90	1.6	2.8	5.1
Methylene Chloride		0.90	12	3.1	43
Methyl tert-butyl ether		0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Hexane		0.90	1.9	3.2	6.8
1,1-Dichloroethane		0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.90	19	2.6	55
cis-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.90	Not Detected	2.6	Not Detected
Chloroform		0.90	130	4.4	630
1,1,1-Trichloroethane		0.90	5.3	4.9	29
Cyclohexane		0.90	0.98	3.1	3.4
Carbon Tetrachloride		0.90	24	5.6	150
Benzene		0.90	1.7	2.8	5.5
1,2-Dichloroethane		0.90	Not Detected	3.6	Not Detected
Heptane		0.90	1.1	3.7	4.7
Trichloroethene		0.90	89	4.8	480
1,2-Dichloropropane		0.90	Not Detected	4.1	Not Detected
1,4-Dioxane		3.6	Not Detected	13	Not Detected
Bromodichloromethane		0.90	0.95	6.0	6.4
cis-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone		0.90	0.89 J	3.7	3.6 J
Toluene		0.90	1.7	3.4	6.6
trans-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane		0.90	Not Detected	4.9	Not Detected
Tetrachloroethene		0.90	51	6.1	340

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6803

Lab ID#: 0711101-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110721	**Date of Collection:**	11/3/07
Dil. Factor:	1.79	**Date of Analysis:**	11/8/07 01:31 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.6	Not Detected	15	Not Detected
Dibromochloromethane		0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)		0.90	Not Detected	6.9	Not Detected
Chlorobenzene		0.90	Not Detected	4.1	Not Detected
Ethyl Benzene		0.90	Not Detected	3.9	Not Detected
m,p-Xylene		0.90	Not Detected	3.9	Not Detected
o-Xylene		0.90	Not Detected	3.9	Not Detected
Styrene		0.90	Not Detected	3.8	Not Detected
Bromoform		0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane		0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene		0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene		0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.90	2.3	4.4	11
1,3-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene		0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene		3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	UJ,V7a	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane		3.6	Not Detected	13	Not Detected
Methanol		90	Not Detected	120	Not Detected
n-Butanol		3.6	Not Detected	11	Not Detected
Propylene		3.6	92	6.2	160

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	99	70-130

MAD
11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6804

Lab ID#: 0711101-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110722	**Date of Collection:**	11/4/07
Dil. Factor:	1.75	**Date of Analysis:**	11/8/07 02:10 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.88	1.2	4.3	6.0
Freon 114		0.88	Not Detected	6.1	Not Detected
Chloromethane		3.5	Not Detected	7.2	Not Detected
Vinyl Chloride		0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	U,V8	0.88	4.7	1.9	10
Bromomethane		0.88	Not Detected	3.4	Not Detected
Chloroethane		0.88	Not Detected	2.3	Not Detected
Freon 11		0.88	Not Detected	4.9	Not Detected
Ethanol		3.5	Not Detected	6.6	Not Detected
Freon 113		0.88	0.95	6.7	7.2
1,1-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Acetone		3.5	21	8.3	49
2-Propanol		3.5	Not Detected	8.6	Not Detected
Carbon Disulfide		0.88	3.7	2.7	12
Methylene Chloride		0.88	1.8	3.0	6.4
Methyl tert-butyl ether		0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Hexane		0.88	2.4	3.1	8.5
1,1-Dichloroethane		0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.88	1.4	2.6	4.3
cis-1,2-Dichloroethene		0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.88	Not Detected	2.6	Not Detected
Chloroform		0.88	170	4.3	840
1,1,1-Trichloroethane		0.88	3.7	4.8	20
Cyclohexane		0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride		0.88	9.9	5.5	62
Benzene		0.88	1.5	2.8	4.8
1,2-Dichloroethane		0.88	Not Detected	3.5	Not Detected
Heptane		0.88	1.5	3.6	6.2
Trichloroethene		0.88	130	4.7	710
1,2-Dichloropropane		0.88	Not Detected	4.0	Not Detected
1,4-Dioxane		3.5	Not Detected	13	Not Detected
Bromodichloromethane		0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene		0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone		0.88	Not Detected	3.6	Not Detected
Toluene		0.88	1.8	3.3	6.6
trans-1,3-Dichloropropene		0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane		0.88	Not Detected	4.8	Not Detected
Tetrachloroethene		0.88	200	5.9	1300

MAD
11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6804

Lab ID#: 0711101-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110722**	**Date of Collection:**	**11/4/07**
Dil. Factor:	**1.75**	**Date of Analysis:**	**11/8/07 02:10 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.5	Not Detected	14	Not Detected
Dibromochloromethane		0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)		0.88	Not Detected	6.7	Not Detected
Chlorobenzene		0.88	Not Detected	4.0	Not Detected
Ethyl Benzene		0.88	Not Detected	3.8	Not Detected
m,p-Xylene		0.88	1.3	3.8	5.6
o-Xylene		0.88	Not Detected	3.8	Not Detected
Styrene		0.88	Not Detected	3.7	Not Detected
Bromoform		0.88	0.99	9.0	10
1,1,2,2-Tetrachloroethane		0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene		0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.88	4.4	4.3	21
1,3-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene		0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene		3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	UJ,V7a	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane		3.5	Not Detected	12	Not Detected
Methanol		88	Not Detected	110	Not Detected
n-Butanol		3.5	Not Detected	11	Not Detected
Propylene		3.5	81	6.0	140

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	100	70-130

MAD
11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6806

Lab ID#: 0711101-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110723	**Date of Collection:**	11/3/07
Dil. Factor:	1.61	**Date of Analysis:**	11/8/07 02:58 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	0.89	4.0	4.4
Freon 114	0.80	Not Detected	5.6	Not Detected
Chloromethane	3.2	Not Detected	6.6	Not Detected
Vinyl Chloride	0.80	Not Detected	2.0	Not Detected
1,3-Butadiene	0.80	Not Detected	1.8	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.80	Not Detected	4.5	Not Detected
Ethanol	3.2	Not Detected	6.1	Not Detected
Freon 113	0.80	3.6	6.2	28
1,1-Dichloroethene	0.80	14	3.2	55
Acetone	3.2	60	7.6	140
2-Propanol	3.2	Not Detected	7.9	Not Detected
Carbon Disulfide	0.80	1.1	2.5	3.3
Methylene Chloride	0.80	300	2.8	1000
Methyl tert-butyl ether	0.80	Not Detected	2.9	Not Detected
trans-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Hexane	0.80	0.83	2.8	2.9
1,1-Dichloroethane	0.80	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	0.83	2.4	2.4
cis-1,2-Dichloroethene	0.80	1.2	3.2	4.6
Tetrahydrofuran	0.80	Not Detected	2.4	Not Detected
Chloroform	0.80	160	3.9	780
1,1,1-Trichloroethane	0.80	2.4	4.4	13
Cyclohexane	0.80	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.80	87	5.1	550
Benzene	0.80	1.5	2.6	4.7
1,2-Dichloroethane	0.80	3.5	3.2	14
Heptane	0.80	Not Detected	3.3	Not Detected
Trichloroethene	0.80	220	4.3	1200
1,2-Dichloropropane	0.80	Not Detected	3.7	Not Detected
1,4-Dioxane	3.2	Not Detected	12	Not Detected
Bromodichloromethane	0.80	1.6	5.4	10
cis-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
4-Methyl-2-pentanone	0.80	Not Detected	3.3	Not Detected
Toluene	0.80	2.0	3.0	7.5
trans-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.80	21	4.4	110
Tetrachloroethene	0.80	17	5.5	120

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6806

Lab ID#: 0711101-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110723**	**Date of Collection:**	**11/3/07**
Dil. Factor:	**1.61**	**Date of Analysis:**	**11/8/07 02:58 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.2	Not Detected	13	Not Detected
Dibromochloromethane		0.80	Not Detected	6.8	Not Detected
1,2-Dibromoethane (EDB)		0.80	Not Detected	6.2	Not Detected
Chlorobenzene		0.80	Not Detected	3.7	Not Detected
Ethyl Benzene		0.80	Not Detected	3.5	Not Detected
m,p-Xylene		0.80	Not Detected	3.5	Not Detected
o-Xylene		0.80	Not Detected	3.5	Not Detected
Styrene		0.80	Not Detected	3.4	Not Detected
Bromoform		0.80	Not Detected	8.3	Not Detected
1,1,2,2-Tetrachloroethane		0.80	Not Detected	5.5	Not Detected
4-Ethyltoluene		0.80	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene		0.80	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene		0.80	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene		0.80	Not Detected	4.8	Not Detected
1,4-Dichlorobenzene		0.80	0.81	4.8	4.9
alpha-Chlorotoluene		0.80	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene		0.80	Not Detected	4.8	Not Detected
1,2,4-Trichlorobenzene		3.2	Not Detected	24	Not Detected
Hexachlorobutadiene	UJ,V7a	3.2	Not Detected	34	Not Detected
Chlorodifluoromethane		3.2	Not Detected	11	Not Detected
Methanol		80	Not Detected	100	Not Detected
n-Butanol		3.2	Not Detected	9.8	Not Detected
Propylene		3.2	33	5.5	57

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	93	70-130

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11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6818

Lab ID#: 0711101-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110725	**Date of Collection:**	10/30/07
Dil. Factor:	1.61	**Date of Analysis:**	11/8/07 04:47 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	Not Detected	4.0	Not Detected
Freon 114	0.80	Not Detected	5.6	Not Detected
Chloromethane	3.2	Not Detected	6.6	Not Detected
Vinyl Chloride	0.80	Not Detected	2.0	Not Detected
1,3-Butadiene	0.80	Not Detected	1.8	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.80	Not Detected	4.5	Not Detected
Ethanol	3.2	Not Detected	6.1	Not Detected
Freon 113	0.80	Not Detected	6.2	Not Detected
1,1-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Acetone	3.2	Not Detected	7.6	Not Detected
2-Propanol	3.2	Not Detected	7.9	Not Detected
Carbon Disulfide	0.80	Not Detected	2.5	Not Detected
Methylene Chloride	0.80	Not Detected	2.8	Not Detected
Methyl tert-butyl ether	0.80	Not Detected	2.9	Not Detected
trans-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Hexane	0.80	Not Detected	2.8	Not Detected
1,1-Dichloroethane	0.80	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.80	Not Detected	2.4	Not Detected
Chloroform	0.80	Not Detected	3.9	Not Detected
1,1,1-Trichloroethane	0.80	Not Detected	4.4	Not Detected
Cyclohexane	0.80	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.80	Not Detected	5.1	Not Detected
Benzene	0.80	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.80	Not Detected	3.2	Not Detected
Heptane	0.80	Not Detected	3.3	Not Detected
Trichloroethene	0.80	Not Detected	4.3	Not Detected
1,2-Dichloropropane	0.80	Not Detected	3.7	Not Detected
1,4-Dioxane	3.2	Not Detected	12	Not Detected
Bromodichloromethane	0.80	Not Detected	5.4	Not Detected
cis-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
4-Methyl-2-pentanone	0.80	Not Detected	3.3	Not Detected
Toluene	0.80	Not Detected	3.0	Not Detected
trans-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.80	Not Detected	4.4	Not Detected
Tetrachloroethene	0.80	Not Detected	5.5	Not Detected

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11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6818

Lab ID#: 0711101-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110725**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.61**	**Date of Analysis:**	**11/8/07 04:47 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.2	Not Detected	13	Not Detected
Dibromochloromethane		0.80	Not Detected	6.8	Not Detected
1,2-Dibromoethane (EDB)		0.80	Not Detected	6.2	Not Detected
Chlorobenzene		0.80	Not Detected	3.7	Not Detected
Ethyl Benzene		0.80	Not Detected	3.5	Not Detected
m,p-Xylene		0.80	Not Detected	3.5	Not Detected
o-Xylene		0.80	Not Detected	3.5	Not Detected
Styrene		0.80	Not Detected	3.4	Not Detected
Bromoform		0.80	Not Detected	8.3	Not Detected
1,1,2,2-Tetrachloroethane		0.80	Not Detected	5.5	Not Detected
4-Ethyltoluene		0.80	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene		0.80	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene		0.80	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene		0.80	Not Detected	4.8	Not Detected
1,4-Dichlorobenzene		0.80	Not Detected	4.8	Not Detected
alpha-Chlorotoluene		0.80	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene		0.80	Not Detected	4.8	Not Detected
1,2,4-Trichlorobenzene		3.2	Not Detected	24	Not Detected
Hexachlorobutadiene	UJ,V7a	3.2	Not Detected	34	Not Detected
Chlorodifluoromethane		3.2	Not Detected	11	Not Detected
Methanol		80	Not Detected	100	Not Detected
n-Butanol		3.2	Not Detected	9.8	Not Detected
Propylene		3.2	Not Detected	5.5	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	97	70-130

MAD
11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-8445

Lab ID#: 0711101-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110726	**Date of Collection:**	11/3/07
Dil. Factor:	1.64	**Date of Analysis:**	11/8/07 05:30 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.82	Not Detected	4.0	Not Detected
Freon 114	0.82	Not Detected	5.7	Not Detected
Chloromethane	3.3	Not Detected	6.8	Not Detected
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
1,3-Butadiene	0.82	Not Detected	1.8	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.82	Not Detected	4.6	Not Detected
Ethanol	3.3	Not Detected	6.2	Not Detected
Freon 113	0.82	Not Detected	6.3	Not Detected
1,1-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Acetone	3.3	Not Detected	7.8	Not Detected
2-Propanol	3.3	Not Detected	8.1	Not Detected
Carbon Disulfide	0.82	Not Detected	2.6	Not Detected
Methylene Chloride	0.82	Not Detected	2.8	Not Detected
Methyl tert-butyl ether	0.82	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Hexane	0.82	Not Detected	2.9	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.82	Not Detected	2.4	Not Detected
Chloroform	0.82	Not Detected	4.0	Not Detected
1,1,1-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Cyclohexane	0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.82	Not Detected	5.2	Not Detected
Benzene	0.82	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.82	Not Detected	3.3	Not Detected
Heptane	0.82	Not Detected	3.4	Not Detected
Trichloroethene	0.82	Not Detected	4.4	Not Detected
1,2-Dichloropropane	0.82	Not Detected	3.8	Not Detected
1,4-Dioxane	3.3	Not Detected	12	Not Detected
Bromodichloromethane	0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	0.82	Not Detected	3.4	Not Detected
Toluene	0.82	Not Detected	3.1	Not Detected
trans-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Tetrachloroethene	0.82	Not Detected	5.6	Not Detected

MAD
11/12/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-8445

Lab ID#: 0711101-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7110726	**Date of Collection:**	11/3/07
Dil. Factor:	1.64	**Date of Analysis:**	11/8/07 05:30 AM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.3	Not Detected	13	Not Detected
Dibromochloromethane		0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)		0.82	Not Detected	6.3	Not Detected
Chlorobenzene		0.82	Not Detected	3.8	Not Detected
Ethyl Benzene		0.82	Not Detected	3.6	Not Detected
m,p-Xylene		0.82	Not Detected	3.6	Not Detected
o-Xylene		0.82	Not Detected	3.6	Not Detected
Styrene		0.82	Not Detected	3.5	Not Detected
Bromoform		0.82	Not Detected	8.5	Not Detected
1,1,2,2-Tetrachloroethane		0.82	Not Detected	5.6	Not Detected
4-Ethyltoluene		0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene		0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene		0.82	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene		0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene		0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene		3.3	Not Detected	24	Not Detected
Hexachlorobutadiene	UJ,V7a	3.3	Not Detected	35	Not Detected
Chlorodifluoromethane		3.3	Not Detected	12	Not Detected
Methanol		82	Not Detected	110	Not Detected
n-Butanol		3.3	Not Detected	9.9	Not Detected
Propylene		3.3	Not Detected	5.6	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	98	70-130

MAD
11/12/07

0711101

Monday, November 05, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-124C

REQUEST NUMBER: 08-124

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6801	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6802	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6800	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6806	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6804	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6818	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-6445	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[signature]	11/5/07	1400	A Scott	ATL	11/6/07	0645
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

0711101

Monday, November 05, 2007

REQUEST NUMBER: 08-124

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-124
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/5/2007
TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4 Days

Receipt
VTR 11/6/07

RAD SCREENING: Not Required
LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

need Results by 11/8 - 11/9

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-07-6800	GAS	11/3/2007	6.0"Hg	
		02A	1	MD21-07-6801	GAS	11/3/2007	6.5"Hg	
		03A	1	MD21-07-6802	GAS	11/3/2007	6.0"Hg	
		04A	1	MD21-07-6803	GAS	11/3/2007	7.5"Hg	
		05A	1	MD21-07-6804	GAS	11/4/2007	7.0"Hg	
		06A	1	MD21-07-6806	GAS	11/3/2007	5.0"Hg	
		07A	1	MD21-07-6818	GAS	10/30/2007	5.0"Hg	
		08A	1	MD21-08-8445	GAS	11/3/2007	5.5"Hg	

Final Page of REQUEST NUMBER 08-124

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

08-124

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0711101

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2. Sample Results and Raw Data (Organized by Sample)	5	266
a. ATL Sample Results Form		
b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
a. Method Blank (Results+ Raw Data)	267	274
b. Surrogate Recover Summary Form (If Applicable)	275	275
c. Internal Standard Summary Form (If Applicable)	276	276
d. Duplicate Results Summary Sheet	277	280
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data	--	--
f. Initial Calibration Data (Summary Sheet + Raw Data)	281	438
g. MDL Study (If Applicable)	--	--
h. Continuing Calibration Verification Data (Summary Sheet	439	462
i. Second Source LCS(Summary + Raw Data)	463	476
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c. Sample Log-In Sheet	513	513
d. Misc Shipping/Receiving Records (list of individual records)		
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5. Other Records (describe or list)		
a. Manual Spectral Defense	--	--
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d. Canister Dilution Factors	514	516
e. Laboratory Corrective Action Request	--	--
f. CAS Number Reference	517	518
g. Variance Table	--	--
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i. Data Review Check Sheet	519	519

Comments:

Completed by:

Kara McKiernan | Kara McKiernan / Document Control | 11/9/07

(Signature) | (Print Name & Title) | (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0711101

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-124
DATE RECEIVED:	11/06/2007	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	11/08/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	MD21-07-6800	Modified TO-15	6.0 "Hg
01AA	MD21-07-6800 Lab Duplicate	Modified TO-15	6.0 "Hg
02A	MD21-07-6801	Modified TO-15	6.5 "Hg
03A	MD21-07-6802	Modified TO-15	6.0 "Hg
04A	MD21-07-6803	Modified TO-15	7.5 "Hg
05A	MD21-07-6804	Modified TO-15	7.0 "Hg
06A	MD21-07-6806	Modified TO-15	5.0 "Hg
06AA	MD21-07-6806 Lab Duplicate	Modified TO-15	5.0 "Hg
07A	MD21-07-6818	Modified TO-15	5.0 "Hg
08A	MD21-08-8445	Modified TO-15	5.5 "Hg
09A	Lab Blank	Modified TO-15	NA
10A	CCV	Modified TO-15	NA
11A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda A. Frumarx DATE: 11/08/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0711101

LUMEN DATA VALIDATED

Eight 6 Liter Summa Canister samples were received on November 06, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

0002

E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-07-6800	0711101-01A	11/ 3/2007	11/ 6/2007	NA	5	11/ 8/2007	NA	Good
MD21-07-6800 Lab Dupli	0711101-01AA	11/ 3/2007	11/ 6/2007	NA	4	11/ 7/2007	NA	Good
MD21-07-6801	0711101-02A	11/ 3/2007	11/ 6/2007	NA	5	11/ 8/2007	NA	Good
MD21-07-6802	0711101-03A	11/ 3/2007	11/ 6/2007	NA	4	11/ 7/2007	NA	Good
MD21-07-6803	0711101-04A	11/ 3/2007	11/ 6/2007	NA	5	11/ 8/2007	NA	Good
MD21-07-6804	0711101-05A	11/ 4/2007	11/ 6/2007	NA	4	11/ 8/2007	NA	Good
MD21-07-6806	0711101-06A	11/ 3/2007	11/ 6/2007	NA	5	11/ 8/2007	NA	Good
MD21-07-6806 Lab Dupli	0711101-06AA	11/ 3/2007	11/ 6/2007	NA	5	11/ 8/2007	NA	Good
MD21-07-6818	0711101-07A	10/30/2007	11/ 6/2007	NA	9	11/ 8/2007	NA	Good
MD21-08-8445	0711101-08A	11/ 3/2007	11/ 6/2007	NA	5	11/ 8/2007	NA	Good
Lab Blank	0711101-09A	NA	NA	NA	NA	11/ 7/2007	NA	Good
CCV	0711101-10A	NA	NA	NA	NA	11/ 7/2007	NA	Good
LCS	0711101-11A	NA	NA	NA	NA	11/ 7/2007	NA	Good

Sample Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6800

Lab ID#: 0711101-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,3-Butadiene	0.84	0.96	1.8	2.1
Freon 113	0.84	2.1	6.4	16
1,1-Dichloroethene	0.84	8.3	3.3	33
Acetone	3.4	55	8.0	130
Carbon Disulfide	0.84	0.91	2.6	2.8
Methylene Chloride	0.84	210	2.9	720
2-Butanone (Methyl Ethyl Ketone)	0.84	1.2	2.5	3.7
Chloroform	0.84	110	4.1	540
1,1,1-Trichloroethane	0.84	1.5	4.6	8.2
Carbon Tetrachloride	0.84	56	5.3	350
Benzene	0.84	1.0	2.7	3.3
1,2-Dichloroethane	0.84	2.7	3.4	11
Trichloroethene	0.84	150	4.5	800
Bromodichloromethane	0.84	1.1	5.6	7.3
Toluene	0.84	1.3	3.2	5.1
1,1,2-Trichloroethane	0.84	15	4.6	81
Tetrachloroethene	0.84	11	5.7	78
Propylene	3.4	23	5.8	40

0006

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6800

Lab ID#: 0711101-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	Not Detected	4.2	Not Detected
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	0.96	1.8	2.1
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	2.1	6.4	16
1,1-Dichloroethene	0.84	8.3	3.3	33
Acetone	3.4	55	8.0	130
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	0.91	2.6	2.8
Methylene Chloride	0.84	210	2.9	720
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	1.2	2.5	3.7
cis-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	110	4.1	540
1,1,1-Trichloroethane	0.84	1.5	4.6	8.2
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	56	5.3	350
Benzene	0.84	1.0	2.7	3.3
1,2-Dichloroethane	0.84	2.7	3.4	11
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	150	4.5	800
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	1.1	5.6	7.3
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	1.3	3.2	5.1
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	15	4.6	81
Tetrachloroethene	0.84	11	5.7	78

0007

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6800

Lab ID#: 0711101-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	23	5.8	40

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	95	70-130

0008

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110719.d
Lab Smp Id: 0711101-01A
Inj Date : 08-NOV-2007 00:00
Operator : ab Inst ID: msd7.i
Smp Info : 200mL #34447
Misc Info : 6.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	606983	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	460931			28.66- 128.66	75.94
14.416	14.416 (1.000)	49	1223948			133.49- 233.49	201.64
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.185	16.158 (1.000)	114	2034114	25.0000		80.00- 120.00	100.00
16.185	16.158 (1.000)	88	312130			0.00- 65.23	15.34
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1365466	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	736629			4.70- 104.70	53.95
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	809098	24.8127	24.813	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	405877			2.91- 102.91	50.16
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1638151	22.6865	22.686	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	177406			0.00- 61.46	10.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1132748			19.18- 119.18	69.15
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	772656	23.7796	23.780	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	950480			73.89- 173.89	123.01
23.347	23.347 (1.093)	176	748091			48.20- 148.20	96.82
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	359276	13.7332	23.072	80.00- 120.00	100.00
5.645	5.617 (0.392)	42	215282			21.19- 121.19	59.92
5.645	5.617 (0.392)	39	327998			24.83- 124.83	91.29
22 1,3-Butadiene					CAS #: 106-99-0		
6.968	6.940 (0.483)	54	16200	0.57428	0.9648	80.00- 120.00	100.00
6.771	6.940 (0.470)	39	138973			55.97- 155.97	857.86
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	63425	1.27438	2.141	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	41322			13.12- 113.12	65.15
10.213	10.186 (0.708)	101	75353			67.28- 167.28	118.81
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.351	10.324 (0.718)	61	262279	4.95248	8.320	80.00- 120.00	100.00
10.351	10.324 (0.718)	96	159305			9.78- 109.78	60.74
10.351	10.324 (0.718)	98	99163			0.00- 88.25	37.81
45 Acetone					CAS #: 67-64-1		
10.517	10.490 (0.730)	58	540260	33.0042	55.447	80.00- 120.00	100.00
10.517	10.490 (0.730)	43	1823873			247.10- 347.10	337.59
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	54849	0.54284	0.9120	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	4828969	124.023	208.36	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	3317234			19.98- 119.98	68.69
11.485	11.457 (0.797)	51	1458066			0.00- 80.85	30.19
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	9840	0.74850	1.257	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	57940			412.48- 512.48	588.82
13.891	13.891 (0.964)	57	2914			0.00- 86.57	29.61
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	4041250	66.1263	111.09	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
82 Chloroform (continued)							
14.471	14.471 (1.004)	85	2626009			15.69- 115.69	64.98
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	55243	0.89763	1.508	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	35802			14.03- 114.03	64.81
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	1932034	33.4901	56.263	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	1982413			53.14- 153.14	102.61
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.959)	78	49533	0.61287	1.030	80.00- 120.00	100.00
15.522	15.522 (0.959)	77	11123			0.00- 71.87	22.46
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.966)	62	69622	1.62132	2.724	80.00- 120.00	100.00
15.632	15.633 (0.966)	64	22344			0.00- 82.89	32.09
101 Trichloroethene					CAS #: 79-01-6		
16.655	16.628 (1.029)	95	3179891	88.5733	148.80	80.00- 120.00	100.00
16.655	16.628 (1.029)	130	3191320			51.11- 151.11	100.36
16.655	16.628 (1.029)	97	2052846			15.04- 115.04	64.56
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.085)	83	40604	0.65144	1.094	80.00- 120.00	100.00
17.568	17.540 (1.085)	85	26205			14.03- 114.03	64.54
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	71101	0.80319	1.349	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	44640			12.90- 112.90	62.78
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	249496	8.82159	14.820	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	155401			12.40- 112.40	62.29
19.669	19.669 (0.921)	83	204906			32.55- 132.55	82.13
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	251012	6.84306	11.496	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	170477			21.07- 121.07	67.92
19.835	19.835 (0.929)	131	169767			18.33- 118.33	67.63

Data File: /chem/msd7.i/7-07nov.b/7110719.d
Report Date: 08-Nov-2007 11:44

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110719.d
Lab Smp Id: 0711101-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	606983	-12.72
97 1,4-Difluorobenze	2265681	1359409	3171953	2034114	-10.22
126 Chlorobenzene-d5	1765821	1059493	2472149	1365466	-22.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-07nov
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711101-01A
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.0"Hg ->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.813	99.25	70-130
$ 113 Toluene-d8	25.000	22.686	90.75	70-130
$ 137 Bromofluorobenzene	25.000	23.780	95.12	70-130

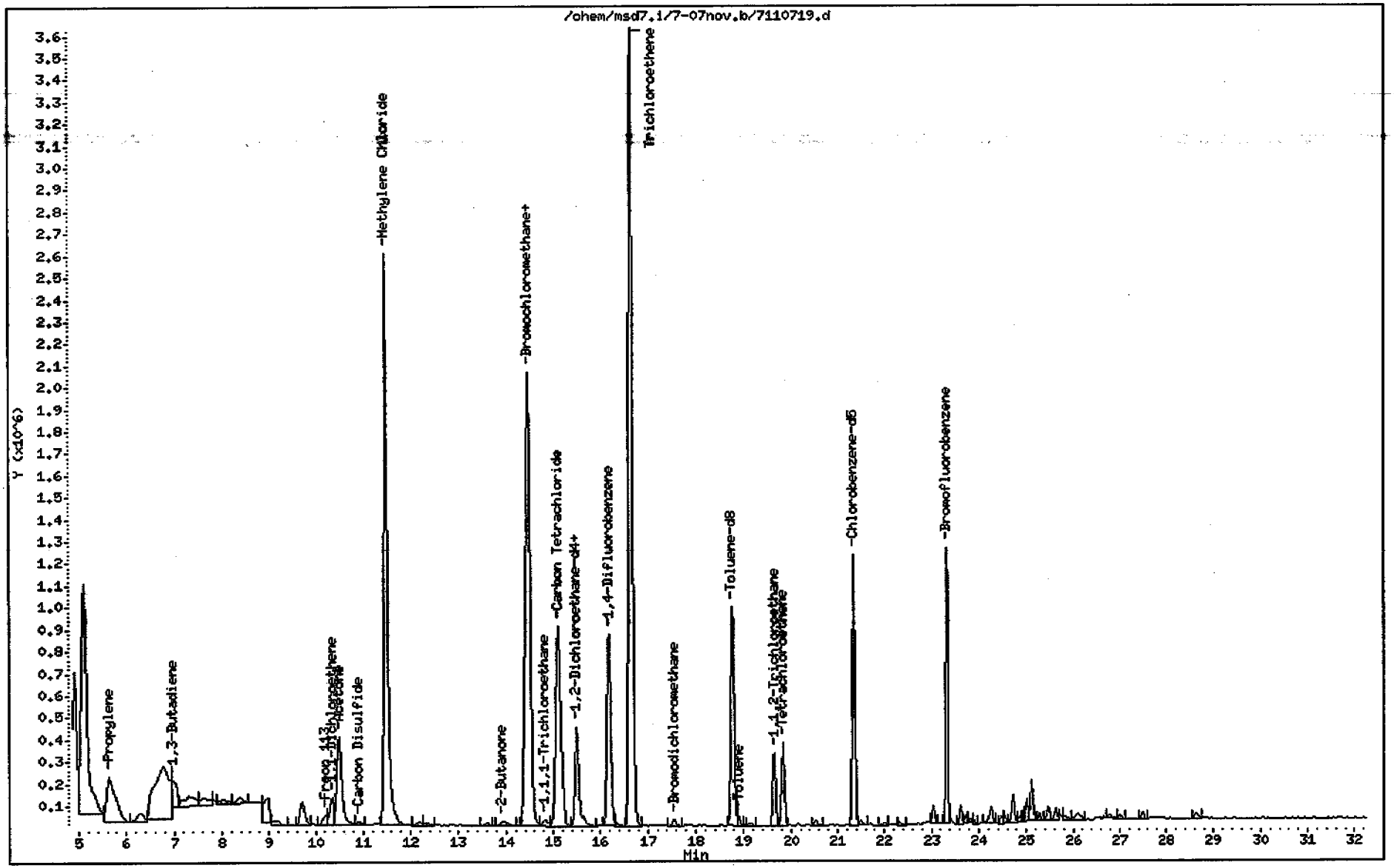
0014

Data File: /chem/msd7.i/7-07nov.b/7110719.d
Date : 08-NOV-2007 00:00
Client ID:
Sample Info: 200mL #34447

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

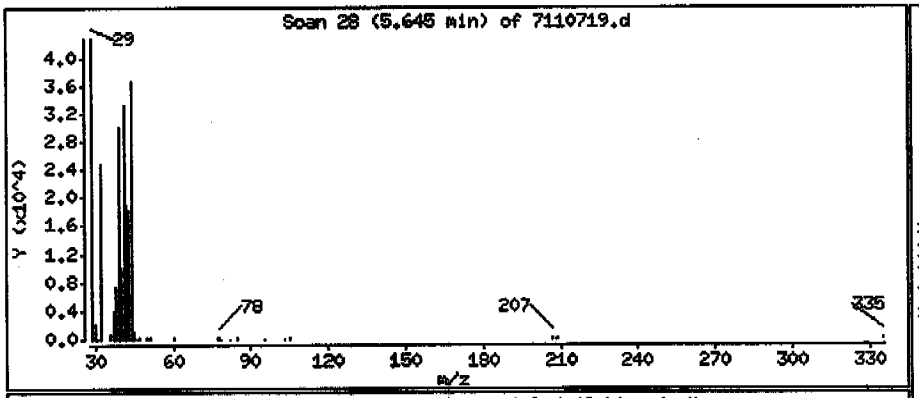
Operator: ab

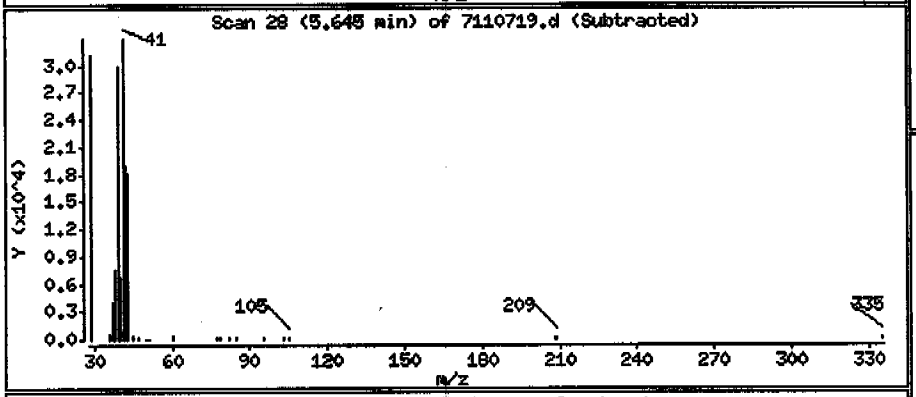
Column phase: RTx-624

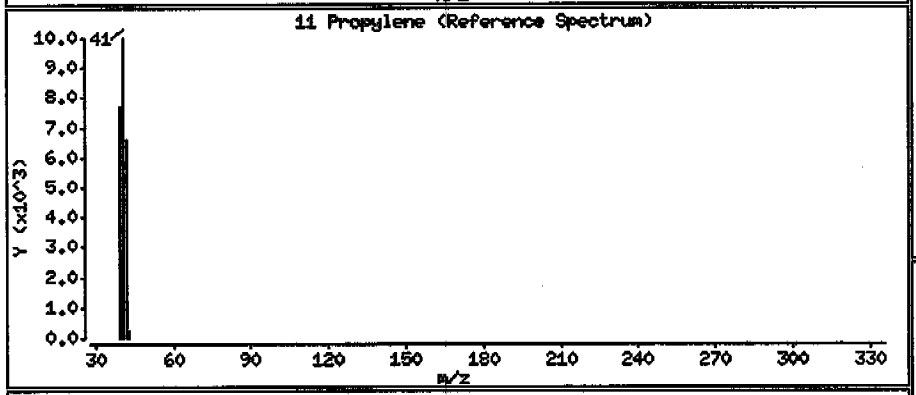
Column diameter: 0.53

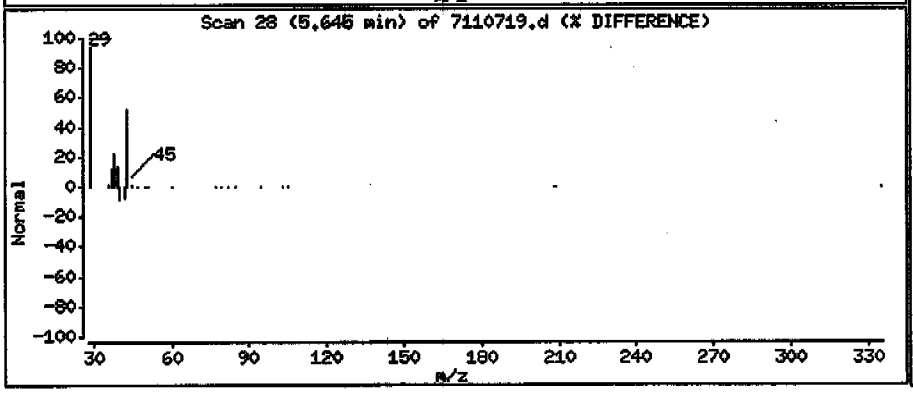
11 Propylene

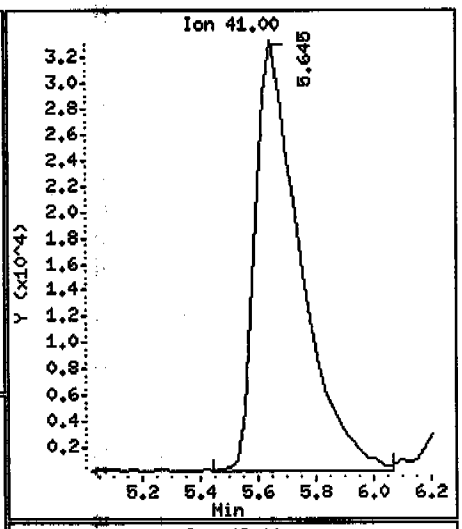
Concentration: 23.072 PPBV

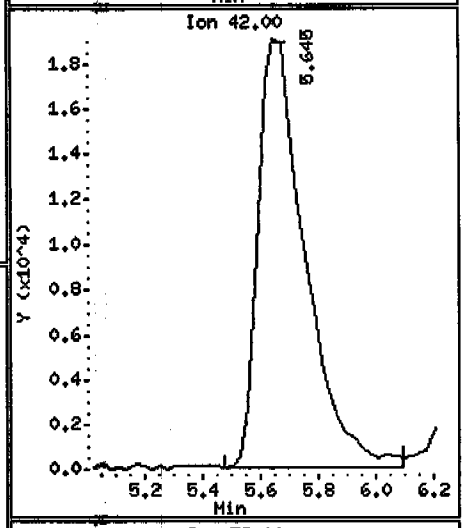


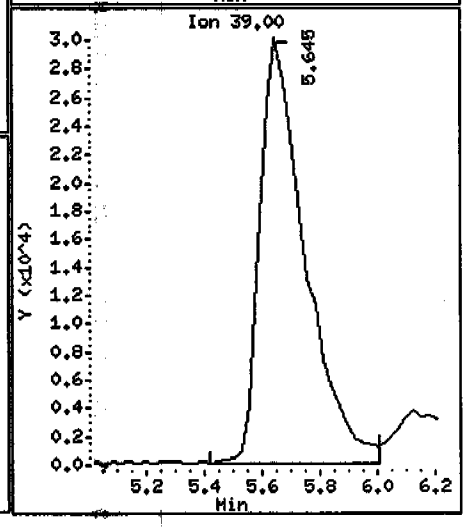












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

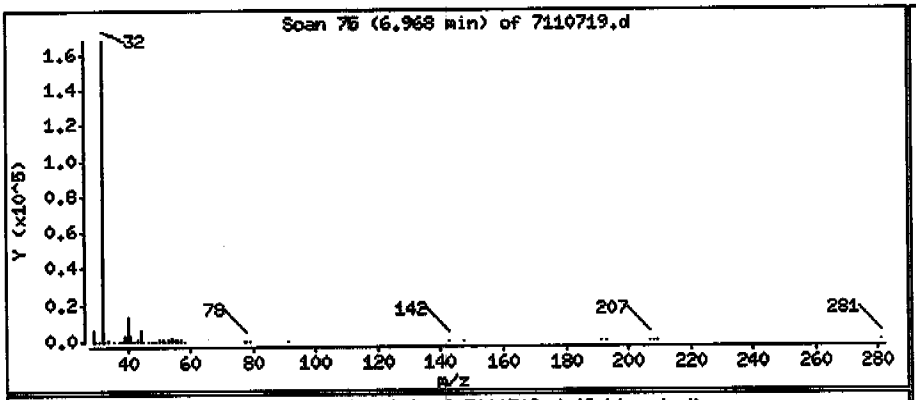
Operator: ab

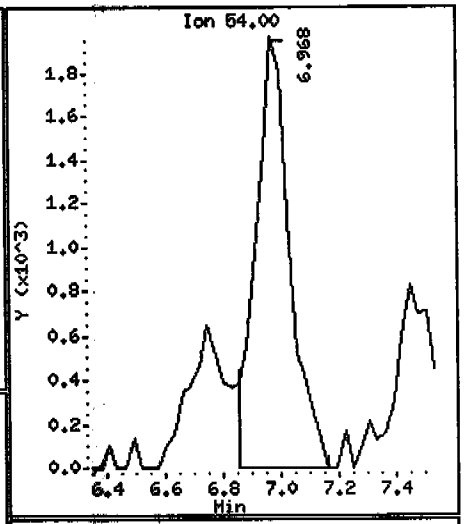
Column phase: RTx-624

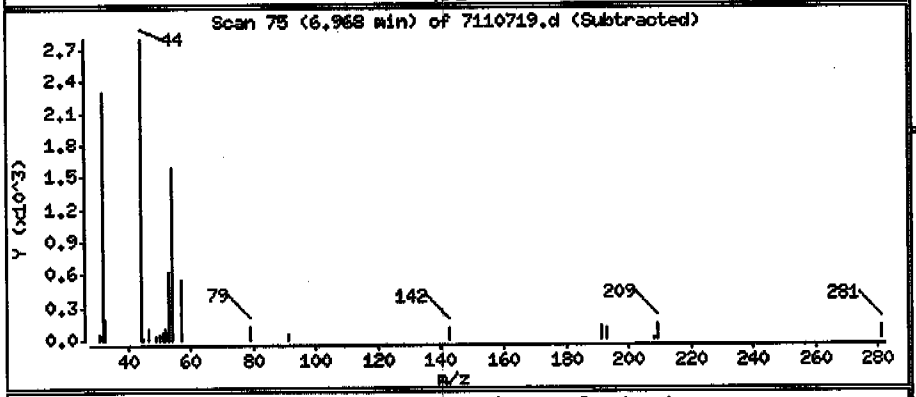
Column diameter: 0.53

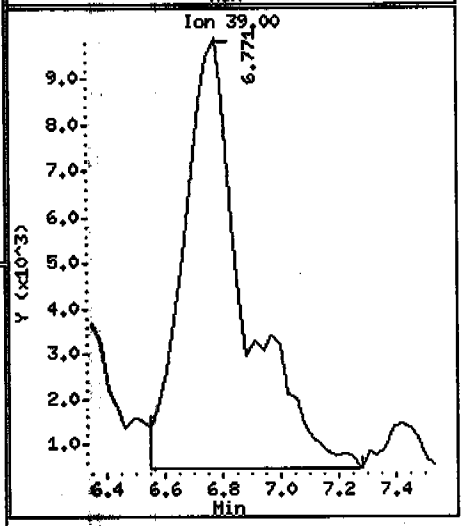
22 1,3-Butadiene

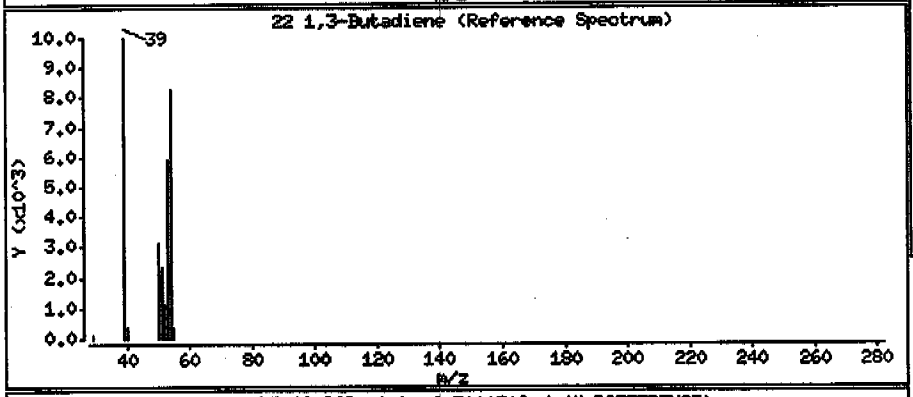
Concentration: 0.9648 PPBV

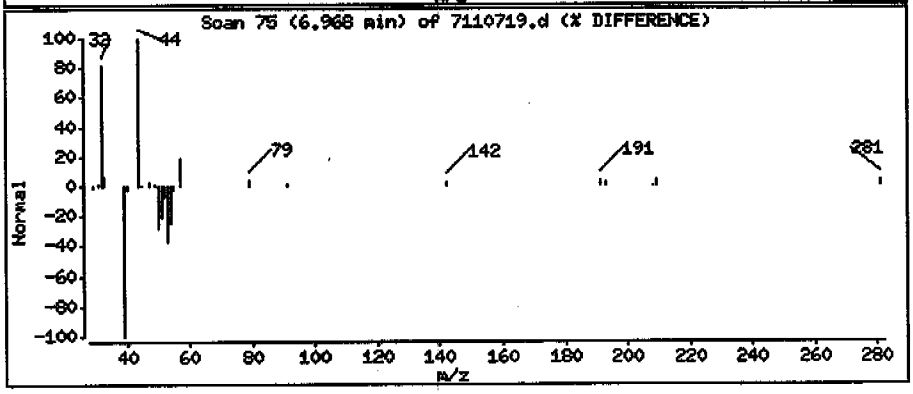












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Sample Info: 200mL #34447

Instrument: msd7.i

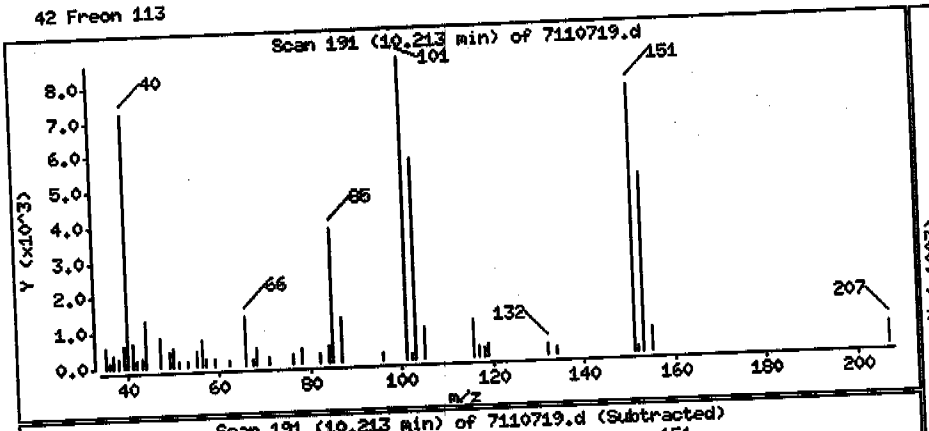
Operator: ab

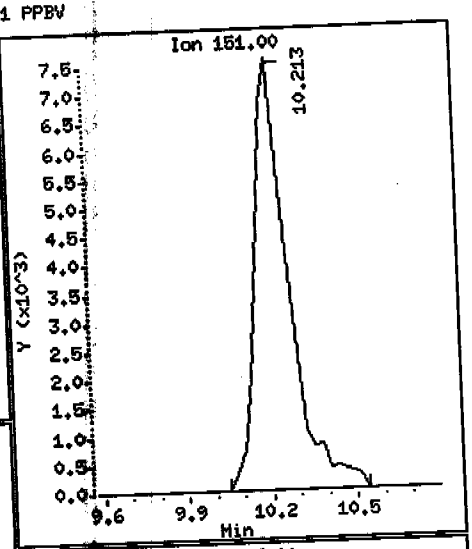
Column diameter: 0.53

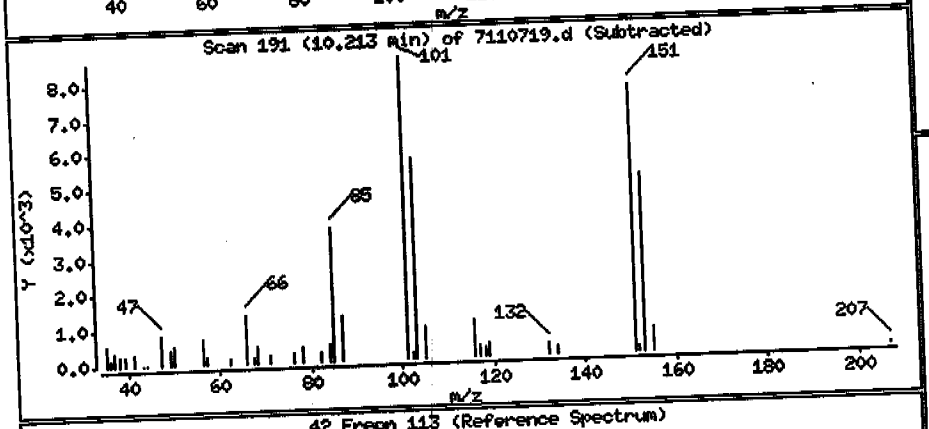
Column phase: RTx-624

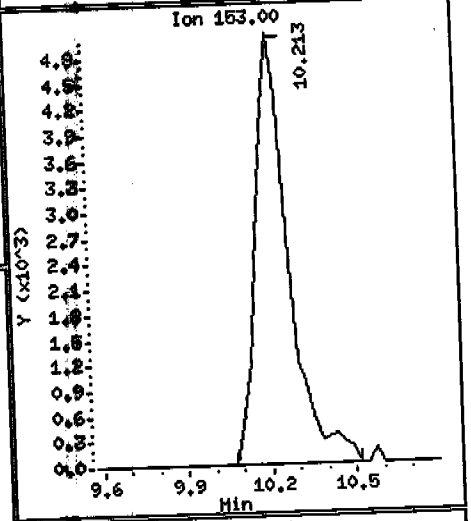
Concentration: 2.141 PPBV

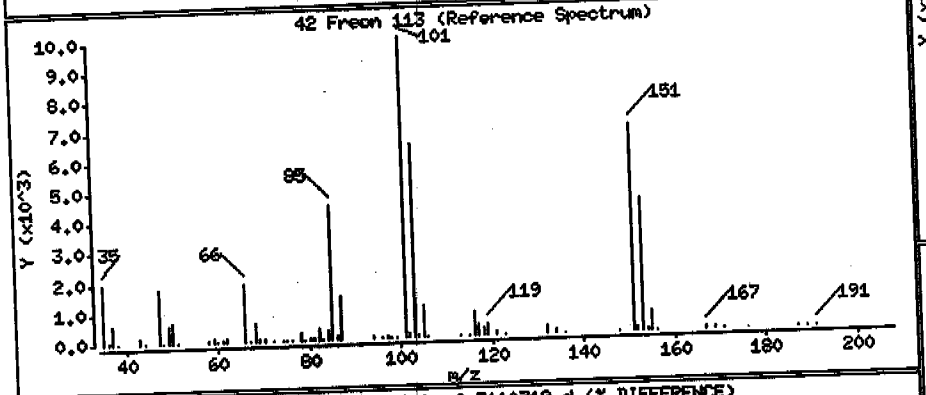
42 Freon 113

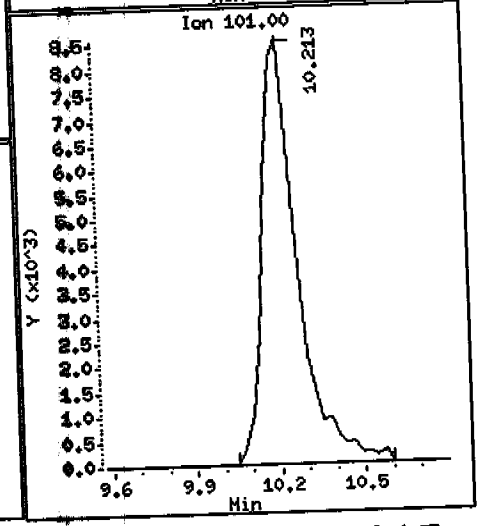


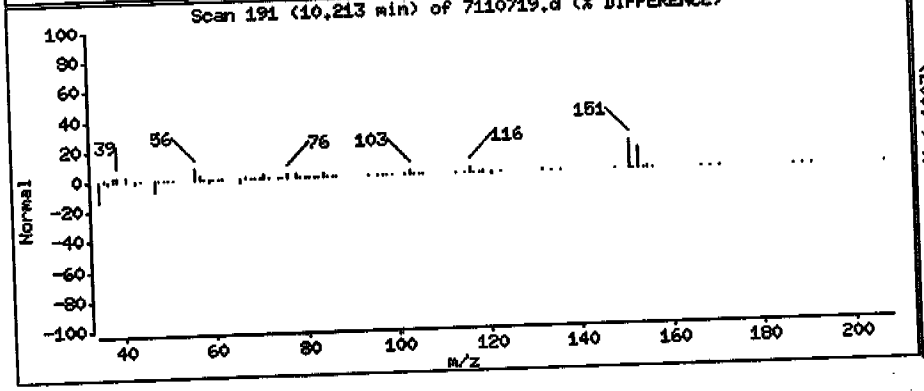












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Sample Info: 200mL #34447

Instrument: msd7.i

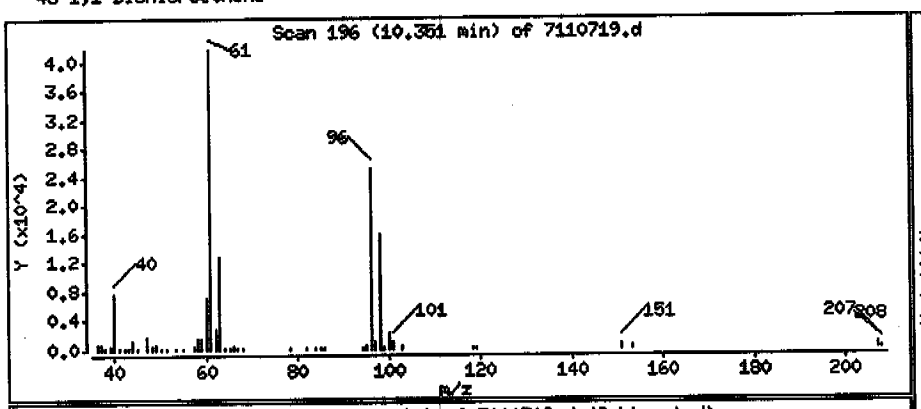
Operator: ab

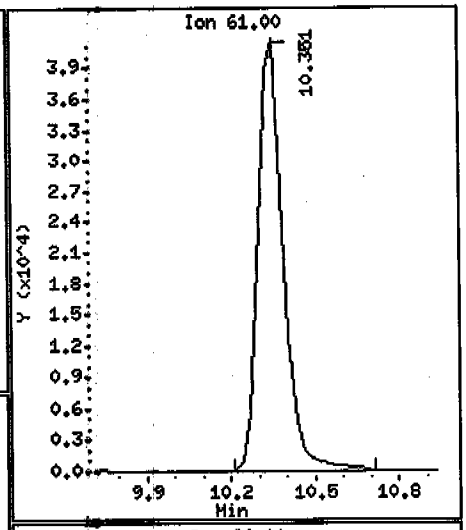
Column phase: RTx-624

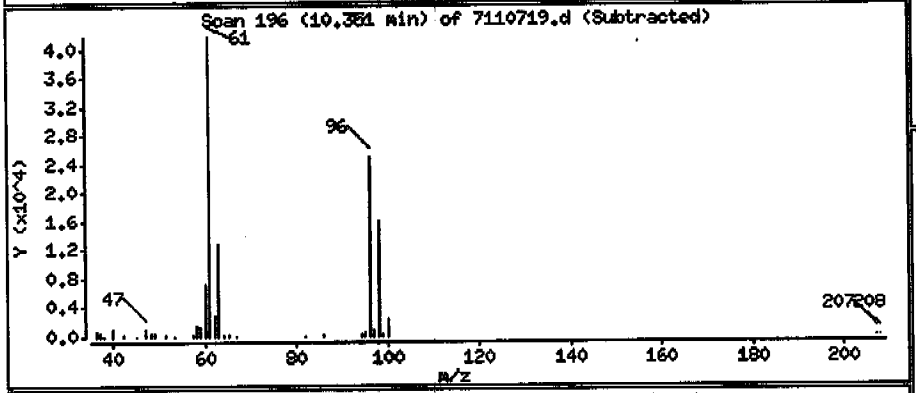
Column diameter: 0.53

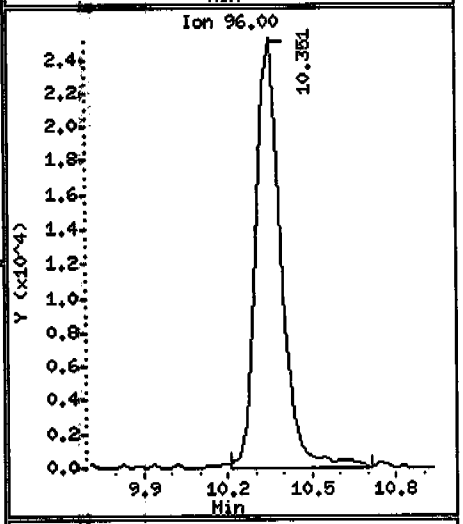
43 1,1-Dichloroethene

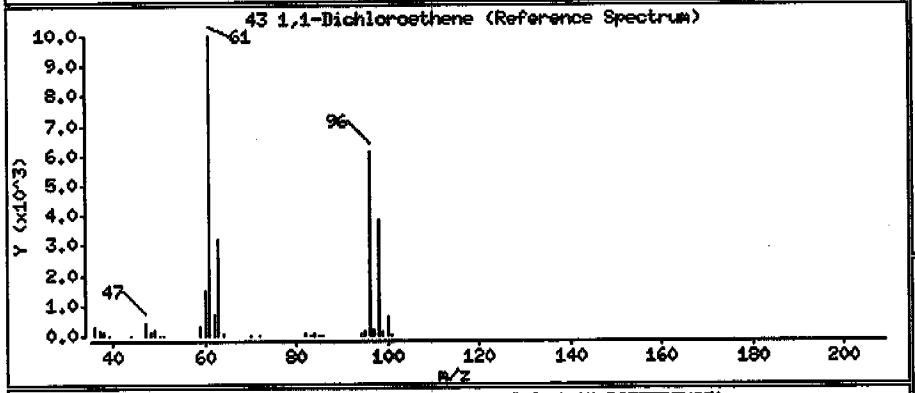
Concentration: 8.320 PPBV

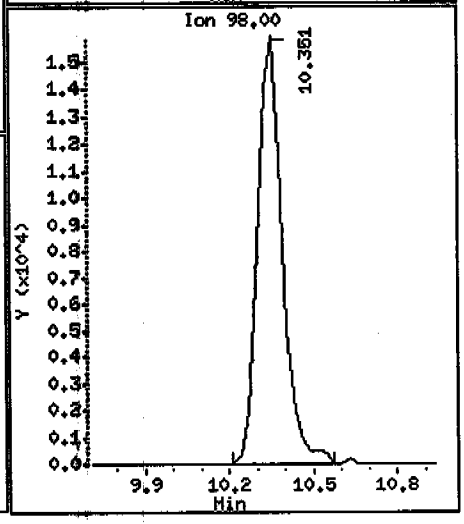


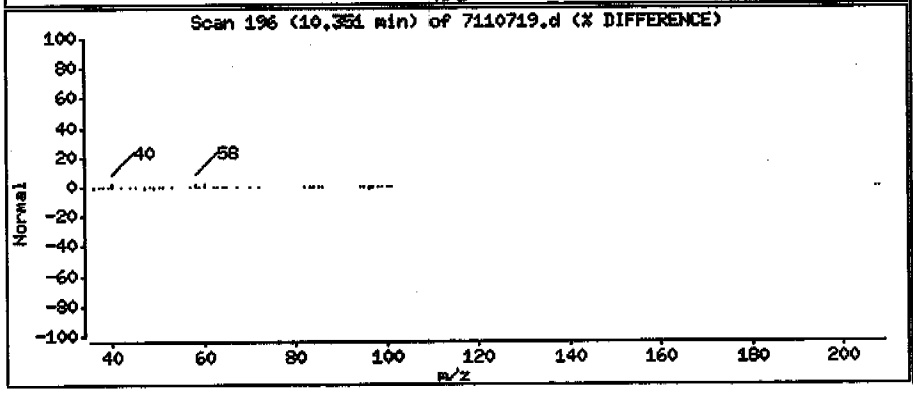












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Sample Info: 200mL #34447

Instrument: msd7.i

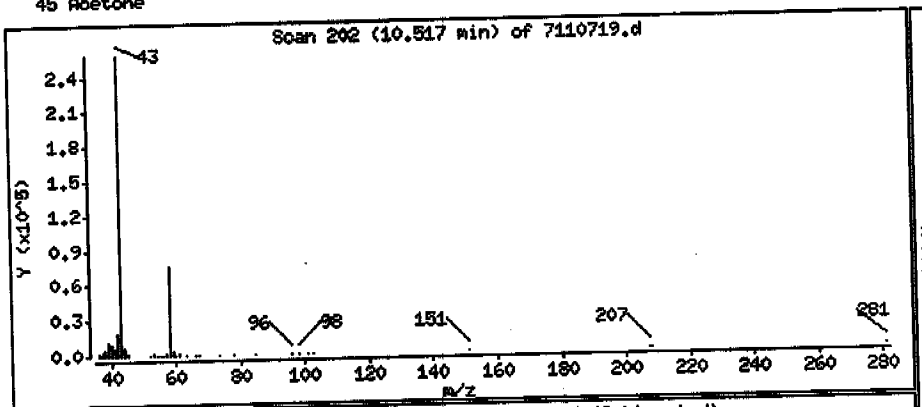
Operator: ab

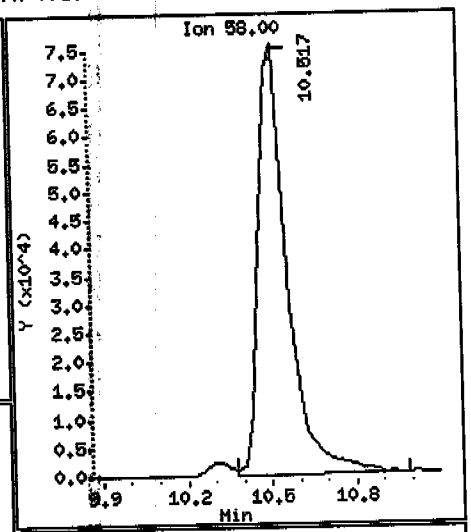
Column phase: RTx-624

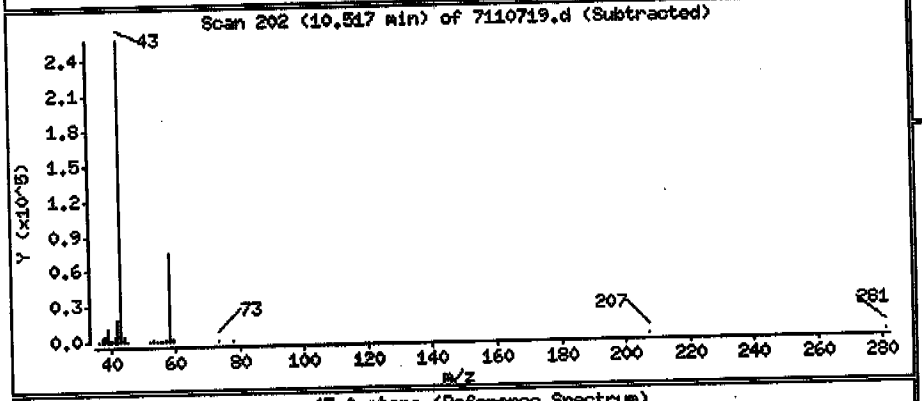
Column diameter: 0.53

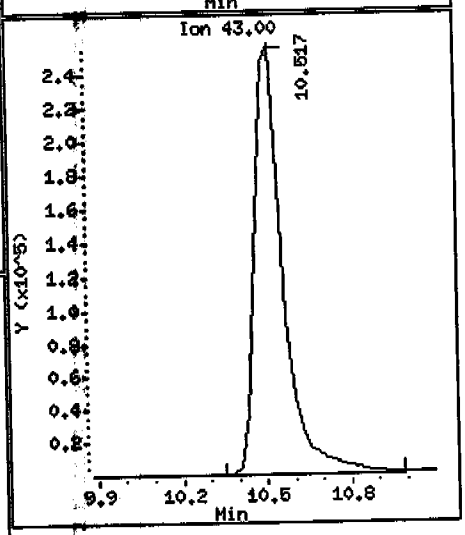
Concentration: 55.447 PPBV

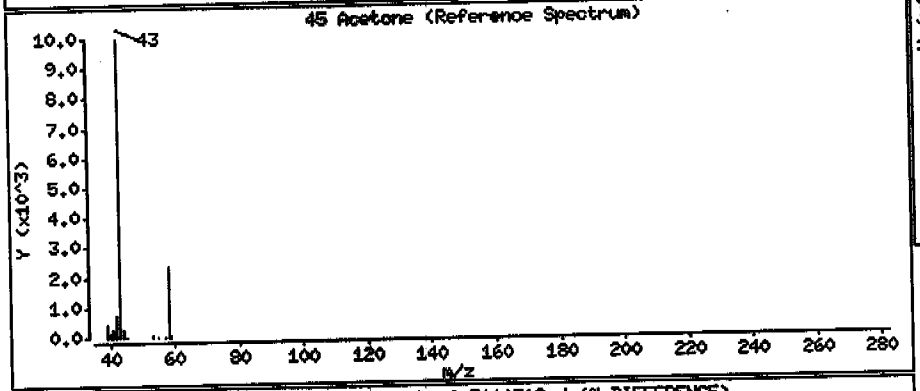
45 Acetone

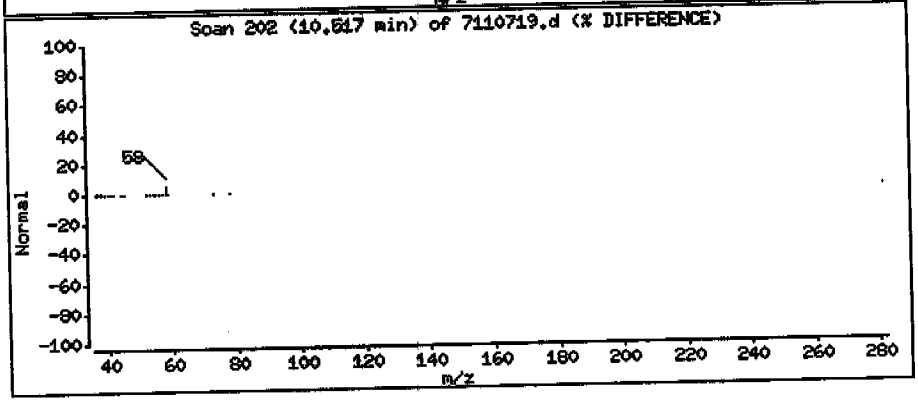












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

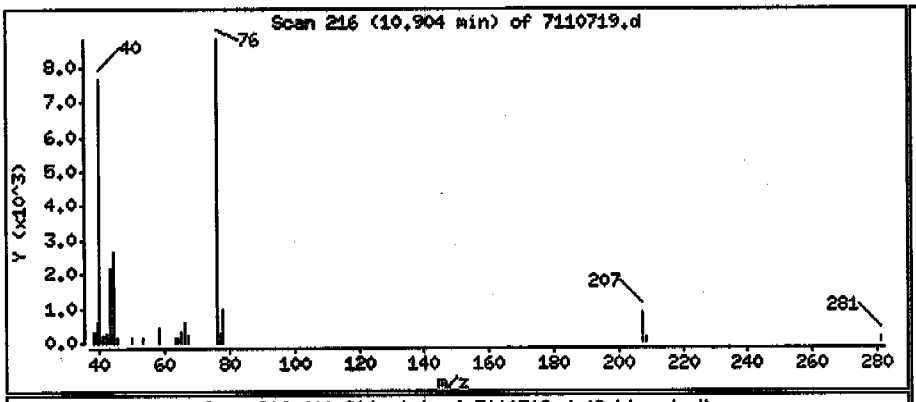
Operator: ab

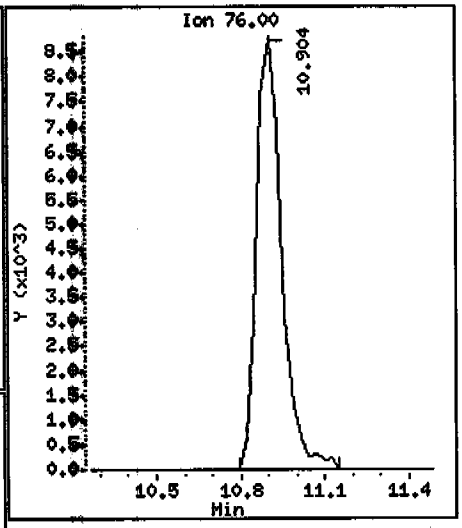
Column phase: RTx-624

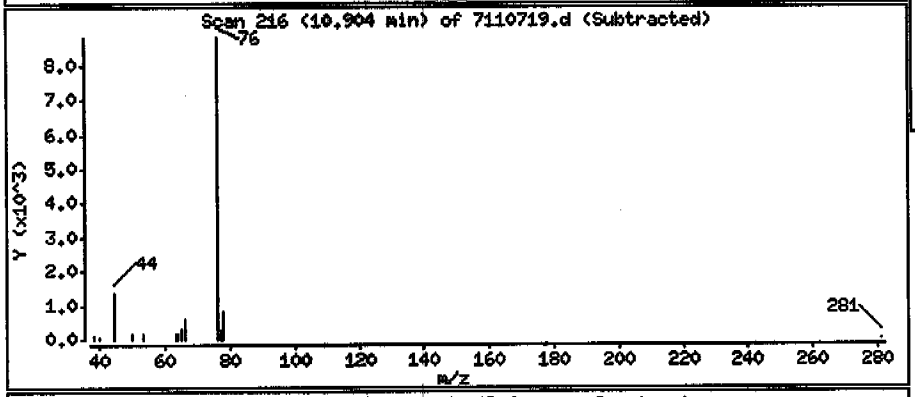
Column diameter: 0.53

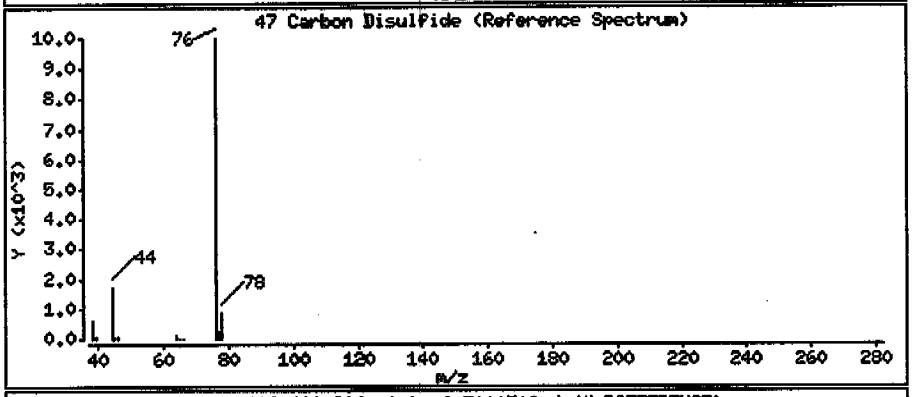
47 Carbon Disulfide

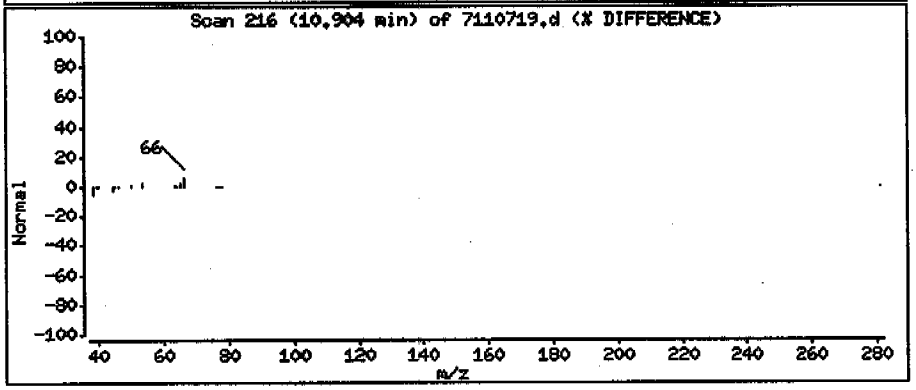
Concentration: 0.9120 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

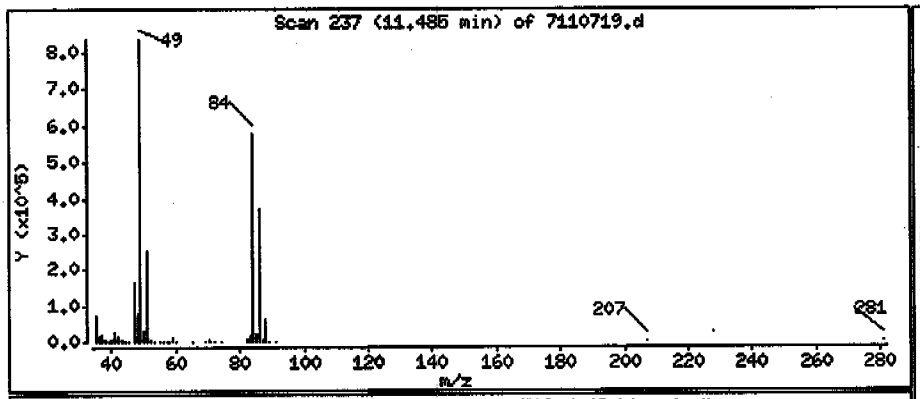
Operator: ab

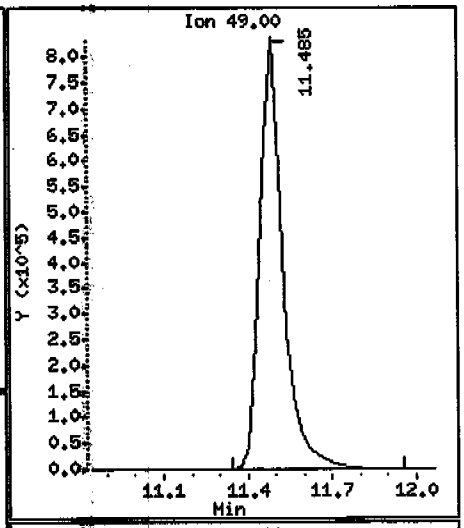
Column phase: RTx-624

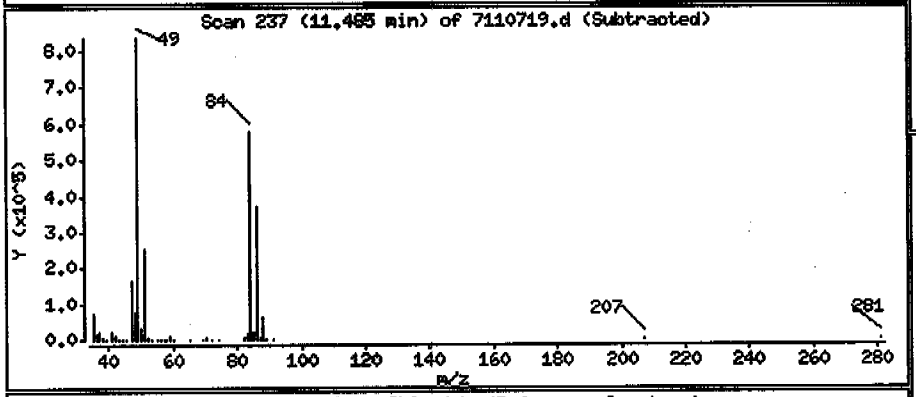
Column diameter: 0.53

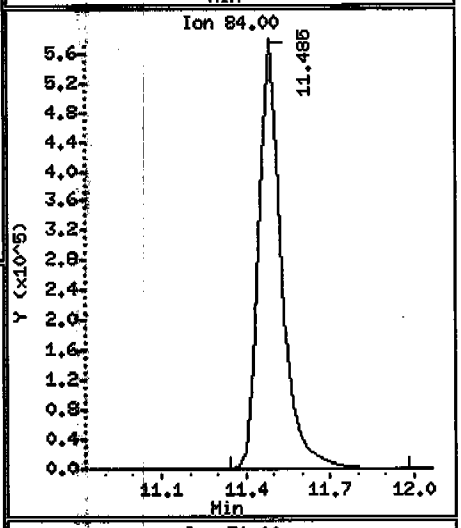
54 Methylene Chloride

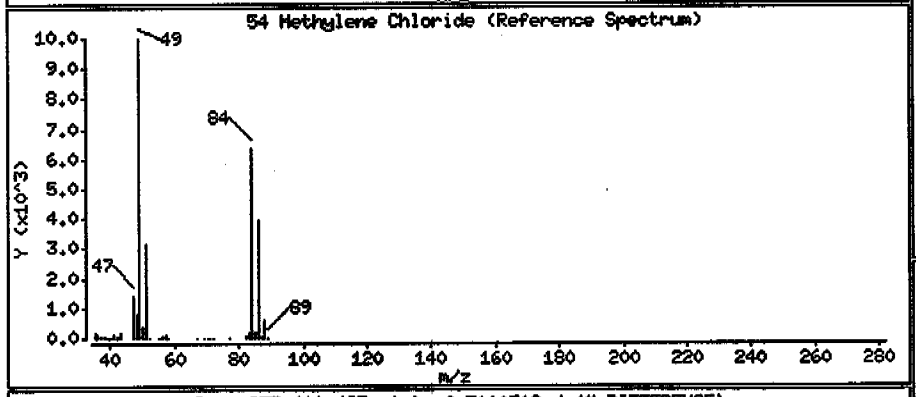
Concentration: 208.36 PPBV

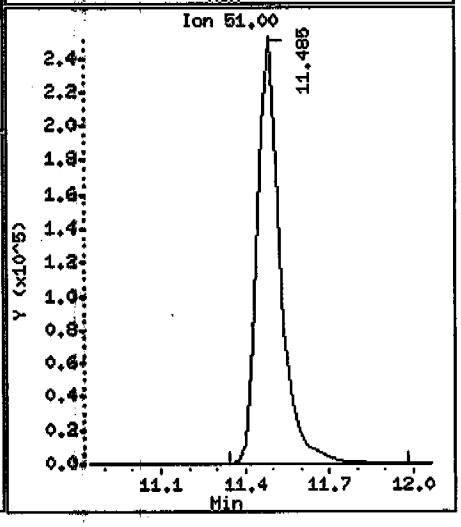


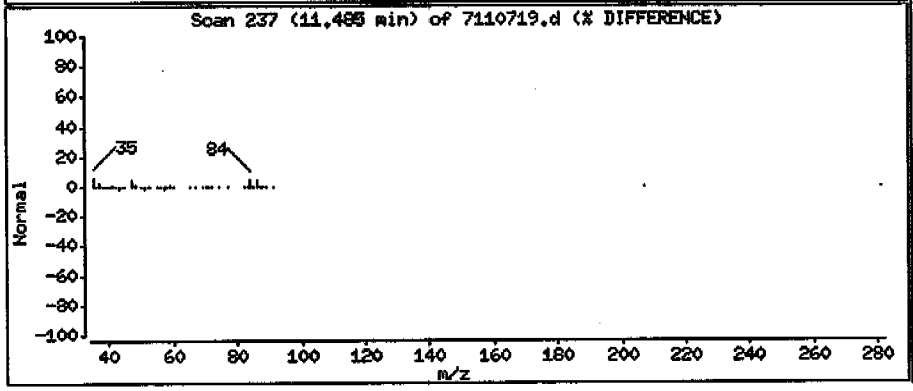












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

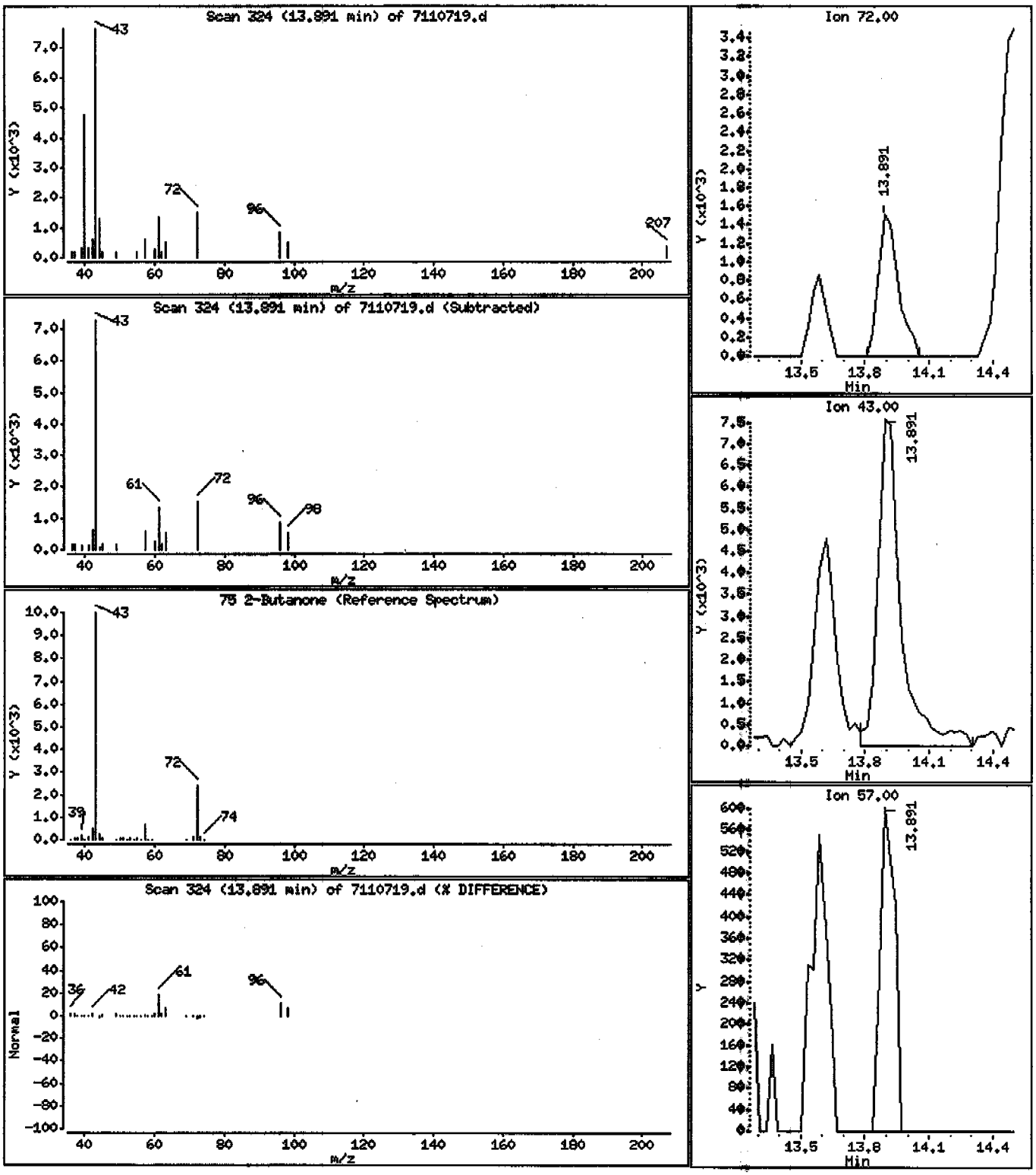
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

75 2-Butanone

Concentration: 1.257 PPBV



Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Sample Info: 200mL #34447

Instrument: msd7.i

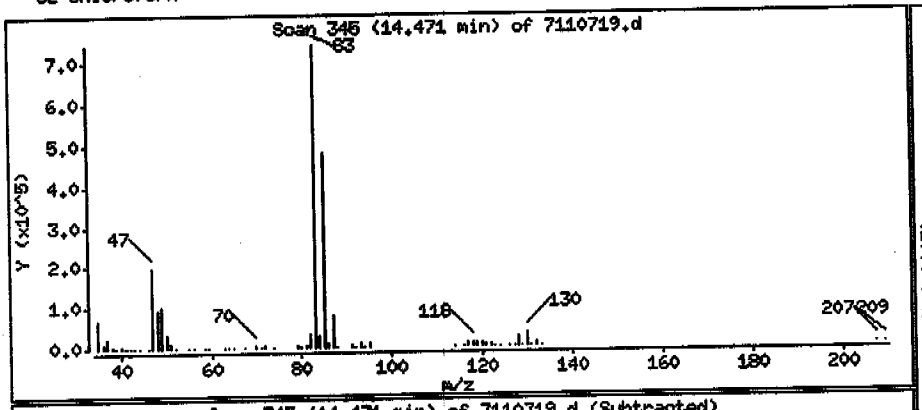
Operator: sb

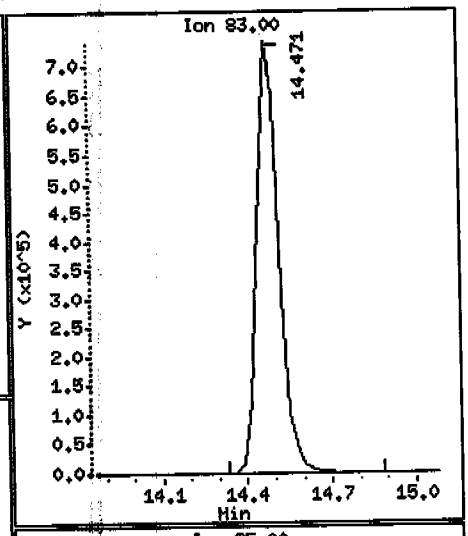
Column phase: RTx-624

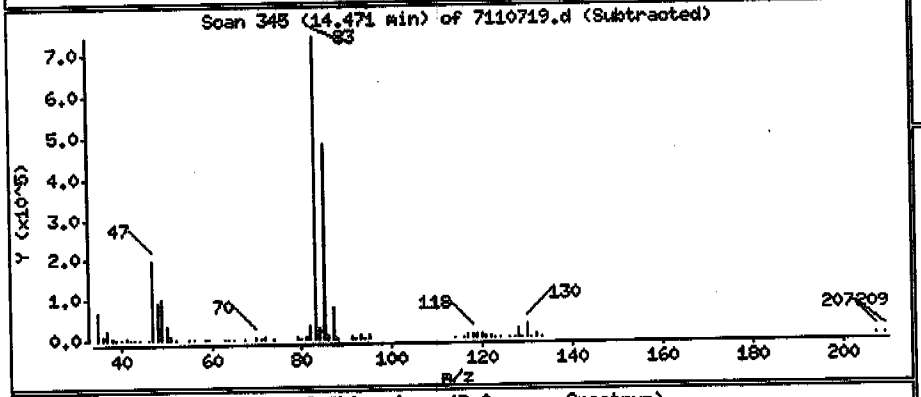
Column diameter: 0.53

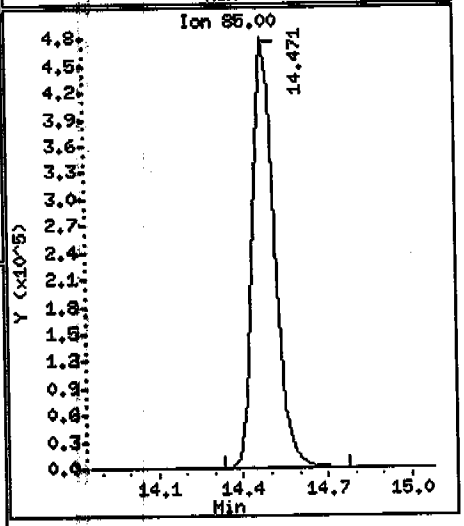
Concentration: 111.09 PPBV

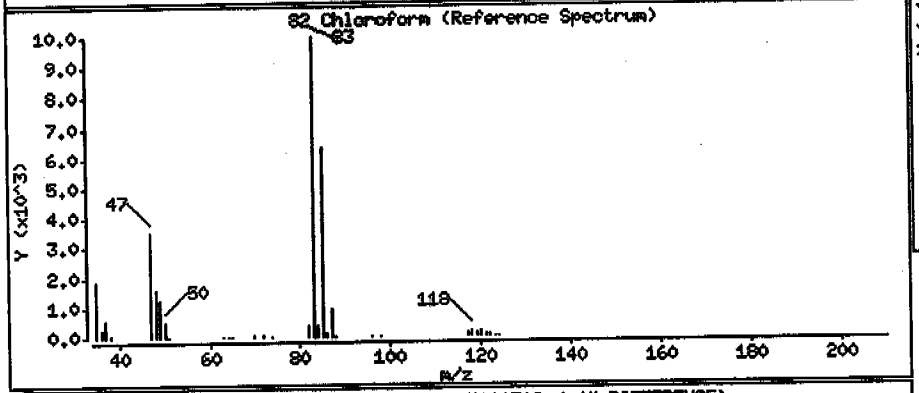
82 Chloroform

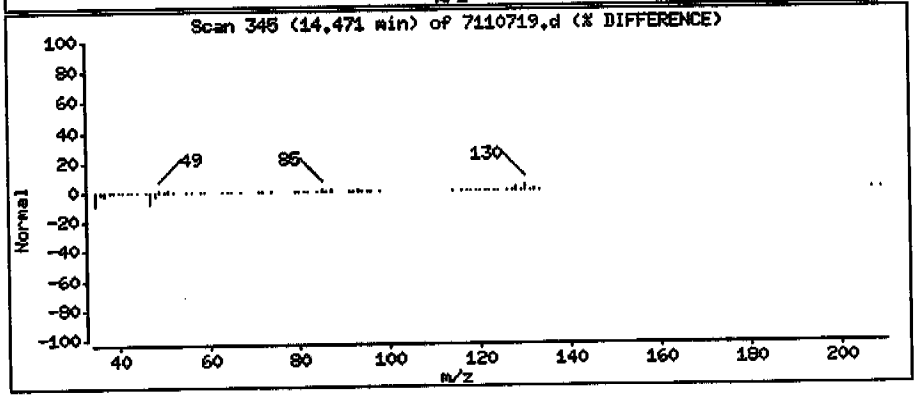












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

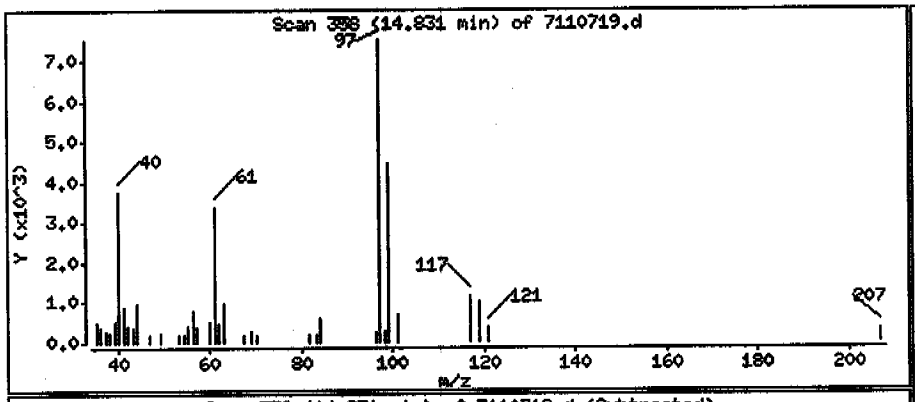
Operator: ab

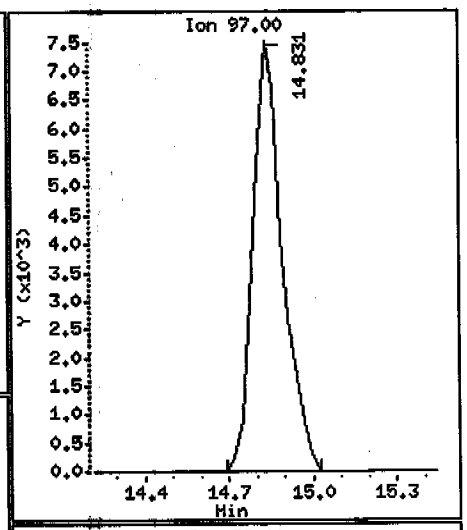
Column phase: RTx-624

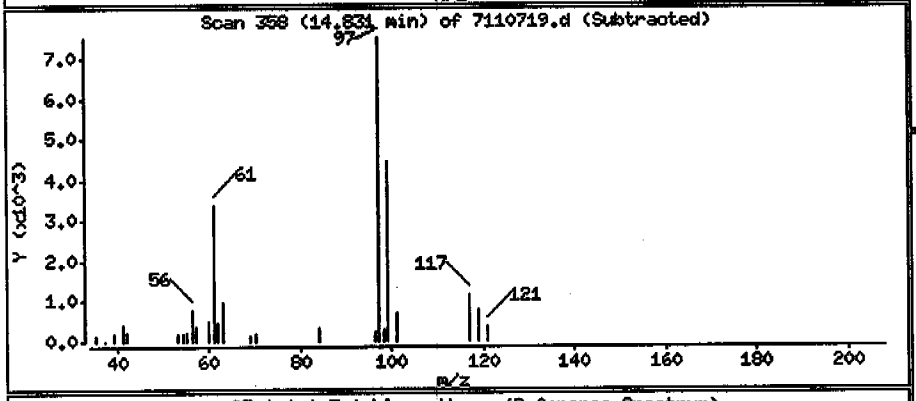
Column diameter: 0.53

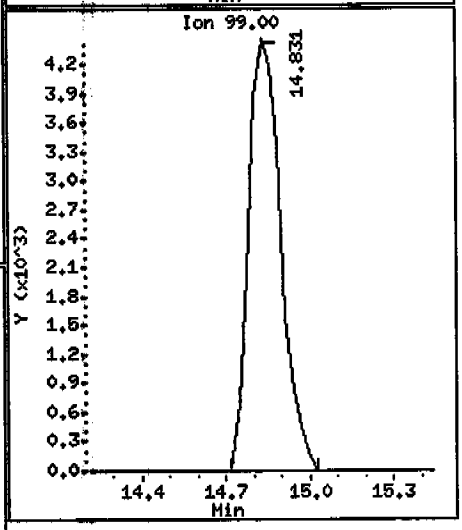
83 1,1,1-Trichloroethane

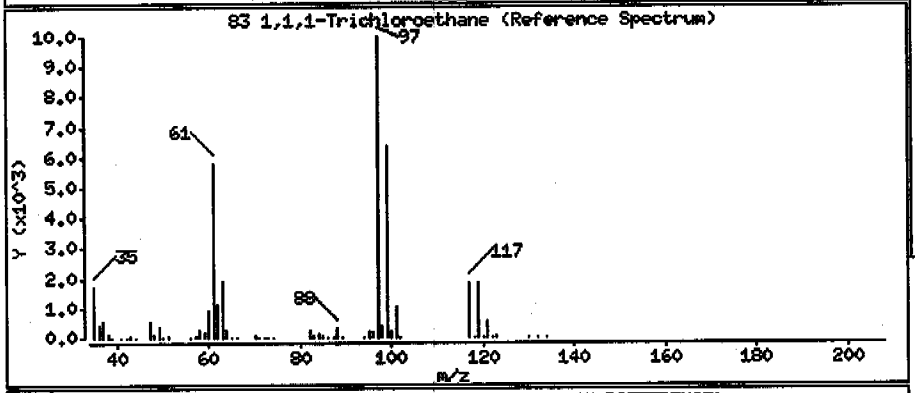
Concentration: 1.508 PPBV

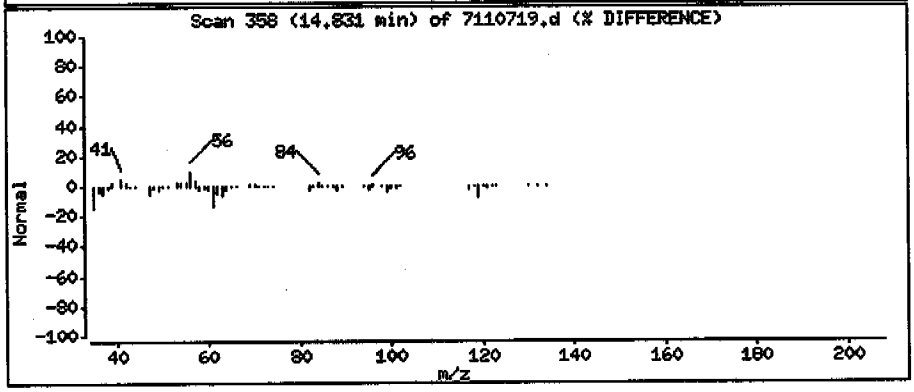












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Sample Info: 200mL #34447

Instrument: msd7.i

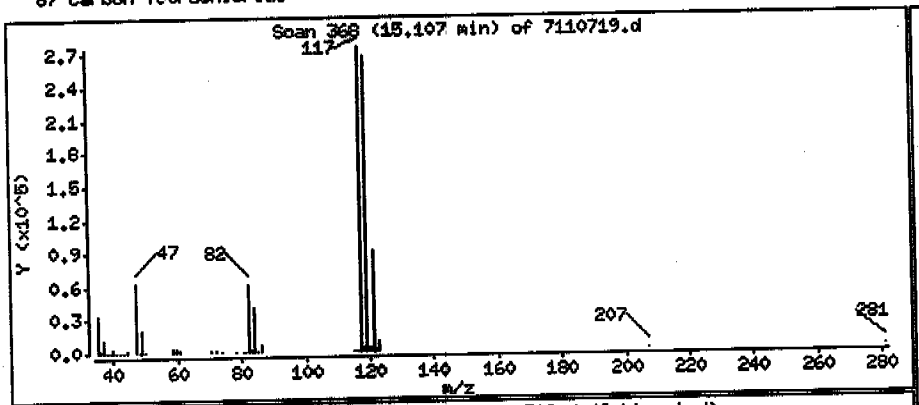
Operator: ab

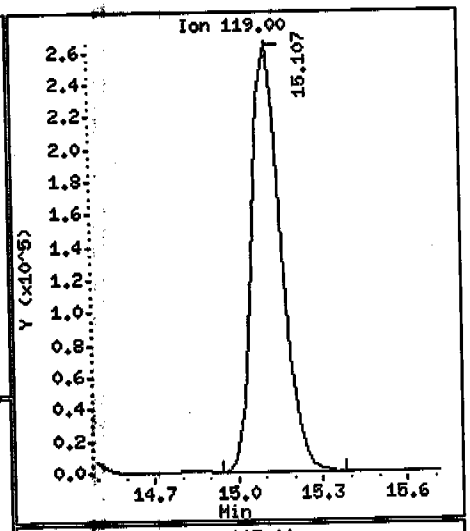
Column phase: RTx-624

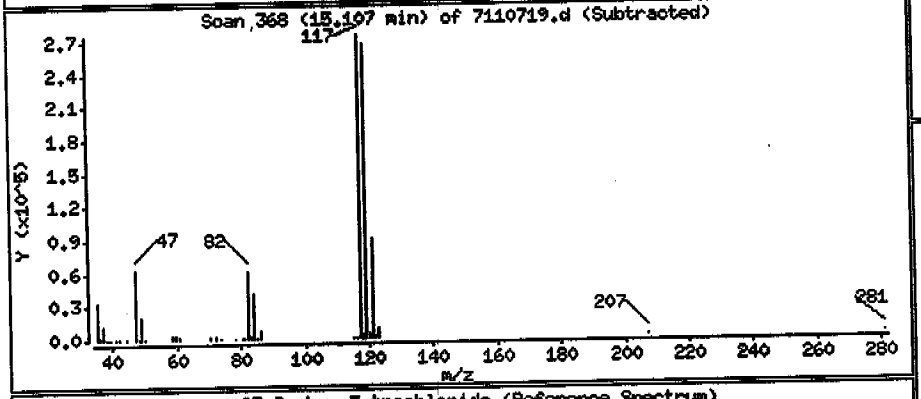
Column diameter: 0.53

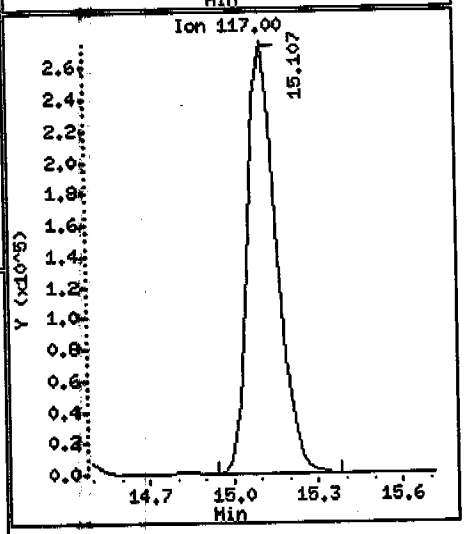
87 Carbon Tetrachloride

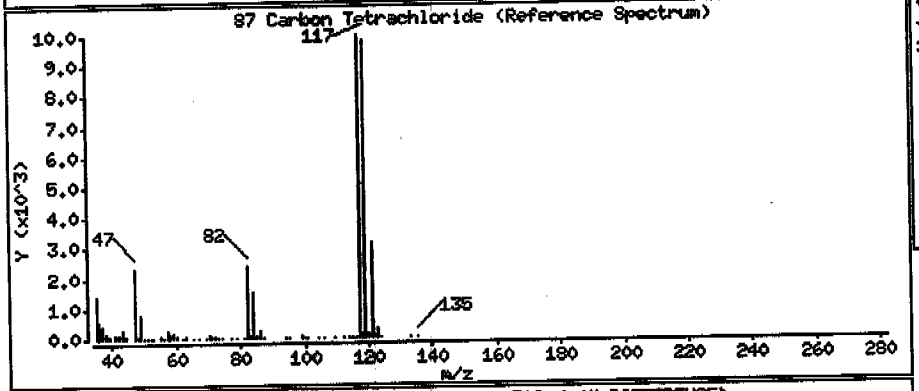
Concentration: 56.263 PPBV

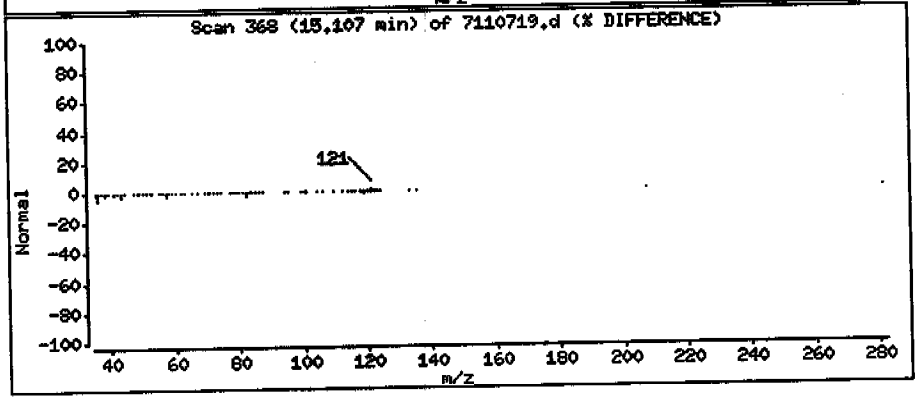












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

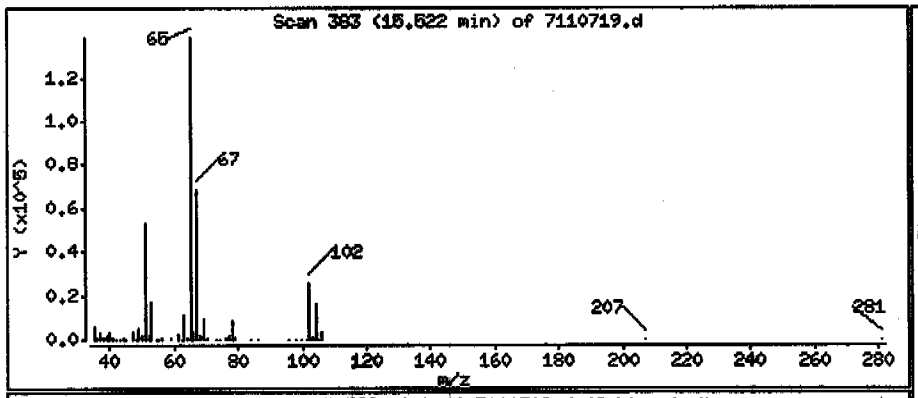
Operator: ab

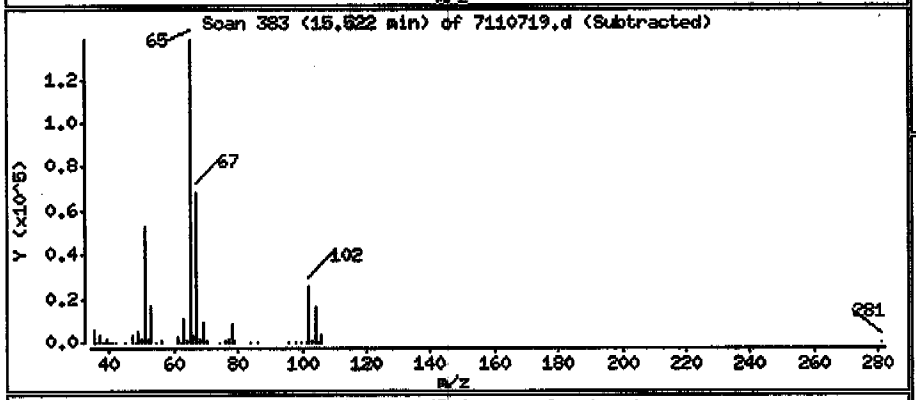
Column phase: RTx-624

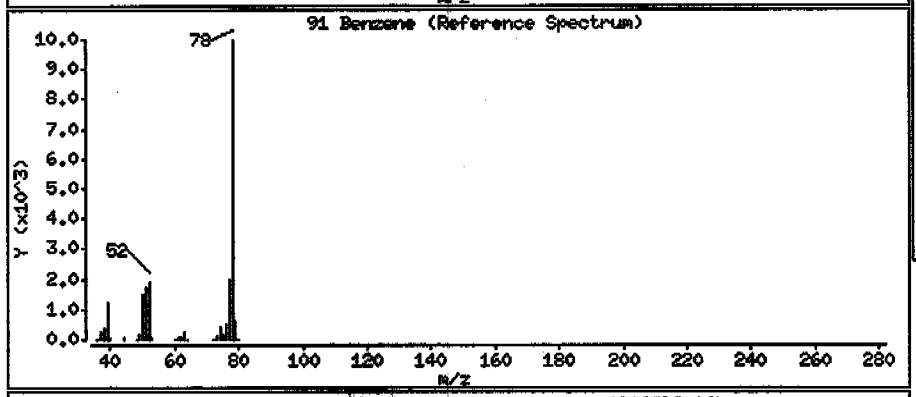
Column diameter: 0.53

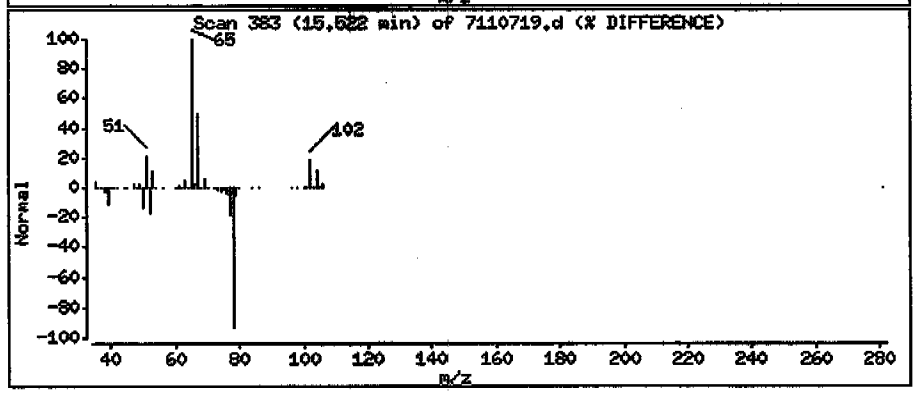
91 Benzene

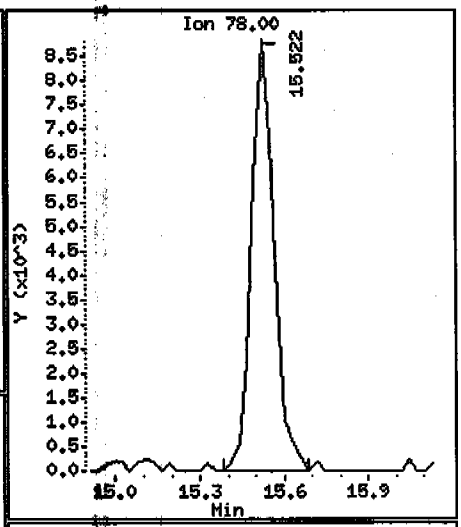
Concentration: 1.030 PPBV

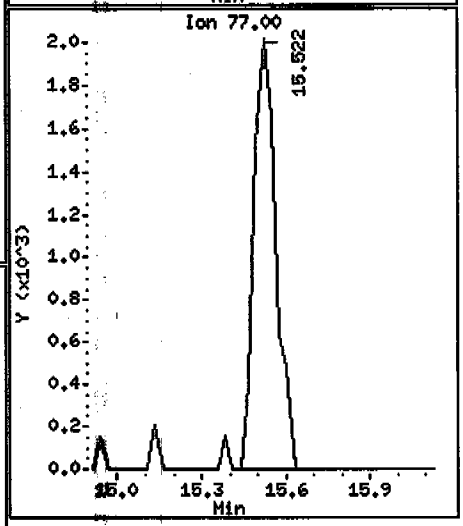












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

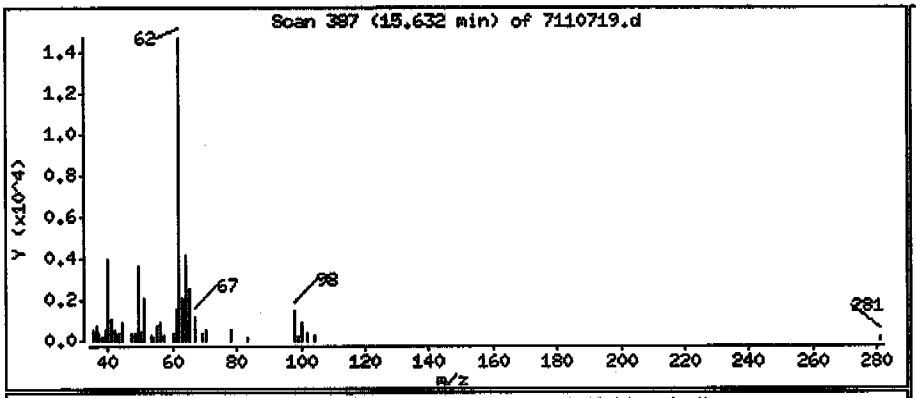
Operator: ab

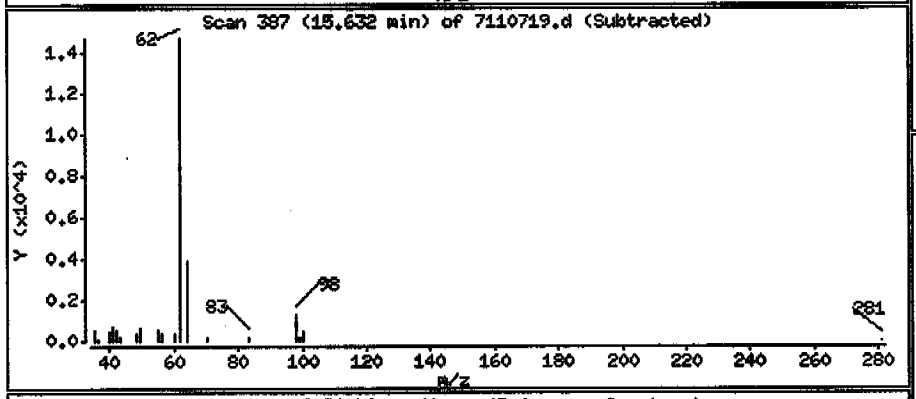
Column phase: RTx-624

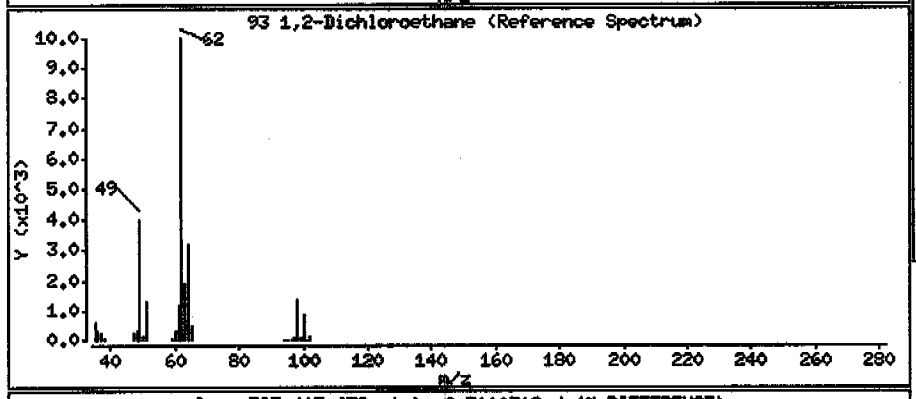
Column diameter: 0.53

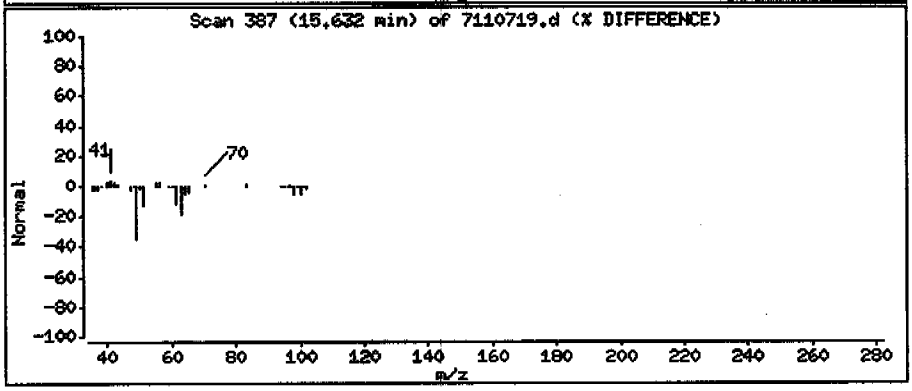
93 1,2-Dichloroethane

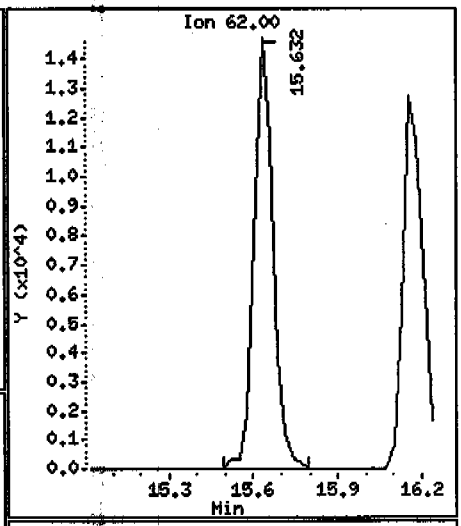
Concentration: 2.724 PPBV

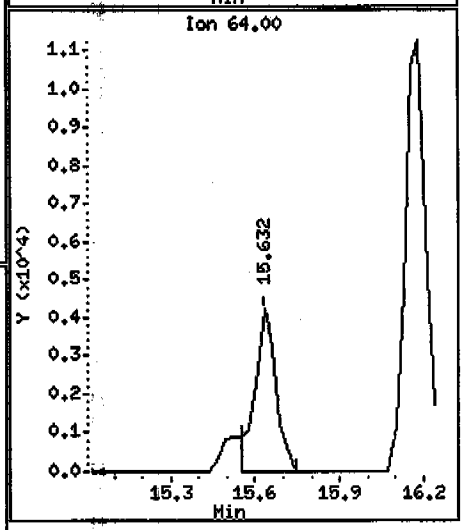












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

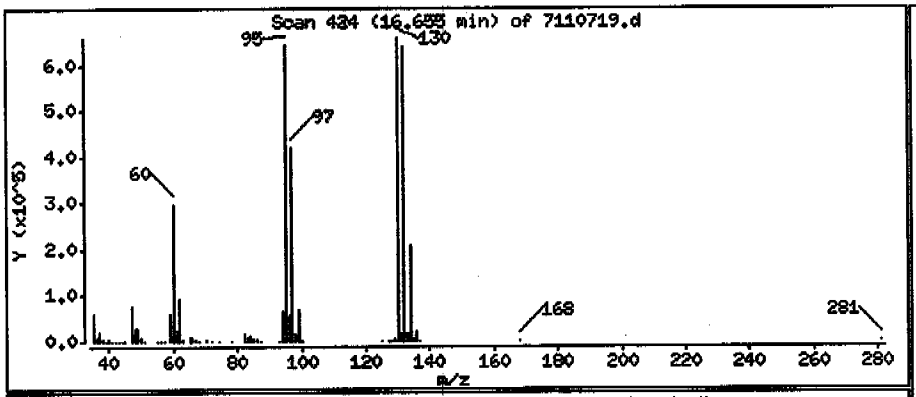
Operator: ab

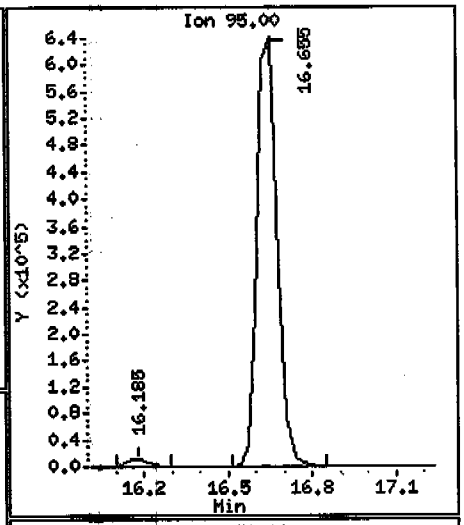
Column phase: RTx-624

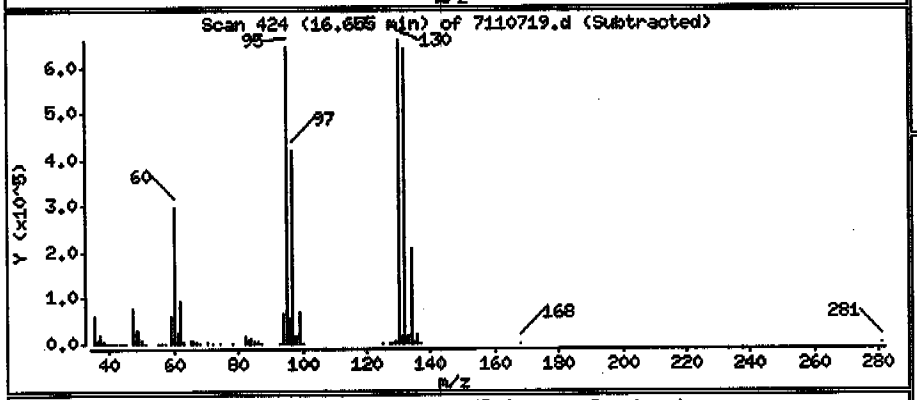
Column diameter: 0.53

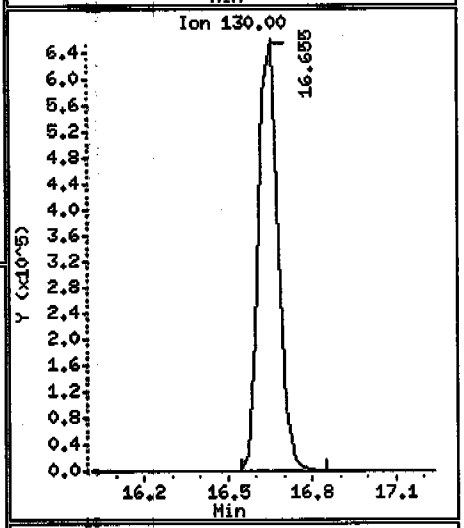
101 Trichloroethene

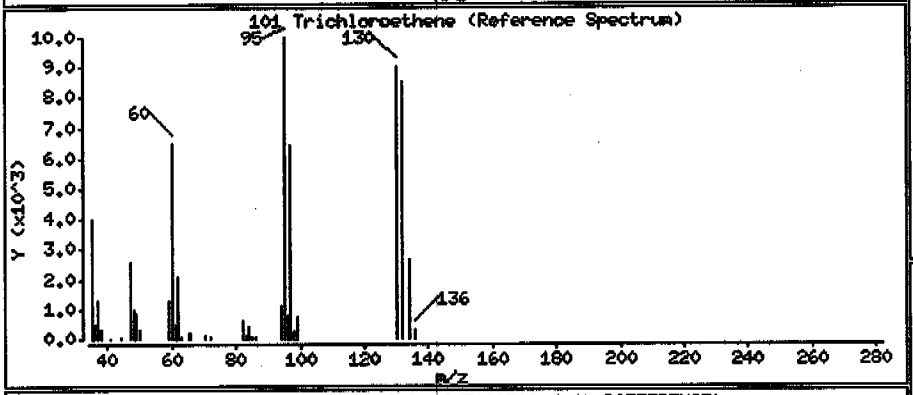
Concentration: 148.80 PPBV

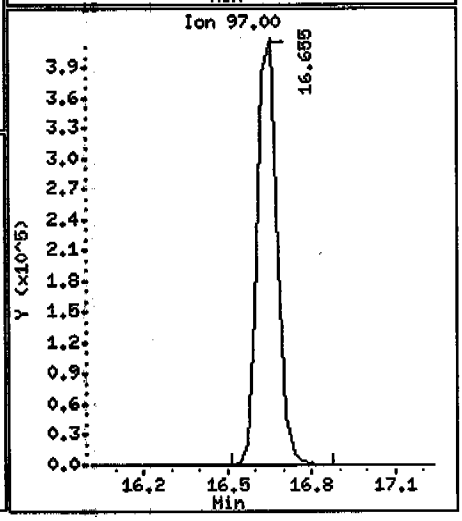


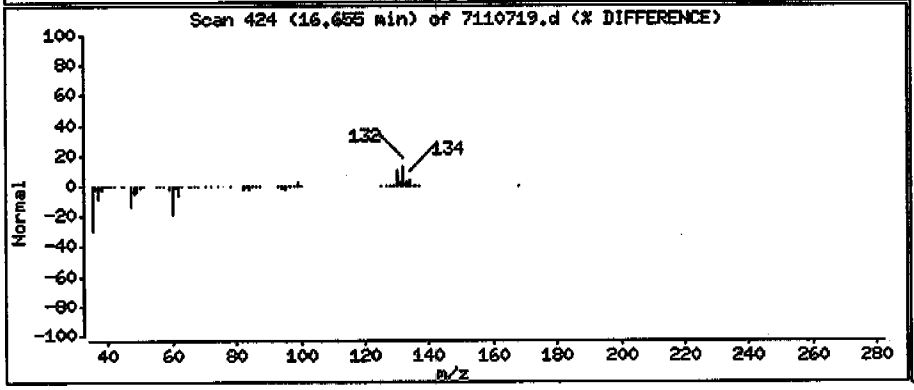












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

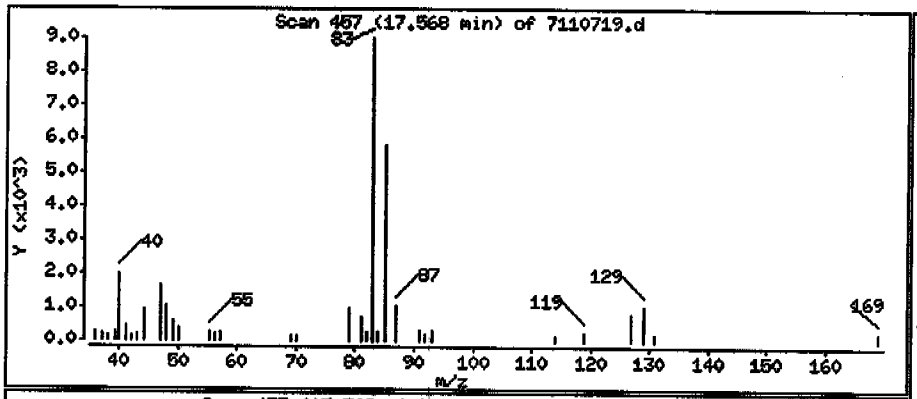
Operator: ab

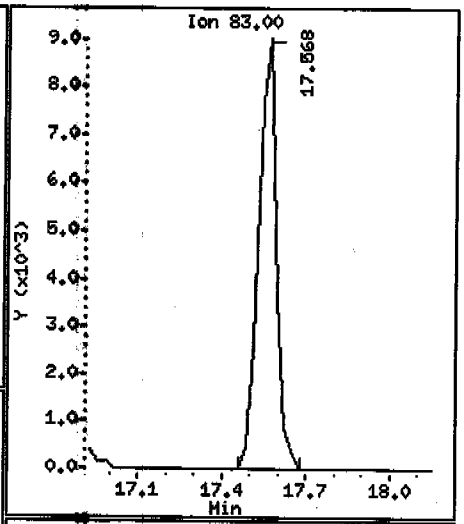
Column phase: RTx-624

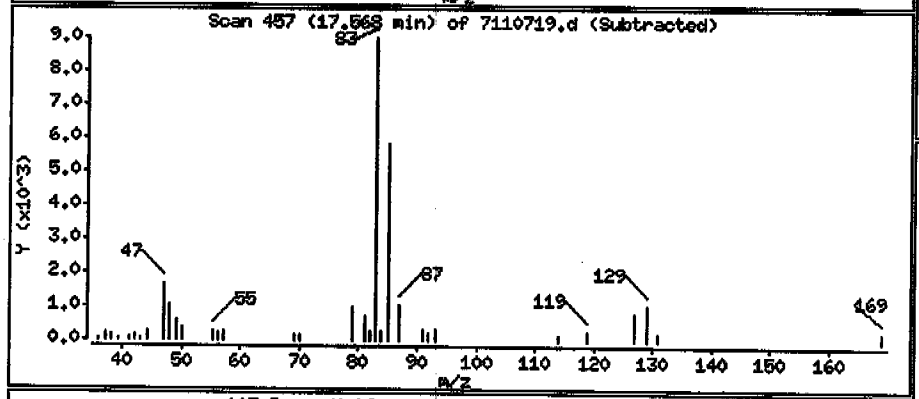
Column diameter: 0.53

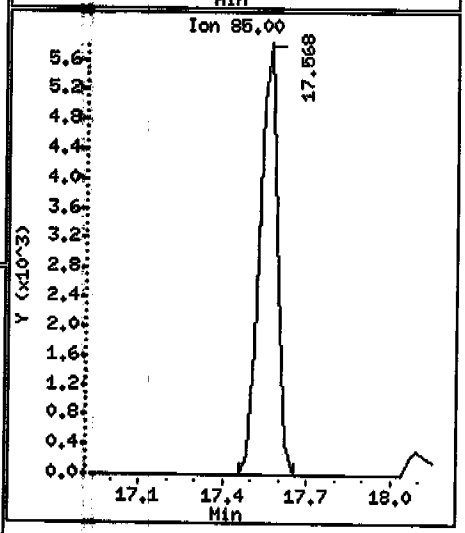
107 Bromodichloromethane

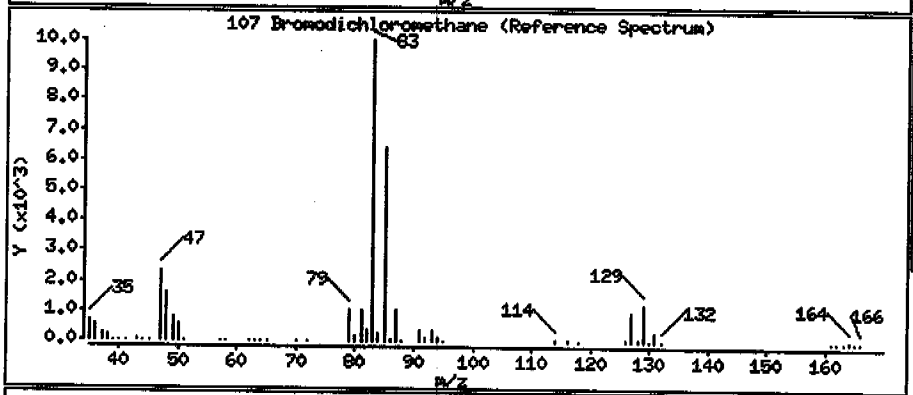
Concentration: 1.094 PPBV

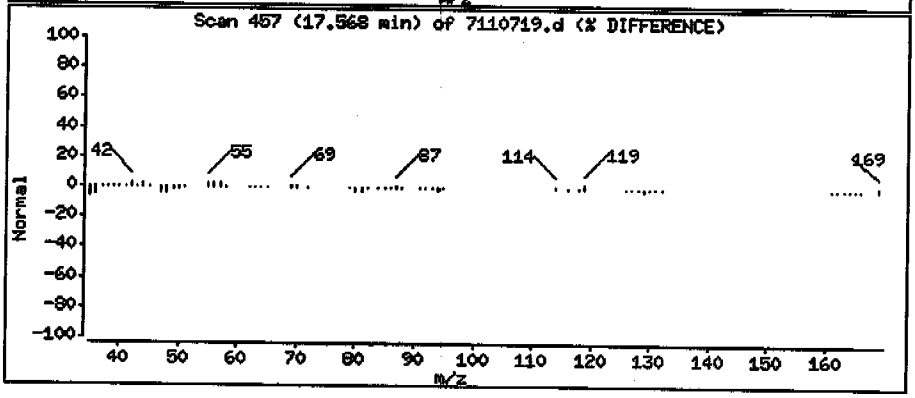












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

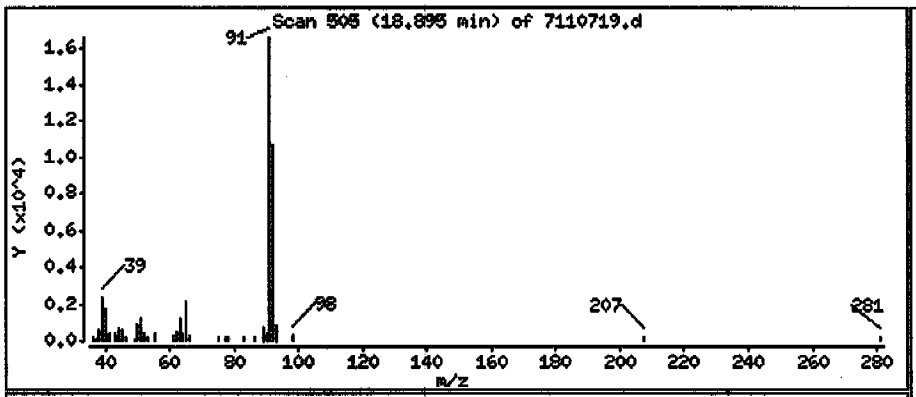
Operator: ab

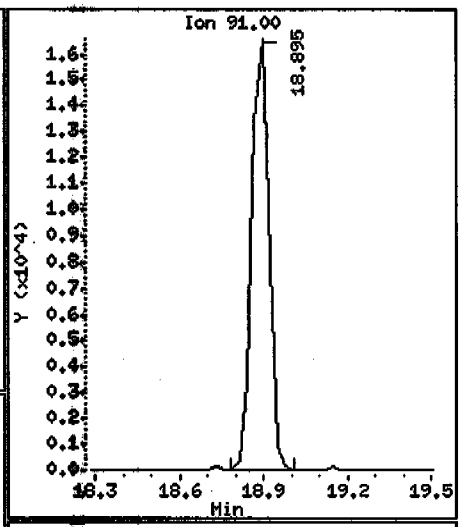
Column phase: RTx-624

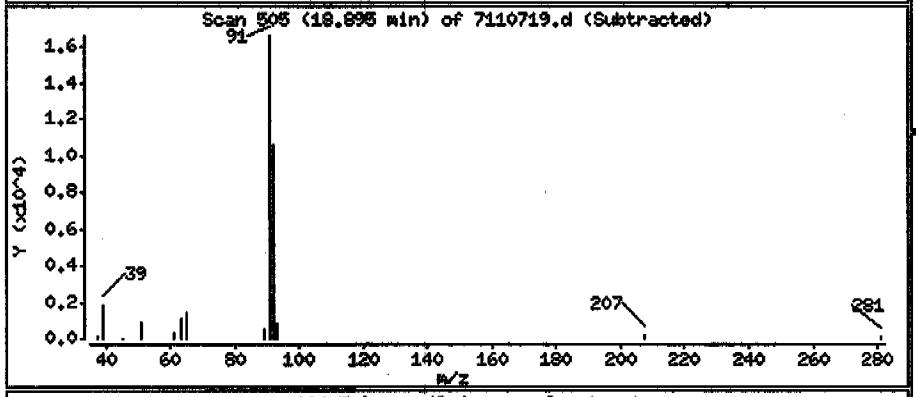
Column diameter: 0.53

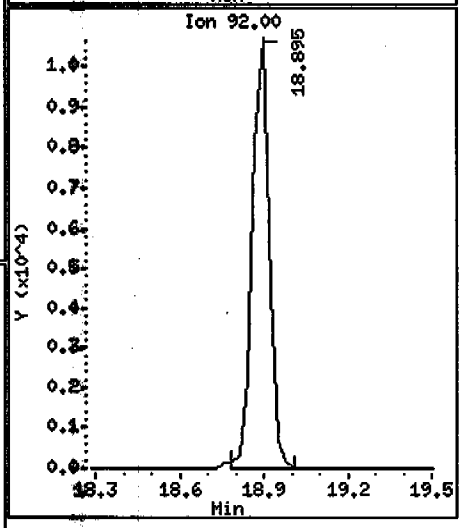
114 Toluene

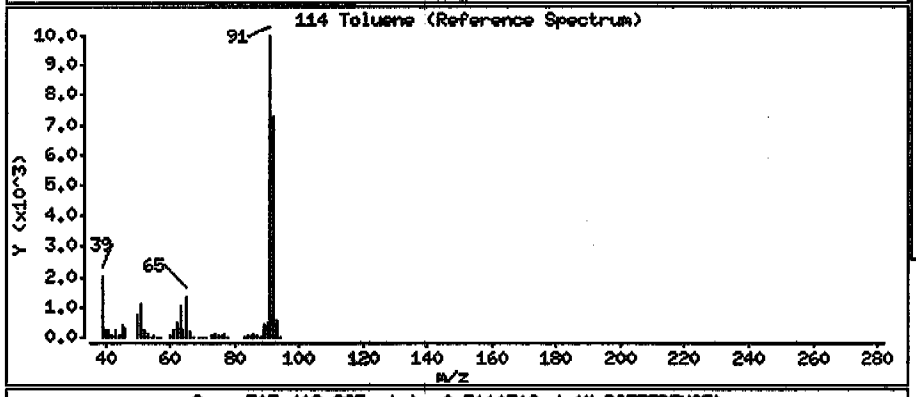
Concentration: 1.349 PPBV

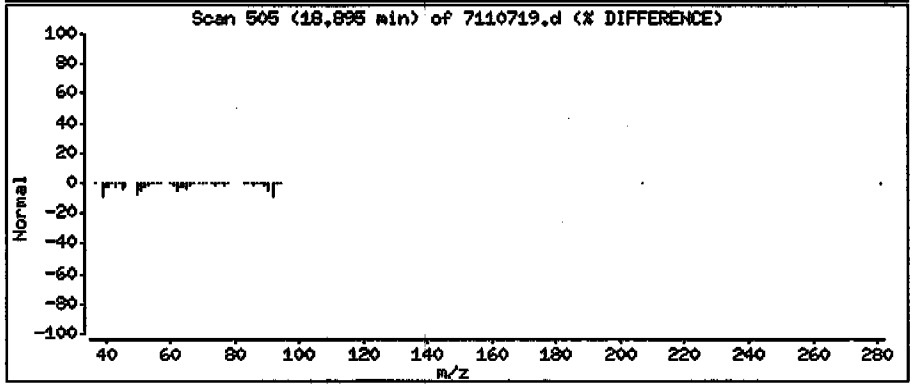












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

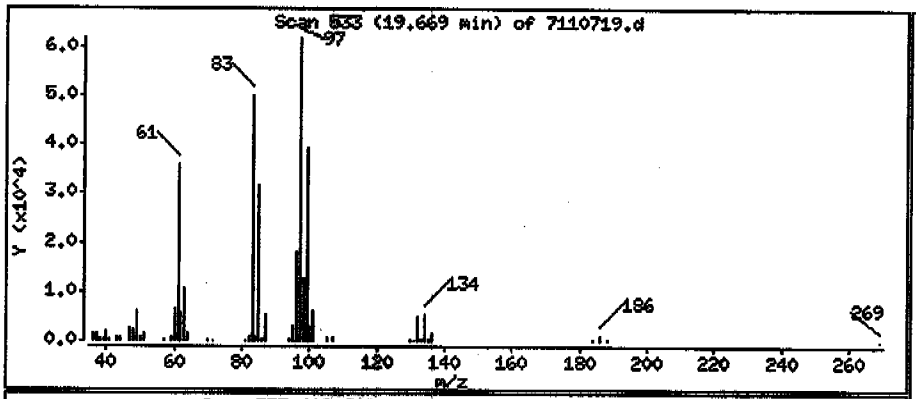
Operator: ab

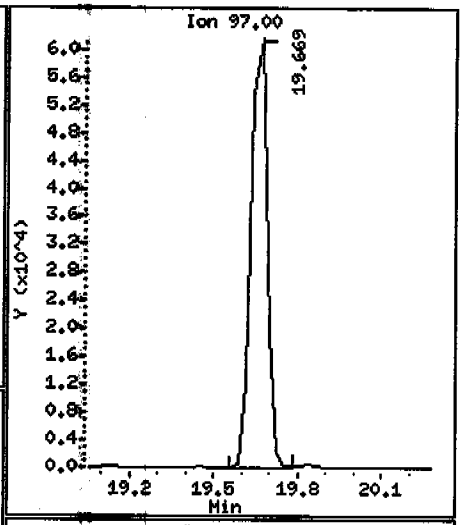
Column phase: RTx-624

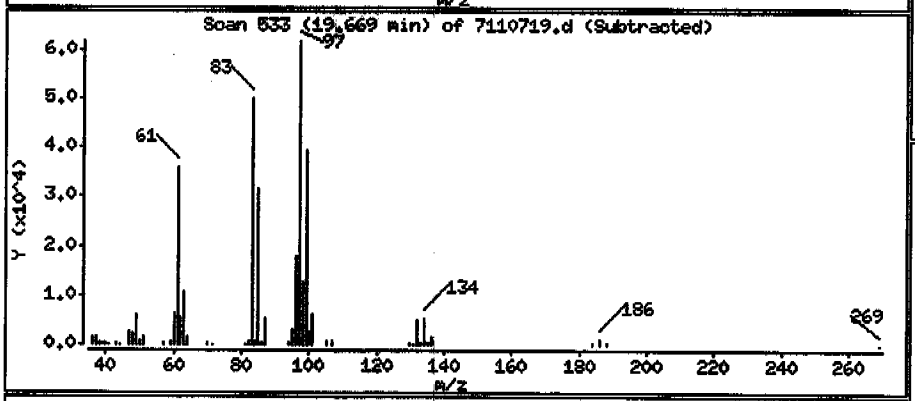
Column diameter: 0.53

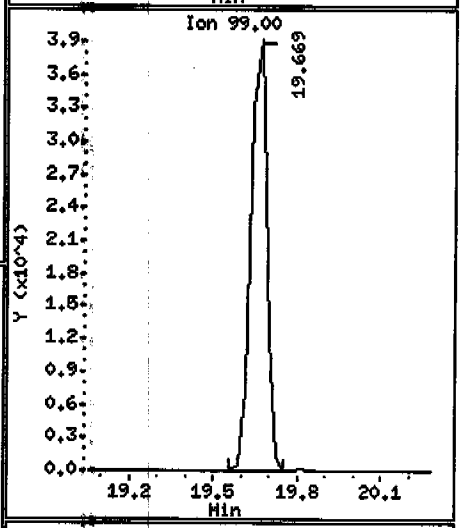
117 1,1,2-Trichloroethane

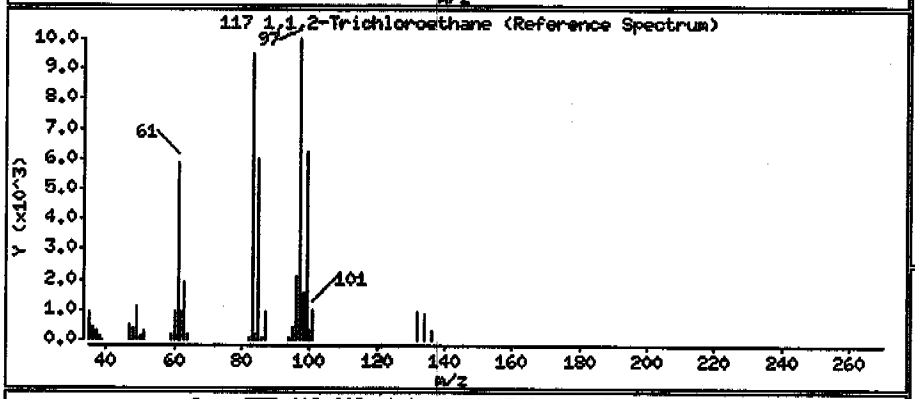
Concentration: 14.820 PPBV

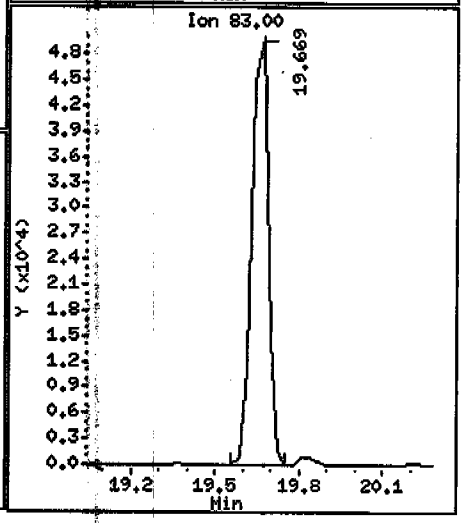


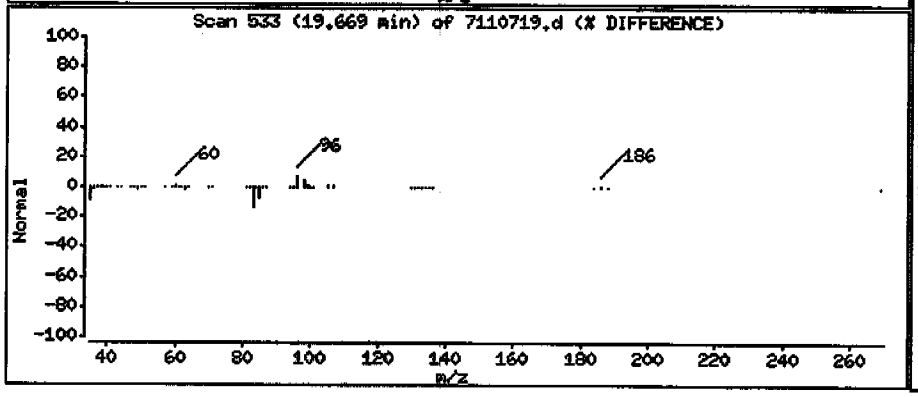












Data File: /chem/msd7.i/7-07nov.b/7110719.d

Date : 08-NOV-2007 00:00

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34447

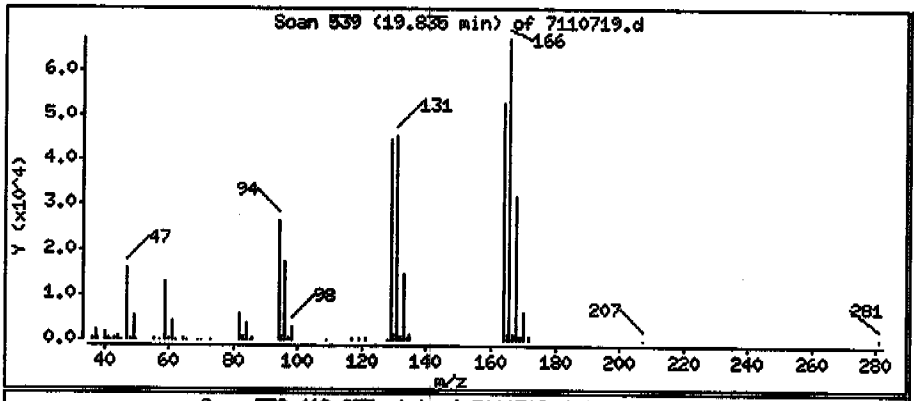
Operator: ab

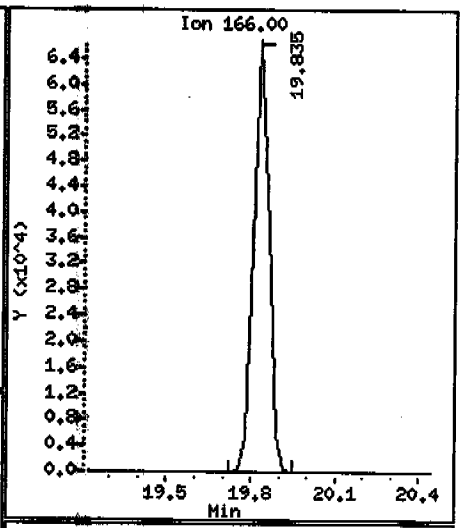
Column phase: RTx-624

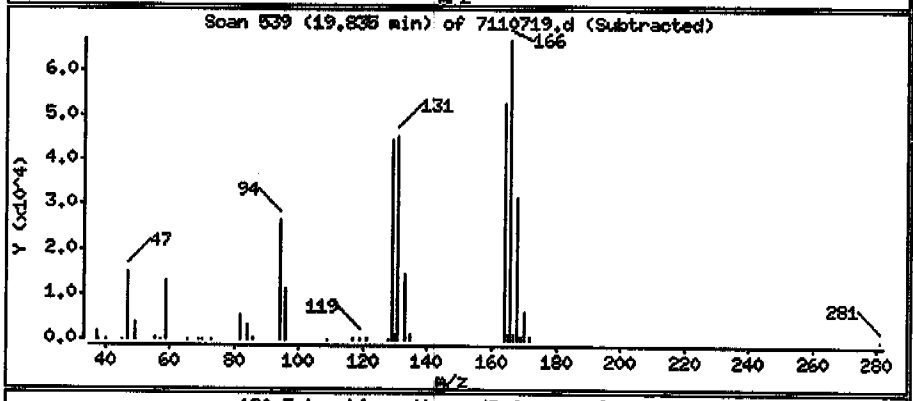
Column diameter: 0.53

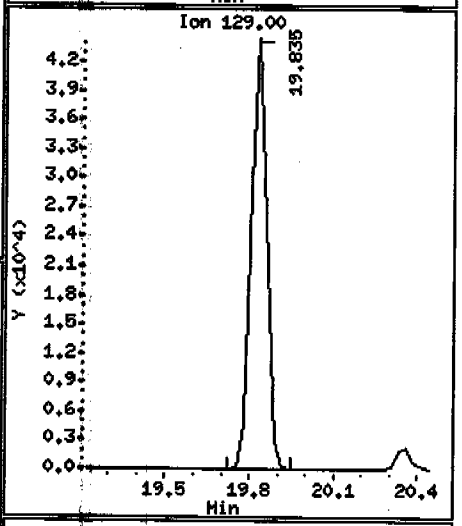
120 Tetrachloroethene

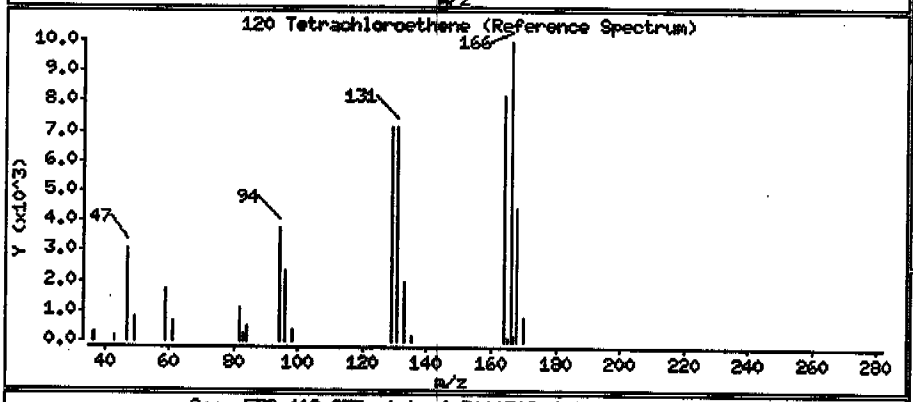
Concentration: 11.496 PPBM

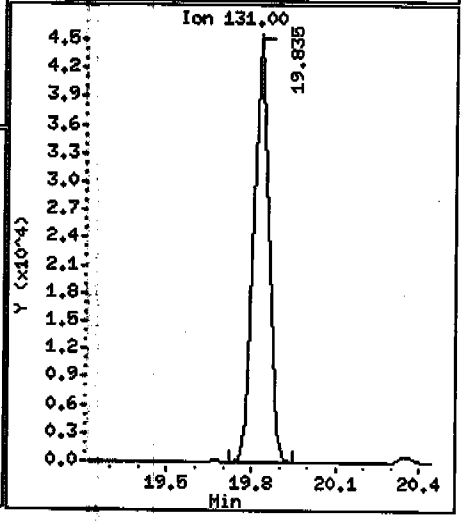


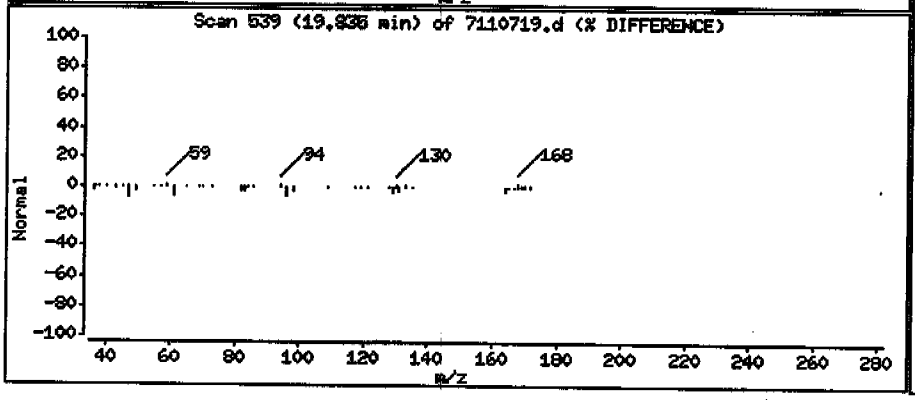












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6800 Lab Duplicate

Lab ID#: 0711101-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 113	1.7	2.2	13	16
1,1-Dichloroethene	1.7	8.7	6.7	35
Acetone	6.7	58	16	140
Methylene Chloride	1.7	210	5.8	740
Chloroform	1.7	110	8.2	550
Carbon Tetrachloride	1.7	55	10	350
1,2-Dichloroethane	1.7	2.5	6.8	10
Trichloroethene	1.7	150	9.0	810
1,1,2-Trichloroethane	1.7	14	9.2	76
Tetrachloroethene	1.7	11	11	75
Propylene	6.7	24	12	42

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6800 Lab Duplicate

Lab ID#: 0711101-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.7	Not Detected	8.3	Not Detected
Freon 114	1.7	Not Detected	12	Not Detected
Chloromethane	6.7	Not Detected	14	Not Detected
Vinyl Chloride	1.7	Not Detected	4.3	Not Detected
1,3-Butadiene	1.7	Not Detected	3.7	Not Detected
Bromomethane	1.7	Not Detected	6.5	Not Detected
Chloroethane	1.7	Not Detected	4.4	Not Detected
Freon 11	1.7	Not Detected	9.4	Not Detected
Ethanol	6.7	Not Detected	13	Not Detected
Freon 113	1.7	2.2	13	16
1,1-Dichloroethene	1.7	8.7	6.7	35
Acetone	6.7	58	16	140
2-Propanol	6.7	Not Detected	16	Not Detected
Carbon Disulfide	1.7	Not Detected	5.2	Not Detected
Methylene Chloride	1.7	210	5.8	740
Methyl tert-butyl ether	1.7	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Hexane	1.7	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.7	Not Detected	6.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.7	Not Detected	6.7	Not Detected
Tetrahydrofuran	1.7	Not Detected	5.0	Not Detected
Chloroform	1.7	110	8.2	550
1,1,1-Trichloroethane	1.7	Not Detected	9.2	Not Detected
Cyclohexane	1.7	Not Detected	5.8	Not Detected
Carbon Tetrachloride	1.7	55	10	350
Benzene	1.7	Not Detected	5.4	Not Detected
1,2-Dichloroethane	1.7	2.5	6.8	10
Heptane	1.7	Not Detected	6.9	Not Detected
Trichloroethene	1.7	150	9.0	810
1,2-Dichloropropane	1.7	Not Detected	7.8	Not Detected
1,4-Dioxane	6.7	Not Detected	24	Not Detected
Bromodichloromethane	1.7	Not Detected	11	Not Detected
cis-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	1.7	Not Detected	6.9	Not Detected
Toluene	1.7	Not Detected	6.3	Not Detected
trans-1,3-Dichloropropene	1.7	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane	1.7	14	9.2	76
Tetrachloroethene	1.7	11	11	75

Air Toxics Ltd.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6800 Lab Duplicate

Lab ID#: 0711101-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	6.7	Not Detected	28	Not Detected
Dibromochloromethane	1.7	Not Detected	14	Not Detected
1,2-Dibromoethane (EDB)	1.7	Not Detected	13	Not Detected
Chlorobenzene	1.7	Not Detected	7.7	Not Detected
Ethyl Benzene	1.7	Not Detected	7.3	Not Detected
m,p-Xylene	1.7	Not Detected	7.3	Not Detected
o-Xylene	1.7	Not Detected	7.3	Not Detected
Styrene	1.7	Not Detected	7.2	Not Detected
Bromoform	1.7	Not Detected	17	Not Detected
1,1,2,2-Tetrachloroethane	1.7	Not Detected	12	Not Detected
4-Ethyltoluene	1.7	Not Detected	8.2	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.2	Not Detected
1,3-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,4-Dichlorobenzene	1.7	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.7	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene	1.7	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	6.7	Not Detected	50	Not Detected
Hexachlorobutadiene	6.7	Not Detected	72	Not Detected
Chlorodifluoromethane	6.7	Not Detected	24	Not Detected
Methanol	170	Not Detected	220	Not Detected
n-Butanol	6.7	Not Detected	20	Not Detected
Propylene	6.7	24	12	42

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110718.d
Lab Smp Id: 0711101-01AA
Inj Date : 07-NOV-2007 23:08
Operator : ab Inst ID: msd7.i
Smp Info : 100mL #34447
Misc Info : 6.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 3.36000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====	
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	577711	25.0000			80.00- 120.00	100.00
14.416	14.416 (1.000)	128	453650				28.66- 128.66	78.53
14.416	14.416 (1.000)	49	1004778				133.49- 233.49	173.92
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1945218	25.0000			80.00- 120.00	100.00
16.158	16.158 (1.000)	88	292402				0.00- 65.23	15.03
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1378856	25.0000			80.00- 120.00	100.00
21.356	21.356 (1.000)	82	730558				4.70- 104.70	52.98
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	745437	24.0188	24.019		80.00- 120.00	100.00
15.494	15.494 (1.075)	67	379352				2.91- 102.91	50.89
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1596623	23.1219	23.122		80.00- 120.00	100.00
18.757	18.757 (1.161)	70	174894				0.00- 61.46	10.95

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1117194			19.18- 119.18	69.97
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	788499	24.0316	24.032	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	970720			73.89- 173.89	123.11
23.347	23.347 (1.093)	176	768063			48.20- 148.20	97.41
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	182057	7.31169	24.567	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	108395			21.19- 121.19	59.54
5.617	5.617 (0.390)	39	176429			24.83- 124.83	96.91
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	30510	0.64409	2.164	80.00- 120.00	100.00
10.186	10.186 (0.707)	153	18303			13.12- 113.12	59.99
10.186	10.186 (0.707)	101	38589			67.28- 167.28	126.48
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	130923	2.59741	8.727	80.00- 120.00	100.00
10.324	10.324 (0.716)	96	75720			9.78- 109.78	57.84
10.324	10.324 (0.716)	98	51213			0.00- 88.25	39.12
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.728)	58	270699	17.3748	58.379	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	899960			247.10- 347.10	332.46
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.795)	49	2338677	63.1080	212.04	80.00- 120.00	100.00
11.457	11.457 (0.795)	84	1659800			19.98- 119.98	70.97
11.457	11.457 (0.795)	51	719283			0.00- 80.85	30.76
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	1951401	33.5483	112.72	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	1277405			15.69- 115.69	65.46
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	902807	16.4423	55.246	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	944178			53.14- 153.14	104.58
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.967)	62	30647	0.74630	2.508	80.00- 120.00	100.00
15.633	15.633 (0.967)	64	10898			0.00- 82.89	35.56
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1547417	45.0718	151.44	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)								
16.656	16.628	(1.031)	130	1565840			51.11- 151.11	101.19
16.628	16.628	(1.029)	97	1001644			15.04- 115.04	64.73
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.669	19.669	(0.921)	97	118132	4.13631	13.898	80.00- 120.00	100.00
19.669	19.669	(0.921)	99	73122			12.40- 112.40	61.90
19.669	19.669	(0.921)	83	97802			32.55- 132.55	82.79
120 Tetrachloroethene						CAS #: 127-18-4		
19.835	19.835	(0.929)	166	121949	3.29228	11.062	80.00- 120.00	100.00
19.835	19.835	(0.929)	129	84146			21.07- 121.07	69.00
19.835	19.835	(0.929)	131	80957			18.33- 118.33	66.39

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110718.d
Lab Smp Id: 0711101-01AA
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	577711	-16.93
97 1,4-Difluorobenze	2265681	1359409	3171953	1945218	-14.14
126 Chlorobenzene-d5	1765821	1059493	2472149	1378856	-21.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-07nov
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711101-01AA
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.0"Hg ->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.019	96.08	70-130
$ 113 Toluene-d8	25.000	23.122	92.49	70-130
$ 137 Bromofluorobenzene	25.000	24.032	96.13	70-130

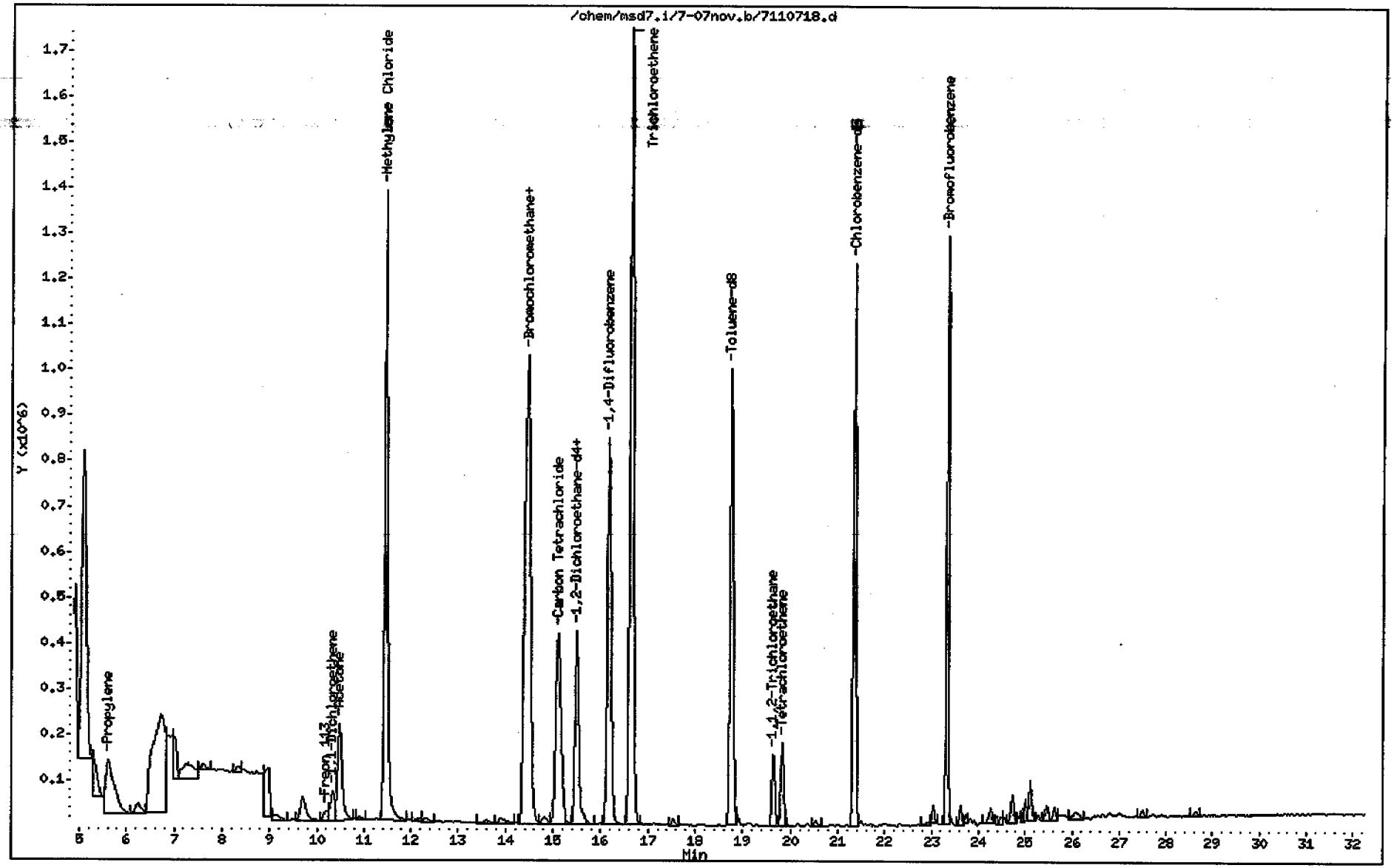
Data File: /chem/msd7.i/7-07nov.b/7110718.d
Date : 07-NOV-2007 23:08
Client ID:
Sample Info: 100mL #34447

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0041



Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

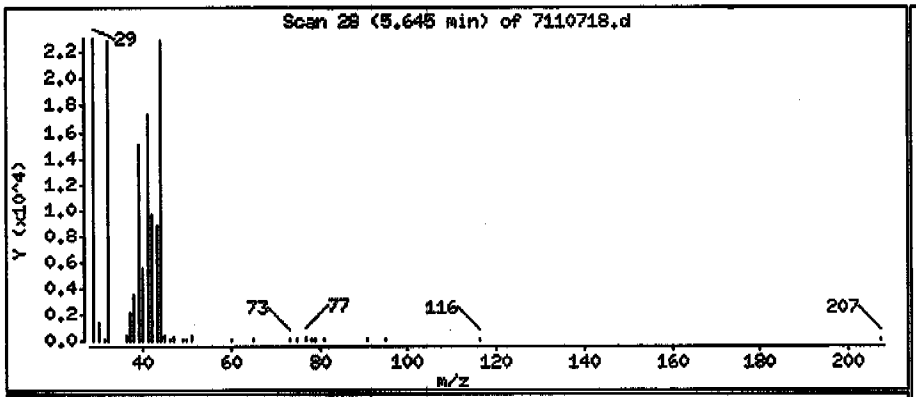
Operator: ab

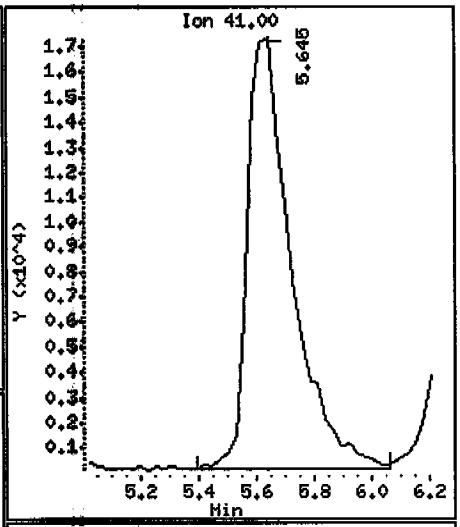
Column phase: RTx-624

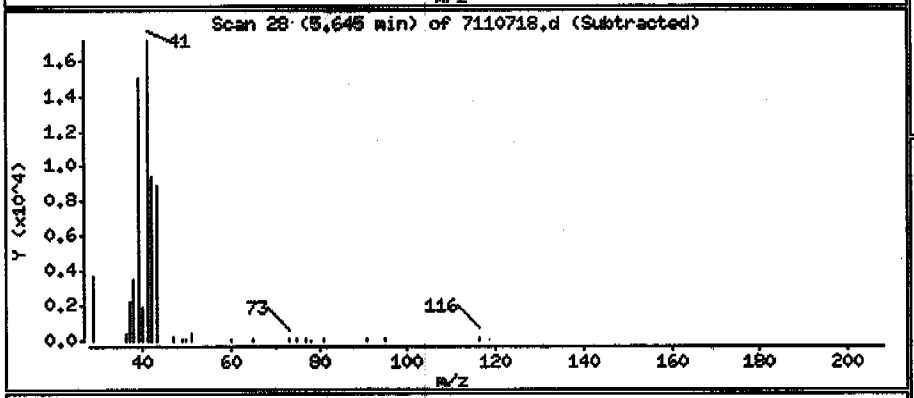
Column diameter: 0.53

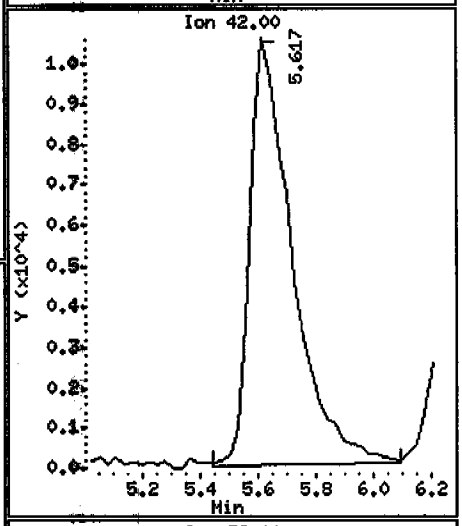
11 Propylene

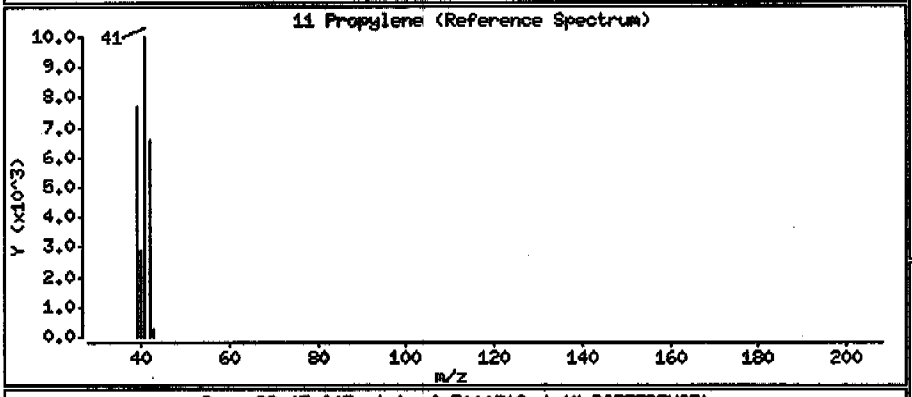
Concentration: 24.567 PPBV

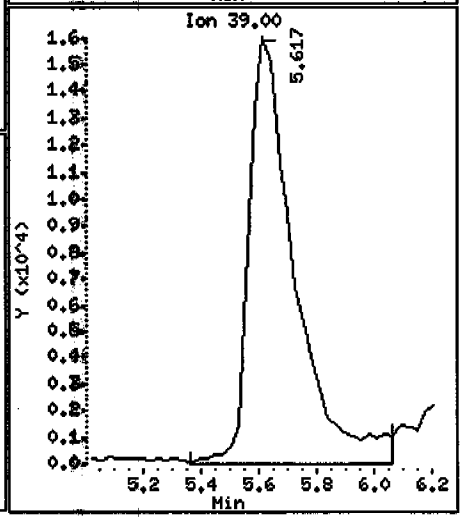


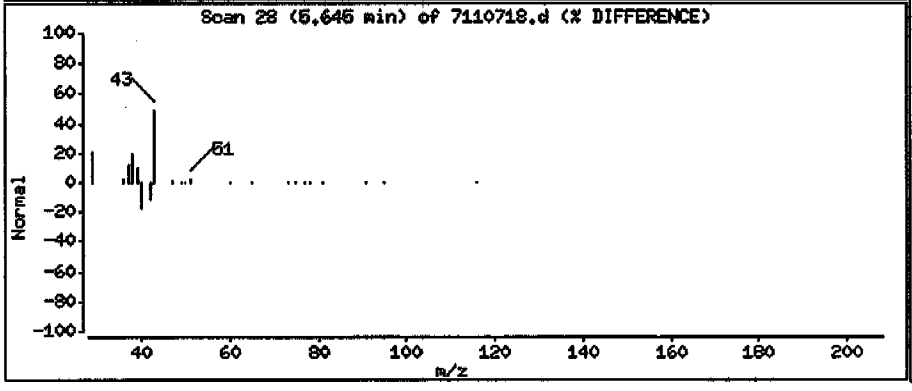












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Sample Info: 100mL #34447

Instrument: msd7.i

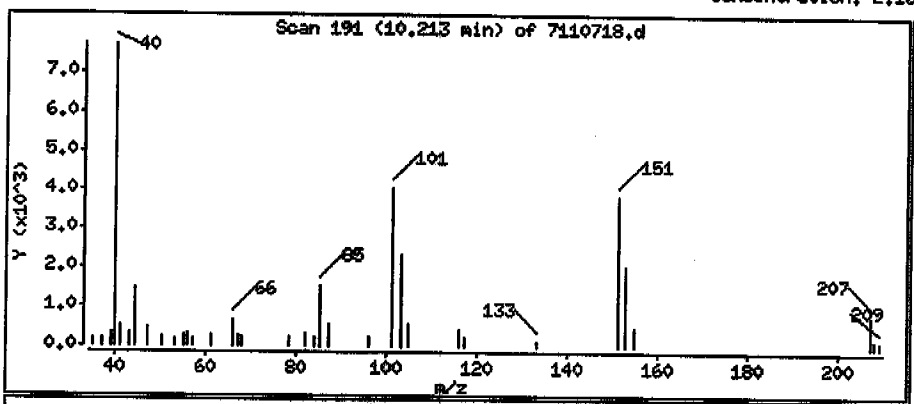
Operator: ab

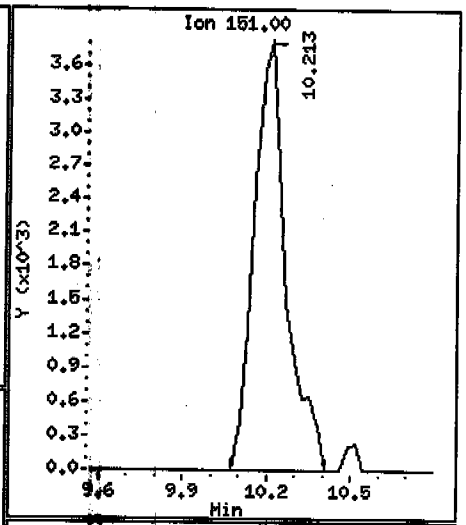
Column phase: RTx-624

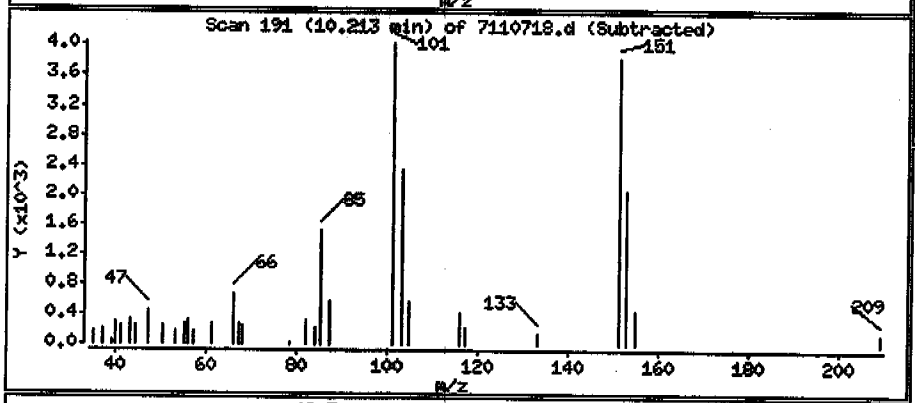
Column diameter: 0.53

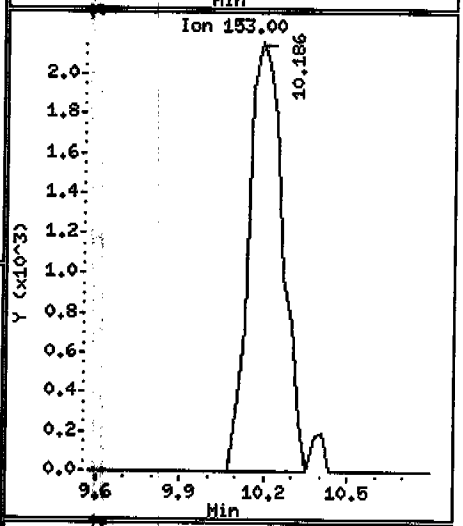
42 Freon 113

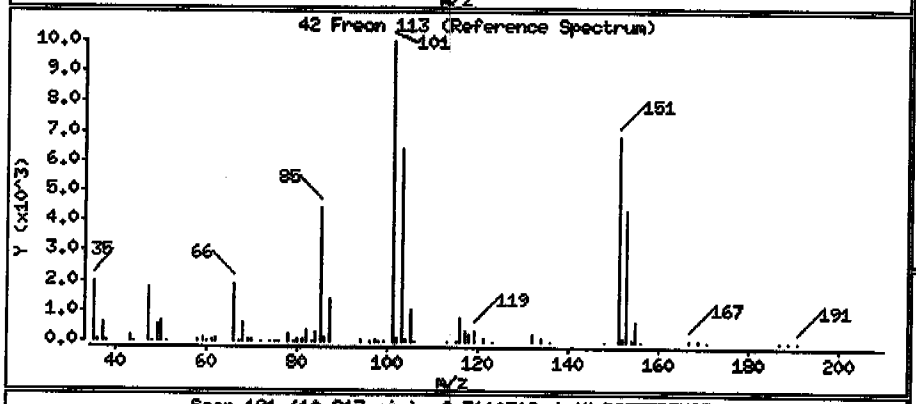
Concentration: 2.164 PPBV

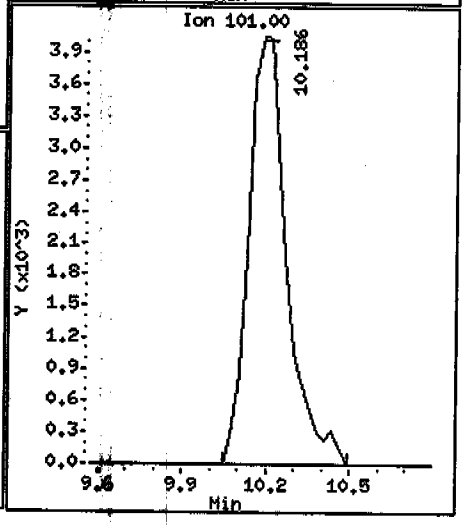


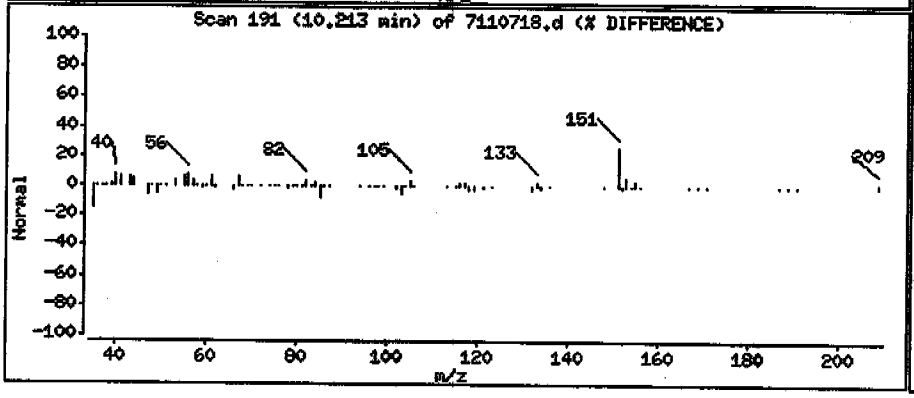












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

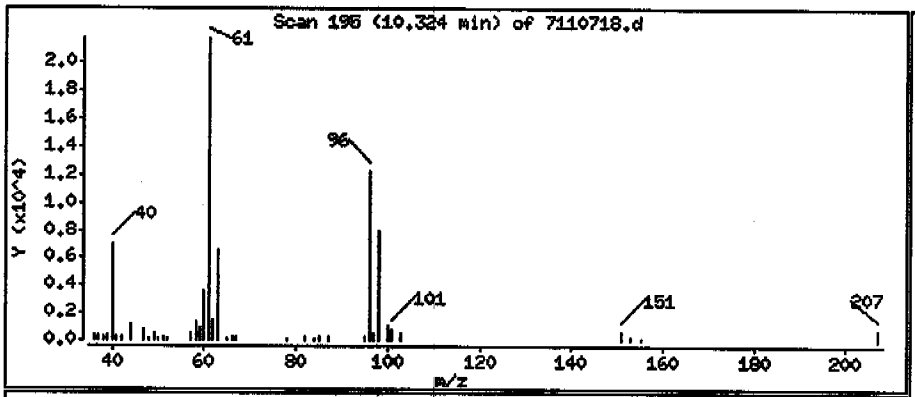
Operator: ab

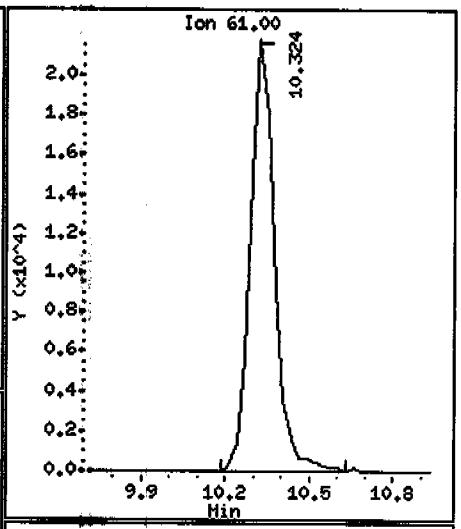
Column phase: RTx-624

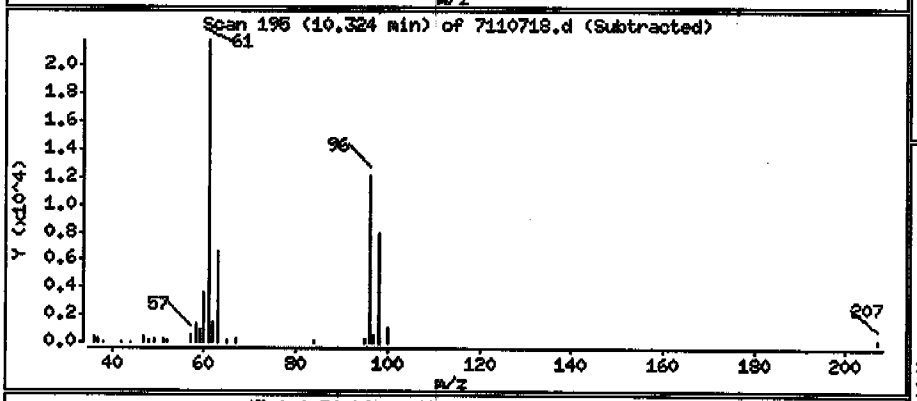
Column diameter: 0.53

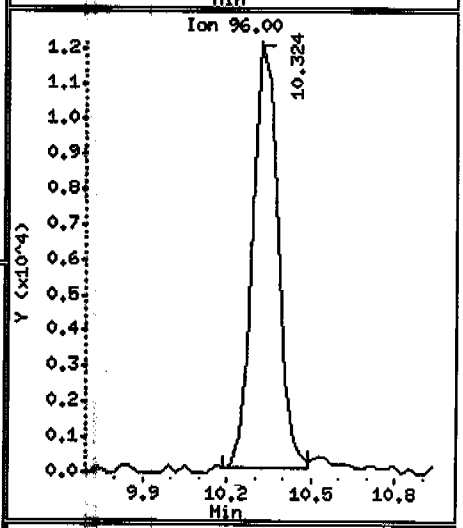
43 1,1-Dichloroethene

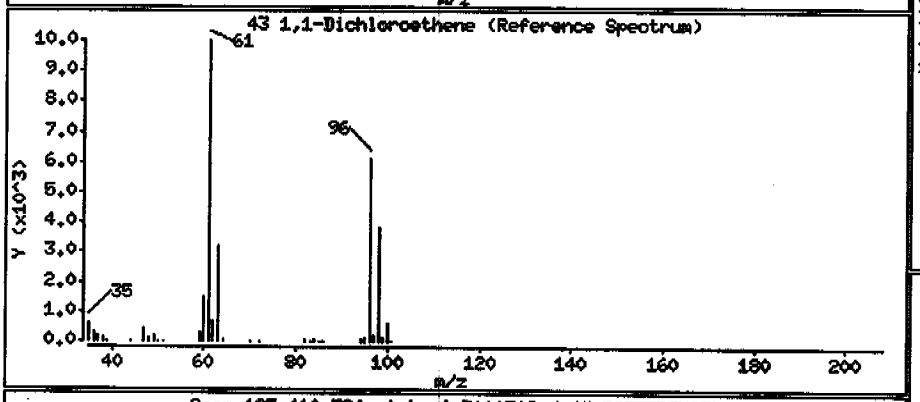
Concentration: 8.727 PPBV

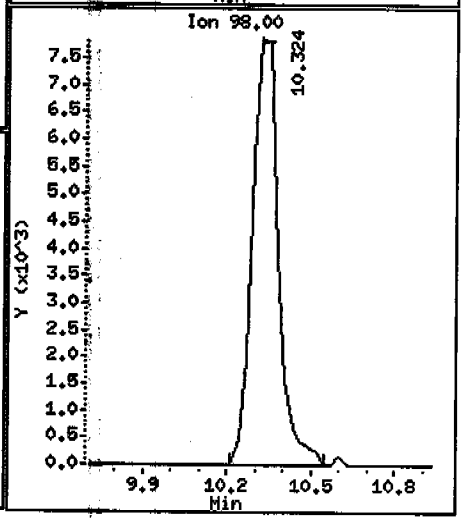


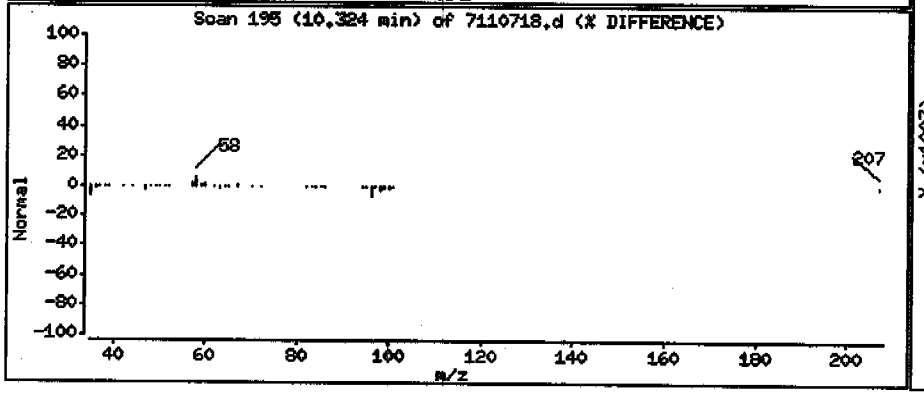












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

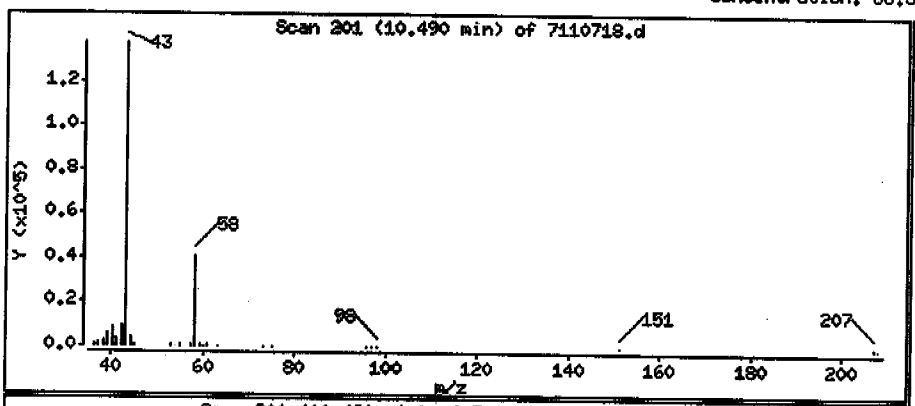
Operator: ab

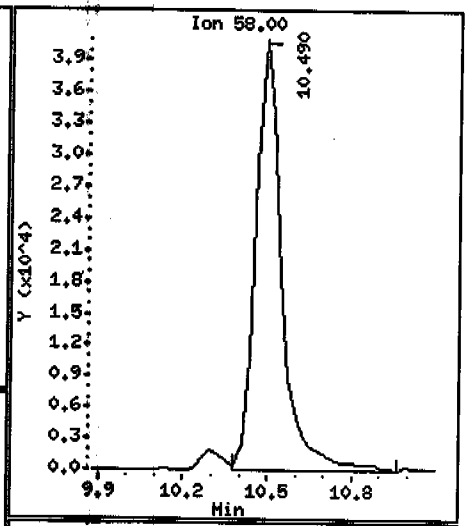
Column phase: RTx-624

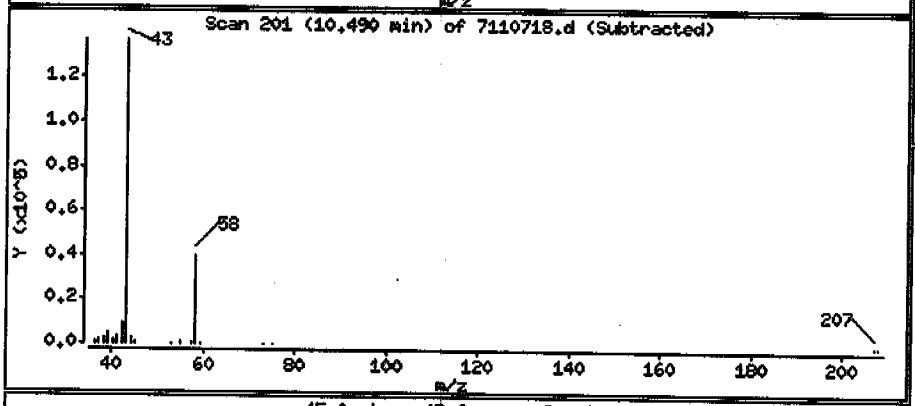
Column diameter: 0.53

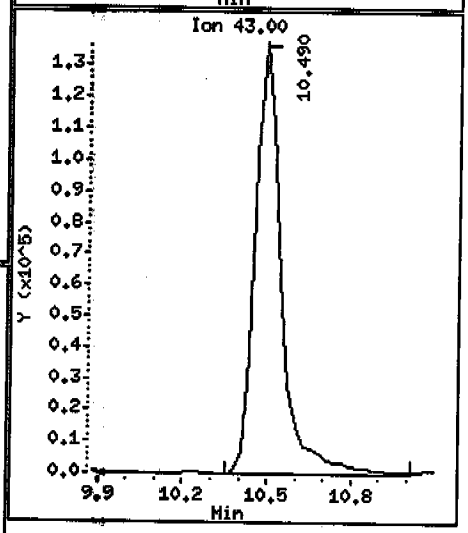
45 Acetone

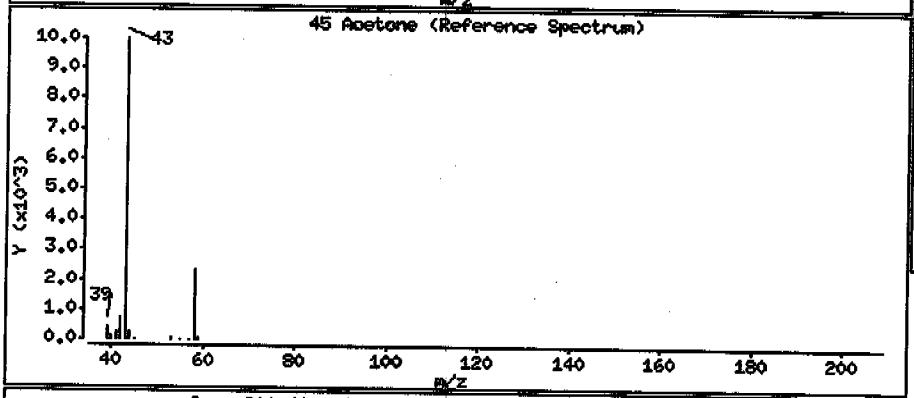
Concentration: 58.379 PPBV

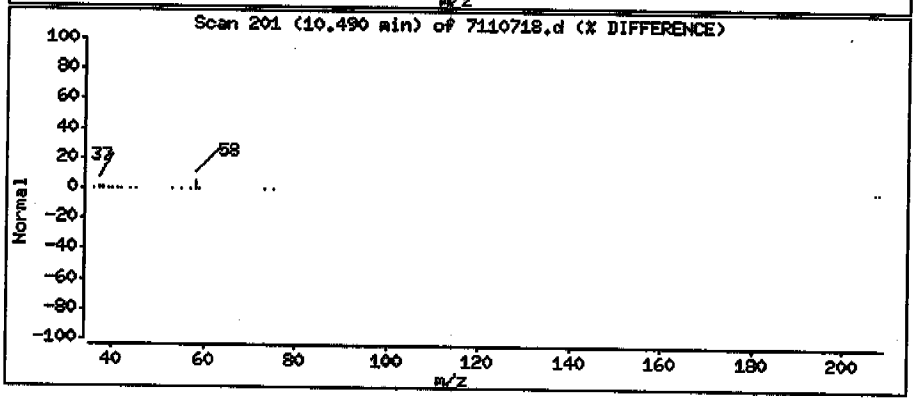












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

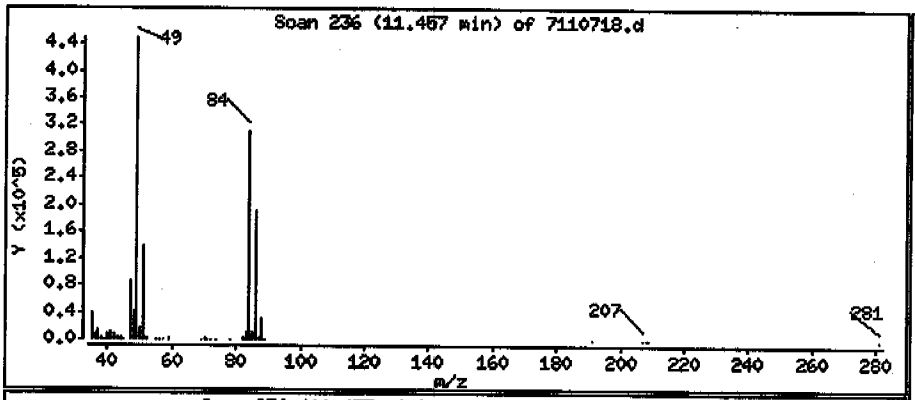
Operator: ab

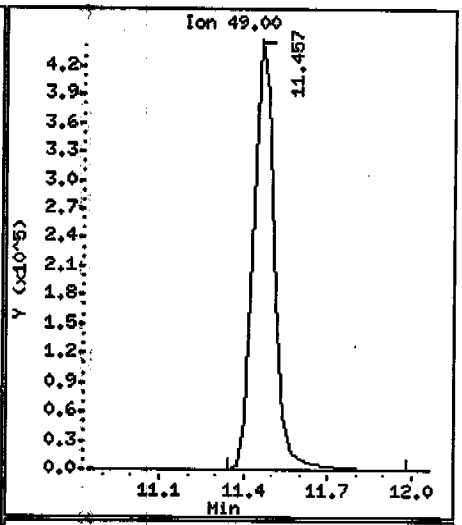
Column phase: RTx-624

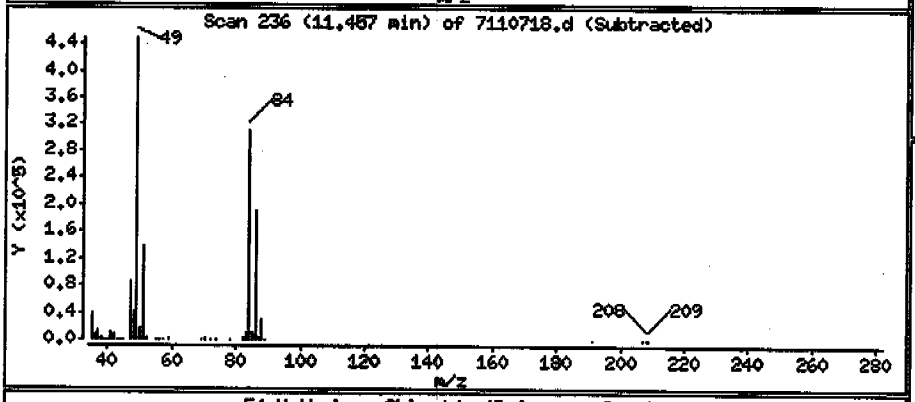
Column diameter: 0.53

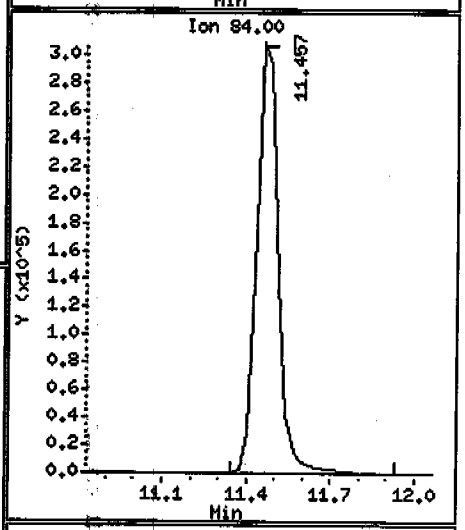
54 Methylene Chloride

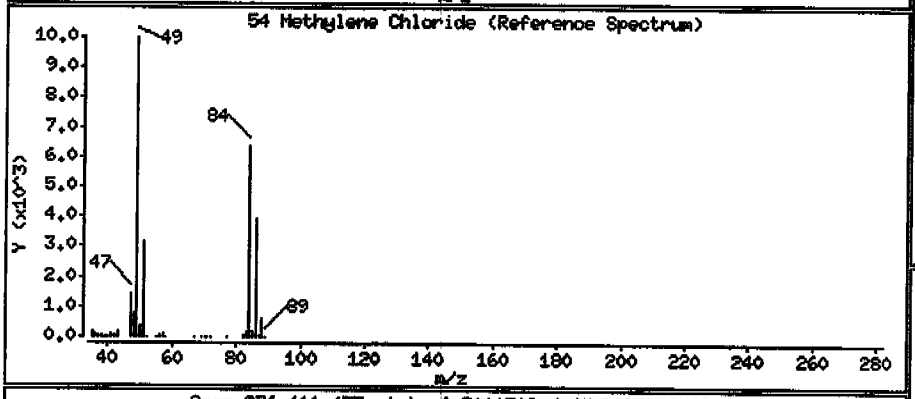
Concentration: 212.04 PPBV

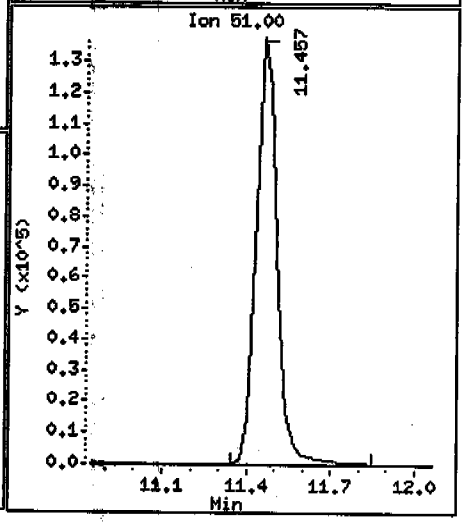


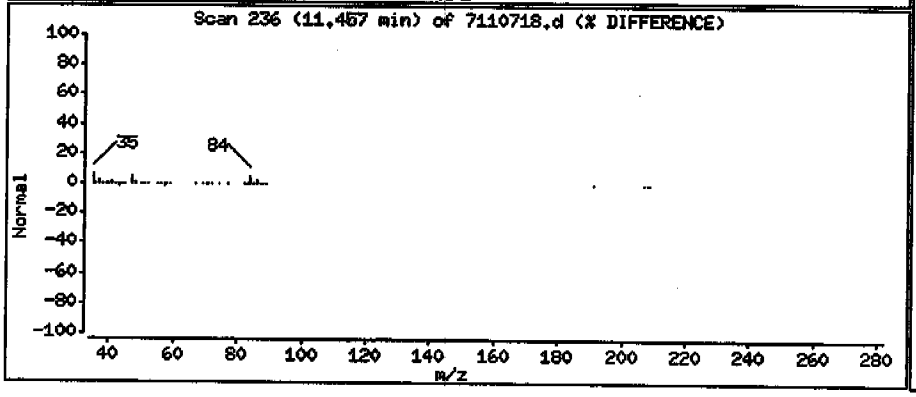












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

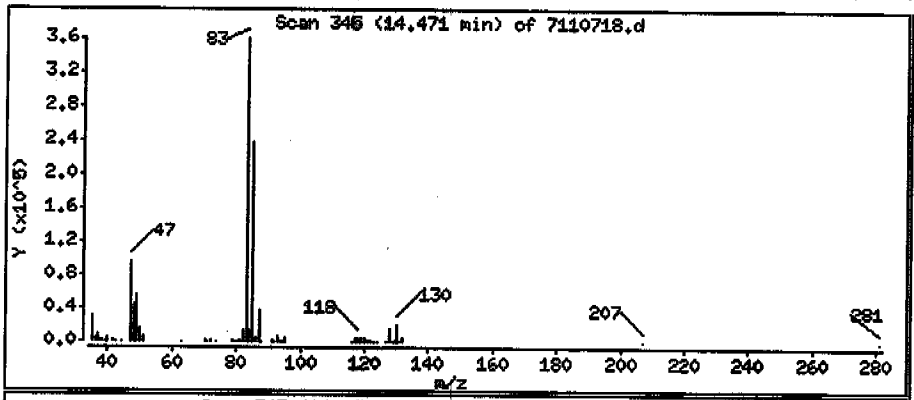
Operator: ab

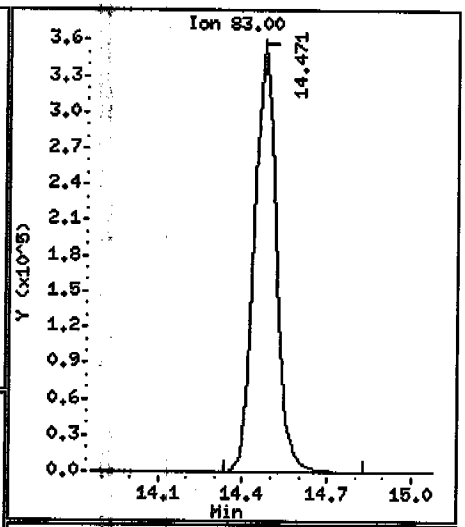
Column phase: RTx-624

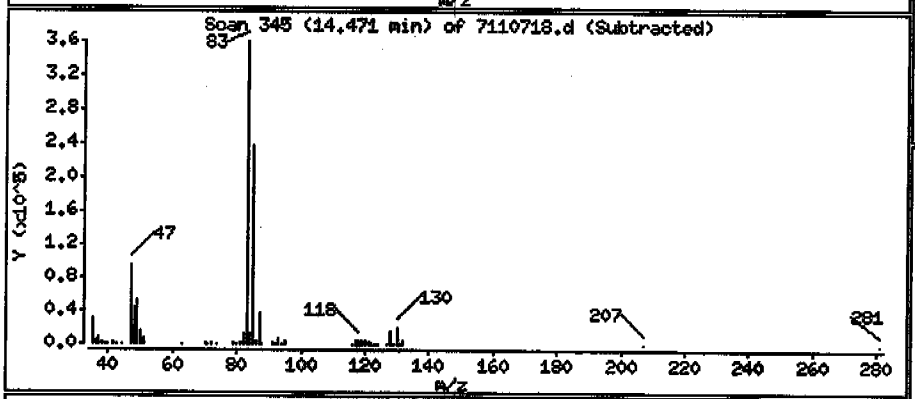
Column diameter: 0.53

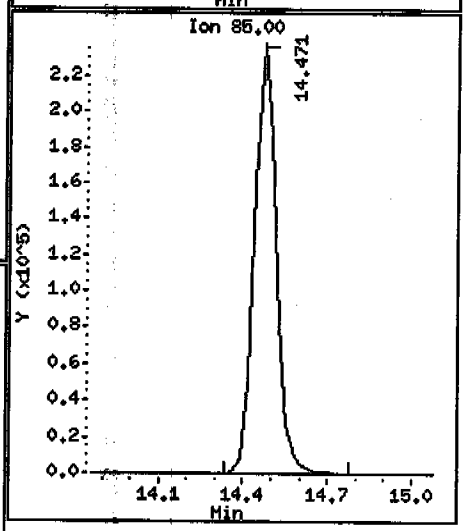
82 Chloroform

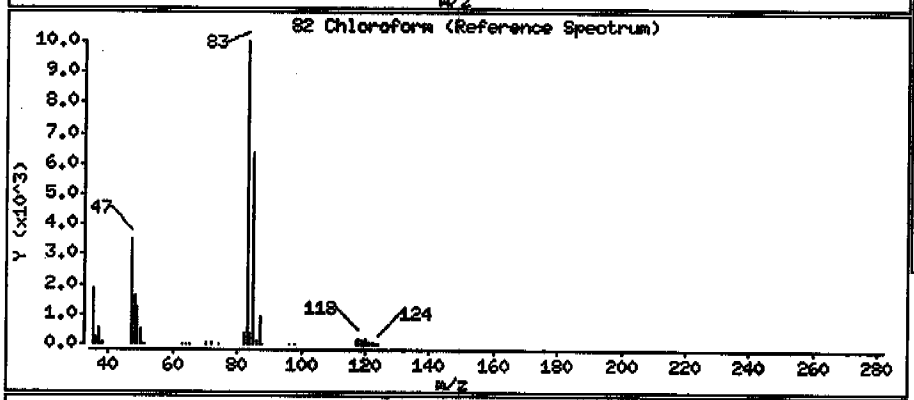
Concentration: 112.72 PPBV

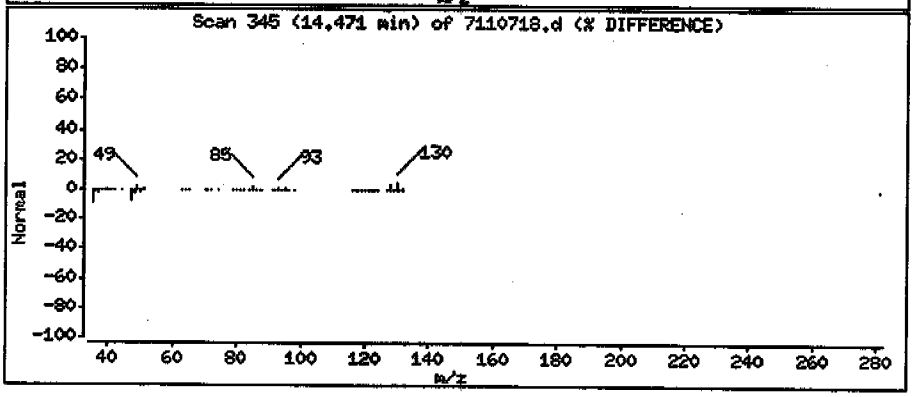












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

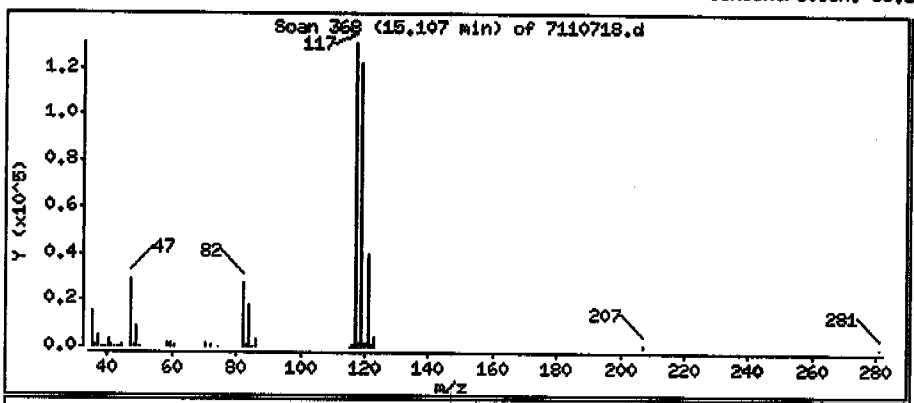
Operator: ab

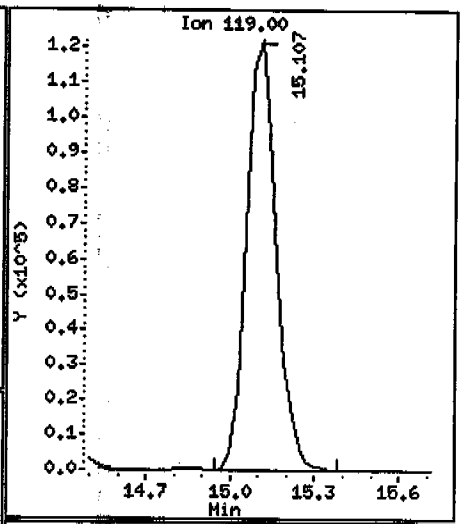
Column phase: RTx-624

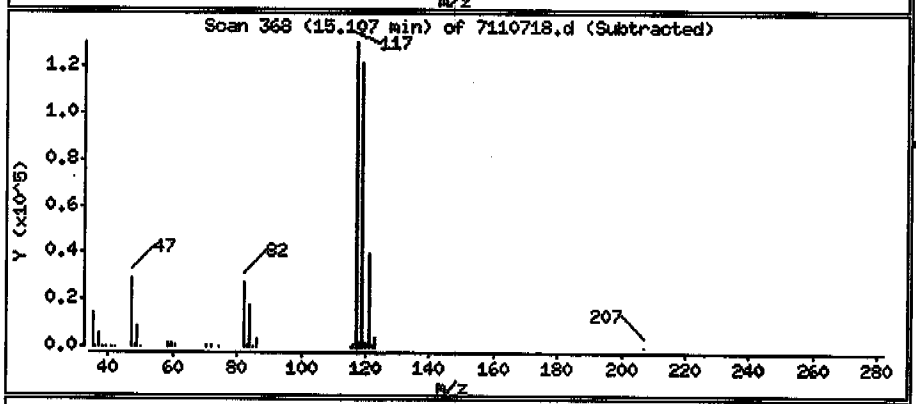
Column diameter: 0.53

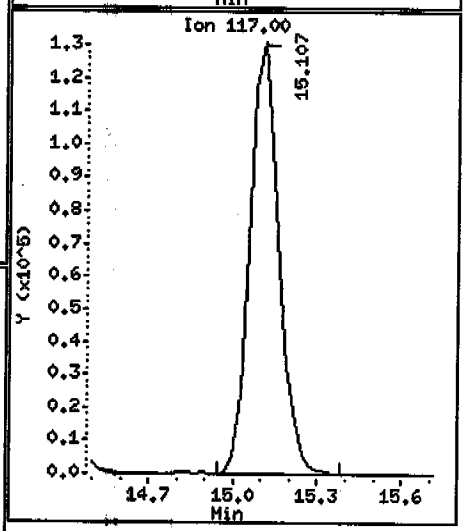
87 Carbon Tetrachloride

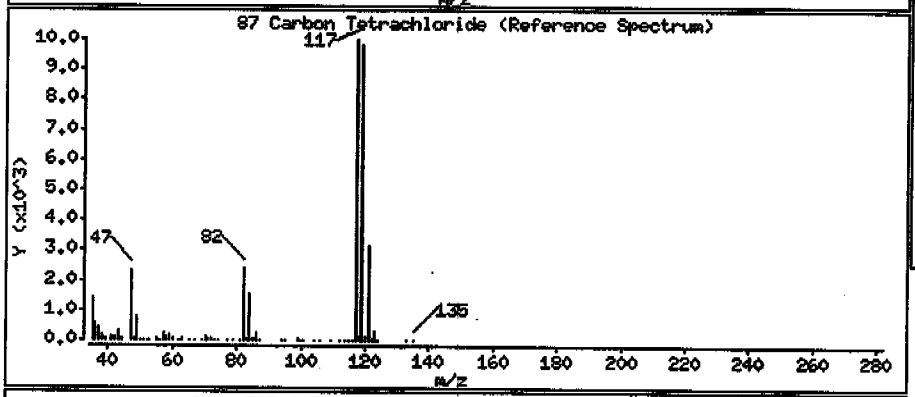
Concentration: 55.246 PPBV

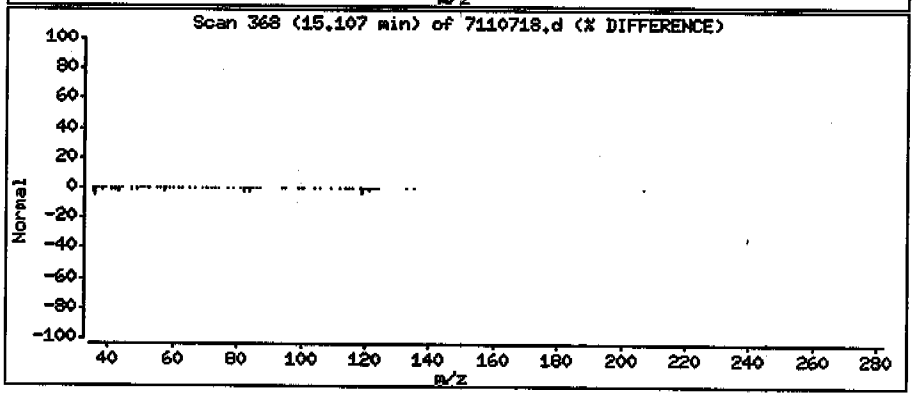












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Sample Info: 100mL #34447

Instrument: msd7.i

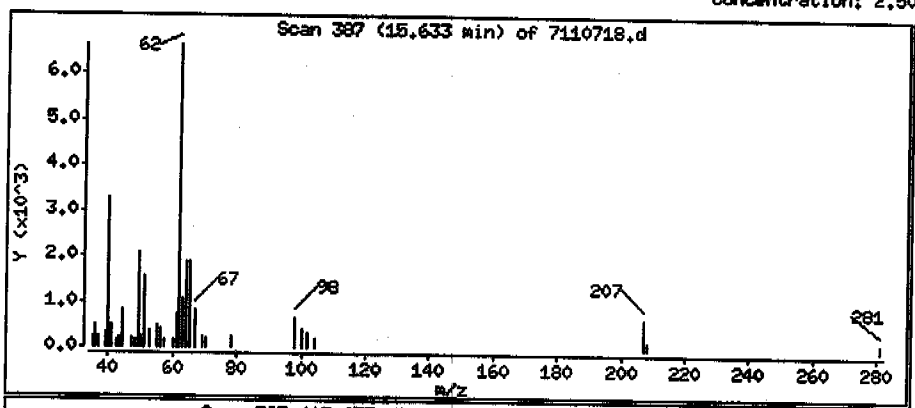
Operator: ab

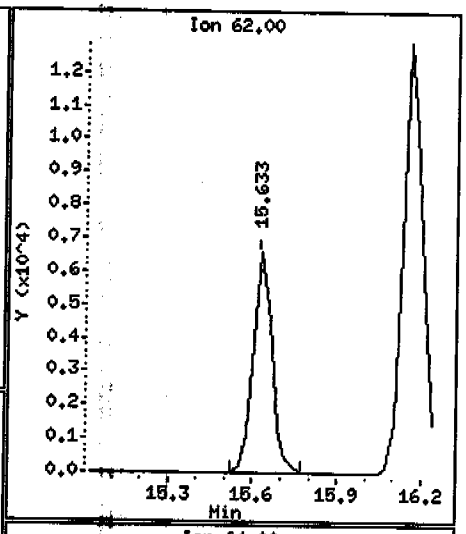
Column phase: RTx-624

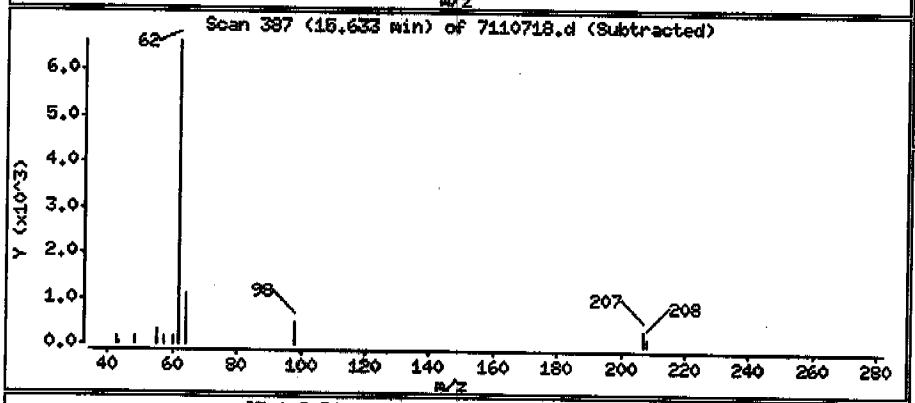
Column diameter: 0.53

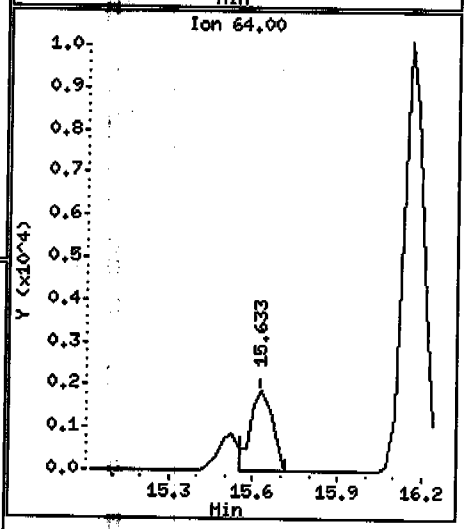
93 1,2-Dichloroethane

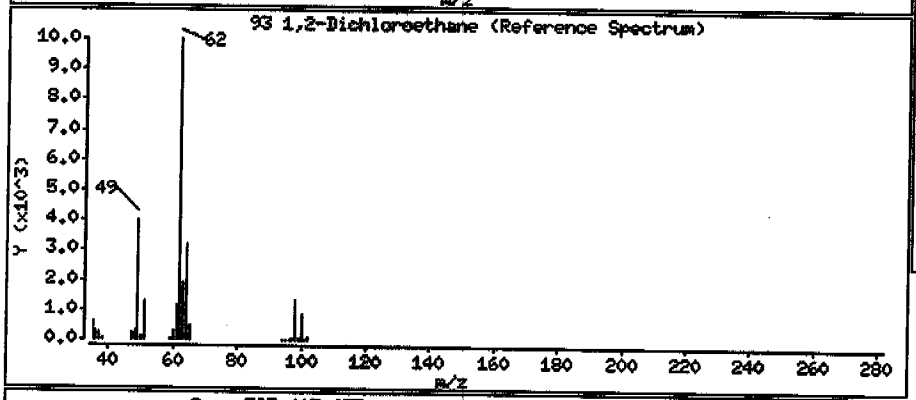
Concentration: 2.508 PPBV

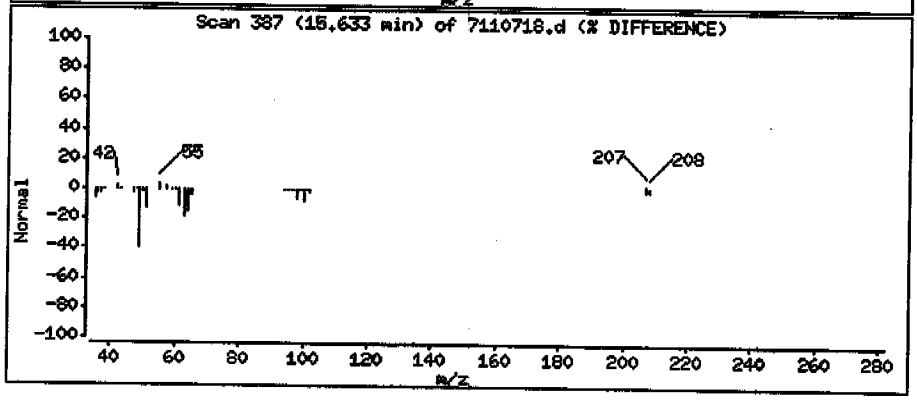












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

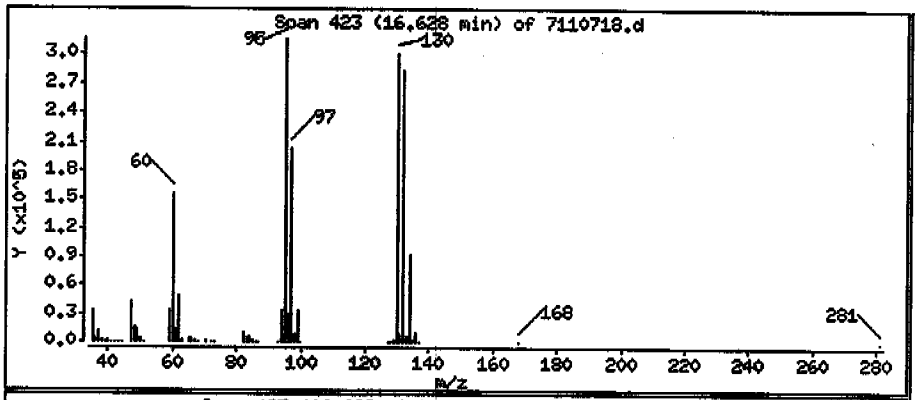
Operator: ab

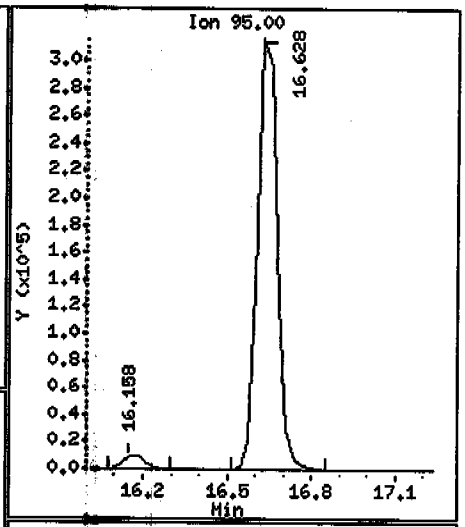
Column phase: RTx-624

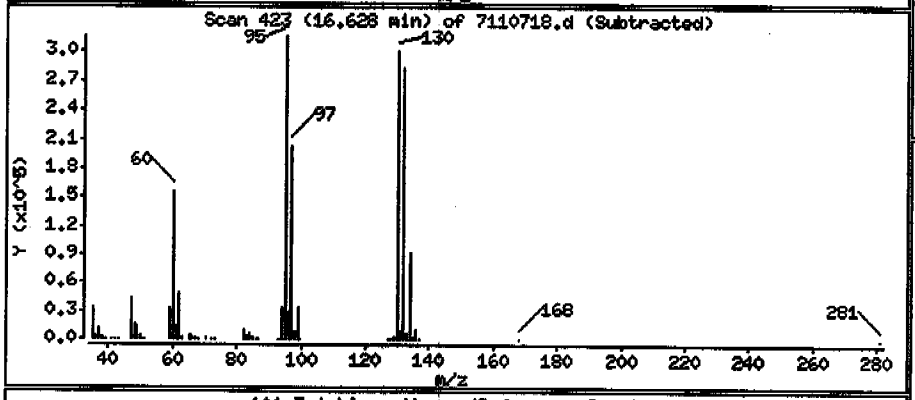
Column diameter: 0.53

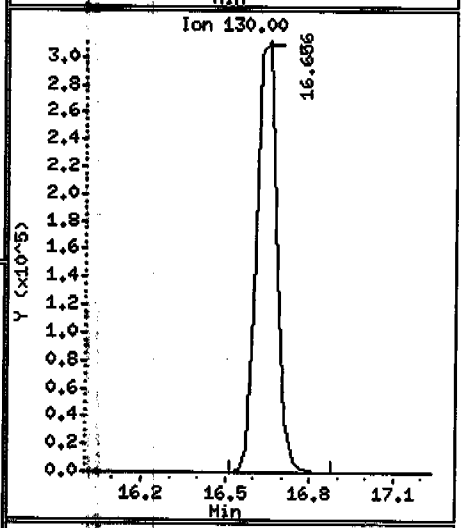
101 Trichloroethene

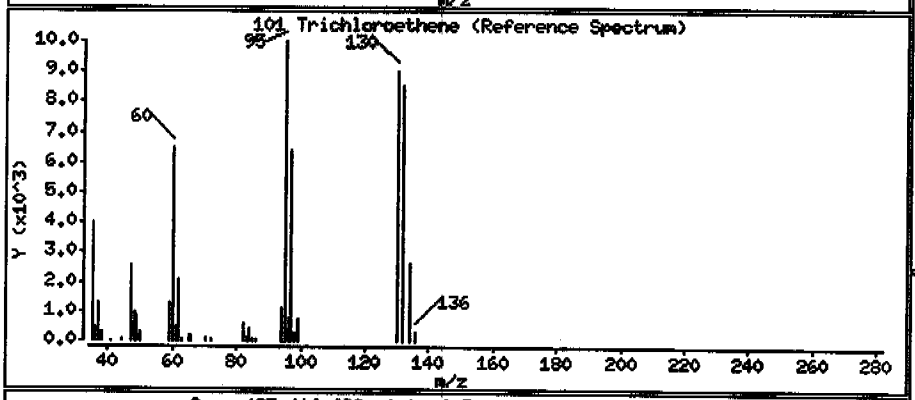
Concentration: 151.44 PPBV

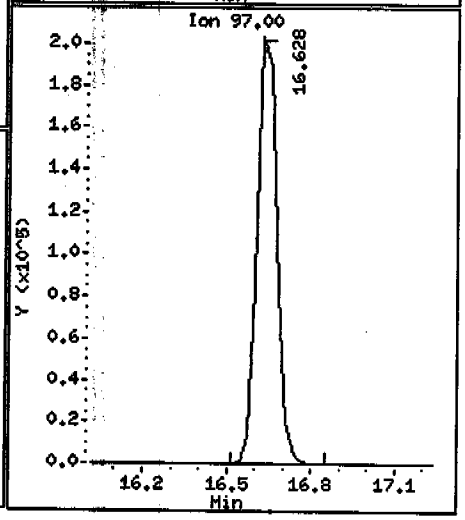


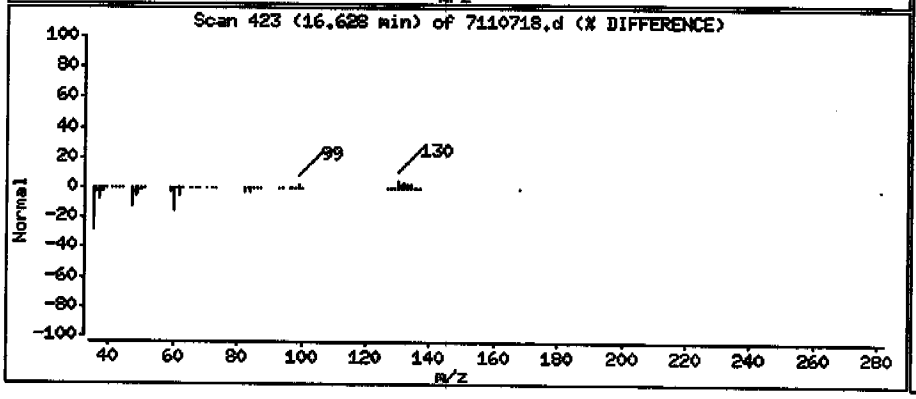












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Instrument: msd7.i

Sample Info: 100mL #34447

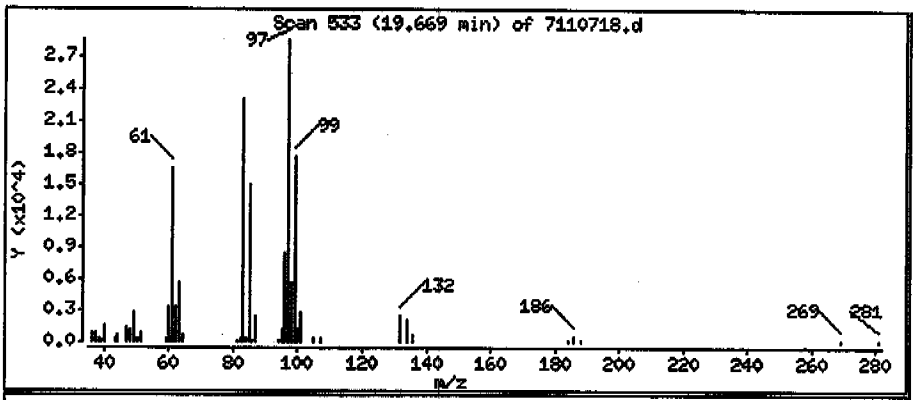
Operator: ab

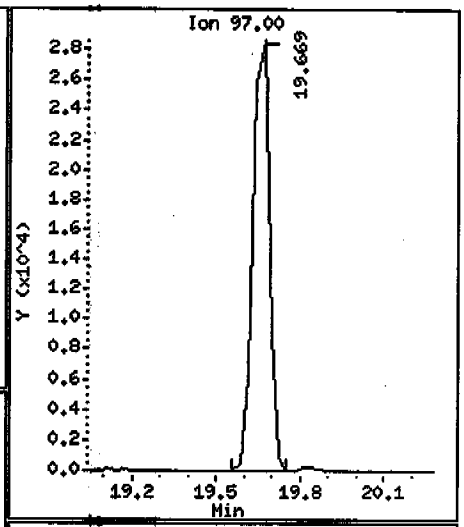
Column phase: RTx-624

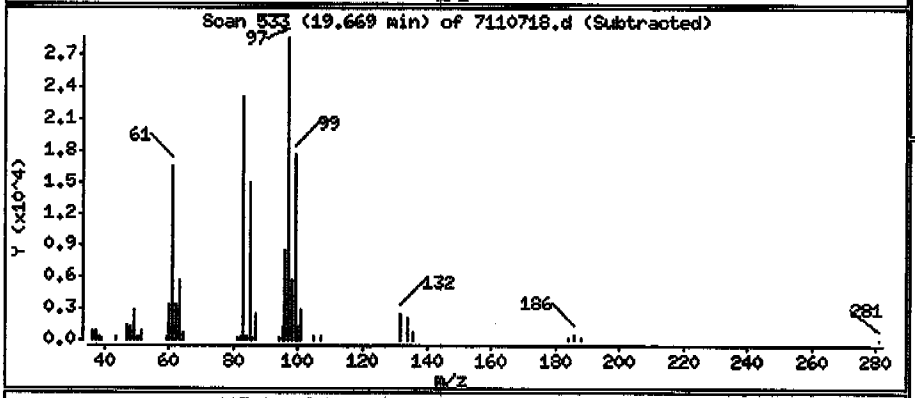
Column diameter: 0.53

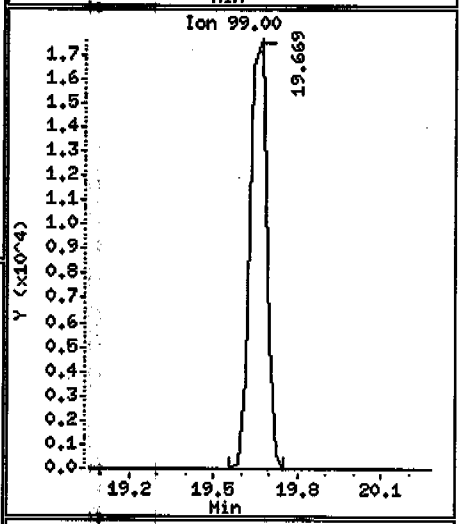
117 1,1,2-Trichloroethane

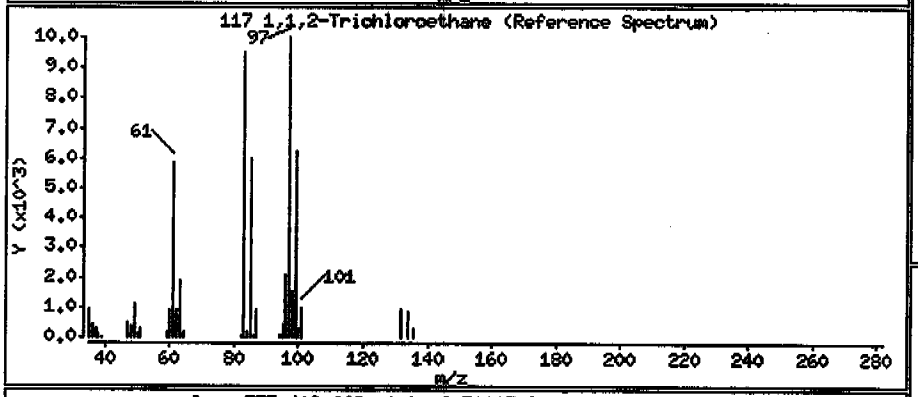
Concentration: 13.898 PPBV

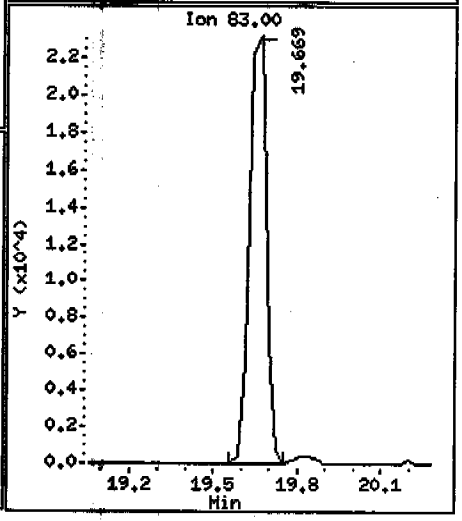


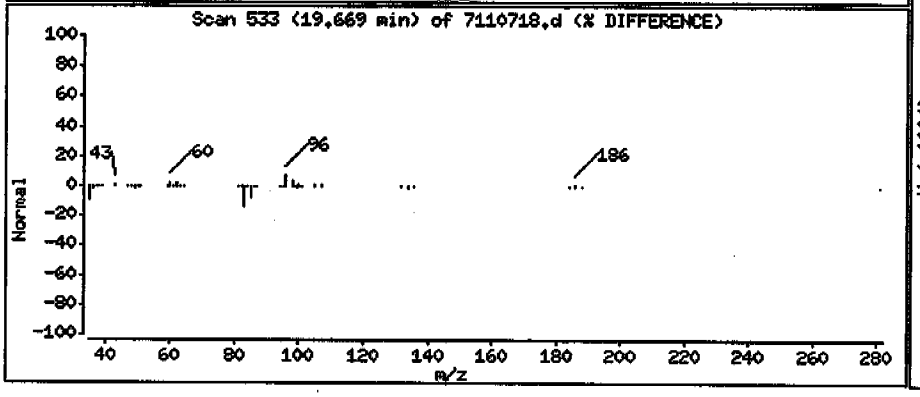












Data File: /chem/msd7.i/7-07nov.b/7110718.d

Date : 07-NOV-2007 23:08

Client ID:

Sample Info: 100mL #34447

Instrument: msd7.i

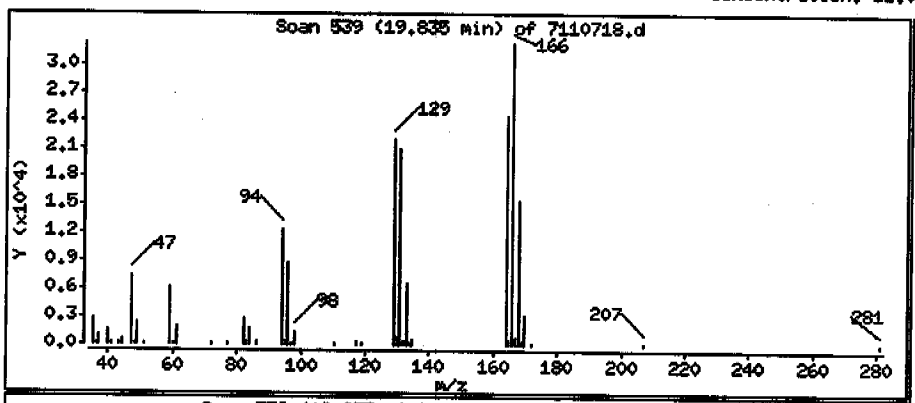
Operator: ab

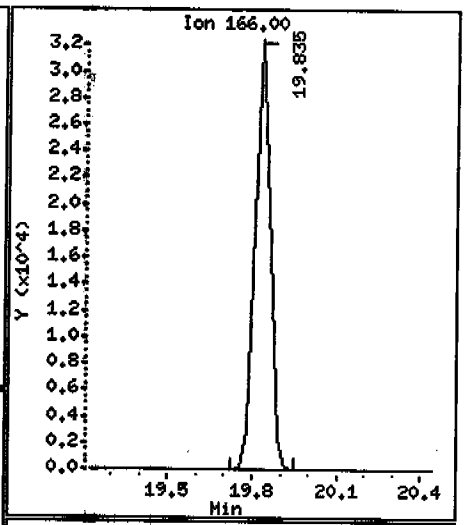
Column phase: RTx-624

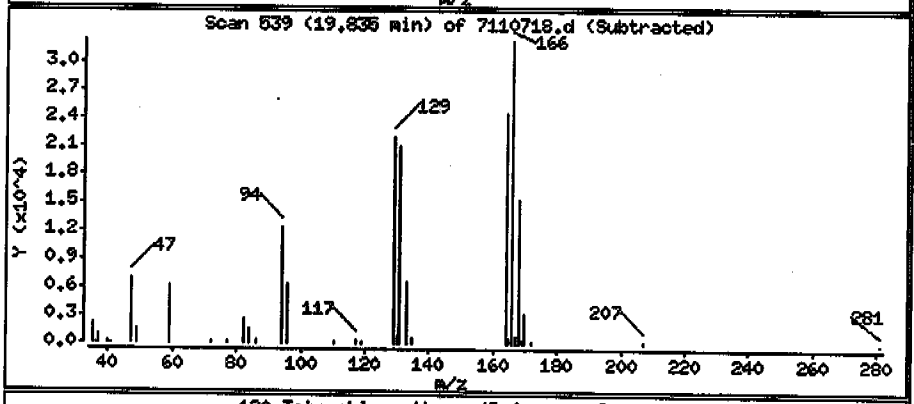
Column diameter: 0.53

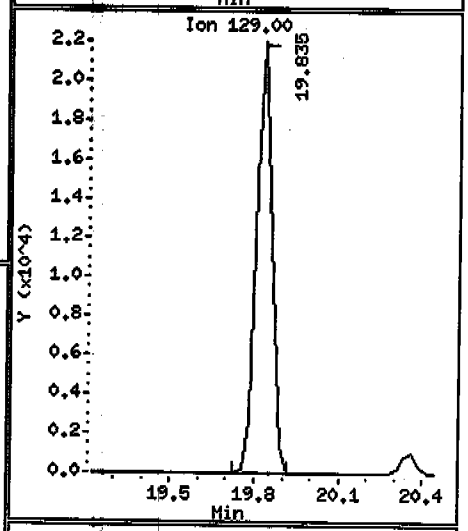
120 Tetrachloroethene

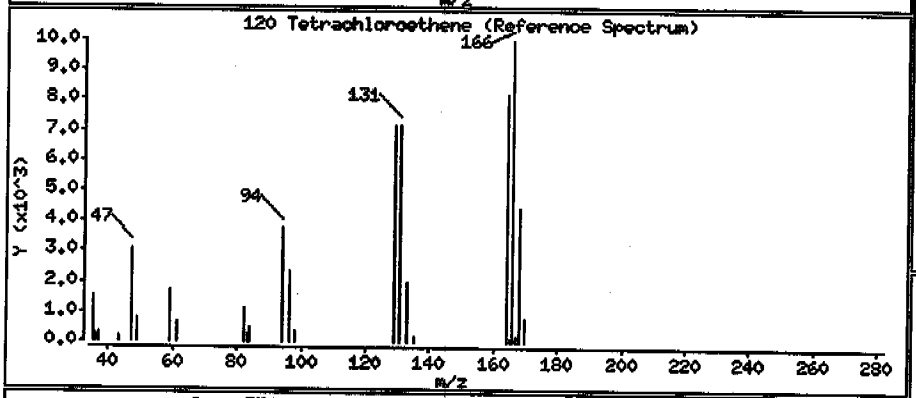
Concentration: 11.062 PPBV

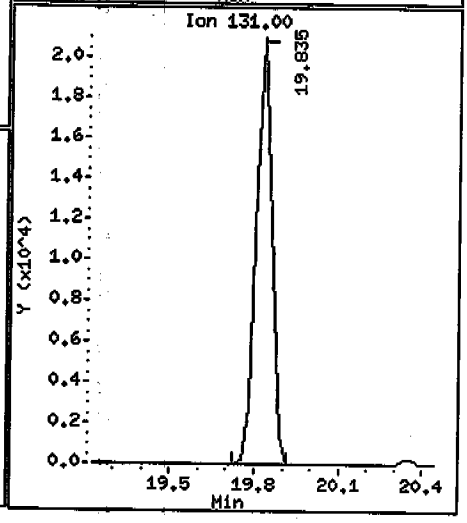


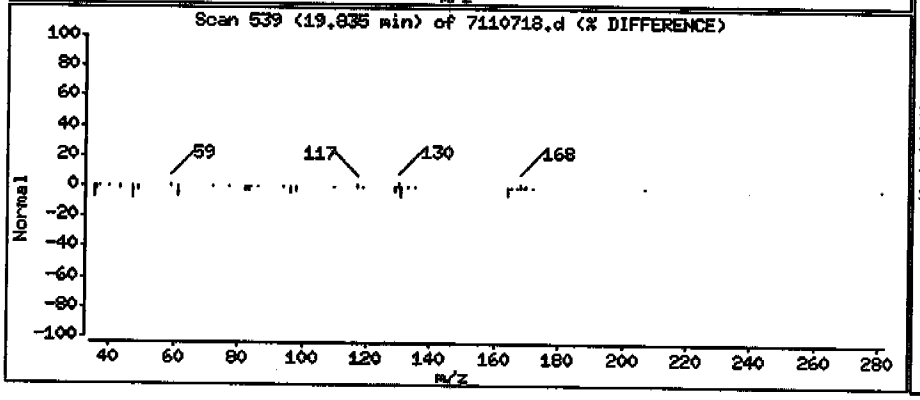












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6801

Lab ID#: 0711101-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.5	4.2	7.4
1,3-Butadiene	0.86	7.4	1.9	16
Freon 113	0.86	3.9	6.6	30
1,1-Dichloroethene	0.86	3.1	3.4	12
Acetone	3.4	240	8.1	560
2-Propanol	3.4	3.6	8.4	9.0
Carbon Disulfide	0.86	4.9	2.7	15
Methylene Chloride	0.86	20	3.0	68
Hexane	0.86	2.2	3.0	7.7
2-Butanone (Methyl Ethyl Ketone)	0.86	58	2.5	170
cis-1,2-Dichloroethene	0.86	0.92	3.4	3.6
Tetrahydrofuran	0.86	1.2	2.5	3.7
Chloroform	0.86	130	4.2	630
1,1,1-Trichloroethane	0.86	5.7	4.7	31
Cyclohexane	0.86	0.99	2.9	3.4
Carbon Tetrachloride	0.86	46	5.4	290
Benzene	0.86	2.6	2.7	8.2
Heptane	0.86	2.8	3.5	12
Trichloroethene	0.86	110	4.6	580
Bromodichloromethane	0.86	1.2	5.7	7.8
4-Methyl-2-pentanone	0.86	5.0	3.5	21
Toluene	0.86	6.6	3.2	25
Tetrachloroethene	0.86	36	5.8	250
2-Hexanone	3.4	21	14	86
Ethyl Benzene	0.86	2.6	3.7	11
m,p-Xylene	0.86	8.0	3.7	35
o-Xylene	0.86	3.6	3.7	16
4-Ethyltoluene	0.86	5.0	4.2	24
1,3,5-Trimethylbenzene	0.86	2.3	4.2	11
1,2,4-Trimethylbenzene	0.86	11	4.2	53
n-Butanol	3.4	7.0	10	21
Propylene	3.4	120	5.9	210

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6801

Lab ID#: 0711101-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.5	4.2	7.4
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	7.4	1.9	16
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	3.9	6.6	30
1,1-Dichloroethene	0.86	3.1	3.4	12
Acetone	3.4	240	8.1	560
2-Propanol	3.4	3.6	8.4	9.0
Carbon Disulfide	0.86	4.9	2.7	15
Methylene Chloride	0.86	20	3.0	68
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	2.2	3.0	7.7
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	58	2.5	170
cis-1,2-Dichloroethene	0.86	0.92	3.4	3.6
Tetrahydrofuran	0.86	1.2	2.5	3.7
Chloroform	0.86	130	4.2	630
1,1,1-Trichloroethane	0.86	5.7	4.7	31
Cyclohexane	0.86	0.99	2.9	3.4
Carbon Tetrachloride	0.86	46	5.4	290
Benzene	0.86	2.6	2.7	8.2
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	2.8	3.5	12
Trichloroethene	0.86	110	4.6	580
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	1.2	5.7	7.8
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	5.0	3.5	21
Toluene	0.86	6.6	3.2	25
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	36	5.8	250

0054

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6801

Lab ID#: 0711101-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	21	14	86
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	2.6	3.7	11
m,p-Xylene	0.86	8.0	3.7	35
o-Xylene	0.86	3.6	3.7	16
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	5.0	4.2	24
1,3,5-Trimethylbenzene	0.86	2.3	4.2	11
1,2,4-Trimethylbenzene	0.86	11	4.2	53
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	7.0	10	21
Propylene	3.4	120	5.9	210

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	104	70-130

0055

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110720.d
Lab Smp Id: 0711101-02A
Inj Date : 08-NOV-2007 00:50
Operator : ab Inst ID: msd7.i
Smp Info : 200mL #34749
Misc Info : 6.5"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	641418	25.0000			80.00- 120.00	100.00
14.416	14.416 (1.000)	128	501362				28.66- 128.66	78.16
14.416	14.416 (1.000)	49	1340875				133.49- 233.49	209.05
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2157343	25.0000			80.00- 120.00	100.00
16.158	16.158 (1.000)	88	328986				0.00- 65.23	15.25
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1630873	25.0000			80.00- 120.00	100.00
21.356	21.356 (1.000)	82	886295				4.70- 104.70	54.34
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	826016	23.9716	23.972		80.00- 120.00	100.00
15.494	15.494 (1.075)	67	433984				2.91- 102.91	52.54
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1793232	23.4157	23.416		80.00- 120.00	100.00
18.757	18.757 (1.161)	70	233843				0.00- 61.46	13.04

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1256299			19.18- 119.18	70.06
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	1014782	26.1488	26.149	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	1304108			73.89- 173.89	128.51
23.347	23.347 (1.093)	176	980865			48.20- 148.20	96.66
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	2010638	72.7300	124.37	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	1322855			21.19- 121.19	65.79
5.617	5.617 (0.390)	39	1633165			24.83- 124.83	81.23
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.757	5.758 (0.399)	85	88345	0.87159	1.490	80.00- 120.00	100.00
5.757	5.758 (0.399)	87	26719			0.00- 83.07	30.24
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.481)	54	128531	4.31176	7.373	80.00- 120.00	100.00
6.743	6.940 (0.468)	39	963269			55.97- 155.97	749.44
42 Freon 113					CAS #: 76-13-1		
10.185	10.186 (0.707)	151	120348	2.28829	3.913	80.00- 120.00	100.00
10.185	10.186 (0.707)	153	76472			13.12- 113.12	63.54
10.185	10.186 (0.707)	101	141783			67.28- 167.28	117.81
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	102081	1.82406	3.119	80.00- 120.00	100.00
10.324	10.324 (0.716)	96	57691			9.78- 109.78	56.51
10.324	10.324 (0.716)	98	37813			0.00- 88.25	37.04
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.728)	58	2397256	138.585	236.98	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	7916235			247.10- 347.10	330.22
46 2-Propanol					CAS #: 67-63-0		
10.683	10.683 (0.741)	45	130934	2.13347	3.648	80.00- 120.00	100.00
10.490	10.683 (0.728)	43	7916235			0.00- 75.54	6045.97
10.656	10.683 (0.739)	59	10131			0.00- 53.72	7.74
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	306084	2.86666	4.902	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.795)	49	472237	11.4774	19.626	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	349727			19.98- 119.98	74.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
54 Methylene Chloride (continued)							
11.457	11.457 (0.795)	51	146700			0.00- 80.85	31.06
65 Hexane					CAS #: 110-54-3		
12.314	12.287 (0.854)	57	68969	1.27106	2.174	80.00- 120.00	100.00
12.314	12.287 (0.854)	43	83400			17.84- 117.84	120.92
12.314	12.287 (0.854)	86	8724			0.00- 65.07	12.65
75 2-Butanone					CAS #: 78-93-3		
13.890	13.891 (0.964)	72	474276	34.1399	58.379	80.00- 120.00	100.00
13.890	13.891 (0.964)	43	2293241			412.48- 512.48	483.52
13.890	13.891 (0.964)	57	167466			0.00- 86.57	35.31
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.965)	61	24463	0.53773	0.9195	80.00- 120.00	100.00
13.946	13.918 (0.967)	96	8316			26.41- 126.41	33.99
13.918	13.918 (0.965)	98	3759			0.00- 98.54	15.37
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (0.998)	42	26391	0.72861	1.246	80.00- 120.00	100.00
14.388	14.388 (0.998)	71	13565			0.00- 86.36	51.40
14.471	14.388 (1.004)	72	32041			0.00- 87.82	121.41
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	4843064	74.9918	128.24	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	3143138			15.69- 115.69	64.90
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	216026	3.32172	5.680	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	142393			14.03- 114.03	65.91
85 Cyclohexane					CAS #: 110-82-7		
14.831	14.831 (1.029)	84	21523	0.57781	0.9880	80.00- 120.00	100.00
14.803	14.831 (1.027)	56	51875			76.16- 176.16	241.02
14.803	14.831 (1.027)	41	111834			19.79- 119.79	519.60
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	1659687	27.2247	46.554	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	1727181			53.14- 153.14	104.07
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	128731	1.50181	2.568	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	31256			0.00- 71.87	24.28
94 Heptane					CAS #: 142-82-5		
15.743	15.715 (0.974)	71	43364	1.64494	2.813	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
94 Heptane (continued)							
15.743	15.715 (0.974)	43	82154			158.53- 258.53	189.45
15.743	15.715 (0.974)	57	33316			59.34- 159.34	76.83
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	2386924	62.6881	107.20	80.00- 120.00	100.00
16.655	16.628 (1.031)	130	2407988			51.11- 151.11	100.88
16.628	16.628 (1.029)	97	1557142			15.04- 115.04	65.24
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.087)	83	44998	0.68070	1.164	80.00- 120.00	100.00
17.568	17.540 (1.087)	85	27774			14.03- 114.03	61.72
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	75718	2.95180	5.048	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	210069			222.97- 322.97	277.44
18.508	18.508 (1.145)	85	30354			0.00- 90.48	40.09
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	365184	3.88963	6.651	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	229393			12.90- 112.90	62.82
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	931397	21.2594	36.354	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	662199			21.07- 121.07	71.10
19.835	19.835 (0.929)	131	637097			18.33- 118.33	68.40
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.973 (0.935)	58	445862	12.3160	21.060	80.00- 120.00	100.00
19.973	19.973 (0.935)	43	857531			134.78- 234.78	192.33
19.973	19.973 (0.935)	100	76015			0.00- 67.05	17.05
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	56940	1.51190	2.585	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	178213			261.69- 361.69	312.98
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	221823	4.70567	8.047	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	429483			145.05- 245.05	193.62
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	86365	2.11415	3.615	80.00- 120.00	100.00
22.379	22.379 (1.048)	91	173279			150.43- 250.43	200.64
145 4-Ethyltoluene					CAS #: 622-96-8		
23.789	23.817 (1.114)	105	355923	2.91318	4.982	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
145 4-Ethyltoluene (continued)								
23.789	23.817	(1.114)	120	114807			0.00- 81.87	32.26
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.927	23.927	(1.120)	105	129851	1.35306	2.314	80.00- 120.00	100.00
23.927	23.927	(1.120)	120	70620			3.80- 103.80	54.39
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.563	24.563	(1.150)	105	552848	6.33878	10.839	80.00- 120.00	100.00
24.563	24.563	(1.150)	120	224087			0.00- 98.95	40.53
98 1-Butanol						CAS #: 71-36-3		
16.324	16.324	(1.010)	56	86782	4.11499	7.037	80.00- 120.00	100.00
16.351	16.324	(1.012)	41	98144			21.86- 121.86	113.09
16.324	16.324	(1.010)	43	50290			9.15- 109.15	57.95

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110720.d
Lab Smp Id: 0711101-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.5"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	641418	-7.77
97 1,4-Difluorobenze	2265681	1359409	3171953	2157343	-4.78
126 Chlorobenzene-d5	1765821	1059493	2472149	1630873	-7.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-07nov
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711101-02A
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.5"Hg ->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.972	95.89	70-130
$ 113 Toluene-d8	25.000	23.416	93.66	70-130
$ 137 Bromofluorobenzene	25.000	26.149	104.60	70-130

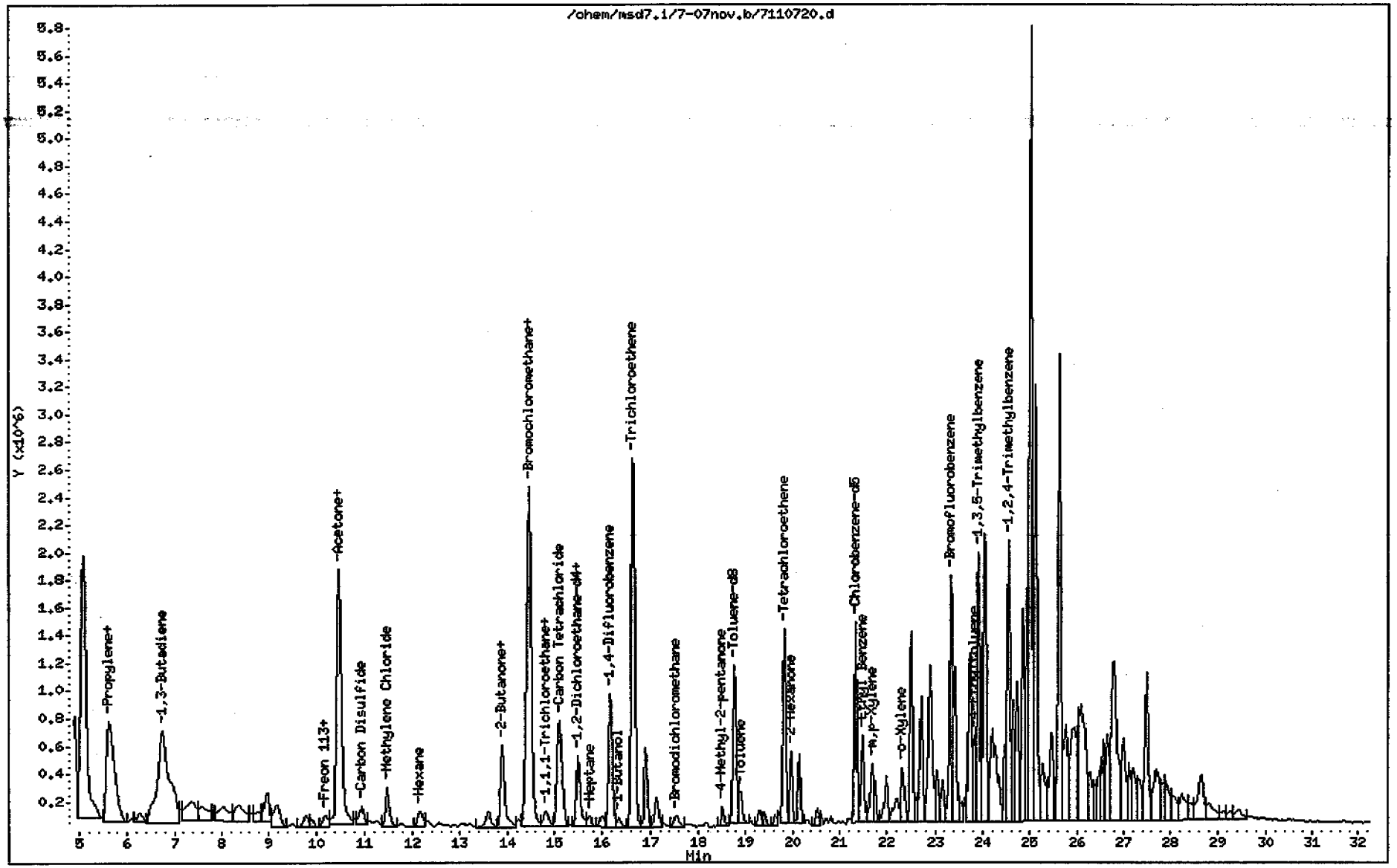
Data File: /chem/msd7.i/7-07nov.b/7110720.d
Date : 08-NOV-2007 00:50
Client ID:
Sample Info: 200mL #34749

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0063



Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

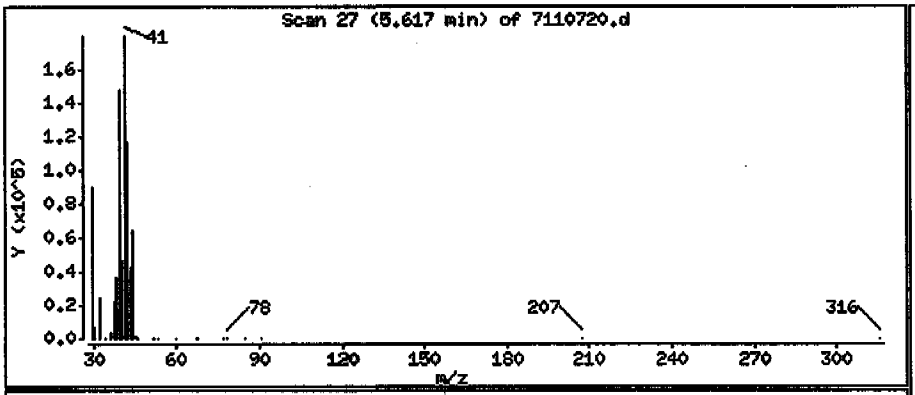
Operator: ab

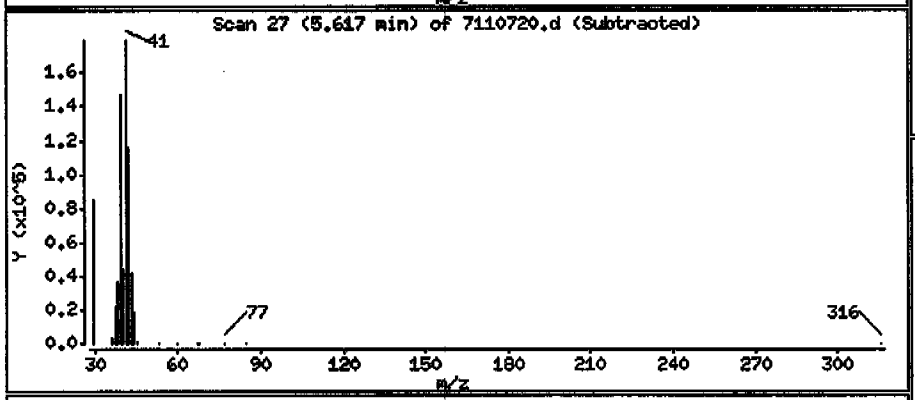
Column phase: RTx-624

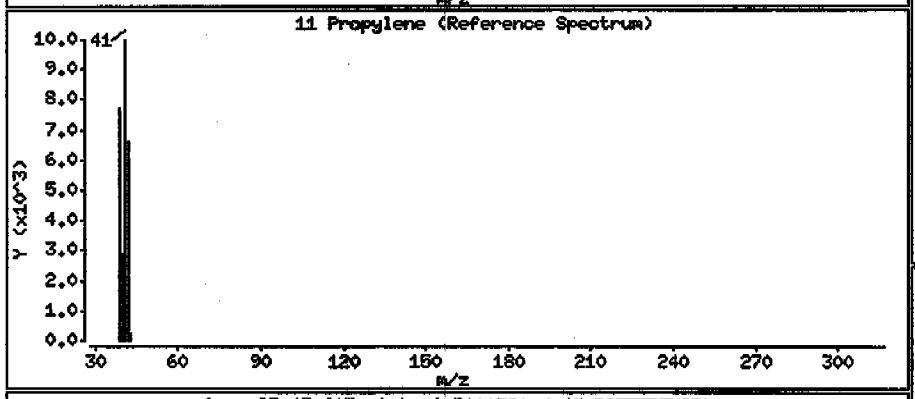
Column diameter: 0.53

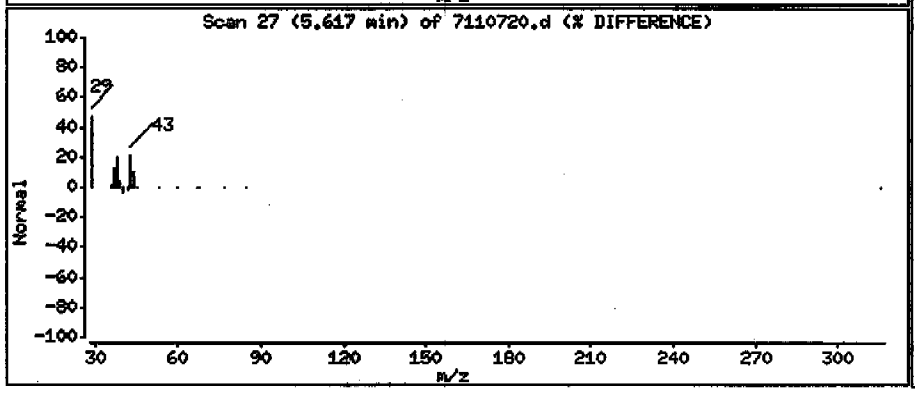
11 Propylene

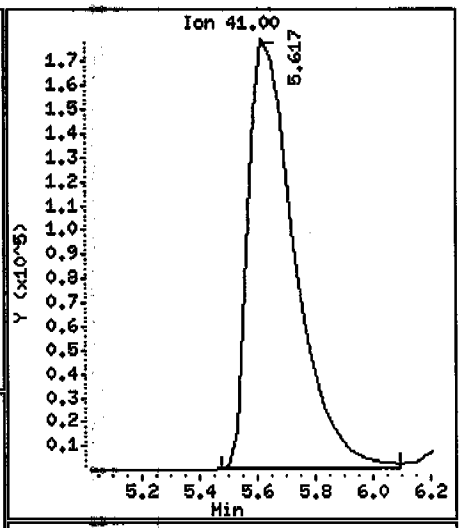
Concentration: 124.37 PPBV

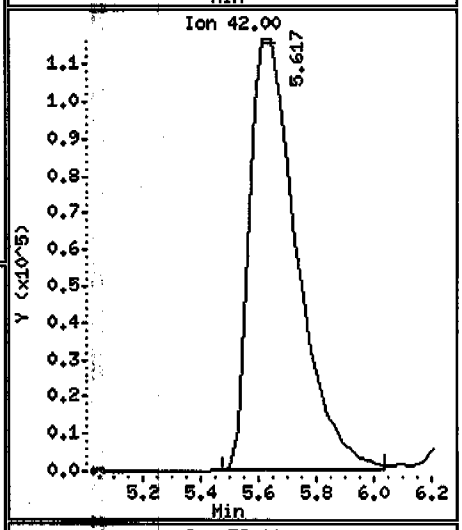


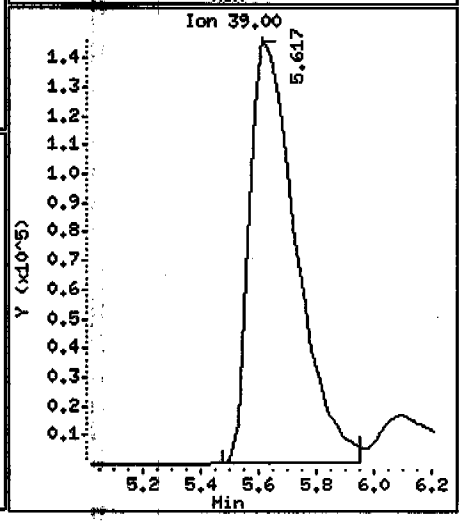












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

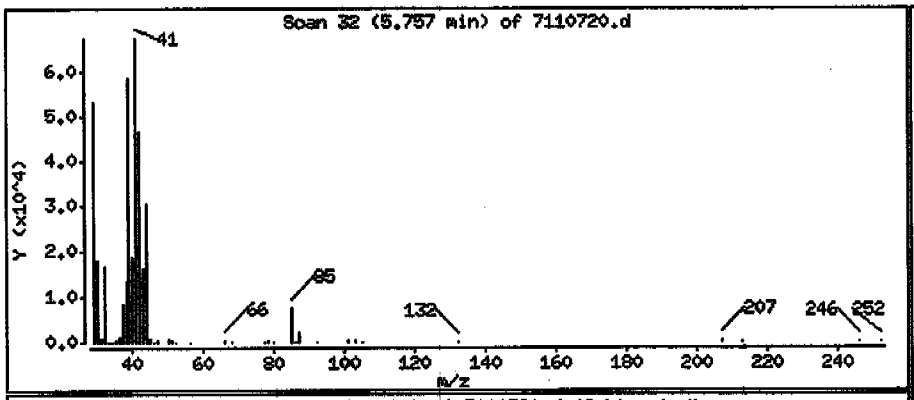
Operator: ab

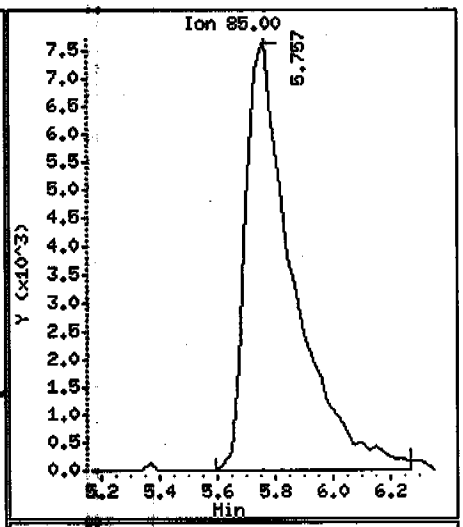
Column phase: RTx-624

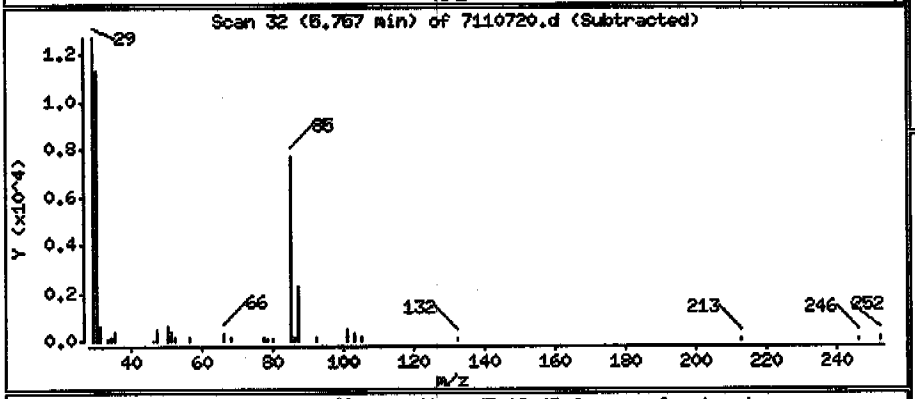
Column diameter: 0.53

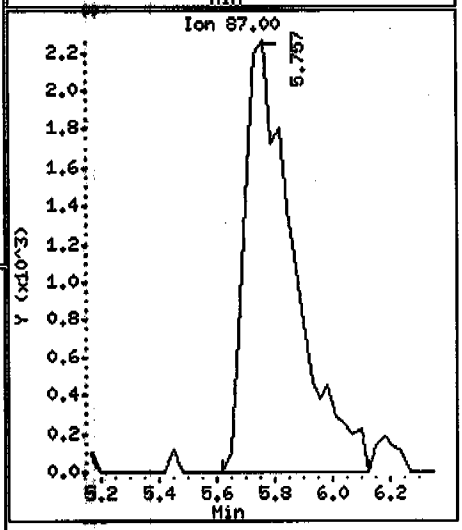
12 Dichlorodifluoromethane/Fr12

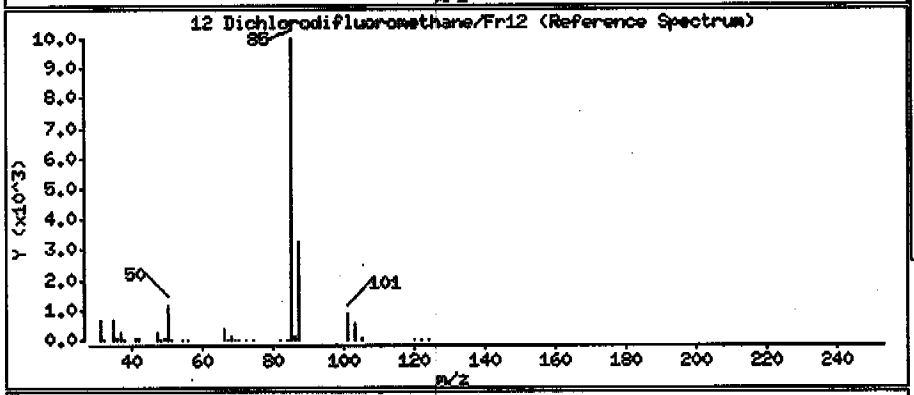
Concentration: 1.490 PPBV

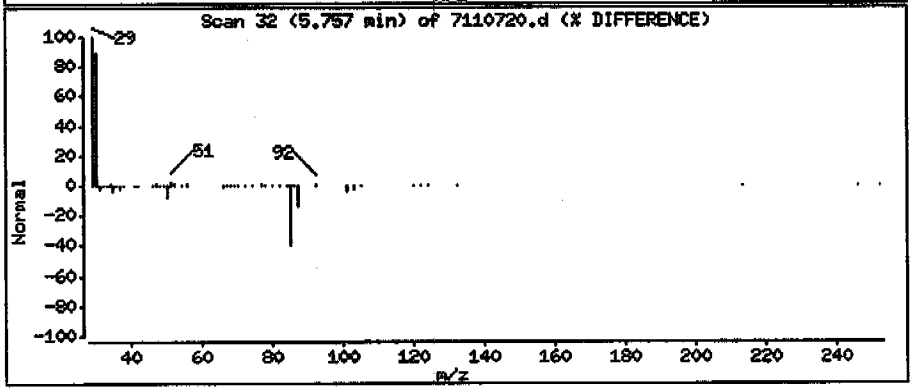












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

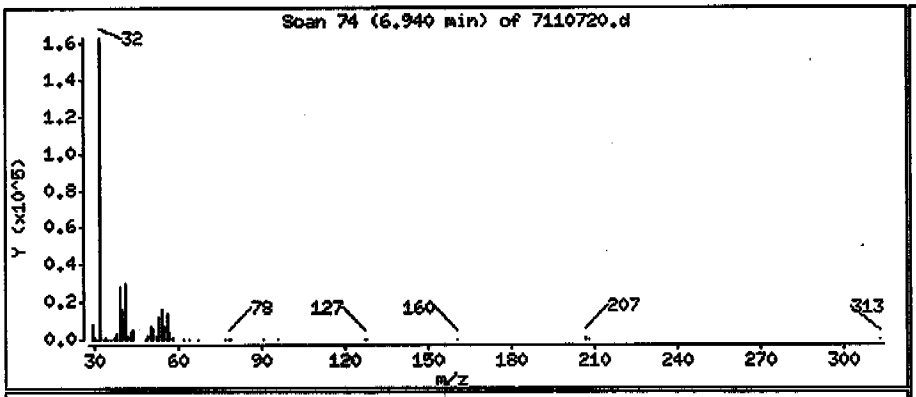
Operator: ab

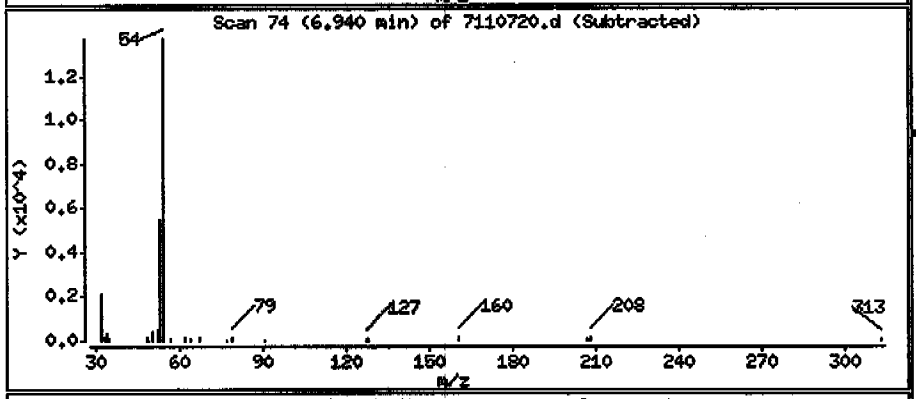
Column phase: RTx-624

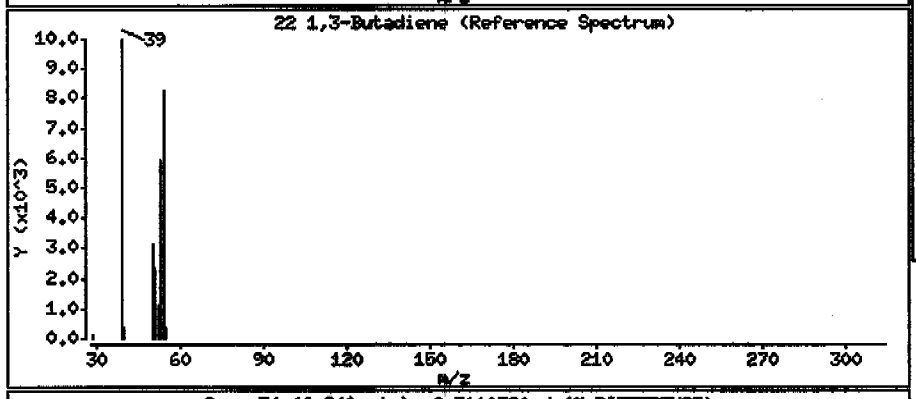
Column diameter: 0.53

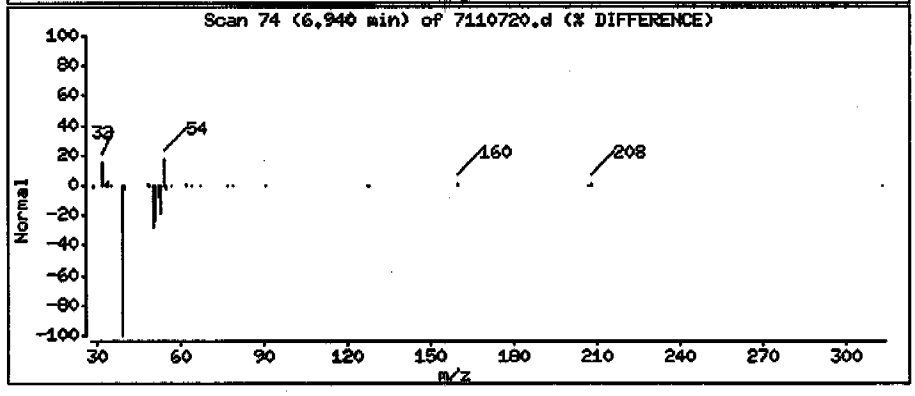
22 1,3-Butadiene

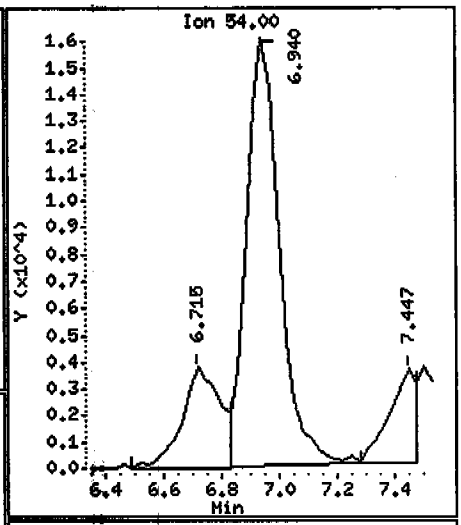
Concentration: 7.373 PPBV

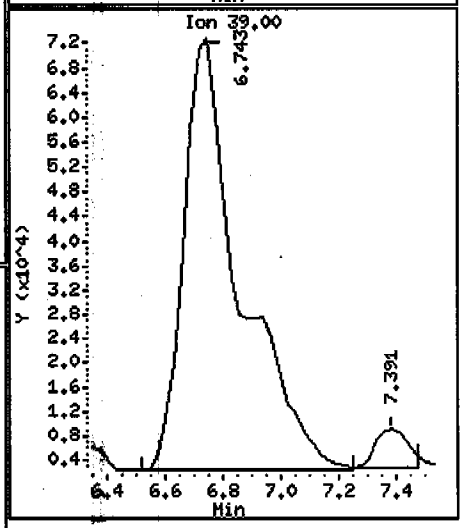












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

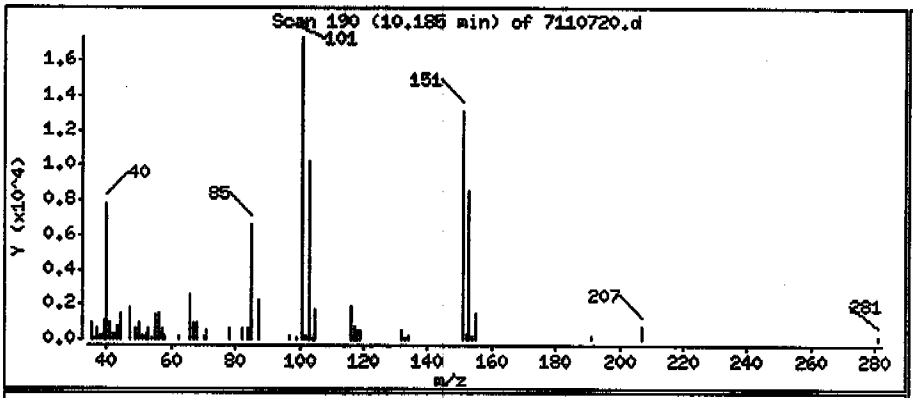
Operator: ab

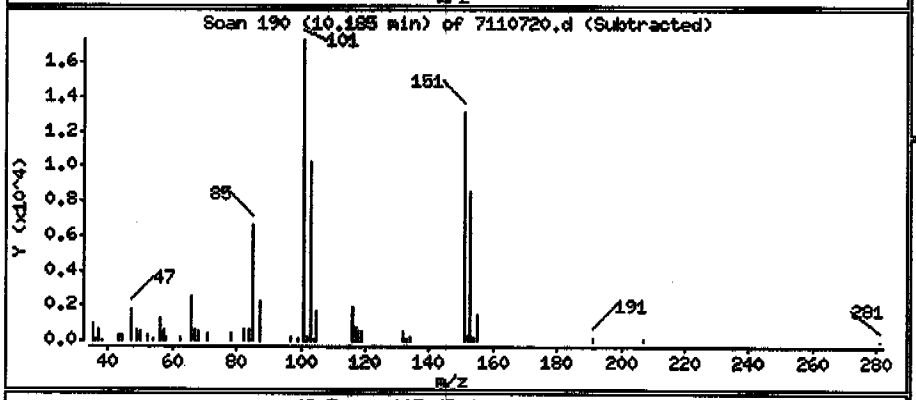
Column phase: RTx-624

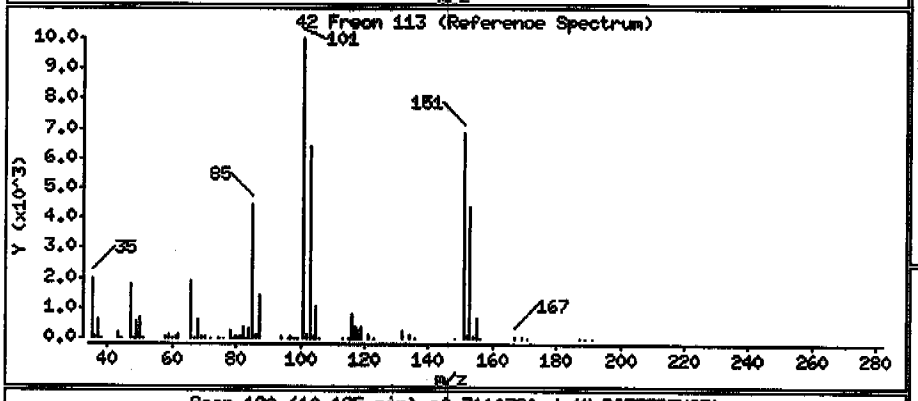
Column diameter: 0.53

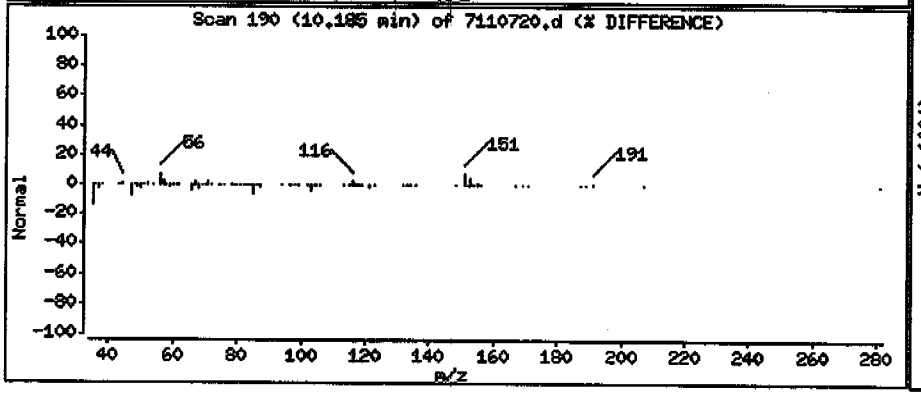
42 Freon 113

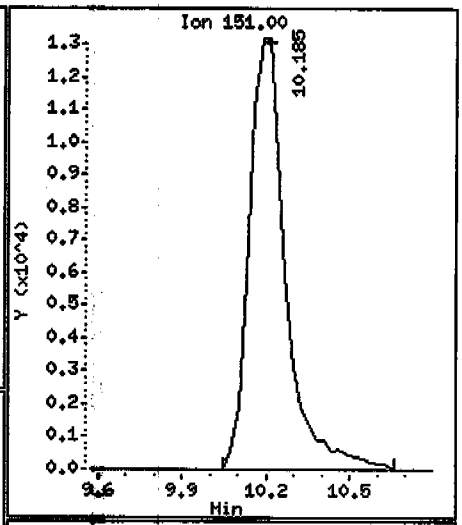
Concentration: 3.913 PPBV

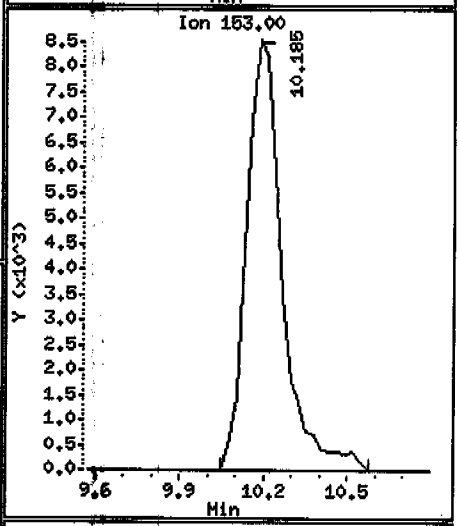


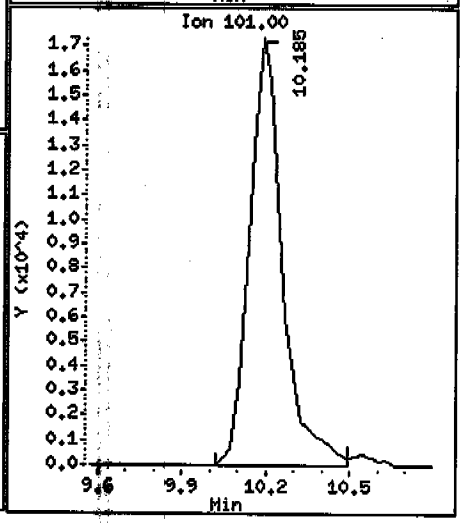












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Sample Info: 200mL #34749

Instrument: msd7.i

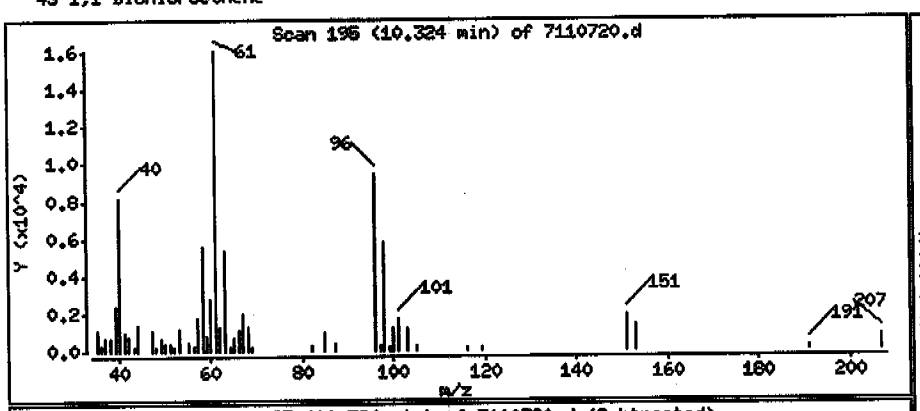
Operator: ab

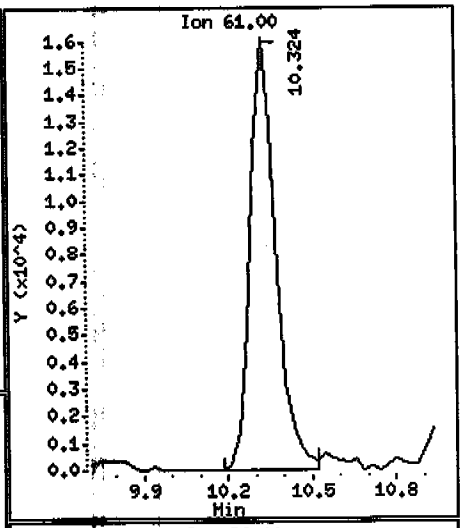
Column phase: RTx-624

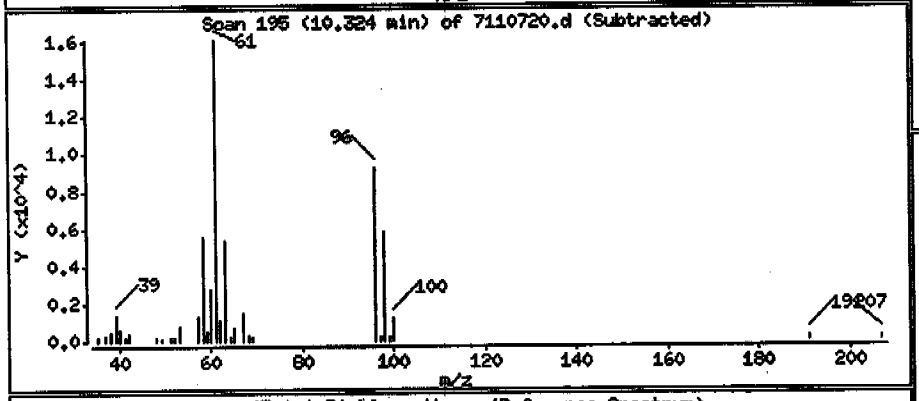
Column diameter: 0.53

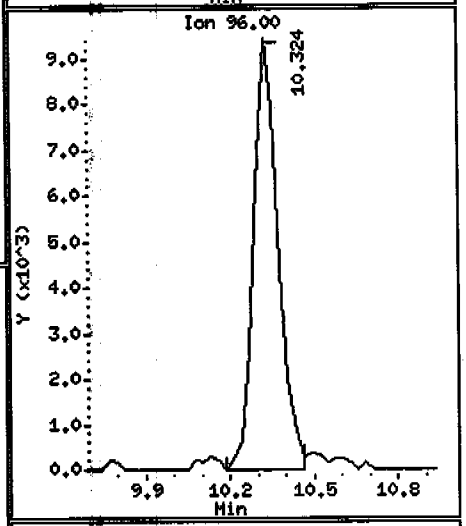
43 1,1-Dichloroethene

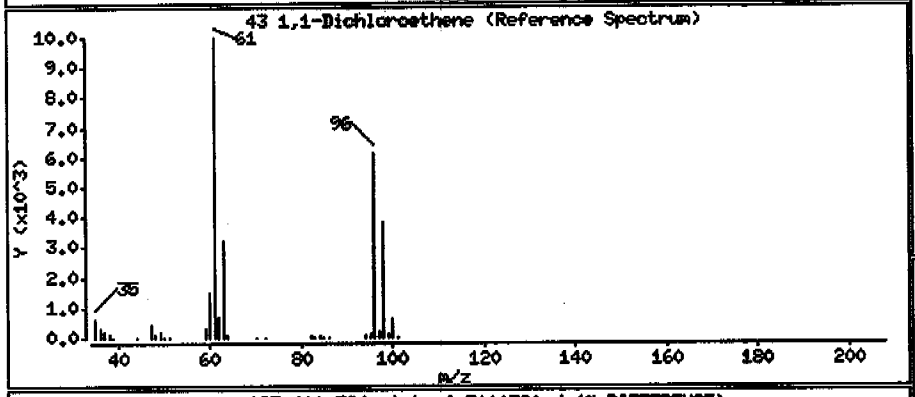
Concentration: 3.119 PPBV

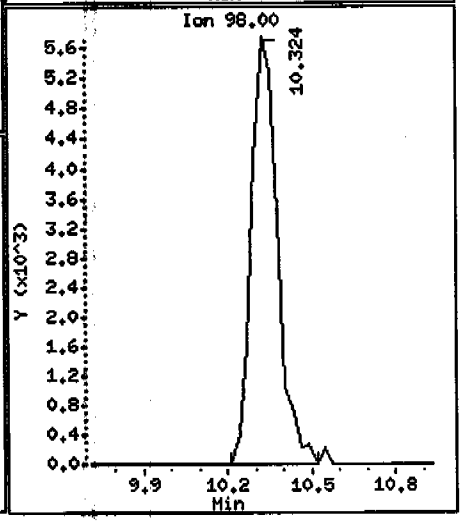


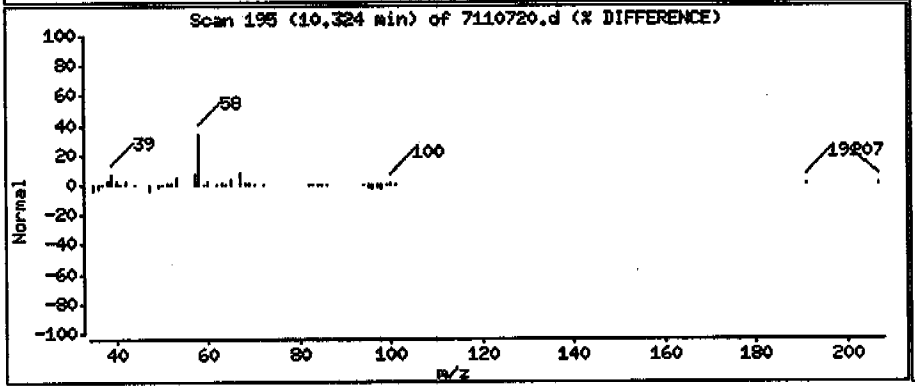












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

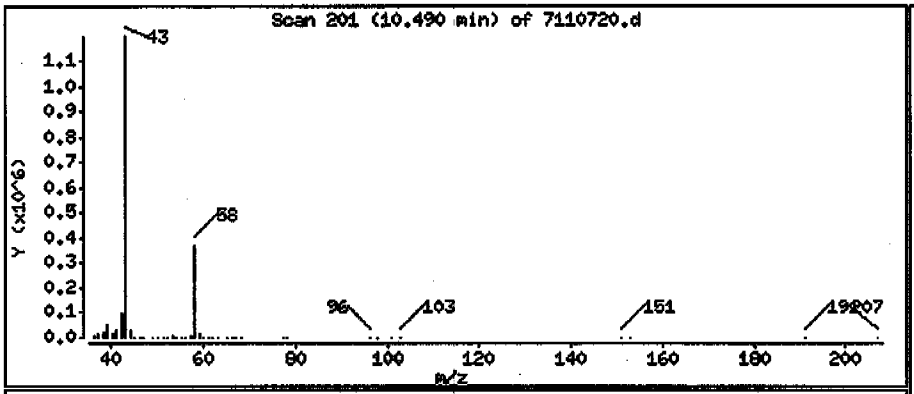
Operator: ab

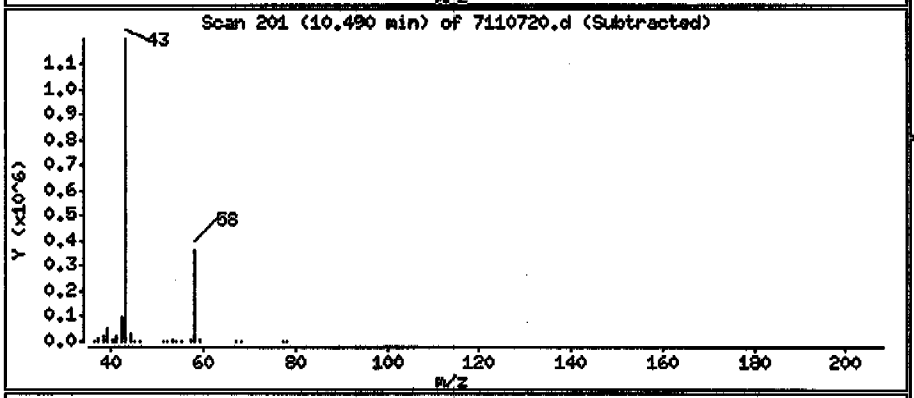
Column phase: RTx-624

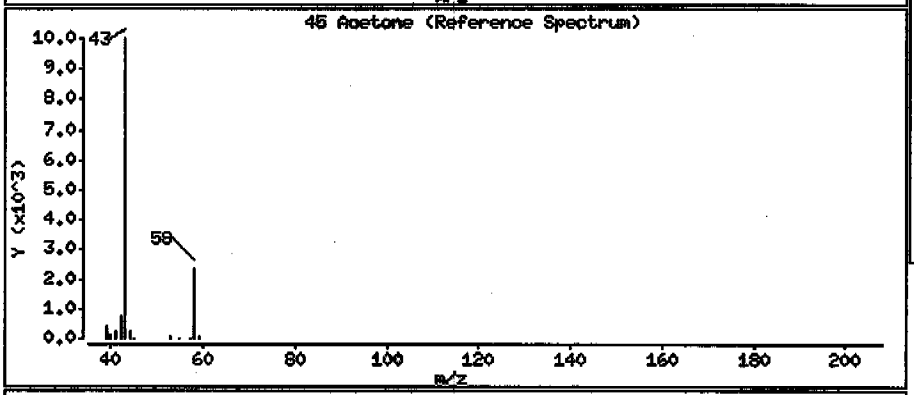
Column diameter: 0.53

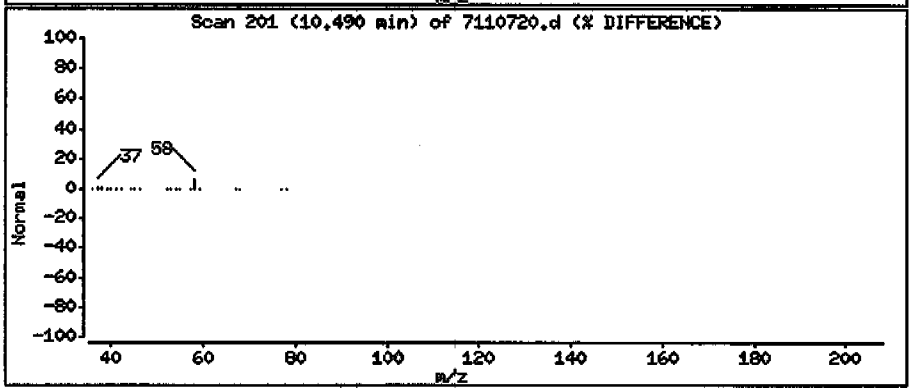
45 Acetone

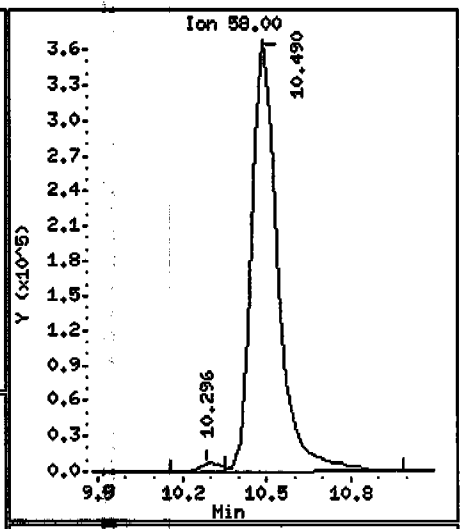
Concentration: 236.98 PPBV

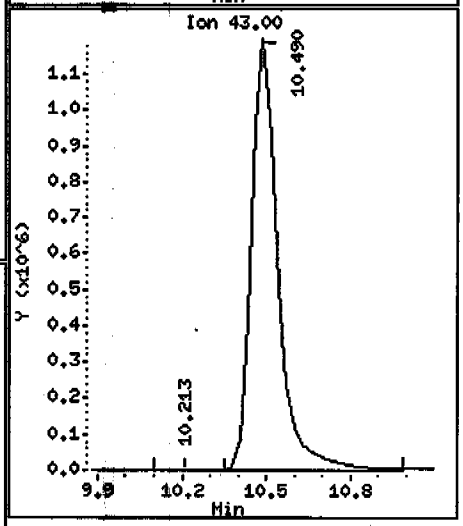












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

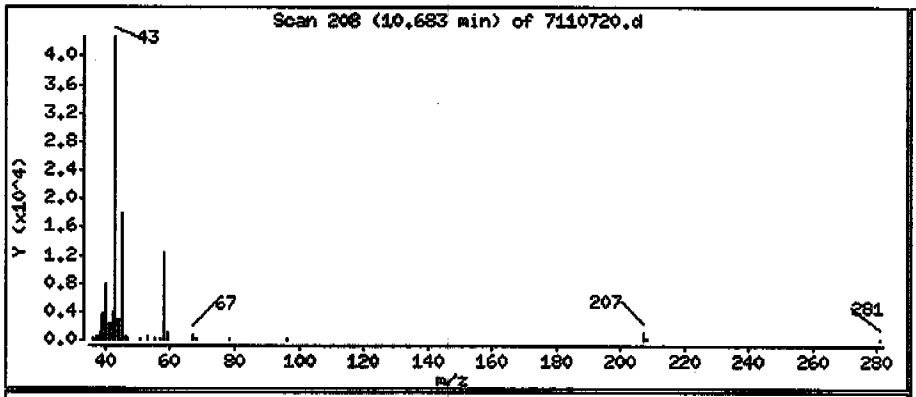
Operator: ab

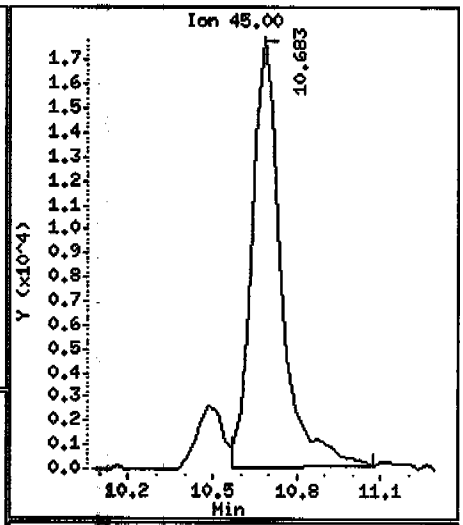
Column phase: RTx-624

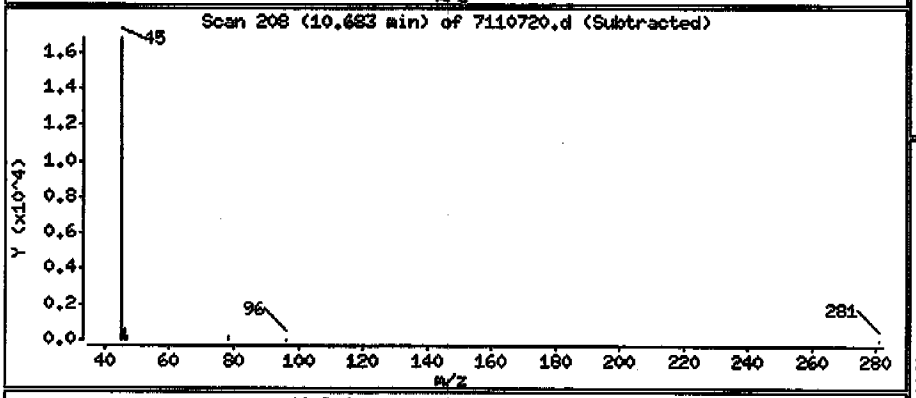
Column diameter: 0.53

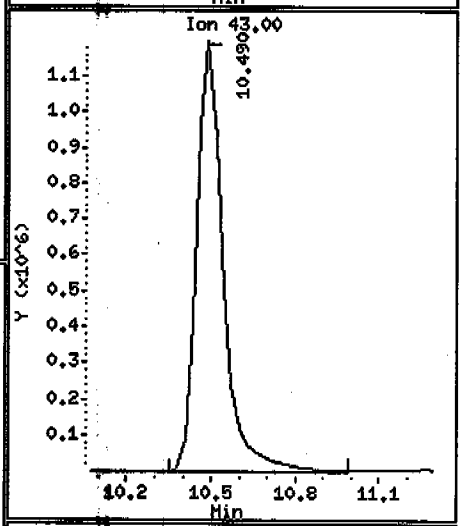
46 2-Propanol

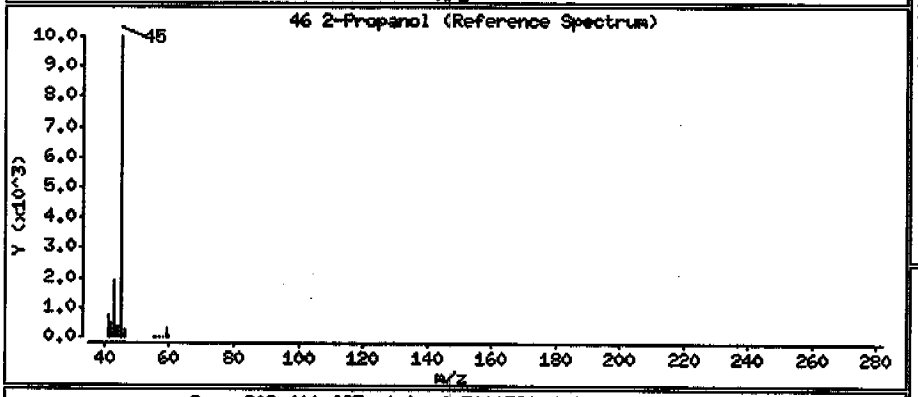
Concentration: 3.648 PPBV

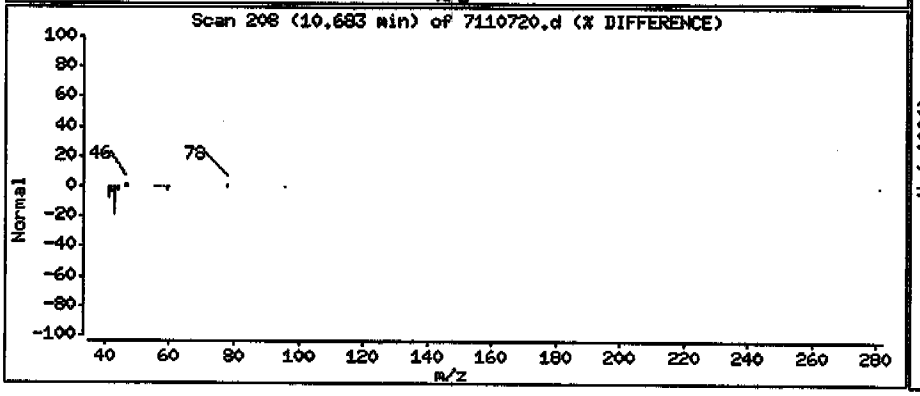


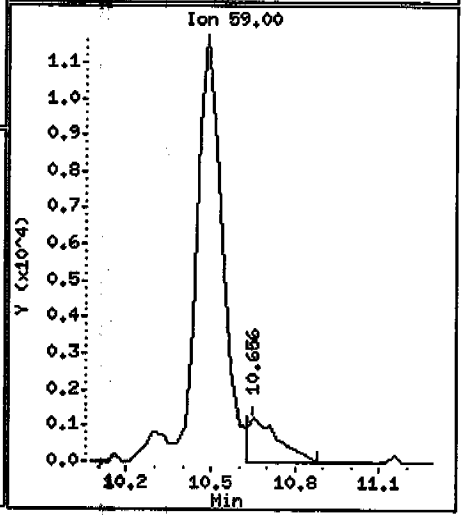












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

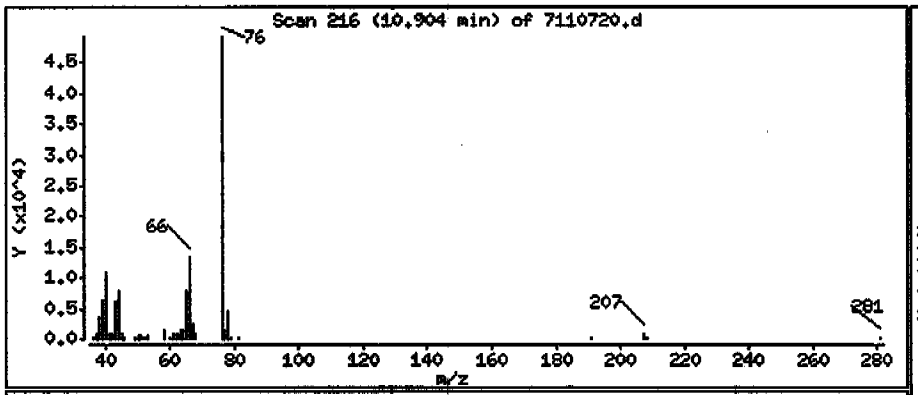
Operator: ab

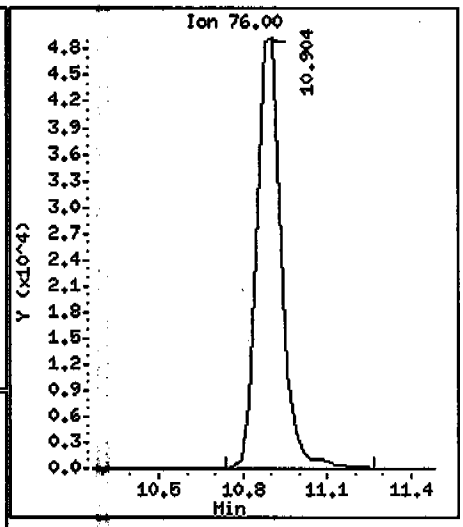
Column phase: RTx-624

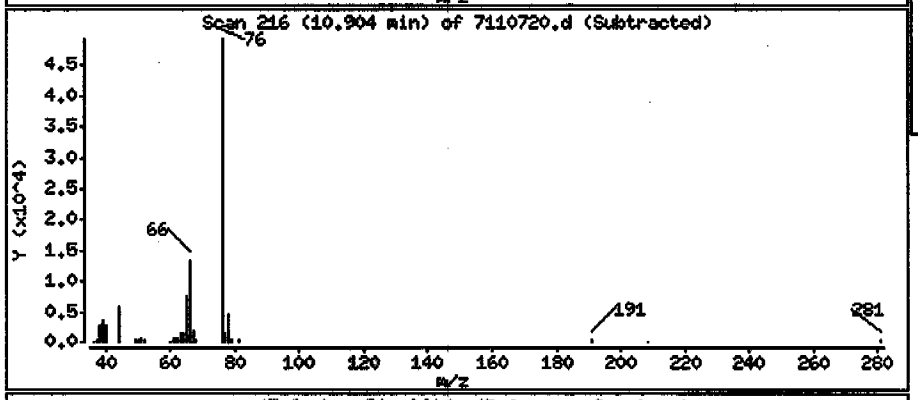
Column diameter: 0.53

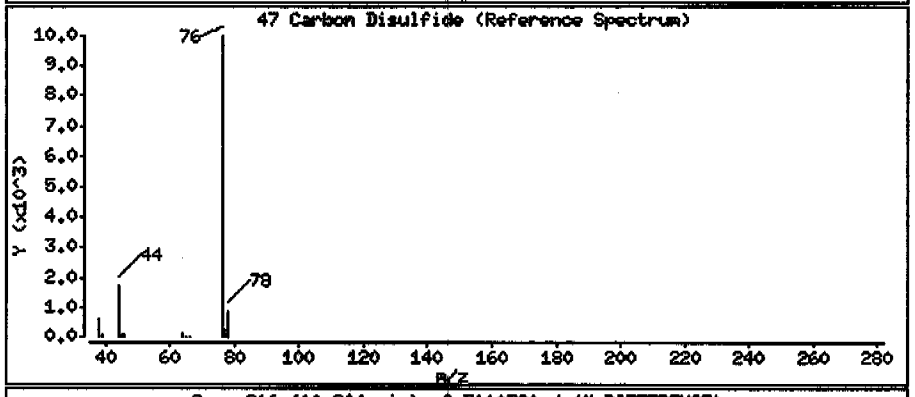
47 Carbon Disulfide

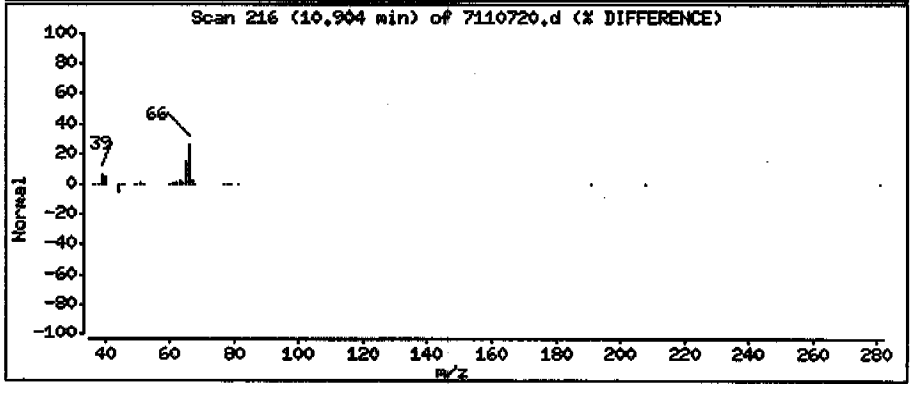
Concentration: 4.902 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

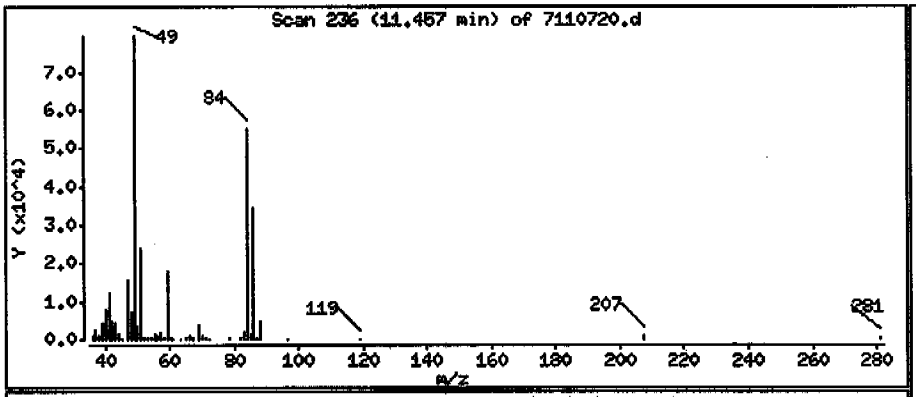
Operator: ab

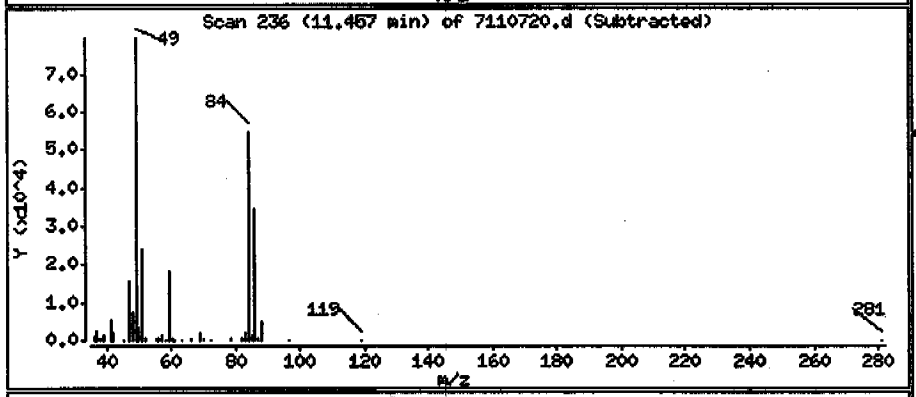
Column phase: RTx-624

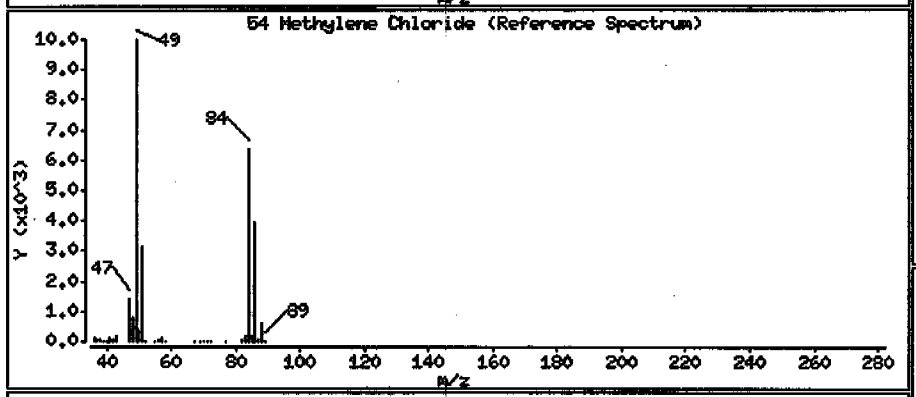
Column diameter: 0.53

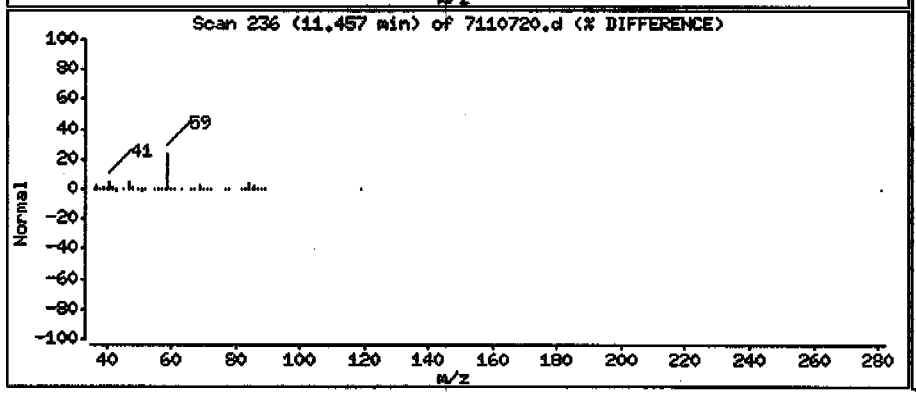
54 Methylene Chloride

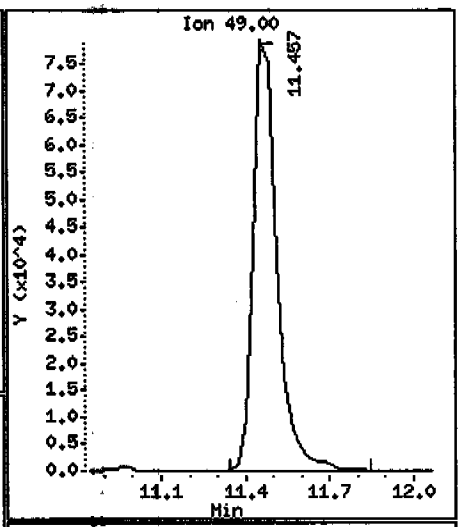
Concentration: 19.626 PPBV

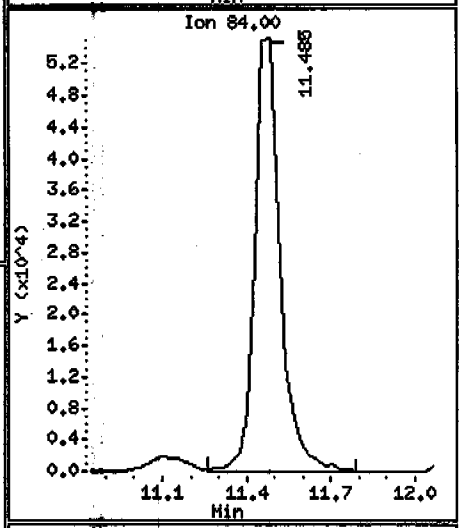


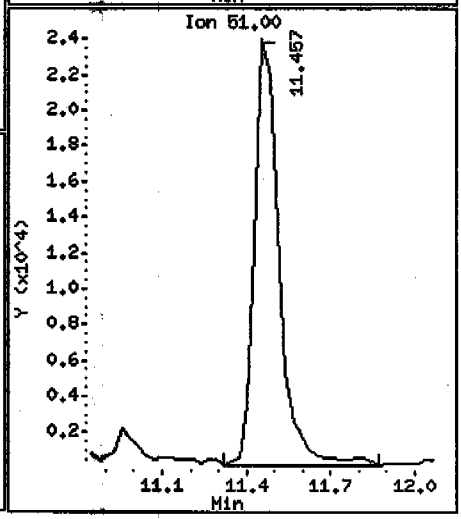












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

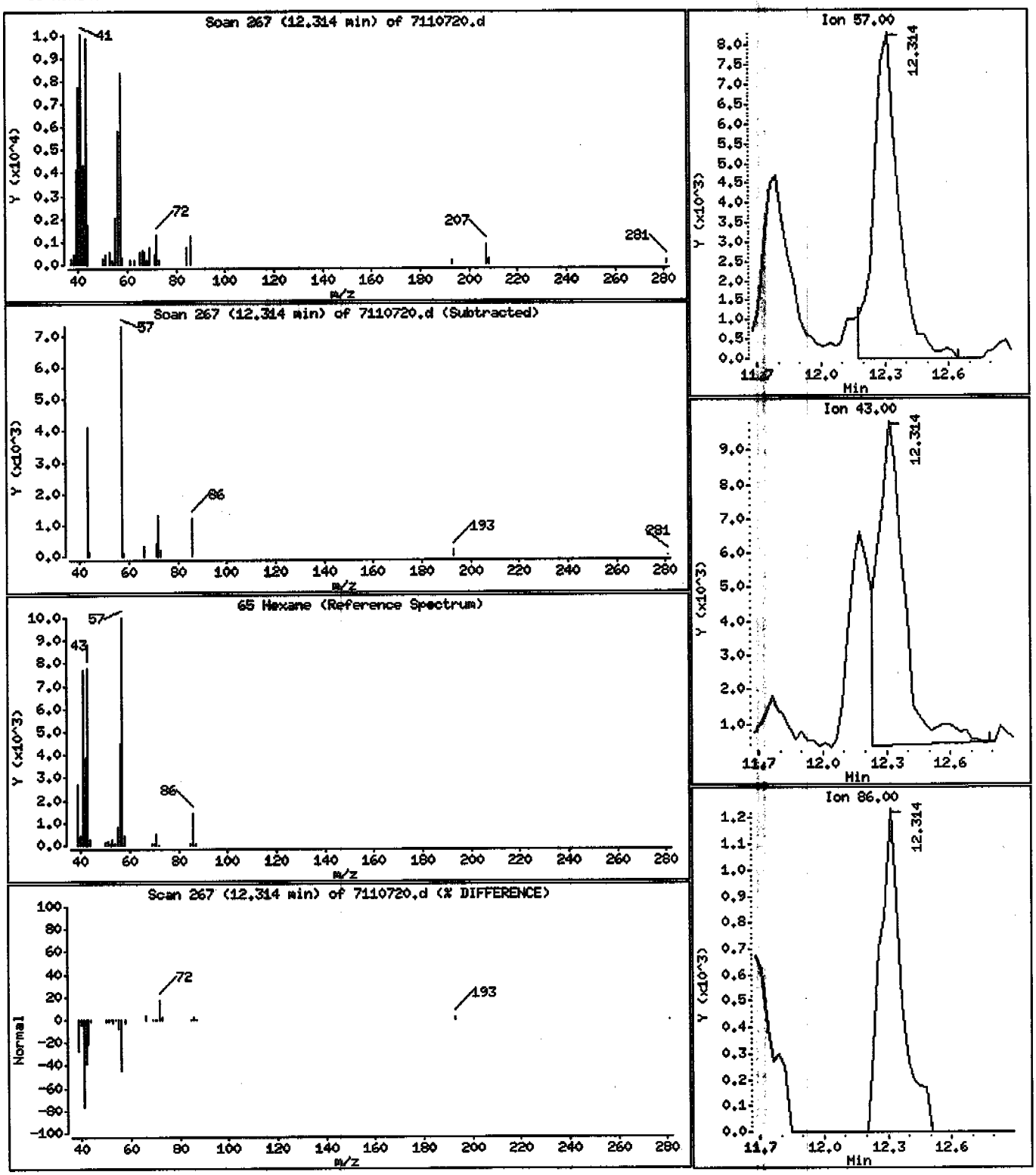
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

65 Hexane

Concentration: 2.174 PPBV



Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

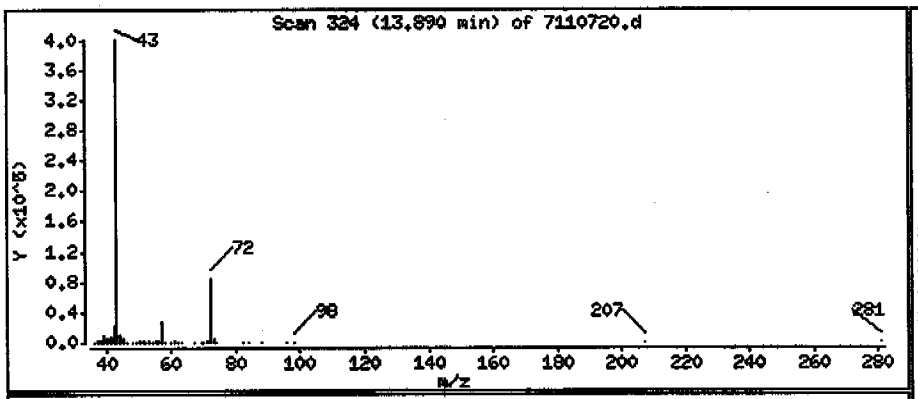
Operator: ab

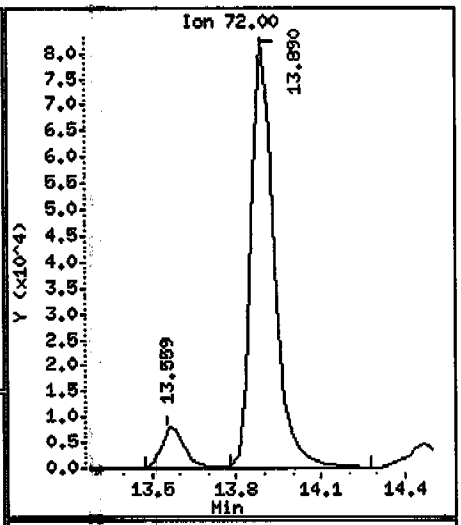
Column phase: RTx-624

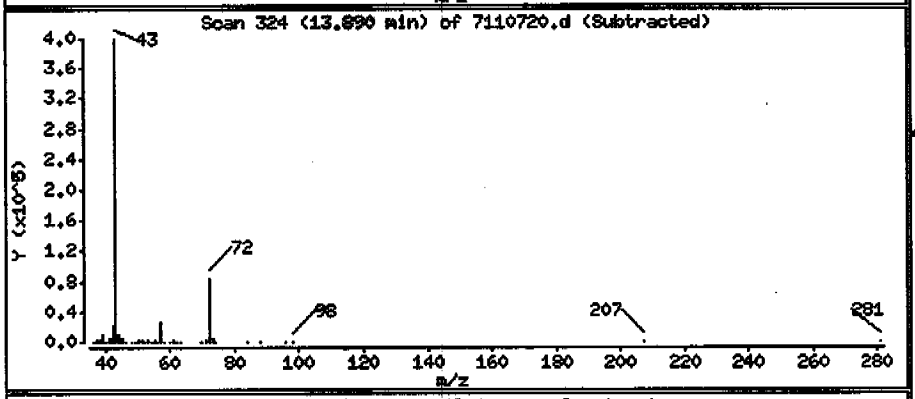
Column diameter: 0.53

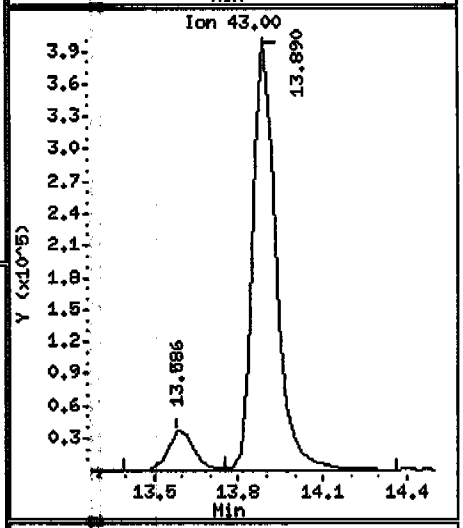
75 2-Butanone

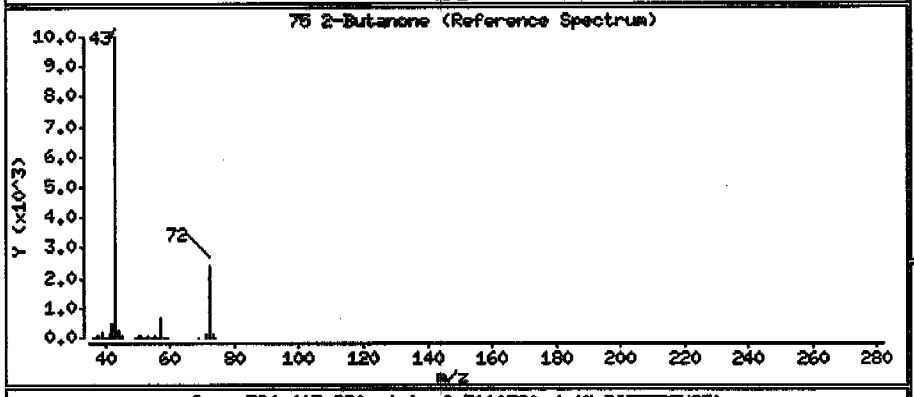
Concentration: 58.379 PPBV

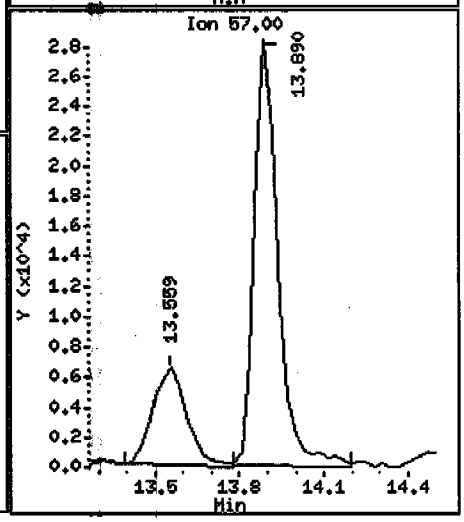


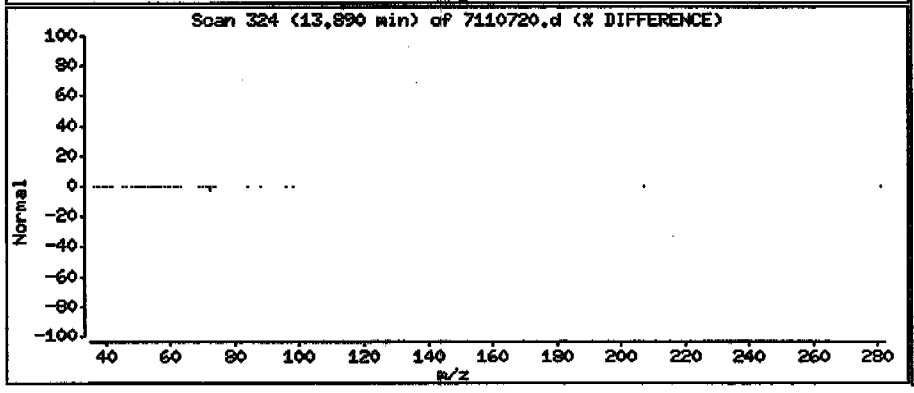












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

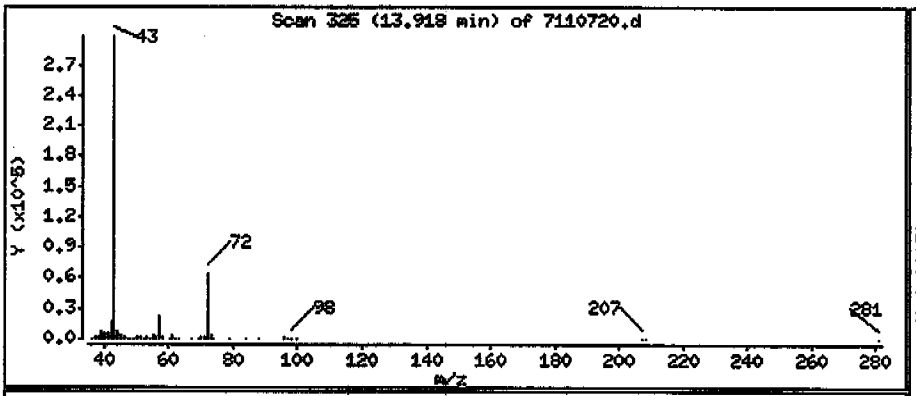
Operator: ab

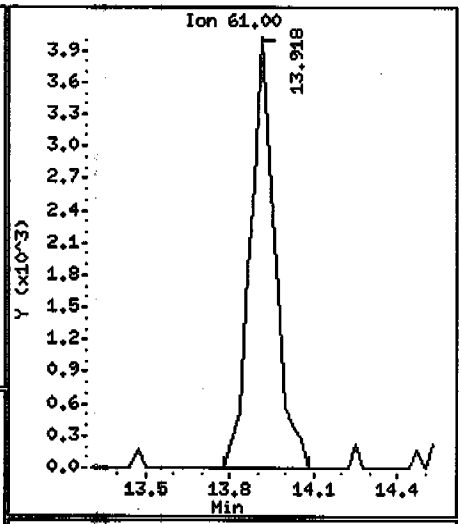
Column phase: RTx-624

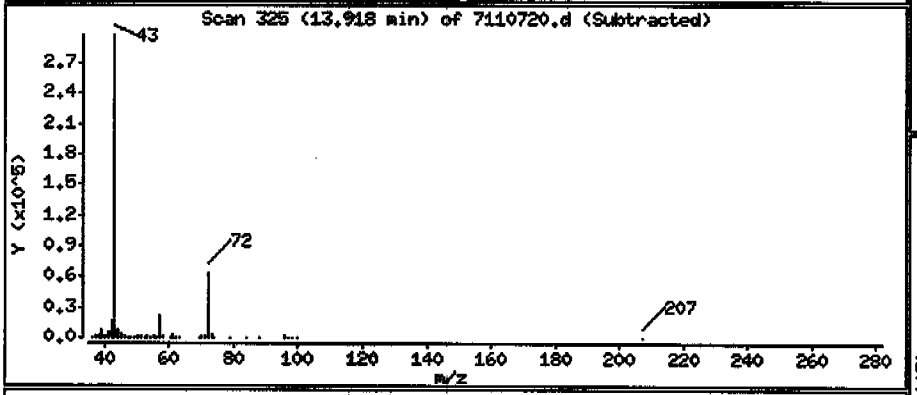
Column diameter: 0.53

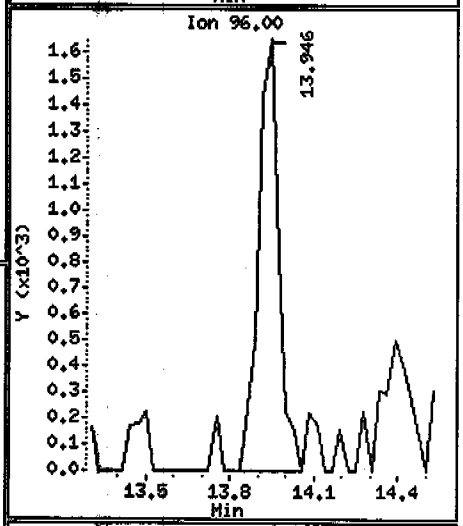
76 cis-1,2-Dichloroethene

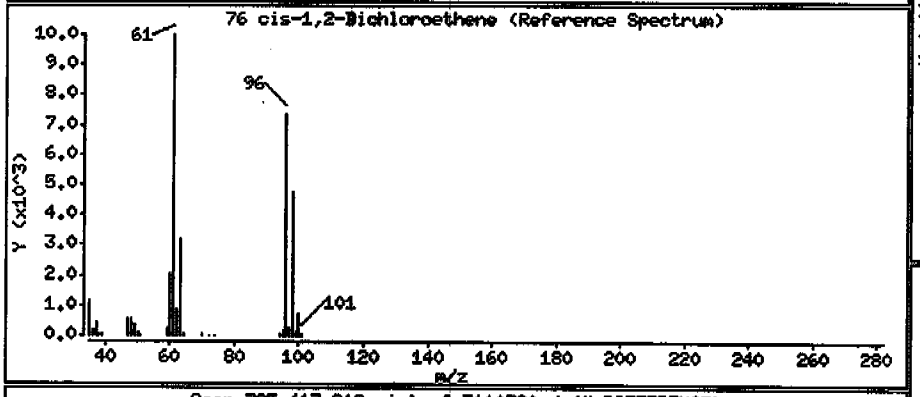
Concentration: 0.9196 PPBV

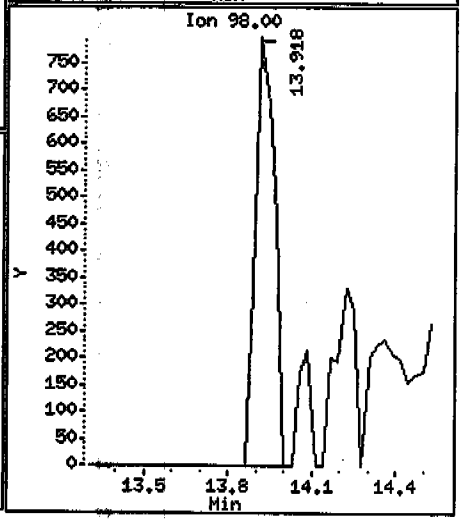


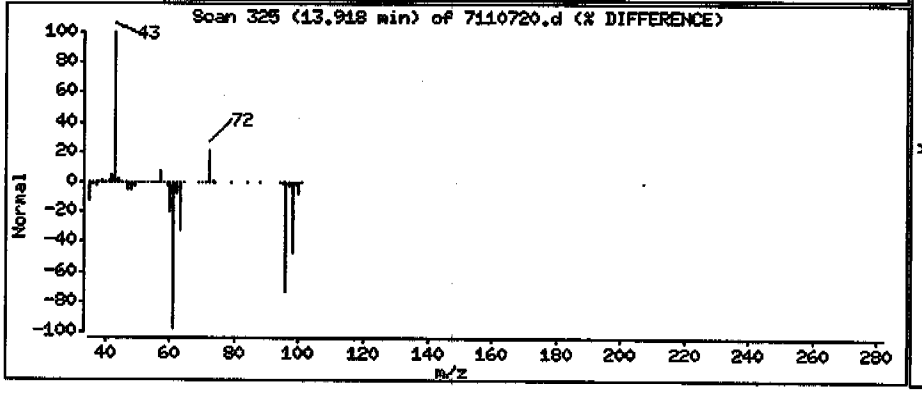












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

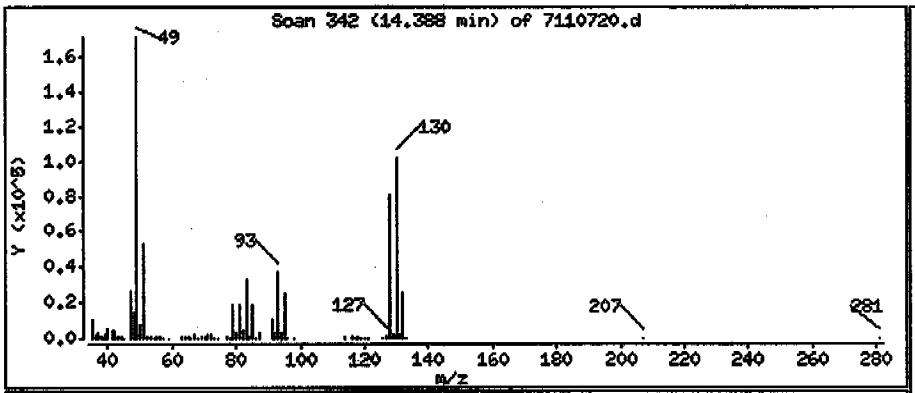
Operator: ab

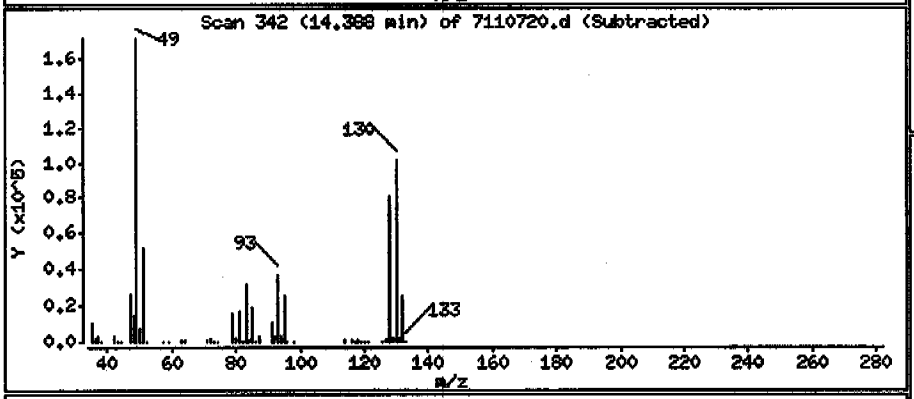
Column phase: RTx-624

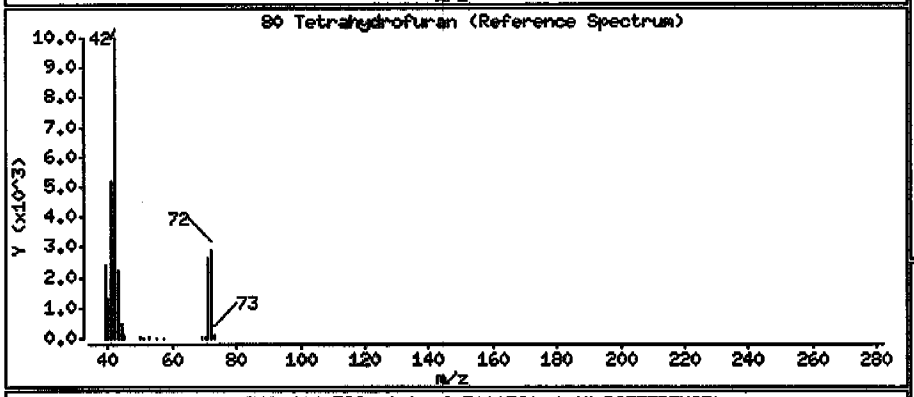
Column diameter: 0.53

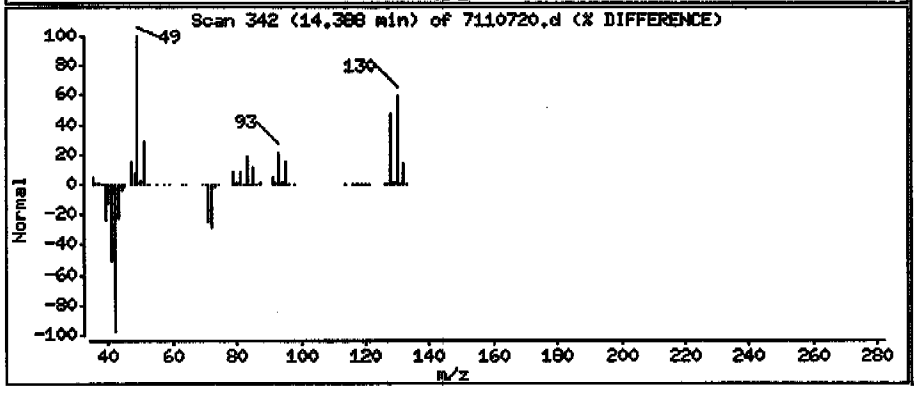
80 Tetrahydrofuran

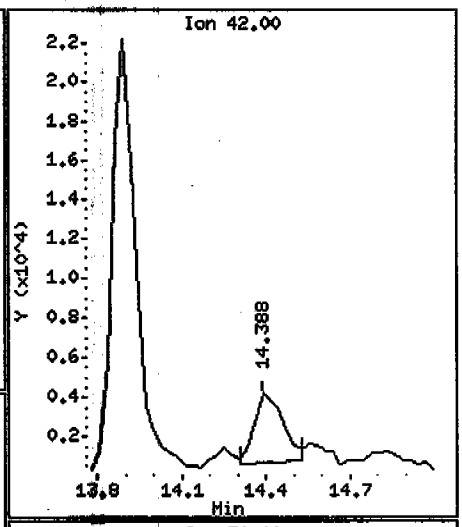
Concentration: 1,246 PPBV

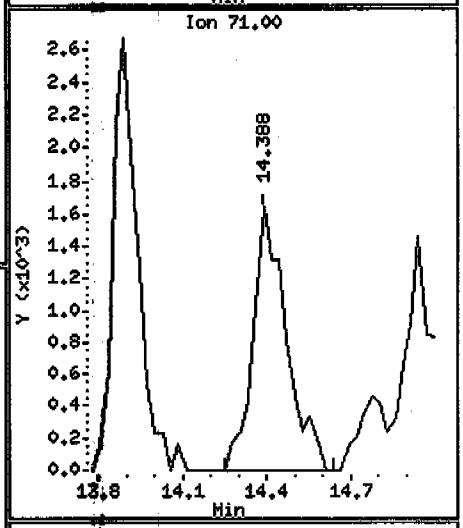


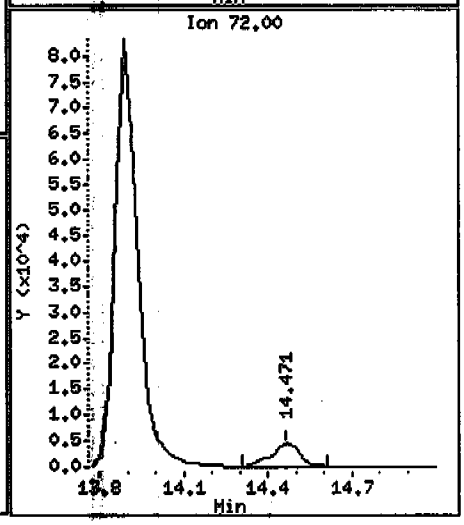












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

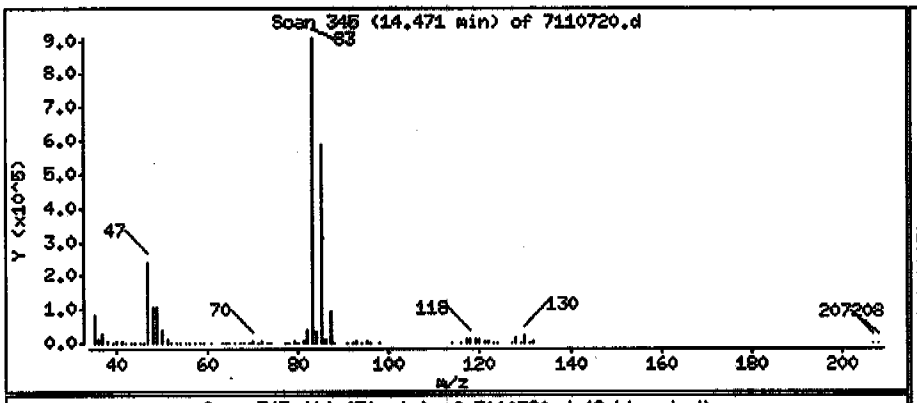
Operator: ab

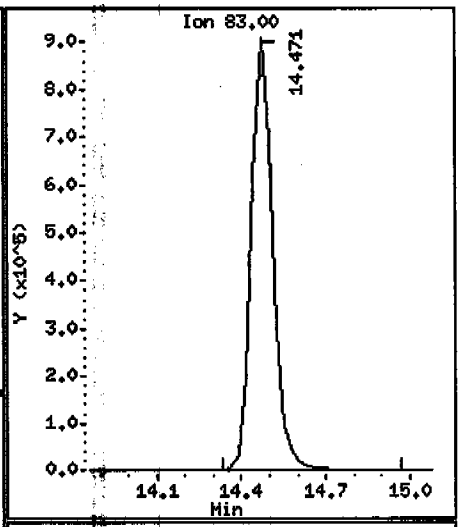
Column phase: RTx-624

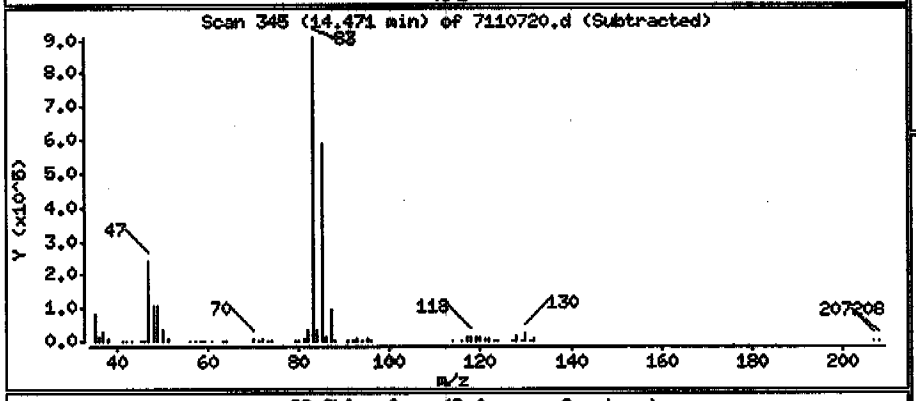
Column diameter: 0.53

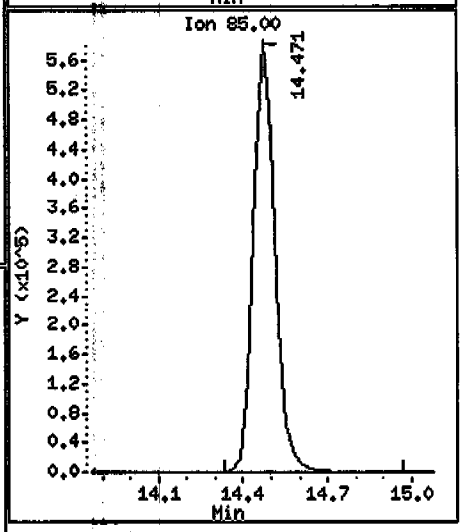
82 Chloroform

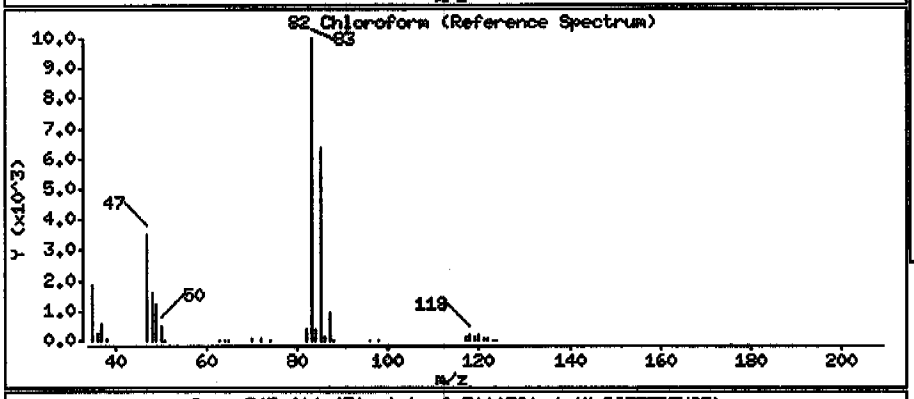
Concentration: 128.24 PPBV

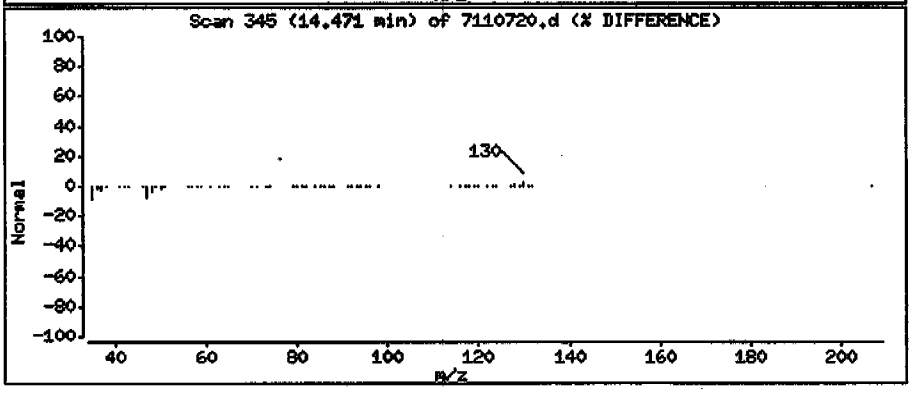












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

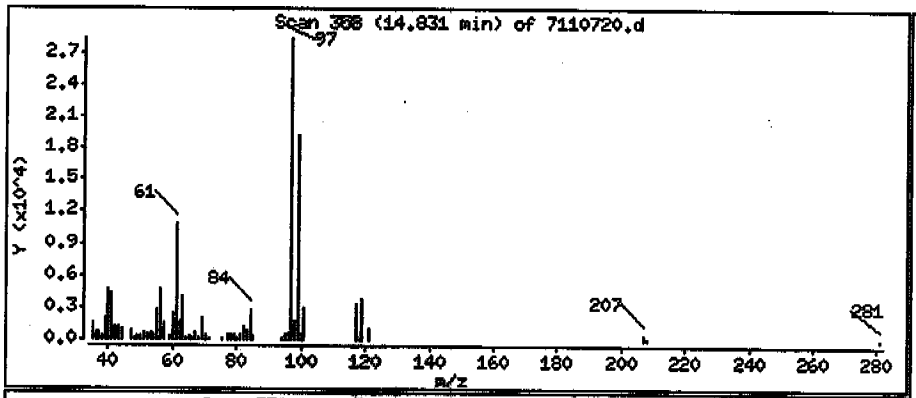
Operator: ab

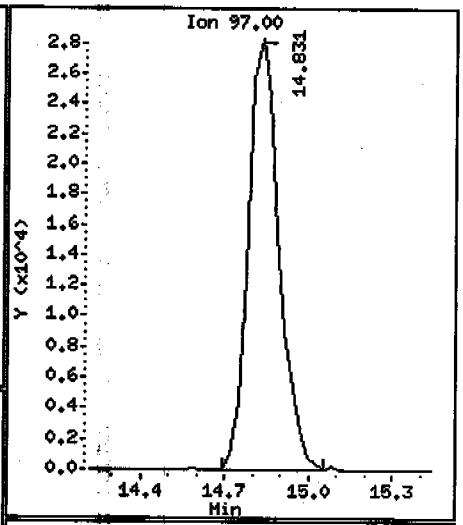
Column phase: RTx-624

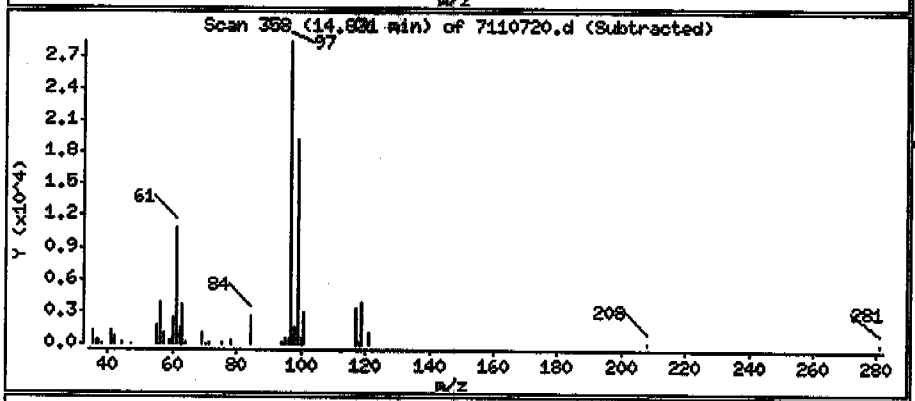
Column diameter: 0.53

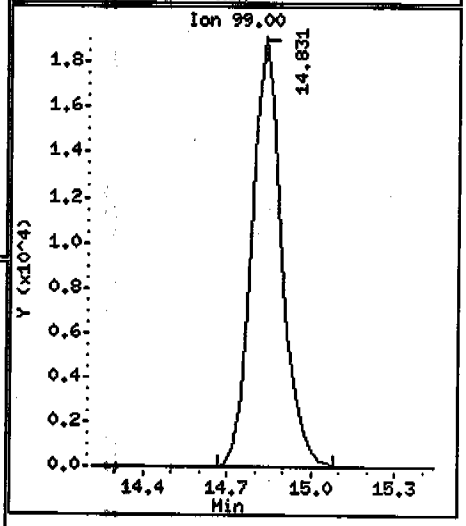
83 1,1,1-Trichloroethane

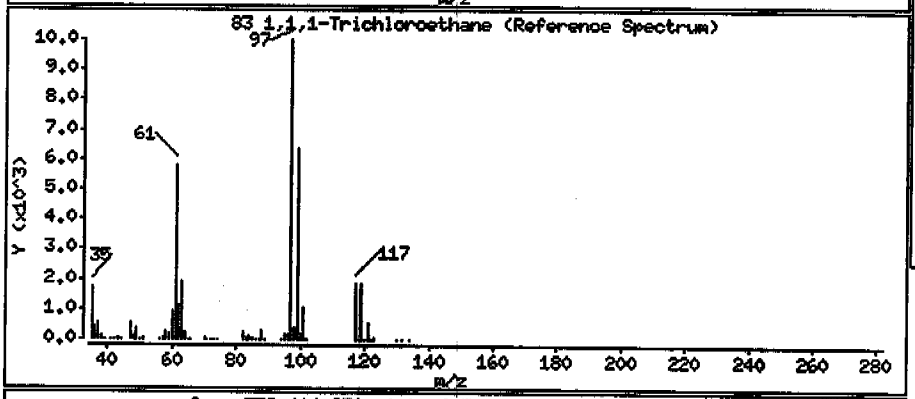
Concentration: 5.680 PPBV

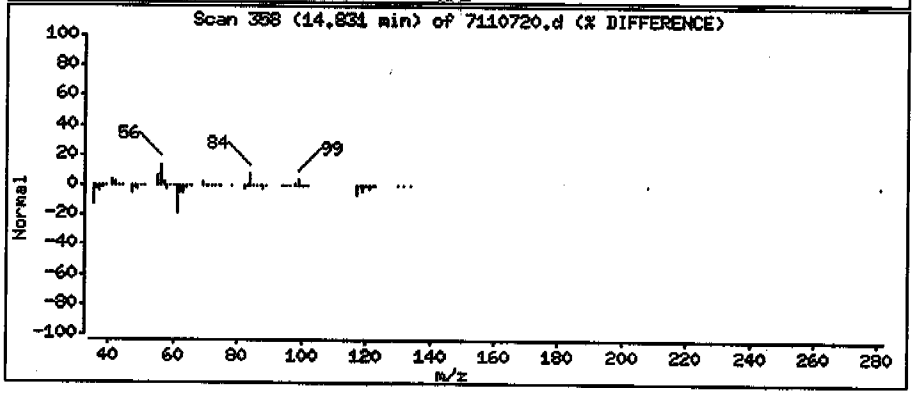












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

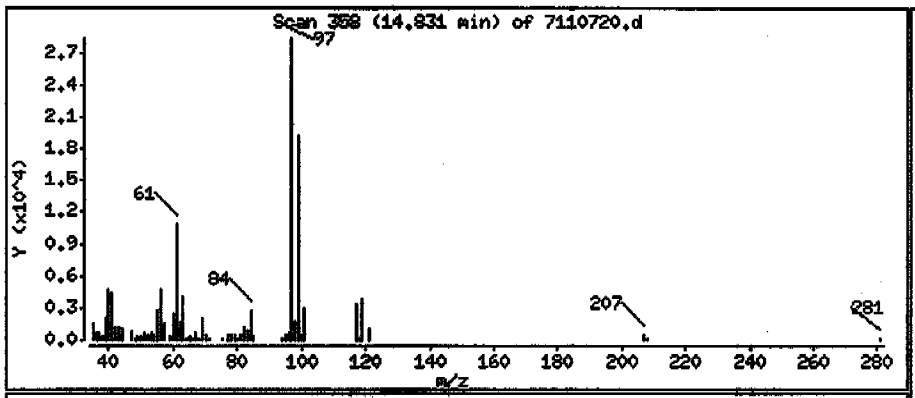
Operator: ab

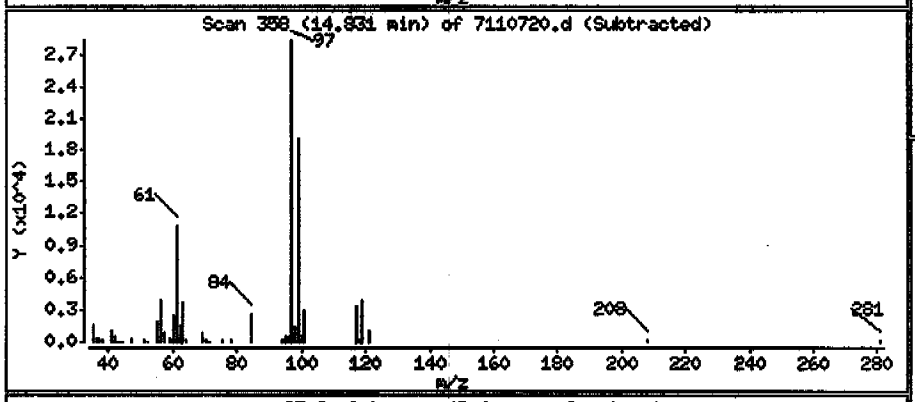
Column phase: RTx-624

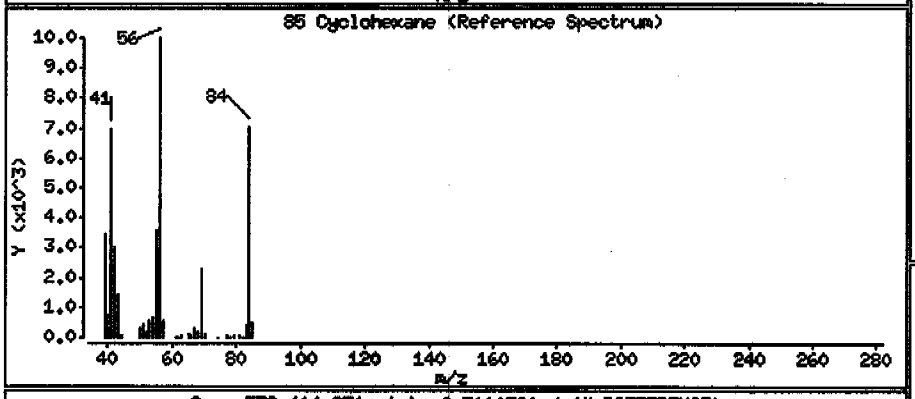
Column diameter: 0.53

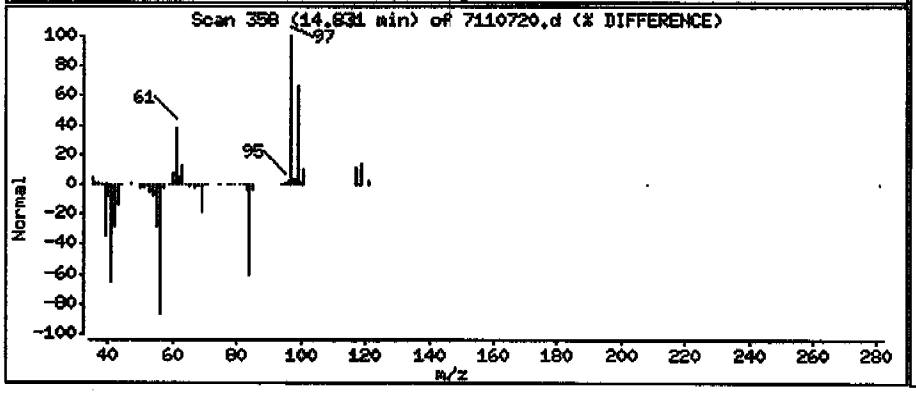
85 Cyclohexane

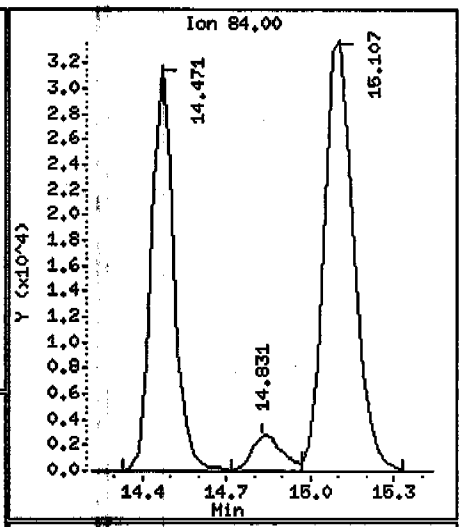
Concentration: 0.9880 PPBV

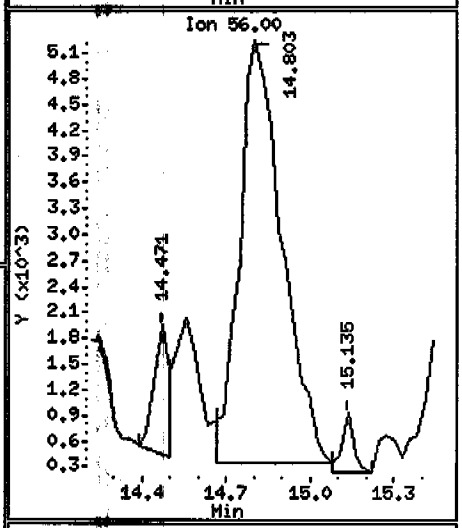


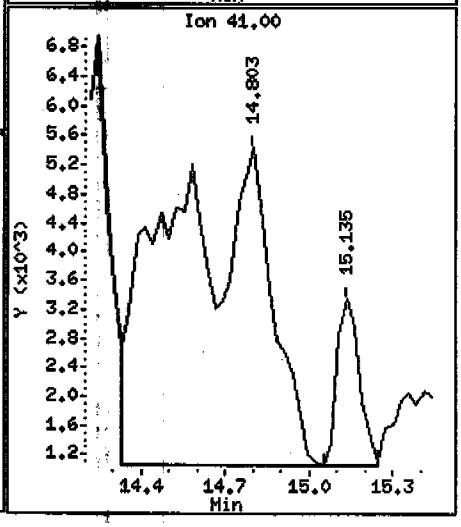












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

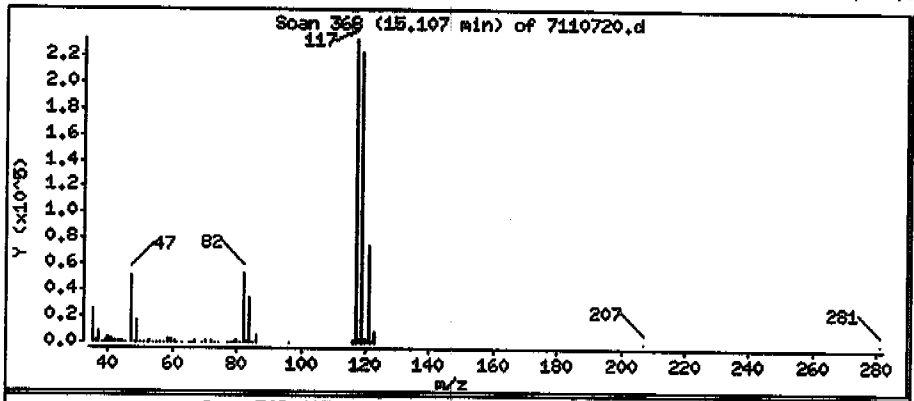
Operator: ab

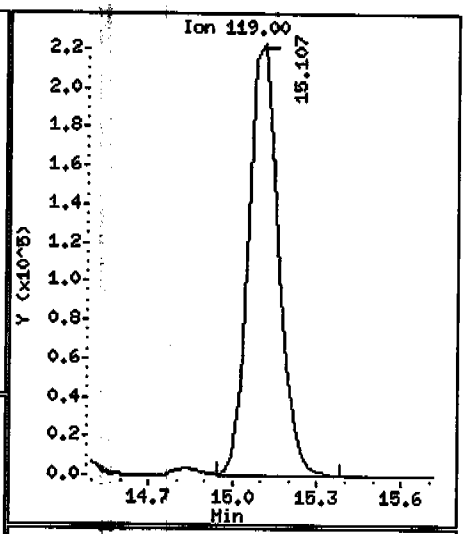
Column phase: RTx-624

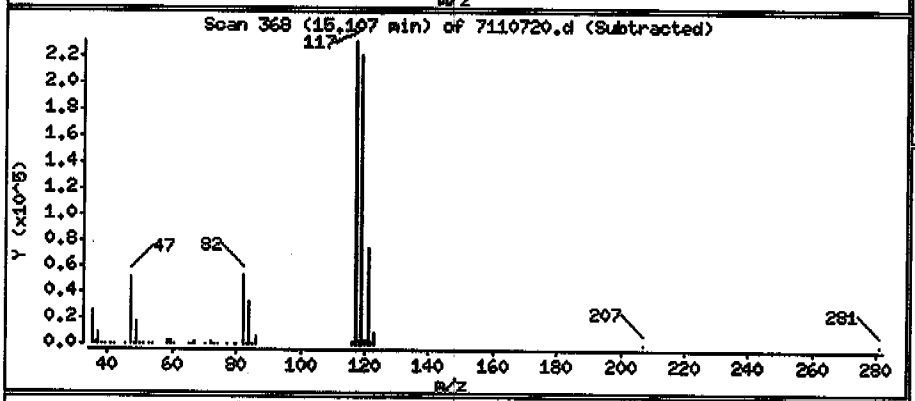
Column diameter: 0.53

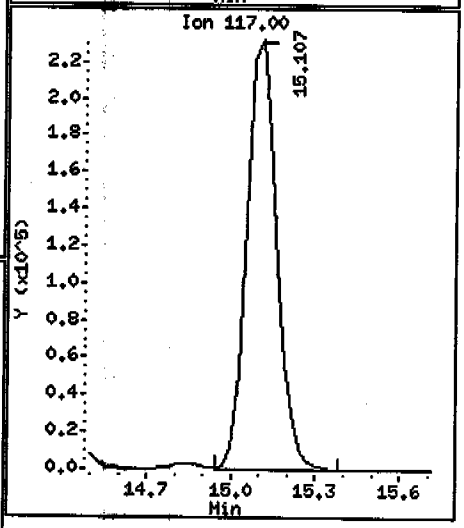
87 Carbon Tetrachloride

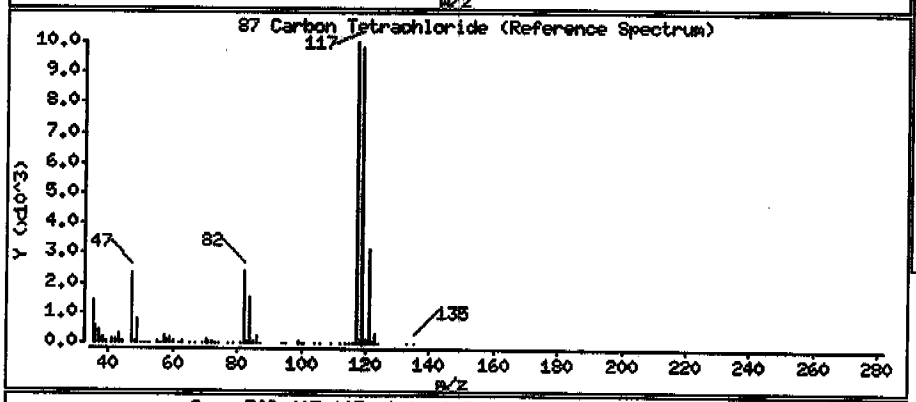
Concentration: 46.554 PPBV

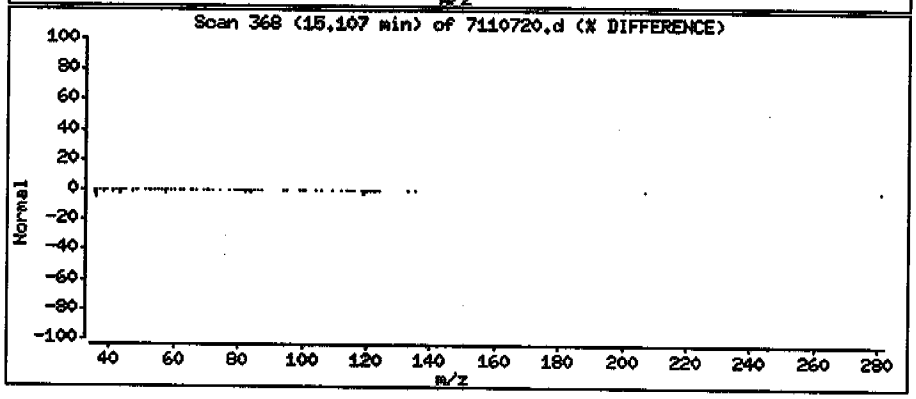












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

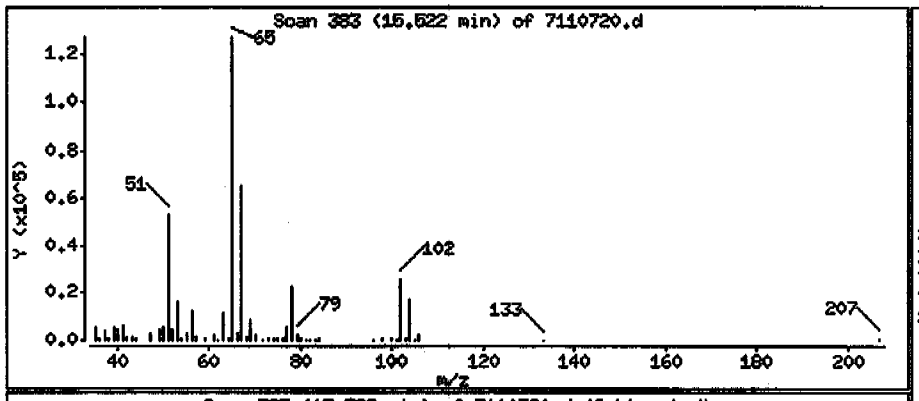
Operator: ab

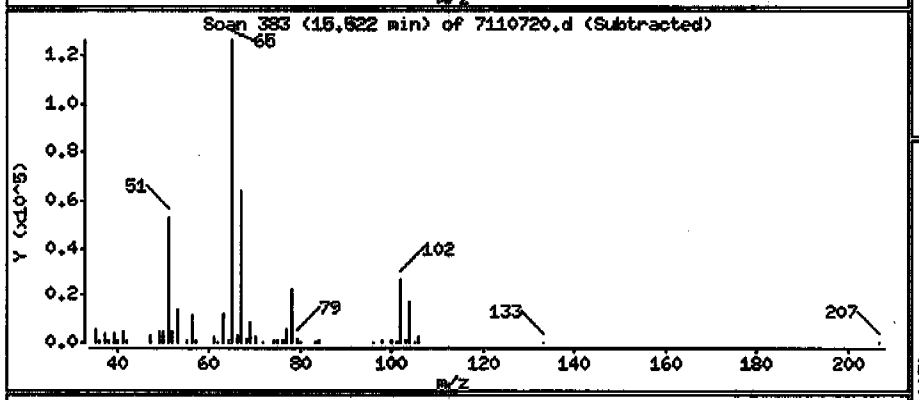
Column phase: RTx-624

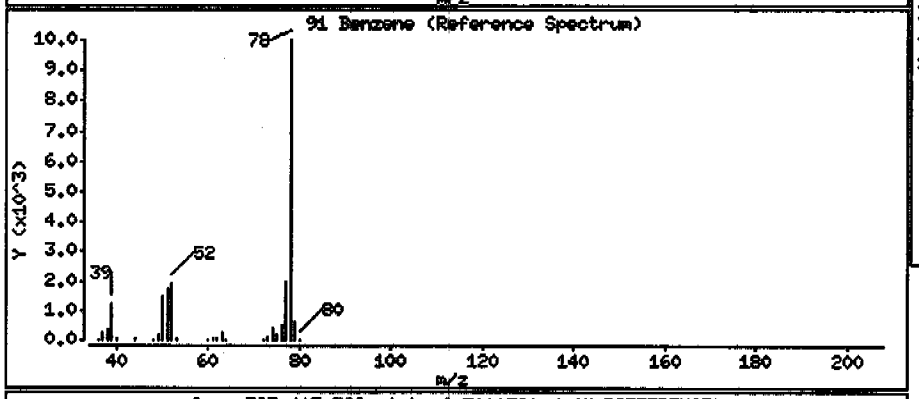
Column diameter: 0.53

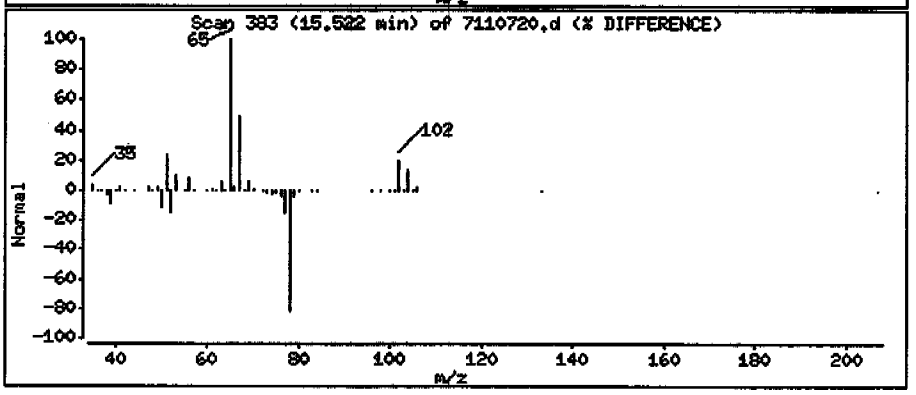
91 Benzene

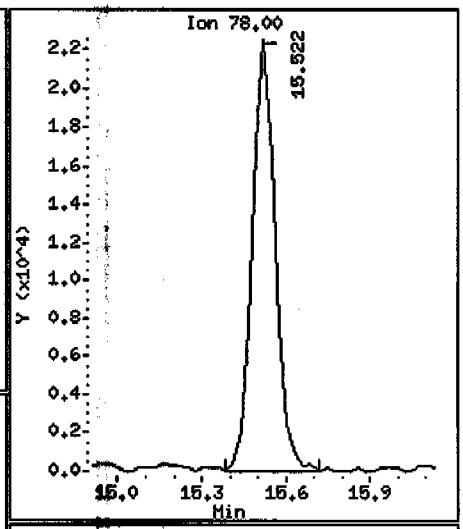
Concentration: 2.568 PPBV

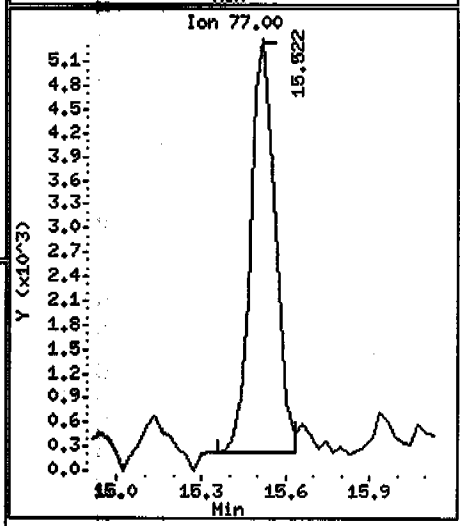












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

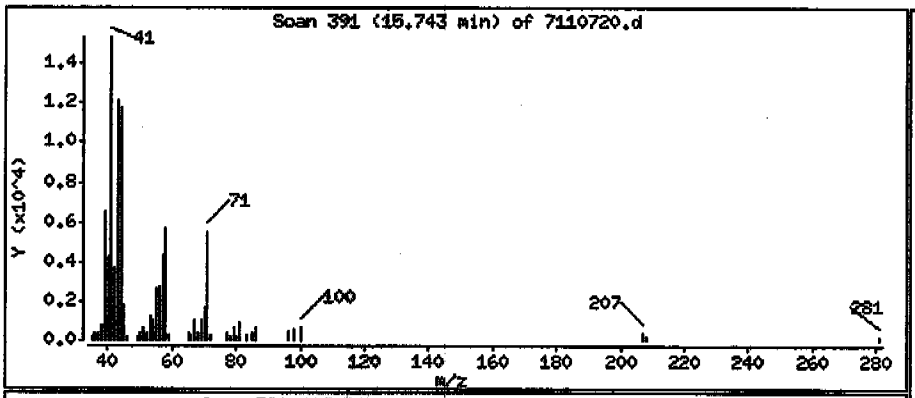
Operator: ab

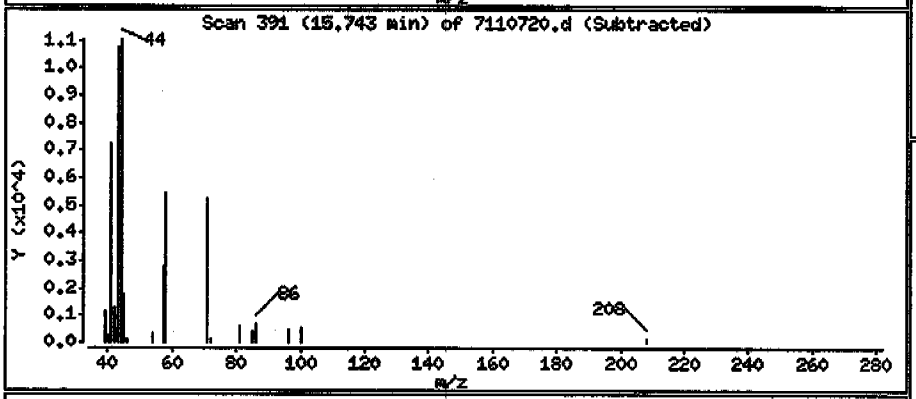
Column phase: RTx-624

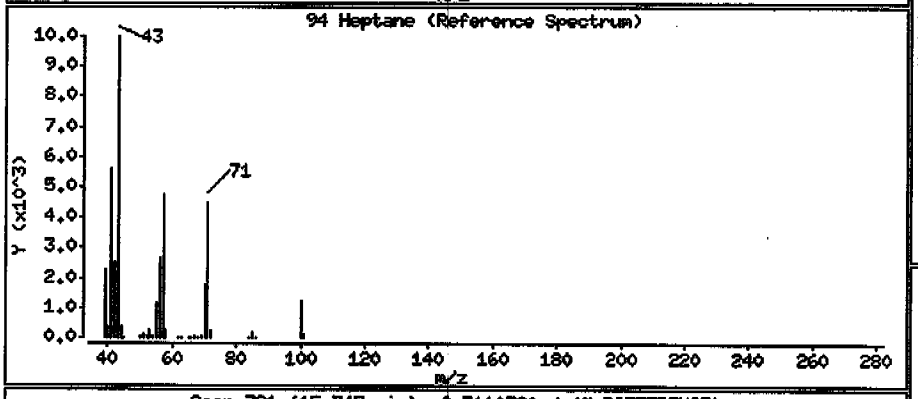
Column diameter: 0.53

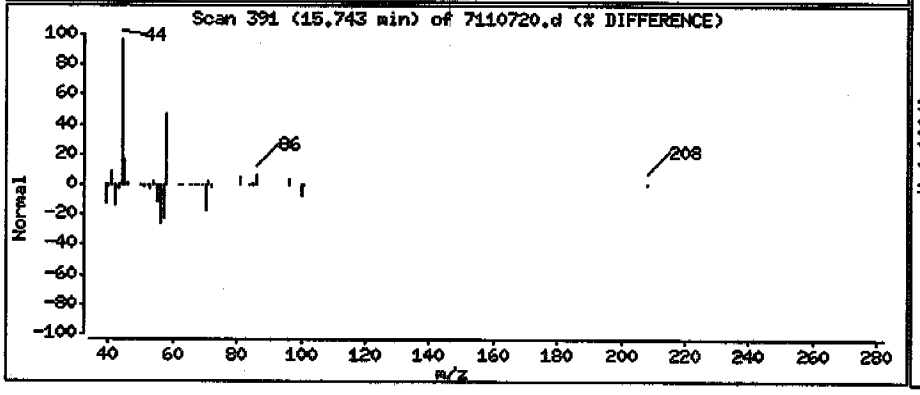
94 Heptane

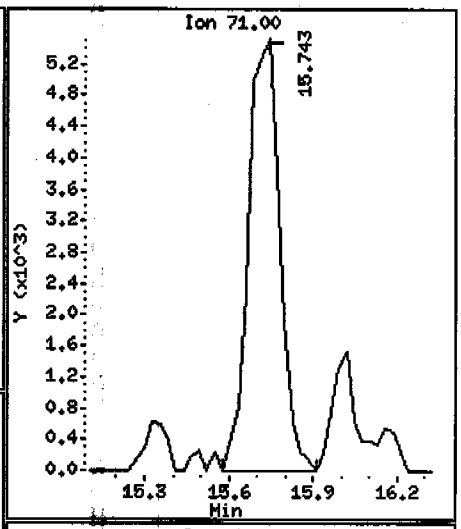
Concentration: 2.813 PPBV

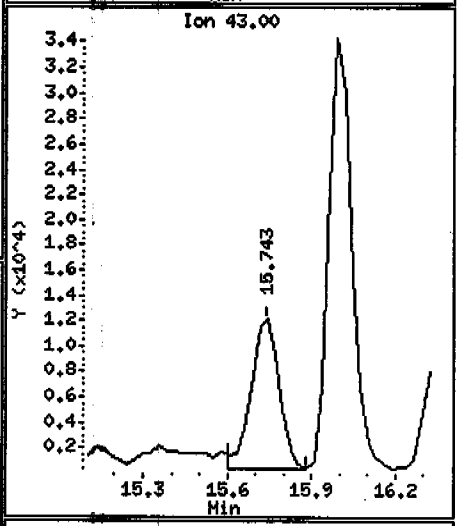


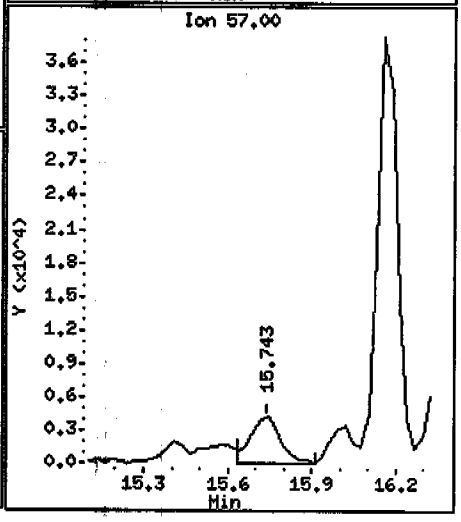












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

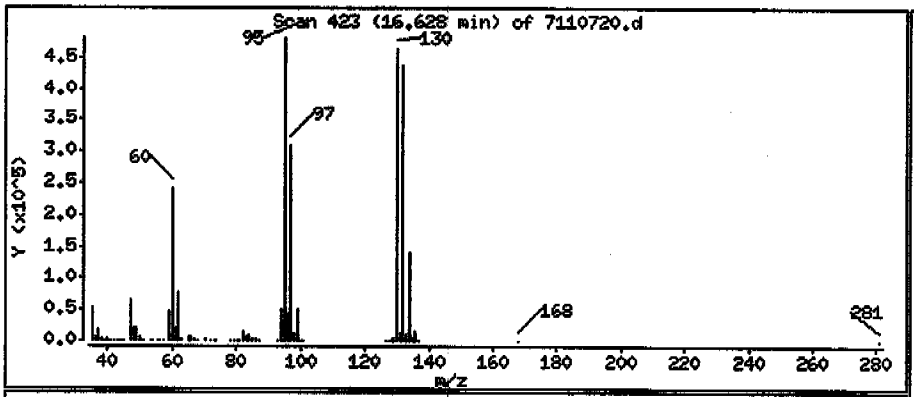
Operator: ab

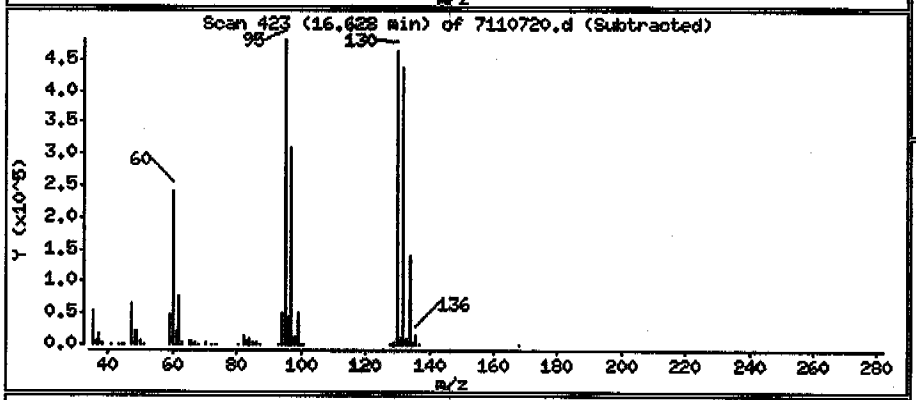
Column phase: RTx-624

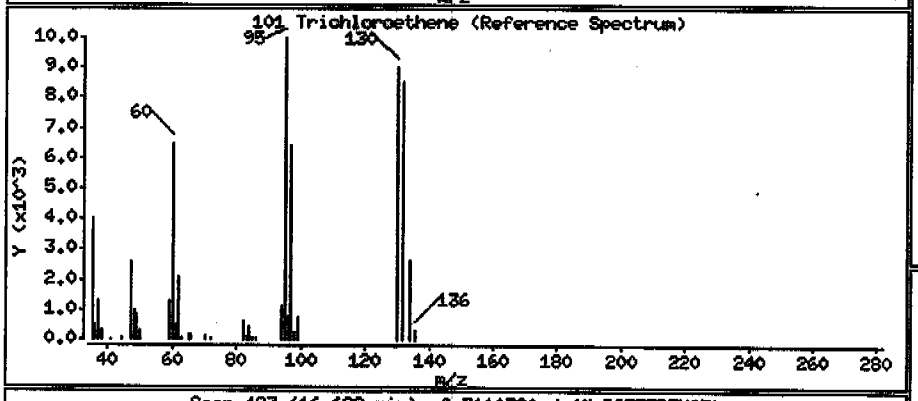
Column diameter: 0.53

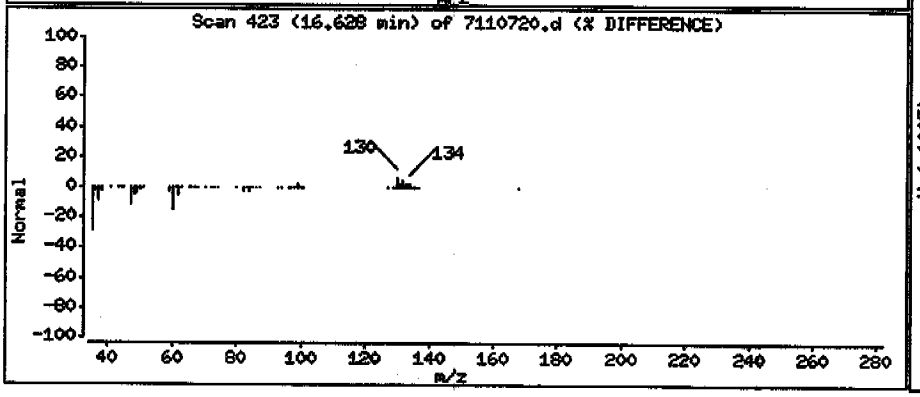
101 Trichloroethene

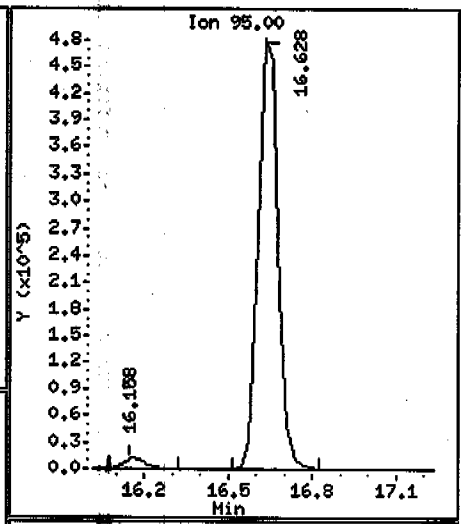
Concentration: 107.20 PPBV

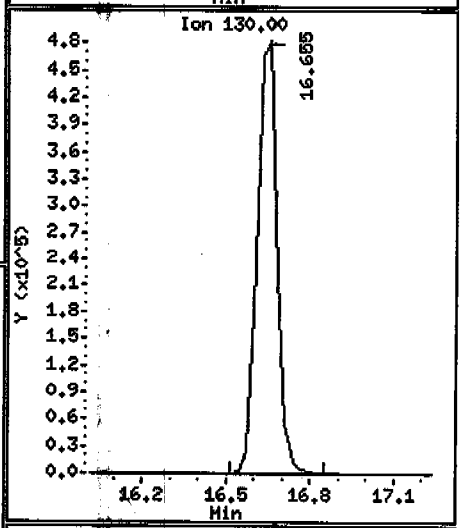


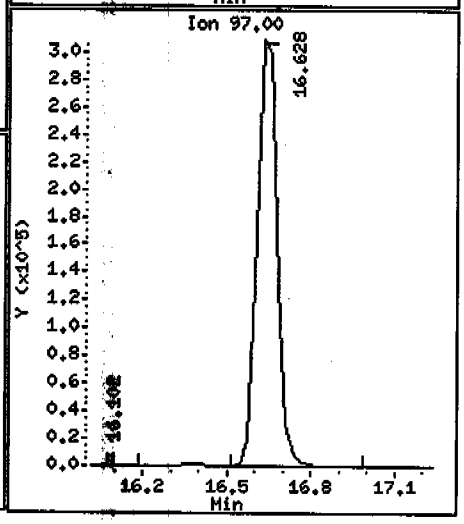












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

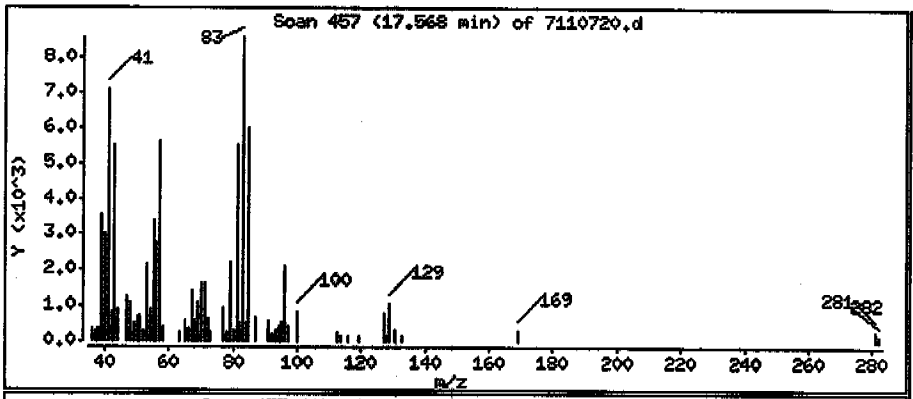
Operator: sb

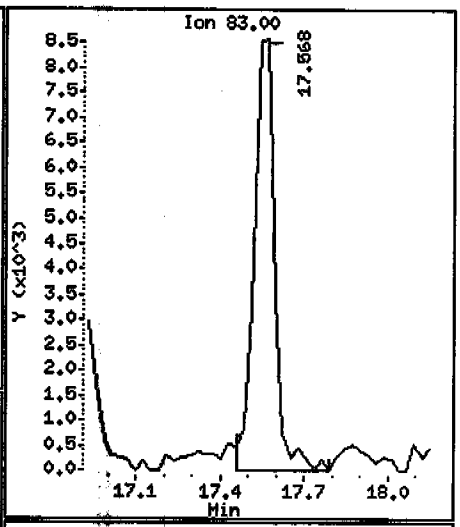
Column phase: RTx-624

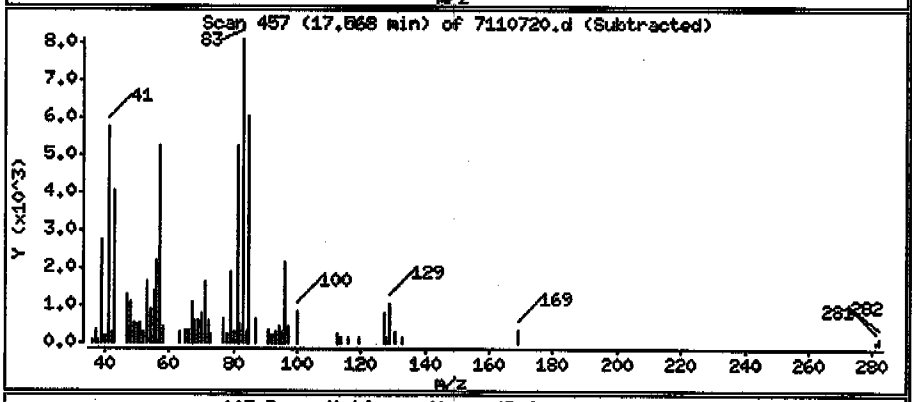
Column diameter: 0.53

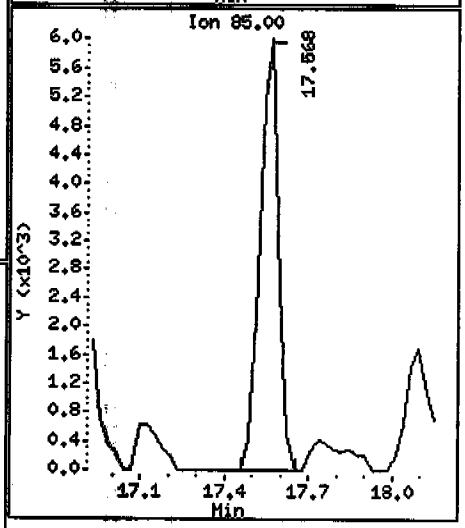
107 Bromodichloromethane

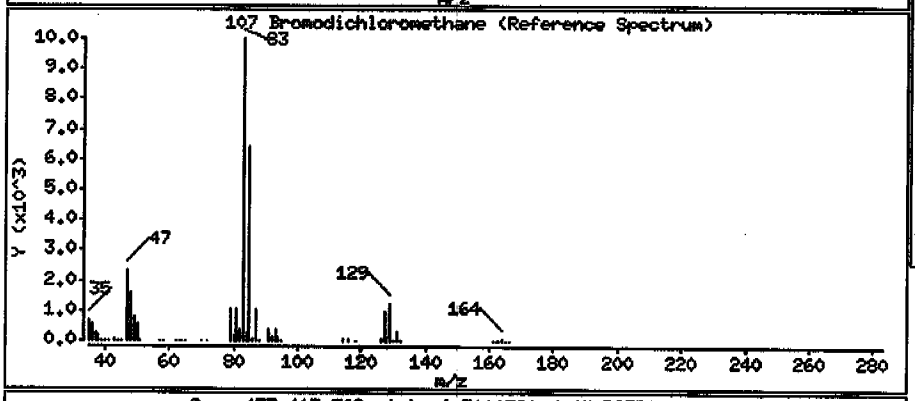
Concentration: 1.164 PPBV

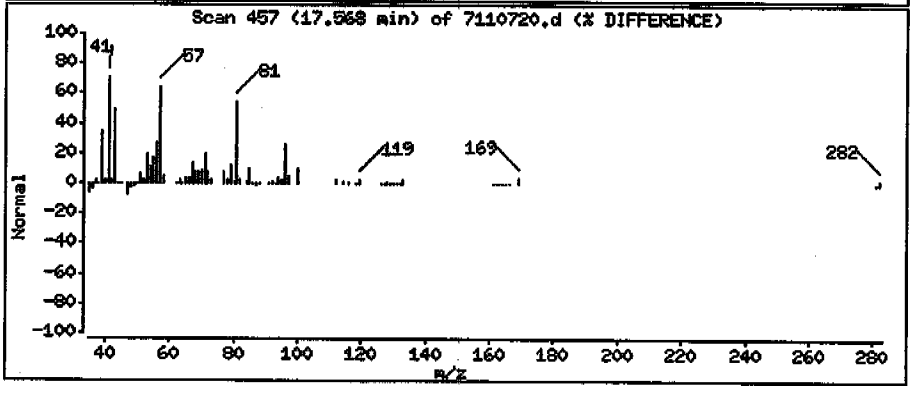












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

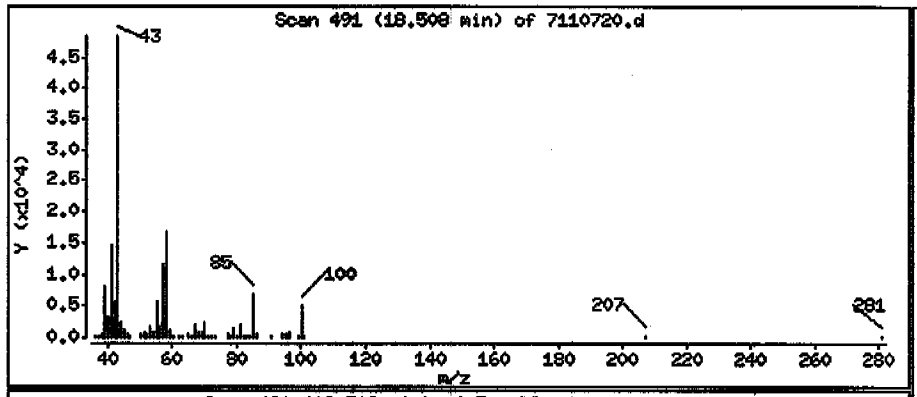
Operator: ab

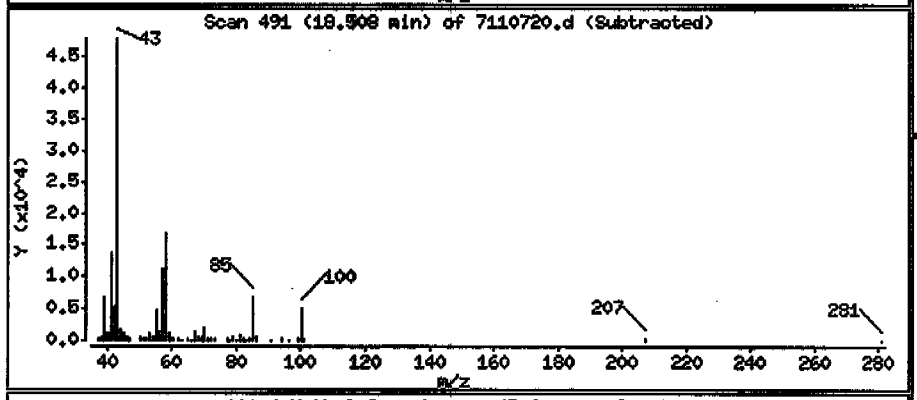
Column phase: RTx-624

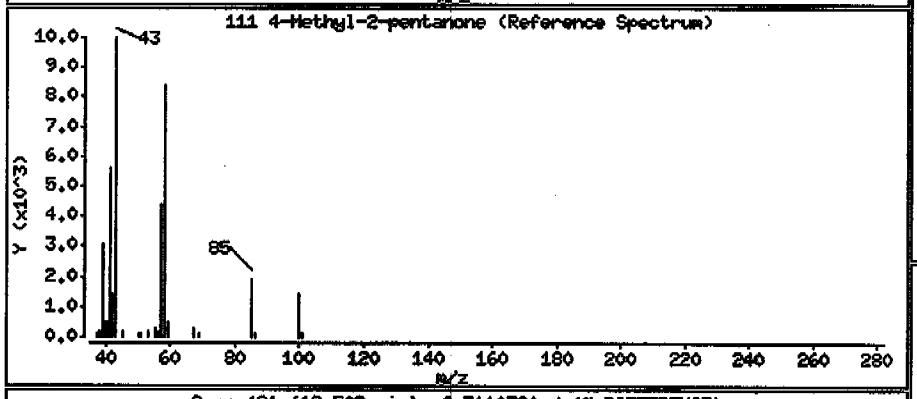
Column diameter: 0.53

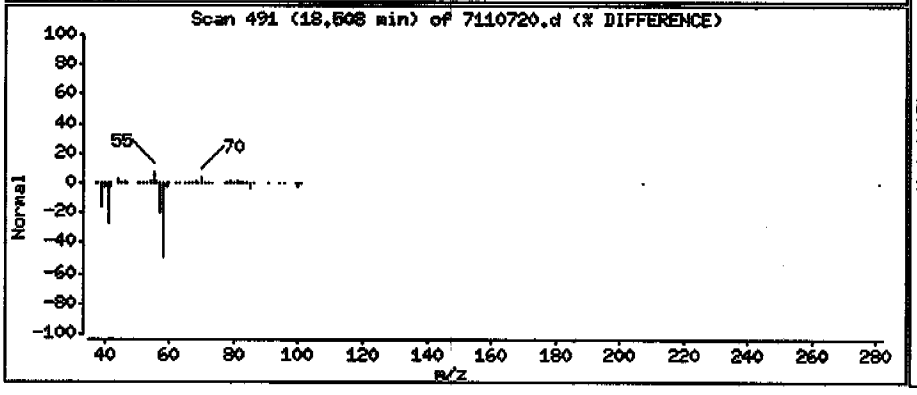
111 4-Methyl-2-pentanone

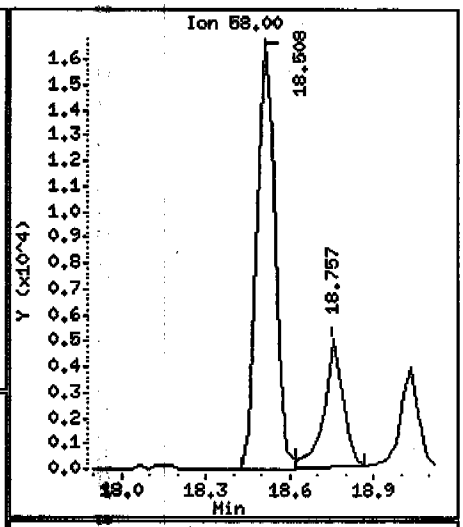
Concentration: 5.048 PPBV

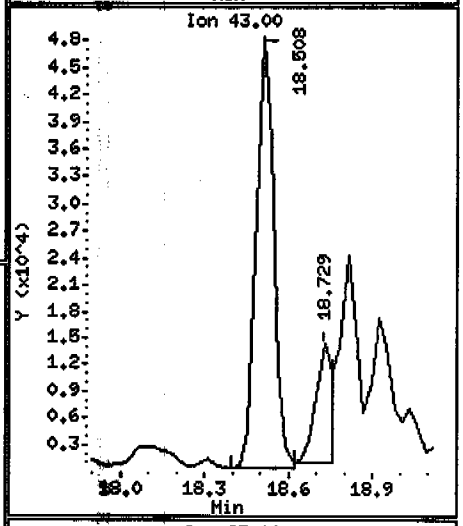


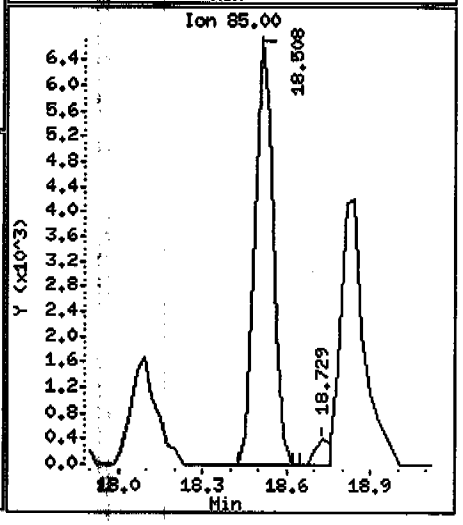












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

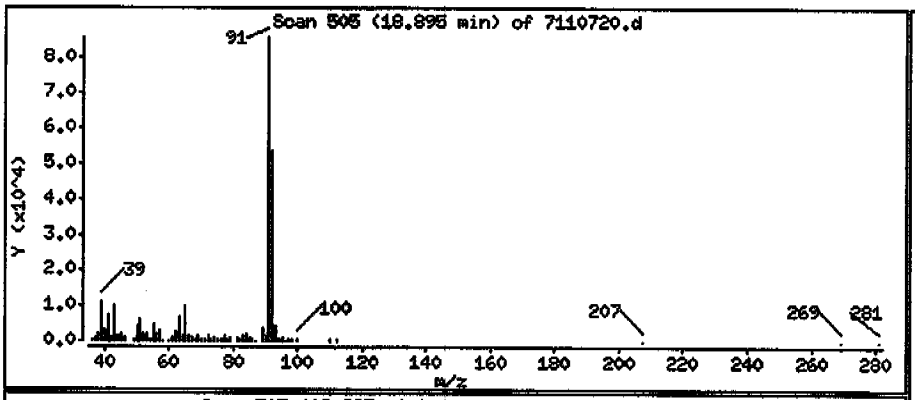
Operator: ab

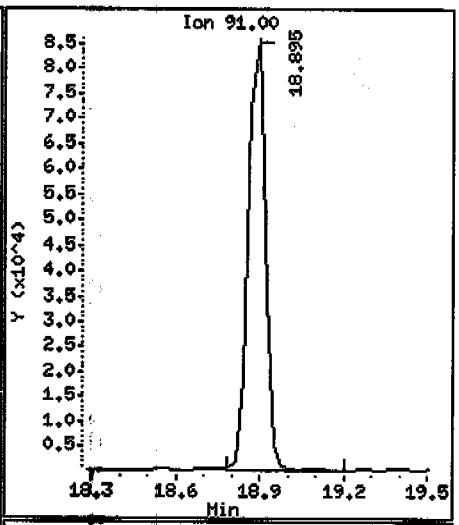
Column phase: RTx-624

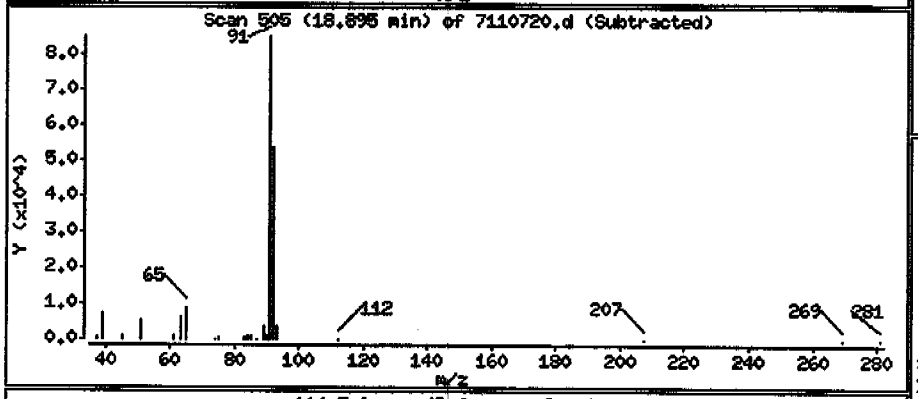
Column diameter: 0.53

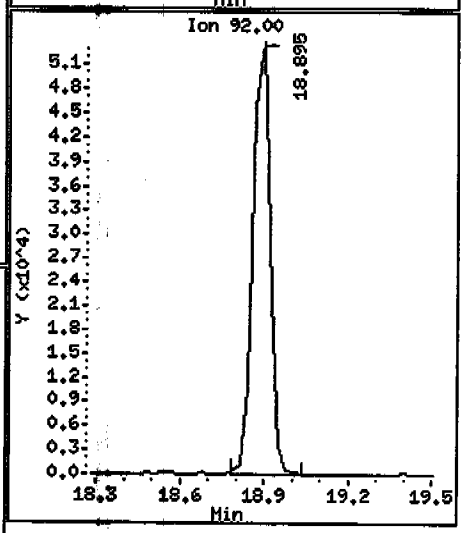
114 Toluene

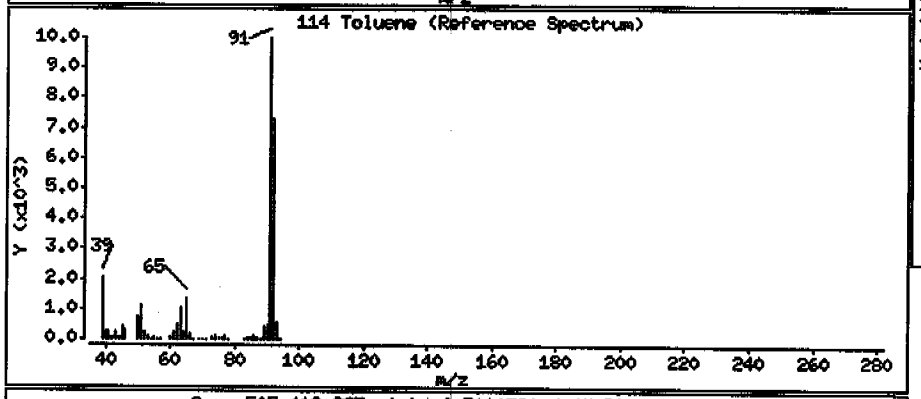
Concentration: 6.651 PPBV

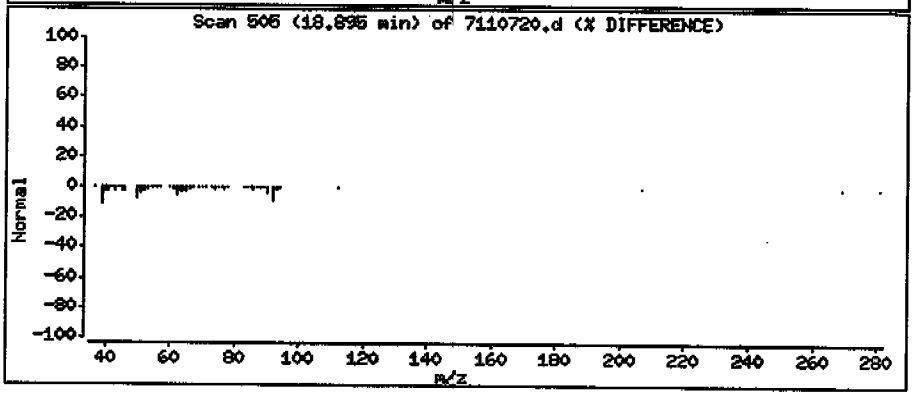












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

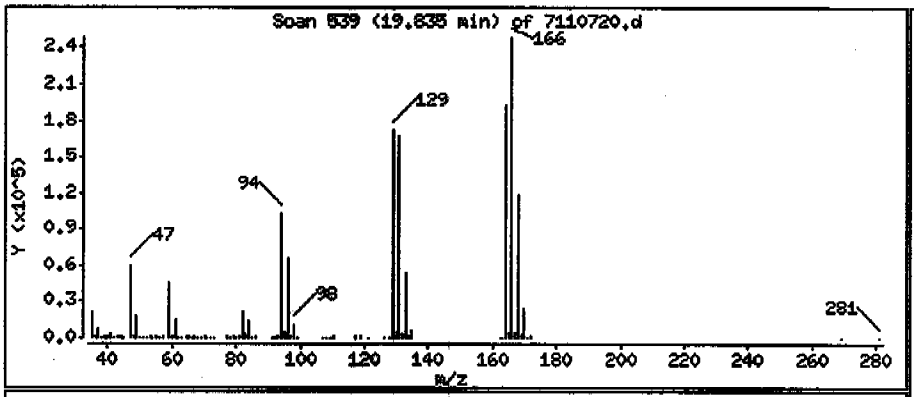
Operator: ab

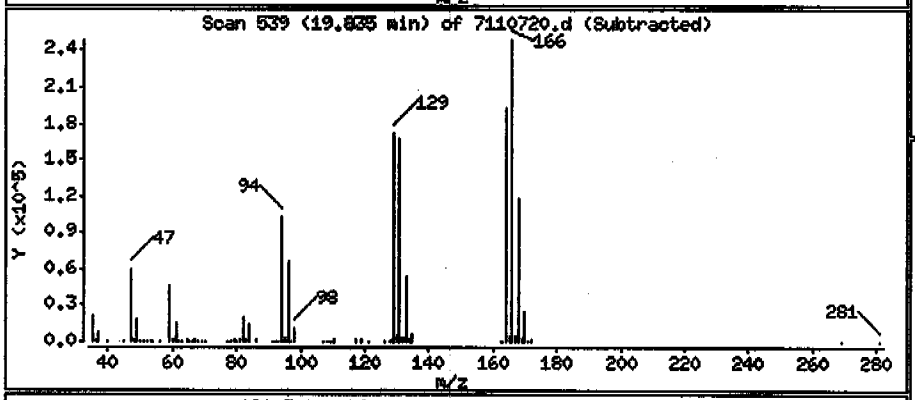
Column phase: RTx-624

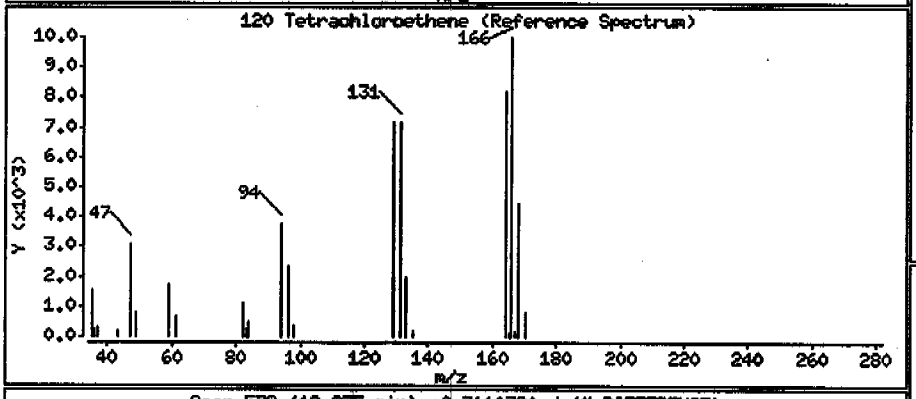
Column diameter: 0.53

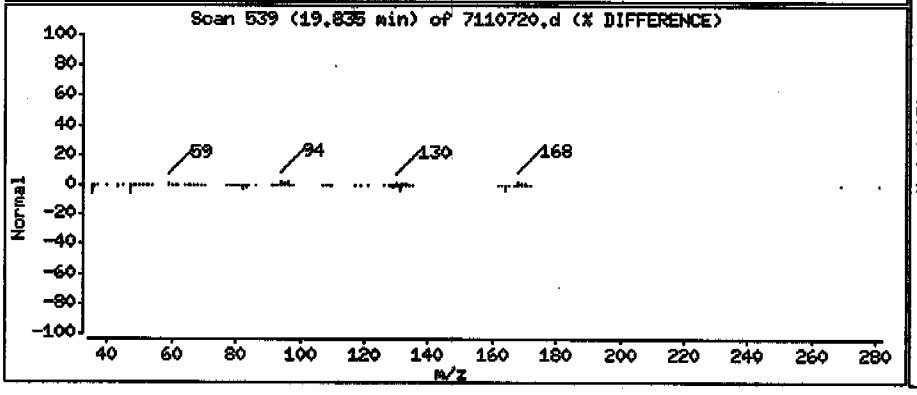
120 Tetrachloroethene

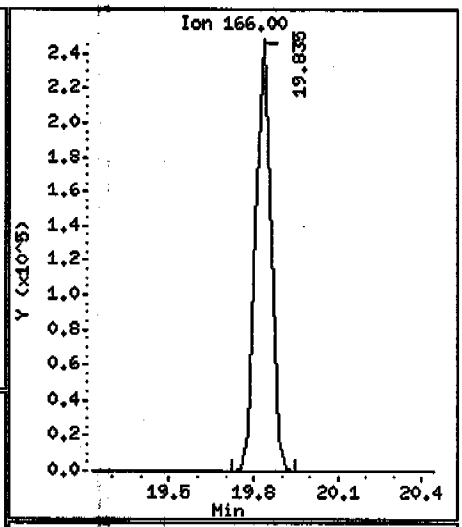
Concentration: 36.354 PPBV

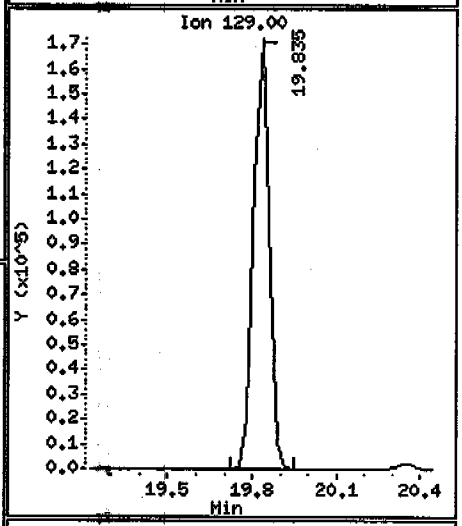


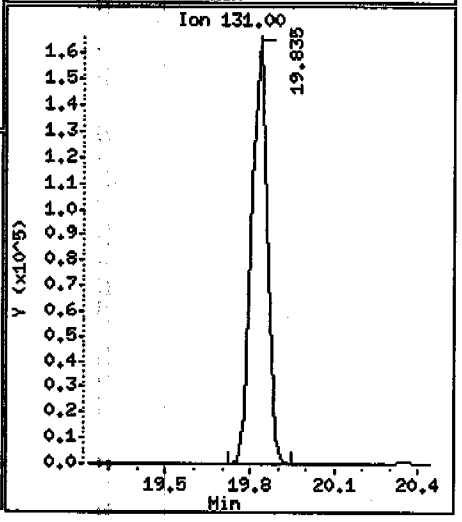












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

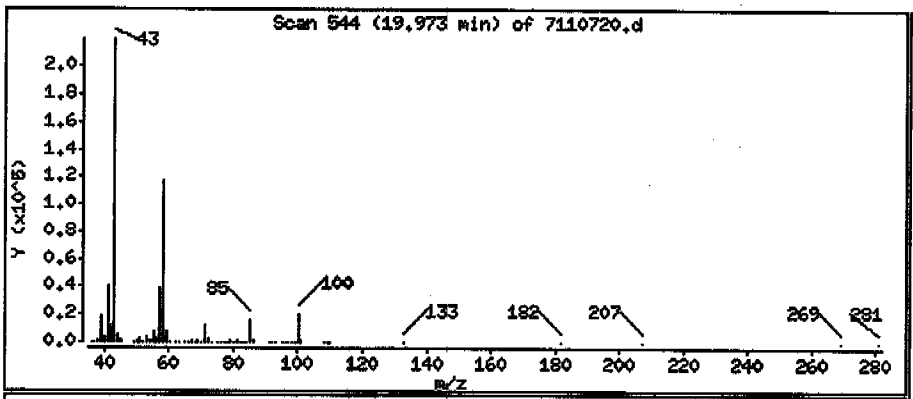
Operator: ab

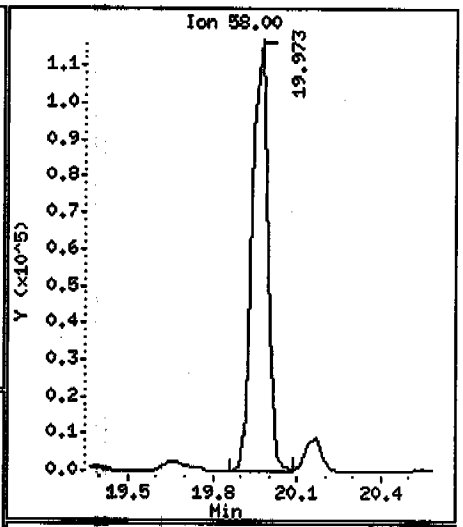
Column phase: RTx-624

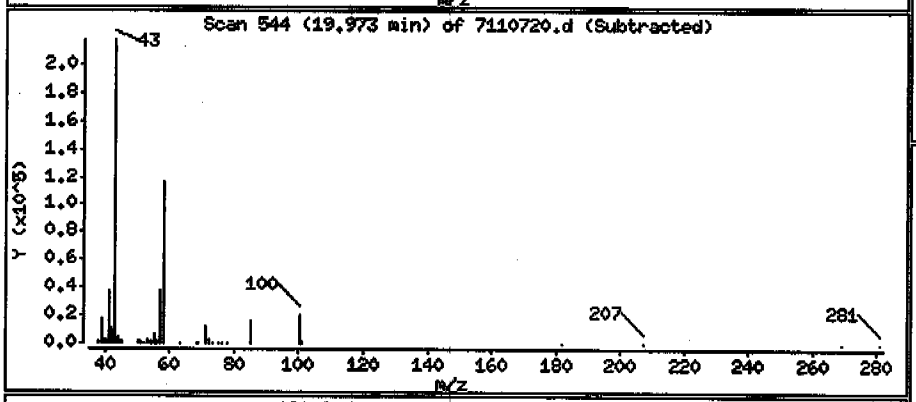
Column diameter: 0.53

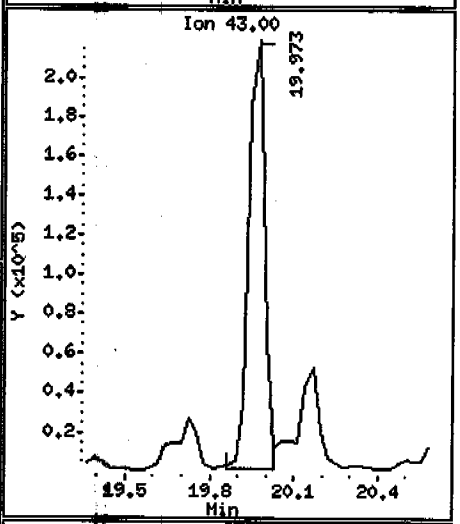
121 2-Hexanone

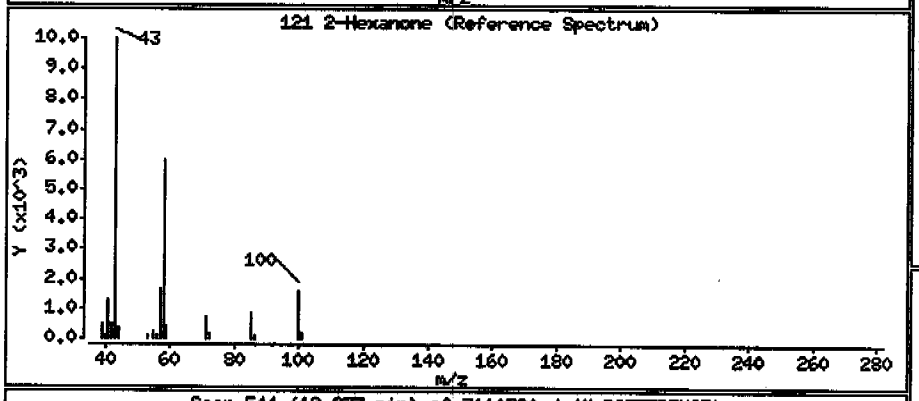
Concentration: 21.060 PPBV

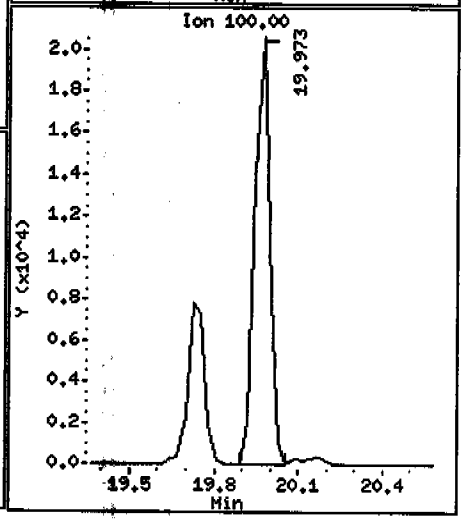


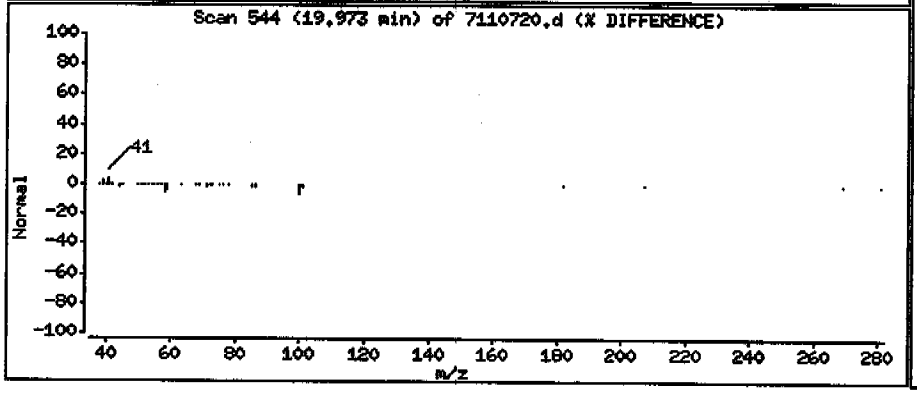












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Sample Info: 200mL #34749

Instrument: msd7.i

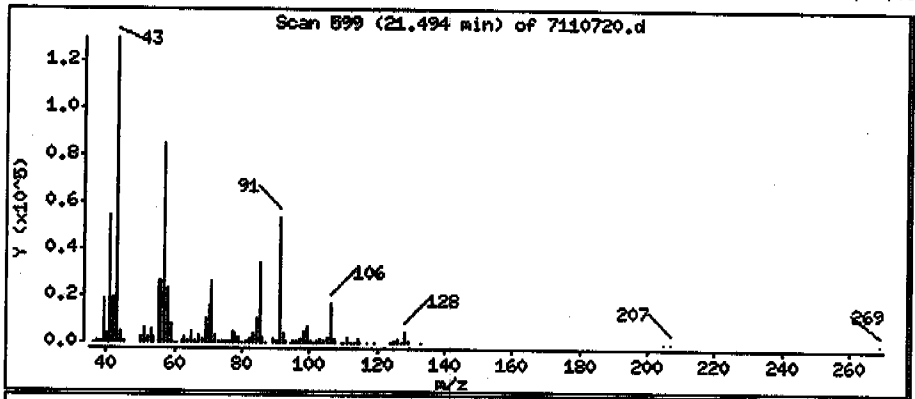
Operator: ab

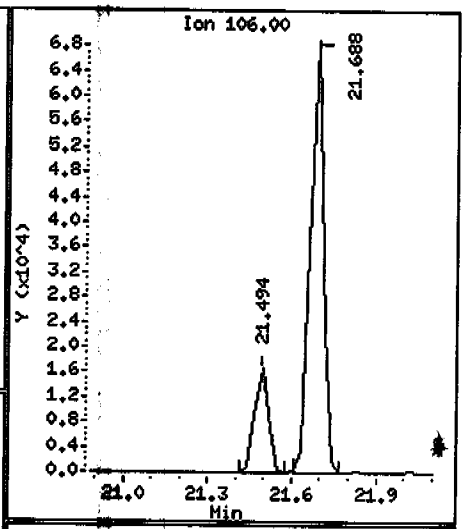
Column phase: RTx-624

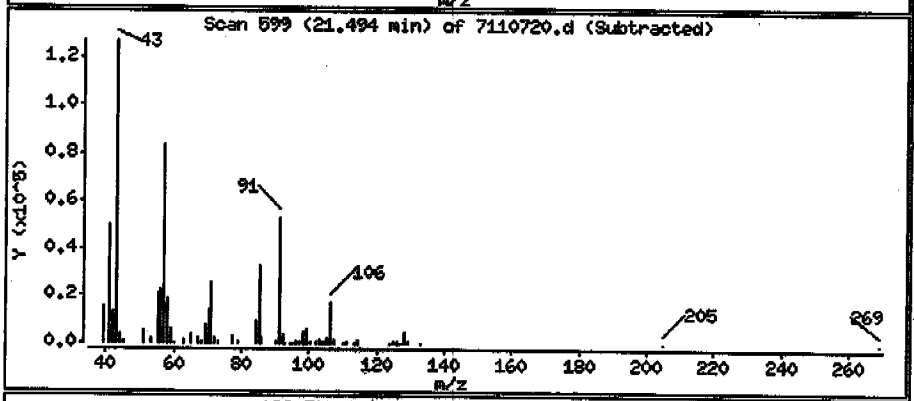
Column diameter: 0.53

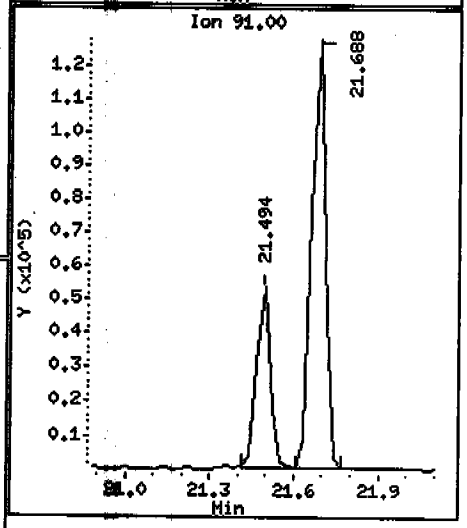
128 Ethyl Benzene

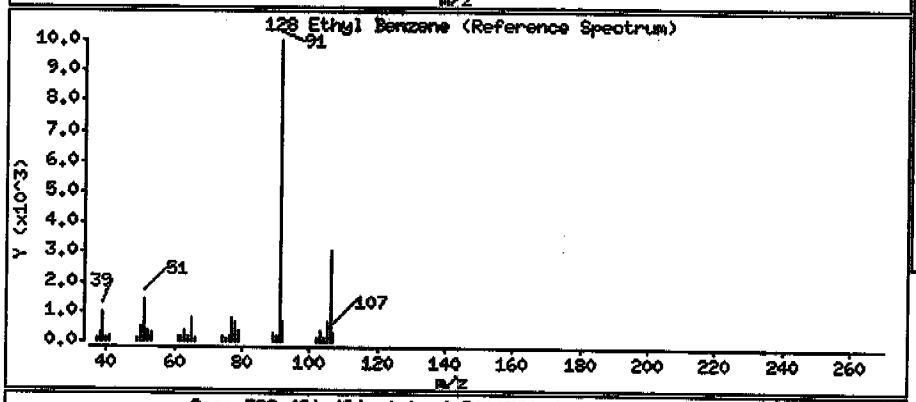
Concentration: 2.585 PPBV

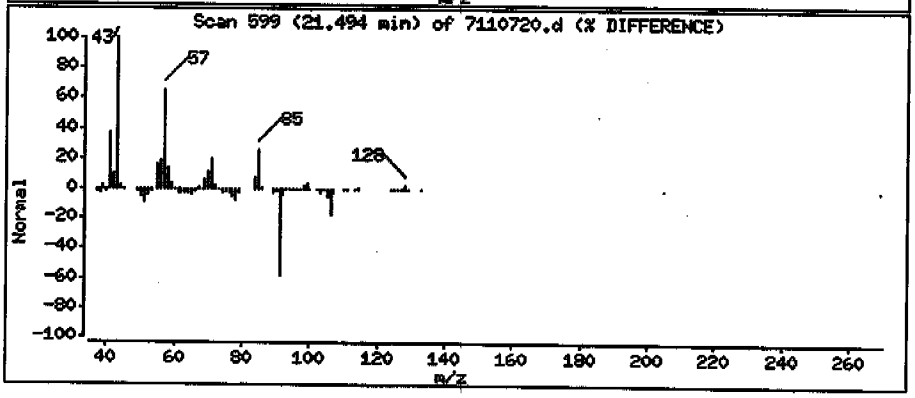












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

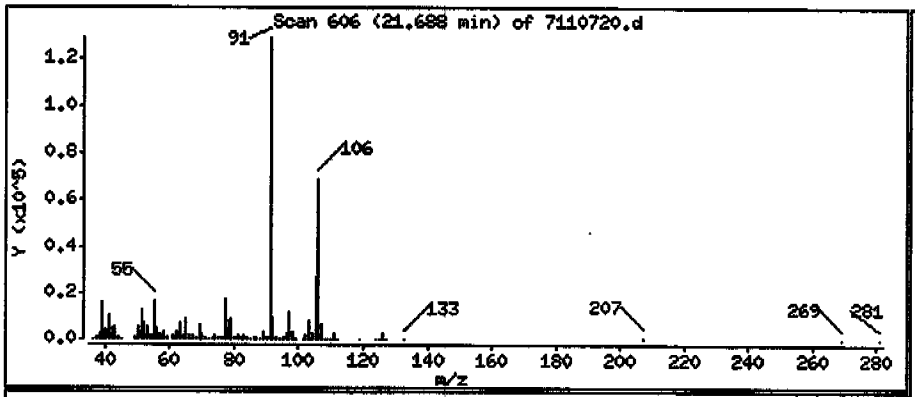
Operator: ab

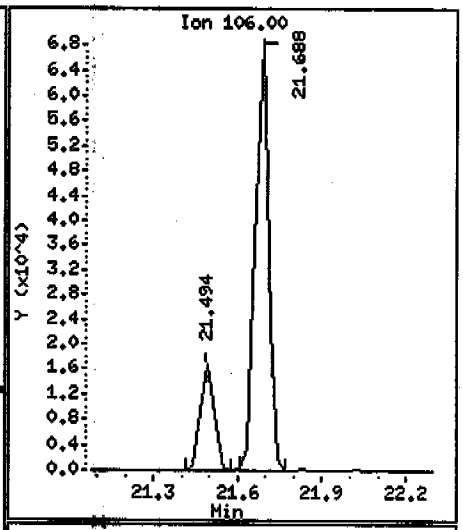
Column phase: RTx-624

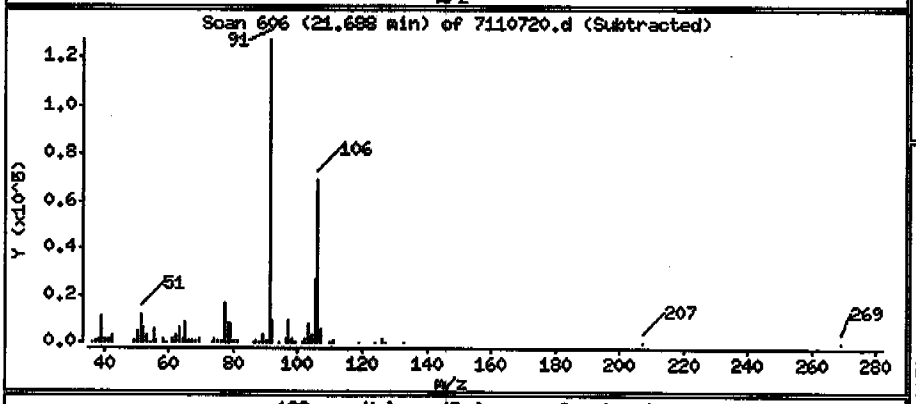
Column diameter: 0.53

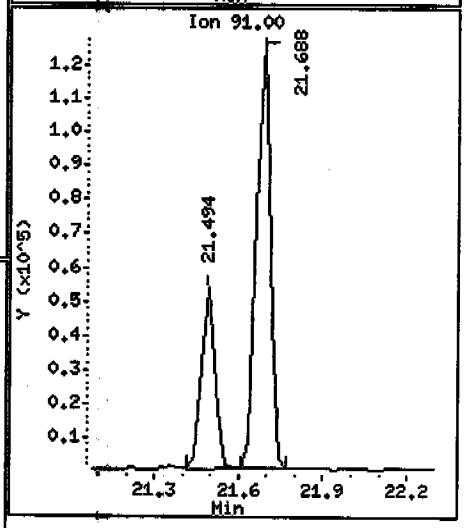
129 m,p-Xylene

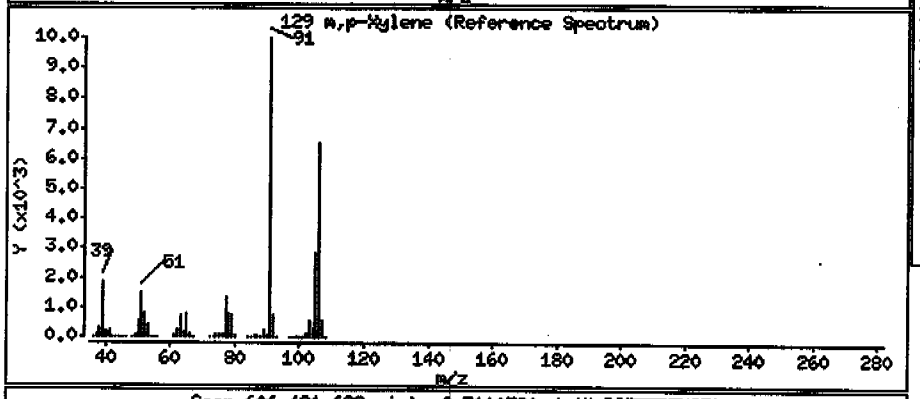
Concentration: 8.047 PPBV

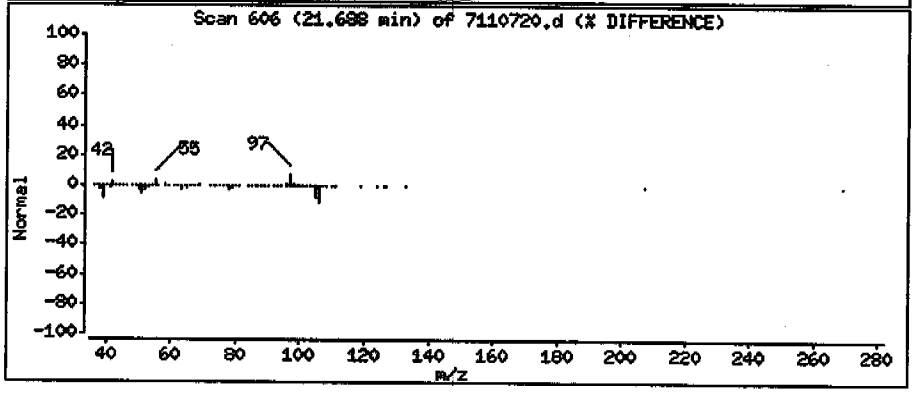












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

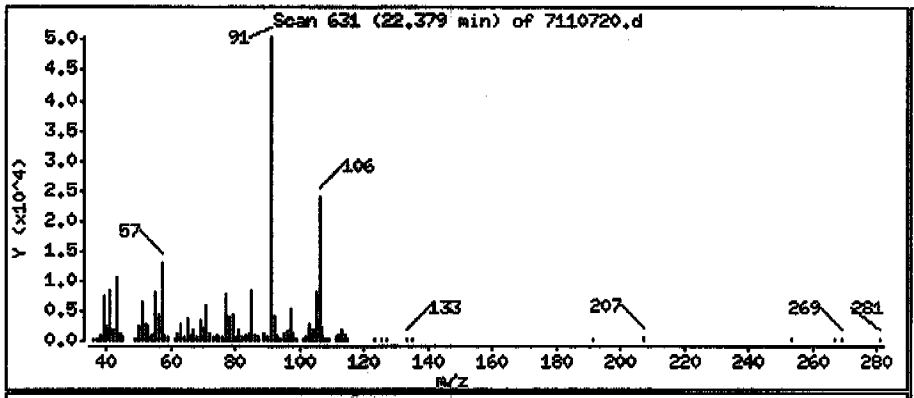
Operator: ab

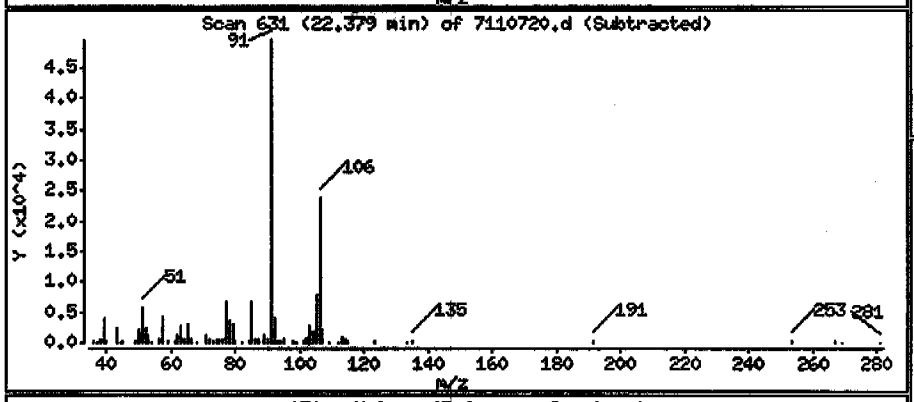
Column phase: RTx-624

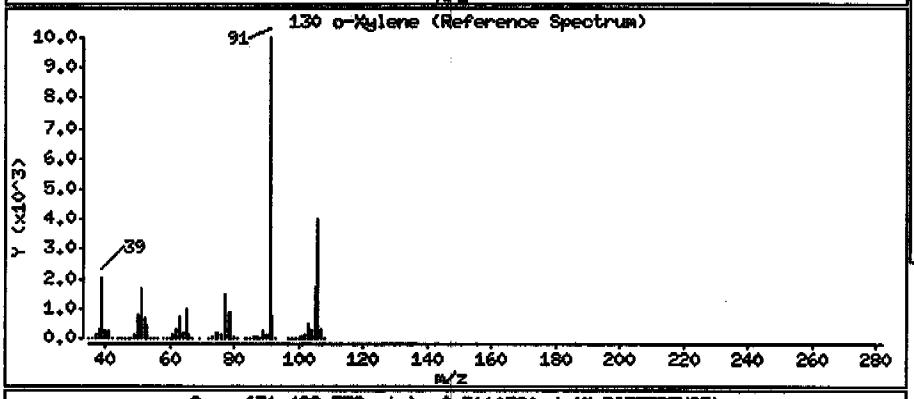
Column diameter: 0.53

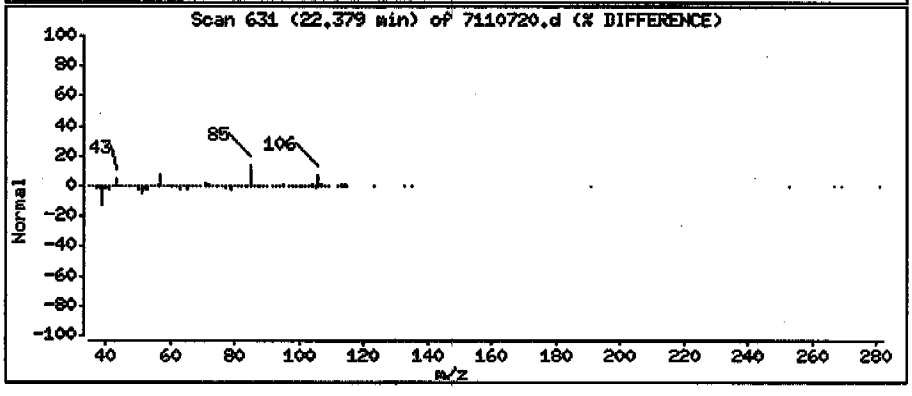
130 o-Xylene

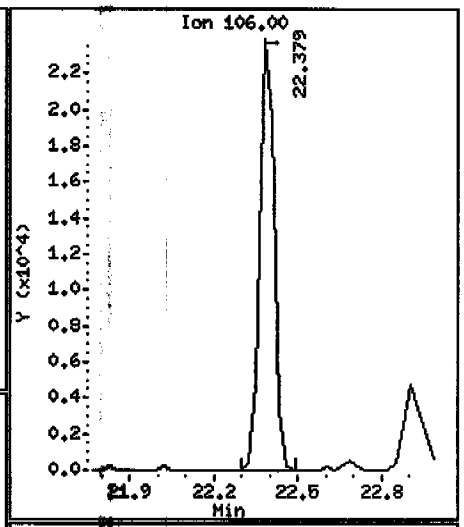
Concentration: 3.615 PPBV

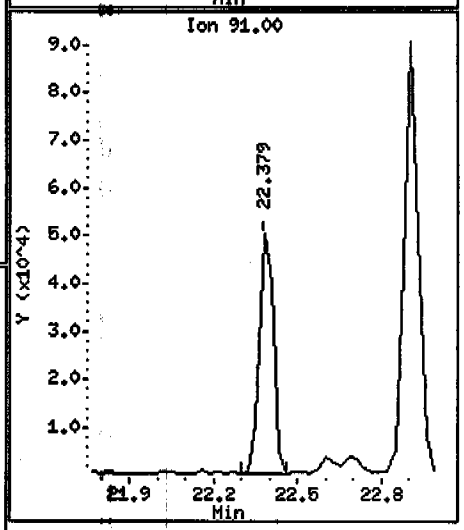












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

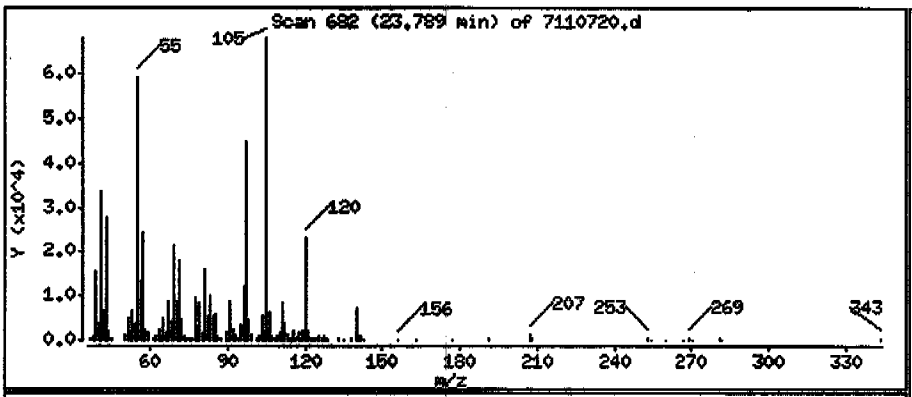
Operator: ab

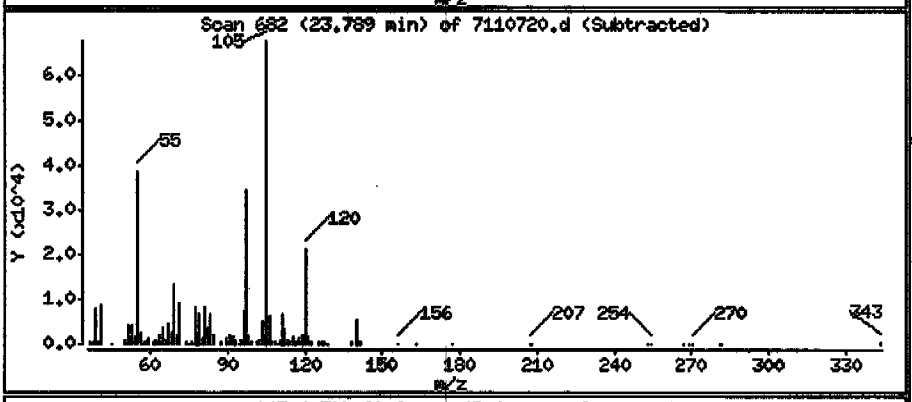
Column phase: RTx-624

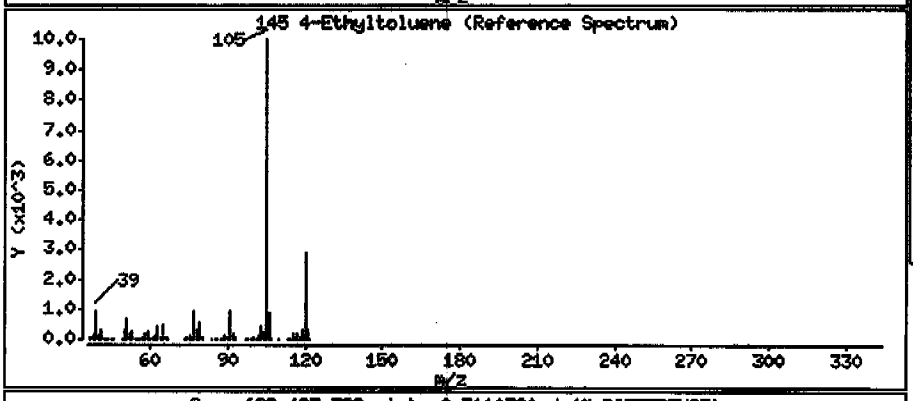
Column diameter: 0.53

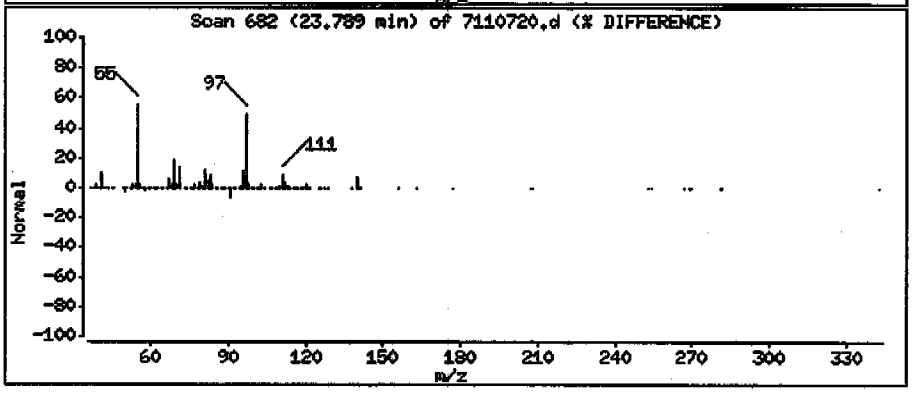
145 4-Ethyltoluene

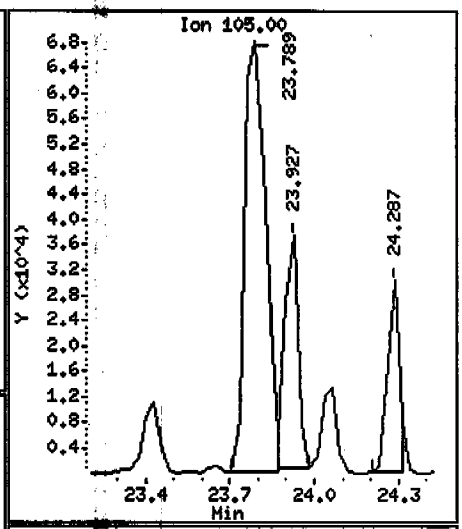
Concentration: 4.982 PPBV

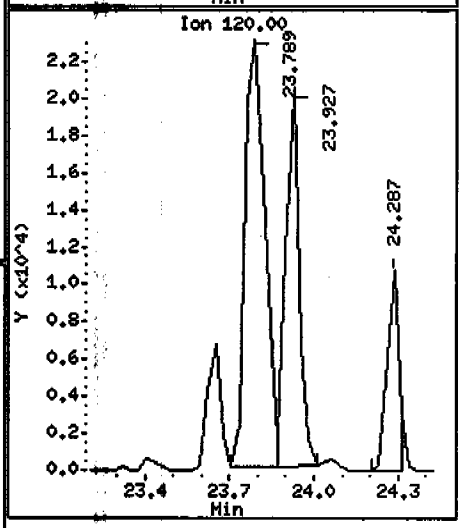












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

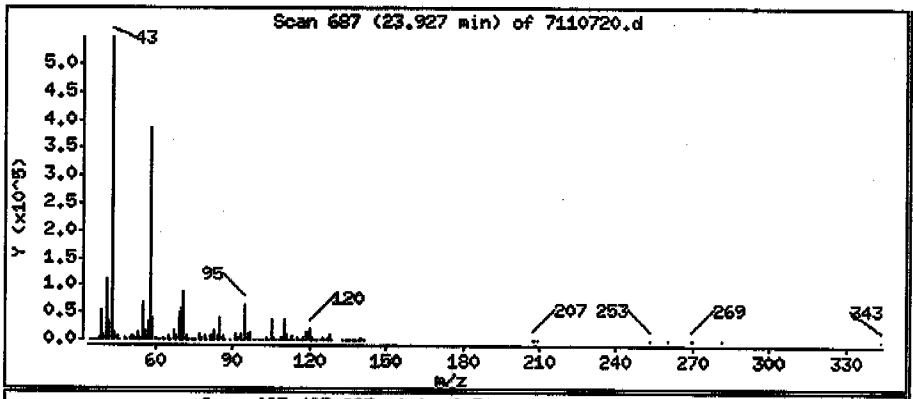
Operator: ab

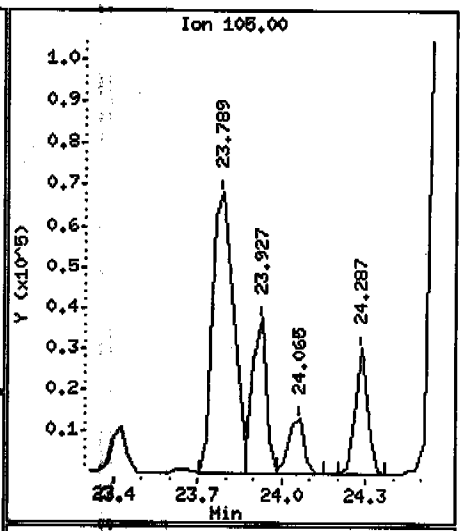
Column phase: RTx-624

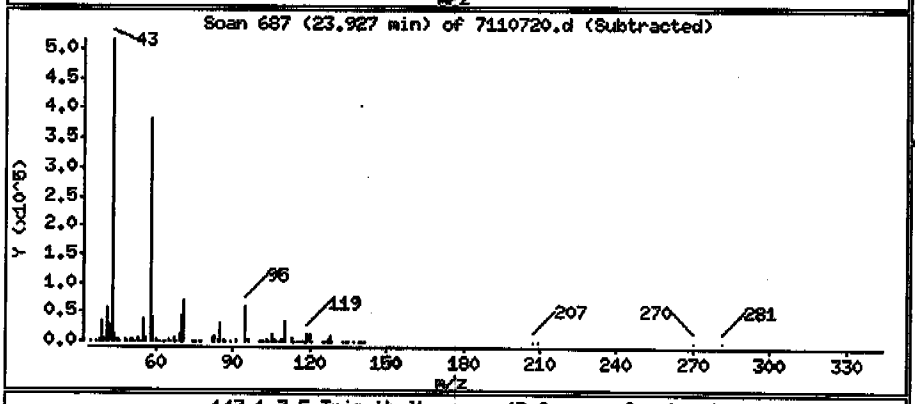
Column diameter: 0.53

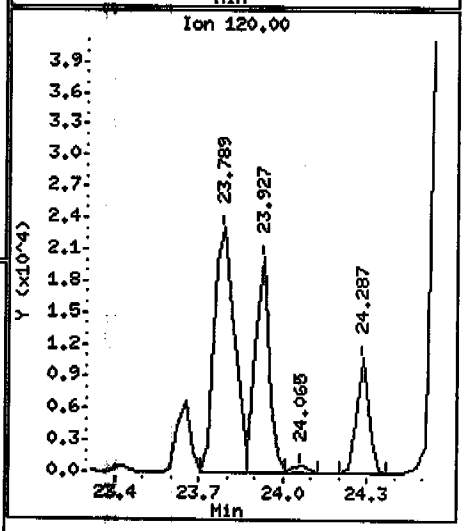
147 1,3,5-Trimethylbenzene

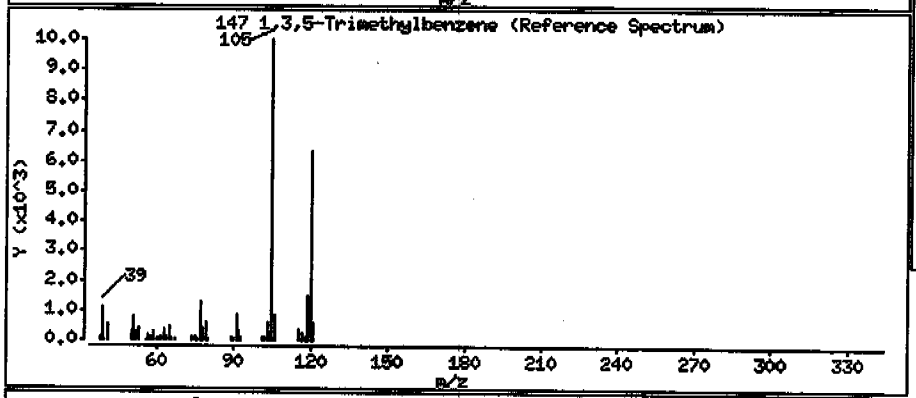
Concentration: 2.314 PPBV

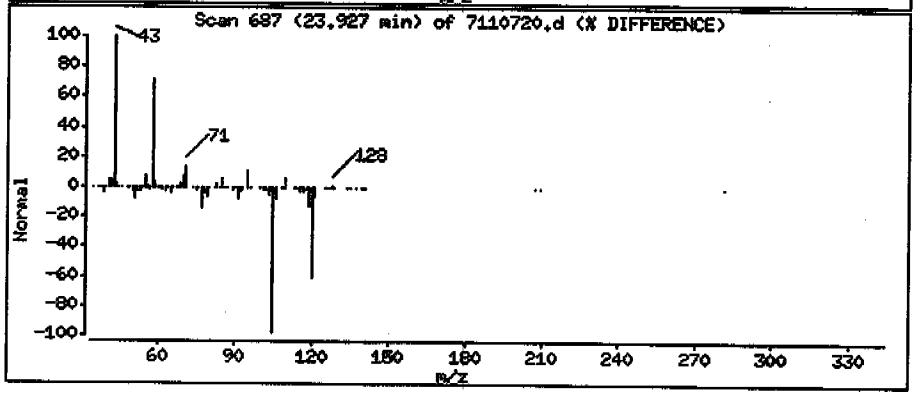












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

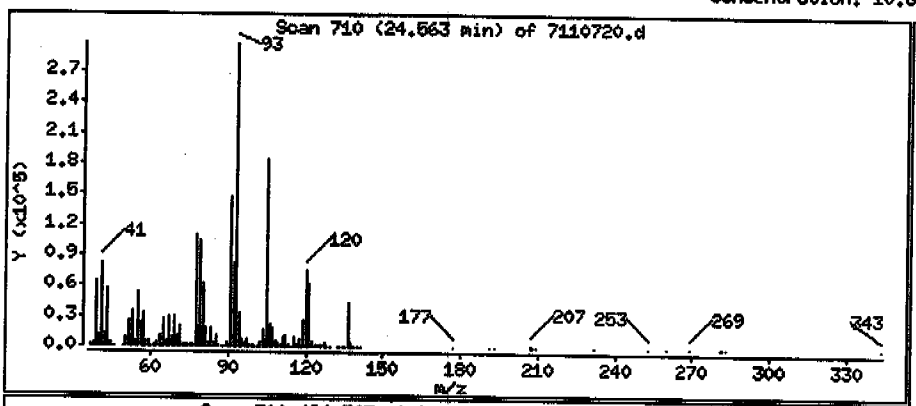
Operator: ab

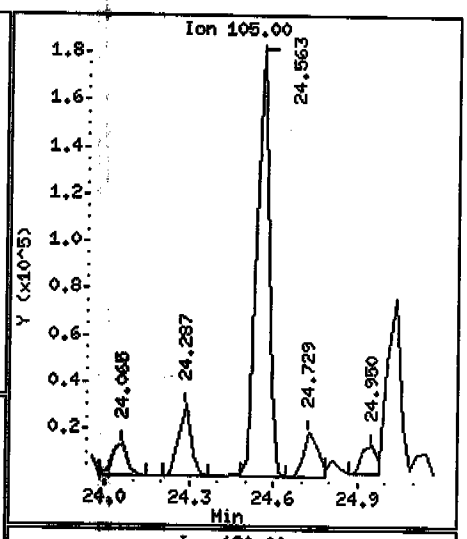
Column phase: RTx-624

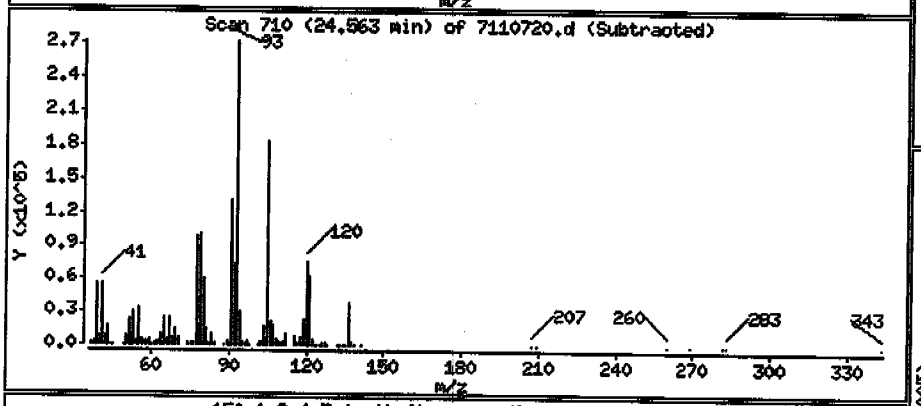
Column diameter: 0.53

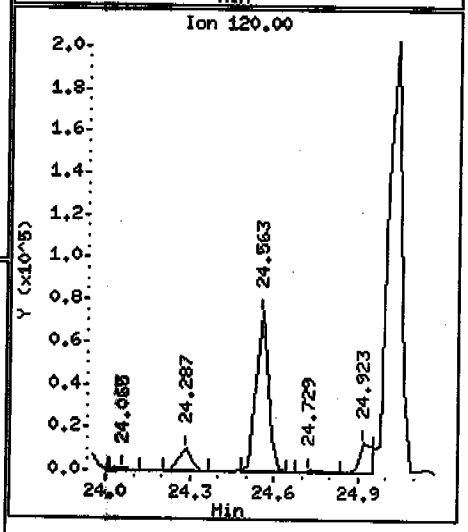
150 1,2,4-Trimethylbenzene

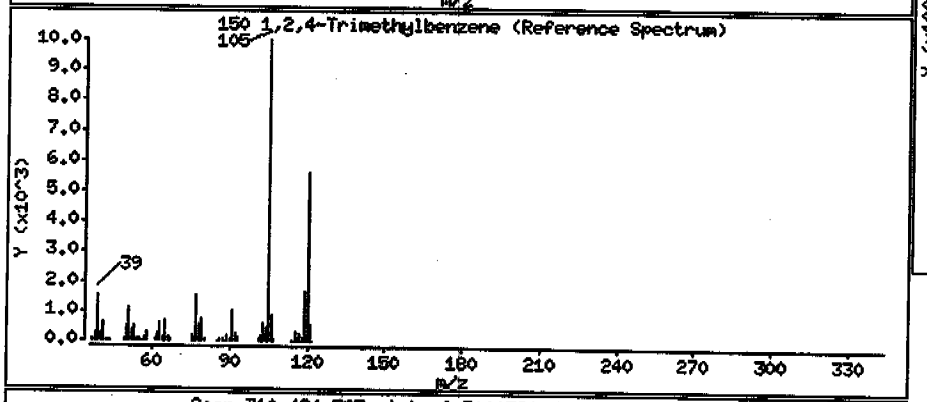
Concentration: 10.839 PPBV

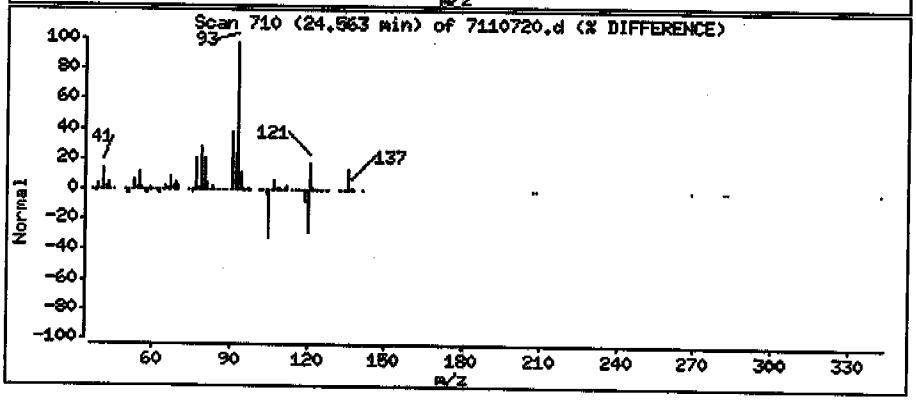












Data File: /chem/msd7.i/7-07nov.b/7110720.d

Date : 08-NOV-2007 00:50

Client ID:

Instrument: msd7.i

Sample Info: 200mL #34749

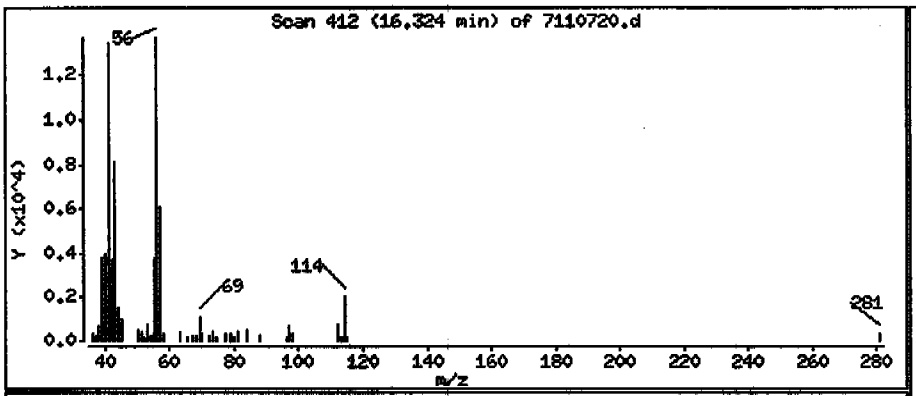
Operator: ab

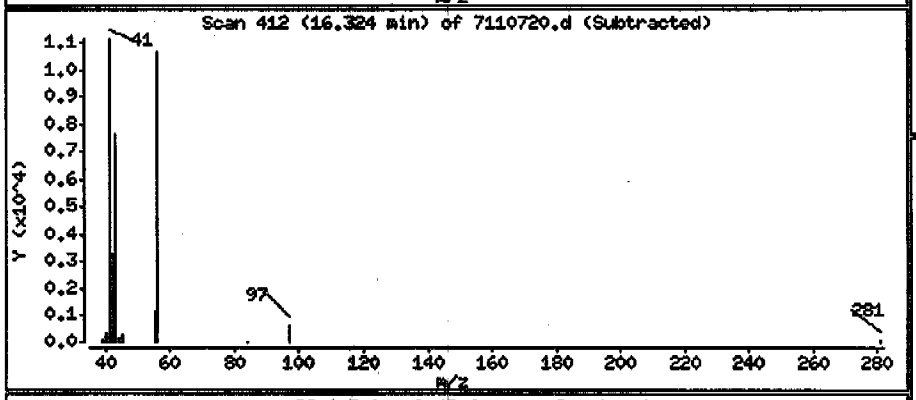
Column phase: RTx-624

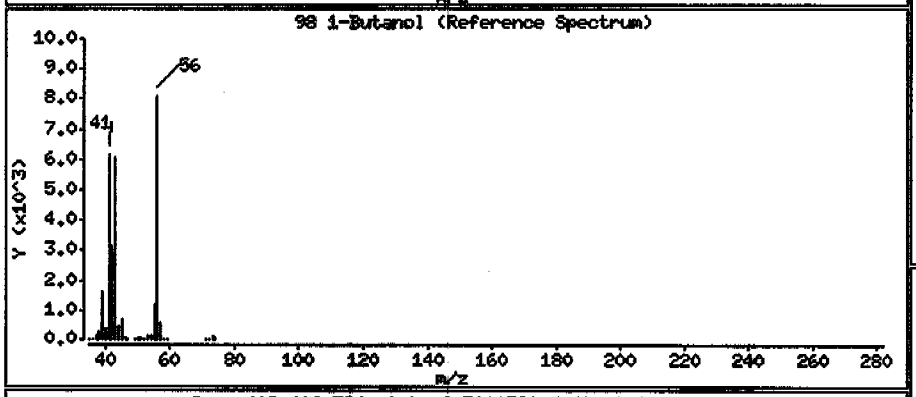
Column diameter: 0.53

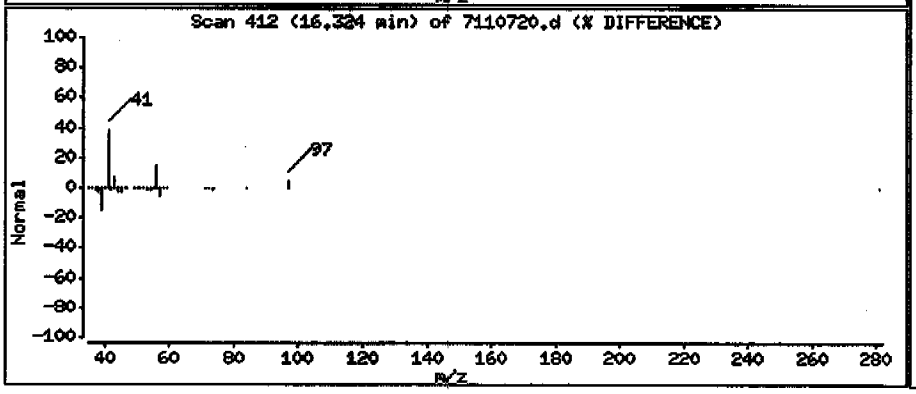
98 1-Butanol

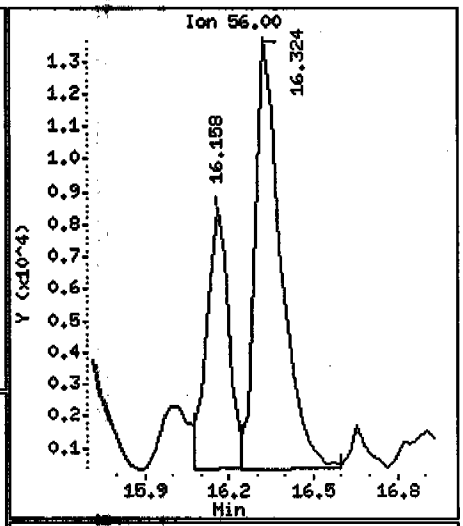
Concentration: 7.037 PPBV

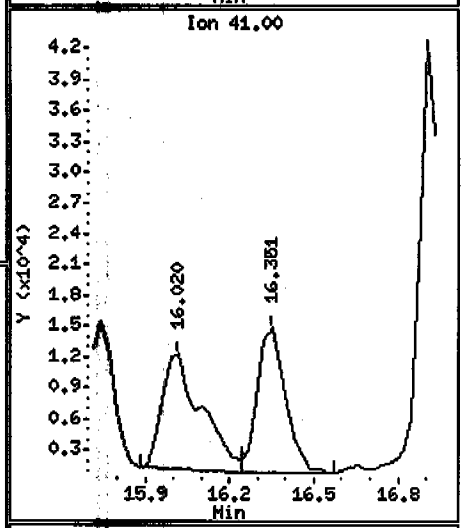


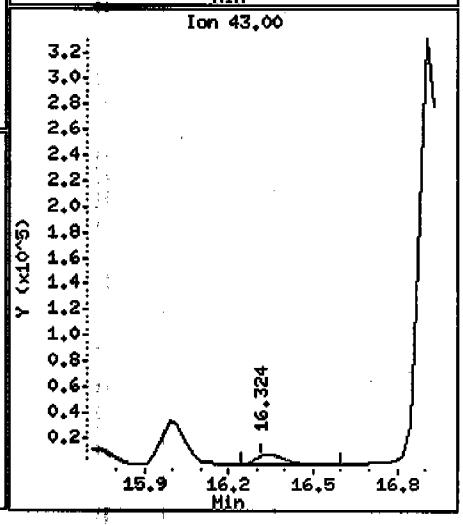












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6802

Lab ID#: 0711101-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.8	4.2	9.2
Freon 113	0.84	7.1	6.4	55
1,1-Dichloroethene	0.84	6.7	3.3	27
Acetone	3.4	62	8.0	150
Carbon Disulfide	0.84	1.6	2.6	5.1
Methylene Chloride	0.84	110	2.9	380
2-Butanone (Methyl Ethyl Ketone)	0.84	2.8	2.5	8.4
cis-1,2-Dichloroethene	0.84	1.3	3.3	5.0
Tetrahydrofuran	0.84	0.91	2.5	2.7
Chloroform	0.84	140	4.1	680
1,1,1-Trichloroethane	0.84	4.7	4.6	26
Carbon Tetrachloride	0.84	99	5.3	620
Benzene	0.84	1.0	2.7	3.2
1,2-Dichloroethane	0.84	1.3	3.4	5.2
Trichloroethene	0.84	200	4.5	1100
Bromodichloromethane	0.84	1.4	5.6	9.2
Toluene	0.84	1.6	3.2	6.0
1,1,2-Trichloroethane	0.84	5.0	4.6	27
Tetrachloroethene	0.84	29	5.7	200
1,2,4-Trimethylbenzene	0.84	0.90	4.1	4.4

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6802

Lab ID#: 0711101-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.8	4.2	9.2
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	Not Detected	1.8	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	7.1	6.4	55
1,1-Dichloroethene	0.84	6.7	3.3	27
Acetone	3.4	62	8.0	150
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	1.6	2.6	5.1
Methylene Chloride	0.84	110	2.9	380
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.8	2.5	8.4
cis-1,2-Dichloroethene	0.84	1.3	3.3	5.0
Tetrahydrofuran	0.84	0.91	2.5	2.7
Chloroform	0.84	140	4.1	680
1,1,1-Trichloroethane	0.84	4.7	4.6	26
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	99	5.3	620
Benzene	0.84	1.0	2.7	3.2
1,2-Dichloroethane	0.84	1.3	3.4	5.2
Heptane	0.84	Not Detected	3.4	Not Detected
Trichloroethene	0.84	200	4.5	1100
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	1.4	5.6	9.2
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	Not Detected	3.4	Not Detected
Toluene	0.84	1.6	3.2	6.0
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	5.0	4.6	27
Tetrachloroethene	0.84	29	5.7	200

0097

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6802

Lab ID#: 0711101-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	Not Detected	7.2	Not Detected
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	Not Detected	3.6	Not Detected
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	Not Detected	8.7	Not Detected
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	0.90	4.1	4.4
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.8	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	99	70-130

0098

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110717.d
Lab Smp Id: 0711101-03A
Inj Date : 07-NOV-2007 22:25
Operator : dm Inst ID: msd7.i
Smp Info : 200mL #35154
Misc Info : 6.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	632631	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	489353			28.66- 128.66	77.35
14.416	14.416 (1.000)	49	1360622			133.49- 233.49	215.07
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.158 (1.000)	114	2127784	25.0000		80.00- 120.00	100.00
16.186	16.158 (1.000)	88	324755			0.00- 65.23	15.26
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1408613	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	770153			4.70- 104.70	54.67
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	826556	24.3205	24.320	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	413924			2.91- 102.91	50.08
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1689827	22.3720	22.372	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	191618			0.00- 61.46	11.34

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1156373			19.18- 119.18	68.43
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	828914	24.7296	24.730	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	1018506			73.89- 173.89	122.87
23.347	23.347 (1.093)	176	799273			48.20- 148.20	96.42
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.758 (0.399)	85	110376	1.10406	1.855	80.00- 120.00	100.00
5.786	5.758 (0.401)	87	36171			0.00- 83.07	32.77
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	220249	4.24597	7.133	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	140922			13.12- 113.12	63.98
10.213	10.186 (0.708)	101	261507			67.28- 167.28	118.73
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	220517	3.99509	6.712	80.00- 120.00	100.00
10.352	10.324 (0.718)	96	134132			9.78- 109.78	60.83
10.352	10.324 (0.718)	98	83741			0.00- 88.25	37.97
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.728)	58	633714	37.1438	62.402	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	2102733			247.10- 347.10	331.81
47 Carbon Disulfide					CAS #: 75-15-0		
10.905	10.877 (0.756)	76	102587	0.97413	1.636	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	2622528	64.6241	108.57	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	1832930			19.98- 119.98	69.89
11.485	11.457 (0.797)	51	794825			0.00- 80.85	30.31
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	23296	1.70021	2.856	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	110491			412.48- 512.48	474.29
13.891	13.891 (0.964)	57	8226			0.00- 86.57	35.31
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.965)	61	33791	0.75309	1.265	80.00- 120.00	100.00
13.946	13.918 (0.967)	96	21590			26.41- 126.41	63.89
13.946	13.918 (0.967)	98	14465			0.00- 98.54	42.81
80 Tetrahydrofuran					CAS #: 109-99-9		
14.416	14.388 (1.000)	42	19282	0.53974	0.9068	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
80 Tetrahydrofuran (continued)							
14.416	14.388 (1.000)	71	5975			0.00- 86.36	30.99
14.471	14.388 (1.004)	72	28280			0.00- 87.82	146.67
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	5295248	83.1325	139.66	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	3411302			15.69- 115.69	64.42
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	180649	2.81633	4.731	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	117825			14.03- 114.03	65.22
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	3556811	59.1546	99.380	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	3659272			53.14- 153.14	102.88
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.959)	78	50120	0.59283	0.9960	80.00- 120.00	100.00
15.522	15.522 (0.959)	77	12547			0.00- 71.87	25.03
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.966)	62	34511	0.76829	1.291	80.00- 120.00	100.00
15.633	15.633 (0.966)	64	11820			0.00- 82.89	34.25
101 Trichloroethene					CAS #: 79-01-6		
16.656	16.628 (1.029)	95	4565173	121.561	204.22	80.00- 120.00	100.00
16.656	16.628 (1.029)	130	4579832			51.11- 151.11	100.32
16.656	16.628 (1.029)	97	2957247			15.04- 115.04	64.78
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.085)	83	53091	0.81428	1.368	80.00- 120.00	100.00
17.568	17.540 (1.085)	85	35714			14.03- 114.03	67.27
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	88609	0.95690	1.608	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	54802			12.90- 112.90	61.85
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	86414	2.96181	4.976	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	53914			12.40- 112.40	62.39
19.669	19.669 (0.921)	83	69756			32.55- 132.55	80.72
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	650276	17.1847	28.870	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	461163			21.07- 121.07	70.92
19.835	19.835 (0.929)	131	447364			18.33- 118.33	68.80

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.563	24.563	(1.150)	105	40563	0.53847	0.9046	80.00- 120.00	100.00
24.563	24.563	(1.150)	120	15126			0.00- 98.95	37.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110717.d
Lab Smp Id: 0711101-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	632631	-9.03
97 1,4-Difluorobenze	2265681	1359409	3171953	2127784	-6.09
126 Chlorobenzene-d5	1765821	1059493	2472149	1408613	-20.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-07nov
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711101-03A
Level: LOW
Operator: dm
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 6.0"Hg ->5psi

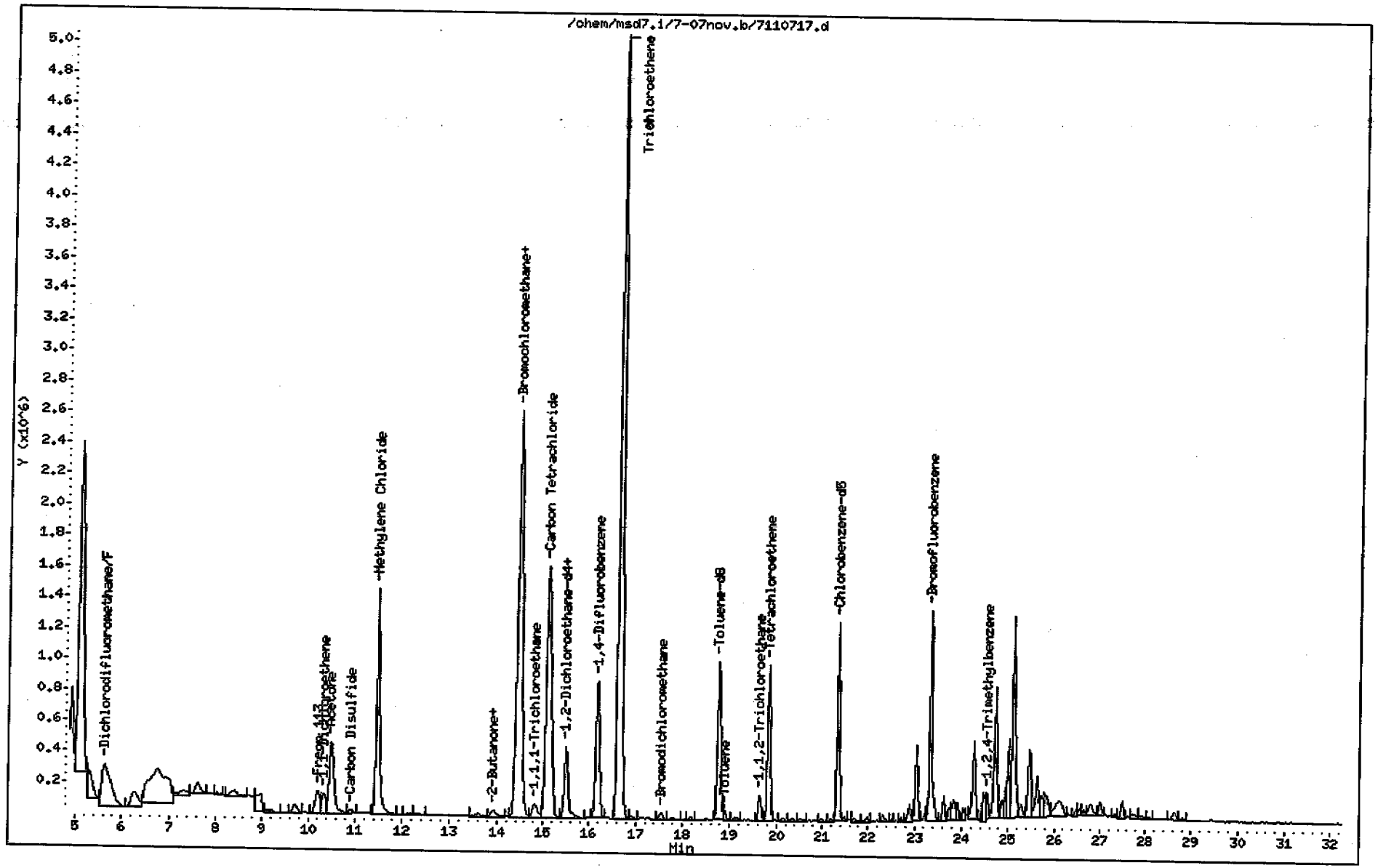
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.320	97.28	70-130
$ 113 Toluene-d8	25.000	22.372	89.49	70-130
$ 137 Bromofluorobenzene	25.000	24.730	98.92	70-130

Data File: /chem/msd7.i/7-07nov.b/7110717.d
Date : 07-NOV-2007 22:25
Client ID:
Sample Info: 200mL #35154

Column phase: RTx-624

Instrument: msd7.i

Operator: dm
Column diameter: 0.53



Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

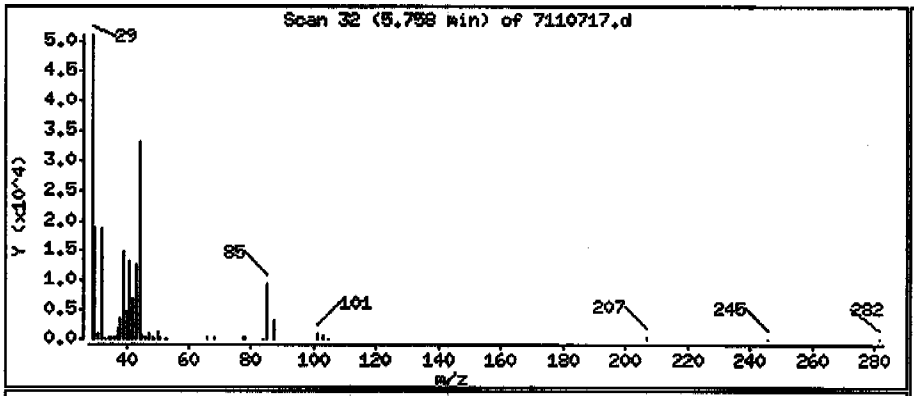
Operator: dm

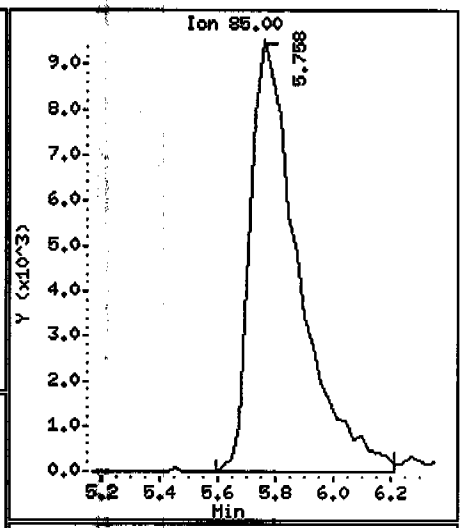
Column phase: RTx-624

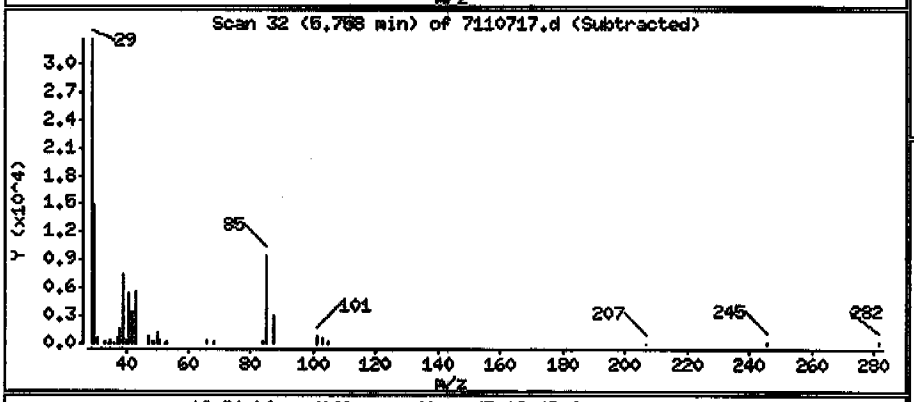
Column diameter: 0.53

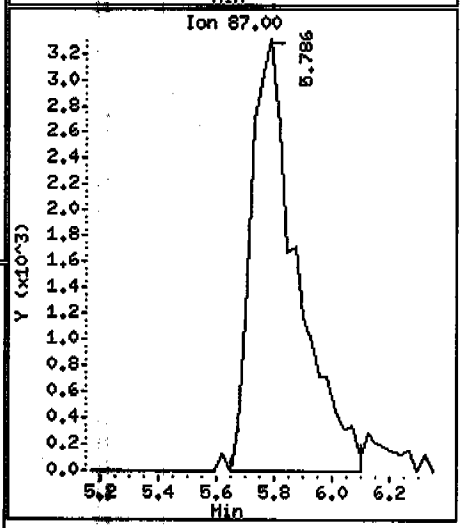
12 Dichlorodifluoromethane/Fr12

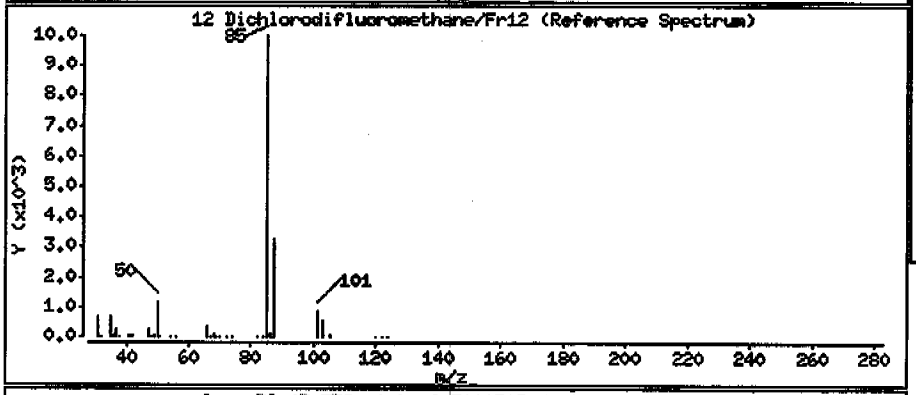
Concentration: 1.855 PPBV

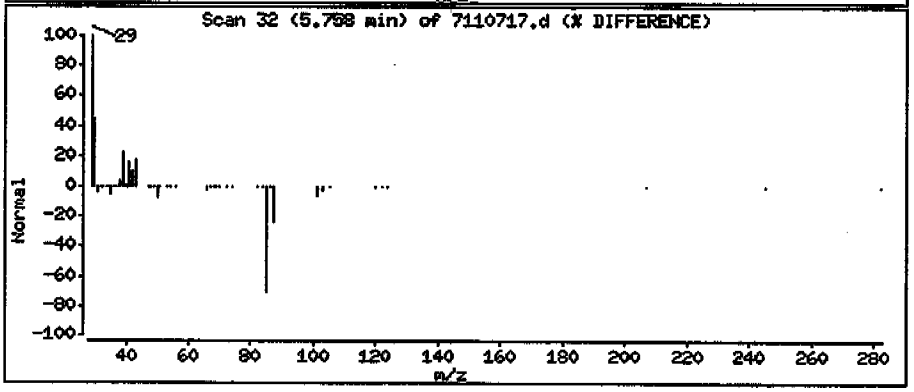












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

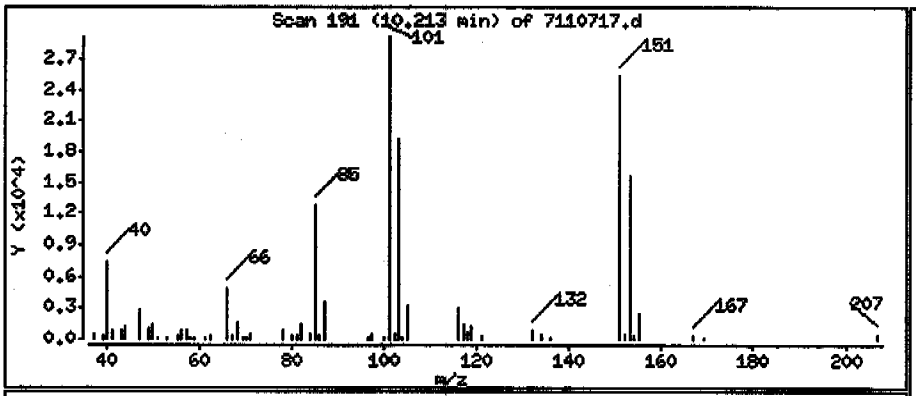
Operator: dm

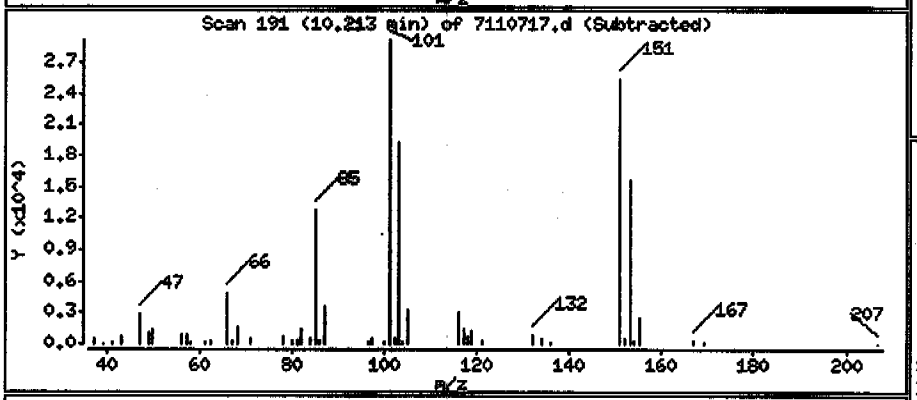
Column phase: RTx-624

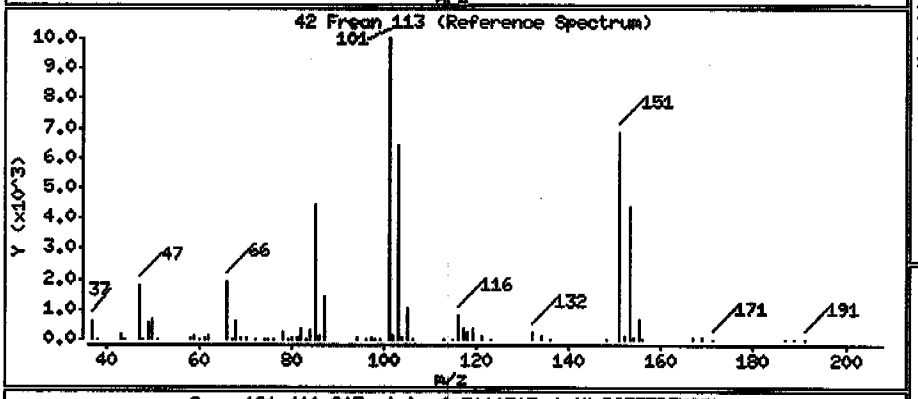
Column diameter: 0.53

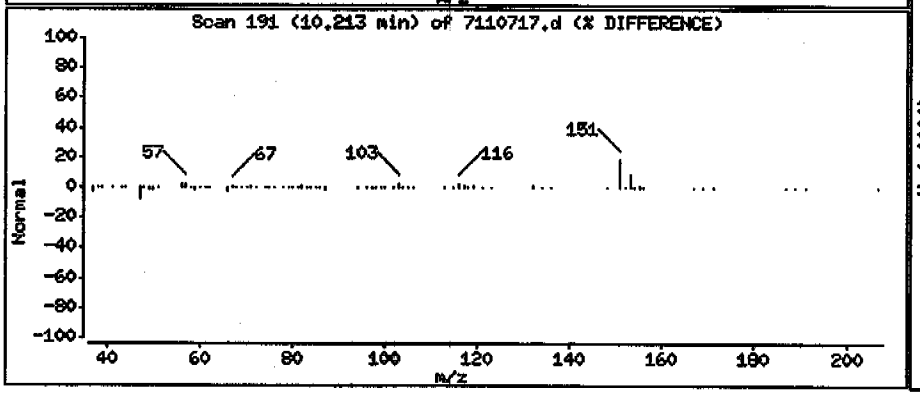
42 Freon 113

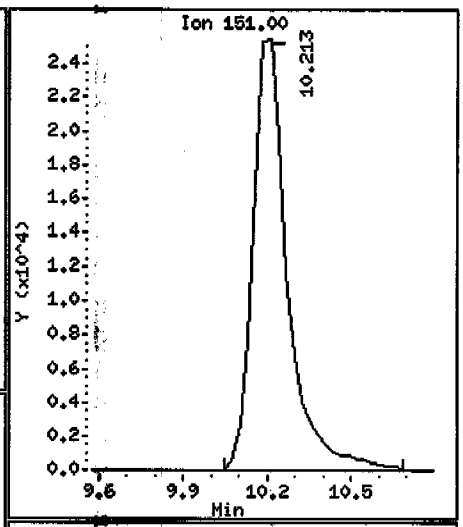
Concentration: 7.133 PPBV

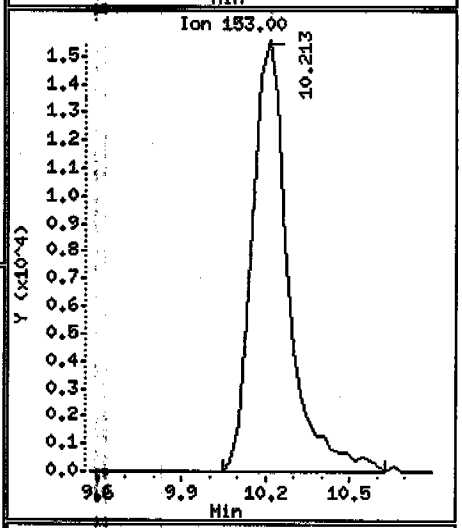


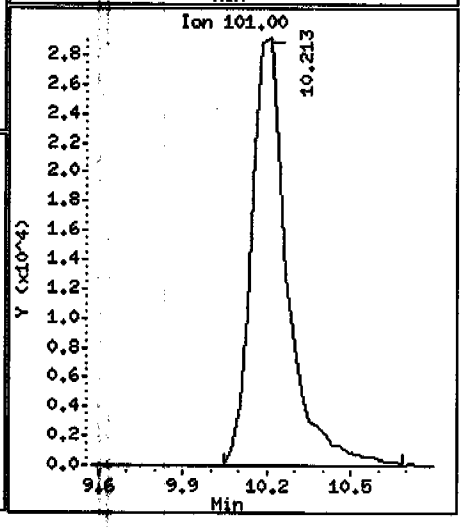












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Sample Info: 200mL #35154

Instrument: msd7.i

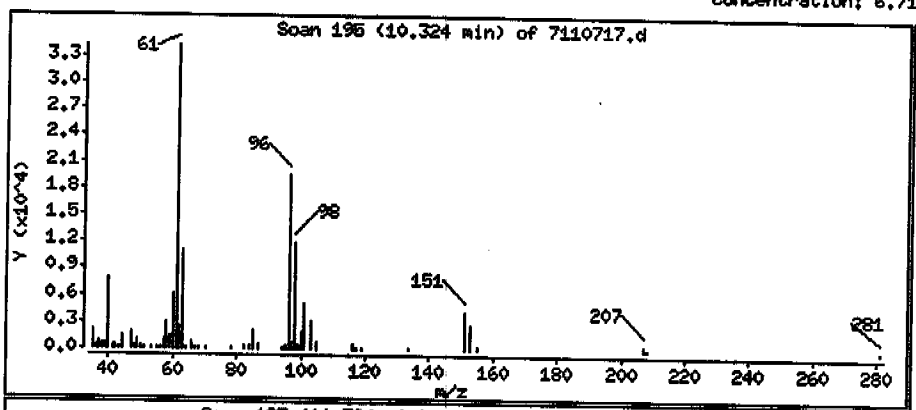
Operator: dm

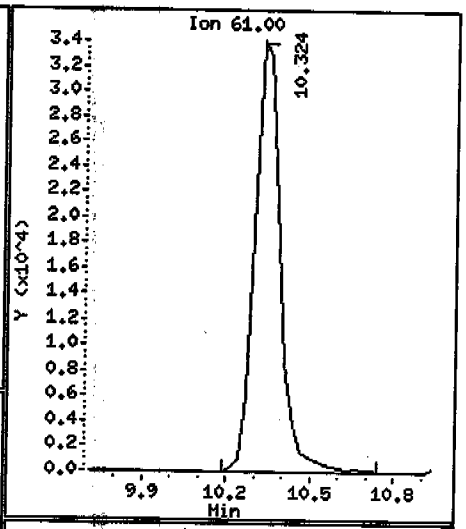
Column phase: RTx-624

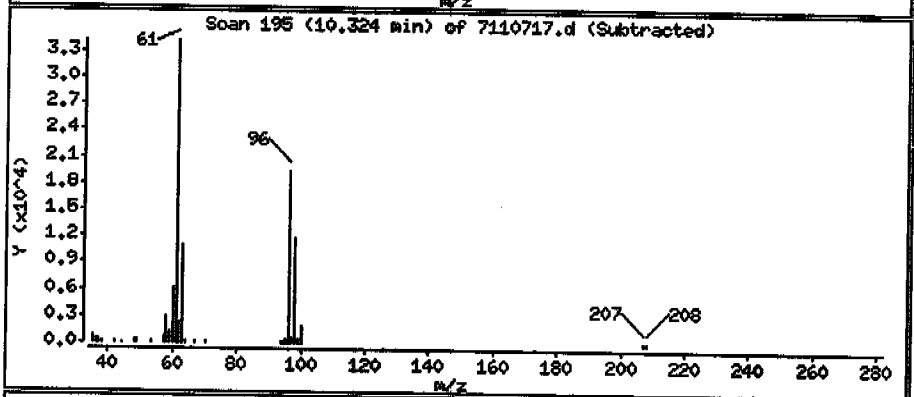
Column diameter: 0.53

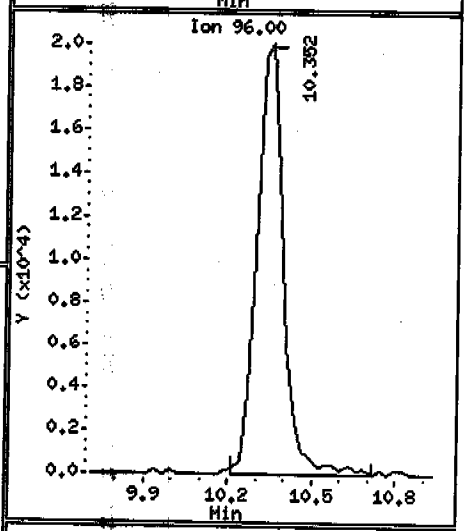
43 1,1-Dichloroethene

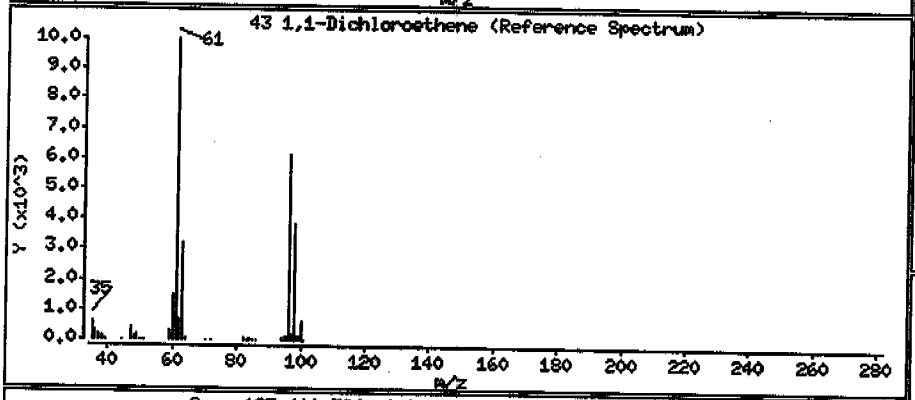
Concentration: 6.712 PPBV

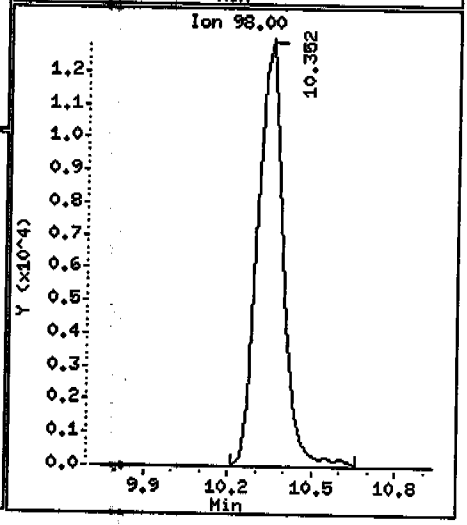


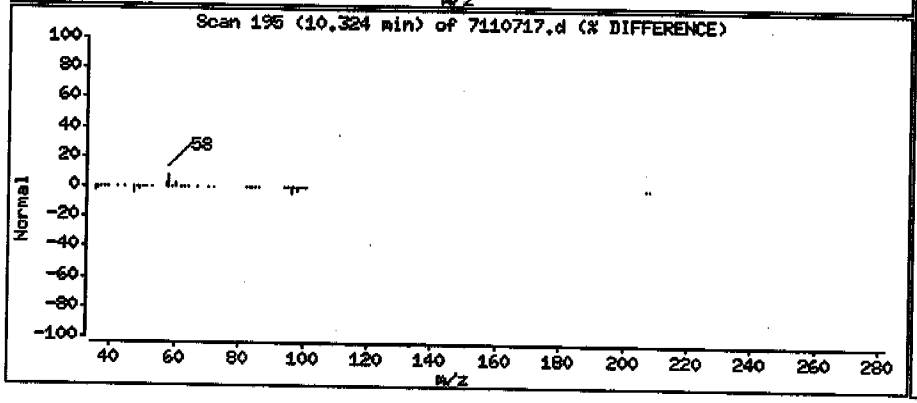












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

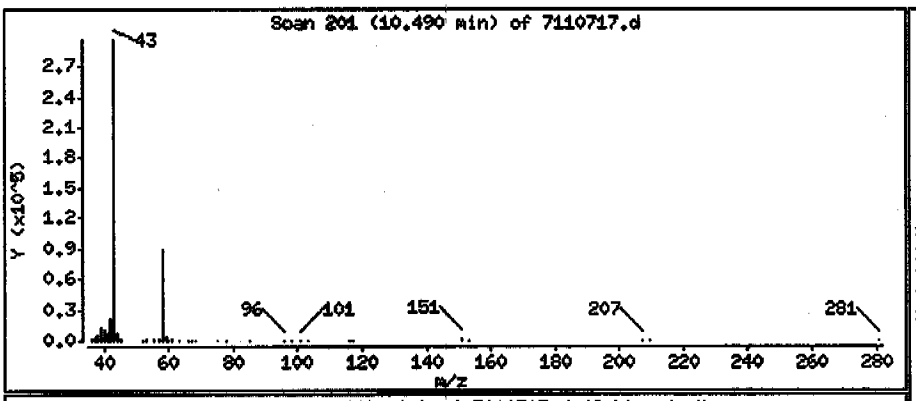
Operator: dm

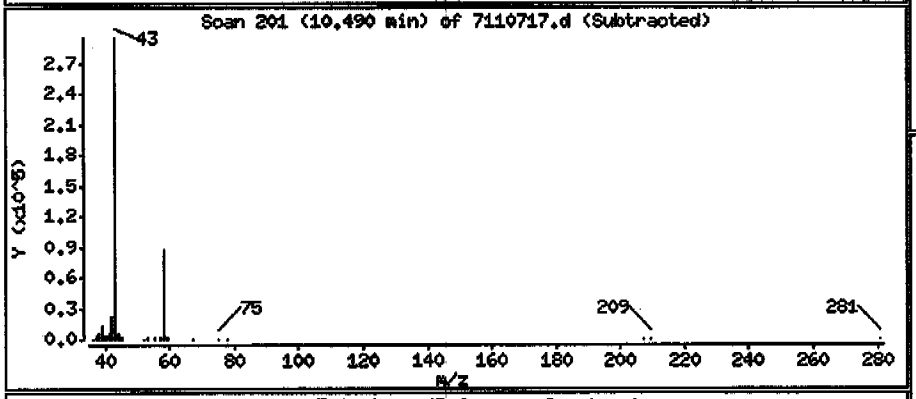
Column phase: RTx-624

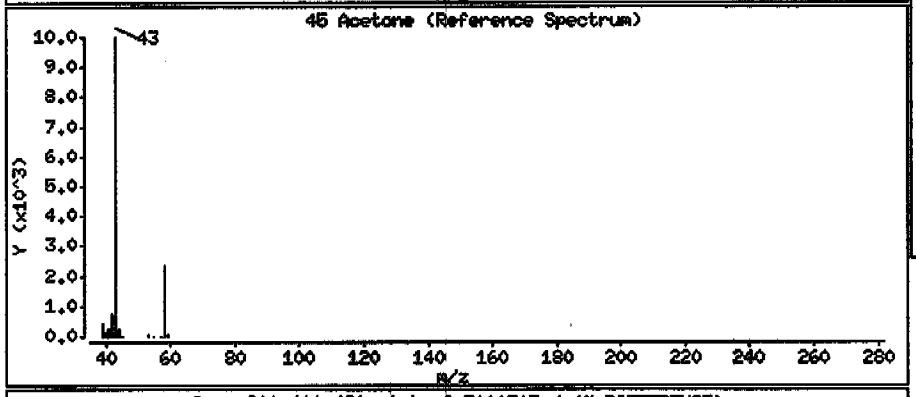
Column diameter: 0.53

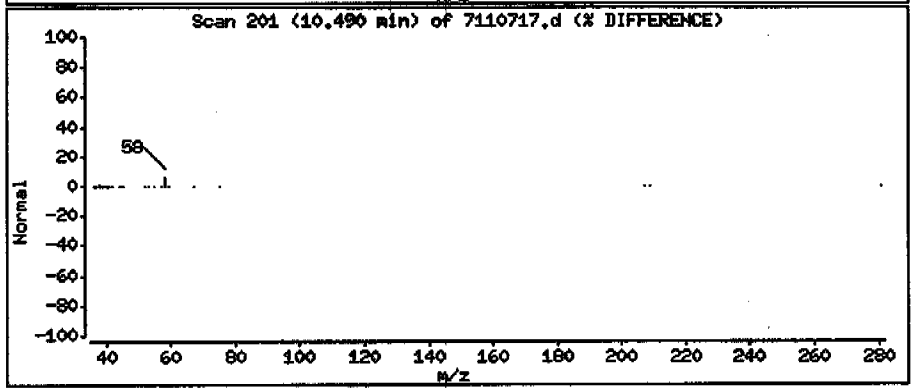
45 Acetone

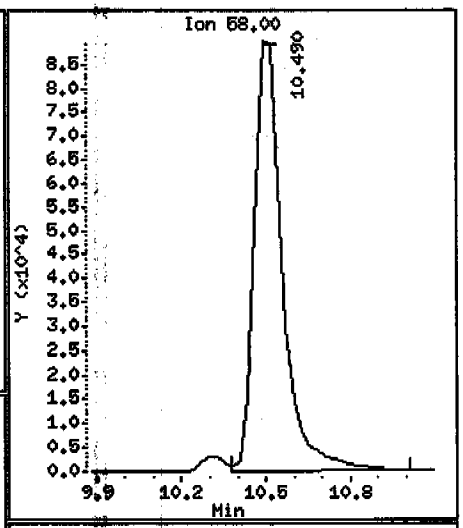
Concentration: 62.402 PPBV

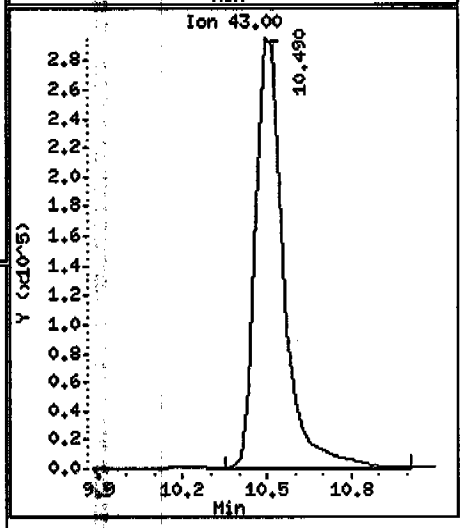












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

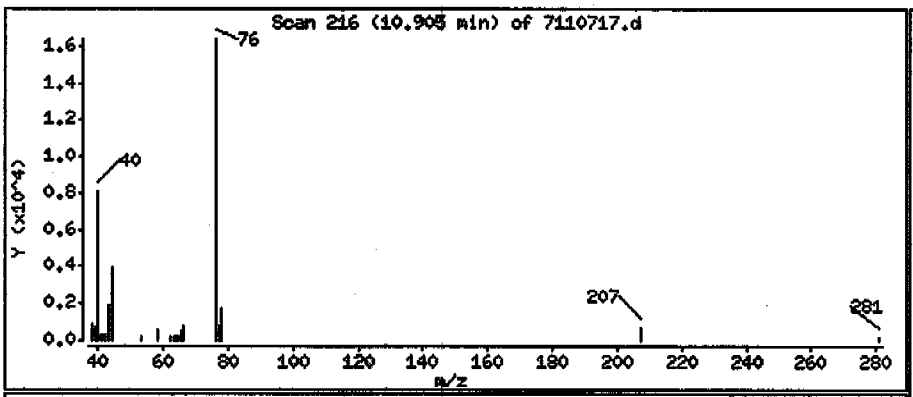
Operator: dm

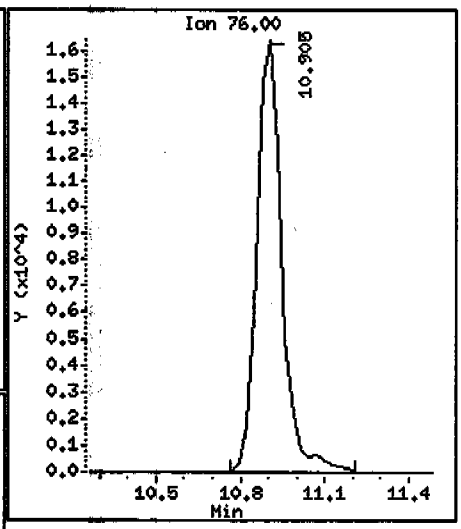
Column phase: RTx-624

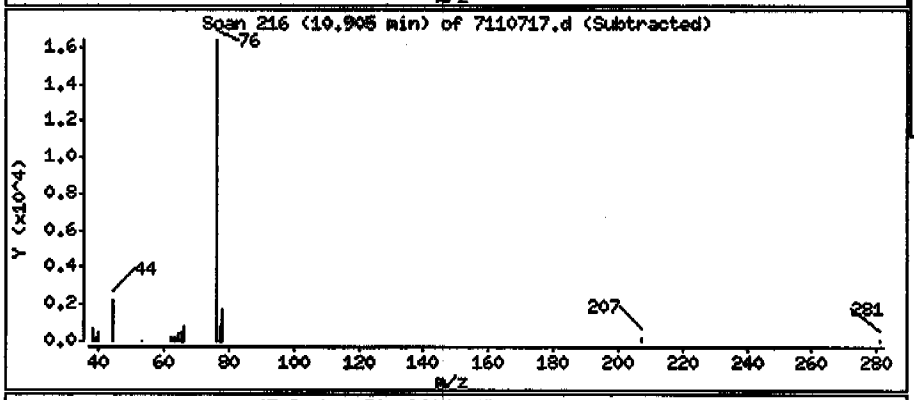
Column diameter: 0.53

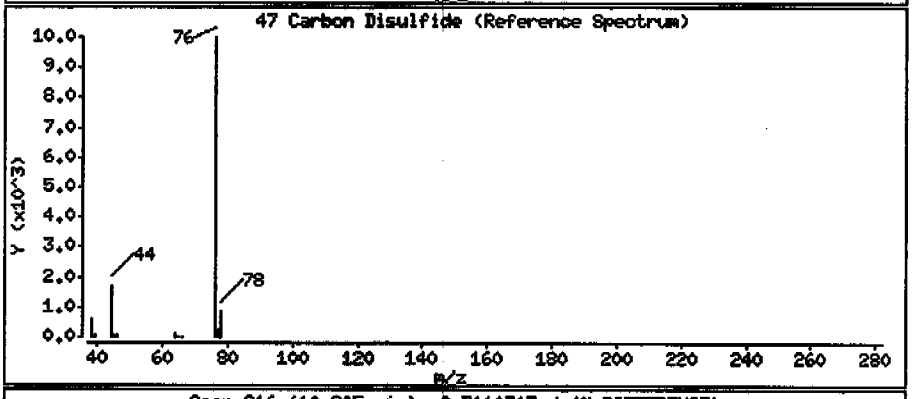
47 Carbon Disulfide

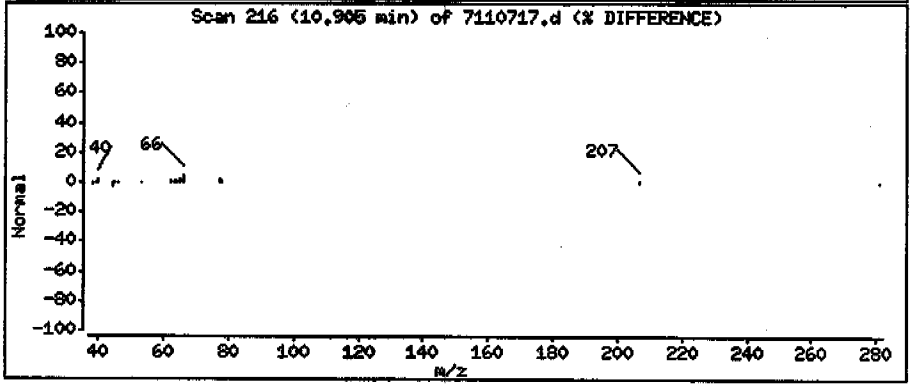
Concentration: 1.636 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

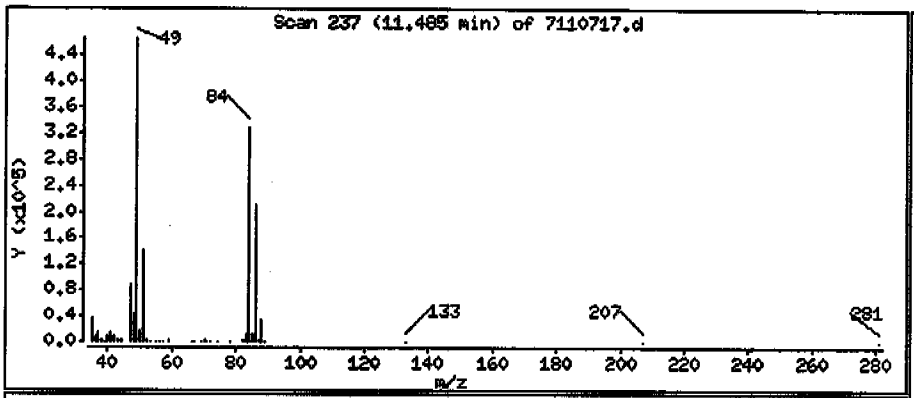
Operator: dm

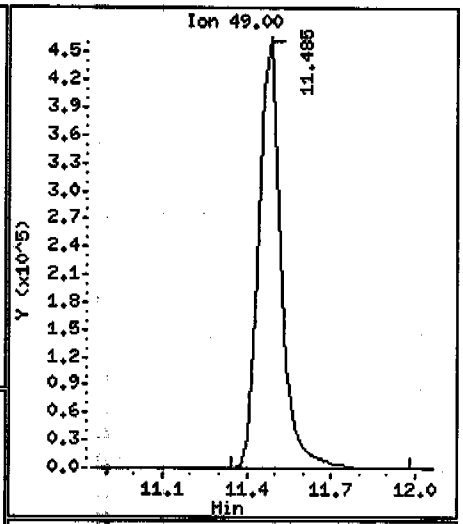
Column phase: RTx-624

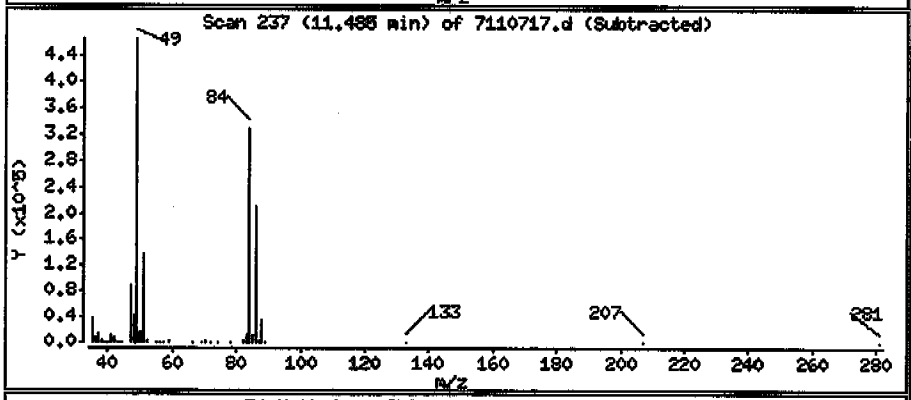
Column diameter: 0.53

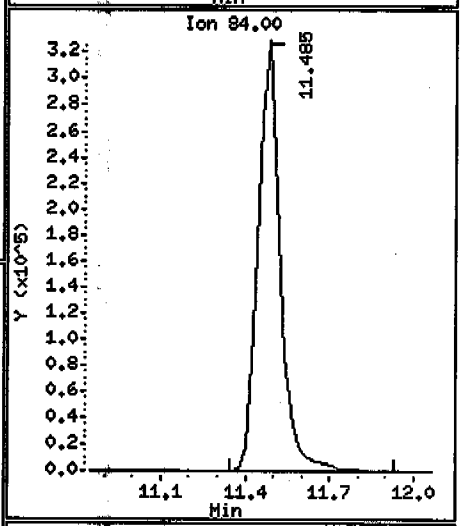
54 Methylene Chloride

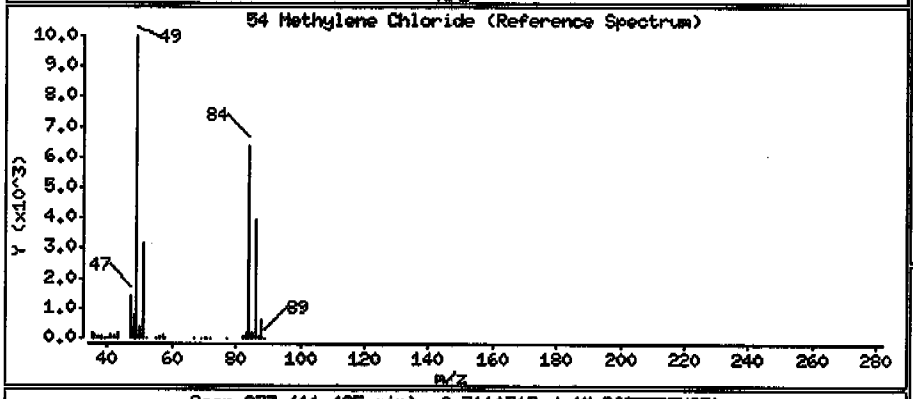
Concentration: 108.57 PPBV

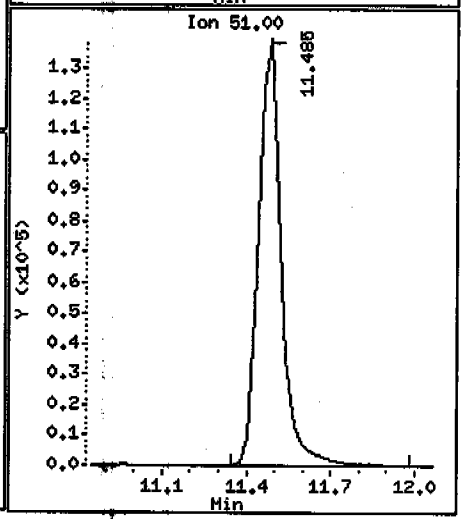


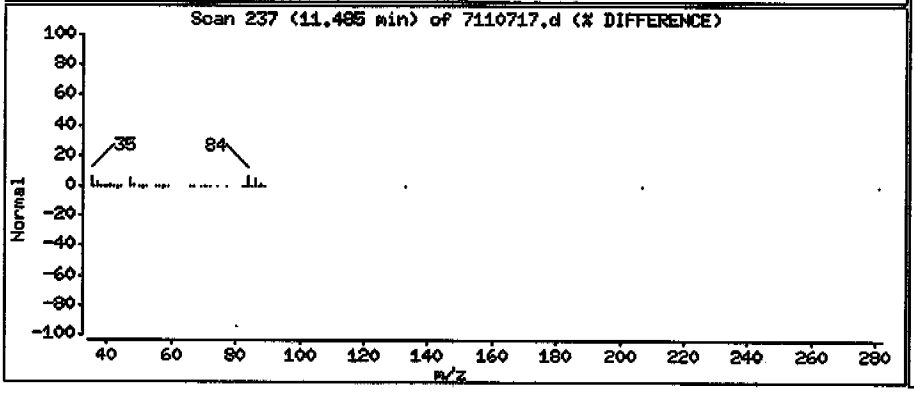












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Sample Info: 200mL #35154

Instrument: msd7.i

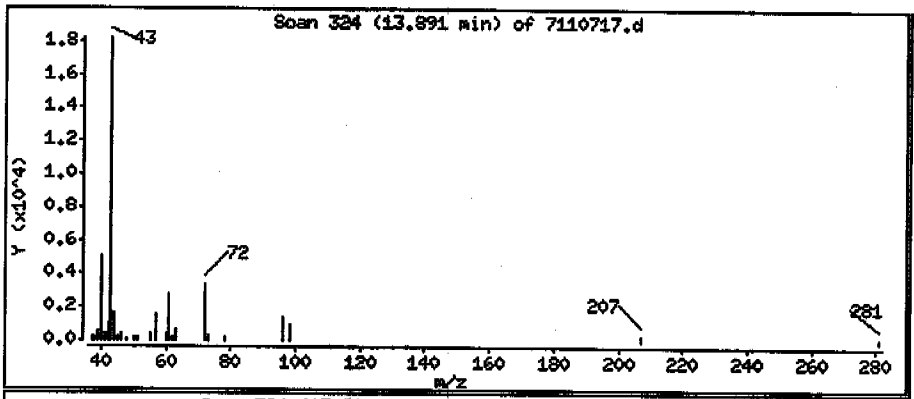
Operator: dm

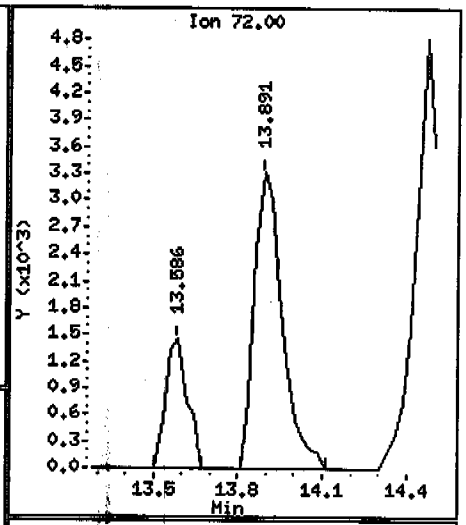
Column phase: RTx-624

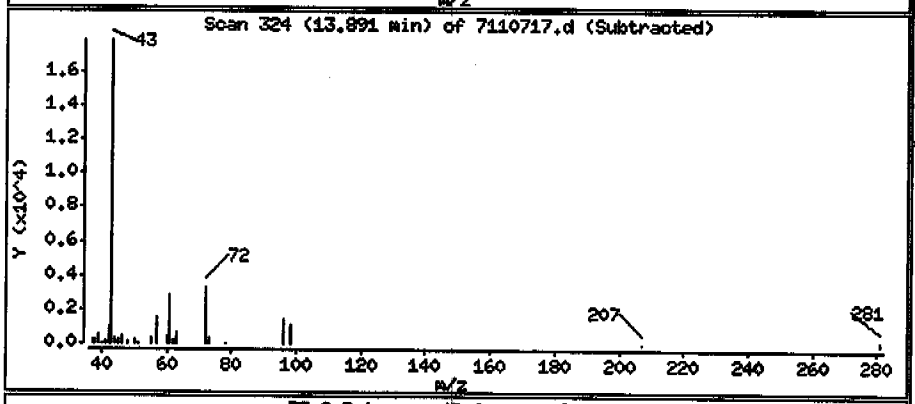
Column diameter: 0.53

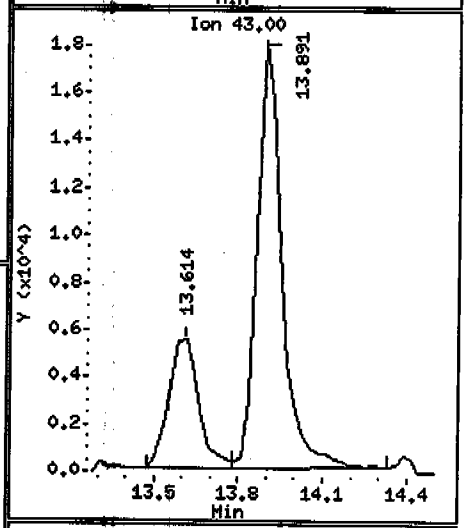
75 2-Butanone

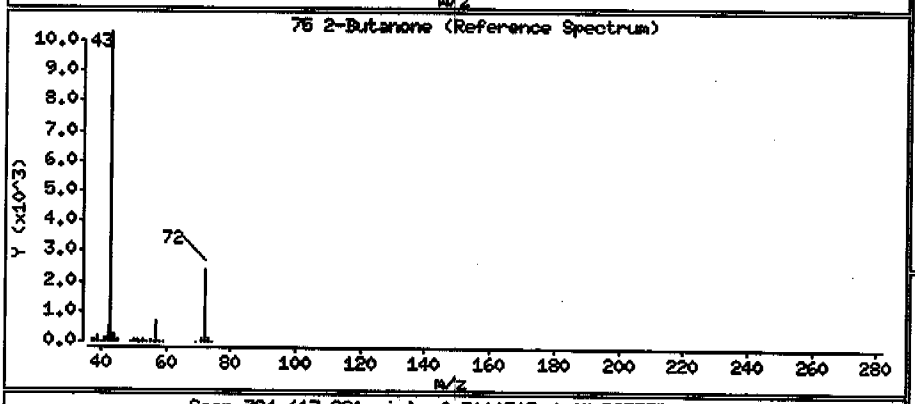
Concentration: 2.856 PPBV

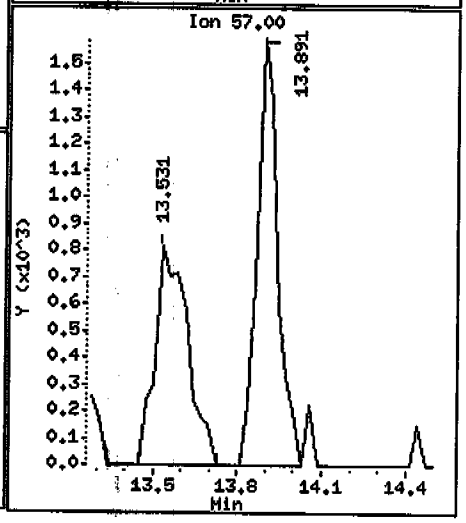


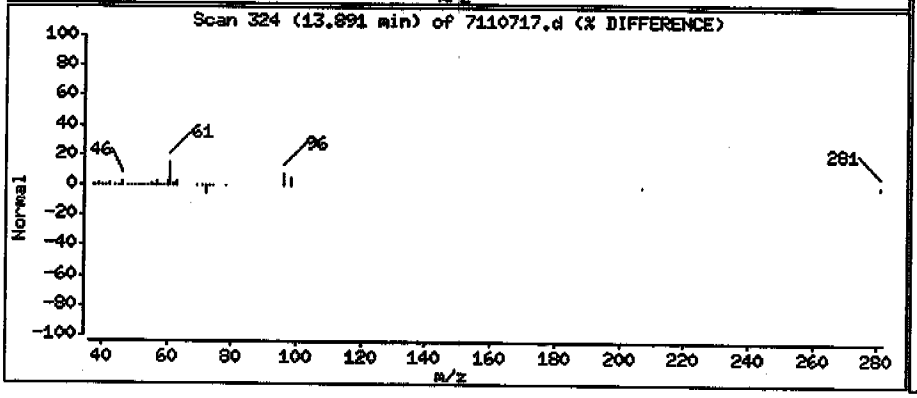












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

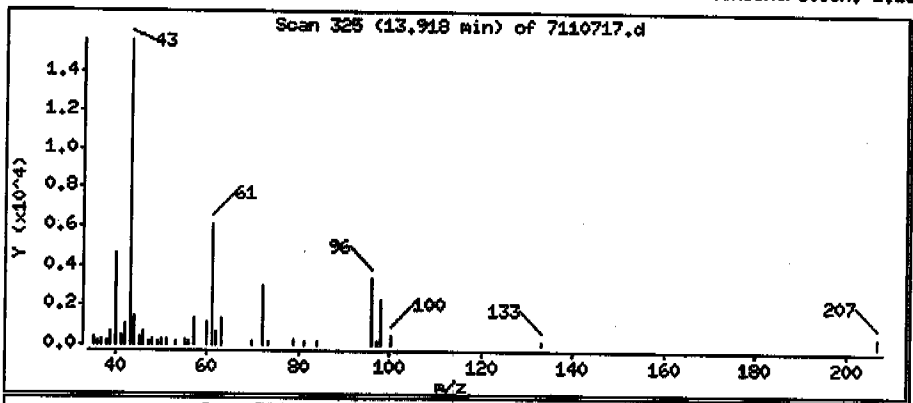
Operator: dm

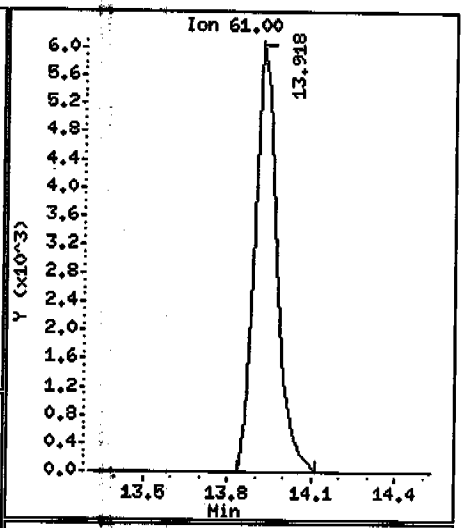
Column phase: RTx-624

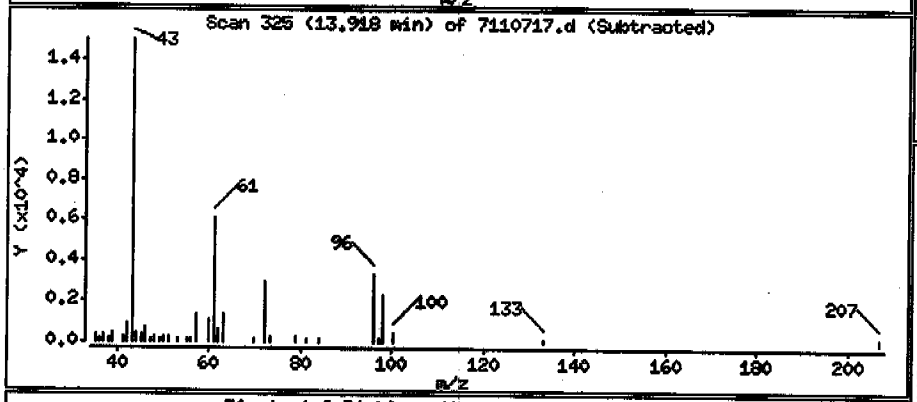
Column diameter: 0.53

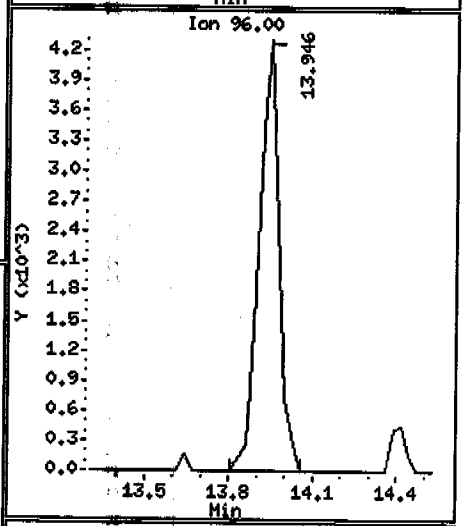
76 cis-1,2-Dichloroethene

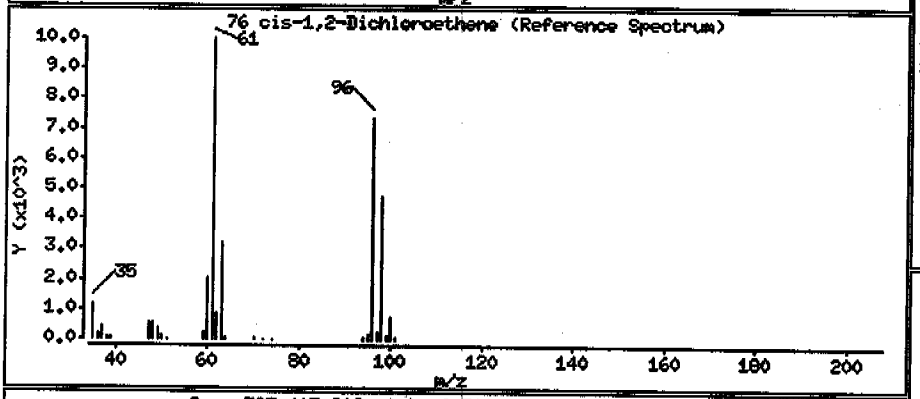
Concentration: 1.265 PPBV

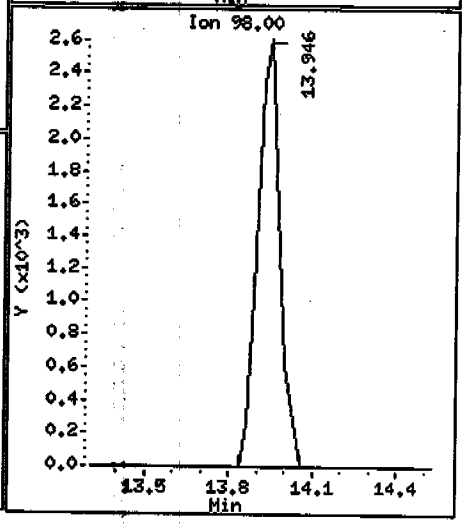


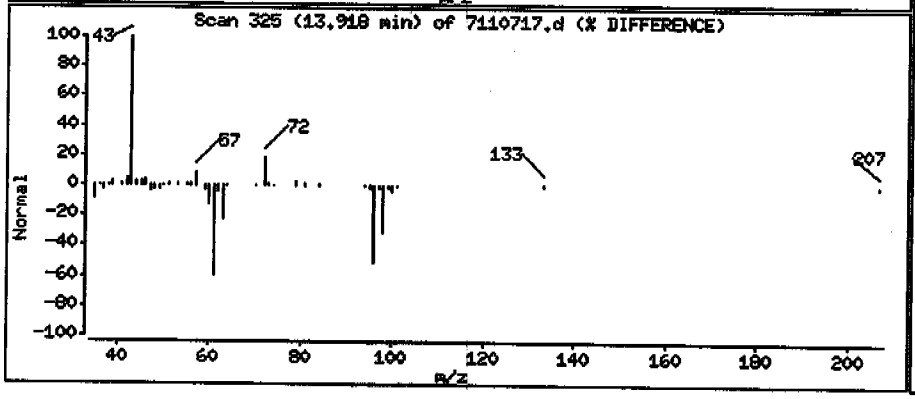












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Sample Info: 200mL #35154

Column phase: RTx-624

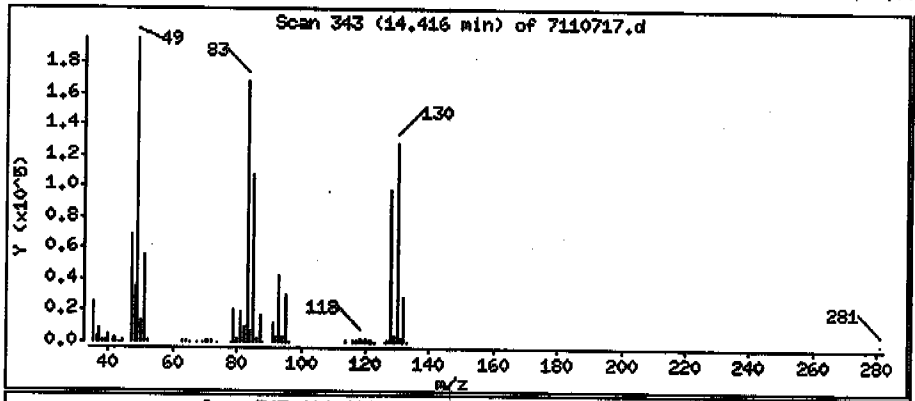
80 Tetrahydrofuran

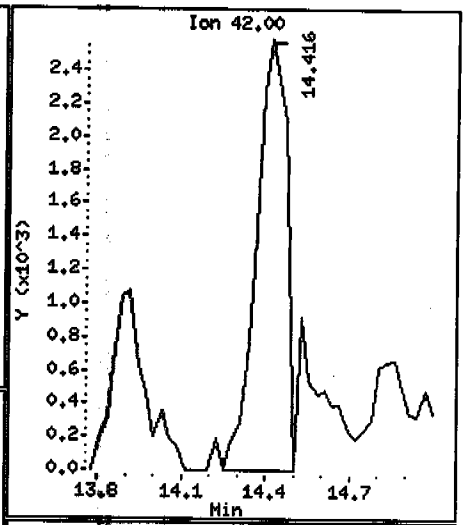
Instrument: msd7.i

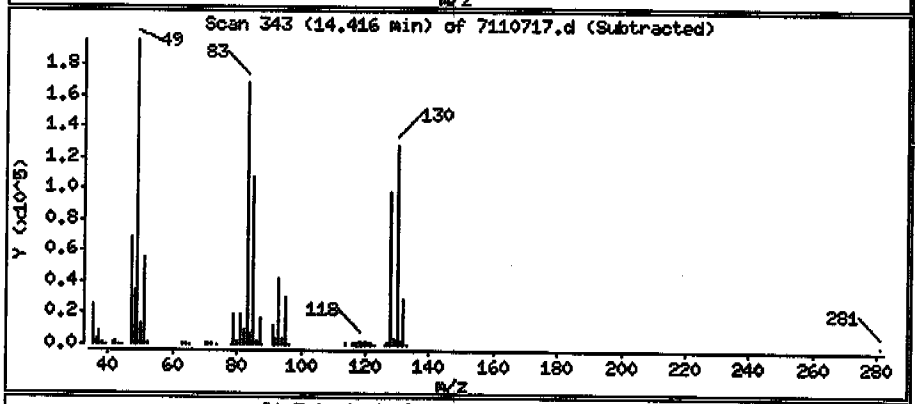
Operator: dm

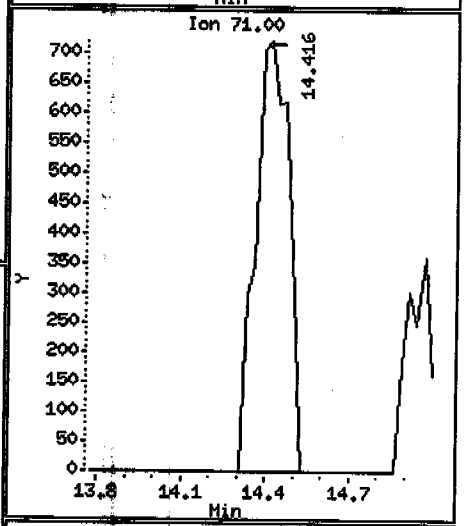
Column diameter: 0.53

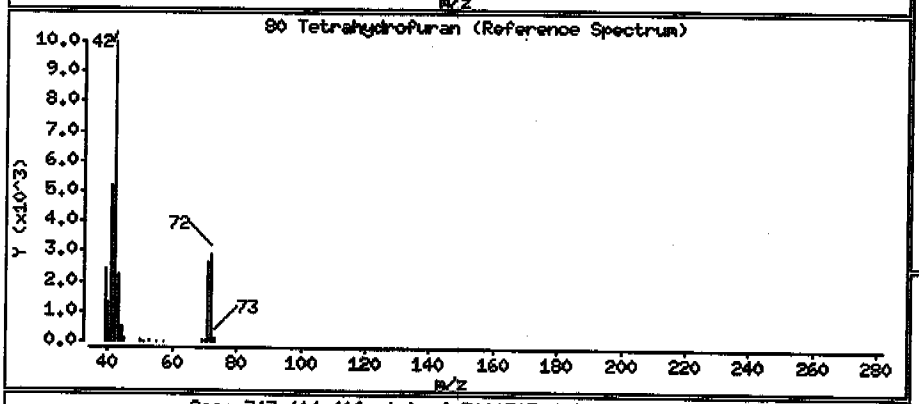
Concentration: 0.9068 PPBV

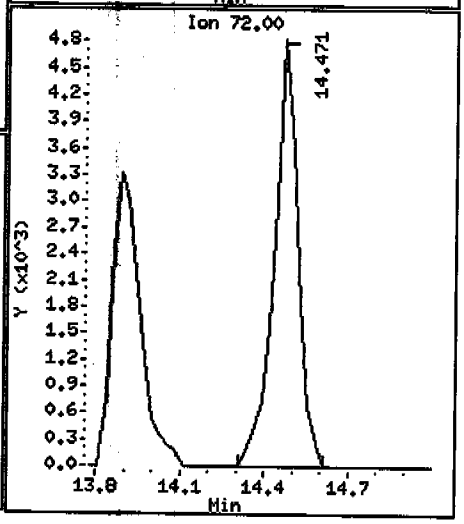


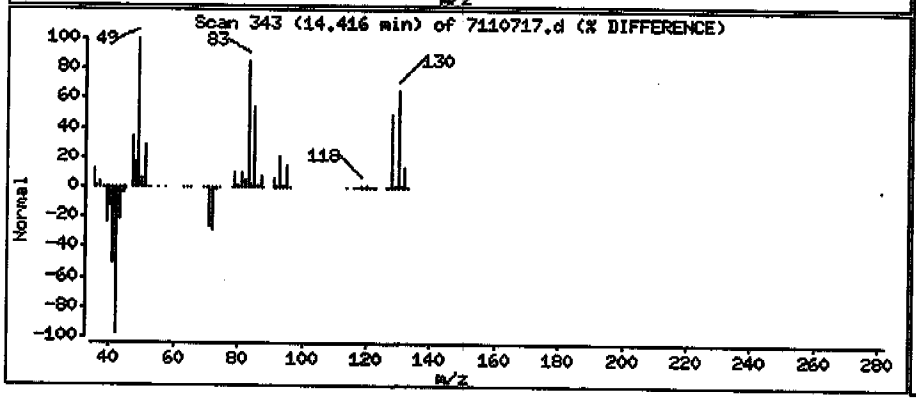












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

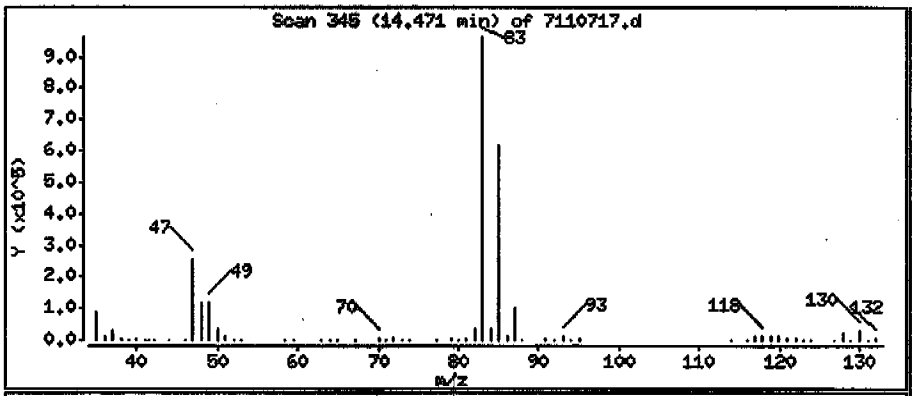
Operator: dm

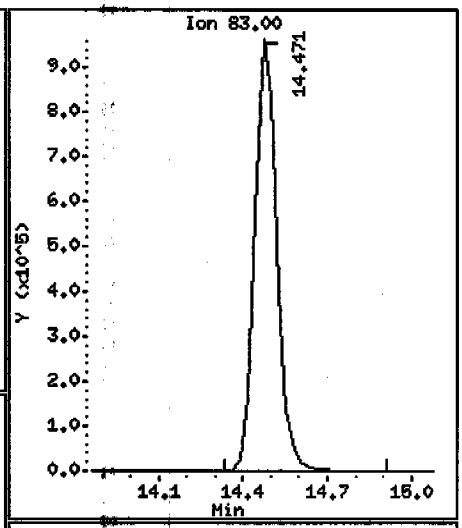
Column phase: RTx-624

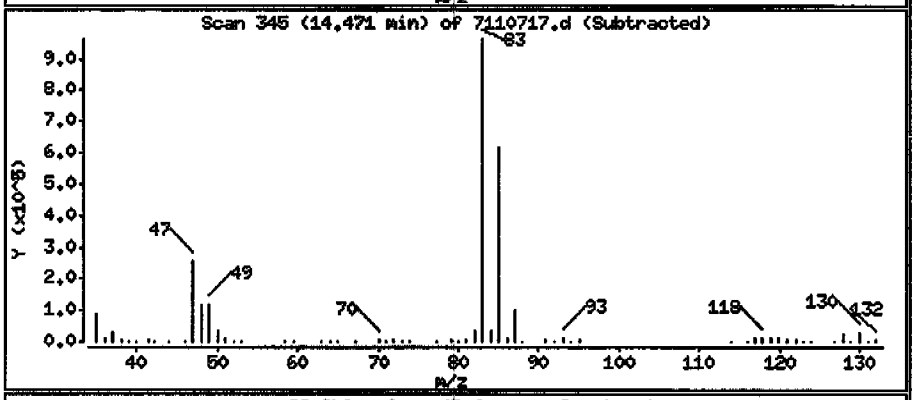
Column diameter: 0.53

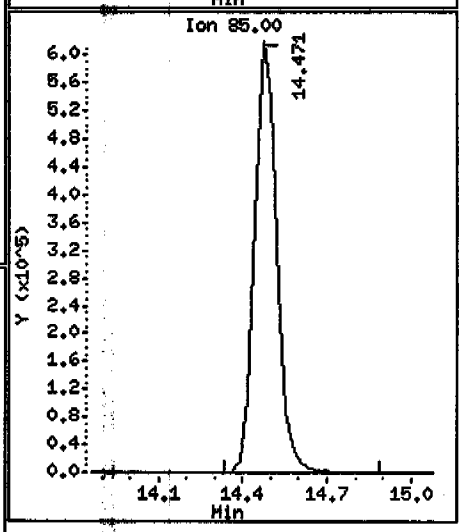
82 Chloroform

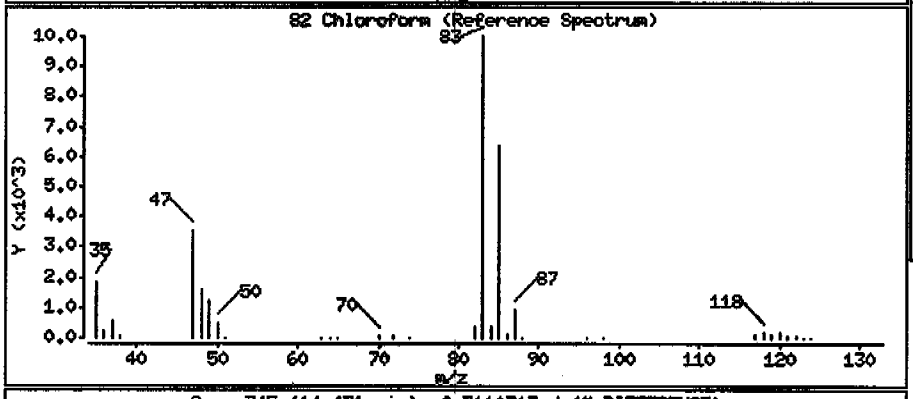
Concentration: 139.66 PPBV

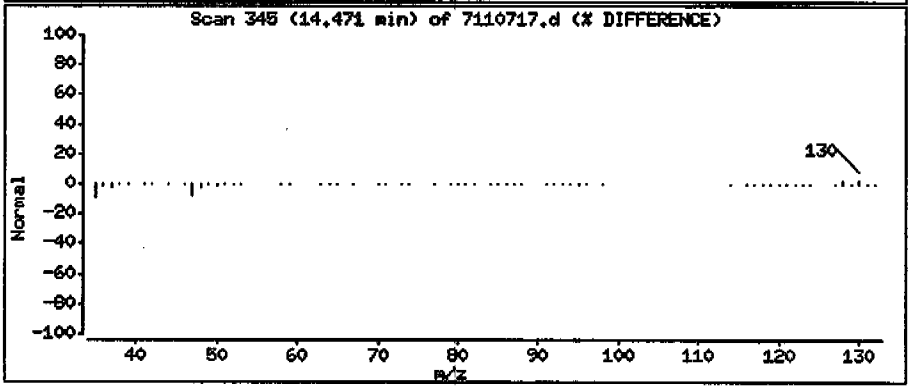












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Sample Info: 200mL #35154

Instrument: msd7.i

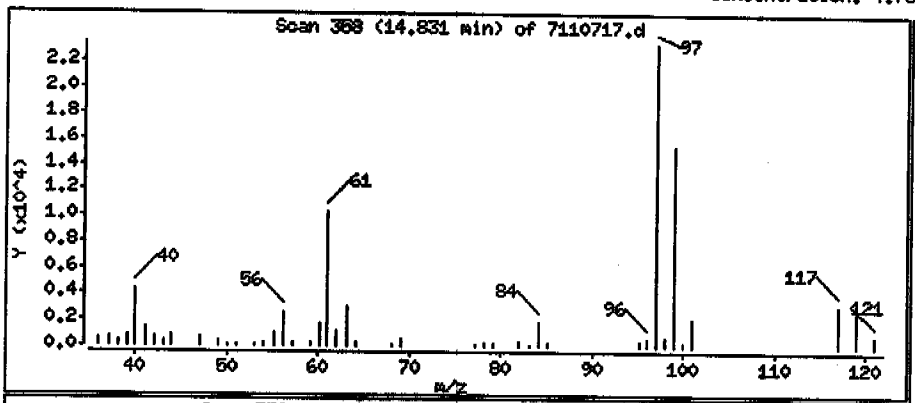
Operator: dm

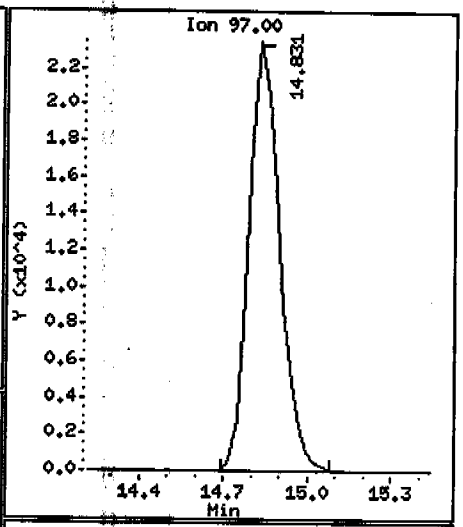
Column phase: RTx-624

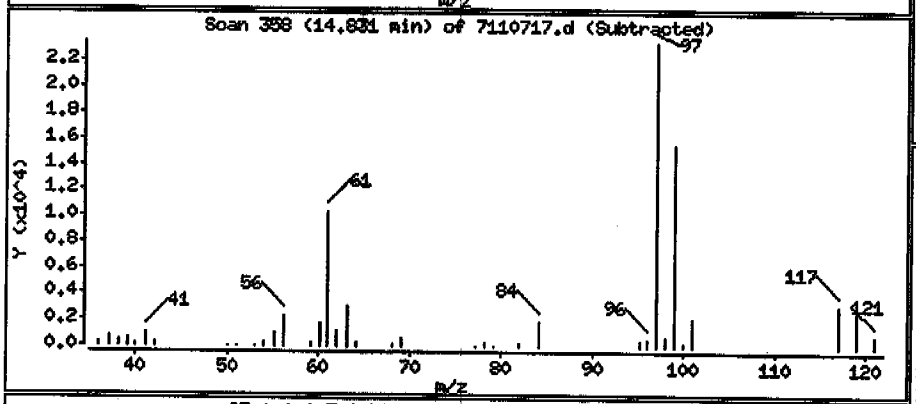
Column diameter: 0.53

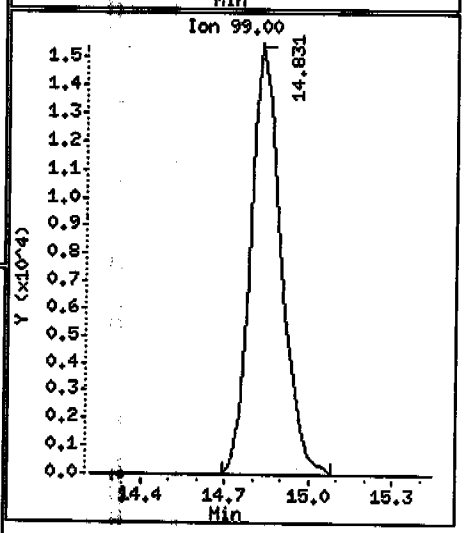
83 1,1,1-Trichloroethane

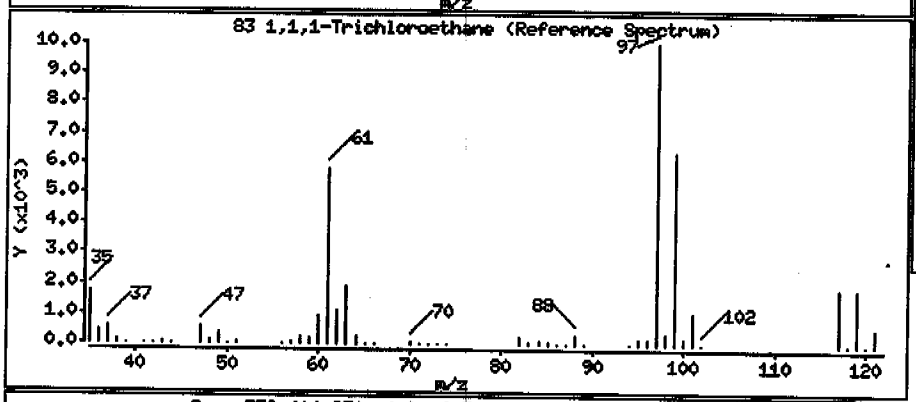
Concentration: 4.731 PPBV

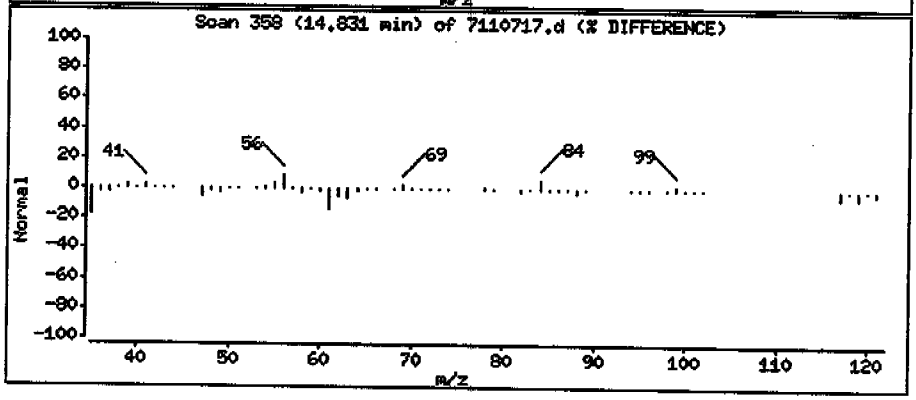












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

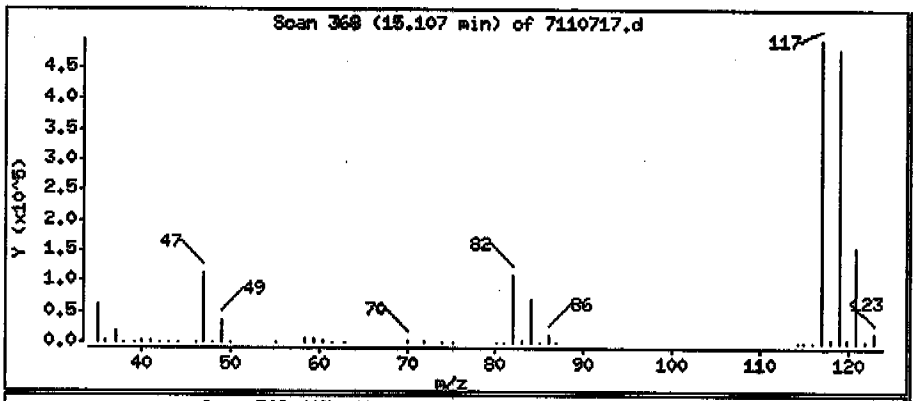
Operator: dm

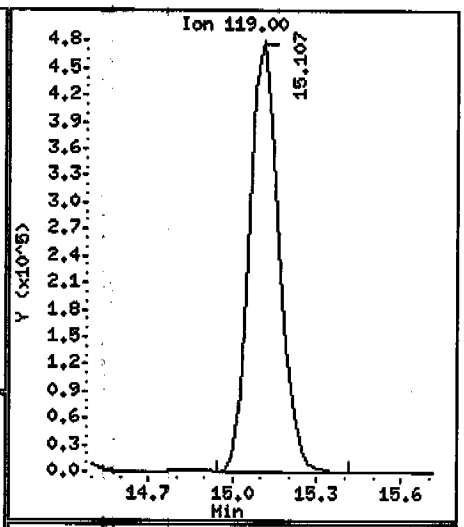
Column phase: RTx-624

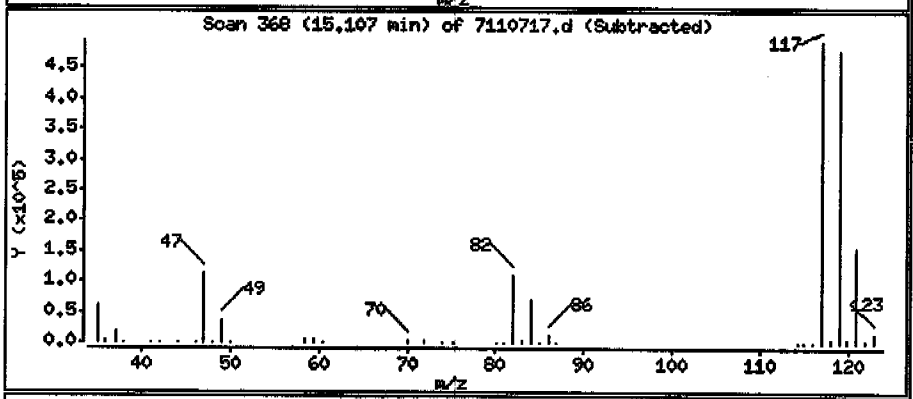
Column diameter: 0.53

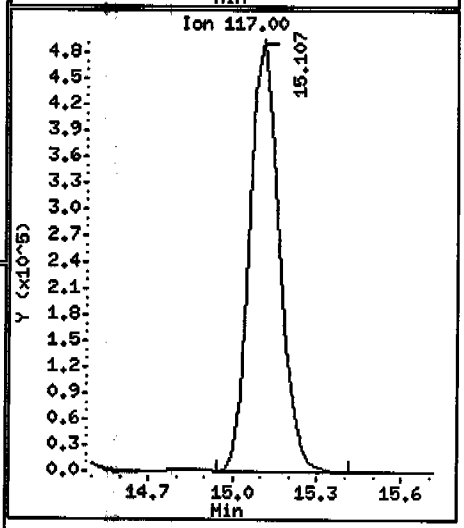
87 Carbon Tetrachloride

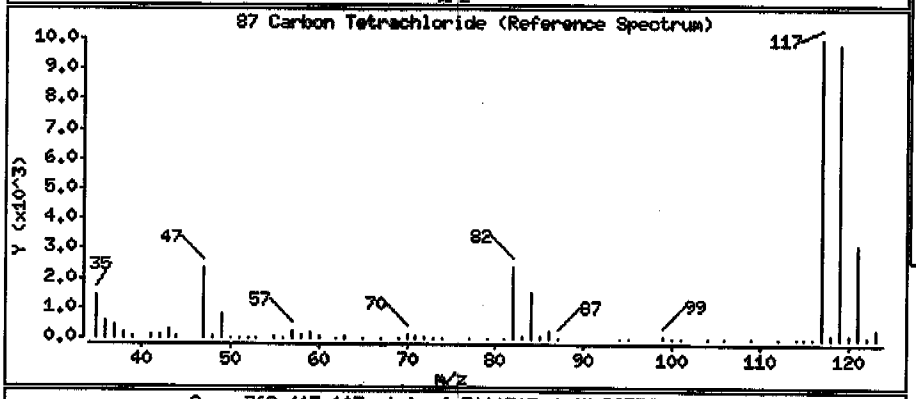
Concentration: 99.380 PPBV

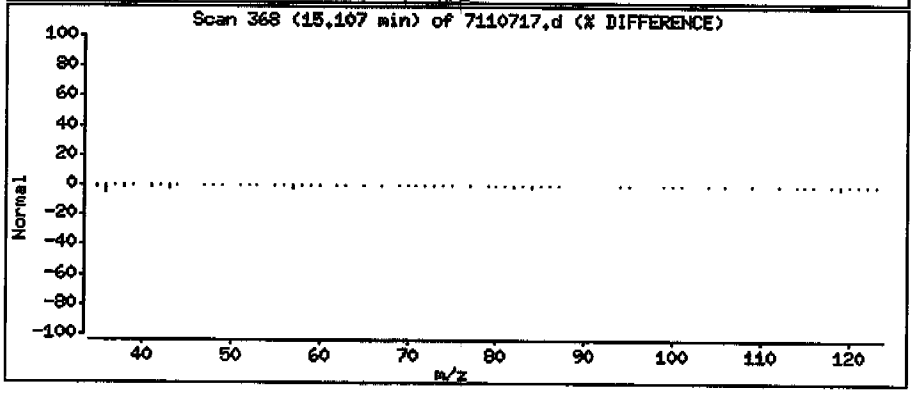












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #36154

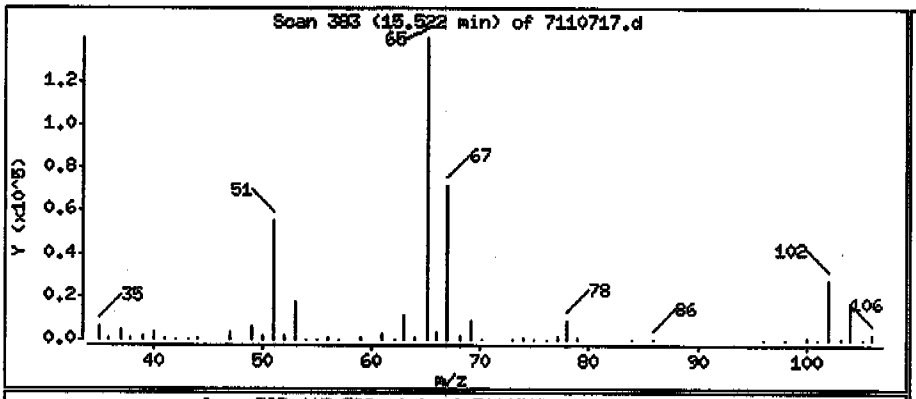
Operator: dm

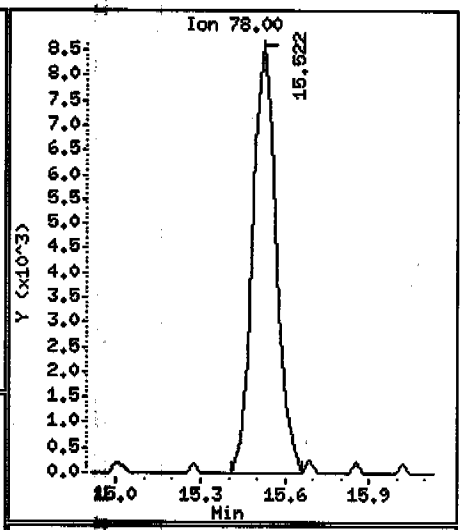
Column phase: RTx-624

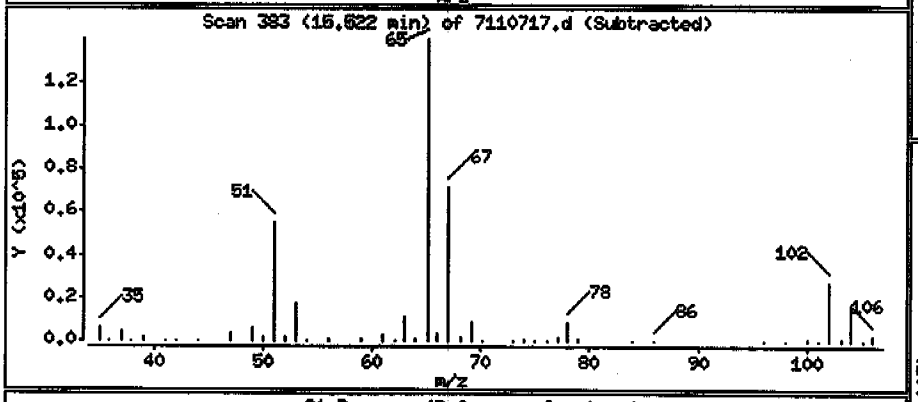
Column diameter: 0.53

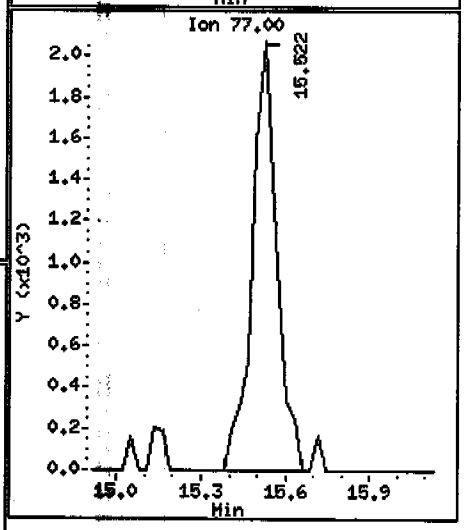
91 Benzene

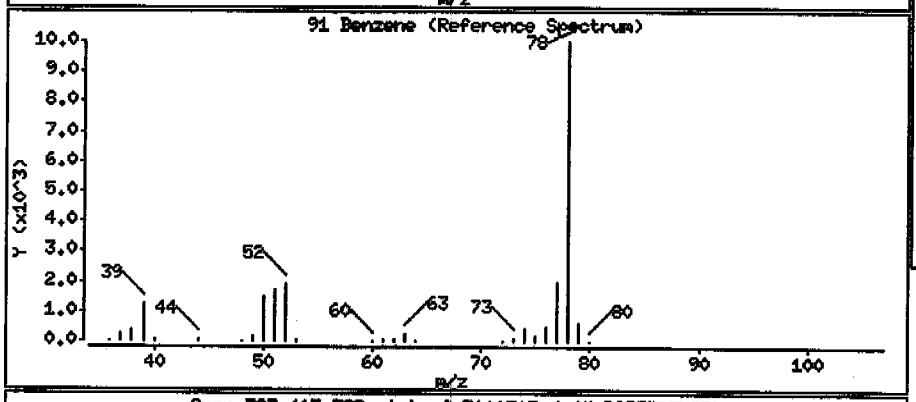
Concentration: 0.9960 PPBV

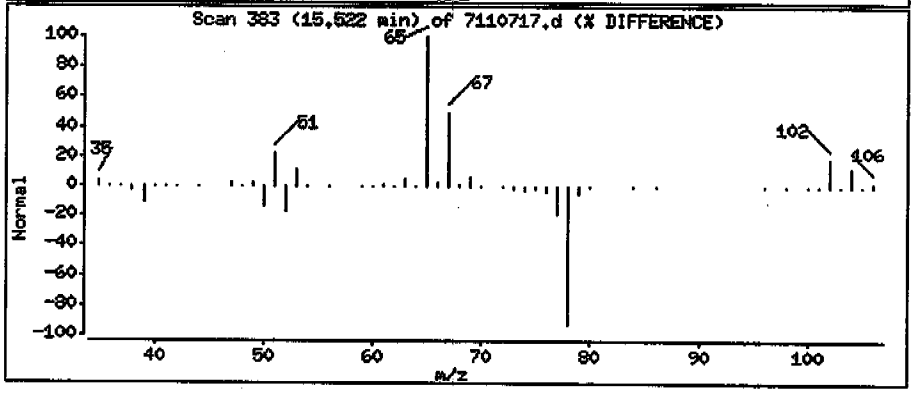












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

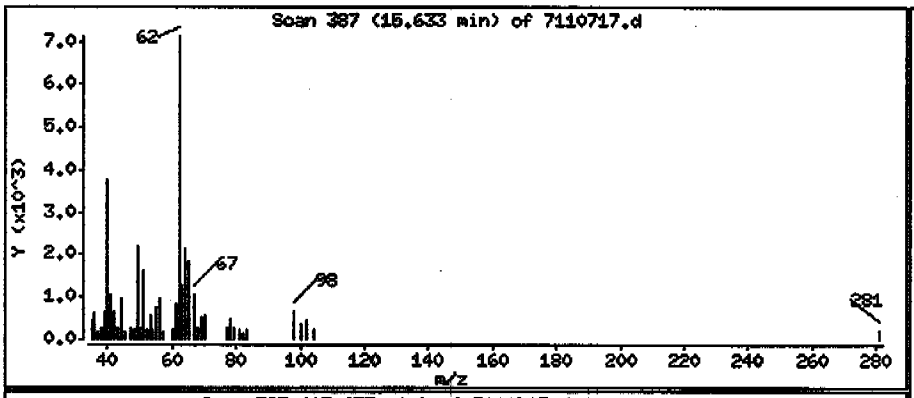
Operator: dm

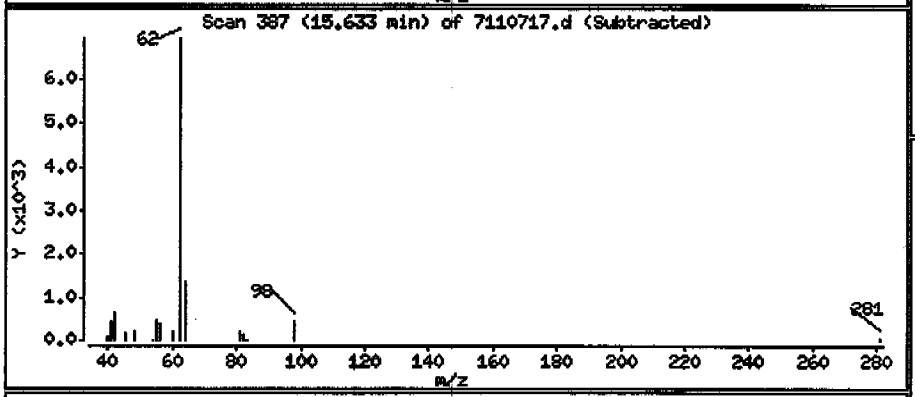
Column phase: RTx-624

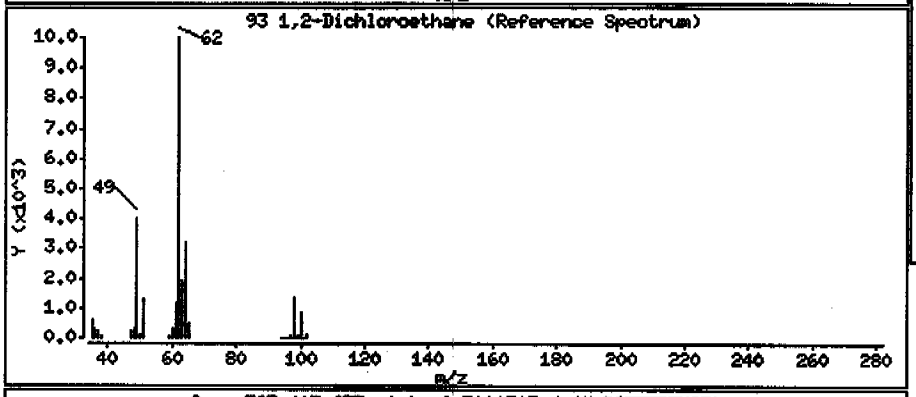
Column diameter: 0.53

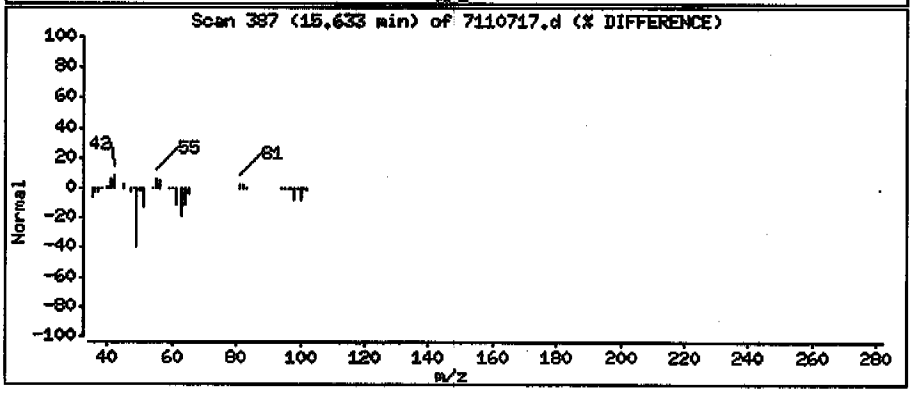
93 1,2-Dichloroethane

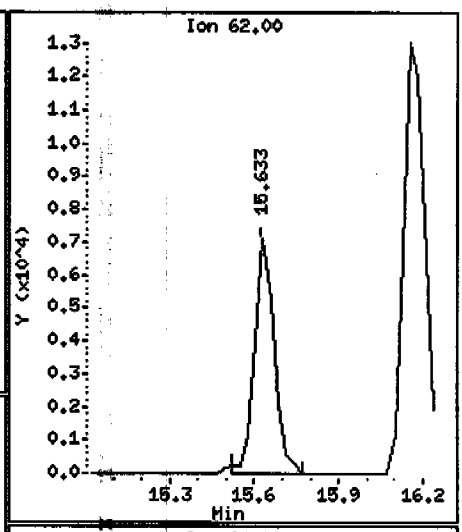
Concentration: 1.291 PPBV

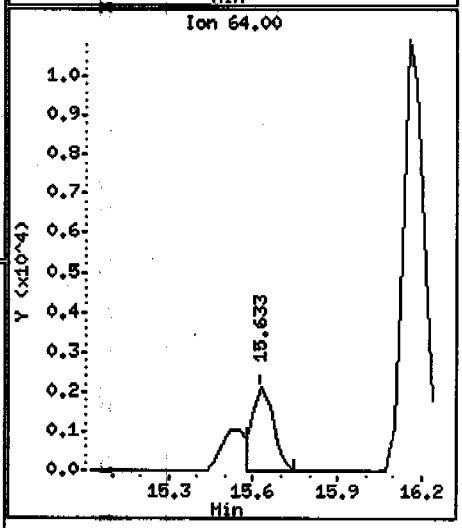












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

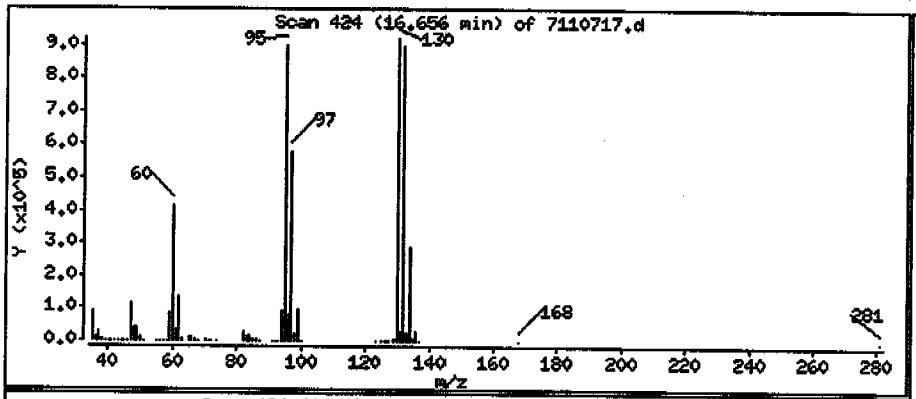
Operator: dm

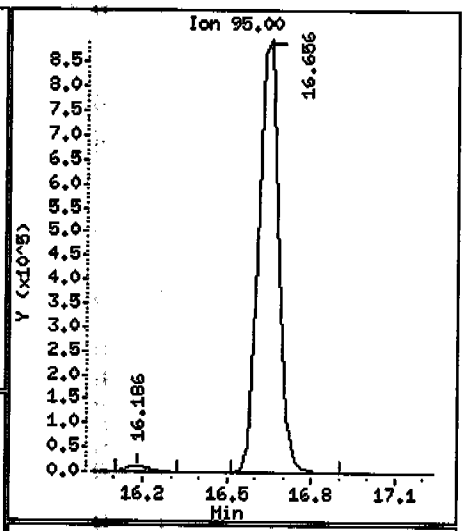
Column phase: RTx-624

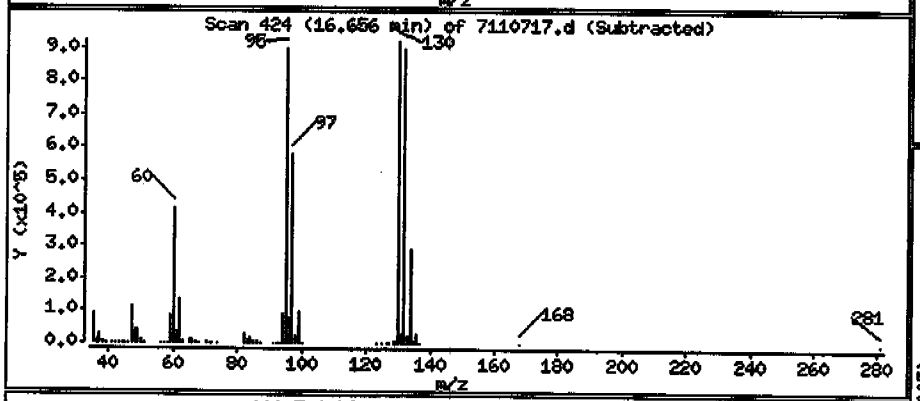
Column diameter: 0.53

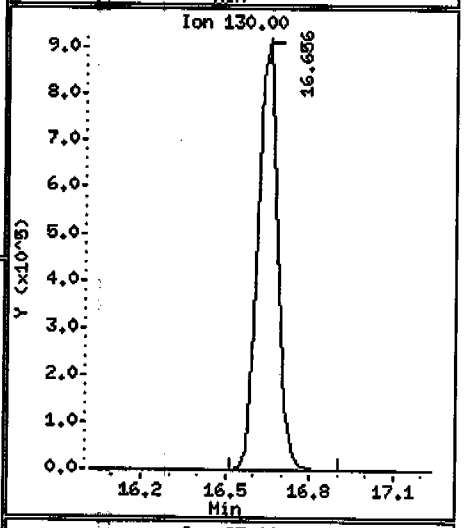
101 Trichloroethene

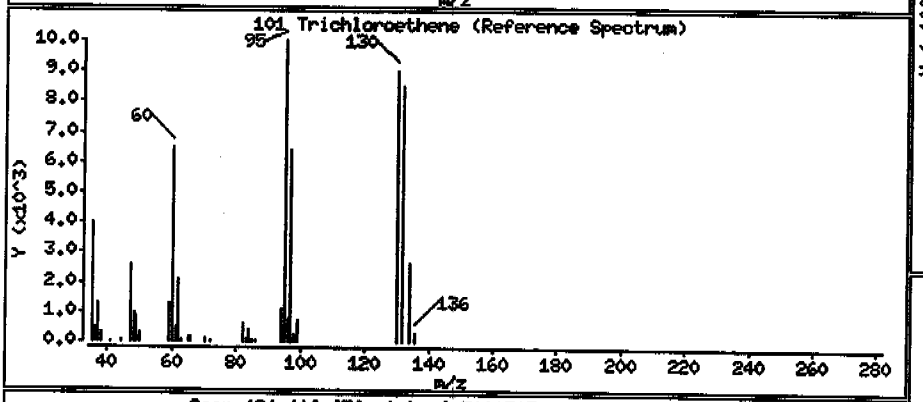
Concentration: 204.22 PPBV

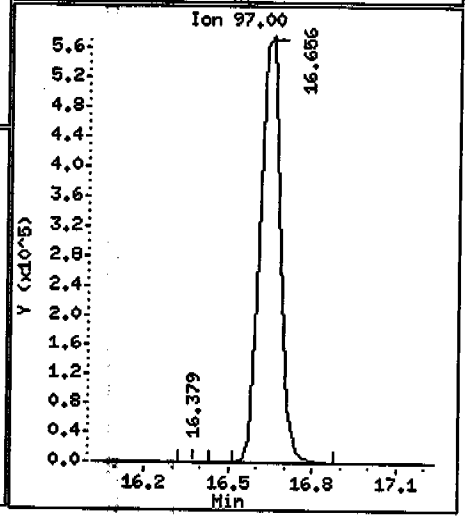


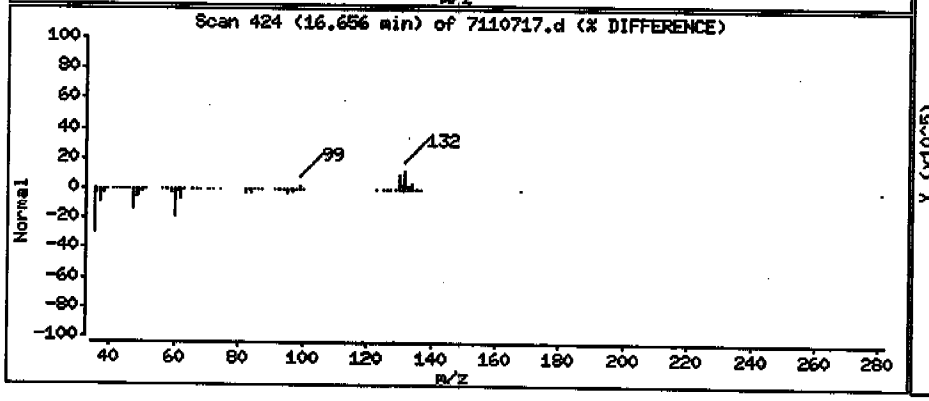












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:26

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

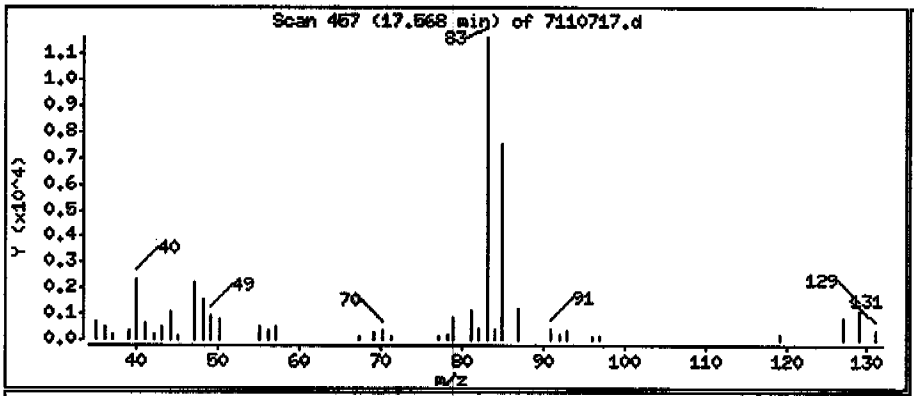
Operator: dm

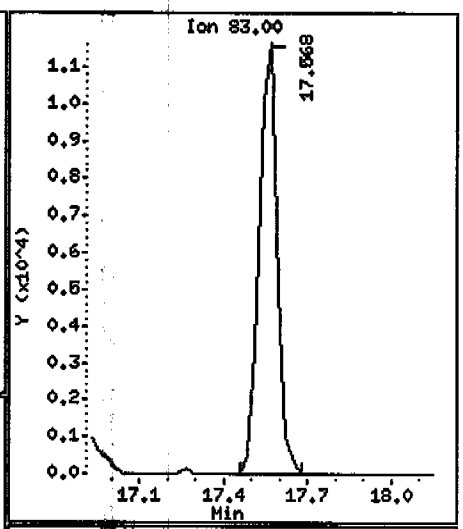
Column phase: RTx-624

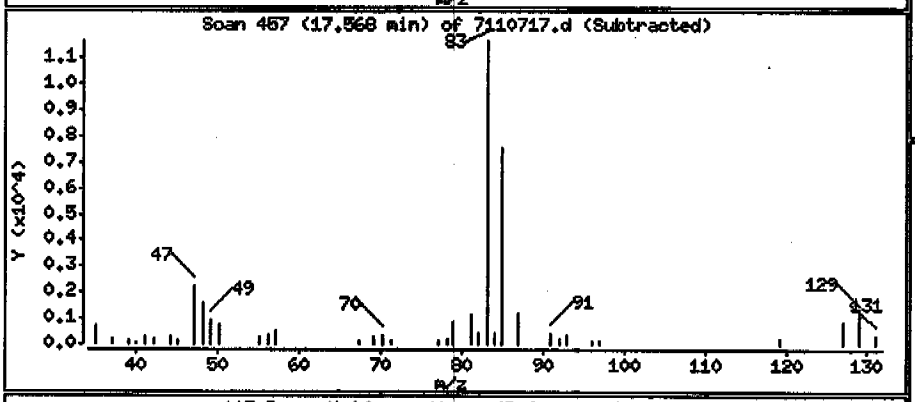
Column diameter: 0.53

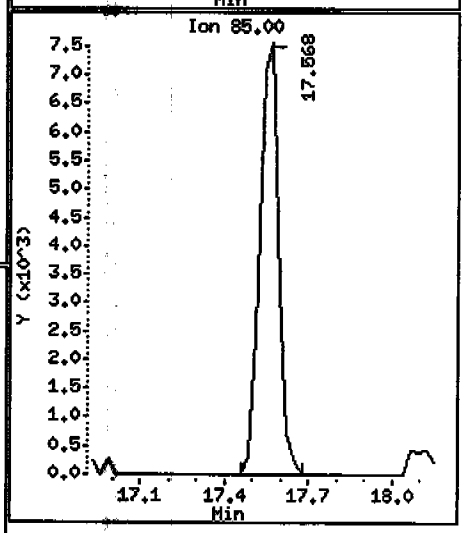
107 Bromodichloromethane

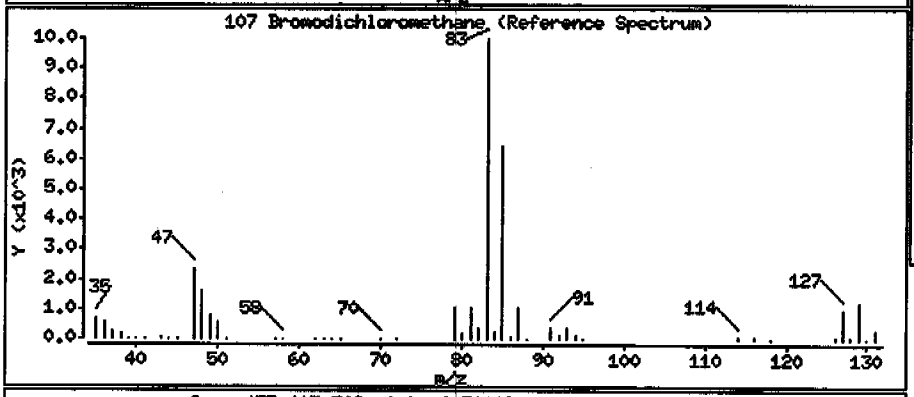
Concentration: 1.368 PPBV

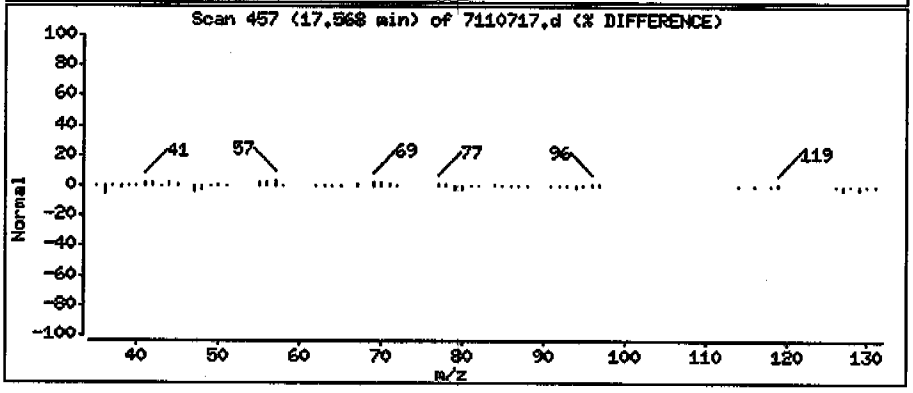












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

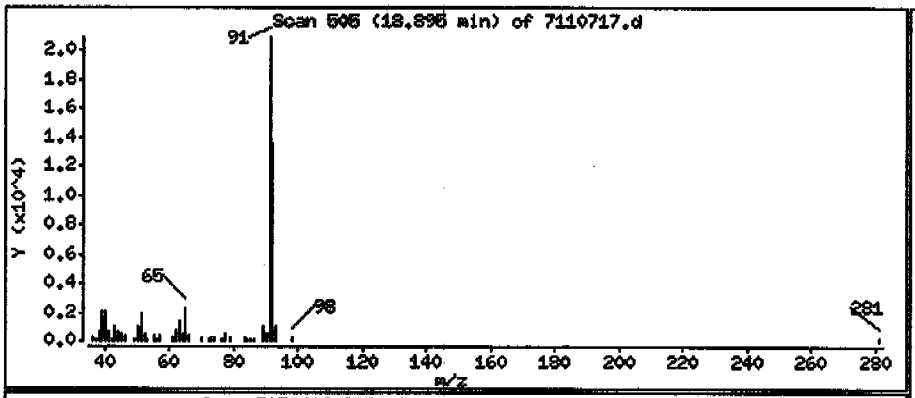
Operator: dm

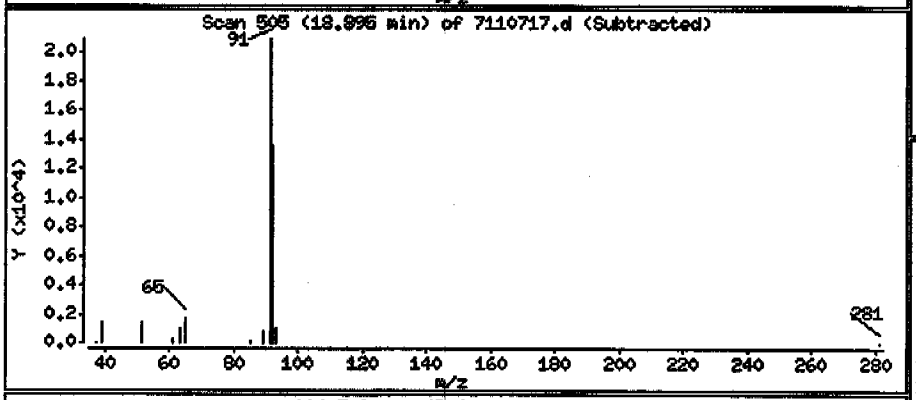
Column phase: RTx-624

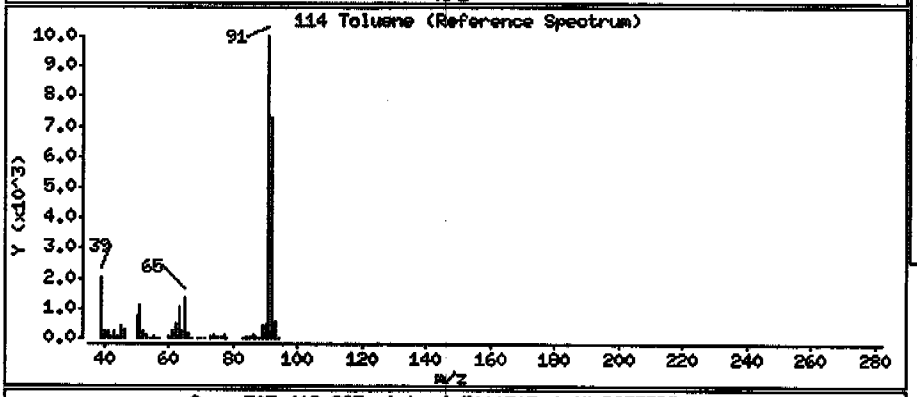
Column diameter: 0.53

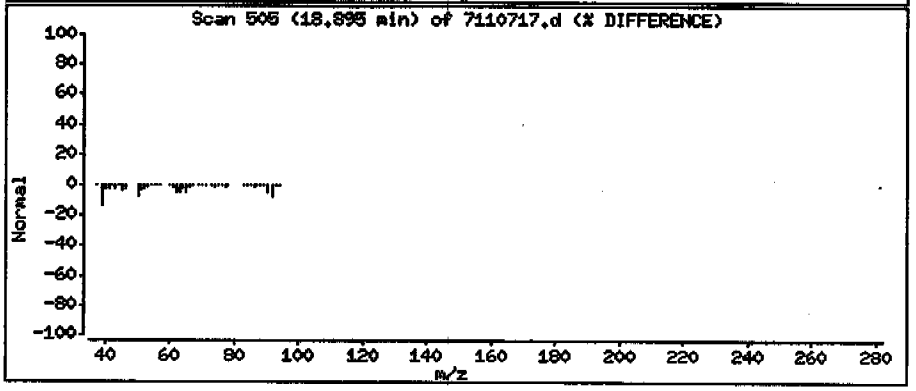
114 Toluene

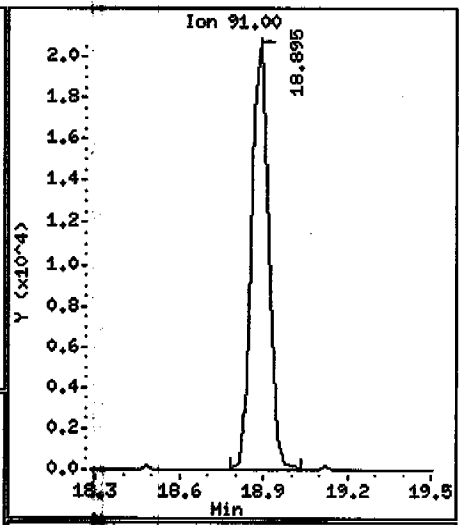
Concentration: 1.608 PPBV

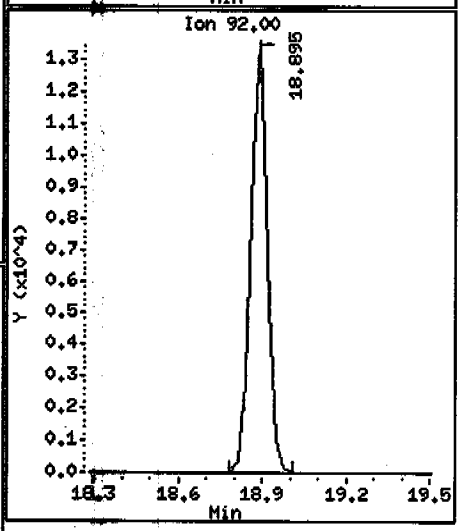












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

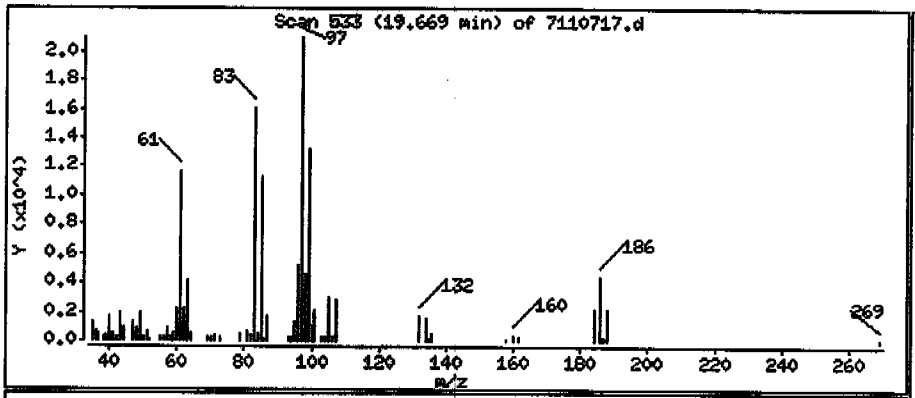
Operator: dm

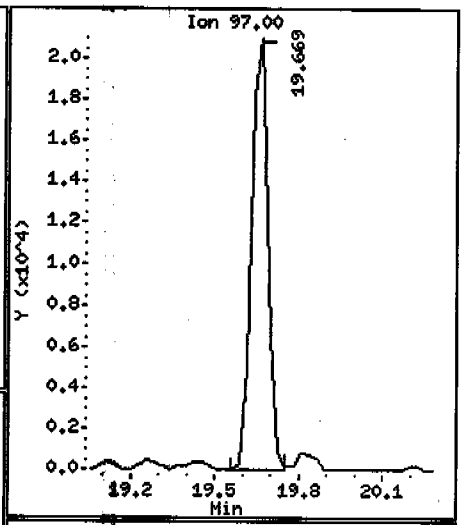
Column phase: RTx-624

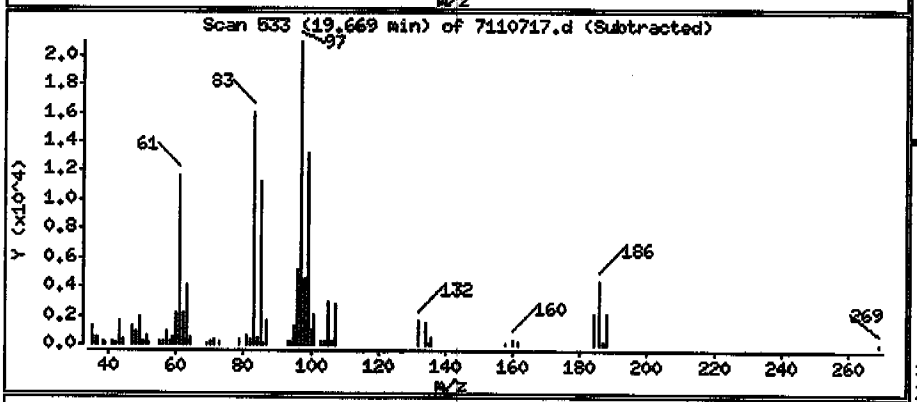
Column diameter: 0.53

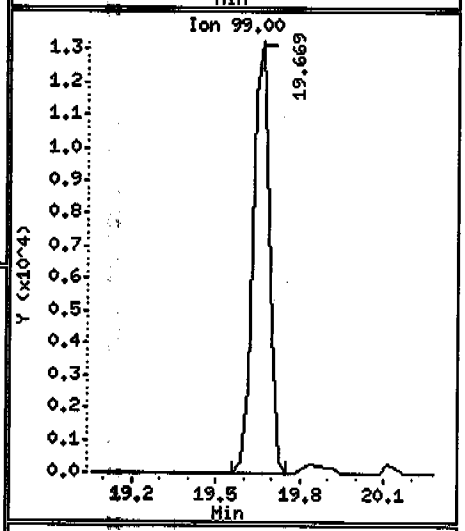
117 1,1,2-Trichloroethane

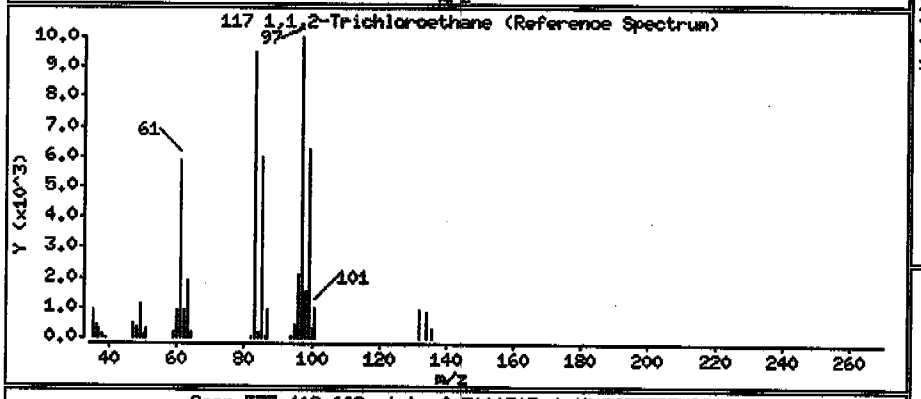
Concentration: 4.976 PPBV

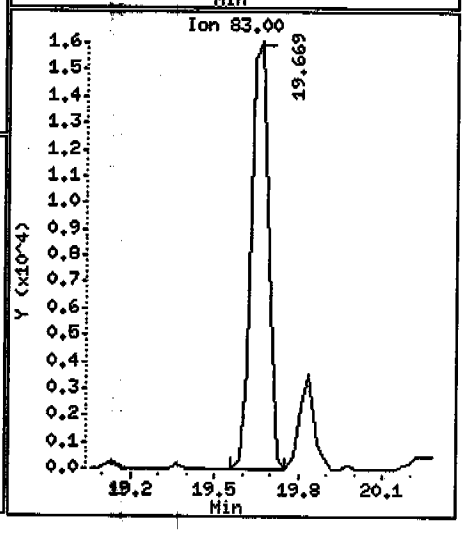


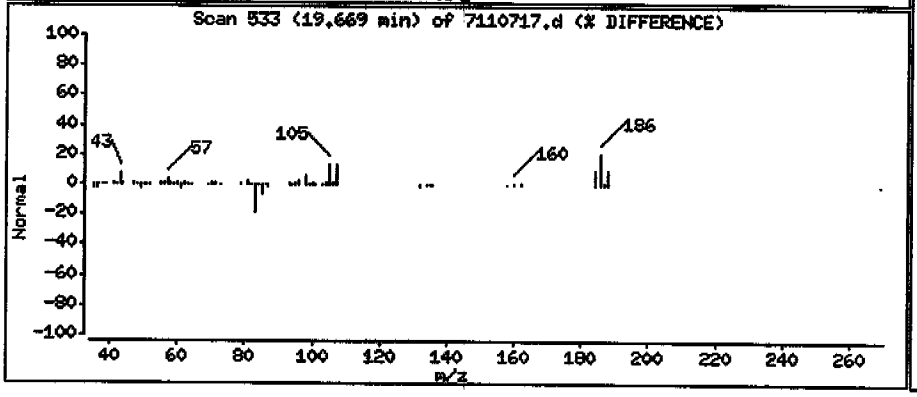












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

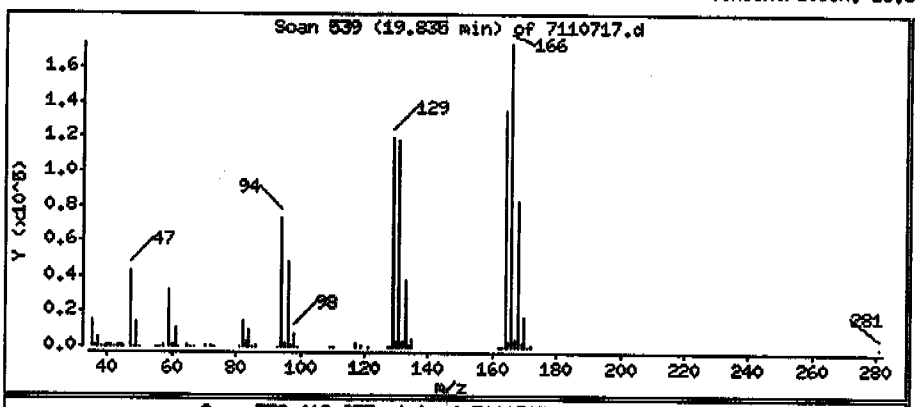
Operator: dm

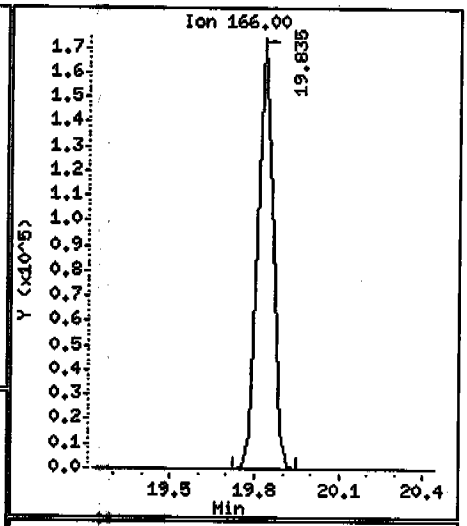
Column phase: RTx-624

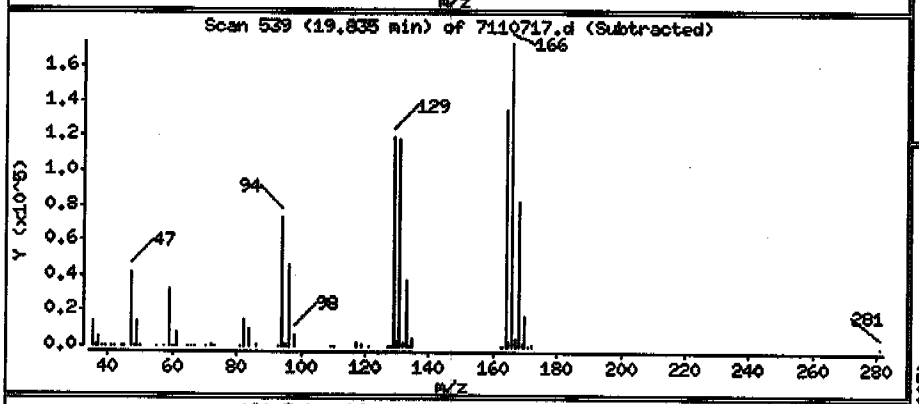
Column diameter: 0.53

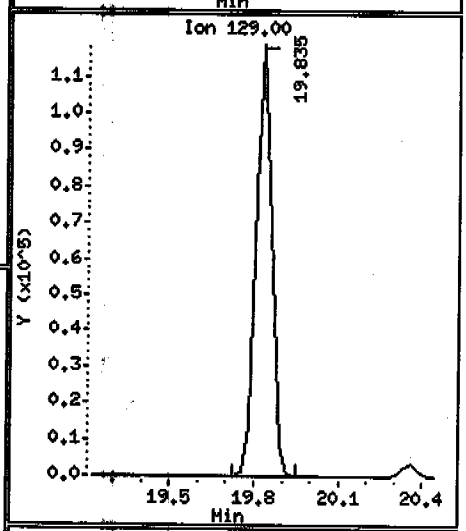
120 Tetrachloroethene

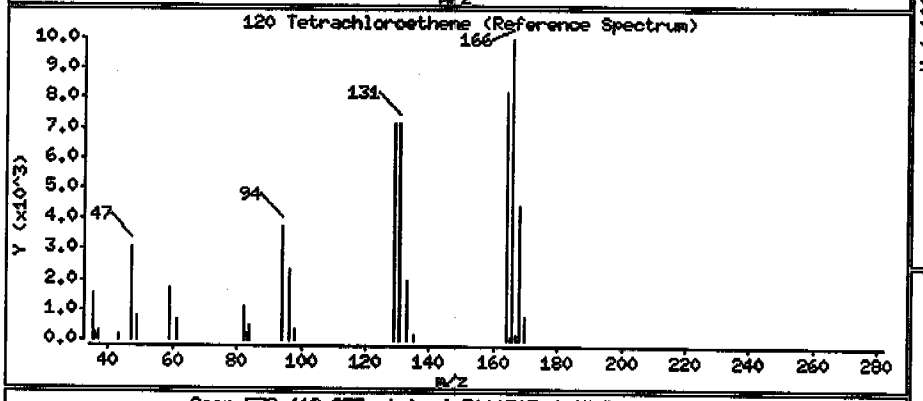
Concentration: 28.870 PPBV

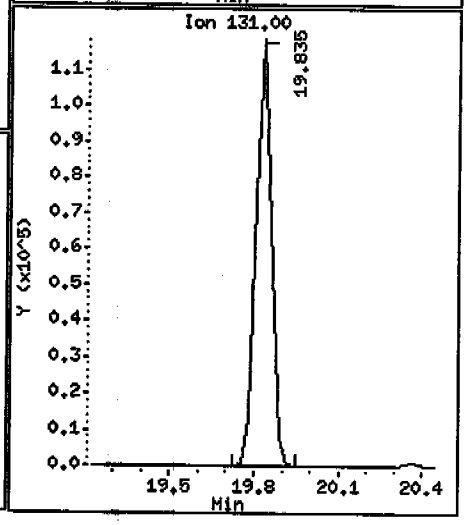


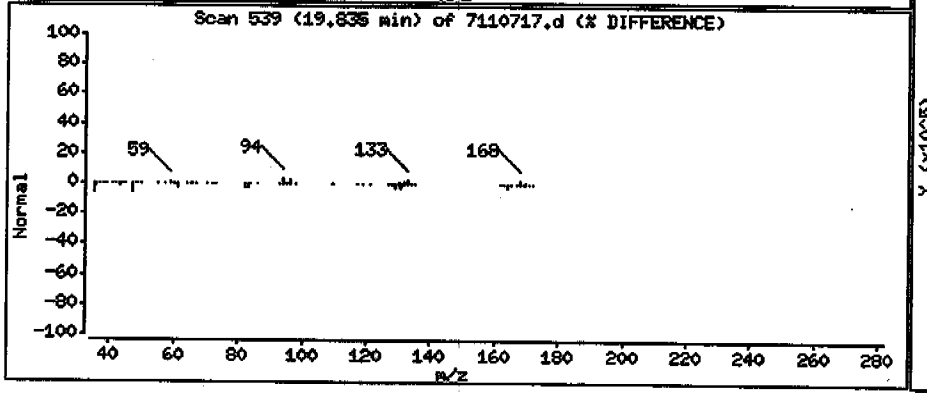












Data File: /chem/msd7.i/7-07nov.b/7110717.d

Date : 07-NOV-2007 22:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL #35154

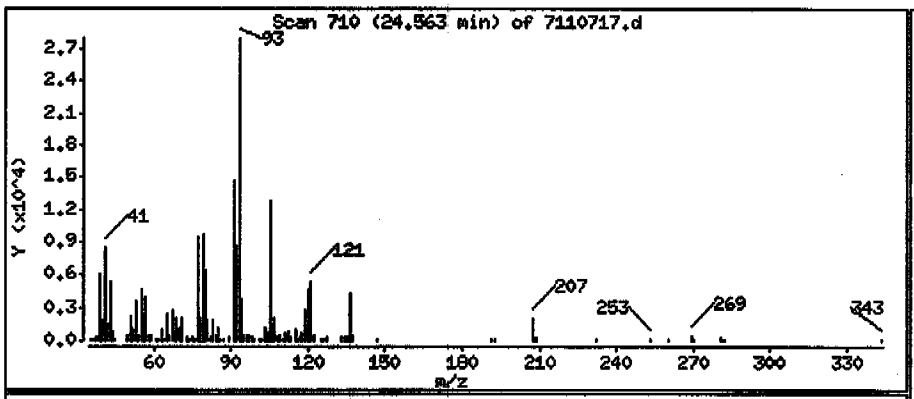
Operator: dm

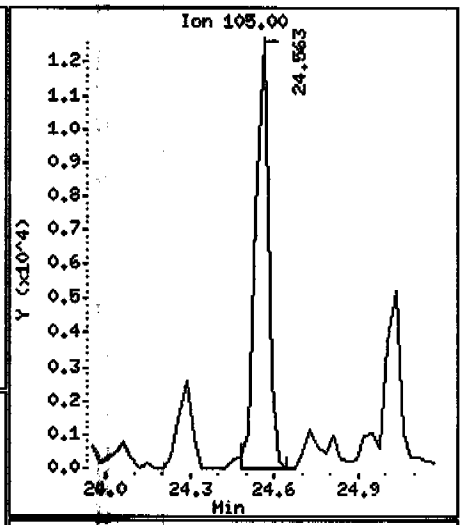
Column phase: RTx-624

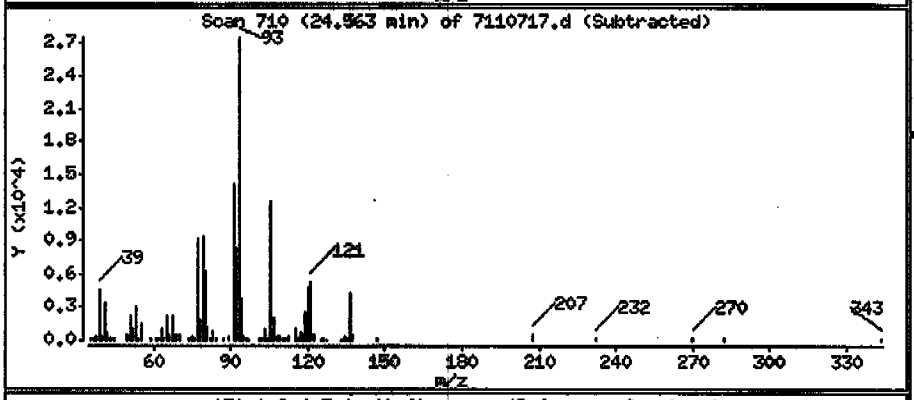
Column diameter: 0.53

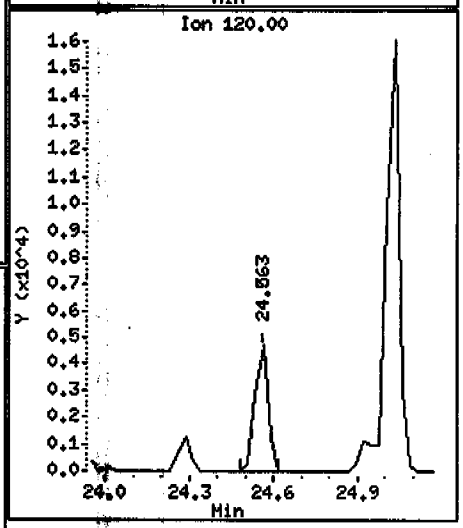
150 1,2,4-Trimethylbenzene

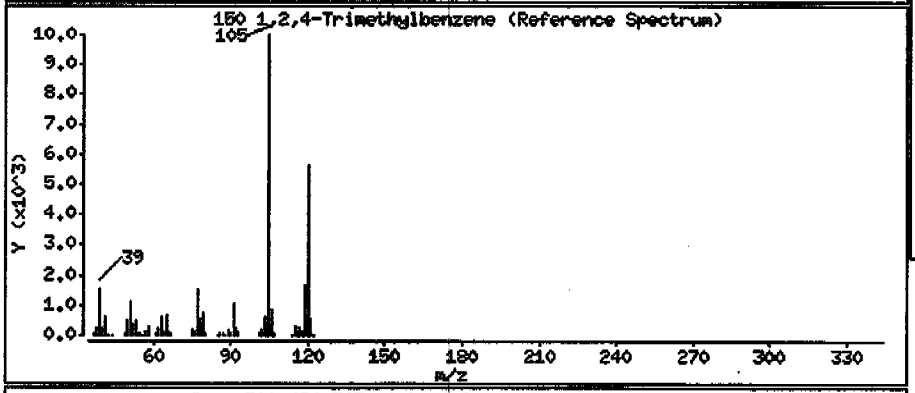
Concentration: 0.9046 PPBV

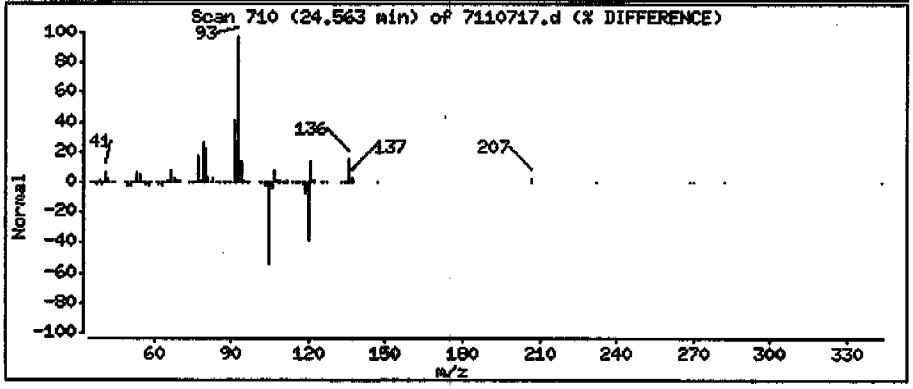












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6803

Lab ID#: 0711101-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.5	4.4	7.4
1,3-Butadiene	0.90	5.1	2.0	11
Freon 113	0.90	2.4	6.8	19
1,1-Dichloroethene	0.90	1.8	3.5	7.4
Acetone	3.6	120	8.5	290
2-Propanol	3.6	4.4	8.8	11
Carbon Disulfide	0.90	1.6	2.8	5.1
Methylene Chloride	0.90	12	3.1	43
Hexane	0.90	1.9	3.2	6.8
2-Butanone (Methyl Ethyl Ketone)	0.90	19	2.6	55
Chloroform	0.90	130	4.4	630
1,1,1-Trichloroethane	0.90	5.3	4.9	29
Cyclohexane	0.90	0.98	3.1	3.4
Carbon Tetrachloride	0.90	24	5.6	150
Benzene	0.90	1.7	2.8	5.5
Heptane	0.90	1.1	3.7	4.7
Trichloroethene	0.90	89	4.8	480
Bromodichloromethane	0.90	0.95	6.0	6.4
4-Methyl-2-pentanone	0.90	0.89 J	3.7	3.6 J
Toluene	0.90	1.7	3.4	6.6
Tetrachloroethene	0.90	51	6.1	340
1,2,4-Trimethylbenzene	0.90	2.3	4.4	11
Propylene	3.6	92	6.2	160

0126

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6803

Lab ID#: 0711101-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.5	4.4	7.4
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	5.1	2.0	11
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	2.4	6.8	19
1,1-Dichloroethene	0.90	1.8	3.5	7.4
Acetone	3.6	120	8.5	290
2-Propanol	3.6	4.4	8.8	11
Carbon Disulfide	0.90	1.6	2.8	5.1
Methylene Chloride	0.90	12	3.1	43
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	1.9	3.2	6.8
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	19	2.6	55
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	130	4.4	630
1,1,1-Trichloroethane	0.90	5.3	4.9	29
Cyclohexane	0.90	0.98	3.1	3.4
Carbon Tetrachloride	0.90	24	5.6	150
Benzene	0.90	1.7	2.8	5.5
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	1.1	3.7	4.7
Trichloroethene	0.90	89	4.8	480
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	0.95	6.0	6.4
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	0.89 J	3.7	3.6 J
Toluene	0.90	1.7	3.4	6.6
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	51	6.1	340

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6803

Lab ID#: 0711101-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	2.3	4.4	11
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	92	6.2	160

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	99	70-130

0128

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110721.d
Lab Smp Id: 0711101-04A
Inj Date : 08-NOV-2007 01:31
Operator : ab Inst ID: msd7.i
Smp Info : 200mL #4199
Misc Info : 7.5"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	======= ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	619105	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	476388			28.66- 128.66	76.95
14.416	14.416 (1.000)	49	1276598			133.49- 233.49	206.20
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.158 (1.000)	114	2091766	25.0000		80.00- 120.00	100.00
16.186	16.158 (1.000)	88	318338			0.00- 65.23	15.22
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1480617	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	794257			4.70- 104.70	53.64
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	775648	23.3212	23.321	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	397788			2.91- 102.91	51.28
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1718279	23.1404	23.140	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	199247			0.00- 61.46	11.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1199964			19.18- 119.18	69.84
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	870742	24.7142	24.714	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	1085747			73.89- 173.89	124.69
23.347	23.347 (1.093)	176	834354			48.20- 148.20	95.82
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	1368886	51.3008	91.828	80.00- 120.00	100.00
5.645	5.617 (0.392)	42	859322			21.19- 121.19	62.78
5.645	5.617 (0.392)	39	1110753			24.83- 124.83	81.14
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.786	5.758 (0.401)	85	81771	0.83580	1.496	80.00- 120.00	100.00
5.758	5.758 (0.399)	87	26803			0.00- 83.07	32.78
22 1,3-Butadiene					CAS #: 106-99-0		
6.969	6.940 (0.483)	54	81982	2.84933	5.100	80.00- 120.00	100.00
6.743	6.940 (0.468)	39	600417			55.97- 155.97	732.38
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	69677	1.37258	2.457	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	45895			13.12- 113.12	65.87
10.213	10.186 (0.708)	101	87869			67.28- 167.28	126.11
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.352	10.324 (0.718)	61	56107	1.03870	1.859	80.00- 120.00	100.00
10.352	10.324 (0.718)	96	36157			9.78- 109.78	64.44
10.352	10.324 (0.718)	98	22396			0.00- 88.25	39.92
45 Acetone					CAS #: 67-64-1		
10.517	10.490 (0.730)	58	1134489	67.9484	121.63	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	3683201			247.10- 347.10	324.66
46 2-Propanol					CAS #: 67-63-0		
10.711	10.683 (0.743)	45	146689	2.47633	4.433	80.00- 120.00	100.00
10.490	10.683 (0.728)	43	3683201			0.00- 75.54	2510.89
10.683	10.683 (0.741)	59	7930			0.00- 53.72	5.41
47 Carbon Disulfide					CAS #: 75-15-0		
10.905	10.877 (0.756)	76	94240	0.91443	1.637	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	273720	6.89234	12.337	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	200864			19.98- 119.98	73.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
54 Methylene Chloride (continued)							
11.485	11.457 (0.797)	51	84361			0.00- 80.85	30.82
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.852)	57	56176	1.07261	1.920	80.00- 120.00	100.00
12.315	12.287 (0.854)	43	63680			17.84- 117.84	113.36
12.342	12.287 (0.856)	86	8089			0.00- 65.07	14.40
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	139681	10.4171	18.646	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	653421			412.48- 512.48	467.80
13.891	13.891 (0.964)	57	52585			0.00- 86.57	37.65
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	4508501	72.3274	129.47	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	2905401			15.69- 115.69	64.44
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	185209	2.95050	5.281	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	120849			14.03- 114.03	65.25
85 Cyclohexane					CAS #: 110-82-7		
14.858	14.831 (1.031)	84	19584	0.54470	0.9750	80.00- 120.00	100.00
14.831	14.831 (1.029)	56	45887			76.16- 176.16	234.31
14.803	14.831 (1.027)	41	32929			19.79- 119.79	168.14
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	795101	13.5125	24.187	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	826056			53.14- 153.14	103.89
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.959)	78	79615	0.95793	1.715	80.00- 120.00	100.00
15.522	15.522 (0.959)	77	21822			0.00- 71.87	27.41
94 Heptane					CAS #: 142-82-5		
15.716	15.715 (0.971)	71	16295	0.63750	1.141	80.00- 120.00	100.00
15.716	15.715 (0.971)	43	29118			158.53- 258.53	178.69
15.716	15.715 (0.971)	57	13859			59.34- 159.34	85.05
101 Trichloroethene					CAS #: 79-01-6		
16.656	16.628 (1.029)	95	1842666	49.9113	89.341	80.00- 120.00	100.00
16.656	16.628 (1.029)	130	1837873			51.11- 151.11	99.74
16.656	16.628 (1.029)	97	1190847			15.04- 115.04	64.63
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.085)	83	34152	0.53282	0.9538	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
107 Bromodichloromethane (continued)							
17.568	17.540 (1.085)	85	22961			14.03- 114.03	67.23
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.143)	58	12323	0.49546	0.8869	80.00- 120.00	100.00(a)
18.508	18.508 (1.143)	43	36781			222.97- 322.97	298.47
18.508	18.508 (1.143)	85	5127			0.00- 90.48	41.61
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	88540	0.97262	1.741	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	55365			12.90- 112.90	62.53
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	1127263	28.3413	50.731	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	797940			21.07- 121.07	70.79
19.835	19.835 (0.929)	131	771911			18.33- 118.33	68.48
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	101165	1.27764	2.287	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	13870			0.00- 98.95	13.71

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110721.d
Lab Smp Id: 0711101-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 7.5"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	619105	-10.98
97 1,4-Difluorobenze	2265681	1359409	3171953	2091766	-7.68
126 Chlorobenzene-d5	1765821	1059493	2472149	1480617	-16.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0711101-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 7.5"Hg ->5psi

Client SDG: 7-07nov
Fraction: VOA

Operator: ab
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.321	93.28	70-130
$ 113 Toluene-d8	25.000	23.140	92.56	70-130
$ 137 Bromofluorobenzene	25.000	24.714	98.86	70-130

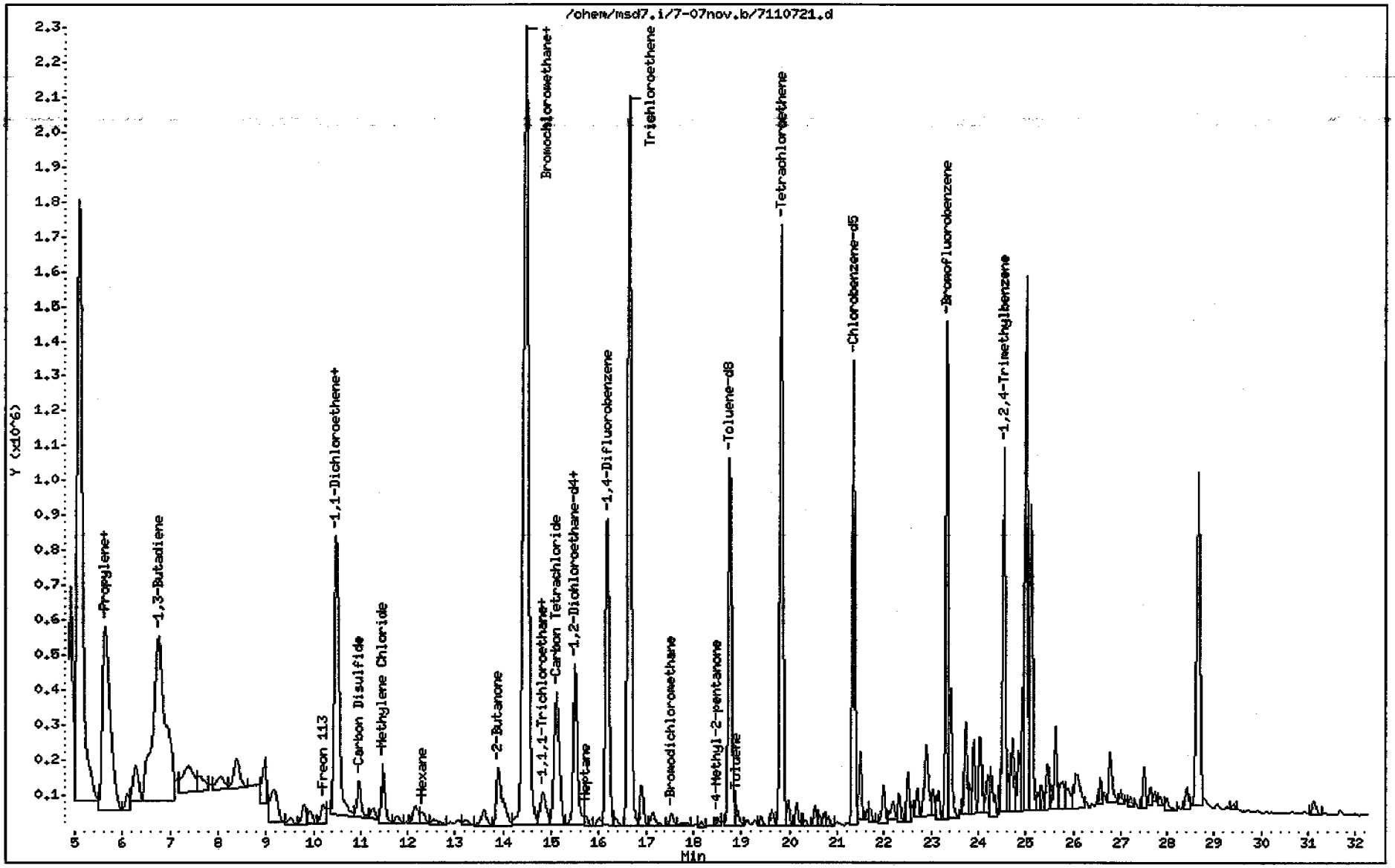
Data File: /chem/msd7.i/7-07nov.b/7110721.d
Date : 08-NOV-2007 01:31
Client ID:
Sample Info: 200mL #4199

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0135



Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

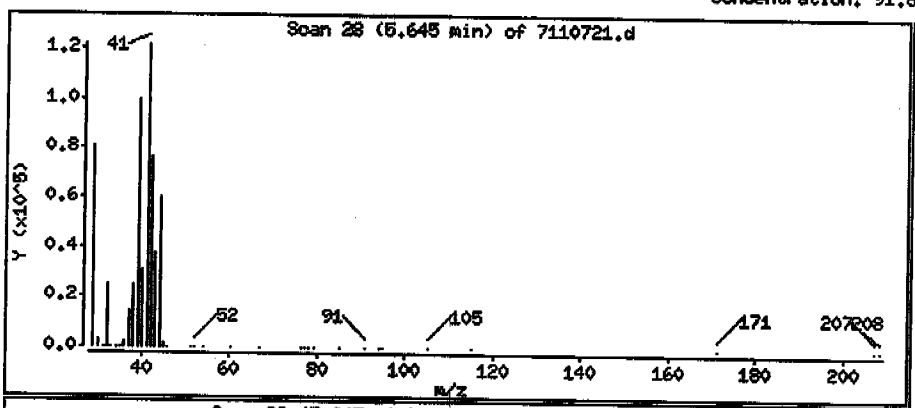
Operator: ab

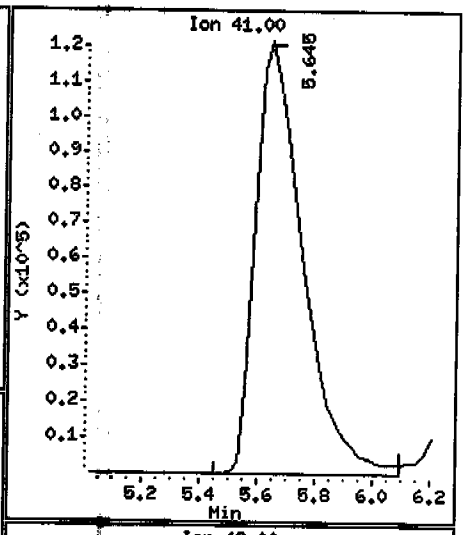
Column phase: RTx-624

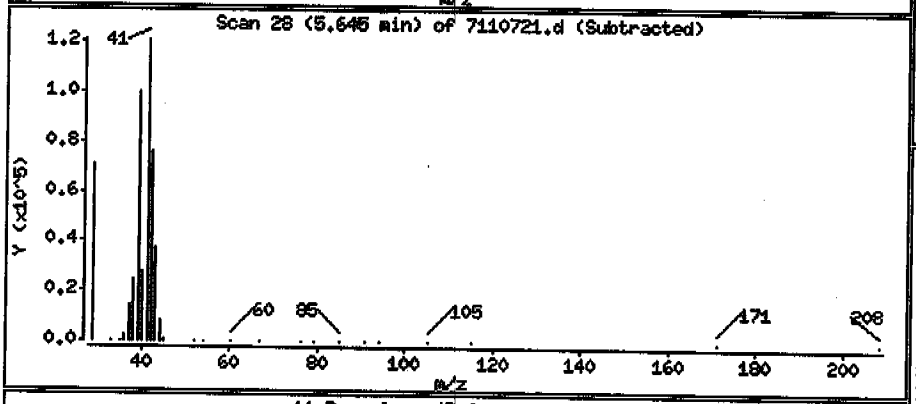
Column diameter: 0.53

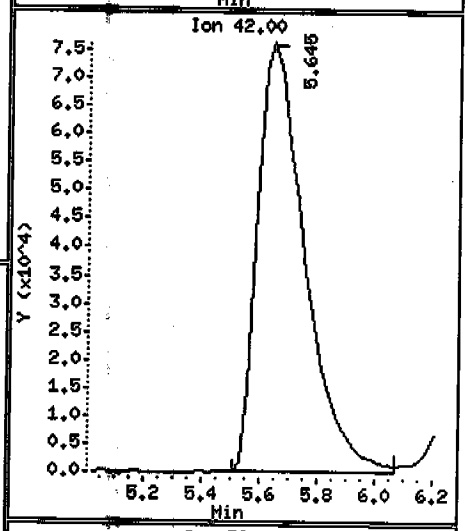
11 Propylene

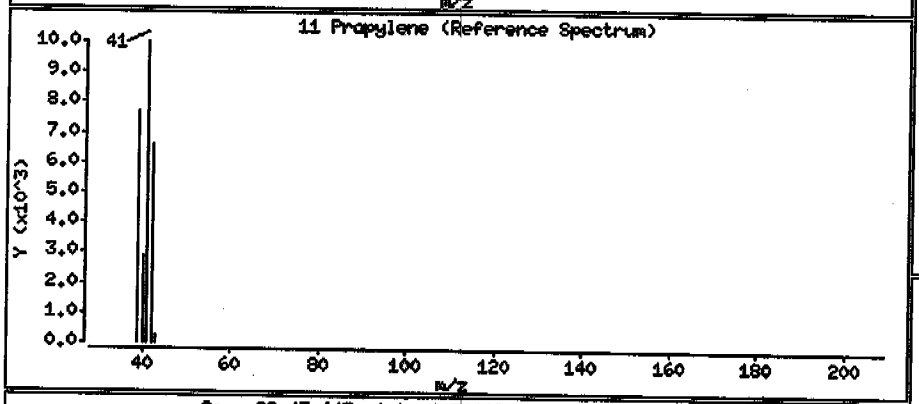
Concentration: 91.828 PPBV

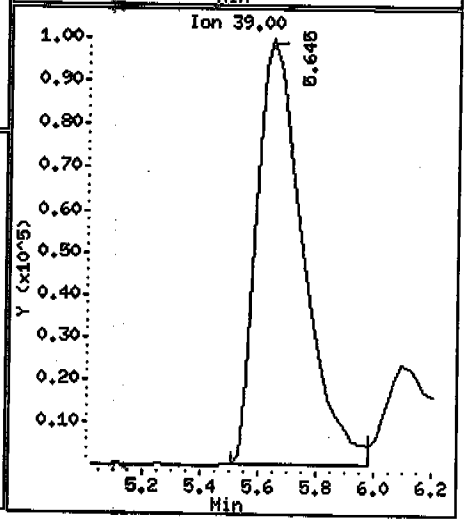


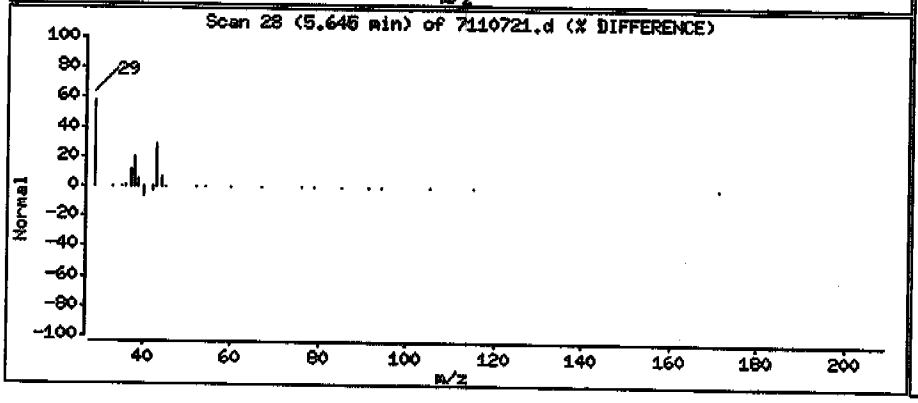












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

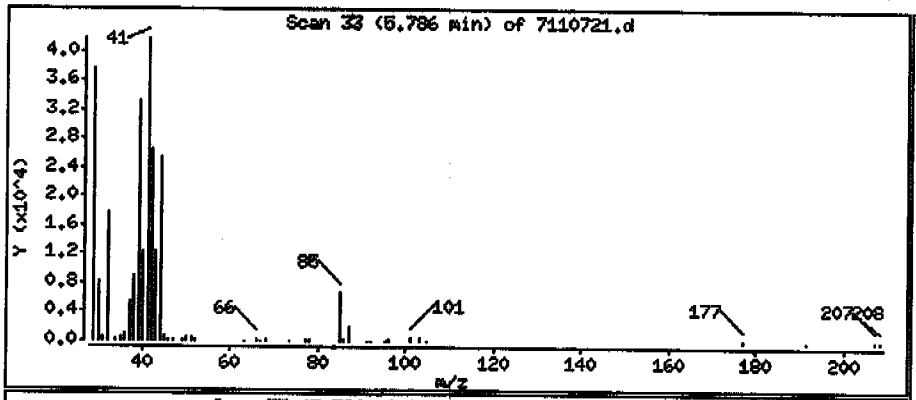
Operator: ab

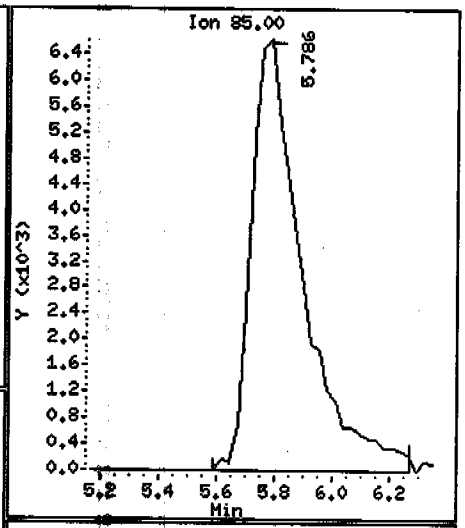
Column phase: RTx-624

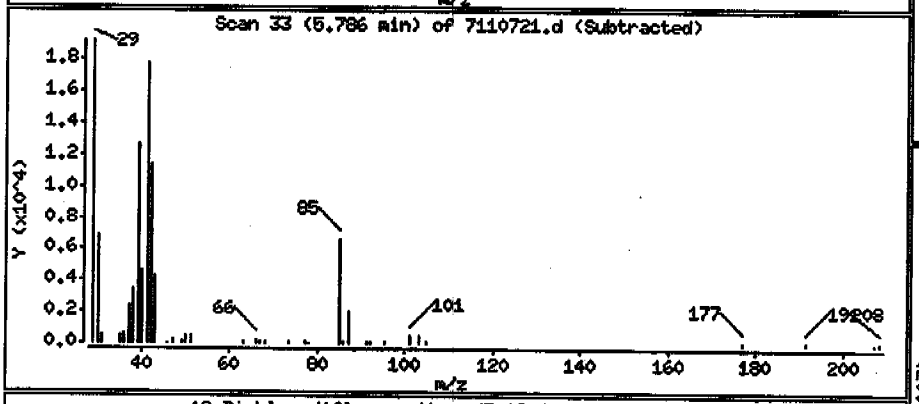
Column diameter: 0.53

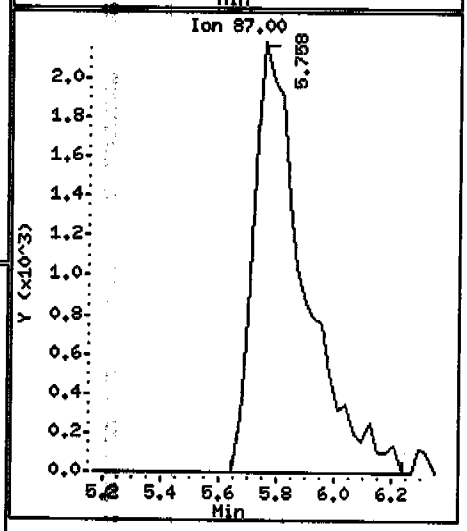
12 Dichlorodifluoromethane/Fr12

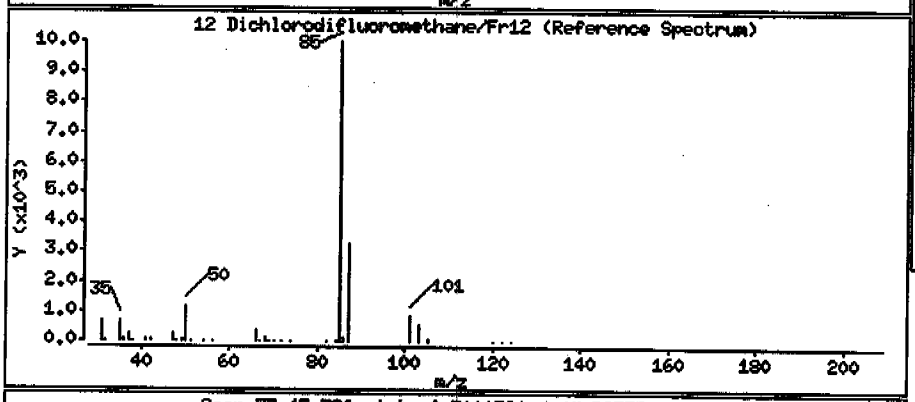
Concentration: 1.496 PPBV

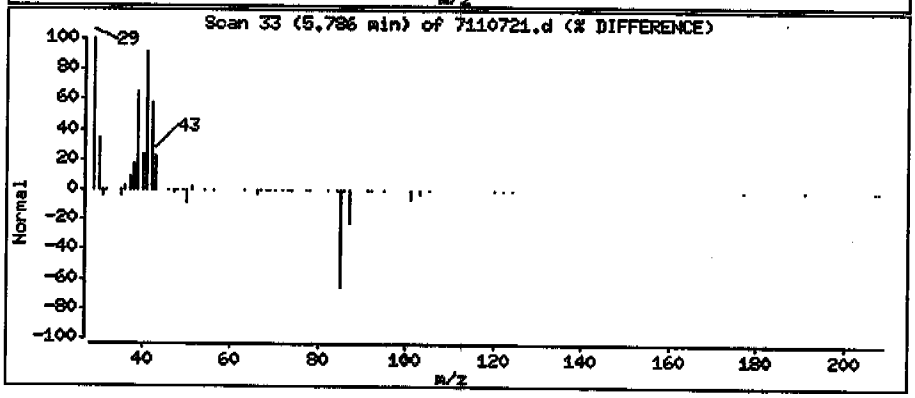












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

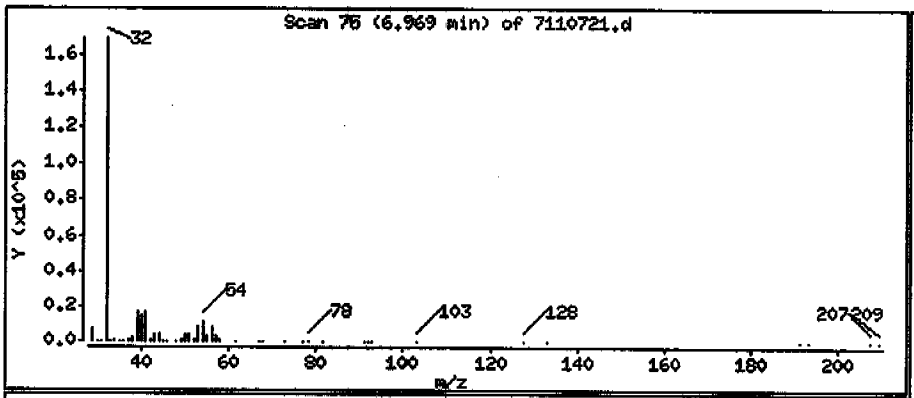
Operator: ab

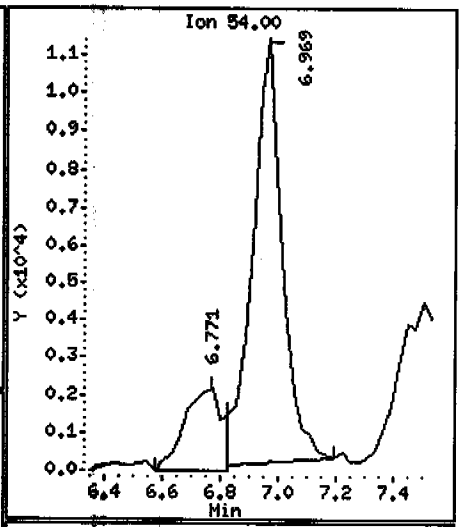
Column phase: RTx-624

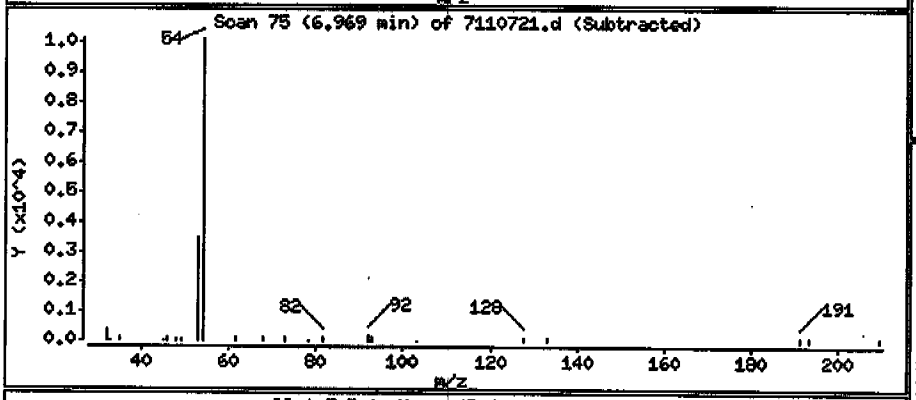
Column diameter: 0.53

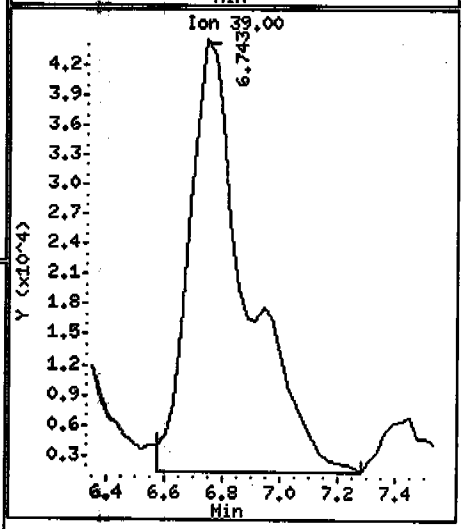
22 1,3-Butadiene

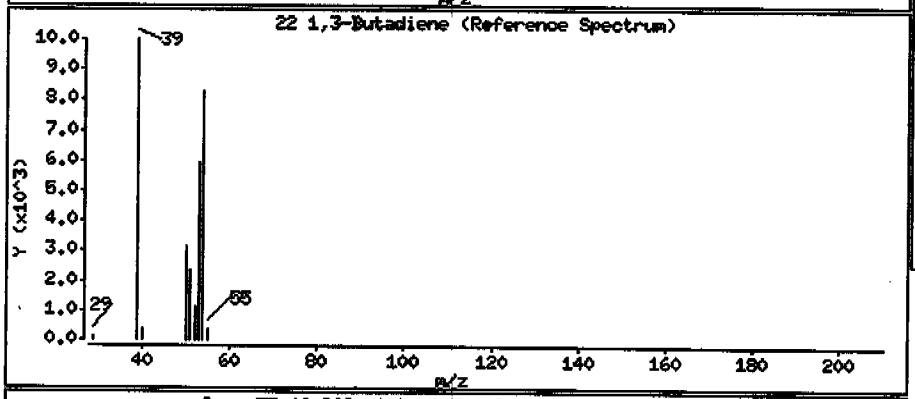
Concentration: 5.100 PPBV

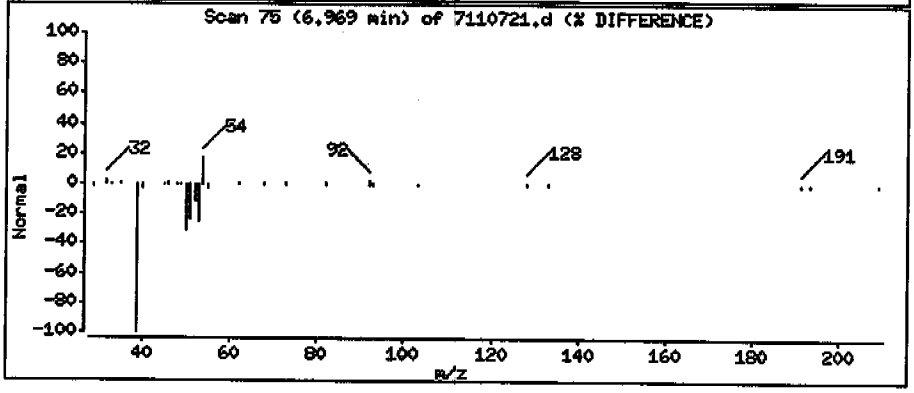












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

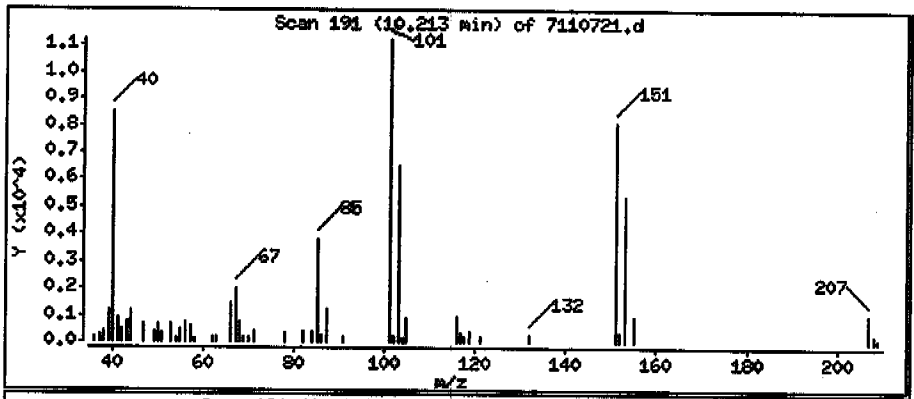
Operator: ab

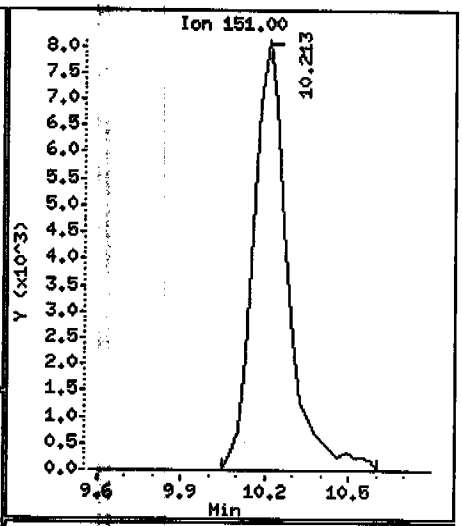
Column phase: RTx-624

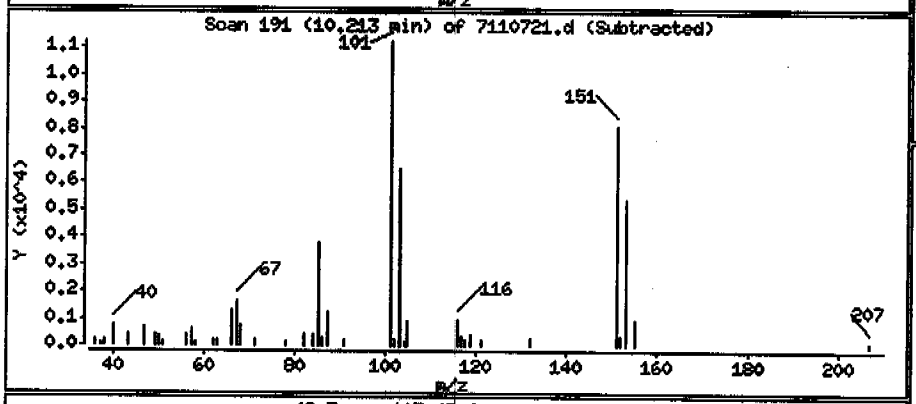
Column diameter: 0.53

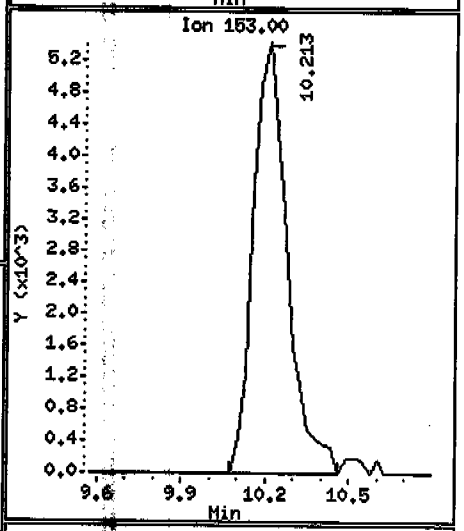
42 Freon 113

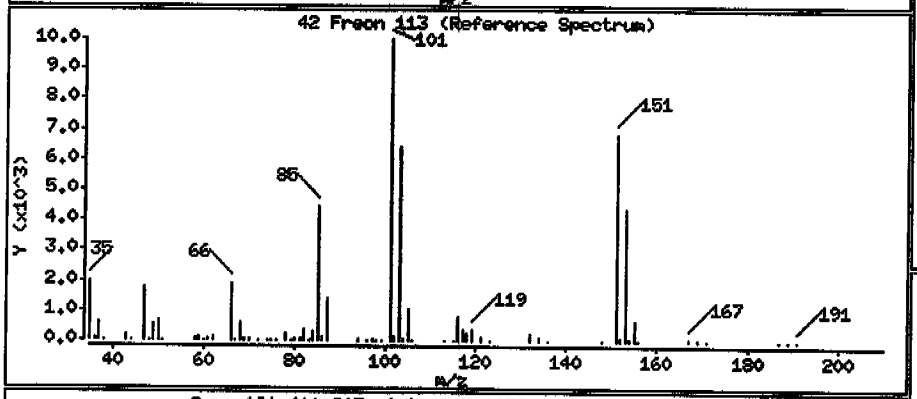
Concentration: 2.457 PPBV

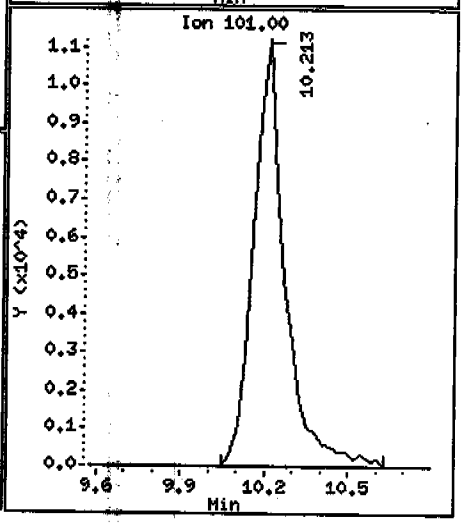


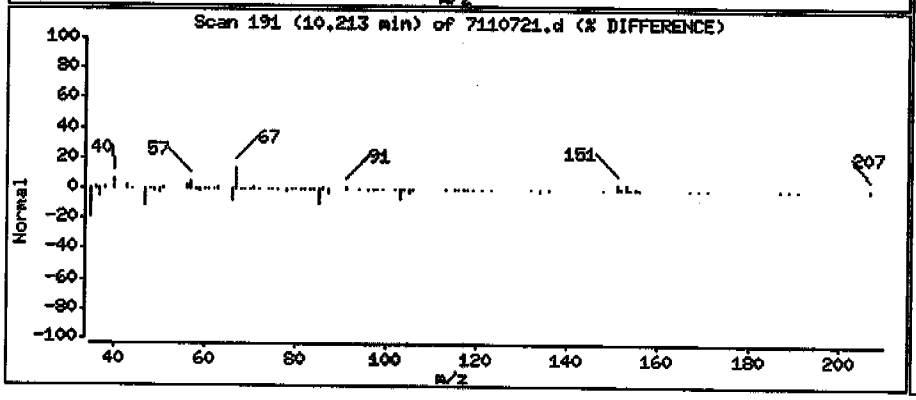












Data File: /ohem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

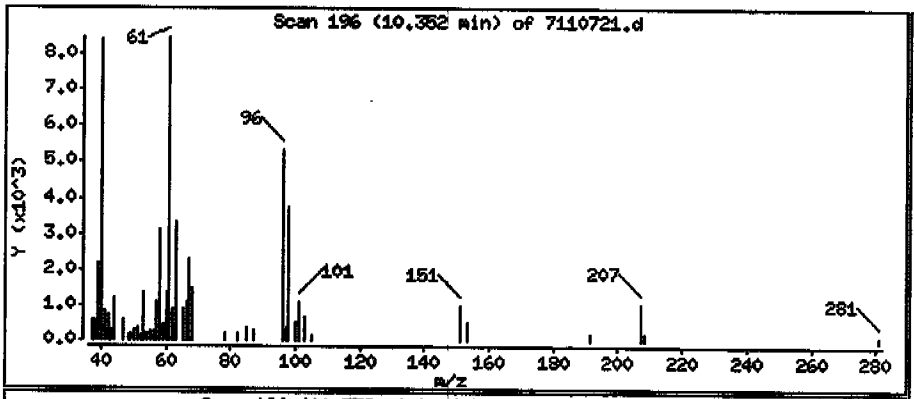
Operator: ab

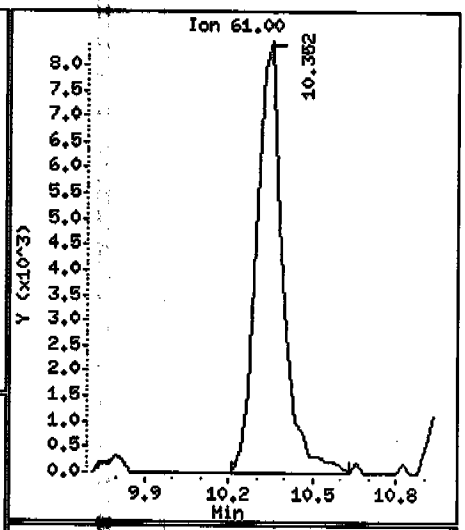
Column phase: RTx-624

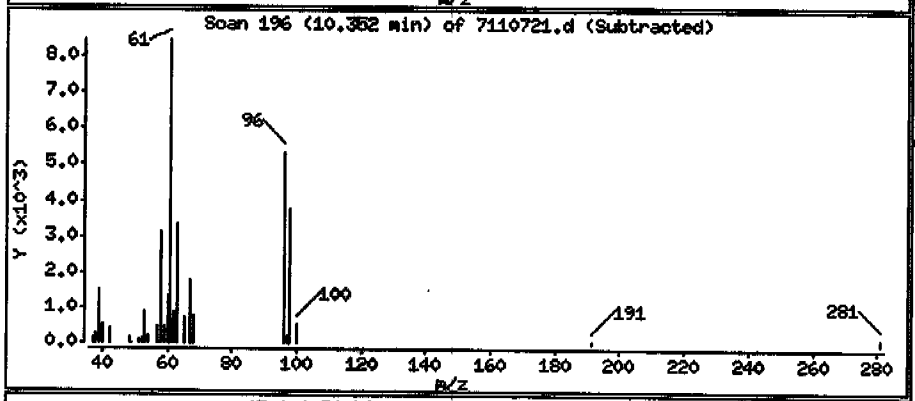
Column diameter: 0.53

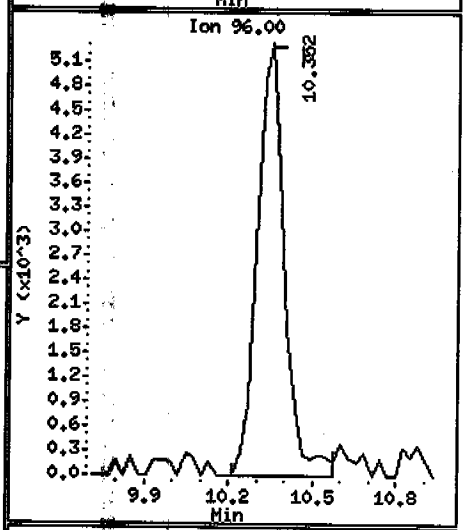
43 1,1-Dichloroethene

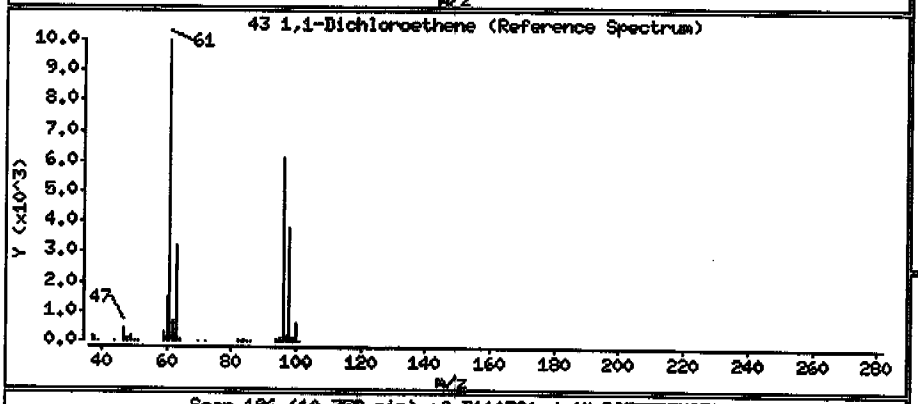
Concentration: 1.859 PPBV

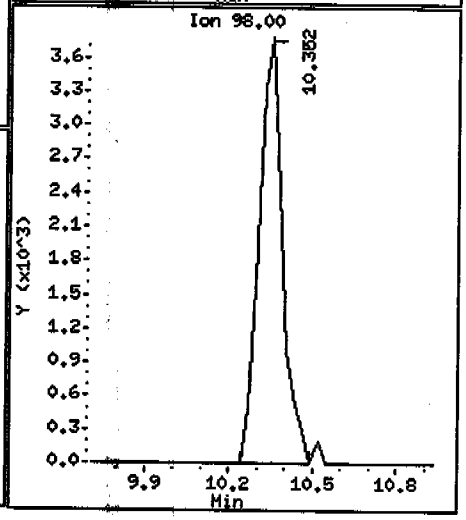


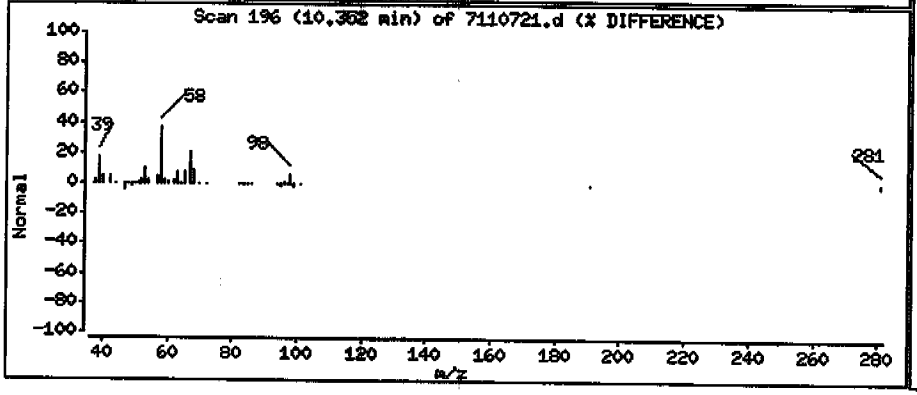












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

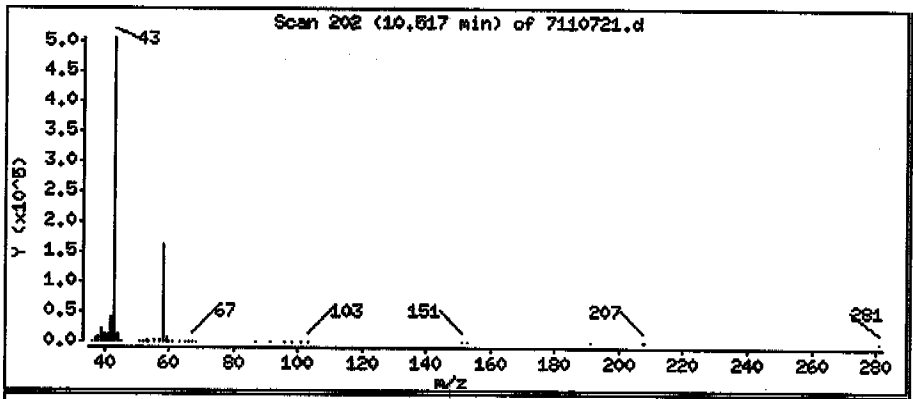
Operator: ab

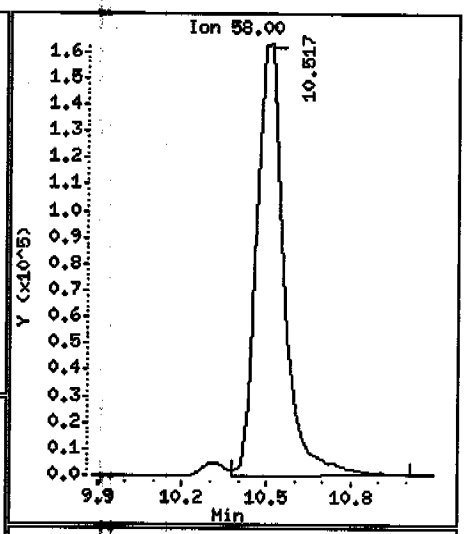
Column phase: RTx-624

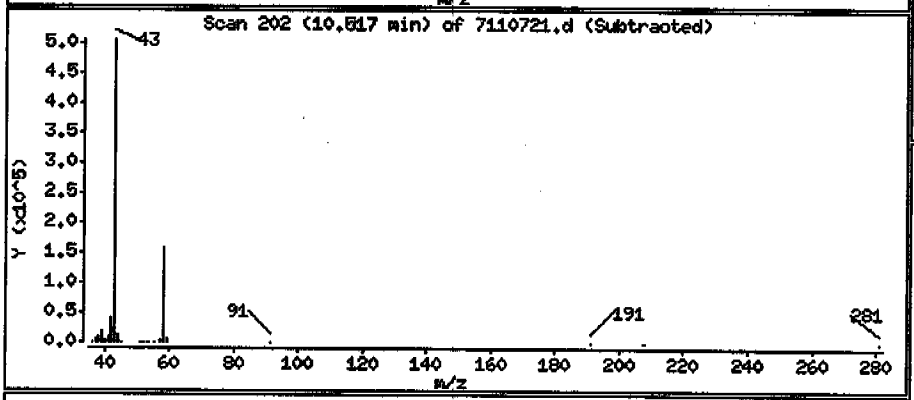
Column diameter: 0.53

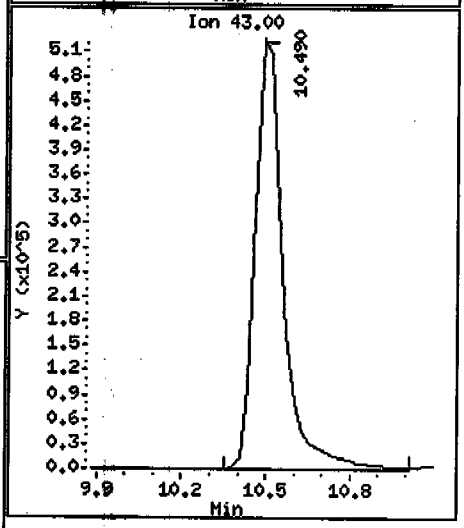
45 Acetone

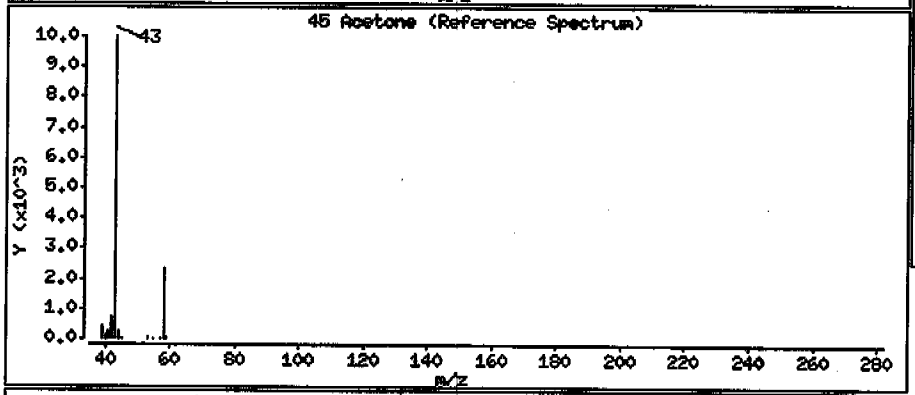
Concentration: 121.63 PPBV

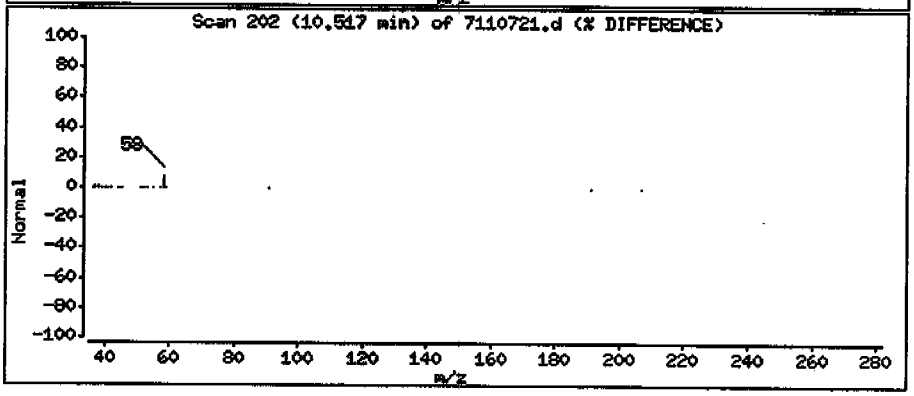












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

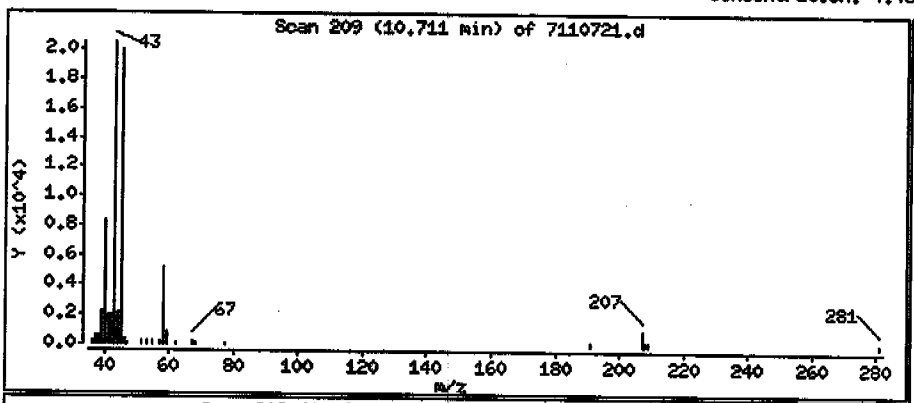
Operator: ab

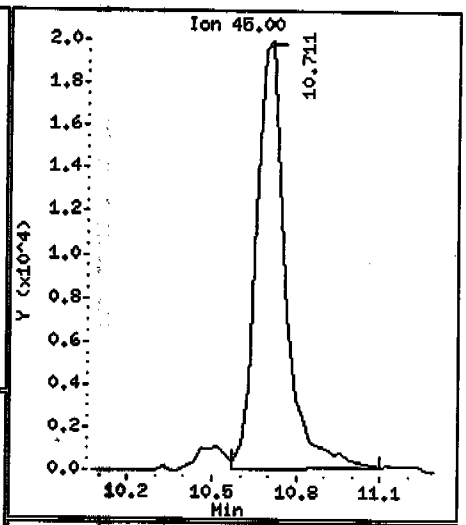
Column phase: RTx-624

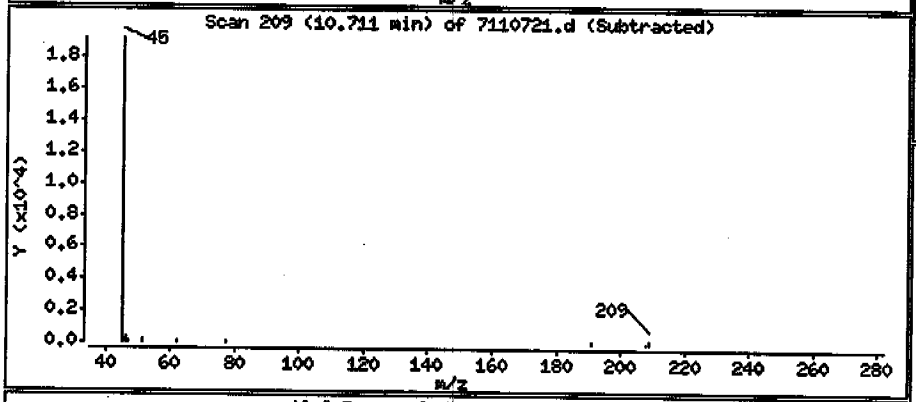
Column diameter: 0.53

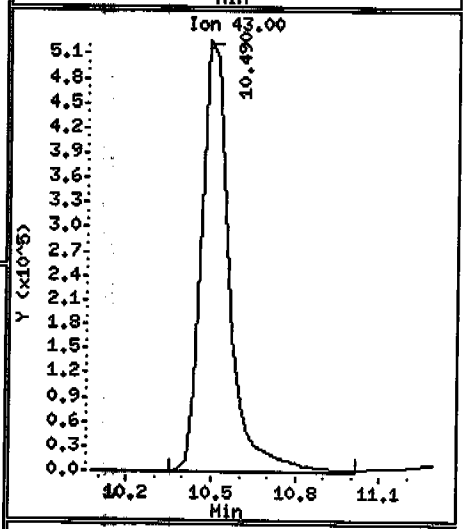
46 2-Propanol

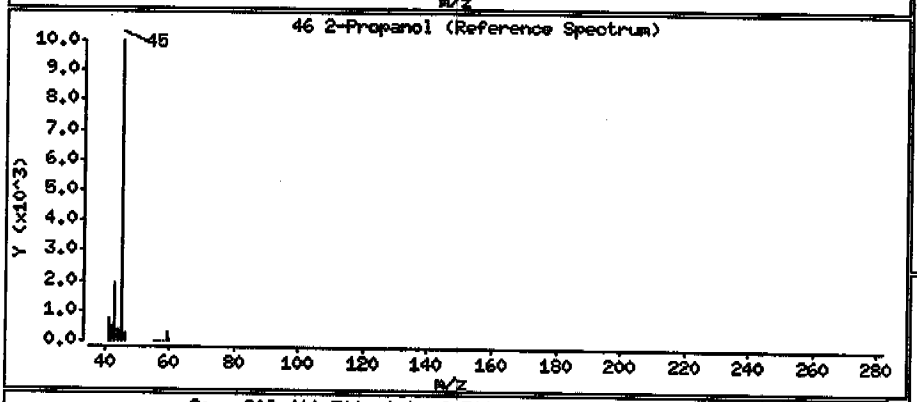
Concentration: 4.433 PPBV

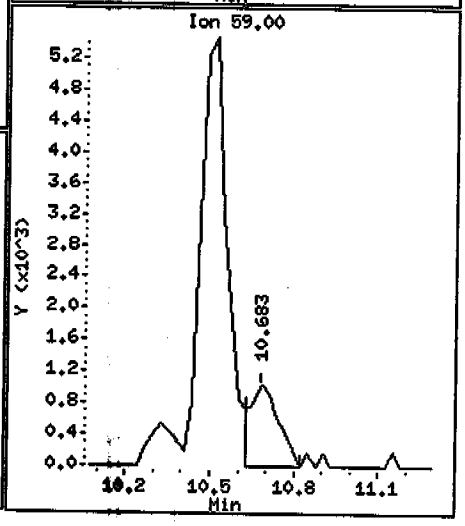


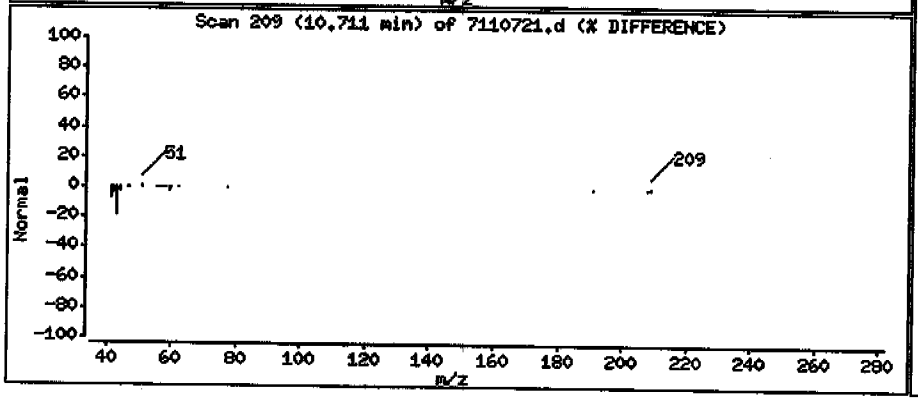












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

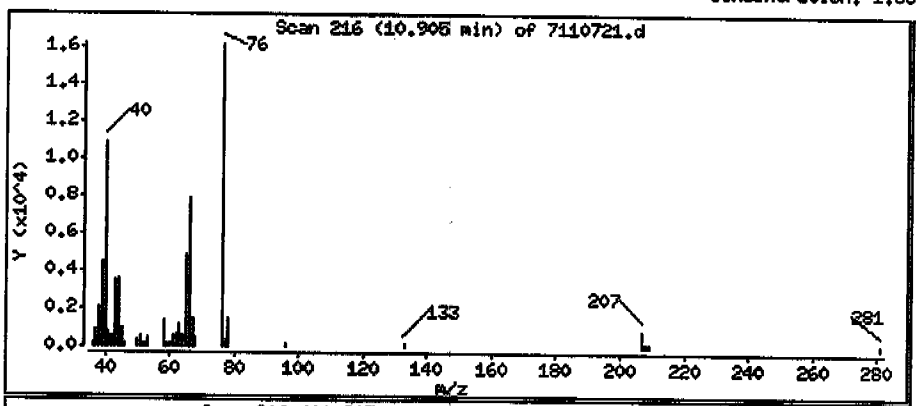
Operator: ab

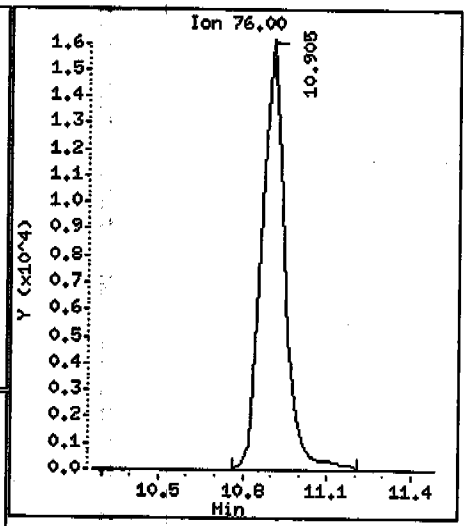
Column phase: RTx-624

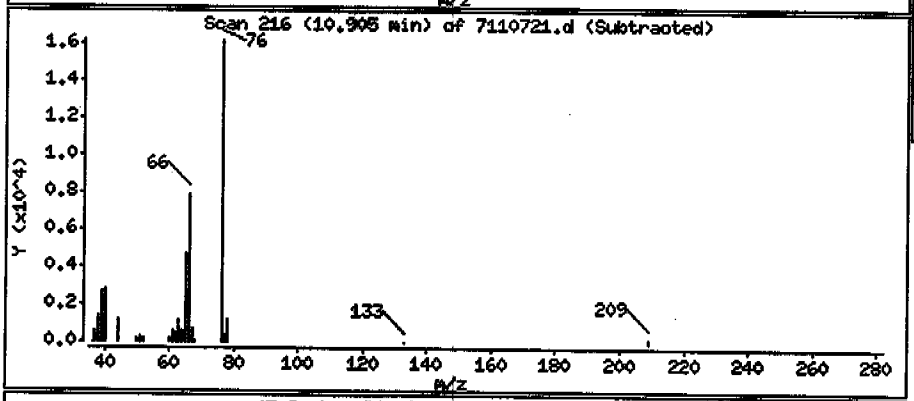
Column diameter: 0.53

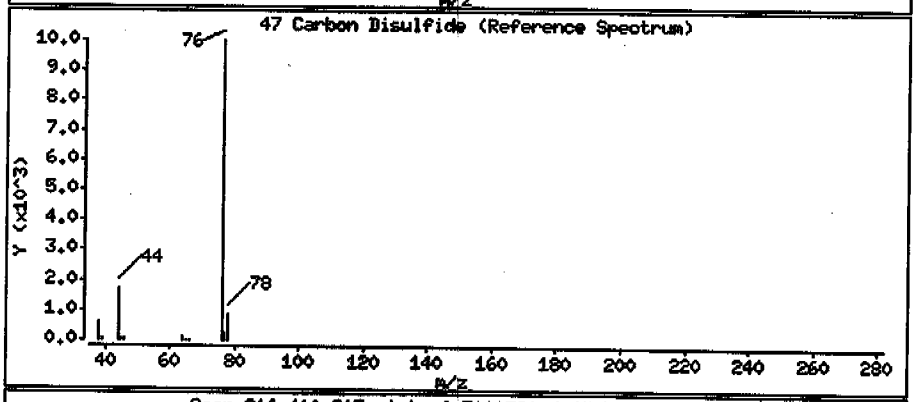
47 Carbon Disulfide

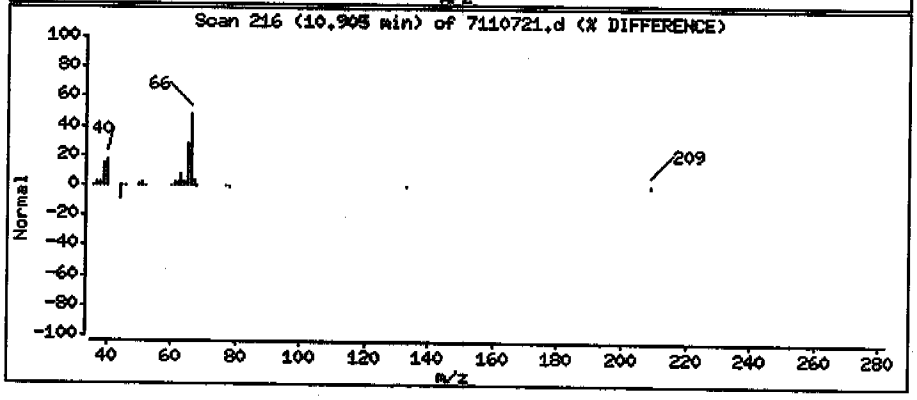
Concentration: 1.637 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

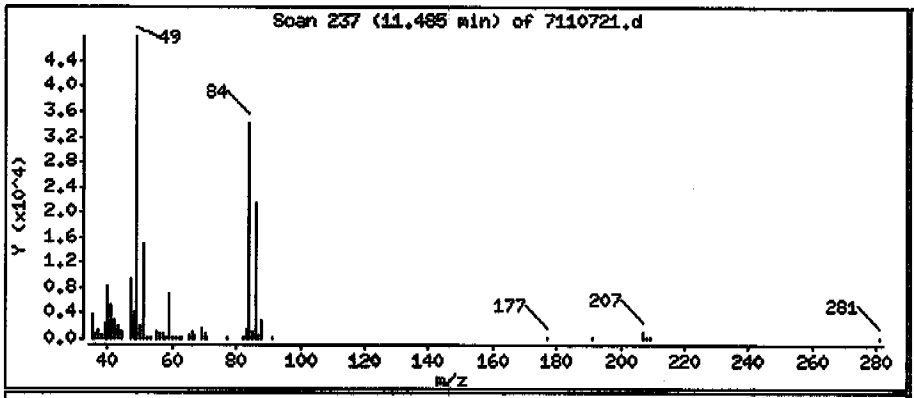
Operator: ab

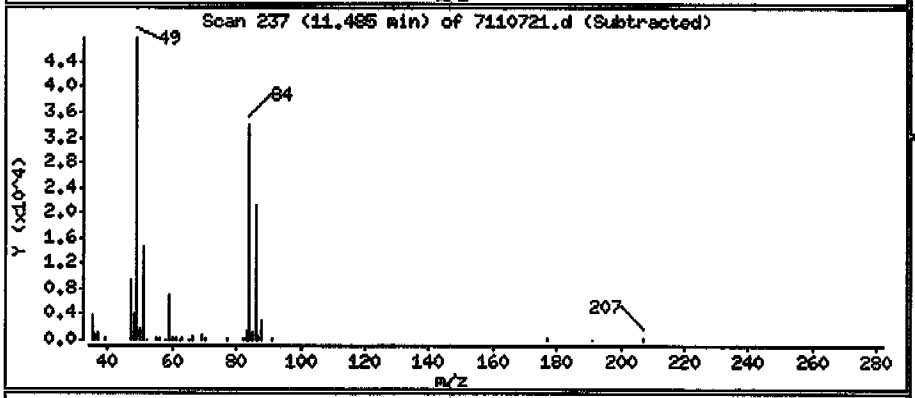
Column phase: RTx-624

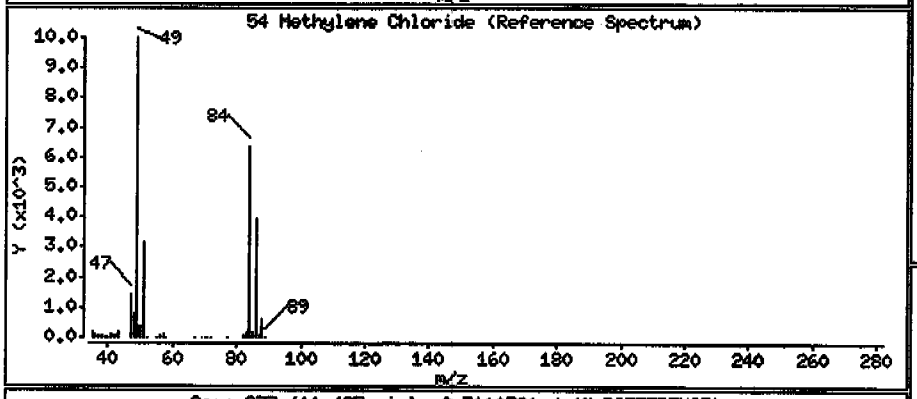
Column diameter: 0.53

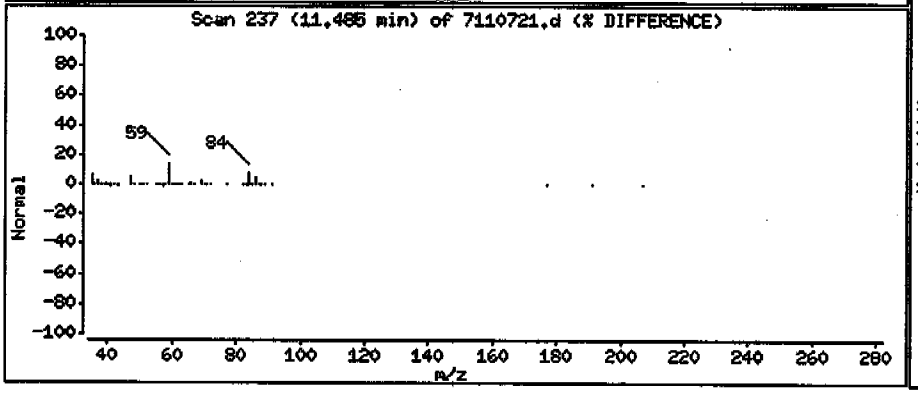
54 Methylene Chloride

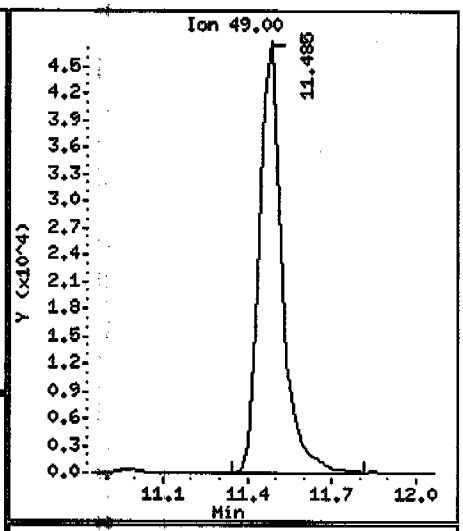
Concentration: 12.337 PPBV

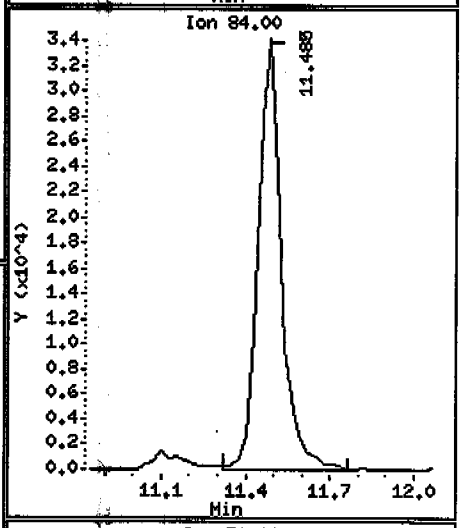


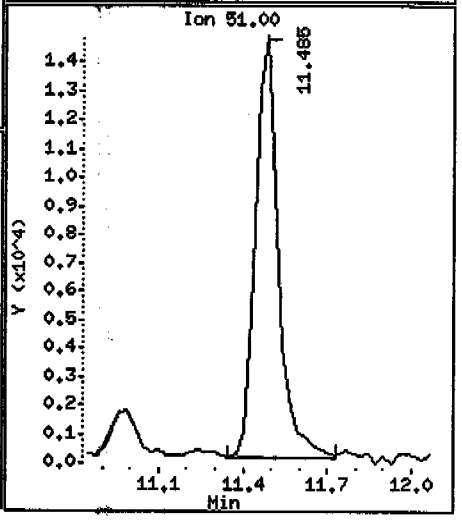












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

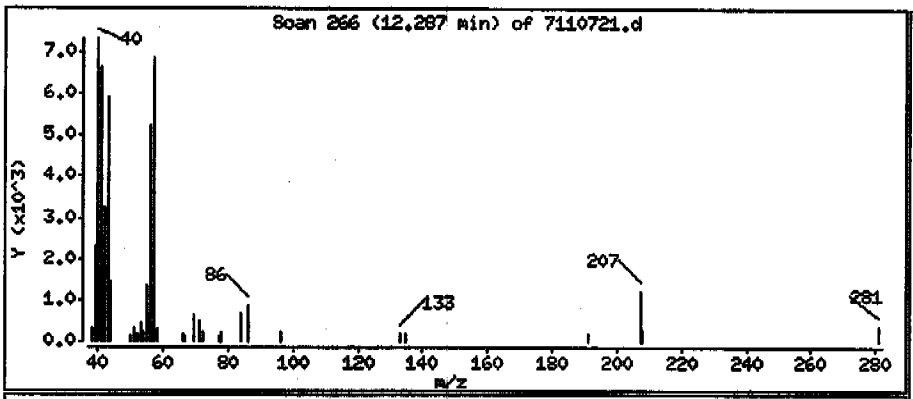
Operator: ab

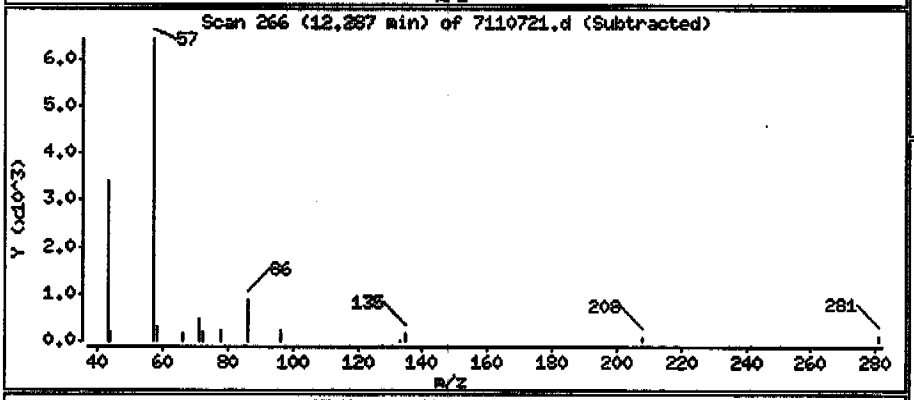
Column phase: RTx-624

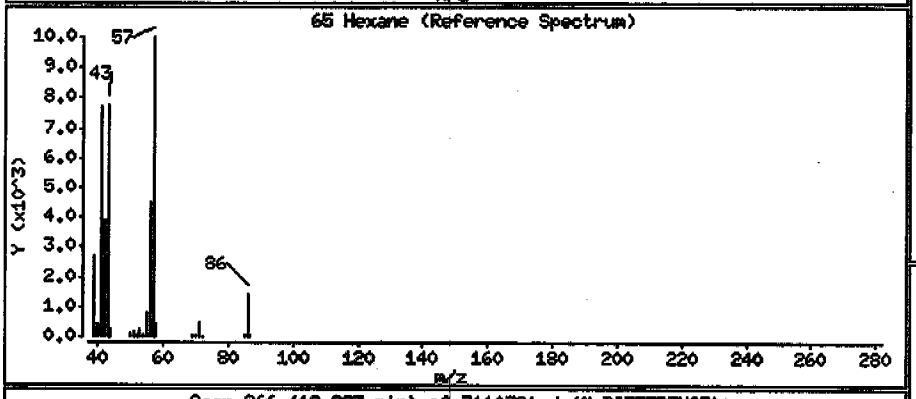
Column diameter: 0.53

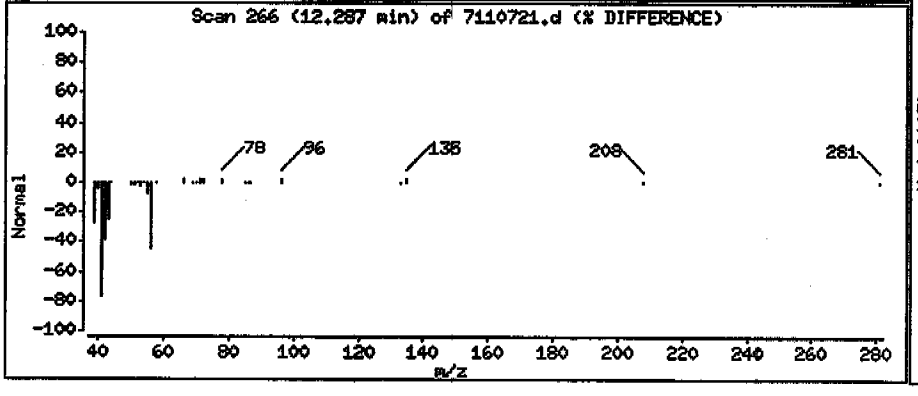
65 Hexane

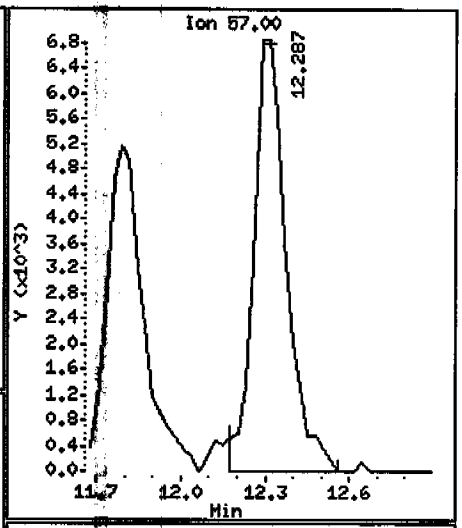
Concentration: 1.920 PPBV

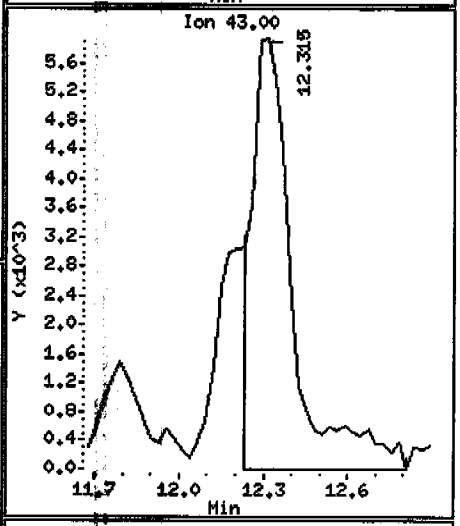


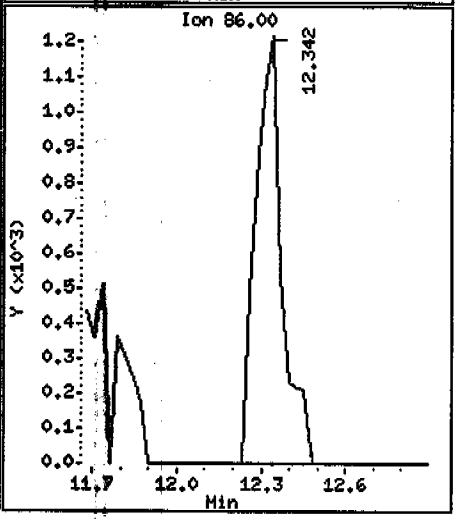












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

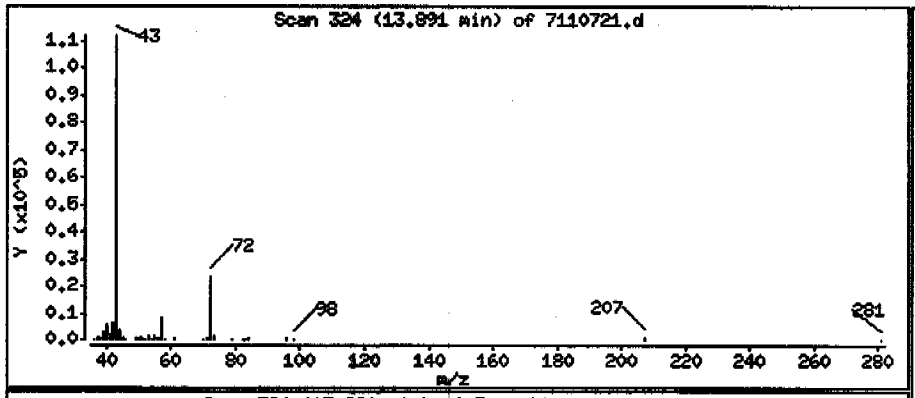
Operator: ab

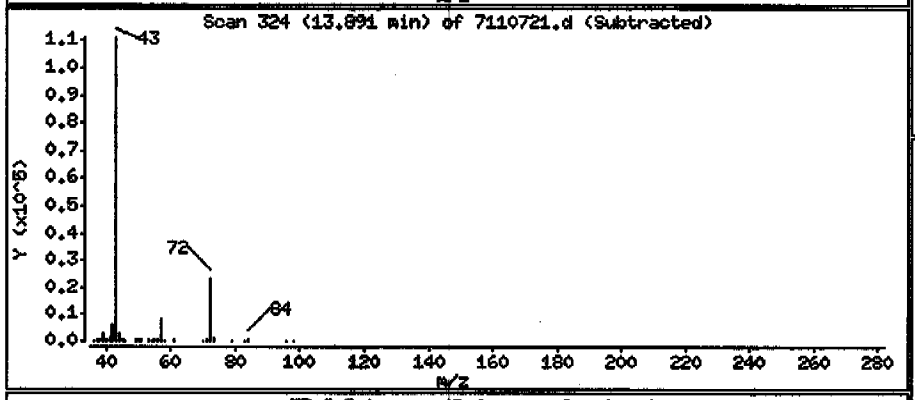
Column phase: RTx-624

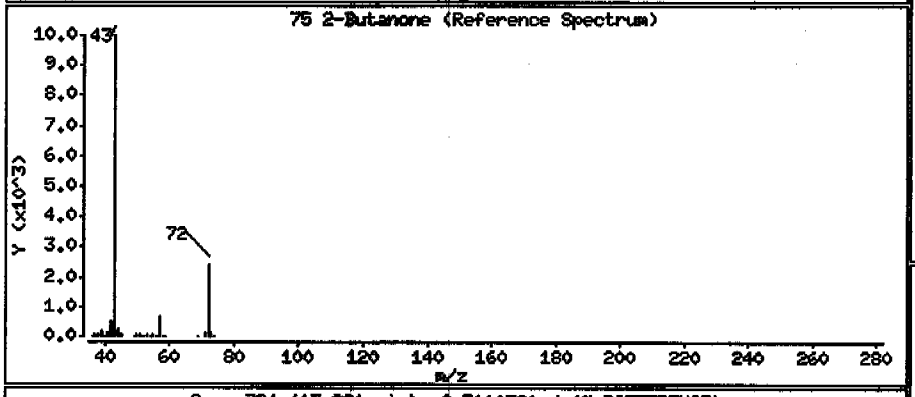
Column diameter: 0.53

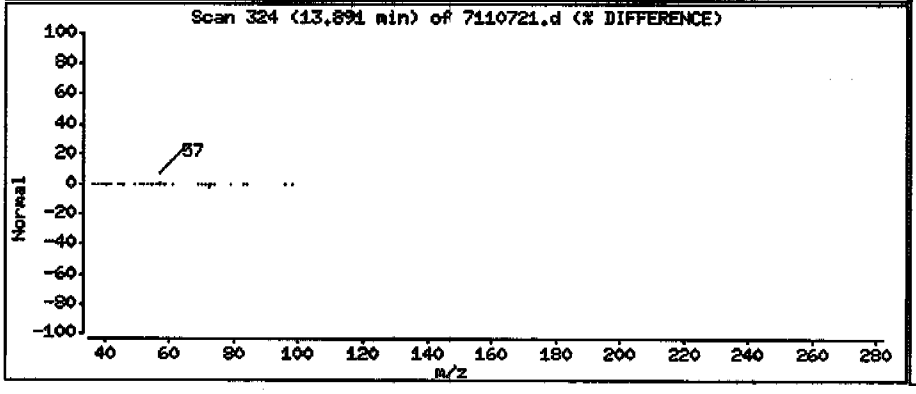
75 2-Butanone

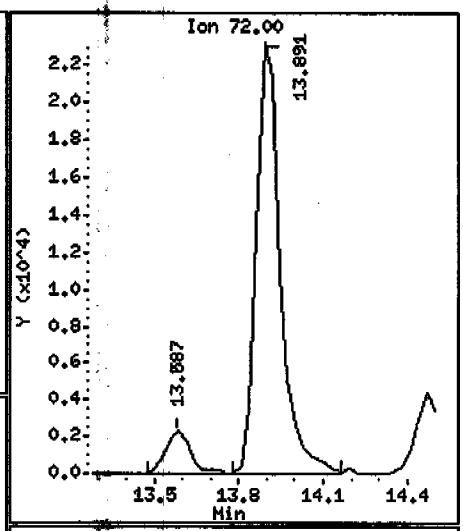
Concentration: 18.646 PPBV

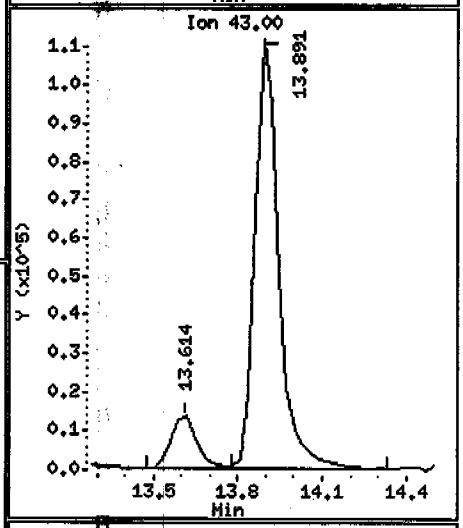


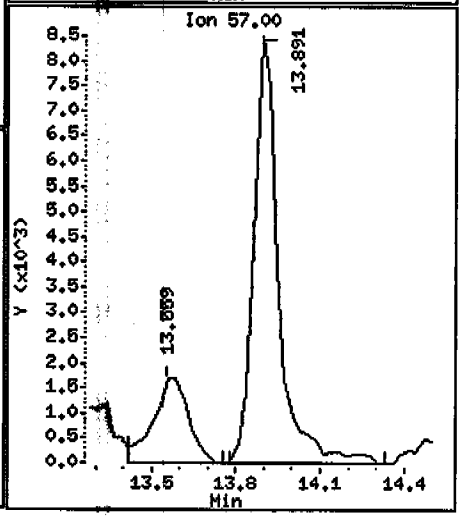












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

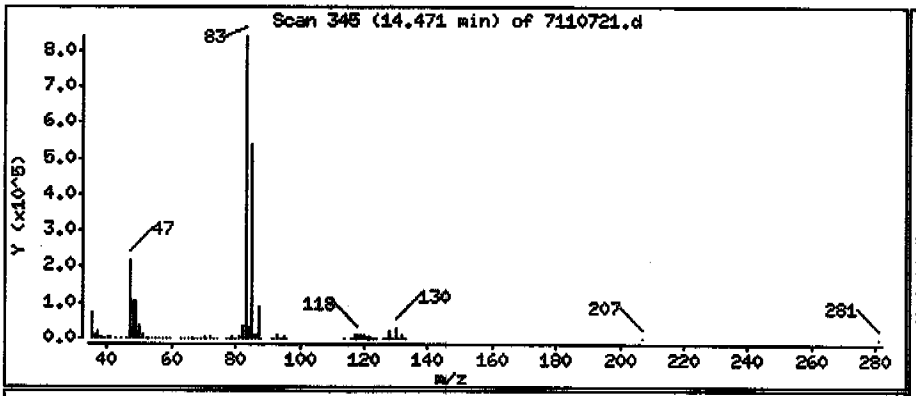
Operator: ab

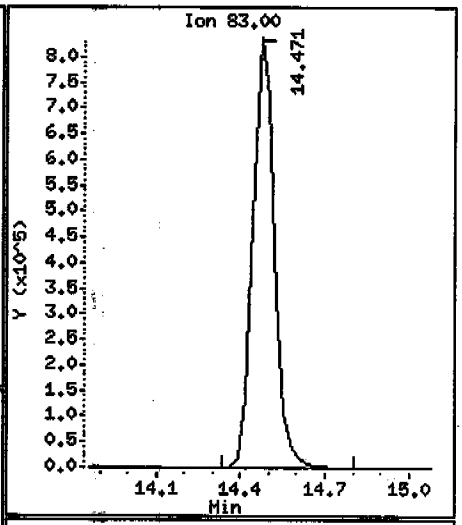
Column phase: RTx-624

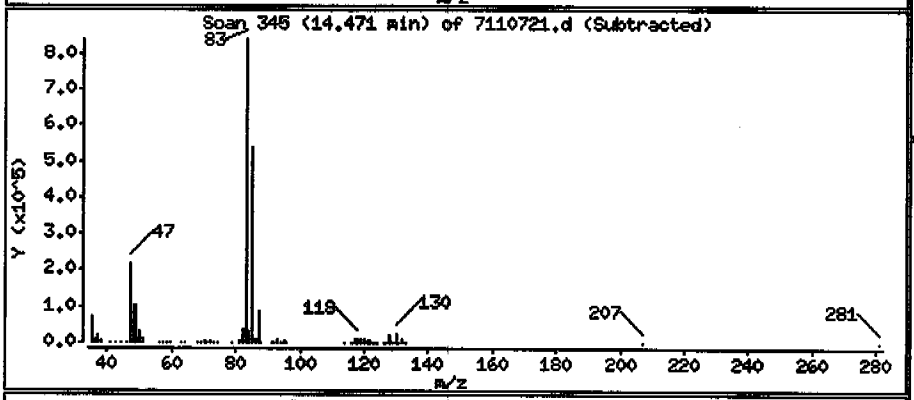
Column diameter: 0.53

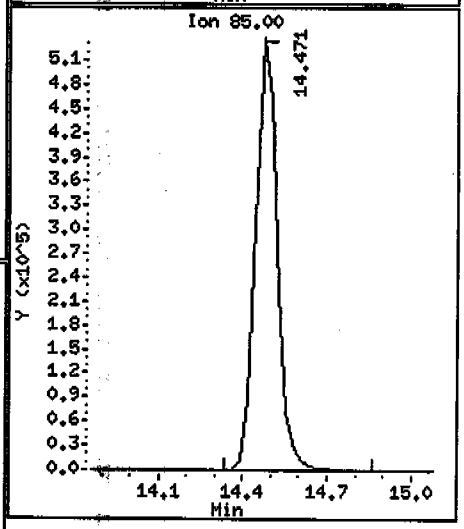
82 Chloroform

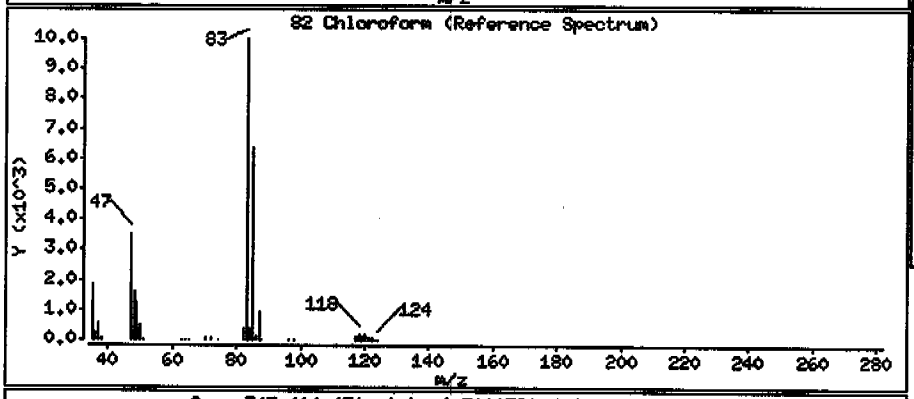
Concentration: 129.47 PPBV

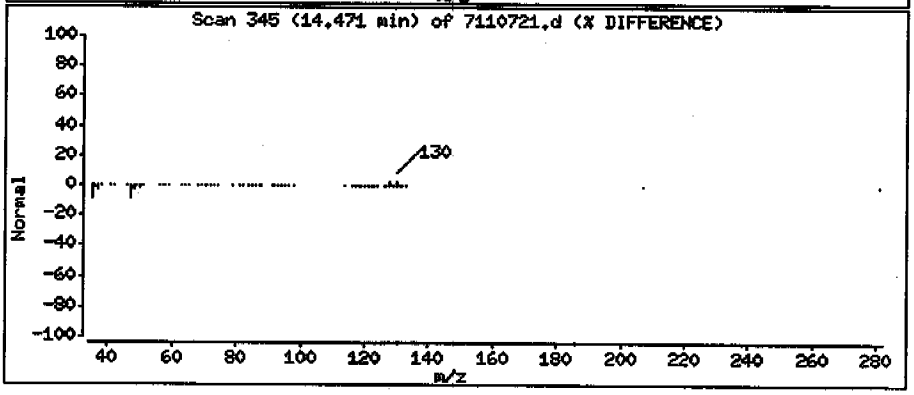












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

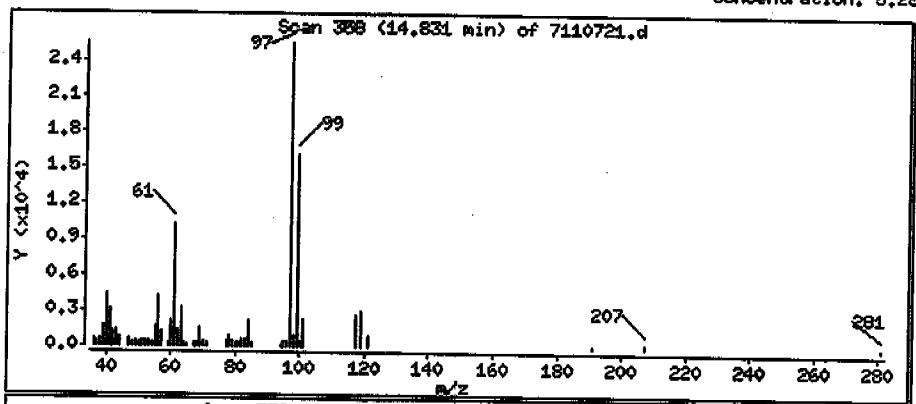
Operator: ab

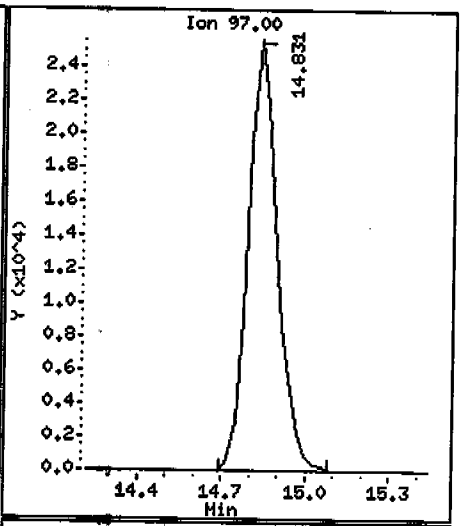
Column phase: RTx-624

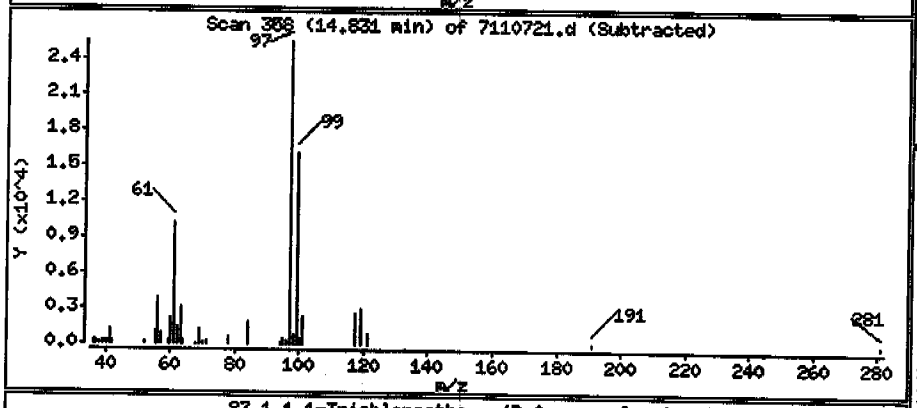
Column diameter: 0.53

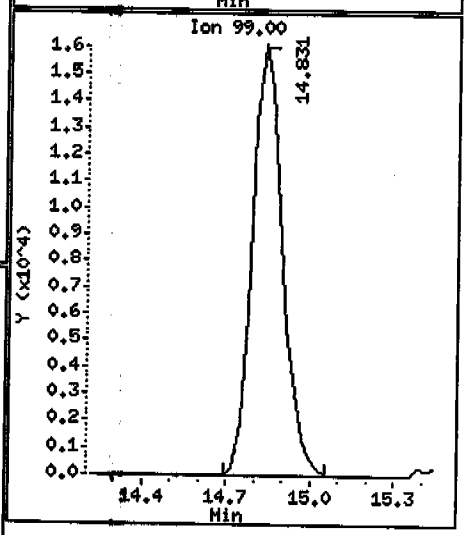
83 1,1,1-Trichloroethane

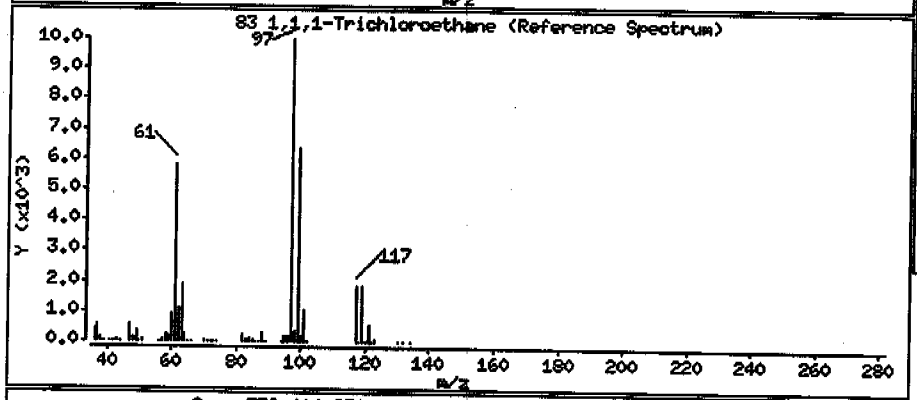
Concentration: 5.281 PPBV

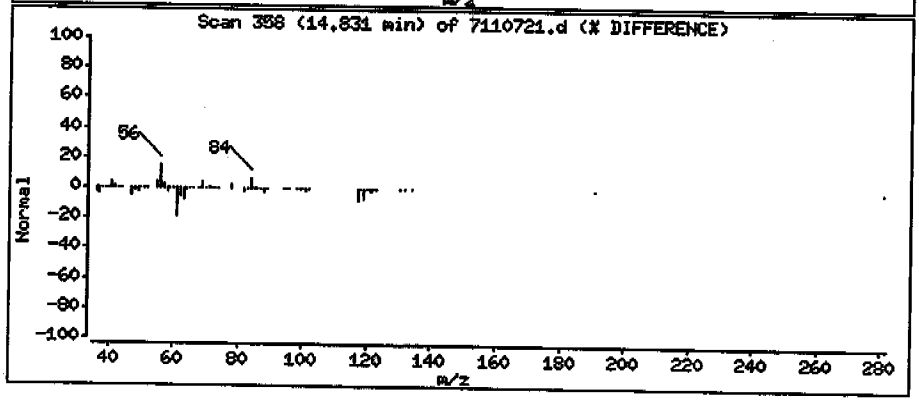












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

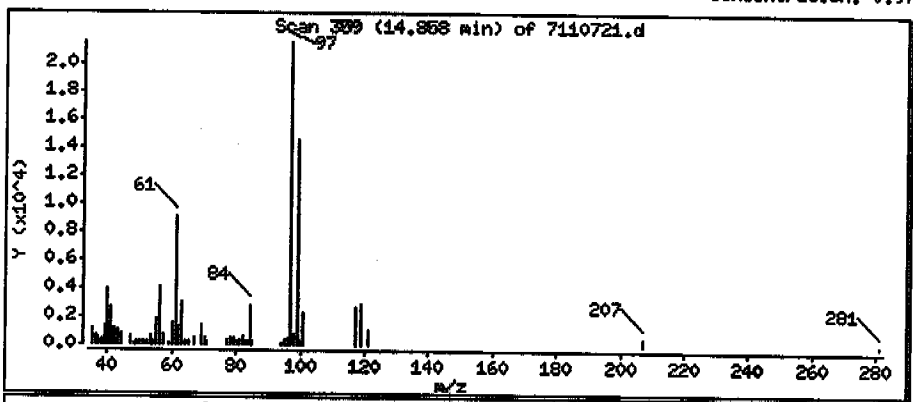
Operator: ab

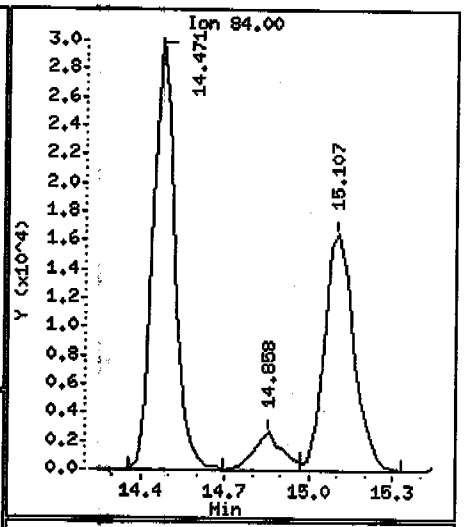
Column phase: RTx-624

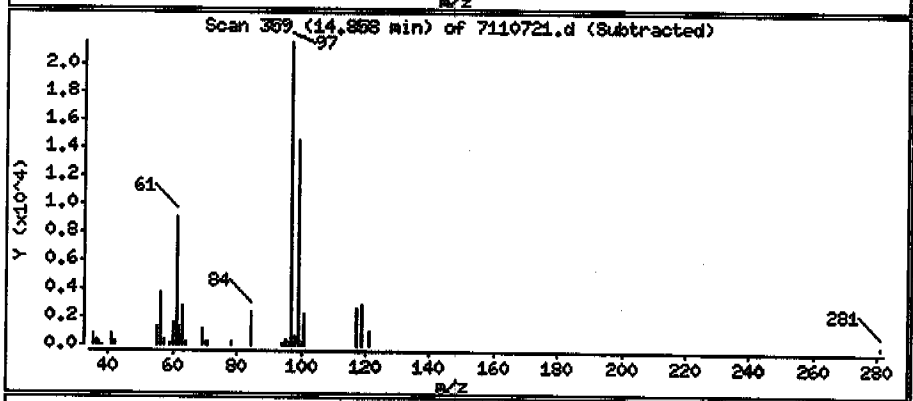
Column diameter: 0.53

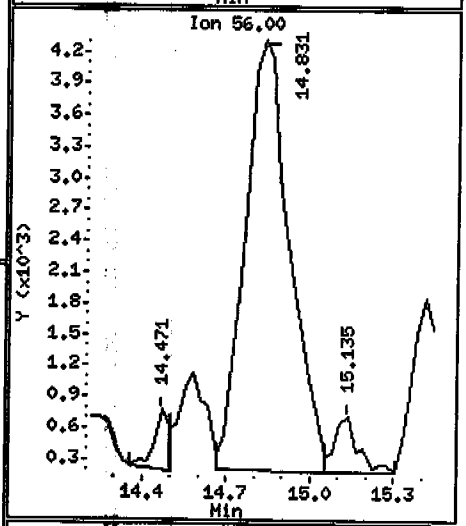
85 Cyclohexane

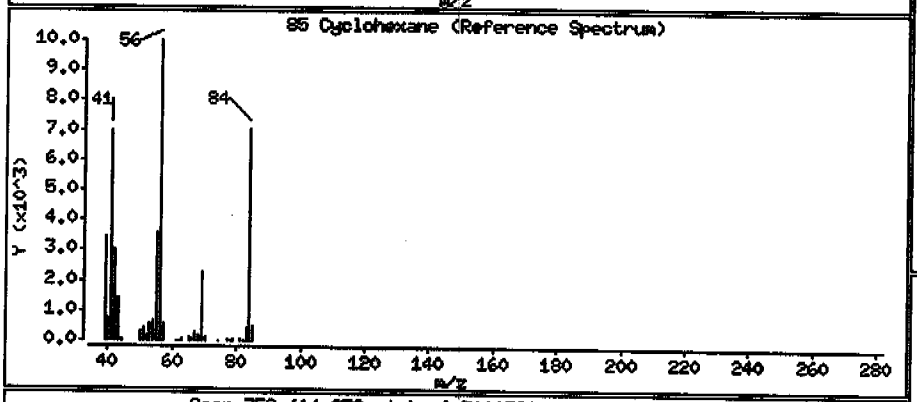
Concentration: 0.9750 PPBV

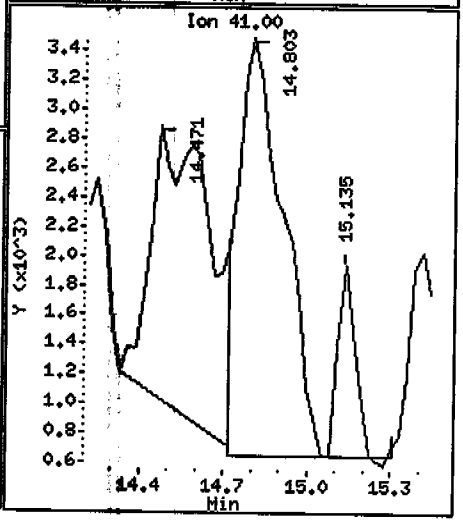


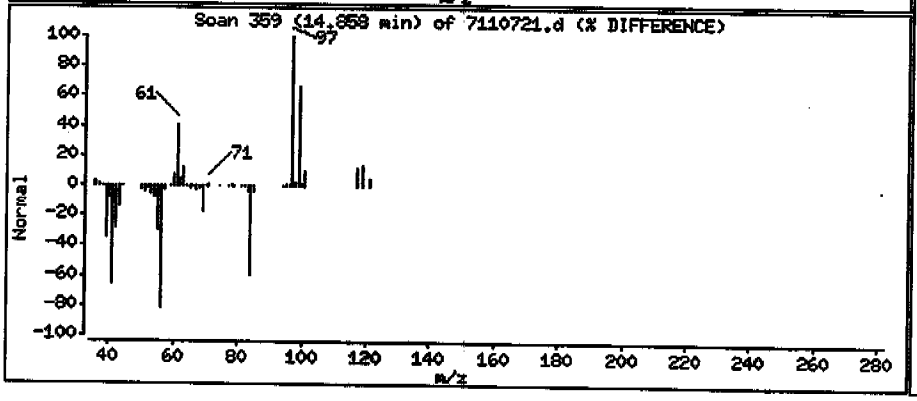












Data File: /ohem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

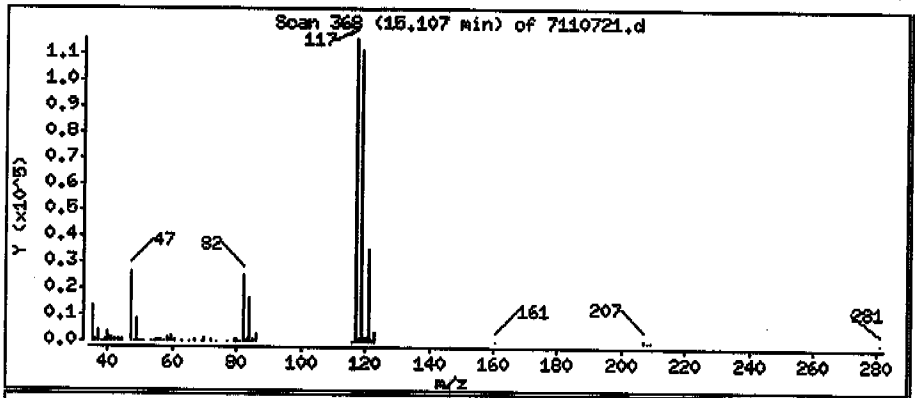
Operator: ab

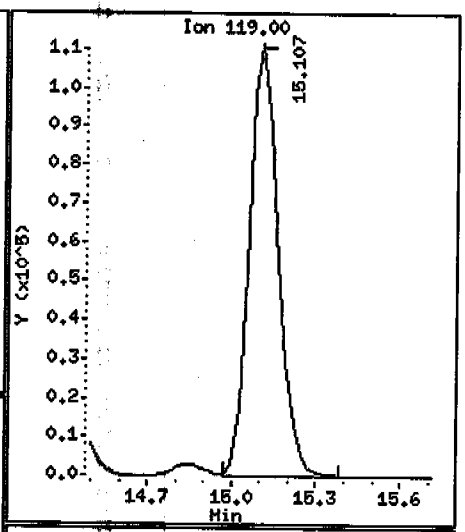
Column phase: RTx-624

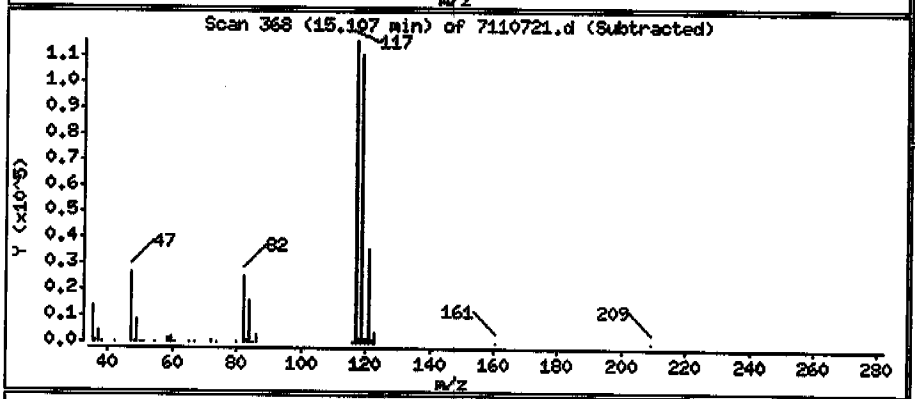
Column diameter: 0.53

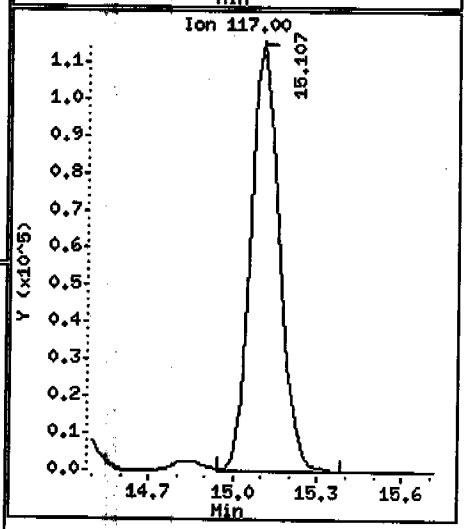
87 Carbon Tetrachloride

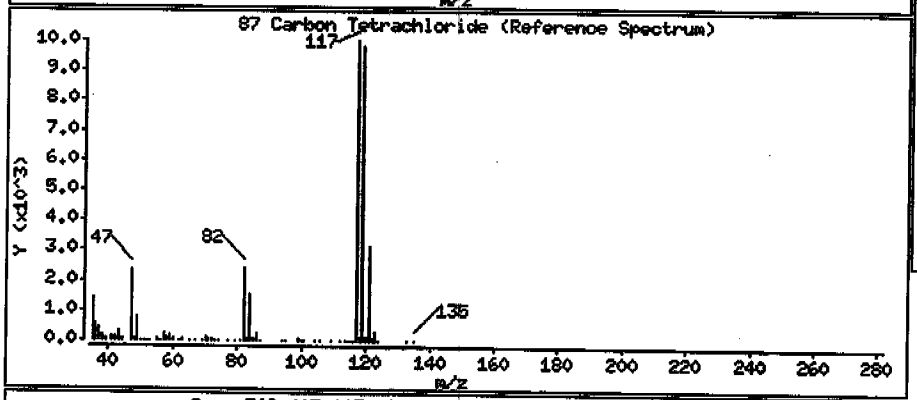
Concentration: 24.187 PPBV

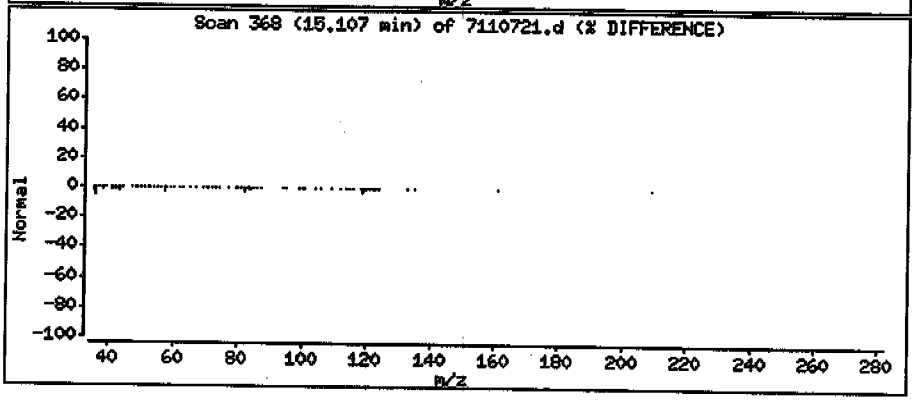












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

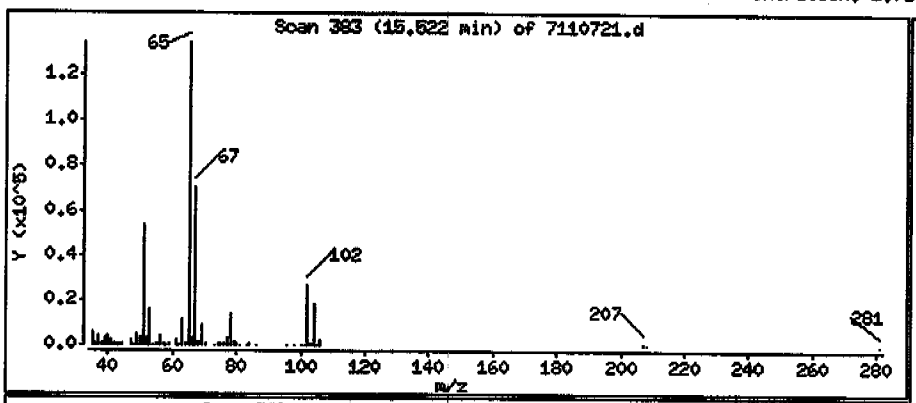
Operator: ab

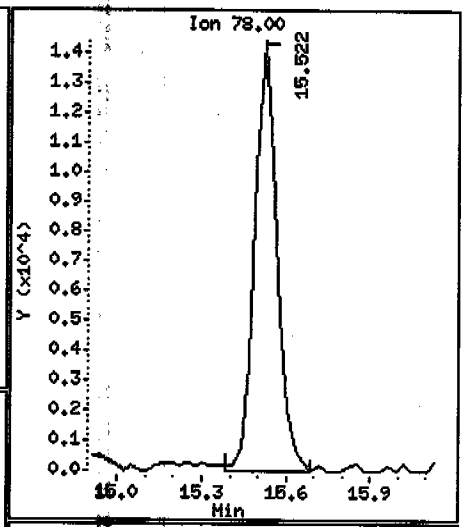
Column phase: RTx-624

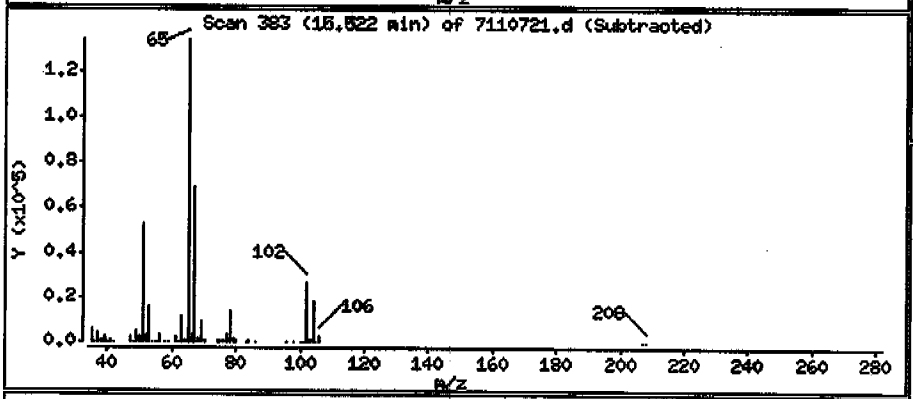
Column diameter: 0.53

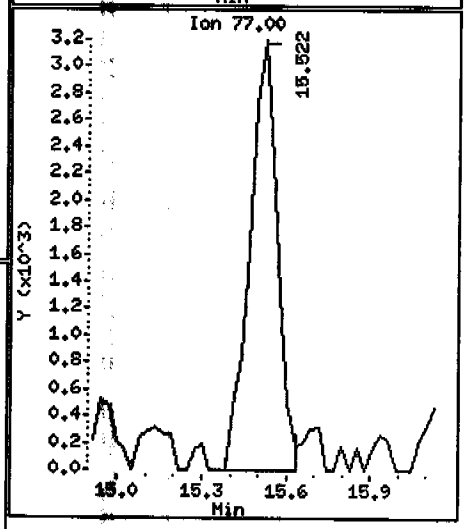
91 Benzene

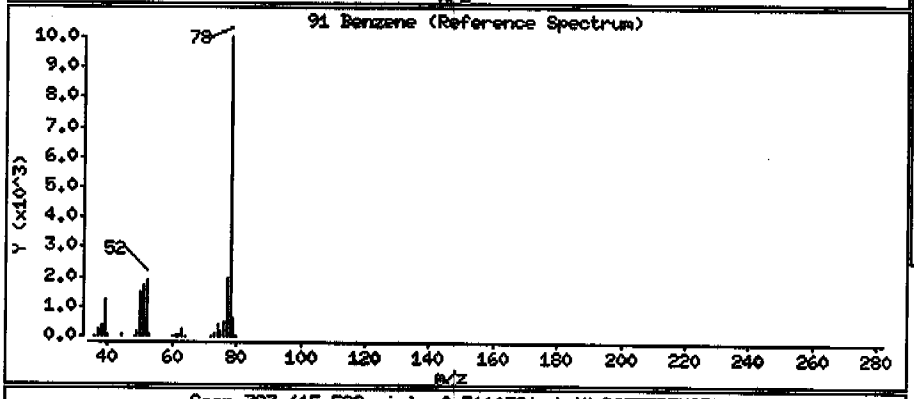
Concentration: 1.715 PPBV

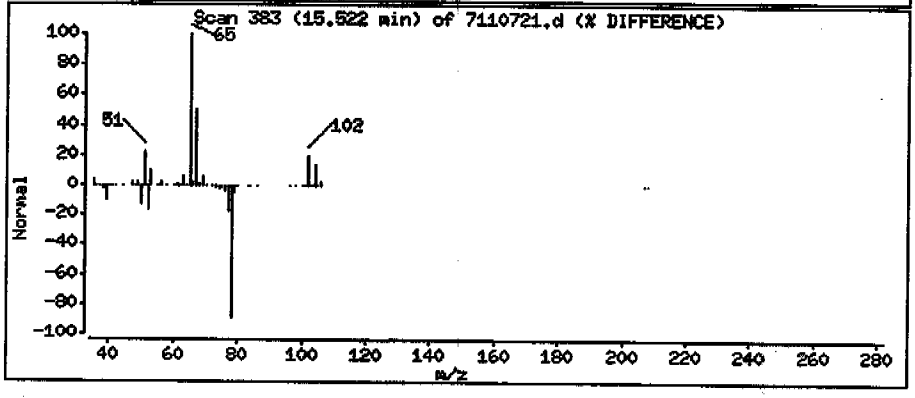












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

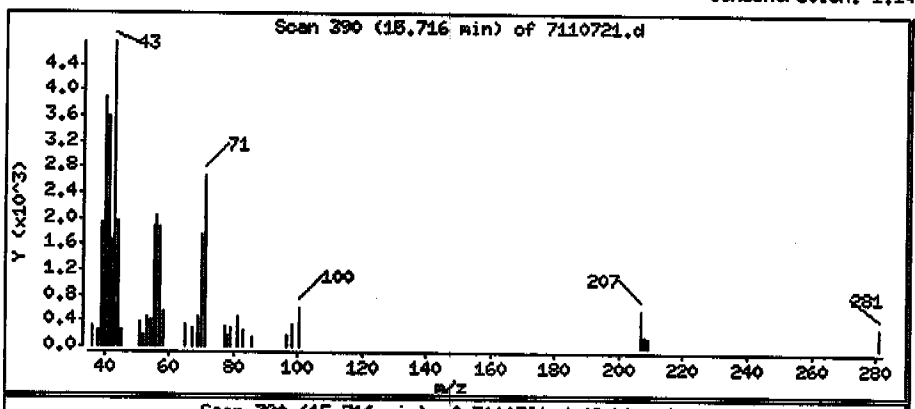
Operator: ab

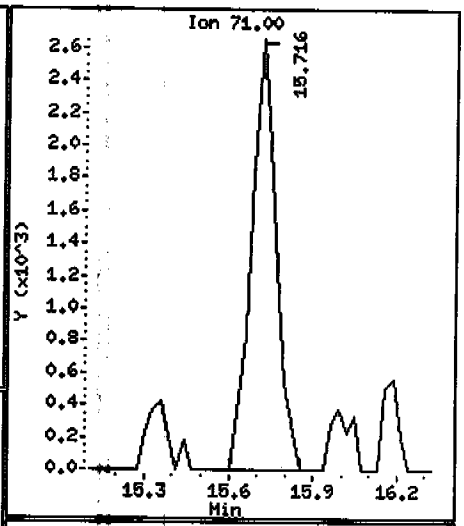
Column phase: RTx-624

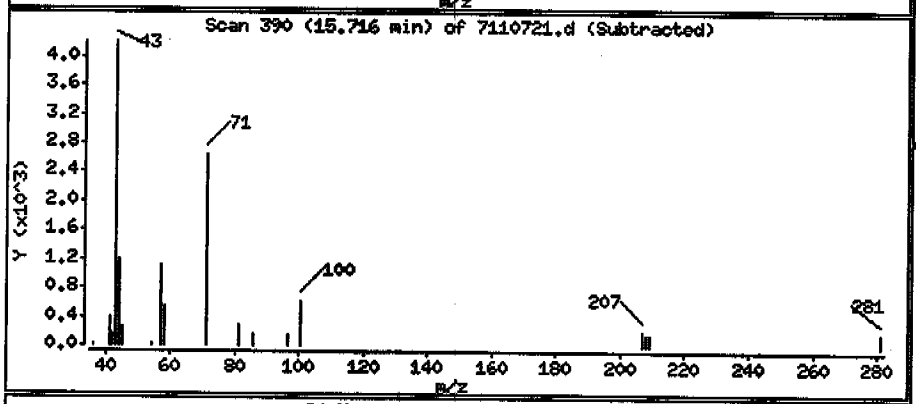
Column diameter: 0.53

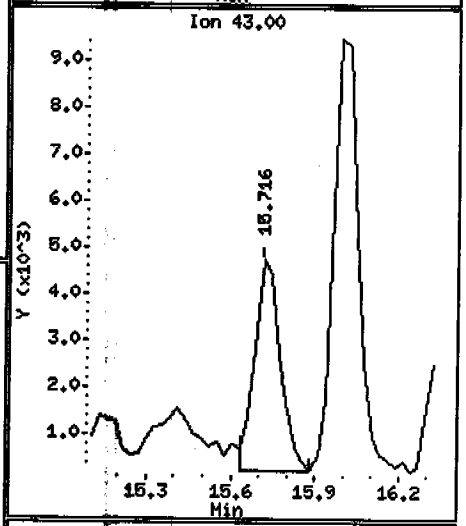
94 Heptane

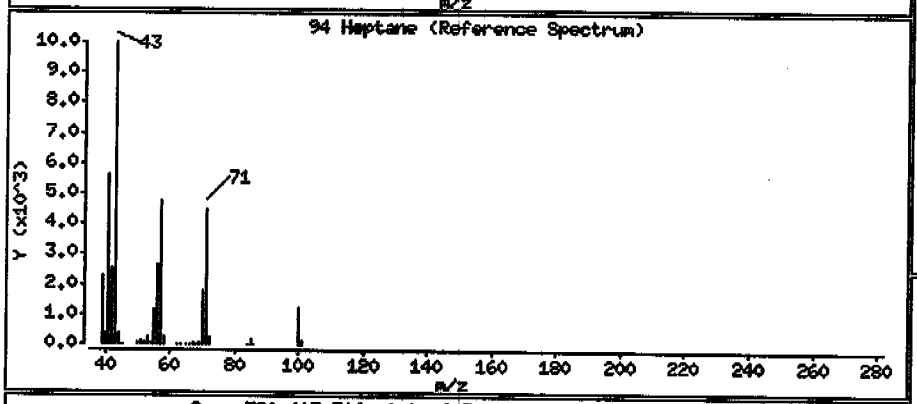
Concentration: 1,141 PPBV

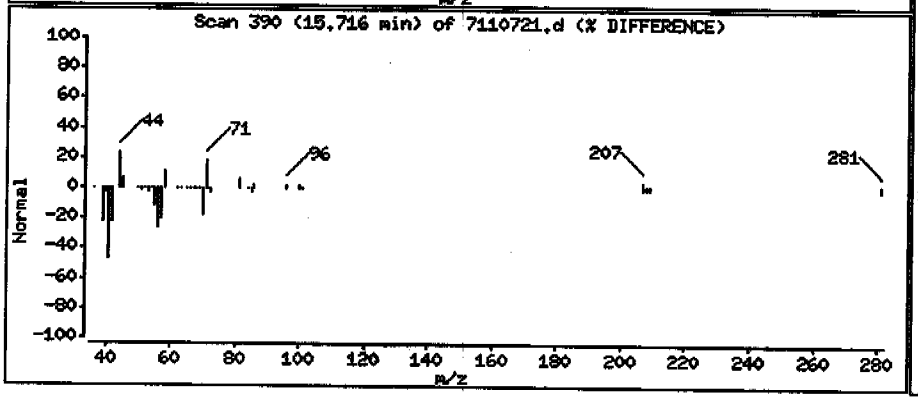


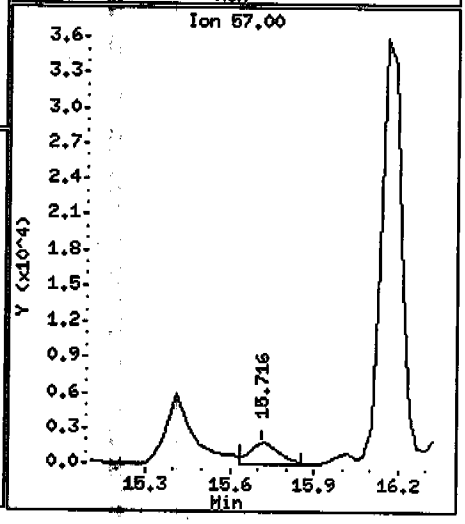












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

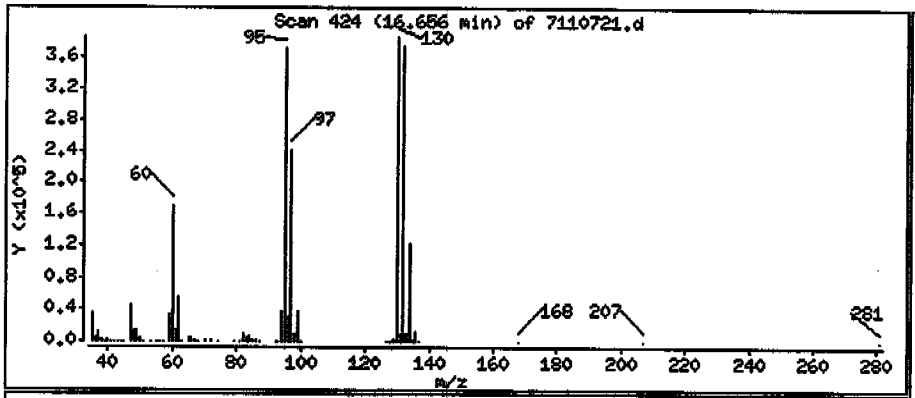
Operator: ab

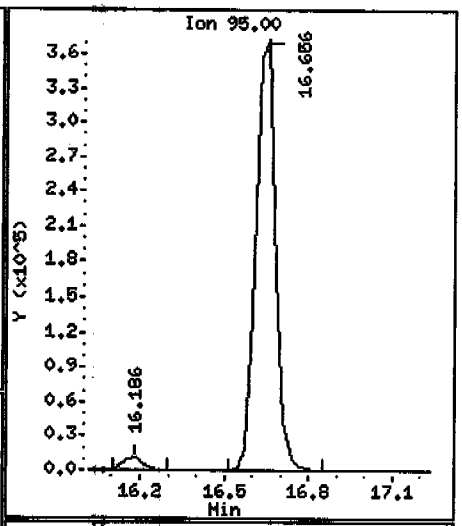
Column phase: RTx-624

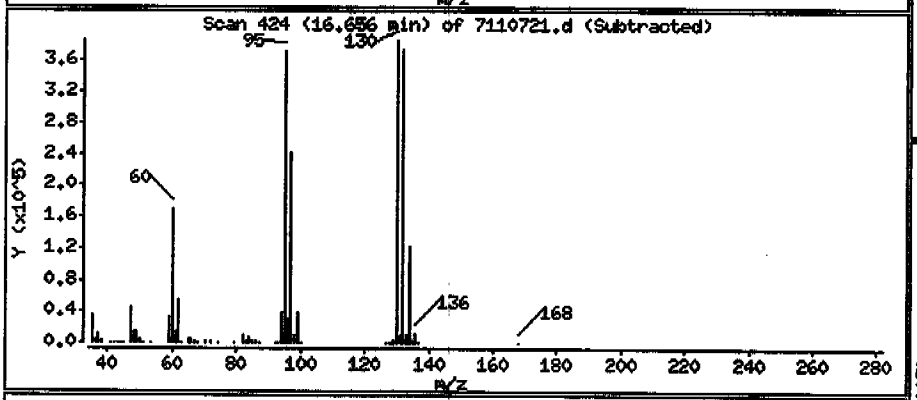
Column diameter: 0.53

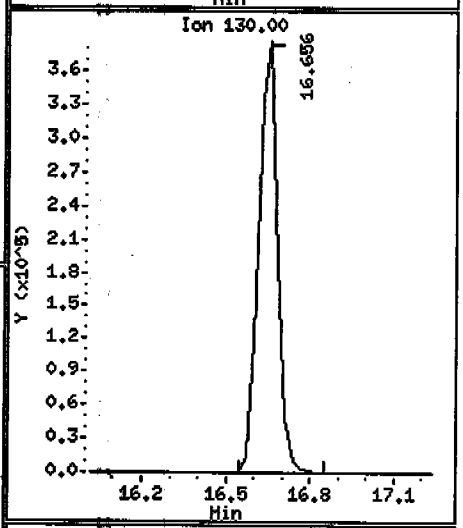
101 Trichloroethene

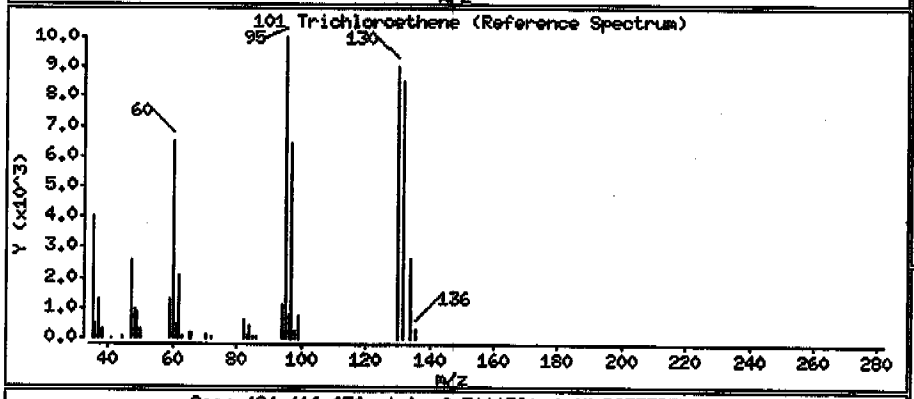
Concentration: 89.341 PPBV

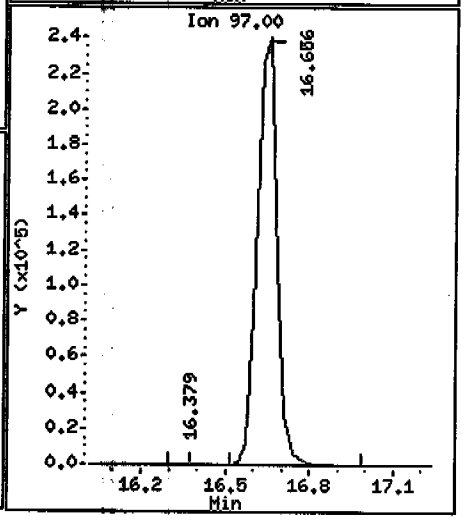


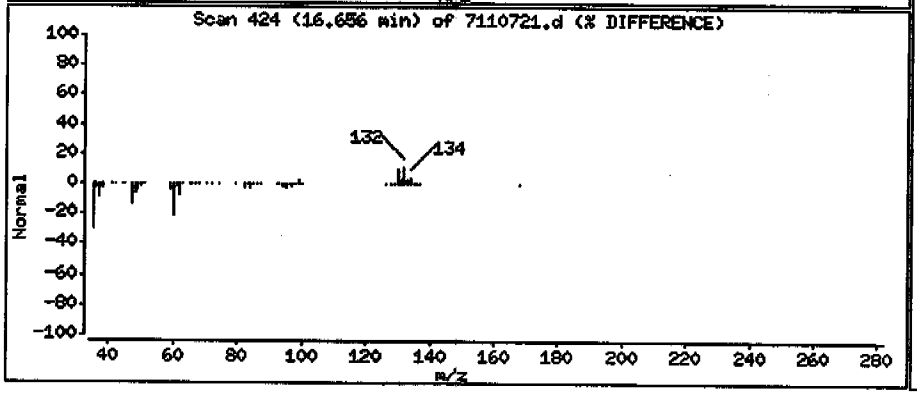












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

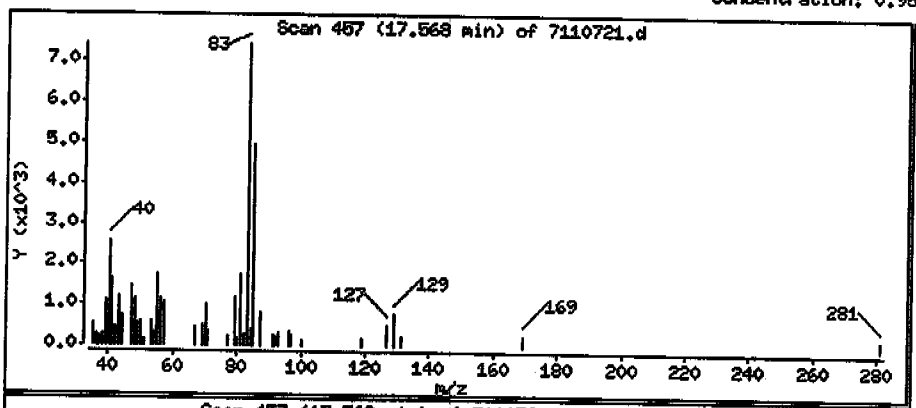
Operator: ab

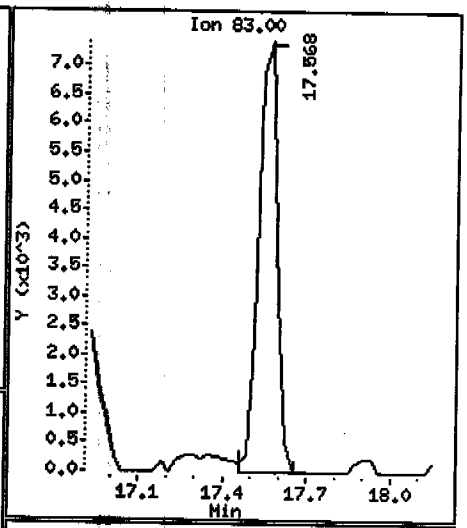
Column phase: RTx-624

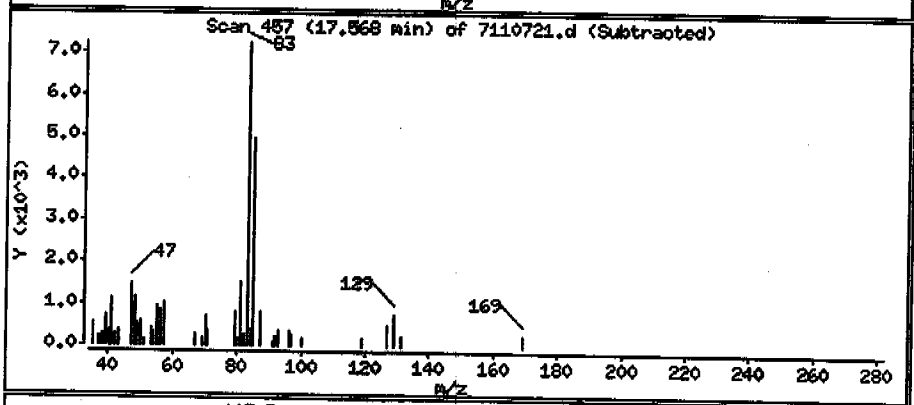
Column diameter: 0.53

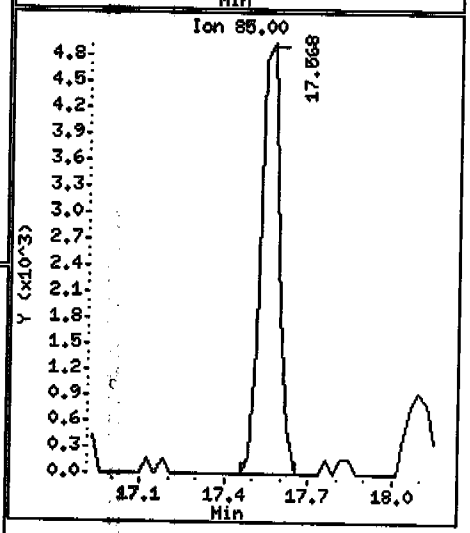
107 Bromodichloromethane

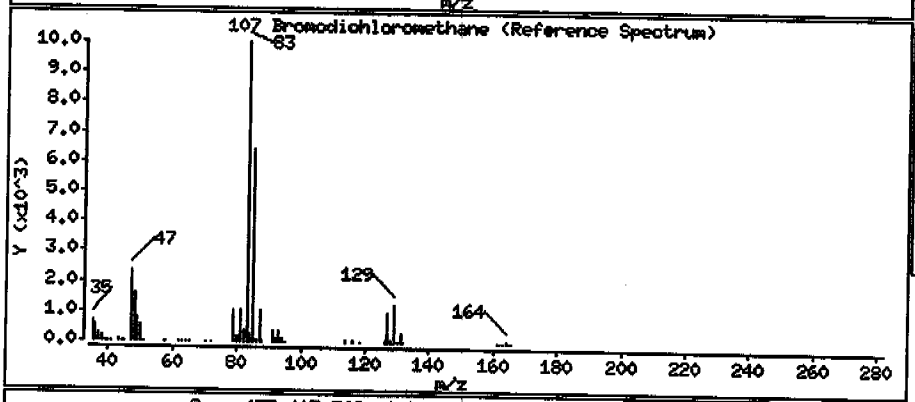
Concentration: 0.9538 PPBV

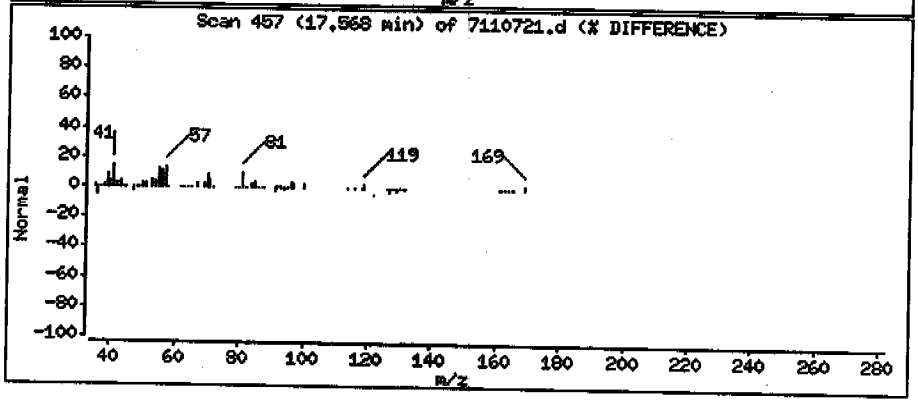












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

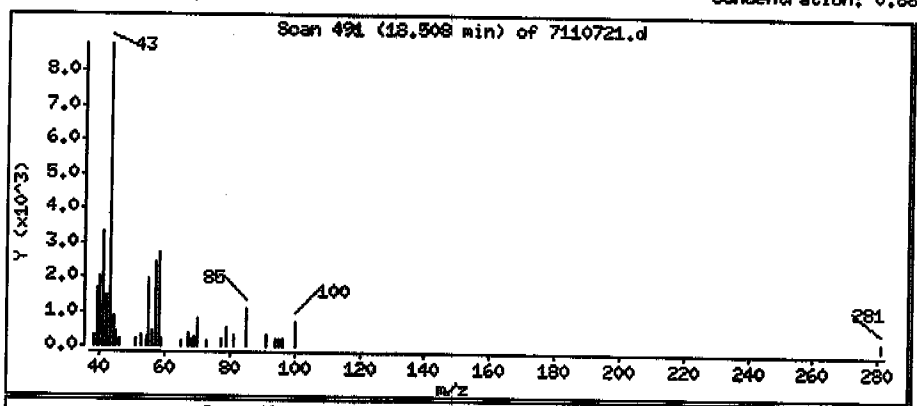
Operator: ab

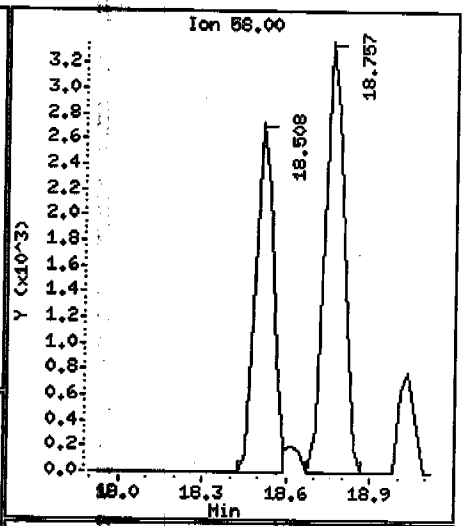
Column phase: RTx-624

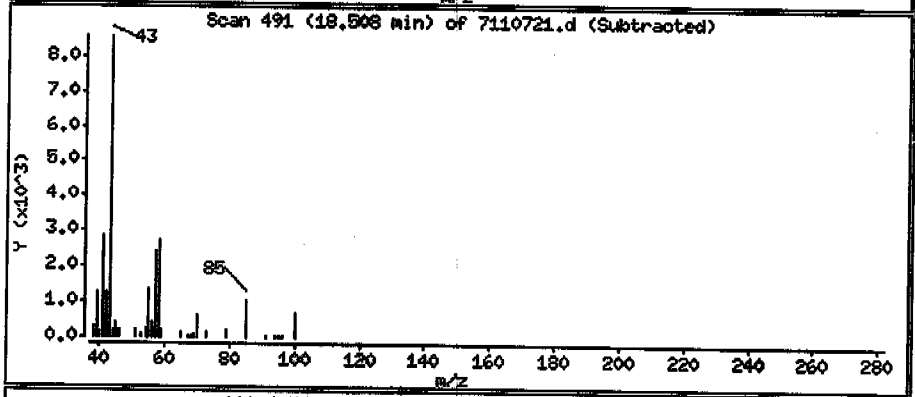
Column diameter: 0.53

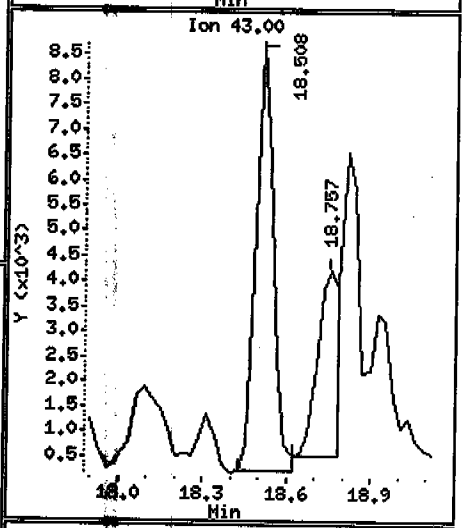
111 4-Methyl-2-pentanone

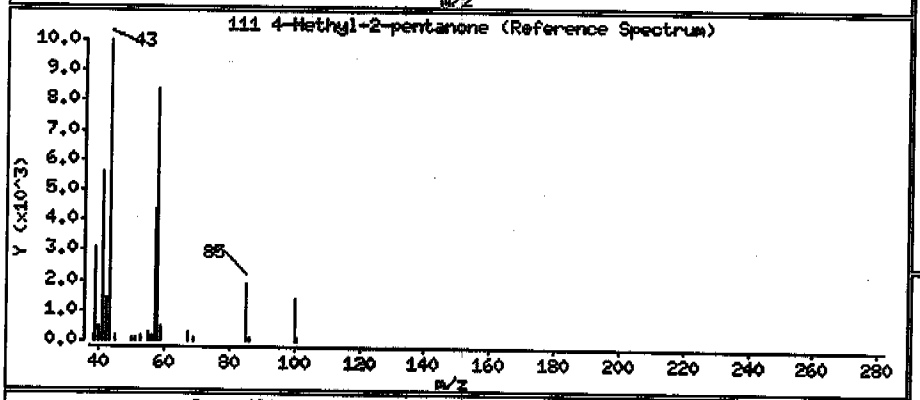
Concentration: 0.8869 PPBV

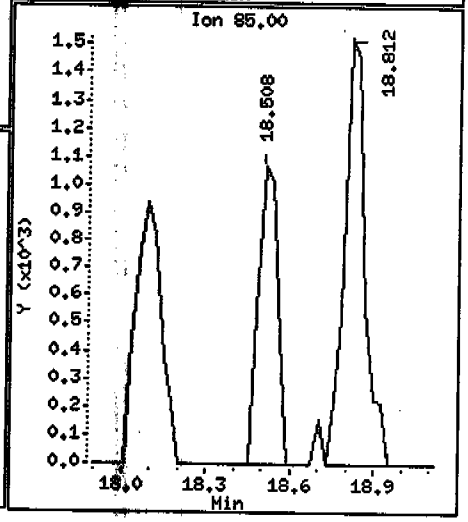


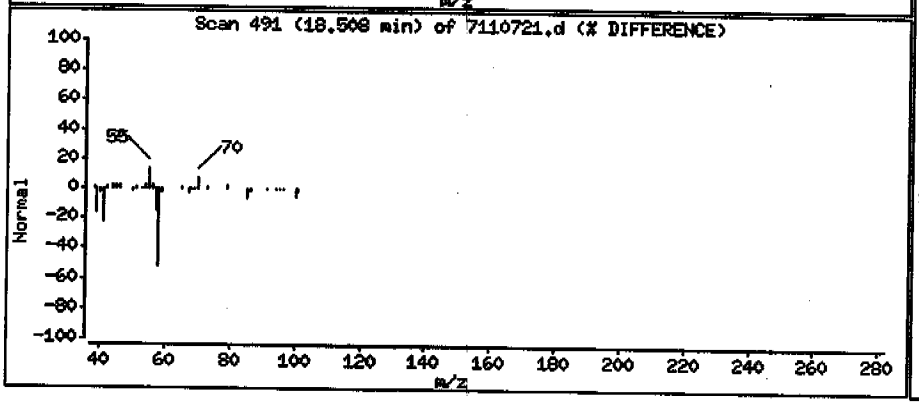












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

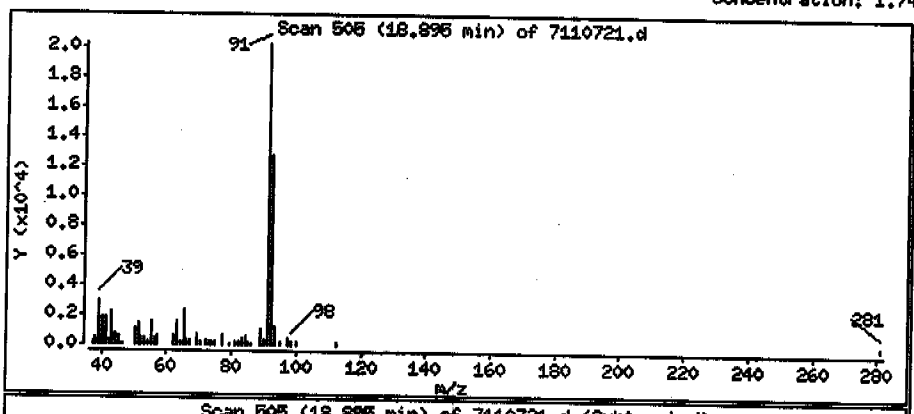
Operator: ab

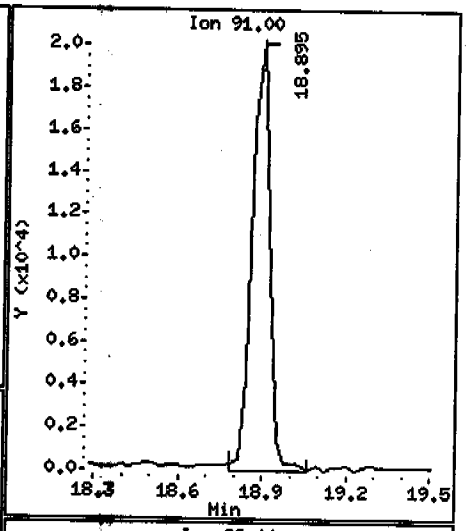
Column phase: RTx-624

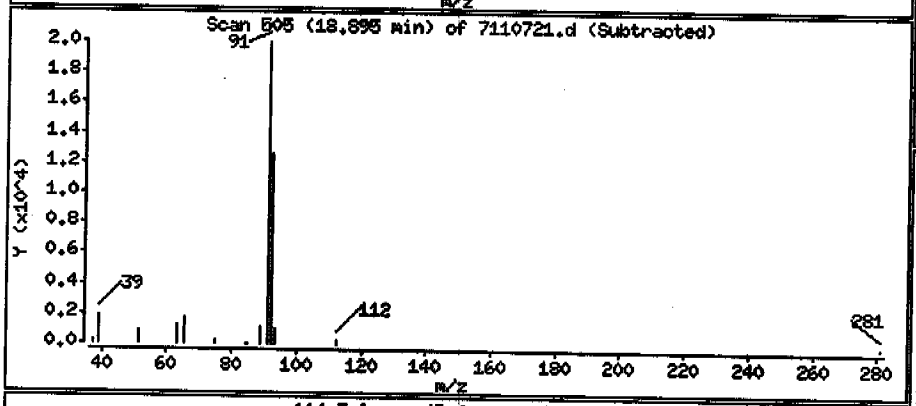
Column diameter: 0.53

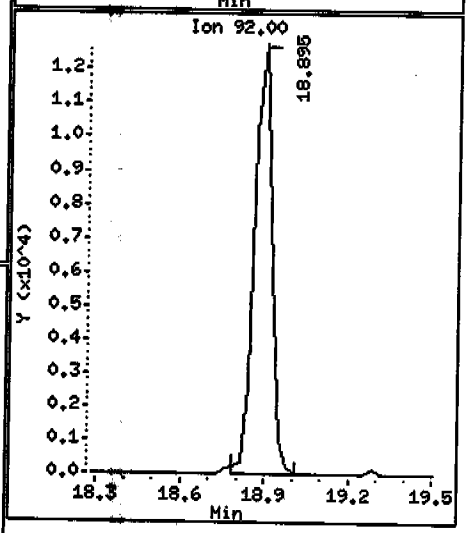
114 Toluene

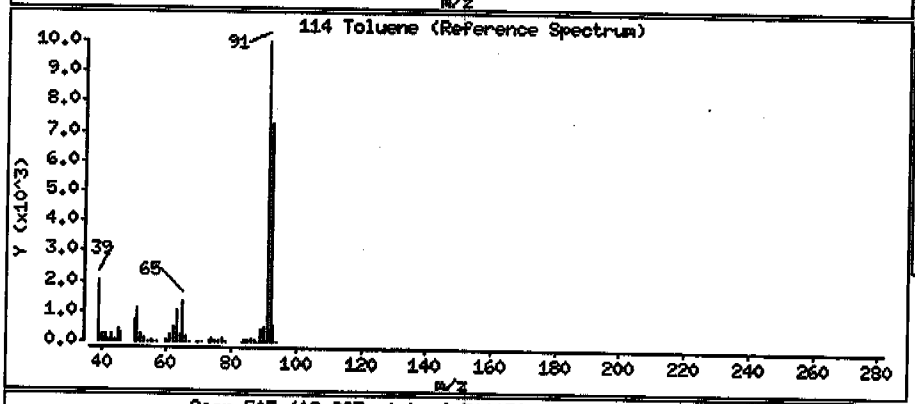
Concentration: 1.741 PPBV

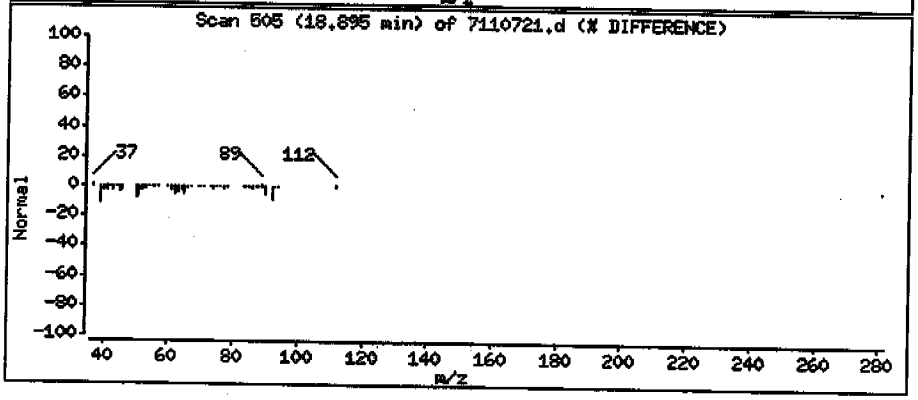












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Sample Info: 200mL #4199

Instrument: msd7.i

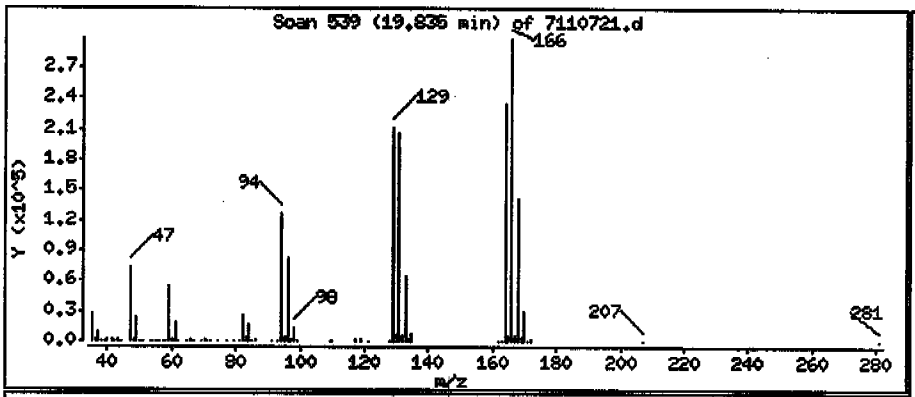
Operator: ab

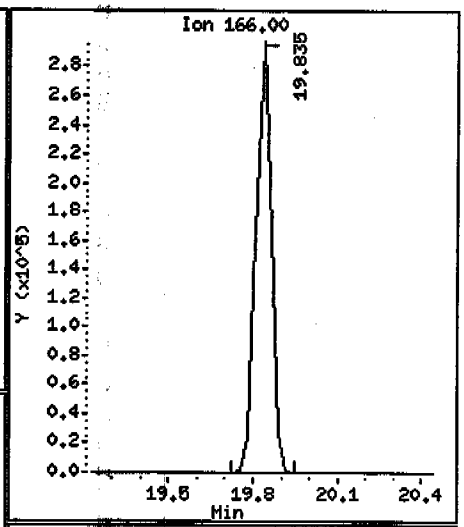
Column phase: RTx-624

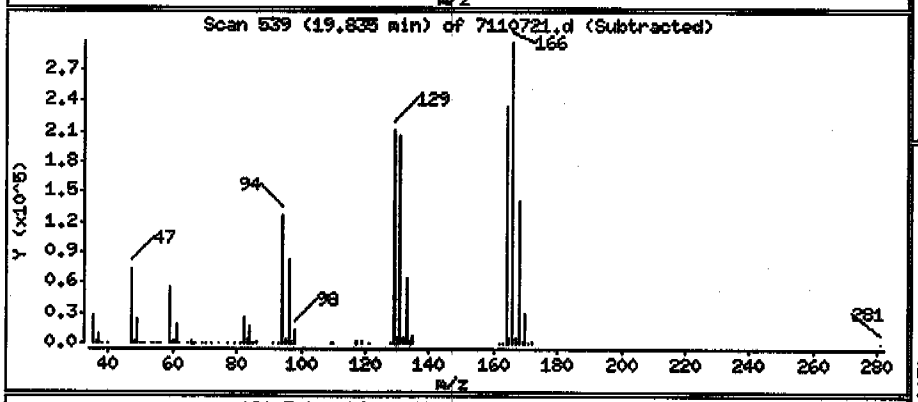
Column diameter: 0.53

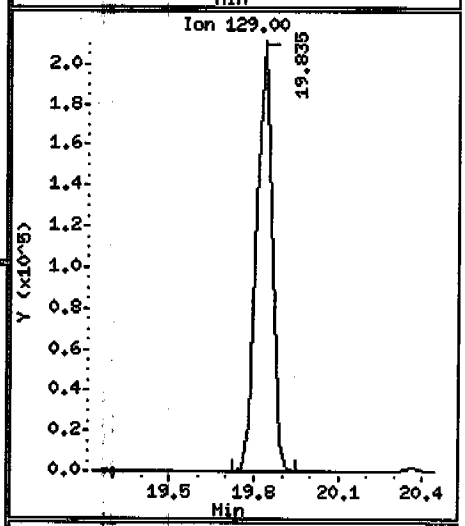
120 Tetrachloroethene

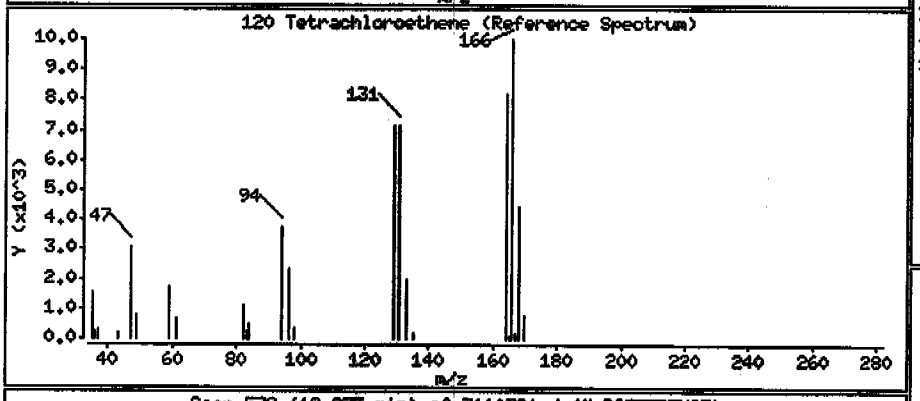
Concentration: 50.731 PPBV

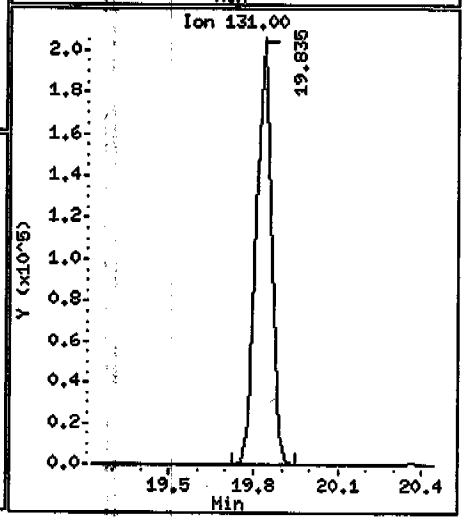


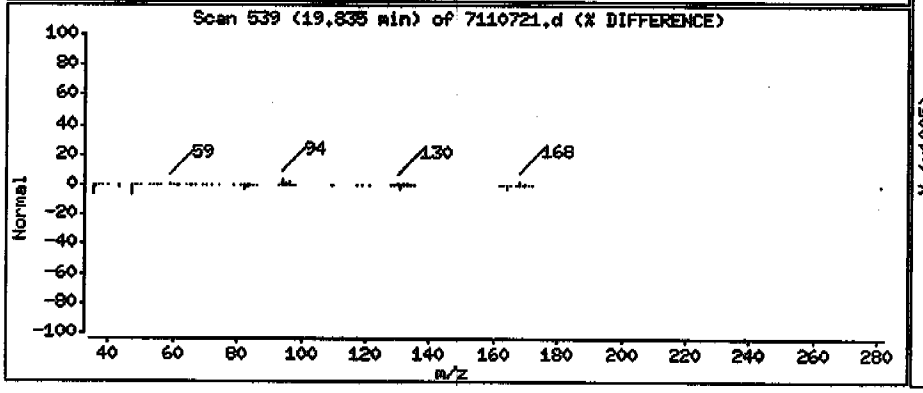












Data File: /chem/msd7.i/7-07nov.b/7110721.d

Date : 08-NOV-2007 01:31

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4199

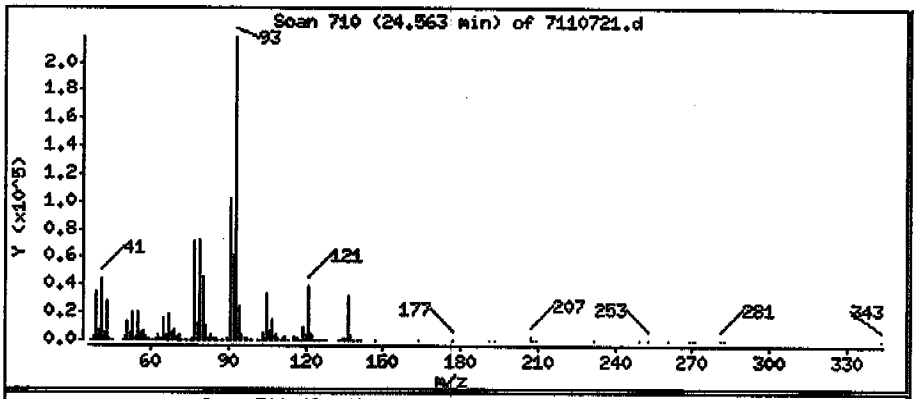
Operator: ab

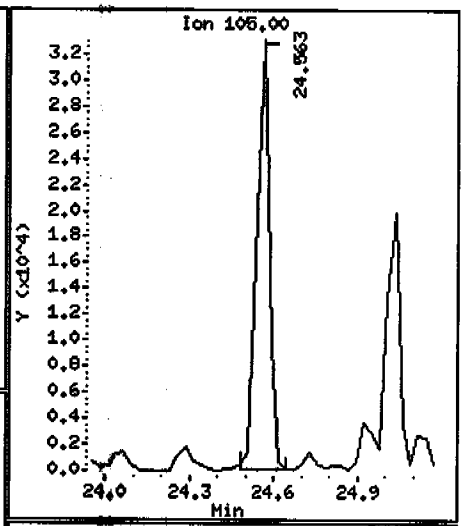
Column phase: RTx-624

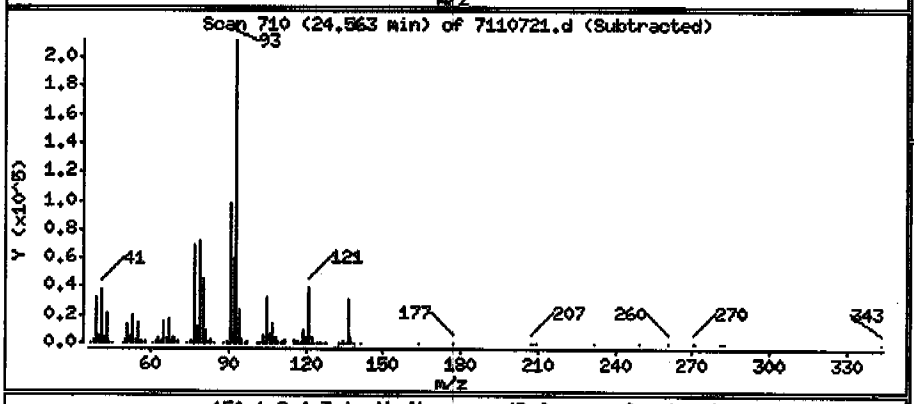
Column diameter: 0.53

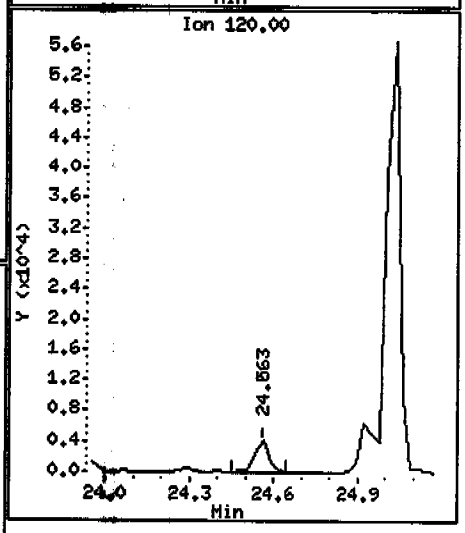
150 1,2,4-Trimethylbenzene

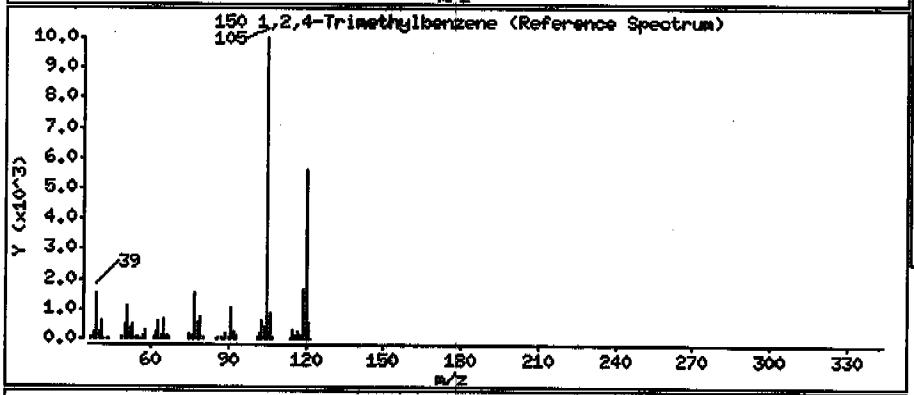
Concentration: 2.287 PPBV

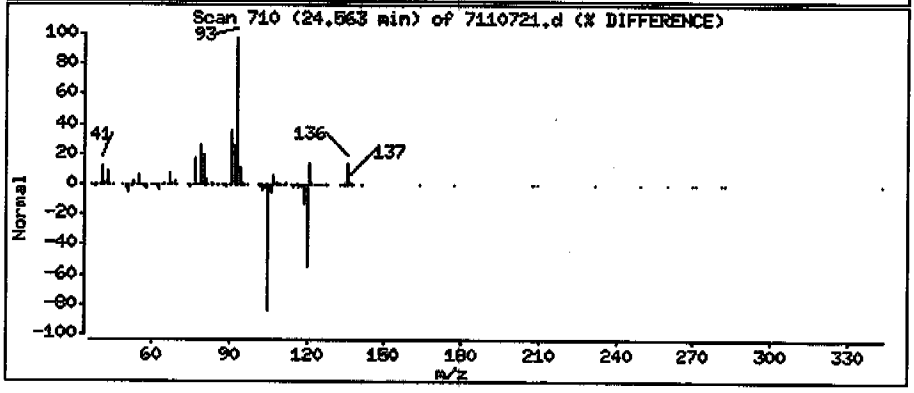












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6804

Lab ID#: 0711101-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.2	4.3	6.0
1,3-Butadiene	0.88	4.7	1.9	10
Freon 113	0.88	0.95	6.7	7.2
Acetone	3.5	21	8.3	49
Carbon Disulfide	0.88	3.7	2.7	12
Methylene Chloride	0.88	1.8	3.0	6.4
Hexane	0.88	2.4	3.1	8.5
2-Butanone (Methyl Ethyl Ketone)	0.88	1.4	2.6	4.3
Chloroform	0.88	170	4.3	840
1,1,1-Trichloroethane	0.88	3.7	4.8	20
Carbon Tetrachloride	0.88	9.9	5.5	62
Benzene	0.88	1.5	2.8	4.8
Heptane	0.88	1.5	3.6	6.2
Trichloroethene	0.88	130	4.7	710
Toluene	0.88	1.8	3.3	6.6
Tetrachloroethene	0.88	200	5.9	1300
m,p-Xylene	0.88	1.3	3.8	5.6
Bromoform	0.88	0.99	9.0	10
1,2,4-Trimethylbenzene	0.88	4.4	4.3	21
Propylene	3.5	81	6.0	140

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6804

Lab ID#: 0711101-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.2	4.3	6.0
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	4.7	1.9	10
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	0.95	6.7	7.2
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	21	8.3	49
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	3.7	2.7	12
Methylene Chloride	0.88	1.8	3.0	6.4
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	2.4	3.1	8.5
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	1.4	2.6	4.3
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	170	4.3	840
1,1,1-Trichloroethane	0.88	3.7	4.8	20
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	9.9	5.5	62
Benzene	0.88	1.5	2.8	4.8
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	1.5	3.6	6.2
Trichloroethene	0.88	130	4.7	710
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	1.8	3.3	6.6
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	200	5.9	1300

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6804

Lab ID#: 0711101-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	1.3	3.8	5.6
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	0.99	9.0	10
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	4.4	4.3	21
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	81	6.0	140

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	100	70-130

0161

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110722.d
Lab Smp Id: 0711101-05A
Inj Date : 08-NOV-2007 02:10
Operator : ab Inst ID: msd7.i
Smp Info : 200mL #25259
Misc Info : 7.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	584784	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	450430			28.66- 128.66	77.03
14.416	14.416 (1.000)	49	1346414			133.49- 233.49	230.24
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.158 (1.000)	114	2032361	25.0000		80.00- 120.00	100.00
16.186	16.158 (1.000)	88	305013			0.00- 65.23	15.01
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1556200	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	825024			4.70- 104.70	53.02
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	723572	23.0323	23.032	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	380900			2.91- 102.91	52.64
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1698814	23.5469	23.547	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	196650			0.00- 61.46	11.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1186764			19.18- 119.18	69.86
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	930466	25.1267	25.127	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	1199787			73.89- 173.89	128.94
23.347	23.347 (1.093)	176	906882			48.20- 148.20	97.47
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1160846	46.0575	80.600	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	763090			21.19- 121.19	65.74
5.617	5.617 (0.390)	39	948137			24.83- 124.83	81.68
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.786	5.758 (0.401)	85	63686	0.68916	1.206	80.00- 120.00	100.00
5.786	5.758 (0.401)	87	20654			0.00- 83.07	32.43
22 1,3-Butadiene					CAS #: 106-99-0		
6.969	6.940 (0.483)	54	72366	2.66273	4.660	80.00- 120.00	100.00
6.743	6.940 (0.468)	39	541205			55.97- 155.97	747.87
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	25920	0.54057	0.9460	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	18225			13.12- 113.12	70.31
10.213	10.186 (0.708)	101	33574			67.28- 167.28	129.53
45 Acetone					CAS #: 67-64-1		
10.517	10.490 (0.730)	58	186970	11.8555	20.747	80.00- 120.00	100.00
10.517	10.490 (0.730)	43	608434			247.10- 347.10	325.42
47 Carbon Disulfide					CAS #: 75-15-0		
10.905	10.877 (0.756)	76	205780	2.11390	3.699	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	39279	1.04710	1.832	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	39298			19.98- 119.98	100.05
11.485	11.457 (0.797)	51	14934			0.00- 80.85	38.02
65 Hexane					CAS #: 110-54-3		
12.315	12.287 (0.854)	57	68501	1.38470	2.423	80.00- 120.00	100.00
12.315	12.287 (0.854)	43	54017			17.84- 117.84	78.86
12.315	12.287 (0.854)	86	9264			0.00- 65.07	13.52
75 2-Butanone					CAS #: 78-93-3		
13.918	13.891 (0.965)	72	10460	0.82586	1.445	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	64700			412.48- 512.48	618.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
75 2-Butanone (continued)							
13.891	13.891 (0.964)	57	4208			0.00- 86.57	40.23
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	5800567	98.5167	172.40	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	3778481			15.69- 115.69	65.14
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	126832	2.13910	3.743	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	81907			14.03- 114.03	64.58
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	313492	5.64039	9.871	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	326613			53.14- 153.14	104.19
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.959)	78	69951	0.86625	1.516	80.00- 120.00	100.00
15.522	15.522 (0.959)	77	21464			0.00- 71.87	30.68
94 Heptane					CAS #: 142-82-5		
15.716	15.715 (0.971)	71	21591	0.86939	1.521	80.00- 120.00	100.00
15.743	15.715 (0.973)	43	34389			158.53- 258.53	159.27
15.716	15.715 (0.971)	57	16726			59.34- 159.34	77.47
101 Trichloroethene					CAS #: 79-01-6		
16.656	16.628 (1.029)	95	2718341	75.7825	132.62	80.00- 120.00	100.00
16.656	16.628 (1.029)	130	2697545			51.11- 151.11	99.23
16.656	16.628 (1.029)	97	1762549			15.04- 115.04	64.84
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	88567	1.00135	1.752	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	55310			12.90- 112.90	62.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	4742717	113.449	198.53	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	3446107			21.07- 121.07	72.66
19.835	19.835 (0.929)	131	3305076			18.33- 118.33	69.69
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	32907	0.73157	1.280	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	61104			145.05- 245.05	185.69
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	28266	0.56363	0.9864	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	15249			1.15- 101.15	53.95

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.563	24.563	(1.150)	105	207007	2.48736	4.353	80.00- 120.00	100.00
24.563	24.563	(1.150)	120	27629			0.00- 98.95	13.35

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110722.d
Lab Smp Id: 0711101-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 7.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	584784	-15.91
97 1,4-Difluorobenze	2265681	1359409	3171953	2032361	-10.30
126 Chlorobenzene-d5	1765821	1059493	2472149	1556200	-11.87

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0711101-05A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 7.0"Hg ->5psi

Client SDG: 7-07nov
Fraction: VOA

Operator: ab
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.032	92.13	70-130
$ 113 Toluene-d8	25.000	23.547	94.19	70-130
$ 137 Bromofluorobenzene	25.000	25.127	100.51	70-130

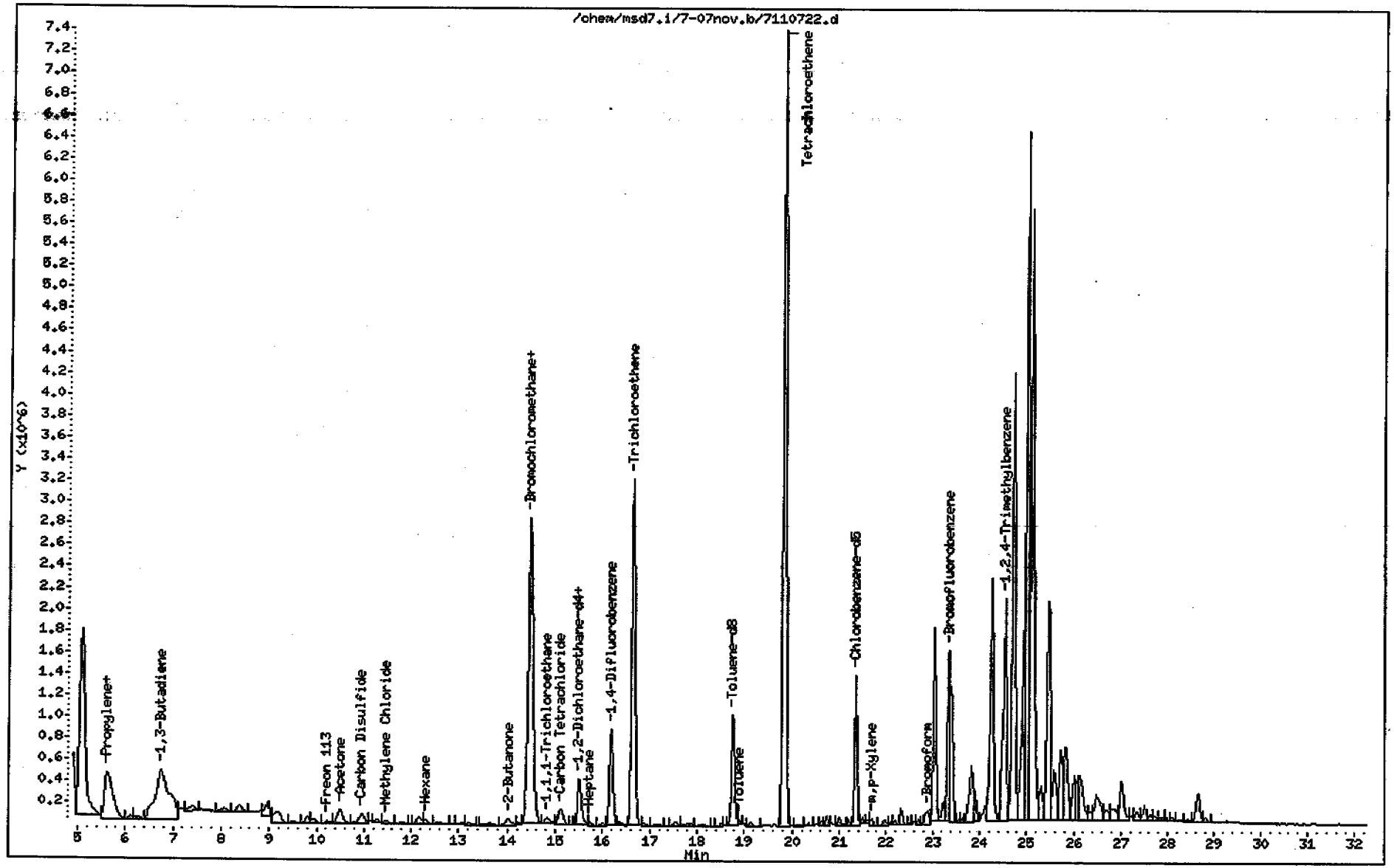
Data File: /chem/msd7.i/7-07nov.b/7110722.d
Date : 08-NOV-2007 02:10
Client ID:
Sample Info: 200mL #25289

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0168



Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

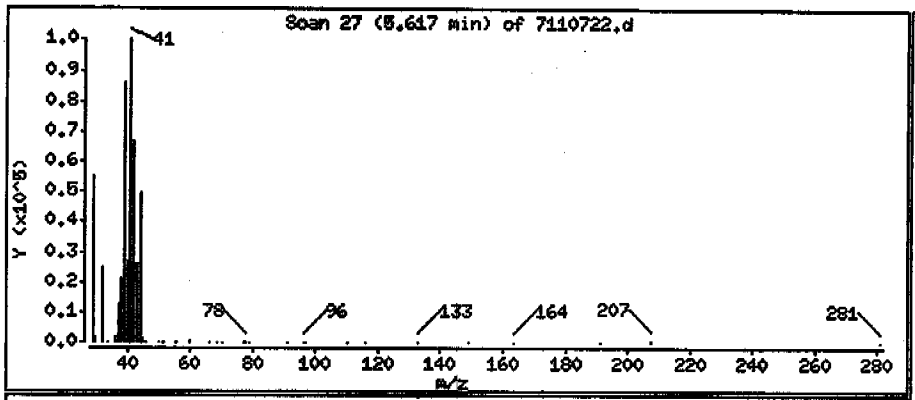
Operator: ab

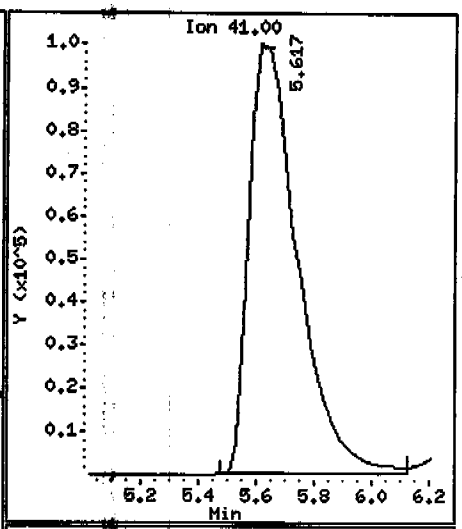
Column phase: RTx-624

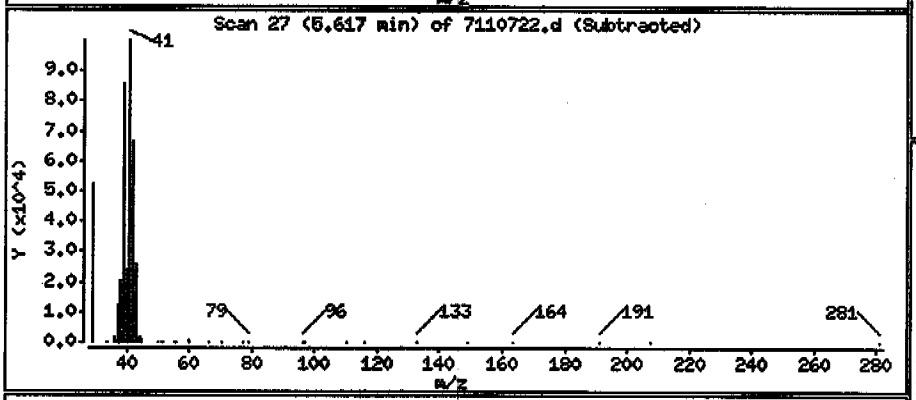
Column diameter: 0.53

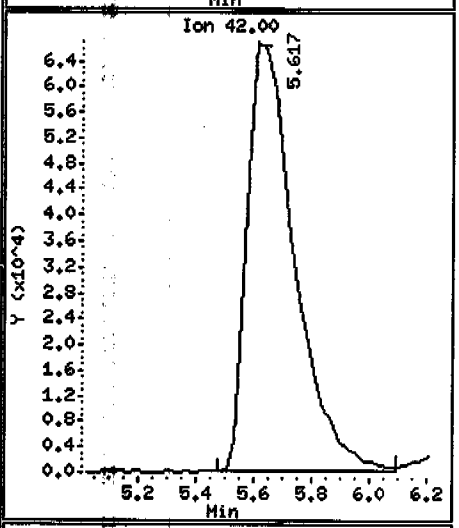
11 Propylene

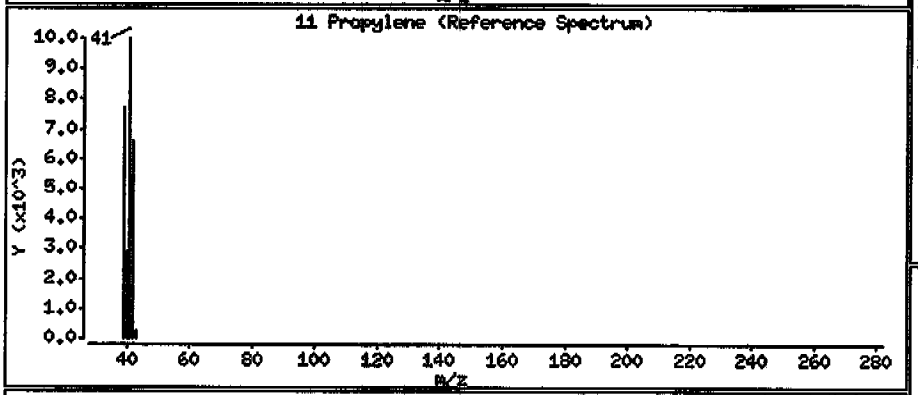
Concentration: 80.600 PPBV

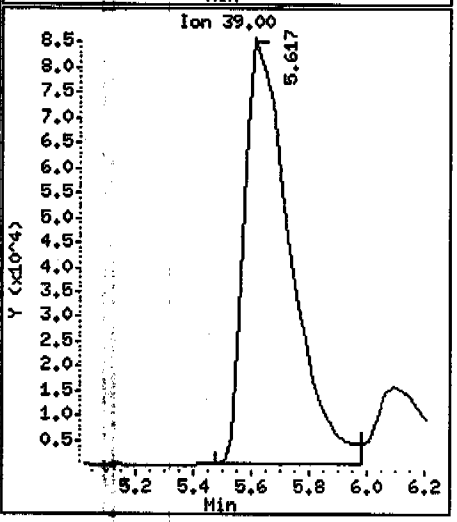


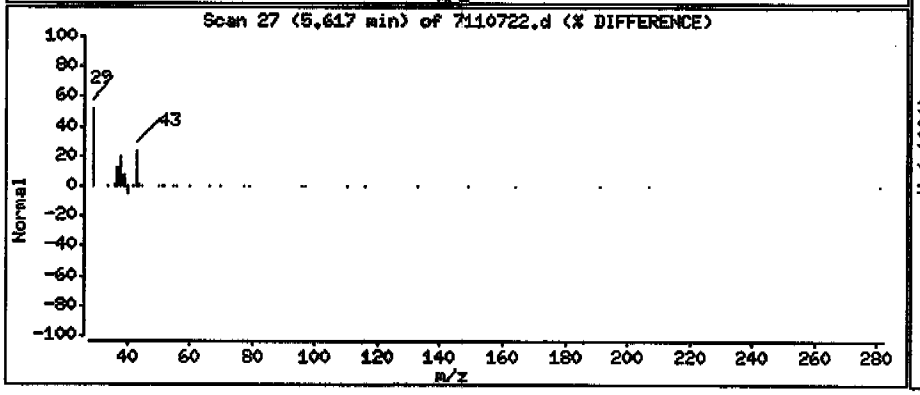












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

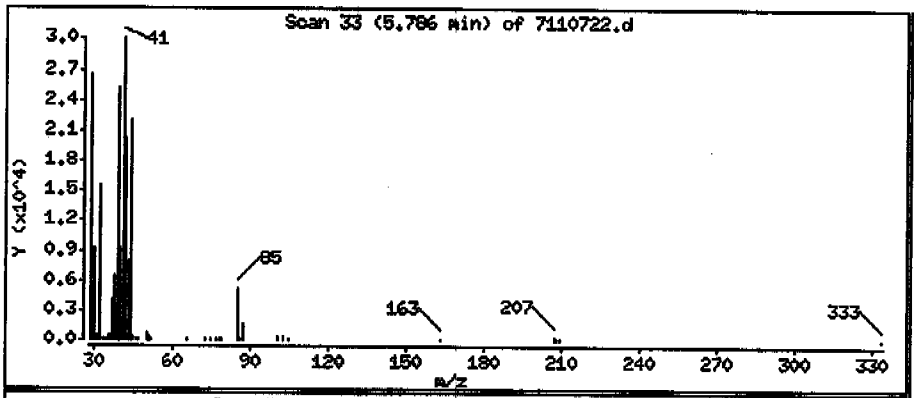
Operator: ab

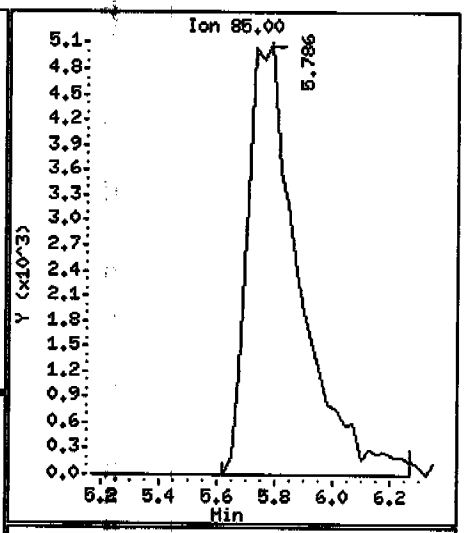
Column phase: RTx-624

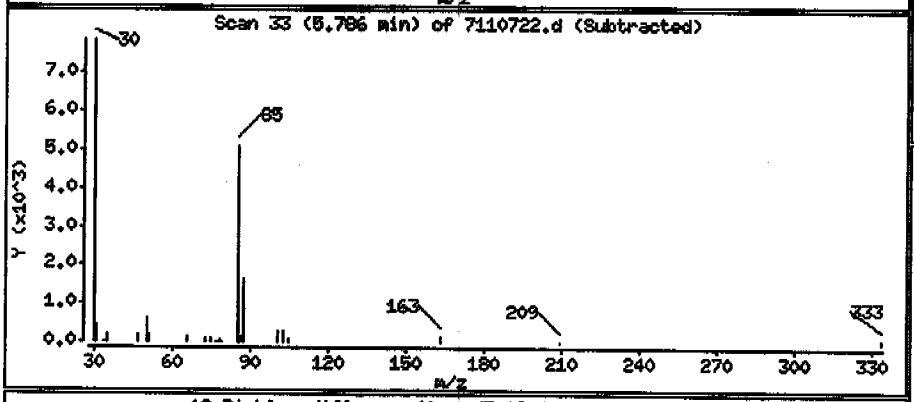
Column diameter: 0.53

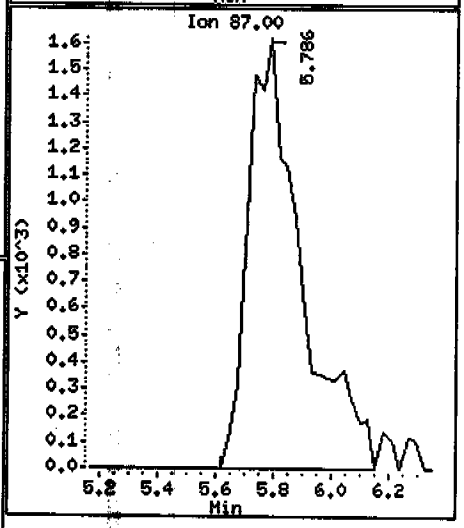
12 Dichlorodifluoromethane/Fr12

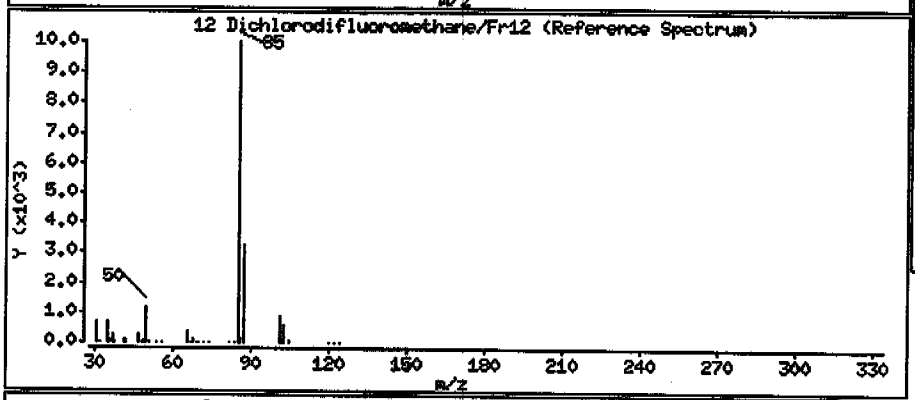
Concentration: 1.206 PPBV

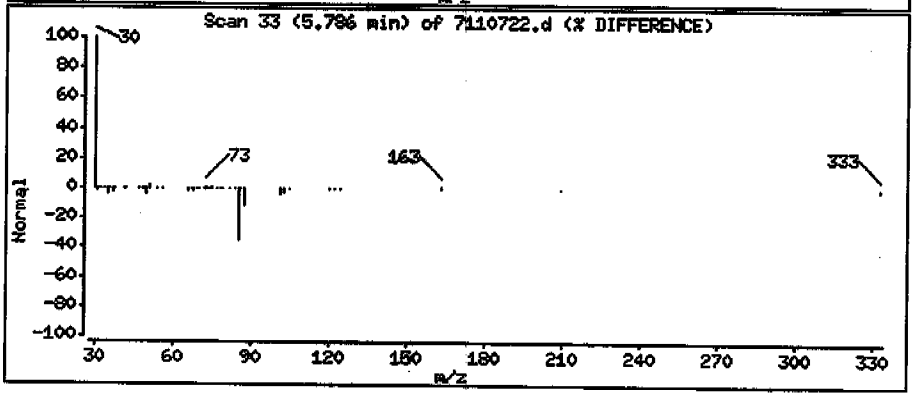












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

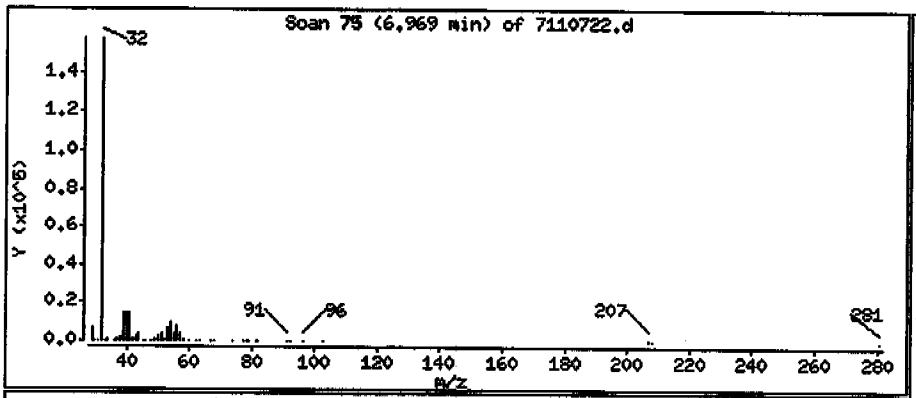
Operator: ab

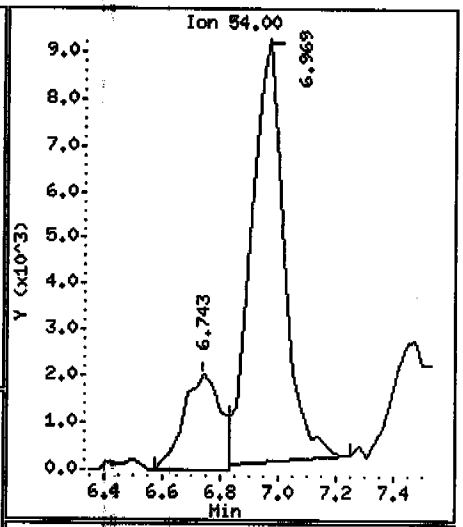
Column phase: RTx-624

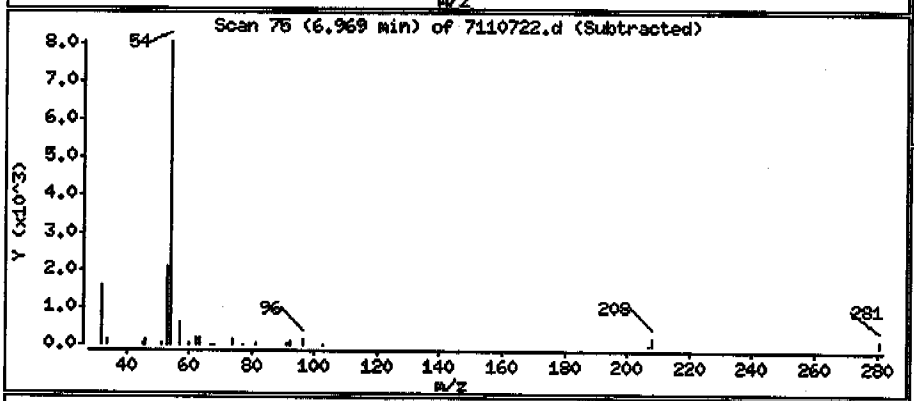
Column diameter: 0.53

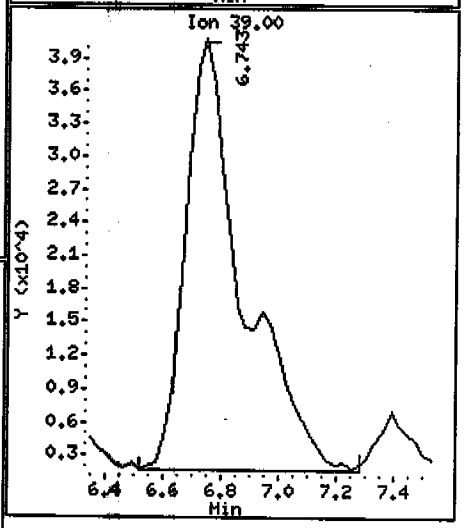
22 1,3-Butadiene

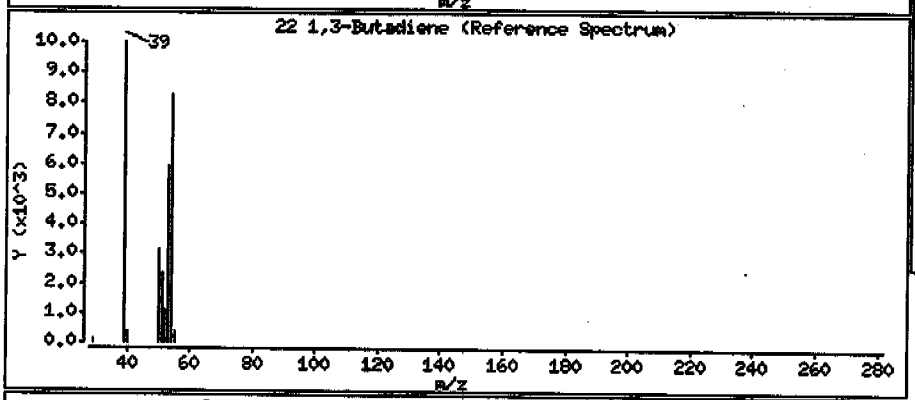
Concentration: 4.660 PPBV

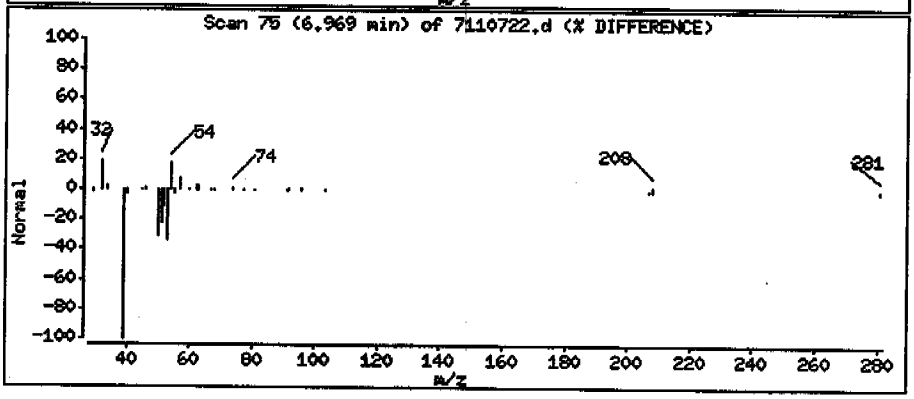












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

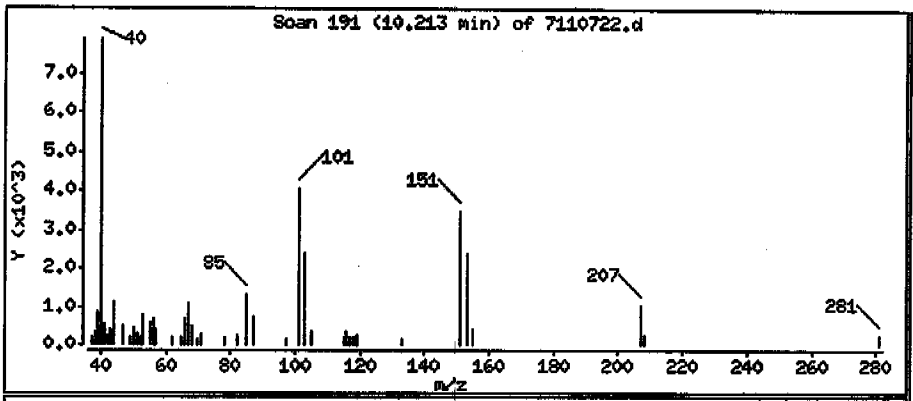
Operator: ab

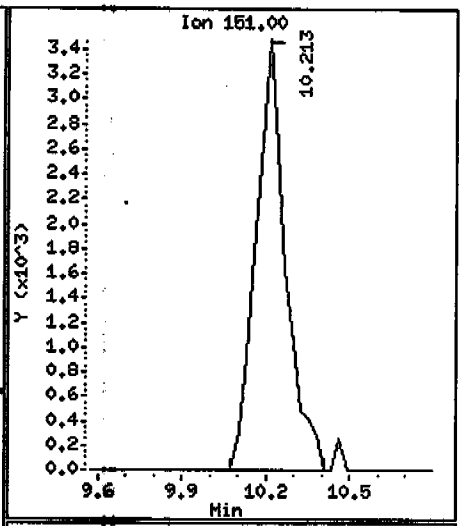
Column phase: RTx-624

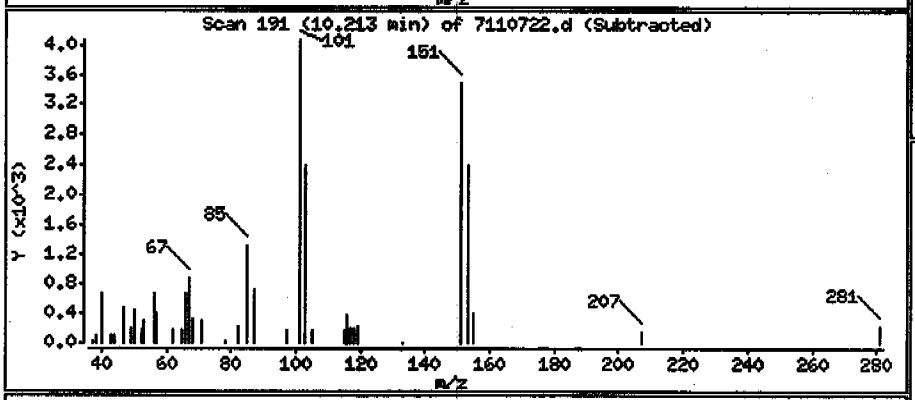
Column diameter: 0.53

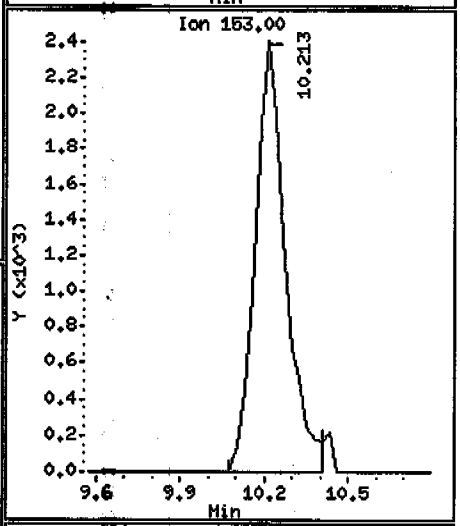
42 Freon 113

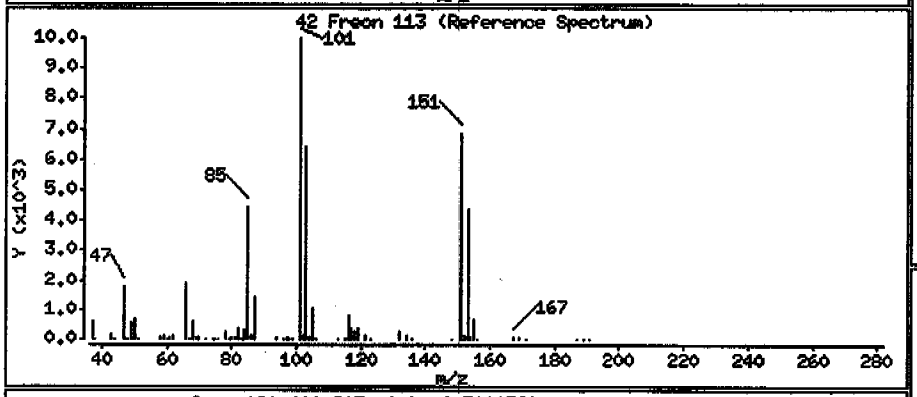
Concentration: 0.9460 PPBV

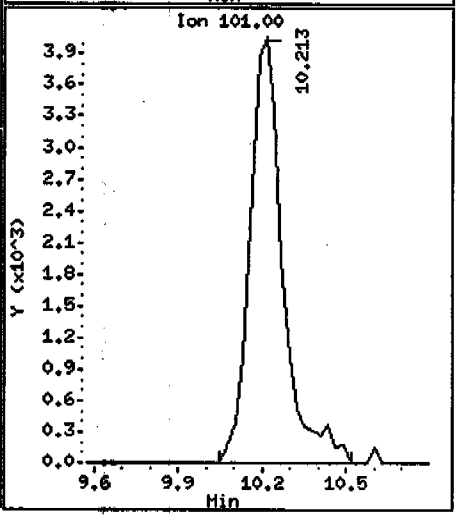


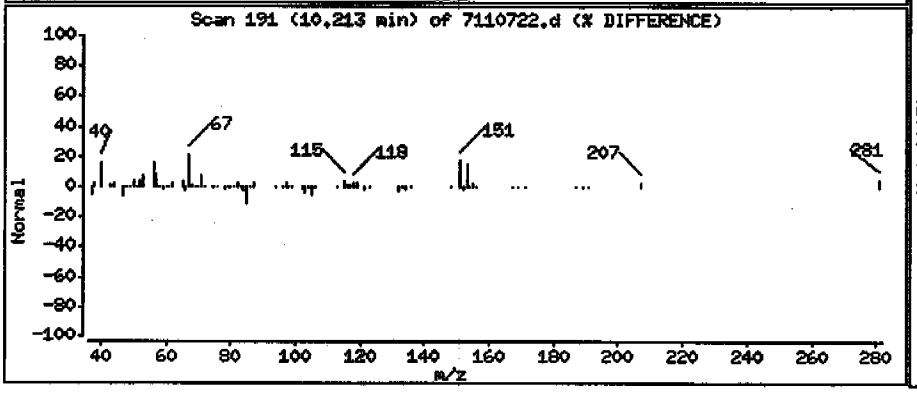












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

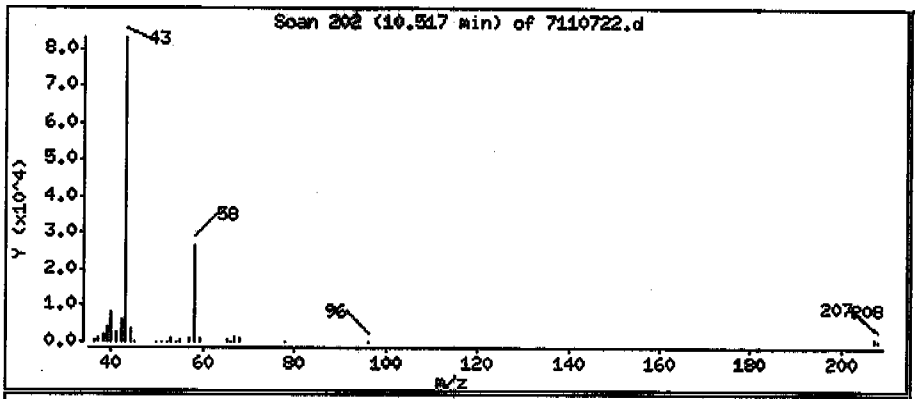
Operator: ab

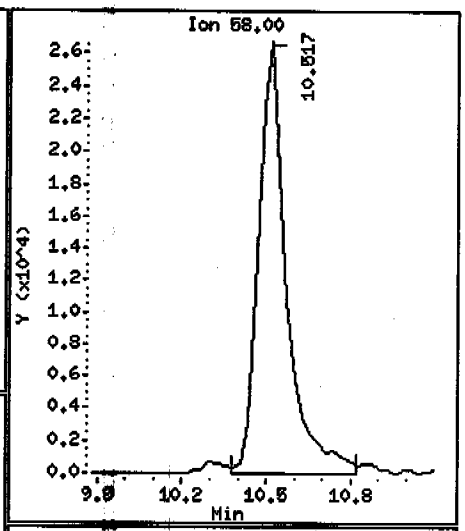
Column phase: RTx-624

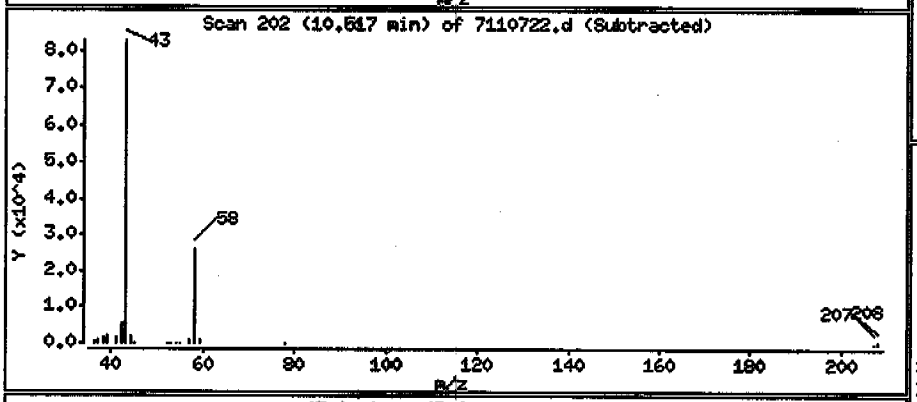
Column diameter: 0.53

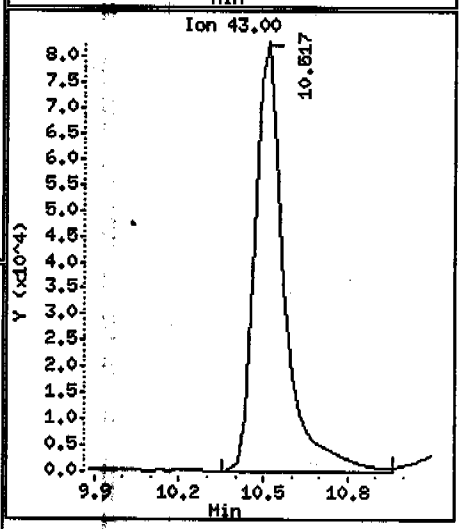
45 Acetone

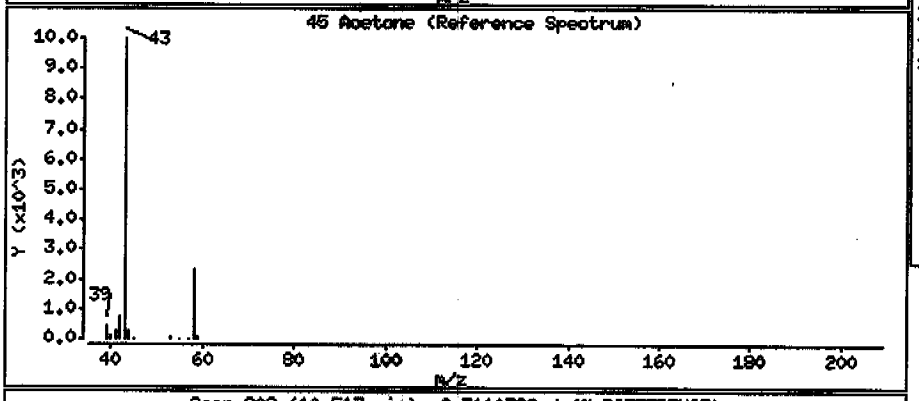
Concentration: 20.747 PPBV

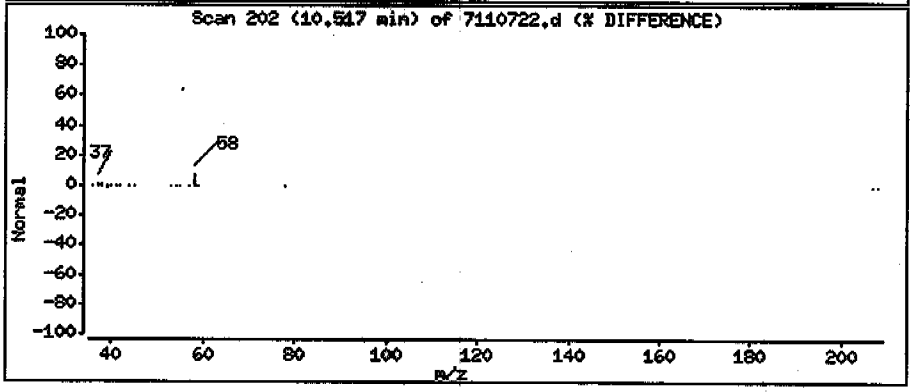












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

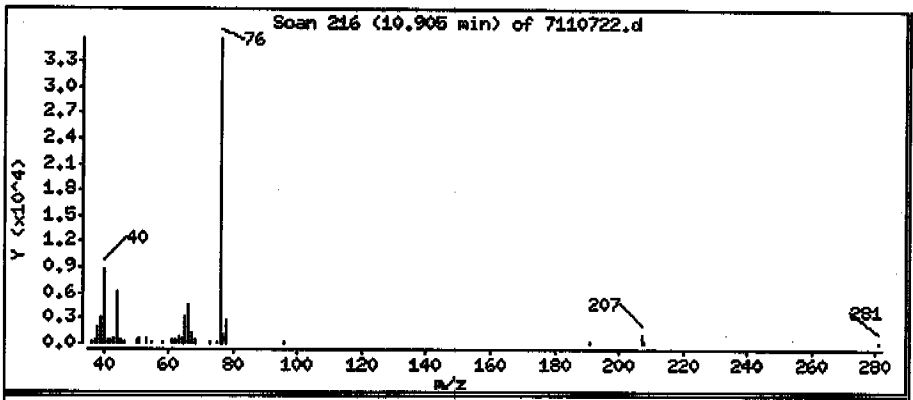
Operator: ab

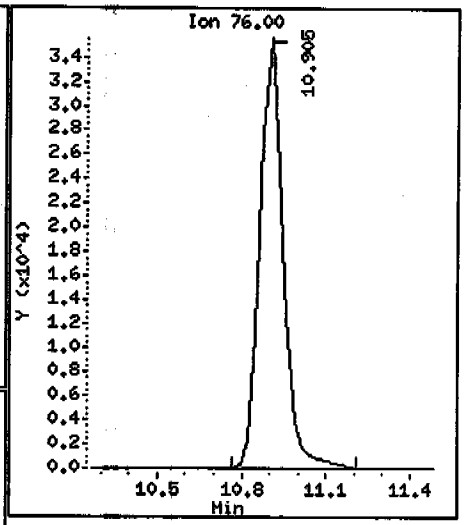
Column phase: RTx-624

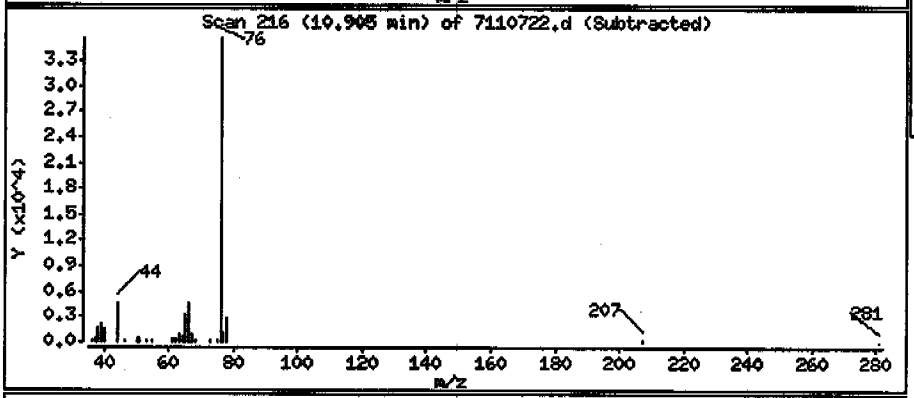
Column diameter: 0.53

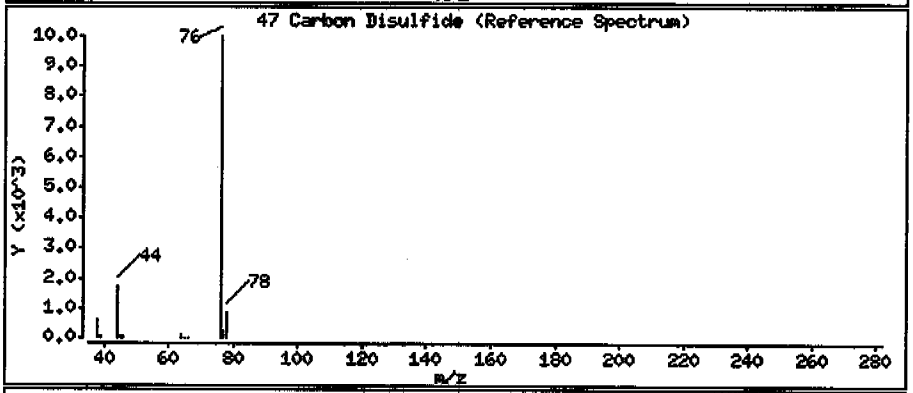
47 Carbon Disulfide

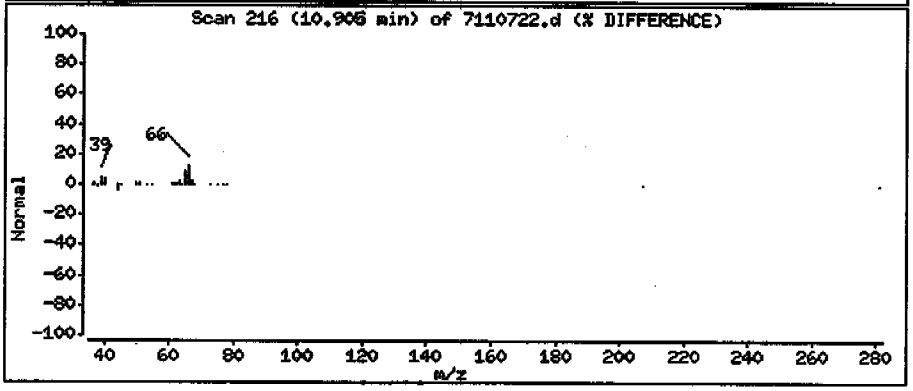
Concentration: 3.699 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

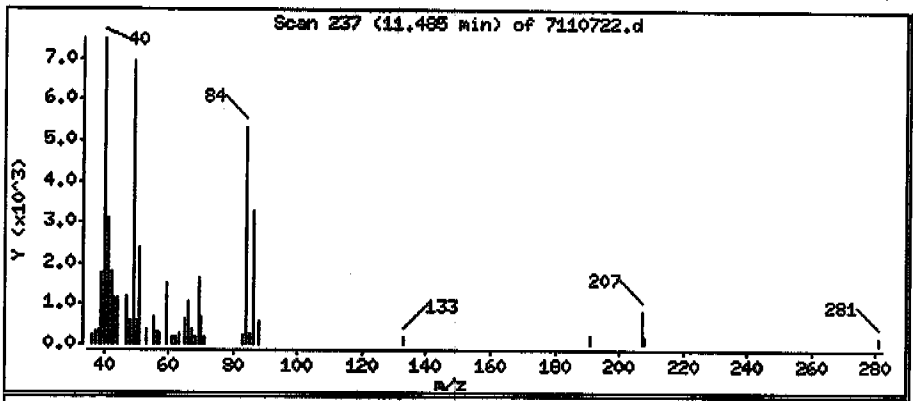
Operator: ab

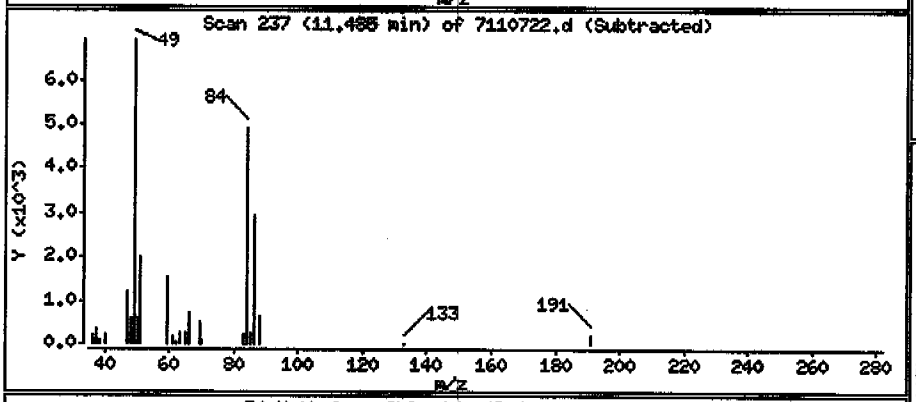
Column phase: RTx-624

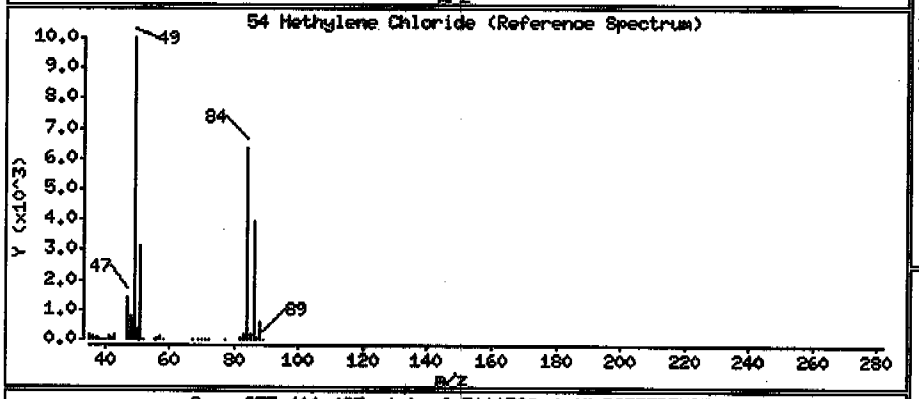
Column diameter: 0.53

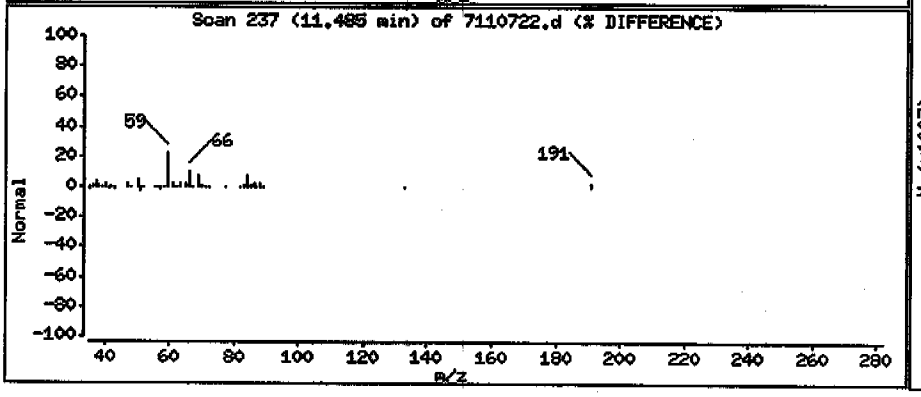
54 Methylene Chloride

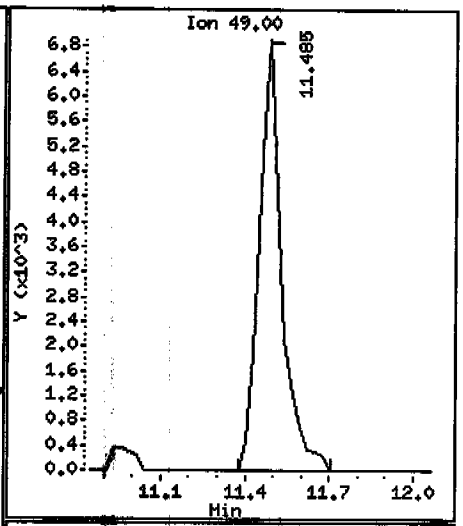
Concentration: 1.832 PPBV

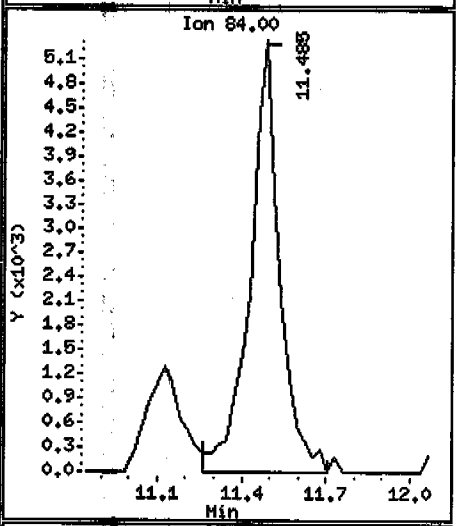


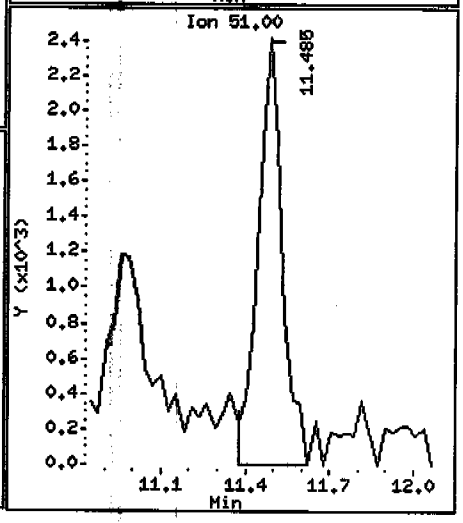












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

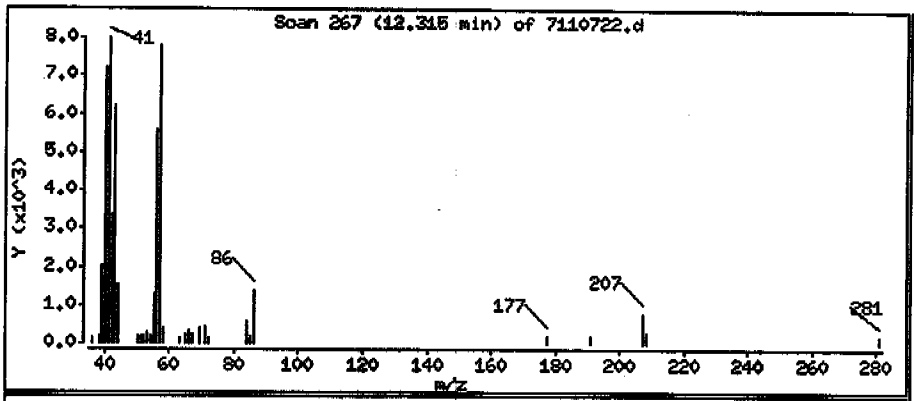
Operator: ab

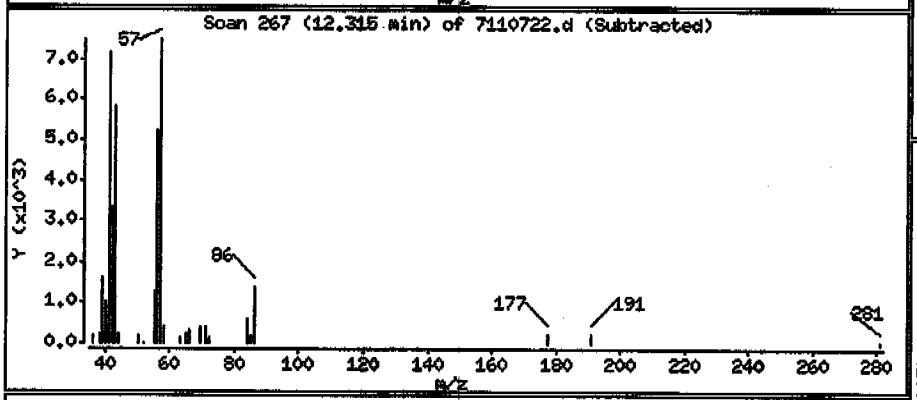
Column phase: RTx-624

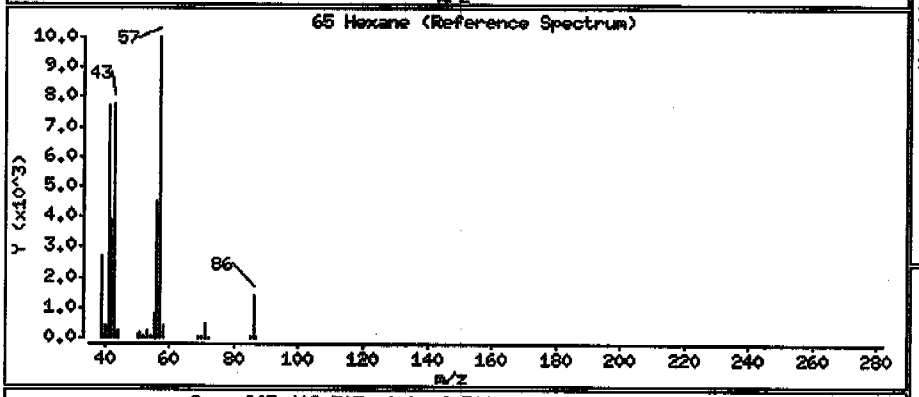
Column diameter: 0.53

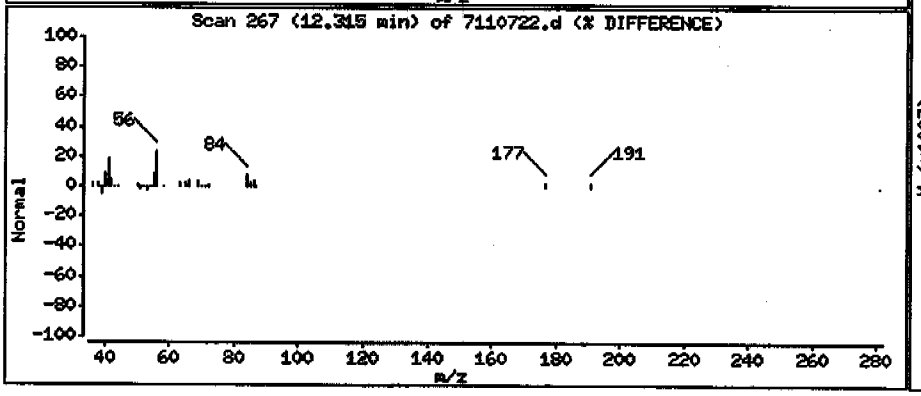
65 Hexane

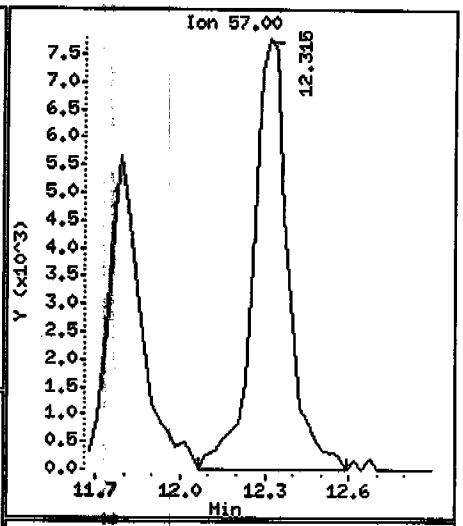
Concentration: 2.423 PPBV

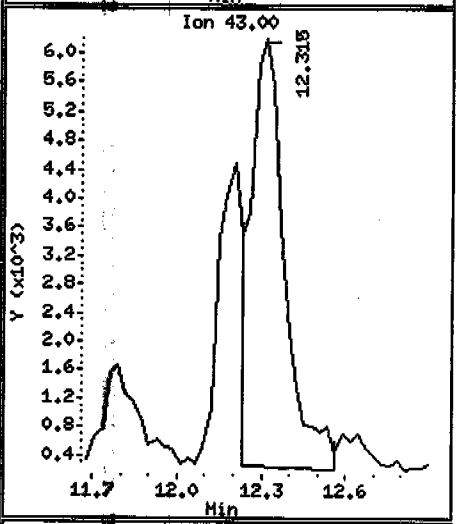


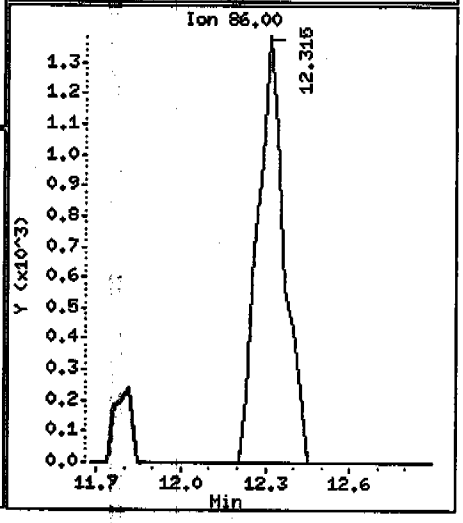












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

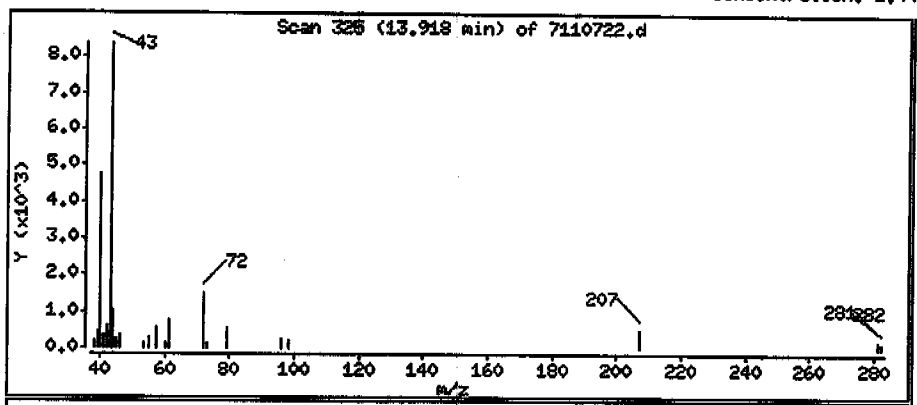
Operator: ab

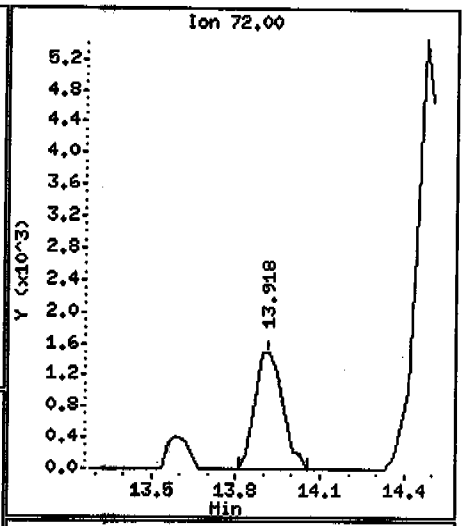
Column phase: RTx-624

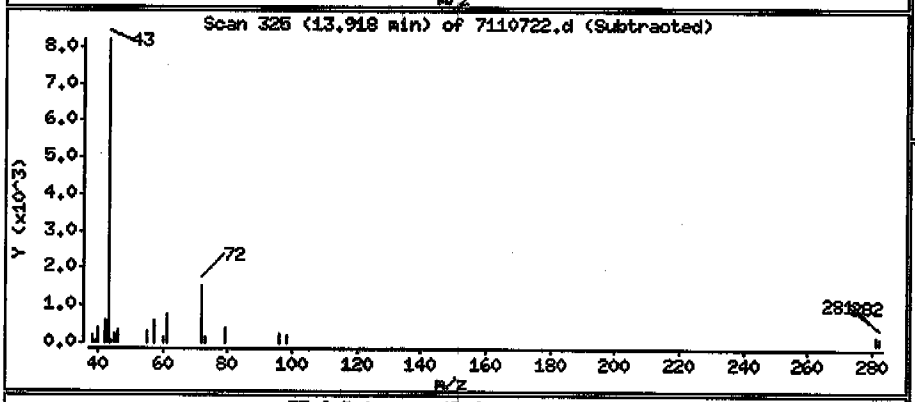
Column diameter: 0.53

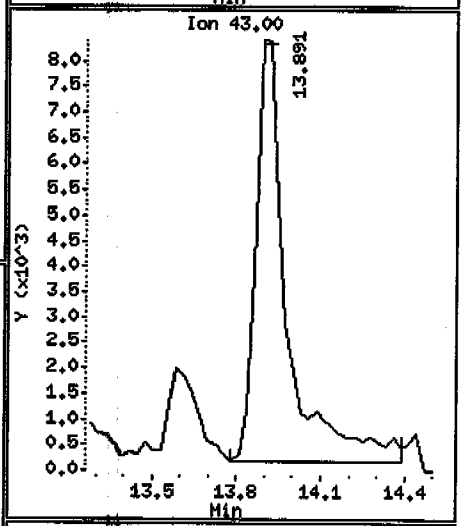
75 2-Butanone

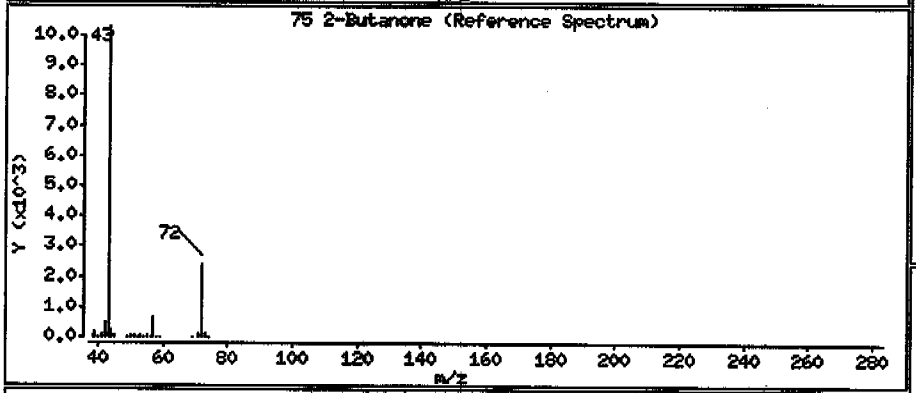
Concentration: 1.445 PPBV

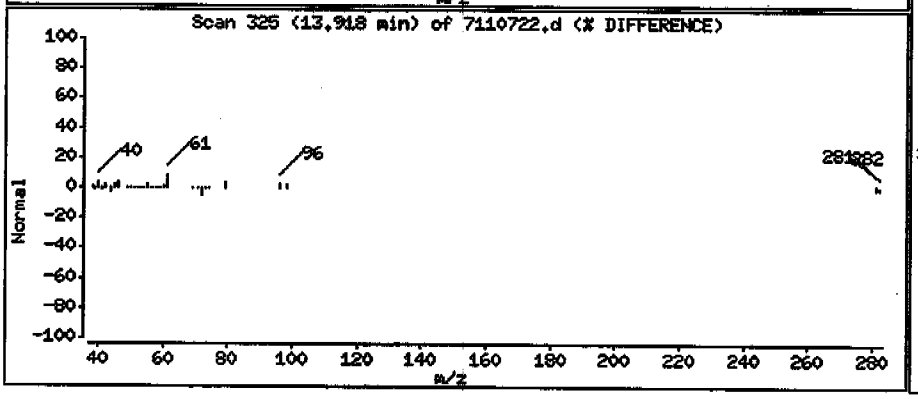


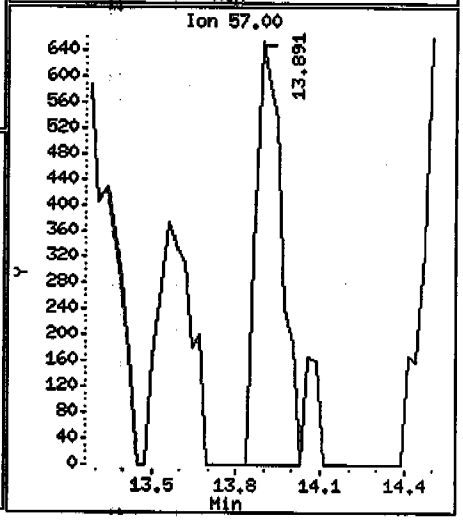












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25269

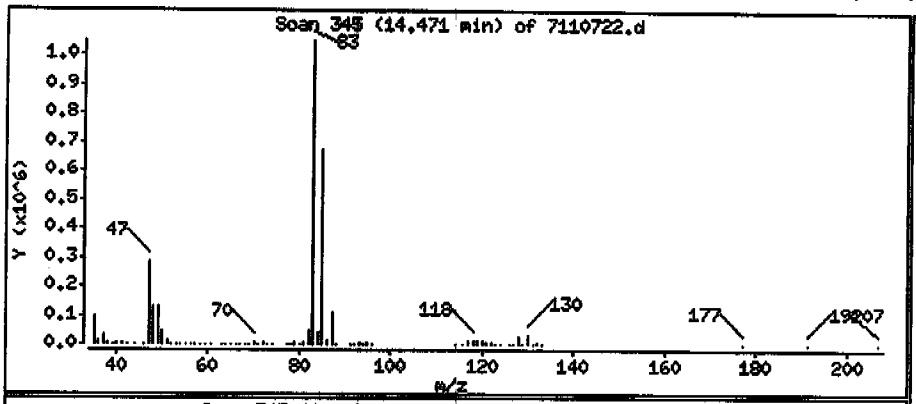
Operator: ab

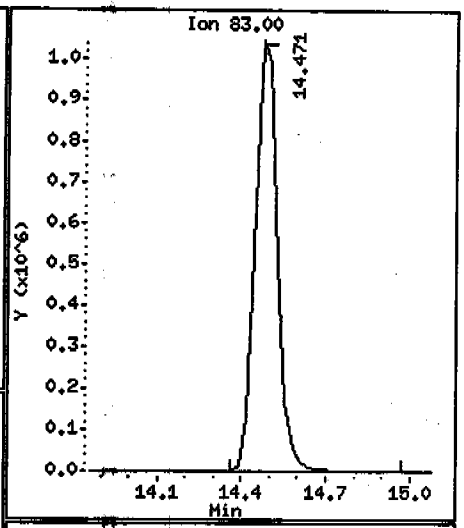
Column phase: RTx-624

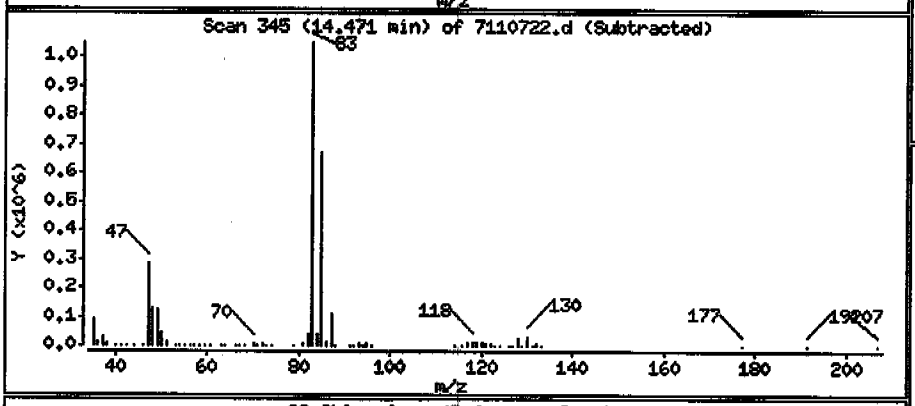
Column diameter: 0.53

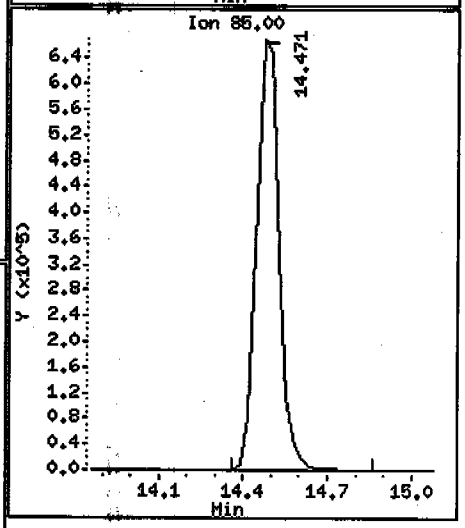
82 Chloroform

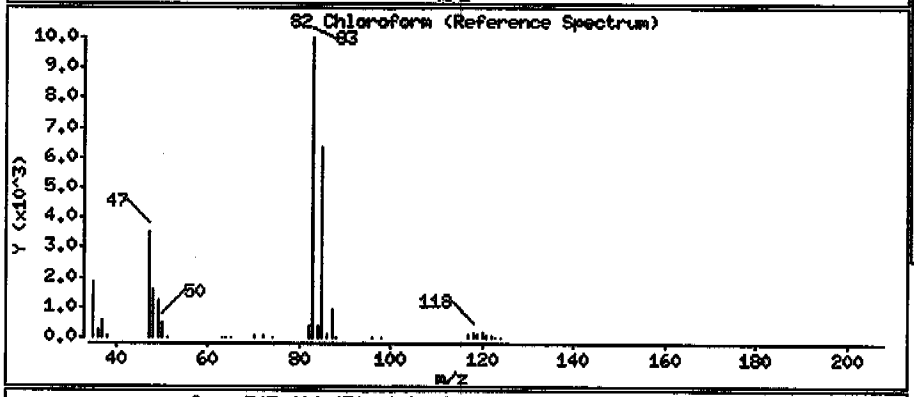
Concentration: 172.40 PPBV

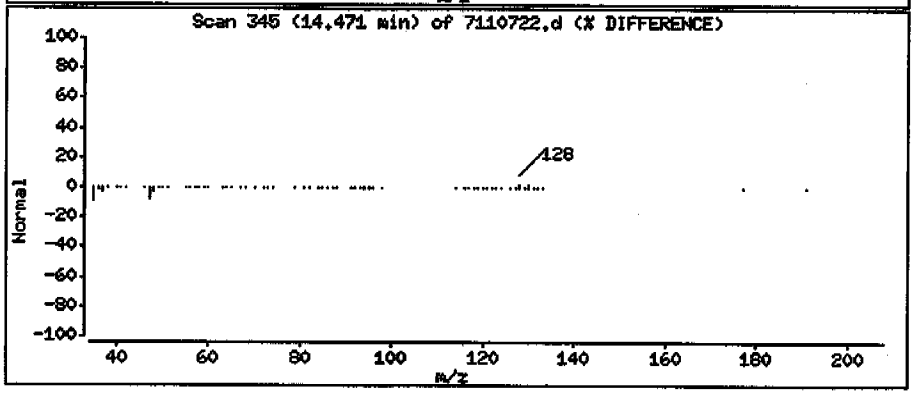












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

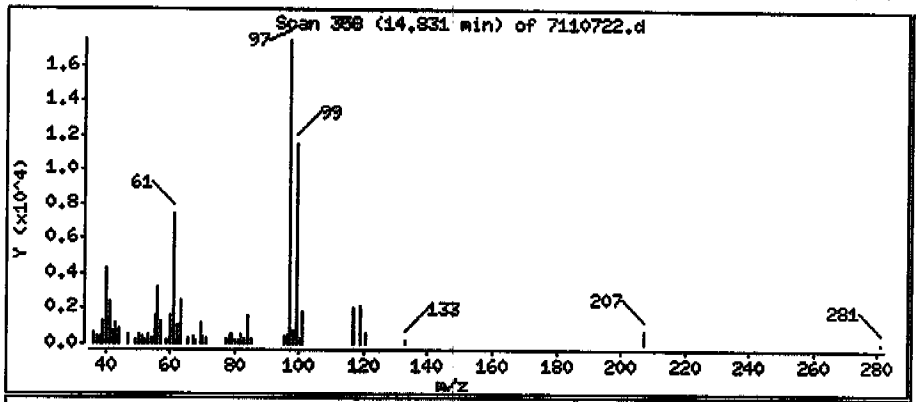
Operator: ab

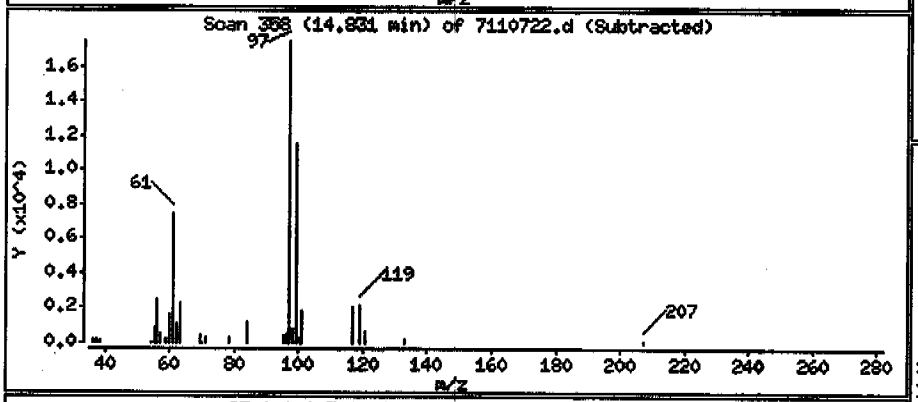
Column phase: RTx-624

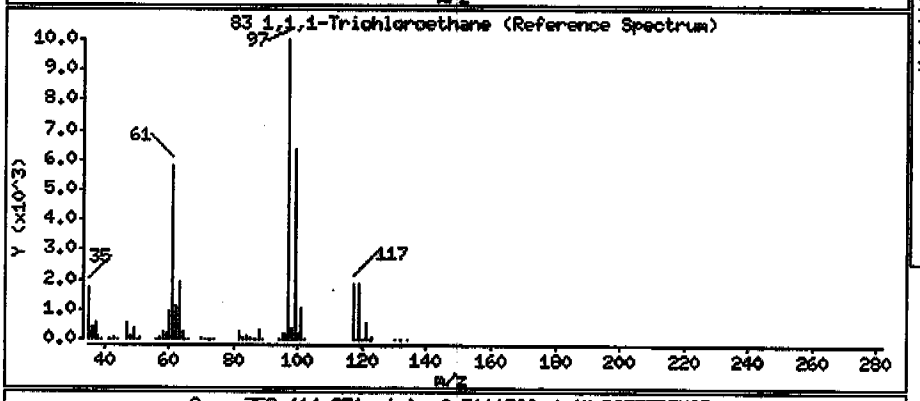
Column diameter: 0.53

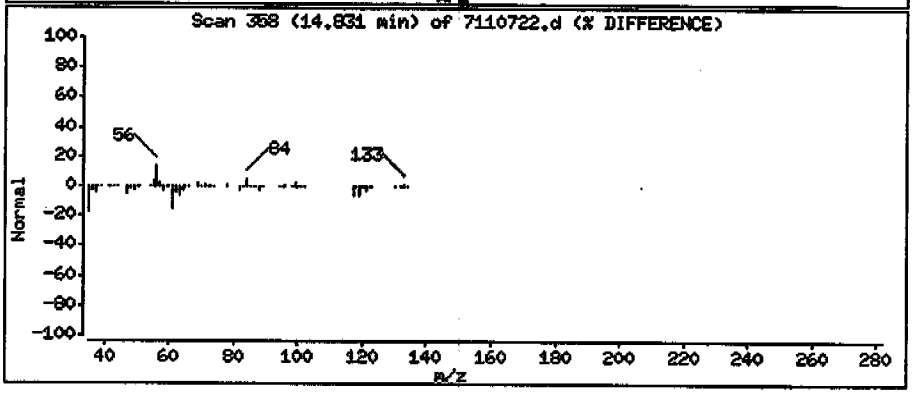
83 1,1,1-Trichloroethane

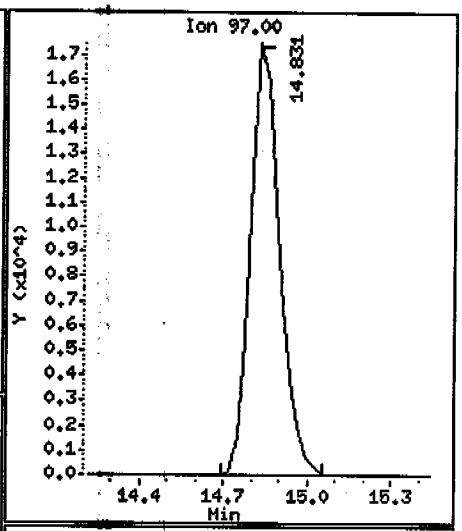
Concentration: 3.743 PPBV

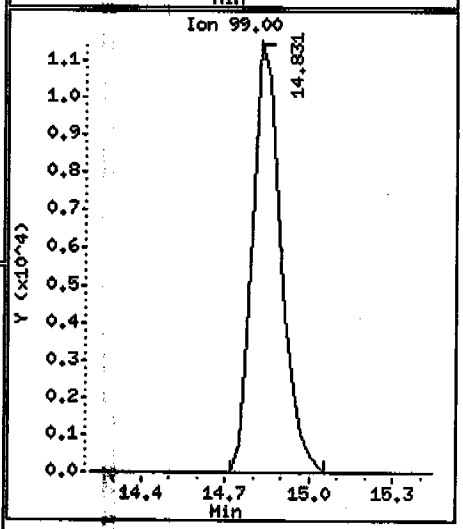












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

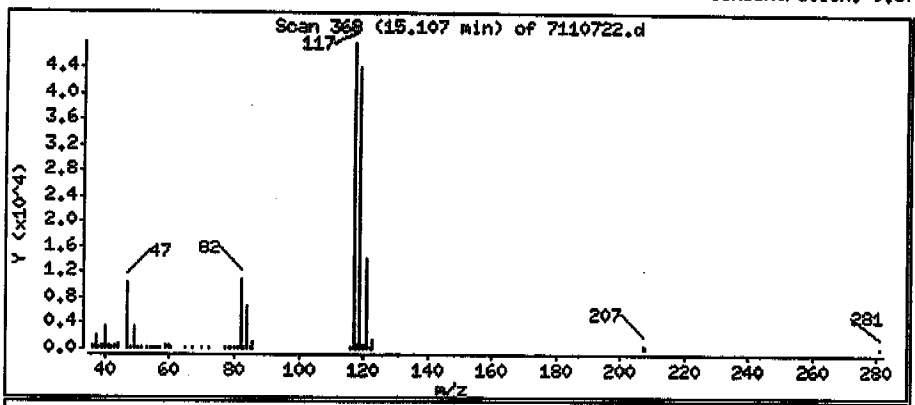
Operator: ab

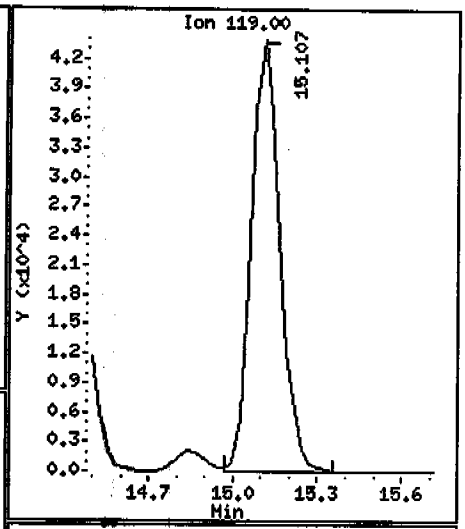
Column phase: RTx-624

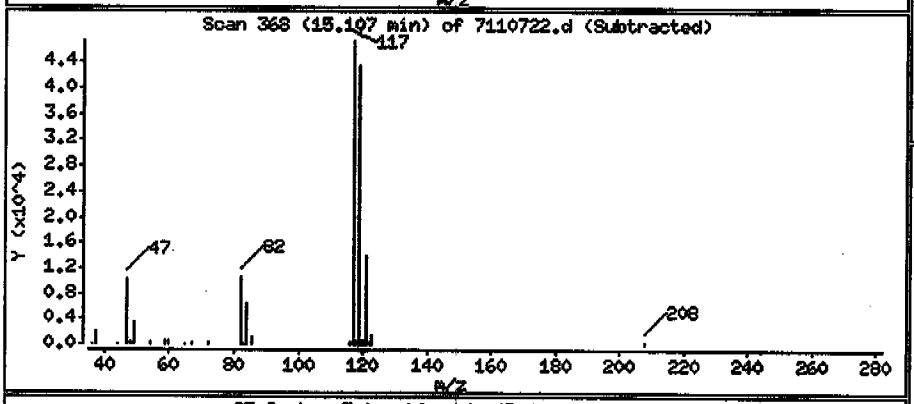
Column diameter: 0.53

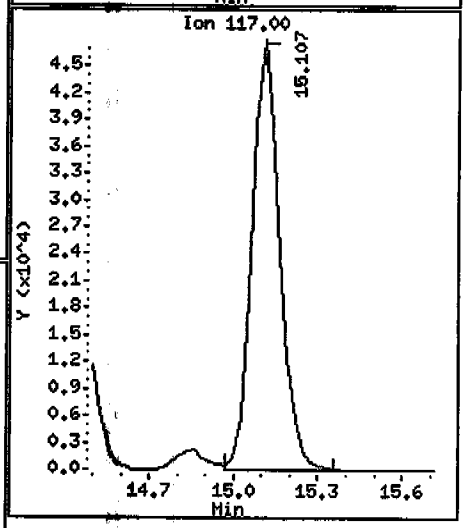
87 Carbon Tetrachloride

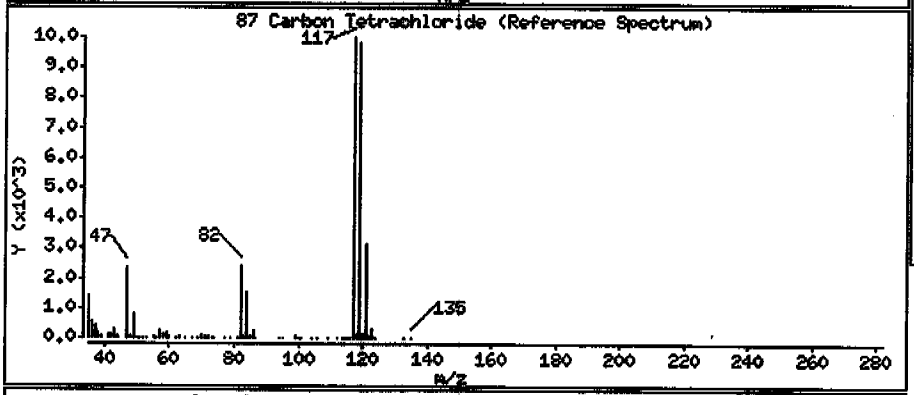
Concentration: 9.871 PPBV

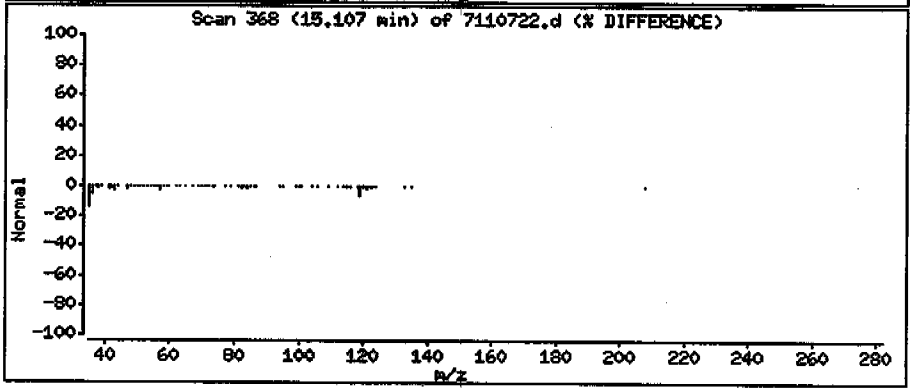












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

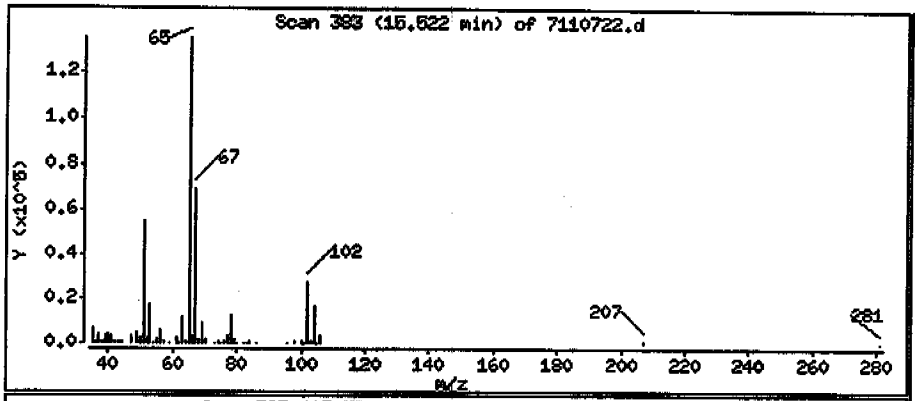
Operator: ab

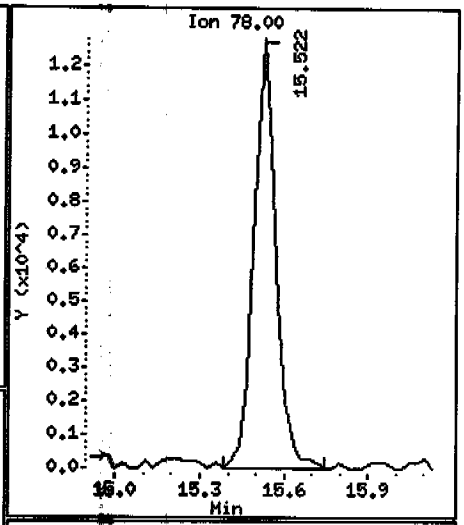
Column phase: RTx-624

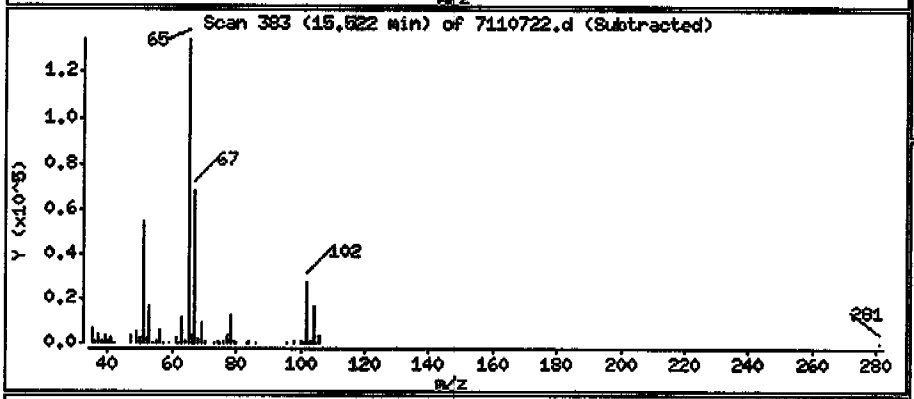
Column diameter: 0.53

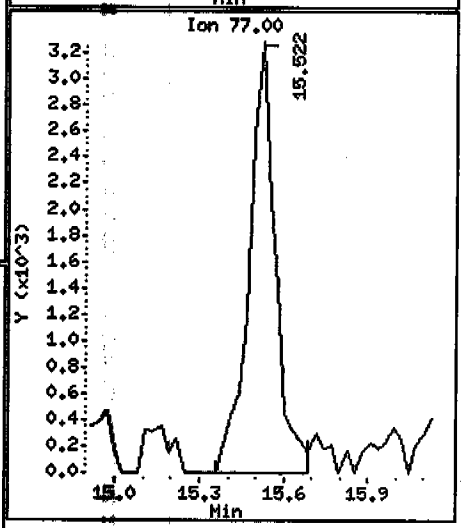
91 Benzene

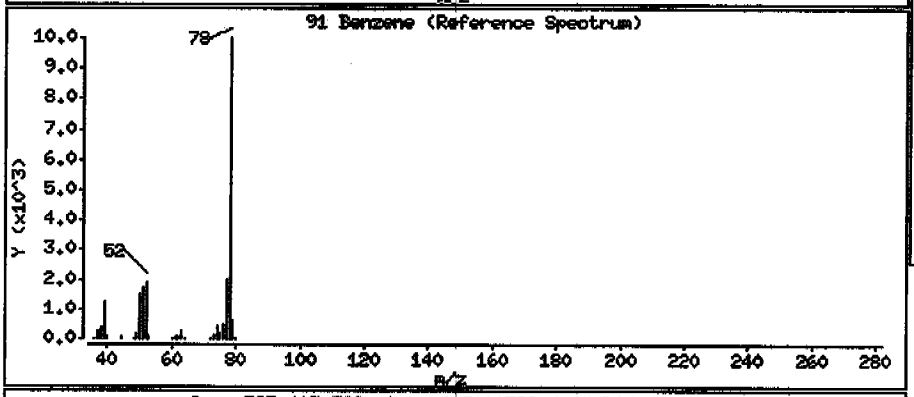
Concentration: 1.516 PPBV

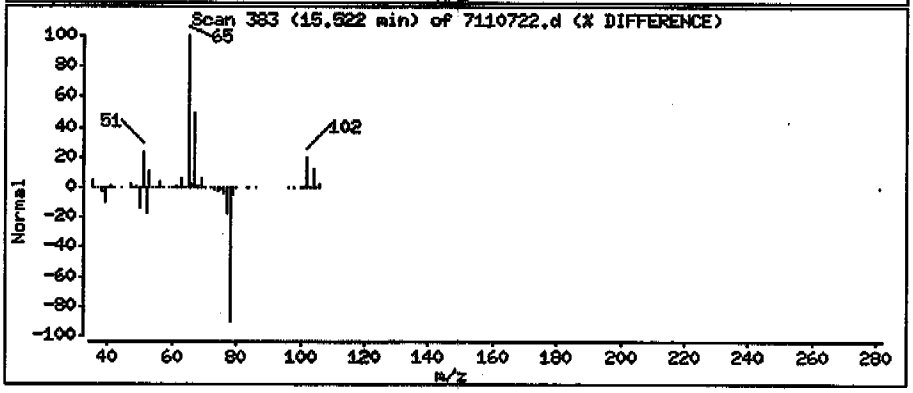












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

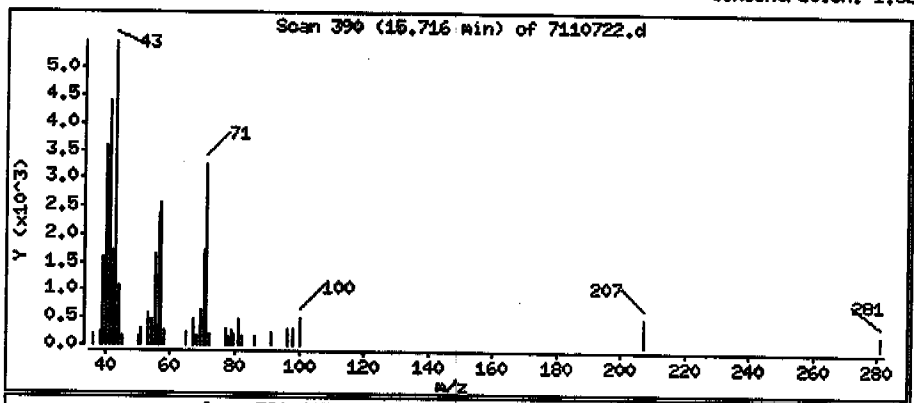
Operator: ab

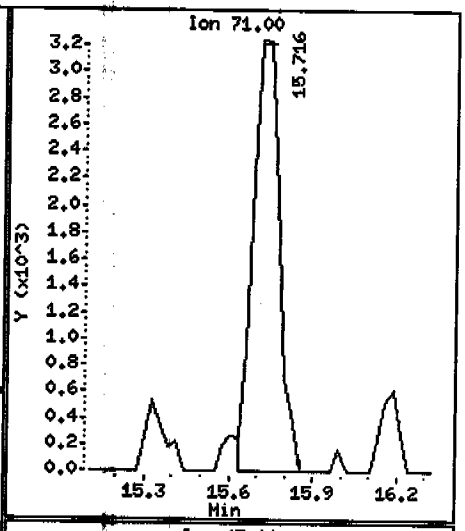
Column phase: RTx-624

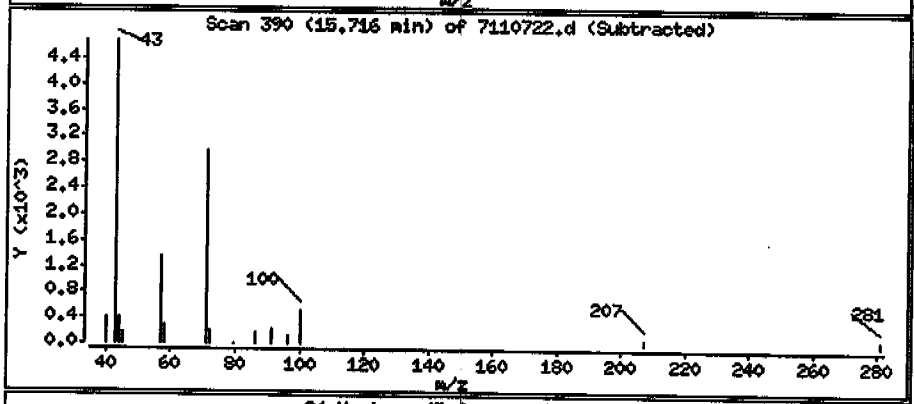
Column diameter: 0.53

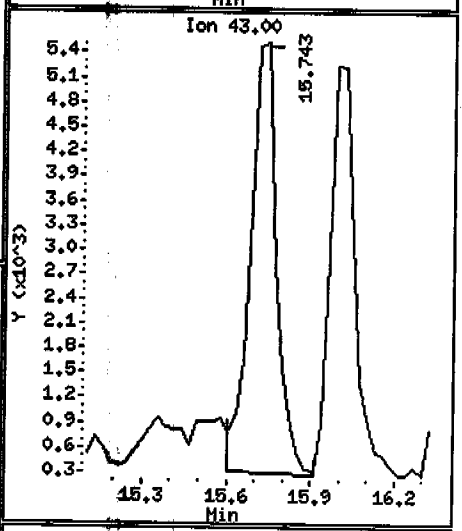
94 Heptane

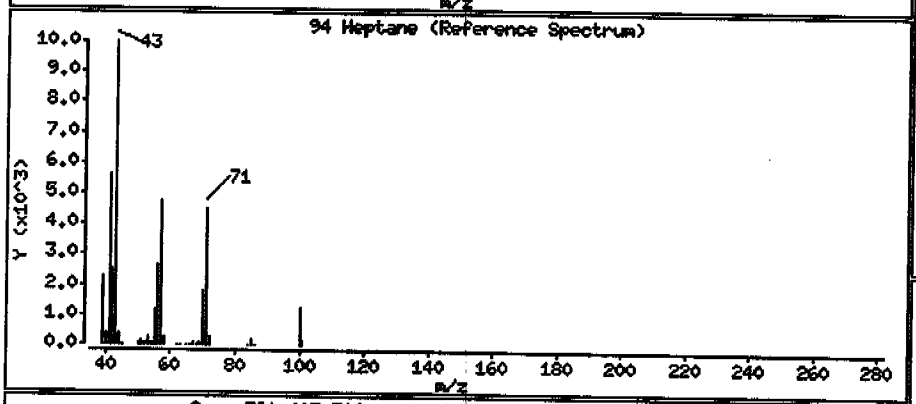
Concentration: 1.521 PPBV

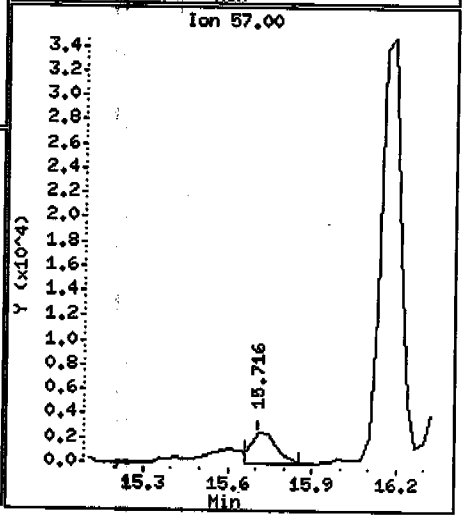


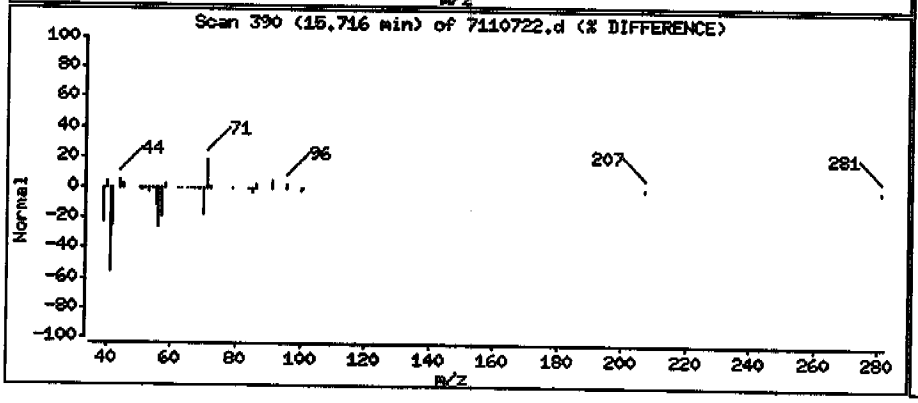












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

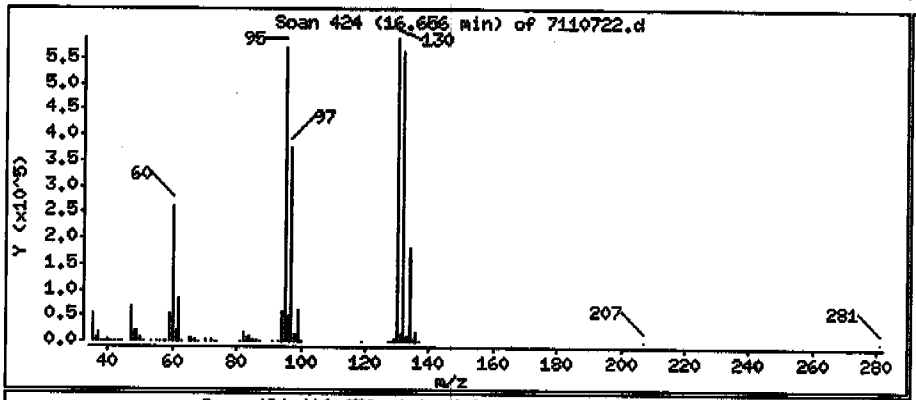
Operator: ab

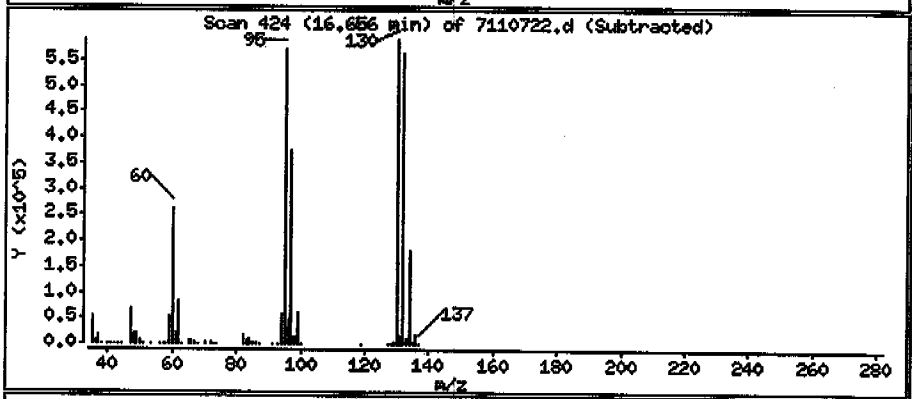
Column phase: RTx-624

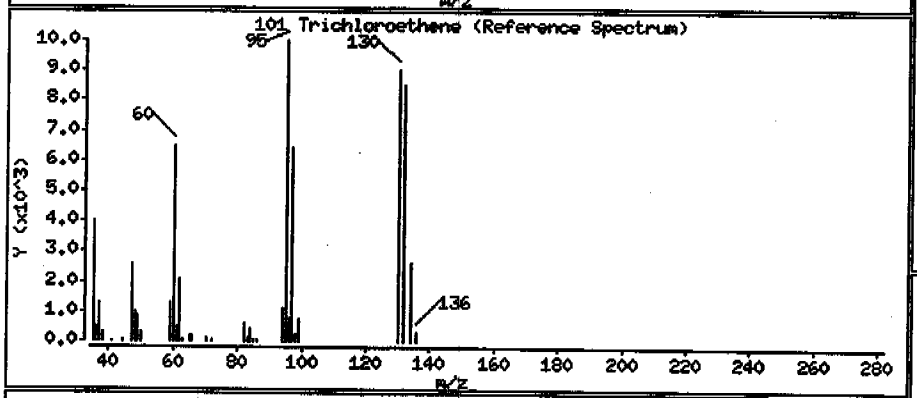
Column diameter: 0.53

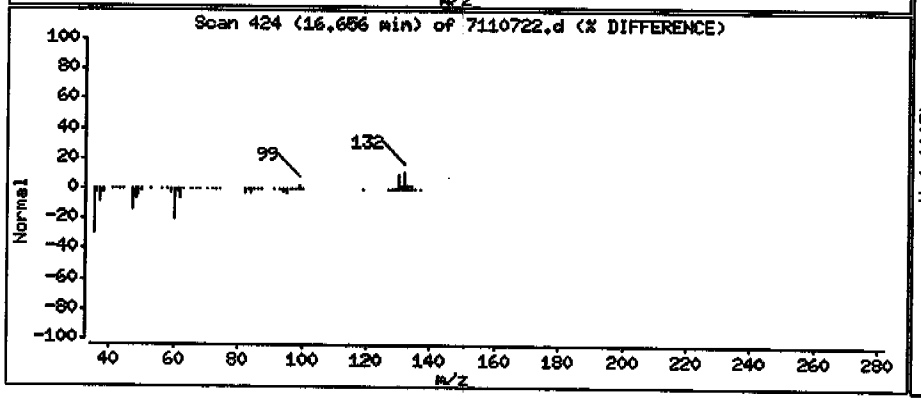
101 Trichloroethene

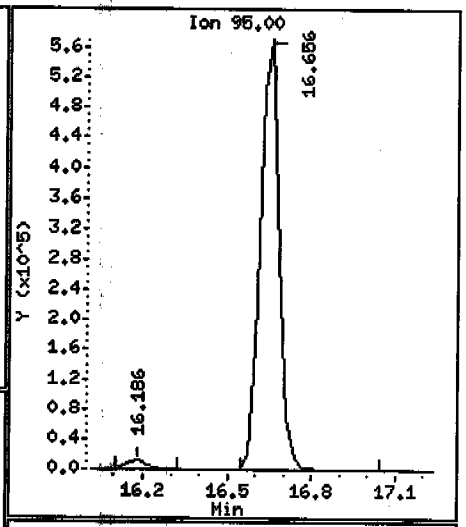
Concentration: 132.62 PPBV

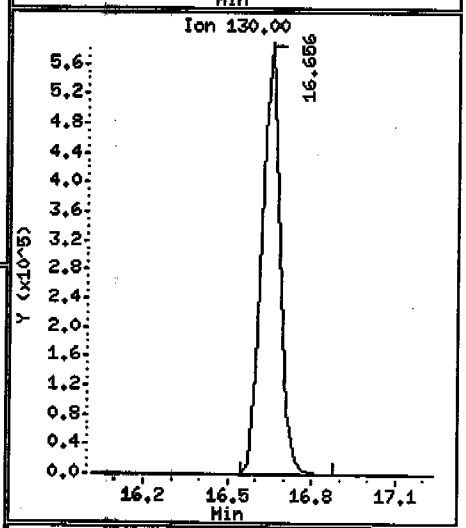


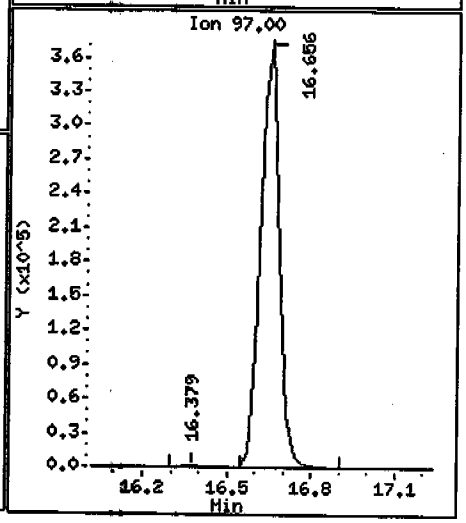












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

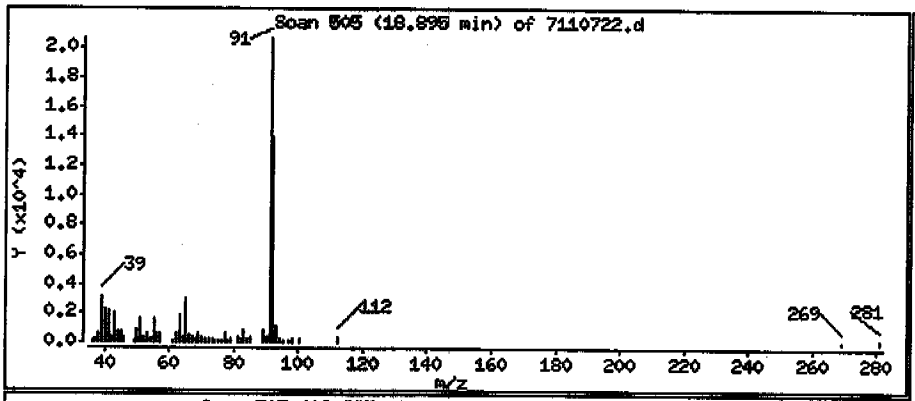
Operator: ab

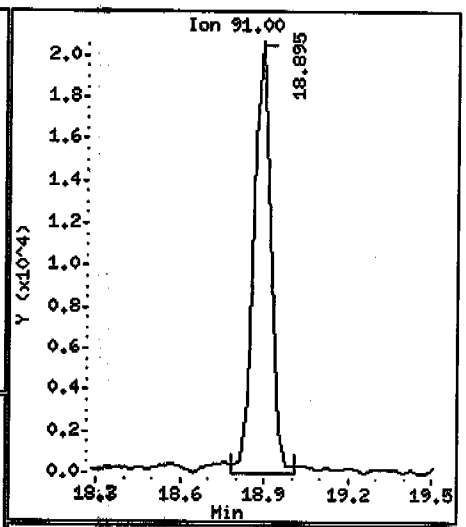
Column phase: RTx-624

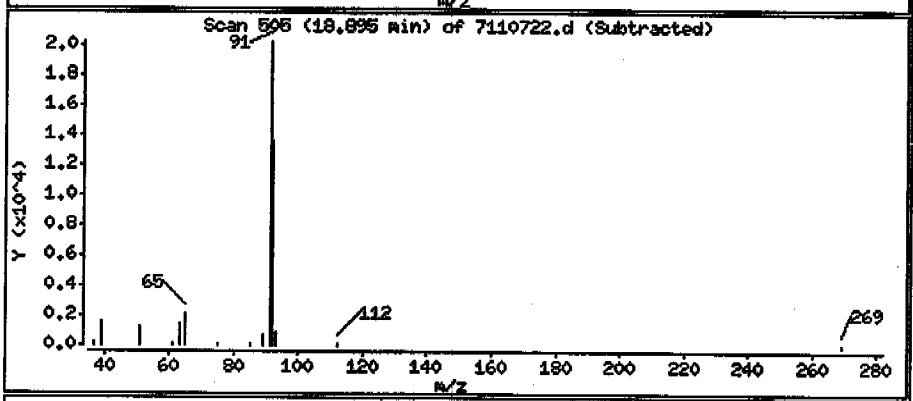
Column diameter: 0.53

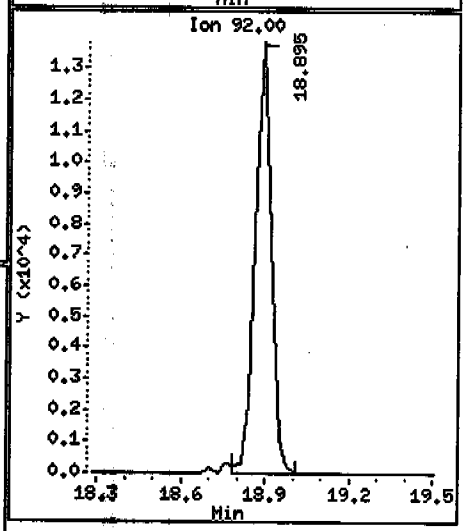
114 Toluene

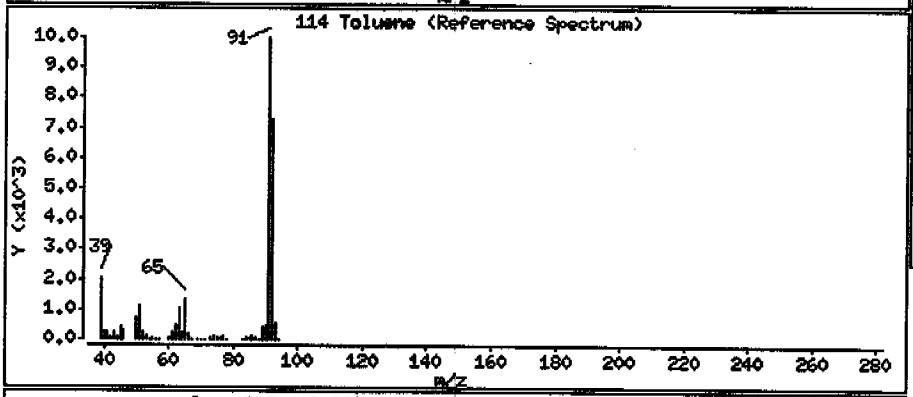
Concentration: 1.752 PPBV

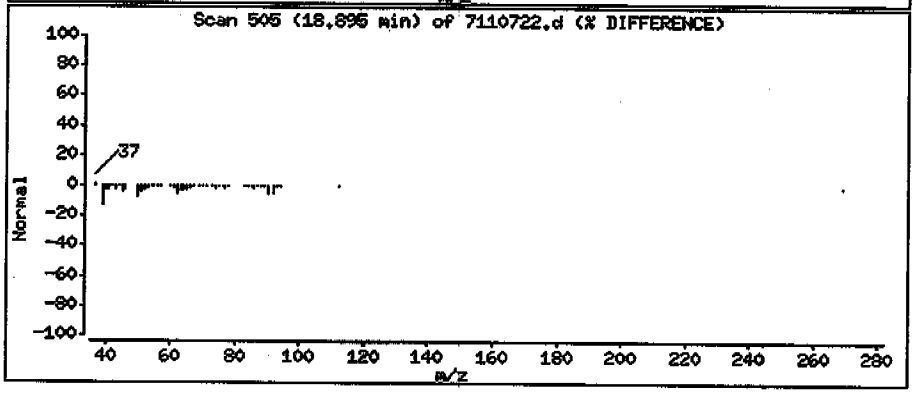












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

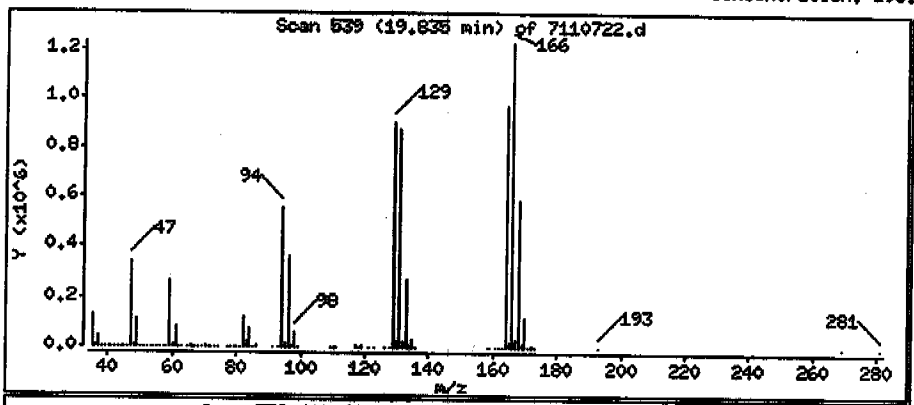
Operator: ab

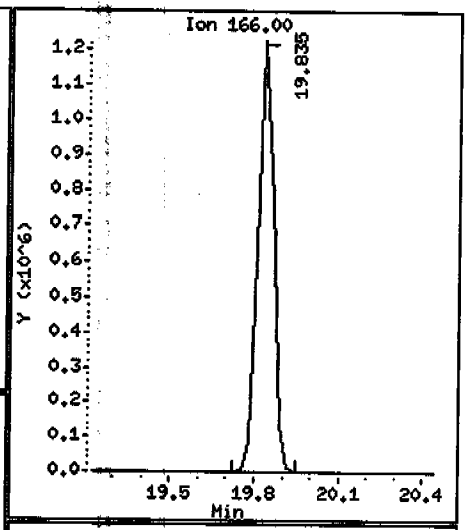
Column phase: RTx-624

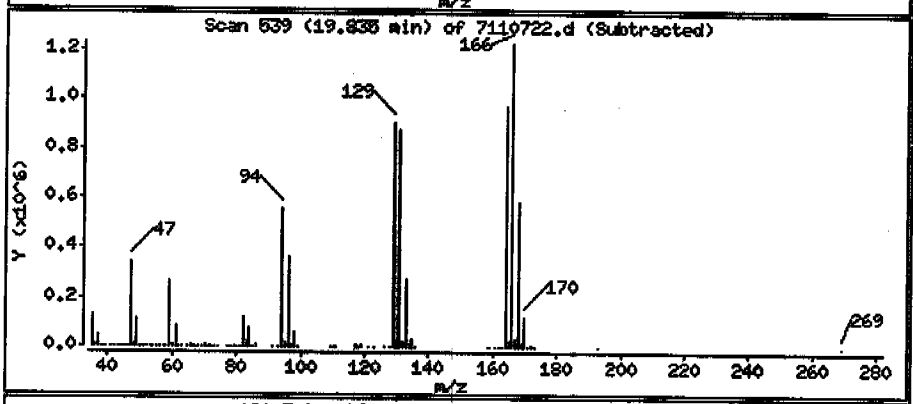
Column diameter: 0.53

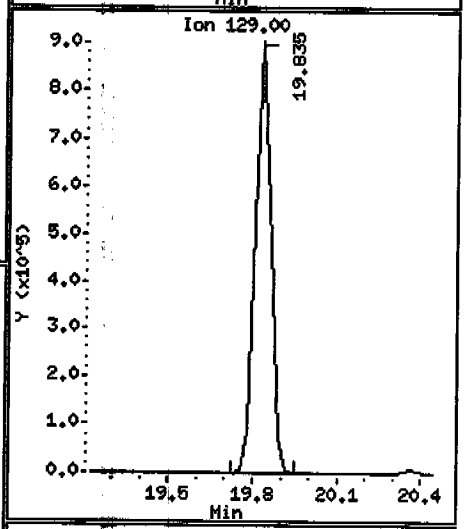
120 Tetrachloroethene

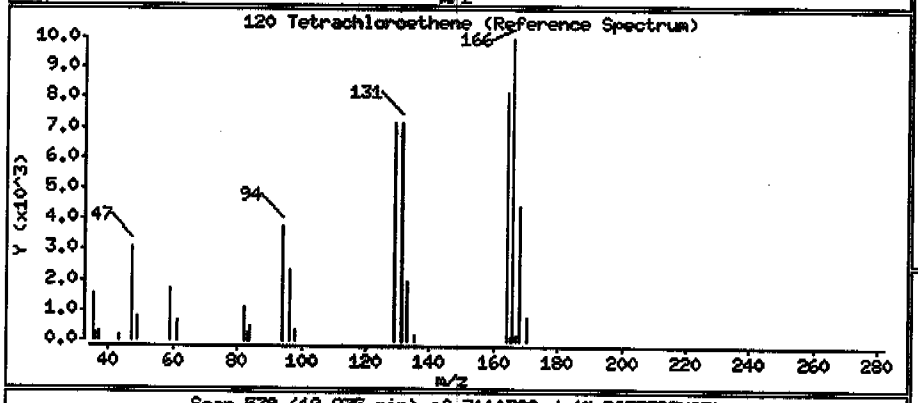
Concentration: 198.53 PPBV

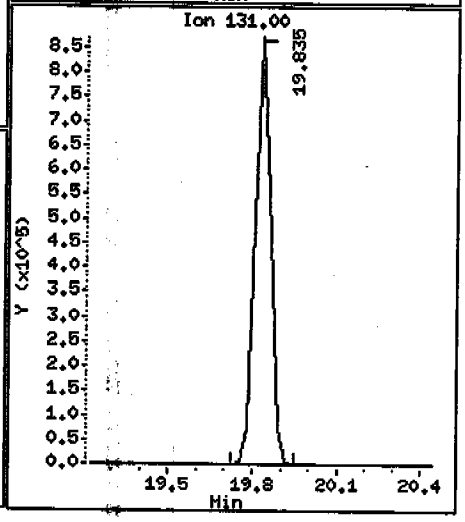


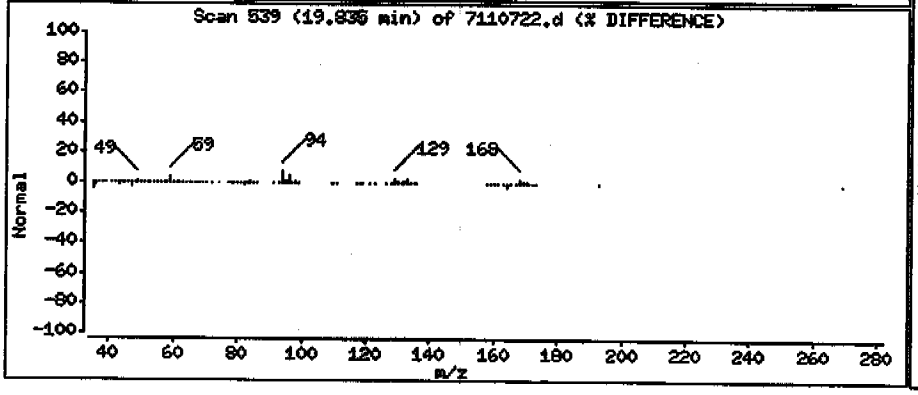












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

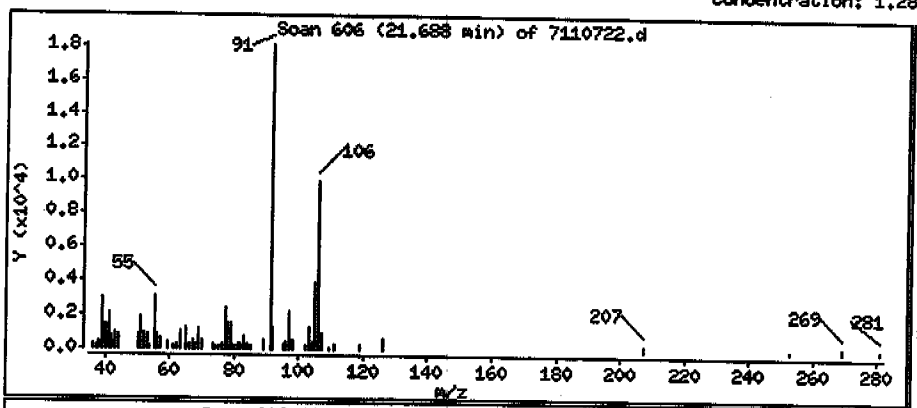
Operator: ab

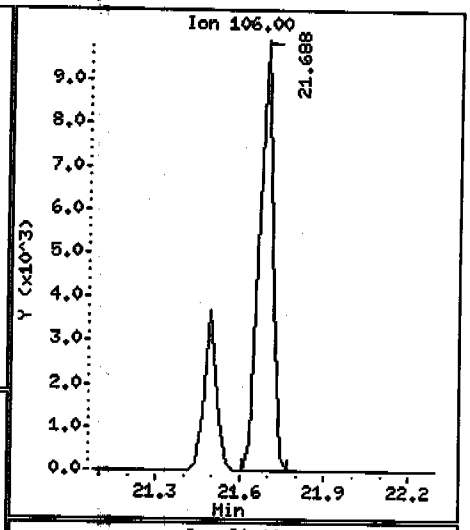
Column phase: RTx-624

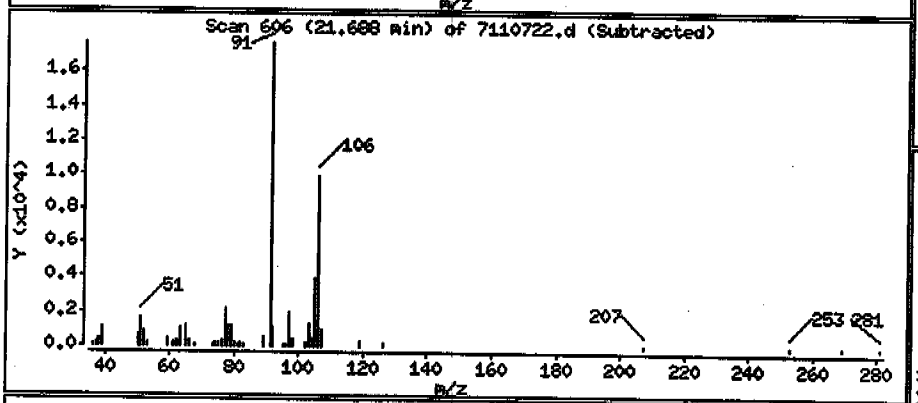
Column diameter: 0.53

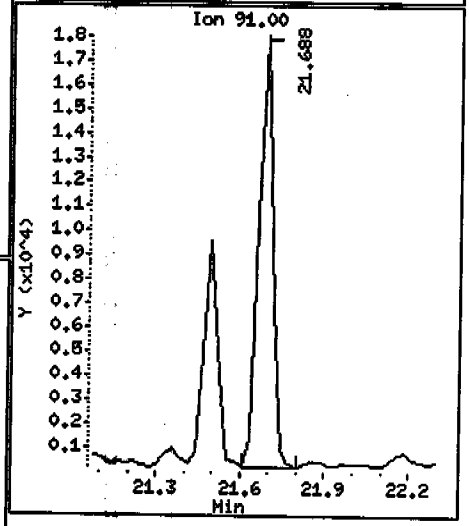
129 m,p-Xylene

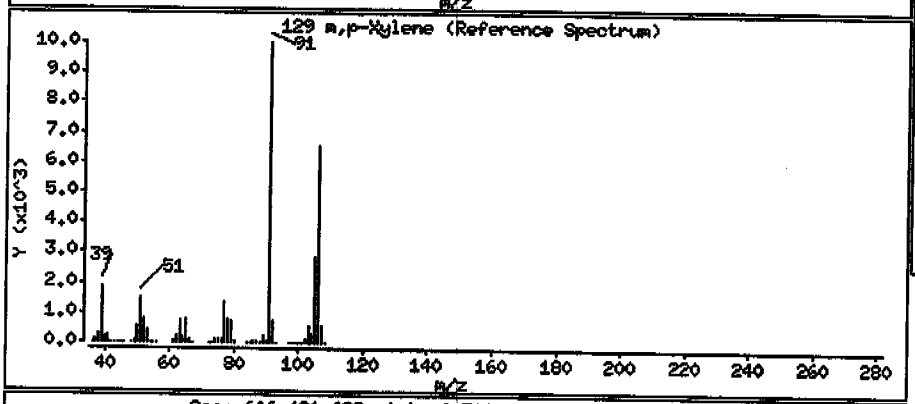
Concentration: 1.280 PPBV

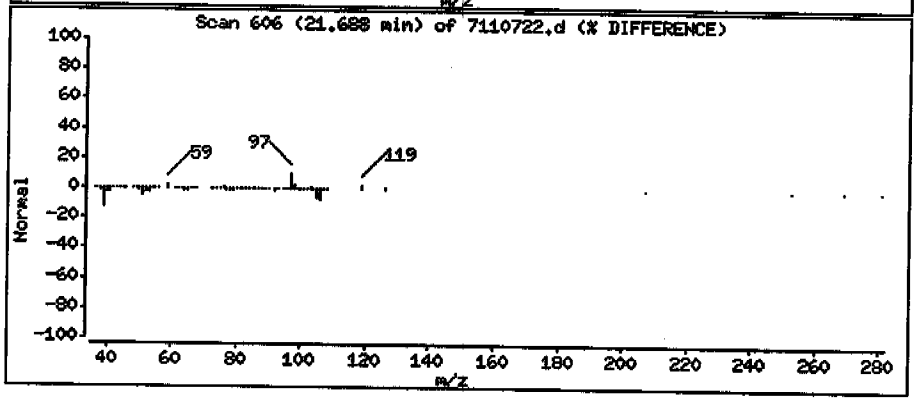












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Instrument: msd7.i

Sample Info: 200mL #25259

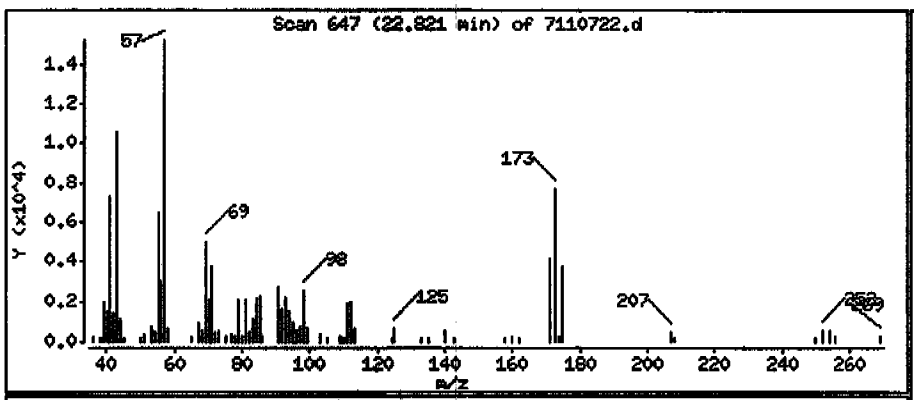
Operator: ab

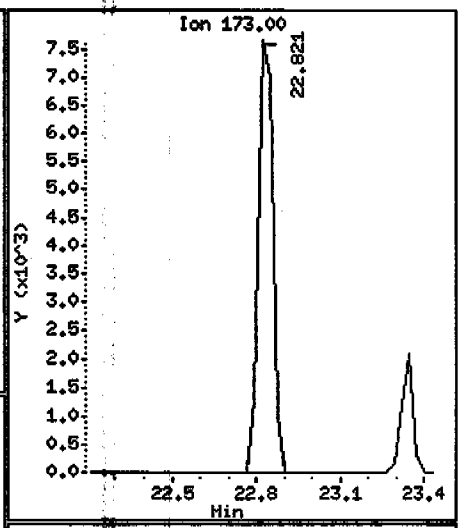
Column phase: RTx-624

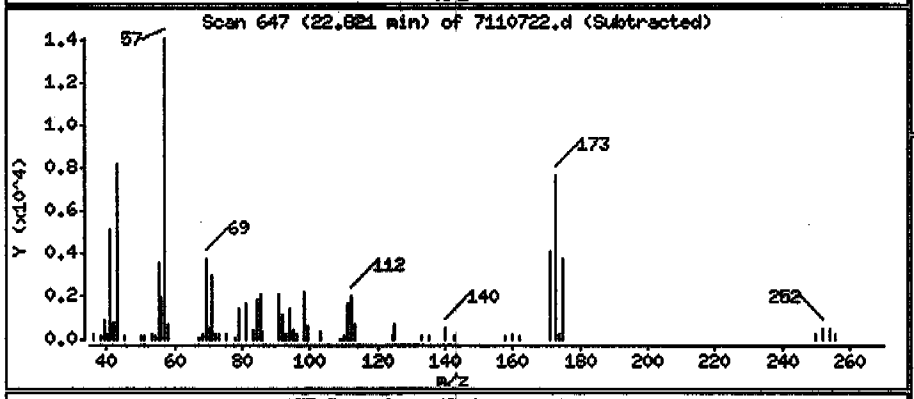
Column diameter: 0.53

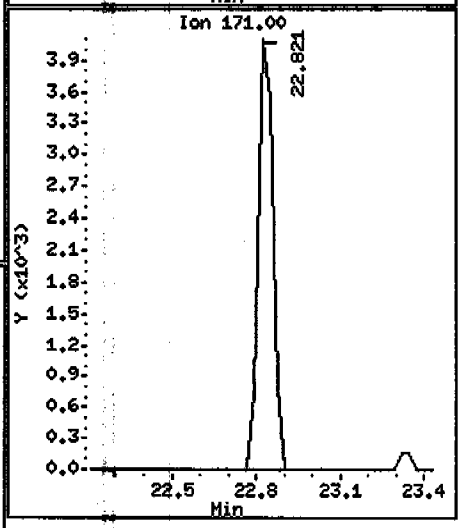
133 Bromoform

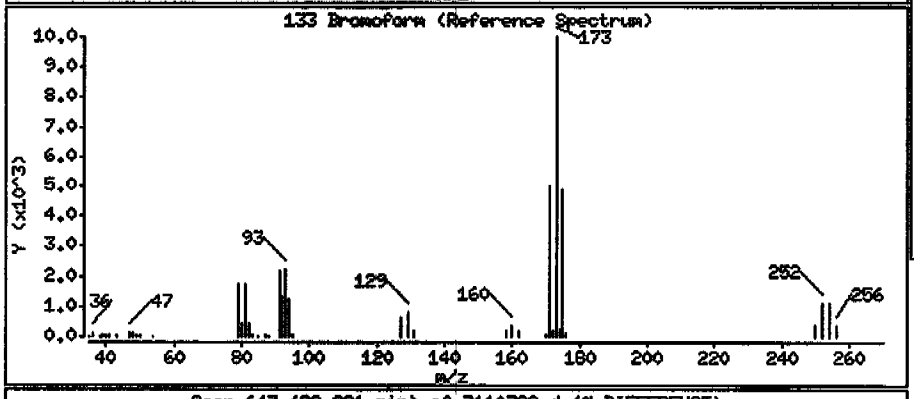
Concentration: 0.9864 PPBV

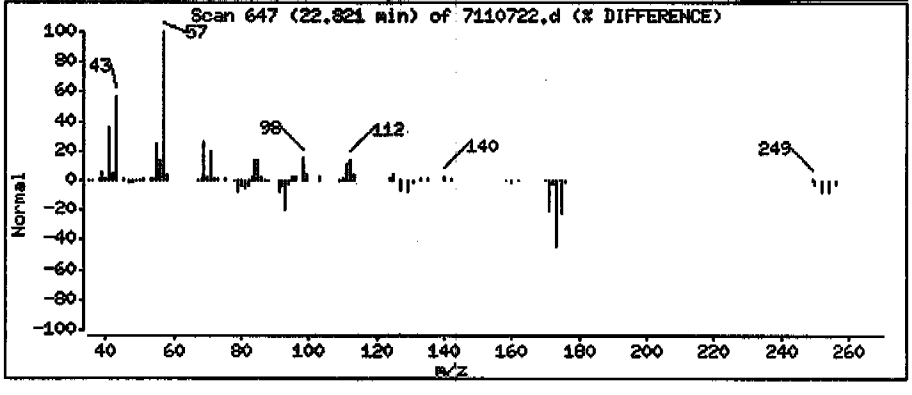












Data File: /chem/msd7.i/7-07nov.b/7110722.d

Date : 08-NOV-2007 02:10

Client ID:

Sample Info: 200mL #25259

Instrument: msd7.i

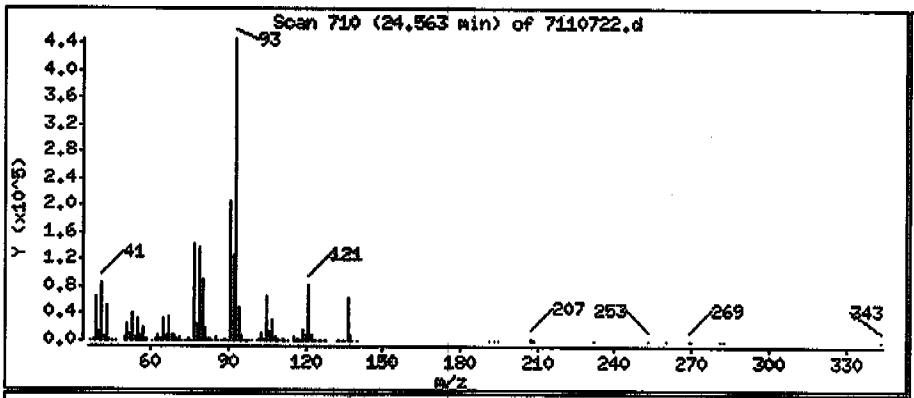
Operator: ab

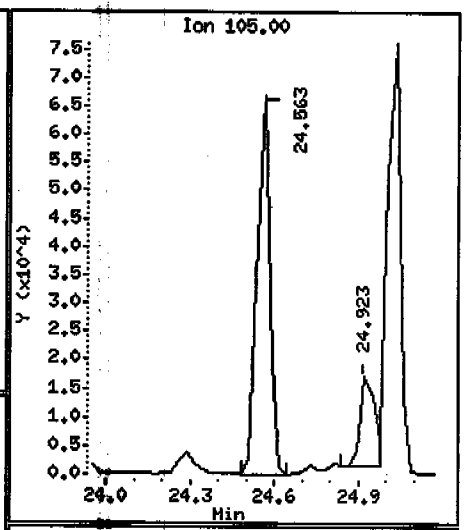
Column phase: RTx-624

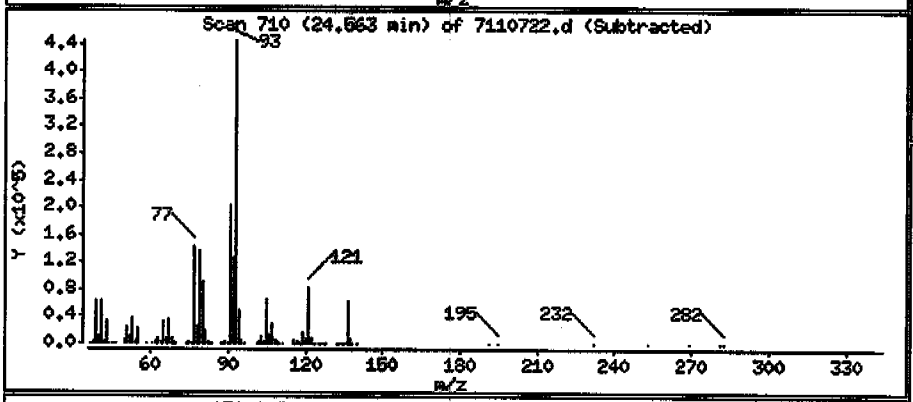
Column diameter: 0.53

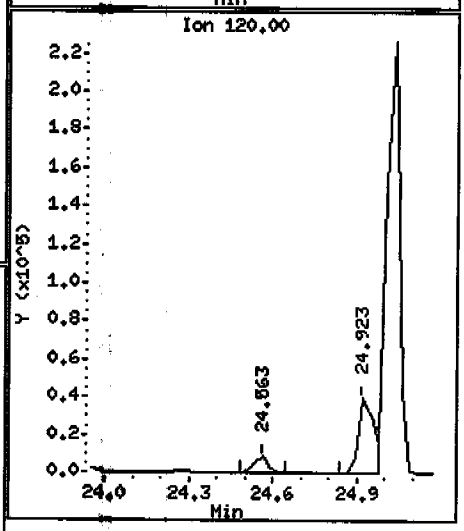
150 1,2,4-Trimethylbenzene

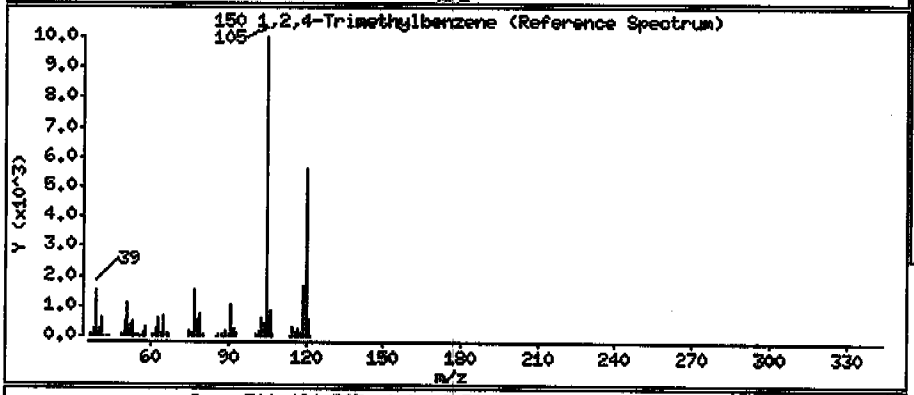
Concentration: 4.353 PPBV

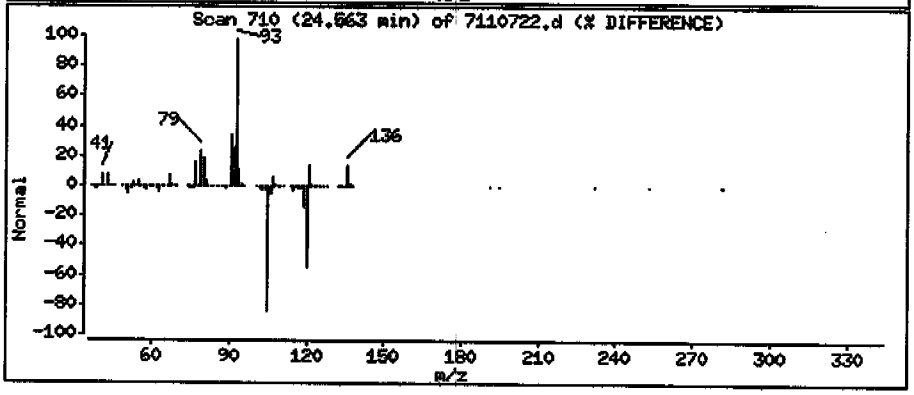












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6806

Lab ID#: 0711101-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	0.89	4.0	4.4
Freon 113	0.80	3.6	6.2	28
1,1-Dichloroethene	0.80	14	3.2	55
Acetone	3.2	60	7.6	140
Carbon Disulfide	0.80	1.1	2.5	3.3
Methylene Chloride	0.80	300	2.8	1000
Hexane	0.80	0.83	2.8	2.9
2-Butanone (Methyl Ethyl Ketone)	0.80	0.83	2.4	2.4
cis-1,2-Dichloroethene	0.80	1.2	3.2	4.6
Chloroform	0.80	160	3.9	780
1,1,1-Trichloroethane	0.80	2.4	4.4	13
Carbon Tetrachloride	0.80	87	5.1	550
Benzene	0.80	1.5	2.6	4.7
1,2-Dichloroethane	0.80	3.5	3.2	14
Trichloroethene	0.80	220	4.3	1200
Bromodichloromethane	0.80	1.6	5.4	10
Toluene	0.80	2.0	3.0	7.5
1,1,2-Trichloroethane	0.80	21	4.4	110
Tetrachloroethene	0.80	17	5.5	120
1,4-Dichlorobenzene	0.80	0.81	4.8	4.9
Propylene	3.2	33	5.5	57

0189

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6806

Lab ID#: 0711101-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	0.89	4.0	4.4
Freon 114	0.80	Not Detected	5.6	Not Detected
Chloromethane	3.2	Not Detected	6.6	Not Detected
Vinyl Chloride	0.80	Not Detected	2.0	Not Detected
1,3-Butadiene	0.80	Not Detected	1.8	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.80	Not Detected	4.5	Not Detected
Ethanol	3.2	Not Detected	6.1	Not Detected
Freon 113	0.80	3.6	6.2	28
1,1-Dichloroethene	0.80	14	3.2	55
Acetone	3.2	60	7.6	140
2-Propanol	3.2	Not Detected	7.9	Not Detected
Carbon Disulfide	0.80	1.1	2.5	3.3
Methylene Chloride	0.80	300	2.8	1000
Methyl tert-butyl ether	0.80	Not Detected	2.9	Not Detected
trans-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Hexane	0.80	0.83	2.8	2.9
1,1-Dichloroethane	0.80	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	0.83	2.4	2.4
cis-1,2-Dichloroethene	0.80	1.2	3.2	4.6
Tetrahydrofuran	0.80	Not Detected	2.4	Not Detected
Chloroform	0.80	160	3.9	780
1,1,1-Trichloroethane	0.80	2.4	4.4	13
Cyclohexane	0.80	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.80	87	5.1	550
Benzene	0.80	1.5	2.6	4.7
1,2-Dichloroethane	0.80	3.5	3.2	14
Heptane	0.80	Not Detected	3.3	Not Detected
Trichloroethene	0.80	220	4.3	1200
1,2-Dichloropropane	0.80	Not Detected	3.7	Not Detected
1,4-Dioxane	3.2	Not Detected	12	Not Detected
Bromodichloromethane	0.80	1.6	5.4	10
cis-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
4-Methyl-2-pentanone	0.80	Not Detected	3.3	Not Detected
Toluene	0.80	2.0	3.0	7.5
trans-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.80	21	4.4	110
Tetrachloroethene	0.80	17	5.5	120

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6806

Lab ID#: 0711101-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.2	Not Detected	13	Not Detected
Dibromochloromethane	0.80	Not Detected	6.8	Not Detected
1,2-Dibromoethane (EDB)	0.80	Not Detected	6.2	Not Detected
Chlorobenzene	0.80	Not Detected	3.7	Not Detected
Ethyl Benzene	0.80	Not Detected	3.5	Not Detected
m,p-Xylene	0.80	Not Detected	3.5	Not Detected
o-Xylene	0.80	Not Detected	3.5	Not Detected
Styrene	0.80	Not Detected	3.4	Not Detected
Bromoform	0.80	Not Detected	8.3	Not Detected
1,1,2,2-Tetrachloroethane	0.80	Not Detected	5.5	Not Detected
4-Ethyltoluene	0.80	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.80	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.80	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
1,4-Dichlorobenzene	0.80	0.81	4.8	4.9
alpha-Chlorotoluene	0.80	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
1,2,4-Trichlorobenzene	3.2	Not Detected	24	Not Detected
Hexachlorobutadiene	3.2	Not Detected	34	Not Detected
Chlorodifluoromethane	3.2	Not Detected	11	Not Detected
Methanol	80	Not Detected	100	Not Detected
n-Butanol	3.2	Not Detected	9.8	Not Detected
Propylene	3.2	33	5.5	57

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	93	70-130

0191

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110723.d
Lab Smp Id: 0711101-06A
Inj Date : 08-NOV-2007 02:58
Operator : ab
Inst ID: msd7.i
Smp Info : 200mL #21005
Misc Info : 5.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth
Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29
Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.61000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	622353	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	485348			28.66- 128.66	77.99
14.416	14.416 (1.000)	49	1440448			133.49- 233.49	231.45
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.185	16.158 (1.000)	114	2128372	25.0000		80.00- 120.00	100.00
16.185	16.158 (1.000)	88	328876			0.00- 65.23	15.45
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1440777	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	757210			4.70- 104.70	52.56
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	789357	23.6095	23.610	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	404162			2.91- 102.91	51.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1705145	22.5685	22.568	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	181225			0.00- 61.46	10.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1186785			19.18- 119.18	69.60
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	801323	23.3728	23.373	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	976457			73.89- 173.89	121.86
23.347	23.347 (1.093)	176	778729			48.20- 148.20	97.18
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	551431	20.5577	33.098	80.00- 120.00	100.00
5.645	5.617 (0.392)	42	339742			21.19- 121.19	61.61
5.645	5.617 (0.392)	39	522420			24.83- 124.83	94.74
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.757	5.758 (0.399)	85	54248	0.55159	0.8881	80.00- 120.00	100.00
5.786	5.758 (0.401)	87	17366			0.00- 83.07	32.01
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	115831	2.26987	3.654	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	75394			13.12- 113.12	65.09
10.213	10.186 (0.708)	101	142342			67.28- 167.28	122.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.351	10.324 (0.718)	61	471314	8.67978	13.974	80.00- 120.00	100.00
10.351	10.324 (0.718)	96	289160			9.78- 109.78	61.35
10.351	10.324 (0.718)	98	181541			0.00- 88.25	38.52
45 Acetone					CAS #: 67-64-1		
10.517	10.490 (0.730)	58	627245	37.3717	60.168	80.00- 120.00	100.00
10.517	10.490 (0.730)	43	2016148			247.10- 347.10	321.43
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	69035	0.66636	1.073	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	7340754	183.878	296.04	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	5264746			19.98- 119.98	71.72
11.485	11.457 (0.797)	51	2254652			0.00- 80.85	30.71
65 Hexane					CAS #: 110-54-3		
12.314	12.287 (0.854)	57	27194	0.51652	0.8316	80.00- 120.00	100.00
12.314	12.287 (0.854)	43	38129			17.84- 117.84	140.21
12.314	12.287 (0.854)	86	4105			0.00- 65.07	15.10
75 2-Butanone					CAS #: 78-93-3		
13.918	13.891 (0.965)	72	6940	0.51487	0.8289	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
75 2-Butanone (continued)							
13.918	13.891 (0.965)	43	34748			412.48- 512.48	500.69
13.918	13.891 (0.965)	57	3546			0.00- 86.57	51.10
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.946	13.918 (0.967)	61	32053	0.72615	1.169	80.00- 120.00	100.00
13.946	13.918 (0.967)	96	23751			26.41- 126.41	74.10
13.946	13.918 (0.967)	98	16051			0.00- 98.54	50.08
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	6261919	99.9322	160.89	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	4083511			15.69- 115.69	65.21
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	94062	1.49065	2.400	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	59915			14.03- 114.03	63.70
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	3203615	54.1604	87.198	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	3313001			53.14- 153.14	103.41
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.959)	78	77314	0.91424	1.472	80.00- 120.00	100.00
15.522	15.522 (0.959)	77	17745			0.00- 71.87	22.95
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.966)	62	98495	2.19211	3.529	80.00- 120.00	100.00
15.632	15.633 (0.966)	64	34588			0.00- 82.89	35.12
101 Trichloroethene					CAS #: 79-01-6		
16.655	16.628 (1.029)	95	5123154	136.382	219.57	80.00- 120.00	100.00
16.655	16.628 (1.029)	130	5049456			51.11- 151.11	98.56
16.655	16.628 (1.029)	97	3295903			15.04- 115.04	64.33
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.085)	83	62945	0.96515	1.554	80.00- 120.00	100.00
17.568	17.540 (1.085)	85	38432			14.03- 114.03	61.06
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	114840	1.23983	1.996	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	76158			12.90- 112.90	66.32
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	389367	13.0475	21.006	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	247082			12.40- 112.40	63.46
19.669	19.669 (0.921)	83	331044			32.55- 132.55	85.02

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	412394	10.6550	17.154	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	289329			21.07- 121.07	70.16
19.835	19.835 (0.929)	131	277723			18.33- 118.33	67.34
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	31393	0.50520	0.8134	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	19441			13.81- 113.81	61.93
25.282	25.282 (1.184)	111	13905			0.00- 87.35	44.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110723.d
Lab Smp Id: 0711101-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	622353	-10.51
97 1,4-Difluorobenze	2265681	1359409	3171953	2128372	-6.06
126 Chlorobenzene-d5	1765821	1059493	2472149	1440777	-18.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0711101-06A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.0"Hg ->5psi

Client SDG: 7-07nov
Fraction: VOA

Operator: ab
SampleType: SAMPLE
Quant Type: ISTD

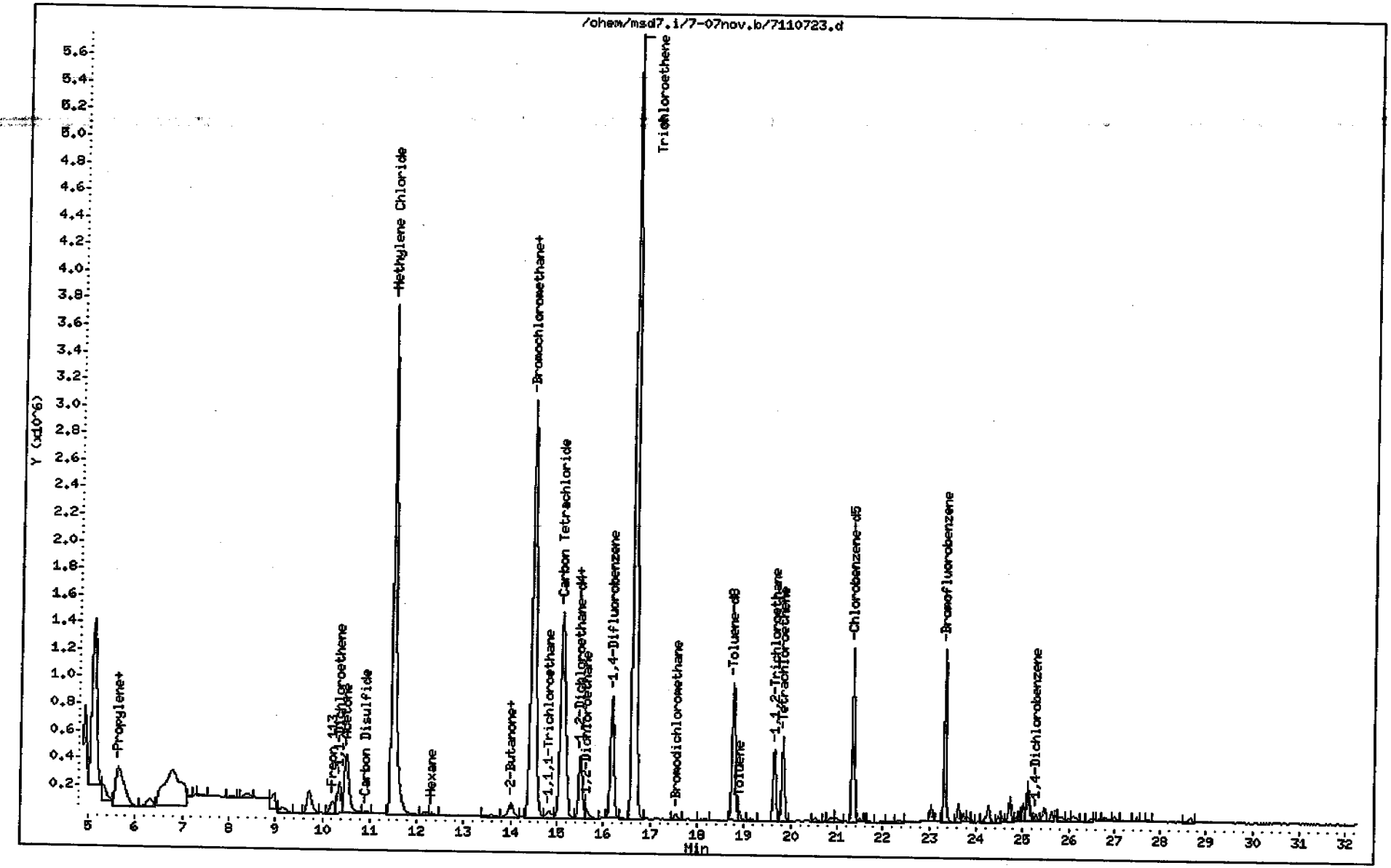
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.610	94.44	70-130
$ 113 Toluene-d8	25.000	22.568	90.27	70-130
$ 137 Bromofluorobenzene	25.000	23.373	93.49	70-130

Data File: /chem/msd7.i/7-07nov.b/7110723.d
Date : 08-NOV-2007 02:58
Client ID:
Sample Info: 200mL #21005

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53



Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21006

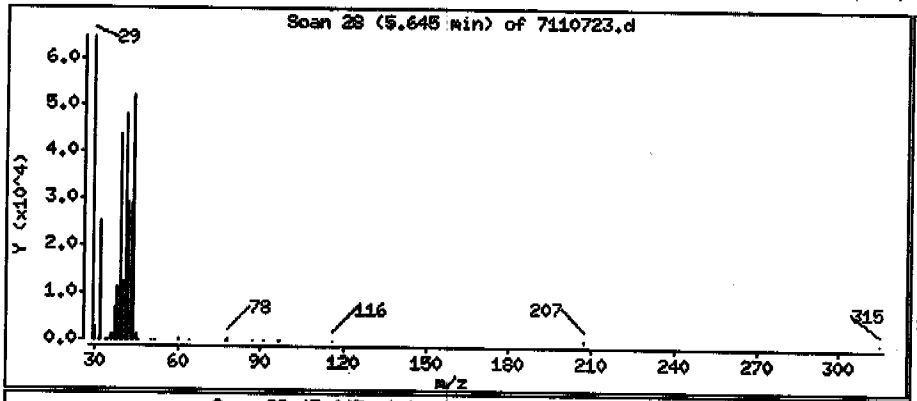
Operator: ab

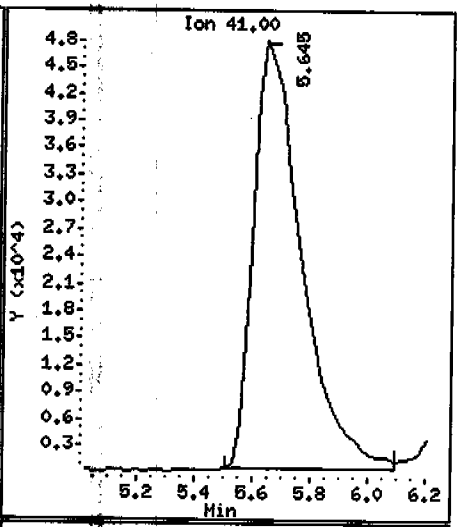
Column phase: RTx-624

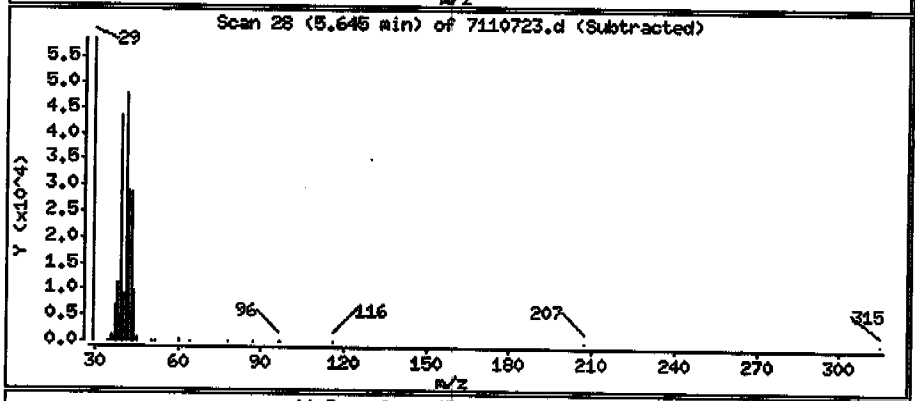
Column diameter: 0.53

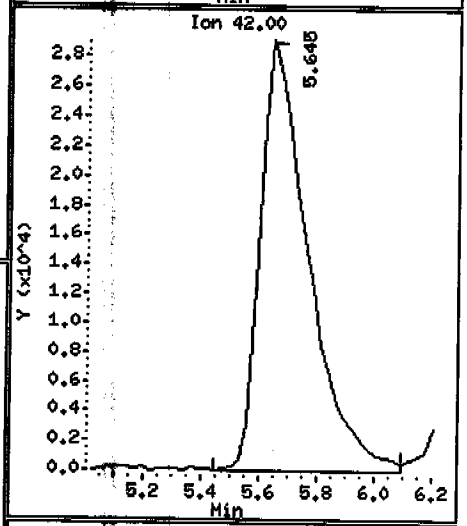
11 Propylene

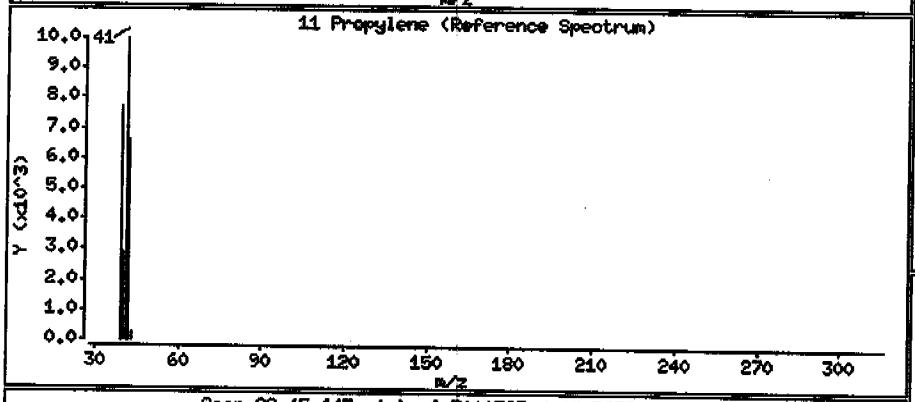
Concentration: 33.098 PPBV

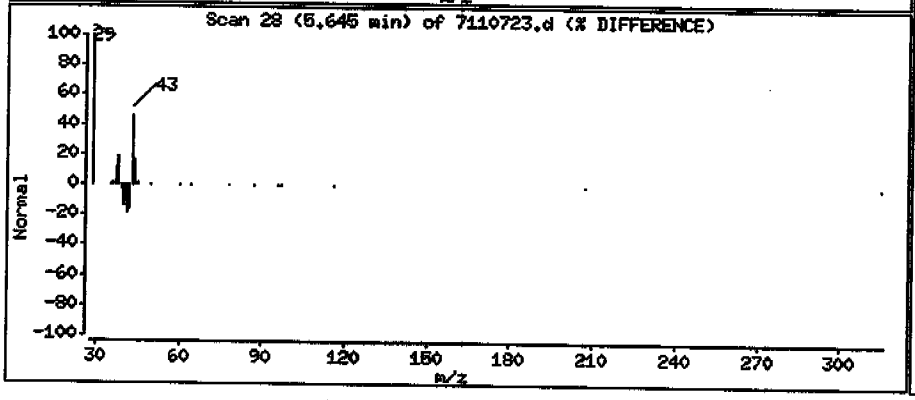


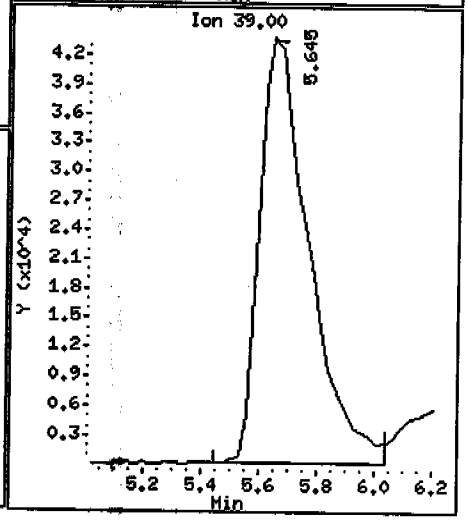












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

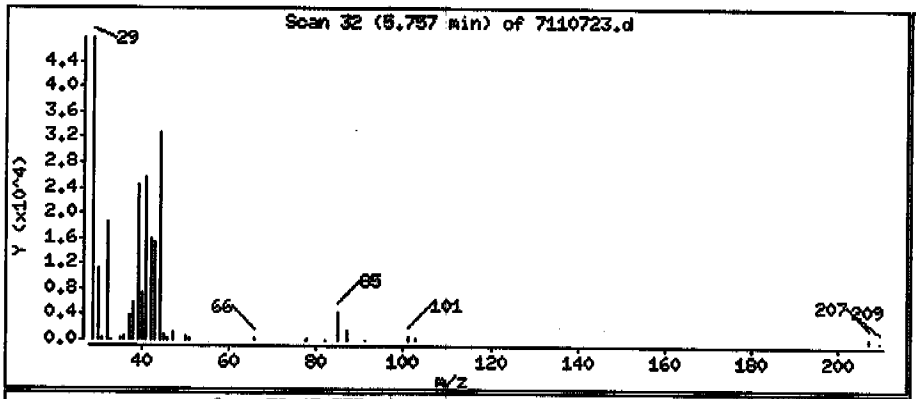
Operator: ab

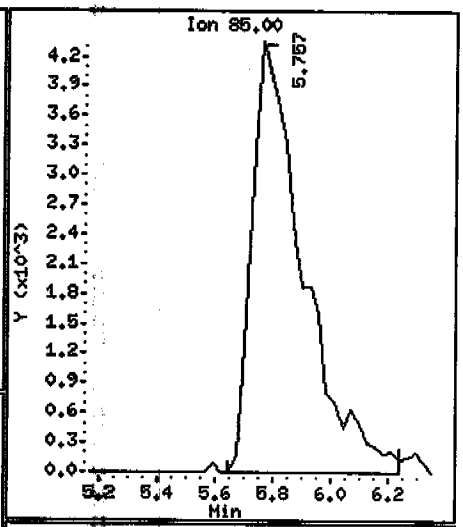
Column phase: RTx-624

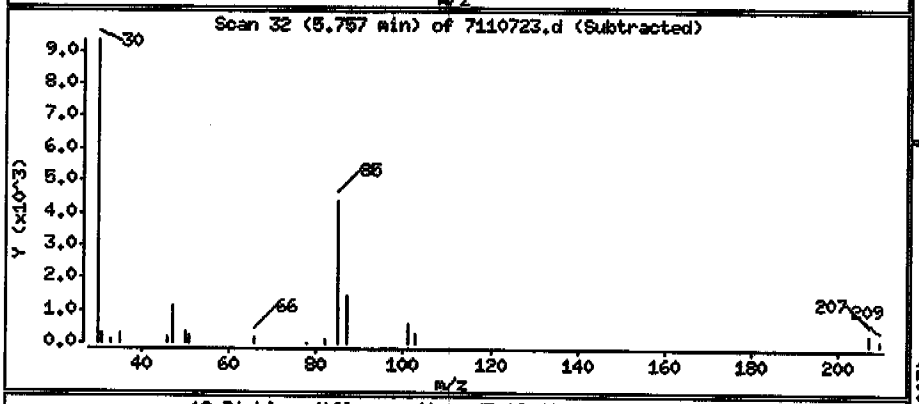
Column diameter: 0.53

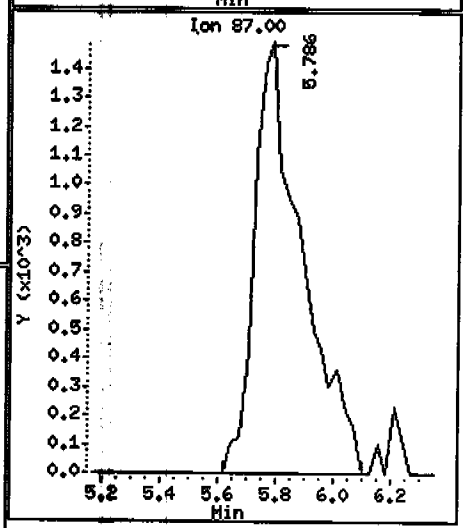
12 Dichlorodifluoromethane/Fr12

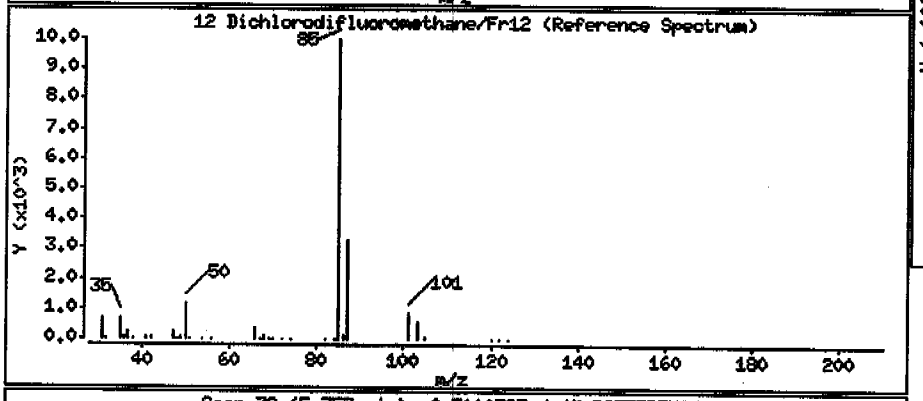
Concentration: 0.8881 PPBV

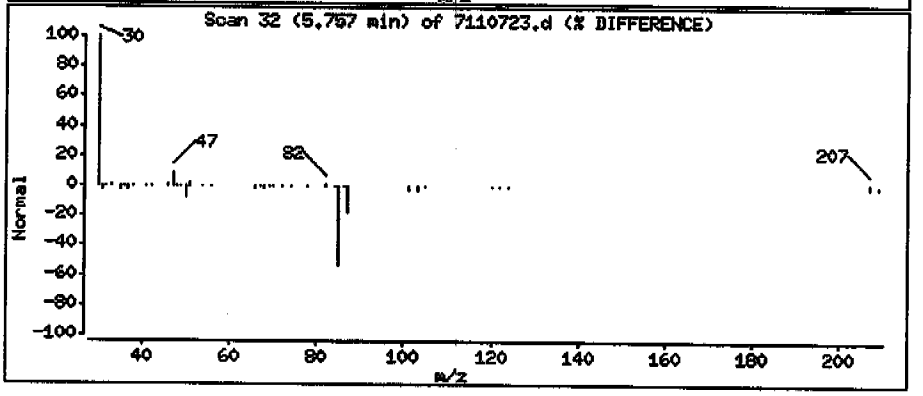












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

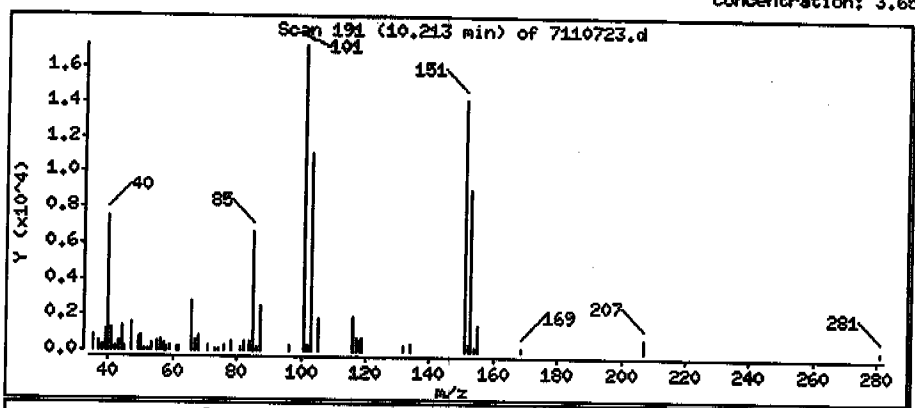
Operator: ab

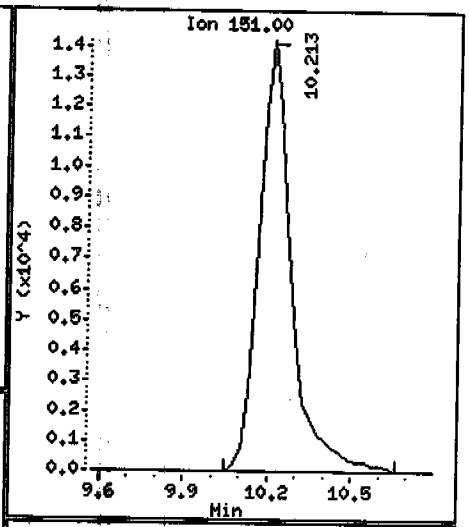
Column phase: RTx-624

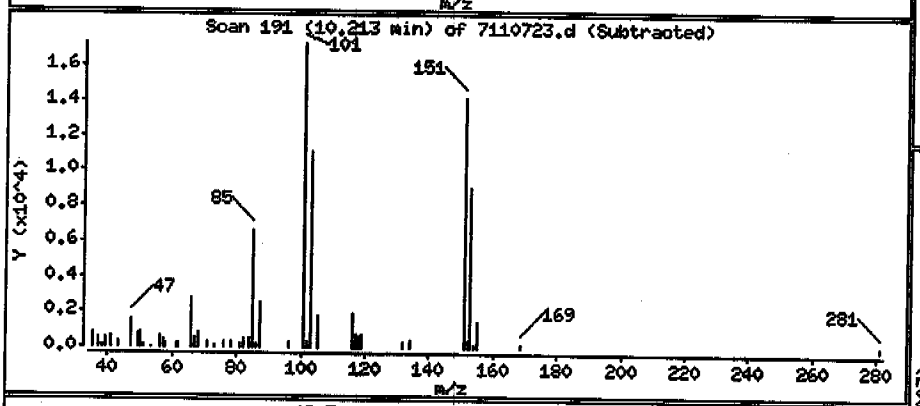
Column diameter: 0.53

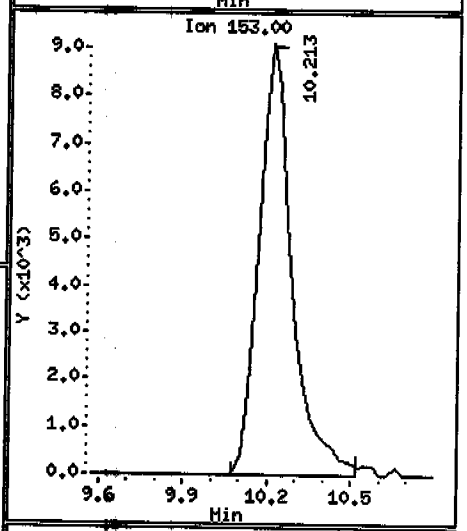
42 Freon 113

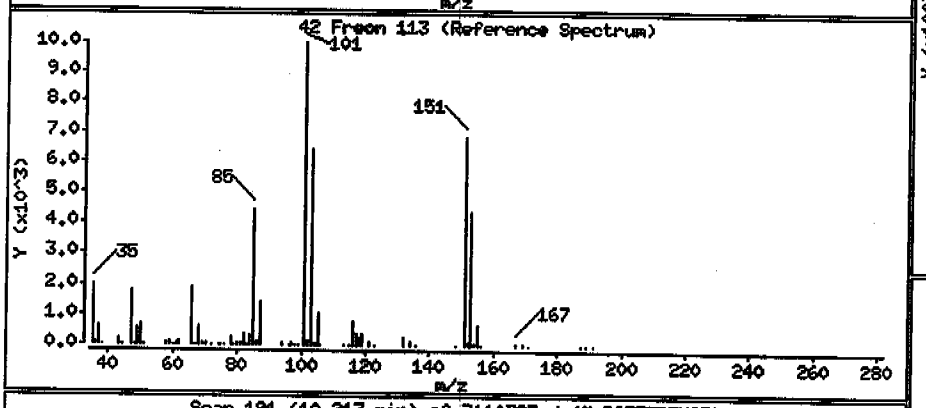
Concentration: 3.684 PPBV

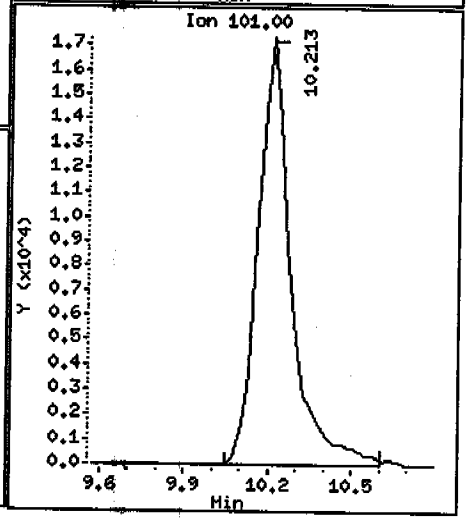


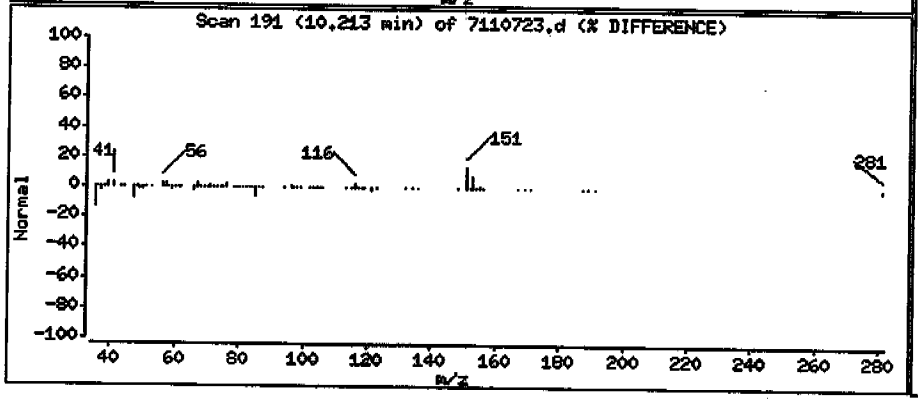












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

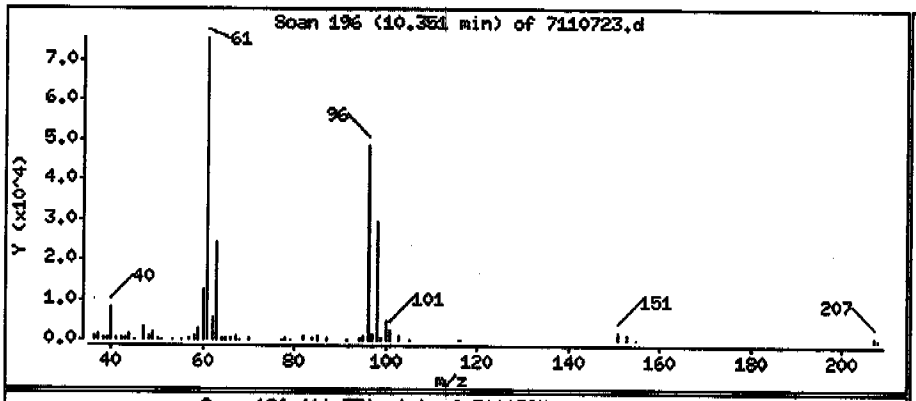
Operator: ab

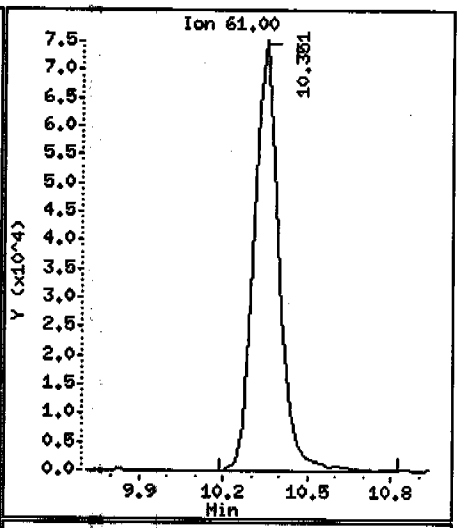
Column phase: RTx-624

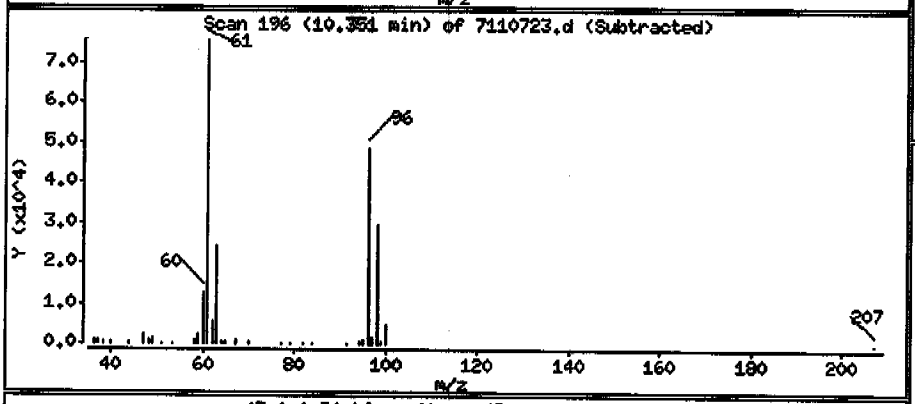
Column diameter: 0.53

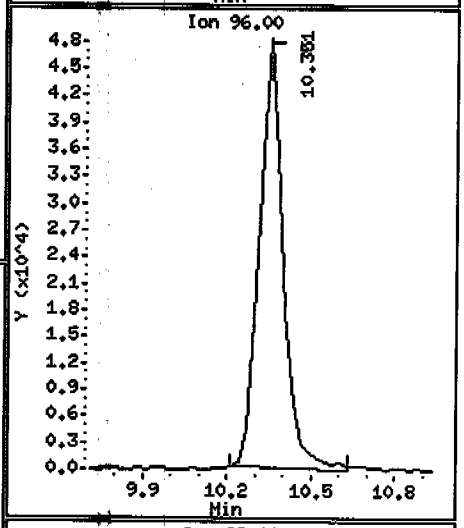
43 1,1-Dichloroethene

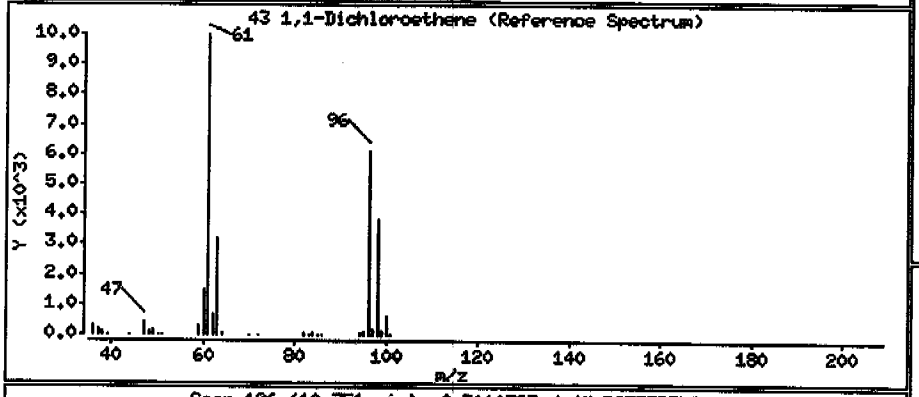
Concentration: 13.974 PPBV

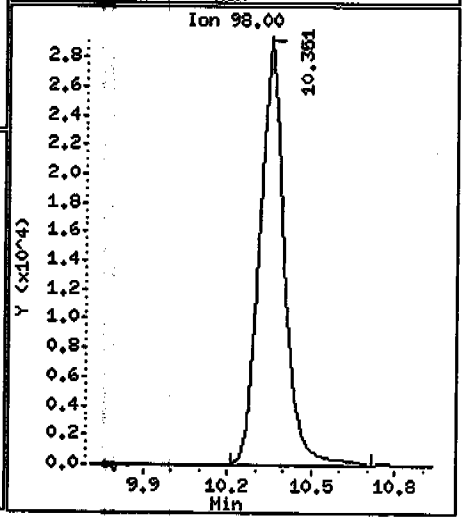


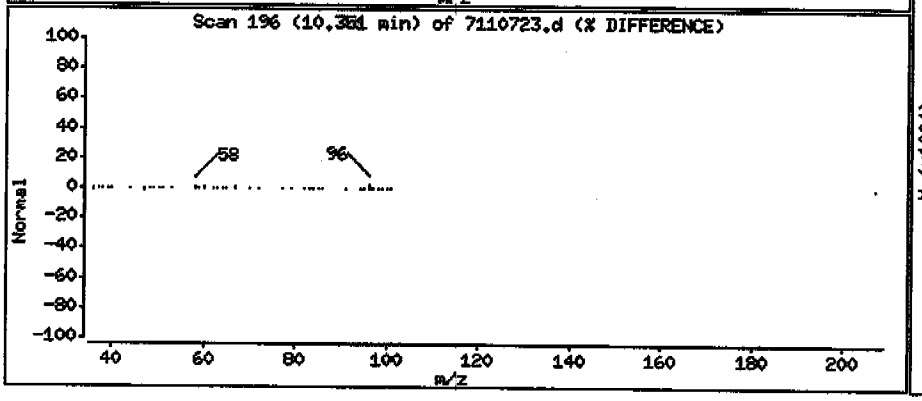












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

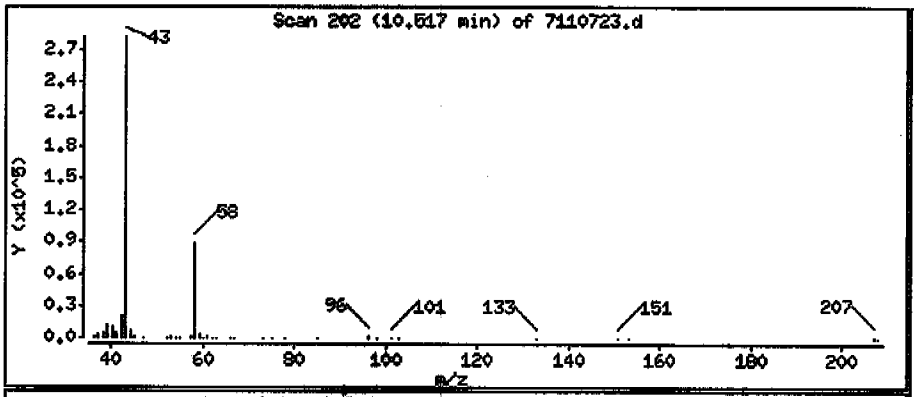
Operator: ab

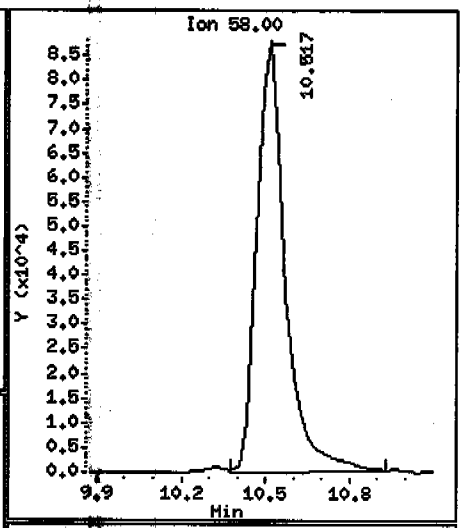
Column phase: RTx-624

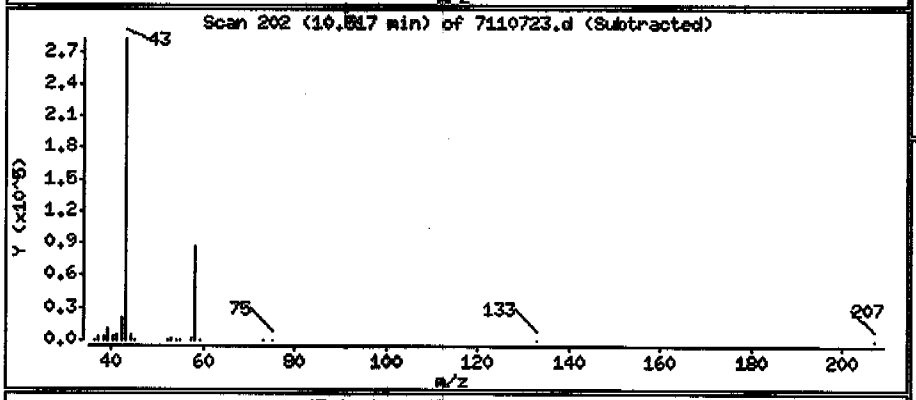
Column diameter: 0.53

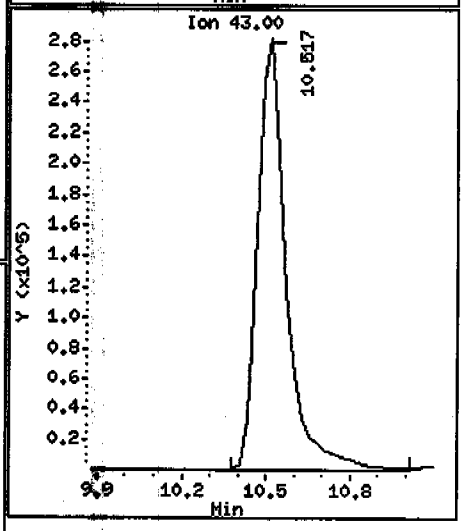
45 Acetone

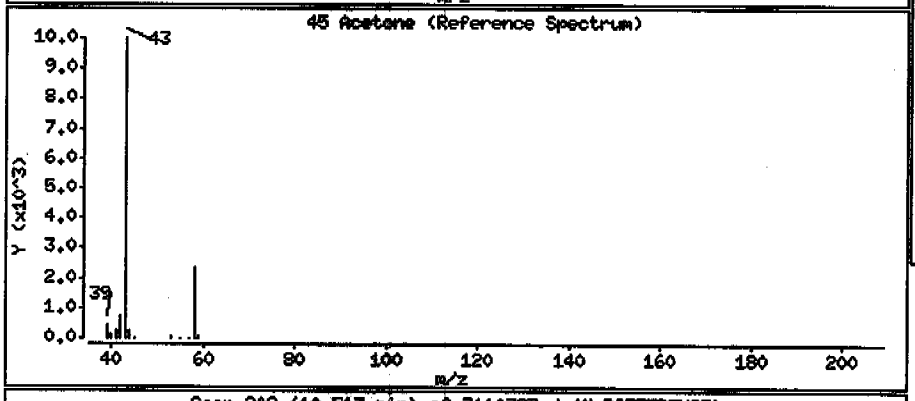
Concentration: 60.168 PPBV

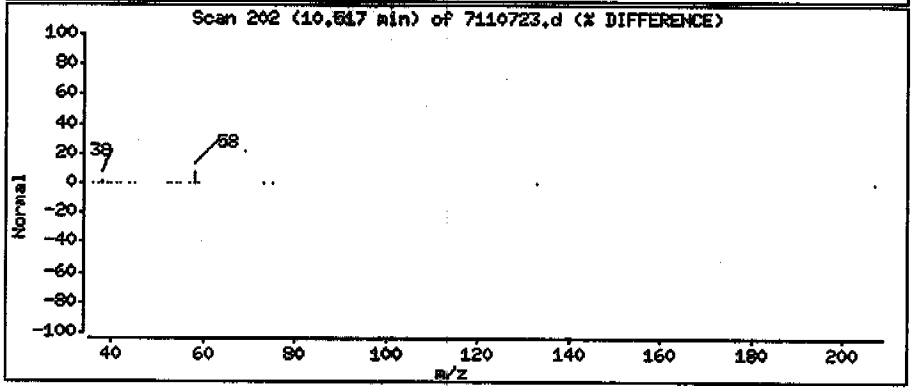












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

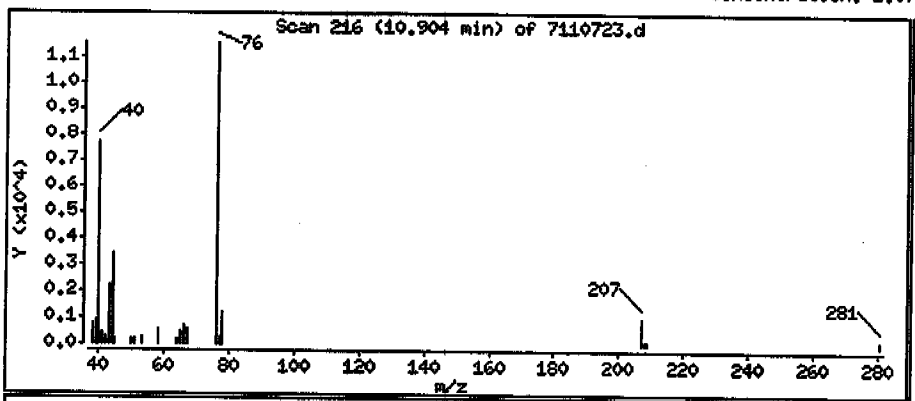
Operator: ab

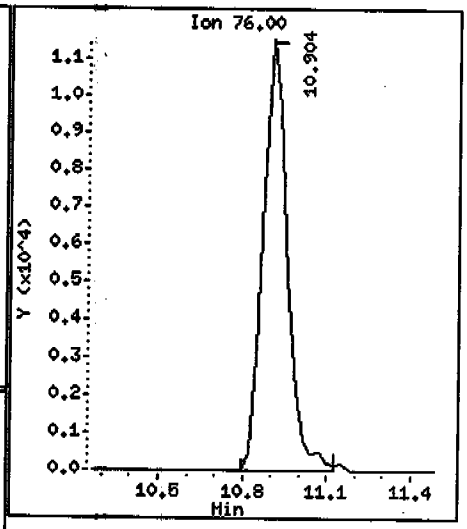
Column phase: RTx-624

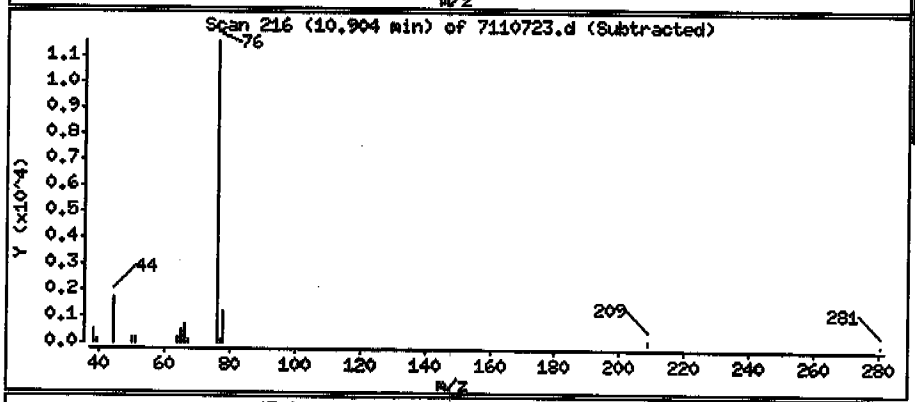
Column diameter: 0.53

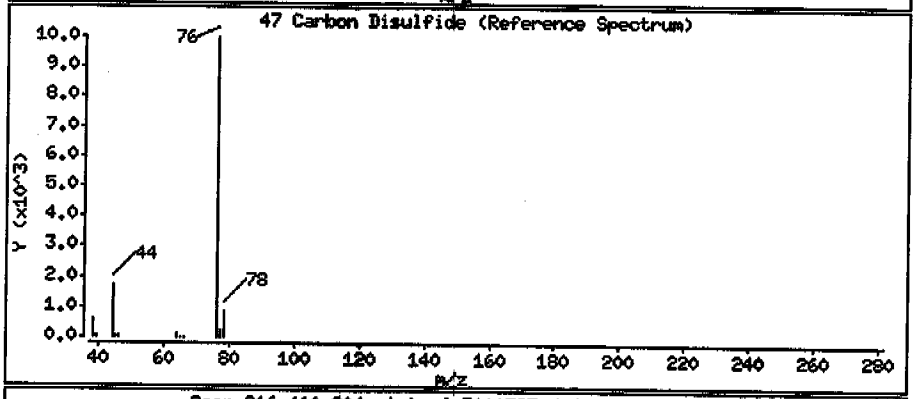
47 Carbon Disulfide

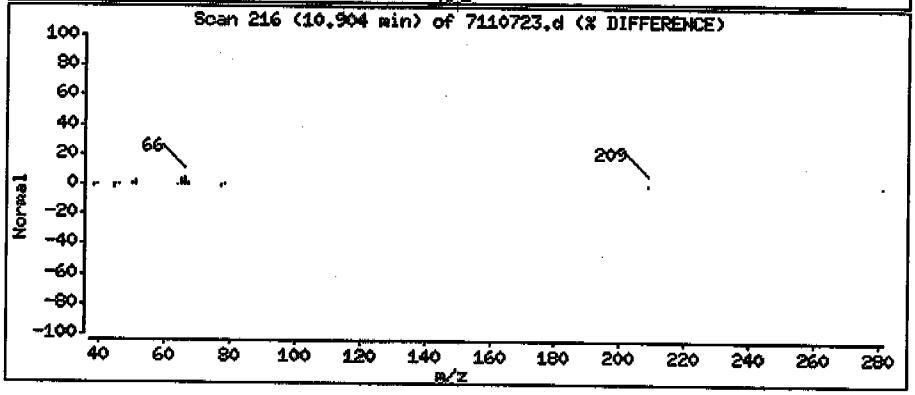
Concentration: 1.073 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

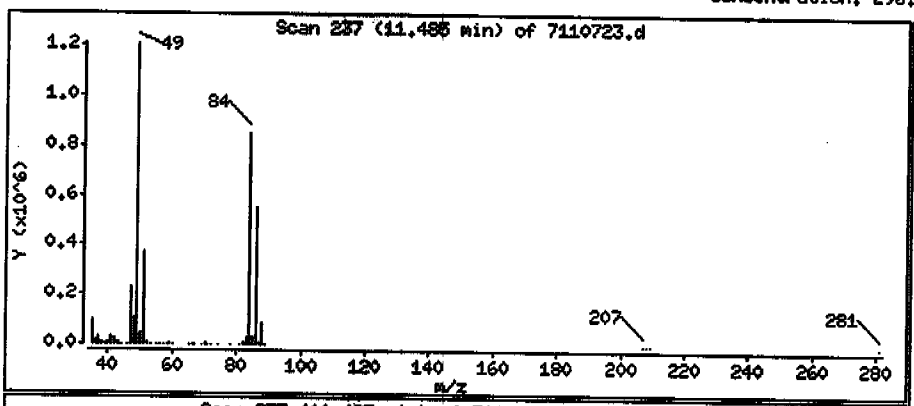
Operator: ab

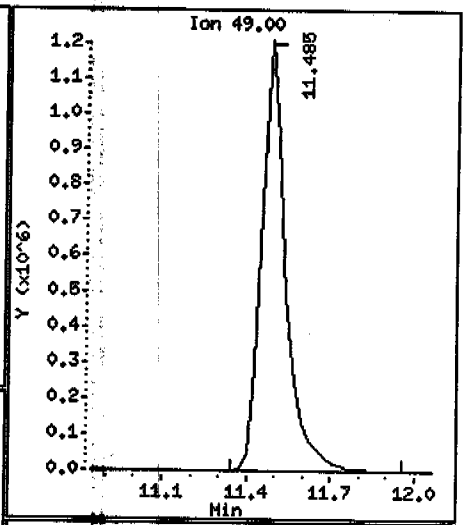
Column phase: RTx-624

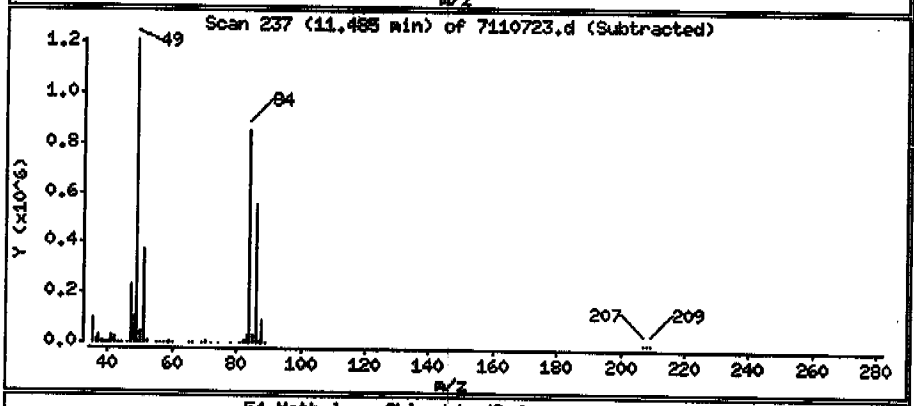
Column diameter: 0.53

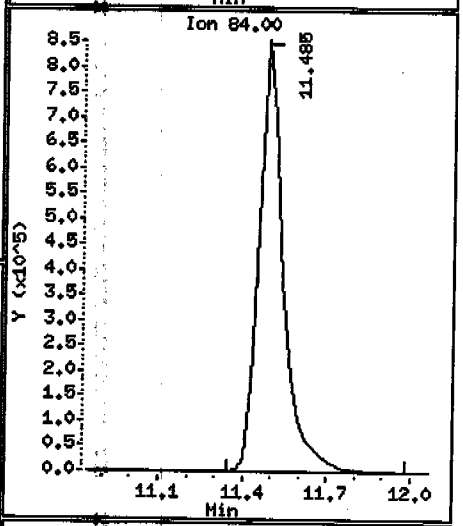
54 Methylene Chloride

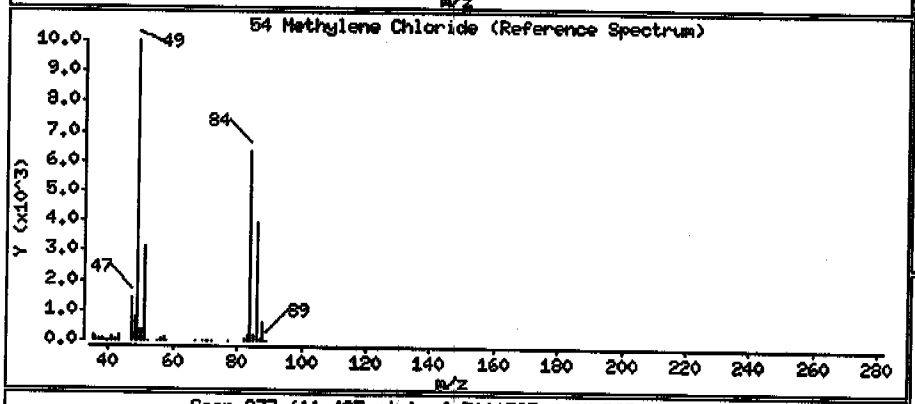
Concentration: 296.04 PPBV

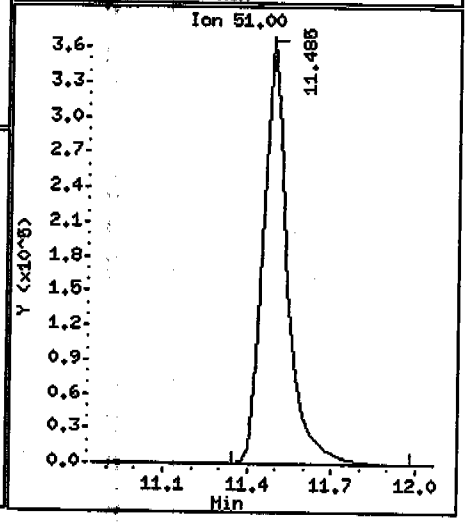


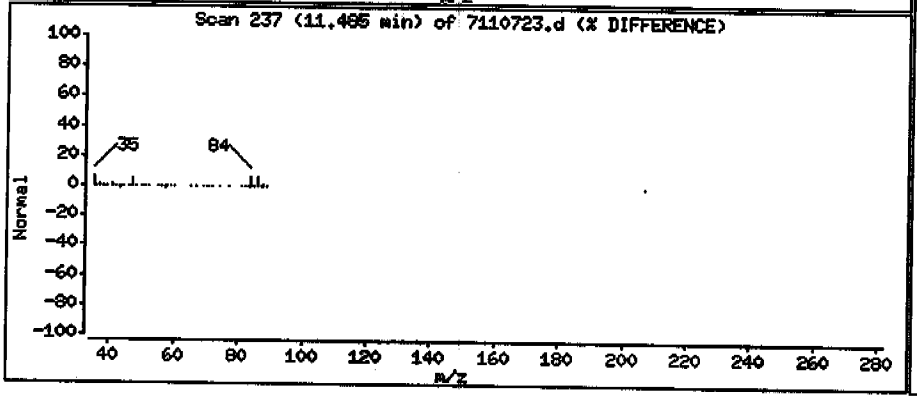












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

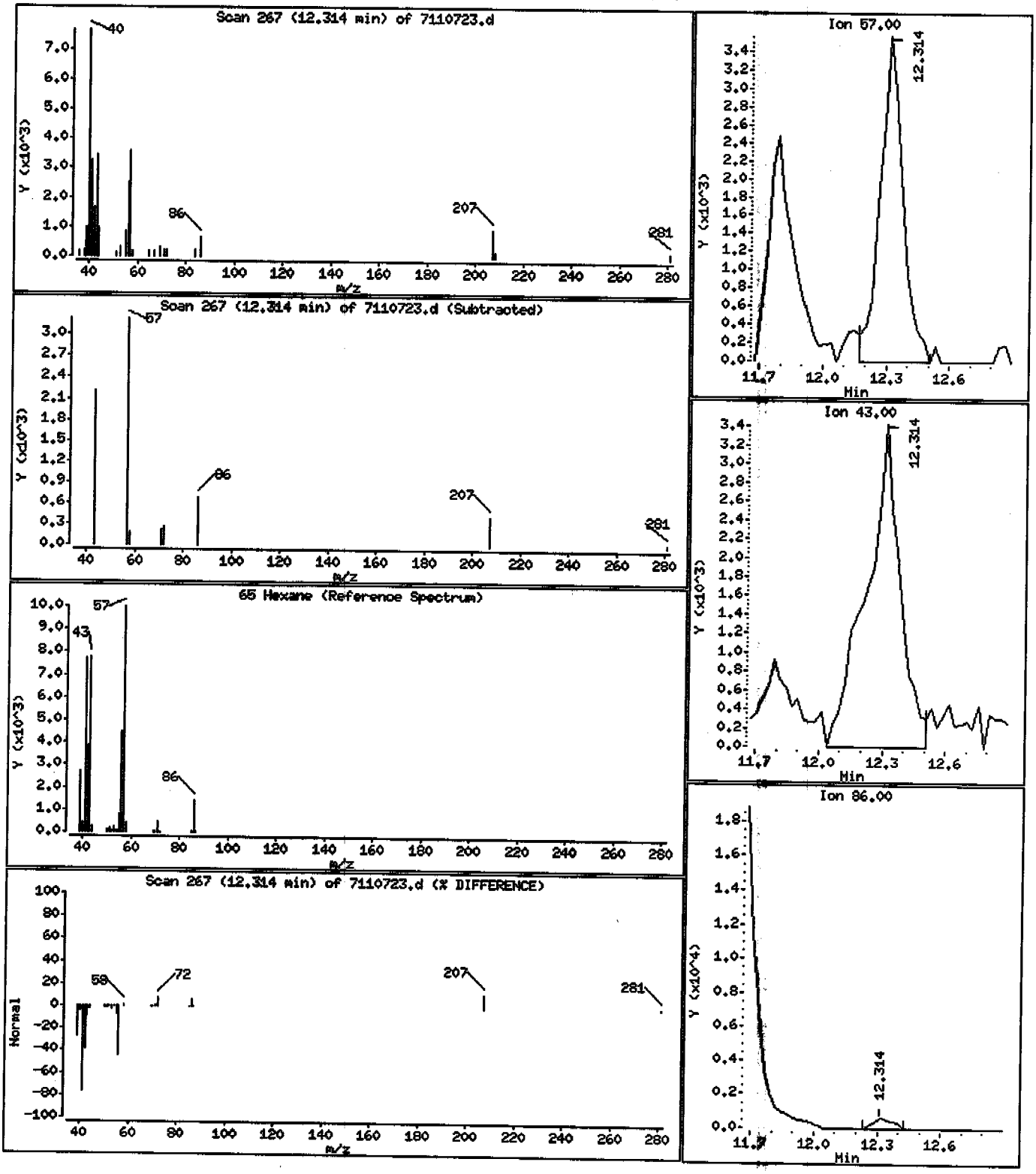
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

65 Hexane

Concentration: 0.8316 PPBV



Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

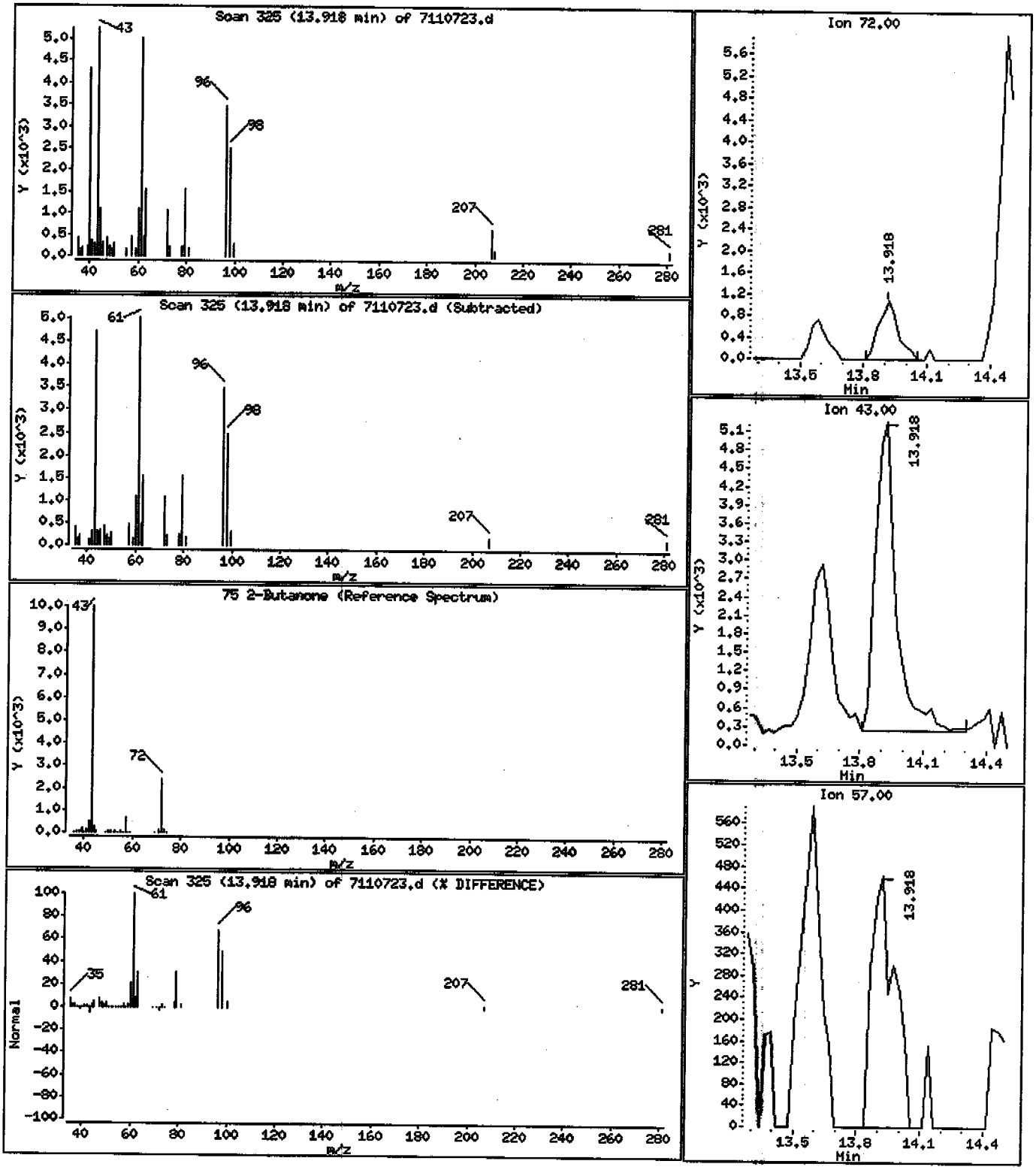
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

75 2-Butanone

Concentration: 0.8289 PPBV



Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21006

Instrument: msd7.i

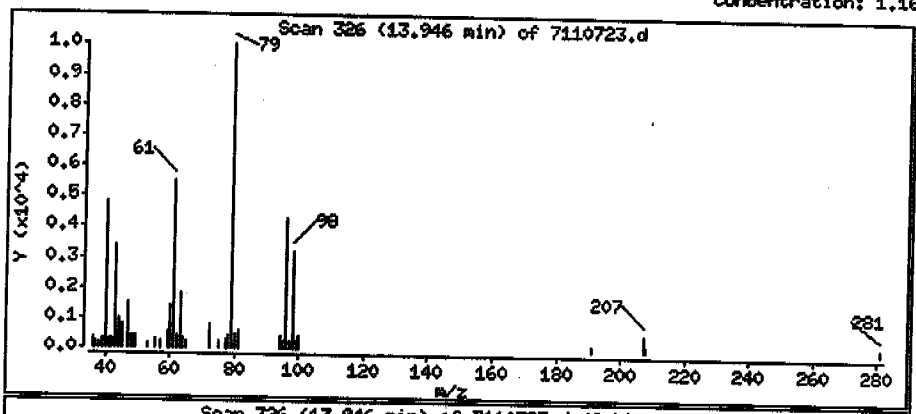
Operator: ab

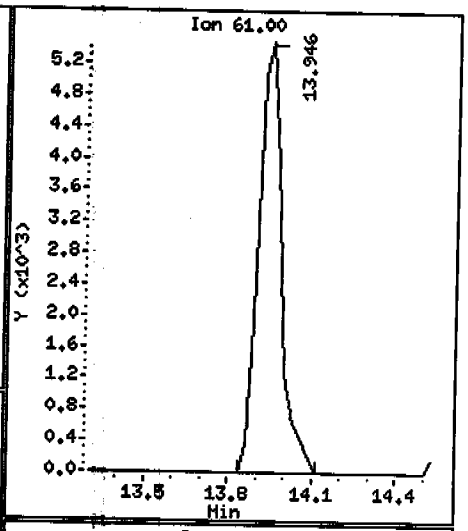
Column phase: RTx-624

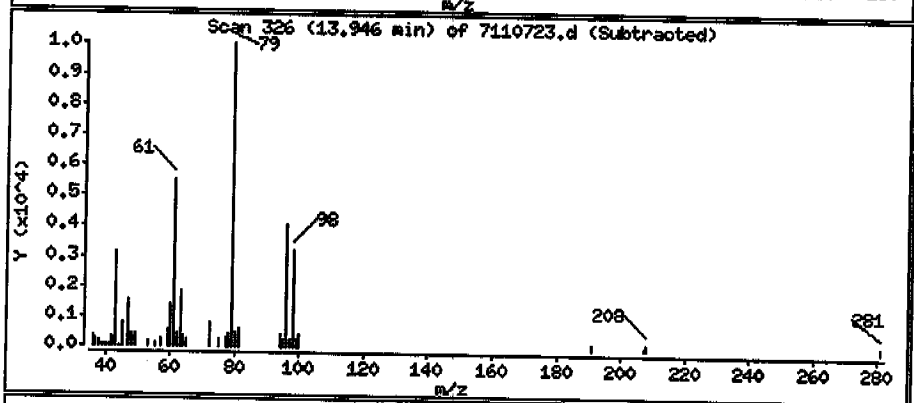
Column diameter: 0.53

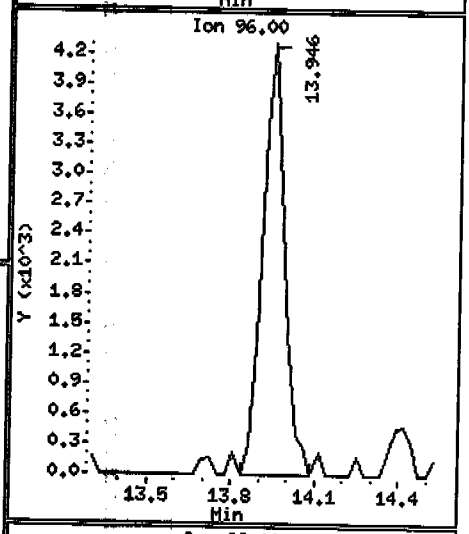
76 cis-1,2-Dichloroethene

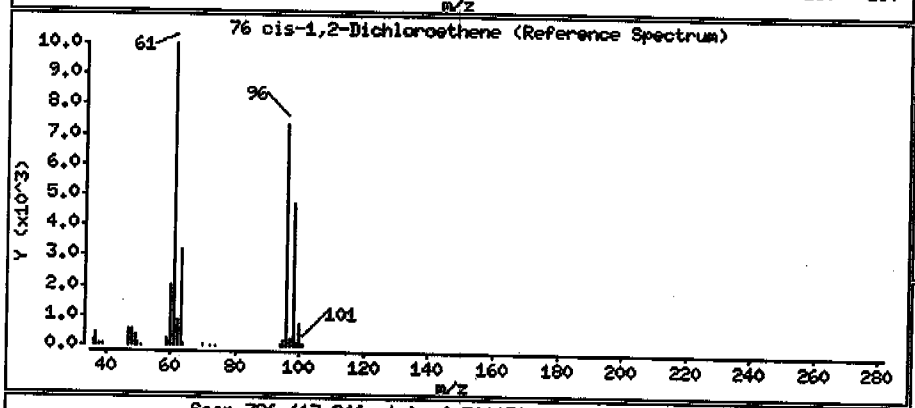
Concentration: 1.169 PPBV

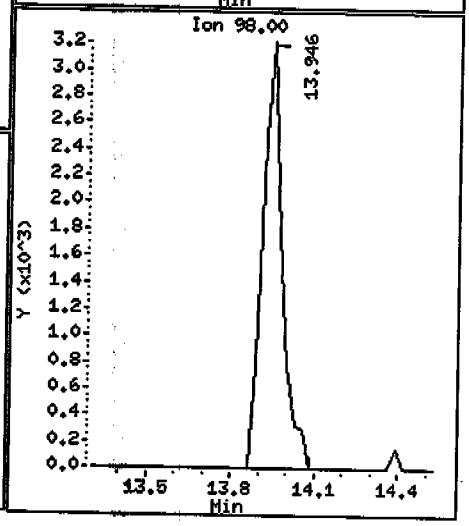


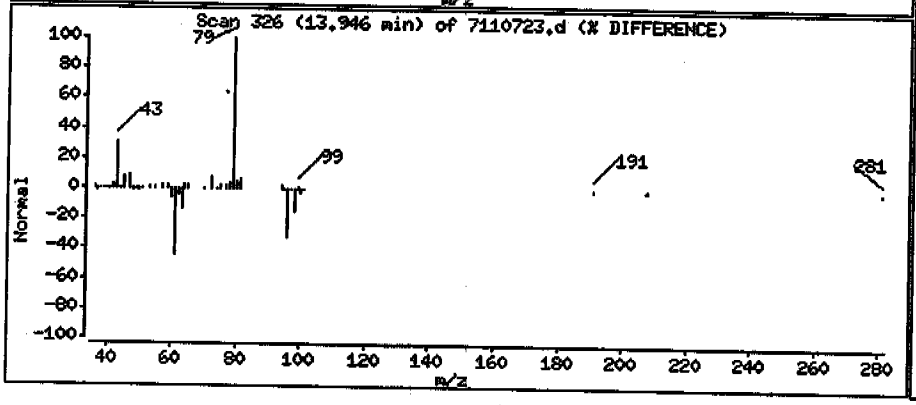












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

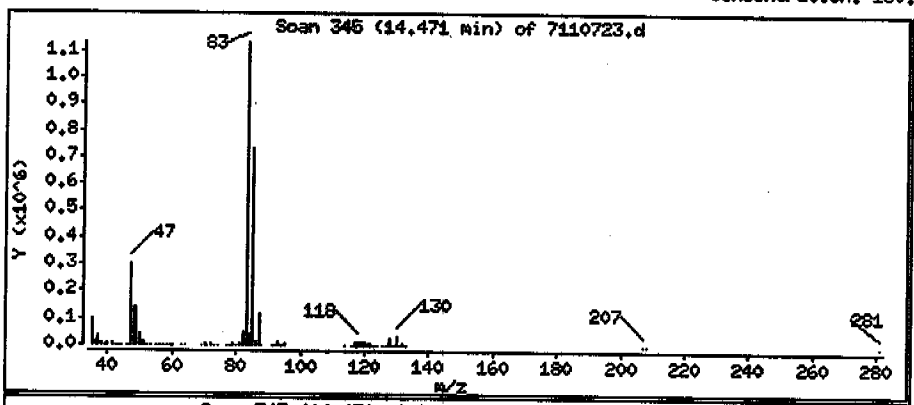
Operator: ab

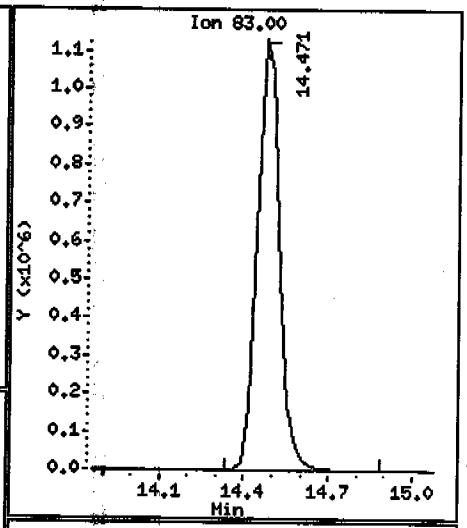
Column phase: RTx-624

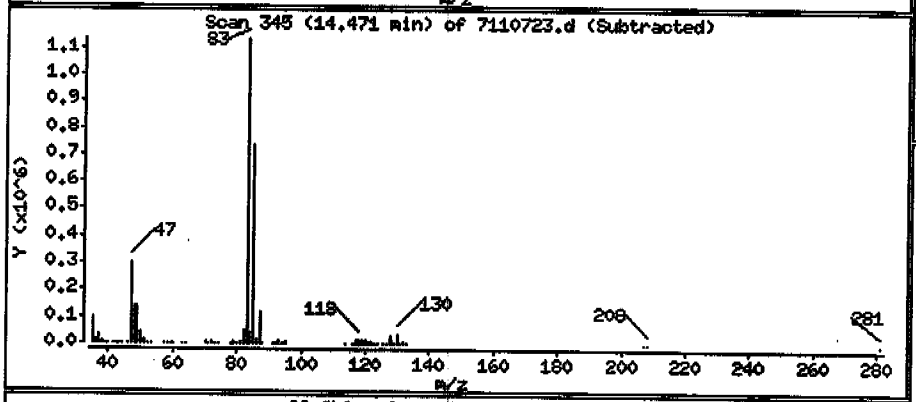
Column diameter: 0.53

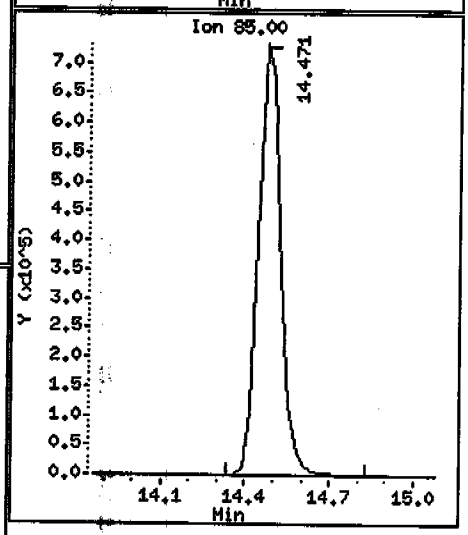
82 Chloroform

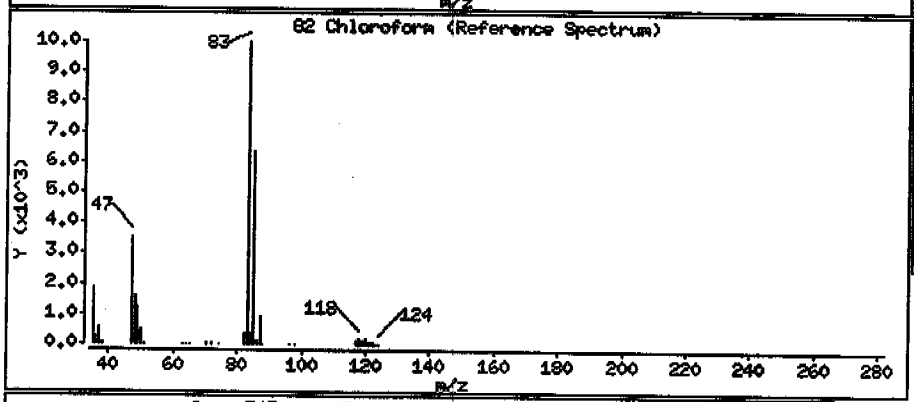
Concentration: 160.89 PPBV

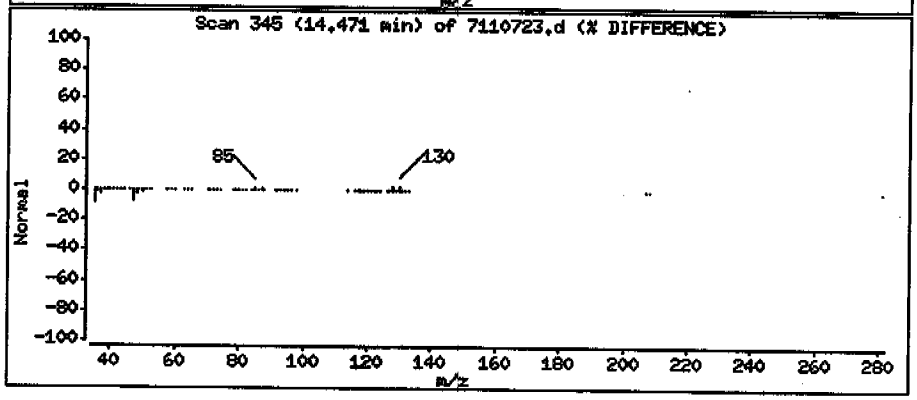












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

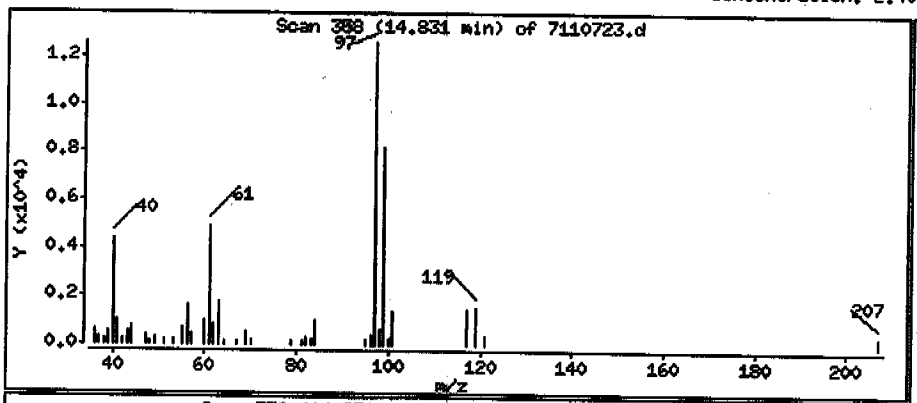
Operator: ab

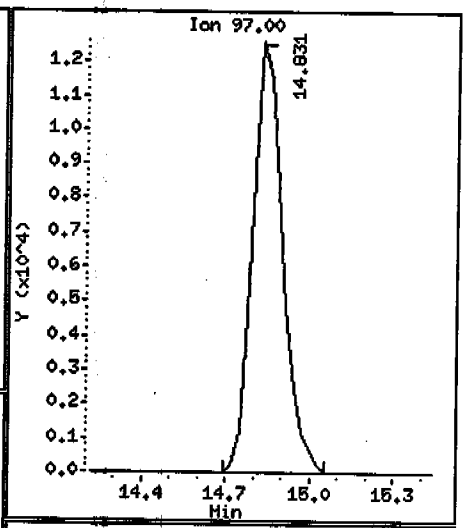
Column phase: RTx-624

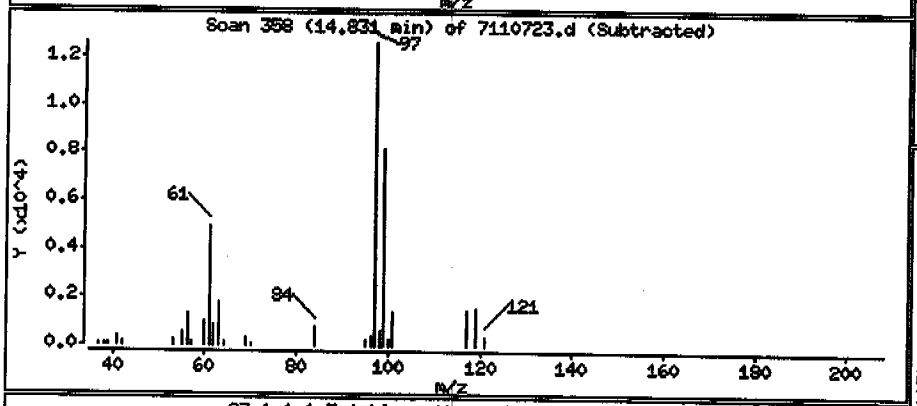
Column diameter: 0.53

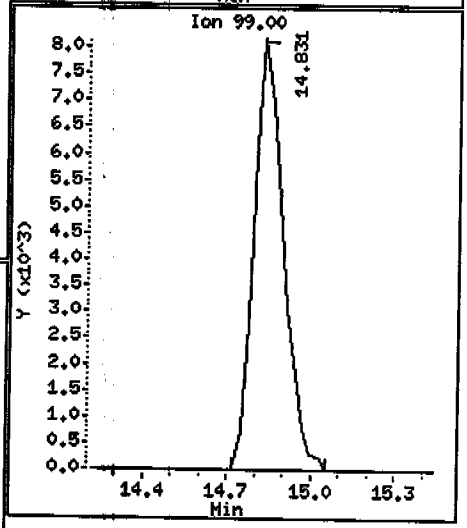
83 1,1,1-Trichloroethane

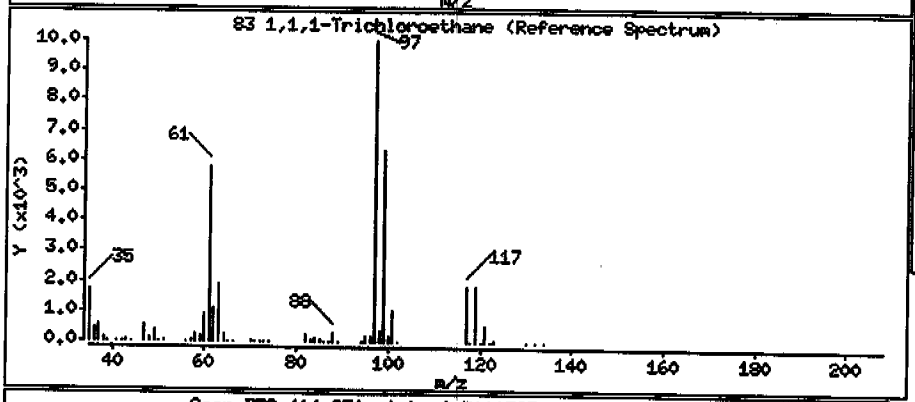
Concentration: 2.400 PPBV

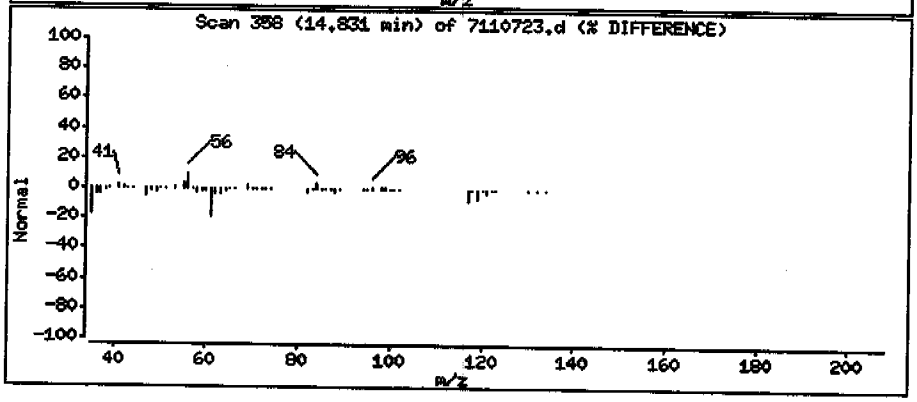












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

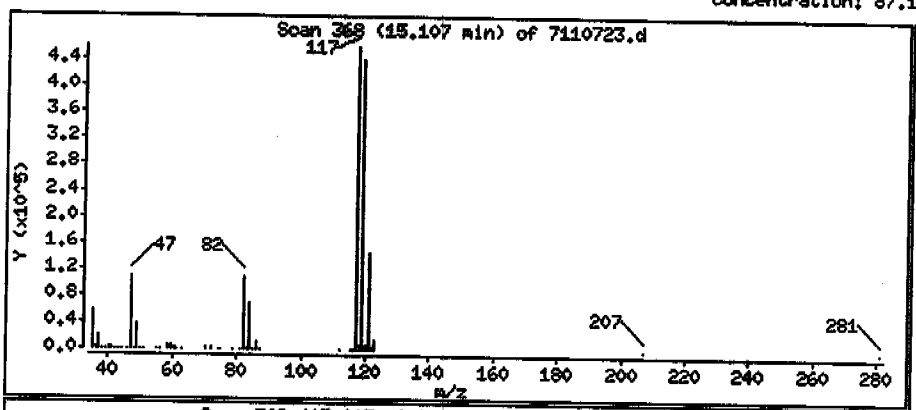
Operator: ab

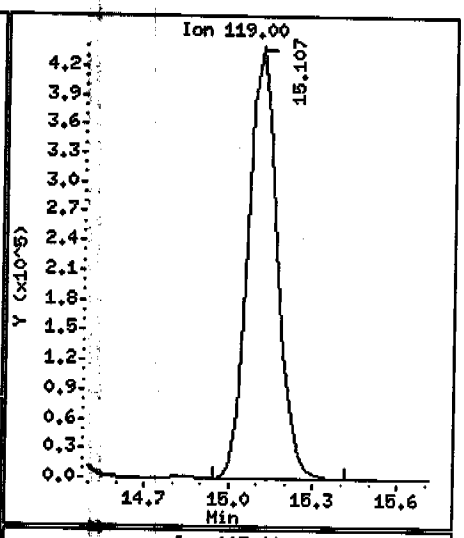
Column phase: RTx-624

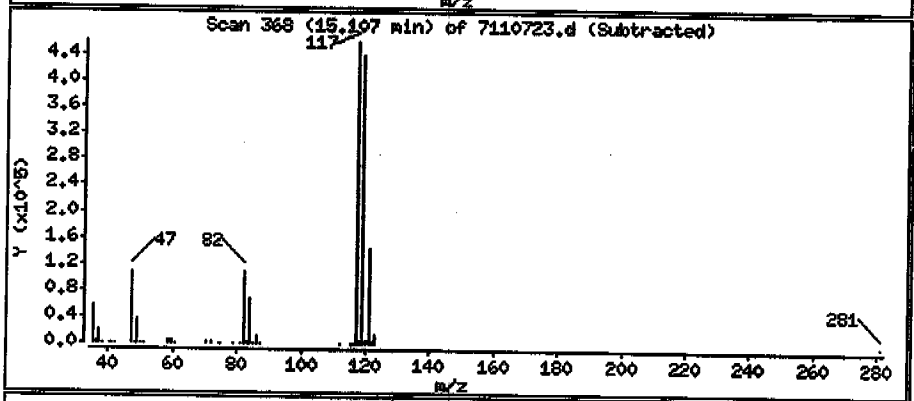
Column diameter: 0.53

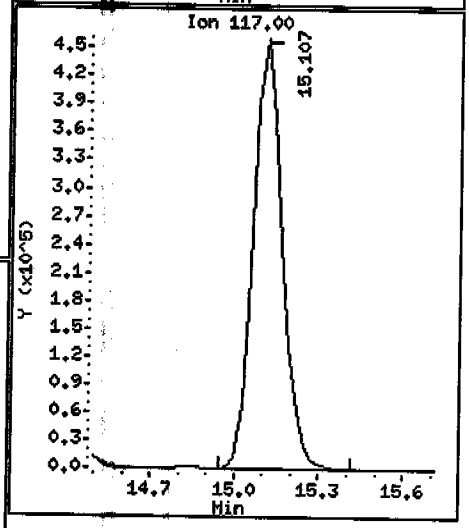
87 Carbon Tetrachloride

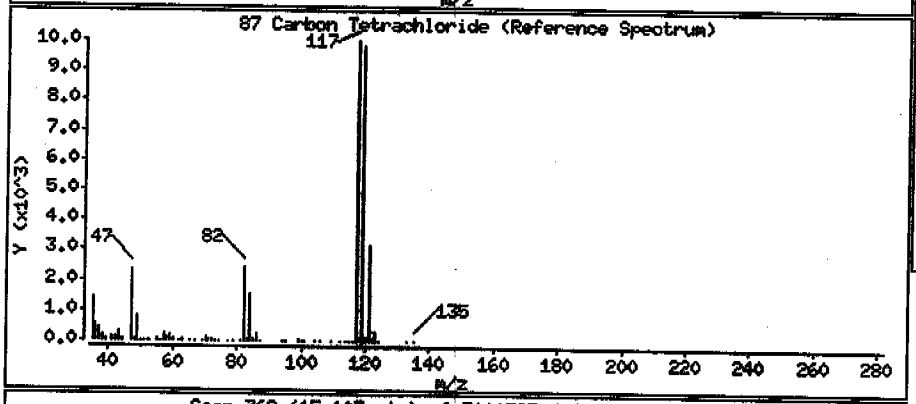
Concentration: 87.198 PPBV

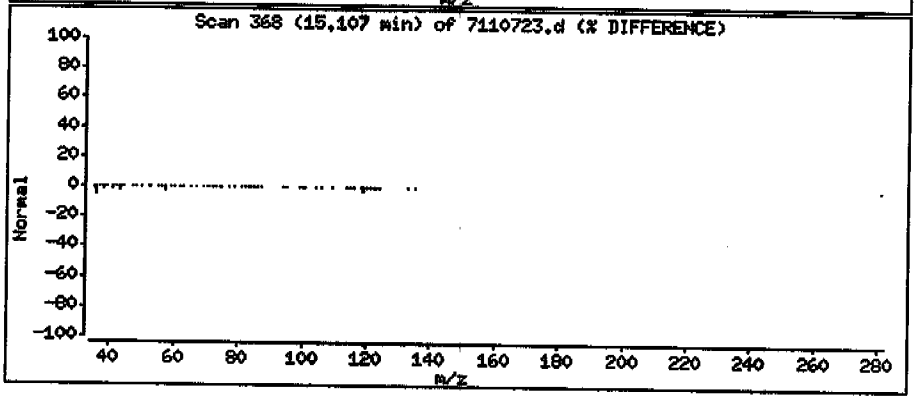












Data File: /ohem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

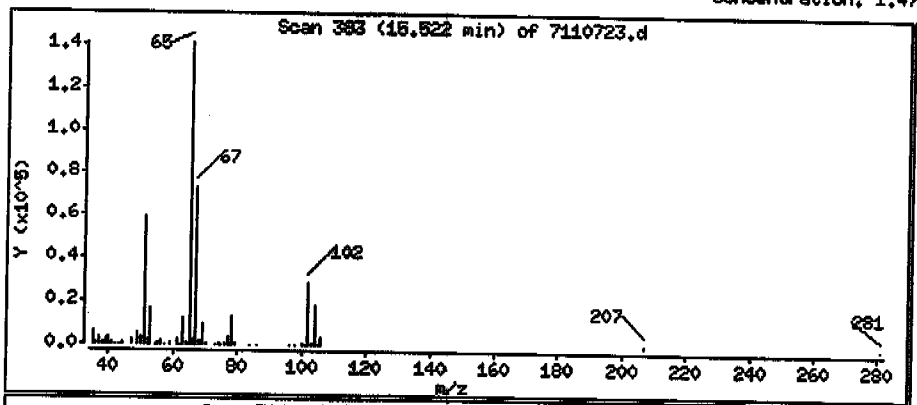
Operator: ab

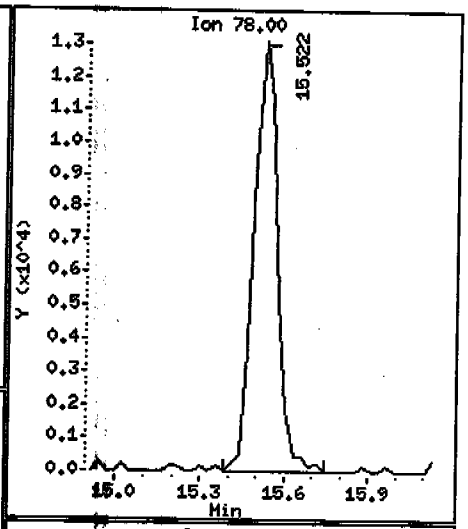
Column phase: RTx-624

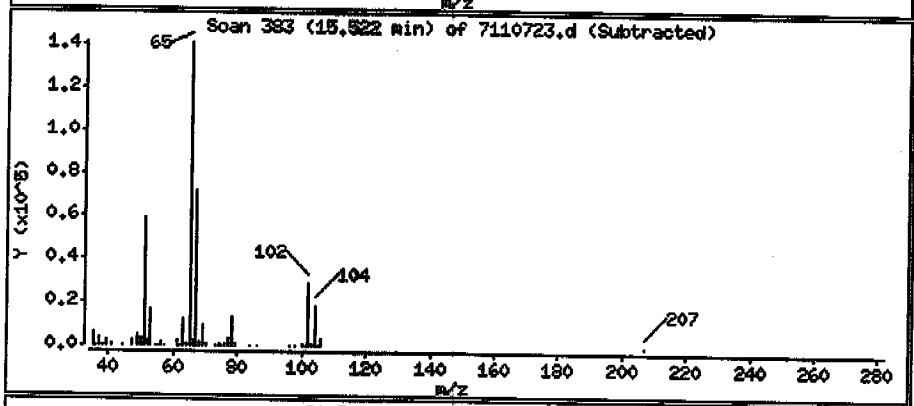
Column diameter: 0.53

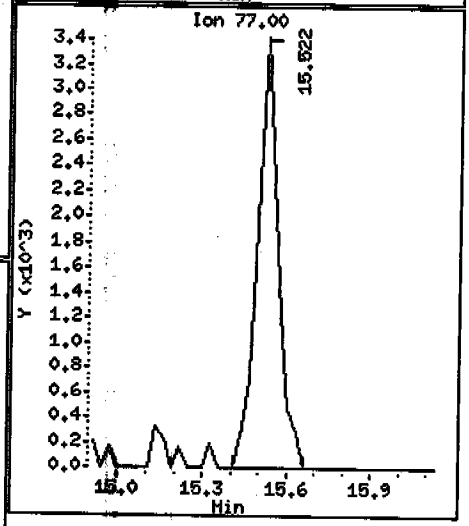
91 Benzene

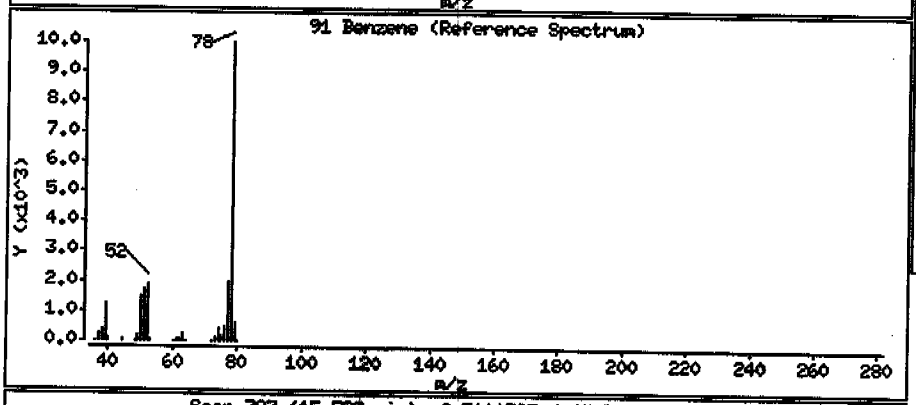
Concentration: 1.472 PPBV

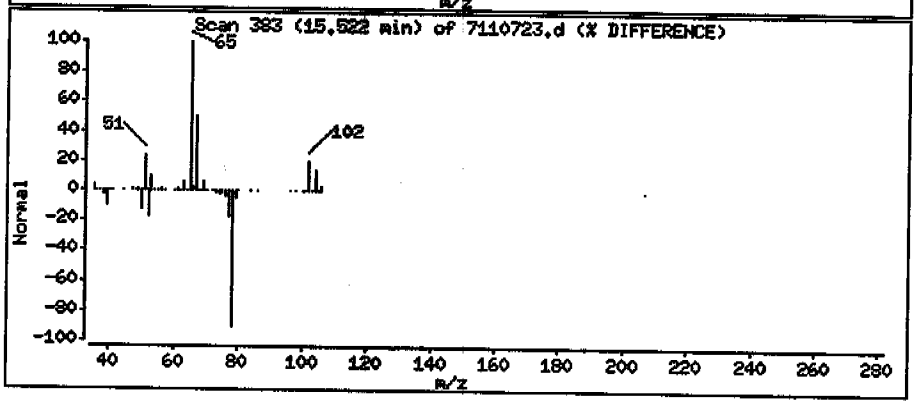












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

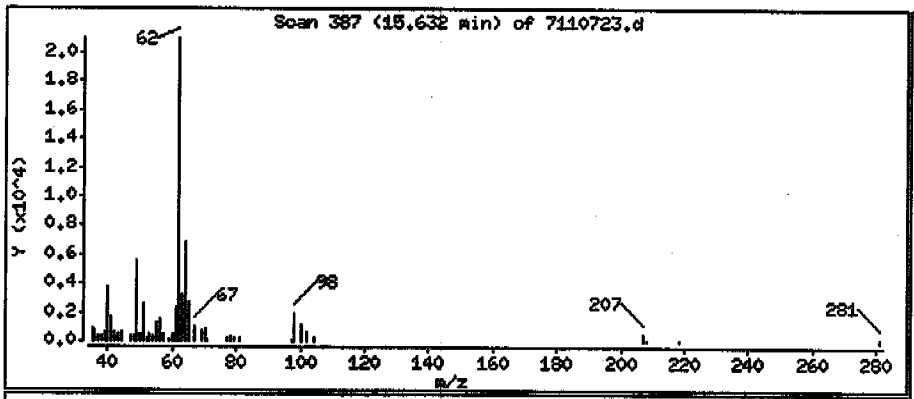
Operator: ab

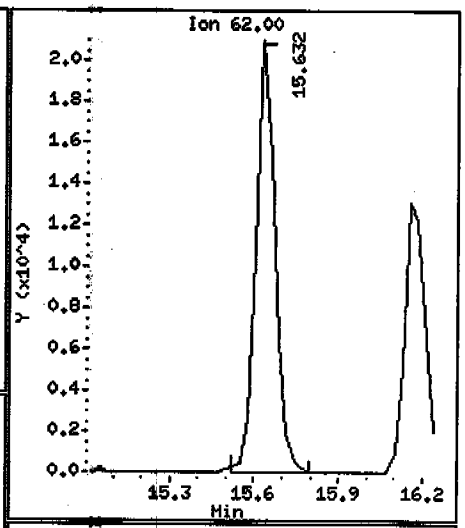
Column phase: RTx-624

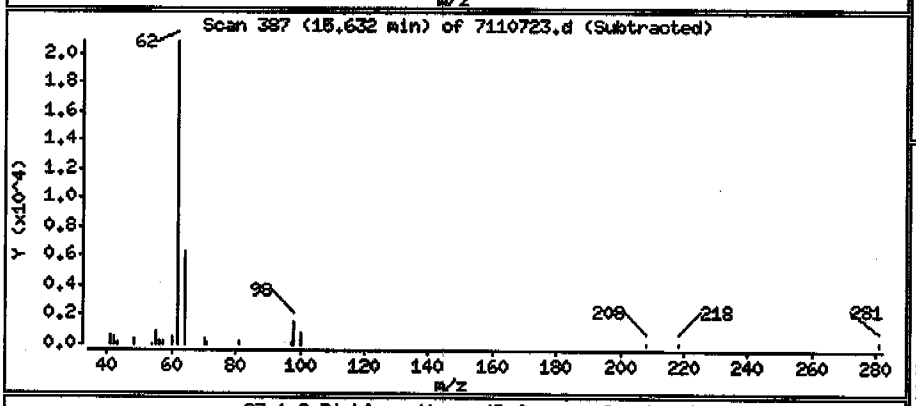
Column diameter: 0.53

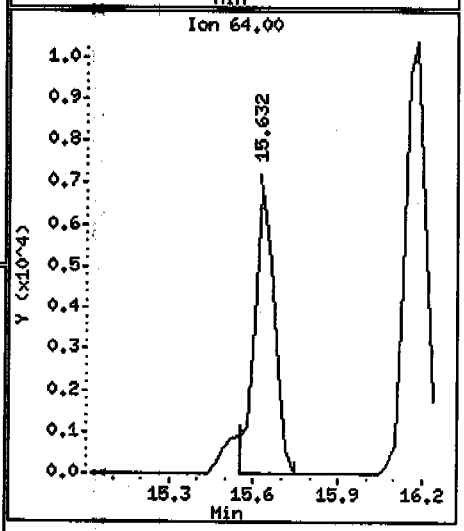
93 1,2-Dichloroethane

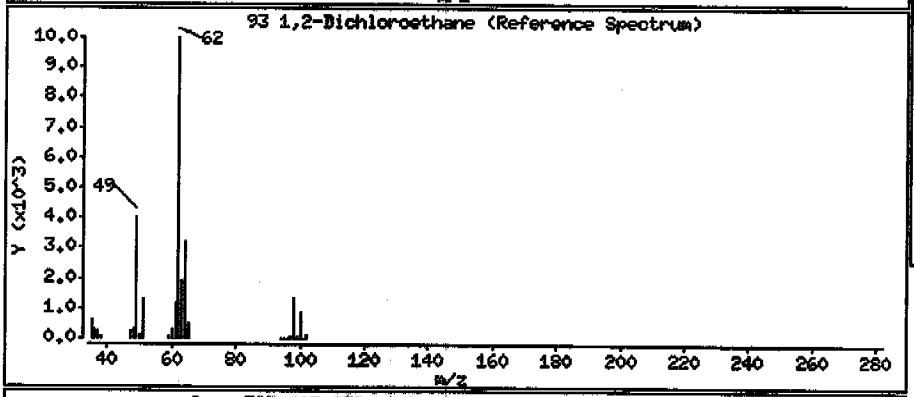
Concentration: 3.529 PPBV

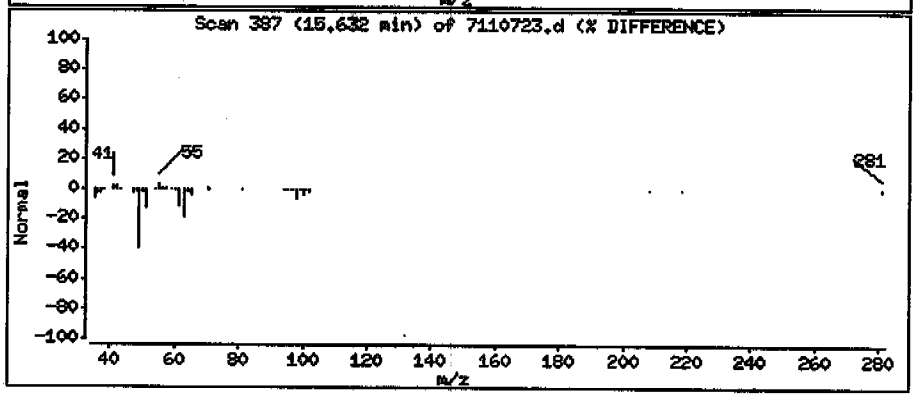












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

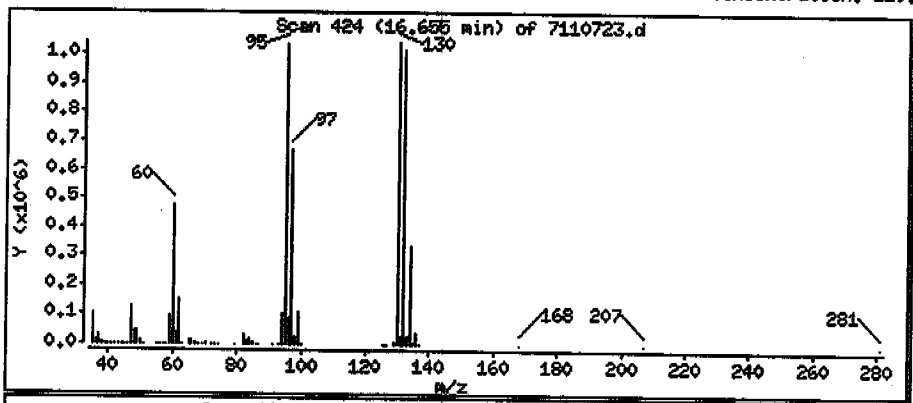
Operator: ab

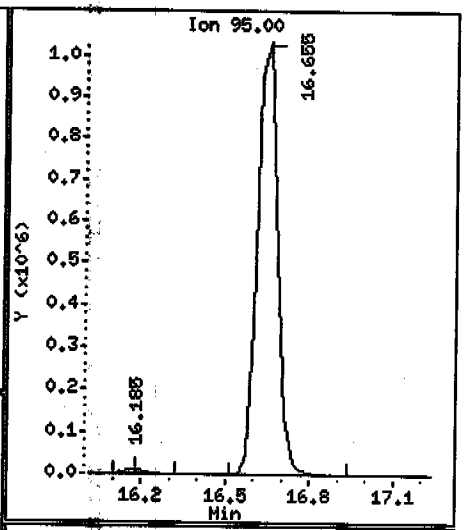
Column phase: RTx-624

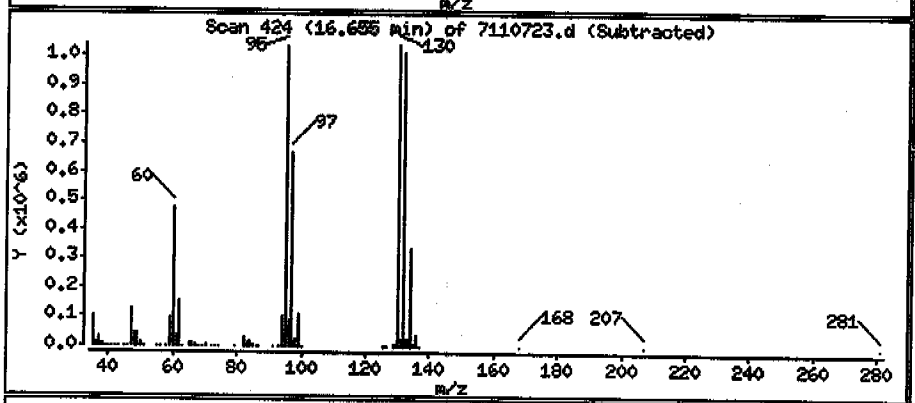
Column diameter: 0.53

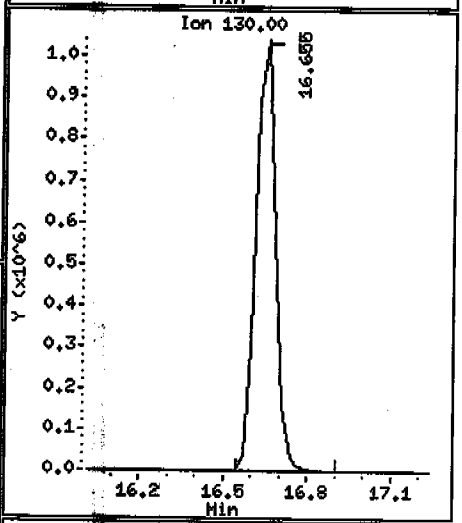
101 Trichloroethene

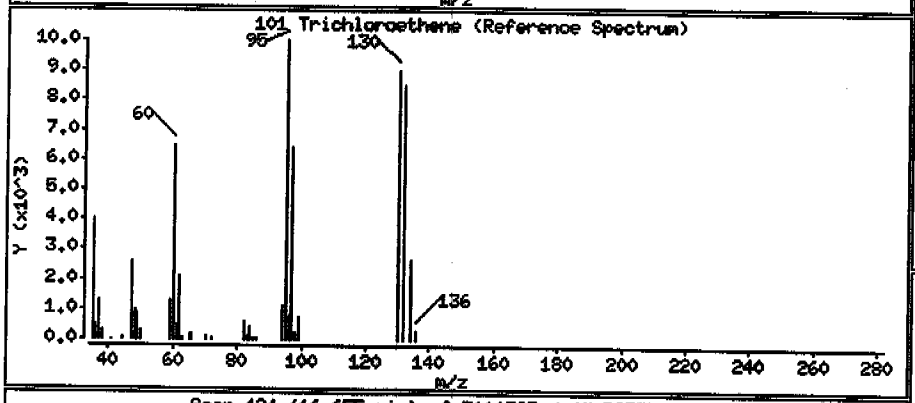
Concentration: 219.57 PPBV

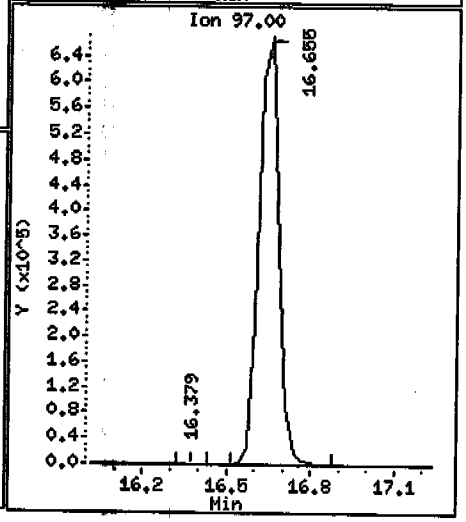


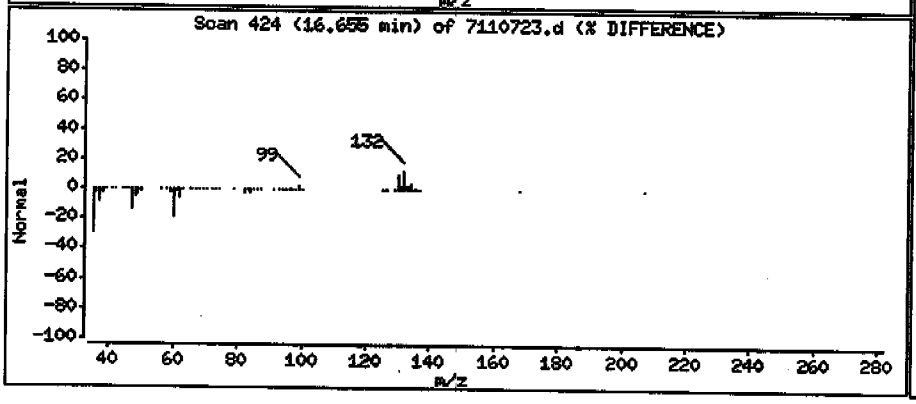












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

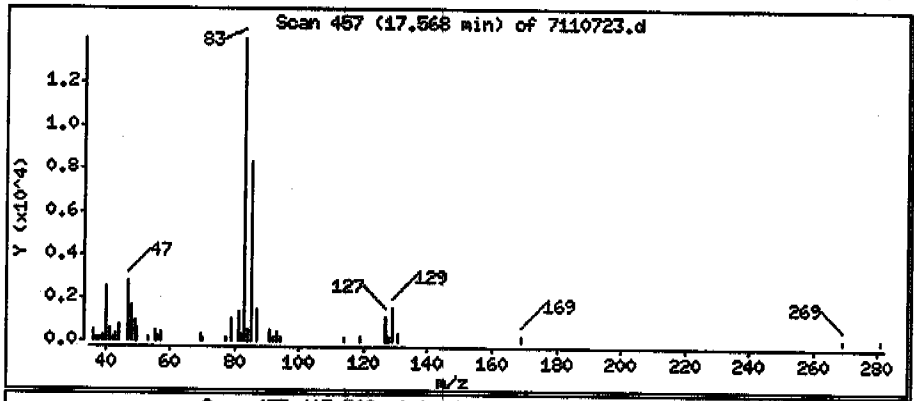
Operator: ab

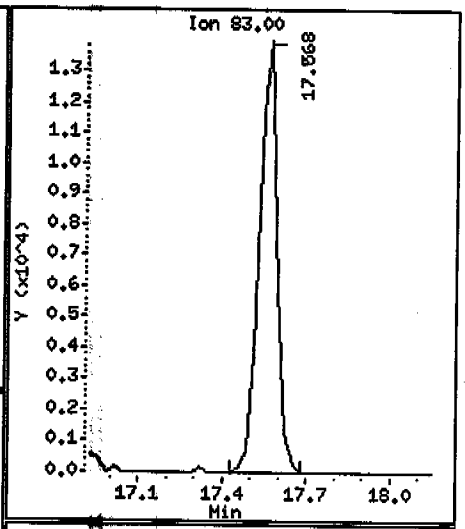
Column phase: RTx-624

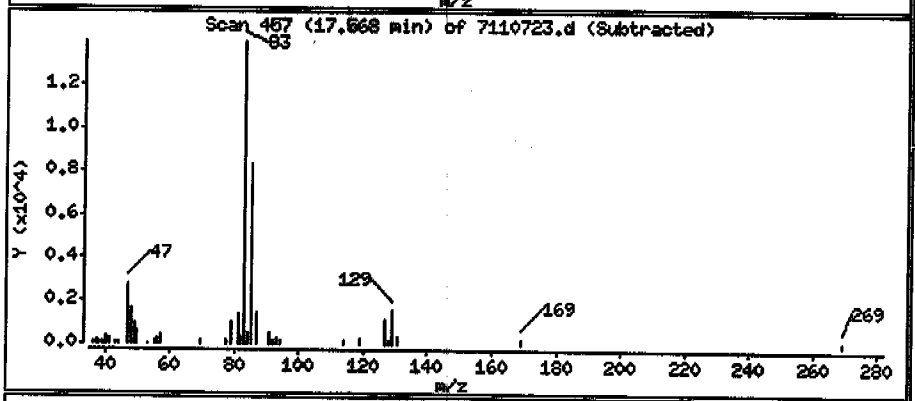
Column diameter: 0.53

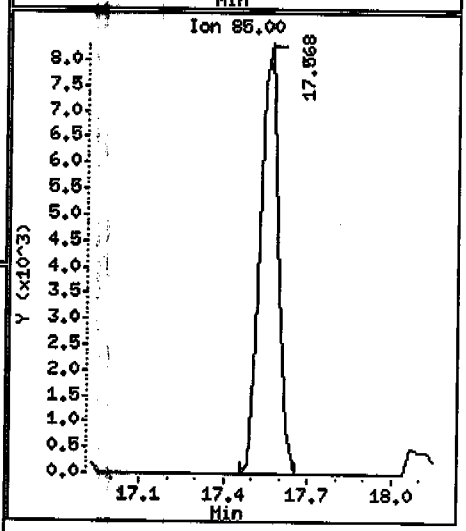
107 Bromodichloromethane

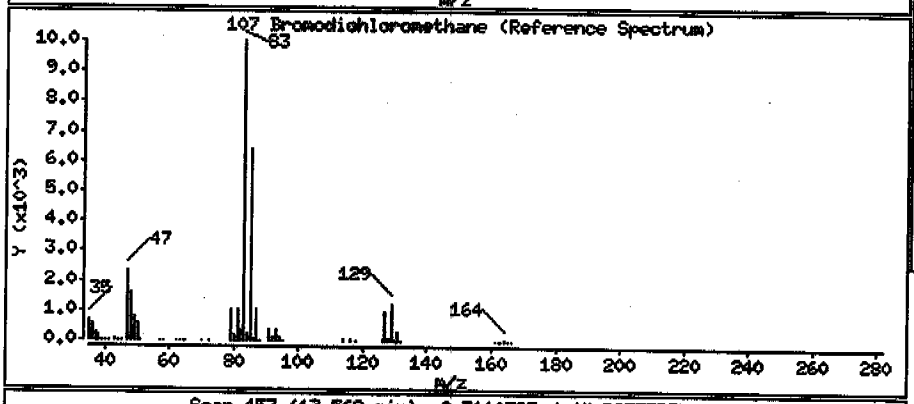
Concentration: 1.554 PPBV

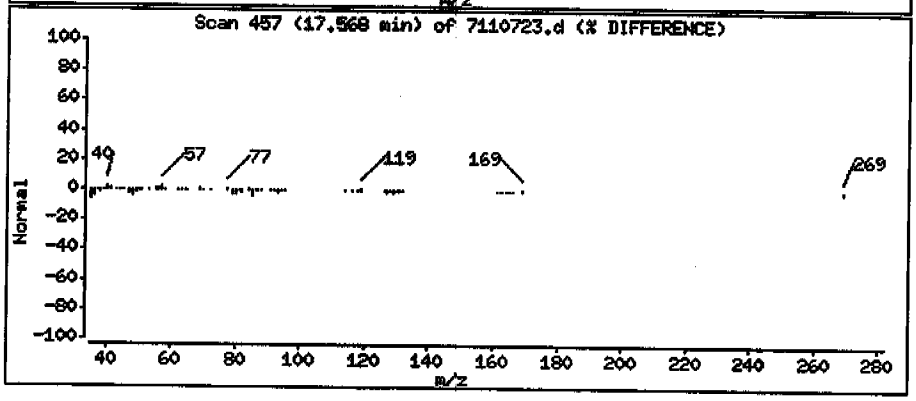












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21006

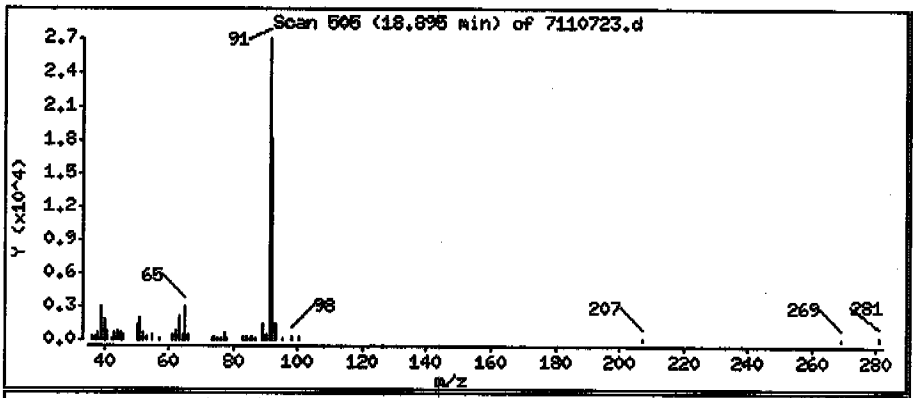
Operator: ab

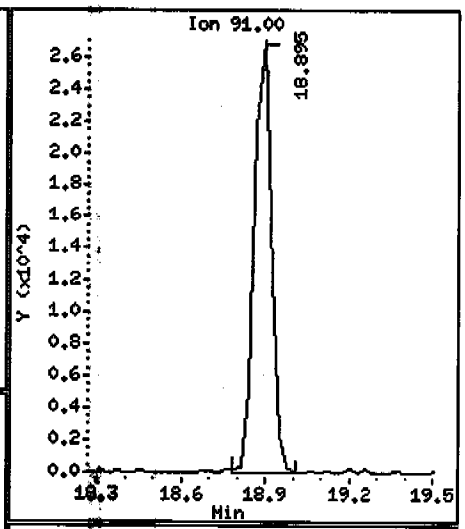
Column phase: RTx-624

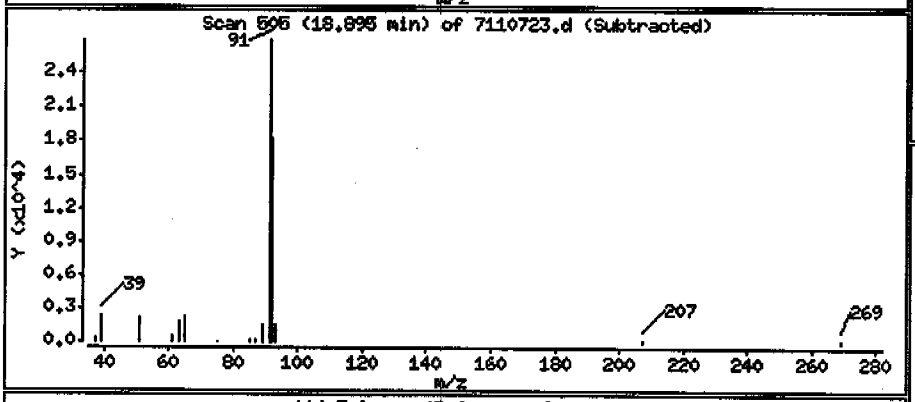
Column diameter: 0.53

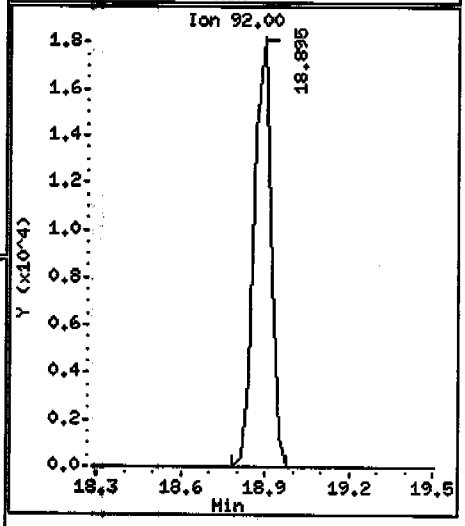
114 Toluene

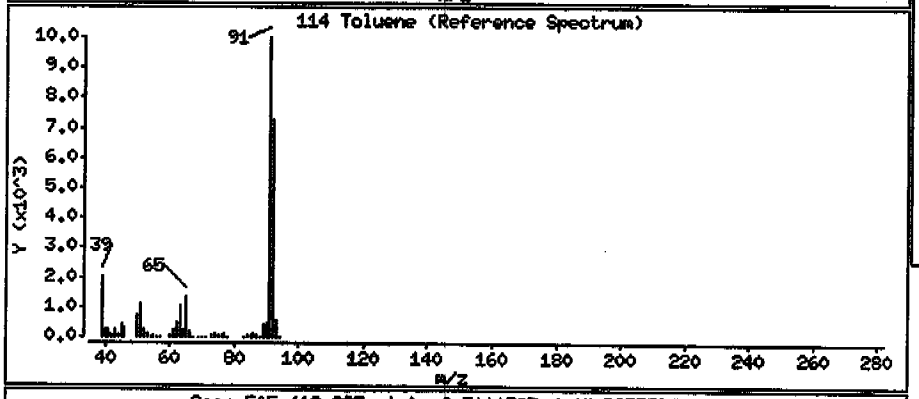
Concentration: 1.996 PPBV

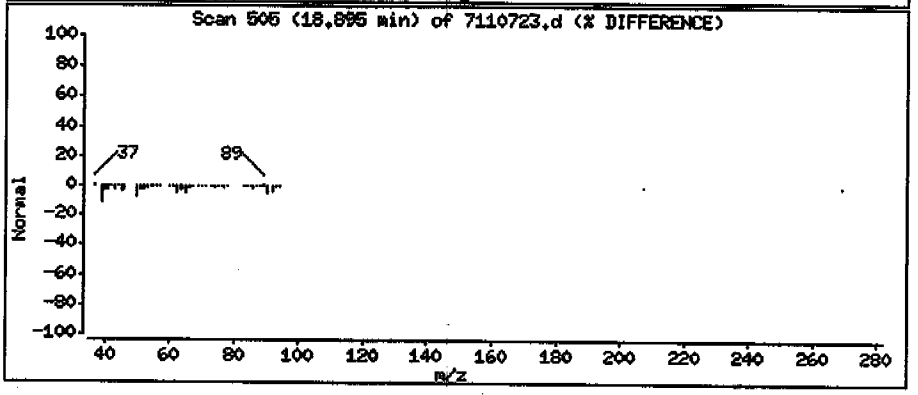












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

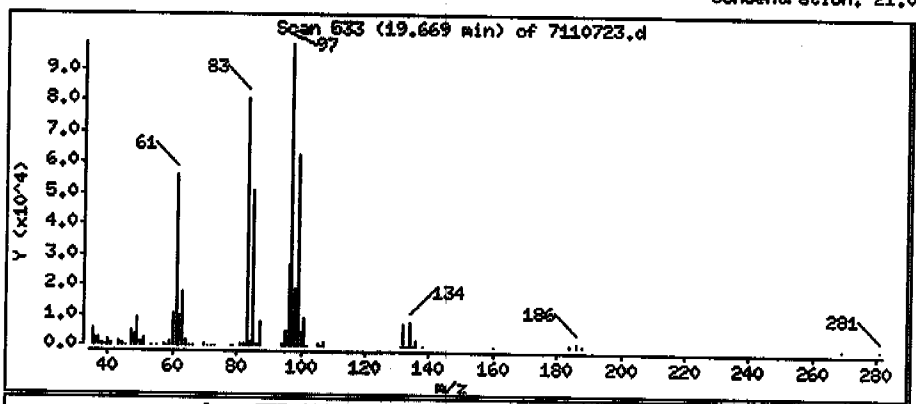
Operator: ab

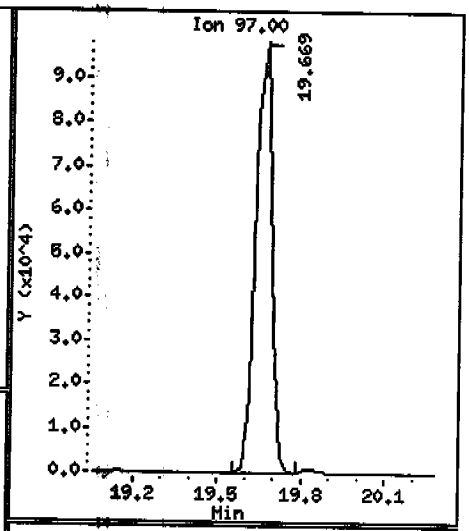
Column phase: RTx-624

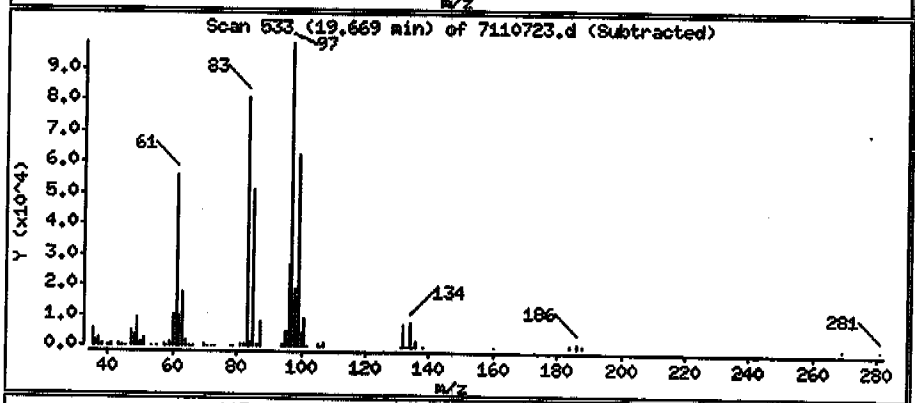
Column diameter: 0.53

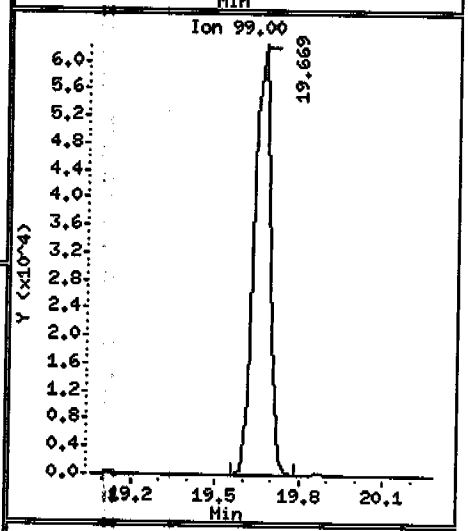
117 1,1,2-Trichloroethane

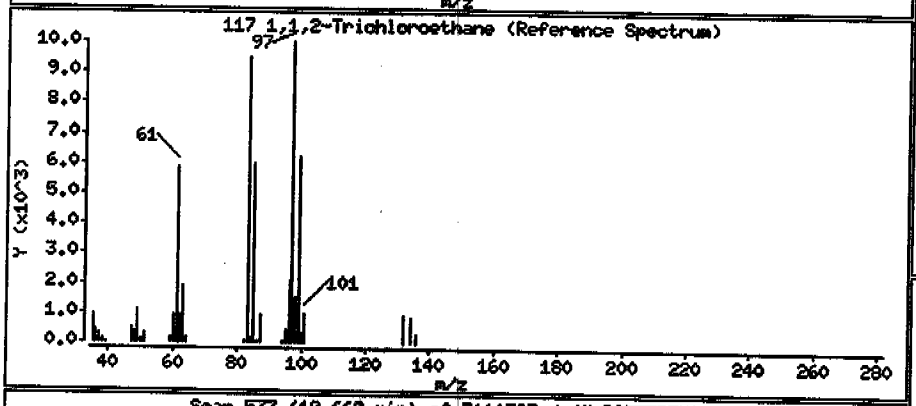
Concentration: 21.006 PPBV

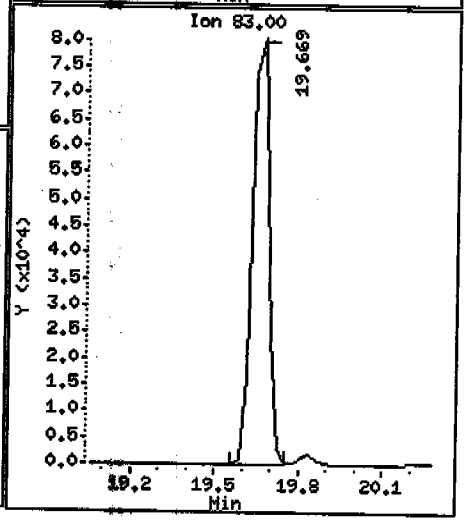


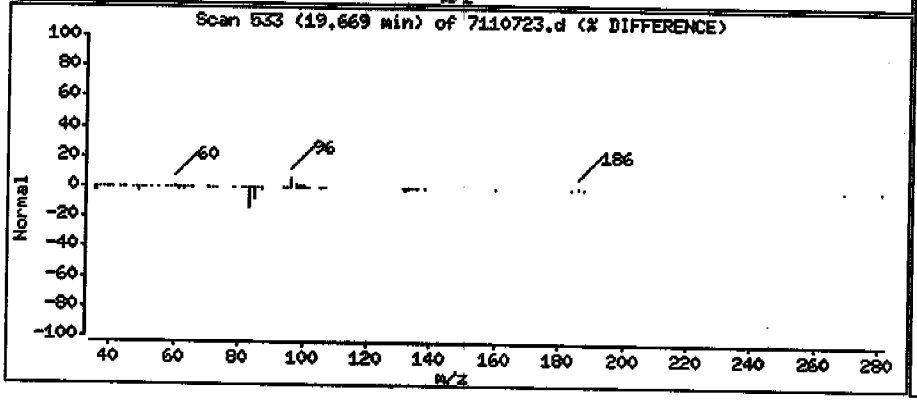












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

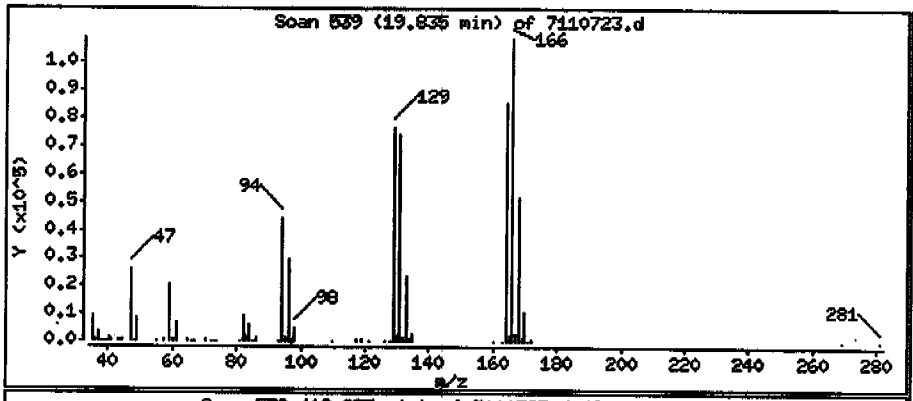
Operator: ab

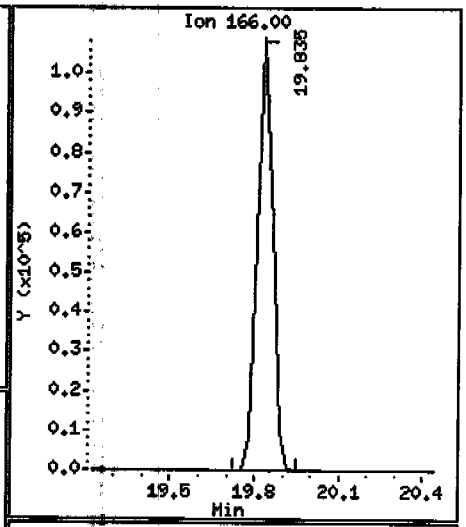
Column phase: RTx-624

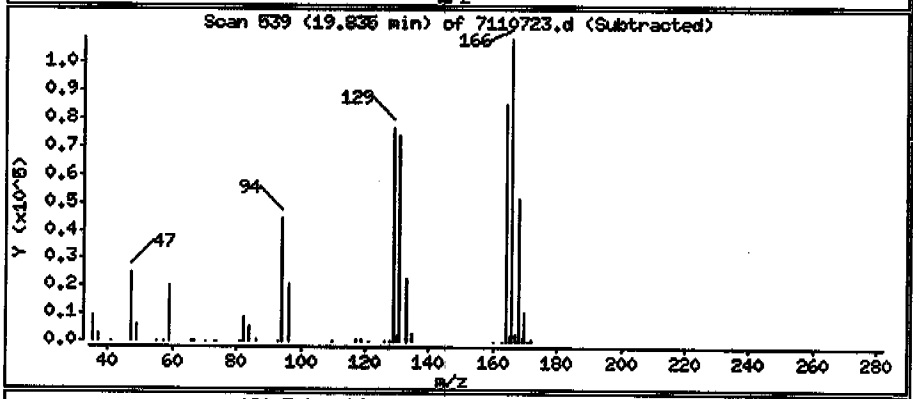
Column diameter: 0.53

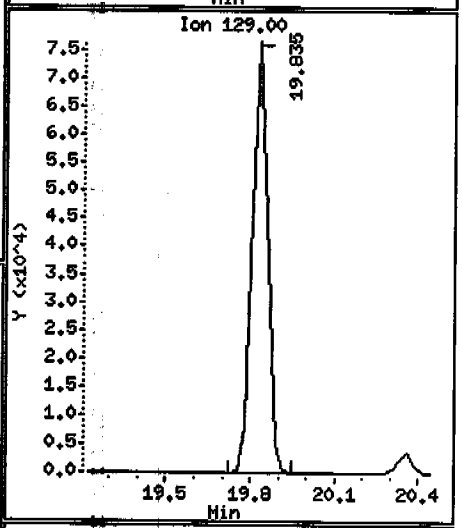
120 Tetrachloroethene

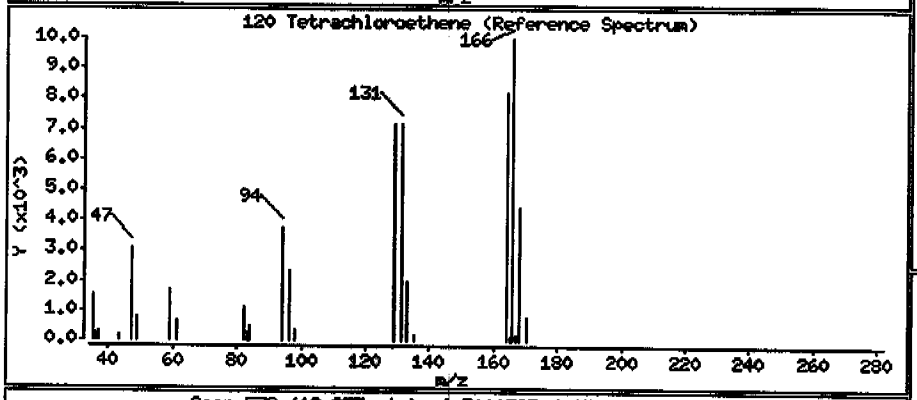
Concentration: 17.154 PPBV

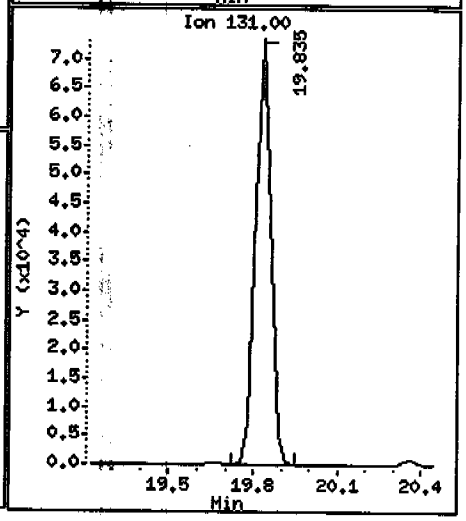


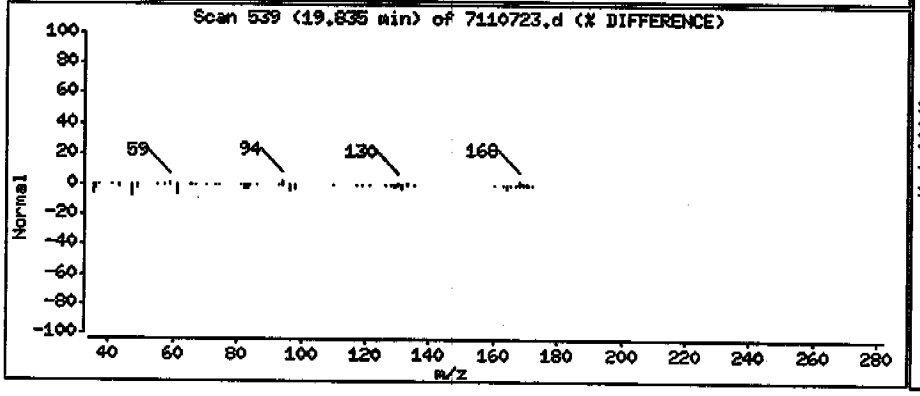












Data File: /chem/msd7.i/7-07nov.b/7110723.d

Date : 08-NOV-2007 02:58

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

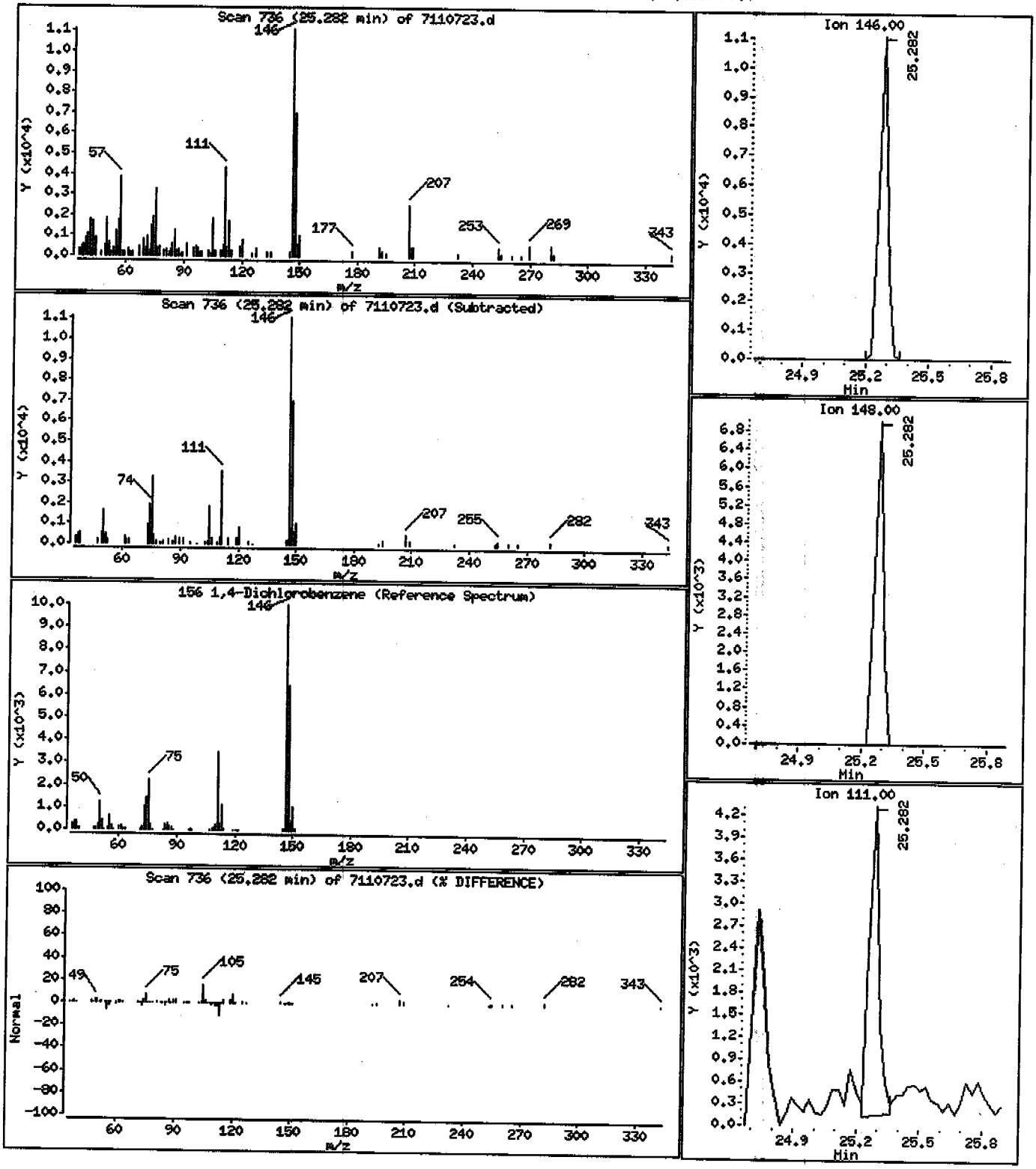
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

156 1,4-Dichlorobenzene

Concentration: 0.8134 PPBV



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6806 Lab Duplicate

Lab ID#: 0711101-06AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	0.89	4.0	4.4
Freon 113	0.80	3.7	6.2	28
1,1-Dichloroethene	0.80	14	3.2	54
Acetone	3.2	58	7.6	140
Carbon Disulfide	0.80	1.0	2.5	3.2
Methylene Chloride	0.80	280	2.8	990
Hexane	0.80	0.88	2.8	3.1
2-Butanone (Methyl Ethyl Ketone)	0.80	0.89	2.4	2.6
cis-1,2-Dichloroethene	0.80	1.2	3.2	4.6
Chloroform	0.80	160	3.9	770
1,1,1-Trichloroethane	0.80	2.4	4.4	13
Carbon Tetrachloride	0.80	86	5.1	540
Benzene	0.80	1.4	2.6	4.3
1,2-Dichloroethane	0.80	3.4	3.2	14
Trichloroethene	0.80	220	4.3	1200
Bromodichloromethane	0.80	1.5	5.4	9.9
Toluene	0.80	1.9	3.0	7.1
1,1,2-Trichloroethane	0.80	21	4.4	120
Tetrachloroethene	0.80	17	5.5	120
1,4-Dichlorobenzene	0.80	0.80	4.8	4.8
Propylene	3.2	32	5.5	55

0220

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6806 Lab Duplicate

Lab ID#: 0711101-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	0.89	4.0	4.4
Freon 114	0.80	Not Detected	5.6	Not Detected
Chloromethane	3.2	Not Detected	6.6	Not Detected
Vinyl Chloride	0.80	Not Detected	2.0	Not Detected
1,3-Butadiene	0.80	Not Detected	1.8	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.80	Not Detected	4.5	Not Detected
Ethanol	3.2	Not Detected	6.1	Not Detected
Freon 113	0.80	3.7	6.2	28
1,1-Dichloroethene	0.80	14	3.2	54
Acetone	3.2	58	7.6	140
2-Propanol	3.2	Not Detected	7.9	Not Detected
Carbon Disulfide	0.80	1.0	2.5	3.2
Methylene Chloride	0.80	280	2.8	990
Methyl tert-butyl ether	0.80	Not Detected	2.9	Not Detected
trans-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Hexane	0.80	0.88	2.8	3.1
1,1-Dichloroethane	0.80	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	0.89	2.4	2.6
cis-1,2-Dichloroethene	0.80	1.2	3.2	4.6
Tetrahydrofuran	0.80	Not Detected	2.4	Not Detected
Chloroform	0.80	160	3.9	770
1,1,1-Trichloroethane	0.80	2.4	4.4	13
Cyclohexane	0.80	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.80	86	5.1	540
Benzene	0.80	1.4	2.6	4.3
1,2-Dichloroethane	0.80	3.4	3.2	14
Heptane	0.80	Not Detected	3.3	Not Detected
Trichloroethene	0.80	220	4.3	1200
1,2-Dichloropropane	0.80	Not Detected	3.7	Not Detected
1,4-Dioxane	3.2	Not Detected	12	Not Detected
Bromodichloromethane	0.80	1.5	5.4	9.9
cis-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
4-Methyl-2-pentanone	0.80	Not Detected	3.3	Not Detected
Toluene	0.80	1.9	3.0	7.1
trans-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.80	21	4.4	120
Tetrachloroethene	0.80	17	5.5	120

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6806 Lab Duplicate

Lab ID#: 0711101-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.2	Not Detected	13	Not Detected
Dibromochloromethane	0.80	Not Detected	6.8	Not Detected
1,2-Dibromoethane (EDB)	0.80	Not Detected	6.2	Not Detected
Chlorobenzene	0.80	Not Detected	3.7	Not Detected
Ethyl Benzene	0.80	Not Detected	3.5	Not Detected
m,p-Xylene	0.80	Not Detected	3.5	Not Detected
o-Xylene	0.80	Not Detected	3.5	Not Detected
Styrene	0.80	Not Detected	3.4	Not Detected
Bromoform	0.80	Not Detected	8.3	Not Detected
1,1,2,2-Tetrachloroethane	0.80	Not Detected	5.5	Not Detected
4-Ethyltoluene	0.80	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.80	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.80	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
1,4-Dichlorobenzene	0.80	0.80	4.8	4.8
alpha-Chlorotoluene	0.80	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
1,2,4-Trichlorobenzene	3.2	Not Detected	24	Not Detected
Hexachlorobutadiene	3.2	Not Detected	34	Not Detected
Chlorodifluoromethane	3.2	Not Detected	11	Not Detected
Methanol	80	Not Detected	100	Not Detected
n-Butanol	3.2	Not Detected	9.8	Not Detected
Propylene	3.2	32	5.5	55

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110724.d
Lab Smp Id: 0711101-06AA
Inj Date : 08-NOV-2007 03:55
Operator : ab
Inst ID: msd7.i
Smp Info : 200mL #21005
Misc Info : 5.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth
Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29
Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.61000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	625844	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	486964			28.66- 128.66	77.81
14.416	14.416 (1.000)	49	1430803			133.49- 233.49	228.62
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.185	16.158 (1.000)	114	2123911	25.0000		80.00- 120.00	100.00
16.185	16.158 (1.000)	88	322997			0.00- 65.23	15.21
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1413093	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	747902			4.70- 104.70	52.93
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	796607	23.6934	23.693	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	412737			2.91- 102.91	51.81
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1689913	22.4139	22.414	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	190179			0.00- 61.46	11.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1186425			19.18- 119.18	70.21
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	794002	23.6130	23.613	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	976528			73.89- 173.89	122.99
23.347	23.347 (1.093)	176	772395			48.20- 148.20	97.28
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	533069	19.7623	31.817	80.00- 120.00	100.00
5.645	5.617 (0.392)	42	320157			21.19- 121.19	60.06
5.645	5.617 (0.392)	39	488110			24.83- 124.83	91.57
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.786	5.758 (0.401)	85	54494	0.55100	0.8871	80.00- 120.00	100.00
5.757	5.758 (0.399)	87	19005			0.00- 83.07	34.88
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	117626	2.29219	3.690	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	72648			13.12- 113.12	61.76
10.213	10.186 (0.708)	101	137112			67.28- 167.28	116.57
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.351	10.324 (0.718)	61	459226	8.41000	13.540	80.00- 120.00	100.00
10.351	10.324 (0.718)	96	281237			9.78- 109.78	61.24
10.351	10.324 (0.718)	98	180845			0.00- 88.25	39.38
45 Acetone					CAS #: 67-64-1		
10.517	10.490 (0.730)	58	612803	36.3076	58.455	80.00- 120.00	100.00
10.517	10.490 (0.730)	43	1957596			247.10- 347.10	319.45
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	65942	0.63296	1.019	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	712373$	177.446	285.69	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	5083216			19.98- 119.98	71.36
11.485	11.457 (0.797)	51	2182204			0.00- 80.85	30.63
65 Hexane					CAS #: 110-54-3		
12.314	12.287 (0.854)	57	28835	0.54464	0.8769	80.00- 120.00	100.00
12.342	12.287 (0.856)	43	21104			17.84- 117.84	73.19
12.314	12.287 (0.854)	86	4061			0.00- 65.07	14.08
75 2-Butanone					CAS #: 78-93-3		
13.918	13.891 (0.965)	72	7500	0.55331	0.8908	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
75 2-Butanone (continued)							
13.890	13.891 (0.964)	43	36090			412.48- 512.48	481.20
13.890	13.891 (0.964)	57	2921			0.00- 86.57	38.95
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.946	13.918 (0.967)	61	31696	0.71406	1.150	80.00- 120.00	100.00
13.946	13.918 (0.967)	96	24450			26.41- 126.41	77.14
13.946	13.918 (0.967)	98	15176			0.00- 98.54	47.88
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	6176352	98.0169	157.81	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	4012069			15.69- 115.69	64.96
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	92721	1.46120	2.352	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	59033			14.03- 114.03	63.67
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	3177418	53.4178	86.003	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	3292859			53.14- 153.14	103.63
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.959)	78	71210	0.84383	1.358	80.00- 120.00	100.00
15.522	15.522 (0.959)	77	17651			0.00- 71.87	24.79
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.966)	62	95030	2.11944	3.412	80.00- 120.00	100.00
15.632	15.633 (0.966)	64	32473			0.00- 82.89	34.17
101 Trichloroethene					CAS #: 79-01-6		
16.655	16.628 (1.029)	95	5023137	134.000	215.74	80.00- 120.00	100.00
16.655	16.628 (1.029)	130	4980389			51.11- 151.11	99.15
16.655	16.628 (1.029)	97	3237806			15.04- 115.04	64.46
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.085)	83	59582	0.91550	1.474	80.00- 120.00	100.00
17.568	17.540 (1.085)	85	40990			14.03- 114.03	68.80
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	108591	1.17482	1.891	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	72008			12.90- 112.90	66.31
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	388921	13.2879	21.393	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	240364			12.40- 112.40	61.80
19.669	19.669 (0.921)	83	317645			32.55- 132.55	81.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	403372	10.6261	17.108	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	280216			21.07- 121.07	69.47
19.835	19.835 (0.929)	131	277557			18.33- 118.33	68.81
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	30359	0.49813	0.8020	80.00- 120.00	100.00(a)
25.282	25.282 (1.184)	148	21245			13.81- 113.81	69.98
25.282	25.282 (1.184)	111	13295			0.00- 87.35	43.79

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110724.d
Lab Smp Id: 0711101-06AA
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	625844	-10.01
97 1,4-Difluorobenze	2265681	1359409	3171953	2123911	-6.26
126 Chlorobenzene-d5	1765821	1059493	2472149	1413093	-19.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0711101-06AA
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.0"Hg ->5psi

Client SDG: 7-07nov
Fraction: VOA

Operator: ab
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.693	94.77	70-130
$ 113 Toluene-d8	25.000	22.414	89.66	70-130
$ 137 Bromofluorobenzene	25.000	23.613	94.45	70-130

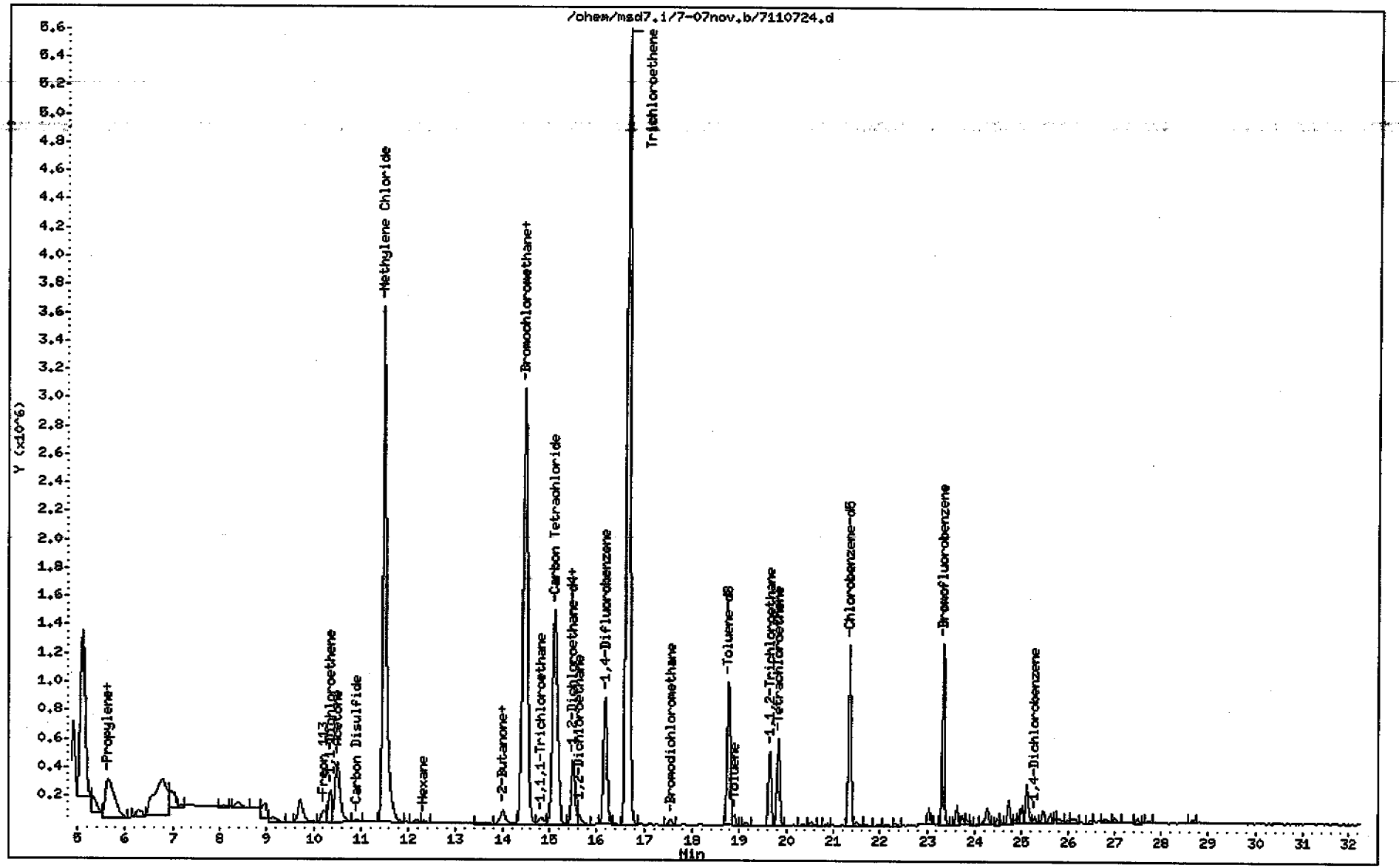
Data File: /chem/msd7.i/7-07nov.b/7110724.d
Date : 08-NOV-2007 03:55
Client ID:
Sample Info: 200mL #21005

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0229



Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

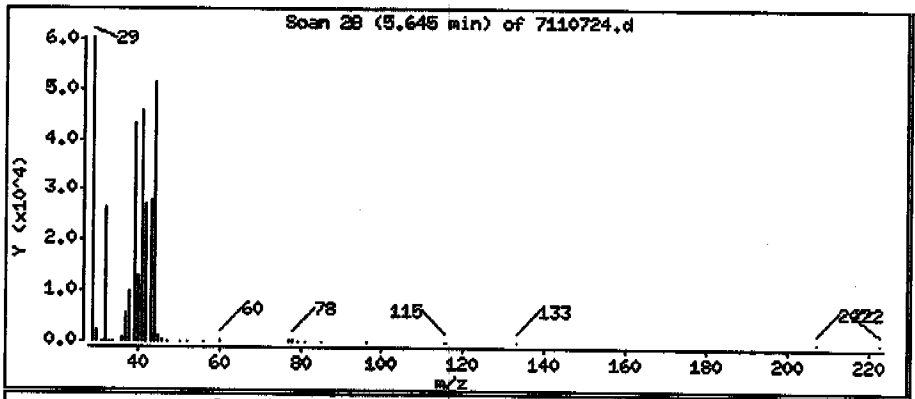
Operator: ab

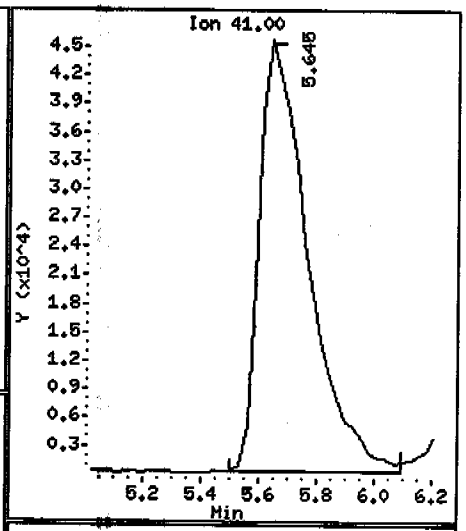
Column phase: RTx-624

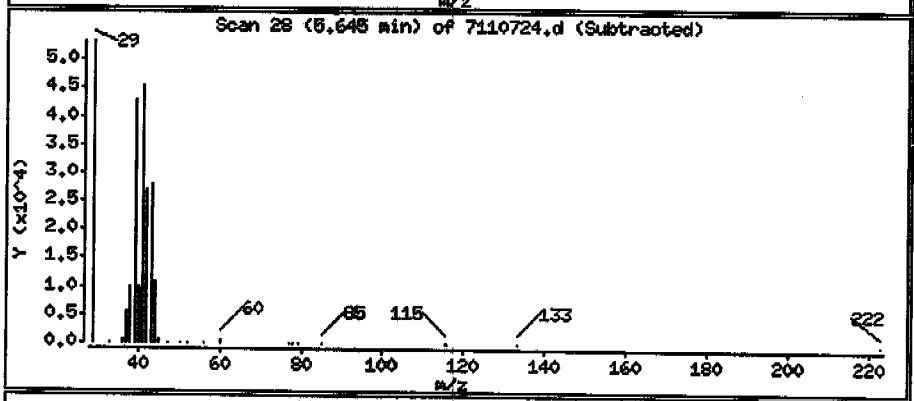
Column diameter: 0.53

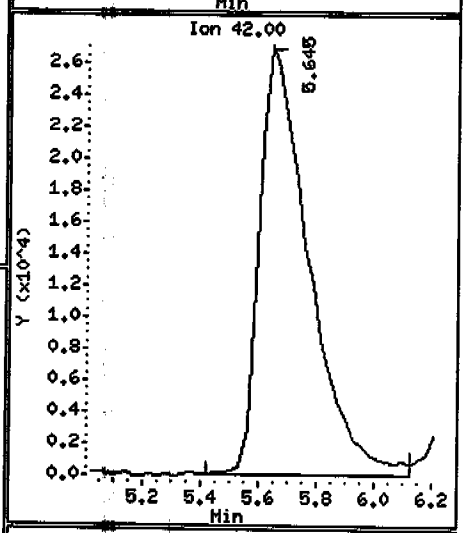
11 Propylene

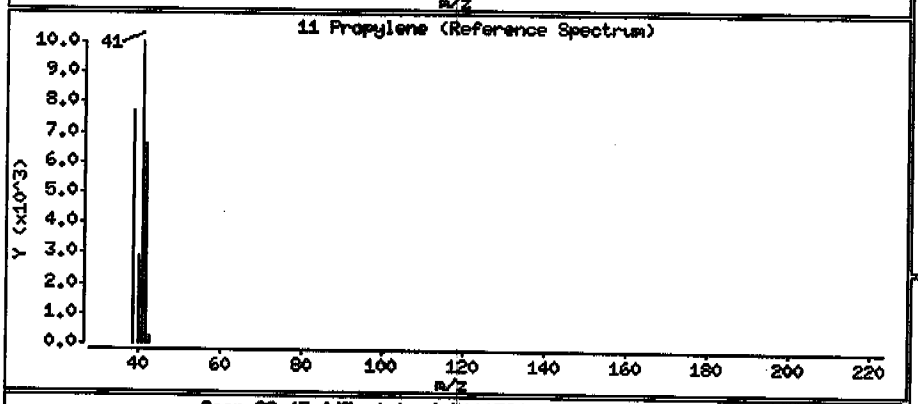
Concentration: 31.817 PPBV

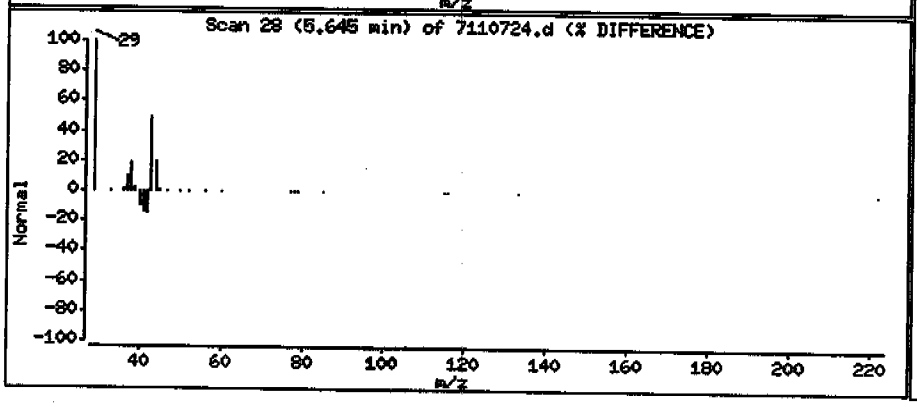


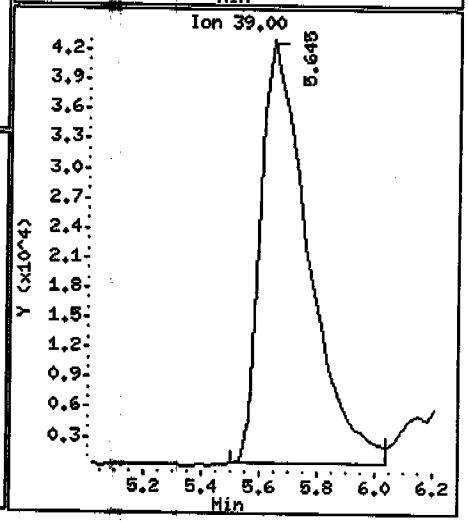












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

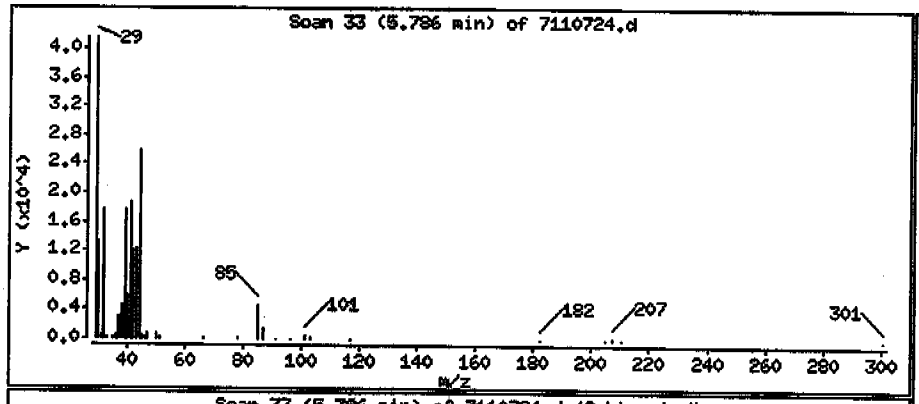
Operator: ab

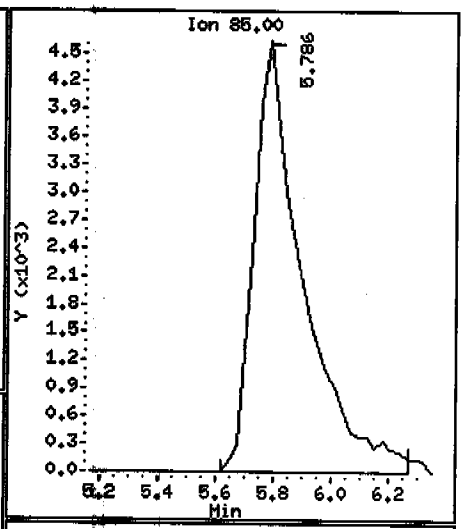
Column phase: RTx-624

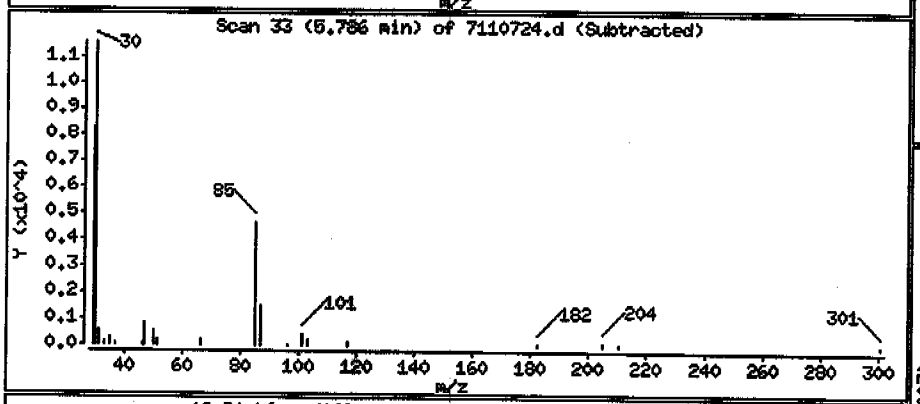
Column diameter: 0.53

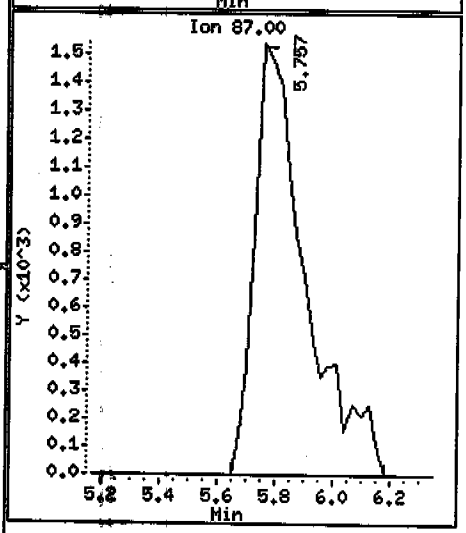
12 Dichlorodifluoromethane/Fr12

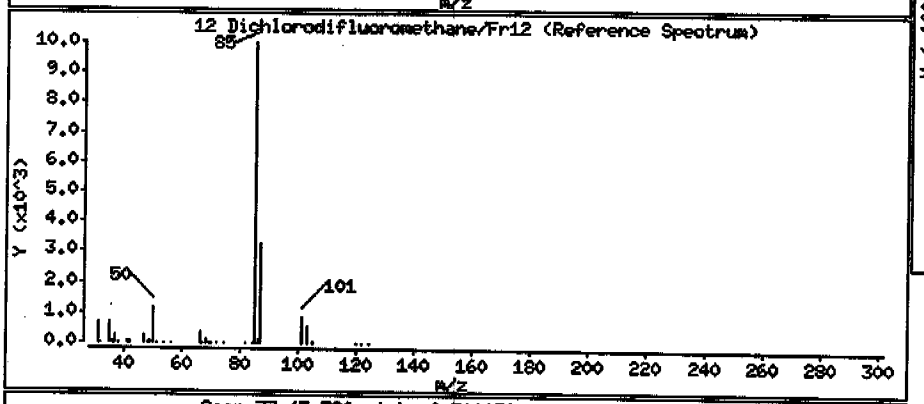
Concentration: 0.8871 PPBV

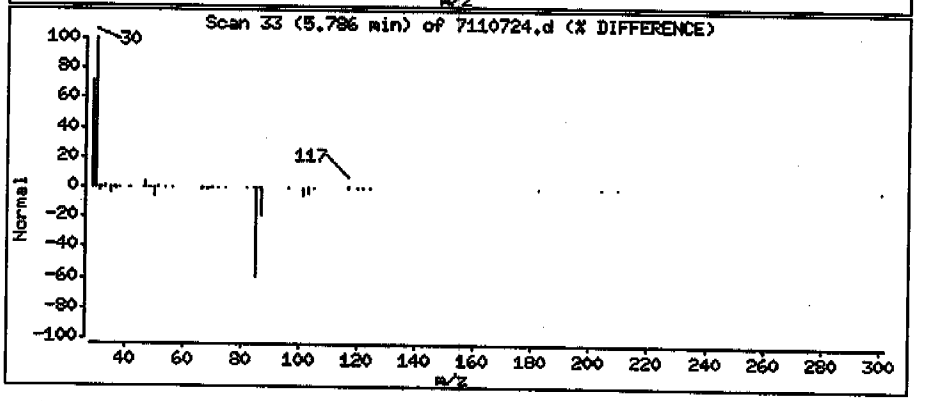












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Column phase: RTx-624

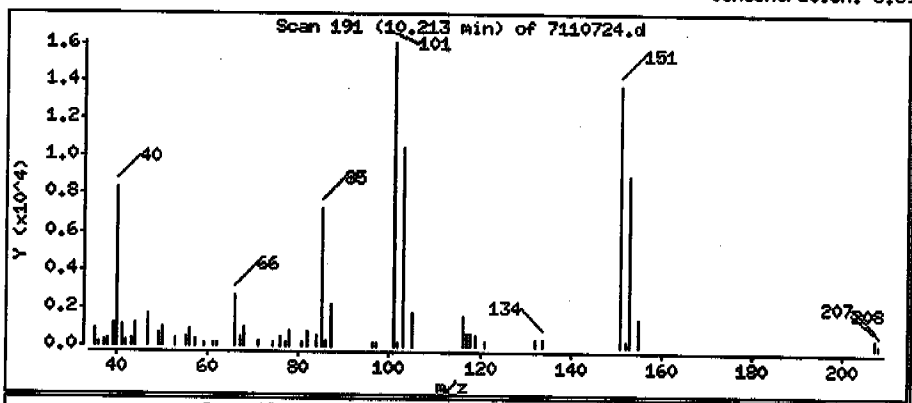
42 Freon 113

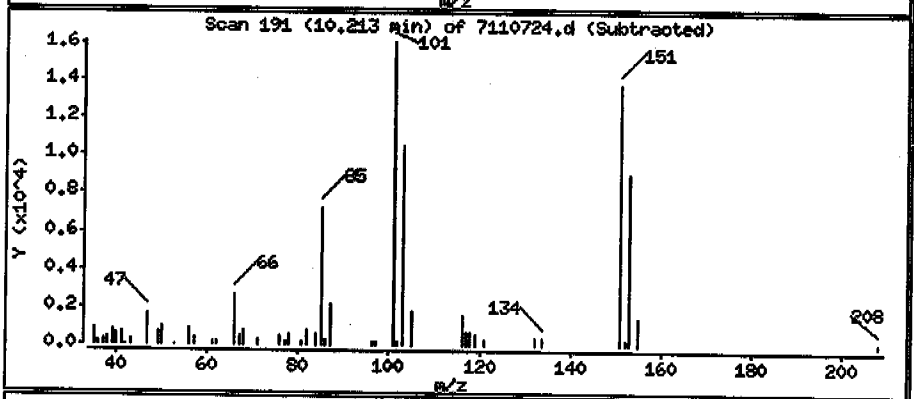
Instrument: msd7.i

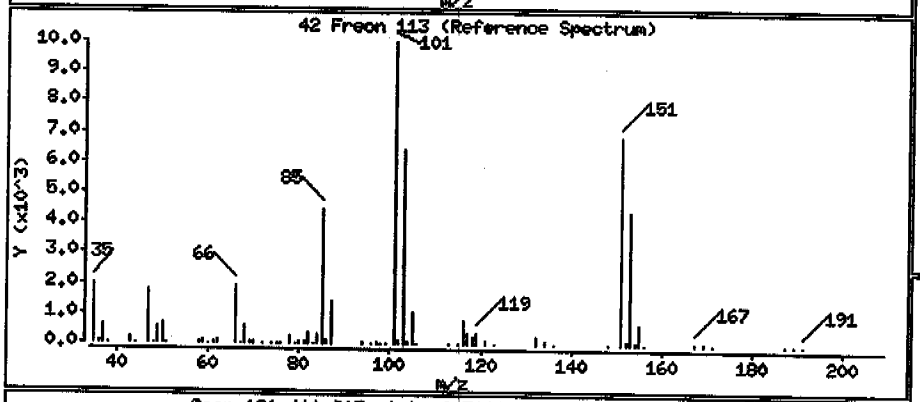
Operator: ab

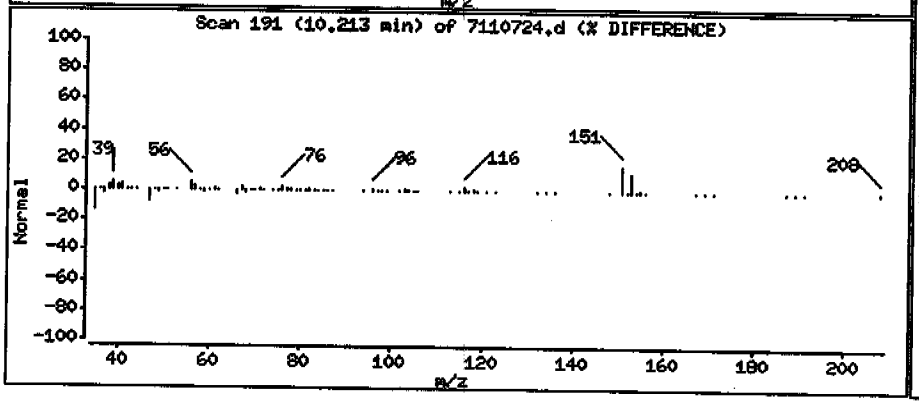
Column diameter: 0.53

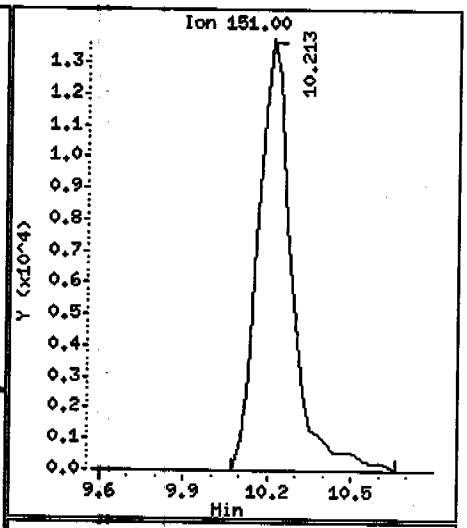
Concentration: 3.690 PPBV

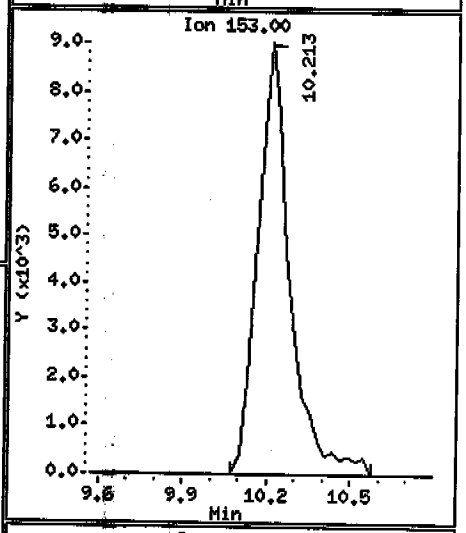


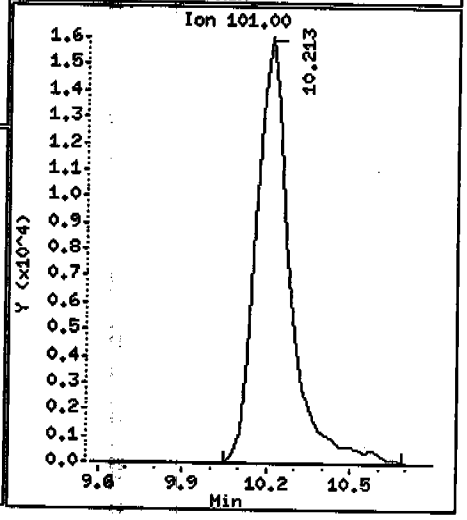












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

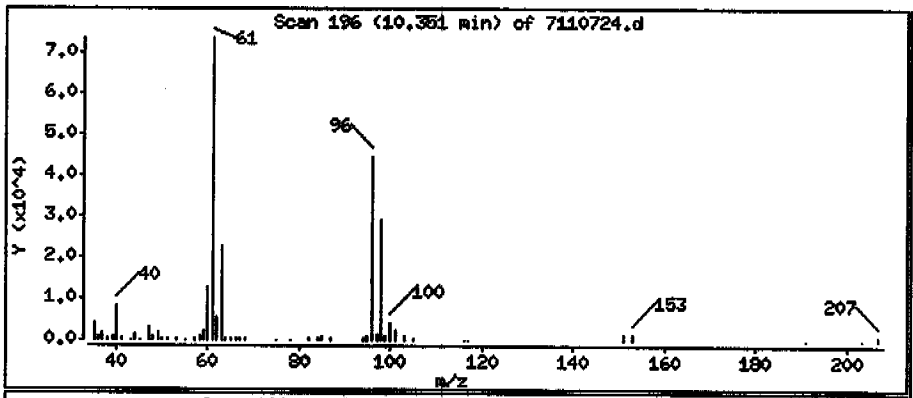
Operator: ab

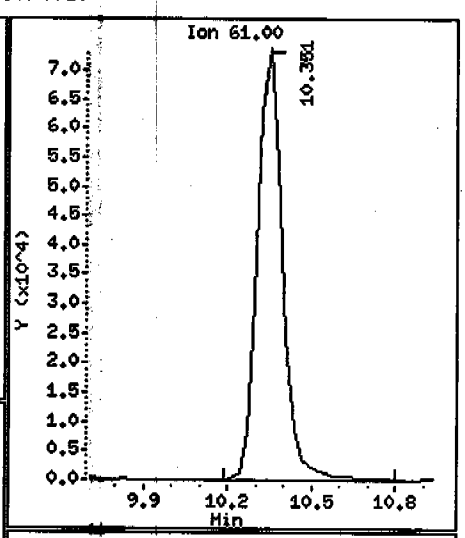
Column phase: RTx-624

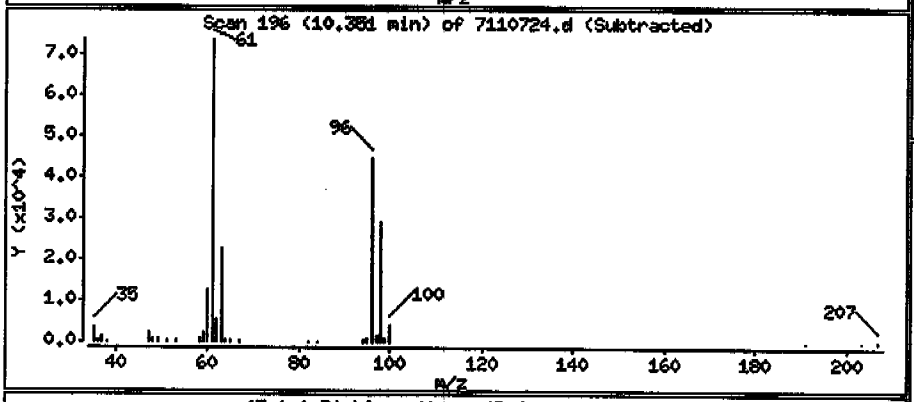
Column diameter: 0.53

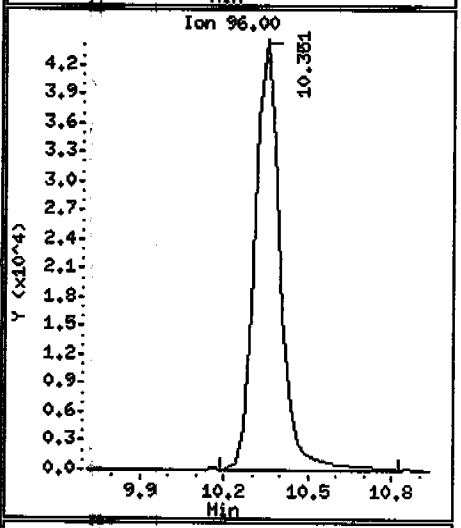
43 1,1-Dichloroethene

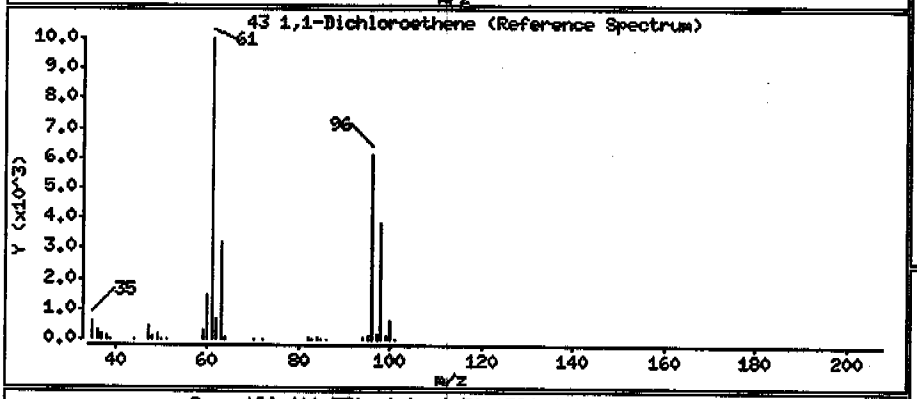
Concentration: 13.540 PPBV

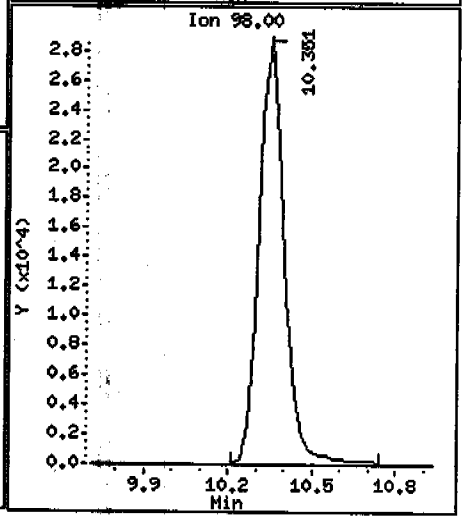


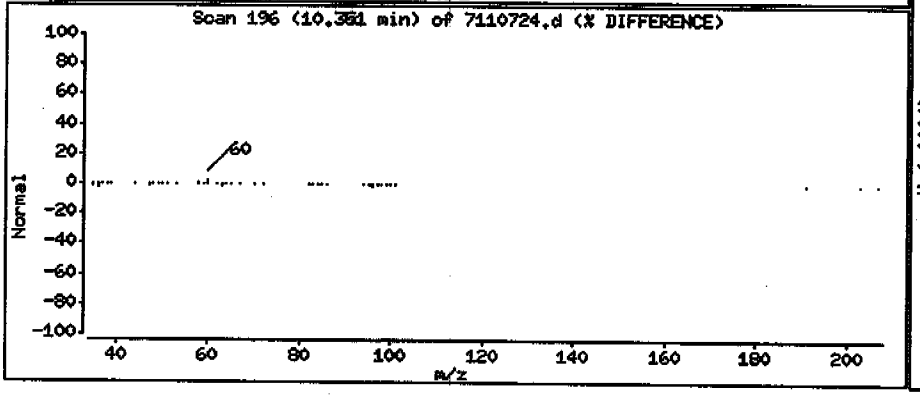












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

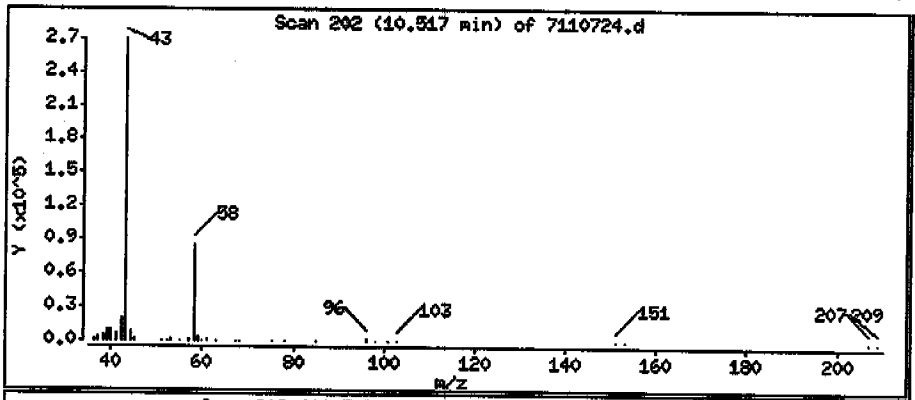
Operator: ab

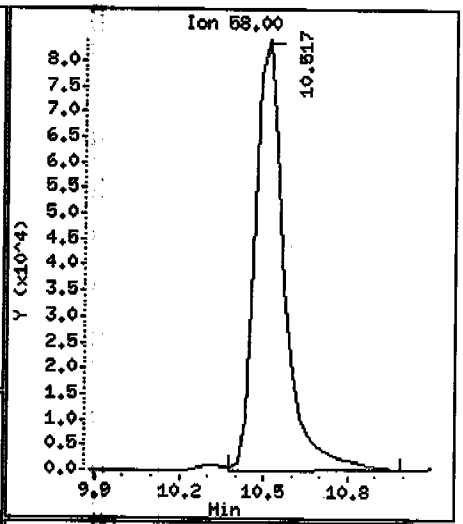
Column phase: RTx-624

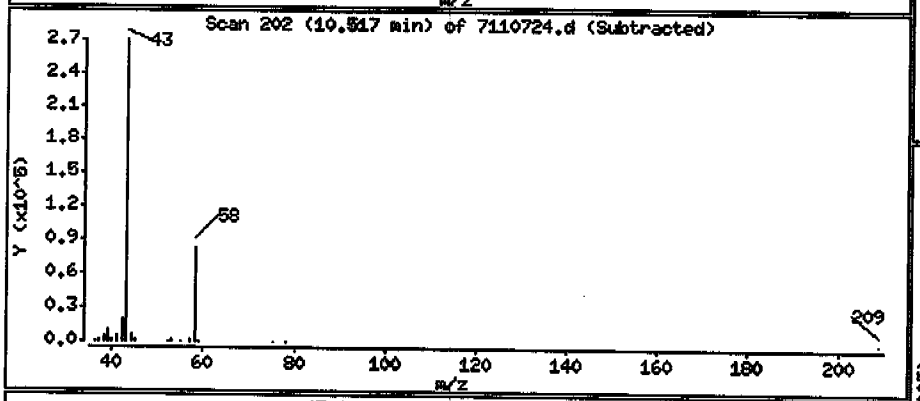
Column diameter: 0.53

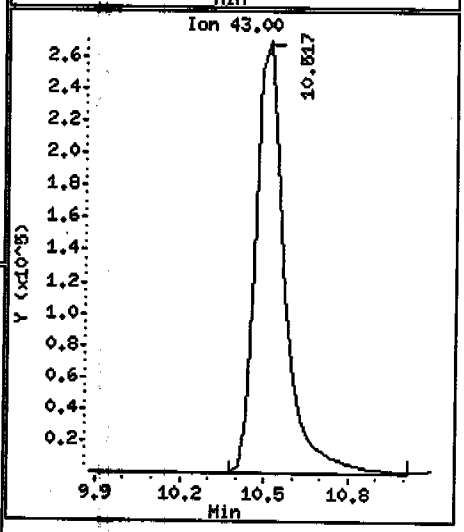
45 Acetone

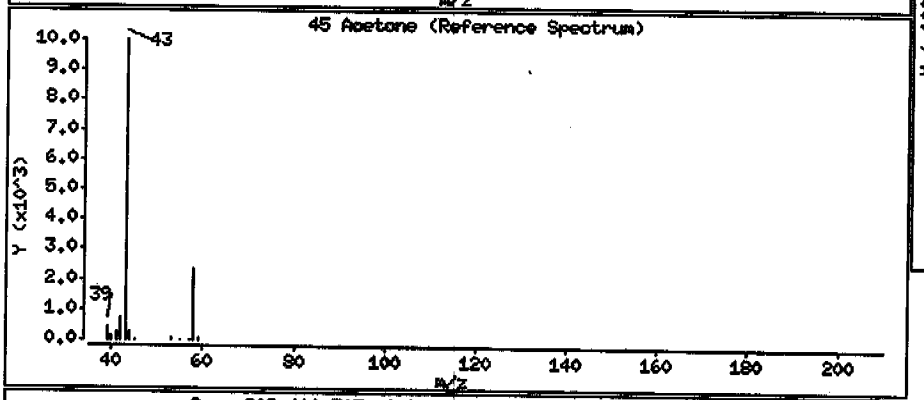
Concentration: 58.455 PPBV

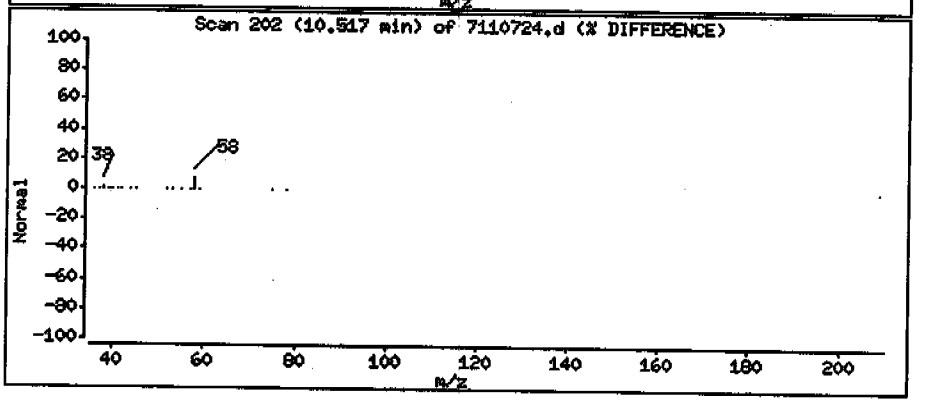












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

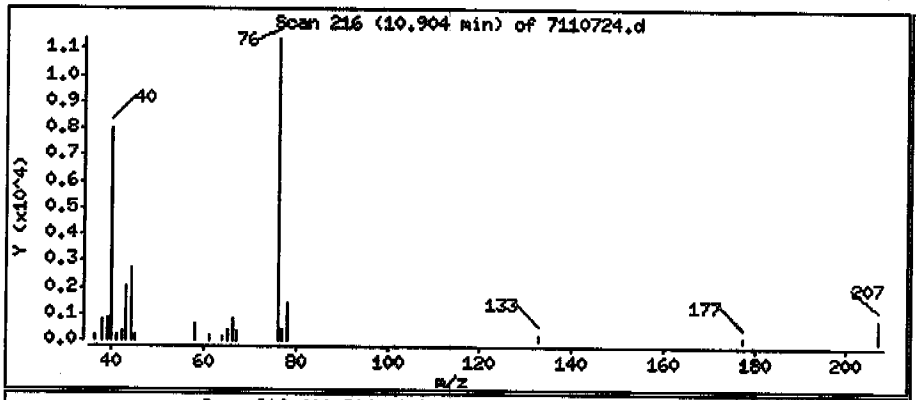
Operator: ab

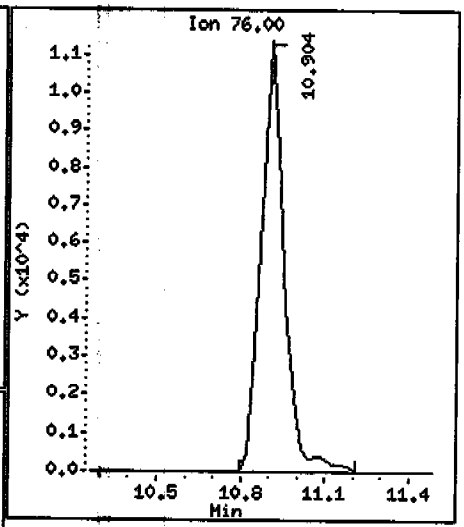
Column phase: RTx-624

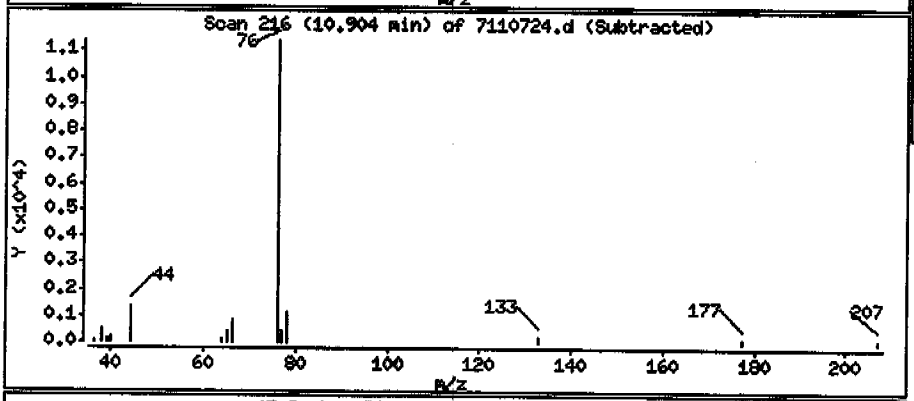
Column diameter: 0.53

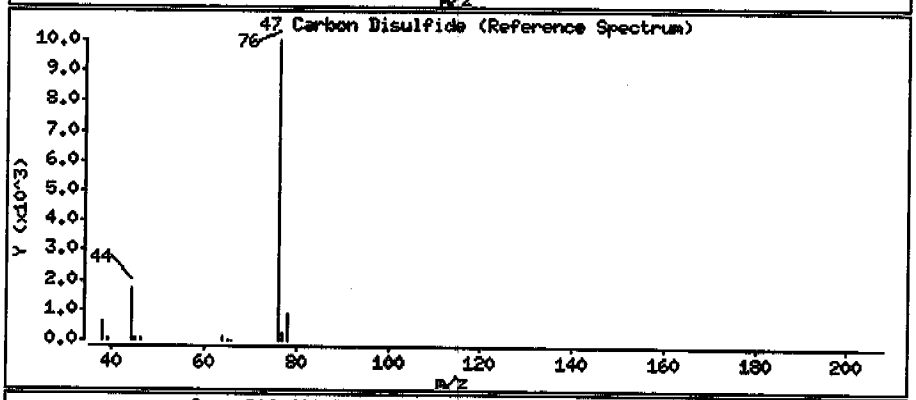
47 Carbon Disulfide

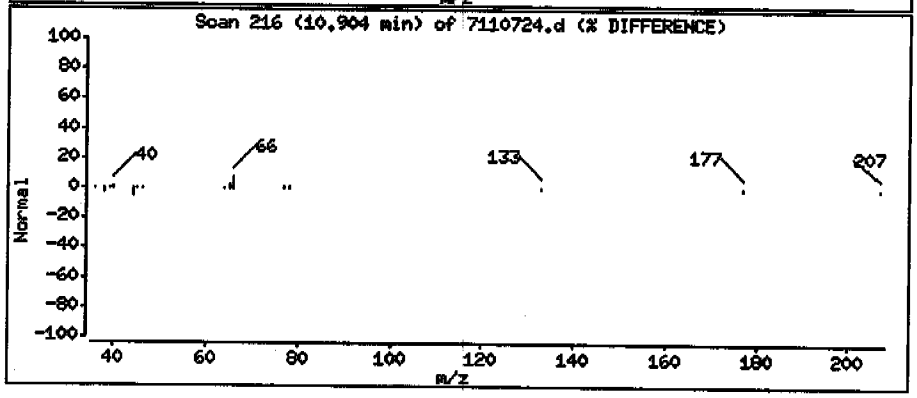
Concentration: 1.019 PPBV











Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:56

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

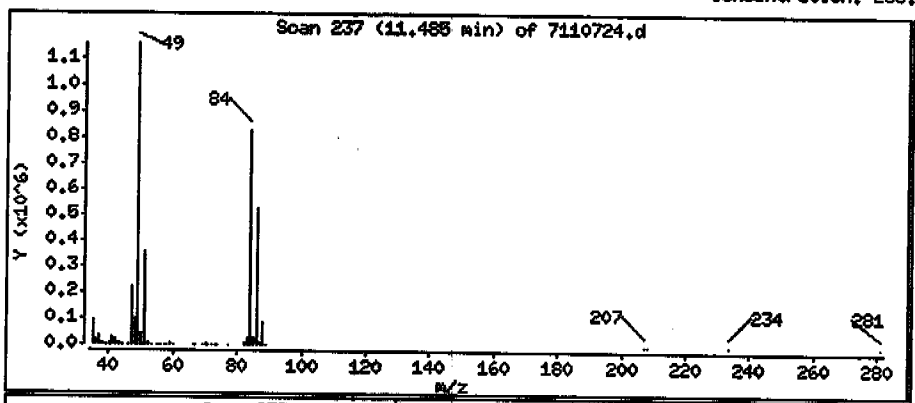
Operator: ab

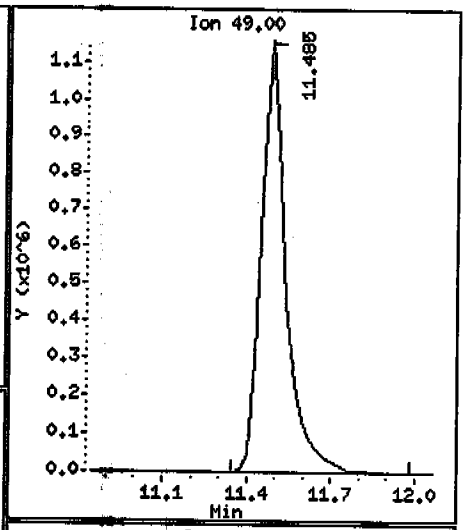
Column phase: RTx-624

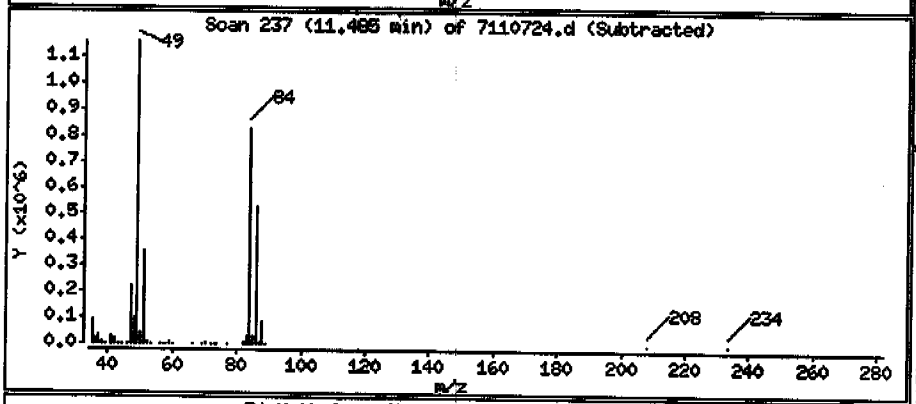
Column diameter: 0.53

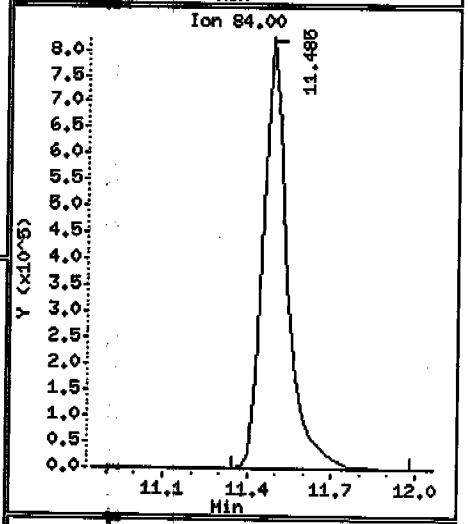
54 Methylene Chloride

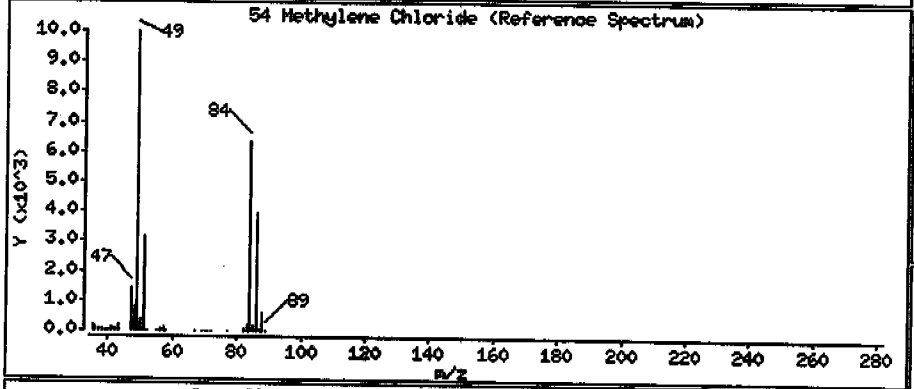
Concentration: 285.69 PPBV

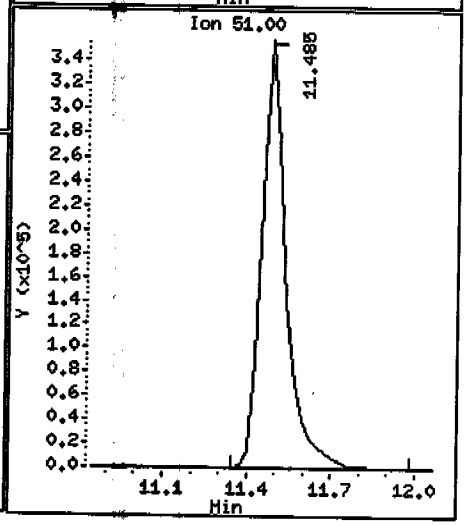


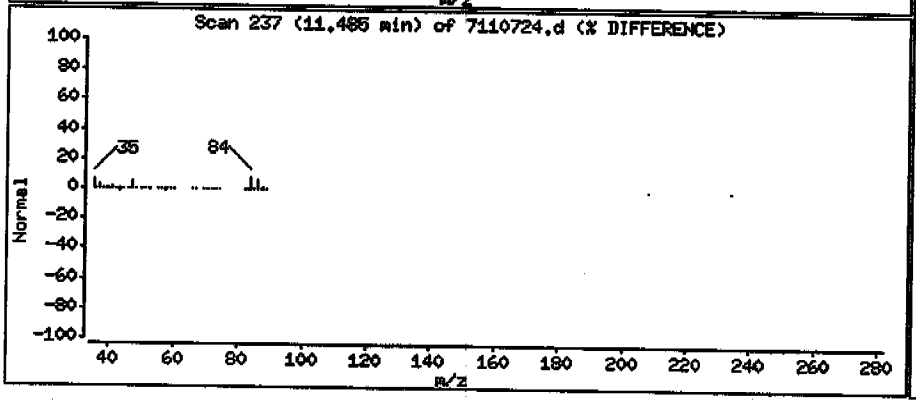












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

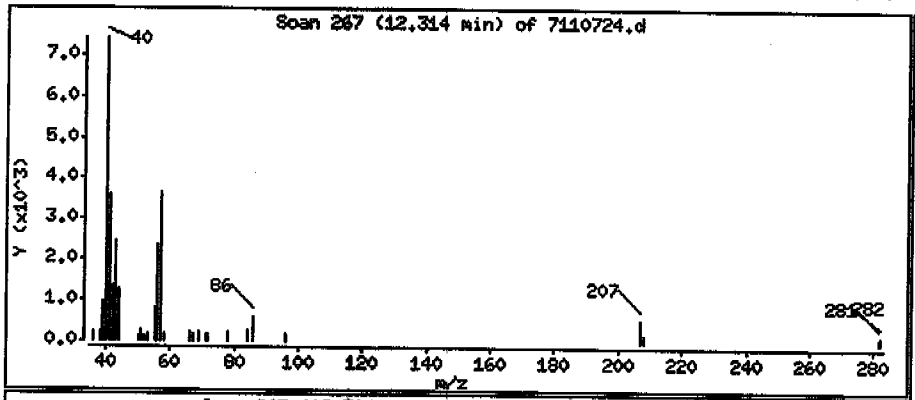
Operator: ab

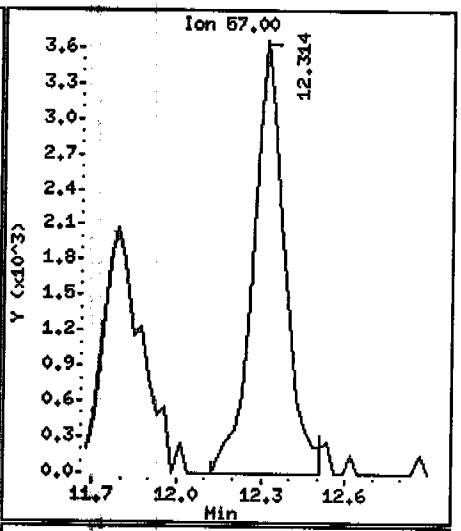
Column phase: RTx-624

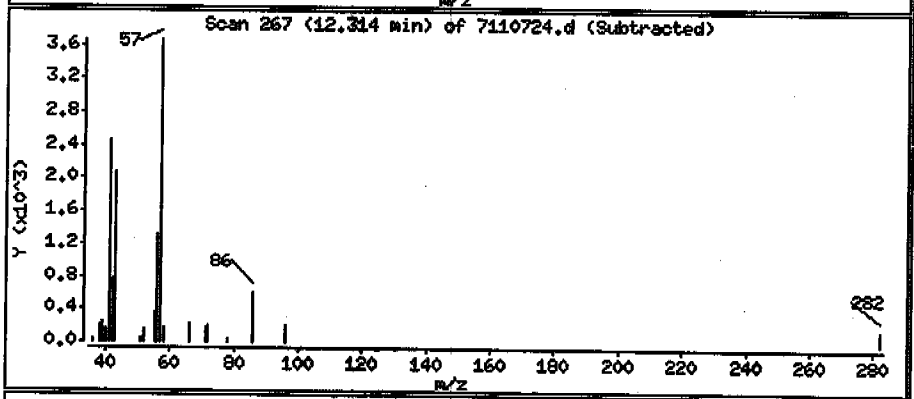
Column diameter: 0.53

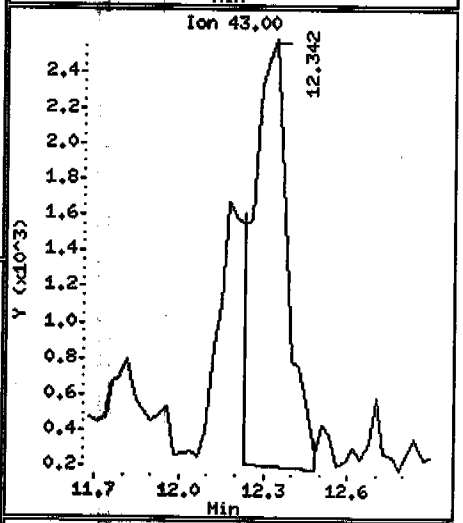
65 Hexane

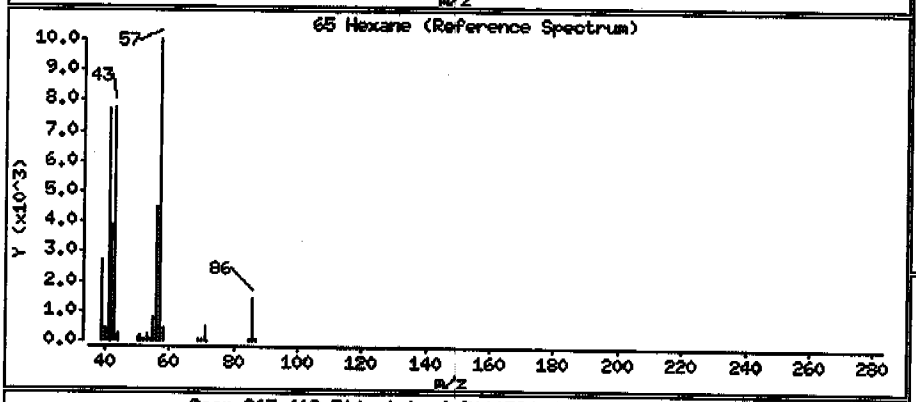
Concentration: 0.8769 PPBV

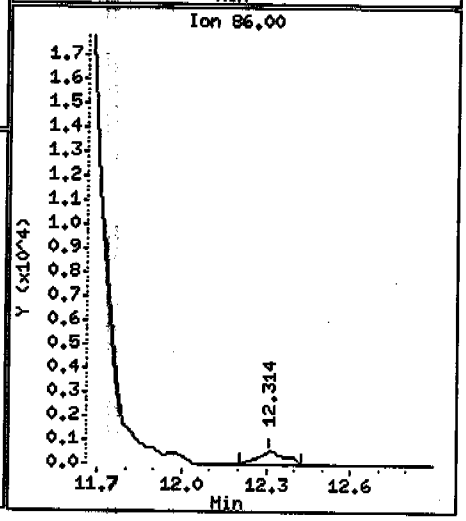


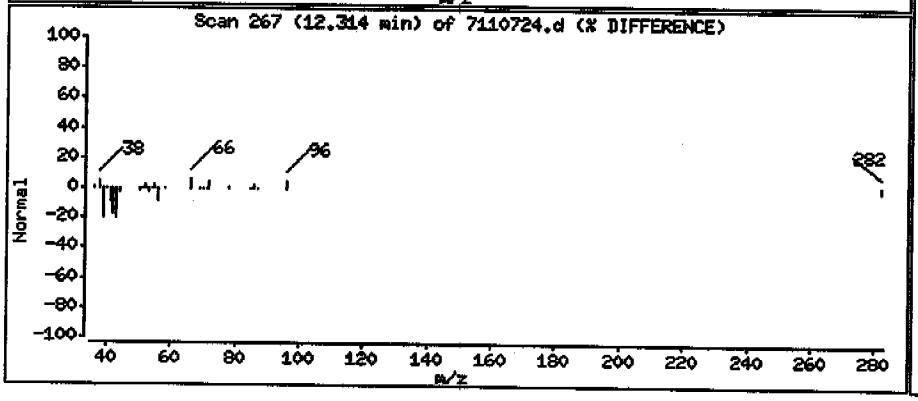












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

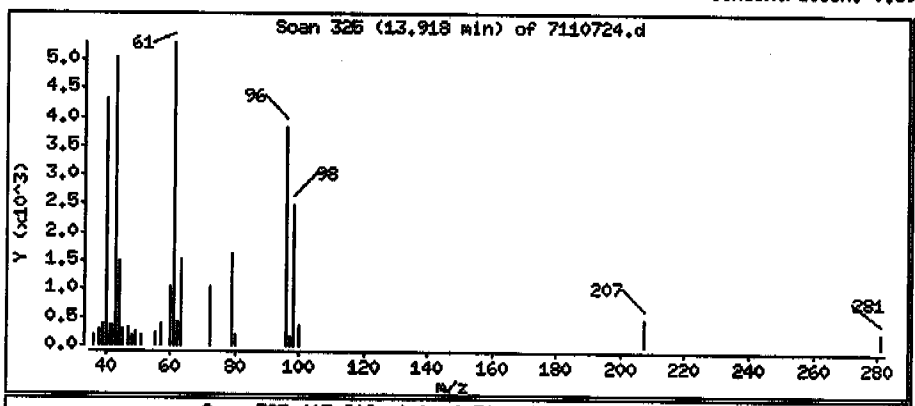
Operator: ab

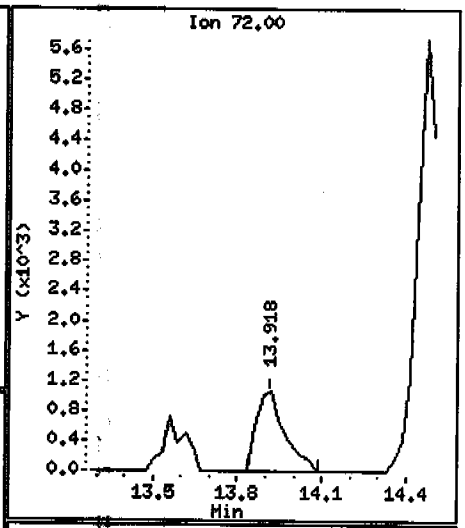
Column phase: RTx-624

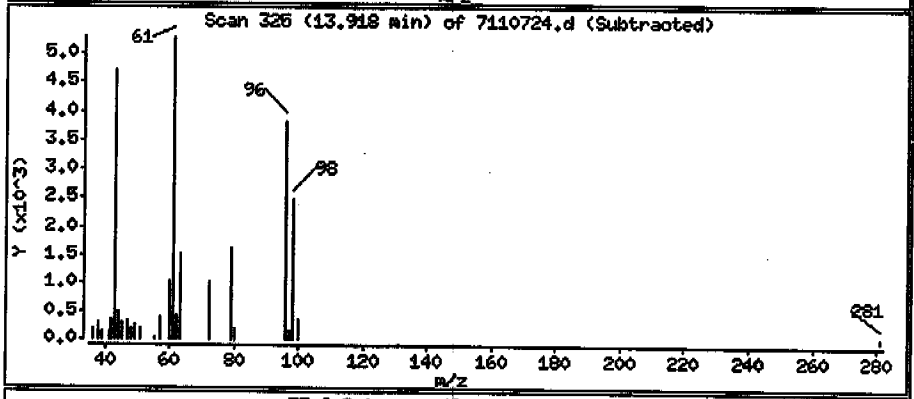
Column diameter: 0.53

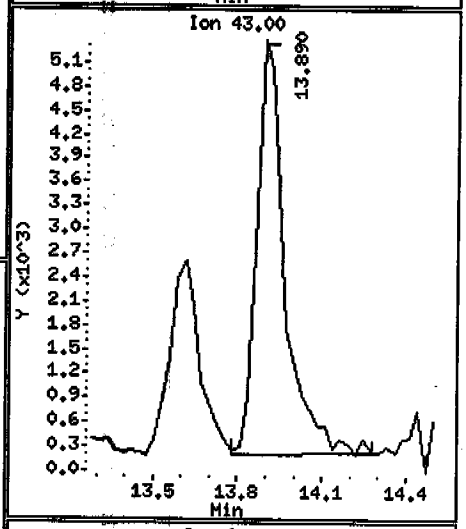
75 2-Butanone

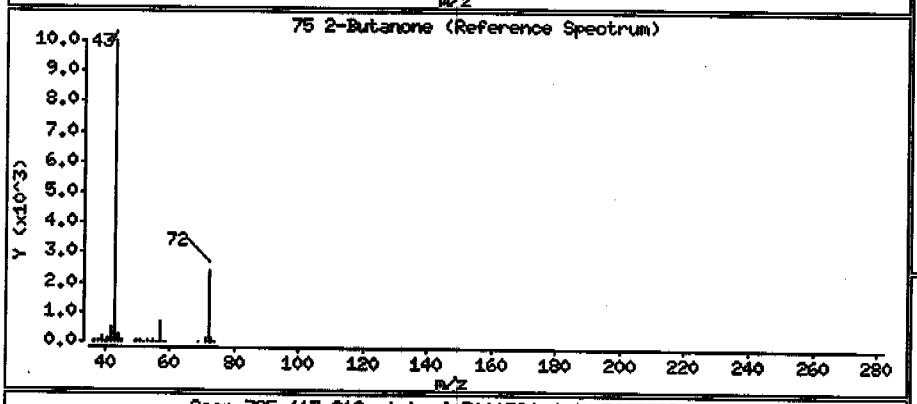
Concentration: 0.8908 PPBV

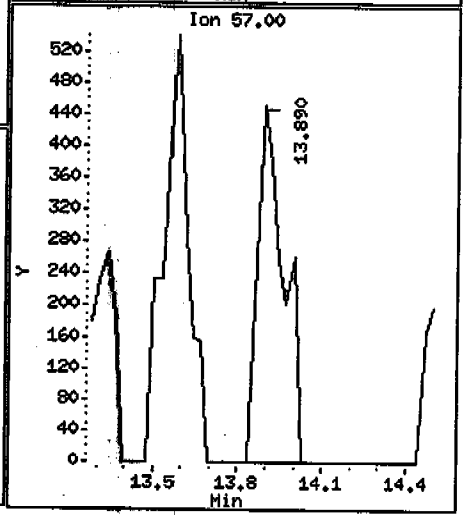


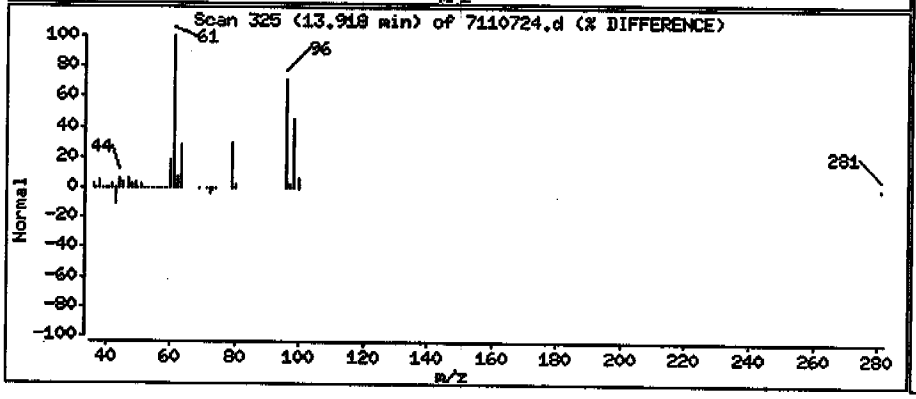












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

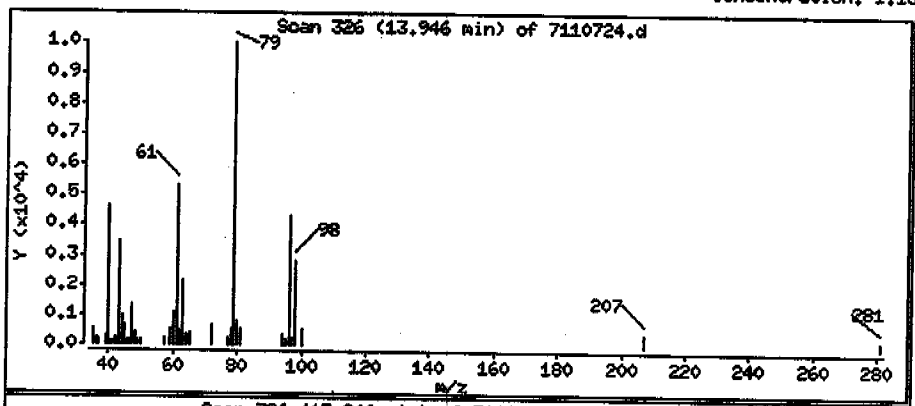
Operator: ab

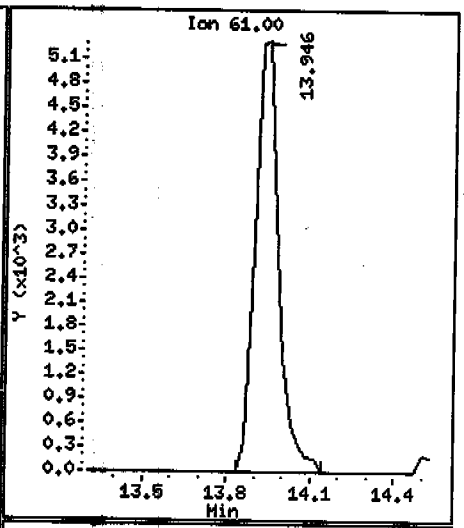
Column phase: RTx-624

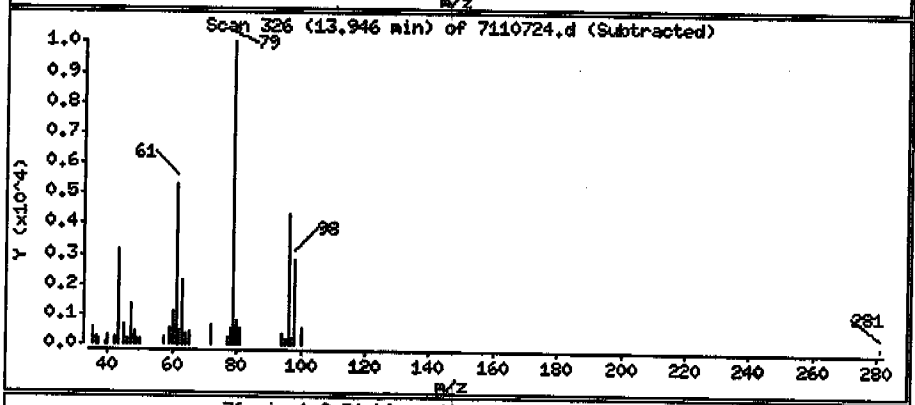
Column diameter: 0.53

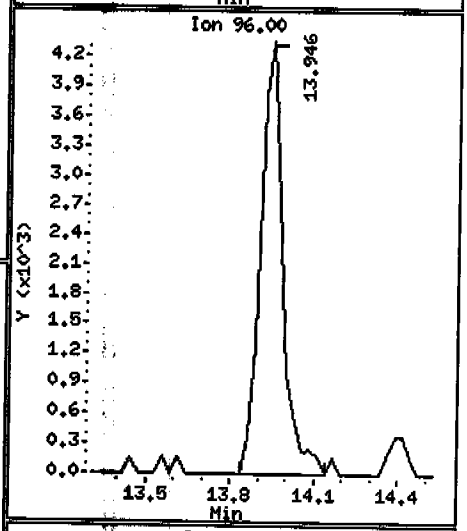
76 cis-1,2-Dichloroethene

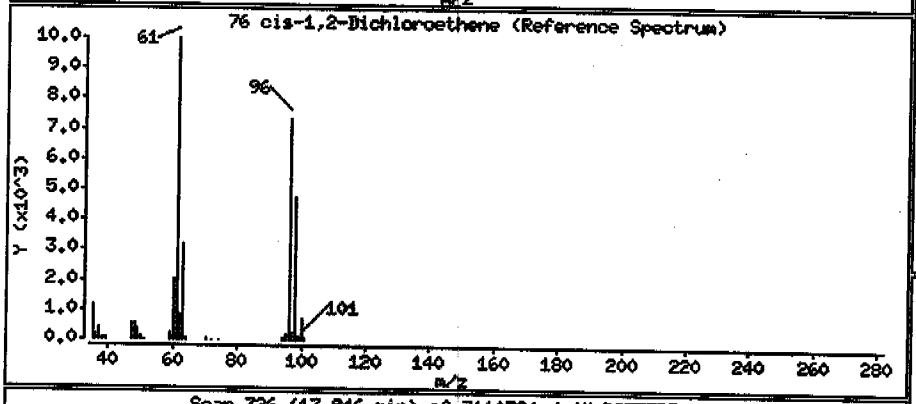
Concentration: 1.150 PPBV

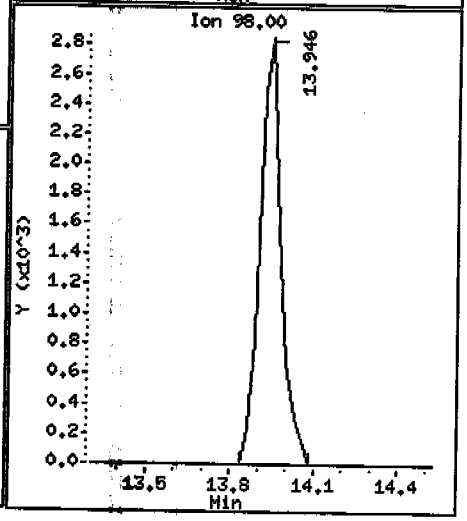


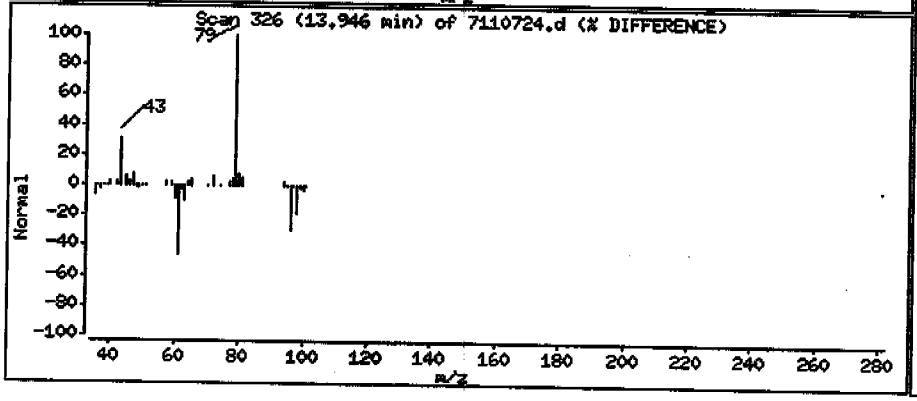












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

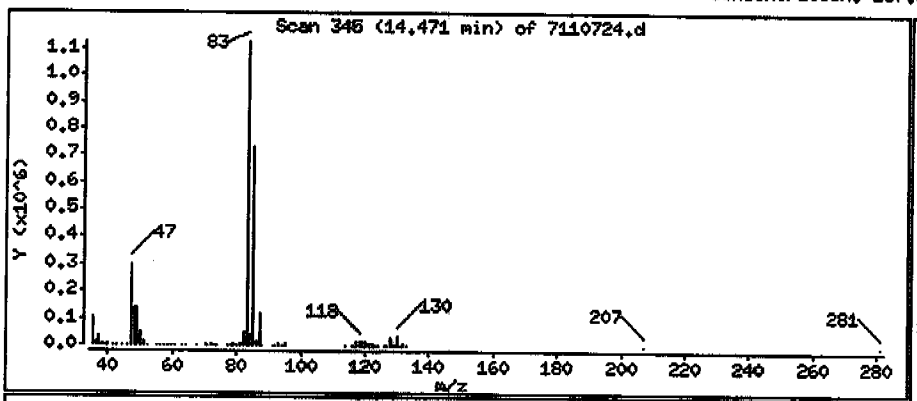
Operator: ab

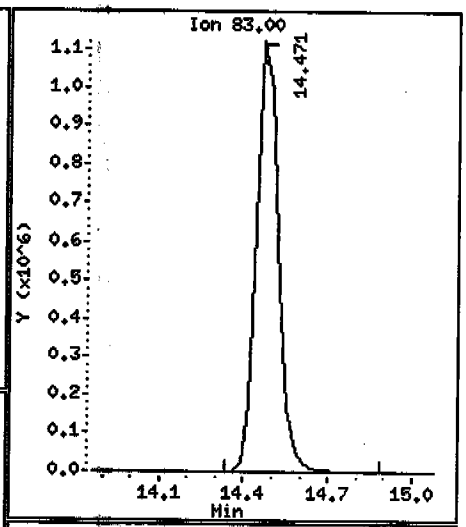
Column phase: RTx-624

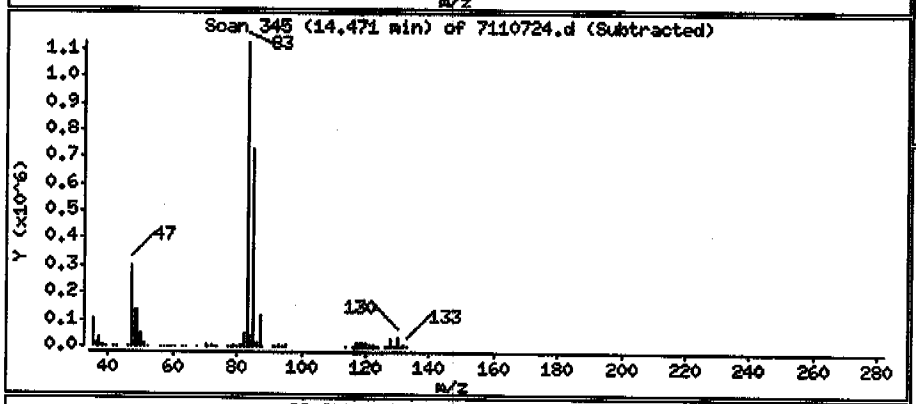
Column diameter: 0.53

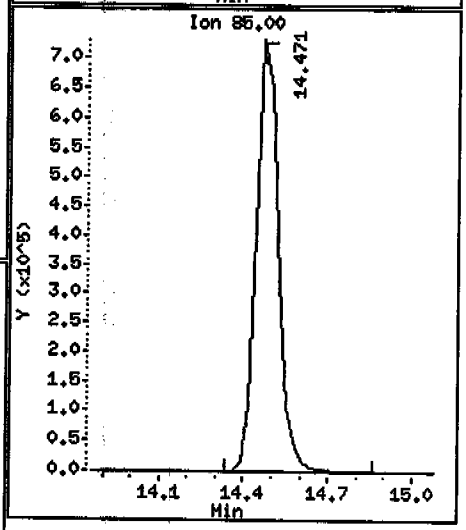
82 Chloroform

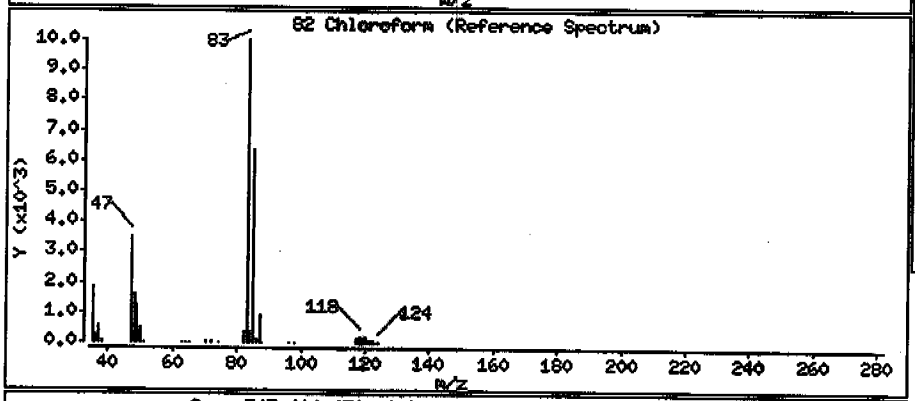
Concentration: 157.81 PPBV

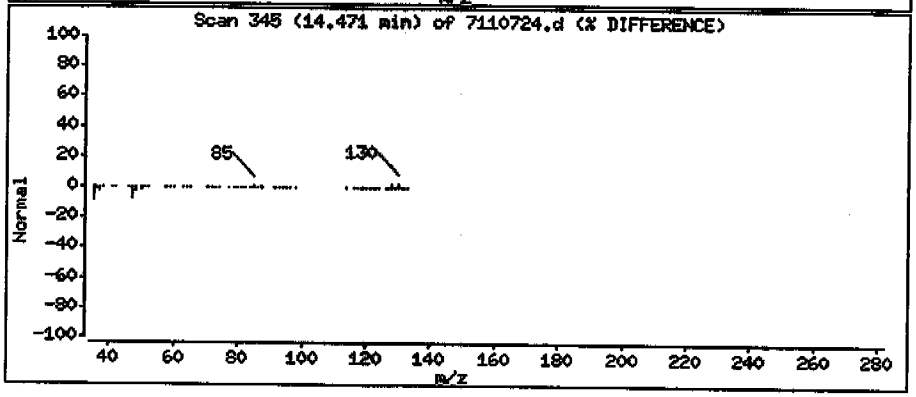












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

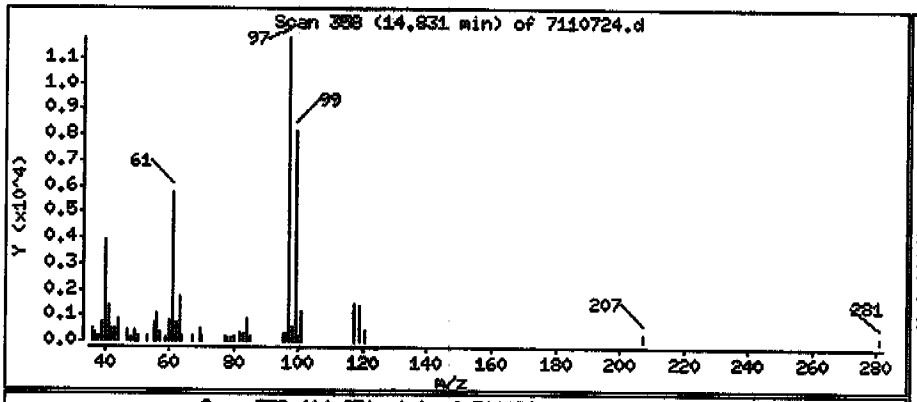
Operator: ab

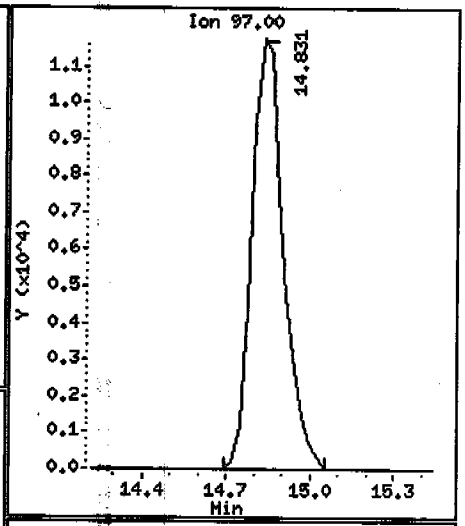
Column phase: RTx-624

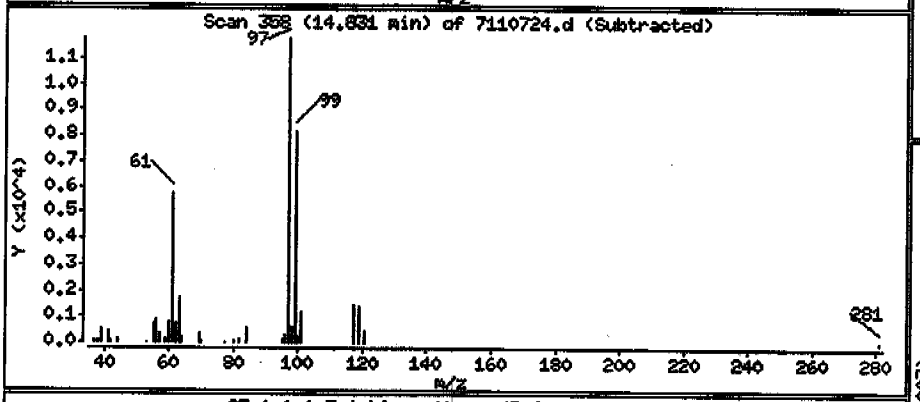
Column diameter: 0.53

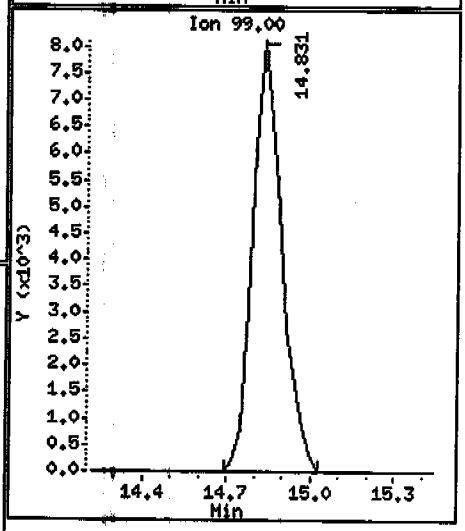
83 1,1,1-Trichloroethane

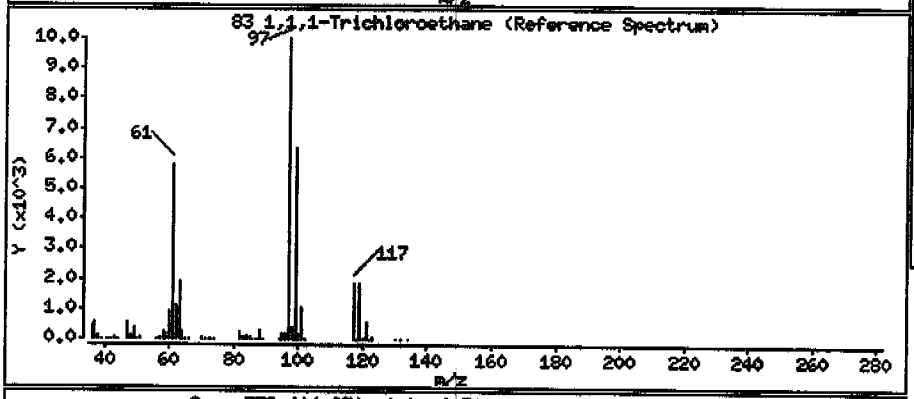
Concentration: 2.352 PPBV

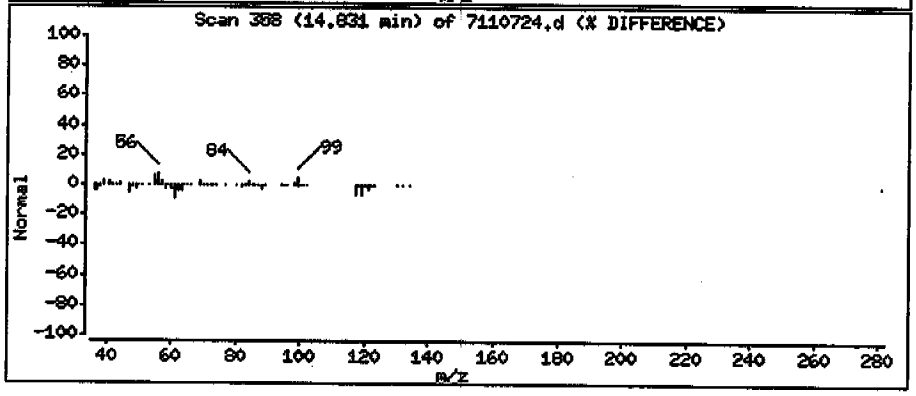












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

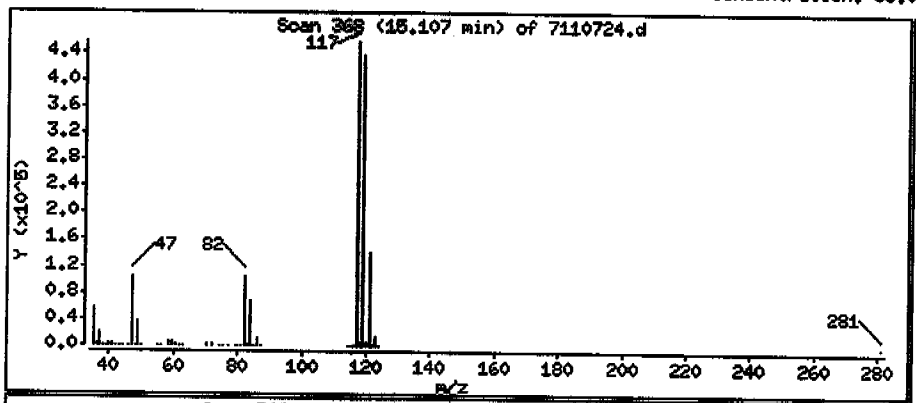
Operator: ab

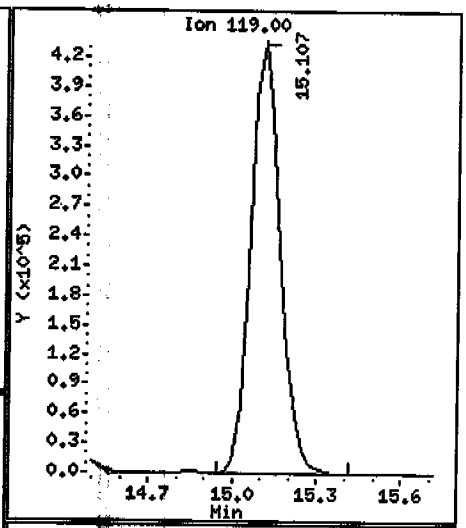
Column phase: RTx-624

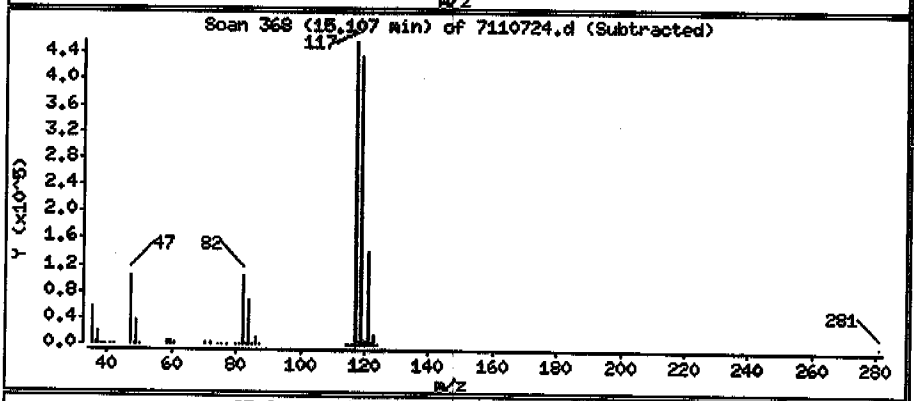
Column diameter: 0.53

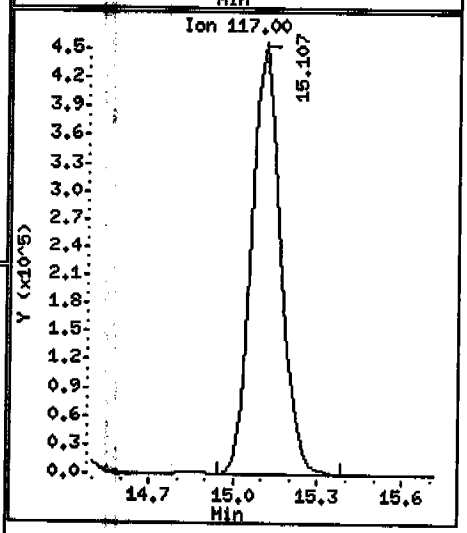
87 Carbon Tetrachloride

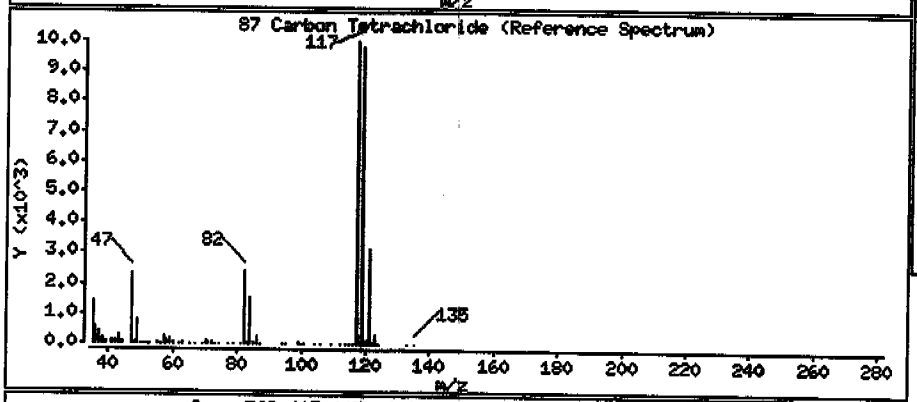
Concentration: 86.003 PPBV

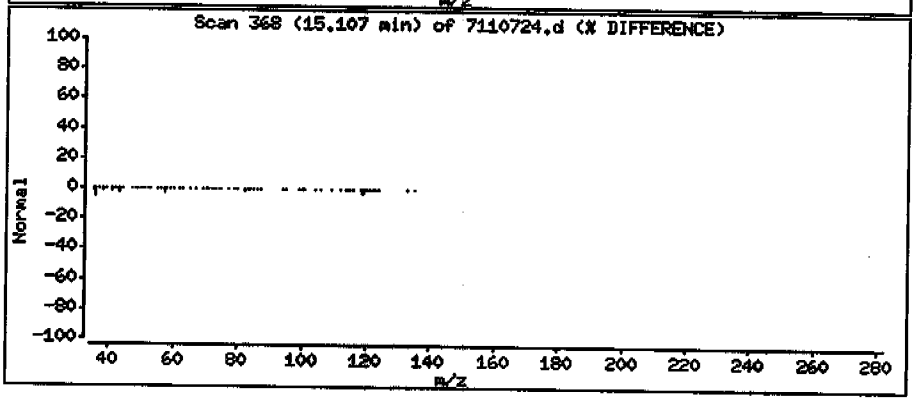












Data File: /ohem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

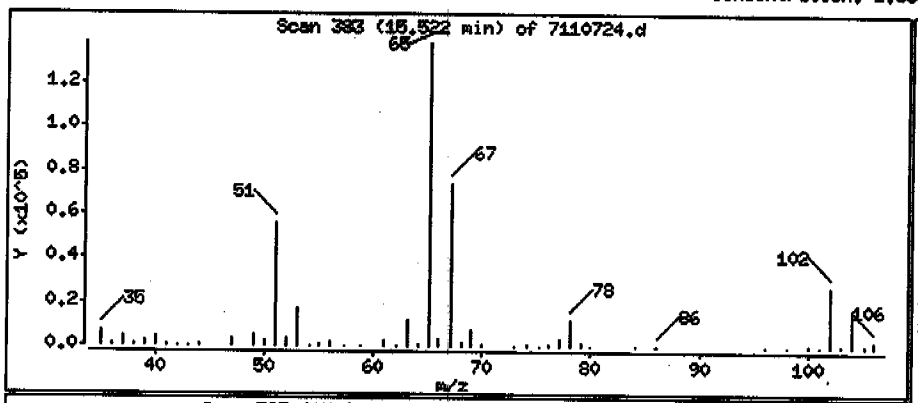
Operator: ab

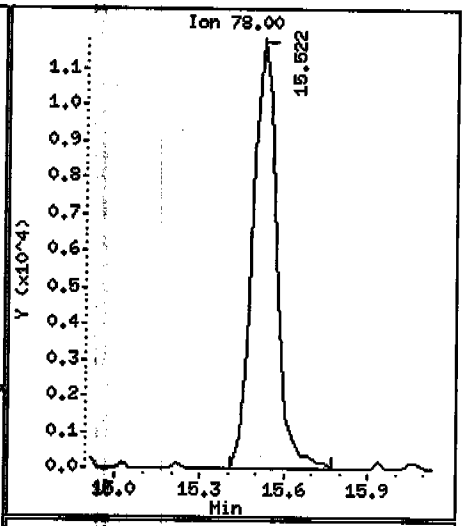
Column phase: RTx-624

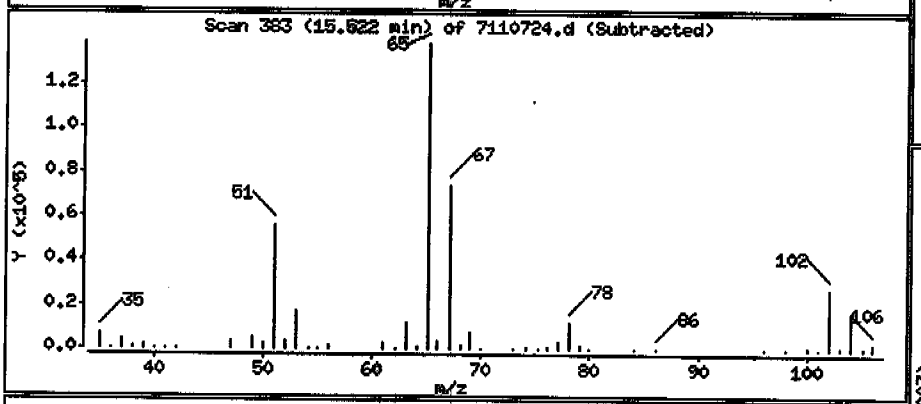
Column diameter: 0.53

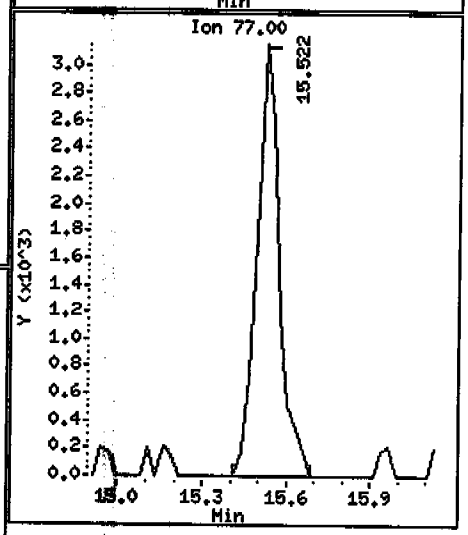
91 Benzene

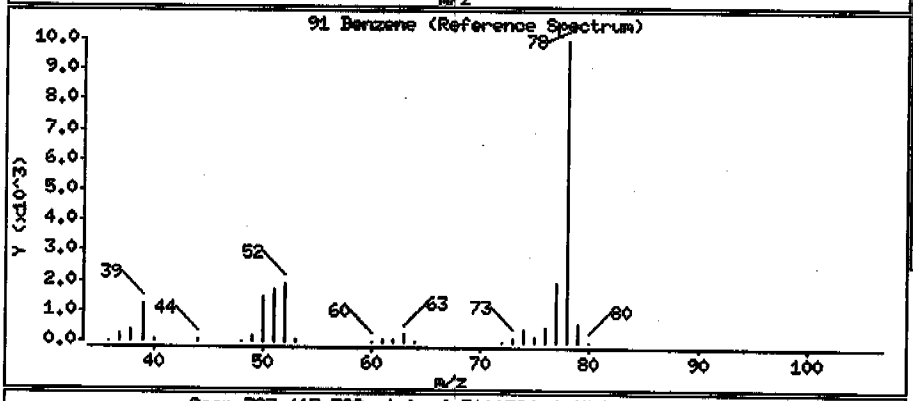
Concentration: 1.358 PPBV

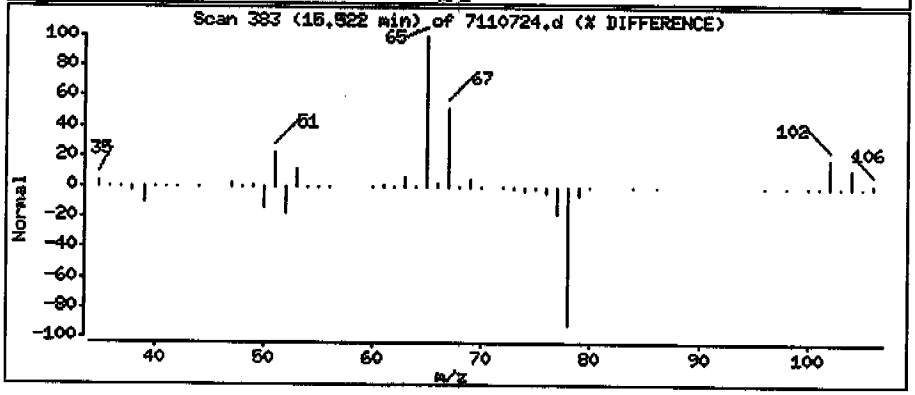












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

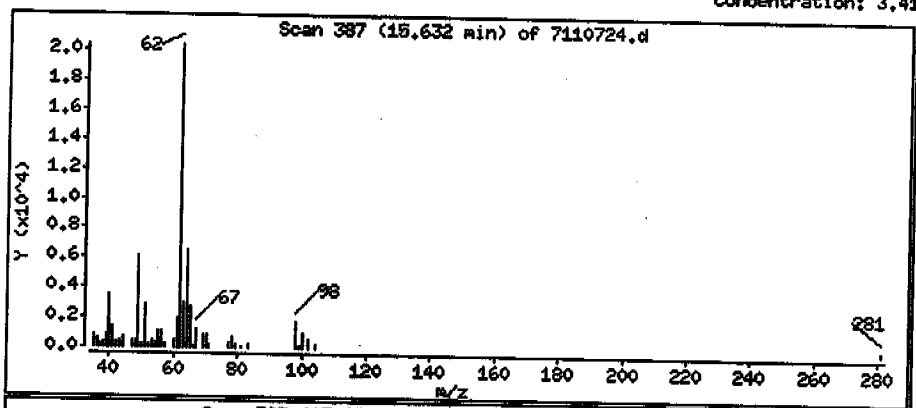
Operator: ab

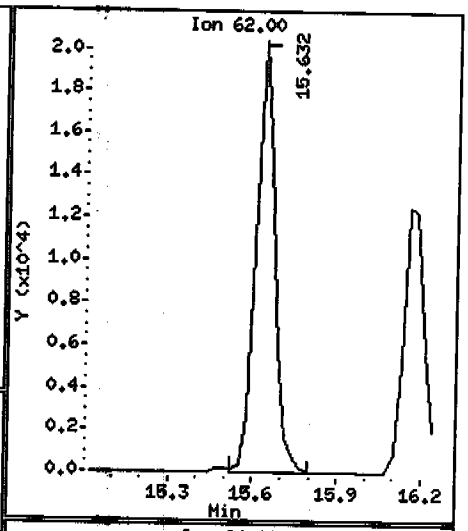
Column phase: RTx-624

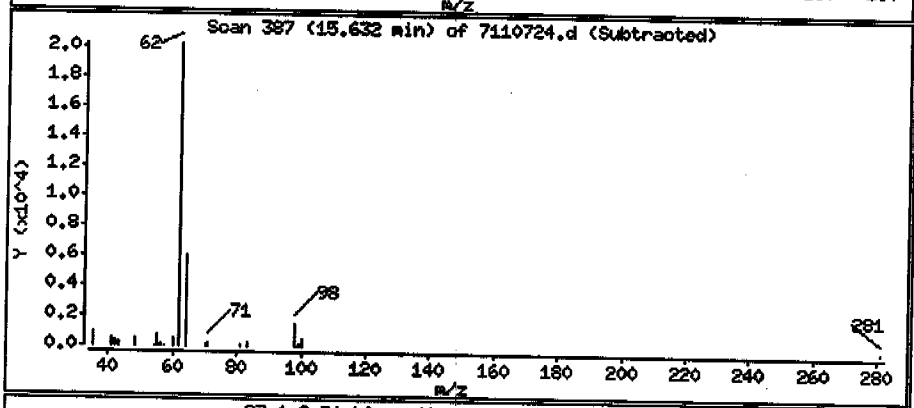
Column diameter: 0.53

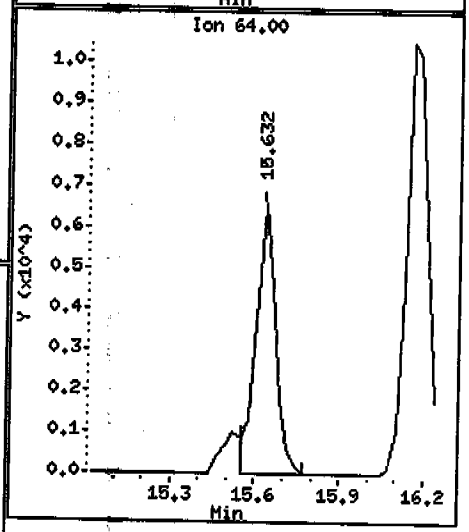
93 1,2-Dichloroethane

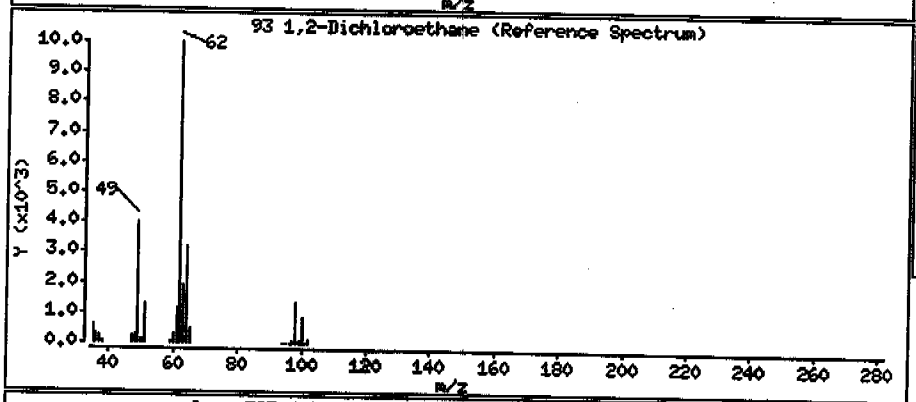
Concentration: 3.412 PPBV

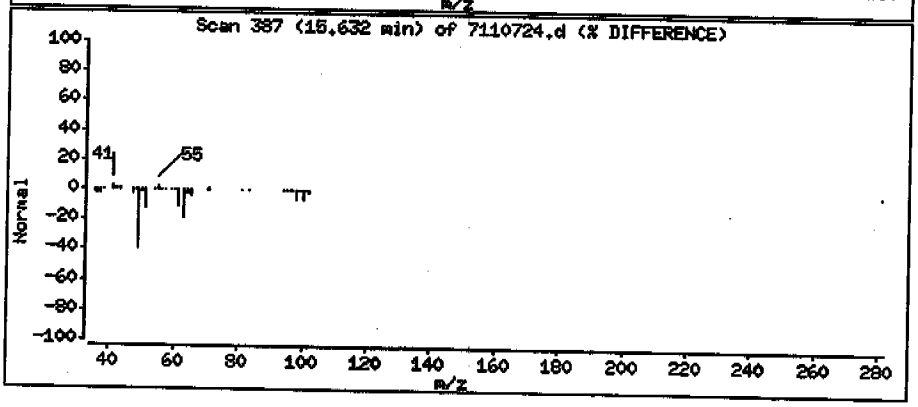












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:56

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

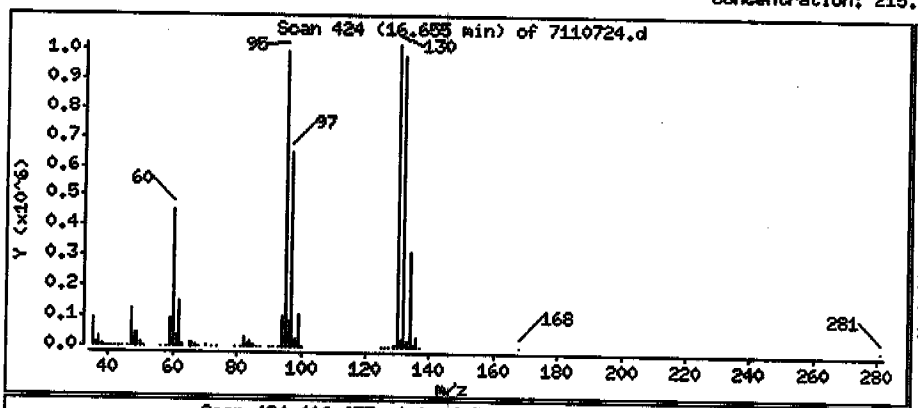
Operator: ab

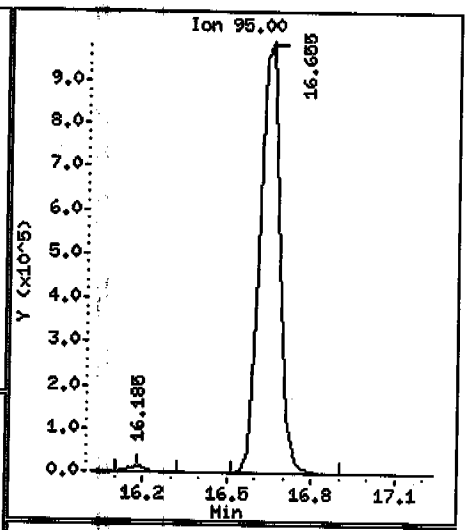
Column phase: RTx-624

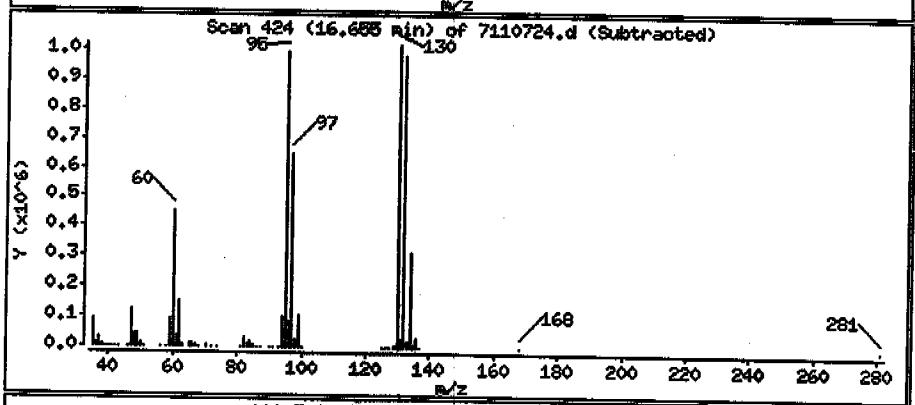
Column diameter: 0.53

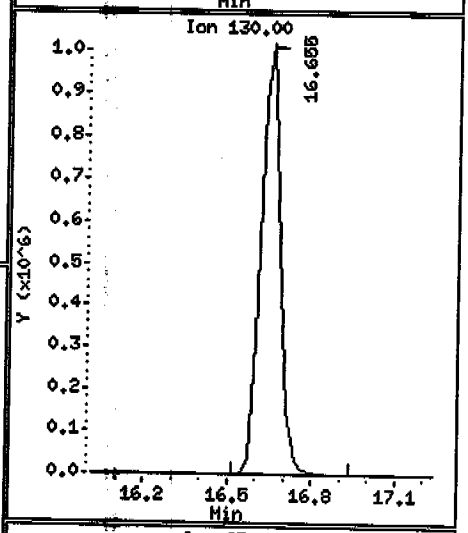
101 Trichloroethene

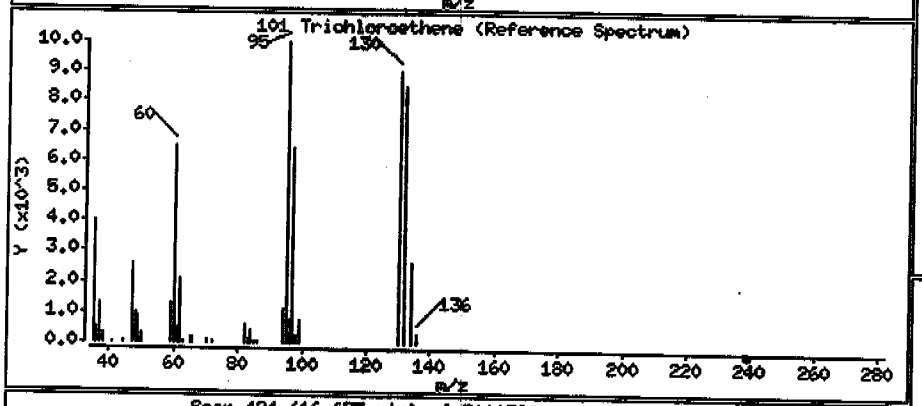
Concentration: 215.74 PPBV

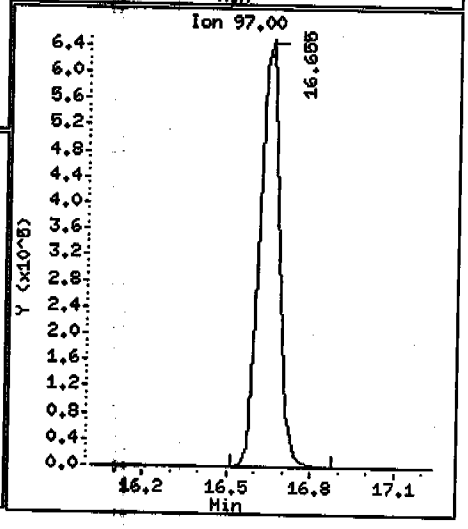


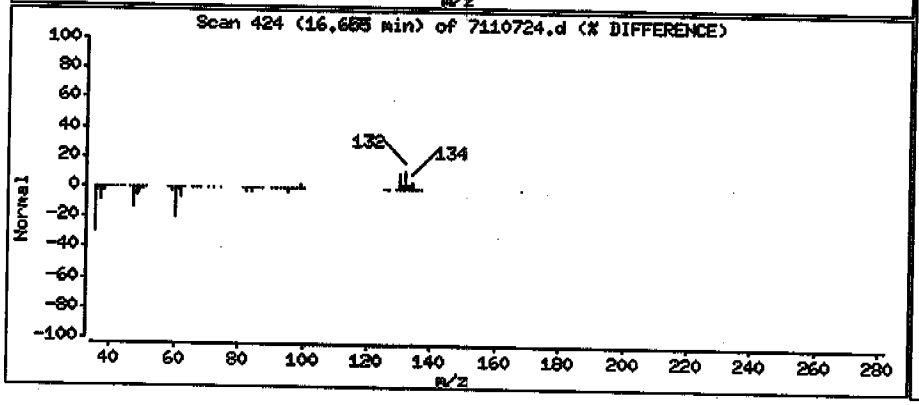












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21005

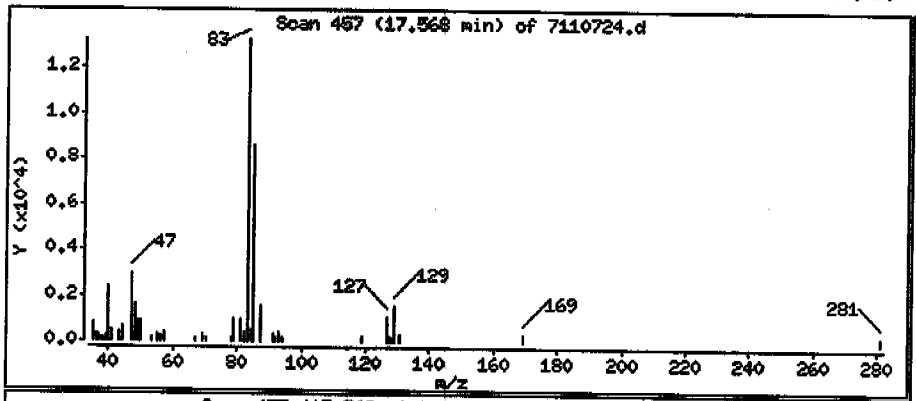
Operator: ab

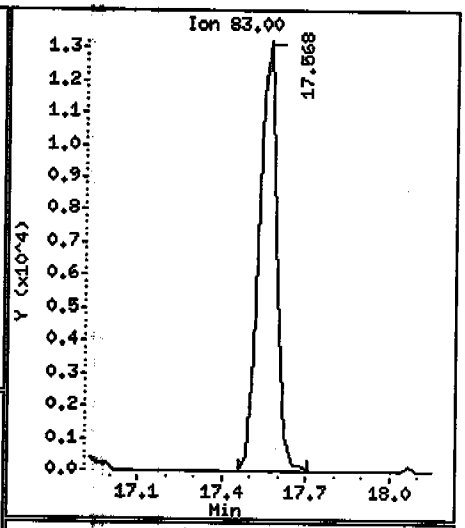
Column phase: RTx-624

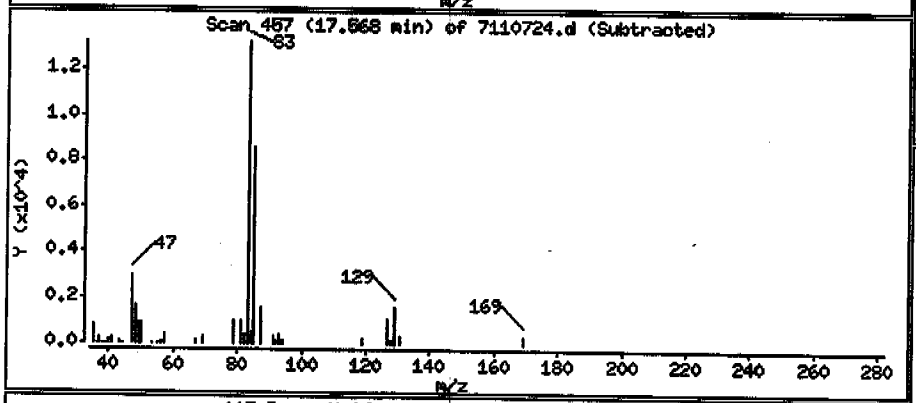
Column diameter: 0.53

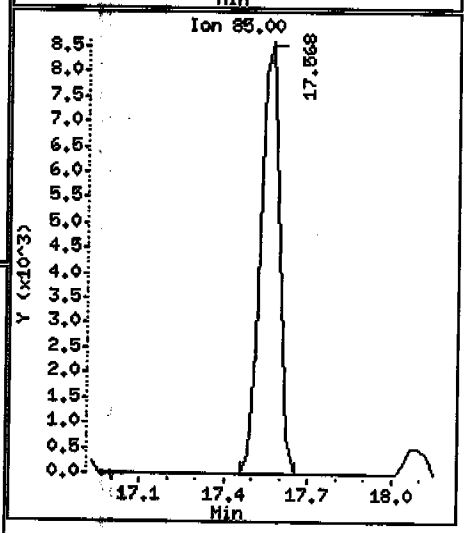
107 Bromodichloromethane

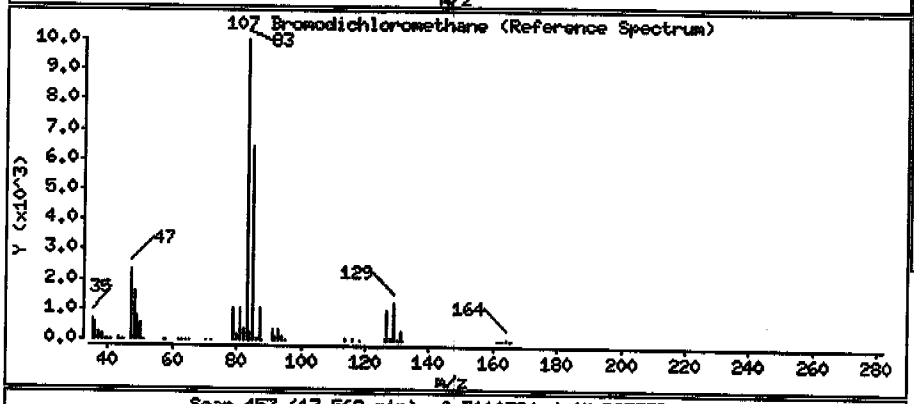
Concentration: 1.474 PPBV

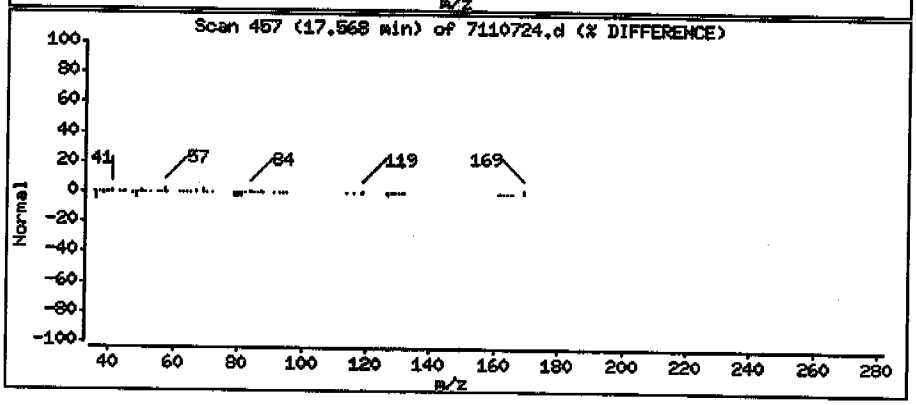












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:56

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

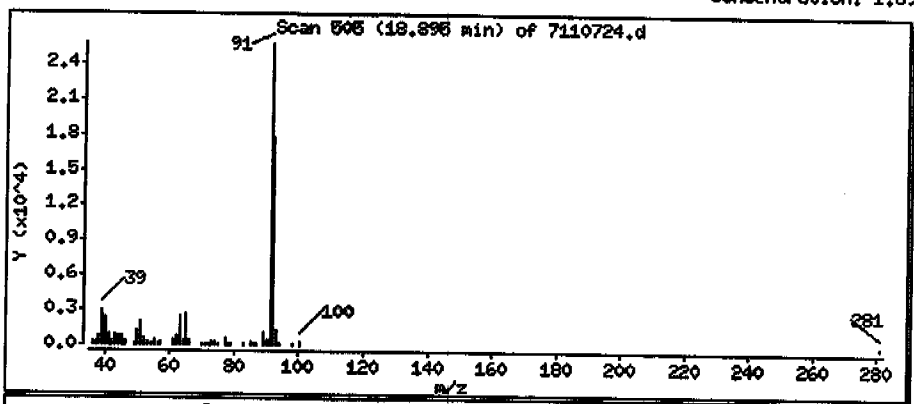
Operator: ab

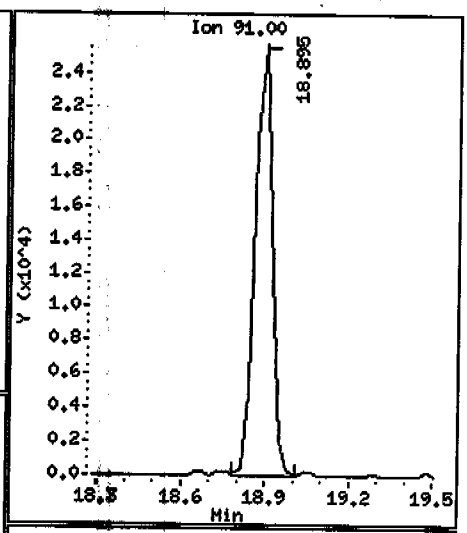
Column phase: RTx-624

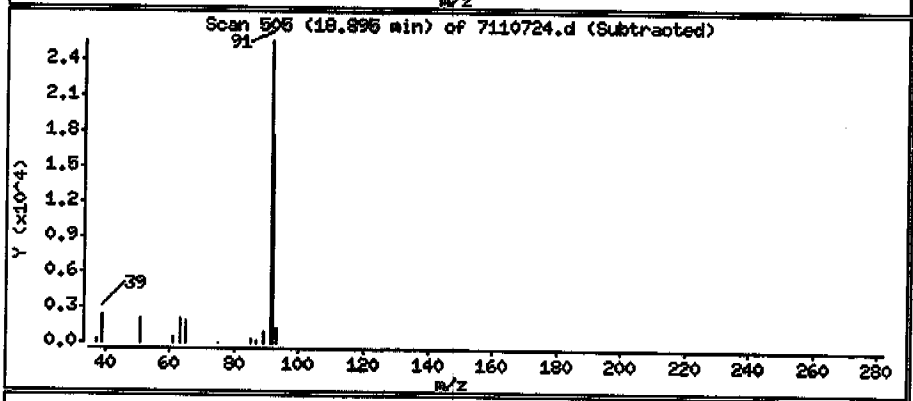
Column diameter: 0.53

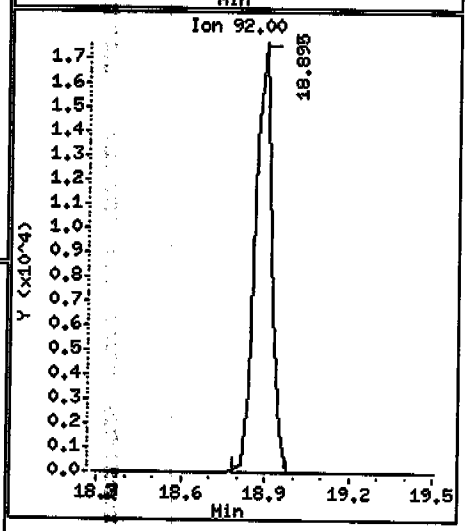
114 Toluene

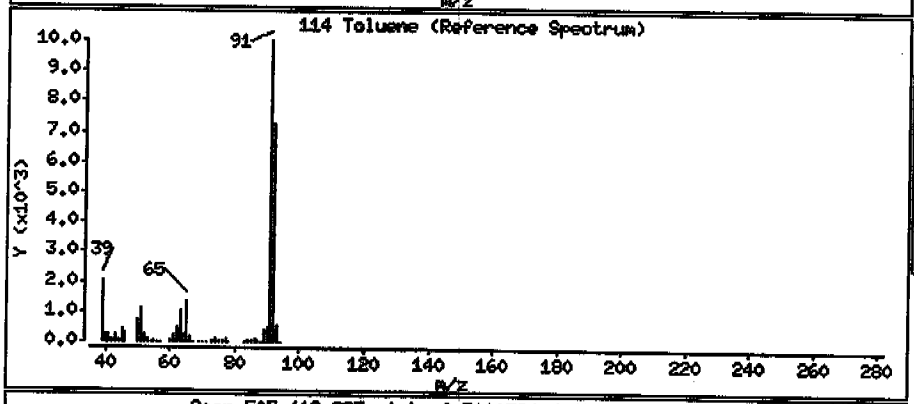
Concentration: 1.891 PPBV

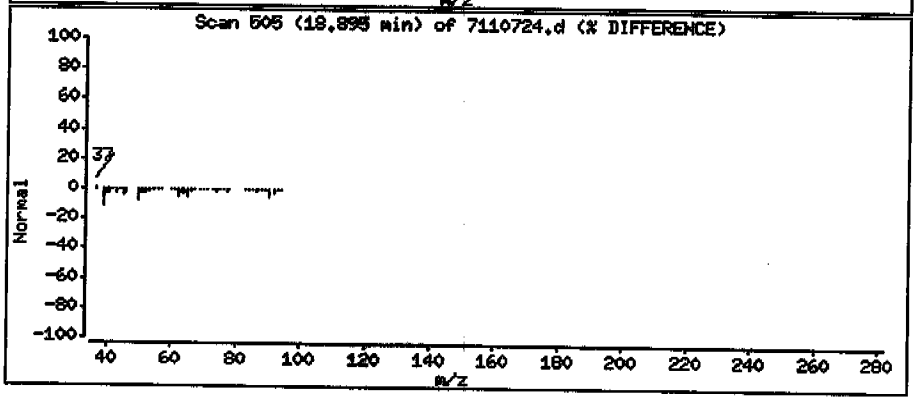












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:56

Client ID:

Instrument: msd7.i

Sample Info: 200mL #21006

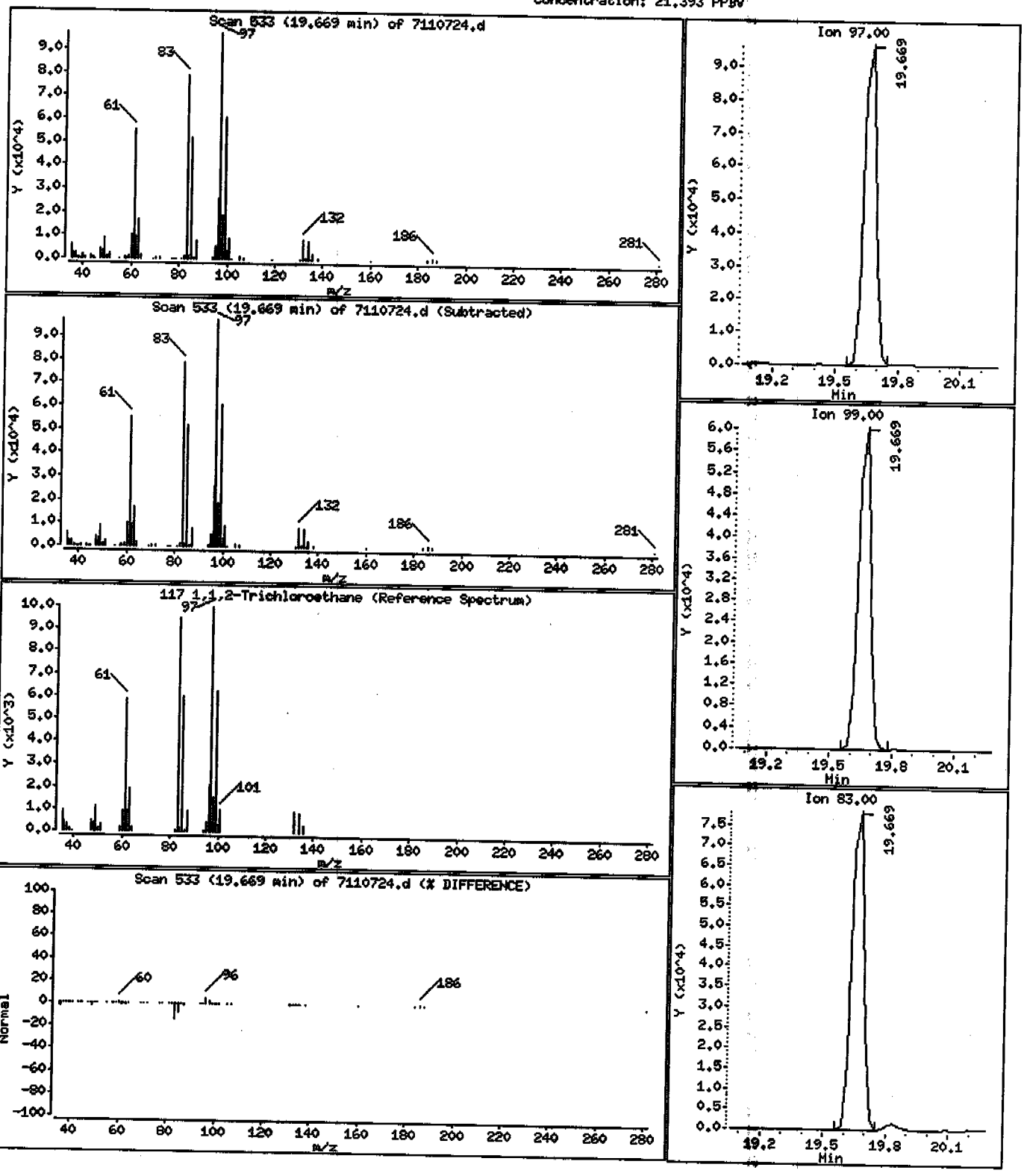
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

117 1,1,2-Trichloroethane

Concentration: 21.393 PPBV



Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21006

Instrument: msd7.i

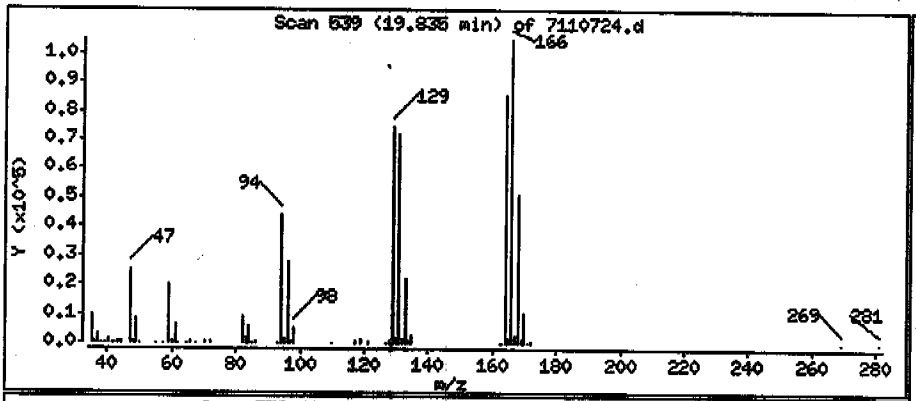
Operator: ab

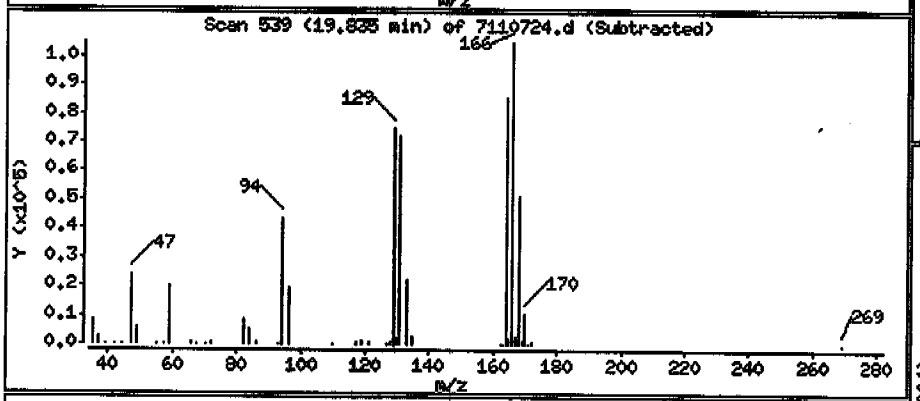
Column phase: RTx-624

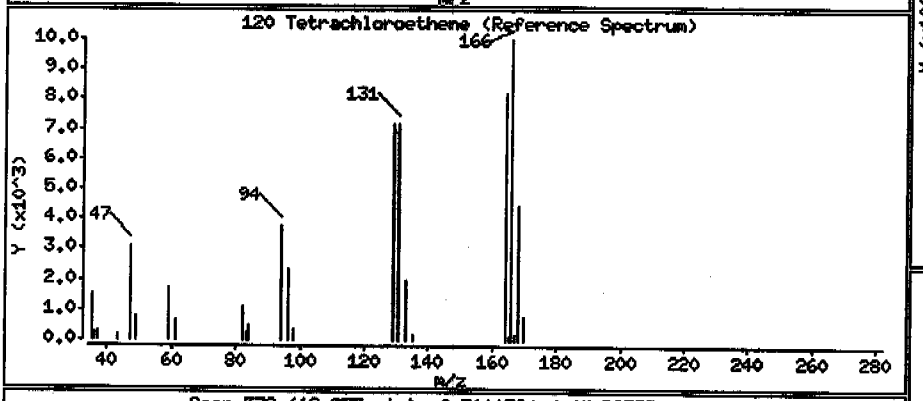
Column diameter: 0.53

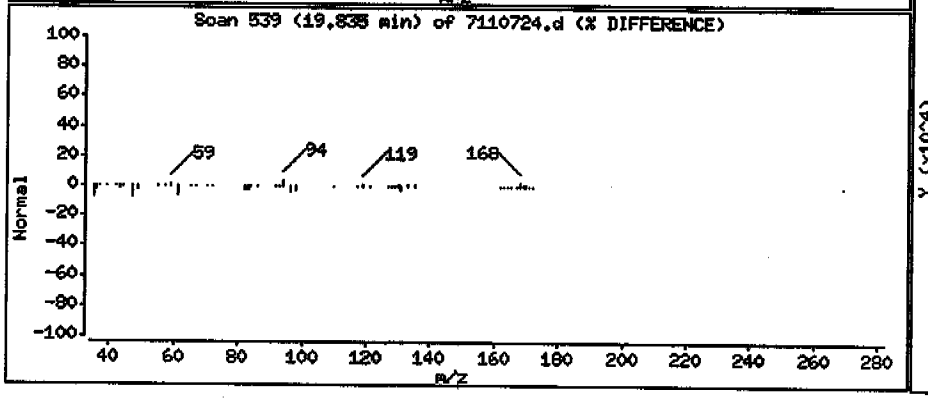
120 Tetrachloroethene

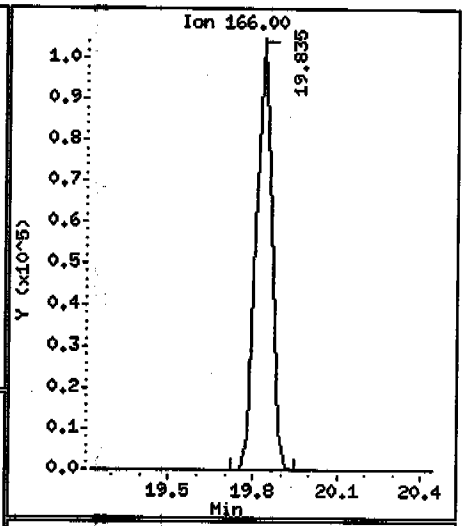
Concentration: 17.108 PPBV

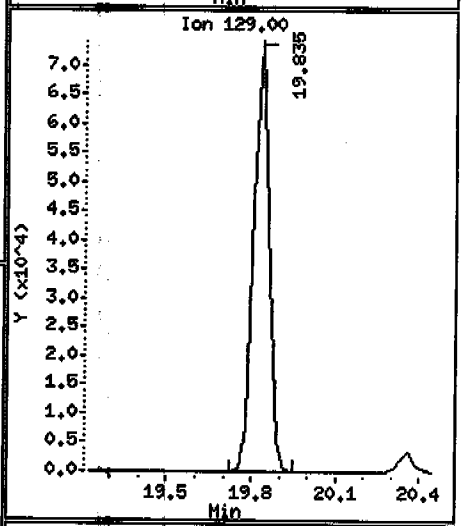


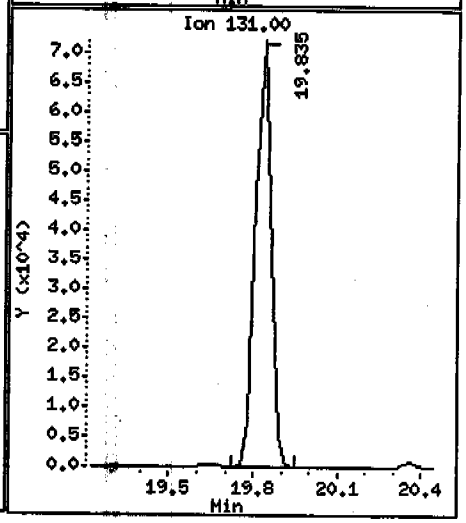












Data File: /chem/msd7.i/7-07nov.b/7110724.d

Date : 08-NOV-2007 03:55

Client ID:

Sample Info: 200mL #21005

Instrument: msd7.i

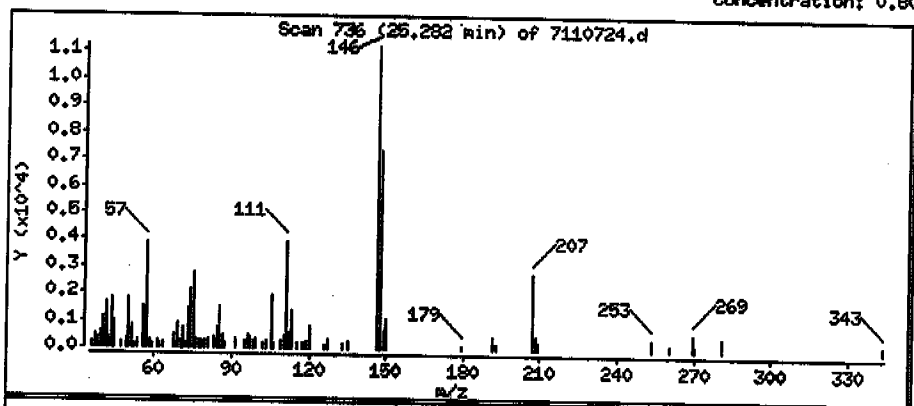
Operator: ab

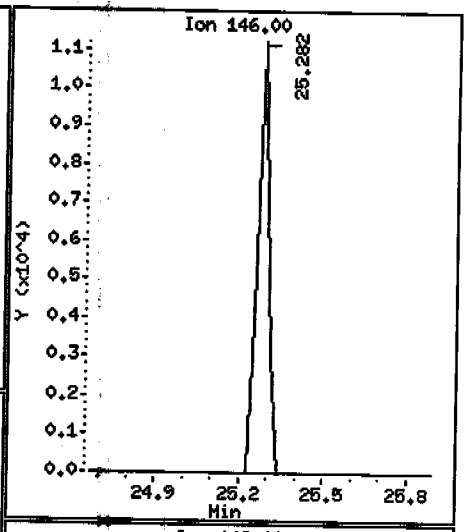
Column phase: RTx-624

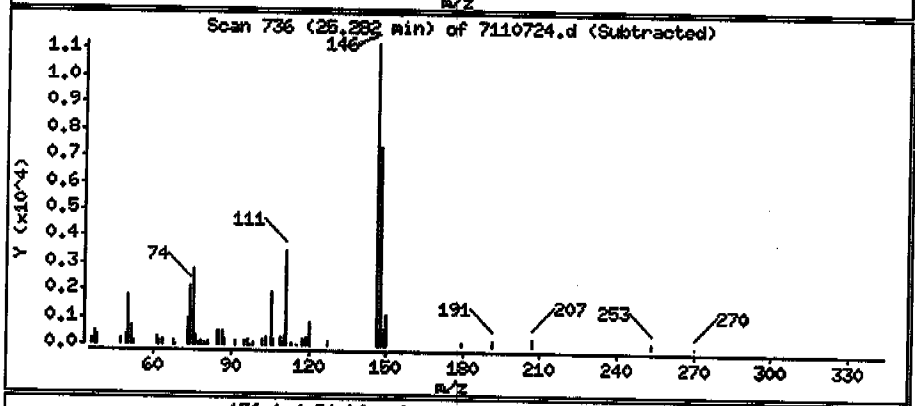
Column diameter: 0.53

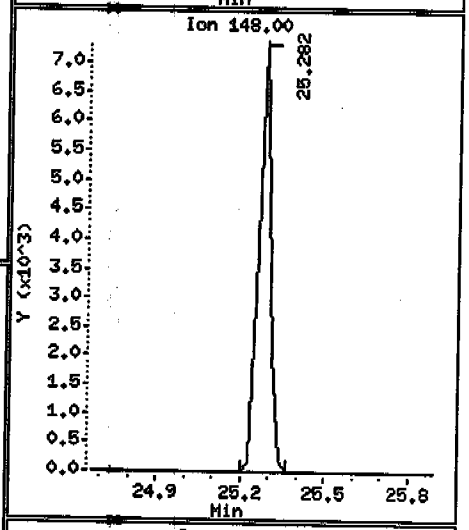
156 1,4-Dichlorobenzene

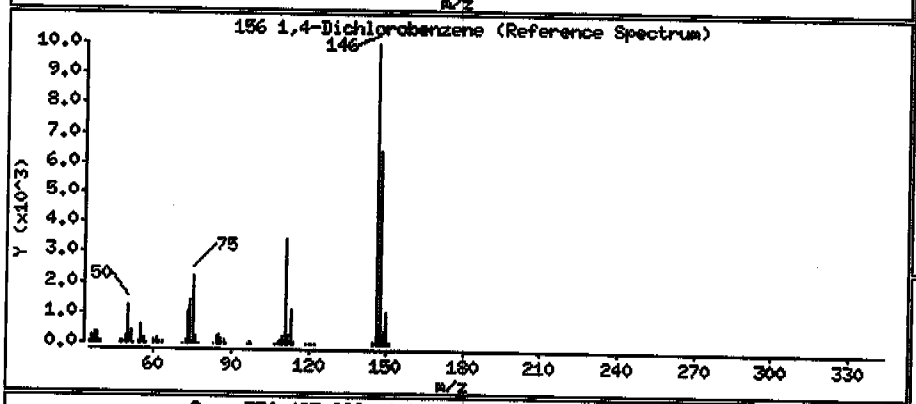
Concentration: 0.8020 PPBV

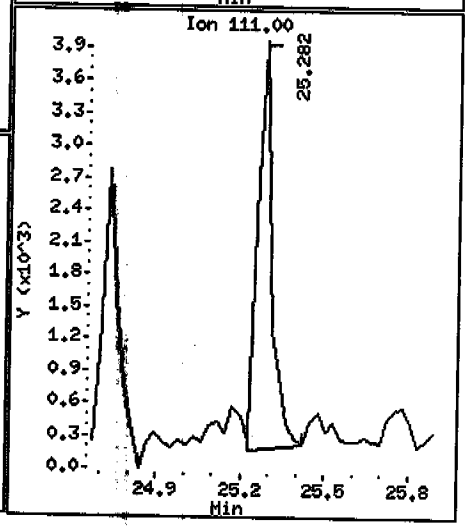


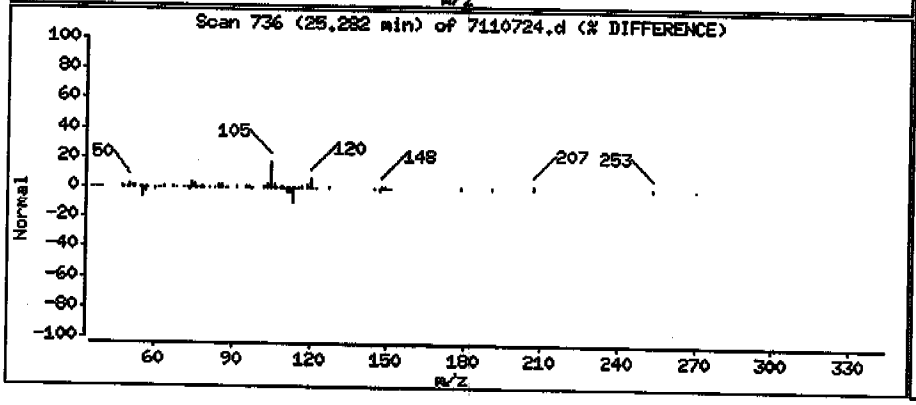












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6818

Lab ID#: 0711101-07A

No Detections Were Found.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6818

Lab ID#: 0711101-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.80	Not Detected	4.0	Not Detected
Freon 114	0.80	Not Detected	5.6	Not Detected
Chloromethane	3.2	Not Detected	6.6	Not Detected
Vinyl Chloride	0.80	Not Detected	2.0	Not Detected
1,3-Butadiene	0.80	Not Detected	1.8	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.80	Not Detected	4.5	Not Detected
Ethanol	3.2	Not Detected	6.1	Not Detected
Freon 113	0.80	Not Detected	6.2	Not Detected
1,1-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Acetone	3.2	Not Detected	7.6	Not Detected
2-Propanol	3.2	Not Detected	7.9	Not Detected
Carbon Disulfide	0.80	Not Detected	2.5	Not Detected
Methylene Chloride	0.80	Not Detected	2.8	Not Detected
Methyl tert-butyl ether	0.80	Not Detected	2.9	Not Detected
trans-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Hexane	0.80	Not Detected	2.8	Not Detected
1,1-Dichloroethane	0.80	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.80	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.80	Not Detected	2.4	Not Detected
Chloroform	0.80	Not Detected	3.9	Not Detected
1,1,1-Trichloroethane	0.80	Not Detected	4.4	Not Detected
Cyclohexane	0.80	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.80	Not Detected	5.1	Not Detected
Benzene	0.80	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.80	Not Detected	3.2	Not Detected
Heptane	0.80	Not Detected	3.3	Not Detected
Trichloroethene	0.80	Not Detected	4.3	Not Detected
1,2-Dichloropropane	0.80	Not Detected	3.7	Not Detected
1,4-Dioxane	3.2	Not Detected	12	Not Detected
Bromodichloromethane	0.80	Not Detected	5.4	Not Detected
cis-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
4-Methyl-2-pentanone	0.80	Not Detected	3.3	Not Detected
Toluene	0.80	Not Detected	3.0	Not Detected
trans-1,3-Dichloropropene	0.80	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.80	Not Detected	4.4	Not Detected
Tetrachloroethene	0.80	Not Detected	5.5	Not Detected

0252

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6818

Lab ID#: 0711101-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.2	Not Detected	13	Not Detected
Dibromochloromethane	0.80	Not Detected	6.8	Not Detected
1,2-Dibromoethane (EDB)	0.80	Not Detected	6.2	Not Detected
Chlorobenzene	0.80	Not Detected	3.7	Not Detected
Ethyl Benzene	0.80	Not Detected	3.5	Not Detected
m,p-Xylene	0.80	Not Detected	3.5	Not Detected
o-Xylene	0.80	Not Detected	3.5	Not Detected
Styrene	0.80	Not Detected	3.4	Not Detected
Bromoform	0.80	Not Detected	8.3	Not Detected
1,1,2,2-Tetrachloroethane	0.80	Not Detected	5.5	Not Detected
4-Ethyltoluene	0.80	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.80	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.80	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
1,4-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
alpha-Chlorotoluene	0.80	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.80	Not Detected	4.8	Not Detected
1,2,4-Trichlorobenzene	3.2	Not Detected	24	Not Detected
Hexachlorobutadiene	3.2	Not Detected	34	Not Detected
Chlorodifluoromethane	3.2	Not Detected	11	Not Detected
Methanol	80	Not Detected	100	Not Detected
n-Butanol	3.2	Not Detected	9.8	Not Detected
Propylene	3.2	Not Detected	5.5	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	97	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110725.d
Lab Smp Id: 0711101-07A
Inj Date : 08-NOV-2007 04:47
Operator : ab
Inst ID: msd7.i
Smp Info : 200mL #35248
Misc Info : 5.0"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth
Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29
Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.61000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	570367	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	434924			28.66- 128.66	76.25
14.416	14.416 (1.000)	49	807437			133.49- 233.49	141.56
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.185	16.158 (1.000)	114	1814662	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	276936			0.00- 65.23	15.26
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1287470	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	687794			4.70- 104.70	53.42
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	659465	21.5222	21.522	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	339600			2.91- 102.91	51.50
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1491546	23.1542	23.154	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	158170			0.00- 61.46	10.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1036183			19.18- 119.18	69.47
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	741118	24.1908	24.191	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	904682			73.89- 173.89	122.07
23.347	23.347 (1.093)	176	706566			48.20- 148.20	95.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110725.d
Lab Smp Id: 0711101-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.0"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	570367	-17.99
97 1,4-Difluorobenze	2265681	1359409	3171953	1814662	-19.91
126 Chlorobenzene-d5	1765821	1059493	2472149	1287470	-27.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-07nov
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711101-07A
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.0"Hg ->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	21.522	86.09	70-130
$ 113 Toluene-d8	25.000	23.154	92.62	70-130
$ 137 Bromofluorobenzene	25.000	24.191	96.76	70-130

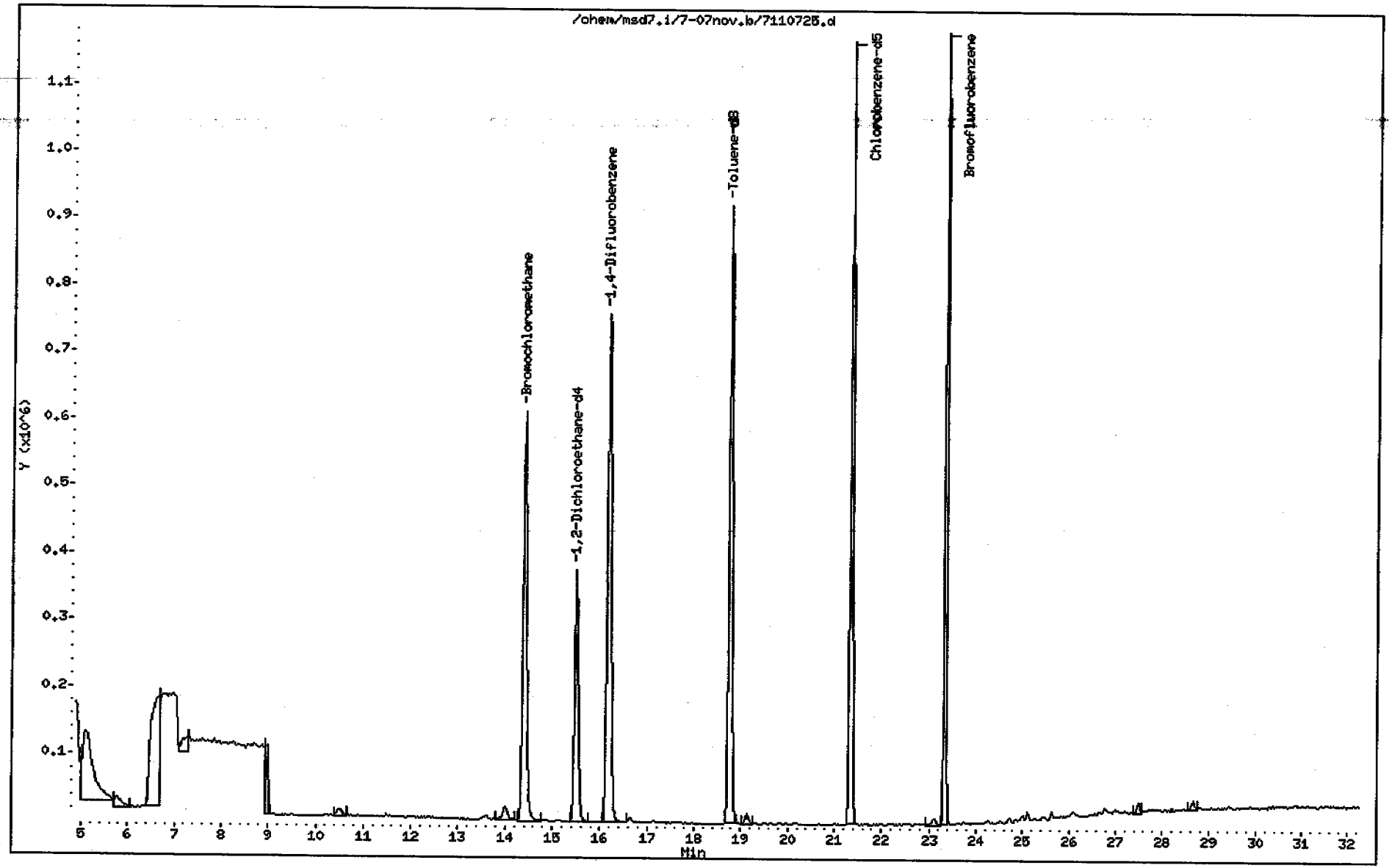
Data File: /chem/msd7.i/7-07nov.b/7110725.d
Date : 08-NOV-2007 04:47
Client ID:
Sample Info: 200mL #35248

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0258



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-08-8445

Lab ID#: 0711101-08A

No Detections Were Found.

0259

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-8445

Lab ID#: 0711101-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.82	Not Detected	4.0	Not Detected
Freon 114	0.82	Not Detected	5.7	Not Detected
Chloromethane	3.3	Not Detected	6.8	Not Detected
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
1,3-Butadiene	0.82	Not Detected	1.8	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.82	Not Detected	4.6	Not Detected
Ethanol	3.3	Not Detected	6.2	Not Detected
Freon 113	0.82	Not Detected	6.3	Not Detected
1,1-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Acetone	3.3	Not Detected	7.8	Not Detected
2-Propanol	3.3	Not Detected	8.1	Not Detected
Carbon Disulfide	0.82	Not Detected	2.6	Not Detected
Methylene Chloride	0.82	Not Detected	2.8	Not Detected
Methyl tert-butyl ether	0.82	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Hexane	0.82	Not Detected	2.9	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.82	Not Detected	2.4	Not Detected
Chloroform	0.82	Not Detected	4.0	Not Detected
1,1,1-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Cyclohexane	0.82	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.82	Not Detected	5.2	Not Detected
Benzene	0.82	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.82	Not Detected	3.3	Not Detected
Heptane	0.82	Not Detected	3.4	Not Detected
Trichloroethene	0.82	Not Detected	4.4	Not Detected
1,2-Dichloropropane	0.82	Not Detected	3.8	Not Detected
1,4-Dioxane	3.3	Not Detected	12	Not Detected
Bromodichloromethane	0.82	Not Detected	5.5	Not Detected
cis-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	0.82	Not Detected	3.4	Not Detected
Toluene	0.82	Not Detected	3.1	Not Detected
trans-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.82	Not Detected	4.5	Not Detected
Tetrachloroethene	0.82	Not Detected	5.6	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-08-8445

Lab ID#: 0711101-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.3	Not Detected	13	Not Detected
Dibromochloromethane	0.82	Not Detected	7.0	Not Detected
1,2-Dibromoethane (EDB)	0.82	Not Detected	6.3	Not Detected
Chlorobenzene	0.82	Not Detected	3.8	Not Detected
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
m,p-Xylene	0.82	Not Detected	3.6	Not Detected
o-Xylene	0.82	Not Detected	3.6	Not Detected
Styrene	0.82	Not Detected	3.5	Not Detected
Bromoform	0.82	Not Detected	8.5	Not Detected
1,1,2,2-Tetrachloroethane	0.82	Not Detected	5.6	Not Detected
4-Ethyltoluene	0.82	Not Detected	4.0	Not Detected
1,3,5-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene	0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene	3.3	Not Detected	24	Not Detected
Hexachlorobutadiene	3.3	Not Detected	35	Not Detected
Chlorodifluoromethane	3.3	Not Detected	12	Not Detected
Methanol	82	Not Detected	110	Not Detected
n-Butanol	3.3	Not Detected	9.9	Not Detected
Propylene	3.3	Not Detected	5.6	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	98	70-130

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110726.d
Lab Smp Id: 0711101-08A
Inj Date : 08-NOV-2007 05:30
Operator : ab
Inst ID: msd7.i
Smp Info : 200mL #4025
Misc Info : 5.5"Hg ->5psi
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth
Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29
Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.64000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	553375	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	419846			28.66- 128.66	75.87
14.416	14.416 (1.000)	49	787175			133.49- 233.49	142.25
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.158 (1.000)	114	1743458	25.0000		80.00- 120.00	100.00
16.186	16.158 (1.000)	88	262477			0.00- 65.23	15.05
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1237454	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	659824			4.70- 104.70	53.32
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	664713	22.3596	22.360	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	330577			2.91- 102.91	49.73
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1439235	23.2547	23.255	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	155804			0.00- 61.46	10.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.785	18.757 (1.161)	100	985366			19.18- 119.18	68.46
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	721939	24.5172	24.517	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	874890			73.89- 173.89	121.19
23.347	23.347 (1.093)	176	693516			48.20- 148.20	96.06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110726.d
Lab Smp Id: 0711101-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.5"Hg ->5psi

Calibration Date: 07-NOV-2007
Calibration Time: 08:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	553375	-20.43
97 1,4-Difluorobenze	2265681	1359409	3171953	1743458	-23.05
126 Chlorobenzene-d5	1765821	1059493	2472149	1237454	-29.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0711101-08A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 5.5"Hg ->5psi

Client SDG: 7-07nov
Fraction: VOA

Operator: ab
SampleType: SAMPLE
Quant Type: ISTD

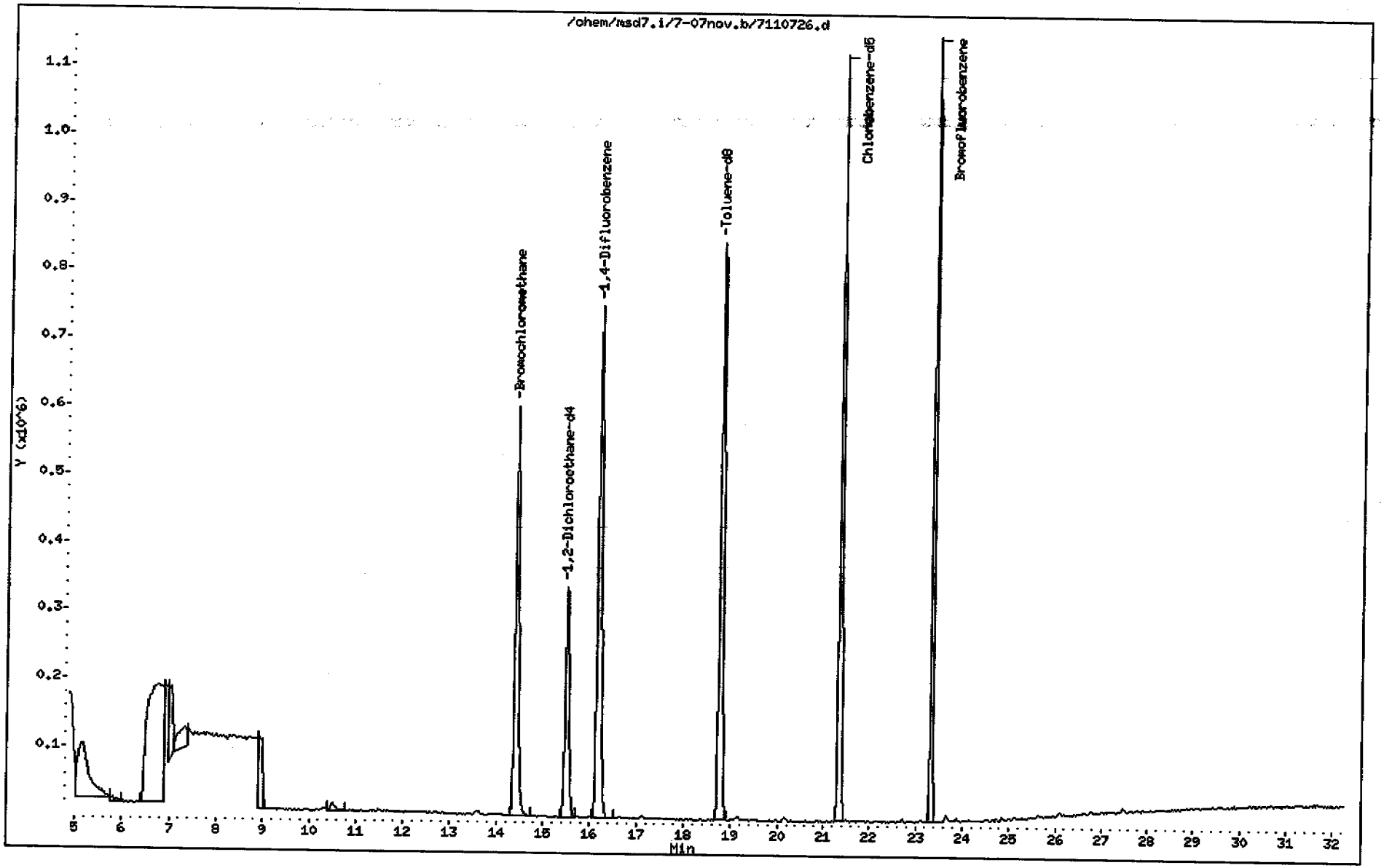
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.360	89.44	70-130
$ 113 Toluene-d8	25.000	23.255	93.02	70-130
$ 137 Bromofluorobenzene	25.000	24.517	98.07	70-130

Data File: /chem/msd7.i/7-07nov.b/7110726.d
Date : 08-NOV-2007 05:30
Client ID:
Sample Info: 200mL #4025

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53



QC Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0711101-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0711101-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110706c.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 07-NOV-2007 12:05
Operator : sjr Inst ID: msd7.i
Smp Info : 200mL #34190
Misc Info : humid
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:47 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	589519	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	457431			28.66- 128.66	77.59
14.388	14.416 (1.000)	49	832645			133.49- 233.49	141.24
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1841261	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	283238			0.00- 65.23	15.38
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1332804	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	723639			4.70- 104.70	54.29
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	695337	21.9557	21.956	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	350192			2.91- 102.91	50.36
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1536030	23.5003	23.500	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	167805			0.00- 61.46	10.92

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	1064591			19.18- 119.18	69.31
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	780395	24.6064	24.606	80.00- 120.00	100.00
23.319	23.347	(1.092)	95	960380			73.89- 173.89	123.06
23.347	23.347	(1.093)	176	759262			48.20- 148.20	97.29

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110706c.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: humid

Calibration Date: 07-NOV-2007
Calibration Time: 08:52
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	589519	-15.23
97 1,4-Difluorobenze	2265681	1359409	3171953	1841261	-18.73
126 Chlorobenzene-d5	1765821	1059493	2472149	1332804	-24.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: humid

Client SDG: 7-07nov
Fraction: VOA
Client Smp ID: Lab blank
Operator: sjr
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	21.956	87.82	70-130
$ 113 Toluene-d8	25.000	23.500	94.00	70-130
$ 137 Bromofluorobenzene	25.000	24.606	98.43	70-130

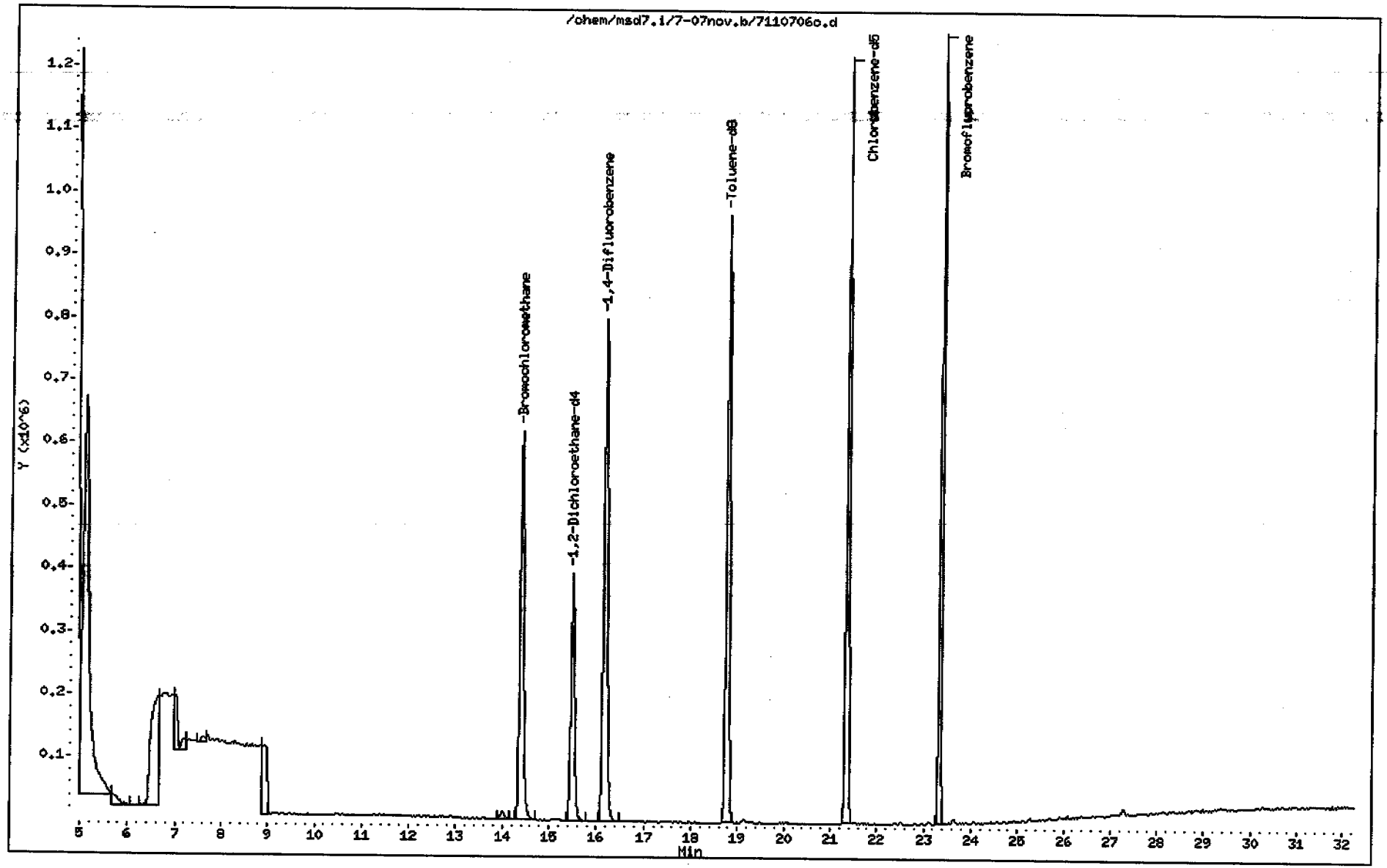
Data File: /chem/msd7.i/7-07nov.b/7110706o.d
Date : 07-NOV-2007 12:05
Client ID: Lab blank
Sample Info: 200mL #34190

Column phase: RTx-624

Instrument: msd7.i

Operator: sjr
Column diameter: 0.53

0274



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0711101

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								TOTAL OUT
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	
01	MD21-07-6800	99		91		95				0
02	MD21-07-6800 Lab Duplicate	96		92		96				0
03	MD21-07-6801	96		94		104				0
04	MD21-07-6802	97		89		99				0
05	MD21-07-6803	93		92		99				0
06	MD21-07-6804	92		94		100				0
07	MD21-07-6806	94		90		93				0
08	MD21-07-6806 Lab Duplicate	95		90		94				0
09	MD21-07-6818	86		93		97				0
10	MD21-08-8445	89		93		98				0
11	Lab Blank	88		94		98				0
12	CCV	92		99		99				0
13	LCS	91		101		102				0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
Lab File ID: 7110702.d
Instrument ID: msd7.i

SDG No: 071101
Date Analyzed: 11/07/2007
Time Analyzed: 08:52 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1765821		21.36		2265681		16.16		695461		14.42	
	UPPER LIMIT	2472149		21.69		3171953		16.49		973645		14.75	
	LOWER LIMIT	1059493		21.03		1359409		15.83		417277		14.09	
	CLIENT SAMPLE NO												
01	MD21-07-6800	1365466		21.36		2034114		16.19		606983		14.42	
02	MD21-07-6800 Lab Duplicate	1378856		21.36		1945218		16.16		577711		14.42	
03	MD21-07-6801	1630873		21.36		2157343		16.16		641418		14.42	
04	MD21-07-6802	1408613		21.36		2127784		16.19		632631		14.42	
05	MD21-07-6803	1480617		21.36		2091766		16.19		619105		14.42	
06	MD21-07-6804	1556200		21.36		2032361		16.19		584784		14.42	
07	MD21-07-6806	1440777		21.36		2128372		16.19		622353		14.42	
08	MD21-07-6806 Lab Duplicate	1413093		21.36		2123911		16.19		625844		14.42	
09	MD21-07-6818	1287470		21.36		1814662		16.19		570367		14.42	
10	MD21-08-8445	1237454		21.36		1743458		16.19		553375		14.42	
11	Lab Blank	1332804		21.36		1841261		16.16		589519		14.42	
12	CCV	1765821		21.36		2265681		16.16		695461		14.42	
13	LCS	1750820		21.36		2227472		16.16		686073		14.42	
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 7110718.d & 7110719.d

Lab Sample ID: 01A & 01AA

Dilution: 3.36 & 1.68

Client Sample ID: &

Date Analyzed: 11/8/07 & 11/7/07

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	1.508		ND	U	-->200<--
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	14.82		13.898		6.4
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	8.32		8.727		4.8
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	2.724		2.508		8.2
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	0.9648		ND	U	-->200<--
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	ND	U	ND	U	0
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.257		ND	U	-->200<--
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	55.447		58.379		5.2
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	1.03		ND	U	-->200<--
75-27-4	Bromodichloromethane	1.094		ND	U	-->200<--
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	0.912		ND	U	-->200<--
56-23-5	Carbon Tetrachloride	56.263		55.246		1.8
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	111.09		112.72		1.4
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	2.141		2.164		1.1
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	ND	U	ND	U	0
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab Sample ID: 01A & 01AA

Client Sample ID: &

Lab File ID: 7110718.d & 7110719.d

Dilution: 3.36 & 1.68

Date Analyzed: 11/8/07 & 11/7/07

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
110-54-3	Hexane	ND	U	ND	U	0
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	208.36		212.04		1.8
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	23.072		24.567		6.3
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	11.496		11.062		3.8
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	1.349		ND	U	-->200<--
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	148.8		151.44		1.8
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 7110724.d & 7110723.d

Lab Sample ID: 06A & 06AA

Dilution: 1.61 & 1.61

Client Sample ID: &

Date Analyzed: 11/8/07 & 11/8/07

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
71-55-6	1,1,1-Trichloroethane	2.4		2.352		2.0
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ND	U	0
79-00-5	1,1,2-Trichloroethane	21.006		21.393		1.8
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0
75-35-4	1,1-Dichloroethene	13.974		13.54		3.2
120-82-1	1,2,4-Trichlorobenzene	ND	U	ND	U	0
95-63-6	1,2,4-Trimethylbenzene	ND	U	ND	U	0
106-93-4	1,2-Dibromoethane (EDB)	ND	U	ND	U	0
95-50-1	1,2-Dichlorobenzene	ND	U	ND	U	0
107-06-2	1,2-Dichloroethane	3.529		3.412		3.4
78-87-5	1,2-Dichloropropane	ND	U	ND	U	0
108-67-8	1,3,5-Trimethylbenzene	ND	U	ND	U	0
106-99-0	1,3-Butadiene	ND	U	ND	U	0
541-73-1	1,3-Dichlorobenzene	ND	U	ND	U	0
106-46-7	1,4-Dichlorobenzene	0.8134		0.802		1.4
123-91-1	1,4-Dioxane	ND	U	ND	U	0
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.8289		0.8908		7.2
591-78-6	2-Hexanone	ND	U	ND	U	0
67-63-0	2-Propanol	ND	U	ND	U	0
622-96-8	4-Ethyltoluene	ND	U	ND	U	0
108-10-1	4-Methyl-2-pentanone	ND	U	ND	U	0
67-64-1	Acetone	60.168		58.455		2.9
100-44-7	alpha-Chlorotoluene	ND	U	ND	U	0
71-43-2	Benzene	1.472		1.358		8.0
75-27-4	Bromodichloromethane	1.554		1.474		5.3
75-25-2	Bromoform	ND	U	ND	U	0
74-83-9	Bromomethane	ND	U	ND	U	0
75-15-0	Carbon Disulfide	1.073		1.019		5.2
56-23-5	Carbon Tetrachloride	87.198		86.003		1.4
108-90-7	Chlorobenzene	ND	U	ND	U	0
75-45-6	Chlorodifluoromethane	ND	U	ND	U	0
75-00-3	Chloroethane	ND	U	ND	U	0
67-66-3	Chloroform	160.89		157.81		1.9
74-87-3	Chloromethane	ND	U	ND	U	0
156-59-2	cis-1,2-Dichloroethene	1.169		1.15		1.6
10061-01-5	cis-1,3-Dichloropropene	ND	U	ND	U	0
110-82-7	Cyclohexane	ND	U	ND	U	0
124-48-1	Dibromochloromethane	ND	U	ND	U	0
64-17-5	Ethanol	ND	U	ND	U	0
100-41-4	Ethyl Benzene	ND	U	ND	U	0
75-69-4	Freon 11	ND	U	ND	U	0
76-13-1	Freon 113	3.654		3.69		0.98
76-14-2	Freon 114	ND	U	ND	U	0
75-71-8	Freon 12	0.8881		0.8871		0.11
142-82-5	Heptane	ND	U	ND	U	0
87-68-3	Hexachlorobutadiene	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab Sample ID: 06A & 06AA

Client Sample ID: &

Lab File ID: 7110724.d & 7110723.d

Dilution: 1.61 & 1.61

Date Analyzed: 11/8/07 & 11/8/07

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
110-54-3	Hexane	0.8316		0.8769		5.3
108-38-3	m,p-Xylene	ND	U	ND	U	0
67-56-1	Methanol	ND	U	ND	U	0
1634-04-4	Methyl tert-butyl ether	ND	U	ND	U	0
75-09-2	Methylene Chloride	296.04		285.69		3.6
71-36-3	n-Butanol	ND	U	ND	U	0
95-47-6	o-Xylene	ND	U	ND	U	0
115-07-1	Propylene	33.098		31.817		3.9
100-42-5	Styrene	ND	U	ND	U	0
127-18-4	Tetrachloroethene	17.154		17.108		0.27
109-99-9	Tetrahydrofuran	ND	U	ND	U	0
108-88-3	Toluene	1.996		1.891		5.4
156-60-5	trans-1,2-Dichloroethene	ND	U	ND	U	0
10061-02-6	trans-1,3-Dichloropropene	ND	U	ND	U	0
79-01-6	Trichloroethene	219.57		215.74		1.8
75-01-4	Vinyl Chloride	ND	U	ND	U	0

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd7.i/7-18oct.b/7101802.d
Level 2: /chem/msd7.i/7-18oct.b/7101803.d
Level 3: /chem/msd7.i/7-05nov.b/7110505.d
Level 4: /chem/msd7.i/7-30oct.b/7103003.d
Level 5: /chem/msd7.i/7-05nov.b/7110506.d
Level 6: /chem/msd7.i/7-18oct.b/7101807.d
Level 7: /chem/msd7.i/7-05nov.b/7110507.d

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 143a	+++++	+++++	0.55395	+++++	0.55199	+++++	0.52936	0.54510	2.507
6 Freon142b	+++++	+++++	2.28105	+++++	2.26472	+++++	2.12470	2.22349	3.865
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Propylene	+++++	+++++	1.12508	1.03756	1.03506	1.07736	1.11245	1.07750	3.849
12 Dichlorodifluoromethane/Fr12	+++++	3.99832	4.01542	3.93538	3.87538	3.94362	3.93588	3.95067	1.272
13 Freon 134a	+++++	+++++	1.08885	+++++	1.07331	+++++	1.03422	1.06546	2.642
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 152a	+++++	+++++	0.79822	+++++	0.77199	+++++	0.73740	0.76921	3.966
16 Freon 114	+++++	2.75763	2.94175	2.80659	2.67187	2.54264	2.41290	2.68890	7.063
17 Freon 22	+++++	+++++	2.64018	+++++	2.47048	+++++	2.34449	2.48505	5.971

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Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
18 Chloromethane	+++++	+++++	1.35842	1.27523	1.23888	1.27208	1.35173	1.29926	4.075
19 Butane	+++++	+++++	0.27760	0.27318	0.27001	0.28033	0.29063	0.27835	2.849
20 Vinyl Chloride	+++++	1.61123	1.66709	1.62947	1.58710	1.59116	1.64603	1.62201	1.940
21 Isobutane	+++++	+++++	2.34934	+++++	2.27508	+++++	2.09561	2.24001	5.824
22 1,3-Butadiene	+++++	0.98714	1.11899	1.17713	1.17364	1.20853	1.30571	1.16186	9.077
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Bromomethane	+++++	1.36911	1.38030	1.38465	1.43147	1.47189	1.57973	1.43619	5.586
26 Methanol	+++++	+++++	+++++	0.49521	0.41205	+++++	0.37348	0.42691	14.573
27 Chloroethane	+++++	0.56164	0.59106	0.70880	0.75786	0.81456	0.88356	0.71958	17.463

Air Toxics Ltd.

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Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Isopentane	+++++	+++++	1.72200	1.68471	1.74289	1.82023	1.94043	1.78205	5.692
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	3.30692	3.64793	3.69780	3.75036	3.79137	3.91953	3.68565	5.627
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.18670	+++++	2.24831	+++++	2.17912	2.20471	1.721
35 1-Pentene	+++++	+++++	1.66100	+++++	1.62245	+++++	1.53088	1.60478	4.165
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Pentane	+++++	+++++	2.82400	+++++	2.66340	+++++	2.42663	2.63801	7.578

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Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
38 Ethanol	+++++	+++++	0.40835	0.46701	0.50651	0.55509	0.57654	0.50270	13.487
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 Freon123a	+++++	+++++	1.12892	+++++	1.34813	+++++	1.26008	1.24571	8.855
41 Freon123	+++++	+++++	2.17978	+++++	2.29407	+++++	2.15449	2.20945	3.366
42 Freon 113	+++++	1.87915	1.96071	2.08299	2.10265	2.12199	2.15175	2.04987	5.188
43 1,1-Dichloroethene	+++++	1.93487	2.07684	2.19744	2.20280	2.28146	2.39408	2.18125	7.326
44 Acrolein	+++++	+++++	0.36672	+++++	0.39522	+++++	0.38347	0.38180	3.751
45 Acetone	+++++	+++++	0.57485	0.65835	0.66872	0.70599	0.76315	0.67421	10.242
46 2-Propanol	+++++	+++++	1.73749	2.29338	2.44395	2.63284	2.85245	2.39202	17.623
47 Carbon Disulfide	+++++	3.64316	3.89848	4.16293	4.20624	4.40983	4.64911	4.16162	8.592

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
48 Ethyl acrylate	+++++	+++++	0.05569	+++++	0.08473	+++++	0.08291	0.07444	21.850
49 Iodomethane	+++++	+++++	3.47871	+++++	4.11936	+++++	3.64727	3.74845	8.860
50 Methyl Methacrylate	+++++	+++++	0.53347	+++++	0.79820	+++++	0.74642	0.69270	20.254
51 3-Chloropropene	+++++	+++++	0.47791	0.67053	0.69517	0.71004	0.83257	0.67724	18.866
52 Acetonitrile	+++++	+++++	0.83678	+++++	0.92045	+++++	0.79421	0.85048	7.551
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methylene Chloride	+++++	1.50433	1.50940	1.55545	1.57830	1.66547	1.80906	1.60367	7.258
55 Cyclopentene	+++++	+++++	4.55063	+++++	4.84748	+++++	4.57554	4.65788	3.535
56 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 tert-Butyl-Alcohol	+++++	+++++	2.48873	+++++	2.67379	+++++	1.79281	2.31844	20.036

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Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
60 MTBE	+++++	2.56761	2.53475	2.73045	2.62429	2.12688		
	2.03593						2.43665	11.678
61 trans-1,2-Dichloroethene	+++++	1.27767	1.25807	1.53893	1.55545	1.59786		
	1.66426						1.48204	11.576
62 Acrylonitrile	+++++	+++++	0.80524	+++++	0.90069	+++++		
	0.87661						0.86085	5.767
63 2-Pentanone	+++++	+++++	1.02380	+++++	1.52198	+++++		
	1.46126						1.33568	20.349
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
65 Hexane	+++++	1.69745	1.86588	2.11588	2.20087	2.32069		
	2.48851						2.11488	13.795
66 1-Hexene	+++++	+++++	0.93076	+++++	0.98451	+++++		
	0.92095						0.94541	3.619
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
68 Isopropyl ether	+++++	+++++	4.21268	+++++	4.73884	+++++	4.43254	4.46135	5.923
69 Vinyl Acetate	+++++	+++++	0.22424	0.31548	0.33299	0.35296	0.37207	0.31955	17.946
70 1,1-Dichloroethane	+++++	2.06984	2.31882	2.66506	2.63329	2.70399	2.80833	2.53322	11.066
71 1-Propanol	+++++	+++++	0.22951	+++++	0.30666	+++++	0.30318	0.27978	15.573
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.43943	+++++	4.07078	+++++	3.89822	3.80281	8.581
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.38112	0.37327	0.57250	0.59883	0.64860	0.67445	0.54146	24.420
76 cis-1,2-Dichloroethene	+++++	1.44231	1.58756	1.86427	1.87388	1.90834	1.96251	1.77314	11.735
77 Ethyl Acetate	+++++	+++++	0.39111	+++++	0.44693	+++++	0.43572	0.42459	6.954

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Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
78 2,2-Dichloropropane	+++++	+++++	2.76326	+++++	3.07482	+++++	2.91201	2.91670	5.343
79 Methyl Acrylate	+++++	+++++	1.96462	+++++	2.41001	+++++	2.35930	2.24464	10.863
80 Tetrahydrofuran	+++++	1.02790	1.12367	1.48422	1.53795	1.59990	1.69691	1.41176	19.223
82 Chloroform	2.05933	2.30448	2.48203	2.71876	2.69631	2.67566	2.68331	2.51713	10.018
83 1,1,1-Trichloroethane	+++++	2.13993	2.49116	2.73073	2.66320	2.61212	2.57161	2.53479	8.276
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Cyclohexane	+++++	1.13455	1.20463	1.54480	1.56422	1.61150	1.65129	1.45184	15.351
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Carbon Tetrachloride	+++++	1.91512	2.28619	2.65822	2.53314	2.44673	2.41712	2.37608	10.837
88 1,1-Dichloropropene	+++++	+++++	0.32293	+++++	0.36098	+++++	0.32719	0.33704	6.186

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 2,2,4-Trimethylpentane	+++++	3.81973	4.40383	5.32986	5.44906	5.60503	5.84105	5.07476	15.513
91 Benzene	0.86624	0.88889	0.91154	1.08544	1.09104	1.07270	1.03741	0.99332	10.069
92 tert-amyl-Methyl Ether	+++++	+++++	2.47283	+++++	2.98882	+++++	2.87645	2.77937	9.763
93 1,2-Dichloroethane	+++++	0.47713	0.50816	0.58724	0.55560	0.53375	0.50473	0.52777	7.497
94 Heptane	+++++	0.21787	0.25494	0.33625	0.34694	0.34672	0.33023	0.30549	18.053
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Heptanone	+++++	+++++	1.17667	+++++	1.87950	+++++	1.94397	1.66671	25.536
98 1-Butanol	+++++	+++++	0.16640	+++++	0.27504	+++++	0.29172	0.24439	27.845
99 Isobutanol	+++++	+++++	0.01857	+++++	0.03090	+++++	0.03265	0.02737	28.046
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
101 Trichloroethene	+++++	0.36757	0.41682	0.48608	0.47584	0.46333	0.43779	0.44124	9.999
102 Methyl Cyclohexane	+++++	1.39533	1.53464	1.88425	1.91342	1.96394	2.03008	1.78694	14.440
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
104 1,2-Dichloropropane	+++++	0.31221	0.33815	0.41169	0.41161	0.41161	0.40196	0.38121	11.628
105 Dibromomethane	+++++	+++++	0.51979	+++++	0.62028	+++++	0.54666	0.56225	9.253
106 1,4-Dioxane	+++++	+++++	0.17948	0.26051	0.26452	0.26965	0.26552	0.24794	15.489
107 Bromodichloromethane	+++++	0.61038	0.69769	0.87294	0.84576	0.81437	0.75521	0.76606	12.941
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 cis-1,3-Dichloropropene	+++++	0.38818	0.43431	0.60245	0.61448	0.61397	0.57859	0.53866	18.678

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
111 4-Methyl-2-pentanone	+++++	0.17517	0.22135	0.33428	0.34745	0.35414	0.35115	0.29726	26.358
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Toluene	+++++	0.88659	0.96936	1.20407	1.18877	1.16407	1.11507	1.08799	11.969
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 trans-1,3-Dichloropropene	+++++	0.53047	0.59368	0.77535	0.80087	0.79044	0.76929	0.71002	16.458
117 1,1,2-Trichloroethane	+++++	0.41044	0.46882	0.56509	0.56186	0.55694	0.54374	0.51782	12.308
118 1,3-Dichloropropane	+++++	+++++	0.95658	+++++	1.08832	+++++	0.96579	1.00356	7.328
119 Butyl Acetate	+++++	+++++	0.28247	+++++	0.41163	+++++	0.39768	0.36393	19.478
120 Tetrachloroethene	+++++	0.58842	0.66370	0.75326	0.72549	0.67756	0.62110	0.67159	9.213
121 2-Hexanone	+++++	+++++	0.36161	0.55434	0.60179	0.62391	0.63307	0.55495	20.234

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
122 Dibromochloromethane	+++++	0.69168	0.84946	1.07299	1.03098	0.96547		
	0.89431						0.91748	15.065
123 1,2-Dibromoethane	+++++	0.62218	0.76958	0.96047	0.95014	0.91717		
	0.87375						0.84888	15.420
124 Nonane	+++++	+++++	1.02484	+++++	1.13232	+++++		
	0.98482						1.04733	7.283
125 1,1,1,2-Tetrachloroethane	+++++	+++++	0.89946	+++++	0.96238	+++++		
	0.81264						0.89149	8.434
127 Chlorobenzene	+++++	0.98017	1.09978	1.22139	1.20798	1.16672		
	1.10992						1.13099	7.863
128 Ethyl Benzene	+++++	0.45805	0.54406	0.64040	0.62635	0.60750		
	0.58753						0.57731	11.679
129 m,p-Xylene	+++++	0.59617	0.64876	0.79109	0.79390	0.76602		
	0.73972						0.72261	11.309
130 o-Xylene	+++++	0.50098	0.57853	0.70214	0.68839	0.66302		
	0.62421						0.62621	12.150
131 Styrene	0.70099	0.69787	0.85261	1.17931	1.15472	1.12570		
	1.06862						0.96855	21.987
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
133 Bromoform	+++++	0.63213	0.75943	0.95882	0.91283	0.83481		
	0.73582						0.80564	14.990
134 Cumene	1.37424	1.32202	1.52398	1.81837	1.75252	1.68271		
	1.59504						1.58127	11.814
135 Cyclohexanone	+++++	+++++	0.42554	+++++	0.51533	+++++		
	0.55003						0.49697	12.926
136 Bromobenzene	+++++	+++++	1.09324	+++++	1.15192	+++++		
	0.89292						1.04603	12.983
138 1,2,3-Trichloropropane	+++++	+++++	0.49256	+++++	0.53270	+++++		
	0.44323						0.48949	9.155
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 1,1,2,2-Tetrachloroethane	+++++	0.90901	1.02955	1.12854	1.10800	1.08214		
	1.01864						1.04598	7.618
141 2-Chlorotoluene	+++++	+++++	0.77382	+++++	0.83371	+++++		
	0.71021						0.77258	7.994
142 Propylbenzene	+++++	1.80614	2.07039	2.37103	2.29000	2.22770		
	1.95985						2.12085	10.116
143 4-Chlorotoluene	+++++	+++++	0.80068	+++++	0.91055	+++++		
	0.76155						0.82426	9.372

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End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++	1.44347	1.70757	2.13595	2.07919	1.99040	1.88068	1.87287	13.869
146 Diisobutyl Ketone	+++++	+++++	1.03326	+++++	1.20971	+++++	1.11764	1.12021	7.878
147 1,3,5-Trimethylbenzene	+++++	1.41316	1.61240	1.56055	1.49171	1.41942	1.32949	1.47112	7.095
148 tert-Butylbenzene	+++++	+++++	2.45687	+++++	2.30546	+++++	1.84295	2.20176	14.526
149 sec-Butylbenzene	+++++	+++++	3.43467	+++++	3.26882	+++++	2.43915	3.04755	17.502
150 1,2,4-Trimethylbenzene	+++++	1.05335	1.33499	1.48885	1.43630	1.39785	1.31045	1.33697	11.480
151 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 p-Cymene	+++++	+++++	2.65193	+++++	2.61222	+++++	2.06279	2.44232	13.482

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
154 1,2,3-Trimethylbenzene	+++++	+++++	0.97569	+++++	1.04736	+++++		
	0.88396						0.96900	8.453
155 1,3-Dichlorobenzene	+++++	0.93407	1.06260	1.12258	1.08075	1.04027		
	0.96733						1.03460	6.878
156 1,4-Dichlorobenzene	+++++	1.02926	1.10239	1.15450	1.11647	1.07564		
	0.99126						1.07824	5.539
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
158 Butylbenzene	+++++	+++++	0.66658	+++++	0.69760	+++++		
	0.60595						0.65671	7.099
159 alpha-Chlorotoluene	+++++	1.02301	1.25741	1.52918	1.58500	1.63564		
	1.55835						1.43143	16.768
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.94286	1.02179	0.99757	0.96941	0.96223		
	0.88582						0.96328	4.881
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	0.76234	+++++	0.80959	+++++		
	0.79238						0.78810	3.035
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD	
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 1,2,4-Trichlorobenzene	+++++	+++++	0.51018	0.27800	0.34560	0.40681	0.42931	0.39398	22.239	
166 Hexachlorobutadiene	+++++	+++++	0.50925	0.26779	0.28274	0.29299	0.28486	0.32753	31.141	<-
167 Naphthalene	+++++	+++++	0.92717	0.46092	0.62590	0.80276	0.87395	0.73814	26.042	
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
201 Pentachloroethane	+++++	+++++	0.71063	+++++	0.70263	+++++	0.56154	0.65826	12.740	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-05nov.b/t14q018d.m
Cal Date : 05-Nov-2007 16:13 ealcan
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.32140	1.33936	1.38524	1.34768	1.31998	1.31873	1.36890	1.34304	1.941
$ 113 Toluene-d8	0.87123	0.85458	0.85764	0.89757	0.90205	0.91537	0.91380	0.88746	2.917
$ 137 Bromofluorobenzene	0.59803	0.60119	0.59463	0.60774	0.59840	0.58089	0.58339	0.59489	1.617

Calibration History

Method : /chem/msd7.i/7-05nov.b/t14q018d.m
Start Cal Date: 18-OCT-2007 12:17
End Cal Date : 05-NOV-2007 14:29

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.30000		
18-OCT-2007 12:17	AFCEElow	/chem/msd7.i/7-18oct.b/7101802.d
Cal Level: 2 , Cal Amount: 0.50000		
18-OCT-2007 12:56	AT04low+ENSR	/chem/msd7.i/7-18oct.b/7101803.d
Cal Level: 3 , Cal Amount: 2.00000		
05-NOV-2007 12:47	sp14d	/chem/msd7.i/7-05nov.b/7110505.d
22-OCT-2007 10:55	sp16b	/chem/msd7.i/7-22oct.b/7102205.d
19-OCT-2007 10:22	sp22a	/chem/msd7.i/7-19oct.b/7101903.d
18-OCT-2007 14:09	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101804.d
Cal Level: 4 , Cal Amount: 25.00000		
30-OCT-2007 09:51	sp1c	/chem/msd7.i/7-30oct.b/7103003.d
18-OCT-2007 14:47	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101805.d
Cal Level: 5 , Cal Amount: 50.00000		
05-NOV-2007 13:30	sp14d	/chem/msd7.i/7-05nov.b/7110506.d
30-OCT-2007 10:29	sp1c	/chem/msd7.i/7-30oct.b/7103004.d
22-OCT-2007 11:44	sp16b	/chem/msd7.i/7-22oct.b/7102206.d
19-OCT-2007 11:00	sp22a	/chem/msd7.i/7-19oct.b/7101904.d
18-OCT-2007 15:26	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101806.d
Cal Level: 6 , Cal Amount: 100.00000		
18-OCT-2007 16:15	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101807.d
Cal Level: 7 , Cal Amount: 200.00000		

05-NOV-2007 14:29	sp14d	/chem/msd7.i/7-05nov.b/7110507.d
30-OCT-2007 11:10	sp1c	/chem/msd7.i/7-30oct.b/7103005.d
22-OCT-2007 12:34	sp16b	/chem/msd7.i/7-22oct.b/7102207.d
19-OCT-2007 11:41	sp22a	/chem/msd7.i/7-19oct.b/7101905.d
18-OCT-2007 17:39	AT04mdl+ENSR	/chem/msd7.i/7-18oct.b/7101808.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
05-NOV-2007 11:13	AT04ENSR	/chem/msd7.i/7-05nov.b/7110503.d
Ccal Level: 5 , Ccal Amount: 50.000		
05-NOV-2007 15:26	sp22aNsp16	/chem/msd7.i/7-05nov.b/7110508.d
Ccal Level: 5 , Ccal Amount: 50.000		
05-NOV-2007 13:30	sp14dccv	/chem/msd7.i/7-05nov.b/7110506a.d
Ccal Level: 5 , Ccal Amount: 50.000		
05-NOV-2007 13:30	sp14d	/chem/msd7.i/7-05nov.b/7110506.d

Initial Calibration Narrative

A seven point and four point initial calibration was analyzed on MSD-7 on 10-18-2007.:

The following compounds used 0.2 ppbv as the lowest calibration concentration:
Chloroform, Benzene, Cumene and Styrene.

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.61
75	30.0 – 60.0% of mass 95	39.71
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.78
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	81.70
175	5.0 – 9.0% of mass 174	(6.88)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.40)[1]
~~177~~	~~5.0 – 9.0% of mass 176~~	(6.69)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/18/07

BFB Injection Time: 1150

BFB File ID: 7101807

Tekmar Purge Flow: 17.9 mL/min

Vacuum: 2.8×10^{-5} torr

0302

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	683549	
1,4-DFB	2204815	
CB-d5	1812979	

Verified CCV IS vs ICAL mid-point (+ 40%RD) CB (initials)

Verify 176/174 m/z Ratio: 1072385 / 1112403 x 100% = 96.40%

NOAH Cart #: N/A File #: N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 902272\ )}{(\ 683549\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.571$

File ID:	7101806
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.571

	Sig	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	7101807	BFB Tune Check	1467-64	50 ng	2uL	1.00	10/18/07	1150	CB	
2	✓	02	ICAL Level 1	1576-50	200ppbv → 0.2ppbv	0.2mL			1217	CB	
3	✓	03	2		200ppbv → 0.5ppbv	0.5mL			1256	CB	
4	✓	04	3		200ppbv → 2ppbv	2mL			1409	CB	
5	✓	05	4		200ppbv → 25ppbv	25mL			1447	CB	
6	✓	06	5		200ppbv → 50ppbv	50mL			1526	CB	CCV
7	✓	07	6		200ppbv → 100ppbv	100mL			1615	DW/CB	
8	✓	08	7		200ppbv → 200ppbv	200mL			1739	DW/CB	2 uni Hexach for chlorobenzene
9	X	09	System Blank	34190			✓	✓	1847	DW	

Laura Derringer
Signature

10/22/07
Date

10	✓	7101810	ICAL LCS-1 (200ppbv)	1443-302	50ppbv	50mL	1.00	10/18/07	1929	[illegible]/CB	∅ oucf ICALCS[illegible]
11		↓ 11	System Blank	34190	Humid	200mL			0828	CB	
12											
13											
14											
15											
16											
17											
18											
19											
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32											

RQ 10/22/07

0308

Comments: Flow controller SN # AA99123141 — Nominal: 23.6 mL/min

NIST Flowmeter # 200-7744 — Actual: 25.0 mL/min CB 10/22/07

Exp 8/27/08

[signature]

Signature

10/18/07

Date

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.32
75	30.0 – 60.0% of mass 95	40.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.83
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	81.69
175	5.0 – 9.0% of mass 174	(7.11)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.18)[1]
177	5.0 – 9.0% of mass 176	(6.67)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/19/07

BFB Injection Time: 0909

BFB File ID: 7101901

Tekmar Purge Flow: 17.8 mL/min

Vacuum: 3.0×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	709290	
1,4-DFB	2353553	
~~CB-d5~~	1919987	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1015727 / 1045184 x 100 = 97.187%

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 919940\ )}{(\ 709290\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.143$

Reported Result 24.143

File ID:	7101902
Compound:	1,2-DCA-d4
Initials:	CB

		File #	Sample / Blank Name	Can #	Pressure	Amt. Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	7101901	BFB Tune Check	1467-64	50 psig	2 mL	1.00	10/19/07	0909	CB	
2	✓	02	CCV-1 (200 ppbv)	1576-50	50 ppbv	50 mL			0929	CB	
3	✓	03	ICAL Level 3	1480-400	100 ppbv – 2 ppbv	2 mL			1022	CB	Sp229 Bl40189
4	✓	04	5	↓	200 ppbv – 50 ppbv	50 mL			1100	CB	CCV ↓ ↓
5	✓	05	7	↓	200 ppbv	200 mL			1141	CB	
6	✓	06	LCS-1 (200 ppbv)	1443-302	50 ppbv	50 mL			1226	CB	~~REAL LCS~~ 10/22/07
7	✓	07	Gas Std (100 ppmv)	1576-14	2500 ppbv	5 mL			1310	CB	
8	✓ CB 10/19/07	08	Lab Blank	12009	Humid	200 mL			1400	CB	
9		09	Lab Blank	↓	↓	↓	↓	↓			CB 10/19/07 not run

Signature

10/19/07
Date

0304

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	17.85
75	30.0 – 60.0% of mass 95	39.75
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.75
173	Less than 2.0% of mass 174	(0.53)[1]
174	Greater than 50.0% of mass 95	86.46
175	5.0 – 9.0% of mass 174	(6.92)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.63)[1]
177	5.0 – 9.0% of mass 176	(6.48)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 10/22/07

BFB Injection Time: 0822

BFB File ID: 7102201

Tekmar Purge Flow: 17.9 mL/min

Vacuum: 2.8×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	691202	
1,4-DFB	2257140	
~~CB-d5~~	1885010	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1142984 / 1182801 × 100 = 96.63%

NOAH Cart #: NA **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 892172\ )}{(\ 691202\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.027$

File ID:	7102202
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.027

	QC	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	7102201	BFB Tune Check	1407-64	50 psig	2 mL	1.00	10/22/07	0822	CB	
2	✓	02	CCV-1 (200 ppbv)	1576-50	50 psig	50 mL			0843	CB	
3	✓	03	LCS-1 (200 ppbv)	1443-302	50 psig	50 mL			0925	CB	
4	✓	04	CCV-2 (200 ppbv)	1487-400	50 psig	50 mL			1007	CB	
5	✓	05	ICAL Level 3	1487-370	200 psig → 2 psig	2 mL			1055	CB	spl#6 T1490186
6	✓	06	↓ 5	↓	200 psig → 50 psig	50 mL			1144	CB	CCV
7	✓	07	↓ 7	↓	200 psig	200 mL			1234	CB	
8	X	08	Lab Blank	34190	Humid	200 mL			1317	CB	
9	✓	09	Lab Blank	~~3487~~ 34190	Humid	200 mL	↓	↓	1422	CB	

5/10/22/07

Signature

10/22/07

Date

0305

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.22
75	30.0 – 60.0% of mass 95	39.23
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.64
173	Less than 2.0% of mass 174	(0.52)[1]
174	Greater than 50.0% of mass 95	86.75
175	5.0 – 9.0% of mass 174	(7.12)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.72)[1]
177	5.0 – 9.0% of mass 176	(6.45)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 10/30/07

BFB Injection Time: 0826

BFB File ID: 7103001

Tekmar Purge Flow: 17.7 mL/min

Vacuum: 2.9×10^{-5} torr

0306

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	537758	
1,4-DFB	1771565	
CB-d5	1414884	

Verified CCV IS vs ICAL mid-point (- 40%D) CB initials

Verify 176/174 m/z Ratio: 835758 / 855253 x 100 = 97.72%

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 692227\ )}{(\ 537758\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 23.961$

File ID:	7103006
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 23.961

		File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	7103001	BFB Tune Check	1467-64	50ng	2mL	1.00	10/30/07	0826	CB	
2	✓	02	System Blank	3490	Humid	200mL			0858	CB	
3	✓	03	ICAL Level 4	1487-400	200/1200ppbv → 8/48ppbv	8mL			0951	CB	spic tl4q018c
4	✓	04	5		200/1200ppbv 50/300ppbv	50mL			1029	CB	CCV
5	✓	05	7		200/1200ppbv	200mL			1110	CB	
6	✓	06	CCV-1 (100ppbv)	1576-50A	50ppbv	100mL			1215	CB	
7	✓	07	LCS-1 (200ppbv)	1443-302	50ppbv	50mL			1253	CB	
8	✓	08	Lab Blank	3490	Humid	200mL			1336	CB	
9											

CB 10/30/07

Signature

10/30/07

Date

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	17.19
75	30.0 – 60.0% of mass 95	38.08
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.74
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	86.03
175	5.0 – 9.0% of mass 174	(6.80)[1]
~~176~~	~~Greater than 95.0% but less than 101.0% of mass 174~~	~~(96.32)[1]~~
177	5.0 – 9.0% of mass 176	(6.75)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 11/5/07

BFB Injection Time: 0931

BFB File ID: 7110501

Tekmar Purge Flow: 18.1 ml/min

Vacuum: 2.5×10^{-5}

IS/S Std.#:	1443-339 Exp. Date: 12/26/07
BCM	720196
1,4-DFB	2301315
~~CB-d5~~	~~1429472~~

Verified CCV IS vs ICAL mid-point (- 40%D) ED (initials)

Verify 176/174 m/z Ratio: 1270632 / 1319198 X 100 = 96.32

NOAH Cart #: M **File #:** M

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(2090909)}{(2301315)} \times \frac{(25.0)}{(0.88746)} = 25.595$

Reported Result 25.595

File ID:	7110503
Compound:	Tol-d8
Initials:	EA

0307

		File ID	Sample / Client Name	Can #	Flow Rate	Amt Loaded	IS	Date Analyzed	Time Analyzed	Reviewed by	Comments
1	✓	7110501	BFB TUNE CHECK	1467-44	50ml	2.0uL	1.00	11/5/07	0931	EA	
2	✓	02	Sensitivity check	1516-50A	0.5ppbv	1.0ml			1125	EA	
3	✓	06	LCS-1 (4ppbv)	1516-50A	100ml Start 50ppbv				1113	EA	ϕ int
4	✓	03	LCS-1 (.20ppbv)	1443-392	50ppbv	50ml			1401	EA	ϕ int
5	✓	05	ICAL level 3	1443-361	2ppbv	20ml			1247	EA	
6	✓	04	5		5ppbv	10ml			1330	EA	spl4d/spl4dccv
7	✓	07	7		10ppbv	20ml			1429	EA	
8	✓	08	CCVgp (.20ppbv)	1467-33 1467-108	50ppbv	50ml			1526	EA	spl2d/spl2
9	✓	09	Gas Std (.15ppbv)	1516-14	25ppbv	5ml			1622	EA	

Kenso Ren
Signature

11-5-07
Date

Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101810.d
Lab Smp Id: lcs-1 Client Smp ID: lcs-1
Inj Date : 18-OCT-2007 19:29
Operator : dm Inst ID: msd7.i
Smp Info : 50mL #1443-302
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza Quant Type: ISTD
Cal Date : 18-OCT-2007 17:39 Cal File: 7101808.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	693629	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	530078			26.95- 126.95	76.42
14.402	14.402 (1.000)	49	1393802			141.62- 241.62	200.94
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2281320	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	352159			0.00- 65.69	15.44
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1855833	25.0000		80.00- 120.00	100.00
21.342	21.370 (1.000)	82	1005254			5.32- 105.32	54.17
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	876557	23.5236	23.524	80.00- 120.00	100.00
15.481	15.508 (1.075)	67	486395			2.91- 102.91	55.49
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2088005	25.7831	25.783	80.00- 120.00	100.00
18.771	18.771 (1.161)	70	225307			0.00- 61.46	10.79

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1458124			19.18- 119.18	69.83
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1059533	23.9925	23.992	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1390500			76.80- 176.80	131.24
23.333	23.333 (1.093)	176	1023241			46.06- 146.06	96.57
11 Propylene					CAS #: 115-07-1		
5.638	5.610 (0.391)	41	1534698	51.3354	51.335	80.00- 120.00	100.00
5.638	5.610 (0.391)	42	1071619			21.19- 121.19	69.83
5.638	5.610 (0.391)	39	1149702			24.83- 124.83	74.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.748 (0.401)	85	5279130	48.1620	48.162	80.00- 120.00	100.00
5.776	5.748 (0.401)	87	1711789			0.00- 83.07	32.43
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	3664358	49.1175	49.117	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	1157150			0.00- 81.81	31.58
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	1695497	47.0340	47.034	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	575964			0.00- 84.80	33.97
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	2274469	50.5403	50.540	80.00- 120.00	100.00
6.882	6.882 (0.478)	64	710275			0.00- 83.25	31.23
22 1,3-Butadiene					CAS #: 106-99-0		
6.965	6.937 (0.484)	54	1686114	52.3055	52.306	80.00- 120.00	100.00
6.965	6.937 (0.484)	39	1613662			55.97- 155.97	95.70
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	1971163	49.4678	49.468	80.00- 120.00	100.00
8.043	8.043 (0.558)	96	1847772			43.77- 143.77	93.74
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	1113775	55.7868	55.787	80.00- 120.00	100.00
8.375	8.375 (0.581)	49	303751			0.00- 79.34	27.27
8.375	8.375 (0.581)	66	350600			0.00- 83.15	31.48
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.983	8.956 (0.624)	101	5275187	51.5865	51.586	80.00- 120.00	100.00
8.983	8.956 (0.624)	103	3407790			14.33- 114.33	64.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	850282	60.9628	60.963	80.00- 120.00	100.00
9.453	9.453 (0.656)	43	163721			0.00- 72.83	19.25
9.453	9.453 (0.656)	46	316936			0.00- 88.20	37.27
42 Freon 113					CAS #: 76-13-1		
10.227	10.227 (0.710)	151	3359898	59.0761	59.076	80.00- 120.00	100.00
10.227	10.227 (0.710)	153	2146359			13.49- 113.49	63.88
10.200	10.227 (0.708)	101	4204443			73.17- 173.17	125.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.338	10.338 (0.718)	61	3633905	60.0456	60.046	80.00- 120.00	100.00
10.338	10.338 (0.718)	96	2250431			11.42- 111.42	61.93
10.338	10.338 (0.718)	98	1429998			0.00- 89.70	39.35
45 Acetone					CAS #: 67-64-1		
10.504	10.504 (0.729)	58	1068582	57.1246	57.125	80.00- 120.00	100.00
10.504	10.504 (0.729)	43	3184271			247.10- 347.10	297.99
46 2-Propanol					CAS #: 67-63-0		
10.670	10.697 (0.741)	45	3852062	58.0418	58.042	80.00- 120.00	100.00
10.670	10.697 (0.741)	43	890934			0.00- 75.54	23.13
10.697	10.697 (0.743)	59	147038			0.00- 53.72	3.82
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	6273161	54.3296	54.330	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.167	11.168 (0.775)	76	1091929	58.1115	58.111	80.00- 120.00	100.00
11.167	11.168 (0.775)	41	2818682			224.96- 324.96	258.14
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	2611233	58.6871	58.687	80.00- 120.00	100.00
11.472	11.472 (0.796)	84	1889884			23.49- 123.49	72.38
11.472	11.472 (0.796)	51	797893			0.00- 80.85	30.56
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	3974575	58.7909	58.791	80.00- 120.00	100.00
11.831	11.831 (0.821)	57	914186			0.00- 73.11	23.00
11.831	11.831 (0.821)	41	882141			0.00- 76.16	22.19
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	2352862	57.2201	57.220	80.00- 120.00	100.00
11.942	11.942 (0.829)	61	3353273			93.77- 193.77	142.52
11.942	11.942 (0.829)	98	1487360			11.77- 111.77	63.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	3482505	59.3497	59.350	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	2243596			17.84- 117.84	64.42
12.301	12.301 (0.854)	86	532459			0.00- 65.07	15.29
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	519165	58.5571	58.557	80.00- 120.00	100.00
12.799	12.799 (0.889)	43	6034912			1150.46-1250.46	1162.43
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	4119087	58.6057	58.606	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	1300555			0.00- 81.66	31.57
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	943974	62.8355	62.835	80.00- 120.00	100.00
13.877	13.905 (0.964)	43	4198247			412.95- 512.95	444.74
13.877	13.905 (0.964)	57	321401			0.00- 86.57	34.05
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	2818744	57.2959	57.296	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	2119143			24.70- 124.70	75.18
13.932	13.932 (0.967)	98	1360701			0.00- 97.31	48.27
80 Tetrahydrofuran					CAS #: 109-99-9		
14.402	14.402 (1.000)	42	2315081	59.1042	59.104	80.00- 120.00	100.00
14.402	14.402 (1.000)	71	837123			0.00- 85.86	36.16
14.402	14.402 (1.000)	72	904656			0.00- 87.82	39.08
82 Chloroform					CAS #: 67-66-3		
14.485	14.485 (1.006)	83	3930935	56.2864	56.286	80.00- 120.00	100.00
14.485	14.485 (1.006)	85	2555017			15.30- 115.30	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	3724675	52.9613	52.961	80.00- 120.00	100.00
14.845	14.845 (1.031)	99	2372213			14.42- 114.42	63.69
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	2370220	58.8413	58.841	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	3004824			77.14- 177.14	126.77
14.845	14.845 (1.031)	41	1640647			22.96- 122.96	69.22
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	3436673	52.1301	52.130	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	3538970			54.22- 154.22	102.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.425	15.426 (1.071)	57	8189957	58.1672	58.167	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)								
15.425	15.426	(1.071)	56	2800725			0.00- 84.62	34.20
15.425	15.426	(1.071)	41	2129961			0.00- 79.27	26.01
91 Benzene						CAS #: 71-43-2		
15.508	15.508	(0.959)	78	5250569	57.9255	57.926	80.00- 120.00	100.00
15.508	15.508	(0.959)	77	1159247			0.00- 71.87	22.08
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.619	15.647	(0.966)	62	2535064	52.6380	52.638	80.00- 120.00	100.00
15.619	15.647	(0.966)	64	812550			0.00- 82.89	32.05
94 Heptane						CAS #: 142-82-5		
15.730	15.730	(0.973)	71	1662367	59.6323	59.632	80.00- 120.00	100.00
15.730	15.730	(0.973)	43	3281313			158.53- 258.53	197.39
15.730	15.730	(0.973)	57	1733443			59.34- 159.34	104.28
101 Trichloroethene						CAS #: 79-01-6		
16.642	16.642	(1.029)	95	2236263	55.5396	55.540	80.00- 120.00	100.00
16.642	16.642	(1.029)	130	2188821			49.05- 149.05	97.88
16.642	16.642	(1.029)	97	1443160			14.93- 114.93	64.53
104 1,2-Dichloropropane						CAS #: 78-87-5		
17.112	17.112	(1.058)	63	1961854	56.3976	56.398	80.00- 120.00	100.00
17.112	17.112	(1.058)	62	1436905			23.52- 123.52	73.24
17.112	17.112	(1.058)	41	1184177			12.01- 112.01	60.36
106 1,4-Dioxane						CAS #: 123-91-1		
17.250	17.250	(1.067)	88	1295263	57.2493	57.249	80.00- 120.00	100.00
17.250	17.250	(1.067)	58	909525			21.50- 121.50	70.22
17.250	17.250	(1.067)	57	298072			0.00- 74.60	23.01
107 Bromodichloromethane						CAS #: 75-27-4		
17.554	17.555	(1.085)	83	3863276	55.2648	55.265	80.00- 120.00	100.00
17.554	17.555	(1.085)	85	2471704			14.37- 114.37	63.98
110 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
18.329	18.329	(1.133)	75	2863012	58.2452	58.245	80.00- 120.00	100.00
18.329	18.329	(1.133)	77	910017			0.00- 81.97	31.79
18.329	18.329	(1.133)	39	1608662			6.88- 106.88	56.19
111 4-Methyl-2-pentanone						CAS #: 108-10-1		
18.522	18.522	(1.145)	58	1713423	63.1663	63.166	80.00- 120.00	100.00
18.522	18.522	(1.145)	43	4340769			222.97- 322.97	253.34
18.522	18.522	(1.145)	85	654176			0.00- 90.48	38.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	5892033	59.3464	59.346	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	3757464			13.04- 113.04	63.77
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	2965147	56.2573	56.257	80.00- 120.00	100.00
19.324	19.324 (0.905)	77	951982			0.00- 81.65	32.11
19.296	19.324 (0.904)	39	1582175			2.52- 102.52	53.36
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	2167076	56.3767	56.377	80.00- 120.00	100.00
19.656	19.656 (0.921)	99	1363207			13.08- 113.08	62.91
19.656	19.656 (0.921)	83	1839848			35.32- 135.32	84.90
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	2735490	54.8698	54.870	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	1961918			22.39- 122.39	71.72
19.822	19.822 (0.929)	131	1871157			19.80- 119.80	68.40
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	2350277	57.0518	57.052	80.00- 120.00	100.00
19.960	19.960 (0.935)	43	4343393			138.63- 238.63	184.80
19.960	19.960 (0.935)	100	396598			0.00- 67.05	16.87
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	3740615	54.9220	54.922	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	2884723			27.62- 127.62	77.12
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	3462202	54.9423	54.942	80.00- 120.00	100.00
20.624	20.624 (0.966)	109	3257401			44.67- 144.67	94.08
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	4557104	54.2787	54.279	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	1454447			0.00- 82.43	31.92
21.398	21.398 (1.003)	77	2729875			10.75- 110.75	59.90
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	2354756	54.9458	54.946	80.00- 120.00	100.00
21.481	21.481 (1.006)	91	7312230			261.69- 361.69	310.53
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	2946846	54.9356	54.936	80.00- 120.00	100.00
21.674	21.674 (1.016)	91	5783687			145.05- 245.05	196.27
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	2582216	55.5485	55.548	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	5281441			154.65- 254.65	204.53
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	4275480	59.4656	59.466	80.00- 120.00	100.00
22.421	22.421	(1.051)	78	2112552			1.69- 101.69	49.41
133 Bromoform						CAS #: 75-25-2		
22.836	22.836	(1.070)	173	3258113	54.4786	54.478	80.00- 120.00	100.00
22.836	22.836	(1.070)	171	1681615			1.22- 101.22	51.61
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	6690351	56.9959	56.996	80.00- 120.00	100.00
22.974	22.974	(1.076)	120	1839176			0.00- 78.08	27.49
22.946	22.974	(1.075)	51	710641			0.00- 61.43	10.62
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	4104155	52.8570	52.857	80.00- 120.00	100.00
23.527	23.527	(1.102)	85	2636394			14.35- 114.35	64.24
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	8737607	55.4988	55.499	80.00- 120.00	100.00
23.637	23.637	(1.108)	120	1980514			0.00- 72.94	22.67
23.637	23.637	(1.108)	105	321331			0.00- 54.03	3.68
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	7699834	55.3826	55.383	80.00- 120.00	100.00
23.831	23.831	(1.117)	120	2210219			0.00- 78.42	28.70
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	5550045	50.8217	50.822	80.00- 120.00	100.00
23.914	23.914	(1.120)	120	3171171			3.80- 103.80	57.14
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	5276389	53.1640	53.164	80.00- 120.00	100.00
24.550	24.550	(1.150)	120	2593089			0.00- 98.95	49.15
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.130	25.130	(1.177)	146	3931611	51.1917	51.192	80.00- 120.00	100.00
25.130	25.130	(1.177)	148	2506642			14.48- 114.48	63.76
25.130	25.130	(1.177)	111	1529949			0.00- 89.68	38.91
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	3971732	49.6212	49.621	80.00- 120.00	100.00
25.269	25.269	(1.184)	148	2535255			13.81- 113.81	63.83
25.269	25.269	(1.184)	111	1499689			0.00- 87.35	37.76

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene						CAS #: 100-44-7		
25.490	25.490	(1.194)	91	5941365	55.9136	55.914	80.00- 120.00	100.00
25.490	25.490	(1.194)	126	1232677			0.00- 71.29	20.75
161 1,2-Dichlorobenzene						CAS #: 95-50-1		
25.932	25.932	(1.215)	146	3481887	48.6925	48.692	80.00- 120.00	100.00
25.932	25.932	(1.215)	148	2225326			14.30- 114.30	63.91
25.905	25.932	(1.214)	111	1403109			0.00- 90.50	40.30
165 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
28.808	28.808	(1.350)	180	1206637	41.2578	41.258	80.00- 120.00	100.00
28.808	28.808	(1.350)	182	1149274			45.65- 145.65	95.25
166 Hexachlorobutadiene						CAS #: 87-68-3		
29.001	29.001	(1.359)	225	972258	39.9886	39.989	80.00- 120.00	100.00
29.001	29.001	(1.359)	223	608395			12.64- 112.64	62.58
29 Isopentane						CAS #: 78-78-4		
8.375	8.375	(0.581)	43	2583203	52.2457	52.246	80.00- 120.00	100.00
8.375	8.375	(0.581)	57	1731177			16.48- 116.48	67.02
19 Butane						CAS #: 106-97-8		
6.771	6.771	(0.470)	58	408645	52.9140	52.914	80.00- 120.00	100.00
6.771	6.771	(0.470)	43	3169804			757.70- 857.70	775.69
102 Methyl Cyclohexane						CAS #: 108-87-2		
16.919	16.919	(1.175)	83	2859963	57.6850	57.685	80.00- 120.00	100.00
16.919	16.919	(1.175)	98	1333582			0.00- 96.13	46.63
16.919	16.919	(1.175)	55	2537608			38.51- 138.51	88.73
167 Naphthalene						CAS #: 91-20-3		
29.388	29.388	(1.377)	128	2149760	39.2330	39.233	80.00- 120.00	100.00
29.388	29.388	(1.377)	127	251185			0.00- 62.50	11.68

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101810.d
Lab Smp Id: lcs-1
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: lcs-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	693629	1.47
97 1,4-Difluorobenze	2204815	1322889	3086741	2281320	3.47
126 Chlorobenzene-d5	1812979	1087787	2538171	1855833	2.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Oct-2007 09:41

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-18oct
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: lcs-1
Client Smp ID: lcs-1
Level: LOW
Operator: dm
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: AT04ENSR.sub
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv-50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	48.162	96.32	70-130
16 Freon 114	50.000	49.117	98.23	70-130
18 Chloromethane	50.000	47.034	94.07	70-130
20 Vinyl Chloride	50.000	50.540	101.08	70-130
22 1,3-Butadiene	50.000	52.306	104.61	60-140
25 Bromomethane	50.000	49.468	98.94	70-130
27 Chloroethane	50.000	55.787	111.57	70-130
31 Trichlorofluoromet	50.000	51.586	103.17	70-130
38 Ethanol	50.000	60.963	121.93	60-140
42 Freon 113	50.000	59.076	118.15	70-130
43 1,1-Dichloroethene	50.000	60.046	120.09	70-130
45 Acetone	50.000	57.125	114.25	60-140
47 Carbon Disulfide	50.000	54.330	108.66	60-140
46 2-Propanol	50.000	58.042	116.08	60-140
54 Methylene Chloride	50.000	58.687	117.37	70-130
60 MTBE	50.000	58.791	117.58	60-140
61 trans-1,2-Dichloro	50.000	57.220	114.44	60-140
65 Hexane	50.000	59.350	118.70	60-140
69 Vinyl Acetate	50.000	58.557	117.11	60-140
70 1,1-Dichloroethane	50.000	58.606	117.21	70-130
76 cis-1,2-Dichloroet	50.000	57.296	114.59	70-130
75 2-Butanone	50.000	62.835	125.67	60-140
80 Tetrahydrofuran	50.000	59.104	118.21	60-140
82 Chloroform	50.000	56.286	112.57	70-130
85 Cyclohexane	50.000	58.841	117.68	60-140
83 1,1,1-Trichloroeth	50.000	52.961	105.92	70-130
87 Carbon Tetrachlori	50.000	52.130	104.26	70-130
91 Benzene	50.000	57.926	115.85	70-130
93 1,2-Dichloroethane	50.000	52.638	105.28	70-130
94 Heptane	50.000	59.632	119.26	60-140
101 Trichloroethene	50.000	55.540	111.08	70-130
104 1,2-Dichloropropan	50.000	56.398	112.80	70-130
106 1,4-Dioxane	50.000	57.249	114.50	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	55.265	110.53	60-140
110 cis-1,3-Dichloropr	50.000	58.245	116.49	70-130
111 4-Methyl-2-pentano	50.000	63.166	126.33	60-140
114 Toluene	50.000	59.346	118.69	70-130
116 trans-1,3-Dichloro	50.000	56.257	112.51	70-130
117 1,1,2-Trichloroeth	50.000	56.377	112.75	70-130
120 Tetrachloroethene	50.000	54.870	109.74	70-130
121 2-Hexanone	50.000	57.052	114.10	60-140
122 Dibromochlorometha	50.000	54.922	109.84	60-140
123 1,2-Dibromoethane	50.000	54.942	109.88	70-130
127 Chlorobenzene	50.000	54.279	108.56	70-130
128 Ethyl Benzene	50.000	54.946	109.89	70-130
129 m,p-Xylene	50.000	54.936	109.87	70-130
130 o-Xylene	50.000	55.548	111.10	70-130
131 Styrene	50.000	59.466	118.93	70-130
133 Bromoform	50.000	54.478	108.96	60-140
140 1,1,2,2-Tetrachlor	50.000	52.857	105.71	70-130
145 4-Ethyltoluene	50.000	55.383	110.77	60-140
147 1,3,5-Trimethylben	50.000	50.822	101.64	70-130
150 1,2,4-Trimethylben	50.000	53.164	106.33	70-130
155 1,3-Dichlorobenzen	50.000	51.192	102.38	70-130
156 1,4-Dichlorobenzen	50.000	49.621	99.24	70-130
159 alpha-Chlorotoluen	50.000	55.914	111.83	70-130
161 1,2-Dichlorobenzen	50.000	48.692	97.39	70-130
165 1,2,4-Trichloroben	50.000	41.258	82.52	70-130
166 Hexachlorobutadien	50.000	39.989	79.98	70-130
142 Propylbenzene	50.000	55.499	111.00	60-140
134 Cumene	50.000	56.996	113.99	60-140
51 3-Chloropropene	50.000	58.111	116.22	60-140
89 2,2,4-Trimethylpen	50.000	58.167	116.33	60-140
29 Isopentane	50.000	52.246	104.49	70-130
19 Butane	50.000	52.914	105.83	70-130
102 Methyl Cyclohexane	50.000	57.685	115.37	70-130
11 Propylene	50.000	51.335	102.67	60-140
167 Naphthalene	50.000	39.233	78.47	60-140

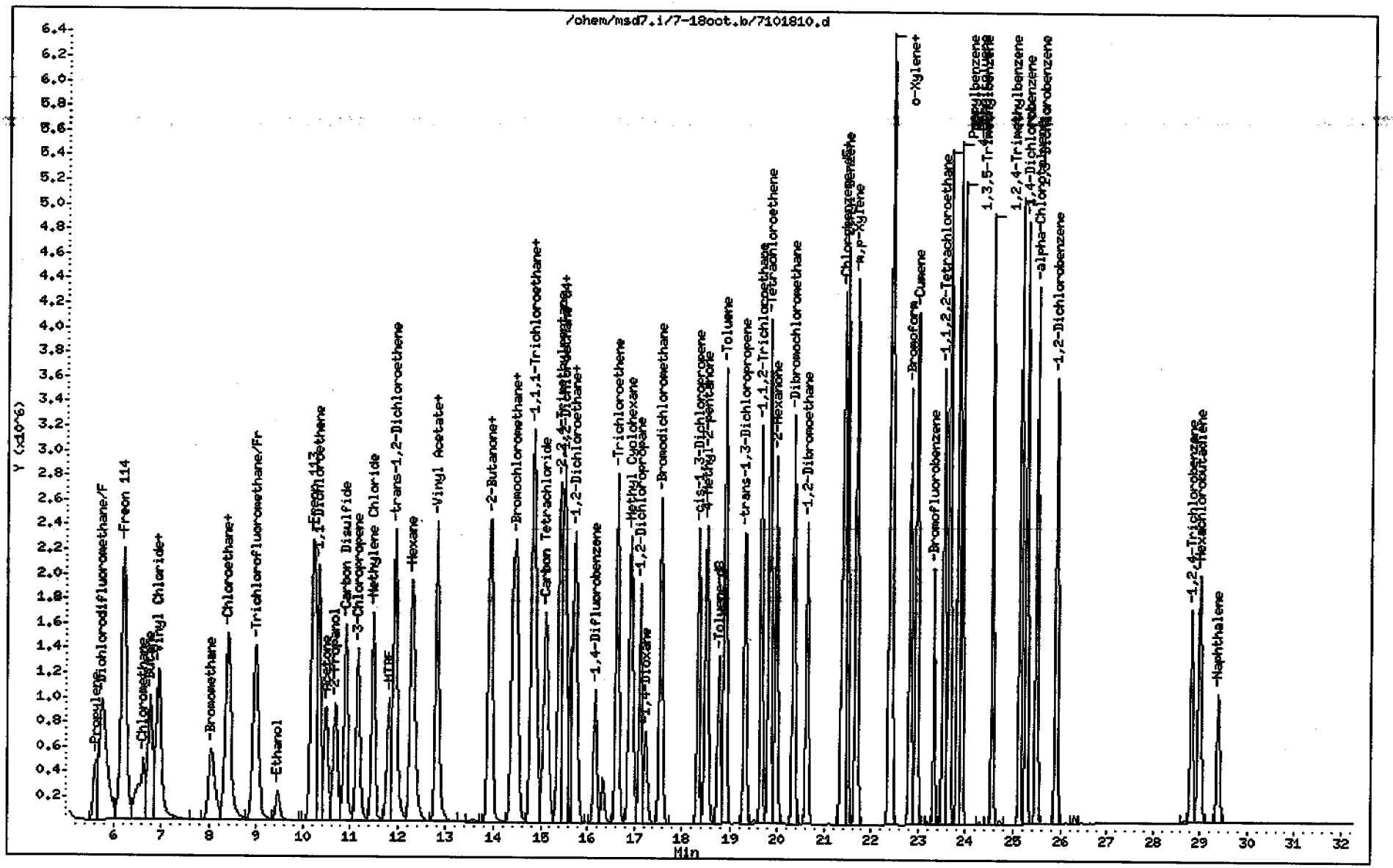
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.524	94.09	70-130
$ 113 Toluene-d8	25.000	25.783	103.13	70-130
$ 137 Bromofluorobenzene	25.000	23.992	95.97	70-130

Data File: /chem/msd7.i/7-18oct.b/7101810.d
Date : 18-OCT-2007 19:29
Client ID: lcs-1
Sample Info: 50mL #1443-302

Instrument: msd7.i

Operator: dm
Column phase: RTx-624
Column diameter: 0.53

0320



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101802.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 18-OCT-2007 12:17
Operator : cb
Inst ID: msd7.i
Smp Info : 0.2mL #1576-50
Misc Info : 200ppbv --> 0.2ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:54 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 12:17
Cal File: 7101802.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.375	14.375 (1.000)	130	636189	25.0000		50.00- 150.00	100.00
14.375	14.375 (1.000)	128	490559			27.11- 127.11	77.11
14.375	14.375 (1.000)	49	923525			95.17- 195.17	145.17
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.144	16.144 (1.000)	114	2066548	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	323845			0.00- 65.67	15.67
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1699390	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	942443			5.46- 105.46	55.46
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.481 (1.077)	65	840662	25.0000	25.000	50.00- 150.00	100.00
15.481	15.481 (1.077)	67	425930			0.67- 100.67	50.67
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.163)	98	1800430	25.0000	25.000	50.00- 150.00	100.00
18.744	18.744 (1.161)	70	203256			0.00- 61.29	11.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.163)	100	1235223			18.61- 118.61	68.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1016286	25.0000	25.000	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1276863			75.64- 175.64	125.64
23.333	23.333 (1.093)	176	976731			46.11- 146.11	96.11
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.006)	83	10481	0.20000	0.2000	50.00- 150.00	100.00(a)
14.458	14.458 (1.006)	85	6627			13.23- 113.23	63.23
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.961)	78	14321	0.20000	0.2000	50.00- 150.00	100.00(a)
15.508	15.508 (0.961)	77	3194			0.00- 72.30	22.30
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	9530	0.20000	0.2000	50.00- 150.00	100.00(a)
22.421	22.421 (1.051)	78	6488			18.08- 118.08	68.08
134 Cumene					CAS #: 98-82-8		
22.946	22.946 (1.075)	105	18683	0.20000	0.2000	50.00- 150.00	100.00(a)
22.974	22.974 (1.076)	120	5104			0.00- 77.32	27.32
22.946	22.946 (1.075)	51	2569			0.00- 63.75	13.75

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msd7.i/7-18oct.b/7101802.d
Report Date: 18-Oct-2007 15:54

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101802.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 0.2ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	636189	-6.93
97 1,4-Difluorobenze	2204815	1322889	3086741	2066548	-6.27
126 Chlorobenzene-d5	1812979	1087787	2538171	1699390	-6.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.37	-0.19
97 1,4-Difluorobenze	16.17	15.84	16.50	16.14	-0.17
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

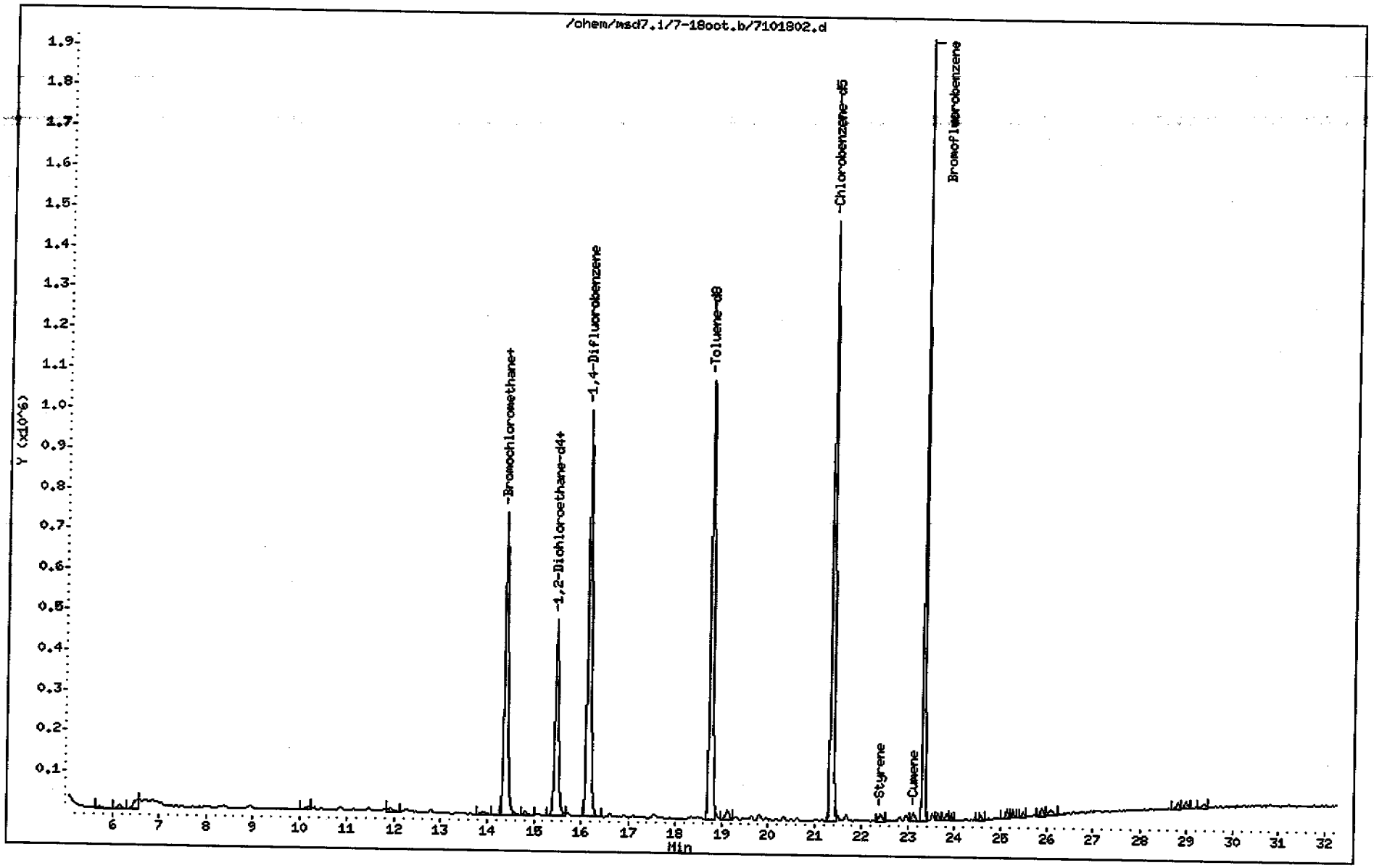
Data File: /chem/msd7.i/7-18oct.b/7101802.d
Date : 18-OCT-2007 12:17
Client ID: Level 1
Sample Info: 0.2mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0324



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101803.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 18-OCT-2007 12:56
Operator : cb
Inst ID: msd7.i
Smp Info : 0.5mL #1576-50
Misc Info : 200ppbv --> 0.5ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 12:56
Cal File: 7101803.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	594950	25.0000		50.00- 150.00		100.00
14.402	14.402 (1.000)	128	451286			26.48- 126.48		75.85
14.402	14.402 (1.000)	49	865261			95.30- 195.30		145.43
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	1954618	25.0000		50.00- 150.00		100.00
16.172	16.172 (1.000)	88	303029			0.00- 65.59		15.50
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1592069	25.0000		50.00- 150.00		100.00
21.342	21.342 (1.000)	82	884524			5.51- 105.51		55.56
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.481	15.481 (1.075)	65	796855	25.0000	25.169	50.00- 150.00		100.00
15.481	15.481 (1.075)	67	397861			0.30- 100.30		49.93
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1670382	25.0000	24.759	50.00- 150.00		100.00
18.771	18.771 (1.161)	70	190048			0.00- 61.33		11.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1154070			18.85- 118.85	69.09
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	957131	25.0000	25.066	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1220204			76.56- 176.56	127.49
23.333	23.333 (1.093)	176	932560			46.77- 146.77	97.43
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.721	5.721 (0.397)	85	47576	0.50000	0.5000	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	17035			0.00- 85.81	35.81
16 Freon 114					CAS #: 76-14-2		
6.163	6.163 (0.428)	135	32813	0.50000	0.5000	50.00- 150.00	100.00
6.163	6.163 (0.428)	137	10433			0.00- 81.80	31.80
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	19172	0.50000	0.5000	50.00- 150.00	100.00
6.882	6.882 (0.478)	64	6960			0.00- 86.30	36.30
22 1,3-Butadiene					CAS #: 106-99-0		
6.882	6.882 (0.478)	54	11746	0.50000	0.5000	50.00- 150.00	100.00
6.882	6.882 (0.478)	39	13765			67.19- 167.19	117.19
25 Bromomethane					CAS #: 74-83-9		
8.015	8.015 (0.557)	94	16291	0.50000	0.5000	50.00- 150.00	100.00
8.015	8.015 (0.557)	96	14944			41.73- 141.73	91.73
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	6683	0.50000	0.5000	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	2473			0.00- 87.00	37.00
8.320	8.320 (0.578)	66	2148			0.00- 82.14	32.14
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.955 (0.622)	101	39349	0.50000	0.5000	50.00- 150.00	100.00
8.928	8.928 (0.620)	103	26784			18.07- 118.07	68.07
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	22360	0.50000	0.5000	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	13095			8.56- 108.56	58.56
10.200	10.200 (0.708)	101	27629			73.56- 173.56	123.56
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	23023	0.50000	0.5000	50.00- 150.00	100.00
10.310	10.310 (0.716)	96	18764			31.50- 131.50	81.50
10.338	10.338 (0.718)	98	8228			0.00- 85.74	35.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.754)	76	43350	0.50000	0.5000	50.00- 150.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	17900	0.50000	0.5000	50.00- 150.00	100.00
11.472	11.472 (0.796)	84	12530			20.00- 120.00	70.00
11.444	11.444 (0.795)	51	5834			0.00- 82.59	32.59
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	30552	0.50000	0.5000	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	6497			0.00- 71.27	21.27
11.803	11.803 (0.820)	41	8855			0.00- 78.98	28.98
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	15203	0.50000	0.5000	50.00- 150.00	100.00
11.914	11.914 (0.827)	61	21746			93.04- 193.04	143.04
11.914	11.914 (0.827)	98	7588			0.00- 99.91	49.91
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	20198	0.50000	0.5000	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	15411			26.30- 126.30	76.30
12.301	12.301 (0.854)	86	3271			0.00- 66.19	16.19
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	24629	0.50000	0.5000	50.00- 150.00	100.00
12.826	12.826 (0.891)	65	8401			0.00- 84.11	34.11
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	4535	0.50000	0.5000	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	22514			446.45- 546.45	496.45
13.905	13.905 (0.965)	57	1741			0.00- 88.39	38.39
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	17162	0.50000	0.5000	50.00- 150.00	100.00
13.932	13.932 (0.967)	96	15482			40.21- 140.21	90.21
13.932	13.932 (0.967)	98	8217			0.00- 97.88	47.88
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.375 (0.998)	42	12231	0.50000	0.5000	50.00- 150.00	100.00
14.402	14.402 (1.000)	71	4285			0.00- 85.03	35.03
14.402	14.402 (1.000)	72	4117			0.00- 83.66	33.66
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	27421	0.50000	0.5281	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	17112			12.82- 112.82	62.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.817 (1.029)	97	25463	0.50000	0.5000	50.00- 150.00	100.00
14.845	14.845 (1.031)	99	16821			16.06- 116.06	66.06
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	13500	0.50000	0.5000	50.00- 150.00	100.00
14.845	14.845 (1.031)	56	17496			79.60- 179.60	129.60
14.845	14.845 (1.031)	41	15222			62.76- 162.76	112.76
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	22788	0.50000	0.5000	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	25102			60.15- 160.15	110.15
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	34749	0.50000	0.5064	50.00- 150.00	100.00
15.536	15.536 (0.961)	77	7253			0.00- 71.59	20.87
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.425	15.425 (1.071)	57	45451	0.50000	0.5000	50.00- 150.00	100.00
15.425	15.425 (1.071)	56	16216			0.00- 85.68	35.68
15.425	15.425 (1.071)	41	15793			0.00- 84.75	34.75
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	18652	0.50000	0.5000	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	6553			0.00- 85.13	35.13
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	8517	0.50000	0.5000	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	19632			180.50- 280.50	230.50
15.730	15.730 (0.973)	57	10427			72.43- 172.43	122.43
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	14369	0.50000	0.5000	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	14236			49.07- 149.07	99.07
16.642	16.642 (1.029)	97	9543			16.41- 116.41	66.41
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.140	17.140 (1.060)	63	12205	0.50000	0.5000	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	9174			25.17- 125.17	75.17
17.140	17.140 (1.060)	41	11048			40.52- 140.52	90.52
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.554 (1.085)	83	23861	0.50000	0.5000	50.00- 150.00	100.00
17.554	17.554 (1.085)	85	15506			14.98- 114.98	64.98
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	15175	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
18.329	18.329 (1.133)	77	4797			0.00- 81.61	31.61
18.329	18.329 (1.133)	39	9773			14.40- 114.40	64.40
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	6848	0.50000	0.5000	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	20498			249.33- 349.33	299.33
18.495	18.495 (1.144)	85	3016			0.00- 94.04	44.04
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	34659	0.50000	0.5000	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	21595			12.31- 112.31	62.31
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	16891	0.50000	0.5000	50.00- 150.00	100.00
19.324	19.324 (0.905)	77	5788			0.00- 84.27	34.27
19.296	19.296 (0.904)	39	11612			18.75- 118.75	68.75
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	13069	0.50000	0.5000	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	8163			12.46- 112.46	62.46
19.656	19.656 (0.921)	83	11292			36.40- 136.40	86.40
120 Tetrachloroethene					CAS #: 127-18-4		
19.849	19.849 (0.930)	166	18736	0.50000	0.5000	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	13781			23.55- 123.55	73.55
19.822	19.822 (0.929)	131	12940			19.06- 119.06	69.06
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	22024	0.50000	0.5000	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	17127			27.77- 127.77	77.77
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	19811	0.50000	0.5000	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	19821			50.05- 150.05	100.05
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	31210	0.50000	0.5000	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	11029			0.00- 85.34	35.34
21.398	21.398 (1.003)	77	31887			52.17- 152.17	102.17
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	14585	0.50000	0.5000	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	47369			274.78- 374.78	324.78
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	18983	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.674	21.674 (1.016)	91	36102			140.18- 240.18	190.18
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	15952	0.50000	0.5000	50.00- 150.00	100.00
22.393	22.393 (1.049)	91	33173			157.96- 257.96	207.96
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	22221	0.50000	0.4989	50.00- 150.00	100.00(a)
22.421	22.421 (1.051)	78	12270			11.65- 111.65	55.22
133 Bromoform					CAS #: 75-25-2		
22.835	22.835 (1.070)	173	20128	0.50000	0.5000	50.00- 150.00	100.00
22.835	22.835 (1.070)	171	10294			1.14- 101.14	51.14
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	42095	0.50000	0.4903	50.00- 150.00	100.00(a)
22.974	22.974 (1.076)	120	13036			0.00- 79.14	30.97
22.946	22.946 (1.075)	51	4671			0.00- 62.42	11.10
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	28944	0.50000	0.5000	50.00- 150.00	100.00
23.527	23.527 (1.102)	85	18819			15.02- 115.02	65.02
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	57510	0.50000	0.5000	50.00- 150.00	100.00
23.637	23.637 (1.108)	120	13859			0.00- 74.10	24.10
23.637	23.637 (1.108)	105	2745			0.00- 54.77	4.77
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	45962	0.50000	0.5000	50.00- 150.00	100.00
23.831	23.831 (1.117)	120	14743			0.00- 82.08	32.08
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	44997	0.50000	0.5000	50.00- 150.00	100.00
23.914	23.914 (1.120)	120	22622			0.27- 100.27	50.27
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	33540	0.50000	0.5000	50.00- 150.00	100.00
24.550	24.550 (1.150)	120	16903			0.40- 100.40	50.40
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.177)	146	29742	0.50000	0.5000	50.00- 150.00	100.00
25.130	25.130 (1.177)	148	19728			16.33- 116.33	66.33
25.130	25.130 (1.177)	111	12094			0.00- 90.66	40.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	32773	0.50000	0.5000	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	20634			12.96- 112.96	62.96
25.269	25.269 (1.184)	111	12309			0.00- 87.56	37.56
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	32574	0.50000	0.5000	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	7503			0.00- 73.03	23.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	30022	0.50000	0.5000	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	18673			12.20- 112.20	62.20
25.905	25.905 (1.214)	111	11890			0.00- 89.60	39.60
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	16603	0.50000	0.5000	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	7709			0.00- 96.43	46.43
16.919	16.919 (1.175)	55	14202			35.54- 135.54	85.54

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msd7.i/7-18oct.b/7101803.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101803.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 0.5ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	594950	-12.96
97 1,4-Difluorobenze	2204815	1322889	3086741	1954618	-11.35
126 Chlorobenzene-d5	1812979	1087787	2538171	1592069	-12.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

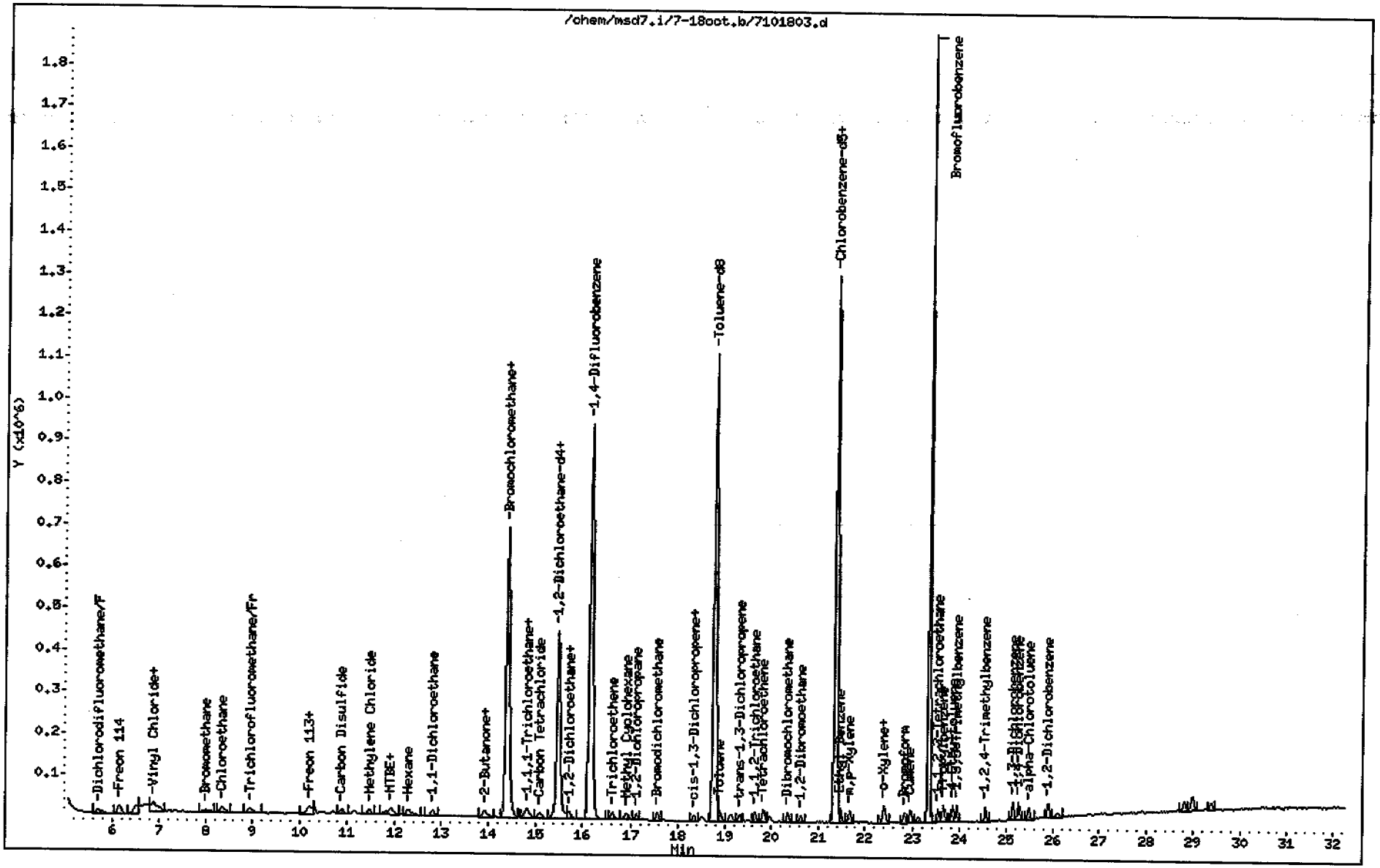
Data File: /chem/msd7.i/7-18oct.b/7101803.d
Date : 18-OCT-2007 12:56
Client ID: Level 2
Sample Info: 0.5mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

0333



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05nov.b/7110505.d
Lab Smp Id: ical level 3
Inj Date : 05-NOV-2007 12:47
Operator : ea Inst ID: msd7.i
Smp Info : 2.0ml #1443-361
Misc Info : 200ppbv-2.0ppbv
Comment :
Method : /chem/msd7.i/7-05nov.b/t14q018d.m
Meth Date : 05-Nov-2007 15:03 ealcan Quant Type: ISTD
Cal Date : 05-NOV-2007 12:47 Cal File: 7110505.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp14d.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	590819	25.0000		50.00- 150.00	100.00
14.402	14.402 (1.000)	128	459854			27.15- 127.15	77.83
14.402	14.402 (1.000)	49	860514			111.39- 211.39	145.65
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	1893977	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	297293			0.00- 65.49	15.70
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1442784	25.0000		50.00- 150.00	100.00
21.342	21.342 (1.000)	82	783695			4.70- 104.70	54.32
66 1-Hexene					CAS #: 592-41-6		
12.190	12.190 (0.846)	55	43993	2.00000	1.969	50.00- 150.00	100.00(a)
12.190	12.190 (0.846)	41	68131			102.84- 202.84	154.87
12.163	12.163 (0.844)	84	15742			0.00- 86.65	35.78
37 Pentane					CAS #: 109-66-0		
9.121	9.121 (0.633)	43	133478	2.00000	2.141	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
37 Pentane (continued)							
9.121	9.121 (0.633)	57	20646			0.00- 65.22	15.47
9.121	9.121 (0.633)	72	11866			0.00- 59.09	8.89
35 1-Pentene					CAS #: 109-67-1		
8.983	8.983 (0.624)	55	78508	2.00000	2.070	50.00- 150.00	100.00
8.983	8.983 (0.624)	42	177093			175.46- 275.46	225.57
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
124 Nonane					CAS #: 111-84-2		
21.481	21.481 (1.006)	43	118290	2.00000	1.957	50.00- 150.00	100.00(a)
21.481	21.481 (1.006)	57	108780			41.17- 141.17	91.96
21.481	21.481 (1.006)	85	37974			0.00- 81.55	32.10
62 Acrylonitrile					CAS #: 107-13-1		
12.025	12.025 (0.835)	52	38060	2.00000	1.871	50.00- 150.00	100.00(a)
12.025	12.025 (0.835)	53	45358			69.26- 169.26	119.17
105 Dibromomethane					CAS #: 74-95-3		
17.361	17.361 (0.813)	174	59996	2.00000	1.849	50.00- 150.00	100.00(a)
17.361	17.361 (0.813)	93	61978			53.48- 153.48	103.30
17.361	17.361 (0.813)	95	52155			36.52- 136.52	86.93
44 Acrolein					CAS #: 107-02-8		
10.172	10.172 (0.706)	55	17333	2.00000	1.921	50.00- 150.00	100.00(a)
10.172	10.172 (0.706)	56	23999			90.98- 190.98	138.46
63 2-Pentanone					CAS #: 107-87-9		
16.918	16.918 (0.793)	43	118170	2.00000	1.533	50.00- 150.00	100.00(a)
16.918	16.918 (0.793)	58	9156			0.00- 57.79	7.75
16.918	16.918 (0.793)	86	18073			0.00- 65.81	15.29
52 Acetonitrile					CAS #: 75-05-8		
11.250	11.250 (0.781)	40	39551	2.00000	1.968	50.00- 150.00	100.00(a)
11.250	11.250 (0.781)	41	68442			116.58- 216.58	173.05
11.250	11.250 (0.781)	38	11569			0.00- 80.94	29.25
50 Methyl Methacrylate					CAS #: 80-62-6		
17.112	17.112 (0.802)	41	61575	2.00000	1.540	50.00- 150.00	100.00(a)
17.112	17.112 (0.802)	69	46155			22.16- 122.16	74.96
17.112	17.112 (0.802)	100	16382			0.00- 76.23	26.60
79 Methyl Acrylate					CAS #: 96-33-3		
14.015	14.015 (0.973)	55	92859	2.00000	1.750	50.00- 150.00	100.00(a)
14.015	14.015 (0.973)	85	15733			0.00- 66.55	16.94
14.015	14.015 (0.973)	58	9356			0.00- 59.80	10.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
48 Ethyl acrylate					CAS #: 140-88-5		
16.697	16.697 (0.782)	99	6428	2.00000	1.496	50.00- 150.00	100.00(a)
16.697	16.697 (0.782)	45	9735			93.69- 193.69	151.45
16.697	16.697 (0.782)	55	93010			1387.00-1487.00	1446.95
49 Iodomethane					CAS #: 74-88-4		
10.780	10.780 (0.748)	142	164423	2.00000	1.856	50.00- 150.00	100.00(a)
10.780	10.780 (0.748)	127	60828			0.00- 87.23	36.99
21 Isobutane					CAS #: 75-28-5		
6.301	6.301 (0.438)	43	111043	2.00000	2.098	50.00- 150.00	100.00
6.301	6.301 (0.438)	42	49096			0.00- 89.47	44.21
6.273	6.273 (0.436)	58	1575			0.00- 51.94	1.42

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110505.d
Lab Smp Id: ical level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msd7.i/7-05nov.b/t14q018d.m
Misc Info: 200ppbv-2.0ppbv

Calibration Date: 05-NOV-2007
Calibration Time: 13:30

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	700965	420579	981351	590819	-15.71
97 1,4-Difluorobenze	2091522	1254913	2928131	1893977	-9.45
126 Chlorobenzene-d5	1523313	913988	2132638	1442784	-5.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

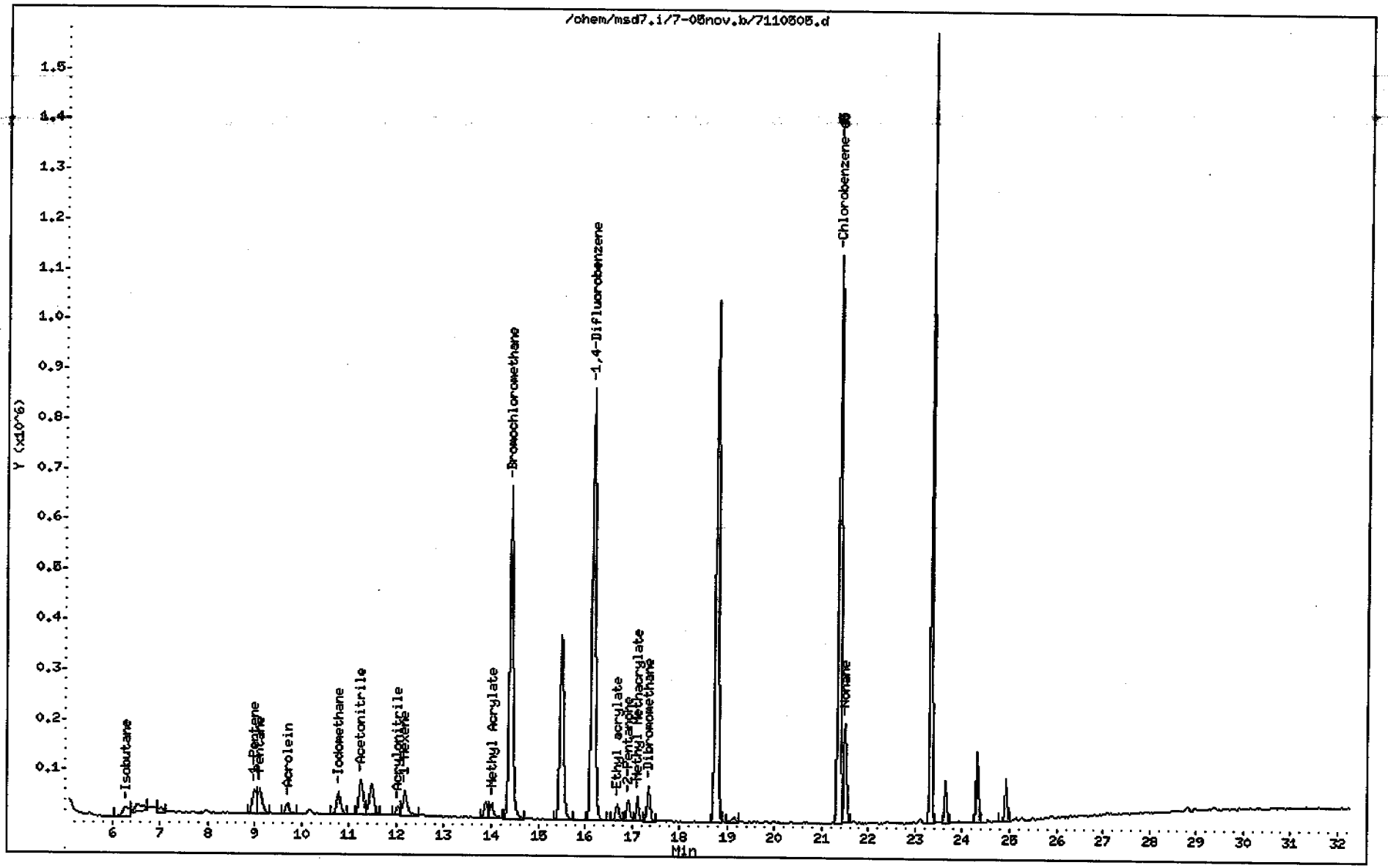
Data File: /chem/msd7.i/7-05nov.b/7110505.d
Date : 05-NOV-2007 12:47
Client ID:
Sample Info: 2.0ml #1443-361

Column phase: RTx-624

Instrument: msd7.i

Operator: ea
Column diameter: 0.53

0338



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102205.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 22-OCT-2007 10:55
Operator : cb
Inst ID: msd7.i
Smp Info : 2mL #1487-370
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 10:55
Cal File: 7102205.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.403	14.403 (1.000)	130	639032	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	485011			26.49- 126.49	75.90
14.375	14.375 (1.000)	49	961966			116.97- 216.97	150.53
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2072294	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	319608			0.00- 65.57	15.42
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1627678	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	894614			5.19- 105.19	54.96
55 Cyclopentene					CAS #: 142-29-0		
11.251	11.251 (0.781)	67	232640	2.00000	1.954	50.00- 150.00	100.00(a)
11.251	11.251 (0.781)	68	93477			0.00- 90.48	40.18
11.251	11.251 (0.781)	53	48369			0.00- 70.85	20.79
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.877	13.877 (0.964)	77	141265	2.00000	1.895	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	50942			0.00- 84.30	36.06
13.877	13.877 (0.964)	97	28410			0.00- 70.03	20.11
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	53537	2.00000	1.916	50.00- 150.00	100.00(a)
15.121	15.121 (0.935)	75	140199			218.22- 318.22	261.87
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	158585	2.00000	1.906	50.00- 150.00	100.00(a)
19.988	19.988 (1.236)	41	112138			21.54- 121.54	70.71
19.988	19.988 (1.236)	78	50086			0.00- 81.77	31.58
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	117122	2.00000	2.018	50.00- 150.00	100.00
21.536	21.536 (1.009)	117	80894			18.93- 118.93	69.07
21.536	21.536 (1.009)	95	46412			0.00- 89.37	39.63
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	142356	2.00000	2.090	50.00- 150.00	100.00
23.610	23.610 (1.106)	158	137653			46.65- 146.65	96.70
23.610	23.610 (1.106)	77	279379			147.77- 247.77	196.25
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	64138	2.00000	2.012	50.00- 150.00	100.00
23.665	23.665 (1.109)	75	194965			252.90- 352.90	303.98
23.665	23.665 (1.109)	61	48439			26.84- 126.84	75.52
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	100762	2.00000	2.003	50.00- 150.00	100.00
23.886	23.886 (1.119)	91	297542			243.86- 343.86	295.29
23.886	23.886 (1.119)	65	28529			0.00- 78.37	28.31
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	104260	2.00000	1.943	50.00- 150.00	100.00(a)
24.080	24.080 (1.128)	91	315277			249.00- 349.00	302.39
24.052	24.052 (1.127)	63	39933			0.00- 88.24	38.30
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	345319	2.00000	2.172	50.00- 150.00	100.00
25.020	25.020 (1.172)	134	97423			0.00- 77.89	28.21
25.020	25.020 (1.172)	91	84154			0.00- 74.89	24.37
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	127049	2.00000	2.014	50.00- 150.00	100.00
25.269	25.269 (1.184)	105	280842			168.18- 268.18	221.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	37584			0.00- 78.76	29.58
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	86798	2.00000	2.030	50.00- 150.00	100.00
25.684	25.684 (1.203)	91	365378			362.01- 462.01	420.95
25.684	25.684 (1.203)	92	204191			181.94- 281.94	235.25
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	319919	2.00000	2.232	50.00- 150.00	100.00
24.467	24.467 (1.146)	134	78445			0.00- 74.64	24.52
24.467	24.467 (1.146)	91	224250			20.96- 120.96	70.10
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	447243	2.00000	2.254	50.00- 150.00	100.00
24.826	24.826 (1.163)	134	88393			0.00- 69.71	19.76
24.826	24.826 (1.163)	91	69536			0.00- 65.99	15.55
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	99267	2.00000	1.935	50.00- 150.00	100.00(a)
27.287	27.287 (1.279)	75	92577			39.96- 139.96	93.26
27.287	27.287 (1.279)	155	79486			28.87- 128.87	80.07
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	92534	2.00000	2.159	50.00- 150.00	100.00
24.605	24.605 (1.153)	117	92152			54.36- 154.36	99.59
24.605	24.605 (1.153)	169	43387			0.00- 97.70	46.89

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102205.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 10:55
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	639032	383419	894645	639032	0.00
97 1,4-Difluorobenze	2072294	1243376	2901212	2072294	0.00
126 Chlorobenzene-d5	1627678	976607	2278749	1627678	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

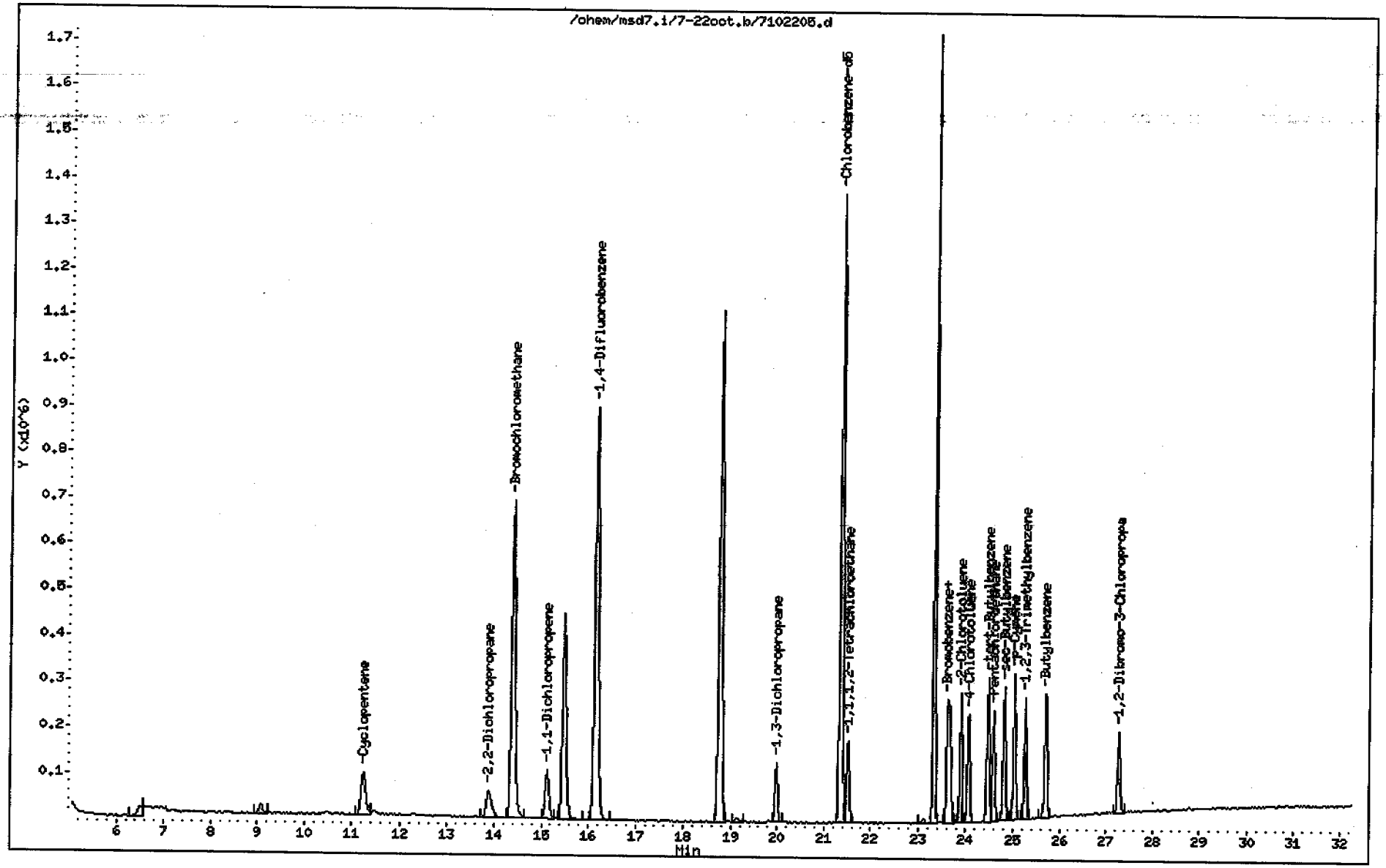
Data File: /ohem/msd7.i/7-22oct.b/7102205.d
Date : 22-OCT-2007 10:55
Client ID: Level 3
Sample Info: 2mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0343



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101903.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 19-OCT-2007 10:22
Operator : cb
Inst ID: msd7.i
Smp Info : 2mL #1487-400
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 10:22
Cal File: 7101903.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5	
14.403	14.403 (1.000)	130	680683	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	521822			26.64- 126.64	76.66
14.403	14.403 (1.000)	49	1021902			124.30- 224.30	150.13
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2218849	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	345014			0.00- 65.60	15.55
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.343	21.343 (1.000)	117	1717856	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	948281			5.36- 105.36	55.20
5 Freon 143a						CAS #: 420-46-2	
5.334	5.334 (0.370)	65	30165	2.00000	2.000	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	276074			0.00- 50.00	915.21
5.334	5.334 (0.370)	64	6959			0.00- 73.07	23.07
6 Freon142b						CAS #: 75-68-3	
6.357	6.357 (0.441)	65	124214	2.00000	2.090	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)							
6.357	6.357 (0.441)	45	30229			0.00- 74.34	24.34
13 Freon 134a					CAS #: 811-97-2		
5.472	5.472 (0.380)	83	59293	2.00000	2.000	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	276074			415.61- 515.61	465.61
5.472	5.472 (0.380)	63	8387			0.00- 64.15	14.15
15 Freon 152a					CAS #: 75-37-6		
5.665	5.665 (0.393)	65	43467	2.00000	2.000	50.00- 150.00	100.00
5.665	5.665 (0.393)	51	69568			110.05- 210.05	160.05
5.693	5.693 (0.395)	47	17369			0.00- 89.96	39.96
17 Freon 22					CAS #: 75-45-6		
5.831	5.831 (0.405)	51	143770	2.00000	2.000	50.00- 150.00	100.00
5.831	5.831 (0.405)	67	16779			0.00- 61.67	11.67
5.831	5.831 (0.405)	85	2871			0.00- 52.00	2.00
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.900	8.900 (0.618)	67	119076	2.00000	2.000	50.00- 150.00	100.00
8.900	8.900 (0.618)	69	36680			0.00- 80.80	30.80
8.900	8.900 (0.618)	35	5758			0.00- 54.84	4.84
40 Freon123a					CAS #: 354-23-4		
9.813	9.813 (0.681)	117	61475	2.00000	2.000	50.00- 150.00	100.00
9.813	9.813 (0.681)	67	108040			125.75- 225.75	175.75
41 Freon123					CAS #: 306-83-2		
9.951	9.951 (0.691)	83	118699	2.00000	2.000	50.00- 150.00	100.00
9.951	9.951 (0.691)	133	22948			0.00- 69.33	19.33
9.979	9.979 (0.693)	85	87037			23.33- 123.33	73.33
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.527	11.527 (0.800)	59	135523	2.00000	2.000	50.00- 150.00	100.00
11.499	11.499 (0.798)	41	31744			0.00- 73.42	23.42
11.499	11.499 (0.798)	57	13899			0.00- 60.26	10.26
68 Isopropyl ether					CAS #: 108-20-3		
12.716	12.716 (0.883)	45	229400	2.00000	2.000	50.00- 150.00	100.00
12.716	12.716 (0.883)	87	53932			0.00- 73.51	23.51
12.716	12.716 (0.883)	59	19957			0.00- 58.70	8.70
71 1-Propanol					CAS #: 71-23-8		
12.854	12.854 (0.892)	42	12498	2.00000	2.000	50.00- 150.00	100.00
12.827	12.827 (0.891)	59	17728			91.85- 191.85	141.85
12.716	12.716 (0.883)	41	42674			291.45- 391.45	341.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.380	13.380 (0.929)	59	187293	2.00000	2.000	50.00- 150.00	100.00
13.380	13.380 (0.929)	87	73600			0.00- 89.30	39.30
13.380	13.380 (0.929)	41	34474			0.00- 68.41	18.41
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	21298	2.00000	2.000	50.00- 150.00	100.00
13.877	13.877 (0.964)	61	21673			51.76- 151.76	101.76
13.877	13.877 (0.964)	43	139113			603.17- 703.17	653.17
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	134657	2.00000	2.000	50.00- 150.00	100.00
15.536	15.536 (1.079)	87	32299			0.00- 73.99	23.99
15.536	15.536 (1.079)	55	41294			0.00- 80.67	30.67
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	64075	2.00000	2.000	50.00- 150.00	100.00
22.504	22.504 (1.562)	43	102414			109.83- 209.83	159.83
98 1-Butanol					CAS #: 71-36-3		
16.310	16.310 (1.009)	56	29538	2.00000	2.000	50.00- 150.00	100.00
16.310	16.310 (1.009)	41	21168			21.66- 121.66	71.66
16.310	16.310 (1.009)	43	18572			12.87- 112.87	62.87
99 Isobutanol					CAS #: 78-83-1		
15.121	15.121 (1.050)	59	1011	2.00000	2.000	50.00- 150.00	100.00
15.149	15.149 (1.052)	41	29081			2826.46-2926.46	2876.46
15.149	15.149 (1.052)	43	41133			4018.55-4118.55	4068.55
119 Butyl Acetate					CAS #: 123-86-4		
20.071	20.071 (1.241)	56	50141	2.00000	2.000	50.00- 150.00	100.00
20.071	20.071 (1.241)	73	17033			0.00- 83.97	33.97
20.071	20.071 (1.241)	43	123513			196.33- 296.33	246.33
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.091)	55	58482	2.00000	2.000	50.00- 150.00	100.00
23.278	23.278 (1.091)	98	22335			0.00- 88.19	38.19
23.278	23.278 (1.091)	42	37611			14.31- 114.31	64.31
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.128)	57	142000	2.00000	2.000	50.00- 150.00	100.00
24.080	24.080 (1.128)	85	115778			31.53- 131.53	81.53
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd7.i/7-19oct.b/7101903.d
Report Date: 19-Oct-2007 12:11

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101903.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	680683	-1.94
97 1,4-Difluorobenze	2223212	1333927	3112497	2218849	-0.20
126 Chlorobenzene-d5	1779964	1067978	2491950	1717856	-3.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

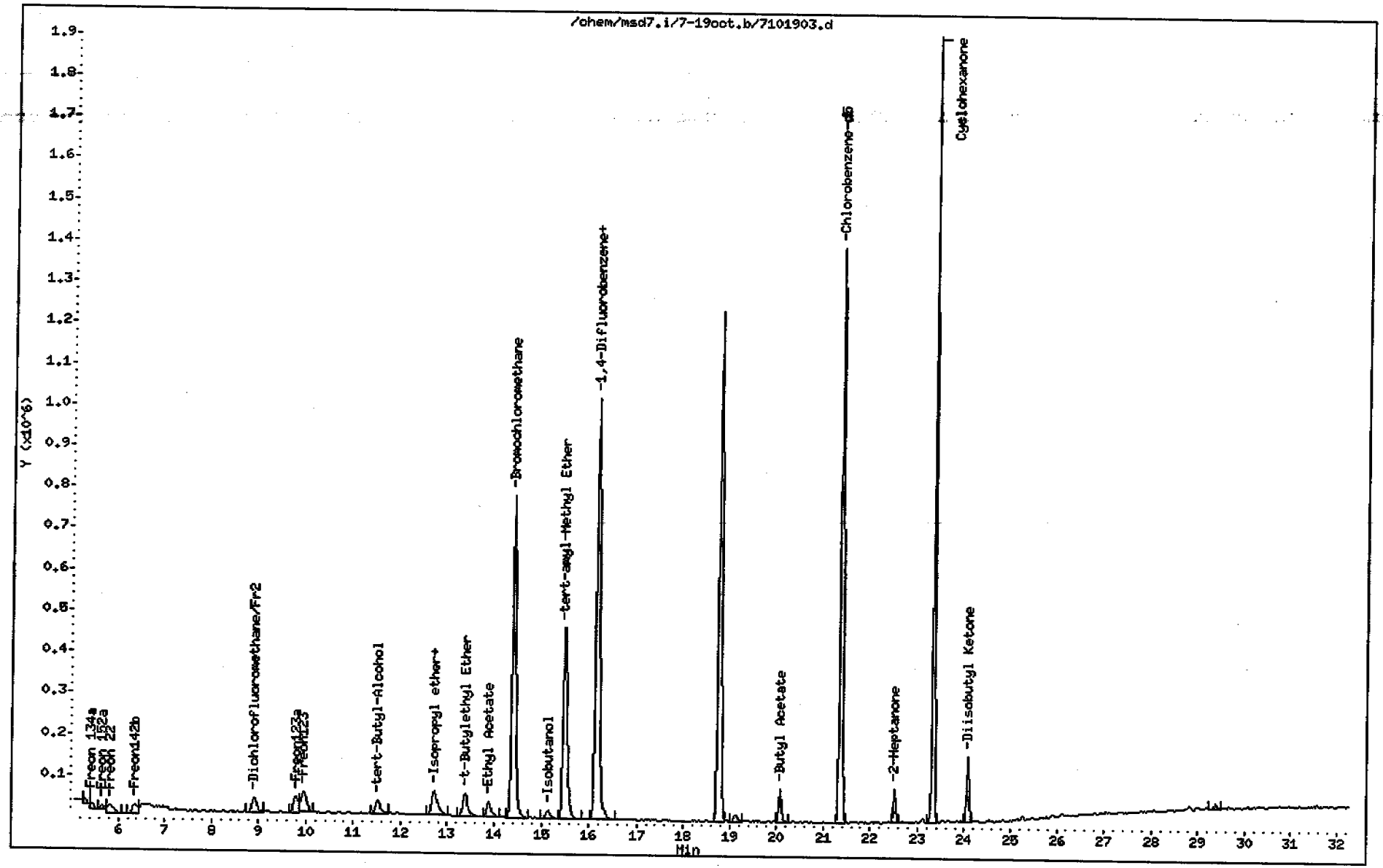
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-19oct.b/7101903.d
Date : 19-OCT-2007 10:22
Client ID: Level 3
Sample Info: 2mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101804.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 18-OCT-2007 14:09
Operator : cb
Inst ID: msd7.i
Smp Info : 2mL #1576-50
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 14:09
Cal File: 7101804.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.403	14.403 (1.000)	130	611723	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	473201			26.77- 126.77	77.36
14.375	14.375 (1.000)	49	892530			95.50- 195.50	145.90
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2006513	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	308736			0.00- 65.52	15.39
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.343	21.343 (1.000)	117	1607236	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	882896			5.32- 105.32	54.93
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.481	15.481 (1.075)	65	847384	25.0000	25.678	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	417312			0.00- 99.95	49.25
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.771	18.771 (1.161)	98	1720868	25.0000	24.898	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	197220			0.00- 61.38	11.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1174360			18.65- 118.65	68.24
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	955710	25.0000	24.861	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1240664			77.65- 177.65	129.82
23.333	23.333 (1.093)	176	928938			46.91- 146.91	97.20
11 Propylene					CAS #: 115-07-1		
5.638	5.638 (0.391)	41	55059	2.00000	2.000	50.00- 150.00	100.00
5.638	5.638 (0.391)	42	41800			25.92- 125.92	75.92
5.638	5.638 (0.391)	39	42003			26.29- 126.29	76.29
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	196506	2.00000	2.004	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	64388			0.00- 84.29	32.77
16 Freon 114					CAS #: 76-14-2		
6.191	6.191 (0.430)	135	143963	2.00000	2.065	50.00- 150.00	100.00
6.191	6.191 (0.430)	137	47951			0.00- 82.55	33.31
18 Chloromethane					CAS #: 74-87-3		
6.495	6.495 (0.451)	50	66478	2.00000	2.000	50.00- 150.00	100.00
6.522	6.522 (0.453)	52	25502			0.00- 88.36	38.36
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.476)	62	81584	2.00000	2.034	50.00- 150.00	100.00
6.882	6.882 (0.478)	64	28755			0.00- 85.77	35.25
22 1,3-Butadiene					CAS #: 106-99-0		
6.910	6.910 (0.480)	54	54761	2.00000	2.125	50.00- 150.00	100.00
6.910	6.910 (0.480)	39	59315			62.75- 162.75	108.32
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.557)	94	67549	2.00000	2.008	50.00- 150.00	100.00
8.016	8.016 (0.557)	96	61778			41.59- 141.59	91.46
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	28925	2.00000	2.051	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	8422			0.00- 83.06	29.12
8.347	8.347 (0.580)	66	11614			0.00- 86.15	40.15
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	178522	2.00000	2.098	50.00- 150.00	100.00
8.928	8.928 (0.620)	103	116828			16.75- 116.75	65.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	19984	2.00000	2.000	50.00- 150.00	100.00
9.426	9.426 (0.654)	43	6027			0.00- 80.16	30.16
9.453	9.453 (0.656)	46	7749			0.00- 88.78	38.78
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	95953	2.00000	2.042	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	60629			10.88- 110.88	63.19
10.200	10.200 (0.708)	101	118187			73.37- 173.37	123.17
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	101636	2.00000	2.071	50.00- 150.00	100.00
10.310	10.310 (0.716)	96	59924			20.23- 120.23	58.96
10.310	10.310 (0.716)	98	36886			0.00- 86.02	36.29
45 Acetone					CAS #: 67-64-1		
10.476	10.476 (0.727)	58	28132	2.00000	2.000	50.00- 150.00	100.00
10.476	10.476 (0.727)	43	77574			225.75- 325.75	275.75
46 2-Propanol					CAS #: 67-63-0		
10.670	10.670 (0.741)	45	85029	2.00000	2.000	50.00- 150.00	100.00
10.670	10.670 (0.741)	43	26641			0.00- 81.33	31.33
10.670	10.670 (0.741)	59	2836			0.00- 53.34	3.34
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.754)	76	190783	2.00000	2.068	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.140	11.140 (0.773)	76	23388	2.00000	2.000	50.00- 150.00	100.00
11.140	11.140 (0.773)	41	70379			250.92- 350.92	300.92
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.795)	49	73867	2.00000	2.003	50.00- 150.00	100.00
11.444	11.444 (0.795)	84	53508			21.22- 121.22	72.44
11.444	11.444 (0.795)	51	22507			0.00- 81.53	30.47
60 MTBE					CAS #: 1634-04-4		
11.803	11.803 (0.820)	73	124045	2.00000	1.987	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	32126			0.00- 73.58	25.90
11.831	11.831 (0.821)	41	37992			0.00- 79.81	30.63
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.914	11.914 (0.827)	96	61567	2.00000	1.984	50.00- 150.00	100.00
11.914	11.914 (0.827)	61	95052			98.71- 198.71	154.39
11.914	11.914 (0.827)	98	41669			8.80- 108.80	67.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	91312	2.00000	2.094	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	60919			21.51- 121.51	66.72
12.301	12.301 (0.854)	86	13027			0.00- 65.23	14.27
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	10974	2.00000	2.000	50.00- 150.00	100.00
12.771	12.771 (0.887)	43	135828			1187.73-1287.73	1237.73
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.799	12.799 (0.889)	63	113478	2.00000	2.113	50.00- 150.00	100.00
12.827	12.827 (0.891)	65	36220			0.00- 83.01	31.92
75 2-Butanone					CAS #: 78-93-3		
13.877	13.877 (0.964)	72	18267	2.00000	1.979	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	102063			477.59- 577.59	558.73
13.877	13.877 (0.964)	57	7363			0.00- 89.35	40.31
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.905	13.905 (0.965)	61	77692	2.00000	2.096	50.00- 150.00	100.00
13.905	13.905 (0.965)	96	56850			31.69- 131.69	73.17
13.932	13.932 (0.967)	98	39327			0.00- 99.25	50.62
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.375 (0.998)	42	54990	2.00000	2.089	50.00- 150.00	100.00
14.375	14.375 (0.998)	71	21394			0.00- 86.97	38.91
14.375	14.375 (0.998)	72	20571			0.00- 85.53	37.41
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	121465	2.00000	2.175	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	77359			13.11- 113.11	63.69
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.817 (1.029)	97	121912	2.00000	2.152	50.00- 150.00	100.00
14.817	14.817 (1.029)	99	77448			14.79- 114.79	63.53
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	58952	2.00000	2.060	50.00- 150.00	100.00
14.817	14.817 (1.029)	56	78258			81.17- 181.17	132.75
14.845	14.845 (1.031)	41	49098			48.02- 148.02	83.28
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	111881	2.00000	2.177	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	115224			56.57- 156.57	102.99
91 Benzene					CAS #: 71-43-2		
15.509	15.509 (0.959)	78	146321	2.00000	2.051	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.509	15.509 (0.959)	77	32260			0.00- 71.74	22.05
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.398 (1.069)	57	215514	2.00000	2.142	50.00- 150.00	100.00
15.398	15.398 (1.069)	56	76082			0.00- 85.49	35.30
15.398	15.398 (1.069)	41	64009			0.00- 82.22	29.70
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	81570	2.00000	2.063	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	27245			0.00- 84.27	33.40
94 Heptane					CAS #: 142-82-5		
15.702	15.702 (0.971)	71	40924	2.00000	2.157	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	88731			173.66- 273.66	216.82
15.730	15.730 (0.973)	57	45995			67.41- 167.41	112.39
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	66909	2.00000	2.126	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	64888			48.03- 148.03	96.98
16.642	16.642 (1.029)	97	42720			15.13- 115.13	63.85
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	54280	2.00000	2.080	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	41230			25.56- 125.56	75.96
17.112	17.112 (1.058)	41	37018			29.36- 129.36	68.20
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	28811	2.00000	2.000	50.00- 150.00	100.00
17.250	17.250 (1.067)	58	21286			23.88- 123.88	73.88
17.250	17.250 (1.067)	57	7846			0.00- 77.23	27.23
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	111994	2.00000	2.134	50.00- 150.00	100.00
17.555	17.555 (1.085)	85	74286			15.66- 115.66	66.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	69716	2.00000	2.112	50.00- 150.00	100.00
18.329	18.329 (1.133)	77	24661			0.00- 83.49	35.37
18.329	18.329 (1.133)	39	42103			12.40- 112.40	60.39
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	35532	2.00000	2.233	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	97570			236.96- 336.96	274.60
18.522	18.522 (1.145)	85	14552			0.00- 92.50	40.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	155602	2.00000	2.089	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	102747			14.17- 114.17	66.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.297	19.297 (0.904)	75	76335	2.00000	2.112	50.00- 150.00	100.00
19.297	19.297 (0.904)	77	26580			0.00- 84.54	34.82
19.297	19.297 (0.904)	39	42907			12.48- 112.48	56.21
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	60280	2.00000	2.133	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	38629			13.27- 113.27	64.08
19.656	19.656 (0.921)	83	51953			36.29- 136.29	86.19
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	85338	2.00000	2.120	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	59944			21.90- 121.90	70.24
19.822	19.822 (0.929)	131	59586			19.44- 119.44	69.82
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	46496	2.00000	2.000	50.00- 150.00	100.00
19.960	19.960 (0.935)	43	88457			140.25- 240.25	190.25
19.960	19.960 (0.935)	100	8137			0.00- 67.50	17.50
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	109223	2.00000	2.205	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	86550			28.50- 128.50	79.24
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	98952	2.00000	2.212	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	92195			46.61- 146.61	93.17
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	141408	2.00000	2.115	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	45440			0.00- 83.74	32.13
21.398	21.398 (1.003)	77	99139			36.14- 136.14	70.11
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	69955	2.00000	2.172	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	212527			264.29- 364.29	303.81
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	83417	2.00000	2.084	50.00- 150.00	100.00
21.674	21.674 (1.016)	91	163670			143.19- 243.19	196.21
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	74387	2.00000	2.144	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	161137			162.29- 262.29	216.62
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	109628	2.00000	2.272	50.00- 150.00	100.00
22.421	22.421	(1.051)	78	62288			10.04- 110.04	56.82
133 Bromoform						CAS #: 75-25-2		
22.836	22.836	(1.070)	173	97647	2.00000	2.183	50.00- 150.00	100.00
22.836	22.836	(1.070)	171	51493			1.94- 101.94	52.73
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	195952	2.00000	2.167	50.00- 150.00	100.00
22.974	22.974	(1.076)	120	53445			0.00- 78.52	27.27
22.946	22.946	(1.075)	51	22911			0.00- 62.18	11.69
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	132378	2.00000	2.124	50.00- 150.00	100.00
23.527	23.527	(1.102)	85	87270			15.47- 115.47	65.92
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	266209	2.00000	2.136	50.00- 150.00	100.00
23.637	23.637	(1.108)	120	60173			0.00- 73.35	22.60
23.637	23.637	(1.108)	105	11173			0.00- 54.49	4.20
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	219557	2.00000	2.168	50.00- 150.00	100.00
23.831	23.831	(1.117)	120	69116			0.00- 81.78	31.48
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	207321	2.00000	2.132	50.00- 150.00	100.00
23.914	23.914	(1.120)	120	98647			0.00- 98.93	47.58
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	171652	2.00000	2.236	50.00- 150.00	100.00
24.550	24.550	(1.150)	120	81863			0.00- 99.04	47.69
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.131	25.131	(1.177)	146	136628	2.00000	2.129	50.00- 150.00	100.00
25.131	25.131	(1.177)	148	88189			15.44- 115.44	64.55
25.131	25.131	(1.177)	111	54874			0.00- 90.41	40.16
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	141744	2.00000	2.069	50.00- 150.00	100.00
25.269	25.269	(1.184)	148	91243			13.67- 113.67	64.37
25.269	25.269	(1.184)	111	51928			0.00- 87.10	36.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	161676	2.00000	2.206	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	33956			0.00- 72.02	21.00
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	131381	2.00000	2.080	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	85098			13.48- 113.48	64.77
25.905	25.905 (1.214)	111	51832			0.00- 89.53	39.45
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	65598	2.00000	2.000	50.00- 150.00	100.00
28.808	28.808 (1.350)	182	63637			47.01- 147.01	97.01
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	65479	2.00000	2.000	50.00- 150.00	100.00
29.001	29.001 (1.359)	223	41018			12.64- 112.64	62.64
167 Naphthalene					CAS #: 91-20-3		
29.361	29.361 (1.376)	128	119215	2.00000	2.000	50.00- 150.00	100.00
29.361	29.361 (1.376)	127	16389			0.00- 63.75	13.75
29 Isopentane					CAS #: 78-78-4		
8.347	8.347 (0.580)	43	84271	2.00000	2.000	50.00- 150.00	100.00
8.347	8.347 (0.580)	57	54396			14.55- 114.55	64.55
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.468)	58	13585	2.00000	2.000	50.00- 150.00	100.00
6.744	6.744 (0.468)	43	112427			777.58- 877.58	827.58
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.891	16.891 (1.173)	83	75102	2.00000	2.095	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	34610			0.00- 96.26	46.08
16.891	16.891 (1.173)	55	68355			38.28- 138.28	91.02

Data File: /chem/msd7.i/7-18oct.b/7101804.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101804.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	611723	-10.51
97 1,4-Difluorobenze	2204815	1322889	3086741	2006513	-8.99
126 Chlorobenzene-d5	1812979	1087787	2538171	1607236	-11.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

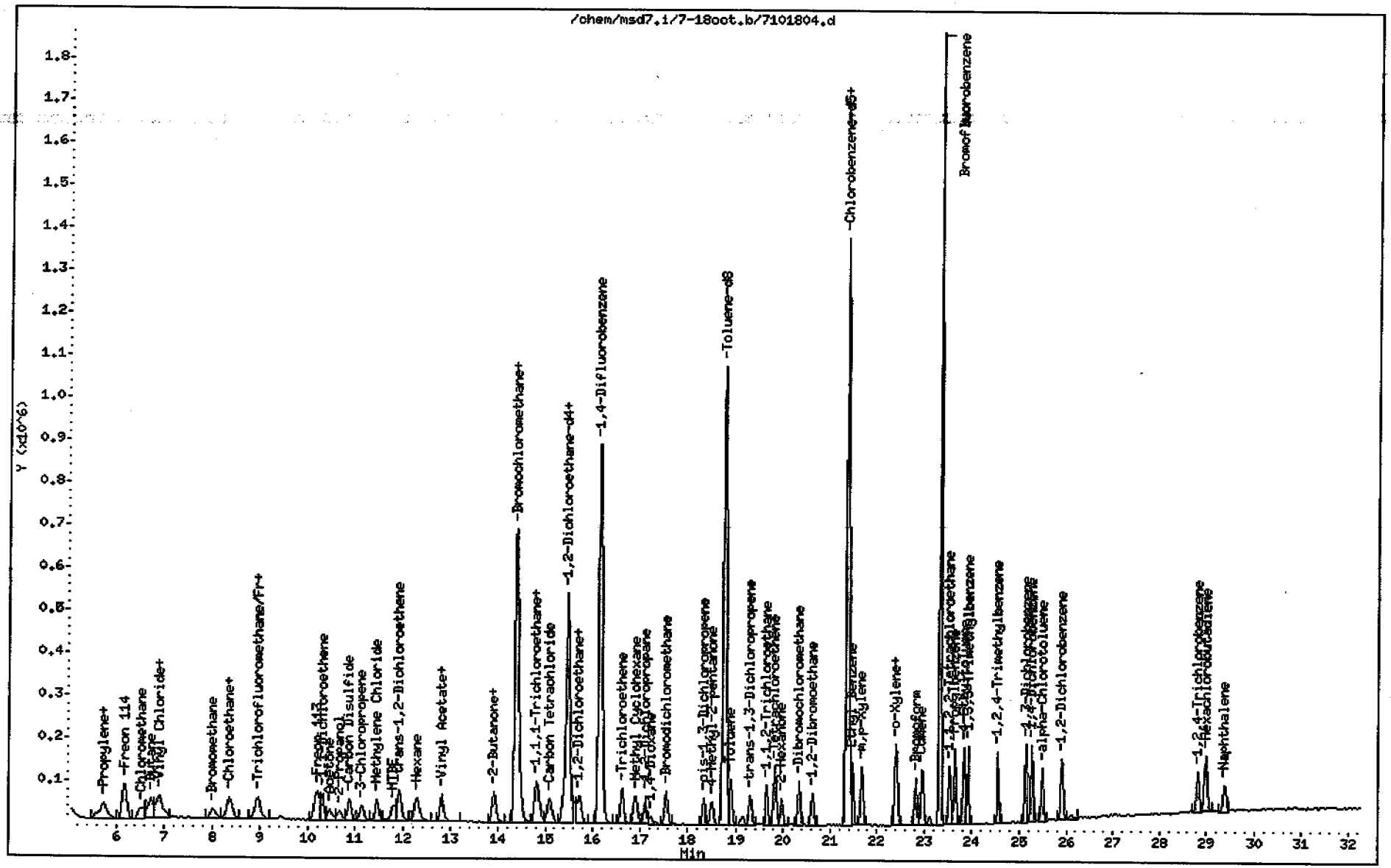
Data File: /chem/msd7.i/7-18oct.b/7101804.d
Date : 18-OCT-2007 14:09
Client ID: Level 3
Sample Info: 2mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

0358



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103003.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 30-OCT-2007 09:51
Operator : cb Inst ID: msd7.i
Smp Info : 8mL #1487-400
Misc Info : 200ppbv --> 8ppbv 1200ppbv --> 48ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 09:51 Cal File: 7103003.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp1c.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.388	14.388 (1.000)	130	457095	25.0000		50.00- 150.00		100.00
14.388	14.388 (1.000)	128	356706			26.81- 126.81		78.04
14.388	14.388 (1.000)	49	651489			112.06- 212.06		142.53
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1520028	25.0000		50.00- 150.00		100.00
16.158	16.158 (1.000)	88	231032			0.00- 65.39		15.20
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1109895	25.0000		50.00- 150.00		100.00
21.356	21.356 (1.000)	82	594855			4.45- 104.45		53.60
26 Methanol						CAS #: 67-56-1		
7.560	7.560 (0.525)	31	434609	48.0000	55.679	50.00- 150.00		100.00
7.560	7.560 (0.525)	32	984446			96.19- 196.19		226.51

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103003.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv --> 8ppbv 1200ppbv --> 48ppbv MeOH

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	457095	-5.99
97 1,4-Difluorobenze	1616415	969849	2262981	1520028	-5.96
126 Chlorobenzene-d5	1130394	678236	1582552	1109895	-1.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.39	-0.19
97 1,4-Difluorobenze	16.19	15.86	16.52	16.16	-0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

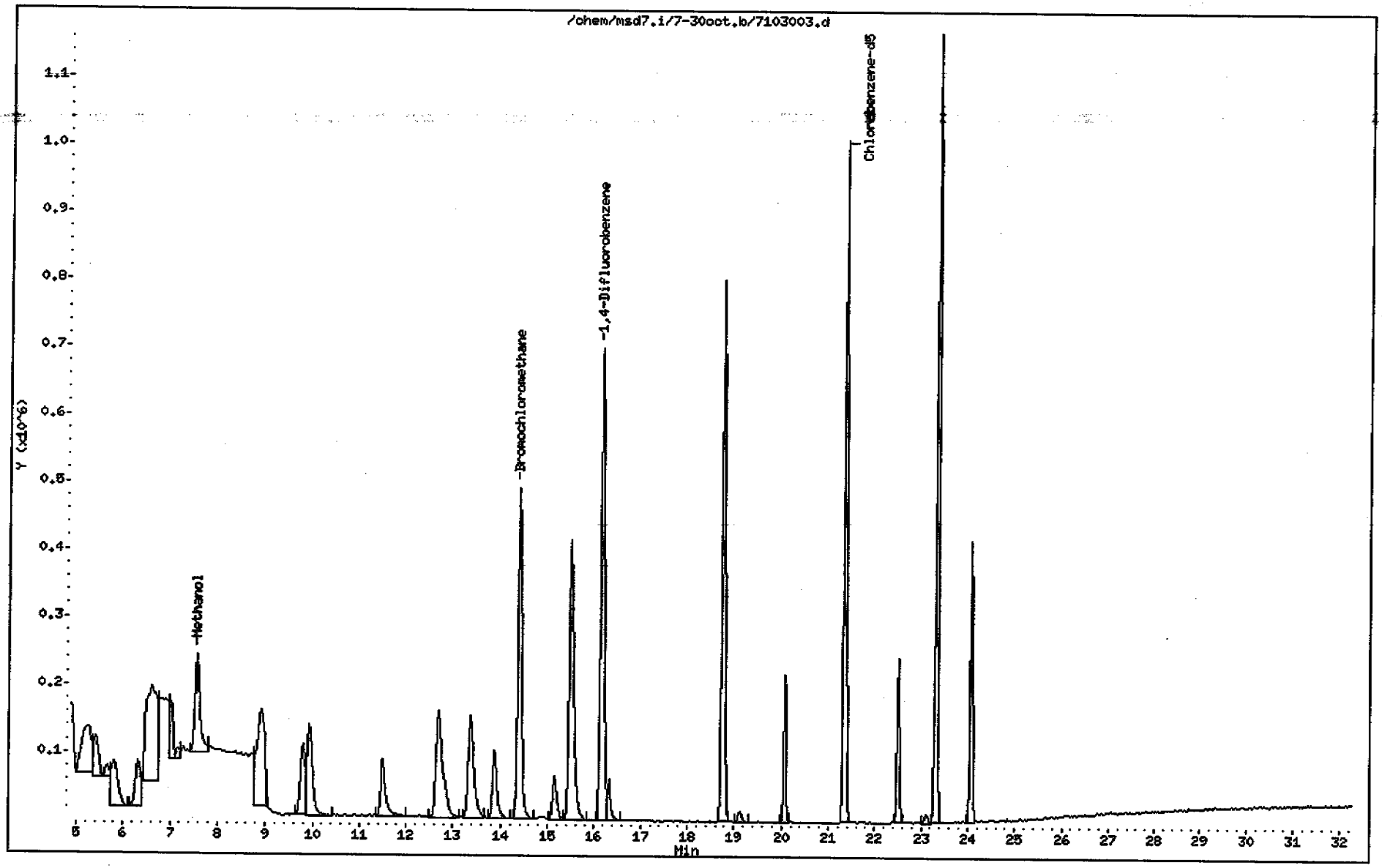
Data File: /chem/msd7.i/7-30oct.b/7103003.d
Date : 30-OCT-2007 09:51
Client ID: Level 4
Sample Info: 8mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0361



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101805.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 18-OCT-2007 14:47
Operator : cb
Inst ID: msd7.i
Smp Info : 25mL #1576-50
Misc Info : 200ppbv --> 25ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 14:47
Cal File: 7101805.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5	
14.403	14.403 (1.000)	130	648629	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	493340			26.59- 126.59	76.06
14.403	14.403 (1.000)	49	1078175			100.68- 200.68	166.22
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2091071	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	329502			0.00- 65.58	15.76
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.343	21.343 (1.000)	117	1761271	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	970978			5.27- 105.27	55.13
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.481	15.481 (1.075)	65	874142	25.0000	24.986	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	456837			0.53- 100.53	52.26
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.771	18.771 (1.161)	98	1876890	25.0000	25.785	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	216509			0.00- 61.42	11.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1297632			18.77- 118.77	69.14
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1070391	25.0000	25.306	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1338336			76.99- 176.99	125.03
23.333	23.333 (1.093)	176	1032203			46.79- 146.79	96.43
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	672994	25.0000	23.988	50.00- 150.00	100.00
5.610	5.610 (0.390)	42	475290			23.27- 123.27	70.62
5.610	5.610 (0.390)	39	505709			25.72- 125.72	75.14
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	2552602	25.0000	24.701	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	837020			0.00- 83.79	32.79
16 Freon 114					CAS #: 76-14-2		
6.163	6.163 (0.428)	135	1820434	25.0000	24.747	50.00- 150.00	100.00
6.191	6.191 (0.430)	137	576965			0.00- 82.27	31.69
18 Chloromethane					CAS #: 74-87-3		
6.467	6.467 (0.449)	50	827148	25.0000	24.210	50.00- 150.00	100.00
6.495	6.495 (0.451)	52	276375			0.00- 85.89	33.41
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.476)	62	1056924	25.0000	24.901	50.00- 150.00	100.00
6.854	6.854 (0.476)	64	331879			0.00- 84.32	31.40
22 1,3-Butadiene					CAS #: 106-99-0		
6.910	6.910 (0.480)	54	763518	25.0000	26.889	50.00- 150.00	100.00
6.910	6.910 (0.480)	39	775774			59.04- 159.04	101.61
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.557)	94	898127	25.0000	25.120	50.00- 150.00	100.00
8.016	8.016 (0.557)	96	847084			42.50- 142.50	94.32
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	459746	25.0000	28.558	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	124278			0.00- 81.05	27.03
8.347	8.347 (0.580)	66	146980			0.00- 84.75	31.97
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	2398500	25.0000	26.034	50.00- 150.00	100.00
8.956	8.956 (0.622)	103	1563188			16.23- 116.23	65.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	302916	25.0000	26.675	50.00- 150.00	100.00
9.453	9.453 (0.656)	43	64833			0.00- 75.78	21.40
9.453	9.453 (0.656)	46	115857			0.00- 88.51	38.25
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	1351088	25.0000	26.376	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	864179			11.90- 111.90	63.96
10.200	10.200 (0.708)	101	1679257			73.68- 173.68	124.29
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	1425325	25.0000	26.543	50.00- 150.00	100.00
10.338	10.338 (0.718)	96	884308			17.50- 117.50	62.04
10.338	10.338 (0.718)	98	559311			0.00- 87.09	39.24
45 Acetone					CAS #: 67-64-1		
10.476	10.476 (0.727)	58	427023	25.0000	26.693	50.00- 150.00	100.00
10.476	10.476 (0.727)	43	1298978			239.97- 339.97	304.19
46 2-Propanol					CAS #: 67-63-0		
10.670	10.670 (0.741)	45	1487551	25.0000	28.448	50.00- 150.00	100.00
10.670	10.670 (0.741)	43	360829			0.00- 77.79	24.26
10.670	10.670 (0.741)	59	57359			0.00- 53.60	3.86
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	2700196	25.0000	26.675	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.168	11.168 (0.775)	76	434925	25.0000	29.193	50.00- 150.00	100.00
11.168	11.168 (0.775)	41	1150405			232.71- 332.71	264.51
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	1008912	25.0000	25.532	50.00- 150.00	100.00
11.472	11.472 (0.796)	84	739684			21.92- 121.92	73.32
11.472	11.472 (0.796)	51	306196			0.00- 81.14	30.35
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	1771052	25.0000	26.144	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	420256			0.00- 73.63	23.73
11.831	11.831 (0.821)	41	443279			0.00- 78.21	25.03
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	998196	25.0000	28.326	50.00- 150.00	100.00
11.942	11.942 (0.829)	61	1447625			97.48- 197.48	145.02
11.942	11.942 (0.829)	98	642993			10.67- 110.67	64.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	1372419	25.0000	27.942	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	911424			19.81- 119.81	66.41
12.301	12.301 (0.854)	86	203564			0.00- 65.10	14.83
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	204632	25.0000	29.226	50.00- 150.00	100.00
12.799	12.799 (0.889)	43	2462047			1170.44-1270.44	1203.16
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.827	12.827 (0.891)	63	1728636	25.0000	28.337	50.00- 150.00	100.00
12.827	12.827 (0.891)	65	537140			0.00- 82.37	31.07
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	371338	25.0000	32.359	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	1736763			457.63- 557.63	467.70
13.905	13.905 (0.965)	57	128669			0.00- 87.78	34.65
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.933	13.933 (0.967)	61	1209222	25.0000	28.569	50.00- 150.00	100.00
13.933	13.933 (0.967)	96	897782			29.21- 129.21	74.24
13.933	13.933 (0.967)	98	571260			0.00- 98.58	47.24
80 Tetrahydrofuran					CAS #: 109-99-9		
14.403	14.403 (1.000)	42	962709	25.0000	30.617	50.00- 150.00	100.00
14.403	14.403 (1.000)	71	343205			0.00- 86.53	35.65
14.403	14.403 (1.000)	72	380604			0.00- 86.87	39.53
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	1763467	25.0000	28.425	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	1152392			13.67- 113.67	65.35
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	1771233	25.0000	27.820	50.00- 150.00	100.00
14.845	14.845 (1.031)	99	1152307			14.88- 114.88	65.06
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	1002003	25.0000	29.830	50.00- 150.00	100.00
14.845	14.845 (1.031)	56	1263499			79.48- 179.48	126.10
14.845	14.845 (1.031)	41	737802			39.89- 139.89	73.63
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	1724198	25.0000	29.064	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	1781371			55.49- 155.49	103.32
91 Benzene					CAS #: 71-43-2		
15.509	15.509 (0.959)	78	2269732	25.0000	28.929	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.509	15.509 (0.959)	77	498689			0.00- 71.80	21.97
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.426	15.426 (1.071)	57	3457104	25.0000	29.494	50.00- 150.00	100.00
15.426	15.426 (1.071)	56	1170008			0.00- 84.94	33.84
15.426	15.426 (1.071)	41	977669			0.00- 80.91	28.28
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	1227957	25.0000	28.008	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	393216			0.00- 83.52	32.02
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	703132	25.0000	31.170	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	1425110			166.67- 266.67	202.68
15.730	15.730 (0.973)	57	737513			63.24- 163.24	104.89
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	1016424	25.0000	28.695	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	1015319			48.65- 148.65	99.89
16.642	16.642 (1.029)	97	658135			15.00- 115.00	64.75
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	860882	25.0000	29.073	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	627970			24.69- 124.69	72.94
17.112	17.112 (1.058)	41	556404			24.45- 124.45	64.63
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	544742	25.0000	29.604	50.00- 150.00	100.00
17.250	17.250 (1.067)	58	388755			22.62- 122.62	71.36
17.250	17.250 (1.067)	57	130892			0.00- 75.63	24.03
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	1825381	25.0000	30.018	50.00- 150.00	100.00
17.555	17.555 (1.085)	85	1169739			15.13- 115.13	64.08
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	1259763	25.0000	31.709	50.00- 150.00	100.00
18.329	18.329 (1.133)	77	405185			0.00- 83.05	32.16
18.329	18.329 (1.133)	39	734636			11.04- 111.04	58.32
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	699008	25.0000	34.306	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	1880425			230.98- 330.98	269.01
18.522	18.522 (1.145)	85	276238			0.00- 91.51	39.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	2517803	25.0000	29.511	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	1570697			13.57- 113.57	62.38
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	1365604	25.0000	30.614	50.00- 150.00	100.00
19.324	19.324 (0.905)	77	431910			0.00- 83.57	31.63
19.297	19.297 (0.904)	39	741173			9.74- 109.74	54.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	995281	25.0000	29.343	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	611788			12.67- 112.67	61.47
19.656	19.656 (0.921)	83	830549			35.35- 135.35	83.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	1326702	25.0000	28.172	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	951582			21.84- 121.84	71.73
19.822	19.822 (0.929)	131	918961			19.38- 119.38	69.27
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	976339	25.0000	30.260	50.00- 150.00	100.00
19.960	19.960 (0.935)	43	1898544			142.35- 242.35	194.46
19.960	19.960 (0.935)	100	167728			0.00- 67.34	17.18
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	1089826	25.0000	30.784	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	1451142			27.93- 127.93	76.79
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	1691649	25.0000	30.624	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	1595981			45.86- 145.86	94.34
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	2151202	25.0000	27.748	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	697219			0.00- 83.29	32.41
21.398	21.398 (1.003)	77	1306142			27.66- 127.66	60.72
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	1127919	25.0000	29.242	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	3464186			261.90- 361.90	307.13
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	1393326	25.0000	29.141	50.00- 150.00	100.00
21.674	21.674 (1.016)	91	2764534			144.93- 244.93	198.41
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	1236660	25.0000	29.557	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	2558031			160.47- 260.47	206.85
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	2077088	25.0000	34.374	50.00- 150.00	100.00
22.421	22.421 (1.051)	78	1061823			7.81- 107.81	51.12
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.070)	173	1688739	25.0000	30.596	50.00- 150.00	100.00
22.836	22.836 (1.070)	171	867217			1.74- 101.74	51.35
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	3202644	25.0000	30.112	50.00- 150.00	100.00
22.974	22.974 (1.076)	120	877707			0.00- 78.24	27.41
22.946	22.946 (1.075)	51	336852			0.00- 61.76	10.52
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	1987656	25.0000	27.596	50.00- 150.00	100.00
23.527	23.527 (1.102)	85	1274611			15.02- 115.02	64.13
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	4176023	25.0000	28.463	50.00- 150.00	100.00
23.637	23.637 (1.108)	120	934951			0.00- 73.03	22.39
23.637	23.637 (1.108)	105	154058			0.00- 54.22	3.69
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	3761987	25.0000	30.300	50.00- 150.00	100.00
23.831	23.831 (1.117)	120	1081840			0.00- 80.77	28.76
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	2748553	25.0000	25.521	50.00- 150.00	100.00
23.914	23.914 (1.120)	120	1560080			1.54- 101.54	56.76
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	2622270	25.0000	28.800	50.00- 150.00	100.00
24.550	24.550 (1.150)	120	1282211			0.00- 98.99	48.90
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.131	25.131 (1.177)	146	1977163	25.0000	26.992	50.00- 150.00	100.00
25.131	25.131 (1.177)	148	1259144			14.85- 114.85	63.68
25.131	25.131 (1.177)	111	766458			0.00- 89.86	38.77
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	2033388	25.0000	26.349	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	1297512			13.71- 113.71	63.81
25.269	25.269 (1.184)	111	752714			0.00- 87.07	37.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	2693301	25.0000	30.105	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	562707			0.00- 71.64	20.89
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	1756987	25.0000	25.257	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	1110267			13.39- 113.39	63.19
25.905	25.905 (1.214)	111	707034			0.00- 89.77	40.24
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	489632	25.0000	17.636	50.00- 150.00	100.00
28.808	28.808 (1.350)	182	471701			46.67- 146.67	96.34
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	471653	25.0000	17.231	50.00- 150.00	100.00
29.001	29.001 (1.359)	223	296659			12.77- 112.77	62.90
167 Naphthalene					CAS #: 91-20-3		
29.361	29.361 (1.376)	128	811801	25.0000	16.602	50.00- 150.00	100.00
29.361	29.361 (1.376)	127	99474			0.00- 63.00	12.25
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	1092752	25.0000	24.726	50.00- 150.00	100.00
8.375	8.375 (0.581)	57	731967			15.77- 115.77	66.98
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.468)	58	177191	25.0000	24.799	50.00- 150.00	100.00
6.744	6.744 (0.468)	43	1417940			763.91- 863.91	800.23
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	1222177	25.0000	29.354	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	569027			0.00- 96.36	46.56
16.919	16.919 (1.175)	55	1091840			38.63- 138.63	89.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101805.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 25ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	648629	-5.11
97 1,4-Difluorobenze	2204815	1322889	3086741	2091071	-5.16
126 Chlorobenzene-d5	1812979	1087787	2538171	1761271	-2.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

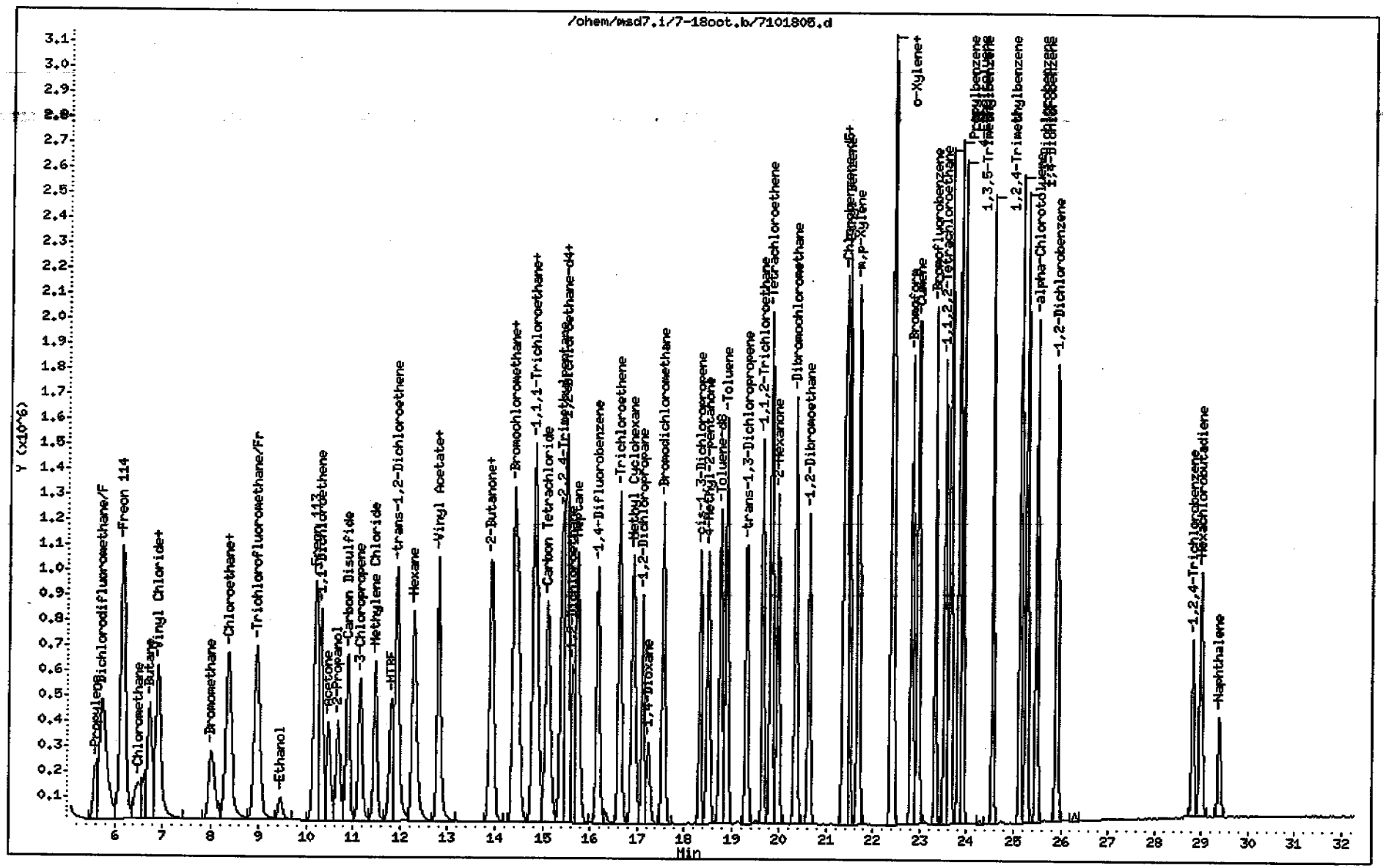
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /ohem/msd7.i/7-18oct.b/7101805.d
Date : 18-OCT-2007 14:47
Client ID: Level 4
Sample Info: 25mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05nov.b/7110506.d
Lab Smp Id: ical level 5
Inj Date : 05-NOV-2007 13:30
Operator : ea Inst ID: msd7.i
Smp Info : 50ml #1443-361
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-05nov.b/t14q018d.m
Meth Date : 05-Nov-2007 15:03 ealcan Quant Type: ISTD
Cal Date : 05-NOV-2007 13:30 Cal File: 7110506.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp14d.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403	(1.000)	130	700965	25.0000		80.00- 120.00	100.00
14.403	14.403	(1.000)	128	538841			26.87- 126.87	76.87
14.403	14.403	(1.000)	49	998077			92.39- 192.39	142.39
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172	(1.000)	114	2091522	25.0000		80.00- 120.00	100.00
16.172	16.172	(1.000)	88	323962			0.00- 65.49	15.49
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343	(1.000)	117	1523313	25.0000		80.00- 120.00	100.00
21.343	21.343	(1.000)	82	832008			4.70- 104.70	54.62
66 1-Hexene						CAS #: 592-41-6		
12.163	12.163	(0.844)	55	1380210	50.0000	52.068	80.00- 120.00	100.00
12.163	12.163	(0.844)	41	2081439			102.84- 202.84	150.81
12.163	12.163	(0.844)	84	517732			0.00- 86.65	37.51
37 Pentane						CAS #: 109-66-0		
9.094	9.094	(0.631)	43	3733903	50.0000	50.481	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
37 Pentane (continued)							
9.094	9.094 (0.631)	57	559106			0.00- 65.22	14.97
9.094	9.094 (0.631)	72	347169			0.00- 59.09	9.30
35 1-Pentene					CAS #: 109-67-1		
8.956	8.956 (0.622)	55	2274566	50.0000	50.551	80.00- 120.00	100.00
8.956	8.956 (0.622)	42	5125590			175.46- 275.46	225.34
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
124 Nonane					CAS #: 111-84-2		
21.481	21.481 (1.006)	43	3449751	50.0000	54.058	80.00- 120.00	100.00
21.481	21.481 (1.006)	57	3099005			41.17- 141.17	89.83
21.481	21.481 (1.006)	85	1079161			0.00- 81.55	31.28
62 Acrylonitrile					CAS #: 107-13-1		
12.025	12.025 (0.835)	52	1262711	50.0000	52.314	80.00- 120.00	100.00
12.025	12.025 (0.835)	53	1506941			69.26- 169.26	119.34
105 Dibromomethane					CAS #: 74-95-3		
17.361	17.361 (0.813)	174	1889769	50.0000	55.161	80.00- 120.00	100.00
17.361	17.361 (0.813)	93	1958925			53.48- 153.48	103.66
17.361	17.361 (0.813)	95	1627313			36.52- 136.52	86.11
44 Acrolein					CAS #: 107-02-8		
10.145	10.145 (0.704)	55	554064	50.0000	51.757	80.00- 120.00	100.00
10.145	10.145 (0.704)	56	795129			90.98- 190.98	143.51
63 2-Pentanone					CAS #: 107-87-9		
16.919	16.919 (0.793)	43	4636913	50.0000	56.974	80.00- 120.00	100.00
16.919	16.919 (0.793)	58	363219			0.00- 57.79	7.83
16.919	16.919 (0.793)	86	757389			0.00- 65.81	16.33
52 Acetonitrile					CAS #: 75-05-8		
11.223	11.223 (0.779)	40	1290400	50.0000	54.113	80.00- 120.00	100.00
11.223	11.223 (0.779)	41	2065995			116.58- 216.58	160.11
11.223	11.223 (0.779)	38	421065			0.00- 80.94	32.63
50 Methyl Methacrylate					CAS #: 80-62-6		
17.112	17.112 (0.802)	41	2431806	50.0000	57.615	80.00- 120.00	100.00
17.112	17.112 (0.802)	69	1686960			22.16- 122.16	69.37
17.112	17.112 (0.802)	100	628571			0.00- 76.23	25.85
79 Methyl Acrylate					CAS #: 96-33-3		
14.015	14.015 (0.973)	55	3378666	50.0000	53.684	80.00- 120.00	100.00
14.015	14.015 (0.973)	85	550474			0.00- 66.55	16.29
14.015	14.015 (0.973)	58	328735			0.00- 59.80	9.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
48 Ethyl acrylate					CAS #: 140-88-5		
16.697	16.697 (0.782)	99	258141	50.0000	56.908	80.00- 120.00	100.00
16.697	16.697 (0.782)	45	350878			85.92- 185.92	135.92
16.697	16.697 (0.782)	55	3683824			1377.06-1477.06	1427.06
49 Iodomethane					CAS #: 74-88-4		
10.753	10.753 (0.747)	142	5775061	50.0000	54.948	80.00- 120.00	100.00
10.753	10.753 (0.747)	127	2157283			0.00- 87.23	37.36
21 Isobutane					CAS #: 75-28-5		
6.246	6.246 (0.434)	43	3189499	50.0000	50.783	80.00- 120.00	100.00
6.246	6.246 (0.434)	42	1107656			0.00- 89.47	34.73
6.246	6.246 (0.434)	58	78582			0.00- 51.94	2.46

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110506.d
Lab Smp Id: ical level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msd7.i/7-05nov.b/t14q018d.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 05-NOV-2007
Calibration Time: 13:30

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	700965	420579	981351	700965	0.00
97 1,4-Difluorobenze	2091522	1254913	2928131	2091522	0.00
126 Chlorobenzene-d5	1523313	913988	2132638	1523313	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

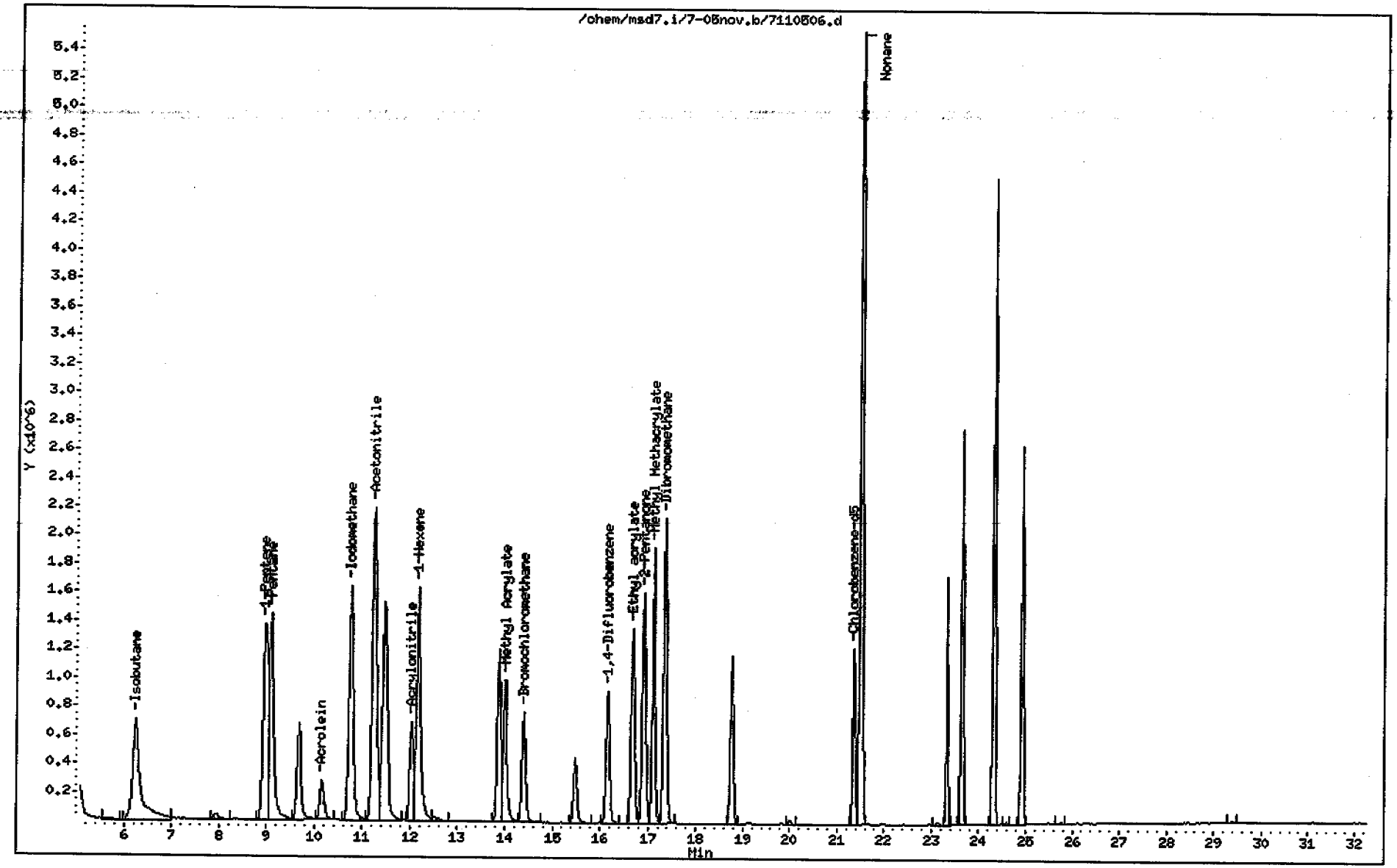
Data File: /chem/msd7.i/7-05nov.b/7110506.d
Date : 05-NOV-2007 13:30
Client ID:
Sample Info: 50ml #1443-361

Column phase: RTx-624

Instrument: msd7.i

Operator: ea
Column diameter: 0.53

0376



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103004.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 30-OCT-2007 10:29
Operator : cb Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 10:29 Cal File: 7103004.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp1c.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	486199	25.0000			80.00- 120.00	100.00
14.416	14.416 (1.000)	128	373087				26.74- 126.74	76.74
14.416	14.416 (1.000)	49	687796				91.46- 191.46	141.46
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1616415	25.0000			80.00- 120.00	100.00
16.158	16.158 (1.000)	88	244505				0.00- 65.13	15.13
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1130394	25.0000			80.00- 120.00	100.00
21.356	21.356 (1.000)	82	593319				4.45- 104.45	52.49
26 Methanol						CAS #: 67-56-1		
7.588	7.588 (0.526)	31	2404086	300.000	289.56		80.00- 120.00	100.00
7.588	7.588 (0.526)	32	1583298				15.86- 115.86	65.86

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103004.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	486199	0.00
97 1,4-Difluorobenze	1616415	969849	2262981	1616415	0.00
126 Chlorobenzene-d5	1130394	678236	1582552	1130394	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.19	15.86	16.52	16.19	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

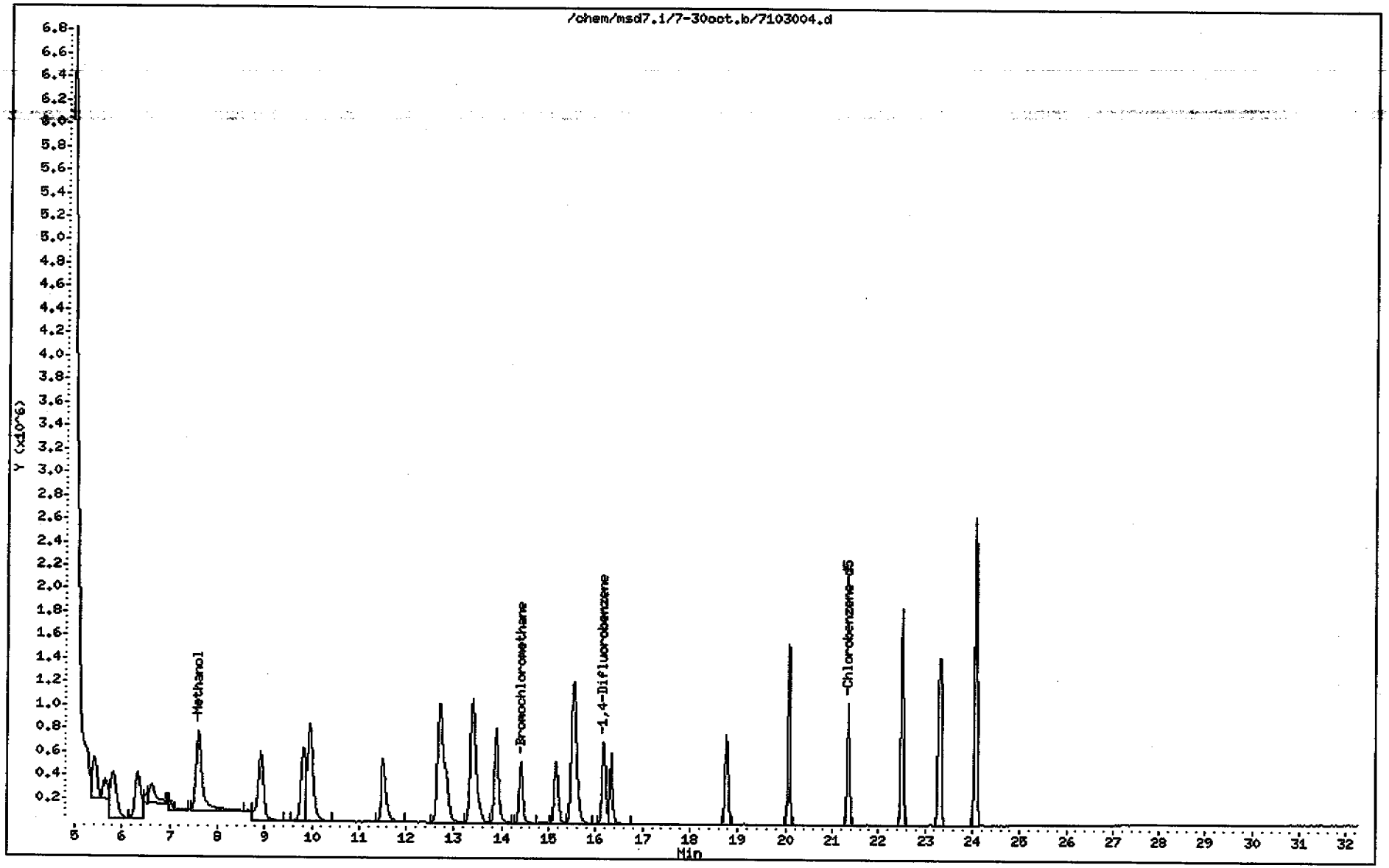
Data File: /chem/msd7.i/7-30oct.b/7103004.d
Date : 30-OCT-2007 10:29
Client ID: Level 5
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0379



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102206.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 22-OCT-2007 11:44
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-370
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 11:44
Cal File: 7102206.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	653745	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	501927			26.78- 126.78	76.78
14.402	14.402 (1.000)	49	962603			97.24- 197.24	147.24
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2055535	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	321836			0.00- 65.66	15.66
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1681036	25.0000		80.00- 120.00	100.00
21.342	21.342 (1.000)	82	930753			5.19- 105.19	55.37
55 Cyclopentene					CAS #: 142-29-0		
11.250	11.250 (0.781)	67	6338028	50.0000	52.035	80.00- 120.00	100.00
11.250	11.250 (0.781)	68	2569210			0.00- 90.48	40.54
11.250	11.250 (0.781)	53	1314450			0.00- 70.85	20.74
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.877	13.877 (0.964)	77	4020302	50.0000	52.711	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	1308053			0.00- 82.54	32.54
13.877	13.877 (0.964)	97	801913			0.00- 70.03	19.95
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	1484028	50.0000	53.552	80.00- 120.00	100.00
15.121	15.121 (0.935)	75	4019552			218.22- 318.22	270.85
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	4474167	50.0000	54.223	80.00- 120.00	100.00
19.988	19.988 (1.236)	41	3238032			22.37- 122.37	72.37
19.988	19.988 (1.236)	78	1429445			0.00- 81.77	31.95
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	3235607	50.0000	53.976	80.00- 120.00	100.00
21.536	21.536 (1.009)	117	2225982			18.93- 118.93	68.80
21.508	21.508 (1.008)	95	1265610			0.00- 89.37	39.12
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	3872849	50.0000	55.062	80.00- 120.00	100.00
23.610	23.610 (1.106)	158	3741648			46.61- 146.61	96.61
23.610	23.610 (1.106)	77	7718215			147.77- 247.77	199.29
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	1790961	50.0000	54.413	80.00- 120.00	100.00
23.665	23.665 (1.109)	75	5405655			251.83- 351.83	301.83
23.665	23.665 (1.109)	61	1399772			26.84- 126.84	78.16
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	2802997	50.0000	53.956	80.00- 120.00	100.00
23.886	23.886 (1.119)	91	8196683			242.43- 342.43	292.43
23.886	23.886 (1.119)	65	796656			0.00- 78.37	28.42
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	3061327	50.0000	55.234	80.00- 120.00	100.00
24.080	24.080 (1.128)	91	9049733			245.61- 345.61	295.61
24.052	24.052 (1.127)	63	1168807			0.00- 88.24	38.18
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	8782477	50.0000	53.478	80.00- 120.00	100.00
25.020	25.020 (1.172)	134	2420527			0.00- 77.89	27.56
25.020	25.020 (1.172)	91	2231273			0.00- 74.89	25.41
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	3521301	50.0000	54.043	80.00- 120.00	100.00
25.269	25.269 (1.184)	105	7581391			165.30- 265.30	215.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	983859			0.00- 78.76	27.94
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	2345394	50.0000	53.114	80.00- 120.00	100.00
25.683	25.683 (1.203)	91	9453400			353.06- 453.06	403.06
25.683	25.683 (1.203)	92	5362392			181.94- 281.94	228.64
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	7751126	50.0000	52.355	80.00- 120.00	100.00
24.467	24.467 (1.146)	134	1919419			0.00- 74.76	24.76
24.467	24.467 (1.146)	91	5566932			20.96- 120.96	71.82
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	10990002	50.0000	53.630	80.00- 120.00	100.00
24.826	24.826 (1.163)	134	2190111			0.00- 69.65	19.65
24.826	24.826 (1.163)	91	1806199			0.00- 65.99	16.43
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	2721900	50.0000	51.363	80.00- 120.00	100.00
27.287	27.287 (1.279)	75	2358984			36.67- 136.67	86.67
27.287	27.287 (1.279)	155	2114262			28.87- 128.87	77.68
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	2362276	50.0000	53.370	80.00- 120.00	100.00
24.605	24.605 (1.153)	117	2494933			54.36- 154.36	105.62
24.605	24.605 (1.153)	169	1140247			0.00- 97.70	48.27

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102206.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 11:44
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	653745	392247	915243	653745	0.00
97 1,4-Difluorobenze	2055535	1233321	2877749	2055535	0.00
126 Chlorobenzene-d5	1681036	1008622	2353450	1681036	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

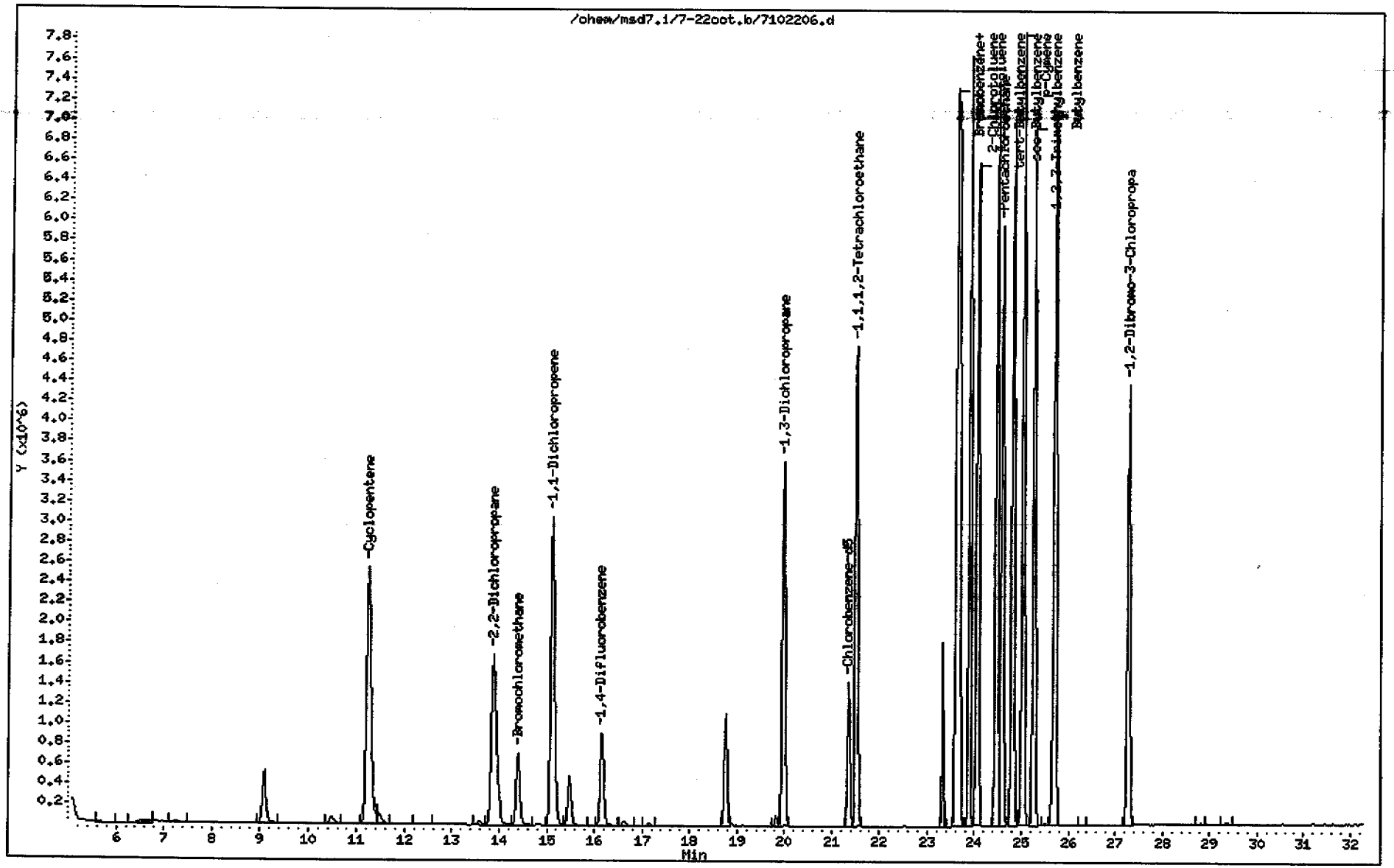
Data File: /chem/msd7.i/7-22oct.b/7102206.d
Date : 22-OCT-2007 11:44
Client ID: Level 5
Sample Info: 50mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0384



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101904.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 19-OCT-2007 11:00
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 11:00
Cal File: 7101904.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	694127	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	531772			26.61- 126.61	76.61
14.402	14.402 (1.000)	49	1021801			97.21- 197.21	147.21
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2223212	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	354725			0.00- 65.96	15.96
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.370	21.370 (1.000)	117	1779964	25.0000		80.00- 120.00	100.00
21.342	21.342 (1.000)	82	986509			5.24- 105.24	55.42
5 Freon 143a					CAS #: 420-46-2		
5.306	5.306 (0.368)	65	766302	50.0000	49.911	80.00- 120.00	100.00
5.223	5.223 (0.363)	69	6741914			0.00- 50.00	879.80
5.278	5.278 (0.366)	64	224377			0.00- 76.18	29.28
6 Freon142b					CAS #: 75-68-3		
6.356	6.356 (0.441)	65	3144007	50.0000	49.820	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)								
6.329	6.329	(0.439)	45	770144			0.00- 74.42	24.50
13 Freon 134a						CAS #: 811-97-2		
5.444	5.444	(0.378)	83	1490027	50.0000	49.641	80.00- 120.00	100.00
5.223	5.223	(0.363)	69	6741914			409.04- 509.04	452.47
5.444	5.444	(0.378)	63	197636			0.00- 63.70	13.26
15 Freon 152a						CAS #: 75-37-6		
5.665	5.665	(0.393)	65	1071725	50.0000	49.165	80.00- 120.00	100.00
5.665	5.665	(0.393)	51	1716739			110.12- 210.12	160.18
5.665	5.665	(0.393)	47	437796			0.00- 90.40	40.85
17 Freon 22						CAS #: 75-45-6		
5.803	5.803	(0.403)	51	3429656	50.0000	48.340	80.00- 120.00	100.00
5.803	5.803	(0.403)	67	407051			0.00- 61.77	11.87
5.831	5.831	(0.405)	85	45824			0.00- 51.67	1.34
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.928	8.928	(0.620)	67	3121227	50.0000	50.694	80.00- 120.00	100.00
8.928	8.928	(0.620)	69	981436			0.00- 81.12	31.44
8.928	8.928	(0.620)	35	88167			0.00- 53.83	2.82
40 Freon123a						CAS #: 354-23-4		
9.813	9.813	(0.681)	117	1871544	50.0000	54.425	80.00- 120.00	100.00
9.813	9.813	(0.681)	67	2736149			110.97- 210.97	146.20
41 Freon123						CAS #: 306-83-2		
9.978	9.978	(0.693)	83	3184755	50.0000	51.277	80.00- 120.00	100.00
9.978	9.978	(0.693)	133	627762			0.00- 69.52	19.71
9.978	9.978	(0.693)	85	2260913			22.16- 122.16	70.99
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.527	11.527	(0.800)	59	3711893	50.0000	51.792	80.00- 120.00	100.00
11.527	11.527	(0.800)	41	752755			0.00- 73.42	20.28
11.527	11.527	(0.800)	57	362771			0.00- 60.26	9.77
68 Isopropyl ether						CAS #: 108-20-3		
12.716	12.716	(0.883)	45	6578708	50.0000	52.939	80.00- 120.00	100.00
12.716	12.716	(0.883)	87	1520476			0.00- 73.31	23.11
12.716	12.716	(0.883)	59	520306			0.00- 58.30	7.91
71 1-Propanol						CAS #: 71-23-8		
12.854	12.854	(0.892)	42	425719	50.0000	57.194	80.00- 120.00	100.00
12.854	12.854	(0.892)	59	638506			95.91- 195.91	149.98
12.716	12.716	(0.883)	41	1236325			265.93- 365.93	290.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.379	13.379 (0.929)	59	5651281	50.0000	54.203	80.00- 120.00	100.00
13.379	13.379 (0.929)	87	2181708			0.00- 88.95	38.61
13.379	13.379 (0.929)	41	981804			0.00- 67.89	17.37
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	620455	50.0000	53.330	80.00- 120.00	100.00
13.877	13.877 (0.964)	61	597626			49.04- 149.04	96.32
13.877	13.877 (0.964)	43	4293069			622.55- 722.55	691.92
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	4149237	50.0000	54.724	80.00- 120.00	100.00
15.564	15.564 (1.081)	87	972129			0.00- 73.71	23.43
15.536	15.536 (1.079)	55	1097280			0.00- 78.56	26.45
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	2609217	50.0000	61.498	80.00- 120.00	100.00
22.504	22.504 (1.562)	43	4102315			108.53- 208.53	157.22
98 1-Butanol					CAS #: 71-36-3		
16.338	16.338 (1.010)	56	1222941	50.0000	62.304	80.00- 120.00	100.00
16.338	16.338 (1.010)	41	881157			21.86- 121.86	72.05
16.338	16.338 (1.010)	43	677934			9.15- 109.15	55.43
99 Isobutanol					CAS #: 78-83-1		
15.149	15.149 (1.052)	59	42901	50.0000	62.469	80.00- 120.00	100.00
15.149	15.149 (1.052)	41	1065866			2630.47-2730.47	2484.48
15.149	15.149 (1.052)	43	1475416			3703.83-3803.83	3439.12
119 Butyl Acetate					CAS #: 123-86-4		
20.070	20.070 (1.241)	56	1830296	50.0000	59.304	80.00- 120.00	100.00
20.070	20.070 (1.241)	73	585535			0.00- 81.99	31.99
20.070	20.070 (1.241)	43	4559849			199.13- 299.13	249.13
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.089)	55	1834532	50.0000	54.771	80.00- 120.00	100.00
23.278	23.278 (1.089)	98	769278			0.00- 90.06	41.93
23.278	23.278 (1.089)	42	1263933			16.60- 116.60	68.90
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.127)	57	4306488	50.0000	53.933	80.00- 120.00	100.00
24.080	24.080 (1.127)	85	3477655			30.75- 130.75	80.75
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101904.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	694127	0.00
97 1,4-Difluorobenze	2223212	1333927	3112497	2223212	0.00
126 Chlorobenzene-d5	1779964	1067978	2491950	1779964	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.37	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

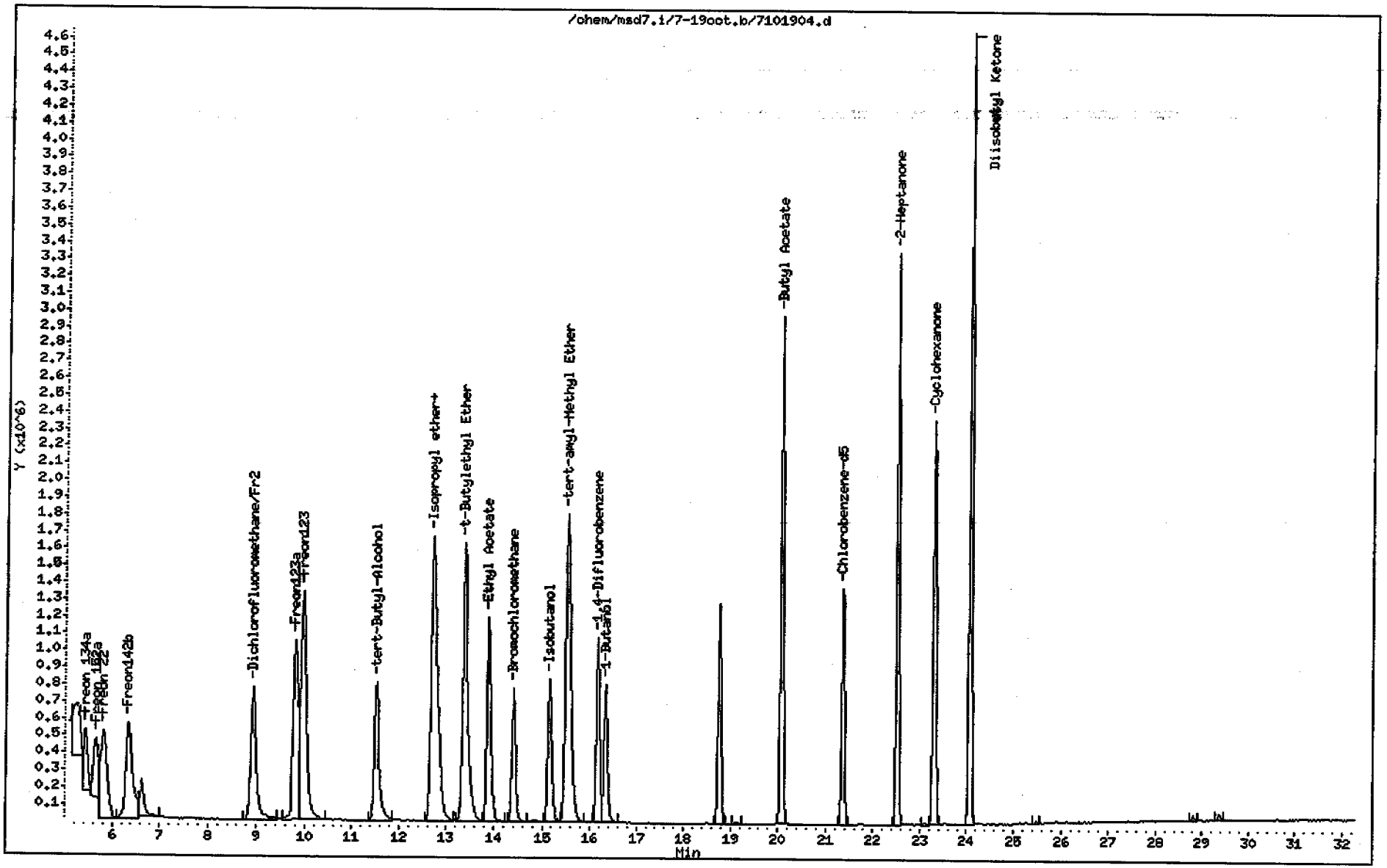
Data File: /chem/msd7.i/7-19oct.b/7101904.d
Date : 19-OCT-2007 11:00
Client ID: Level 5
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

0389



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101806.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 18-OCT-2007 15:26
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1576-50
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 15:26
Cal File: 7101806.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
**	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	683549	25.0000		80.00- 120.00		100.00
14.402	14.402 (1.000)	128	526020			26.95- 126.95		76.95
14.402	14.402 (1.000)	49	1309838			141.62- 241.62		191.62
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2204815	25.0000		80.00- 120.00		100.00
16.172	16.172 (1.000)	88	346032			0.00- 65.69		15.69
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.370	21.370 (1.000)	117	1812979	25.0000		80.00- 120.00		100.00
21.342	21.342 (1.000)	82	1018657			5.45- 105.45		56.19
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.508	15.508 (1.077)	65	902272	25.0000	24.576	80.00- 120.00		100.00
15.508	15.508 (1.077)	67	497167			1.44- 101.44		55.10
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1988860	25.0000	25.725	80.00- 120.00		100.00
18.771	18.771 (1.161)	70	232527			0.00- 61.47		11.69

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1398815			19.08- 119.08	70.33
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.092)	174	1084886	25.0000	24.933	80.00- 120.00	100.00
23.333	23.333 (1.092)	95	1375583			76.80- 176.80	126.80
23.333	23.333 (1.092)	176	1042148			46.06- 146.06	96.06
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	1415032	50.0000	48.553	80.00- 120.00	100.00
5.610	5.610 (0.390)	42	982874			22.00- 122.00	69.46
5.610	5.610 (0.390)	39	1047010			25.14- 125.14	73.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	5298030	50.0000	48.980	80.00- 120.00	100.00
5.748	5.748 (0.399)	87	1667645			0.00- 83.21	31.48
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	3652709	50.0000	47.806	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	1161951			0.00- 81.81	31.81
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	1693664	50.0000	47.987	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	575628			0.00- 85.25	33.99
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	2169718	50.0000	48.872	80.00- 120.00	100.00
6.882	6.882 (0.478)	64	690774			0.00- 83.70	31.84
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.482)	54	1604484	50.0000	52.666	80.00- 120.00	100.00
6.937	6.937 (0.482)	39	1626075			57.11- 157.11	101.35
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	1956954	50.0000	51.440	80.00- 120.00	100.00
8.043	8.043 (0.558)	96	1834965			43.77- 143.77	93.77
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	1036064	50.0000	57.866	80.00- 120.00	100.00
8.375	8.375 (0.581)	49	276958			0.00- 79.97	26.73
8.375	8.375 (0.581)	66	325306			0.00- 83.92	31.40
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	5127114	50.0000	52.077	80.00- 120.00	100.00
8.983	8.983 (0.624)	103	3298307			14.33- 114.33	64.33

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.453	9.453	(0.656)	45	692455	50.0000	54.981	80.00- 120.00	100.00
9.453	9.453	(0.656)	43	138038			0.00- 73.83	19.93
9.453	9.453	(0.656)	46	261445			0.00- 88.26	37.76
42 Freon 113						CAS #: 76-13-1		
10.227	10.227	(0.710)	151	2874533	50.0000	52.399	80.00- 120.00	100.00
10.227	10.227	(0.710)	153	1825117			13.49- 113.49	63.49
10.200	10.200	(0.708)	101	3540517			73.17- 173.17	123.17
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.338	10.338	(0.718)	61	3011437	50.0000	52.373	80.00- 120.00	100.00
10.338	10.338	(0.718)	96	1849526			11.42- 111.42	61.42
10.338	10.338	(0.718)	98	1195426			0.00- 89.70	39.70
45 Acetone						CAS #: 67-64-1		
10.504	10.504	(0.729)	58	914212	50.0000	52.741	80.00- 120.00	100.00
10.504	10.504	(0.729)	43	2796075			245.26- 345.26	305.85
46 2-Propanol						CAS #: 67-63-0		
10.697	10.697	(0.743)	45	3341125	50.0000	56.618	80.00- 120.00	100.00
10.697	10.697	(0.743)	43	786824			0.00- 76.38	23.55
10.670	10.670	(0.741)	59	124809			0.00- 53.64	3.74
47 Carbon Disulfide						CAS #: 75-15-0		
10.891	10.891	(0.756)	76	5750337	50.0000	52.873	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
11.168	11.168	(0.775)	76	950362	50.0000	56.560	80.00- 120.00	100.00
11.168	11.168	(0.775)	41	2534016			227.35- 327.35	266.64
54 Methylene Chloride						CAS #: 75-09-2		
11.472	11.472	(0.796)	49	2157693	50.0000	51.348	80.00- 120.00	100.00
11.472	11.472	(0.796)	84	1585590			23.49- 123.49	73.49
11.472	11.472	(0.796)	51	653724			0.00- 80.93	30.30
60 MTBE						CAS #: 1634-04-4		
11.831	11.831	(0.821)	73	3587655	50.0000	50.191	80.00- 120.00	100.00
11.831	11.831	(0.821)	57	828957			0.00- 73.11	23.11
11.831	11.831	(0.821)	41	846055			0.00- 77.06	23.58
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.942	11.942	(0.829)	96	2126458	50.0000	55.255	80.00- 120.00	100.00
11.942	11.942	(0.829)	61	3057162			93.77- 193.77	143.77
11.942	11.942	(0.829)	98	1345621			11.32- 111.32	63.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	3008806	50.0000	55.859	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	1950873			18.57- 118.57	64.84
12.301	12.301 (0.854)	86	447575			0.00- 65.04	14.88
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	455231	50.0000	57.233	80.00- 120.00	100.00
12.799	12.799 (0.889)	43	5401152			1159.12-1259.12	1186.46
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	3599964	50.0000	54.367	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	1139875			0.00- 81.66	31.66
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	818664	50.0000	62.193	80.00- 120.00	100.00
13.905	13.905 (0.965)	43	3790041			412.95- 512.95	462.95
13.905	13.905 (0.965)	57	288123			0.00- 87.14	35.19
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	2561771	50.0000	55.374	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	1913669			24.70- 124.70	74.70
13.932	13.932 (0.967)	98	1211977			0.00- 97.31	47.31
80 Tetrahydrofuran					CAS #: 109-99-9		
14.402	14.402 (1.000)	42	2102531	50.0000	59.452	80.00- 120.00	100.00
14.402	14.402 (1.000)	71	754061			0.00- 85.86	35.86
14.402	14.402 (1.000)	72	820596			0.00- 87.41	39.03
82 Chloroform					CAS #: 67-66-3		
14.485	14.485 (1.006)	83	3686125	50.0000	54.978	80.00- 120.00	100.00
14.485	14.485 (1.006)	85	2406880			15.30- 115.30	65.30
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	3640858	50.0000	53.131	80.00- 120.00	100.00
14.845	14.845 (1.031)	99	2345271			14.42- 114.42	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	2138441	50.0000	57.422	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	2718812			77.14- 177.14	127.14
14.845	14.845 (1.031)	41	1560161			22.96- 122.96	72.96
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	3463048	50.0000	53.939	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	3609254			54.22- 154.22	104.22
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	4811071	50.0000	56.318	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	1049814			0.00- 71.80	21.82
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.426	15.426 (1.071)	57	7449400	50.0000	57.351	80.00- 120.00	100.00
15.426	15.426 (1.071)	56	2538112			0.00- 84.72	34.07
15.426	15.426 (1.071)	41	2024280			0.00- 79.98	27.17
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.647	15.647 (0.968)	62	2450001	50.0000	52.215	80.00- 120.00	100.00
15.647	15.647 (0.968)	64	778826			0.00- 83.09	31.79
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	1529856	50.0000	60.023	80.00- 120.00	100.00
15.730	15.730 (0.973)	43	2998586			161.50- 261.50	196.00
15.730	15.730 (0.973)	57	1580456			60.75- 160.75	103.31
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	2098294	50.0000	54.497	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	2078430			49.05- 149.05	99.05
16.642	16.642 (1.029)	97	1362364			14.93- 114.93	64.93
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	1815045	50.0000	55.862	80.00- 120.00	100.00
17.140	17.140 (1.060)	62	1334457			23.52- 123.52	73.52
17.112	17.112 (1.058)	41	1125501			12.01- 112.01	62.01
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	1166444	50.0000	56.320	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	834019			21.50- 121.50	71.50
17.250	17.250 (1.067)	57	275329			0.00- 74.96	23.60
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	3729470	50.0000	55.885	80.00- 120.00	100.00
17.555	17.555 (1.085)	85	2400491			14.37- 114.37	64.37
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	2709608	50.0000	60.260	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	866280			0.00- 81.97	31.97
18.329	18.329 (1.133)	39	1541138			6.88- 106.88	56.88
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	1532118	50.0000	64.446	80.00- 120.00	100.00
18.522	18.522 (1.145)	43	4010581			226.18- 326.18	261.77
18.522	18.522 (1.145)	85	598542			0.00- 90.90	39.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	5242049	50.0000	55.958	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	3304331			13.04- 113.04	63.04
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.904)	75	2903918	50.0000	59.315	80.00- 120.00	100.00
19.324	19.324 (0.904)	77	919192			0.00- 81.65	31.65
19.296	19.296 (0.903)	39	1525103			2.52- 102.52	52.52
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.920)	97	2037297	50.0000	56.012	80.00- 120.00	100.00
19.656	19.656 (0.920)	99	1285217			13.08- 113.08	63.08
19.656	19.656 (0.920)	83	1738135			35.32- 135.32	85.32
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.928)	166	2630580	50.0000	53.132	80.00- 120.00	100.00
19.822	19.822 (0.928)	129	1904175			22.39- 122.39	72.39
19.822	19.822 (0.928)	131	1836103			19.80- 119.80	69.80
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.934)	58	2182082	50.0000	59.476	80.00- 120.00	100.00
19.960	19.960 (0.934)	43	4116153			138.63- 238.63	188.63
19.960	19.960 (0.934)	100	368946			0.00- 67.20	16.91
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.952)	129	3738274	50.0000	56.568	80.00- 120.00	100.00
20.347	20.347 (0.952)	127	2895663			27.81- 127.81	77.46
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.965)	107	3445162	50.0000	57.543	80.00- 120.00	100.00
20.624	20.624 (0.965)	109	3261446			44.67- 144.67	94.67
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.001)	112	4380087	50.0000	53.577	80.00- 120.00	100.00
21.398	21.398 (1.001)	114	1420303			0.00- 82.43	32.43
21.398	21.398 (1.001)	77	2660829			10.75- 110.75	60.75
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.005)	106	2271121	50.0000	55.213	80.00- 120.00	100.00
21.481	21.481 (1.005)	91	7073632			261.79- 361.79	311.46
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.014)	106	2878647	50.0000	56.107	80.00- 120.00	100.00
21.674	21.674 (1.014)	91	5612675			144.94- 244.94	194.98
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.048)	106	2496065	50.0000	55.739	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.048)	91	5108173			154.65- 254.65	204.65
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.049)	104	4186975	50.0000	62.955	80.00- 120.00	100.00
22.421	22.421 (1.049)	78	2164094			1.69- 101.69	51.69
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.069)	173	3309894	50.0000	55.947	80.00- 120.00	100.00
22.836	22.836 (1.069)	171	1695247			1.22- 101.22	51.22
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.075)	105	6354552	50.0000	56.234	80.00- 120.00	100.00
22.974	22.974 (1.075)	120	1765060			0.00- 78.15	27.78
22.946	22.946 (1.074)	51	673484			0.00- 61.53	10.60
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.101)	83	4017577	50.0000	53.077	80.00- 120.00	100.00
23.527	23.527 (1.101)	85	2585413			14.35- 114.35	64.35
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.106)	91	8303428	50.0000	53.645	80.00- 120.00	100.00
23.637	23.637 (1.106)	120	1899976			0.00- 72.99	22.88
23.637	23.637 (1.106)	105	309581			0.00- 54.10	3.73
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.115)	105	7539048	50.0000	56.452	80.00- 120.00	100.00
23.831	23.831 (1.115)	120	2142451			0.00- 78.42	28.42
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.119)	105	5408871	50.0000	49.087	80.00- 120.00	100.00
23.914	23.914 (1.119)	120	3102305			2.99- 102.99	57.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.149)	105	5207980	50.0000	54.062	80.00- 120.00	100.00
24.550	24.550 (1.149)	120	2539167			0.00- 98.94	48.76
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.176)	146	3918753	50.0000	51.464	80.00- 120.00	100.00
25.130	25.130 (1.176)	148	2506551			14.63- 114.63	63.96
25.130	25.130 (1.176)	111	1546766			0.00- 89.77	39.47
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.182)	146	4048283	50.0000	50.718	80.00- 120.00	100.00
25.269	25.269 (1.182)	148	2596227			13.82- 113.82	64.13
25.269	25.269 (1.182)	111	1524194			0.00- 87.22	37.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.193)	91	5747139	50.0000	58.762	80.00- 120.00	100.00
25.490	25.490 (1.193)	126	1192032			0.00- 71.42	20.74
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.213)	146	3515051	50.0000	49.313	80.00- 120.00	100.00
25.932	25.932 (1.213)	148	2260098			14.30- 114.30	64.30
25.905	25.905 (1.212)	111	1423581			0.00- 90.50	40.50
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.348)	180	1253115	50.0000	45.723	80.00- 120.00	100.00
28.808	28.808 (1.348)	182	1198592			45.65- 145.65	95.65
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.357)	225	1025202	50.0000	40.018	80.00- 120.00	100.00
29.001	29.001 (1.357)	223	641430			12.70- 112.70	62.57
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.375)	128	2269503	50.0000	46.617	80.00- 120.00	100.00
29.388	29.388 (1.375)	127	270609			0.00- 62.64	11.92
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	2382695	50.0000	50.768	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	1600924			16.24- 116.24	67.19
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	369130	50.0000	49.345	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	2976625			761.40- 861.40	806.39
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	2615829	50.0000	56.882	80.00- 120.00	100.00
16.919	16.919 (1.175)	98	1205235			0.00- 96.29	46.07
16.919	16.919 (1.175)	55	2319276			38.64- 138.64	88.66

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101806.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	683549	0.00
97 1,4-Difluorobenze	2204815	1322889	3086741	2204815	0.00
126 Chlorobenzene-d5	1812979	1087787	2538171	1812979	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.37	0.00

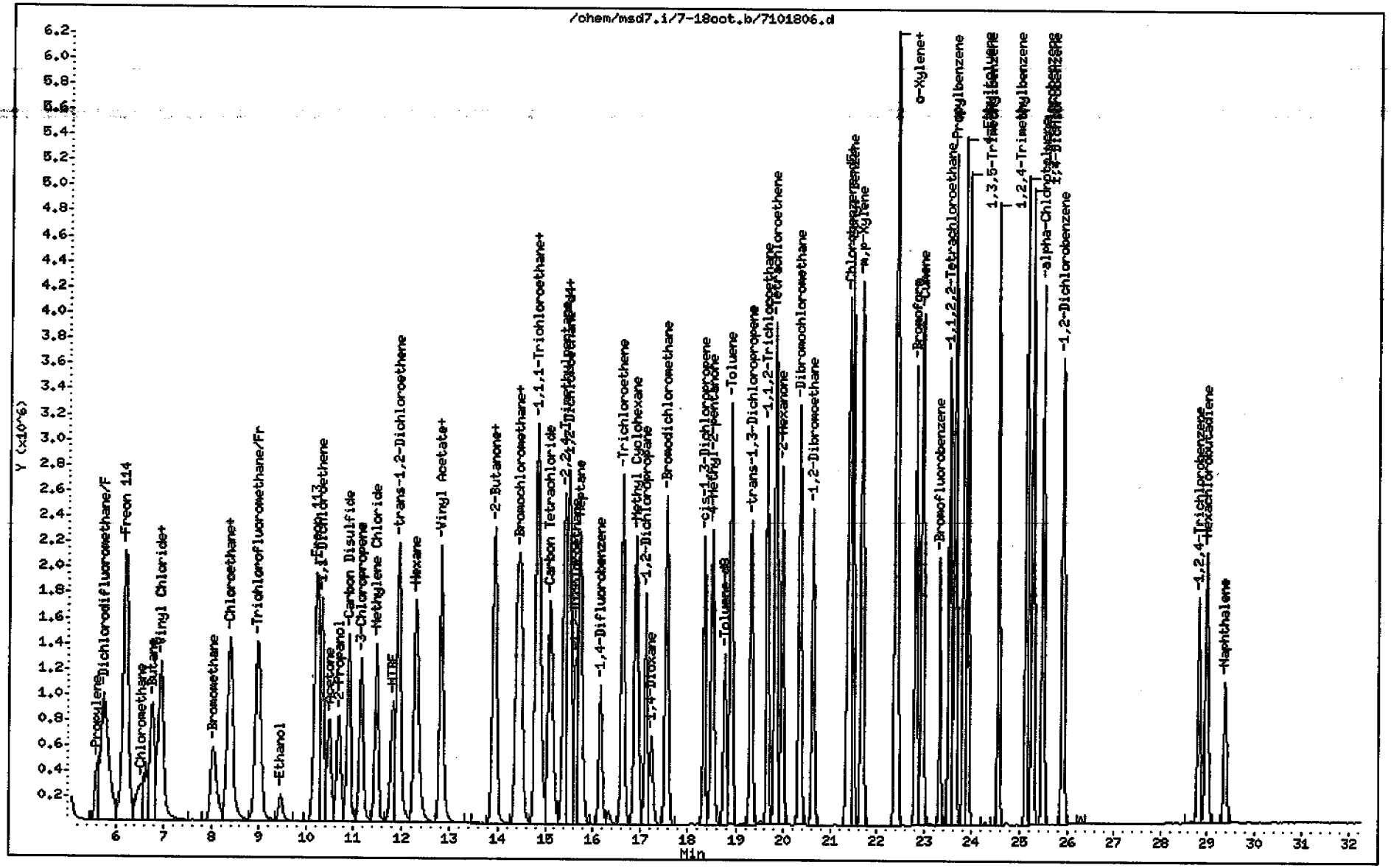
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-18oct.b/7101806.d
Date : 18-OCT-2007 15:26
Client ID: Level 5
Sample Info: 50mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53



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AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101807.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 18-OCT-2007 16:15
Operator : cb
Inst ID: msd7.i
Smp Info : 100mL #1576-50
Misc Info : 200ppbv --> 100ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza
Quant Type: ISTD
Cal Date : 18-OCT-2007 16:15
Cal File: 7101807.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	692933	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	535123			26.95- 126.95	77.23
14.402	14.402 (1.000)	49	1712983			141.62- 241.62	247.21
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2281331	25.0000		80.00- 120.00	100.00
16.144	16.172 (1.000)	88	351386			0.00- 65.69	15.40
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1862597	25.0000		80.00- 120.00	100.00
21.342	21.370 (1.000)	82	1017930			5.32- 105.32	54.65
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	913793	25.0000	24.626	80.00- 120.00	100.00
15.481	15.508 (1.075)	67	550511			2.91- 102.91	60.24
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2088251	25.0000	25.914	80.00- 120.00	100.00
18.771	18.771 (1.161)	70	237587			0.00- 61.46	11.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1454452			19.18- 119.18	69.65
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1081956	25.0000	24.333	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1400916			76.80- 176.80	129.48
23.333	23.333 (1.093)	176	1039964			46.06- 146.06	96.12
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	2986150	100.000	100.80	80.00- 120.00	100.00
5.610	5.610 (0.390)	42	2053059			21.19- 121.19	68.75
5.610	5.610 (0.390)	39	2206631			24.83- 124.83	73.90
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	10930653	100.000	99.747	80.00- 120.00	100.00
5.748	5.748 (0.399)	87	3552505			0.00- 83.07	32.50
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	7047529	100.000	92.659	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	2245736			0.00- 81.81	31.87
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	3525852	100.000	98.906	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	1179186			0.00- 84.80	33.44
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.882 (0.476)	62	4410236	100.000	98.388	80.00- 120.00	100.00
6.854	6.882 (0.476)	64	1387722			0.00- 83.25	31.47
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.482)	54	3349709	100.000	106.66	80.00- 120.00	100.00
6.937	6.937 (0.482)	39	3396133			55.97- 155.97	101.39
25 Bromomethane					CAS #: 74-83-9		
8.015	8.043 (0.557)	94	4079688	100.000	104.58	80.00- 120.00	100.00
8.015	8.043 (0.557)	96	3868112			43.77- 143.77	94.81
27 Chloroethane					CAS #: 75-00-3		
8.347	8.375 (0.580)	64	2257754	100.000	118.60	80.00- 120.00	100.00
8.347	8.375 (0.580)	49	605583			0.00- 79.34	26.82
8.347	8.375 (0.580)	66	706033			0.00- 83.15	31.27
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.956 (0.622)	101	10508664	100.000	104.19	80.00- 120.00	100.00
8.955	8.956 (0.622)	103	6789159			14.33- 114.33	64.61

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.453	9.453	(0.656)	45	1538559	100.000	114.63	80.00- 120.00	100.00
9.453	9.453	(0.656)	43	304971			0.00- 72.83	19.82
9.453	9.453	(0.656)	46	585137			0.00- 88.20	38.03
42 Freon 113						CAS #: 76-13-1		
10.200	10.227	(0.708)	151	5881542	100.000	104.56	80.00- 120.00	100.00
10.200	10.227	(0.708)	153	3752567			13.49- 113.49	63.80
10.200	10.227	(0.708)	101	7271712			73.17- 173.17	123.64
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.310	10.338	(0.716)	61	6323571	100.000	106.68	80.00- 120.00	100.00
10.310	10.338	(0.716)	96	3889755			11.42- 111.42	61.51
10.310	10.338	(0.716)	98	2479983			0.00- 89.70	39.22
45 Acetone						CAS #: 67-64-1		
10.476	10.504	(0.727)	58	1956828	100.000	108.28	80.00- 120.00	100.00
10.476	10.504	(0.727)	43	5921961			247.10- 347.10	302.63
46 2-Propanol						CAS #: 67-63-0		
10.670	10.697	(0.741)	45	7297517	100.000	115.63	80.00- 120.00	100.00
10.670	10.697	(0.741)	43	1679125			0.00- 75.54	23.01
10.670	10.697	(0.741)	59	288762			0.00- 53.72	3.96
47 Carbon Disulfide						CAS #: 75-15-0		
10.891	10.891	(0.756)	76	12222860	100.000	108.51	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
11.140	11.168	(0.773)	76	1968053	100.000	111.22	80.00- 120.00	100.00
11.140	11.168	(0.773)	41	5269936			224.96- 324.96	267.77
54 Methylene Chloride						CAS #: 75-09-2		
11.472	11.472	(0.796)	49	4616250	100.000	106.58	80.00- 120.00	100.00
11.472	11.472	(0.796)	84	3385429			23.49- 123.49	73.34
11.472	11.472	(0.796)	51	1409490			0.00- 80.85	30.53
60 MTBE						CAS #: 1634-04-4		
11.803	11.831	(0.820)	73	5895128	100.000	84.507	80.00- 120.00	100.00
11.803	11.831	(0.820)	57	1393845			0.00- 73.11	23.64
11.803	11.831	(0.820)	41	1331231			0.00- 76.16	22.58
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.914	11.942	(0.827)	96	4428835	100.000	110.53	80.00- 120.00	100.00
11.914	11.942	(0.827)	61	6358416			93.77- 193.77	143.57
11.914	11.942	(0.827)	98	2816096			11.77- 111.77	63.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	6432321	100.000	113.75	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	4176945			17.84- 117.84	64.94
12.301	12.301 (0.854)	86	975109			0.00- 65.07	15.16
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	978320	100.000	115.19	80.00- 120.00	100.00
12.771	12.799 (0.887)	43	11490251			1150.46-1250.46	1174.49
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.799	12.826 (0.889)	63	7494739	100.000	109.11	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	2364614			0.00- 81.66	31.55
75 2-Butanone					CAS #: 78-93-3		
13.877	13.905 (0.964)	72	1797732	100.000	125.97	80.00- 120.00	100.00
13.877	13.905 (0.964)	43	8012978			412.95- 512.95	445.73
13.877	13.905 (0.964)	57	616575			0.00- 86.57	34.30
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.905	13.932 (0.965)	61	5289406	100.000	109.97	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	3957657			24.70- 124.70	74.82
13.932	13.932 (0.967)	98	2537854			0.00- 97.31	47.98
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.402 (0.998)	42	4434496	100.000	118.10	80.00- 120.00	100.00
14.375	14.402 (0.998)	71	1625228			0.00- 85.86	36.65
14.375	14.402 (0.998)	72	1749407			0.00- 87.82	39.45
82 Chloroform					CAS #: 67-66-3		
14.458	14.485 (1.004)	83	7416210	100.000	107.48	80.00- 120.00	100.00
14.458	14.485 (1.004)	85	4828164			15.30- 115.30	65.10
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.845 (1.029)	97	7240093	100.000	103.35	80.00- 120.00	100.00
14.817	14.845 (1.029)	99	4660096			14.42- 114.42	64.37
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	4466769	100.000	114.14	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	5668418			77.14- 177.14	126.90
14.845	14.845 (1.031)	41	3159222			22.96- 122.96	70.73
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	6781673	100.000	103.33	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	7039047			54.22- 154.22	103.80
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	9788721	100.000	108.80	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	2175873			0.00- 71.87	22.23
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.426 (1.069)	57	15535652	100.000	113.89	80.00- 120.00	100.00
15.398	15.426 (1.069)	56	5317737			0.00- 84.62	34.23
15.398	15.426 (1.069)	41	4107948			0.00- 79.27	26.44
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	4870654	100.000	100.26	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	1562832			0.00- 82.89	32.09
94 Heptane					CAS #: 142-82-5		
15.702	15.730 (0.971)	71	3163902	100.000	115.36	80.00- 120.00	100.00
15.702	15.730 (0.971)	43	6221004			158.53- 258.53	196.62
15.702	15.730 (0.971)	57	3280251			59.34- 159.34	103.68
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	4228075	100.000	104.84	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	4128816			49.05- 149.05	97.65
16.642	16.642 (1.029)	97	2716108			14.93- 114.93	64.24
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	3756119	100.000	109.16	80.00- 120.00	100.00
17.112	17.112 (1.058)	62	2777792			23.52- 123.52	73.95
17.112	17.112 (1.058)	41	2270112			12.01- 112.01	60.44
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	2460610	100.000	110.72	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	1758611			21.50- 121.50	71.47
17.250	17.250 (1.067)	57	579042			0.00- 74.60	23.53
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	7431432	100.000	106.01	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	4773361			14.37- 114.37	64.23
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	5602642	100.000	115.69	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	1775227			0.00- 81.97	31.69
18.329	18.329 (1.133)	39	3130655			6.88- 106.88	55.88
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	3231617	100.000	123.62	80.00- 120.00	100.00
18.494	18.522 (1.144)	43	8407133			222.97- 322.97	260.15
18.522	18.522 (1.145)	85	1253983			0.00- 90.48	38.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	10622557	100.000	107.53	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	6779189			13.04- 113.04	63.82
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.296	19.324 (0.904)	75	5889075	100.000	113.22	80.00- 120.00	100.00
19.296	19.324 (0.904)	77	1891543			0.00- 81.65	32.12
19.296	19.324 (0.904)	39	3137203			2.52- 102.52	53.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	4149436	100.000	108.64	80.00- 120.00	100.00
19.656	19.656 (0.921)	99	2605800			13.08- 113.08	62.80
19.656	19.656 (0.921)	83	3504268			35.32- 135.32	84.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	5048096	100.000	99.395	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	3627743			22.39- 122.39	71.86
19.822	19.822 (0.929)	131	3514583			19.80- 119.80	69.62
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	4648378	100.000	116.53	80.00- 120.00	100.00
19.960	19.960 (0.935)	43	8666932			138.63- 238.63	186.45
19.960	19.960 (0.935)	100	771717			0.00- 67.05	16.60
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	7193156	100.000	104.70	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	5526699			27.62- 127.62	76.83
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.623	20.624 (0.966)	107	6833270	100.000	108.68	80.00- 120.00	100.00
20.623	20.624 (0.966)	109	6483894			44.67- 144.67	94.89
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	8692529	100.000	102.78	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	2809468			0.00- 82.43	32.32
21.398	21.398 (1.003)	77	5295683			10.75- 110.75	60.92
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	4526085	100.000	105.60	80.00- 120.00	100.00
21.481	21.481 (1.006)	91	14088042			261.69- 361.69	311.26
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	5707165	100.000	106.51	80.00- 120.00	100.00
21.674	21.674 (1.016)	91	11155051			145.05- 245.05	195.46
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	4939741	100.000	105.81	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	10133037			154.65- 254.65	205.13
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	8386880	100.000	118.26	80.00- 120.00	100.00
22.421	22.421 (1.051)	78	4228696			1.69- 101.69	50.42
133 Bromoform					CAS #: 75-25-2		
22.835	22.836 (1.070)	173	6219626	100.000	101.85	80.00- 120.00	100.00
22.835	22.836 (1.070)	171	3232278			1.22- 101.22	51.97
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	12536875	100.000	106.57	80.00- 120.00	100.00
22.974	22.974 (1.076)	120	3479782			0.00- 78.08	27.76
22.946	22.974 (1.075)	51	1373233			0.00- 61.43	10.95
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	8062379	100.000	102.92	80.00- 120.00	100.00
23.527	23.527 (1.102)	85	5184917			14.35- 114.35	64.31
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	16597227	100.000	103.47	80.00- 120.00	100.00
23.637	23.637 (1.108)	120	3775008			0.00- 72.94	22.74
23.637	23.637 (1.108)	105	628127			0.00- 54.03	3.78
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	14829235	100.000	106.36	80.00- 120.00	100.00
23.831	23.831 (1.117)	120	4239290			0.00- 78.42	28.59
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	10575210	100.000	94.663	80.00- 120.00	100.00
23.914	23.914 (1.120)	120	6029821			3.80- 103.80	57.02
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	10414533	100.000	104.14	80.00- 120.00	100.00
24.550	24.550 (1.150)	120	5104145			0.00- 98.95	49.01
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.177)	146	7750426	100.000	99.257	80.00- 120.00	100.00
25.130	25.130 (1.177)	148	4950703			14.48- 114.48	63.88
25.130	25.130 (1.177)	111	3048873			0.00- 89.68	39.34
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	8013173	100.000	98.166	80.00- 120.00	100.00
25.269	25.269 (1.184)	148	5111044			13.81- 113.81	63.78
25.269	25.269 (1.184)	111	3035431			0.00- 87.35	37.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	12186141	100.000	116.33	80.00- 120.00	100.00
25.490	25.490 (1.194)	126	2530175			0.00- 71.29	20.76
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	7169014	100.000	98.310	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	4537423			14.30- 114.30	63.29
25.905	25.932 (1.214)	111	2874063			0.00- 90.50	40.09
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	3030873	100.000	105.62	80.00- 120.00	100.00
28.808	28.808 (1.350)	182	2886523			45.65- 145.65	95.24
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	2182918	100.000	86.635	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	1362900			12.64- 112.64	62.43
167 Naphthalene					CAS #: 91-20-3		
29.361	29.388 (1.376)	128	5980908	100.000	114.00	80.00- 120.00	100.00(A)
29.361	29.388 (1.376)	127	723074			0.00- 62.50	12.09
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	5045198	100.000	104.46	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	3389808			16.48- 116.48	67.19
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	777002	100.000	101.84	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	6189652			757.70- 857.70	796.61
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.918	16.919 (1.175)	83	5443508	100.000	112.98	80.00- 120.00	100.00
16.918	16.919 (1.175)	98	2475787			0.00- 96.13	45.48
16.891	16.919 (1.173)	55	4789110			38.51- 138.51	87.98

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101807.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 100ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	692933	1.37
97 1,4-Difluorobenze	2204815	1322889	3086741	2281331	3.47
126 Chlorobenzene-d5	1812979	1087787	2538171	1862597	2.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-18oot.b/7101807.d

Date : 18-OCT-2007 16:15

Client ID: Level 6

Sample Info: 100mL #1576-50

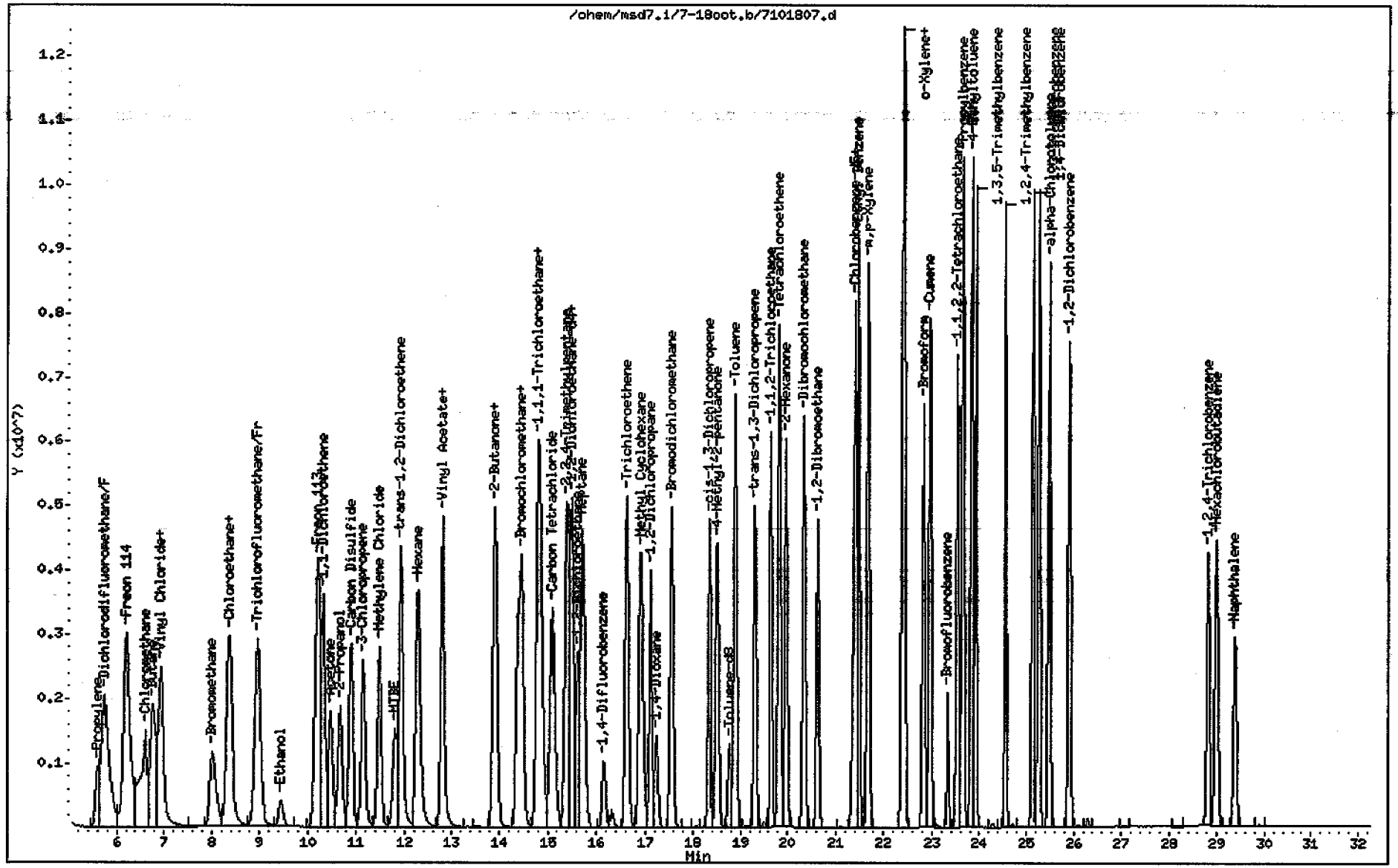
Column phase: RTx-624

Instrument: msd7.i

Operator: cb

Column diameter: 0.53

0409



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-05nov.b/7110507.d
Lab Smp Id: ical level 7
Inj Date : 05-NOV-2007 14:29
Operator : ea Inst ID: msd7.i
Smp Info : 200ml #1443-361
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-05nov.b/t14q018d.m
Meth Date : 05-Nov-2007 15:03 ealcan Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp14d.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403 (1.000)	130	743892	25.0000			50.00- 150.00	100.00
14.403	14.403 (1.000)	128	585801				27.15- 127.15	78.75
14.403	14.403 (1.000)	49	1071451				111.39- 211.39	144.03
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2217626	25.0000			50.00- 150.00	100.00
16.172	16.172 (1.000)	88	340035				0.00- 65.49	15.33
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1617176	25.0000			50.00- 150.00	100.00
21.343	21.343 (1.000)	82	880112				4.70- 104.70	54.42
66 1-Hexene						CAS #: 592-41-6		
12.163	12.163 (0.844)	55	5480702	200.000	194.83		50.00- 150.00	100.00
12.163	12.163 (0.844)	41	8227231				102.84- 202.84	150.11
12.191	12.191 (0.846)	84	2066951				0.00- 86.65	37.71
37 Pentane						CAS #: 109-66-0		
9.121	9.121 (0.633)	43	14441187	200.000	183.97		50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
37 Pentane (continued)							
9.121	9.121 (0.633)	57	2169968			0.00- 65.22	15.03
9.121	9.121 (0.633)	72	1329297			0.00- 59.09	9.20
35 1-Pentene					CAS #: 109-67-1		
8.983	8.983 (0.624)	55	9110481	200.000	190.79	50.00- 150.00	100.00
8.983	8.983 (0.624)	42	20064566			175.46- 275.46	220.24
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
124 Nonane					CAS #: 111-84-2		
21.481	21.481 (1.006)	43	12741048	200.000	188.06	50.00- 150.00	100.00
21.481	21.481 (1.006)	57	11684992			41.17- 141.17	91.71
21.481	21.481 (1.006)	85	3982101			0.00- 81.55	31.25
62 Acrylonitrile					CAS #: 107-13-1		
12.025	12.025 (0.835)	52	5216826	200.000	203.66	50.00- 150.00	100.00
12.025	12.025 (0.835)	53	6244056			69.26- 169.26	119.69
105 Dibromomethane					CAS #: 74-95-3		
17.361	17.361 (0.813)	174	7072379	200.000	194.46	50.00- 150.00	100.00
17.361	17.361 (0.813)	93	7506318			53.48- 153.48	106.14
17.361	17.361 (0.813)	95	6253342			36.52- 136.52	88.42
44 Acrolein					CAS #: 107-02-8		
10.172	10.172 (0.706)	55	2282107	200.000	200.88	50.00- 150.00	100.00
10.172	10.172 (0.706)	56	3269684			90.98- 190.98	143.27
63 2-Pentanone					CAS #: 107-87-9		
16.919	16.919 (0.793)	43	18904980	200.000	218.80	50.00- 150.00	100.00(A)
16.919	16.919 (0.793)	58	1502095			0.00- 57.79	7.95
16.919	16.919 (0.793)	86	3117705			0.00- 65.81	16.49
52 Acetonitrile					CAS #: 75-05-8		
11.251	11.251 (0.781)	40	4726467	200.000	186.77	50.00- 150.00	100.00
11.251	11.251 (0.781)	41	8027386			116.58- 216.58	169.84
11.251	11.251 (0.781)	38	1565931			0.00- 80.94	33.13
50 Methyl Methacrylate					CAS #: 80-62-6		
17.112	17.112 (0.802)	41	9656728	200.000	215.51	50.00- 150.00	100.00(A)
17.112	17.112 (0.802)	69	6794698			22.16- 122.16	70.36
17.112	17.112 (0.802)	100	2537427			0.00- 76.23	26.28
79 Methyl Acrylate					CAS #: 96-33-3		
14.015	14.015 (0.973)	55	14040492	200.000	210.22	50.00- 150.00	100.00(A)
14.015	14.015 (0.973)	85	2304963			0.00- 66.55	16.42
14.015	14.015 (0.973)	58	1345556			0.00- 59.80	9.58

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
48 Ethyl acrylate						CAS #: 140-88-5		
16.697	16.697	(0.782)	99	1072662	200.000	222.75	50.00- 150.00	100.00(A)
16.697	16.697	(0.782)	45	1508737			93.69- 193.69	140.65
16.697	16.697	(0.782)	55	15482712			1387.00-1487.00	1443.39
49 Iodomethane						CAS #: 74-88-4		
10.780	10.780	(0.748)	142	21705380	200.000	194.60	50.00- 150.00	100.00
10.780	10.780	(0.748)	127	8107074			0.00- 87.23	37.35
21 Isobutane						CAS #: 75-28-5		
6.301	6.301	(0.438)	43	12471282	200.000	187.11	50.00- 150.00	100.00
6.301	6.301	(0.438)	42	4283700			0.00- 89.47	34.35
6.301	6.301	(0.438)	58	297757			0.00- 51.94	2.39

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110507.d
Lab Smp Id: ical level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msd7.i/7-05nov.b/t14q018d.m
Misc Info: 200ppbv

Calibration Date: 05-NOV-2007
Calibration Time: 13:30

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	700965	420579	981351	743892	6.12
97 1,4-Difluorobenze	2091522	1254913	2928131	2217626	6.03
126 Chlorobenzene-d5	1523313	913988	2132638	1617176	6.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

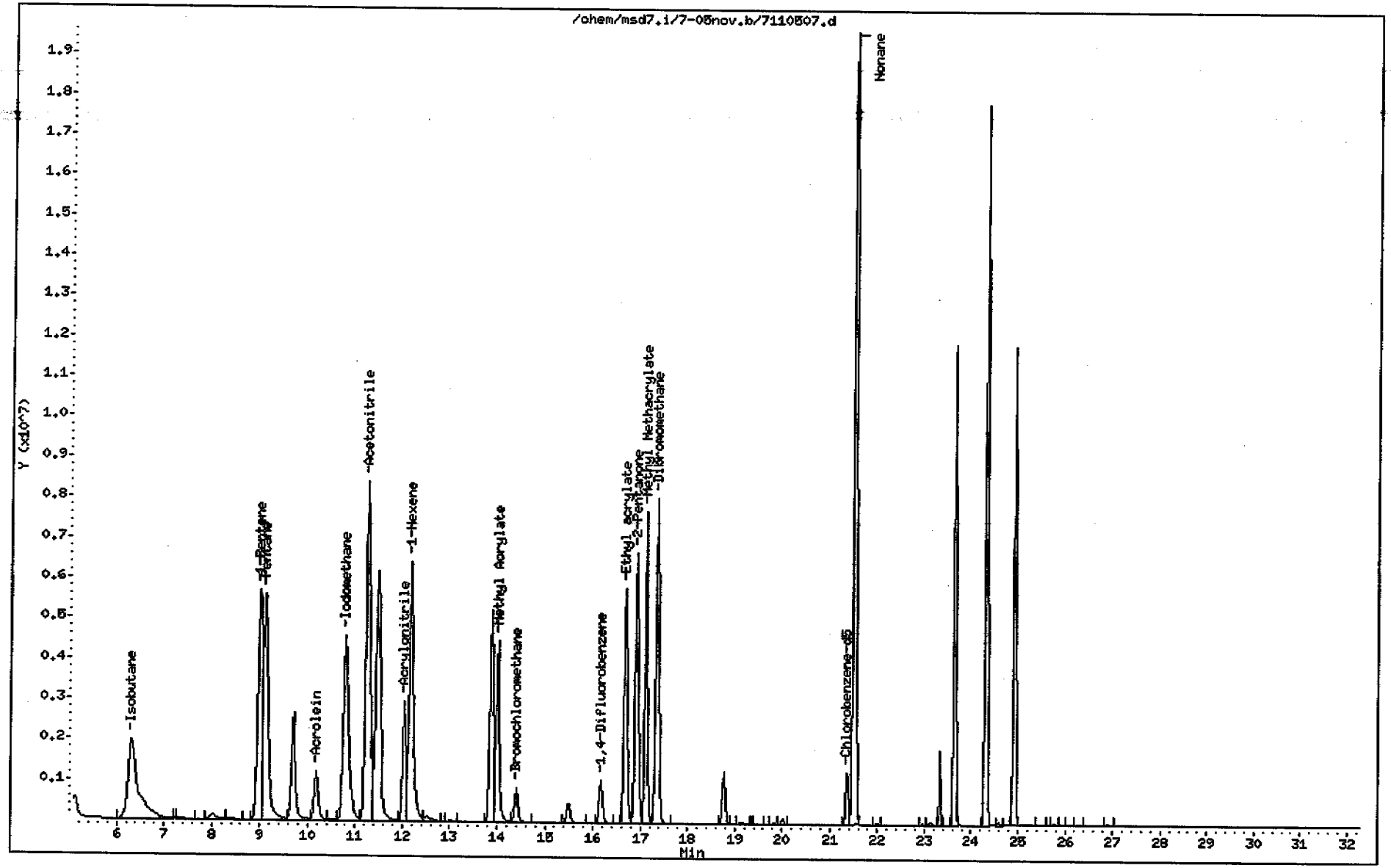
Data File: /chem/msd7.i/7-05nov.b/7110507.d
Date : 05-NOV-2007 14:29
Client ID:
Sample Info: 200ml #1443-361

Column phase: RTx-624

Instrument: msd7.i

Operator: ea
Column diameter: 0.53

0414



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103005.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 30-OCT-2007 11:10
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-400
Misc Info : 200ppbv / 1200ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	522806	25.0000		50.00- 150.00		100.00
14.416	14.416 (1.000)	128	396127			26.81- 126.81		75.77
14.416	14.416 (1.000)	49	725431			112.06- 212.06		138.76
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1724754	25.0000		50.00- 150.00		100.00
16.158	16.158 (1.000)	88	263120			0.00- 65.39		15.26
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1260309	25.0000		50.00- 150.00		100.00
21.356	21.356 (1.000)	82	666153			4.45- 104.45		52.86
26 Methanol						CAS #: 67-56-1		
7.616	7.616 (0.528)	31	9372295	1200.00	1049.8	50.00- 150.00		100.00
7.616	7.616 (0.528)	32	6569144			96.19- 196.19		70.09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103005.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv / 1200ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	522806	7.53
97 1,4-Difluorobenze	1616415	969849	2262981	1724754	6.70
126 Chlorobenzene-d5	1130394	678236	1582552	1260309	11.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.19	15.86	16.52	16.19	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

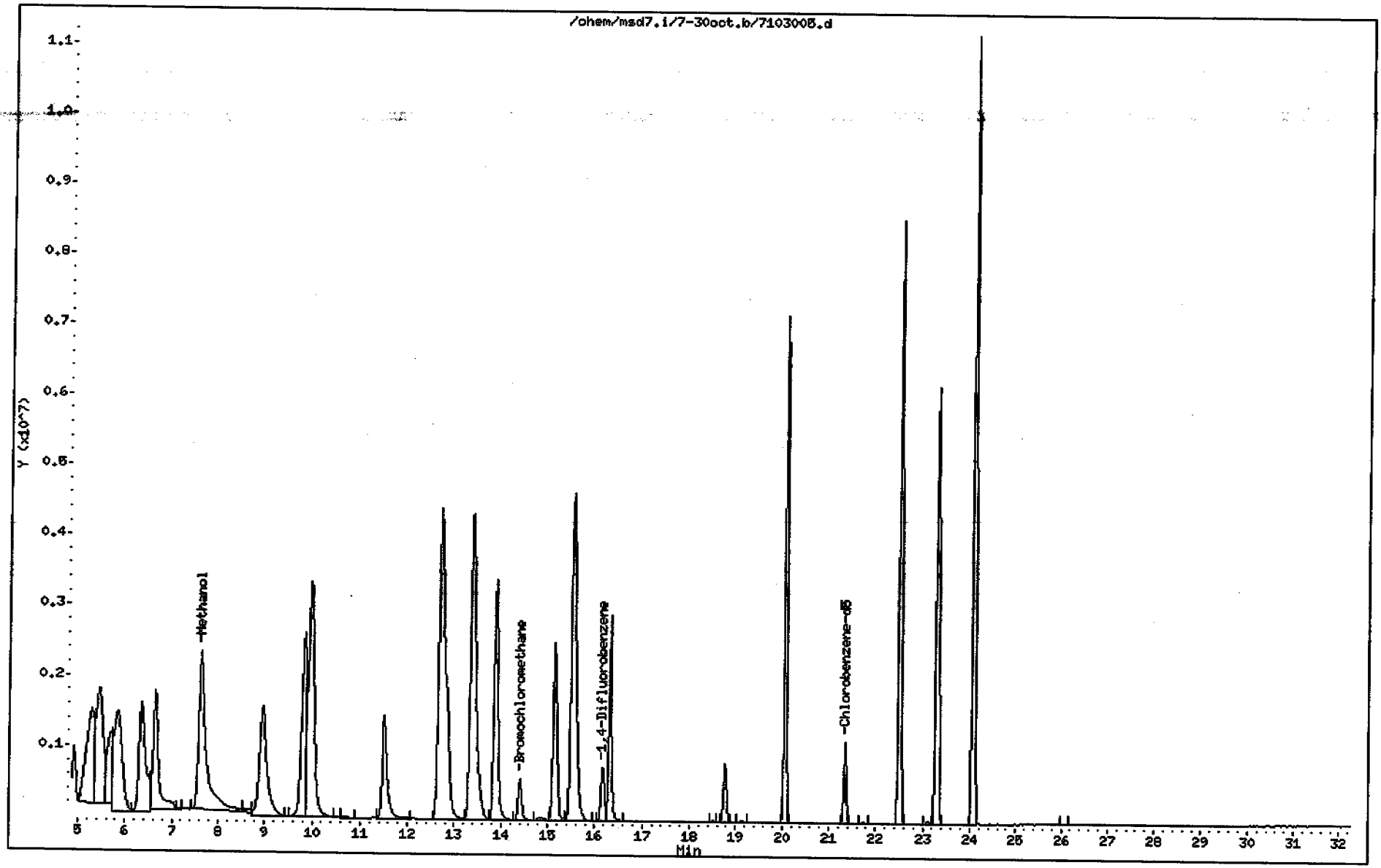
Data File: /chem/msd7.i/7-30oct.b/7103005.d
Date : 30-OCT-2007 11:10
Client ID: Level 7
Sample Info: 200mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0417



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102207.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 22-OCT-2007 12:34
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-370
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 12:34
Cal File: 7102207.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.403	14.403 (1.000)	130	673561	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	516226			26.49- 126.49	76.64
14.403	14.403 (1.000)	49	984353			116.97- 216.97	146.14
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2139015	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	336134			0.00- 65.57	15.71
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1735730	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	959991			5.19- 105.19	55.31
55 Cyclopentene					CAS #: 142-29-0		
11.250	11.250 (0.781)	67	24655264	200.000	196.46	50.00- 150.00	100.00
11.250	11.250 (0.781)	68	10041444			0.00- 90.48	40.73
11.250	11.250 (0.781)	53	5185944			0.00- 70.85	21.03
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.877	13.877 (0.964)	77	15691308	200.000	199.68	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	5093949			0.00- 84.30	32.46
13.877	13.877 (0.964)	97	3105546			0.00- 70.03	19.79
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	5598961	200.000	194.16	50.00- 150.00	100.00
15.121	15.121 (0.935)	75	15225105			218.22- 318.22	271.93
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	16526790	200.000	192.47	50.00- 150.00	100.00
19.988	19.988 (1.236)	41	12361559			21.54- 121.54	74.80
19.988	19.988 (1.236)	78	5401543			0.00- 81.77	32.68
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	11284242	200.000	182.31	50.00- 150.00	100.00
21.536	21.536 (1.009)	117	7823289			18.93- 118.93	69.33
21.508	21.508 (1.008)	95	4494362			0.00- 89.37	39.83
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	12398942	200.000	170.72	50.00- 150.00	100.00
23.610	23.610 (1.106)	158	11947029			46.65- 146.65	96.36
23.610	23.610 (1.106)	77	25141267			147.77- 247.77	202.77
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	6154610	200.000	181.10	50.00- 150.00	100.00
23.665	23.665 (1.109)	75	18226348			252.90- 352.90	296.14
23.665	23.665 (1.109)	61	5029833			26.84- 126.84	81.72
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	9861927	200.000	183.86	50.00- 150.00	100.00
23.886	23.886 (1.119)	91	27734828			243.86- 343.86	281.23
23.886	23.886 (1.119)	65	2849980			0.00- 78.37	28.90
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	10574734	200.000	184.78	50.00- 150.00	100.00
24.080	24.080 (1.128)	91	31217904			249.00- 349.00	295.21
24.052	24.052 (1.127)	63	4277338			0.00- 88.24	40.45
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	28643628	200.000	168.92	50.00- 150.00	100.00
25.020	25.020 (1.172)	134	8292866			0.00- 77.89	28.95
25.020	25.020 (1.172)	91	7805069			0.00- 74.89	27.25
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	12274481	200.000	182.45	50.00- 150.00	100.00
25.269	25.269 (1.184)	105	26523849			168.18- 268.18	216.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	3529142			0.00- 78.76	28.75
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	8414072	200.000	184.54	50.00- 150.00	100.00
25.683	25.683 (1.203)	91	32519787			362.01- 462.01	386.49
25.683	25.683 (1.203)	92	19592755			181.94- 281.94	232.86
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	25590950	200.000	167.41	50.00- 150.00	100.00
24.467	24.467 (1.146)	134	6336082			0.00- 74.64	24.76
24.467	24.467 (1.146)	91	18525334			20.96- 120.96	72.39
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	33869689	200.000	160.07	50.00- 150.00	100.00
24.826	24.826 (1.163)	134	7347588			0.00- 69.71	21.69
24.826	24.826 (1.163)	91	6246168			0.00- 65.99	18.44
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	11002854	200.000	201.08	50.00- 150.00	100.00(A)
27.287	27.287 (1.279)	75	9943412			39.96- 139.96	90.37
27.287	27.287 (1.279)	155	8612482			28.87- 128.87	78.27
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	7797399	200.000	170.61	50.00- 150.00	100.00
24.605	24.605 (1.153)	117	8410733			54.36- 154.36	107.87
24.605	24.605 (1.153)	169	3738433			0.00- 97.70	47.94

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msd7.i/7-22oct.b/7102207.d
Report Date: 22-Oct-2007 13:49

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102207.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 11:44
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	653745	392247	915243	673561	3.03
97 1,4-Difluorobenze	2055535	1233321	2877749	2139015	4.06
126 Chlorobenzene-d5	1681036	1008622	2353450	1735730	3.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

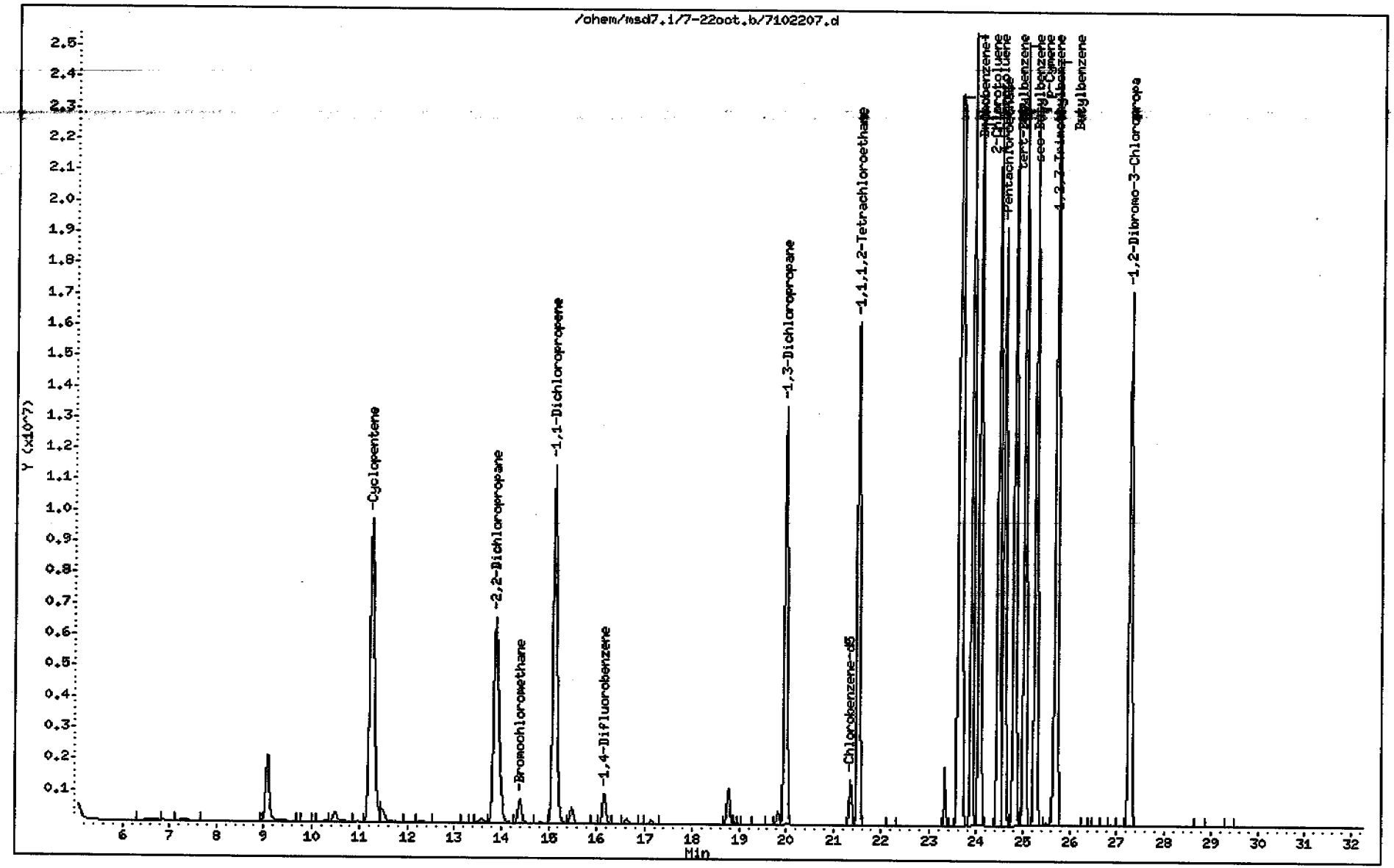
Data File: /chem/msd7.i/7-22oct.b/7102207.d
Date : 22-OCT-2007 12:34
Client ID: Level 7
Sample Info: 200mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0422



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101905.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 19-OCT-2007 11:41
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-400
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 11:41
Cal File: 7101905.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403 (1.000)	130	719204	25.0000			50.00- 150.00	100.00
14.403	14.403 (1.000)	128	554464				26.59- 126.59	77.09
14.403	14.403 (1.000)	49	1056116				116.89- 216.89	146.85
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2349296	25.0000			50.00- 150.00	100.00
16.172	16.172 (1.000)	88	359832				0.00- 65.64	15.32
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1844247	25.0000			50.00- 150.00	100.00
21.343	21.343 (1.000)	82	1019868				5.24- 105.24	55.30
5 Freon 143a						CAS #: 420-46-2		
5.334	5.334 (0.370)	65	3045734	200.000	194.22		50.00- 150.00	100.00
5.278	5.278 (0.366)	69	25389070				0.00- 50.00	833.59
5.334	5.334 (0.370)	64	879543				0.00- 77.08	28.88
6 Freon142b						CAS #: 75-68-3		
6.357	6.357 (0.441)	65	12224721	200.000	191.11		50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)								
6.357	6.357	(0.441)	45	2982983			0.00- 74.42	24.40
13 Freon 134a						CAS #: 811-97-2		
5.472	5.472	(0.380)	83	5950549	200.000	194.14	50.00- 150.00	100.00
5.278	5.278	(0.366)	69	25368047			398.13- 498.13	426.31
5.472	5.472	(0.380)	63	881809			0.00- 64.08	14.82
15 Freon 152a						CAS #: 75-37-6		
5.693	5.693	(0.395)	65	4242747	200.000	191.73	50.00- 150.00	100.00
5.693	5.693	(0.395)	51	6723031			109.56- 209.56	158.46
5.693	5.693	(0.395)	47	1728528			0.00- 90.52	40.74
17 Freon 22						CAS #: 75-45-6		
5.831	5.831	(0.405)	51	13489320	200.000	188.69	50.00- 150.00	100.00
5.831	5.831	(0.405)	67	1587590			0.00- 61.77	11.77
5.831	5.831	(0.405)	85	174736			0.00- 51.67	1.30
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.956	8.956	(0.622)	67	12537837	200.000	197.68	50.00- 150.00	100.00
8.956	8.956	(0.622)	69	3925693			0.00- 81.12	31.31
8.956	8.956	(0.622)	35	312263			0.00- 53.83	2.49
40 Freon123a						CAS #: 354-23-4		
9.813	9.813	(0.681)	117	7250064	200.000	202.31	50.00- 150.00	100.00
9.813	9.813	(0.681)	67	10592599			110.97- 210.97	146.10
41 Freon123						CAS #: 306-83-2		
9.979	9.979	(0.693)	83	12396163	200.000	195.02	50.00- 150.00	100.00
9.979	9.979	(0.693)	133	2428184			0.00- 69.52	19.59
9.979	9.979	(0.693)	85	8627843			22.16- 122.16	69.60
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.499	11.499	(0.798)	59	10315180	200.000	154.66	50.00- 150.00	100.00
11.499	11.499	(0.798)	41	2017442			0.00- 73.42	19.56
11.499	11.499	(0.798)	57	995118			0.00- 60.26	9.65
68 Isopropyl ether						CAS #: 108-20-3		
12.716	12.716	(0.883)	45	25503179	200.000	198.71	50.00- 150.00	100.00
12.716	12.716	(0.883)	87	5827965			0.00- 73.31	22.85
12.716	12.716	(0.883)	59	2197946			0.00- 58.30	8.62
71 1-Propanol						CAS #: 71-23-8		
12.827	12.827	(0.891)	42	1744378	200.000	216.72	50.00- 150.00	100.00(A)
12.827	12.827	(0.891)	59	2451515			95.91- 195.91	140.54
12.716	12.716	(0.883)	41	4841849			265.93- 365.93	277.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.380	13.380 (0.929)	59	22428943	200.000	205.02	50.00- 150.00	100.00(A)
13.380	13.380 (0.929)	87	8578877			0.00- 88.95	38.25
13.380	13.380 (0.929)	41	3840776			0.00- 67.89	17.12
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	2506944	200.000	205.24	50.00- 150.00	100.00(A)
13.877	13.877 (0.964)	61	2395467			49.04- 149.04	95.55
13.877	13.877 (0.964)	43	17175833			622.55- 722.55	685.13
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	16550042	200.000	206.99	50.00- 150.00	100.00(A)
15.536	15.536 (1.079)	87	3917490			0.00- 73.71	23.67
15.536	15.536 (1.079)	55	4261857			0.00- 78.56	25.75
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	11184866	200.000	233.27	50.00- 150.00	100.00(A)
22.504	22.504 (1.562)	43	17315235			108.53- 208.53	154.81
98 1-Butanol					CAS #: 71-36-3		
16.310	16.310 (1.009)	56	5482757	200.000	238.74	50.00- 150.00	100.00(A)
16.310	16.310 (1.009)	41	3917821			21.86- 121.86	71.46
16.310	16.310 (1.009)	43	3065816			9.15- 109.15	55.92
99 Isobutanol					CAS #: 78-83-1		
15.149	15.149 (1.052)	59	187856	200.000	238.56	50.00- 150.00	100.00(A)
15.149	15.149 (1.052)	41	4506517			2630.47-2730.47	2398.92
15.149	15.149 (1.052)	43	6310018			3703.83-3803.83	3358.97
119 Butyl Acetate					CAS #: 123-86-4		
20.071	20.071 (1.241)	56	7474090	200.000	218.55	50.00- 150.00	100.00(A)
20.071	20.071 (1.241)	73	2366289			0.00- 82.98	31.66
20.071	20.071 (1.241)	43	18435926			197.73- 297.73	246.66
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.091)	55	8115059	200.000	221.35	50.00- 150.00	100.00(A)
23.278	23.278 (1.091)	98	3387837			0.00- 90.62	41.75
23.278	23.278 (1.091)	42	5606169			17.43- 117.43	69.08
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.128)	57	16489699	200.000	199.54	50.00- 150.00	100.00
24.080	24.080 (1.128)	85	13022144			31.14- 131.14	78.97
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msd7.i/7-19oct.b/7101905.d
Report Date: 19-Oct-2007 12:11

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101905.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	719204	3.61
97 1,4-Difluorobenze	2223212	1333927	3112497	2349296	5.67
126 Chlorobenzene-d5	1779964	1067978	2491950	1844247	3.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

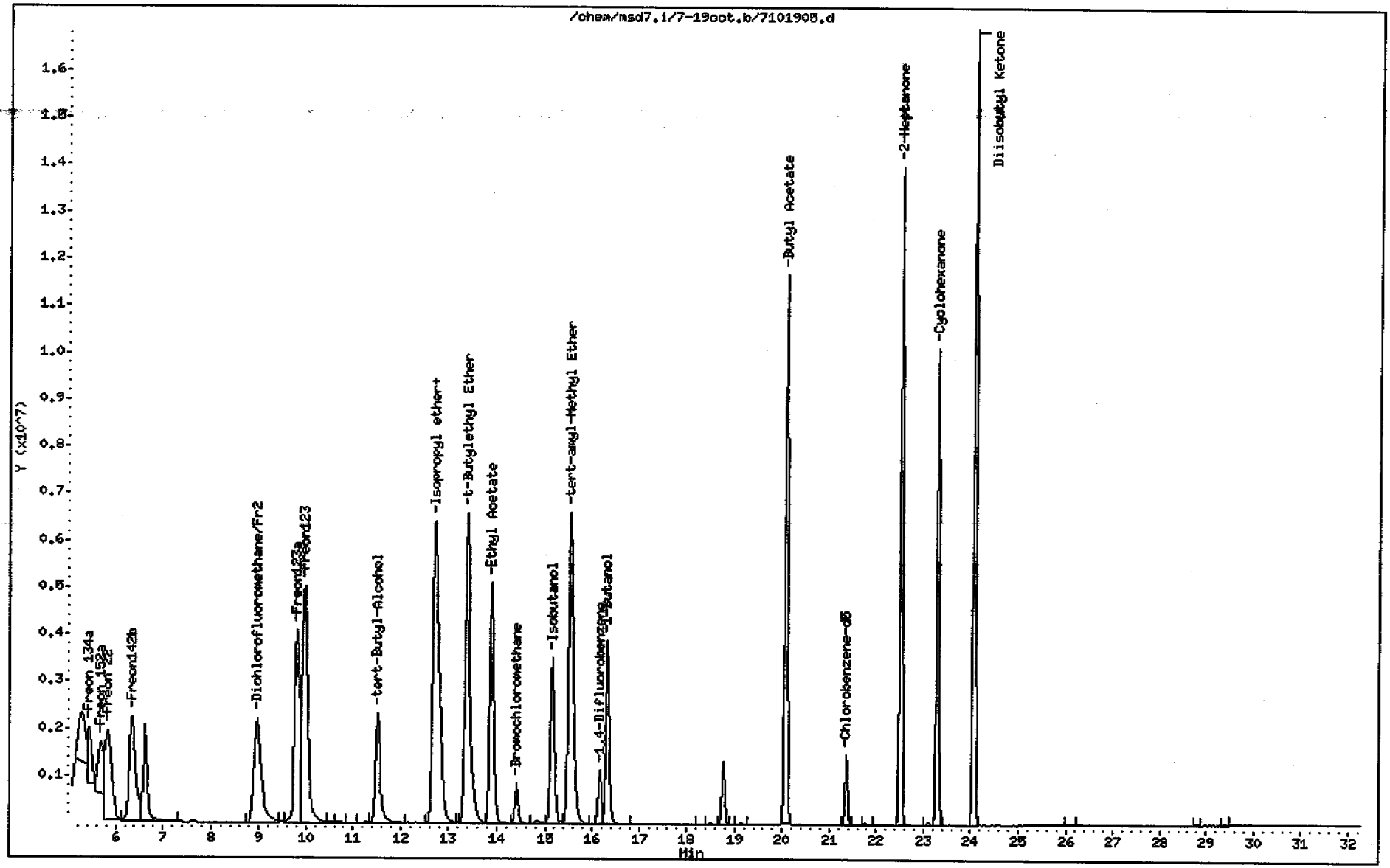
Data File: /chem/msd7.i/7-19oct.b/7101905.d
Date : 19-OCT-2007 11:41
Client ID: Level 7
Sample Info: 200mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0428



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101808.d
Lab Smp Id: ICAL — Client Smp ID: Level 7
Inj Date : 18-OCT-2007 17:39
Operator : cb — Inst ID: msd7.i
Smp Info : 200mL #1576-50
Misc Info : 200ppbv --> 200ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza — Quant Type: ISTD
Cal Date : 18-OCT-2007 17:39 — Cal File: 7101808.d
Als bottle: 1 — Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	676936	25.0000		80.00- 120.00		100.00
14.402	14.402 (1.000)	128	529899			26.95- 126.95		78.28
14.458	14.402 (1.000)	49	2421312			141.62- 241.62		357.69
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2378077	25.0000		80.00- 120.00		100.00
16.172	16.172 (1.000)	88	364352			0.00- 65.69		15.32
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1869726	25.0000		80.00- 120.00		100.00
21.342	21.370 (1.000)	82	1037631			5.32- 105.32		55.50
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	926657	25.0000	25.481	80.00- 120.00		100.00
15.481	15.508 (1.075)	67	627207			2.91- 102.91		67.68
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2173091	25.0000	25.742	80.00- 120.00		100.00
18.771	18.771 (1.161)	70	240988			0.00- 61.46		11.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1512682			19.18- 119.18	69.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1090787	25.0000	24.517	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1407511			76.80- 176.80	129.04
23.333	23.333 (1.093)	176	1052507			46.06- 146.06	96.49
11 Propylene					CAS #: 115-07-1		
5.638	5.610 (0.391)	41	6024485	200.000	206.49	80.00- 120.00	100.00(A)
5.638	5.610 (0.391)	42	4229291			21.19- 121.19	70.20
5.638	5.610 (0.391)	39	4559811			24.83- 124.83	75.69
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.748 (0.401)	85	21314692	200.000	199.25	80.00- 120.00	100.00
5.776	5.748 (0.401)	87	7050808			0.00- 83.07	33.08
16 Freon 114					CAS #: 76-14-2		
6.246	6.218 (0.434)	135	13067052	200.000	179.47	80.00- 120.00	100.00
6.246	6.218 (0.434)	137	4161827			0.00- 81.81	31.85
18 Chloromethane					CAS #: 74-87-3		
6.550	6.522 (0.455)	50	7320258	200.000	208.08	80.00- 120.00	100.00(A)
6.550	6.522 (0.455)	52	2424741			0.00- 84.80	33.12
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	8914081	200.000	202.96	80.00- 120.00	100.00(A)
6.882	6.882 (0.478)	64	2806611			0.00- 83.25	31.49
22 1,3-Butadiene					CAS #: 106-99-0		
6.992	6.937 (0.485)	54	7071038	200.000	224.76	80.00- 120.00	100.00(A)
6.992	6.937 (0.485)	39	7381307			55.97- 155.97	104.39
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	8554987	200.000	219.99	80.00- 120.00	100.00(A)
8.043	8.043 (0.558)	96	8052509			43.77- 143.77	94.13
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	4784892	200.000	245.58	80.00- 120.00	100.00(A)
8.375	8.375 (0.581)	49	1297505			0.00- 79.34	27.12
8.375	8.375 (0.581)	66	1528927			0.00- 83.15	31.95
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.983	8.956 (0.624)	101	21226149	200.000	212.69	80.00- 120.00	100.00(A)
8.983	8.956 (0.624)	103	13713885			14.33- 114.33	64.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.481	9.453 (0.658)	45	3122247	200.000	229.38	80.00- 120.00	100.00(A)
9.481	9.453 (0.658)	43	609786			0.00- 72.83	19.53
9.481	9.453 (0.658)	46	1215909			0.00- 88.20	38.94
42 Freon 113					CAS #: 76-13-1		
10.227	10.227 (0.710)	151	11652787	200.000	209.94	80.00- 120.00	100.00(A)
10.227	10.227 (0.710)	153	7437320			13.49- 113.49	63.82
10.200	10.227 (0.708)	101	14619562			73.17- 173.17	125.46
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.338	10.338 (0.718)	61	12965105	200.000	219.51	80.00- 120.00	100.00(A)
10.338	10.338 (0.718)	96	7908848			11.42- 111.42	61.00
10.338	10.338 (0.718)	98	5068711			0.00- 89.70	39.10
45 Acetone					CAS #: 67-64-1		
10.476	10.504 (0.727)	58	4132810	200.000	226.38	80.00- 120.00	100.00(A)
10.476	10.504 (0.727)	43	12250219			247.10- 347.10	296.41
46 2-Propanol					CAS #: 67-63-0		
10.670	10.697 (0.741)	45	15447383	200.000	238.50	80.00- 120.00	100.00(A)
10.670	10.697 (0.741)	43	3565283			0.00- 75.54	23.08
10.670	10.697 (0.741)	59	612054			0.00- 53.72	3.96
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	25177181	200.000	223.43	80.00- 120.00	100.00(A)
51 3-Chloropropene					CAS #: 107-05-1		
11.167	11.168 (0.775)	76	4508750	200.000	245.87	80.00- 120.00	100.00(A)
11.167	11.168 (0.775)	41	11027823			224.96- 324.96	244.59
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	9796957	200.000	225.62	80.00- 120.00	100.00(A)
11.472	11.472 (0.796)	84	7143181			23.49- 123.49	72.91
11.472	11.472 (0.796)	51	3006658			0.00- 80.85	30.69
60 MTBE					CAS #: 1634-04-4		
11.803	11.831 (0.820)	73	11025528	200.000	167.11	80.00- 120.00	100.00
11.803	11.831 (0.820)	57	2595297			0.00- 73.11	23.54
11.803	11.831 (0.820)	41	2404900			0.00- 76.16	21.81
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	9012807	200.000	224.59	80.00- 120.00	100.00(A)
11.942	11.942 (0.829)	61	12893816			93.77- 193.77	143.06
11.942	11.942 (0.829)	98	5726329			11.77- 111.77	63.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	13476499	200.000	235.33	80.00- 120.00	100.00(A)
12.301	12.301 (0.854)	43	8689968			17.84- 117.84	64.48
12.301	12.301 (0.854)	86	2045178			0.00- 65.07	15.18
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	2014922	200.000	232.87	80.00- 120.00	100.00(A)
12.799	12.799 (0.889)	43	23503120			1150.46-1250.46	1166.45
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	15208502	200.000	221.72	80.00- 120.00	100.00(A)
12.826	12.826 (0.891)	65	4797143			0.00- 81.66	31.54
75 2-Butanone					CAS #: 78-93-3		
13.877	13.905 (0.964)	72	3652475	200.000	249.12	80.00- 120.00	100.00(A)
13.877	13.905 (0.964)	43	16402680			412.95- 512.95	449.08
13.877	13.905 (0.964)	57	1277677			0.00- 86.57	34.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	10627950	200.000	221.36	80.00- 120.00	100.00(A)
13.932	13.932 (0.967)	96	7912975			24.70- 124.70	74.45
13.932	13.932 (0.967)	98	5079116			0.00- 97.31	47.79
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.402 (0.998)	42	9189583	200.000	240.40	80.00- 120.00	100.00(A)
14.375	14.402 (0.998)	71	3311270			0.00- 85.86	36.03
14.375	14.402 (0.998)	72	3616002			0.00- 87.82	39.35
82 Chloroform					CAS #: 67-66-3		
14.458	14.485 (1.004)	83	14531456	200.000	213.20	80.00- 120.00	100.00(A)
14.458	14.485 (1.004)	85	9504871			15.30- 115.30	65.41
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.845 (1.029)	97	13926518	200.000	202.90	80.00- 120.00	100.00(A)
14.817	14.845 (1.029)	99	8949810			14.42- 114.42	64.26
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	8942562	200.000	227.48	80.00- 120.00	100.00(A)
14.845	14.845 (1.031)	56	11510364			77.14- 177.14	128.71
14.845	14.845 (1.031)	41	6322961			22.96- 122.96	70.71
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	13089871	200.000	203.45	80.00- 120.00	100.00(A)
15.094	15.094 (1.048)	117	13611237			54.22- 154.22	103.98
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	19736309	200.000	208.88	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	4339447			0.00- 71.87	21.99
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.426 (1.069)	57	31632116	200.000	230.20	80.00- 120.00	100.00(A)
15.398	15.426 (1.069)	56	10900526			0.00- 84.62	34.46
15.398	15.426 (1.069)	41	8227297			0.00- 79.27	26.01
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	9602381	200.000	191.27	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	3054754			0.00- 82.89	31.81
94 Heptane					CAS #: 142-82-5		
15.702	15.730 (0.971)	71	6282483	200.000	216.20	80.00- 120.00	100.00(A)
15.702	15.730 (0.971)	43	12514936			158.53- 258.53	199.20
15.702	15.730 (0.971)	57	6727545			59.34- 159.34	107.08
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	8328807	200.000	198.44	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	8066565			49.05- 149.05	96.85
16.642	16.642 (1.029)	97	5388543			14.93- 114.93	64.70
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	7647118	200.000	210.89	80.00- 120.00	100.00(A)
17.112	17.112 (1.058)	62	5629589			23.52- 123.52	73.62
17.112	17.112 (1.058)	41	4567700			12.01- 112.01	59.73
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	5051505	200.000	214.19	80.00- 120.00	100.00(A)
17.250	17.250 (1.067)	58	3620228			21.50- 121.50	71.67
17.250	17.250 (1.067)	57	1192718			0.00- 74.60	23.61
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	14367494	200.000	197.17	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	9277547			14.37- 114.37	64.57
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	11007513	200.000	214.82	80.00- 120.00	100.00(A)
18.329	18.329 (1.133)	77	3583647			0.00- 81.97	32.56
18.329	18.329 (1.133)	39	6277823			6.88- 106.88	57.03
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	6680445	200.000	236.26	80.00- 120.00	100.00(A)
18.494	18.522 (1.144)	43	16914065			222.97- 322.97	253.19
18.522	18.522 (1.145)	85	2542376			0.00- 90.48	38.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	21213764	200.000	204.98	80.00- 120.00	100.00(A)
18.882	18.882 (1.168)	92	13605027			13.04- 113.04	64.13
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.296	19.324 (0.904)	75	11506838	200.000	216.70	80.00- 120.00	100.00(A)
19.296	19.324 (0.904)	77	3666959			0.00- 81.65	31.87
19.296	19.324 (0.904)	39	6234784			2.52- 102.52	54.18
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	8133154	200.000	210.01	80.00- 120.00	100.00(A)
19.656	19.656 (0.921)	99	5125477			13.08- 113.08	63.02
19.656	19.656 (0.921)	83	6859943			35.32- 135.32	84.35
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	9290283	200.000	184.96	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	6818614			22.39- 122.39	73.40
19.822	19.822 (0.929)	131	6582279			19.80- 119.80	70.85
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	9469386	200.000	228.16	80.00- 120.00	100.00(A)
19.960	19.960 (0.935)	43	17305893			138.63- 238.63	182.76
19.960	19.960 (0.935)	100	1575326			0.00- 67.05	16.64
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	13376992	200.000	194.95	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	10423775			27.62- 127.62	77.92
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	13069323	200.000	205.86	80.00- 120.00	100.00(A)
20.624	20.624 (0.966)	109	12296113			44.67- 144.67	94.08
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	16601996	200.000	196.27	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	5394737			0.00- 82.43	32.49
21.398	21.398 (1.003)	77	10031248			10.75- 110.75	60.42
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	8788124	200.000	203.54	80.00- 120.00	100.00(A)
21.481	21.481 (1.006)	91	26914189			261.69- 361.69	306.26
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	11064572	200.000	204.73	80.00- 120.00	100.00(A)
21.674	21.674 (1.016)	91	21363976			145.05- 245.05	193.08
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	9336788	200.000	199.36	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	18842407			154.65- 254.65	201.81
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	15984259	200.000	220.66	80.00- 120.00	100.00(A)
22.421	22.421 (1.051)	78	7823852			1.69- 101.69	48.95
133 Bromoform					CAS #: 75-25-2		
22.835	22.836 (1.070)	173	11006294	200.000	182.67	80.00- 120.00	100.00
22.835	22.836 (1.070)	171	5759605			1.22- 101.22	52.33
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	23858342	200.000	201.74	80.00- 120.00	100.00(A)
22.974	22.974 (1.076)	120	6668314			0.00- 78.08	27.95
22.946	22.974 (1.075)	51	2635407			0.00- 61.43	11.05
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	15236549	200.000	194.77	80.00- 120.00	100.00
23.527	23.527 (1.102)	85	9937979			14.35- 114.35	65.22
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	29315025	200.000	184.82	80.00- 120.00	100.00
23.637	23.637 (1.108)	120	7179772			0.00- 72.94	24.49
23.637	23.637 (1.108)	105	1208835			0.00- 54.03	4.12
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	28130830	200.000	200.83	80.00- 120.00	100.00(A)
23.831	23.831 (1.117)	120	8039568			0.00- 78.42	28.58
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	19886270	200.000	180.74	80.00- 120.00	100.00
23.914	23.914 (1.120)	120	11506570			3.80- 103.80	57.86
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	19601387	200.000	196.03	80.00- 120.00	100.00
24.550	24.550 (1.150)	120	9673988			0.00- 98.95	49.35
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.177)	146	14469122	200.000	187.00	80.00- 120.00	100.00
25.130	25.130 (1.177)	148	9170698			14.48- 114.48	63.38
25.130	25.130 (1.177)	111	5741172			0.00- 89.68	39.68
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	14827054	200.000	183.87	80.00- 120.00	100.00
25.269	25.269 (1.184)	148	9476740			13.81- 113.81	63.92
25.269	25.269 (1.184)	111	5716851			0.00- 87.35	38.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	23309446	200.000	217.73	80.00- 120.00	100.00(A)
25.490	25.490 (1.194)	126	4853718			0.00- 71.29	20.82
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	13249955	200.000	183.92	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	8480902			14.30- 114.30	64.01
25.905	25.932 (1.214)	111	5527605			0.00- 90.50	41.72
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	6421549	200.000	217.94	80.00- 120.00	100.00(A)
28.808	28.808 (1.350)	182	6143942			45.65- 145.65	95.68
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	4260828	200.000	173.94	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	2664913			12.64- 112.64	62.54
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.377)	128	13072303	200.000	236.80	80.00- 120.00	100.00(A)
29.388	29.388 (1.377)	127	1572392			0.00- 62.50	12.03
29 Isopentane					CAS #: 78-78-4		
8.402	8.375 (0.583)	43	10508368	200.000	217.77	80.00- 120.00	100.00(A)
8.402	8.375 (0.583)	57	7144223			16.48- 116.48	67.99
19 Butane					CAS #: 106-97-8		
6.826	6.771 (0.474)	58	1573883	200.000	208.82	80.00- 120.00	100.00(A)
6.799	6.771 (0.472)	43	12494796			757.70- 857.70	793.88
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.918	16.919 (1.175)	83	10993866	200.000	227.21	80.00- 120.00	100.00(A)
16.918	16.919 (1.175)	98	5086864			0.00- 96.13	46.27
16.891	16.919 (1.173)	55	9808425			38.51- 138.51	89.22

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101808.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 200ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	676936	-0.97
97 1,4-Difluorobenze	2204815	1322889	3086741	2378077	7.86
126 Chlorobenzene-d5	1812979	1087787	2538171	1869726	3.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-18oct.b/7101808.d

Date : 18-OCT-2007 17:39

Client ID: Level 7

Sample Info: 200mL #1576-50

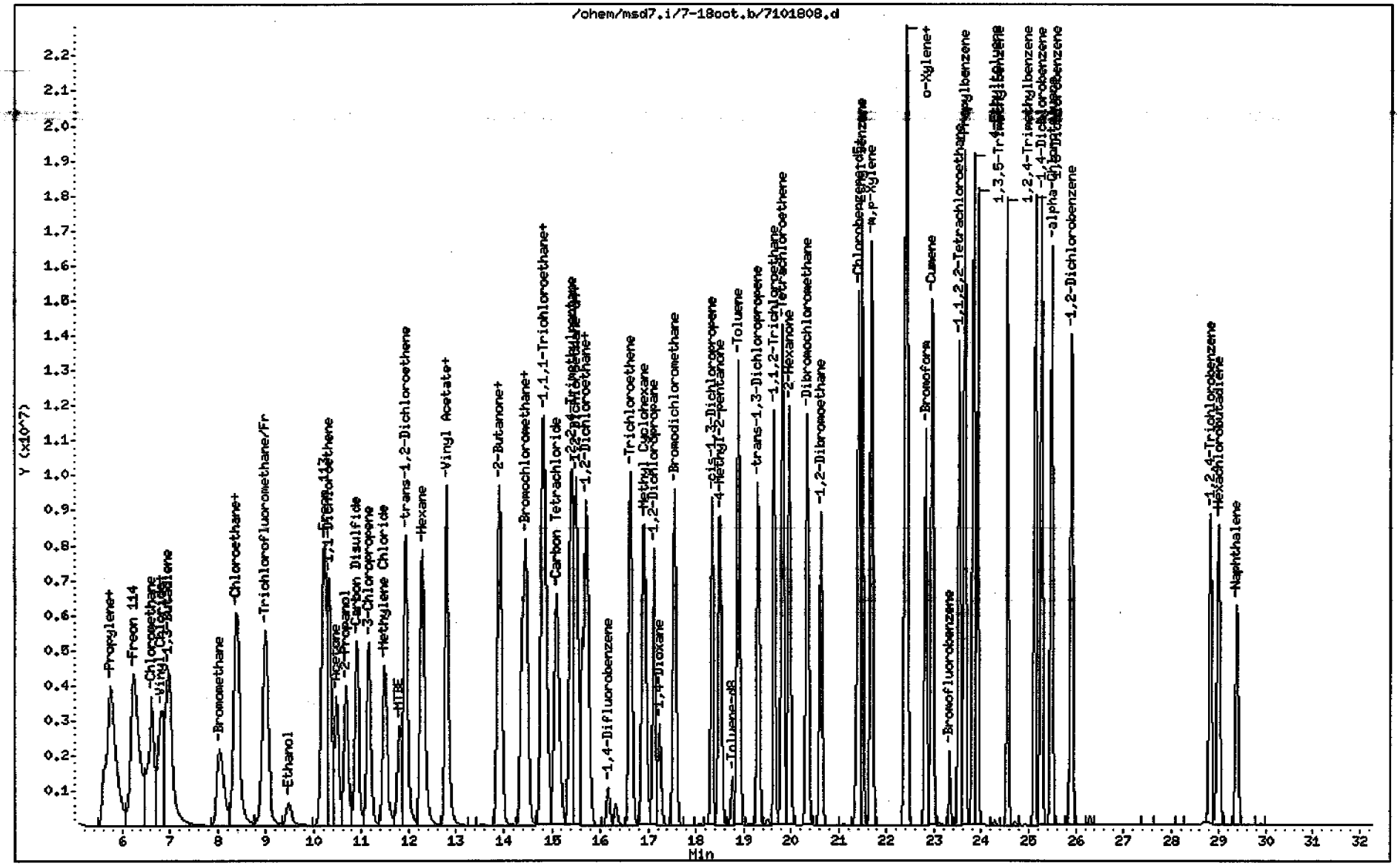
Column phase: RTx-624

Instrument: msd7.i

Operator: cb

Column diameter: 0.53

0438



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0711101-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	87
Freon 114	87
Chloromethane	87
Vinyl Chloride	85
1,3-Butadiene	92
Bromomethane	85
Chloroethane	94
Freon 11	92
Ethanol	93
Freon 113	95
1,1-Dichloroethene	93
Acetone	91
2-Propanol	96
Carbon Disulfide	89
Methylene Chloride	92
Methyl tert-butyl ether	93
trans-1,2-Dichloroethene	95
Hexane	97
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	98
cis-1,2-Dichloroethene	93
Tetrahydrofuran	96
Chloroform	95
1,1,1-Trichloroethane	93
Cyclohexane	96
Carbon Tetrachloride	94
Benzene	96
1,2-Dichloroethane	89
Heptane	98
Trichloroethene	96
1,2-Dichloropropane	94
1,4-Dioxane	95
Bromodichloromethane	96
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	101
Toluene	97
trans-1,3-Dichloropropene	101
1,1,2-Trichloroethane	102
Tetrachloroethene	104

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0711101-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	98
Dibromochloromethane	105
1,2-Dibromoethane (EDB)	102
Chlorobenzene	98
Ethyl Benzene	100
m,p-Xylene	100
o-Xylene	102
Styrene	110
Bromoform	105
1,1,2,2-Tetrachloroethane	97
4-Ethyltoluene	97
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	101
1,4-Dichlorobenzene	101
alpha-Chlorotoluene	86
1,2-Dichlorobenzene	100
1,2,4-Trichlorobenzene	107
Hexachlorobutadiene	100
Chlorodifluoromethane	92
Methanol	88
n-Butanol	103
Propylene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7110702.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/7-07nov.b/t14q018d.m

Injection Date: 07-NOV-2007 08:52
Init. Cal. Date(s): 18-OCT-2007 05-NOV-2007
Init. Cal. Times: 12:17 14:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.23326	0.010	8.17451	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.88010	0.010	0.82974	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.58838	0.010	1.09586	30.00000	Averaged
11 Propylene	1.07750	0.93545	0.010	13.18375	30.00000	Averaged
12 Dichlorodifluoromethane/Fri	3.95067	3.45642	0.010	12.51047	30.00000	Averaged
16 Freon 114	2.68890	2.33664	0.010	13.10031	30.00000	Averaged
18 Chloromethane	1.29926	1.12709	0.010	13.25161	30.00000	Averaged
20 Vinyl Chloride	1.62201	1.38452	0.010	14.64196	30.00000	Averaged
22 1,3-Butadiene	1.16186	1.07459	0.010	7.51080	30.00000	Averaged
25 Bromomethane	1.43619	1.21993	0.010	15.05813	30.00000	Averaged
27 Chloroethane	0.71958	0.67672	0.010	5.95610	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	3.68565	3.40664	0.010	7.57015	30.00000	Averaged
38 Ethanol	0.50270	0.46972	0.010	6.56073	30.00000	Averaged
42 Freon 113	2.04987	1.95601	0.010	4.57903	30.00000	Averaged
43 1,1-Dichloroethene	2.18125	2.02692	0.010	7.07495	30.00000	Averaged
45 Acetone	0.67421	0.61234	0.010	9.17664	30.00000	Averaged
46 2-Propanol	2.39202	2.28566	0.010	4.44659	30.00000	Averaged
47 Carbon Disulfide	4.16162	3.72147	0.010	10.57643	30.00000	Averaged
51 3-Chloropropene	0.67724	0.57789	0.010	14.66990	30.00000	Averaged
54 Methylene Chloride	1.60367	1.47545	0.010	7.99518	30.00000	Averaged
60 MTBE	2.43665	2.27605	0.010	6.59097	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.48204	1.40356	0.010	5.29553	30.00000	Averaged
65 Hexane	2.11488	2.05188	0.010	2.97876	30.00000	Averaged
69 Vinyl Acetate	0.31955	0.29419	0.010	7.93524	30.00000	Averaged
70 1,1-Dichloroethane	2.53322	2.38991	0.010	5.65743	30.00000	Averaged
75 2-Butanone	0.54146	0.53205	0.010	1.73738	30.00000	Averaged
76 cis-1,2-Dichloroethene	1.77314	1.65702	0.010	6.54887	30.00000	Averaged
80 Tetrahydrofuran	1.41176	1.36243	0.010	3.49414	30.00000	Averaged
82 Chloroform	2.51713	2.38605	0.010	5.20746	30.00000	Averaged
83 1,1,1-Trichloroethane	2.53479	2.34997	0.010	7.29129	30.00000	Averaged
85 Cyclohexane	1.45184	1.38861	0.010	4.35545	30.00000	Averaged
87 Carbon Tetrachloride	2.37608	2.24706	0.010	5.43026	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.07476	4.78251	0.010	5.75887	30.00000	Averaged
91 Benzene	0.99332	0.95895	0.010	3.45998	30.00000	Averaged
93 1,2-Dichloroethane	0.52777	0.47221	0.010	10.52724	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7110702.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/7-07nov.b/t14q018d.m

Injection Date: 07-NOV-2007 08:52
Init. Cal. Date(s): 18-OCT-2007 05-NOV-2007
Init. Cal. Times: 12:17 14:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.30549	0.29974	0.010	1.88115	30.00000	Averaged
101 Trichloroethene	0.44124	0.42316	0.010	4.09797	30.00000	Averaged
104 1,2-Dichloropropane	0.38121	0.35662	0.010	6.44989	30.00000	Averaged
106 1,4-Dioxane	0.24794	0.23479	0.010	5.30142	30.00000	Averaged
107 Bromodichloromethane	0.76606	0.73653	0.010	3.85441	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.53866	0.52947	0.010	1.70724	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29726	0.30041	0.010	-1.05891	30.00000	Averaged
114 Toluene	1.08799	1.05122	0.010	3.37941	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.71002	0.71807	0.010	-1.13377	30.00000	Averaged
117 1,1,2-Trichloroethane	0.51782	0.52831	0.010	-2.02712	30.00000	Averaged
120 Tetrachloroethene	0.67159	0.69914	0.010	-4.10292	30.00000	Averaged
121 2-Hexanone	0.55495	0.54564	0.010	1.67747	30.00000	Averaged
122 Dibromochloromethane	0.91748	0.96243	0.010	-4.89885	30.00000	Averaged
123 1,2-Dibromoethane	0.84888	0.87086	0.010	-2.58948	30.00000	Averaged
127 Chlorobenzene	1.13099	1.11382	0.010	1.51859	30.00000	Averaged
128 Ethyl Benzene	0.57731	0.57742	0.010	-0.01869	30.00000	Averaged
129 m,p-Xylene	0.72261	0.72423	0.010	-0.22468	30.00000	Averaged
130 o-Xylene	0.62621	0.63700	0.010	-1.72329	30.00000	Averaged
131 Styrene	0.96855	1.06722	0.010	-10.18786	30.00000	Averaged
133 Bromoform	0.80564	0.84930	0.010	-5.41894	30.00000	Averaged
134 Cumene	1.58127	1.64188	0.010	-3.83316	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.04598	1.01720	0.010	2.75171	30.00000	Averaged
142 Propylbenzene	2.12085	2.12761	0.010	-0.31855	30.00000	Averaged
145 4-Ethyltoluene	1.87287	1.81577	0.010	3.04926	30.00000	Averaged
147 1,3,5-Trimethylbenzene	1.47112	1.43531	0.010	2.43414	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.33697	1.35507	0.010	-1.35408	30.00000	Averaged
155 1,3-Dichlorobenzene	1.03460	1.04339	0.010	-0.84970	30.00000	Averaged
156 1,4-Dichlorobenzene	1.07824	1.08708	0.010	-0.82036	30.00000	Averaged
159 alpha-Chlorotoluene	1.43143	1.22605	0.010	14.34772	30.00000	Averaged
161 1,2-Dichlorobenzene	0.96328	0.96249	0.010	0.08193	30.00000	Averaged
165 1,2,4-Trichlorobenzene	0.39398	0.42051	0.010	-6.73475	30.00000	Averaged
166 Hexachlorobutadiene	0.32753	0.32774	0.010	-0.06462	30.00000	Averaged
29 Isopentane	1.78205	1.60596	0.010	9.88136	30.00000	Averaged
19 Butane	0.27835	0.24206	0.010	13.03589	30.00000	Averaged
102 Methyl Cyclohexane	1.78694	1.69787	0.010	4.98464	30.00000	Averaged
167 Naphthalene	0.73814	0.83205	0.010	-12.72235	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110702.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 07-NOV-2007 08:52
Operator : sjr Inst ID: msd7.i
Smp Info : 200mL #1576-50B
Misc Info : 50ppbv -> 50ppbv
Comment :
Method : /chem/msd7.i/7-07nov.b/t14qO18d.m
Meth Date : 07-Nov-2007 11:36 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	695461	25.0000			80.00- 120.00	100.00
14.416	14.416 (1.000)	128	547040				28.66- 128.66	78.66
14.388	14.388 (1.000)	49	1276119				133.49- 233.49	183.49
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2265681	25.0000			80.00- 120.00	100.00
16.158	16.158 (1.000)	88	345043				0.00- 65.23	15.23
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1765821	25.0000			80.00- 120.00	100.00
21.356	21.356 (1.000)	82	934026				4.70- 104.70	52.89
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	857681	25.0000	22.956		80.00- 120.00	100.00
15.494	15.494 (1.075)	67	473551				2.91- 102.91	55.21
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1994025	25.0000	24.792		80.00- 120.00	100.00
18.757	18.757 (1.161)	70	219062				0.00- 61.46	10.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1389670			19.18- 119.18	69.69
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	1038966	25.0000	24.726	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1287218			73.89- 173.89	123.89
23.347	23.347 (1.093)	176	1020299			48.20- 148.20	98.20
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1301136	50.0000	43.408	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	913111			21.19- 121.19	70.18
5.617	5.617 (0.390)	39	960183			24.83- 124.83	73.80
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.758 (0.399)	85	4807610	50.0000	43.745	80.00- 120.00	100.00
5.758	5.758 (0.399)	87	1556067			0.00- 83.07	32.37
16 Freon 114					CAS #: 76-14-2		
6.208	6.208 (0.431)	135	3250089	50.0000	43.450	80.00- 120.00	100.00
6.208	6.208 (0.431)	137	1017351			0.00- 81.30	31.30
18 Chloromethane					CAS #: 74-87-3		
6.546	6.546 (0.454)	50	1567695	50.0000	43.374	80.00- 120.00	100.00
6.518	6.518 (0.452)	52	508061			0.00- 84.80	32.41
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.856 (0.476)	62	1925757	50.0000	42.679	80.00- 120.00	100.00
6.856	6.856 (0.476)	64	608325			0.00- 83.25	31.59
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.481)	54	1494672	50.0000	46.244	80.00- 120.00	100.00
6.940	6.940 (0.481)	39	1510026			55.97- 155.97	101.03
25 Bromomethane					CAS #: 74-83-9		
8.039	8.039 (0.558)	94	1696824	50.0000	42.471	80.00- 120.00	100.00
8.039	8.039 (0.558)	96	1591967			43.82- 143.82	93.82
27 Chloroethane					CAS #: 75-00-3		
8.348	8.348 (0.579)	64	941265	50.0000	47.022	80.00- 120.00	100.00
8.348	8.348 (0.579)	49	259951			0.00- 79.34	27.62
8.348	8.348 (0.579)	66	284730			0.00- 83.15	30.25
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.968	8.968 (0.622)	101	4738374	50.0000	46.215	80.00- 120.00	100.00
8.968	8.968 (0.622)	103	3056650			14.51- 114.51	64.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.467	9.467 (0.657)	45	653345	50.0000	46.720	80.00- 120.00	100.00
9.467	9.467 (0.657)	43	130564			0.00- 72.83	19.98
9.467	9.467 (0.657)	46	248961			0.00- 88.20	38.11
42 Freon 113					CAS #: 76-13-1		
10.186	10.186 (0.707)	151	2720654	50.0000	47.710	80.00- 120.00	100.00
10.186	10.186 (0.707)	153	1717247			13.12- 113.12	63.12
10.186	10.186 (0.707)	101	3190661			67.28- 167.28	117.28
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	2819293	50.0000	46.462	80.00- 120.00	100.00
10.324	10.324 (0.716)	96	1685284			9.78- 109.78	59.78
10.324	10.324 (0.716)	98	1078478			0.00- 88.25	38.25
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.728)	58	851721	50.0000	45.412	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	2581858			247.10- 347.10	303.13
46 2-Propanol					CAS #: 67-63-0		
10.683	10.683 (0.741)	45	3179171	50.0000	47.777	80.00- 120.00	100.00
10.683	10.683 (0.741)	43	759982			0.00- 75.54	23.91
10.683	10.683 (0.741)	59	125172			0.00- 53.72	3.94
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.754)	76	5176277	50.0000	44.712	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.774)	76	803804	50.0000	42.665	80.00- 120.00	100.00
11.153	11.153 (0.774)	41	2255116			224.96- 324.96	280.56
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.795)	49	2052242	50.0000	46.002	80.00- 120.00	100.00
11.485	11.485 (0.797)	84	1436237			19.98- 119.98	69.98
11.457	11.457 (0.795)	51	622780			0.00- 80.85	30.35
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.820)	73	3165809	50.0000	46.704	80.00- 120.00	100.00
11.817	11.817 (0.820)	57	755188			0.00- 73.85	23.85
11.817	11.817 (0.820)	41	725324			0.00- 76.16	22.91
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.928	11.928 (0.827)	96	1952241	50.0000	47.352	80.00- 120.00	100.00
11.928	11.928 (0.827)	61	2811319			94.00- 194.00	144.00
11.928	11.928 (0.827)	98	1240429			11.77- 111.77	63.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.852)	57	2854008	50.0000	48.511	80.00- 120.00	100.00
12.287	12.287 (0.852)	43	1825767			17.84- 117.84	63.97
12.315	12.315 (0.854)	86	429496			0.00- 65.07	15.05
69 Vinyl Acetate					CAS #: 108-05-4		
12.785	12.785 (0.887)	86	409199	50.0000	46.032	80.00- 120.00	100.00
12.785	12.785 (0.887)	43	4990471			1150.46-1250.46	1219.57
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.889)	63	3324174	50.0000	47.171	80.00- 120.00	100.00
12.812	12.812 (0.889)	65	1040554			0.00- 81.30	31.30
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	740046	50.0000	49.131	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	3422563			412.48- 512.48	462.48
13.891	13.891 (0.964)	57	258927			0.00- 86.57	34.99
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.965)	61	2304791	50.0000	46.726	80.00- 120.00	100.00
13.918	13.918 (0.965)	96	1760990			26.41- 126.41	76.41
13.918	13.918 (0.965)	98	1118817			0.00- 98.54	48.54
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (0.998)	42	1895034	50.0000	48.253	80.00- 120.00	100.00
14.388	14.388 (0.998)	71	689002			0.00- 86.36	36.36
14.388	14.388 (0.998)	72	742657			0.00- 87.82	39.19
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	3318807	50.0000	47.396	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	2180130			15.69- 115.69	65.69
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	3268629	50.0000	46.354	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	2092976			14.03- 114.03	64.03
85 Cyclohexane					CAS #: 110-82-7		
14.831	14.831 (1.029)	84	1931442	50.0000	47.822	80.00- 120.00	100.00
14.831	14.831 (1.029)	56	2436720			76.16- 176.16	126.16
14.831	14.831 (1.029)	41	1348032			19.79- 119.79	69.79
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	3125481	50.0000	47.285	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	3223578			53.14- 153.14	103.14
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.069)	57	6652102	50.0000	47.120	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.069)	56	2260342			0.00- 84.62	33.98
15.411	15.411 (1.069)	41	1724308			0.00- 79.27	25.92
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	4345366	50.0000	48.270	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	951437			0.00- 71.87	21.90
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.967)	62	2139750	50.0000	44.736	80.00- 120.00	100.00
15.633	15.633 (0.967)	64	681653			0.00- 82.89	31.86
94 Heptane					CAS #: 142-82-5		
15.715	15.715 (0.973)	71	1358252	50.0000	49.059	80.00- 120.00	100.00
15.715	15.715 (0.973)	43	2646821			158.53- 258.53	194.87
15.715	15.715 (0.973)	57	1423287			59.34- 159.34	104.79
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1917480	50.0000	47.951	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	1938735			51.11- 151.11	101.11
16.628	16.628 (1.029)	97	1247203			15.04- 115.04	65.04
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.126	17.126 (1.060)	63	1615968	50.0000	46.775	80.00- 120.00	100.00
17.126	17.126 (1.060)	62	1194565			23.92- 123.92	73.92
17.126	17.126 (1.060)	41	989654			11.24- 111.24	61.24
106 1,4-Dioxane					CAS #: 123-91-1		
17.264	17.264 (1.068)	88	1063932	50.0000	47.349	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	732157			18.82- 118.82	68.82
17.236	17.236 (1.067)	57	249266			0.00- 74.60	23.43
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	3337484	50.0000	48.073	80.00- 120.00	100.00
17.568	17.568 (1.087)	85	2137025			14.03- 114.03	64.03
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	2399205	50.0000	49.146	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	767959			0.00- 82.01	32.01
18.342	18.342 (1.135)	39	1314445			4.79- 104.79	54.79
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1361244	50.0000	50.529	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	3494192			222.97- 322.97	256.69
18.508	18.508 (1.145)	85	536155			0.00- 90.48	39.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	4763468	50.0000	48.310	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	2996420			12.90- 112.90	62.90
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2535955	50.0000	50.567	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	825072			0.00- 82.53	32.53
19.310	19.310 (0.904)	39	1300062			1.27- 101.27	51.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	1865812	50.0000	51.014	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	1164336			12.40- 112.40	62.40
19.669	19.669 (0.921)	83	1540257			32.55- 132.55	82.55
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2469122	50.0000	52.051	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1754691			21.07- 121.07	71.07
19.835	19.835 (0.929)	131	1687231			18.33- 118.33	68.33
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.973 (0.935)	58	1926995	50.0000	49.161	80.00- 120.00	100.00
19.973	19.973 (0.935)	43	3560746			134.78- 234.78	184.78
19.973	19.973 (0.935)	100	341999			0.00- 67.05	17.75
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	3398954	50.0000	52.449	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	2601663			27.62- 127.62	76.54
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.637	20.637 (0.966)	107	3075574	50.0000	51.295	80.00- 120.00	100.00
20.637	20.637 (0.966)	109	2924880			45.10- 145.10	95.10
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	3933609	50.0000	49.241	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1257316			0.00- 81.96	31.96
21.411	21.411 (1.003)	77	2746745			19.83- 119.83	69.83
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	2039251	50.0000	50.009	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	6256067			261.69- 361.69	306.78
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2557738	50.0000	50.112	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	4945986			145.05- 245.05	193.37
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	2249667	50.0000	50.862	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.379	22.379 (1.048)	91	4508999			150.43- 250.43	200.43
131 Styrene					CAS #: 100-42-5		
22.407	22.407 (1.049)	104	3769038	50.0000	55.094	80.00- 120.00	100.00
22.407	22.407 (1.049)	78	1833787			0.00- 98.65	48.65
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	2999417	50.0000	52.709	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	1534316			1.15- 101.15	51.15
134 Cumene					CAS #: 98-82-8		
22.960	22.960 (1.075)	105	5798543	50.0000	51.916	80.00- 120.00	100.00
22.960	22.960 (1.075)	120	1599327			0.00- 78.08	27.58
22.960	22.960 (1.075)	51	577197			0.00- 61.43	9.95
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.540	23.540 (1.102)	83	3592372	50.0000	48.624	80.00- 120.00	100.00
23.540	23.540 (1.102)	85	2317608			14.51- 114.51	64.51
142 Propylbenzene					CAS #: 103-65-1		
23.651	23.651 (1.107)	91	7513946	50.0000	50.159	80.00- 120.00	100.00
23.651	23.651 (1.107)	120	1747152			0.00- 72.94	23.25
23.651	23.651 (1.107)	105	266423			0.00- 54.03	3.55
145 4-Ethyltoluene					CAS #: 622-96-8		
23.817	23.817 (1.115)	105	6412635	50.0000	48.475	80.00- 120.00	100.00
23.817	23.817 (1.115)	120	2043953			0.00- 81.87	31.87
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	5069011	50.0000	48.783	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	2652601			3.80- 103.80	52.33
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	4785618	50.0000	50.677	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	2355788			0.00- 98.95	49.23
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.116	25.116 (1.176)	146	3684881	50.0000	50.425	80.00- 120.00	100.00
25.116	25.116 (1.176)	148	2333424			14.48- 114.48	63.32
25.116	25.116 (1.176)	111	1410496			0.00- 89.68	38.28
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	3839183	50.0000	50.410	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	2474409			13.81- 113.81	64.45
25.282	25.282 (1.184)	111	1414056			0.00- 87.35	36.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	4329978	50.0000	42.826	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	921873			0.00- 71.29	21.29
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	3399179	50.0000	49.959	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	2169865			13.83- 113.83	63.83
25.918	25.918 (1.214)	111	1354104			0.00- 89.84	39.84
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	1485096	50.0000	53.367	80.00- 120.00	100.00
28.821	28.821 (1.350)	182	1389223			43.54- 143.54	93.54
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	1157454	50.0000	50.032	80.00- 120.00	100.00
28.987	28.987 (1.357)	223	728048			12.64- 112.64	62.90
29 Isopentane					CAS #: 78-78-4		
8.377	8.377 (0.581)	43	2233766	50.0000	45.059	80.00- 120.00	100.00
8.377	8.377 (0.581)	57	1510561			16.48- 116.48	67.62
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	336691	50.0000	43.482	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	2708806			757.70- 857.70	804.54
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.904	16.904 (1.173)	83	2361603	50.0000	47.508	80.00- 120.00	100.00
16.904	16.904 (1.173)	98	1109675			0.00- 96.13	46.99
16.904	16.904 (1.173)	55	2013072			38.51- 138.51	85.24
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	2938503	50.0000	56.361	80.00- 120.00	100.00
29.374	29.374 (1.375)	127	346745			0.00- 62.50	11.80

Data File: /chem/msd7.i/7-07nov.b/7110702.d
Report Date: 07-Nov-2007 11:36

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110702.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 50ppbv -> 50ppbv

Calibration Date: 07-NOV-2007
Calibration Time: 11:15
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695093	417056	973130	695461	0.05
97 1,4-Difluorobenze	2194138	1316483	3071793	2265681	3.26
126 Chlorobenzene-d5	1603205	961923	2244487	1765821	10.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

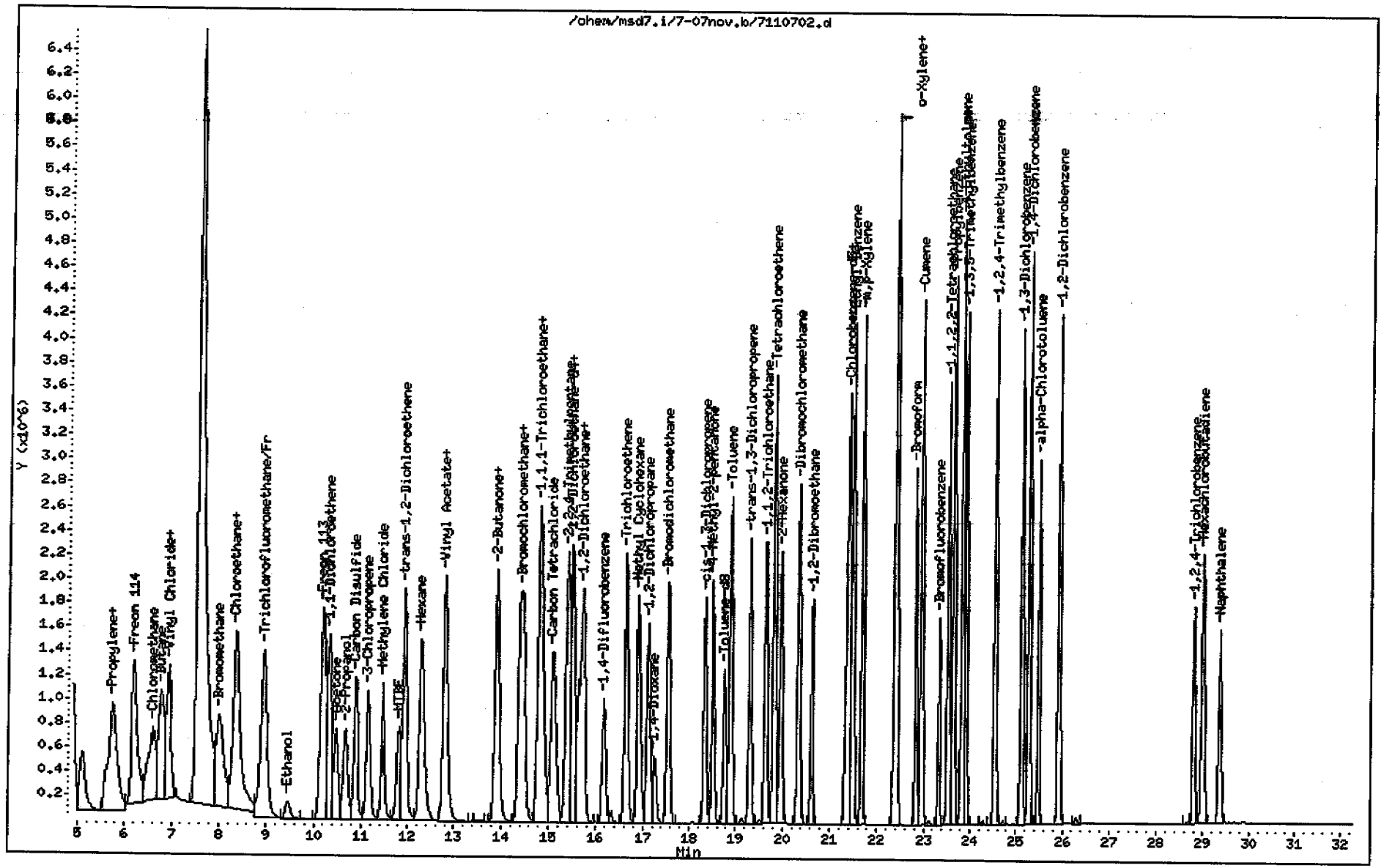
Data File: /chem/msd7.i/7-07nov.b/7110702.d
Date : 07-NOV-2007 08:52
Client ID: CCV-1
Sample Info: 200mL #1576-50B

Column phase: RTx-624

Instrument: msd7.i

Operator: sjr
Column diameter: 0.53

0452



Data File: /chem/msd7.i/7-07nov.b/7110705.d
Report Date: 07-Nov-2007 11:36

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7110705.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd7.i/7-07nov.b/t14q018d.m

Injection Date: 07-NOV-2007 11:15
Init. Cal. Date(s): 18-OCT-2007 05-NOV-2007
Init. Cal. Times: 12:17 14:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.20883	0.010	9.99299	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.78915	0.010	11.07832	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.65147	0.010	-9.50939	30.00000	Averaged
5 Freon 143a	0.54510	0.49167	0.010	9.80146	40.00000	Averaged
6 Freon142b	2.22349	1.99041	0.010	10.48280	40.00000	Averaged
13 Freon 134a	1.06546	0.98345	0.010	7.69728	40.00000	Averaged
15 Freon 152a	0.76921	0.69285	0.010	9.92661	40.00000	Averaged
17 Freon 22	2.48505	2.28916	0.010	7.88270	40.00000	Averaged
26 Methanol	0.42691	0.37521	0.010	12.11069	40.00000	Averaged
34 Dichlorofluoromethane/Fr21	2.20471	1.98383	0.010	10.01875	40.00000	Averaged
40 Freon123a	1.24571	1.22275	0.010	1.84311	40.00000	Averaged
41 Freon123	2.20945	2.02061	0.010	8.54689	40.00000	Averaged
57 tert-Butyl-Alcohol	2.31844	2.55562	0.010	-10.22995	40.00000	Averaged
68 Isopropyl ether	4.46135	4.24197	0.010	4.91738	40.00000	Averaged
71 1-Propanol	0.27978	0.27757	0.010	0.78987	40.00000	Averaged
73 t-Butylethyl Ether	3.80281	3.66486	0.010	3.62767	40.00000	Averaged
77 Ethyl Acetate	0.42459	0.41275	0.010	2.78763	40.00000	Averaged
92 tert-amyl-Methyl Ether	2.77937	2.69823	0.010	2.91920	40.00000	Averaged
96 2-Heptanone	1.66671	1.69813	0.010	-1.88510	40.00000	Averaged
98 1-Butanol	0.24439	0.25091	0.010	-2.66861	40.00000	Averaged
99 Isobutanol	0.02737	0.03638	0.010	-32.89731	40.00000	Averaged
119 Butyl Acetate	0.36393	0.37478	0.010	-2.98100	40.00000	Averaged
135 Cyclohexanone	0.49697	0.48955	0.010	1.49330	40.00000	Averaged
146 Diisobutyl Ketone	1.12021	1.22670	0.010	-9.50681	40.00000	Averaged
55 Cyclopentene	4.65788	4.46479	0.010	4.14545	40.00000	Averaged
78 2,2-Dichloropropane	2.91670	2.90299	0.010	0.46991	40.00000	Averaged
88 1,1-Dichloropropene	0.33704	0.35543	0.010	-5.45758	40.00000	Averaged
118 1,3-Dichloropropane	1.00356	0.94173	0.010	6.16106	40.00000	Averaged
125 1,1,1,2-Tetrachloroethane	0.89149	1.02131	0.010	-14.56117	40.00000	Averaged
136 Bromobenzene	1.04603	1.28815	0.010	-23.14672	40.00000	Averaged
138 1,2,3-Trichloropropane	0.48949	0.59052	0.010	-20.63959	40.00000	Averaged
141 2-Chlorotoluene	0.77258	0.94049	0.010	-21.73297	40.00000	Averaged
143 4-Chlorotoluene	0.82426	0.99363	0.010	-20.54849	40.00000	Averaged
153 p-Cymene	2.44232	2.92327	0.010	-19.69271	40.00000	Averaged
154 1,2,3-Trimethylbenzene	0.96900	1.17407	0.010	-21.16278	40.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7110705.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd7.i/7-07nov.b/t14q018d.m

Injection Date: 07-NOV-2007 11:15
Init. Cal. Date(s): 18-OCT-2007 05-NOV-2007
Init. Cal. Times: 12:17 14:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
158 Butylbenzene	0.65671	0.81976	0.010	-24.82910	40.00000	Averaged
148 tert-Butylbenzene	2.20176	2.55555	0.010	-16.06843	40.00000	Averaged
149 sec-Butylbenzene	3.04755	3.61709	0.010	-18.68868	40.00000	Averaged
162 1,2-Dibromo-3-Chloropropane	0.78810	1.02997	0.010	-30.68957	40.00000	Averaged
201 Pentachloroethane	0.65826	0.80699	0.010	-22.59305	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110705.d
Lab Smp Id: CCV Client Smp ID: CCVsp
Inj Date : 07-NOV-2007 11:15
Operator : sjr Inst ID: msd7.i
Smp Info : 50mL/100mL #1487-370/1487-400A
Misc Info : 200ppbv/100ppbv -> 50ppbv
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 11:36 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22aNsp16.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	695093	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	532063			26.55- 126.55	76.55
14.388	14.388 (1.000)	49	981981			91.27- 191.27	141.27
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2194138	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	340642			0.00- 65.53	15.53
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1603205	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	862382			4.70- 104.70	53.79
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	840251	25.0000	22.502	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	427373			2.91- 102.91	50.86
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1731498	25.0000	22.230	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	188172			0.00- 61.46	10.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1212855			19.18- 119.18	70.05
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	1044433	25.0000	27.377	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1276252			72.20- 172.20	122.20
23.347	23.347 (1.093)	176	998698			45.62- 145.62	95.62
5 Freon 143a					CAS #: 420-46-2		
5.279	5.279 (0.366)	65	683514	50.0000	45.099	80.00- 120.00	100.00
5.251	5.251 (0.364)	69	6546207			0.00- 50.00	957.73
5.279	5.279 (0.366)	64	199242			0.00- 77.08	29.15
6 Freon142b					CAS #: 75-68-3		
6.321	6.321 (0.438)	65	2767035	50.0000	44.758	80.00- 120.00	100.00
6.321	6.321 (0.438)	45	663042			0.00- 74.42	23.96
13 Freon 134a					CAS #: 811-97-2		
5.420	5.420 (0.376)	83	1367179	50.0000	46.151	80.00- 120.00	100.00
5.251	5.251 (0.364)	69	6546207			398.13- 498.13	478.81
5.420	5.420 (0.376)	63	176478			0.00- 64.08	12.91
15 Freon 152a					CAS #: 75-37-6		
5.645	5.645 (0.392)	65	963192	50.0000	45.037	80.00- 120.00	100.00
5.645	5.645 (0.392)	51	1465320			109.56- 209.56	152.13
5.645	5.645 (0.392)	47	390460			0.00- 90.52	40.54
17 Freon 22					CAS #: 75-45-6		
5.814	5.814 (0.403)	51	3182359	50.0000	46.059	80.00- 120.00	100.00
5.814	5.814 (0.403)	67	363923			0.00- 61.77	11.44
5.786	5.786 (0.401)	85	41694			0.00- 51.67	1.31
26 Methanol					CAS #: 67-56-1		
7.588	7.588 (0.526)	31	3129689	300.000	263.67	80.00- 120.00	100.00
7.588	7.588 (0.526)	32	2095746			16.96- 116.96	66.96
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.618)	67	2757886	50.0000	44.991	80.00- 120.00	100.00
8.912	8.912 (0.618)	69	849275			0.00- 81.12	30.79
8.912	8.912 (0.618)	35	130823			0.00- 53.83	4.74
40 Freon123a					CAS #: 354-23-4		
9.798	9.798 (0.680)	117	1699852	50.0000	49.078	80.00- 120.00	100.00
9.798	9.798 (0.680)	67	2414440			110.97- 210.97	142.04
41 Freon123					CAS #: 306-83-2		
9.937	9.937 (0.689)	83	2809022	50.0000	45.726	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)							
9.964	9.964 (0.691)	133	581333			0.00- 69.52	20.70
9.937	9.937 (0.689)	85	1952826			22.16- 122.16	69.52
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.485	11.485 (0.797)	59	3552785	50.0000	55.115	80.00- 120.00	100.00
11.485	11.485 (0.797)	41	809369			0.00- 73.42	22.78
11.513	11.513 (0.799)	57	356377			0.00- 60.26	10.03
68 Isopropyl ether					CAS #: 108-20-3		
12.702	12.702 (0.881)	45	5897126	50.0000	47.541	80.00- 120.00	100.00
12.702	12.702 (0.881)	87	1341992			0.00- 73.31	22.76
12.702	12.702 (0.881)	59	466379			0.00- 58.30	7.91
71 1-Propanol					CAS #: 71-23-8		
12.840	12.840 (0.891)	42	385878	50.0000	49.605	80.00- 120.00	100.00
12.812	12.812 (0.889)	59	563522			95.91- 195.91	146.04
12.702	12.702 (0.881)	41	1086836			265.93- 365.93	281.65
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.365	13.365 (0.927)	59	5094836	50.0000	48.186	80.00- 120.00	100.00
13.365	13.365 (0.927)	87	1963338			0.00- 88.95	38.54
13.365	13.365 (0.927)	41	875781			0.00- 67.89	17.19
77 Ethyl Acetate					CAS #: 141-78-6		
13.863	13.863 (0.962)	45	573801	50.0000	48.606	80.00- 120.00	100.00
13.863	13.863 (0.962)	61	1119093			49.04- 149.04	195.03
13.863	13.863 (0.962)	43	3943587			622.55- 722.55	687.27
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.522	15.522 (1.077)	73	3751042	50.0000	48.540	80.00- 120.00	100.00
15.549	15.549 (1.079)	87	894990			0.00- 73.71	23.86
15.522	15.522 (1.077)	55	966642			0.00- 78.56	25.77
96 2-Heptanone					CAS #: 110-43-0		
22.517	22.517 (1.562)	58	2360715	50.0000	50.942	80.00- 120.00	100.00
22.517	22.517 (1.562)	43	3645910			108.53- 208.53	154.44
98 1-Butanol					CAS #: 71-36-3		
16.324	16.324 (1.010)	56	1101065	50.0000	51.334	80.00- 120.00	100.00
16.324	16.324 (1.010)	41	770923			21.86- 121.86	70.02
16.324	16.324 (1.010)	43	606850			9.15- 109.15	55.11
99 Isobutanol					CAS #: 78-83-1		
15.135	15.135 (1.050)	59	50572	50.0000	66.449	80.00- 120.00	100.00
15.135	15.135 (1.050)	41	946072			2630.47-2730.47	1870.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
99 Isobutanol (continued)							
15.135	15.135 (1.050)	43	1312899			3703.83-3803.83	2596.10
119 Butyl Acetate					CAS #: 123-86-4		
20.056	20.056 (1.241)	56	1644621	50.0000	51.490	80.00- 120.00	100.00
20.056	20.056 (1.241)	73	568899			0.00- 84.59	34.59
20.056	20.056 (1.241)	43	4066598			197.27- 297.27	247.27
135 Cyclohexanone					CAS #: 108-94-1		
23.291	23.291 (1.091)	55	1569682	50.0000	49.253	80.00- 120.00	100.00
23.291	23.291 (1.091)	98	658433			0.00- 90.62	41.95
23.291	23.291 (1.091)	42	1085506			17.43- 117.43	69.15
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.066	24.066 (1.127)	57	3933313	50.0000	54.753	80.00- 120.00	100.00
24.066	24.066 (1.127)	85	3305957			34.05- 134.05	84.05
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00
55 Cyclopentene					CAS #: 142-29-0		
11.264	11.264 (0.781)	67	6206895	50.0000	47.927	80.00- 120.00	100.00
11.264	11.264 (0.781)	68	2527589			0.00- 90.48	40.72
11.264	11.264 (0.781)	53	1362809			0.00- 70.85	21.96
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.891	13.891 (0.964)	77	4035698	50.0000	49.765	80.00- 120.00	100.00
13.891	13.891 (0.964)	79	1327591			0.00- 82.90	32.90
13.891	13.891 (0.964)	97	807966			0.00- 70.03	20.02
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.135	15.135 (0.937)	110	1559727	50.0000	52.729	80.00- 120.00	100.00
15.135	15.135 (0.937)	75	4093701			218.22- 318.22	262.46
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.973	19.973 (1.236)	76	4132592	50.0000	46.919	80.00- 120.00	100.00
19.973	19.973 (1.236)	41	3020085			23.08- 123.08	73.08
19.973	19.973 (1.236)	78	1324137			0.00- 81.77	32.04
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.522	21.522 (1.008)	131	3274729	50.0000	57.280	80.00- 120.00	100.00
21.522	21.522 (1.008)	117	2292172			18.93- 118.93	70.00
21.522	21.522 (1.008)	95	1253410			0.00- 89.37	38.28
136 Bromobenzene					CAS #: 108-86-1		
23.623	23.623 (1.106)	156	4130339	50.0000	61.573	80.00- 120.00	100.00
23.623	23.623 (1.106)	158	3995417			46.73- 146.73	96.73
23.623	23.623 (1.106)	77	7839126			147.77- 247.77	189.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.678	23.678 (1.109)	110	1893461	50.0000	60.320	80.00- 120.00	100.00
23.678	23.678 (1.109)	75	5515158			241.27- 341.27	291.27
23.651	23.651 (1.107)	61	1429454			26.84- 126.84	75.49
141 2-Chlorotoluene					CAS #: 95-49-8		
23.900	23.900 (1.119)	126	3015583	50.0000	60.866	80.00- 120.00	100.00
23.900	23.900 (1.119)	91	8628412			236.13- 336.13	286.13
23.872	23.872 (1.118)	65	814091			0.00- 78.37	27.00
143 4-Chlorotoluene					CAS #: 106-43-4		
24.066	24.066 (1.127)	126	3185990	50.0000	60.274	80.00- 120.00	100.00
24.066	24.066 (1.127)	91	9254039			240.46- 340.46	290.46
24.066	24.066 (1.127)	63	1164725			0.00- 88.24	36.56
153 p-Cymene					CAS #: 99-87-6		
25.033	25.033 (1.172)	119	9373212	50.0000	59.846	80.00- 120.00	100.00
25.033	25.033 (1.172)	134	2592466			0.00- 77.89	27.66
25.033	25.033 (1.172)	91	2282221			0.00- 74.89	24.35
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.282	25.282 (1.184)	120	3764553	50.0000	60.581	80.00- 120.00	100.00
25.282	25.282 (1.184)	105	8058394			164.06- 264.06	214.06
25.282	25.282 (1.184)	77	1025882			0.00- 78.76	27.25
158 Butylbenzene					CAS #: 104-51-8		
25.697	25.697 (1.203)	134	2628501	50.0000	62.414	80.00- 120.00	100.00
25.697	25.697 (1.203)	91	10249755			339.95- 439.95	389.95
25.697	25.697 (1.203)	92	5803995			181.94- 281.94	220.81
148 tert-Butylbenzene					CAS #: 98-06-6		
24.453	24.453 (1.145)	119	8194136	50.0000	58.034	80.00- 120.00	100.00
24.453	24.453 (1.145)	134	2042361			0.00- 74.92	24.92
24.453	24.453 (1.145)	91	5676387			20.96- 120.96	69.27
149 sec-Butylbenzene					CAS #: 135-98-8		
24.812	24.812 (1.162)	105	11597885	50.0000	59.344	80.00- 120.00	100.00
24.812	24.812 (1.162)	134	2312901			0.00- 69.94	19.94
24.812	24.812 (1.162)	91	1842591			0.00- 65.99	15.89
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.300	27.300 (1.278)	157	3302496	50.0000	65.345	80.00- 120.00	100.00
27.273	27.273 (1.277)	75	2739286			32.95- 132.95	82.95
27.300	27.300 (1.278)	155	2589780			28.87- 128.87	78.42
201 Pentachloroethane					CAS #: 76-01-7		
24.591	24.591 (1.151)	167	2587525	50.0000	61.296	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
201 Pentachloroethane (continued)								
24.591	24.591	(1.151)	117	2698355			54.36- 154.36	104.28
24.591	24.591	(1.151)	169	1250161			0.00- 97.70	48.31

Data File: /chem/msd7.i/7-07nov.b/7110705.d
Report Date: 07-Nov-2007 11:36

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110705.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 200ppbv/100ppbv -> 50ppbv

Calibration Date: 07-NOV-2007
Calibration Time: 10:30
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	685348	411209	959487	695093	1.42
97 1,4-Difluorobenze	2041148	1224689	2857607	2194138	7.50
126 Chlorobenzene-d5	1487389	892433	2082345	1603205	7.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

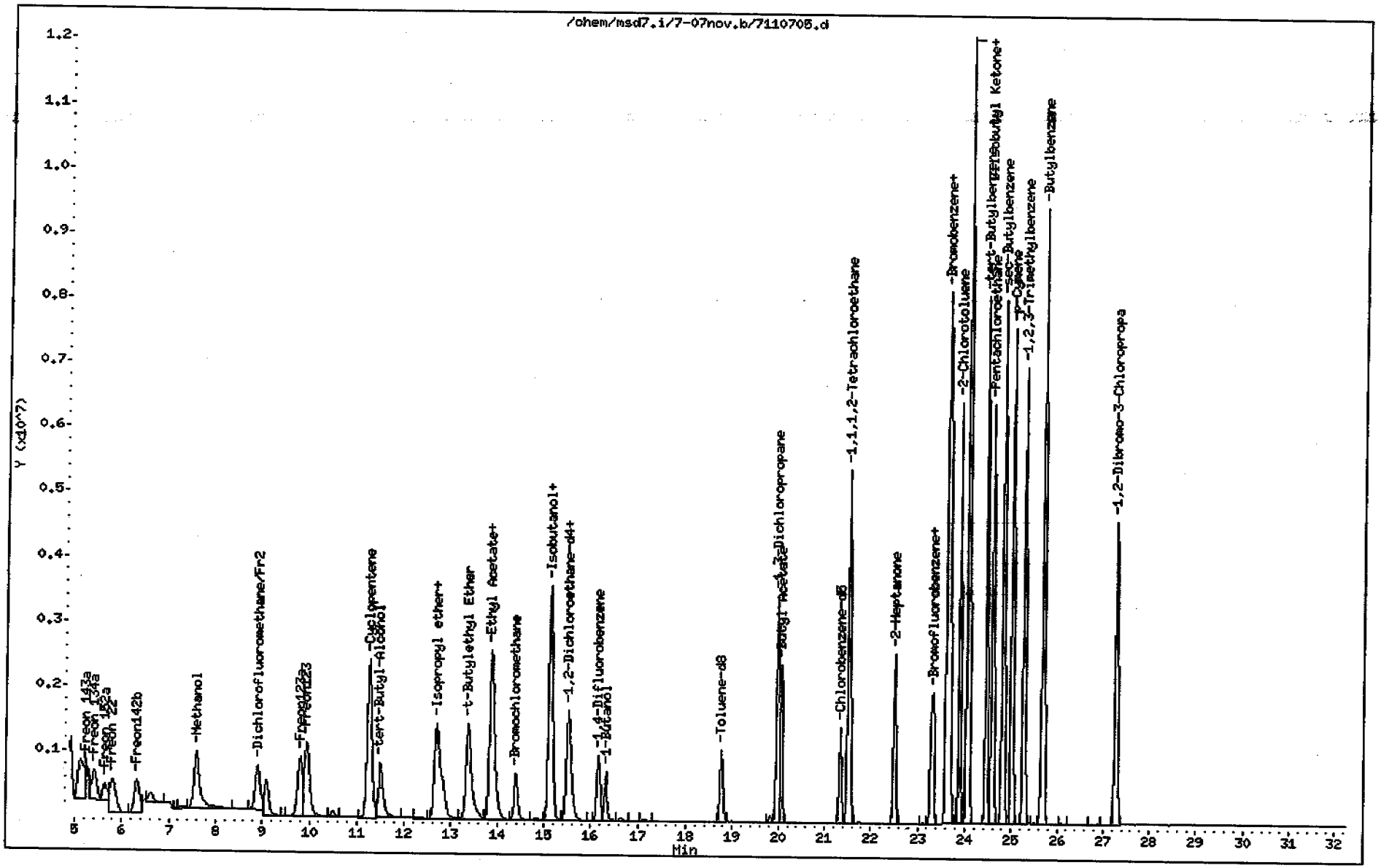
Data File: /chem/msd7.i/7-07nov.b/7110705.d
Date : 07-NOV-2007 11:15
Client ID: CCVsp
Sample Info: 50mL/100mL #1487-370/1487-400A

Column phase: RTx-624

Instrument: msd7.i

Operator: sjr
Column diameter: 0.53

0462



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711101-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	97
Freon 114	101
Chloromethane	89
Vinyl Chloride	98
1,3-Butadiene	100
Bromomethane	94
Chloroethane	105
Freon 11	102
Ethanol	117
Freon 113	120
1,1-Dichloroethene	116
Acetone	108
2-Propanol	112
Carbon Disulfide	101
Methylene Chloride	112
Methyl tert-butyl ether	126
trans-1,2-Dichloroethene	109
Hexane	112
1,1-Dichloroethane	113
2-Butanone (Methyl Ethyl Ketone)	115
cis-1,2-Dichloroethene	109
Tetrahydrofuran	111
Chloroform	110
1,1,1-Trichloroethane	106
Cyclohexane	109
Carbon Tetrachloride	106
Benzene	112
1,2-Dichloroethane	104
Heptane	115
Trichloroethene	110
1,2-Dichloropropane	108
1,4-Dioxane	110
Bromodichloromethane	110
cis-1,3-Dichloropropene	112
4-Methyl-2-pentanone	119
Toluene	115
trans-1,3-Dichloropropene	115
1,1,2-Trichloroethane	116
Tetrachloroethene	119

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711101-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	112
Dibromochloromethane	117
1,2-Dibromoethane (EDB)	114
Chlorobenzene	112
Ethyl Benzene	112
m,p-Xylene	112
o-Xylene	113
Styrene	120
Bromoform	119
1,1,2,2-Tetrachloroethane	107
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	109
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	111
1,4-Dichlorobenzene	108
alpha-Chlorotoluene	118
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	93
Hexachlorobutadiene	90
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	102	70-130

Data File: /chem/msd7.i/7-07nov.b/7110703.d
Report Date: 07-Nov-2007 10:06

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 100ppbv -> 50ppbv

Client SDG: 7-07nov
Fraction: VOA
Client Smp ID: LCS-1
Operator: sjr
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	48.475	96.95	70-130
16 Freon 114	50.000	50.481	100.96	70-130
18 Chloromethane	50.000	44.356	88.71	70-130
20 Vinyl Chloride	50.000	48.987	97.97	70-130
22 1,3-Butadiene	50.000	50.153	100.31	60-140
25 Bromomethane	50.000	47.176	94.35	70-130
27 Chloroethane	50.000	52.339	104.68	70-130
31 Trichlorofluoromet	50.000	51.019	102.04	70-130
38 Ethanol	50.000	58.691	117.38	60-140
42 Freon 113	50.000	59.786	119.57	70-130
43 1,1-Dichloroethene	50.000	57.819	115.64	70-130
45 Acetone	50.000	54.227	108.45	60-140
47 Carbon Disulfide	50.000	50.348	100.70	60-140
46 2-Propanol	50.000	56.084	112.17	60-140
54 Methylene Chloride	50.000	55.929	111.86	70-130
60 MTBE	50.000	63.056	126.11	60-140
61 trans-1,2-Dichloro	50.000	54.353	108.71	60-140
65 Hexane	50.000	55.911	111.82	60-140
69 Vinyl Acetate	50.000	54.500	109.00	60-140
70 1,1-Dichloroethane	50.000	56.530	113.06	70-130
76 cis-1,2-Dichloroet	50.000	54.732	109.46	70-130
75 2-Butanone	50.000	57.555	115.11	60-140
80 Tetrahydrofuran	50.000	55.451	110.90	60-140
82 Chloroform	50.000	55.143	110.29	70-130
85 Cyclohexane	50.000	54.695	109.39	60-140
83 1,1,1-Trichloroeth	50.000	52.961	105.92	70-130
87 Carbon Tetrachlori	50.000	53.098	106.20	70-130
91 Benzene	50.000	55.877	111.75	70-130
93 1,2-Dichloroethane	50.000	51.845	103.69	70-130
94 Heptane	50.000	57.473	114.95	60-140
101 Trichloroethene	50.000	55.239	110.48	70-130
104 1,2-Dichloropropan	50.000	54.163	108.33	70-130
106 1,4-Dioxane	50.000	54.984	109.97	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	55.155	110.31	60-140
110 cis-1,3-Dichloropr	50.000	55.889	111.78	70-130
111 4-Methyl-2-pentano	50.000	59.618	119.24	60-140
114 Toluene	50.000	57.727	115.45	70-130
116 trans-1,3-Dichloro	50.000	57.442	114.88	70-130
117 1,1,2-Trichloroeth	50.000	58.030	116.06	70-130
120 Tetrachloroethene	50.000	59.311	118.62	70-130
121 2-Hexanone	50.000	55.773	111.55	60-140
122 Dibromochlorometha	50.000	58.722	117.45	60-140
123 1,2-Dibromoethane	50.000	56.880	113.76	70-130
127 Chlorobenzene	50.000	55.826	111.65	70-130
128 Ethyl Benzene	50.000	55.838	111.68	70-130
129 m,p-Xylene	50.000	56.133	112.27	70-130
130 o-Xylene	50.000	56.600	113.20	70-130
131 Styrene	50.000	59.774	119.55	70-130
133 Bromoform	50.000	59.546	119.09	60-140
140 1,1,2,2-Tetrachlor	50.000	53.637	107.27	70-130
145 4-Ethyltoluene	50.000	54.242	108.48	60-140
147 1,3,5-Trimethylben	50.000	54.319	108.64	70-130
150 1,2,4-Trimethylben	50.000	55.971	111.94	70-130
155 1,3-Dichlorobenzen	50.000	55.412	110.82	70-130
156 1,4-Dichlorobenzen	50.000	54.277	108.55	70-130
159 alpha-Chlorotoluen	50.000	58.906	117.81	70-130
161 1,2-Dichlorobenzen	50.000	53.356	106.71	70-130
165 1,2,4-Trichloroben	50.000	46.632	93.26	70-130
166 Hexachlorobutadien	50.000	45.199	90.40	70-130
142 Propylbenzene	50.000	56.803	113.61	60-140
134 Cumene	50.000	59.231	118.46	60-140
51 3-Chloropropene	50.000	52.998	106.00	60-140
89 2,2,4-Trimethylpen	50.000	54.528	109.06	60-140
29 Isopentane	50.000	50.225	100.45	70-130
19 Butane	50.000	50.253	100.51	70-130
102 Methyl Cyclohexane	50.000	55.126	110.25	70-130
11 Propylene	50.000	52.104	104.21	60-140
167 Naphthalene	50.000	44.876	89.75	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.784	91.14	70-130
$ 113 Toluene-d8	25.000	25.213	100.85	70-130
$ 137 Bromofluorobenzene	25.000	25.395	101.58	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-07nov.b/7110703.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 07-NOV-2007 09:45
Operator : sjr Inst ID: msd7.i
Smp Info : 100mL #1443-302A
Misc Info : 100ppbv -> 50ppbv
Comment :
Method : /chem/msd7.i/7-07nov.b/t14q018d.m
Meth Date : 07-Nov-2007 09:17 sruth Quant Type: ISTD
Cal Date : 05-NOV-2007 14:29 Cal File: 7110507.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane							CAS #: 74-97-5	
14.416	14.416	(1.000)	130	686073	25.0000		80.00- 120.00	100.00
14.416	14.416	(1.000)	128	537674			28.66- 128.66	78.37
14.416	14.388	(1.000)	49	1314192			133.49- 233.49	191.55
* 97 1,4-Difluorobenzene							CAS #: 540-36-3	
16.158	16.158	(1.000)	114	2227472	25.0000		80.00- 120.00	100.00
16.158	16.158	(1.000)	88	335917			0.00- 65.23	15.08
* 126 Chlorobenzene-d5							CAS #: 3114-55-4	
21.356	21.356	(1.000)	117	1750820	25.0000		80.00- 120.00	100.00
21.356	21.356	(1.000)	82	945127			4.70- 104.70	53.98
$ 90 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
15.494	15.494	(1.075)	65	839742	22.7838	22.784	80.00- 120.00	100.00
15.494	15.494	(1.075)	67	469755			2.91- 102.91	55.94
$ 113 Toluene-d8							CAS #: 2037-26-5	
18.757	18.757	(1.161)	98	1993650	25.2131	25.213	80.00- 120.00	100.00
18.757	18.757	(1.161)	70	218911			0.00- 61.46	10.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1392202			19.18- 119.18	69.83
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	1058013	25.3951	25.395	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1311548			73.89- 173.89	123.96
23.347	23.347 (1.093)	176	1020464			48.20- 148.20	96.45
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	1540699	52.1037	52.104	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	1084017			21.19- 121.19	70.36
5.617	5.617 (0.390)	39	1155303			24.83- 124.83	74.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.758 (0.399)	85	5255583	48.4753	48.475	80.00- 120.00	100.00
5.758	5.758 (0.399)	87	1683393			0.00- 83.07	32.03
16 Freon 114					CAS #: 76-14-2		
6.208	6.208 (0.431)	135	3725076	50.4813	50.481	80.00- 120.00	100.00
6.208	6.208 (0.431)	137	1155769			0.00- 81.30	31.03
18 Chloromethane					CAS #: 74-87-3		
6.518	6.546 (0.452)	50	1581528	44.3557	44.356	80.00- 120.00	100.00
6.518	6.518 (0.452)	52	541668			0.00- 84.80	34.25
20 Vinyl Chloride					CAS #: 75-01-4		
6.884	6.856 (0.478)	62	2180551	48.9871	48.987	80.00- 120.00	100.00
6.884	6.856 (0.478)	64	682635			0.00- 83.25	31.31
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.481)	54	1599105	50.1527	50.153	80.00- 120.00	100.00
6.940	6.940 (0.481)	39	1549414			55.97- 155.97	96.89
25 Bromomethane					CAS #: 74-83-9		
8.039	8.039 (0.558)	94	1859379	47.1765	47.176	80.00- 120.00	100.00
8.039	8.039 (0.558)	96	1749030			43.82- 143.82	94.07
27 Chloroethane					CAS #: 75-00-3		
8.377	8.348 (0.581)	64	1033564	52.3394	52.339	80.00- 120.00	100.00
8.377	8.348 (0.581)	49	286274			0.00- 79.34	27.70
8.377	8.348 (0.581)	66	320310			0.00- 83.15	30.99
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.968	8.968 (0.622)	101	5160297	51.0188	51.019	80.00- 120.00	100.00
8.968	8.968 (0.622)	103	3351392			14.51- 114.51	64.95

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.467	9.467 (0.657)	45	809676	58.6909	58.691	80.00- 120.00	100.00
9.467	9.467 (0.657)	43	158687			0.00- 72.83	19.60
9.467	9.467 (0.657)	46	307404			0.00- 88.20	37.97
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	3363235	59.7861	59.786	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	2140831			13.12- 113.12	63.65
10.213	10.186 (0.708)	101	3978460			67.28- 167.28	118.29
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	3461034	57.8190	57.819	80.00- 120.00	100.00
10.324	10.324 (0.716)	96	2106709			9.78- 109.78	60.87
10.352	10.324 (0.718)	98	1355982			0.00- 88.25	39.18
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.728)	58	1003330	54.2271	54.227	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	3025302			247.10- 347.10	301.53
46 2-Propanol					CAS #: 67-63-0		
10.683	10.683 (0.741)	45	3681589	56.0841	56.084	80.00- 120.00	100.00
10.683	10.683 (0.741)	43	884353			0.00- 75.54	24.02
10.683	10.683 (0.741)	59	142019			0.00- 53.72	3.86
47 Carbon Disulfide					CAS #: 75-15-0		
10.905	10.877 (0.756)	76	5750128	50.3483	50.348	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.774)	76	984998	52.9981	52.998	80.00- 120.00	100.00
11.153	11.153 (0.774)	41	2673163			224.96- 324.96	271.39
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.795)	49	2461396	55.9289	55.929	80.00- 120.00	100.00
11.485	11.485 (0.797)	84	1746418			19.98- 119.98	70.95
11.457	11.457 (0.795)	51	758289			0.00- 80.85	30.81
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.820)	73	4216511	63.0565	63.056	80.00- 120.00	100.00
11.817	11.817 (0.820)	57	1001036			0.00- 73.85	23.74
11.817	11.817 (0.820)	41	951185			0.00- 76.16	22.56
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.928	11.928 (0.827)	96	2210637	54.3534	54.353	80.00- 120.00	100.00
11.928	11.928 (0.827)	61	3149190			94.00- 194.00	142.46
11.928	11.928 (0.827)	98	1415040			11.77- 111.77	64.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.315	12.287 (0.854)	57	3245015	55.9115	55.911	80.00- 120.00	100.00
12.287	12.287 (0.852)	43	2084458			17.84- 117.84	64.24
12.315	12.315 (0.854)	86	484185			0.00- 65.07	14.92
69 Vinyl Acetate					CAS #: 108-05-4		
12.785	12.785 (0.887)	86	477930	54.4999	54.500	80.00- 120.00	100.00
12.785	12.785 (0.887)	43	5687520			1150.46-1250.46	1190.03
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.889)	63	3929948	56.5305	56.530	80.00- 120.00	100.00
12.812	12.812 (0.889)	65	1225997			0.00- 81.30	31.20
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	855221	57.5547	57.555	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	3915055			412.48- 512.48	457.78
13.891	13.891 (0.964)	57	294679			0.00- 86.57	34.46
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.965)	61	2663290	54.7323	54.732	80.00- 120.00	100.00
13.918	13.918 (0.965)	96	2032442			26.41- 126.41	76.31
13.918	13.918 (0.965)	98	1291728			0.00- 98.54	48.50
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (0.998)	42	2148322	55.4509	55.451	80.00- 120.00	100.00
14.388	14.388 (0.998)	71	771469			0.00- 86.36	35.91
14.388	14.388 (0.998)	72	839885			0.00- 87.82	39.09
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	3809122	55.1429	55.143	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	2490066			15.69- 115.69	65.37
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	3684075	52.9610	52.961	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	2378045			14.03- 114.03	64.55
85 Cyclohexane					CAS #: 110-82-7		
14.858	14.831 (1.031)	84	2179212	54.6954	54.695	80.00- 120.00	100.00
14.831	14.831 (1.029)	56	2754400			76.16- 176.16	126.39
14.831	14.831 (1.029)	41	1518558			19.79- 119.79	69.68
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	3462355	53.0982	53.098	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	3606997			53.14- 153.14	104.18
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.069)	57	7593941	54.5282	54.528	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.069)	56	2562982			0.00- 84.62	33.75
15.411	15.411 (1.069)	41	1956004			0.00- 79.27	25.76
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	4945352	55.8772	55.877	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	1085871			0.00- 71.87	21.96
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.967)	62	2437920	51.8446	51.845	80.00- 120.00	100.00
15.633	15.633 (0.967)	64	793972			0.00- 82.89	32.57
94 Heptane					CAS #: 142-82-5		
15.716	15.715 (0.973)	71	1564357	57.4731	57.473	80.00- 120.00	100.00
15.716	15.715 (0.973)	43	2999139			158.53- 258.53	191.72
15.716	15.715 (0.973)	57	1596186			59.34- 159.34	102.03
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	2171661	55.2390	55.239	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	2202986			51.11- 151.11	101.44
16.628	16.628 (1.029)	97	1400114			15.04- 115.04	64.47
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.126	17.126 (1.060)	63	1839663	54.1635	54.163	80.00- 120.00	100.00
17.126	17.126 (1.060)	62	1351922			23.92- 123.92	73.49
17.126	17.126 (1.060)	41	1091013			11.24- 111.24	59.31
106 1,4-Dioxane					CAS #: 123-91-1		
17.236	17.264 (1.067)	88	1214660	54.9846	54.984	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	856216			18.82- 118.82	70.49
17.236	17.236 (1.067)	57	276948			0.00- 74.60	22.80
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	3764613	55.1553	55.155	80.00- 120.00	100.00
17.540	17.568 (1.086)	85	2413628			14.03- 114.03	64.11
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	2682342	55.8888	55.889	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	864245			0.00- 82.01	32.22
18.342	18.342 (1.135)	39	1475376			4.79- 104.79	55.00
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1578999	59.6179	59.618	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	3998714			222.97- 322.97	253.24
18.508	18.508 (1.145)	85	613140			0.00- 90.48	38.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	5595999	57.7272	57.727	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	3562047			12.90- 112.90	63.65
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2856279	57.4421	57.442	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	910778			0.00- 82.53	31.89
19.310	19.310 (0.904)	39	1459706			1.27- 101.27	51.11
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	2104403	58.0299	58.030	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	1306444			12.40- 112.40	62.08
19.642	19.669 (0.920)	83	1747282			32.55- 132.55	83.03
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2789570	59.3107	59.311	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1950320			21.07- 121.07	69.91
19.835	19.835 (0.929)	131	1904366			18.33- 118.33	68.27
121 2-Hexanone					CAS #: 591-78-6		
19.974	19.973 (0.935)	58	2167582	55.7729	55.773	80.00- 120.00	100.00
19.974	19.973 (0.935)	43	3990768			134.78- 234.78	184.11
19.974	19.973 (0.935)	100	383712			0.00- 67.05	17.70
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	3773149	58.7225	58.722	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	2926562			27.62- 127.62	77.56
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.637	20.637 (0.966)	107	3381476	56.8798	56.880	80.00- 120.00	100.00
20.637	20.637 (0.966)	109	3189210			45.10- 145.10	94.31
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	4421782	55.8259	55.826	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1415865			0.00- 81.96	32.02
21.411	21.411 (1.003)	77	3095269			19.83- 119.83	70.00
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	2257576	55.8378	55.838	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	6935286			261.69- 361.69	307.20
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2840674	56.1326	56.133	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	5471476			145.05- 245.05	192.61
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	2462212	56.6000	56.600	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.379	22.379 (1.048)	91	5060568			150.43- 250.43	203.87
131 Styrene					CAS #: 100-42-5		
22.407	22.407 (1.049)	104	4054509	59.7746	59.774	80.00- 120.00	100.00
22.407	22.407 (1.049)	78	1988973			0.00- 98.65	49.06
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	3359674	59.5462	59.546	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	1732830			1.15- 101.15	51.58
134 Cumene					CAS #: 98-82-8		
22.960	22.960 (1.075)	105	6559326	59.2313	59.231	80.00- 120.00	100.00
22.960	22.960 (1.075)	120	1831489			0.00- 78.08	27.92
22.960	22.960 (1.075)	51	653563			0.00- 61.43	9.96
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.540	23.540 (1.102)	83	3929085	53.6373	53.637	80.00- 120.00	100.00
23.540	23.540 (1.102)	85	2531530			14.51- 114.51	64.43
142 Propylbenzene					CAS #: 103-65-1		
23.651	23.651 (1.107)	91	8436869	56.8028	56.803	80.00- 120.00	100.00
23.651	23.651 (1.107)	120	1938229			0.00- 72.94	22.97
23.651	23.651 (1.107)	105	301030			0.00- 54.03	3.57
145 4-Ethyltoluene					CAS #: 622-96-8		
23.817	23.817 (1.115)	105	7114568	54.2423	54.242	80.00- 120.00	100.00
23.817	23.817 (1.115)	120	2260331			0.00- 81.87	31.77
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	5596362	54.3195	54.319	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	2941518			3.80- 103.80	52.56
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	5240639	55.9709	55.971	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	2583041			0.00- 98.95	49.29
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.116	25.116 (1.176)	146	4014891	55.4115	55.412	80.00- 120.00	100.00
25.116	25.116 (1.176)	148	2562720			14.48- 114.48	63.83
25.116	25.116 (1.176)	111	1556414			0.00- 89.68	38.77
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	4098541	54.2768	54.277	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	2602465			13.81- 113.81	63.50
25.282	25.282 (1.184)	111	1510244			0.00- 87.35	36.85

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	5905125	58.9057	58.906	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	1261022			0.00- 71.29	21.35
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	3599434	53.3555	53.356	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	2292678			13.83- 113.83	63.70
25.918	25.918 (1.214)	111	1400031			0.00- 89.84	38.90
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	1286635	46.6318	46.632	80.00- 120.00	100.00
28.821	28.821 (1.350)	182	1218153			43.54- 143.54	94.68
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	1036750	45.1987	45.199	80.00- 120.00	100.00
28.987	28.987 (1.357)	223	652348			12.64- 112.64	62.92
29 Isopentane					CAS #: 78-78-4		
8.377	8.377 (0.581)	43	2456261	50.2255	50.225	80.00- 120.00	100.00
8.377	8.377 (0.581)	57	1643768			16.48- 116.48	66.92
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	383870	50.2534	50.253	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	3039801			757.70- 857.70	791.88
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.904	16.904 (1.173)	83	2703317	55.1260	55.126	80.00- 120.00	100.00
16.904	16.904 (1.173)	98	1267788			0.00- 96.13	46.90
16.904	16.904 (1.173)	55	2332342			38.51- 138.51	86.28
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	2319807	44.8757	44.876	80.00- 120.00	100.00
29.374	29.374 (1.375)	127	277846			0.00- 62.50	11.98

Data File: /chem/msd7.i/7-07nov.b/7110703.d
Report Date: 07-Nov-2007 10:06

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110703.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msd7.i/7-07nov.b/t14q018d.m
Misc Info: 100ppbv -> 50ppbv

Calibration Date: 07-NOV-2007
Calibration Time: 08:52
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	695461	417277	973645	686073	-1.35
97 1,4-Difluorobenze	2265681	1359409	3171953	2227472	-1.69
126 Chlorobenzene-d5	1765821	1059493	2472149	1750820	-0.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

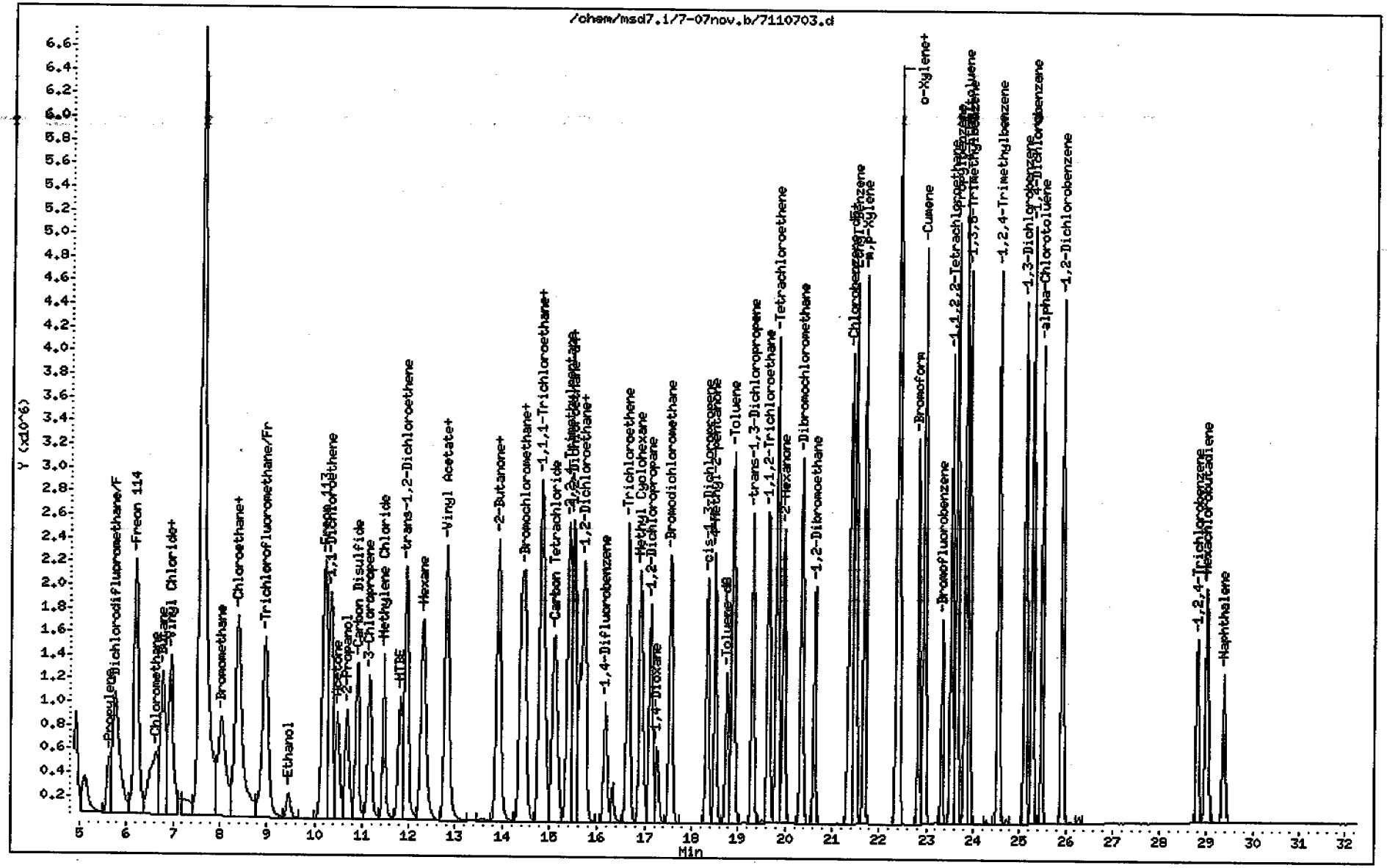
Data File: /chem/msd7.i/7-07nov.b/7110703.d
Date : 07-NOV-2007 09:45
Client ID: LCS-1
Sample Info: 100mL #1443-302A

Instrument: msd7.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624

0476



@ Air Toxics Ltd.

MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.49
75	30.0 – 60.0% of mass 95	39.68
95	Base peak, 100.00% relative abundance	100
96	5.0 – 9.0% of mass 95	6.67
173	Less than 2.0% of mass 174	(0.50)[1]
174	Greater than 50.0% of mass 95	96.45
175	5.0 – 9.0% of mass 174	(6.85)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.00)[1]
177	5.0 – 9.0% of mass 176	(6.37)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 11/7/07

BFB Injection Time: 0822

BFB File ID: 7110701

Tekmar Purge Flow: 17.7 mL/min

Vacuum: 4.1e-5

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	695461	
1,4-DFB	2265681	
CB-d5	1765821	

Verified CCV IS vs ICAL mid-point (- 40%D) Initials

Verify 176/174 m/z Ratio: 115664/119244 x 100 = 97.00

NOAH Cart #: NA File #: NA

0477

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area}_{\text{Cmpnd}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1994025)}{(2265681)} \times \frac{(25.0)}{(0.88746)} = 24.792$$

File ID:	7110702
Compound:	Tol-d8
Initials:	

Reported Result 24.792

		File ID	Sample / Client Name	Canister	Flow	Time	IS	RT	Date	Time	Initials	Comments
1	✓	7110701	BFB Tune Check	1467-64	50mg	2uL	1.00		11/7/07	0822		
2	✓	02	CCV-1 (50ppbv)	1576-506	50ppbv	200mL				0852		
3	✓	03	LCS-1 (50ppbv)	1442-3001		100mL				0945		
4	✓	04	CCVsp (200ppbv)	1467-34		50mL				1030		spiked
5	✓	05	CCVsp (200ppbv/MeOH)	1467-3[illegible]		50mL/MeOH				1115		spiked
6	✓	06	Lab blank	34190	Humid	200mL				1205		
7	✓	07	0710664-10H	34619	6.5%-15s	200mL	2.58			1317		
8	✓	08	-11H	11825	5.5%-15s	200mL	2.47			1419		
9	✓	09	↓ NA	30824	4.5%-15s	200mL	2.38		↓	1516		

Signature

11/7/07

Date

10	X✓	7110710	071016A - 15AA		9313	5.5% - 15psi	100ml	5.44	11/7/07	1613	SG	RR@200
11	✓	11	↓	-15A	9315	5.5% - 15psi	200ml	2.47	↓	1703	DM/JO	
12	✓	12		-16A	21022	6.0% - 15psi	↓	2.53		1758	DM/	
13	✓	13		-17A	35601	5.5% - 15psi		2.47		1852	DM/	
14	X Buffle	14		-19A	34645	2.0% - 15psi		2.16		1944	DM/	
15	✓	15		20A	35614	1.5% - 15psi		2.13		2032	DM/	out of clock
16	X	16	↓	18A	31765	7.5% - 15psi		2.69		2123	DM/	↓
17	✓	17	071101	-03A	35154	6.0% - 5psi	↓	[illegible]		[illegible]	[illegible]/JO	
18	✓	18	↓	-01AA	34447	6.0% - 5psi	100ml	3.36	↓	2308	BJ	
19	✓	19		-01A	↓	↓	200ml	1.68	11/8/07	0000	BJ	
20	✓	20		-02A	34749	6.5% - 5psi	200ml	1.71	↓	0050	BJ	
21	✓	21		-04A	4199	7.5% - 5psi	↓	1.79		0131	BJ	
22	✓	22		-05A	25259	7.0% - 5psi		1.75		0210	BJ	
23	✓	23		-06A	21005	5.0% - 5psi		1.61		0258	BJ	
24	✓	24		-06AA	↓	↓		↓		0355	BJ	
25	✓	25	↓	-07A	35248	↓		↓		0447	BJ	
26	✓	26		-08A	4025 / 4205	5.5% - 5psi	↓	1.64		0530	JO	
27	X	27	071108AA-01A		Solvent 11 bags	Electron vessel 1	1ml	200		0700	JO	RR-200
28	✓	28	↓	01A	↓	↓	200ml	1.00		0753	[illegible]	
29												
30												
31												
32												

0478

Comments:

[illegible] 11/8/07

Signature [illegible]

11/8/07
Date

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-18oct.b/7101801.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 18-OCT-2007 11:50
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-18oct.b/bfb105.m
Meth Date : 18-Oct-2007 11:45
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.204	8.232	-0.028	95	1361542			100.00- 100.00	100.00
8.204	8.232	-0.028	50	253402			15.00- 40.00	18.61
8.204	8.232	-0.028	75	540735			30.00- 60.00	39.71
8.204	8.232	-0.028	96	92275			5.00- 9.00	6.78
8.204	8.232	-0.028	173	5478			0.00- 2.00	0.49
8.204	8.232	-0.028	174	1112403			50.00- 100.00	81.70
8.204	8.232	-0.028	175	76512			5.00- 9.00	6.88
8.204	8.232	-0.028	176	1072385			95.00- 101.00	96.40
8.204	8.232	-0.028	177	71737			5.00- 9.00	6.69

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

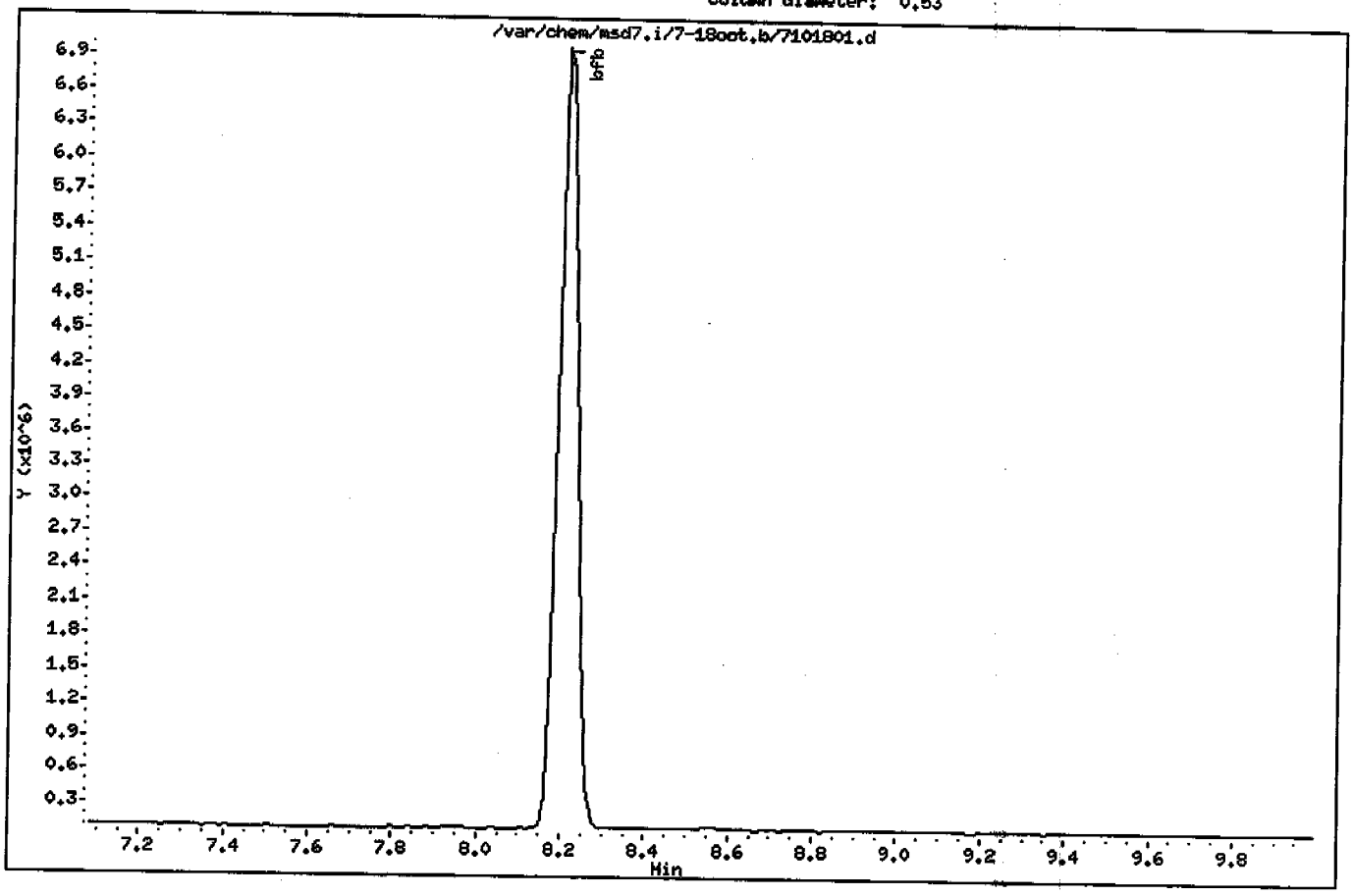
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

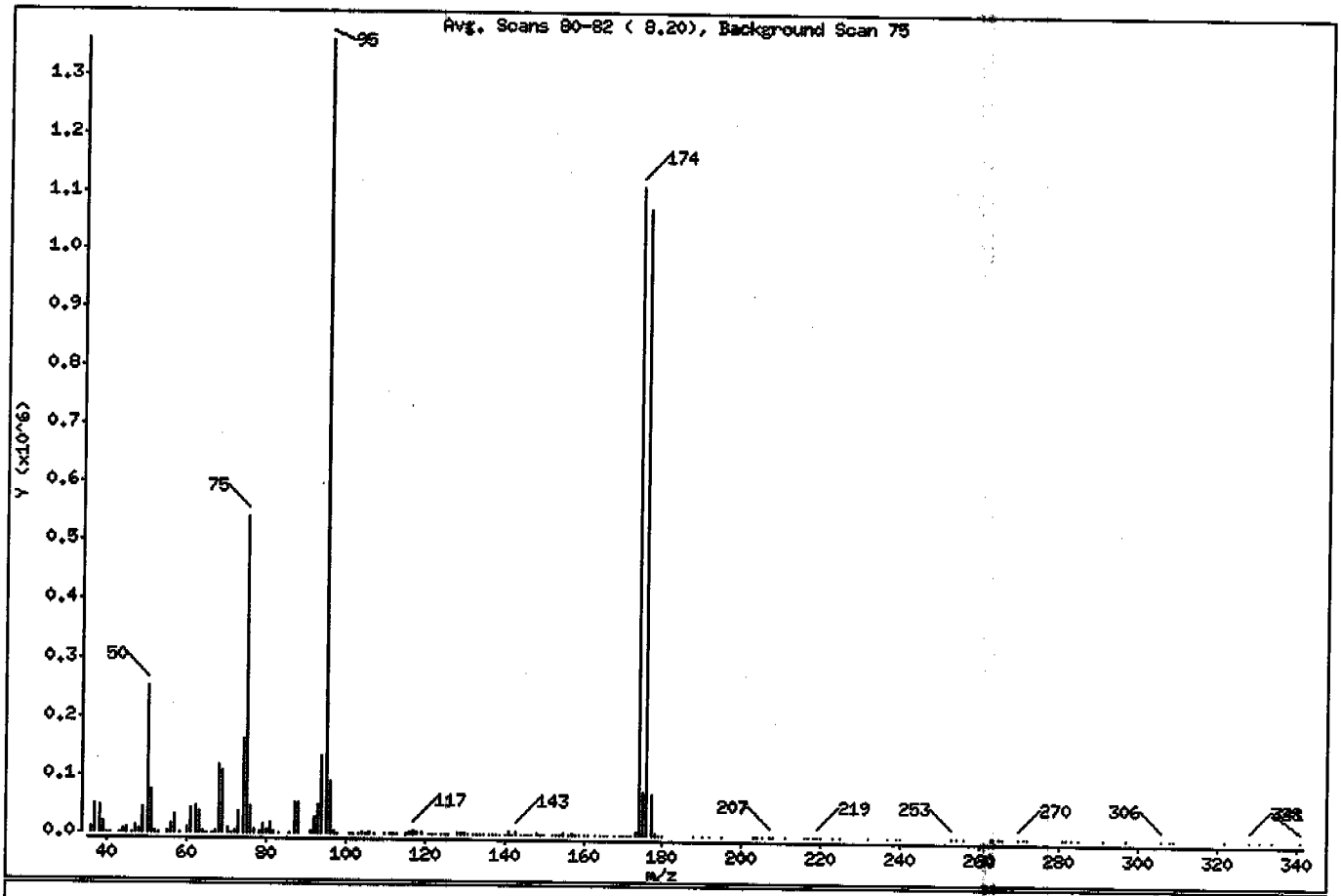
Volume Injected (uL): 2.0

Operator: ob

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.61
75	30.00 - 60.00% of mass 95	39.71
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.40 (0.49)
174	50.00 - 100.00% of mass 95	81.70
175	5.00 - 9.00% of mass 174	5.62 (6.88)
176	95.00 - 101.00% of mass 174	78.76 (96.40)
177	5.00 - 9.00% of mass 176	5.27 (6.69)

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101801.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8158	83.00	554	138.00	104	203.00	51
37.00	49192	86.00	1313	139.00	375	204.00	50
38.00	45528	87.00	54192	140.00	632	205.00	189
39.00	18720	88.00	53800	141.00	6507	207.00	741
40.00	732	91.00	2816	142.00	957	208.00	804
41.00	74	92.00	27664	143.00	6881	211.00	169
43.00	497	93.00	48888	144.00	483	216.00	66
44.00	4997	94.00	133568	145.00	361	217.00	63
45.00	9825	95.00	1361408	146.00	1560	218.00	35
46.00	873	96.00	92272	147.00	676	219.00	212
47.00	13741	97.00	2838	148.00	2309	220.00	15
48.00	5492	98.00	75	149.00	1043	223.00	146
49.00	42264	101.00	135	150.00	871	225.00	51
50.00	253376	102.00	118	152.00	549	232.00	107
51.00	73776	103.00	426	153.00	862	237.00	53
52.00	3233	104.00	3526	154.00	656	239.00	108
53.00	104	105.00	1311	155.00	2400	240.00	51
55.00	2446	106.00	3382	156.00	486	253.00	738
56.00	14834	107.00	1234	157.00	1946	254.00	63
57.00	31320	110.00	477	158.00	503	256.00	73
58.00	1332	111.00	643	159.00	927	263.00	50
60.00	8076	112.00	546	160.00	166	265.00	164
61.00	44952	113.00	773	161.00	961	266.00	121
62.00	46256	115.00	711	163.00	50	270.00	379
63.00	36824	116.00	3373	164.00	6	271.00	115
64.00	3340	117.00	5525	165.00	191	272.00	189
65.00	65	118.00	2784	166.00	52	281.00	44
66.00	128	119.00	4176	168.00	237	282.00	190
67.00	2479	121.00	195	169.00	104	283.00	43
68.00	119376	122.00	240	170.00	388	285.00	69
69.00	110568	123.00	240	171.00	532	291.00	92
70.00	8062	124.00	581	172.00	1047	297.00	50
71.00	416	125.00	238	173.00	5478	306.00	182
72.00	4070	126.00	222	174.00	1112064	308.00	72
73.00	38304	128.00	3372	175.00	76512	309.00	53

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101801.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	163648	129.00	1628	176.00	1072128	322.00	66
75.00	540672	130.00	3411	177.00	71736	328.00	157
76.00	45504	131.00	1190	178.00	1947	331.00	61
77.00	6657	132.00	336	179.00	187	334.00	27
78.00	3945	133.00	196	180.00	198	341.00	150
79.00	17176	134.00	119	188.00	83		
80.00	5949	135.00	1488	190.00	234		
81.00	17288	136.00	367	192.00	279		
82.00	3829	137.00	1534	195.00	264		

Air Toxics Ltd.

Data file : /chem/msd7.i/7-19oct.b/7101901.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 19-OCT-2007 09:09
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-19oct.b/bfb105.m
Meth Date : 19-Oct-2007 09:04
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.218	8.232	-0.014	95	1279483			100.00- 100.00	100.00
8.218	8.232	-0.014	50	234402			15.00- 40.00	18.32
8.218	8.232	-0.014	75	514967			30.00- 60.00	40.25
8.218	8.232	-0.014	96	87384			5.00- 9.00	6.83
8.218	8.232	-0.014	173	5154			0.00- 2.00	0.49
8.218	8.232	-0.014	174	1045184			50.00- 100.00	81.69
8.218	8.232	-0.014	175	74282			5.00- 9.00	7.11
8.218	8.232	-0.014	176	1015727			95.00- 101.00	97.18
8.218	8.232	-0.014	177	67754			5.00- 9.00	6.67

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

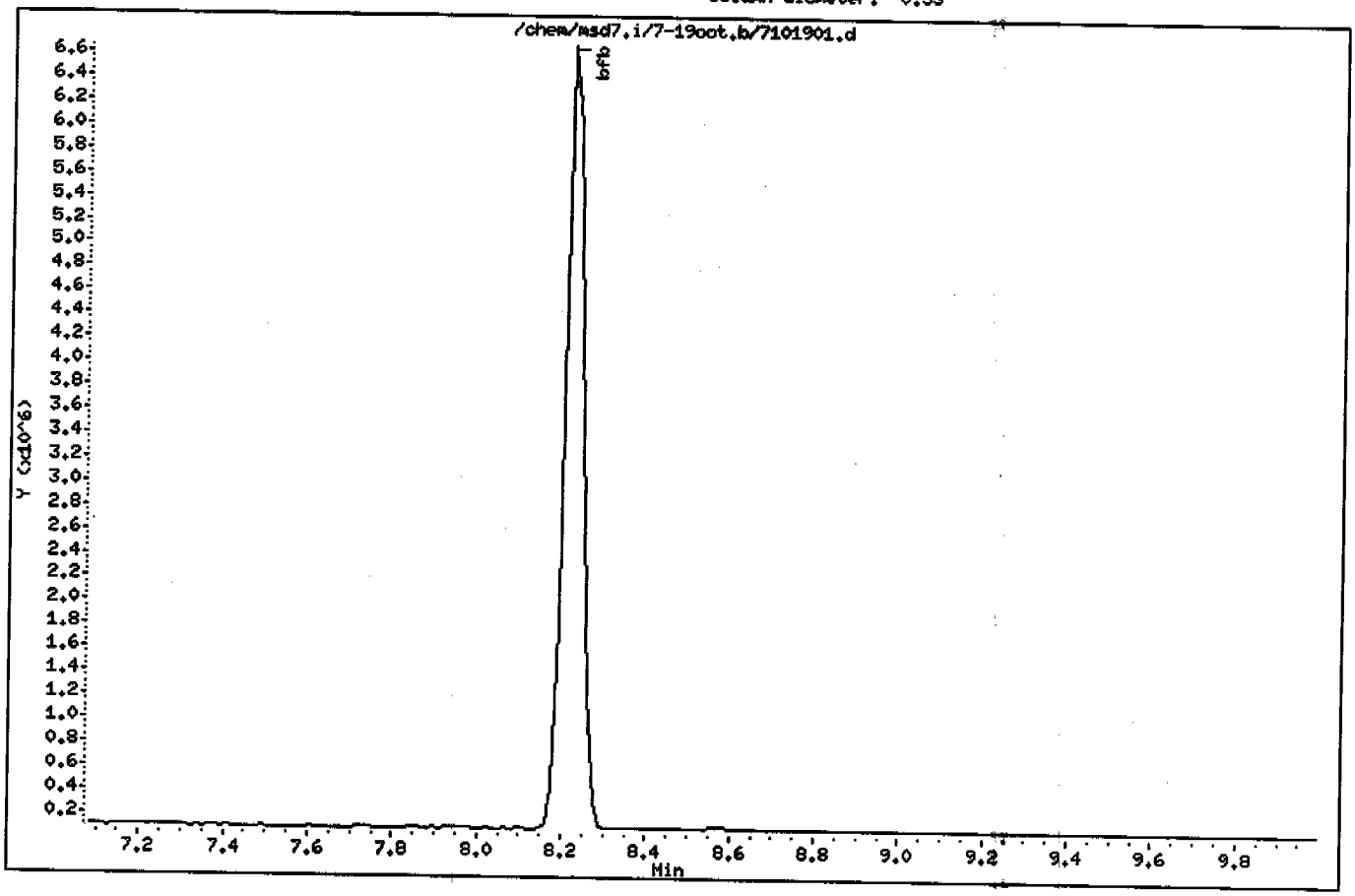
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

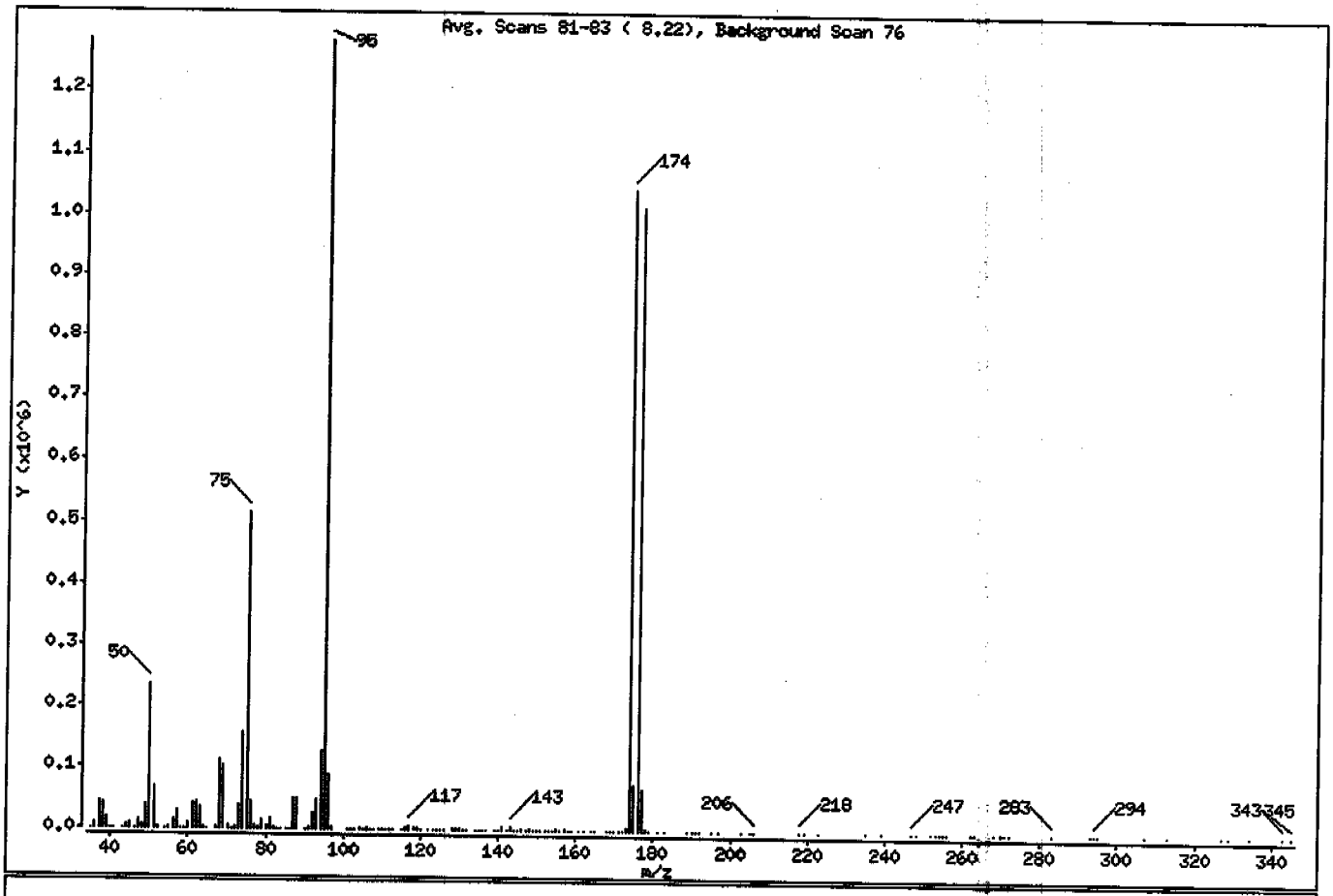
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.32
75	30.00 - 60.00% of mass 95	40.25
96	5.00 - 9.00% of mass 95	6.83
173	Less than 2.00% of mass 174	0.40 (0.49)
174	50.00 - 100.00% of mass 95	81.69
175	5.00 - 9.00% of mass 174	5.81 (7.11)
176	95.00 - 101.00% of mass 174	79.39 (97.18)
177	5.00 - 9.00% of mass 176	5.30 (6.67)

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101901.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76

Location of Maximum: 95.00

Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	72	81.00	16704	131.00	1146	181.00	171
36.00	7866	82.00	3637	132.00	454	183.00	50
37.00	45072	83.00	479	134.00	161	189.00	206
38.00	40240	84.00	53	135.00	1280	190.00	52
39.00	17640	85.00	82	136.00	225	191.00	120
40.00	628	86.00	903	137.00	1337	192.00	19
41.00	514	87.00	50640	139.00	320	195.00	40
43.00	189	88.00	48824	140.00	552	197.00	61
44.00	4493	90.00	132	141.00	6532	203.00	123
45.00	9647	91.00	2770	142.00	943	205.00	82
46.00	741	92.00	27528	143.00	7001	206.00	177
47.00	14368	93.00	47072	144.00	545	218.00	236
48.00	5164	94.00	125368	145.00	738	219.00	161
49.00	39698	95.00	1278976	146.00	1511	223.00	87
50.00	234368	96.00	87384	147.00	819	235.00	47
51.00	68168	97.00	2415	148.00	2396	239.00	107
52.00	2980	101.00	172	149.00	484	247.00	182
54.00	63	102.00	133	150.00	1007	248.00	62
55.00	2156	103.00	141	151.00	144	252.00	36
56.00	13491	104.00	2803	152.00	540	253.00	19
57.00	28776	105.00	1086	153.00	901	254.00	160
58.00	1021	106.00	3164	154.00	676	255.00	35
59.00	272	107.00	1031	155.00	2357	256.00	50
60.00	7740	108.00	15	156.00	629	262.00	32
61.00	41792	109.00	150	157.00	1793	263.00	50
62.00	43952	110.00	458	158.00	360	268.00	131
63.00	34352	111.00	504	159.00	1015	270.00	109
64.00	3135	112.00	313	161.00	1159	271.00	95
65.00	478	113.00	444	162.00	295	272.00	57
67.00	2376	115.00	640	164.00	102	283.00	471
68.00	112072	116.00	2542	165.00	171	293.00	77
69.00	101736	117.00	4565	168.00	62	294.00	66
70.00	7312	118.00	2617	169.00	215	295.00	52
71.00	405	119.00	4082	170.00	464	307.00	60
72.00	4296	120.00	347	171.00	397	313.00	52

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101901.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76

Location of Maximum: 95.00

Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	37336	122.00	296	172.00	834	327.00	42
74.00	157248	123.00	376	173.00	5154	329.00	64
75.00	514944	124.00	587	174.00	1045184	334.00	39
76.00	44472	125.00	107	175.00	74280	343.00	346
77.00	6177	126.00	562	176.00	1015680	345.00	241
78.00	4351	128.00	3477	177.00	67752		
79.00	15940	129.00	1800	178.00	1868		
80.00	5895	130.00	3276	179.00	89		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-22oct.b/7102201.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 22-OCT-2007 08:22
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-22oct.b/bfb105.m
Meth Date : 22-Oct-2007 08:17
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	1368062			100.00- 100.00	100.00
8.218	8.232	-0.014	50	244266			15.00- 40.00	17.85
8.218	8.232	-0.014	75	543796			30.00- 60.00	39.75
8.218	8.232	-0.014	96	92363			5.00- 9.00	6.75
8.218	8.232	-0.014	173	6310			0.00- 2.00	0.53
8.218	8.232	-0.014	174	1182801			50.00- 100.00	86.46
8.218	8.232	-0.014	175	81821			5.00- 9.00	6.92
8.218	8.232	-0.014	176	1142984			95.00- 101.00	96.63
8.218	8.232	-0.014	177	74057			5.00- 9.00	6.48

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Page 1

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

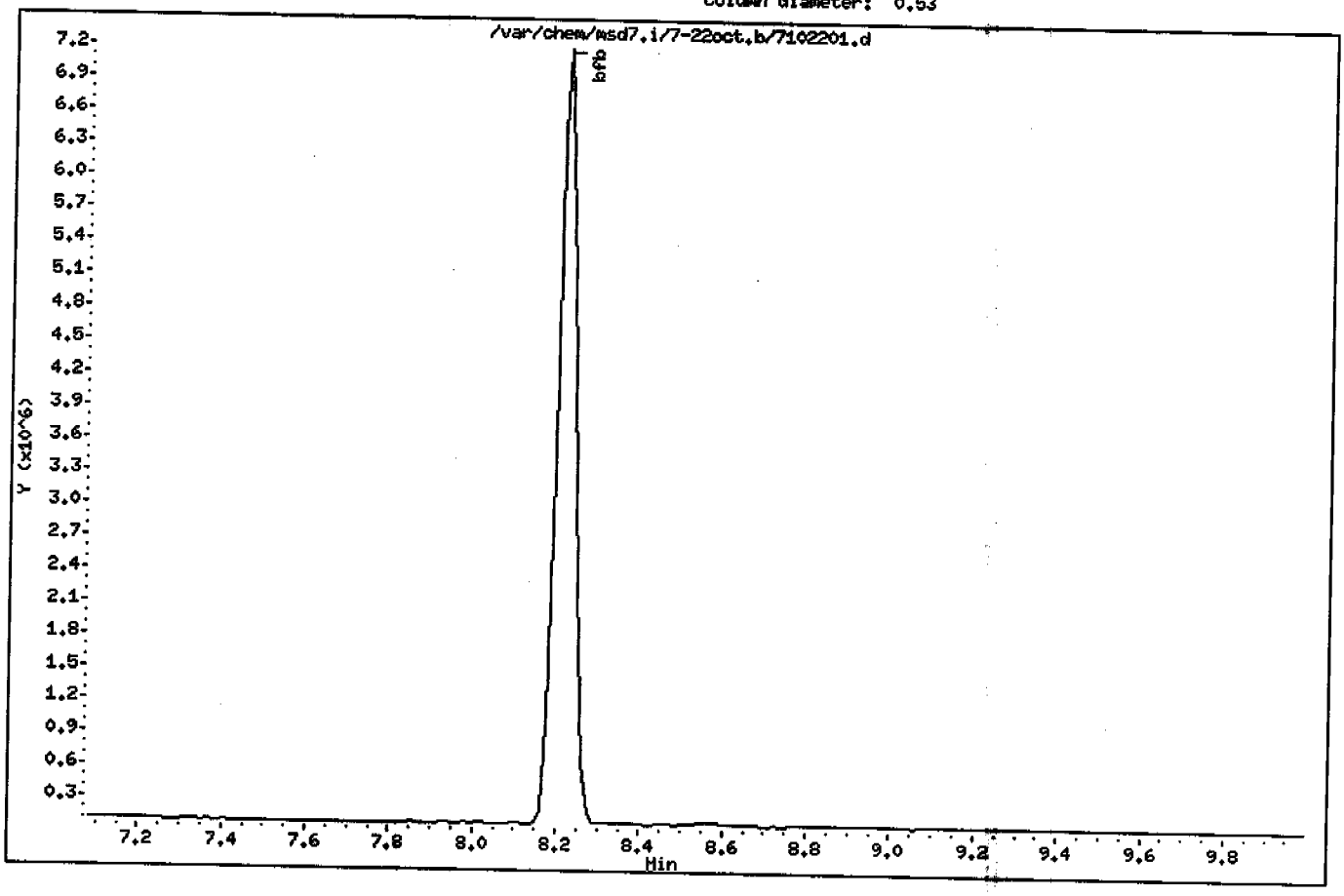
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

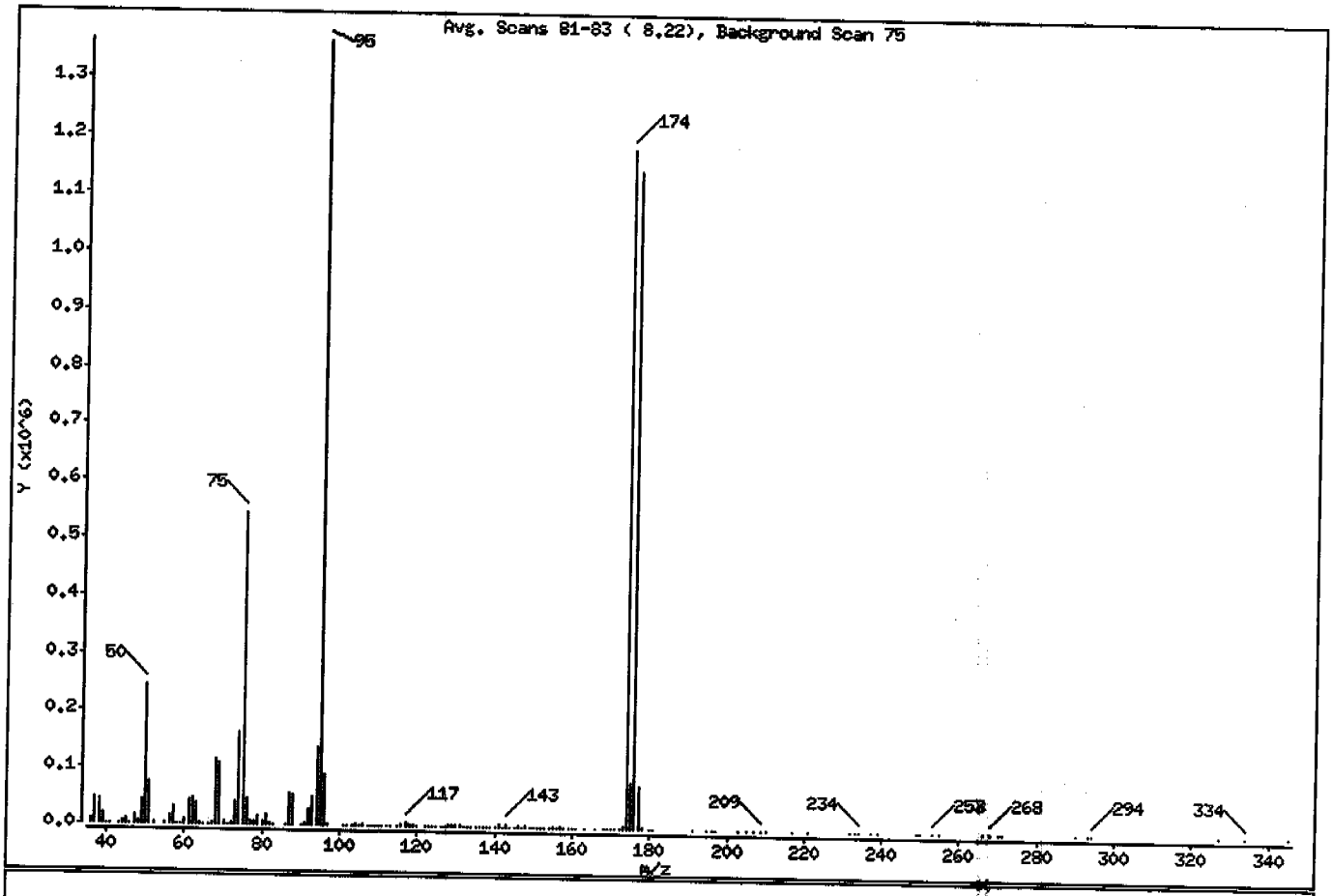
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.85
75	30.00 - 60.00% of mass 95	39.76
96	5.00 - 9.00% of mass 95	6.76
173	Less than 2.00% of mass 174	0.46 (0.53)
174	50.00 - 100.00% of mass 95	86.46
175	5.00 - 9.00% of mass 174	5.98 (6.92)
176	95.00 - 101.00% of mass 174	83.55 (96.63)
177	5.00 - 9.00% of mass 176	5.41 (6.48)

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7102201.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 75

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7934	80.00	6507	129.00	1848	174.00	1182780
37.00	46400	81.00	17392	130.00	3896	175.00	81816
38.00	43896	82.00	4057	131.00	1722	176.00	1142704
39.00	18320	83.00	366	132.00	246	177.00	74056
40.00	466	86.00	1209	133.00	474	178.00	1906
41.00	102	87.00	55040	134.00	351	180.00	63
43.00	446	88.00	52696	135.00	1238	181.00	60
44.00	5254	90.00	94	136.00	390	191.00	49
45.00	10160	91.00	2696	137.00	1212	196.00	127
46.00	749	92.00	28584	138.00	67	196.00	50
47.00	14258	93.00	49208	139.00	329	197.00	84
48.00	4923	94.00	136960	140.00	640	203.00	23
49.00	44064	95.00	1367552	141.00	6885	205.00	114
50.00	244224	96.00	92360	142.00	1006	207.00	64
51.00	74240	97.00	2784	143.00	7115	209.00	122
52.00	2711	101.00	64	144.00	424	210.00	61
55.00	2537	102.00	33	145.00	525	217.00	109
56.00	14247	103.00	527	146.00	1988	221.00	104
57.00	30944	104.00	3615	147.00	642	232.00	114
58.00	1172	105.00	1276	148.00	2214	233.00	24
59.00	16	106.00	3688	149.00	812	234.00	201
60.00	8822	107.00	1268	150.00	1058	237.00	52
61.00	43248	108.00	66	151.00	149	239.00	80
62.00	46912	109.00	216	152.00	573	249.00	279
63.00	37216	110.00	357	153.00	1089	250.00	65
64.00	3029	111.00	609	154.00	769	253.00	409
65.00	121	112.00	147	155.00	2837	255.00	19
66.00	148	113.00	586	156.00	132	266.00	68
67.00	2227	115.00	534	157.00	1838	268.00	195
68.00	116288	116.00	2972	158.00	266	270.00	109
69.00	109120	117.00	5461	159.00	1124	271.00	4
70.00	7621	118.00	2641	160.00	100	290.00	51
71.00	436	119.00	4156	161.00	871	293.00	00
72.00	4566	120.00	149	163.00	80	294.00	54
73.00	39620	122.00	241	166.00	50	327.00	33

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7102201.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 75

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	164672	123.00	275	168.00	118	334.00	71
75.00	543744	124.00	566	169.00	146	345.00	25
76.00	47160	125.00	204	170.00	403		
77.00	6258	126.00	206	171.00	332		
78.00	4752	127.00	159	172.00	1080		
79.00	16057	128.00	3694	173.00	6310		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-30oct.b/7103001.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 30-OCT-2007 08:26
Operator : cb Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-30oct.b/bfb105.m
Meth Date : 30-Oct-2007 08:20 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	985898			100.00- 100.00	100.00
8.218	8.232	-0.014	50	179605			15.00- 40.00	18.22
8.218	8.232	-0.014	75	386803			30.00- 60.00	39.23
8.218	8.232	-0.014	96	65481			5.00- 9.00	6.64
8.218	8.232	-0.014	173	4443			0.00- 2.00	0.52
8.218	8.232	-0.014	174	855253			50.00- 100.00	86.75
8.218	8.232	-0.014	175	60898			5.00- 9.00	7.12
8.218	8.232	-0.014	176	835758			95.00- 101.00	97.72
8.218	8.232	-0.014	177	53944			5.00- 9.00	6.45

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

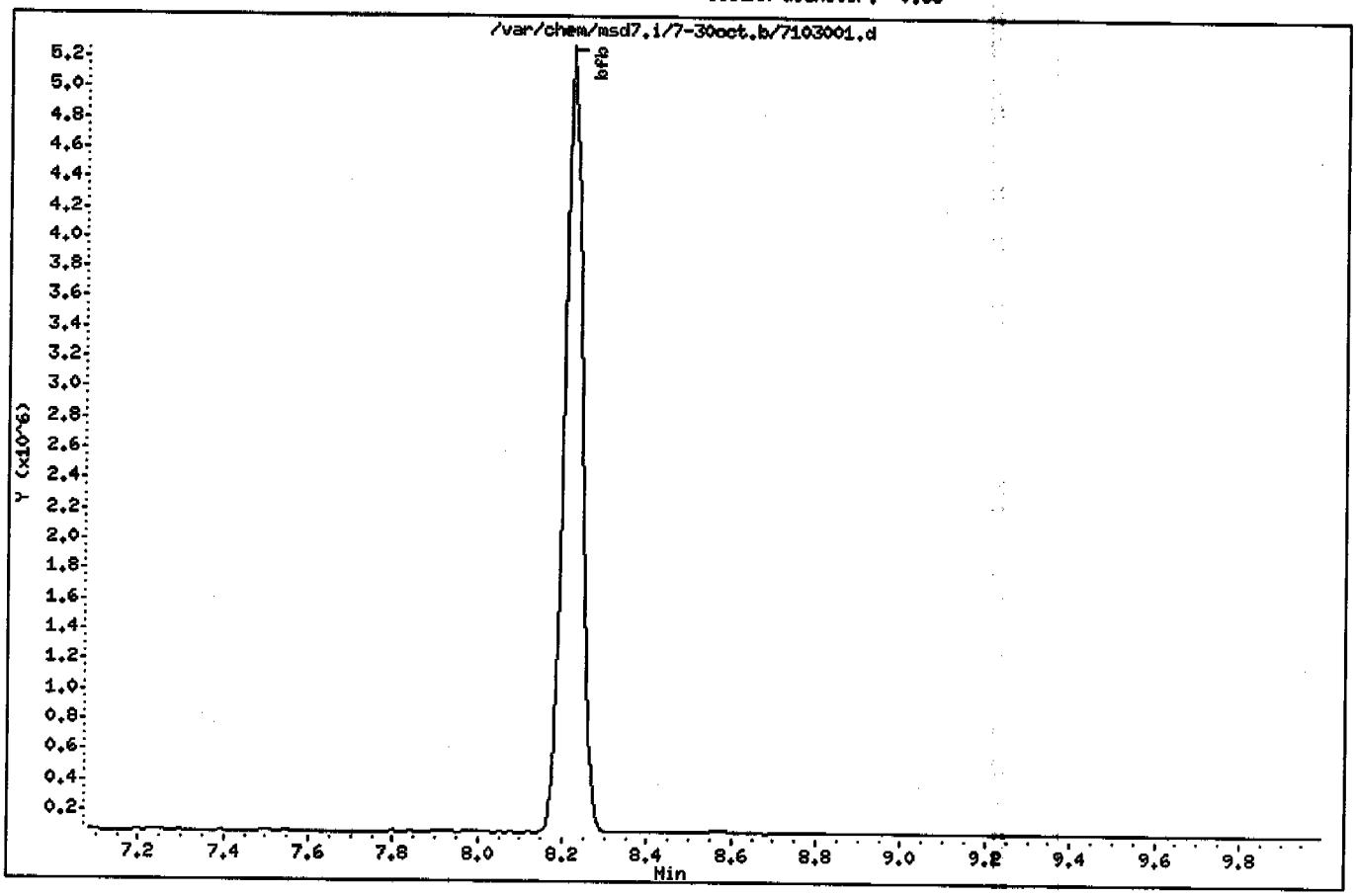
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

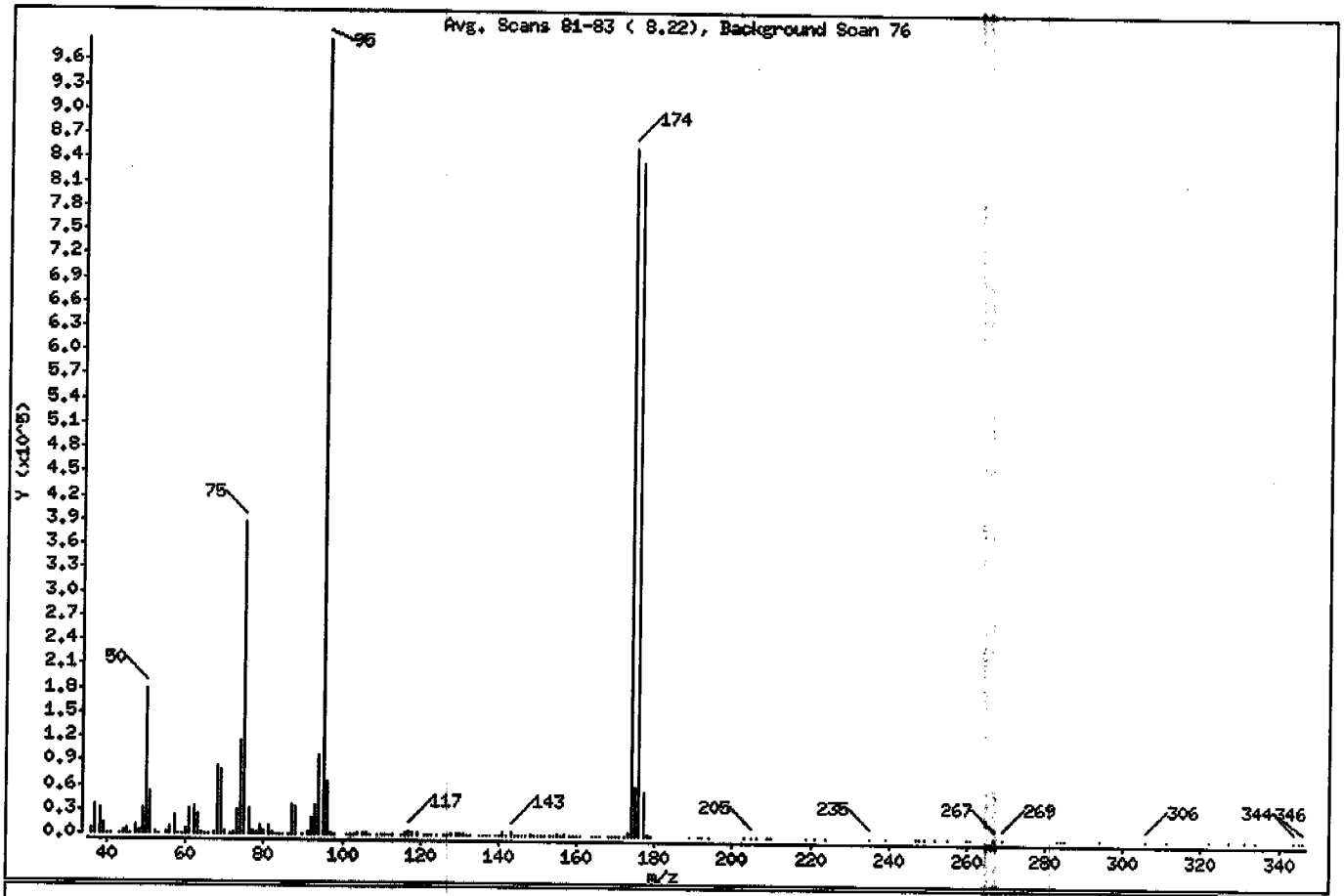
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.22
75	30.00 - 60.00% of mass 95	39.23
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.45 (0.52)
174	50.00 - 100.00% of mass 95	86.76
175	5.00 - 9.00% of mass 174	6.18 (7.12)
176	95.00 - 101.00% of mass 174	84.77 (97.72)
177	5.00 - 9.00% of mass 176	5.47 (6.45)

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103001.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5964	80.00	4195	129.00	1278	175.00	60896
37.00	35984	81.00	12097	130.00	2861	176.00	835712
38.00	32616	82.00	2437	131.00	1250	177.00	53944
39.00	13375	83.00	269	132.00	40	178.00	1321
40.00	252	84.00	56	133.00	221	179.00	25
41.00	118	85.00	51	135.00	850	189.00	147
43.00	194	86.00	972	136.00	239	191.00	119
44.00	3444	87.00	35968	137.00	991	192.00	85
45.00	7216	88.00	33456	138.00	108	194.00	76
46.00	550	90.00	115	139.00	64	203.00	61
47.00	10457	91.00	1553	140.00	426	205.00	142
48.00	4077	92.00	20376	141.00	4690	206.00	91
49.00	30808	93.00	35520	142.00	663	209.00	22
50.00	179884	94.00	96568	143.00	4970	210.00	105
51.00	53056	95.00	985856	144.00	322	219.00	106
52.00	2430	96.00	65480	145.00	447	221.00	68
53.00	124	97.00	1839	146.00	920	224.00	92
55.00	1522	98.00	50	147.00	386	235.00	132
56.00	9728	101.00	140	148.00	1872	239.00	74
57.00	22088	102.00	66	149.00	667	247.00	32
58.00	909	103.00	111	150.00	776	248.00	64
59.00	161	104.00	2660	151.00	123	249.00	223
60.00	5809	105.00	1235	152.00	504	252.00	106
61.00	30872	106.00	2288	153.00	738	255.00	1
62.00	34136	107.00	825	154.00	588	260.00	24
63.00	26000	109.00	263	155.00	2007	261.00	87
64.00	2039	110.00	310	156.00	425	267.00	404
65.00	308	111.00	281	157.00	1404	269.00	145
66.00	94	112.00	327	158.00	200	283.00	48
67.00	1714	113.00	417	159.00	927	284.00	39
68.00	83912	115.00	523	160.00	85	285.00	64
69.00	79304	116.00	1973	161.00	708	294.00	78
70.00	6473	117.00	4153	164.00	197	306.00	76
71.00	168	118.00	2490	165.00	28	311.00	53
72.00	2901	119.00	3262	166.00	172	322.00	154

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: ob

Column phase:

Column diameter: 0.53

Data File: 7103001.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76

Location of Maximum: 96.00

Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	28448	121.00	198	168.00	123	327.00	38
74.00	115962	122.00	214	169.00	68	331.00	60
75.00	396752	123.00	289	170.00	319	334.00	24
76.00	32240	124.00	318	171.00	440	344.00	306
77.00	4494	126.00	237	172.00	936	345.00	85
78.00	2890	127.00	171	173.00	4443	346.00	56
79.00	11211	128.00	2629	174.00	855232		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-05nov.b/7110501.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 05-NOV-2007 09:31
Operator : ea
Inst ID: msd7.i
Smp Info : #1467-64;bfb tune check;bfb tune check
Misc Info : 2.0uL-50ng
Comment :
Method : /var/chem/msd7.i/7-05nov.b/bfb105.m
Meth Date : 05-Nov-2007 09:25
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.204	8.232	-0.028	95	1533486			100.00- 100.00	100.00
8.204	8.232	-0.028	50	263560			15.00- 40.00	17.19
8.204	8.232	-0.028	75	583889			30.00- 60.00	38.08
8.204	8.232	-0.028	96	103388			5.00- 9.00	6.74
8.204	8.232	-0.028	173	6486			0.00- 2.00	0.49
8.204	8.232	-0.028	174	1319198			50.00- 100.00	86.03
8.204	8.232	-0.028	175	89771			5.00- 9.00	6.80
8.204	8.232	-0.028	176	1270632			95.00- 101.00	96.32
8.204	8.232	-0.028	177	85723			5.00- 9.00	6.75

Data File: /var/chem/msd7.i/7-05nov.b/7110501.d

Date : 05-NOV-2007 09:31

Client ID: BFB

Instrument: msd7.i

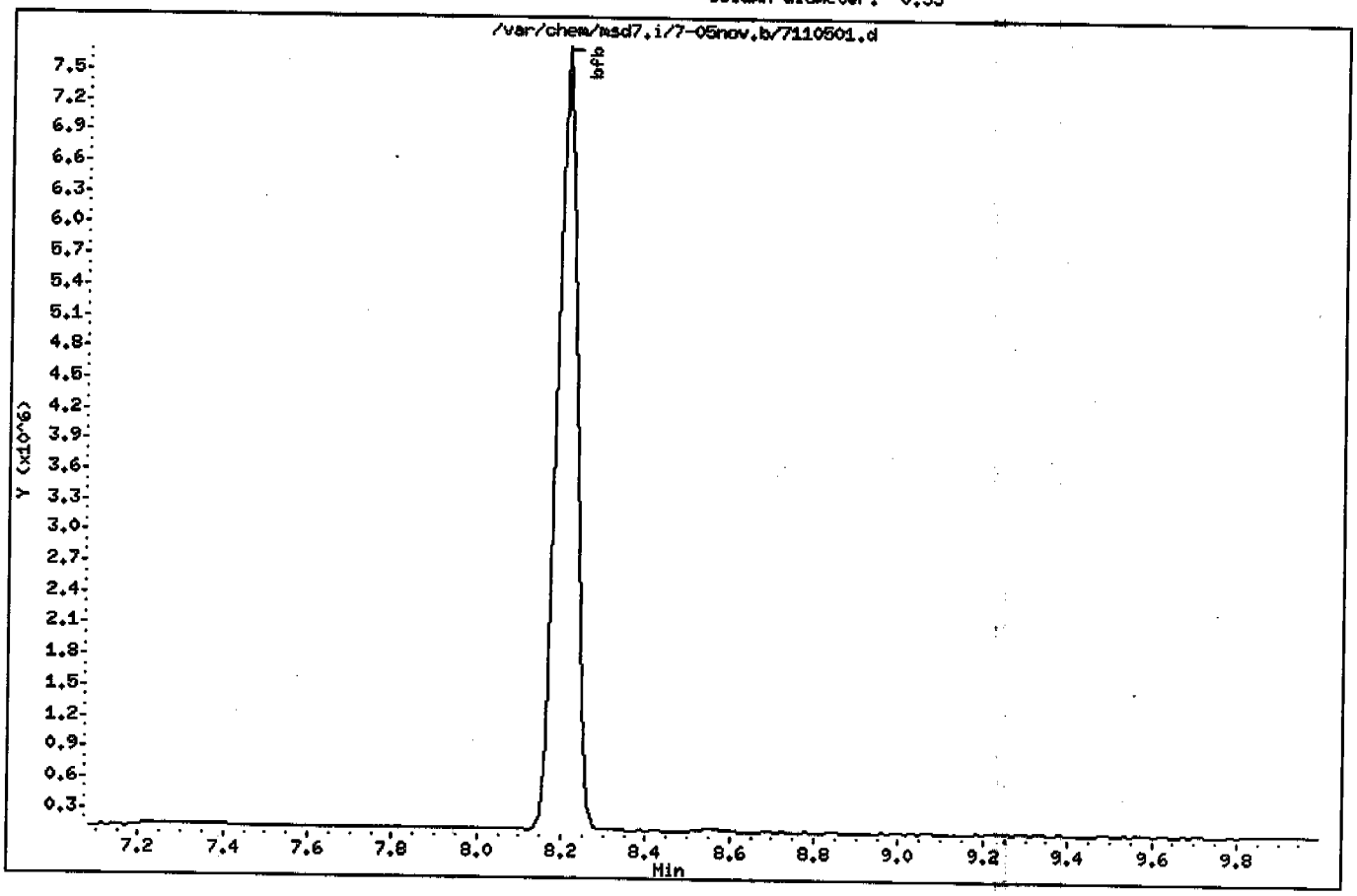
Sample Info: #1467-64;bfb tune check;bfb tune check

Volume Injected (uL): 2.0

Operator: ea

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-06nov.b/7110501.d

Date : 05-NOV-2007 09:31

Client ID: BFB

Instrument: msd7.i

Sample Info: #1467-64;bfb tune check;bfb tune check

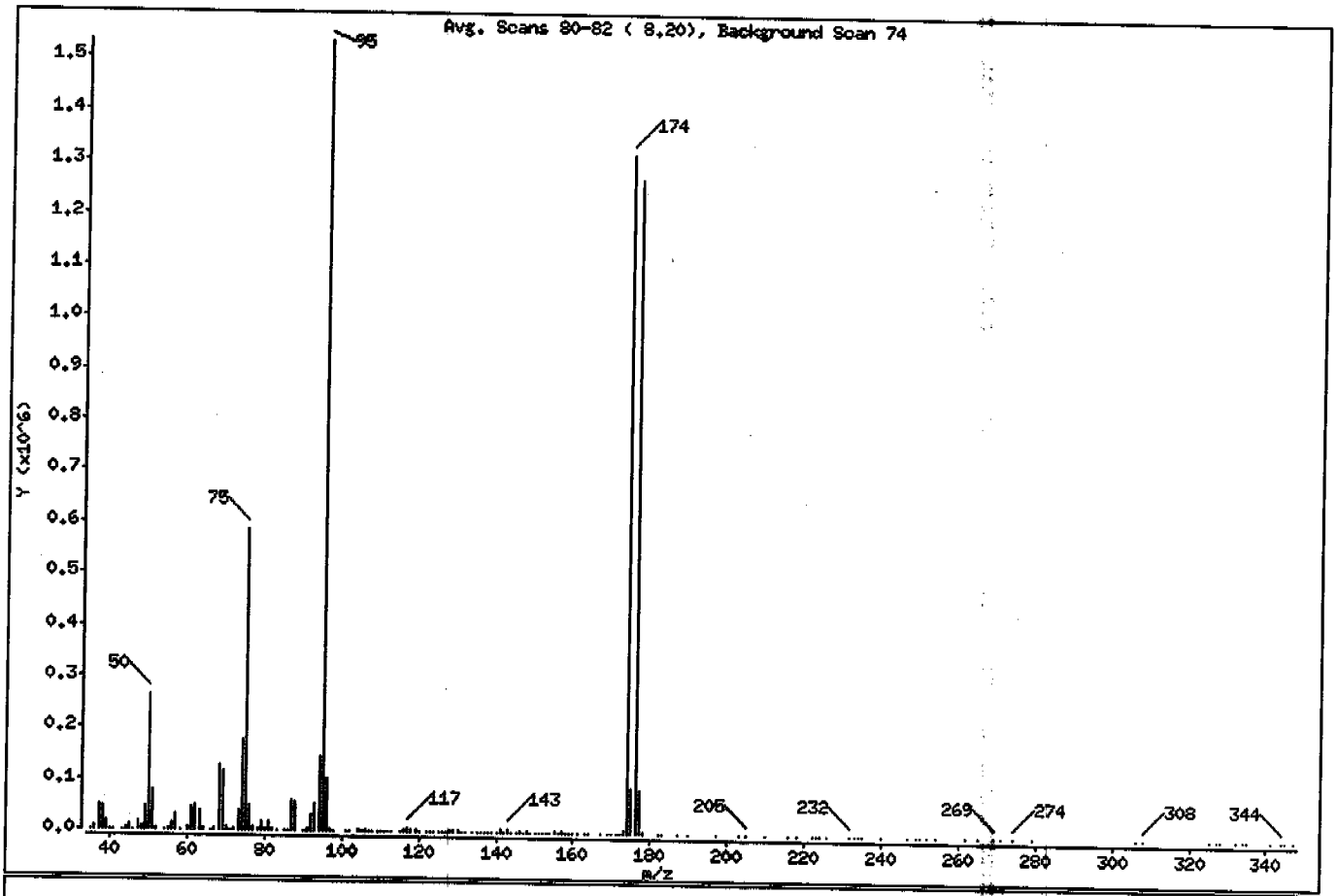
Volume Injected (uL): 2.0

Operator: ea

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.19
75	30.00 - 60.00% of mass 95	38.08
96	5.00 - 9.00% of mass 95	6.74
173	Less than 2.00% of mass 174	0.42 (0.49)
174	50.00 - 100.00% of mass 95	86.03
175	5.00 - 9.00% of mass 174	5.85 (6.80)
176	95.00 - 101.00% of mass 174	82.86 (96.32)
177	5.00 - 9.00% of mass 176	5.59 (6.76)

0501

Data File: /var/chem/msd7.i/7-05nov.b/7110501.d

Date : 05-NOV-2007 09:31

Client ID: BFB

Instrument: msd7.i

Sample Info: #1467-64;bfb tune check;bfb tune check

Volume Injected (uL): 2.0

Operator: ea

Column phase:

Column diameter: 0.53

Data File: 7110501.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 74

Location of Maximum: 95.00

Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	148	82.00	3857	132.00	16	183.00	61
36.00	7417	83.00	306	134.00	316	187.00	173
37.00	47872	85.00	263	135.00	1161	190.00	196
38.00	47312	86.00	1328	136.00	171	197.00	63
39.00	19072	87.00	59848	137.00	1631	203.00	53
40.00	431	88.00	57920	138.00	241	205.00	147
41.00	464	90.00	197	139.00	511	210.00	44
43.00	455	91.00	2587	140.00	735	216.00	82
44.00	4271	92.00	30616	141.00	7168	218.00	188
45.00	10804	93.00	53024	142.00	1135	222.00	196
46.00	725	94.00	145536	143.00	7209	223.00	194
47.00	16052	95.00	1533440	144.00	533	224.00	113
48.00	5667	96.00	103384	145.00	462	226.00	58
49.00	44784	97.00	3017	146.00	1993	232.00	286
50.00	263552	98.00	290	147.00	1181	233.00	94
51.00	78144	101.00	160	148.00	2606	234.00	78
52.00	3337	102.00	189	149.00	1023	235.00	142
54.00	27	104.00	3564	150.00	1118	240.00	92
55.00	2391	105.00	1246	151.00	229	247.00	65
56.00	15127	106.00	3592	152.00	624	249.00	179
57.00	32144	107.00	1167	153.00	983	250.00	235
58.00	982	108.00	162	154.00	906	252.00	96
60.00	8673	109.00	120	155.00	3300	254.00	68
61.00	46016	110.00	447	156.00	478	262.00	130
62.00	48864	111.00	518	157.00	2356	265.00	37
63.00	38256	112.00	430	158.00	301	269.00	389
64.00	2839	113.00	537	159.00	958	271.00	46
66.00	46	115.00	859	160.00	191	274.00	82
67.00	2006	116.00	3106	161.00	1066	279.00	50
68.00	126912	117.00	5966	163.00	271	306.00	76
69.00	116648	118.00	3223	164.00	244	308.00	73
70.00	8458	119.00	4359	167.00	232	325.00	98
71.00	303	120.00	255	169.00	271	327.00	138
72.00	3930	122.00	297	170.00	357	328.00	78
73.00	39808	123.00	265	171.00	676	332.00	118

Data File: /var/chem/msd7.i/7-05nov.b/7110501.d

Date : 05-NOV-2007 09:31

Client ID: BFB

Instrument: msd7.i

Sample Info: #1467-64;bfb tune check;bfb tune check

Volume Injected (uL): 2.0

Operator: ea

Column phase:

Column diameter: 0.53

Data File: 7110501.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 74

Location of Maximum: 95.00

Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	174528	124.00	579	172.00	1083	334.00	54
75.00	583872	125.00	385	173.00	6486	335.00	95
76.00	49768	126.00	123	174.00	1318912	341.00	177
77.00	6824	127.00	181	175.00	89768	344.00	218
78.00	3314	128.00	4080	176.00	1270272	345.00	186
79.00	16384	129.00	1781	177.00	85720	347.00	80
80.00	5189	130.00	4069	178.00	2106		
81.00	17088	131.00	1543	182.00	65		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-07nov.b/7110701.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 07-NOV-2007 08:22
Operator : sjr
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-07nov.b/bfb105.m
Meth Date : 07-Nov-2007 08:17
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.204	8.232	-0.028	95	1379350			100.00- 100.00	100.00
8.204	8.232	-0.028	50	254982			15.00- 40.00	18.49
8.204	8.232	-0.028	75	547265			30.00- 60.00	39.68
8.204	8.232	-0.028	96	92024			5.00- 9.00	6.67
8.204	8.232	-0.028	173	5910			0.00- 2.00	0.50
8.204	8.232	-0.028	174	1192444			50.00- 100.00	86.45
8.204	8.232	-0.028	175	81714			5.00- 9.00	6.85
8.204	8.232	-0.028	176	1156664			95.00- 101.00	97.00
8.204	8.232	-0.028	177	73691			5.00- 9.00	6.37

Data File: /var/chem/msd7.i/7-07nov.b/7110701.d

Date : 07-NOV-2007 08:22

Client ID: BFB

Instrument: msd7.i

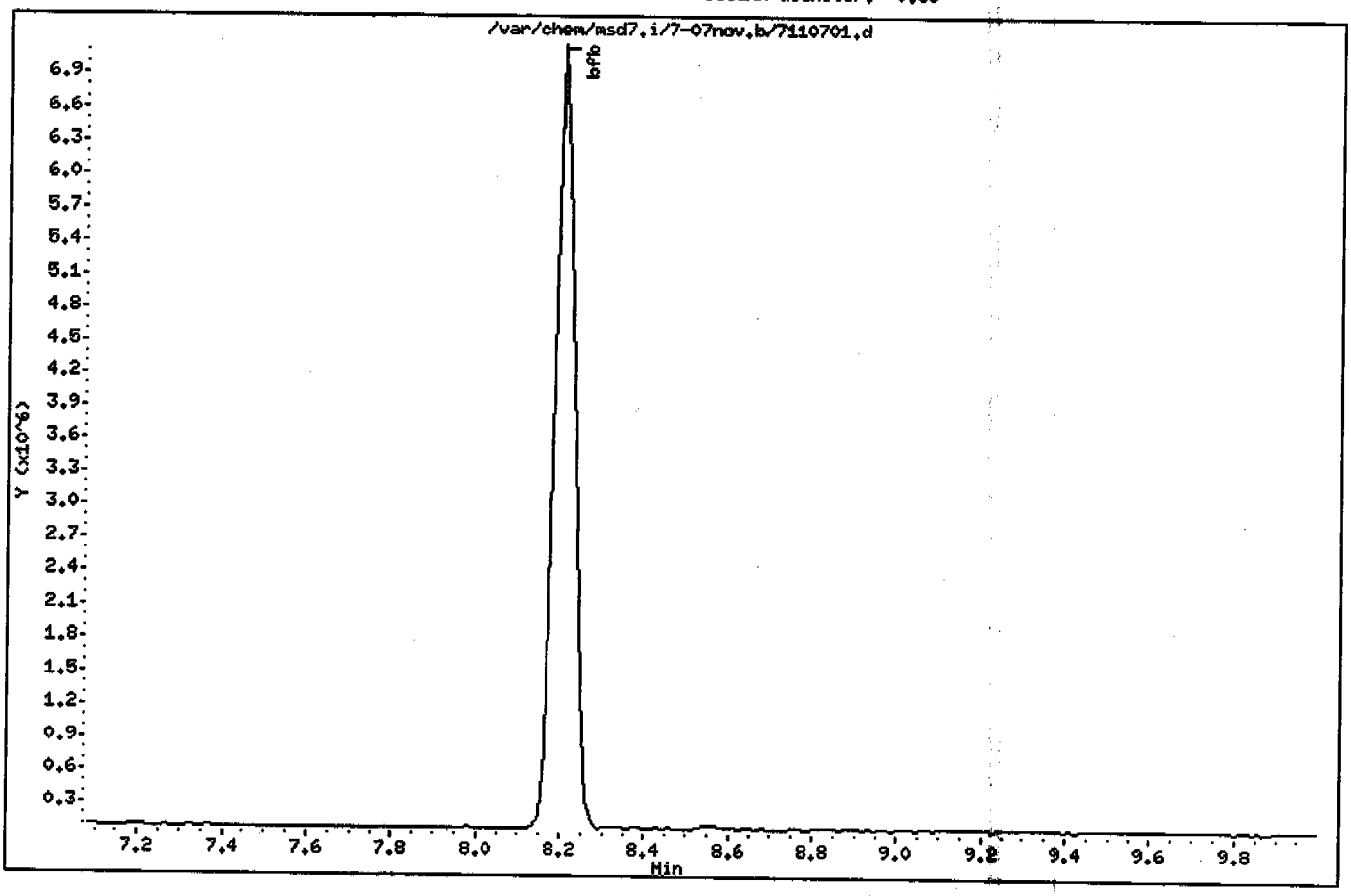
Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

Volume Injected (uL): 2.0

Operator: sjr

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-07nov.b/7110701.d

Date : 07-NOV-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

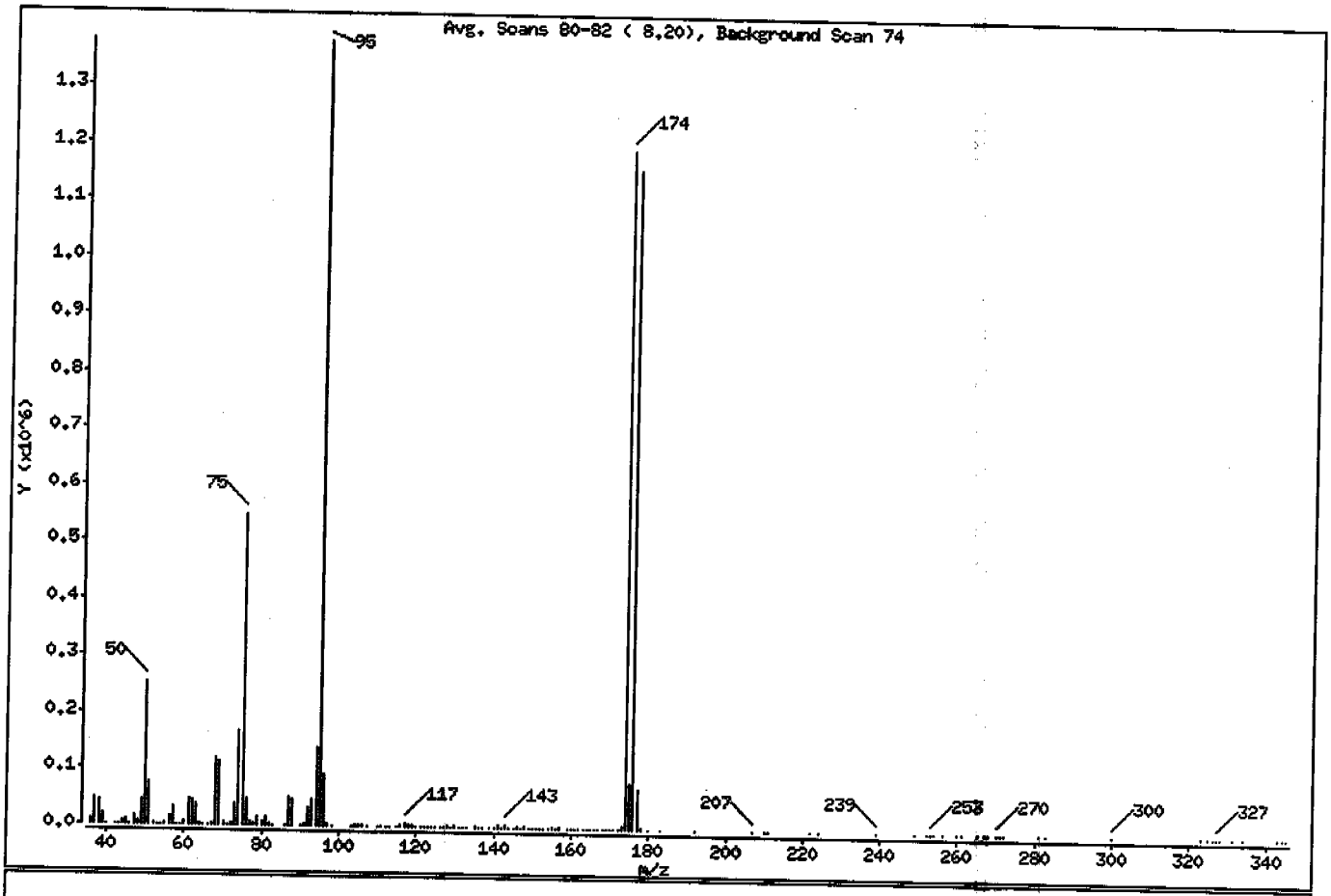
Volume Injected (uL): 2.0

Operator: sjr

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.49
75	30.00 - 60.00% of mass 95	39.68
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.43 (0.50)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	5.92 (6.85)
176	95.00 - 101.00% of mass 174	83.86 (97.00)
177	5.00 - 9.00% of mass 176	5.34 (6.37)

Data File: /var/chem/msd7.i/7-07nov.b/7110701.d

Date : 07-NOV-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

Volume Injected (uL): 2.0

Operator: sjr

Column phase:

Column diameter: 0.53

Data File: 7110701.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 74

Location of Maximum: 95.00

Number of points: 164

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8110	79.00	16464	131.00	1465	176.00	1156[illegible]
37.00	46400	80.00	5512	132.00	380	177.00	73[illegible]
38.00	44368	81.00	16880	133.00	362	178.00	2[illegible]
39.00	18832	82.00	4210	135.00	1854	180.00	[illegible]
40.00	292	83.00	430	136.00	435	183.00	78
42.00	49	86.00	1177	137.00	1297	192.00	15
43.00	177	87.00	50448	139.00	424	207.00	370
44.00	5102	88.00	48168	140.00	711	210.00	[illegible]
45.00	10121	90.00	168	141.00	6887	211.00	116
46.00	561	91.00	2485	142.00	730	222.00	[illegible]
47.00	15854	92.00	30232	143.00	7799	224.00	70
48.00	5940	93.00	48480	144.00	526	239.00	117
49.00	43900	94.00	138368	145.00	655	249.00	133
50.00	254976	95.00	1379328	146.00	1800	252.00	74
51.00	76096	96.00	92024	147.00	524	253.00	295
52.00	2700	97.00	2721	148.00	2833	264.00	15
53.00	29	98.00	240	149.00	625	266.00	106
54.00	191	103.00	297	150.00	972	280.00	42
55.00	2189	104.00	3485	151.00	153	281.00	72
56.00	15421	105.00	1684	152.00	594	265.00	123
57.00	31304	106.00	3196	153.00	628	267.00	147
58.00	566	107.00	972	154.00	655	268.00	208
59.00	203	110.00	398	155.00	2797	270.00	285
60.00	7639	111.00	492	156.00	492	271.00	56
61.00	46216	112.00	186	157.00	2487	272.00	90
62.00	45312	113.00	734	159.00	1216	281.00	91
63.00	37792	115.00	851	160.00	106	283.00	159
64.00	3273	116.00	3375	161.00	949	300.00	64
65.00	333	117.00	5353	162.00	207	323.00	53
66.00	236	118.00	3071	163.00	162	325.00	61
67.00	2398	119.00	4305	164.00	165	326.00	59
68.00	119368	120.00	290	165.00	226	327.00	426
69.00	114312	121.00	250	166.00	61	328.00	121
70.00	7240	122.00	162	167.00	118	331.00	139
71.00	420	123.00	299	168.00	124	334.00	229

Data File: /var/chem/msd7.i/7-07nov.b/7110701.d

Date : 07-NOV-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

Volume Injected (uL): 2.0

Operator: sjr

Column phase:

Column diameter: 0.53

Data File: 7110701.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 74

Location of Maximum: 95.00

Number of points: 164

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	4174	124.00	660	169.00	332	343.00	177
73.00	39320	125.00	519	170.00	405	344.00	62
74.00	166528	126.00	399	171.00	673	345.00	82
75.00	547264	127.00	144	172.00	1245		
76.00	47400	128.00	3589	173.00	5910		
77.00	6805	129.00	1512	174.00	1191936		
78.00	3616	130.00	3712	175.00	81712		

Shipping/ Receiving Documents

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0711101
# of pages (Including Cover): 1

11/9/2007

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

Monday, November 05, 2007

0711101

REQUEST NUMBER: 08-124

0511

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-124
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 11/5/2007
TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

Receipt
VTR 11/6/07

need Results by 11/8 - 11/9

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-07-6800	GAS	11/3/2007	6.0"Hg	
		02A	1	MD21-07-6801	GAS	11/3/2007	6.5"Hg	
		03A	1	MD21-07-6802	GAS	11/3/2007	6.0"Hg	
		04A	1	MD21-07-6803	GAS	11/3/2007	7.5"Hg	
		05A	1	MD21-07-6804	GAS	11/4/2007	7.0"Hg	
		06A	1	MD21-07-6806	GAS	11/3/2007	5.0"Hg	
		07A	1	MD21-07-6818	GAS	10/30/2007	5.0"Hg	
		08A	1	MD21-08-6445	GAS	11/3/2007	5.5"Hg	

Final Page of REQUEST NUMBER 08-124

0711101

Monday, November 05, 2007

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-124C
REQUEST NUMBER: 08-124

TURNAROUND/REPORT DUE: 11/9/2007
TURNAROUND REQ'D: 4

LAB REQUEST COMMENTS: DATA TO BE RECEIVED 11/9/07

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6803	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6801	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6802	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6800	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6806	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6804	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6818	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-08-8445	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	11/5/07	1400	A Scott	ATL	11/6/07	0645
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0711101

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: R6

Date Promised: 11/08/07 4:00 pm
Date Completed: 11/8/07
Date Received: 11/6/07
PO#: 47247-001-07
Project#: 08-124

Total $: $ 3,630.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-07-6800	Modified TO-15	11/3/2007	6.0 "Hg	$358.75
01AA	MD21-07-6800 Lab Duplicate	Modified TO-15	11/3/2007	6.0 "Hg	$0.00
02A	MD21-07-6801	Modified TO-15	11/3/2007	6.5 "Hg	$358.75
03A	MD21-07-6802	Modified TO-15	11/3/2007	6.0 "Hg	$358.75
04A	MD21-07-6803	Modified TO-15	11/3/2007	7.5 "Hg	$358.75
05A	MD21-07-6804	Modified TO-15	11/3/2007	7.0 "Hg	$358.75
06A	MD21-07-6806	Modified TO-15	11/3/2007	5.0 "Hg	$358.75
06AA	MD21-07-6806 Lab Duplicate	Modified TO-15	11/3/2007	5.0 "Hg	$0.00
07A	MD21-07-6818	Modified TO-15	10/30/2007	5.0 "Hg	$358.75
08A	MD21-08-8445	Modified TO-15	11/3/2007	5.5 "Hg	$358.75
09A	Lab Blank	Modified TO-15	NA	NA	$0.00
10A	CCV	Modified TO-15	NA	NA	$0.00
11A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (8) @ $60.00 each.	$480.00
CVP (8) @ $20.00 each.	$160.00
Client Specific EDD (8) @ $5.00 each.	$40.00
eCVP (8) @ $10.00 each.	$80.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

REMARKS: A 75% surcharge is applied for a 48 hour turnaround time.

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.84	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.97	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.58	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.26	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.74	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.04	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.39	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.74	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.34	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.20	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.36	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.96	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.52	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.13	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.81	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.28	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	[illegible]	1.99
0.4	1.30	1.64	1.97
0.6	1.29	[illegible]	1.94
0.8	1.27	1.59	1.92
1.0	1.25	[illegible]	1.89
1.2	1.24	1.55	1.87
1.4	1.22	[illegible]	1.84
1.6	1.21	1.52	1.82
1.8	1.19	[illegible]	1.80
2.0	1.18	1.48	1.78
2.2	1.17	[illegible]	1.76
2.4	1.15	1.44	1.74
2.6	1.14	[illegible]	1.72
2.8	1.13	1.41	1.70
3.0	1.11	[illegible]	1.68
3.2	1.10	1.38	1.66
3.4	1.09	[illegible]	1.64
3.6	1.08	1.35	1.62
3.8	1.06	[illegible]	1.61
4.0	1.05	1.32	1.59
4.2	1.04	[illegible]	1.57
4.4	1.03	1.29	1.55
4.6	1.02	[illegible]	1.54
4.8	1.01	1.27	1.52
5.0	1.00	[illegible]	1.51
5.2	NA	1.24	1.49
5.4	NA	[illegible]	1.48
5.6	NA	1.22	1.46
5.8	NA	[illegible]	1.45
6.0	NA	1.19	1.43
6.2	NA	[illegible]	1.42
6.4	NA	1.17	1.41
6.6	NA	[illegible]	1.39
6.8	NA	1.15	1.38
7.0	NA	[illegible]	1.37
7.2	NA	1.13	1.36
7.4	NA	[illegible]	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0711101

A	R	T	M	Q	
☑	☑	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
	☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	NA	☐	☑	☐	Corrective Action Issued - #
☑	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initiated* — *CIRCLE (YES / NO)*

☑	☐	☐	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	Hold time is met for all samples
	☐	☐	☐	Appropriate data qualifier flags are applied
	☐	☐	☐	Manual integrations for samples and QC are properly documented
☑	☐		☐	Samples analyzed within the project or method specific clock
	☐			Retention times have been verified
☑	☐		☐	Appropriate ICAL(s) included
	☐	☐	☐	At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐	☐ Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑	☐	Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐	Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
	NA	☐	TICs resemble reference spectra
	☐	☐	TICs between duplicate samples are consistent
NA	☐	☐	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☑	☐	Special units for all samples in the final report are correctly calculated
	☑	☐	Manually entered results checked (i.e. special CCV compounds)
	NA	☐	TPH/NMOC (verify calculations and correct reference compound used)
	☑		Chain of Custody scanned correctly
		☐	Verify sample id's vs. chain of custody
☑	☑		Samples pressurized w/ appropriate gas (N_2 or He) ☐ Tedlar Bag only
☑	☑		Final pressure consistent with canister size (6L vs. 1L)
☑	☑		Verify receipt pressures against logbook and Target
☑	☐		Verify canister ID #'s
	NA	☐	Extra printed copies are provided per client profile
	☑	☐	Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	☑	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: HCB 312 in ICAL. 2 out in CCV & LCS.
CCV from multiple files.

M/O:

A (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
JO 11/8/07	R: JO 11/8/07	[signature] 11/9/07	
	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev. 08/29/05

Wednesday, October 31, 2007

REQUEST NUMBER: 08-99

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-99
Per Agreement Number:126310041
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 10/31/2007
TURNAROUND/REPORT DUE: 11/5/2007
TURNAROUND REQ'D: 5 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6807	GAS	10/30/2007		
		1	MD21-07-6808	GAS	10/30/2007		
		1	MD21-07-6809	GAS	10/30/2007		
		1	MD21-07-6810	GAS	10/30/2007		
		1	MD21-07-6811	GAS	10/30/2007		
		1	MD21-07-6812	GAS	10/30/2007		

Final Page of REQUEST NUMBER 08-99

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-99C

REQUEST NUMBER: 08-99

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

LAB REQUEST COMMENTS:

TURNAROUND/REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6810	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6807	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6811	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6809	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6808	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6812	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

10/31/07 3:00

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6807

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OR
TIME COLLECTED (HH:MM)		16:02	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OR	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OR	FIELD PREP:	NA	
TOP DEPTH:	0	67.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5' ft	SCREEN/PORT DESC:		Vapor port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 24422

LOCATION DESC:

Port # 1

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	10/31/07	(Printed Name) Harold Mark	6/31/07
(Signature)	8:50	(Signature)	8:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6808

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	on
TIME COLLECTED (HH:MM)		16:11	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	on	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	on	FIELD PREP:	NA	
TOP DEPTH:	0	160.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	165.5 ft	SCREEN/PORT DESC:		Vapor port #2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 14003

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6809

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	SV
TIME COLLECTED (HH:MM)		16:17	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	SV	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	SV	FIELD PREP:	NA	
TOP DEPTH:	0	217' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222' ft	SCREEN/PORT DESC:		Vapor port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vert.

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # F11

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [illegible] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) [illegible] (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6810

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	Oc
TIME COLLECTED (HH:MM)		16:23	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	Oc	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	Oc	FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	Q
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Vapor port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vert

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # TO1556

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY (Printed Name) [signature] (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) [signature] (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6811

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	
TIME COLLECTED (HH:MM)		16:30	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port # 1 OR 10/30/07 port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** North

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 34322

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stout **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Bill Stout (Signature)	**Date/Time** 10/31/07 8:51	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6812

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	AC
TIME COLLECTED (HH:MM)		16:37	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	379.5'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	344.5'	SCREEN/PORT DESC:	KR 10/30/07 NA	Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: West

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6811

SAMPLE COMMENTS:

Summa Canister 35979 ~~34737~~ WCJ

LOCATION DESC:

Port #5 Duplicate

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY (Printed Name) (Signature)	Date/Time 10/31/07 8:52	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

Attachment C: Data-Validation Cover Sheet

☐ **Rejected Data**

Section I

Request Number: 08-99 Validation Date: 11/7/07 Lab Code: ARS

Contract Laboratory Name: American Radiation Services, Inc. Validator: Jamie Fox

Organization: Analytical Quality Associates, Inc.

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

Other (describe): Tritium

Section II - Completeness Check

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

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

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): **(page 1 of 1)**

1. The reported sample results that were ≤ the MDC were qualified U,R5.

Reviewed By: MAD **Level:** I **Date:** 11/07/07

Validator's signature: James Fox Date: 11/7/07

Attachment D. RAD Checklist

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

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

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-07-01760	**Request or PO Number:**	08-99
Client Sample ID:	MD21-07-6810	**ARS Sample ID:**	ARS1-07-01760-001
Sample Collection Date:	10/30/2007	**Date Received:**	11/01/07 10:15
Sample Matrix:	Aqueous	**Report Date:**	11/05/07 08:43

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	53.880	114.340	193.103	94.948	U	pCi/L	ARS-0S4/EPA 906.0	11/2/07 6:54	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lassaigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JKF
11/7/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6807
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-002
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:43

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	139.683	117.280	193.959	95.369	U	pCi/L	ARS-054/EPA 906.0	11/2/07 10:01	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JKF
11/7/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6811
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-003
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	-22.054	114.437	196.054	96.400	U	pCi/L	ARS-054/EPA 906.0	11/2/07 13:08	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsey

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JKF
11/7/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-07-01760	**Request or PO Number:**	08-99
Client Sample ID:	MD21-07-6809	**ARS Sample ID:**	ARS1-07-01760-004
Sample Collection Date:	10/30/2007	**Date Received:**	11/01/07 10:15
Sample Matrix:	Aqueous	**Report Date:**	11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	5.608	114.684	195.560	96.157	U	pCi/L	ARS-054/EPA 906.0	11/2/07 16:14	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigna
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JKF
11/7/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6808
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-005
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	816.721	156.335	199.126	97.910		pCi/L	ARS-054/EPA 906.0	11/2/07 19:21	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JKF
11/7/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6812
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-006
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	121.936	118.546	197.083	96.905	U	pCi/L	ARS-054/EPA 906.0	11/2/07 22:28	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsdyne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JKF
11/7/07

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-99C

REQUEST NUMBER: 08-99

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6810	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6807	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6811	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6809	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6808	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6812	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
		10/31/07	3:00	Shirley Clayton	Shirley Clayton		10:15
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

REQUEST NUMBER: 08-99

Wednesday, October 31, 2007

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-99
Per Agreement Number:126310041
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 10/31/2007
TURNAROUND/REPORT DUE: 11/5/2007
TURNAROUND REQ'D: 5 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6807	GAS	10/30/2007		
		1	MD21-07-6808	GAS	10/30/2007		
		1	MD21-07-6809	GAS	10/30/2007		
		1	MD21-07-6810	GAS	10/30/2007		
		1	MD21-07-6811	GAS	10/30/2007		
		1	MD21-07-6812	GAS	10/30/2007		

Final Page of REQUEST NUMBER 08-99

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-99

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory Request Number: 08-99

Original COC

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-99C

REQUEST NUMBER: 08-99

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6810	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6807	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6811	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6809	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6808	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6812	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		10/31/07	3:00	Shirley Clayton	Shirley Clayton		10:15
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Wednesday, October 31, 2007

REQUEST NUMBER: 08-99

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-99
Per Agreement Number:126310041
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 10/31/2007
TURNAROUND/REPORT DUE: 11/5/2007
TURNAROUND REQ'D: 5 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6807	GAS	10/30/2007		
		1	MD21-07-6808	GAS	10/30/2007		
		1	MD21-07-6809	GAS	10/30/2007		
		1	MD21-07-6810	GAS	10/30/2007		
		1	MD21-07-6811	GAS	10/30/2007		
		1	MD21-07-6812	GAS	10/30/2007		

Final Page of REQUEST NUMBER 08-99

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-99

Case Narrative

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

November 5, 2007

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-99
LANL Sample ID: MD21-07-6810, MD21-07-6807, MD21-07-6811, MD21-07-6809, MD21-07-6808, MD21-07-6812

Dear Mr. Greene:

On November 1, 2007, American Radiation Services (ARS) received 6 Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet a statistical sound detection limits.

Counting equipment Quality Assurance was with in acceptance criteria when the above referenced samples were processed.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

for Virgene Mulligan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-99	MD21-07-6810	ARS1-07-01760-001
08-99	MD21-07-6807	ARS1-07-01760-002
08-99	MD21-07-6811	ARS1-07-01760-003
08-99	MD21-07-6809	ARS1-07-01760-004
08-99	MD21-07-6808	ARS1-07-01760-005
08-99	MD21-07-6812	ARS1-07-01760-006

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicates that the activity is below the MDC.

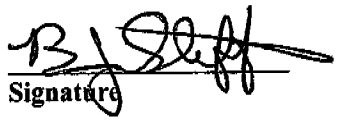
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."



Signature

Lab Manager/Technical Director, American Radiation Services
Title

11-5-07
Date

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-07-01760	**Request or PO Number:**	08-99
Client Sample ID:	MD21-07-6810	**ARS Sample ID:**	ARS1-07-01760-001
Sample Collection Date:	10/30/2007	**Date Received:**	11/01/07 10:15
Sample Matrix:	Aqueous	**Report Date:**	11/05/07 08:43

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	53.880	114.340	193.103	94.948	U	pCi/L	ARS-054/EPA 906.0	11/2/07 6:54	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6807
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-002
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:43

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	139.683	117.280	193.959	95.369	U	pCi/L	ARS-054/EPA 906.0	11/2/07 10:01	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6811
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-003
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	-22.054	114.437	196.054	96.400	U	pCi/L	ARS-054/EPA 906.0	11/2/07 13:08	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6809
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-004
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	5.608	114.684	195.560	96.157	U	pCi/L	ARS-054/EPA 906.0	11/2/07 16:14	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6808
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-005
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	816.721	156.335	199.126	97.910		pCi/L	ARS-054/ERA 906.0	11/2/07 19:21	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6812
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-006
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:44

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	121.936	118.546	197.083	96.905	U	pCi/L	ARS-054/EPA 906.0	11/2/07 22:28	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsey-Lane
Project Manager Review

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1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-07-01760

Date Received: 11/1/2007

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B07-03107	LCS	H3	1080.86	169.2	184.29021	1210.90		pCi/L	ARS-055/EPA 906.0	11/1/07 21:34	BS	89	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B07-03107	MBL	H3	-6.661	110.44084	188.73786	NA	U	pCi/L	ARS-055/EPA 906.0	11/1/07 21:34	BS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B07-03107	LCSD	H3	1080.86	169.2	1014.7783	165.9756		pCi/L	ARS-055/EPA 906.0	11/1/07 21:34	BS	0.20	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B07-03107	LCSD	H3	1080.86	169.2	1014.7783	165.9756		pCi/L	ARS-055/EPA 906.0	11/1/07 21:34	BS	0.56	< 3

Lindsay Lanoeigne

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS
AMERICAN RADIATION SERVICES, INC.

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Samples

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071101_1822
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071101_1822\20071101_1822.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071101_1822\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071101_1822\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	6.611	15.18	429.59	43.55	180.00	11/1/2007	6:27:34 PM	
5	2	B07-03107-01	11.929	27.11	434.80	44.00	180.00	11/1/2007	9:34:23 PM	
5	3	B07-03107-02	11.486	26.50	427.02	43.34	180.00	11/2/2007	12:41:01 AM	
5	4	B07-03107-03	6.579	15.15	428.03	43.42	180.00	11/2/2007	3:47:36 AM	
5	5	B07-03107-04	6.864	16.16	407.60	42.46	180.00	11/2/2007	6:54:10 AM	
5	**6**	**B07-03107-05**	**7.264**	**17.15**	**405.34**	**42.35**	**180.00**	**11/2/2007**	**10:00:53 AM**	
5	7	B07-03107-06	6.509	15.71	393.76	41.44	180.00	11/2/2007	1:07:40 PM	
5	8	B07-03107-07	6.637	15.95	396.03	41.62	180.00	11/2/2007	4:14:20 PM	
5	9	B07-03107-08	10.330	25.34	385.08	40.77	180.00	11/2/2007	7:21:01 PM	
5	10	B07-03107-09	7.172	17.27	394.97	41.54	180.00	11/2/2007	10:27:43 PM	

LSC Instrument Data Transfer Report

\\Packard3170\Results\H3 Results\Tritium for Protocol

Batch ID	Number of Samples Counted	Number of Samples Requested
ARS1-B07-03107	9	9

LSC Batch Sample ID	LSC Rack	LSC Det	LSC Vial	LSC Sample ID	LSC Count Date	LSC DPM	LSC SIE	LSC Eff	LSC Count Time	Aliquot Batch	ARS Batch	ARS Aliquot
BKG	5		1	BACKGROUND	11/01/07 18:27	6.61	429.59	43.5500	180.00	ARS1-B07-03107		
ARS1-B07-03107-01	5		2	B07-03107-01	11/01/07 21:34	11.93	434.80	44.0000	180.00	ARS1-B07-03107		
ARS1-B07-03107-02	5		3	B07-03107-02	11/02/07 00:41	11.49	427.02	43.3400	180.00	ARS1-B07-03107		
ARS1-B07-03107-03	5		4	B07-03107-03	11/02/07 03:47	6.58	428.03	43.4200	180.00	ARS1-B07-03107		
ARS1-B07-03107-04	5		5	B07-03107-04	11/02/07 06:54	6.85	407.60	42.4600	180.00	ARS1-B07-03107	ARS1-07-01760	1
ARS1-B07-03107-05	5		6	B07-03107-05	11/02/07 10:00	7.26	405.34	42.3500	180.00	ARS1-B07-03107	ARS1-07-01760	1
ARS1-B07-03107-06	5		7	B07-03107-06	11/02/07 13:07	6.51	393.76	41.4400	180.00	ARS1-B07-03107	ARS1-07-01760	1
ARS1-B07-03107-07	5		8	B07-03107-07	11/02/07 16:14	6.64	396.03	41.6200	180.00	ARS1-B07-03107	ARS1-07-01760	1
ARS1-B07-03107-08	5		9	B07-03107-08	11/02/07 19:21	10.33	385.08	40.7700	180.00	ARS1-B07-03107	ARS1-07-01760	1
ARS1-B07-03107-09	5		10	B07-03107-09	11/02/07 22:27	7.17	394.97	41.5400	180.00	ARS1-B07-03107	ARS1-07-01760	1

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.929000
Sample Count Mins	180.000000
BKG Count Rate	6.611000
BKG Count Mins	180.000000
Instrument Efficiency	0.440000
Sample Aliquot	5.037000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/1/07 9:34 PM
Count Date (t2)	11/1/07 9:34 PM
Activity Units = pCi = 2.2200	
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1080.863201	1080.863201	OK
CU	127.848925	127.848925	OK
TPU	169.150321	169.150321	OK
MDA	184.290205	184.290205	OK
DL	90.615110	90.615110	OK
Net Count Rate	5.318000	5.318000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004920	0.004920	OK
K MDA	0.885625	0.885625	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-01
Analysis Code	
SDG	ARS1-07-01760
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	LIVA QC Sample
Instr File Name	84
Instr Detector	P-5 - S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Calculation Verification

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.486000
Sample Count Mins	1440.000000
BKG Count Rate	6.611000
BKG Count Mins	1440.000000
Instrument Efficiency	0.433400
Sample Aliquot	4.993000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	11/2/07 12:41 AM
Count Date (t2)	11/2/07 12:41 AM
Activity Units = pCi, BCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1014.778302	1014.778302	OK
CU	129.365855	129.365855	OK
TPU	165.975589	165.975589	OK
MDA	188.745414	188.745414	OK
DL	92.805727	92.805727	OK
Net Count Rate	4.875000	4.875000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004804	0.004804	OK
K MDA	0.864721	0.864721	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-02
Analysis Code	
SDG	ARS1-07-01760
Fraction	006
Run Number	1
Client	QC Sample
Client Profile	
Client ID	MA QC Sample
Instr File Name	84
Instr Detector	S-5 - S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ **Date:** _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.579000
Sample Count Mins	180.000000
BKG Count Rate	6.611000
BKG Count Mins	180.000000
Instrument Efficiency	0.434200
Sample Aliquot	0.984000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection (Filtered)	11/2/07 3:48 AM
Count Date (t2)	11/2/07 3:48 AM
Activity Units = pCi/g pCi/L	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.011360
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	-6.660842	-6.660842	OK
CU	110.438726	110.438726	OK
TPU	110.440835	110.440835	OK
MDA	188.737861	188.737861	OK
DL	92.802013	92.802013	OK
Net Count Rate	-0.032000	-0.032000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004804	0.004804	OK
K MDA	0.864755	0.864755	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-03
Analysis Code	
SDG	ARS1-07-01760
Fraction	006
Run Number	
Client	QC Sample
Client Profile	
Client ID	LA QC Sample
Instr File Name	84
Instr Detector	G S - S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.864000
Sample Counting Time	180.000000
BKG Count Rate	6.611000
BKG Counting Time	180.000000
Instrument Efficiency	0.424600
Sample Aliquot	4.984000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/30/07 12:00 AM
Count Date (t2)	11/2/07 6:54 AM
Activity Units = pCi = dpm*2.2	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	53.880231	53.880231	OK
CU	114.207109	114.207109	OK
TPU	114.340479	114.340479	OK
MDA	193.102896	193.102896	OK
DL	94.948292	94.948292	OK
Net Count Rate	0.253000	0.253000	OK
D t 1 (t2 - t1)	3.287500	3.287500	OK
DF	0.999494	0.999494	OK
Sys Err	0.052280	0.052280	OK
K	0.004696	0.004696	OK
K MDA	0.845208	0.845208	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-04
Analysis Code	LSC-A-001
SDG	ARS1-07-01760
Fraction	001
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	021-07-6810
Instr File Name	04
Instr Detector	5 - S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.264000
Sample Count Mins	1800.000000
BKG Count Rate	6.611000
BKG Count Mins	1800.000000
Instrument Efficiency	0.423500
Sample Aliquot	4.975000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date/Time	10/30/07 12:00 AM
Count Date (t2)	11/2/07 10:01 AM
Activity Units = pCi, Mod =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	139.682604	139.682604	OK
CU	116.403344	116.403344	OK
TPU	117.280013	117.280013	OK
MDA	193.958581	193.958581	OK
DL	95.369031	95.369031	OK
Net Count Rate	0.653000	0.653000	OK
D t 1 (t2 - t1)	3.417361	3.417361	OK
DF	0.999474	0.999474	OK
Sys Err	0.052280	0.052280	OK
K	0.004675	0.004675	OK
K MDA	0.841479	0.841479	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-05
Analysis Code	LSC-A-001
SDG	ARS1-07-01760
Fraction	002
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	1021-07-6807
Instr File Name	84
Instr Detector	85 - S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.509000
Sample Count Min	100.000000
BKG Count Rate	6.611000
BKG Count Min	100.000000
Instrument Efficiency	0.414400
Sample Aliquot	5.000000
Dilution Factor	1.000000
Activity Conversion Factor	1.000000
Sample Collection Date	10/30/07 12:00 PM
Count Date (t2)	11/2/07 1:08 PM
Activity Units - pCi/L or pCi	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041338
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	-22.054477	-22.054477	OK
CU	114.415097	114.415097	OK
TPU	114.437413	114.437413	OK
MDA	196.054337	196.054337	OK
DL	96.399509	96.399509	OK
Net Count Rate	-0.102000	-0.102000	OK
D t 1 (t2 - t1)	3.547222	3.547222	OK
DF	0.999454	0.999454	OK
Sys Err	0.052280	0.052280	OK
K	0.004625	0.004625	OK
K MDA	0.832484	0.832484	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-06
Analysis Code	LSC-A-001
SDG	ARS1-07-01760
Fraction	003
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	LA21-07-6811
Instr File Name	84
Instr Detector	6 - S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ **Date:** _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.637000
Sample Count Mins	180.000000
BKG Count Rate	6.611000
BKG Count Mins	180.000000
Instrument Efficiency	0.416200
Sample Aliquot	5.000000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date/Time	10/30/07 12:00 PM
Count Date (t2)	11/2/07 4:14 PM
Activity Units - pCi = Enter 1	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.021330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	5.607561	5.607561	OK
CU	114.682104	114.682104	OK
TPU	114.683543	114.683543	OK
MDA	195.560225	195.560225	OK
DL	96.156556	96.156556	OK
Net Count Rate	0.026000	0.026000	OK
D t 1 (t2 - t1)	3.676389	3.676389	OK
DF	0.999434	0.999434	OK
Sys Err	0.052280	0.052280	OK
K	0.004637	0.004637	OK
K MDA	0.834587	0.834587	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-07
Analysis Code	LSC-A-001
SDG	ARS1-07-01760
Fraction	004
Run Number	
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	0021-07-6809
Instr File Name	84
Instr Detector	5 - S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.330000
Sample Count Mins	180.000000
BKG Count Rate	6.611000
BKG Count Mins	180.000000
Instrument Efficiency	0.407700
Sample Aliquot	5.054000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/30/07 12:00 AM
Count Date (t2)	11/2/07 7:21 PM
Activity Units = pCi = 3.7E-2 Bq	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041336
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	816.721360	816.721360	OK
CU	132.049596	132.049596	OK
TPU	156.335466	156.335466	OK
MDA	199.125826	199.125826	OK
DL	97.909754	97.909754	OK
Net Count Rate	3.719000	3.719000	OK
D t 1 (t2 - t1)	3.806250	3.806250	OK
DF	0.999414	0.999414	OK
Sys Err	0.052280	0.052280	OK
K	0.004554	0.004554	OK
K MDA	0.819643	0.819643	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-08
Analysis Code	LSC-A-001
SDG	ARS1-07-01760
Fraction	005
Run Number	19
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	M921-07-6808
Instr File Name	84
Instr Detector	PSC - S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Calculation Verification

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.172000
Sample Count Time	180.000000
BKG Count Rate	6.611000
BKG Count Time	180.000000
Instrument Efficiency	0.415400
Sample Aliquot	1.000000
Dilution Factor	1.000000
Aliquot Conversion Factor	1.000000
Sample Collection Date/Time	10/30/07 12:00 AM
Count Date (t2)	11/2/07 10:28 PM
Activity Units - pCi = 1, DPM = 2	1.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor	0.041350
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	121.936054	121.936054	OK
CU	117.885658	117.885658	OK
TPU	118.545952	118.545952	OK
MDA	197.082985	197.082985	OK
DL	96.905294	96.905294	OK
Net Count Rate	0.561000	0.561000	OK
D t 1 (t2 - t1)	3.936111	3.936111	OK
DF	0.999394	0.999394	OK
Sys Err	0.052280	0.052280	OK
K	0.004601	0.004601	OK
K MDA	0.828139	0.828139	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03107
Batch ID	ARS1-B07-03107-09
Analysis Code	LSC-A-001
SDG	ARS1-07-01760
Fraction	006
Run Number	4
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	9021-07-6812
Instr File Name	84
Instr Detector	5 - 5-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

ABatch	ABatchSampleID	Isotope	ClientID	ACL	CU	TPU	DL	MDA	BP_DL	BP_MDA	SD	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	Eff	ALIQ	UCF	CF	GrossCountRate
ARS1-B07-03107	ARS1-B07-03107-01	H-3	MD21-07-6812	1080.863201	127.8489254	169.1503211	90.61511	184.29021				0.06627	180.00000	0.03673	180.00000	0.44000	5.03700	2.22000	1.96000	11.92900
ARS1-B07-03107	ARS1-B07-03107-02	H-3	MD21-07-6812	1014.778302	129.3658554	165.9755886	92.80573	188.74541				0.06381	180.00000	0.03673	180.00000	0.43340	4.99300	2.22000	1.96000	11.48600
ARS1-B07-03107	ARS1-B07-03107-03	H-3	MD21-07-6812	-6.660842293	110.4387263	110.4408354	92.80201	188.73786				0.03655	180.00000	0.03673	180.00000	0.43420	4.98400	2.22000	1.96000	6.57900
ARS1-B07-03107	ARS1-B07-03107-04	H-3	MD21-07-6810	53.88023139	114.2071086	114.3404795	94.94829	193.10290				0.03813	180.00000	0.03673	180.00000	0.42460	4.98400	2.22000	1.96000	6.86400
ARS1-B07-03107	ARS1-B07-03107-05	H-3	MD21-07-6807	139.6826043	116.403344	117.2800127	95.36903	193.95858				0.04036	180.00000	0.03673	180.00000	0.42350	4.97500	2.22000	1.96000	7.26400
ARS1-B07-03107	ARS1-B07-03107-06	H-3	MD21-07-6811	-22.05447731	114.4150972	114.4374132	96.39951	196.05434				0.03616	180.00000	0.03673	180.00000	0.41440	5.03000	2.22000	1.96000	6.50900
ARS1-B07-03107	ARS1-B07-03107-07	H-3	MD21-07-6809	5.607561189	114.6821039	114.6835434	96.15656	195.56023				0.03687	180.00000	0.03673	180.00000	0.41620	5.02100	2.22000	1.96000	6.63700
ARS1-B07-03107	ARS1-B07-03107-08	H-3	MD21-07-6808	816.7213595	132.0495956	156.3354664	97.90975	199.12583				0.05739	180.00000	0.03673	180.00000	0.40770	5.03400	2.22000	1.96000	10.33000
ARS1-B07-03107	ARS1-B07-03107-09	H-3	MD21-07-6812	121.9360544	117.8856584	118.5459524	96.90529	197.08299				0.03984	180.00000	0.03673	180.00000	0.41540	4.99200	2.22000	1.96000	7.17200

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMassACT	TracerKnownACT	SampleCollDate	MidPointCountDate	UserField1	UserField2	UserField3	TPUr_1
ARS1-B07-03107	ARS1-B07-03107-01	H-3	MD21-07-6812	6.61100	5.31800							11/5/07 7:14	11/1/07 21:34	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-02	H-3	MD21-07-6812	6.61100	4.87500							11/5/07 7:14	11/2/07 0:41	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-03	H-3	MD21-07-6812	6.61100	-0.03200							11/5/07 7:14	11/2/07 3:48	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-04	H-3	MD21-07-6810	6.61100	0.25300							10/30/07 0:00	11/2/07 6:54	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-05	H-3	MD21-07-6807	6.61100	0.65300							10/30/07 0:00	11/2/07 10:01	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-06	H-3	MD21-07-6811	6.61100	-0.10200							10/30/07 0:00	11/2/07 13:08	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-07	H-3	MD21-07-6809	6.61100	0.02600							10/30/07 0:00	11/2/07 16:14	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-08	H-3	MD21-07-6808	6.61100	3.71900							10/30/07 0:00	11/2/07 19:21	4499.80000			0.04133
ARS1-B07-03107	ARS1-B07-03107-09	H-3	MD21-07-6812	6.61100	0.56100							10/30/07 0:00	11/2/07 22:28	4499.80000			0.04133

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DB1	DF2	DF3	TF1	TF2	SysErr	K_Val	K_RDA	InstFileName	DetectorID	InstrumentKeV
ARS1-B07-03107	ARS1-B07-03107-01	H-3	MD21-07-6812	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00492	0.88563	84	P-5 - S-2	
ARS1-B07-03107	ARS1-B07-03107-02	H-3	MD21-07-6812	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00480	0.86472	84	P-5 - S-3	
ARS1-B07-03107	ARS1-B07-03107-03	H-3	MD21-07-6812	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00480	0.86476	84	P-5 - S-4	
ARS1-B07-03107	ARS1-B07-03107-04	H-3	MD21-07-6810	0.02000	0.00000	0.02500	0.00000	0.00000	3.28750						0.99949					0.05228	0.00470	0.84521	84	P-5 - S-5	
ARS1-B07-03107	ARS1-B07-03107-05	H-3	MD21-07-6807	0.02000	0.00000	0.02500	0.00000	0.00000	3.41736						0.99947					0.05228	0.00467	0.84148	84	P-5 - S-6	
ARS1-B07-03107	ARS1-B07-03107-06	H-3	MD21-07-6811	0.02000	0.00000	0.02500	0.00000	0.00000	3.54722						0.99945					0.05228	0.00462	0.83248	84	P-5 - S-7	
ARS1-B07-03107	ARS1-B07-03107-07	H-3	MD21-07-6809	0.02000	0.00000	0.02500	0.00000	0.00000	3.67639						0.99943					0.05228	0.00464	0.83459	84	P-5 - S-8	
ARS1-B07-03107	ARS1-B07-03107-08	H-3	MD21-07-6808	0.02000	0.00000	0.02500	0.00000	0.00000	3.80625						0.99941					0.05228	0.00455	0.81964	84	P-5 - S-9	
ARS1-B07-03107	ARS1-B07-03107-09	H-3	MD21-07-6812	0.02000	0.00000	0.02500	0.00000	0.00000	3.93611						0.99939					0.05228	0.00460	0.82814	84	P-5 - S-10	

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B07-03107	ARS1-B07-03107-01	H-3	MD21-07-6812					ARS1-07-01760	1	006		BSTEFFENS	11/5/07 7:13
ARS1-B07-03107	ARS1-B07-03107-02	H-3	MD21-07-6812					ARS1-07-01760	1	006		BSTEFFENS	11/5/07 7:13
ARS1-B07-03107	ARS1-B07-03107-03	H-3	MD21-07-6812					ARS1-07-01760	1	006		BSTEFFENS	11/5/07 7:14
ARS1-B07-03107	ARS1-B07-03107-04	H-3	MD21-07-6810					ARS1-07-01760	1	001	LSC-A-001	BSTEFFENS	11/5/07 7:14
ARS1-B07-03107	ARS1-B07-03107-05	H-3	MD21-07-6807					ARS1-07-01760	1	002	LSC-A-001	BSTEFFENS	11/5/07 7:14
ARS1-B07-03107	ARS1-B07-03107-06	H-3	MD21-07-6811					ARS1-07-01760	1	003	LSC-A-001	BSTEFFENS	11/5/07 7:14
ARS1-B07-03107	ARS1-B07-03107-07	H-3	MD21-07-6809					ARS1-07-01760	1	004	LSC-A-001	BSTEFFENS	11/5/07 7:14
ARS1-B07-03107	ARS1-B07-03107-08	H-3	MD21-07-6808					ARS1-07-01760	1	005	LSC-A-001	BSTEFFENS	11/5/07 7:14
ARS1-B07-03107	ARS1-B07-03107-09	H-3	MD21-07-6812					ARS1-07-01760	1	006	LSC-A-001	BSTEFFENS	11/5/07 7:14

ARS
AMERICAN RADIATION SERVICES, INC.

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Laboratory Records

American Radiation Services, Inc.
Baton Rouge Laboratory

Analysis Batch Report

Printed: 11/1/2007 12:37 PM

Analysis Batch ID ARS1-B07-03107

Method ARS-054 | **Matrix** AQ

Description TRITIUM IN WATER

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3
ARS1-B07-03107-01	LCS	B-04013		
ARS1-B07-03107-02	LCSD	B-04014		
ARS1-B07-03107-03	MBL			
ARS1-B07-03107-04	TRG			
ARS1-B07-03107-05	TRG			
ARS1-B07-03107-06	TRG			
ARS1-B07-03107-07	TRG			
ARS1-B07-03107-08	TRG			
ARS1-B07-03107-09	TRG			

Batch Sample ID	Rep	Pl	Client ID	Client Deadline	Lab Deadline	Analysis Code
ARS1-07-01760	1	001	MD21-07-6810	11/05/07	11/03/07	LSC-A-001
ARS1-07-01760	1	002	MD21-07-6807	11/05/07	11/03/07	LSC-A-001
ARS1-07-01760	1	003	MD21-07-6811	11/05/07	11/03/07	LSC-A-001
ARS1-07-01760	1	004	MD21-07-6809	11/05/07	11/03/07	LSC-A-001
ARS1-07-01760	1	005	MD21-07-6808	11/05/07	11/03/07	LSC-A-001
ARS1-07-01760	1	006	MD21-07-6812	11/05/07	11/03/07	LSC-A-001

LCS Expected = 1210.9009

Range = 605.4505 - 1816.3514

LCSD Expected = 1210.9009

Range = 605.4505 - 1816.3514

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B07-03107
SDG's: ARS1-07-01760

LCS	1080.8632	**CSU**	169.1503
LCSD	1014.7783	**CSU-D**	165.9756

DER = $\frac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\frac{66.084899}{118.49022}$ = 0.557725 **< 3**

% RPD= $\frac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\frac{66.084899}{1047.8208}$ *100 = 6.30689 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\frac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\frac{66.084899}{335.1259}$ 0.197194 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-6.660842	110.44084	188.7379
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

American Radiation Services
Baton Rouge Laboratory

ARS AMERICAN RADIATION SERVICES, INC.

Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0001	Am-241	S	06/07/07	06/07/08	OK	03/16/06	5.1937E+01	51.8012	1.579E+05	S-0069		[illegible]
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	115.9209	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	Ra-226	S	05/29/07	05/29/08	OK	02/01/06	[illegible]	64.9655	5.840E+05	S-0105		[illegible]
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.1144	5.053E+01	S-0109		
A	S-0023	Pu-238	S	11/02/05	11/02/06	EXP	11/01/05	[illegible]	11.4745	3.204E+04	S-0071		[illegible]
A	S-0024	Pu-239	S	04/17/07	04/17/08	OK	10/26/05	1.1412E+01	11.4114	8.807E+06	S-0073		
A	S-0025	Pu-242	ST	04/17/07	04/17/08	OK	10/24/05	[illegible]	7.6328	1.365E+08	S-0075		[illegible]
A	S-0027	Tc-99	SLC	09/01/06	09/01/07	EXP	10/18/05	9.4141E+03	9414.0769	7.710E+07	S-0113		S-0027 - Information entered from dilution records - RTS 4/19/2006
A	S-0028	U-238	S	06/15/07	06/15/08	OK	10/26/05	[illegible]	34.9549	[illegible]	S-0063		
A	S-0032	H-3	SL	04/02/07	04/02/08	OK	03/01/06	3.4431E+03	3134.3075	4.500E+03	S-0031		S-0032 - Intermediate dilution for preparation of control solutions -
A	S-0033	Tc-99	SLC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.710E+07	S-0027	[illegible]	[illegible]
A	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4895	2.753E+07	S-0065		Empirical data collected over 2 mos. for S-0036 indicated that the ori
A	S-0037	Ra-226	SC	02/15/06	02/15/07	EXP	01/05/97	[illegible]	640.8395	5.840E+05	S-0104		[illegible]
A	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6546	2.692E+06	S-0067		S-0038 Entered from dilution documention. Density from certificate use
A	S-0039	Tc-99	SC	08/03/07	08/03/08	OK	07/30/05	1.1146E+04	11146.2817	7.710E+07	S-0114		[illegible]
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.5732	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions -
A	S-0063	U-238	P			Not Ver	08/01/97	2.4200E+02	242.0000	1.632E+12			[illegible]
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0036 Information entered on 4/6/2006 RTS Density entered based on m
A	S-0067	Am-243	PT			Not Ver	10/30/05	3.6240E+01	36.2331	2.692E+06			[illegible]
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records Dilution incorre
A	S-0071	Pu-238	PL			Not Ver	10/15/99	[illegible]	38.9582	[illegible]			[illegible] entered from dilution records
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2310	8.807E+06			S-0024 Information entered from dilution records
A	S-0074	Pu-239	SL			Not Ver	10/26/05	[illegible]	11.4114	8.807E+06	S-0073		
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	S-0077	U-232	PT			Not Ver	07/01/02	[illegible]	36.2221	2.516E+04			[illegible]
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E+12			NIST 4321 - uranium standard for use as total uranium standard)also I
A	S-0103	U-nat	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	70.2265	1.632E+12	S-0102		[illegible]
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8237	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	01/01/93	1.1900E+01	11.8237	5.840E+05			[illegible]
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	379075.8194	4.500E+03			Primary for S-0029 - Information entered from dilution records - 4/18/
A	S-0108	Sr-90	PC			Not Ver	02/01/05	[illegible]	2970.5575	1.041E+04			Primary for S-0117
A	S-0109	Sr-89	PLC			Not Ver	01/24/05	3.9414E+05	0.3738	5.053E+01			Activity concentration calculated per certificate information - 2.018E
A	S-0111	H-3	PC			Not Ver	04/01/06	2.0870E+00	1.9069	4.500E+03			primary
A	S-0112	H-3	SC	04/19/06	04/19/07	EXP	04/18/06	1.1410E+04	10464.1828	4.500E+03	S-0111		Solution for use as calibration stock standard - Entered from dilution
A	S-0113	Tc-99	PLC			Not Ver	09/01/98	[illegible]	32608.6045	7.710E+07			primary solution
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	S-0115	Cs-137	PL			Not Ver	01/29/95	[illegible]	21.6029	1.098E+04			[illegible]
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4431	5.840E+05	S-0105		S-0003 - Information entered from dilution records - 4/19/2006 RTS
A	S-0117	Sr-90	PLCT			Not Ver	07/01/95	[illegible]	2970.5575	1.041E+04			[illegible]
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0353	1.098E+04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	04/19/06	04/19/07	EXP	04/08/06	[illegible]	11205.4494	1.098E+04	S-0118		Solution for use as calibration stock standard
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9715	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	10884.4896	1.041E+04	S-0120		[illegible]
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0997	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	[illegible]	04/24/07	EXP	[illegible]	[illegible]	11602.5742	1.579E+05	S-0122		Solution for use as calibration stock standard

Standards Report

A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	03/27/06	1.0413E+04	10412.8695	2.753E+07	S-0124		[illegible]
A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	88448.0625	2.100E+03			Primary Ra-228 Standard
A	S-0127	Ra-228	SL	05/10/06	05/10/07	EXP	05/10/06	1.1274E+04	9463.8052	2.100E+03	S-0126		[illegible]
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0568	7.710E+07	S-0039		Solution diluted per plan and as documented in measurements above exce
A	S-0129	Sr-90	PL			Not Ver	07/01/95	4.0100E+03	2970.5575	1.041E+04			
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	37.7291	2.100E+03	S-0127		Dilution performed as stated above by B Steffens on 5/18/2006. Measure
A	S-0134	Sr-90	SL			Not Ver	09/26/03	[illegible]	432.1670	1.041E+04	S-0129		[illegible]
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	53.4015	1.041E+04	S-0134		Original standard ID# was T11c-1/S-0017. Information entered from dilu
A	S-0137	Th-229	PT			Not Ver	12/05/02	[illegible]	[illegible]	2.681E+06			Primary Th-229 standard
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6972	2.681E+06	S-0137		Used as an intermediate standard for creating tracer stock solutions.
A	S-0139	Po-209	P			Not Ver	01/15/04	[illegible]	4671.7680	3.726E+04			Primary Po-209 standard
A	S-0140	Po-208	S			Not Ver	10/07/03	1.1882E+01	11.8888	3.726E+04	S-0139		
A	S-0141	Ra-226	PC			Not Ver	01/21/93	2.6418E+04	26249.3167	5.840E+05			[illegible]
A	S-0142	Ra-226	SC	04/03/07	04/03/08	OK	07/21/06	6.5210E+02	651.7356	5.840E+05	S-0141		Solution for use as calibration stock. Dilution performed as stated ab
A	S-0143	Pb-210	P			Not Ver	07/18/06	7.6400E+00	7.3393	8.130E+03			ARS-WRM-001
A	S-0144	Pb-210	S	07/18/06	07/18/07	EXP	07/18/06	1.6961E+01	16.2932	8.130E+03	S-0143		7/18/2006 ARS-WRM-001 20 gamma spectroscopy measurements average act
A	S-0145	Th-229	ST			Not Ver	09/26/05	[illegible]	119.8524	2.681E+06	S-0138		[illegible]
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9796	2.681E+06	S-0145		Information gathered from existing dilution records created on 4/28/20
A	S-0147	Tc-99	SC	[illegible]	[illegible]	EXP	06/08/05	[illegible]	232.0133	7.710E+07	S-0027		Tc-99 LCS standard [illegible]
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473100.9311	2.090E+06			Primary C-14 standard. The certified activity in dpm/g was derived by
A	S-0151	I-129	PLC			Not Ver	12/12/06	2.4490E+05	[illegible]	[illegible]			Primary I-129 standard
A	S-0152	H-3	P	12/04/06	12/04/07	OK	09/03/98	2.0090E+00	1.1999	4.500E+03			Liquid in a 500-ml borosilicate-glass media bottle with teflon-lined s
A	S-0153	C-14	SL			Not Ver	[illegible]	[illegible]	11835.0619	2.090E+06	S-0148		[illegible]
A	S-0154	C-14	S	03/12/07	03/12/08	OK	10/13/06	1.7245E+02	172.4281	2.090E+06	S-0153		LCS standard for C-14. Originally logged as S-0150. See parent comment
A	S-0155	Ra-226	SC	04/03/07	04/03/08	OK	03/20/07	5.9902E+01	59.8564	5.840E+05	S-0142		[illegible]
A	S-0156	H-3	S	05/18/07	05/18/08	OK	04/27/07	2.7672E+00	2.6882	4.500E+03	S-0032		Normal level tritium LCS standard. Dilution performed as stated above
A	S-0157	Sr-90	P			Not Ver	05/15/07	[illegible]	7518.4095	1.041E+04			Primary Sr-90 LCS standard
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	828.4712	2.516E+04			Primary U-232 standard
A	S-0159	Sr-89	PC			Not Ver	05/18/07	[illegible]	1702.9679	5.053E+01			Primary Sr-89 standard
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4475.8119	1.041E+04	S-0157		Intermediate standard for creating LCS standards. Dilution performed a
A	S-0161	U-232	ST	06/18/07	06/18/08	OK	06/06/07	5.1903E+02	516.9393	2.516E+04	S-0158		[illegible]
A	S-0162	U-232	ST	06/18/07	06/18/08	OK	06/08/07	9.8656E+00	9.8260	2.516E+04	S-0161		Dilution performed as stated above by BSteffens on 6/8/2007. -BJS 6/8/
A	S-0163	Sr-90	S	07/16/07	07/16/08	OK	06/12/07	4.7407E+01	46.9606	1.041E+04	S-0160		[illegible]
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	1702.4694	5.053E+01			Primary Sr-89 calibration standard.
A	S-0165	Sr-89	SC	[illegible]	04/18/08	OK	08/06/07	[illegible]	1027.2915	5.053E+01	S-0164		[illegible]
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6493	2.681E+06	S-0145		Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS
I	S-0026	U-232	ST	06/19/06	06/19/07	EXP	10/25/05	1.0894E+01	10.6358	2.516E+04	S-0027	06/21/07	[illegible]
I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4206	4.500E+03			Tritium in Oil
I	S-0031	H-3	S	10/26/05	10/26/06	EXP	10/19/05	6.0777E+05	542041.6819	4.500E+03	S-0107		[illegible]
I	S-0130	Sr-90	SL			Not Ver	09/26/03	5.3620E+02	485.3328	1.041E+04	S-0129	05/26/06	Original solution ID# is T11c. Dilution information entered from exist
I	S-0131	Sr-90	SL			Not Ver	02/02/06	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	
I	S-0133	Sr-90	SL	01/09/06	01/09/07	EXP	06/09/04	5.8438E+01	53.8063	1.041E+04	S-0130	05/26/06	Original solution ID# was T11c-1/S-0017. Information entered from dilu
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2045E+01	47.9121	1.041E+04	S-0133	[illegible]	[illegible]
I	S-0149	C-14	SL			Not Ver	10/13/06	5.9553E+04	59545.4780	2.090E+06	S-0148	03/16/07	Intermediate standard for creating LCS stock solutions. Dilution perfo
I	S-0150	C-14	SL			Not Ver	10/13/06	[illegible]	[illegible]	2.090E+06	S-0149	[illegible]	[illegible]

Standards Report

1	S-0167	Th-229	ST			Not Ver	08/27/07	5.6494E+00		5.6493	2.681E+06	S-0145	08/28/07	Th-229 [illegible] performed as stated above by B Steffens. -BJS

LCS Report
Analytical Batch: ARS1-B07-03107

ID_S8050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
3990	B-04013	ARS1-B07-03107	ARS1-B07-03107-01	B-H3	S-0156	H-3	5	1.21089496	0	1	1	BSTEFFENS	11/1/2007
3991	B-04014	ARS1-B07-03107	ARS1-B07-03107-02	B-H3	S-0156	H-3	5	1.21089496	0	1	1	BSTEFFENS	11/1/2007

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
104	ARS1-B07-03107	ARS1-B07-03107-01		0	g	5.037	g	BSTEFFENS	11/2/2007
105	ARS1-B07-03107	ARS1-B07-03107-02		0	g	4.993	g	BSTEFFENS	11/2/2007
106	ARS1-B07-03107	ARS1-B07-03107-03		0	g	4.984	g	BSTEFFENS	11/2/2007
107	ARS1-B07-03107	ARS1-B07-03107-04	MD21-07-6810	0	g	4.984	g	BSTEFFENS	11/2/2007
108	ARS1-B07-03107	ARS1-B07-03107-05	MD21-07-6807	0	g	4.975	g	BSTEFFENS	11/2/2007
109	ARS1-B07-03107	ARS1-B07-03107-06	MD21-07-6811	0	g	5.03	g	BSTEFFENS	11/2/2007
110	ARS1-B07-03107	ARS1-B07-03107-07	MD21-07-6809	0	g	5.021	g	BSTEFFENS	11/2/2007
111	ARS1-B07-03107	ARS1-B07-03107-08	MD21-07-6808	0	g	5.034	g	BSTEFFENS	11/2/2007
112	ARS1-B07-03107	ARS1-B07-03107-09	MD21-07-6812	0	g	4.992	g	BSTEFFENS	11/2/2007

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
10-29-07	15:52	B07-03039-04	07-03039	1647	
↓	↓	B07-03039-07	↓	↓	
↓	↓	B07-03039-08	↓	↓	
11-1-07	16:09	SNC	QA	QA	
↓	17:00	Background	07-03107	1822	
↓	↓	B07-03107-01	↓	↓	
↓	↓	B07-03107-02	↓	↓	
↓	↓	B07-03107-03	↓	↓	
↓	↓	B07-03107-04	↓	↓	
↓	↓	B07-03107-05	↓	↓	
↓	↓	B07-03107-06	↓	↓	
↓	↓	B07-03107-07	↓	↓	
↓	↓	B07-03107-08	↓	↓	
↓	↓	B07-03107-09	↓	↓	

Reviewed By: _____ Date: _____
Initials

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American Radiation Services Analytical Reports

for

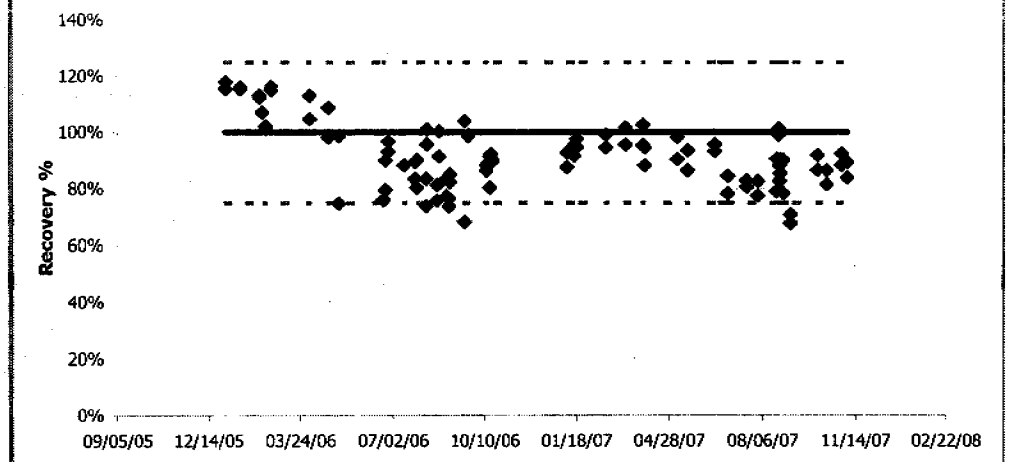
Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Control Charts

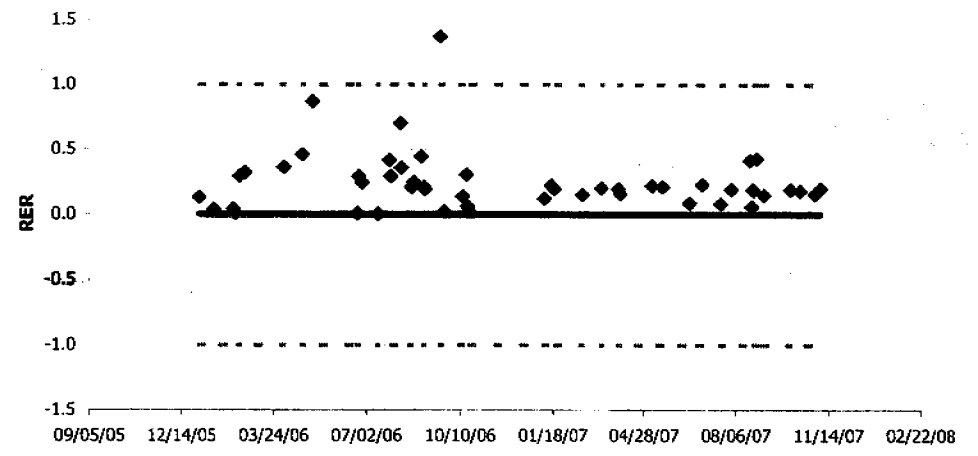
QC Chart

Tritium LCS



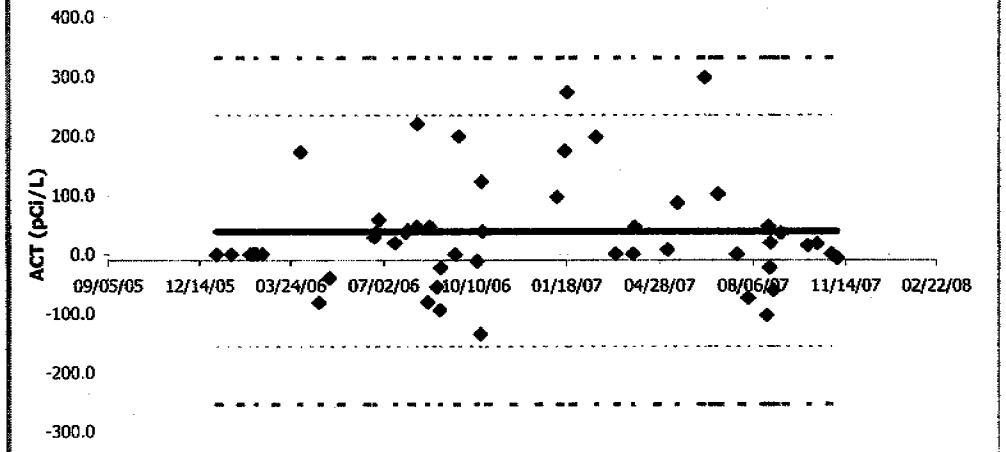
Average	STDEV	n	UCL	LCL
0.9141	0.1146	51	1.2500	0.7500

Tritium RER



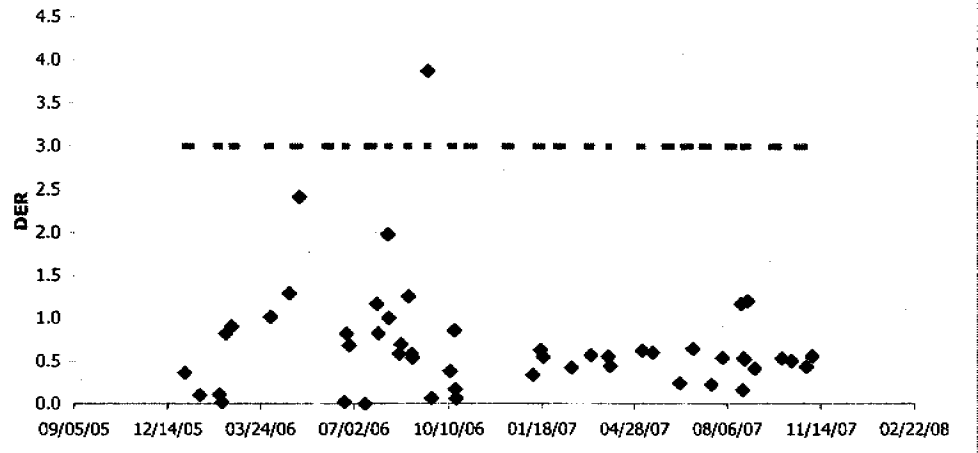
n	UCL	LCL
51	1.0000	-1.0000

Tritium Blank



Average	STDEV	n	UCL	LCL
39.2963	92.9713	51	332.0487	-253.4560

Tritium DER



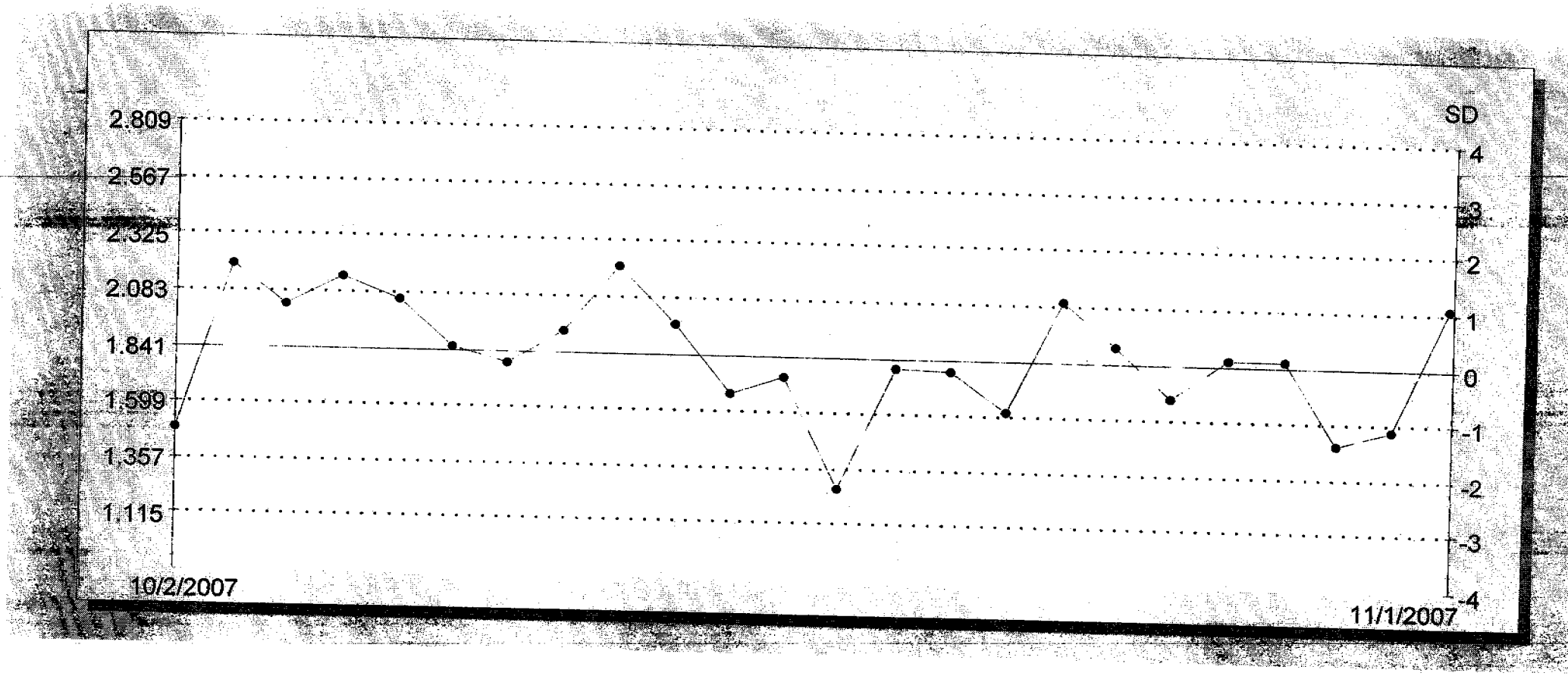
n	UCL
51	3.0000

3H Background
Total # pts : 3922
Valid # pts : 24
Mean : 1.84
SD : 0.24

Date	Value	Valid Pt
Oct 02, 2007	1.49	X
Oct 02, 2007	2.20	X
Oct 02, 2007	2.03	X
Oct 02, 2007	2.15	X
Oct 02, 2007	2.05	X
Oct 03, 2007	1.86	X
Oct 03, 2007	1.79	X
Oct 03, 2007	1.93	X
Oct 03, 2007	2.22	X
Oct 03, 2007	1.97	X
Oct 03, 2007	1.67	X
Oct 03, 2007	1.76	X
Oct 03, 2007	1.27	X
Oct 03, 2007	1.80	X
Oct 03, 2007	1.79	X
Oct 04, 2007	1.62	X
Oct 12, 2007	2.11	X
Oct 12, 2007	1.92	X
Oct 24, 2007	1.69	X
Oct 24, 2007	1.87	X
Oct 29, 2007	1.86	X
Oct 29, 2007	1.51	X
Nov 01, 2007	1.58	X
Nov 01, 2007	2.10	X

3H Background

Total # pts	: 3922
Valid # pts	: 24
Mean	: 1.84
SD	: 0.24



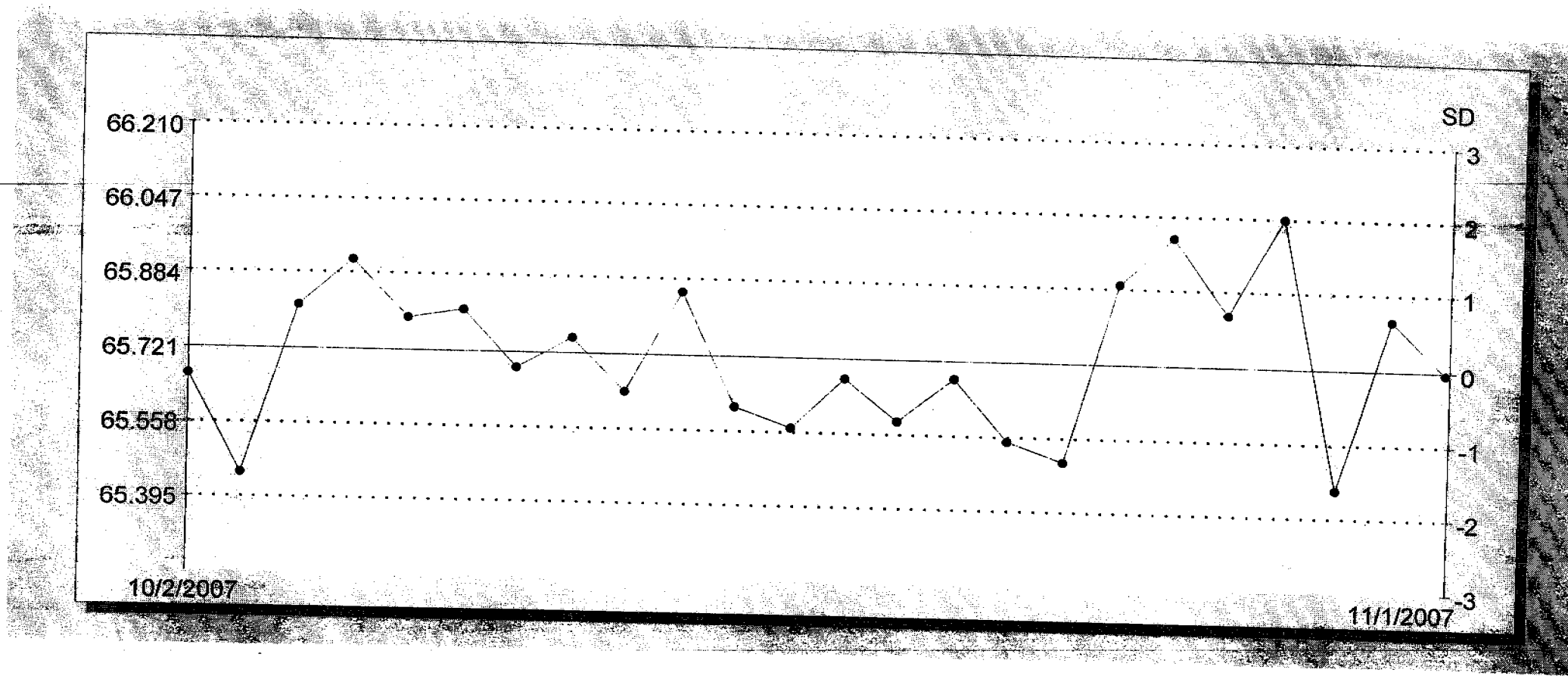
3H Efficiency

Total # pts	: 3967
Valid # pts	: 24
Mean	: 65.72
SD	: 0.16

Date	Value	Valid Pt
Oct 02, 2007	65.66	X
Oct 02, 2007	65.45	X
Oct 02, 2007	65.81	X
Oct 02, 2007	65.91	X
Oct 02, 2007	65.79	X
Oct 03, 2007	65.81	X
Oct 03, 2007	65.69	X
Oct 03, 2007	65.76	X
Oct 03, 2007	65.64	X
Oct 03, 2007	65.86	X
Oct 03, 2007	65.61	X
Oct 03, 2007	65.57	X
Oct 03, 2007	65.68	X
Oct 03, 2007	65.58	X
Oct 03, 2007	65.68	X
Oct 04, 2007	65.55	X
Oct 12, 2007	65.51	X
Oct 12, 2007	65.90	X
Oct 24, 2007	66.00	X
Oct 24, 2007	65.84	X
Oct 29, 2007	66.05	X
Oct 29, 2007	65.46	X
Nov 01, 2007	65.83	X
Nov 01, 2007	65.71	X

3H Efficiency

Total # pts	: 3967
Valid # pts	: 24
Mean	: 65.72
SD	: 0.16



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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	Create a dilution of S-0032 for use as LCS stock solution
Target dpm/g (on dil. date)	2.76
Target Final volume mL	2000
Appx mass g of Parent Sol'n	
Appx vol ml of Parent Sol'n	
Expected Addition for Analysis g	5
Standards Preparation / Dilution	
Secondary Solution #	
Dilution Date (New Ref Date)	04/27/2007 00:00
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	17.8583
Container Plus Solution (g)	19.5702
Net Wt Transferred (g)	
DPM Xferred on 04/27/2007 00:00	
Diluent/matrix	H2O
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	
Dilution Empty Container Mass (g)	1
Dilution Full Cont g (if measured)	1997
Dilution Final Volume ml (if measured)	2000
Final Dilution Density (g/mL)	
Final Dilution Measured Mass g	1997
Comments	Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007
Final Dilution dpm/g	
Final Dil New Ref Date/Time	

Parent Standard Data	
Parent Solution Reference #	
Parent Solution #	
Parent Principal Radionuclide	
Parent Reference Date	
Parent Certified Act	
Parent Cert Act Uncert 1 Sigma	
Parent Sp. Gravity G/Ml	
Parent Supplier	
Parent Date Recvd	
Parent Received By	
Parent Cert Exp Date	
Parent Matrix	
Certified dpm/g At Ref Date	
Certified dpm/g on 04/27/2007 00:00	
Parent Comments	
Parent Tech	
Is_Primary	
Is_LCS	
Is_Tracer	
Is_Calib	

Half Life (Days)

Certi Act/Vol Units

ARS AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION- Rev 1

VERIFICATION DATE 5/18/2007 0:00
SOLUTION REFERENCE #

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.232E+01	4.500E+03

Radionuclide H-3 **Primary Dilution Reference Date** 4/27/2007 0:00

Primary Dilution Activity	1.25	pCi per gram ===> dpm/g	2.78
Verif. Date Decay Corrected	1.25	pCi per gram ===> dpm/g	2.77

Verification Trials

Trial ID#

Gross Weight 2.0000
Tare Weight 1.0000
Net Weight 1.0000

Gross Weight 2.0000
Tare Weight 1.0000
Net Weight 1.0000

Trial ID#

Gross Weight 2.0000
Tare Weight 1.0000
Net Weight 1.0000

Gross Weight 2.0000
Tare Weight 1.0000
Net Weight 1.0000

	Sample Count Time (min)	Trials	Counter	Efficiency	Background (cpm)	Gross Count Rate (cpm)	Activity Result (dpm/g)	Activity Result (pCi/g)
S-0156-1	12.198	1	LSC	0.4395	6.143	5.0100	2.75	1.24
S-0156-2	11.748	1	LSC	0.4325	6.143	5.0100	2.59	1.17
S-0156-3	11.822	1	LSC	0.434	6.143	5.0000	2.62	1.18

Average	2.65	1.19
Two Sigma Uncertainty	0.17	0.08
Standard Deviation percent of known concentration	3.14%	3.14%
Target Activity	2.77	1.25
% Diff	-4.15	-4.15

Prepared & Counted By Jon Boyd

Verification Expiration Date: May 17, 2008

Date: 5/18/2007 0:00

Verified & Approved By Marlene Mellgren

Date: 5-18-07

QC Approval Steve Lopez

Date: 5-18-07

Verifier's Name: Tony Byrd **Date:** 4/30/2007
Pipettor ID: CH84078
Pipettor ID:
Pipettor ID: CH80870
Standard ID: S-0112
Standard ID: S-0032 (S-0156)

		Weight of Standard		
15mL of Ultima Gold added to standard	S-0156-1	5.01 g	**Balance ID:**	H1331122173560P
	S-0156-2	5.01 g		
	S-0156-3	5.00 g		
		g		
		g		
15mL of Ultima Gold added to standard	S-0112-1	1.03 g	**Balance ID:**	H1331122173560P
	S-0112-2	1.08 g		
	S-0112-3	1.00 g		
		g		
		g		

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\20070517_1143.results
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.rtf
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for protocol 6.lsa\20070517_1143\H3 Results.csv

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1
#Vials/Sample: 1
Repeat Sample Count: 1
Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On
Colored Samples: Off
Coincidence Time (nsec): 18
Luminescence Correction: Off
Heterogeneity Monitor: Off
Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
6	1	BACKGROUND	6.143	13.99	433.79	43.91	90.00	5/17/2007	11:48:37 AM	
6	2	S-0156-1 S-0032-1	12.198	27.76	434.24	43.95	90.00	5/17/2007	1:24:20 PM	
6	3	S-0156-2 S-0032-2	11.748	27.16	426.06	43.25	90.00	5/17/2007	3:00:09 PM	
6	4	S-0156-3 S-0032-3	11.822	27.24	427.76	43.40	90.00	5/17/2007	4:35:56 PM	

5-16-07

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Nancy M. Trahey, Chief
Standard Reference Materials Program

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πß gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πß liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100.	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 and 6.

STD ID: S-0032

ARS AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	**Dilute S-0031 to form intermediate level solution for controls**
Target dpm/g (on dil. date)	**3367**
Target Final volume mL	**200**
Appx mass g of Parent Sol'n	
Appx vol ml of Parent Sol'n	
Expected Addition for Analysis g	
Standards Preparation / Dilution	
Secondary Solution #	
Dilution Date (New Ref Date)	**03/01/2006 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	**0**
Container Plus Solution (g)	**1.1544**
Net Wt Transferred (g)	
DPM Xferred on 03/01/2006 00:00	
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (If measured)	**200.64**
Dilution Final Volume ml (If measured)	**200**
Final Dilution Density (g/mL)	
Final Dilution Measured Mass g	
Comments	**S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU**
Final Dilution dpm/g	
Final Dil New Ref Date/Time	

Parent Standard Data			
Parent Solution Reference #			
Parent Solution #			
Parent Principal Radionuclide		Half Life (Days)	
Parent Reference Date			
Parent Certified Act		Certi Act/Vol Units	
Parent Cert Act Uncert 1 Sigma			
Parent Sp. Gravity G/Ml			
Parent Supplier			
Parent Date Recvd			
Parent Received By			
Parent Cert Exp Date			
Parent Matrix			
Certified dpm/g At Ref Date			
Certified dpm/g on 03/01/2006 00:00			
Parent Comments			
Parent Tech			
Is_Primary			
Is_LCS			
Is_Tracer			
Is_Calib			

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6810
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-001
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:59

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	11.526	NA	NA	NA		%	Moisture	11/2/07 6:54	BS	NA

NOTES:

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6807
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-002
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:59

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	13.086	NA	NA	NA		%	Moisture	11/2/07 10:01	BS	NA

NOTES:

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6811
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-003
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:59

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	10.772	NA	NA	NA		%	Moisture	11/2/07 13:08	BS	NA

NOTES:

Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6809
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-004
Date Received: 11/01/07 10:15
Report Date: 11/05/07 08:59

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	Dl.C	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	11.211	NA	NA	NA		%	Moisture	11/2/07 16:14	BS	NA

NOTES:

Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6808
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-005
Date Received: 11/01/07 10:15
Report Date: 11/05/07 09:00

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	6.655	NA	NA	NA		%	Moisture	11/2/07 19:21	BS	NA

NOTES:

Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01760
Client Sample ID: MD21-07-6812
Sample Collection Date: 10/30/2007
Sample Matrix: Aqueous

Request or PO Number: 08-99
ARS Sample ID: ARS1-07-01760-006
Date Received: 11/01/07 10:15
Report Date: 11/05/07 09:00

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	6.969	NA	NA	NA		%	Moisture	11/2/07 22:28	BS	NA

NOTES:

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-07-01760
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-07-6810	ARS1-07-01760-001	614	455	159	18.327	4.984	**11.5264151**
MD21-07-6807	ARS1-07-01760-002	613	451	162	21.2	4.975	**13.0864198**
MD21-07-6811	ARS1-07-01760-003	611	450	161	17.343	5.03	**10.7720497**
MD21-07-6809	ARS1-07-01760-004	606	449	158	17.713	5.021	**11.2107595**
MD21-07-6808	ARS1-07-01760-005	609	457	152	10.115	5.034	**6.65460526**
MD21-07-6812	ARS1-07-01760-005	605	454	151	10.523	4.992	**6.96887417**

Balance ID: 0102/1125183449
Popettor ID: V97701

Signature [signature] Date/ Time 11-1-07

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Folder Duplicate

ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 07-01760 Client Name: LANL Sample Matrix: AQ

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Ranseyne 11-5-07
Report Generator Signature Date

Management Review Signature 11-5-07
Date

ARS AMERICAN RADIATION SERVICES, INC.

LSC
Technical Review Checklist

ARS SDG 07-01760

Sample Matrix: Silica Gel **Aliquot** (Circle One) : Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) (LCS) (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): **Batch A:** B07-03107 **Batch B:** _____ **Batch C:** _____

Test(s): LSC-A-001 _____ _____

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	Yes No (N/A)	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) **NCR #** (If initiated): _____

Chemist Signature 11-1-07 Date

N/A
Analyst Signature Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	(Yes) No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) **NCR #** (If initiated): _____

Analyst Signature 11-5-07 Date

Project Manager Signature 11-5-07 Date

ARS AMERICAN RADIATION SERVICES, INC.

Batch A: 07-03107

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)
7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated):		
Lindsay Ramsey 11-5-07 Project Manager Signature Date	B [signature] 11-5-07 QA Officer Signature Date	

GENERAL COMMENTS

DQO Report for SDG
ARS1-07-01760

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DilflonReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STC	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

ARS FILE TRACKING SHEET

SDG: 07-01760

Task	Date / Time	Initials
Date & Time Received	11-1-07 / 10:15	SMC
Storage Location: K3	11-1-07 / 11:42	SMC
Chain of Custody Completed	11-1-07 / 11:42	SMC
Report Written	11-5-07 9:09	LMC
Laboratory Supervisor Checks Performed	see batch	NA
Quality Assurance Checks Performed on Report	11-5-07 09:22	
Laboratory Director Check Performed on Report	11-5-07 09:23	
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 11/01/07 Shipper's Name: LANL

Technician Performing Inspection: Shirley Clayton Initials: SMC

SDG: **07-01760**

External and Internal Surveys

Exposure Rate Meter: 44-2 104898 Serial No: 013681 Calibration. Due Date: 05/21/08

Count Rate Meter: 44-9 109043 Serial No: 108796 Calibration. Due Date: 05/21/08

Background Exposure Rate (μR/hr) 12 Background Count Rate (cpm): 50

Max. Exposure Rate on Shipping Containers Externals (Including Background): 24

Max. Removable Count Rate on Shipping Container Externals (Including Background): 50

Max. Removable Count Rate on Shipping Container Internals (Including Background): 60

Max. Removable Count Rate on Sample Container Externals (Including Background): 60

Max. Exposure Rate on Sample Containers Externals (Including Background): 26

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? Yes If yes, were the seals intact? Yes

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 6(six)

Was the pH of Aqueous Samples < 2? N/A

If no, was the sample(s) checked for acid reactivity? N/A Was the sample(s) acidified to a pH < 2? N/A

Matrix of Samples: ~~SO~~ AQ SMC 11-1-07 12:22

Volume of Each Sample Container: 100

Brief Description of Sample Material:

Inspectors' Comments

ARS-062-001 r0

Sample Check In Report
Samples

SDG **ARS1-07-01760**

Client Code	114	Los Alamos National Laboratory	TAT Days	5	Level 4
Profile Number	PN-00094	Location: Los Alamos	Date Received	11/1/2007	
Project Type	Environmental		Client Deadline	11/5/2007	COC No 1
Comments			Internal Deadline	11/4/2007	COC No 2
			Lab Deadline	11/3/2007	COC No 3
			Workdays	FALSE	COC No 4

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-07-6810	1	AQ	10/30/07 00:00	10/30/07 00:00	K3	H	90	5
002	MD21-07-6807	1	AQ	10/30/07 00:00	10/30/07 00:00	K3	H	90	5
003	MD21-07-6811	1	AQ	10/30/07 00:00	10/30/07 00:00	K3	H	90	5
004	MD21-07-6809	1	AQ	10/30/07 00:00	10/30/07 00:00	K3	H	90	5
005	MD21-07-6808	1	AQ	10/30/07 00:00	10/30/07 00:00	K3	H	90	5
006	MD21-07-6812	1	AQ	10/30/07 00:00	10/30/07 00:00	K3	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-07-01760
Analyses per Sample

Printed 11/1/2007 11:42 AM

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	6
001	X
002	X
003	X
004	X
005	X
006	X

ARS AMERICAN RADIATION SERVICES, INC.

Sample Check In Report
Comments per Sample

SDG **ARS1-07-01760**

Fraction	Client ID	Comments
001	MD21-07-6810	
002	MD21-07-6807	
003	MD21-07-6811	
004	MD21-07-6809	
005	MD21-07-6808	
006	MD21-07-6812	

ARS LABEL SHEET

SDG: 07-01760

Analysis

ARS1-07-01760 **LSC-A-001**

Los Alamos National Laboratory

Tritium in (Water [Aqueous, AQ])

This Test Requires 6 of 6 Samples

Scan Analysis Code Here	Dates for This Test
	Rcvd 11/1/2007
	Due 11/5/2007

SAMPLE CHECK-IN COMMENT SHEET

SDG: 07-01760

NOTES

COMPANY NAME: LANL **SDG:** 07-01460

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

Shipping Container Survey

Outside 24 µR/hr 50 cpm

Inside 60 cpm

Rcv'd By

Date Rcv'd

Time Rcv'd

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
# Samples Rcv	6 (six)	
pH < 2	☐ Yes	☐ No

Intact ☐ Yes ☐ No

If No... Acid Rxt ☐ Yes ☐ No

Acid'fd < 2 ☐ Yes ☐ No

Matrix [AF , (AQ) , BI , FE , LT , SI , SO , UR , VG]

Record Sample Label, Exposure Rate and Count Rate for EACH SAMPLE in the area below:

Sample Lable/Comments/Notes	Weight/ Volume	µR/hr	cpm
MD21-07-6810		26	60
MD21-07-6807		24	60
MD21-07-6811		26	60
MD21-07-6809		26	60
MD21-07-6808		22	60
MD21-07-6812		26	60

Surveyors' Name: Shirley Clayton Date/Time Surveyed 11-1-07 10:38

Wednesday, October 31, 2007

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge. LA 70806

LAB REQUEST COMMENTS:

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-99C

REQUEST NUMBER: 08-99

TURNAROUND REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6810	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6807	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6811	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6809	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6808	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6812	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	10/31/07	3:00	Shirley Clayton	Shirley Clayton		10:15
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: Date Time

Printed Name Signature

Remarks:

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-99C

REQUEST NUMBER: 08-99

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6810	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6807	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6811	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6809	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6808	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6812	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		10/31/07	3:00	Shirley Clayton	Shirley Clayton		10:15
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		Date	Time	Remarks:
Printed Name	Signature			

Wednesday, October 31, 2007

REQUEST NUMBER: 08-98

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-98
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 10/31/2007
TURNAROUND/REPORT DUE: 11/5/2007
TURNAROUND REQ'D: 5 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-07-6807	GAS	10/30/2007		
		1	MD21-07-6808	GAS	10/30/2007		
		1	MD21-07-6809	GAS	10/30/2007		
		1	MD21-07-6810	GAS	10/30/2007		
		1	MD21-07-6811	GAS	10/30/2007		
		1	MD21-07-6812	GAS	10/30/2007		

Final Page of REQUEST NUMBER 08-98

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-98C

REQUEST NUMBER: 08-98

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6810	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6807	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6811	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6809	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6808	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6812	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

10/31/07 3:10

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6807

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	OR
TIME COLLECTED (HH:MM)		16:02	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OR	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OR	FIELD PREP:	NA	
TOP DEPTH:	0	67.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5' ft	SCREEN/PORT DESC:		Vapor port #1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 24422

LOCATION DESC:

Port # 1

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stewart **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	10/31/07	(Printed Name) Maronda Pierce	6/13/07
(Signature)	8:50	(Signature)	8:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6808

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	on
TIME COLLECTED (HH:MM)		16:11	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	on	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	on	FIELD PREP:	NA	
TOP DEPTH:	0	160.5' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	165.5 ft	SCREEN/PORT DESC:		Vapor port #2
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 14003

LOCATION DESC:

Port #2

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stevens **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stevens	10/30/07	(Printed Name)	10/31/07
(Signature)	8:50	(Signature)	8:50
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6809

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	
TIME COLLECTED (HH:MM)		16:17	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	on	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	on	FIELD PREP:	NA	
TOP DEPTH:	0	217' ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222' ft	SCREEN/PORT DESC:		Vapor port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vert

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # F11

LOCATION DESC:

Port #3

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) [signature] (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6810

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	Oc
TIME COLLECTED (HH:MM)		16:23	SUB-MEDIA:	NA	
PRS ID:	21-016(a)-99	Oc	SAMPLE TECH CODE:	VQST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	Oc	FIELD PREP:	NA	
TOP DEPTH:	0	242.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5 ft	SCREEN/PORT DESC:		Vapor port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** Vert

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # TO.1556

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) [signature] (Signature)	**Date/Time** 10/31/07 8:50	**RECEIVED BY** (Printed Name) [signature] (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6811

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	
TIME COLLECTED (HH:MM)		16:30	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port # 1 CR 10/30/07 port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

OK

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: North

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Canister # 34322

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Bill Stout **REVIEWED BY (PRINT)** Kevin Reid

RELINQUISHED BY (Printed Name) Bill Stout (Signature)	**Date/Time** 10/31/07 8:51	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6812

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/30/07	MEDIA:	NA	AC
TIME COLLECTED (HH:MM)		16:32	SUB-MEDIA:	HA	
PRS ID:	21-016(a)-99		SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25263	21-603058	FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5'	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	344.5'	SCREEN/PORT DESC:	KR 10/30/07 NA	port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: West

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-07-6811

SAMPLE COMMENTS:

35979

Summa Canister 34732 kcj

LOCATION DESC:

Port #5 Duplicate

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Reid

RELINQUISHED BY (Printed Name) (Signature)	**Date/Time** 10/31/07 8:52	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/31/07 8:50
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Attachment C: Data-Validation Cover Sheet

☐ **Rejected Data**

Section I

Request Number: 08-98 Validation Date: 11/13/07 Lab Code: ATL

Contract Laboratory Name: Air Toxics Ltd Validator: Jamie Fox

Organization: Analytical Quality Associates, Inc.

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

Other (describe): VOCs by TO-15

Section II - Completeness Check

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

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

None

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): **(page 1 of 1)**

1. The ICAL curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, based on professional judgment.
2. The ICAL %RSD was >30% for hexachlorobutadiene. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
3. The 1,3-butadiene and 1,2,4-trimethylbenzene mass spectra for samples MD21-07-6807 – 6810 and the ethanol, bromodichloromethane, bromoform, 4-ethyltoluene, and 1,3,5-trimethylbenzene mass spectra for sample -6808 did not meet method specifications. The associated sample results were detects and, thus, were qualified U,V8. It should be noted that the benzene mass spectra for samples -6807 – 6810 and -6812 and the tetrahydrofuran mass spectrum for sample -6808 did not meet method specifications due to co-elution with either another target analyte or an IS. No sample data were qualified, based on professional judgment.
4. The LCS %Rs for 1,2,4-trichlorobenzene and hexachlorobutadiene were < the LAL but ≥10%. The associated sample results were NDs and, thus, were qualified UJ,V12c.
5. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.
6. A duplicate sample was not reported in the data package. No sample data were qualified as a result.
7. It should be noted that a Zero Air Certification for the sampling apparatus was not included in the data package. No sample data were qualified as a result.

Reviewed by: JEJ Level: 1 Date: 11/13/07

Validator's signature: James Fox Date: 11/13/07

Attachment D: VOC Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	J, V9	UJ, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	R, V9a
☐	☒	☐	3. The instrument performance check was not present or fails acceptance criteria.	R, V16a	R, V16a
☐	☒	☐	4. The initial calibration was not present.	R, V16	R, V16
☒	☐	☐	5. The initial calibration did not have 5 calibration points and/or a low standard at or below the reporting limit.	R, V7	R, V7
☒	☐	☐	6. The initial calibration analyte %RSD was >30% or r^2 was <0.995.	J, V7a	UJ, V7a
☐	☒	☐	7. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	8. The CCV was not present.	R, V16	R, V16
☐	☒	☐	9. The continuing calibration analyte %D was >25%.	J, V7a	UJ, V7a
☐	☒	☐	10. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	11. The method blank was not reported.	R, V4b	R, V4b
☐	☒	☐	12. The analyte detected in the method blank and sample result for analyte was ≤ 5x/10x the amount in the blank.	U, V4	N/A
☐	☒	☐	13. The analyte detected in the method blank and sample result for analyte was >5x/10x the amount in the method blank.	J, V4a	N/A
☐	☒	☐	14. The IS information was not present.	R, V2a	R, V2a
☐	☐	☒	15. The IS areas in CCV were <50% or >200% of the previous day's IS areas.	J, V1	UJ, V1
☐	☒	☐	16. The IS retention times had shifted by >30 s.	J, V0	UJ, V0
☐	☒	☐	17. The sample IS areas were >200% of the daily CCV IS areas.	J, V1b	N/A
☐	☒	☐	18. The sample IS areas were <50% but are ≥10% of the daily CCV IS areas.	J, V1a	UJ, V1a
☐	☒	☐	19. The sample IS areas were <10% of the daily CCV IS areas.	J, V2	R, V2
☐	☐	☒	20. The surrogate information was not present.	R, V3f	R, V3f
☐	☐	☒	21. The surrogate %R was >UAL.	J+, V3	N/A
☐	☐	☒	22. The surrogate %R was <LAL but ≥10%.	J-, V3a	UJ, V3c
☐	☐	☒	23. The surrogate %R was <10%.	J-, V3b	R, V3d
☐	☐	☒	24. The surrogate recoveries were (1) <LAL and (1) >UAL.	J, V3e	UJ, V3e
☐	☒	☐	25. The LCS information was not present.	R, V12	R, V12
☐	☒	☐	26. The LCS %R was >UAL.	J+, V12d	N/A
☒	☐	☐	27. The LCS %R was <LAL but ≥10%.	J-, V12b	UJ, V12c
☐	☒	☐	28. The LCS %R was <10%.	J-, V12a	R, V12a
☐	☒	☐	29. The mass spectral information was missing.	R, V8a	R, V8a
☒	☐	☐	30. The mass spectrum did not meet method specifications.	U, V8	N/A
☐	☐	☒	31. The TICs were requested but not reported.	R, V11	R, V11
☐	☒	☐	32. The sample was diluted inappropriately.	N/A	UJ, V10
☐	☒	☐	33. Other obvious data-quality issues were identified.	__, V19	__, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6810

Lab ID#: 0711008-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110414**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.68**	**Date of Analysis:**	**11/5/07 03:15 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.84	1.1	4.2	5.5
Freon 114		0.84	Not Detected	5.9	Not Detected
Chloromethane		3.4	Not Detected	6.9	Not Detected
Vinyl Chloride		0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	U,V8	0.84	5.0	1.8	11
Bromomethane		0.84	Not Detected	3.3	Not Detected
Chloroethane		0.84	Not Detected	2.2	Not Detected
Freon 11		0.84	Not Detected	4.7	Not Detected
Ethanol		3.4	Not Detected	6.3	Not Detected
Freon 113		0.84	2.4	6.4	19
1,1-Dichloroethene		0.84	2.8	3.3	11
Acetone		3.4	72	8.0	170
2-Propanol		3.4	Not Detected	8.2	Not Detected
Carbon Disulfide		0.84	2.0	2.6	6.2
Methylene Chloride		0.84	250	2.9	860
Methyl tert-butyl ether		0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene		0.84	Not Detected	3.3	Not Detected
Hexane		0.84	2.7	3.0	9.4
1,1-Dichloroethane		0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.84	7.0	2.5	20
cis-1,2-Dichloroethene		0.84	1.0	3.3	4.1
Tetrahydrofuran		0.84	Not Detected	2.5	Not Detected
Chloroform		0.84	150	4.1	720
1,1,1-Trichloroethane		0.84	4.1	4.6	22
Cyclohexane		0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride		0.84	64	5.3	400
Benzene		0.84	2.0	2.7	6.4
1,2-Dichloroethane		0.84	2.4	3.4	9.8
Heptane		0.84	1.5	3.4	6.3
Trichloroethene		0.84	150	4.5	810
1,2-Dichloropropane		0.84	Not Detected	3.9	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone		0.84	1.1	3.4	4.5
Toluene		0.84	2.5	3.2	9.6
trans-1,3-Dichloropropene		0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane		0.84	3.4	4.6	19
Tetrachloroethene		0.84	18	5.7	120

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6810

Lab ID#: 0711008-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110414**	**Date of Collection: 10/30/07**	
Dil. Factor:	**1.68**	**Date of Analysis: 11/5/07 03:15 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.84	0.86	7.2	7.3
1,2-Dibromoethane (EDB)		0.84	Not Detected	6.4	Not Detected
Chlorobenzene		0.84	Not Detected	3.9	Not Detected
Ethyl Benzene		0.84	Not Detected	3.6	Not Detected
m,p-Xylene		0.84	1.2	3.6	5.0
o-Xylene		0.84	Not Detected	3.6	Not Detected
Styrene		0.84	Not Detected	3.6	Not Detected
Bromoform		0.84	1.6	8.7	16
1,1,2,2-Tetrachloroethane		0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene		0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene		0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.84	1.6	4.1	7.7
1,3-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene		0.84	1.7	5.0	10
alpha-Chlorotoluene		0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene		0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	UJ,V12c	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	UJ,V7a	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol		84	Not Detected	110	Not Detected
n-Butanol		3.4	Not Detected	10	Not Detected
Propylene		3.4	93	5.8	160

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	114	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6807

Lab ID#: 0711008-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110415**	**Date of Collection: 10/30/07**	
Dil. Factor:	**1.79**	**Date of Analysis: 11/5/07 04:30 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.90	1.0	4.4	5.1
Freon 114		0.90	Not Detected	6.2	Not Detected
Chloromethane		3.6	Not Detected	7.4	Not Detected
Vinyl Chloride		0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	U,V8	0.90	3.5	2.0	7.8
Bromomethane		0.90	Not Detected	3.5	Not Detected
Chloroethane		0.90	Not Detected	2.4	Not Detected
Freon 11		0.90	Not Detected	5.0	Not Detected
Ethanol		3.6	Not Detected	6.7	Not Detected
Freon 113		0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Acetone		3.6	53	8.5	120
2-Propanol		3.6	Not Detected	8.8	Not Detected
Carbon Disulfide		0.90	1.2	2.8	3.8
Methylene Chloride		0.90	2.1	3.1	7.2
Methyl tert-butyl ether		0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Hexane		0.90	1.2	3.2	4.3
1,1-Dichloroethane		0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.90	13	2.6	40
cis-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.90	Not Detected	2.6	Not Detected
Chloroform		0.90	92	4.4	450
1,1,1-Trichloroethane		0.90	4.1	4.9	23
Cyclohexane		0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride		0.90	10	5.6	63
Benzene		0.90	1.2	2.8	3.9
1,2-Dichloroethane		0.90	Not Detected	3.6	Not Detected
Heptane		0.90	0.96	3.7	3.9
Trichloroethene		0.90	51	4.8	270
1,2-Dichloropropane		0.90	Not Detected	4.1	Not Detected
1,4-Dioxane		3.6	Not Detected	13	Not Detected
Bromodichloromethane		0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone		0.90	2.1	3.7	8.7
Toluene		0.90	1.5	3.4	5.7
trans-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane		0.90	Not Detected	4.9	Not Detected
Tetrachloroethene		0.90	96	6.1	650

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6807

Lab ID#: 0711008-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110415**	**Date of Collection: 10/30/07**	
Dil. Factor:	**1.79**	**Date of Analysis: 11/5/07 04:30 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.6	7.2	15	29
Dibromochloromethane		0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)		0.90	Not Detected	6.9	Not Detected
Chlorobenzene		0.90	Not Detected	4.1	Not Detected
Ethyl Benzene		0.90	Not Detected	3.9	Not Detected
m,p-Xylene		0.90	1.1	3.9	4.9
o-Xylene		0.90	Not Detected	3.9	Not Detected
Styrene		0.90	Not Detected	3.8	Not Detected
Bromoform		0.90	1.0	9.2	10
1,1,2,2-Tetrachloroethane		0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene		0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene		0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.90	1.3	4.4	6.4
1,3-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene		0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	UJ,V12c	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	UJ,V7a	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane		3.6	Not Detected	13	Not Detected
Methanol		90	Not Detected	120	Not Detected
n-Butanol		3.6	Not Detected	11	Not Detected
Propylene		3.6	49	6.2	85

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	108	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6811

Lab ID#: 0711008-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110417**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.91**	**Date of Analysis:**	**11/5/07 06:25 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	Not Detected	4.7	Not Detected
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	Not Detected	7.2	Not Detected
Freon 113	0.96	Not Detected	7.3	Not Detected
1,1-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Acetone	3.8	66	9.1	160
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected
Methylene Chloride	0.96	81	3.3	280
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	7.2	2.8	21
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	23	4.7	110
1,1,1-Trichloroethane	0.96	Not Detected	5.2	Not Detected
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	1.0	6.0	6.4
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	0.97	3.9	3.9
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	8.8	5.1	47
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	1.2	5.2	6.3
Tetrachloroethene	0.96	Not Detected	6.5	Not Detected

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6811

Lab ID#: 0711008-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110417**	**Date of Collection: 10/30/07**	
Dil. Factor:	**1.91**	**Date of Analysis: 11/5/07 06:25 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.8	Not Detected	16	Not Detected
Dibromochloromethane		0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)		0.96	Not Detected	7.3	Not Detected
Chlorobenzene		0.96	Not Detected	4.4	Not Detected
Ethyl Benzene		0.96	Not Detected	4.1	Not Detected
m,p-Xylene		0.96	Not Detected	4.1	Not Detected
o-Xylene		0.96	Not Detected	4.1	Not Detected
Styrene		0.96	Not Detected	4.1	Not Detected
Bromoform		0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane		0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene		0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene		0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene		0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene		0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene		0.96	Not Detected	5.7	Not Detected
alpha-Chlorotoluene		0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene		0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	UJ,V12c	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	UJ,V7a	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane		3.8	Not Detected	14	Not Detected
Methanol		96	Not Detected	120	Not Detected
n-Butanol		3.8	Not Detected	12	Not Detected
Propylene		3.8	7.0	6.6	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	102	70-130

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6809

Lab ID#: 0711008-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110416**	**Date of Collection: 10/30/07**	
Dil. Factor:	**1.83**	**Date of Analysis: 11/5/07 05:36 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.92	1.4	4.5	6.8
Freon 114		0.92	Not Detected	6.4	Not Detected
Chloromethane		3.7	Not Detected	7.6	Not Detected
Vinyl Chloride		0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	U,V8	0.92	4.7	2.0	10
Bromomethane		0.92	Not Detected	3.6	Not Detected
Chloroethane		0.92	Not Detected	2.4	Not Detected
Freon 11		0.92	Not Detected	5.1	Not Detected
Ethanol		3.7	Not Detected	6.9	Not Detected
Freon 113		0.92	3.4	7.0	26
1,1-Dichloroethene		0.92	2.4	3.6	9.7
Acetone		3.7	86	8.7	200
2-Propanol		3.7	Not Detected	9.0	Not Detected
Carbon Disulfide		0.92	1.8	2.8	5.7
Methylene Chloride		0.92	120	3.2	420
Methyl tert-butyl ether		0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene		0.92	Not Detected	3.6	Not Detected
Hexane		0.92	2.4	3.2	8.3
1,1-Dichloroethane		0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.92	23	2.7	69
cis-1,2-Dichloroethene		0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran		0.92	Not Detected	2.7	Not Detected
Chloroform		0.92	140	4.5	680
1,1,1-Trichloroethane		0.92	6.7	5.0	36
Cyclohexane		0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride		0.92	64	5.8	400
Benzene		0.92	1.5	2.9	4.9
1,2-Dichloroethane		0.92	1.2	3.7	5.0
Heptane		0.92	1.6	3.7	6.4
Trichloroethene		0.92	150	4.9	790
1,2-Dichloropropane		0.92	Not Detected	4.2	Not Detected
1,4-Dioxane		3.7	Not Detected	13	Not Detected
Bromodichloromethane		0.92	0.96	6.1	6.4
cis-1,3-Dichloropropene		0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone		0.92	2.2	3.7	8.9
Toluene		0.92	1.5	3.4	5.8
trans-1,3-Dichloropropene		0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane		0.92	2.4	5.0	13
Tetrachloroethene		0.92	40	6.2	270

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6809

Lab ID#: 0711008-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110416**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.83**	**Date of Analysis:**	**11/5/07 05:36 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.7	9.0	15	37
Dibromochloromethane		0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)		0.92	Not Detected	7.0	Not Detected
Chlorobenzene		0.92	Not Detected	4.2	Not Detected
Ethyl Benzene		0.92	Not Detected	4.0	Not Detected
m,p-Xylene		0.92	1.1	4.0	4.8
o-Xylene		0.92	Not Detected	4.0	Not Detected
Styrene		0.92	Not Detected	3.9	Not Detected
Bromoform		0.92	Not Detected	9.4	Not Detected
1,1,2,2-Tetrachloroethane		0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene		0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene		0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	U,V8	0.92	0.97	4.5	4.8
1,3-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene		0.92	1.0	5.5	6.0
alpha-Chlorotoluene		0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	UJ,V12c	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	UJ,V7a	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane		3.7	Not Detected	13	Not Detected
Methanol		92	Not Detected	120	Not Detected
n-Butanol		3.7	Not Detected	11	Not Detected
Propylene		3.7	88	6.3	150

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	108	70-130

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11/13/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6808

Lab ID#: 0711008-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110418**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.83**	**Date of Analysis:**	**11/5/07 07:24 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.92	1.4	4.5	6.9
Freon 114		0.92	Not Detected	6.4	Not Detected
Chloromethane		3.7	Not Detected	7.6	Not Detected
Vinyl Chloride		0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	U,V8	0.92	17	2.0	38
Bromomethane		0.92	Not Detected	3.6	Not Detected
Chloroethane		0.92	Not Detected	2.4	Not Detected
Freon 11		0.92	Not Detected	5.1	Not Detected
Ethanol	U,V8	3.7	4.6	6.9	8.6
Freon 113		0.92	1.1	7.0	8.5
1,1-Dichloroethene		0.92	Not Detected	3.6	Not Detected
Acetone		3.7	15	8.7	35
2-Propanol		3.7	Not Detected	9.0	Not Detected
Carbon Disulfide		0.92	4.0	2.8	12
Methylene Chloride		0.92	15	3.2	52
Methyl tert-butyl ether		0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene		0.92	Not Detected	3.6	Not Detected
Hexane		0.92	10	3.2	36
1,1-Dichloroethane		0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.92	5.9	2.7	17
cis-1,2-Dichloroethene		0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran		0.92	1.6	2.7	4.9
Chloroform		0.92	68	4.5	330
1,1,1-Trichloroethane		0.92	3.2	5.0	17
Cyclohexane		0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride		0.92	16	5.8	100
Benzene		0.92	2.6	2.9	8.4
1,2-Dichloroethane		0.92	Not Detected	3.7	Not Detected
Heptane		0.92	5.8	3.7	24
Trichloroethene		0.92	51	4.9	280
1,2-Dichloropropane		0.92	Not Detected	4.2	Not Detected
1,4-Dioxane		3.7	Not Detected	13	Not Detected
Bromodichloromethane	U,V8	0.92	0.99	6.1	6.6
cis-1,3-Dichloropropene		0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone		0.92	1.3	3.7	5.5
Toluene		0.92	3.9	3.4	14
trans-1,3-Dichloropropene		0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane		0.92	Not Detected	5.0	Not Detected
Tetrachloroethene		0.92	31	6.2	210

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11/13/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6808

Lab ID#: 0711008-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110418**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.83**	**Date of Analysis:**	**11/5/07 07:24 AM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.7	Not Detected	15	Not Detected
Dibromochloromethane		0.92	1.1	7.8	9.7
1,2-Dibromoethane (EDB)		0.92	Not Detected	7.0	Not Detected
Chlorobenzene		0.92	Not Detected	4.2	Not Detected
Ethyl Benzene		0.92	1.7	4.0	7.5
m,p-Xylene		0.92	4.8	4.0	21
o-Xylene		0.92	2.3	4.0	9.9
Styrene		0.92	Not Detected	3.9	Not Detected
Bromoform	U,V8	0.92	1.4	9.4	15
1,1,2,2-Tetrachloroethane		0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene	U,V8	0.92	2.0	4.5	9.8
1,3,5-Trimethylbenzene	↓	0.92	0.92	4.5	4.5
1,2,4-Trimethylbenzene	↓	0.92	11	4.5	54
1,3-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene		0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	UJ,V12c	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	UJ,V7a	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane		3.7	Not Detected	13	Not Detected
Methanol		92	Not Detected	120	Not Detected
n-Butanol		3.7	14	11	42
Propylene		3.7	400 E	6.3	690 E

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	102	70-130

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11/13/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6812

Lab ID#: 0711008-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110419**	**Date of Collection:**	**10/30/07**
Dil. Factor:	**1.79**	**Date of Analysis:**	**11/5/07 08:17 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	3.6	71	8.5	170
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	Not Detected	2.8	Not Detected
Methylene Chloride	0.90	80	3.1	280
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	7.9	2.6	23
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	22	4.4	110
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	0.97	5.6	6.1
Benzene	0.90	0.90	2.8	2.9
1,2-Dichloroethane	0.90	1.0	3.6	4.2
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	8.2	4.8	44
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	0.92	3.4	3.4
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected

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11/13/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6812

Lab ID#: 0711008-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7110419**	**Date of Collection: 10/30/07**	
Dil. Factor:	**1.79**	**Date of Analysis: 11/5/07 08:17 AM**	

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.6	Not Detected	15	Not Detected
Dibromochloromethane		0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)		0.90	Not Detected	6.9	Not Detected
Chlorobenzene		0.90	Not Detected	4.1	Not Detected
Ethyl Benzene		0.90	Not Detected	3.9	Not Detected
m,p-Xylene		0.90	Not Detected	3.9	Not Detected
o-Xylene		0.90	Not Detected	3.9	Not Detected
Styrene		0.90	Not Detected	3.8	Not Detected
Bromoform		0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane		0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene		0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene		0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene		0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene		0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene		0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	UJ,V12c	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	UJ,V7a	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane		3.6	Not Detected	13	Not Detected
Methanol		90	Not Detected	120	Not Detected
n-Butanol		3.6	Not Detected	11	Not Detected
Propylene		3.6	6.9	6.2	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	83	70-130
4-Bromofluorobenzene	100	70-130

JKF
11/13/07

0711008 Page 1 of 1

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-98C

REQUEST NUMBER: 08-98

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 11/5/2007

TURNAROUND REQ'D: 5

LAB REQUEST COMMENTS:

SAMPLE ID	Receipt Vacuum	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
01A MD21-07-6810	6.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
02A MD21-07-6807	7.5"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
03A MD21-07-6811	9.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
04A MD21-07-6809	8.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
05A MD21-07-6808	8.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
06A MD21-07-6812	7.5"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		10/31/07	3145	A Scott	AZ	11/1/07	0845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT? Y N NONE TEMP NA

CUSTODY SEAL INTACT? Y N NONE TEMP

AS 11/1/07

Wednesday, October 31, 2007

REQUEST NUMBER: 08-98 0711008

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-98
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule incicated:

SHIP DATE: 10/31/2007
TURNAROUND/REPORT DUE: 11/5/2007
TURNAROUND REQ'D: 5 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA TO15	1	MD21-07-6807	GAS	10/30/2007		
		1	MD21-07-6808	GAS	10/30/2007		
		1	MD21-07-6809	GAS	10/30/2007		
		1	MD21-07-6810	GAS	10/30/2007		
		1	MD21-07-6811	GAS	10/30/2007		
		1	MD21-07-6812	GAS	10/30/2007		

Final Page of REQUEST NUMBER 08-98

Request # 08-98

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0711008

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b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
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Comments:

Completed by:

Kara McKiernan | Kara McKiernan / Document Control | 11/7/07

(Signature) | (Print Name & Title) | (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0711008

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-98
DATE RECEIVED:	11/01/2007	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	11/05/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	MD21-07-6810	Modified TO-15	6.0 "Hg
02A	MD21-07-6807	Modified TO-15	7.5 "Hg
03A	MD21-07-6811	Modified TO-15	9.0 "Hg
04A	MD21-07-6809	Modified TO-15	8.0 "Hg
05A	MD21-07-6808	Modified TO-15	8.0 "Hg
06A	MD21-07-6812	Modified TO-15	7.5 "Hg
07A	Lab Blank	Modified TO-15	NA
08A	CCV	Modified TO-15	NA
09A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda A. Frumarx DATE: 11/05/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0711008

Six 6 Liter Summa Canister samples were received on November 01, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

0002

U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-07-6810	0711008-01A	10/30/2007	11/ 1/2007	NA	6	11/ 5/2007	NA	Good
MD21-07-6807	0711008-02A	10/30/2007	11/ 1/2007	NA	6	11/ 5/2007	NA	Good
MD21-07-6811	0711008-03A	10/30/2007	11/ 1/2007	NA	6	11/ 5/2007	NA	Good
MD21-07-6809	0711008-04A	10/30/2007	11/ 1/2007	NA	6	11/ 5/2007	NA	Good
MD21-07-6808	0711008-05A	10/30/2007	11/ 1/2007	NA	6	11/ 5/2007	NA	Good
MD21-07-6812	0711008-06A	10/30/2007	11/ 1/2007	NA	6	11/ 5/2007	NA	Good
Lab Blank	0711008-07A	NA	NA	NA	NA	11/ 5/2007	NA	Good
CCV	0711008-08A	NA	NA	NA	NA	11/ 4/2007	NA	Good
LCS	0711008-09A	NA	NA	NA	NA	11/ 4/2007	NA	Good

Sample Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6810

Lab ID#: 0711008-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.1	4.2	5.5
1,3-Butadiene	0.84	5.0	1.8	11
Freon 113	0.84	2.4	6.4	19
1,1-Dichloroethene	0.84	2.8	3.3	11
Acetone	3.4	72	8.0	170
Carbon Disulfide	0.84	2.0	2.6	6.2
Methylene Chloride	0.84	250	2.9	860
Hexane	0.84	2.7	3.0	9.4
2-Butanone (Methyl Ethyl Ketone)	0.84	7.0	2.5	20
cis-1,2-Dichloroethene	0.84	1.0	3.3	4.1
Chloroform	0.84	150	4.1	720
1,1,1-Trichloroethane	0.84	4.1	4.6	22
Carbon Tetrachloride	0.84	64	5.3	400
Benzene	0.84	2.0	2.7	6.4
1,2-Dichloroethane	0.84	2.4	3.4	9.8
Heptane	0.84	1.5	3.4	6.3
Trichloroethene	0.84	150	4.5	810
4-Methyl-2-pentanone	0.84	1.1	3.4	4.5
Toluene	0.84	2.5	3.2	9.6
1,1,2-Trichloroethane	0.84	3.4	4.6	19
Tetrachloroethene	0.84	18	5.7	120
Dibromochloromethane	0.84	0.86	7.2	7.3
m,p-Xylene	0.84	1.2	3.6	5.0
Bromoform	0.84	1.6	8.7	16
1,2,4-Trimethylbenzene	0.84	1.6	4.1	7.7
1,4-Dichlorobenzene	0.84	1.7	5.0	10
Propylene	3.4	93	5.8	160

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6810

Lab ID#: 0711008-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.84	1.1	4.2	5.5
Freon 114	0.84	Not Detected	5.9	Not Detected
Chloromethane	3.4	Not Detected	6.9	Not Detected
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,3-Butadiene	0.84	5.0	1.8	11
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.84	Not Detected	4.7	Not Detected
Ethanol	3.4	Not Detected	6.3	Not Detected
Freon 113	0.84	2.4	6.4	19
1,1-Dichloroethene	0.84	2.8	3.3	11
Acetone	3.4	72	8.0	170
2-Propanol	3.4	Not Detected	8.2	Not Detected
Carbon Disulfide	0.84	2.0	2.6	6.2
Methylene Chloride	0.84	250	2.9	860
Methyl tert-butyl ether	0.84	Not Detected	3.0	Not Detected
trans-1,2-Dichloroethene	0.84	Not Detected	3.3	Not Detected
Hexane	0.84	2.7	3.0	9.4
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	7.0	2.5	20
cis-1,2-Dichloroethene	0.84	1.0	3.3	4.1
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.84	150	4.1	720
1,1,1-Trichloroethane	0.84	4.1	4.6	22
Cyclohexane	0.84	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.84	64	5.3	400
Benzene	0.84	2.0	2.7	6.4
1,2-Dichloroethane	0.84	2.4	3.4	9.8
Heptane	0.84	1.5	3.4	6.3
Trichloroethene	0.84	150	4.5	810
1,2-Dichloropropane	0.84	Not Detected	3.9	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.84	Not Detected	5.6	Not Detected
cis-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
4-Methyl-2-pentanone	0.84	1.1	3.4	4.5
Toluene	0.84	2.5	3.2	9.6
trans-1,3-Dichloropropene	0.84	Not Detected	3.8	Not Detected
1,1,2-Trichloroethane	0.84	3.4	4.6	19
Tetrachloroethene	0.84	18	5.7	120

0007

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6810

Lab ID#: 0711008-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.84	0.86	7.2	7.3
1,2-Dibromoethane (EDB)	0.84	Not Detected	6.4	Not Detected
Chlorobenzene	0.84	Not Detected	3.9	Not Detected
Ethyl Benzene	0.84	Not Detected	3.6	Not Detected
m,p-Xylene	0.84	1.2	3.6	5.0
o-Xylene	0.84	Not Detected	3.6	Not Detected
Styrene	0.84	Not Detected	3.6	Not Detected
Bromoform	0.84	1.6	8.7	16
1,1,2,2-Tetrachloroethane	0.84	Not Detected	5.8	Not Detected
4-Ethyltoluene	0.84	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.84	Not Detected	4.1	Not Detected
1,2,4-Trimethylbenzene	0.84	1.6	4.1	7.7
1,3-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,4-Dichlorobenzene	0.84	1.7	5.0	10
alpha-Chlorotoluene	0.84	Not Detected	4.3	Not Detected
1,2-Dichlorobenzene	0.84	Not Detected	5.0	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	84	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	93	5.8	160

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	114	70-130

0008

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110414.d
Lab Smp Id: 0711008-01A
Inj Date : 05-NOV-2007 03:15
Operator : ab Inst ID: msd7.i
Smp Info : 200mL#TO-1556
Misc Info : 6.0"Hg-5psi
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.68000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	516113	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	400024			28.08- 128.08	77.51
14.416	14.388 (1.000)	49	1196806			128.80- 228.80	231.89
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1817424	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	272545			0.00- 64.88	15.00
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1305579	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	677723			4.45- 104.45	51.91
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	761427	27.4621	27.462	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	371911			2.91- 102.91	48.84
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1453927	22.5360	22.536	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	170805			0.00- 61.46	11.75

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	1000372			19.18- 119.18	68.80
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	885570	28.5049	28.505	80.00- 120.00	100.00
23.319	23.319	(1.092)	95	1019852			63.49- 163.49	115.16
23.347	23.347	(1.093)	176	856830			46.77- 146.77	96.75
11 Propylene						CAS #: 115-07-1		
5.617	5.617	(0.390)	41	1231664	55.3692	93.020	80.00- 120.00	100.00(H)
5.617	5.617	(0.390)	42	776937			21.19- 121.19	63.08
5.617	5.617	(0.390)	39	1069573			24.83- 124.83	86.84
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.729	5.729	(0.397)	85	54021	0.66235	1.113	80.00- 120.00	100.00
5.729	5.729	(0.397)	87	17653			0.00- 83.07	32.68
22 1,3-Butadiene						CAS #: 106-99-0		
6.940	6.940	(0.481)	54	71930	2.99884	5.038	80.00- 120.00	100.00
6.743	6.940	(0.468)	39	589117			55.97- 155.97	819.01
42 Freon 113						CAS #: 76-13-1		
10.186	10.186	(0.707)	151	61175	1.44558	2.428	80.00- 120.00	100.00
10.186	10.186	(0.707)	153	41561			13.28- 113.28	67.94
10.186	10.186	(0.707)	101	74432			60.51- 160.51	121.67
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.324	10.324	(0.716)	61	73828	1.63950	2.754	80.00- 120.00	100.00
10.324	10.324	(0.716)	96	40439			8.23- 108.23	54.77
10.324	10.324	(0.716)	98	25210			0.00- 87.38	34.15
45 Acetone						CAS #: 67-64-1		
10.490	10.462	(0.728)	58	598545	43.0026	72.244	80.00- 120.00	100.00
10.490	10.462	(0.728)	43	2330892			247.10- 347.10	389.43
47 Carbon Disulfide						CAS #: 75-15-0		
10.877	10.877	(0.754)	76	102012	1.18736	1.995	80.00- 120.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.457	11.457	(0.795)	49	4878184	147.346	247.54	80.00- 120.00	100.00
11.457	11.457	(0.795)	84	3016153			15.73- 115.73	61.83
11.457	11.457	(0.795)	51	1496718			0.00- 80.85	30.68
65 Hexane						CAS #: 110-54-3		
12.287	12.287	(0.852)	57	69392	1.58935	2.670	80.00- 120.00	100.00
12.287	12.287	(0.852)	43	58707			17.84- 117.84	84.60

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane (continued)								
12.315	12.287	(0.854)	86	7925			0.00- 65.07	11.42
75 2-Butanone						CAS #: 78-93-3		
13.891	13.891	(0.964)	72	46448	4.15523	6.981	80.00- 120.00	100.00
13.891	13.891	(0.964)	43	261954			458.59- 558.59	563.97
13.891	13.891	(0.964)	57	19567			0.00- 86.57	42.13
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.918	13.918	(0.965)	61	22592	0.61717	1.037	80.00- 120.00	100.00
13.918	13.918	(0.965)	96	14128			23.12- 123.12	62.54
13.918	13.918	(0.965)	98	9250			0.00- 97.59	40.94
82 Chloroform						CAS #: 67-66-3		
14.471	14.471	(1.004)	83	4555438	87.6638	147.28	80.00- 120.00	100.00
14.471	14.471	(1.004)	85	2975076			15.98- 115.98	65.31
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.831	14.831	(1.029)	97	127335	2.43333	4.088	80.00- 120.00	100.00
14.831	14.831	(1.029)	99	80733			14.42- 114.42	63.40
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.107	15.107	(1.048)	119	1873517	38.1936	64.165	80.00- 120.00	100.00
15.107	15.080	(1.048)	117	1927062			54.21- 154.21	102.86
91 Benzene						CAS #: 71-43-2		
15.522	15.522	(0.961)	78	86619	1.19952	2.015	80.00- 120.00	100.00
15.522	15.522	(0.961)	77	22545			0.00- 71.87	26.03
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.633	15.633	(0.967)	62	55589	1.44887	2.434	80.00- 120.00	100.00(H)
15.633	15.633	(0.967)	64	19411			0.00- 82.89	34.92
94 Heptane						CAS #: 142-82-5		
15.715	15.716	(0.973)	71	20367	0.91709	1.541	80.00- 120.00	100.00
15.715	15.716	(0.973)	43	39648			158.53- 258.53	194.67
15.715	15.716	(0.973)	57	17735			59.34- 159.34	87.08
101 Trichloroethene						CAS #: 79-01-6		
16.628	16.628	(1.029)	95	2870632	89.4926	150.35	80.00- 120.00	100.00
16.628	16.628	(1.029)	130	2988511			54.96- 154.96	104.11
16.628	16.628	(1.029)	97	1859270			15.03- 115.03	64.77
111 4-Methyl-2-pentanone						CAS #: 108-10-1		
18.508	18.508	(1.145)	58	14269	0.66031	1.109	80.00- 120.00	100.00
18.508	18.508	(1.145)	43	40343			222.97- 322.97	282.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone (continued)							
18.508	18.508 (1.145)	85	5053			0.00- 90.48	35.41
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	119915	1.51612	2.547	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	75353			12.81- 112.81	62.84
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	55173	2.04027	3.428	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	35743			12.57- 112.57	64.78
19.669	19.642 (0.921)	83	44583			31.77- 131.77	80.81
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	385350	10.9873	18.458	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	267014			18.66- 118.66	69.29
19.835	19.835 (0.929)	131	255591			16.81- 116.81	66.33
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	24538	0.51213	0.8604	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	19498			27.62- 127.62	79.46
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	25921	0.68688	1.154	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	50795			145.05- 245.05	195.96
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	39784	0.94559	1.588	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	19888			1.50- 101.50	49.99
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	64977	0.93063	1.563	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	20992			0.00- 98.95	32.31
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	56495	1.00331	1.686	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	38346			13.81- 113.81	67.88
25.282	25.282 (1.184)	111	36294			0.00- 87.35	64.24

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110414.d
Lab Smp Id: 0711008-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 6.0"Hg-5psi

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	516113	-20.74
97 1,4-Difluorobenze	2188066	1312840	3063292	1817424	-16.94
126 Chlorobenzene-d5	1729248	1037549	2420947	1305579	-24.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-04nova.b/7110414.d
Report Date: 05-Nov-2007 11:20

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-04nova
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711008-01A
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 6.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.462	109.85	70-130
$ 113 Toluene-d8	25.000	22.536	90.14	70-130
$ 137 Bromofluorobenzene	25.000	28.505	114.02	70-130

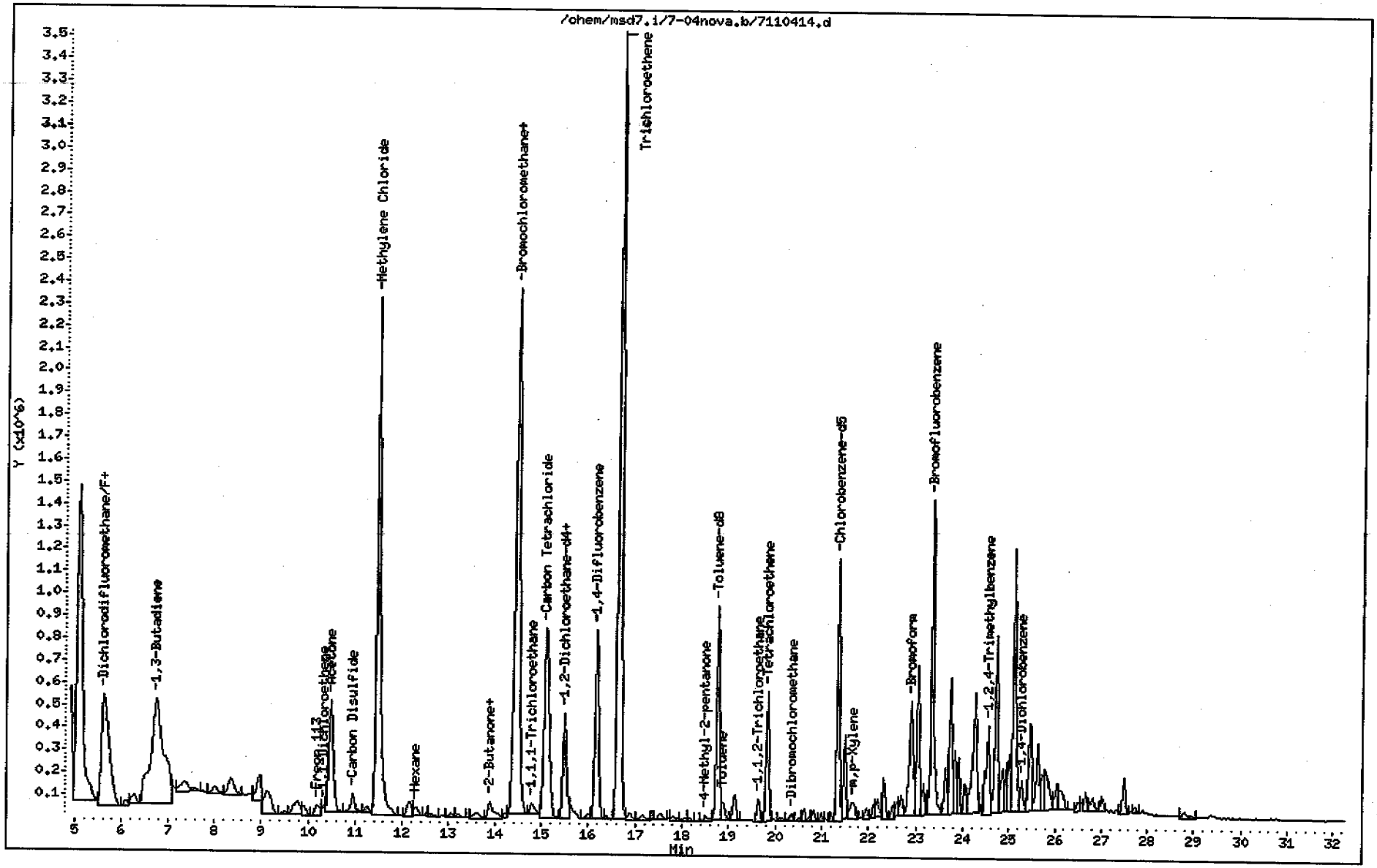
Data File: /chem/msd7.i/7-04nova.b/7110414.d
Date : 05-NOV-2007 03:15
Client ID:
Sample Info: 200mL#TO-1556

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0015



Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

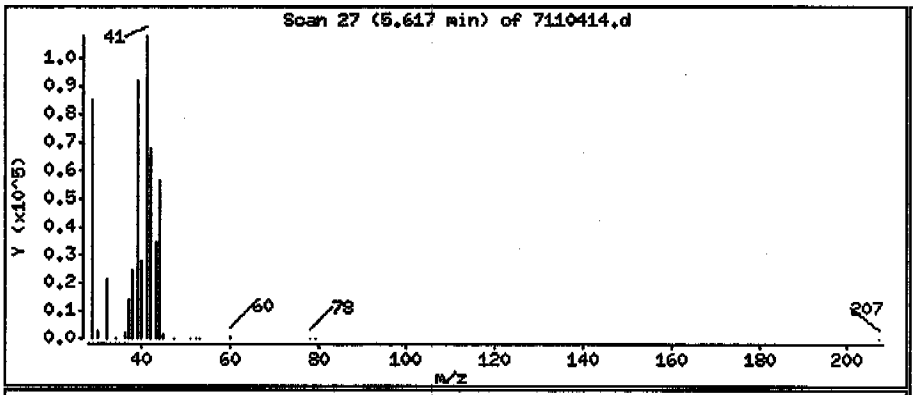
Operator: ab

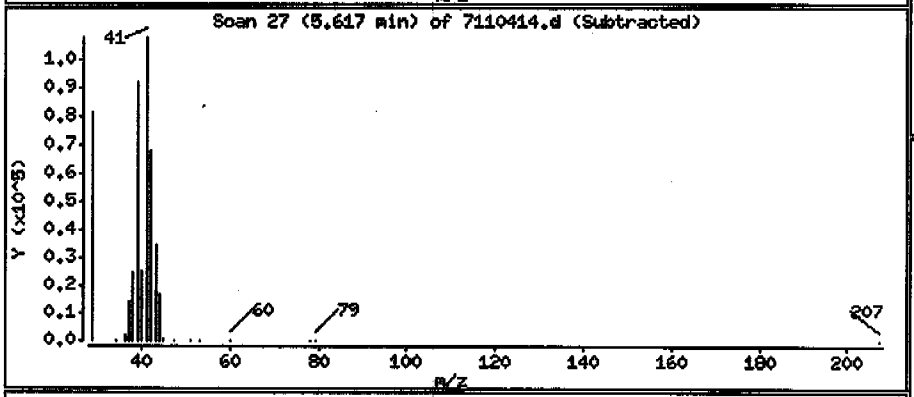
Column phase: RTx-624

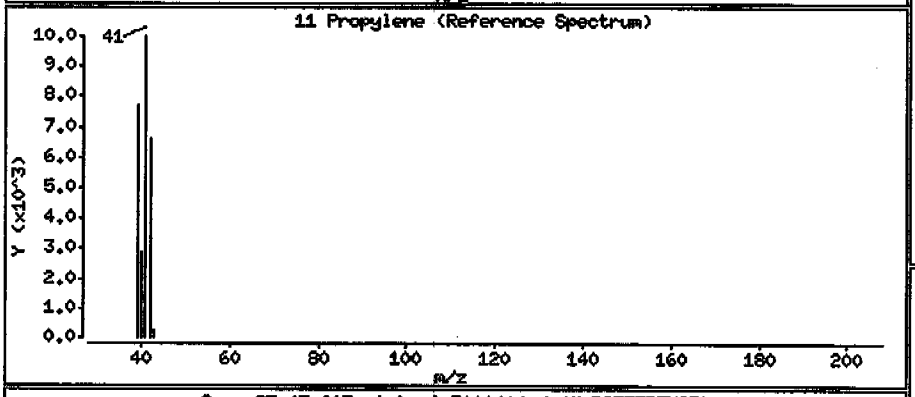
Column diameter: 0.53

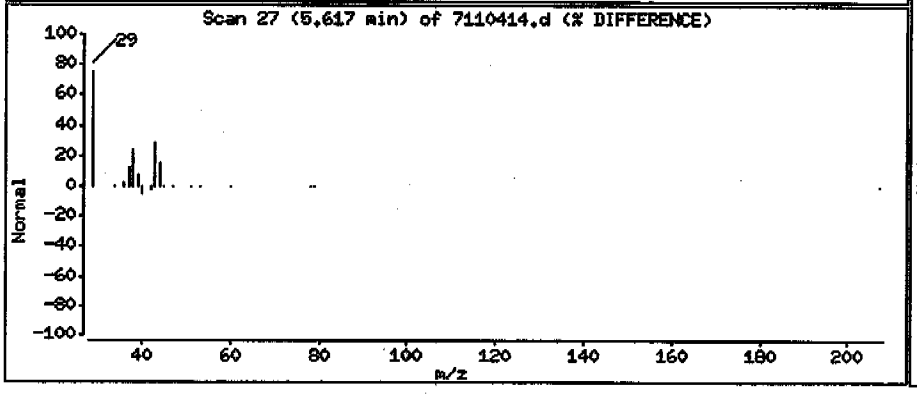
11 Propylene

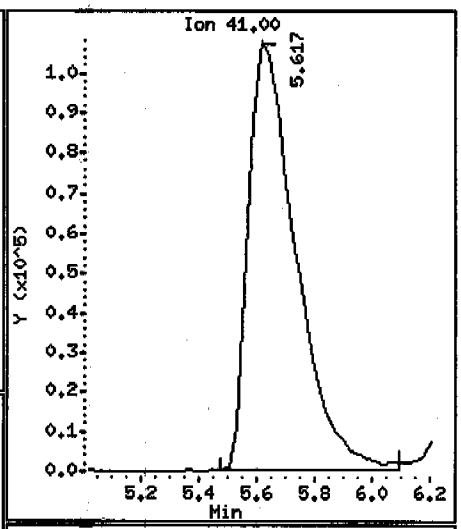
Concentration: 93.020 PPBV

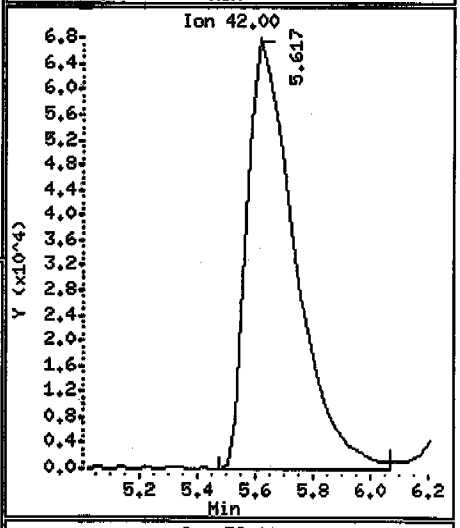


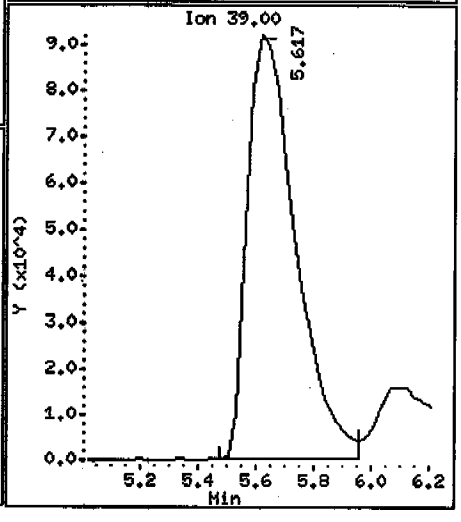












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Sample Info: 200mL#TO-1566

Instrument: msd7.i

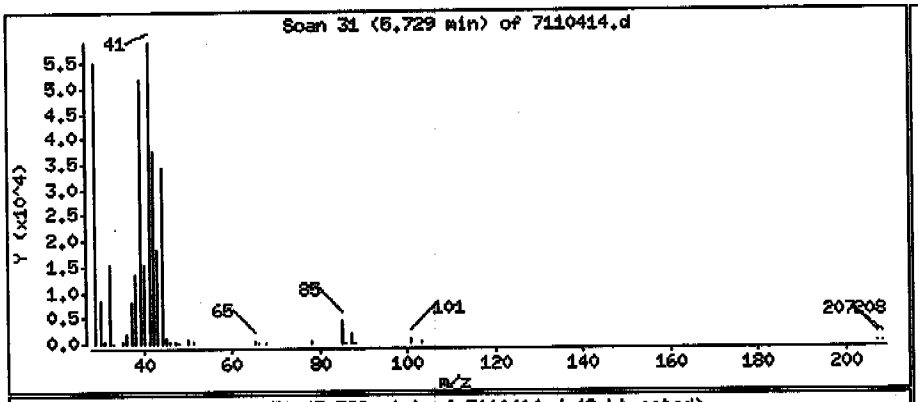
Operator: ab

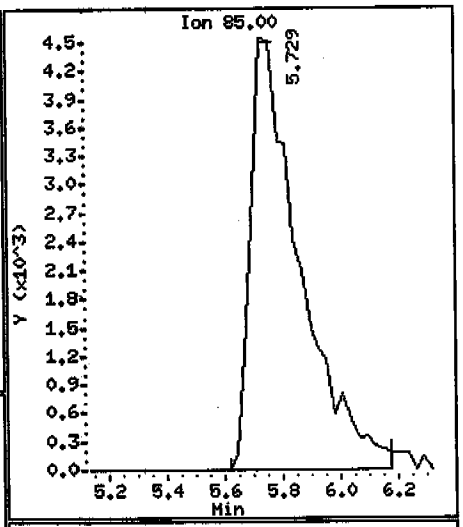
Column phase: RTx-624

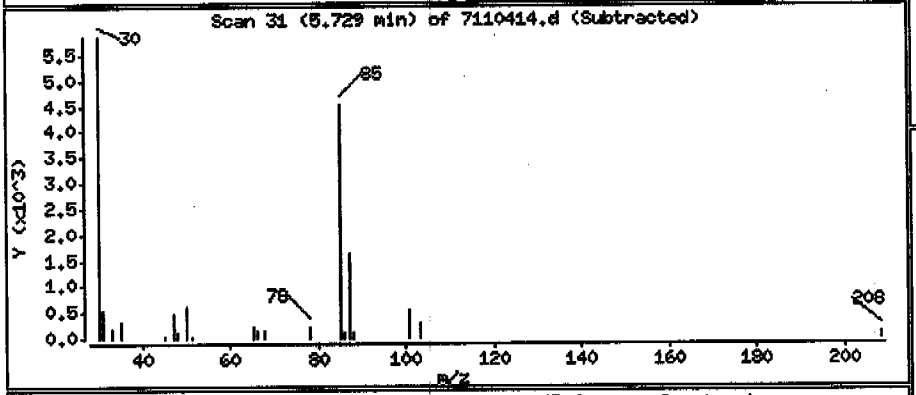
Column diameter: 0.53

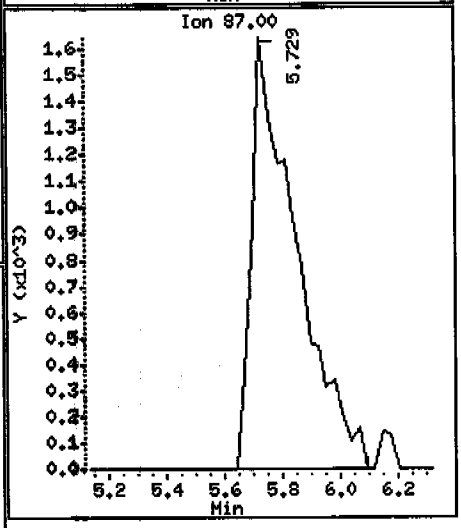
12 Dichlorodifluoromethane/Fr12

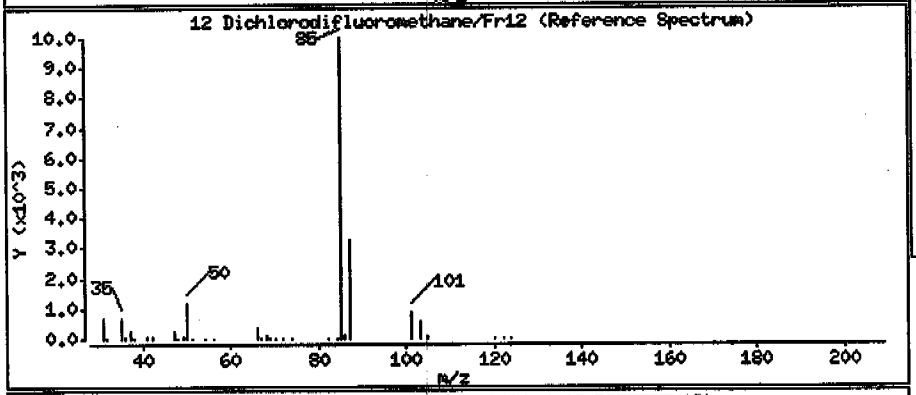
Concentration: 1.113 PPBV

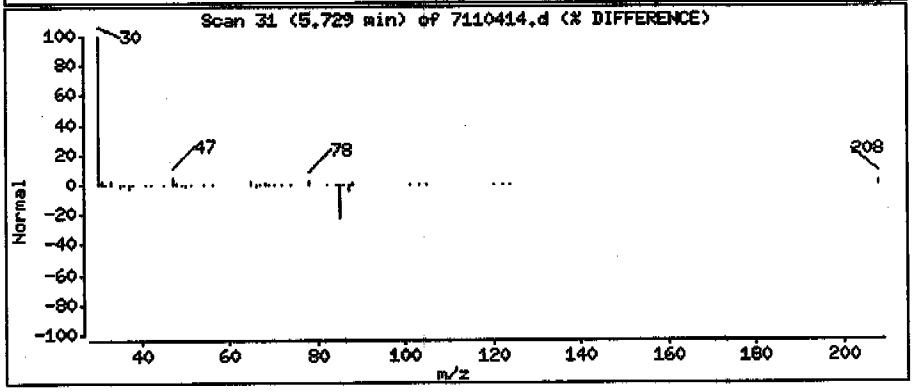












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

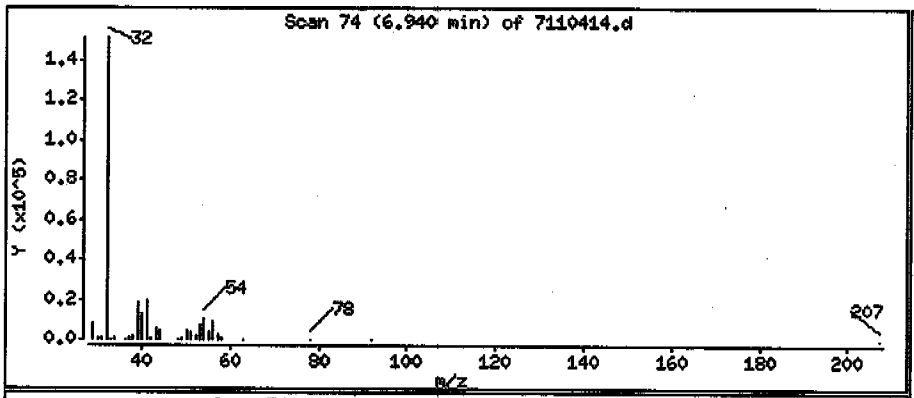
Operator: ab

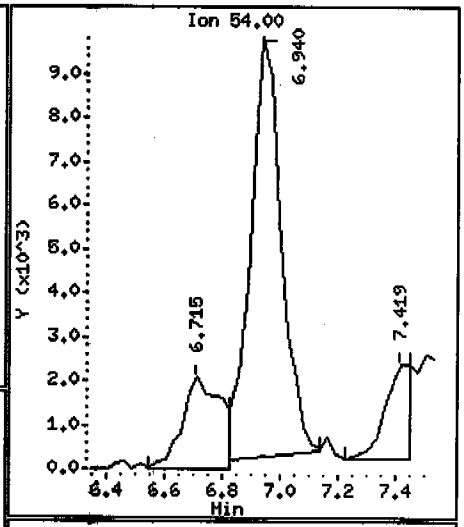
Column phase: RTx-624

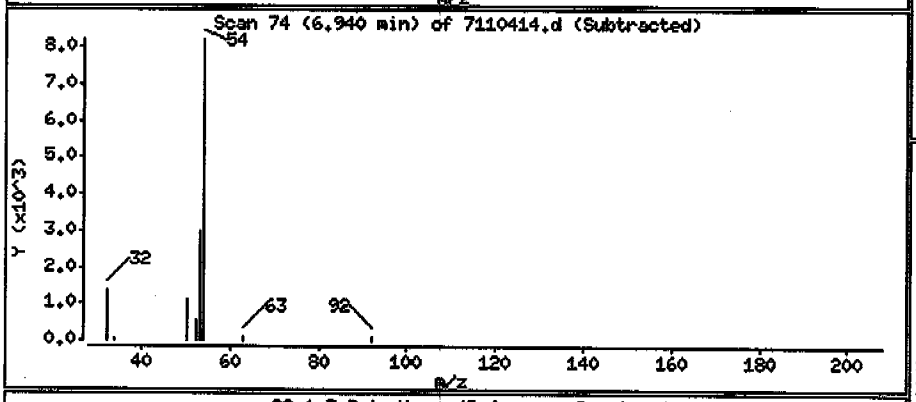
Column diameter: 0.53

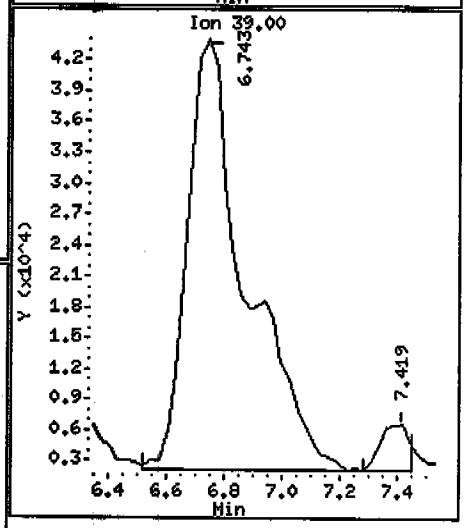
22 1,3-Butadiene

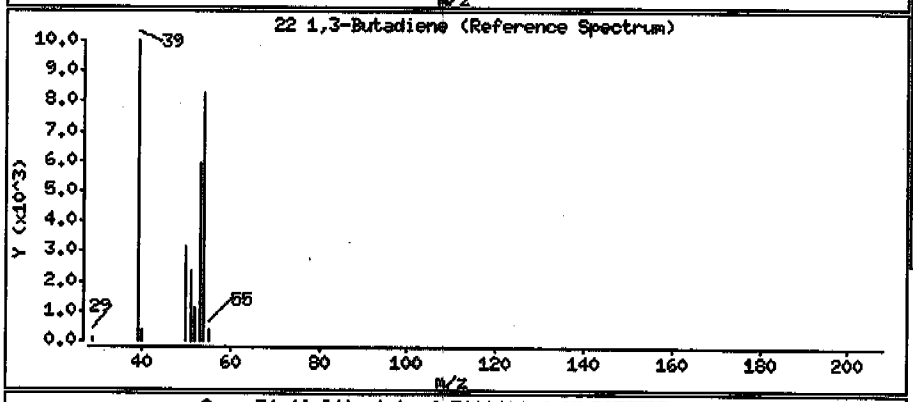
Concentration: 5.038 PPBV

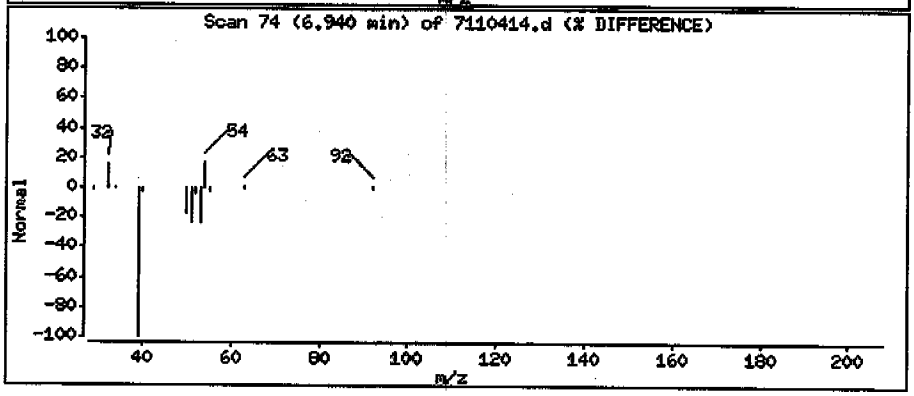












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1566

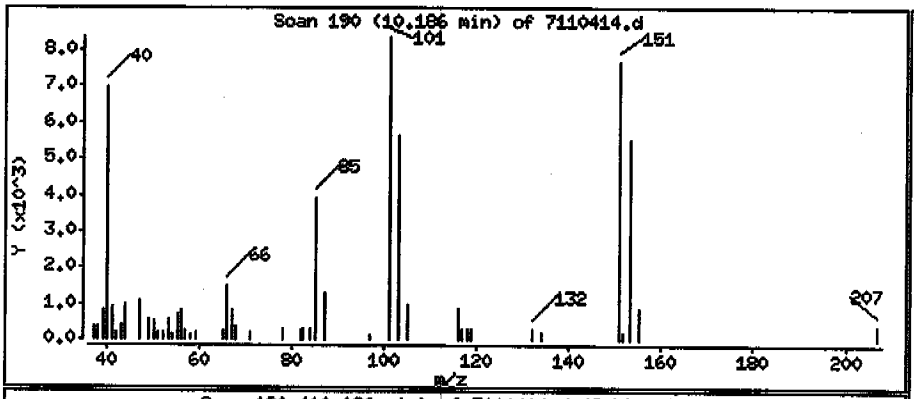
Operator: ab

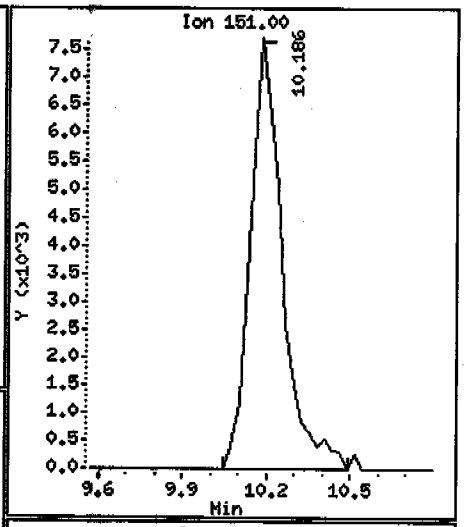
Column phase: RTx-624

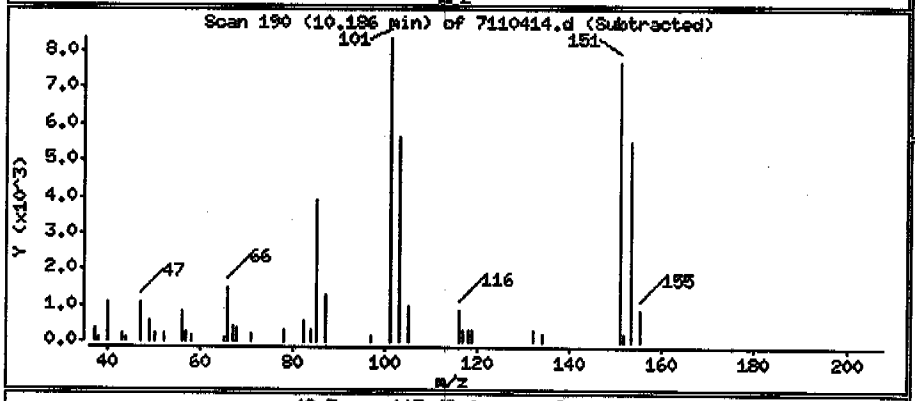
Column diameter: 0.53

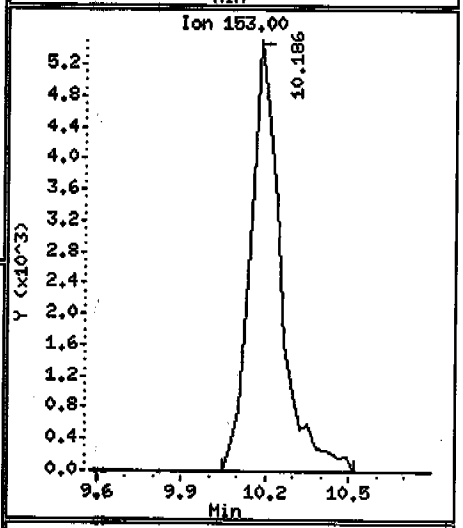
42 Freon 113

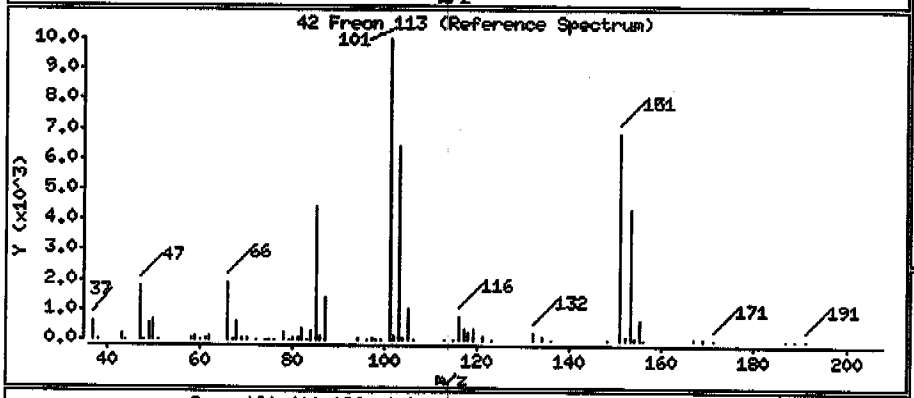
Concentration: 2.428 PPBV

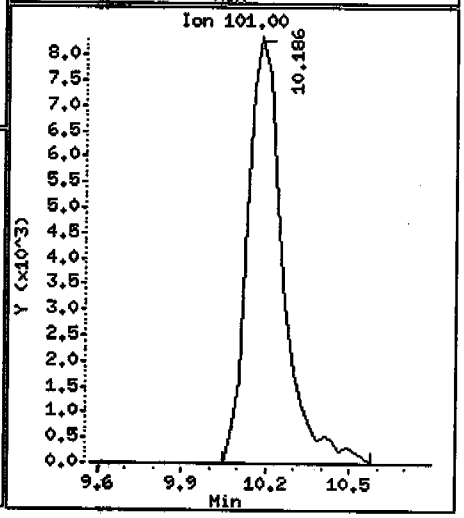


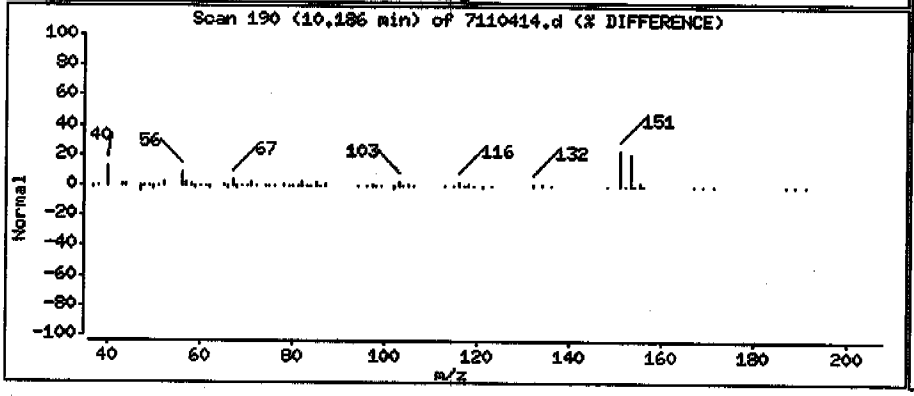












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Sample Info: 200mL#TO-1556

Instrument: msd7.i

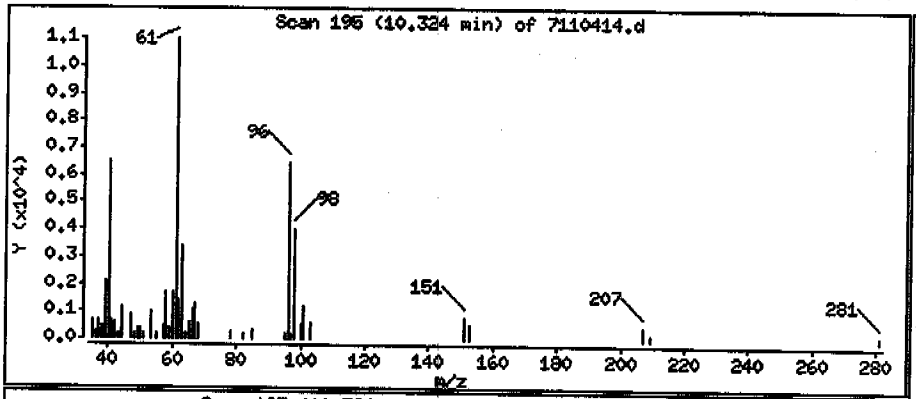
Operator: ab

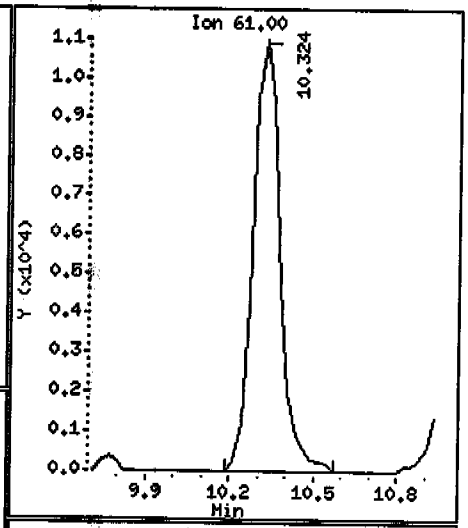
Column phase: RTx-624

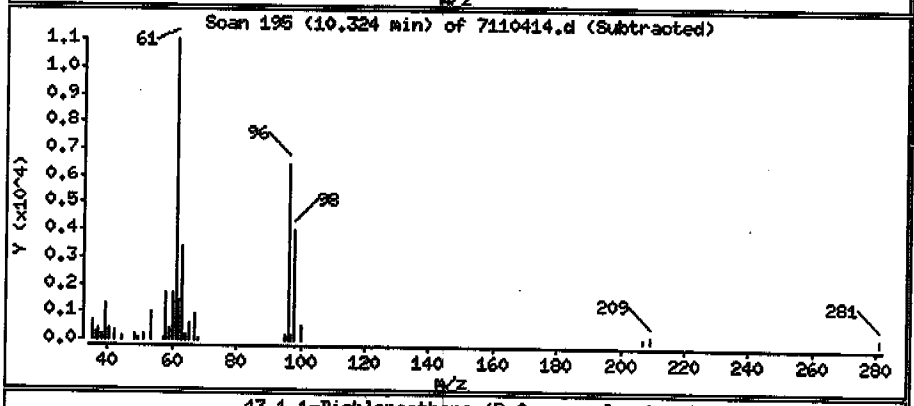
Column diameter: 0.53

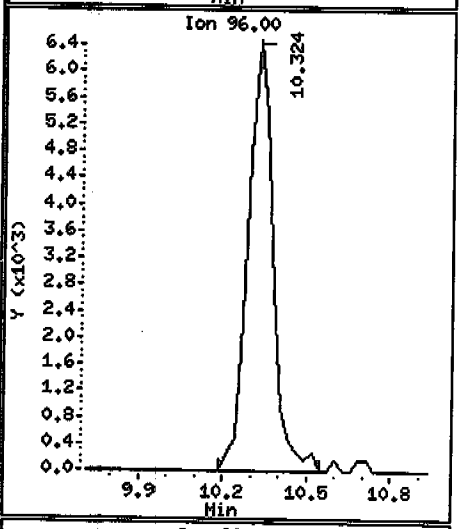
43 1,1-Dichloroethene

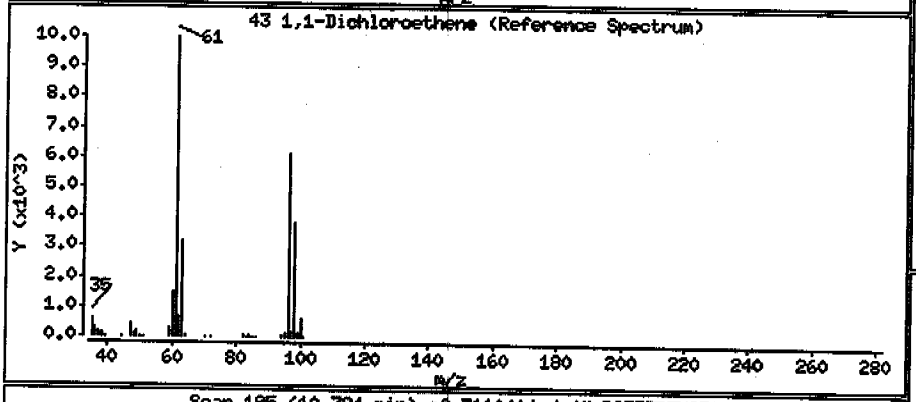
Concentration: 2.754 PPBV

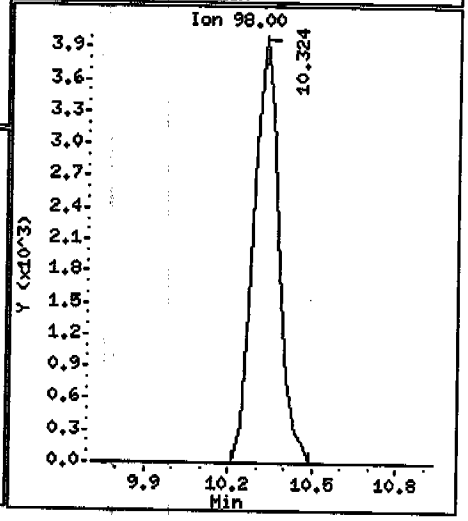


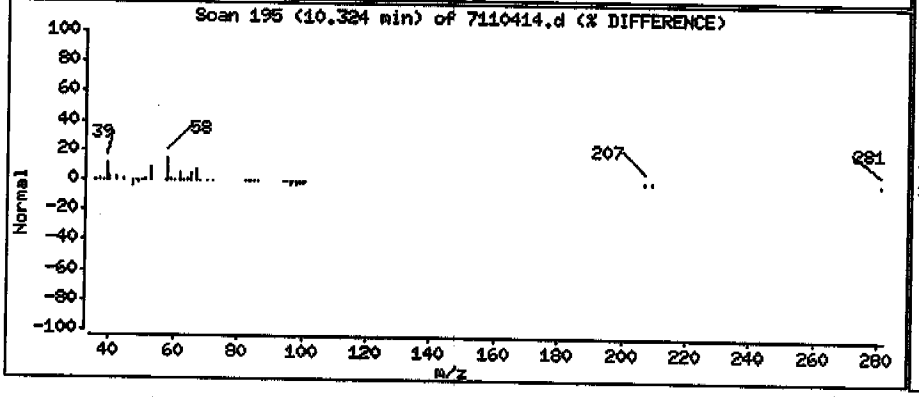












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

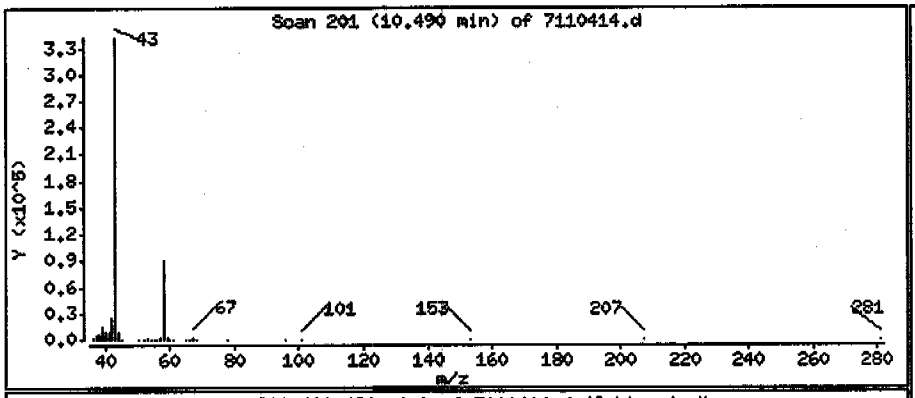
Operator: ab

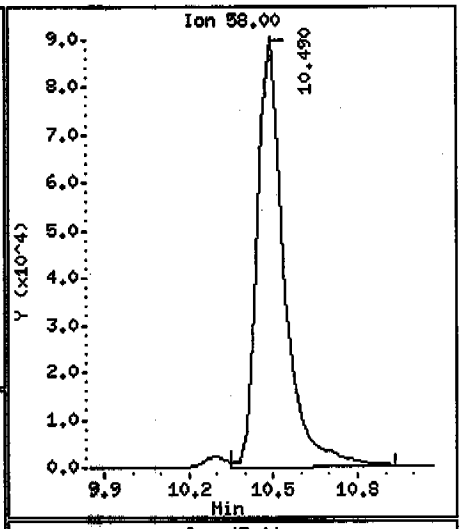
Column phase: RTx-624

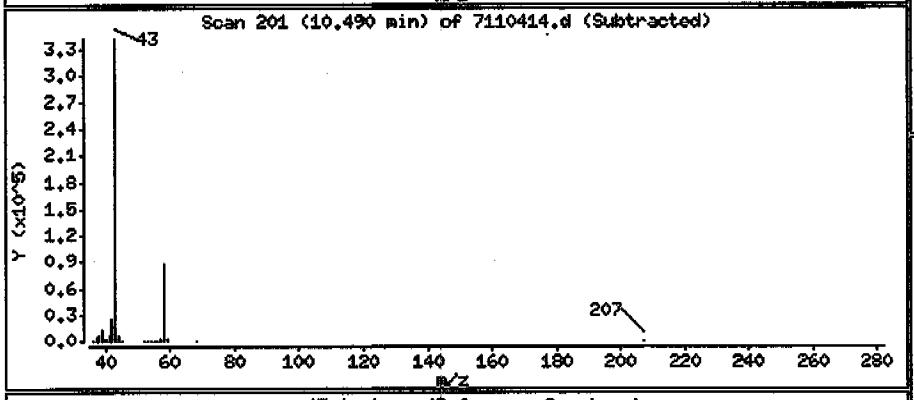
Column diameter: 0.53

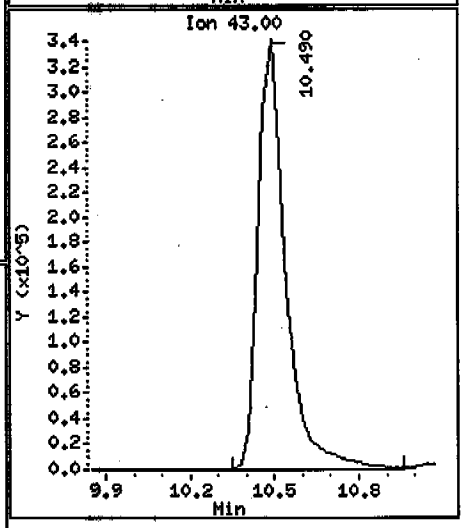
45 Acetone

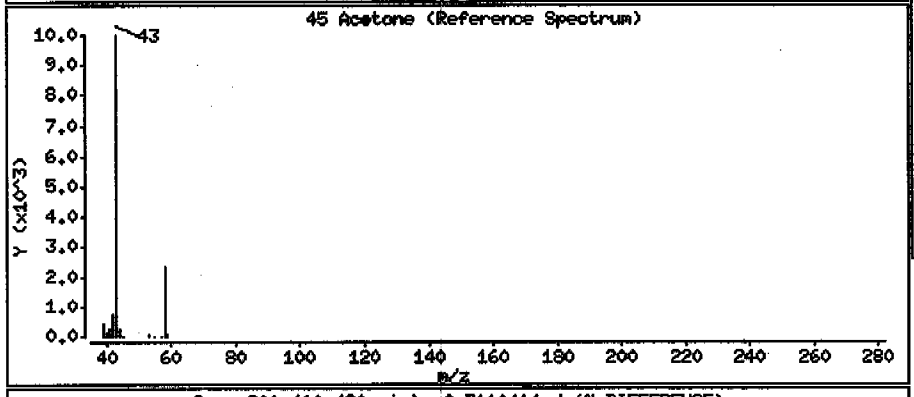
Concentration: 72.244 PPBV

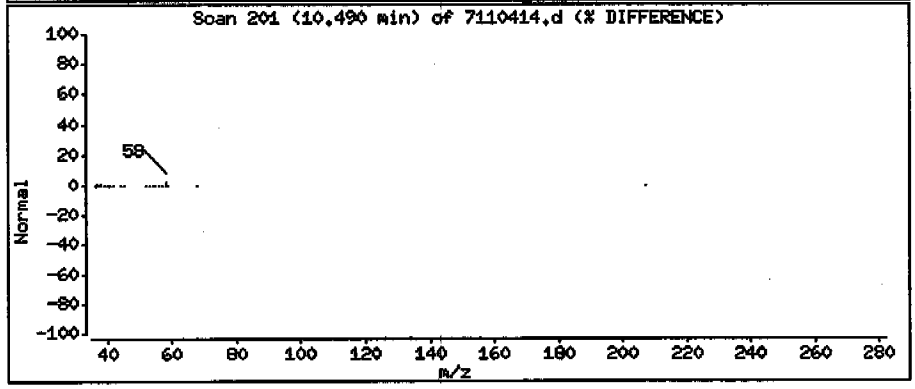












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

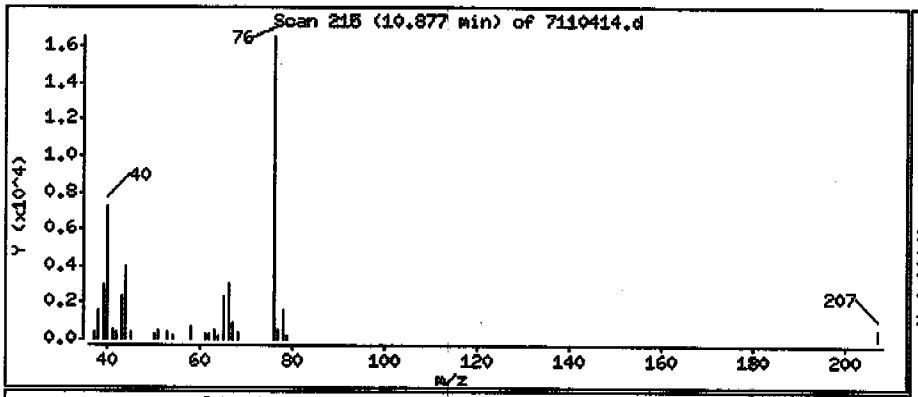
Operator: ab

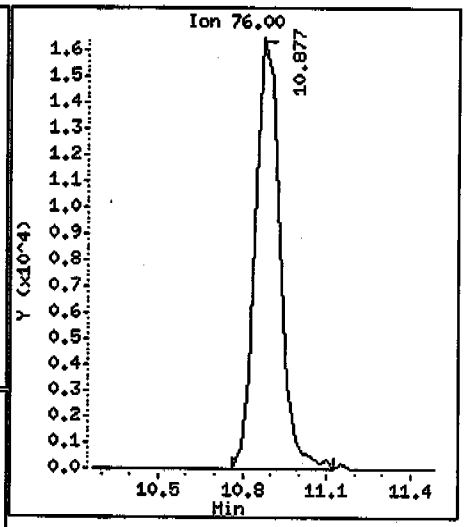
Column phase: RTx-624

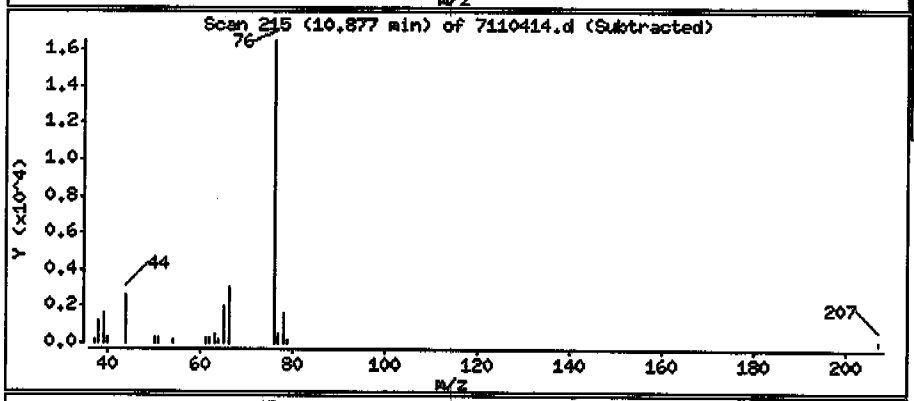
Column diameter: 0.53

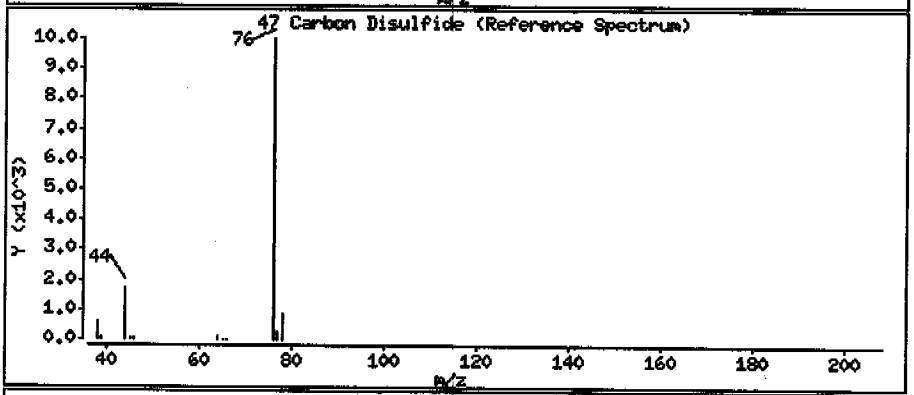
47 Carbon Disulfide

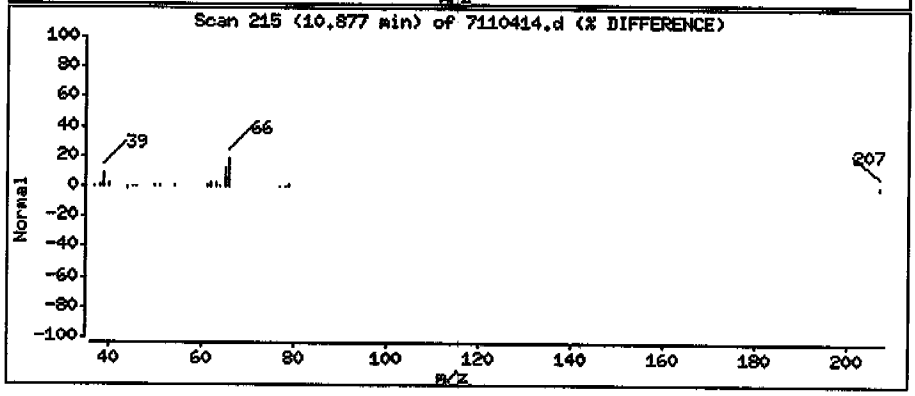
Concentration: 1.995 PPBV











Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

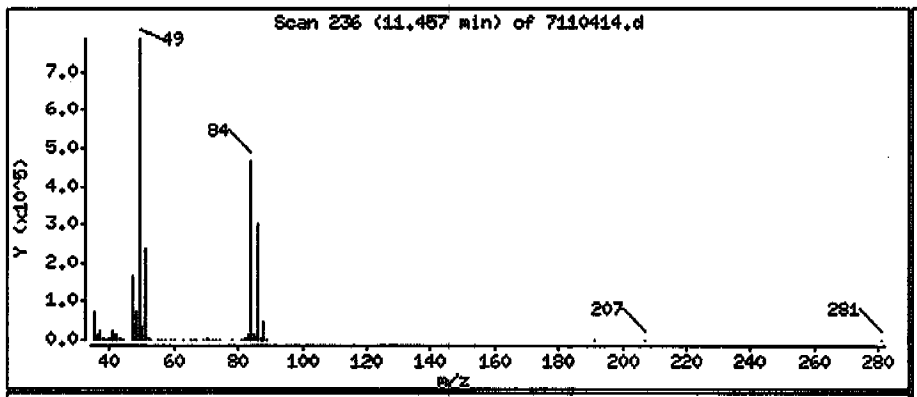
Operator: ab

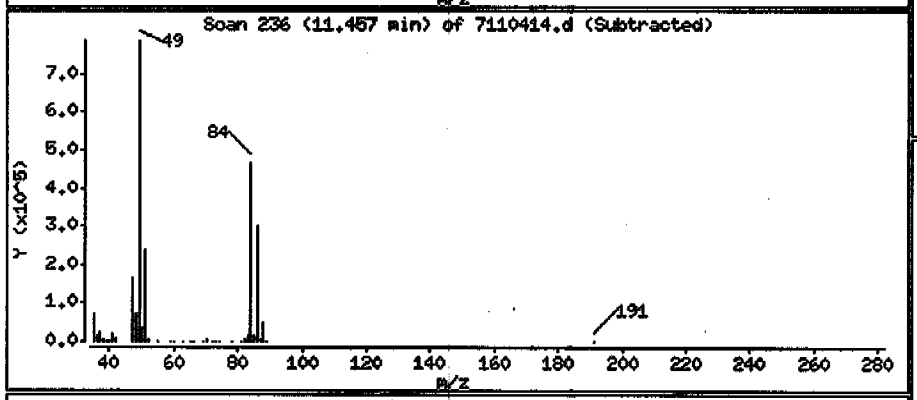
Column phase: RTx-624

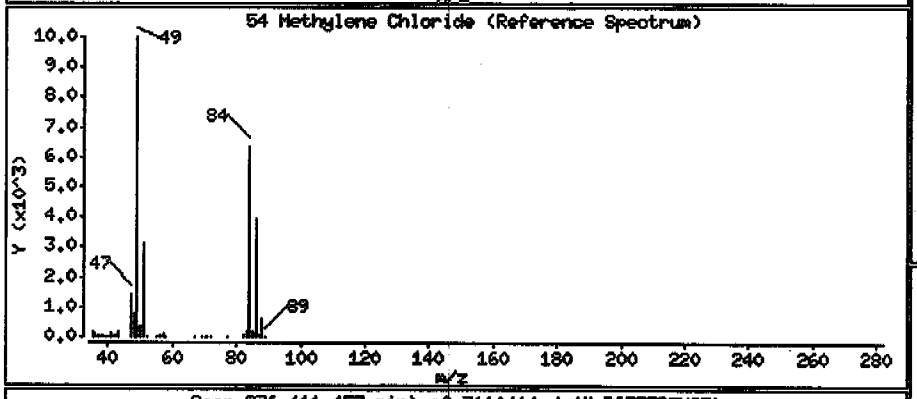
Column diameter: 0.53

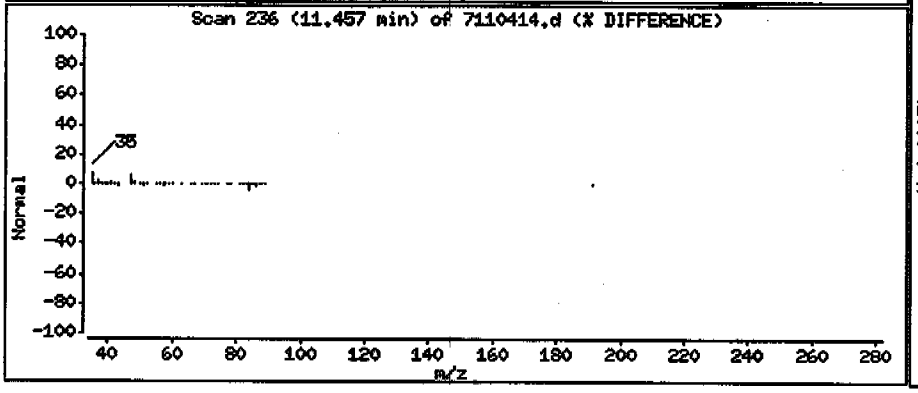
54 Methylene Chloride

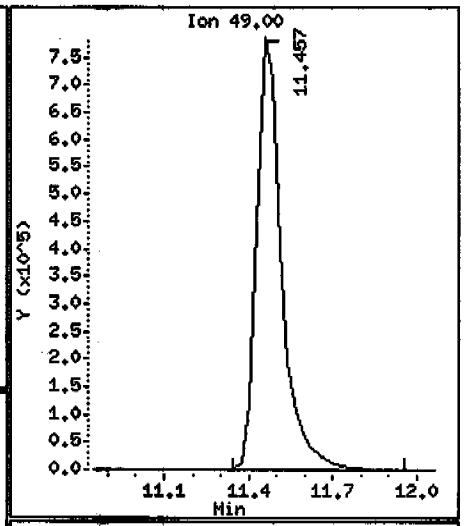
Concentration: 247.54 PPBV

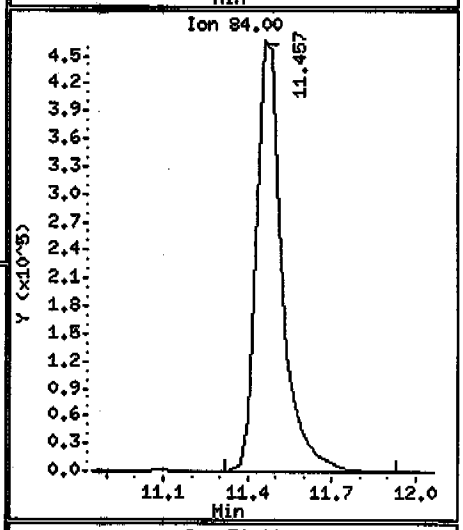


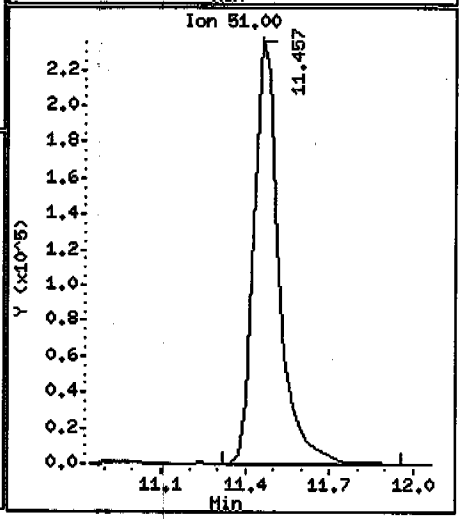












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

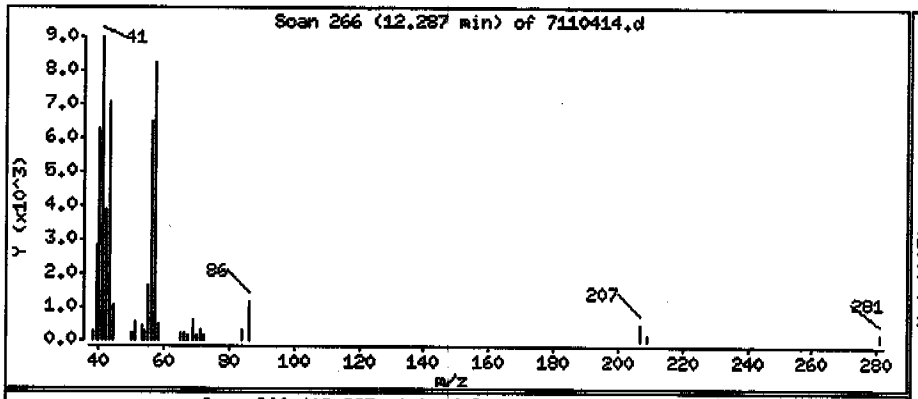
Operator: ab

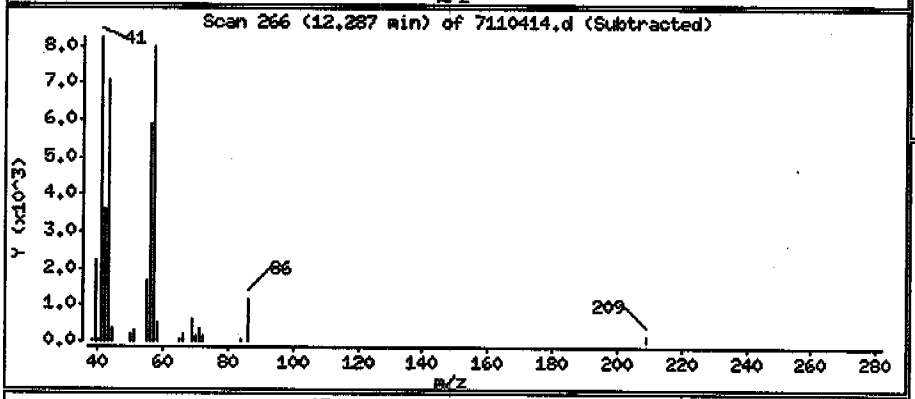
Column phase: RTx-624

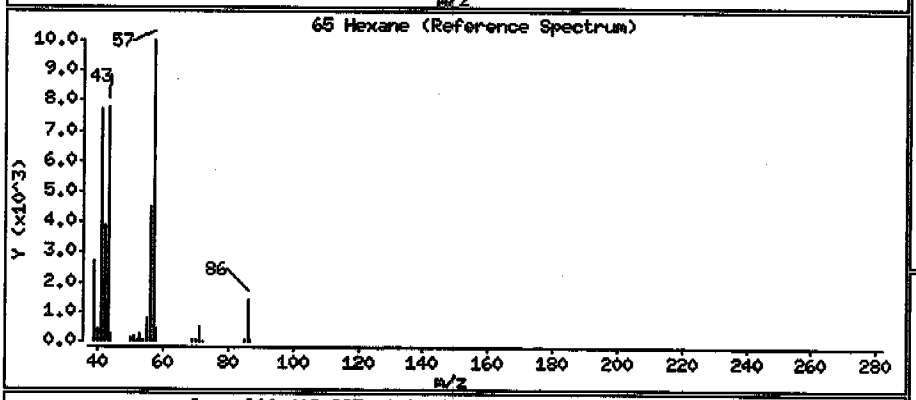
Column diameter: 0.53

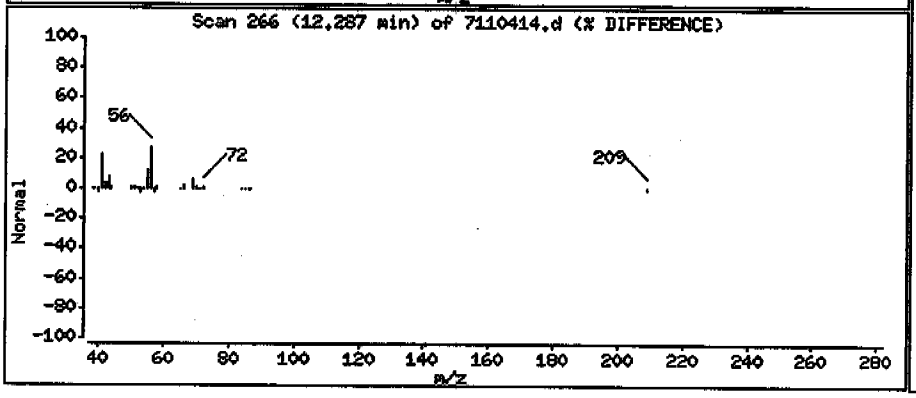
65 Hexane

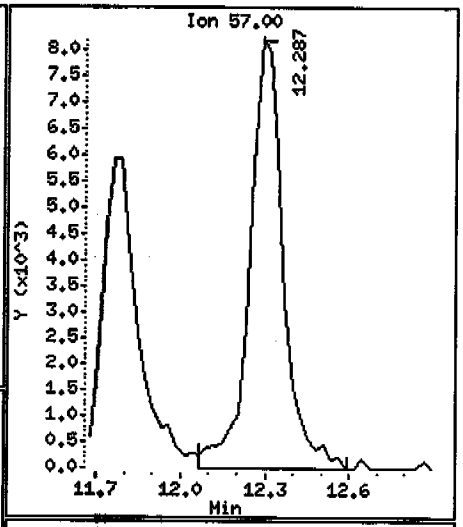
Concentration: 2.670 PPBV

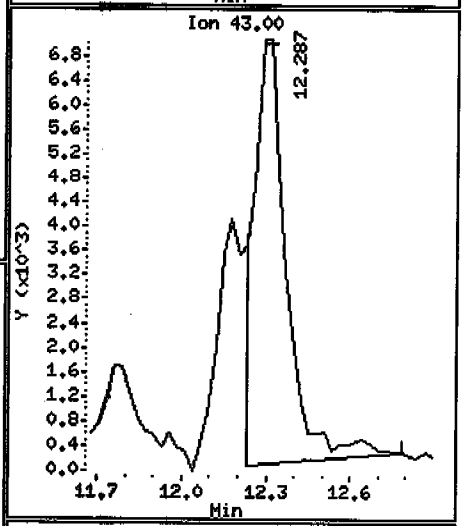


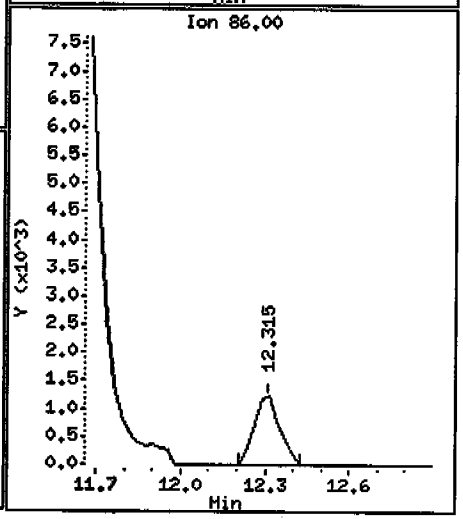












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200ML#TO-1556

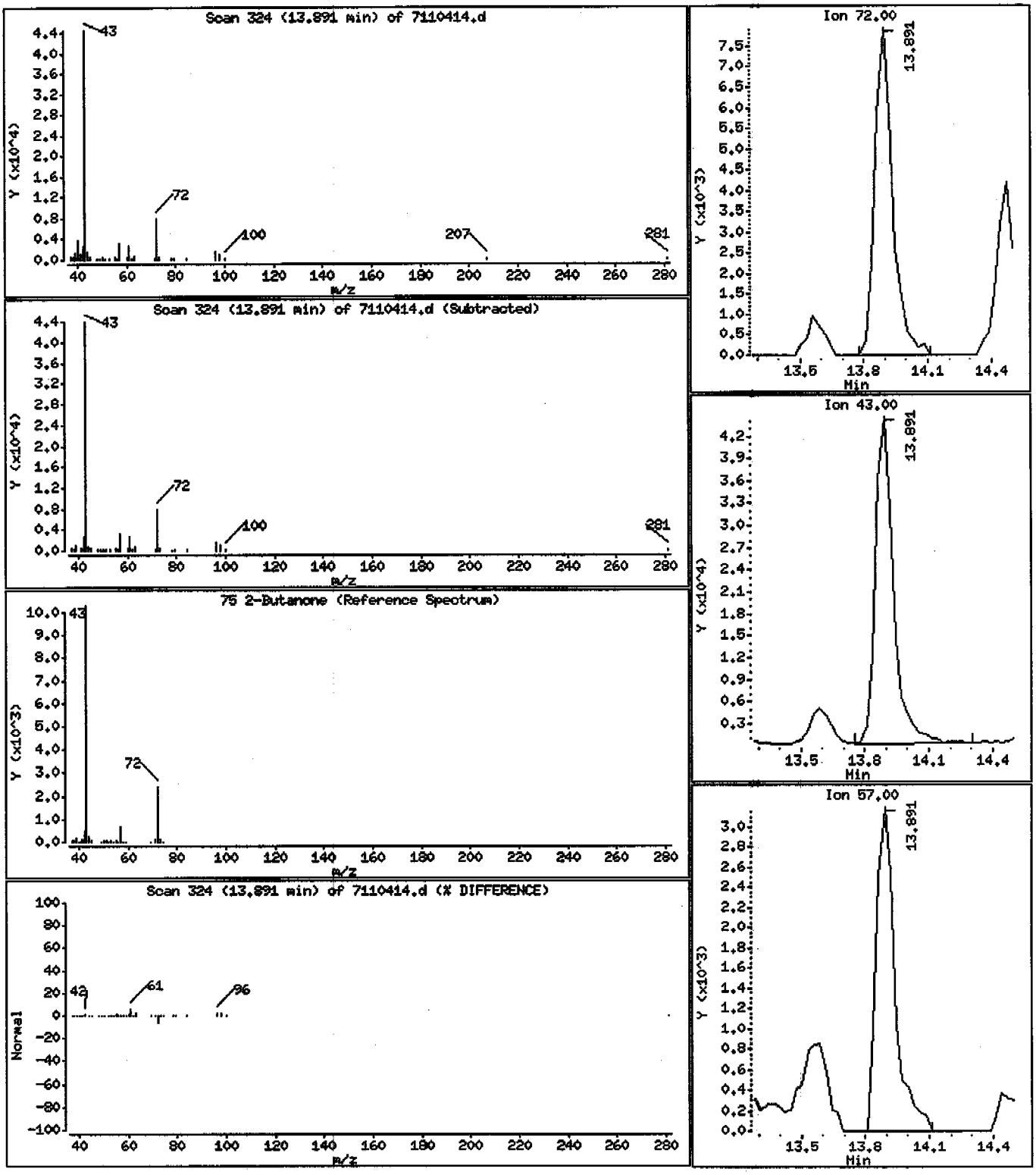
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

75 2-Butanone

Concentration: 6.981 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

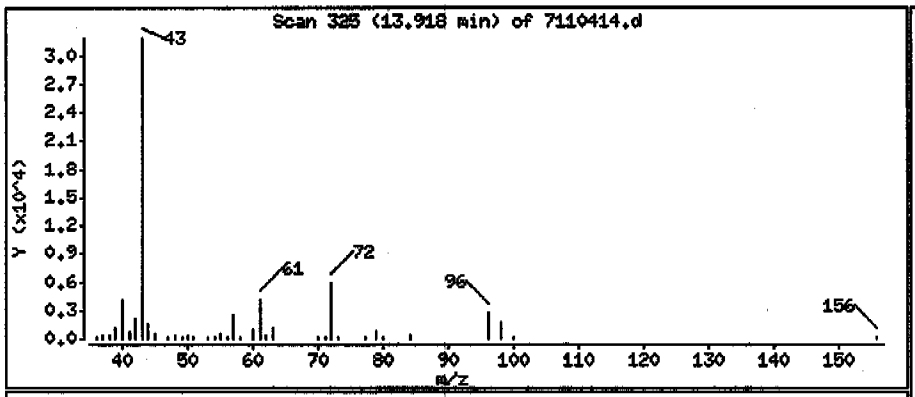
Operator: ab

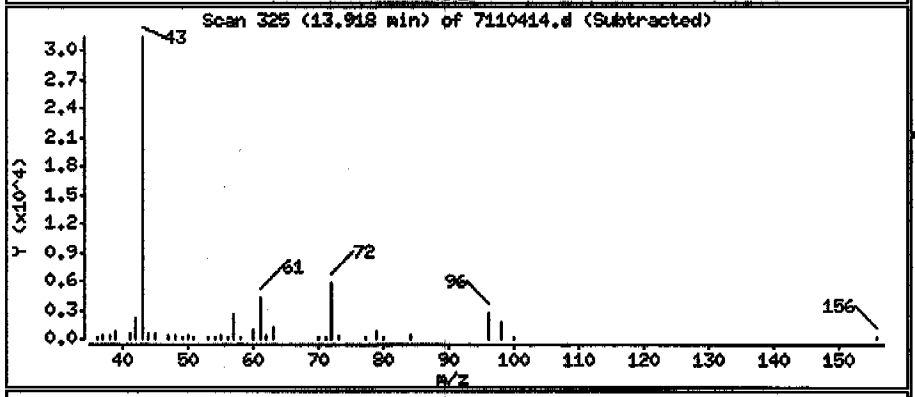
Column phase: RTx-624

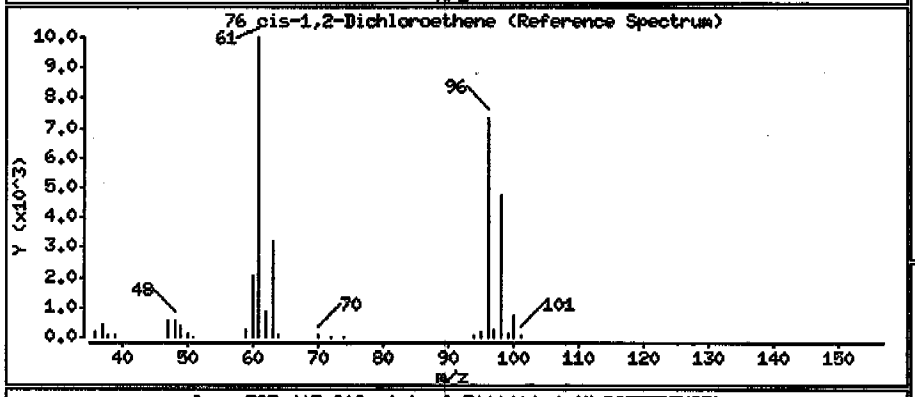
Column diameter: 0.53

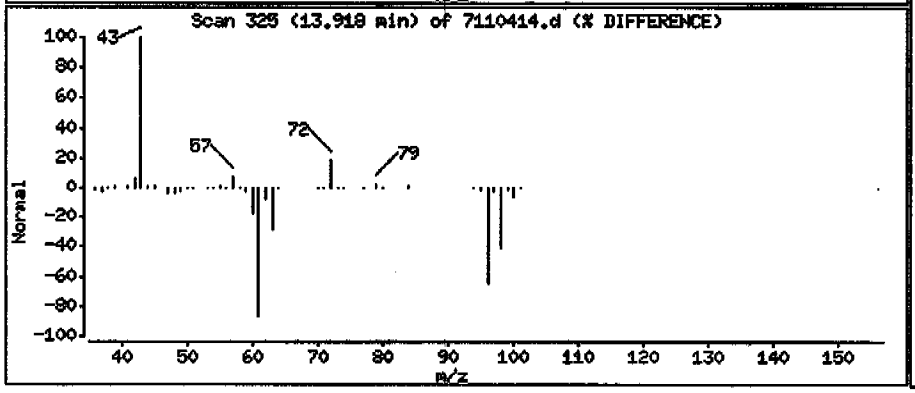
76 cis-1,2-Dichloroethene

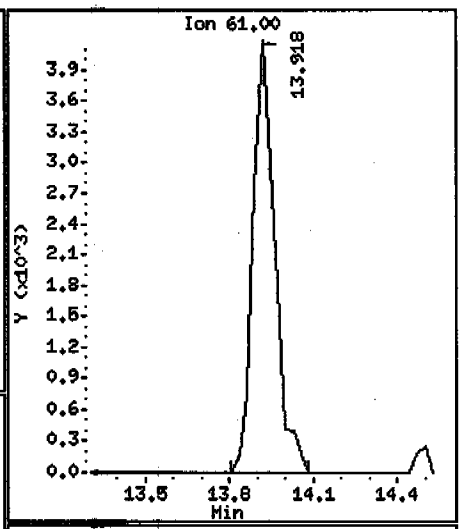
Concentration: 1.037 PPBV

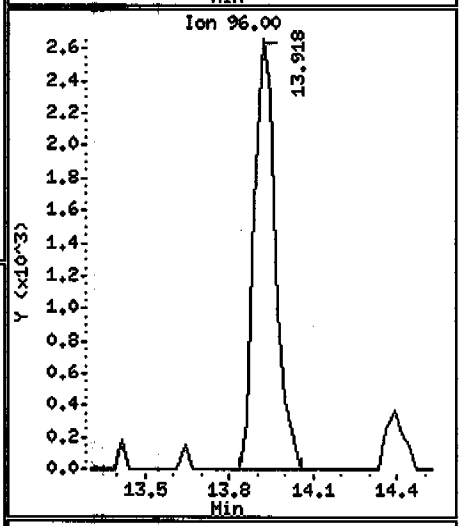


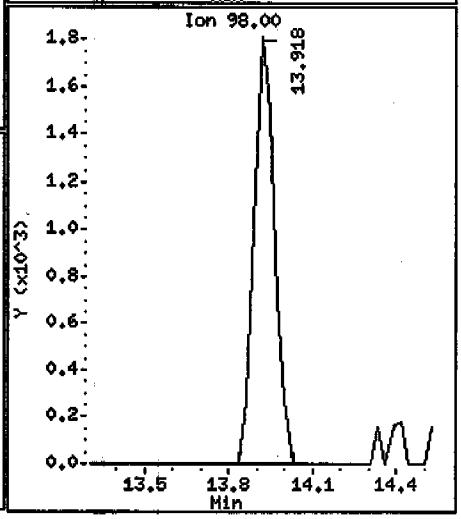












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

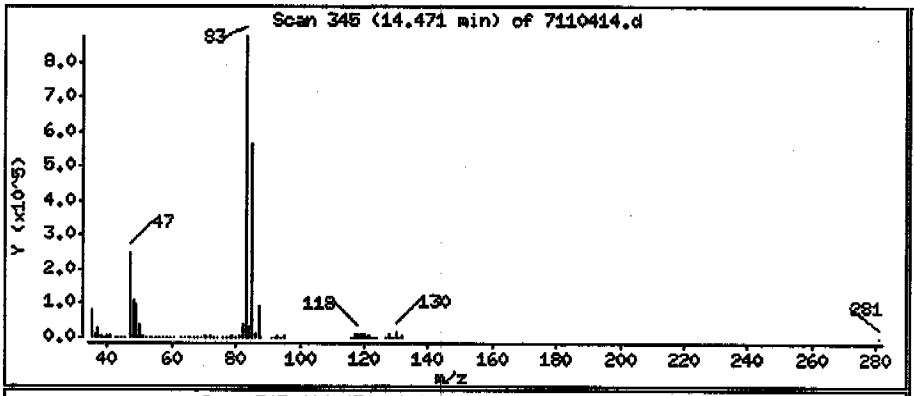
Operator: ab

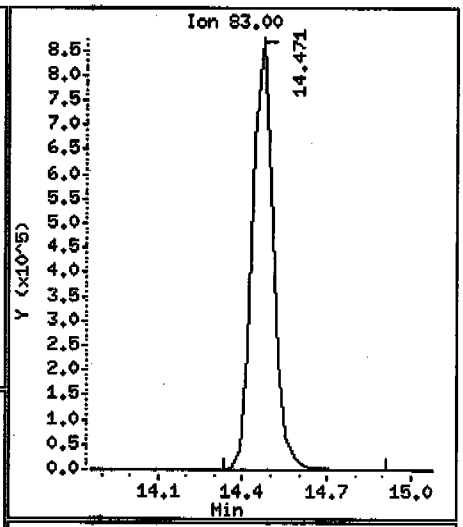
Column phase: RTx-624

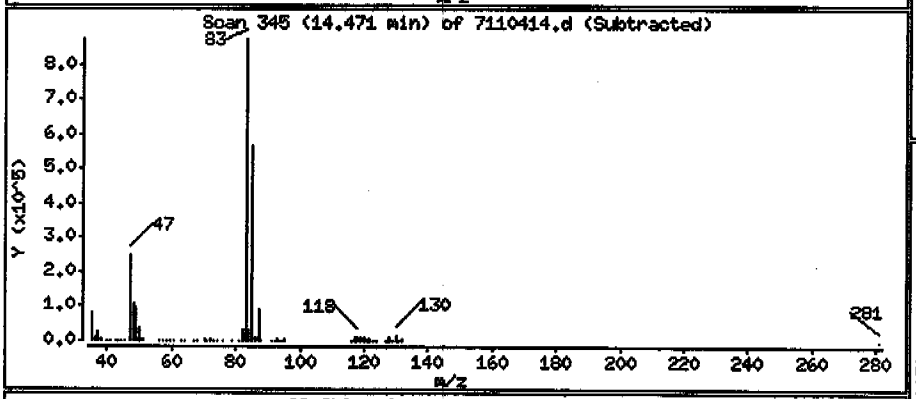
Column diameter: 0.53

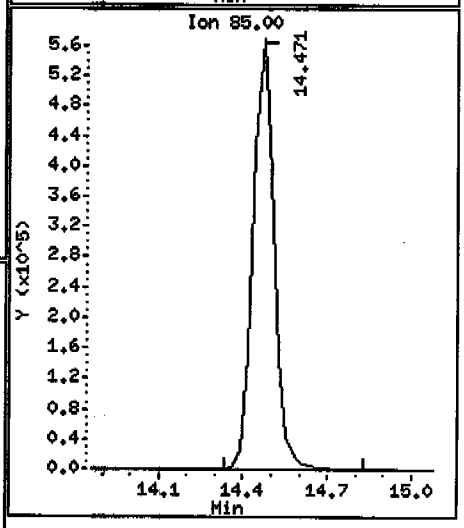
82 Chloroform

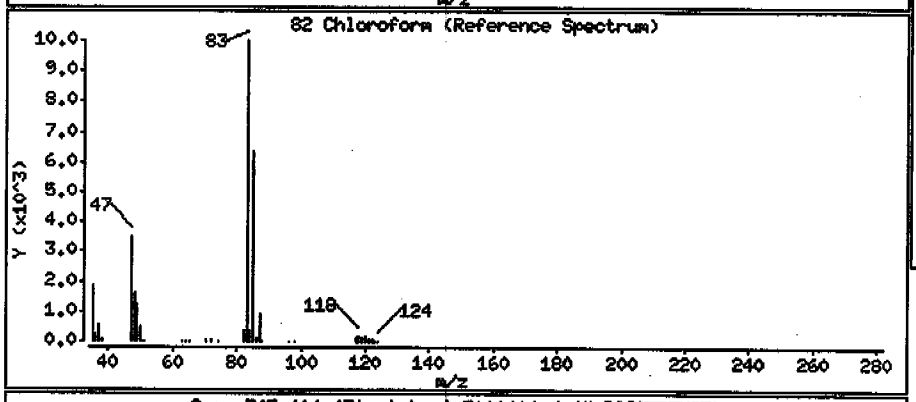
Concentration: 147.28 PPBV

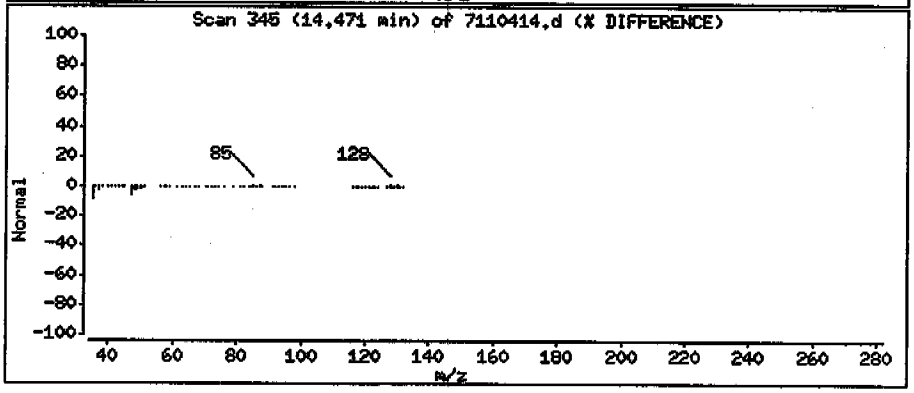












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200WL#TO-1556

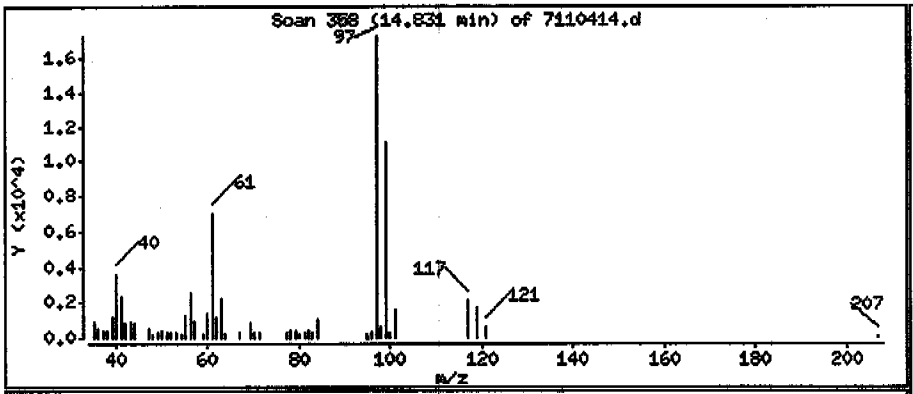
Operator: ab

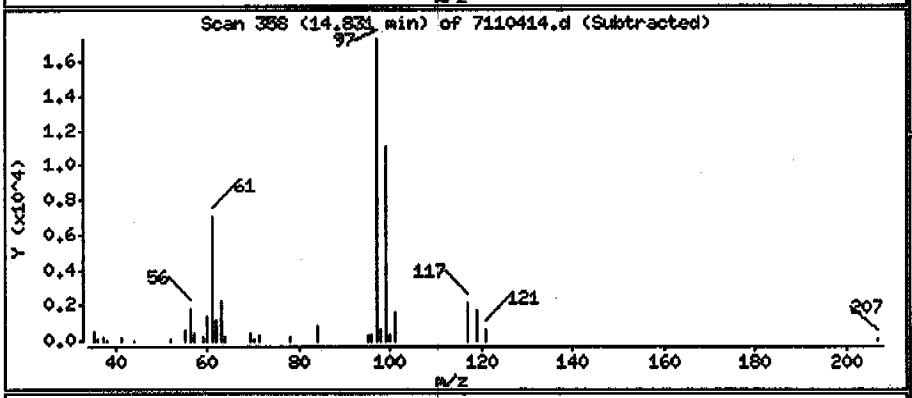
Column phase: RTx-624

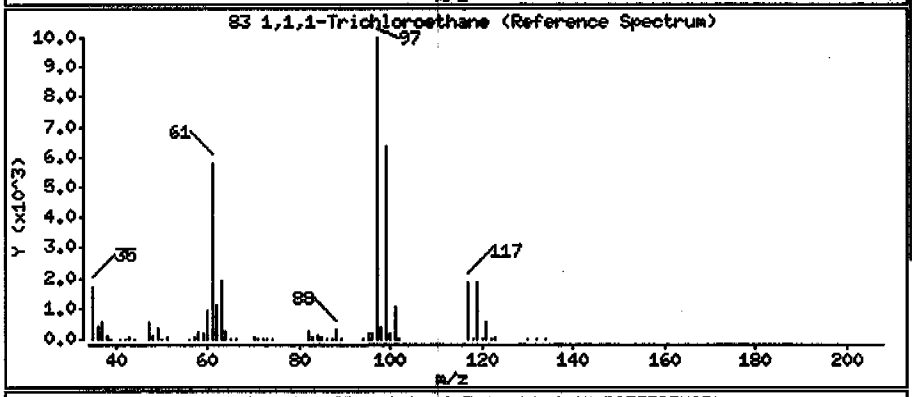
Column diameter: 0.53

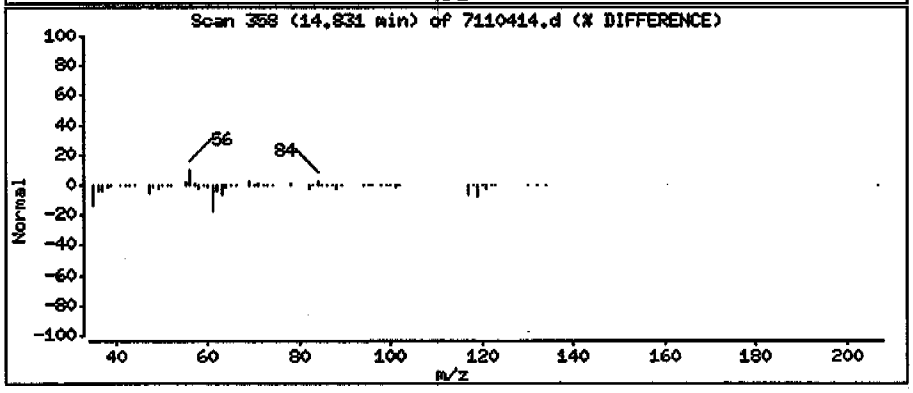
83 1,1,1-Trichloroethane

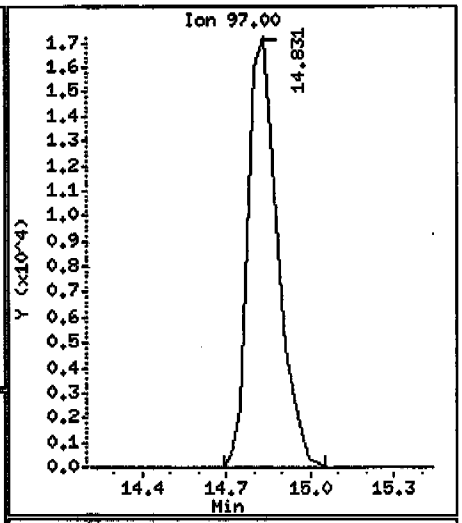
Concentration: 4.088 PPBV

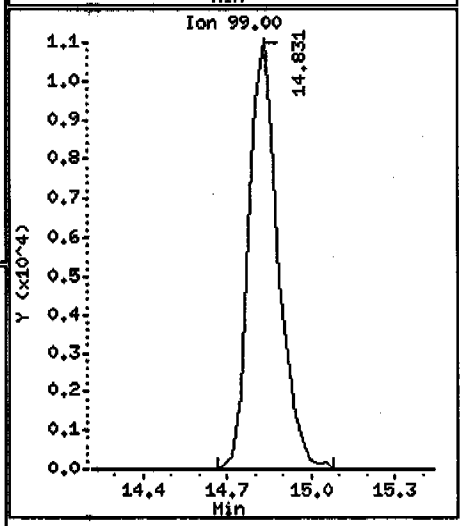












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

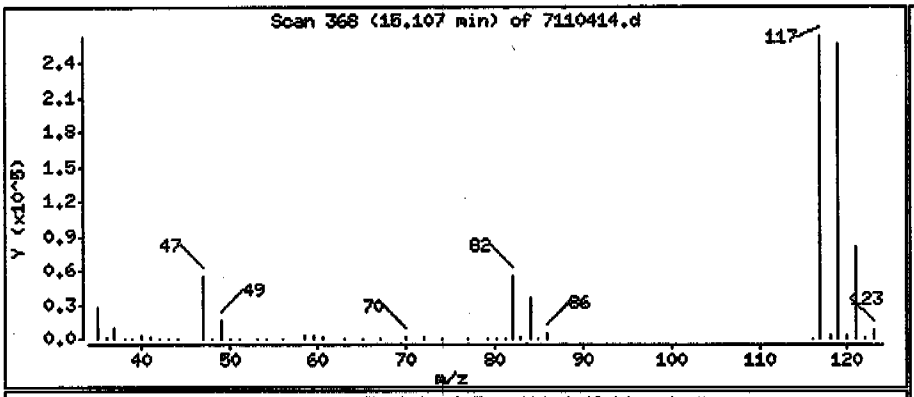
Operator: ab

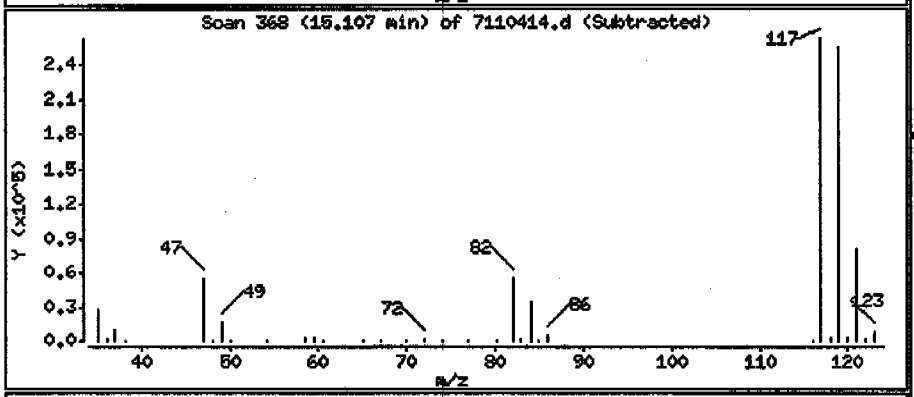
Column phase: RTx-624

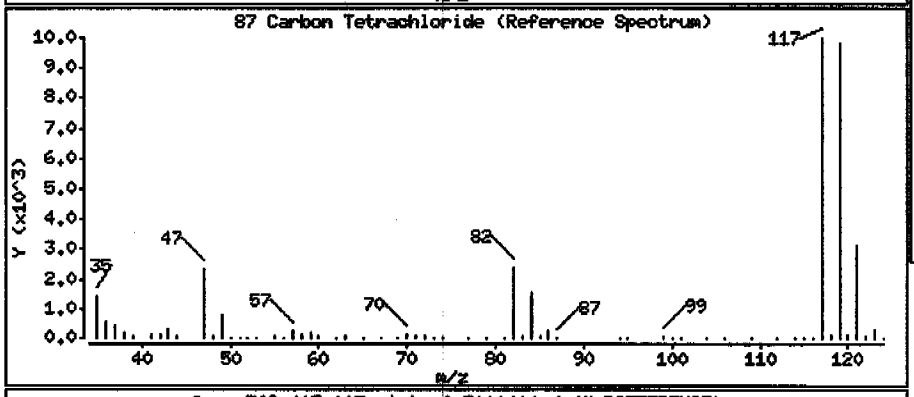
Column diameter: 0.53

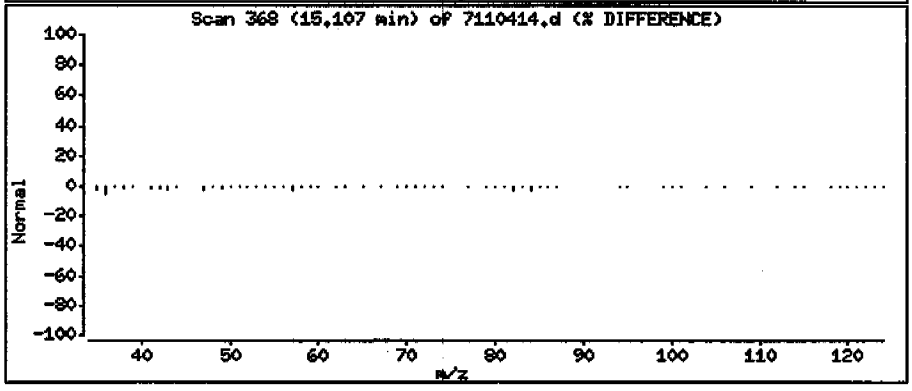
87 Carbon Tetrachloride

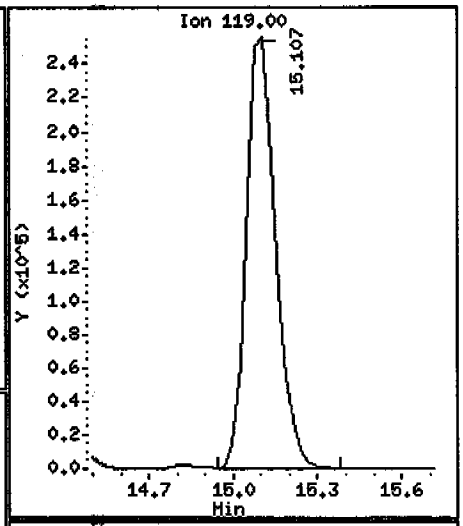
Concentration: 64.165 PPBV

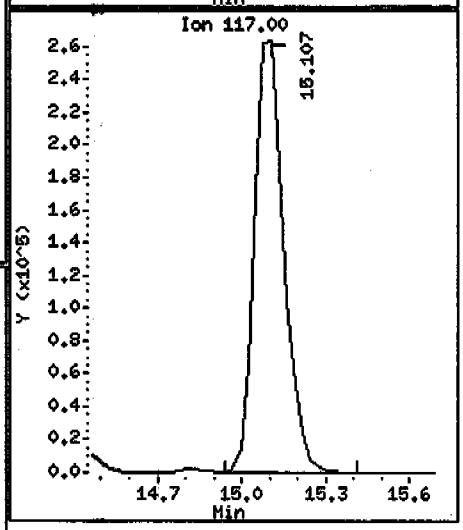












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

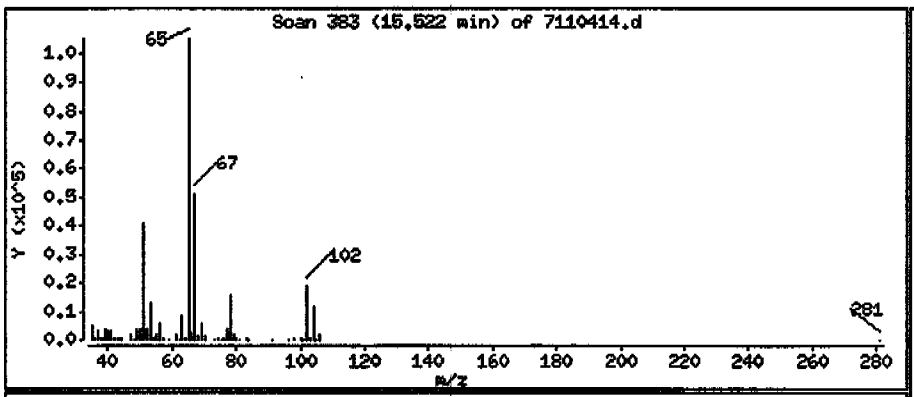
Operator: ab

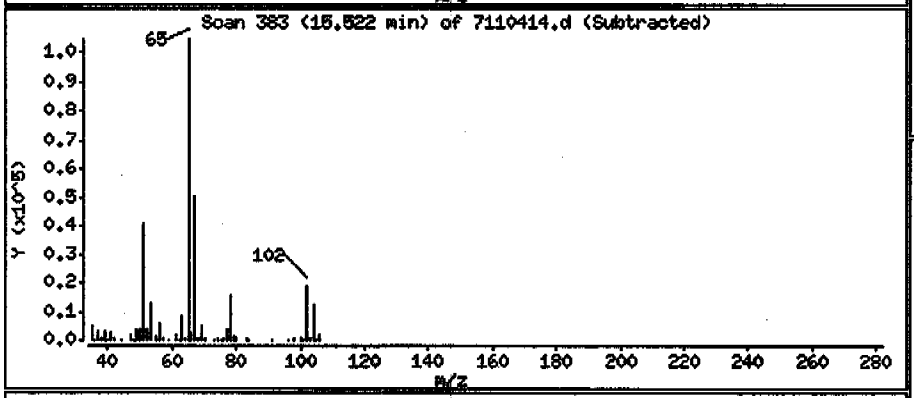
Column phase: RTx-624

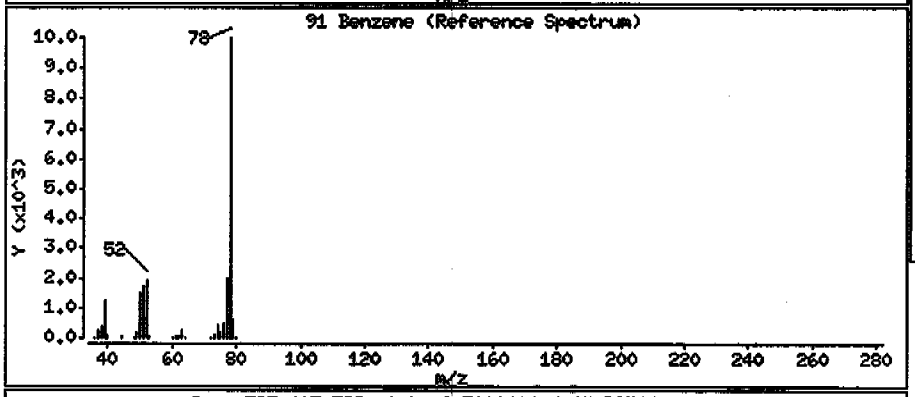
Column diameter: 0.53

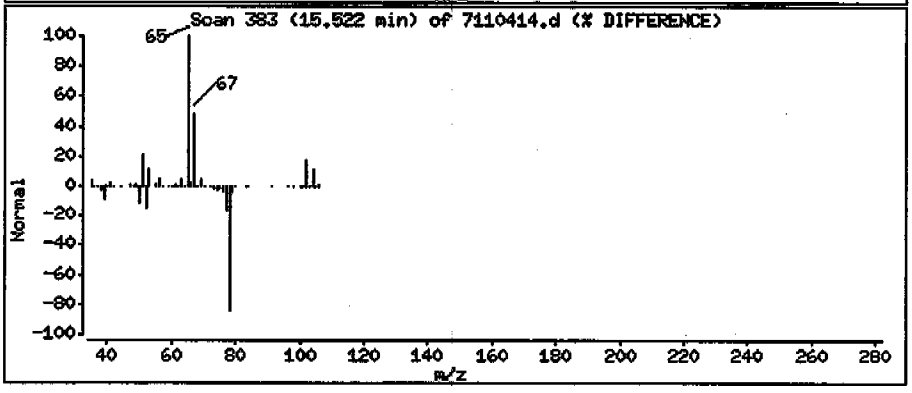
91 Benzene

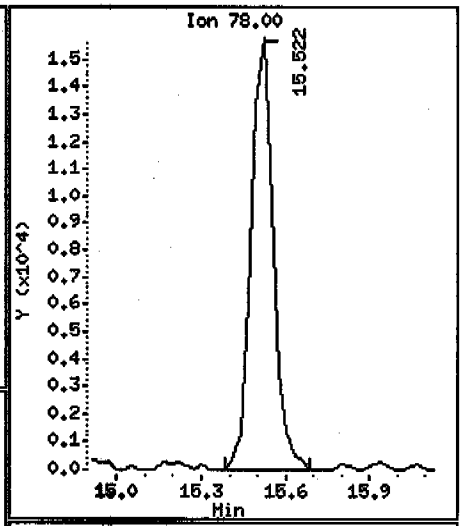
Concentration: 2.015 PPBV

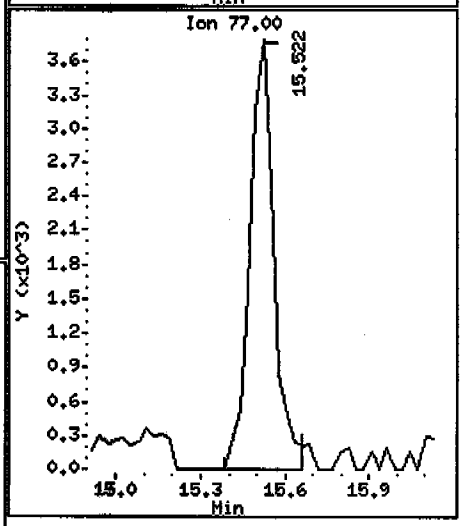












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Sample Info: 200mL#TO-1556

Instrument: msd7.i

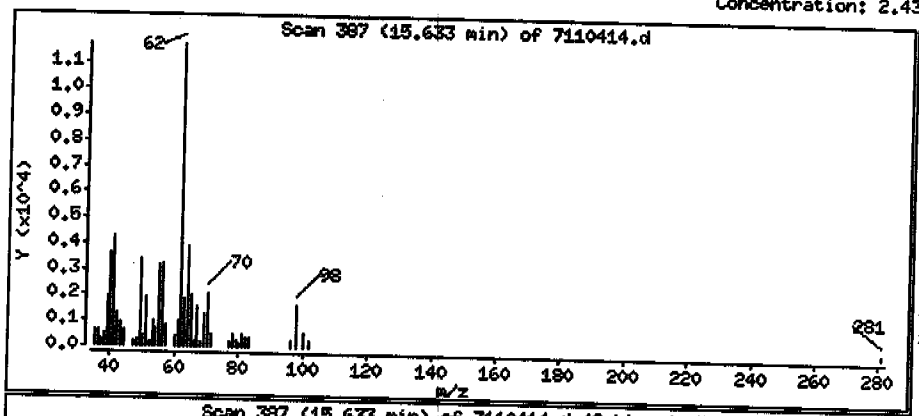
Operator: ab

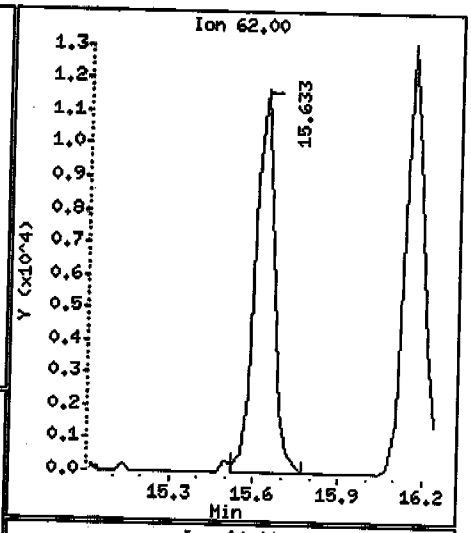
Column phase: RTx-624

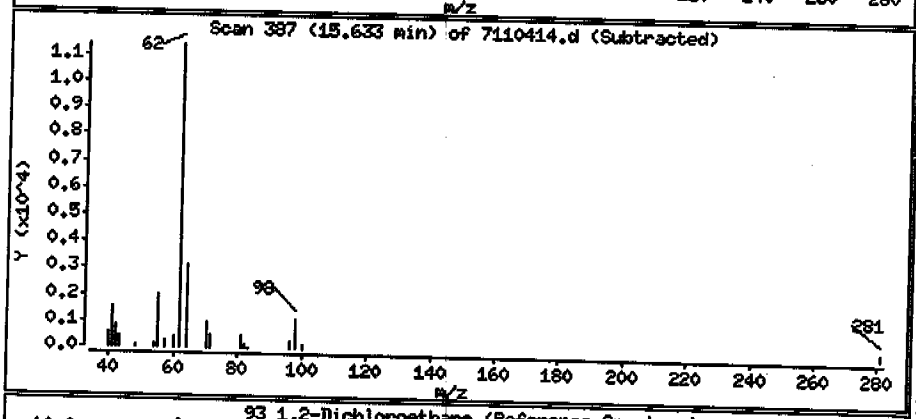
Column diameter: 0.53

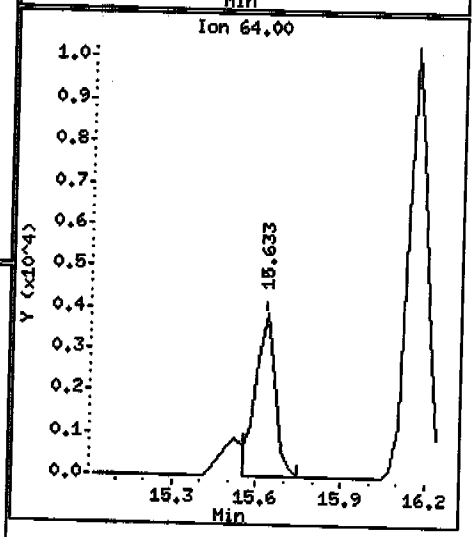
93 1,2-Dichloroethane

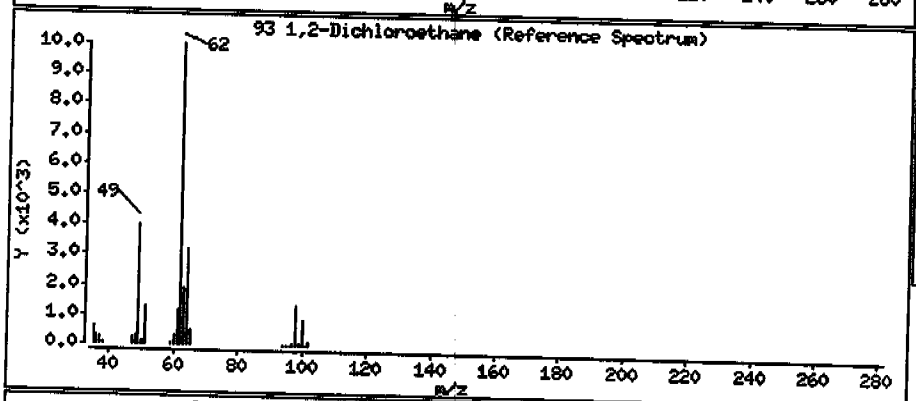
Concentration: 2.434 PPBV

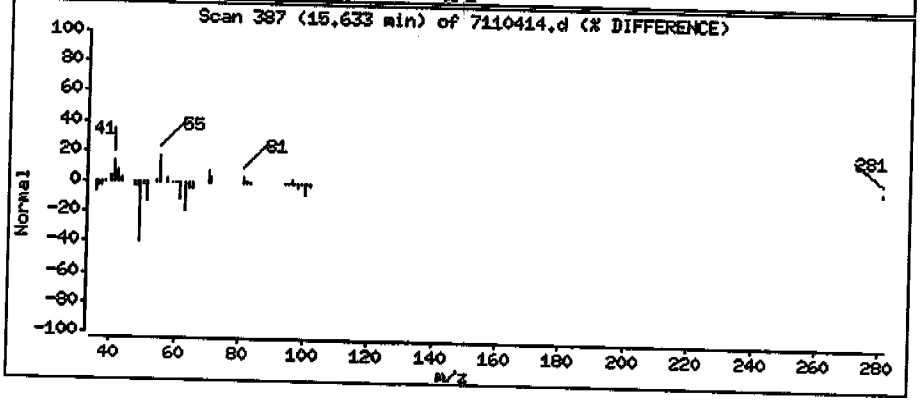












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Sample Info: 200mL#TO-1556

Instrument: msd7.i

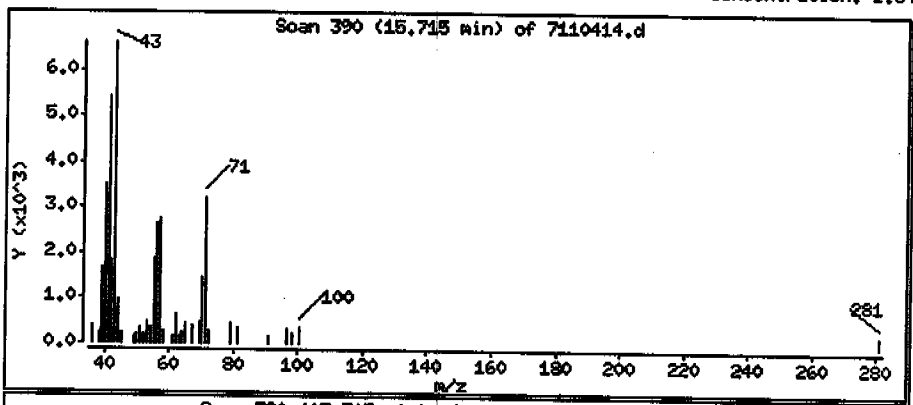
Operator: ab

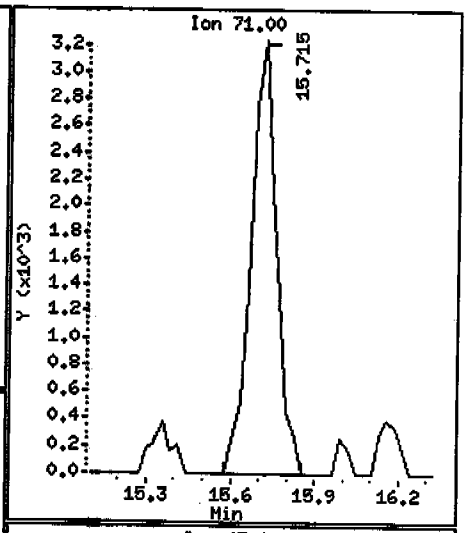
Column phase: RTx-624

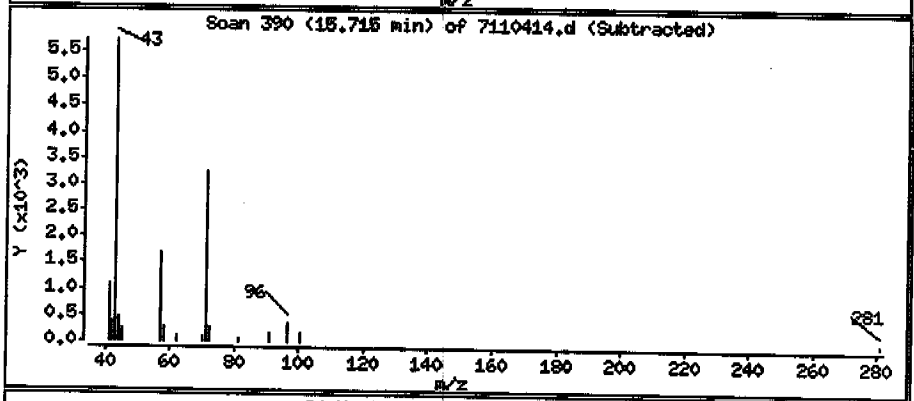
Column diameter: 0.53

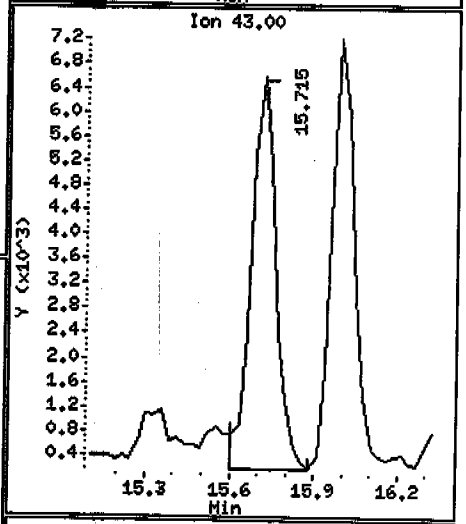
94 Heptane

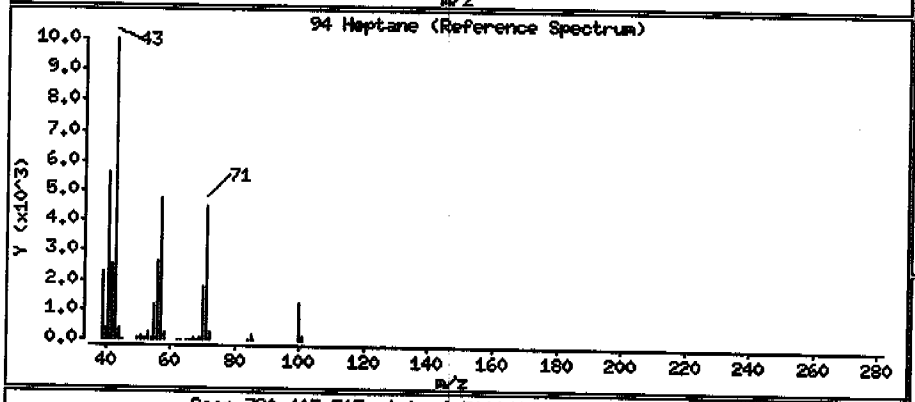
Concentration: 1.541 PPBV

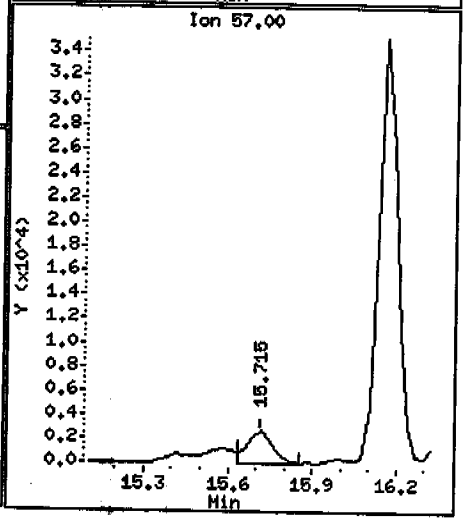


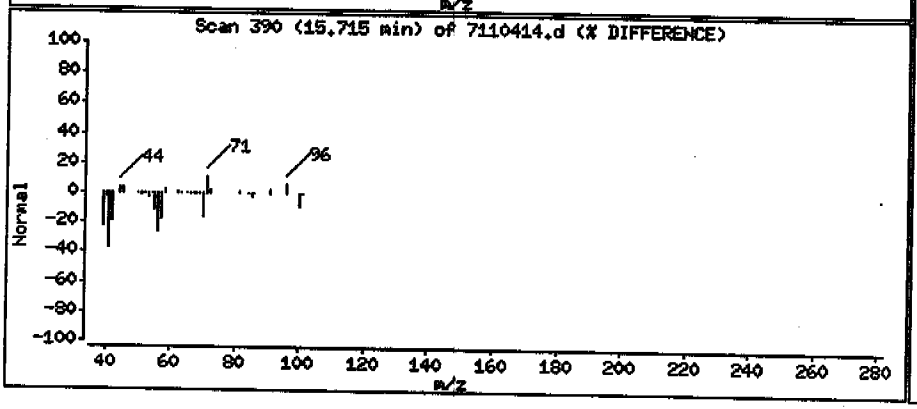












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

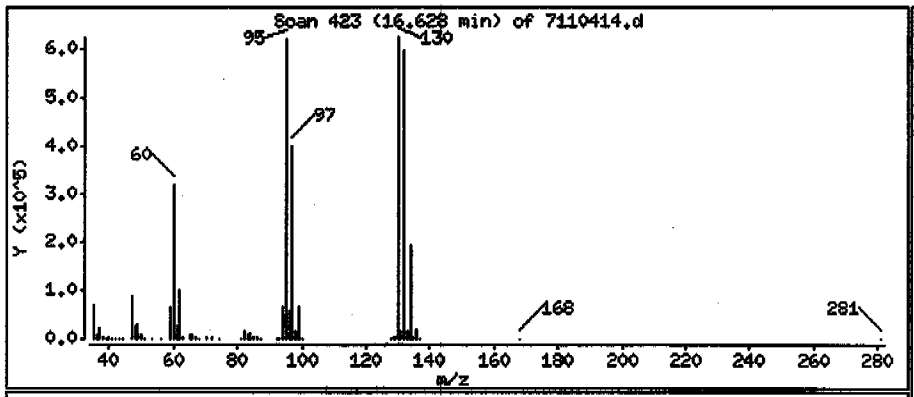
Operator: ab

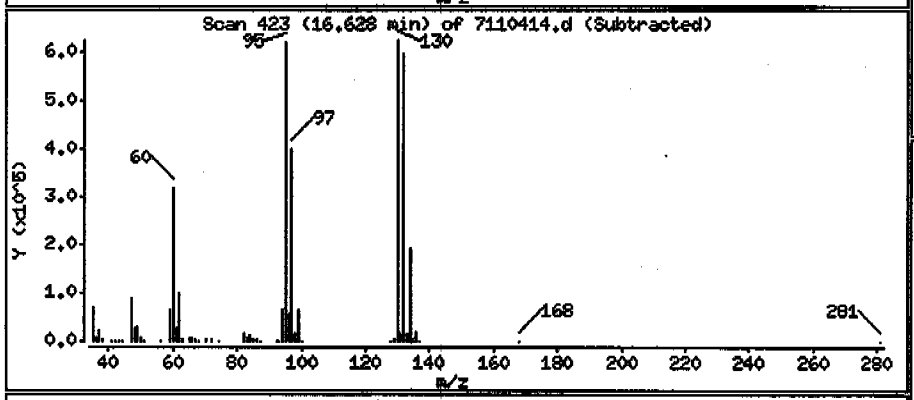
Column phase: RTx-624

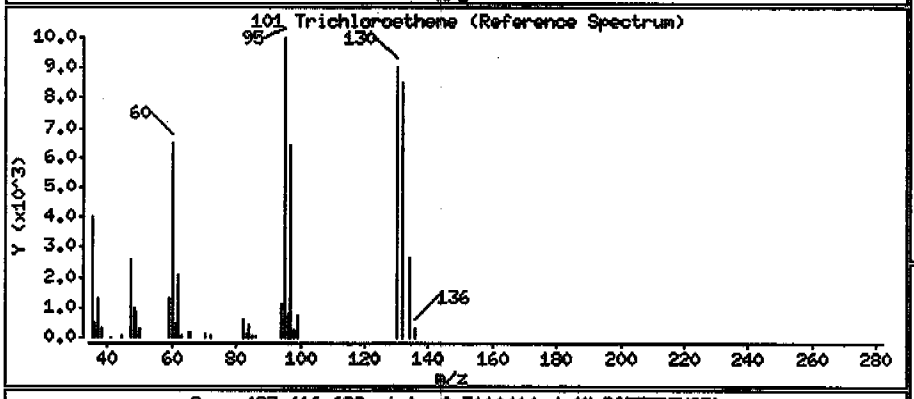
Column diameter: 0.53

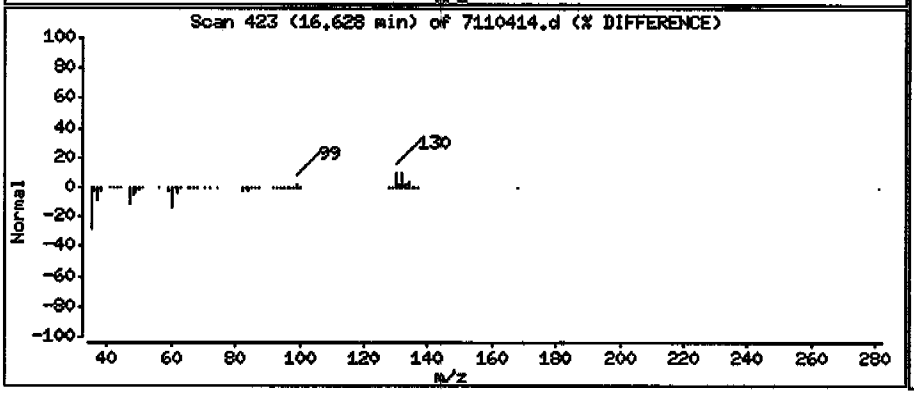
101 Trichloroethene

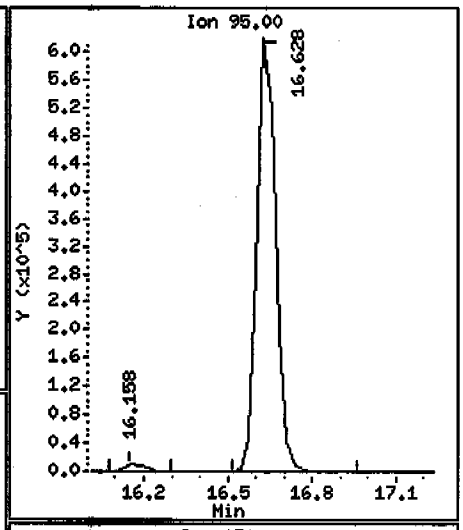
Concentration: 150.35 PPBV

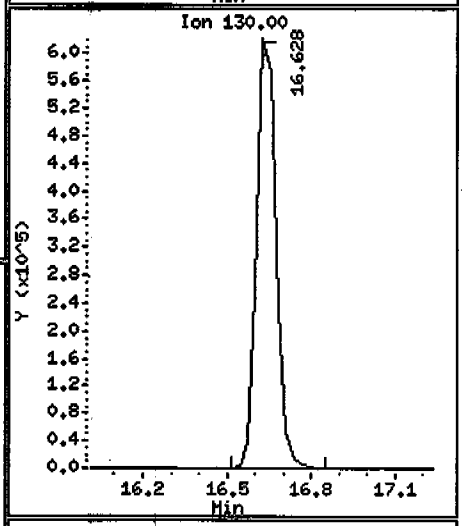


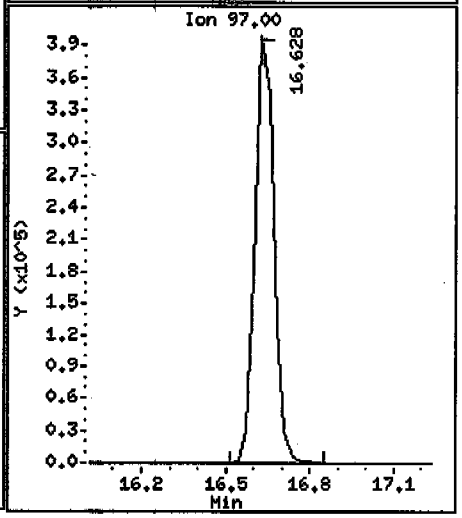












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

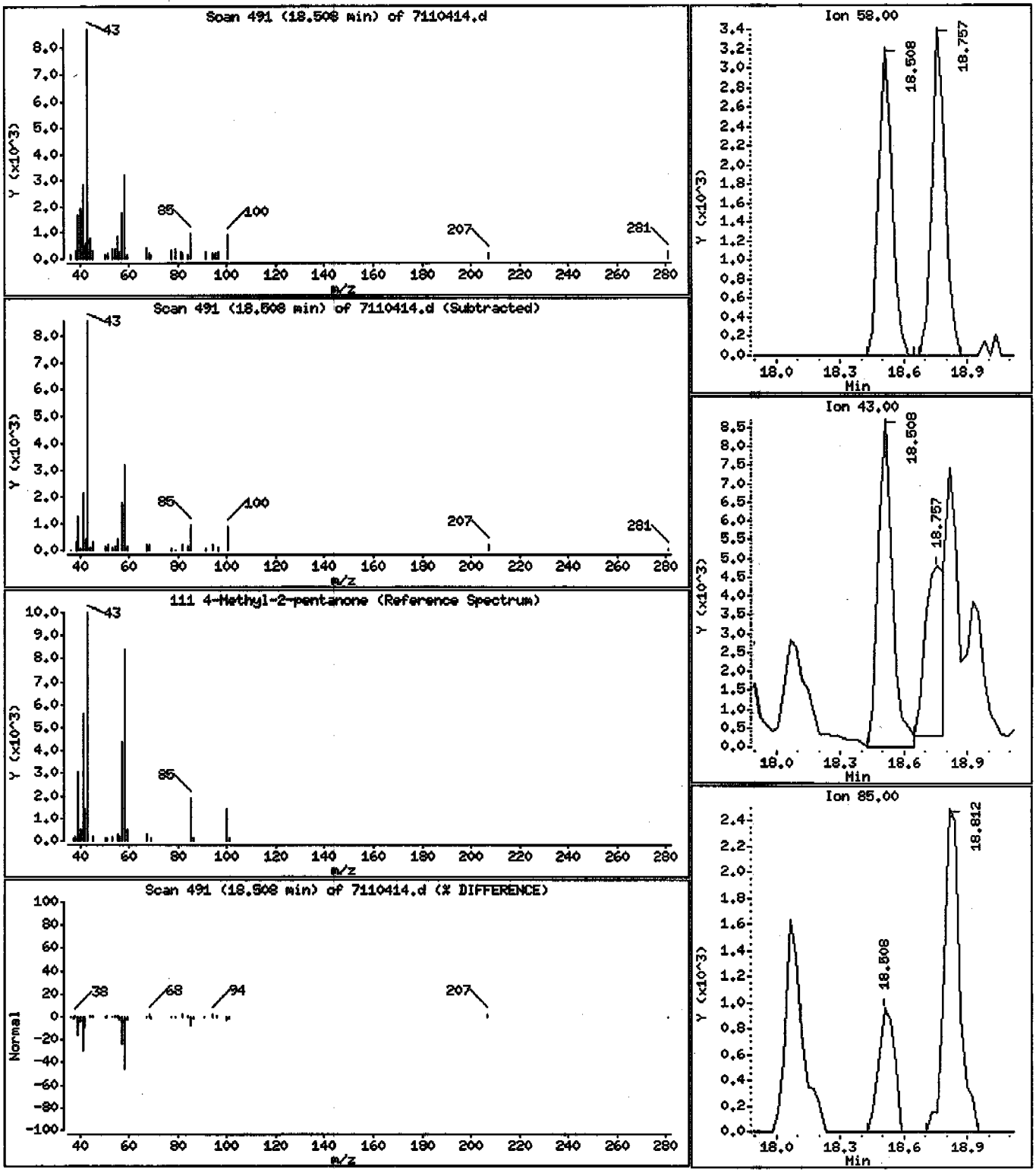
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

111 4-Methyl-2-pentanone

Concentration: 1.109 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

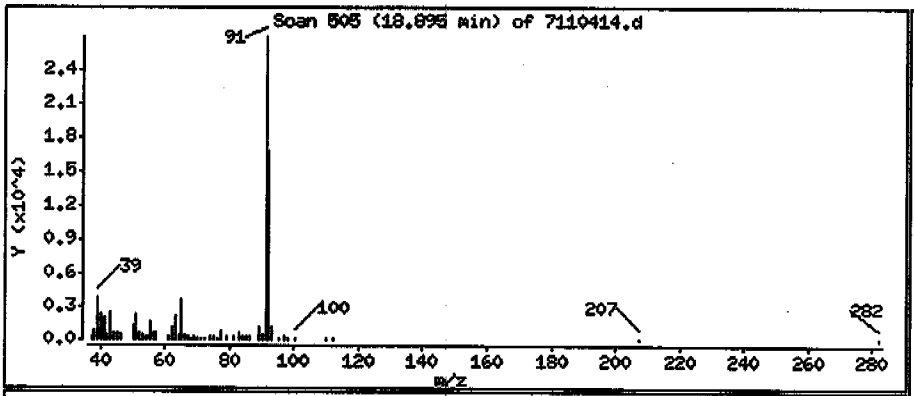
Operator: ab

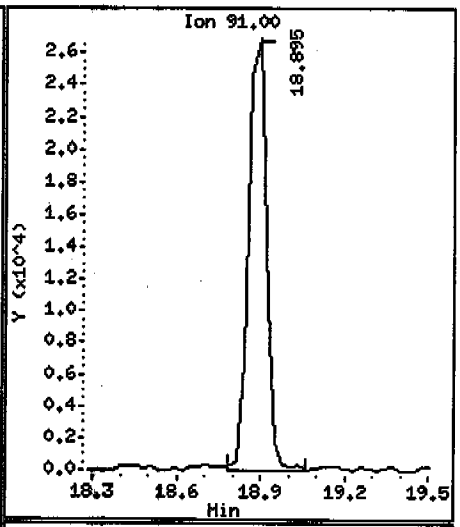
Column phase: RTx-624

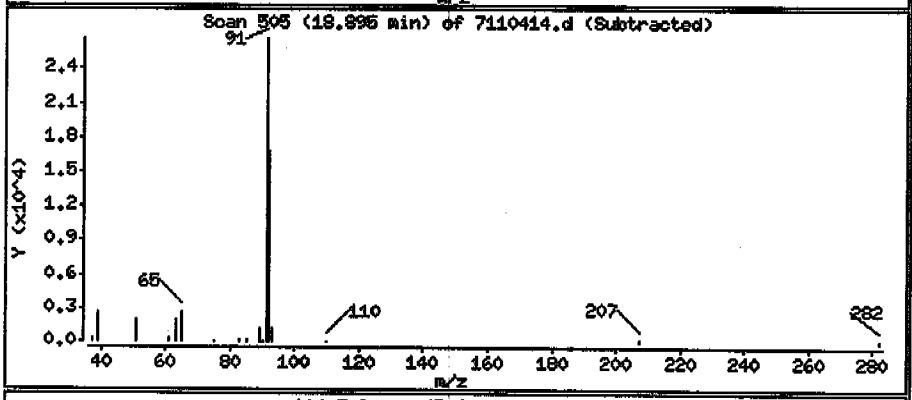
Column diameter: 0.53

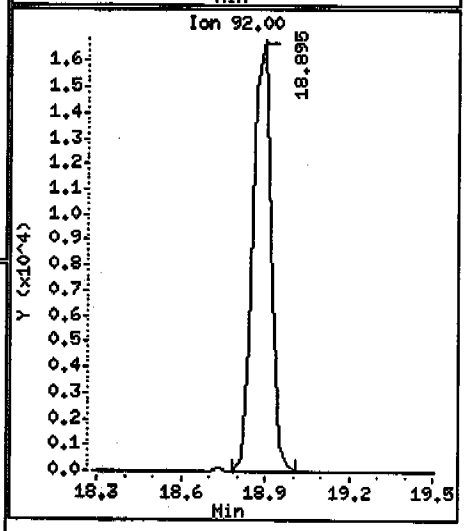
114 Toluene

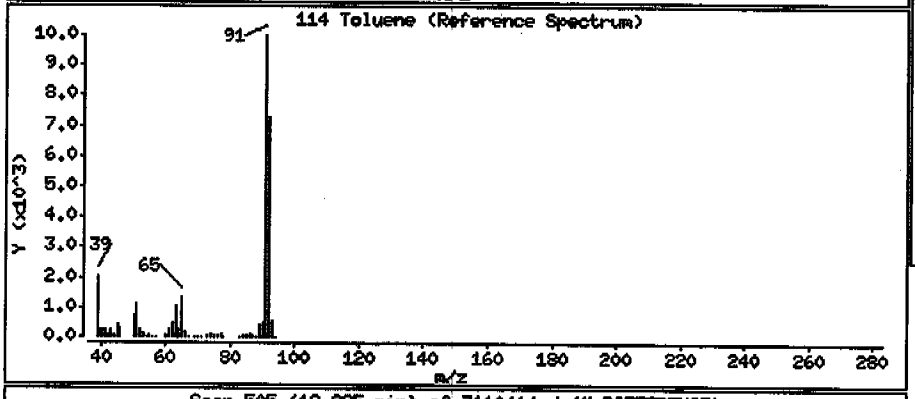
Concentration: 2.547 PPBV

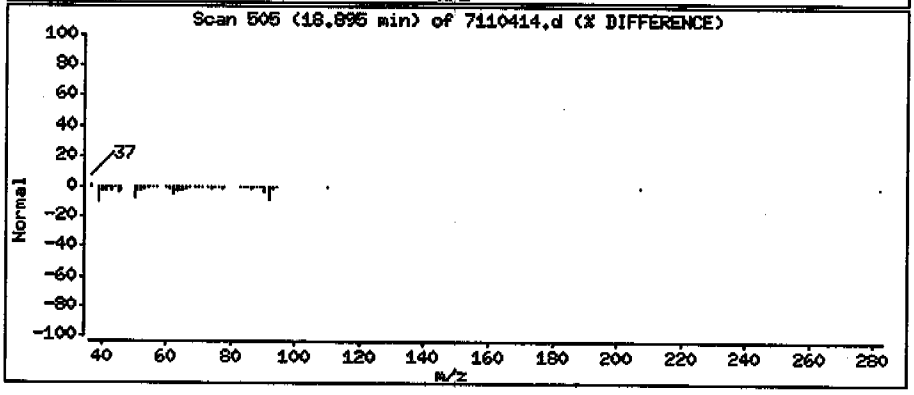












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

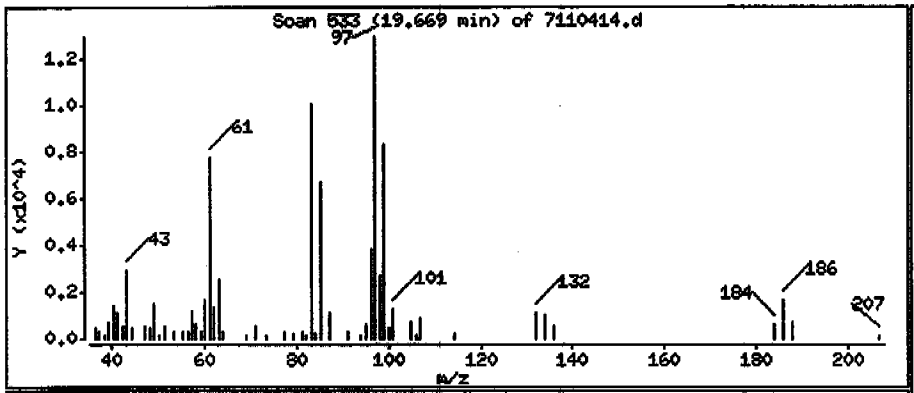
Operator: ab

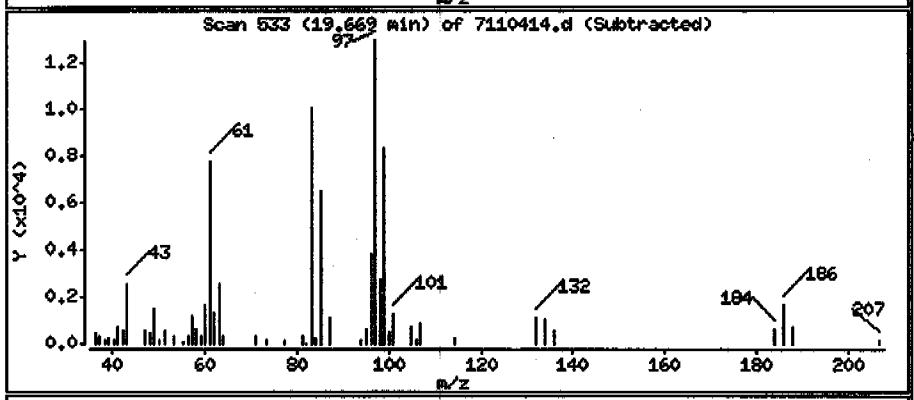
Column phase: RTx-624

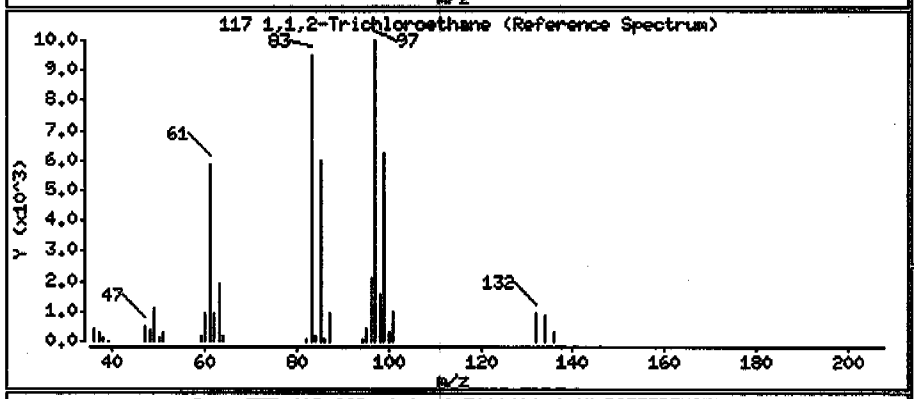
Column diameter: 0.53

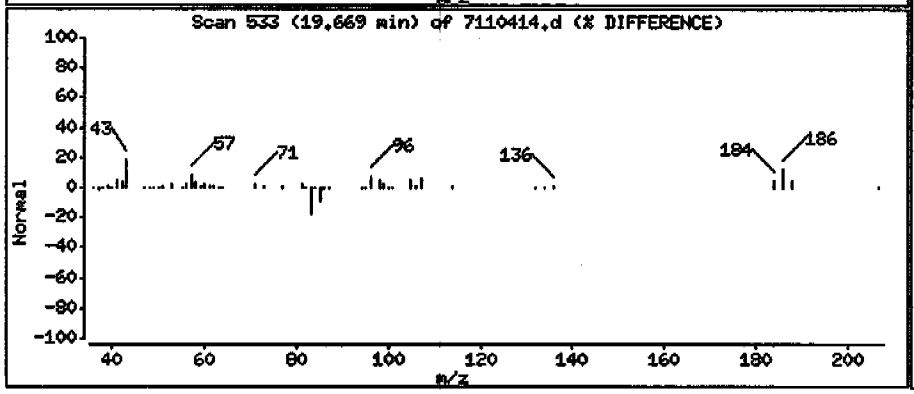
117 1,1,2-Trichloroethane

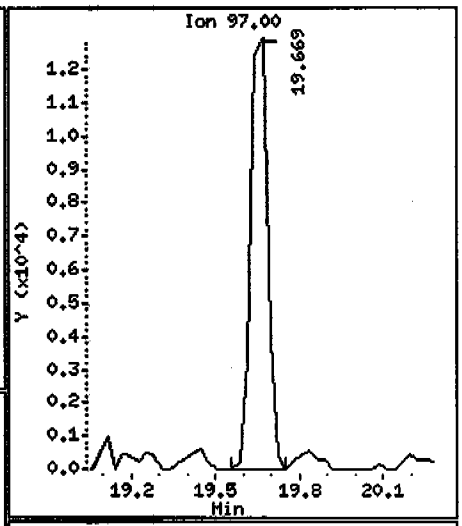
Concentration: 3.428 PPBV

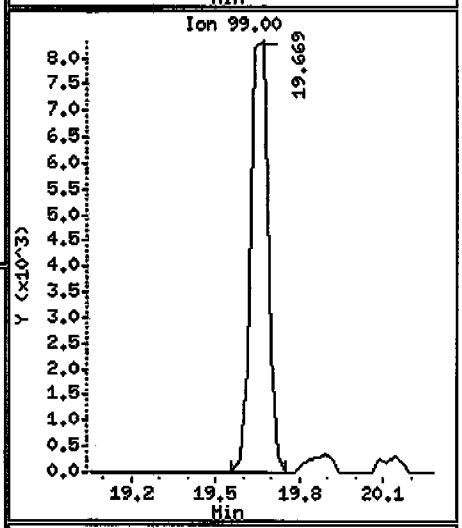


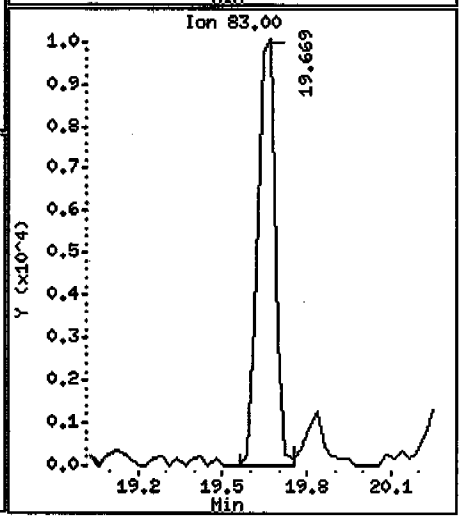












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

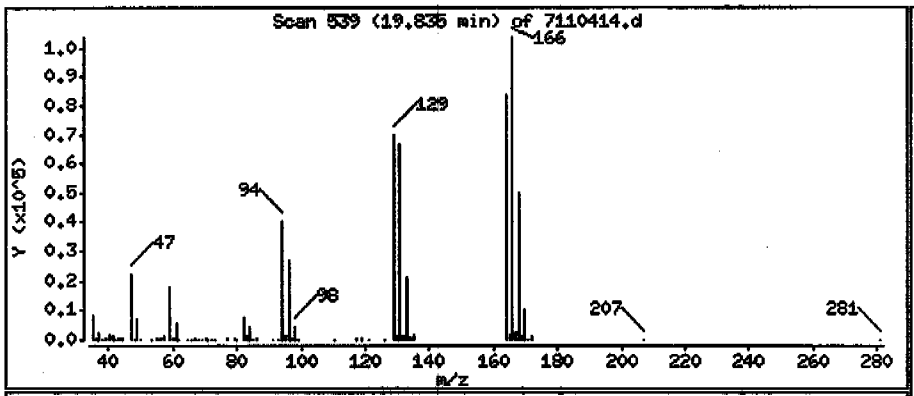
Operator: ab

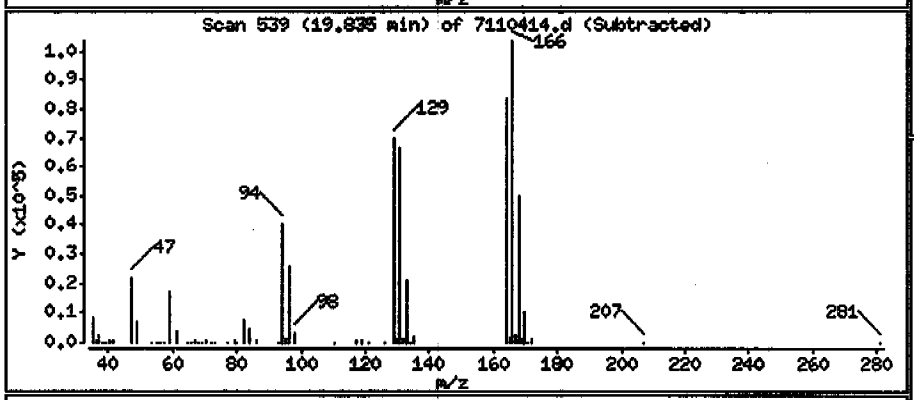
Column phase: RTx-624

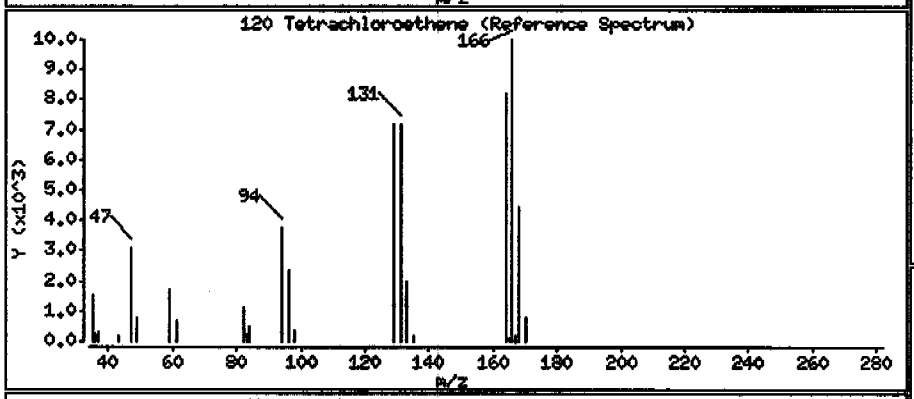
Column diameter: 0.53

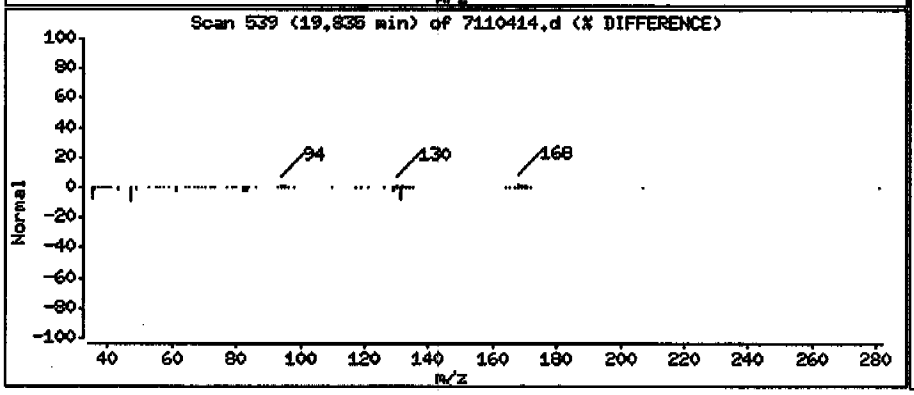
120 Tetrachloroethene

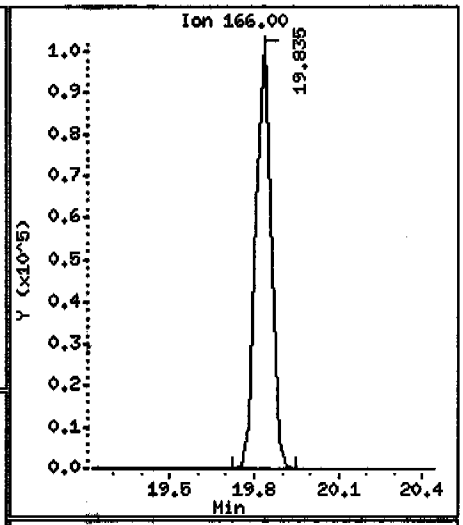
Concentration: 18.458 PPBV

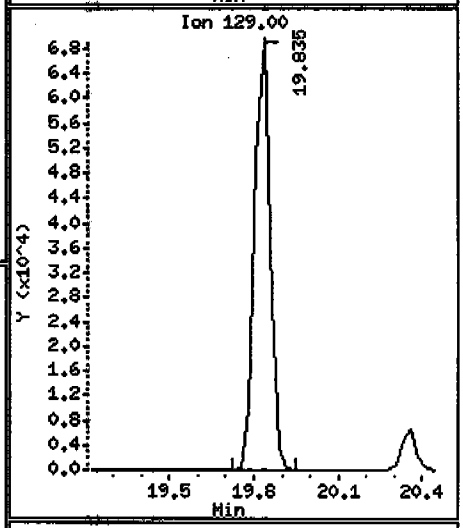


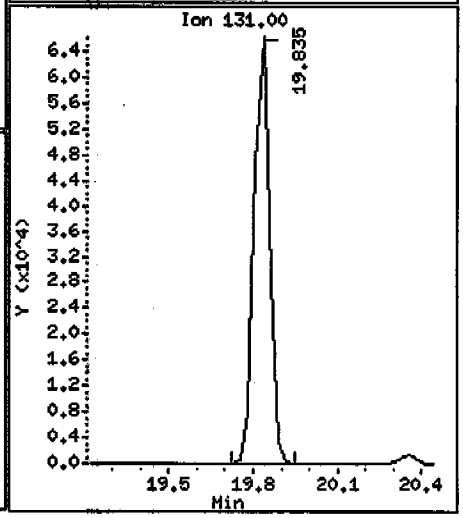












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

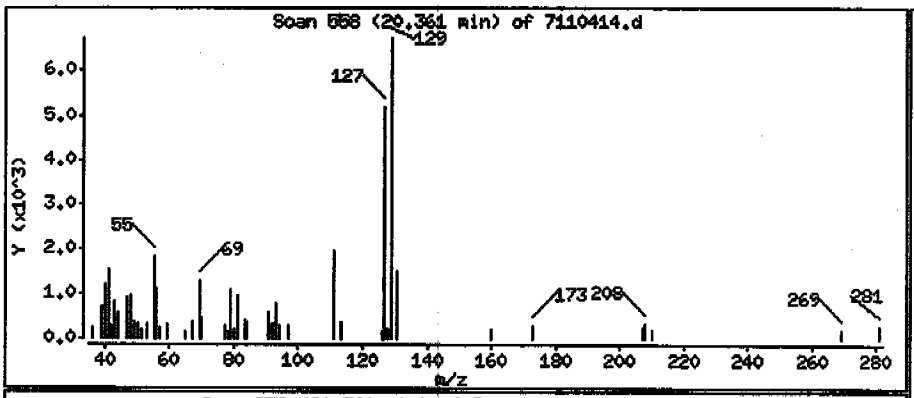
Operator: ab

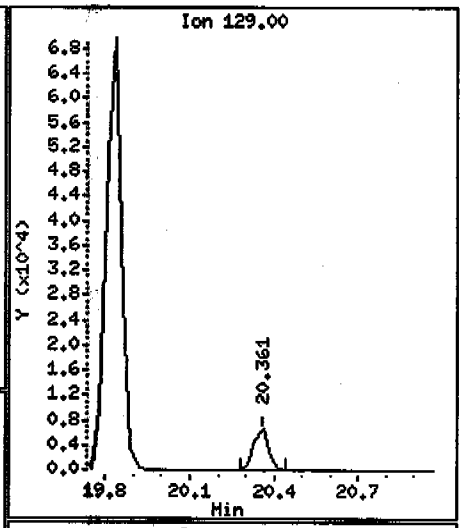
Column phase: RTx-624

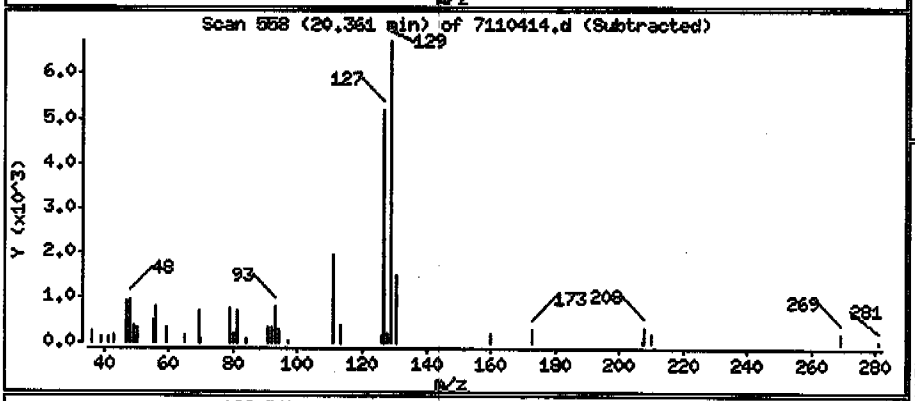
Column diameter: 0.53

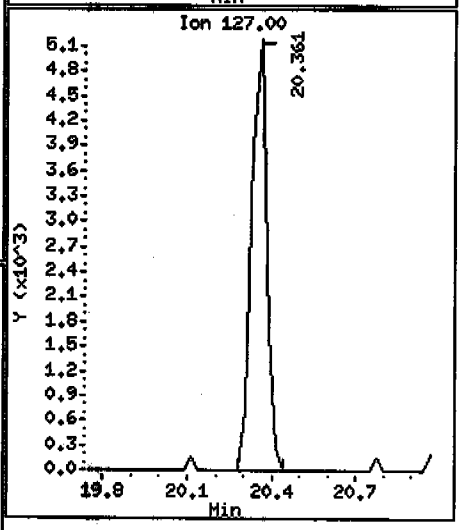
122 Dibromochloromethane

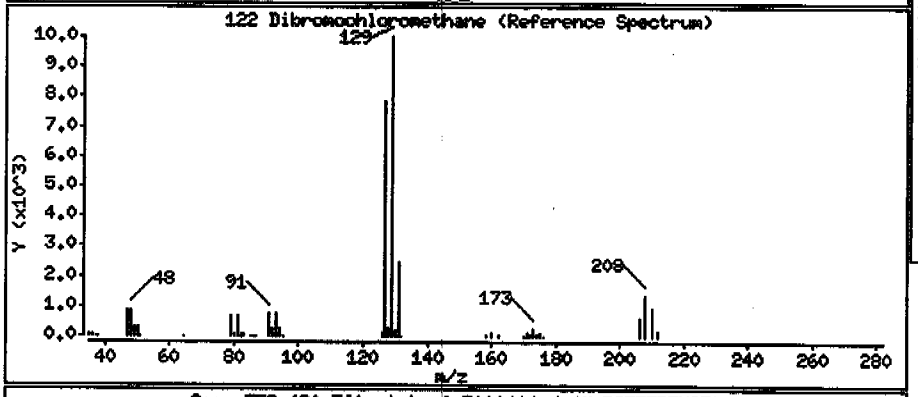
Concentration: 0.8604 PPBV

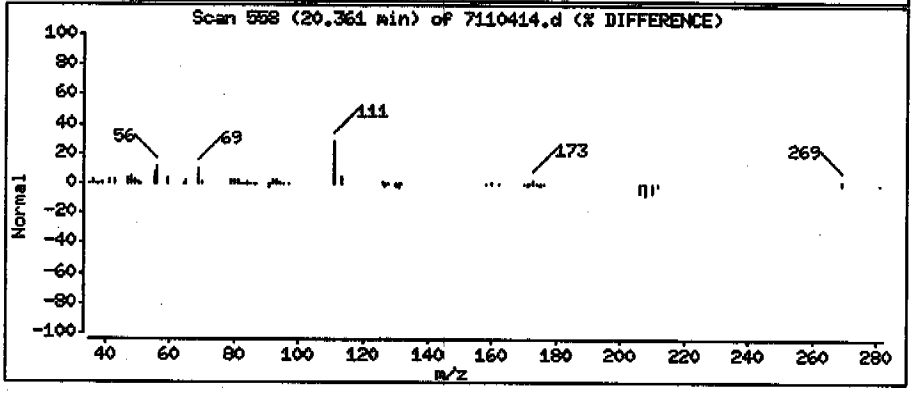












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

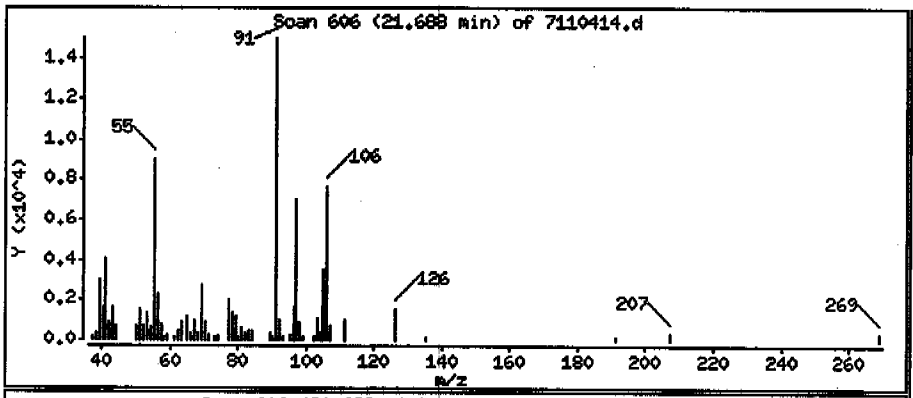
Operator: ab

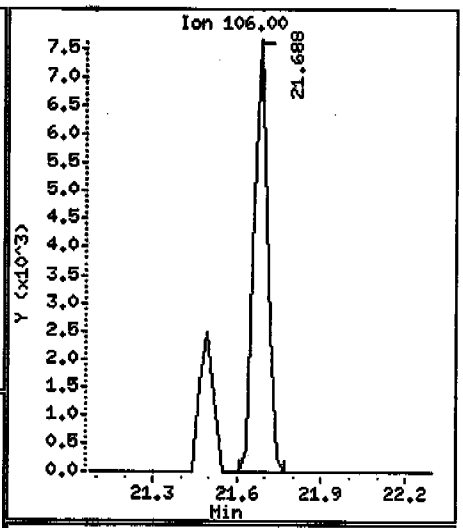
Column phase: RTx-624

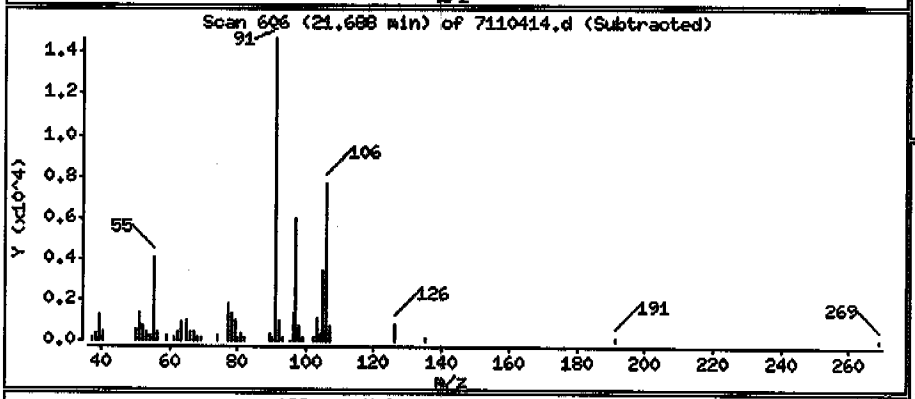
Column diameter: 0.53

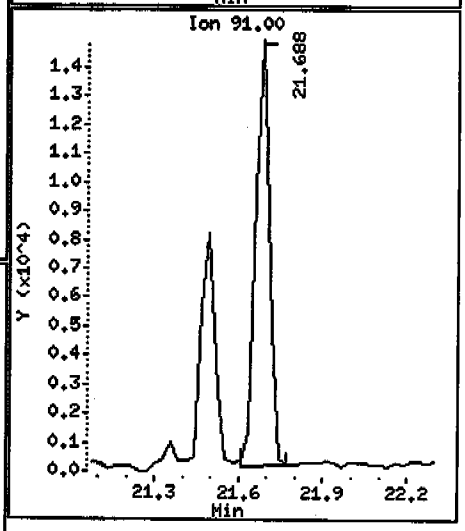
129 m,p-Xylene

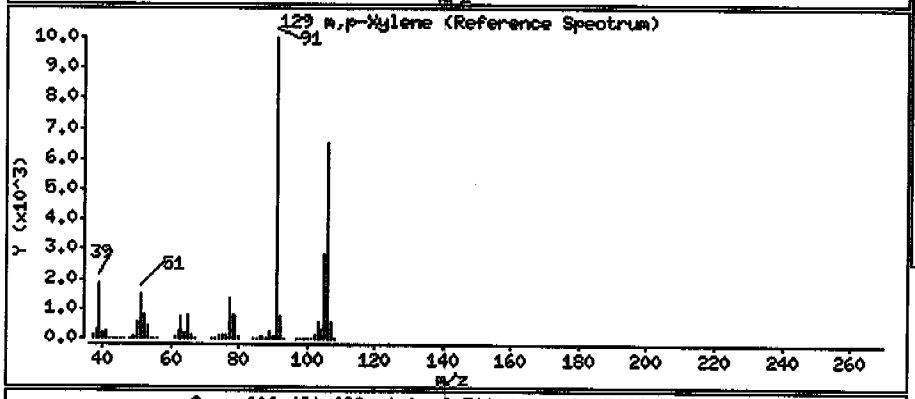
Concentration: 1.154 PPBV

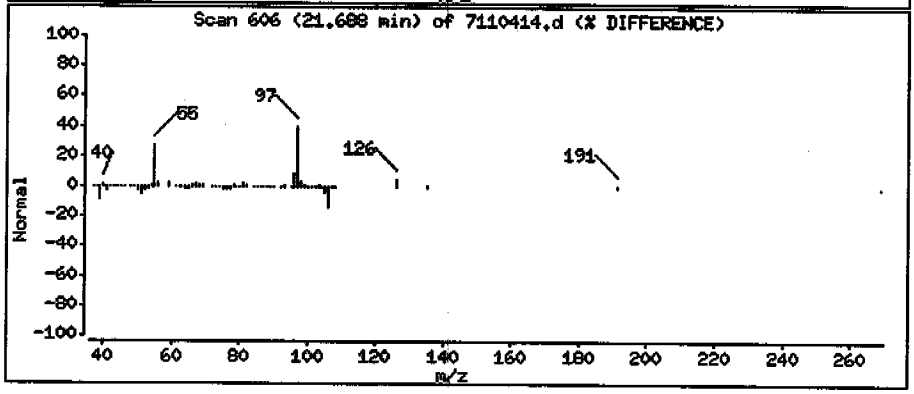












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

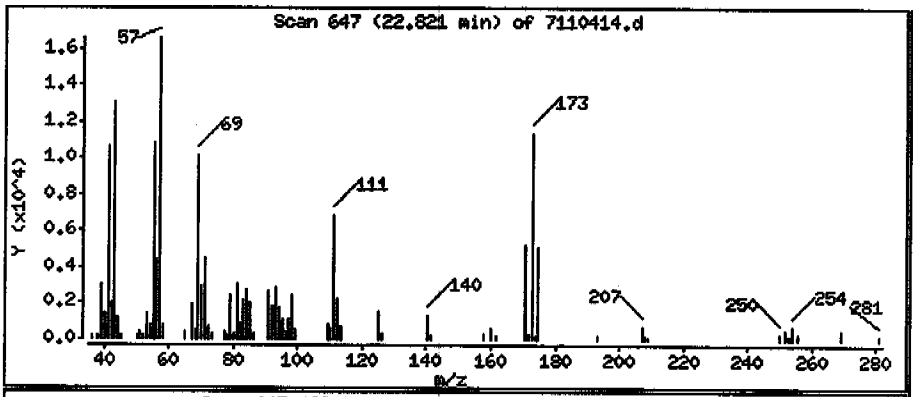
Operator: ab

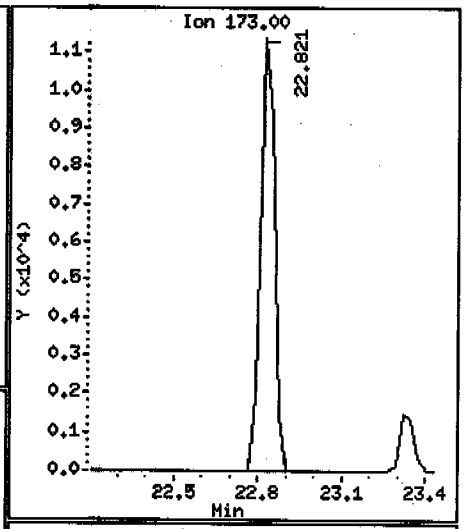
Column phase: RTx-624

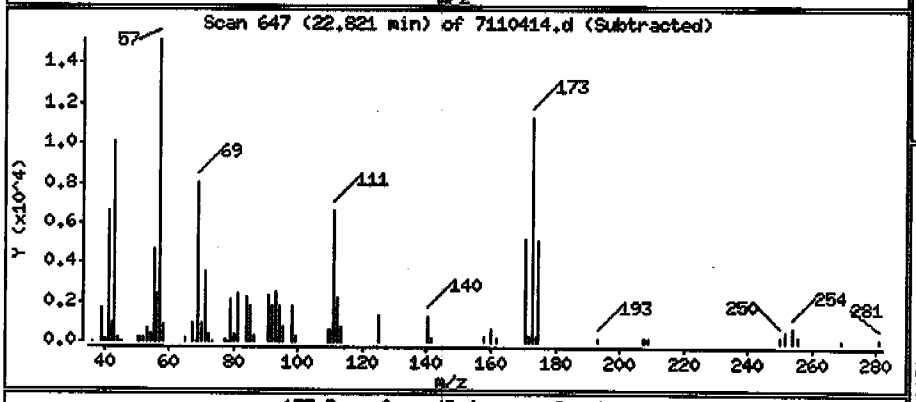
Column diameter: 0.53

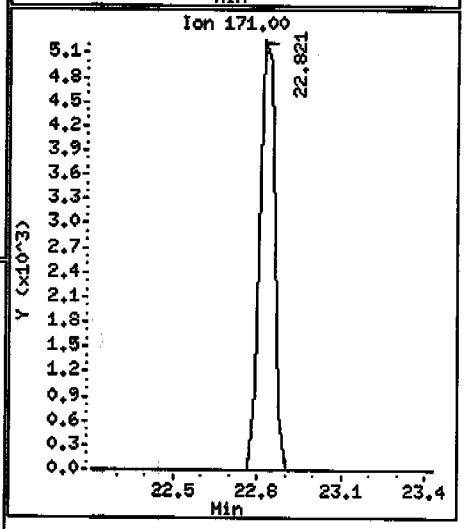
133 Bromoform

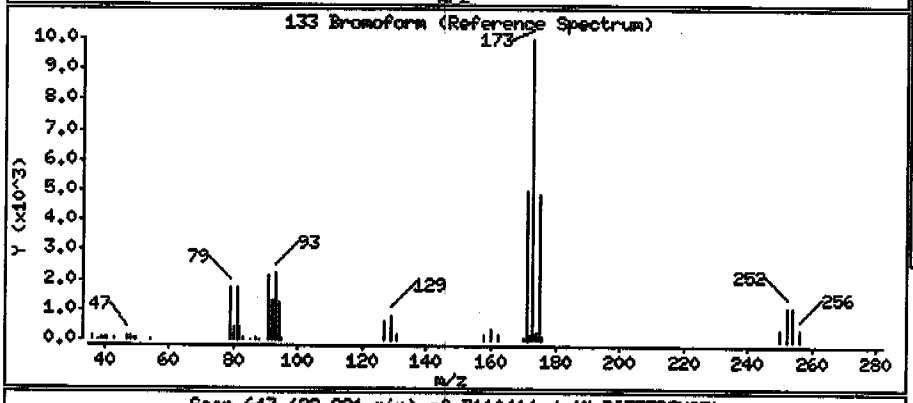
Concentration: 1.588 PPBV

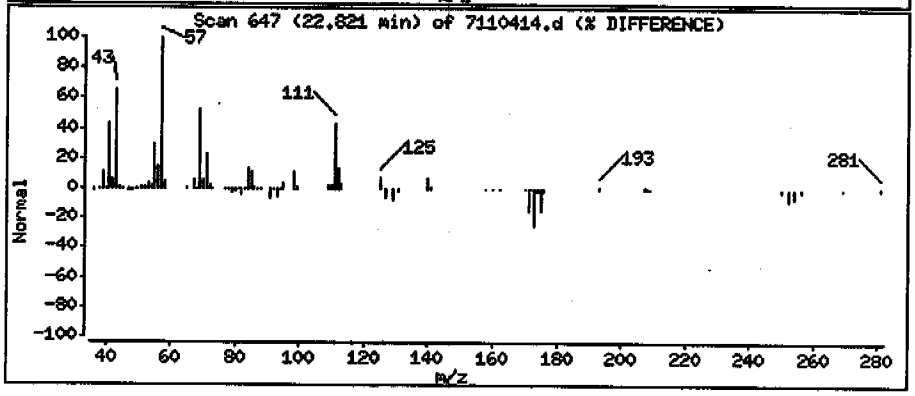












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

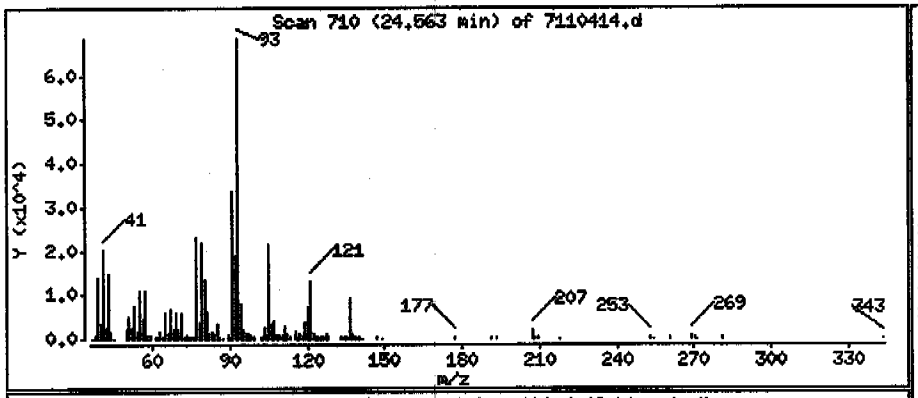
Operator: ab

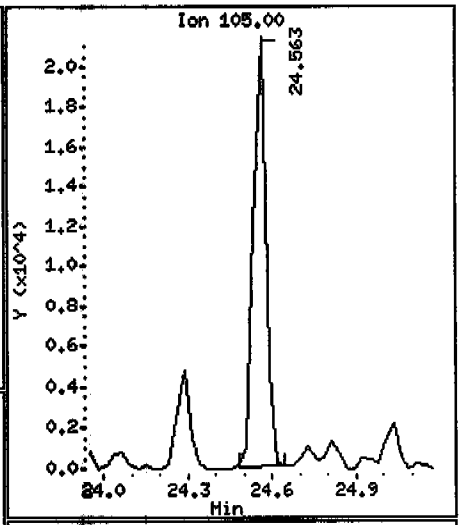
Column phase: RTx-624

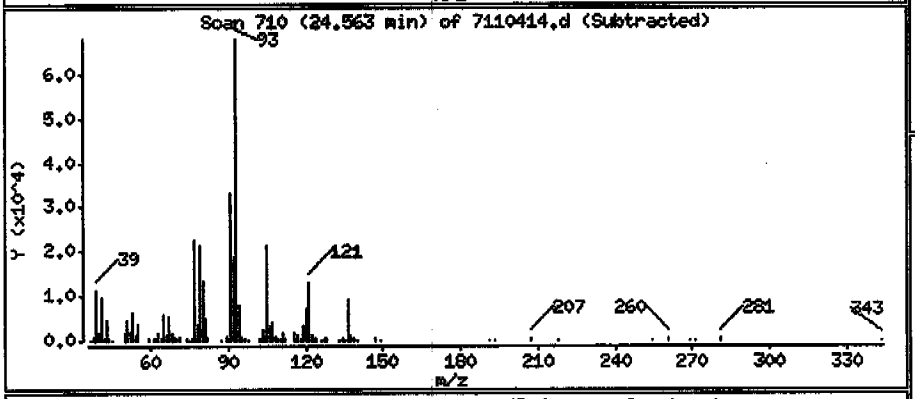
Column diameter: 0.53

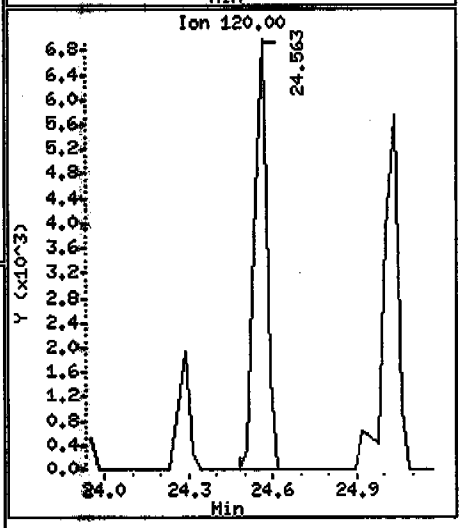
150 1,2,4-Trimethylbenzene

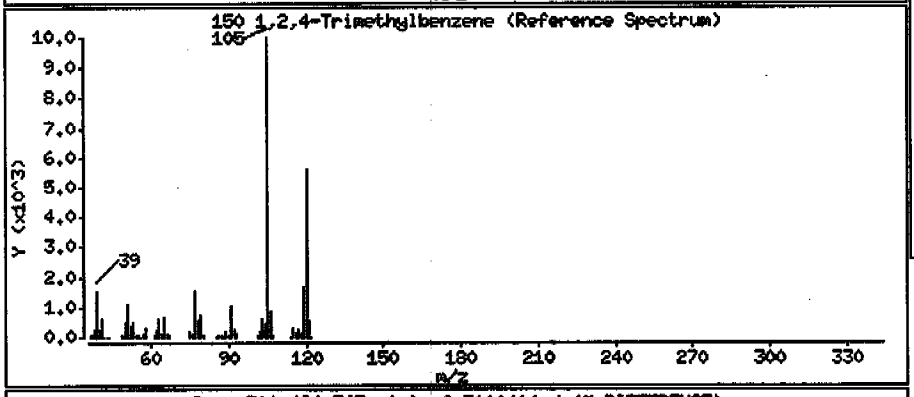
Concentration: 1.563 PPBV

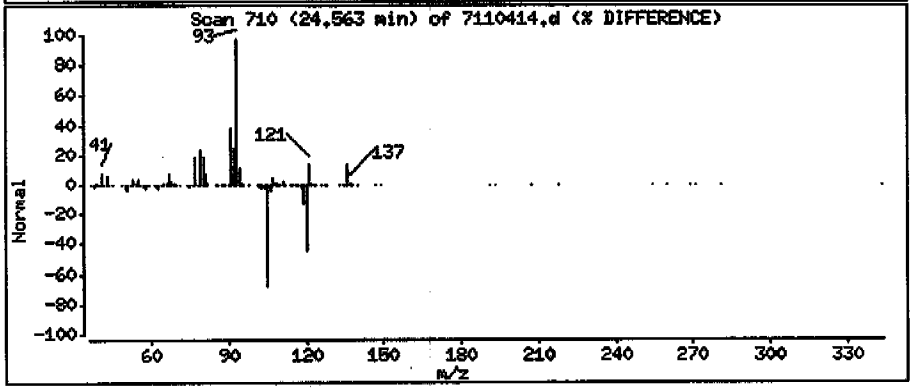












Data File: /chem/msd7.i/7-04nova.b/7110414.d

Date : 05-NOV-2007 03:15

Client ID:

Instrument: msd7.i

Sample Info: 200mL#TO-1556

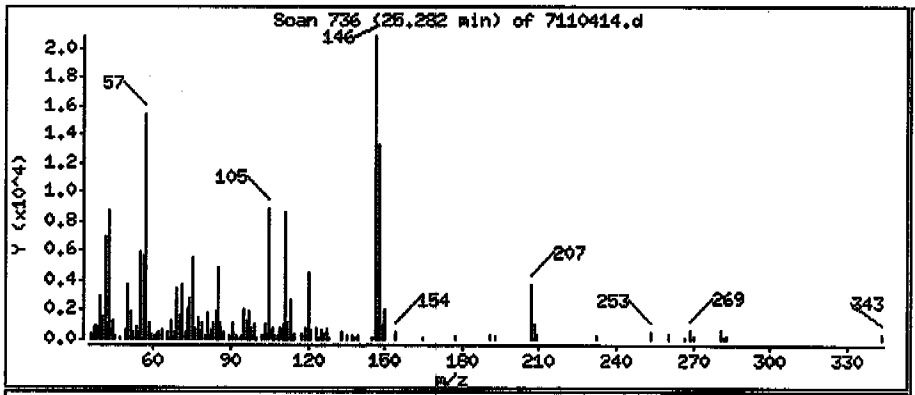
Operator: ab

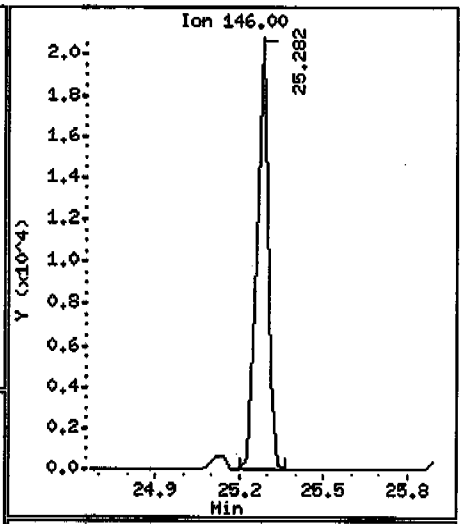
Column phase: RTx-624

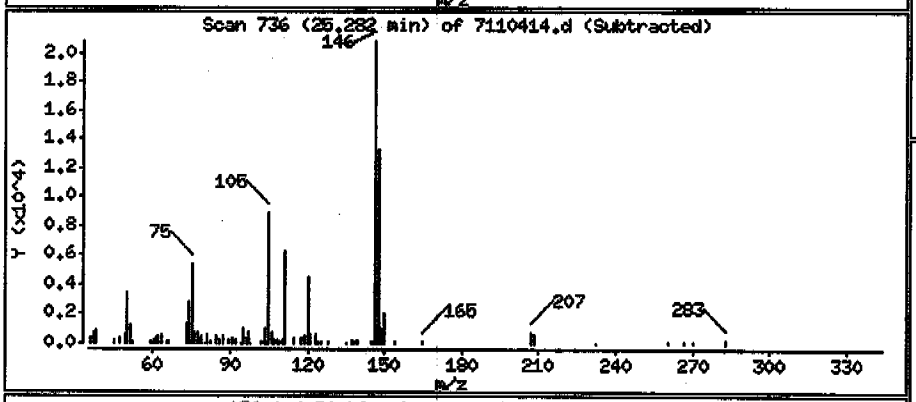
Column diameter: 0.53

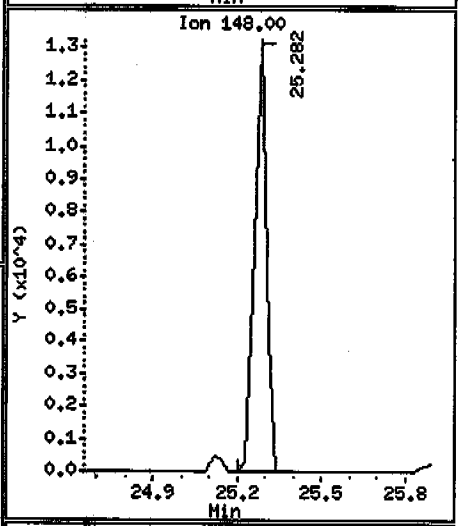
156 1,4-Dichlorobenzene

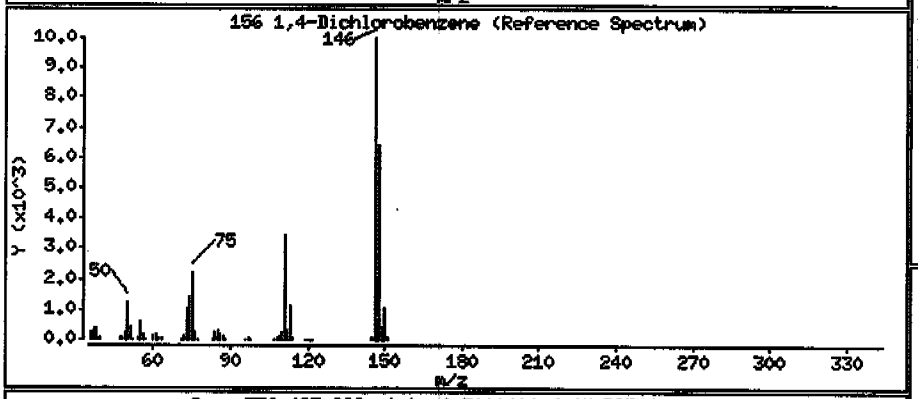
Concentration: 1.686 PPBV

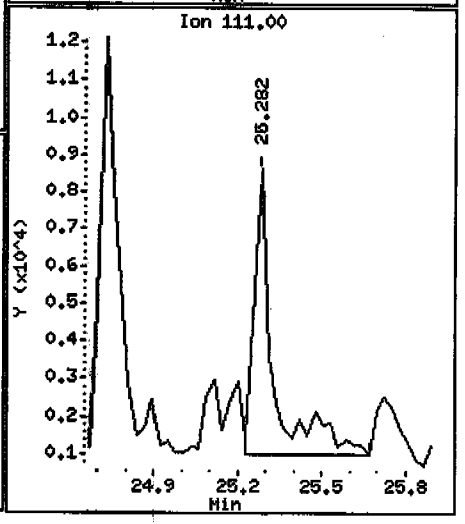


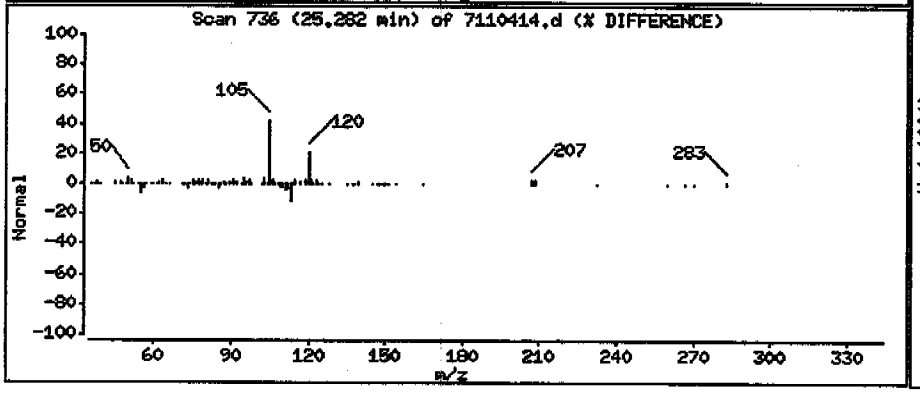












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6807

Lab ID#: 0711008-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.0	4.4	5.1
1,3-Butadiene	0.90	3.5	2.0	7.8
Acetone	3.6	53	8.5	120
Carbon Disulfide	0.90	1.2	2.8	3.8
Methylene Chloride	0.90	2.1	3.1	7.2
Hexane	0.90	1.2	3.2	4.3
2-Butanone (Methyl Ethyl Ketone)	0.90	13	2.6	40
Chloroform	0.90	92	4.4	450
1,1,1-Trichloroethane	0.90	4.1	4.9	23
Carbon Tetrachloride	0.90	10	5.6	63
Benzene	0.90	1.2	2.8	3.9
Heptane	0.90	0.96	3.7	3.9
Trichloroethene	0.90	51	4.8	270
4-Methyl-2-pentanone	0.90	2.1	3.7	8.7
Toluene	0.90	1.5	3.4	5.7
Tetrachloroethene	0.90	96	6.1	650
2-Hexanone	3.6	7.2	15	29
m,p-Xylene	0.90	1.1	3.9	4.9
Bromoform	0.90	1.0	9.2	10
1,2,4-Trimethylbenzene	0.90	1.3	4.4	6.4
Propylene	3.6	49	6.2	85

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6807

Lab ID#: 0711008-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	1.0	4.4	5.1
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	3.5	2.0	7.8
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	3.6	53	8.5	120
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	1.2	2.8	3.8
Methylene Chloride	0.90	2.1	3.1	7.2
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	1.2	3.2	4.3
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	13	2.6	40
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	92	4.4	450
1,1,1-Trichloroethane	0.90	4.1	4.9	23
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	10	5.6	63
Benzene	0.90	1.2	2.8	3.9
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Heptane	0.90	0.96	3.7	3.9
Trichloroethene	0.90	51	4.8	270
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	2.1	3.7	8.7
Toluene	0.90	1.5	3.4	5.7
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	96	6.1	650

0044

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6807

Lab ID#: 0711008-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	7.2	15	29
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	1.1	3.9	4.9
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	1.0	9.2	10
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	1.3	4.4	6.4
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	49	6.2	85

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	108	70-130

0045

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110415.d
Lab Smp Id: 0711008-02A
Inj Date : 05-NOV-2007 04:30
Operator : ab Inst ID: msd7.i
Smp Info : 200mL#34422
Misc Info : 7.5"Hg-5psi
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane							CAS #: 74-97-5	
14.416	14.388 (1.000)	130	550117	25.0000			80.00- 120.00	100.00
14.416	14.388 (1.000)	128	426608				28.08- 128.08	77.55
14.416	14.388 (1.000)	49	1035280				128.80- 228.80	188.19
* 97 1,4-Difluorobenzene							CAS #: 540-36-3	
16.158	16.158 (1.000)	114	1878976	25.0000			80.00- 120.00	100.00
16.158	16.158 (1.000)	88	281149				0.00- 64.88	14.96
* 126 Chlorobenzene-d5							CAS #: 3114-55-4	
21.356	21.356 (1.000)	117	1415558	25.0000			80.00- 120.00	100.00
21.356	21.356 (1.000)	82	741236				4.45- 104.45	52.36
$ 90 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
15.494	15.494 (1.075)	65	714493	24.1765	24.176		80.00- 120.00	100.00
15.494	15.494 (1.075)	67	358644				2.91- 102.91	50.20
$ 113 Toluene-d8							CAS #: 2037-26-5	
18.757	18.757 (1.161)	98	1561527	23.4109	23.411		80.00- 120.00	100.00
18.757	18.757 (1.161)	70	169219				0.00- 61.46	10.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1074993			19.18- 119.18	68.84
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	911864	27.0709	27.071	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1023748			63.49- 163.49	112.27
23.347	23.347 (1.093)	176	885632			46.77- 146.77	97.12
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	653662	27.5689	49.348	80.00- 120.00	100.00(H)
5.645	5.617 (0.392)	42	414111			21.19- 121.19	63.35
5.645	5.617 (0.392)	39	549920			24.83- 124.83	84.13
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.786	5.729 (0.401)	85	50415	0.57993	1.038	80.00- 120.00	100.00
5.786	5.729 (0.401)	87	15590			0.00- 83.07	30.92
22 1,3-Butadiene					CAS #: 106-99-0		
6.968	6.940 (0.483)	54	50460	1.97370	3.533	80.00- 120.00	100.00
6.743	6.940 (0.468)	39	324674			55.97- 155.97	643.43
45 Acetone					CAS #: 67-64-1		
10.517	10.462 (0.730)	58	439487	29.6233	53.026	80.00- 120.00	100.00
10.490	10.462 (0.728)	43	1597031			247.10- 347.10	363.39
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	62579	0.68336	1.223	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	40638	1.15160	2.061	80.00- 120.00	100.00
11.457	11.457 (0.795)	84	28493			15.73- 115.73	70.11
11.457	11.457 (0.795)	51	14347			0.00- 80.85	35.30
65 Hexane					CAS #: 110-54-3		
12.315	12.287 (0.854)	57	31584	0.67868	1.215	80.00- 120.00	100.00
12.315	12.287 (0.854)	43	32644			17.84- 117.84	103.36
12.287	12.287 (0.852)	86	4409			0.00- 65.07	13.96
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	89501	7.51182	13.446	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	492742			458.59- 558.59	550.54
13.891	13.891 (0.964)	57	35043			0.00- 86.57	39.15
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	2836890	51.2180	91.680	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	1832929			15.98- 115.98	64.61

Data File: /chem/msd7.i/7-04nova.b/7110415.d
Report Date: 05-Nov-2007 11:31

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	129207	2.31648	4.146	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	78835			14.42- 114.42	61.01
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	291733	5.57967	9.988	80.00- 120.00	100.00
15.107	15.080 (1:048)	117	304510			54.21- 154.21	104.38
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	50473	0.67606	1.210	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	15083			0.00- 71.87	29.88
94 Heptane					CAS #: 142-82-5		
15.715	15.716 (0.973)	71	12316	0.53640	0.9602	80.00- 120.00	100.00
15.715	15.716 (0.973)	43	22146			158.53- 258.53	179.81
15.715	15.716 (0.973)	57	9053			59.34- 159.34	73.51
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	942990	28.4349	50.898	80.00- 120.00	100.00
16.655	16.628 (1.031)	130	980180			54.96- 154.96	103.94
16.628	16.628 (1.029)	97	610151			15.03- 115.03	64.70
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	26421	1.18259	2.117	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	67997			222.97- 322.97	257.36
18.508	18.508 (1.145)	85	9877			0.00- 90.48	37.38
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	69162	0.84579	1.514	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	42672			12.81- 112.81	61.70
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2044126	53.7548	96.221	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1422028			18.66- 118.66	69.57
19.835	19.835 (0.929)	131	1372406			16.81- 116.81	67.14
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.974 (0.935)	58	125786	4.00308	7.166	80.00- 120.00	100.00
19.973	19.974 (0.935)	43	244530			132.73- 232.73	194.40
19.973	19.974 (0.935)	100	22953			0.00- 67.05	18.25
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	25638	0.62660	1.122	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	50331			145.05- 245.05	196.31
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	25968	0.56926	1.019	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
133 Bromoform (continued)								
22.821	22.821	(1.069)	171	12422			1.50- 101.50	47.84
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.563	24.563	(1.150)	105	55432	0.73224	1.311	80.00- 120.00	100.00
24.563	24.563	(1.150)	120	15578			0.00- 98.95	28.10

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110415.d
Lab Smp Id: 0711008-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 7.5"Hg-5psi

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	550117	-15.52
97 1,4-Difluorobenze	2188066	1312840	3063292	1878976	-14.13
126 Chlorobenzene-d5	1729248	1037549	2420947	1415558	-18.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 05-Nov-2007 11:31

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 7-04nova
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0711008-02A
Level: LOW Operator: ab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 7.5"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.176	96.71	70-130
$ 113 Toluene-d8	25.000	23.411	93.64	70-130
$ 137 Bromofluorobenzene	25.000	27.071	108.28	70-130

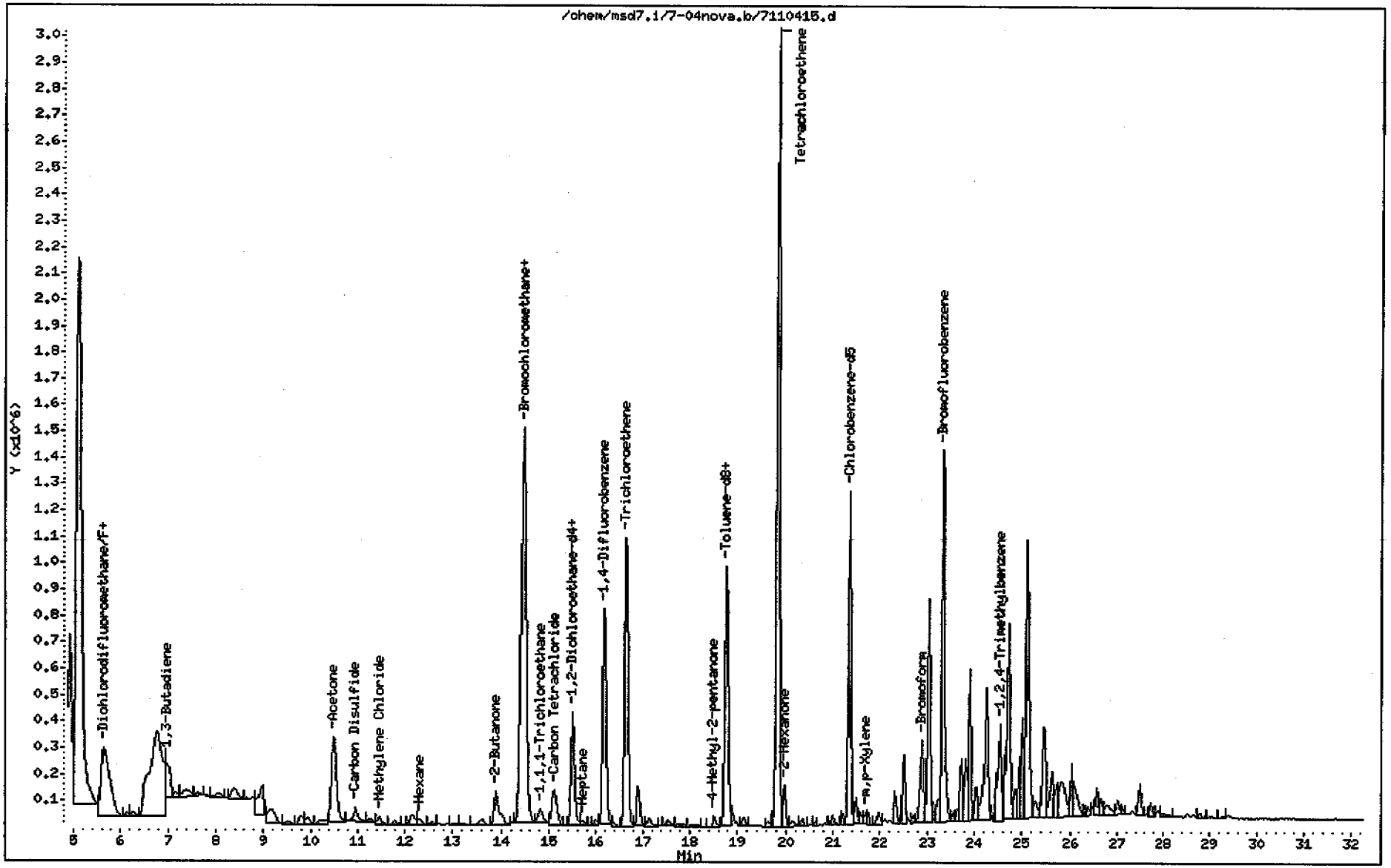
0052

Data File: /chem/msd7.i/7-04nova.b/7110415.d
Date : 05-NOV-2007 04:30
Client ID:
Sample Info: 200mL#34422

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

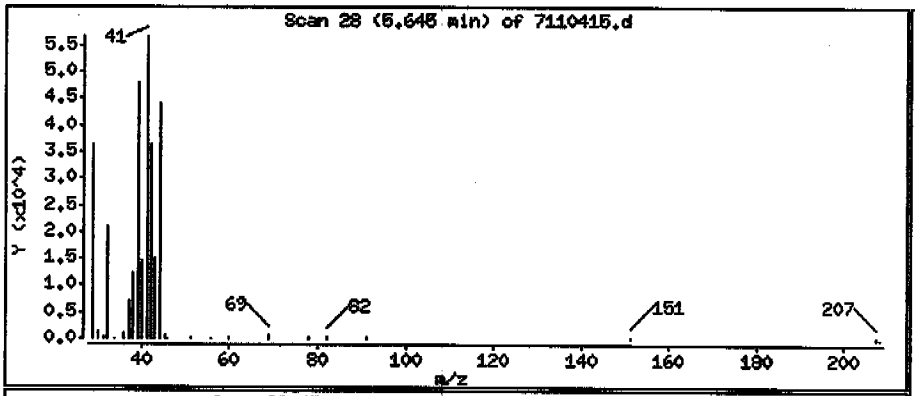
Operator: ab

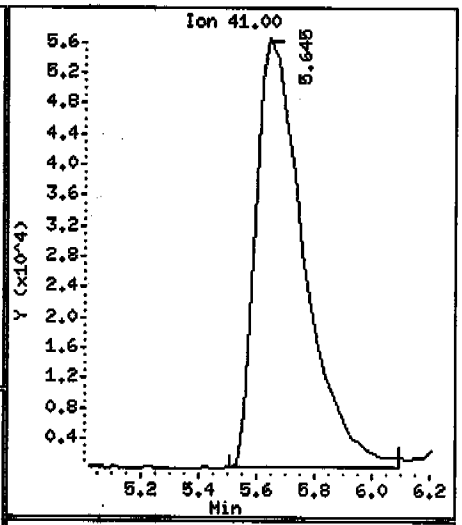
Column phase: RTx-624

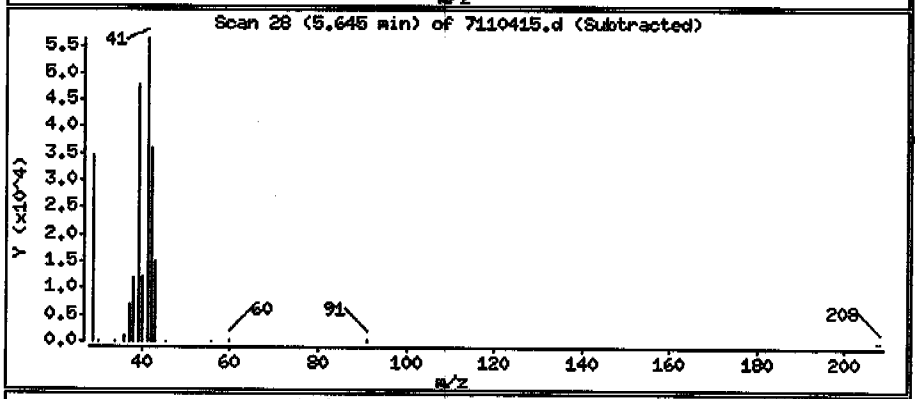
Column diameter: 0.53

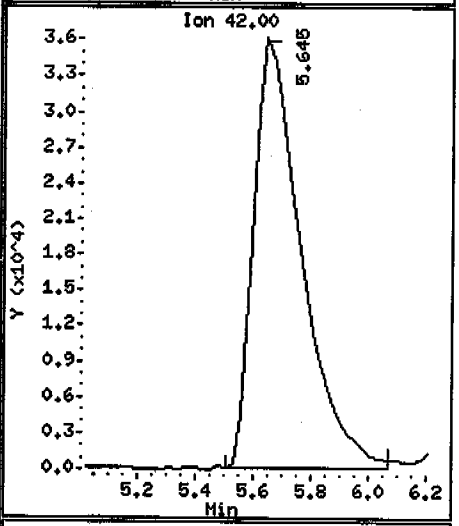
11 Propylene

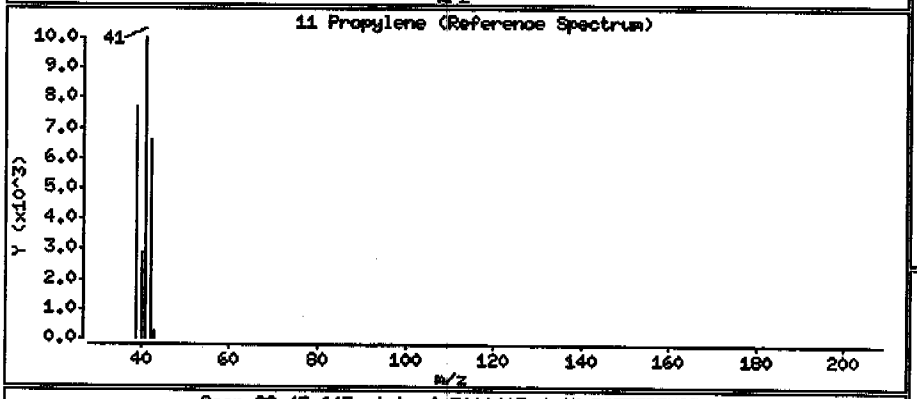
Concentration: 49.348 PPBV

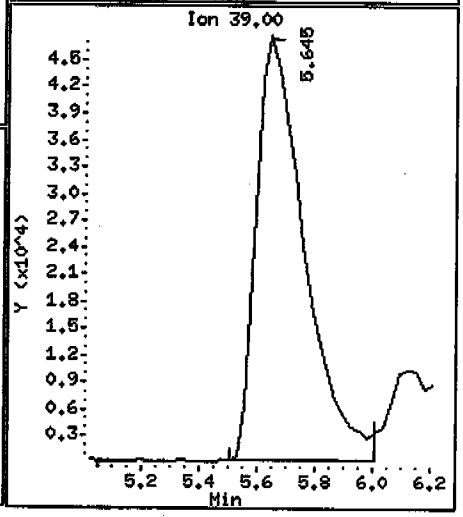


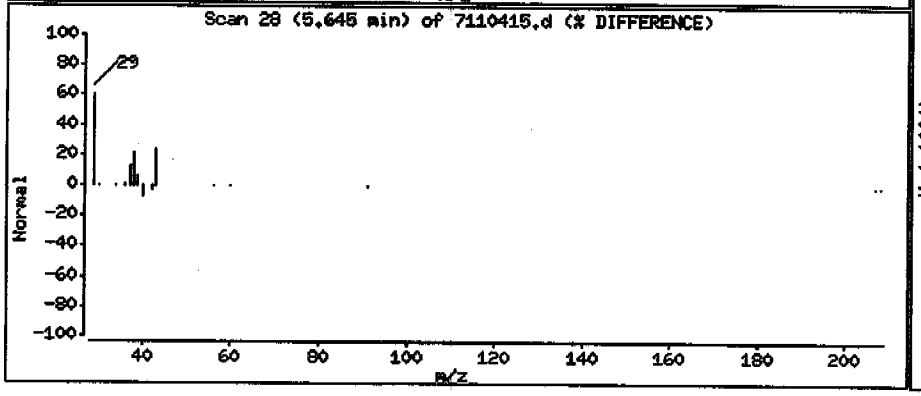












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

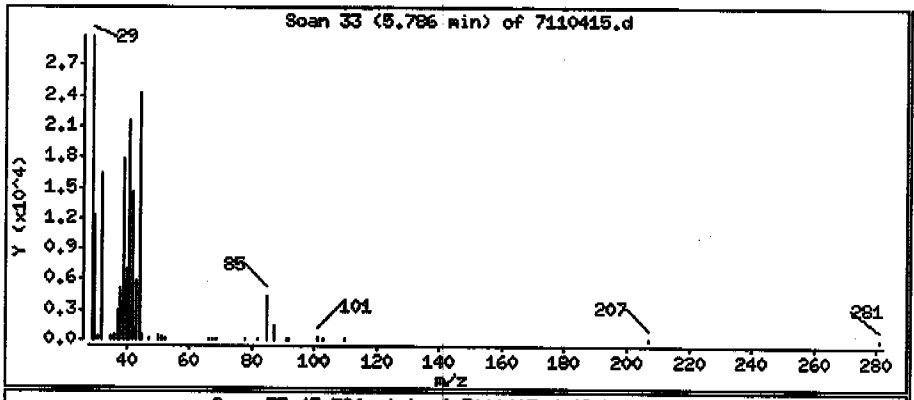
Operator: ab

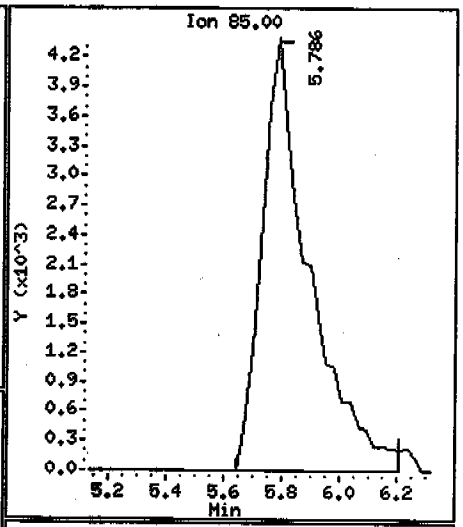
Column phase: RTx-624

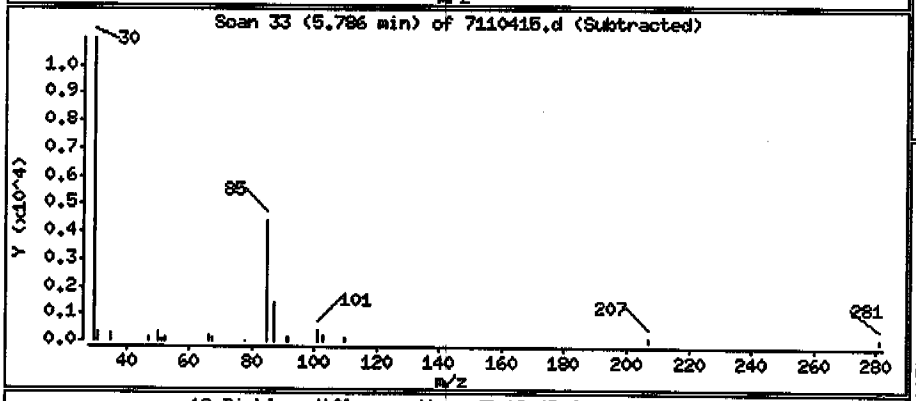
Column diameter: 0.53

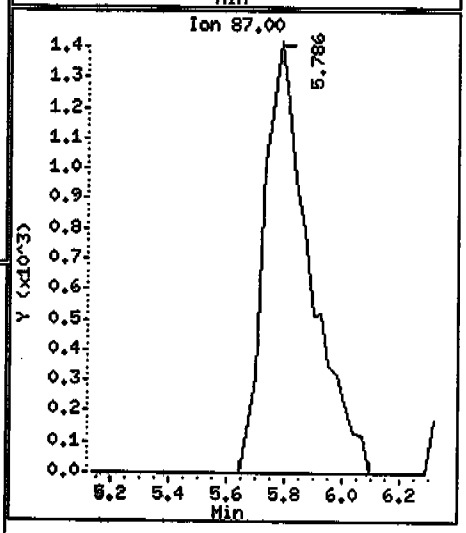
12 Dichlorodifluoromethane/Fr12

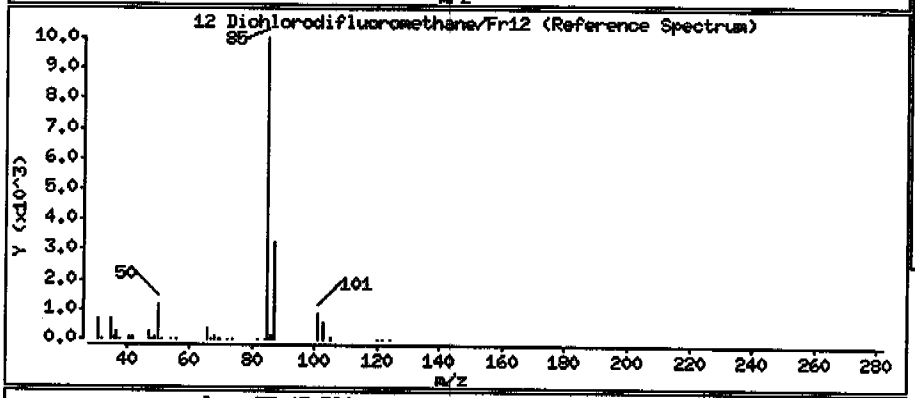
Concentration: 1.038 PPBV

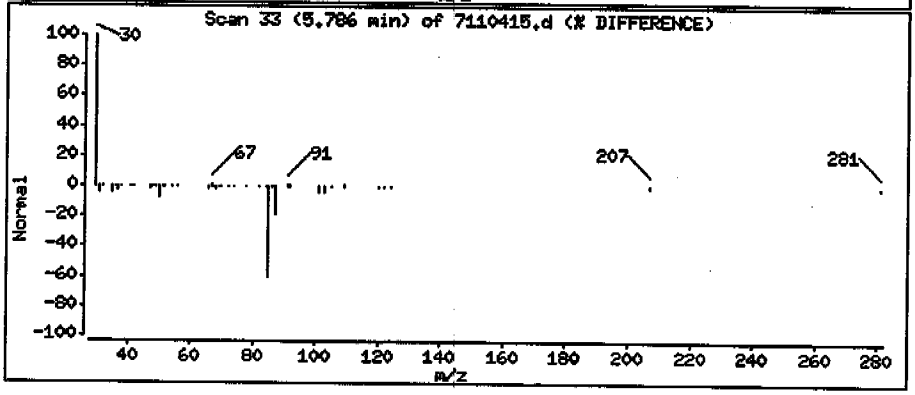












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

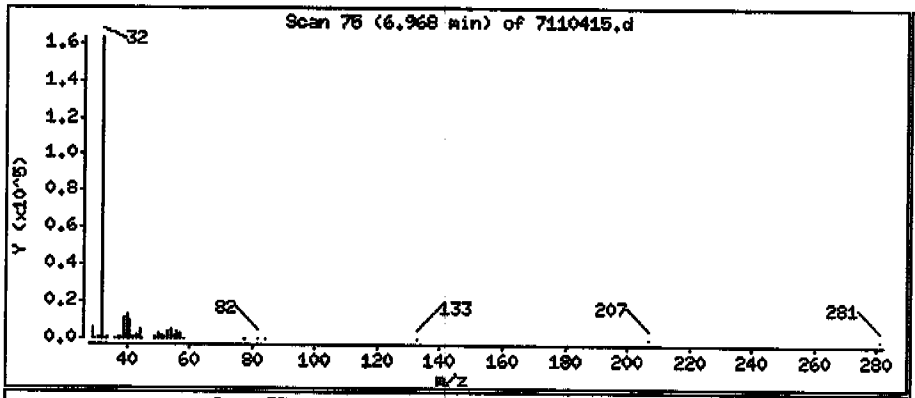
Operator: ab

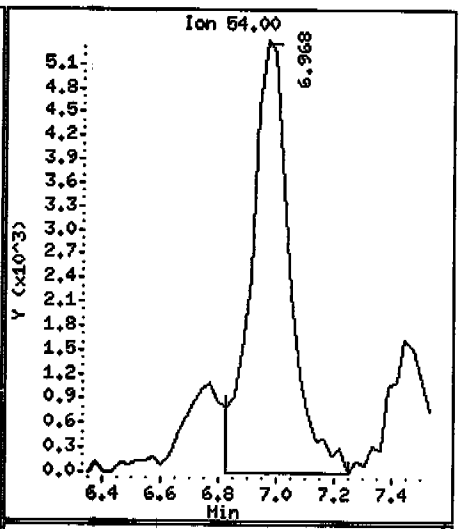
Column phase: RTx-624

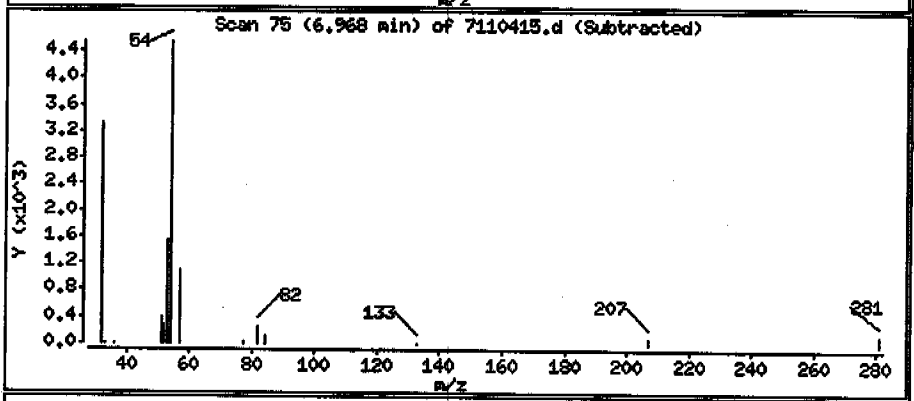
Column diameter: 0.53

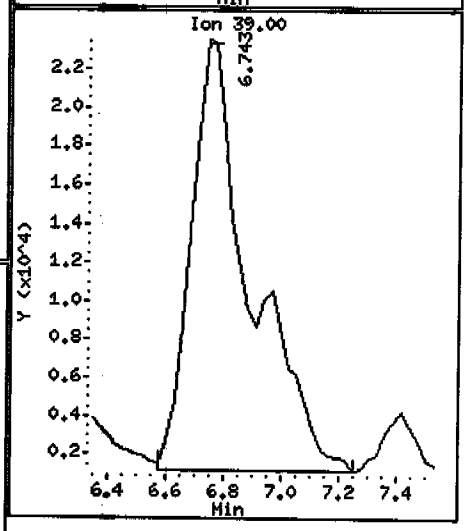
22 1,3-Butadiene

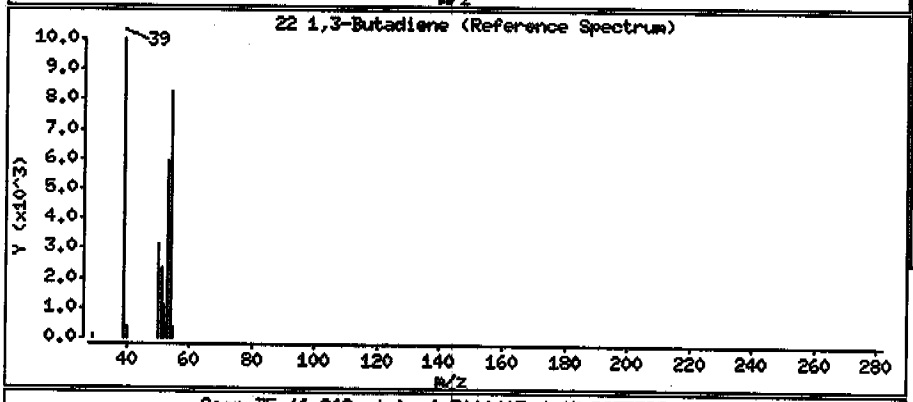
Concentration: 3.533 PPBV

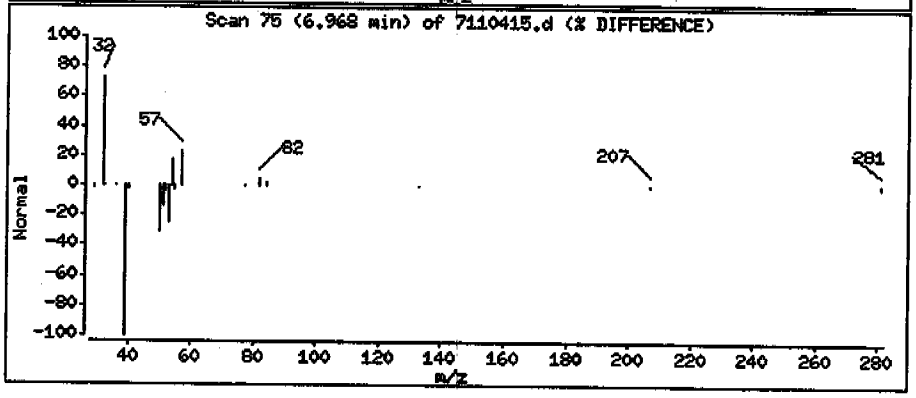












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Sample Info: 200mL#34422

Instrument: msd7.i

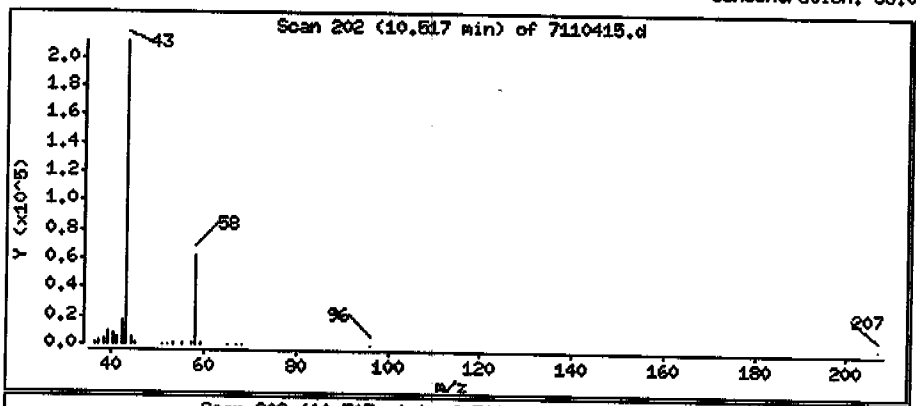
Operator: ab

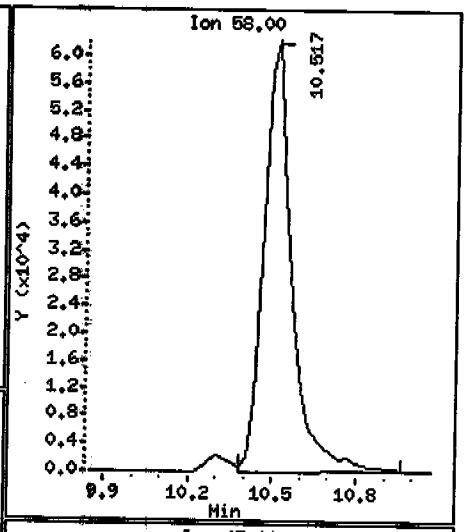
Column phase: RTx-624

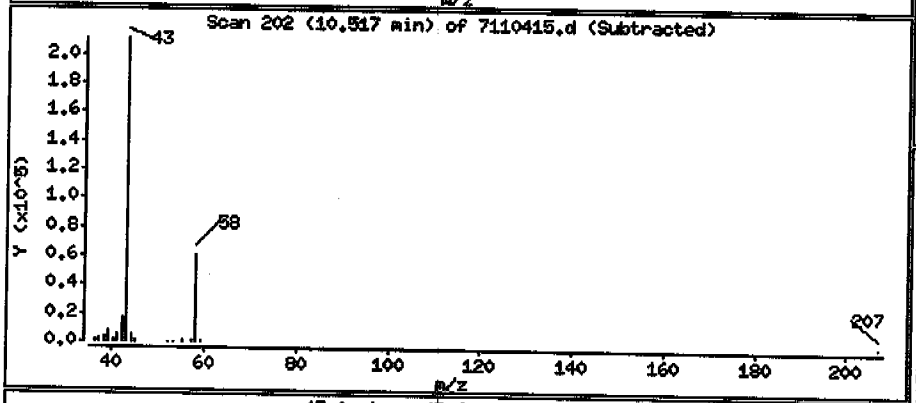
Column diameter: 0.53

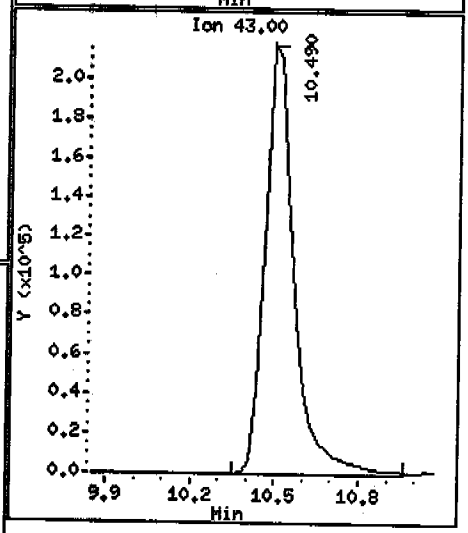
45 Acetone

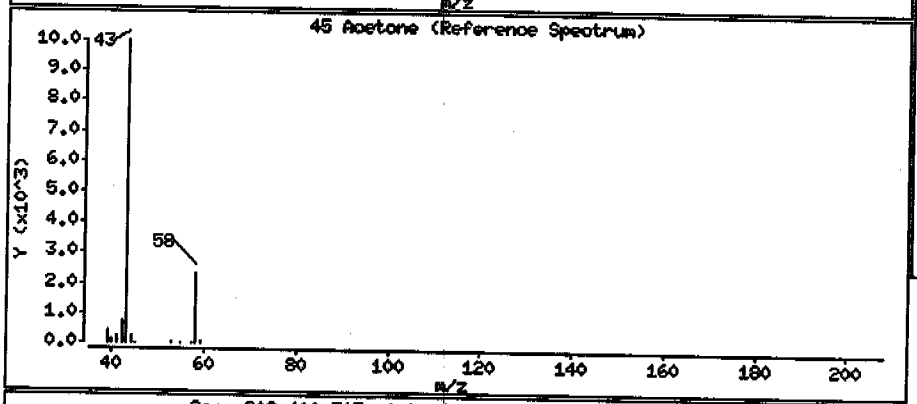
Concentration: 53.026 PPBV

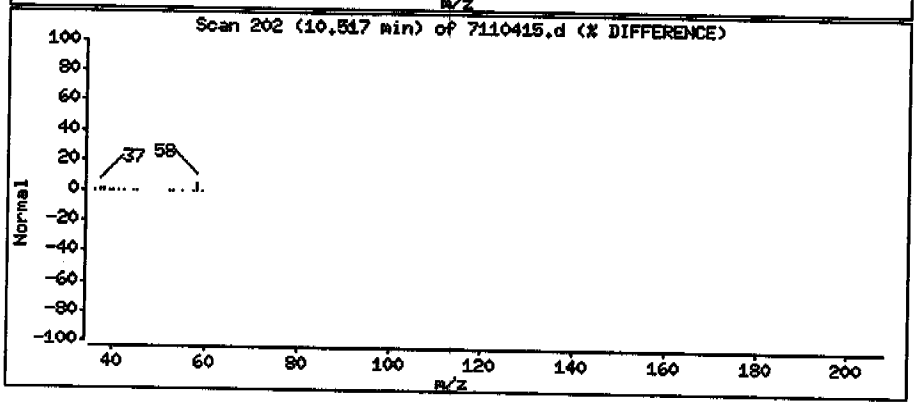












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

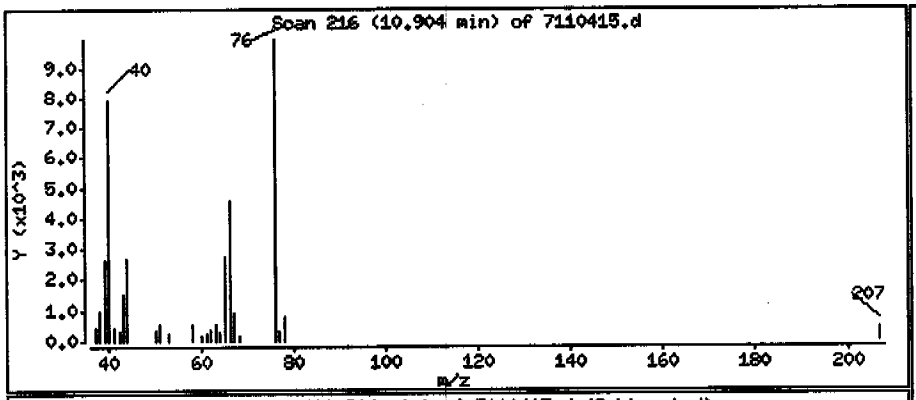
Operator: ab

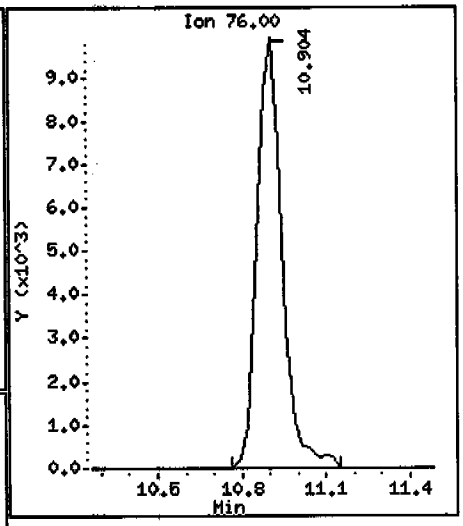
Column phase: RTx-624

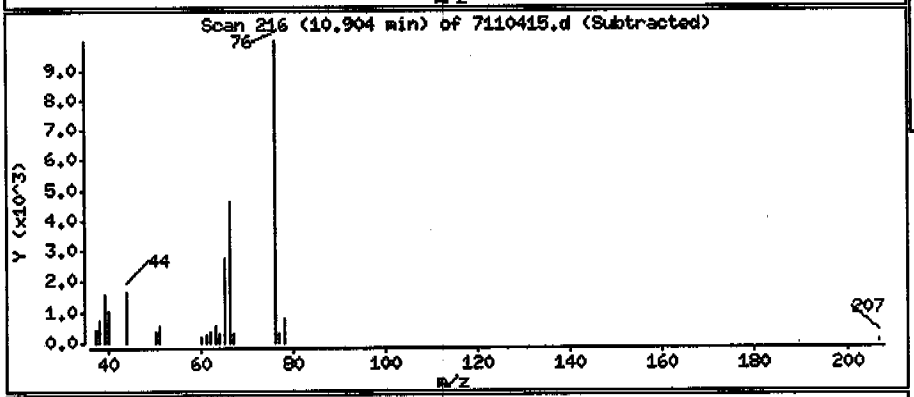
Column diameter: 0.53

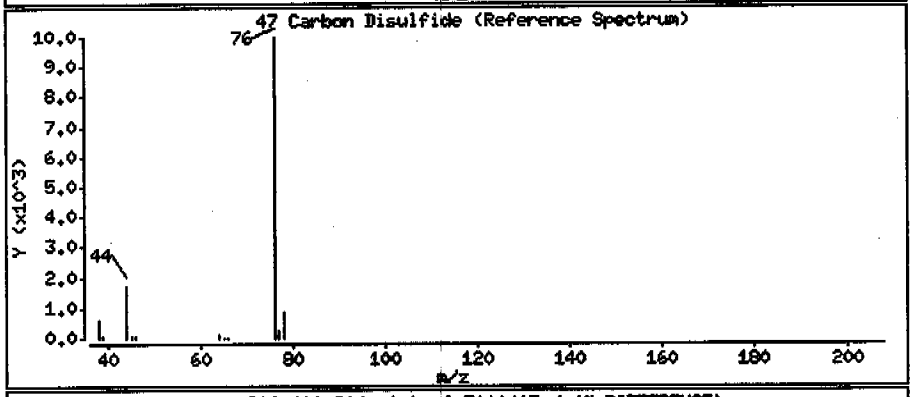
47 Carbon Disulfide

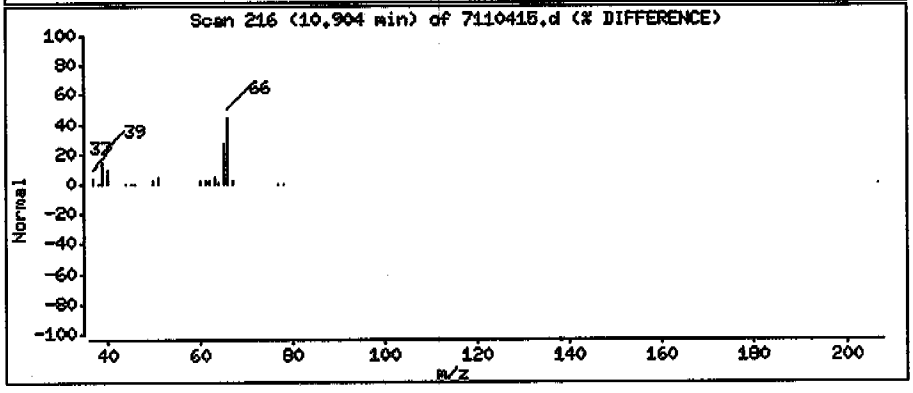
Concentration: 1.223 PPBV











Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

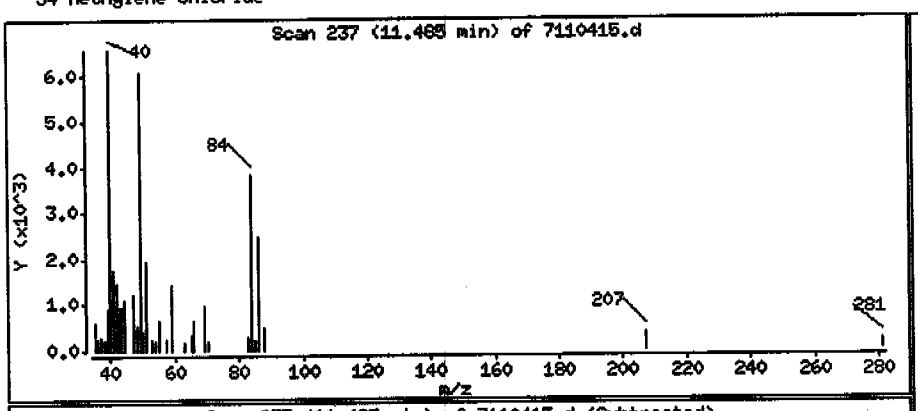
Operator: ab

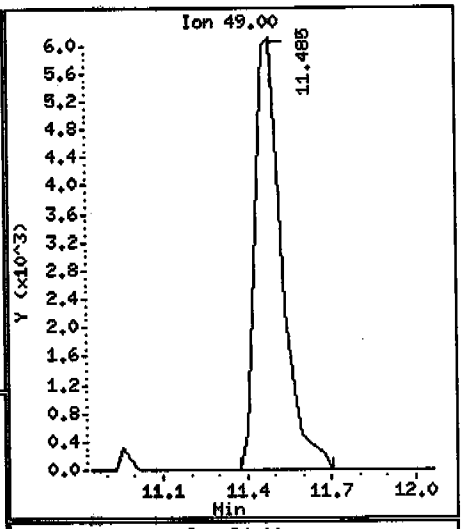
Column phase: RTx-624

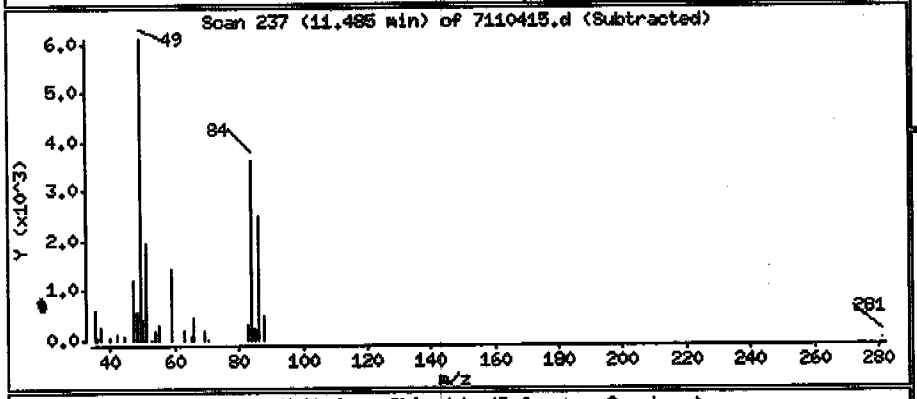
Column diameter: 0.53

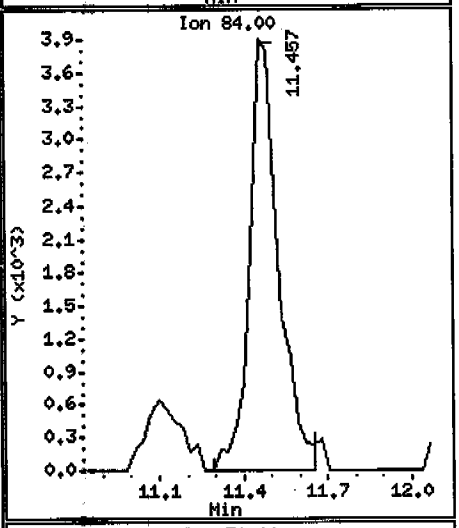
54 Methylene Chloride

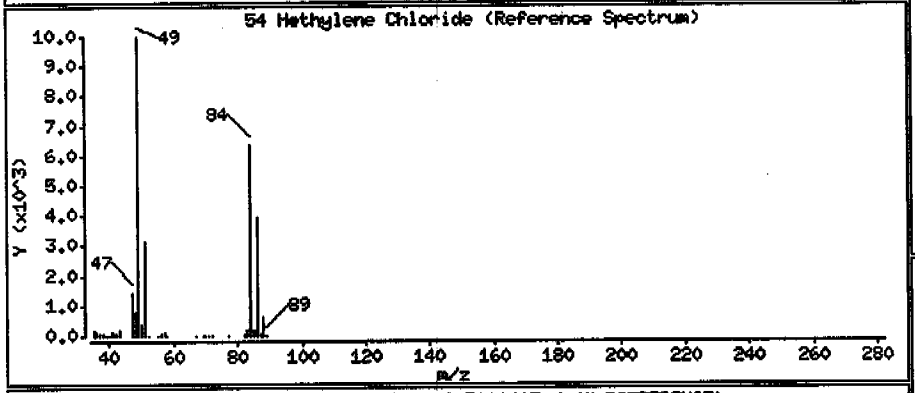
Concentration: 2.061 PPBV

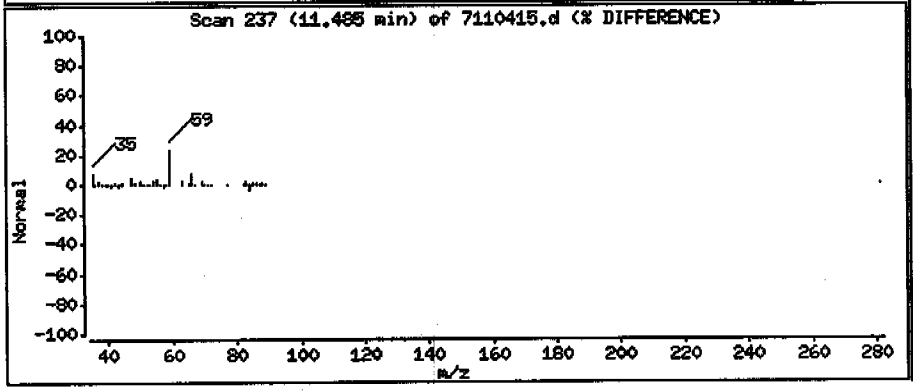


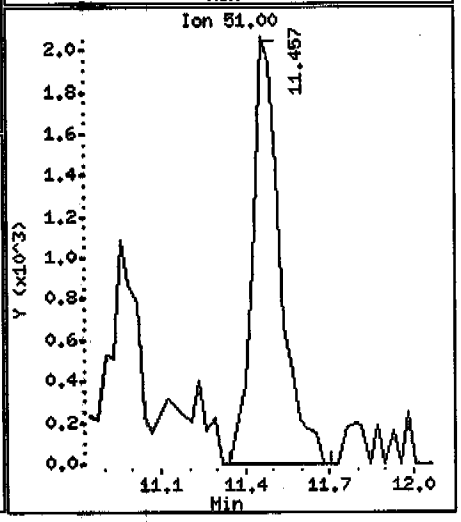












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

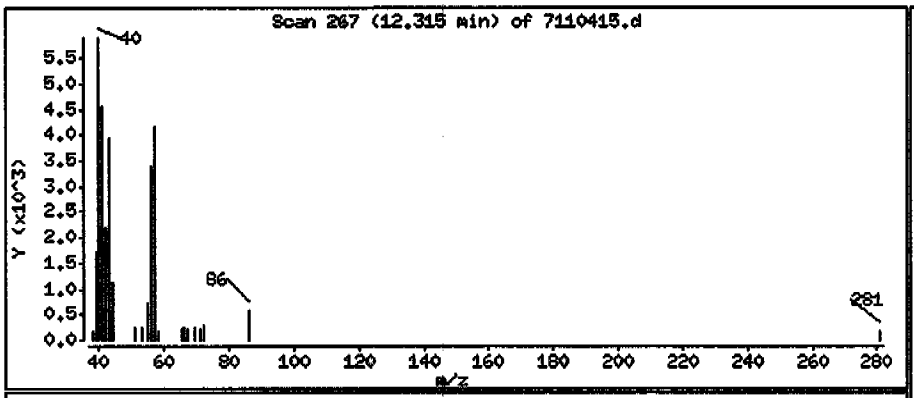
Operator: ab

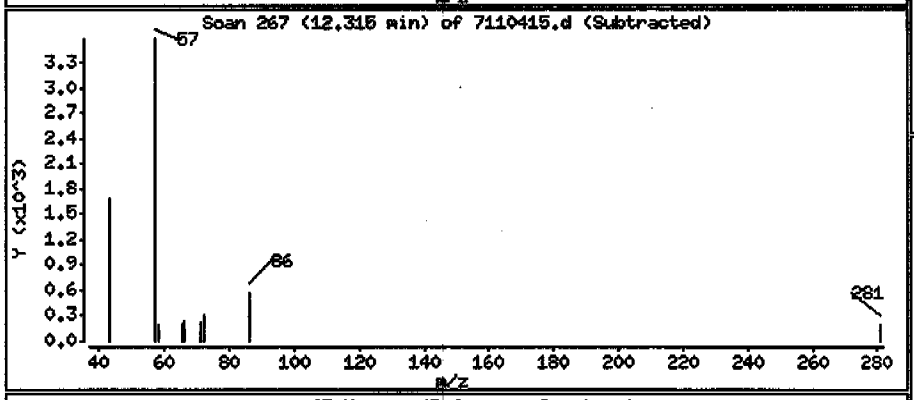
Column phase: RTx-624

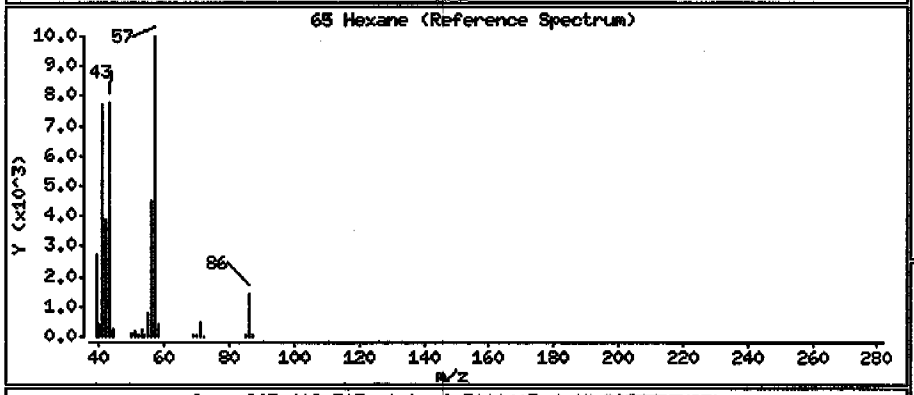
Column diameter: 0.53

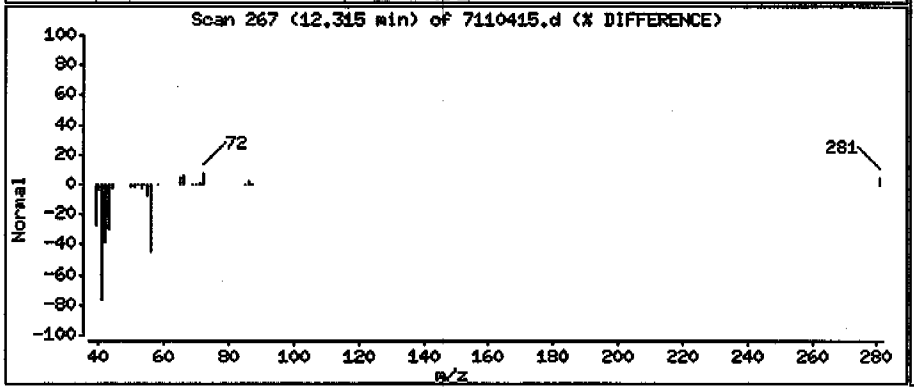
65 Hexane

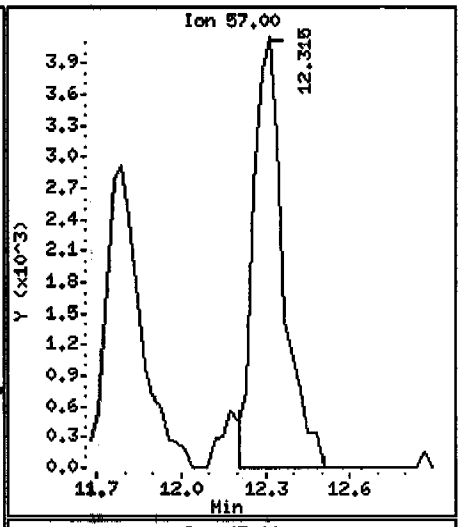
Concentration: 1.215 PPBV

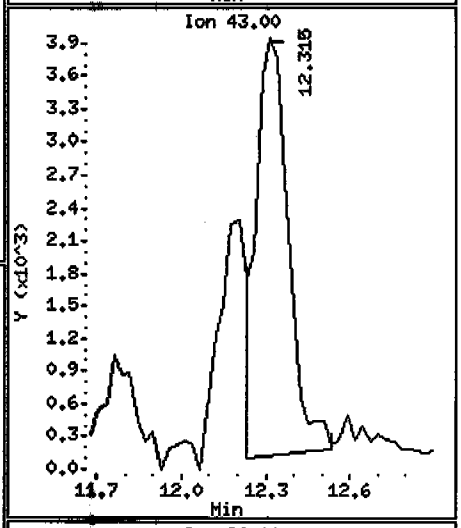


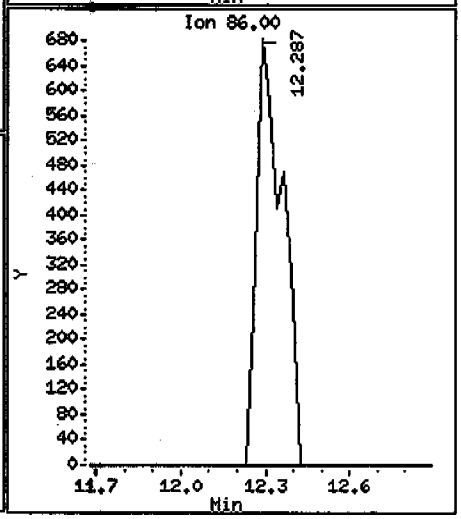












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

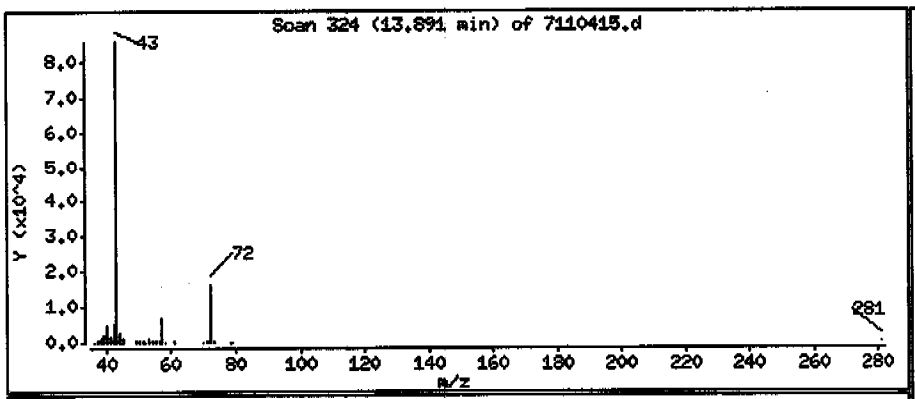
Operator: ab

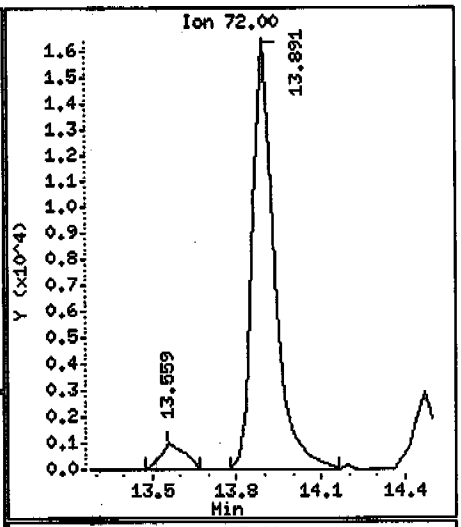
Column phase: RTx-624

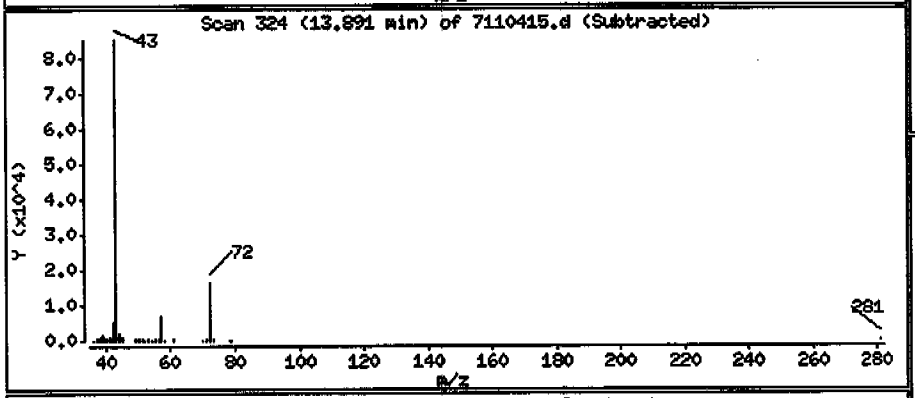
Column diameter: 0.53

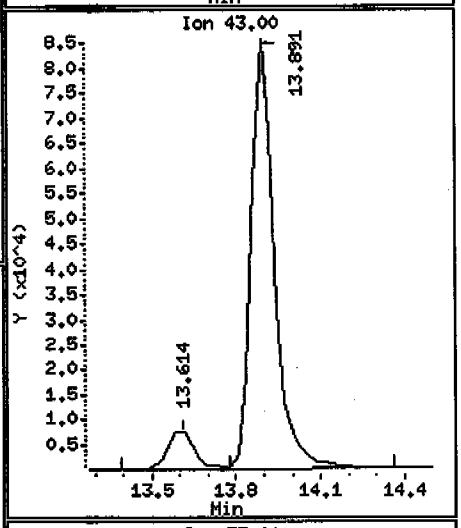
75 2-Butanone

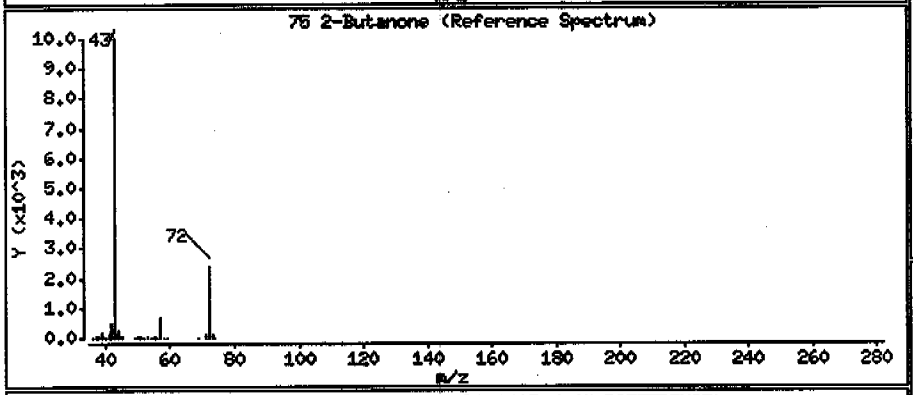
Concentration: 13.446 PPBV

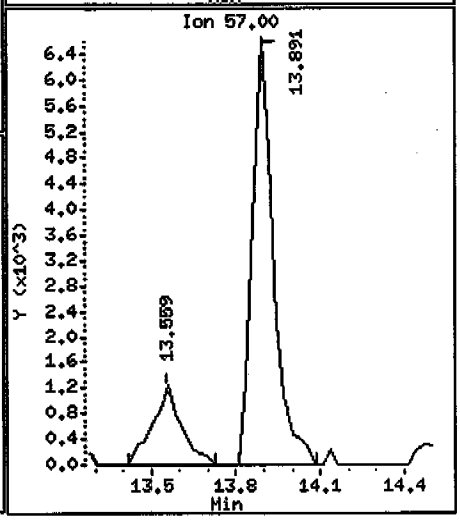


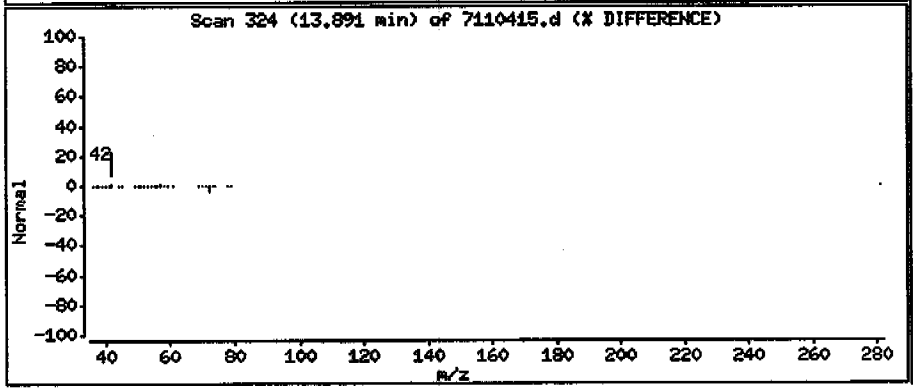












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200ML834422

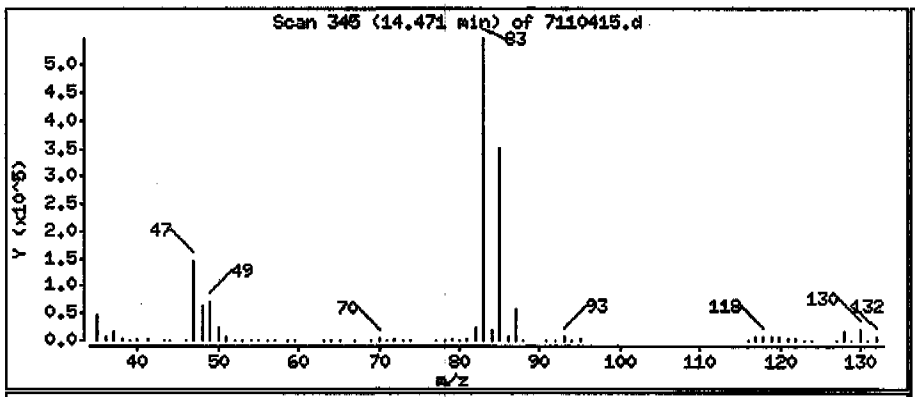
Operator: ab

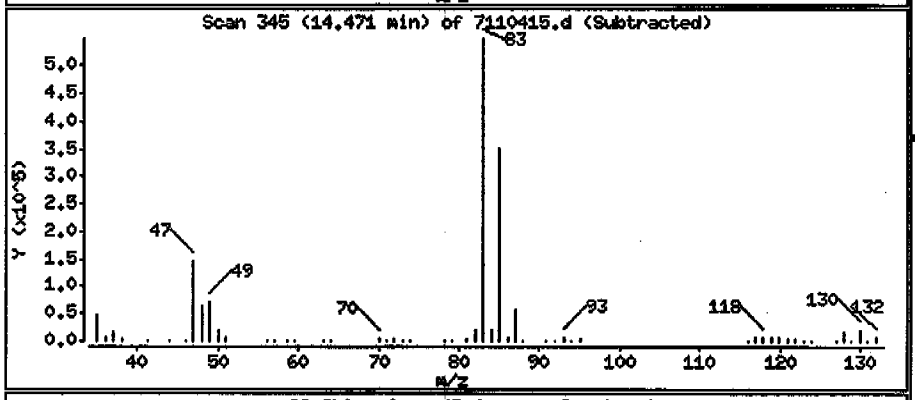
Column phase: RTx-624

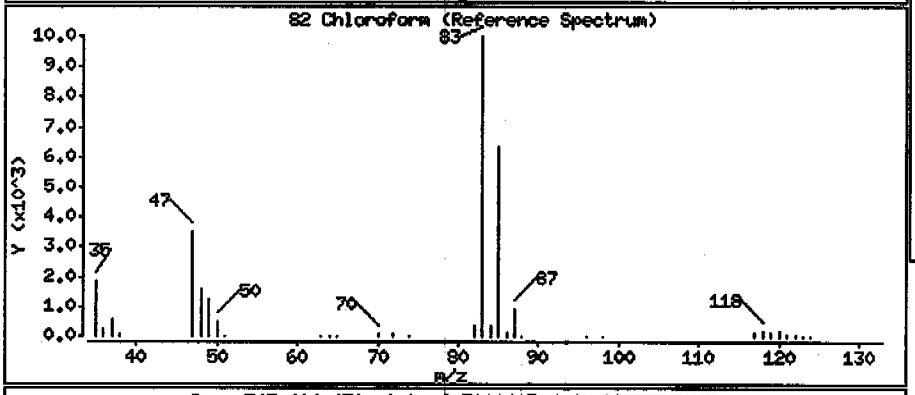
Column diameter: 0.53

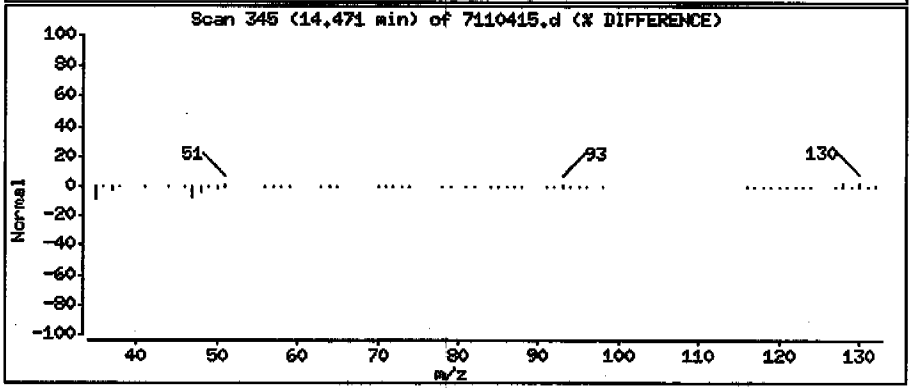
82 Chloroform

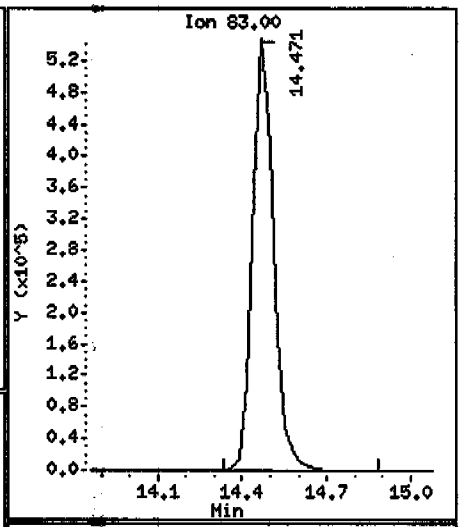
Concentration: 91.680 PPBV

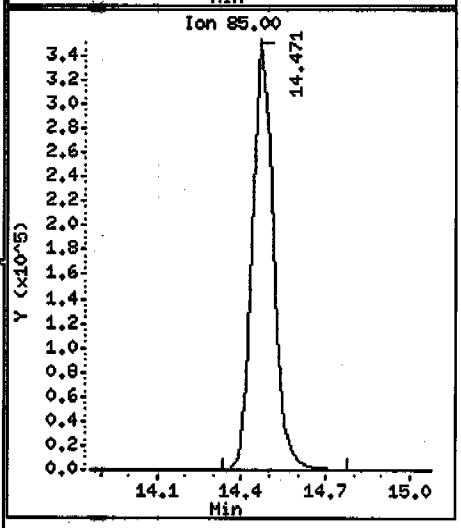












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

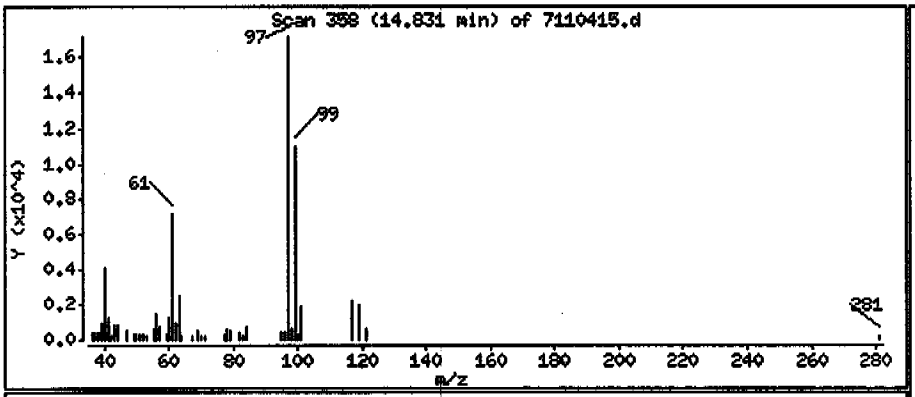
Operator: ab

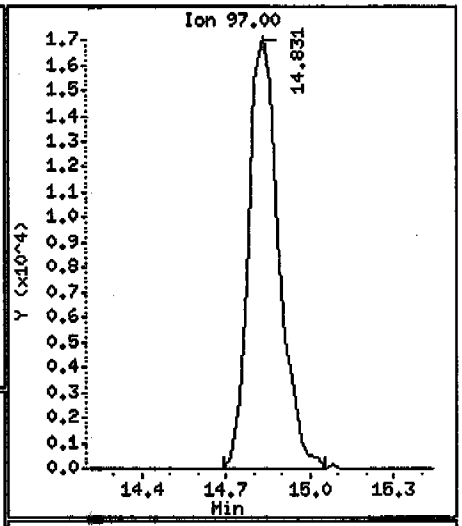
Column phase: RTx-624

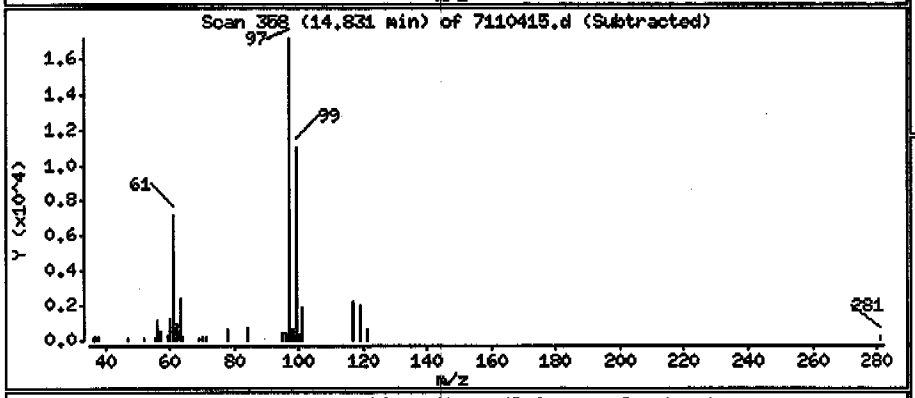
Column diameter: 0.53

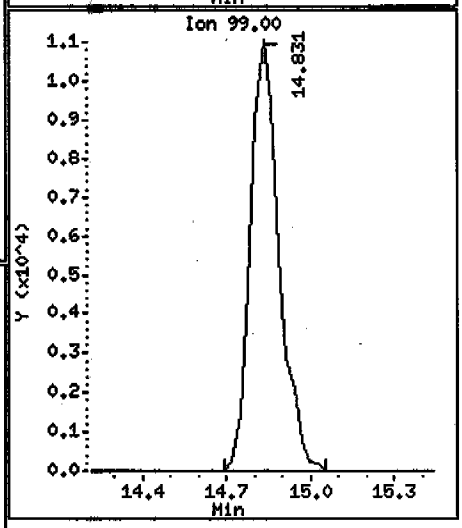
83 1,1,1-Trichloroethane

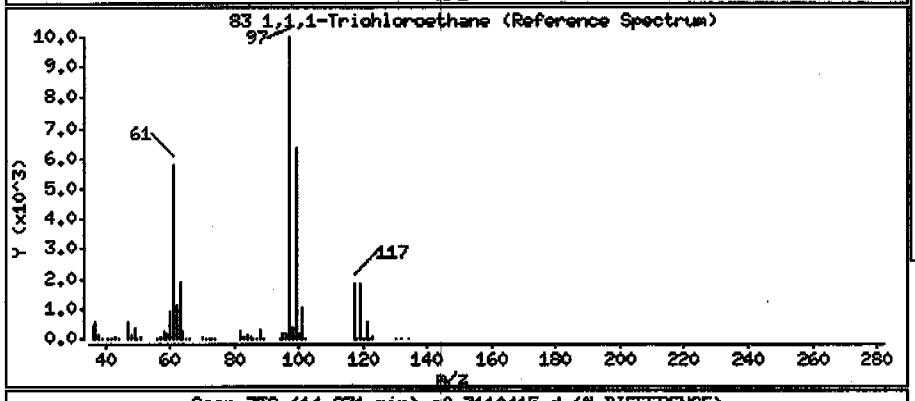
Concentration: 4.146 PPBV

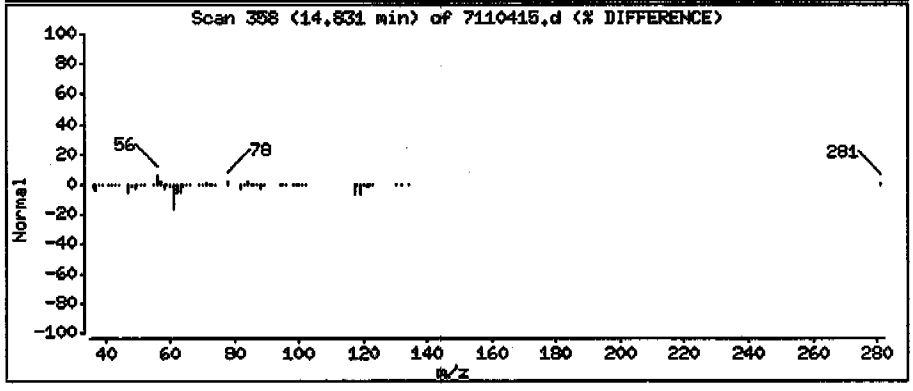












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

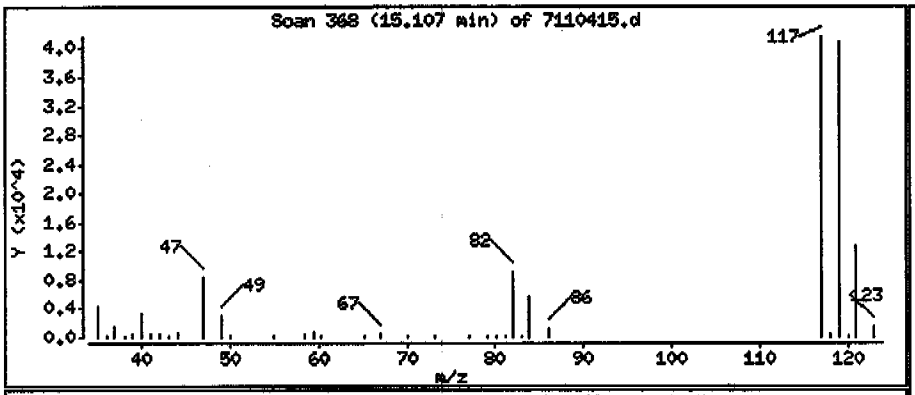
Operator: ab

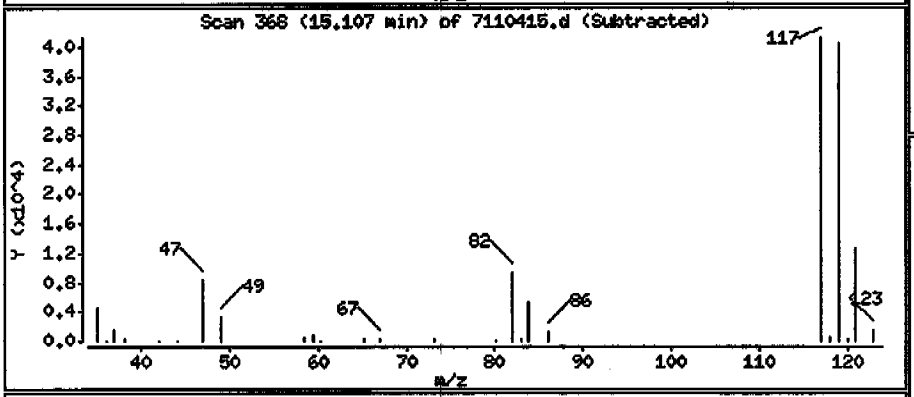
Column phase: RTx-624

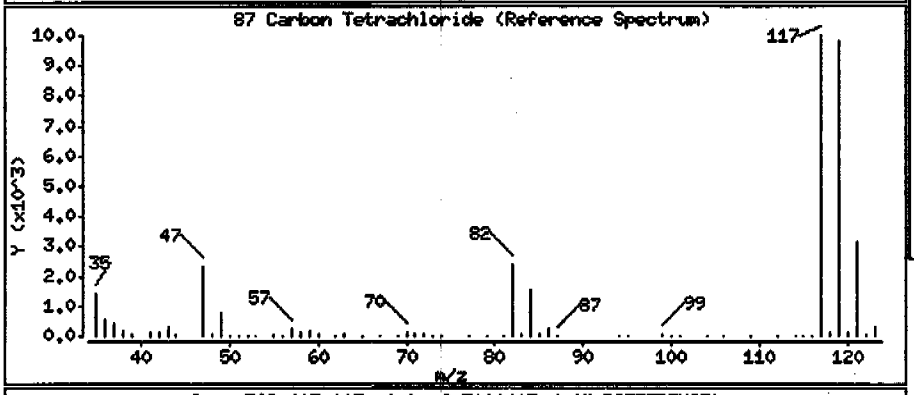
Column diameter: 0.53

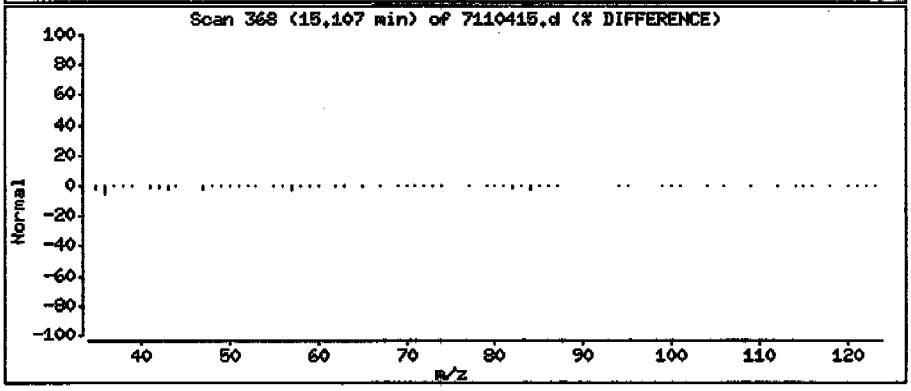
87 Carbon Tetrachloride

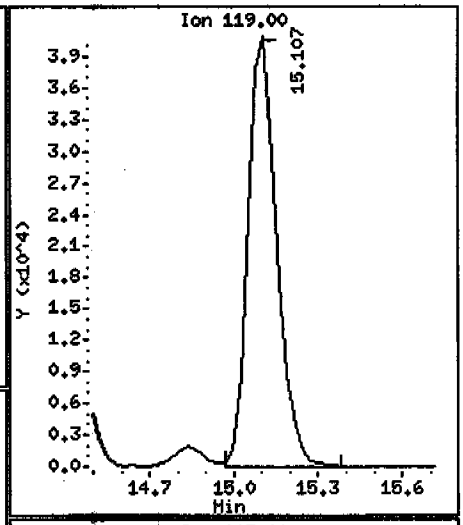
Concentration: 9.988 PPBV

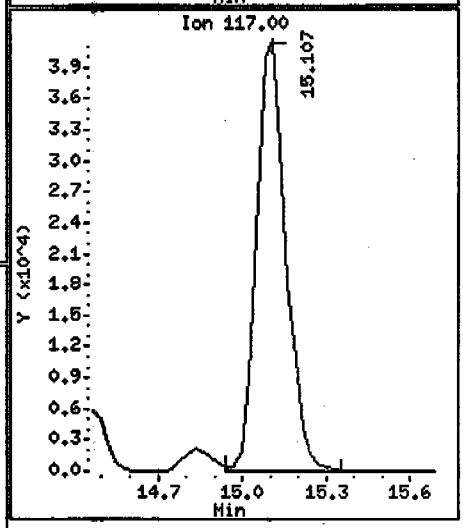












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

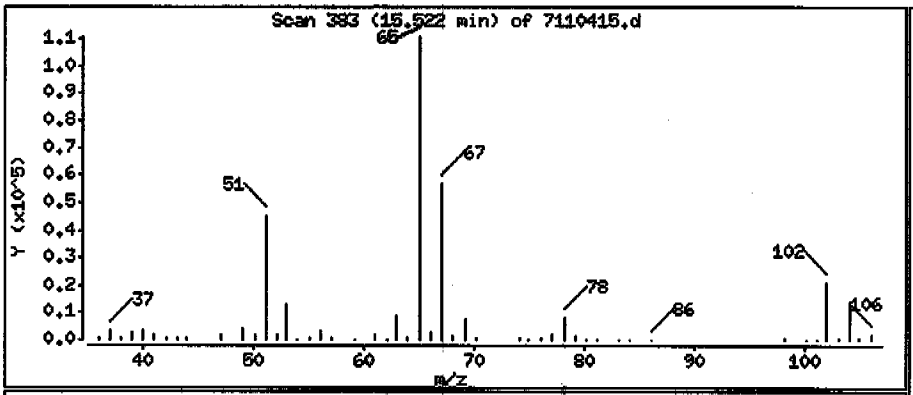
Operator: ab

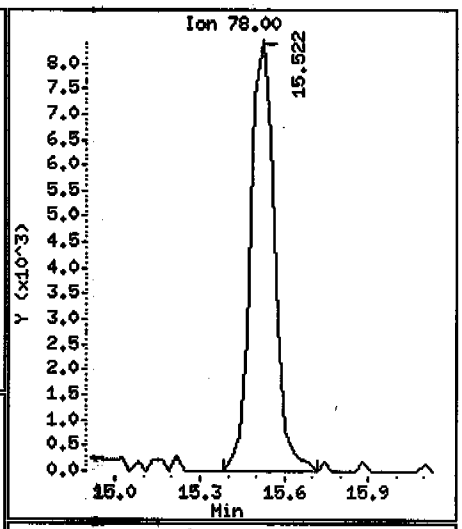
Column phase: RTx-624

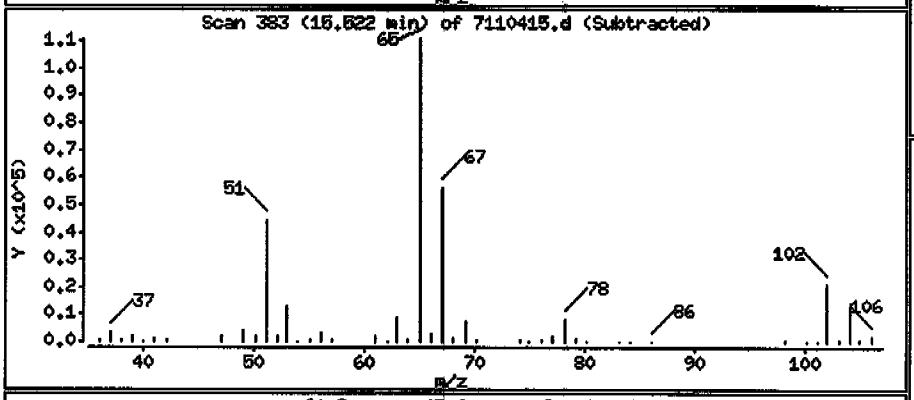
Column diameter: 0.53

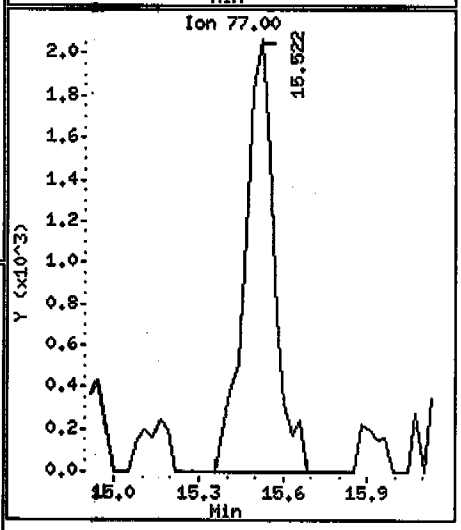
91 Benzene

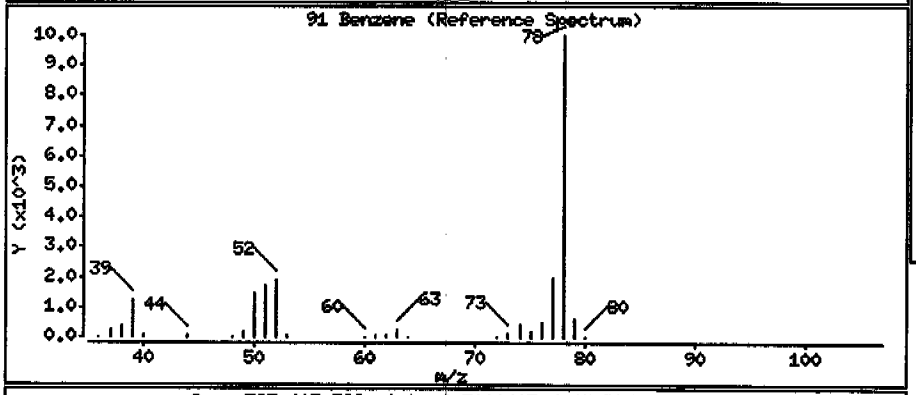
Concentration: 1.210 PPBV

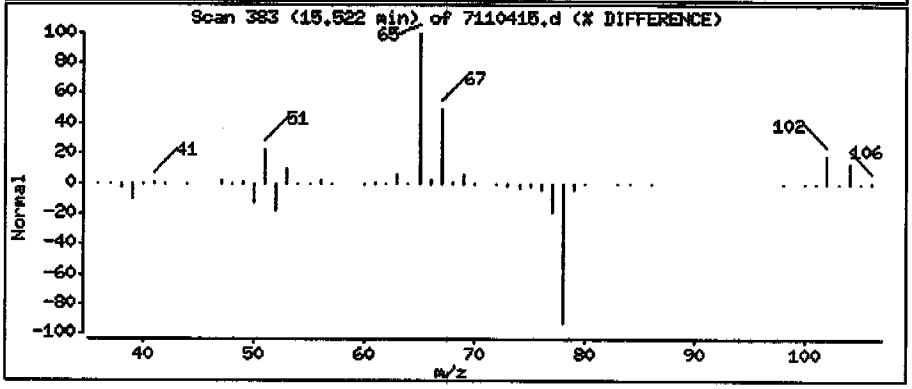












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

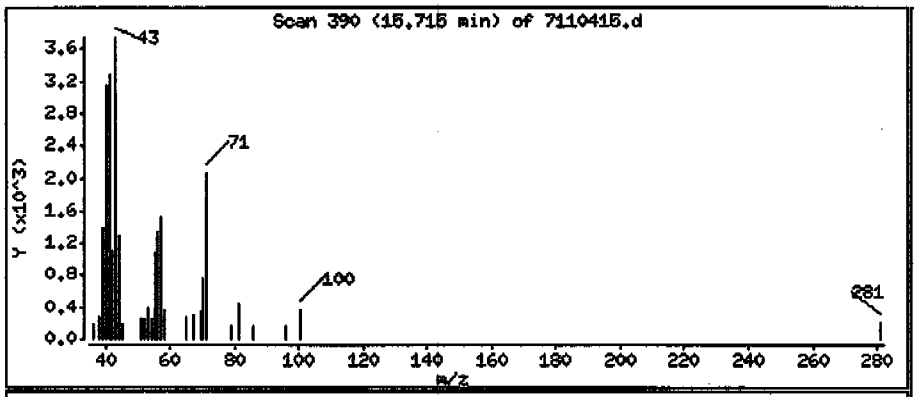
Operator: ab

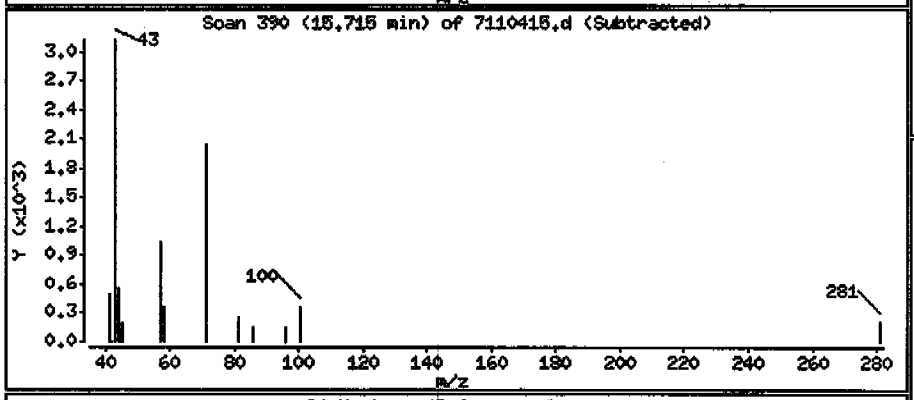
Column phase: RTx-624

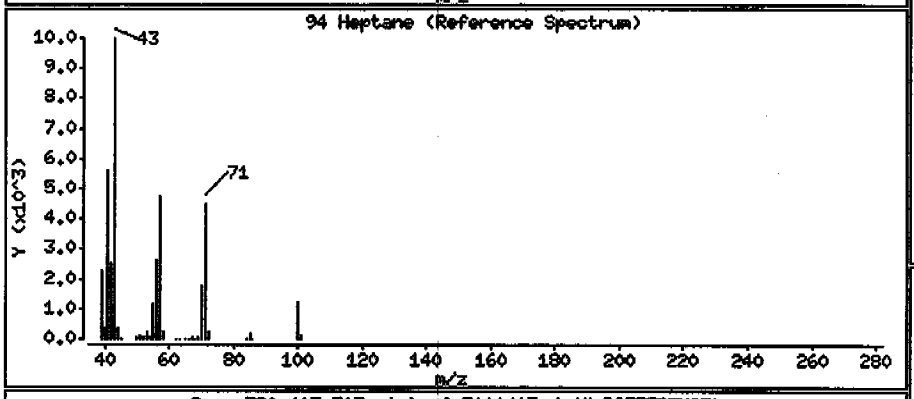
Column diameter: 0.53

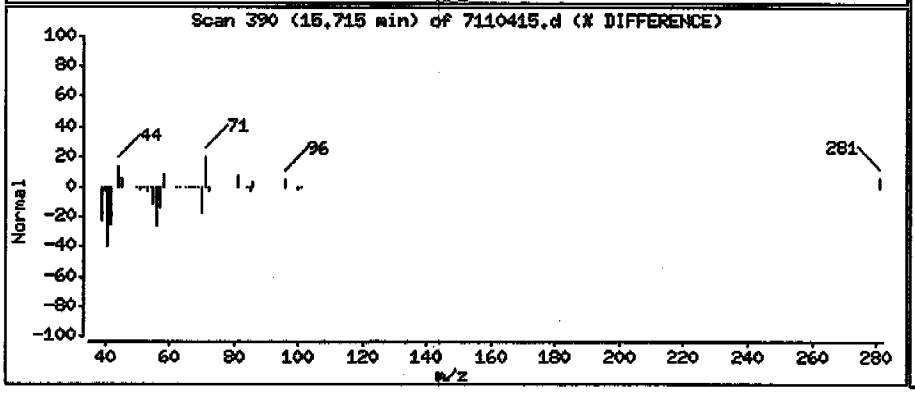
94 Heptane

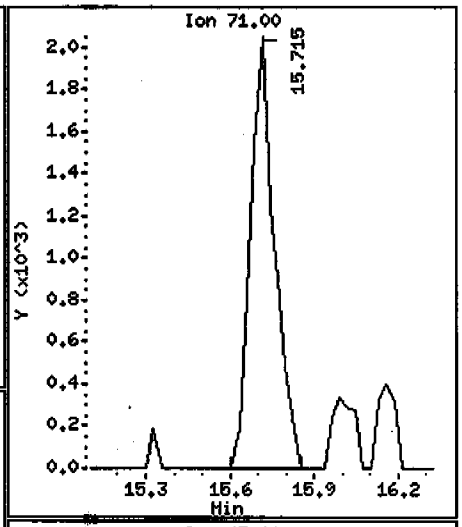
Concentration: 0.9602 PPBV

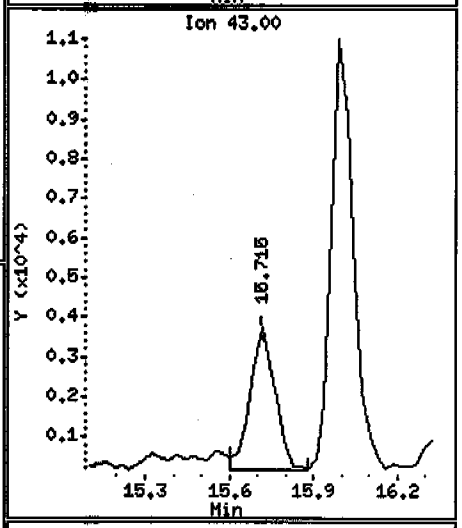


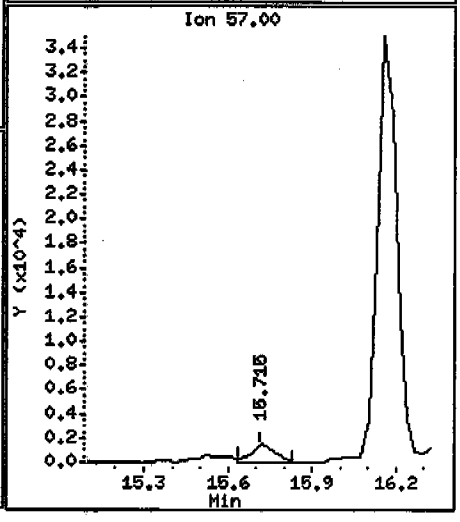












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

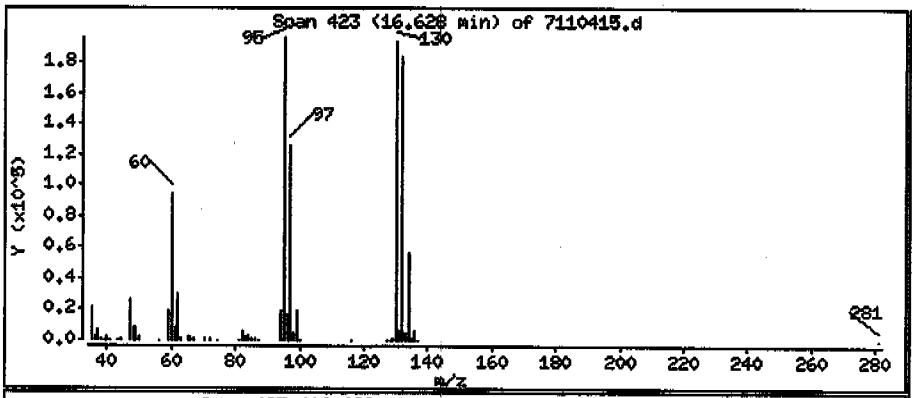
Operator: ab

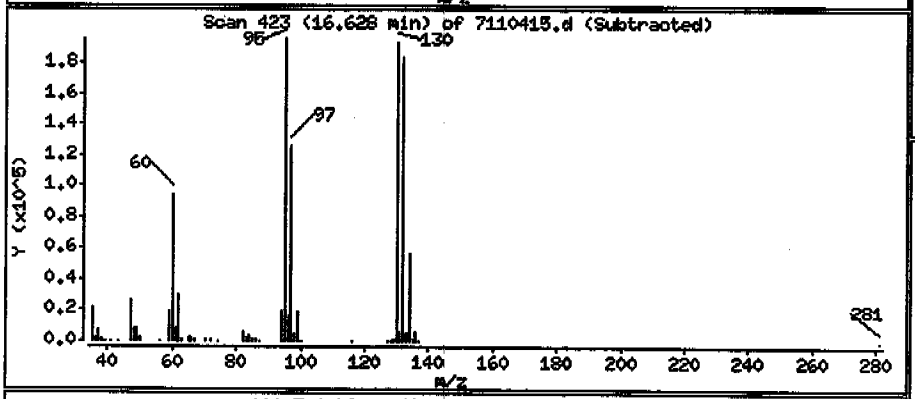
Column phase: RTx-624

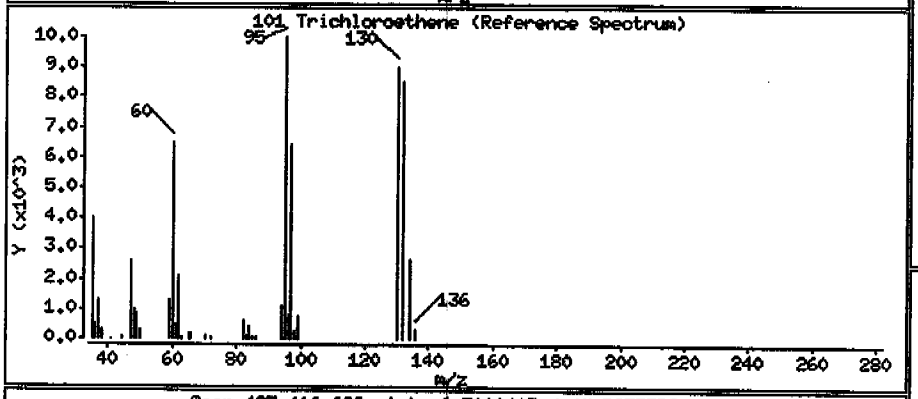
Column diameter: 0.53

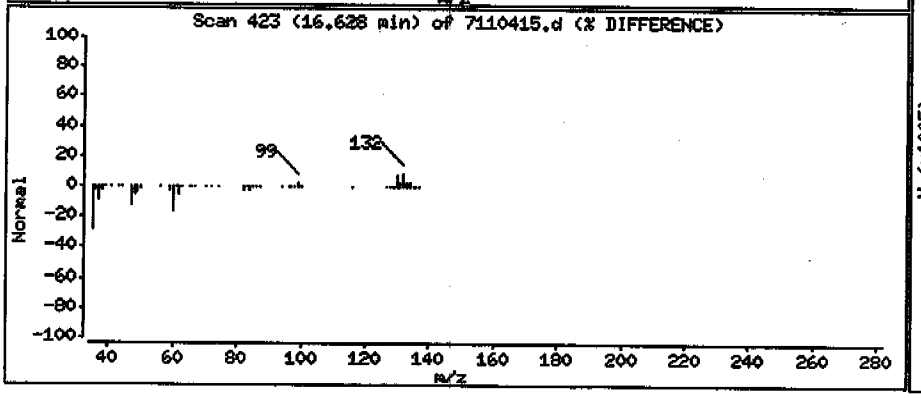
101 Trichloroethene

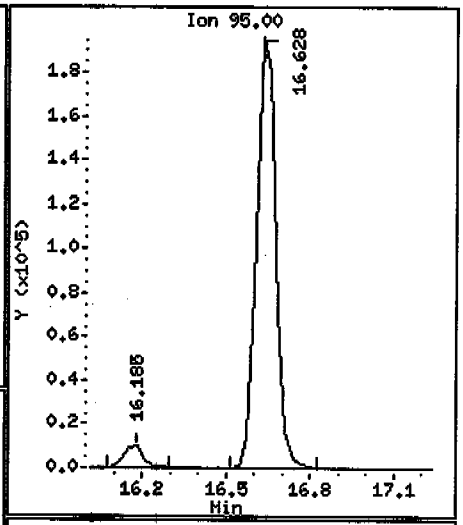
Concentration: 50.898 PPBV

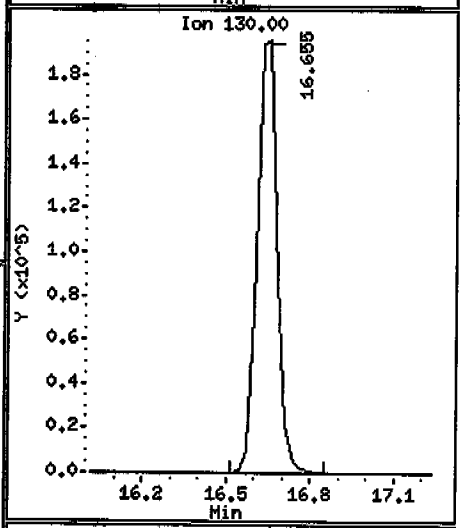


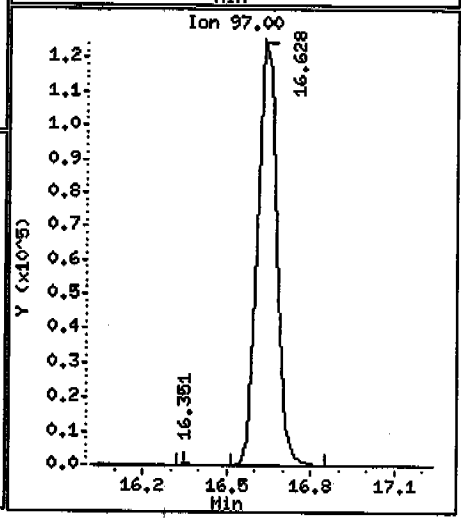












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

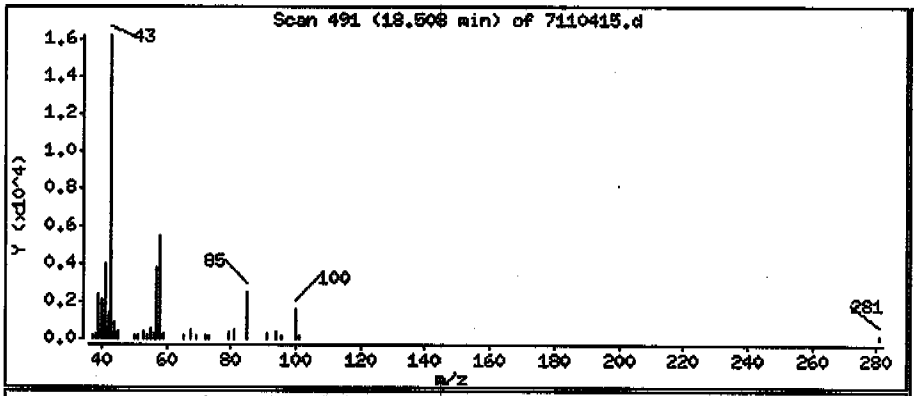
Operator: ab

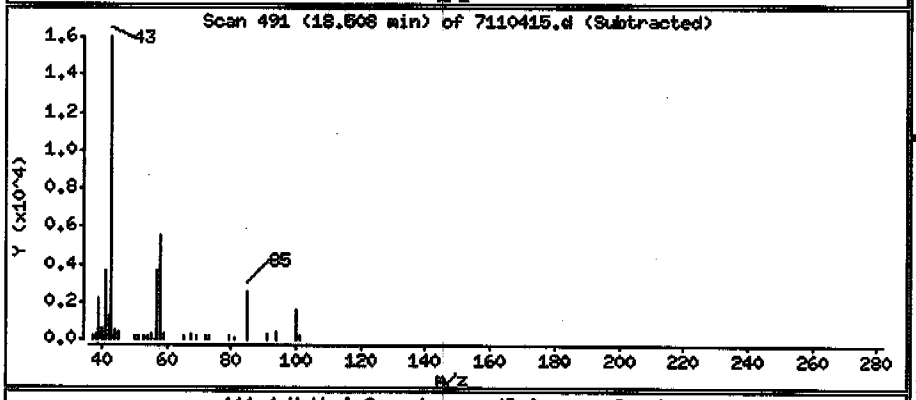
Column phase: RTx-624

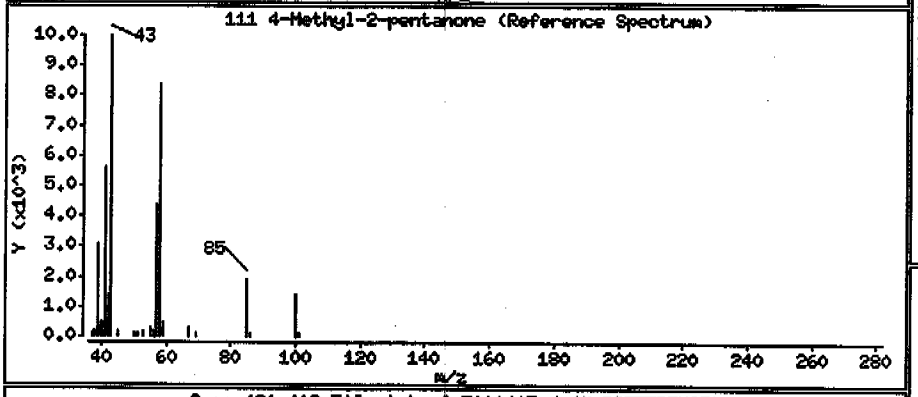
Column diameter: 0.53

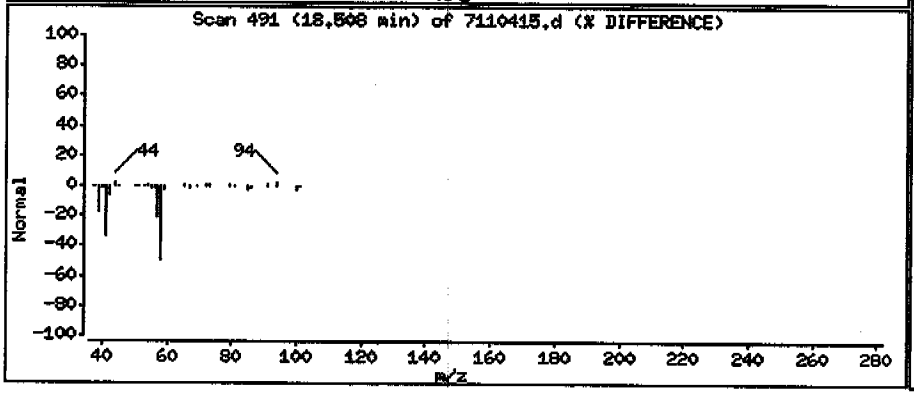
111 4-Methyl-2-pentanone

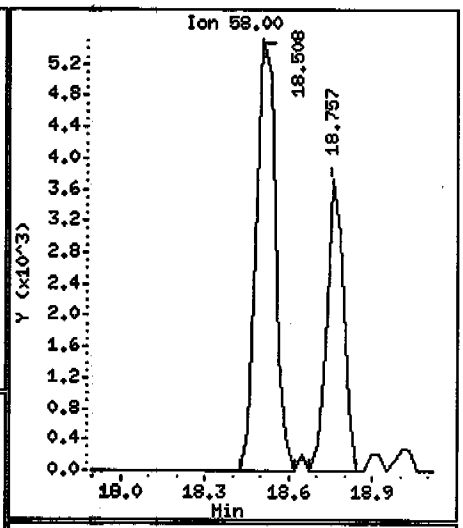
Concentration: 2.117 PPBV

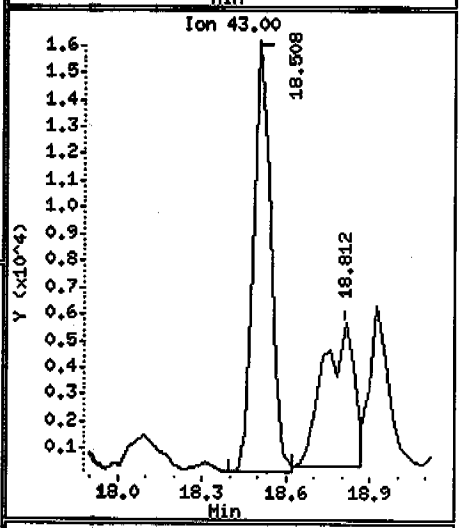


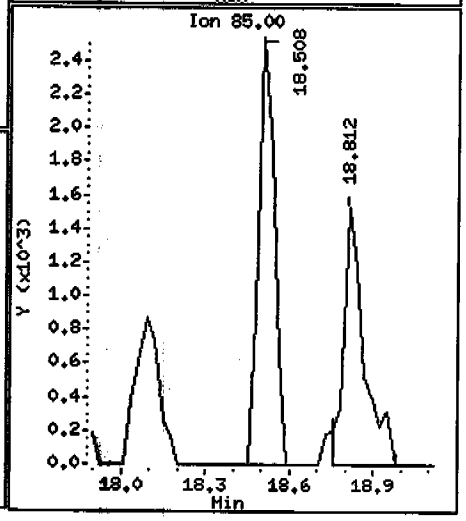












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

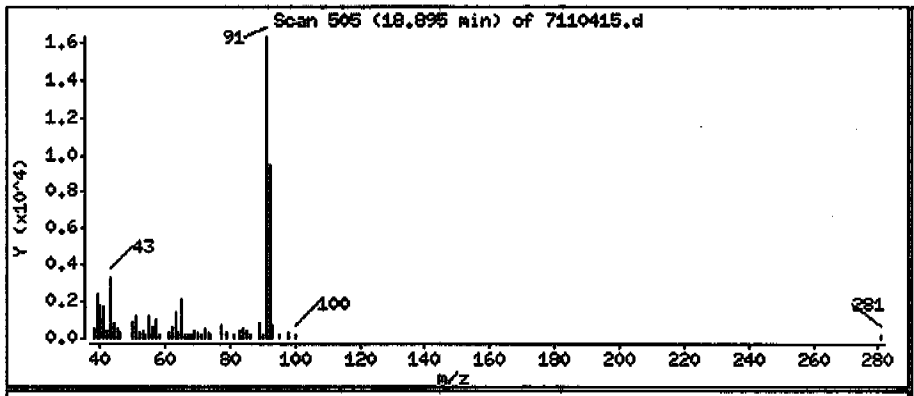
Operator: ab

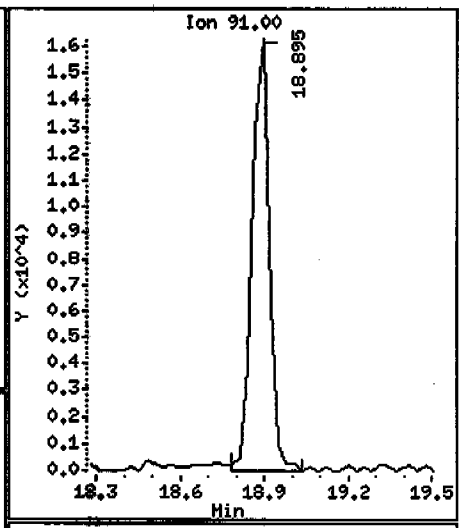
Column phase: RTx-624

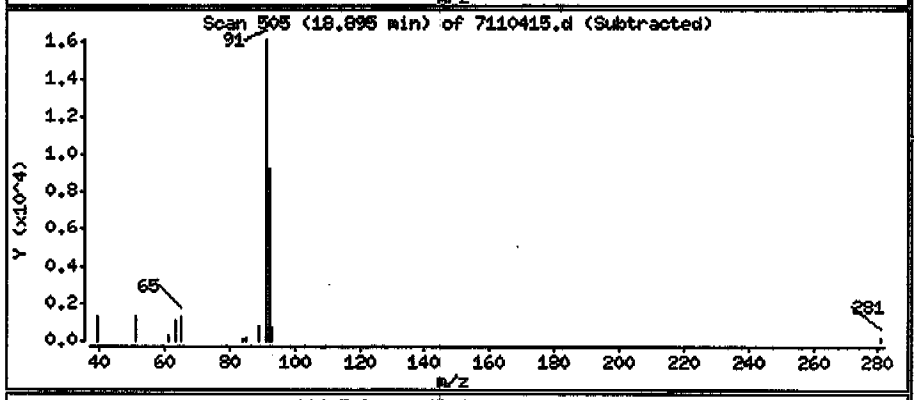
Column diameter: 0.53

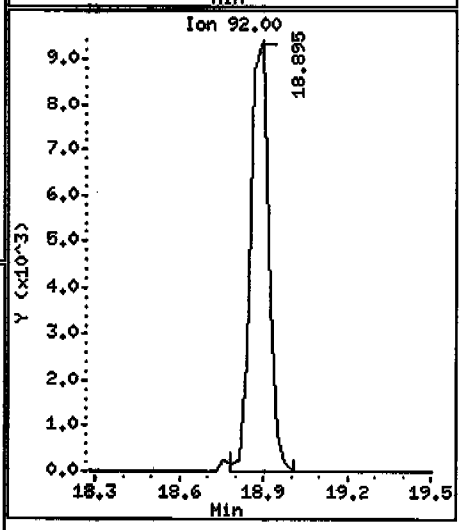
114 Toluene

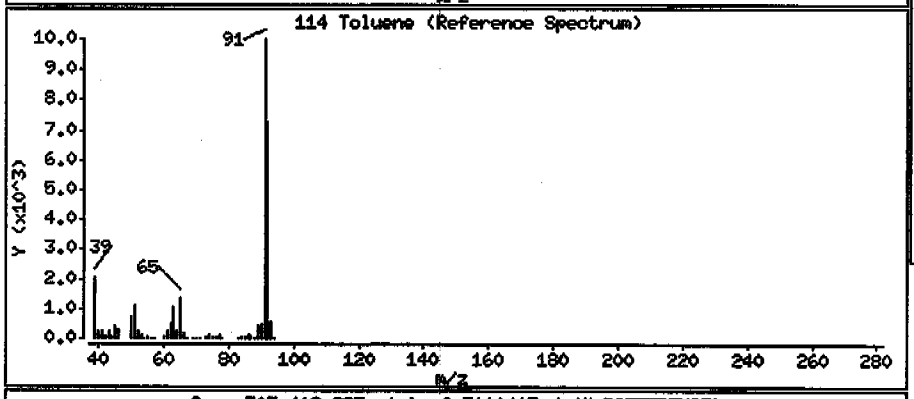
Concentration: 1.514 PPBV

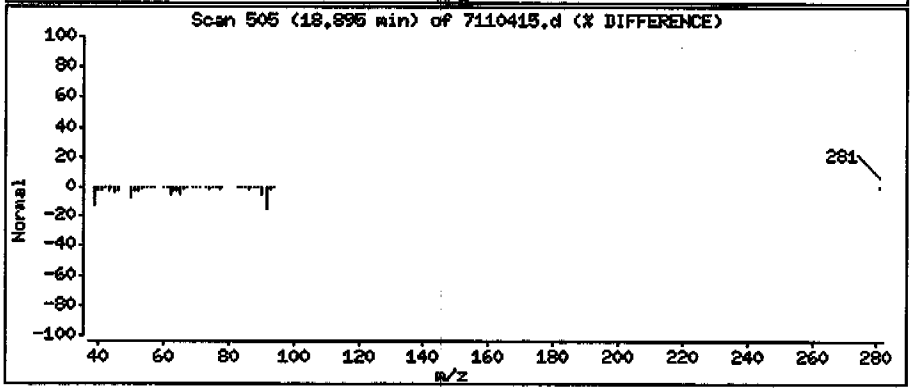












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Sample Info: 200mL#34422

Instrument: msd7.i

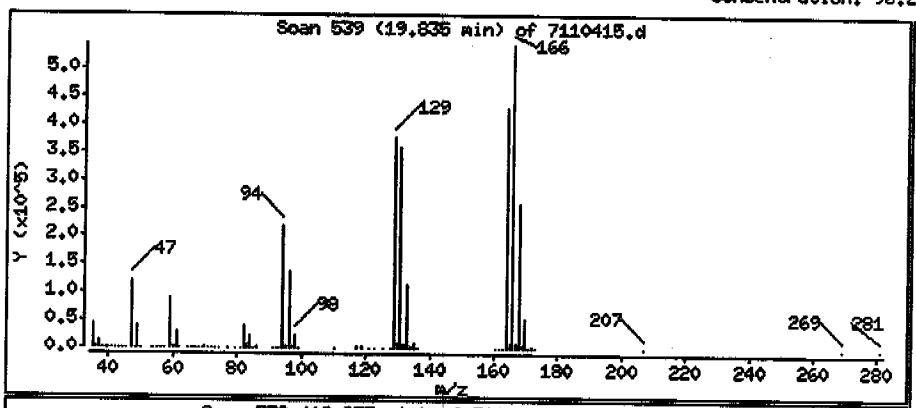
Operator: ab

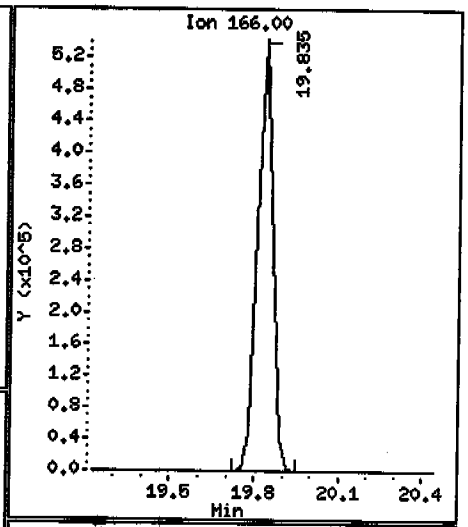
Column phase: RTx-624

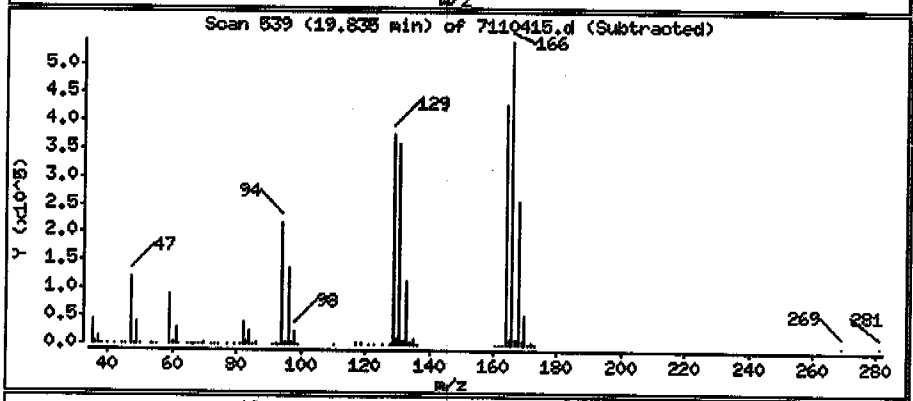
Column diameter: 0.53

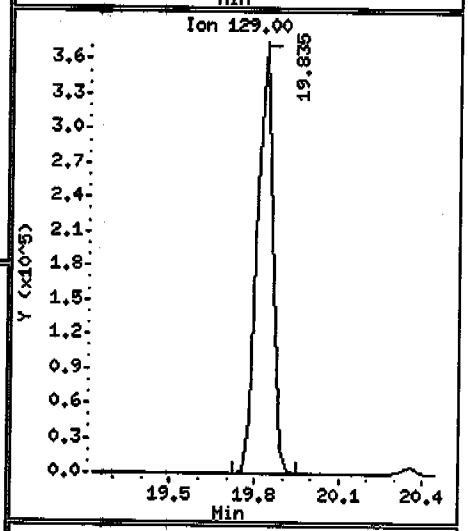
120 Tetrachloroethene

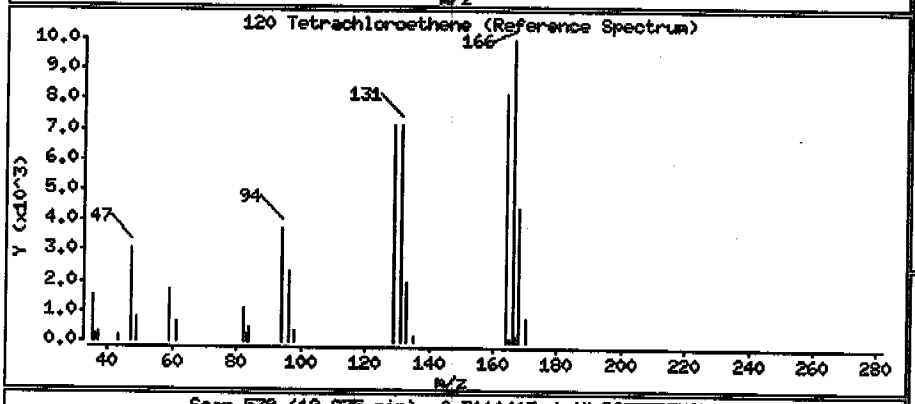
Concentration: 96.221 PPBV

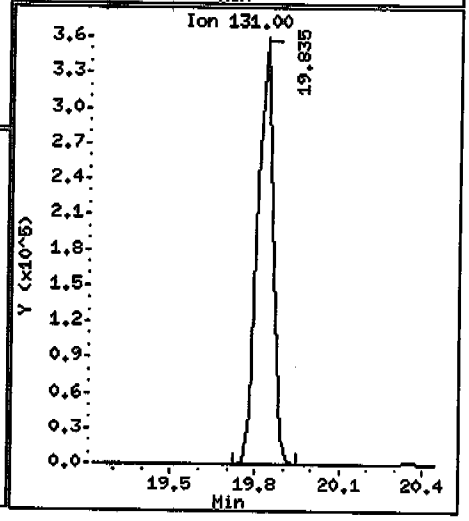


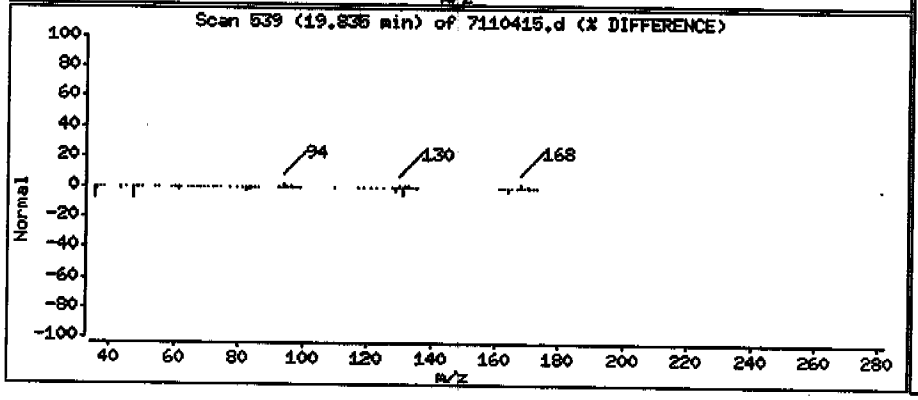












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

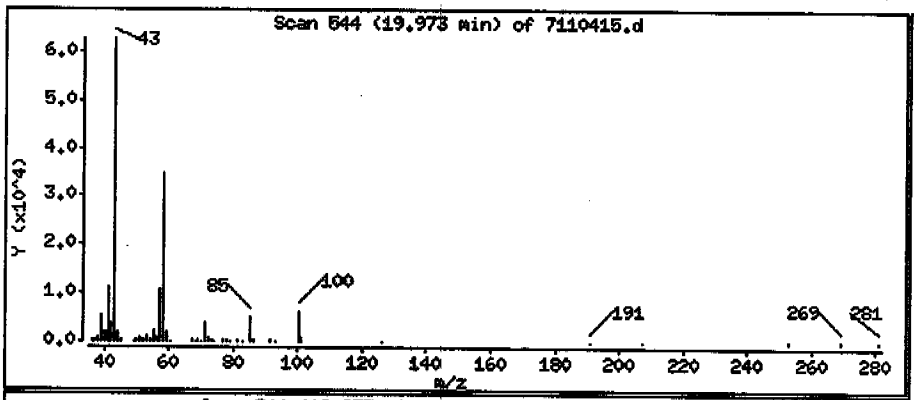
Operator: ab

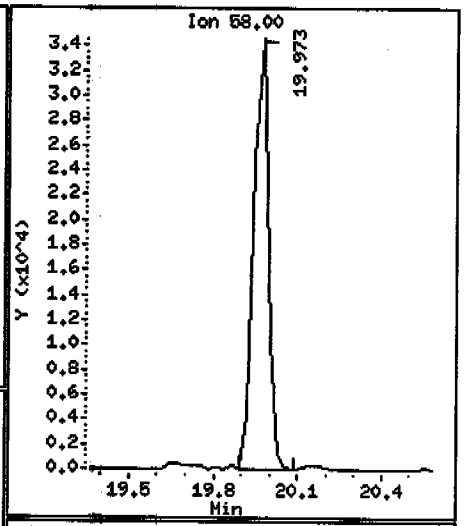
Column phase: RTx-624

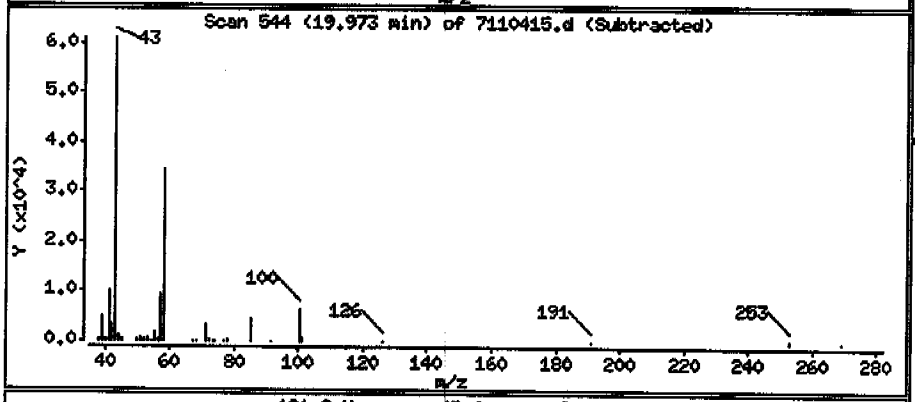
Column diameter: 0.53

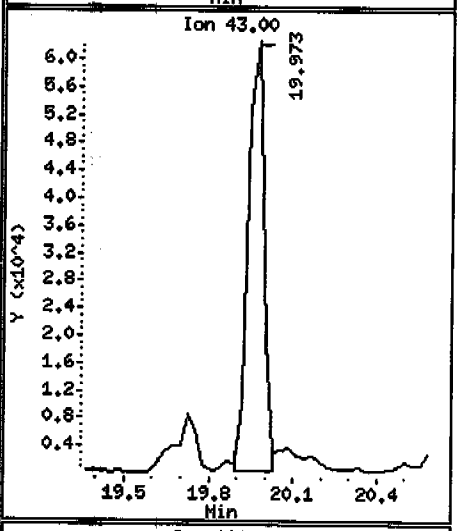
121 2-Hexanone

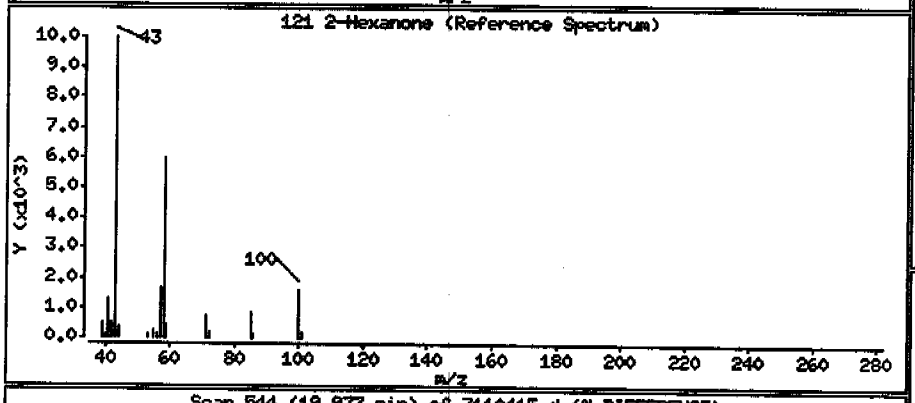
Concentration: 7.166 PPBV

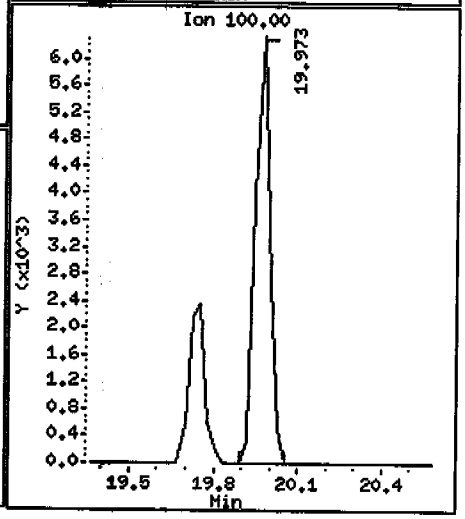


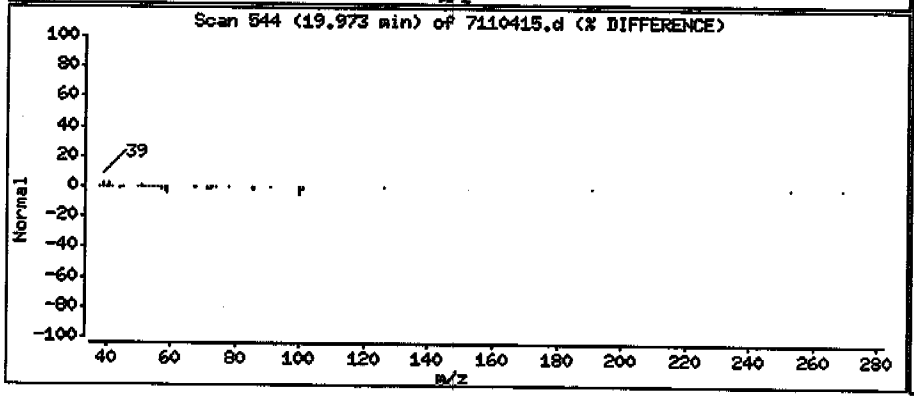












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

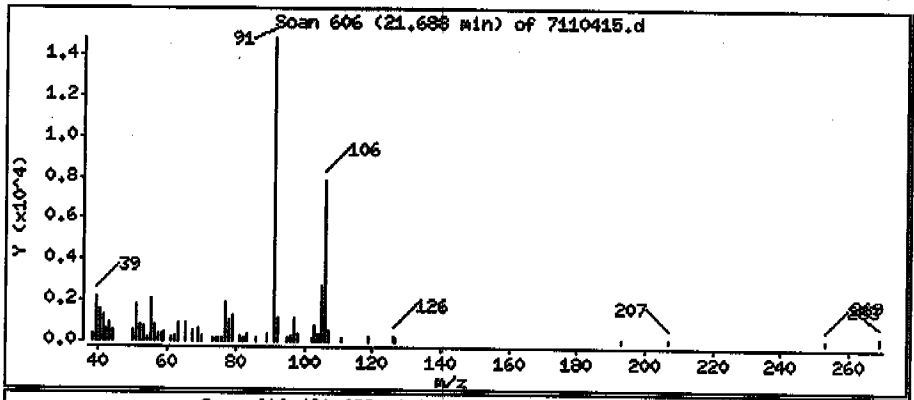
Operator: ab

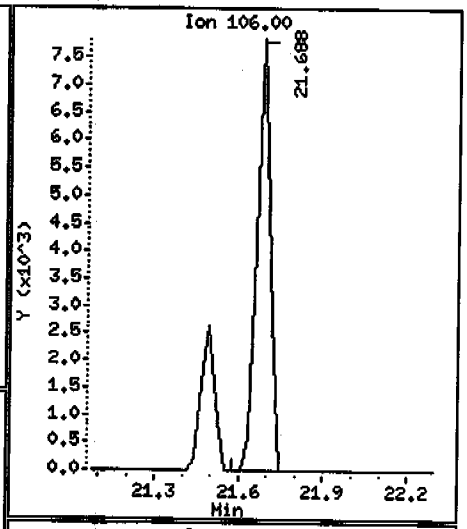
Column phase: RTx-624

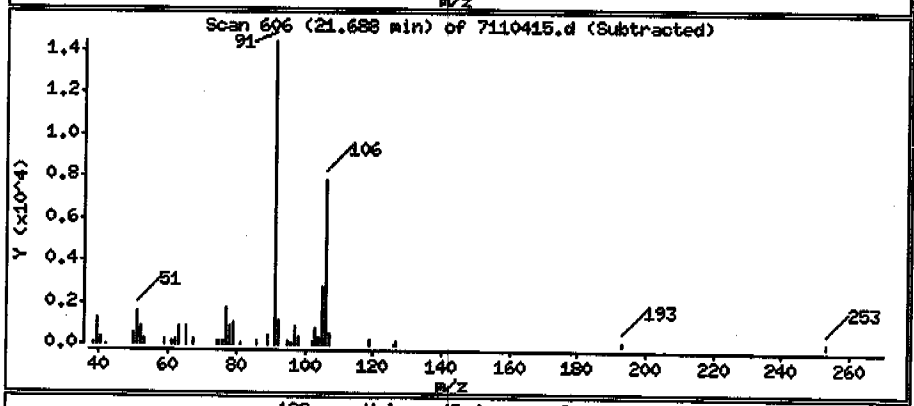
Column diameter: 0.53

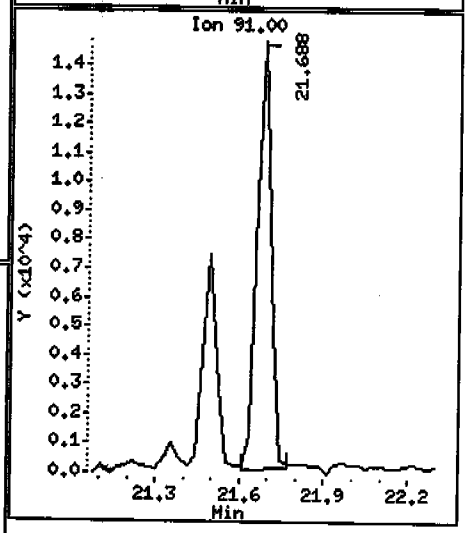
129 m,p-Xylene

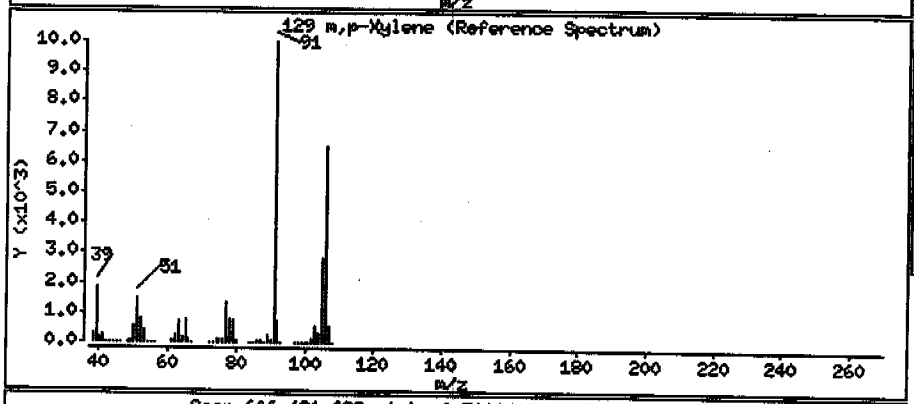
Concentration: 1.122 PPBV

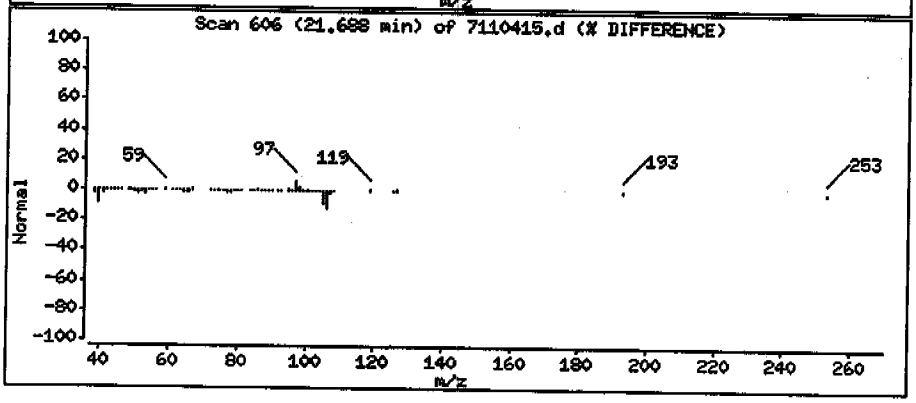












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Sample Info: 200mL#34422

Instrument: msd7.i

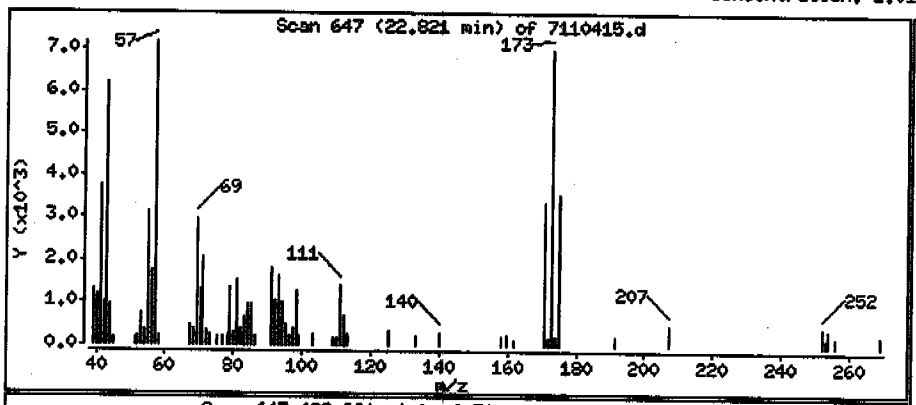
Operator: ab

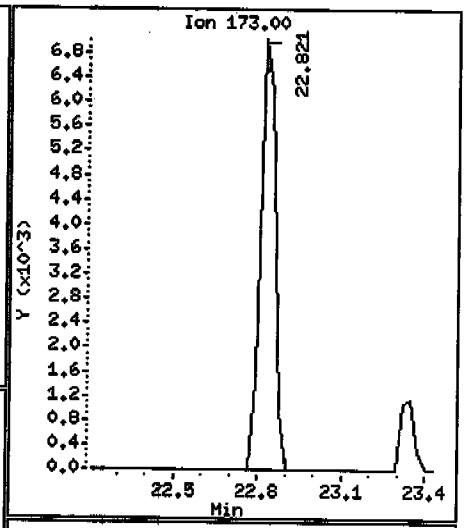
Column phase: RTx-624

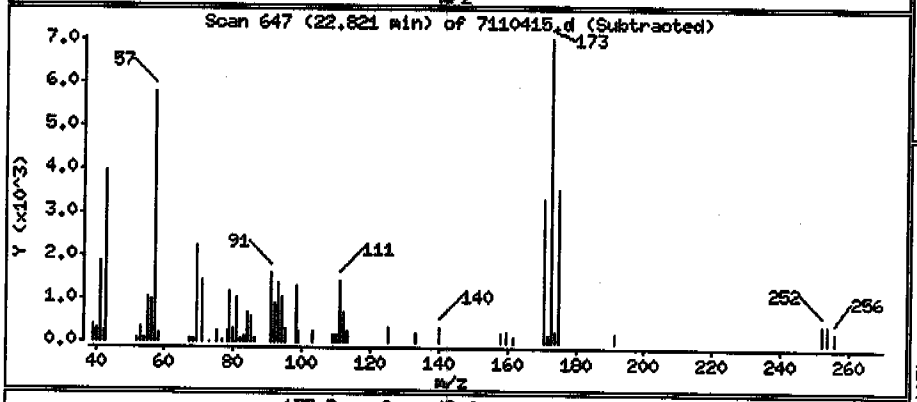
Column diameter: 0.53

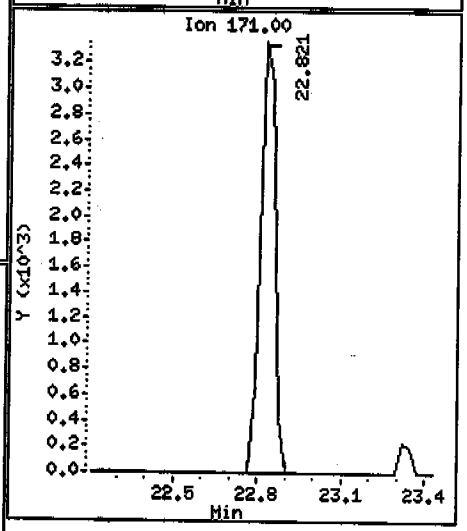
133 Bromoform

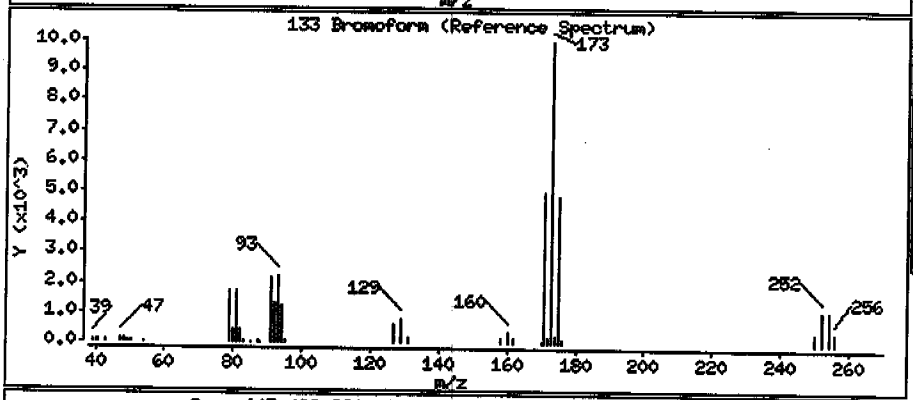
Concentration: 1.019 PPBV

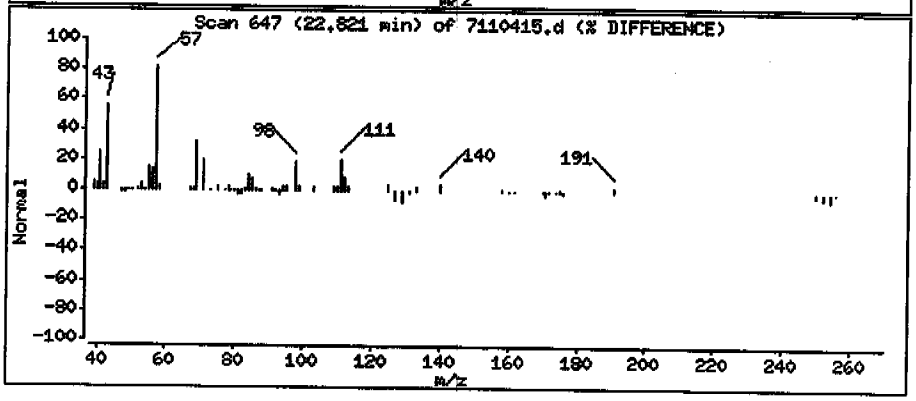












Data File: /chem/msd7.i/7-04nova.b/7110415.d

Date : 05-NOV-2007 04:30

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34422

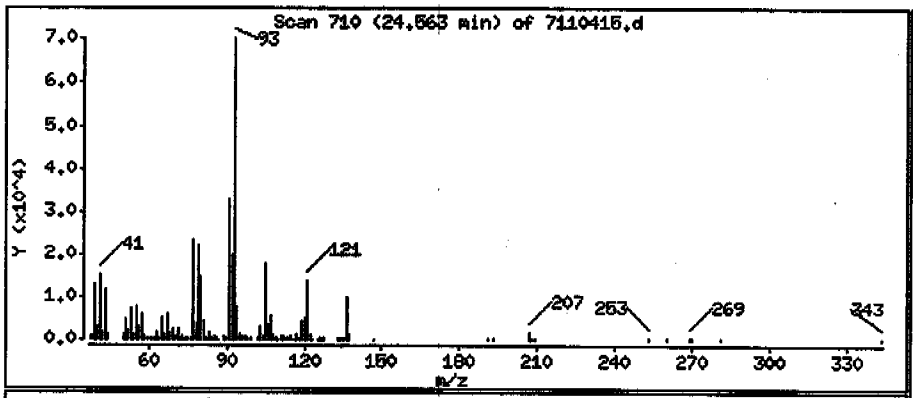
Operator: ab

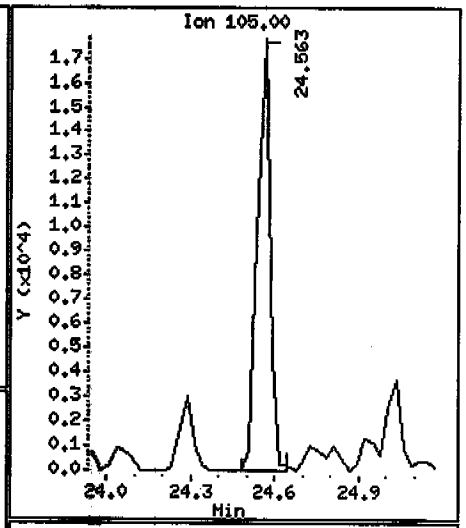
Column phase: RTx-624

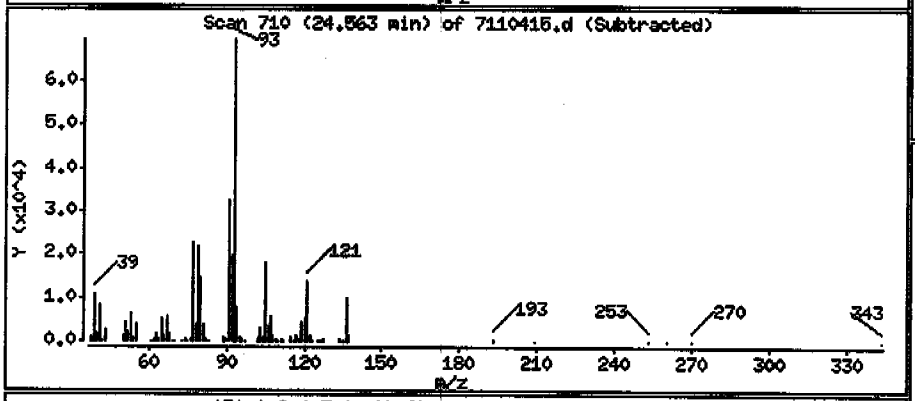
Column diameter: 0.53

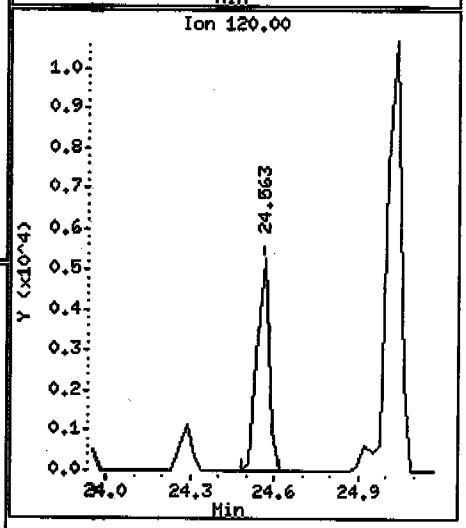
150 1,2,4-Trimethylbenzene

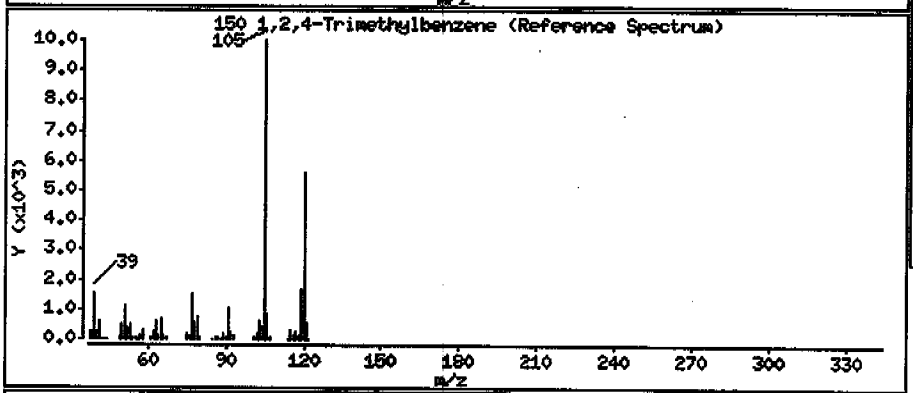
Concentration: 1.311 PPBV

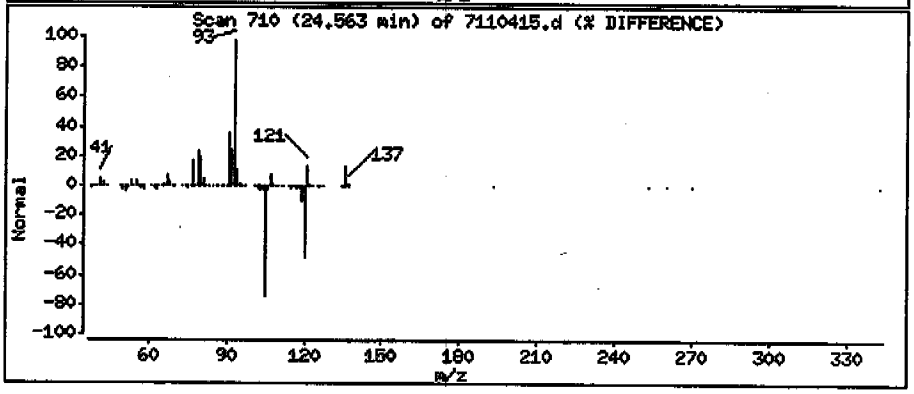












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6811

Lab ID#: 0711008-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Acetone	3.8	66	9.1	160
Methylene Chloride	0.96	81	3.3	280
2-Butanone (Methyl Ethyl Ketone)	0.96	7.2	2.8	21
Chloroform	0.96	23	4.7	110
Carbon Tetrachloride	0.96	1.0	6.0	6.4
1,2-Dichloroethane	0.96	0.97	3.9	3.9
Trichloroethene	0.96	8.8	5.1	47
1,1,2-Trichloroethane	0.96	1.2	5.2	6.3
Propylene	3.8	7.0	6.6	12

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6811

Lab ID#: 0711008-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.96	Not Detected	4.7	Not Detected
Freon 114	0.96	Not Detected	6.7	Not Detected
Chloromethane	3.8	Not Detected	7.9	Not Detected
Vinyl Chloride	0.96	Not Detected	2.4	Not Detected
1,3-Butadiene	0.96	Not Detected	2.1	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.96	Not Detected	5.4	Not Detected
Ethanol	3.8	Not Detected	7.2	Not Detected
Freon 113	0.96	Not Detected	7.3	Not Detected
1,1-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Acetone	3.8	66	9.1	160
2-Propanol	3.8	Not Detected	9.4	Not Detected
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected
Methylene Chloride	0.96	81	3.3	280
Methyl tert-butyl ether	0.96	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Hexane	0.96	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.96	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	7.2	2.8	21
cis-1,2-Dichloroethene	0.96	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.96	23	4.7	110
1,1,1-Trichloroethane	0.96	Not Detected	5.2	Not Detected
Cyclohexane	0.96	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.96	1.0	6.0	6.4
Benzene	0.96	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.96	0.97	3.9	3.9
Heptane	0.96	Not Detected	3.9	Not Detected
Trichloroethene	0.96	8.8	5.1	47
1,2-Dichloropropane	0.96	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.96	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.96	Not Detected	3.9	Not Detected
Toluene	0.96	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.96	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.96	1.2	5.2	6.3
Tetrachloroethene	0.96	Not Detected	6.5	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6811

Lab ID#: 0711008-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.8	Not Detected	16	Not Detected
Dibromochloromethane	0.96	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.96	Not Detected	7.3	Not Detected
Chlorobenzene	0.96	Not Detected	4.4	Not Detected
Ethyl Benzene	0.96	Not Detected	4.1	Not Detected
m,p-Xylene	0.96	Not Detected	4.1	Not Detected
o-Xylene	0.96	Not Detected	4.1	Not Detected
Styrene	0.96	Not Detected	4.1	Not Detected
Bromoform	0.96	Not Detected	9.9	Not Detected
1,1,2,2-Tetrachloroethane	0.96	Not Detected	6.6	Not Detected
4-Ethyltoluene	0.96	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.96	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.96	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.96	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	41	Not Detected
Chlorodifluoromethane	3.8	Not Detected	14	Not Detected
Methanol	96	Not Detected	120	Not Detected
n-Butanol	3.8	Not Detected	12	Not Detected
Propylene	3.8	7.0	6.6	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	102	70-130

0076

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110417.d
Lab Smp Id: 0711008-03A
Inj Date : 05-NOV-2007 06:25
Operator : ab
Inst ID: msd7.i
Smp Info : 200mL#34327
Misc Info : 9.0"Hg-5psi
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	578639	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	449305			28.08- 128.08	77.65
14.416	14.388 (1.000)	49	852423			128.80- 228.80	147.32
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.158 (1.000)	114	1897401	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	284004			0.00- 64.88	14.97
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1350084	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	685485			4.45- 104.45	50.77
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	665972	21.4239	21.424	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	342636			2.91- 102.91	51.45
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1530659	22.7253	22.725	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	161560			0.00- 61.46	10.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	1056021			19.18- 119.18	68.99
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	819173	25.4985	25.498	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	938898			63.49- 163.49	114.62
23.347	23.347 (1.093)	176	777111			46.77- 146.77	94.87
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	91860	3.68332	7.035	80.00- 120.00	100.00(H)
5.645	5.617 (0.392)	42	58136			21.19- 121.19	63.29
5.645	5.617 (0.392)	39	79598			24.83- 124.83	86.65
45 Acetone					CAS #: 67-64-1		
10.490	10.462 (0.728)	58	537099	34.4183	65.739	80.00- 120.00	100.00
10.490	10.462 (0.728)	43	1816984			247.10- 347.10	338.30
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	1573098	42.3812	80.948	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	1072612			15.73- 115.73	68.18
11.485	11.457 (0.797)	51	480162			0.00- 80.85	30.52
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	47454	3.78650	7.232	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	241132			458.59- 558.59	508.14
13.891	13.891 (0.964)	57	17840			0.00- 86.57	37.59
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	711501	12.2124	23.326	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	462326			15.98- 115.98	64.98
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	29171	0.53042	1.013	80.00- 120.00	100.00
15.107	15.080 (1.048)	117	30578			54.21- 154.21	104.82
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.966)	62	20282	0.50635	0.9671	80.00- 120.00	100.00
15.633	15.633 (0.966)	64	7651			0.00- 82.89	37.72
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.027)	95	153645	4.58802	8.763	80.00- 120.00	100.00
16.656	16.628 (1.029)	130	158067			54.96- 154.96	102.88
16.628	16.628 (1.027)	97	96382			15.03- 115.03	62.73
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	16971	0.60689	1.159	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
117 1,1,2-Trichloroethane (continued)								
19.642	19.669	(0.920)	99	11107			12.57- 112.57	65.45
19.642	19.642	(0.920)	83	14524			31.77- 131.77	85.58

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110417.d
Lab Smp Id: 0711008-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 9.0"Hg-5psi

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	578639	-11.14
97 1,4-Difluorobenze	2188066	1312840	3063292	1897401	-13.28
126 Chlorobenzene-d5	1729248	1037549	2420947	1350084	-21.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-04nova
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711008-03A
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 9.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	21.424	85.70	70-130
$ 113 Toluene-d8	25.000	22.725	90.90	70-130
$ 137 Bromofluorobenzene	25.000	25.498	101.99	70-130

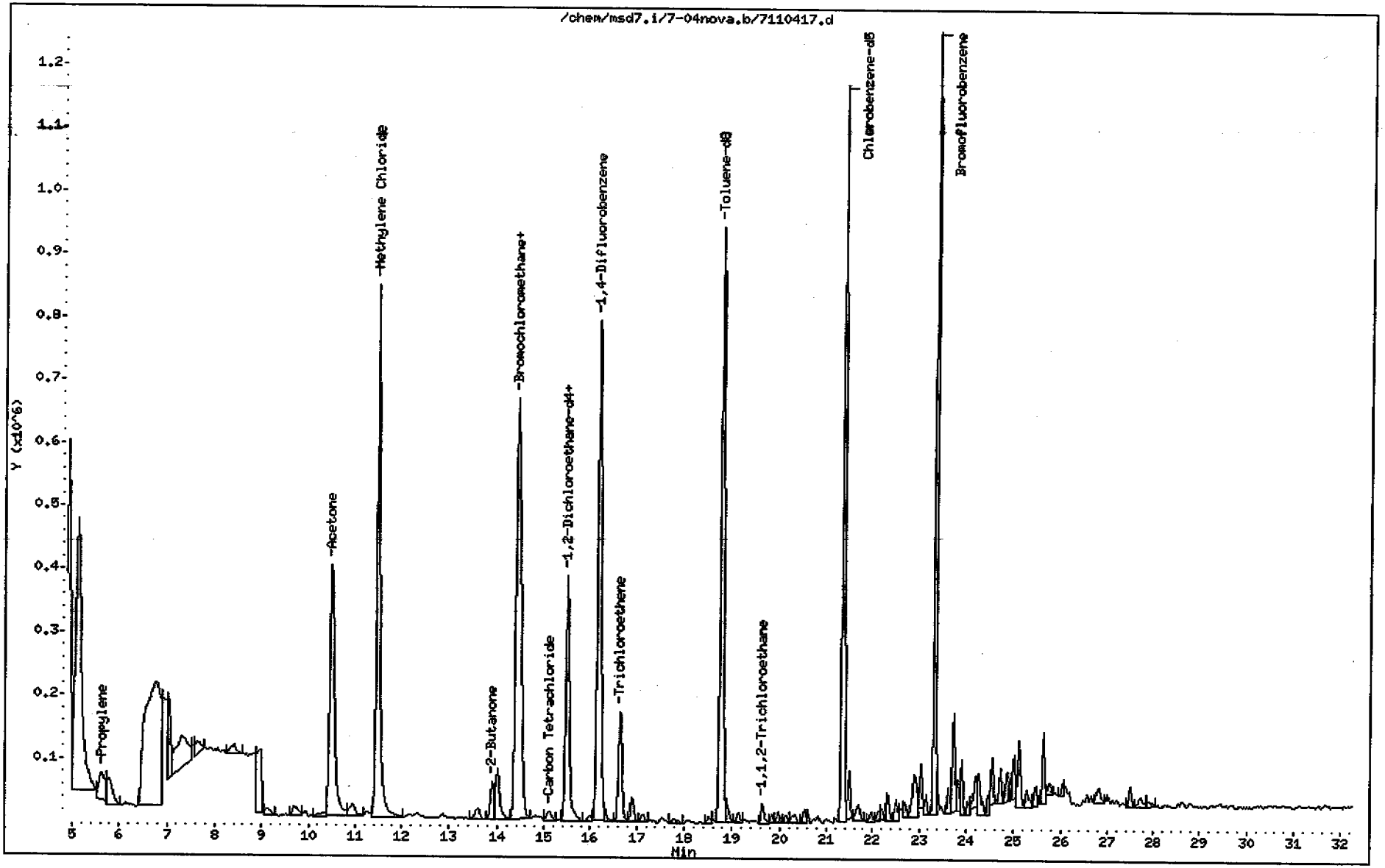
Data File: /chem/msd7.i/7-04nova.b/7110417.d
Date : 05-NOV-2007 06:25
Client ID:
Sample Info: 200mL#34327

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0082



Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34327

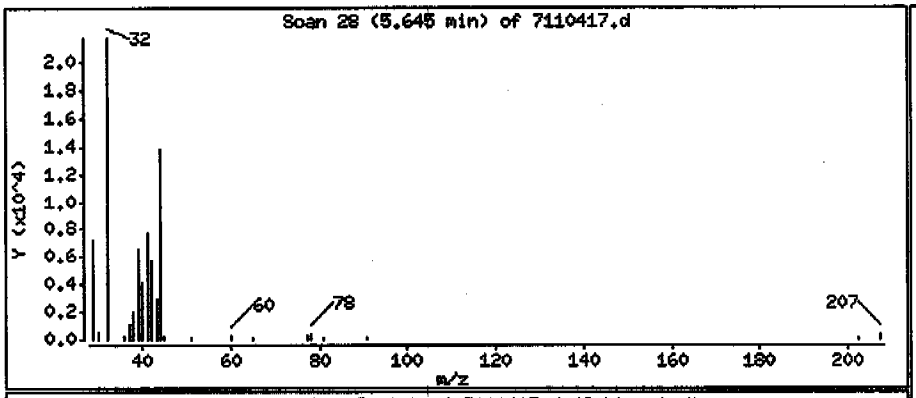
Operator: ab

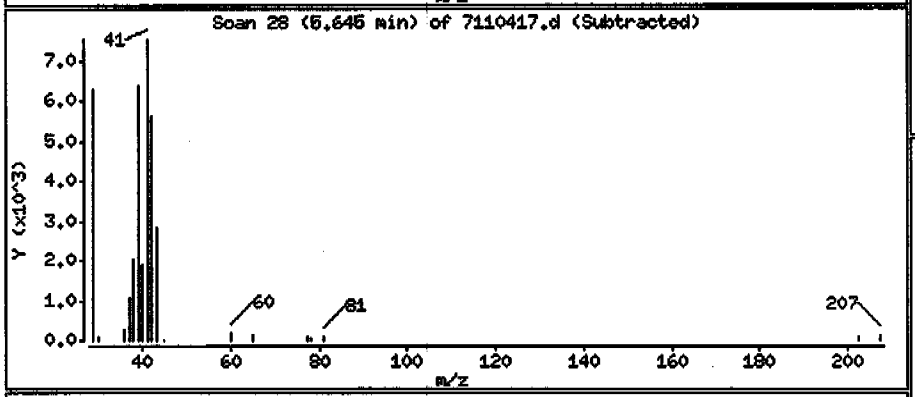
Column phase: RTx-624

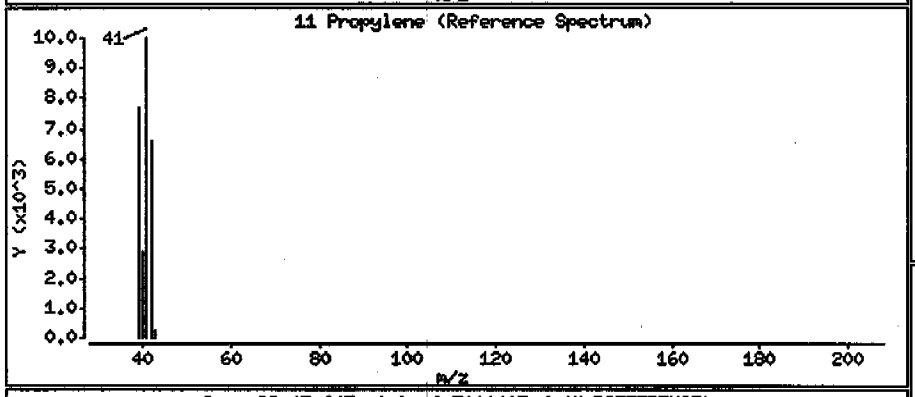
Column diameter: 0.53

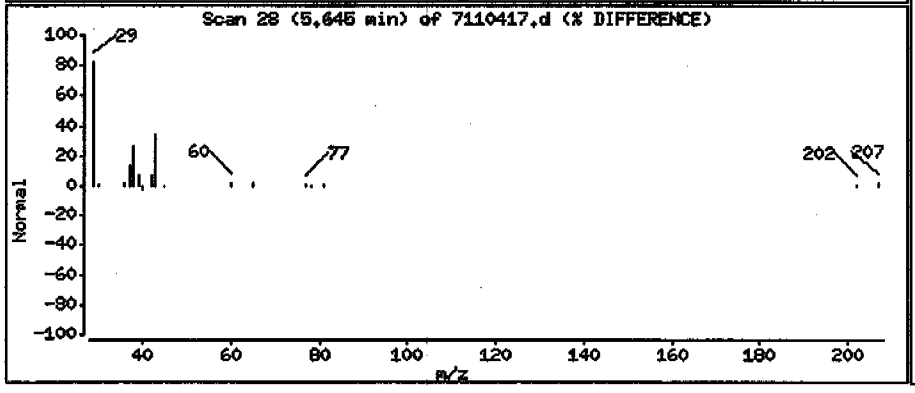
11 Propylene

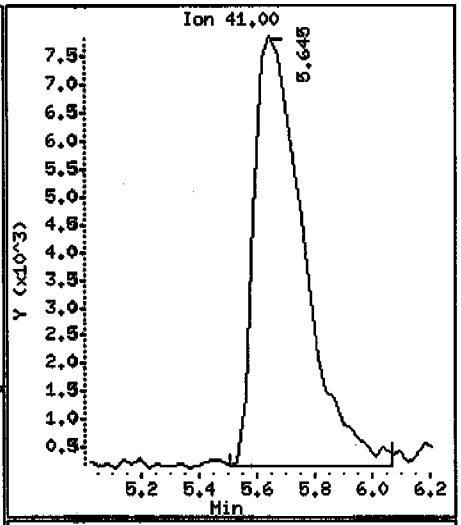
Concentration: 7.035 PPBV

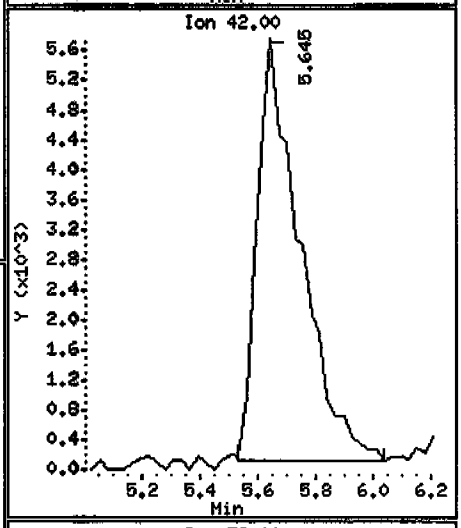


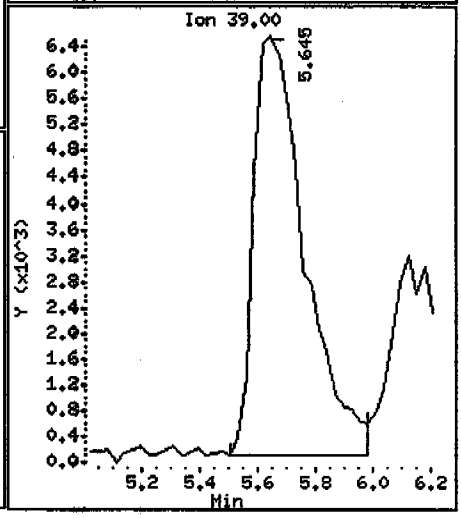












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Sample Info: 200mL#34327

Instrument: msd7.i

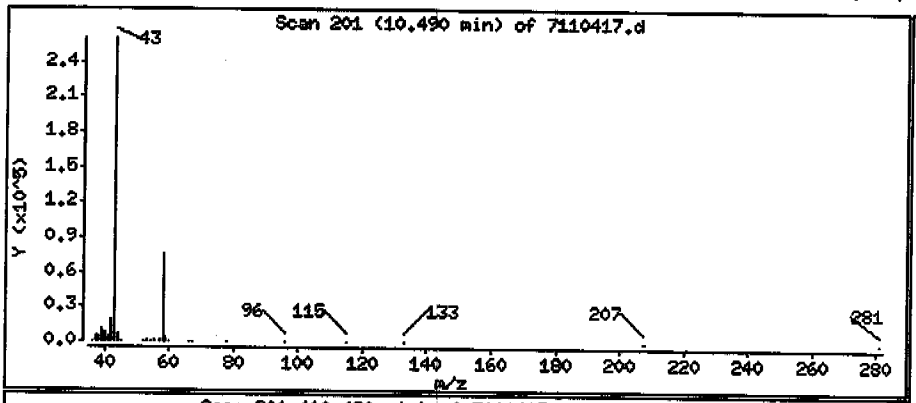
Operator: ab

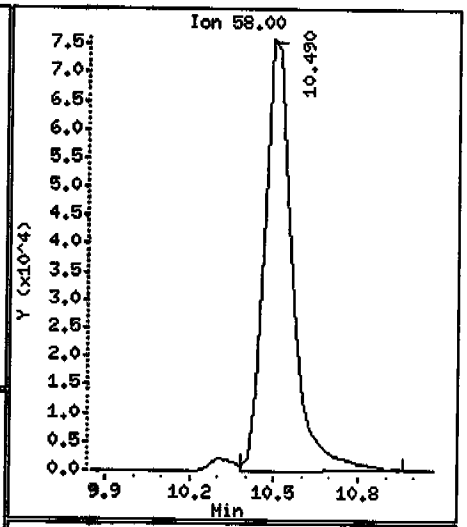
Column phase: RTx-624

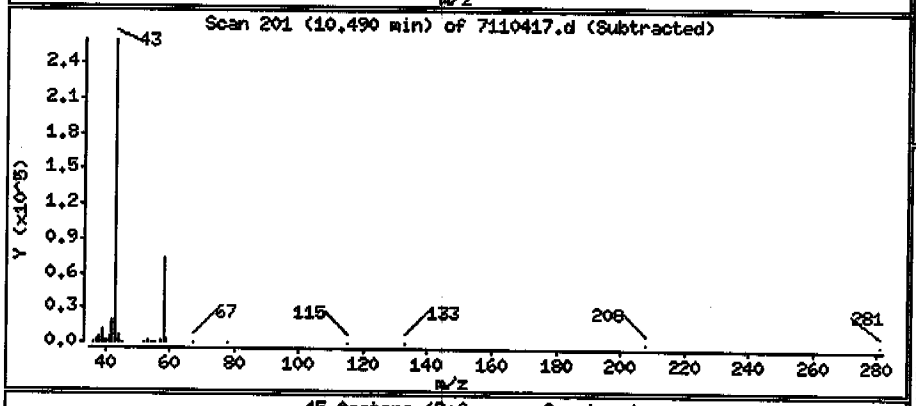
Column diameter: 0.53

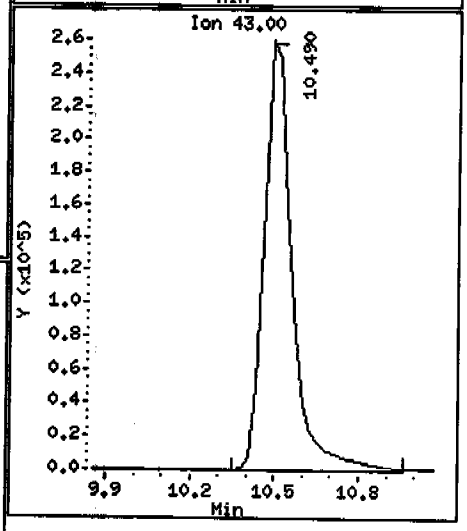
45 Acetone

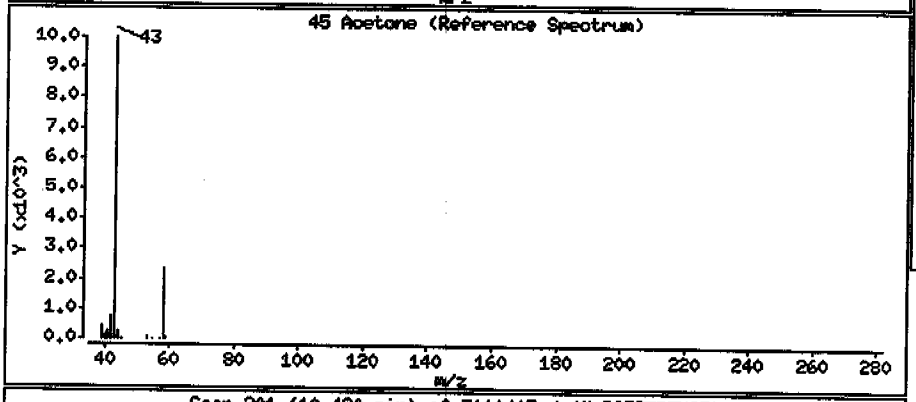
Concentration: 65.739 PPBV

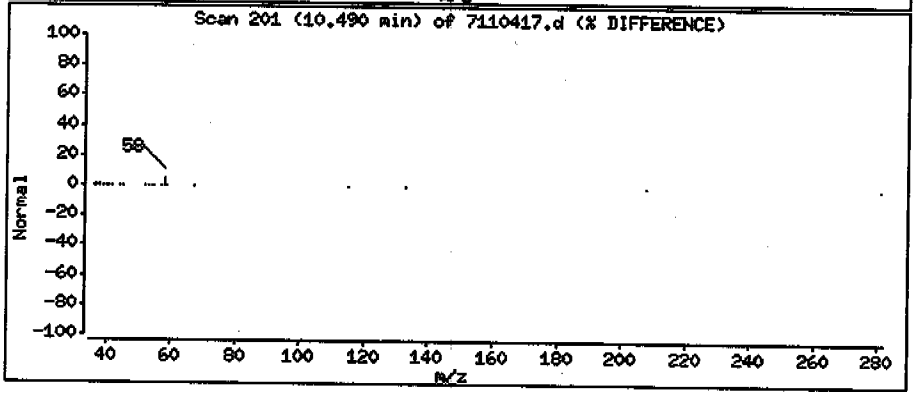












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200ML#34327

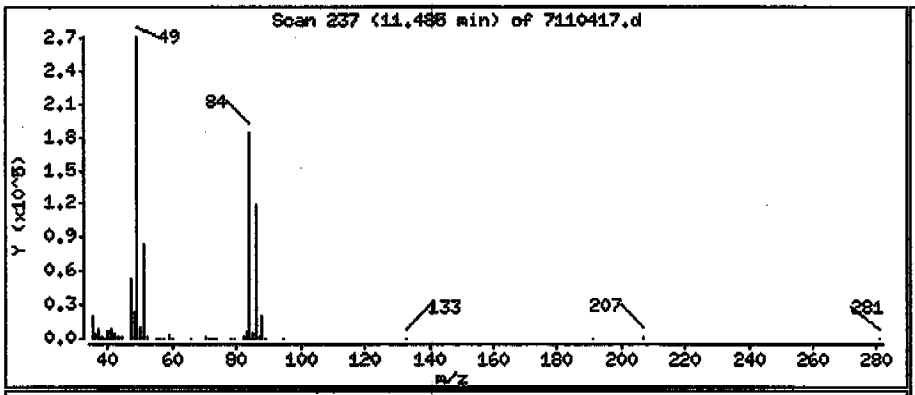
Operator: ab

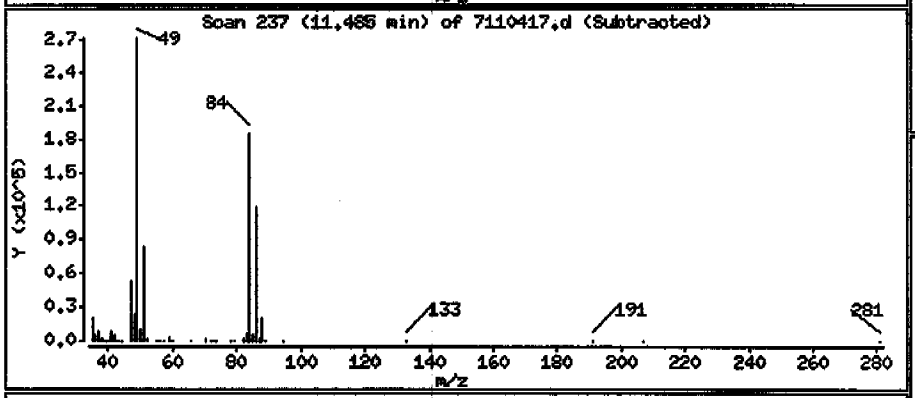
Column phase: RTx-624

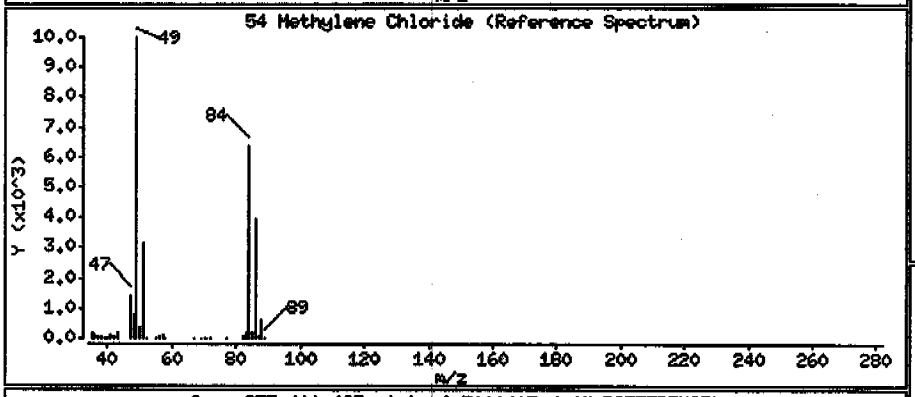
Column diameter: 0.53

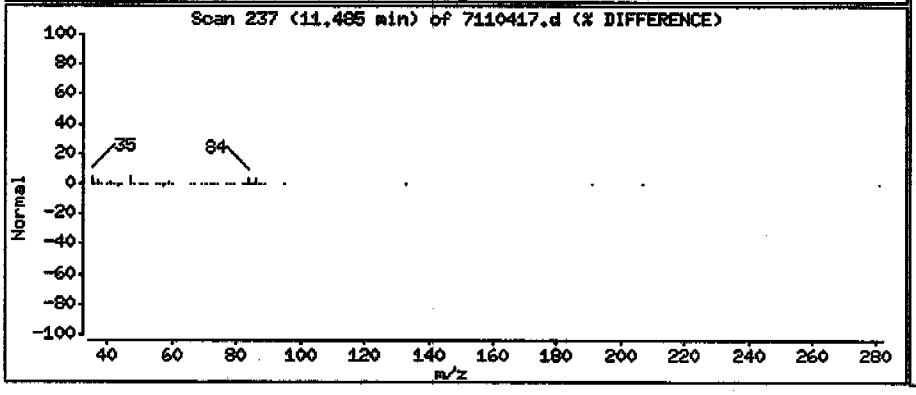
54 Methylene Chloride

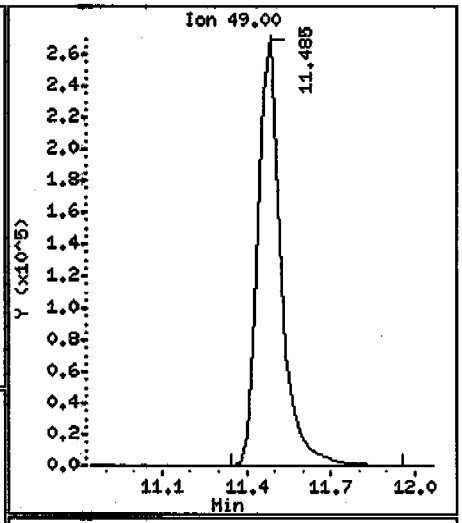
Concentration: 80.948 PPBV

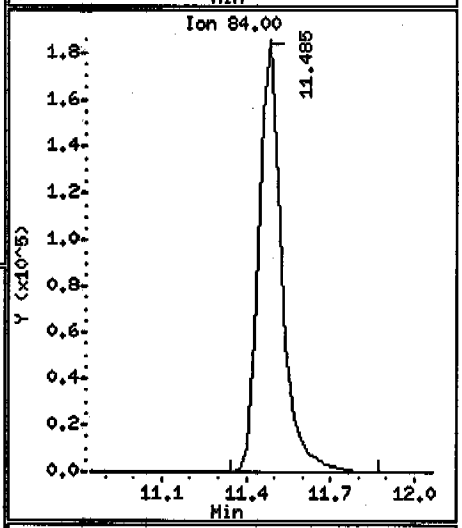


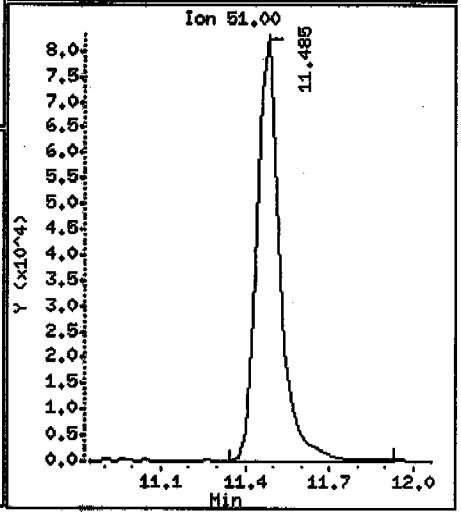












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Sample Info: 200mL#34327

Instrument: msd7.i

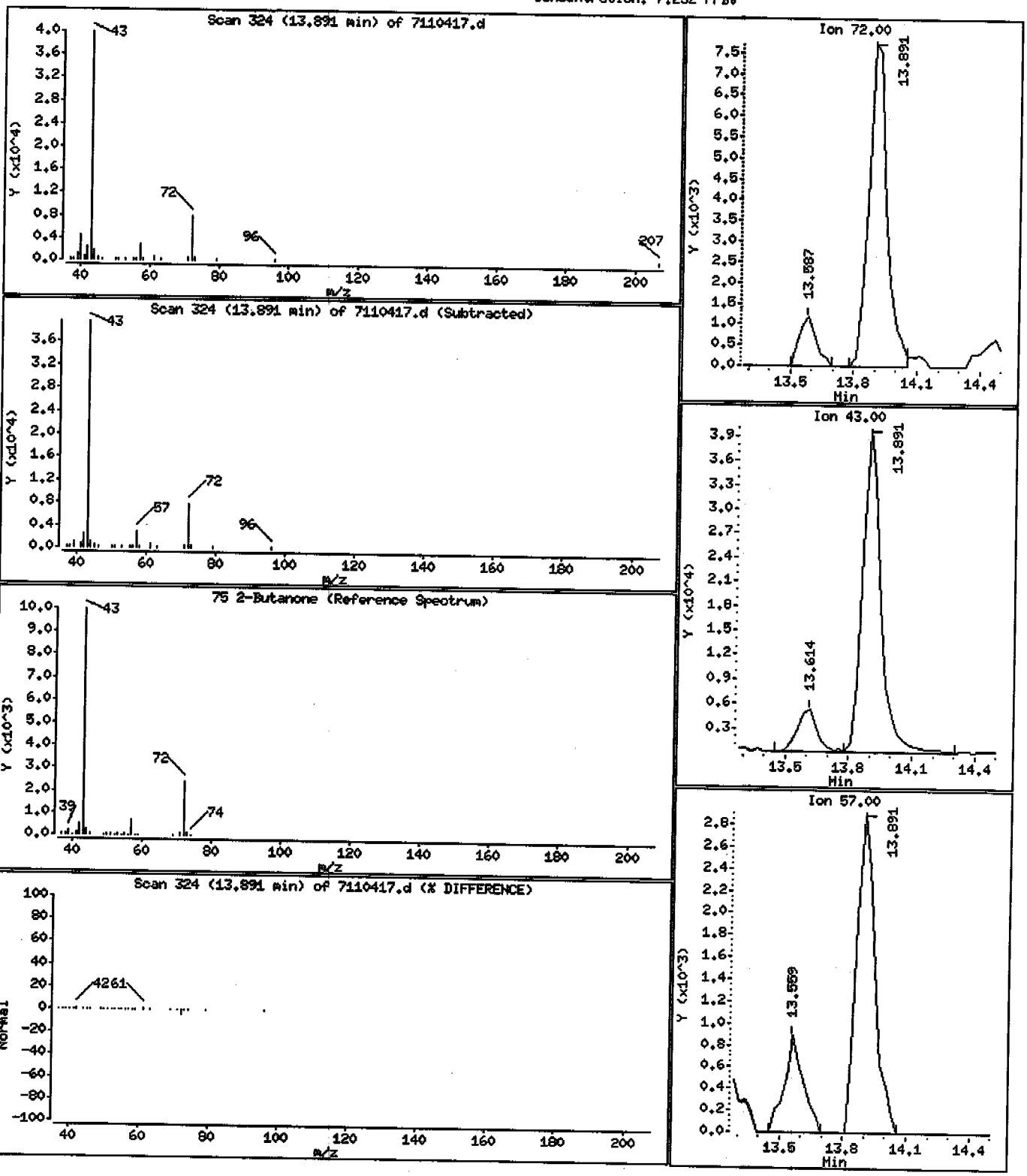
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

75 2-Butanone

Concentration: 7.232 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34327

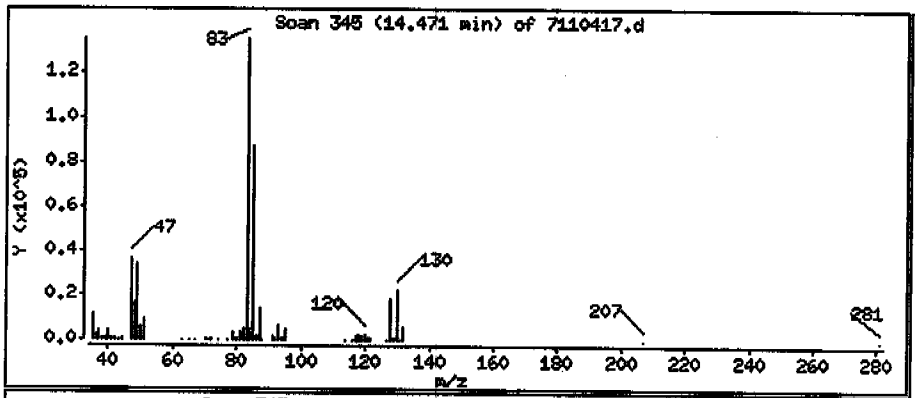
Operator: ab

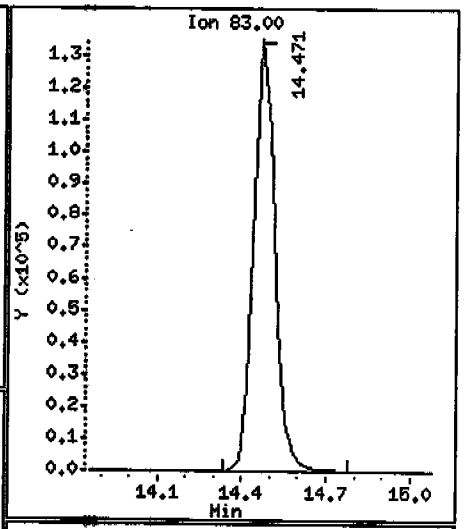
Column phase: RTx-624

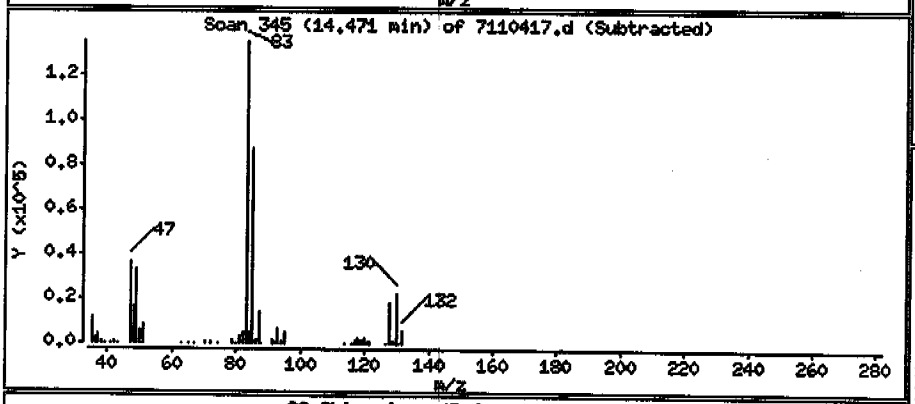
Column diameter: 0.53

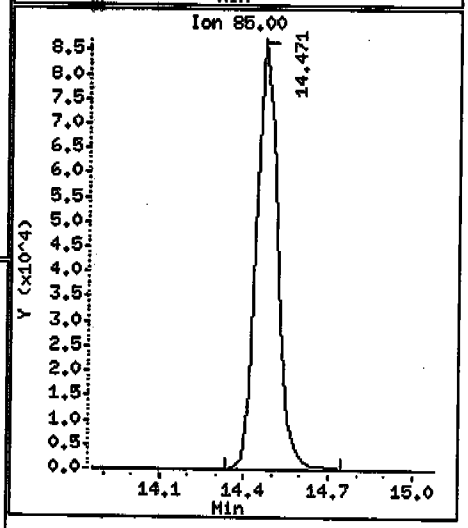
82 Chloroform

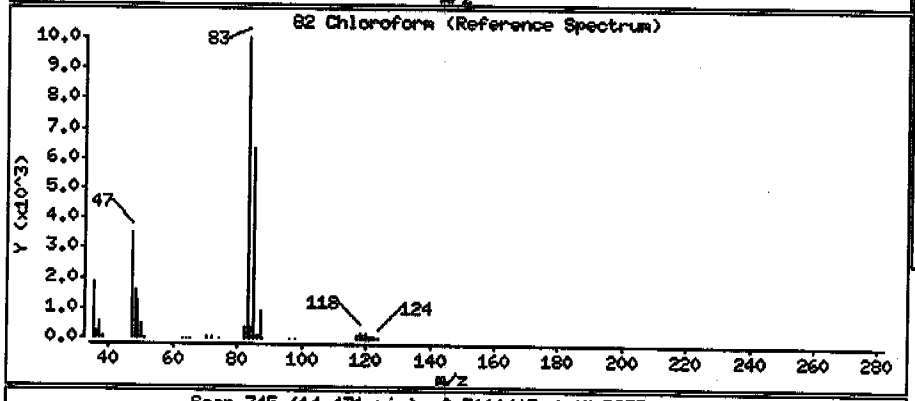
Concentration: 23.326 PPBV

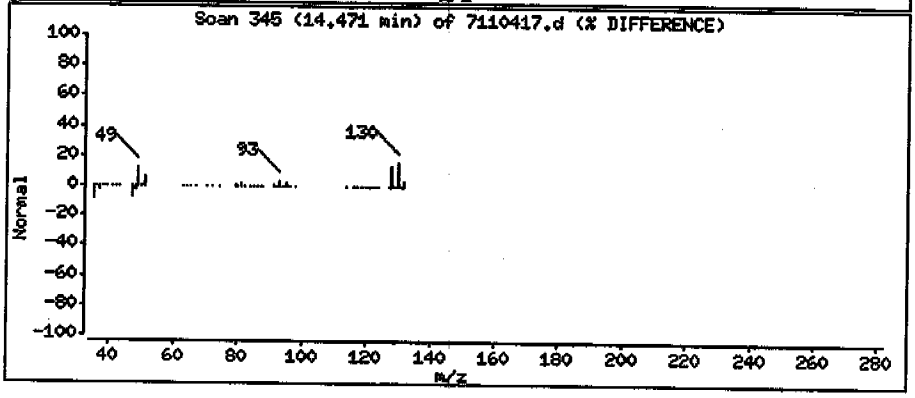












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34327

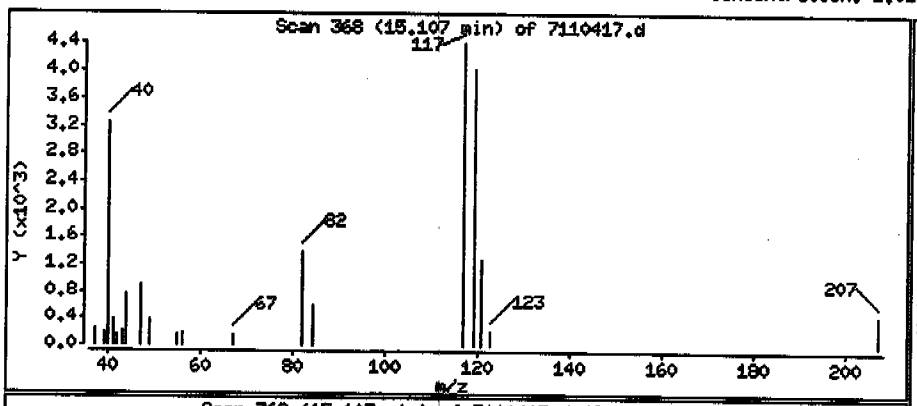
Operator: ab

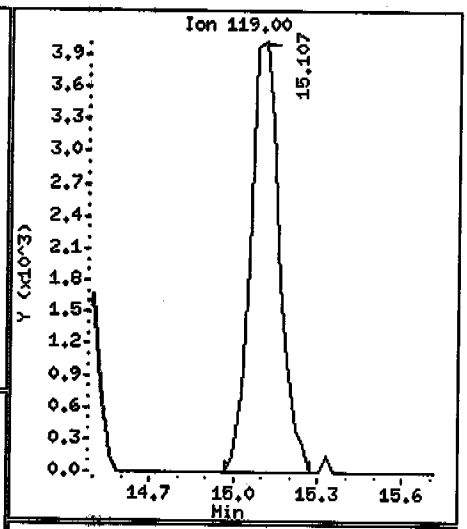
Column phase: RTx-624

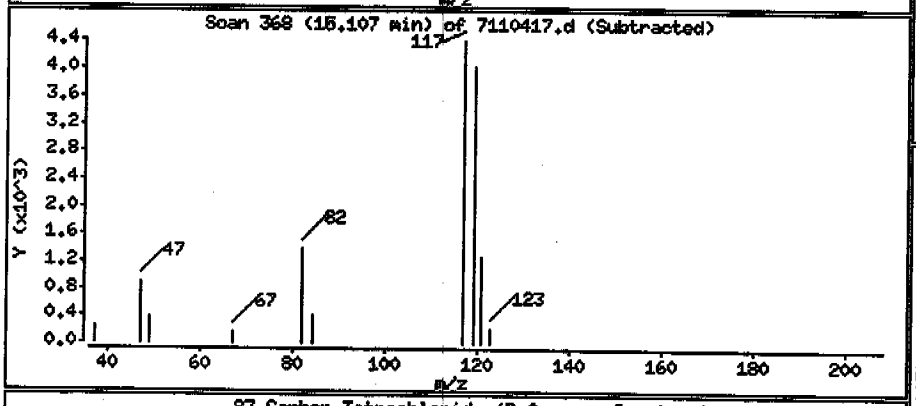
Column diameter: 0.53

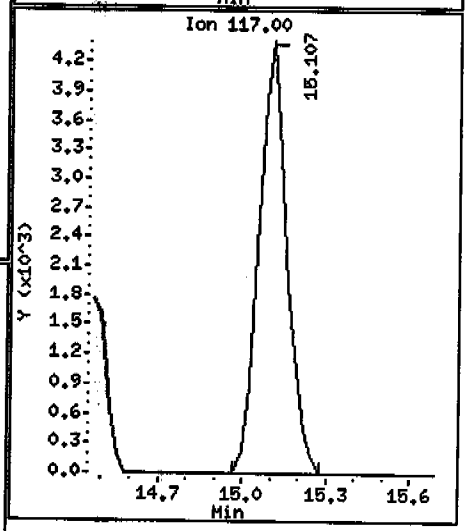
87 Carbon Tetrachloride

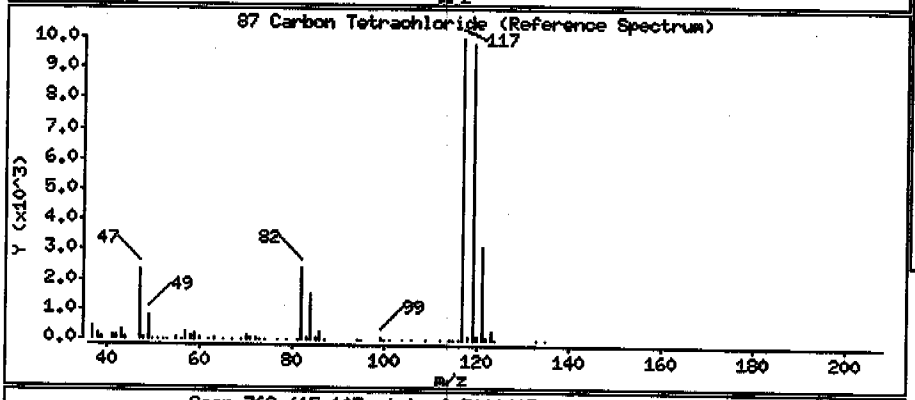
Concentration: 1.013 PPBV

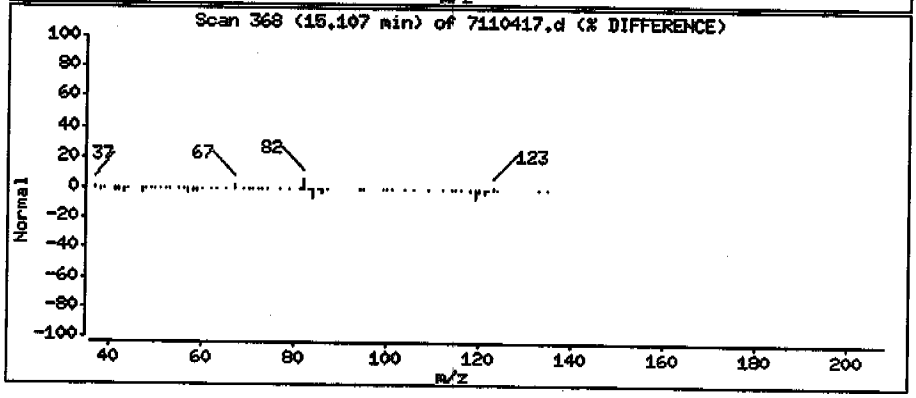












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34327

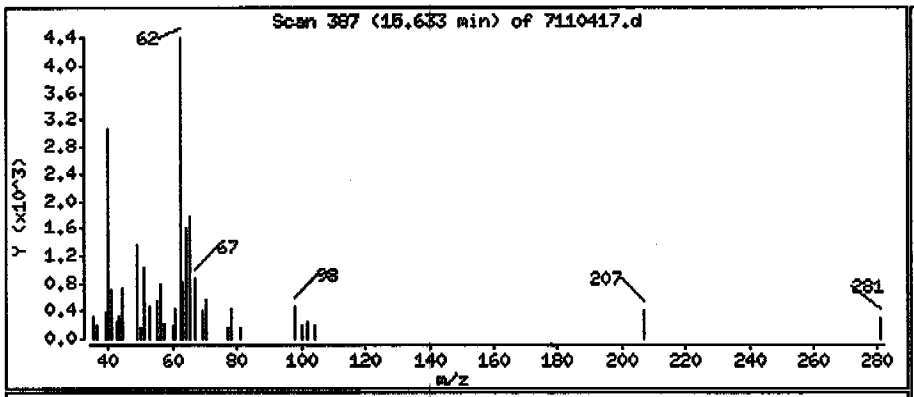
Operator: ab

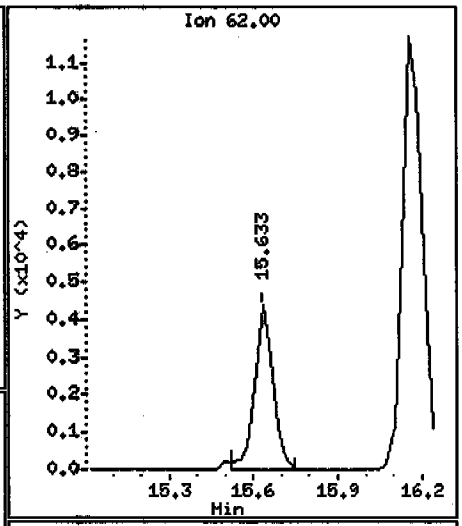
Column phase: RTx-624

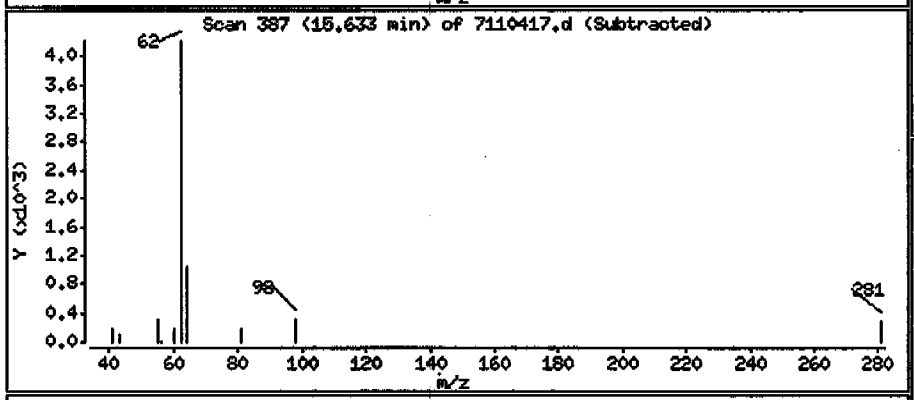
Column diameter: 0.53

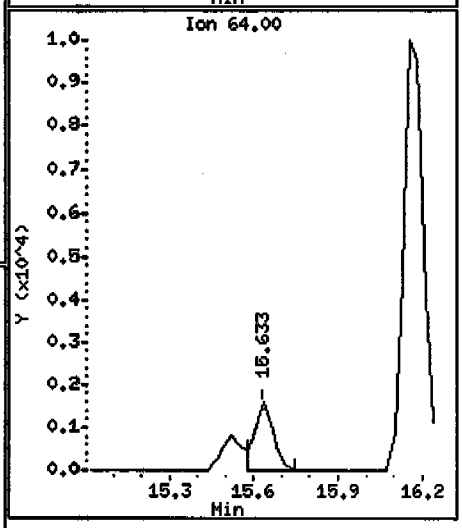
93 1,2-Dichloroethane

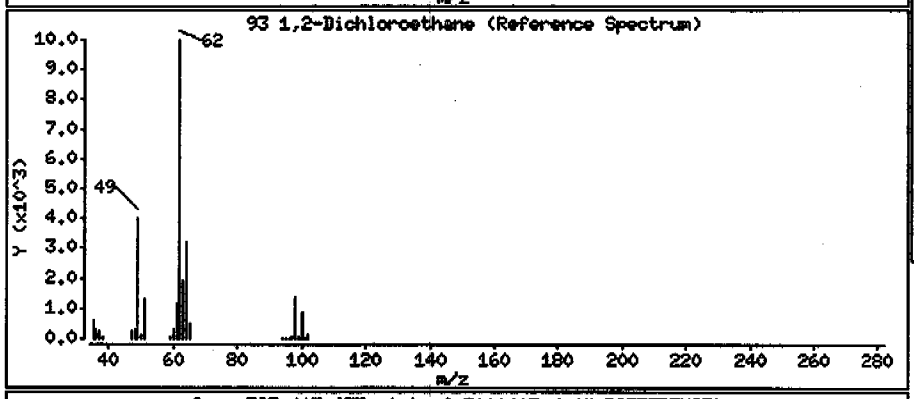
Concentration: 0.9671 PPBV

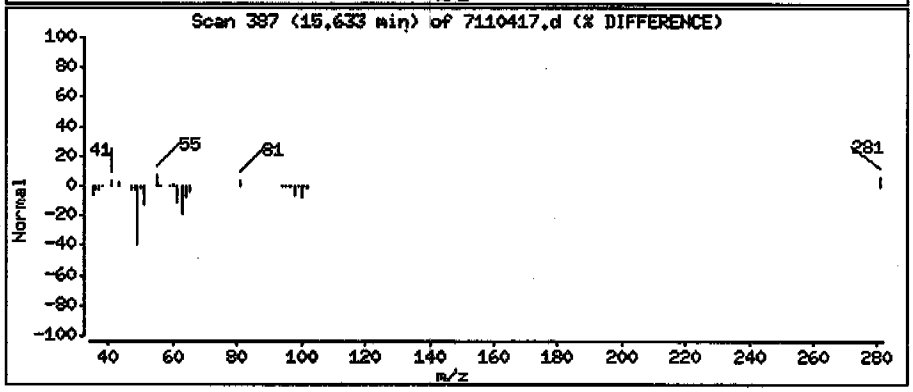












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34327

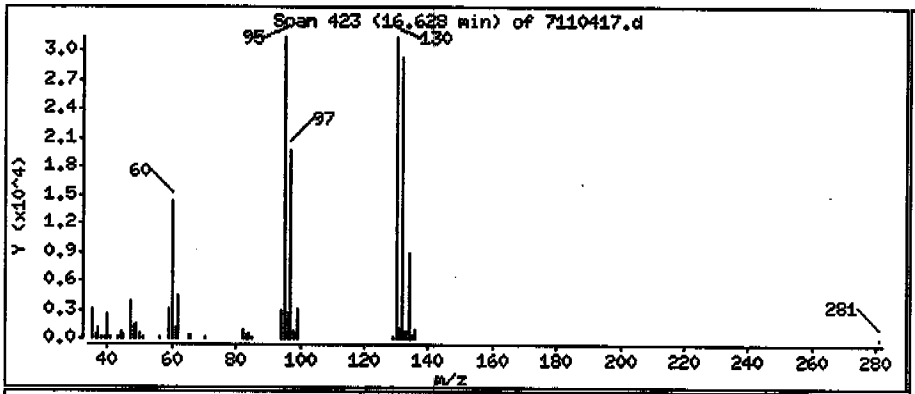
Operator: ab

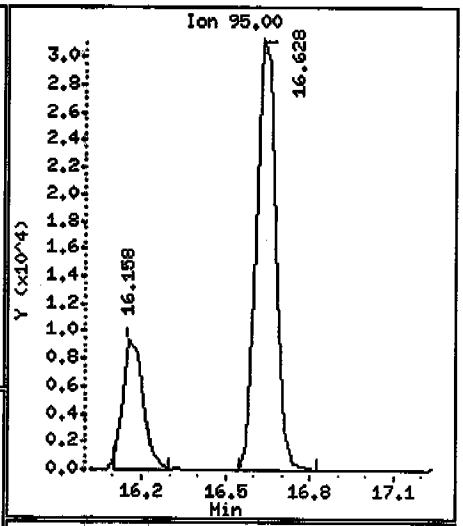
Column phase: RTx-624

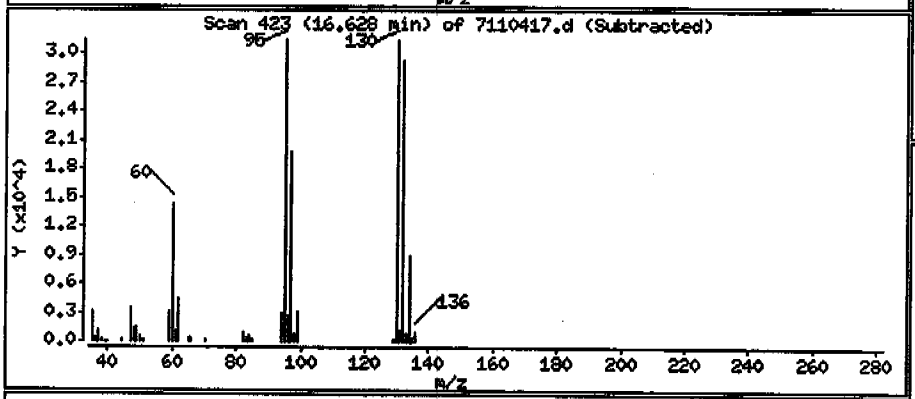
Column diameter: 0.53

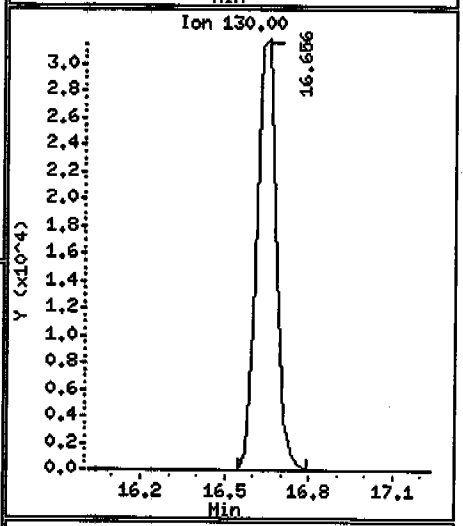
101 Trichloroethene

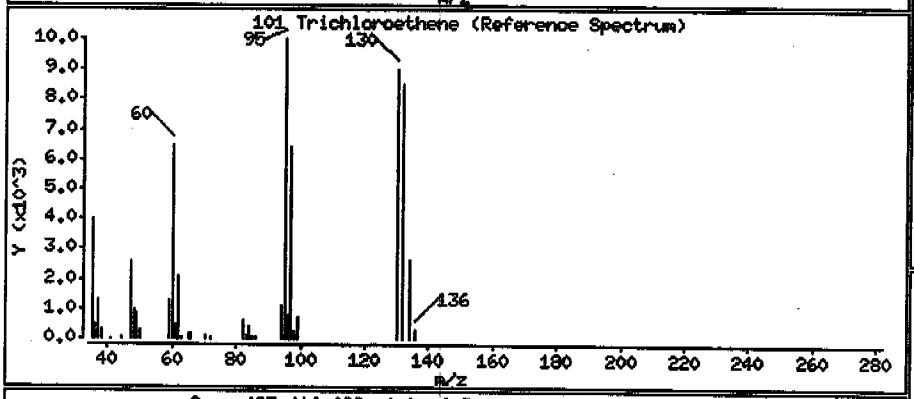
Concentration: 8.763 PPBV

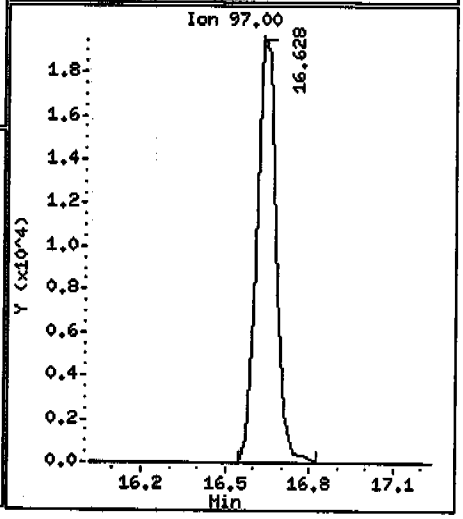


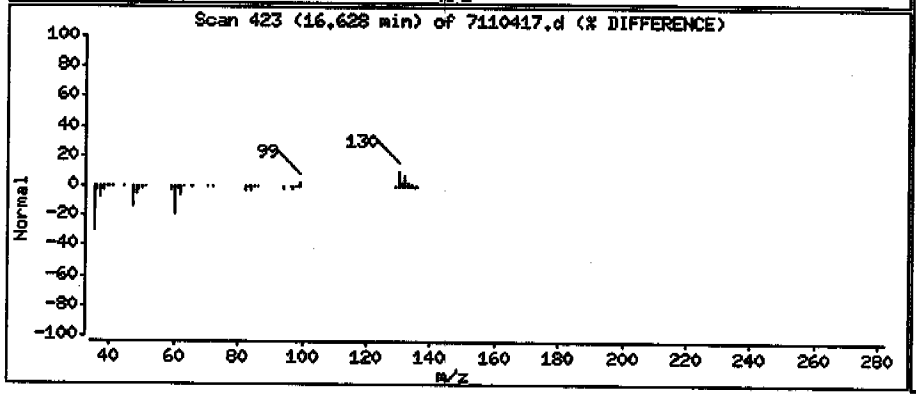












Data File: /chem/msd7.i/7-04nova.b/7110417.d

Date : 05-NOV-2007 06:25

Client ID:

Instrument: msd7.i

Sample Info: 200mL#34327

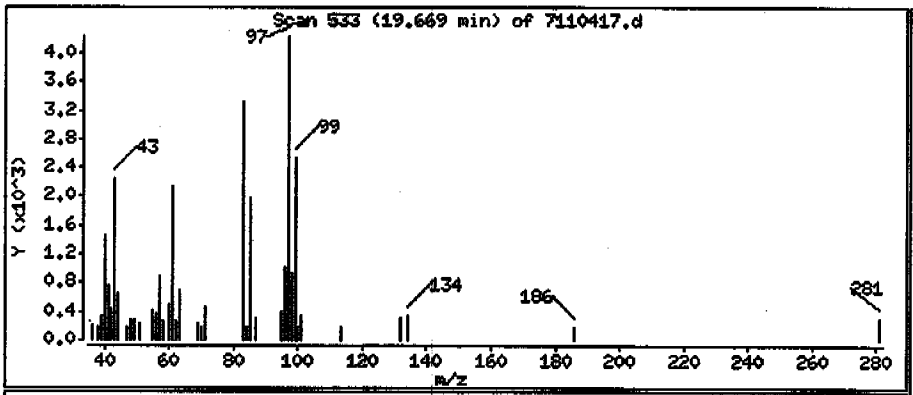
Operator: ab

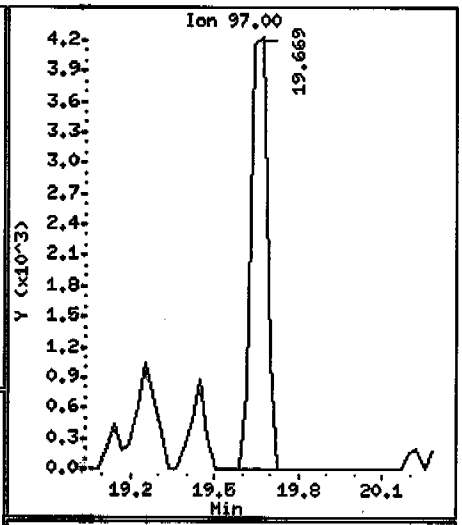
Column phase: RTx-624

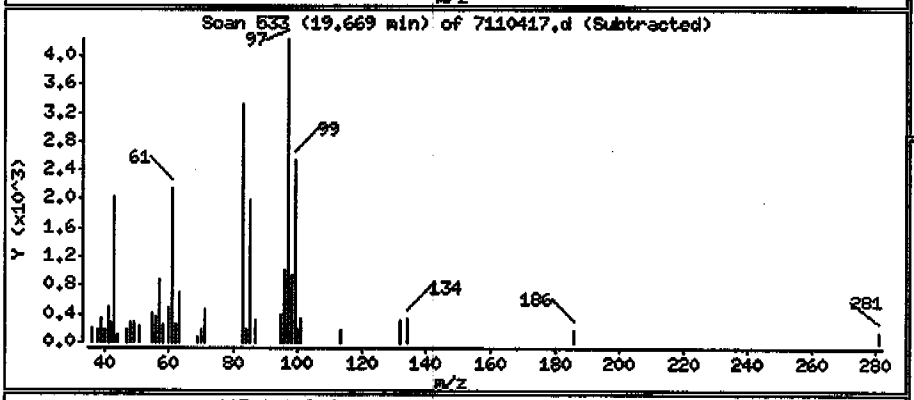
Column diameter: 0.53

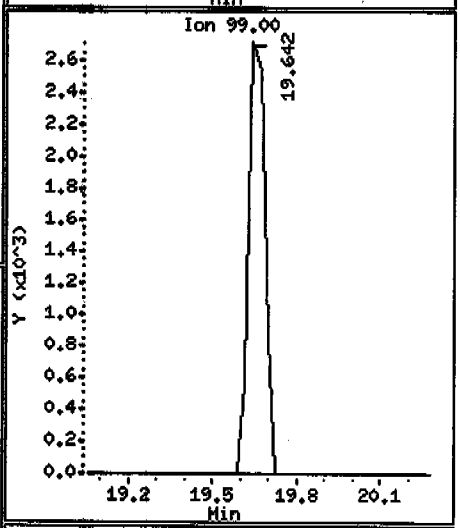
117 1,1,2-Trichloroethane

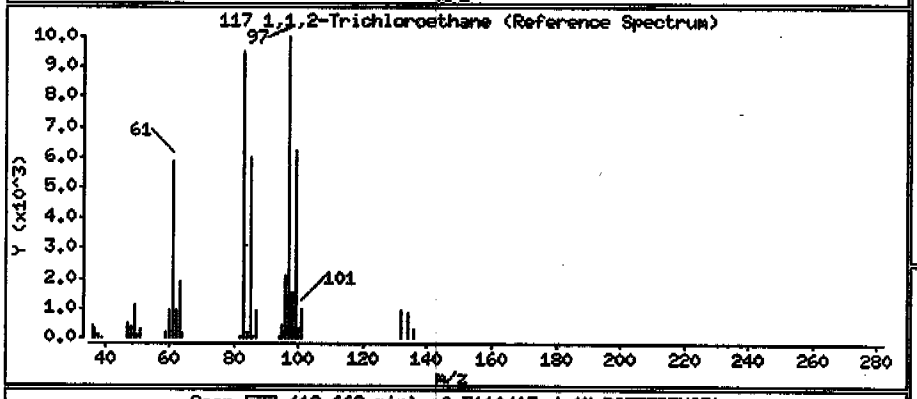
Concentration: 1.159 PPBV

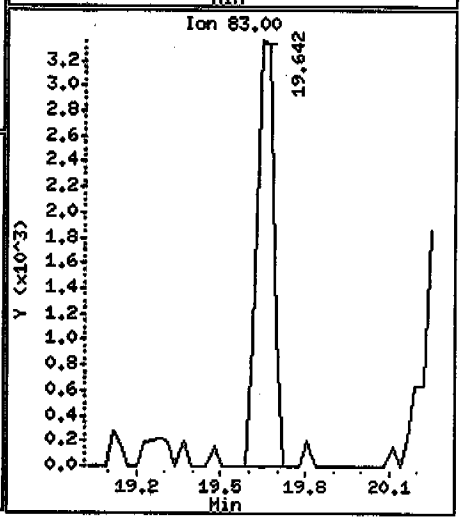


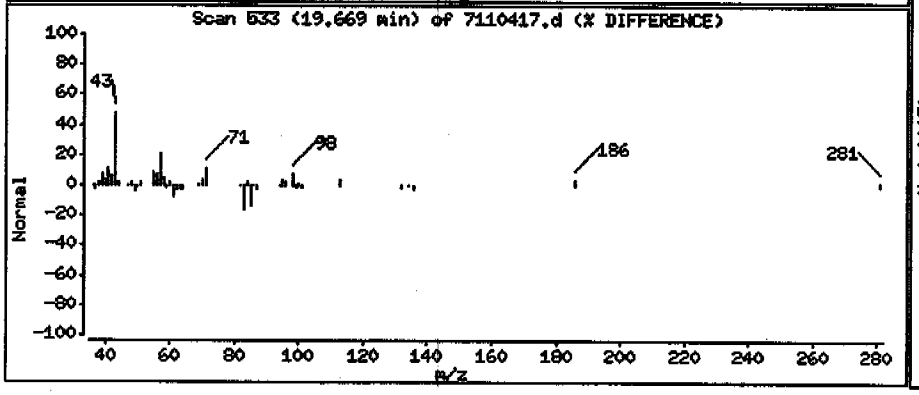












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6809

Lab ID#: 0711008-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.4	4.5	6.8
1,3-Butadiene	0.92	4.7	2.0	10
Freon 113	0.92	3.4	7.0	26
1,1-Dichloroethene	0.92	2.4	3.6	9.7
Acetone	3.7	86	8.7	200
Carbon Disulfide	0.92	1.8	2.8	5.7
Methylene Chloride	0.92	120	3.2	420
Hexane	0.92	2.4	3.2	8.3
2-Butanone (Methyl Ethyl Ketone)	0.92	23	2.7	69
Chloroform	0.92	140	4.5	680
1,1,1-Trichloroethane	0.92	6.7	5.0	36
Carbon Tetrachloride	0.92	64	5.8	400
Benzene	0.92	1.5	2.9	4.9
1,2-Dichloroethane	0.92	1.2	3.7	5.0
Heptane	0.92	1.6	3.7	6.4
Trichloroethene	0.92	150	4.9	790
Bromodichloromethane	0.92	0.96	6.1	6.4
4-Methyl-2-pentanone	0.92	2.2	3.7	8.9
Toluene	0.92	1.5	3.4	5.8
1,1,2-Trichloroethane	0.92	2.4	5.0	13
Tetrachloroethene	0.92	40	6.2	270
2-Hexanone	3.7	9.0	15	37
m,p-Xylene	0.92	1.1	4.0	4.8
1,2,4-Trimethylbenzene	0.92	0.97	4.5	4.8
1,4-Dichlorobenzene	0.92	1.0	5.5	6.0
Propylene	3.7	88	6.3	150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6809

Lab ID#: 0711008-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.4	4.5	6.8
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	3.7	Not Detected	7.6	Not Detected
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	0.92	4.7	2.0	10
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	Not Detected	6.9	Not Detected
Freon 113	0.92	3.4	7.0	26
1,1-Dichloroethene	0.92	2.4	3.6	9.7
Acetone	3.7	86	8.7	200
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	0.92	1.8	2.8	5.7
Methylene Chloride	0.92	120	3.2	420
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Hexane	0.92	2.4	3.2	8.3
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	23	2.7	69
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.92	140	4.5	680
1,1,1-Trichloroethane	0.92	6.7	5.0	36
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	64	5.8	400
Benzene	0.92	1.5	2.9	4.9
1,2-Dichloroethane	0.92	1.2	3.7	5.0
Heptane	0.92	1.6	3.7	6.4
Trichloroethene	0.92	150	4.9	790
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	0.96	6.1	6.4
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	2.2	3.7	8.9
Toluene	0.92	1.5	3.4	5.8
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	2.4	5.0	13
Tetrachloroethene	0.92	40	6.2	270

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6809

Lab ID#: 0711008-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	9.0	15	37
Dibromochloromethane	0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected
Chlorobenzene	0.92	Not Detected	4.2	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
m,p-Xylene	0.92	1.1	4.0	4.8
o-Xylene	0.92	Not Detected	4.0	Not Detected
Styrene	0.92	Not Detected	3.9	Not Detected
Bromoform	0.92	Not Detected	9.4	Not Detected
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	0.92	0.97	4.5	4.8
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.92	1.0	5.5	6.0
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected
Methanol	92	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	88	6.3	150

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	108	70-130

0094

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110416.d
Lab Smp Id: 0711008-04A
Inj Date : 05-NOV-2007 05:36
Operator : ab Inst ID: msd7.i
Smp Info : 200mL#R11
Misc Info : 8.0"Hg-5psi
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	600905	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	462178			28.08- 128.08	76.91
14.388	14.388 (1.000)	49	1222529			128.80- 228.80	203.45
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2082380	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	302722			0.00- 64.88	14.54
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1492758	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	770269			4.45- 104.45	51.60
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	747951	23.1695	23.170	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	388823			2.91- 102.91	51.99
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1685002	22.7945	22.794	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	188965			0.00- 61.46	11.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1165399			19.18- 119.18	69.16
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	963794	27.1328	27.133	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1096323			63.49- 163.49	113.75
23.347	23.347 (1.093)	176	938373			46.77- 146.77	97.36
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1252614	48.3651	88.508	80.00- 120.00	100.00(H)
5.617	5.617 (0.390)	42	792862			21.19- 121.19	63.30
5.617	5.617 (0.390)	39	1047844			24.83- 124.83	83.65
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.399)	85	71300	0.75085	1.374	80.00- 120.00	100.00
5.729	5.729 (0.397)	87	23223			0.00- 83.07	32.57
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.481)	54	71397	2.55660	4.678	80.00- 120.00	100.00
6.715	6.940 (0.466)	39	561996			55.97- 155.97	787.14
42 Freon 113					CAS #: 76-13-1		
10.186	10.186 (0.707)	151	90597	1.83874	3.365	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	56143			13.28- 113.28	61.97
10.186	10.186 (0.707)	101	105554			60.51- 160.51	116.51
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	70375	1.34230	2.456	80.00- 120.00	100.00
10.324	10.324 (0.716)	96	40401			8.23- 108.23	57.41
10.324	10.324 (0.716)	98	26033			0.00- 87.38	36.99
45 Acetone					CAS #: 67-64-1		
10.490	10.462 (0.728)	58	760676	46.9393	85.899	80.00- 120.00	100.00
10.490	10.462 (0.728)	43	2648542			247.10- 347.10	348.18
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.754)	76	100928	1.00898	1.846	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.795)	49	2581375	66.9684	122.55	80.00- 120.00	100.00
11.457	11.457 (0.795)	84	1723102			15.73- 115.73	66.75
11.457	11.457 (0.795)	51	783500			0.00- 80.85	30.35
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.852)	57	65737	1.29318	2.366	80.00- 120.00	100.00
12.287	12.287 (0.852)	43	55473			17.84- 117.84	84.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane (continued)							
12.287	12.287 (0.852)	86	8912			0.00- 65.07	13.56
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	166693	12.8081	23.439	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	867292			458.59- 558.59	520.29
13.891	13.891 (0.964)	57	65670			0.00- 86.57	39.40
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	4635796	76.6220	140.22	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	3012464			15.98- 115.98	64.98
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	221763	3.63983	6.661	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	140729			14.42- 114.42	63.46
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.079	15.107 (1.046)	119	1987334	34.7971	63.679	80.00- 120.00	100.00
15.107	15.080 (1.048)	117	2032553			54.21- 154.21	102.28
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	69378	0.83852	1.534	80.00- 120.00	100.00
15.494	15.522 (0.959)	77	18763			0.00- 71.87	27.04
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.967)	62	29697	0.67554	1.236	80.00- 120.00	100.00
15.632	15.633 (0.967)	64	10532			0.00- 82.89	35.46
94 Heptane					CAS #: 142-82-5		
15.715	15.716 (0.973)	71	21839	0.85825	1.570	80.00- 120.00	100.00
15.715	15.716 (0.973)	43	44456			158.53- 258.53	203.56
15.715	15.716 (0.973)	57	18038			59.34- 159.34	82.60
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	2967445	80.7399	147.75	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	3102046			54.96- 154.96	104.54
16.628	16.628 (1.029)	97	1932068			15.03- 115.03	65.11
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	33559	0.52593	0.9624	80.00- 120.00	100.00
17.540	17.540 (1.086)	85	20964			14.07- 114.07	62.47
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	29314	1.18392	2.166	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	74942			222.97- 322.97	255.65
18.508	18.508 (1.145)	85	12191			0.00- 90.48	41.59

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	76328	0.84225	1.541	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	44970			12.81- 112.81	58.92
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	40753	1.31806	2.412	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	24677			12.57- 112.57	60.55
19.642	19.642 (0.920)	83	34811			31.77- 131.77	85.42
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	873717	21.7881	39.872	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	612809			18.66- 118.66	70.14
19.835	19.835 (0.929)	131	581447			16.81- 116.81	66.55
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.974 (0.935)	58	162379	4.90038	8.968	80.00- 120.00	100.00
19.973	19.974 (0.935)	43	306540			132.73- 232.73	188.78
19.973	19.974 (0.935)	100	29966			0.00- 67.05	18.45
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	25809	0.59816	1.095	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	49496			145.05- 245.05	191.78
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	42365	0.53069	0.9712	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	16266			0.00- 98.95	38.39
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	35095	0.54511	0.9975	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	22080			13.81- 113.81	62.91
25.282	25.282 (1.184)	111	15657			0.00- 87.35	44.61

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110416.d
Lab Smp Id: 0711008-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 8.0"Hg-5psi

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	600905	-7.72
97 1,4-Difluorobenze	2188066	1312840	3063292	2082380	-4.83
126 Chlorobenzene-d5	1729248	1037549	2420947	1492758	-13.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-04nova
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711008-04A
Level: LOW
Operator: ab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 8.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.170	92.68	70-130
$ 113 Toluene-d8	25.000	22.794	91.18	70-130
$ 137 Bromofluorobenzene	25.000	27.133	108.53	70-130

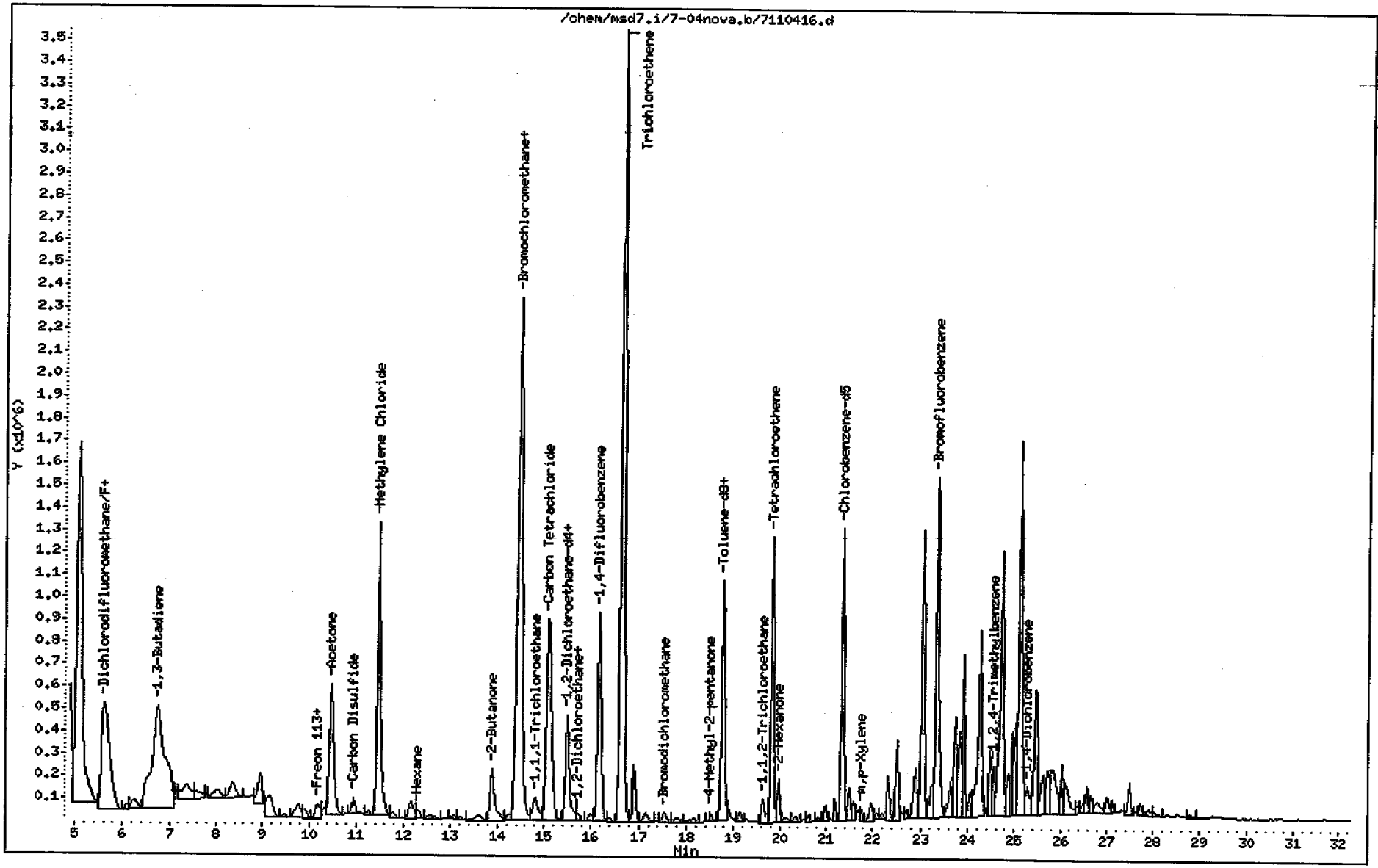
Data File: /chem/msd7.i/7-04nova.b/7110416.d
Date : 05-NOV-2007 05:36
Client ID:
Sample Info: 200mL#R11

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0101



Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

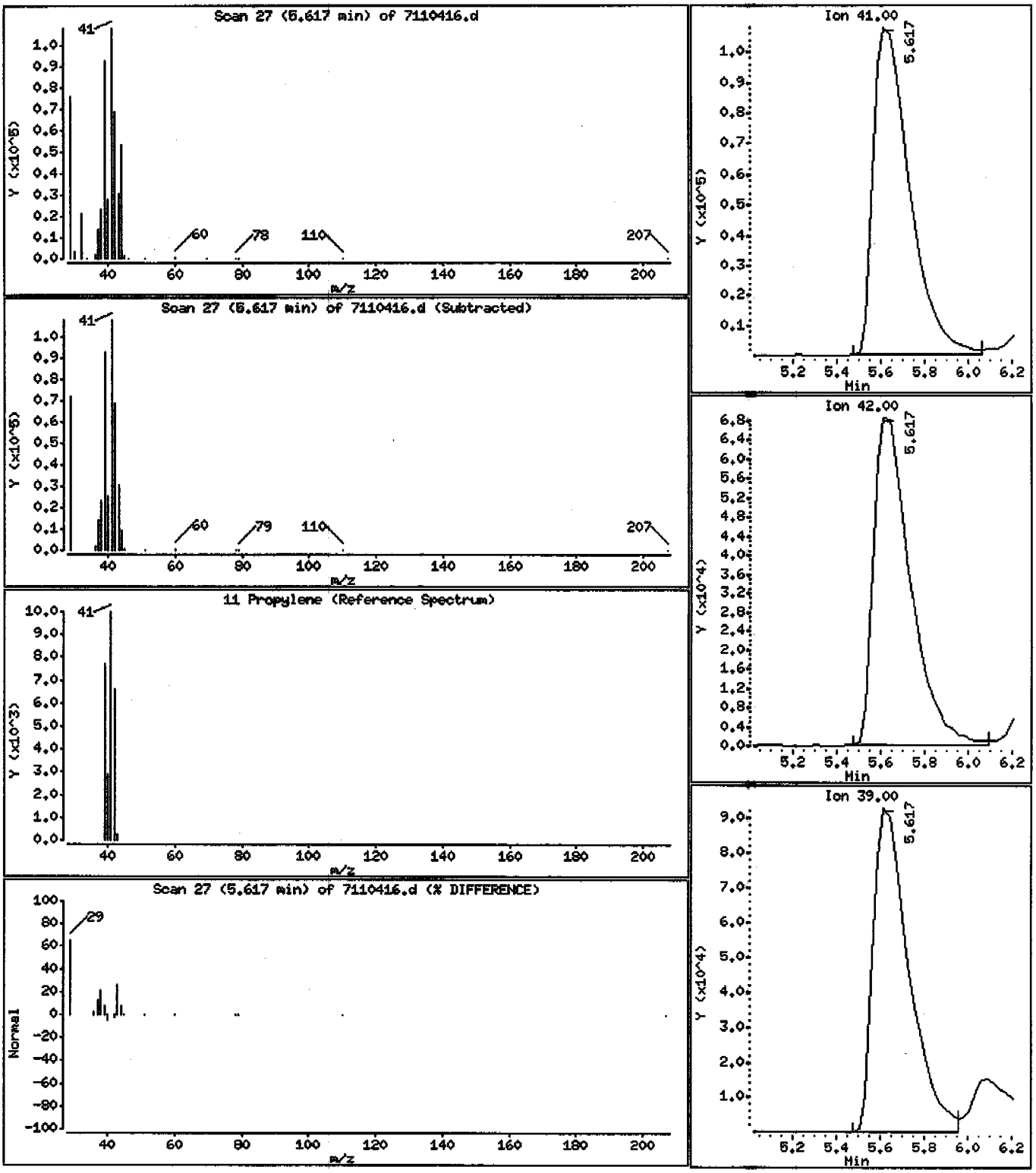
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

11 Propylene

Concentration: 88.508 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

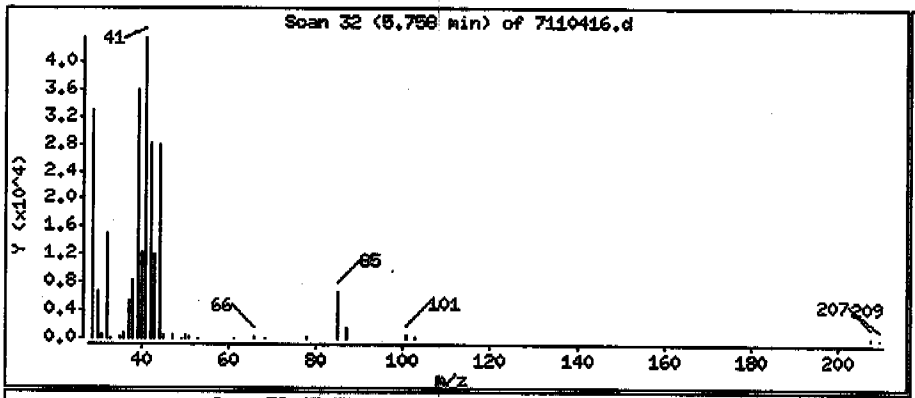
Operator: ab

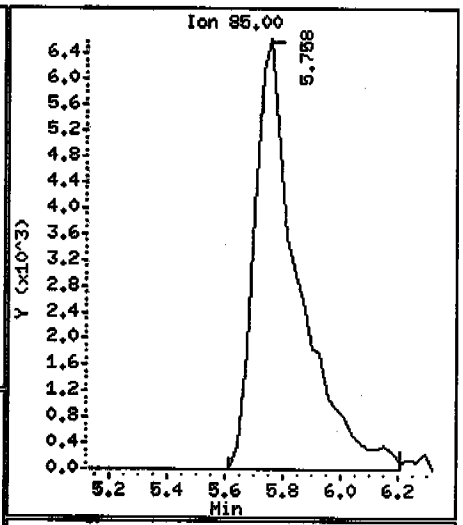
Column phase: RTx-624

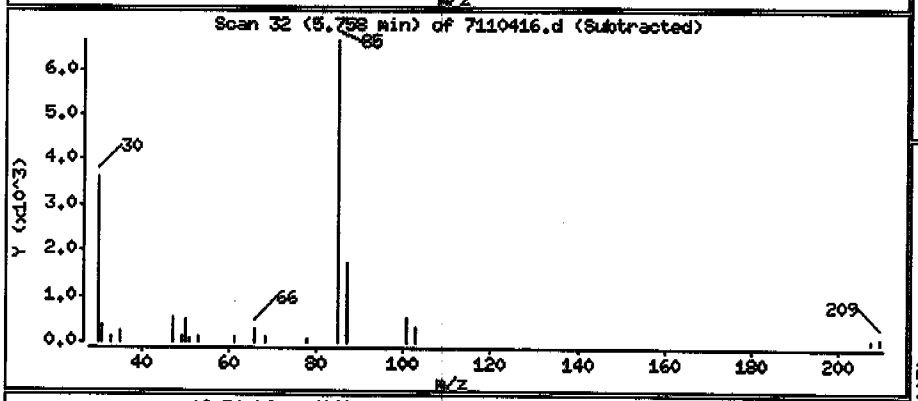
Column diameter: 0.53

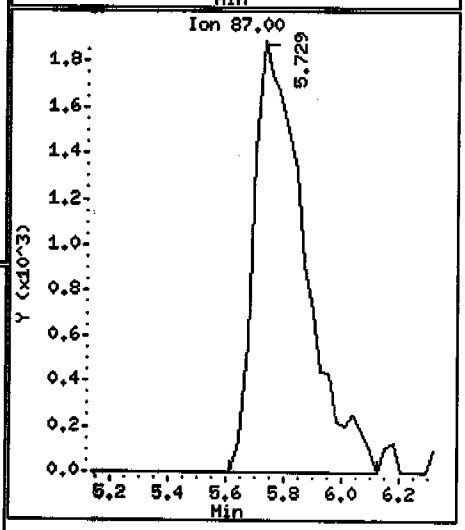
12 Dichlorodifluoromethane/Fr12

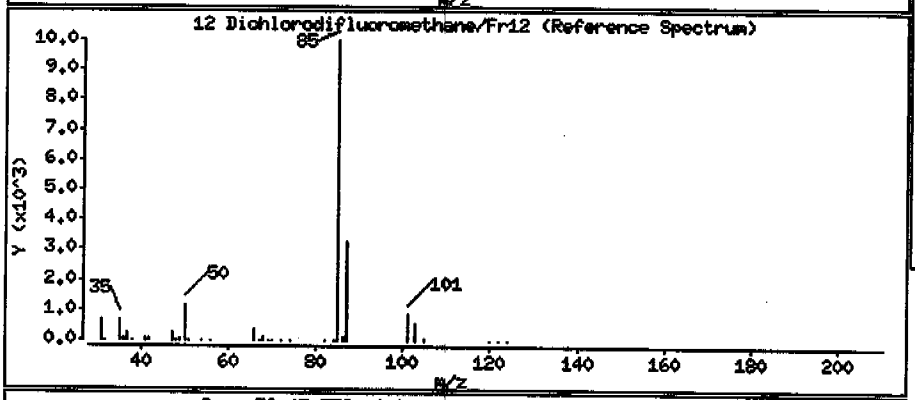
Concentration: 1.374 PPBV

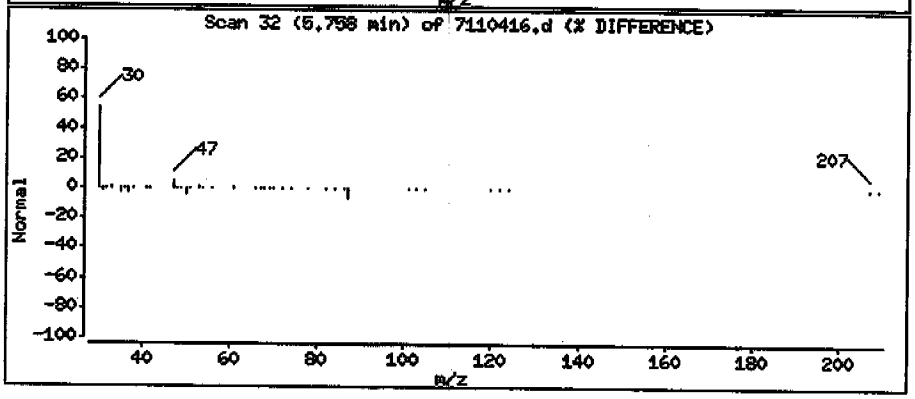












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

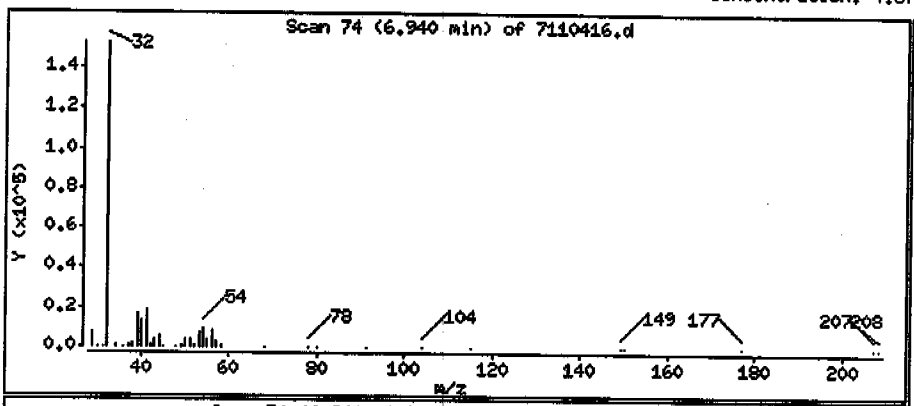
Operator: ab

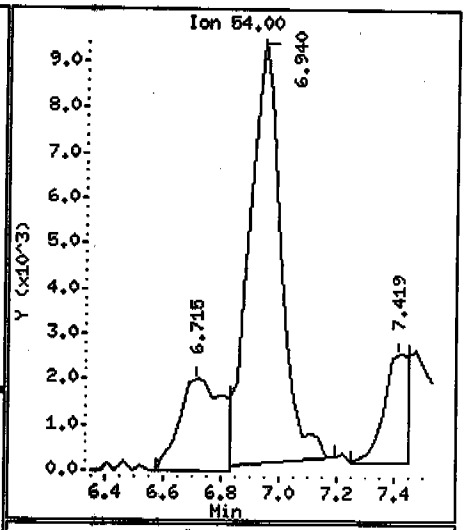
Column phase: RTx-624

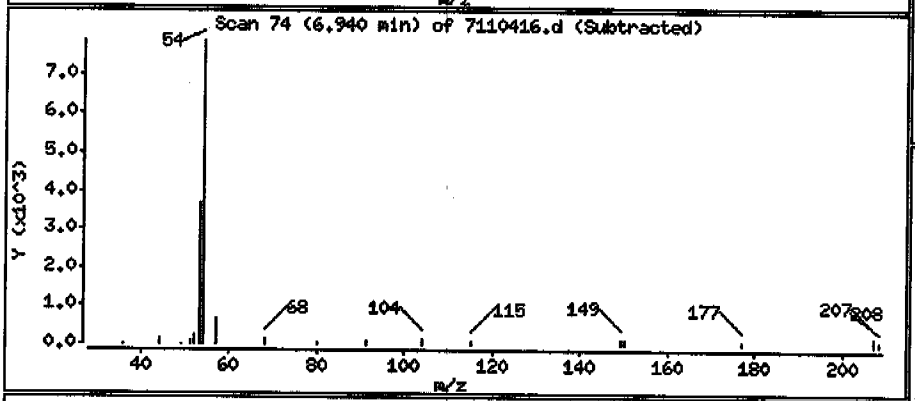
Column diameter: 0.53

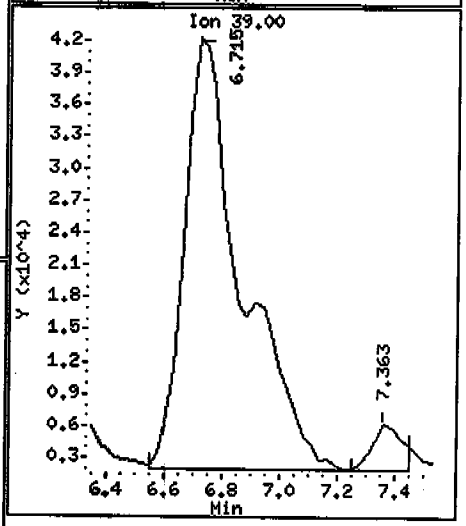
22 1,3-Butadiene

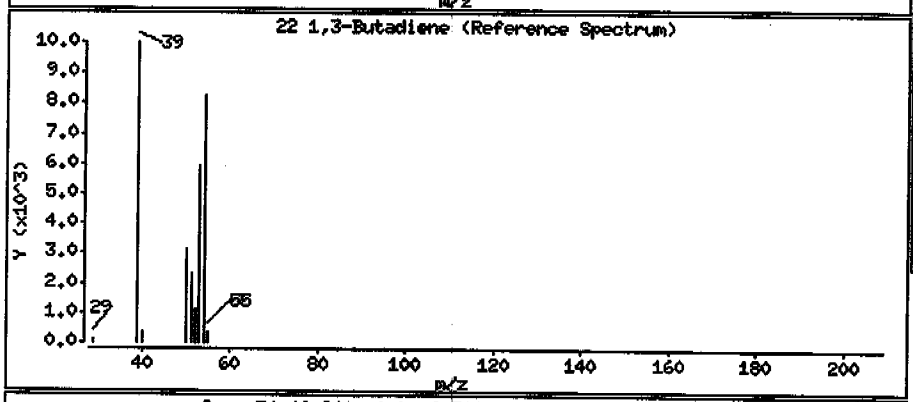
Concentration: 4.678 PPBV

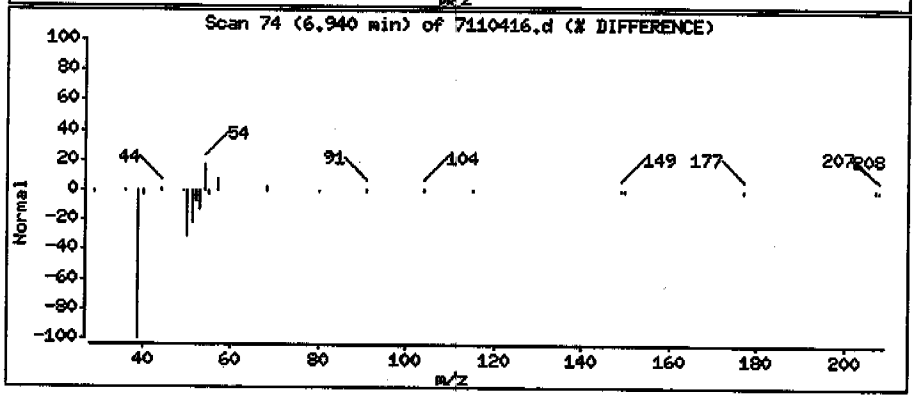












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Sample Info: 200mL#R11

Instrument: msd7.i

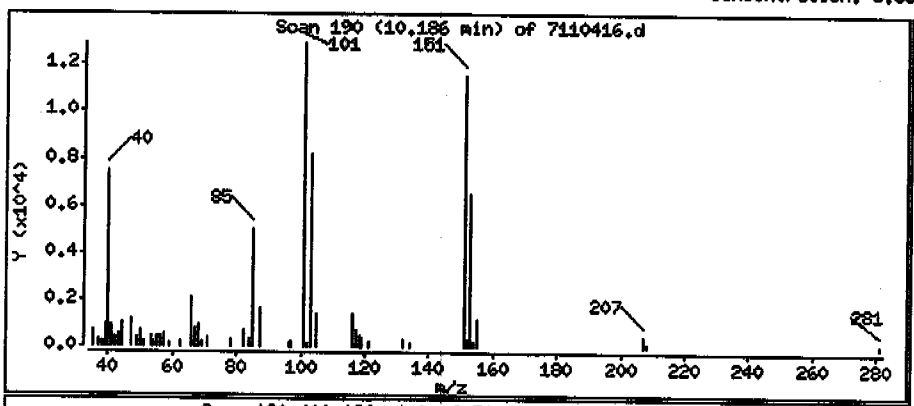
Operator: ab

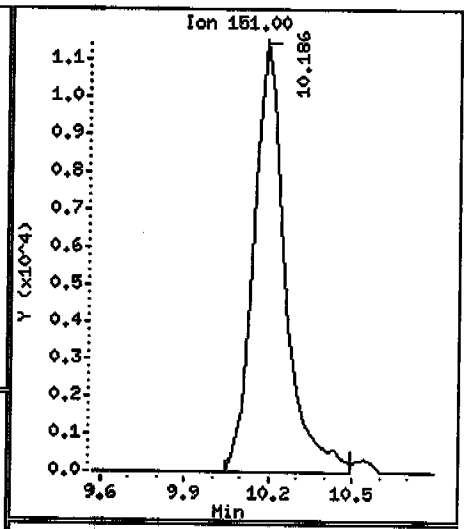
Column phase: RTx-624

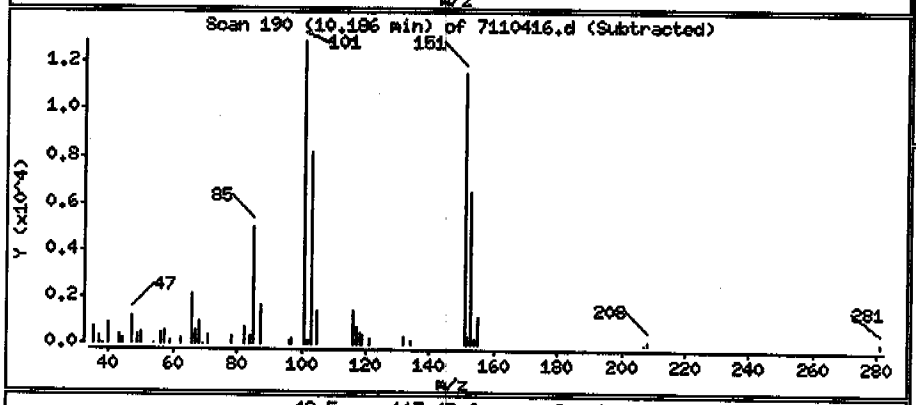
Column diameter: 0.53

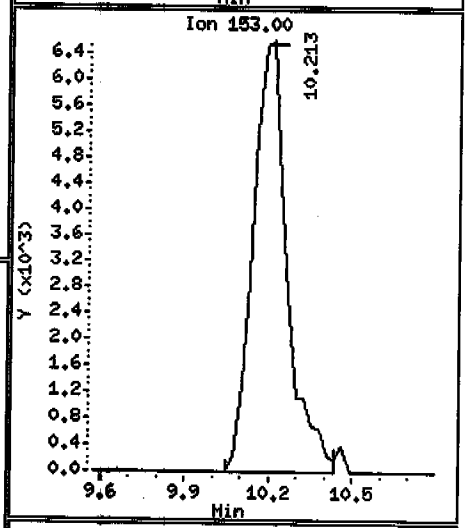
42 Freon 113

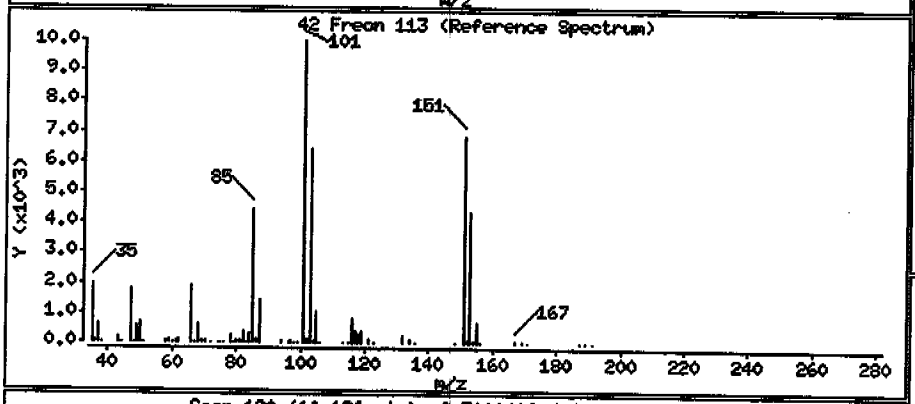
Concentration: 3.365 PPBV

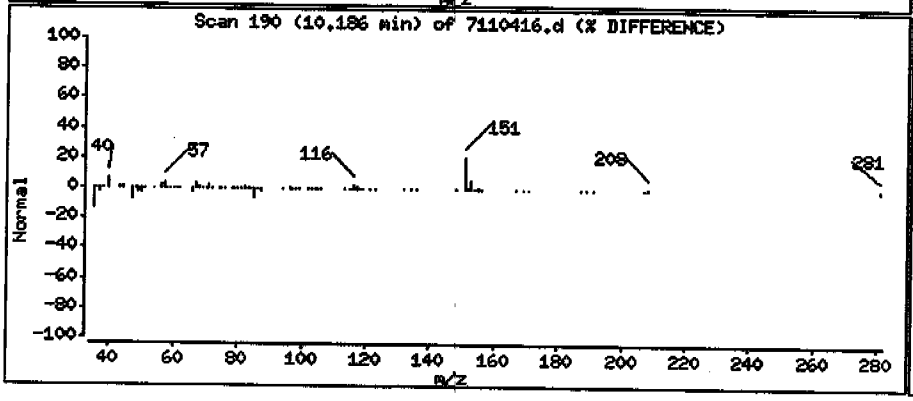


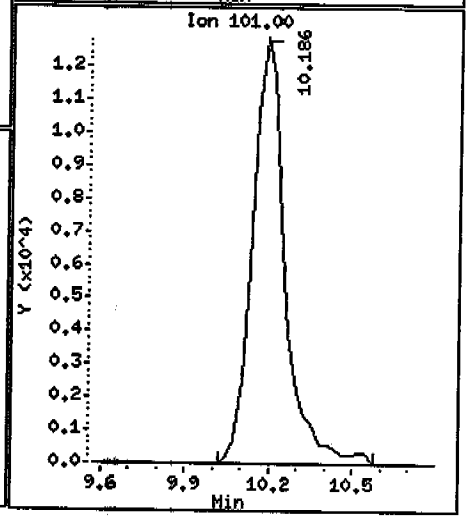












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 06:36

Client ID:

Sample Info: 200mL#R11

Instrument: msd7.i

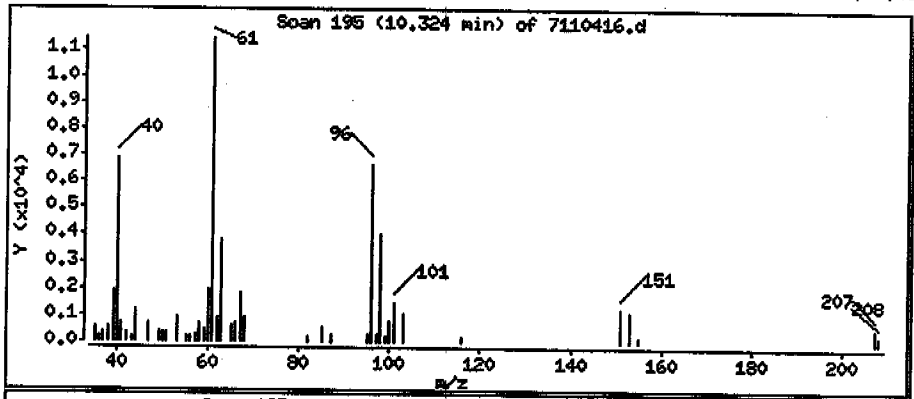
Operator: ab

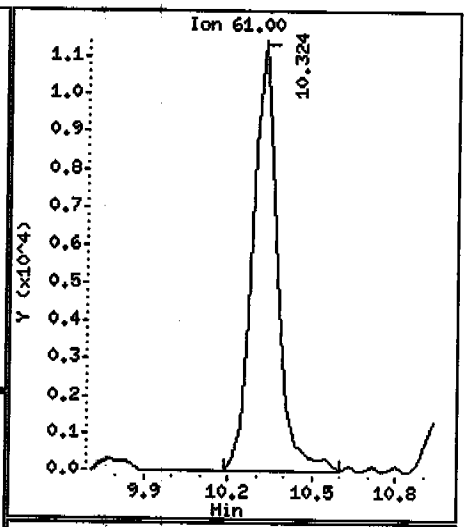
Column phase: RTx-624

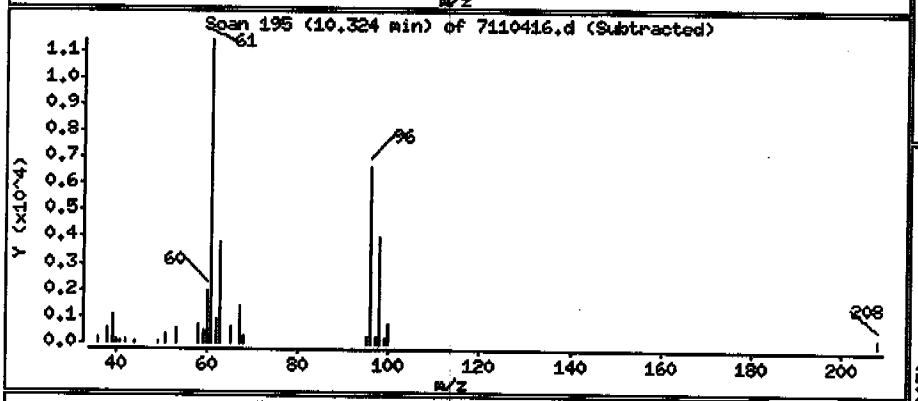
Column diameter: 0.53

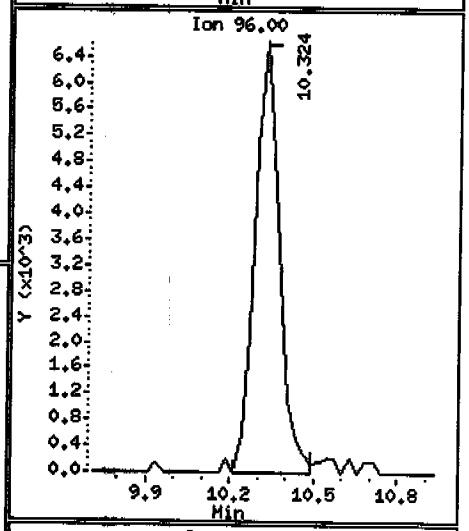
43 1,1-Dichloroethene

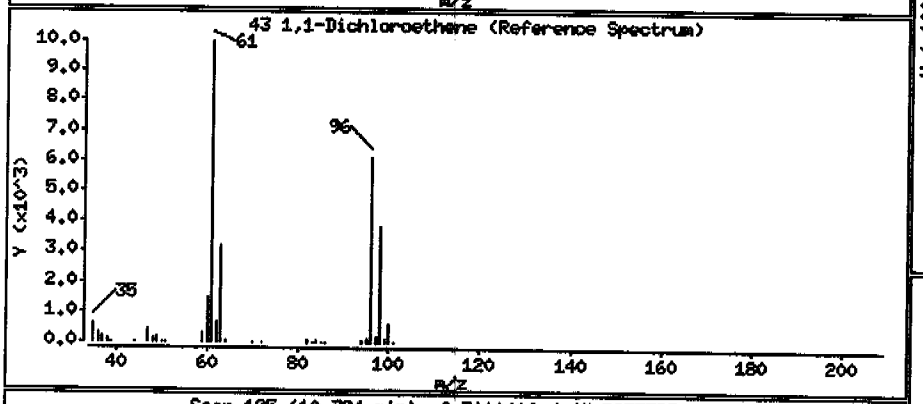
Concentration: 2.456 PPBV

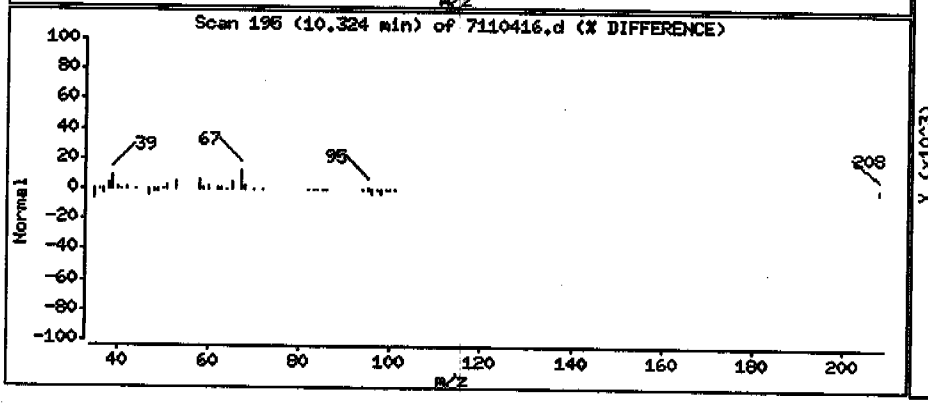


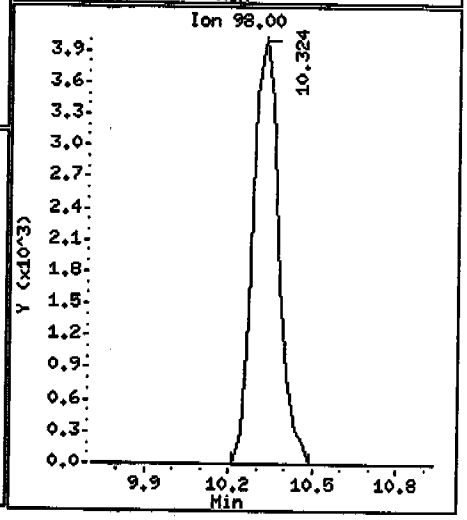












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

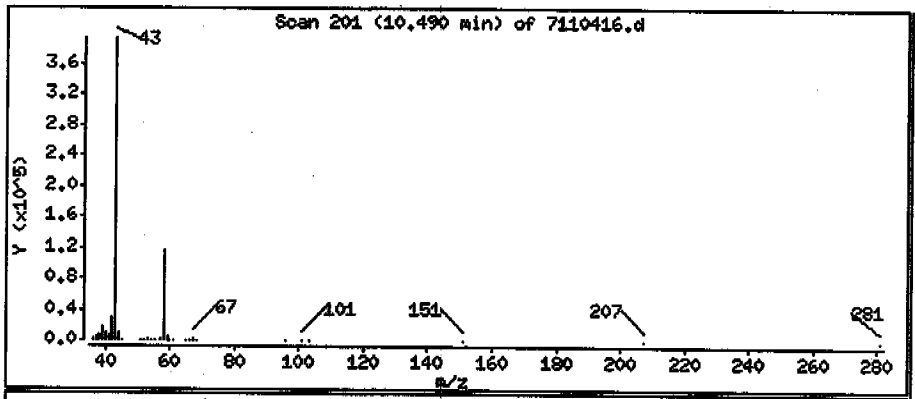
Operator: ab

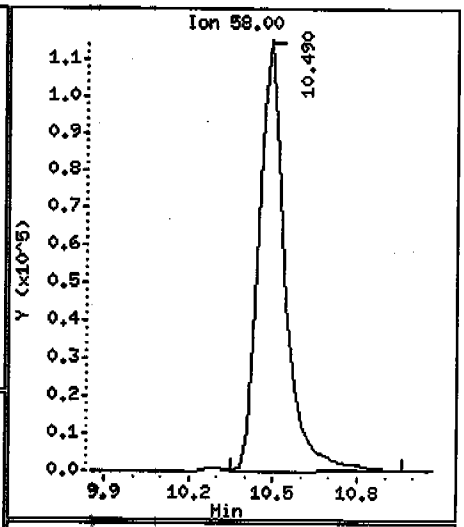
Column phase: RTx-624

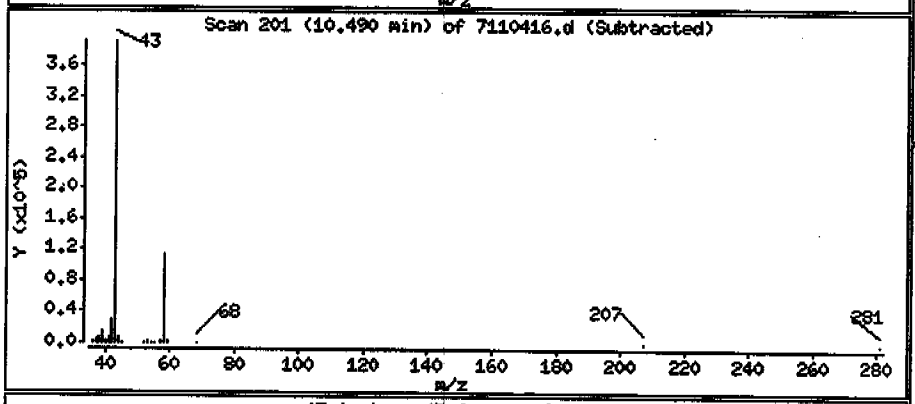
Column diameter: 0.53

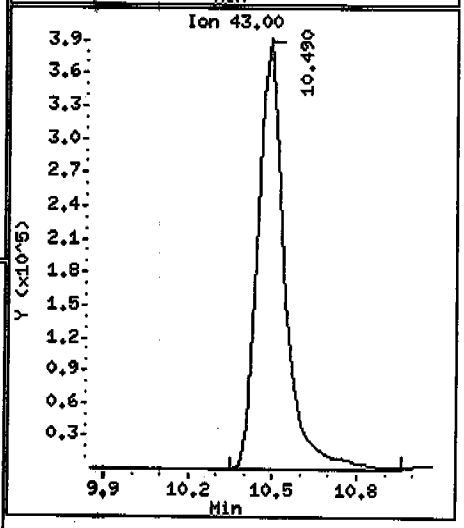
45 Acetone

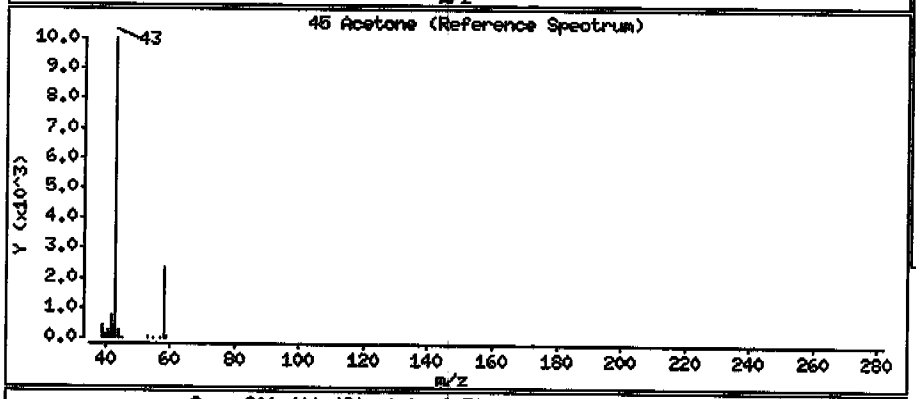
Concentration: 85.899 PPBV

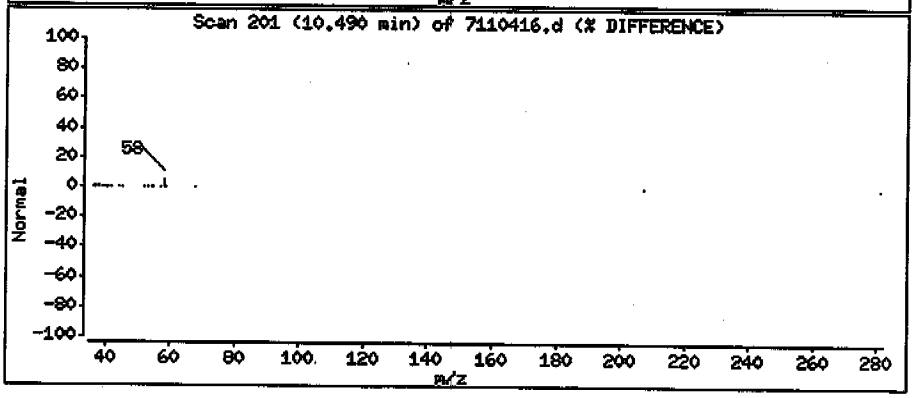












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

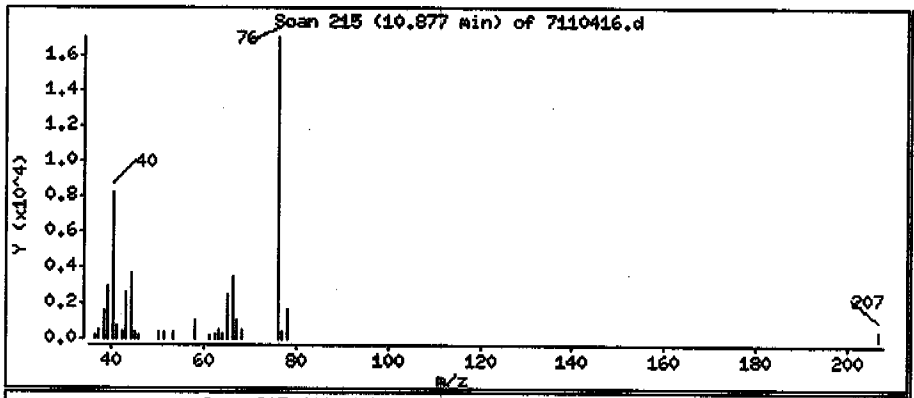
Operator: ab

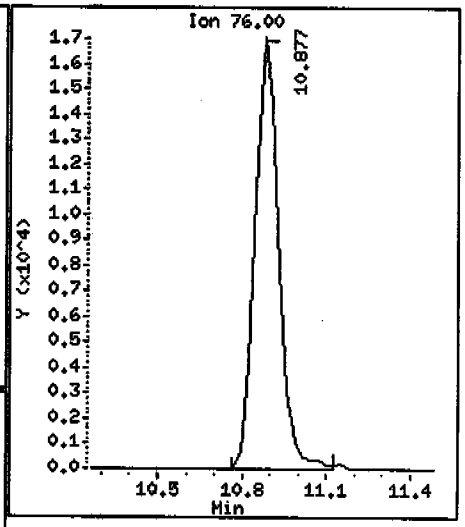
Column phase: RTx-624

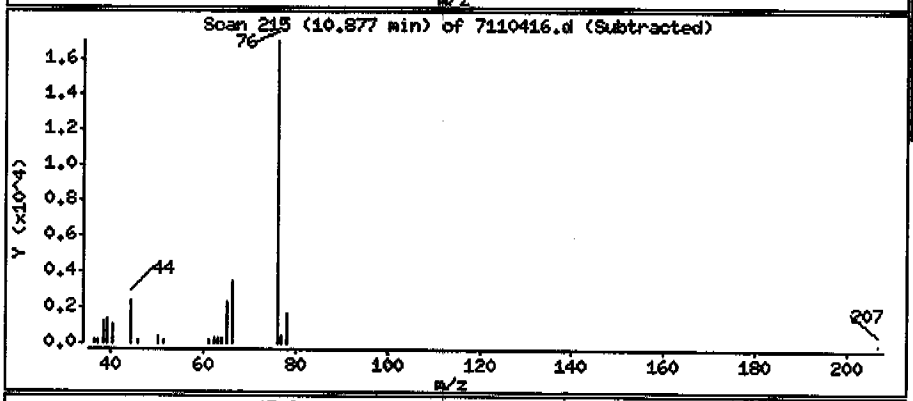
Column diameter: 0.53

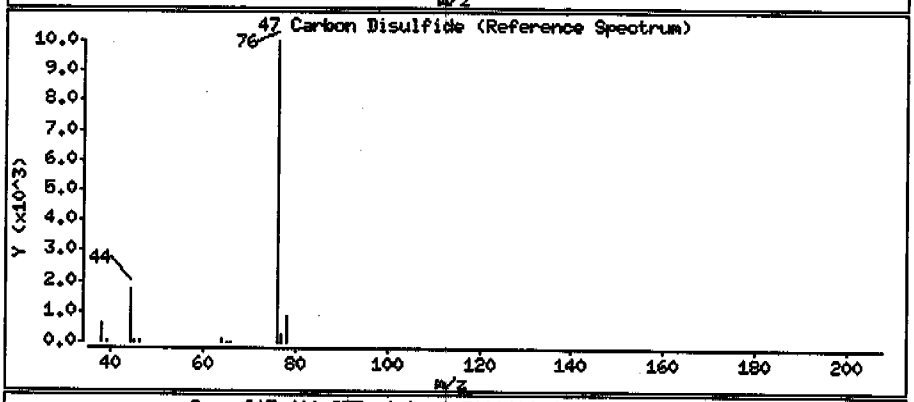
47 Carbon Disulfide

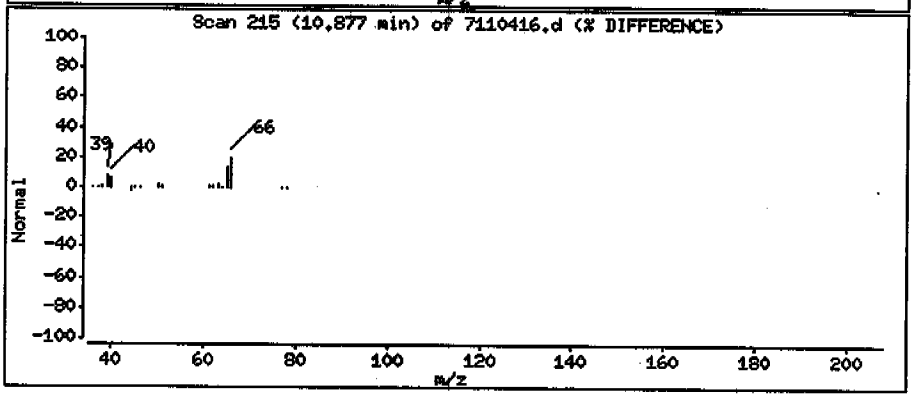
Concentration: 1.846 PPBV











Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

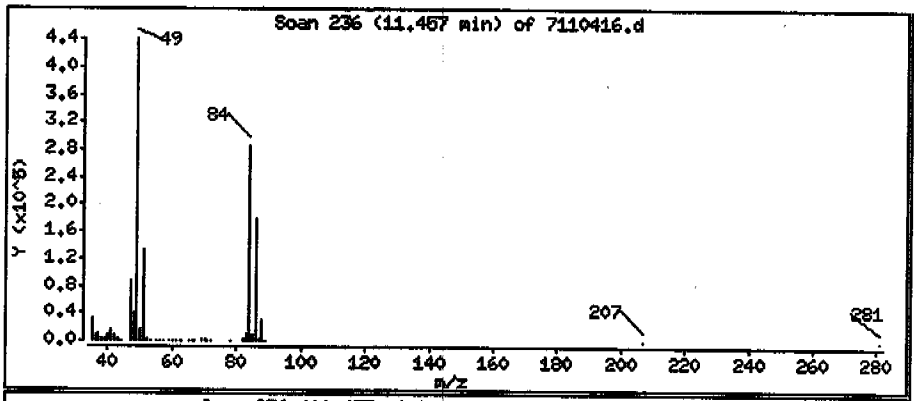
Operator: ab

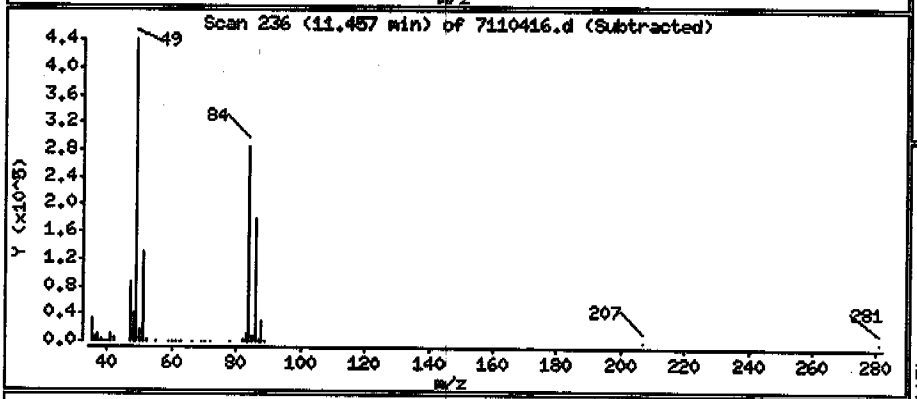
Column phase: RTx-624

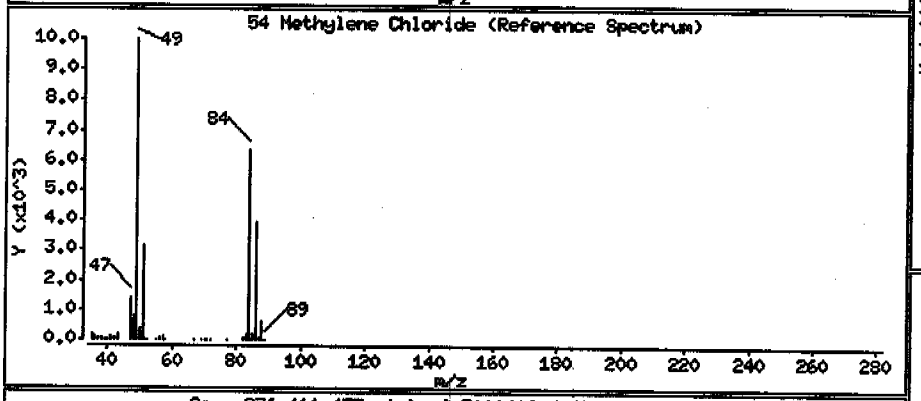
Column diameter: 0.53

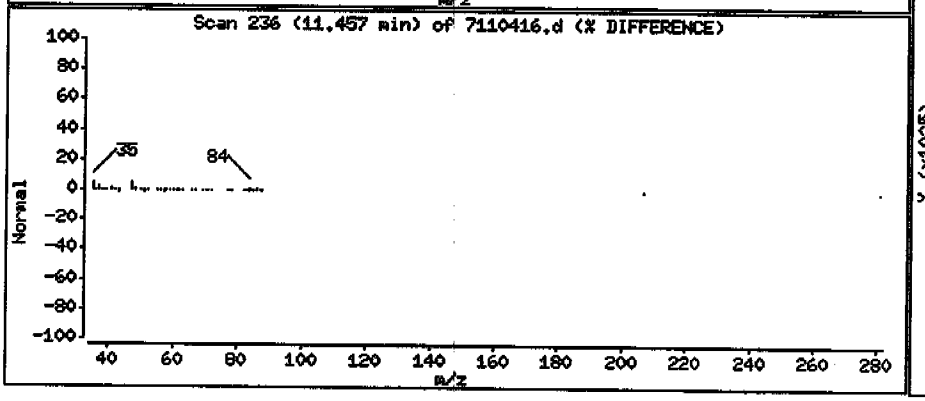
54 Methylene Chloride

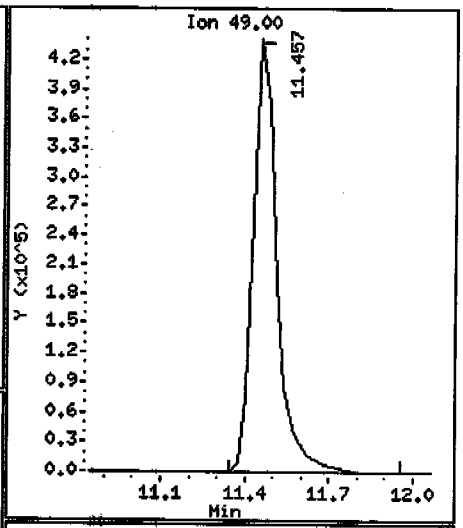
Concentration: 122.55 PPBV

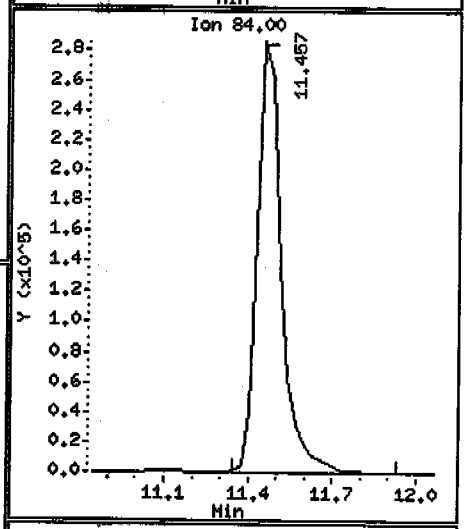


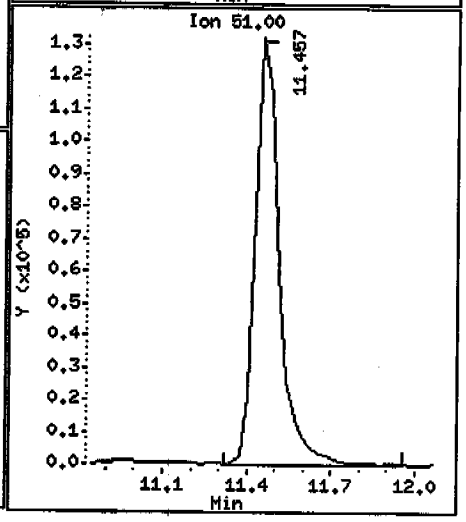












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

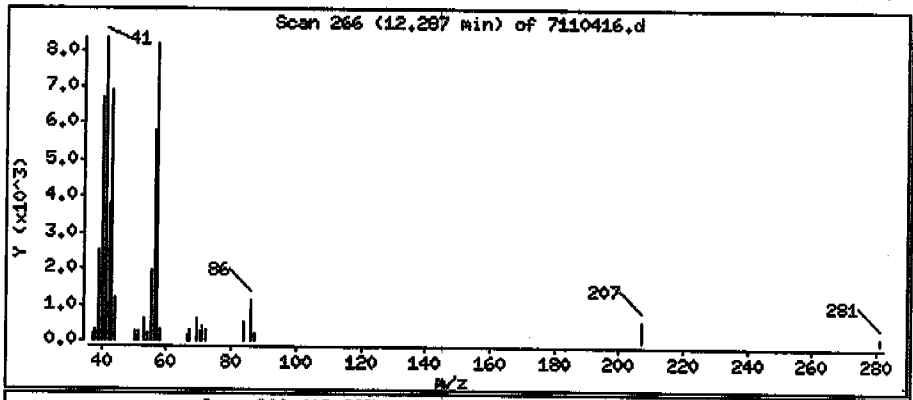
Operator: ab

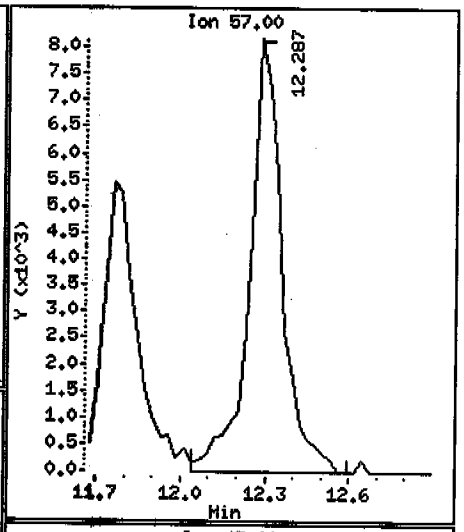
Column phase: RTx-624

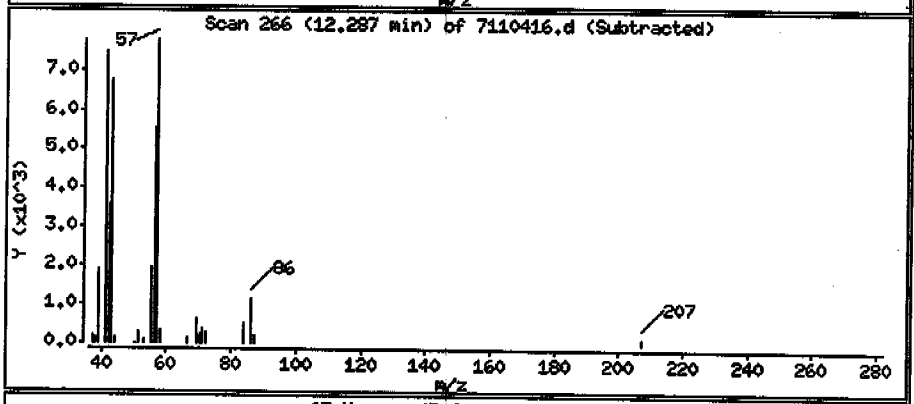
Column diameter: 0.53

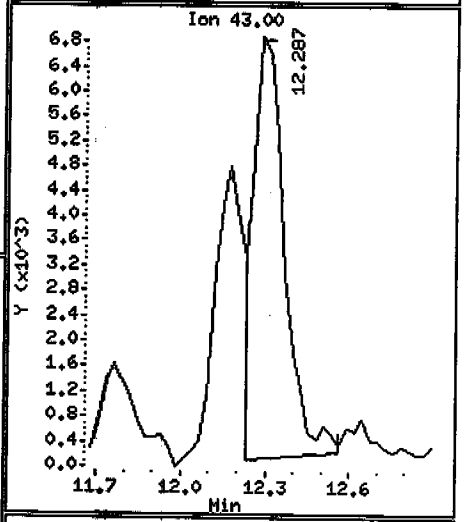
65 Hexane

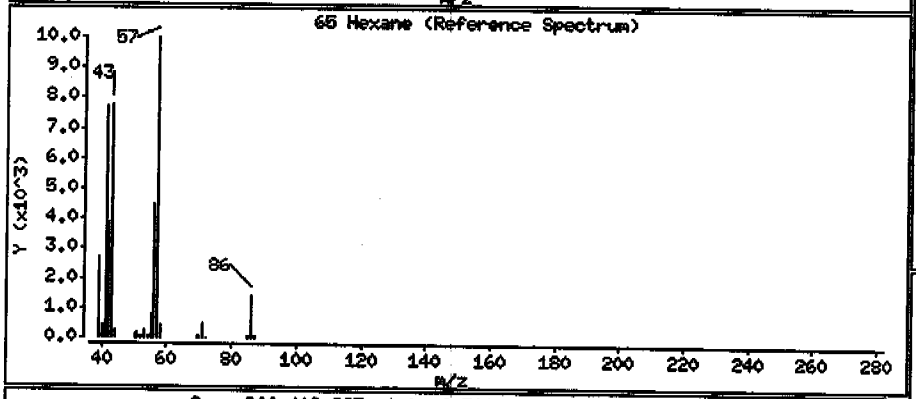
Concentration: 2.366 PPBV

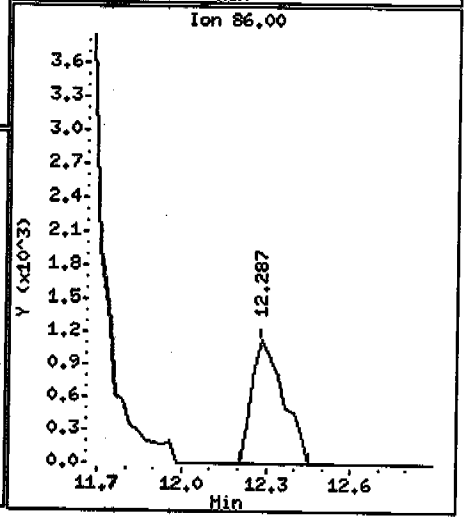


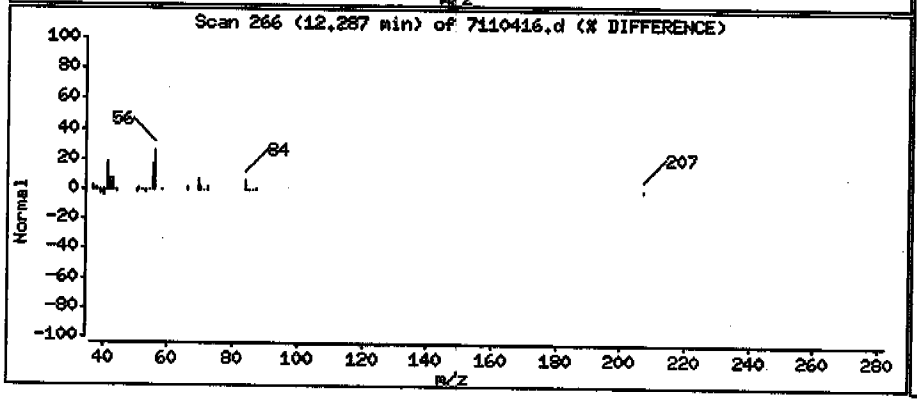












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 06:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

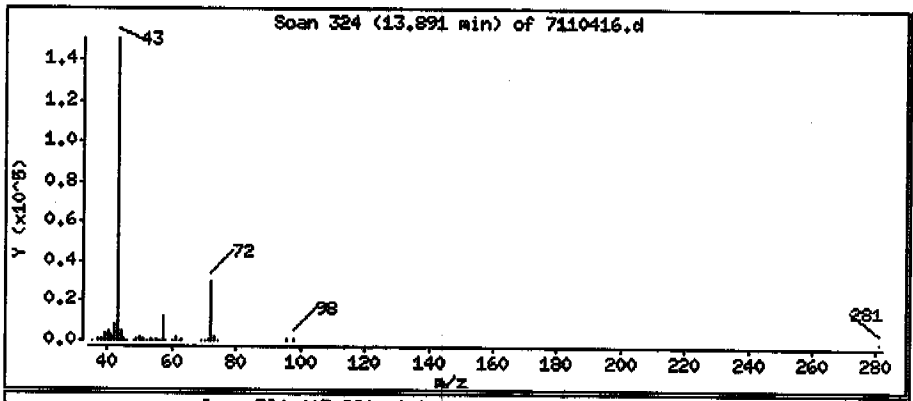
Operator: ab

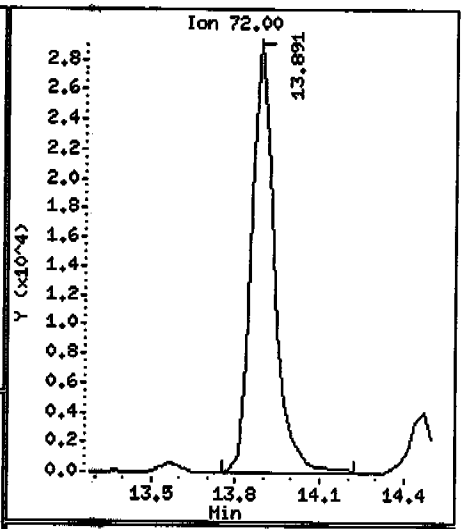
Column phase: RTx-624

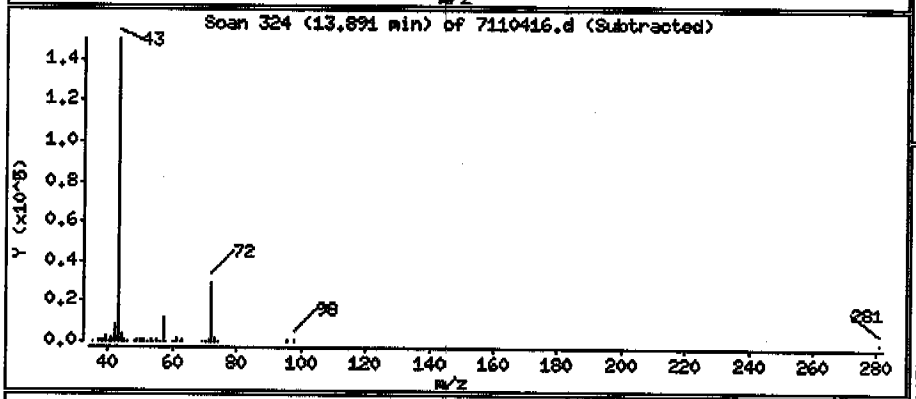
Column diameter: 0.53

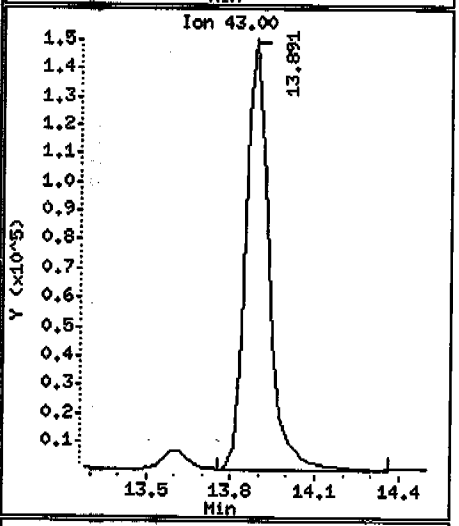
75 2-Butanone

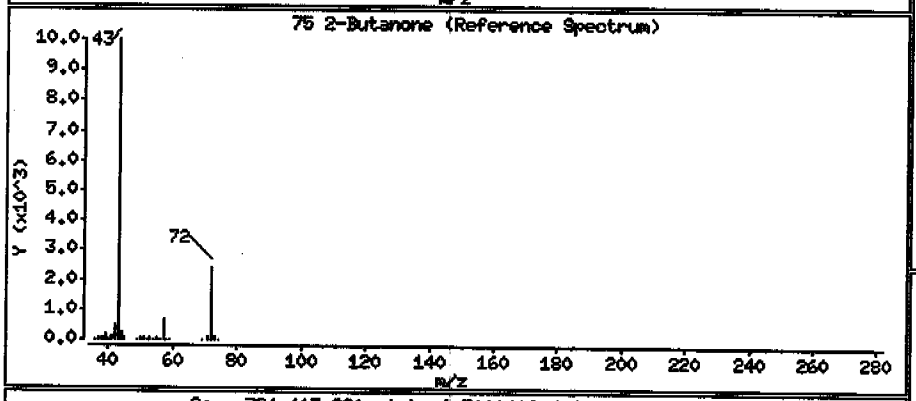
Concentration: 23.439 PPBV

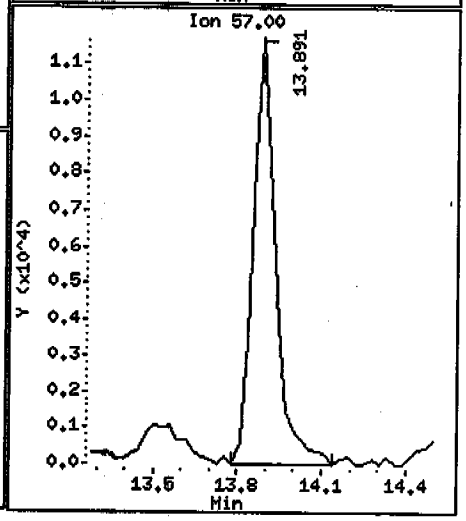


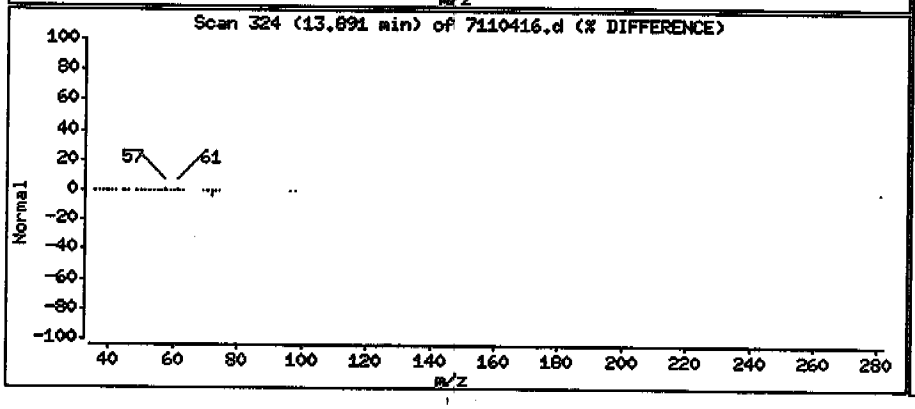












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 06:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL@R11

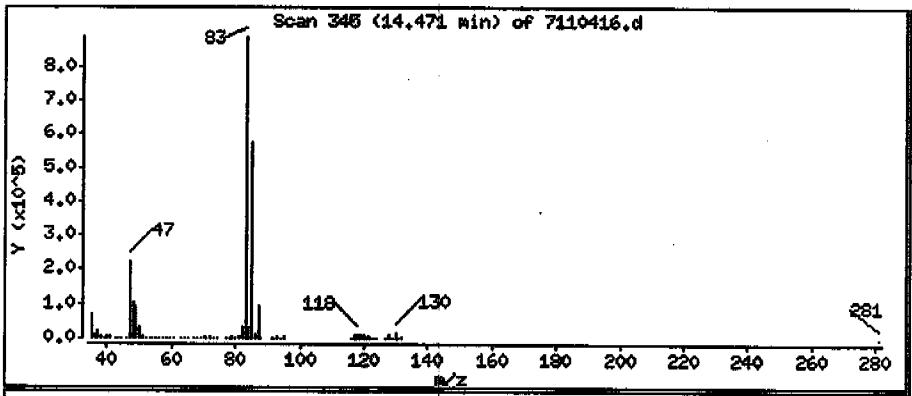
Operator: ab

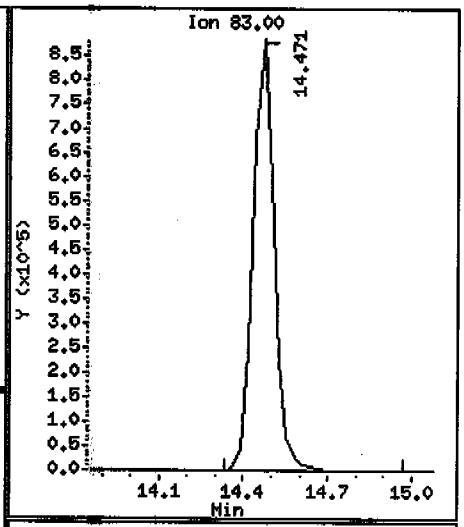
Column phase: RTx-624

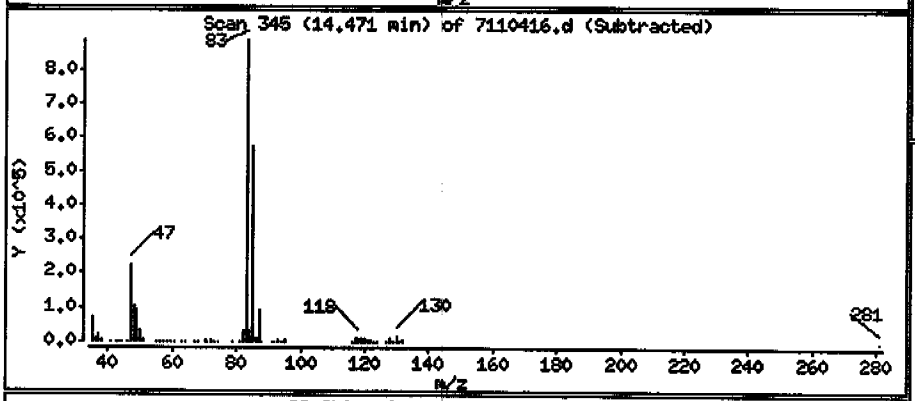
Column diameter: 0.53

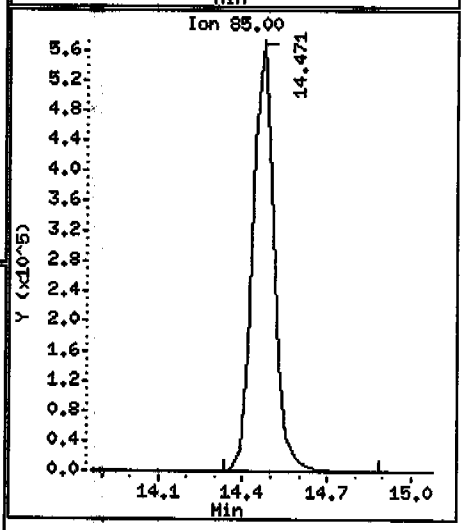
82 Chloroform

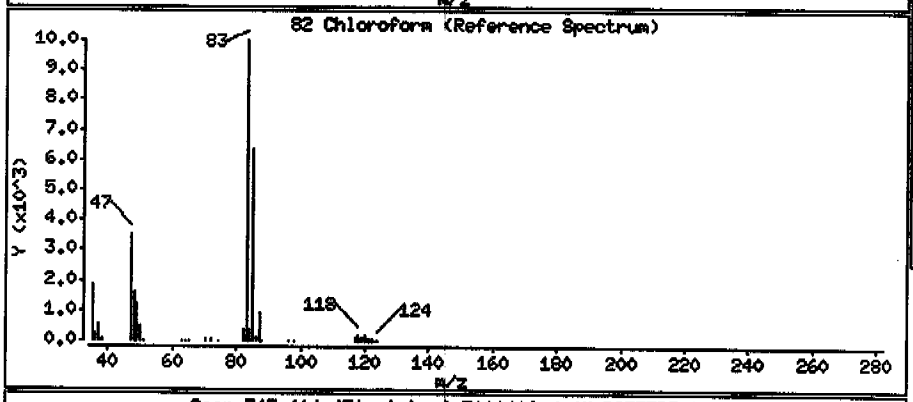
Concentration: 140.22 PPBV

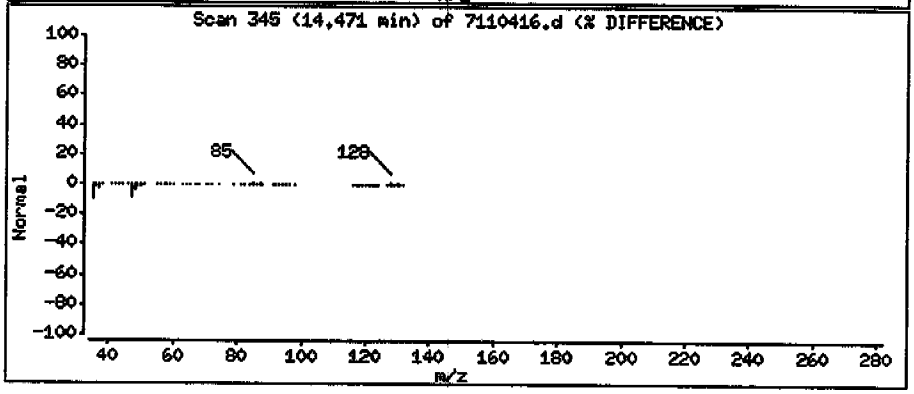












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

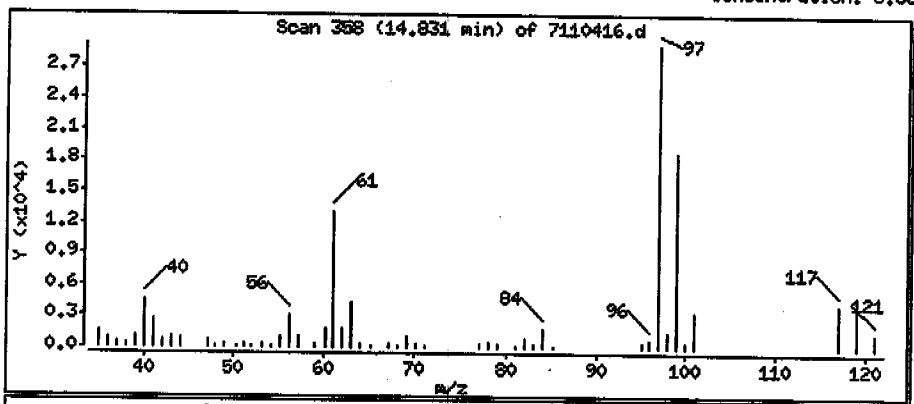
Operator: ab

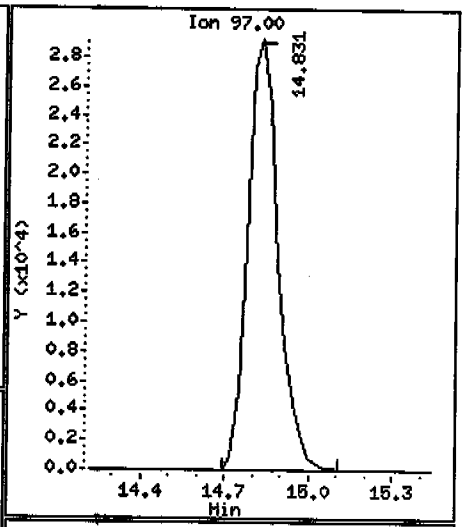
Column phase: RTx-624

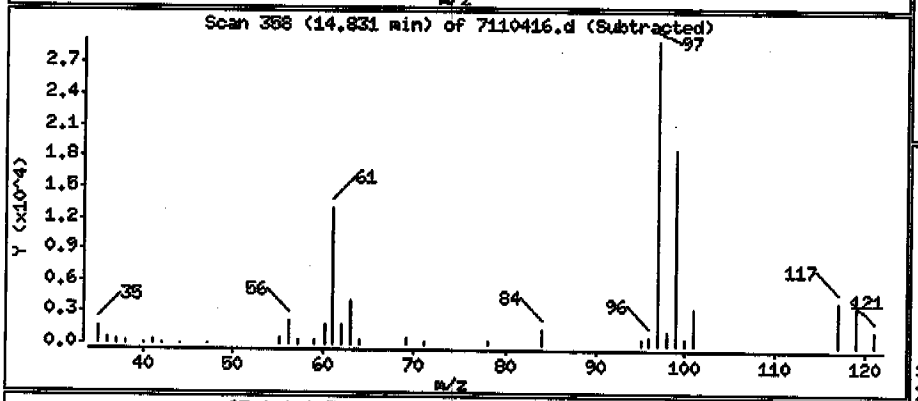
Column diameter: 0.53

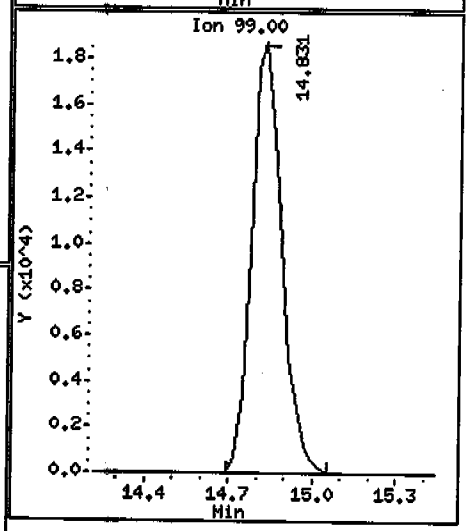
83 1,1,1-Trichloroethane

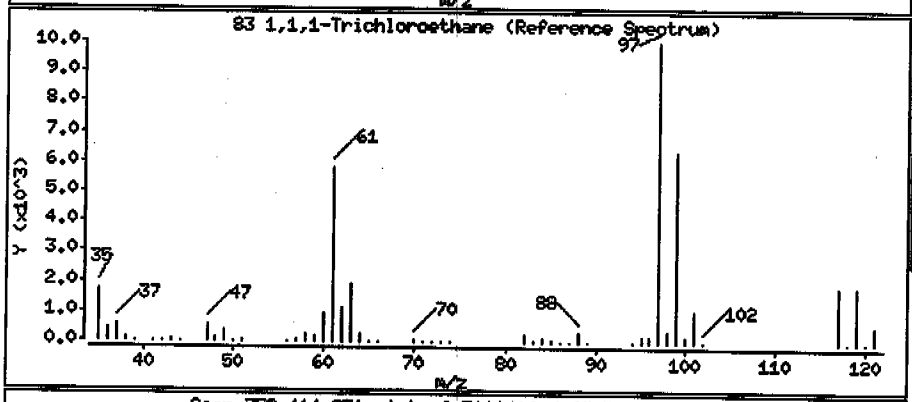
Concentration: 6.661 PPBV

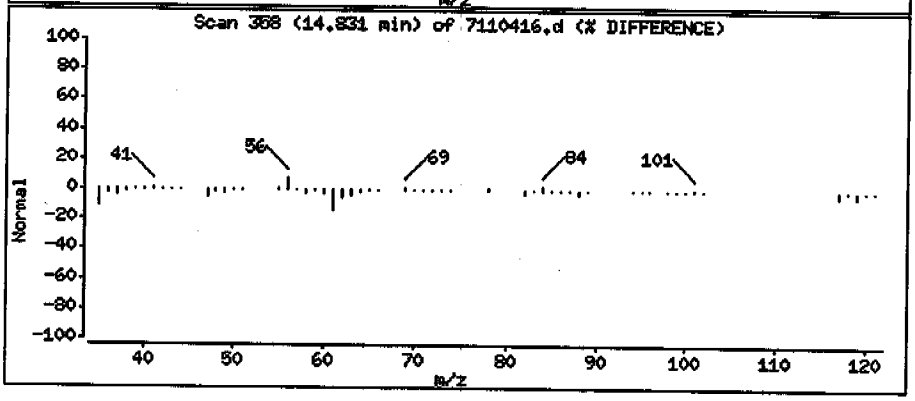












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

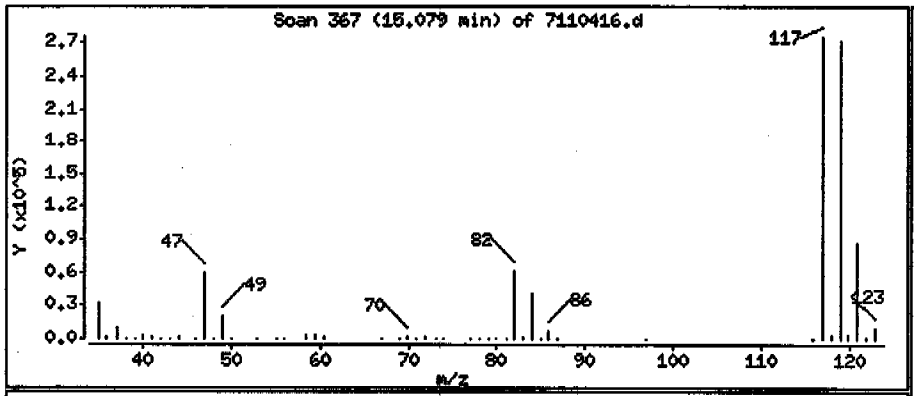
Operator: ab

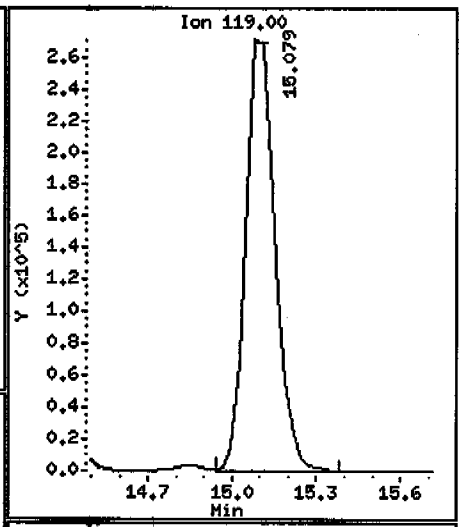
Column phase: RTx-624

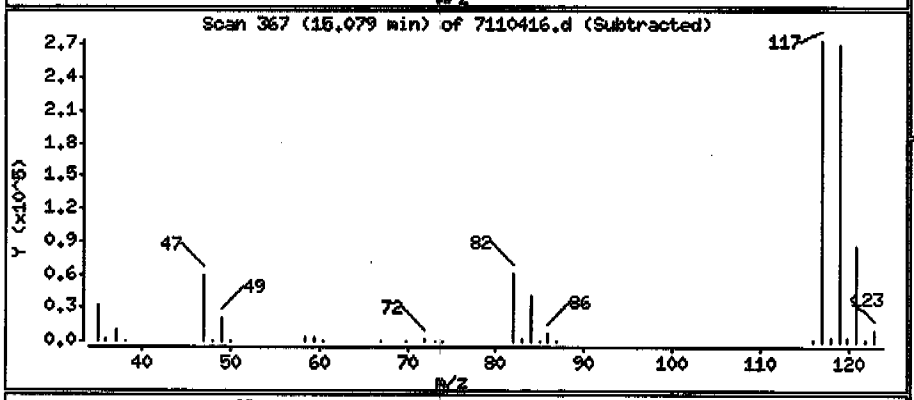
Column diameter: 0.53

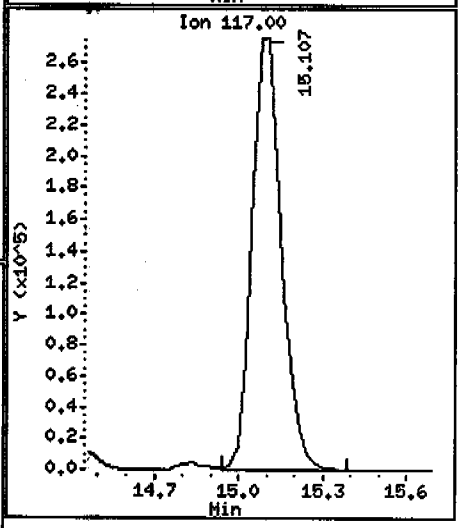
87 Carbon Tetrachloride

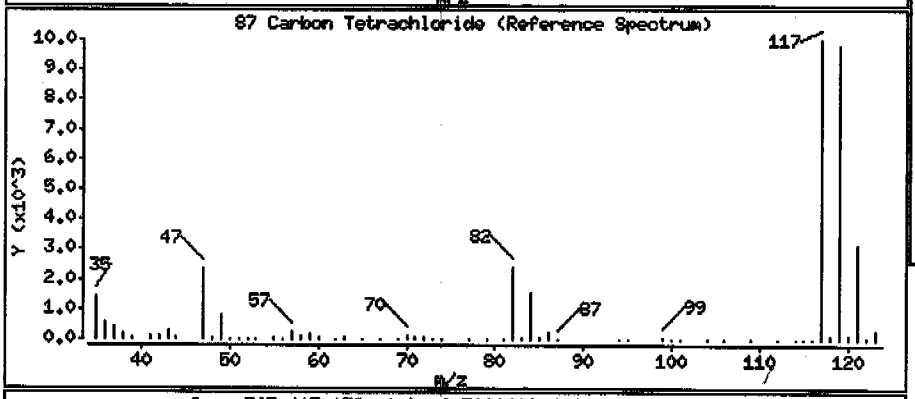
Concentration: 63.679 PPBV

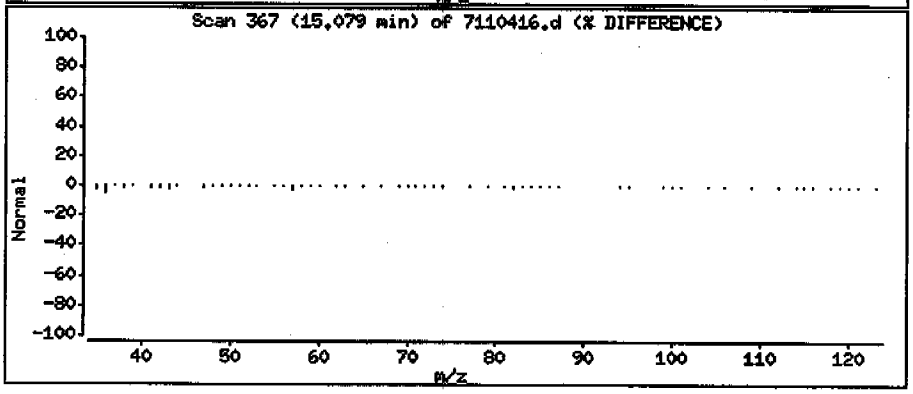












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

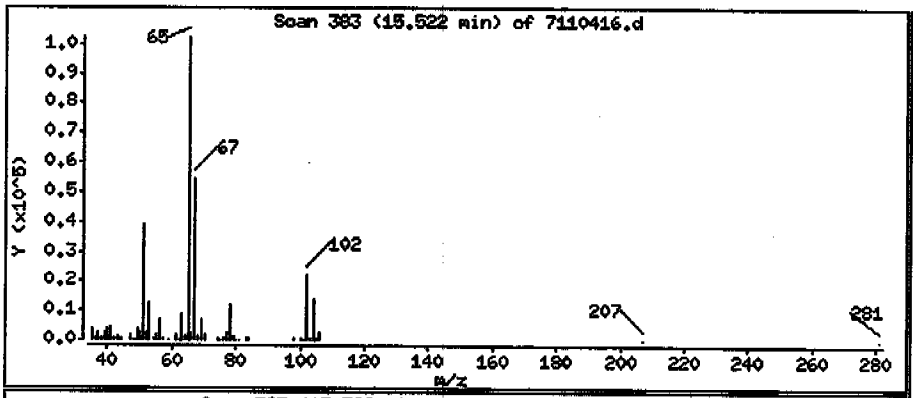
Operator: ab

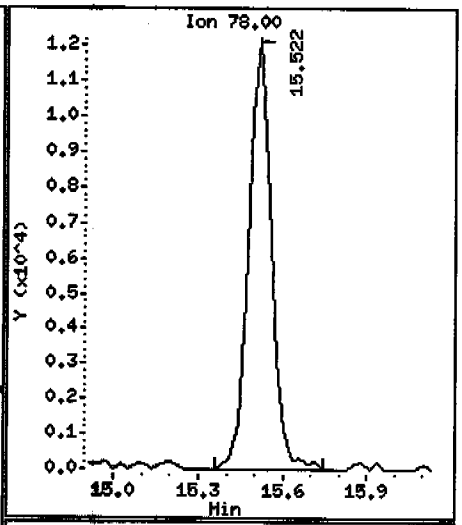
Column phase: RTx-624

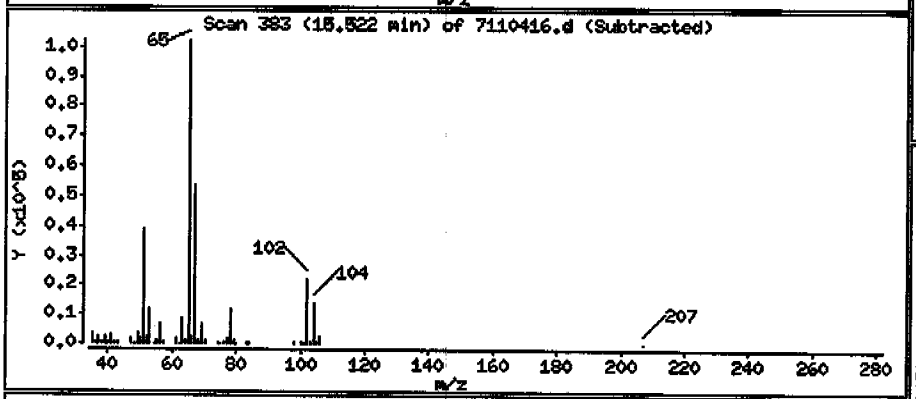
Column diameter: 0.53

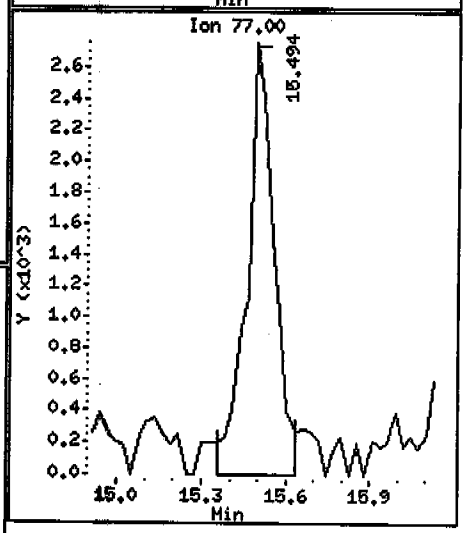
91 Benzene

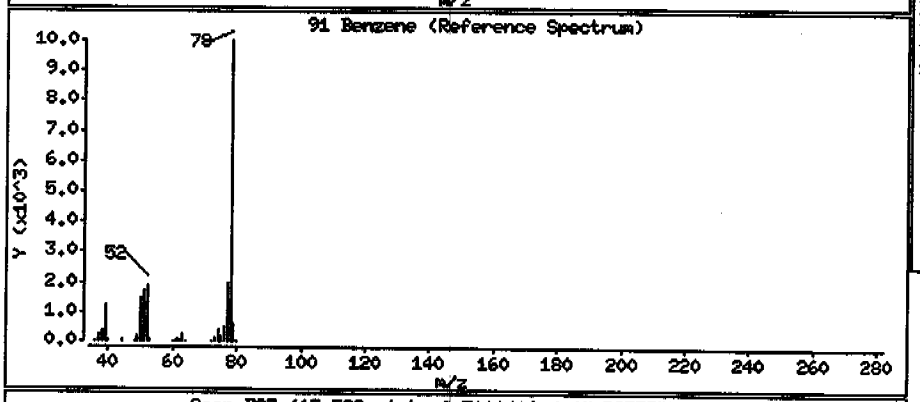
Concentration: 1.534 PPBV

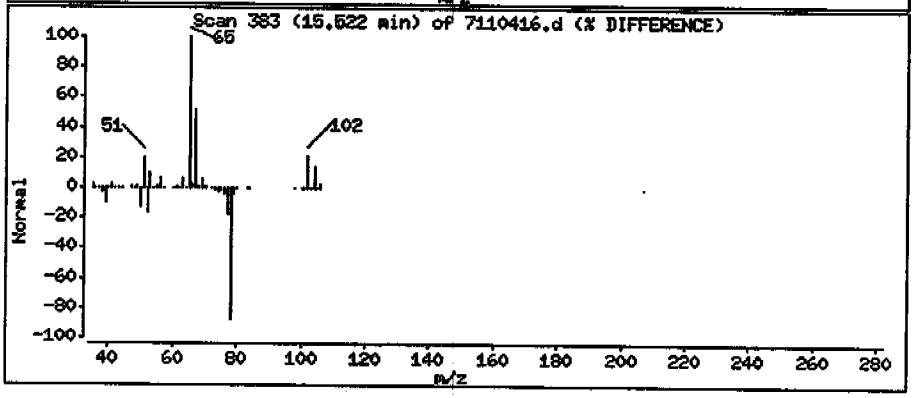












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Sample Info: 200mL#R11

Instrument: msd7.i

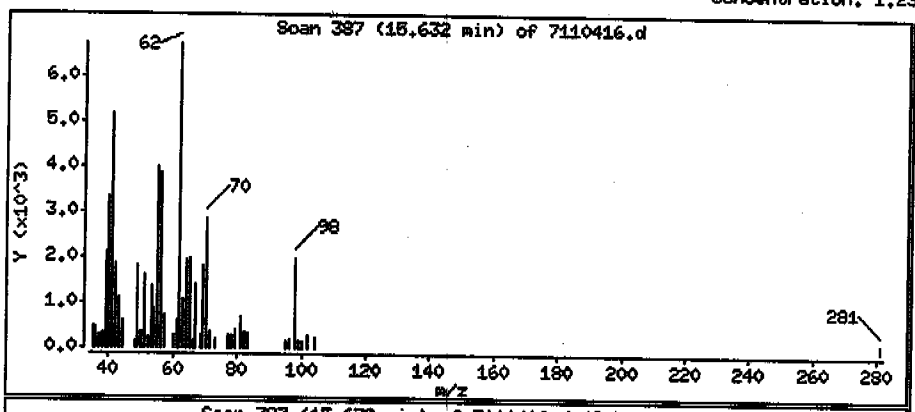
Operator: ab

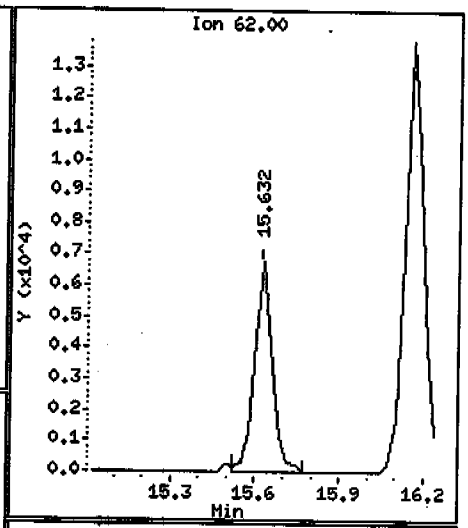
Column phase: RTx-624

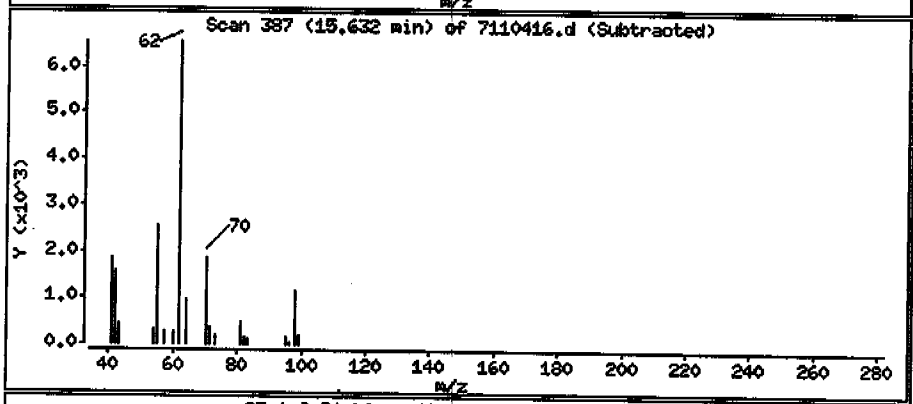
Column diameter: 0.53

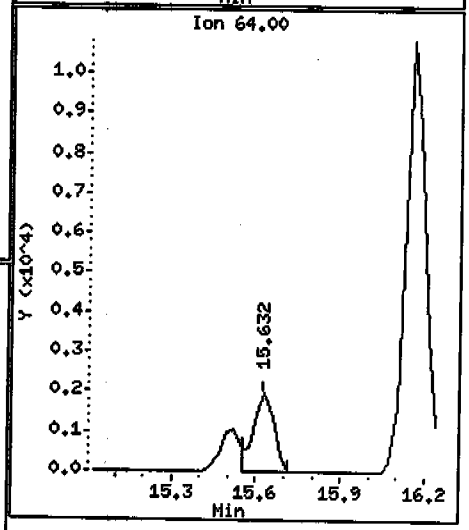
93 1,2-Dichloroethane

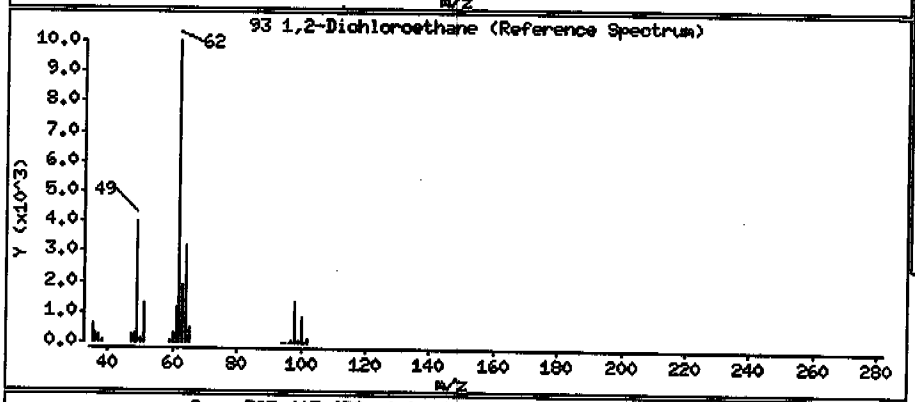
Concentration: 1.236 PPBV

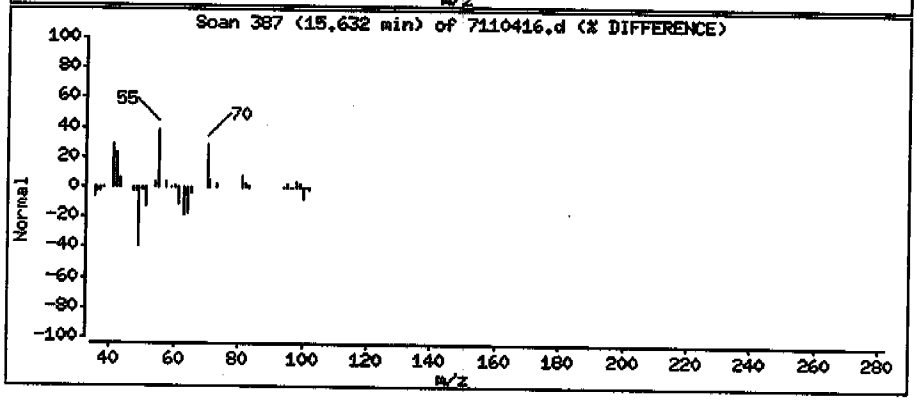












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

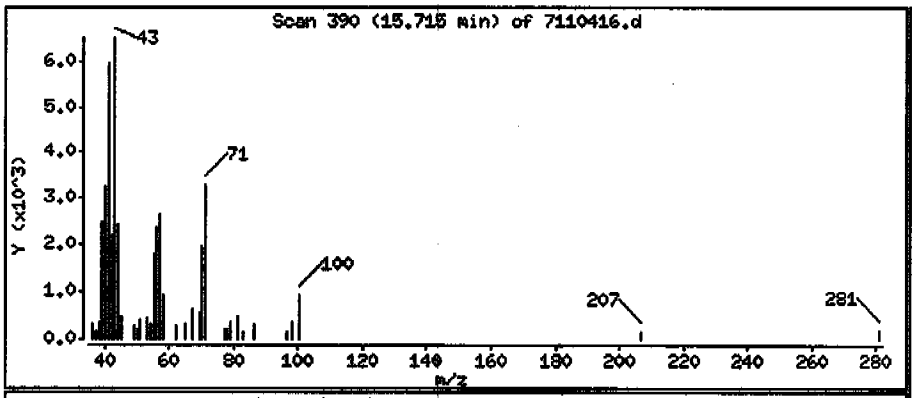
Operator: ab

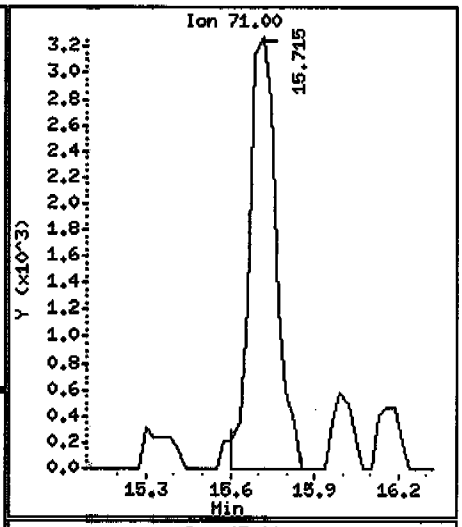
Column phase: RTx-624

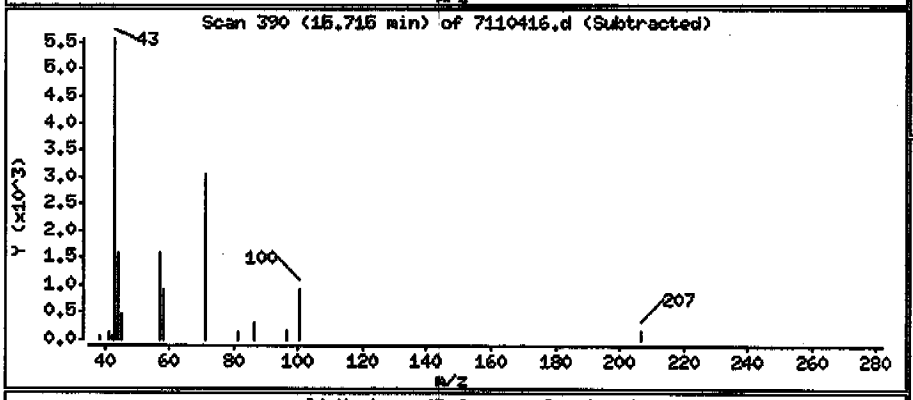
Column diameter: 0.53

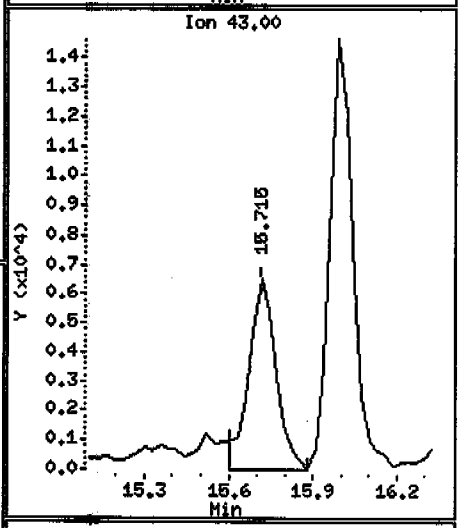
94 Heptane

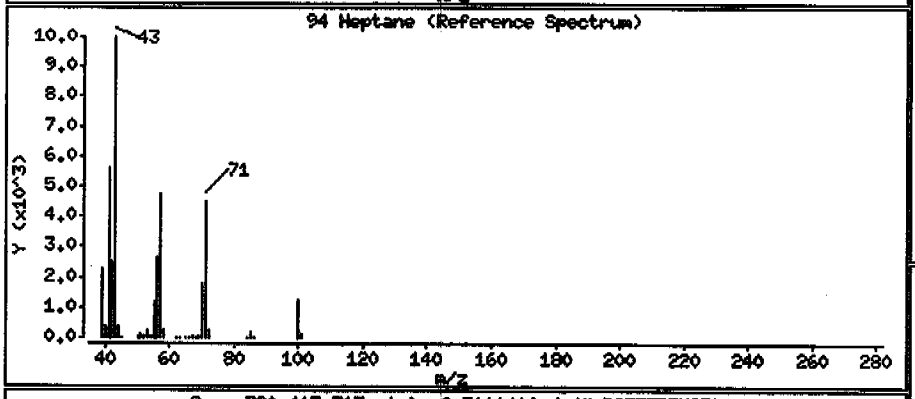
Concentration: 1,570 PPBV

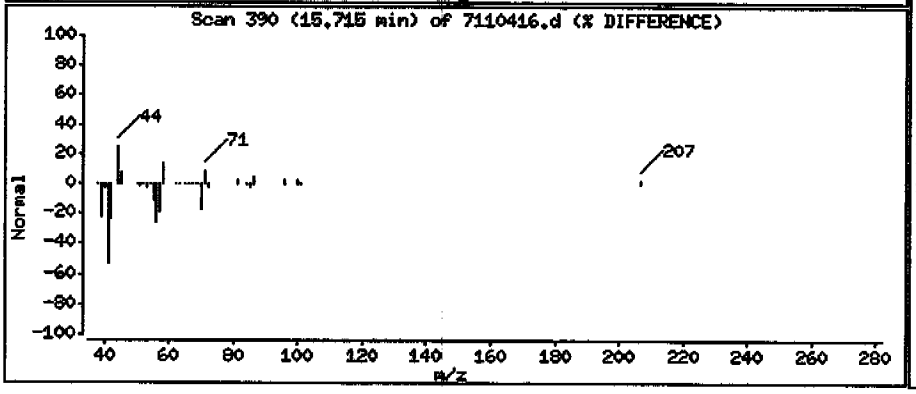


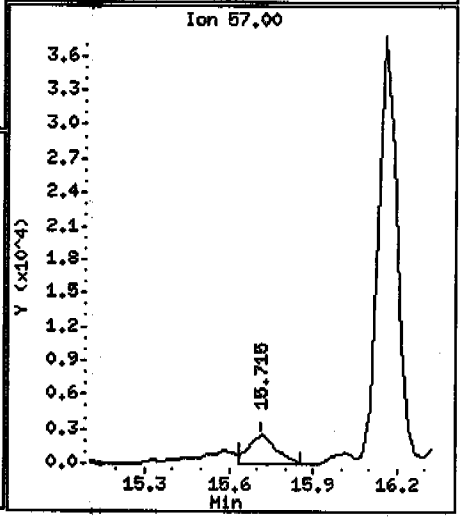












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Sample Info: 200mL#R11

Instrument: msd7.i

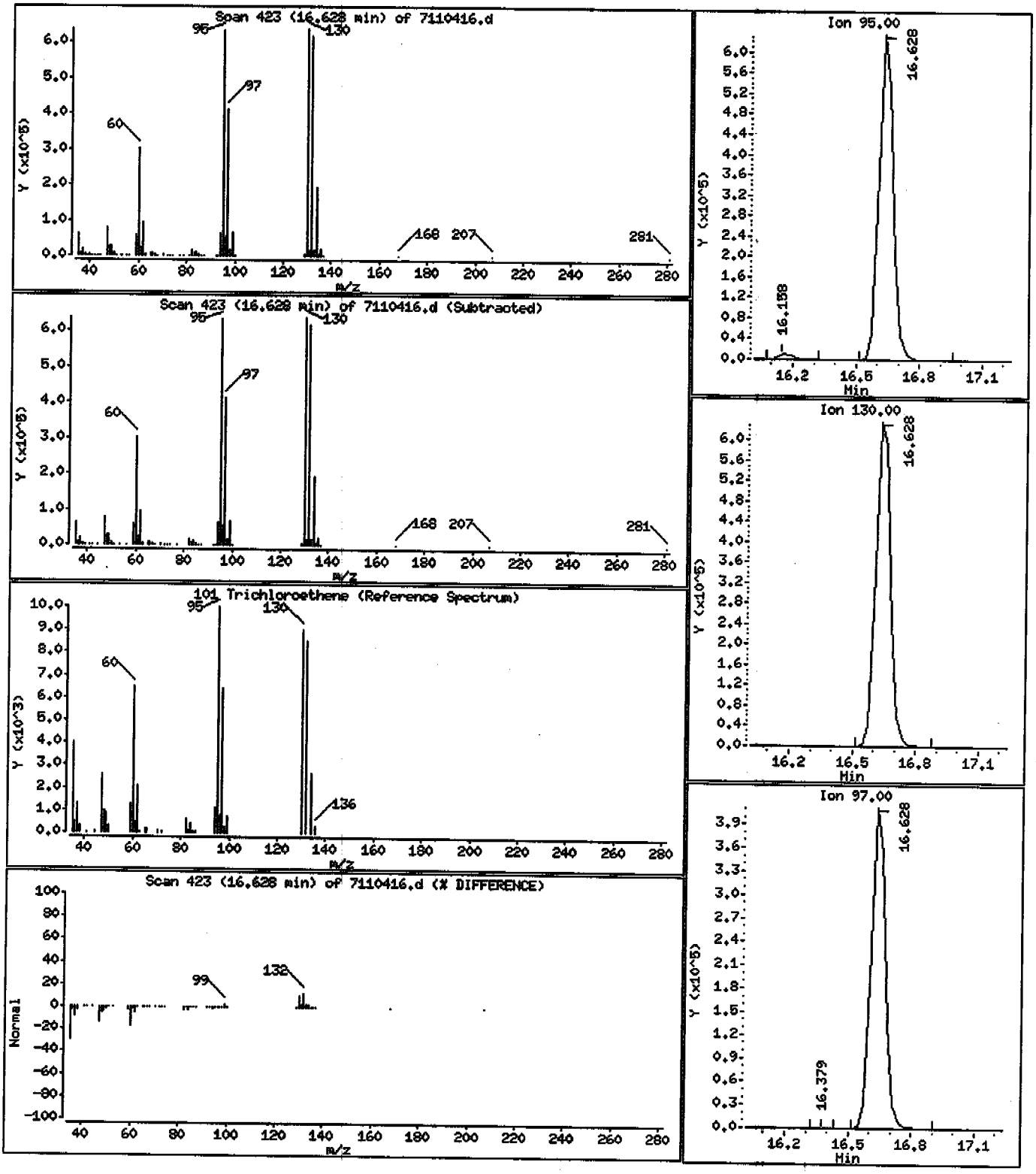
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

101 Trichloroethene

Concentration: 147.75 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

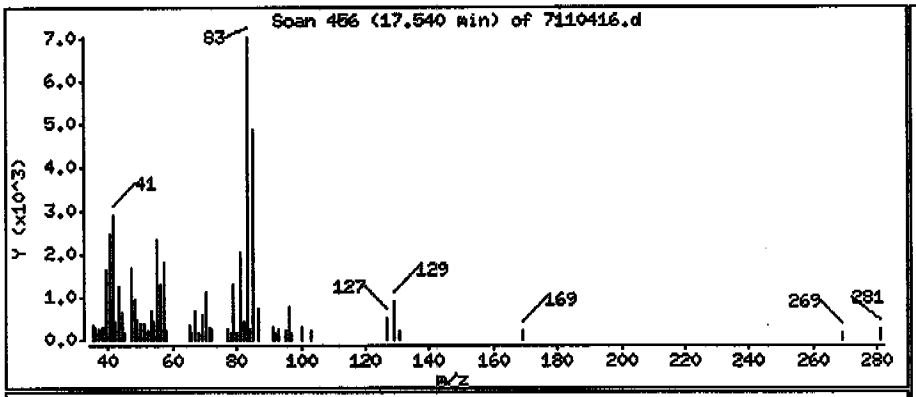
Operator: ab

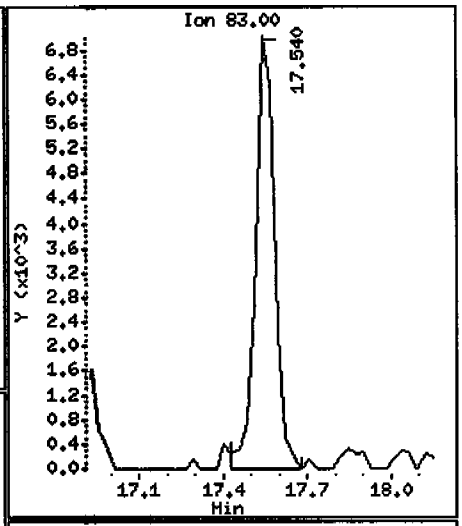
Column phase: RTx-624

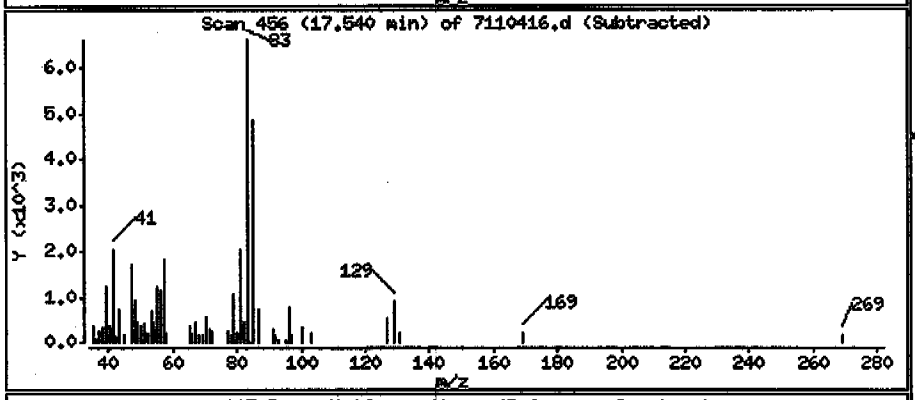
Column diameter: 0.53

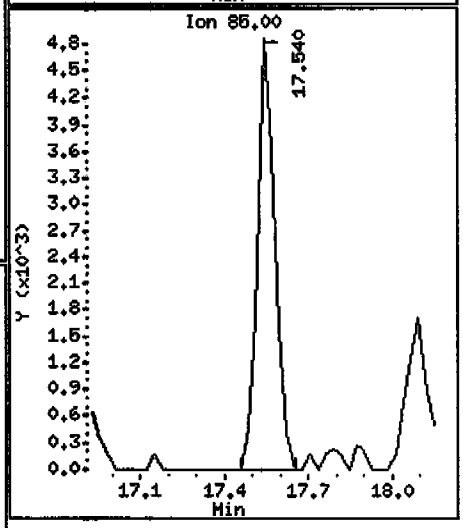
107 Bromodichloromethane

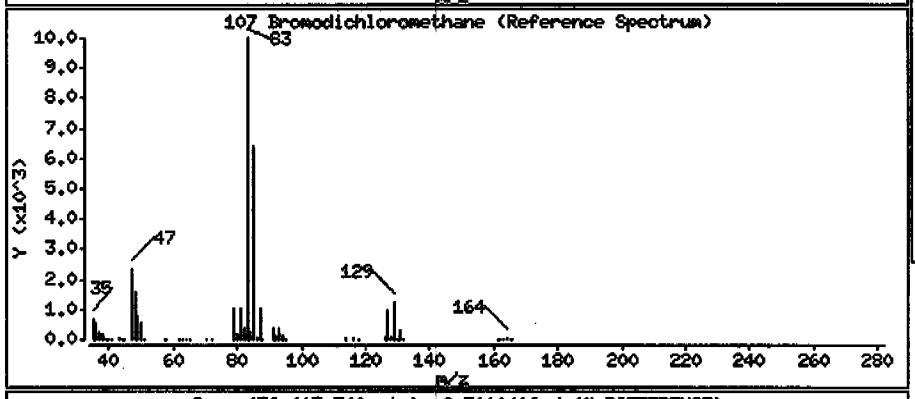
Concentration: 0.9624 PPBV

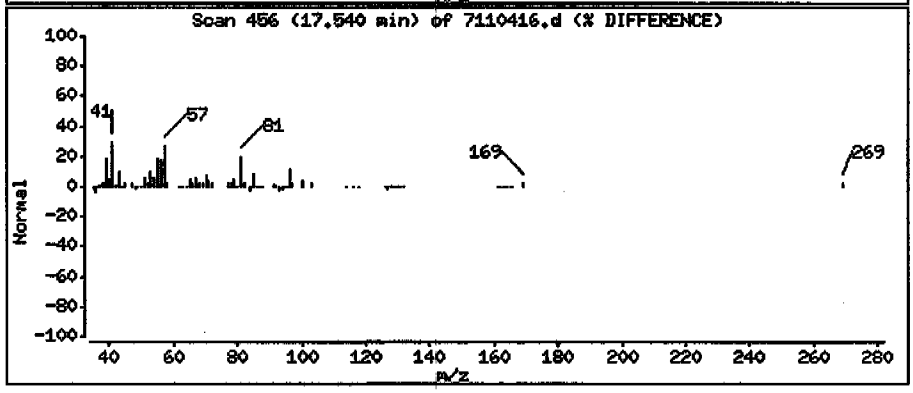












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL@R11

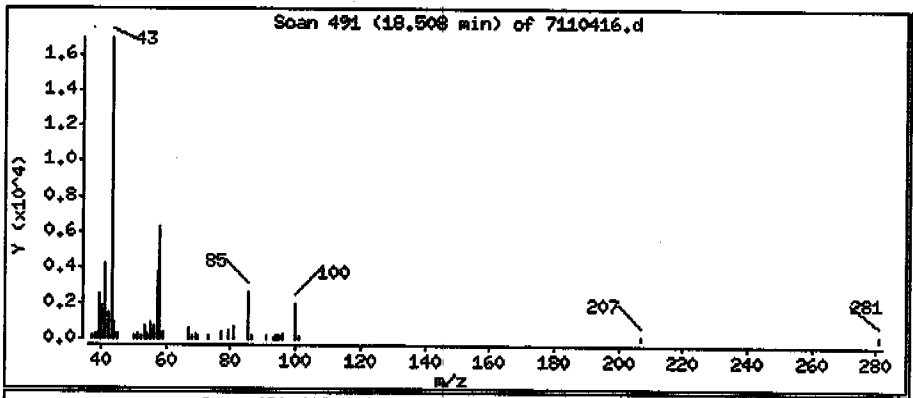
Operator: ab

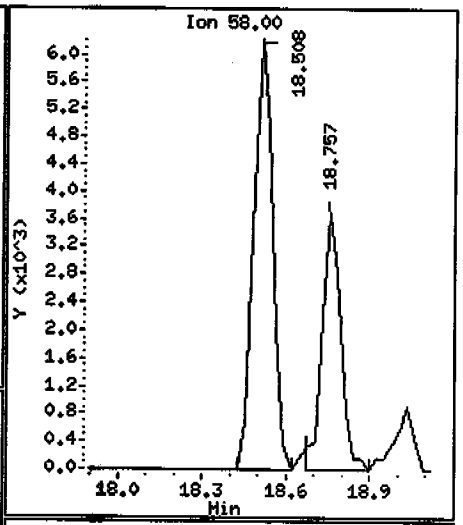
Column phase: RTx-624

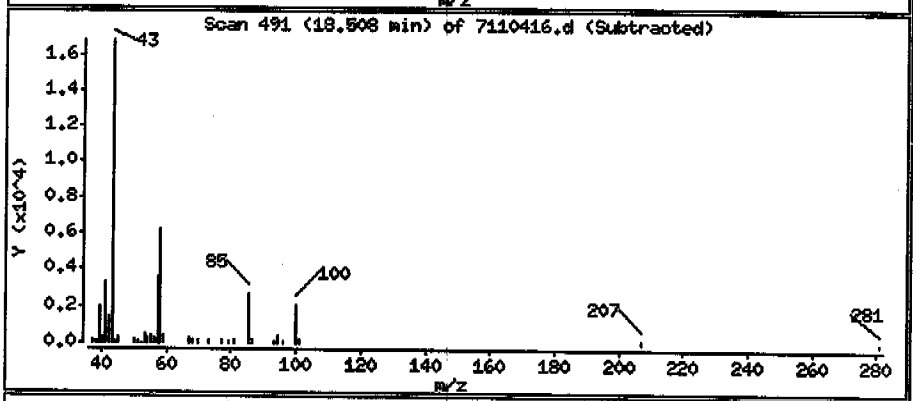
Column diameter: 0.53

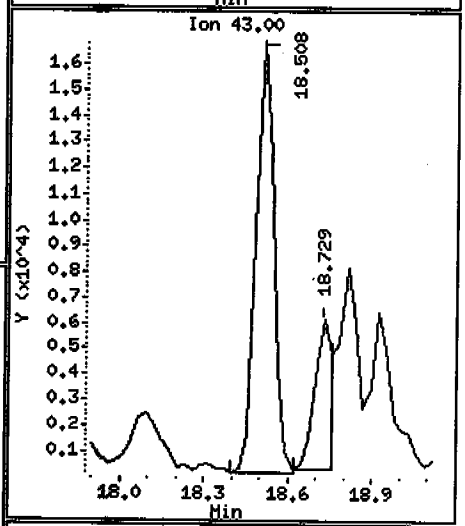
111 4-Methyl-2-pentanone

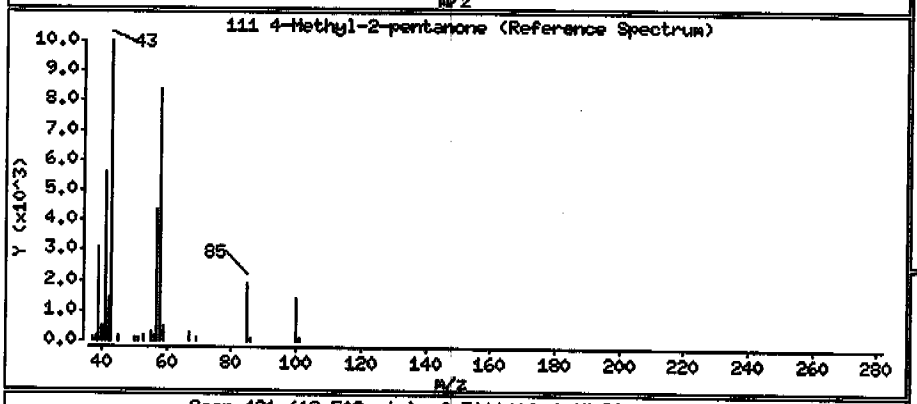
Concentration: 2.166 PPBV

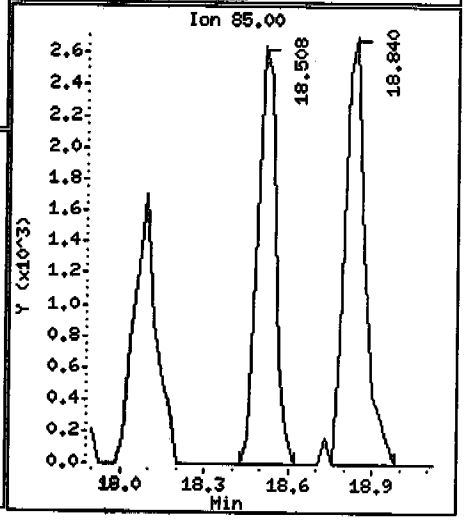


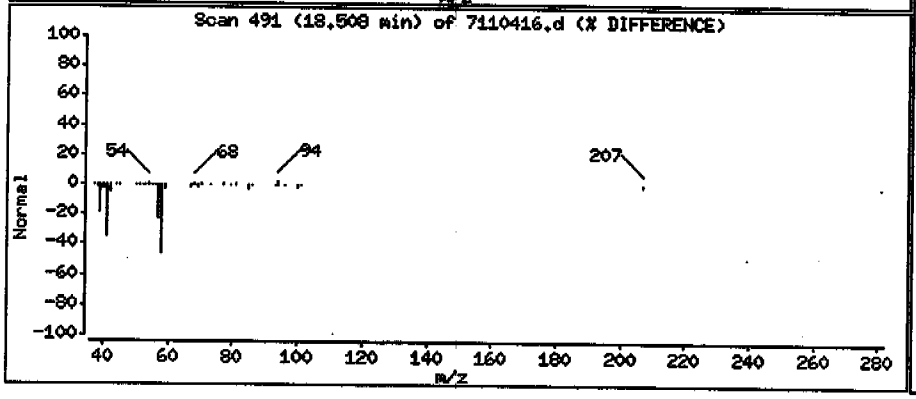












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

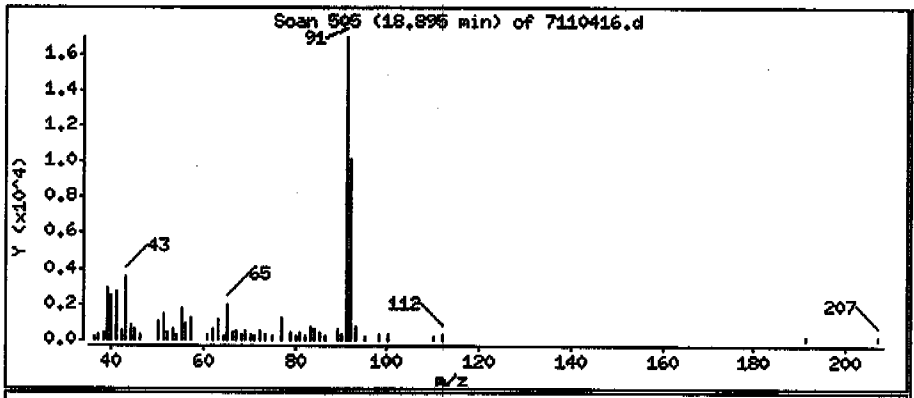
Operator: ab

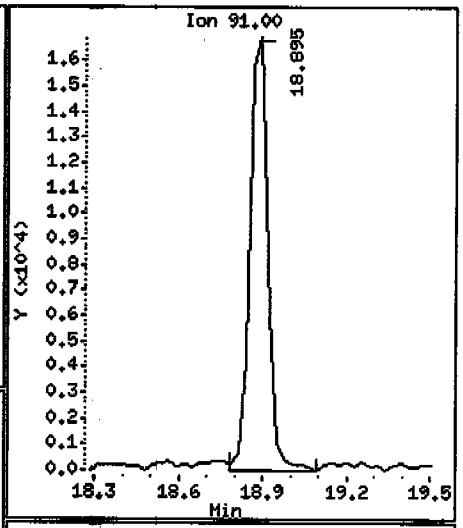
Column phase: RTx-624

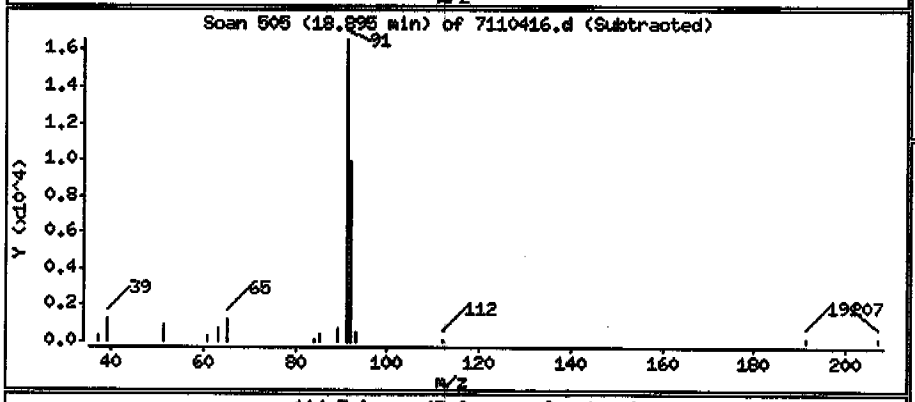
Column diameter: 0.53

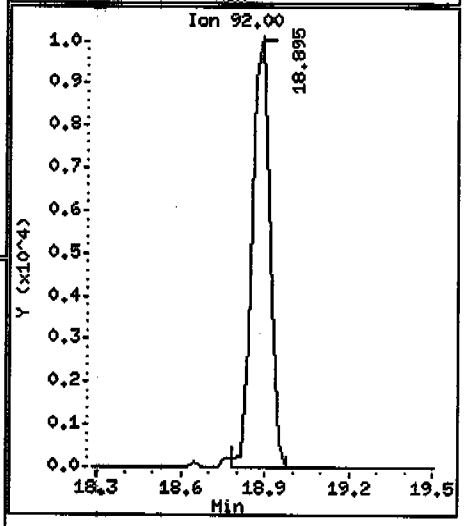
114 Toluene

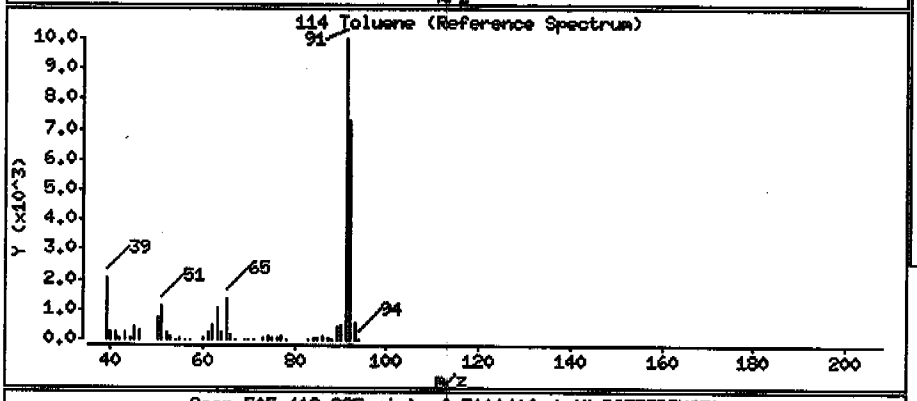
Concentration: 1.541 PPBV

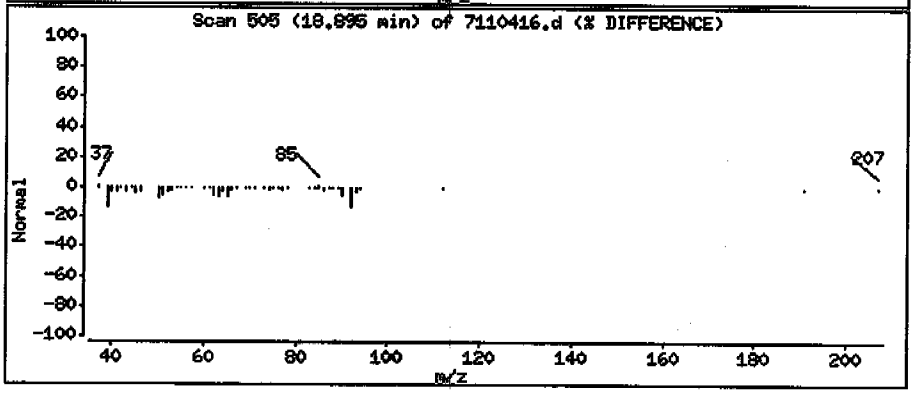












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

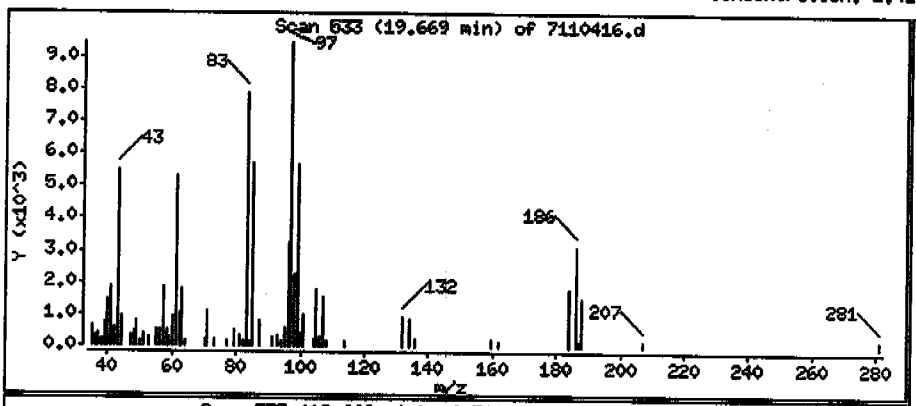
Operator: ab

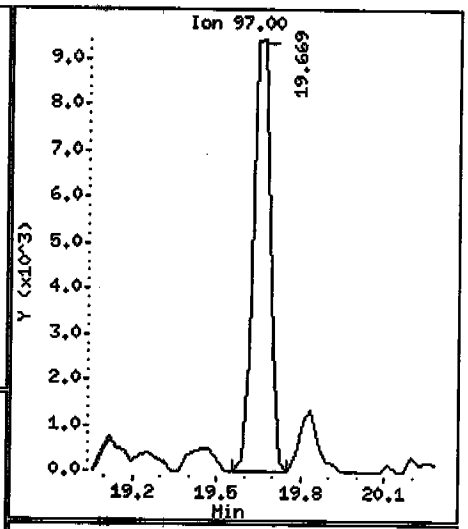
Column phase: RTx-624

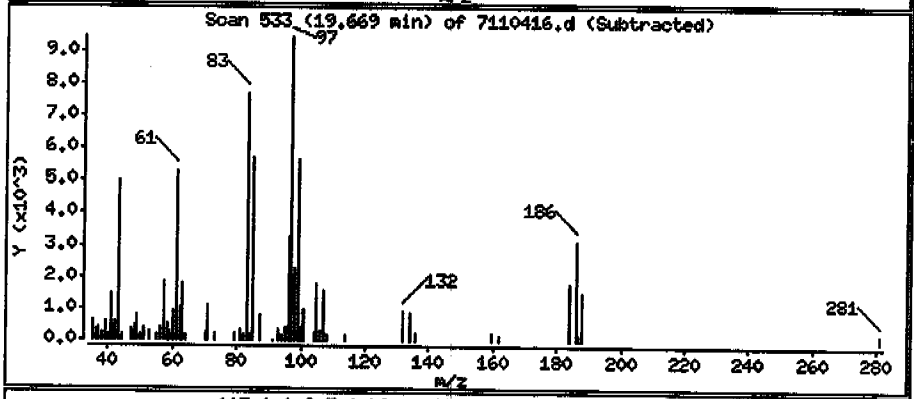
Column diameter: 0.53

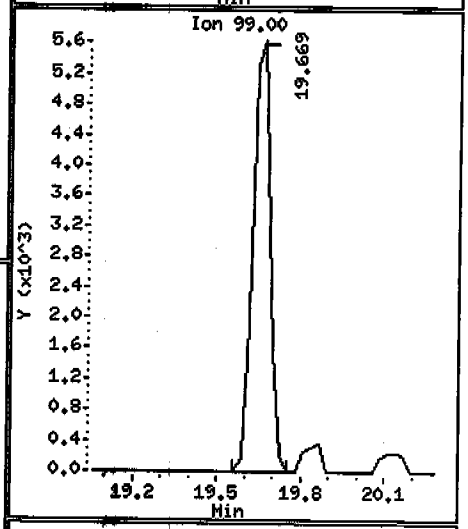
117 1,1,2-Trichloroethane

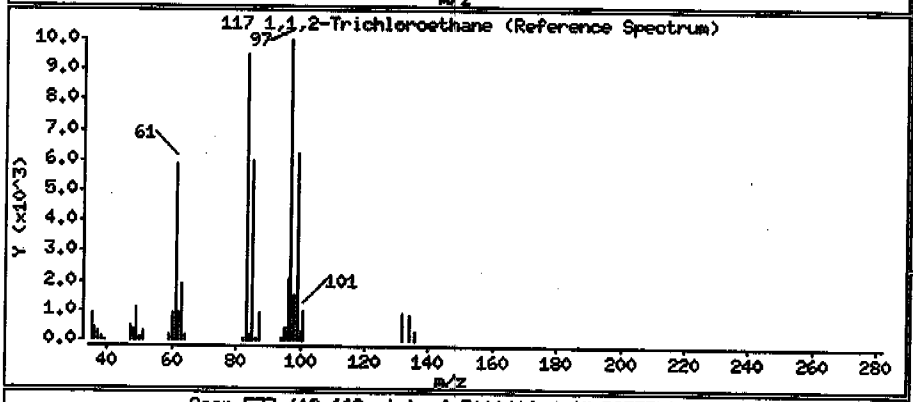
Concentration: 2.412 PPBV

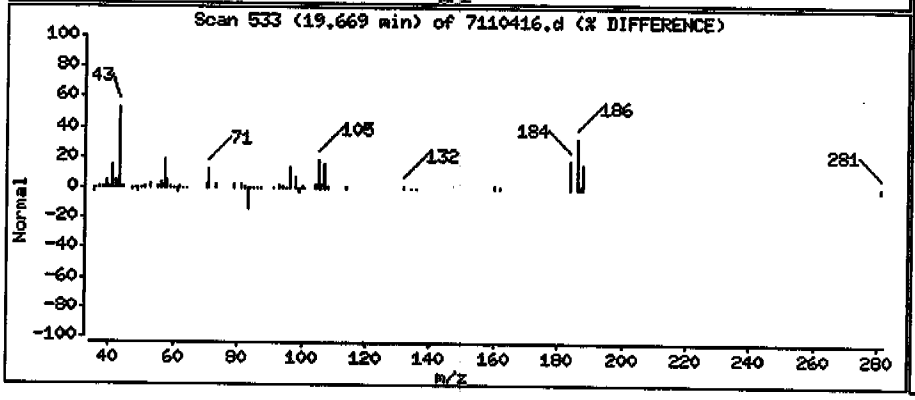


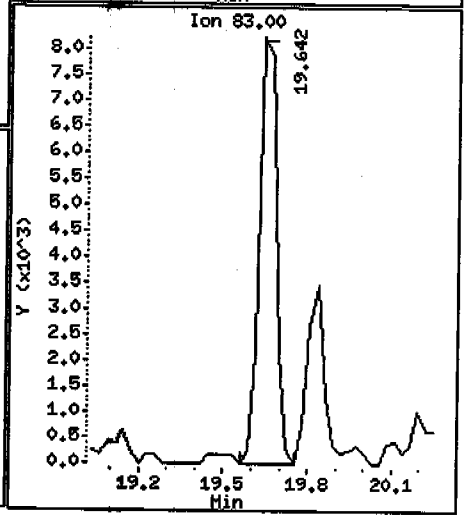












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

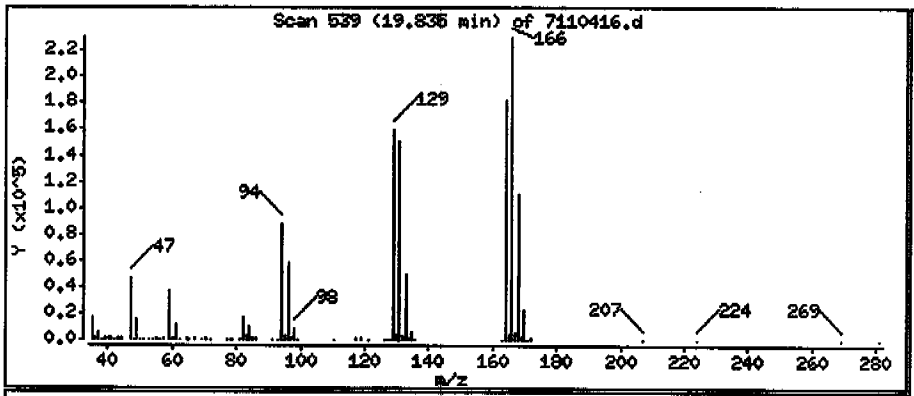
Operator: ab

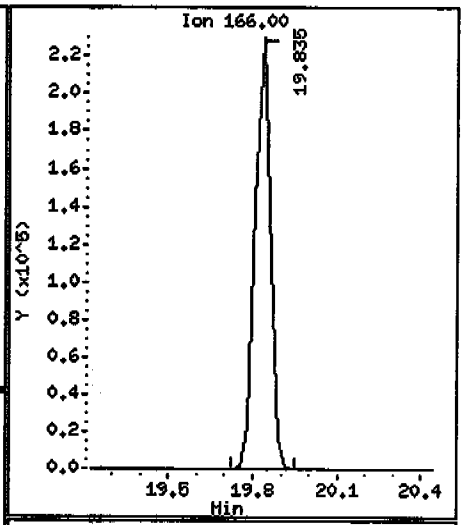
Column phase: RTx-624

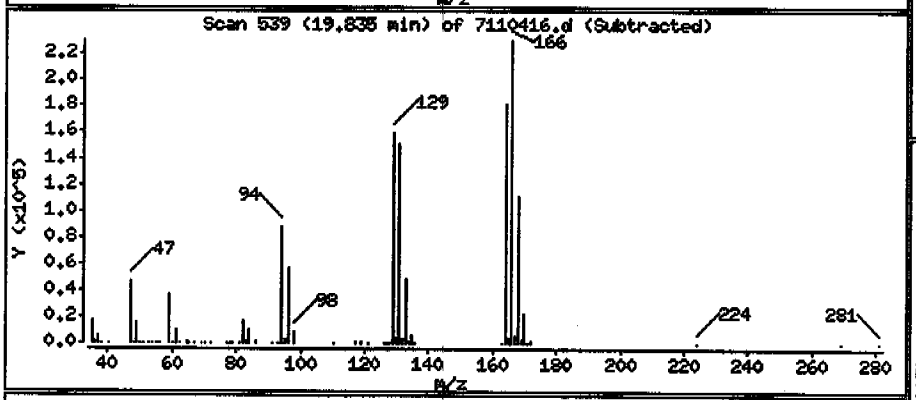
Column diameter: 0.53

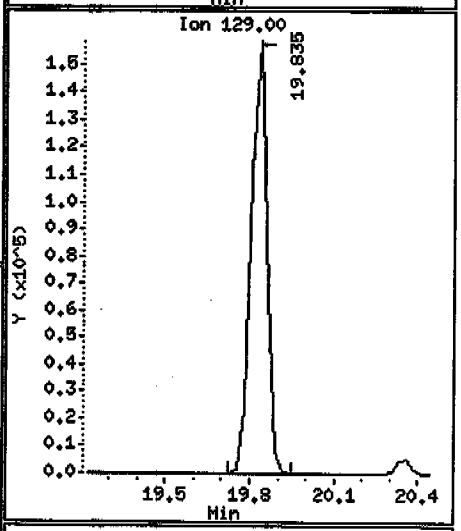
120 Tetrachloroethene

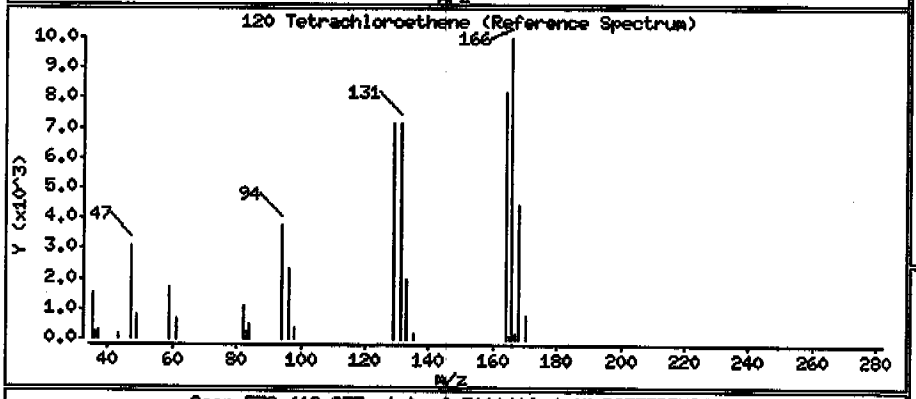
Concentration: 39.872 PPBV

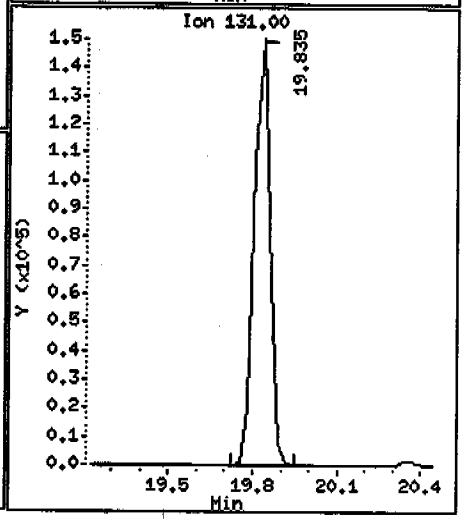


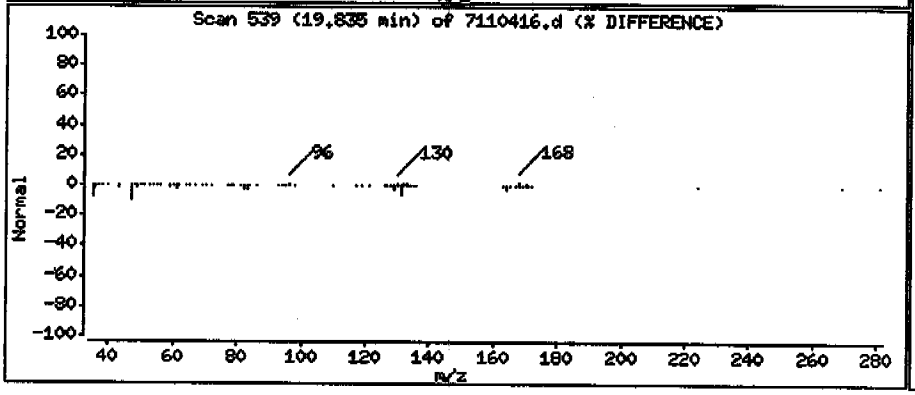












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

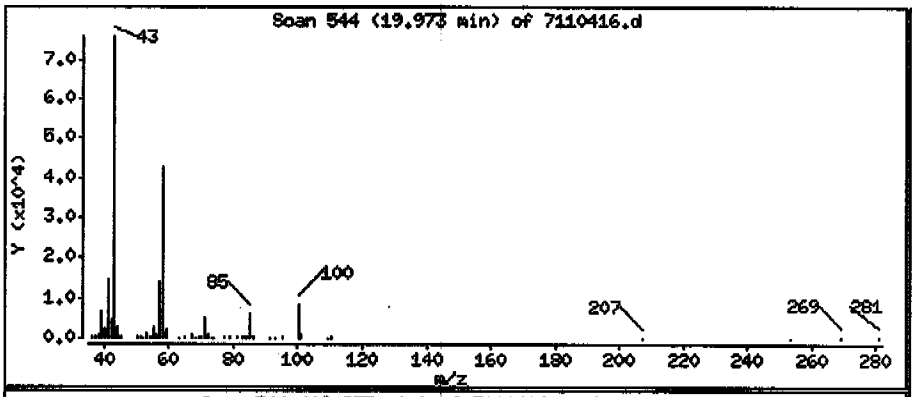
Operator: ab

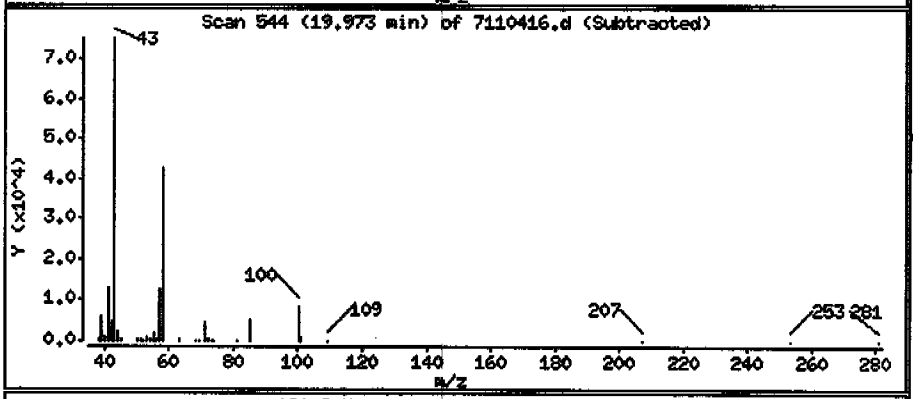
Column phase: RTx-624

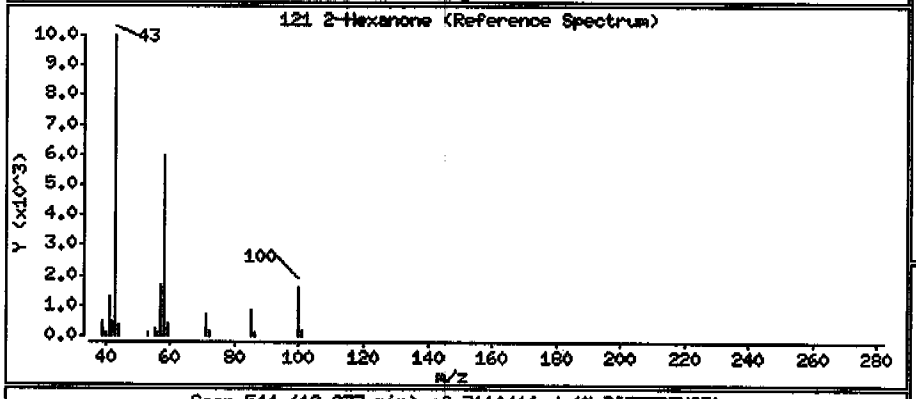
Column diameter: 0.53

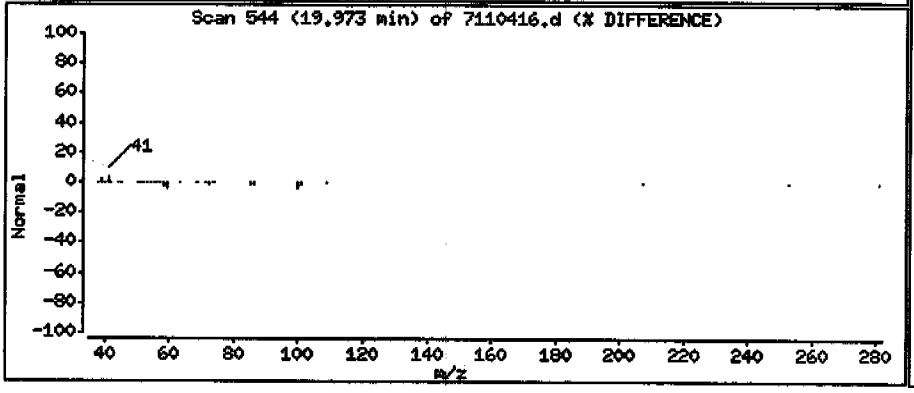
121 2-Hexanone

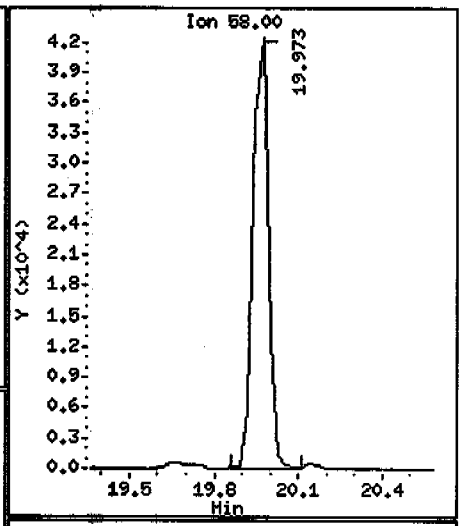
Concentration: 8.968 PPBV

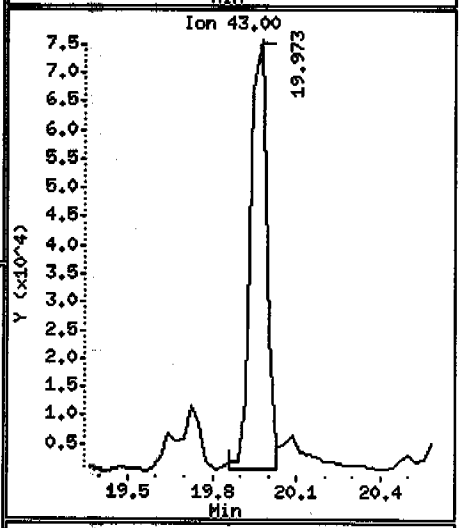


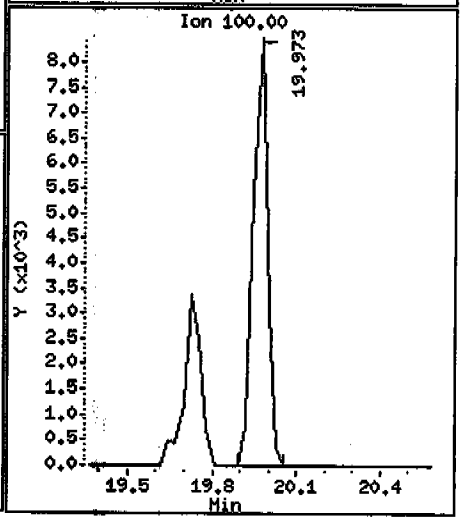












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

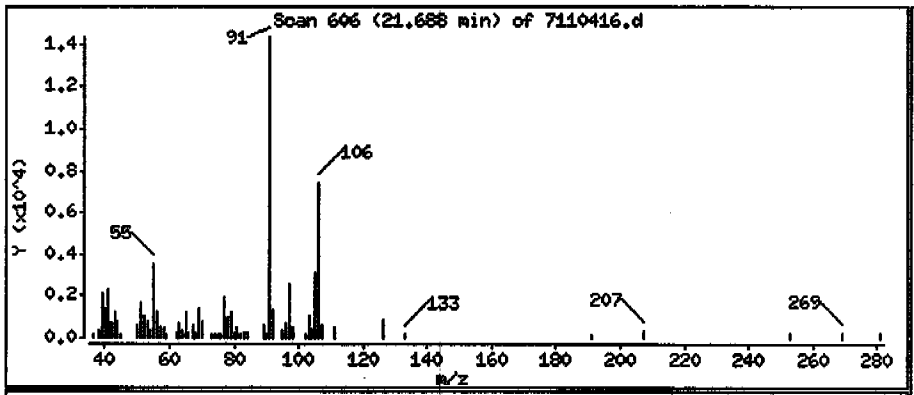
Operator: ab

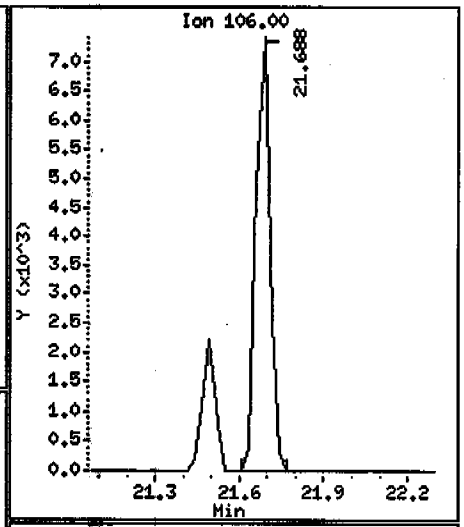
Column phase: RTx-624

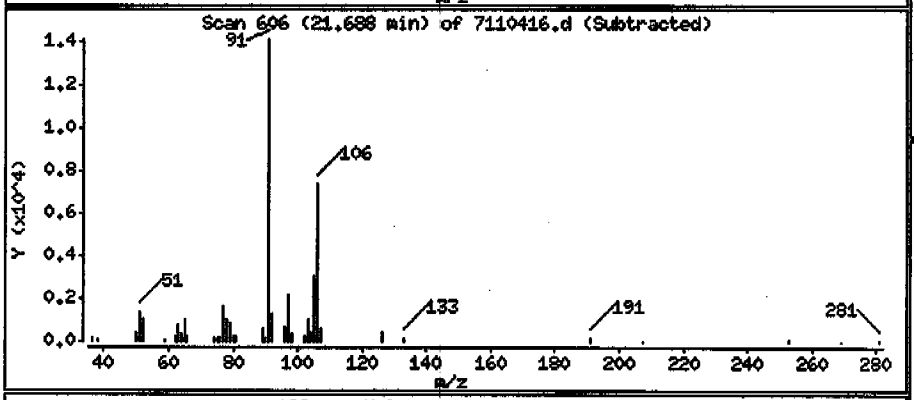
Column diameter: 0.53

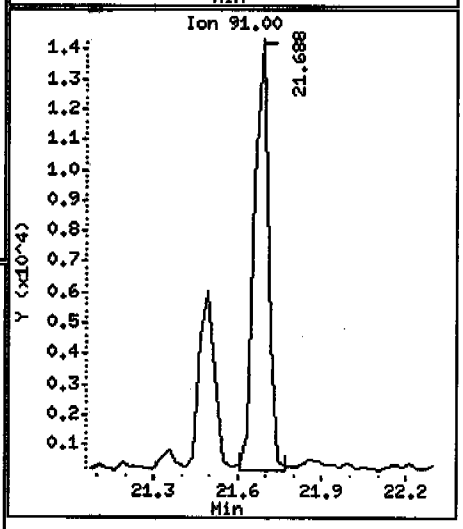
129 m,p-Xylene

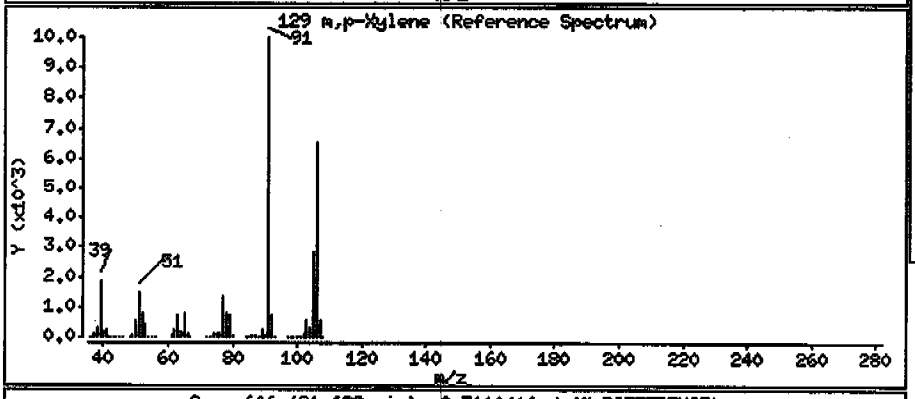
Concentration: 1.095 PPBV

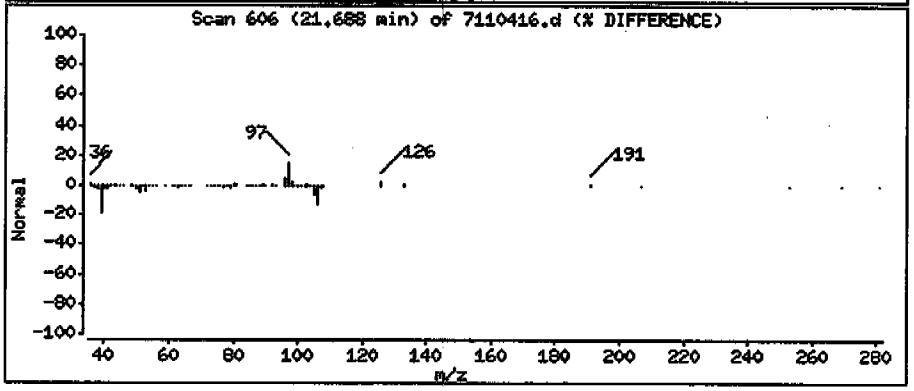












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

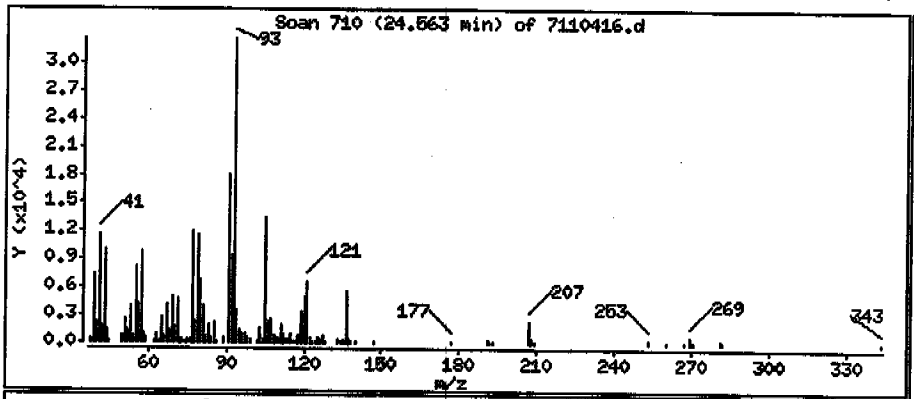
Operator: ab

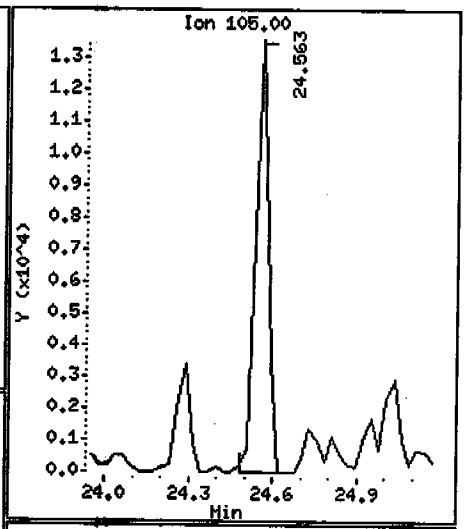
Column phase: RTx-624

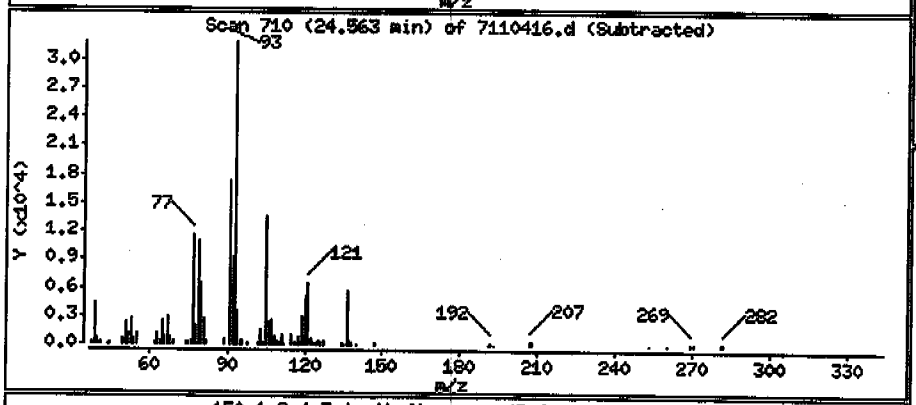
Column diameter: 0.53

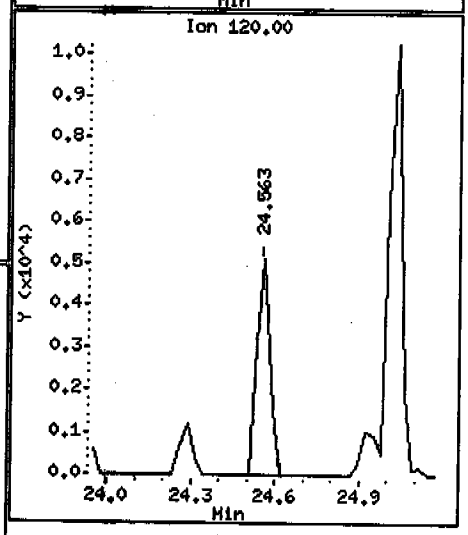
150 1,2,4-Trimethylbenzene

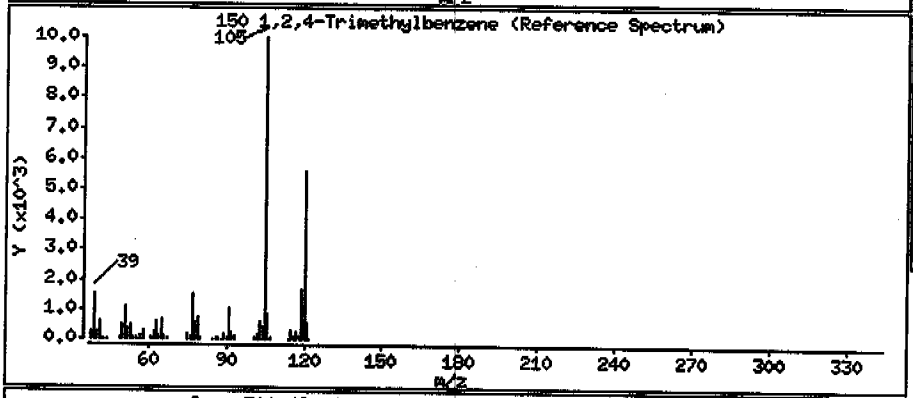
Concentration: 0.9712 PPBV

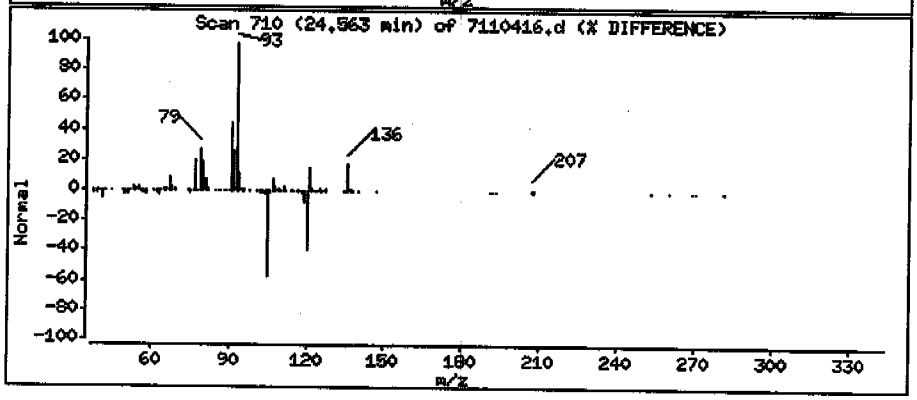












Data File: /chem/msd7.i/7-04nova.b/7110416.d

Date : 05-NOV-2007 05:36

Client ID:

Instrument: msd7.i

Sample Info: 200mL#R11

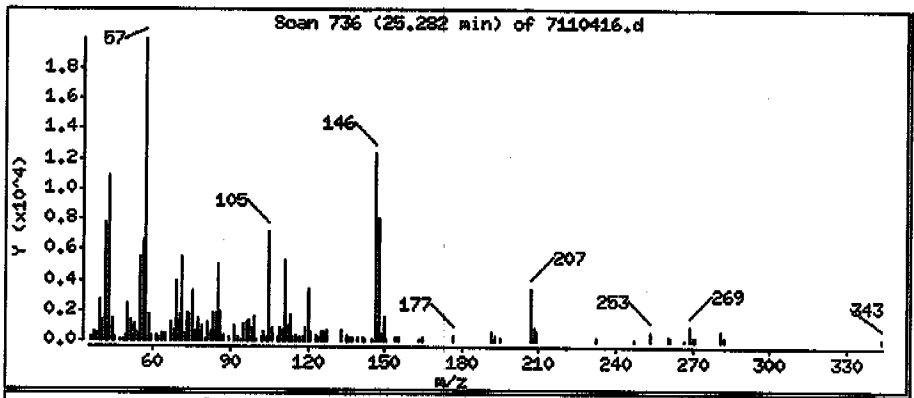
Operator: ab

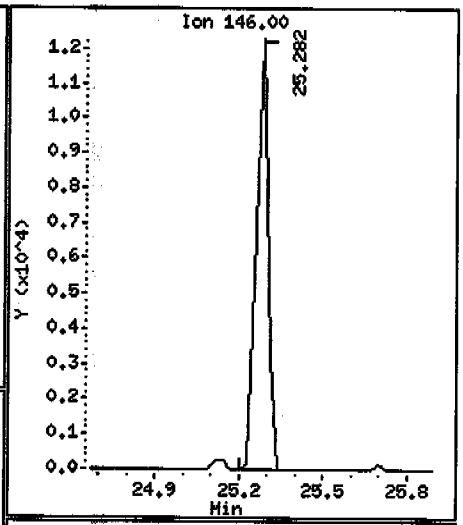
Column phase: RTx-624

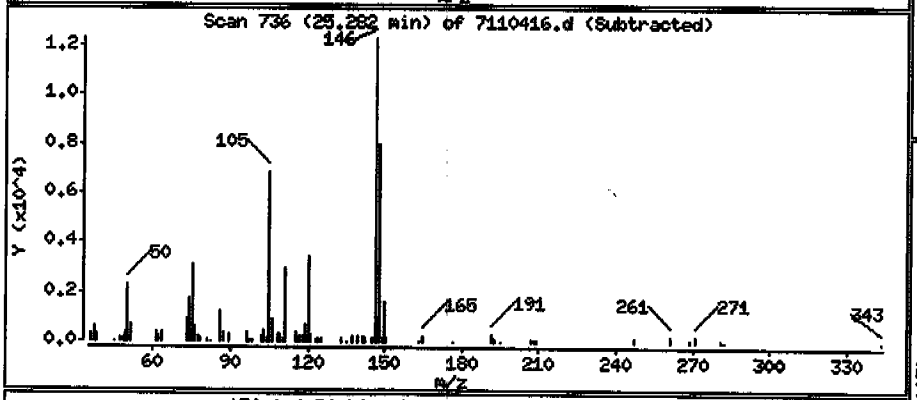
Column diameter: 0.53

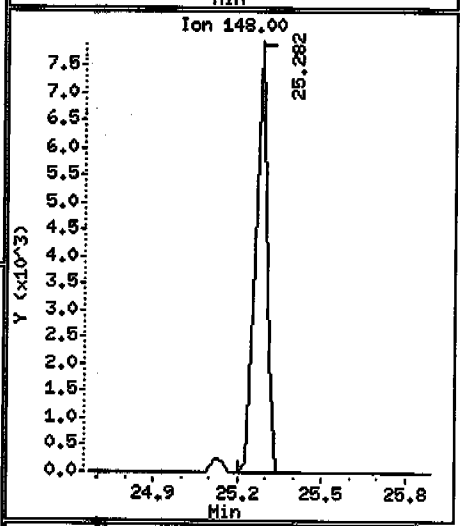
156 1,4-Dichlorobenzene

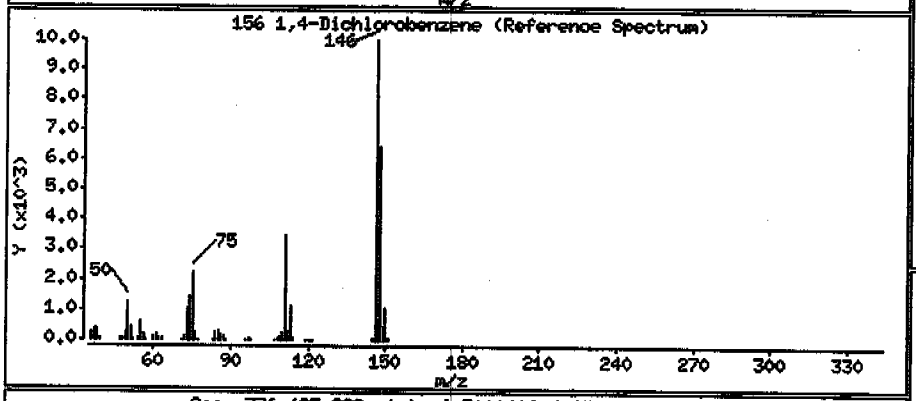
Concentration: 0.9975 PPBV

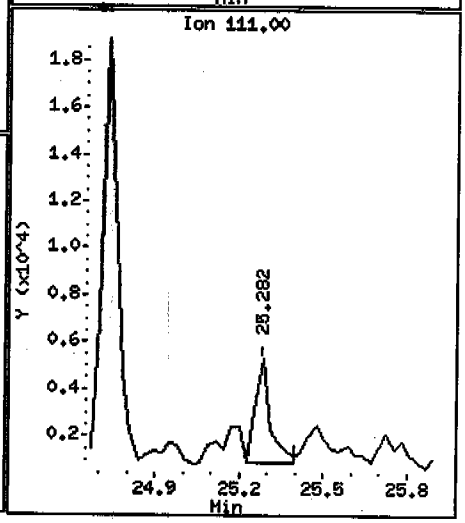


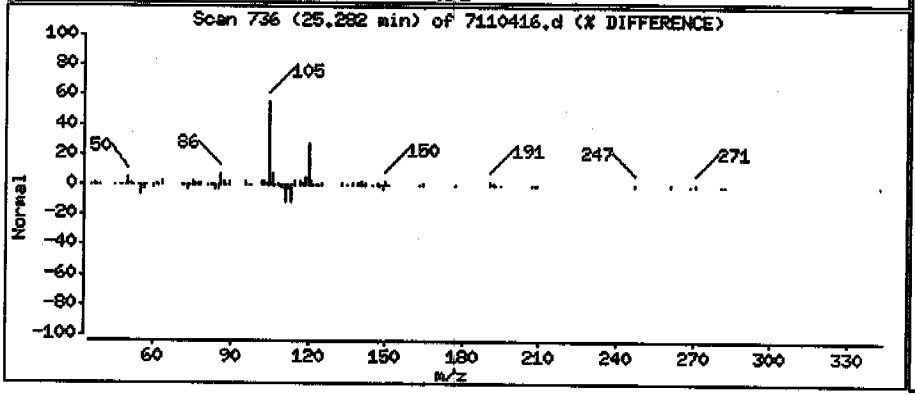












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6808

Lab ID#: 0711008-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.4	4.5	6.9
1,3-Butadiene	0.92	17	2.0	38
Ethanol	3.7	4.6	6.9	8.6
Freon 113	0.92	1.1	7.0	8.5
Acetone	3.7	15	8.7	35
Carbon Disulfide	0.92	4.0	2.8	12
Methylene Chloride	0.92	15	3.2	52
Hexane	0.92	10	3.2	36
2-Butanone (Methyl Ethyl Ketone)	0.92	5.9	2.7	17
Tetrahydrofuran	0.92	1.6	2.7	4.9
Chloroform	0.92	68	4.5	330
1,1,1-Trichloroethane	0.92	3.2	5.0	17
Carbon Tetrachloride	0.92	16	5.8	100
Benzene	0.92	2.6	2.9	8.4
Heptane	0.92	5.8	3.7	24
Trichloroethene	0.92	51	4.9	280
Bromodichloromethane	0.92	0.99	6.1	6.6
4-Methyl-2-pentanone	0.92	1.3	3.7	5.5
Toluene	0.92	3.9	3.4	14
Tetrachloroethene	0.92	31	6.2	210
Dibromochloromethane	0.92	1.1	7.8	9.7
Ethyl Benzene	0.92	1.7	4.0	7.5
m,p-Xylene	0.92	4.8	4.0	21
o-Xylene	0.92	2.3	4.0	9.9
Bromoform	0.92	1.4	9.4	15
4-Ethyltoluene	0.92	2.0	4.5	9.8
1,3,5-Trimethylbenzene	0.92	0.92	4.5	4.5
1,2,4-Trimethylbenzene	0.92	11	4.5	54
n-Butanol	3.7	14	11	42
Propylene	3.7	400 E	6.3	690 E

0128

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6808

Lab ID#: 0711008-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	1.4	4.5	6.9
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	3.7	Not Detected	7.6	Not Detected
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	0.92	17	2.0	38
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	4.6	6.9	8.6
Freon 113	0.92	1.1	7.0	8.5
1,1-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Acetone	3.7	15	8.7	35
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	0.92	4.0	2.8	12
Methylene Chloride	0.92	15	3.2	52
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Hexane	0.92	10	3.2	36
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	5.9	2.7	17
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran	0.92	1.6	2.7	4.9
Chloroform	0.92	68	4.5	330
1,1,1-Trichloroethane	0.92	3.2	5.0	17
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	16	5.8	100
Benzene	0.92	2.6	2.9	8.4
1,2-Dichloroethane	0.92	Not Detected	3.7	Not Detected
Heptane	0.92	5.8	3.7	24
Trichloroethene	0.92	51	4.9	280
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	0.99	6.1	6.6
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	1.3	3.7	5.5
Toluene	0.92	3.9	3.4	14
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Tetrachloroethene	0.92	31	6.2	210

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6808

Lab ID#: 0711008-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.92	1.1	7.8	9.7
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected
Chlorobenzene	0.92	Not Detected	4.2	Not Detected
Ethyl Benzene	0.92	1.7	4.0	7.5
m,p-Xylene	0.92	4.8	4.0	21
o-Xylene	0.92	2.3	4.0	9.9
Styrene	0.92	Not Detected	3.9	Not Detected
Bromoform	0.92	1.4	9.4	15
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.92	2.0	4.5	9.8
1,3,5-Trimethylbenzene	0.92	0.92	4.5	4.5
1,2,4-Trimethylbenzene	0.92	11	4.5	54
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected
Methanol	92	Not Detected	120	Not Detected
n-Butanol	3.7	14	11	42
Propylene	3.7	400 E	6.3	690 E

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	102	70-130

0130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110418.d
Lab Smp Id: 0711008-05A
Inj Date : 05-NOV-2007 07:24
Operator : lo Inst ID: msd7.i
Smp Info : 200mL#14003
Misc Info : 8.0"Hg-5psi
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	627788	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	483452			28.08- 128.08	77.01
14.416	14.388 (1.000)	49	1048785			128.80- 228.80	167.06
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2116809	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	311715			0.00- 64.88	14.73
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1715571	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	869038			4.45- 104.45	50.66
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	749801	22.2322	22.232	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	415327			2.91- 102.91	55.39
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1775906	23.6335	23.633	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	292241			0.00- 61.46	16.46

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	1245533			19.18- 119.18	70.14
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	1037986	25.4263	25.426	80.00- 120.00	100.00
23.319	23.319	(1.092)	95	1239414			63.49- 163.49	119.41
23.347	23.347	(1.093)	176	1005705			46.77- 146.77	96.89
11 Propylene						CAS #: 115-07-1		
5.645	5.617	(0.392)	41	5948808	219.856	402.34	80.00- 120.00	100.00(AH)
5.645	5.617	(0.392)	42	3886422			21.19- 121.19	65.33
5.645	5.617	(0.392)	39	4857556			24.83- 124.83	81.66
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.758	5.729	(0.399)	85	75604	0.76208	1.395	80.00- 120.00	100.00
5.758	5.729	(0.399)	87	22892			0.00- 83.07	30.28
22 1,3-Butadiene						CAS #: 106-99-0		
6.968	6.940	(0.483)	54	271533	9.30674	17.031	80.00- 120.00	100.00
6.743	6.940	(0.468)	39	2807279			55.97- 155.97	1033.86
38 Ethanol						CAS #: 64-17-5		
9.467	9.439	(0.657)	45	31559	2.50000	4.575	80.00- 120.00	100.00
9.467	9.439	(0.657)	43	17699			0.00- 72.83	56.08
9.467	9.439	(0.657)	46	12054			0.00- 88.20	38.20
42 Freon 113						CAS #: 76-13-1		
10.186	10.186	(0.707)	151	31368	0.60938	1.115	80.00- 120.00	100.00
10.186	10.186	(0.707)	153	20556			13.28- 113.28	65.53
10.213	10.186	(0.708)	101	34757			60.51- 160.51	110.80
45 Acetone						CAS #: 67-64-1		
10.490	10.462	(0.728)	58	137785	8.13827	14.893	80.00- 120.00	100.00
10.490	10.462	(0.728)	43	458799			247.10- 347.10	332.98
47 Carbon Disulfide						CAS #: 75-15-0		
10.904	10.877	(0.756)	76	226876	2.17097	3.973	80.00- 120.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.485	11.457	(0.797)	49	328728	8.16298	14.938	80.00- 120.00	100.00
11.457	11.457	(0.795)	84	272459			15.73- 115.73	82.88
11.457	11.457	(0.795)	51	98475			0.00- 80.85	29.96
65 Hexane						CAS #: 110-54-3		
12.287	12.287	(0.852)	57	295605	5.56613	10.186	80.00- 120.00	100.00
12.287	12.287	(0.852)	43	243027			17.84- 117.84	82.21

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane (continued)								
12.315	12.287	(0.854)	86	41204			0.00- 65.07	13.94
75 2-Butanone						CAS #: 78-93-3		
13.891	13.891	(0.964)	72	43858	3.22558	5.903	80.00- 120.00	100.00
13.891	13.891	(0.964)	43	251064			458.59- 558.59	572.45
13.891	13.891	(0.964)	57	17300			0.00- 86.57	39.45
80 Tetrahydrofuran						CAS #: 109-99-9		
14.388	14.388	(0.998)	42	32080	0.90490	1.656	80.00- 120.00	100.00
14.388	14.388	(0.998)	71	19835			0.00- 83.57	61.83
14.444	14.388	(1.002)	72	25077			0.00- 87.82	78.17
82 Chloroform						CAS #: 67-66-3		
14.471	14.471	(1.004)	83	2352332	37.2152	68.104	80.00- 120.00	100.00
14.471	14.471	(1.004)	85	1630357			15.98- 115.98	69.31
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.831	14.831	(1.029)	97	110580	1.73725	3.179	80.00- 120.00	100.00
14.831	14.831	(1.029)	99	72120			14.42- 114.42	65.22
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.107	15.107	(1.048)	119	518246	8.68562	15.895	80.00- 120.00	100.00
15.080	15.080	(1.046)	117	525332			54.21- 154.21	101.37
91 Benzene						CAS #: 71-43-2		
15.522	15.522	(0.961)	78	120563	1.43345	2.623	80.00- 120.00	100.00
15.522	15.522	(0.961)	77	36137			0.00- 71.87	29.97
94 Heptane						CAS #: 142-82-5		
15.715	15.716	(0.973)	71	81747	3.16032	5.783	80.00- 120.00	100.00
15.715	15.716	(0.973)	43	155998			158.53- 258.53	190.83
15.715	15.716	(0.973)	57	87766			59.34- 159.34	107.36
101 Trichloroethene						CAS #: 79-01-6		
16.628	16.628	(1.029)	95	1047706	28.0429	51.318	80.00- 120.00	100.00
16.628	16.628	(1.029)	130	1098335			54.96- 154.96	104.83
16.628	16.628	(1.029)	97	690986			15.03- 115.03	65.95
107 Bromodichloromethane						CAS #: 75-27-4		
17.540	17.540	(1.086)	83	35079	0.54081	0.9897	80.00- 120.00	100.00
17.540	17.540	(1.086)	85	15018			14.07- 114.07	42.81
111 4-Methyl-2-pentanone						CAS #: 108-10-1		
18.508	18.508	(1.145)	58	18453	0.73315	1.342	80.00- 120.00	100.00
18.508	18.508	(1.145)	43	47737			222.97- 322.97	258.70

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
111 4-Methyl-2-pentanone (continued)							
18.508	18.508 (1.145)	85	6473			0.00- 90.48	35.08
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	195010	2.11685	3.874	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	125798			12.81- 112.81	64.51
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	773125	16.7756	30.699	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	535135			18.66- 118.66	69.22
19.835	19.835 (0.929)	131	519568			16.81- 116.81	67.20
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	39155	0.62190	1.138	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	29667			27.62- 127.62	75.77
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	37607	0.94926	1.737	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	109497			261.69- 361.69	291.16
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	129501	2.61156	4.779	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	252541			145.05- 245.05	195.01
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	53530	1.24568	2.280	80.00- 120.00	100.00
22.379	22.379 (1.048)	91	104573			150.06- 250.06	195.35
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	43480	0.78646	1.439	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	23010			1.50- 101.50	52.92
145 4-Ethyltoluene					CAS #: 622-96-8		
23.789	23.817 (1.114)	105	140238	1.09116	1.997	80.00- 120.00	100.00
23.789	23.817 (1.114)	120	47180			0.00- 82.38	33.64
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	50497	0.50021	0.9154	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	28126			3.80- 103.80	55.70
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	555393	6.05357	11.078	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	87872			0.00- 98.95	15.82
98 1-Butanol					CAS #: 71-36-3		
16.324	16.324 (1.010)	56	156058	7.54159	13.801	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
98 1-Butanol (continued)								
16.324	16.324	(1.010)	41	149874			21.86- 121.86	96.04
16.324	16.324	(1.010)	43	75856			9.15- 109.15	48.61

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110418.d
Lab Smp Id: 0711008-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 8.0"Hg-5psi

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	627788	-3.59
97 1,4-Difluorobenze	2188066	1312840	3063292	2116809	-3.26
126 Chlorobenzene-d5	1729248	1037549	2420947	1715571	-0.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 05-Nov-2007 12:05

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-04nova
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711008-05A
Level: LOW
Operator: lo
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 8.0"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.232	88.93	70-130
$ 113 Toluene-d8	25.000	23.633	94.53	70-130
$ 137 Bromofluorobenzene	25.000	25.426	101.71	70-130

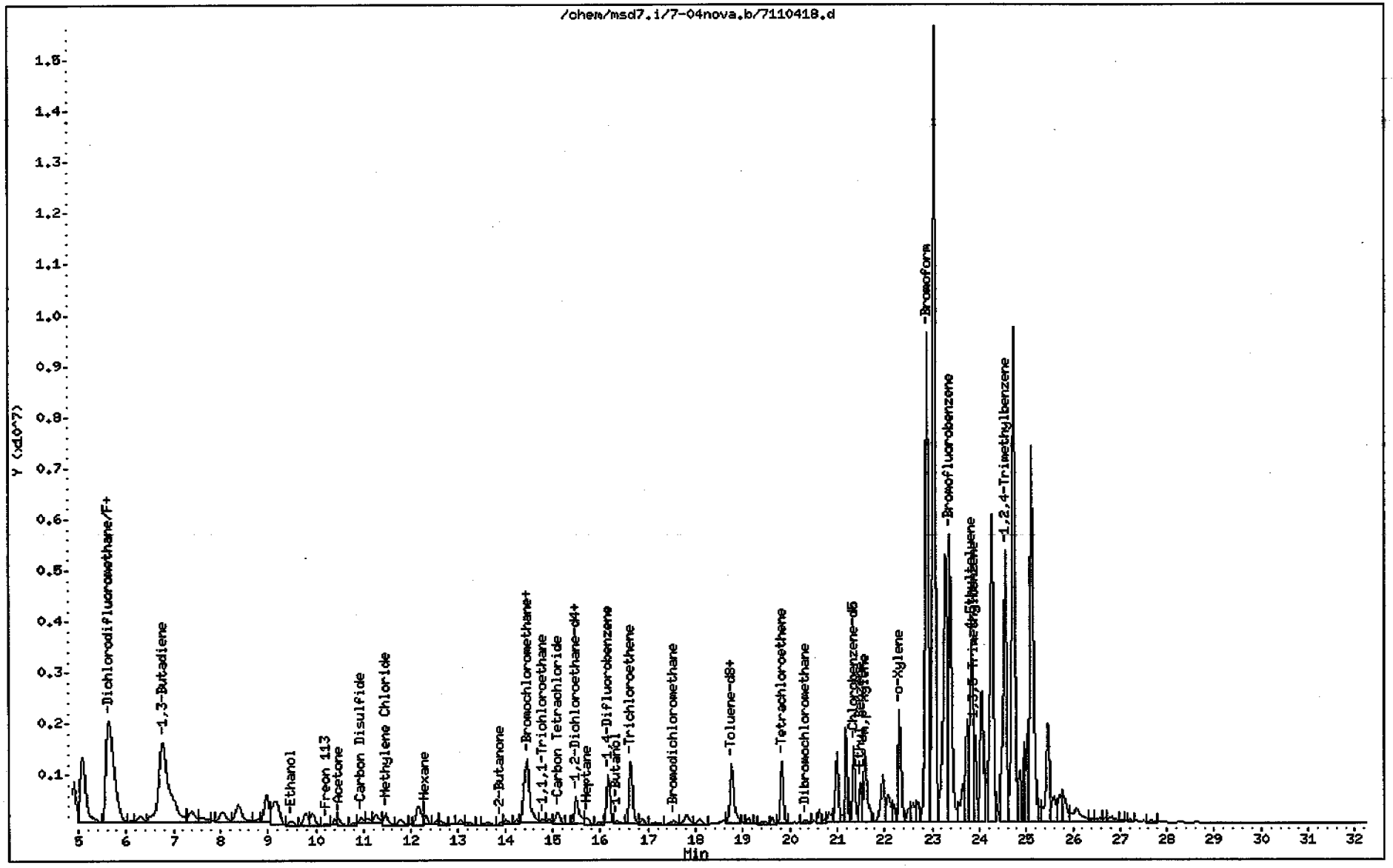
Data File: /chem/msd7.i/7-04nova.b/7110418.d
Date : 05-NOV-2007 07:24
Client ID:
Sample Info: 200mL#14003

Column phase: RTx-624

Instrument: msd7.i

Operator: lo
Column diameter: 0.53

0138



Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

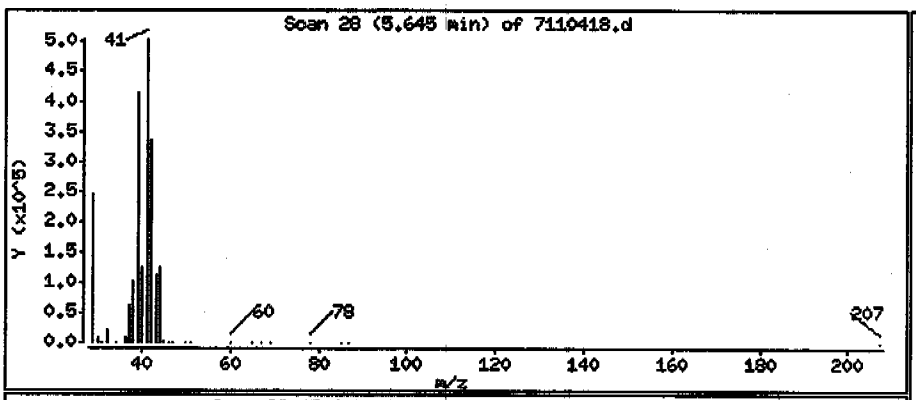
Operator: lo

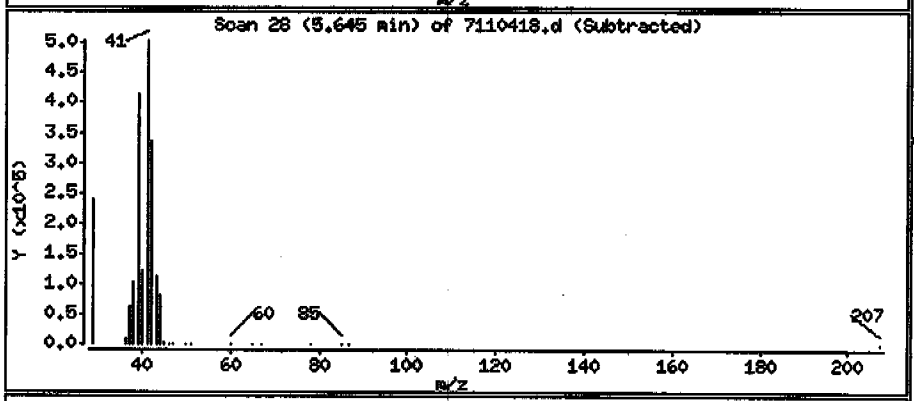
Column phase: RTx-624

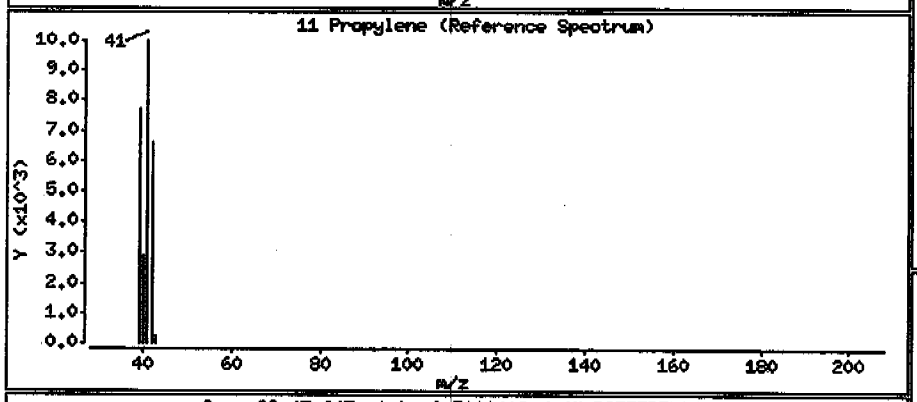
Column diameter: 0.53

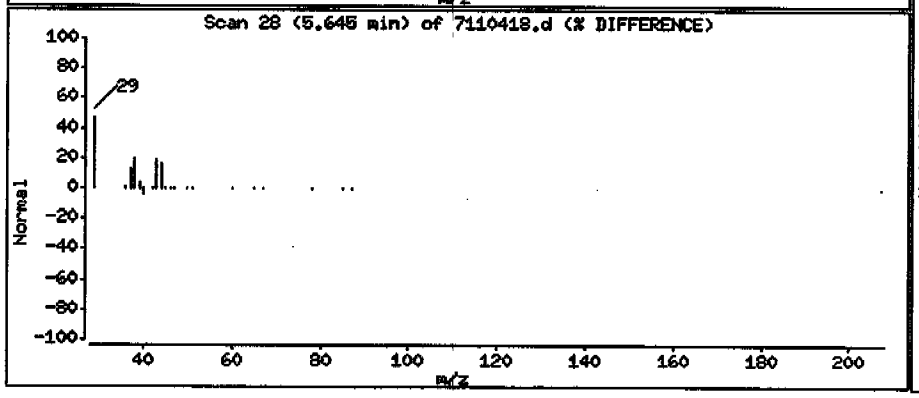
11 Propylene

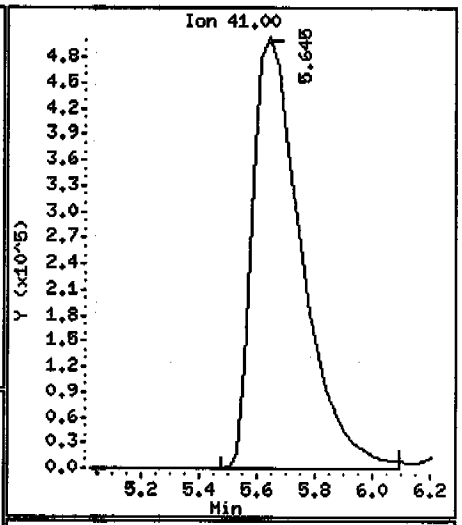
Concentration: 402.34 PPBV

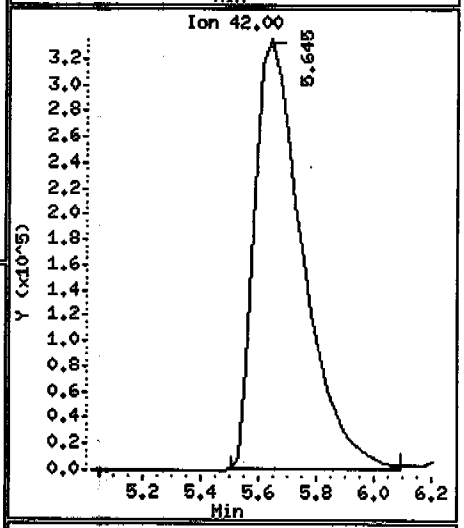


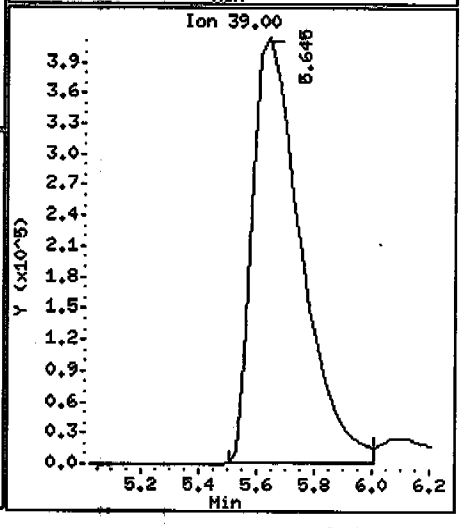












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

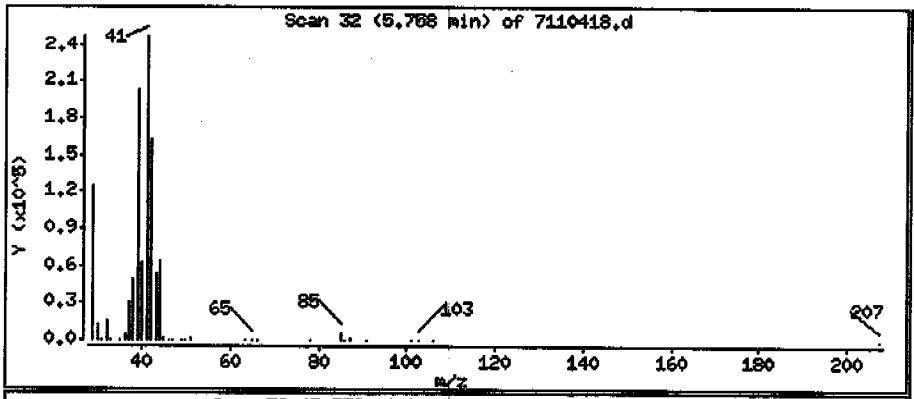
Operator: lo

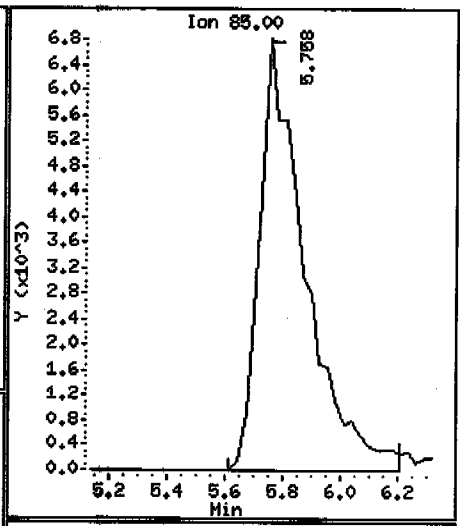
Column phase: RTx-624

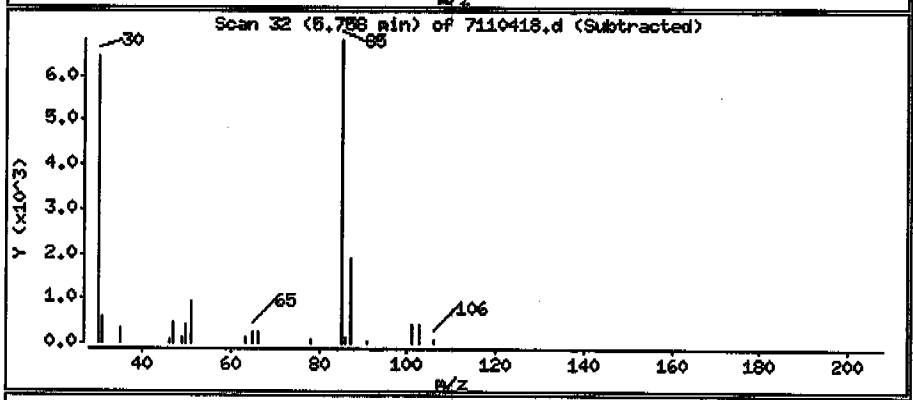
Column diameter: 0.53

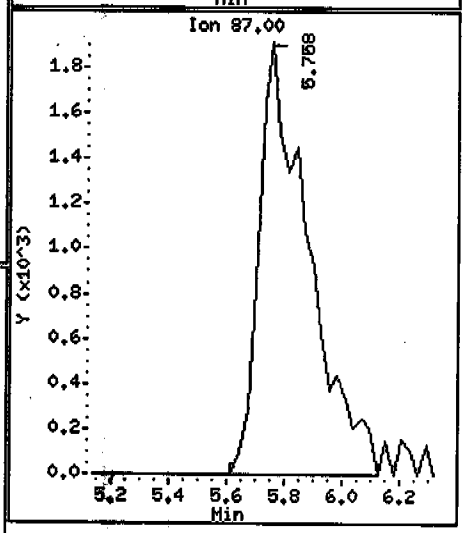
12 Dichlorodifluoromethane/Fr12

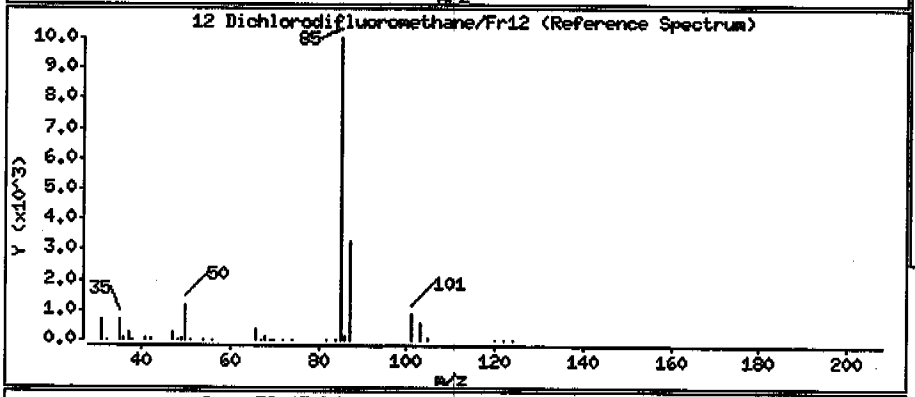
Concentration: 1.395 PPBV

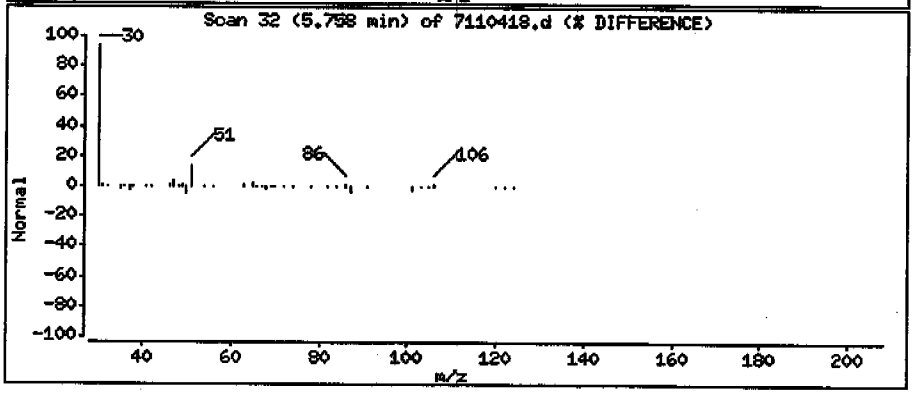












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

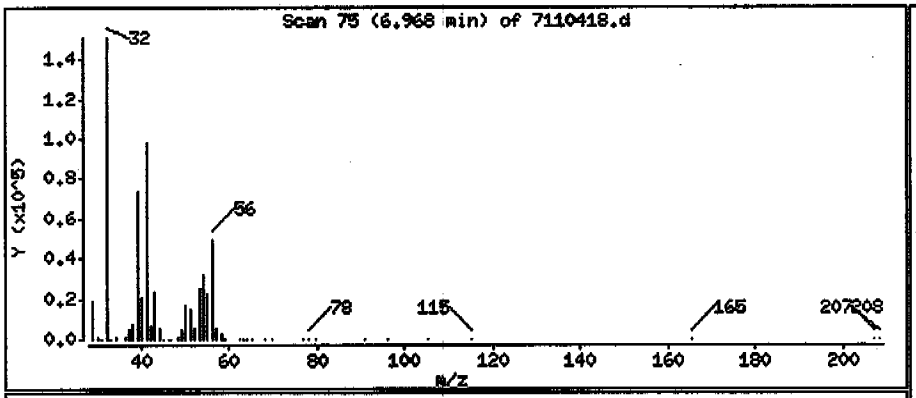
Operator: lo

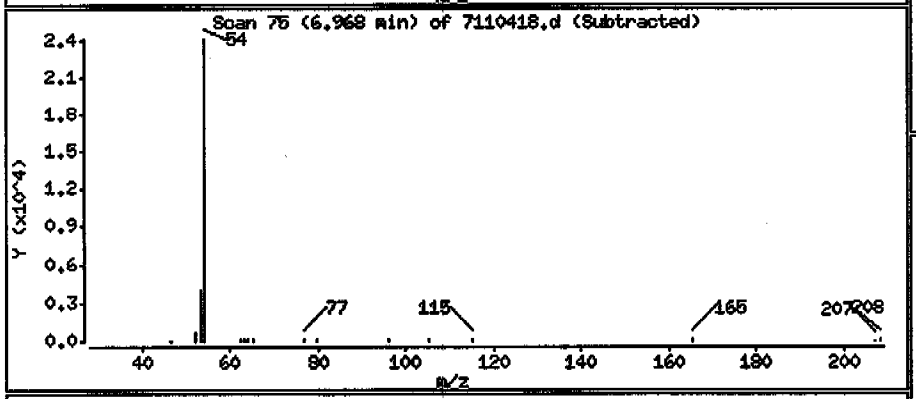
Column phase: RTx-624

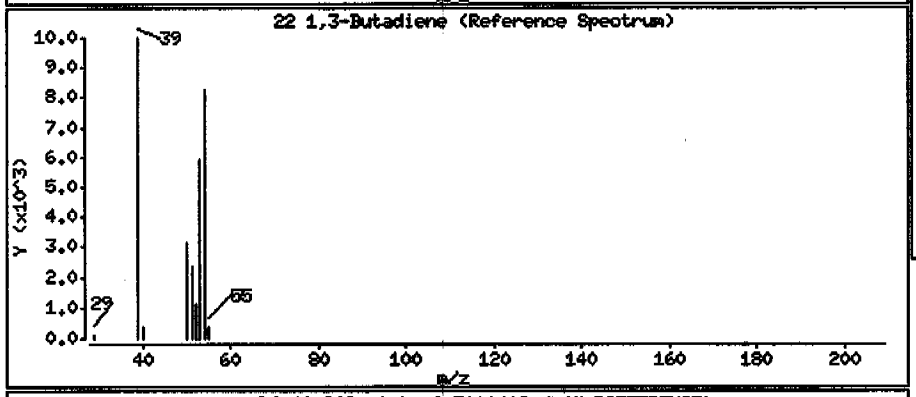
Column diameter: 0.53

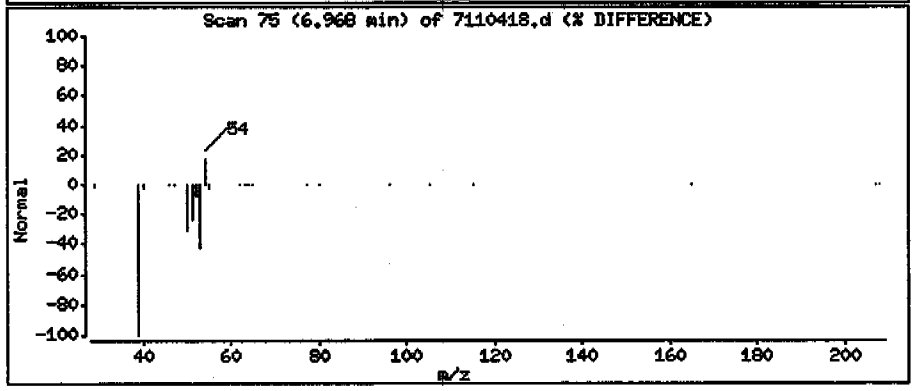
22 1,3-Butadiene

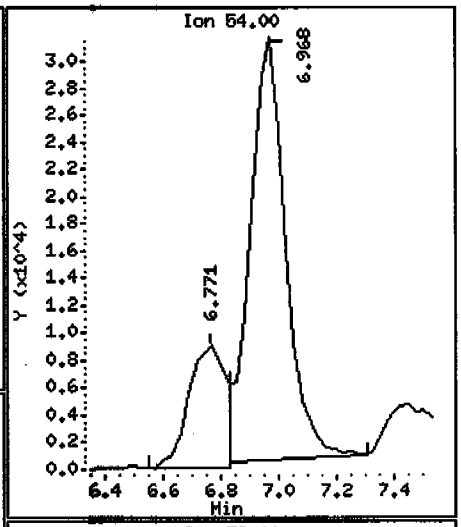
Concentration: 17.031 PPBV

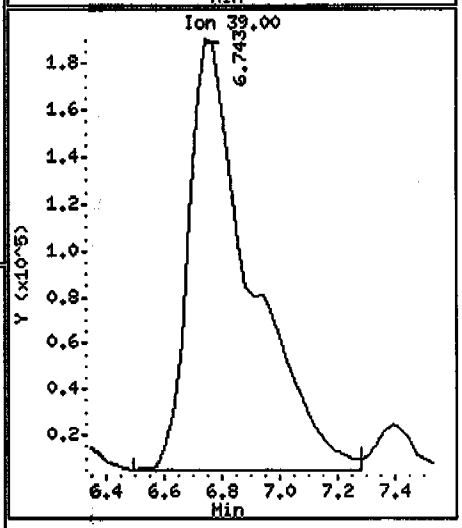












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

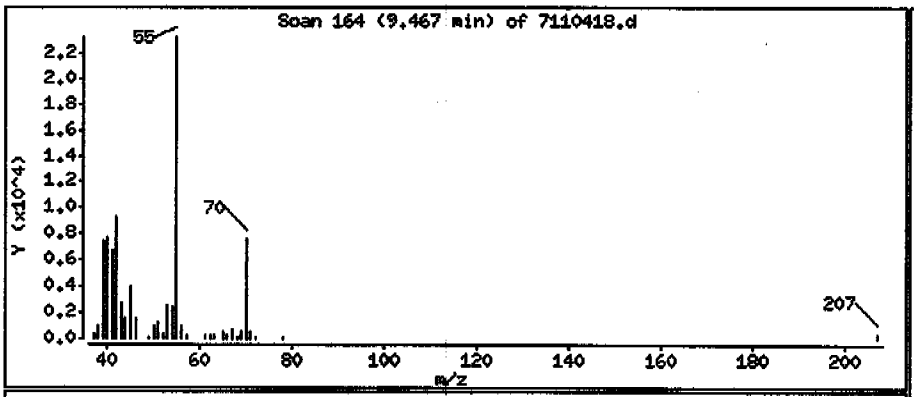
Operator: lo

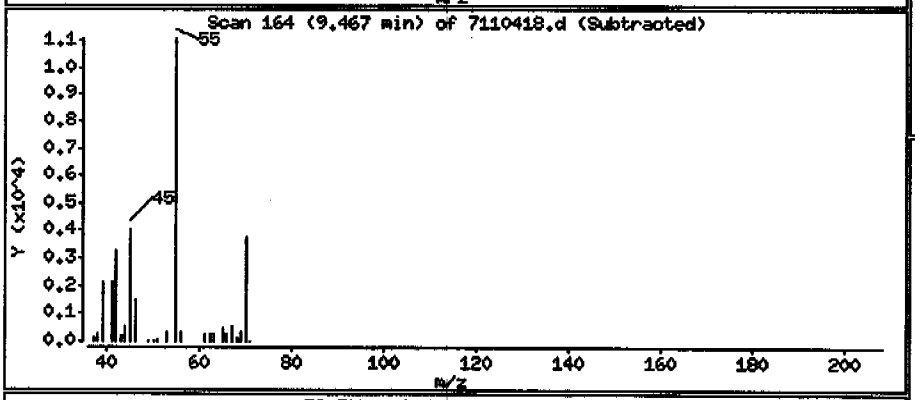
Column phase: RTx-624

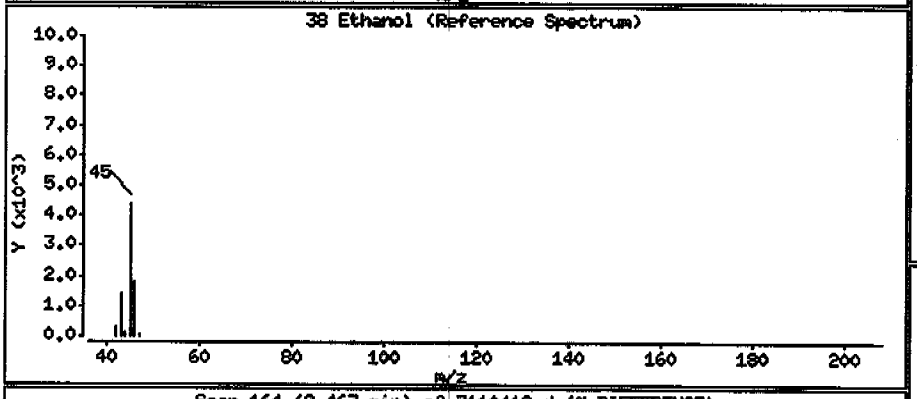
Column diameter: 0.53

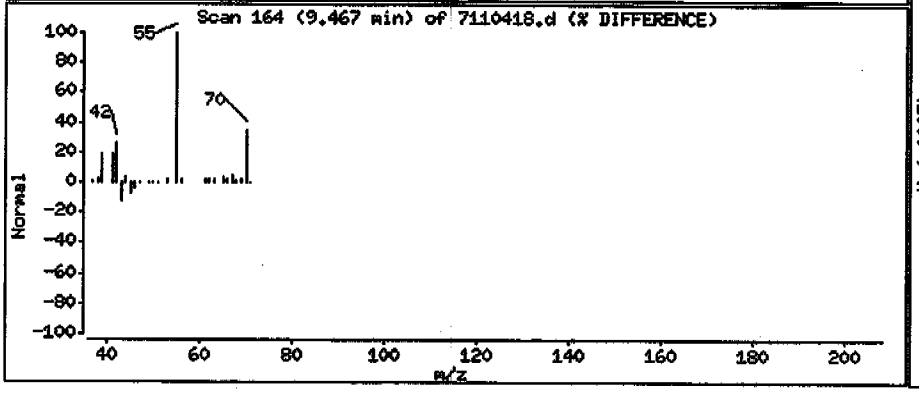
38 Ethanol

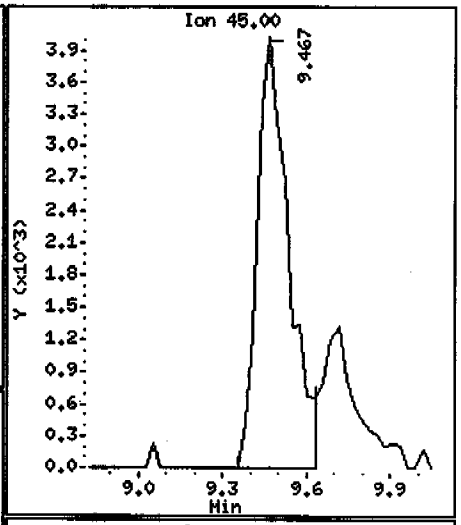
Concentration: 4.575 PPBV

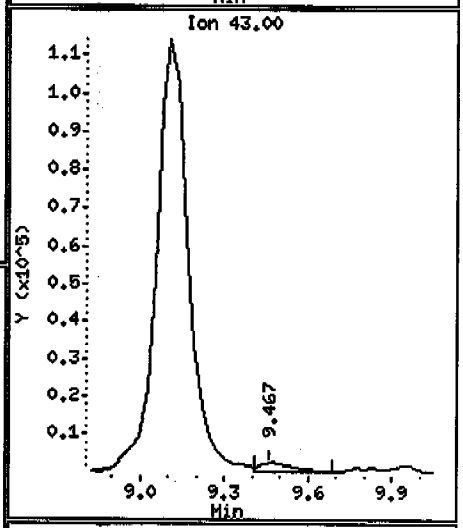


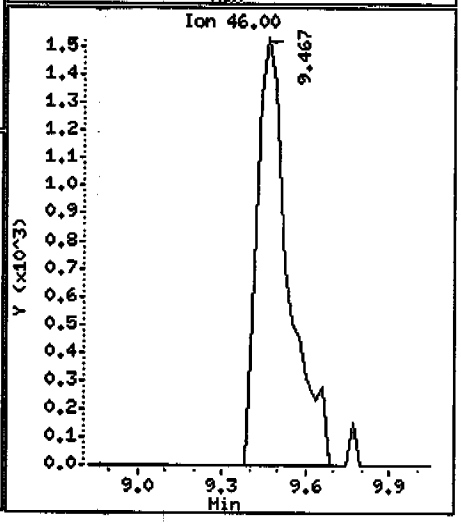












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

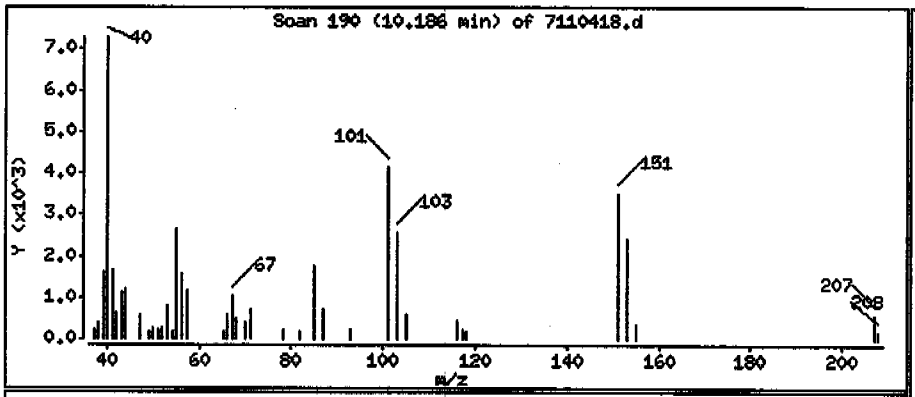
Operator: lo

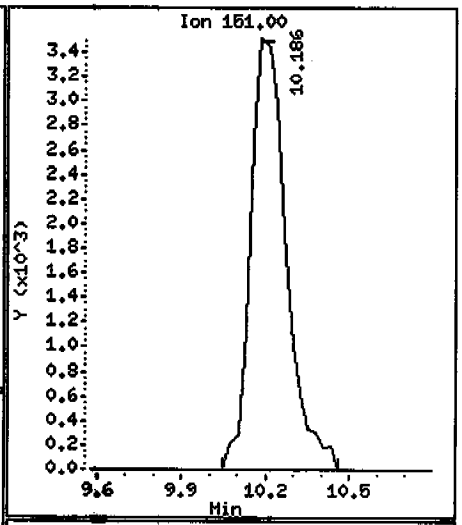
Column phase: RTx-624

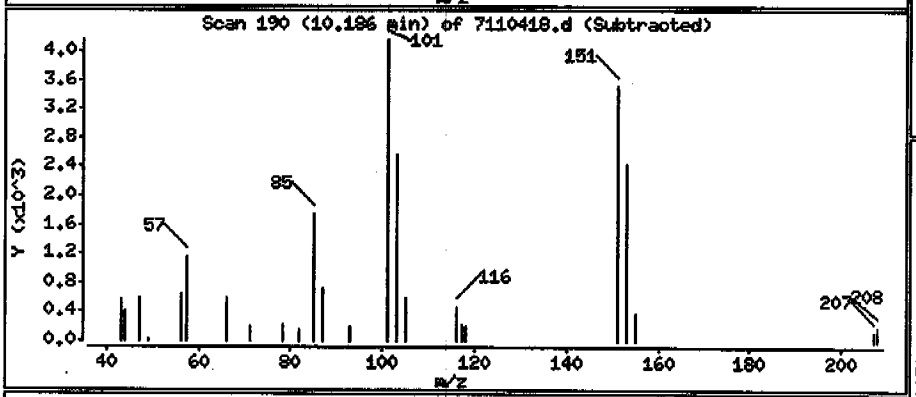
Column diameter: 0.53

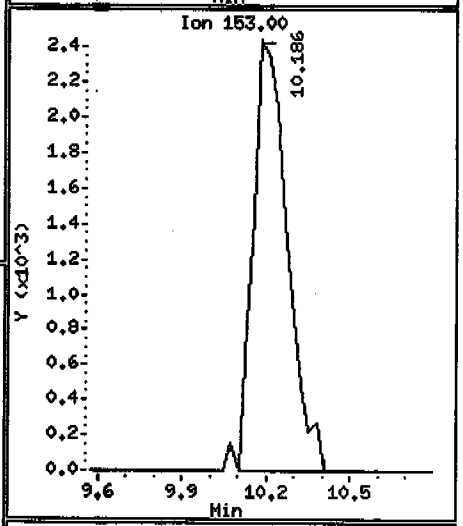
42 Freon 113

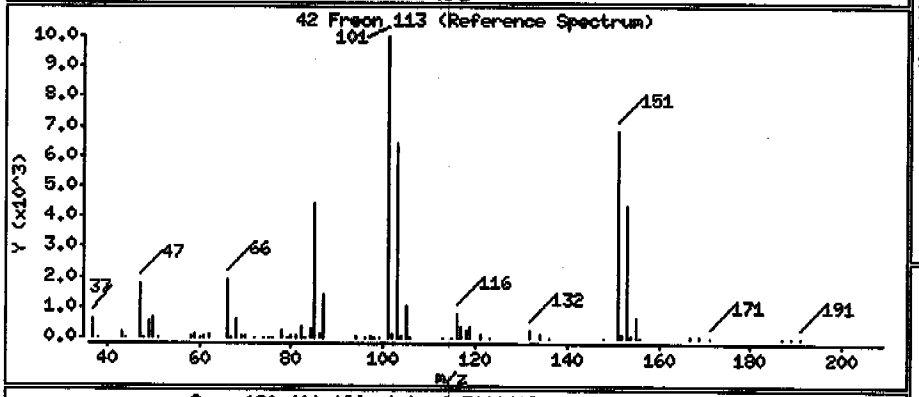
Concentration: 1.115 PPBV

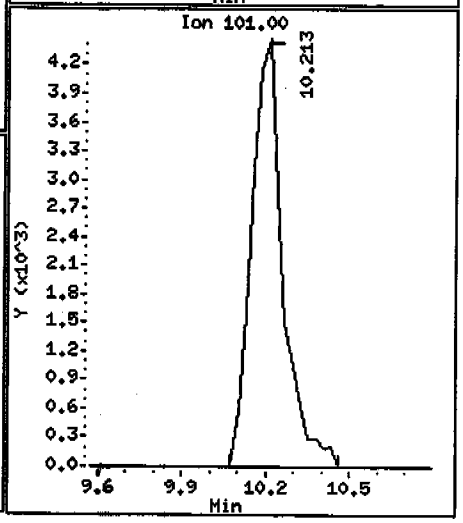


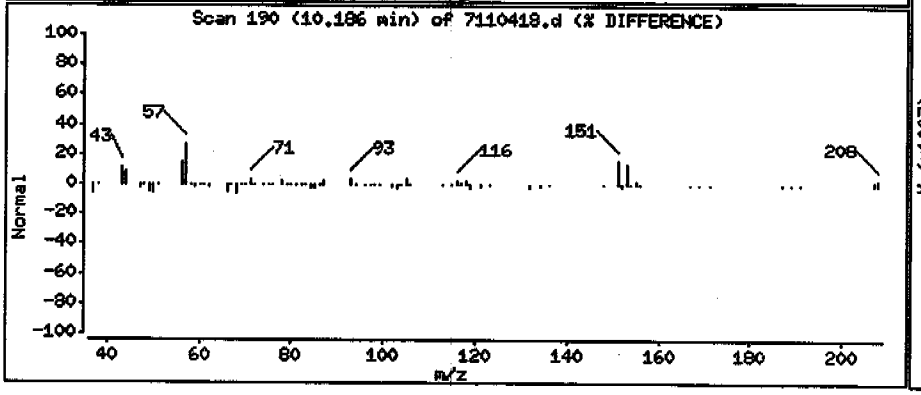












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

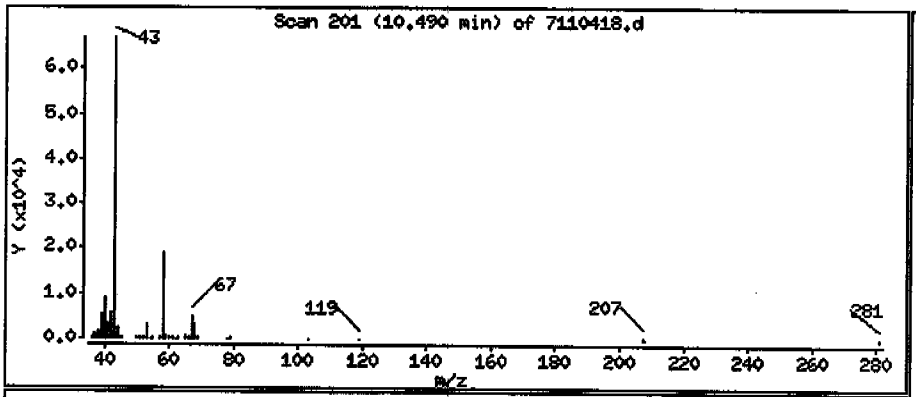
Operator: lo

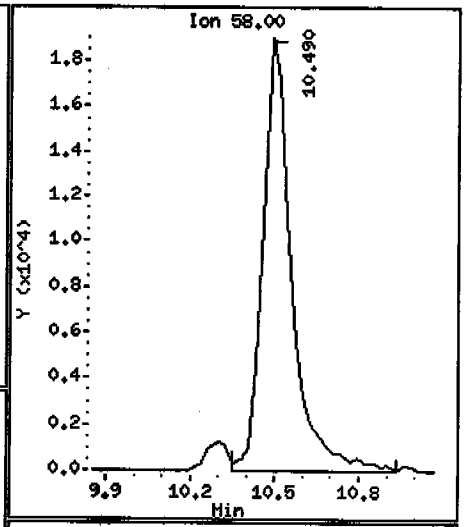
Column phase: RTx-624

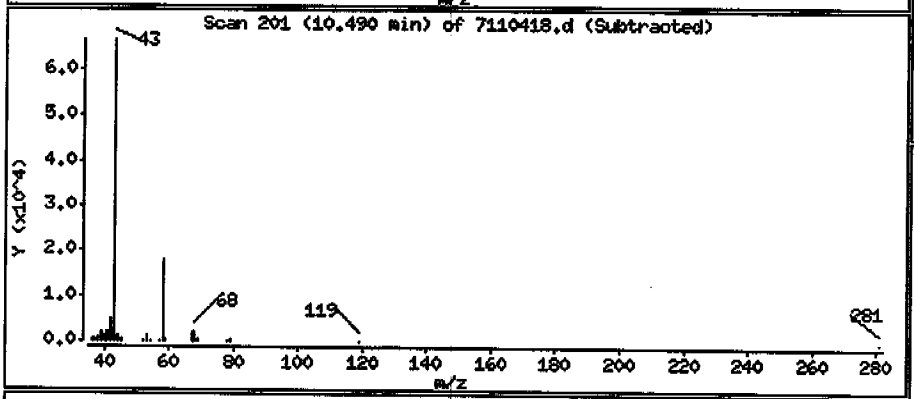
Column diameter: 0.53

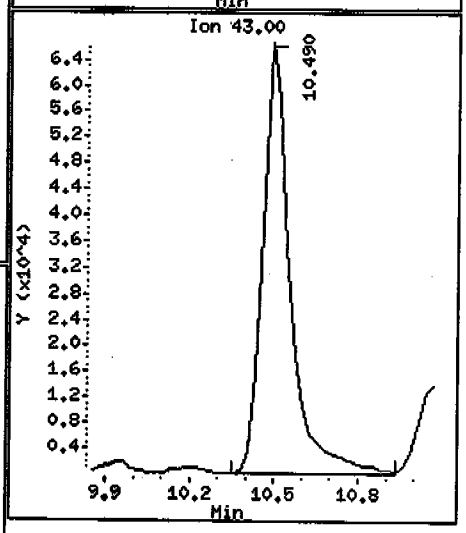
45 Acetone

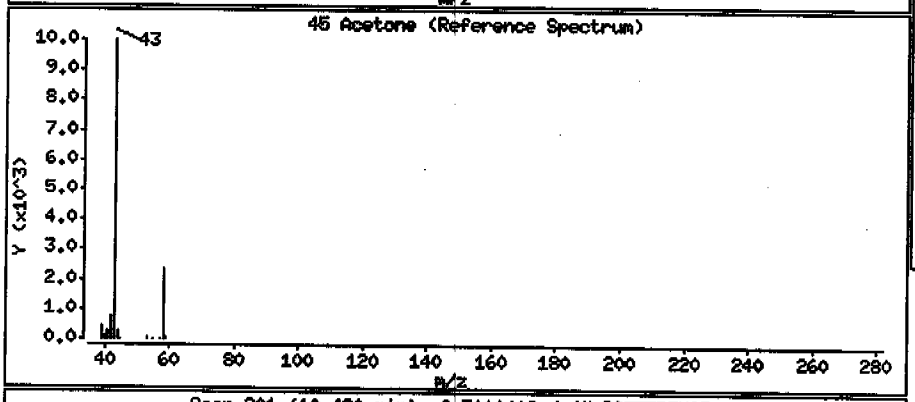
Concentration: 14.893 PPBV

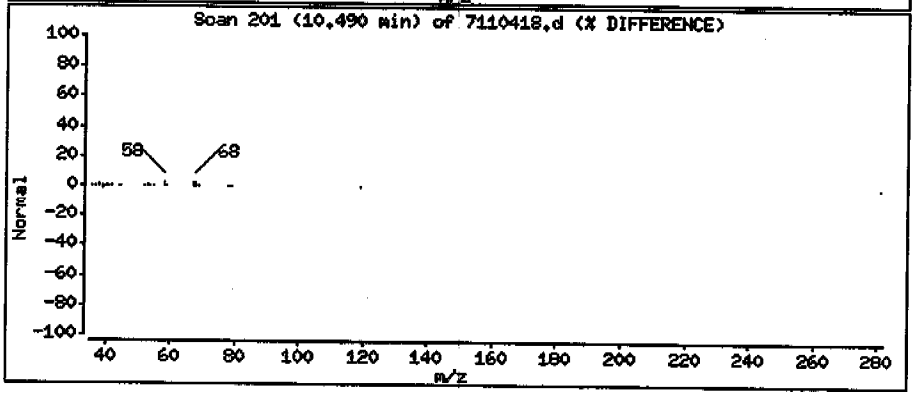












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

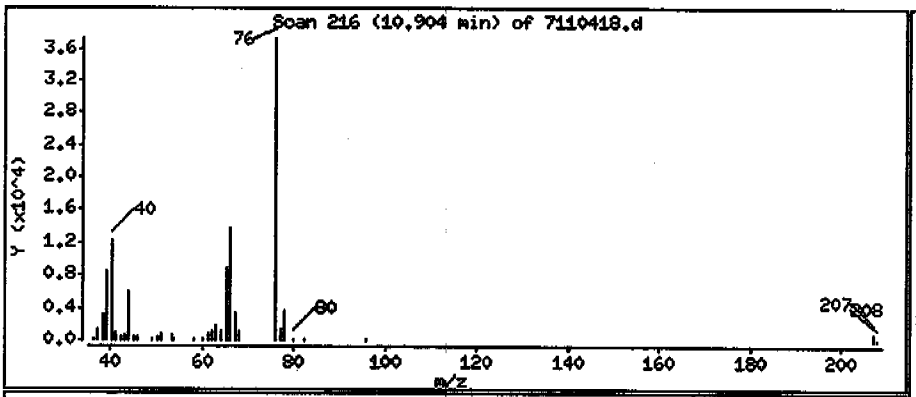
Operator: lo

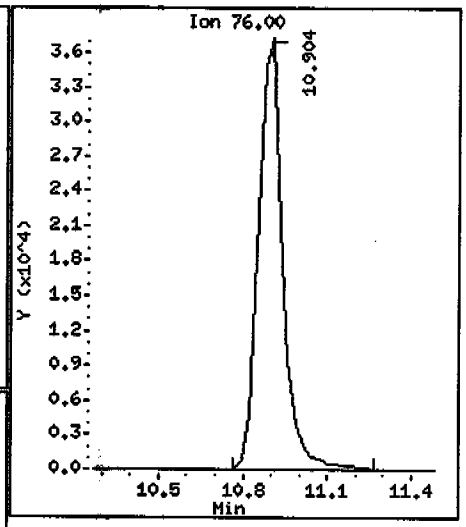
Column phase: RTx-624

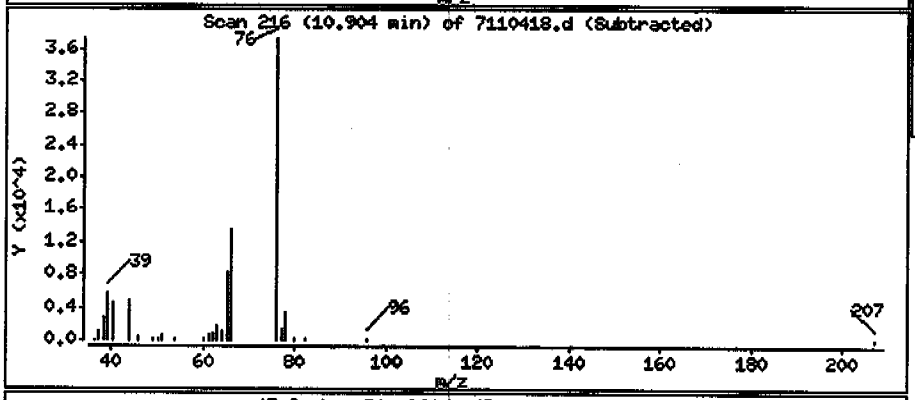
Column diameter: 0.53

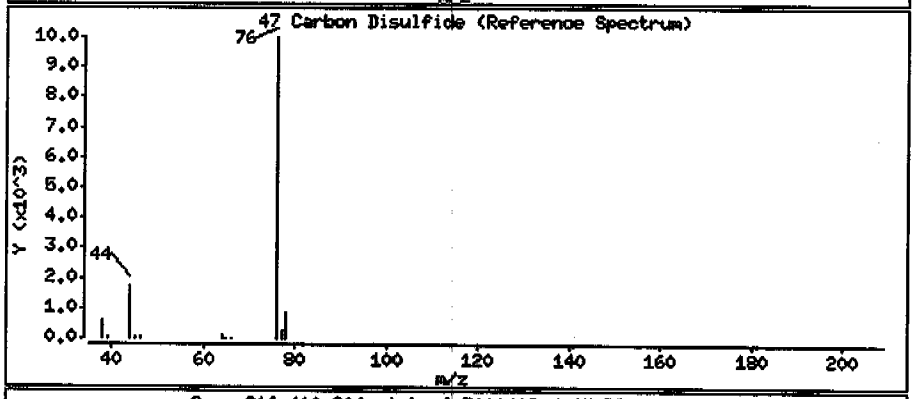
47 Carbon Disulfide

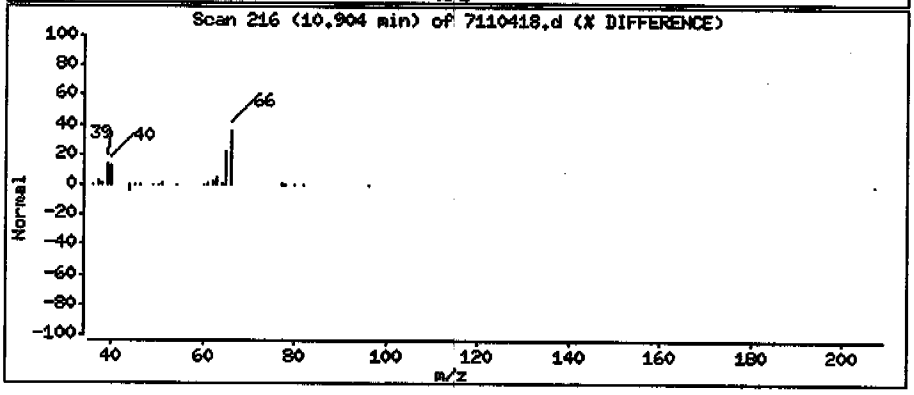
Concentration: 3.973 PPBV











Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

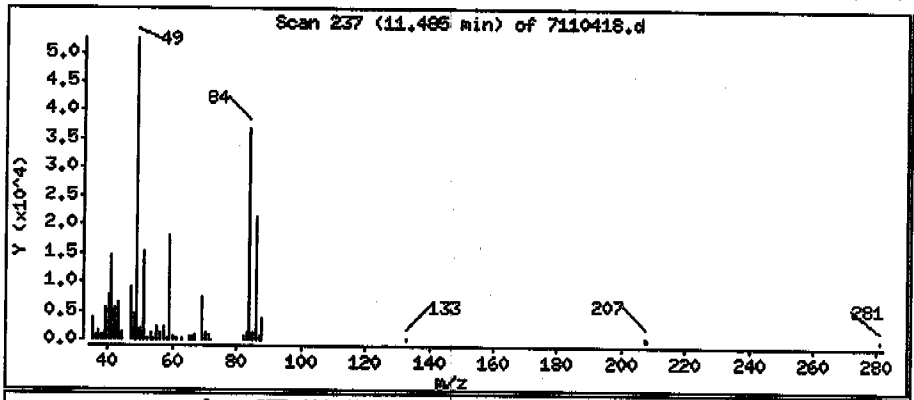
Operator: lo

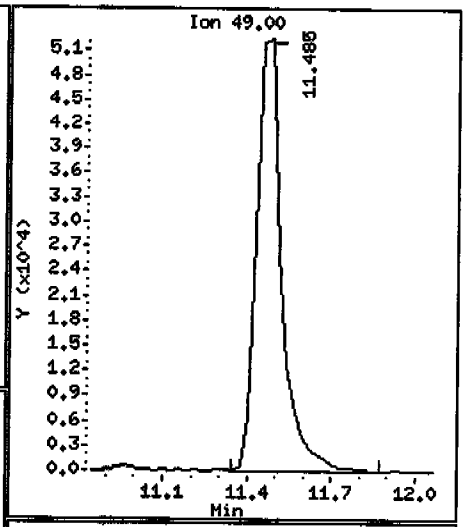
Column phase: RTx-624

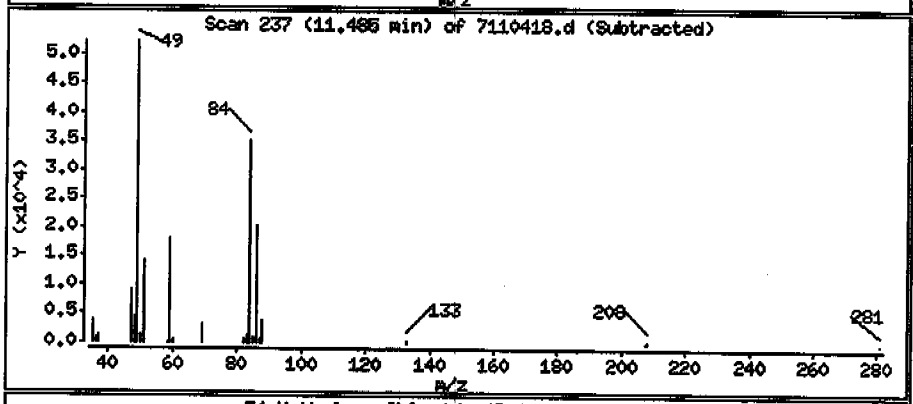
Column diameter: 0.53

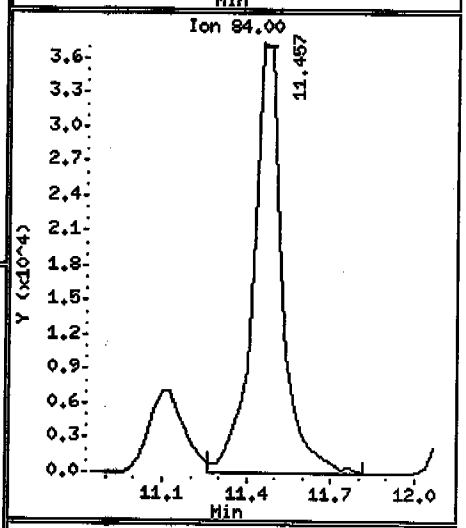
54 Methylene Chloride

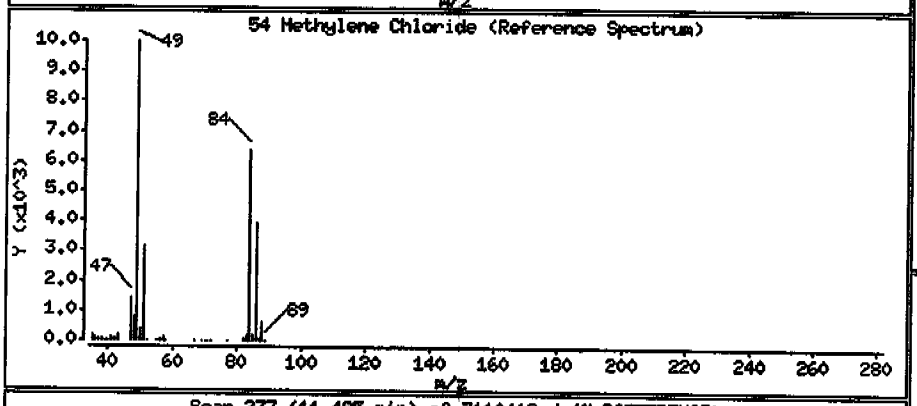
Concentration: 14.938 PPBV

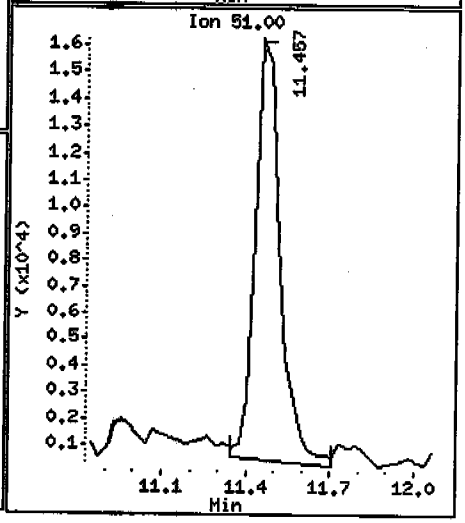


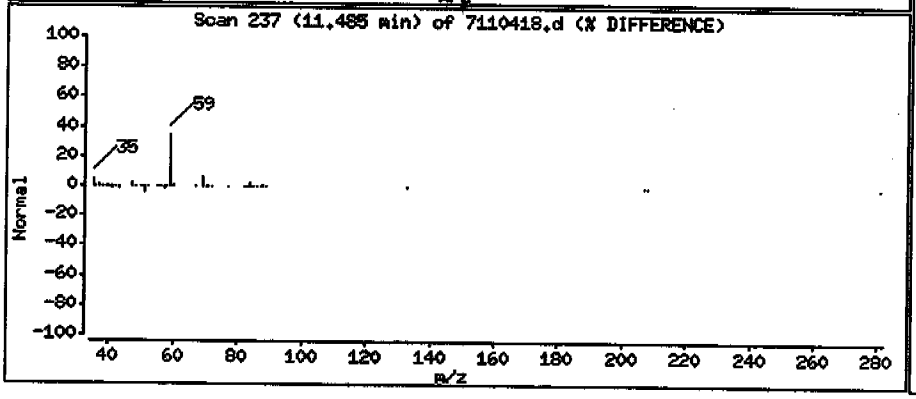












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Sample Info: 200mL#14003

Instrument: msd7.i

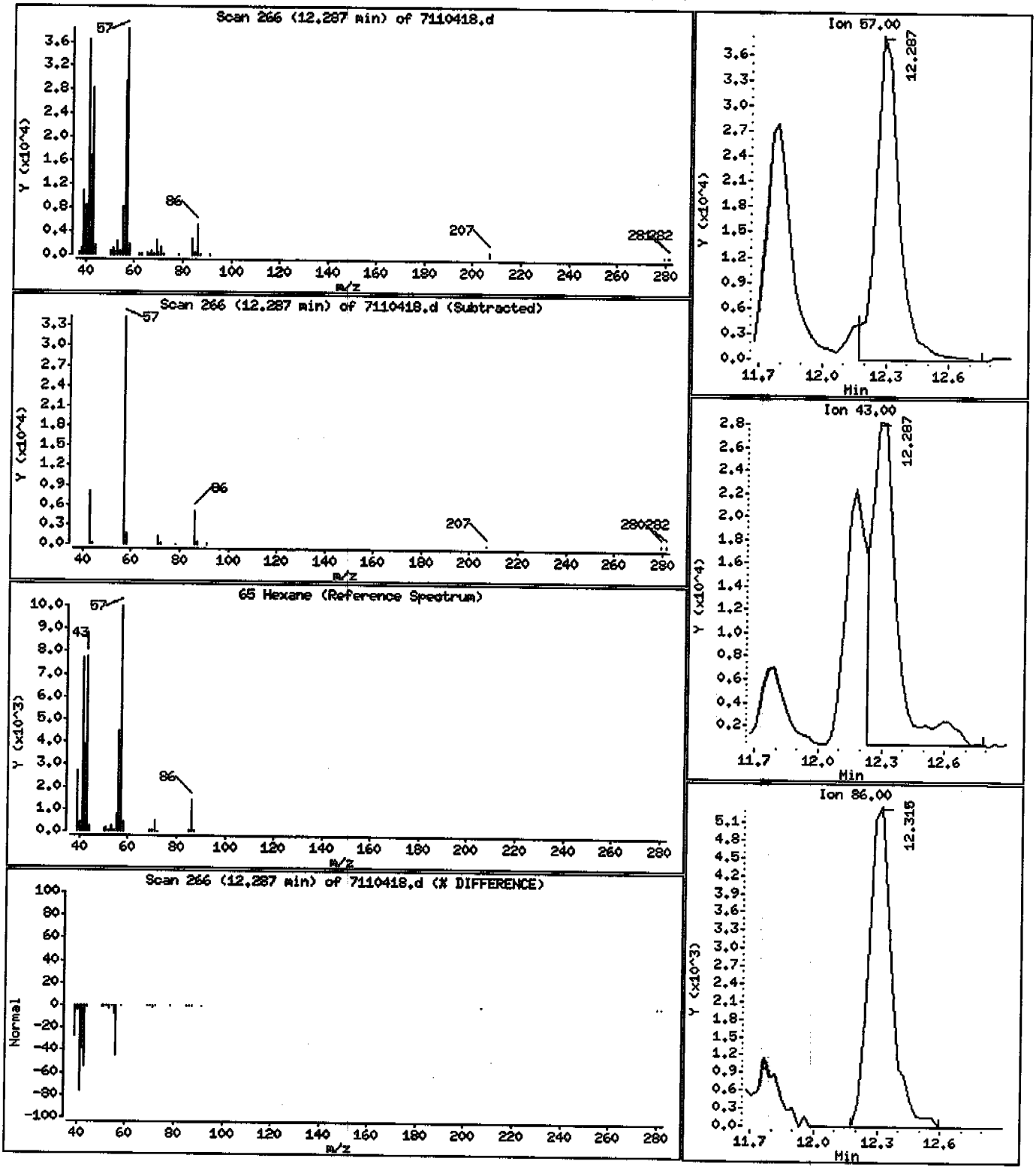
Operator: lo

Column phase: RTx-624

Column diameter: 0.53

65 Hexane

Concentration: 10.186 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

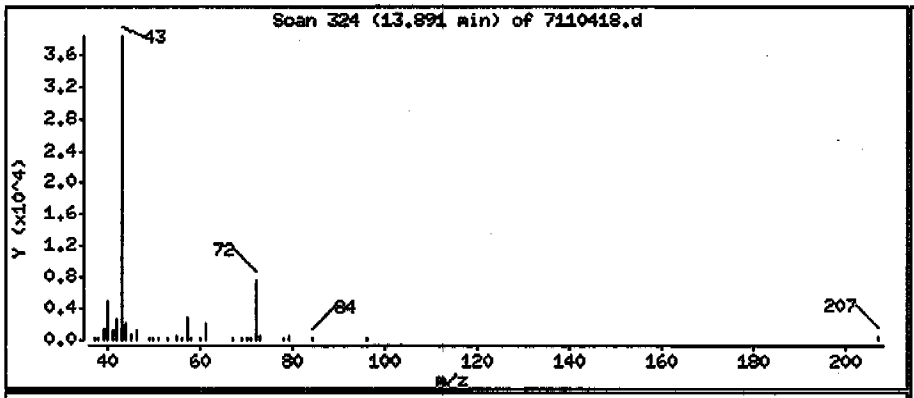
Operator: lo

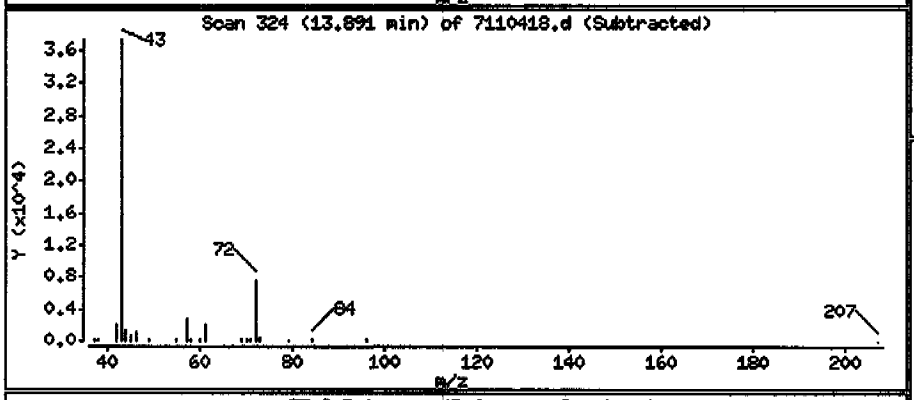
Column phase: RTx-624

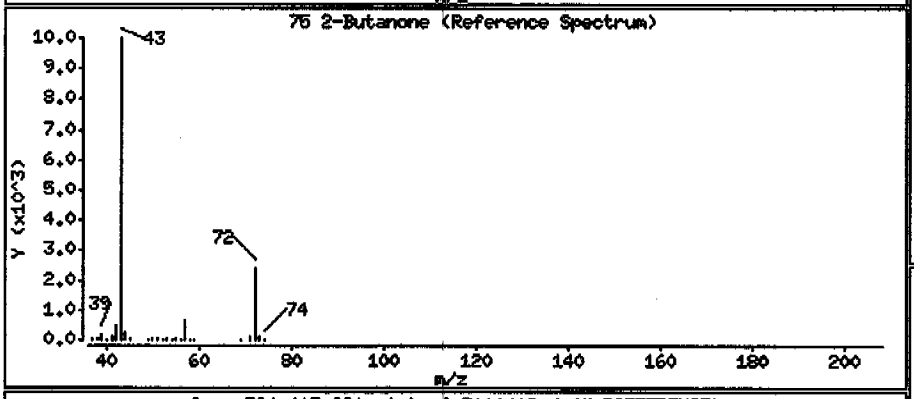
Column diameter: 0.53

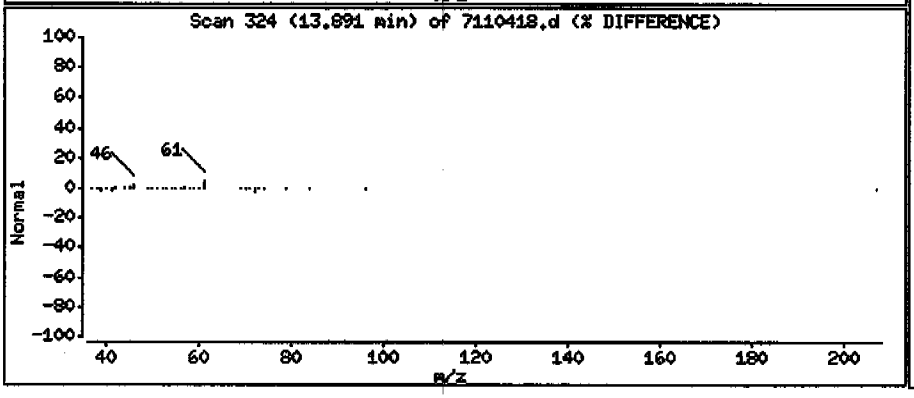
75 2-Butanone

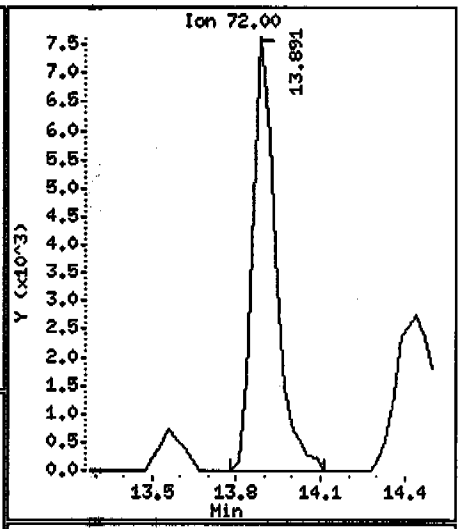
Concentration: 5.903 PPBV

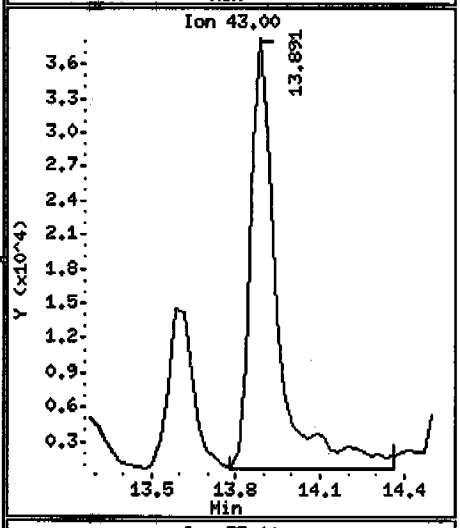


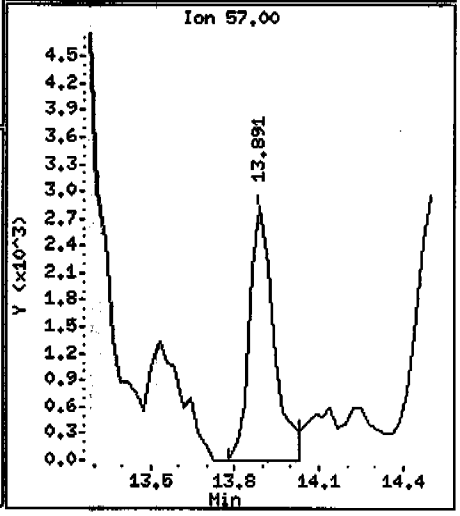












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

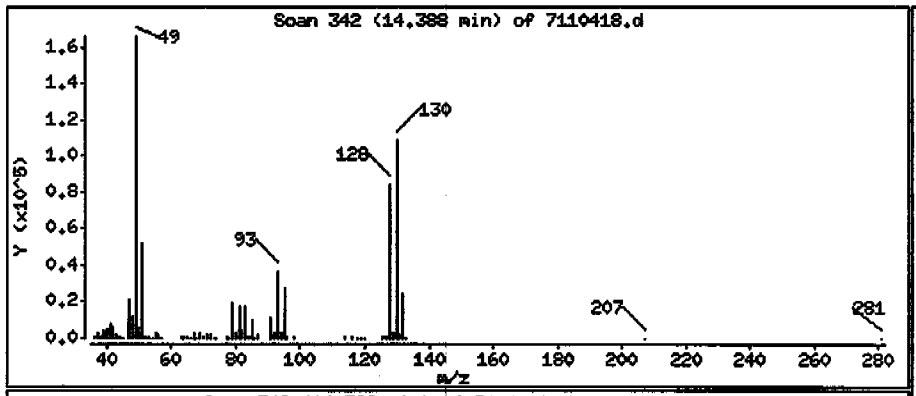
Operator: lo

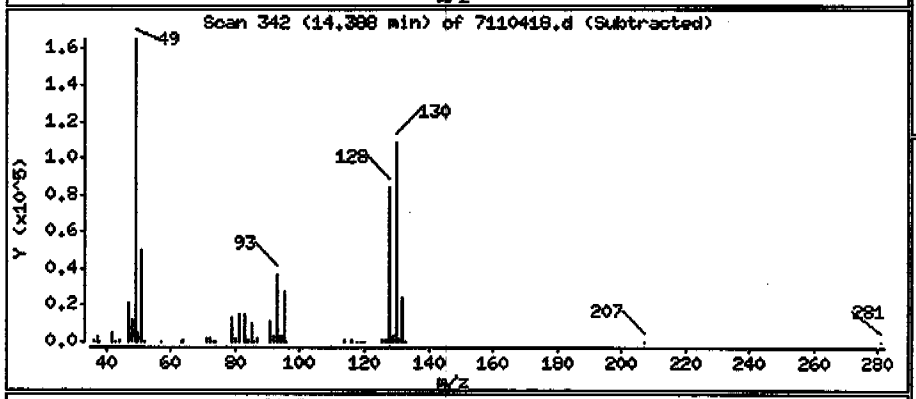
Column phase: RTx-624

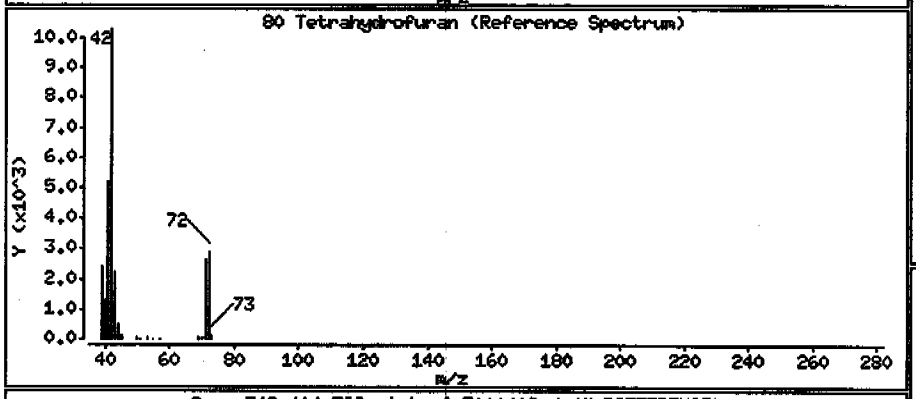
Column diameter: 0.53

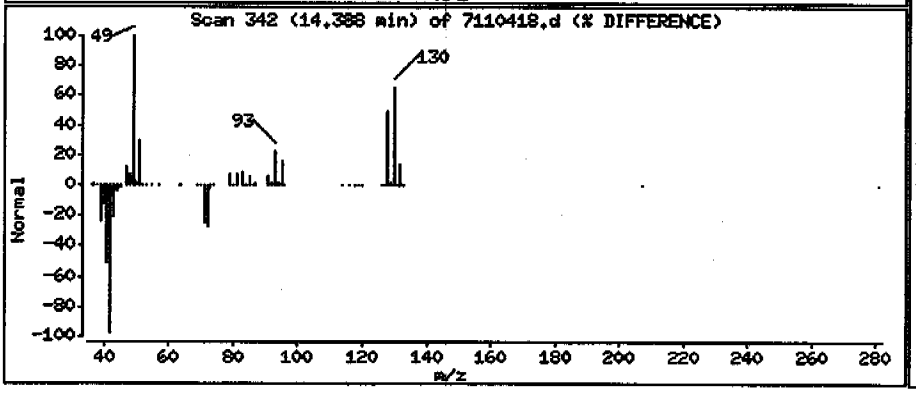
80 Tetrahydrofuran

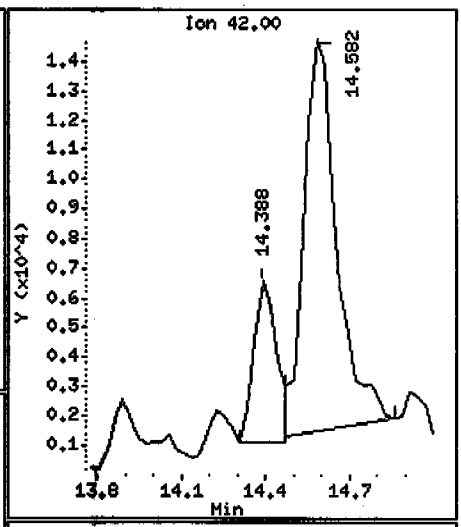
Concentration: 1,656 PPBV

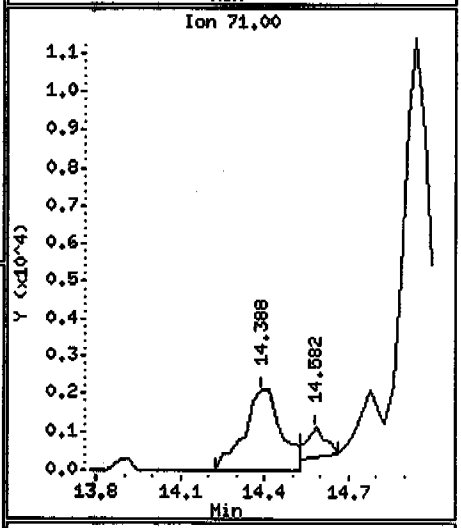


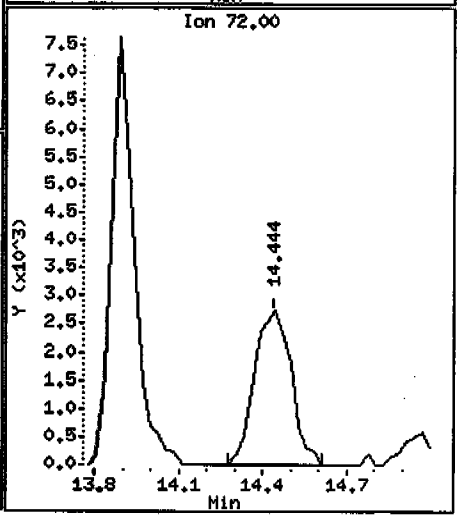












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

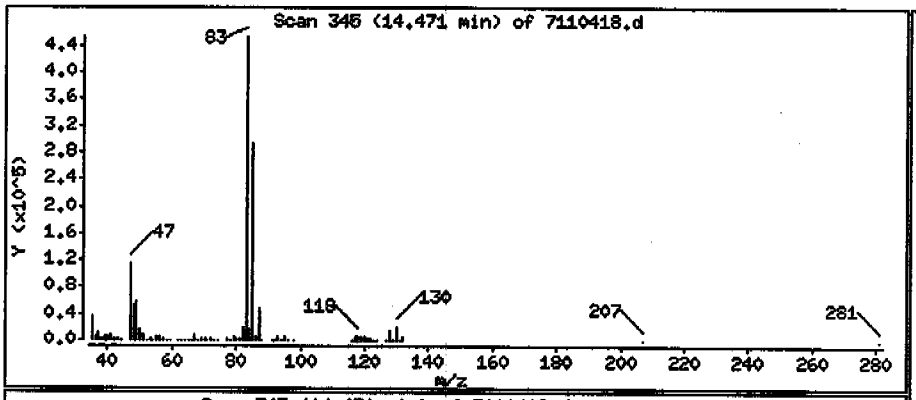
Operator: lo

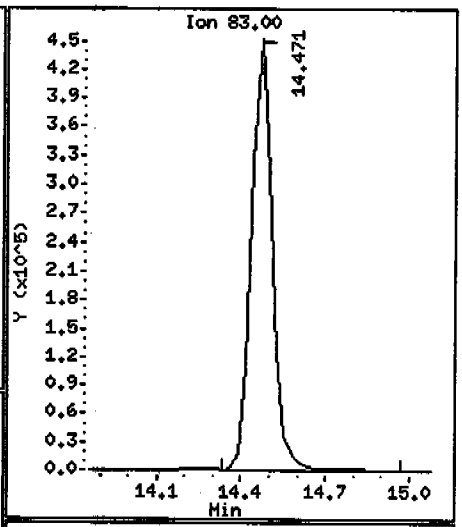
Column phase: RTx-624

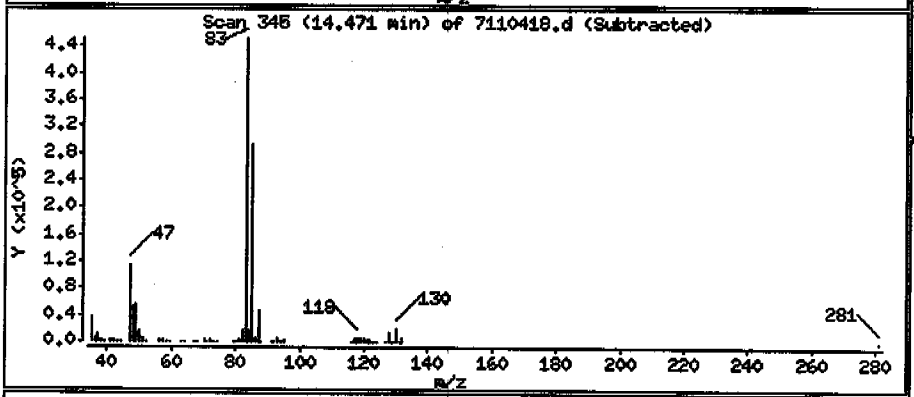
Column diameter: 0.53

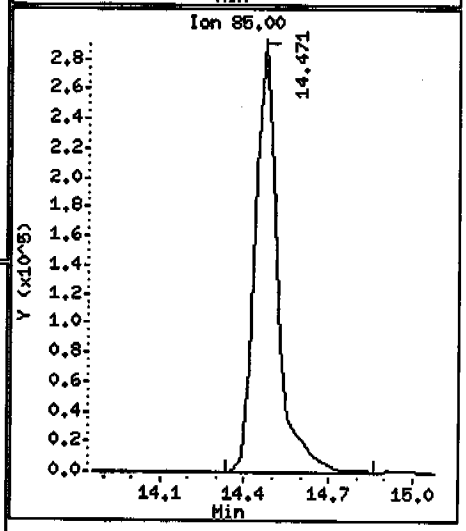
82 Chloroform

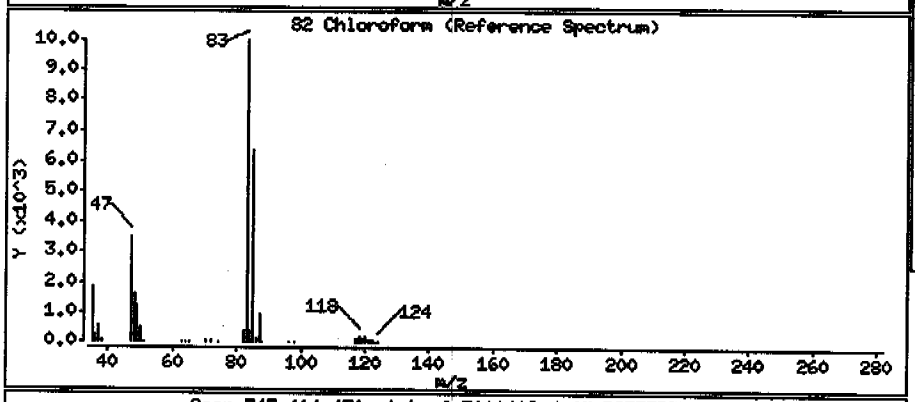
Concentration: 68.104 PPBV

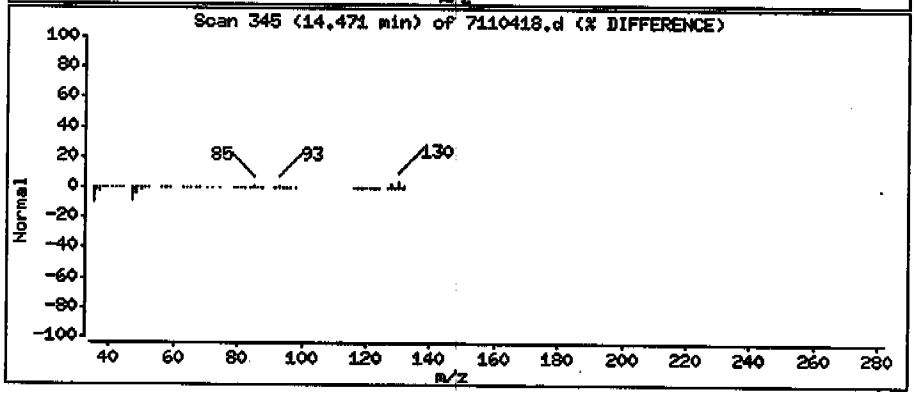












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

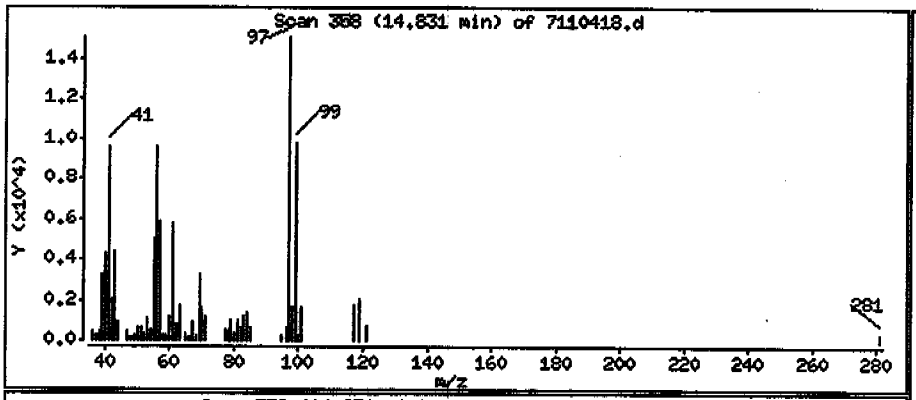
Operator: lo

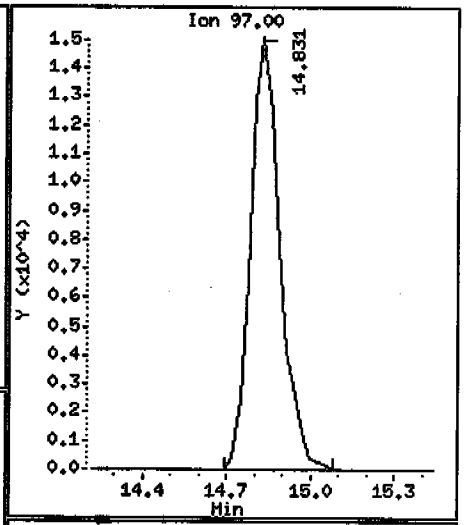
Column phase: RTx-624

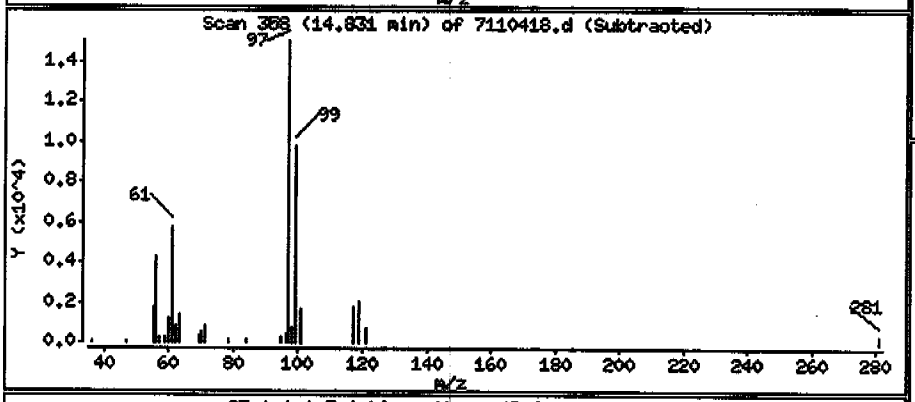
Column diameter: 0.53

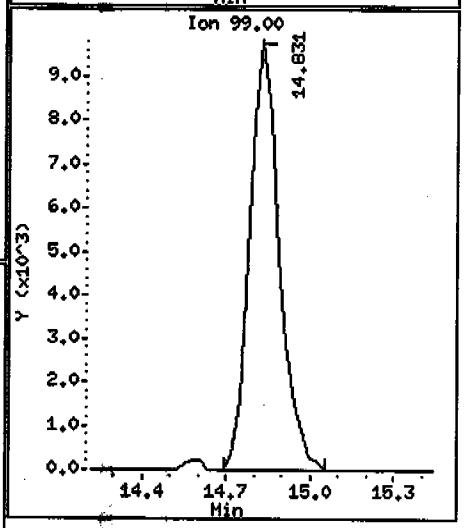
83 1,1,1-Trichloroethane

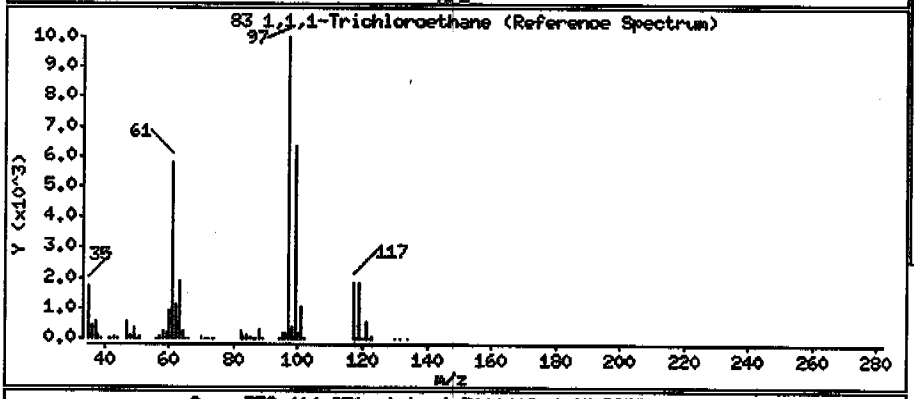
Concentration: 3.179 PPBV

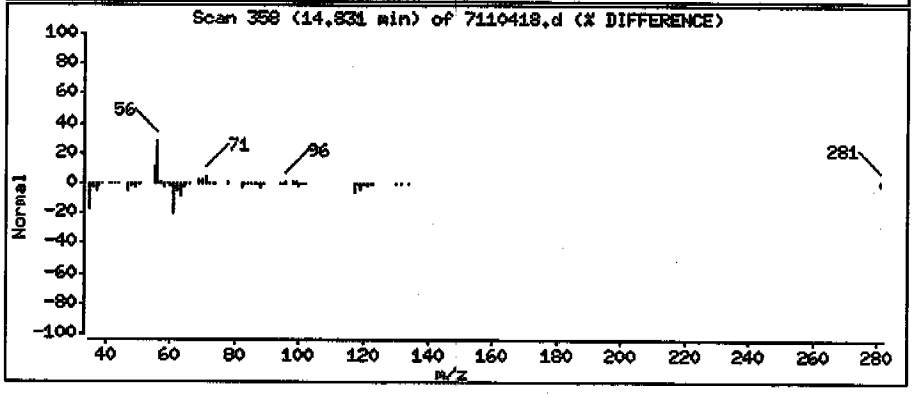












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

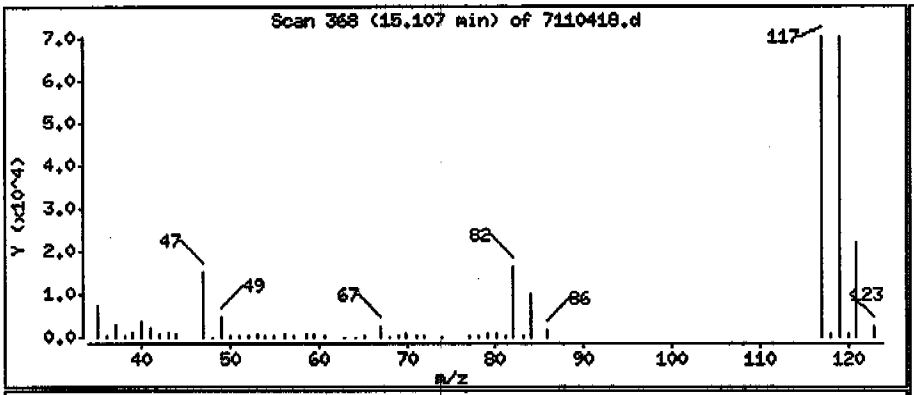
Operator: lo

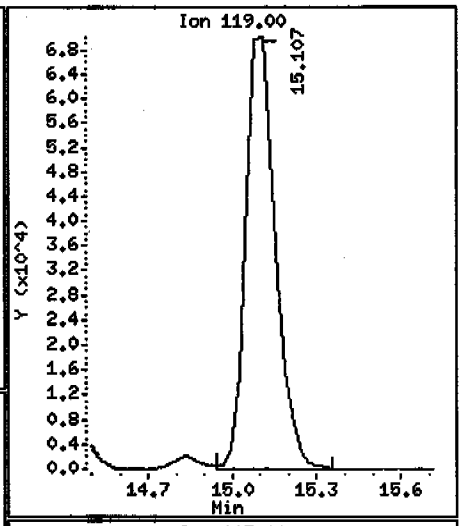
Column phase: RTx-624

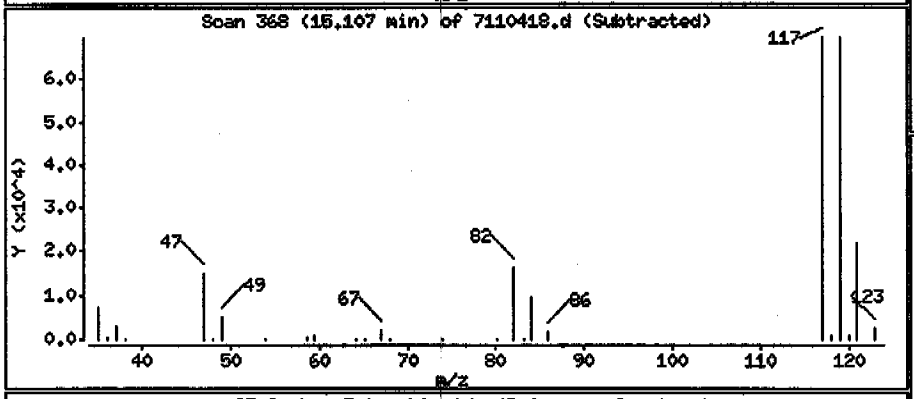
Column diameter: 0.53

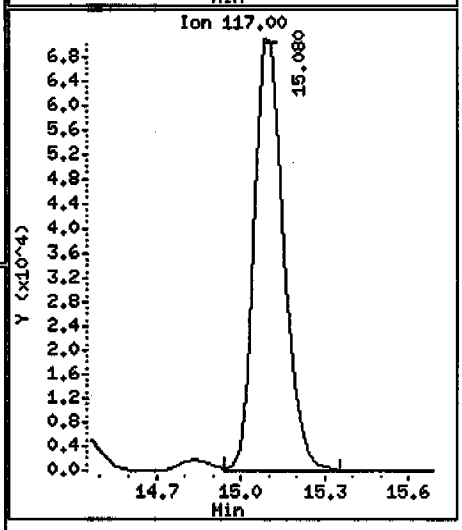
87 Carbon Tetrachloride

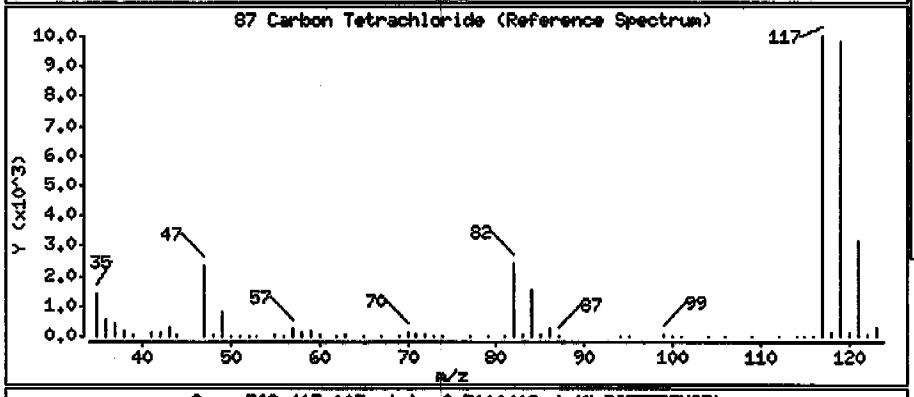
Concentration: 15.895 PPBV

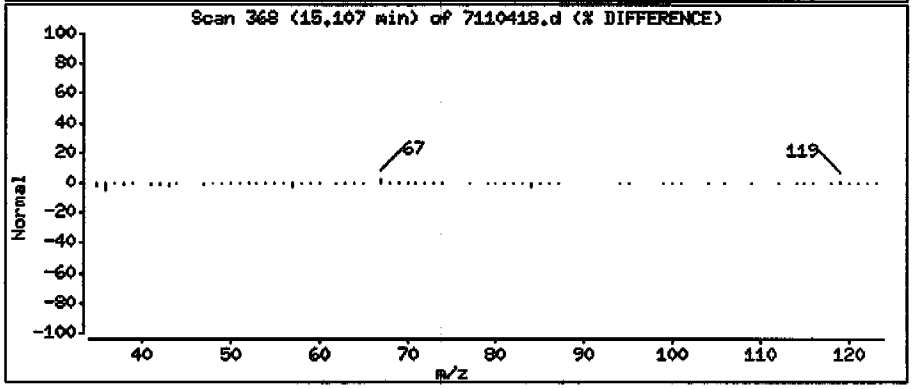












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

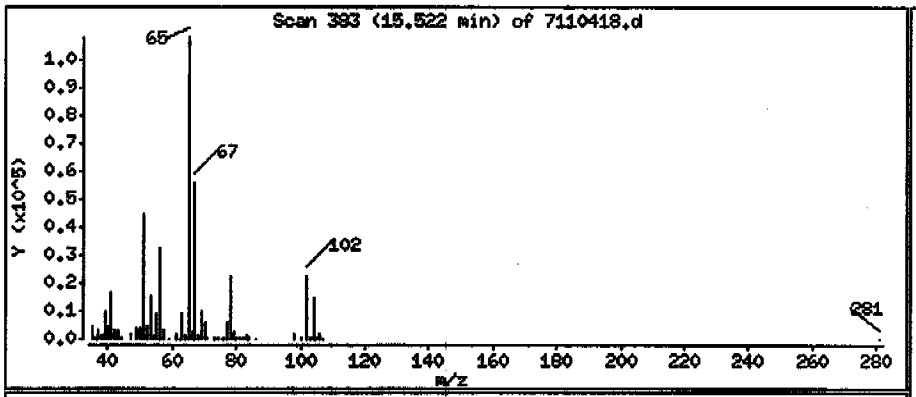
Operator: lo

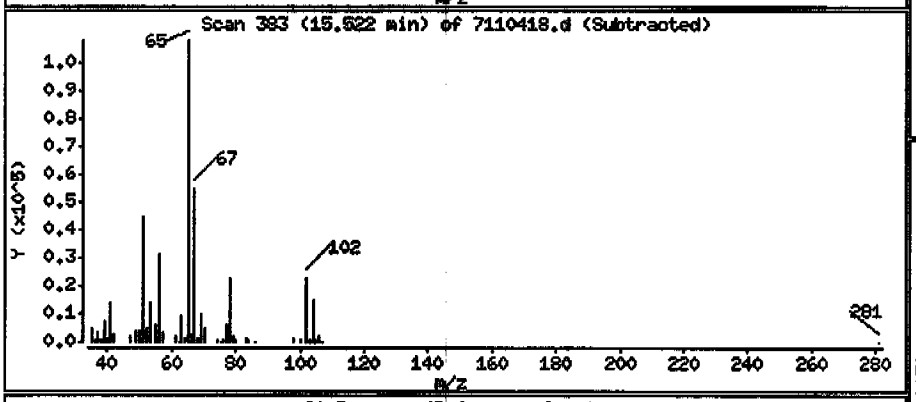
Column phase: RTx-624

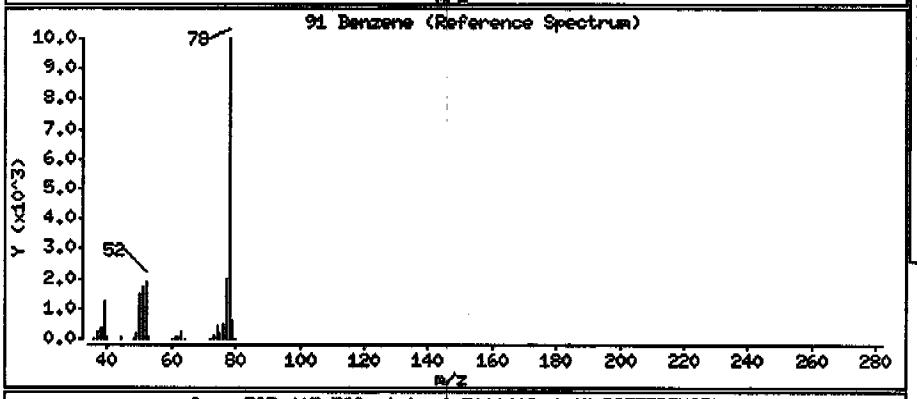
Column diameter: 0.53

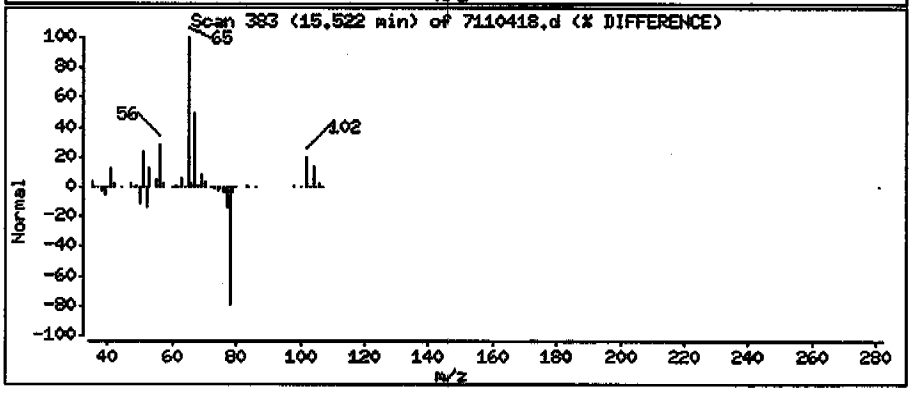
91 Benzene

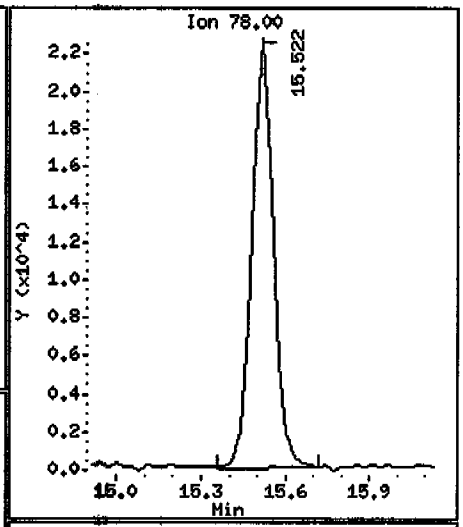
Concentration: 2.623 PPBV

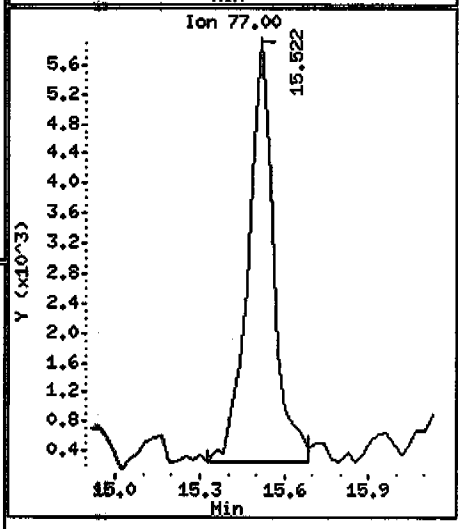












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

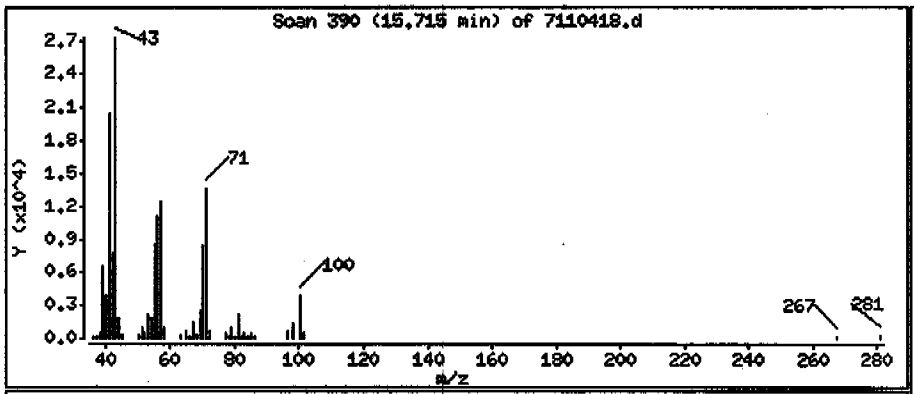
Operator: lo

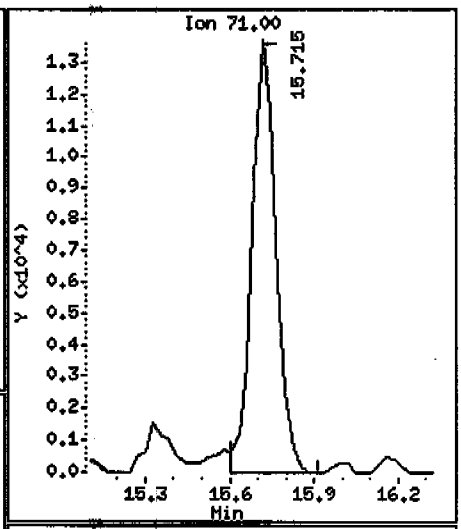
Column phase: RTx-624

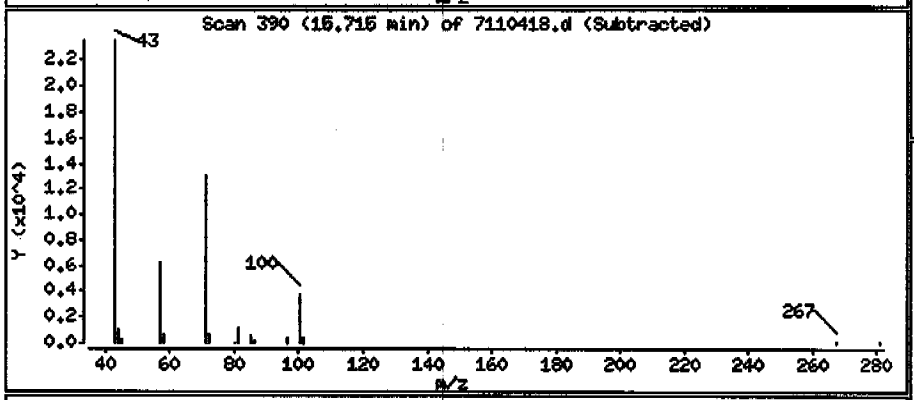
Column diameter: 0.53

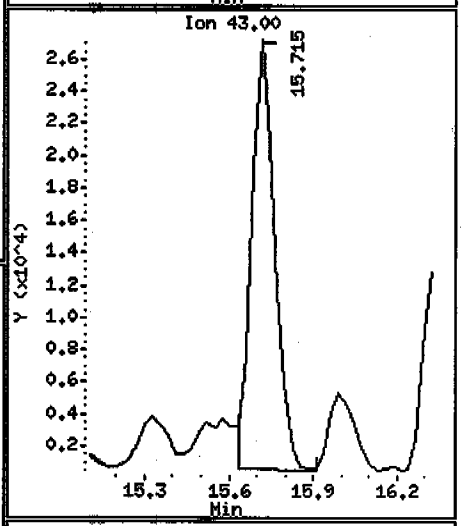
94 Heptane

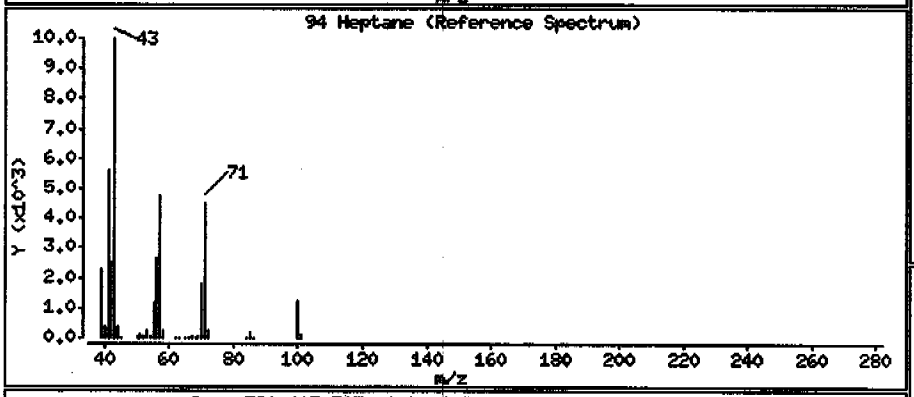
Concentration: 5.783 PPBV

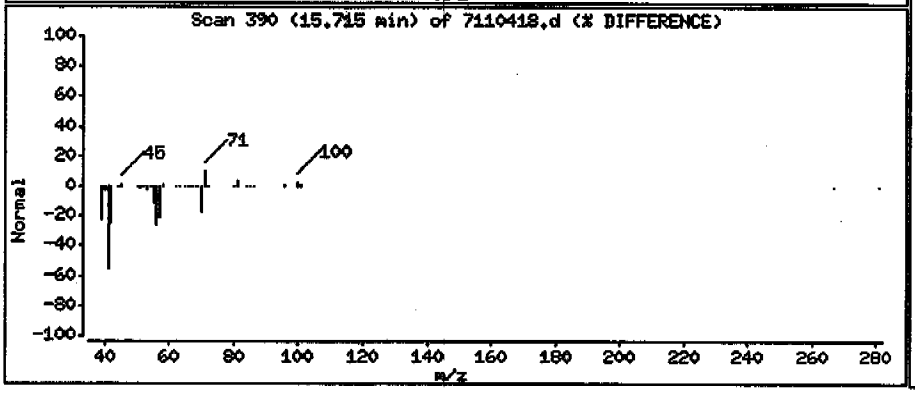


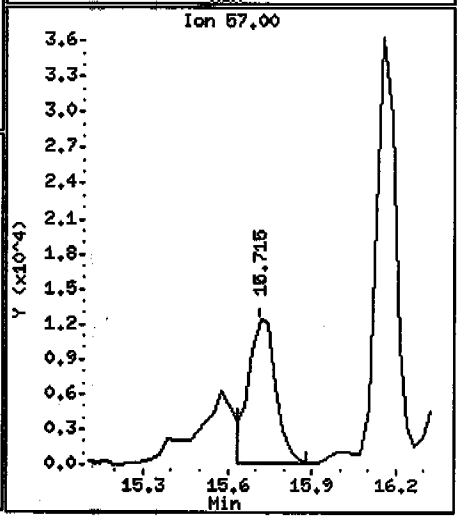












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

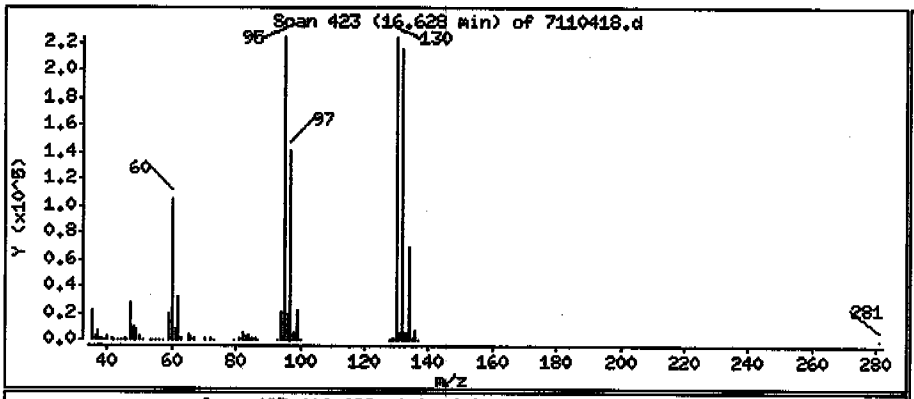
Operator: lo

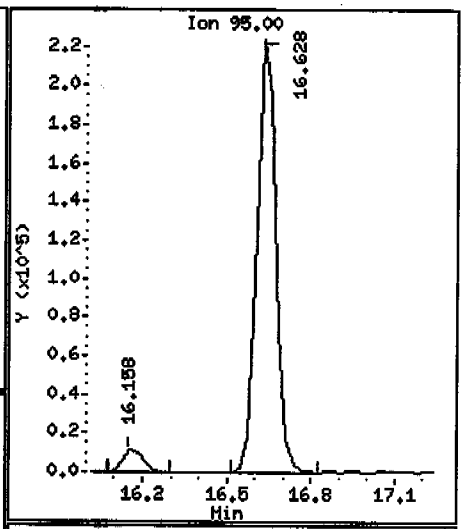
Column phase: RTx-624

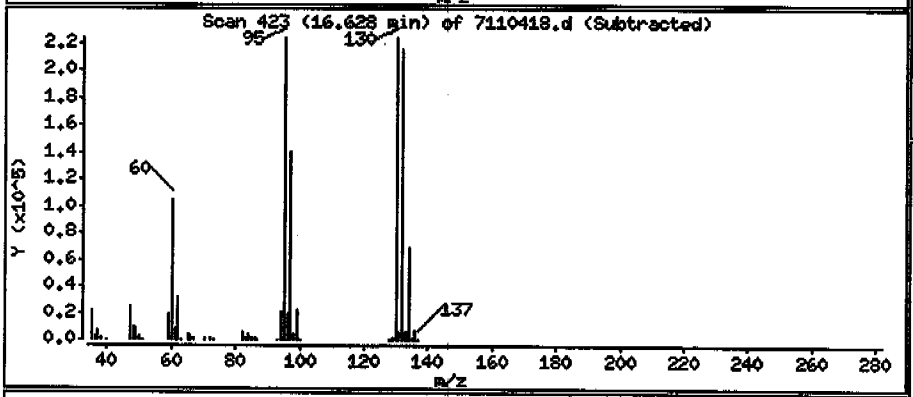
Column diameter: 0.53

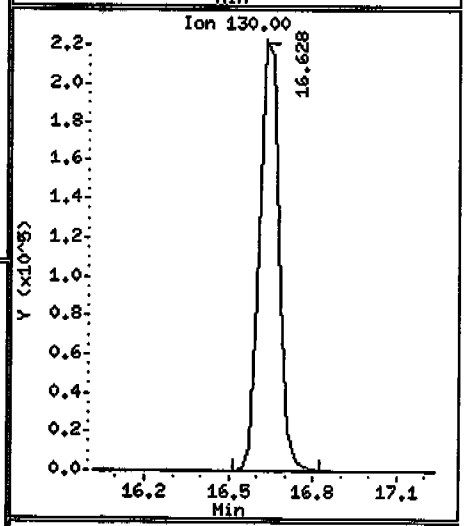
101 Trichloroethene

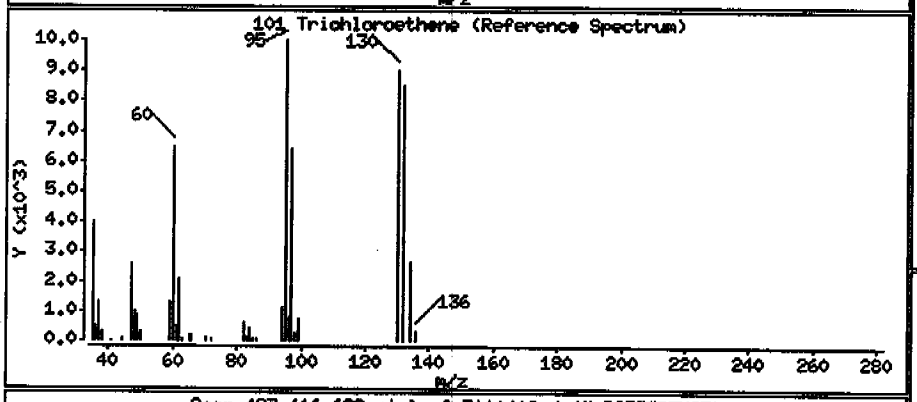
Concentration: 51.318 PPBV

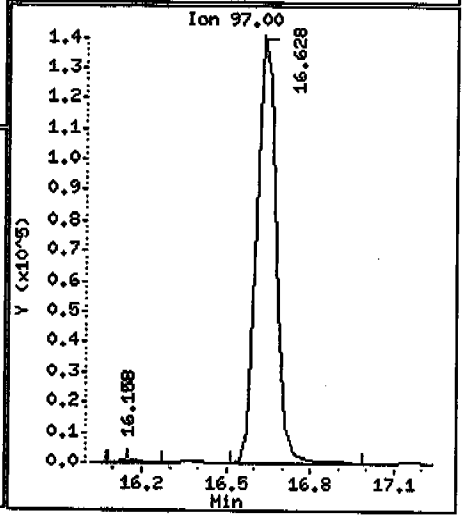


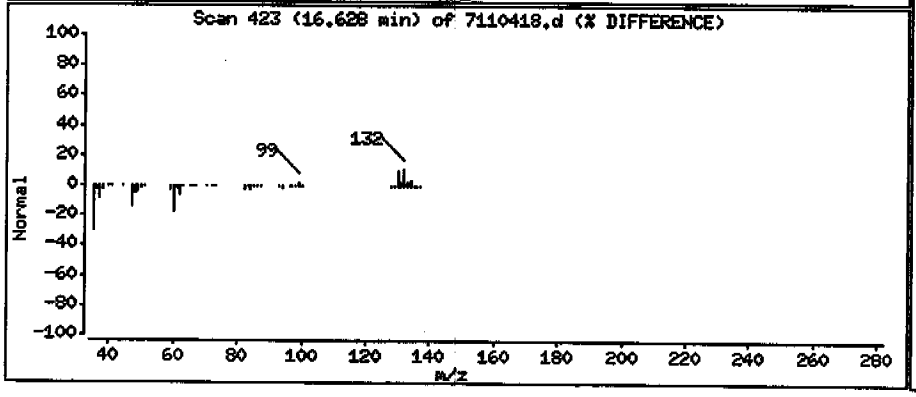












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

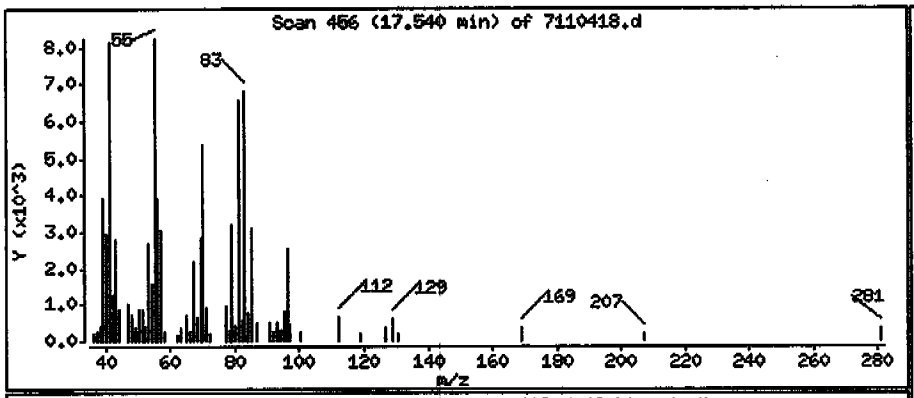
Operator: lo

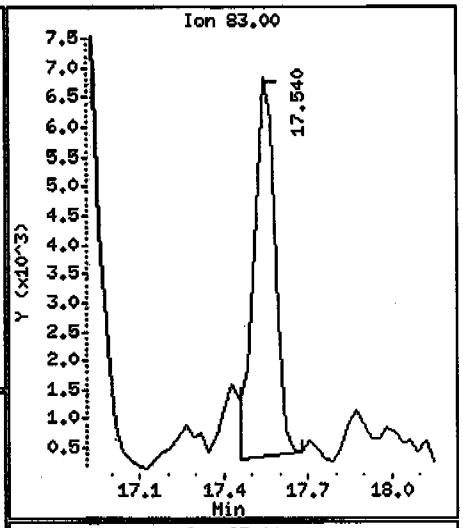
Column phase: RTx-624

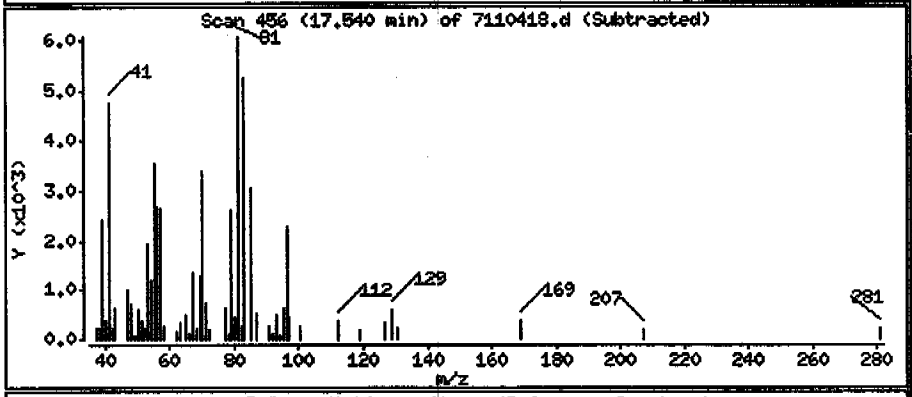
Column diameter: 0.53

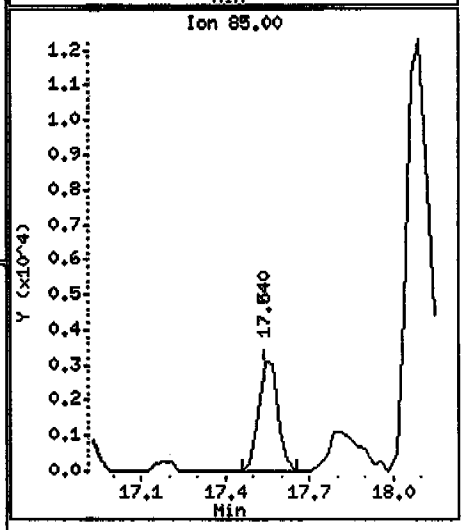
107 Bromodichloromethane

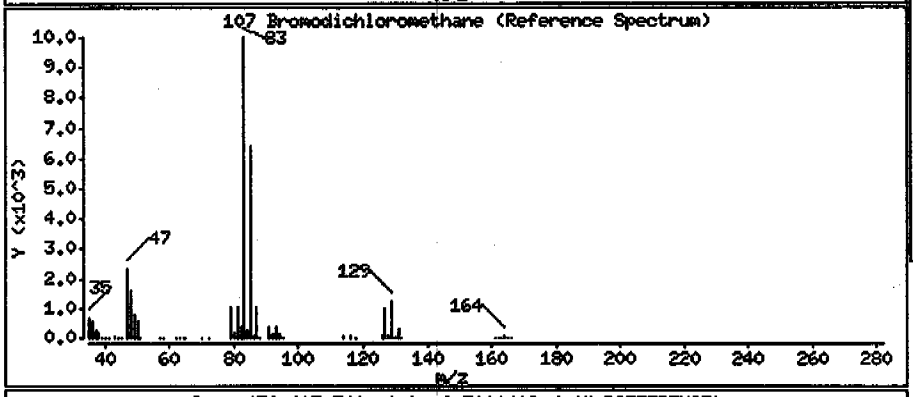
Concentration: 0.9897 PPBV

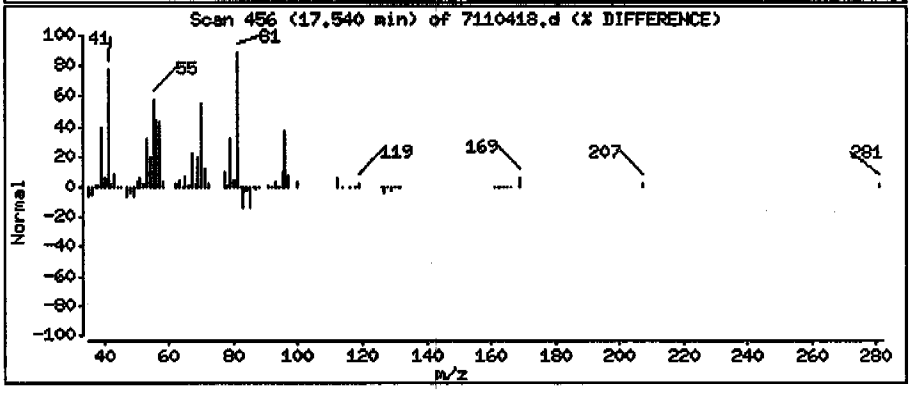












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

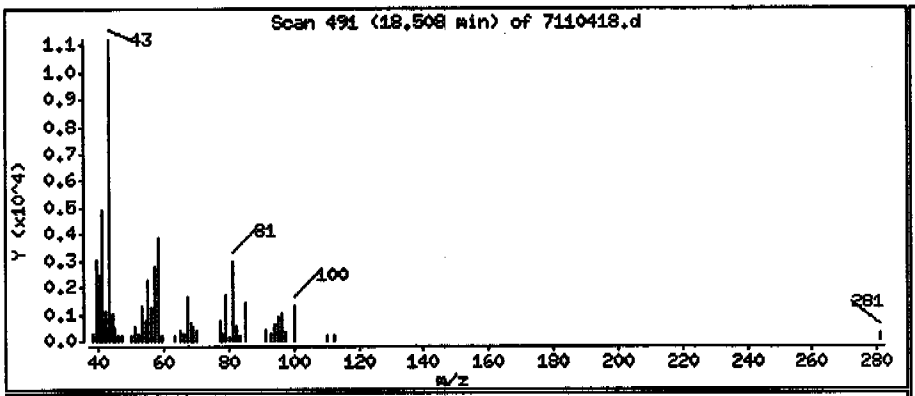
Operator: lo

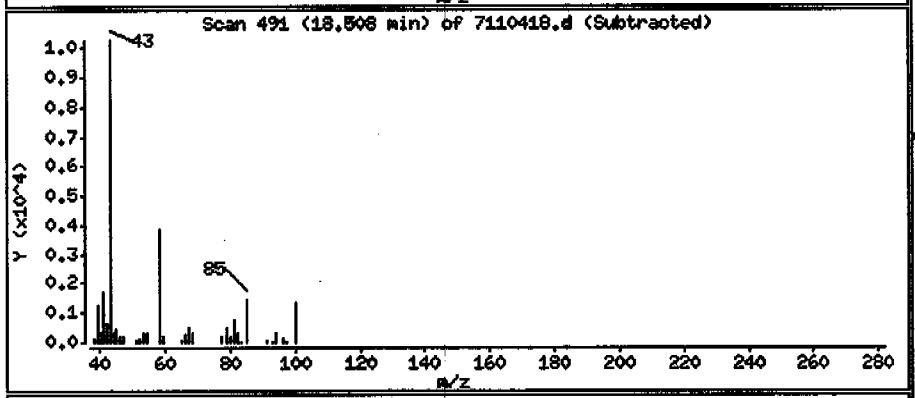
Column phase: RTx-624

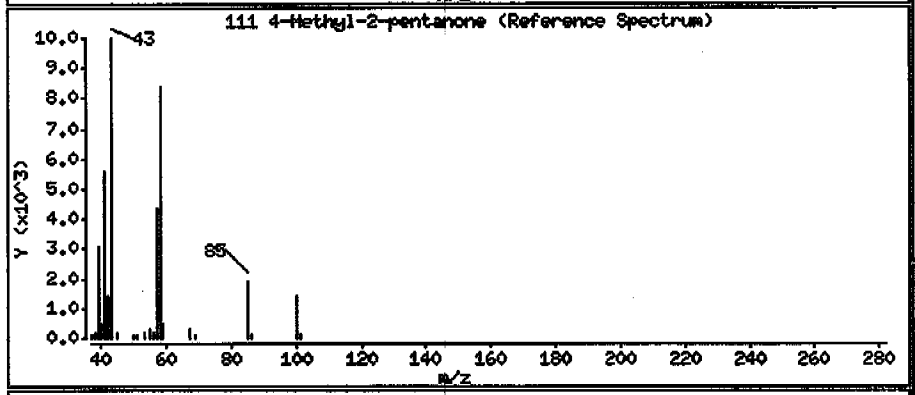
Column diameter: 0.53

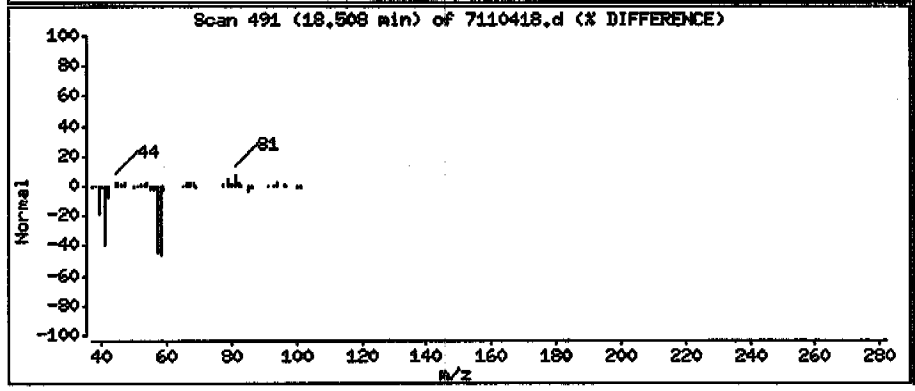
111 4-Methyl-2-pentanone

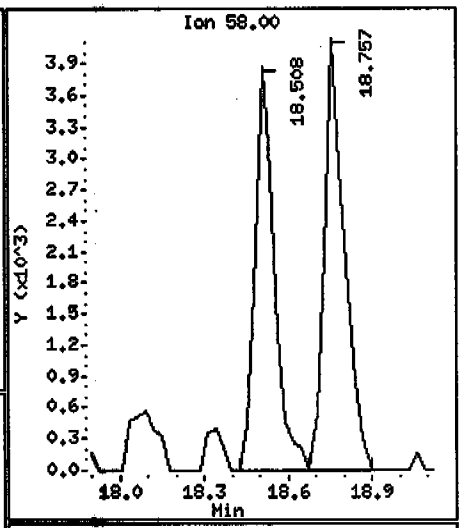
Concentration: 1.342 PPBV

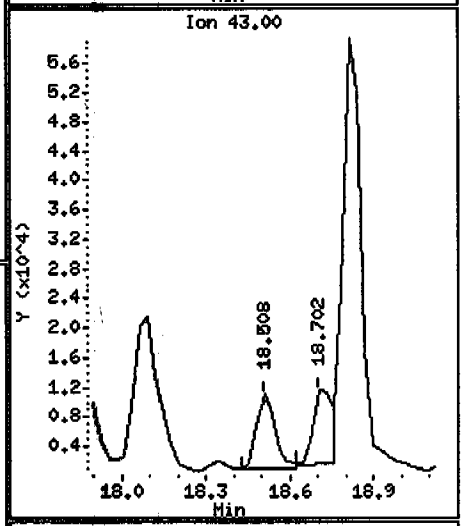


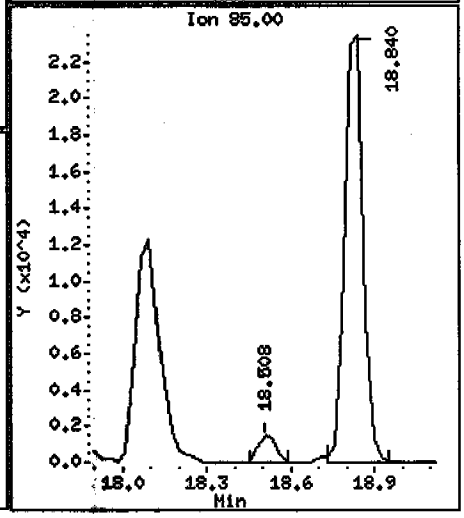












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

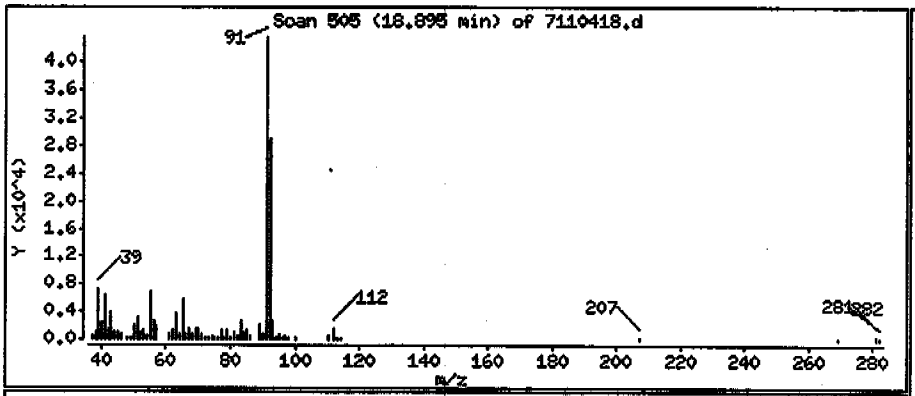
Operator: lo

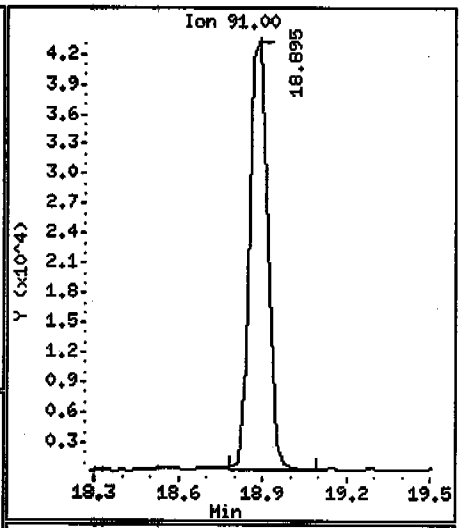
Column phase: RTx-624

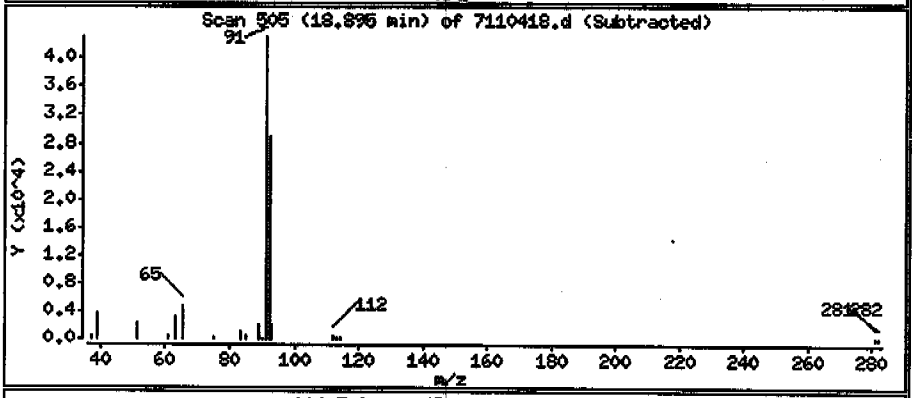
Column diameter: 0.53

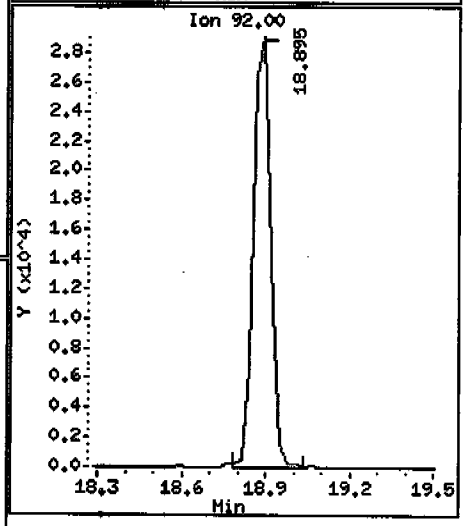
114 Toluene

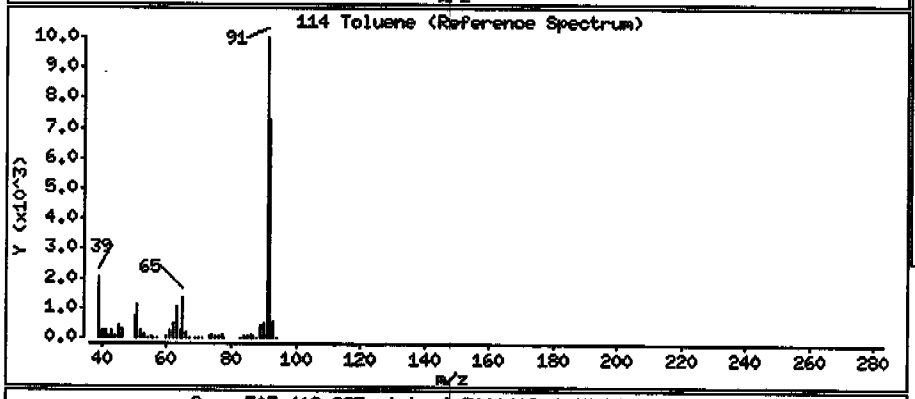
Concentration: 3.874 PPBV

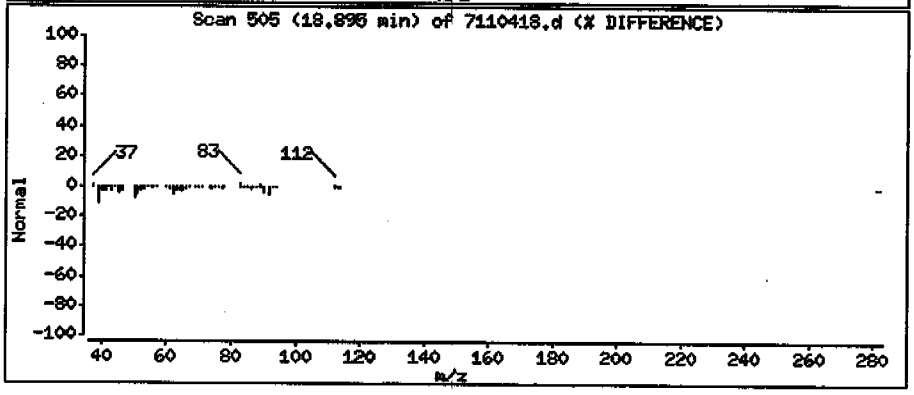












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

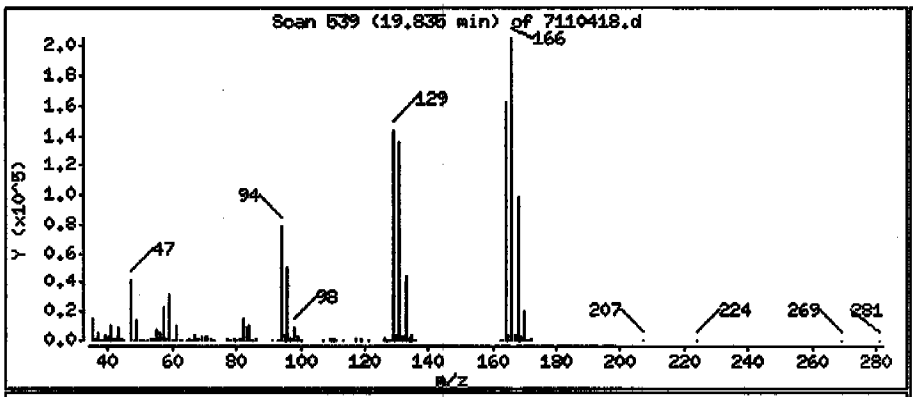
Operator: lo

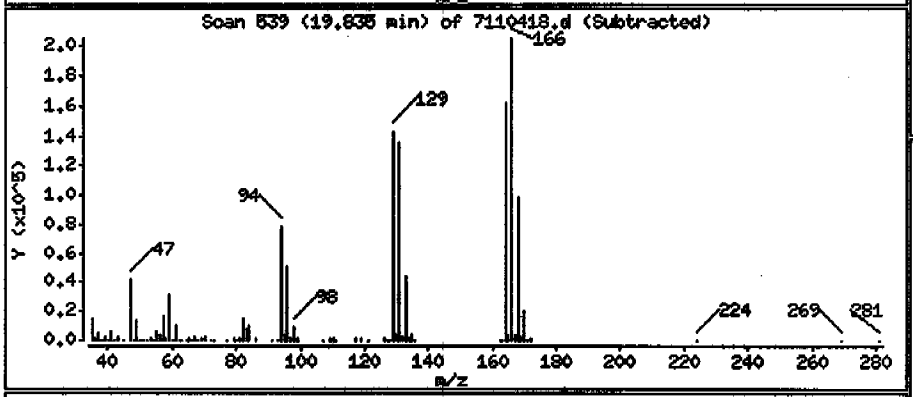
Column phase: RTx-624

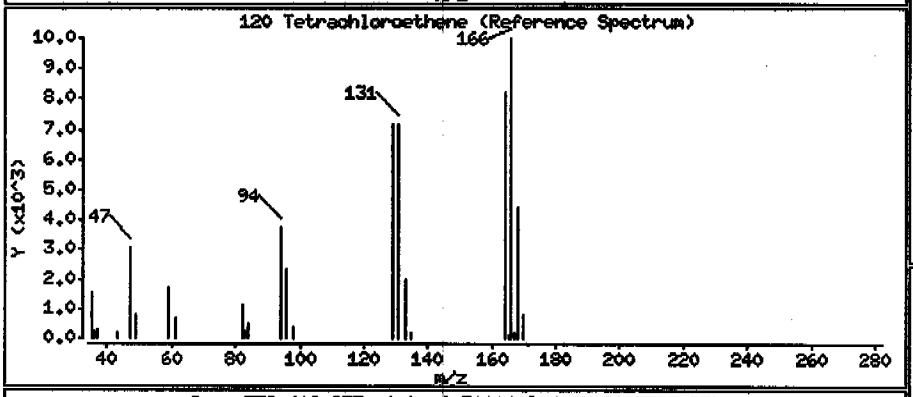
Column diameter: 0.53

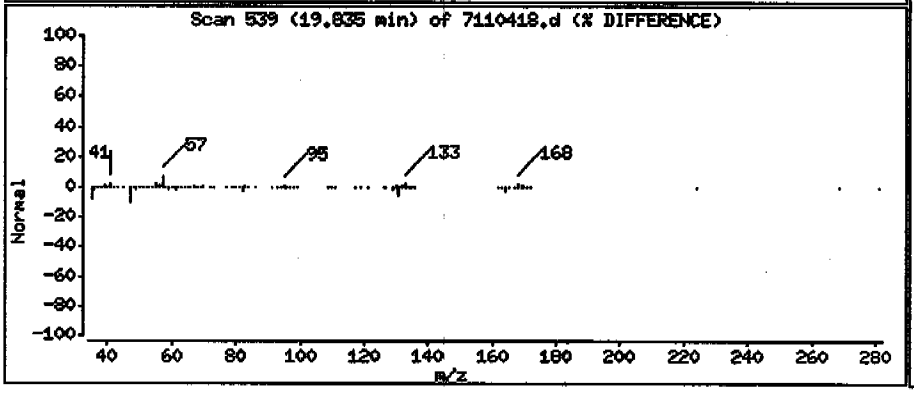
120 Tetrachloroethene

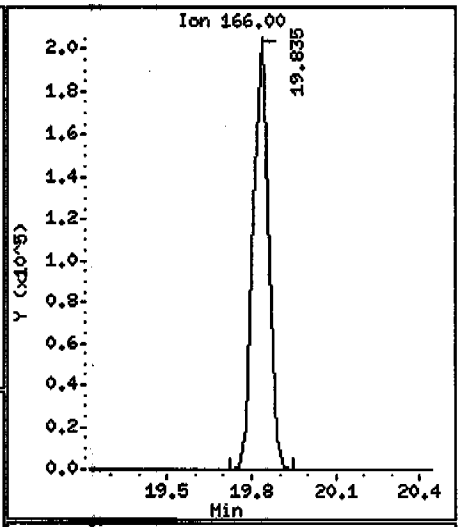
Concentration: 30.699 PPBV

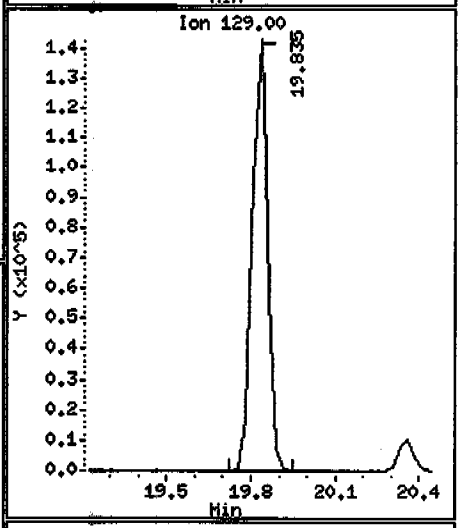


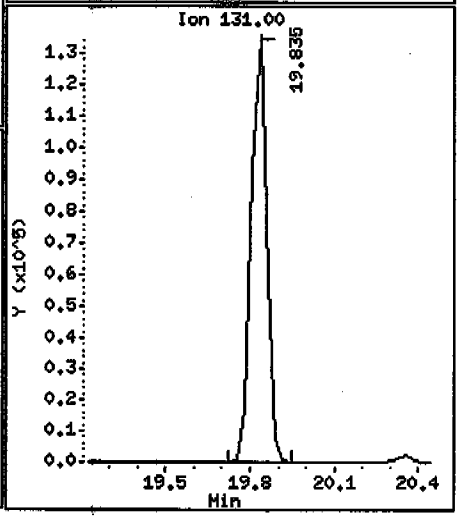












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

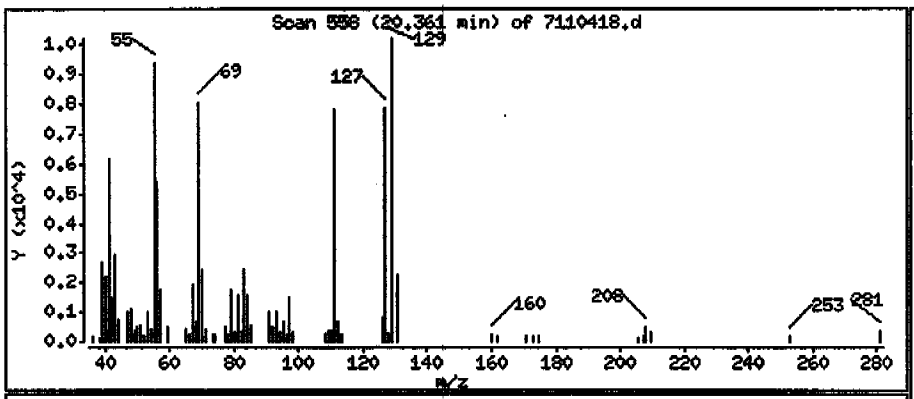
Operator: lo

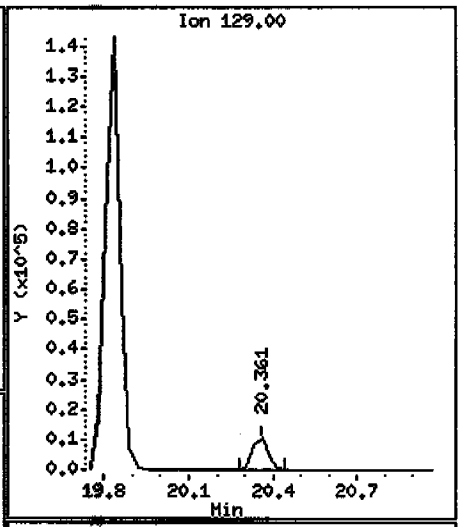
Column phase: RTx-624

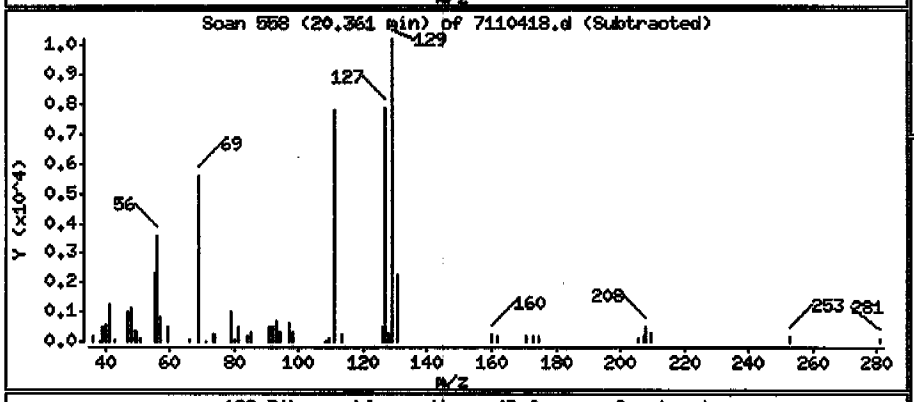
Column diameter: 0.53

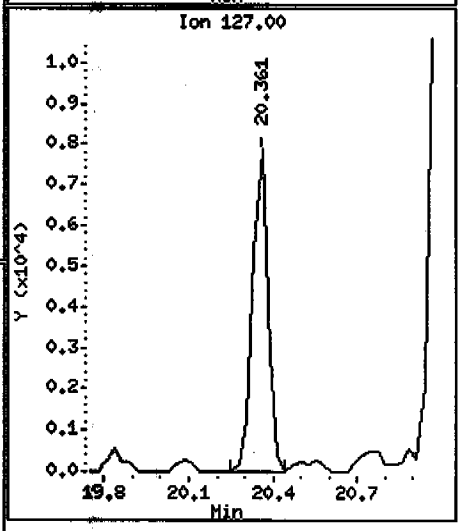
122 Dibromochloromethane

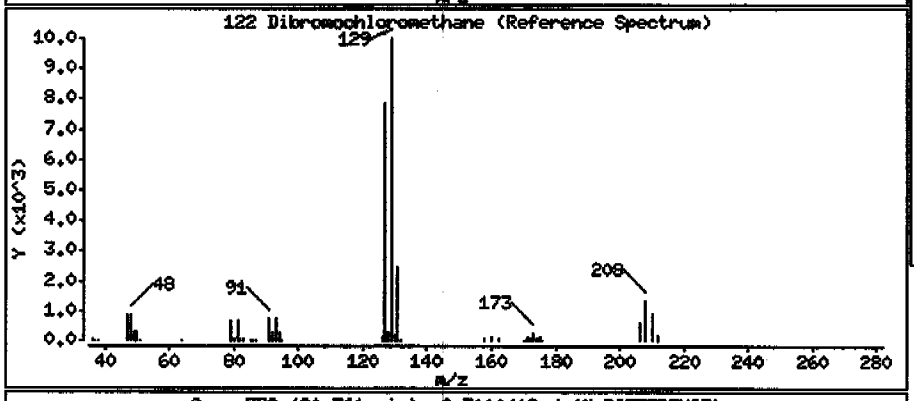
Concentration: 1.138 PPBV

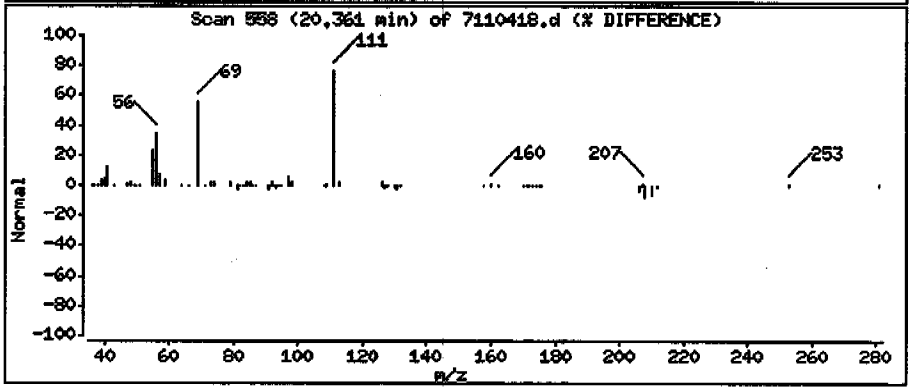












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

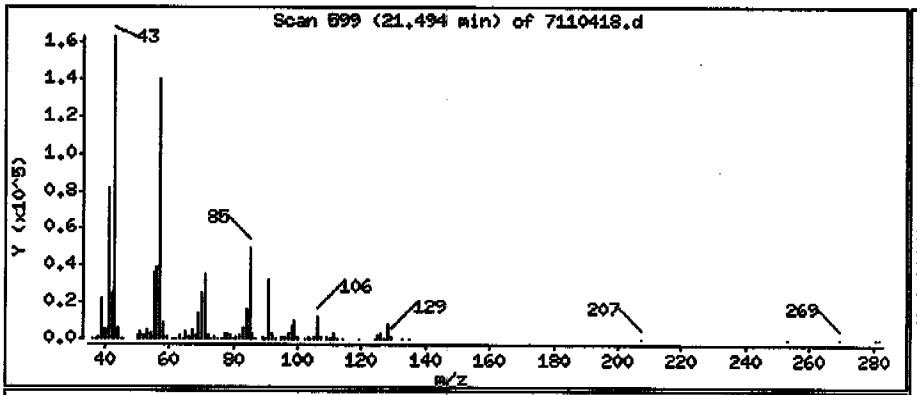
Operator: lo

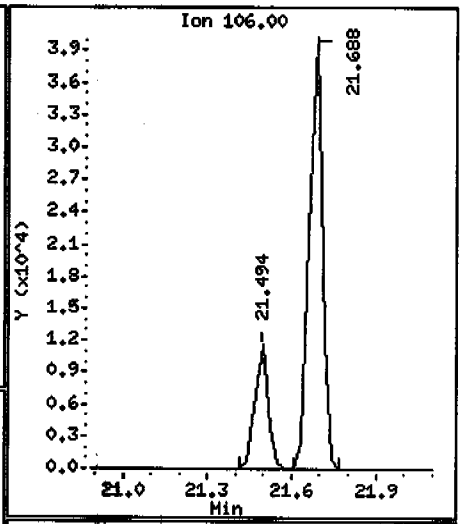
Column phase: RTx-624

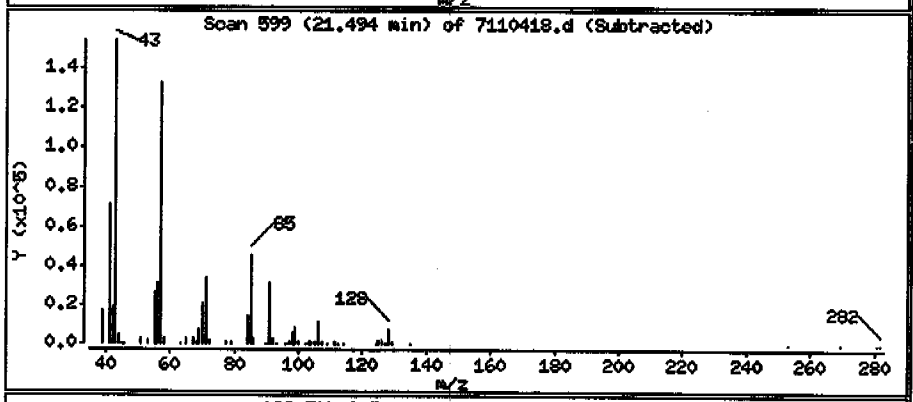
Column diameter: 0.53

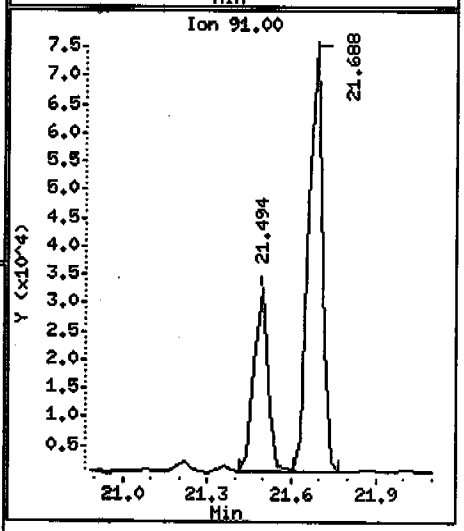
128 Ethyl Benzene

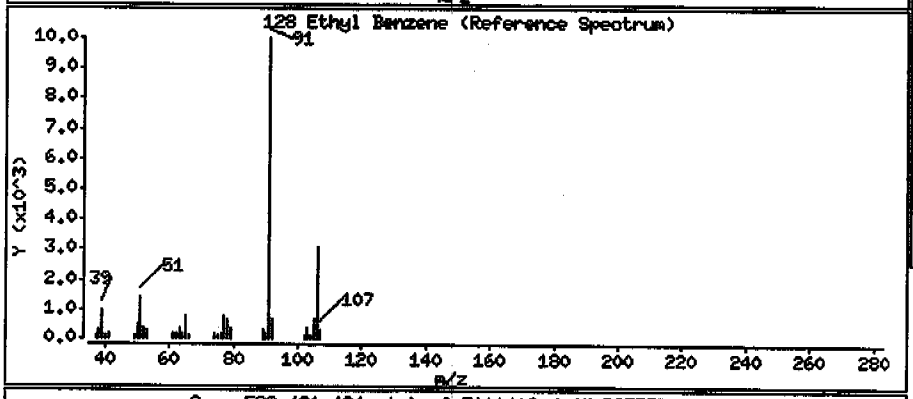
Concentration: 1.737 PPBV

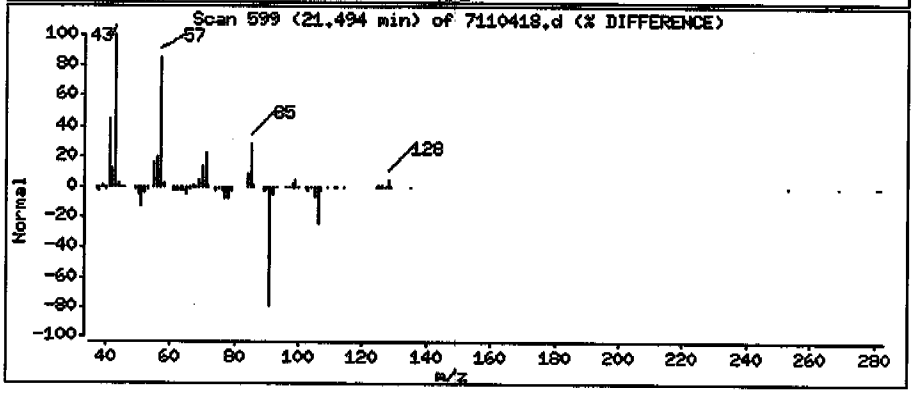












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

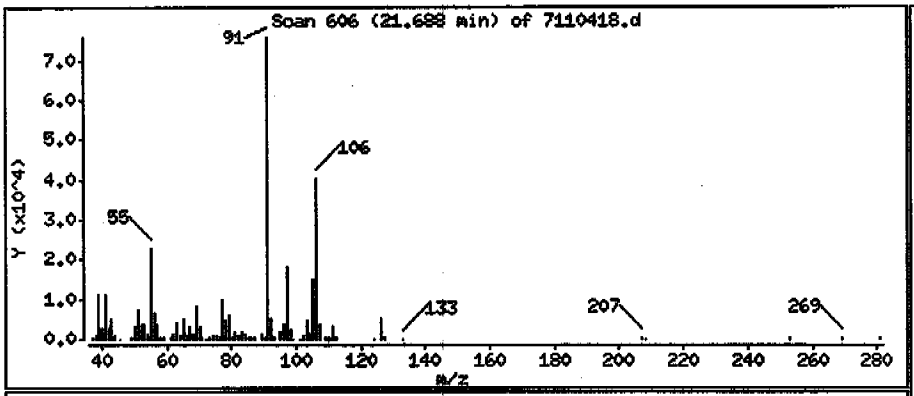
Operator: lo

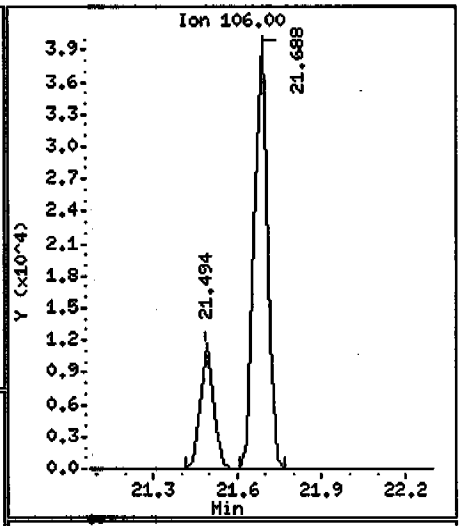
Column phase: RTx-624

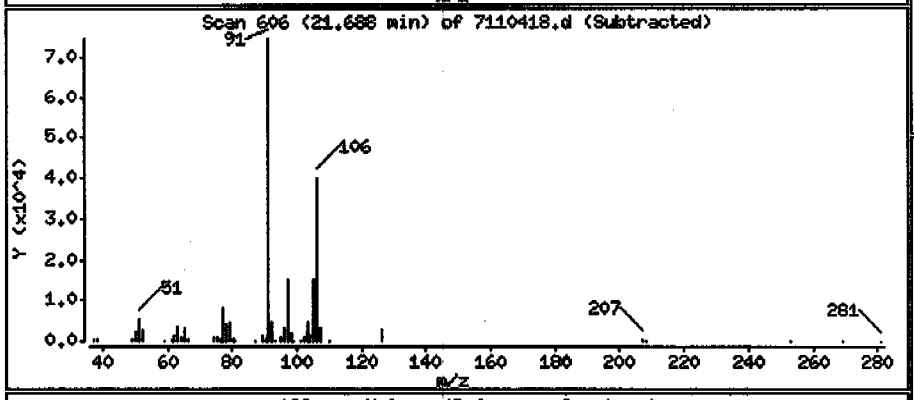
Column diameter: 0.53

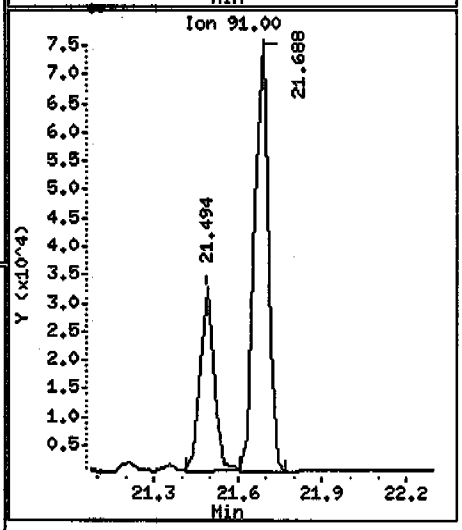
129 m,p-Xylene

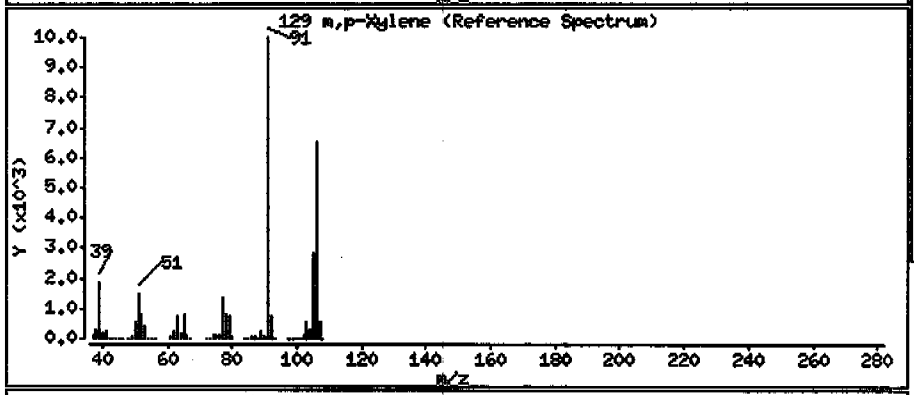
Concentration: 4.779 PPBV

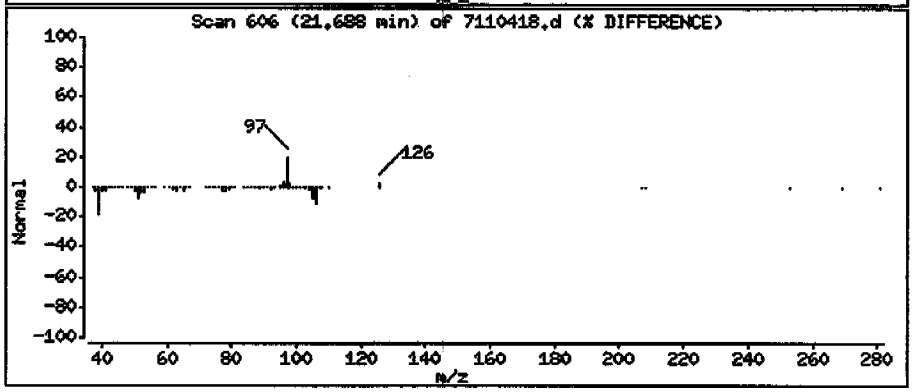












Data File: /ohem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

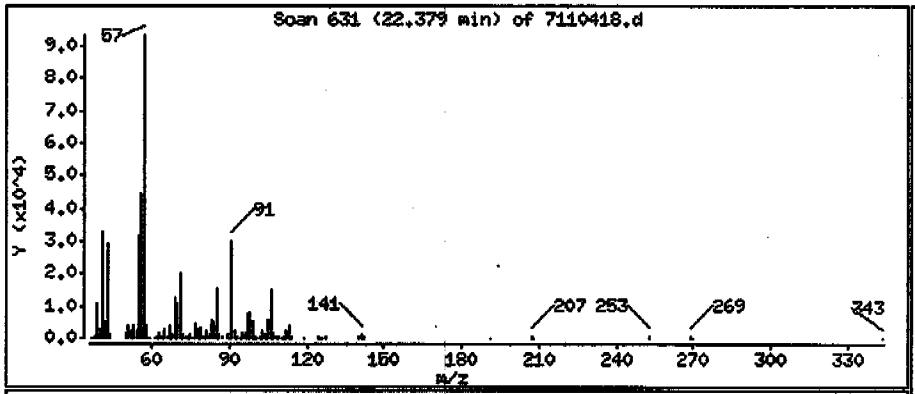
Operator: lo

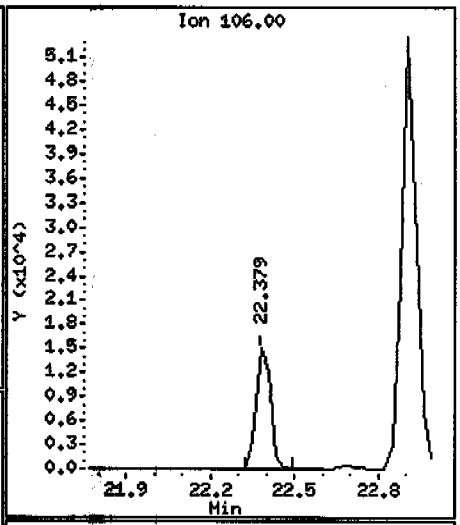
Column phase: RTx-624

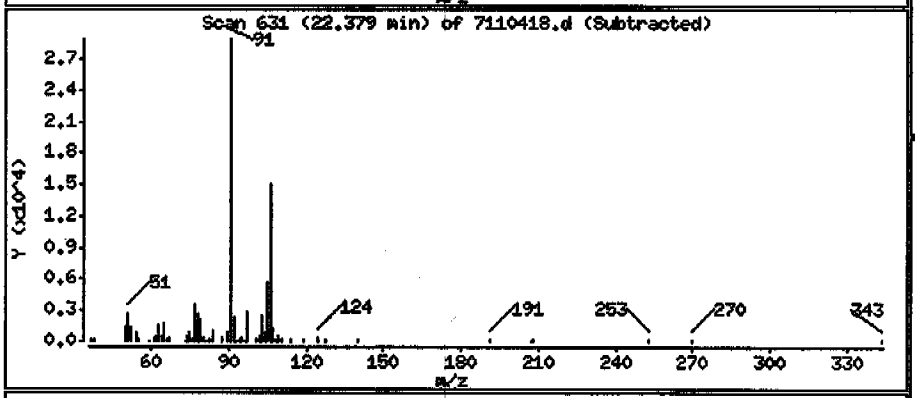
Column diameter: 0.53

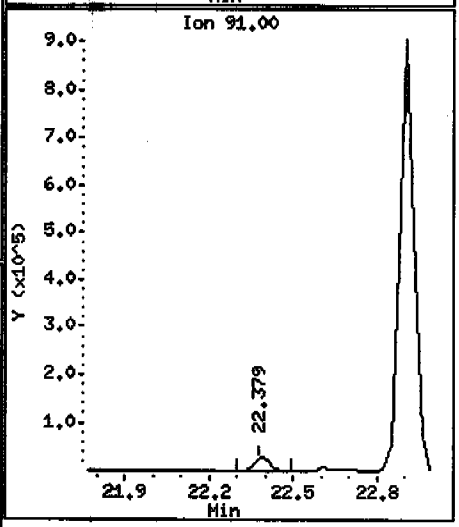
130 o-Xylene

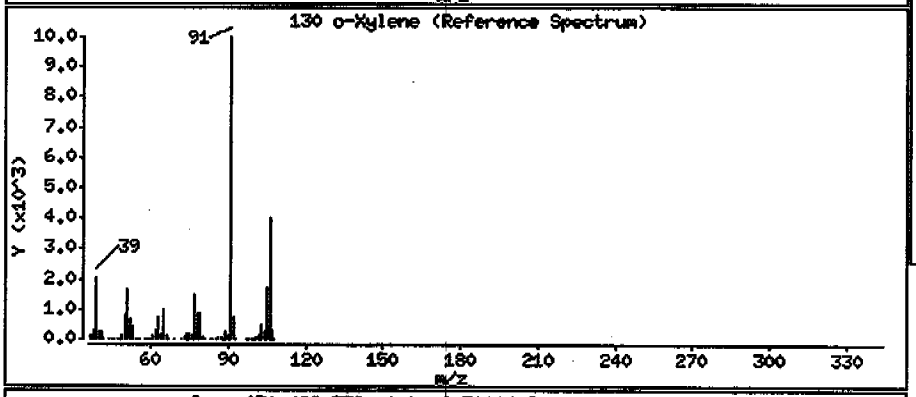
Concentration: 2,280 PPBV

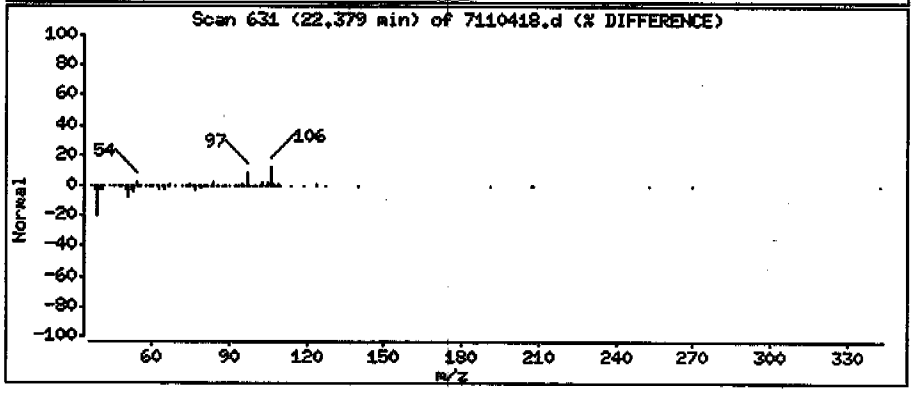












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

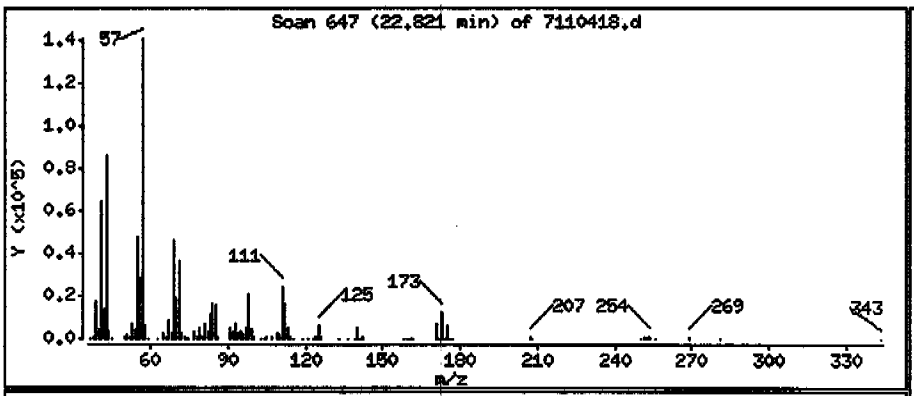
Operator: lo

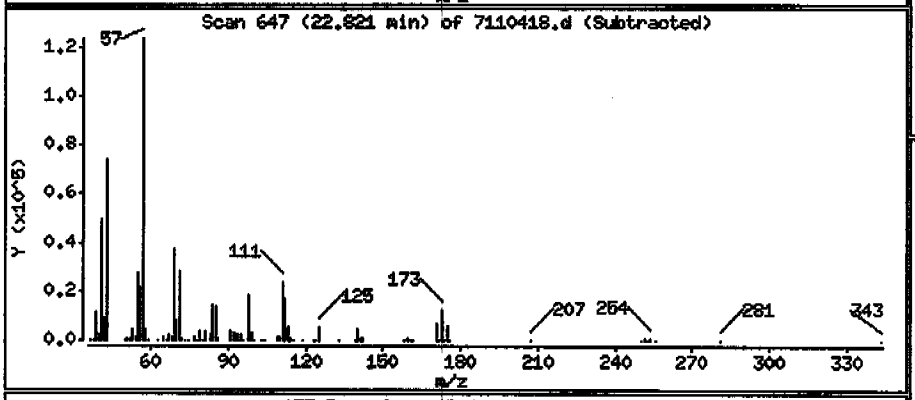
Column phase: RTx-624

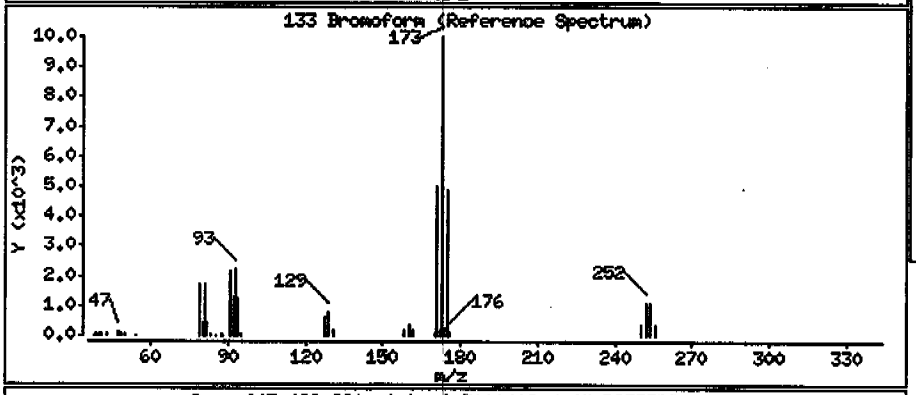
Column diameter: 0.53

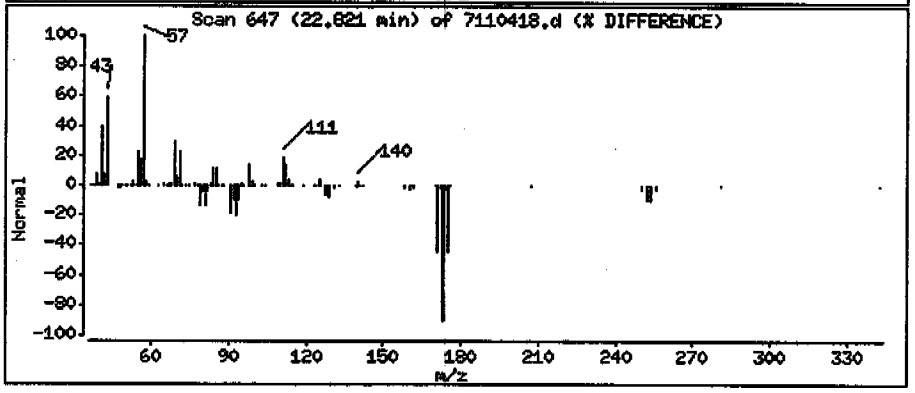
133 Bromoform

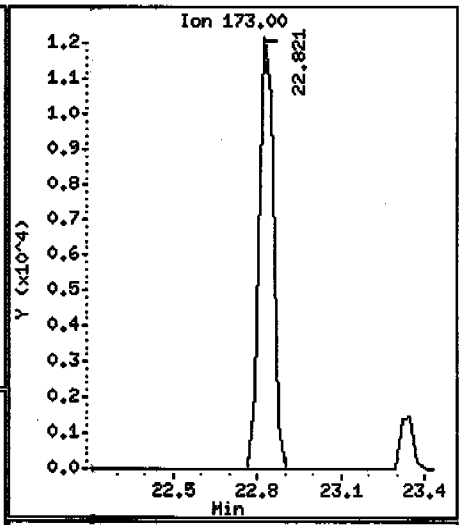
Concentration: 1.439 PPBV

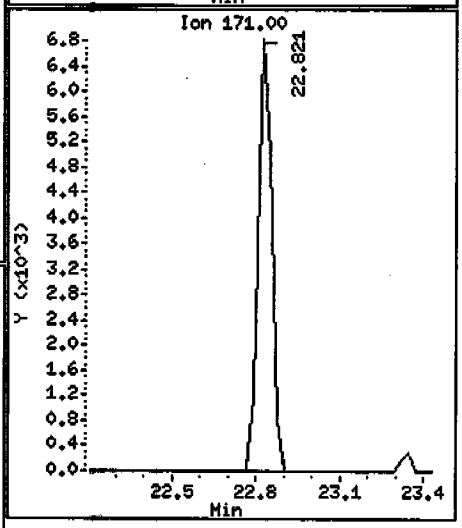












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

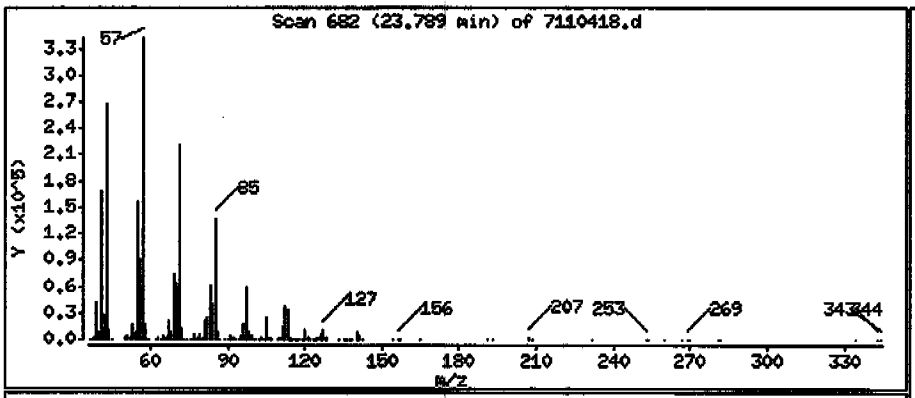
Operator: lo

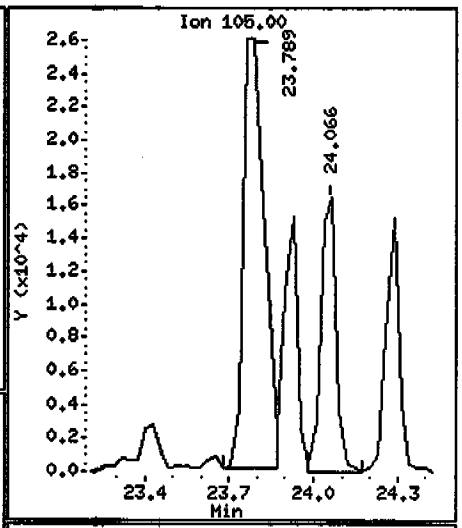
Column phase: RTx-624

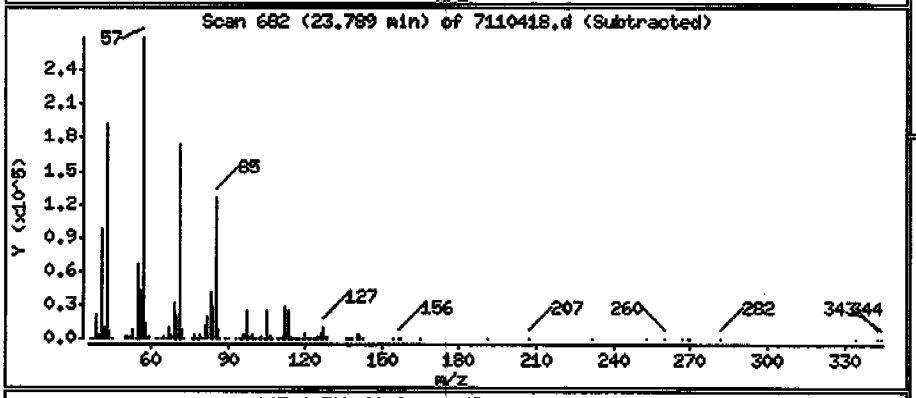
Column diameter: 0.53

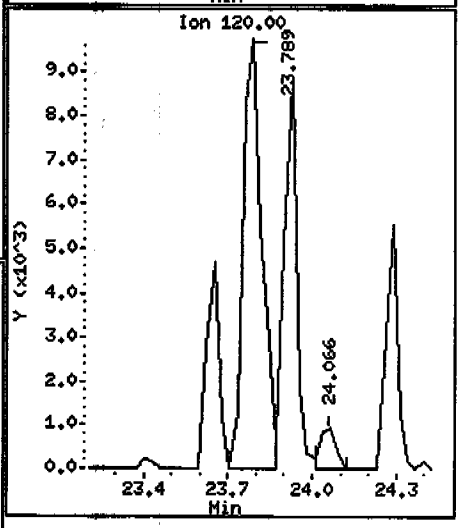
145 4-Ethyltoluene

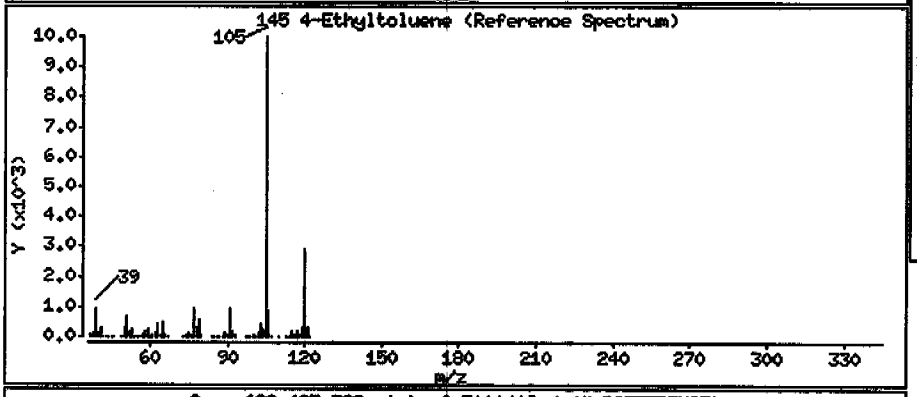
Concentration: 1.997 PPBV

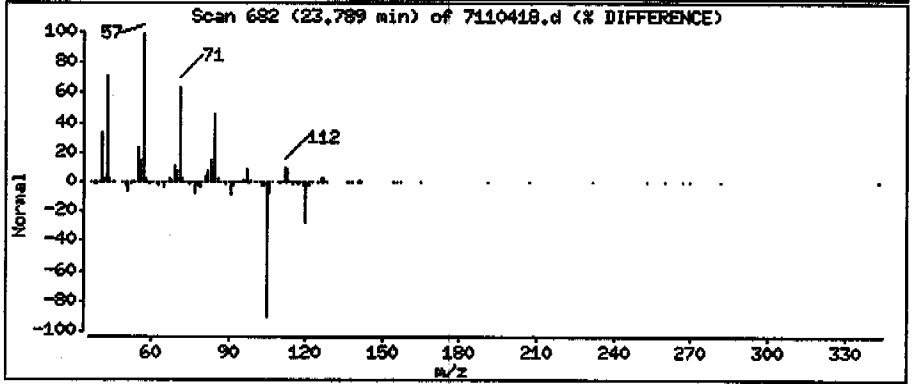












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

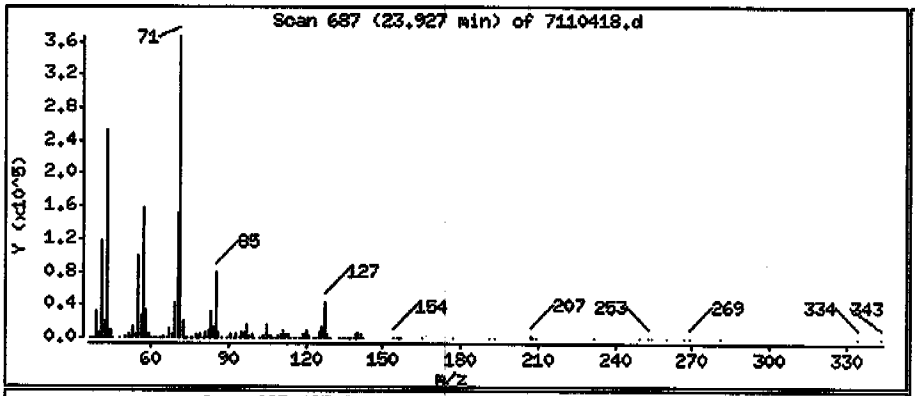
Operator: lo

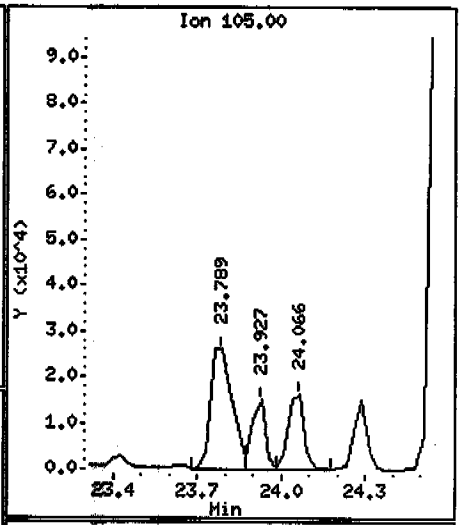
Column phase: RTx-624

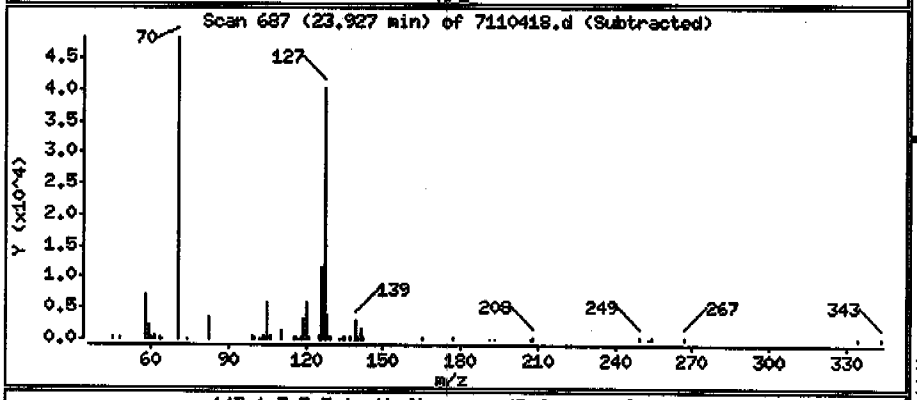
Column diameter: 0.53

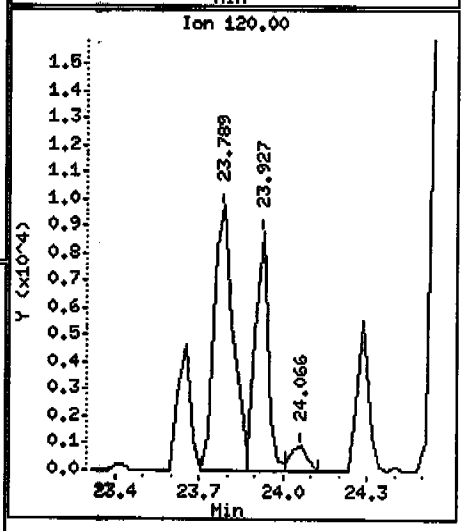
147 1,3,5-Trimethylbenzene

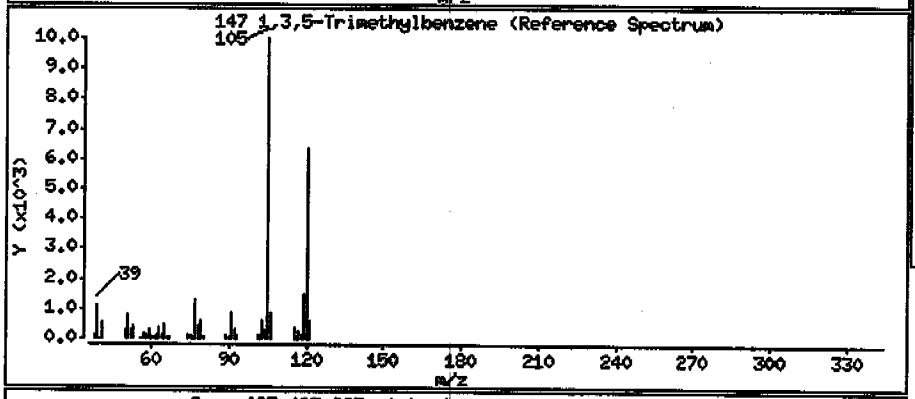
Concentration: 0.9154 PPBV

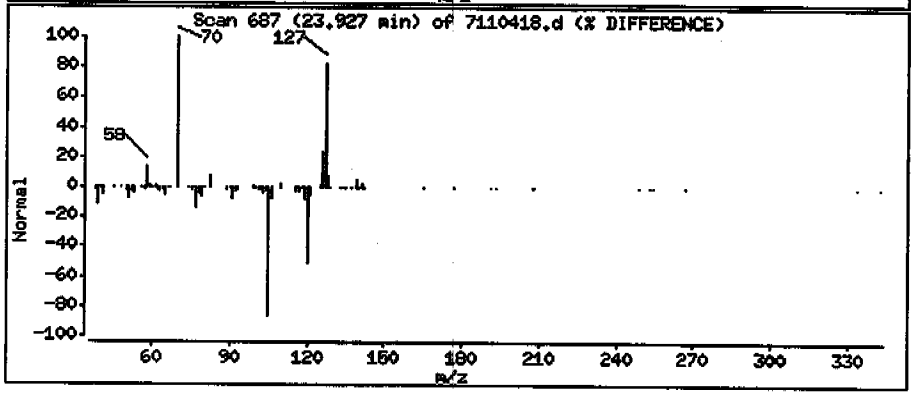












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

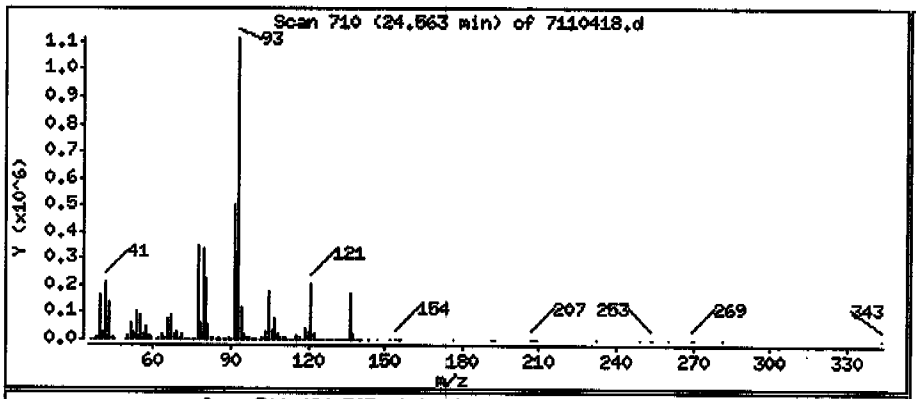
Operator: lo

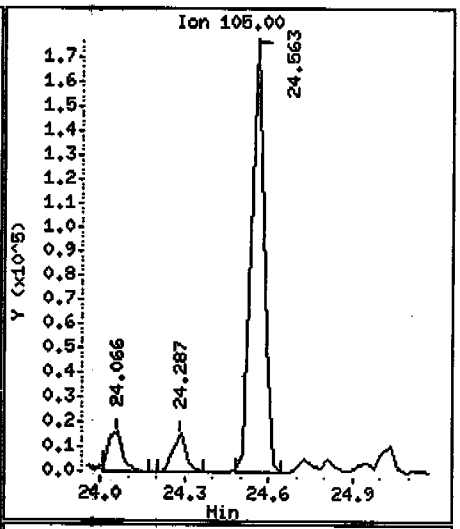
Column phase: RTx-624

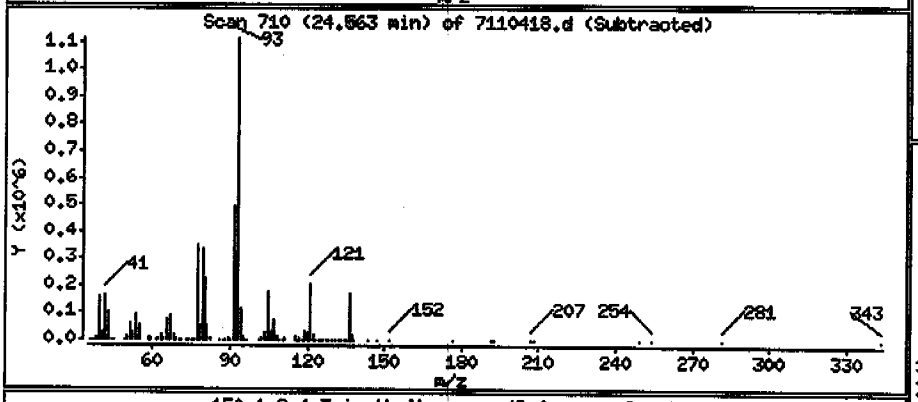
Column diameter: 0.53

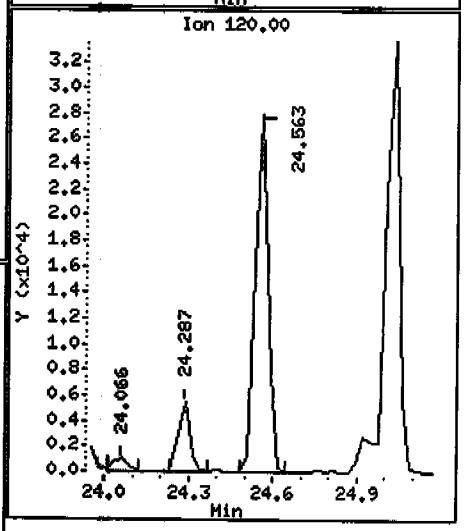
150 1,2,4-Trimethylbenzene

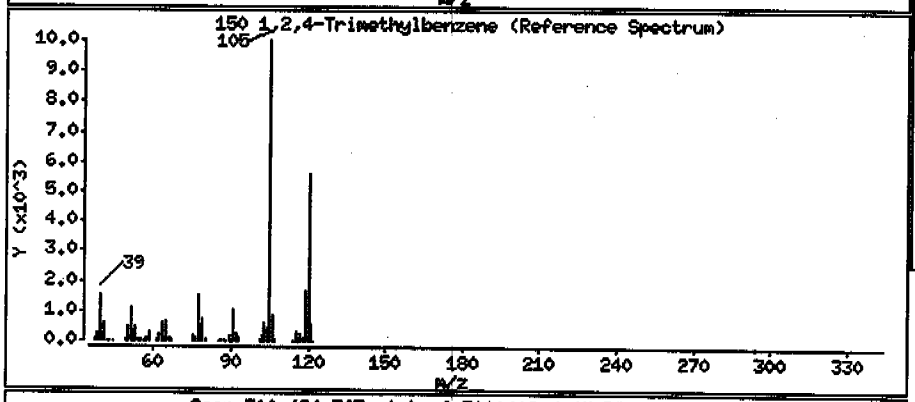
Concentration: 11.078 PPBV

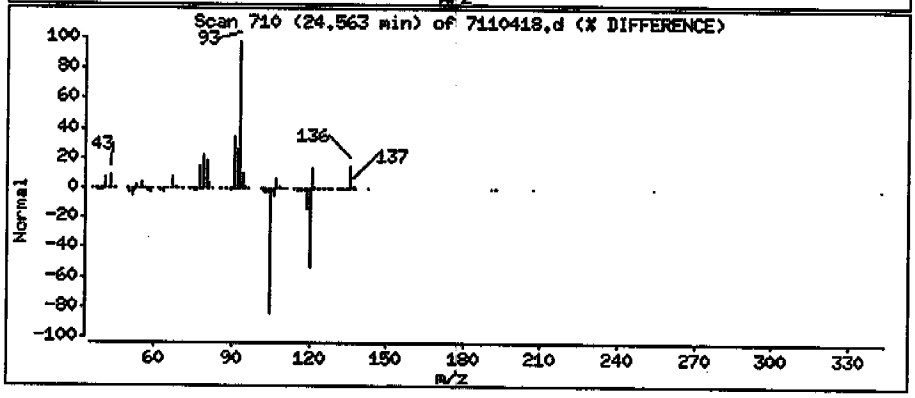












Data File: /chem/msd7.i/7-04nova.b/7110418.d

Date : 05-NOV-2007 07:24

Client ID:

Instrument: msd7.i

Sample Info: 200mL#14003

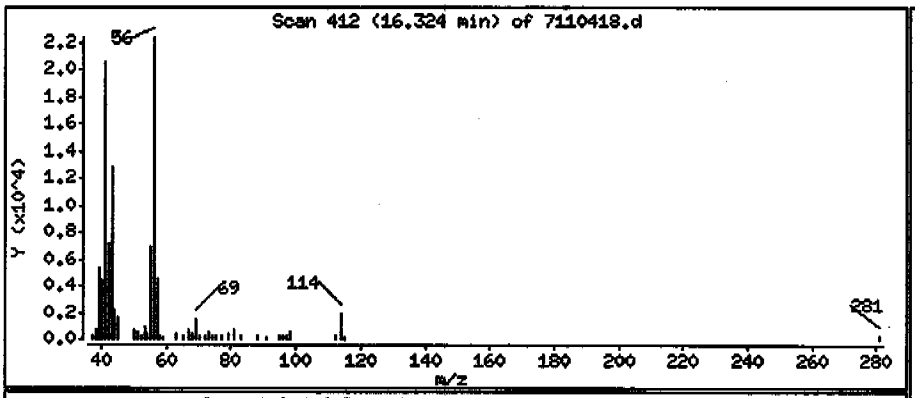
Operator: lo

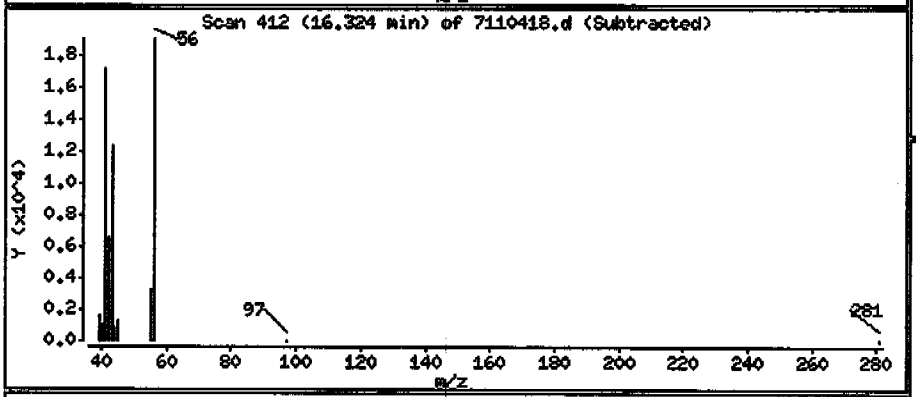
Column phase: RTx-624

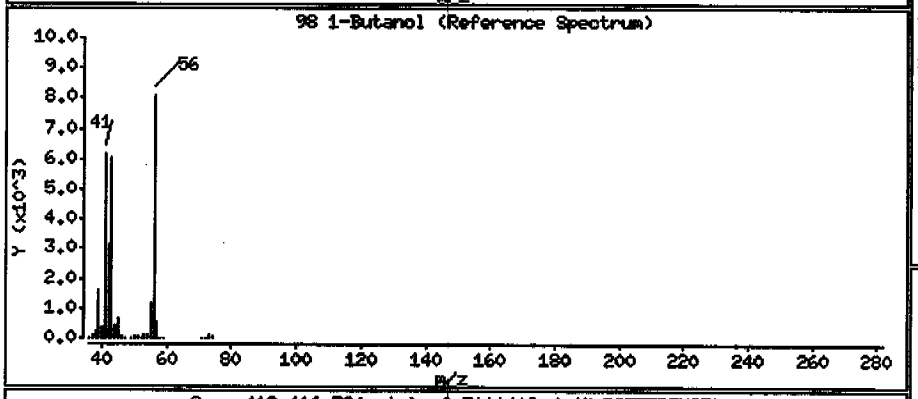
Column diameter: 0.53

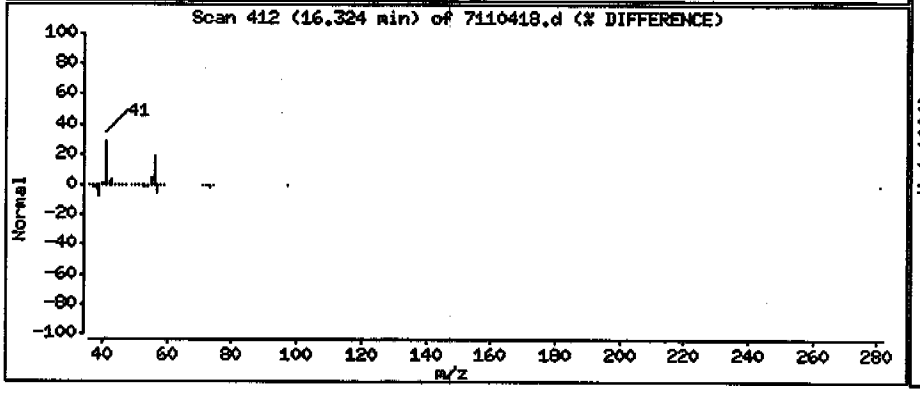
98 1-Butanol

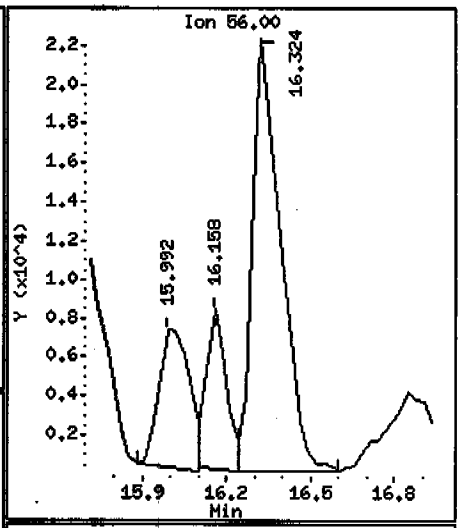
Concentration: 13.801 PPBV

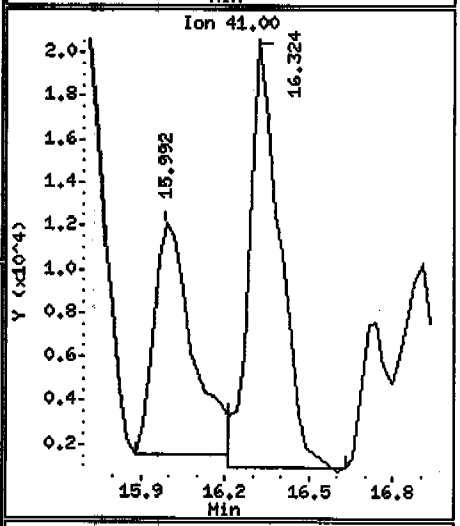


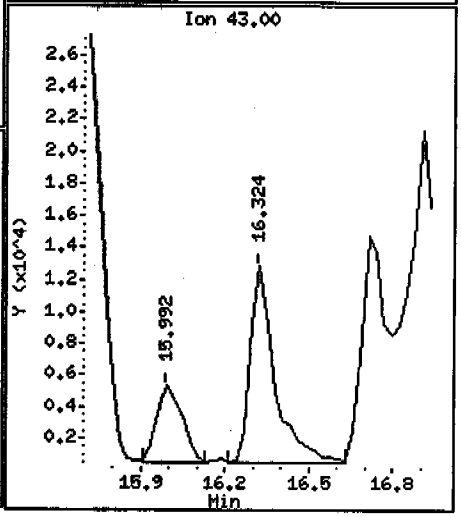












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6812

Lab ID#: 0711008-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Acetone	3.6	71	8.5	170
Methylene Chloride	0.90	80	3.1	280
2-Butanone (Methyl Ethyl Ketone)	0.90	7.9	2.6	23
Chloroform	0.90	22	4.4	110
Carbon Tetrachloride	0.90	0.97	5.6	6.1
Benzene	0.90	0.90	2.8	2.9
1,2-Dichloroethane	0.90	1.0	3.6	4.2
Trichloroethene	0.90	8.2	4.8	44
Toluene	0.90	0.92	3.4	3.4
Propylene	3.6	6.9	6.2	12

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6812

Lab ID#: 0711008-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	3.6	71	8.5	170
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	Not Detected	2.8	Not Detected
Methylene Chloride	0.90	80	3.1	280
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	7.9	2.6	23
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	22	4.4	110
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.90	0.97	5.6	6.1
Benzene	0.90	0.90	2.8	2.9
1,2-Dichloroethane	0.90	1.0	3.6	4.2
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	8.2	4.8	44
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	0.92	3.4	3.4
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6812

Lab ID#: 0711008-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	Not Detected	9.2	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	6.9	6.2	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	83	70-130
4-Bromofluorobenzene	100	70-130

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Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110419.d
Lab Smp Id: 0711008-06A
Inj Date : 05-NOV-2007 08:17
Operator : lo Inst ID: msd7.i
Smp Info : 200mL#35797
Misc Info : 7.5"Hg-5psi
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	596553	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	458909			28.08- 128.08	76.93
14.388	14.388 (1.000)	49	847715			128.80- 228.80	142.10
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1956883	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	289475			0.00- 64.88	14.79
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1400838	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	707223			4.45- 104.45	50.49
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	662046	20.6581	20.658	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	343932			2.91- 102.91	51.95
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1589799	22.8858	22.886	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	165440			0.00- 61.46	10.41

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1091642			19.18- 119.18	68.67
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	833625	25.0082	25.008	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	972242			63.49- 163.49	116.63
23.347	23.347 (1.093)	176	816672			46.77- 146.77	97.97
11 Propylene					CAS #: 115-07-1		
5.645	5.617 (0.392)	41	99376	3.86504	6.918	80.00- 120.00	100.00(H)
5.617	5.617 (0.390)	42	60368			21.19- 121.19	60.75
5.617	5.617 (0.390)	39	88029			24.83- 124.83	88.58
45 Acetone					CAS #: 67-64-1		
10.490	10.462 (0.728)	58	639254	39.7345	71.125	80.00- 120.00	100.00
10.490	10.462 (0.728)	43	2086218			247.10- 347.10	326.35
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.795)	49	1712807	44.7594	80.119	80.00- 120.00	100.00
11.457	11.457 (0.795)	84	1187274			15.73- 115.73	69.32
11.457	11.457 (0.795)	51	520584			0.00- 80.85	30.39
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	57332	4.43732	7.943	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	281209			458.59- 558.59	490.49
13.891	13.891 (0.964)	57	24044			0.00- 86.57	41.94
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	755901	12.5849	22.527	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	493016			15.98- 115.98	65.22
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.079	15.107 (1.046)	119	30784	0.54294	0.9719	80.00- 120.00	100.00
15.107	15.080 (1.048)	117	30865			54.21- 154.21	100.26
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	39018	0.50182	0.8983	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	8542			0.00- 71.87	21.89
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.967)	62	23750	0.57490	1.029	80.00- 120.00	100.00
15.632	15.633 (0.967)	64	9049			0.00- 82.89	38.10
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	158511	4.58945	8.215	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	164615			54.96- 154.96	103.85

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 Trichloroethene (continued)							
16.628	16.628 (1.029)	97	105857			15.03- 115.03	66.78
114 Toluene					CAS #: 108-88-3		
18.867	18.895 (1.168)	91	43591	0.51186	0.9162	80.00- 120.00	100.00
18.867	18.895 (1.168)	92	26648			12.81- 112.81	61.13

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110419.d
Lab Smp Id: 0711008-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: lo
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 7.5"Hg-5psi

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	596553	-8.39
97 1,4-Difluorobenze	2188066	1312840	3063292	1956883	-10.57
126 Chlorobenzene-d5	1729248	1037549	2420947	1400838	-18.99

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-04nova
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0711008-06A
Level: LOW
Operator: lo
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 7.5"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	20.658	82.63	70-130
$ 113 Toluene-d8	25.000	22.886	91.54	70-130
$ 137 Bromofluorobenzene	25.000	25.008	100.03	70-130

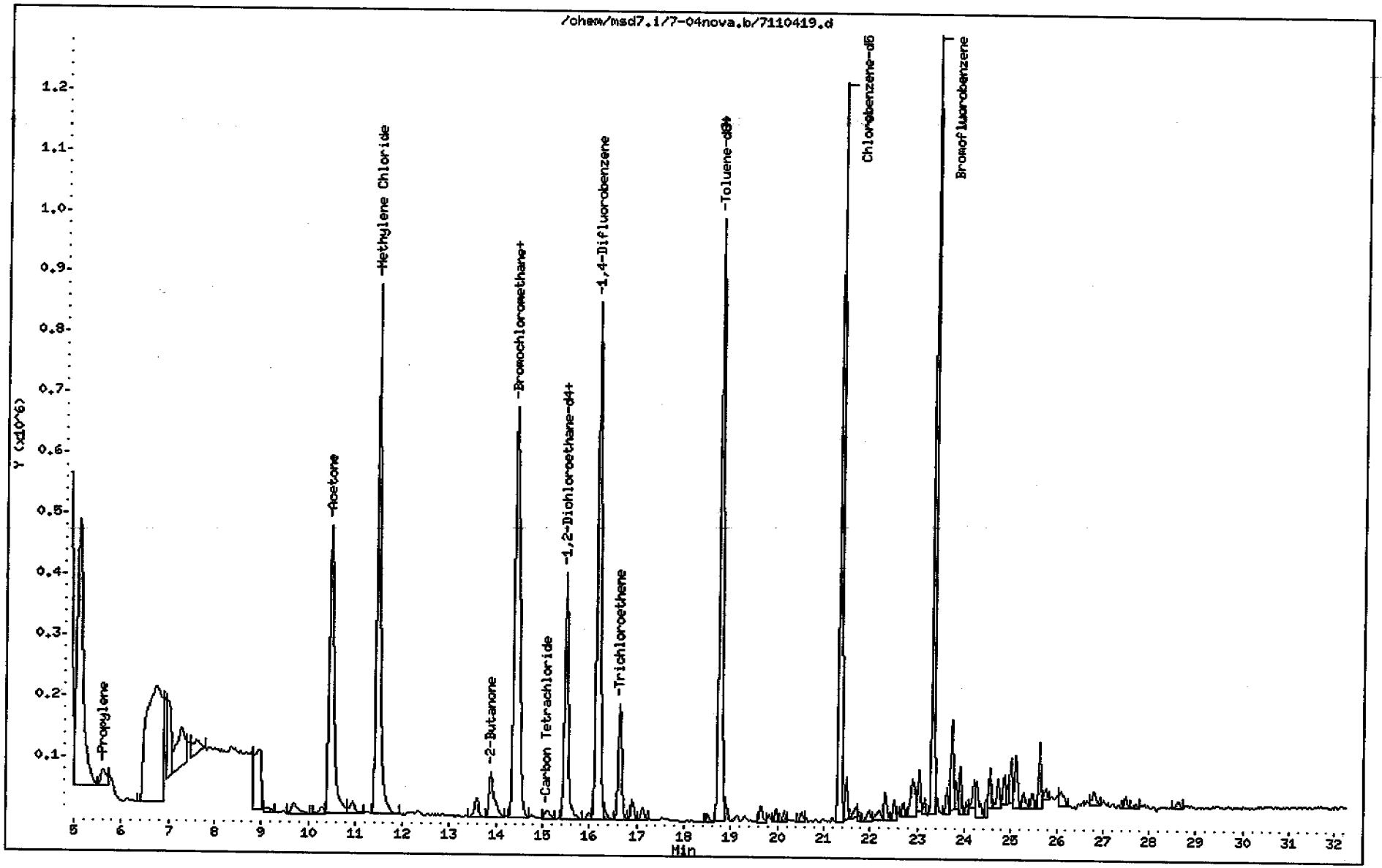
Data File: /ohem/msd7.i/7-04nova.b/7110419.d
Date : 05-NOV-2007 08:17
Client ID:
Sample Info: 200mL#35797

Column phase: RTx-624

Instrument: msd7.i

Operator: lo
Column diameter: 0.53

0177



Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

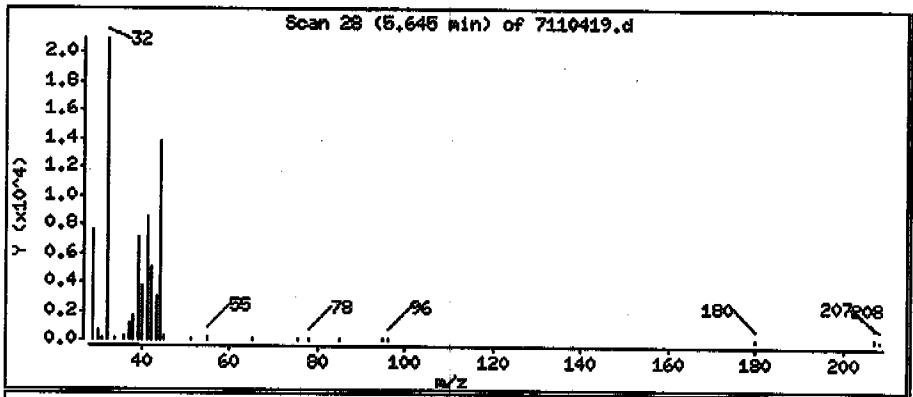
Operator: lo

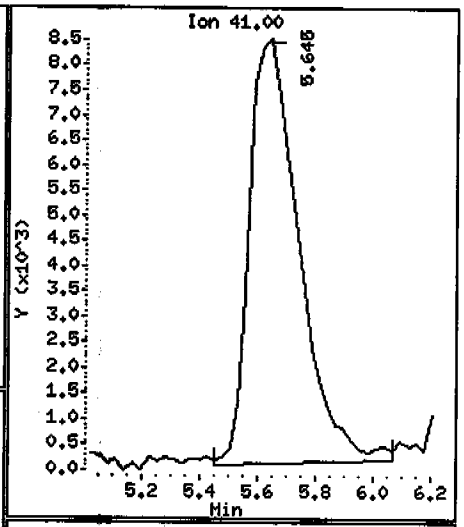
Column phase: RTx-624

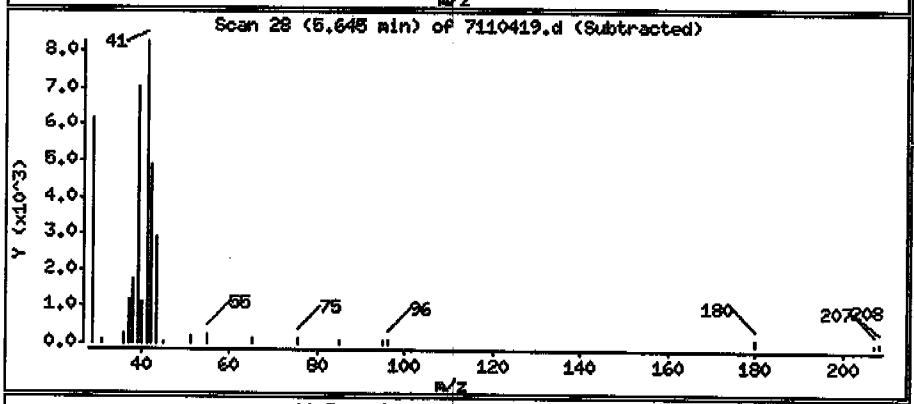
Column diameter: 0.53

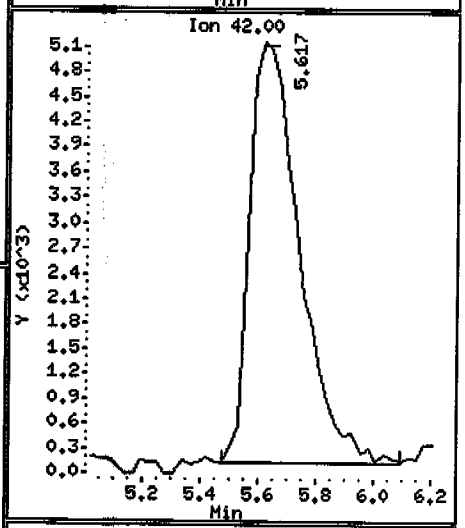
11 Propylene

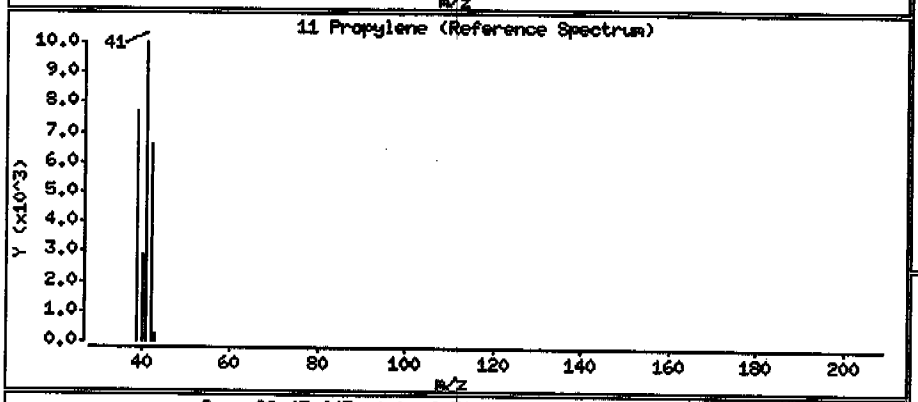
Concentration: 6.918 PPBV

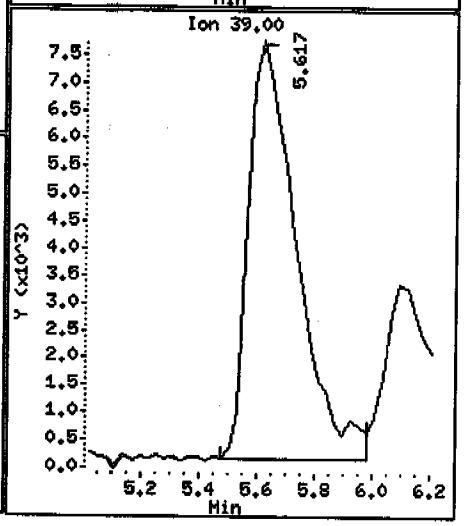


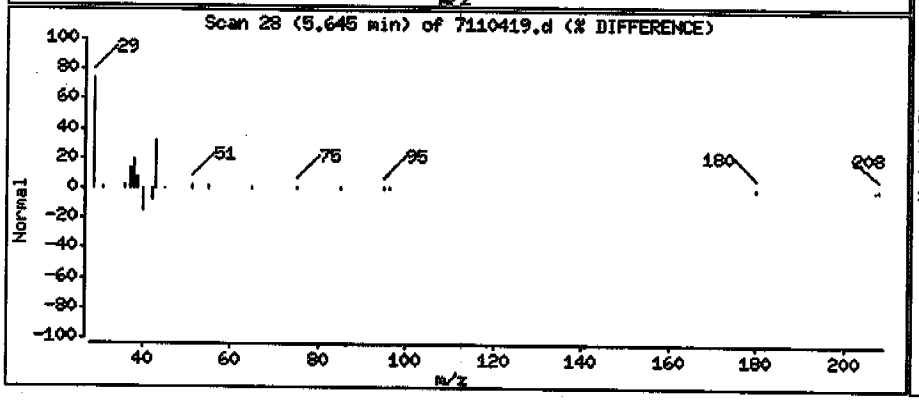












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Sample Info: 200mL#35797

Instrument: msd7.i

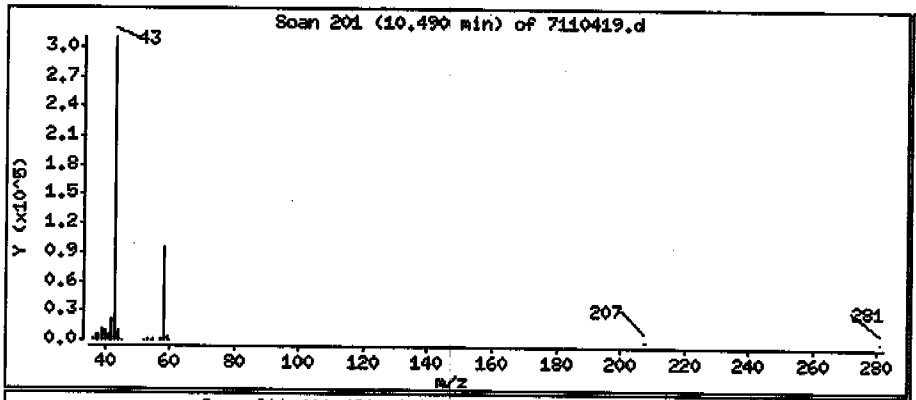
Operator: lo

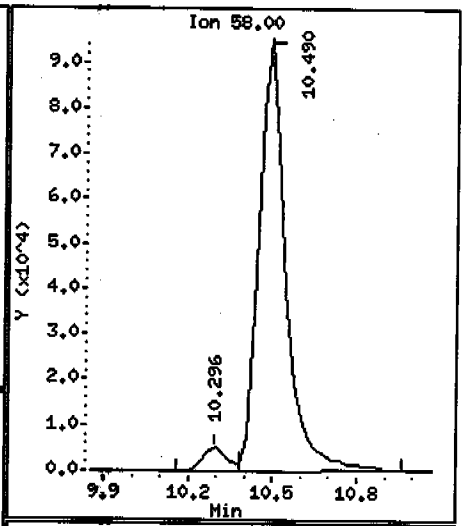
Column phase: RTx-624

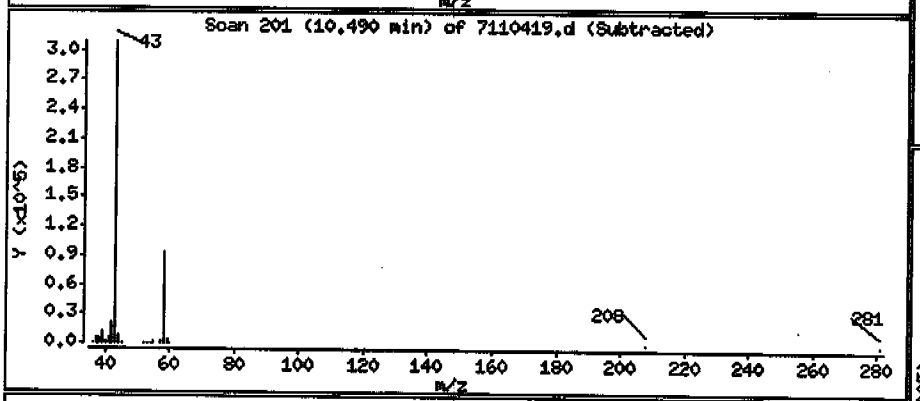
Column diameter: 0.53

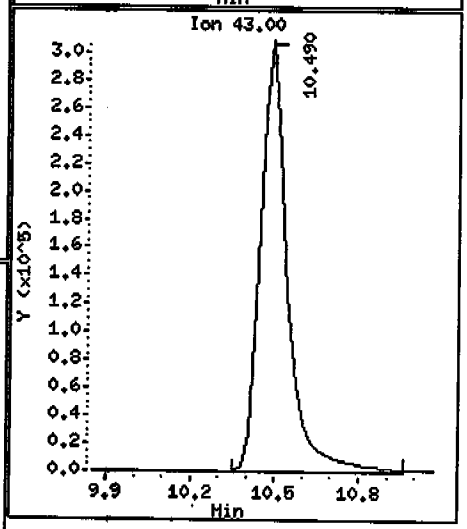
45 Acetone

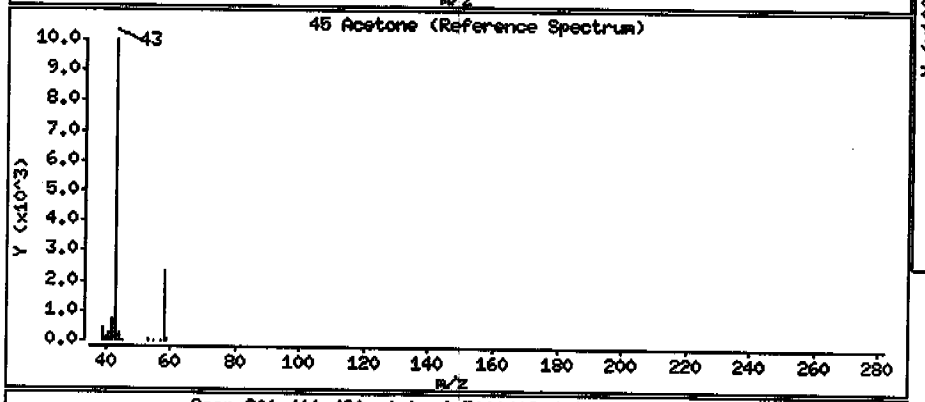
Concentration: 71.125 PPBV

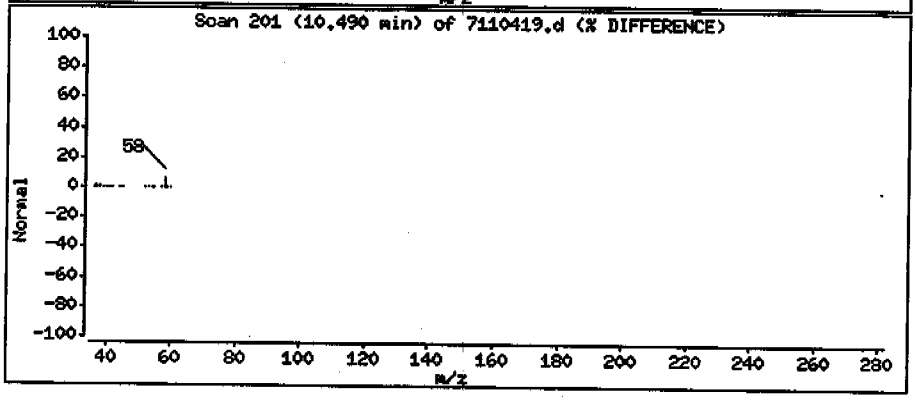












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

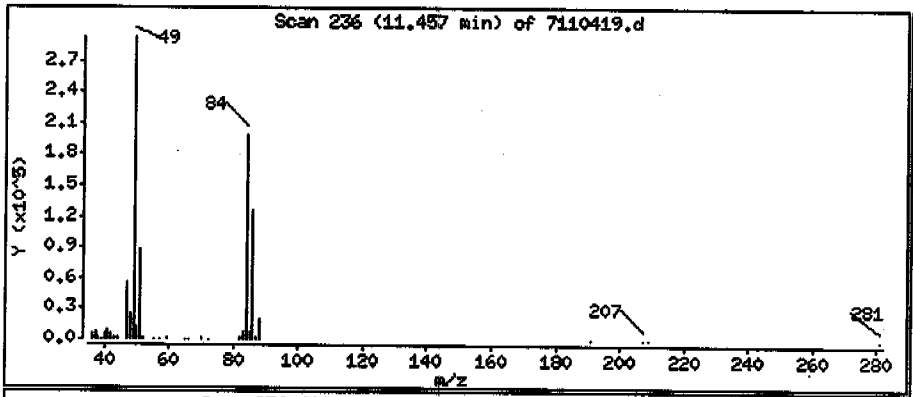
Operator: lo

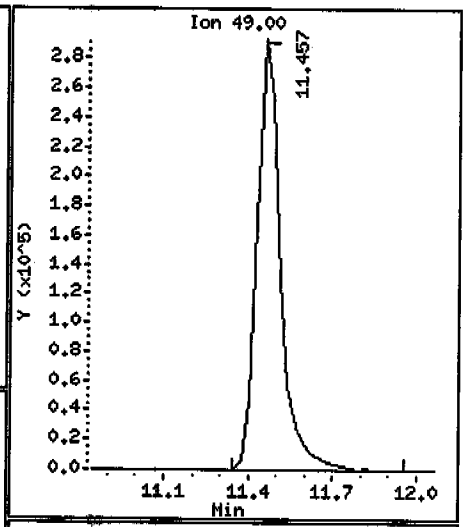
Column phase: RTx-624

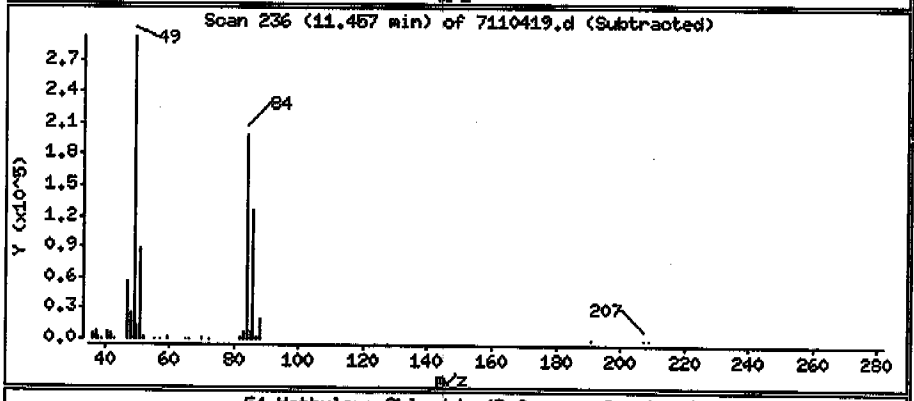
Column diameter: 0.53

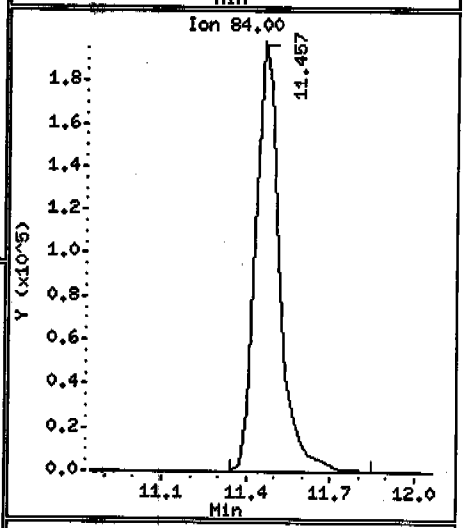
54 Methylene Chloride

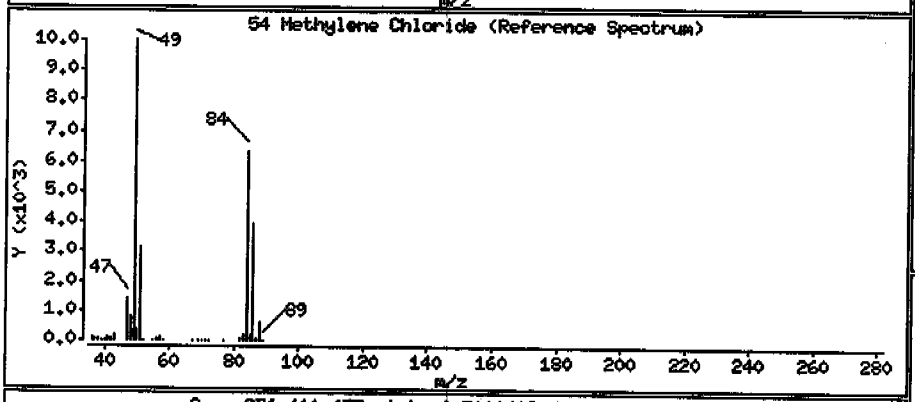
Concentration: 80.119 PPBV

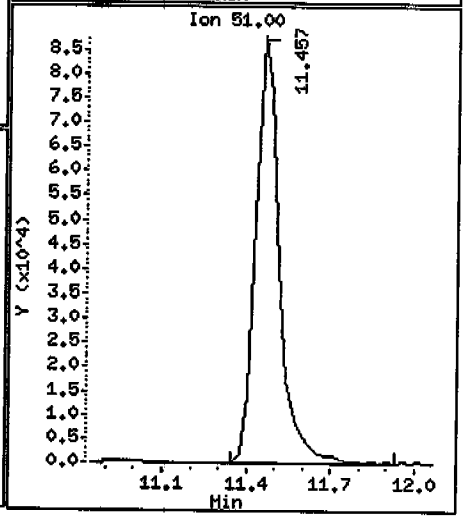


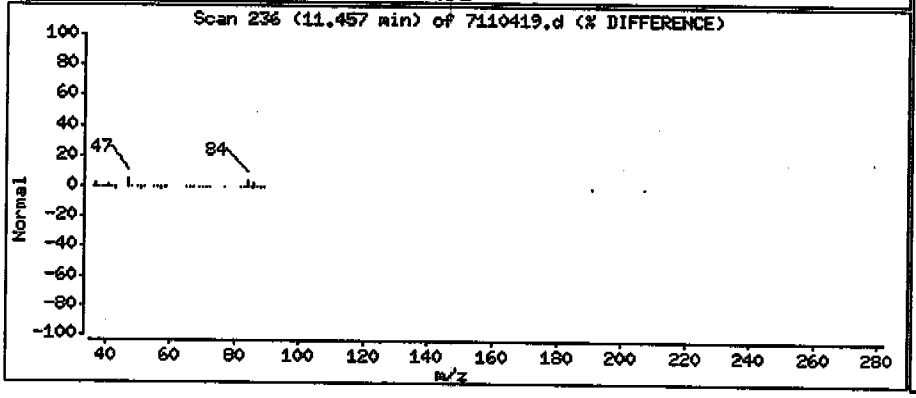












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

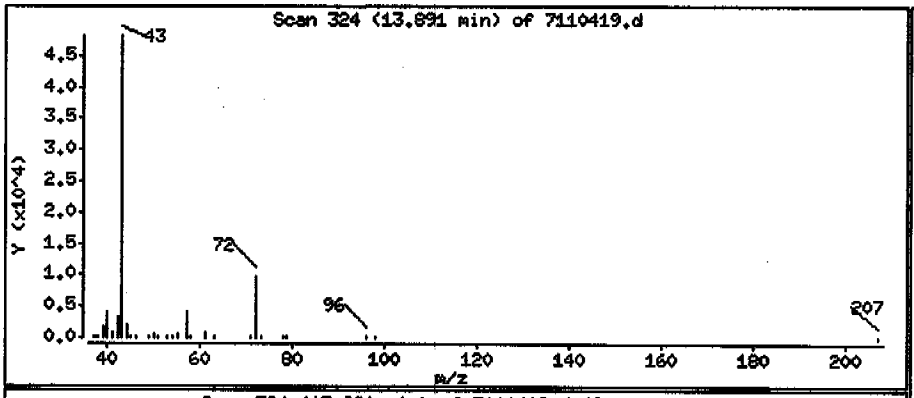
Operator: lo

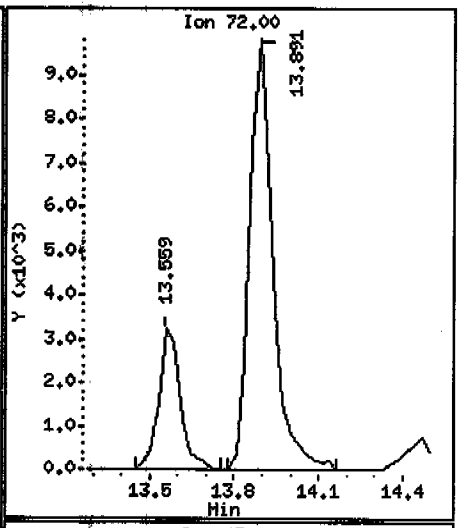
Column phase: RTx-624

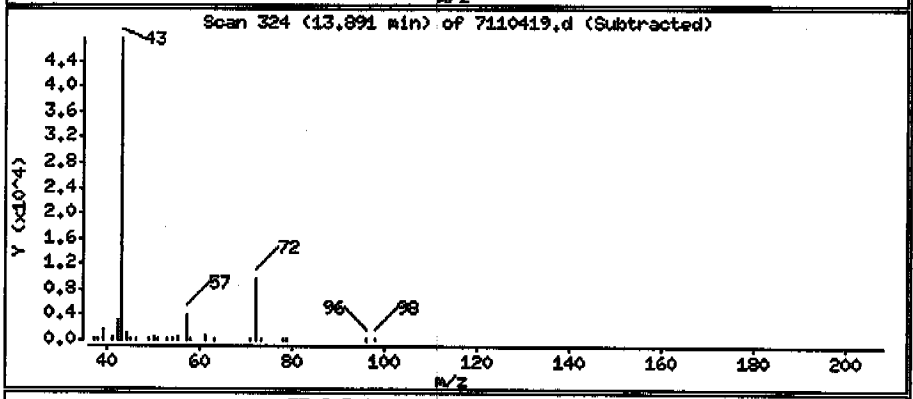
Column diameter: 0.53

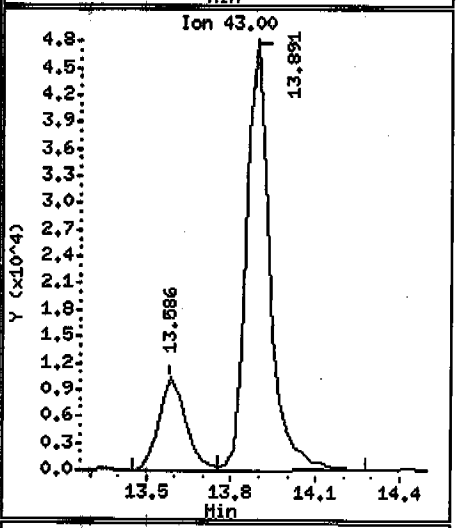
75 2-Butanone

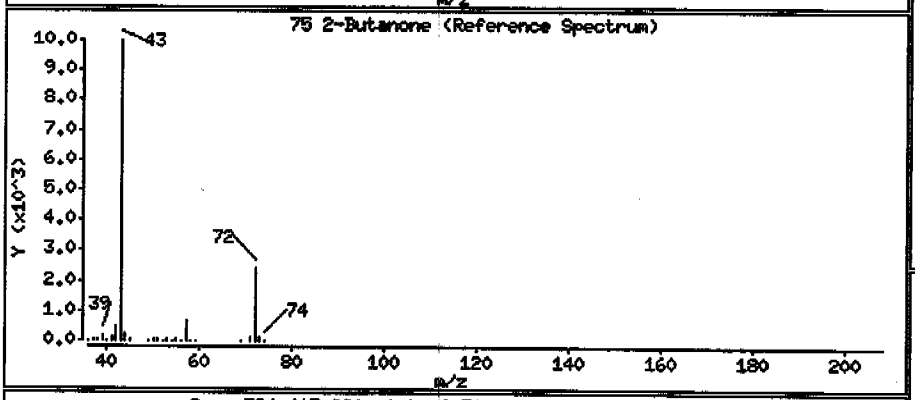
Concentration: 7.943 PPBV

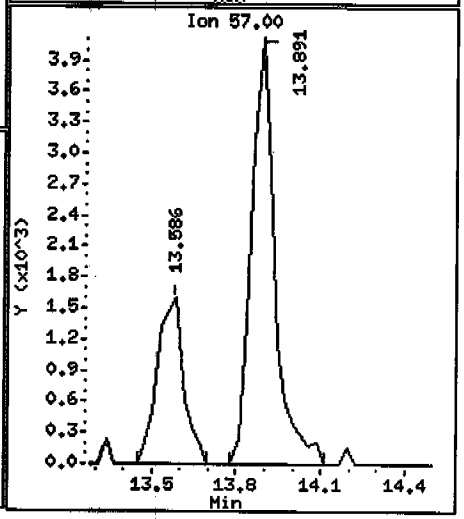


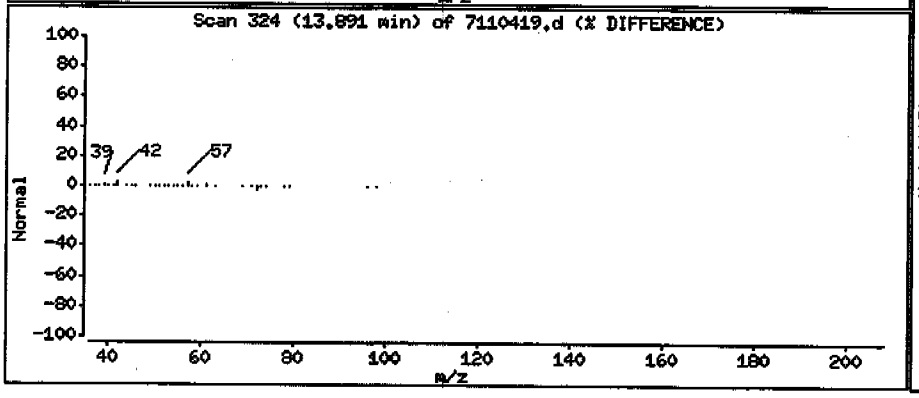












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Sample Info: 200mL#35797

Instrument: msd7.i

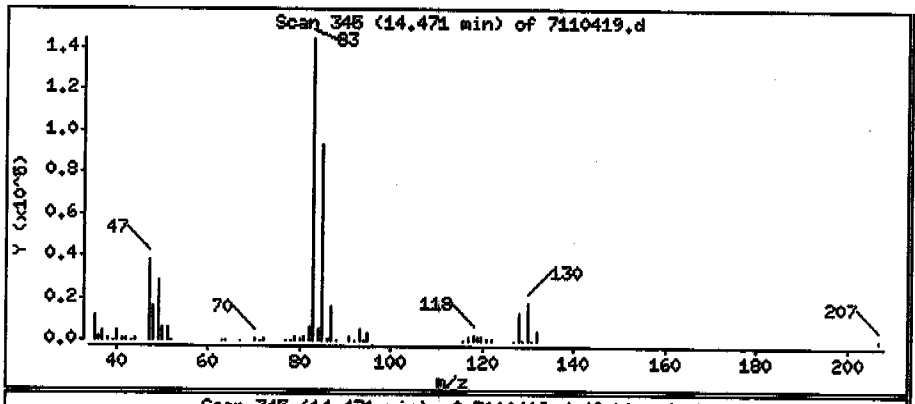
Operator: lo

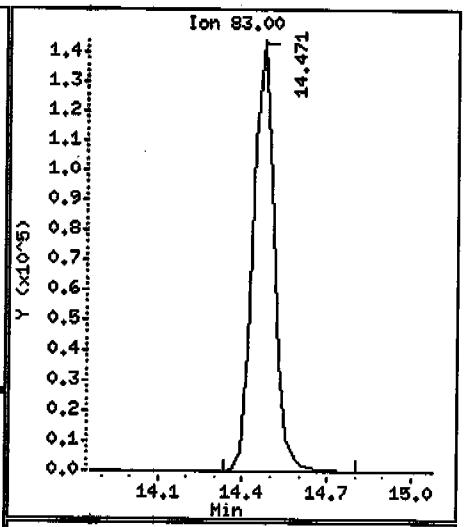
Column phase: RTx-624

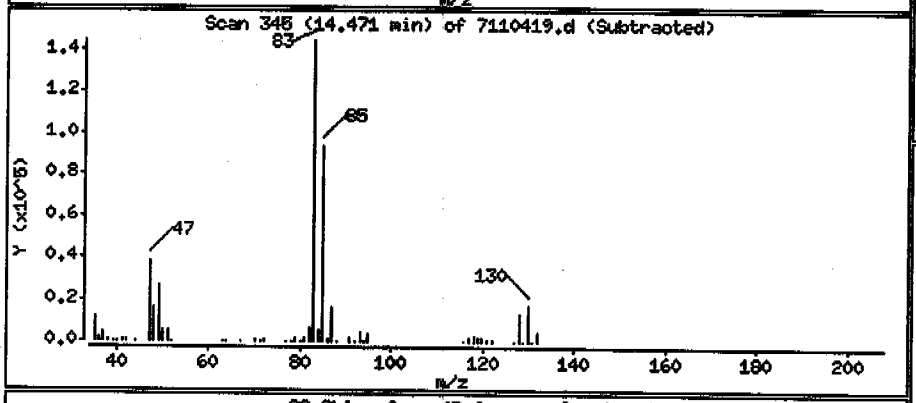
Column diameter: 0.53

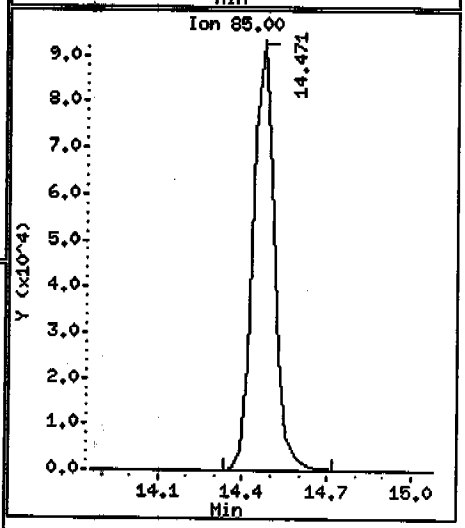
82 Chloroform

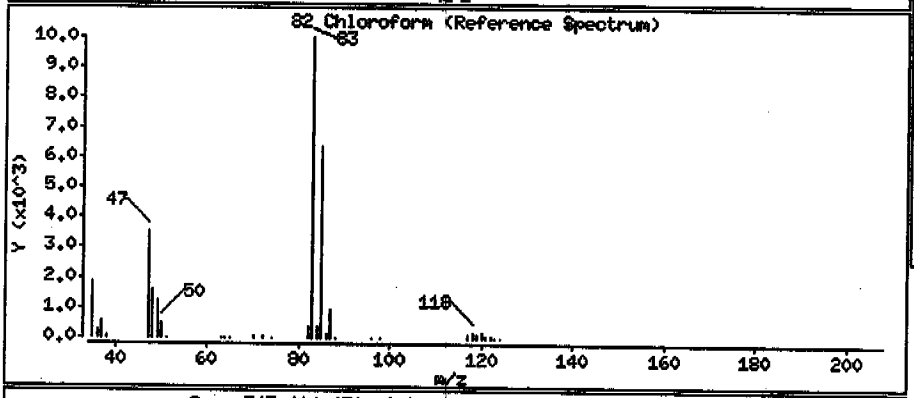
Concentration: 22.527 PPBV

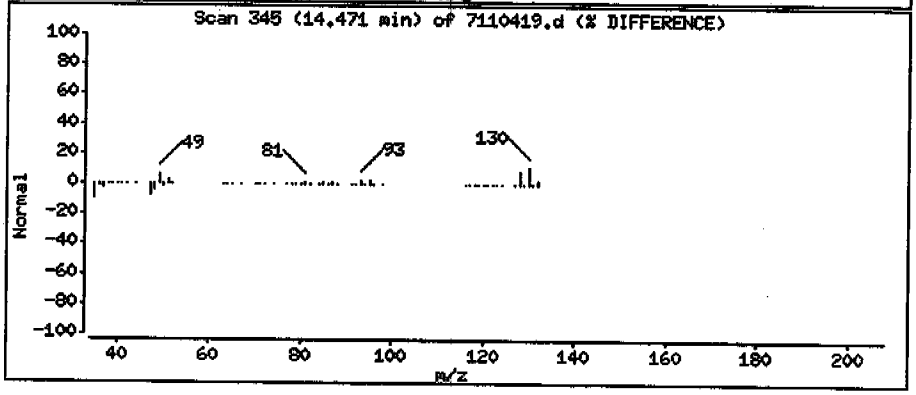












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

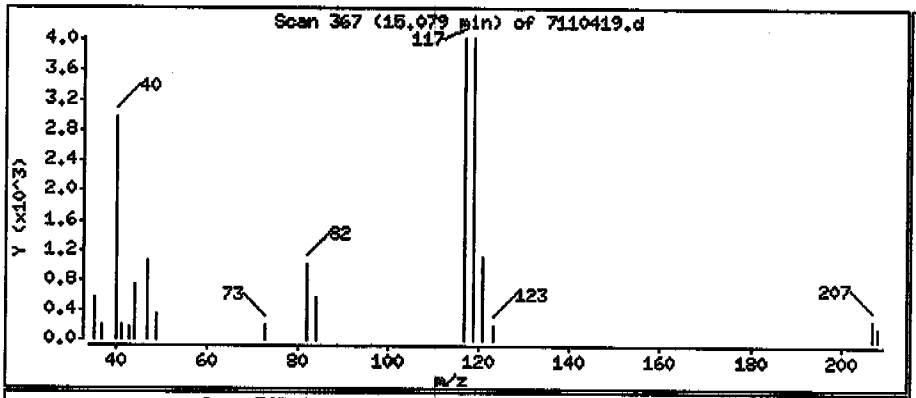
Operator: lo

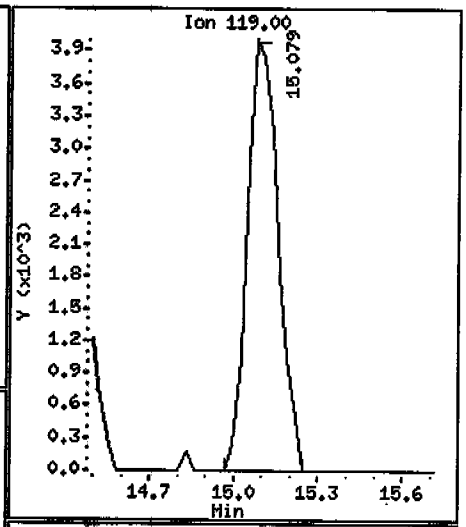
Column phase: RTx-624

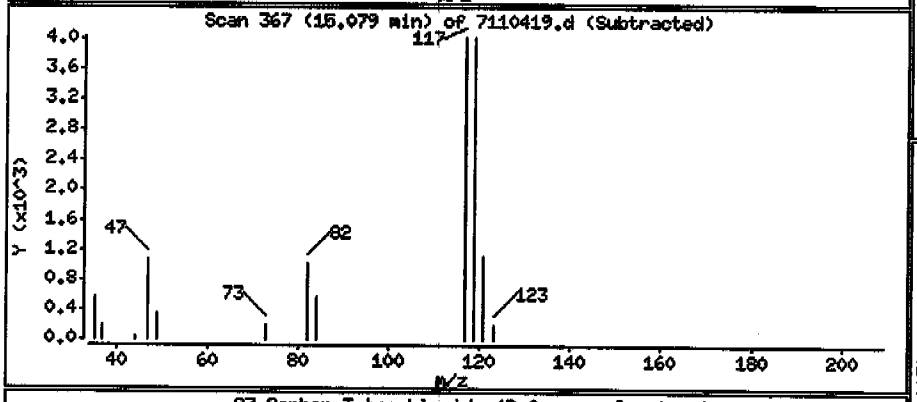
Column diameter: 0.53

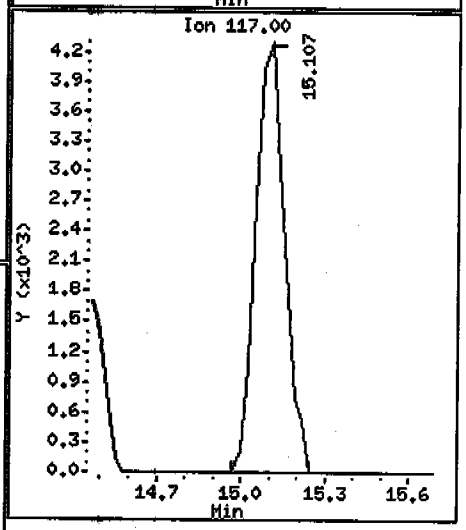
87 Carbon Tetrachloride

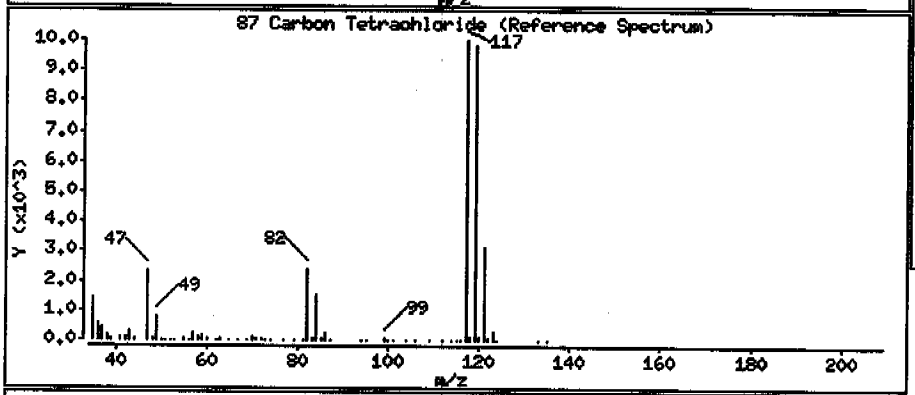
Concentration: 0.9719 PPBV

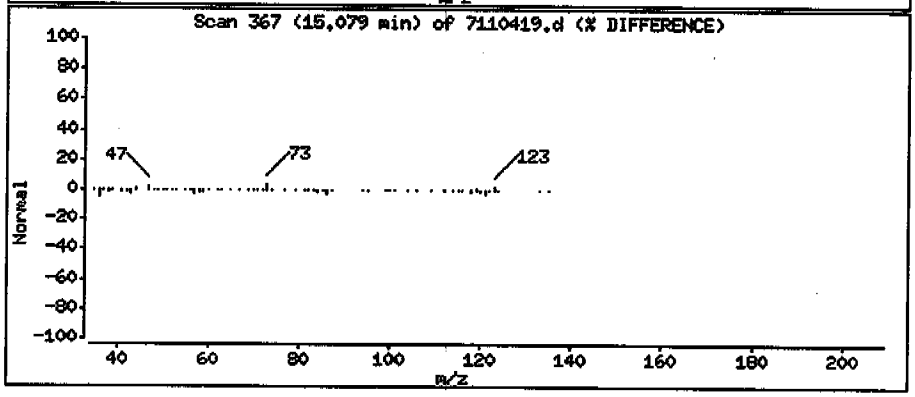












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

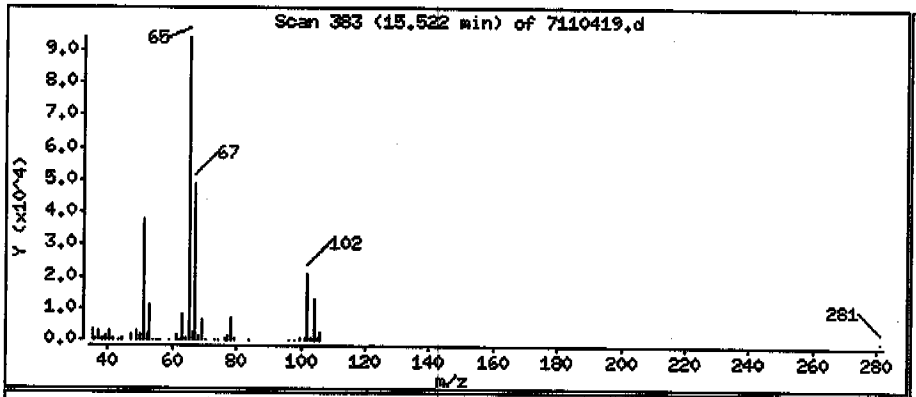
Operator: lo

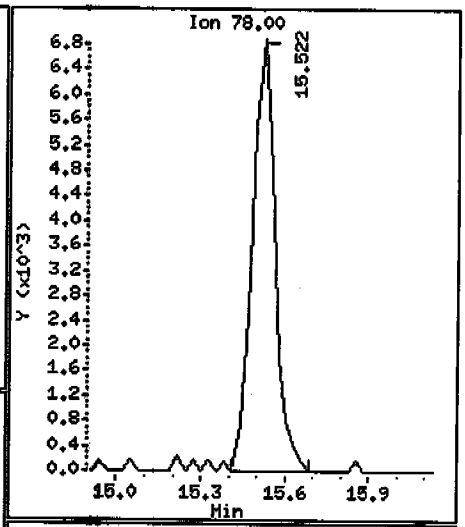
Column phase: RTx-624

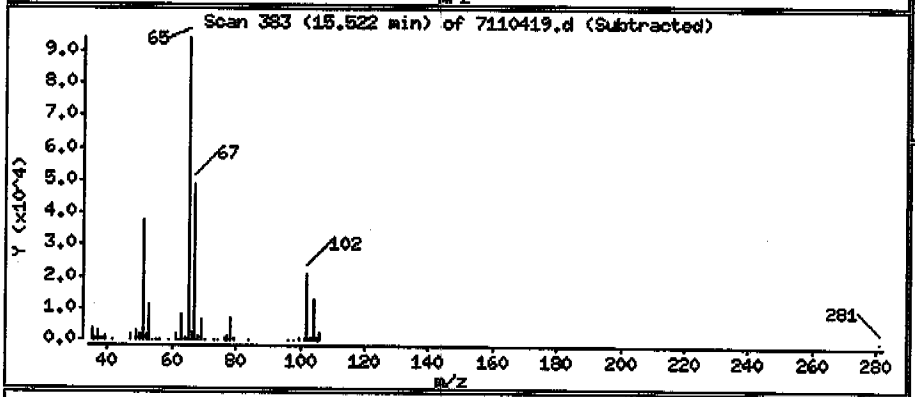
Column diameter: 0.53

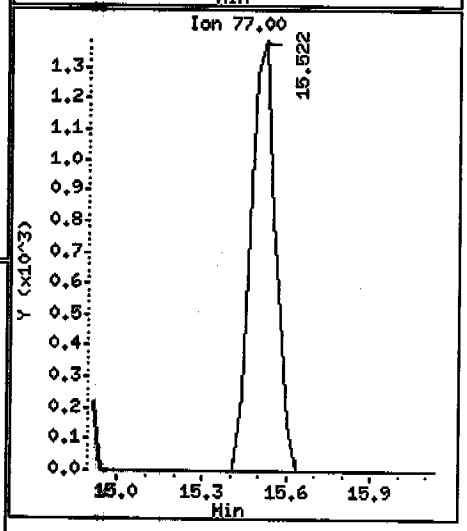
91 Benzene

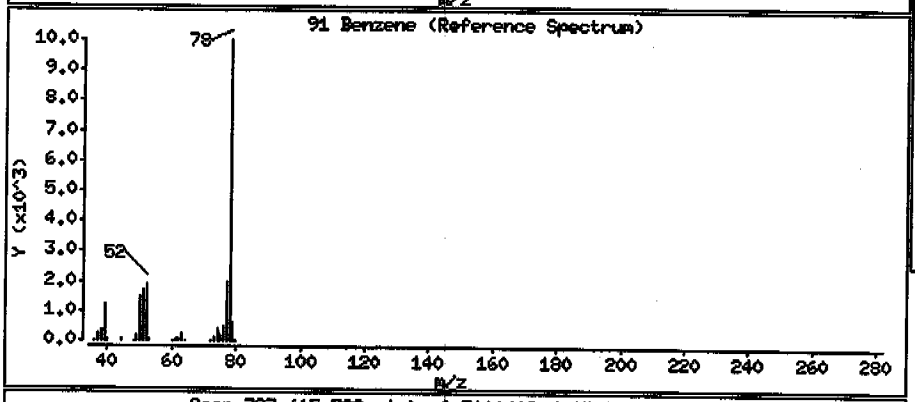
Concentration: 0.8983 PPBV

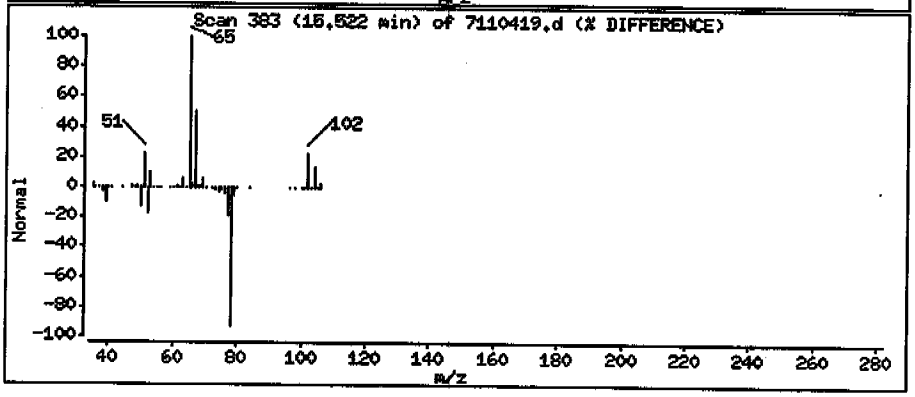












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

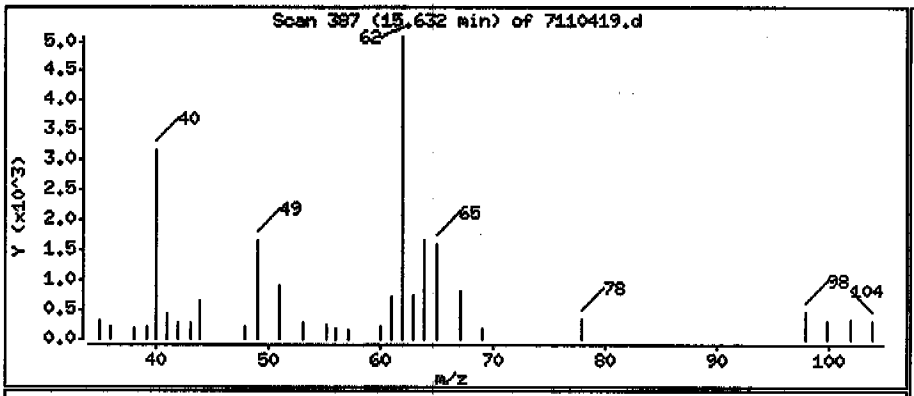
Operator: lo

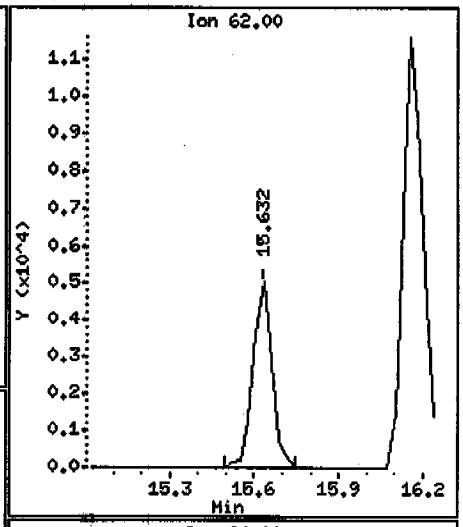
Column phase: RTx-624

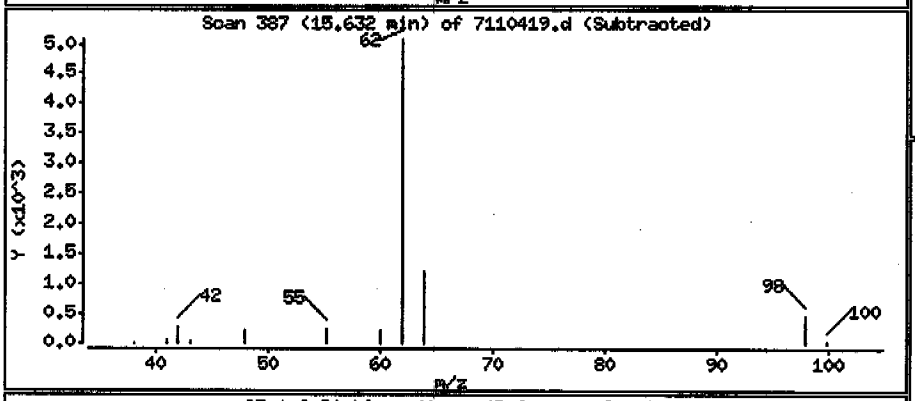
Column diameter: 0.53

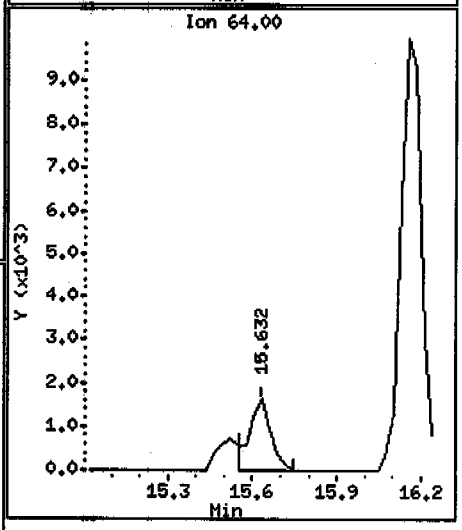
93 1,2-Dichloroethane

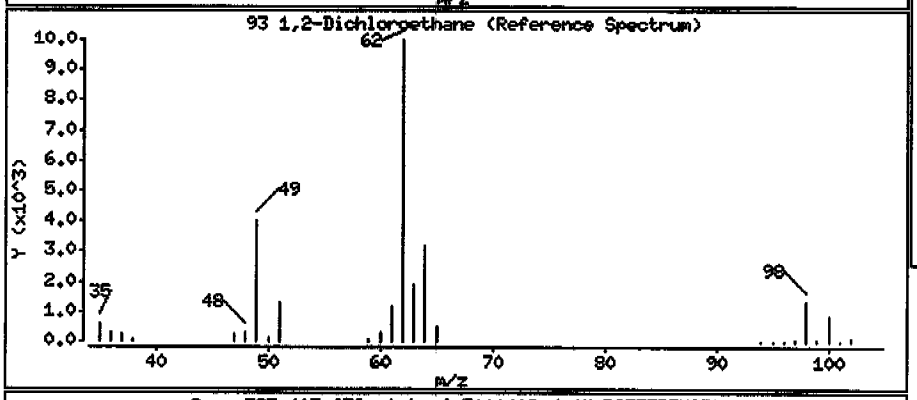
Concentration: 1.029 PPBV

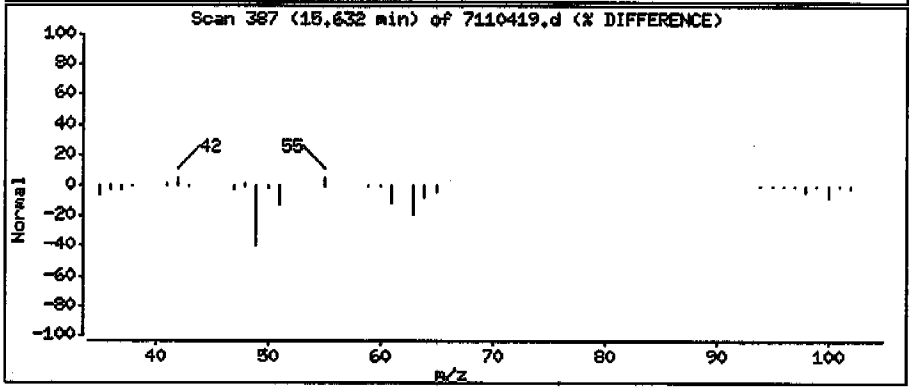












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

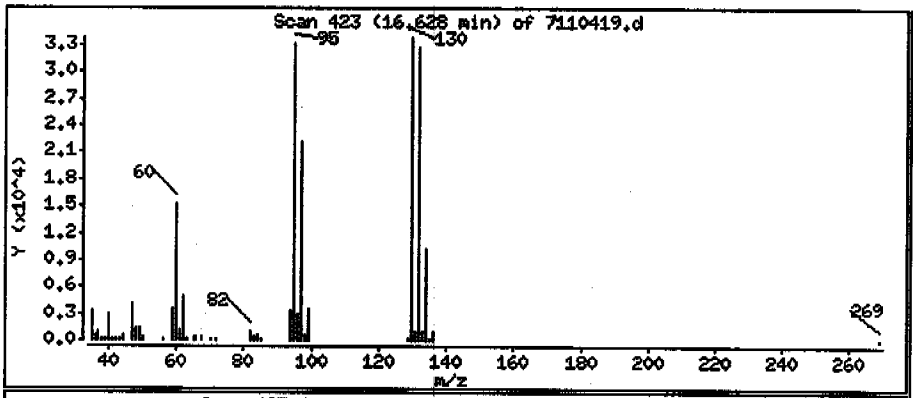
Operator: lo

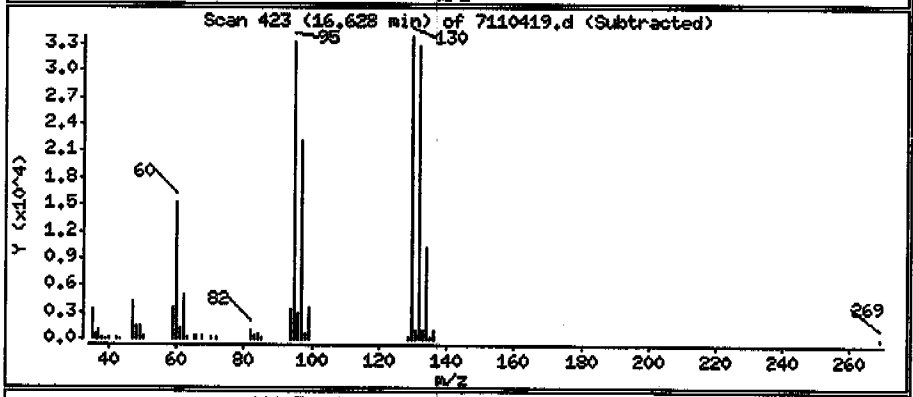
Column phase: RTx-624

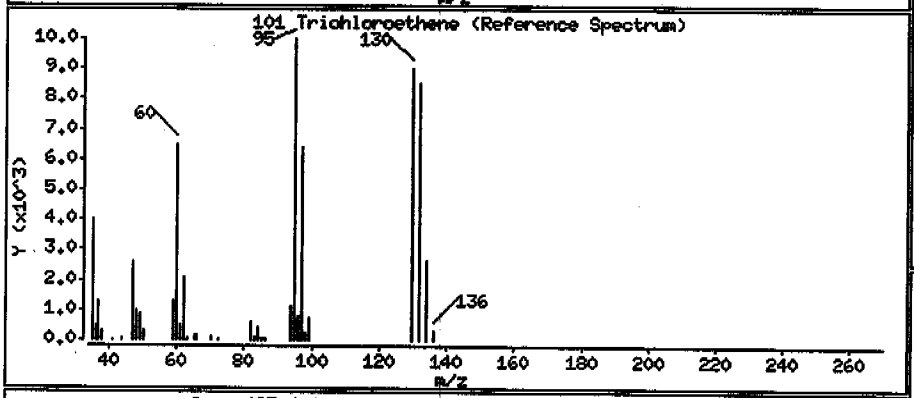
Column diameter: 0.53

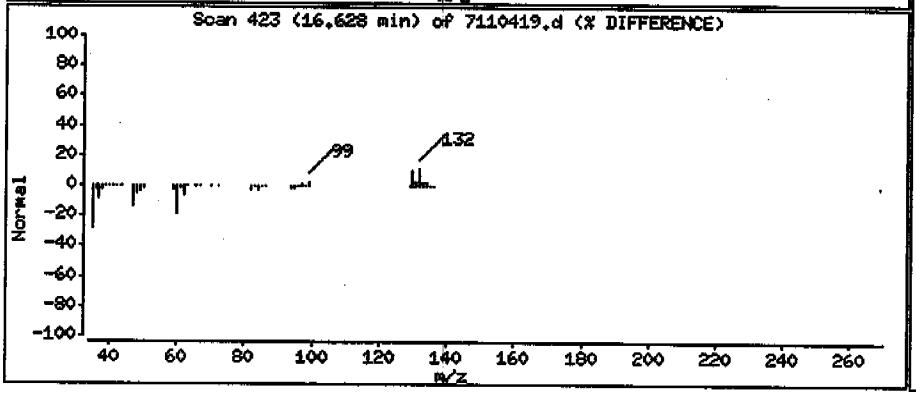
101 Trichloroethene

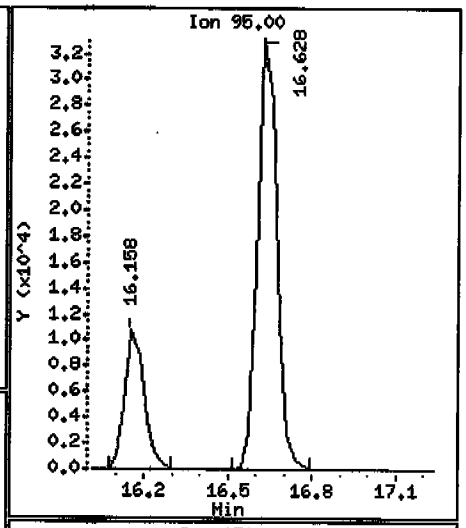
Concentration: 8.215 PPBV

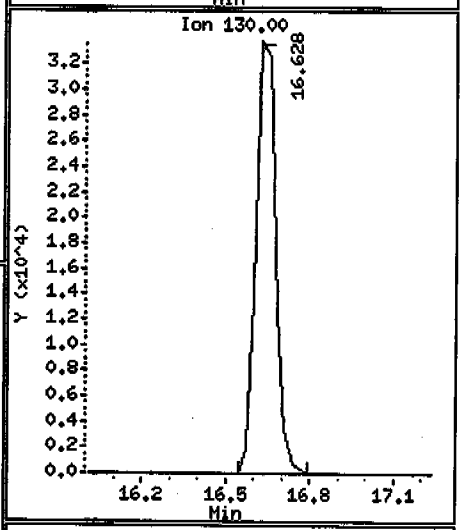


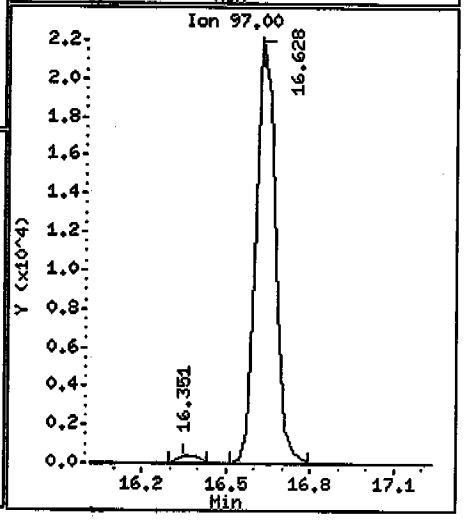












Data File: /chem/msd7.i/7-04nova.b/7110419.d

Date : 05-NOV-2007 08:17

Client ID:

Instrument: msd7.i

Sample Info: 200mL#35797

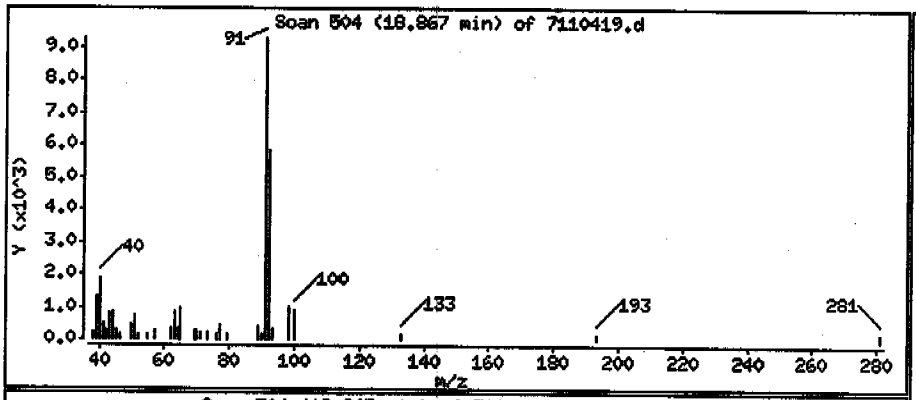
Operator: lo

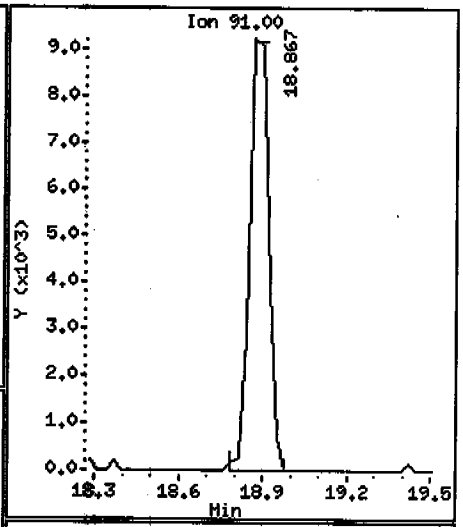
Column phase: RTx-624

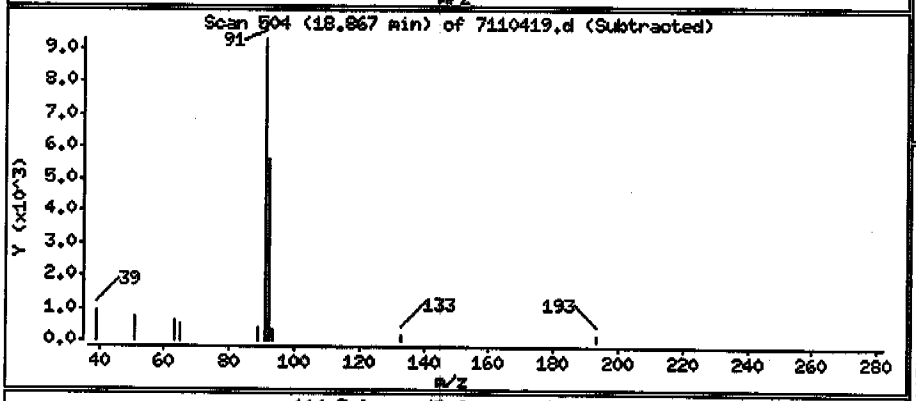
Column diameter: 0.53

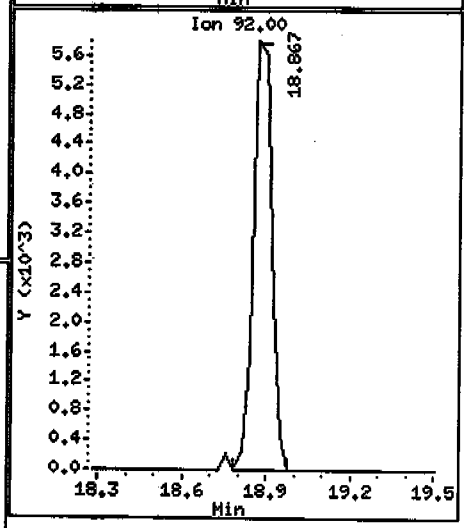
114 Toluene

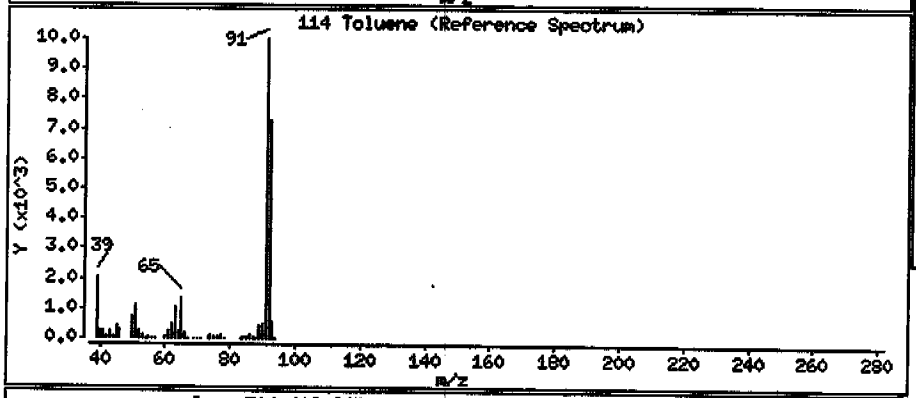
Concentration: 0.9162 PPBV

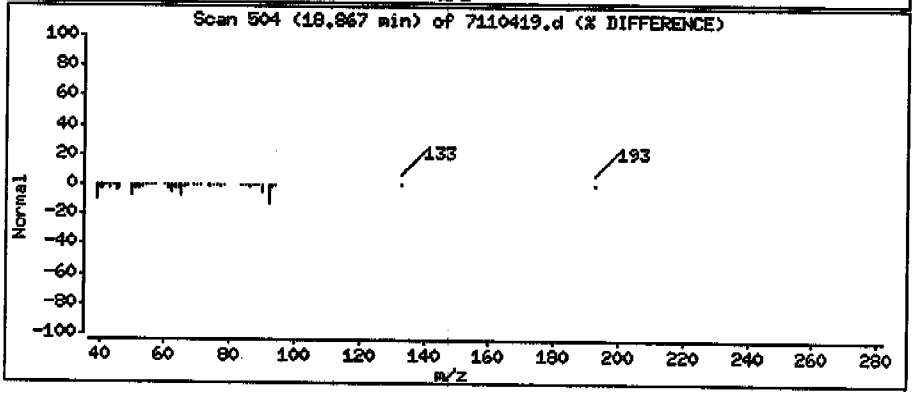












QC Results and Raw Data

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0711008-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0711008-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110413a.d
Lab Smp Id: Lab Blank
Inj Date : 05-NOV-2007 02:13
Operator : ab
Inst ID: msd7.i
Smp Info : 200mL#34190
Misc Info : Humid
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: Los2153.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	505800	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	394352			28.08- 128.08	77.97
14.388	14.388 (1.000)	49	728891			128.80- 228.80	144.11
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1654472	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	252202			0.00- 64.88	15.24
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1183032	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	609285			4.45- 104.45	51.50
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	656718	24.1685	24.168	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	316492			2.91- 102.91	48.19
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1323090	22.5278	22.528	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	141370			0.00- 61.46	10.68

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	909843			19.18- 119.18	68.77
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	732171	26.0085	26.008	80.00- 120.00	100.00
23.319	23.319	(1.092)	95	831125			63.49- 163.49	113.52
23.347	23.347	(1.093)	176	706820			46.77- 146.77	96.54

Data File: /chem/msd7.i/7-04nova.b/7110413a.d
Report Date: 05-Nov-2007 02:47

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110413a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: Humid

Calibration Date: 04-NOV-2007
Calibration Time: 22:27

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	505800	-22.32
97 1,4-Difluorobenze	2188066	1312840	3063292	1654472	-24.39
126 Chlorobenzene-d5	1729248	1037549	2420947	1183032	-31.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: Humid

Client SDG: 7-04nova
Fraction: VOA

Operator: ab
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	24.168	96.67	70-130
$ 113 Toluene-d8	25.000	22.528	90.11	70-130
$ 137 Bromofluorobenzene	25.000	26.008	104.03	70-130

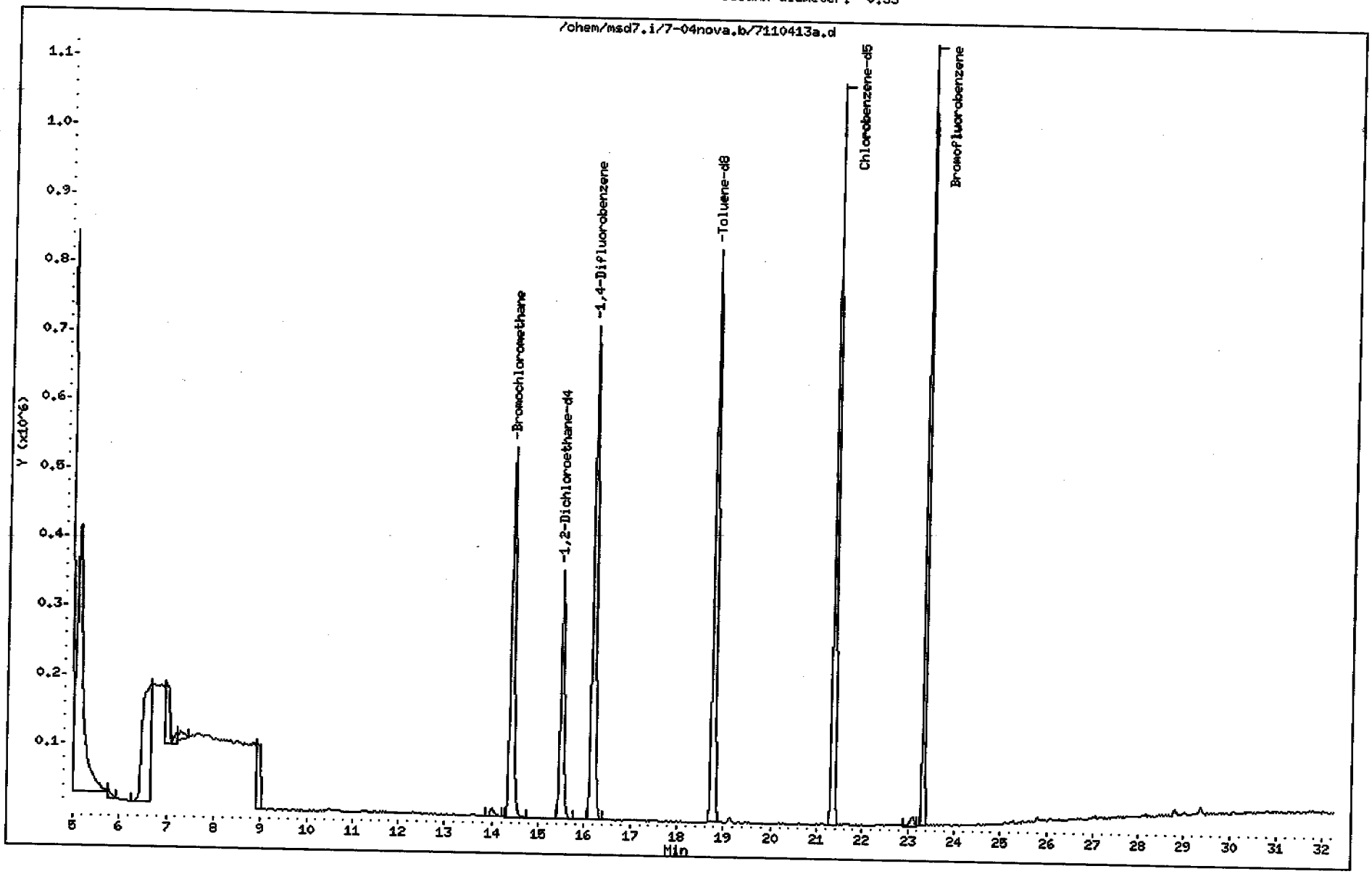
Data File: /chem/msd7.i/7-04nova.b/7110413a.d
Date : 05-NOV-2007 02:13
Client ID:
Sample Info: 200mL#34190

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0195



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0711008

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-07-6810	110		90		114				0
02	MD21-07-6807	97		94		108				0
03	MD21-07-6811	86		91		102				0
04	MD21-07-6809	93		91		108				0
05	MD21-07-6808	89		94		102				0
06	MD21-07-6812	83		92		100				0
07	Lab Blank	97		90		104				0
08	CCV	92		100		105				0
09	LCS	93		100		107				0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

Lab File ID: 7110409.d

Instrument ID: msd7.i

SDG No: 0711008

Date Analyzed: 11/04/2007

Time Analyzed: 10:27 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1729248		21.36		2188066		16.16		651162		14.39	
	UPPER LIMIT	2420947		21.69		3063292		16.49		911627		14.72	
	LOWER LIMIT	1037549		21.03		1312840		15.83		390697		14.06	
	CLIENT SAMPLE NO												
01	MD21-07-6810	1305579		21.36		1817424		16.16		516113		14.42	
02	MD21-07-6807	1415558		21.36		1878976		16.16		550117		14.42	
03	MD21-07-6811	1350084		21.36		1897401		16.19		578639		14.42	
04	MD21-07-6809	1492758		21.36		2082380		16.16		600905		14.42	
05	MD21-07-6808	1715571		21.36		2116809		16.16		627788		14.42	
06	MD21-07-6812	1400838		21.36		1956883		16.16		596553		14.42	
07	Lab Blank	1183032		21.36		1654472		16.16		505800		14.42	
08	CCV	1729248		21.36		2188066		16.16		651162		14.39	
09	LCS	1687430		21.36		2122832		16.16		626813		14.39	
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

0197

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd7.i/7-18oct.b/7101802.d
Level 2: /chem/msd7.i/7-18oct.b/7101803.d
Level 3: /chem/msd7.i/7-22oct.b/7102205.d
Level 4: /chem/msd7.i/7-30oct.b/7103003.d
Level 5: /chem/msd7.i/7-30oct.b/7103004.d
Level 6: /chem/msd7.i/7-18oct.b/7101807.d
Level 7: /chem/msd7.i/7-30oct.b/7103005.d

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 143a	+++++	+++++	0.55395	+++++	0.55199	+++++	0.52936	0.54510	2.507
6 Freon142b	+++++	+++++	2.28105	+++++	2.26472	+++++	2.12470	2.22349	3.865
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Propylene	+++++	+++++	1.12508	1.03756	1.03506	1.07736		
	1.11245						1.07750	3.849
12 Dichlorodifluoromethane/Fr12	+++++	3.99832	4.01542	3.93538	3.87538	3.94362		
	3.93588						3.95067	1.272
13 Freon 134a	+++++	+++++	1.08885	+++++	1.07331	+++++		
	1.03422						1.06546	2.642
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
15 Freon 152a	+++++	+++++	0.79822	+++++	0.77199	+++++		
	0.73740						0.76921	3.966
16 Freon 114	+++++	2.75763	2.94175	2.80659	2.67187	2.54264		
	2.41290						2.68890	7.063
17 Freon 22	+++++	+++++	2.64018	+++++	2.47048	+++++		
	2.34449						2.48505	5.971

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
18 Chloromethane	+++++	+++++	1.35842	1.27523	1.23888	1.27208	1.35173	1.29926	4.075
19 Butane	+++++	+++++	0.27760	0.27318	0.27001	0.28033	0.29063	0.27835	2.849
20 Vinyl Chloride	+++++	1.61123	1.66709	1.62947	1.58710	1.59115	1.64603	1.62201	1.940
21 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 1,3-Butadiene	+++++	0.98714	1.11899	1.17713	1.17364	1.20853	1.30571	1.16186	9.077
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Bromomethane	+++++	1.36911	1.38030	1.38465	1.43147	1.47189	1.57973	1.43619	5.586
26 Methanol	+++++	+++++	+++++	0.49521	0.41205	+++++	0.37348	0.42691	14.573
27 Chloroethane	+++++	0.56164	0.59106	0.70880	0.75786	0.81456	0.88356	0.71958	17.463

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Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
29 Isopentane	+++++	+++++	1.72200	1.68471	1.74289	1.82023		
	1.94043						1.78205	5.692
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	3.30692	3.64793	3.69780	3.75036	3.79137		
	3.91953						3.68565	5.627
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.18670	+++++	2.24831	+++++		
	2.17912						2.20471	1.721
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
37 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
38 Ethanol	+++++	+++++	0.40835	0.46701	0.50651	0.55509	0.57654	0.50270	13.487
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 Freon123a	+++++	+++++	1.12892	+++++	1.34813	+++++	1.26008	1.24571	8.855
41 Freon123	+++++	+++++	2.17978	+++++	2.29407	+++++	2.15449	2.20945	3.366
42 Freon 113	+++++	1.87915	1.96071	2.08299	2.10265	2.12197	2.15175	2.04987	5.188
43 1,1-Dichloroethene	+++++	1.93487	2.07684	2.19744	2.20280	2.28145	2.39408	2.18125	7.326
44 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 Acetone	+++++	+++++	0.57485	0.65835	0.66872	0.70599	0.76315	0.67421	10.242
46 2-Propanol	+++++	+++++	1.73749	2.29338	2.44395	2.63284	2.85245	2.39202	17.623
47 Carbon Disulfide	+++++	3.64316	3.89848	4.16293	4.20624	4.40983	4.64911	4.16162	8.592

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
48 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
51 3-Chloropropene	+++++	+++++	0.47791	0.67053	0.69517	0.71004		
	0.83257						0.67724	18.866
52 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Methylene Chloride	+++++	1.50433	1.50940	1.55545	1.57830	1.66547		
	1.80906						1.60367	7.258
55 Cyclopentene	+++++	+++++	4.55063	+++++	4.84748	+++++		
	4.57554						4.65788	3.535
56 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
57 tert-Butyl-Alcohol	+++++	+++++	2.48873	+++++	2.67379	+++++		
	1.79281						2.31844	20.036

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 MTBE	+++++	2.56761	2.53475	2.73045	2.62429	2.12688	2.03593	2.43665	11.678
61 trans-1,2-Dichloroethene	+++++	1.27767	1.25807	1.53893	1.55545	1.59786	1.66426	1.48204	11.576
62 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 Hexane	+++++	1.69745	1.86588	2.11588	2.20087	2.32069	2.48851	2.11488	13.795
66 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
68 Isopropyl ether	+++++	+++++	4.21268	+++++	4.73884	+++++	4.43254	4.46135	5.923
69 Vinyl Acetate	+++++	+++++	0.22424	0.31548	0.33299	0.35296	0.37207	0.31955	17.946
70 1,1-Dichloroethane	+++++	2.06984	2.31882	2.66506	2.63329	2.70399	2.80833	2.53322	11.066
71 1-Propanol	+++++	+++++	0.22951	+++++	0.30666	+++++	0.30318	0.27978	15.573
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.43943	+++++	4.07078	+++++	3.89822	3.80281	8.581
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.38112	0.37327	0.57250	0.59883	0.64860	0.67445	0.54146	24.420
76 cis-1,2-Dichloroethene	+++++	1.44231	1.58756	1.86427	1.87388	1.90834	1.96251	1.77314	11.735
77 Ethyl Acetate	+++++	+++++	0.39111	+++++	0.44693	+++++	0.43572	0.42459	6.954

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
78 2,2-Dichloropropane	+++++	+++++	2.76326	+++++	3.07482	+++++		
	2.91201						2.91670	5.343
79 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
80 Tetrahydrofuran	+++++	1.02790	1.12367	1.48422	1.53795	1.59990		
	1.69691						1.41176	19.223
82 Chloroform	2.05933	2.30448	2.48203	2.71876	2.69631	2.67566		
	2.68331						2.51713	10.018
83 1,1,1-Trichloroethane	+++++	2.13993	2.49116	2.73073	2.66320	2.61212		
	2.57161						2.53479	8.276
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
85 Cyclohexane	+++++	1.13455	1.20463	1.54480	1.56422	1.61154		
	1.65129						1.45184	15.351
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Carbon Tetrachloride	+++++	1.91512	2.28619	2.65822	2.53314	2.44673		
	2.41712						2.37608	10.837
88 1,1-Dichloropropene	+++++	+++++	0.32293	+++++	0.36098	+++++		
	0.32719						0.33704	6.186

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 2,2,4-Trimethylpentane	+++++	3.81973	4.40383	5.32986	5.44906	5.60503	5.84105	5.07476	15.513
91 Benzene	0.86624	0.88889	0.91154	1.08544	1.09104	1.07370	1.03741	0.99332	10.069
92 tert-amyl-Methyl Ether	+++++	+++++	2.47283	+++++	2.98882	+++++	2.87645	2.77937	9.763
93 1,2-Dichloroethane	+++++	0.47713	0.50816	0.58724	0.55560	0.53375	0.50473	0.52777	7.497
94 Heptane	+++++	0.21787	0.25494	0.33625	0.34694	0.34672	0.33023	0.30549	18.053
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Heptanone	+++++	+++++	1.17667	+++++	1.87950	+++++	1.94397	1.66671	25.536
98 1-Butanol	+++++	+++++	0.16640	+++++	0.27504	+++++	0.29172	0.24439	27.845
99 Isobutanol	+++++	+++++	0.01857	+++++	0.03090	+++++	0.03265	0.02737	28.046
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
101 Trichloroethene	+++++	0.36757	0.41682	0.48608	0.47584	0.46333		
	0.43779						0.44124	9.999
102 Methyl Cyclohexane	+++++	1.39533	1.53464	1.88425	1.91342	1.96394		
	2.03008						1.78694	14.440
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
104 1,2-Dichloropropane	+++++	0.31221	0.33815	0.41169	0.41161	0.41161		
	0.40196						0.38121	11.628
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
106 1,4-Dioxane	+++++	+++++	0.17948	0.26051	0.26452	0.26965		
	0.26552						0.24794	15.489
107 Bromodichloromethane	+++++	0.61038	0.69769	0.87294	0.84576	0.81437		
	0.79521						0.76606	12.941
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
110 cis-1,3-Dichloropropene	+++++	0.38818	0.43431	0.60245	0.61448	0.61397		
	0.57859						0.53866	18.678

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
111 4-Methyl-2-pentanone	+++++	0.17517	0.22135	0.33428	0.34745	0.35414	0.35115	0.29726	26.358
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Toluene	+++++	0.88659	0.96936	1.20407	1.18877	1.16407	1.11507	1.08799	11.969
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 trans-1,3-Dichloropropene	+++++	0.53047	0.59368	0.77535	0.80087	0.79044	0.76929	0.71002	16.458
117 1,1,2-Trichloroethane	+++++	0.41044	0.46882	0.56509	0.56186	0.55694	0.54374	0.51782	12.308
118 1,3-Dichloropropane	+++++	+++++	0.95658	+++++	1.08832	+++++	0.96579	1.00356	7.328
119 Butyl Acetate	+++++	+++++	0.28247	+++++	0.41163	+++++	0.39768	0.36393	19.478
120 Tetrachloroethene	+++++	0.58842	0.66370	0.75326	0.72549	0.67756	0.62110	0.67159	9.213
121 2-Hexanone	+++++	+++++	0.36161	0.55434	0.60179	0.62391	0.63307	0.55495	20.234

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
122 Dibromochloromethane	+++++	0.69168	0.84946	1.07299	1.03098	0.96547	0.89431	0.91748	15.065
123 1,2-Dibromoethane	+++++	0.62218	0.76958	0.96047	0.95014	0.91717	0.87375	0.84888	15.420
124 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 1,1,1,2-Tetrachloroethane	+++++	+++++	0.89946	+++++	0.96238	+++++	0.81264	0.89149	8.434
127 Chlorobenzene	+++++	0.98017	1.09978	1.22139	1.20798	1.16672	1.10992	1.13099	7.863
128 Ethyl Benzene	+++++	0.45805	0.54406	0.64040	0.62635	0.60750	0.58753	0.57731	11.679
129 m,p-Xylene	+++++	0.59617	0.64876	0.79109	0.79390	0.76602	0.73972	0.72261	11.309
130 o-Xylene	+++++	0.50098	0.57853	0.70214	0.68839	0.66302	0.62421	0.62621	12.150
131 Styrene	0.70099	0.69787	0.85261	1.17931	1.15472	1.12570	1.06862	0.96855	21.987
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
133 Bromoform	+++++	0.63213	0.75943	0.95882	0.91283	0.83481		
	0.73582						0.80564	14.990
134 Cumene	1.37424	1.32202	1.52398	1.81837	1.75252	1.68271		
	1.59504						1.58127	11.814
135 Cyclohexanone	+++++	+++++	0.42554	+++++	0.51533	+++++		
	0.55003						0.49697	12.926
136 Bromobenzene	+++++	+++++	1.09324	+++++	1.15192	+++++		
	0.89292						1.04603	12.983
138 1,2,3-Trichloropropane	+++++	+++++	0.49256	+++++	0.53270	+++++		
	0.44323						0.48949	9.155
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 1,1,2,2-Tetrachloroethane	+++++	0.90901	1.02955	1.12854	1.10800	1.08214		
	1.01864						1.04598	7.618
141 2-Chlorotoluene	+++++	+++++	0.77382	+++++	0.83371	+++++		
	0.71021						0.77258	7.994
142 Propylbenzene	+++++	1.80614	2.07039	2.37103	2.29000	2.22770		
	1.95985						2.12085	10.116
143 4-Chlorotoluene	+++++	+++++	0.80068	+++++	0.91055	+++++		
	0.76155						0.82426	9.372

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Compound	0.30000 Level 1 / 200.000 Level 7	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
144 beta-Pinene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++ / 1.88068	1.44347	1.70757	2.13595	2.07919	1.99040	1.87287	13.869
146 Diisobutyl Ketone	+++++ / 1.11764	+++++	1.03326	+++++	1.20971	+++++	1.12021	7.878
147 1,3,5-Trimethylbenzene	+++++ / 1.32949	1.41316	1.61240	1.56055	1.49171	1.41942	1.47112	7.095
148 tert-Butylbenzene	+++++ / 1.84295	+++++	2.45687	+++++	2.30546	+++++	2.20176	14.526
149 sec-Butylbenzene	+++++ / 2.43915	+++++	3.43467	+++++	3.26882	+++++	3.04755	17.502
150 1,2,4-Trimethylbenzene	+++++ / 1.31045	1.05335	1.33499	1.48885	1.43630	1.39785	1.33697	11.480
151 bis(2-chloroethyl)ether	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 D-Limonene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 p-Cymene	+++++ / 2.06279	+++++	2.65193	+++++	2.61222	+++++	2.44232	13.482

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
154 1,2,3-Trimethylbenzene	+++++	+++++	0.97569	+++++	1.04736	+++++		
	0.88396						0.96900	8.453
155 1,3-Dichlorobenzene	+++++	0.93407	1.06260	1.12258	1.08075	1.04027		
	0.96733						1.03460	6.878
156 1,4-Dichlorobenzene	+++++	1.02926	1.10239	1.15450	1.11647	1.07554		
	0.99126						1.07824	5.539
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
158 Butylbenzene	+++++	+++++	0.66658	+++++	0.69760	+++++		
	0.60595						0.65671	7.099
159 alpha-Chlorotoluene	+++++	1.02301	1.25741	1.52918	1.58500	1.63564		
	1.55835						1.43143	16.768
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.94286	1.02179	0.99757	0.96941	0.96283		
	0.88582						0.96328	4.881
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	0.76234	+++++	0.80959	+++++		
	0.79238						0.78810	3.035
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	200.000 Level 7								
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
165 1,2,4-Trichlorobenzene	+++++	+++++	0.51018	0.27800	0.34560	0.40681			
	0.42931						0.39398	22.239	
166 Hexachlorobutadiene	+++++	+++++	0.50925	0.26779	0.28274	0.29299			
	0.28486						0.32753	31.141	<-
167 Naphthalene	+++++	+++++	0.92717	0.46092	0.62590	0.80276			
	0.87395						0.73814	26.042	
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
201 Pentachloroethane	+++++	+++++	0.71063	+++++	0.70263	+++++			
	0.56154						0.65826	12.740	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.32140	1.33936	1.38524	1.34768	1.31998	1.31873	1.36890	1.34304	1.941
$ 113 Toluene-d8	0.87123	0.85458	0.85764	0.89757	0.90205	0.91537	0.91380	0.88746	2.917
$ 137 Bromofluorobenzene	0.59803	0.60119	0.59463	0.60774	0.59840	0.58089	0.58339	0.59489	1.617

Calibration History

Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Start Cal Date: 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.30000		
18-OCT-2007 12:17	AFCEElow	/chem/msd7.i/7-18oct.b/7101802.d
Cal Level: 2 , Cal Amount: 0.50000		
18-OCT-2007 12:56	AT04low+ENSR	/chem/msd7.i/7-18oct.b/7101803.d
Cal Level: 3 , Cal Amount: 2.00000		
22-OCT-2007 10:55	sp16b	/chem/msd7.i/7-22oct.b/7102205.d
19-OCT-2007 10:22	sp22a	/chem/msd7.i/7-19oct.b/7101903.d
18-OCT-2007 14:09	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101804.d
Cal Level: 4 , Cal Amount: 25.00000		
30-OCT-2007 09:51	sp1c	/chem/msd7.i/7-30oct.b/7103003.d
18-OCT-2007 14:47	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101805.d
Cal Level: 5 , Cal Amount: 50.00000		
30-OCT-2007 10:29	sp1c	/chem/msd7.i/7-30oct.b/7103004.d
22-OCT-2007 11:44	sp16b	/chem/msd7.i/7-22oct.b/7102206.d
19-OCT-2007 11:00	sp22a	/chem/msd7.i/7-19oct.b/7101904.d
18-OCT-2007 15:26	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101806.d
Cal Level: 6 , Cal Amount: 100.00000		
18-OCT-2007 16:15	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101807.d
Cal Level: 7 , Cal Amount: 200.00000		
30-OCT-2007 11:10	sp1c	/chem/msd7.i/7-30oct.b/7103005.d

22-OCT-2007 12:34	sp16b	/chem/msd7.i/7-22oct.b/7102207.d
19-OCT-2007 11:41	sp22a	/chem/msd7.i/7-19oct.b/7101905.d
18-OCT-2007 17:39	AT04md1+ENSR	/chem/msd7.i/7-18oct.b/7101808.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
30-OCT-2007 10:29	sp22aCCV	/chem/msd7.i/7-30oct.b/7103004a.d

Initial Calibration Narrative

A seven point and four point initial calibration was analyzed on MSD-7 on 10-18-2007.:

The following compounds used 0.2 ppbv as the lowest calibration concentration:
Chloroform, Benzene, Cumene and Styrene.

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.61
75	30.0 – 60.0% of mass 95	39.71
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.78
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	81.70
175	5.0 – 9.0% of mass 174	(6.88)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.40)[1]
~~177~~	~~5.0 – 9.0% of mass 176~~	(6.69)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/18/07

BFB Injection Time: 1150

BFB File ID: 7101801

Tekmar Purge Flow: 17.9 mL/min

Vacuum: 2.8×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	683549	
1,4-DFB	2204815	
CB-d5	1812979	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1072385 / 1112403 x 100 =

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 902272\ )}{(\ 683549\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.571$

File ID:	7101806
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.571

	Q	File ID	Sample / Client Name	Can #	Pressure	Amt. Loaded	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	7101801	BFB Tune Check	1467-64	50 psig	2uL	1.00	10/18/07	1150	CB	
2	✓	02	ICAL Level 1	1576-50	200ppbv	0.2mL			1217	CB	
3	✓	03	2		200ppbv	0.5mL			1256	CB	
4	✓	04	3		200ppbv	2mL			1409	CB	
5	✓	05	4		200ppbv	25mL			1447	CB	
6	✓	06	5		200ppbv	50mL			1526	CB	CCV
7	✓	07	6		200ppbv	100mL			1615	DW/CB	
8	✓	08	7		200ppbv	200mL			1739	DW/CB	1 ust Hexach for int standards
9	X	09	System Blank	3419					1847	CB	

Laura Dierking
Signature

10/22/07
Date

✓	7101810	ICAL LCS-1 (200ppb)	1443-302	50ppb	50L/L	1.00	10/18/07	1929	dlw/CB	ϕ out ICALCS	0220
	↓ 11	System Blank	34490	Humid	200mL			0828	CB		

FR 10/22/07

Comments: Flow controller SN # AA[illegible]123141 Nominal: 23.6 mL/min

NIST Flowmeter # 200-7744 Actual: 25.0 mL/min CB 10/22/07

Exp 8/27/08

Signature

10/18/07
Date

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.32
75	30.0 – 60.0% of mass 95	40.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.83
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	81.69
175	5.0 – 9.0% of mass 174	(7.11)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.18)[1]
177	5.0 – 9.0% of mass 176	(6.67)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/19/07

BFB Injection Time: 0909

BFB File ID: 7101901

Tekmar Purge Flow: 17.8 mL/min

Vacuum: 3.0×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	709290	
1,4-DFB	2353563	
CB-d5	1919987	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1015727 / 1045184 x 100 = 97.18%

NOAH Cart #: NA **File #:** NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 919940\ )}{(\ 709290\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.143$

Reported Result 24.143

File ID:	7101902
Compound:	1,2-DCA-d4
Initials:	CB

		File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	7101901	BFB Tune Check	1467-64	50 psig	2mL	1.00	10/19/07	0909	CB	
2	✓	02	CCV-1 (200ppbv)	1576-50	50 psig	50mL			0929	CB	
3	✓	03	ICAL Level 3	1487-400	760 mm Hg - 3 ppbv	2mL			1022	CB	Sp 22.9 Lt 40.18
4	✓	04	5		200 ppbv - 50 mbar	50mL			1100	CB	CCV
5	✓	05	7		200 psig	200mL			1141	CB	
6	✓	06	LCS-1 (200 ppbv)	1443-302	50 psig	50mL			1226	CB	~~TEAL LCS~~ 10/22/07
7	✓	07	Gas Std (100 ppmv)	1576-14	2500 psig	5mL			1310	CB	
8	✓	08	Lab Blank	12009	Humid	200mL			1400	CB	
9		09	Lab Blank								Reviewed not run

Signature

10/19/07
Date

0221

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	17.85
75	30.0 – 60.0% of mass 95	39.75
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.75
173	Less than 2.0% of mass 174	(0.53)[1]
174	Greater than 50.0% of mass 95	86.46
175	5.0 – 9.0% of mass 174	(6.92)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.63)[1]
177	5.0 – 9.0% of mass 176	(6.48)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/22/07
BFB Injection Time: 0822
BFB File ID: 7102201
Tekmar Purge Flow: 17.9 mL/min
Vacuum: 2.8 x 10^{-5} torr

IS/S Std.#:	1443-389	Exp. Date: 12/26/07
BCM	691202	
1,4-DFB	2257140	
CB-d5	1886010	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1142984 / 1182801 x 100 = 96.63%

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF}$ = $\frac{(\ 892172\ )}{(\ 691202\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )}$ = 24.027

File ID:	7102202
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.027

		File ID	Sample / Client Name	Cal #	Pressure	Amt. Purged	DF	Date Analyzed	Time Analyzed	Reviewed by	Comments
1	✓	7102201	BFB Tune Check	1467-64	50 psig	1mL	1.00	10/22/07	0822	CB	
2	✓	02	CCV-1 (200ppbv)	1576-50	50ppbv	50mL			0843	CB	
3	✓	03	LCS-1 (200ppbv)	1443-302	50ppbv	50mL			0925	CB	
4	✓	04	CCVsp (200ppbv)	1487-400	50ppbv	50mL			1007	CB	
5	✓	05	ICAL Level 3	1487-370	200ppbv-2mL	2mL			1055	CB	spl6b T1490186
6	✓	06	↓ 5	↓	200ppbv-50mL	50mL			1144	CB	CCV
7	✓	07	↓ 7	↓	200ppbv	200mL			1234	CB	
8	✗	08	Lab Blank	34190	Humid	200mL			1317	CB	
9	✓	09	Lab Blank	34190	Humid	200mL	↓	↓	1422	CB	

5/10/22/07

Signature

10/22/07
Date

0222

@ Air Toxics Ltd.

MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.22
75	30.0 – 60.0% of mass 95	39.23
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.64
173	Less than 2.0% of mass 174	(0.52)[1]
174	Greater than 50.0% of mass 95	86.75
175	5.0 – 9.0% of mass 174	(7.12)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.72)[1]
177	5.0 – 9.0% of mass 176	(6.45)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/30/07
BFB Injection Time: 0826
BFB File ID: 7103001
Tekmar Purge Flow: 17.7 mL/min
Vacuum: 2.9×10^{-5} torr

0223

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	537758	
1,4-DFB	1771565	
CB-d5	1414884	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 835758 / 865253 x 100 = 97.72%

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(\ 692227\ )}{(\ 537758\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 23.961$$

File ID:	7103006
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 23.961

		File ID	Sample / Client Name	Cal #	Pre-conc	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init	Comments
1	✓	7103001	BFB Tune Check	1467-64	50ng	2mL	1.00	10/30/07	0826	CB	
2	✓	02	System Blank	34190	Humid	200mL			0858	CB	
3	✓	03	ICAL Level 4	1487-400	200/1200ppbv → 8/48ppbv	8mL			0951	CB	spic tlkg 018c
4	✓	04	5		200/1200ppbv 50/300ppbv	50mL			1029	CB	CCV
5	✓	05	7		200/1200ppbv	200mL			1110	CB	
6	✓	06	CCV-1 (100ppbv)	1576-50A	50ppbv	100mL			1215	CB	
7	✓	07	LCS-1 (200ppbv)	1443-302	50ppbv	50mL			1253	CB	
8	✓	08	Lab Blank	34190	Humid	200mL			1336	CB	
9											CB 10/30/07

Signature

10/30/07
Date

Air Toxics Ltd.

Modified EPA Methods TO-14A/TO-15

Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101810.d
Lab Smp Id: lcs-1 Client Smp ID: lcs-1
Inj Date : 18-OCT-2007 19:29
Operator : dm Inst ID: msd7.i
Smp Info : 50mL #1443-302
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza Quant Type: ISTD
Cal Date : 18-OCT-2007 17:39 Cal File: 7101808.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	693629	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	530078			26.95- 126.95	76.42
14.402	14.402 (1.000)	49	1393802			141.62- 241.62	200.94
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2281320	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	352159			0.00- 65.69	15.44
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1855833	25.0000		80.00- 120.00	100.00
21.342	21.370 (1.000)	82	1005254			5.32- 105.32	54.17
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	876557	23.5236	23.524	80.00- 120.00	100.00
15.481	15.508 (1.075)	67	486395			2.91- 102.91	55.49
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2088005	25.7831	25.783	80.00- 120.00	100.00
18.771	18.771 (1.161)	70	225307			0.00- 61.46	10.79

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1458124			19.18- 119.18	69.83
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1059533	23.9925	23.992	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1390500			76.80- 176.80	131.24
23.333	23.333 (1.093)	176	1023241			46.06- 146.06	96.57
11 Propylene					CAS #: 115-07-1		
5.638	5.610 (0.391)	41	1534698	51.3354	51.335	80.00- 120.00	100.00
5.638	5.610 (0.391)	42	1071619			21.19- 121.19	69.83
5.638	5.610 (0.391)	39	1149702			24.83- 124.83	74.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.748 (0.401)	85	5279130	48.1620	48.162	80.00- 120.00	100.00
5.776	5.748 (0.401)	87	1711789			0.00- 83.07	32.43
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	3664358	49.1175	49.117	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	1157150			0.00- 81.81	31.58
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	1695497	47.0340	47.034	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	575964			0.00- 84.80	33.97
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	2274469	50.5403	50.540	80.00- 120.00	100.00
6.882	6.882 (0.478)	64	710275			0.00- 83.25	31.23
22 1,3-Butadiene					CAS #: 106-99-0		
6.965	6.937 (0.484)	54	1686114	52.3055	52.306	80.00- 120.00	100.00
6.965	6.937 (0.484)	39	1613662			55.97- 155.97	95.70
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	1971163	49.4678	49.468	80.00- 120.00	100.00
8.043	8.043 (0.558)	96	1847772			43.77- 143.77	93.74
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	1113775	55.7868	55.787	80.00- 120.00	100.00
8.375	8.375 (0.581)	49	303751			0.00- 79.34	27.27
8.375	8.375 (0.581)	66	350600			0.00- 83.15	31.48
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.983	8.956 (0.624)	101	5275187	51.5865	51.586	80.00- 120.00	100.00
8.983	8.956 (0.624)	103	3407790			14.33- 114.33	64.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	850282	60.9628	60.963	80.00- 120.00	100.00
9.453	9.453 (0.656)	43	163721			0.00- 72.83	19.25
9.453	9.453 (0.656)	46	316936			0.00- 88.20	37.27
42 Freon 113					CAS #: 76-13-1		
10.227	10.227 (0.710)	151	3359898	59.0761	59.076	80.00- 120.00	100.00
10.227	10.227 (0.710)	153	2146359			13.49- 113.49	63.88
10.200	10.227 (0.708)	101	4204443			73.17- 173.17	125.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.338	10.338 (0.718)	61	3633905	60.0456	60.046	80.00- 120.00	100.00
10.338	10.338 (0.718)	96	2250431			11.42- 111.42	61.93
10.338	10.338 (0.718)	98	1429998			0.00- 89.70	39.35
45 Acetone					CAS #: 67-64-1		
10.504	10.504 (0.729)	58	1068582	57.1246	57.125	80.00- 120.00	100.00
10.504	10.504 (0.729)	43	3184271			247.10- 347.10	297.99
46 2-Propanol					CAS #: 67-63-0		
10.670	10.697 (0.741)	45	3852062	58.0418	58.042	80.00- 120.00	100.00
10.670	10.697 (0.741)	43	890934			0.00- 75.54	23.13
10.697	10.697 (0.743)	59	147038			0.00- 53.72	3.82
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	6273161	54.3296	54.330	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.167	11.168 (0.775)	76	1091929	58.1115	58.111	80.00- 120.00	100.00
11.167	11.168 (0.775)	41	2818682			224.96- 324.96	258.14
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	2611233	58.6871	58.687	80.00- 120.00	100.00
11.472	11.472 (0.796)	84	1889884			23.49- 123.49	72.38
11.472	11.472 (0.796)	51	797893			0.00- 80.85	30.56
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	3974575	58.7909	58.791	80.00- 120.00	100.00
11.831	11.831 (0.821)	57	914186			0.00- 73.11	23.00
11.831	11.831 (0.821)	41	882141			0.00- 76.16	22.19
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	2352862	57.2201	57.220	80.00- 120.00	100.00
11.942	11.942 (0.829)	61	3353273			93.77- 193.77	142.52
11.942	11.942 (0.829)	98	1487360			11.77- 111.77	63.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	3482505	59.3497	59.350	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	2243596			17.84- 117.84	64.42
12.301	12.301 (0.854)	86	532459			0.00- 65.07	15.29
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	519165	58.5571	58.557	80.00- 120.00	100.00
12.799	12.799 (0.889)	43	6034912			1150.46-1250.46	1162.43
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	4119087	58.6057	58.606	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	1300555			0.00- 81.66	31.57
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	943974	62.8355	62.835	80.00- 120.00	100.00
13.877	13.905 (0.964)	43	4198247			412.95- 512.95	444.74
13.877	13.905 (0.964)	57	321401			0.00- 86.57	34.05
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	2818744	57.2959	57.296	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	2119143			24.70- 124.70	75.18
13.932	13.932 (0.967)	98	1360701			0.00- 97.31	48.27
80 Tetrahydrofuran					CAS #: 109-99-9		
14.402	14.402 (1.000)	42	2315081	59.1042	59.104	80.00- 120.00	100.00
14.402	14.402 (1.000)	71	837123			0.00- 85.86	36.16
14.402	14.402 (1.000)	72	904656			0.00- 87.82	39.08
82 Chloroform					CAS #: 67-66-3		
14.485	14.485 (1.006)	83	3930935	56.2864	56.286	80.00- 120.00	100.00
14.485	14.485 (1.006)	85	2555017			15.30- 115.30	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	3724675	52.9613	52.961	80.00- 120.00	100.00
14.845	14.845 (1.031)	99	2372213			14.42- 114.42	63.69
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	2370220	58.8413	58.841	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	3004824			77.14- 177.14	126.77
14.845	14.845 (1.031)	41	1640647			22.96- 122.96	69.22
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	3436673	52.1301	52.130	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	3538970			54.22- 154.22	102.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.425	15.426 (1.071)	57	8189957	58.1672	58.167	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.425	15.426 (1.071)	56	2800725			0.00- 84.62	34.20
15.425	15.426 (1.071)	41	2129961			0.00- 79.27	26.01
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	5250569	57.9255	57.926	80.00- 120.00	100.00
15.508	15.508 (0.959)	77	1159247			0.00- 71.87	22.08
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	2535064	52.6380	52.638	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	812550			0.00- 82.89	32.05
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	1662367	59.6323	59.632	80.00- 120.00	100.00
15.730	15.730 (0.973)	43	3281313			158.53- 258.53	197.39
15.730	15.730 (0.973)	57	1733443			59.34- 159.34	104.28
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	2236263	55.5396	55.540	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	2188821			49.05- 149.05	97.88
16.642	16.642 (1.029)	97	1443160			14.93- 114.93	64.53
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	1961854	56.3976	56.398	80.00- 120.00	100.00
17.112	17.112 (1.058)	62	1436905			23.52- 123.52	73.24
17.112	17.112 (1.058)	41	1184177			12.01- 112.01	60.36
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	1295263	57.2493	57.249	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	909525			21.50- 121.50	70.22
17.250	17.250 (1.067)	57	298072			0.00- 74.60	23.01
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	3863276	55.2648	55.265	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	2471704			14.37- 114.37	63.98
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	2863012	58.2452	58.245	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	910017			0.00- 81.97	31.79
18.329	18.329 (1.133)	39	1608662			6.88- 106.88	56.19
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	1713423	63.1663	63.166	80.00- 120.00	100.00
18.522	18.522 (1.145)	43	4340769			222.97- 322.97	253.34
18.522	18.522 (1.145)	85	654176			0.00- 90.48	38.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	5892033	59.3464	59.346	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	3757464			13.04- 113.04	63.77
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	2965147	56.2573	56.257	80.00- 120.00	100.00
19.324	19.324 (0.905)	77	951982			0.00- 81.65	32.11
19.296	19.324 (0.904)	39	1582175			2.52- 102.52	53.36
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	2167076	56.3767	56.377	80.00- 120.00	100.00
19.656	19.656 (0.921)	99	1363207			13.08- 113.08	62.91
19.656	19.656 (0.921)	83	1839848			35.32- 135.32	84.90
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	2735490	54.8698	54.870	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	1961918			22.39- 122.39	71.72
19.822	19.822 (0.929)	131	1871157			19.80- 119.80	68.40
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	2350277	57.0518	57.052	80.00- 120.00	100.00
19.960	19.960 (0.935)	43	4343393			138.63- 238.63	184.80
19.960	19.960 (0.935)	100	396598			0.00- 67.05	16.87
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	3740615	54.9220	54.922	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	2884723			27.62- 127.62	77.12
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	3462202	54.9423	54.942	80.00- 120.00	100.00
20.624	20.624 (0.966)	109	3257401			44.67- 144.67	94.08
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	4557104	54.2787	54.279	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	1454447			0.00- 82.43	31.92
21.398	21.398 (1.003)	77	2729875			10.75- 110.75	59.90
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	2354756	54.9458	54.946	80.00- 120.00	100.00
21.481	21.481 (1.006)	91	7312230			261.69- 361.69	310.53
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	2946846	54.9356	54.936	80.00- 120.00	100.00
21.674	21.674 (1.016)	91	5783687			145.05- 245.05	196.27
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	2582216	55.5485	55.548	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	5281441			154.65- 254.65	204.53
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	4275480	59.4656	59.466	80.00- 120.00	100.00
22.421	22.421	(1.051)	78	2112552			1.69- 101.69	49.41
133 Bromoform						CAS #: 75-25-2		
22.836	22.836	(1.070)	173	3258113	54.4786	54.478	80.00- 120.00	100.00
22.836	22.836	(1.070)	171	1681615			1.22- 101.22	51.61
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	6690351	56.9959	56.996	80.00- 120.00	100.00
22.974	22.974	(1.076)	120	1839176			0.00- 78.08	27.49
22.946	22.974	(1.075)	51	710641			0.00- 61.43	10.62
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	4104155	52.8570	52.857	80.00- 120.00	100.00
23.527	23.527	(1.102)	85	2636394			14.35- 114.35	64.24
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	8737607	55.4988	55.499	80.00- 120.00	100.00
23.637	23.637	(1.108)	120	1980514			0.00- 72.94	22.67
23.637	23.637	(1.108)	105	321331			0.00- 54.03	3.68
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	7699834	55.3826	55.383	80.00- 120.00	100.00
23.831	23.831	(1.117)	120	2210219			0.00- 78.42	28.70
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	5550045	50.8217	50.822	80.00- 120.00	100.00
23.914	23.914	(1.120)	120	3171171			3.80- 103.80	57.14
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	5276389	53.1640	53.164	80.00- 120.00	100.00
24.550	24.550	(1.150)	120	2593089			0.00- 98.95	49.15
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.130	25.130	(1.177)	146	3931611	51.1917	51.192	80.00- 120.00	100.00
25.130	25.130	(1.177)	148	2506642			14.48- 114.48	63.76
25.130	25.130	(1.177)	111	1529949			0.00- 89.68	38.91
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	3971732	49.6212	49.621	80.00- 120.00	100.00
25.269	25.269	(1.184)	148	2535255			13.81- 113.81	63.83
25.269	25.269	(1.184)	111	1499689			0.00- 87.35	37.76

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	5941365	55.9136	55.914	80.00- 120.00	100.00
25.490	25.490 (1.194)	126	1232677			0.00- 71.29	20.75
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	3481887	48.6925	48.692	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	2225326			14.30- 114.30	63.91
25.905	25.932 (1.214)	111	1403109			0.00- 90.50	40.30
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	1206637	41.2578	41.258	80.00- 120.00	100.00
28.808	28.808 (1.350)	182	1149274			45.65- 145.65	95.25
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	972258	39.9886	39.989	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	608395			12.64- 112.64	62.58
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	2583203	52.2457	52.246	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	1731177			16.48- 116.48	67.02
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	408645	52.9140	52.914	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	3169804			757.70- 857.70	775.69
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	2859963	57.6850	57.685	80.00- 120.00	100.00
16.919	16.919 (1.175)	98	1333582			0.00- 96.13	46.63
16.919	16.919 (1.175)	55	2537608			38.51- 138.51	88.73
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.377)	128	2149760	39.2330	39.233	80.00- 120.00	100.00
29.388	29.388 (1.377)	127	251185			0.00- 62.50	11.68

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101810.d
Lab Smp Id: lcs-1
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: lcs-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	693629	1.47
97 1,4-Difluorobenze	2204815	1322889	3086741	2281320	3.47
126 Chlorobenzene-d5	1812979	1087787	2538171	1855833	2.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: lcs-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv-50ppbv

Client SDG: 7-18oct
Fraction: VOA
Client Smp ID: lcs-1
Operator: dm
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	48.162	96.32	70-130
16 Freon 114	50.000	49.117	98.23	70-130
18 Chloromethane	50.000	47.034	94.07	70-130
20 Vinyl Chloride	50.000	50.540	101.08	70-130
22 1,3-Butadiene	50.000	52.306	104.61	60-140
25 Bromomethane	50.000	49.468	98.94	70-130
27 Chloroethane	50.000	55.787	111.57	70-130
31 Trichlorofluoromet	50.000	51.586	103.17	70-130
38 Ethanol	50.000	60.963	121.93	60-140
42 Freon 113	50.000	59.076	118.15	70-130
43 1,1-Dichloroethene	50.000	60.046	120.09	70-130
45 Acetone	50.000	57.125	114.25	60-140
47 Carbon Disulfide	50.000	54.330	108.66	60-140
46 2-Propanol	50.000	58.042	116.08	60-140
54 Methylene Chloride	50.000	58.687	117.37	70-130
60 MTBE	50.000	58.791	117.58	60-140
61 trans-1,2-Dichloro	50.000	57.220	114.44	60-140
65 Hexane	50.000	59.350	118.70	60-140
69 Vinyl Acetate	50.000	58.557	117.11	60-140
70 1,1-Dichloroethane	50.000	58.606	117.21	70-130
76 cis-1,2-Dichloroet	50.000	57.296	114.59	70-130
75 2-Butanone	50.000	62.835	125.67	60-140
80 Tetrahydrofuran	50.000	59.104	118.21	60-140
82 Chloroform	50.000	56.286	112.57	70-130
85 Cyclohexane	50.000	58.841	117.68	60-140
83 1,1,1-Trichloroeth	50.000	52.961	105.92	70-130
87 Carbon Tetrachlori	50.000	52.130	104.26	70-130
91 Benzene	50.000	57.926	115.85	70-130
93 1,2-Dichloroethane	50.000	52.638	105.28	70-130
94 Heptane	50.000	59.632	119.26	60-140
101 Trichloroethene	50.000	55.540	111.08	70-130
104 1,2-Dichloropropan	50.000	56.398	112.80	70-130
106 1,4-Dioxane	50.000	57.249	114.50	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	55.265	110.53	60-140
110 cis-1,3-Dichloropr	50.000	58.245	116.49	70-130
111 4-Methyl-2-pentano	50.000	63.166	126.33	60-140
114 Toluene	50.000	59.346	118.69	70-130
116 trans-1,3-Dichloro	50.000	56.257	112.51	70-130
117 1,1,2-Trichloroeth	50.000	56.377	112.75	70-130
120 Tetrachloroethene	50.000	54.870	109.74	70-130
121 2-Hexanone	50.000	57.052	114.10	60-140
122 Dibromochlorometha	50.000	54.922	109.84	60-140
123 1,2-Dibromoethane	50.000	54.942	109.88	70-130
127 Chlorobenzene	50.000	54.279	108.56	70-130
128 Ethyl Benzene	50.000	54.946	109.89	70-130
129 m,p-Xylene	50.000	54.936	109.87	70-130
130 o-Xylene	50.000	55.548	111.10	70-130
131 Styrene	50.000	59.466	118.93	70-130
133 Bromoform	50.000	54.478	108.96	60-140
140 1,1,2,2-Tetrachlor	50.000	52.857	105.71	70-130
145 4-Ethyltoluene	50.000	55.383	110.77	60-140
147 1,3,5-Trimethylben	50.000	50.822	101.64	70-130
150 1,2,4-Trimethylben	50.000	53.164	106.33	70-130
155 1,3-Dichlorobenzen	50.000	51.192	102.38	70-130
156 1,4-Dichlorobenzen	50.000	49.621	99.24	70-130
159 alpha-Chlorotoluen	50.000	55.914	111.83	70-130
161 1,2-Dichlorobenzen	50.000	48.692	97.39	70-130
165 1,2,4-Trichloroben	50.000	41.258	82.52	70-130
166 Hexachlorobutadien	50.000	39.989	79.98	70-130
142 Propylbenzene	50.000	55.499	111.00	60-140
134 Cumene	50.000	56.996	113.99	60-140
51 3-Chloropropene	50.000	58.111	116.22	60-140
89 2,2,4-Trimethylpen	50.000	58.167	116.33	60-140
29 Isopentane	50.000	52.246	104.49	70-130
19 Butane	50.000	52.914	105.83	70-130
102 Methyl Cyclohexane	50.000	57.685	115.37	70-130
11 Propylene	50.000	51.335	102.67	60-140
167 Naphthalene	50.000	39.233	78.47	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.524	94.09	70-130
$ 113 Toluene-d8	25.000	25.783	103.13	70-130
$ 137 Bromofluorobenzene	25.000	23.992	95.97	70-130

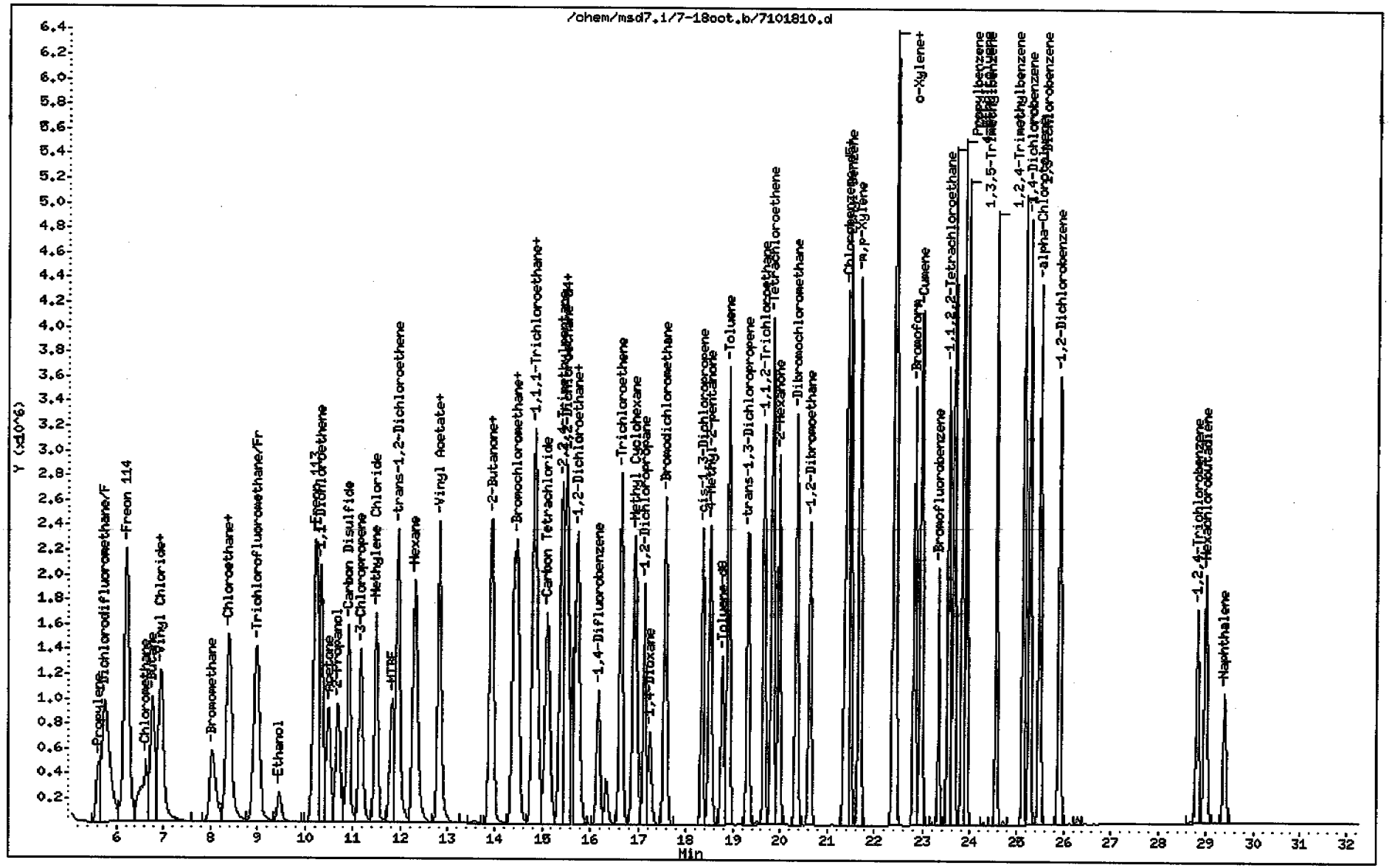
0236

Data File: /chem/msd7.i/7-18oct.b/7101810.d
Date : 18-OCT-2007 19:29
Client ID: lcs-1
Sample Info: 50mL #1443-302

Instrument: msd7.i

Operator: dm
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101802.d
Lab Smp Id: ICAL
Client Smp ID: Level 1
Inj Date : 18-OCT-2007 12:17
Operator : cb
Inst ID: msd7.i
Smp Info : 0.2mL #1576-50
Misc Info : 200ppbv --> 0.2ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:54 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 12:17
Cal File: 7101802.d
Als bottle: 1
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AFCEElow.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.375	14.375 (1.000)	130	636189	25.0000		50.00- 150.00	100.00
14.375	14.375 (1.000)	128	490559			27.11- 127.11	77.11
14.375	14.375 (1.000)	49	923525			95.17- 195.17	145.17
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.144	16.144 (1.000)	114	2066548	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	323845			0.00- 65.67	15.67
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.343	21.343 (1.000)	117	1699390	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	942443			5.46- 105.46	55.46
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.481	15.481 (1.077)	65	840662	25.0000	25.000	50.00- 150.00	100.00
15.481	15.481 (1.077)	67	425930			0.67- 100.67	50.67
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.771	18.771 (1.163)	98	1800430	25.0000	25.000	50.00- 150.00	100.00
18.744	18.744 (1.161)	70	203256			0.00- 61.29	11.29

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.771	18.771	(1.163)	100	1235223			18.61- 118.61	68.61
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.333	23.333	(1.093)	174	1016286	25.0000	25.000	50.00- 150.00	100.00
23.333	23.333	(1.093)	95	1276863			75.64- 175.64	125.64
23.333	23.333	(1.093)	176	976731			46.11- 146.11	96.11
82 Chloroform						CAS #: 67-66-3		
14.458	14.458	(1.006)	83	10481	0.20000	0.2000	50.00- 150.00	100.00(a)
14.458	14.458	(1.006)	85	6627			13.23- 113.23	63.23
91 Benzene						CAS #: 71-43-2		
15.508	15.508	(0.961)	78	14321	0.20000	0.2000	50.00- 150.00	100.00(a)
15.508	15.508	(0.961)	77	3194			0.00- 72.30	22.30
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	9530	0.20000	0.2000	50.00- 150.00	100.00(a)
22.421	22.421	(1.051)	78	6488			18.08- 118.08	68.08
134 Cumene						CAS #: 98-82-8		
22.946	22.946	(1.075)	105	18683	0.20000	0.2000	50.00- 150.00	100.00(a)
22.974	22.974	(1.076)	120	5104			0.00- 77.32	27.32
22.946	22.946	(1.075)	51	2569			0.00- 63.75	13.75

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101802.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 0.2ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	636189	-6.93
97 1,4-Difluorobenze	2204815	1322889	3086741	2066548	-6.27
126 Chlorobenzene-d5	1812979	1087787	2538171	1699390	-6.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.37	-0.19
97 1,4-Difluorobenze	16.17	15.84	16.50	16.14	-0.17
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

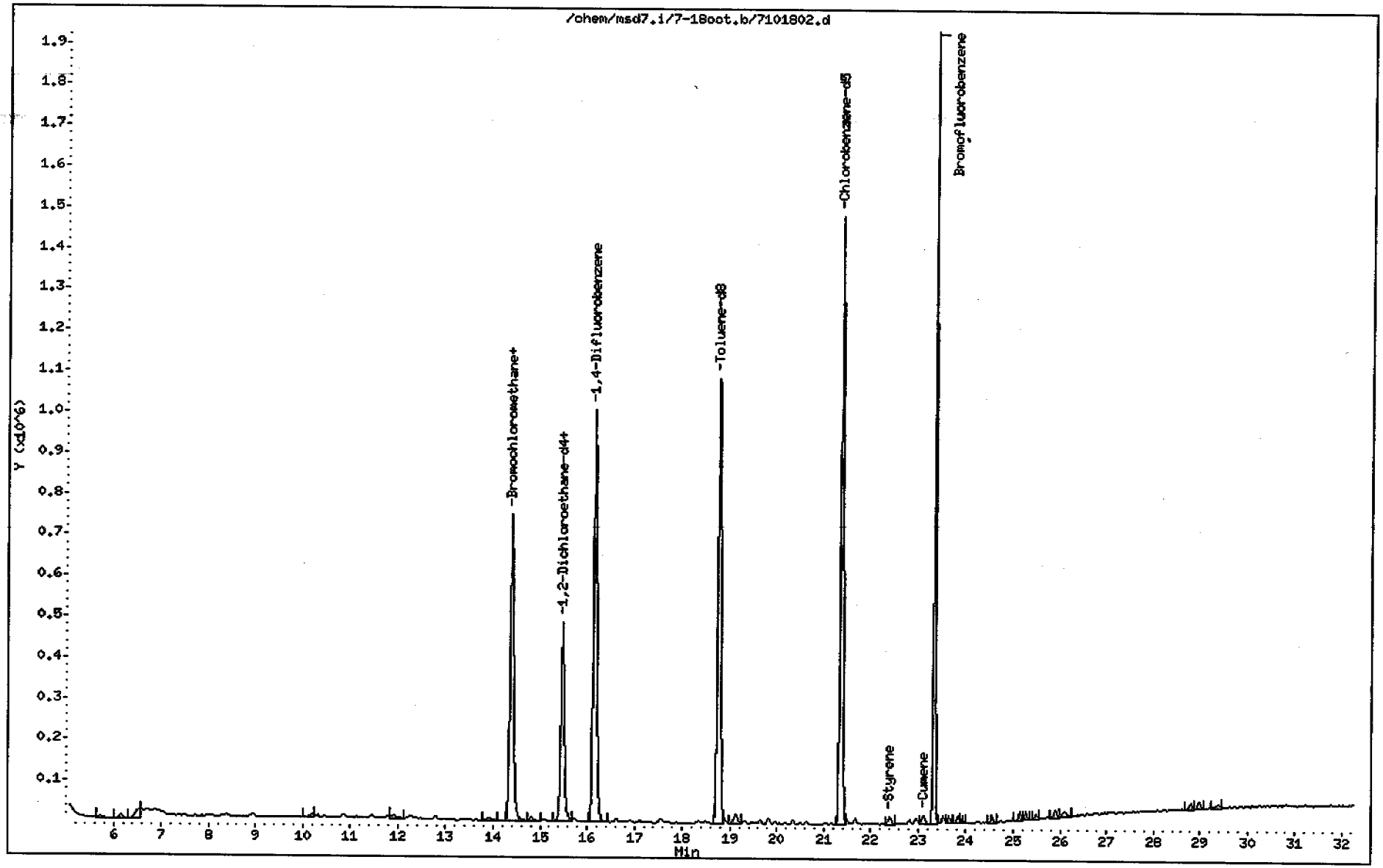
Data File: /chem/msd7.i/7-18oct.b/7101802.d
Date : 18-OCT-2007 12:17
Client ID: Level 1
Sample Info: 0.2mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0240



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101803.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 18-OCT-2007 12:56
Operator : cb
Inst ID: msd7.i
Smp Info : 0.5mL #1576-50
Misc Info : 200ppbv --> 0.5ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 12:56
Cal File: 7101803.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	594950	25.0000		50.00- 150.00	100.00
14.402	14.402 (1.000)	128	451286			26.48- 126.48	75.85
14.402	14.402 (1.000)	49	865261			95.30- 195.30	145.43
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	1954618	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	303029			0.00- 65.59	15.50
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1592069	25.0000		50.00- 150.00	100.00
21.342	21.342 (1.000)	82	884524			5.51- 105.51	55.56
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.481 (1.075)	65	796855	25.0000	25.169	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	397861			0.30- 100.30	49.93
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1670382	25.0000	24.759	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	190048			0.00- 61.33	11.38

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.771	18.771	(1.161)	100	1154070			18.85- 118.85	69.09
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.333	23.333	(1.093)	174	957131	25.0000	25.066	50.00- 150.00	100.00
23.333	23.333	(1.093)	95	1220204			76.56- 176.56	127.49
23.333	23.333	(1.093)	176	932560			46.77- 146.77	97.43
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.721	5.721	(0.397)	85	47576	0.50000	0.5000	50.00- 150.00	100.00
5.748	5.748	(0.399)	87	17035			0.00- 85.81	35.81
16 Freon 114						CAS #: 76-14-2		
6.163	6.163	(0.428)	135	32813	0.50000	0.5000	50.00- 150.00	100.00
6.163	6.163	(0.428)	137	10433			0.00- 81.80	31.80
20 Vinyl Chloride						CAS #: 75-01-4		
6.882	6.882	(0.478)	62	19172	0.50000	0.5000	50.00- 150.00	100.00
6.882	6.882	(0.478)	64	6960			0.00- 86.30	36.30
22 1,3-Butadiene						CAS #: 106-99-0		
6.882	6.882	(0.478)	54	11746	0.50000	0.5000	50.00- 150.00	100.00
6.882	6.882	(0.478)	39	13765			67.19- 167.19	117.19
25 Bromomethane						CAS #: 74-83-9		
8.015	8.015	(0.557)	94	16291	0.50000	0.5000	50.00- 150.00	100.00
8.015	8.015	(0.557)	96	14944			41.73- 141.73	91.73
27 Chloroethane						CAS #: 75-00-3		
8.347	8.347	(0.580)	64	6683	0.50000	0.5000	50.00- 150.00	100.00
8.347	8.347	(0.580)	49	2473			0.00- 87.00	37.00
8.320	8.320	(0.578)	66	2148			0.00- 82.14	32.14
31 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
8.955	8.955	(0.622)	101	39349	0.50000	0.5000	50.00- 150.00	100.00
8.928	8.928	(0.620)	103	26784			18.07- 118.07	68.07
42 Freon 113						CAS #: 76-13-1		
10.200	10.200	(0.708)	151	22360	0.50000	0.5000	50.00- 150.00	100.00
10.200	10.200	(0.708)	153	13095			8.56- 108.56	58.56
10.200	10.200	(0.708)	101	27629			73.56- 173.56	123.56
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.310	10.310	(0.716)	61	23023	0.50000	0.5000	50.00- 150.00	100.00
10.310	10.310	(0.716)	96	18764			31.50- 131.50	81.50
10.338	10.338	(0.718)	98	8228			0.00- 85.74	35.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.754)	76	43350	0.50000	0.5000	50.00- 150.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	17900	0.50000	0.5000	50.00- 150.00	100.00
11.472	11.472 (0.796)	84	12530			20.00- 120.00	70.00
11.444	11.444 (0.795)	51	5834			0.00- 82.59	32.59
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	30552	0.50000	0.5000	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	6497			0.00- 71.27	21.27
11.803	11.803 (0.820)	41	8855			0.00- 78.98	28.98
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	15203	0.50000	0.5000	50.00- 150.00	100.00
11.914	11.914 (0.827)	61	21746			93.04- 193.04	143.04
11.914	11.914 (0.827)	98	7588			0.00- 99.91	49.91
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	20198	0.50000	0.5000	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	15411			26.30- 126.30	76.30
12.301	12.301 (0.854)	86	3271			0.00- 66.19	16.19
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	24629	0.50000	0.5000	50.00- 150.00	100.00
12.826	12.826 (0.891)	65	8401			0.00- 84.11	34.11
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	4535	0.50000	0.5000	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	22514			446.45- 546.45	496.45
13.905	13.905 (0.965)	57	1741			0.00- 88.39	38.39
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	17162	0.50000	0.5000	50.00- 150.00	100.00
13.932	13.932 (0.967)	96	15482			40.21- 140.21	90.21
13.932	13.932 (0.967)	98	8217			0.00- 97.88	47.88
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.375 (0.998)	42	12231	0.50000	0.5000	50.00- 150.00	100.00
14.402	14.402 (1.000)	71	4285			0.00- 85.03	35.03
14.402	14.402 (1.000)	72	4117			0.00- 83.66	33.66
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	27421	0.50000	0.5281	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	17112			12.82- 112.82	62.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.817 (1.029)	97	25463	0.50000	0.5000	50.00- 150.00	100.00
14.845	14.845 (1.031)	99	16821			16.06- 116.06	66.06
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	13500	0.50000	0.5000	50.00- 150.00	100.00
14.845	14.845 (1.031)	56	17496			79.60- 179.60	129.60
14.845	14.845 (1.031)	41	15222			62.76- 162.76	112.76
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	22788	0.50000	0.5000	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	25102			60.15- 160.15	110.15
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	34749	0.50000	0.5064	50.00- 150.00	100.00
15.536	15.536 (0.961)	77	7253			0.00- 71.59	20.87
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.425	15.425 (1.071)	57	45451	0.50000	0.5000	50.00- 150.00	100.00
15.425	15.425 (1.071)	56	16216			0.00- 85.68	35.68
15.425	15.425 (1.071)	41	15793			0.00- 84.75	34.75
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	18652	0.50000	0.5000	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	6553			0.00- 85.13	35.13
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	8517	0.50000	0.5000	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	19632			180.50- 280.50	230.50
15.730	15.730 (0.973)	57	10427			72.43- 172.43	122.43
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	14369	0.50000	0.5000	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	14236			49.07- 149.07	99.07
16.642	16.642 (1.029)	97	9543			16.41- 116.41	66.41
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.140	17.140 (1.060)	63	12205	0.50000	0.5000	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	9174			25.17- 125.17	75.17
17.140	17.140 (1.060)	41	11048			40.52- 140.52	90.52
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.554 (1.085)	83	23861	0.50000	0.5000	50.00- 150.00	100.00
17.554	17.554 (1.085)	85	15506			14.98- 114.98	64.98
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	15175	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)								
18.329	18.329	(1.133)	77	4797			0.00- 81.61	31.61
18.329	18.329	(1.133)	39	9773			14.40- 114.40	64.40
111 4-Methyl-2-pentanone						CAS #: 108-10-1		
18.522	18.522	(1.145)	58	6848	0.50000	0.5000	50.00- 150.00	100.00
18.522	18.522	(1.145)	43	20498			249.33- 349.33	299.33
18.495	18.495	(1.144)	85	3016			0.00- 94.04	44.04
114 Toluene						CAS #: 108-88-3		
18.882	18.882	(1.168)	91	34659	0.50000	0.5000	50.00- 150.00	100.00
18.882	18.882	(1.168)	92	21595			12.31- 112.31	62.31
116 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
19.324	19.324	(0.905)	75	16891	0.50000	0.5000	50.00- 150.00	100.00
19.324	19.324	(0.905)	77	5788			0.00- 84.27	34.27
19.296	19.296	(0.904)	39	11612			18.75- 118.75	68.75
117 1,1,2-Trichloroethane						CAS #: 79-00-5		
19.656	19.656	(0.921)	97	13069	0.50000	0.5000	50.00- 150.00	100.00
19.656	19.656	(0.921)	99	8163			12.46- 112.46	62.46
19.656	19.656	(0.921)	83	11292			36.40- 136.40	86.40
120 Tetrachloroethene						CAS #: 127-18-4		
19.849	19.849	(0.930)	166	18736	0.50000	0.5000	50.00- 150.00	100.00
19.822	19.822	(0.929)	129	13781			23.55- 123.55	73.55
19.822	19.822	(0.929)	131	12940			19.06- 119.06	69.06
122 Dibromochloromethane						CAS #: 124-48-1		
20.347	20.347	(0.953)	129	22024	0.50000	0.5000	50.00- 150.00	100.00
20.347	20.347	(0.953)	127	17127			27.77- 127.77	77.77
123 1,2-Dibromoethane						CAS #: 106-93-4		
20.624	20.624	(0.966)	107	19811	0.50000	0.5000	50.00- 150.00	100.00
20.624	20.624	(0.966)	109	19821			50.05- 150.05	100.05
127 Chlorobenzene						CAS #: 108-90-7		
21.398	21.398	(1.003)	112	31210	0.50000	0.5000	50.00- 150.00	100.00
21.398	21.398	(1.003)	114	11029			0.00- 85.34	35.34
21.398	21.398	(1.003)	77	31887			52.17- 152.17	102.17
128 Ethyl Benzene						CAS #: 100-41-4		
21.481	21.481	(1.006)	106	14585	0.50000	0.5000	50.00- 150.00	100.00
21.481	21.481	(1.006)	91	47369			274.78- 374.78	324.78
129 m,p-Xylene						CAS #: 108-38-3		
21.674	21.674	(1.016)	106	18983	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)								
21.674	21.674	(1.016)	91	36102			140.18- 240.18	190.18
130 o-Xylene						CAS #: 95-47-6		
22.393	22.393	(1.049)	106	15952	0.50000	0.5000	50.00- 150.00	100.00
22.393	22.393	(1.049)	91	33173			157.96- 257.96	207.96
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	22221	0.50000	0.4989	50.00- 150.00	100.00(a)
22.421	22.421	(1.051)	78	12270			11.65- 111.65	55.22
133 Bromoform						CAS #: 75-25-2		
22.835	22.835	(1.070)	173	20128	0.50000	0.5000	50.00- 150.00	100.00
22.835	22.835	(1.070)	171	10294			1.14- 101.14	51.14
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	42095	0.50000	0.4903	50.00- 150.00	100.00(a)
22.974	22.974	(1.076)	120	13036			0.00- 79.14	30.97
22.946	22.946	(1.075)	51	4671			0.00- 62.42	11.10
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	28944	0.50000	0.5000	50.00- 150.00	100.00
23.527	23.527	(1.102)	85	18819			15.02- 115.02	65.02
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	57510	0.50000	0.5000	50.00- 150.00	100.00
23.637	23.637	(1.108)	120	13859			0.00- 74.10	24.10
23.637	23.637	(1.108)	105	2745			0.00- 54.77	4.77
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	45962	0.50000	0.5000	50.00- 150.00	100.00
23.831	23.831	(1.117)	120	14743			0.00- 82.08	32.08
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	44997	0.50000	0.5000	50.00- 150.00	100.00
23.914	23.914	(1.120)	120	22622			0.27- 100.27	50.27
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	33540	0.50000	0.5000	50.00- 150.00	100.00
24.550	24.550	(1.150)	120	16903			0.40- 100.40	50.40
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.130	25.130	(1.177)	146	29742	0.50000	0.5000	50.00- 150.00	100.00
25.130	25.130	(1.177)	148	19728			16.33- 116.33	66.33
25.130	25.130	(1.177)	111	12094			0.00- 90.66	40.66

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	32773	0.50000	0.5000	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	20634			12.96- 112.96	62.96
25.269	25.269 (1.184)	111	12309			0.00- 87.56	37.56
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	32574	0.50000	0.5000	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	7503			0.00- 73.03	23.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	30022	0.50000	0.5000	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	18673			12.20- 112.20	62.20
25.905	25.905 (1.214)	111	11890			0.00- 89.60	39.60
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	16603	0.50000	0.5000	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	7709			0.00- 96.43	46.43
16.919	16.919 (1.175)	55	14202			35.54- 135.54	85.54

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101803.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 0.5ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	594950	-12.96
97 1,4-Difluorobenze	2204815	1322889	3086741	1954618	-11.35
126 Chlorobenzene-d5	1812979	1087787	2538171	1592069	-12.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

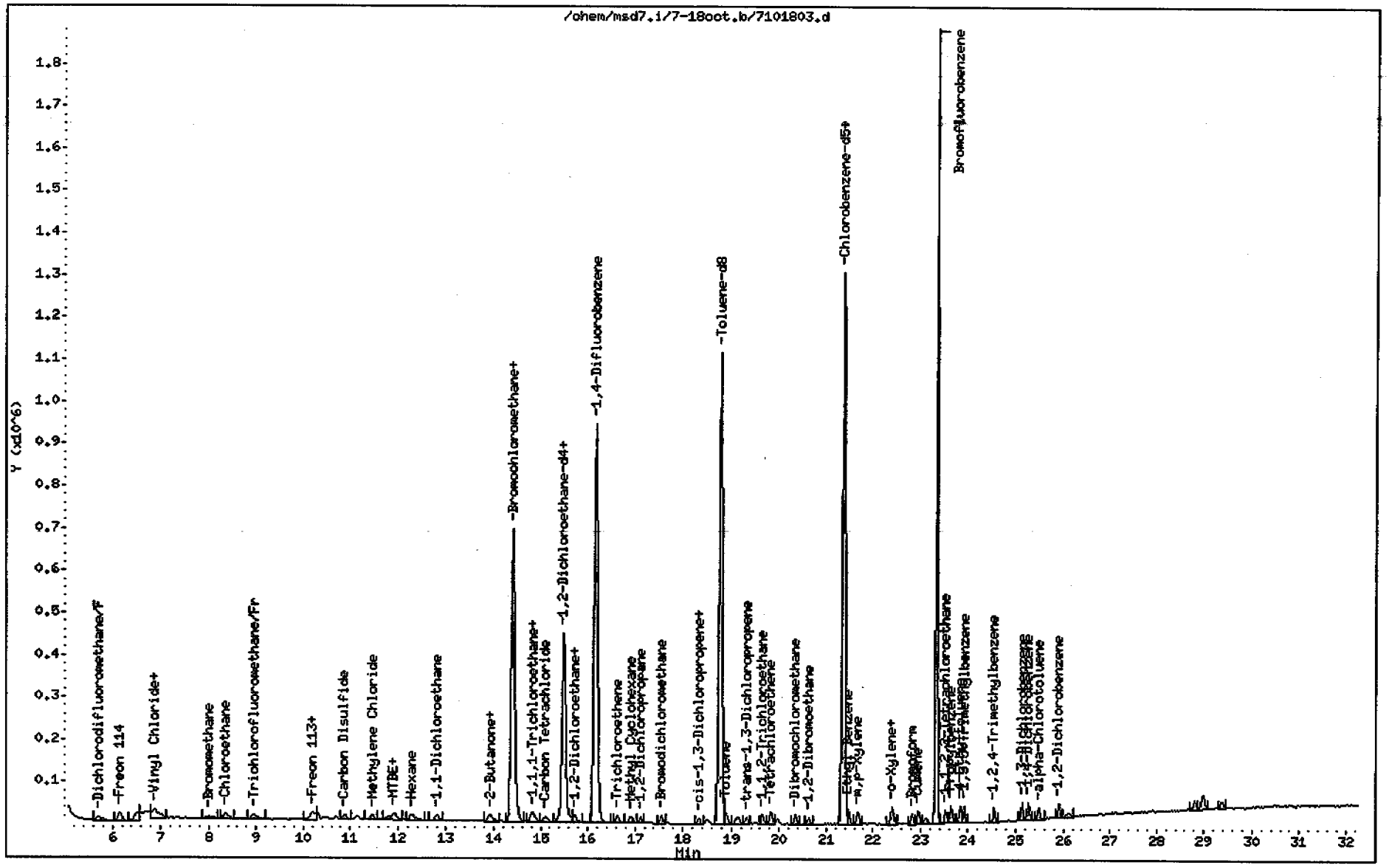
Data File: /chem/msd7.i/7-18oot.b/7101803.d
Date : 18-OCT-2007 12:56
Client ID: Level 2
Sample Info: 0.5mL #1576-50

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

Column phase: RTx-624

0249



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102205.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 22-OCT-2007 10:55
Operator : cb Inst ID: msd7.i
Smp Info : 2mL #1487-370
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott Quant Type: ISTD
Cal Date : 22-OCT-2007 10:55 Cal File: 7102205.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp16b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.403	14.403 (1.000)	130	639032	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	485011			26.49- 126.49	75.90
14.375	14.375 (1.000)	49	961966			116.97- 216.97	150.53
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2072294	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	319608			0.00- 65.57	15.42
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1627678	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	894614			5.19- 105.19	54.96
55 Cyclopentene					CAS #: 142-29-0		
11.251	11.251 (0.781)	67	232640	2.00000	1.954	50.00- 150.00	100.00(a)
11.251	11.251 (0.781)	68	93477			0.00- 90.48	40.18
11.251	11.251 (0.781)	53	48369			0.00- 70.85	20.79
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.877	13.877 (0.964)	77	141265	2.00000	1.895	50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	50942			0.00- 84.30	36.06
13.877	13.877 (0.964)	97	28410			0.00- 70.03	20.11
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	53537	2.00000	1.916	50.00- 150.00	100.00(a)
15.121	15.121 (0.935)	75	140199			218.22- 318.22	261.87
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	158585	2.00000	1.906	50.00- 150.00	100.00(a)
19.988	19.988 (1.236)	41	112138			21.54- 121.54	70.71
19.988	19.988 (1.236)	78	50086			0.00- 81.77	31.58
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	117122	2.00000	2.018	50.00- 150.00	100.00
21.536	21.536 (1.009)	117	80894			18.93- 118.93	69.07
21.536	21.536 (1.009)	95	46412			0.00- 89.37	39.63
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	142356	2.00000	2.090	50.00- 150.00	100.00
23.610	23.610 (1.106)	158	137653			46.65- 146.65	96.70
23.610	23.610 (1.106)	77	279379			147.77- 247.77	196.25
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	64138	2.00000	2.012	50.00- 150.00	100.00
23.665	23.665 (1.109)	75	194965			252.90- 352.90	303.98
23.665	23.665 (1.109)	61	48439			26.84- 126.84	75.52
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	100762	2.00000	2.003	50.00- 150.00	100.00
23.886	23.886 (1.119)	91	297542			243.86- 343.86	295.29
23.886	23.886 (1.119)	65	28529			0.00- 78.37	28.31
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	104260	2.00000	1.943	50.00- 150.00	100.00(a)
24.080	24.080 (1.128)	91	315277			249.00- 349.00	302.39
24.052	24.052 (1.127)	63	39933			0.00- 88.24	38.30
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	345319	2.00000	2.172	50.00- 150.00	100.00
25.020	25.020 (1.172)	134	97423			0.00- 77.89	28.21
25.020	25.020 (1.172)	91	84154			0.00- 74.89	24.37
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	127049	2.00000	2.014	50.00- 150.00	100.00
25.269	25.269 (1.184)	105	280842			168.18- 268.18	221.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	37584			0.00- 78.76	29.58
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	86798	2.00000	2.030	50.00- 150.00	100.00
25.684	25.684 (1.203)	91	365378			362.01- 462.01	420.95
25.684	25.684 (1.203)	92	204191			181.94- 281.94	235.25
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	319919	2.00000	2.232	50.00- 150.00	100.00
24.467	24.467 (1.146)	134	78445			0.00- 74.64	24.52
24.467	24.467 (1.146)	91	224250			20.96- 120.96	70.10
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	447243	2.00000	2.254	50.00- 150.00	100.00
24.826	24.826 (1.163)	134	88393			0.00- 69.71	19.76
24.826	24.826 (1.163)	91	69536			0.00- 65.99	15.55
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	99267	2.00000	1.935	50.00- 150.00	100.00(a)
27.287	27.287 (1.279)	75	92577			39.96- 139.96	93.26
27.287	27.287 (1.279)	155	79486			28.87- 128.87	80.07
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	92534	2.00000	2.159	50.00- 150.00	100.00
24.605	24.605 (1.153)	117	92152			54.36- 154.36	99.59
24.605	24.605 (1.153)	169	43387			0.00- 97.70	46.89

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102205.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 10:55
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	639032	383419	894645	639032	0.00
97 1,4-Difluorobenze	2072294	1243376	2901212	2072294	0.00
126 Chlorobenzene-d5	1627678	976607	2278749	1627678	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

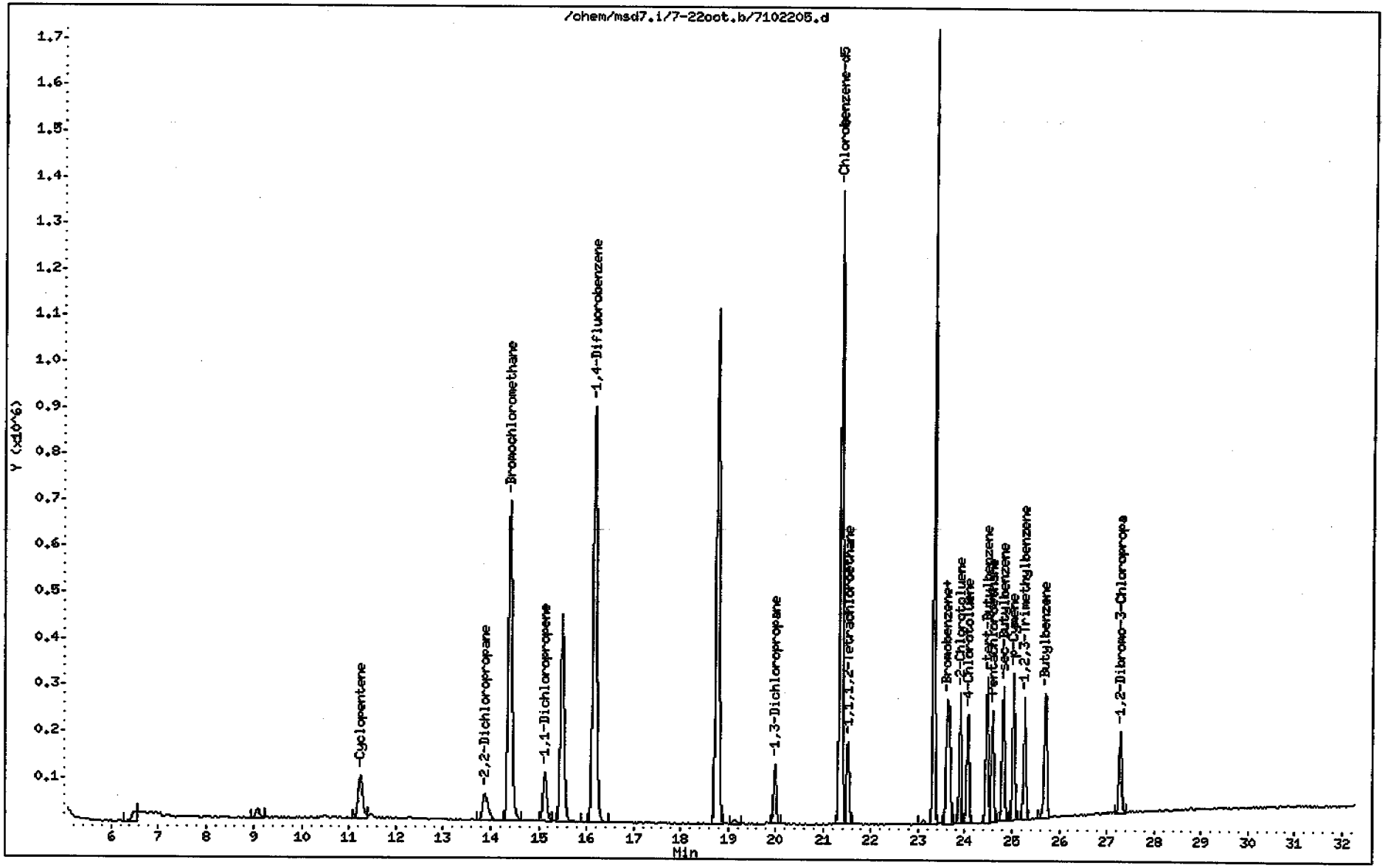
Data File: /ohem/msd7.i/7-22oct.b/7102205.d
Date : 22-OCT-2007 10:55
Client ID: Level 3
Sample Info: 2mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0254



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101903.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 19-OCT-2007 10:22
Operator : cb
Inst ID: msd7.i
Smp Info : 2mL #1487-400
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 10:22
Cal File: 7101903.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.403	14.403 (1.000)	130	680683	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	521822			26.64- 126.64	76.66
14.403	14.403 (1.000)	49	1021902			124.30- 224.30	150.13
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2218849	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	345014			0.00- 65.60	15.55
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.343	21.343 (1.000)	117	1717856	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	948281			5.36- 105.36	55.20
5 Freon 143a						CAS #: 420-46-2	
5.334	5.334 (0.370)	65	30165	2.00000	2.000	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	276074			0.00- 50.00	915.21
5.334	5.334 (0.370)	64	6959			0.00- 73.07	23.07
6 Freon142b						CAS #: 75-68-3	
6.357	6.357 (0.441)	65	124214	2.00000	2.000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)							
6.357	6.357 (0.441)	45	30229			0.00- 74.34	24.34
13 Freon 134a					CAS #: 811-97-2		
5.472	5.472 (0.380)	83	59293	2.00000	2.000	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	276074			415.61- 515.61	465.61
5.472	5.472 (0.380)	63	8387			0.00- 64.15	14.15
15 Freon 152a					CAS #: 75-37-6		
5.665	5.665 (0.393)	65	43467	2.00000	2.000	50.00- 150.00	100.00
5.665	5.665 (0.393)	51	69568			110.05- 210.05	160.05
5.693	5.693 (0.395)	47	17369			0.00- 89.96	39.96
17 Freon 22					CAS #: 75-45-6		
5.831	5.831 (0.405)	51	143770	2.00000	2.000	50.00- 150.00	100.00
5.831	5.831 (0.405)	67	16779			0.00- 61.67	11.67
5.831	5.831 (0.405)	85	2871			0.00- 52.00	2.00
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.900	8.900 (0.618)	67	119076	2.00000	2.000	50.00- 150.00	100.00
8.900	8.900 (0.618)	69	36680			0.00- 80.80	30.80
8.900	8.900 (0.618)	35	5758			0.00- 54.84	4.84
40 Freon123a					CAS #: 354-23-4		
9.813	9.813 (0.681)	117	61475	2.00000	2.000	50.00- 150.00	100.00
9.813	9.813 (0.681)	67	108040			125.75- 225.75	175.75
41 Freon123					CAS #: 306-83-2		
9.951	9.951 (0.691)	83	118699	2.00000	2.000	50.00- 150.00	100.00
9.951	9.951 (0.691)	133	22948			0.00- 69.33	19.33
9.979	9.979 (0.693)	85	87037			23.33- 123.33	73.33
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.527	11.527 (0.800)	59	135523	2.00000	2.000	50.00- 150.00	100.00
11.499	11.499 (0.798)	41	31744			0.00- 73.42	23.42
11.499	11.499 (0.798)	57	13899			0.00- 60.26	10.26
68 Isopropyl ether					CAS #: 108-20-3		
12.716	12.716 (0.883)	45	229400	2.00000	2.000	50.00- 150.00	100.00
12.716	12.716 (0.883)	87	53932			0.00- 73.51	23.51
12.716	12.716 (0.883)	59	19957			0.00- 58.70	8.70
71 1-Propanol					CAS #: 71-23-8		
12.854	12.854 (0.892)	42	12498	2.00000	2.000	50.00- 150.00	100.00
12.827	12.827 (0.891)	59	17728			91.85- 191.85	141.85
12.716	12.716 (0.883)	41	42674			291.45- 391.45	341.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.380	13.380 (0.929)	59	187293	2.00000	2.000	50.00- 150.00	100.00
13.380	13.380 (0.929)	87	73600			0.00- 89.30	39.30
13.380	13.380 (0.929)	41	34474			0.00- 68.41	18.41
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	21298	2.00000	2.000	50.00- 150.00	100.00
13.877	13.877 (0.964)	61	21673			51.76- 151.76	101.76
13.877	13.877 (0.964)	43	139113			603.17- 703.17	653.17
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	134657	2.00000	2.000	50.00- 150.00	100.00
15.536	15.536 (1.079)	87	32299			0.00- 73.99	23.99
15.536	15.536 (1.079)	55	41294			0.00- 80.67	30.67
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	64075	2.00000	2.000	50.00- 150.00	100.00
22.504	22.504 (1.562)	43	102414			109.83- 209.83	159.83
98 1-Butanol					CAS #: 71-36-3		
16.310	16.310 (1.009)	56	29538	2.00000	2.000	50.00- 150.00	100.00
16.310	16.310 (1.009)	41	21168			21.66- 121.66	71.66
16.310	16.310 (1.009)	43	18572			12.87- 112.87	62.87
99 Isobutanol					CAS #: 78-83-1		
15.121	15.121 (1.050)	59	1011	2.00000	2.000	50.00- 150.00	100.00
15.149	15.149 (1.052)	41	29081			2826.46-2926.46	2876.46
15.149	15.149 (1.052)	43	41133			4018.55-4118.55	4068.55
119 Butyl Acetate					CAS #: 123-86-4		
20.071	20.071 (1.241)	56	50141	2.00000	2.000	50.00- 150.00	100.00
20.071	20.071 (1.241)	73	17033			0.00- 83.97	33.97
20.071	20.071 (1.241)	43	123513			196.33- 296.33	246.33
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.091)	55	58482	2.00000	2.000	50.00- 150.00	100.00
23.278	23.278 (1.091)	98	22335			0.00- 88.19	38.19
23.278	23.278 (1.091)	42	37611			14.31- 114.31	64.31
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.128)	57	142000	2.00000	2.000	50.00- 150.00	100.00
24.080	24.080 (1.128)	85	115778			31.53- 131.53	81.53
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101903.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	680683	-1.94
97 1,4-Difluorobenze	2223212	1333927	3112497	2218849	-0.20
126 Chlorobenzene-d5	1779964	1067978	2491950	1717856	-3.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

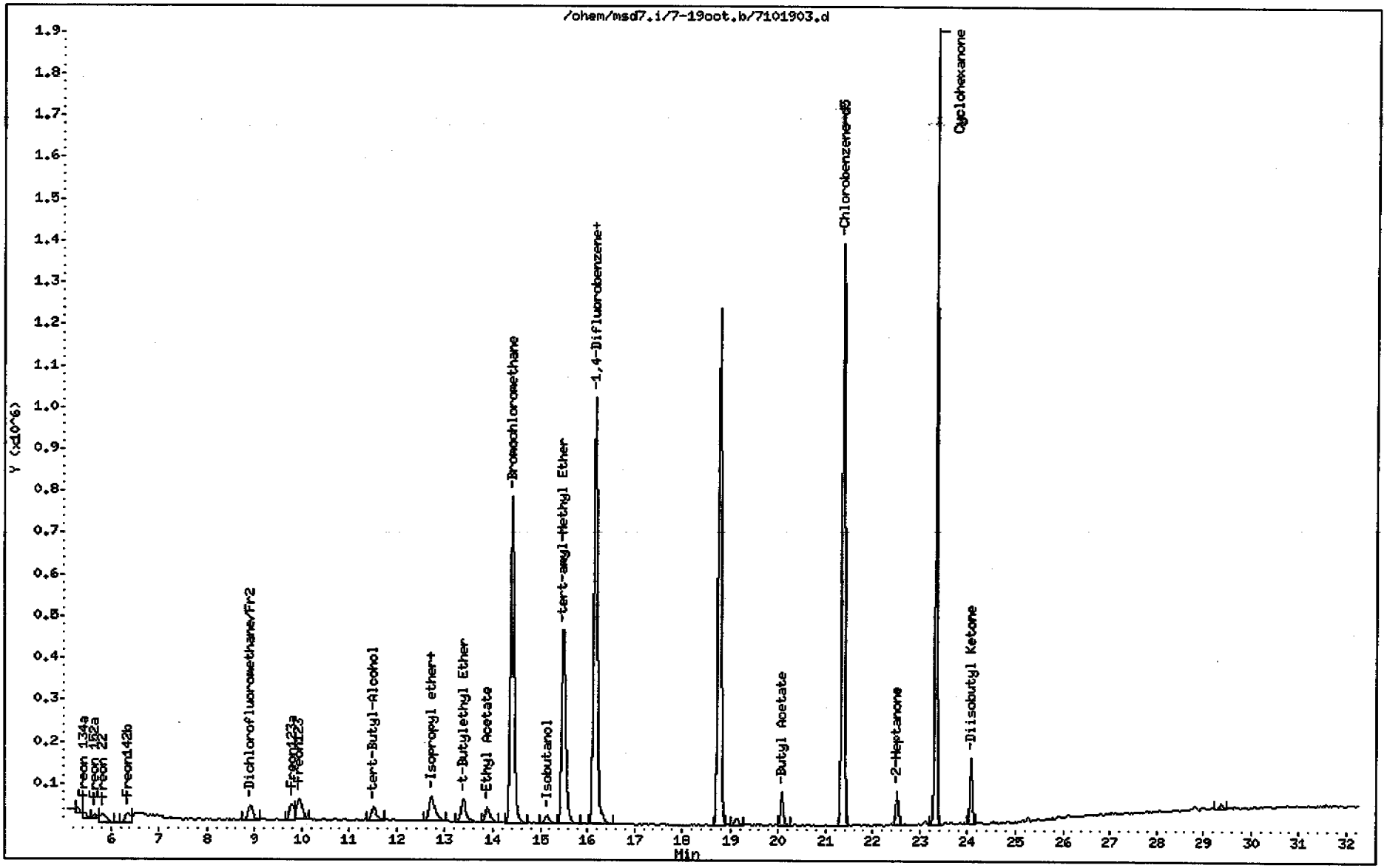
Data File: /ohem/msd7.i/7-19oct.b/7101903.d
Date : 19-OCT-2007 10:22
Client ID: Level 3
Sample Info: 2mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

0259



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101804.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 18-OCT-2007 14:09
Operator : cb Inst ID: msd7.i
Smp Info : 2mL #1576-50
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond Quant Type: ISTD
Cal Date : 18-OCT-2007 14:09 Cal File: 7101804.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.403	14.403 (1.000)	130	611723	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	473201			26.77- 126.77	77.36
14.375	14.375 (1.000)	49	892530			95.50- 195.50	145.90
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2006513	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	308736			0.00- 65.52	15.39
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1607236	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	882896			5.32- 105.32	54.93
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.481 (1.075)	65	847384	25.0000	25.678	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	417312			0.00- 99.95	49.25
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1720868	25.0000	24.898	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	197220			0.00- 61.38	11.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1174360			18.65- 118.65	68.24
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	955710	25.0000	24.861	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1240664			77.65- 177.65	129.82
23.333	23.333 (1.093)	176	928938			46.91- 146.91	97.20
11 Propylene					CAS #: 115-07-1		
5.638	5.638 (0.391)	41	55059	2.00000	2.000	50.00- 150.00	100.00
5.638	5.638 (0.391)	42	41800			25.92- 125.92	75.92
5.638	5.638 (0.391)	39	42003			26.29- 126.29	76.29
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	196506	2.00000	2.004	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	64388			0.00- 84.29	32.77
16 Freon 114					CAS #: 76-14-2		
6.191	6.191 (0.430)	135	143963	2.00000	2.065	50.00- 150.00	100.00
6.191	6.191 (0.430)	137	47951			0.00- 82.55	33.31
18 Chloromethane					CAS #: 74-87-3		
6.495	6.495 (0.451)	50	66478	2.00000	2.000	50.00- 150.00	100.00
6.522	6.522 (0.453)	52	25502			0.00- 88.36	38.36
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.476)	62	81584	2.00000	2.034	50.00- 150.00	100.00
6.882	6.882 (0.478)	64	28755			0.00- 85.77	35.25
22 1,3-Butadiene					CAS #: 106-99-0		
6.910	6.910 (0.480)	54	54761	2.00000	2.125	50.00- 150.00	100.00
6.910	6.910 (0.480)	39	59315			62.75- 162.75	108.32
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.557)	94	67549	2.00000	2.008	50.00- 150.00	100.00
8.016	8.016 (0.557)	96	61778			41.59- 141.59	91.46
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	28925	2.00000	2.051	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	8422			0.00- 83.06	29.12
8.347	8.347 (0.580)	66	11614			0.00- 86.15	40.15
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	178522	2.00000	2.098	50.00- 150.00	100.00
8.928	8.928 (0.620)	103	116828			16.75- 116.75	65.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	19984	2.00000	2.000	50.00- 150.00	100.00
9.426	9.426 (0.654)	43	6027			0.00- 80.16	30.16
9.453	9.453 (0.656)	46	7749			0.00- 88.78	38.78
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	95953	2.00000	2.042	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	60629			10.88- 110.88	63.19
10.200	10.200 (0.708)	101	118187			73.37- 173.37	123.17
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	101636	2.00000	2.071	50.00- 150.00	100.00
10.310	10.310 (0.716)	96	59924			20.23- 120.23	58.96
10.310	10.310 (0.716)	98	36886			0.00- 86.02	36.29
45 Acetone					CAS #: 67-64-1		
10.476	10.476 (0.727)	58	28132	2.00000	2.000	50.00- 150.00	100.00
10.476	10.476 (0.727)	43	77574			225.75- 325.75	275.75
46 2-Propanol					CAS #: 67-63-0		
10.670	10.670 (0.741)	45	85029	2.00000	2.000	50.00- 150.00	100.00
10.670	10.670 (0.741)	43	26641			0.00- 81.33	31.33
10.670	10.670 (0.741)	59	2836			0.00- 53.34	3.34
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.754)	76	190783	2.00000	2.068	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.140	11.140 (0.773)	76	23388	2.00000	2.000	50.00- 150.00	100.00
11.140	11.140 (0.773)	41	70379			250.92- 350.92	300.92
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.795)	49	73867	2.00000	2.003	50.00- 150.00	100.00
11.444	11.444 (0.795)	84	53508			21.22- 121.22	72.44
11.444	11.444 (0.795)	51	22507			0.00- 81.53	30.47
60 MTBE					CAS #: 1634-04-4		
11.803	11.803 (0.820)	73	124045	2.00000	1.987	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	32126			0.00- 73.58	25.90
11.831	11.831 (0.821)	41	37992			0.00- 79.81	30.63
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.914	11.914 (0.827)	96	61567	2.00000	1.984	50.00- 150.00	100.00
11.914	11.914 (0.827)	61	95052			98.71- 198.71	154.39
11.914	11.914 (0.827)	98	41669			8.80- 108.80	67.68

				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	91312	2.00000	2.094	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	60919			21.51- 121.51	66.72
12.301	12.301 (0.854)	86	13027			0.00- 65.23	14.27
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	10974	2.00000	2.000	50.00- 150.00	100.00
12.771	12.771 (0.887)	43	135828			1187.73-1287.73	1237.73
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.799	12.799 (0.889)	63	113478	2.00000	2.113	50.00- 150.00	100.00
12.827	12.827 (0.891)	65	36220			0.00- 83.01	31.92
75 2-Butanone					CAS #: 78-93-3		
13.877	13.877 (0.964)	72	18267	2.00000	1.979	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	102063			477.59- 577.59	558.73
13.877	13.877 (0.964)	57	7363			0.00- 89.35	40.31
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.905	13.905 (0.965)	61	77692	2.00000	2.096	50.00- 150.00	100.00
13.905	13.905 (0.965)	96	56850			31.69- 131.69	73.17
13.932	13.932 (0.967)	98	39327			0.00- 99.25	50.62
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.375 (0.998)	42	54990	2.00000	2.089	50.00- 150.00	100.00
14.375	14.375 (0.998)	71	21394			0.00- 86.97	38.91
14.375	14.375 (0.998)	72	20571			0.00- 85.53	37.41
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	121465	2.00000	2.175	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	77359			13.11- 113.11	63.69
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.817 (1.029)	97	121912	2.00000	2.152	50.00- 150.00	100.00
14.817	14.817 (1.029)	99	77448			14.79- 114.79	63.53
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	58952	2.00000	2.060	50.00- 150.00	100.00
14.817	14.817 (1.029)	56	78258			81.17- 181.17	132.75
14.845	14.845 (1.031)	41	49098			48.02- 148.02	83.28
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	111881	2.00000	2.177	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	115224			56.57- 156.57	102.99
91 Benzene					CAS #: 71-43-2		
15.509	15.509 (0.959)	78	146321	2.00000	2.051	50.00- 150.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.509	15.509 (0.959)	77	32260			0.00- 71.74	22.05
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.398 (1.069)	57	215514	2.00000	2.142	50.00- 150.00	100.00
15.398	15.398 (1.069)	56	76082			0.00- 85.49	35.30
15.398	15.398 (1.069)	41	64009			0.00- 82.22	29.70
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	81570	2.00000	2.063	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	27245			0.00- 84.27	33.40
94 Heptane					CAS #: 142-82-5		
15.702	15.702 (0.971)	71	40924	2.00000	2.157	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	88731			173.66- 273.66	216.82
15.730	15.730 (0.973)	57	45995			67.41- 167.41	112.39
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	66909	2.00000	2.126	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	64888			48.03- 148.03	96.98
16.642	16.642 (1.029)	97	42720			15.13- 115.13	63.85
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	54280	2.00000	2.080	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	41230			25.56- 125.56	75.96
17.112	17.112 (1.058)	41	37018			29.36- 129.36	68.20
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	28811	2.00000	2.000	50.00- 150.00	100.00
17.250	17.250 (1.067)	58	21286			23.88- 123.88	73.88
17.250	17.250 (1.067)	57	7846			0.00- 77.23	27.23
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	111994	2.00000	2.134	50.00- 150.00	100.00
17.555	17.555 (1.085)	85	74286			15.66- 115.66	66.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	69716	2.00000	2.112	50.00- 150.00	100.00
18.329	18.329 (1.133)	77	24661			0.00- 83.49	35.37
18.329	18.329 (1.133)	39	42103			12.40- 112.40	60.39
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	35532	2.00000	2.233	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	97570			236.96- 336.96	274.60
18.522	18.522 (1.145)	85	14552			0.00- 92.50	40.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	155602	2.00000	2.089	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	102747			14.17- 114.17	66.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.297	19.297 (0.904)	75	76335	2.00000	2.112	50.00- 150.00	100.00
19.297	19.297 (0.904)	77	26580			0.00- 84.54	34.82
19.297	19.297 (0.904)	39	42907			12.48- 112.48	56.21
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	60280	2.00000	2.133	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	38629			13.27- 113.27	64.08
19.656	19.656 (0.921)	83	51953			36.29- 136.29	86.19
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	85338	2.00000	2.120	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	59944			21.90- 121.90	70.24
19.822	19.822 (0.929)	131	59586			19.44- 119.44	69.82
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	46496	2.00000	2.000	50.00- 150.00	100.00
19.960	19.960 (0.935)	43	88457			140.25- 240.25	190.25
19.960	19.960 (0.935)	100	8137			0.00- 67.50	17.50
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	109223	2.00000	2.205	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	86550			28.50- 128.50	79.24
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	98952	2.00000	2.212	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	92195			46.61- 146.61	93.17
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	141408	2.00000	2.115	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	45440			0.00- 83.74	32.13
21.398	21.398 (1.003)	77	99139			36.14- 136.14	70.11
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	69955	2.00000	2.172	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	212527			264.29- 364.29	303.81
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	83417	2.00000	2.084	50.00- 150.00	100.00
21.674	21.674 (1.016)	91	163670			143.19- 243.19	196.21
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	74387	2.00000	2.144	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	161137			162.29- 262.29	216.62
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	109628	2.00000	2.272	50.00- 150.00	100.00
22.421	22.421 (1.051)	78	62288			10.04- 110.04	56.82
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.070)	173	97647	2.00000	2.183	50.00- 150.00	100.00
22.836	22.836 (1.070)	171	51493			1.94- 101.94	52.73
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	195952	2.00000	2.167	50.00- 150.00	100.00
22.974	22.974 (1.076)	120	53445			0.00- 78.52	27.27
22.946	22.946 (1.075)	51	22911			0.00- 62.18	11.69
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	132378	2.00000	2.124	50.00- 150.00	100.00
23.527	23.527 (1.102)	85	87270			15.47- 115.47	65.92
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	266209	2.00000	2.136	50.00- 150.00	100.00
23.637	23.637 (1.108)	120	60173			0.00- 73.35	22.60
23.637	23.637 (1.108)	105	11173			0.00- 54.49	4.20
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	219557	2.00000	2.168	50.00- 150.00	100.00
23.831	23.831 (1.117)	120	69116			0.00- 81.78	31.48
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	207321	2.00000	2.132	50.00- 150.00	100.00
23.914	23.914 (1.120)	120	98647			0.00- 98.93	47.58
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	171652	2.00000	2.236	50.00- 150.00	100.00
24.550	24.550 (1.150)	120	81863			0.00- 99.04	47.69
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.131	25.131 (1.177)	146	136628	2.00000	2.129	50.00- 150.00	100.00
25.131	25.131 (1.177)	148	88189			15.44- 115.44	64.55
25.131	25.131 (1.177)	111	54874			0.00- 90.41	40.16
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	141744	2.00000	2.069	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	91243			13.67- 113.67	64.37
25.269	25.269 (1.184)	111	51928			0.00- 87.10	36.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	161676	2.00000	2.206	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	33956			0.00- 72.02	21.00
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	131381	2.00000	2.080	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	85098			13.48- 113.48	64.77
25.905	25.905 (1.214)	111	51832			0.00- 89.53	39.45
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	65598	2.00000	2.000	50.00- 150.00	100.00
28.808	28.808 (1.350)	182	63637			47.01- 147.01	97.01
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	65479	2.00000	2.000	50.00- 150.00	100.00
29.001	29.001 (1.359)	223	41018			12.64- 112.64	62.64
167 Naphthalene					CAS #: 91-20-3		
29.361	29.361 (1.376)	128	119215	2.00000	2.000	50.00- 150.00	100.00
29.361	29.361 (1.376)	127	16389			0.00- 63.75	13.75
29 Isopentane					CAS #: 78-78-4		
8.347	8.347 (0.580)	43	84271	2.00000	2.000	50.00- 150.00	100.00
8.347	8.347 (0.580)	57	54396			14.55- 114.55	64.55
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.468)	58	13585	2.00000	2.000	50.00- 150.00	100.00
6.744	6.744 (0.468)	43	112427			777.58- 877.58	827.58
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.891	16.891 (1.173)	83	75102	2.00000	2.095	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	34610			0.00- 96.26	46.08
16.891	16.891 (1.173)	55	68355			38.28- 138.28	91.02

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101804.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	611723	-10.51
97 1,4-Difluorobenze	2204815	1322889	3086741	2006513	-8.99
126 Chlorobenzene-d5	1812979	1087787	2538171	1607236	-11.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

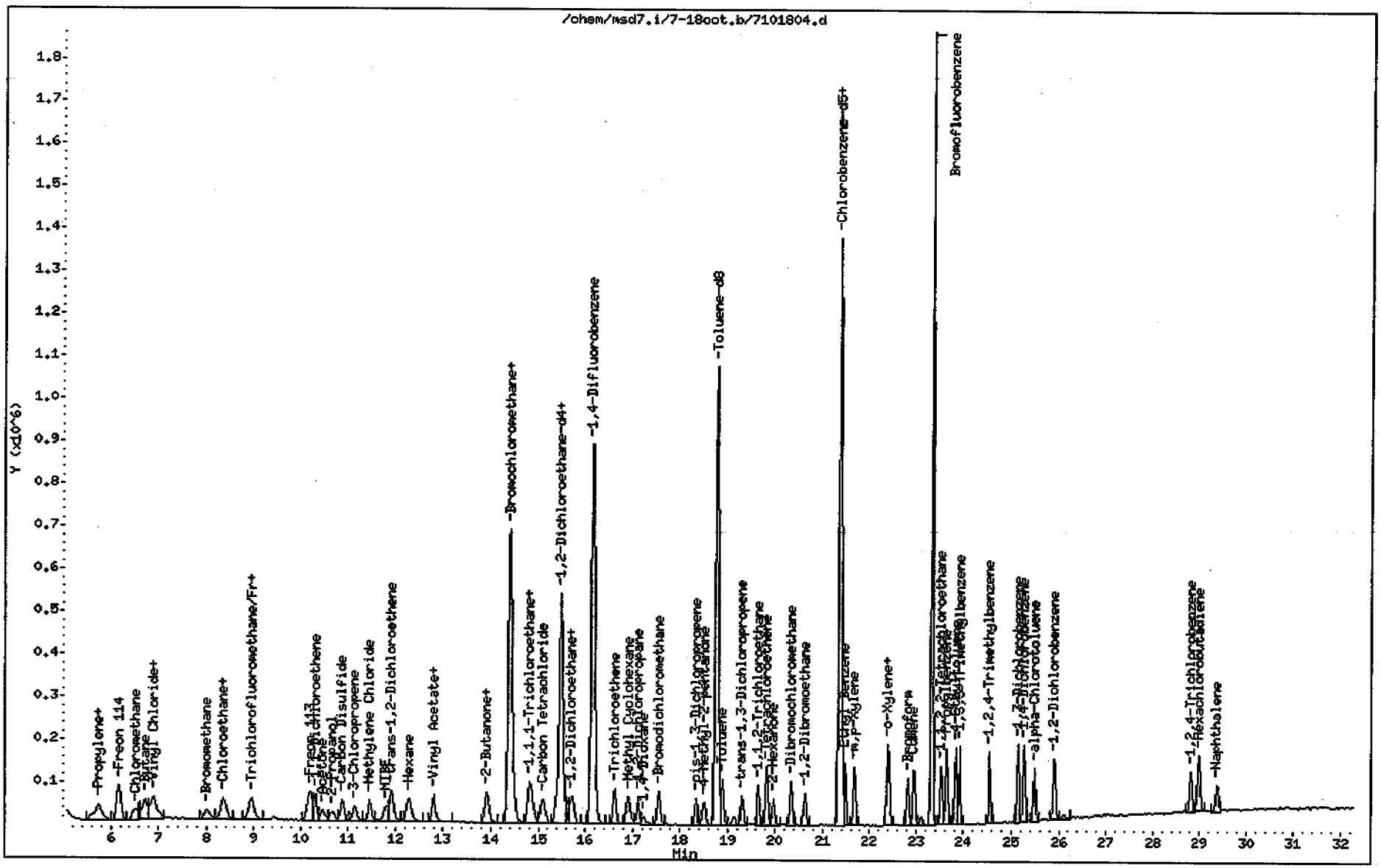
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-18oct.b/7101804.d
Date : 18-OCT-2007 14:09
Client ID: Level 3
Sample Info: 2mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103003.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 30-OCT-2007 09:51
Operator : cb
Inst ID: msd7.i
Smp Info : 8mL #1487-400
Misc Info : 200ppbv --> 8ppbv 1200ppbv --> 48ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 09:51
Cal File: 7103003.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.388	14.388 (1.000)	130	457095	25.0000		50.00- 150.00		100.00
14.388	14.388 (1.000)	128	356706			26.81- 126.81		78.04
14.388	14.388 (1.000)	49	651489			112.06- 212.06		142.53
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1520028	25.0000		50.00- 150.00		100.00
16.158	16.158 (1.000)	88	231032			0.00- 65.39		15.20
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1109895	25.0000		50.00- 150.00		100.00
21.356	21.356 (1.000)	82	594855			4.45- 104.45		53.60
26 Methanol						CAS #: 67-56-1		
7.560	7.560 (0.525)	31	434609	48.0000	55.679	50.00- 150.00		100.00
7.560	7.560 (0.525)	32	984446			96.19- 196.19		226.51

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103003.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv --> 8ppbv 1200ppbv --> 48ppbv MeOH

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	457095	-5.99
97 1,4-Difluorobenze	1616415	969849	2262981	1520028	-5.96
126 Chlorobenzene-d5	1130394	678236	1582552	1109895	-1.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.39	-0.19
97 1,4-Difluorobenze	16.19	15.86	16.52	16.16	-0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

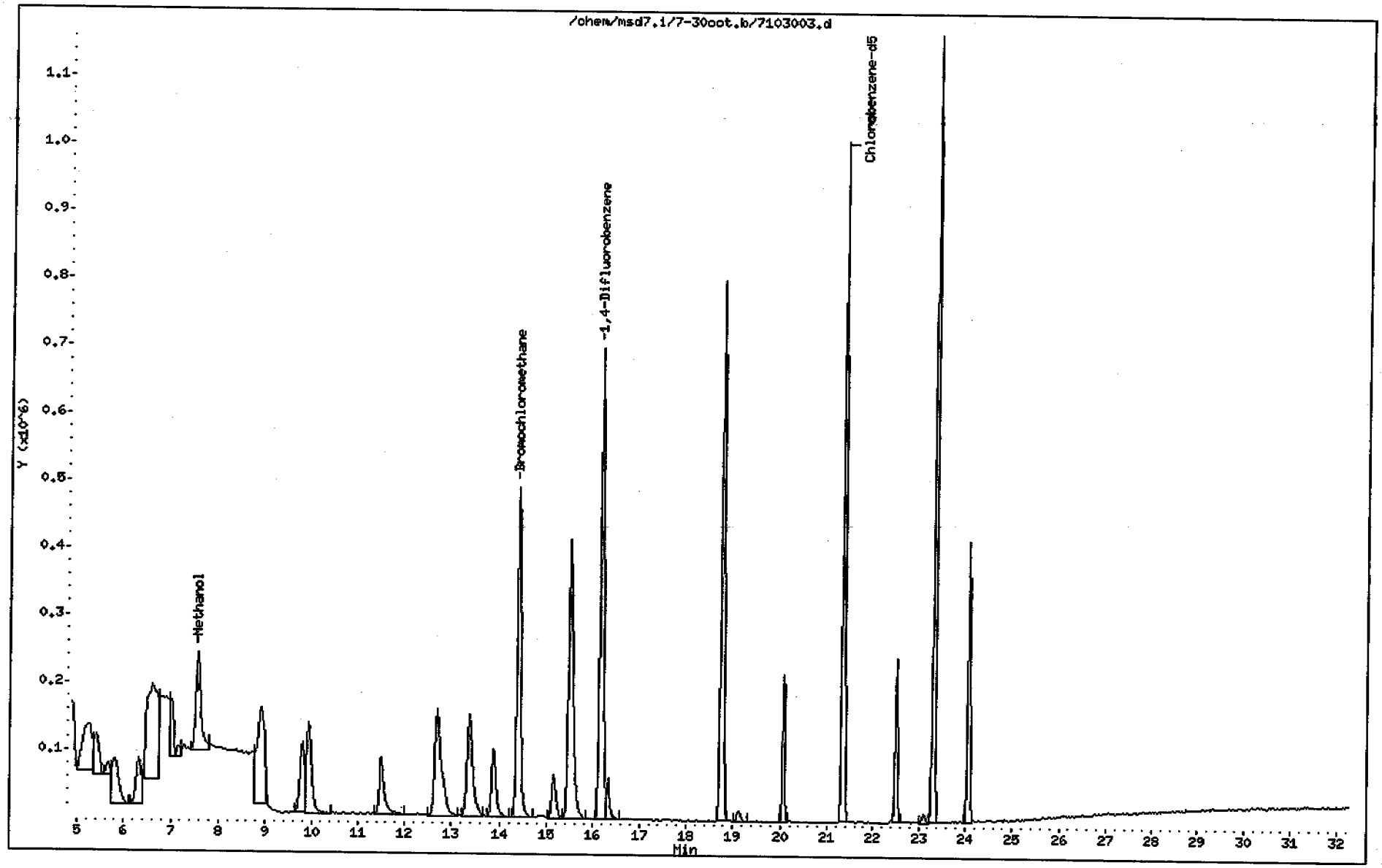
Data File: /chem/msd7.i/7-30oct.b/7103003.d
Date : 30-OCT-2007 09:51
Client ID: Level 4
Sample Info: 8mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0272



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101805.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 18-OCT-2007 14:47
Operator : cb
Inst ID: msd7.i
Smp Info : 25mL #1576-50
Misc Info : 200ppbv --> 25ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 14:47
Cal File: 7101805.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5	
14.403	14.403 (1.000)	130	648629	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	493340			26.59- 126.59	76.06
14.403	14.403 (1.000)	49	1078175			100.68- 200.68	166.22
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2091071	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	329502			0.00- 65.58	15.76
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.343	21.343 (1.000)	117	1761271	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	970978			5.27- 105.27	55.13
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.481	15.481 (1.075)	65	874142	25.0000	24.986	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	456837			0.53- 100.53	52.26
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.771	18.771 (1.161)	98	1876890	25.0000	25.785	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	216509			0.00- 61.42	11.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1297632			18.77- 118.77	69.14
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1070391	25.0000	25.306	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1338336			76.99- 176.99	125.03
23.333	23.333 (1.093)	176	1032203			46.79- 146.79	96.43
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	672994	25.0000	23.988	50.00- 150.00	100.00
5.610	5.610 (0.390)	42	475290			23.27- 123.27	70.62
5.610	5.610 (0.390)	39	505709			25.72- 125.72	75.14
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	2552602	25.0000	24.701	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	837020			0.00- 83.79	32.79
16 Freon 114					CAS #: 76-14-2		
6.163	6.163 (0.428)	135	1820434	25.0000	24.747	50.00- 150.00	100.00
6.191	6.191 (0.430)	137	576965			0.00- 82.27	31.69
18 Chloromethane					CAS #: 74-87-3		
6.467	6.467 (0.449)	50	827148	25.0000	24.210	50.00- 150.00	100.00
6.495	6.495 (0.451)	52	276375			0.00- 85.89	33.41
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.476)	62	1056924	25.0000	24.901	50.00- 150.00	100.00
6.854	6.854 (0.476)	64	331879			0.00- 84.32	31.40
22 1,3-Butadiene					CAS #: 106-99-0		
6.910	6.910 (0.480)	54	763518	25.0000	26.889	50.00- 150.00	100.00
6.910	6.910 (0.480)	39	775774			59.04- 159.04	101.61
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.557)	94	898127	25.0000	25.120	50.00- 150.00	100.00
8.016	8.016 (0.557)	96	847084			42.50- 142.50	94.32
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	459746	25.0000	28.558	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	124278			0.00- 81.05	27.03
8.347	8.347 (0.580)	66	146980			0.00- 84.75	31.97
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	2398500	25.0000	26.034	50.00- 150.00	100.00
8.956	8.956 (0.622)	103	1563188			16.23- 116.23	65.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	302916	25.0000	26.675	50.00- 150.00	100.00
9.453	9.453 (0.656)	43	64833			0.00- 75.78	21.40
9.453	9.453 (0.656)	46	115857			0.00- 88.51	38.25
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	1351088	25.0000	26.376	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	864179			11.90- 111.90	63.96
10.200	10.200 (0.708)	101	1679257			73.68- 173.68	124.29
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	1425325	25.0000	26.543	50.00- 150.00	100.00
10.338	10.338 (0.718)	96	884308			17.50- 117.50	62.04
10.338	10.338 (0.718)	98	559311			0.00- 87.09	39.24
45 Acetone					CAS #: 67-64-1		
10.476	10.476 (0.727)	58	427023	25.0000	26.693	50.00- 150.00	100.00
10.476	10.476 (0.727)	43	1298978			239.97- 339.97	304.19
46 2-Propanol					CAS #: 67-63-0		
10.670	10.670 (0.741)	45	1487551	25.0000	28.448	50.00- 150.00	100.00
10.670	10.670 (0.741)	43	360829			0.00- 77.79	24.26
10.670	10.670 (0.741)	59	57359			0.00- 53.60	3.86
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	2700196	25.0000	26.675	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.168	11.168 (0.775)	76	434925	25.0000	29.193	50.00- 150.00	100.00
11.168	11.168 (0.775)	41	1150405			232.71- 332.71	264.51
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	1008912	25.0000	25.532	50.00- 150.00	100.00
11.472	11.472 (0.796)	84	739684			21.92- 121.92	73.32
11.472	11.472 (0.796)	51	306196			0.00- 81.14	30.35
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	1771052	25.0000	26.144	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	420256			0.00- 73.63	23.73
11.831	11.831 (0.821)	41	443279			0.00- 78.21	25.03
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	998196	25.0000	28.326	50.00- 150.00	100.00
11.942	11.942 (0.829)	61	1447625			97.48- 197.48	145.02
11.942	11.942 (0.829)	98	642993			10.67- 110.67	64.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	1372419	25.0000	27.942	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	911424			19.81- 119.81	66.41
12.301	12.301 (0.854)	86	203564			0.00- 65.10	14.83
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	204632	25.0000	29.226	50.00- 150.00	100.00
12.799	12.799 (0.889)	43	2462047			1170.44-1270.44	1203.16
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.827	12.827 (0.891)	63	1728636	25.0000	28.337	50.00- 150.00	100.00
12.827	12.827 (0.891)	65	537140			0.00- 82.37	31.07
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	371338	25.0000	32.359	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	1736763			457.63- 557.63	467.70
13.905	13.905 (0.965)	57	128669			0.00- 87.78	34.65
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.933	13.933 (0.967)	61	1209222	25.0000	28.569	50.00- 150.00	100.00
13.933	13.933 (0.967)	96	897782			29.21- 129.21	74.24
13.933	13.933 (0.967)	98	571260			0.00- 98.58	47.24
80 Tetrahydrofuran					CAS #: 109-99-9		
14.403	14.403 (1.000)	42	962709	25.0000	30.617	50.00- 150.00	100.00
14.403	14.403 (1.000)	71	343205			0.00- 86.53	35.65
14.403	14.403 (1.000)	72	380604			0.00- 86.87	39.53
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	1763467	25.0000	28.425	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	1152392			13.67- 113.67	65.35
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	1771233	25.0000	27.820	50.00- 150.00	100.00
14.845	14.845 (1.031)	99	1152307			14.88- 114.88	65.06
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	1002003	25.0000	29.830	50.00- 150.00	100.00
14.845	14.845 (1.031)	56	1263499			79.48- 179.48	126.10
14.845	14.845 (1.031)	41	737802			39.89- 139.89	73.63
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	1724198	25.0000	29.064	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	1781371			55.49- 155.49	103.32
91 Benzene					CAS #: 71-43-2		
15.509	15.509 (0.959)	78	2269732	25.0000	28.929	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.509	15.509 (0.959)	77	498689			0.00- 71.80	21.97
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.426	15.426 (1.071)	57	3457104	25.0000	29.494	50.00- 150.00	100.00
15.426	15.426 (1.071)	56	1170008			0.00- 84.94	33.84
15.426	15.426 (1.071)	41	977669			0.00- 80.91	28.28
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	1227957	25.0000	28.008	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	393216			0.00- 83.52	32.02
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	703132	25.0000	31.170	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	1425110			166.67- 266.67	202.68
15.730	15.730 (0.973)	57	737513			63.24- 163.24	104.89
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	1016424	25.0000	28.695	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	1015319			48.65- 148.65	99.89
16.642	16.642 (1.029)	97	658135			15.00- 115.00	64.75
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	860882	25.0000	29.073	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	627970			24.69- 124.69	72.94
17.112	17.112 (1.058)	41	556404			24.45- 124.45	64.63
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	544742	25.0000	29.604	50.00- 150.00	100.00
17.250	17.250 (1.067)	58	388755			22.62- 122.62	71.36
17.250	17.250 (1.067)	57	130892			0.00- 75.63	24.03
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	1825381	25.0000	30.018	50.00- 150.00	100.00
17.555	17.555 (1.085)	85	1169739			15.13- 115.13	64.08
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	1259763	25.0000	31.709	50.00- 150.00	100.00
18.329	18.329 (1.133)	77	405185			0.00- 83.05	32.16
18.329	18.329 (1.133)	39	734636			11.04- 111.04	58.32
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	699008	25.0000	34.306	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	1880425			230.98- 330.98	269.01
18.522	18.522 (1.145)	85	276238			0.00- 91.51	39.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	2517803	25.0000	29.511	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	1570697			13.57- 113.57	62.38
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	1365604	25.0000	30.614	50.00- 150.00	100.00
19.324	19.324 (0.905)	77	431910			0.00- 83.57	31.63
19.297	19.297 (0.904)	39	741173			9.74- 109.74	54.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	995281	25.0000	29.343	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	611788			12.67- 112.67	61.47
19.656	19.656 (0.921)	83	830549			35.35- 135.35	83.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	1326702	25.0000	28.172	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	951582			21.84- 121.84	71.73
19.822	19.822 (0.929)	131	918961			19.38- 119.38	69.27
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	976339	25.0000	30.260	50.00- 150.00	100.00
19.960	19.960 (0.935)	43	1898544			142.35- 242.35	194.46
19.960	19.960 (0.935)	100	167728			0.00- 67.34	17.18
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	1889826	25.0000	30.784	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	1451142			27.93- 127.93	76.79
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	1691649	25.0000	30.624	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	1595981			45.86- 145.86	94.34
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	2151202	25.0000	27.748	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	697219			0.00- 83.29	32.41
21.398	21.398 (1.003)	77	1306142			27.66- 127.66	60.72
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	1127919	25.0000	29.242	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	3464186			261.90- 361.90	307.13
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	1393326	25.0000	29.141	50.00- 150.00	100.00
21.674	21.674 (1.016)	91	2764534			144.93- 244.93	198.41
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	1236660	25.0000	29.557	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	2558031			160.47- 260.47	206.85
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	2077088	25.0000	34.374	50.00- 150.00	100.00
22.421	22.421 (1.051)	78	1061823			7.81- 107.81	51.12
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.070)	173	1688739	25.0000	30.596	50.00- 150.00	100.00
22.836	22.836 (1.070)	171	867217			1.74- 101.74	51.35
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	3202644	25.0000	30.112	50.00- 150.00	100.00
22.974	22.974 (1.076)	120	877707			0.00- 78.24	27.41
22.946	22.946 (1.075)	51	336852			0.00- 61.76	10.52
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	1987656	25.0000	27.596	50.00- 150.00	100.00
23.527	23.527 (1.102)	85	1274611			15.02- 115.02	64.13
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	4176023	25.0000	28.463	50.00- 150.00	100.00
23.637	23.637 (1.108)	120	934951			0.00- 73.03	22.39
23.637	23.637 (1.108)	105	154058			0.00- 54.22	3.69
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	3761987	25.0000	30.300	50.00- 150.00	100.00
23.831	23.831 (1.117)	120	1081840			0.00- 80.77	28.76
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	2748553	25.0000	25.521	50.00- 150.00	100.00
23.914	23.914 (1.120)	120	1560080			1.54- 101.54	56.76
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	2622270	25.0000	28.800	50.00- 150.00	100.00
24.550	24.550 (1.150)	120	1282211			0.00- 98.99	48.90
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.131	25.131 (1.177)	146	1977163	25.0000	26.992	50.00- 150.00	100.00
25.131	25.131 (1.177)	148	1259144			14.85- 114.85	63.68
25.131	25.131 (1.177)	111	766458			0.00- 89.86	38.77
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	2033388	25.0000	26.349	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	1297512			13.71- 113.71	63.81
25.269	25.269 (1.184)	111	752714			0.00- 87.07	37.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	2693301	25.0000	30.105	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	562707			0.00- 71.64	20.89
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	1756987	25.0000	25.257	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	1110267			13.39- 113.39	63.19
25.905	25.905 (1.214)	111	707034			0.00- 89.77	40.24
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	489632	25.0000	17.636	50.00- 150.00	100.00
28.808	28.808 (1.350)	182	471701			46.67- 146.67	96.34
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	471653	25.0000	17.231	50.00- 150.00	100.00
29.001	29.001 (1.359)	223	296659			12.77- 112.77	62.90
167 Naphthalene					CAS #: 91-20-3		
29.361	29.361 (1.376)	128	811801	25.0000	16.602	50.00- 150.00	100.00
29.361	29.361 (1.376)	127	99474			0.00- 63.00	12.25
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	1092752	25.0000	24.726	50.00- 150.00	100.00
8.375	8.375 (0.581)	57	731967			15.77- 115.77	66.98
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.468)	58	177191	25.0000	24.799	50.00- 150.00	100.00
6.744	6.744 (0.468)	43	1417940			763.91- 863.91	800.23
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	1222177	25.0000	29.354	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	569027			0.00- 96.36	46.56
16.919	16.919 (1.175)	55	1091840			38.63- 138.63	89.34

Data File: /chem/msd7.i/7-18oct.b/7101805.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101805.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 25ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	648629	-5.11
97 1,4-Difluorobenze	2204815	1322889	3086741	2091071	-5.16
126 Chlorobenzene-d5	1812979	1087787	2538171	1761271	-2.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

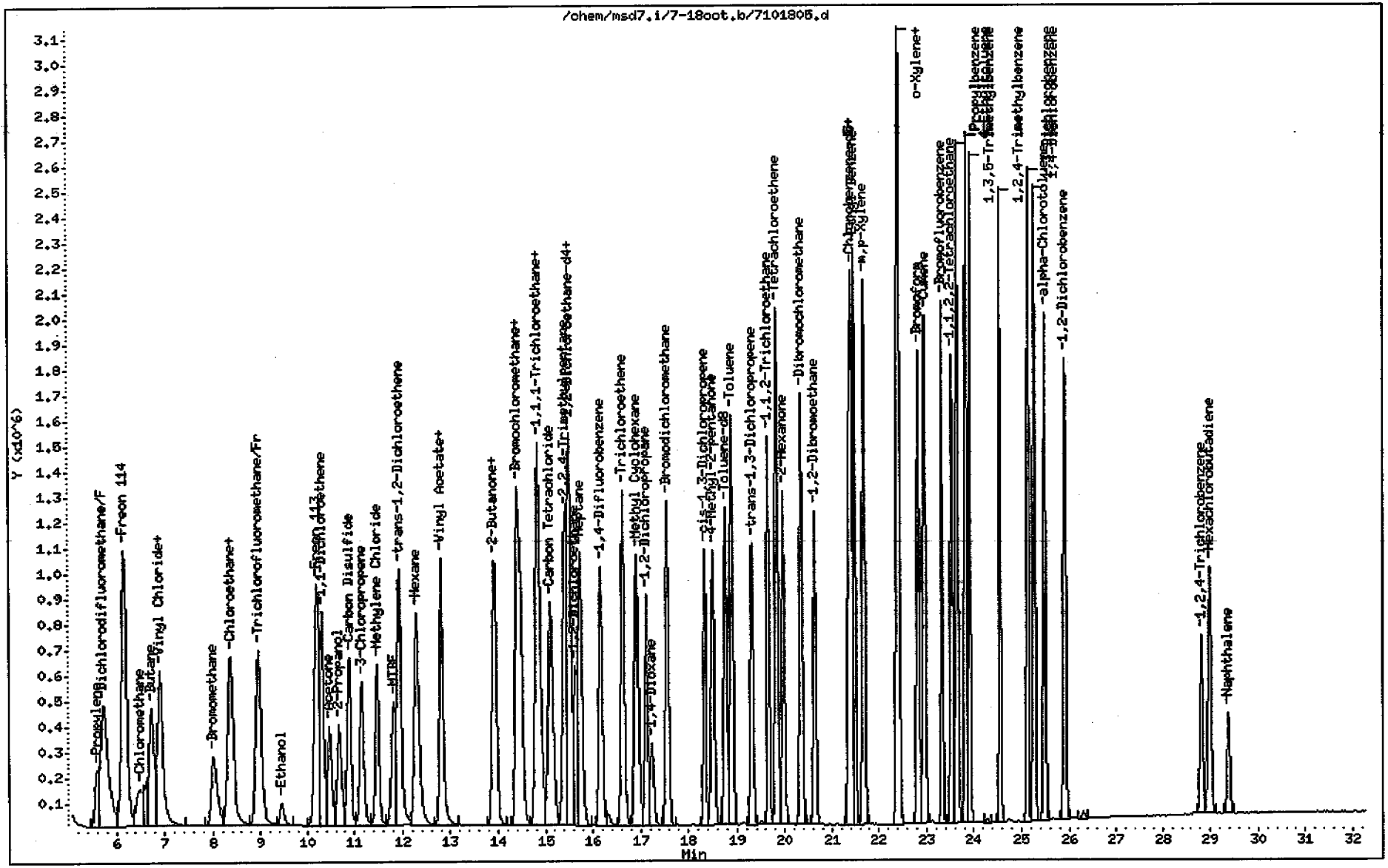
0282

Data File: /chem/msd7.i/7-18oct.b/7101805.d
Date : 18-OCT-2007 14:47
Client ID: Level 4
Sample Info: 25mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103004.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 30-OCT-2007 10:29
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 10:29
Cal File: 7103004.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	486199	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	373087			26.74- 126.74	76.74
14.416	14.416 (1.000)	49	687796			91.46- 191.46	141.46
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1616415	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	244505			0.00- 65.13	15.13
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1130394	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	593319			4.45- 104.45	52.49
26 Methanol					CAS #: 67-56-1		
7.588	7.588 (0.526)	31	2404086	300.000	289.56	80.00- 120.00	100.00
7.588	7.588 (0.526)	32	1583298			15.86- 115.86	65.86

Data File: /chem/msd7.i/7-30oct.b/7103004.d
Report Date: 30-Oct-2007 11:34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103004.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	486199	0.00
97 1,4-Difluorobenze	1616415	969849	2262981	1616415	0.00
126 Chlorobenzene-d5	1130394	678236	1582552	1130394	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.19	15.86	16.52	16.19	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

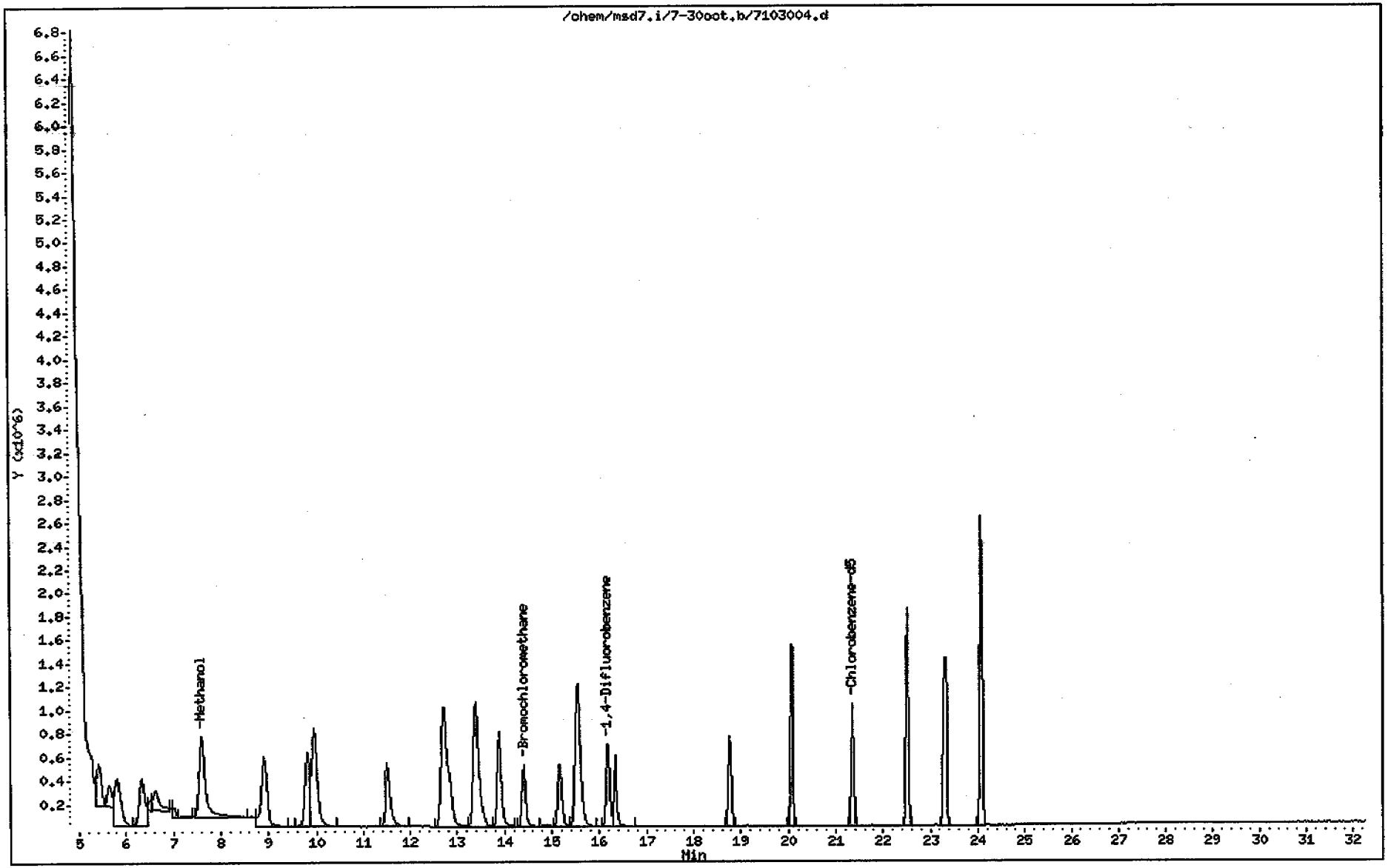
Data File: /chem/msd7.i/7-30oct.b/7103004.d
Date : 30-OCT-2007 10:29
Client ID: Level 5
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0285



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102206.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 22-OCT-2007 11:44
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-370
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 11:44
Cal File: 7102206.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	653745	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	501927			26.78- 126.78	76.78
14.402	14.402 (1.000)	49	962603			97.24- 197.24	147.24
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2055535	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	321836			0.00- 65.66	15.66
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1681036	25.0000		80.00- 120.00	100.00
21.342	21.342 (1.000)	82	930753			5.19- 105.19	55.37
55 Cyclopentene					CAS #: 142-29-0		
11.250	11.250 (0.781)	67	6338028	50.0000	52.035	80.00- 120.00	100.00
11.250	11.250 (0.781)	68	2569210			0.00- 90.48	40.54
11.250	11.250 (0.781)	53	1314450			0.00- 70.85	20.74
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.877	13.877 (0.964)	77	4020302	50.0000	52.711	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	1308053			0.00- 82.54	32.54
13.877	13.877 (0.964)	97	801913			0.00- 70.03	19.95
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	1484028	50.0000	53.552	80.00- 120.00	100.00
15.121	15.121 (0.935)	75	4019552			218.22- 318.22	270.85
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	4474167	50.0000	54.223	80.00- 120.00	100.00
19.988	19.988 (1.236)	41	3238032			22.37- 122.37	72.37
19.988	19.988 (1.236)	78	1429445			0.00- 81.77	31.95
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	3235607	50.0000	53.976	80.00- 120.00	100.00
21.536	21.536 (1.009)	117	2225982			18.93- 118.93	68.80
21.508	21.508 (1.008)	95	1265610			0.00- 89.37	39.12
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	3872849	50.0000	55.062	80.00- 120.00	100.00
23.610	23.610 (1.106)	158	3741648			46.61- 146.61	96.61
23.610	23.610 (1.106)	77	7718215			147.77- 247.77	199.29
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	1790961	50.0000	54.413	80.00- 120.00	100.00
23.665	23.665 (1.109)	75	5405655			251.83- 351.83	301.83
23.665	23.665 (1.109)	61	1399772			26.84- 126.84	78.16
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	2802997	50.0000	53.956	80.00- 120.00	100.00
23.886	23.886 (1.119)	91	8196683			242.43- 342.43	292.43
23.886	23.886 (1.119)	65	796656			0.00- 78.37	28.42
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	3061327	50.0000	55.234	80.00- 120.00	100.00
24.080	24.080 (1.128)	91	9049733			245.61- 345.61	295.61
24.052	24.052 (1.127)	63	1168807			0.00- 88.24	38.18
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	8782477	50.0000	53.478	80.00- 120.00	100.00
25.020	25.020 (1.172)	134	2420527			0.00- 77.89	27.56
25.020	25.020 (1.172)	91	2231273			0.00- 74.89	25.41
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	3521301	50.0000	54.043	80.00- 120.00	100.00
25.269	25.269 (1.184)	105	7581391			165.30- 265.30	215.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	983859			0.00- 78.76	27.94
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	2345394	50.0000	53.114	80.00- 120.00	100.00
25.683	25.683 (1.203)	91	9453400			353.06- 453.06	403.06
25.683	25.683 (1.203)	92	5362392			181.94- 281.94	228.64
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	7751126	50.0000	52.355	80.00- 120.00	100.00
24.467	24.467 (1.146)	134	1919419			0.00- 74.76	24.76
24.467	24.467 (1.146)	91	5566932			20.96- 120.96	71.82
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	10990002	50.0000	53.630	80.00- 120.00	100.00
24.826	24.826 (1.163)	134	2159111			0.00- 69.65	19.65
24.826	24.826 (1.163)	91	1806199			0.00- 65.99	16.43
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	2721900	50.0000	51.363	80.00- 120.00	100.00
27.287	27.287 (1.279)	75	2358984			36.67- 136.67	86.67
27.287	27.287 (1.279)	155	2114262			28.87- 128.87	77.68
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	2362276	50.0000	53.370	80.00- 120.00	100.00
24.605	24.605 (1.153)	117	2494933			54.36- 154.36	105.62
24.605	24.605 (1.153)	169	1140247			0.00- 97.70	48.27

Data File: /chem/msd7.i/7-22oct.b/7102206.d
Report Date: 22-Oct-2007 13:49

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102206.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 11:44
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	653745	392247	915243	653745	0.00
97 1,4-Difluorobenze	2055535	1233321	2877749	2055535	0.00
126 Chlorobenzene-d5	1681036	1008622	2353450	1681036	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

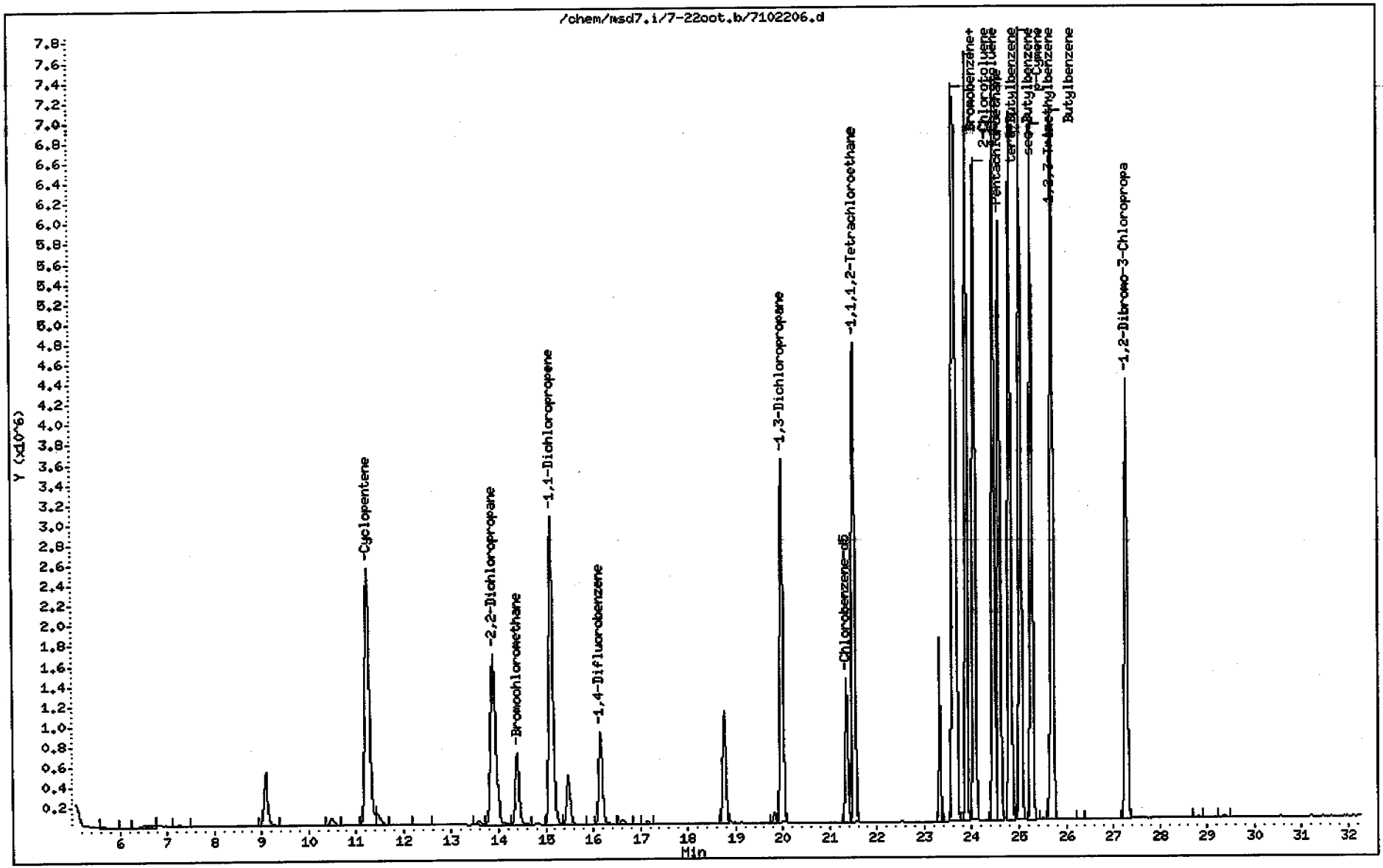
0290

Data File: /chem/msd7.i/7-22oct.b/7102206.d
Date : 22-OCT-2007 11:44
Client ID: Level 5
Sample Info: 50mL #1487-370

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/7-19oct.b/7101904.d
Report Date: 19-Oct-2007 12:11

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101904.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 19-OCT-2007 11:00
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 11:00
Cal File: 7101904.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	694127	25.0000		80.00- 120.00		100.00
14.402	14.402 (1.000)	128	531772			26.61- 126.61		76.61
14.402	14.402 (1.000)	49	1021801			97.21- 197.21		147.21
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2223212	25.0000		80.00- 120.00		100.00
16.172	16.172 (1.000)	88	354725			0.00- 65.96		15.96
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.370	21.370 (1.000)	117	1779964	25.0000		80.00- 120.00		100.00
21.342	21.342 (1.000)	82	986509			5.24- 105.24		55.42
5 Freon 143a						CAS #: 420-46-2		
5.306	5.306 (0.368)	65	766302	50.0000	49.911	80.00- 120.00		100.00
5.223	5.223 (0.363)	69	6741914			0.00- 50.00		879.80
5.278	5.278 (0.366)	64	224377			0.00- 76.18		29.28
6 Freon142b						CAS #: 75-68-3		
6.356	6.356 (0.441)	65	3144007	50.0000	49.820	80.00- 120.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)							
6.329	6.329 (0.439)	45	770144			0.00- 74.42	24.50
13 Freon 134a					CAS #: 811-97-2		
5.444	5.444 (0.378)	83	1490027	50.0000	49.641	80.00- 120.00	100.00
5.223	5.223 (0.363)	69	6741914			409.04- 509.04	452.47
5.444	5.444 (0.378)	63	197636			0.00- 63.70	13.26
15 Freon 152a					CAS #: 75-37-6		
5.665	5.665 (0.393)	65	1071725	50.0000	49.165	80.00- 120.00	100.00
5.665	5.665 (0.393)	51	1716739			110.12- 210.12	160.18
5.665	5.665 (0.393)	47	437796			0.00- 90.40	40.85
17 Freon 22					CAS #: 75-45-6		
5.803	5.803 (0.403)	51	3429656	50.0000	48.340	80.00- 120.00	100.00
5.803	5.803 (0.403)	67	407051			0.00- 61.77	11.87
5.831	5.831 (0.405)	85	45824			0.00- 51.67	1.34
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.928	8.928 (0.620)	67	3121227	50.0000	50.694	80.00- 120.00	100.00
8.928	8.928 (0.620)	69	981436			0.00- 81.12	31.44
8.928	8.928 (0.620)	35	88167			0.00- 53.83	2.82
40 Freon123a					CAS #: 354-23-4		
9.813	9.813 (0.681)	117	1871544	50.0000	54.425	80.00- 120.00	100.00
9.813	9.813 (0.681)	67	2736149			110.97- 210.97	146.20
41 Freon123					CAS #: 306-83-2		
9.978	9.978 (0.693)	83	3184755	50.0000	51.277	80.00- 120.00	100.00
9.978	9.978 (0.693)	133	627762			0.00- 69.52	19.71
9.978	9.978 (0.693)	85	2260913			22.16- 122.16	70.99
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.527	11.527 (0.800)	59	3711893	50.0000	51.792	80.00- 120.00	100.00
11.527	11.527 (0.800)	41	752755			0.00- 73.42	20.28
11.527	11.527 (0.800)	57	362771			0.00- 60.26	9.77
68 Isopropyl ether					CAS #: 108-20-3		
12.716	12.716 (0.883)	45	6578708	50.0000	52.939	80.00- 120.00	100.00
12.716	12.716 (0.883)	87	1520476			0.00- 73.31	23.11
12.716	12.716 (0.883)	59	520306			0.00- 58.30	7.91
71 1-Propanol					CAS #: 71-23-8		
12.854	12.854 (0.892)	42	425719	50.0000	57.194	80.00- 120.00	100.00
12.854	12.854 (0.892)	59	638506			95.91- 195.91	149.98
12.716	12.716 (0.883)	41	1236325			265.93- 365.93	290.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.379	13.379 (0.929)	59	5651281	50.0000	54.203	80.00- 120.00	100.00
13.379	13.379 (0.929)	87	2181708			0.00- 88.95	38.61
13.379	13.379 (0.929)	41	981804			0.00- 67.89	17.37
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	620455	50.0000	53.330	80.00- 120.00	100.00
13.877	13.877 (0.964)	61	597626			49.04- 149.04	96.32
13.877	13.877 (0.964)	43	4293069			622.55- 722.55	691.92
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	4149237	50.0000	54.724	80.00- 120.00	100.00
15.564	15.564 (1.081)	87	972129			0.00- 73.71	23.43
15.536	15.536 (1.079)	55	1097280			0.00- 78.56	26.45
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	2609217	50.0000	61.498	80.00- 120.00	100.00
22.504	22.504 (1.562)	43	4102315			108.53- 208.53	157.22
98 1-Butanol					CAS #: 71-36-3		
16.338	16.338 (1.010)	56	1222941	50.0000	62.304	80.00- 120.00	100.00
16.338	16.338 (1.010)	41	881157			21.86- 121.86	72.05
16.338	16.338 (1.010)	43	677934			9.15- 109.15	55.43
99 Isobutanol					CAS #: 78-83-1		
15.149	15.149 (1.052)	59	42901	50.0000	62.469	80.00- 120.00	100.00
15.149	15.149 (1.052)	41	1065866			2630.47-2730.47	2484.48
15.149	15.149 (1.052)	43	1475416			3703.83-3803.83	3439.12
119 Butyl Acetate					CAS #: 123-86-4		
20.070	20.070 (1.241)	56	1830296	50.0000	59.304	80.00- 120.00	100.00
20.070	20.070 (1.241)	73	585535			0.00- 81.99	31.99
20.070	20.070 (1.241)	43	4559849			199.13- 299.13	249.13
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.089)	55	1834532	50.0000	54.771	80.00- 120.00	100.00
23.278	23.278 (1.089)	98	769278			0.00- 90.06	41.93
23.278	23.278 (1.089)	42	1263933			16.60- 116.60	68.90
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.127)	57	4306488	50.0000	53.933	80.00- 120.00	100.00
24.080	24.080 (1.127)	85	3477655			30.75- 130.75	80.75
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd7.i/7-19oct.b/7101904.d
Report Date: 19-Oct-2007 12:11

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101904.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	694127	0.00
97 1,4-Difluorobenze	2223212	1333927	3112497	2223212	0.00
126 Chlorobenzene-d5	1779964	1067978	2491950	1779964	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.37	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

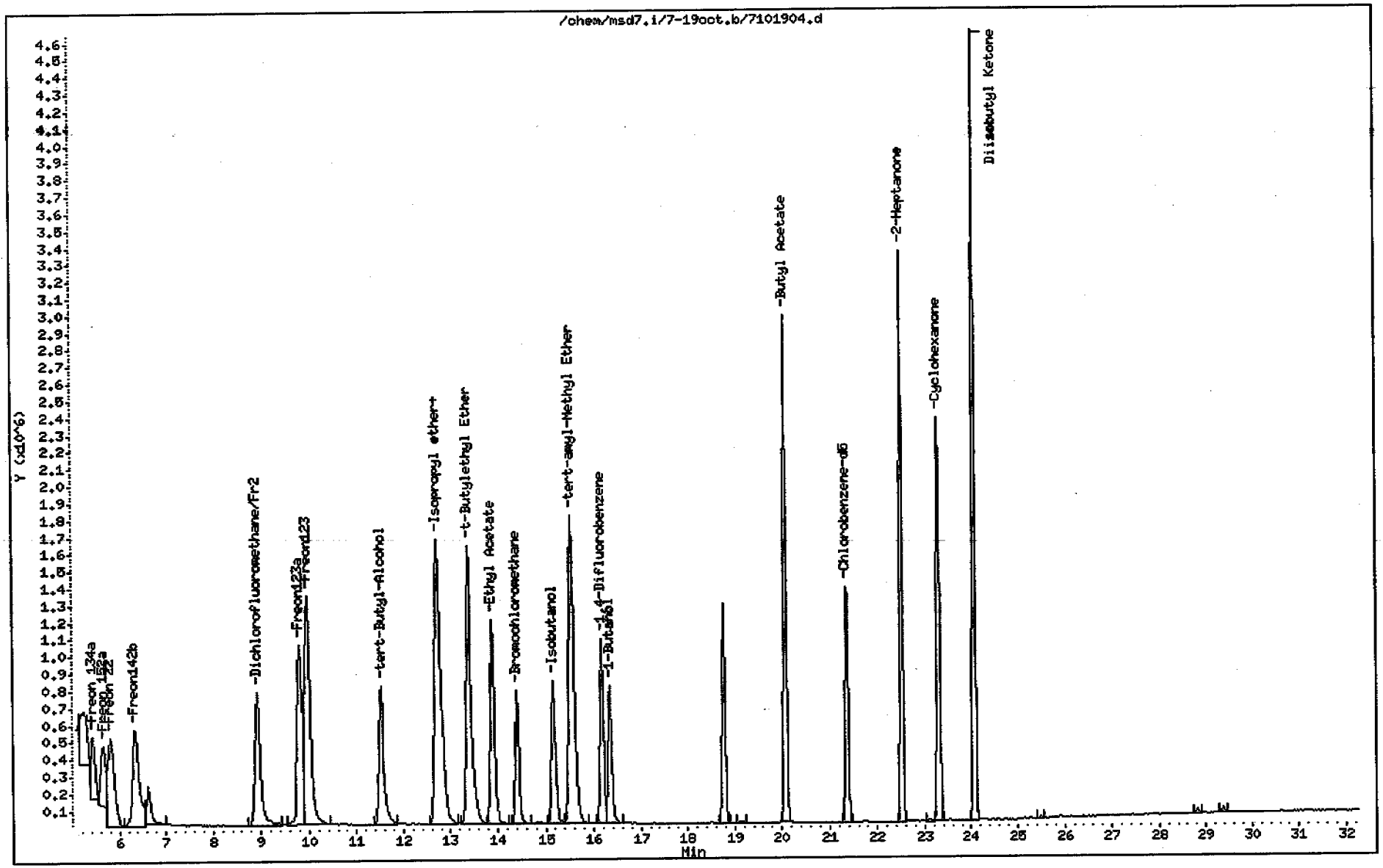
0295

Data File: /chem/msd7.i/7-19oct.b/7101904.d
Date : 19-OCT-2007 11:00
Client ID: Level 5
Sample Info: 50mL #1487-400

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101806.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 18-OCT-2007 15:26
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1576-50
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 15:26
Cal File: 7101806.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	======= ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	683549	25.0000		80.00- 120.00		100.00
14.402	14.402 (1.000)	128	526020			26.95- 126.95		76.95
14.402	14.402 (1.000)	49	1309838			141.62- 241.62		191.62
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2204815	25.0000		80.00- 120.00		100.00
16.172	16.172 (1.000)	88	346032			0.00- 65.69		15.69
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.370	21.370 (1.000)	117	1812979	25.0000		80.00- 120.00		100.00
21.342	21.342 (1.000)	82	1018657			5.45- 105.45		56.19
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.508	15.508 (1.077)	65	902272	25.0000	24.576	80.00- 120.00		100.00
15.508	15.508 (1.077)	67	497167			1.44- 101.44		55.10
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1988860	25.0000	25.725	80.00- 120.00		100.00
18.771	18.771 (1.161)	70	232527			0.00- 61.47		11.69

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1398815			19.08- 119.08	70.33
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.092)	174	1084886	25.0000	24.933	80.00- 120.00	100.00
23.333	23.333 (1.092)	95	1375583			76.80- 176.80	126.80
23.333	23.333 (1.092)	176	1042148			46.06- 146.06	96.06
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	1415032	50.0000	48.553	80.00- 120.00	100.00
5.610	5.610 (0.390)	42	982874			22.00- 122.00	69.46
5.610	5.610 (0.390)	39	1047010			25.14- 125.14	73.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	5298030	50.0000	48.980	80.00- 120.00	100.00
5.748	5.748 (0.399)	87	1667645			0.00- 83.21	31.48
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	3652709	50.0000	47.806	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	1161951			0.00- 81.81	31.81
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	1693664	50.0000	47.987	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	575628			0.00- 85.25	33.99
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	2169718	50.0000	48.872	80.00- 120.00	100.00
6.882	6.882 (0.478)	64	690774			0.00- 83.70	31.84
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.482)	54	1604484	50.0000	52.666	80.00- 120.00	100.00
6.937	6.937 (0.482)	39	1626075			57.11- 157.11	101.35
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	1956954	50.0000	51.440	80.00- 120.00	100.00
8.043	8.043 (0.558)	96	1834965			43.77- 143.77	93.77
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	1036064	50.0000	57.866	80.00- 120.00	100.00
8.375	8.375 (0.581)	49	276958			0.00- 79.97	26.73
8.375	8.375 (0.581)	66	325306			0.00- 83.92	31.40
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	5127114	50.0000	52.077	80.00- 120.00	100.00
8.983	8.983 (0.624)	103	3298307			14.33- 114.33	64.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	692455	50.0000	54.981	80.00- 120.00	100.00
9.453	9.453 (0.656)	43	138038			0.00- 73.83	19.93
9.453	9.453 (0.656)	46	261445			0.00- 88.26	37.76
42 Freon 113					CAS #: 76-13-1		
10.227	10.227 (0.710)	151	2874533	50.0000	52.399	80.00- 120.00	100.00
10.227	10.227 (0.710)	153	1825117			13.49- 113.49	63.49
10.200	10.200 (0.708)	101	3540517			73.17- 173.17	123.17
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.338	10.338 (0.718)	61	3011437	50.0000	52.373	80.00- 120.00	100.00
10.338	10.338 (0.718)	96	1849526			11.42- 111.42	61.42
10.338	10.338 (0.718)	98	1195426			0.00- 89.70	39.70
45 Acetone					CAS #: 67-64-1		
10.504	10.504 (0.729)	58	914212	50.0000	52.741	80.00- 120.00	100.00
10.504	10.504 (0.729)	43	2796075			245.26- 345.26	305.85
46 2-Propanol					CAS #: 67-63-0		
10.697	10.697 (0.743)	45	3341125	50.0000	56.618	80.00- 120.00	100.00
10.697	10.697 (0.743)	43	786824			0.00- 76.38	23.55
10.670	10.670 (0.741)	59	124809			0.00- 53.64	3.74
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	5750337	50.0000	52.873	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.168	11.168 (0.775)	76	950362	50.0000	56.560	80.00- 120.00	100.00
11.168	11.168 (0.775)	41	2534016			227.35- 327.35	266.64
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	2157693	50.0000	51.348	80.00- 120.00	100.00
11.472	11.472 (0.796)	84	1585590			23.49- 123.49	73.49
11.472	11.472 (0.796)	51	653724			0.00- 80.93	30.30
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	3587655	50.0000	50.191	80.00- 120.00	100.00
11.831	11.831 (0.821)	57	828957			0.00- 73.11	23.11
11.831	11.831 (0.821)	41	846055			0.00- 77.06	23.58
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	2126458	50.0000	55.255	80.00- 120.00	100.00
11.942	11.942 (0.829)	61	3057162			93.77- 193.77	143.77
11.942	11.942 (0.829)	98	1345621			11.32- 111.32	63.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	3008806	50.0000	55.859	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	1950873			18.57- 118.57	64.84
12.301	12.301 (0.854)	86	447575			0.00- 65.04	14.88
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	455231	50.0000	57.233	80.00- 120.00	100.00
12.799	12.799 (0.889)	43	5401152			1159.12-1259.12	1186.46
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	3599964	50.0000	54.367	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	1139875			0.00- 81.66	31.66
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	818664	50.0000	62.193	80.00- 120.00	100.00
13.905	13.905 (0.965)	43	3790041			412.95- 512.95	462.95
13.905	13.905 (0.965)	57	288123			0.00- 87.14	35.19
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	2561771	50.0000	55.374	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	1913669			24.70- 124.70	74.70
13.932	13.932 (0.967)	98	1211977			0.00- 97.31	47.31
80 Tetrahydrofuran					CAS #: 109-99-9		
14.402	14.402 (1.000)	42	2102531	50.0000	59.452	80.00- 120.00	100.00
14.402	14.402 (1.000)	71	754061			0.00- 85.86	35.86
14.402	14.402 (1.000)	72	820596			0.00- 87.41	39.03
82 Chloroform					CAS #: 67-66-3		
14.485	14.485 (1.006)	83	3686125	50.0000	54.978	80.00- 120.00	100.00
14.485	14.485 (1.006)	85	2406880			15.30- 115.30	65.30
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	3640858	50.0000	53.131	80.00- 120.00	100.00
14.845	14.845 (1.031)	99	2345271			14.42- 114.42	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	2138441	50.0000	57.422	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	2718812			77.14- 177.14	127.14
14.845	14.845 (1.031)	41	1560161			22.96- 122.96	72.96
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	3463048	50.0000	53.939	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	3609254			54.22- 154.22	104.22
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	4811071	50.0000	56.318	80.00- 120.00	100.00

Data File: /chem/msd7.i/7-18oct.b/7101806.d
Report Date: 18-Oct-2007 15:55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	1049814			0.00- 71.80	21.82
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.426	15.426 (1.071)	57	7449400	50.0000	57.351	80.00- 120.00	100.00
15.426	15.426 (1.071)	56	2538112			0.00- 84.72	34.07
15.426	15.426 (1.071)	41	2024280			0.00- 79.98	27.17
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.647	15.647 (0.968)	62	2450001	50.0000	52.215	80.00- 120.00	100.00
15.647	15.647 (0.968)	64	778826			0.00- 83.09	31.79
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	1529856	50.0000	60.023	80.00- 120.00	100.00
15.730	15.730 (0.973)	43	2998586			161.50- 261.50	196.00
15.730	15.730 (0.973)	57	1580456			60.75- 160.75	103.31
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	2098294	50.0000	54.497	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	2078430			49.05- 149.05	99.05
16.642	16.642 (1.029)	97	1362364			14.93- 114.93	64.93
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	1815045	50.0000	55.862	80.00- 120.00	100.00
17.140	17.140 (1.060)	62	1334457			23.52- 123.52	73.52
17.112	17.112 (1.058)	41	1125501			12.01- 112.01	62.01
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	1166444	50.0000	56.320	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	834019			21.50- 121.50	71.50
17.250	17.250 (1.067)	57	275329			0.00- 74.96	23.60
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	3729470	50.0000	55.885	80.00- 120.00	100.00
17.555	17.555 (1.085)	85	2400491			14.37- 114.37	64.37
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	2709608	50.0000	60.260	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	866280			0.00- 81.97	31.97
18.329	18.329 (1.133)	39	1541138			6.88- 106.88	56.88
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	1532118	50.0000	64.446	80.00- 120.00	100.00
18.522	18.522 (1.145)	43	4010581			226.18- 326.18	261.77
18.522	18.522 (1.145)	85	598542			0.00- 90.90	39.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	5242049	50.0000	55.958	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	3304331			13.04- 113.04	63.04
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.904)	75	2903918	50.0000	59.315	80.00- 120.00	100.00
19.324	19.324 (0.904)	77	919192			0.00- 81.65	31.65
19.296	19.296 (0.903)	39	1525103			2.52- 102.52	52.52
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.920)	97	2037297	50.0000	56.012	80.00- 120.00	100.00
19.656	19.656 (0.920)	99	1285217			13.08- 113.08	63.08
19.656	19.656 (0.920)	83	1738135			35.32- 135.32	85.32
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.928)	166	2630580	50.0000	53.132	80.00- 120.00	100.00
19.822	19.822 (0.928)	129	1904175			22.39- 122.39	72.39
19.822	19.822 (0.928)	131	1836103			19.80- 119.80	69.80
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.934)	58	2182082	50.0000	59.476	80.00- 120.00	100.00
19.960	19.960 (0.934)	43	4116153			138.63- 238.63	188.63
19.960	19.960 (0.934)	100	368946			0.00- 67.20	16.91
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.952)	129	3738274	50.0000	56.568	80.00- 120.00	100.00
20.347	20.347 (0.952)	127	2895663			27.81- 127.81	77.46
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.965)	107	3445162	50.0000	57.543	80.00- 120.00	100.00
20.624	20.624 (0.965)	109	3261446			44.67- 144.67	94.67
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.001)	112	4380087	50.0000	53.577	80.00- 120.00	100.00
21.398	21.398 (1.001)	114	1420303			0.00- 82.43	32.43
21.398	21.398 (1.001)	77	2660829			10.75- 110.75	60.75
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.005)	106	2271121	50.0000	55.213	80.00- 120.00	100.00
21.481	21.481 (1.005)	91	7073632			261.79- 361.79	311.46
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.014)	106	2878647	50.0000	56.107	80.00- 120.00	100.00
21.674	21.674 (1.014)	91	5612675			144.94- 244.94	194.98
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.048)	106	2496065	50.0000	55.739	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.048)	91	5108173			154.65- 254.65	204.65
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.049)	104	4186975	50.0000	62.955	80.00- 120.00	100.00
22.421	22.421 (1.049)	78	2164094			1.69- 101.69	51.69
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.069)	173	3309894	50.0000	55.947	80.00- 120.00	100.00
22.836	22.836 (1.069)	171	1695247			1.22- 101.22	51.22
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.075)	105	6354552	50.0000	56.234	80.00- 120.00	100.00
22.974	22.974 (1.075)	120	1765060			0.00- 78.15	27.78
22.946	22.946 (1.074)	51	673484			0.00- 61.53	10.60
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.101)	83	4017577	50.0000	53.077	80.00- 120.00	100.00
23.527	23.527 (1.101)	85	2585413			14.35- 114.35	64.35
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.106)	91	8303428	50.0000	53.645	80.00- 120.00	100.00
23.637	23.637 (1.106)	120	1899976			0.00- 72.99	22.88
23.637	23.637 (1.106)	105	309581			0.00- 54.10	3.73
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.115)	105	7539048	50.0000	56.452	80.00- 120.00	100.00
23.831	23.831 (1.115)	120	2142451			0.00- 78.42	28.42
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.119)	105	5408871	50.0000	49.087	80.00- 120.00	100.00
23.914	23.914 (1.119)	120	3102305			2.99- 102.99	57.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.149)	105	5207980	50.0000	54.062	80.00- 120.00	100.00
24.550	24.550 (1.149)	120	2539167			0.00- 98.94	48.76
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.176)	146	3918753	50.0000	51.464	80.00- 120.00	100.00
25.130	25.130 (1.176)	148	2506551			14.63- 114.63	63.96
25.130	25.130 (1.176)	111	1546766			0.00- 89.77	39.47
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.182)	146	4048283	50.0000	50.718	80.00- 120.00	100.00
25.269	25.269 (1.182)	148	2596227			13.82- 113.82	64.13
25.269	25.269 (1.182)	111	1524194			0.00- 87.22	37.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.193)	91	5747139	50.0000	58.762	80.00- 120.00	100.00
25.490	25.490 (1.193)	126	1192032			0.00- 71.42	20.74
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.213)	146	3515051	50.0000	49.313	80.00- 120.00	100.00
25.932	25.932 (1.213)	148	2260098			14.30- 114.30	64.30
25.905	25.905 (1.212)	111	1423581			0.00- 90.50	40.50
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.348)	180	1253115	50.0000	45.723	80.00- 120.00	100.00
28.808	28.808 (1.348)	182	1198592			45.65- 145.65	95.65
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.357)	225	1025202	50.0000	40.018	80.00- 120.00	100.00
29.001	29.001 (1.357)	223	641430			12.70- 112.70	62.57
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.375)	128	2269503	50.0000	46.617	80.00- 120.00	100.00
29.388	29.388 (1.375)	127	270609			0.00- 62.64	11.92
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	2382695	50.0000	50.768	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	1600924			16.24- 116.24	67.19
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	369130	50.0000	49.345	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	2976625			761.40- 861.40	806.39
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	2615829	50.0000	56.882	80.00- 120.00	100.00
16.919	16.919 (1.175)	98	1205235			0.00- 96.29	46.07
16.919	16.919 (1.175)	55	2319276			38.64- 138.64	88.66

Data File: /chem/msd7.i/7-18oct.b/7101806.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101806.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	683549	0.00
97 1,4-Difluorobenze	2204815	1322889	3086741	2204815	0.00
126 Chlorobenzene-d5	1812979	1087787	2538171	1812979	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.37	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

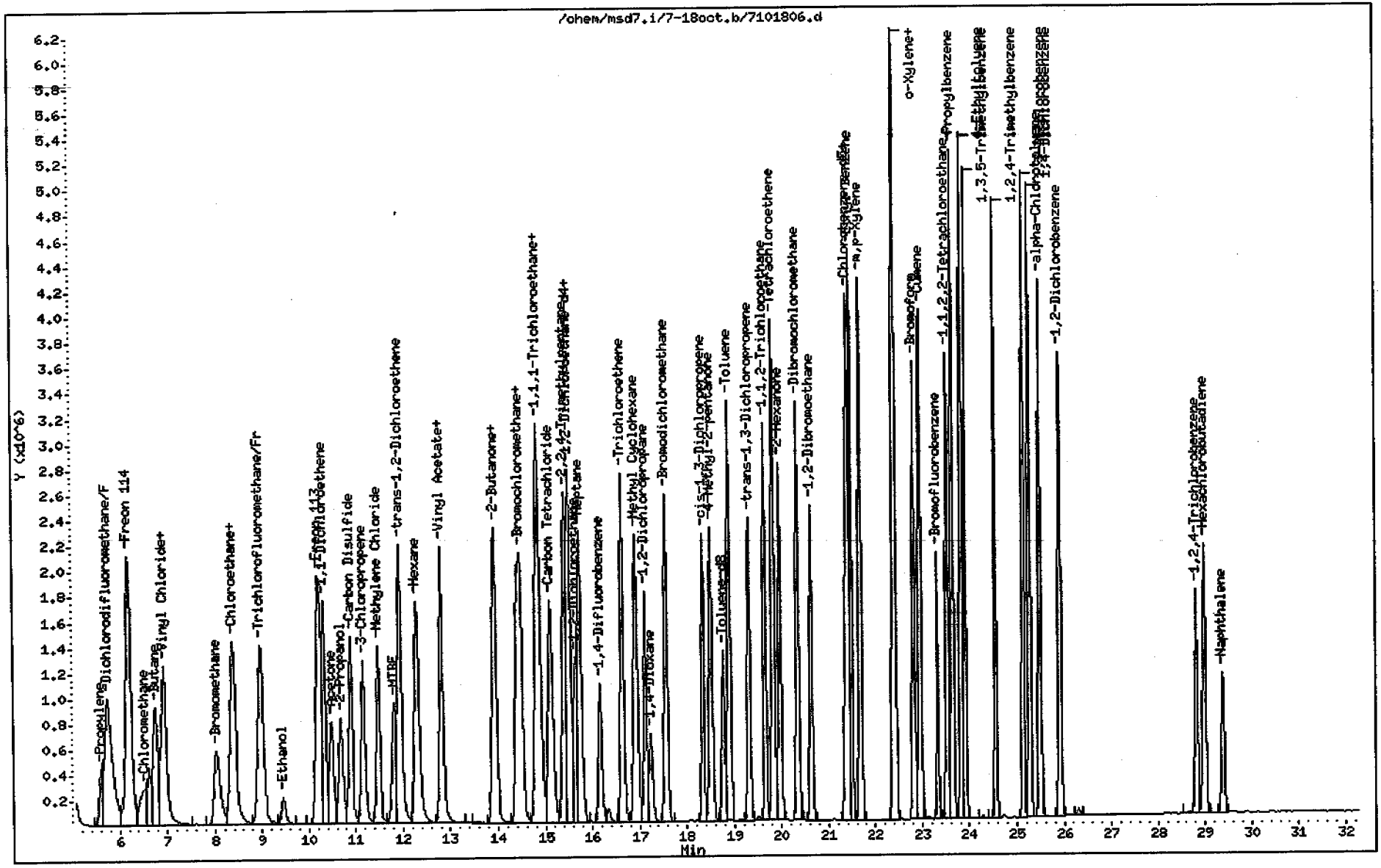
0305

Data File: /chem/msd7.i/7-18oct.b/7101806.d
Date : 18-OCT-2007 15:26
Client ID: Level 5
Sample Info: 50mL #1576-50

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/7-18oct.b/7101807.d
Report Date: 23-Oct-2007 09:33

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101807.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 18-OCT-2007 16:15
Operator : cb
Inst ID: msd7.i
Smp Info : 100mL #1576-50
Misc Info : 200ppbv --> 100ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza
Quant Type: ISTD
Cal Date : 18-OCT-2007 16:15
Cal File: 7101807.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	692933	25.0000		80.00- 120.00		100.00
14.402	14.402 (1.000)	128	535123			26.95- 126.95		77.23
14.402	14.402 (1.000)	49	1712983			141.62- 241.62		247.21
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2281331	25.0000		80.00- 120.00		100.00
16.144	16.172 (1.000)	88	351386			0.00- 65.69		15.40
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1862597	25.0000		80.00- 120.00		100.00
21.342	21.370 (1.000)	82	1017930			5.32- 105.32		54.65
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	913793	25.0000	24.626	80.00- 120.00		100.00
15.481	15.508 (1.075)	67	550511			2.91- 102.91		60.24
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2088251	25.0000	25.914	80.00- 120.00		100.00
18.771	18.771 (1.161)	70	237587			0.00- 61.46		11.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1454452			19.18- 119.18	69.65
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1081956	25.0000	24.333	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1400916			76.80- 176.80	129.48
23.333	23.333 (1.093)	176	1039964			46.06- 146.06	96.12
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	2986150	100.000	100.80	80.00- 120.00	100.00
5.610	5.610 (0.390)	42	2053059			21.19- 121.19	68.75
5.610	5.610 (0.390)	39	2206631			24.83- 124.83	73.90
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	10930653	100.000	99.747	80.00- 120.00	100.00
5.748	5.748 (0.399)	87	3552505			0.00- 83.07	32.50
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	7047529	100.000	92.659	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	2245736			0.00- 81.81	31.87
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	3525852	100.000	98.906	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	1179186			0.00- 84.80	33.44
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.882 (0.476)	62	4410236	100.000	98.388	80.00- 120.00	100.00
6.854	6.882 (0.476)	64	1387722			0.00- 83.25	31.47
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.482)	54	3349709	100.000	106.66	80.00- 120.00	100.00
6.937	6.937 (0.482)	39	3396133			55.97- 155.97	101.39
25 Bromomethane					CAS #: 74-83-9		
8.015	8.043 (0.557)	94	4079688	100.000	104.58	80.00- 120.00	100.00
8.015	8.043 (0.557)	96	3868112			43.77- 143.77	94.81
27 Chloroethane					CAS #: 75-00-3		
8.347	8.375 (0.580)	64	2257754	100.000	118.60	80.00- 120.00	100.00
8.347	8.375 (0.580)	49	605583			0.00- 79.34	26.82
8.347	8.375 (0.580)	66	706033			0.00- 83.15	31.27
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.956 (0.622)	101	10508664	100.000	104.19	80.00- 120.00	100.00
8.955	8.956 (0.622)	103	6789159			14.33- 114.33	64.61

Data File: /chem/msd7.i/7-18oct.b/7101807.d
Report Date: 23-Oct-2007 09:33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	1538559	100.000	114.63	80.00- 120.00	100.00
9.453	9.453 (0.656)	43	304971			0.00- 72.83	19.82
9.453	9.453 (0.656)	46	585137			0.00- 88.20	38.03
42 Freon 113					CAS #: 76-13-1		
10.200	10.227 (0.708)	151	5881542	100.000	104.56	80.00- 120.00	100.00
10.200	10.227 (0.708)	153	3752567			13.49- 113.49	63.80
10.200	10.227 (0.708)	101	7271712			73.17- 173.17	123.64
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.338 (0.716)	61	6323571	100.000	106.68	80.00- 120.00	100.00
10.310	10.338 (0.716)	96	3889755			11.42- 111.42	61.51
10.310	10.338 (0.716)	98	2479983			0.00- 89.70	39.22
45 Acetone					CAS #: 67-64-1		
10.476	10.504 (0.727)	58	1956828	100.000	108.28	80.00- 120.00	100.00
10.476	10.504 (0.727)	43	5921961			247.10- 347.10	302.63
46 2-Propanol					CAS #: 67-63-0		
10.670	10.697 (0.741)	45	7297517	100.000	115.63	80.00- 120.00	100.00
10.670	10.697 (0.741)	43	1679125			0.00- 75.54	23.01
10.670	10.697 (0.741)	59	288762			0.00- 53.72	3.96
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	12222860	100.000	108.51	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.140	11.168 (0.773)	76	1968053	100.000	111.22	80.00- 120.00	100.00
11.140	11.168 (0.773)	41	5269936			224.96- 324.96	267.77
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	4616250	100.000	106.58	80.00- 120.00	100.00
11.472	11.472 (0.796)	84	3385429			23.49- 123.49	73.34
11.472	11.472 (0.796)	51	1409490			0.00- 80.85	30.53
60 MTBE					CAS #: 1634-04-4		
11.803	11.831 (0.820)	73	5895128	100.000	84.507	80.00- 120.00	100.00
11.803	11.831 (0.820)	57	1393845			0.00- 73.11	23.64
11.803	11.831 (0.820)	41	1331231			0.00- 76.16	22.58
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.914	11.942 (0.827)	96	4428835	100.000	110.53	80.00- 120.00	100.00
11.914	11.942 (0.827)	61	6358416			93.77- 193.77	143.57
11.914	11.942 (0.827)	98	2816096			11.77- 111.77	63.59

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane						CAS #: 110-54-3		
12.301	12.301	(0.854)	57	6432321	100.000	113.75	80.00- 120.00	100.00
12.301	12.301	(0.854)	43	4176945			17.84- 117.84	64.94
12.301	12.301	(0.854)	86	975109			0.00- 65.07	15.16
69 Vinyl Acetate						CAS #: 108-05-4		
12.799	12.799	(0.889)	86	978320	100.000	115.19	80.00- 120.00	100.00
12.771	12.799	(0.887)	43	11490251			1150.46-1250.46	1174.49
70 1,1-Dichloroethane						CAS #: 75-34-3		
12.799	12.826	(0.889)	63	7494739	100.000	109.11	80.00- 120.00	100.00
12.826	12.826	(0.891)	65	2364614			0.00- 81.66	31.55
75 2-Butanone						CAS #: 78-93-3		
13.877	13.905	(0.964)	72	1797732	100.000	125.97	80.00- 120.00	100.00
13.877	13.905	(0.964)	43	8012978			412.95- 512.95	445.73
13.877	13.905	(0.964)	57	616575			0.00- 86.57	34.30
76 cis-1,2-Dichloroethene						CAS #: 156-59-2		
13.905	13.932	(0.965)	61	5289406	100.000	109.97	80.00- 120.00	100.00
13.932	13.932	(0.967)	96	3957657			24.70- 124.70	74.82
13.932	13.932	(0.967)	98	2537854			0.00- 97.31	47.98
80 Tetrahydrofuran						CAS #: 109-99-9		
14.375	14.402	(0.998)	42	4434496	100.000	118.10	80.00- 120.00	100.00
14.375	14.402	(0.998)	71	1625228			0.00- 85.86	36.65
14.375	14.402	(0.998)	72	1749407			0.00- 87.82	39.45
82 Chloroform						CAS #: 67-66-3		
14.458	14.485	(1.004)	83	7416210	100.000	107.48	80.00- 120.00	100.00
14.458	14.485	(1.004)	85	4828164			15.30- 115.30	65.10
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.817	14.845	(1.029)	97	7240093	100.000	103.35	80.00- 120.00	100.00
14.817	14.845	(1.029)	99	4660096			14.42- 114.42	64.37
85 Cyclohexane						CAS #: 110-82-7		
14.845	14.845	(1.031)	84	4466769	100.000	114.14	80.00- 120.00	100.00
14.845	14.845	(1.031)	56	5668418			77.14- 177.14	126.90
14.845	14.845	(1.031)	41	3159222			22.96- 122.96	70.73
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.094	15.094	(1.048)	119	6781673	100.000	103.33	80.00- 120.00	100.00
15.094	15.094	(1.048)	117	7039047			54.22- 154.22	103.80
91 Benzene						CAS #: 71-43-2		
15.508	15.508	(0.959)	78	9788721	100.000	108.80	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	2175873			0.00- 71.87	22.23
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.426 (1.069)	57	15535652	100.000	113.89	80.00- 120.00	100.00
15.398	15.426 (1.069)	56	5317737			0.00- 84.62	34.23
15.398	15.426 (1.069)	41	4107948			0.00- 79.27	26.44
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	4870654	100.000	100.26	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	1562832			0.00- 82.89	32.09
94 Heptane					CAS #: 142-82-5		
15.702	15.730 (0.971)	71	3163902	100.000	115.36	80.00- 120.00	100.00
15.702	15.730 (0.971)	43	6221004			158.53- 258.53	196.62
15.702	15.730 (0.971)	57	3280251			59.34- 159.34	103.68
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	4228075	100.000	104.84	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	4128816			49.05- 149.05	97.65
16.642	16.642 (1.029)	97	2716108			14.93- 114.93	64.24
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	3756119	100.000	109.16	80.00- 120.00	100.00
17.112	17.112 (1.058)	62	2777792			23.52- 123.52	73.95
17.112	17.112 (1.058)	41	2270112			12.01- 112.01	60.44
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	2460610	100.000	110.72	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	1758611			21.50- 121.50	71.47
17.250	17.250 (1.067)	57	579042			0.00- 74.60	23.53
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	7431432	100.000	106.01	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	4773361			14.37- 114.37	64.23
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	5602642	100.000	115.69	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	1775227			0.00- 81.97	31.69
18.329	18.329 (1.133)	39	3130655			6.88- 106.88	55.88
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	3231617	100.000	123.62	80.00- 120.00	100.00
18.494	18.522 (1.144)	43	8407133			222.97- 322.97	260.15
18.522	18.522 (1.145)	85	1253983			0.00- 90.48	38.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	10622557	100.000	107.53	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	6779189			13.04- 113.04	63.82
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.296	19.324 (0.904)	75	5889075	100.000	113.22	80.00- 120.00	100.00
19.296	19.324 (0.904)	77	1891543			0.00- 81.65	32.12
19.296	19.324 (0.904)	39	3137203			2.52- 102.52	53.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	4149436	100.000	108.64	80.00- 120.00	100.00
19.656	19.656 (0.921)	99	2605800			13.08- 113.08	62.80
19.656	19.656 (0.921)	83	3504268			35.32- 135.32	84.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	5048096	100.000	99.395	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	3627743			22.39- 122.39	71.86
19.822	19.822 (0.929)	131	3514583			19.80- 119.80	69.62
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	4648378	100.000	116.53	80.00- 120.00	100.00
19.960	19.960 (0.935)	43	8666932			138.63- 238.63	186.45
19.960	19.960 (0.935)	100	771717			0.00- 67.05	16.60
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	7193156	100.000	104.70	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	5526699			27.62- 127.62	76.83
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.623	20.624 (0.966)	107	6833270	100.000	108.68	80.00- 120.00	100.00
20.623	20.624 (0.966)	109	6483894			44.67- 144.67	94.89
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	8692529	100.000	102.78	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	2809468			0.00- 82.43	32.32
21.398	21.398 (1.003)	77	5295683			10.75- 110.75	60.92
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	4526085	100.000	105.60	80.00- 120.00	100.00
21.481	21.481 (1.006)	91	14088042			261.69- 361.69	311.26
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	5707165	100.000	106.51	80.00- 120.00	100.00
21.674	21.674 (1.016)	91	11155051			145.05- 245.05	195.46
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	4939741	100.000	105.81	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	10133037			154.65- 254.65	205.13
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	8386880	100.000	118.26	80.00- 120.00	100.00
22.421	22.421 (1.051)	78	4228696			1.69- 101.69	50.42
133 Bromoform					CAS #: 75-25-2		
22.835	22.836 (1.070)	173	6219626	100.000	101.85	80.00- 120.00	100.00
22.835	22.836 (1.070)	171	3232278			1.22- 101.22	51.97
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	12536875	100.000	106.57	80.00- 120.00	100.00
22.974	22.974 (1.076)	120	3479782			0.00- 78.08	27.76
22.946	22.974 (1.075)	51	1373233			0.00- 61.43	10.95
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	8062379	100.000	102.92	80.00- 120.00	100.00
23.527	23.527 (1.102)	85	5184917			14.35- 114.35	64.31
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	16597227	100.000	103.47	80.00- 120.00	100.00
23.637	23.637 (1.108)	120	3775008			0.00- 72.94	22.74
23.637	23.637 (1.108)	105	628127			0.00- 54.03	3.78
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	14829235	100.000	106.36	80.00- 120.00	100.00
23.831	23.831 (1.117)	120	4239290			0.00- 78.42	28.59
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	10575210	100.000	94.663	80.00- 120.00	100.00
23.914	23.914 (1.120)	120	6029821			3.80- 103.80	57.02
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	10414533	100.000	104.14	80.00- 120.00	100.00
24.550	24.550 (1.150)	120	5104145			0.00- 98.95	49.01
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.177)	146	7750426	100.000	99.257	80.00- 120.00	100.00
25.130	25.130 (1.177)	148	4950703			14.48- 114.48	63.88
25.130	25.130 (1.177)	111	3048873			0.00- 89.68	39.34
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	8013173	100.000	98.166	80.00- 120.00	100.00
25.269	25.269 (1.184)	148	5111044			13.81- 113.81	63.78
25.269	25.269 (1.184)	111	3035431			0.00- 87.35	37.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	12186141	100.000	116.33	80.00- 120.00	100.00
25.490	25.490 (1.194)	126	2530175			0.00- 71.29	20.76
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	7169014	100.000	98.310	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	4537423			14.30- 114.30	63.29
25.905	25.932 (1.214)	111	2874063			0.00- 90.50	40.09
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	3030873	100.000	105.62	80.00- 120.00	100.00
28.808	28.808 (1.350)	182	2886523			45.65- 145.65	95.24
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	2182918	100.000	86.635	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	1362900			12.64- 112.64	62.43
167 Naphthalene					CAS #: 91-20-3		
29.361	29.388 (1.376)	128	5980908	100.000	114.00	80.00- 120.00	100.00(A)
29.361	29.388 (1.376)	127	723074			0.00- 62.50	12.09
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	5045198	100.000	104.46	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	3389808			16.48- 116.48	67.19
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	777002	100.000	101.84	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	6189652			757.70- 857.70	796.61
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.918	16.919 (1.175)	83	5443508	100.000	112.98	80.00- 120.00	100.00
16.918	16.919 (1.175)	98	2475787			0.00- 96.13	45.48
16.891	16.919 (1.173)	55	4789110			38.51- 138.51	87.98

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101807.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 100ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	692933	1.37
97 1,4-Difluorobenze	2204815	1322889	3086741	2281331	3.47
126 Chlorobenzene-d5	1812979	1087787	2538171	1862597	2.74

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

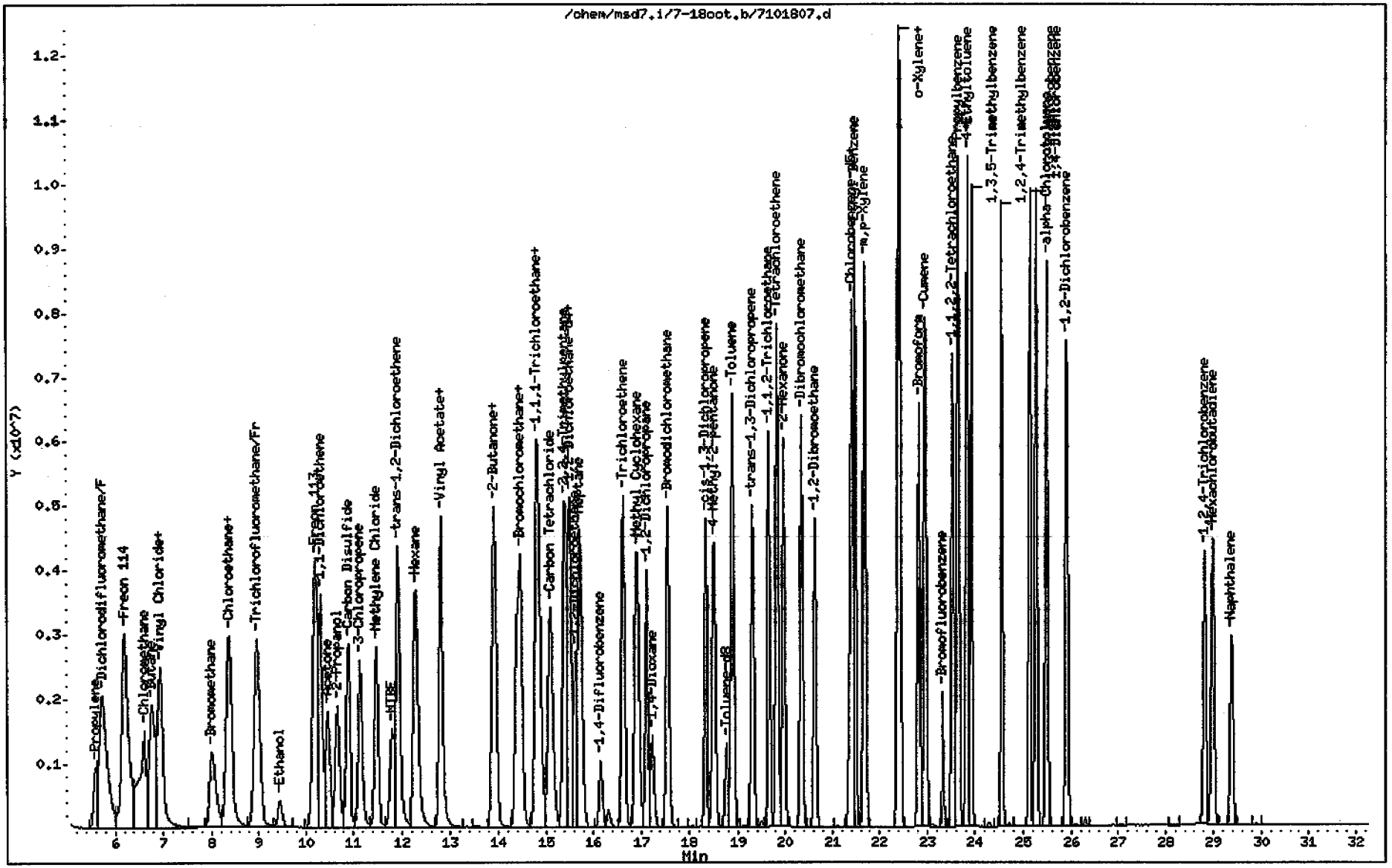
0315

Data File: /chem/msd7.i/7-18oot.b/7101807.d
Date : 18-OCT-2007 16:15
Client ID: Level 6
Sample Info: 100mL #1576-50

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103005.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 30-OCT-2007 11:10
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-400
Misc Info : 200ppbv / 1200ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	522806	25.0000		50.00- 150.00	100.00
14.416	14.416 (1.000)	128	396127			26.81- 126.81	75.77
14.416	14.416 (1.000)	49	725431			112.06- 212.06	138.76
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1724754	25.0000		50.00- 150.00	100.00
16.158	16.158 (1.000)	88	263120			0.00- 65.39	15.26
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1260309	25.0000		50.00- 150.00	100.00
21.356	21.356 (1.000)	82	666153			4.45- 104.45	52.86
26 Methanol					CAS #: 67-56-1		
7.616	7.616 (0.528)	31	9372295	1200.00	1049.8	50.00- 150.00	100.00
7.616	7.616 (0.528)	32	6569144			96.19- 196.19	70.09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103005.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv / 1200ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	522806	7.53
97 1,4-Difluorobenze	1616415	969849	2262981	1724754	6.70
126 Chlorobenzene-d5	1130394	678236	1582552	1260309	11.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.19	15.86	16.52	16.19	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-30oct.b/7103005.d

Date : 30-OCT-2007 11:10

Client ID: Level 7

Sample Info: 200mL #1487-400

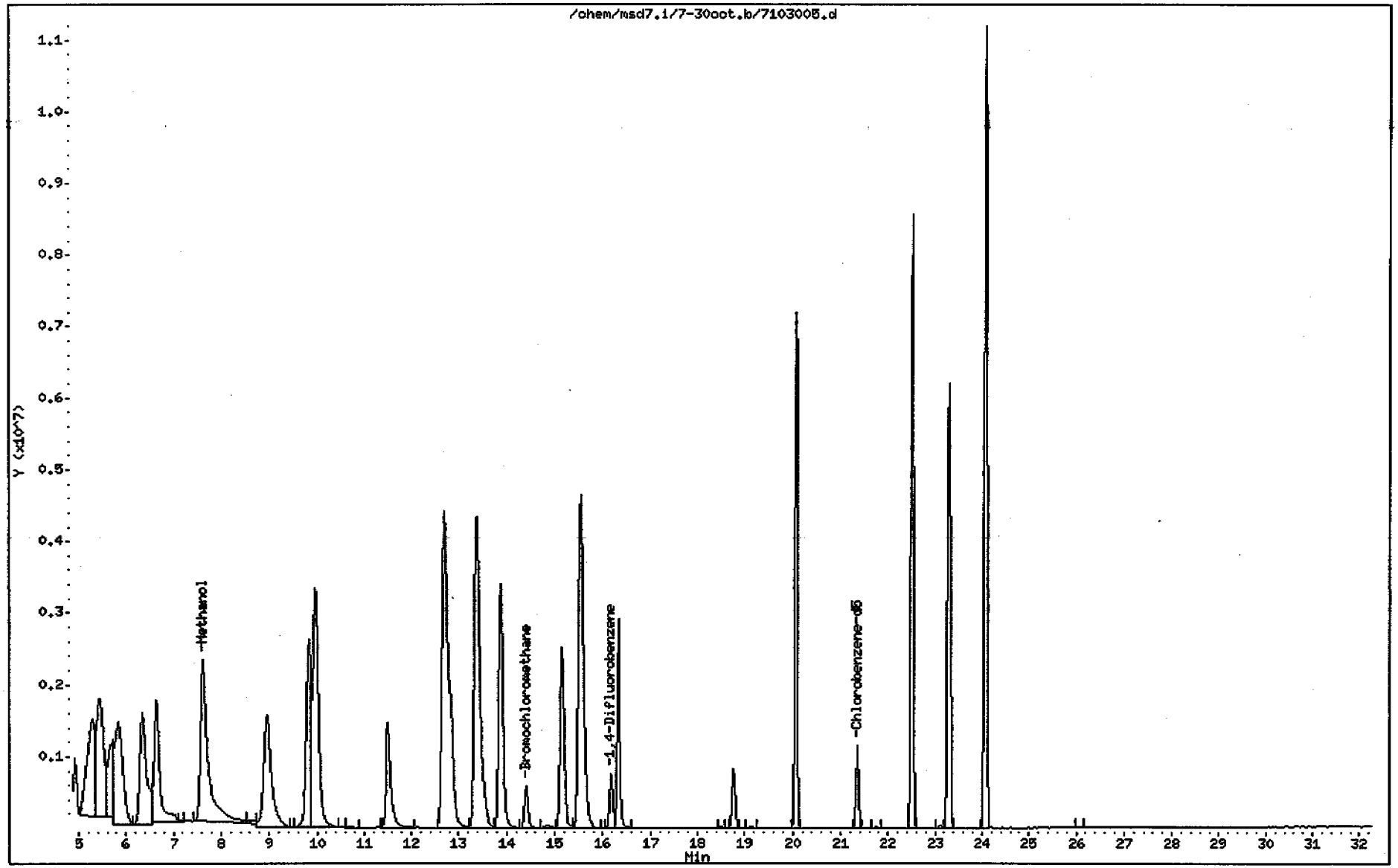
Column phase: RTx-624

Instrument: msd7.i

Operator: cb

Column diameter: 0.53

0318



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102207.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 22-OCT-2007 12:34
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-370
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 12:34
Cal File: 7102207.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403	(1.000)	130	673561	25.0000		50.00- 150.00	100.00
14.403	14.403	(1.000)	128	516226			26.49- 126.49	76.64
14.403	14.403	(1.000)	49	984353			116.97- 216.97	146.14
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172	(1.000)	114	2139015	25.0000		50.00- 150.00	100.00
16.144	16.144	(1.000)	88	336134			0.00- 65.57	15.71
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343	(1.000)	117	1735730	25.0000		50.00- 150.00	100.00
21.343	21.343	(1.000)	82	959991			5.19- 105.19	55.31
55 Cyclopentene						CAS #: 142-29-0		
11.250	11.250	(0.781)	67	24655264	200.000	196.46	50.00- 150.00	100.00
11.250	11.250	(0.781)	68	10041444			0.00- 90.48	40.73
11.250	11.250	(0.781)	53	5185944			0.00- 70.85	21.03
78 2,2-Dichloropropane						CAS #: 594-20-7		
13.877	13.877	(0.964)	77	15691308	200.000	199.68	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	5093949			0.00- 84.30	32.46
13.877	13.877 (0.964)	97	3105546			0.00- 70.03	19.79
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	5598961	200.000	194.16	50.00- 150.00	100.00
15.121	15.121 (0.935)	75	15225105			218.22- 318.22	271.93
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	16526790	200.000	192.47	50.00- 150.00	100.00
19.988	19.988 (1.236)	41	12361559			21.54- 121.54	74.80
19.988	19.988 (1.236)	78	5401543			0.00- 81.77	32.68
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	11284242	200.000	182.31	50.00- 150.00	100.00
21.536	21.536 (1.009)	117	7823289			18.93- 118.93	69.33
21.508	21.508 (1.008)	95	4494362			0.00- 89.37	39.83
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	12398942	200.000	170.72	50.00- 150.00	100.00
23.610	23.610 (1.106)	158	11947029			46.65- 146.65	96.36
23.610	23.610 (1.106)	77	25141267			147.77- 247.77	202.77
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	6154610	200.000	181.10	50.00- 150.00	100.00
23.665	23.665 (1.109)	75	18226348			252.90- 352.90	296.14
23.665	23.665 (1.109)	61	5029833			26.84- 126.84	81.72
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	9861927	200.000	183.86	50.00- 150.00	100.00
23.886	23.886 (1.119)	91	27734828			243.86- 343.86	281.23
23.886	23.886 (1.119)	65	2849980			0.00- 78.37	28.90
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	10574734	200.000	184.78	50.00- 150.00	100.00
24.080	24.080 (1.128)	91	31217904			249.00- 349.00	295.21
24.052	24.052 (1.127)	63	4277338			0.00- 88.24	40.45
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	28643628	200.000	168.92	50.00- 150.00	100.00
25.020	25.020 (1.172)	134	8292866			0.00- 77.89	28.95
25.020	25.020 (1.172)	91	7805069			0.00- 74.89	27.25
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	12274481	200.000	182.45	50.00- 150.00	100.00
25.269	25.269 (1.184)	105	26523849			168.18- 268.18	216.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	3529142			0.00- 78.76	28.75
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	8414072	200.000	184.54	50.00- 150.00	100.00
25.683	25.683 (1.203)	91	32519787			362.01- 462.01	386.49
25.683	25.683 (1.203)	92	19592755			181.94- 281.94	232.86
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	25590950	200.000	167.41	50.00- 150.00	100.00
24.467	24.467 (1.146)	134	6336082			0.00- 74.64	24.76
24.467	24.467 (1.146)	91	18525334			20.96- 120.96	72.39
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	33869689	200.000	160.07	50.00- 150.00	100.00
24.826	24.826 (1.163)	134	7347588			0.00- 69.71	21.69
24.826	24.826 (1.163)	91	6246168			0.00- 65.99	18.44
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	11002854	200.000	201.08	50.00- 150.00	100.00(A)
27.287	27.287 (1.279)	75	9943412			39.96- 139.96	90.37
27.287	27.287 (1.279)	155	8612482			28.87- 128.87	78.27
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	7797399	200.000	170.61	50.00- 150.00	100.00
24.605	24.605 (1.153)	117	8410733			54.36- 154.36	107.87
24.605	24.605 (1.153)	169	3738433			0.00- 97.70	47.94

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102207.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 11:44
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	653745	392247	915243	673561	3.03
97 1,4-Difluorobenze	2055535	1233321	2877749	2139015	4.06
126 Chlorobenzene-d5	1681036	1008622	2353450	1735730	3.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

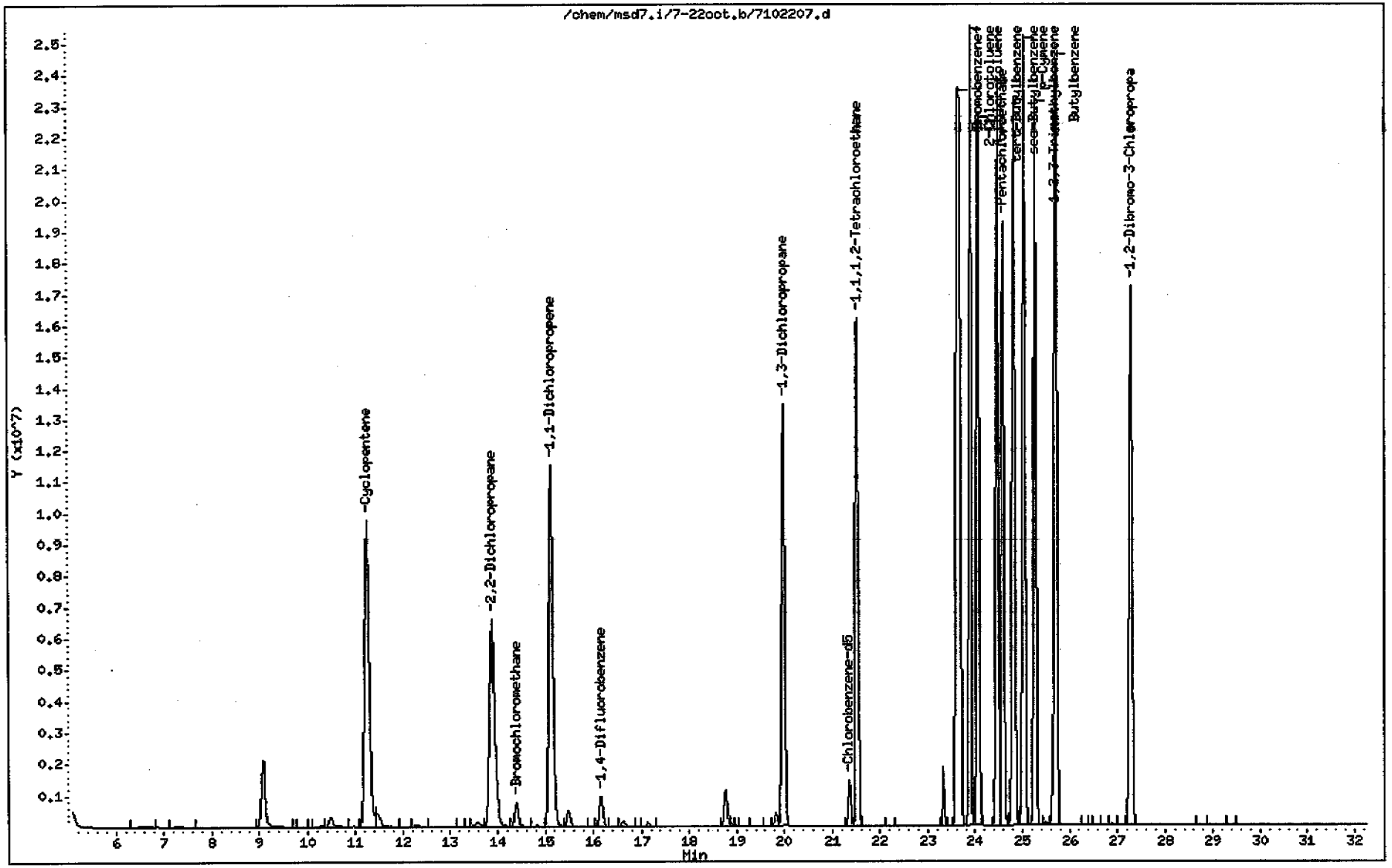
Data File: /chem/msd7.i/7-22oct.b/7102207.d
Date : 22-OCT-2007 12:34
Client ID: Level 7
Sample Info: 200mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0323



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101905.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 19-OCT-2007 11:41
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-400
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 11:41
Cal File: 7101905.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.403	14.403 (1.000)	130	719204	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	554464			26.59- 126.59	77.09
14.403	14.403 (1.000)	49	1056116			116.89- 216.89	146.85
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2349296	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	359832			0.00- 65.64	15.32
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1844247	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	1019868			5.24- 105.24	55.30
5 Freon 143a					CAS #: 420-46-2		
5.334	5.334 (0.370)	65	3045734	200.000	194.22	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	25389070			0.00- 50.00	833.59
5.334	5.334 (0.370)	64	879543			0.00- 77.08	28.88
6 Freon142b					CAS #: 75-68-3		
6.357	6.357 (0.441)	65	12224721	200.000	191.11	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)								
6.357	6.357	(0.441)	45	2982983			0.00- 74.42	24.40
13 Freon 134a						CAS #: 811-97-2		
5.472	5.472	(0.380)	83	5950549	200.000	194.14	50.00- 150.00	100.00
5.278	5.278	(0.366)	69	25368047			398.13- 498.13	426.31
5.472	5.472	(0.380)	63	881809			0.00- 64.08	14.82
15 Freon 152a						CAS #: 75-37-6		
5.693	5.693	(0.395)	65	4242747	200.000	191.73	50.00- 150.00	100.00
5.693	5.693	(0.395)	51	6723031			109.56- 209.56	158.46
5.693	5.693	(0.395)	47	1728528			0.00- 90.52	40.74
17 Freon 22						CAS #: 75-45-6		
5.831	5.831	(0.405)	51	13489320	200.000	188.69	50.00- 150.00	100.00
5.831	5.831	(0.405)	67	1587590			0.00- 61.77	11.77
5.831	5.831	(0.405)	85	174736			0.00- 51.67	1.30
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.956	8.956	(0.622)	67	12537837	200.000	197.68	50.00- 150.00	100.00
8.956	8.956	(0.622)	69	3925693			0.00- 81.12	31.31
8.956	8.956	(0.622)	35	312263			0.00- 53.83	2.49
40 Freon123a						CAS #: 354-23-4		
9.813	9.813	(0.681)	117	7250064	200.000	202.31	50.00- 150.00	100.00
9.813	9.813	(0.681)	67	10592599			110.97- 210.97	146.10
41 Freon123						CAS #: 306-83-2		
9.979	9.979	(0.693)	83	12396163	200.000	195.02	50.00- 150.00	100.00
9.979	9.979	(0.693)	133	2428184			0.00- 69.52	19.59
9.979	9.979	(0.693)	85	8627843			22.16- 122.16	69.60
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.499	11.499	(0.798)	59	10315180	200.000	154.66	50.00- 150.00	100.00
11.499	11.499	(0.798)	41	2017442			0.00- 73.42	19.56
11.499	11.499	(0.798)	57	995118			0.00- 60.26	9.65
68 Isopropyl ether						CAS #: 108-20-3		
12.716	12.716	(0.883)	45	25503179	200.000	198.71	50.00- 150.00	100.00
12.716	12.716	(0.883)	87	5827965			0.00- 73.31	22.85
12.716	12.716	(0.883)	59	2197946			0.00- 58.30	8.62
71 1-Propanol						CAS #: 71-23-8		
12.827	12.827	(0.891)	42	1744378	200.000	216.72	50.00- 150.00	100.00(A)
12.827	12.827	(0.891)	59	2451515			95.91- 195.91	140.54
12.716	12.716	(0.883)	41	4841849			265.93- 365.93	277.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.380	13.380 (0.929)	59	22428943	200.000	205.02	50.00- 150.00	100.00(A)
13.380	13.380 (0.929)	87	8578877			0.00- 88.95	38.25
13.380	13.380 (0.929)	41	3840776			0.00- 67.89	17.12
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	2506944	200.000	205.24	50.00- 150.00	100.00(A)
13.877	13.877 (0.964)	61	2395467			49.04- 149.04	95.55
13.877	13.877 (0.964)	43	17175833			622.55- 722.55	685.13
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	16550042	200.000	206.99	50.00- 150.00	100.00(A)
15.536	15.536 (1.079)	87	3917490			0.00- 73.71	23.67
15.536	15.536 (1.079)	55	4261857			0.00- 78.56	25.75
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	11184866	200.000	233.27	50.00- 150.00	100.00(A)
22.504	22.504 (1.562)	43	17315235			108.53- 208.53	154.81
98 1-Butanol					CAS #: 71-36-3		
16.310	16.310 (1.009)	56	5482757	200.000	238.74	50.00- 150.00	100.00(A)
16.310	16.310 (1.009)	41	3917821			21.86- 121.86	71.46
16.310	16.310 (1.009)	43	3065816			9.15- 109.15	55.92
99 Isobutanol					CAS #: 78-83-1		
15.149	15.149 (1.052)	59	187856	200.000	238.56	50.00- 150.00	100.00(A)
15.149	15.149 (1.052)	41	4506517			2630.47-2730.47	2398.92
15.149	15.149 (1.052)	43	6310018			3703.83-3803.83	3358.97
119 Butyl Acetate					CAS #: 123-86-4		
20.071	20.071 (1.241)	56	7474090	200.000	218.55	50.00- 150.00	100.00(A)
20.071	20.071 (1.241)	73	2366289			0.00- 82.98	31.66
20.071	20.071 (1.241)	43	18435926			197.73- 297.73	246.66
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.091)	55	8115059	200.000	221.35	50.00- 150.00	100.00(A)
23.278	23.278 (1.091)	98	3387837			0.00- 90.62	41.75
23.278	23.278 (1.091)	42	5606169			17.43- 117.43	69.08
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.128)	57	16489699	200.000	199.54	50.00- 150.00	100.00
24.080	24.080 (1.128)	85	13022144			31.14- 131.14	78.97
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101905.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	719204	3.61
97 1,4-Difluorobenze	2223212	1333927	3112497	2349296	5.67
126 Chlorobenzene-d5	1779964	1067978	2491950	1844247	3.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-19oct.b/7101905.d
Date : 19-OCT-2007 11:41
Client ID: Level 7
Sample Info: 200mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

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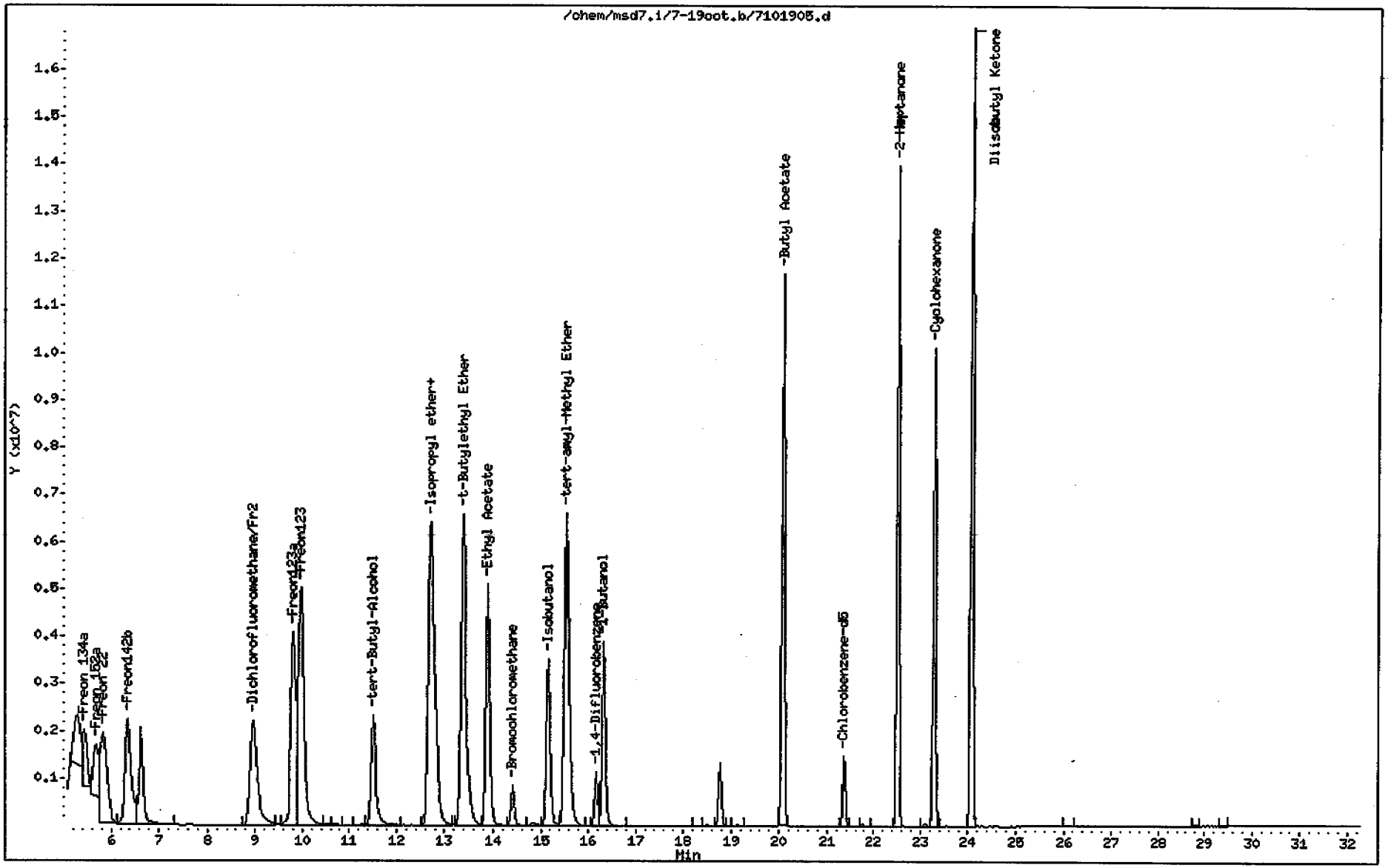


Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101808.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 18-OCT-2007 17:39
Operator : cb Inst ID: msd7.i
Smp Info : 200mL #1576-50
Misc Info : 200ppbv --> 200ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza Quant Type: ISTD
Cal Date : 18-OCT-2007 17:39 Cal File: 7101808.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	676936	25.0000			80.00- 120.00	100.00
14.402	14.402 (1.000)	128	529899				26.95- 126.95	78.28
14.458	14.402 (1.000)	49	2421312				141.62- 241.62	357.69
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2378077	25.0000			80.00- 120.00	100.00
16.172	16.172 (1.000)	88	364352				0.00- 65.69	15.32
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1869726	25.0000			80.00- 120.00	100.00
21.342	21.370 (1.000)	82	1037631				5.32- 105.32	55.50
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	926657	25.0000	25.481		80.00- 120.00	100.00
15.481	15.508 (1.075)	67	627207				2.91- 102.91	67.68
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2173091	25.0000	25.742		80.00- 120.00	100.00
18.771	18.771 (1.161)	70	240988				0.00- 61.46	11.09

*

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1512682			19.18- 119.18	69.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1090787	25.0000	24.517	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1407511			76.80- 176.80	129.04
23.333	23.333 (1.093)	176	1052507			46.06- 146.06	96.49
11 Propylene					CAS #: 115-07-1		
5.638	5.610 (0.391)	41	6024485	200.000	206.49	80.00- 120.00	100.00(A)
5.638	5.610 (0.391)	42	4229291			21.19- 121.19	70.20
5.638	5.610 (0.391)	39	4559811			24.83- 124.83	75.69
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.748 (0.401)	85	21314692	200.000	199.25	80.00- 120.00	100.00
5.776	5.748 (0.401)	87	7050808			0.00- 83.07	33.08
16 Freon 114					CAS #: 76-14-2		
6.246	6.218 (0.434)	135	13067052	200.000	179.47	80.00- 120.00	100.00
6.246	6.218 (0.434)	137	4161827			0.00- 81.81	31.85
18 Chloromethane					CAS #: 74-87-3		
6.550	6.522 (0.455)	50	7320258	200.000	208.08	80.00- 120.00	100.00(A)
6.550	6.522 (0.455)	52	2424741			0.00- 84.80	33.12
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	8914081	200.000	202.96	80.00- 120.00	100.00(A)
6.882	6.882 (0.478)	64	2806611			0.00- 83.25	31.49
22 1,3-Butadiene					CAS #: 106-99-0		
6.992	6.937 (0.485)	54	7071038	200.000	224.76	80.00- 120.00	100.00(A)
6.992	6.937 (0.485)	39	7381307			55.97- 155.97	104.39
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	8554987	200.000	219.99	80.00- 120.00	100.00(A)
8.043	8.043 (0.558)	96	8052509			43.77- 143.77	94.13
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	4784892	200.000	245.58	80.00- 120.00	100.00(A)
8.375	8.375 (0.581)	49	1297505			0.00- 79.34	27.12
8.375	8.375 (0.581)	66	1528927			0.00- 83.15	31.95
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.983	8.956 (0.624)	101	21226149	200.000	212.69	80.00- 120.00	100.00(A)
8.983	8.956 (0.624)	103	13713885			14.33- 114.33	64.61

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.481	9.453	(0.658)	45	3122247	200.000	229.38	80.00- 120.00	100.00(A)
9.481	9.453	(0.658)	43	609786			0.00- 72.83	19.53
9.481	9.453	(0.658)	46	1215909			0.00- 88.20	38.94
42 Freon 113						CAS #: 76-13-1		
10.227	10.227	(0.710)	151	11652787	200.000	209.94	80.00- 120.00	100.00(A)
10.227	10.227	(0.710)	153	7437320			13.49- 113.49	63.82
10.200	10.227	(0.708)	101	14619562			73.17- 173.17	125.46
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.338	10.338	(0.718)	61	12965105	200.000	219.51	80.00- 120.00	100.00(A)
10.338	10.338	(0.718)	96	7908848			11.42- 111.42	61.00
10.338	10.338	(0.718)	98	5068711			0.00- 89.70	39.10
45 Acetone						CAS #: 67-64-1		
10.476	10.504	(0.727)	58	4132810	200.000	226.38	80.00- 120.00	100.00(A)
10.476	10.504	(0.727)	43	12250219			247.10- 347.10	296.41
46 2-Propanol						CAS #: 67-63-0		
10.670	10.697	(0.741)	45	15447383	200.000	238.50	80.00- 120.00	100.00(A)
10.670	10.697	(0.741)	43	3565283			0.00- 75.54	23.08
10.670	10.697	(0.741)	59	612054			0.00- 53.72	3.96
47 Carbon Disulfide						CAS #: 75-15-0		
10.891	10.891	(0.756)	76	25177181	200.000	223.43	80.00- 120.00	100.00(A)
51 3-Chloropropene						CAS #: 107-05-1		
11.167	11.168	(0.775)	76	4508750	200.000	245.87	80.00- 120.00	100.00(A)
11.167	11.168	(0.775)	41	11027823			224.96- 324.96	244.59
54 Methylene Chloride						CAS #: 75-09-2		
11.472	11.472	(0.796)	49	9796957	200.000	225.62	80.00- 120.00	100.00(A)
11.472	11.472	(0.796)	84	7143181			23.49- 123.49	72.91
11.472	11.472	(0.796)	51	3006658			0.00- 80.85	30.69
60 MTBE						CAS #: 1634-04-4		
11.803	11.831	(0.820)	73	11025528	200.000	167.11	80.00- 120.00	100.00
11.803	11.831	(0.820)	57	2595297			0.00- 73.11	23.54
11.803	11.831	(0.820)	41	2404900			0.00- 76.16	21.81
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.942	11.942	(0.829)	96	9012807	200.000	224.59	80.00- 120.00	100.00(A)
11.942	11.942	(0.829)	61	12893816			93.77- 193.77	143.06
11.942	11.942	(0.829)	98	5726329			11.77- 111.77	63.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	13476499	200.000	235.33	80.00- 120.00	100.00(A)
12.301	12.301 (0.854)	43	8689968			17.84- 117.84	64.48
12.301	12.301 (0.854)	86	2045178			0.00- 65.07	15.18
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	2014922	200.000	232.87	80.00- 120.00	100.00(A)
12.799	12.799 (0.889)	43	23503120			1150.46-1250.46	1166.45
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	15208502	200.000	221.72	80.00- 120.00	100.00(A)
12.826	12.826 (0.891)	65	4797143			0.00- 81.66	31.54
75 2-Butanone					CAS #: 78-93-3		
13.877	13.905 (0.964)	72	3652475	200.000	249.12	80.00- 120.00	100.00(A)
13.877	13.905 (0.964)	43	16402680			412.95- 512.95	449.08
13.877	13.905 (0.964)	57	1277677			0.00- 86.57	34.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	10627950	200.000	221.36	80.00- 120.00	100.00(A)
13.932	13.932 (0.967)	96	7912975			24.70- 124.70	74.45
13.932	13.932 (0.967)	98	5079116			0.00- 97.31	47.79
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.402 (0.998)	42	9189583	200.000	240.40	80.00- 120.00	100.00(A)
14.375	14.402 (0.998)	71	3311270			0.00- 85.86	36.03
14.375	14.402 (0.998)	72	3616002			0.00- 87.82	39.35
82 Chloroform					CAS #: 67-66-3		
14.458	14.485 (1.004)	83	14531456	200.000	213.20	80.00- 120.00	100.00(A)
14.458	14.485 (1.004)	85	9504871			15.30- 115.30	65.41
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.845 (1.029)	97	13926518	200.000	202.90	80.00- 120.00	100.00(A)
14.817	14.845 (1.029)	99	8949810			14.42- 114.42	64.26
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	8942562	200.000	227.48	80.00- 120.00	100.00(A)
14.845	14.845 (1.031)	56	11510364			77.14- 177.14	128.71
14.845	14.845 (1.031)	41	6322961			22.96- 122.96	70.71
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	13089871	200.000	203.45	80.00- 120.00	100.00(A)
15.094	15.094 (1.048)	117	13611237			54.22- 154.22	103.98
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	19736309	200.000	208.88	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	4339447			0.00- 71.87	21.99
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.426 (1.069)	57	31632116	200.000	230.20	80.00- 120.00	100.00(A)
15.398	15.426 (1.069)	56	10900526			0.00- 84.62	34.46
15.398	15.426 (1.069)	41	8227297			0.00- 79.27	26.01
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	9602381	200.000	191.27	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	3054754			0.00- 82.89	31.81
94 Heptane					CAS #: 142-82-5		
15.702	15.730 (0.971)	71	6282483	200.000	216.20	80.00- 120.00	100.00(A)
15.702	15.730 (0.971)	43	12514936			158.53- 258.53	199.20
15.702	15.730 (0.971)	57	6727545			59.34- 159.34	107.08
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	8328807	200.000	198.44	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	8066565			49.05- 149.05	96.85
16.642	16.642 (1.029)	97	5388543			14.93- 114.93	64.70
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	7647118	200.000	210.89	80.00- 120.00	100.00(A)
17.112	17.112 (1.058)	62	5629589			23.52- 123.52	73.62
17.112	17.112 (1.058)	41	4567700			12.01- 112.01	59.73
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	5051505	200.000	214.19	80.00- 120.00	100.00(A)
17.250	17.250 (1.067)	58	3620228			21.50- 121.50	71.67
17.250	17.250 (1.067)	57	1192718			0.00- 74.60	23.61
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	14367494	200.000	197.17	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	9277547			14.37- 114.37	64.57
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	11007513	200.000	214.82	80.00- 120.00	100.00(A)
18.329	18.329 (1.133)	77	3583647			0.00- 81.97	32.56
18.329	18.329 (1.133)	39	6277823			6.88- 106.88	57.03
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	6680445	200.000	236.26	80.00- 120.00	100.00(A)
18.494	18.522 (1.144)	43	16914065			222.97- 322.97	253.19
18.522	18.522 (1.145)	85	2542376			0.00- 90.48	38.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	21213764	200.000	204.98	80.00- 120.00	100.00(A)
18.882	18.882 (1.168)	92	13605027			13.04- 113.04	64.13
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.296	19.324 (0.904)	75	11506838	200.000	216.70	80.00- 120.00	100.00(A)
19.296	19.324 (0.904)	77	3666959			0.00- 81.65	31.87
19.296	19.324 (0.904)	39	6234784			2.52- 102.52	54.18
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	8133154	200.000	210.01	80.00- 120.00	100.00(A)
19.656	19.656 (0.921)	99	5125477			13.08- 113.08	63.02
19.656	19.656 (0.921)	83	6859943			35.32- 135.32	84.35
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	9290283	200.000	184.96	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	6818614			22.39- 122.39	73.40
19.822	19.822 (0.929)	131	6582279			19.80- 119.80	70.85
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	9469386	200.000	228.16	80.00- 120.00	100.00(A)
19.960	19.960 (0.935)	43	17305893			138.63- 238.63	182.76
19.960	19.960 (0.935)	100	1575326			0.00- 67.05	16.64
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	13376992	200.000	194.95	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	10423775			27.62- 127.62	77.92
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	13069323	200.000	205.86	80.00- 120.00	100.00(A)
20.624	20.624 (0.966)	109	12296113			44.67- 144.67	94.08
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	16601996	200.000	196.27	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	5394737			0.00- 82.43	32.49
21.398	21.398 (1.003)	77	10031248			10.75- 110.75	60.42
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	8788124	200.000	203.54	80.00- 120.00	100.00(A)
21.481	21.481 (1.006)	91	26914189			261.69- 361.69	306.26
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	11064572	200.000	204.73	80.00- 120.00	100.00(A)
21.674	21.674 (1.016)	91	21363976			145.05- 245.05	193.08
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	9336788	200.000	199.36	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	18842407			154.65- 254.65	201.81
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	15984259	200.000	220.66	80.00- 120.00	100.00(A)
22.421	22.421 (1.051)	78	7823852			1.69- 101.69	48.95
133 Bromoform					CAS #: 75-25-2		
22.835	22.836 (1.070)	173	11006294	200.000	182.67	80.00- 120.00	100.00
22.835	22.836 (1.070)	171	5759605			1.22- 101.22	52.33
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	23858342	200.000	201.74	80.00- 120.00	100.00(A)
22.974	22.974 (1.076)	120	6668314			0.00- 78.08	27.95
22.946	22.974 (1.075)	51	2635407			0.00- 61.43	11.05
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	15236549	200.000	194.77	80.00- 120.00	100.00
23.527	23.527 (1.102)	85	9937979			14.35- 114.35	65.22
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	29315025	200.000	184.82	80.00- 120.00	100.00
23.637	23.637 (1.108)	120	7179772			0.00- 72.94	24.49
23.637	23.637 (1.108)	105	1208835			0.00- 54.03	4.12
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	28130830	200.000	200.83	80.00- 120.00	100.00(A)
23.831	23.831 (1.117)	120	8039568			0.00- 78.42	28.58
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	19886270	200.000	180.74	80.00- 120.00	100.00
23.914	23.914 (1.120)	120	11506570			3.80- 103.80	57.86
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	19601387	200.000	196.03	80.00- 120.00	100.00
24.550	24.550 (1.150)	120	9673988			0.00- 98.95	49.35
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.177)	146	14469122	200.000	187.00	80.00- 120.00	100.00
25.130	25.130 (1.177)	148	9170698			14.48- 114.48	63.38
25.130	25.130 (1.177)	111	5741172			0.00- 89.68	39.68
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	14827054	200.000	183.87	80.00- 120.00	100.00
25.269	25.269 (1.184)	148	9476740			13.81- 113.81	63.92
25.269	25.269 (1.184)	111	5716851			0.00- 87.35	38.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	23309446	200.000	217.73	80.00- 120.00	100.00(A)
25.490	25.490 (1.194)	126	4853718			0.00- 71.29	20.82
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	13249955	200.000	183.92	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	8480902			14.30- 114.30	64.01
25.905	25.932 (1.214)	111	5527605			0.00- 90.50	41.72
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	6421549	200.000	217.94	80.00- 120.00	100.00(A)
28.808	28.808 (1.350)	182	6143942			45.65- 145.65	95.68
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	4260828	200.000	173.94	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	2664913			12.64- 112.64	62.54
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.377)	128	13072303	200.000	236.80	80.00- 120.00	100.00(A)
29.388	29.388 (1.377)	127	1572392			0.00- 62.50	12.03
29 Isopentane					CAS #: 78-78-4		
8.402	8.375 (0.583)	43	10508368	200.000	217.77	80.00- 120.00	100.00(A)
8.402	8.375 (0.583)	57	7144223			16.48- 116.48	67.99
19 Butane					CAS #: 106-97-8		
6.826	6.771 (0.474)	58	1573883	200.000	208.82	80.00- 120.00	100.00(A)
6.799	6.771 (0.472)	43	12494796			757.70- 857.70	793.88
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.918	16.919 (1.175)	83	10993866	200.000	227.21	80.00- 120.00	100.00(A)
16.918	16.919 (1.175)	98	5086864			0.00- 96.13	46.27
16.891	16.919 (1.173)	55	9808425			38.51- 138.51	89.22

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101808.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 200ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	676936	-0.97
97 1,4-Difluorobenze	2204815	1322889	3086741	2378077	7.86
126 Chlorobenzene-d5	1812979	1087787	2538171	1869726	3.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

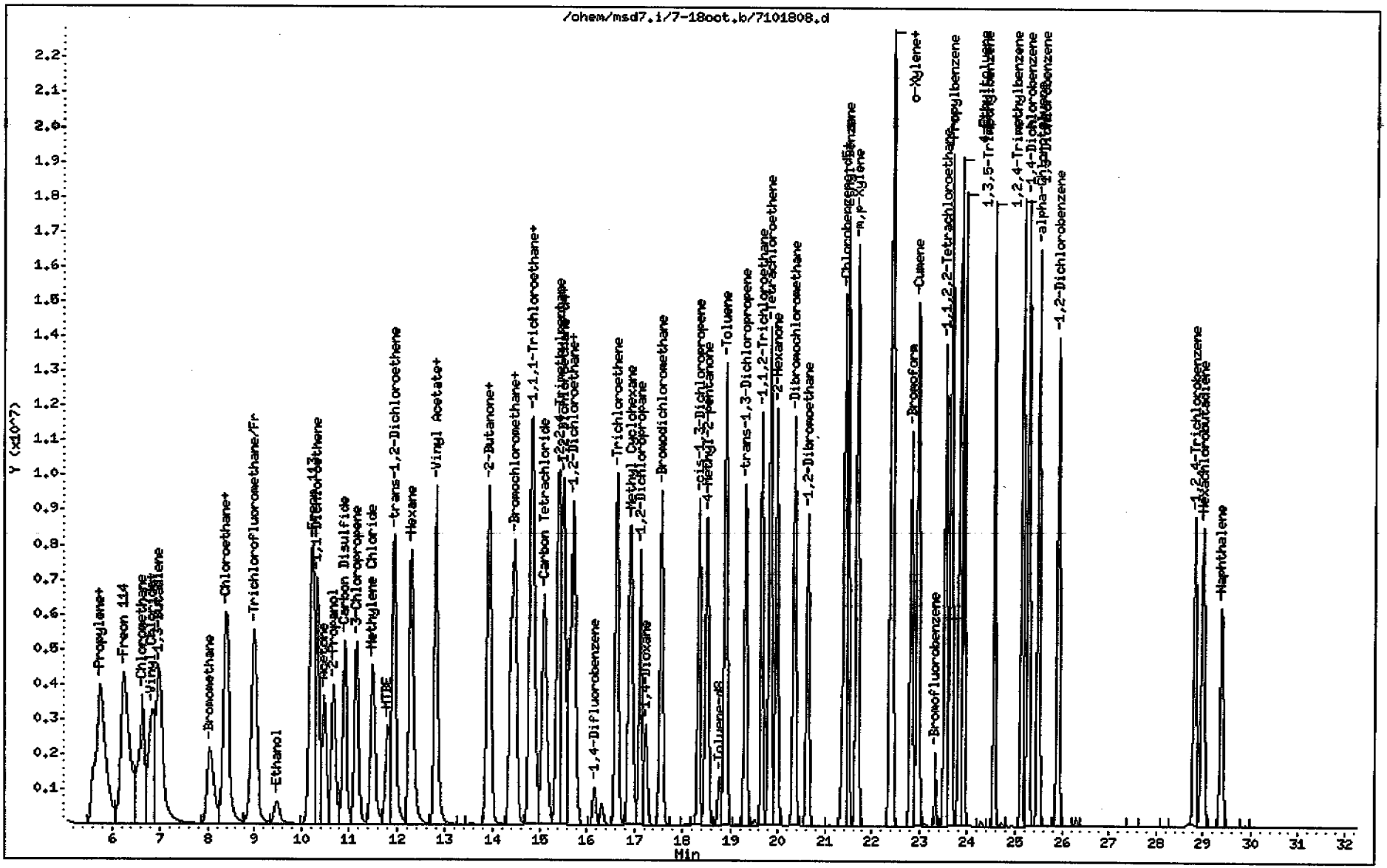
Data File: /ohem/msd7.i/7-18oot.b/7101808.d
Date : 18-OCT-2007 17:39
Client ID: Level 7
Sample Info: 200mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0339



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0711008-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	80
Freon 114	87
Chloromethane	81
Vinyl Chloride	80
1,3-Butadiene	87
Bromomethane	75
Chloroethane	83
Freon 11	86
Ethanol	89
Freon 113	91
1,1-Dichloroethene	86
Acetone	82
2-Propanol	90
Carbon Disulfide	77
Methylene Chloride	85
Methyl tert-butyl ether	81
trans-1,2-Dichloroethene	84
Hexane	90
1,1-Dichloroethane	86
2-Butanone (Methyl Ethyl Ketone)	88
cis-1,2-Dichloroethene	91
Tetrahydrofuran	97
Chloroform	92
1,1,1-Trichloroethane	94
Cyclohexane	93
Carbon Tetrachloride	98
Benzene	93
1,2-Dichloroethane	87
Heptane	94
Trichloroethene	96
1,2-Dichloropropane	94
1,4-Dioxane	91
Bromodichloromethane	95
cis-1,3-Dichloropropene	96
4-Methyl-2-pentanone	100
Toluene	96
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	101
Tetrachloroethene	111

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0711008-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	96
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	104
Chlorobenzene	100
Ethyl Benzene	101
m,p-Xylene	101
o-Xylene	100
Styrene	111
Bromoform	112
1,1,2,2-Tetrachloroethane	92
4-Ethyltoluene	96
1,3,5-Trimethylbenzene	97
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	101
alpha-Chlorotoluene	82
1,2-Dichlorobenzene	96
1,2,4-Trichlorobenzene	88
Hexachlorobutadiene	91
Chlorodifluoromethane	91
Methanol	93
n-Butanol	105
Propylene	84

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	105	70-130

Report Date: 05-Nov-2007 00:40

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 04-NOV-2007 22:27
Lab File ID: 7110409.d Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Analysis Type: AIR Init. Cal. Times: 12:17 11:10
Lab Sample ID: ccv-1 Quant Type: ISTD
Method: /chem/msd7.i/7-04nova.b/t14q018c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.23144	0.010	8.31002	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.89168	0.010	-0.47465	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.62400	0.010	-4.89301	30.00000	Averaged
11 Propylene	1.07750	0.90544	0.010	15.96857	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	3.95067	3.15078	0.010	20.24686	30.00000	Averaged
16 Freon 114	2.68890	2.33126	0.010	13.30067	30.00000	Averaged
18 Chloromethane	1.29926	1.05795	0.010	18.57293	30.00000	Averaged
20 Vinyl Chloride	1.62201	1.30544	0.010	19.51727	30.00000	Averaged
22 1,3-Butadiene	1.16186	1.01526	0.010	12.61752	30.00000	Averaged
25 Bromomethane	1.43619	1.07579	0.010	25.09418	30.00000	Averaged
27 Chloroethane	0.71958	0.59926	0.010	16.72125	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	3.68565	3.15710	0.010	14.34084	30.00000	Averaged
38 Ethanol	0.50270	0.44971	0.010	10.54079	30.00000	Averaged
42 Freon 113	2.04987	1.86730	0.010	8.90663	30.00000	Averaged
43 1,1-Dichloroethene	2.18125	1.88396	0.010	13.62933	30.00000	Averaged
45 Acetone	0.67421	0.55686	0.010	17.40638	30.00000	Averaged
46 2-Propanol	2.39202	2.16631	0.010	9.43597	30.00000	Averaged
47 Carbon Disulfide	4.16162	3.20455	0.010	22.99760	30.00000	Averaged
51 3-Chloropropene	0.67724	0.52203	0.010	22.91849	30.00000	Averaged
54 Methylene Chloride	1.60367	1.36767	0.010	14.71626	30.00000	Averaged
60 MTBE	2.43665	1.97491	0.010	18.94982	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.48204	1.24640	0.010	15.89979	30.00000	Averaged
65 Hexane	2.11488	1.89446	0.010	10.42241	30.00000	Averaged
69 Vinyl Acetate	0.31955	0.26711	0.010	16.41043	30.00000	Averaged
70 1,1-Dichloroethane	2.53322	2.19005	0.010	13.54691	30.00000	Averaged
75 2-Butanone	0.54146	0.47592	0.010	12.10499	30.00000	Averaged
76 cis-1,2-Dichloroethene	1.77314	1.61312	0.010	9.02474	30.00000	Averaged
80 Tetrahydrofuran	1.41176	1.36949	0.010	2.99393	30.00000	Averaged
82 Chloroform	2.51713	2.31546	0.010	8.01175	30.00000	Averaged
83 1,1,1-Trichloroethane	2.53479	2.38419	0.010	5.94145	30.00000	Averaged
85 Cyclohexane	1.45184	1.35531	0.010	6.64845	30.00000	Averaged
87 Carbon Tetrachloride	2.37608	2.32500	0.010	2.15005	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.07476	4.91832	0.010	3.08281	30.00000	Averaged
91 Benzene	0.99332	0.92678	0.010	6.69903	30.00000	Averaged
93 1,2-Dichloroethane	0.52777	0.45910	0.010	13.01193	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7110409.d
Analysis Type: AIR
Lab Sample ID: ccv-1
Method: /chem/msd7.i/7-04nova.b/t14q018c.m

Injection Date: 04-NOV-2007 22:27
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.30549	0.28613	0.010	6.33854	30.00000	Averaged
101 Trichloroethene	0.44124	0.42357	0.010	4.00352	30.00000	Averaged
104 1,2-Dichloropropane	0.38121	0.35711	0.010	6.32203	30.00000	Averaged
106 1,4-Dioxane	0.24794	0.22471	0.010	9.36749	30.00000	Averaged
107 Bromodichloromethane	0.76606	0.72991	0.010	4.71809	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.53866	0.51465	0.010	4.45784	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29726	0.29747	0.010	-0.07269	30.00000	Averaged
114 Toluene	1.08799	1.04694	0.010	3.77271	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.71002	0.69949	0.010	1.48247	30.00000	Averaged
117 1,1,2-Trichloroethane	0.51782	0.52275	0.010	-0.95210	30.00000	Averaged
120 Tetrachloroethene	0.67159	0.74503	0.010	-10.93607	30.00000	Averaged
121 2-Hexanone	0.55495	0.53228	0.010	4.08498	30.00000	Averaged
122 Dibromochloromethane	0.91748	0.99039	0.010	-7.94652	30.00000	Averaged
123 1,2-Dibromoethane	0.84888	0.87963	0.010	-3.62213	30.00000	Averaged
127 Chlorobenzene	1.13099	1.13505	0.010	-0.35823	30.00000	Averaged
128 Ethyl Benzene	0.57731	0.58146	0.010	-0.71738	30.00000	Averaged
129 m,p-Xylene	0.72261	0.72962	0.010	-0.96945	30.00000	Averaged
130 o-Xylene	0.62621	0.62900	0.010	-0.44601	30.00000	Averaged
131 Styrene	0.96855	1.07675	0.010	-11.17212	30.00000	Averaged
133 Bromoform	0.80564	0.90109	0.010	-11.84723	30.00000	Averaged
134 Cumene	1.58127	1.62763	0.010	-2.93198	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.04598	0.96697	0.010	7.55358	30.00000	Averaged
142 Propylbenzene	2.12085	2.06445	0.010	2.65919	30.00000	Averaged
145 4-Ethyltoluene	1.87287	1.79932	0.010	3.92751	30.00000	Averaged
147 1,3,5-Trimethylbenzene	1.47112	1.43193	0.010	2.66387	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.33697	1.35164	0.010	-1.09762	30.00000	Averaged
155 1,3-Dichlorobenzene	1.03460	1.05267	0.010	-1.74686	30.00000	Averaged
156 1,4-Dichlorobenzene	1.07824	1.08804	0.010	-0.90906	30.00000	Averaged
159 alpha-Chlorotoluene	1.43143	1.17298	0.010	18.05536	30.00000	Averaged
161 1,2-Dichlorobenzene	0.96328	0.92877	0.010	3.58268	30.00000	Averaged
165 1,2,4-Trichlorobenzene	0.39398	0.34872	0.010	11.48860	30.00000	Averaged
166 Hexachlorobutadiene	0.32753	0.29700	0.010	9.32009	30.00000	Averaged
29 Isopentane	1.78205	1.51569	0.010	14.94676	30.00000	Averaged
19 Butane	0.27835	0.22812	0.010	18.04491	30.00000	Averaged
102 Methyl Cyclohexane	1.78694	1.72677	0.010	3.36745	30.00000	Averaged
167 Naphthalene	0.73814	0.61031	0.010	17.31766	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110409.d
Lab Smp Id: ccv-1 Client Smp ID: ccv-1
Inj Date : 04-NOV-2007 22:27
Operator : dm Inst ID: msd7.i
Smp Info : 100mL #1576-50A
Misc Info : 100ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.388	14.388 (1.000)	130	651162	25.0000		80.00- 120.00		100.00
14.388	14.388 (1.000)	128	508454			28.08- 128.08		78.08
14.388	14.388 (1.000)	49	1164258			128.80- 228.80		178.80
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2188066	25.0000		80.00- 120.00		100.00
16.158	16.158 (1.000)	88	325633			0.00- 64.88		14.88
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1729248	25.0000		80.00- 120.00		100.00
21.356	21.356 (1.000)	82	880677			4.45- 104.45		50.93
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.077)	65	801864	25.0000	22.922	80.00- 120.00		100.00
15.494	15.494 (1.077)	67	435879			2.91- 102.91		54.36
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1951045	25.0000	25.119	80.00- 120.00		100.00
18.757	18.757 (1.161)	70	198286			0.00- 61.46		10.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1345596			19.18- 119.18	68.97
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	1079056	25.0000	26.223	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1224575			63.49- 163.49	113.49
23.347	23.347 (1.093)	176	1044164			46.77- 146.77	96.77
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1179179	50.0000	42.016	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	828510			21.19- 121.19	70.26
5.617	5.617 (0.390)	39	880430			24.83- 124.83	74.66
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.398)	85	4103337	50.0000	39.876	80.00- 120.00	100.00
5.729	5.729 (0.398)	87	1316369			0.00- 83.07	32.08
16 Freon 114					CAS #: 76-14-2		
6.180	6.180 (0.430)	135	3036051	50.0000	43.350	80.00- 120.00	100.00
6.180	6.180 (0.430)	137	968470			0.00- 81.90	31.90
18 Chloromethane					CAS #: 74-87-3		
6.518	6.518 (0.453)	50	1377797	50.0000	40.714	80.00- 120.00	100.00
6.518	6.518 (0.453)	52	469242			0.00- 84.80	34.06
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.856 (0.476)	62	1700106	50.0000	40.241	80.00- 120.00	100.00
6.856	6.856 (0.476)	64	523822			0.00- 83.25	30.81
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.482)	54	1322195	50.0000	43.691	80.00- 120.00	100.00
6.940	6.940 (0.482)	39	1368847			55.97- 155.97	103.53
25 Bromomethane					CAS #: 74-83-9		
8.011	8.011 (0.557)	94	1401028	50.0000	37.453	80.00- 120.00	100.00
8.011	8.011 (0.557)	96	1318788			44.13- 144.13	94.13
27 Chloroethane					CAS #: 75-00-3		
8.348	8.348 (0.580)	64	780426	50.0000	41.639	80.00- 120.00	100.00
8.348	8.348 (0.580)	49	229577			0.00- 79.34	29.42
8.348	8.348 (0.580)	66	242995			0.00- 83.15	31.14
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.940	8.940 (0.621)	101	4111565	50.0000	42.830	80.00- 120.00	100.00
8.940	8.940 (0.621)	103	2654108			14.55- 114.55	64.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.439	9.439 (0.656)	45	585672	50.0000	44.730	80.00- 120.00	100.00
9.439	9.439 (0.656)	43	120372			0.00- 72.83	20.55
9.439	9.439 (0.656)	46	217438			0.00- 88.20	37.13
42 Freon 113					CAS #: 76-13-1		
10.186	10.186 (0.708)	151	2431826	50.0000	45.547	80.00- 120.00	100.00
10.186	10.186 (0.708)	153	1538789			13.28- 113.28	63.28
10.186	10.186 (0.708)	101	2687424			60.51- 160.51	110.51
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.718)	61	2453522	50.0000	43.185	80.00- 120.00	100.00
10.324	10.324 (0.718)	96	1428647			8.23- 108.23	58.23
10.324	10.324 (0.718)	98	917169			0.00- 87.38	37.38
45 Acetone					CAS #: 67-64-1		
10.462	10.462 (0.727)	58	725208	50.0000	41.297	80.00- 120.00	100.00
10.462	10.462 (0.727)	43	2388629			247.10- 347.10	329.37
46 2-Propanol					CAS #: 67-63-0		
10.656	10.656 (0.741)	45	2821238	50.0000	45.282	80.00- 120.00	100.00
10.656	10.656 (0.741)	43	644933			0.00- 75.54	22.86
10.656	10.656 (0.741)	59	99483			0.00- 53.72	3.53
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.756)	76	4173362	50.0000	38.501	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.775)	76	679852	50.0000	38.541	80.00- 120.00	100.00
11.153	11.153 (0.775)	41	2070327			224.96- 324.96	304.53
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.796)	49	1781150	50.0000	42.642	80.00- 120.00	100.00
11.457	11.457 (0.796)	84	1170676			15.73- 115.73	65.73
11.457	11.457 (0.796)	51	548326			0.00- 80.85	30.78
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.821)	73	2571971	50.0000	40.525	80.00- 120.00	100.00
11.817	11.817 (0.821)	57	634285			0.00- 74.66	24.66
11.817	11.817 (0.821)	41	633451			0.00- 76.16	24.63
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.928	11.928 (0.829)	96	1623216	50.0000	42.050	80.00- 120.00	100.00
11.928	11.928 (0.829)	61	2443928			100.56- 200.56	150.56
11.928	11.928 (0.829)	98	1058164			11.77- 111.77	65.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.854)	57	2467198	50.0000	44.789	80.00- 120.00	100.00
12.287	12.287 (0.854)	43	1669144			17.84- 117.84	67.65
12.287	12.287 (0.854)	86	339623			0.00- 65.07	13.77
69 Vinyl Acetate					CAS #: 108-05-4		
12.785	12.785 (0.889)	86	347864	50.0000	41.795	80.00- 120.00	100.00
12.785	12.785 (0.889)	43	4496218			1150.46-1250.46	1292.52
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.890)	63	2852153	50.0000	43.226	80.00- 120.00	100.00
12.812	12.812 (0.890)	65	881488			0.00- 80.91	30.91
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.965)	72	619799	50.0000	43.948	80.00- 120.00	100.00
13.891	13.891 (0.965)	43	3152230			458.59- 558.59	508.59
13.891	13.891 (0.965)	57	233106			0.00- 86.57	37.61
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.967)	61	2100809	50.0000	45.488	80.00- 120.00	100.00
13.918	13.918 (0.967)	96	1536096			23.12- 123.12	73.12
13.918	13.918 (0.967)	98	999764			0.00- 97.59	47.59
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (1.000)	42	1783522	50.0000	48.503	80.00- 120.00	100.00
14.388	14.388 (1.000)	71	598690			0.00- 83.57	33.57
14.388	14.388 (1.000)	72	648551			0.00- 87.82	36.36
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.006)	83	3015480	50.0000	45.994	80.00- 120.00	100.00
14.471	14.471 (1.006)	85	1989690			15.98- 115.98	65.98
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.031)	97	3104986	50.0000	47.029	80.00- 120.00	100.00
14.831	14.831 (1.031)	99	2000324			14.42- 114.42	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.831	14.831 (1.031)	84	1765059	50.0000	46.676	80.00- 120.00	100.00
14.831	14.831 (1.031)	56	2318180			81.34- 181.34	131.34
14.831	14.831 (1.031)	41	1299860			23.64- 123.64	73.64
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.050)	119	3027900	50.0000	48.925	80.00- 120.00	100.00
15.080	15.080 (1.048)	117	3155462			54.21- 154.21	104.21
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.071)	57	6405241	50.0000	48.458	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.071)	56	2174431			0.00- 84.62	33.95
15.411	15.411 (1.071)	41	1648316			0.00- 79.27	25.73
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	4055709	50.0000	46.650	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	889502			0.00- 71.87	21.93
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.967)	62	2009063	50.0000	43.494	80.00- 120.00	100.00
15.633	15.633 (0.967)	64	639620			0.00- 82.89	31.84
94 Heptane					CAS #: 142-82-5		
15.716	15.716 (0.973)	71	1252133	50.0000	46.831	80.00- 120.00	100.00
15.716	15.716 (0.973)	43	2585747			158.53- 258.53	206.51
15.716	15.716 (0.973)	57	1377577			59.34- 159.34	110.02
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1853617	50.0000	47.998	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	1945472			54.96- 154.96	104.96
16.628	16.628 (1.029)	97	1205426			15.03- 115.03	65.03
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.126	17.126 (1.060)	63	1562743	50.0000	46.839	80.00- 120.00	100.00
17.126	17.126 (1.060)	62	1132619			22.48- 122.48	72.48
17.126	17.126 (1.060)	41	942992			10.34- 110.34	60.34
106 1,4-Dioxane					CAS #: 123-91-1		
17.236	17.236 (1.067)	88	983368	50.0000	45.316	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	696079			20.79- 120.79	70.79
17.236	17.236 (1.067)	57	227364			0.00- 74.60	23.12
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	3194199	50.0000	47.641	80.00- 120.00	100.00
17.540	17.540 (1.086)	85	2046473			14.07- 114.07	64.07
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	2252177	50.0000	47.771	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	724360			0.00- 82.16	32.16
18.342	18.342 (1.135)	39	1245364			5.30- 105.30	55.30
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1301783	50.0000	50.036	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	3354684			222.97- 322.97	257.70
18.508	18.508 (1.145)	85	505317			0.00- 90.48	38.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	4581561	50.0000	48.114	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	2877815			12.81- 112.81	62.81
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2419187	50.0000	49.259	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	779241			0.00- 82.21	32.21
19.310	19.310 (0.904)	39	1239632			1.24- 101.24	51.24
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	1807916	50.0000	50.476	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	1131199			12.57- 112.57	62.57
19.642	19.642 (0.920)	83	1478293			31.77- 131.77	81.77
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2576695	50.0000	55.468	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1769268			18.66- 118.66	68.66
19.835	19.835 (0.929)	131	1721418			16.81- 116.81	66.81
121 2-Hexanone					CAS #: 591-78-6		
19.974	19.974 (0.935)	58	1840877	50.0000	47.958	80.00- 120.00	100.00
19.974	19.974 (0.935)	43	3363891			132.73- 232.73	182.73
19.974	19.974 (0.935)	100	320497			0.00- 67.05	17.41
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	3425262	50.0000	53.973	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	2648377			27.62- 127.62	77.32
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.637	20.637 (0.966)	107	3042191	50.0000	51.811	80.00- 120.00	100.00
20.637	20.637 (0.966)	109	2902204			45.40- 145.40	95.40
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	3925550	50.0000	50.179	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1273713			0.00- 82.45	32.45
21.411	21.411 (1.003)	77	2622364			16.80- 116.80	66.80
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	2010965	50.0000	50.359	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	6076836			261.69- 361.69	302.19
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2523376	50.0000	50.485	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	4766816			145.05- 245.05	188.91
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	2175410	50.0000	50.223	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.379	22.379 (1.048)	91	4352086			150.06- 250.06	200.06
131 Styrene					CAS #: 100-42-5		
22.407	22.407 (1.049)	104	3723945	50.0000	55.586	80.00- 120.00	100.00
22.407	22.407 (1.049)	78	1738581			0.00- 96.69	46.69
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	3116406	50.0000	55.924	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	1605054			1.50- 101.50	51.50
134 Cumene					CAS #: 98-82-8		
22.960	22.960 (1.075)	105	5629162	50.0000	51.466	80.00- 120.00	100.00
22.960	22.960 (1.075)	120	1589881			0.00- 78.08	28.24
22.960	22.960 (1.075)	51	532192			0.00- 61.43	9.45
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.540	23.540 (1.102)	83	3344260	50.0000	46.223	80.00- 120.00	100.00
23.540	23.540 (1.102)	85	2150700			14.31- 114.31	64.31
142 Propylbenzene					CAS #: 103-65-1		
23.651	23.651 (1.107)	91	7139904	50.0000	48.670	80.00- 120.00	100.00
23.651	23.651 (1.107)	120	1713270			0.00- 72.94	24.00
23.651	23.651 (1.107)	105	258516			0.00- 54.03	3.62
145 4-Ethyltoluene					CAS #: 622-96-8		
23.817	23.817 (1.115)	105	6222932	50.0000	48.036	80.00- 120.00	100.00
23.817	23.817 (1.115)	120	2015124			0.00- 82.38	32.38
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	4952335	50.0000	48.668	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	2624471			3.80- 103.80	52.99
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	4674642	50.0000	50.549	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	2312743			0.00- 98.95	49.47
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.116	25.116 (1.176)	146	3640663	50.0000	50.873	80.00- 120.00	100.00
25.116	25.116 (1.176)	148	2322745			14.48- 114.48	63.80
25.116	25.116 (1.176)	111	1363625			0.00- 89.68	37.46
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	3762975	50.0000	50.454	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	2395494			13.81- 113.81	63.66
25.282	25.282 (1.184)	111	1338485			0.00- 87.35	35.57

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene						CAS #: 100-44-7		
25.476	25.476	(1.193)	91	4056747	50.0000	40.972	80.00- 120.00	100.00
25.476	25.476	(1.193)	126	884739			0.00- 71.29	21.81
161 1,2-Dichlorobenzene						CAS #: 95-50-1		
25.918	25.918	(1.214)	146	3212149	50.0000	48.209	80.00- 120.00	100.00
25.918	25.918	(1.214)	148	2059250			14.11- 114.11	64.11
25.918	25.918	(1.214)	111	1232183			0.00- 88.36	38.36
165 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
28.821	28.821	(1.350)	180	1206031	50.0000	44.256	80.00- 120.00	100.00
28.821	28.821	(1.350)	182	1149265			45.29- 145.29	95.29
166 Hexachlorobutadiene						CAS #: 87-68-3		
28.987	28.987	(1.357)	225	1027176	50.0000	45.340	80.00- 120.00	100.00
28.987	28.987	(1.357)	223	648504			12.64- 112.64	63.13
29 Isopentane						CAS #: 78-78-4		
8.348	8.348	(0.580)	43	1973923	50.0000	42.527	80.00- 120.00	100.00
8.348	8.348	(0.580)	57	1297539			16.48- 116.48	65.73
19 Butane						CAS #: 106-97-8		
6.743	6.743	(0.469)	58	297087	50.0000	40.978	80.00- 120.00	100.00
6.743	6.743	(0.469)	43	2486732			757.70- 857.70	837.04
102 Methyl Cyclohexane						CAS #: 108-87-2		
16.904	16.904	(1.175)	83	2248810	50.0000	48.316	80.00- 120.00	100.00
16.904	16.904	(1.175)	98	1079581			0.00- 96.13	48.01
16.904	16.904	(1.175)	55	1952912			38.51- 138.51	86.84
167 Naphthalene						CAS #: 91-20-3		
29.374	29.374	(1.375)	128	2110763	50.0000	41.341	80.00- 120.00	100.00
29.374	29.374	(1.375)	127	249666			0.00- 62.50	11.83

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110409.d
Lab Smp Id: ccv-1
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 100ppbv-50ppbv

Calibration Date: 04-NOV-2007
Calibration Time: 23:11
Client Smp ID: ccv-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	640543	384326	896760	651162	1.66
97 1,4-Difluorobenze	2138324	1282994	2993654	2188066	2.33
126 Chlorobenzene-d5	1456889	874133	2039645	1729248	18.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.39	-0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

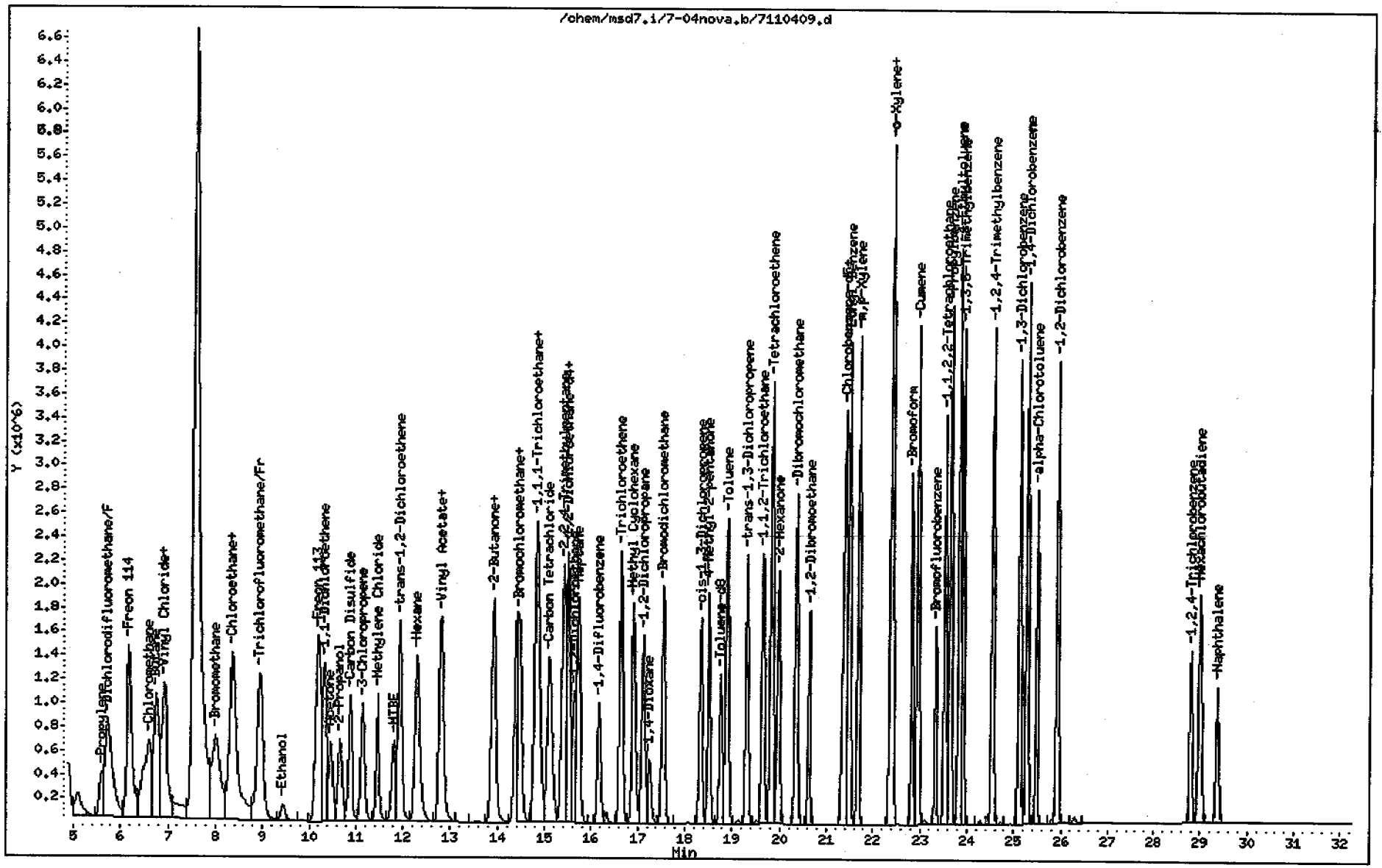
Data File: /chem/msd7.i/7-04nova.b/7110409.d
Date : 04-NOV-2007 22:27
Client ID: ccv-1
Sample Info: 100mL #1576-50A

Column phase: RTx-624

Instrument: msd7.i

Operator: dm
Column diameter: 0.53

0353



Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i Injection Date: 04-NOV-2007 23:11
Lab File ID: 7110410.d Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Analysis Type: AIR Init. Cal. Times: 12:17 11:10
Lab Sample ID: ccvsp Quant Type: ISTD
Method: /chem/msd7.i/7-04nova.b/t14q018c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 90 1,2-Dichloroethane-d4	1.34304	1.16725	0.010	13.08899	30.00000	Averaged	
$ 113 Toluene-d8	0.88746	0.75470	0.010	14.95939	30.00000	Averaged	
$ 137 Bromofluorobenzene	0.59489	0.65551	0.010	-10.18920	30.00000	Averaged	
5 Freon 143a	0.54510	0.49751	0.010	8.73027	40.00000	Averaged	
6 Freon142b	2.22349	2.05488	0.010	7.58314	40.00000	Averaged	
9 Freon 13	++++	0.65031	0.010	++++	40.00000	Averaged	<-
13 Freon 134a	1.06546	0.95704	0.010	10.17639	40.00000	Averaged	
15 Freon 152a	0.76921	0.66026	0.010	14.16317	40.00000	Averaged	
17 Freon 22	2.48505	2.26471	0.010	8.86655	40.00000	Averaged	
26 Methanol	0.42691	0.39691	0.010	7.02799	40.00000	Averaged	
34 Dichlorofluoromethane/Fr21	2.20471	1.89698	0.010	13.95799	40.00000	Averaged	
40 Freon123a	1.24571	1.21932	0.010	2.11837	40.00000	Averaged	
41 Freon123	2.20945	1.92263	0.010	12.98122	40.00000	Averaged	
57 tert-Butyl-Alcohol	2.31844	2.47658	0.010	-6.82069	40.00000	Averaged	
68 Isopropyl ether	4.46135	4.24020	0.010	4.95710	40.00000	Averaged	
71 1-Propanol	0.27978	0.28687	0.010	-2.53333	40.00000	Averaged	
73 t-Butylethyl Ether	3.80281	3.75729	0.010	1.19701	40.00000	Averaged	
77 Ethyl Acetate	0.42459	0.41463	0.010	2.34526	40.00000	Averaged	
92 tert-amyl-Methyl Ether	2.77937	2.82406	0.010	-1.60809	40.00000	Averaged	
96 2-Heptanone	1.66671	1.55157	0.010	6.90846	40.00000	Averaged	
98 1-Butanol	0.24439	0.25595	0.010	-4.73074	40.00000	Averaged	
99 Isobutanol	0.02737	0.02893	0.010	-5.67468	40.00000	Averaged	
119 Butyl Acetate	0.36393	0.33249	0.010	8.63939	40.00000	Averaged	
135 Cyclohexanone	0.49697	0.48607	0.010	2.19338	40.00000	Averaged	
146 Diisobutyl Ketone	1.12021	1.22044	0.010	-8.94749	40.00000	Averaged	

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110410.d
Lab Smp Id: ccvsp Client Smp ID: ccvsp
Inj Date : 04-NOV-2007 23:11
Operator : dm Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22aCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.416 (1.000)	130	640543	25.0000		80.00- 120.00	100.00
14.416	14.416 (1.000)	128	485516			25.80- 125.80	75.80
14.388	14.388 (1.000)	49	862980			84.73- 184.73	134.73
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	2138324	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	315556			0.00- 64.76	14.76
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1456889	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	747911			4.45- 104.45	51.34
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	747675	25.0000	21.728	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	389480			2.91- 102.91	52.09
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1613802	25.0000	21.260	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	169307			0.00- 61.46	10.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1115538			19.18- 119.18	69.12
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	955005	25.0000	27.547	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1093417			64.49- 164.49	114.49
23.347	23.347 (1.093)	176	928086			47.18- 147.18	97.18
5 Freon 143a					CAS #: 420-46-2		
5.307	5.307 (0.368)	65	637353	50.0000	45.635	80.00- 120.00	100.00
5.251	5.251 (0.364)	69	5613004			0.00- 50.00	880.67
5.307	5.307 (0.368)	64	177881			0.00- 77.08	27.91
6 Freon142b					CAS #: 75-68-3		
6.349	6.349 (0.440)	65	2632478	50.0000	46.208	80.00- 120.00	100.00
6.349	6.349 (0.440)	45	619936			0.00- 74.42	23.55
9 Freon 13					CAS #: 75-72-9		
5.194	5.194 (0.360)	85	833106	50.0000		80.00- 120.00	100.00(a)
5.194	5.194 (0.360)	87	269536			0.00- 0.00	32.35
5.251	5.251 (0.364)	69	5604515			0.00- 0.00	672.73
13 Freon 134a					CAS #: 811-97-2		
5.448	5.448 (0.378)	83	1226046	50.0000	44.912	80.00- 120.00	100.00
5.251	5.251 (0.364)	69	5621683			398.13- 498.13	458.52
5.448	5.448 (0.378)	63	170875			0.00- 64.08	13.94
15 Freon 152a					CAS #: 75-37-6		
5.673	5.673 (0.394)	65	845854	50.0000	42.918	80.00- 120.00	100.00
5.673	5.673 (0.394)	51	1435057			109.56- 209.56	169.66
5.673	5.673 (0.394)	47	379960			0.00- 90.52	44.92
17 Freon 22					CAS #: 75-45-6		
5.814	5.814 (0.403)	51	2901290	50.0000	45.567	80.00- 120.00	100.00
5.842	5.842 (0.405)	67	333158			0.00- 61.77	11.48
5.842	5.842 (0.405)	85	37516			0.00- 51.67	1.29
26 Methanol					CAS #: 67-56-1		
7.588	7.588 (0.526)	31	3050863	300.000	278.92	80.00- 120.00	100.00
7.588	7.588 (0.526)	32	1923705			13.05- 113.05	63.05
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.618)	67	2430190	50.0000	43.021	80.00- 120.00	100.00
8.912	8.912 (0.618)	69	734459			0.00- 81.12	30.22
8.912	8.912 (0.618)	35	117266			0.00- 53.83	4.83

					AMOUNTS CAL-AMT (PPBV)	ON-COL. (PPBV)	TARGET RANGE	RATIO
RT	EXP RT	(REL RT)	MASS	RESPONSE				
40 Freon123a						CAS #: 354-23-4		
9.798	9.798	(0.680)	117	1562057	50.0000	48.941	80.00- 120.00	100.00
9.798	9.798	(0.680)	67	2073675			110.97- 210.97	132.75
41 Freon123						CAS #: 306-83-2		
9.964	9.964	(0.691)	83	2463060	50.0000	43.509	80.00- 120.00	100.00
9.964	9.964	(0.691)	133	562982			0.00- 69.52	22.86
9.964	9.964	(0.691)	85	1764957			22.16- 122.16	71.66
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.513	11.513	(0.799)	59	3172708	50.0000	53.410	80.00- 120.00	100.00
11.513	11.513	(0.799)	41	639927			0.00- 73.42	20.17
11.513	11.513	(0.799)	57	306817			0.00- 60.26	9.67
68 Isopropyl ether						CAS #: 108-20-3		
12.702	12.702	(0.881)	45	5432057	50.0000	47.521	80.00- 120.00	100.00
12.702	12.702	(0.881)	87	1168158			0.00- 73.31	21.50
12.702	12.702	(0.881)	59	470082			0.00- 58.30	8.65
71 1-Propanol						CAS #: 71-23-8		
12.840	12.840	(0.891)	42	367506	50.0000	51.267	80.00- 120.00	100.00
12.840	12.840	(0.891)	59	474812			95.91- 195.91	129.20
12.702	12.702	(0.881)	41	1009868			265.93- 365.93	274.79
73 t-Butylethyl Ether						CAS #: 637-92-3		
13.365	13.365	(0.927)	59	4813415	50.0000	49.401	80.00- 120.00	100.00
13.393	13.393	(0.929)	87	1773150			0.00- 88.95	36.84
13.365	13.365	(0.927)	41	814267			0.00- 67.89	16.92
77 Ethyl Acetate						CAS #: 141-78-6		
13.890	13.890	(0.964)	45	531176	50.0000	48.827	80.00- 120.00	100.00
13.890	13.890	(0.964)	61	494867			49.04- 149.04	93.16
13.890	13.890	(0.964)	43	3684788			622.55- 722.55	693.70
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
15.549	15.549	(1.079)	73	3617864	50.0000	50.804	80.00- 120.00	100.00
15.549	15.549	(1.079)	87	887717			0.00- 73.71	24.54
15.549	15.549	(1.079)	55	939261			0.00- 78.56	25.96
96 2-Heptanone						CAS #: 110-43-0		
22.517	22.517	(1.562)	58	1987689	50.0000	46.546	80.00- 120.00	100.00
22.517	22.517	(1.562)	43	3142048			108.53- 208.53	158.08
98 1-Butanol						CAS #: 71-36-3		
16.324	16.324	(1.010)	56	1094609	50.0000	52.365	80.00- 120.00	100.00
16.324	16.324	(1.010)	41	772895			21.86- 121.86	70.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
98 1-Butanol (continued)							
16.324	16.324 (1.010)	43	612921			9.15- 109.15	55.99
99 Isobutanol					CAS #: 78-83-1		
15.135	15.135 (1.050)	59	37057	50.0000	52.837	80.00- 120.00	100.00
15.135	15.135 (1.050)	41	932140			2630.47-2730.47	2515.42
15.135	15.135 (1.050)	43	1286620			3703.83-3803.83	3472.00
119 Butyl Acetate					CAS #: 123-86-4		
20.056	20.056 (1.241)	56	1421927	50.0000	45.680	80.00- 120.00	100.00
20.084	20.084 (1.243)	73	443596			0.00- 81.20	31.20
20.056	20.056 (1.241)	43	3589550			202.44- 302.44	252.44
135 Cyclohexanone					CAS #: 108-94-1		
23.291	23.291 (1.091)	55	1416288	50.0000	48.903	80.00- 120.00	100.00
23.291	23.291 (1.091)	98	602178			0.00- 90.62	42.52
23.291	23.291 (1.091)	42	967147			17.43- 117.43	68.29
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.065	24.065 (1.127)	57	3556084	50.0000	54.474	80.00- 120.00	100.00
24.065	24.065 (1.127)	85	2892209			31.33- 131.33	81.33
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110410.d
Lab Smp Id: ccvsp
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 04-NOV-2007
Calibration Time: 22:27
Client Smp ID: ccvsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	640543	-1.63
97 1,4-Difluorobenze	2188066	1312840	3063292	2138324	-2.27
126 Chlorobenzene-d5	1729248	1037549	2420947	1456889	-15.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

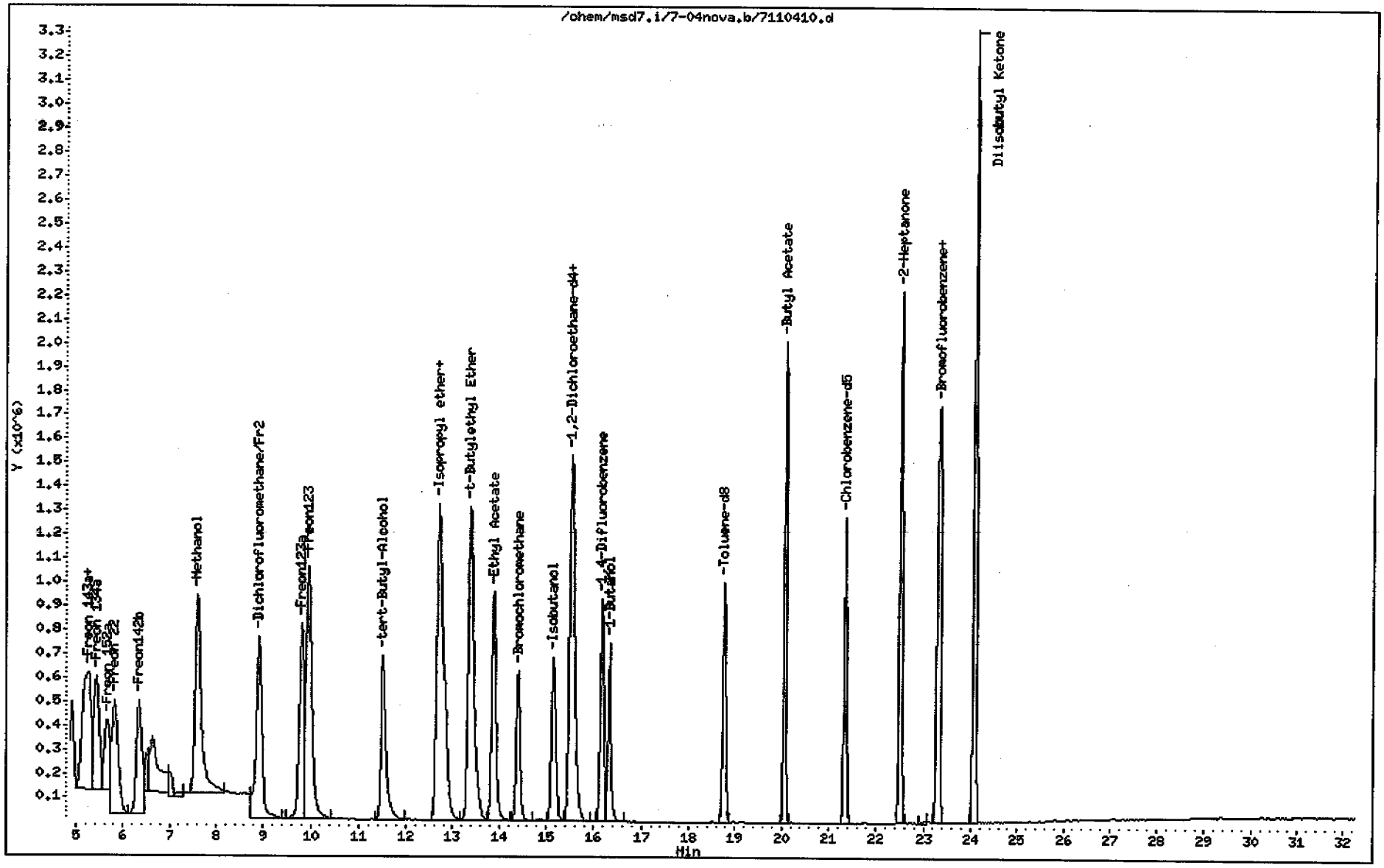
Data File: /chem/msd7.i/7-04nova.b/7110410.d
Date : 04-NOV-2007 23:11
Client ID: ccvsp
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: dm
Column diameter: 0.53

0360



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711008-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	86
Freon 114	95
Chloromethane	89
Vinyl Chloride	87
1,3-Butadiene	92
Bromomethane	82
Chloroethane	90
Freon 11	93
Ethanol	106
Freon 113	111
1,1-Dichloroethene	106
Acetone	94
2-Propanol	103
Carbon Disulfide	85
Methylene Chloride	100
Methyl tert-butyl ether	105
trans-1,2-Dichloroethene	94
Hexane	101
1,1-Dichloroethane	98
2-Butanone (Methyl Ethyl Ketone)	100
cis-1,2-Dichloroethene	101
Tetrahydrofuran	108
Chloroform	104
1,1,1-Trichloroethane	105
Cyclohexane	106
Carbon Tetrachloride	109
Benzene	104
1,2-Dichloroethane	98
Heptane	104
Trichloroethene	106
1,2-Dichloropropane	103
1,4-Dioxane	104
Bromodichloromethane	106
cis-1,3-Dichloropropene	105
4-Methyl-2-pentanone	112
Toluene	110
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	110
Tetrachloroethene	122

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711008-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	106
Dibromochloromethane	118
1,2-Dibromoethane (EDB)	110
Chlorobenzene	108
Ethyl Benzene	106
m,p-Xylene	106
o-Xylene	107
Styrene	113
Bromoform	120
1,1,2,2-Tetrachloroethane	97
4-Ethyltoluene	101
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	103
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	100
alpha-Chlorotoluene	102
1,2-Dichlorobenzene	94
1,2,4-Trichlorobenzene	64 Q
Hexachlorobutadiene	69 Q
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	96

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR.sub
Client SDG: 7-04nova
Fraction: VOA
Client Smp ID: LCS-1
Operator: ab
SampleType: LCS
Quant Type: ISTD
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 200ppbv-50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	42.789	85.58	70-130
16 Freon 114	50.000	47.341	94.68	70-130
18 Chloromethane	50.000	44.320	88.64	70-130
20 Vinyl Chloride	50.000	43.377	86.75	70-130
22 1,3-Butadiene	50.000	46.222	92.44	60-140
25 Bromomethane	50.000	40.921	81.84	70-130
27 Chloroethane	50.000	44.754	89.51	70-130
31 Trichlorofluoromet	50.000	46.371	92.74	70-130
38 Ethanol	50.000	52.864	105.73	60-140
42 Freon 113	50.000	55.678	111.36	70-130
43 1,1-Dichloroethene	50.000	52.900	105.80	70-130
45 Acetone	50.000	47.287	94.57	60-140
47 Carbon Disulfide	50.000	42.350	84.70	60-140
46 2-Propanol	50.000	51.498	103.00	60-140
54 Methylene Chloride	50.000	50.136	100.27	70-130
60 MTBE	50.000	52.546	105.09	60-140
61 trans-1,2-Dichloro	50.000	47.098	94.20	60-140
65 Hexane	50.000	50.447	100.89	60-140
69 Vinyl Acetate	50.000	46.927	93.85	60-140
70 1,1-Dichloroethane	50.000	49.278	98.56	70-130
76 cis-1,2-Dichloroet	50.000	50.615	101.23	70-130
75 2-Butanone	50.000	50.019	100.04	60-140
80 Tetrahydrofuran	50.000	53.943	107.89	60-140
82 Chloroform	50.000	51.941	103.88	70-130
85 Cyclohexane	50.000	52.882	105.76	60-140
83 1,1,1-Trichloroeth	50.000	52.638	105.28	70-130
87 Carbon Tetrachlori	50.000	54.319	108.64	70-130
91 Benzene	50.000	51.783	103.57	70-130
93 1,2-Dichloroethane	50.000	49.085	98.17	70-130
94 Heptane	50.000	51.990	103.98	60-140
101 Trichloroethene	50.000	52.822	105.64	70-130
104 1,2-Dichloropropan	50.000	51.324	102.65	70-130
106 1,4-Dioxane	50.000	52.162	104.32	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	52.787	105.57	60-140
110 cis-1,3-Dichloropr	50.000	52.464	104.93	70-130
111 4-Methyl-2-pentano	50.000	56.245	112.49	60-140
114 Toluene	50.000	55.086	110.17	70-130
116 trans-1,3-Dichloro	50.000	53.750	107.50	70-130
117 1,1,2-Trichloroeth	50.000	54.940	109.88	70-130
120 Tetrachloroethene	50.000	61.274	122.55	70-130
121 2-Hexanone	50.000	53.056	106.11	60-140
122 Dibromochlorometha	50.000	58.813	117.63	60-140
123 1,2-Dibromoethane	50.000	55.177	110.35	70-130
127 Chlorobenzene	50.000	54.003	108.01	70-130
128 Ethyl Benzene	50.000	53.119	106.24	70-130
129 m,p-Xylene	50.000	53.268	106.54	70-130
130 o-Xylene	50.000	53.338	106.68	70-130
131 Styrene	50.000	56.477	112.95	70-130
133 Bromoform	50.000	59.856	119.71	60-140
140 1,1,2,2-Tetrachlor	50.000	48.465	96.93	70-130
145 4-Ethyltoluene	50.000	50.610	101.22	60-140
147 1,3,5-Trimethylben	50.000	50.933	101.87	70-130
150 1,2,4-Trimethylben	50.000	51.315	102.63	70-130
155 1,3-Dichlorobenzen	50.000	51.182	102.36	70-130
156 1,4-Dichlorobenzen	50.000	50.218	100.44	70-130
159 alpha-Chlorotoluen	50.000	50.861	101.72	70-130
161 1,2-Dichlorobenzen	50.000	47.075	94.15	70-130
165 1,2,4-Trichloroben	50.000	31.867	63.73*	70-130
166 Hexachlorobutadien	50.000	34.539	69.08*	70-130
142 Propylbenzene	50.000	52.279	104.56	60-140
134 Cumene	50.000	56.723	113.45	60-140
51 3-Chloropropene	50.000	42.817	85.63	60-140
89 2,2,4-Trimethylpen	50.000	53.666	107.33	60-140
29 Isopentane	50.000	45.799	91.60	70-130
19 Butane	50.000	45.410	90.82	70-130
102 Methyl Cyclohexane	50.000	54.255	108.51	70-130
11 Propylene	50.000	47.994	95.99	60-140
167 Naphthalene	50.000	27.196	54.39*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.189	92.76	70-130
$ 113 Toluene-d8	25.000	25.034	100.14	70-130
$ 137 Bromofluorobenzene	25.000	26.802	107.21	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-04nova.b/7110411.d
Lab Smp Id: LCS-1
Client Smp ID: LCS-1
Inj Date : 04-NOV-2007 23:58
Operator : ab
Inst ID: msd7.i
Smp Info : 50mL #1443-302
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-04nova.b/t14q018c.m
Meth Date : 05-Nov-2007 00:40 dmendoza
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	14.388	14.388 (1.000)	130	626813	25.0000		80.00- 120.00	100.00
	14.388	14.388 (1.000)	128	488302			28.08- 128.08	77.90
	14.388	14.388 (1.000)	49	1154733			128.80- 228.80	184.22
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	16.158	16.158 (1.000)	114	2122832	25.0000		80.00- 120.00	100.00
	16.158	16.158 (1.000)	88	317674			0.00- 64.88	14.96
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	21.356	21.356 (1.000)	117	1687430	25.0000		80.00- 120.00	100.00
	21.356	21.356 (1.000)	82	880830			4.45- 104.45	52.20
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.494	15.494 (1.077)	65	780852	23.1889	23.189	80.00- 120.00	100.00
	15.494	15.494 (1.077)	67	433236			2.91- 102.91	55.48
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.757	18.757 (1.161)	98	1886542	25.0346	25.034	80.00- 120.00	100.00
	18.757	18.757 (1.161)	70	196953			0.00- 61.46	10.44

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1313527			19.18- 119.18	69.63
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	1076224	26.8026	26.802	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1209364			63.49- 163.49	112.37
23.347	23.347 (1.093)	176	1033863			46.77- 146.77	96.06
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1296609	47.9946	47.994	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	881557			21.19- 121.19	67.99
5.617	5.617 (0.390)	39	968632			24.83- 124.83	74.71
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.400)	85	4238424	42.7894	42.789	80.00- 120.00	100.00
5.758	5.729 (0.400)	87	1361762			0.00- 83.07	32.13
16 Freon 114					CAS #: 76-14-2		
6.180	6.180 (0.430)	135	3191582	47.3406	47.341	80.00- 120.00	100.00
6.180	6.180 (0.430)	137	1027872			0.00- 81.90	32.21
18 Chloromethane					CAS #: 74-87-3		
6.518	6.518 (0.453)	50	1443761	44.3200	44.320	80.00- 120.00	100.00
6.518	6.518 (0.453)	52	471969			0.00- 84.80	32.69
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.856 (0.476)	62	1764052	43.3770	43.377	80.00- 120.00	100.00
6.856	6.856 (0.476)	64	552803			0.00- 83.25	31.34
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.482)	54	1346479	46.2221	46.222	80.00- 120.00	100.00
6.940	6.940 (0.482)	39	1382823			55.97- 155.97	102.70
25 Bromomethane					CAS #: 74-83-9		
8.039	8.011 (0.559)	94	1473510	40.9207	40.921	80.00- 120.00	100.00
8.039	8.011 (0.559)	96	1389257			44.13- 144.13	94.28
27 Chloroethane					CAS #: 75-00-3		
8.349	8.348 (0.580)	64	807437	44.7540	44.754	80.00- 120.00	100.00
8.349	8.348 (0.580)	49	233334			0.00- 79.34	28.90
8.349	8.348 (0.580)	66	243148			0.00- 83.15	30.11
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.940	8.940 (0.621)	101	4285064	46.3708	46.371	80.00- 120.00	100.00
8.968	8.940 (0.623)	103	2776194			14.55- 114.55	64.79

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.439	9.439 (0.656)	45	666298	52.8640	52.864	80.00- 120.00	100.00
9.439	9.439 (0.656)	43	134884			0.00- 72.83	20.24
9.439	9.439 (0.656)	46	257790			0.00- 88.20	38.69
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.710)	151	2861603	55.6781	55.678	80.00- 120.00	100.00
10.186	10.186 (0.708)	153	1824988			13.28- 113.28	63.78
10.186	10.186 (0.708)	101	3219900			60.51- 160.51	112.52
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.718)	61	2893064	52.9000	52.900	80.00- 120.00	100.00
10.324	10.324 (0.718)	96	1682969			8.23- 108.23	58.17
10.324	10.324 (0.718)	98	1074306			0.00- 87.38	37.13
45 Acetone					CAS #: 67-64-1		
10.490	10.462 (0.729)	58	799349	47.2870	47.287	80.00- 120.00	100.00
10.490	10.462 (0.729)	43	2634912			247.10- 347.10	329.63
46 2-Propanol					CAS #: 67-63-0		
10.683	10.656 (0.742)	45	3088566	51.4984	51.498	80.00- 120.00	100.00
10.656	10.656 (0.741)	43	714655			0.00- 75.54	23.14
10.683	10.656 (0.742)	59	115131			0.00- 53.72	3.73
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.756)	76	4418859	42.3496	42.350	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.775)	76	727037	42.8167	42.817	80.00- 120.00	100.00
11.153	11.153 (0.775)	41	2323125			224.96- 324.96	319.53
54 Methylene Chloride					CAS #: 75-09-2		
11.458	11.457 (0.796)	49	2015872	50.1360	50.136	80.00- 120.00	100.00
11.458	11.457 (0.796)	84	1357558			15.73- 115.73	67.34
11.458	11.457 (0.796)	51	615353			0.00- 80.85	30.53
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.821)	73	3210164	52.5456	52.546	80.00- 120.00	100.00
11.817	11.817 (0.821)	57	801272			0.00- 74.66	24.96
11.817	11.817 (0.821)	41	785425			0.00- 76.16	24.47
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.928	11.928 (0.829)	96	1750081	47.0977	47.098	80.00- 120.00	100.00
11.928	11.928 (0.829)	61	2580182			100.56- 200.56	147.43
11.928	11.928 (0.829)	98	1118259			11.77- 111.77	63.90

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.854)	57	2674968	50.4470	50.447	80.00- 120.00	100.00
12.287	12.287 (0.854)	43	1777721			17.84- 117.84	66.46
12.287	12.287 (0.854)	86	373113			0.00- 65.07	13.95
69 Vinyl Acetate					CAS #: 108-05-4		
12.785	12.785 (0.889)	86	375977	46.9272	46.927	80.00- 120.00	100.00
12.785	12.785 (0.889)	43	4867462			1150.46-1250.46	1294.62
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.890)	63	3129884	49.2784	49.278	80.00- 120.00	100.00
12.812	12.812 (0.890)	65	969239			0.00- 80.91	30.97
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.965)	72	679052	50.0193	50.019	80.00- 120.00	100.00
13.891	13.891 (0.965)	43	3445989			458.59- 558.59	507.47
13.891	13.891 (0.965)	57	250325			0.00- 86.57	36.86
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.967)	61	2250218	50.6154	50.615	80.00- 120.00	100.00
13.918	13.918 (0.967)	96	1672926			23.12- 123.12	74.35
13.918	13.918 (0.967)	98	1080759			0.00- 97.59	48.03
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (1.000)	42	1909392	53.9432	53.943	80.00- 120.00	100.00
14.388	14.388 (1.000)	71	631233			0.00- 83.57	33.06
14.388	14.388 (1.000)	72	694313			0.00- 87.82	36.36
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.006)	83	3278052	51.9413	51.941	80.00- 120.00	100.00
14.471	14.471 (1.006)	85	2139191			15.98- 115.98	65.26
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.031)	97	3345373	52.6386	52.638	80.00- 120.00	100.00
14.831	14.831 (1.031)	99	2160013			14.42- 114.42	64.57
85 Cyclohexane					CAS #: 110-82-7		
14.858	14.831 (1.033)	84	1924960	52.8817	52.882	80.00- 120.00	100.00
14.831	14.831 (1.031)	56	2458435			81.34- 181.34	127.71
14.831	14.831 (1.031)	41	1383457			23.64- 123.64	71.87
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.050)	119	3236022	54.3190	54.319	80.00- 120.00	100.00
15.107	15.080 (1.050)	117	3352238			54.21- 154.21	103.59
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.071)	57	6828333	53.6662	53.666	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.071)	56	2319265			0.00- 84.62	33.97
15.411	15.411 (1.071)	41	1770377			0.00- 79.27	25.93
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	4367692	51.7829	51.783	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	963032			0.00- 71.87	22.05
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.967)	62	2199736	49.0853	49.085	80.00- 120.00	100.00
15.633	15.633 (0.967)	64	699203			0.00- 82.89	31.79
94 Heptane					CAS #: 142-82-5		
15.716	15.716 (0.973)	71	1348627	51.9897	51.990	80.00- 120.00	100.00
15.716	15.716 (0.973)	43	2749009			158.53- 258.53	203.84
15.716	15.716 (0.973)	57	1468579			59.34- 159.34	108.89
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1979104	52.8225	52.822	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	2074260			54.96- 154.96	104.81
16.628	16.628 (1.029)	97	1292407			15.03- 115.03	65.30
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.126	17.126 (1.060)	63	1661324	51.3238	51.324	80.00- 120.00	100.00
17.126	17.126 (1.060)	62	1223804			22.48- 122.48	73.66
17.126	17.126 (1.060)	41	1004298			10.34- 110.34	60.45
106 1,4-Dioxane					CAS #: 123-91-1		
17.236	17.236 (1.067)	88	1098181	52.1623	52.162	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	773953			20.79- 120.79	70.48
17.236	17.236 (1.067)	57	252985			0.00- 74.60	23.04
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	3433720	52.7871	52.787	80.00- 120.00	100.00
17.540	17.540 (1.086)	85	2215249			14.07- 114.07	64.51
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	2399667	52.4636	52.464	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	756648			0.00- 82.16	31.53
18.342	18.342 (1.135)	39	1320726			5.30- 105.30	55.04
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1419690	56.2452	56.245	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	3693000			222.97- 322.97	260.13
18.508	18.508 (1.145)	85	560451			0.00- 90.48	39.48

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	5089096	55.0859	55.086	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	3196861			12.81- 112.81	62.82
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2575912	53.7498	53.750	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	822742			0.00- 82.21	31.94
19.310	19.310 (0.904)	39	1319749			1.24- 101.24	51.23
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	1920216	54.9400	54.940	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	1211123			12.57- 112.57	63.07
19.642	19.642 (0.920)	83	1569584			31.77- 131.77	81.74
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2777574	61.2741	61.274	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1900963			18.66- 118.66	68.44
19.835	19.835 (0.929)	131	1838478			16.81- 116.81	66.19
121 2-Hexanone					CAS #: 591-78-6		
19.974	19.974 (0.935)	58	1987355	53.0565	53.056	80.00- 120.00	100.00
19.974	19.974 (0.935)	43	3656517			132.73- 232.73	183.99
19.974	19.974 (0.935)	100	345193			0.00- 67.05	17.37
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	3642161	58.8133	58.813	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	2813448			27.62- 127.62	77.25
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.637	20.637 (0.966)	107	3161498	55.1773	55.177	80.00- 120.00	100.00
20.637	20.637 (0.966)	109	2985156			45.40- 145.40	94.42
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	4122515	54.0028	54.003	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1326584			0.00- 82.45	32.18
21.411	21.411 (1.003)	77	2773989			16.80- 116.80	67.29
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	2069909	53.1193	53.119	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	6308807			261.69- 361.69	304.79
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2598084	53.2675	53.268	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	4942988			145.05- 245.05	190.26
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	2254491	53.3386	53.338	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.379	22.379 (1.048)	91	4543884			150.06- 250.06	201.55
131 Styrene					CAS #: 100-42-5		
22.407	22.407 (1.049)	104	3692159	56.4774	56.477	80.00- 120.00	100.00
22.407	22.407 (1.049)	78	1756164			0.00- 96.69	47.56
133 Bromoform					CAS #: 75-25-2		
22.822	22.821 (1.069)	173	3254906	59.8565	59.856	80.00- 120.00	100.00
22.822	22.821 (1.069)	171	1683910			1.50- 101.50	51.73
134 Cumene					CAS #: 98-82-8		
22.960	22.960 (1.075)	105	6054113	56.7229	56.723	80.00- 120.00	100.00
22.960	22.960 (1.075)	120	1688774			0.00- 78.08	27.89
22.960	22.960 (1.075)	51	585230			0.00- 61.43	9.67
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.540	23.540 (1.102)	83	3421644	48.4648	48.465	80.00- 120.00	100.00
23.540	23.540 (1.102)	85	2203282			14.31- 114.31	64.39
142 Propylbenzene					CAS #: 103-65-1		
23.651	23.651 (1.107)	91	7483793	52.2788	52.279	80.00- 120.00	100.00
23.651	23.651 (1.107)	120	1793077			0.00- 72.94	23.96
23.651	23.651 (1.107)	105	276678			0.00- 54.03	3.70
145 4-Ethyltoluene					CAS #: 622-96-8		
23.817	23.817 (1.115)	105	6397828	50.6102	50.610	80.00- 120.00	100.00
23.817	23.817 (1.115)	120	2084424			0.00- 82.38	32.58
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	5057501	50.9333	50.933	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	2651496			3.80- 103.80	52.43
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	4630746	51.3151	51.315	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	2311224			0.00- 98.95	49.91
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.116	25.116 (1.176)	146	3574141	51.1816	51.182	80.00- 120.00	100.00
25.144	25.116 (1.177)	148	2274261			14.48- 114.48	63.63
25.116	25.116 (1.176)	111	1316086			0.00- 89.68	36.82
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	3654783	50.2183	50.218	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	2335553			13.81- 113.81	63.90
25.282	25.282 (1.184)	111	1274193			0.00- 87.35	34.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	4914102	50.8614	50.861	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	1079864			0.00- 71.29	21.97
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	3060786	47.0754	47.075	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	1947743			14.11- 114.11	63.64
25.918	25.918 (1.214)	111	1159717			0.00- 88.36	37.89
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	847420	31.8670	31.867	80.00- 120.00	100.00(R)
28.821	28.821 (1.350)	182	802683			45.29- 145.29	94.72
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	763569	34.5395	34.539	80.00- 120.00	100.00(R)
28.987	28.987 (1.357)	223	482855			12.64- 112.64	63.24
29 Isopentane					CAS #: 78-78-4		
8.377	8.348 (0.582)	43	2046336	45.7993	45.799	80.00- 120.00	100.00
8.377	8.348 (0.582)	57	1338093			16.48- 116.48	65.39
19 Butane					CAS #: 106-97-8		
6.743	6.743 (0.469)	58	316912	45.4101	45.410	80.00- 120.00	100.00
6.743	6.743 (0.469)	43	2601699			757.70- 857.70	820.95
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.905	16.904 (1.175)	83	2430791	54.2549	54.255	80.00- 120.00	100.00
16.905	16.904 (1.175)	98	1159884			0.00- 96.13	47.72
16.905	16.904 (1.175)	55	2105496			38.51- 138.51	86.62
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	1354969	27.1959	27.196	80.00- 120.00	100.00(R)
29.374	29.374 (1.375)	127	156516			0.00- 62.50	11.55

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7110411.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-04nova.b/t14q018c.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 04-NOV-2007
Calibration Time: 22:27
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	651162	390697	911627	626813	-3.74
97 1,4-Difluorobenze	2188066	1312840	3063292	2122832	-2.98
126 Chlorobenzene-d5	1729248	1037549	2420947	1687430	-2.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.39	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

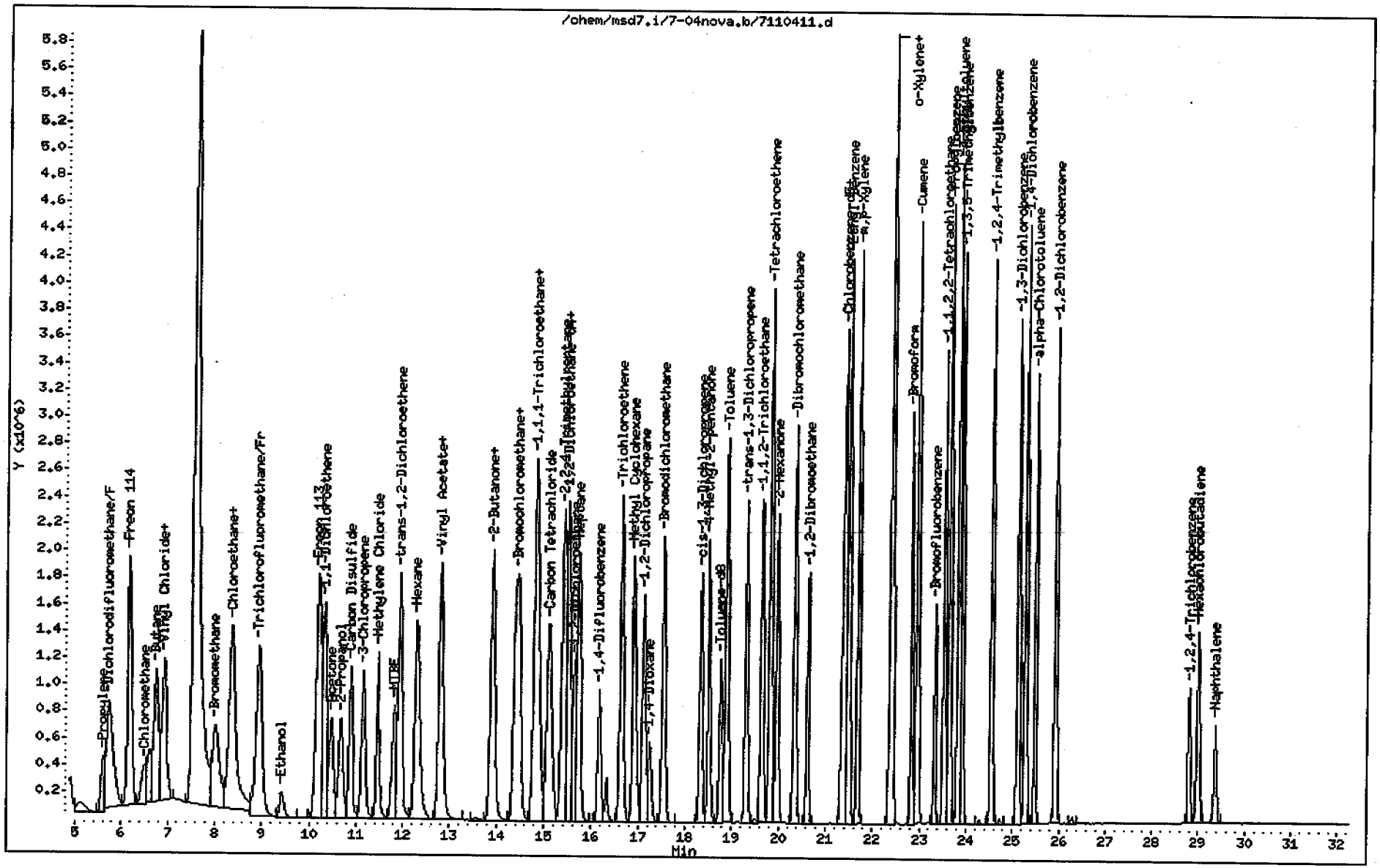
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-04nova.b/7110411.d
Date : 04-NOV-2007 23:58
Client ID: LCS-1
Sample Info: 50mL #1443-302

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53



Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

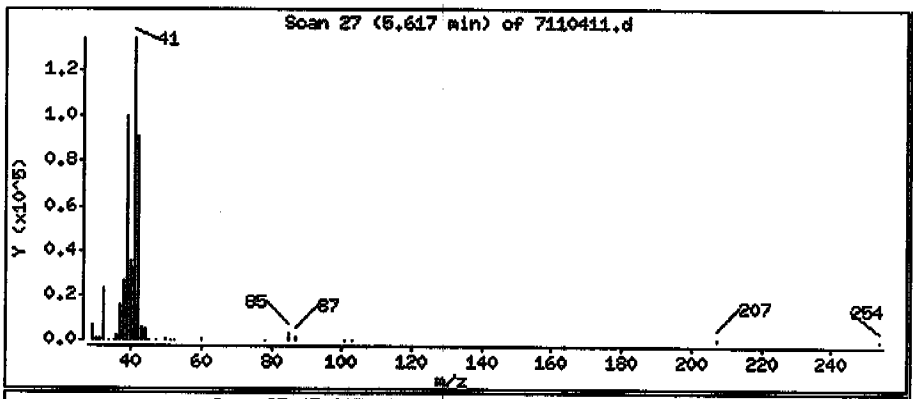
Operator: ab

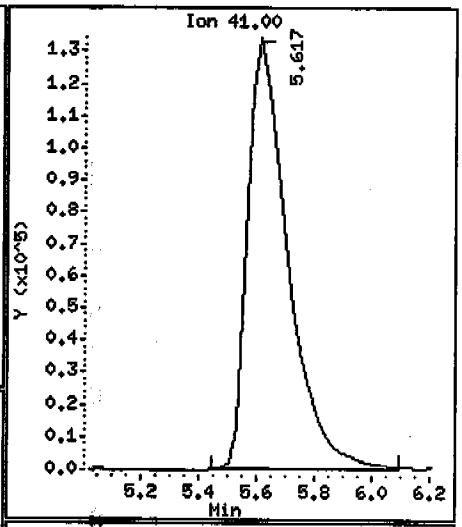
Column phase: RTx-624

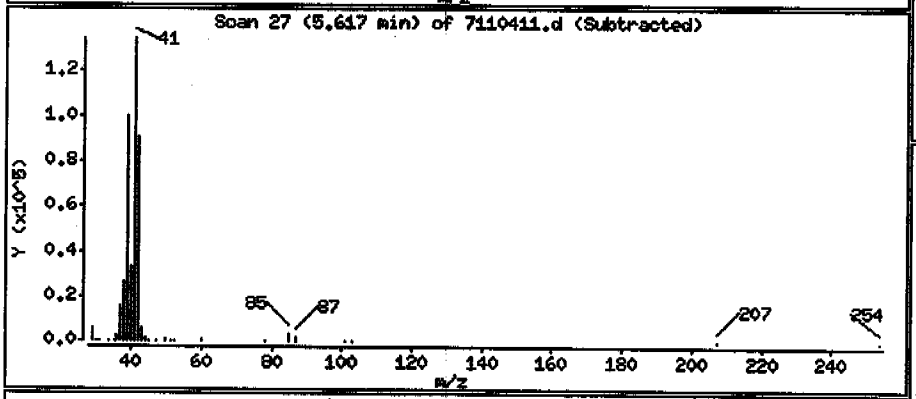
Column diameter: 0.53

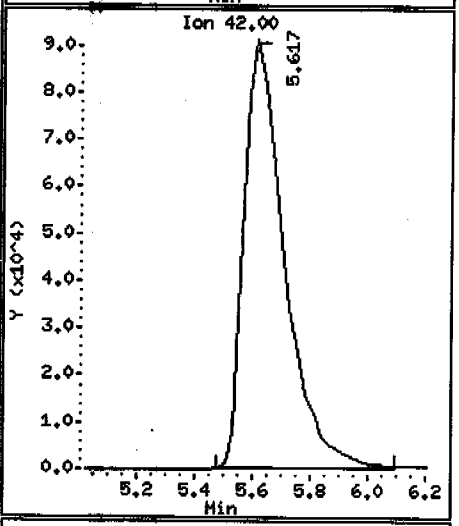
11 Propylene

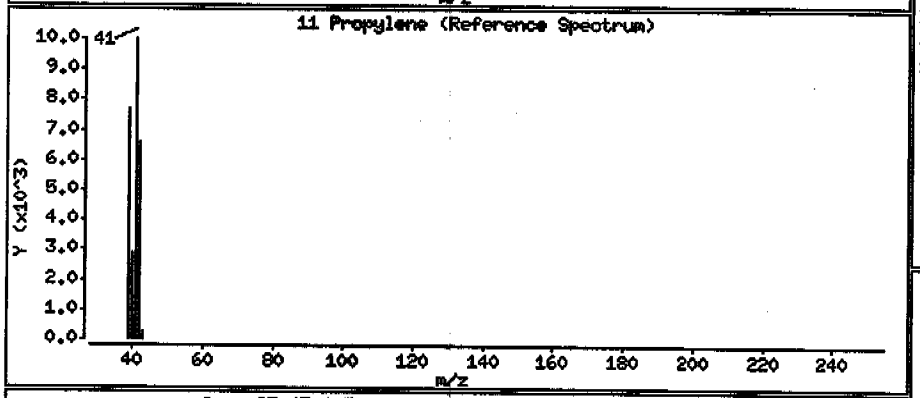
Concentration: 47.994 PPBV

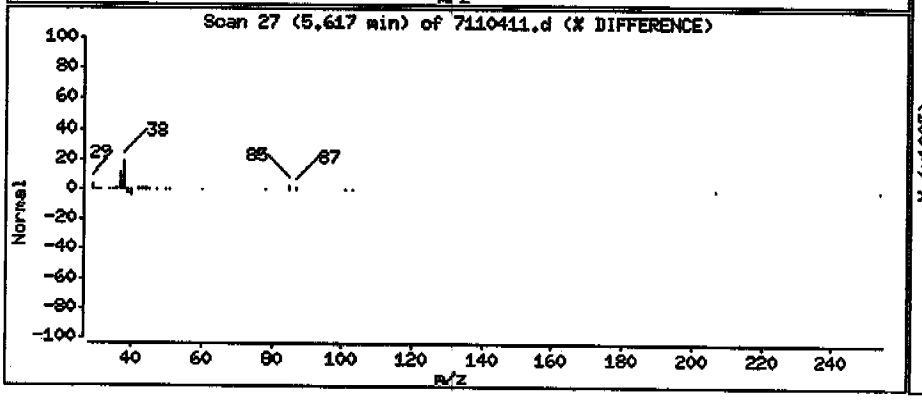


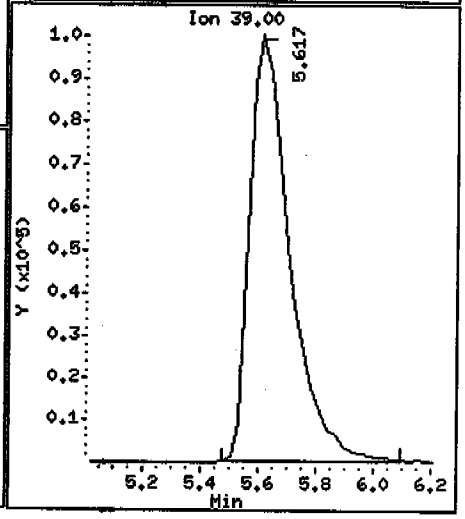












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

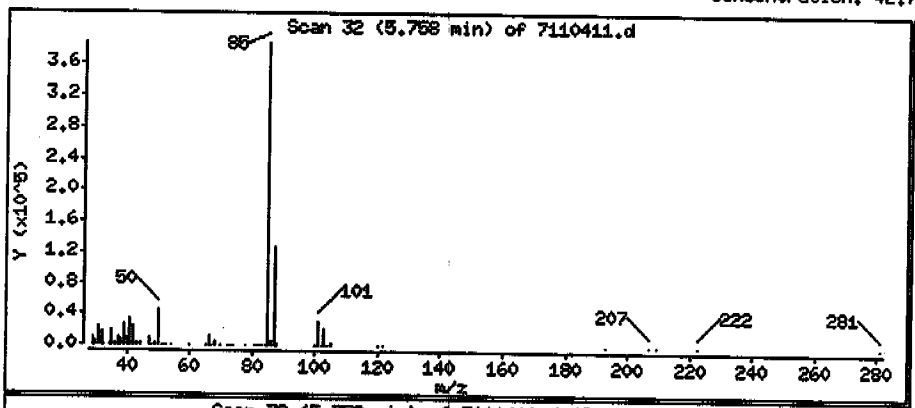
Operator: ab

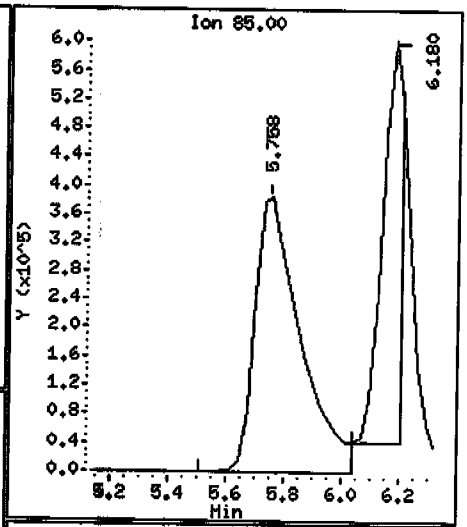
Column phase: RTx-624

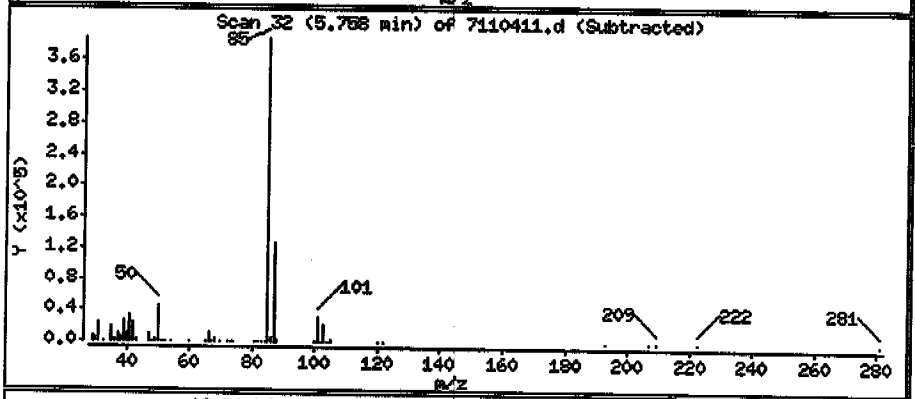
Column diameter: 0.53

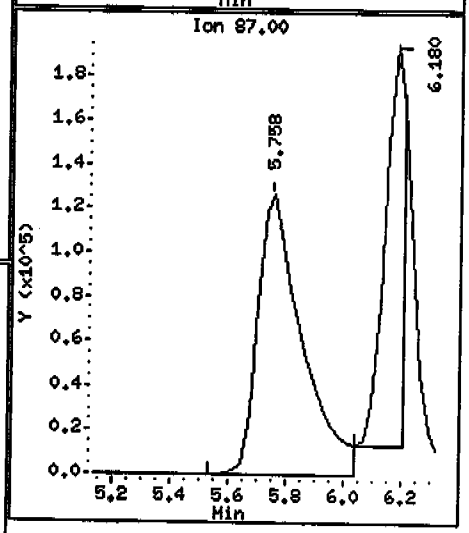
12 Dichlorodifluoromethane/Fr12

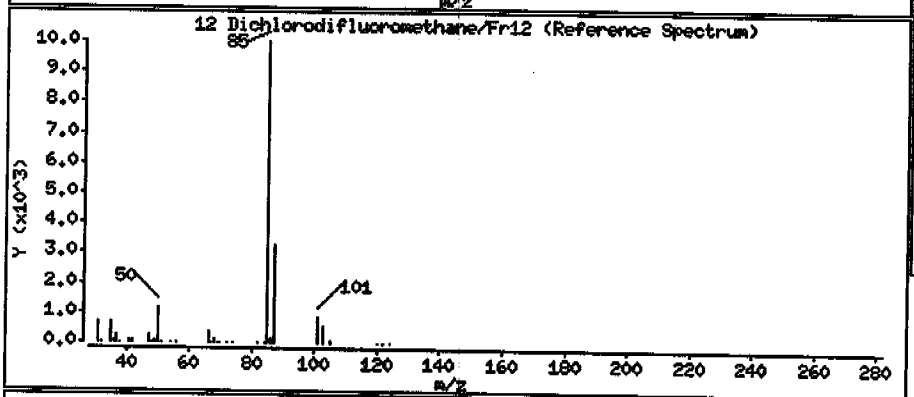
Concentration: 42.789 PPBV

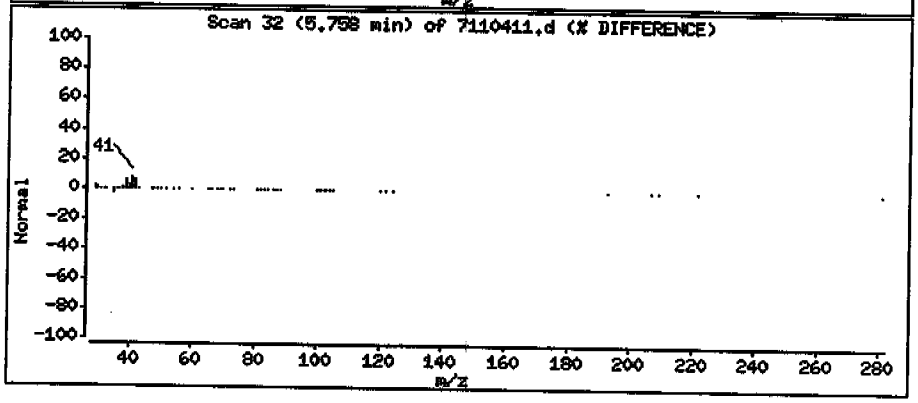












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

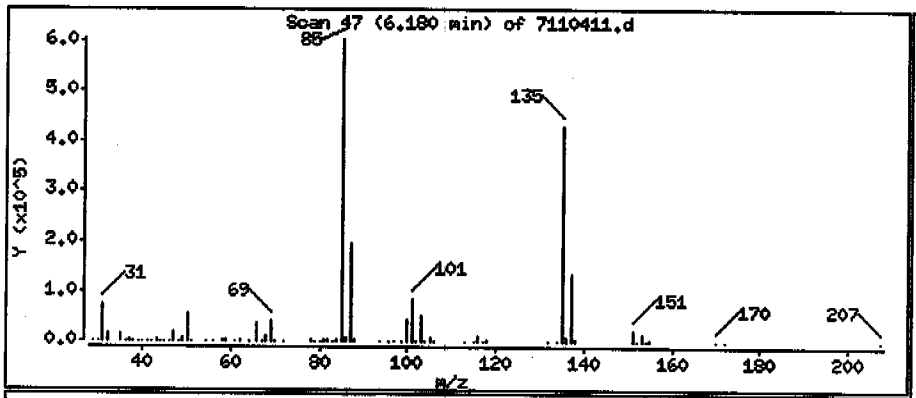
Operator: ab

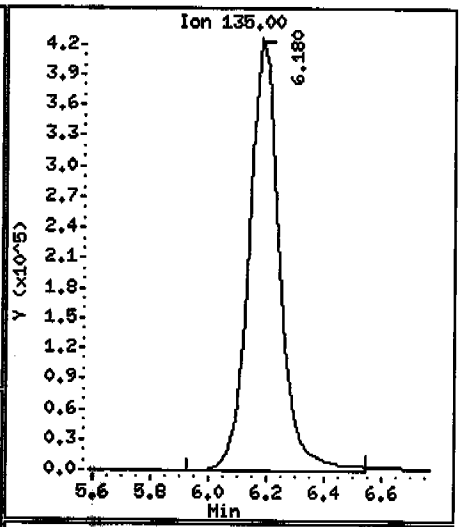
Column phase: RTx-624

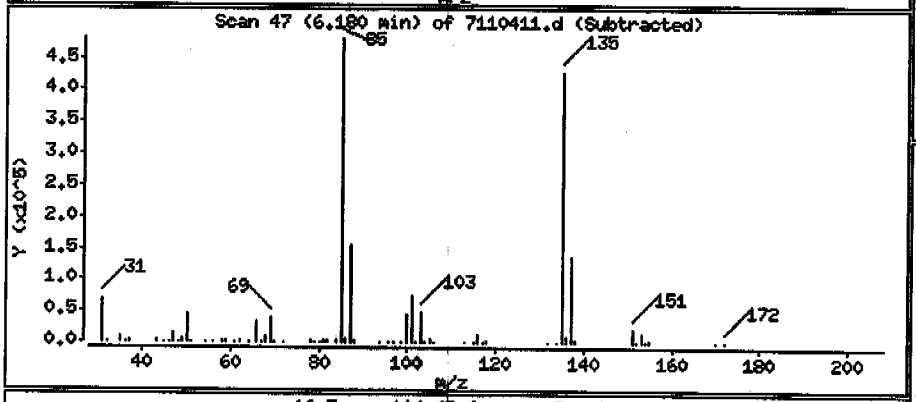
Column diameter: 0.53

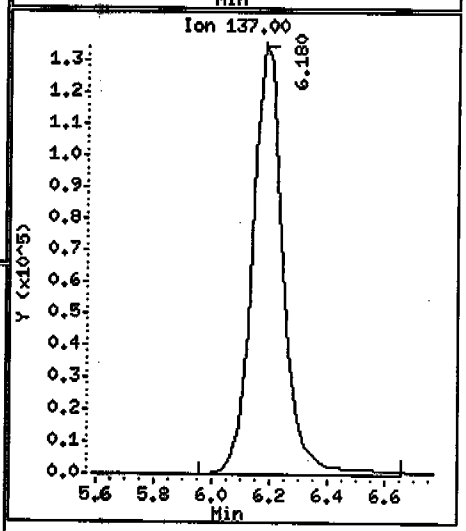
16 Freon 114

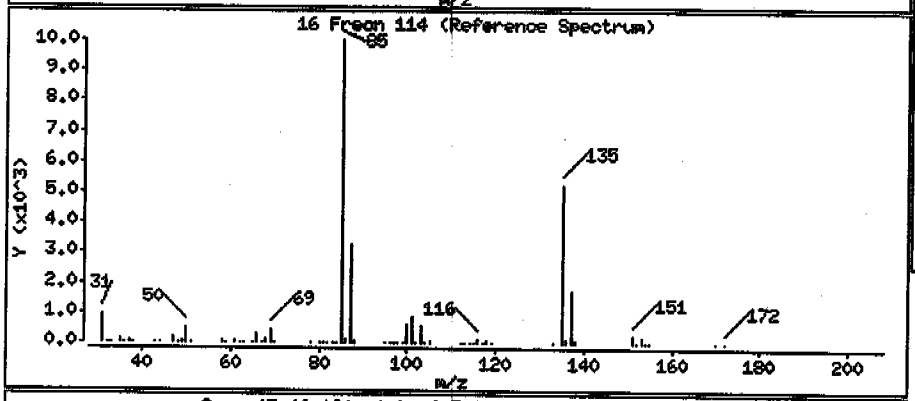
Concentration: 47.341 PPBV

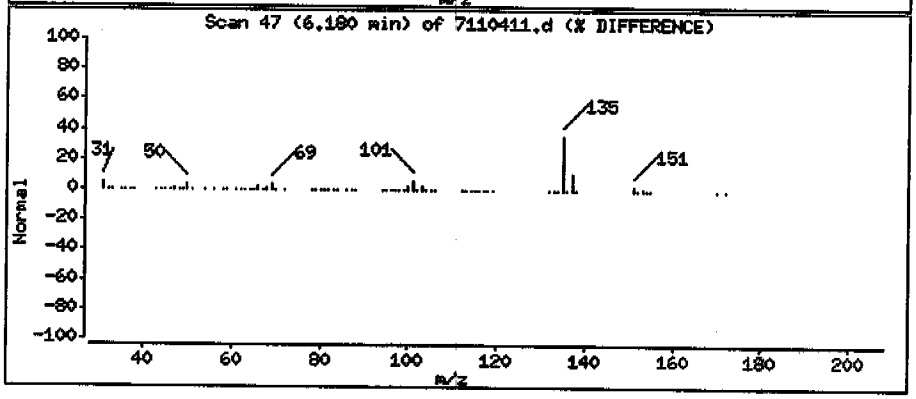












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

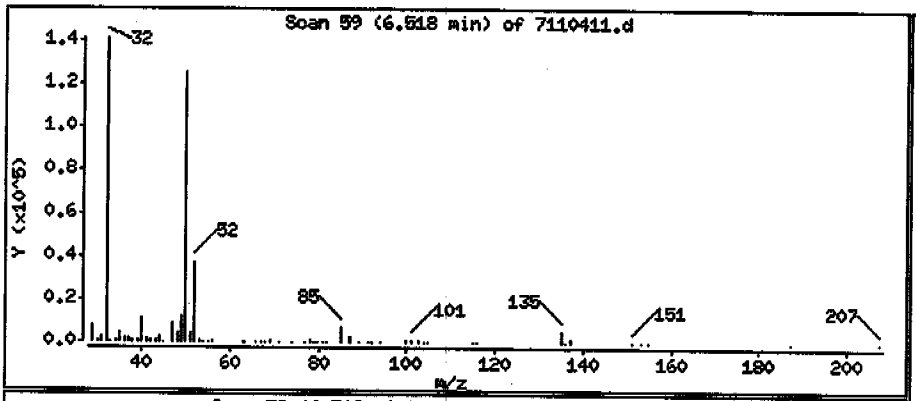
Operator: ab

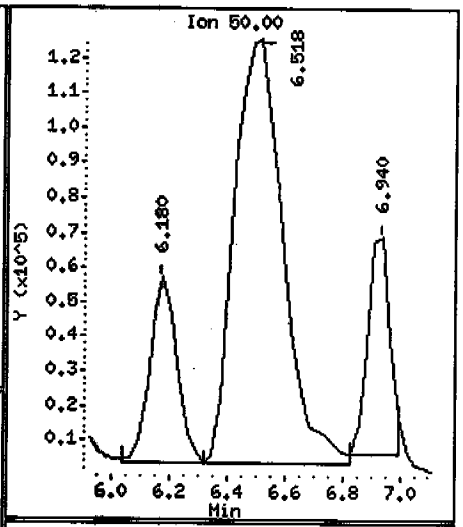
Column phase: RTx-624

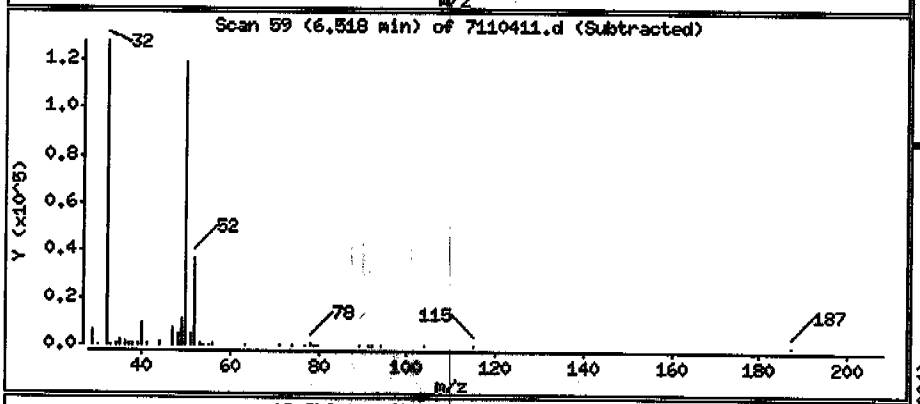
Column diameter: 0.53

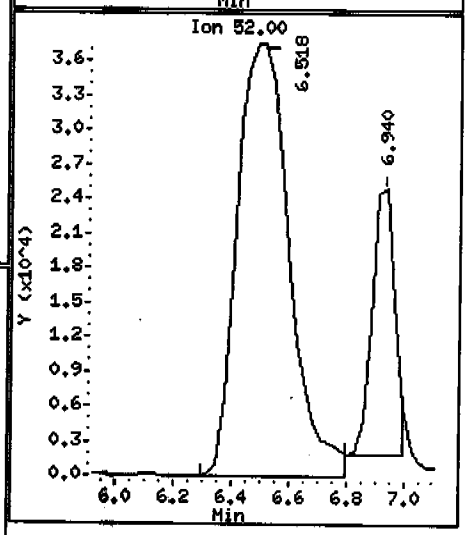
18 Chloromethane

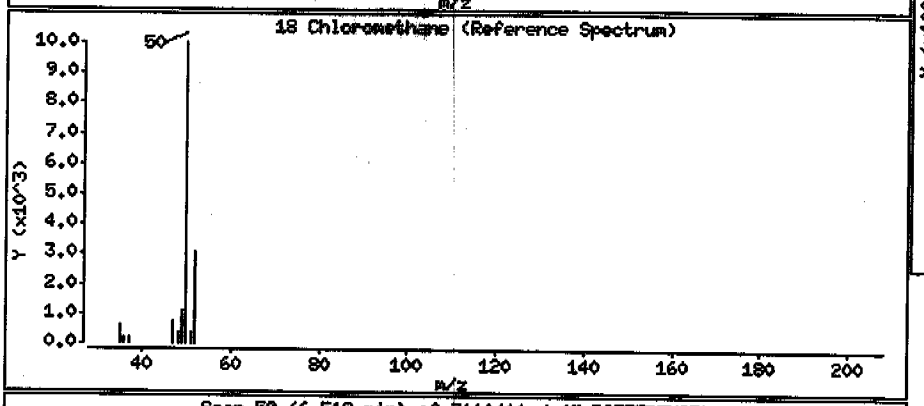
Concentration: 44.320 PPBV

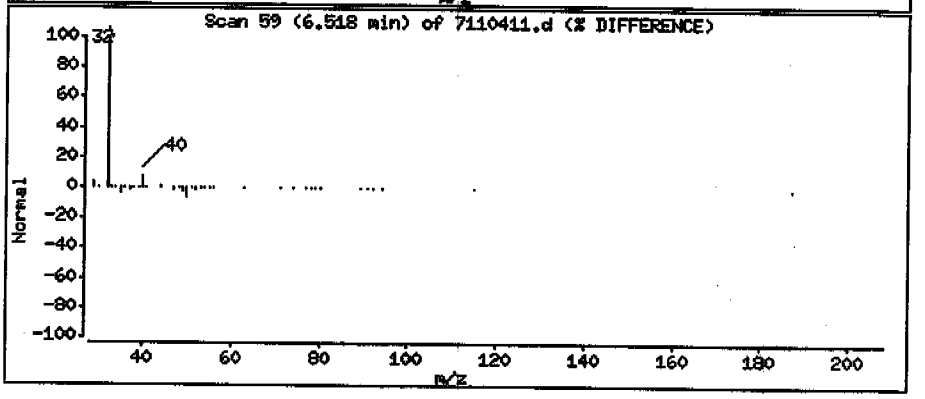












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

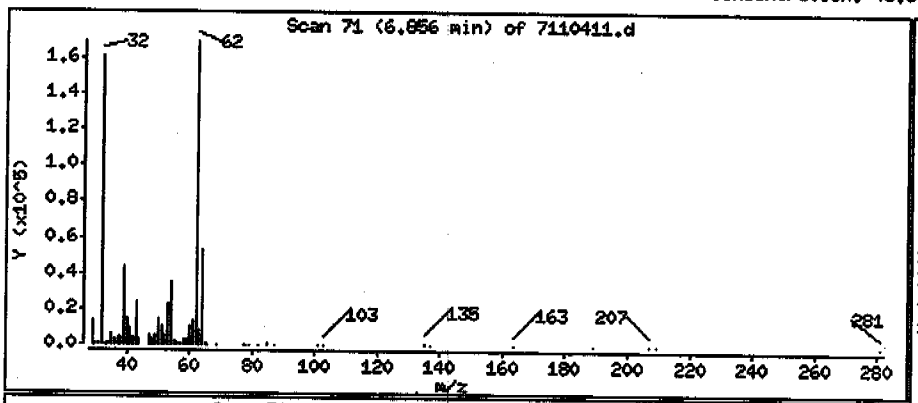
Operator: ab

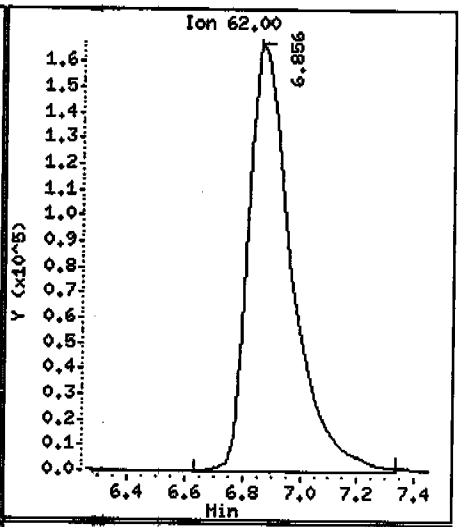
Column phase: RTx-624

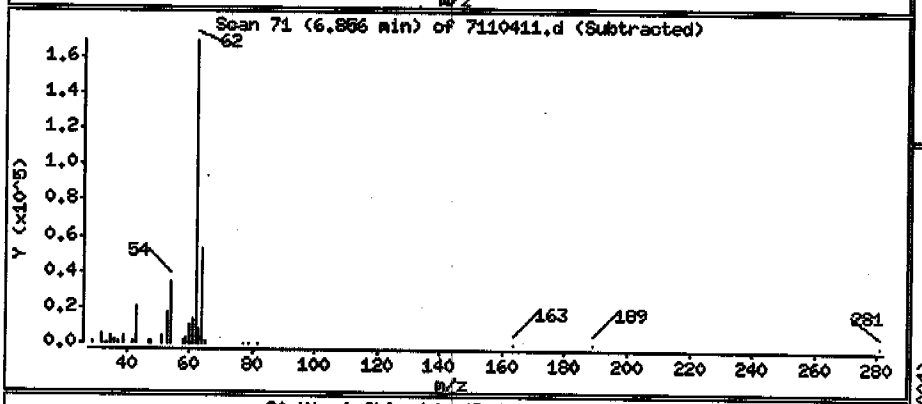
Column diameter: 0.53

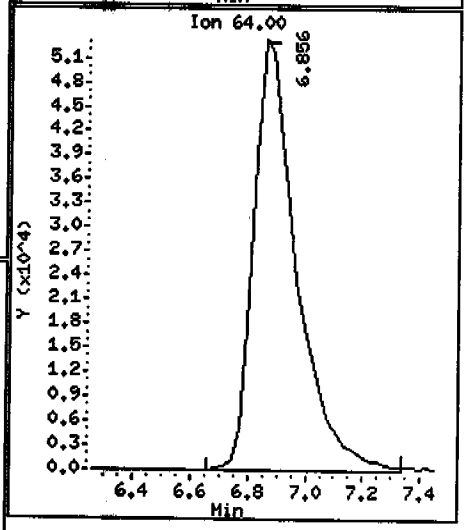
20 Vinyl Chloride

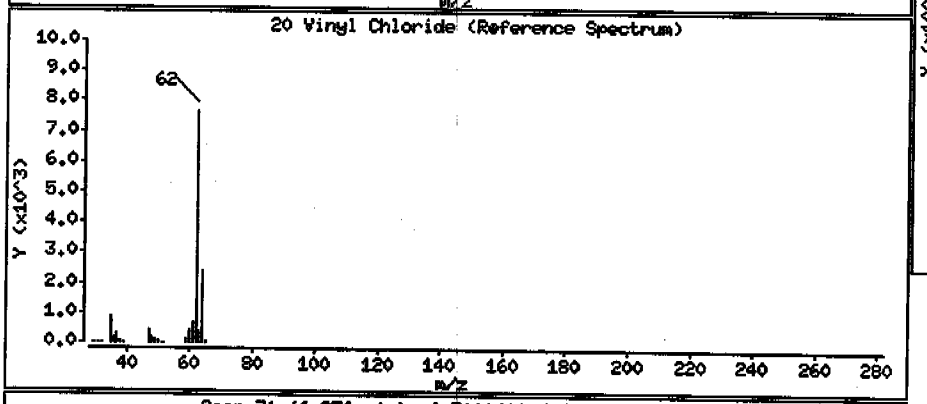
Concentration: 43.377 PPBV

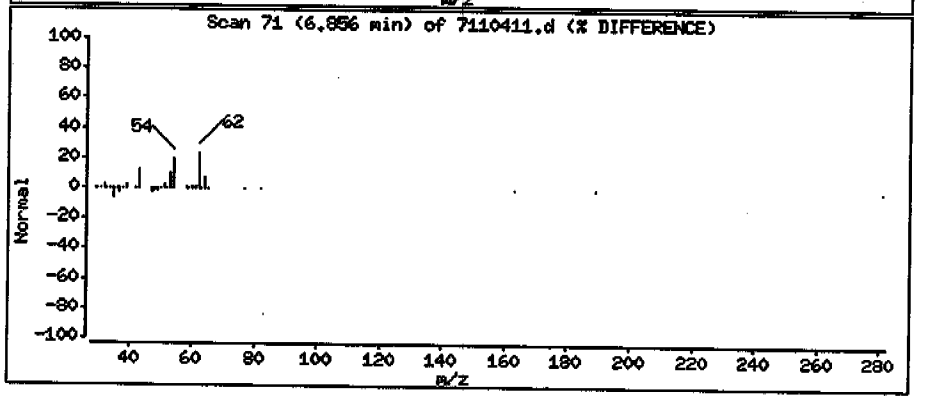












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

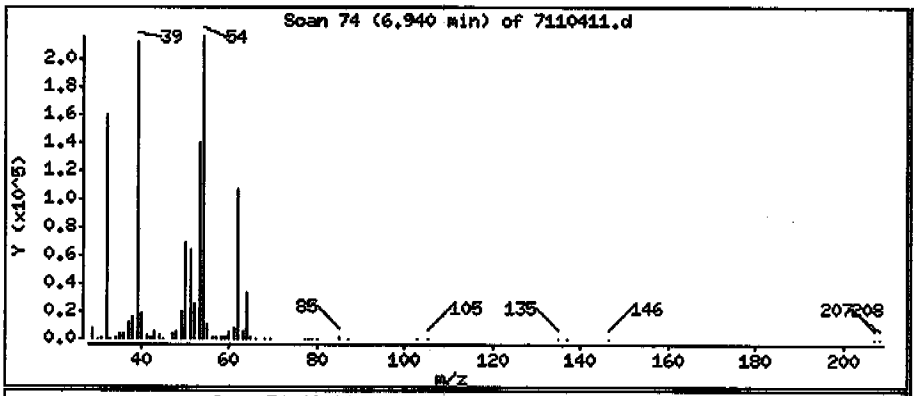
Operator: ab

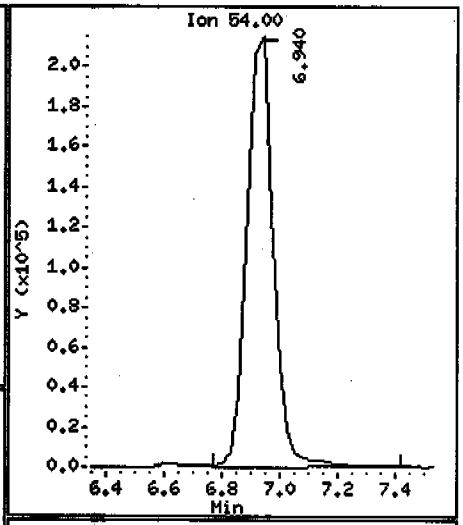
Column phase: RTx-624

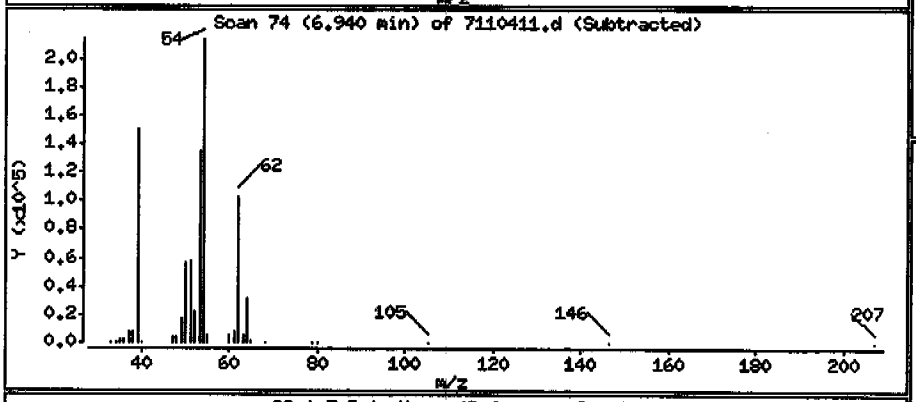
Column diameter: 0.53

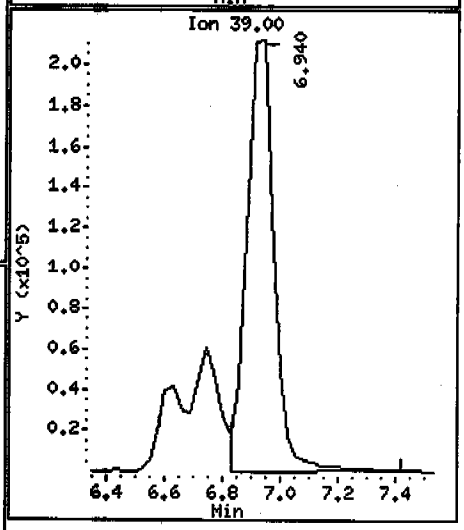
22 1,3-Butadiene

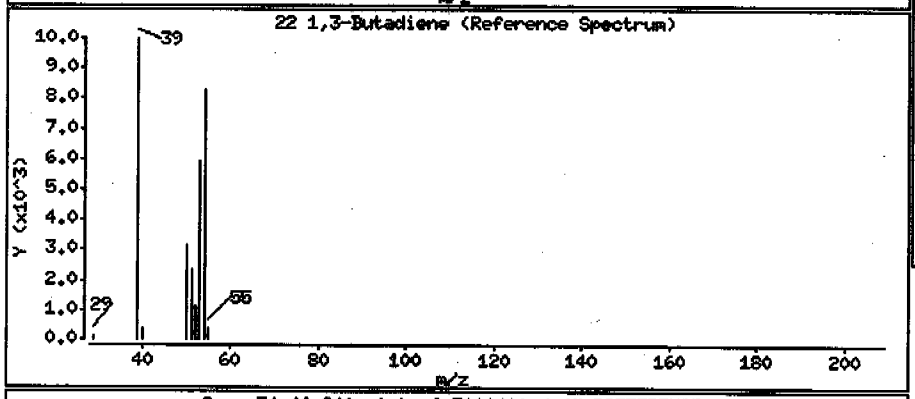
Concentration: 46.222 PPBV

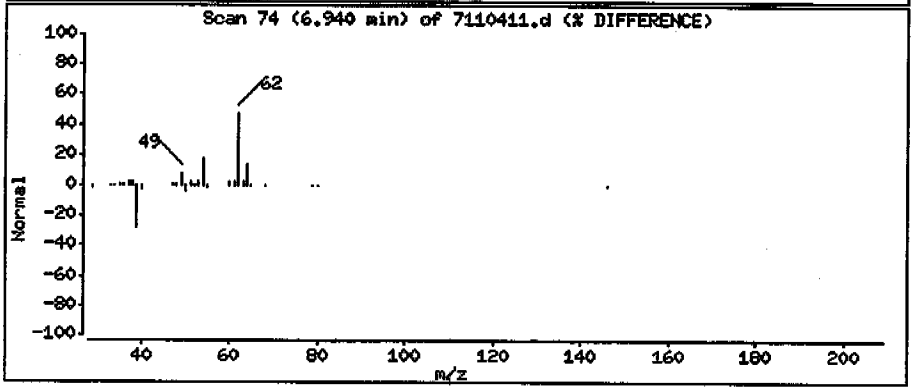












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

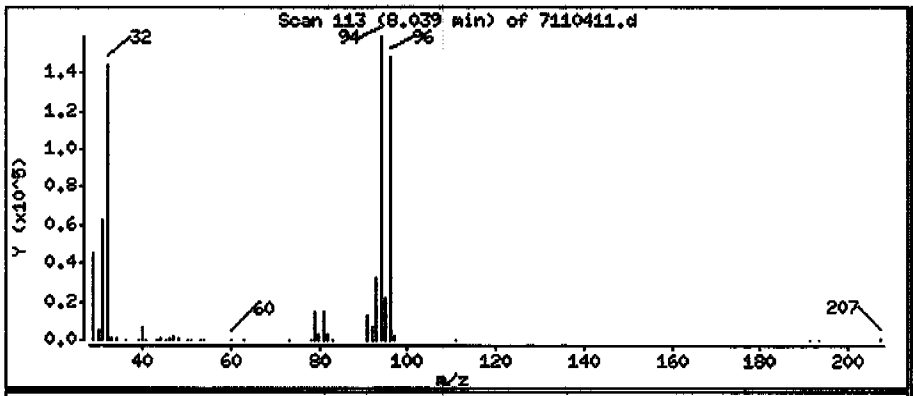
Operator: ab

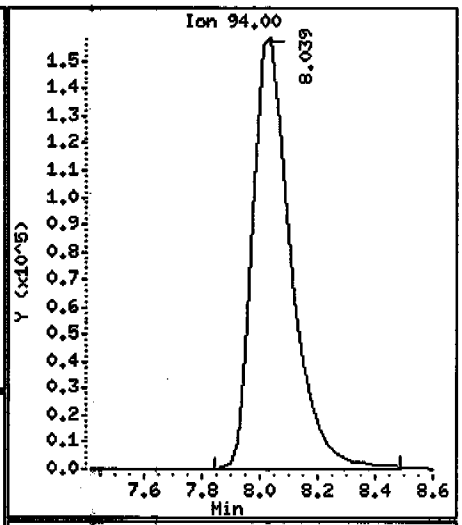
Column phase: RTx-624

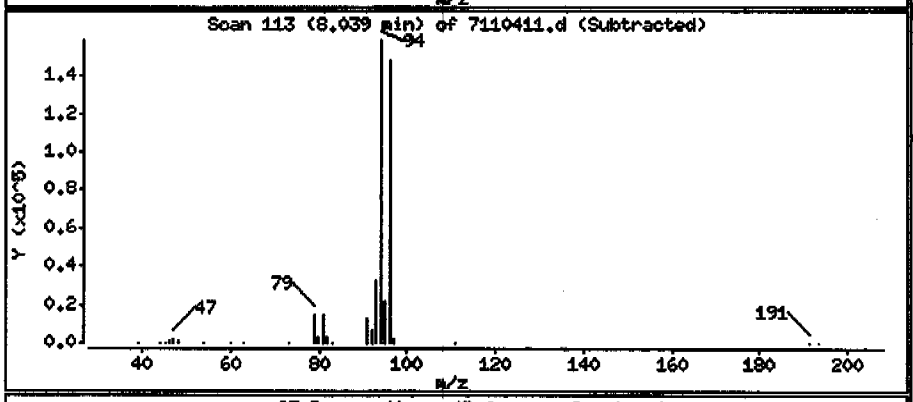
Column diameter: 0.53

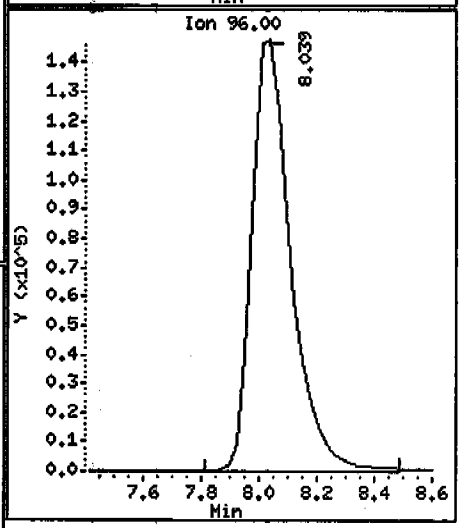
25 Bromomethane

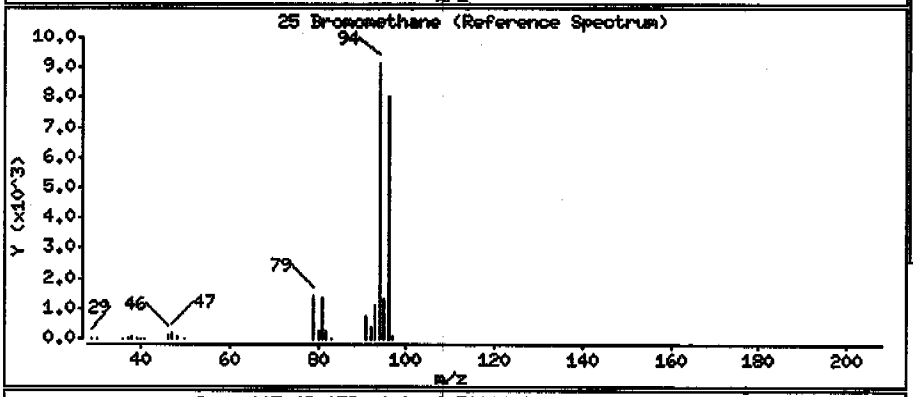
Concentration: 40.921 PPBV

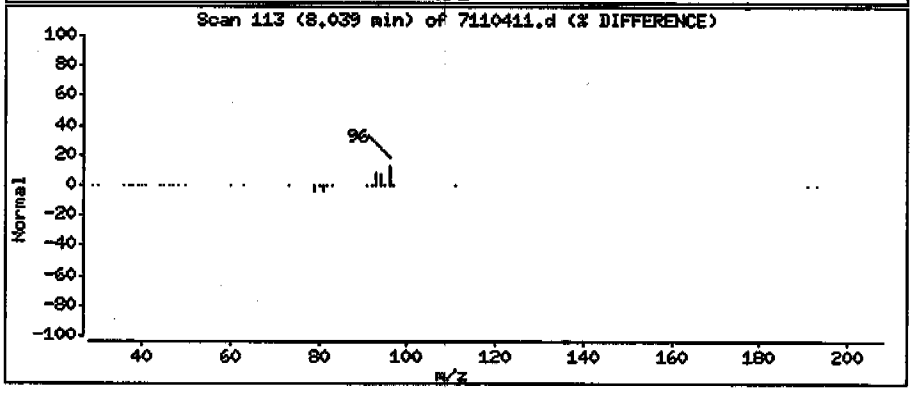












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

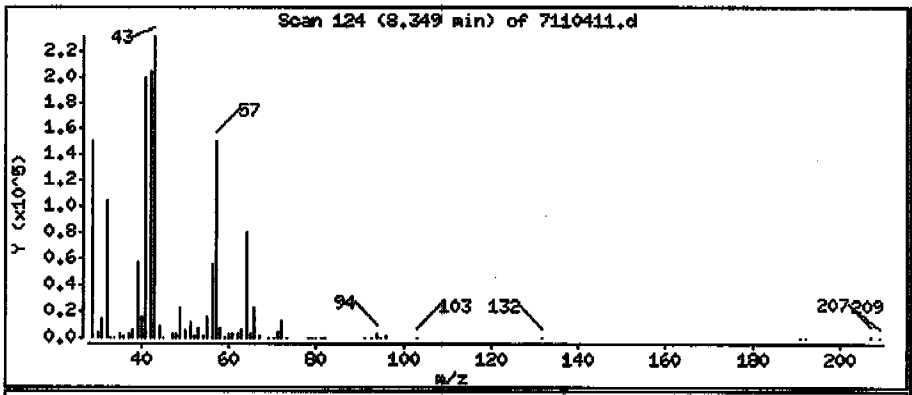
Operator: ab

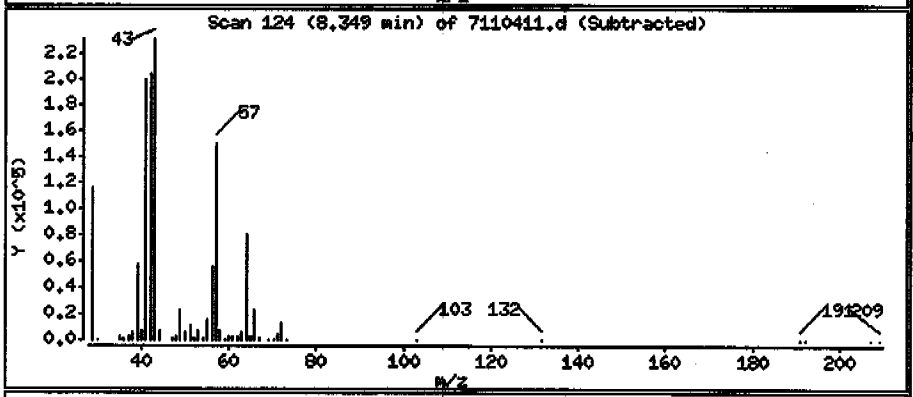
Column phase: RTx-624

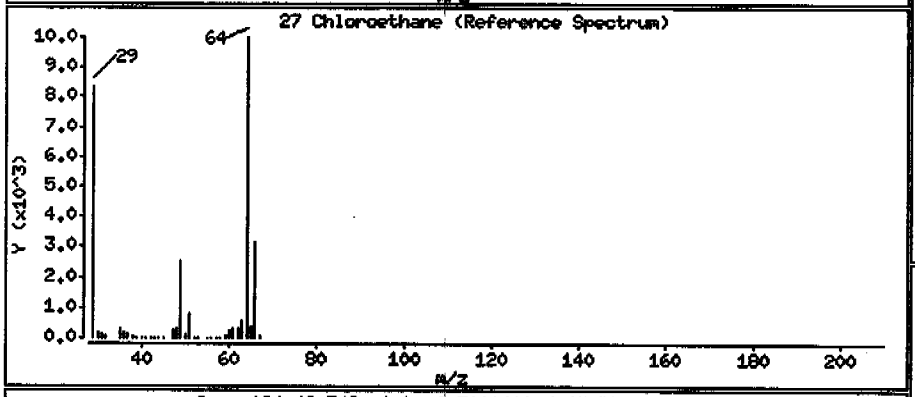
Column diameter: 0.53

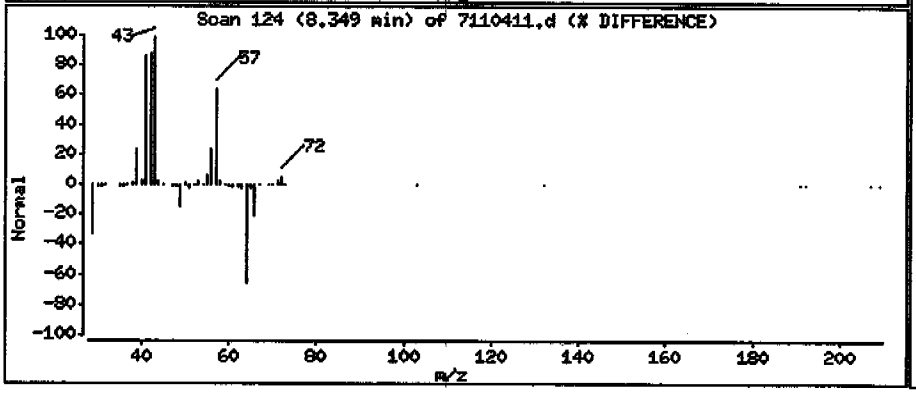
27 Chloroethane

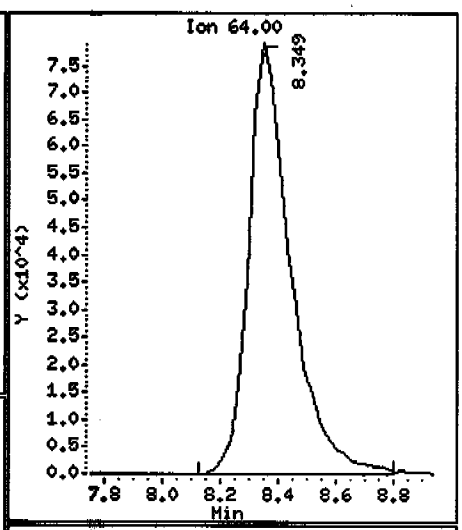
Concentration: 44.754 PPBV

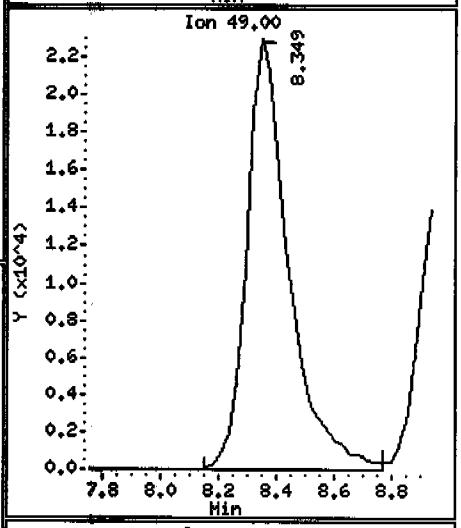


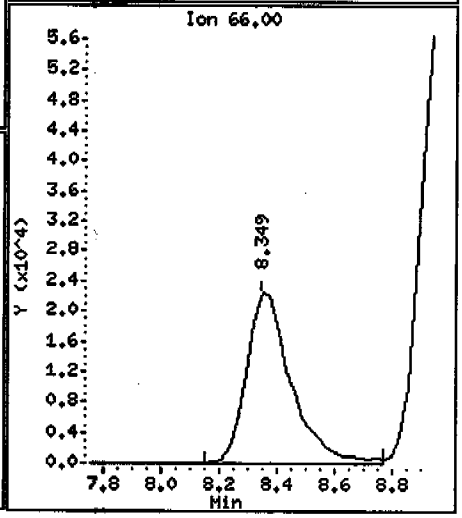












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

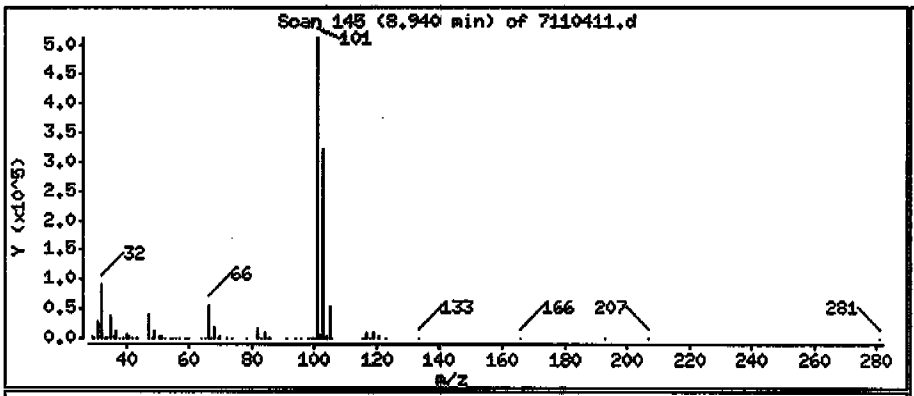
Operator: ab

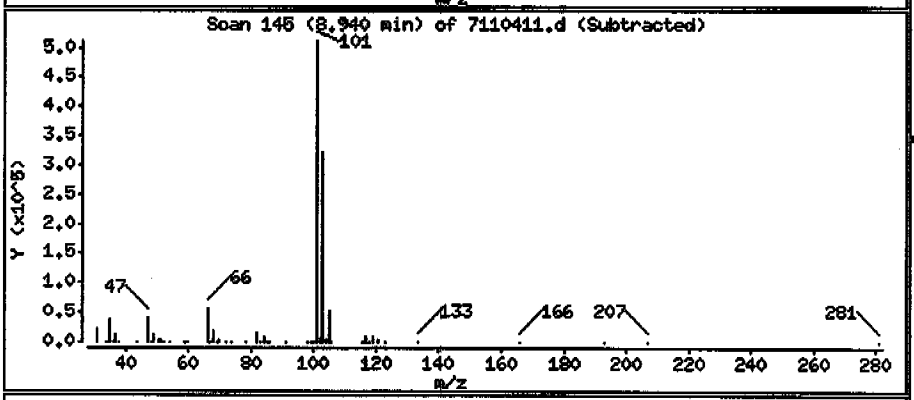
Column phase: RTx-624

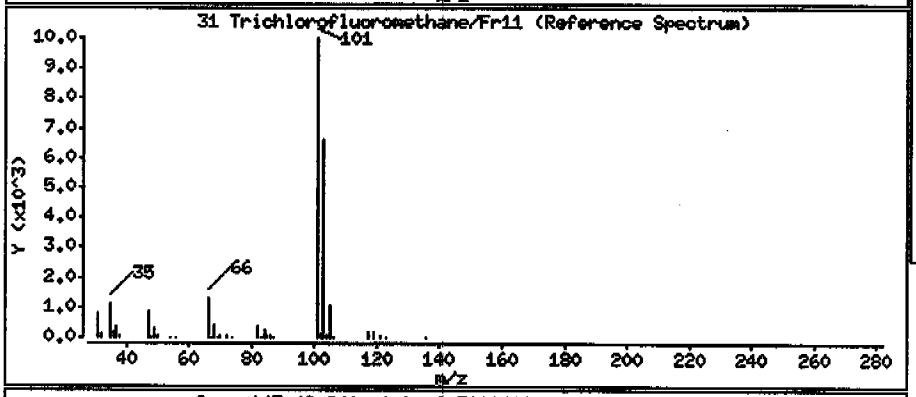
Column diameter: 0.53

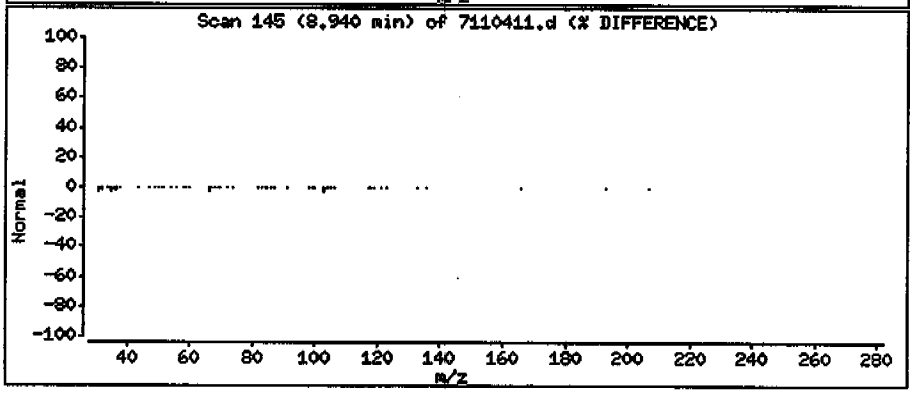
31 Trichlorofluoromethane/Fr11

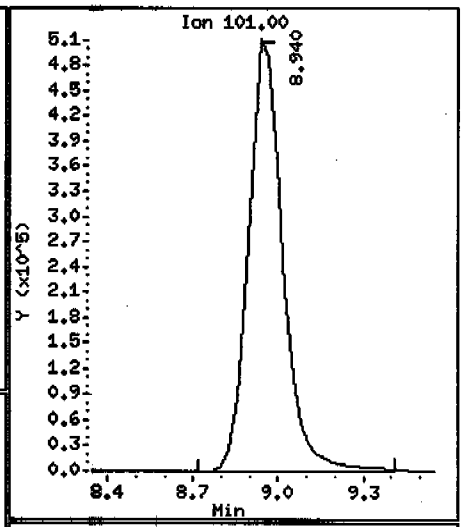
Concentration: 46.371 PPBV

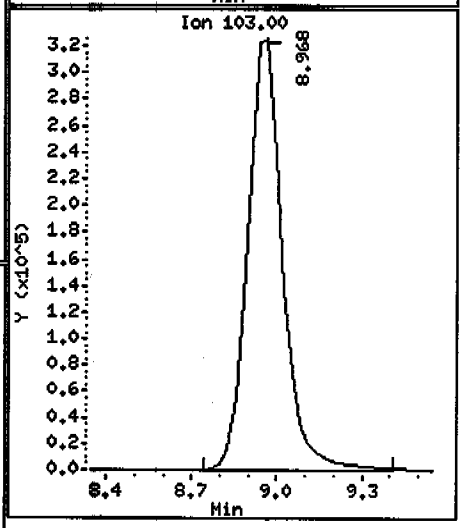












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

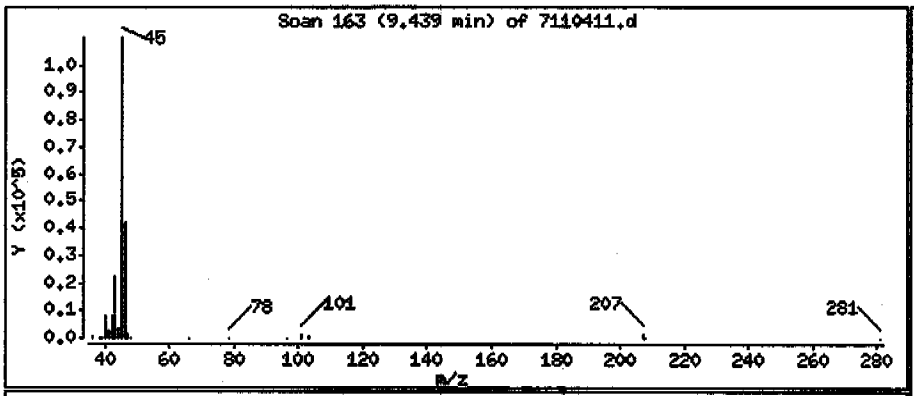
Operator: ab

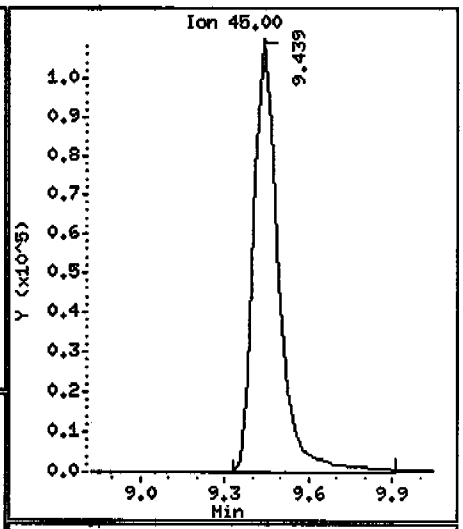
Column phase: RTx-624

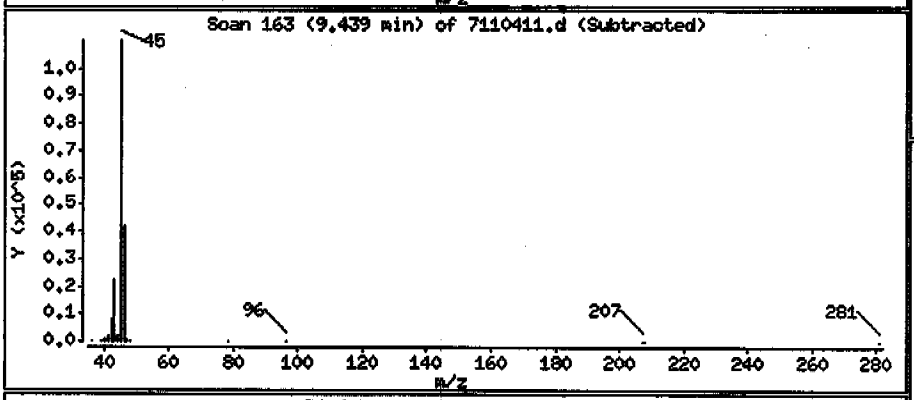
Column diameter: 0.53

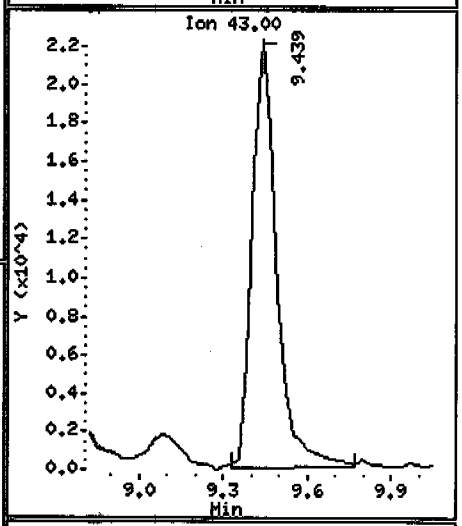
38 Ethanol

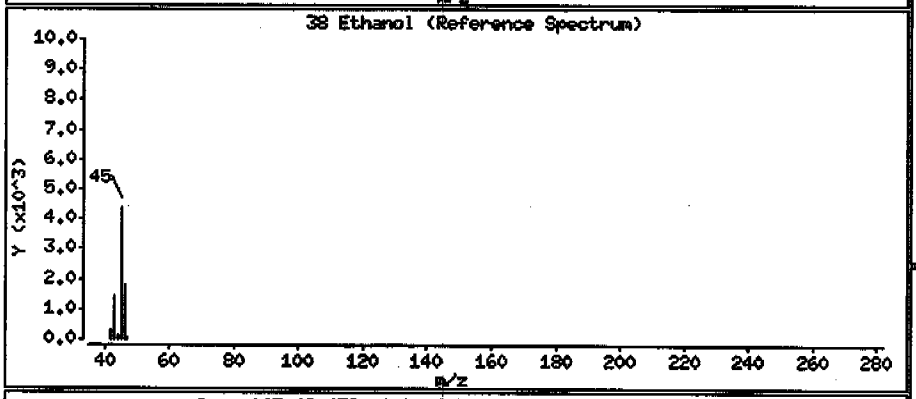
Concentration: 52.864 PPBV

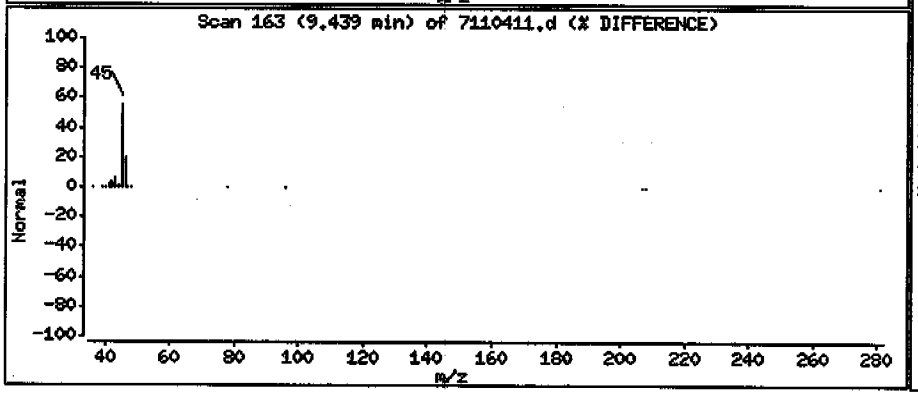


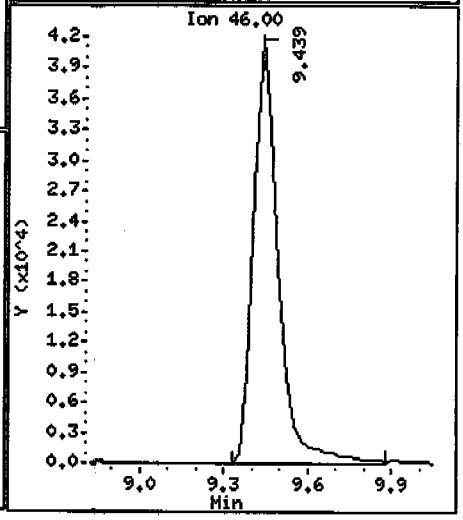












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

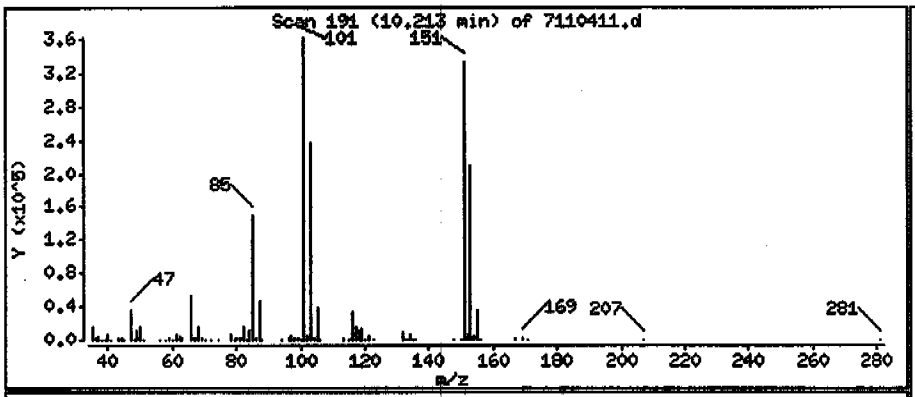
Operator: ab

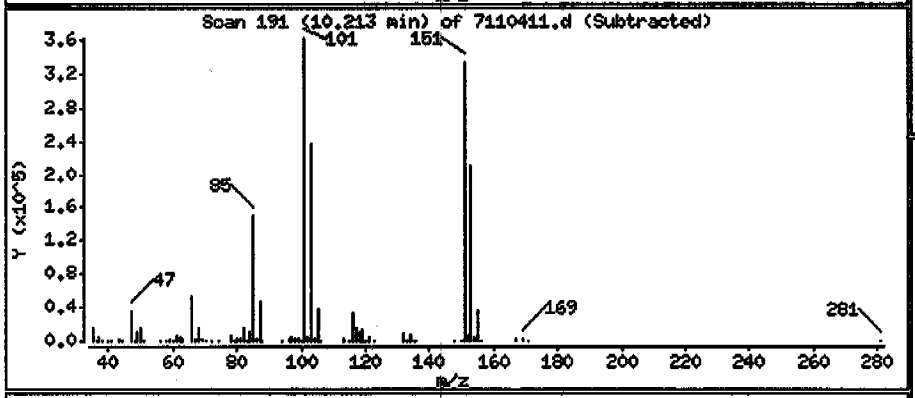
Column phase: RTx-624

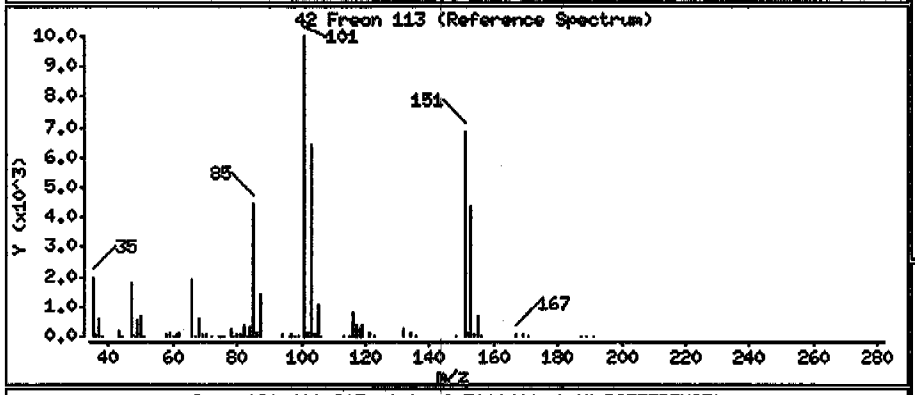
Column diameter: 0.53

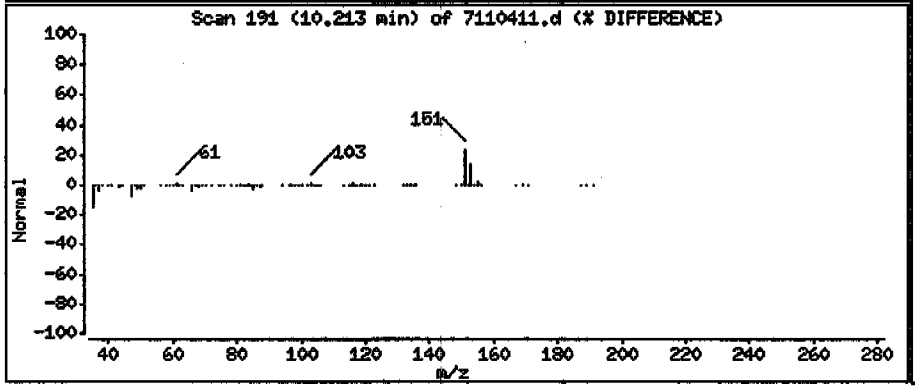
42 Freon 113

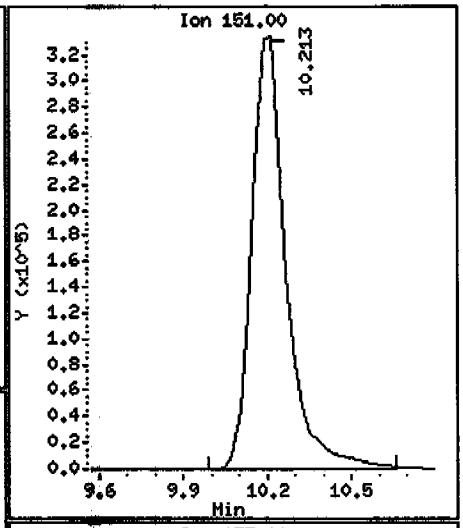
Concentration: 55.678 PPBV

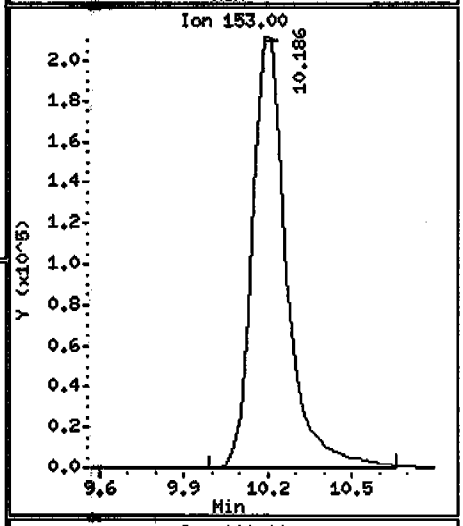


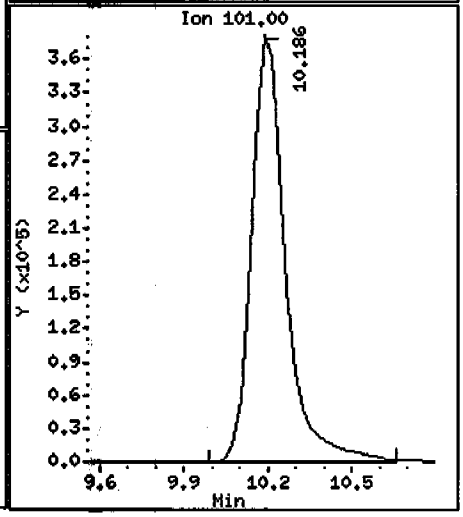












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

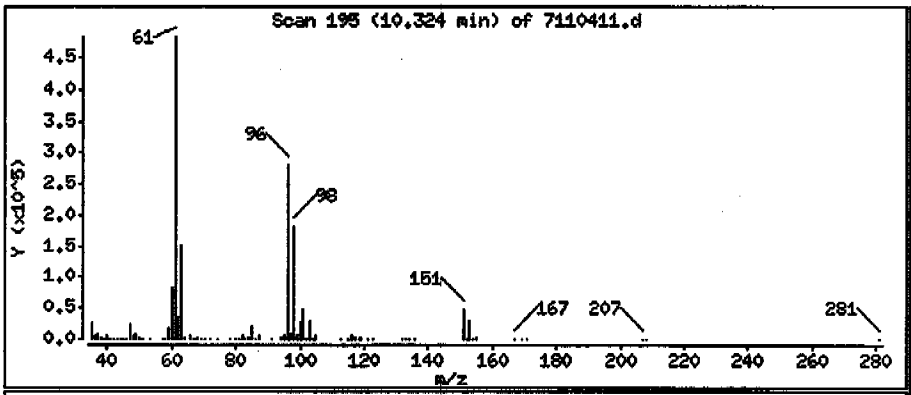
Operator: ab

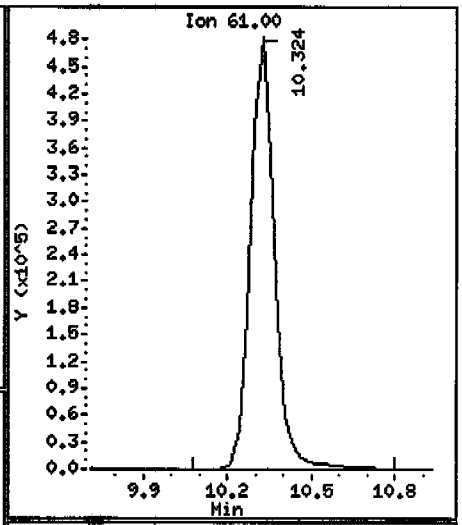
Column phase: RTx-624

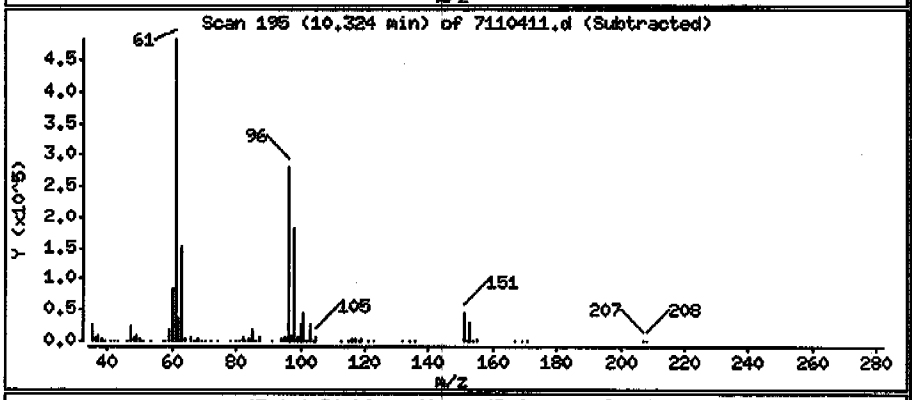
Column diameter: 0.53

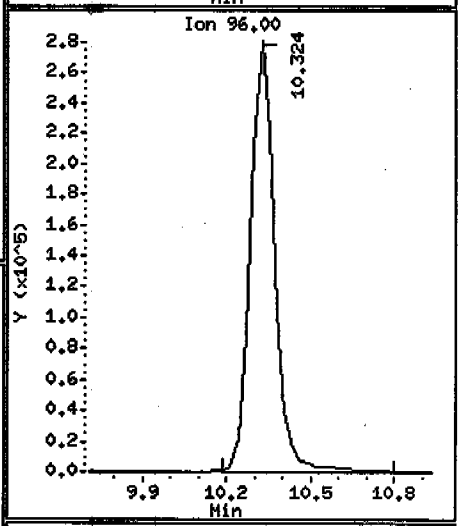
43 1,1-Dichloroethene

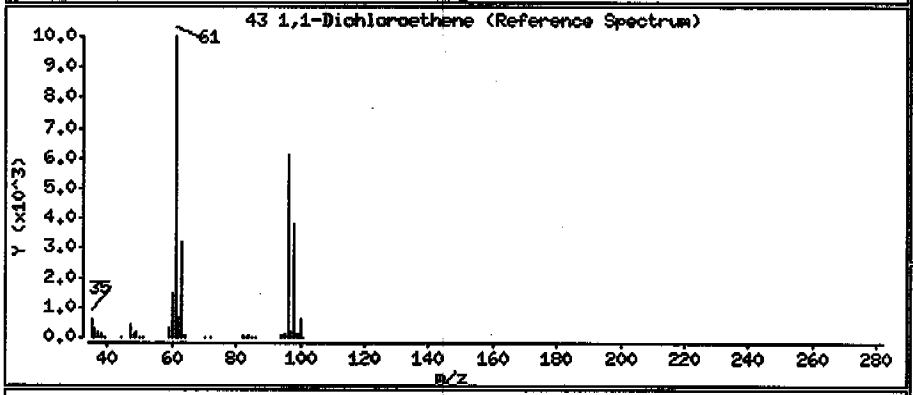
Concentration: 52.900 PPBV

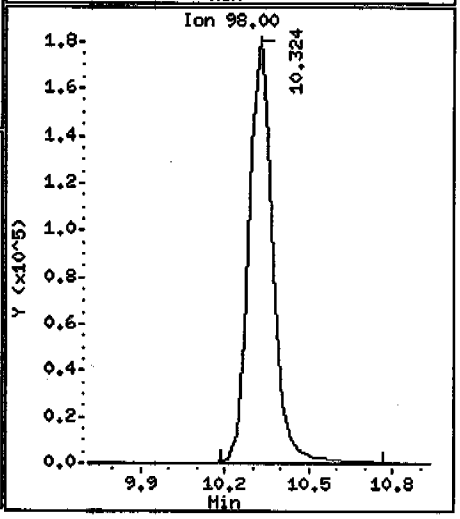


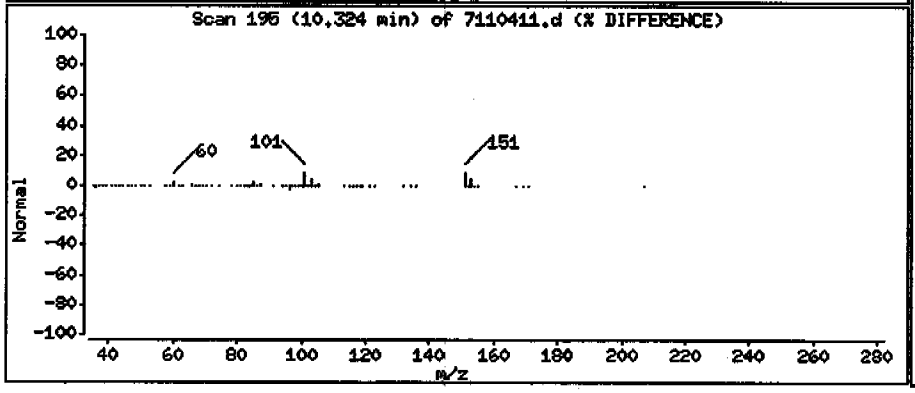












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

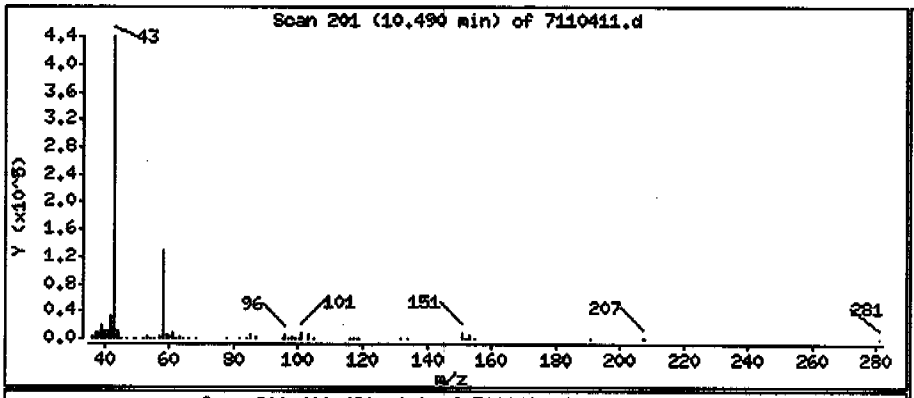
Operator: ab

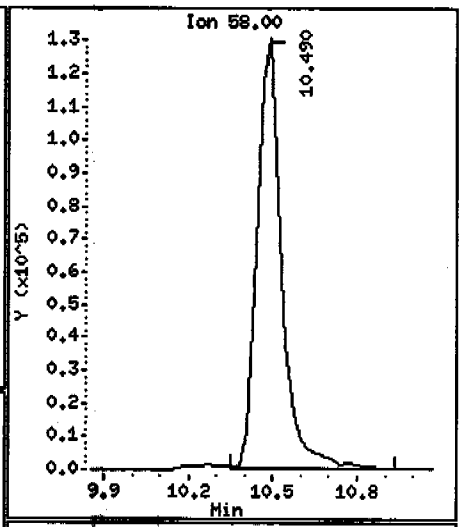
Column phase: RTx-624

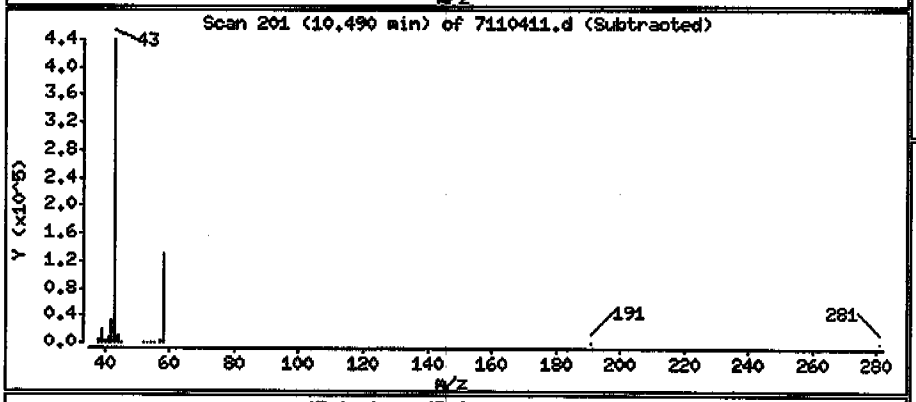
Column diameter: 0.53

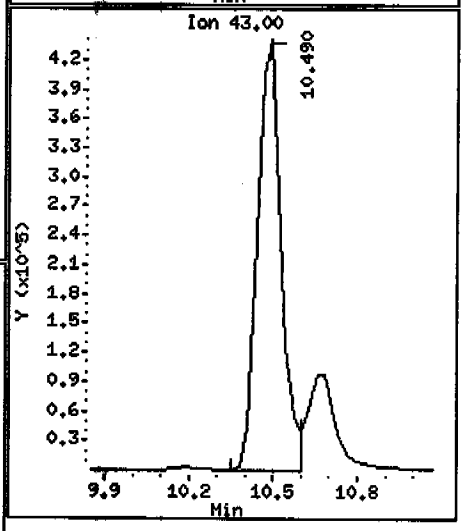
45 Acetone

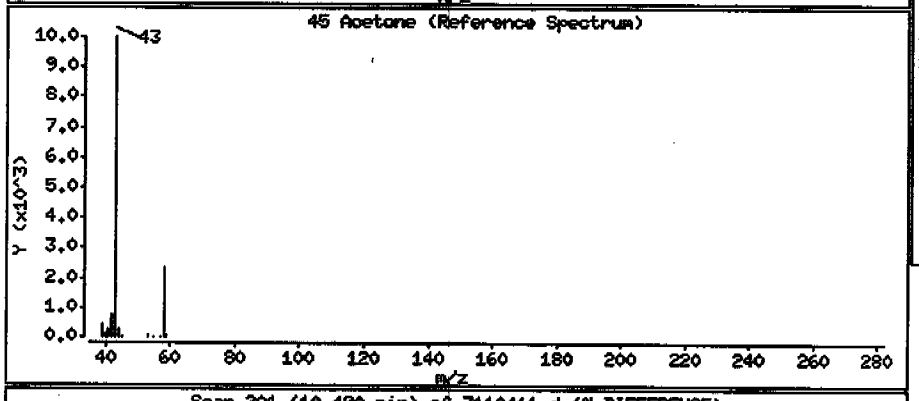
Concentration: 47.287 PPBV

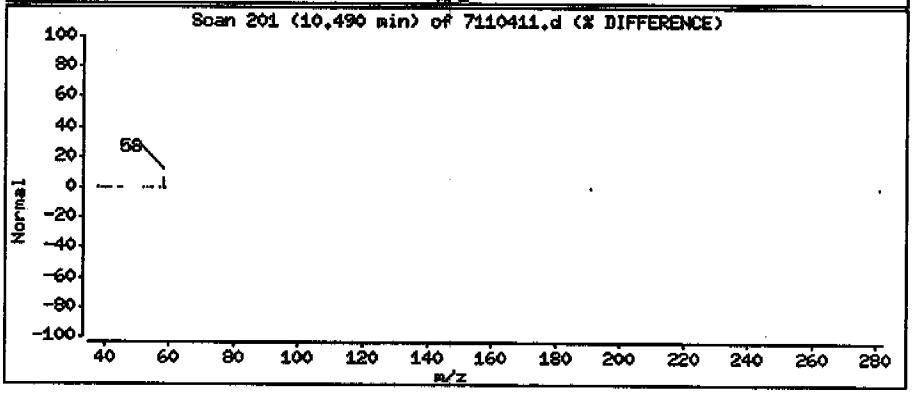












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

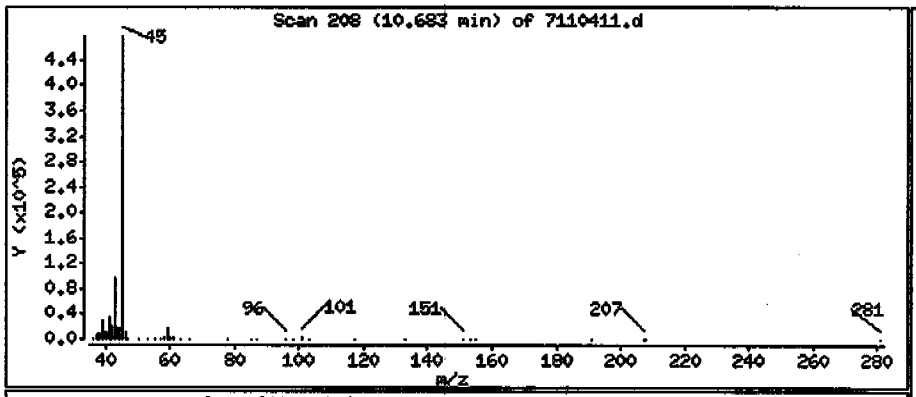
Operator: ab

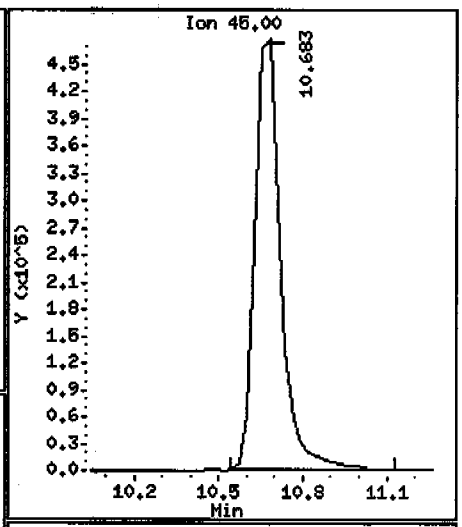
Column phase: RTx-624

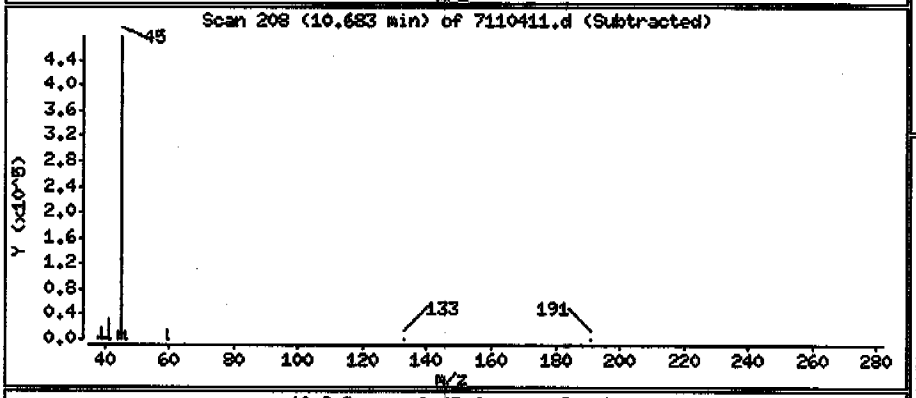
Column diameter: 0.53

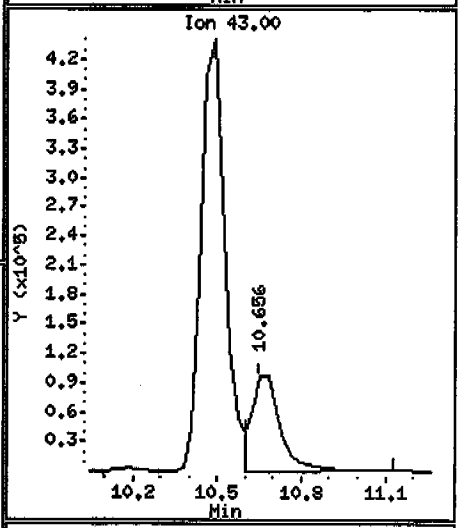
46 2-Propanol

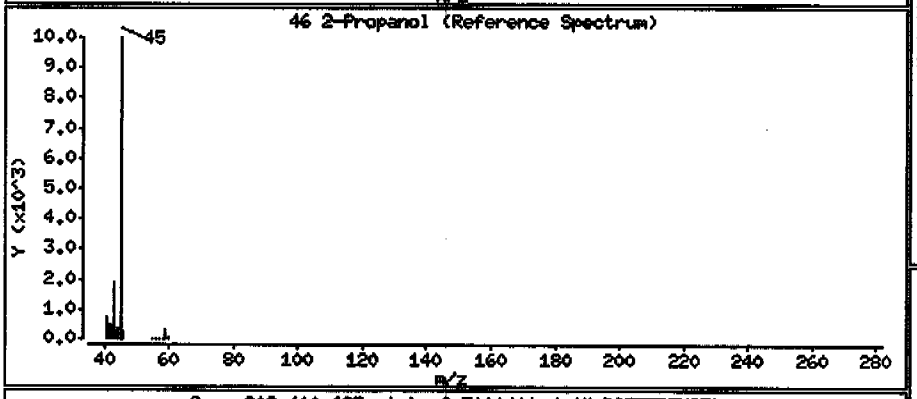
Concentration: 51.498 PPBV

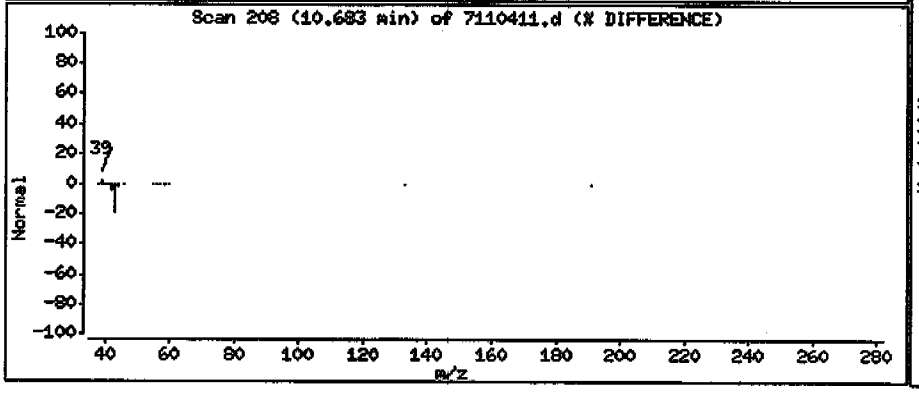


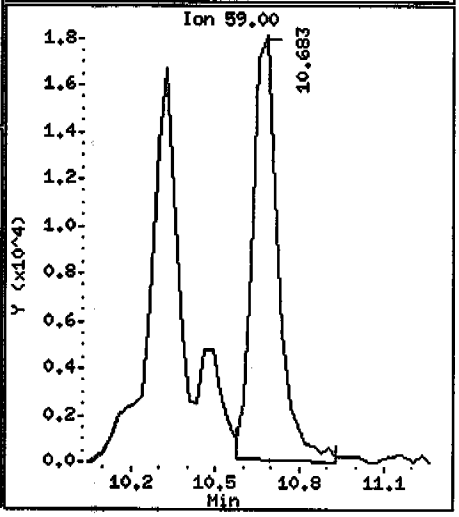












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

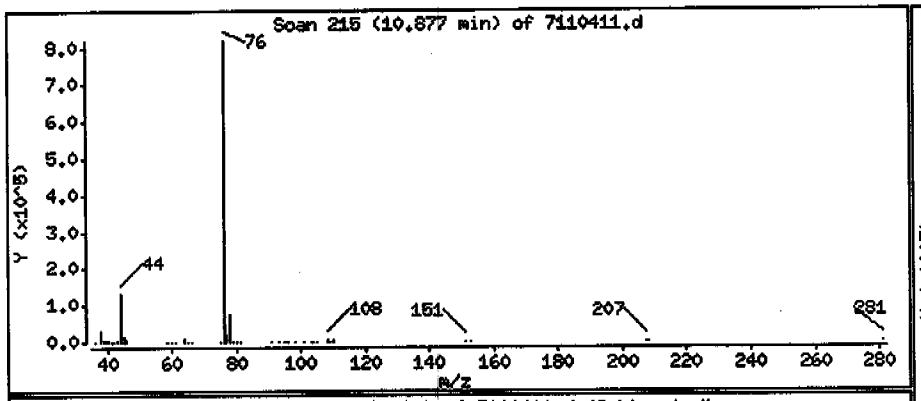
Operator: ab

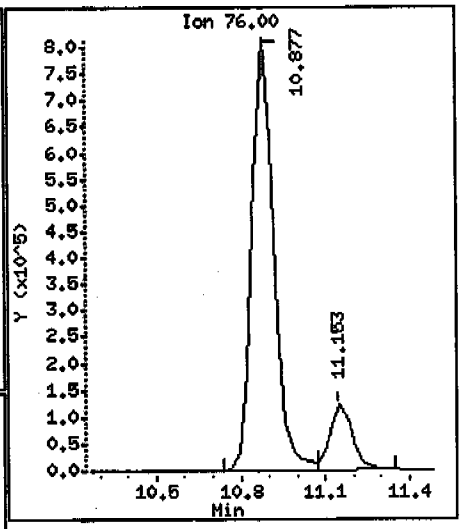
Column phase: RTx-624

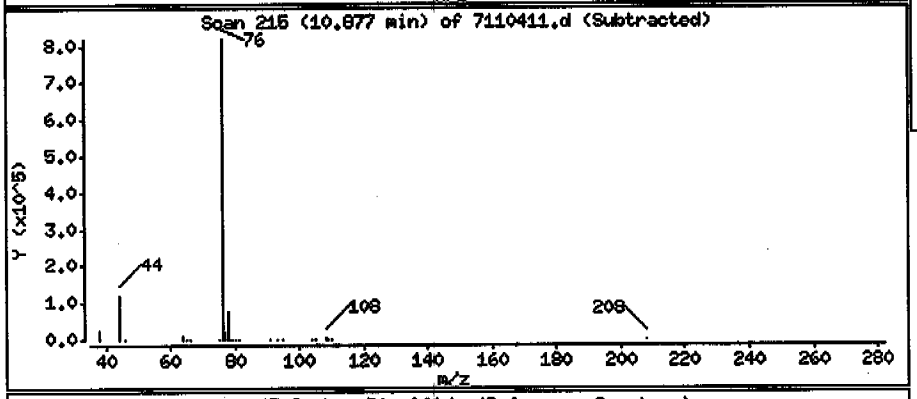
Column diameter: 0.53

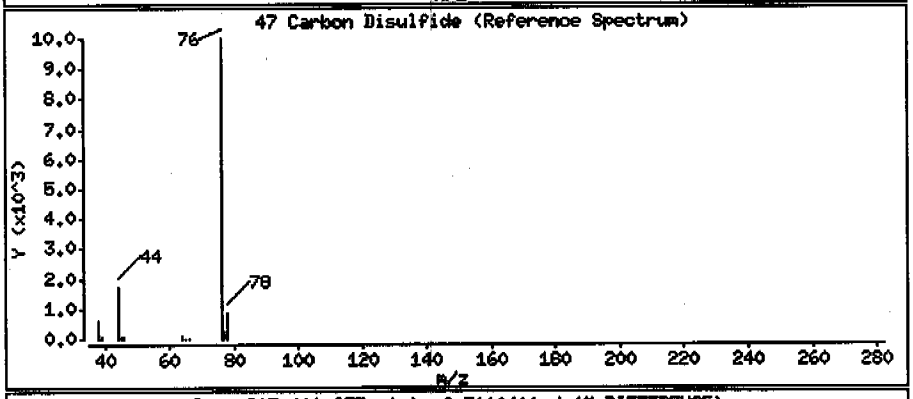
47 Carbon Disulfide

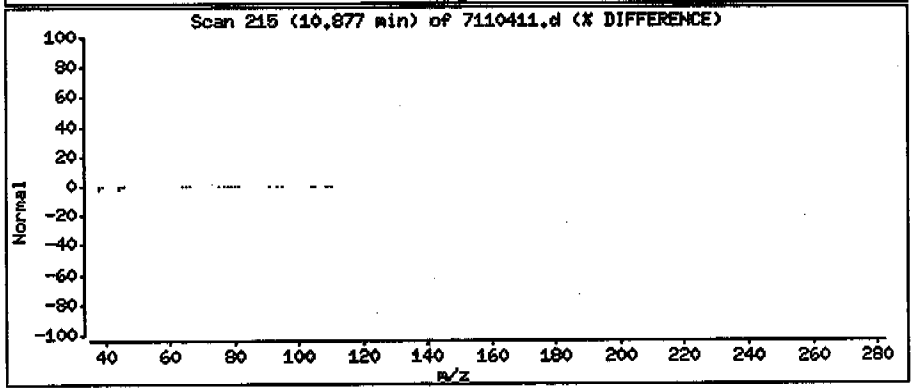
Concentration: 42.350 PPBV











Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

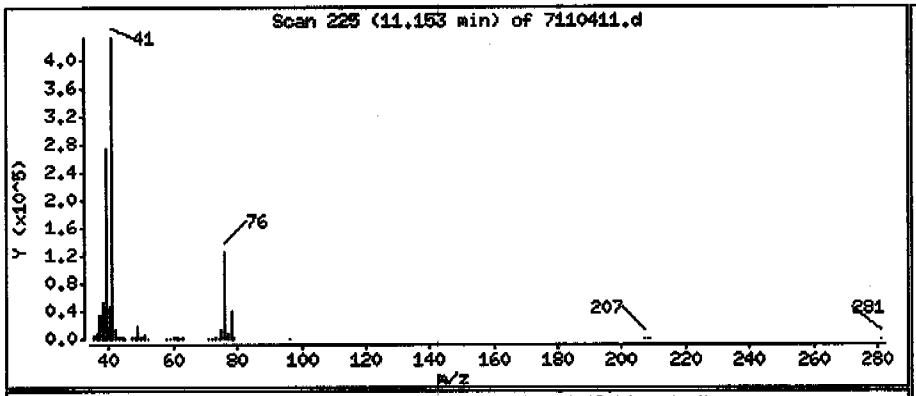
Operator: ab

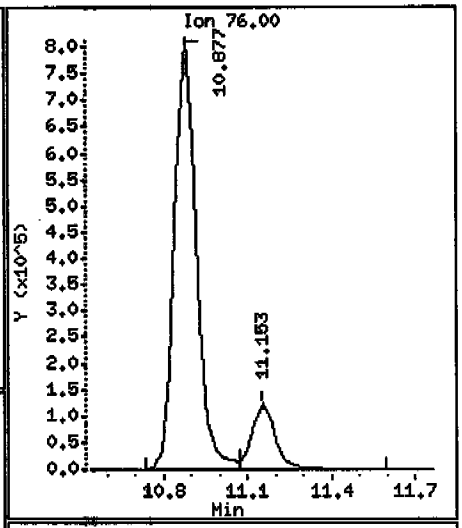
Column phase: RTx-624

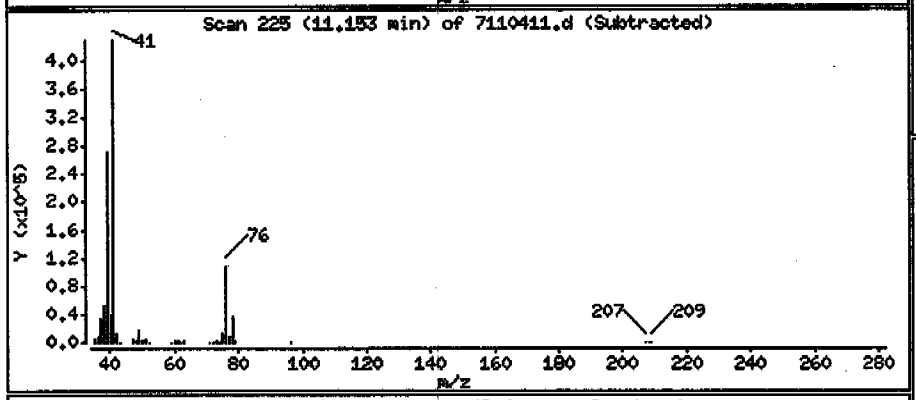
Column diameter: 0.53

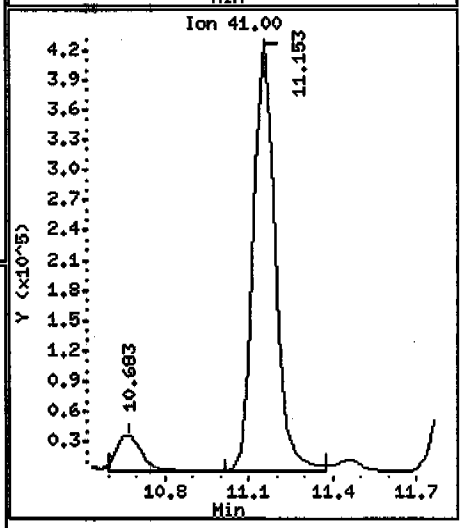
51 3-Chloropropene

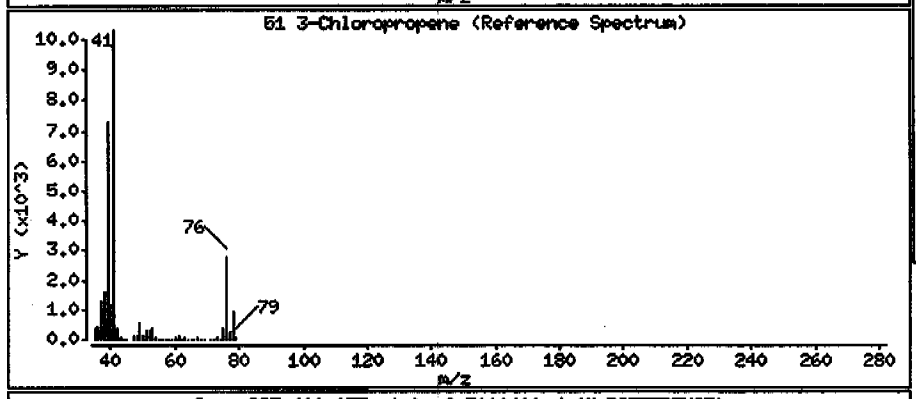
Concentration: 42.817 PPBV

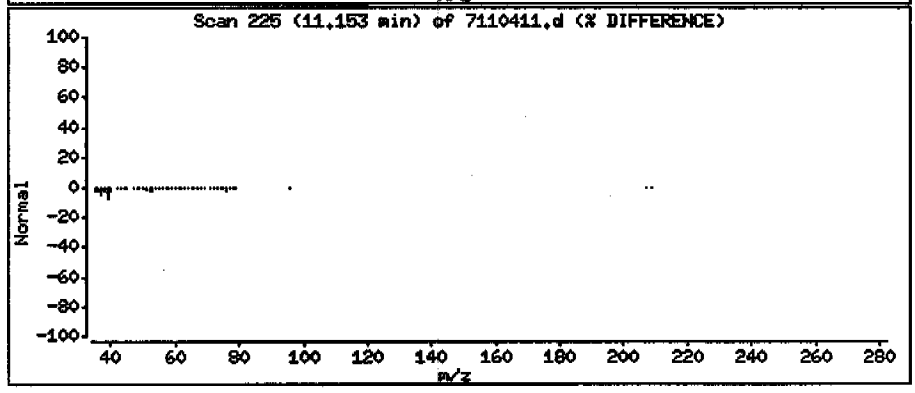












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

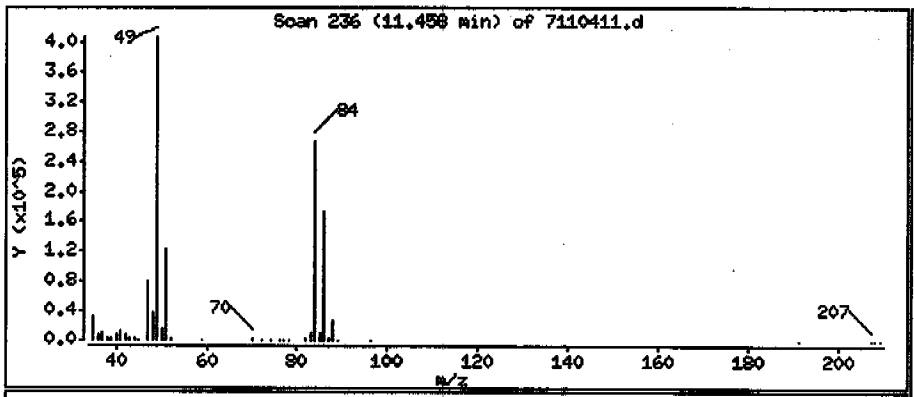
Operator: ab

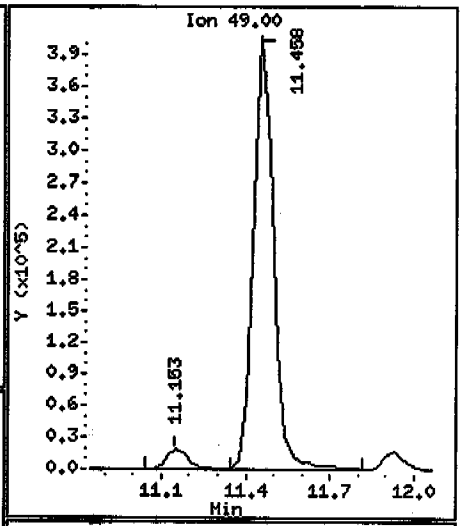
Column phase: RTx-624

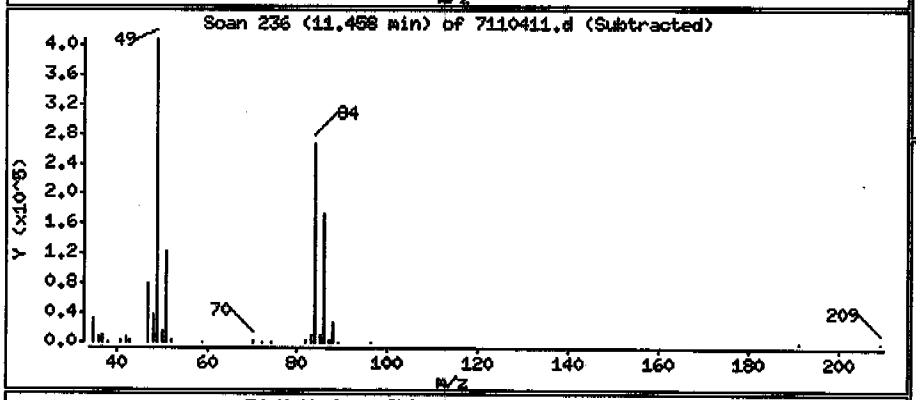
Column diameter: 0.53

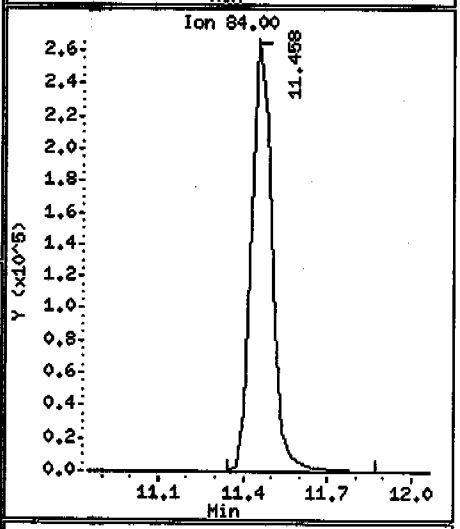
54 Methylene Chloride

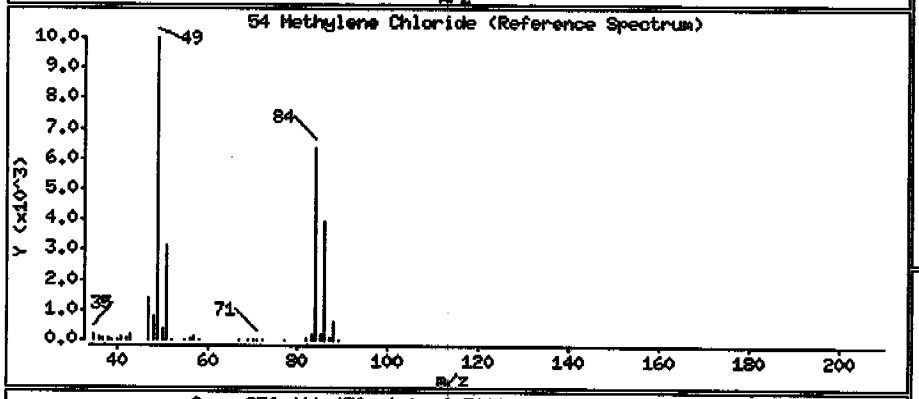
Concentration: 50.136 PPBV

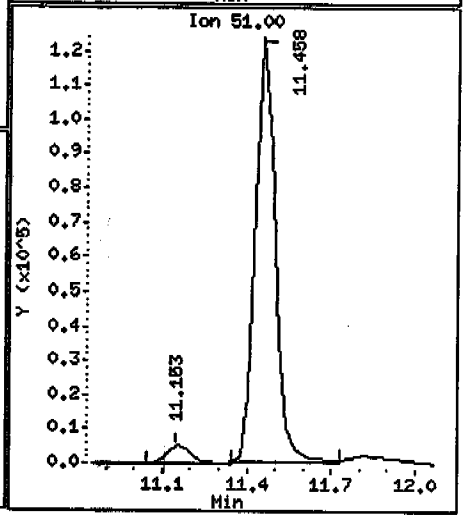


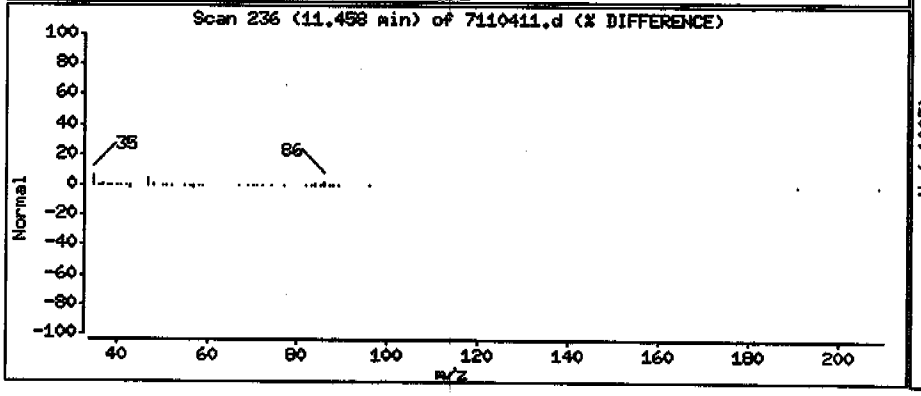












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

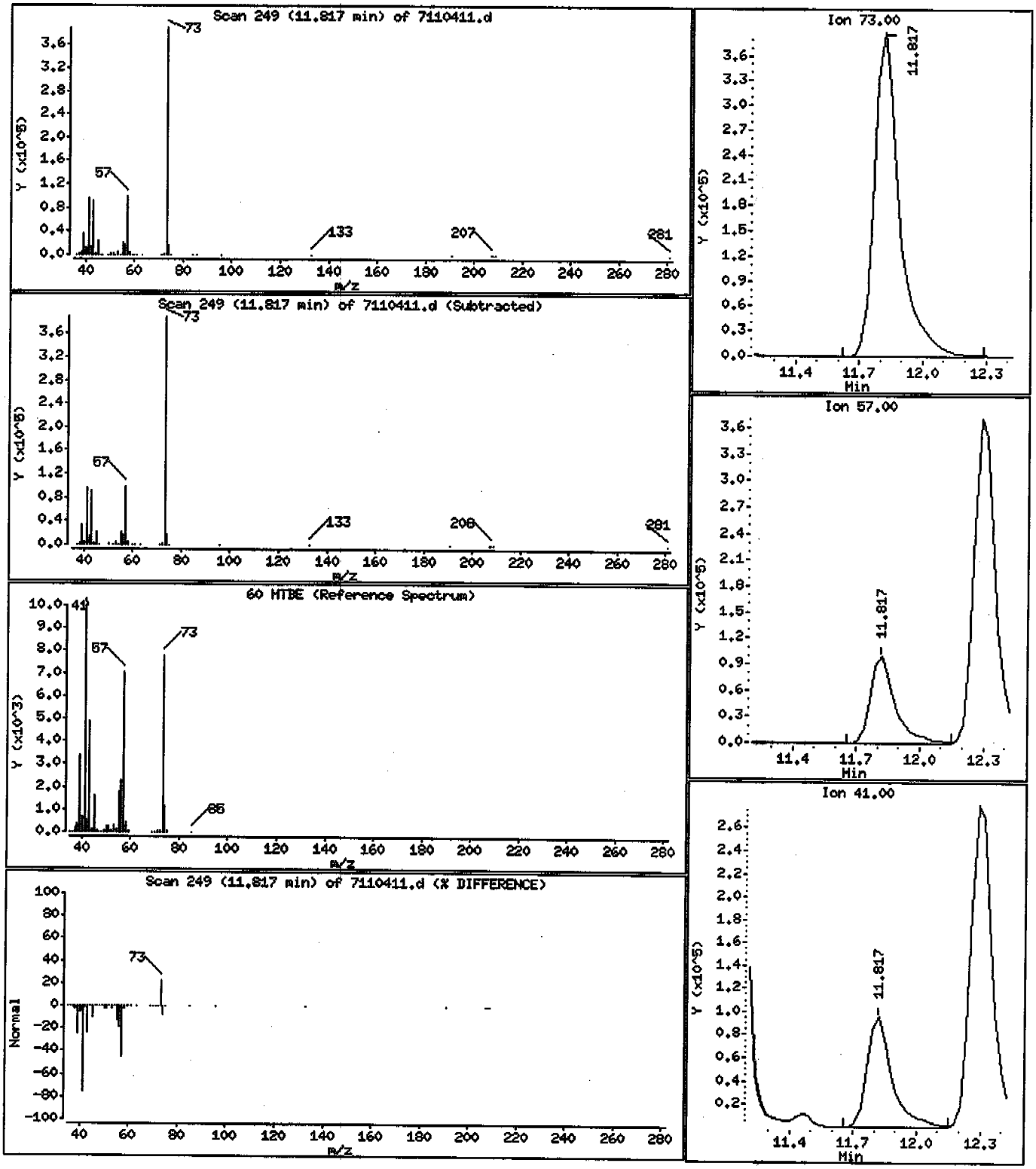
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

60 MTBE

Concentration: 52.546 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

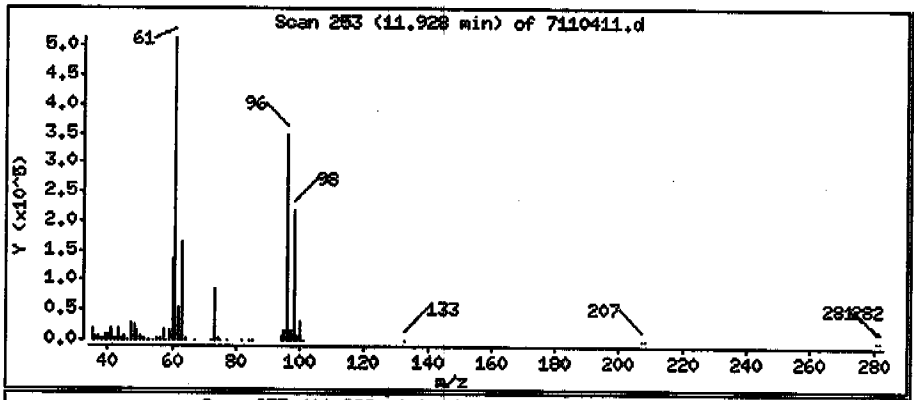
Operator: ab

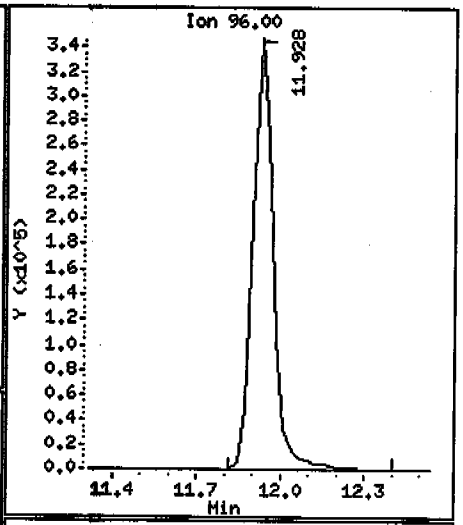
Column phase: RTx-624

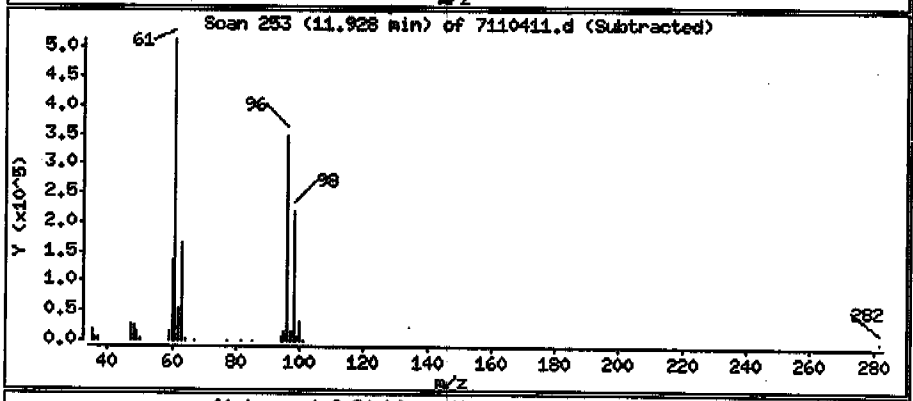
Column diameter: 0.53

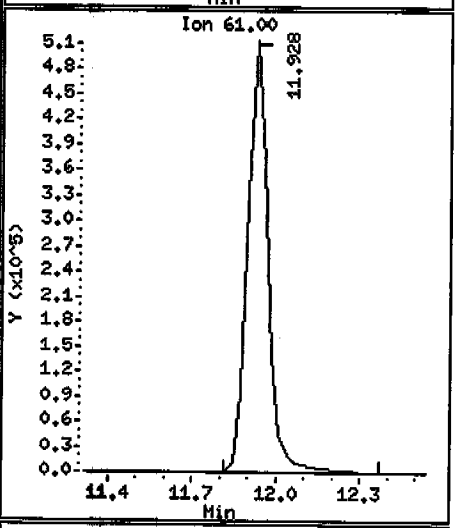
61 trans-1,2-Dichloroethene

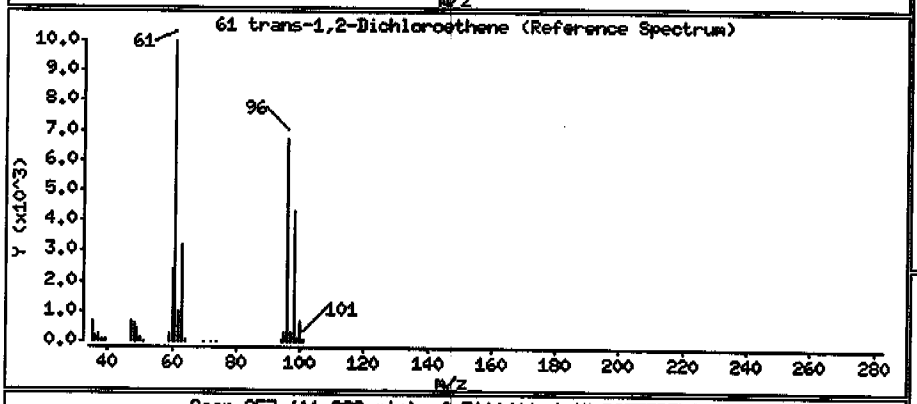
Concentration: 47.098 PPBV

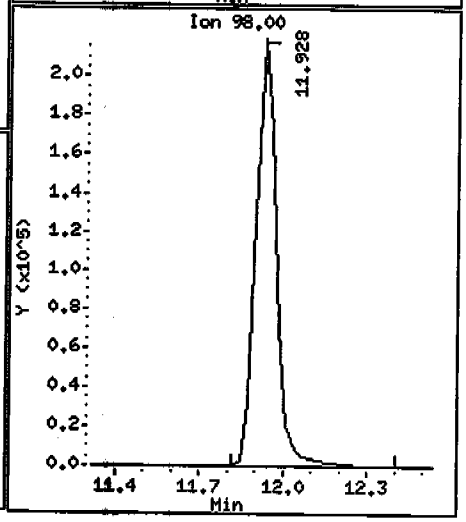


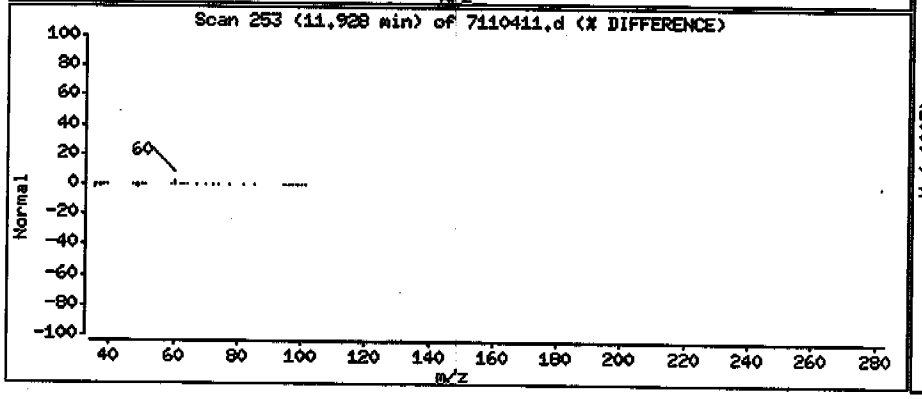












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

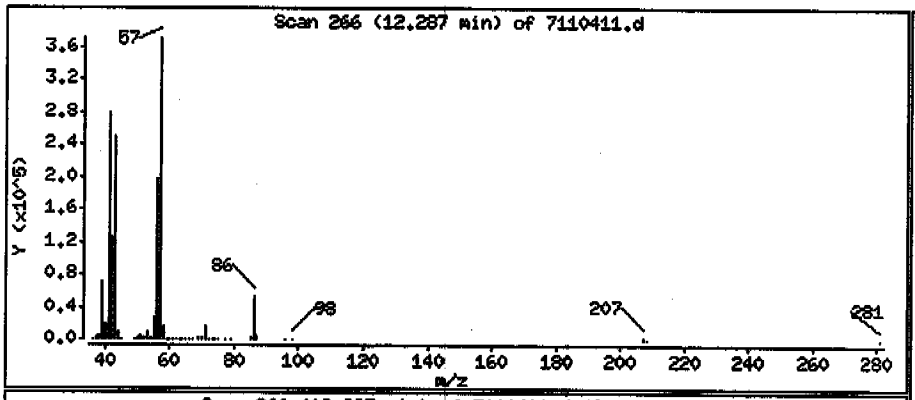
Operator: ab

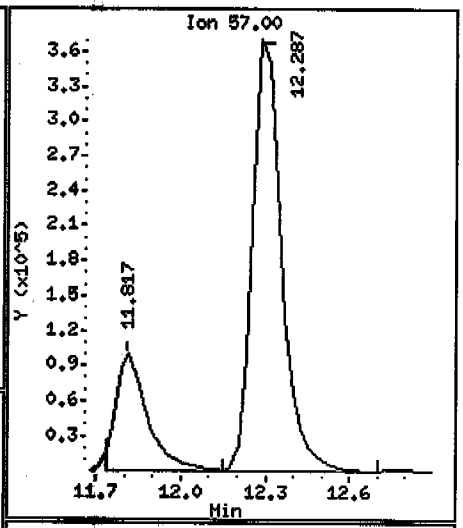
Column phase: RTx-624

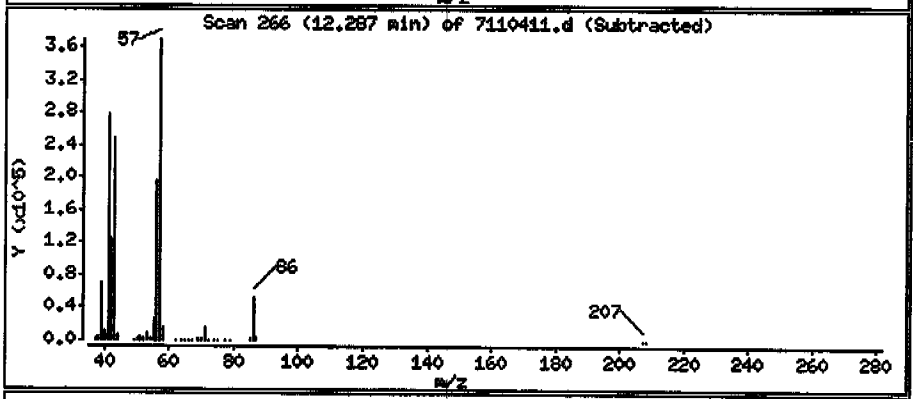
Column diameter: 0.53

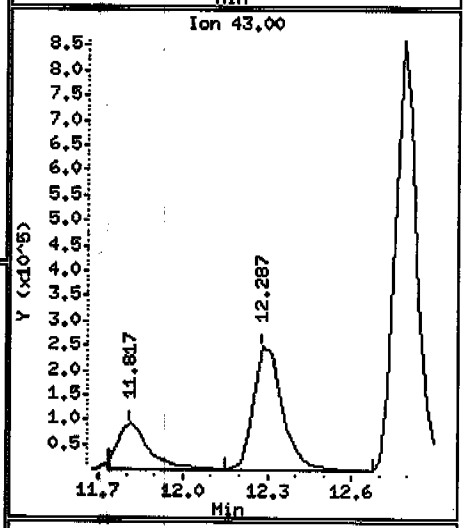
65 Hexane

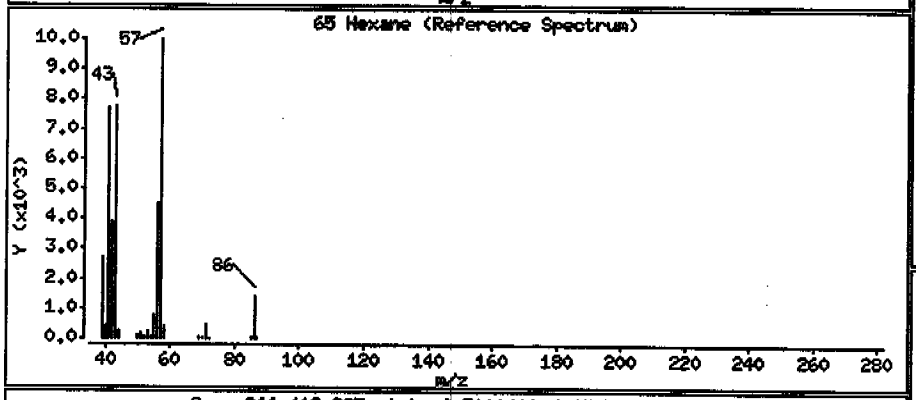
Concentration: 50.447 PPBV

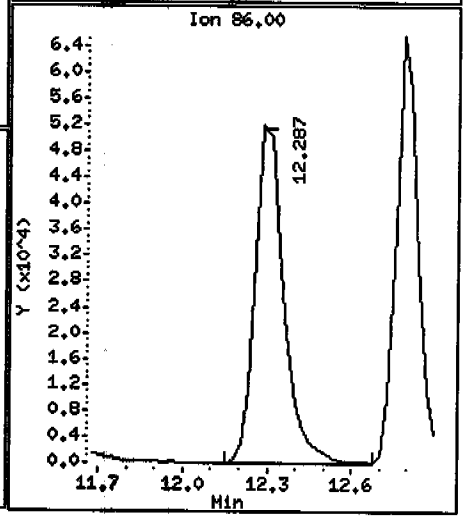


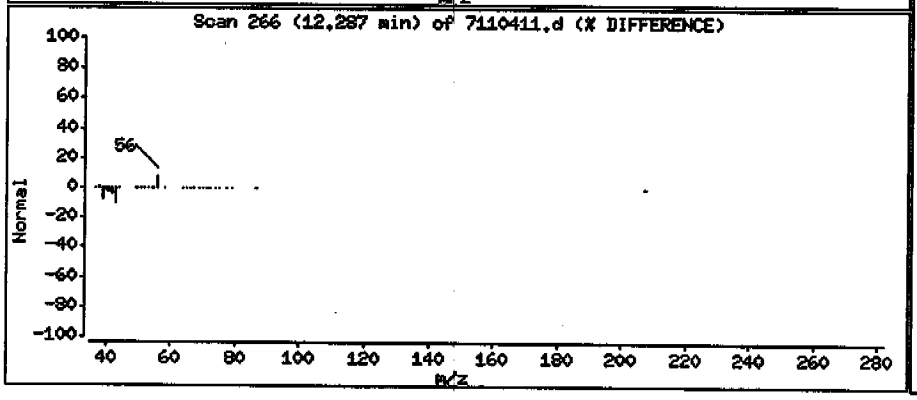












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

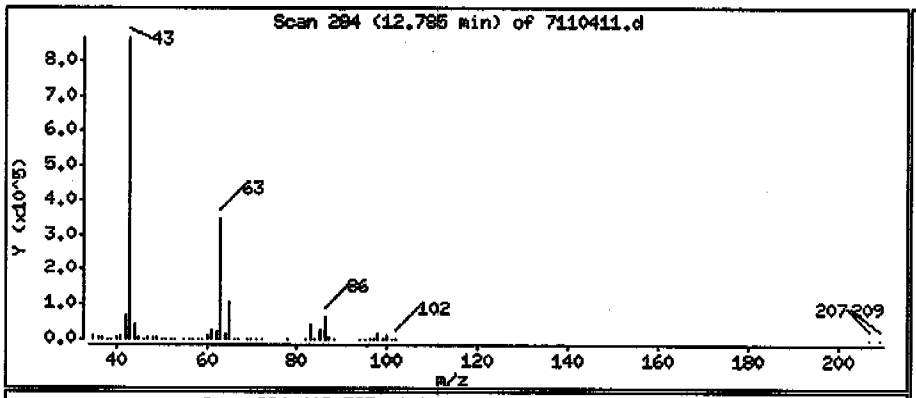
Operator: ab

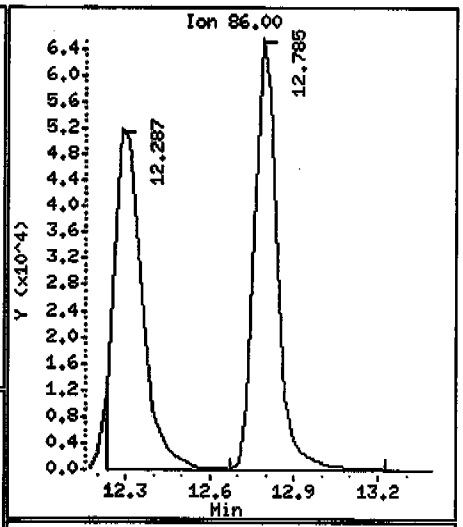
Column phase: RTx-624

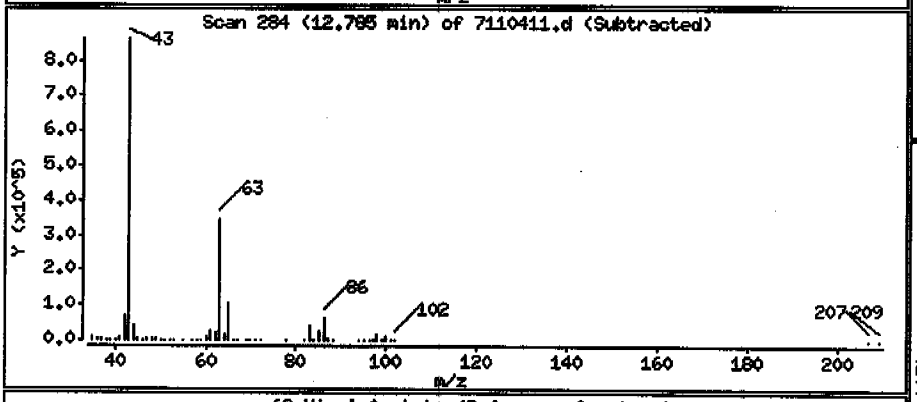
Column diameter: 0.53

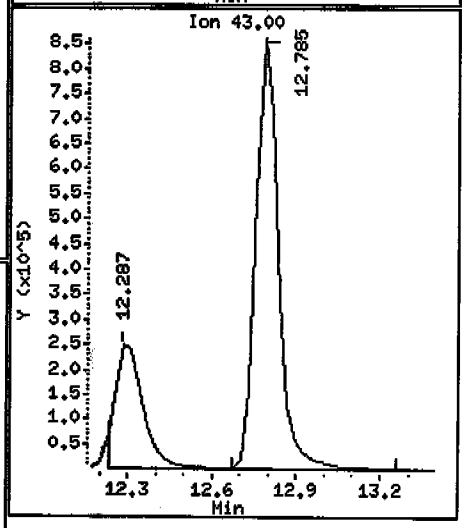
69 Vinyl Acetate

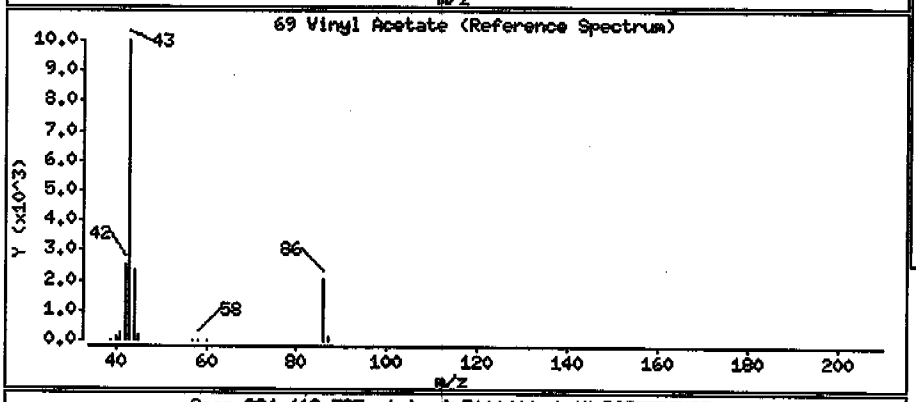
Concentration: 46.927 PPBV

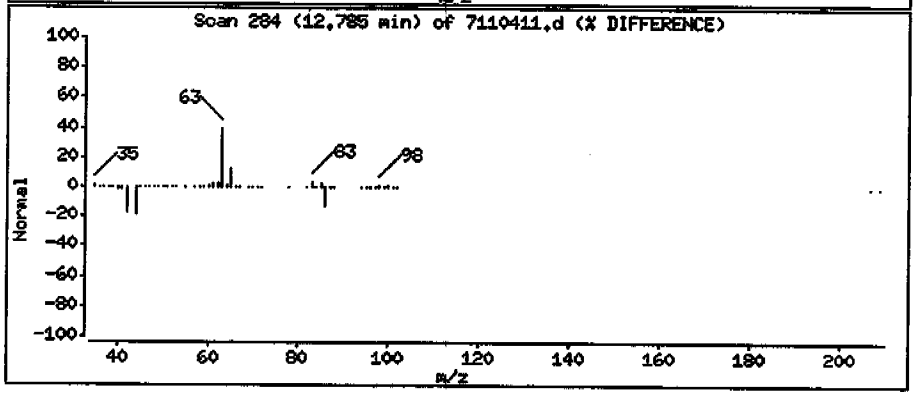












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

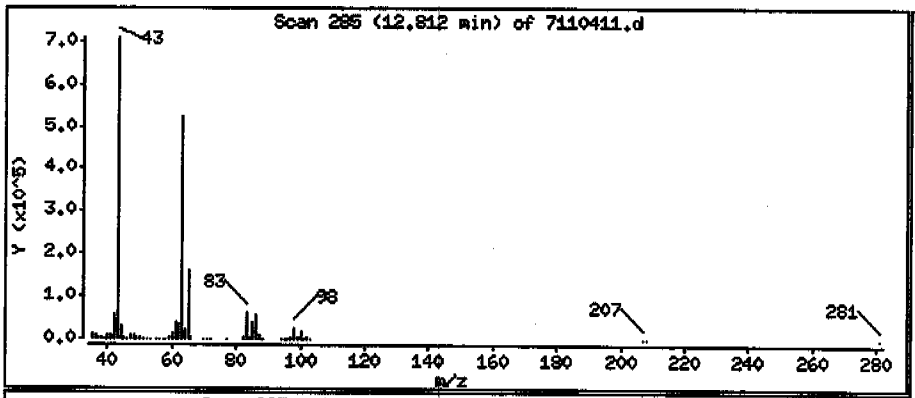
Operator: ab

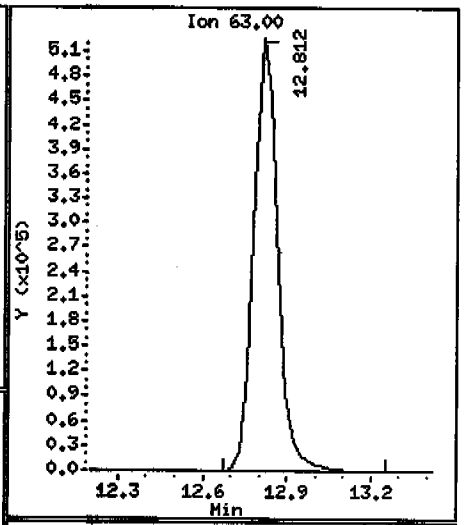
Column phase: RTx-624

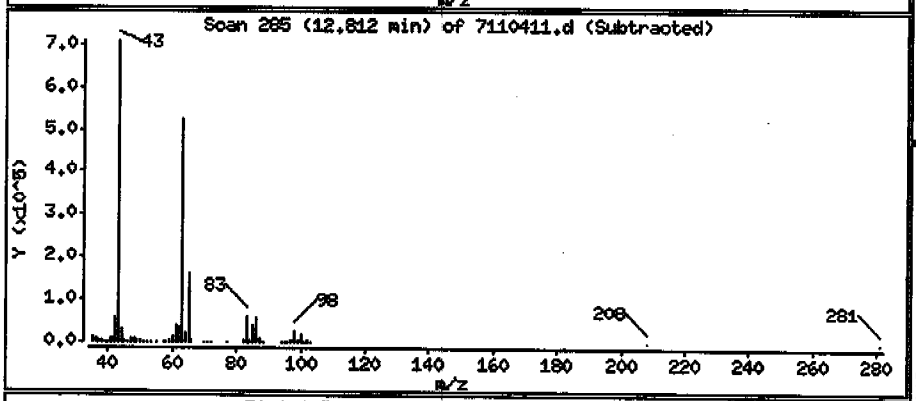
Column diameter: 0.53

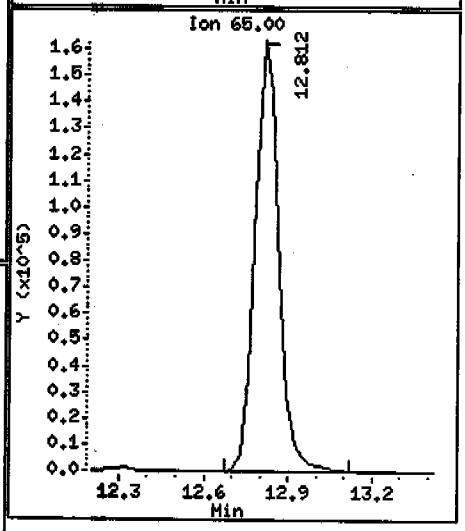
70 1,1-Dichloroethane

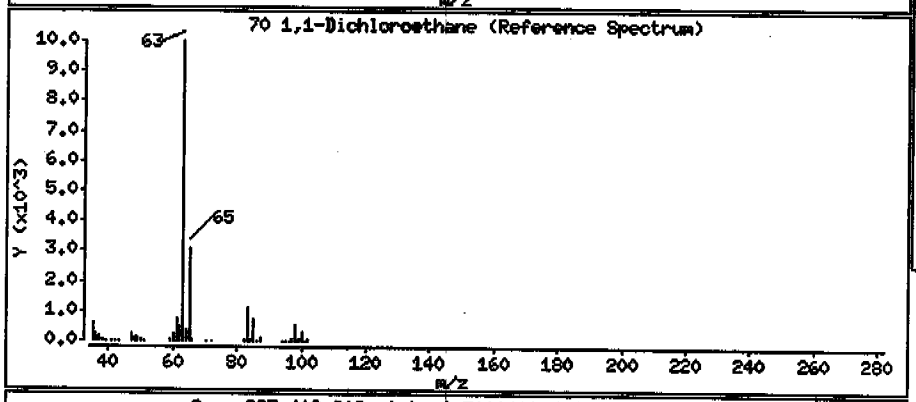
Concentration: 49.278 PPBV

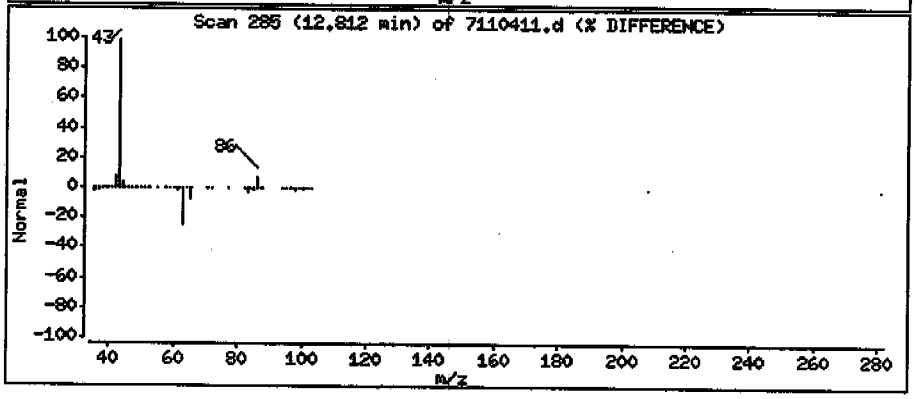












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

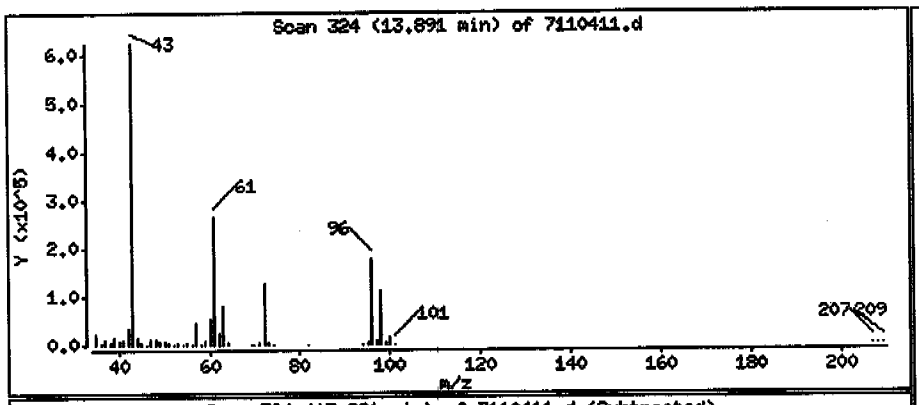
Operator: ab

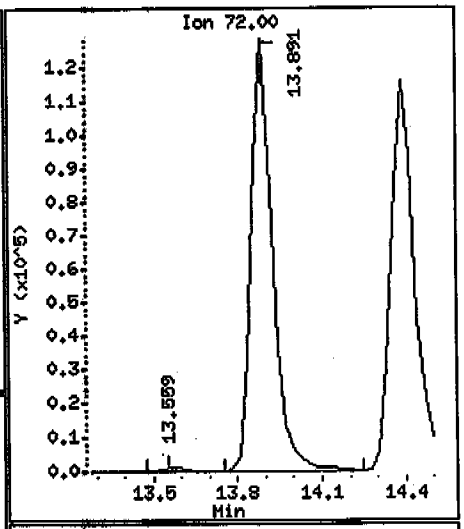
Column phase: RTx-624

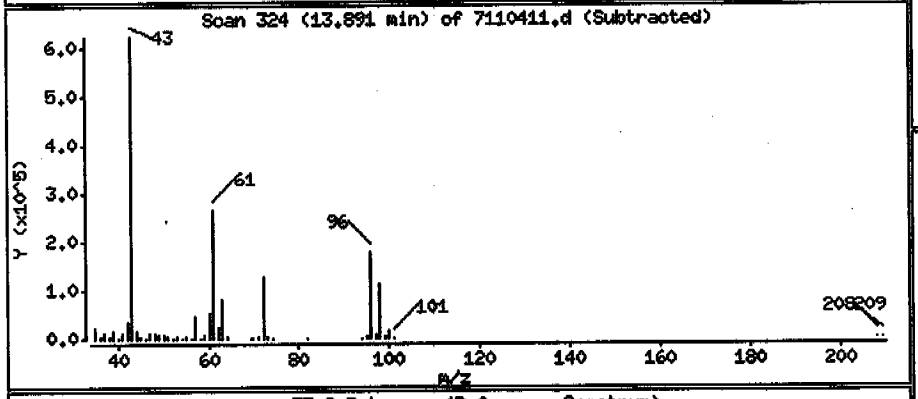
Column diameter: 0.53

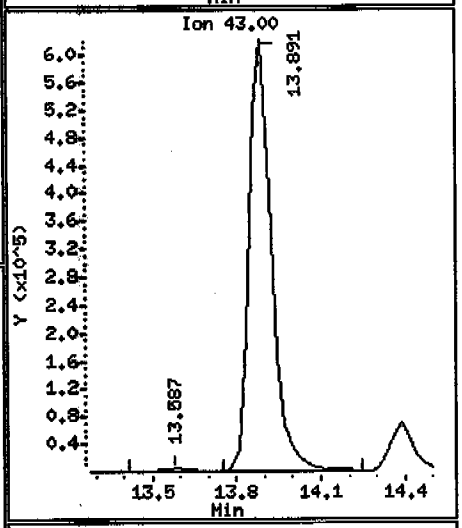
75 2-Butanone

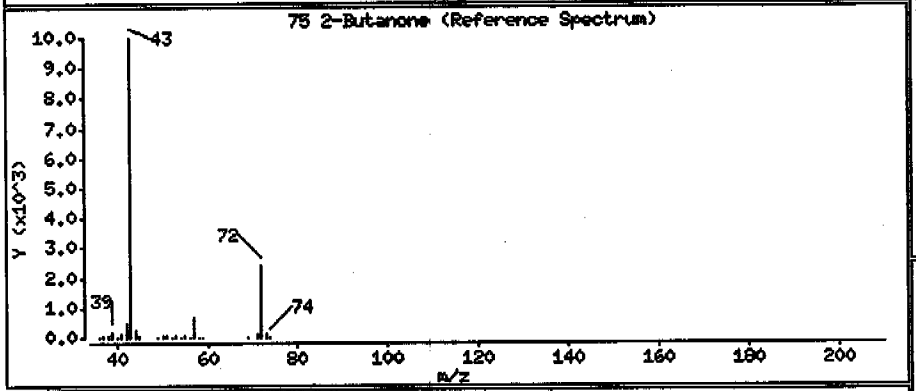
Concentration: 50.019 PPBV

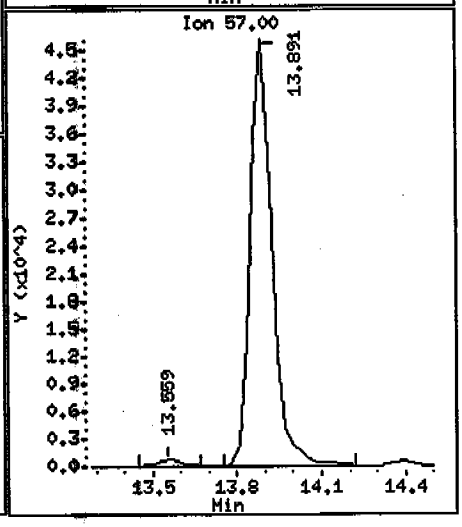


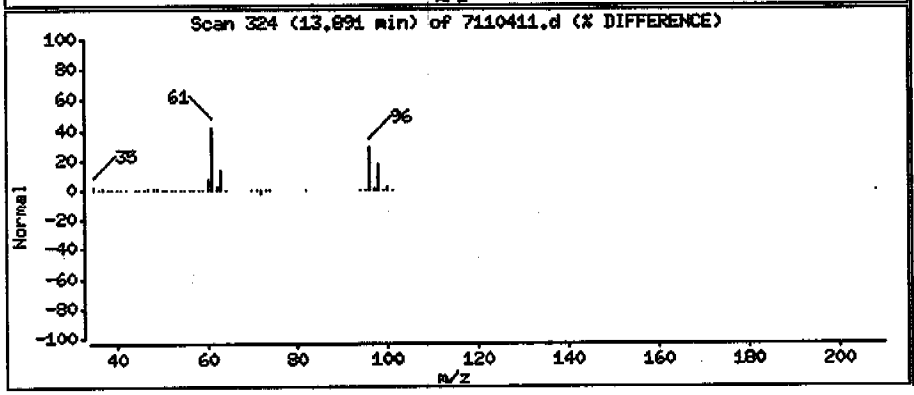












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

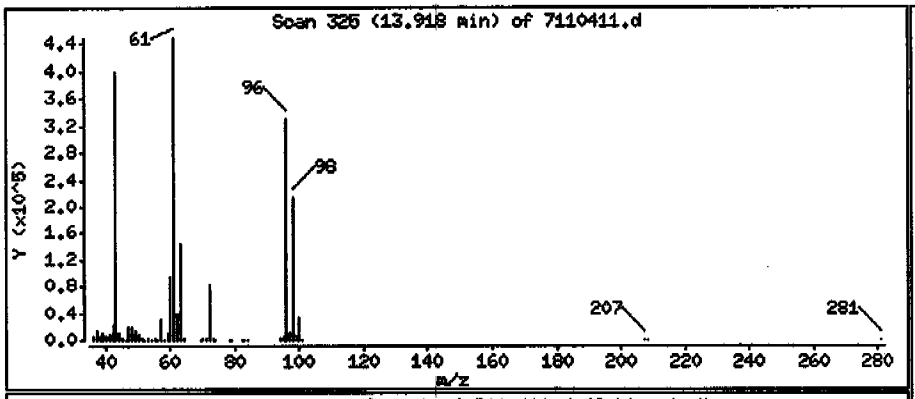
Operator: ab

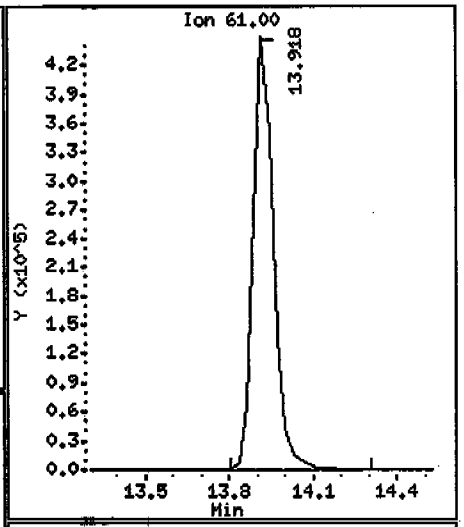
Column phase: RTx-624

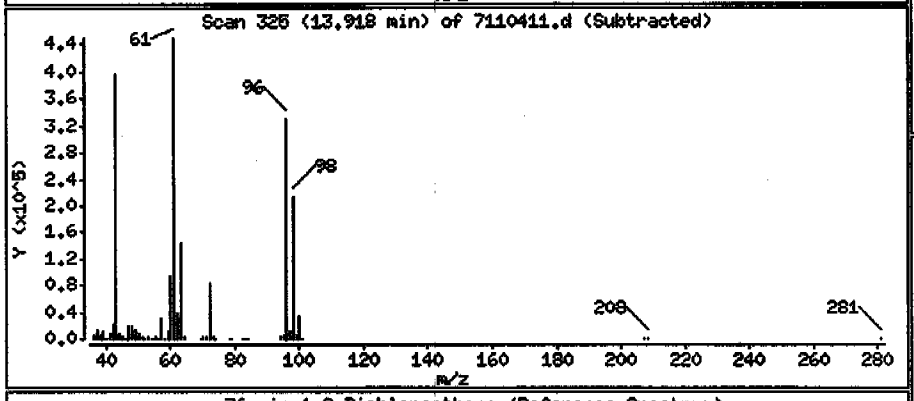
Column diameter: 0.53

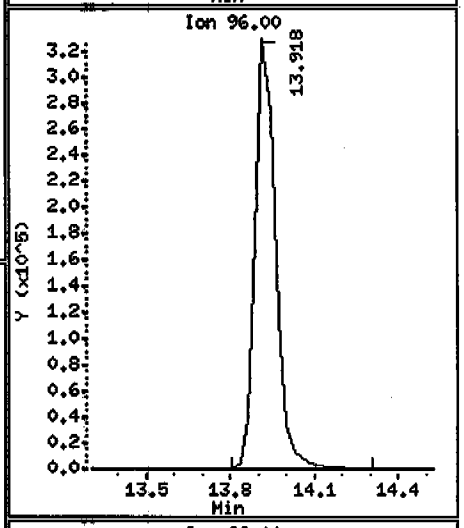
76 cis-1,2-Dichloroethene

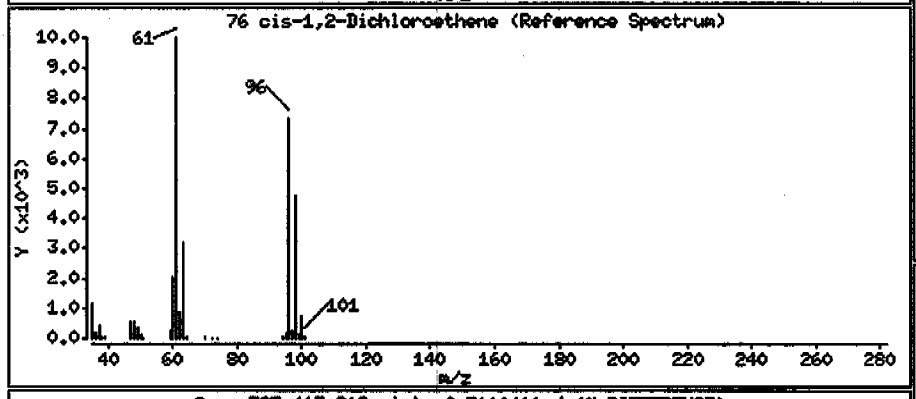
Concentration: 50.615 PPBV

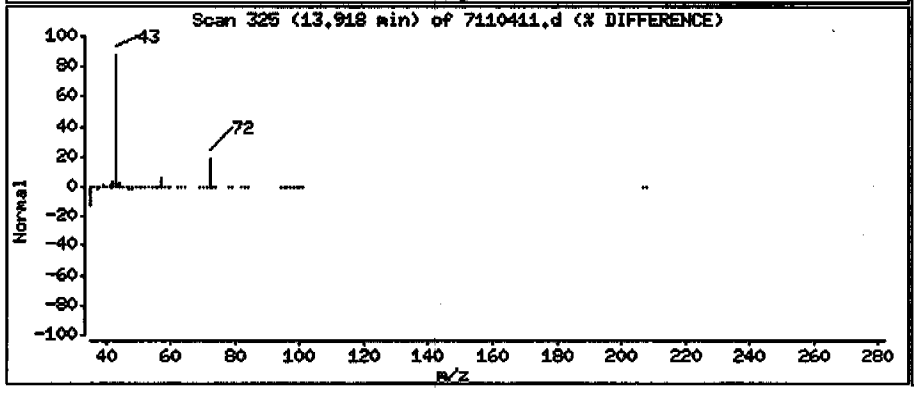


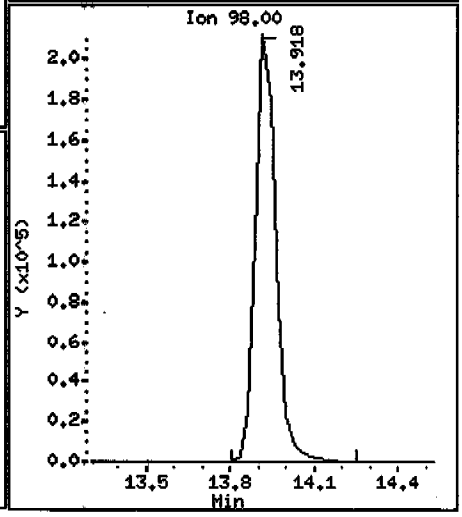












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

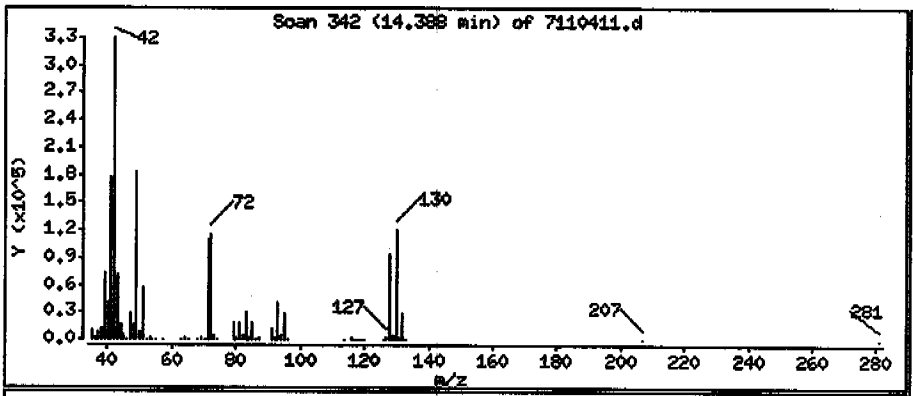
Operator: ab

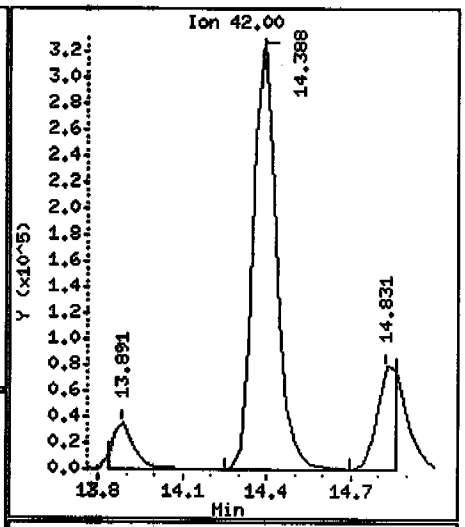
Column phase: RTx-624

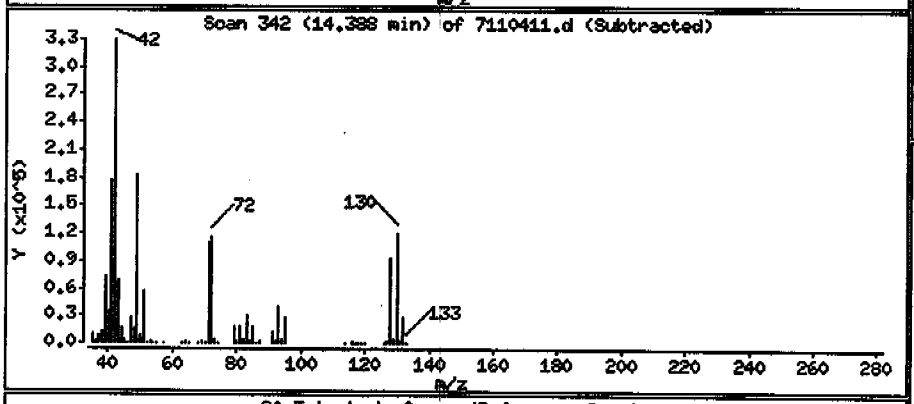
Column diameter: 0.53

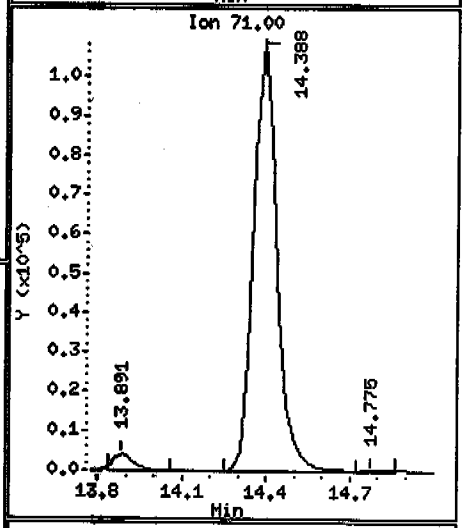
80 Tetrahydrofuran

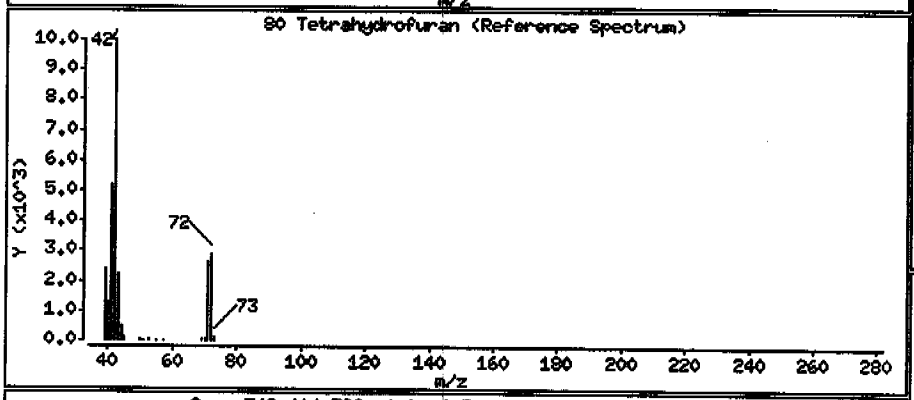
Concentration: 53.943 PPBV

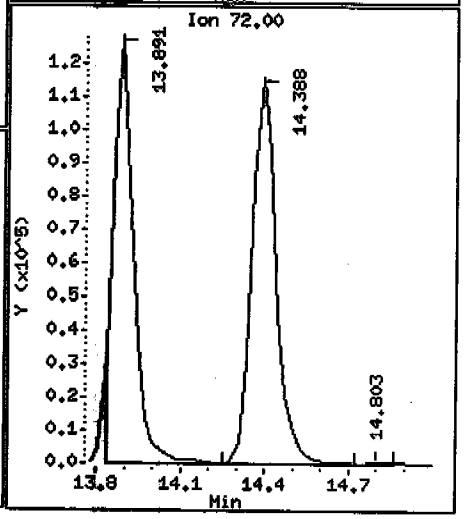


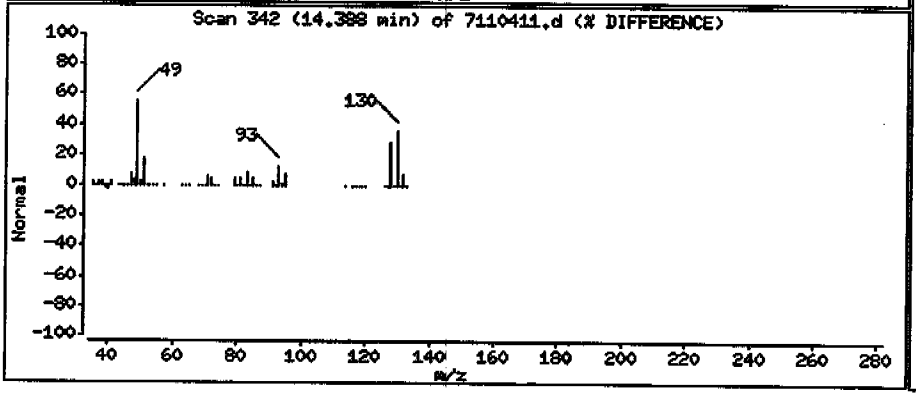












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

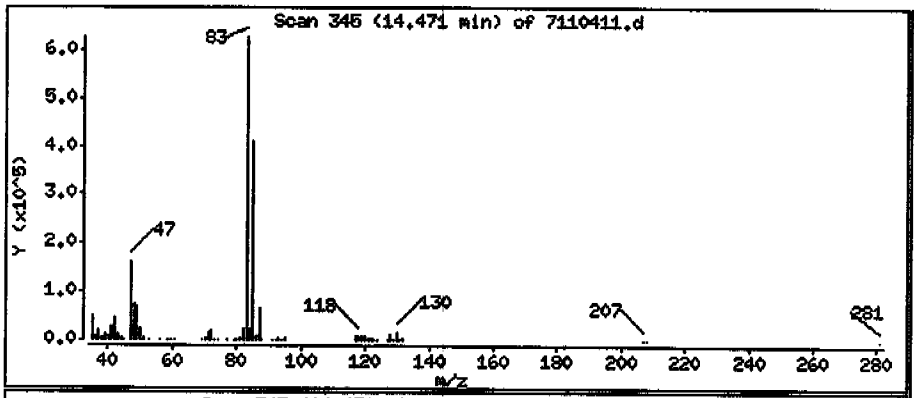
Operator: ab

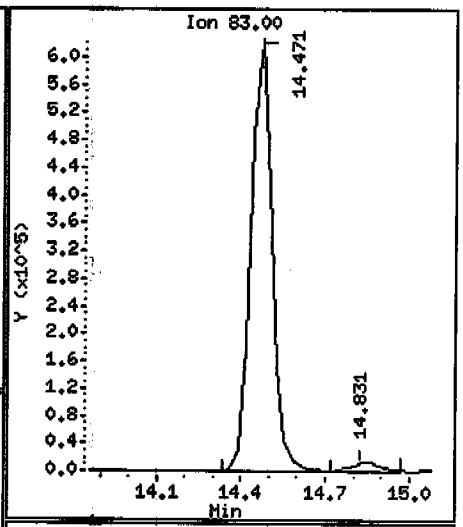
Column phase: RTx-624

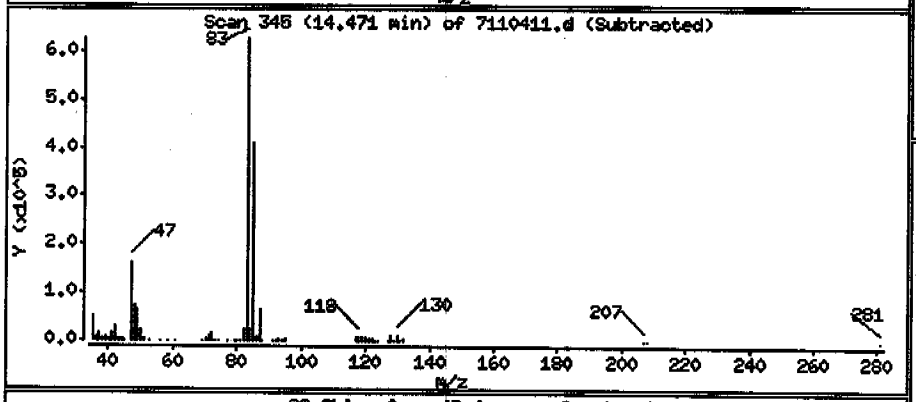
Column diameter: 0.53

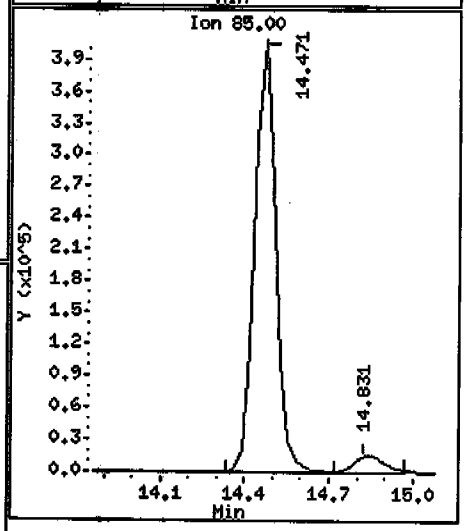
82 Chloroform

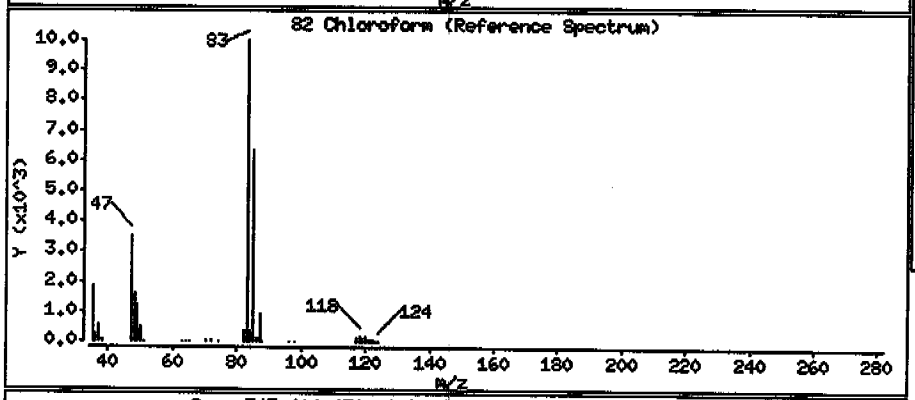
Concentration: 51.941 PPBV

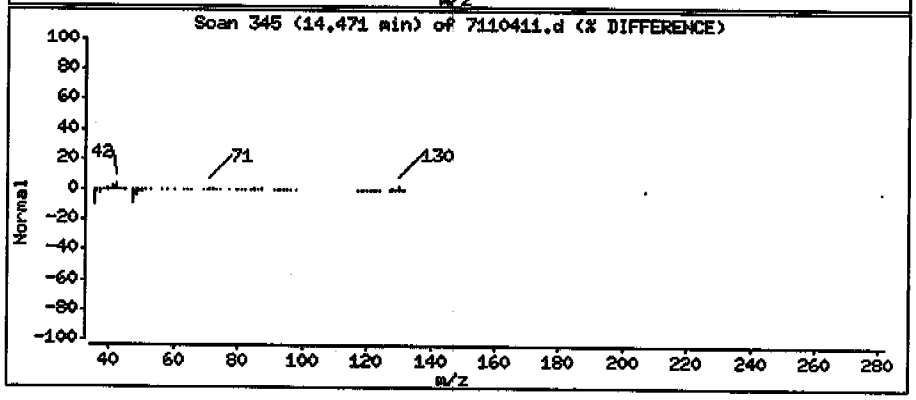












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

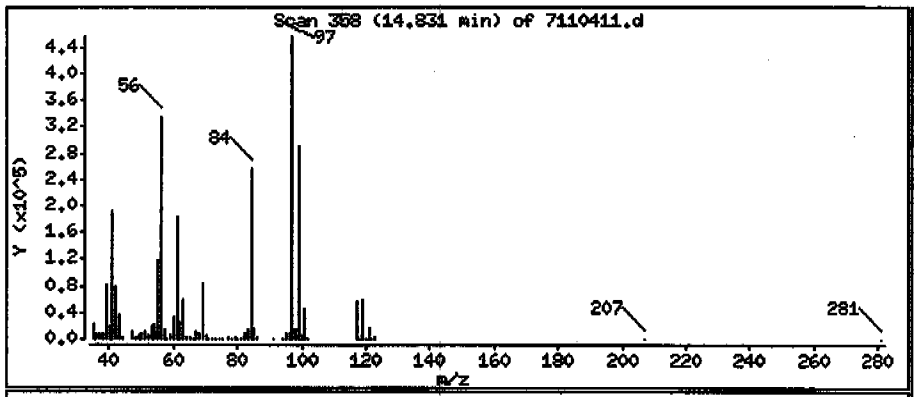
Operator: ab

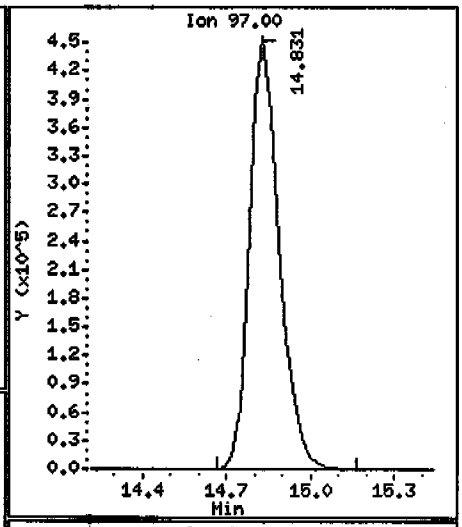
Column phase: RTx-624

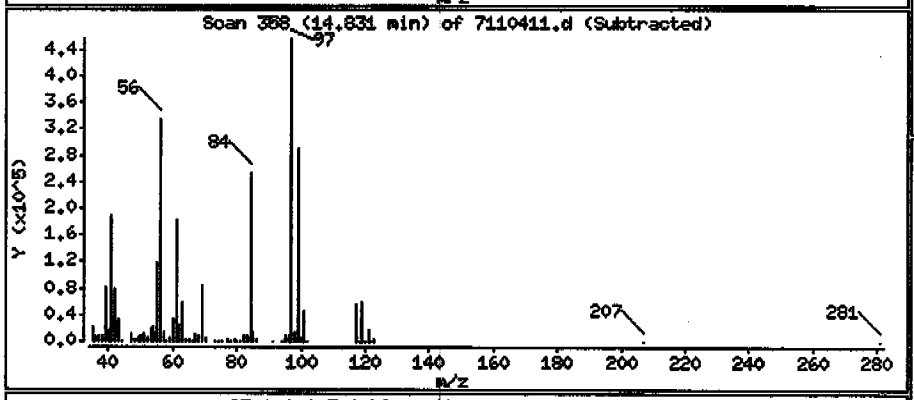
Column diameter: 0.53

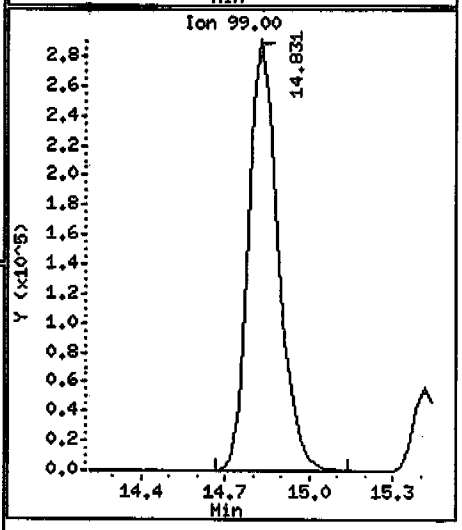
83 1,1,1-Trichloroethane

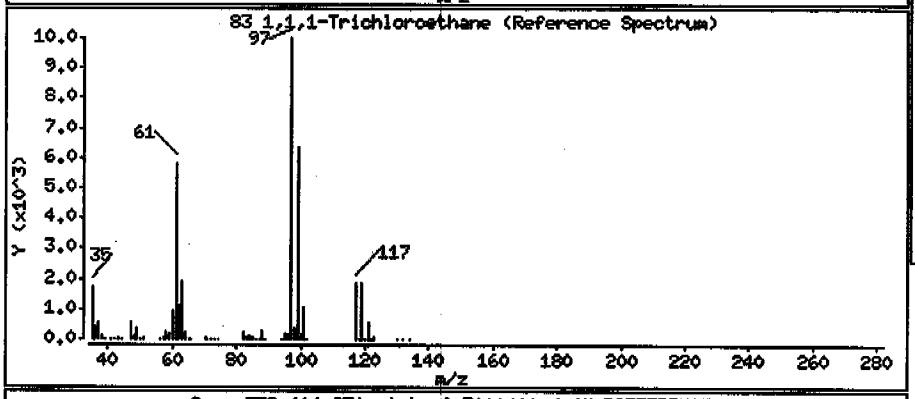
Concentration: 52.638 PPBV

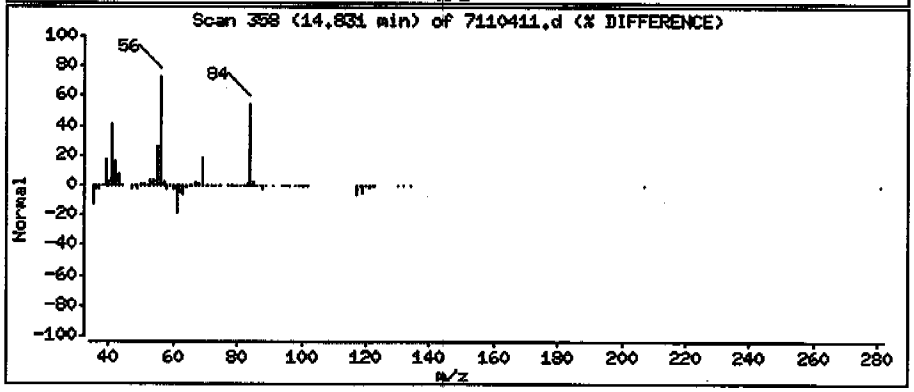












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

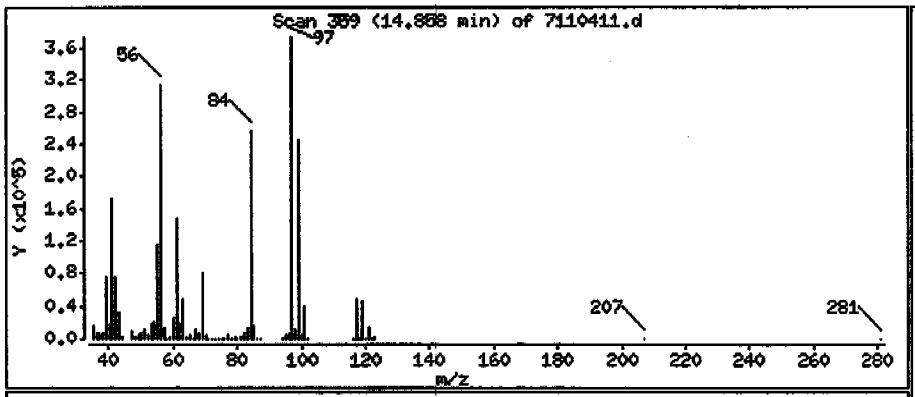
Operator: ab

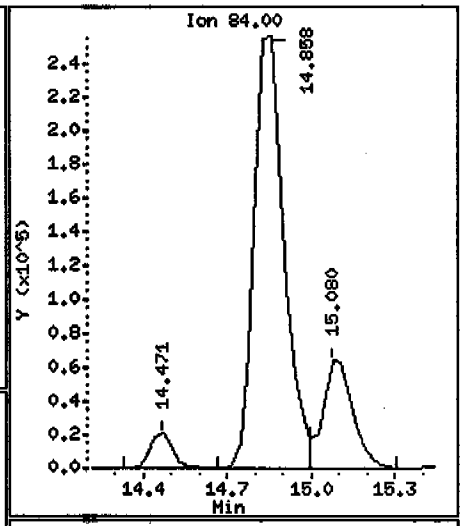
Column phase: RTx-624

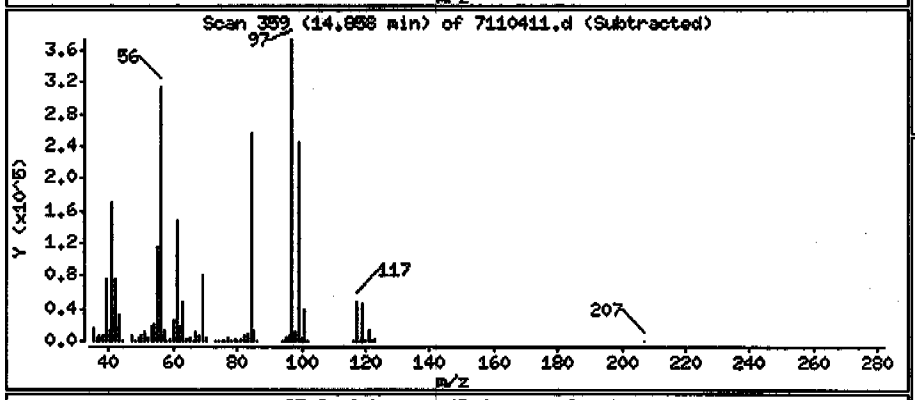
Column diameter: 0.53

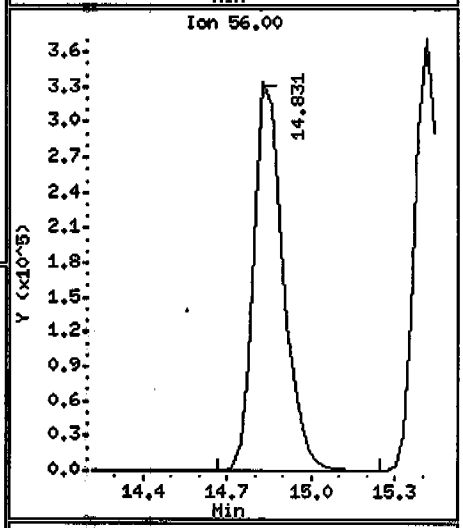
85 Cyclohexane

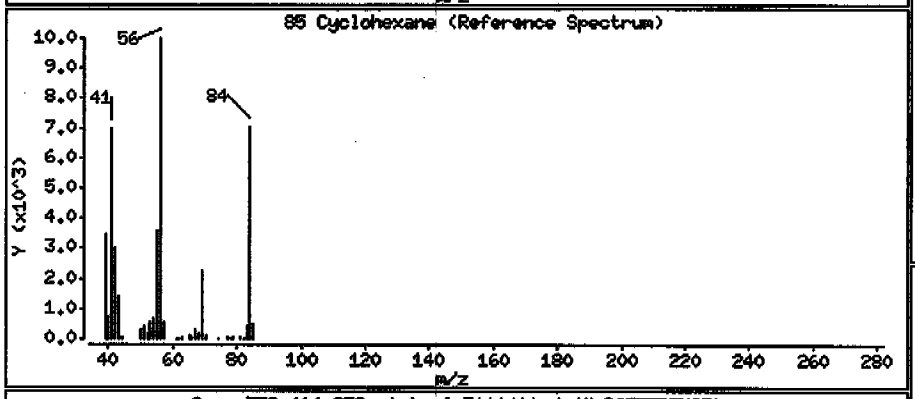
Concentration: 52.882 PPBV

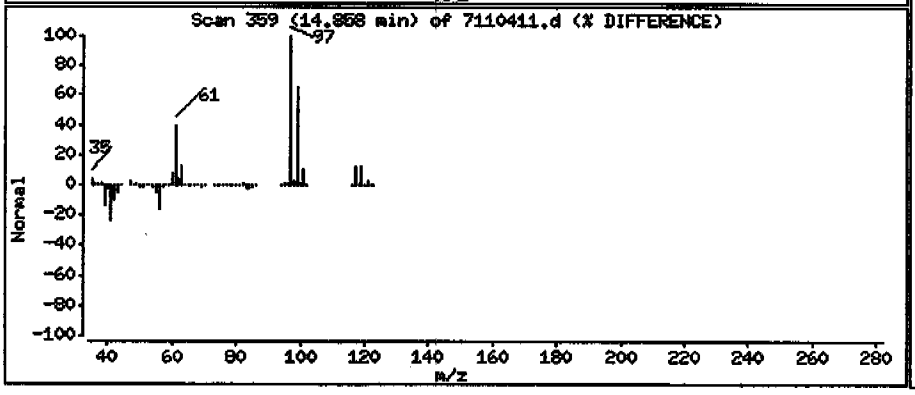


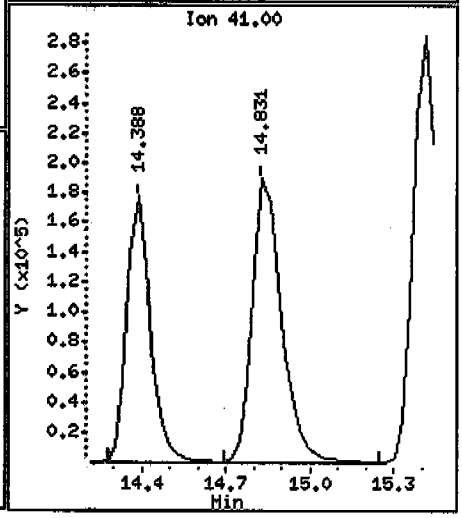












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

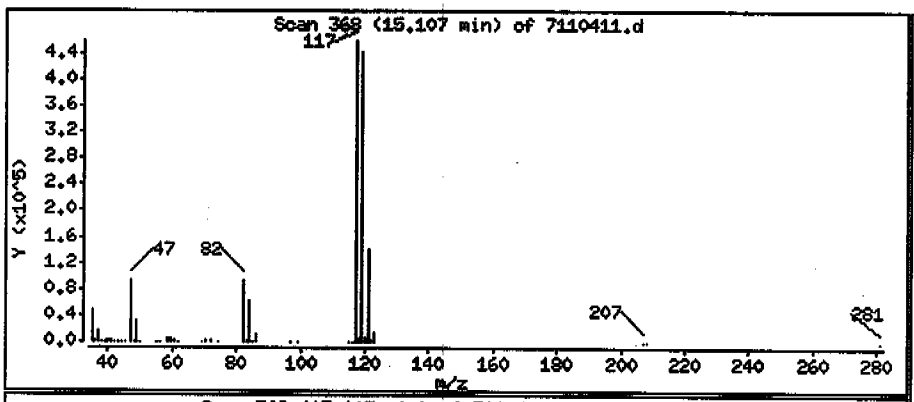
Operator: ab

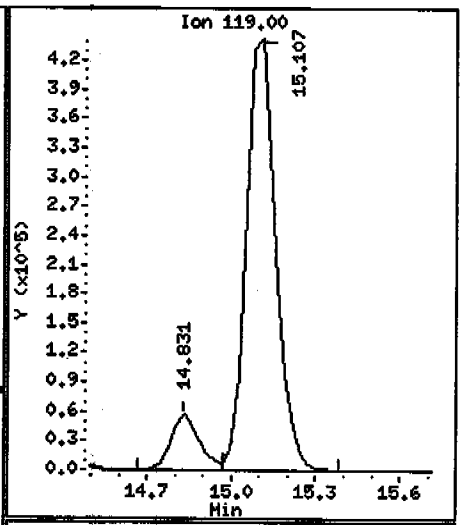
Column phase: RTx-624

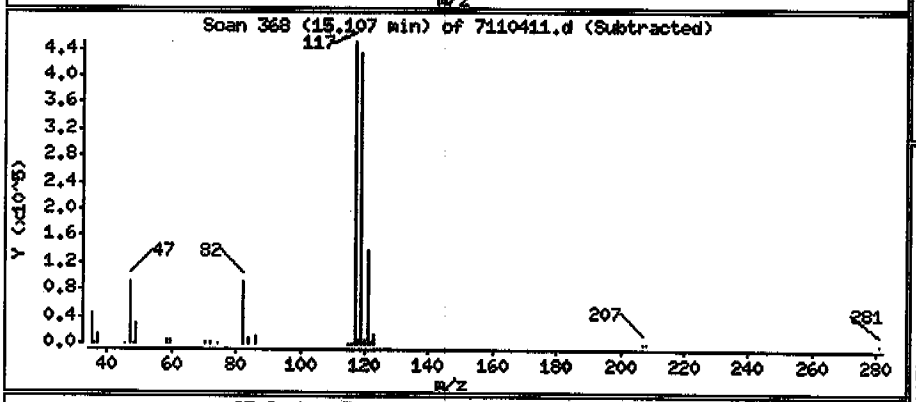
Column diameter: 0.53

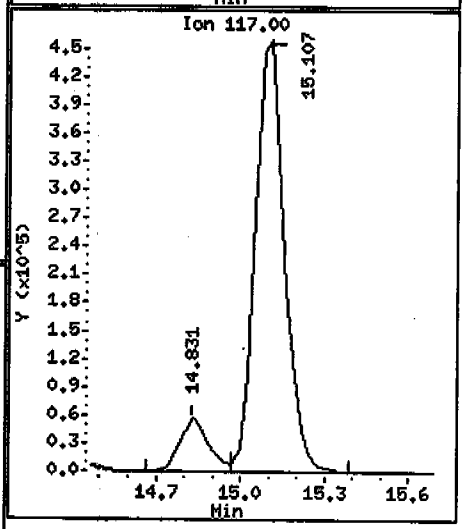
87 Carbon Tetrachloride

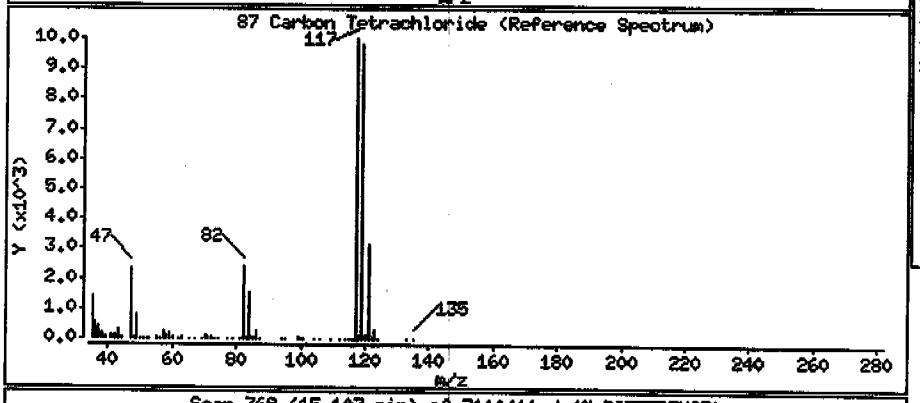
Concentration: 54.319 PPBV

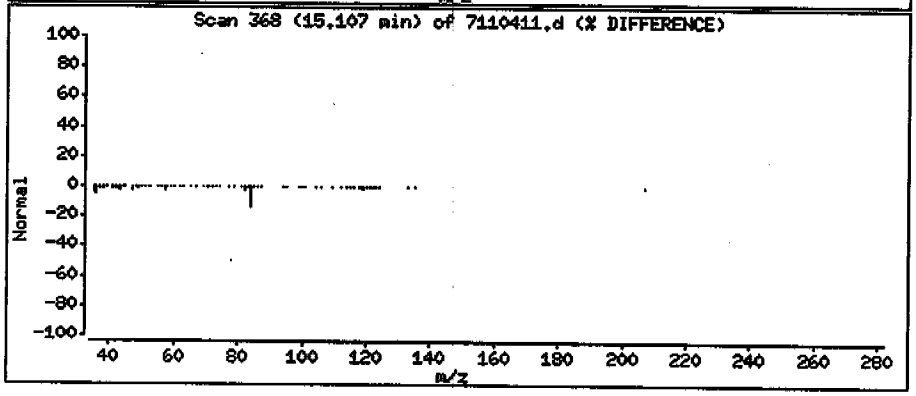












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

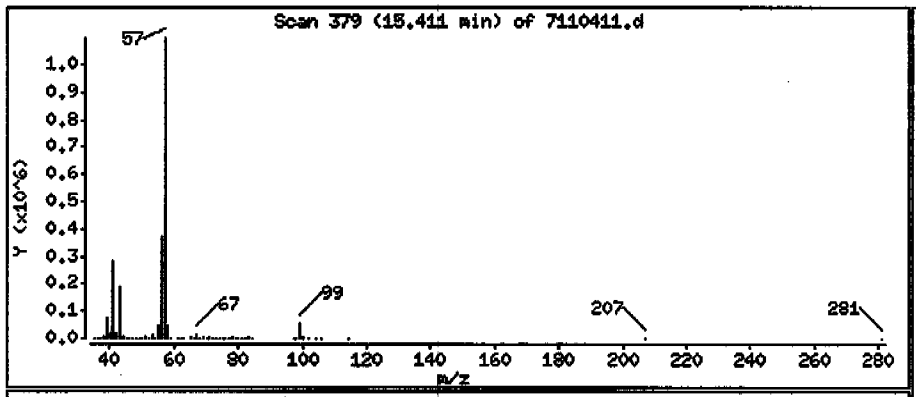
Operator: ab

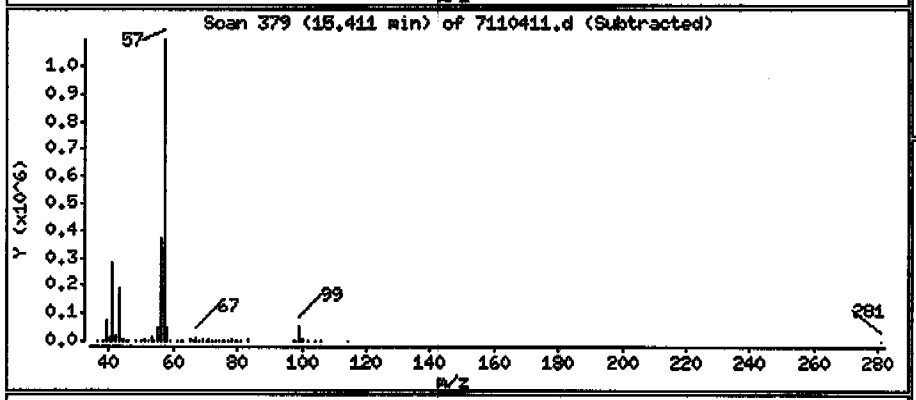
Column phase: RTx-624

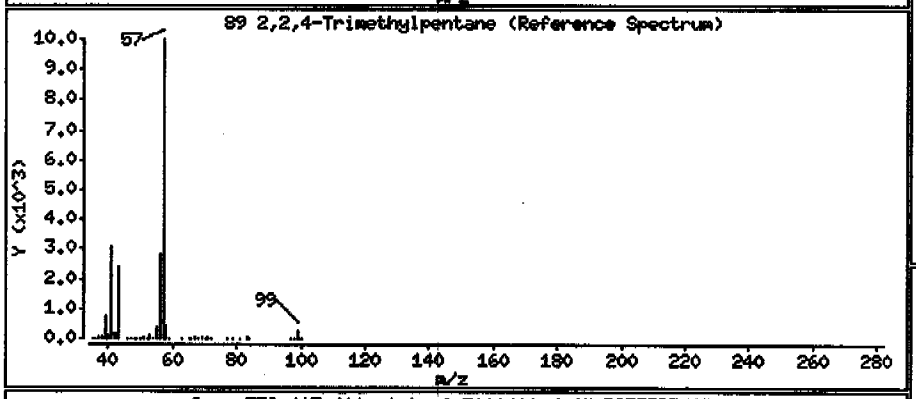
Column diameter: 0.53

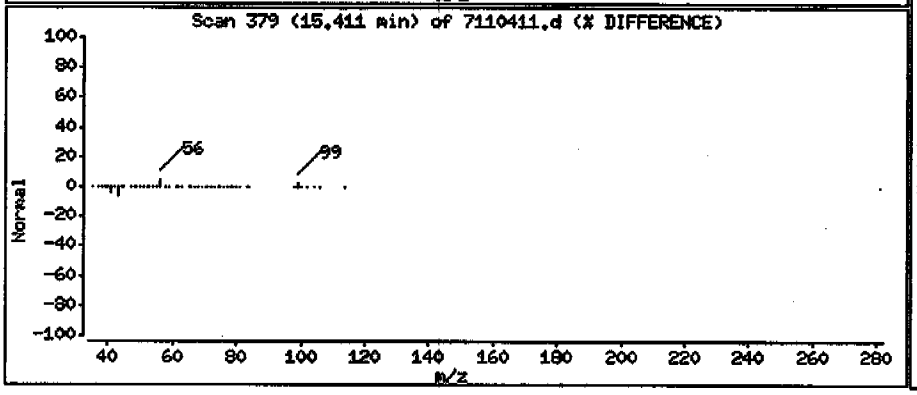
89 2,2,4-Trimethylpentane

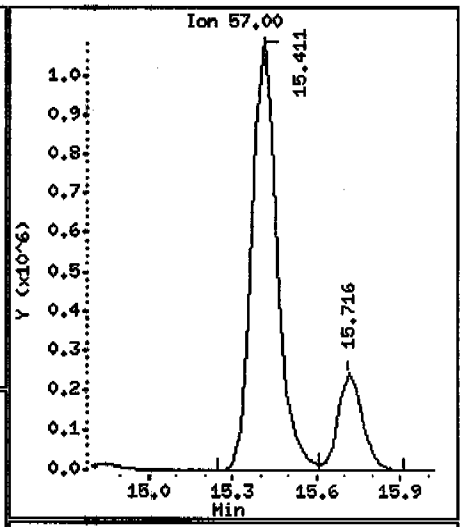
Concentration: 53.666 PPBV

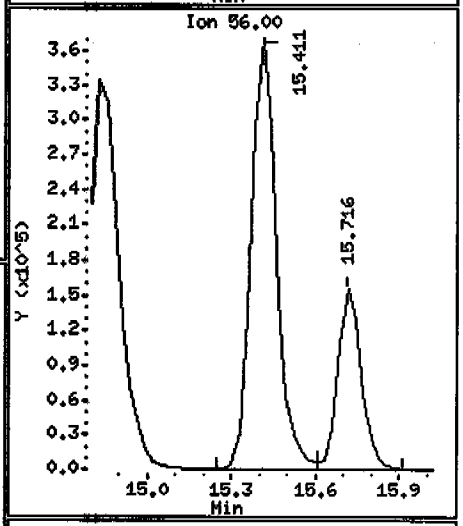


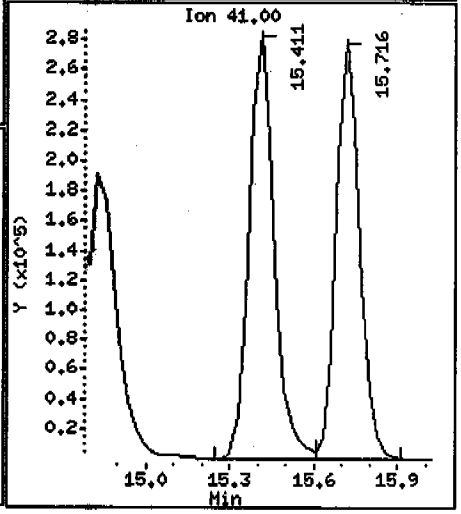












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

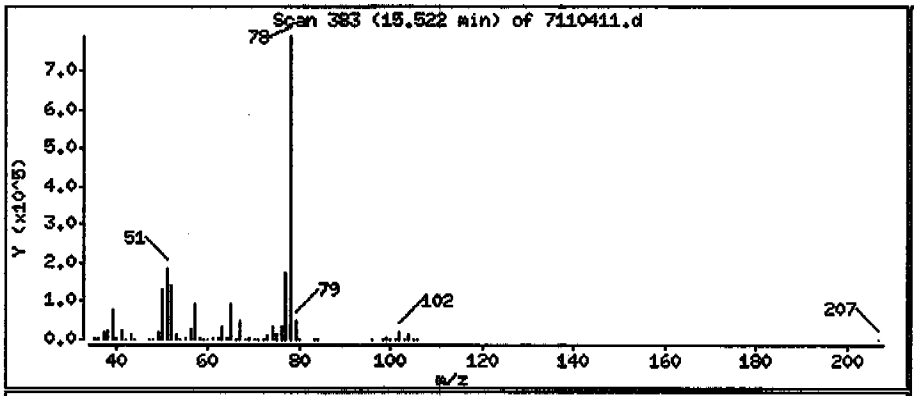
Operator: ab

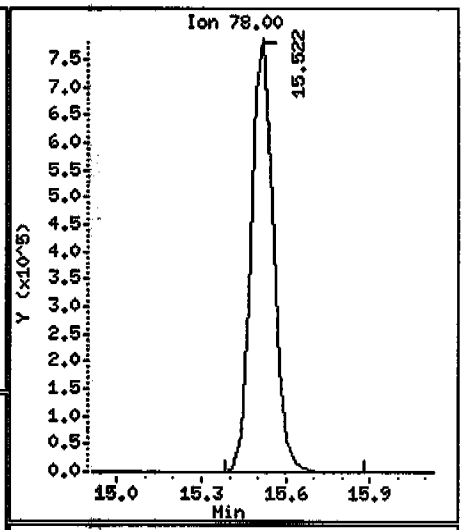
Column phase: RTx-624

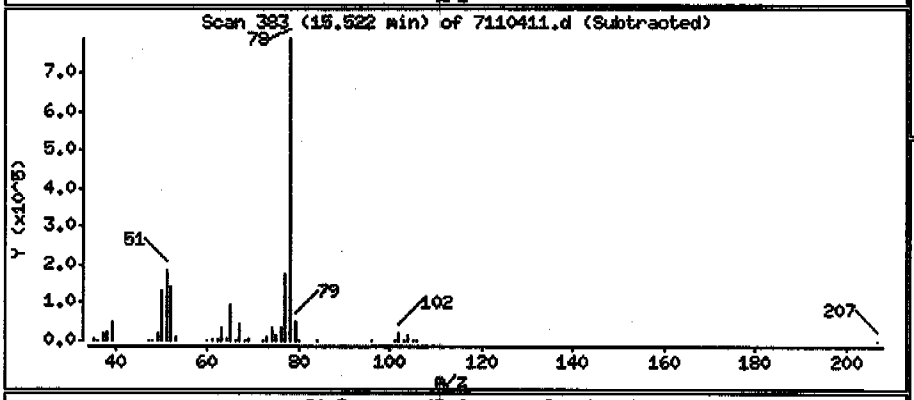
Column diameter: 0.53

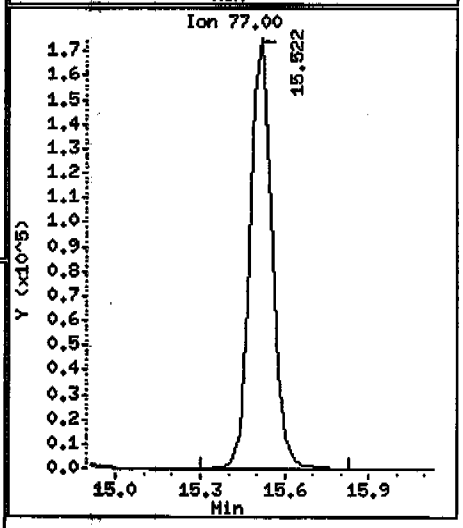
91 Benzene

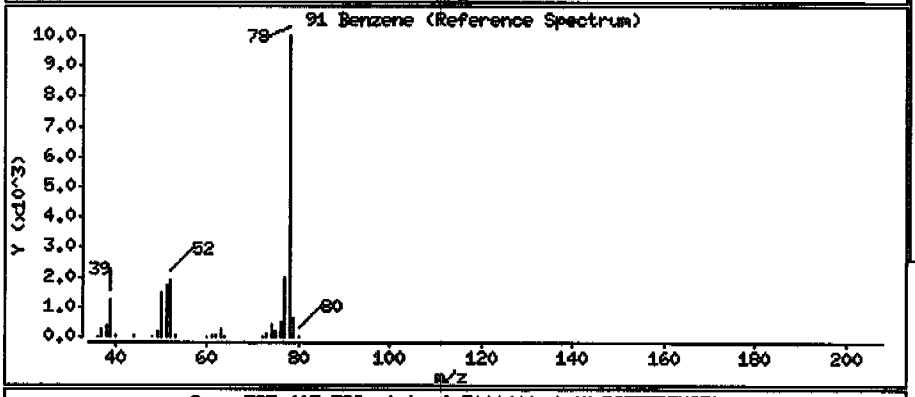
Concentration: 51.783 PPBV

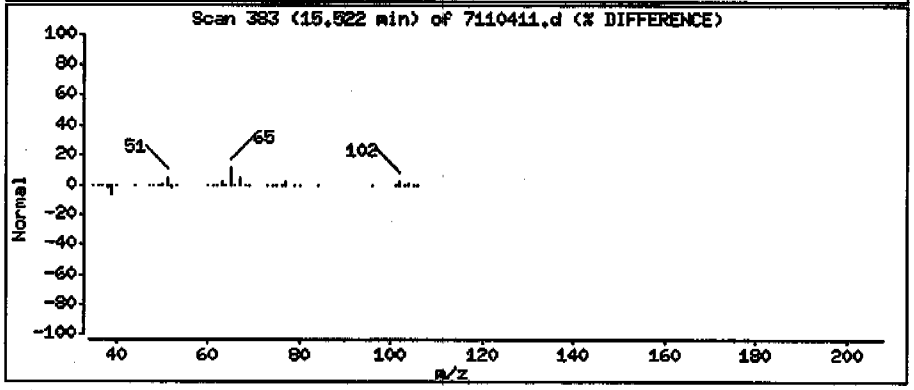












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

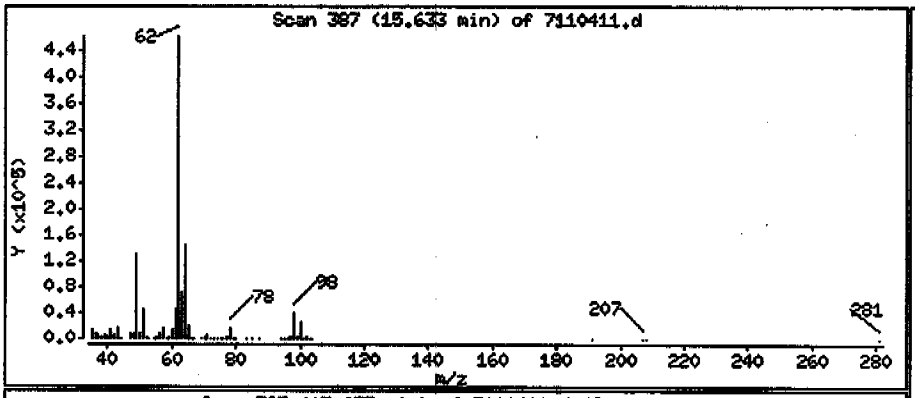
Operator: ab

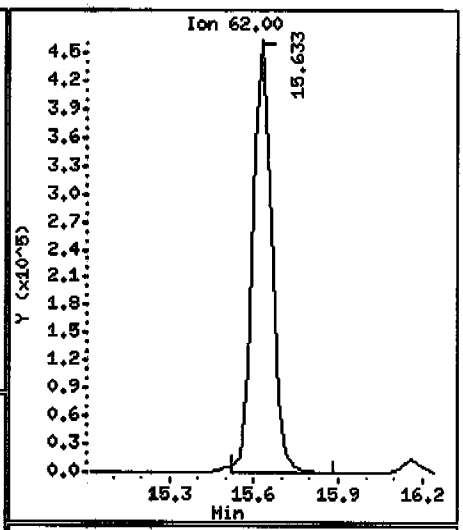
Column phase: RTx-624

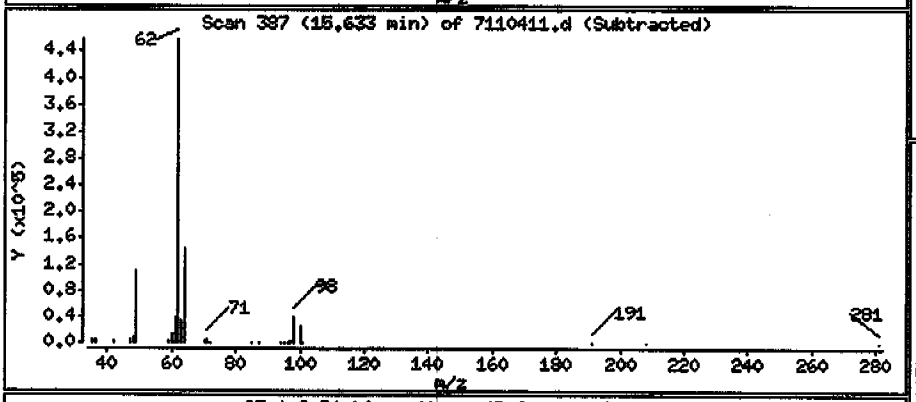
Column diameter: 0.53

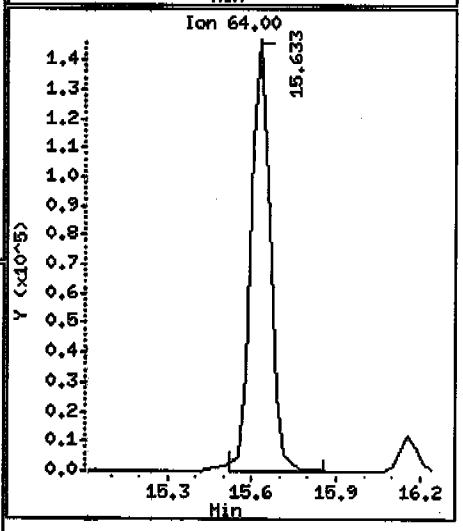
93 1,2-Dichloroethane

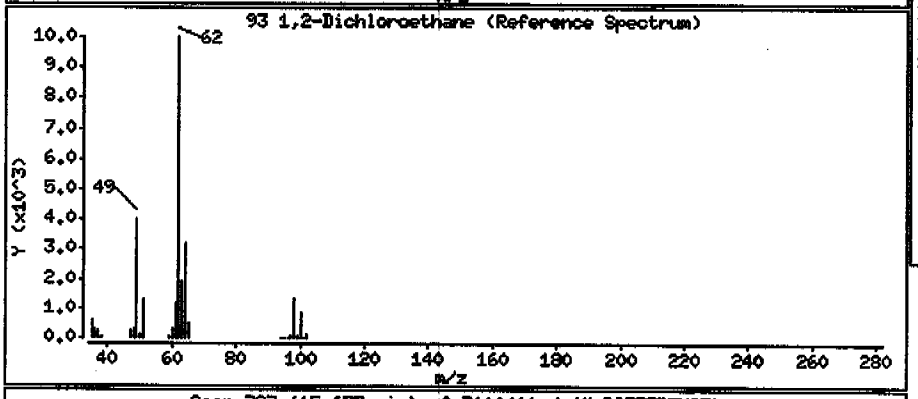
Concentration: 49.085 PPBV

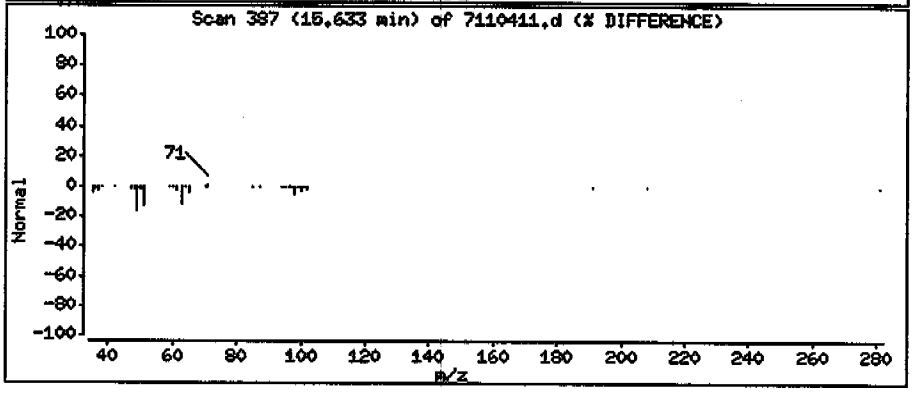












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

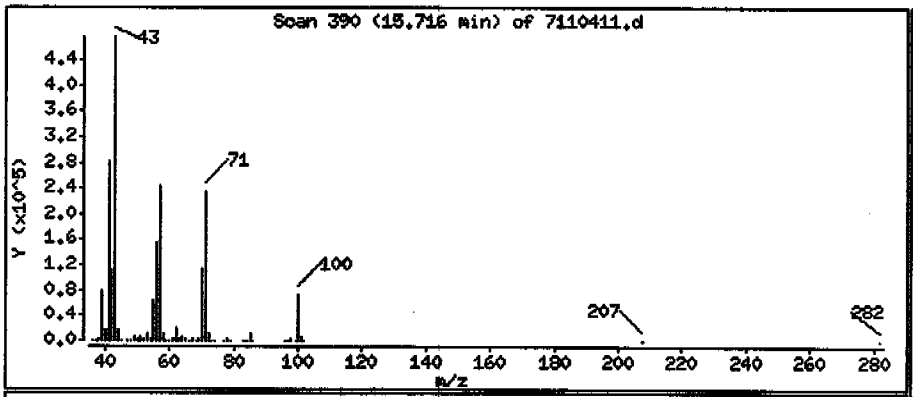
Operator: ab

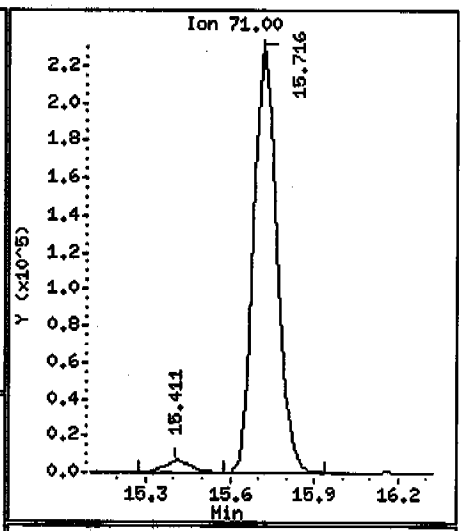
Column phase: RTx-624

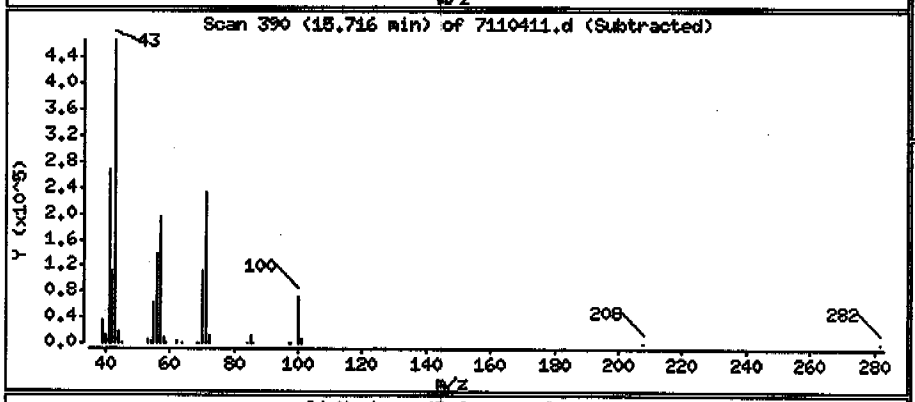
Column diameter: 0.53

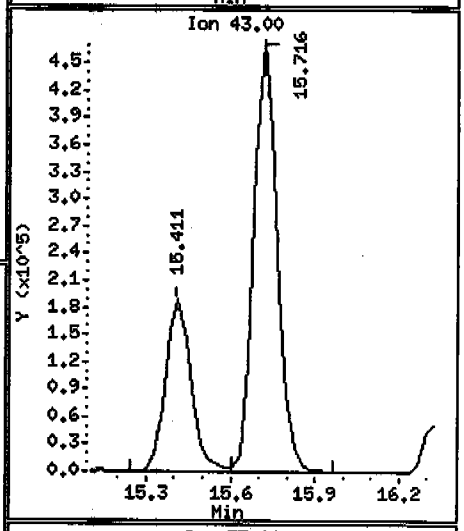
94 Heptane

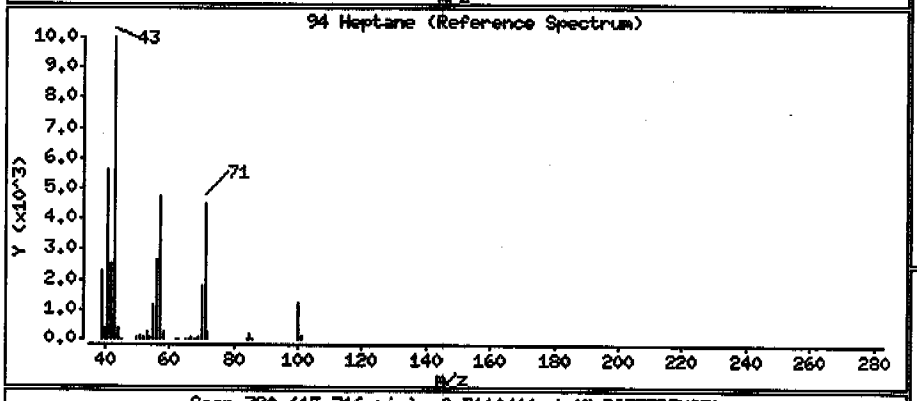
Concentration: 51.990 PPBV

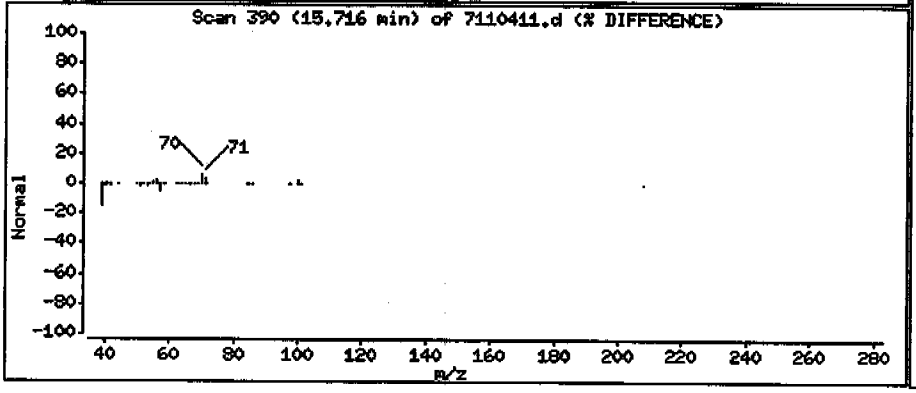


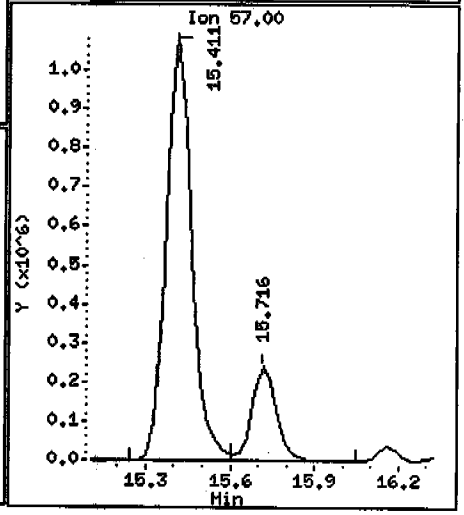












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

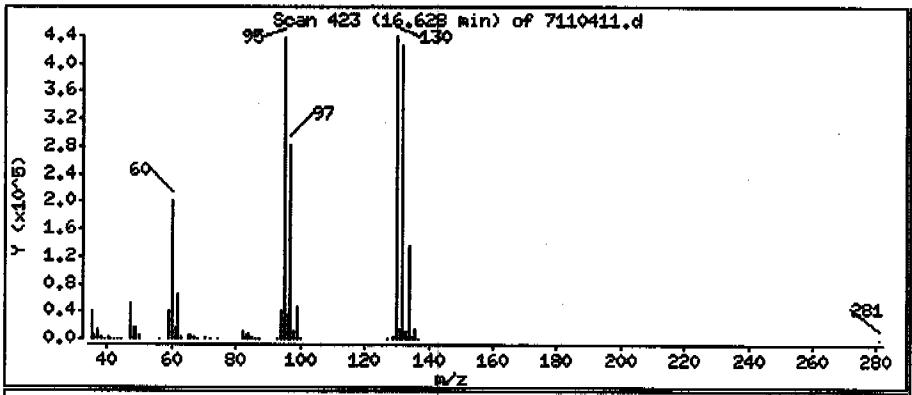
Operator: ab

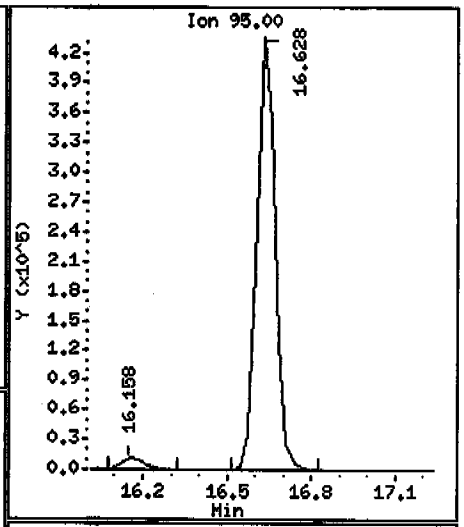
Column phase: RTx-624

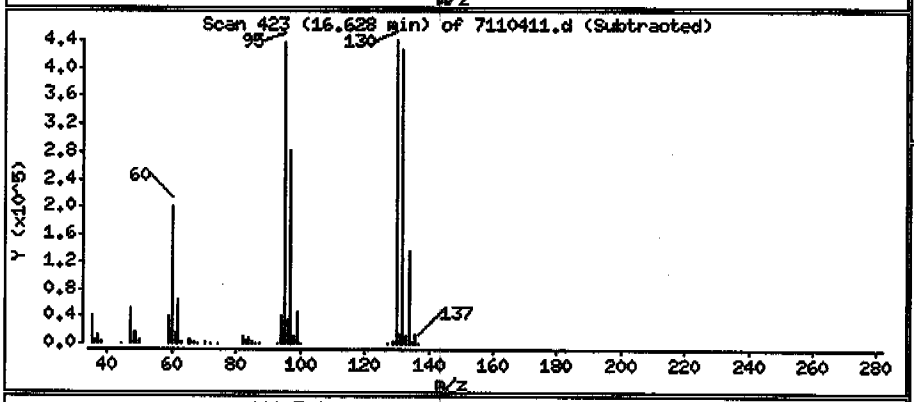
Column diameter: 0.53

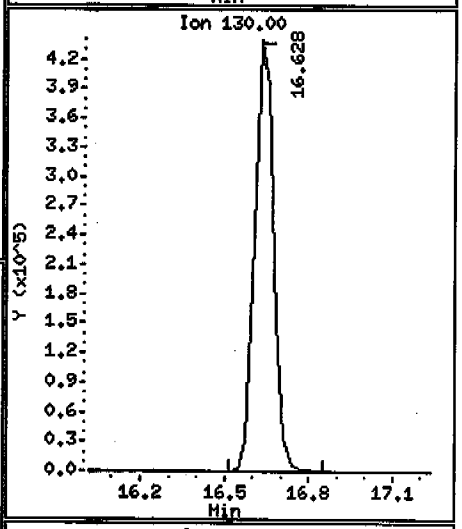
101 Trichloroethene

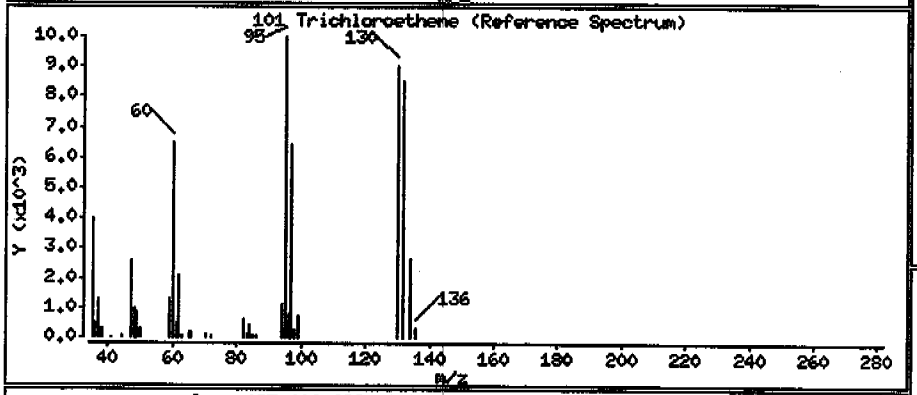
Concentration: 52.822 PPBV

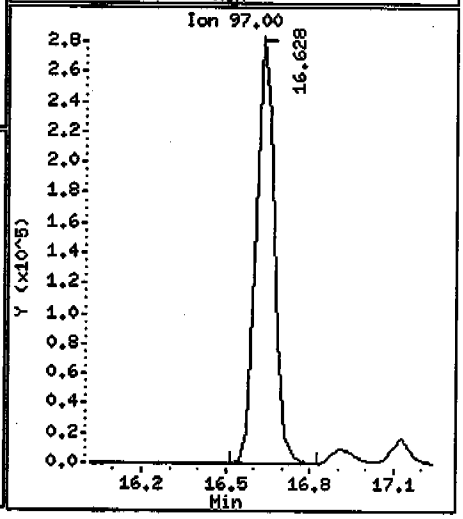


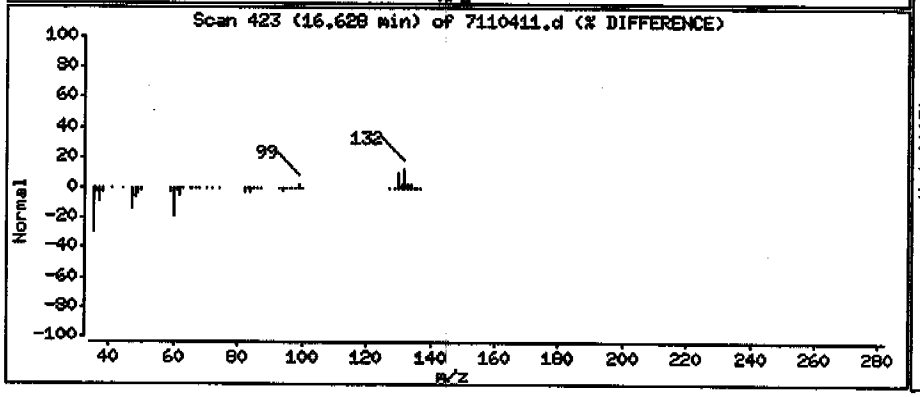












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

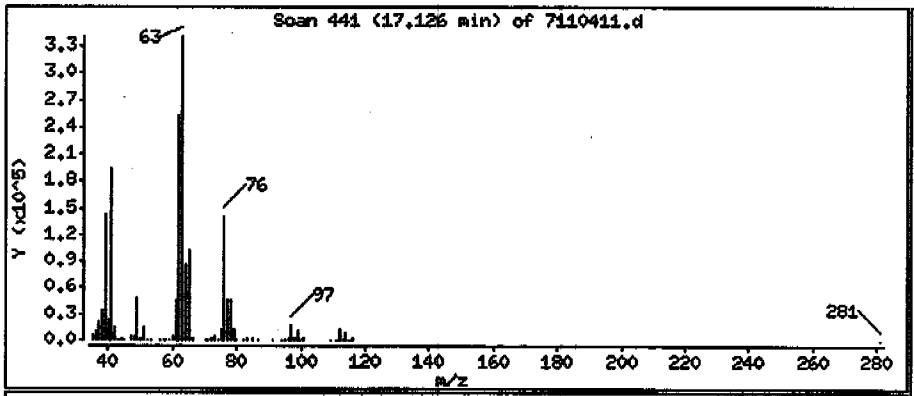
Operator: ab

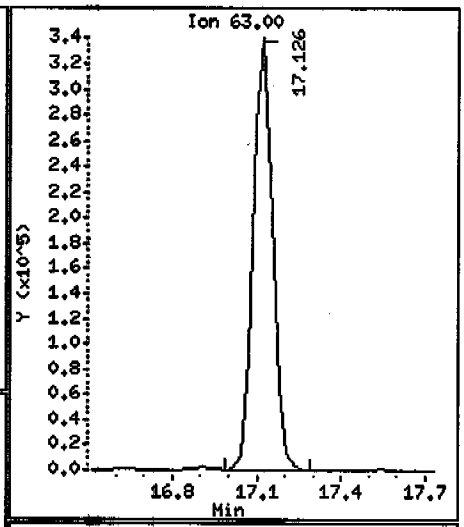
Column phase: RTx-624

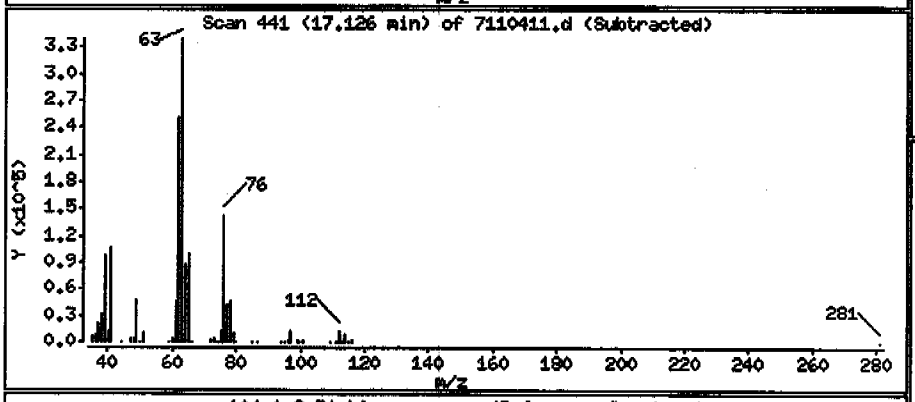
Column diameter: 0.53

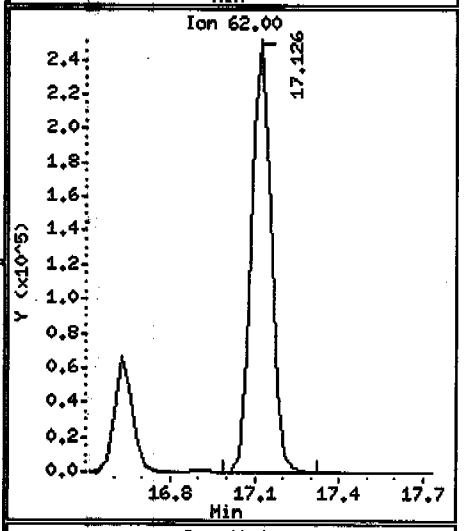
104 1,2-Dichloropropane

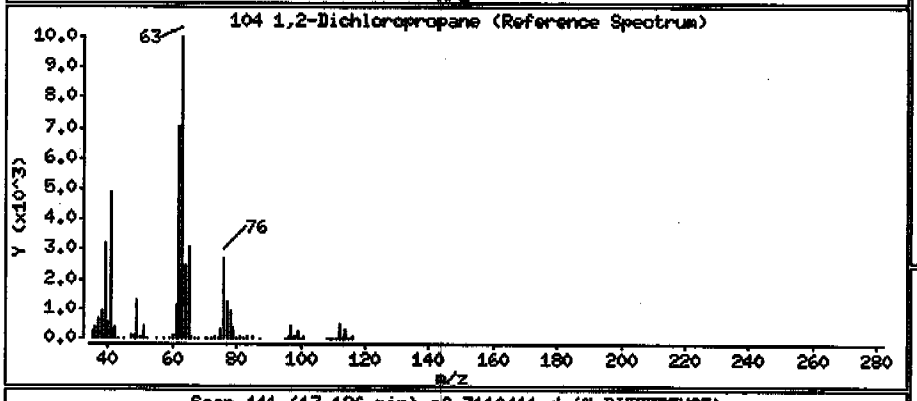
Concentration: 51.324 PPBV

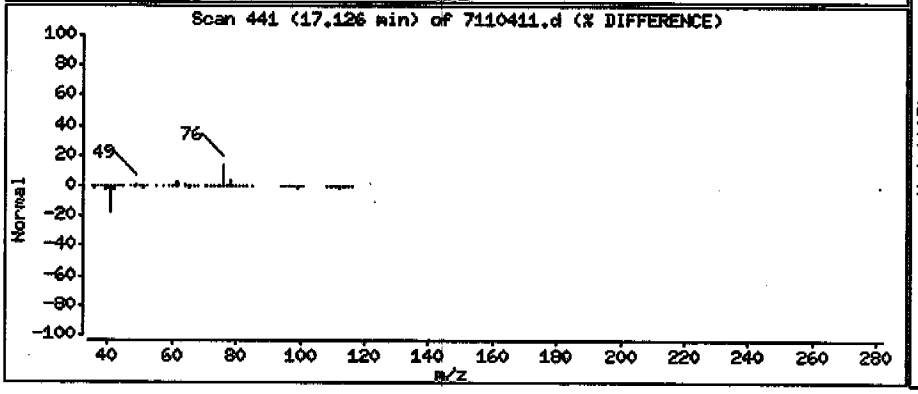


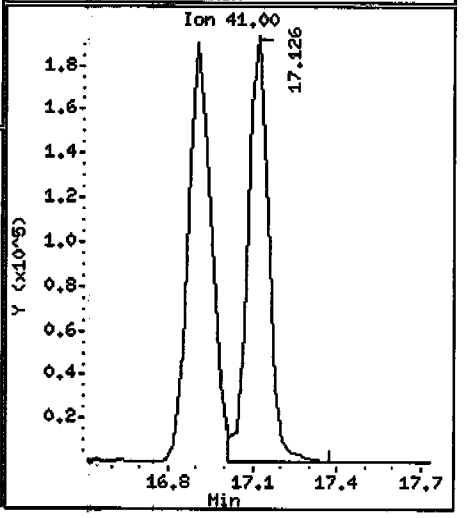












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

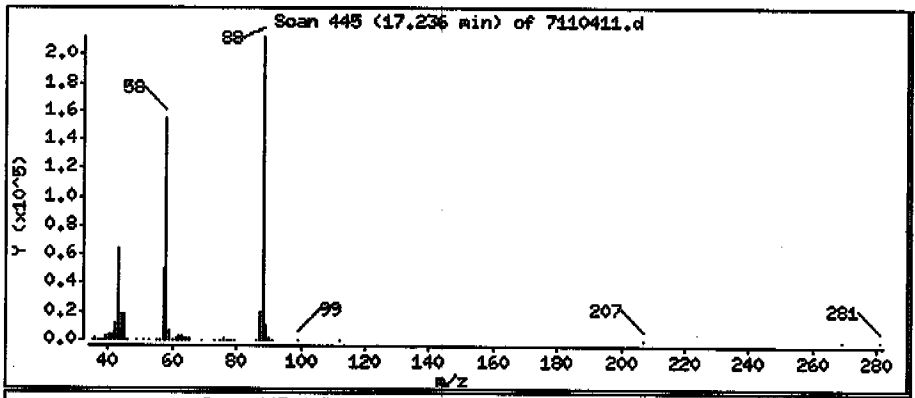
Operator: ab

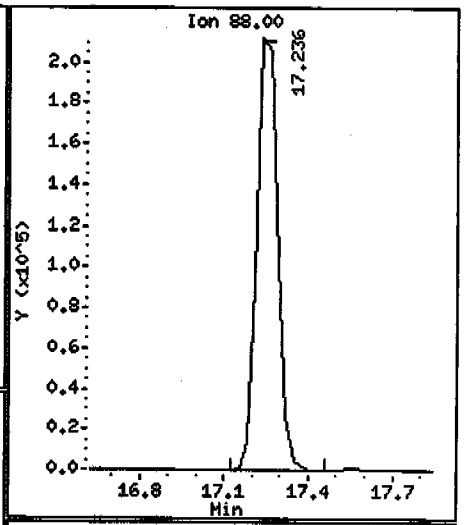
Column phase: RTx-624

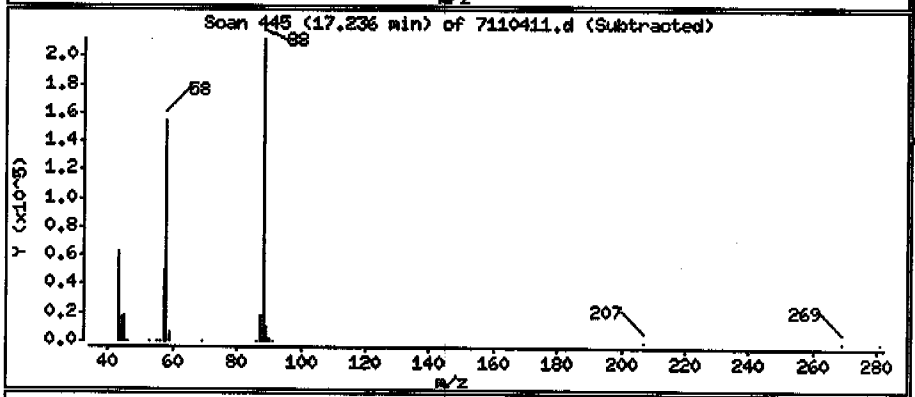
Column diameter: 0.53

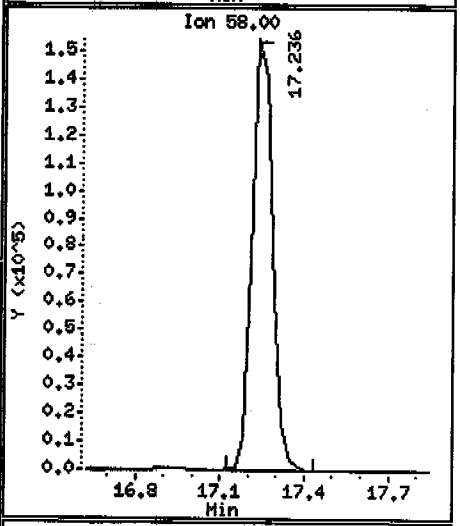
106 1,4-Dioxane

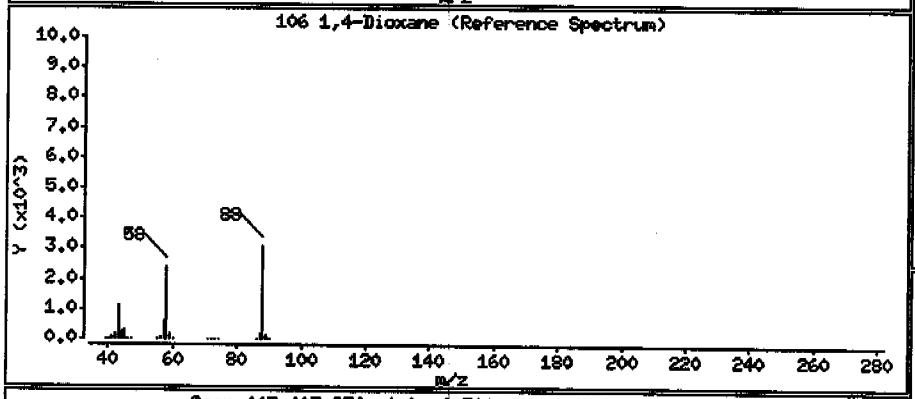
Concentration: 52.162 PPBV

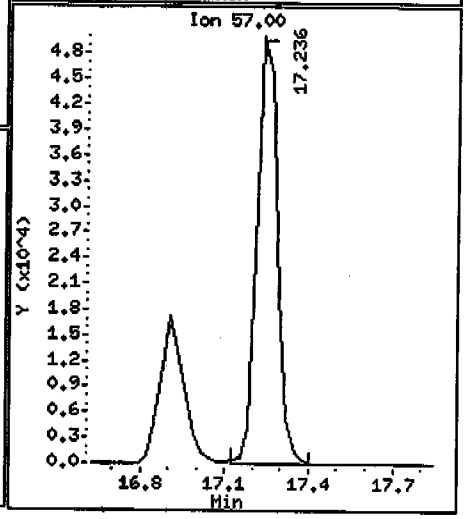


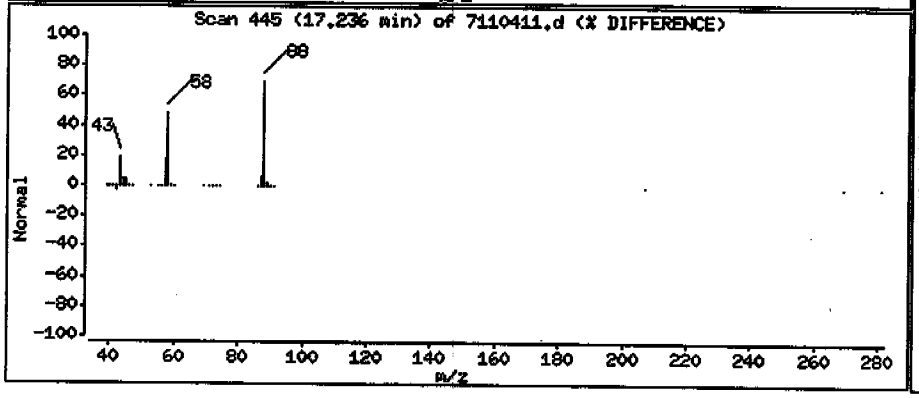












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

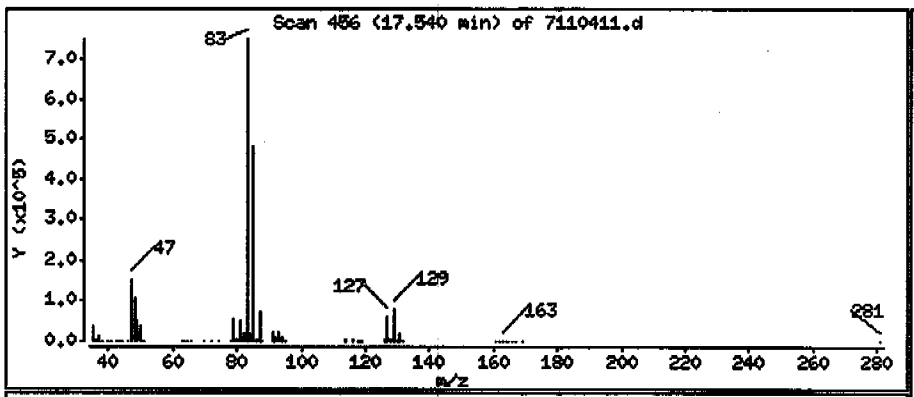
Operator: ab

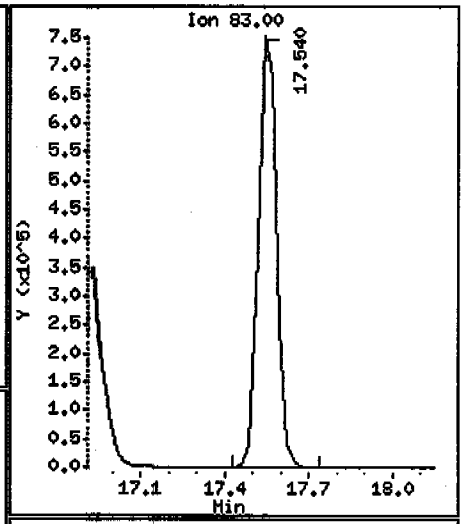
Column phase: RTx-624

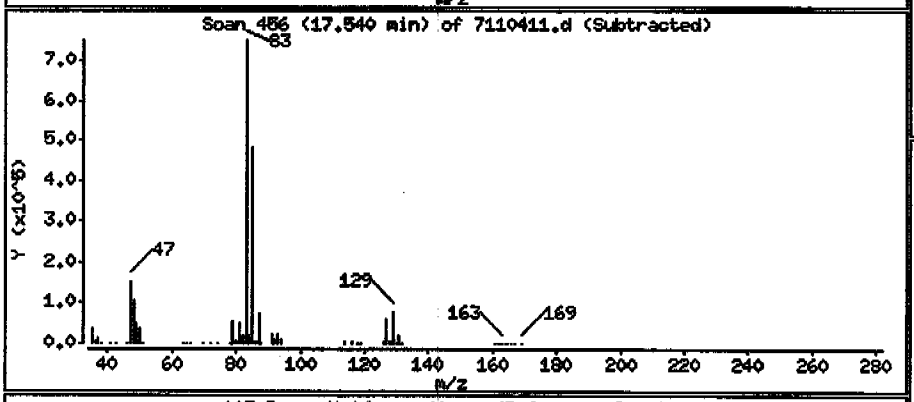
Column diameter: 0.53

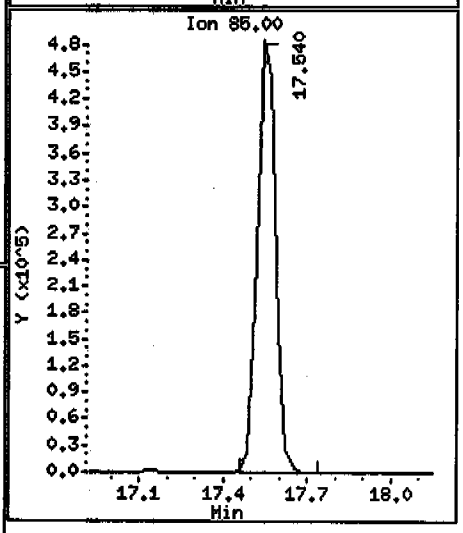
107 Bromodichloromethane

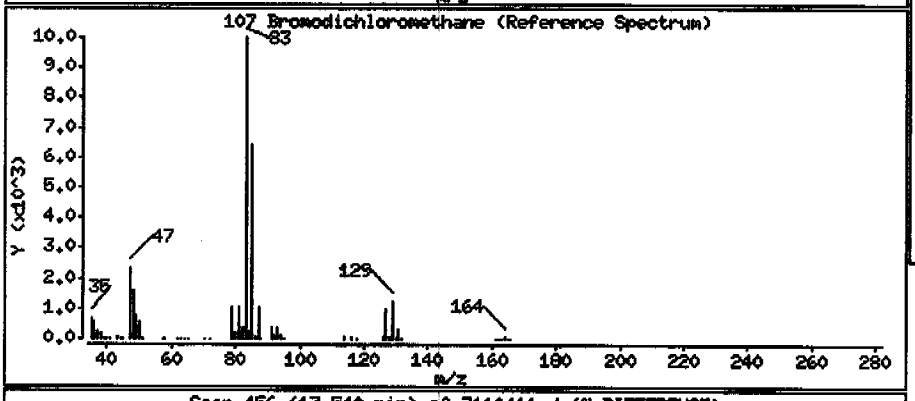
Concentration: 52.787 PPBV

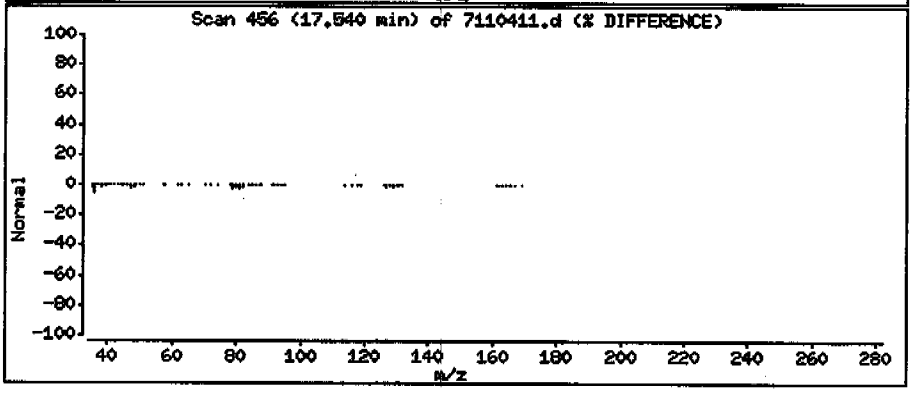












0411

Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

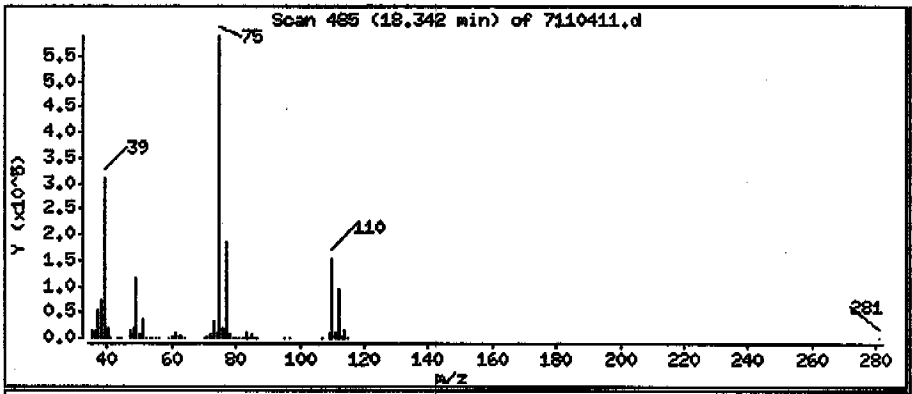
Operator: ab

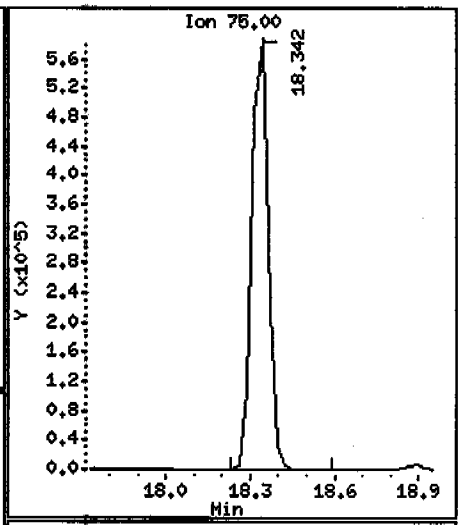
Column phase: RTx-624

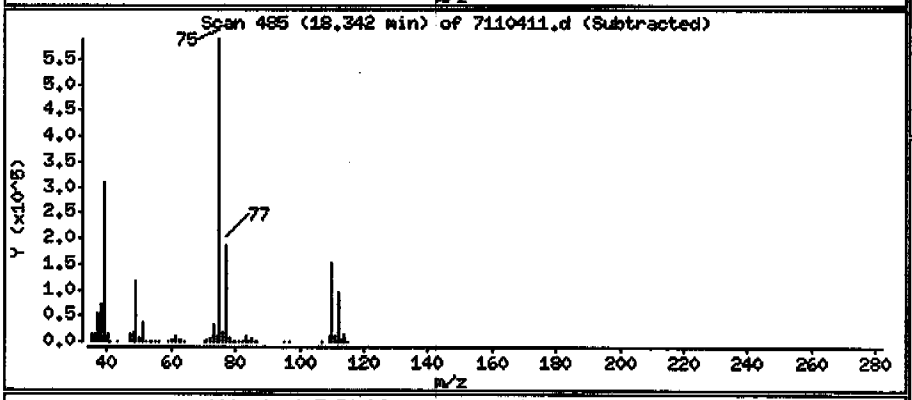
Column diameter: 0.53

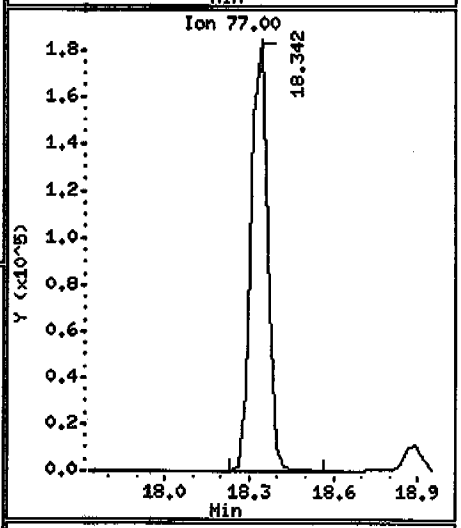
110 cis-1,3-Dichloropropene

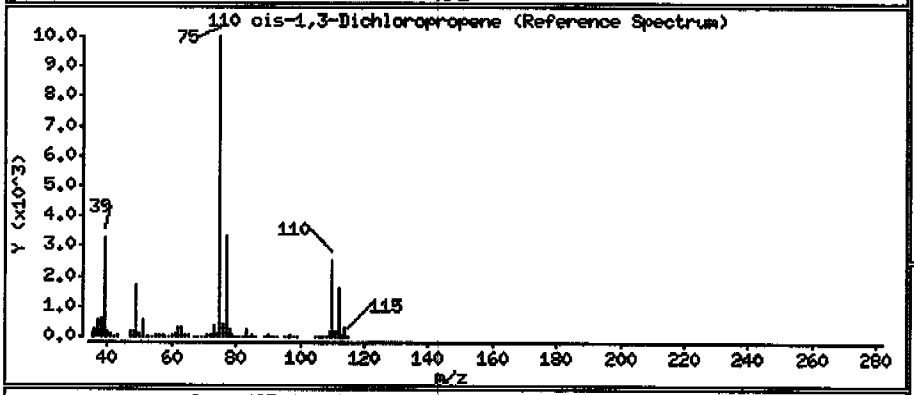
Concentration: 52.464 PPBV

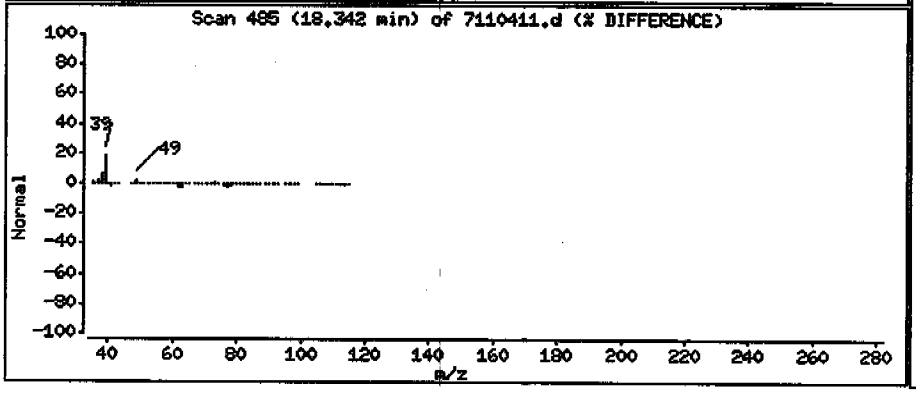


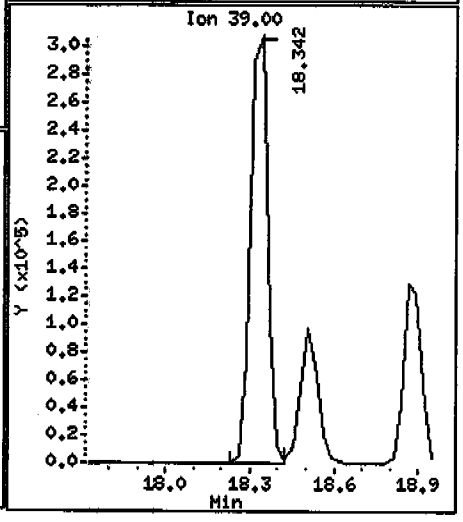












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

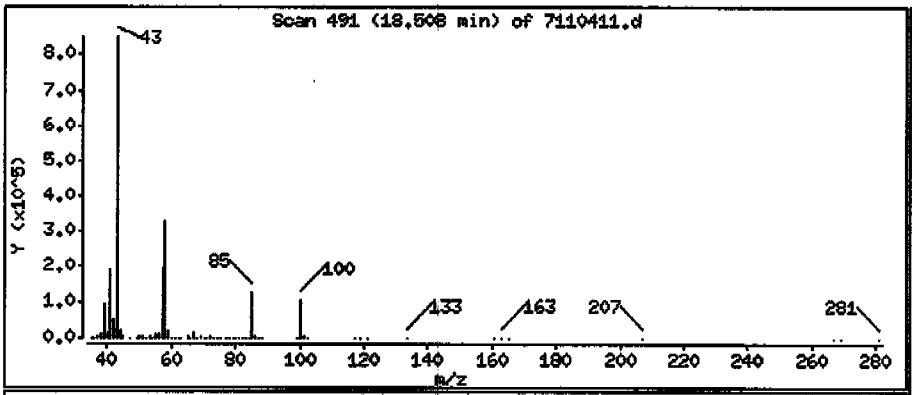
Operator: ab

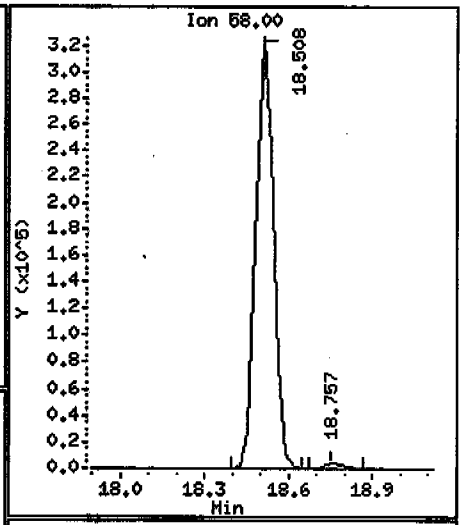
Column phase: RTx-624

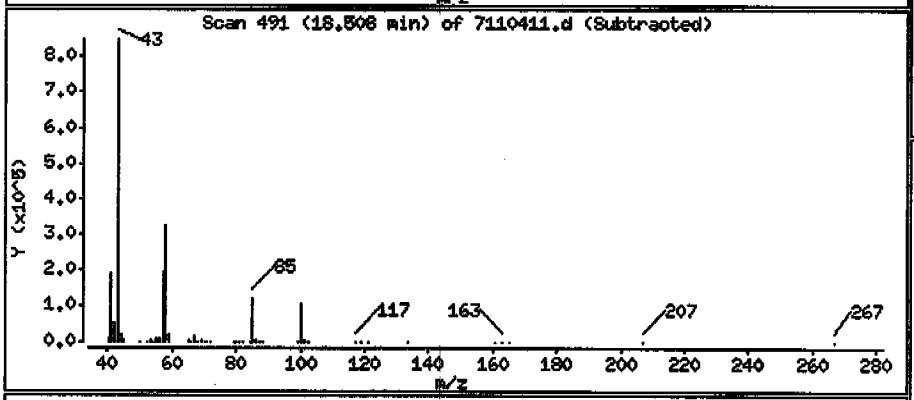
Column diameter: 0.53

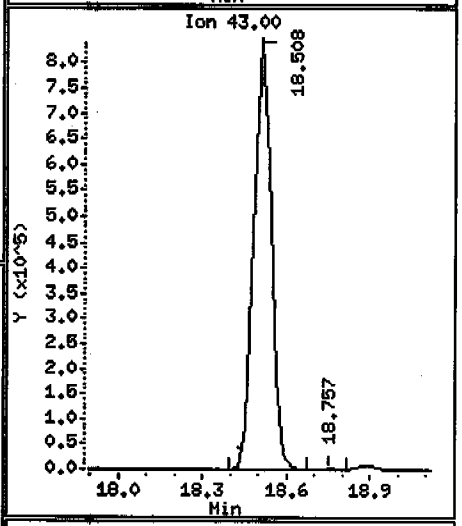
111 4-Methyl-2-pentanone

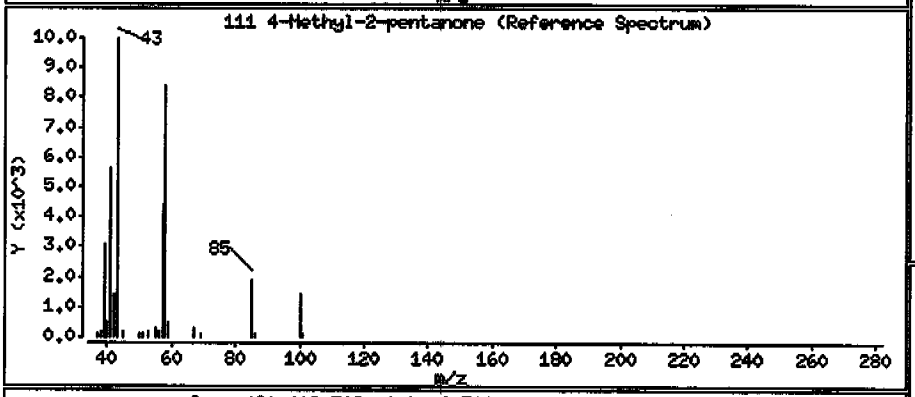
Concentration: 56.245 PPBV

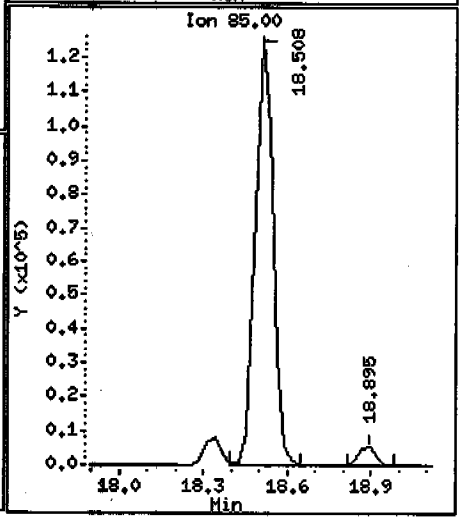


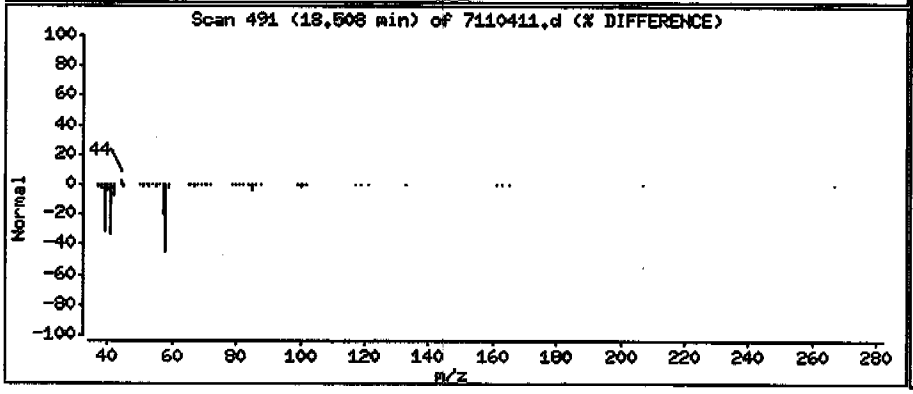












Data File: /chem/msd7.i/7-04nova.b/7110411.d

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Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

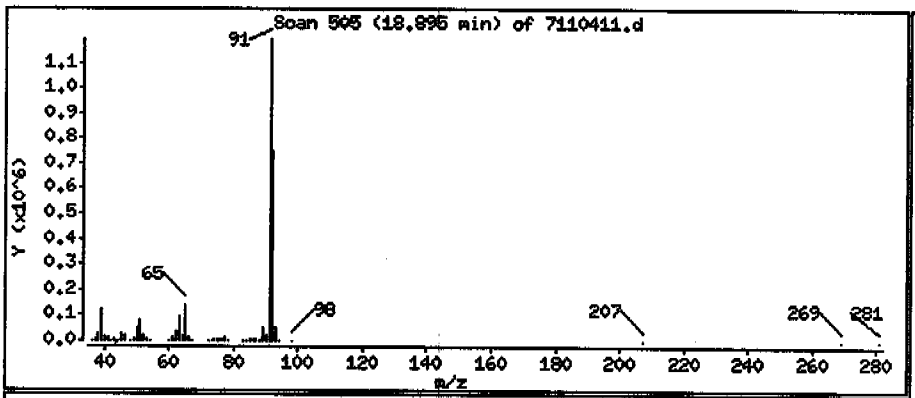
Operator: ab

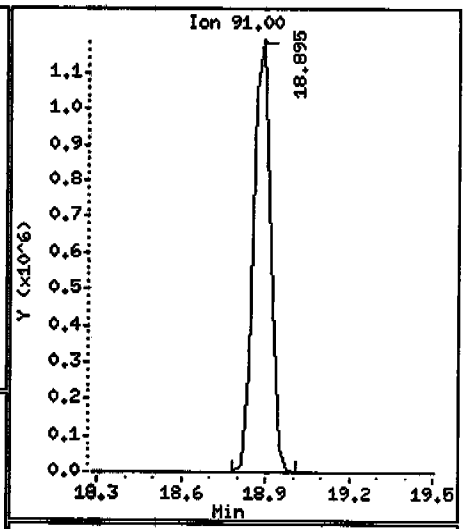
Column phase: RTx-624

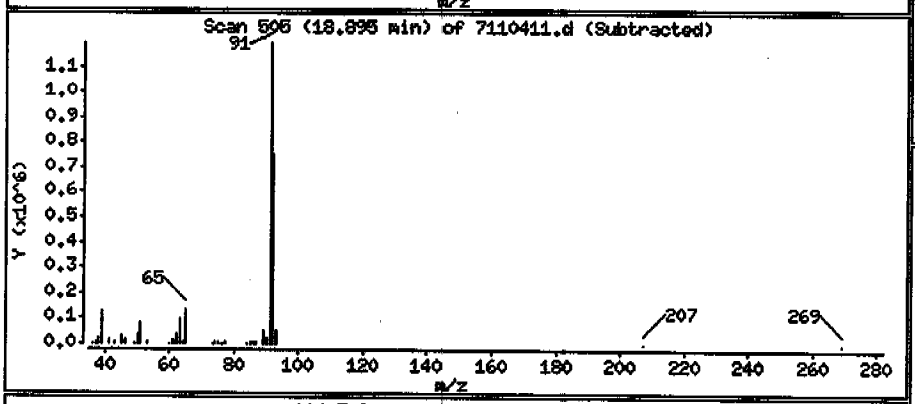
Column diameter: 0.53

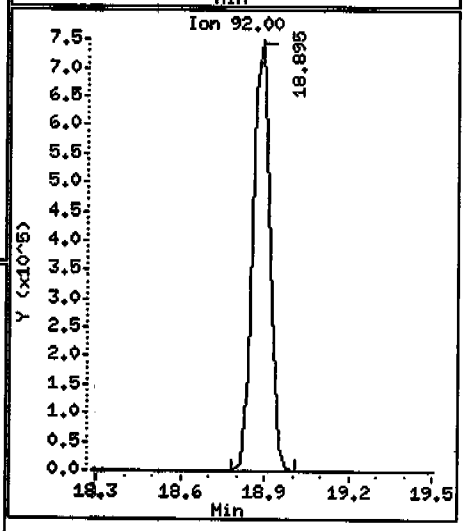
114 Toluene

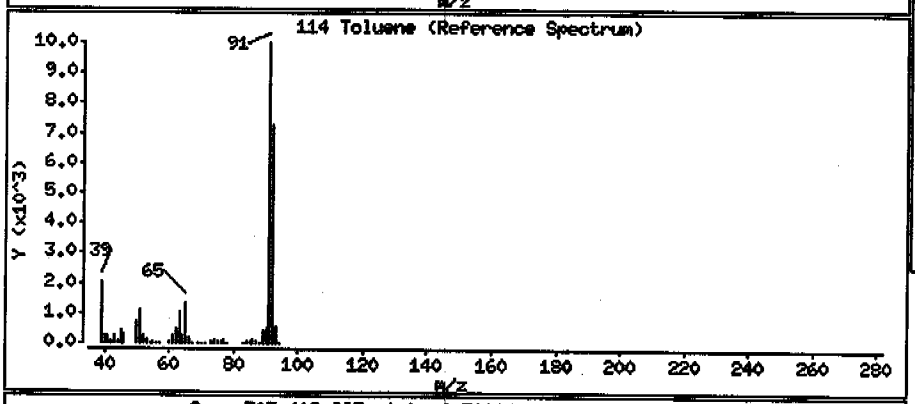
Concentration: 55.086 PPBV

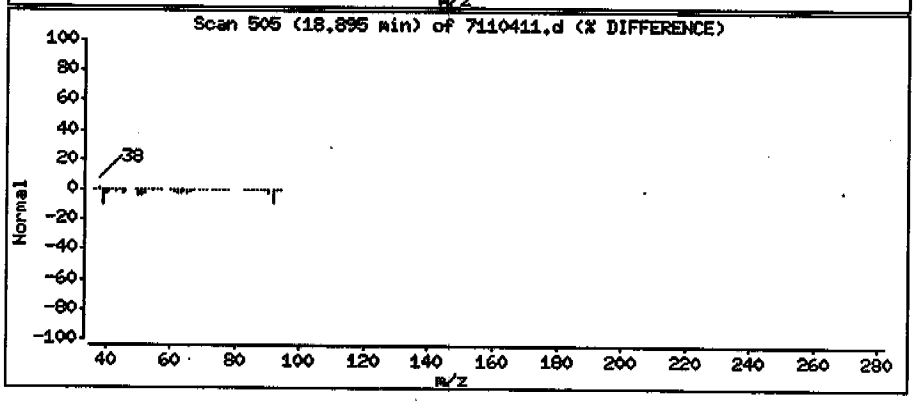












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

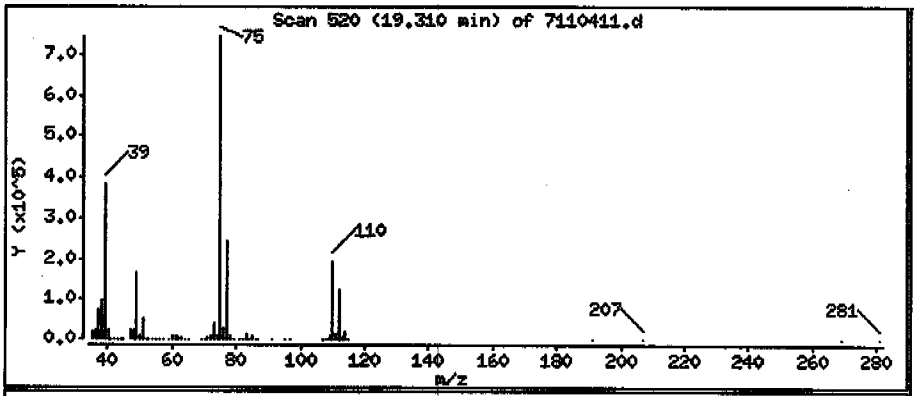
Operator: ab

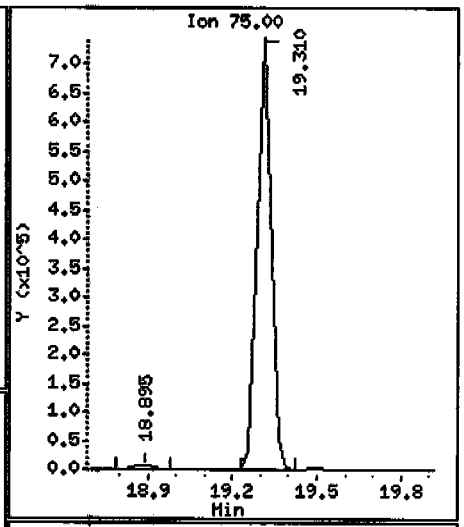
Column phase: RTx-624

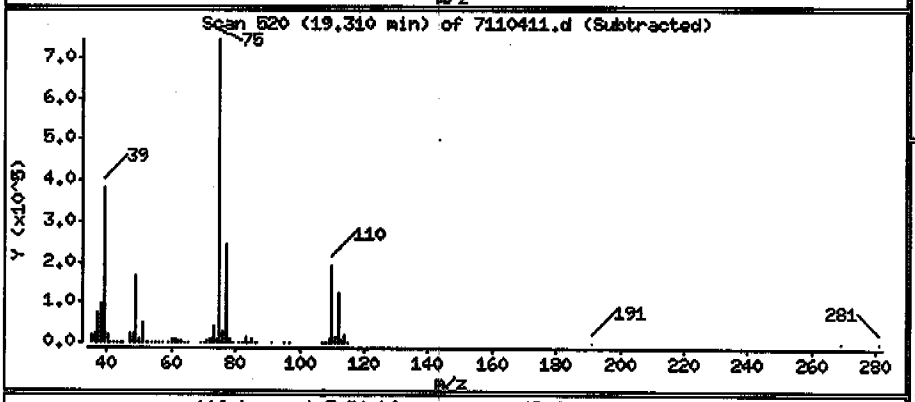
Column diameter: 0.53

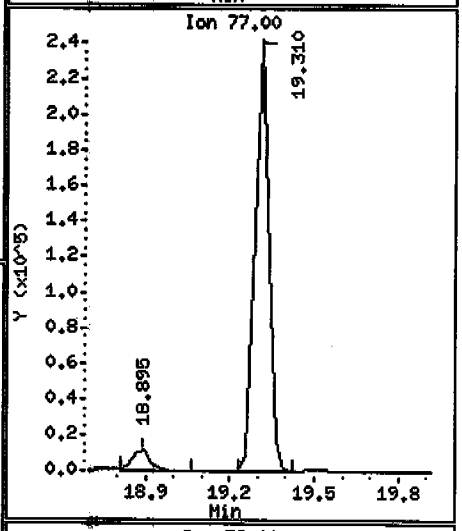
116 trans-1,3-Dichloropropene

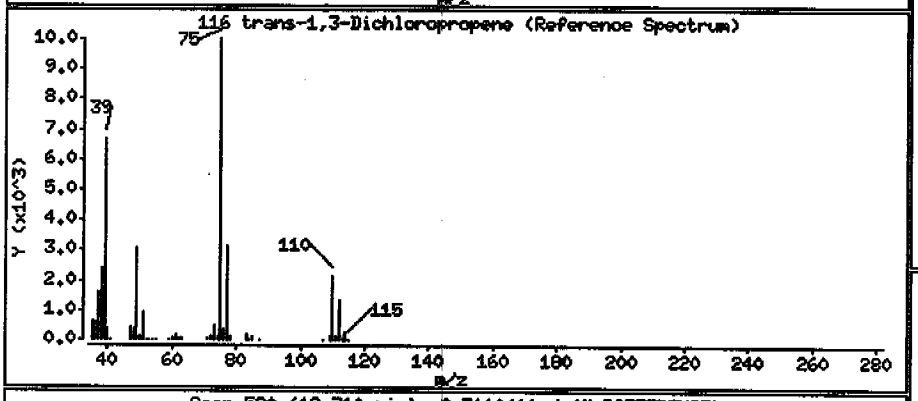
Concentration: 53.750 PPBV

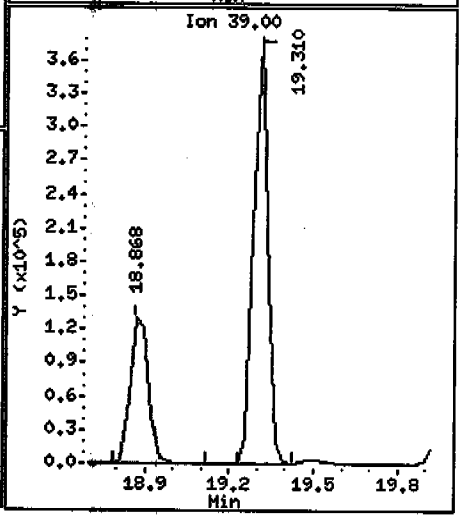


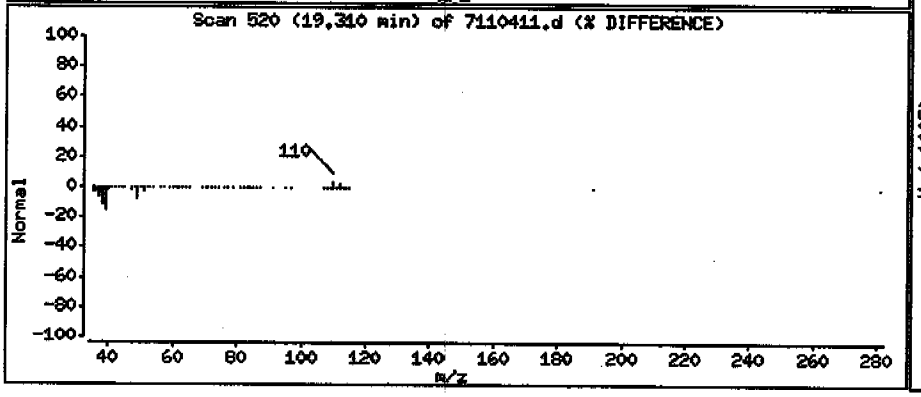












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

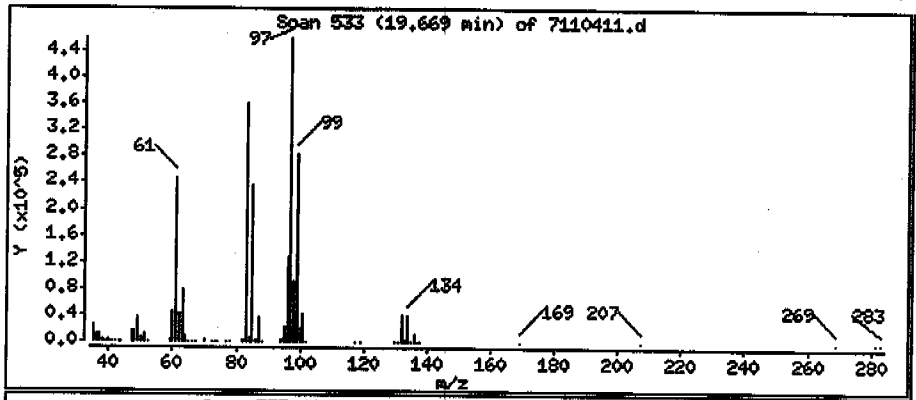
Operator: ab

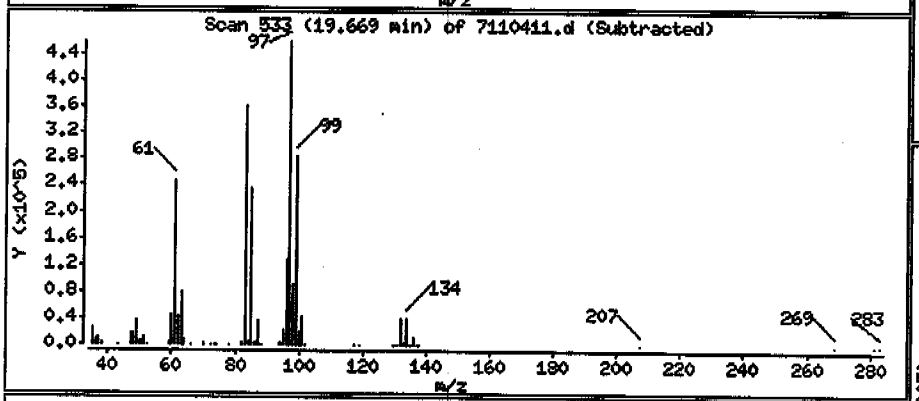
Column phase: RTx-624

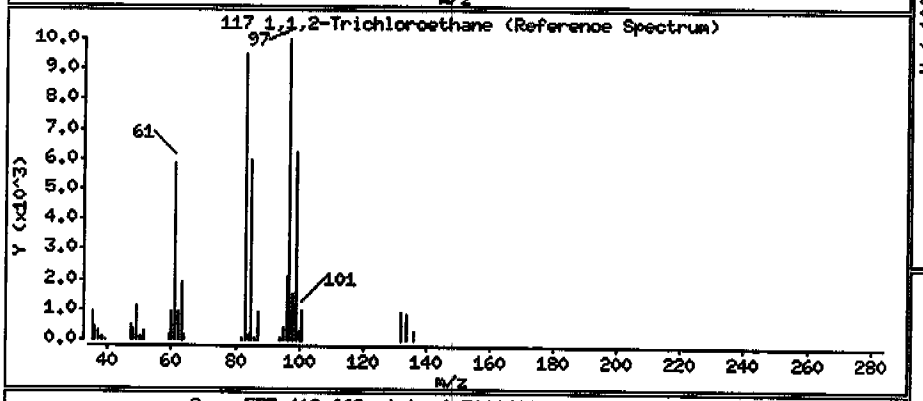
Column diameter: 0.53

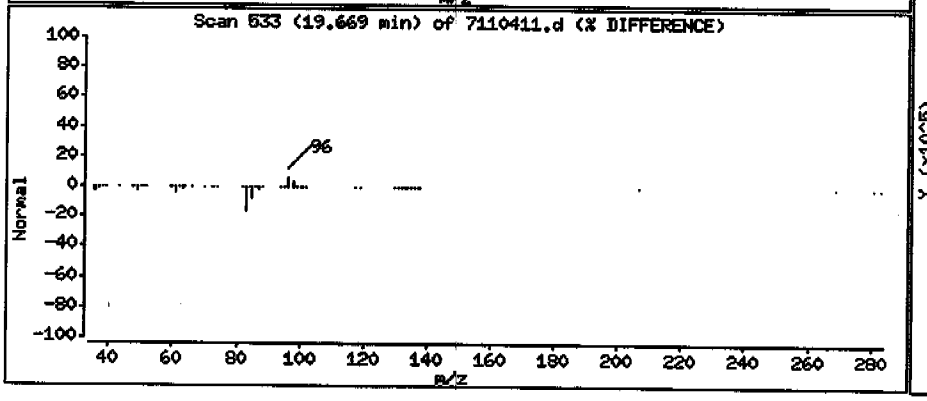
117 1,1,2-Trichloroethane

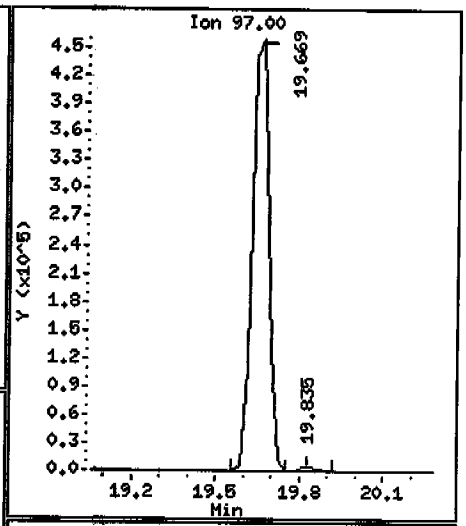
Concentration: 54.940 PPBV

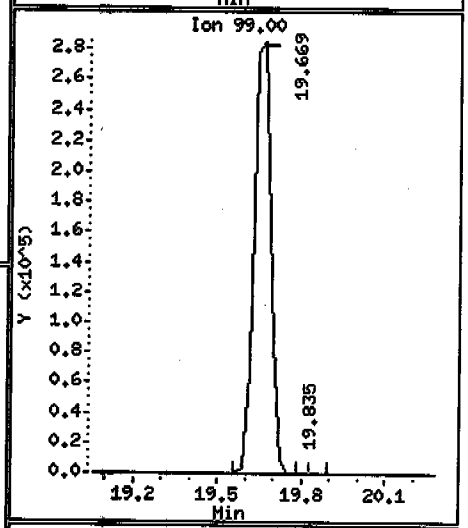


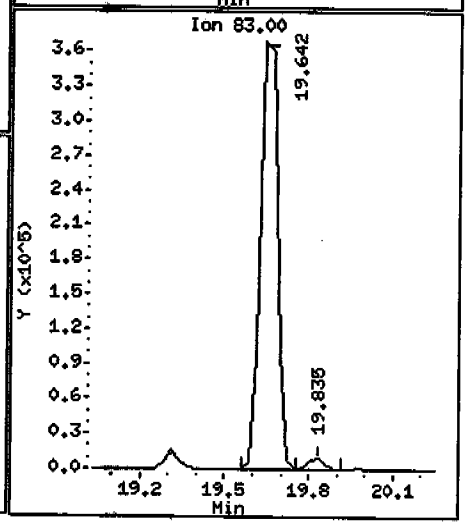












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

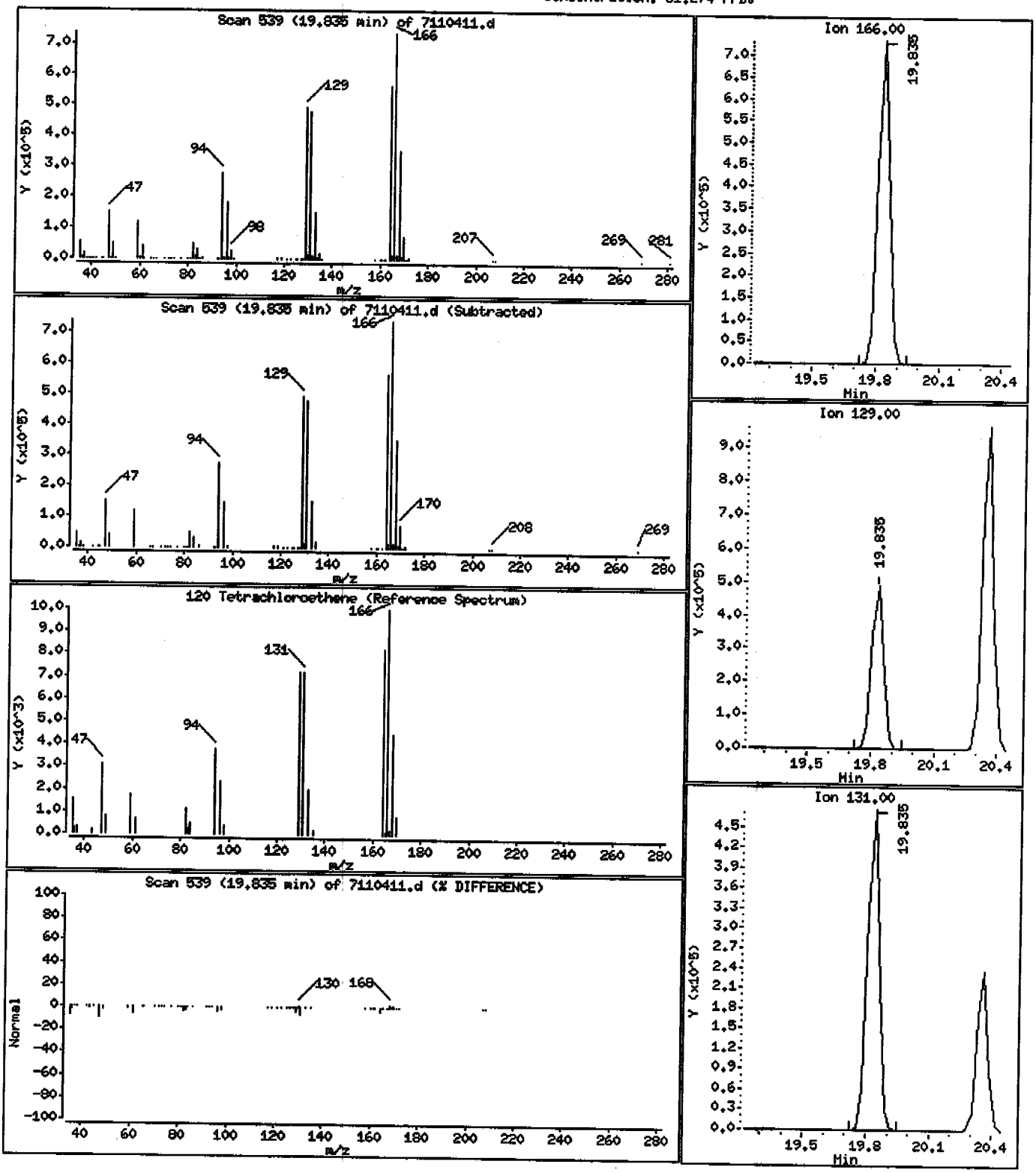
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

120 Tetrachloroethene

Concentration: 61.274 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

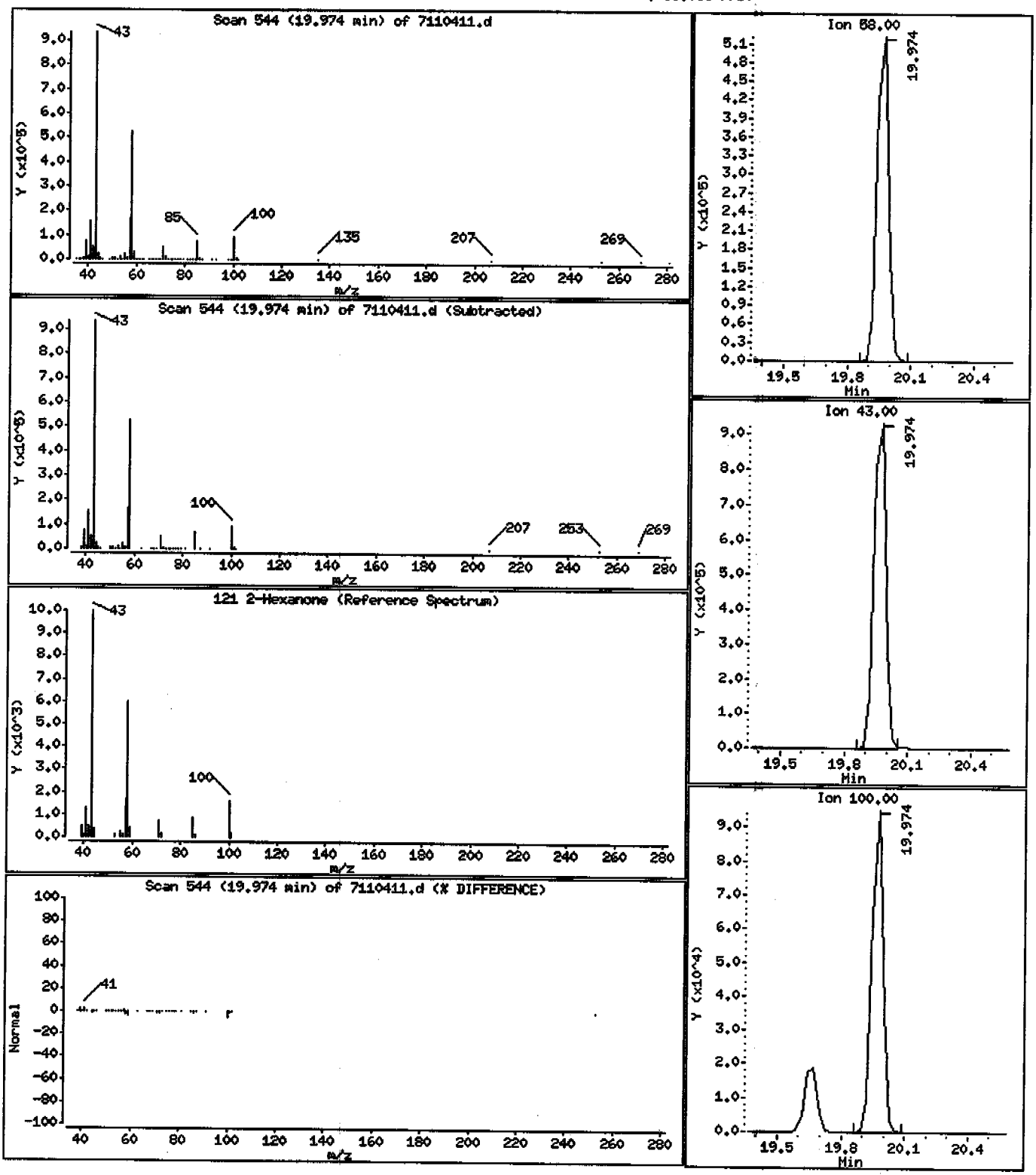
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

121 2-Hexanone

Concentration: 53.056 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

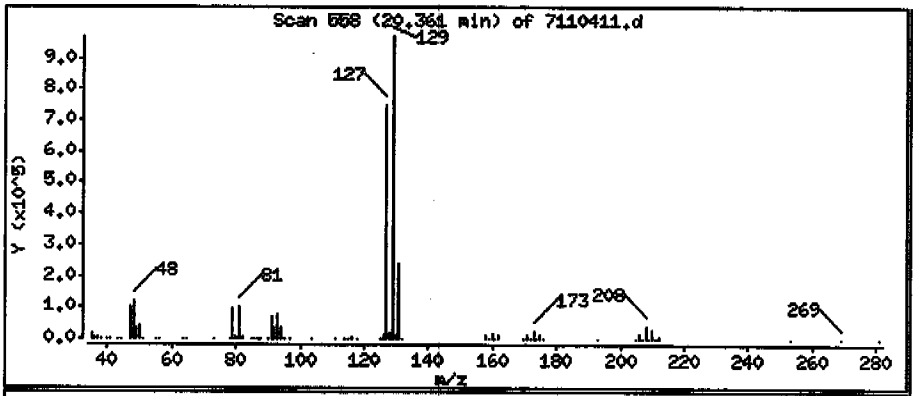
Operator: ab

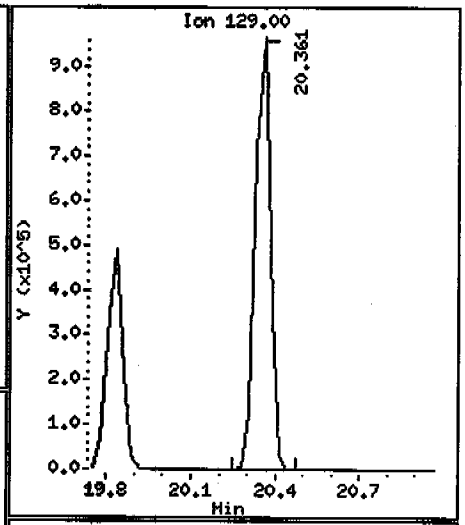
Column phase: RTx-624

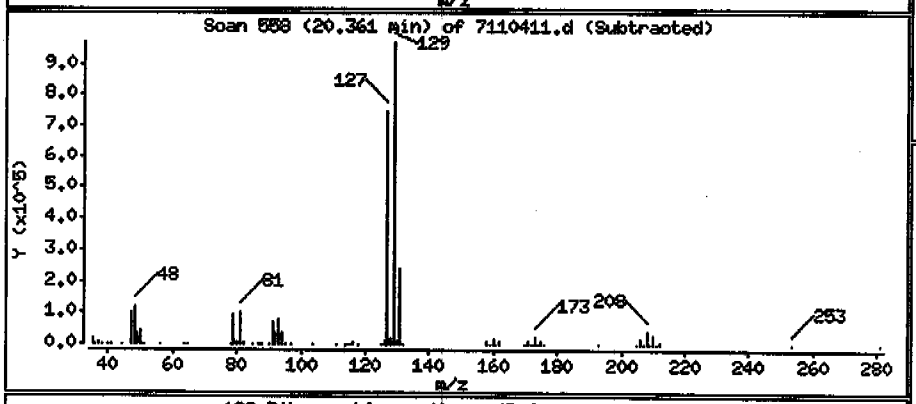
Column diameter: 0.53

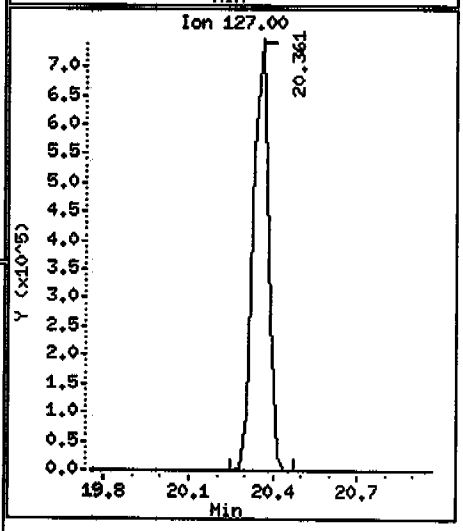
122 Dibromochloromethane

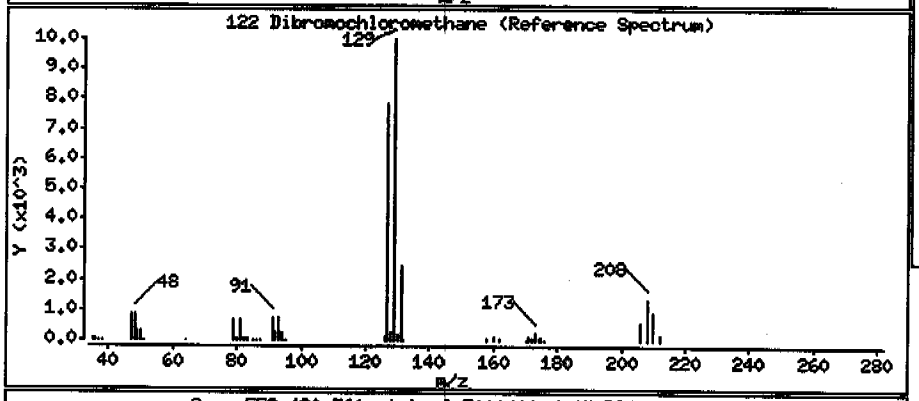
Concentration: 58.813 PPBV

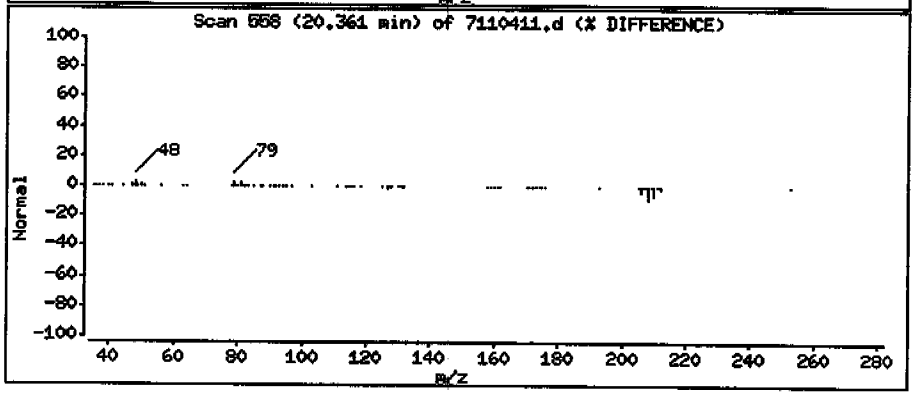












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

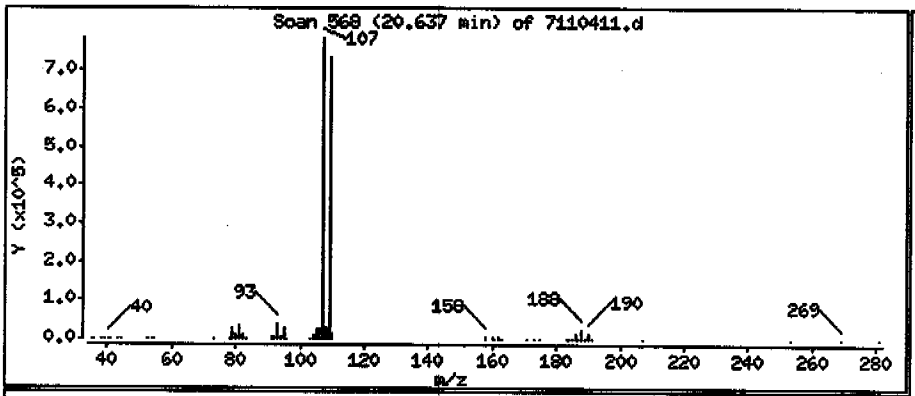
Operator: ab

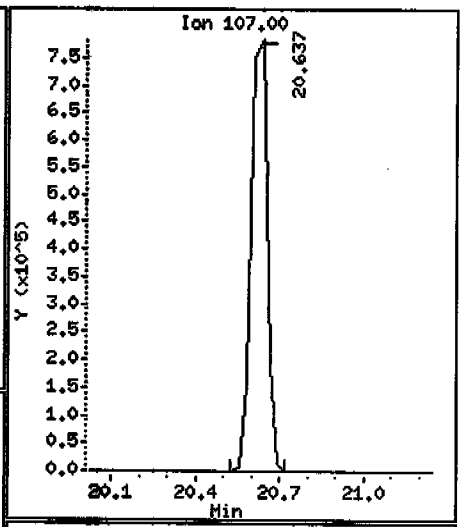
Column phase: RTx-624

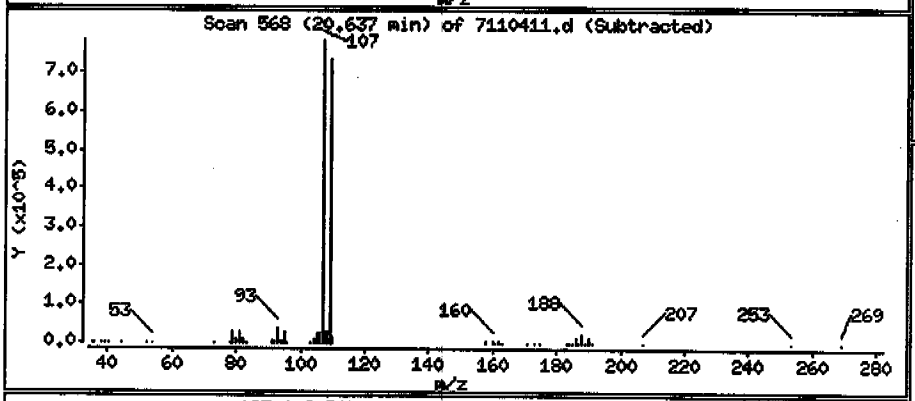
Column diameter: 0.53

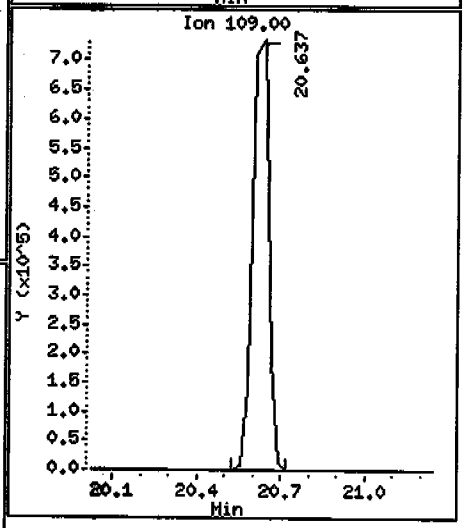
123 1,2-Dibromoethane

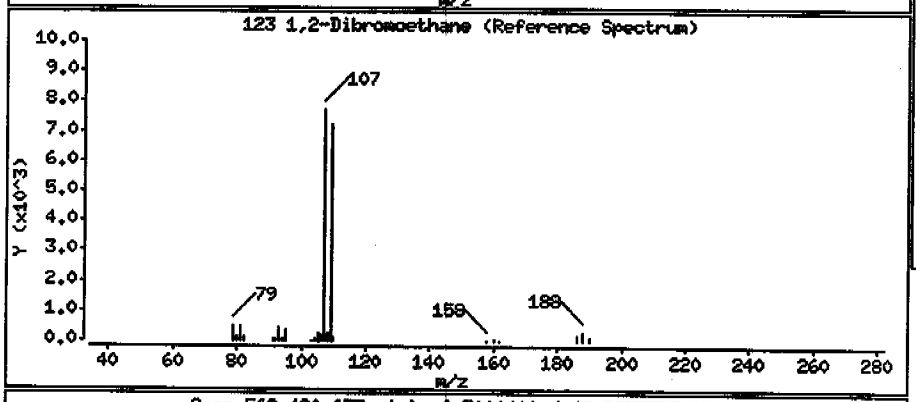
Concentration: 55.177 PPBV

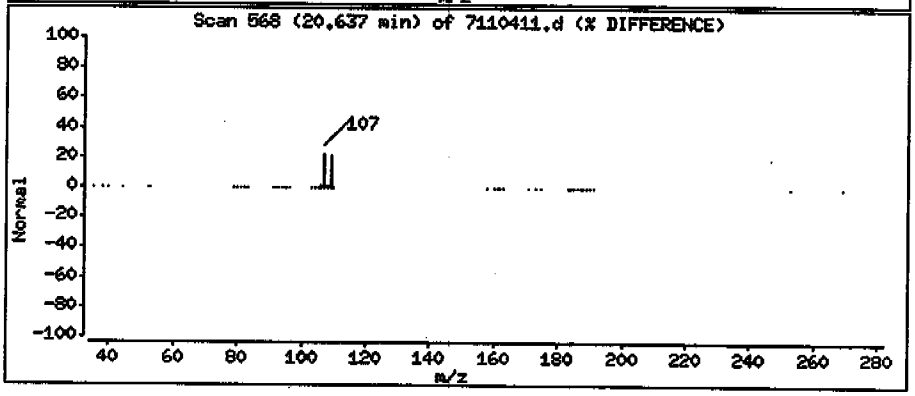












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

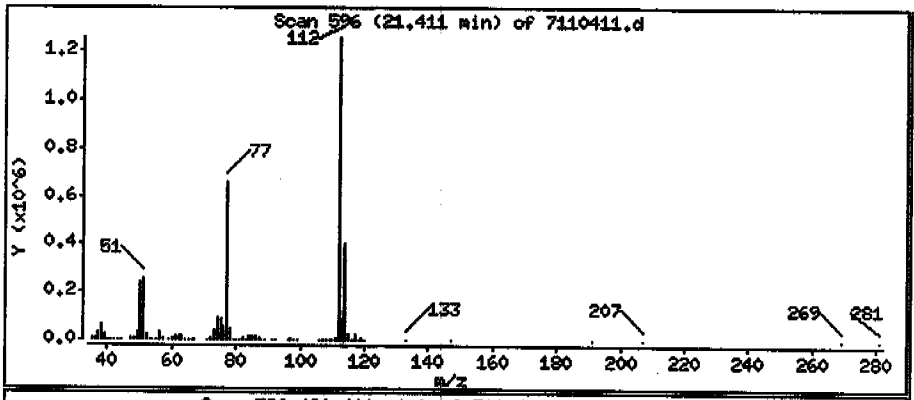
Operator: ab

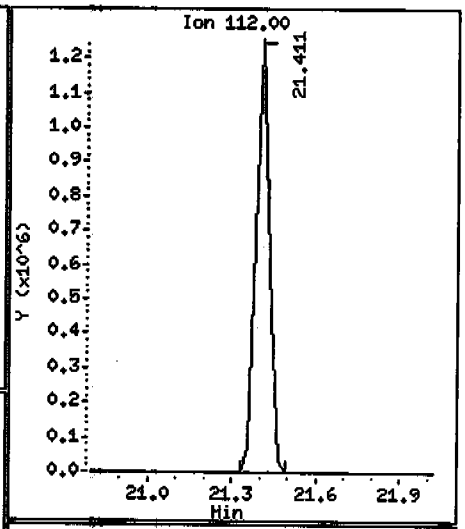
Column phase: RTx-624

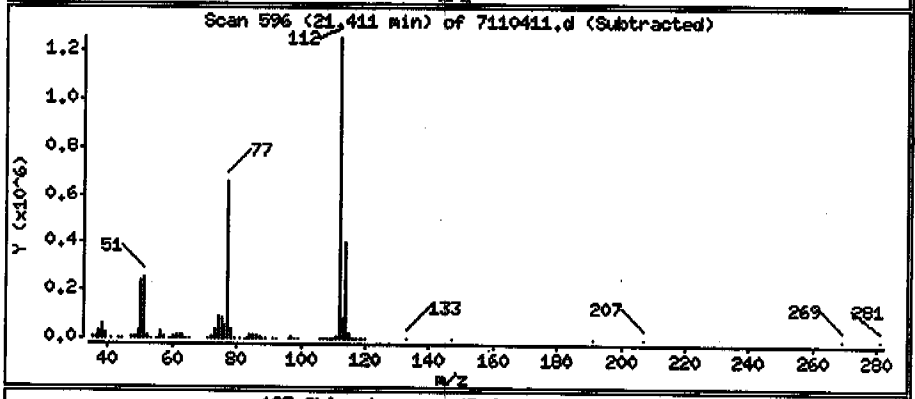
Column diameter: 0.53

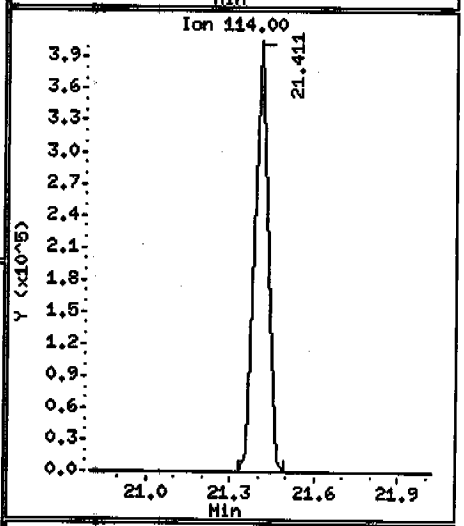
127 Chlorobenzene

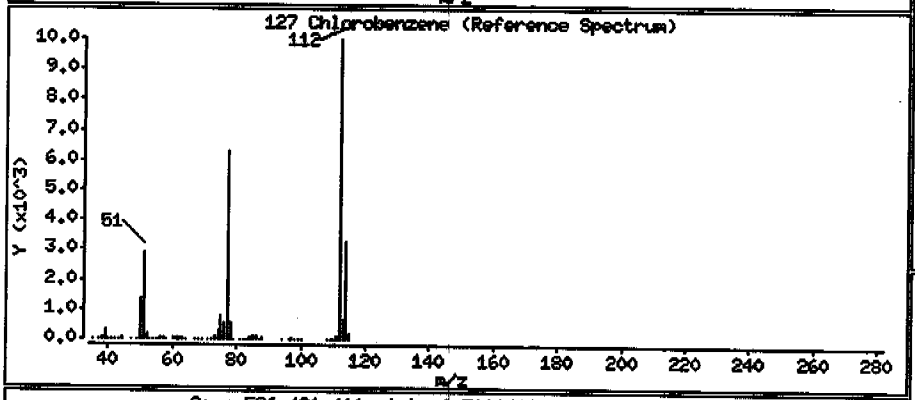
Concentration: 54.003 PPBV

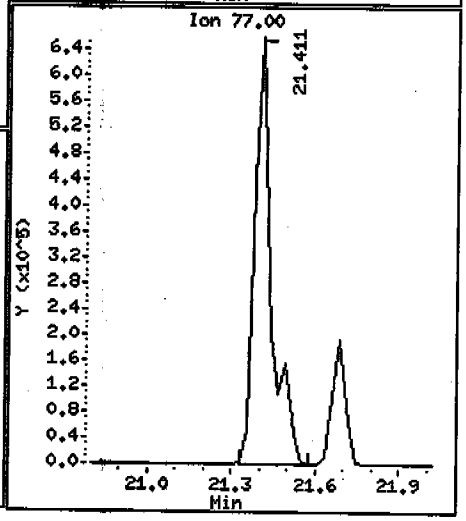


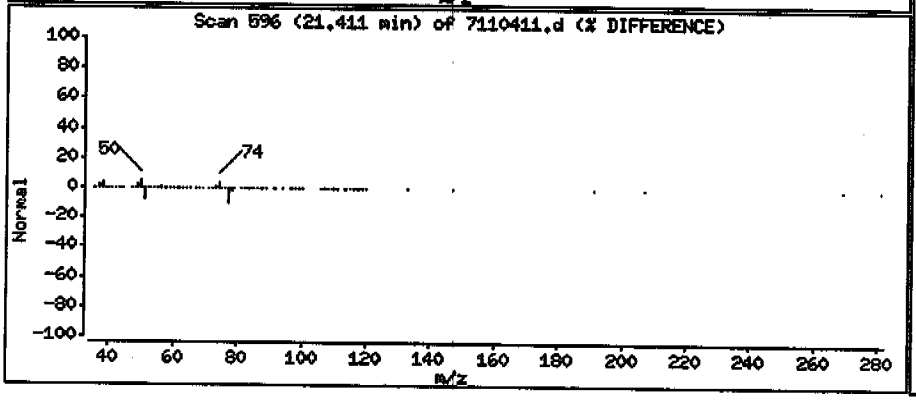












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

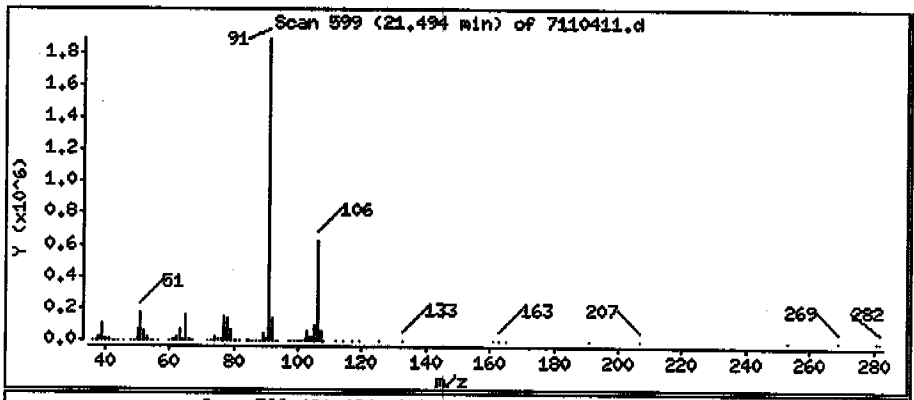
Operator: ab

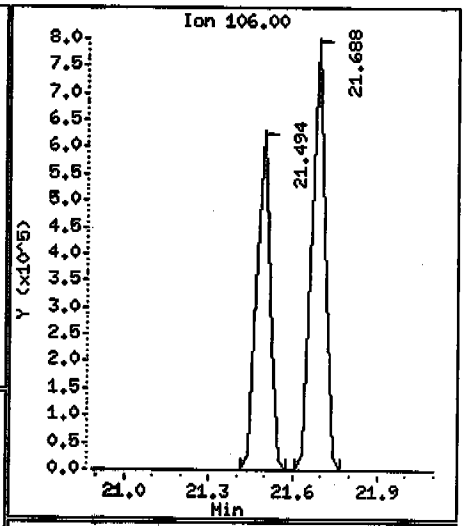
Column phase: RTx-624

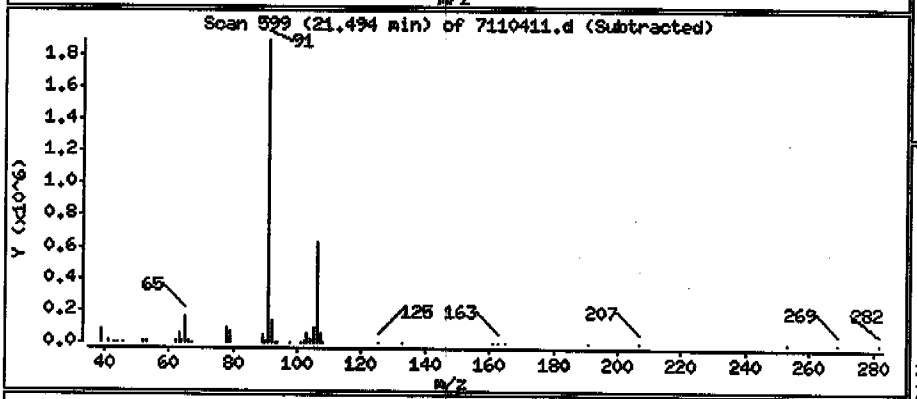
Column diameter: 0.53

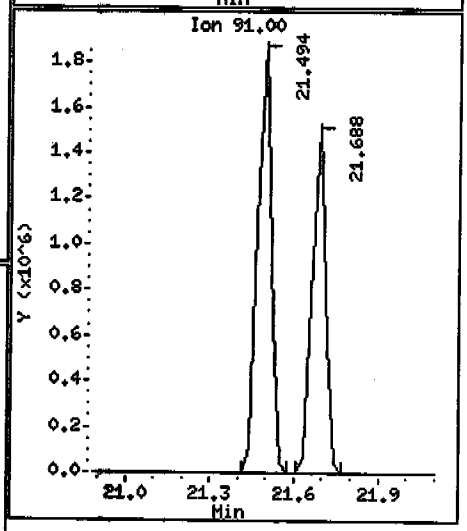
128 Ethyl Benzene

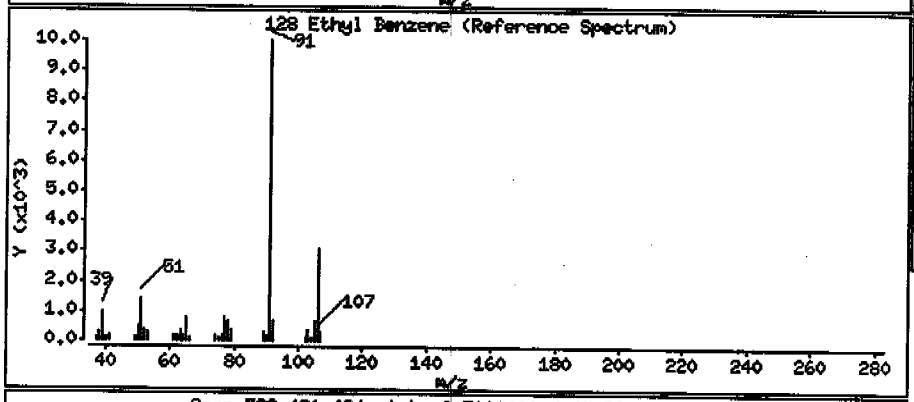
Concentration: 53.119 PPBV

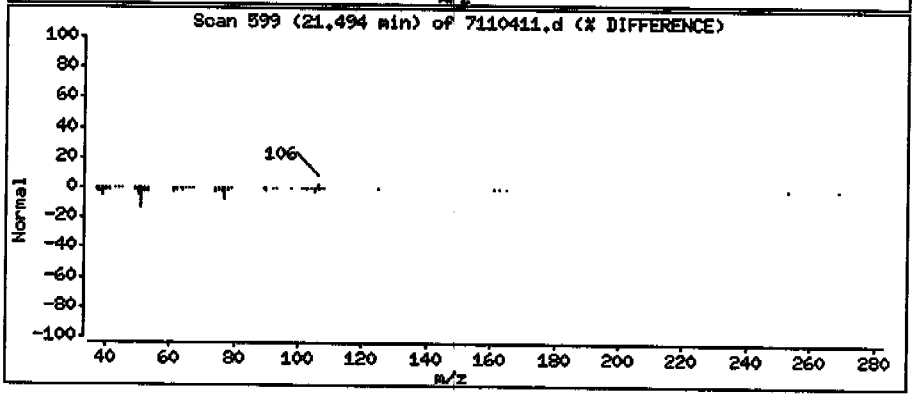












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

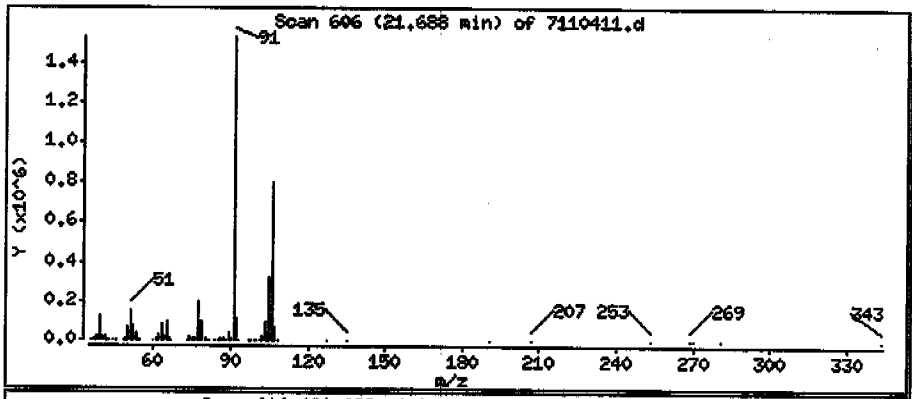
Operator: ab

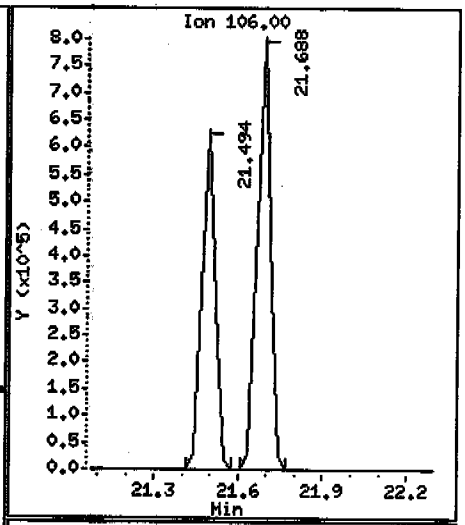
Column phase: RTx-624

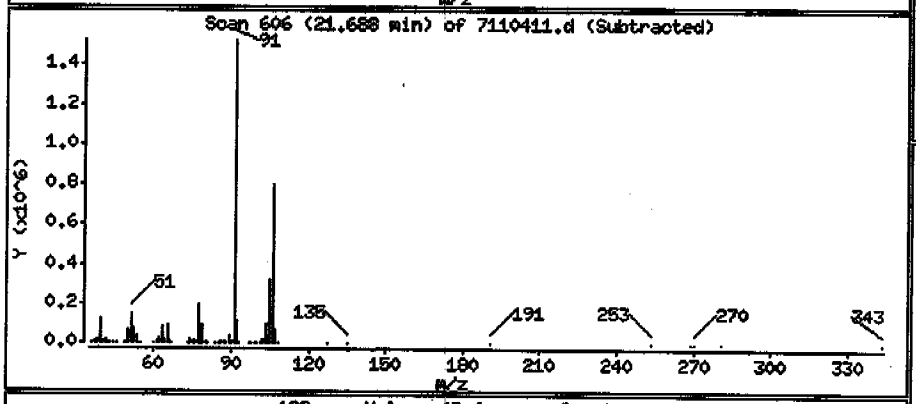
Column diameter: 0.53

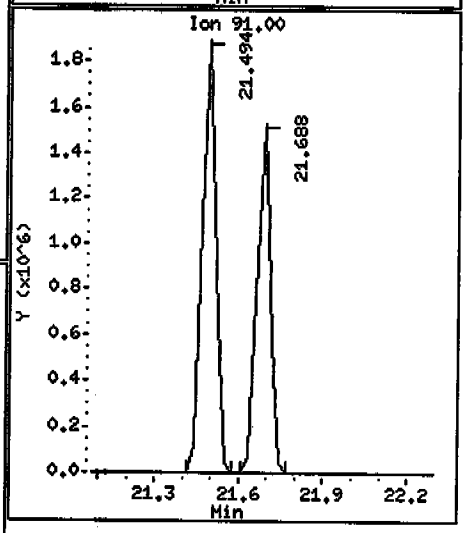
129 m,p-Xylene

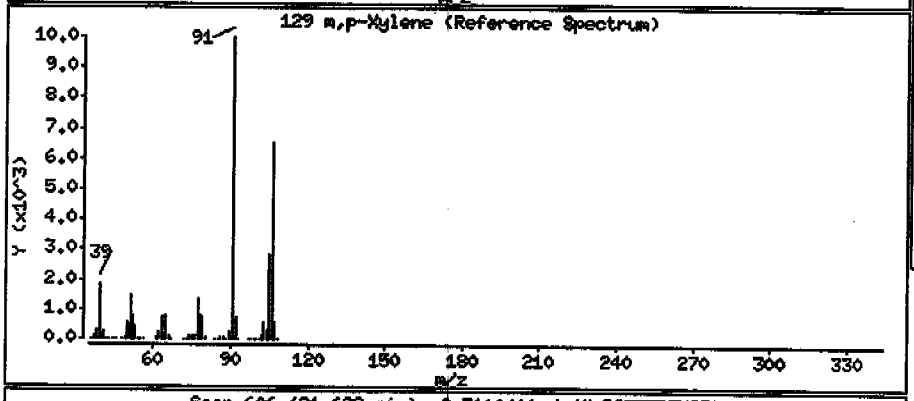
Concentration: 53.268 PPBV

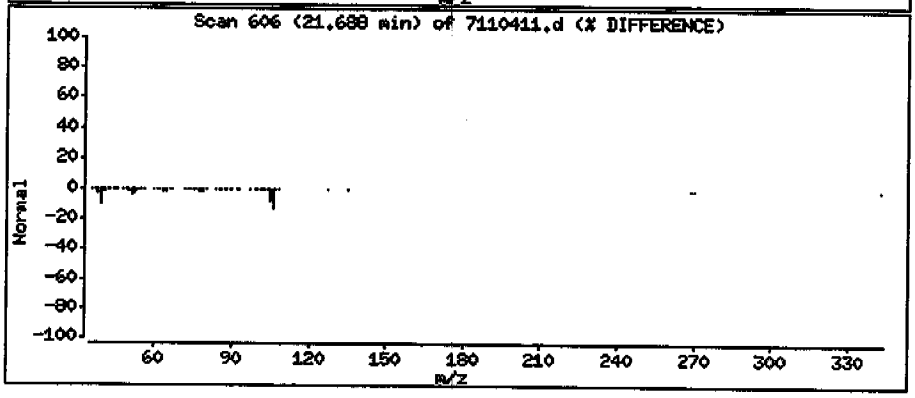












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

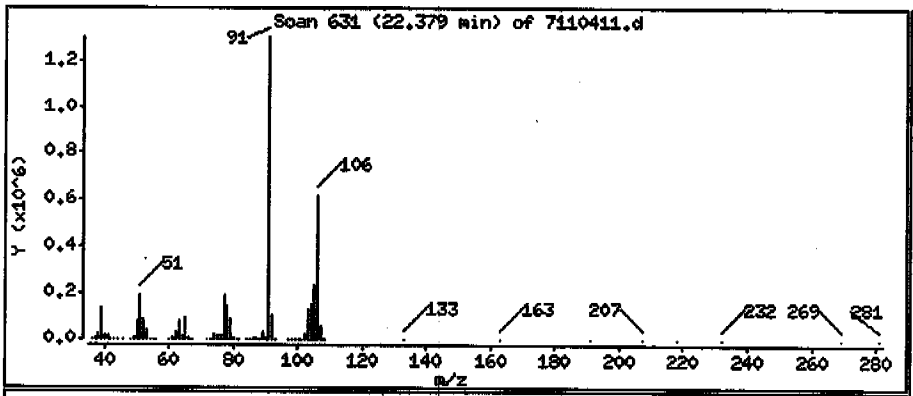
Operator: ab

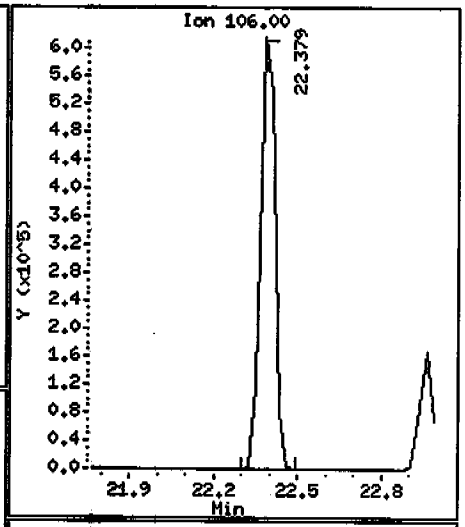
Column phase: RTx-624

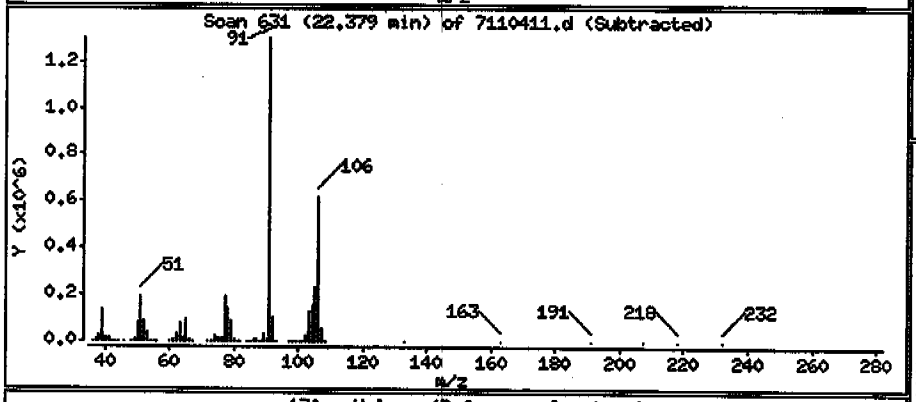
Column diameter: 0.53

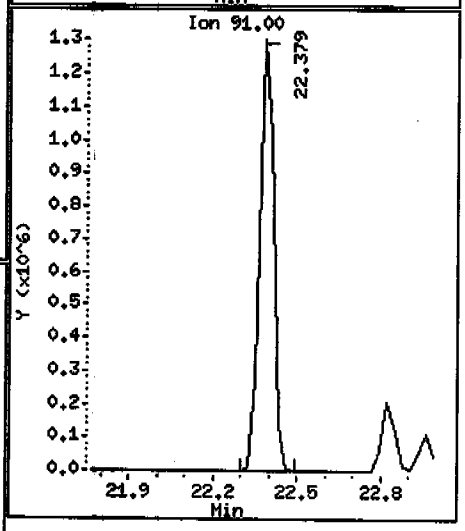
130 o-Xylene

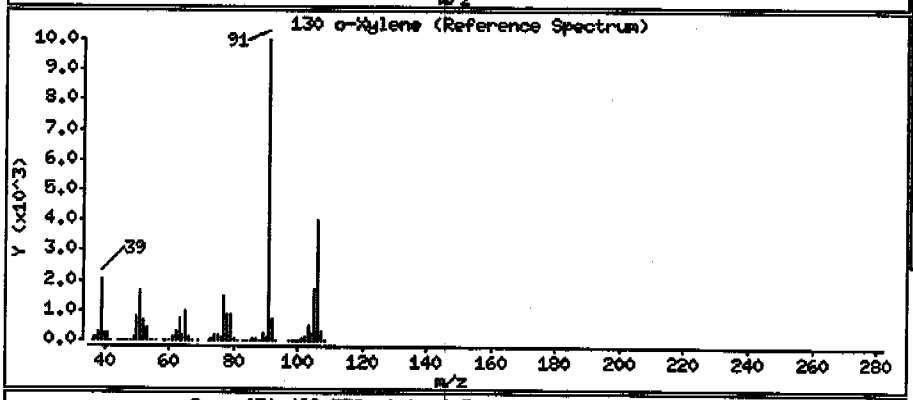
Concentration: 53.338 PPBV

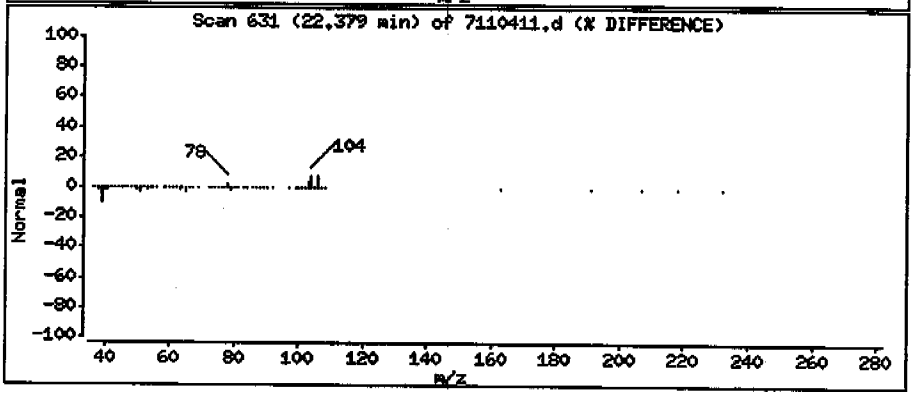












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

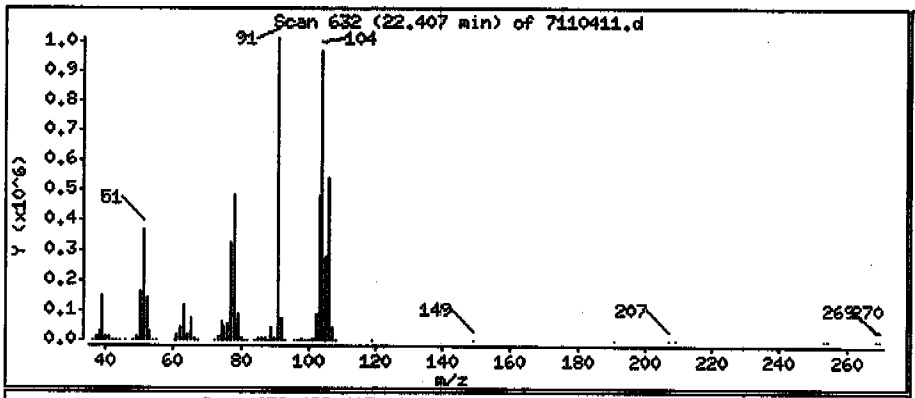
Operator: ab

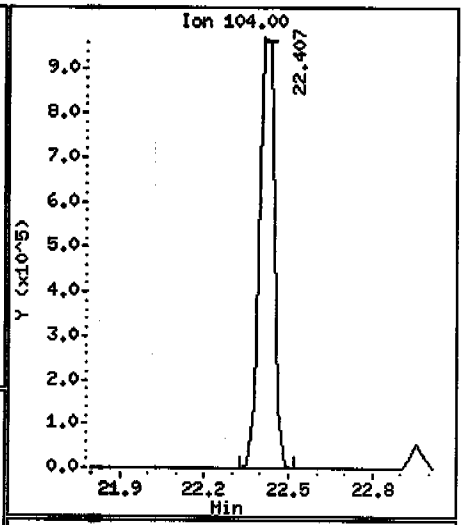
Column phase: RTx-624

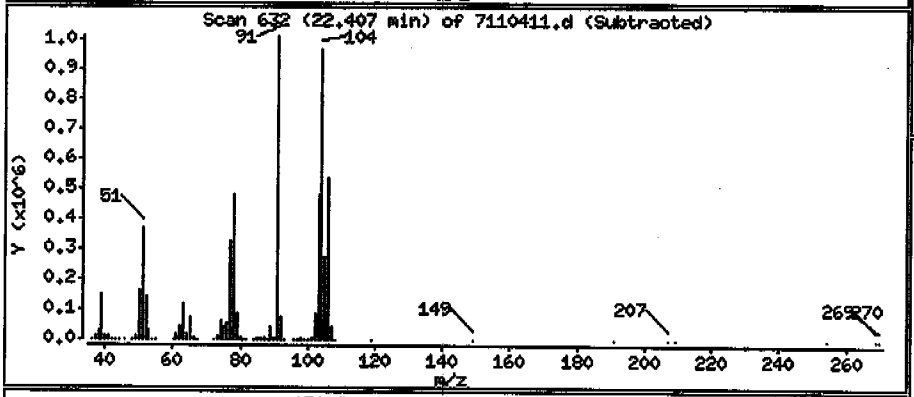
Column diameter: 0.53

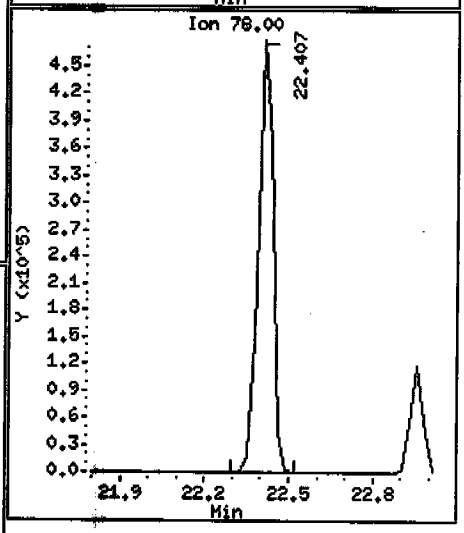
131 Styrene

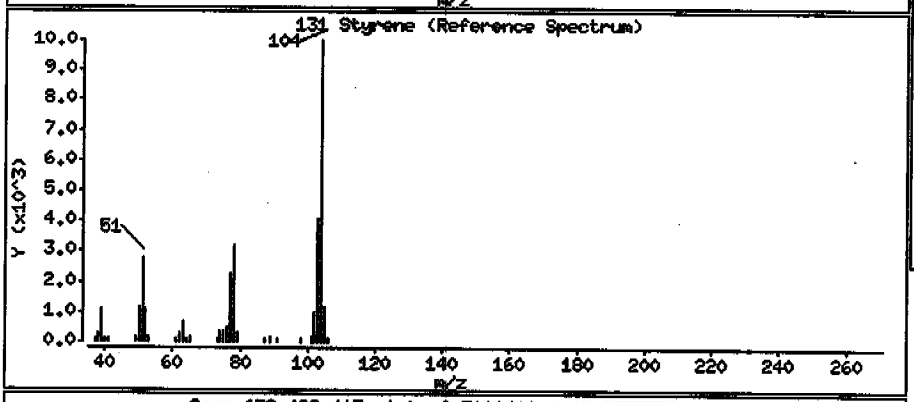
Concentration: 56.477 PPBV

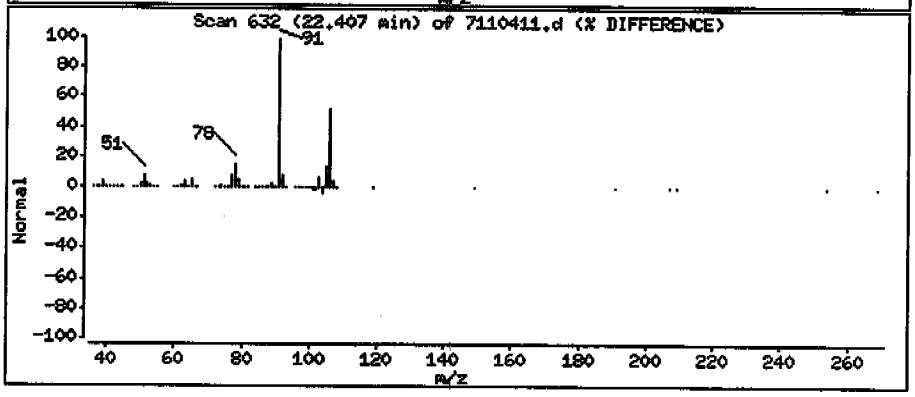












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

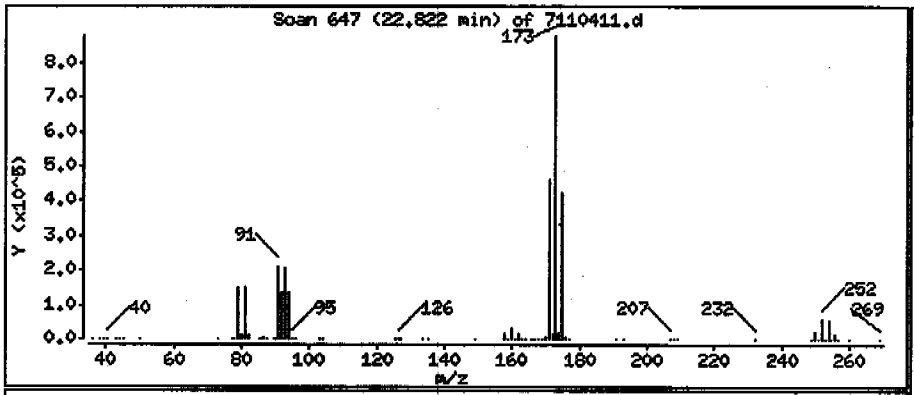
Operator: ab

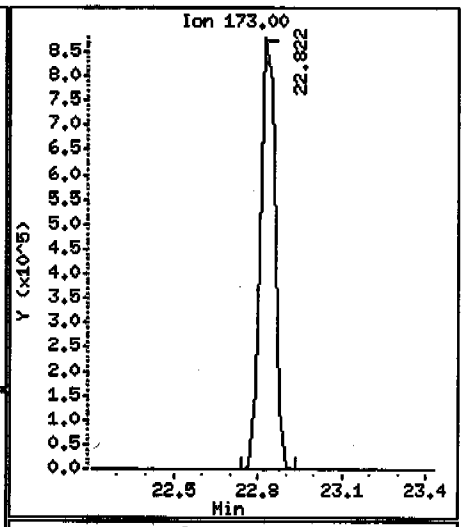
Column phase: RTx-624

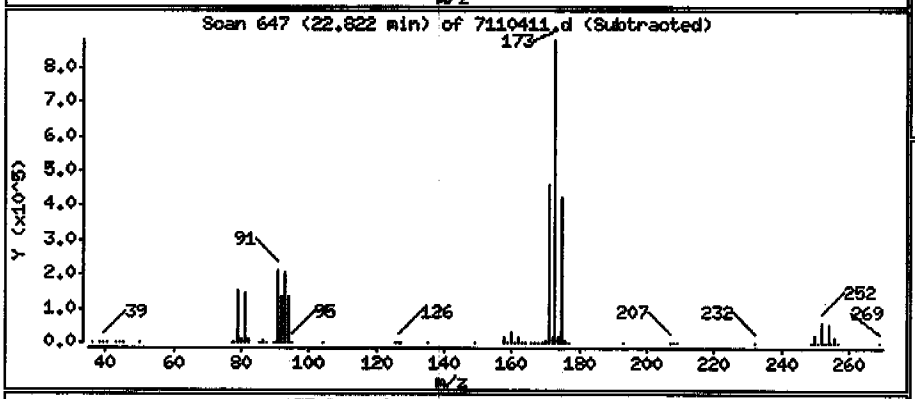
Column diameter: 0.53

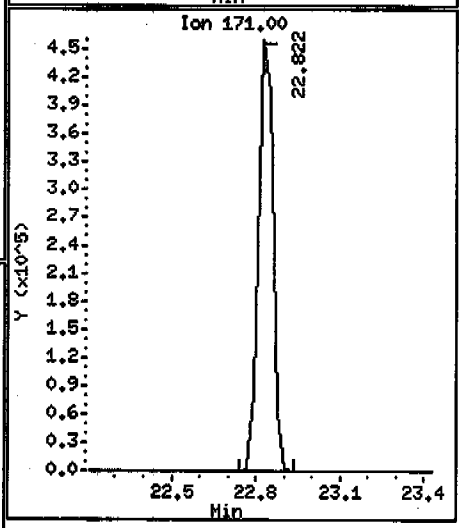
133 Bromoform

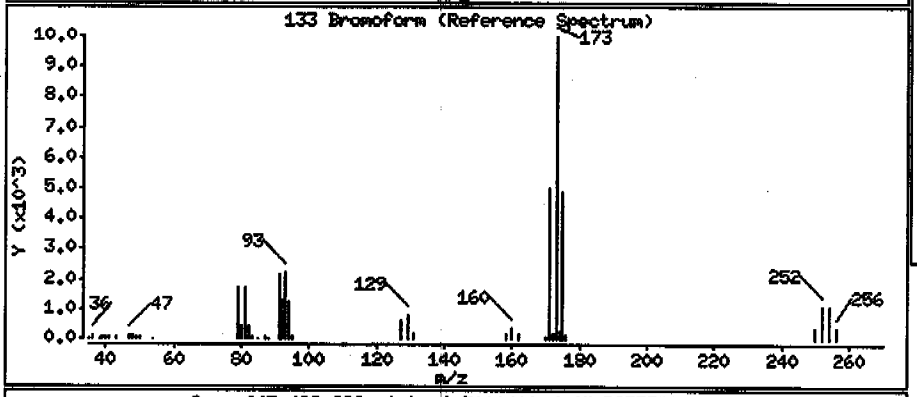
Concentration: 59.856 PPBV

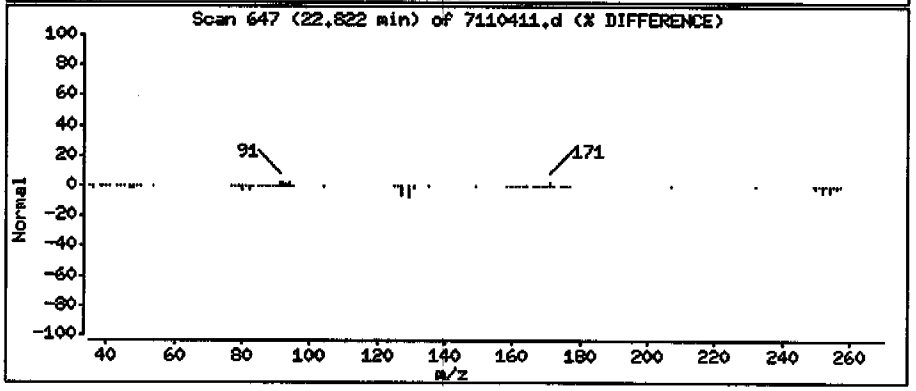












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

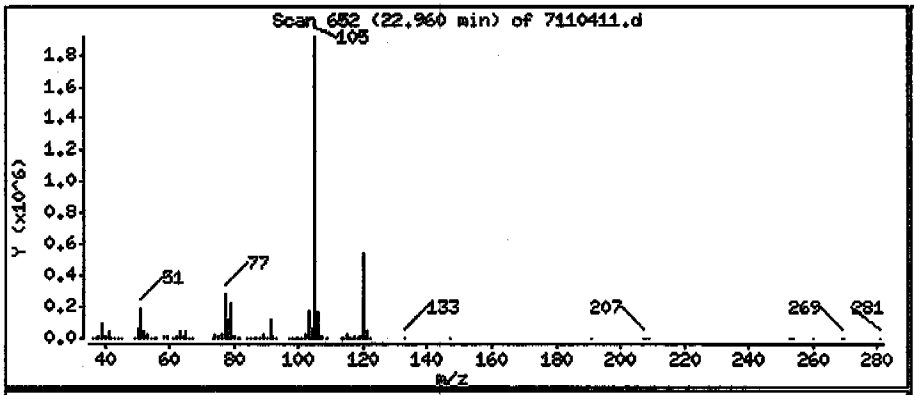
Operator: ab

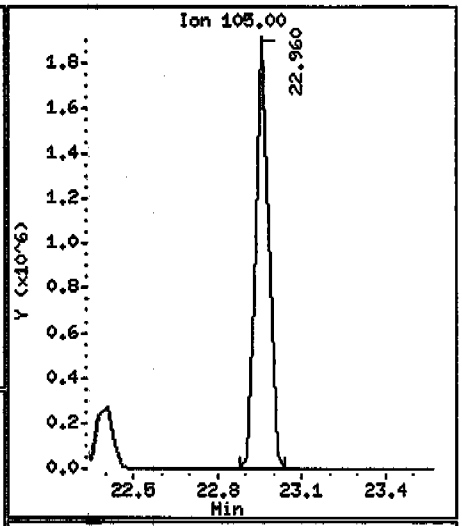
Column phase: RTx-624

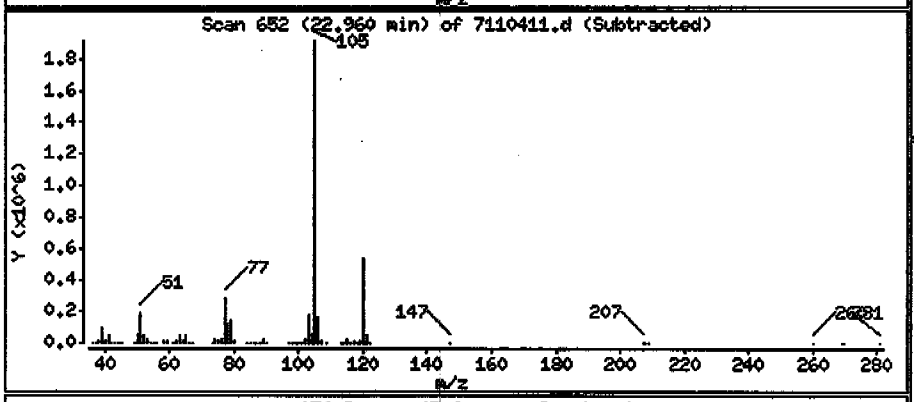
Column diameter: 0.53

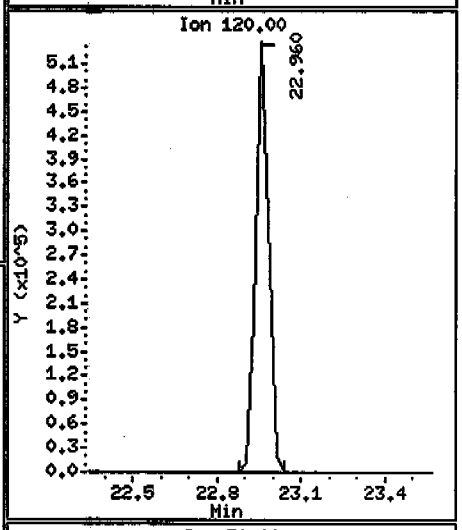
134 Cumene

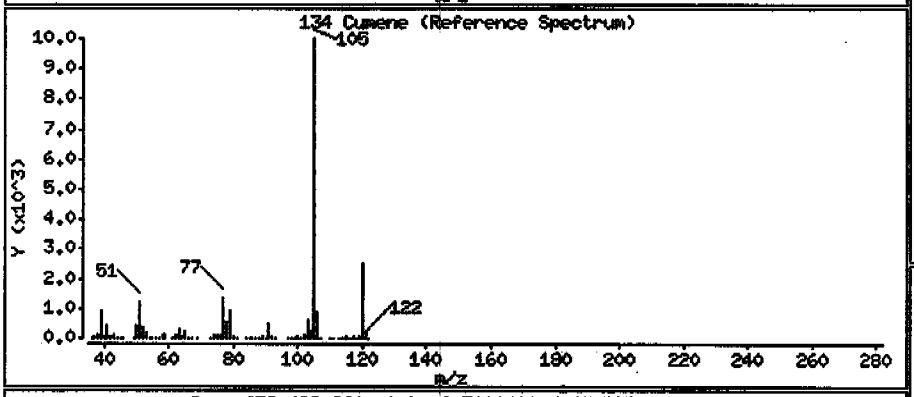
Concentration: 56.723 PPBV

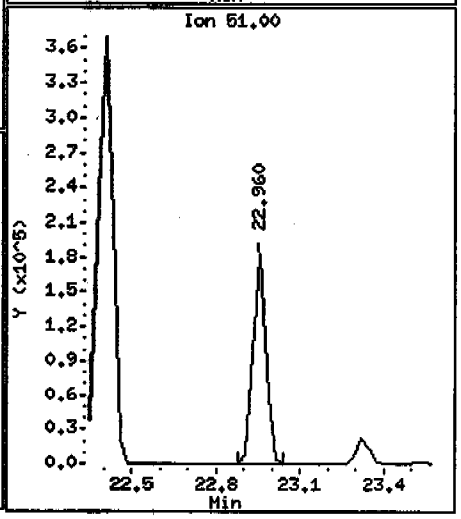


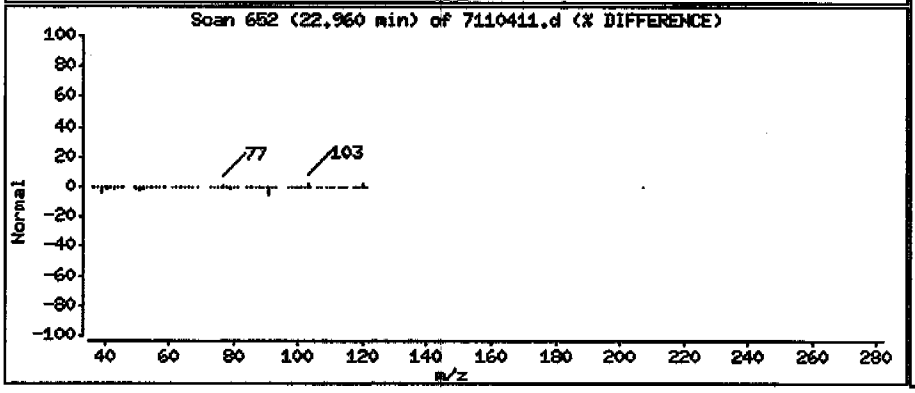












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

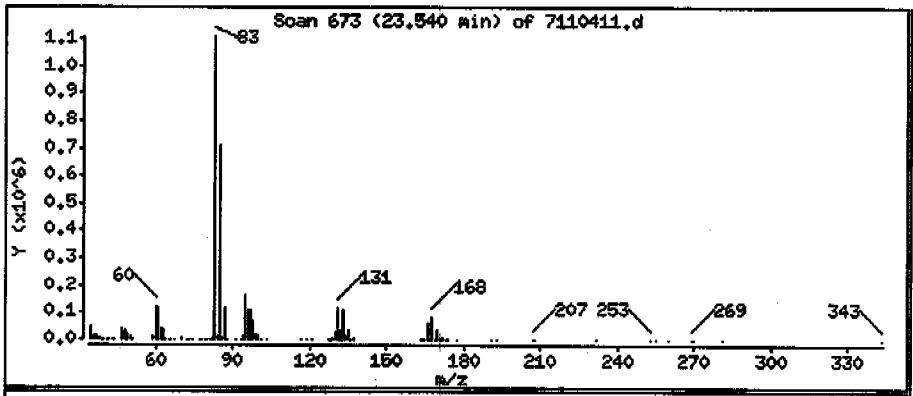
Operator: ab

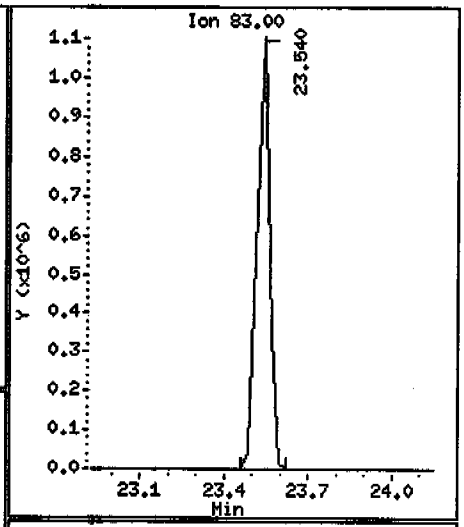
Column phase: RTx-624

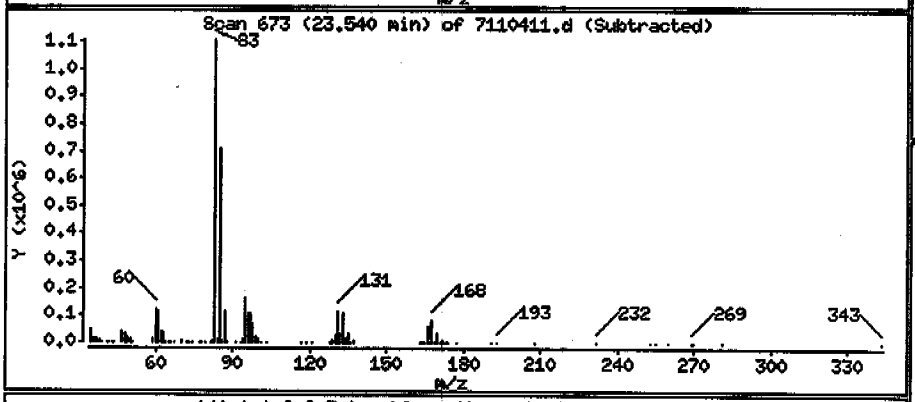
Column diameter: 0.53

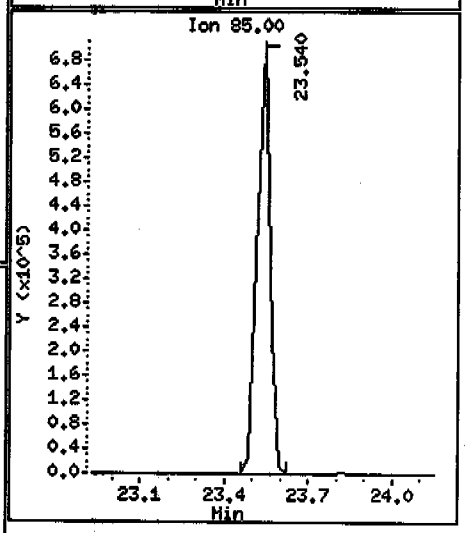
140 1,1,2,2-Tetrachloroethane

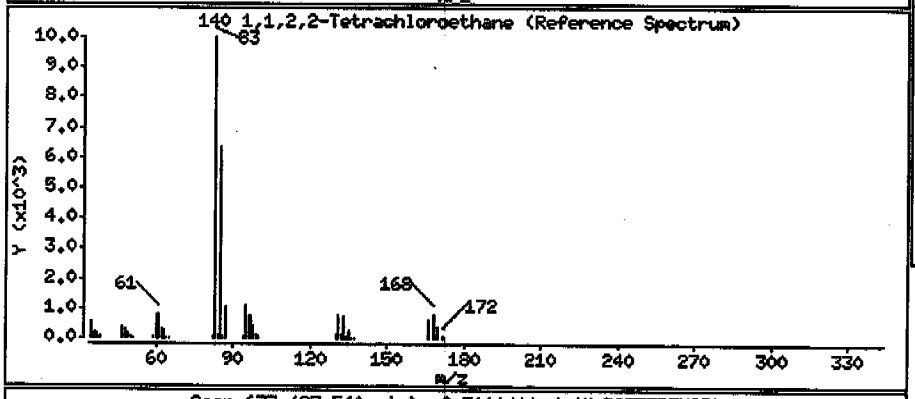
Concentration: 48.465 PPBV

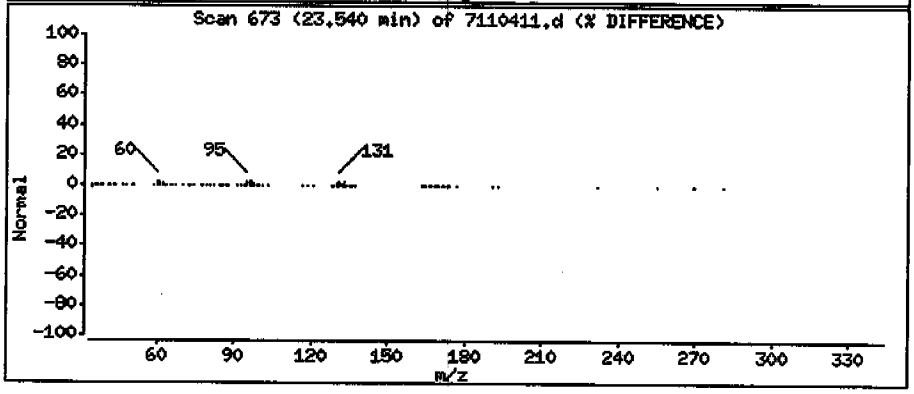












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

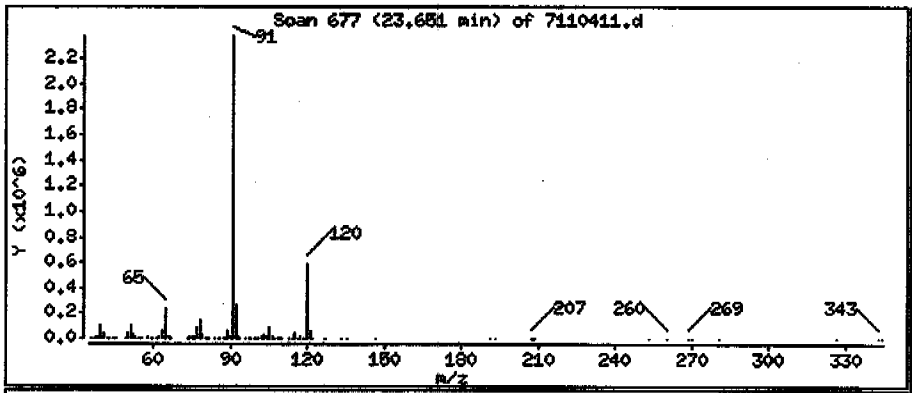
Operator: ab

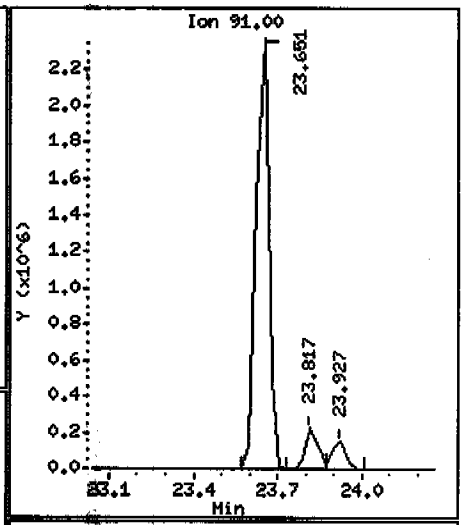
Column phase: RTx-624

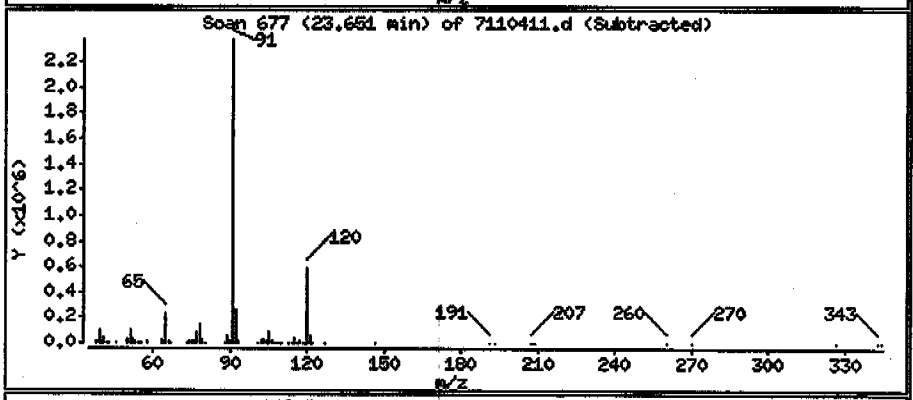
Column diameter: 0.53

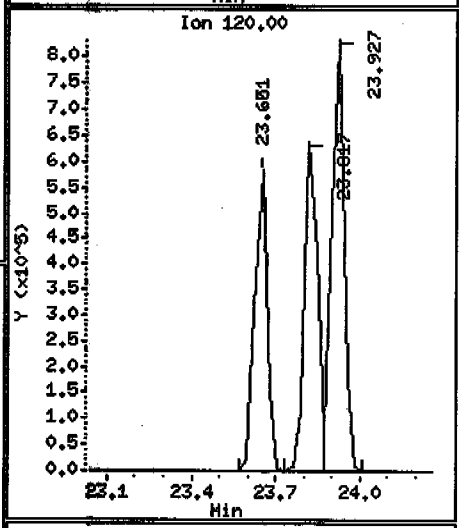
142 Propylbenzene

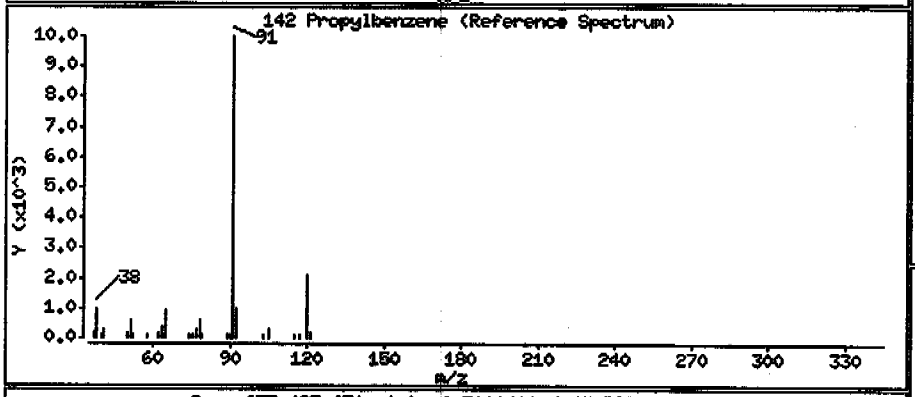
Concentration: 52.279 PPBV

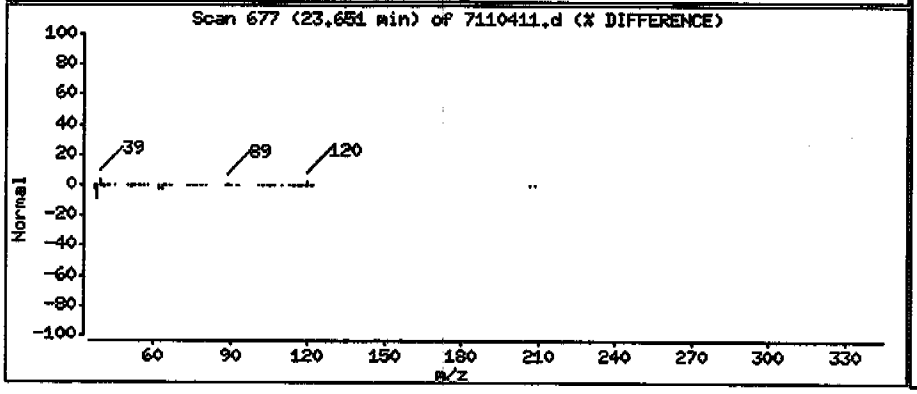


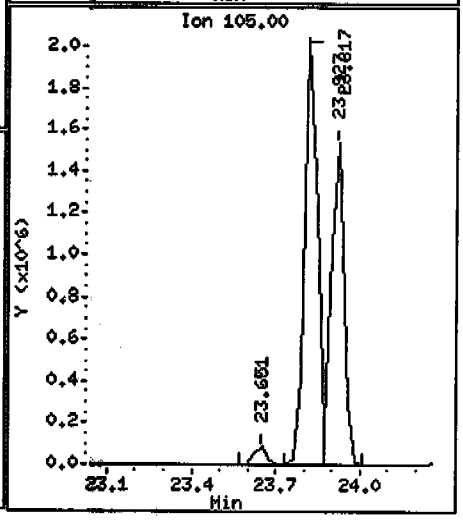












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

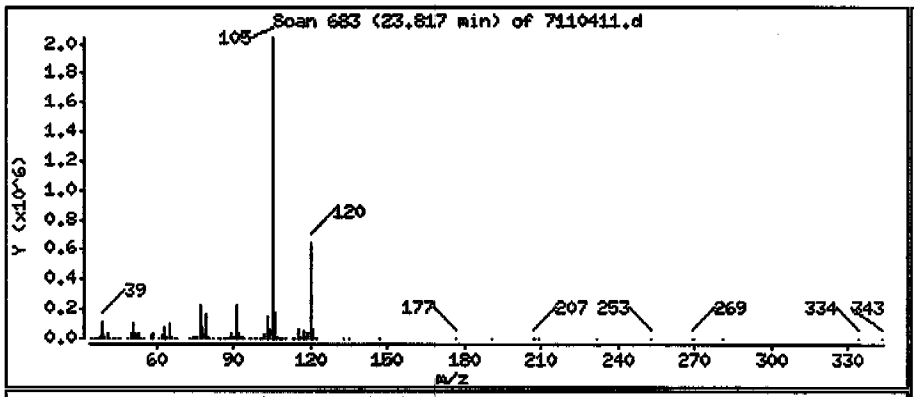
Operator: ab

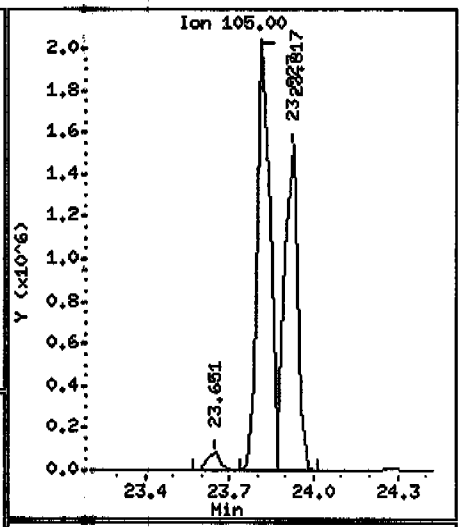
Column phase: RTx-624

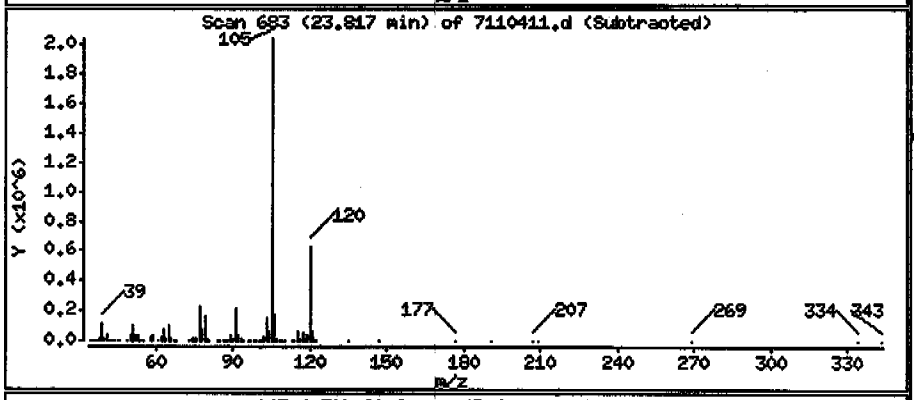
Column diameter: 0.53

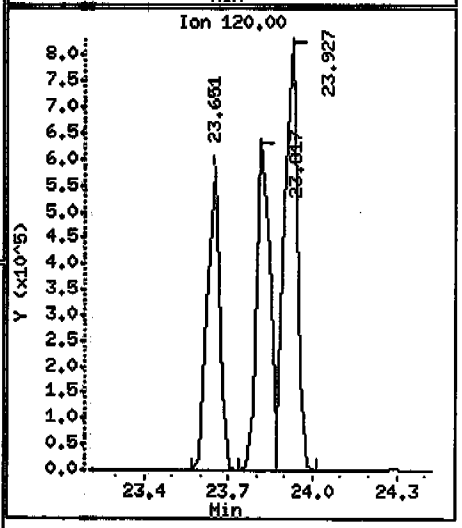
145 4-Ethyltoluene

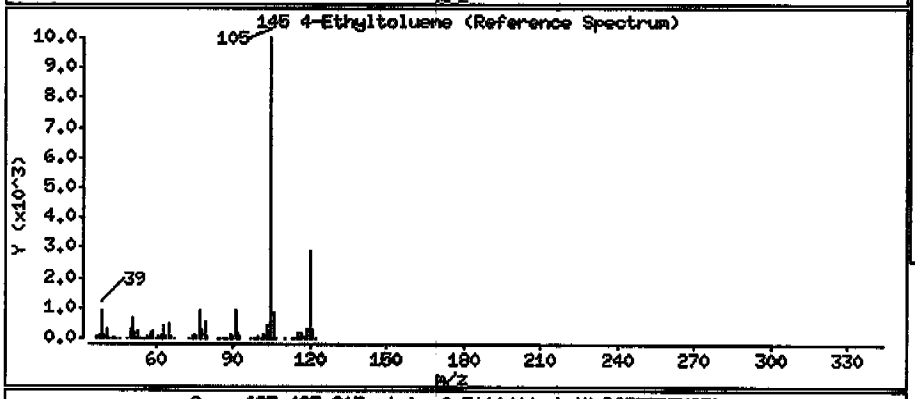
Concentration: 50.610 PPBV

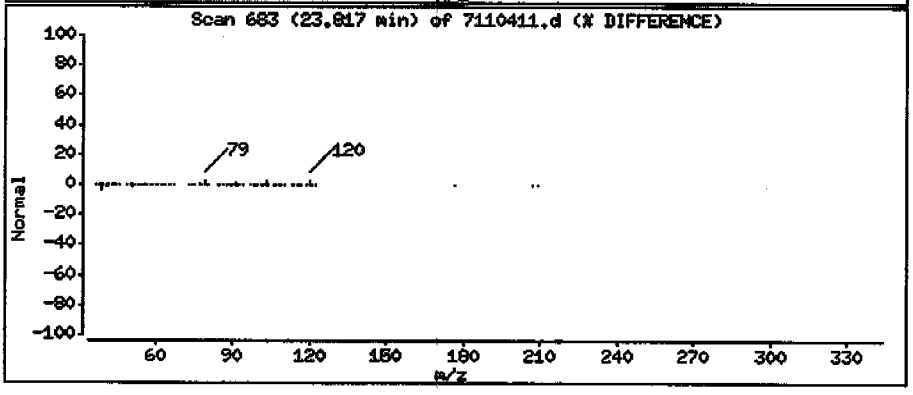












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

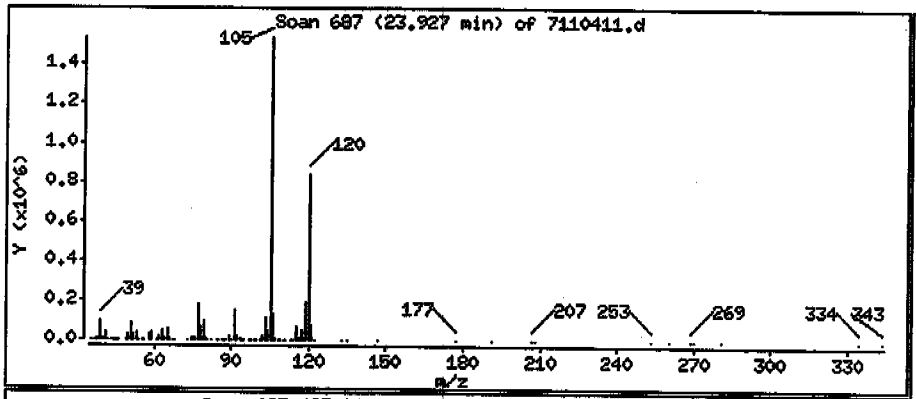
Operator: ab

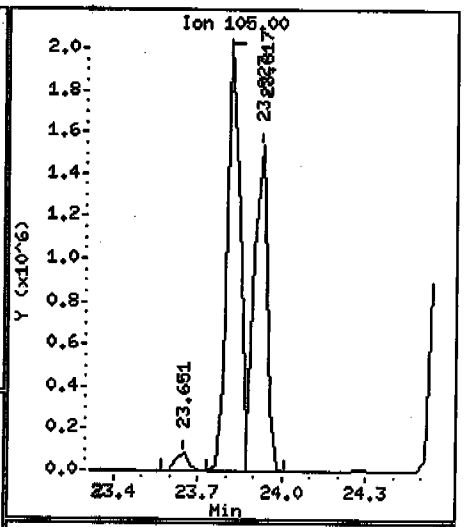
Column phase: RTx-624

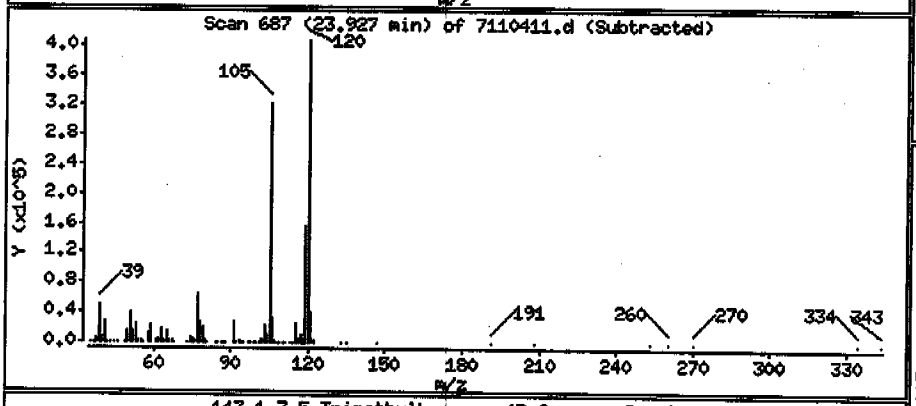
Column diameter: 0.53

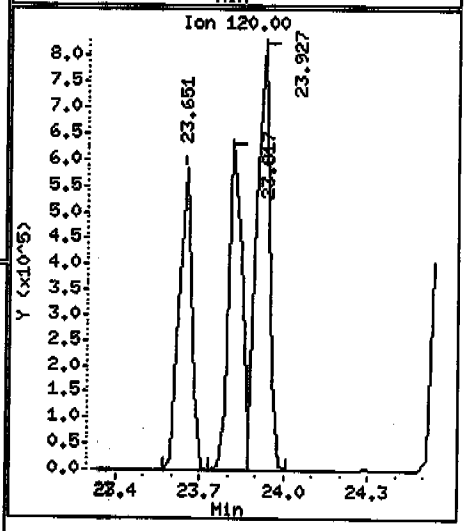
147 1,3,5-Trimethylbenzene

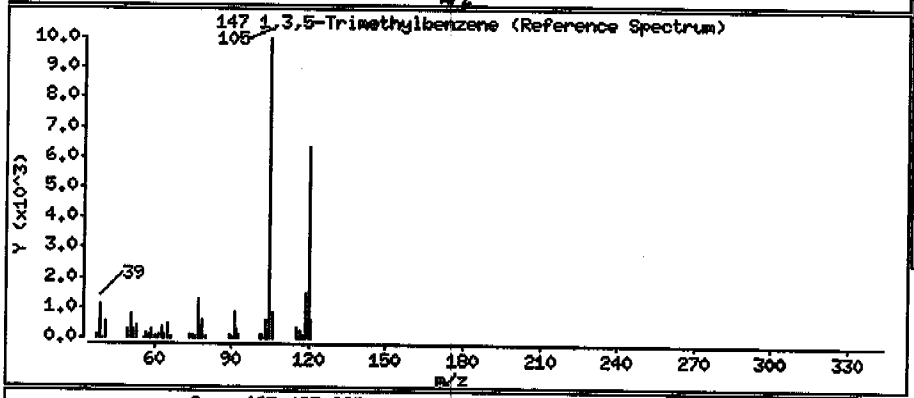
Concentration: 50.933 PPBV

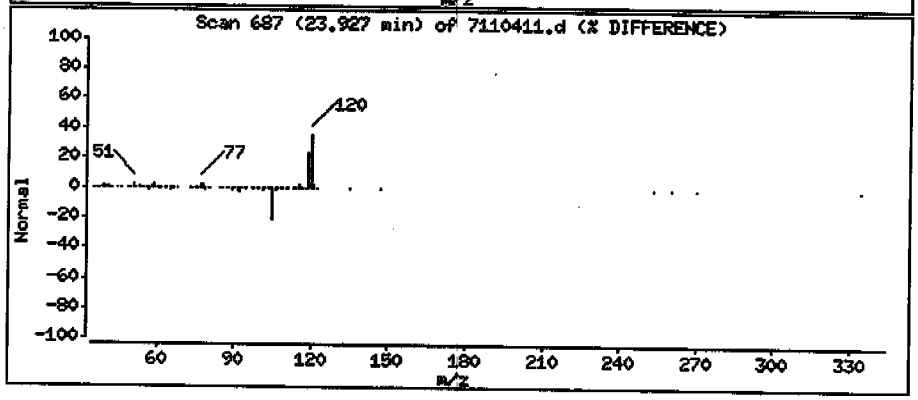












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

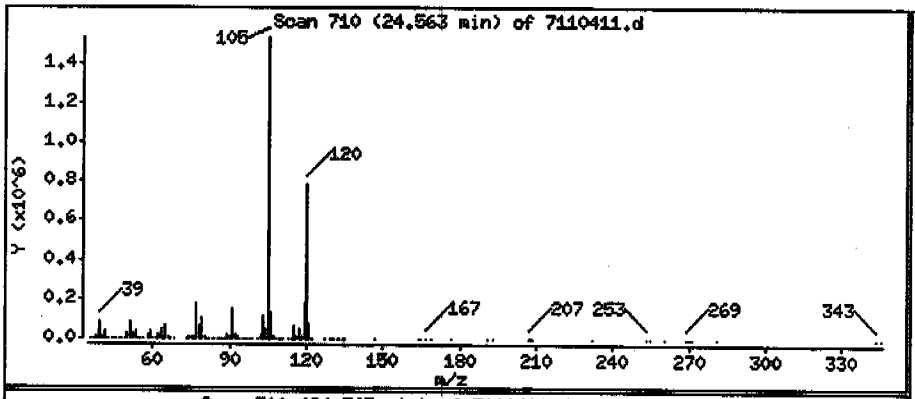
Operator: ab

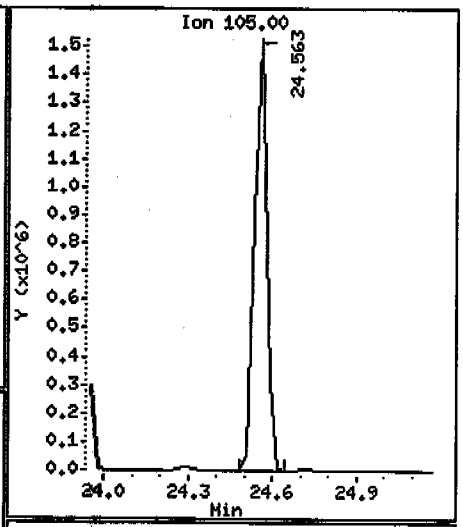
Column phase: RTx-624

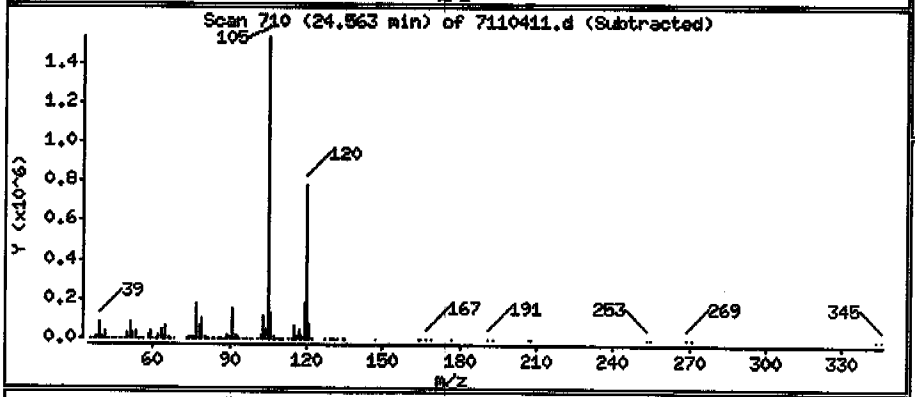
Column diameter: 0.53

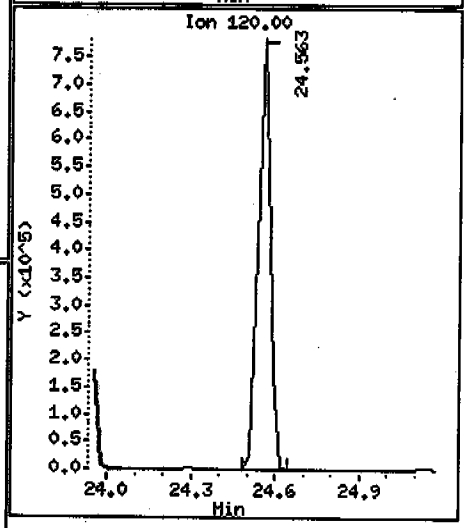
150 1,2,4-Trimethylbenzene

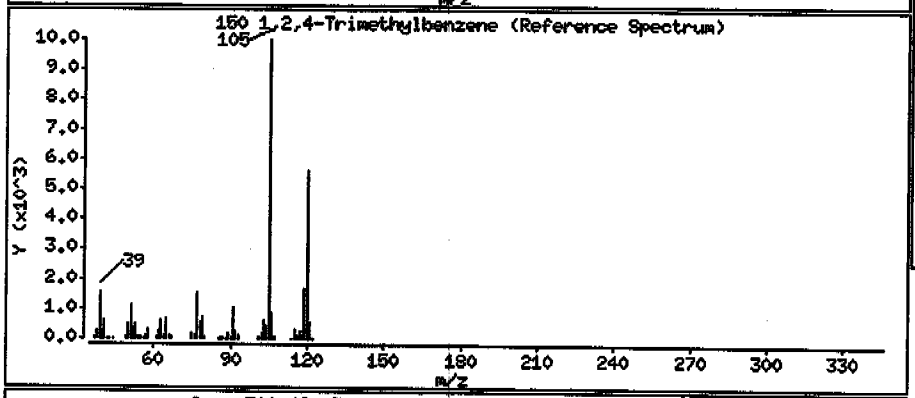
Concentration: 51.315 PPBV

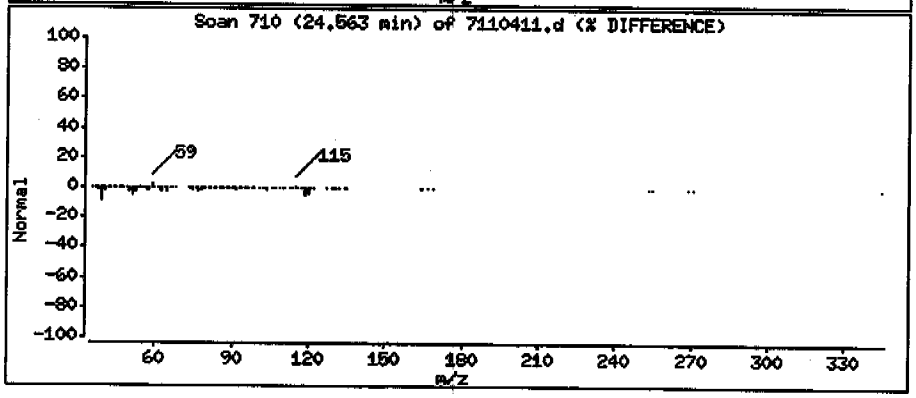












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

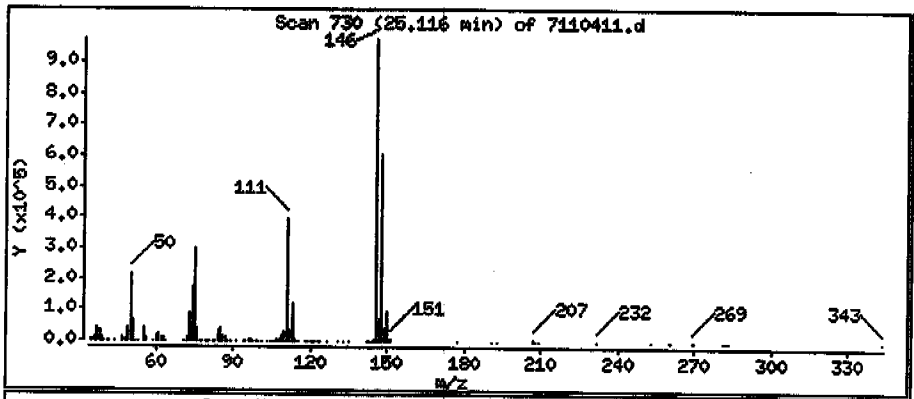
Operator: ab

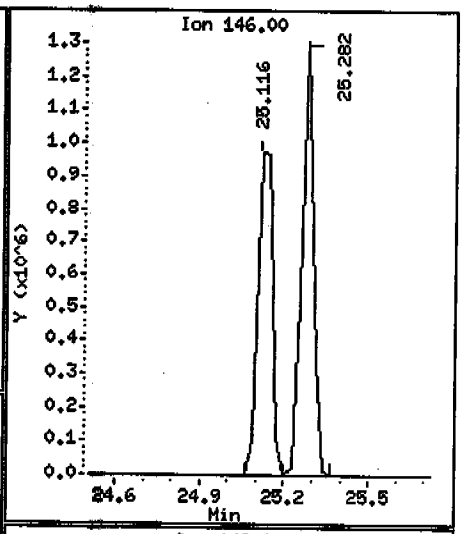
Column phase: RTx-624

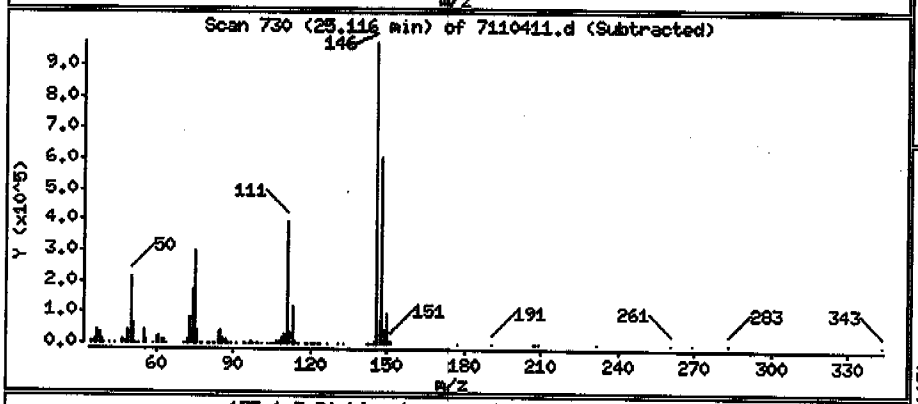
Column diameter: 0.53

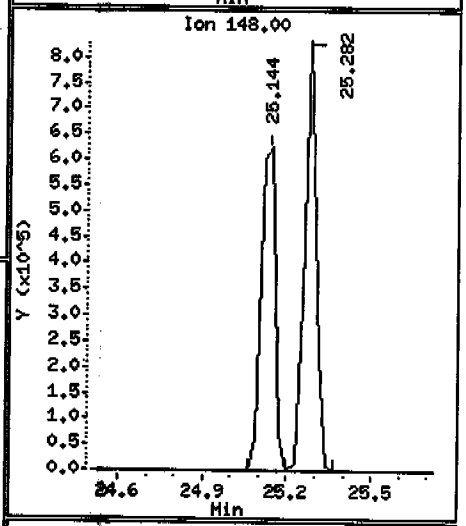
155 1,3-Dichlorobenzene

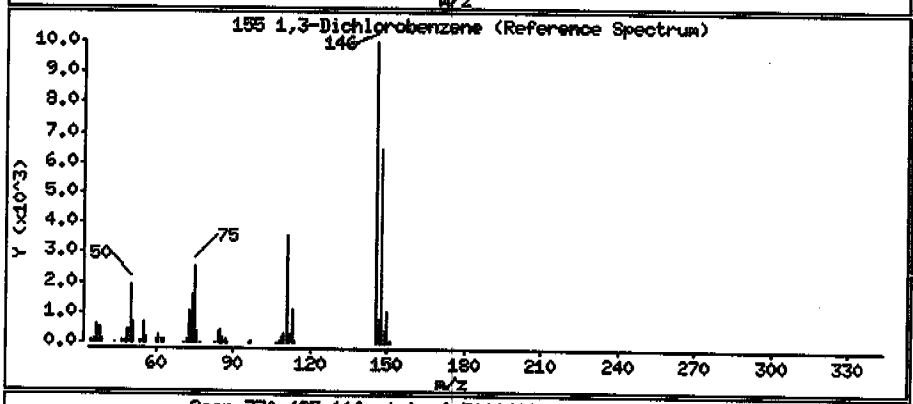
Concentration: 51.182 PPBV

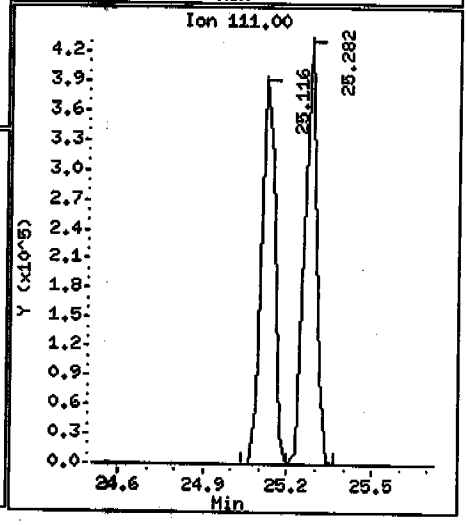


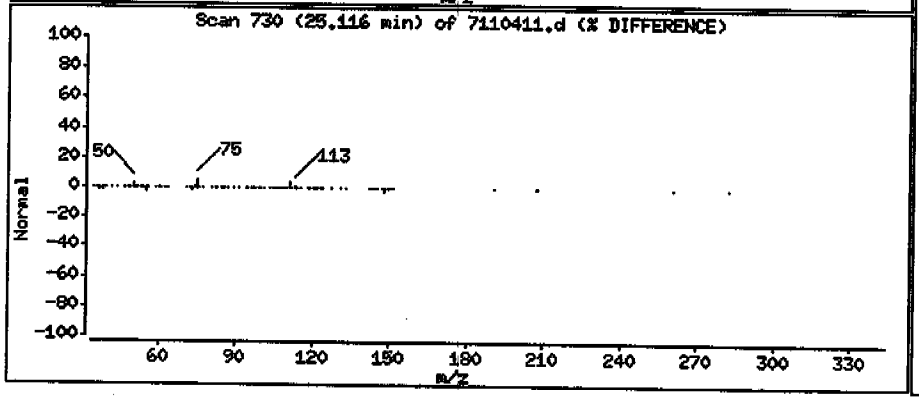












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

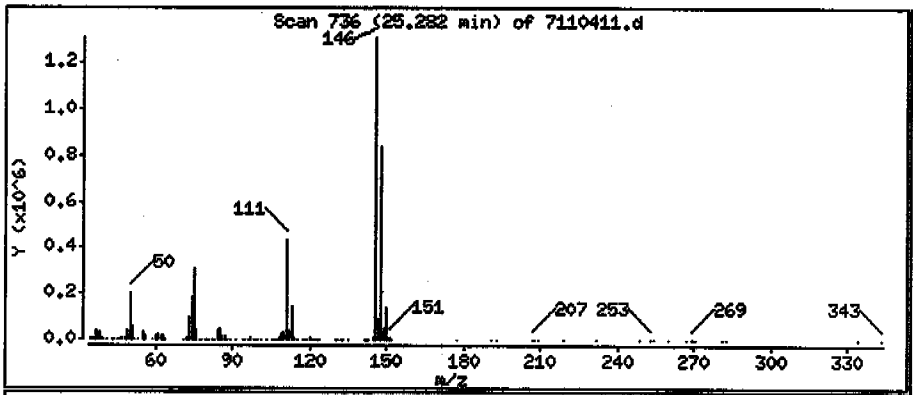
Operator: ab

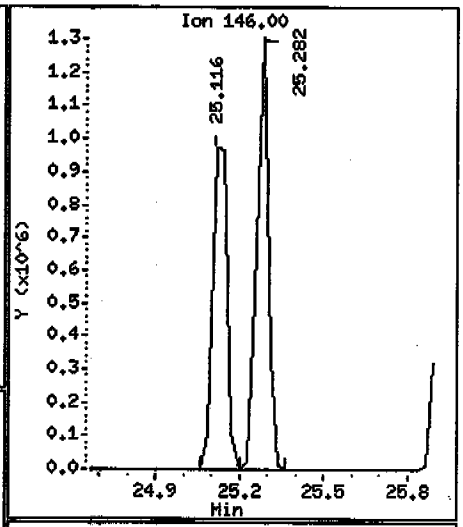
Column phase: RTx-624

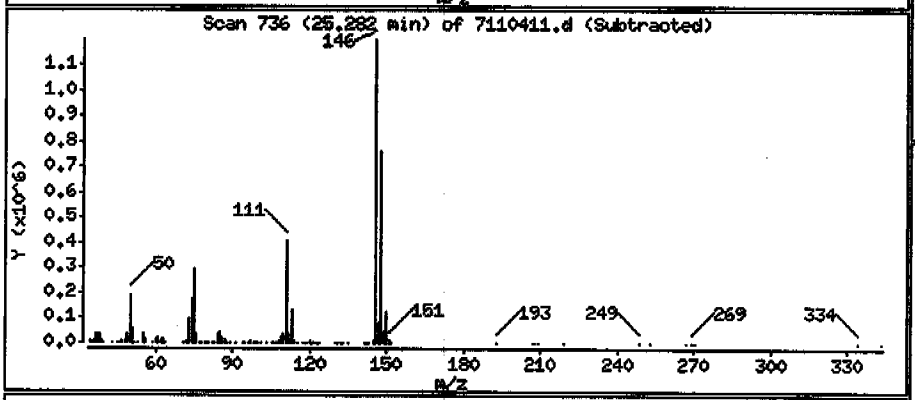
Column diameter: 0.53

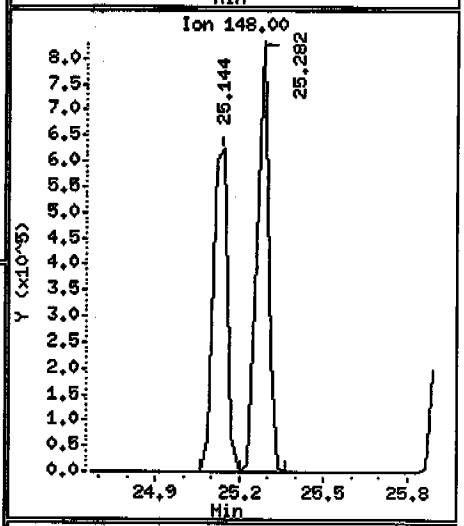
156 1,4-Dichlorobenzene

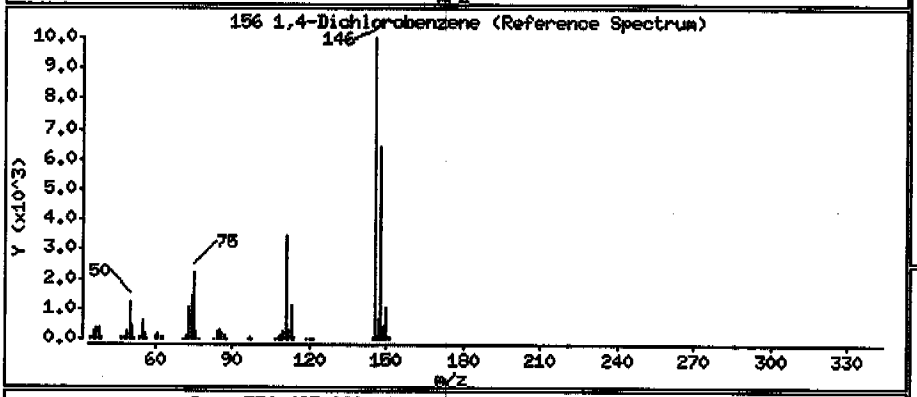
Concentration: 50.218 PPBV

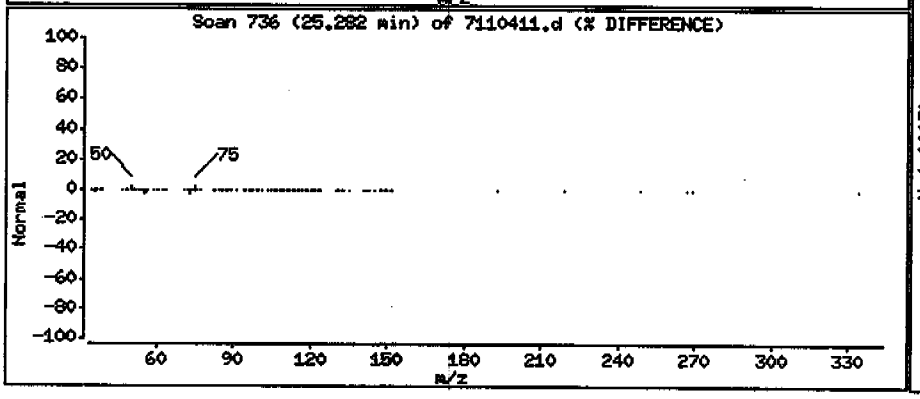


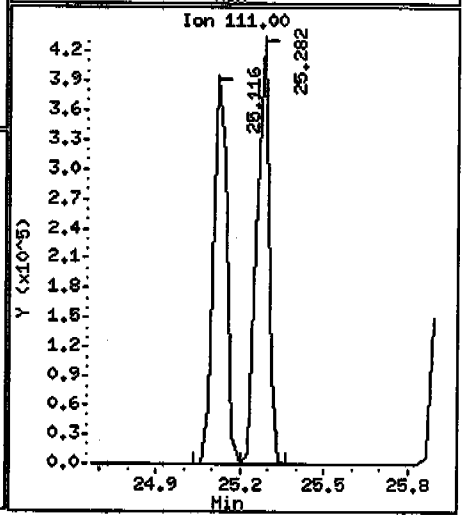












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

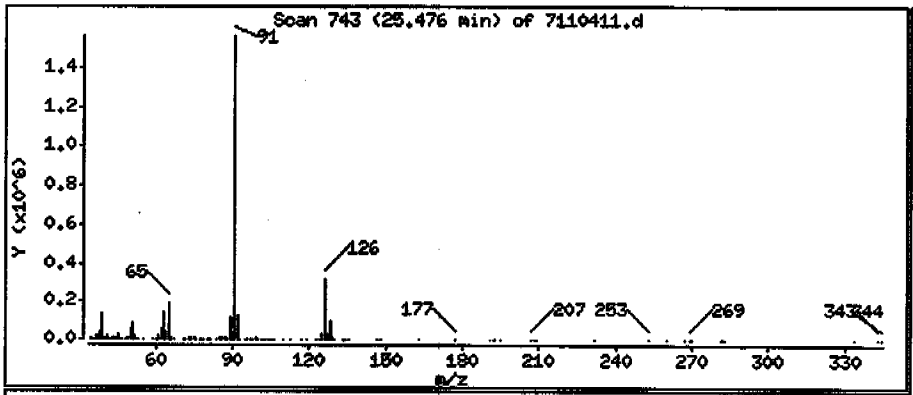
Operator: ab

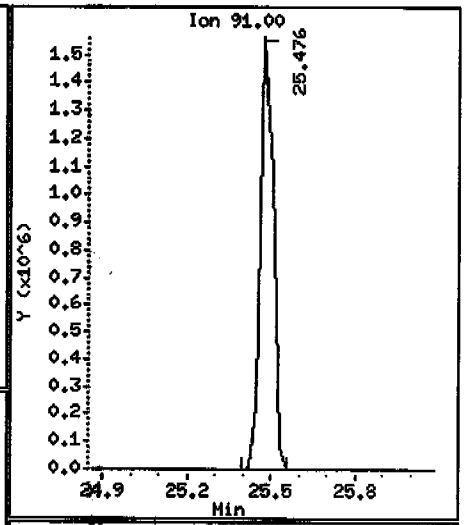
Column phase: RTx-624

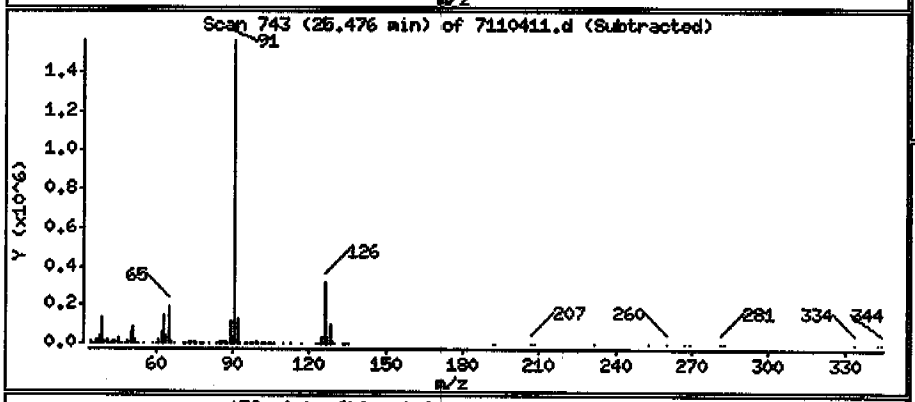
Column diameter: 0.53

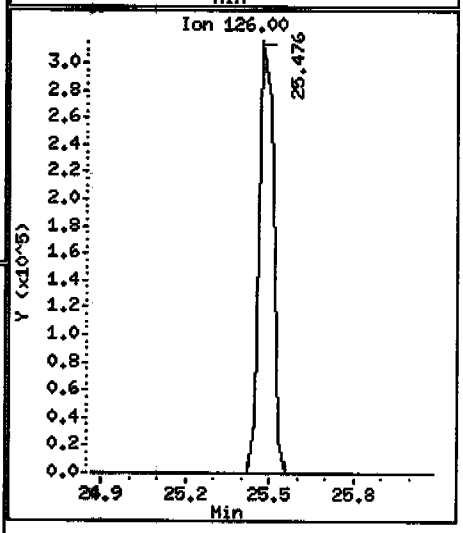
159 alpha-Chlorotoluene

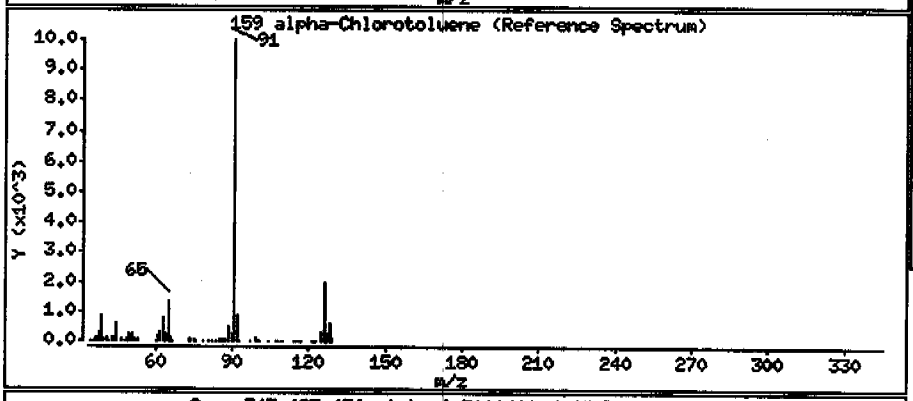
Concentration: 50.861 PPBV

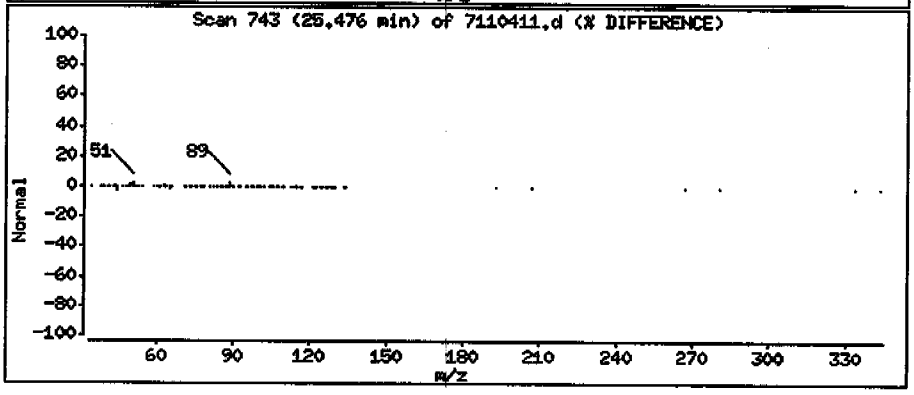












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

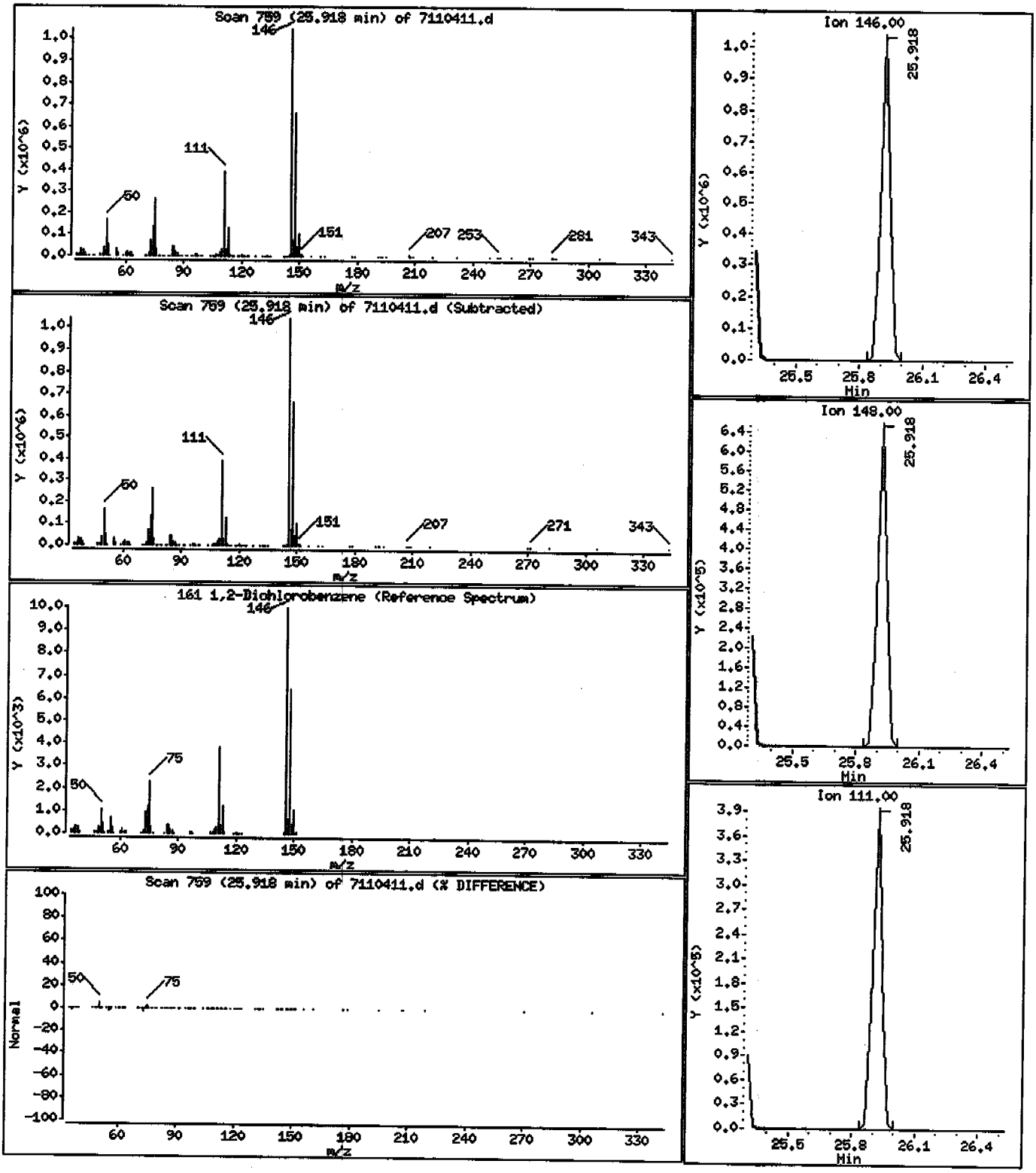
Operator: ab

Column phase: RTx-624

Column diameter: 0.53

161 1,2-Dichlorobenzene

Concentration: 47.076 PPBV



Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

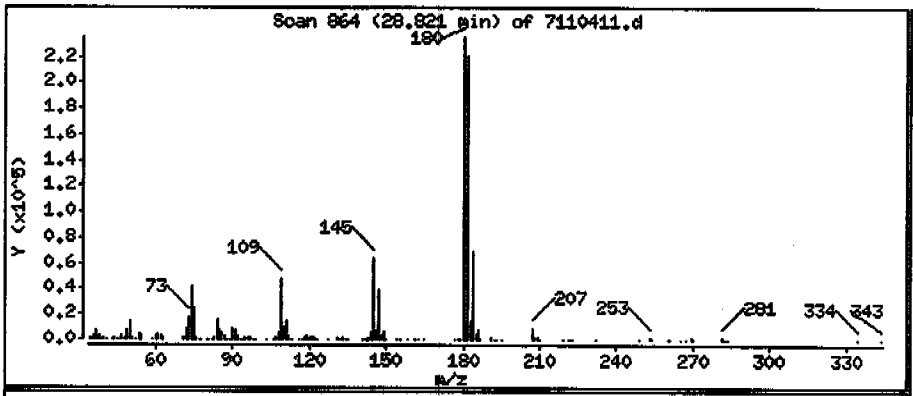
Operator: ab

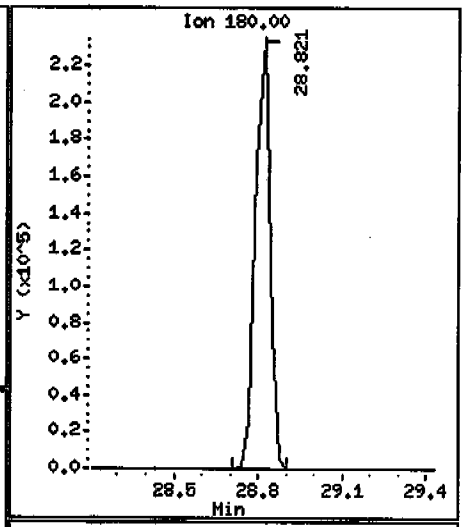
Column phase: RTx-624

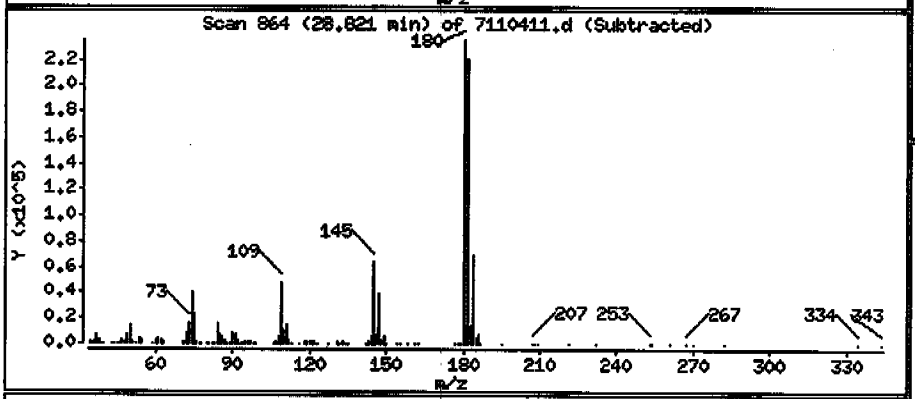
Column diameter: 0.53

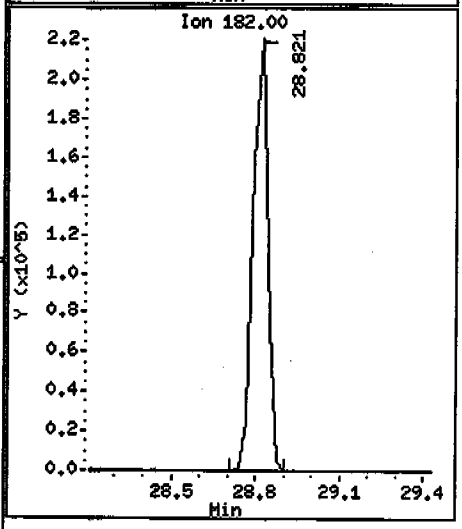
165 1,2,4-Trichlorobenzene

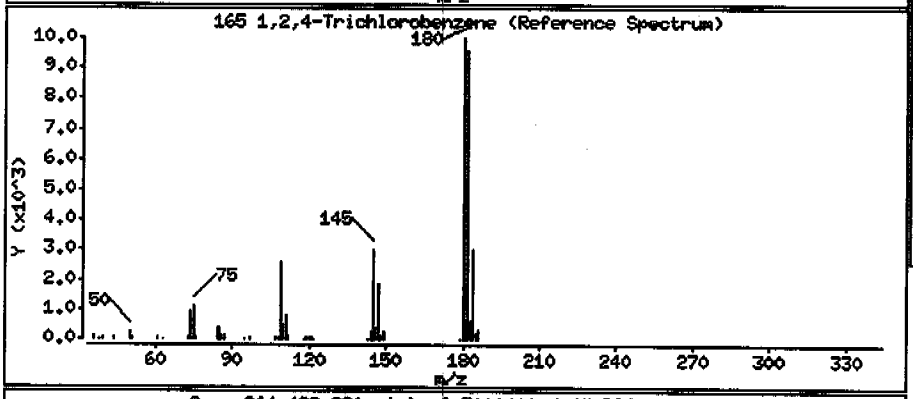
Concentration: 31.867 PPBV

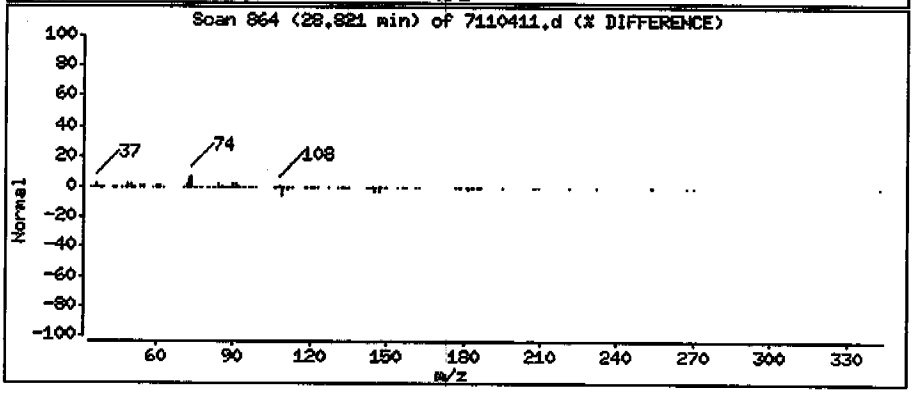












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

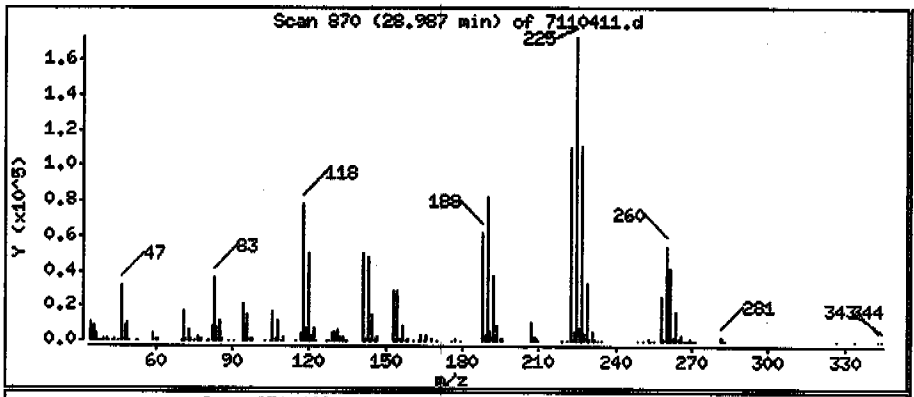
Operator: ab

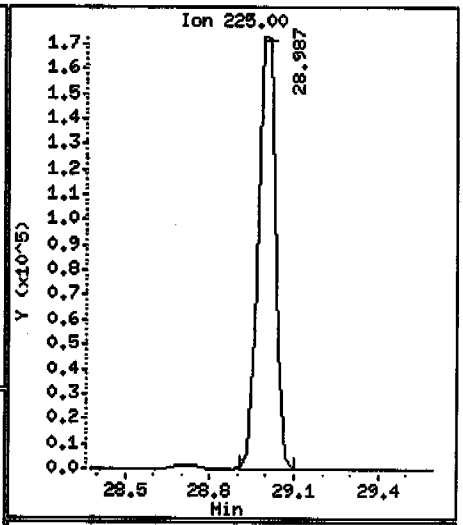
Column phase: RTx-624

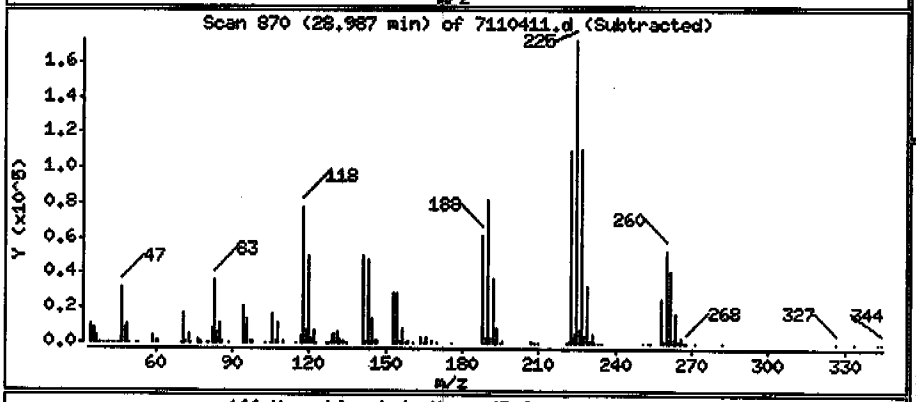
Column diameter: 0.53

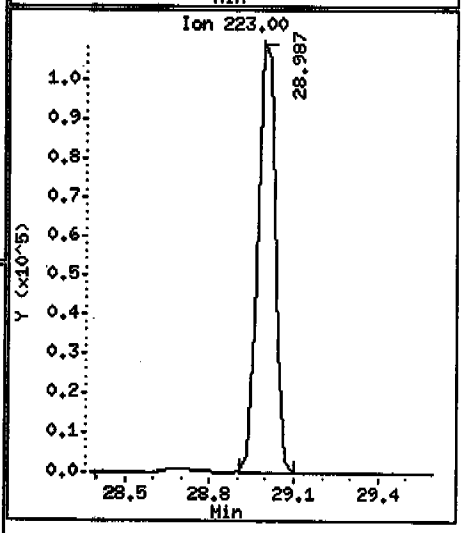
166 Hexachlorobutadiene

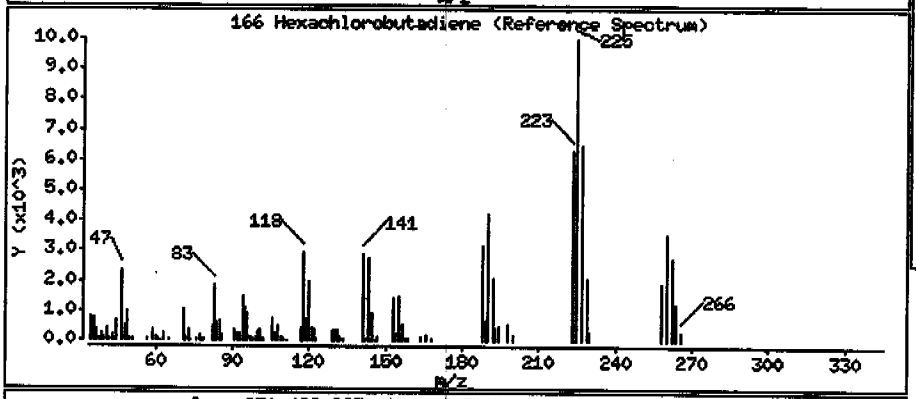
Concentration: 34.539 PPBV

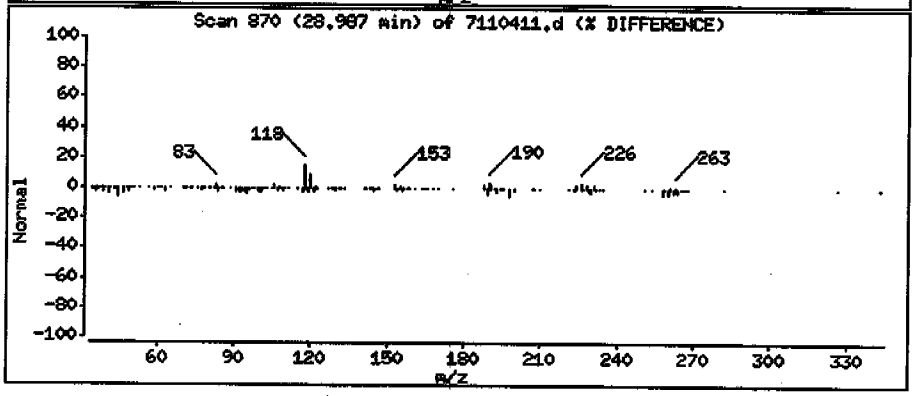












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

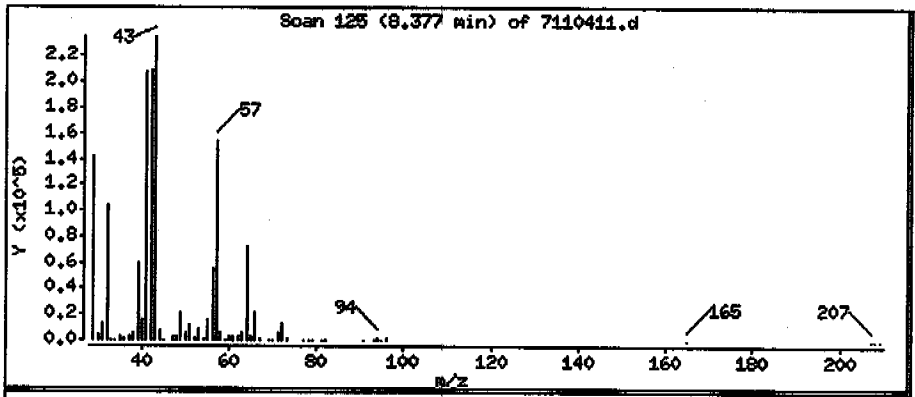
Operator: ab

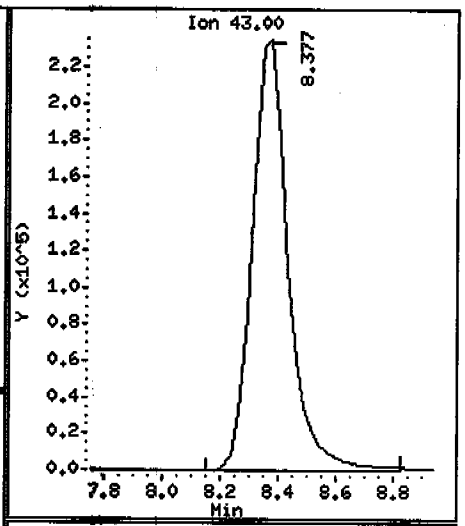
Column phase: RTx-624

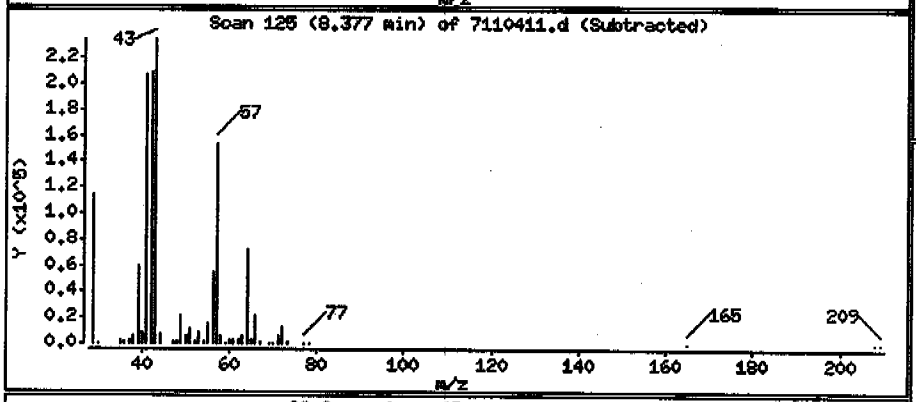
Column diameter: 0.53

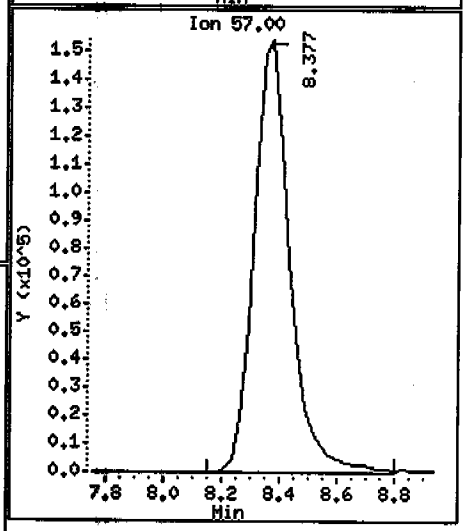
29 Isopentane

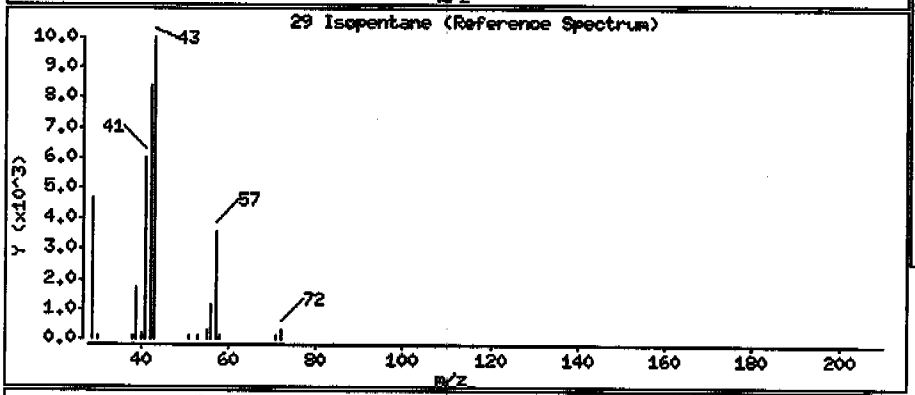
Concentration: 45.799 PPBV

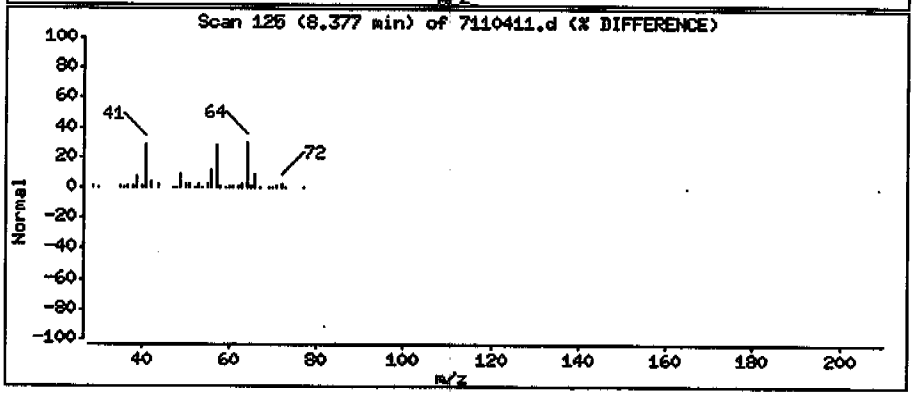












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

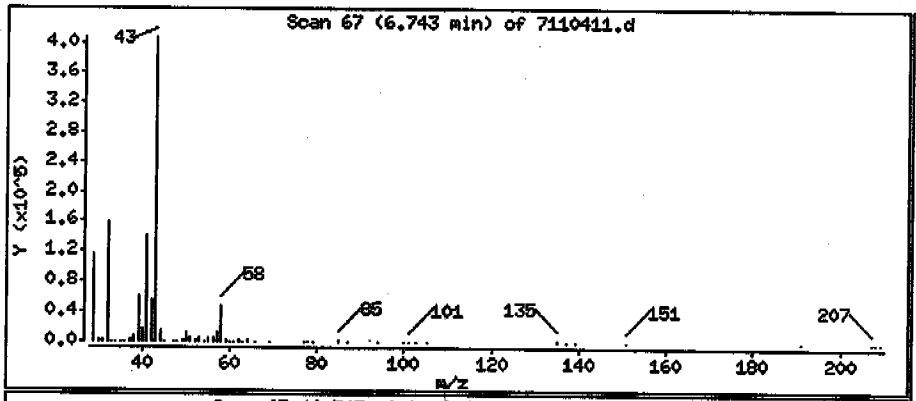
Operator: ab

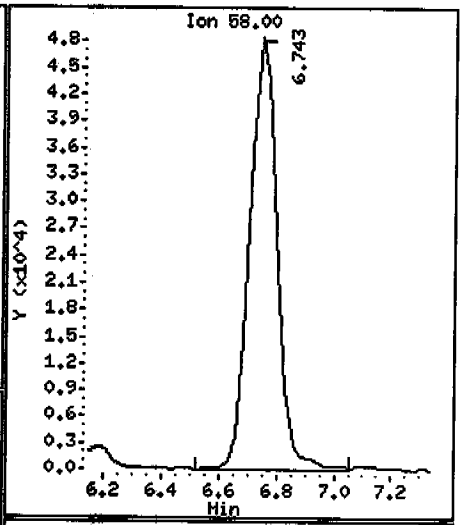
Column phase: RTx-624

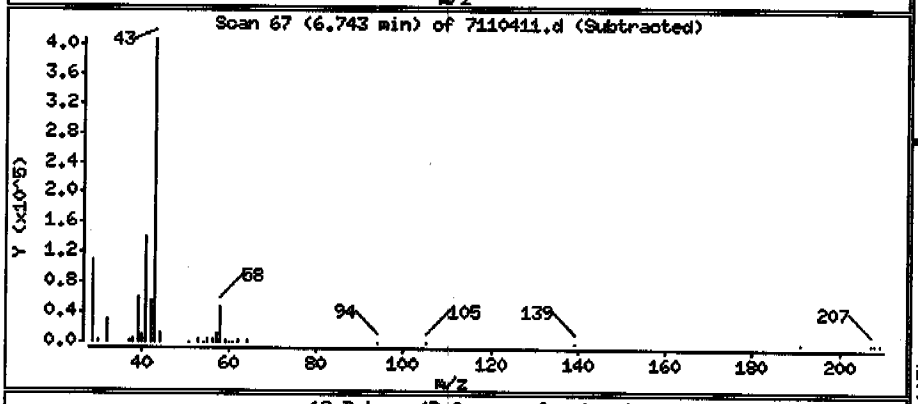
Column diameter: 0.53

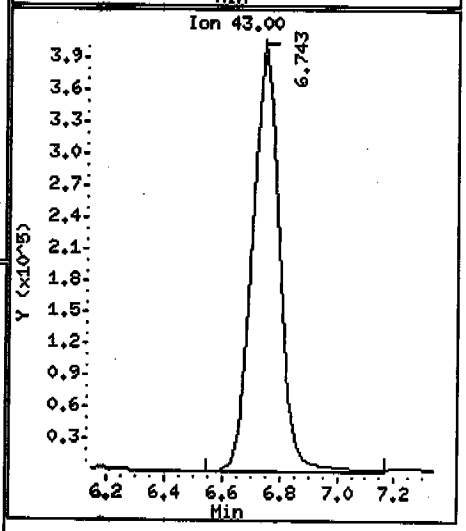
19 Butane

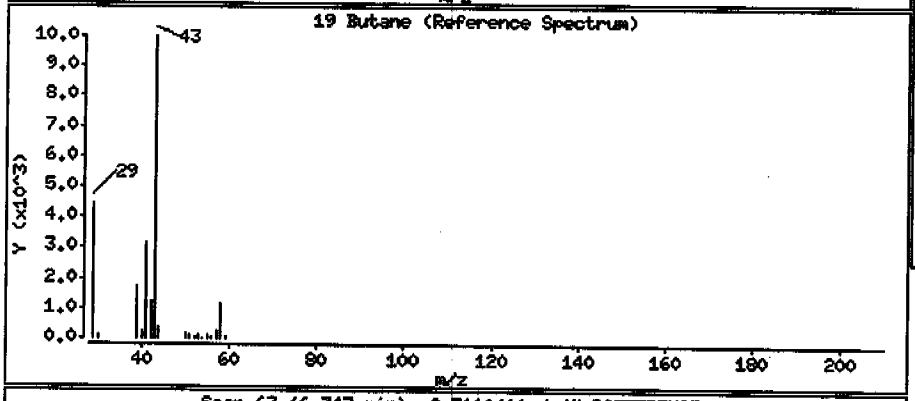
Concentration: 45.410 PPBV

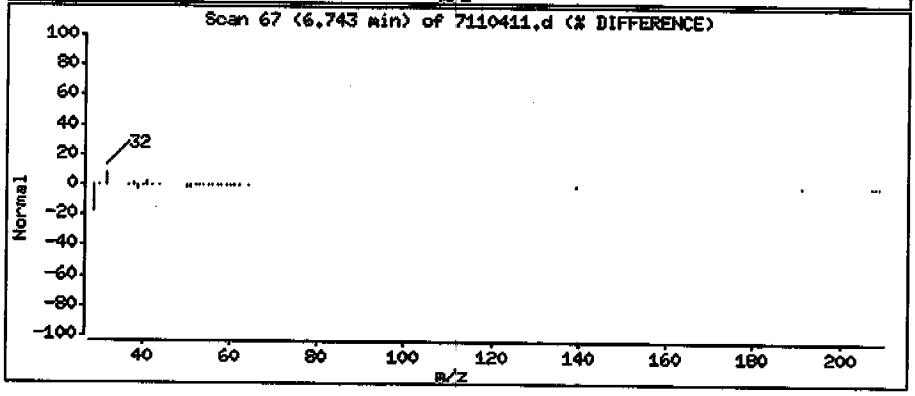












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

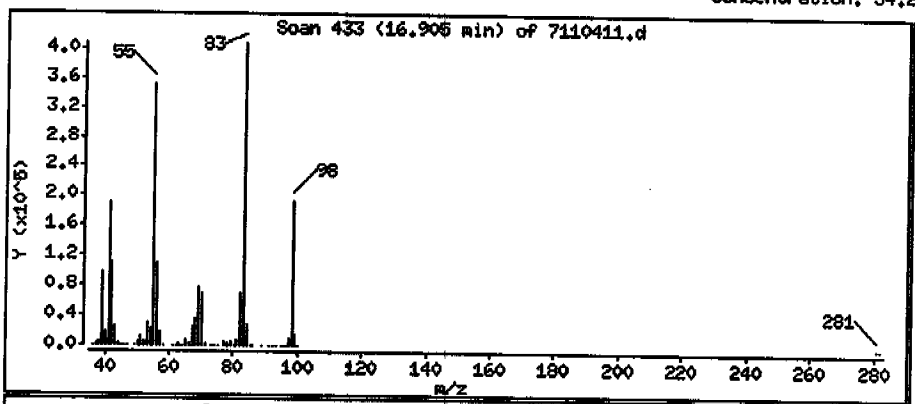
Operator: ab

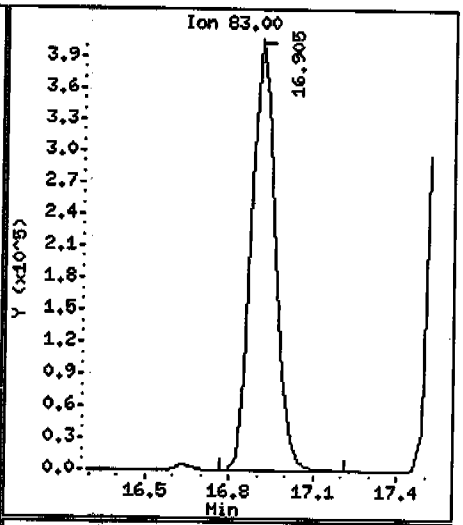
Column phase: RTx-624

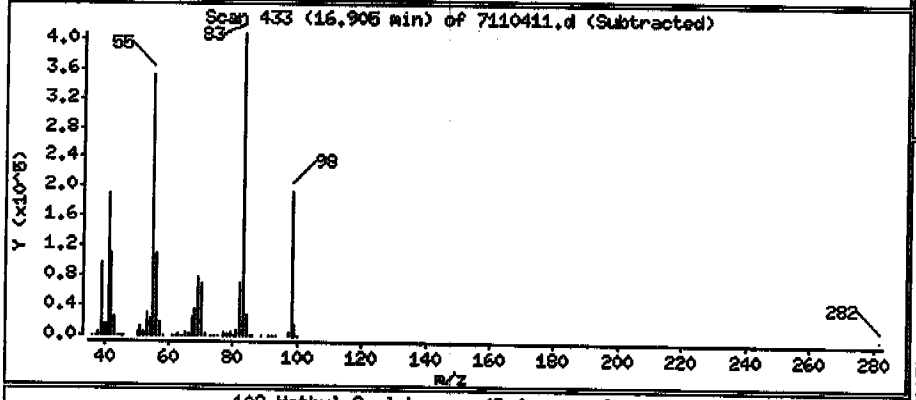
Column diameter: 0.53

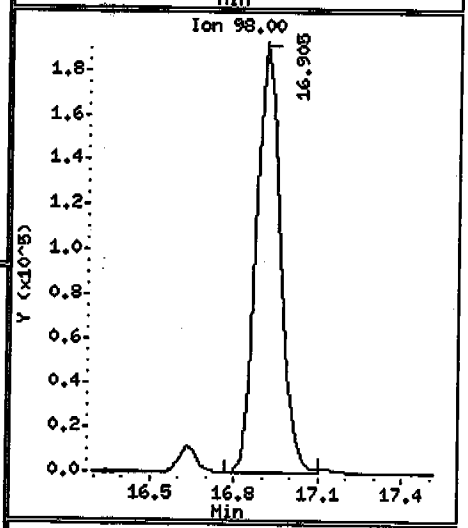
102 Methyl Cyclohexane

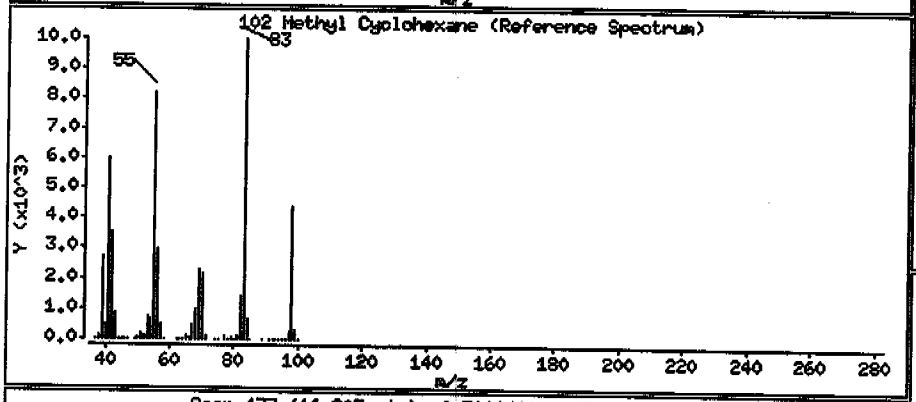
Concentration: 54.255 PPBV

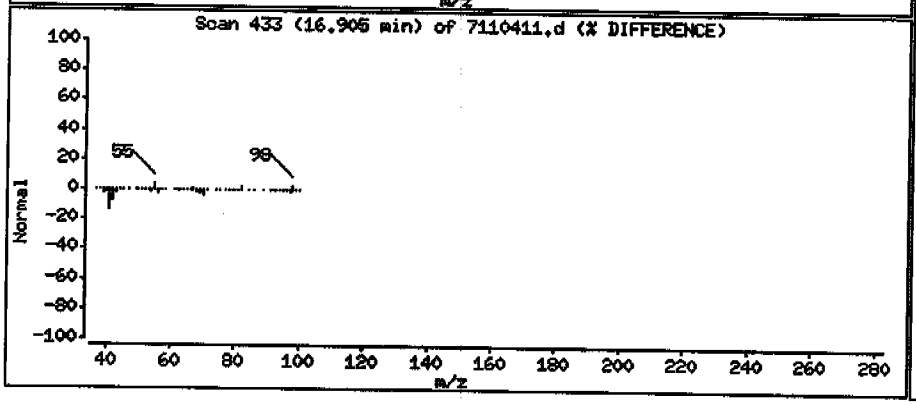


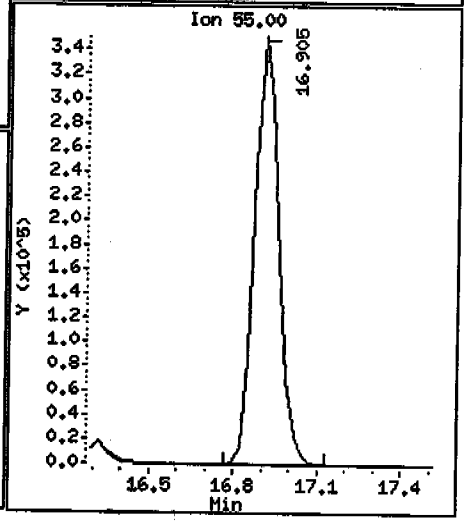












Data File: /chem/msd7.i/7-04nova.b/7110411.d

Date : 04-NOV-2007 23:58

Client ID: LCS-1

Instrument: msd7.i

Sample Info: 50mL #1443-302

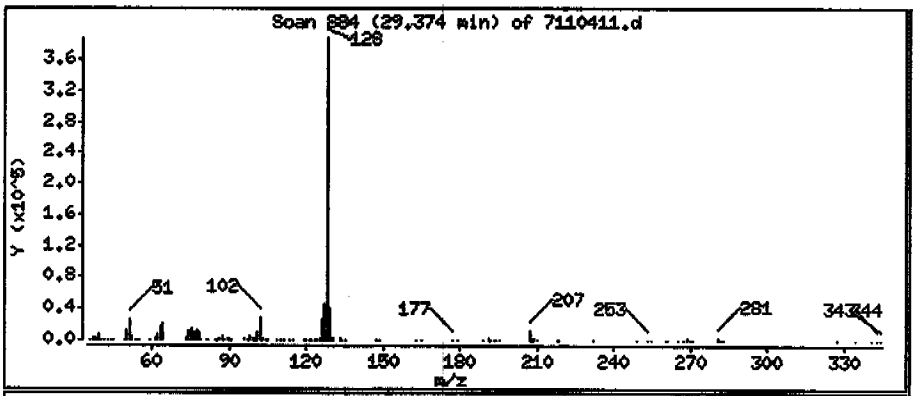
Operator: ab

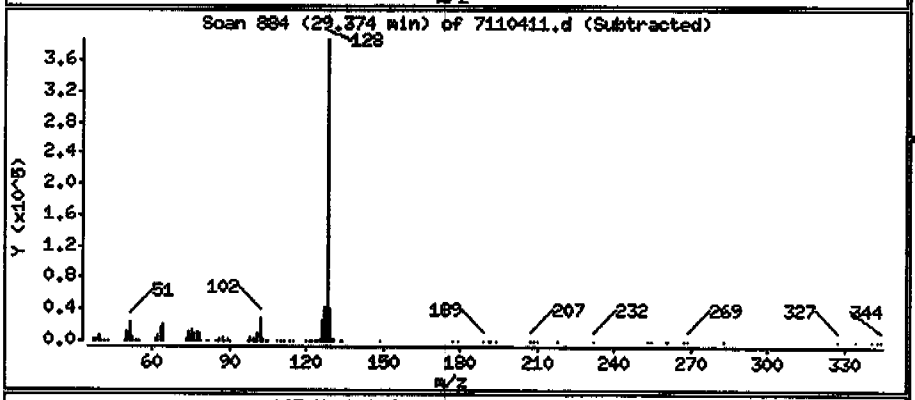
Column phase: RTx-624

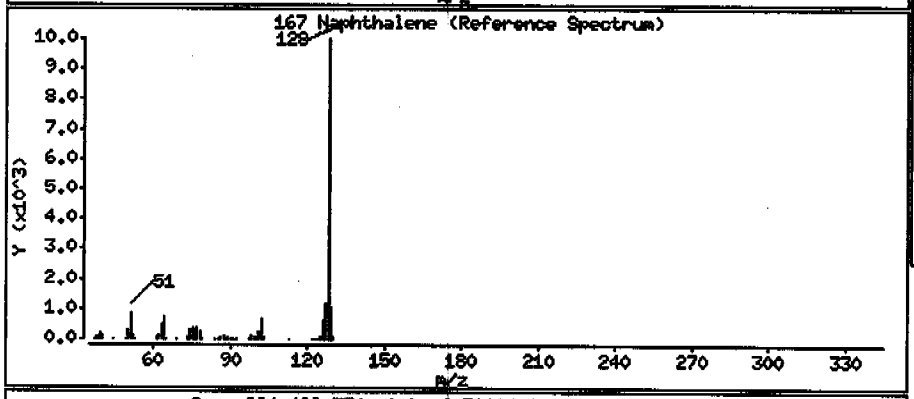
Column diameter: 0.53

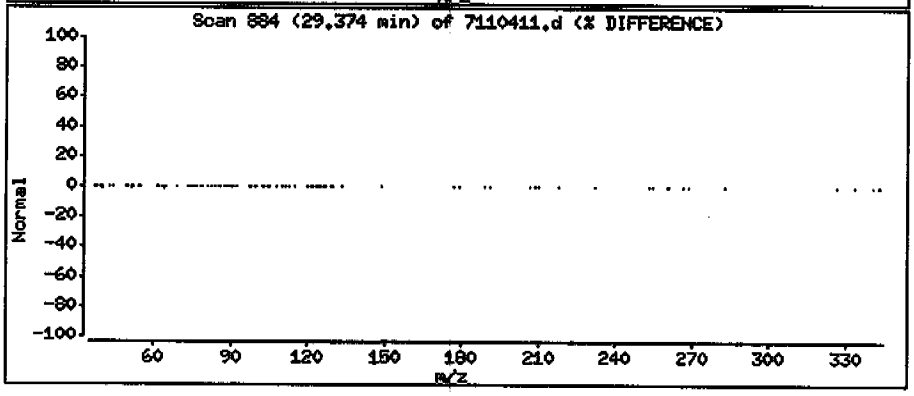
167 Naphthalene

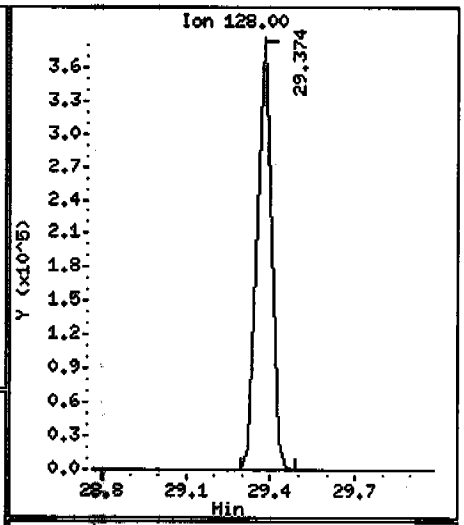
Concentration: 27.196 PPBV

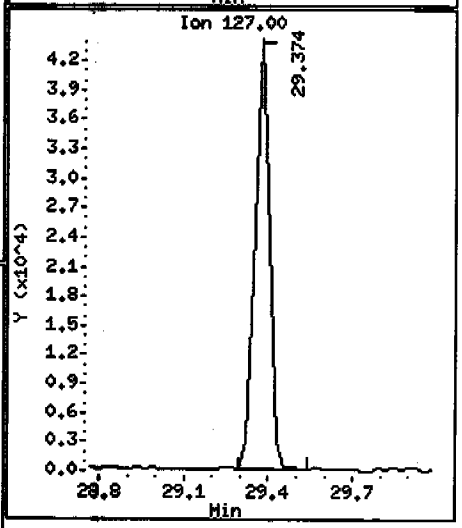












@ Air Toxics Ltd.

MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	19.51
75	30.0 – 60.0% of mass 95	39.38
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.87
173	Less than 2.0% of mass 174	(0.47)[1]
174	Greater than 50.0% of mass 95	94.97
~~175~~	~~5.0 – 9.0% of mass 174~~	(6.85)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(98.13)[1]
177	5.0 – 9.0% of mass 176	(6.52)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 11/4/07

BFB Injection Time: 2200

BFB File ID: 7110408

Tekmar Purge Flow: 20 ml/min

Vacuum:

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	6511162	
1,4-DFB	2188066	
CB-d5	1729242	

Verified CCV IS vs ICAL mid-point (- 40%D) EA (initials)

Verify 176/174 m/z Ratio: 996330/1015338 X100 = 98.13

NOAH Cart #: 1M **File #:** 1M

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(195045)}{(2188066)} \times \frac{(25)}{(0.887416)} = 25.119$

Reported Result 25.119

File ID:	7110409
Compound:	To1-d8
Initials:	EA

1	✓	7110408	BFB TUNE CHECK	1487-89	50ml	2.0 mL	1.00	11/4/07	2200	BFB	
2	✓	09	20ng CCV-1 (100 ppbv)	1776-78	50 ppbv	100 mL			2227	CCV	
3	✓	10	CCV SP (200 ppbv)	1780-90		50 mL			2311	IB	
4	✓	11	LCS-1 (200 ppbv)	1793-302		50 mL			2358	IB	
5	X	12	System Blank	34190	Humid	200 mL		11/5/07	0110	IB	
6	✓	13	Lab Blank						0213	IB	
7	✓	14	0711008-01A	10-1556	6.0" Hg-5psi		1.68		0315	IB	
8	✓	15	-02A	34422	7.5" Hg-5psi		1.79		0430	IB	
	✓	16	04A -03A	R-11	8.0" Hg-5psi		1.83		0536	BFB	

11/5/07 Date

0443

10	✓	71104 17	07110028-03A	34527	9.0%-5gal	200mL	1.91	11/5/07	0536	lb/lb		
11		18	-05A	14003	8.0%-5gal	200mL	1.83		0724	lb/LD	"E" Replaces 4004	
12	✓	19	-06A	35979	7.5%-4½		1.79		1017	LA		
13												
14												
15												
16												
17												
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27												
28												
29												
30												
31												
32												

Comments:

11/5/07

Signature

11/5/07
Date

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-18oct.b/7101801.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 18-OCT-2007 11:50
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-18oct.b/bfb105.m
Meth Date : 18-Oct-2007 11:45
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.204	8.232	-0.028	95	1361542			100.00- 100.00	100.00
8.204	8.232	-0.028	50	253402			15.00- 40.00	18.61
8.204	8.232	-0.028	75	540735			30.00- 60.00	39.71
8.204	8.232	-0.028	96	92275			5.00- 9.00	6.78
8.204	8.232	-0.028	173	5478			0.00- 2.00	0.49
8.204	8.232	-0.028	174	1112403			50.00- 100.00	81.70
8.204	8.232	-0.028	175	76512			5.00- 9.00	6.88
8.204	8.232	-0.028	176	1072385			95.00- 101.00	96.40
8.204	8.232	-0.028	177	71737			5.00- 9.00	6.69

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

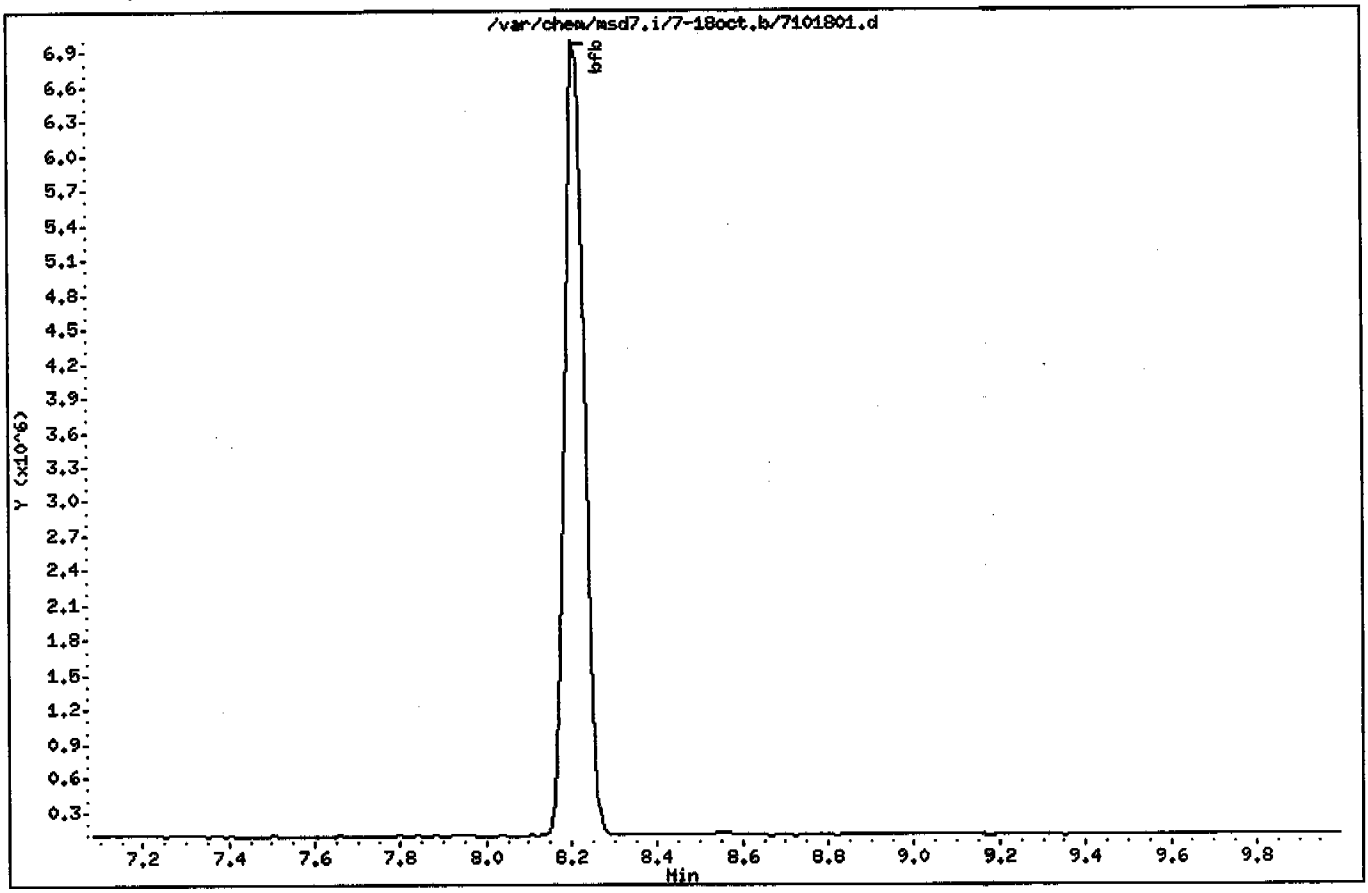
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

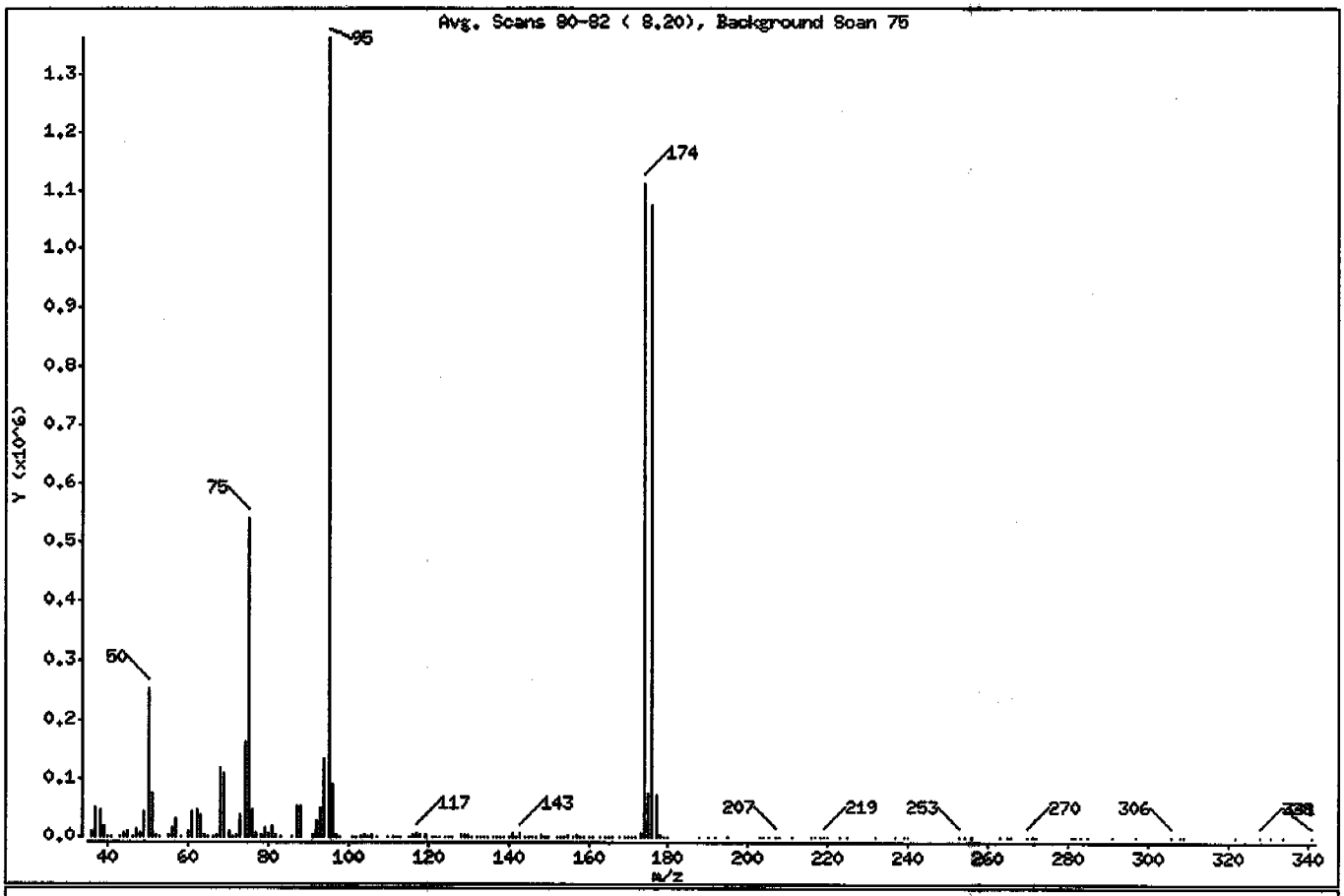
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.61
75	30.00 - 60.00% of mass 95	39.71
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.40 (0.49)
174	50.00 - 100.00% of mass 95	81.70
175	5.00 - 9.00% of mass 174	5.62 (6.88)
176	95.00 - 101.00% of mass 174	78.76 (96.40)
177	5.00 - 9.00% of mass 176	5.27 (6.69)

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101801.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8158	83.00	554	138.00	104	203.00	51
37.00	49192	86.00	1313	139.00	375	204.00	50
38.00	45528	87.00	54192	140.00	632	205.00	189
39.00	18720	88.00	53800	141.00	6507	207.00	741
40.00	732	91.00	2816	142.00	957	208.00	504
41.00	74	92.00	27664	143.00	6881	211.00	169
43.00	497	93.00	48888	144.00	483	216.00	66
44.00	4997	94.00	133568	145.00	361	217.00	63
45.00	9825	95.00	1361408	146.00	1560	218.00	35
46.00	873	96.00	92272	147.00	676	219.00	212
47.00	13741	97.00	2838	148.00	2309	220.00	15
48.00	5492	98.00	75	149.00	1043	223.00	146
49.00	42264	101.00	135	150.00	871	226.00	51
50.00	263376	102.00	118	152.00	549	232.00	107
51.00	73776	103.00	426	153.00	862	237.00	53
52.00	3233	104.00	3526	154.00	656	239.00	108
53.00	104	105.00	1311	155.00	2400	240.00	51
55.00	2446	106.00	3382	156.00	486	253.00	738
56.00	14834	107.00	1234	157.00	1946	254.00	63
57.00	31320	110.00	477	158.00	503	256.00	73
58.00	1332	111.00	643	159.00	927	263.00	50
60.00	8076	112.00	546	160.00	166	265.00	164
61.00	44952	113.00	773	161.00	951	266.00	131
62.00	46256	115.00	711	163.00	50	270.00	379
63.00	36824	116.00	3373	164.00	6	271.00	115
64.00	3340	117.00	5525	165.00	191	272.00	119
65.00	65	118.00	2784	166.00	52	281.00	44
66.00	128	119.00	4176	168.00	237	282.00	150
67.00	2479	121.00	195	169.00	104	283.00	43
68.00	119376	122.00	240	170.00	388	285.00	69
69.00	110568	123.00	240	171.00	532	291.00	92
70.00	8062	124.00	581	172.00	1047	297.00	50
71.00	416	125.00	238	173.00	5478	306.00	182
72.00	4070	126.00	222	174.00	1112064	308.00	72
73.00	38304	128.00	3372	175.00	76512	309.00	53

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101801.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	163648	129.00	1628	176.00	1072128	322.00	66
75.00	540672	130.00	3411	177.00	71736	328.00	157
76.00	45504	131.00	1190	178.00	1947	331.00	61
77.00	6657	132.00	336	179.00	187	334.00	27
78.00	3945	133.00	196	180.00	198	341.00	150
79.00	17176	134.00	119	188.00	83		
80.00	5949	135.00	1488	190.00	234		
81.00	17288	136.00	367	192.00	279		
82.00	3829	137.00	1534	196.00	264		

Air Toxics Ltd.

Data file : /chem/msd7.i/7-19oct.b/7101901.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 19-OCT-2007 09:09
Operator : cb Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-19oct.b/bfb105.m
Meth Date : 19-Oct-2007 09:04 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	1279483			100.00- 100.00	100.00
8.218	8.232	-0.014	50	234402			15.00- 40.00	18.32
8.218	8.232	-0.014	75	514967			30.00- 60.00	40.25
8.218	8.232	-0.014	96	87384			5.00- 9.00	6.83
8.218	8.232	-0.014	173	5154			0.00- 2.00	0.49
8.218	8.232	-0.014	174	1045184			50.00- 100.00	81.69
8.218	8.232	-0.014	175	74282			5.00- 9.00	7.11
8.218	8.232	-0.014	176	1015727			95.00- 101.00	97.18
8.218	8.232	-0.014	177	67754			5.00- 9.00	6.67

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

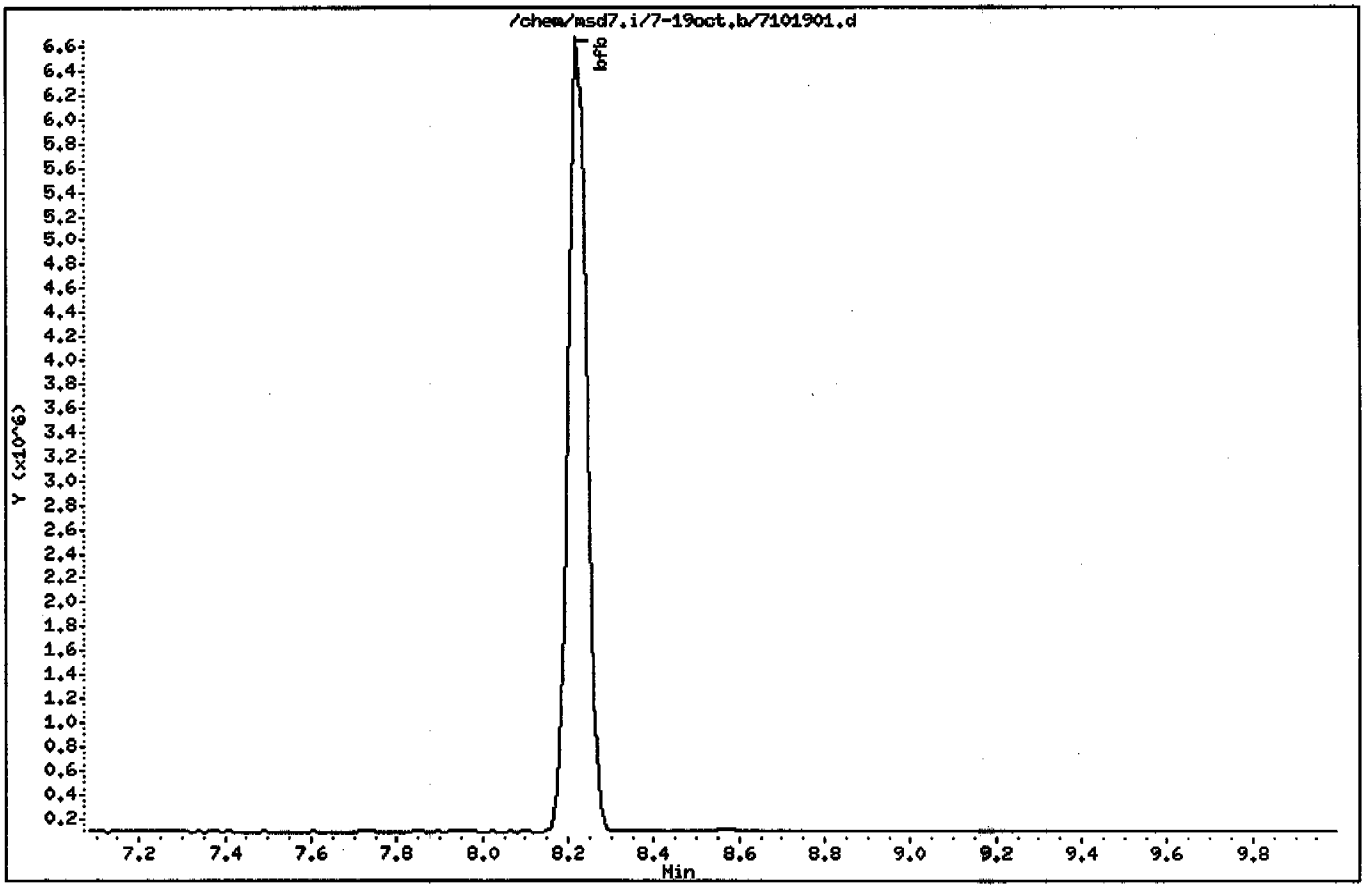
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

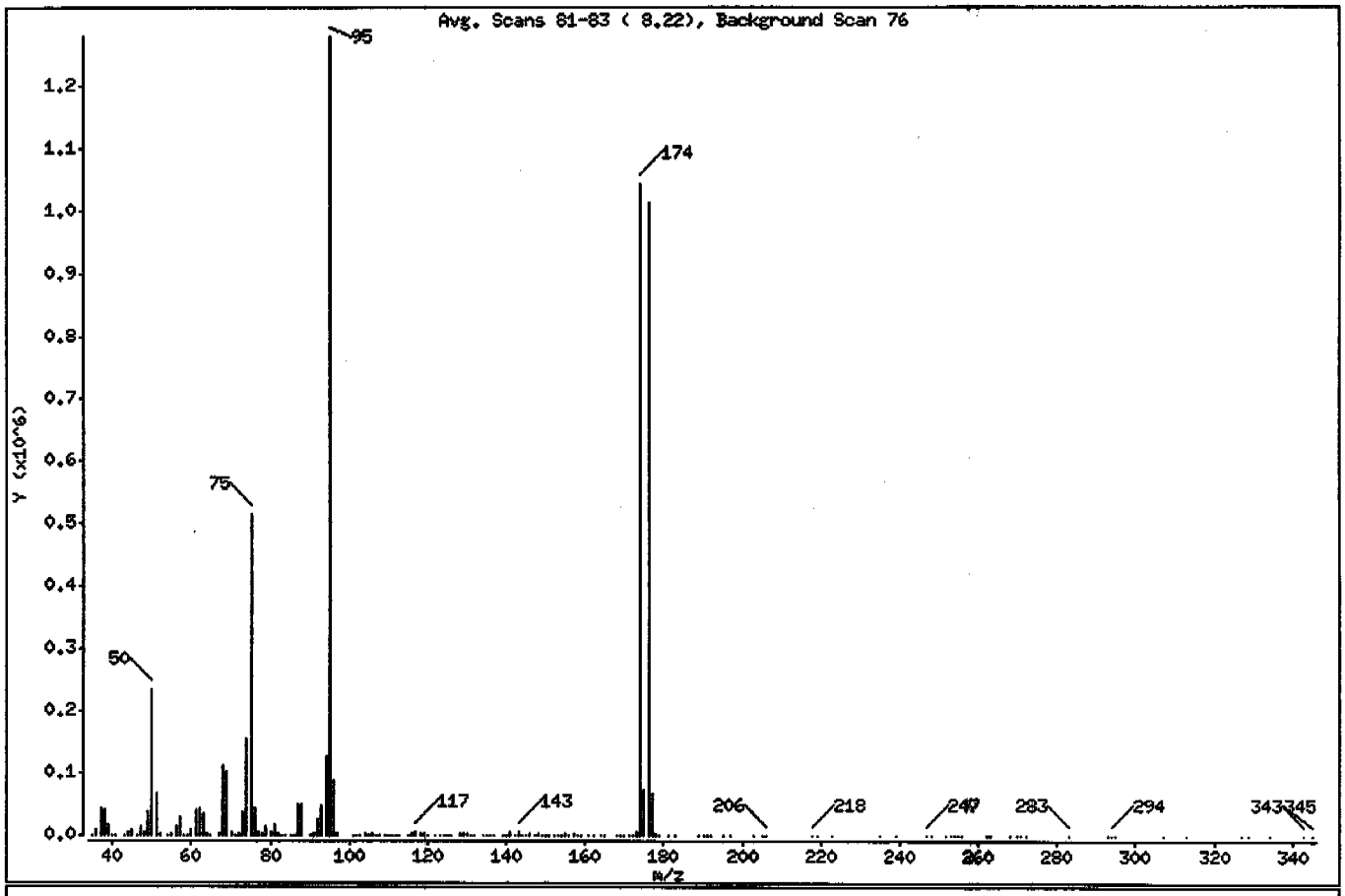
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.32
75	30.00 - 60.00% of mass 95	40.25
96	5.00 - 9.00% of mass 95	6.83
173	Less than 2.00% of mass 174	0.40 (0.49)
174	50.00 - 100.00% of mass 95	81.69
175	5.00 - 9.00% of mass 174	5.81 (7.11)
176	95.00 - 101.00% of mass 174	79.39 (97.18)
177	5.00 - 9.00% of mass 176	5.30 (6.67)

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101901.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 96.00
Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	72	81.00	16704	131.00	1146	181.00	171
36.00	7566	82.00	3637	132.00	454	183.00	50
37.00	46072	83.00	479	134.00	161	189.00	206
38.00	40240	84.00	53	135.00	1280	190.00	52
39.00	17640	85.00	82	136.00	225	191.00	120
40.00	628	86.00	903	137.00	1337	192.00	19
41.00	514	87.00	50640	139.00	320	195.00	40
43.00	189	88.00	48824	140.00	552	197.00	61
44.00	4493	90.00	132	141.00	6532	203.00	123
45.00	9647	91.00	2770	142.00	943	205.00	82
46.00	741	92.00	27528	143.00	7001	206.00	177
47.00	14368	93.00	47072	144.00	545	218.00	236
48.00	5164	94.00	125368	145.00	738	219.00	161
49.00	39688	95.00	1278976	146.00	1511	223.00	27
50.00	234368	96.00	87384	147.00	819	235.00	67
51.00	68168	97.00	2415	148.00	2386	239.00	107
52.00	2980	101.00	172	149.00	484	247.00	182
54.00	63	102.00	133	150.00	1007	248.00	62
55.00	2156	103.00	141	151.00	144	262.00	66
56.00	13491	104.00	2803	152.00	540	263.00	19
57.00	29776	106.00	1086	153.00	901	264.00	160
58.00	1021	106.00	3164	154.00	676	265.00	25
59.00	272	107.00	1031	155.00	2357	266.00	50
60.00	7740	108.00	15	156.00	629	282.00	82
61.00	41792	109.00	150	157.00	1793	283.00	50
62.00	43952	110.00	468	158.00	360	288.00	131
63.00	34352	111.00	504	159.00	1015	270.00	109
64.00	3135	112.00	313	161.00	1159	271.00	85
65.00	478	113.00	444	162.00	295	272.00	57
67.00	2376	115.00	640	164.00	102	283.00	471
68.00	112072	116.00	2842	165.00	171	293.00	77
69.00	101736	117.00	4565	168.00	62	294.00	66
70.00	7312	118.00	2617	169.00	215	296.00	82
71.00	405	119.00	4082	170.00	464	307.00	60
72.00	4296	120.00	347	171.00	397	313.00	52

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101901.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76

Location of Maximum: 95.00

Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	37336	122.00	296	172.00	834	327.00	42
74.00	157248	123.00	376	173.00	5154	329.00	64
75.00	514944	124.00	587	174.00	1045184	334.00	39
76.00	44472	125.00	107	175.00	74280	343.00	346
77.00	6177	126.00	562	176.00	1015680	345.00	241
78.00	4351	128.00	3477	177.00	67752		
79.00	15940	129.00	1800	178.00	1868		
80.00	6885	130.00	3276	179.00	89		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-22oct.b/7102201.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 22-OCT-2007 08:22
Operator : cb Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-22oct.b/bfb105.m
Meth Date : 22-Oct-2007 08:17 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	1368062			100.00- 100.00	100.00
8.218	8.232	-0.014	50	244266			15.00- 40.00	17.85
8.218	8.232	-0.014	75	543796			30.00- 60.00	39.75
8.218	8.232	-0.014	96	92363			5.00- 9.00	6.75
8.218	8.232	-0.014	173	6310			0.00- 2.00	0.53
8.218	8.232	-0.014	174	1182801			50.00- 100.00	86.46
8.218	8.232	-0.014	175	81821			5.00- 9.00	6.92
8.218	8.232	-0.014	176	1142984			95.00- 101.00	96.63
8.218	8.232	-0.014	177	74057			5.00- 9.00	6.48

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

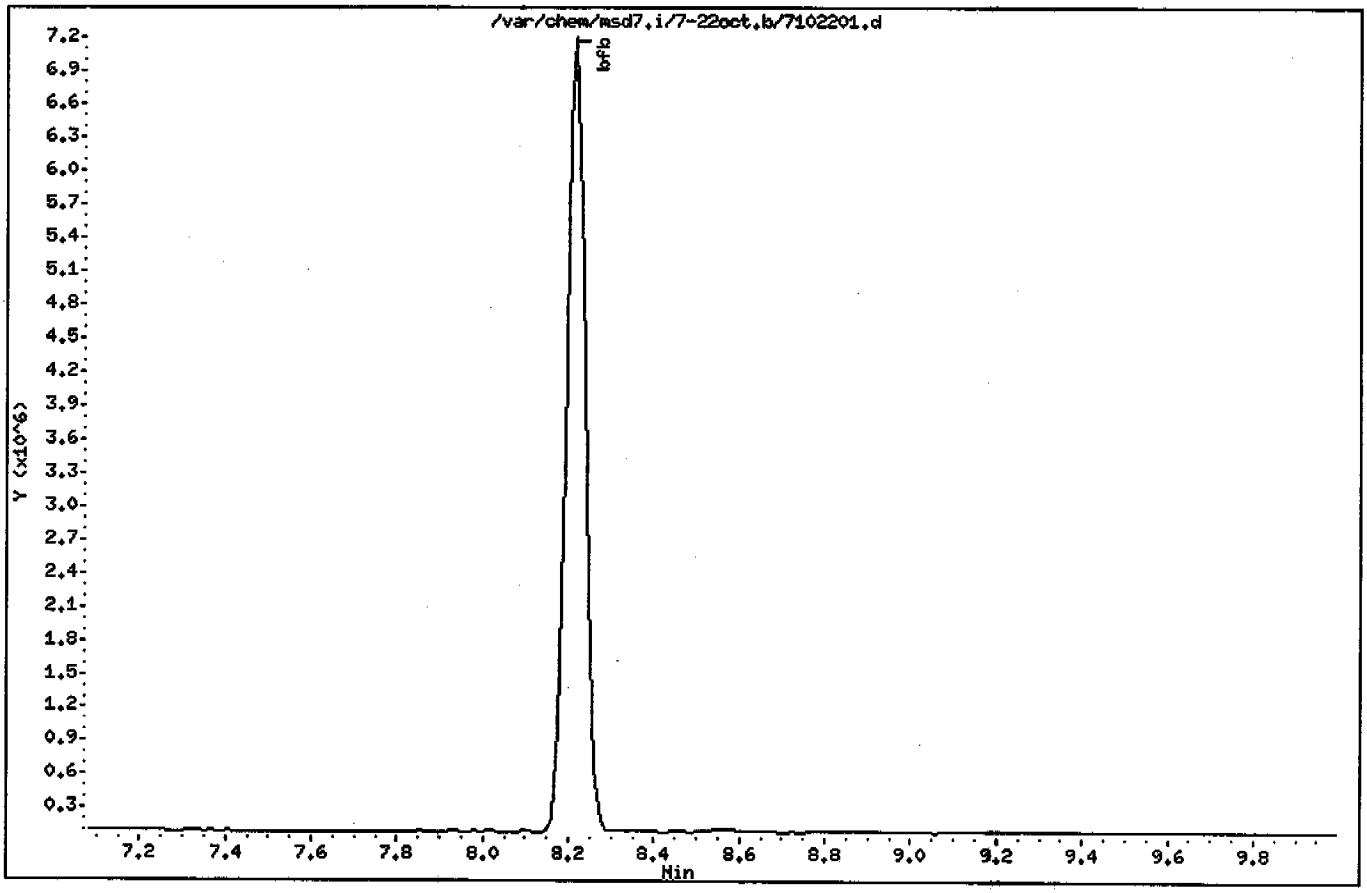
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-22oct,b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

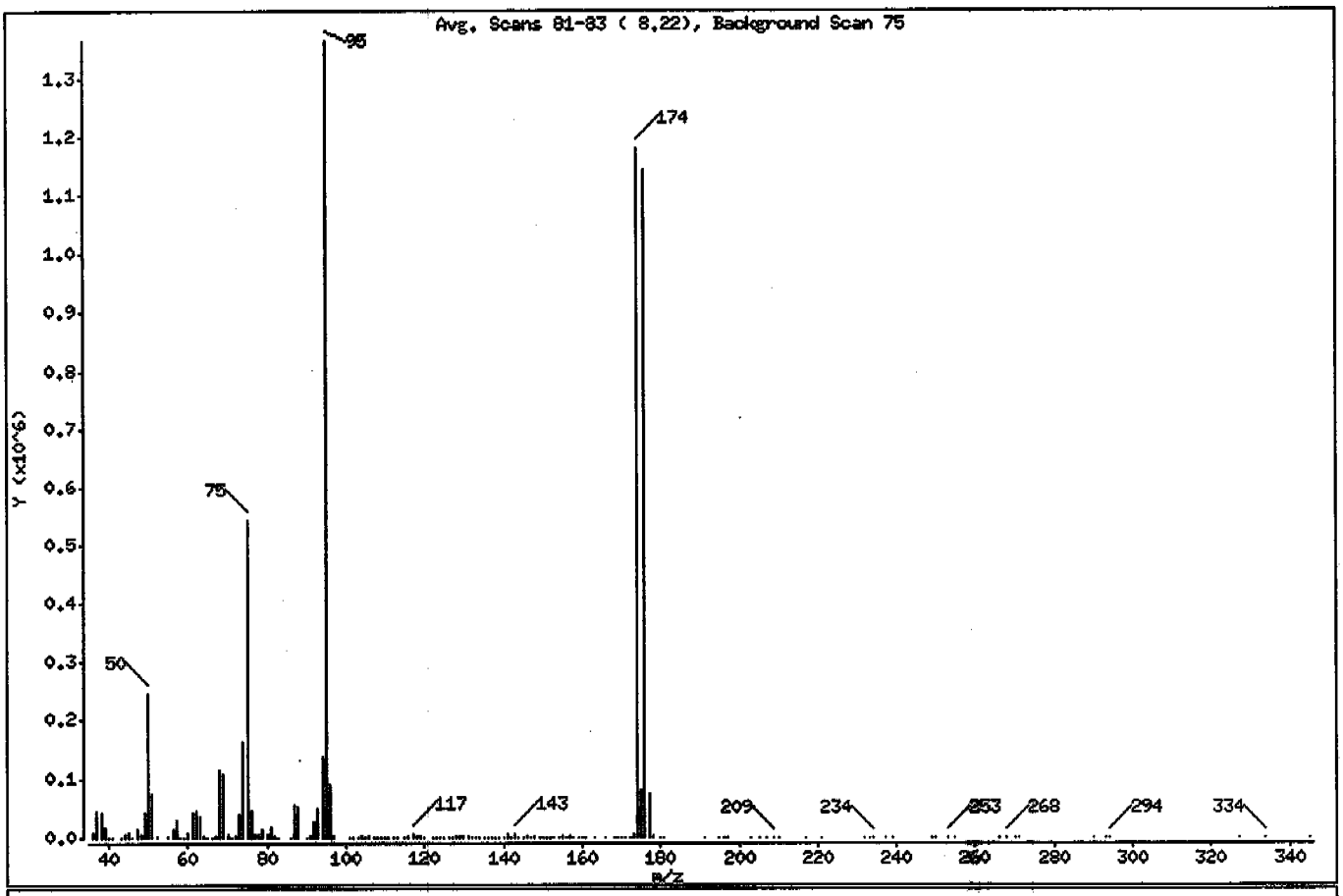
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.85
75	30.00 - 60.00% of mass 95	39.75
96	5.00 - 9.00% of mass 95	6.75
173	Less than 2.00% of mass 174	0.46 (0.53)
174	50.00 - 100.00% of mass 95	86.46
175	5.00 - 9.00% of mass 174	5.98 (6.92)
176	95.00 - 101.00% of mass 174	83.55 (96.63)
177	5.00 - 9.00% of mass 176	5.41 (6.48)

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: ob

Column phase:

Column diameter: 0.53

Data File: 7102201.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 75
Location of Maximum: 95.00
Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7934	80.00	6507	129.00	1848	174.00	1182720
37.00	46400	81.00	17392	130.00	3596	175.00	81816
38.00	43896	82.00	4057	131.00	1722	176.00	1142784
39.00	18320	83.00	366	132.00	246	177.00	74056
40.00	466	86.00	1209	133.00	474	178.00	1906
41.00	102	87.00	55040	134.00	351	180.00	63
43.00	446	88.00	52696	135.00	1238	181.00	60
44.00	5254	90.00	94	136.00	390	191.00	49
45.00	10160	91.00	2696	137.00	1212	195.00	127
46.00	749	92.00	28584	138.00	67	196.00	50
47.00	14258	93.00	49208	139.00	329	197.00	54
48.00	4923	94.00	136960	140.00	640	203.00	23
49.00	44064	95.00	1367552	141.00	6885	205.00	114
50.00	244224	96.00	92360	142.00	1006	207.00	64
51.00	74240	97.00	2784	143.00	7115	209.00	162
52.00	2711	101.00	64	144.00	424	210.00	61
55.00	2537	102.00	33	145.00	525	217.00	109
56.00	14247	103.00	527	146.00	1988	221.00	104
57.00	30944	104.00	3615	147.00	642	232.00	114
58.00	1172	105.00	1276	148.00	2214	233.00	24
59.00	16	106.00	3588	149.00	812	234.00	201
60.00	8822	107.00	1268	150.00	1068	237.00	52
61.00	43248	108.00	66	151.00	149	239.00	80
62.00	48912	109.00	216	152.00	573	249.00	279
63.00	37216	110.00	357	153.00	1089	250.00	65
64.00	3029	111.00	609	154.00	769	253.00	409
65.00	121	112.00	147	155.00	2837	265.00	19
66.00	148	113.00	586	156.00	132	266.00	68
67.00	2227	115.00	534	157.00	1838	268.00	195
68.00	116288	116.00	2972	158.00	266	270.00	108
69.00	109120	117.00	5461	159.00	1124	271.00	4
70.00	7621	118.00	2641	160.00	100	290.00	51
71.00	436	119.00	4156	161.00	871	293.00	50
72.00	4566	120.00	149	163.00	80	294.00	54
73.00	39520	122.00	241	166.00	50	327.00	35

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7102201.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 75

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	164672	123.00	275	168.00	118	334.00	71
75.00	543744	124.00	566	169.00	146	345.00	25
76.00	47160	125.00	204	170.00	403		
77.00	6258	126.00	206	171.00	332		
78.00	4752	127.00	159	172.00	1080		
79.00	16057	128.00	3594	173.00	6310		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-30oct.b/7103001.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 30-OCT-2007 08:26
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-30oct.b/bfb105.m
Meth Date : 30-Oct-2007 08:20
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	985898			100.00- 100.00	100.00
8.218	8.232	-0.014	50	179605			15.00- 40.00	18.22
8.218	8.232	-0.014	75	386803			30.00- 60.00	39.23
8.218	8.232	-0.014	96	65481			5.00- 9.00	6.64
8.218	8.232	-0.014	173	4443			0.00- 2.00	0.52
8.218	8.232	-0.014	174	855253			50.00- 100.00	86.75
8.218	8.232	-0.014	175	60898			5.00- 9.00	7.12
8.218	8.232	-0.014	176	835758			95.00- 101.00	97.72
8.218	8.232	-0.014	177	53944			5.00- 9.00	6.45

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

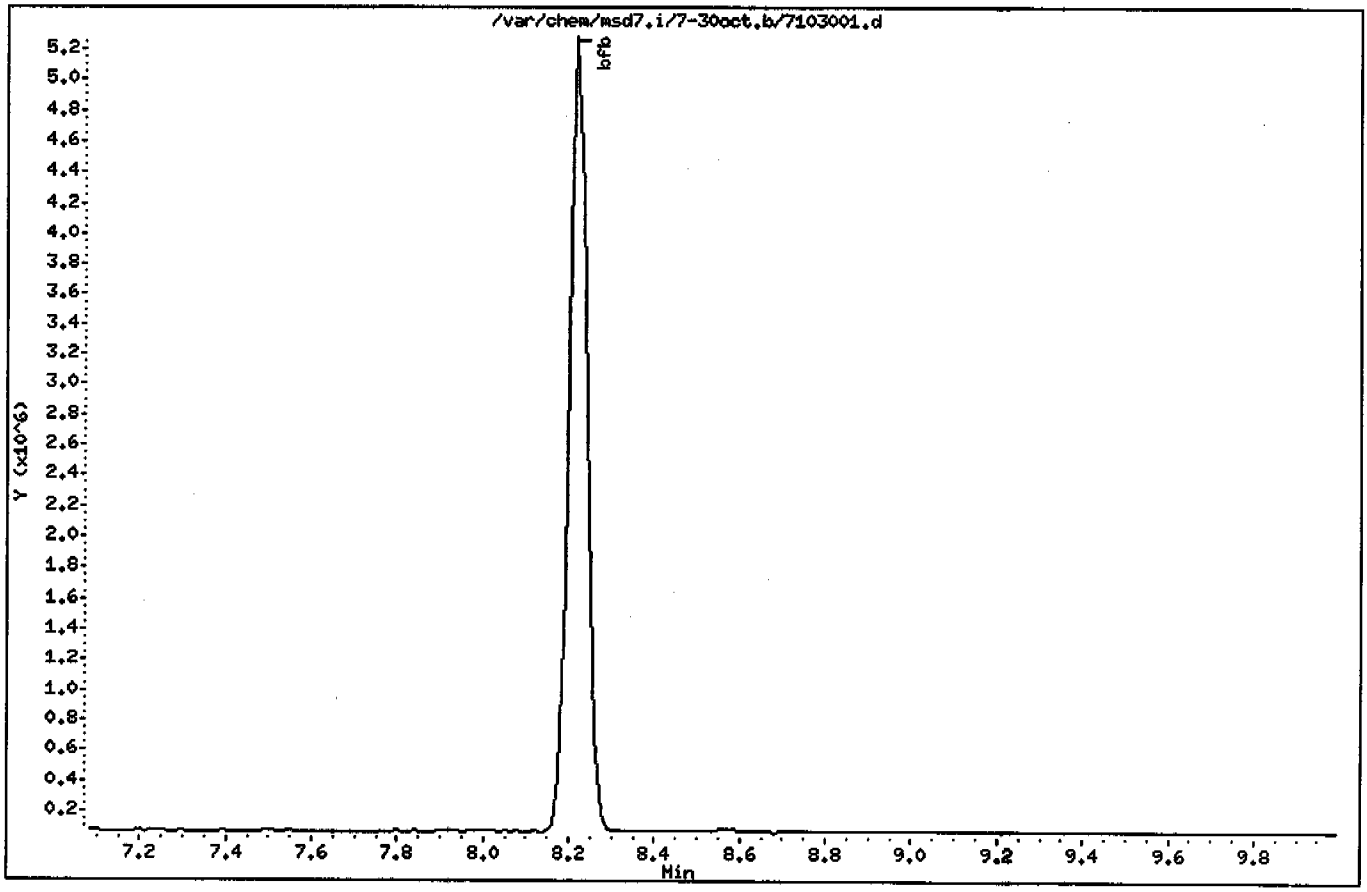
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

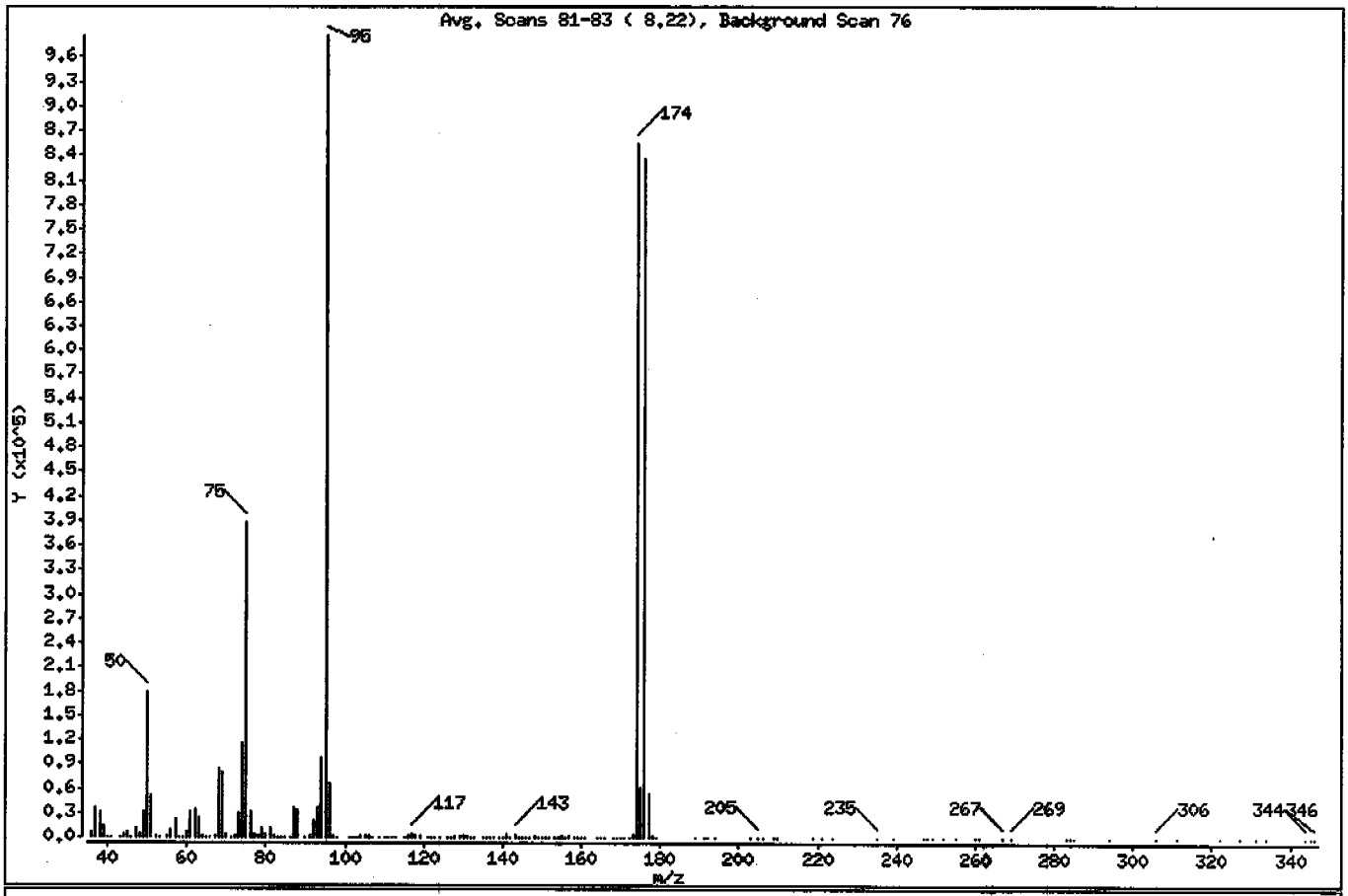
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.22
75	30.00 - 60.00% of mass 95	39.23
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.45 (0.52)
174	50.00 - 100.00% of mass 95	86.75
175	5.00 - 9.00% of mass 174	6.18 (7.12)
176	95.00 - 101.00% of mass 174	84.77 (97.72)
177	5.00 - 9.00% of mass 176	5.47 (6.45)

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103001.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5864	80.00	4195	129.00	1278	175.00	60896
37.00	35984	81.00	12097	130.00	2851	176.00	835712
38.00	32616	82.00	2437	131.00	1250	177.00	53944
39.00	13376	83.00	269	132.00	40	178.00	1321
40.00	252	84.00	56	133.00	221	179.00	25
41.00	118	85.00	51	135.00	850	189.00	147
43.00	194	86.00	972	136.00	239	191.00	119
44.00	3444	87.00	35968	137.00	991	192.00	85
45.00	7216	88.00	33456	138.00	108	194.00	76
46.00	550	90.00	115	139.00	64	203.00	51
47.00	10457	91.00	1553	140.00	426	205.00	142
48.00	4077	92.00	20376	141.00	4690	206.00	91
49.00	30808	93.00	35520	142.00	663	209.00	22
50.00	179684	94.00	96568	143.00	4970	210.00	105
51.00	53066	95.00	985856	144.00	322	219.00	106
52.00	2430	96.00	65480	145.00	447	221.00	68
53.00	124	97.00	1839	146.00	920	224.00	52
55.00	1522	98.00	50	147.00	386	235.00	132
56.00	9728	101.00	140	148.00	1872	239.00	74
57.00	22088	102.00	66	149.00	667	247.00	32
58.00	909	103.00	111	150.00	776	248.00	64
59.00	161	104.00	2660	151.00	123	249.00	823
60.00	5809	105.00	1235	152.00	504	252.00	106
61.00	30872	106.00	2288	153.00	738	255.00	1
62.00	34136	107.00	826	154.00	588	260.00	24
63.00	26000	109.00	263	155.00	2007	261.00	87
64.00	2039	110.00	310	156.00	425	267.00	404
65.00	308	111.00	281	157.00	1404	269.00	146
66.00	94	112.00	327	158.00	200	283.00	48
67.00	1714	113.00	417	159.00	927	284.00	39
68.00	83912	115.00	523	160.00	55	285.00	64
69.00	79304	116.00	1973	161.00	708	294.00	75
70.00	5473	117.00	4153	164.00	197	306.00	76
71.00	168	118.00	2490	165.00	28	311.00	53
72.00	2901	119.00	3262	166.00	172	322.00	151

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103001.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	28448	121.00	198	168.00	123	327.00	38
74.00	115962	122.00	214	169.00	68	331.00	60
75.00	396752	123.00	289	170.00	319	334.00	24
76.00	32240	124.00	318	171.00	440	344.00	306
77.00	4494	126.00	237	172.00	936	345.00	85
78.00	2890	127.00	171	173.00	4443	346.00	56
79.00	11211	128.00	2629	174.00	855232		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-04nova.b/7110408.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 04-NOV-2007 22:00
Operator : dm Inst ID: msd7.i
Smp Info : 2.0uL #1467-64;bfb tune check;bfb tune check;
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-04nova.b/bfb105.m
Meth Date : 04-Nov-2007 21:55 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	1069149			100.00- 100.00	100.00
8.218	8.232	-0.014	50	208948			15.00- 40.00	19.54
8.218	8.232	-0.014	75	421024			30.00- 60.00	39.38
8.218	8.232	-0.014	96	73430			5.00- 9.00	6.87
8.218	8.232	-0.014	173	4750			0.00- 2.00	0.47
8.218	8.232	-0.014	174	1015338			50.00- 100.00	94.97
8.218	8.232	-0.014	175	69509			5.00- 9.00	6.85
8.218	8.232	-0.014	176	996330			95.00- 101.00	98.13
8.218	8.232	-0.014	177	64980			5.00- 9.00	6.52

Data File: /var/chem/msd7.i/7-04nova.b/7110408.d

Date : 04-NOV-2007 22:00

Client ID: BFB

Instrument: msd7.i

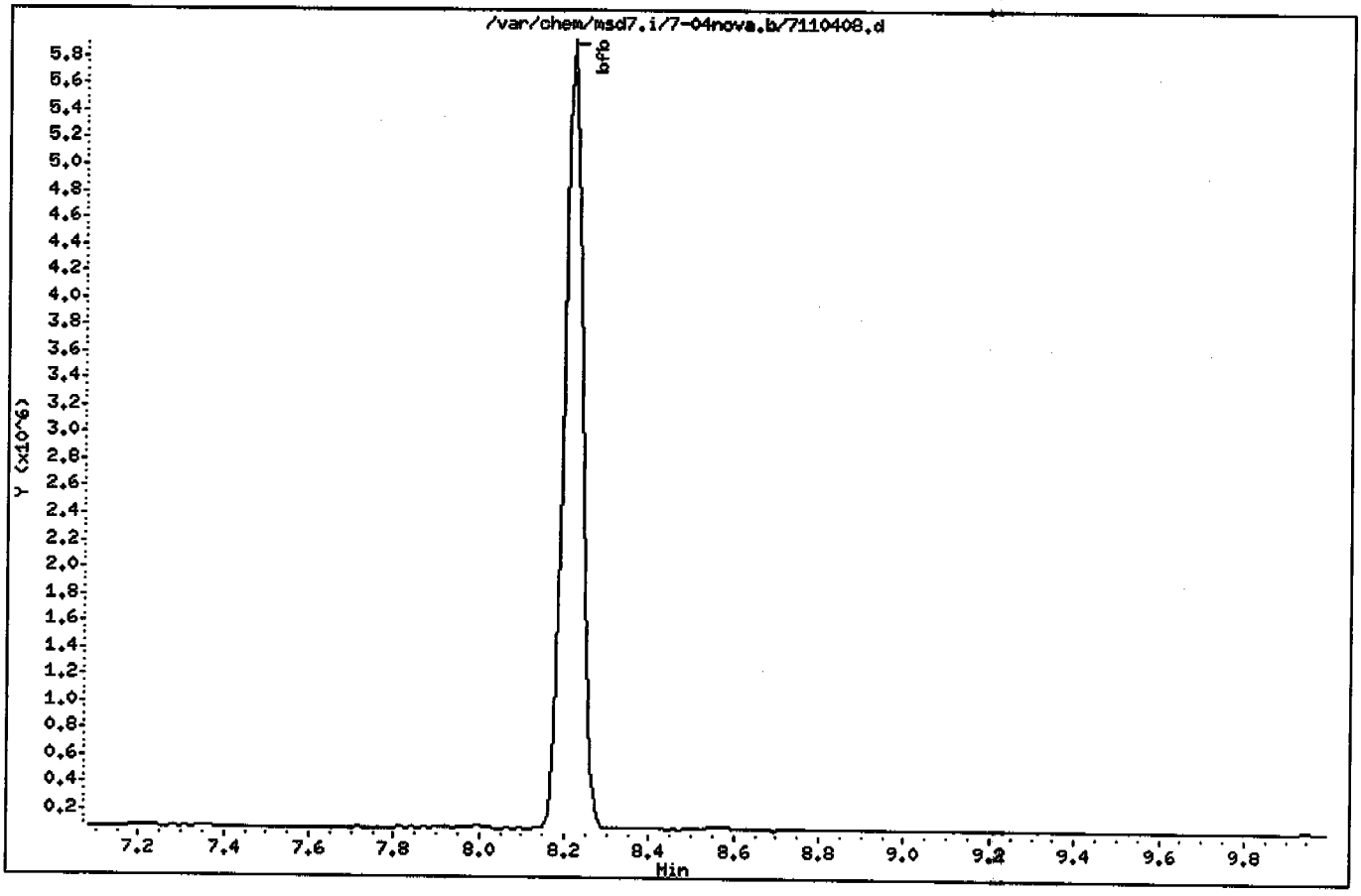
Sample Info: 2.0uL #1467-64;bfb tune check;bfb tune check;

Volume Injected (uL): 2.0

Operator: dm

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-04nova.b/7110408.d

Date : 04-NOV-2007 22:00

Client ID: BFB

Instrument: msd7.i

Sample Info: 2.0uL #1467-64;bfb tune check;bfb tune check;

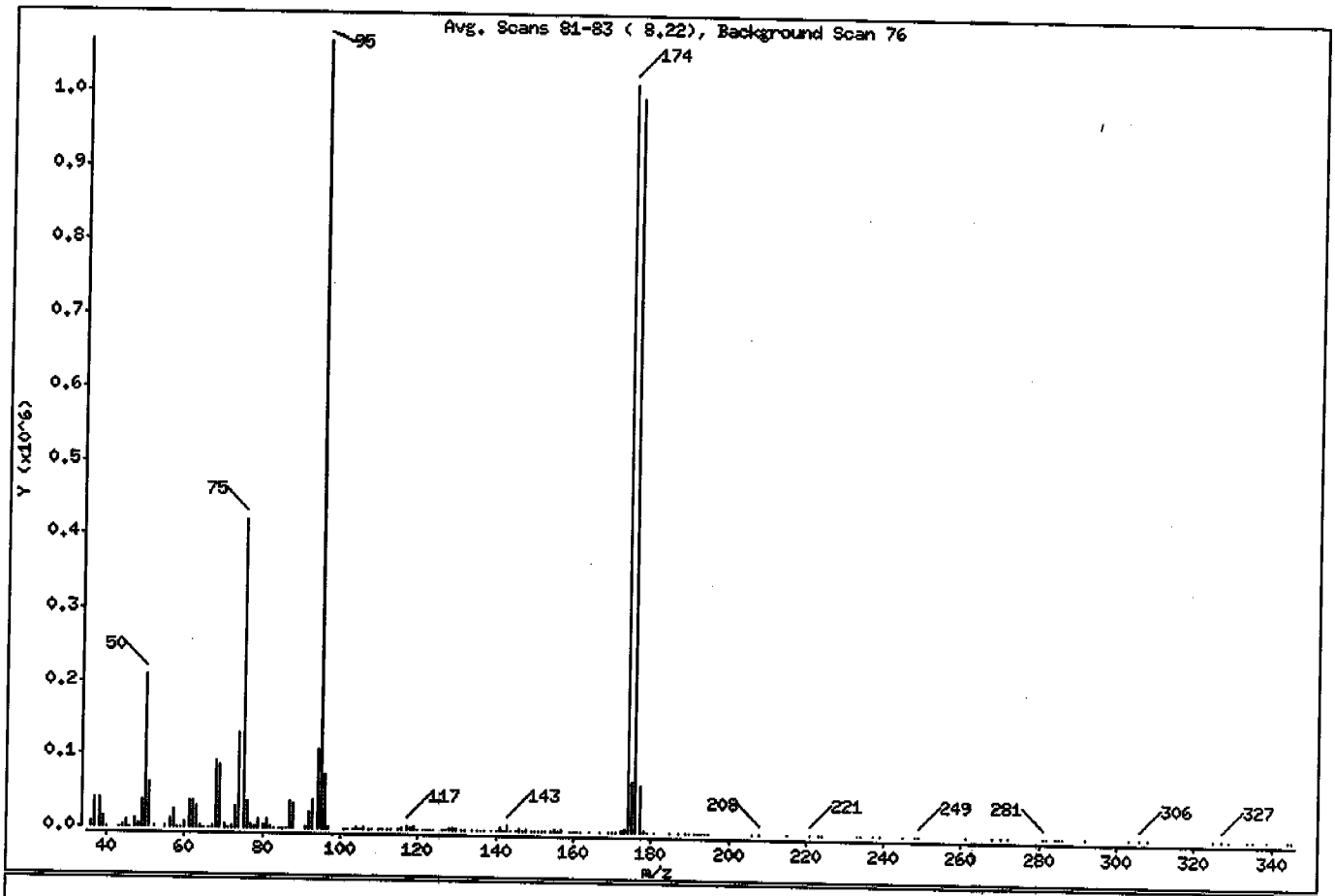
Volume Injected (uL): 2.0

Operator: dm

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.54
75	30.00 - 60.00% of mass 95	39.38
96	5.00 - 9.00% of mass 95	6.87
173	Less than 2.00% of mass 174	0.44 (0.47)
174	50.00 - 100.00% of mass 95	94.97
175	5.00 - 9.00% of mass 174	6.50 (6.85)
176	95.00 - 101.00% of mass 174	93.19 (98.13)
177	5.00 - 9.00% of mass 176	6.08 (6.52)

Data File: /var/chem/msd7.i/7-04nova.b/7110408.d

Date : 04-NOV-2007 22:00

Client ID: BFB

Instrument: msd7.i

Sample Info: 2.0uL #1467-64;bfb tune check;bfb tune check;

Volume Injected (uL): 2.0

Operator: dm

Column phase:

Column diameter: 0.53

Data File: 7110408.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76

Location of Maximum: 95.00

Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6500	83.00	367	135.00	637	190.00	177
37.00	40536	84.00	68	136.00	168	191.00	139
38.00	38528	85.00	158	137.00	1032	192.00	12
39.00	15323	86.00	1027	139.00	221	193.00	167
40.00	736	87.00	36280	140.00	435	194.00	41
43.00	92	88.00	34432	141.00	5643	195.00	61
44.00	3677	91.00	1884	142.00	838	206.00	109
45.00	9096	92.00	22720	143.00	6349	208.00	966
46.00	653	93.00	38656	144.00	538	216.00	61
47.00	11857	94.00	108208	145.00	590	221.00	307
48.00	4329	95.00	1069056	146.00	1419	223.00	39
49.00	35736	96.00	73424	147.00	367	224.00	67
50.00	208896	97.00	2099	148.00	2276	233.00	65
51.00	60776	101.00	110	149.00	645	234.00	60
52.00	2817	102.00	16	150.00	888	237.00	51
55.00	1742	103.00	109	151.00	206	239.00	128
56.00	11632	104.00	2894	152.00	537	245.00	50
57.00	23944	105.00	933	153.00	790	248.00	56
58.00	1160	106.00	2687	154.00	576	249.00	175
59.00	48	107.00	748	155.00	2622	261.00	6
60.00	6668	108.00	182	156.00	199	268.00	83
61.00	36872	110.00	309	157.00	1939	270.00	119
62.00	36480	111.00	478	159.00	965	272.00	61
63.00	29280	112.00	294	160.00	143	281.00	624
64.00	2340	113.00	487	161.00	672	282.00	140
65.00	397	115.00	448	162.00	56	284.00	41
66.00	55	116.00	2217	164.00	71	285.00	59
67.00	1737	117.00	4156	167.00	120	286.00	50
68.00	90684	118.00	2218	169.00	238	292.00	54
69.00	85808	119.00	3721	170.00	134	303.00	57
70.00	5632	120.00	307	171.00	411	306.00	160
71.00	153	121.00	251	172.00	1231	308.00	57
72.00	3428	122.00	119	173.00	4750	325.00	142
73.00	28520	123.00	297	174.00	1015296	327.00	188
74.00	130128	124.00	498	175.00	69504	329.00	102

Data File: /var/chem/msd7.i/7-04nova.b/7110408.d

Date : 04-NOV-2007 22:00

Client ID: BFB

Instrument: msd7.i

Sample Info: 2.0uL #1467-64;bfb tune check;bfb tune check;

Volume Injected (uL): 2.0

Operator: dm

Column phase:

Column diameter: 0.53

Data File: 7110408.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 95.00
Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	420992	126.00	199	176.00	996288	334.00	186
76.00	36416	127.00	73	177.00	64976	335.00	138
77.00	4262	128.00	2943	178.00	1771	339.00	58
78.00	2868	129.00	1492	179.00	11	344.00	109
79.00	12792	130.00	3022	181.00	61	345.00	170
80.00	4261	131.00	1037	185.00	52		
81.00	12487	132.00	241	187.00	66		
82.00	2697	134.00	146	189.00	130		

Shipping/ Receiving Documents

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0711008
# of pages (Including Cover): 1

11/7/2007

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

0711008 Page 1 of 1

Wednesday, October 31, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-98C

REQUEST NUMBER: 08-98

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 11/5/2007

TURNAROUND REQD: 5

LAB REQUEST COMMENTS:

	SAMPLE ID	Receipt Vacuum	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
05A	MD21-07-6810	6.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
02A	MD21-07-6807	7.5"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
03A	MD21-07-6811	9.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
04A	MD21-07-6809	8.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
05A	MD21-07-6808	8.0"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS
06A	MD21-07-6812	7.5"Hg	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
		10/31/07	3:00	A.R. Scott AIR		11/1/07	0845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

CUSTODY SEAL INTACT?
Y N NONE TEMP

AR 11/1/07

Wednesday, October 31, 2007

REQUEST NUMBER: 08-98 0711008

0473

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Toxic LTD
180 Blue Ravine Rd. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-98
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 10/31/2007
TURNAROUND/REPORT DUE: 11/5/2007
TURNAROUND REQ'D: 5 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-07-6807	GAS	10/30/2007		
		1	MD21-07-6808	GAS	10/30/2007		
		1	MD21-07-6809	GAS	10/30/2007		
		1	MD21-07-6810	GAS	10/30/2007		
		1	MD21-07-6811	GAS	10/30/2007		
		1	MD21-07-6812	GAS	10/30/2007		

Final Page of REQUEST NUMBER 08-98

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0711008

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: R6

Date Promised: 11/05/07 4:00 pm
Date Completed: 11/5/07
Date Received: 11/1/07
PO#: 47247-001-07
Project#: 08-98

Total $: $ 2,722.50
Logged By: AS

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-07-6810	Modified TO-15	10/30/2007	6.0 "Hg	$358.75
02A	MD21-07-6807	Modified TO-15	10/30/2007	7.5 "Hg	$358.75
03A	MD21-07-6811	Modified TO-15	10/30/2007	9.0 "Hg	$358.75
04A	MD21-07-6809	Modified TO-15	10/30/2007	8.0 "Hg	$358.75
05A	MD21-07-6808	Modified TO-15	10/30/2007	8.0 "Hg	$358.75
06A	MD21-07-6812	Modified TO-15	10/30/2007	7.5 "Hg	$358.75
07A	Lab Blank	Modified TO-15	NA	NA	$0.00
08A	CCV	Modified TO-15	NA	NA	$0.00
09A	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (6) @ $60.00 each.	$360.00
CVP (6) @ $20.00 each.	$120.00
Client Specific EDD (6) @ $5.00 each.	$30.00
eCVP (6) @ $10.00 each.	$60.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

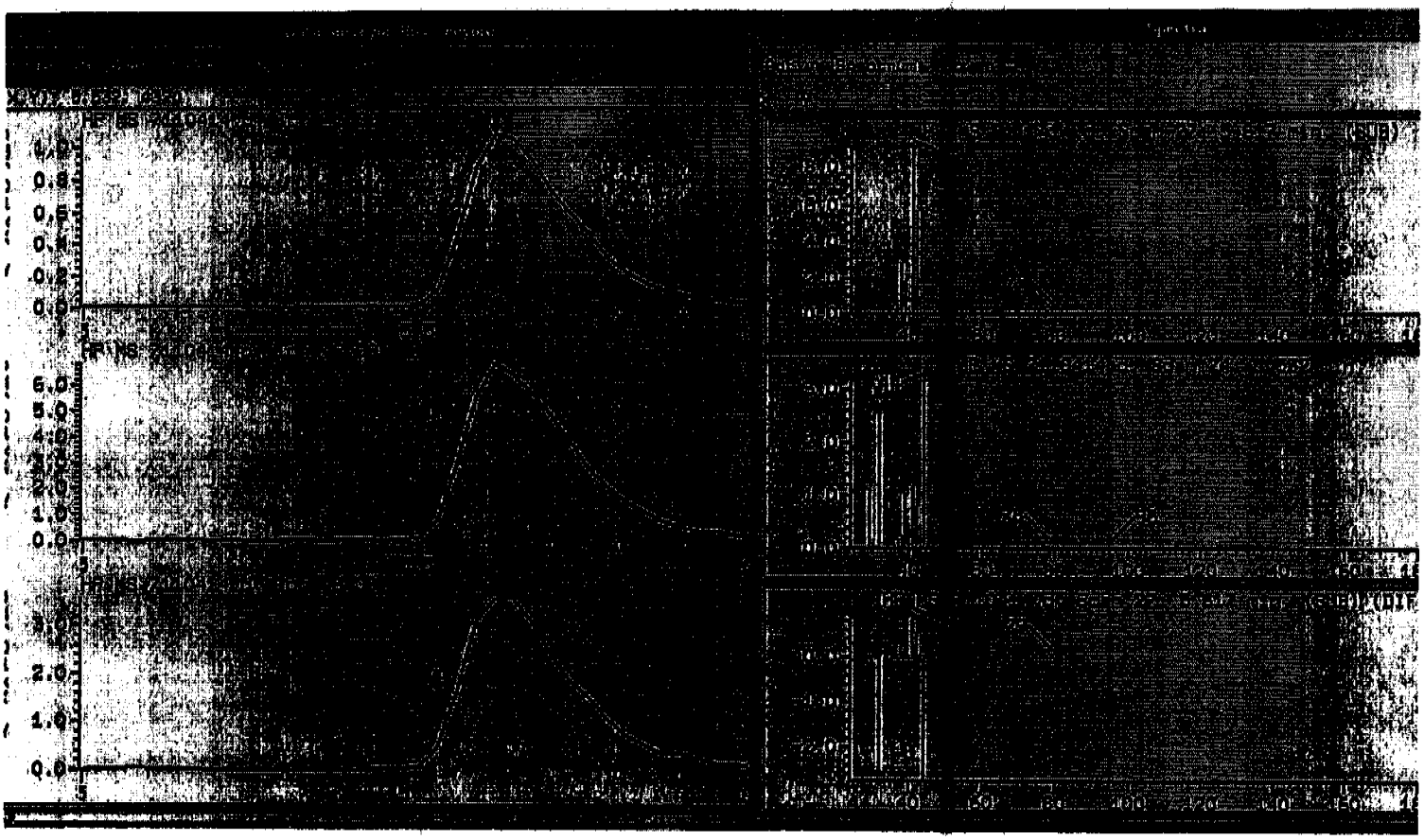
Analysis Code: TO-14A

REMARKS: A 75% surcharge is applied for a 48 hour turnaround time.

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Other Records



Team VOG	NK
Date / Initial	
Poor Integration	
Split Peak	
Peak Tailing	X
Background Subtraction	
Zoom In	
Missed Peak	
Merged Peaks	

Propylene
NK 11/05/07

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} - [(\text{Initial Pressure ("Hg)})\ (14.7\ \text{psi} / 30\ \text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.33	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0711008

A	R	T	M	Q	
☑	☑	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
	☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
NA	NA	☐	☐	☐	Corrective Action issued - # _____
NA	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* ***CIRCLE (YES / NO)***

☑	☐	☐	☐	☐ Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	☐ Hold time is met for all samples
	☐	☐	☐	☐ Appropriate data qualifier flags are applied
	☐	☐	☐	☐ Manual integrations for samples and QC are properly documented
☑	☐	☐		☐ Samples analyzed within the project or method specific clock
	☐	☐		Retention times have been verified
☑	☐	☐		☐ Appropriate ICAL(s) included
	☐	☐	☐	☐ At least one result per sample is verified against the target quant sheets/raw data

☑	☑	☐		☐ Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑	☐		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐		Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
	NA	☐		TICs reasonable reference spectra
	NA	☐		TICs between duplicate samples are consistent
☑	☑	☐	☑	Checked samples for trends (i.e. Influent>Effluent, Landfill and Ambient etc)
	☑		☑	Special units for all samples in the final report are correctly calculated
	☑	☐	☑	Manually entered results checked (i.e. special CCV compounds)
	NA	☐	☑	TPH/NMOC (verify calculations and correct reference compound used)
	☑			Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☑			Samples pressurized w/ appropriate gas (N_2 or He) ☐ Tedlar Bag only
☑	☑			Final pressure consistent with canister size (6L vs. 1L)
☑	☑			Verify receipt pressures against logbook and Target
☑	☑			Verify canister ID #'s
	NA		☐	Extra printed copies are provided per client profile
	☑		☑	Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
	NA	☐	☐	☐ Client LUMEN report reviewed for accuracy and completeness

Notes: *(to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)*

A/R:

2 out in LCS
multiple files for ccv.

M/Q:

A	R/T	M	Q
(Analytical Review/Date)	(Reporting Review/Date)	(Management Review/Date)	(QA Review/Date)
11/5/07	R: NE 11/05/07	11/9/07	

T:_____

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Rev 04/29/05

Note (2): Management reviewer and reporting reviewer must be separate individuals.

Monday, October 22, 2007

REQUEST NUMBER: 08-80

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-80

Per Agreement Number:126310041

Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 10/22/2007

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6813	GAS	10/19/2007		
		1	MD21-07-6814	GAS	10/19/2007		
		1	MD21-07-6815	GAS	10/19/2007		
		1	MD21-07-6816	GAS	10/19/2007		
		1	MD21-07-6817	GAS	10/19/2007		

Final Page of REQUEST NUMBER 08-80

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-80C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-80

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/1/2007
TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6816	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6817	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6815	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6814	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
[illegible]		10/27/07	1400				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6813

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0949	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Can #20940: Tritium column Final mass = 24.0 gms

LOCATION DESC:

Port#1 70ft

FIELD SCREENING/MEASUREMENT RESULTS:

O_2 = 20.2 %

CO_2 = 0.3 %

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kerry Reid

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stone	10/19/07	(Printed Name)	10/19/07
(Signature)	10:42	(Signature)	10:42
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6814

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/9/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0957	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	150.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:	Port #2	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister: # 4216 ; Final tritium column mass = 24.9 gms

LOCATION DESC:

Port #2 153 ft BGS

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 20.1\ \%$

$CO_2 = 0.7\ \%$

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Bill Stewart	10/9/07	(Printed Name)	10/9/07
(Signature)	10:42	(Signature)	10:42
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6815

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1005	SUB-MEDIA:	IA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		Port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister = # 13863 Final tritium column mass = 26.5 gms

LOCATION DESC:

Port #3 225 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.1 %

O_2 = 20.9 %

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Brad Stewart	10/19/07	(Printed Name)	10/19/07
(Signature)	10:42	(Signature)	10:42
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6816

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1012	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	YOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	323.0	SAMPLE USAGE:	INV	✓
BOTTOM DEPTH:	0	328.0	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister # 434 Final tritium column mass = 29.2 gms

LOCATION DESC:

Port #4 325.5 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 21.5 %

O_2 = 0.0 %

COLLECTED BY (PRINT) **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY (Printed Name) Erin Stanek (Signature)	**Date/Time** 10/19/07 16:42	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/19/07 16:42
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6817

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1017	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	ok	FIELD PREP:	NA	
TOP DEPTH:	0	349.5	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	354.5	SCREEN/PORT DESC:		port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister = 4175 final tritium column mass = 23.6 gms

LOCATION DESC:

Port #5 352 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

~~Rad~~ = 2+ KR 10/19/07

CO_2 = 0.1 %

O_2 = 21.8 %

COLLECTED BY (PRINT) [signature] **REVIEWED BY (PRINT)** Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) ~~Kevin Read~~	10/19/07	(Printed Name)	10/19/07
(Signature) [signature]	10:42	(Signature) [signature]	10:42
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Attachment C: Data-Validation Cover Sheet

☐ **Rejected Data**

Section I

Request Number: 08-80 Validation Date: 11/7/07 Lab Code: ARS

Contract Laboratory Name: American Radiation Services Validator: Eric T. Mink

Organization: Analytical Quality Associates, Inc.

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

Other (describe):

Section II - Completeness Check

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

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

None

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): **(Page 1 of 1)**

1. The tritium result for sample MD21-07-6816 was ≤ the MDC and, thus, was qualified U,R5.

Reviewed: By: JKF **Level:** I **Date:** 11/8/07

Validator's signature: Eric T. Mink Date: 11/7/07

Attachment D. RAD Checklist

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

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

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6813
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-001
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:35

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	318.847	119.506	185.406	91.126		pCi/L	ARS-054/EPA 906.0	10/30/07 5:21	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lamoigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/7/07

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6816
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-002
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:36

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	141.323	112.961	186.399	91.614	U	pCi/L	ARS-054/EPA 906.0	10/30/07 8:28	BS	NA

NOTES: Project Cost Code: MRSR0225FB00

Lindsay Ramsigne
Project Manager Review

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11/7/07

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6817
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-003
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:36

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	243.472	116.573	186.078	91.456		pCi/L	ARS-054/EPA 906.0	10/30/07 11:35	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigne
Project Manager Review

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ETM
11/7/07

ARS
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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6815
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-004
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:36

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	206.760	115.483	186.722	91.773		pCi/L	ARS-054/EPA 906.0	10/30/07 14:41	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigne
Project Manager Review

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11/7/07

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6814
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-005
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	9385.239	989.166	184.992	90.923		pCi/L	ARS-054/EPA 906.0	10/30/07 17:48	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lamoigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ETM
11/7/07

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-80C

REQUEST NUMBER: 08-80

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6816	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6817	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6815	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6814	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	10/22/07	1400	Printed Name	Signature	10/23/07	952
				Shirley Clayton	Shirley Clayton		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, October 22, 2007

REQUEST NUMBER: 08-80

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-80
Per Agreement Number:126310041
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 10/22/2007
TURNAROUND/REPORT DUE: 11/1/2007
TURNAROUND REQ'D: 10 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6813	GAS	10/19/2007		
		1	MD21-07-6814	GAS	10/19/2007		
		1	MD21-07-6815	GAS	10/19/2007		
		1	MD21-07-6816	GAS	10/19/2007		
		1	MD21-07-6817	GAS	10/19/2007		

Final Page of REQUEST NUMBER 08-80

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

REC'D NOV 0 5 2007

for

Los Alamos National Laboratory

Request Number: 08-80

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-80

Original COC

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-80C

REQUEST NUMBER: 08-80

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6816	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6817	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6815	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6814	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	10/22/07	1400	Printed Name	Signature	10/23/07	9:5
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, October 22, 2007

REQUEST NUMBER: 08-80

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

These Samples are on:

LANL Request Number:08-80

Per Agreement Number:126310041

Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 10/22/2007

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-07-6813	GAS	10/19/2007		
		1	MD21-07-6814	GAS	10/19/2007		
		1	MD21-07-6815	GAS	10/19/2007		
		1	MD21-07-6816	GAS	10/19/2007		
		1	MD21-07-6817	GAS	10/19/2007		

Final Page of REQUEST NUMBER 08-80

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SERVICES, INC.

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American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-80

Case Narrative

ARS
AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

October 31, 2007

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-80
LANL Sample ID: MD21-07-6813, MD21-07-6816, MD21-07-6817, MD21-07-6815, MD21-07-6814

Dear Mr. Greene:

On October 23, 2007, American Radiation Services (ARS) received 5 Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet a statistical sound detection limits.

Counting equipment Quality Assurance was with in acceptance criteria when the above referenced samples were processed.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

Virgene Mulligan

Laboratory Director
American Radiation Services

AMERICAN RADIATION SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-80	MD21-07-6813	ARS1-07-01726-001
08-80	MD21-07-6816	ARS1-07-01726-002
08-80	MD21-07-6817	ARS1-07-01726-003
08-80	MD21-07-6815	ARS1-07-01726-004
08-80	MD21-07-6814	ARS1-07-01726-005

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water".**

ANALYTICAL RESULTS

The result data that are flagged with "U" indicates that the activity is below the MDC.

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."

Virginia Mullegan
Signature

Lab Manager/Technical Director, American Radiation Services
Title

10-31-07
Date

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6813
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-001
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:35

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	318.847	119.506	185.406	91.126		pCi/L	ARS-054/EPA 906.0	10/30/07 5:21	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lamoigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6816
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-002
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:36

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	141.323	112.961	186.399	91.614	U	pCi/L	ARS-054/EPA 906.0	10/30/07 8:28	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lamarque
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6817
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-003
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:36

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	243.472	116.573	186.078	91.456		pCi/L	ARS-054/EPA 906.0	10/30/07 11:35	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6815
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-004
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:36

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	206.760	115.483	186.722	91.773		pCi/L	ARS-054/EPA 906.0	10/30/07 14:41	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Ramsigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6814
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-005
Date Received: 10/23/07 09:50
Report Date: 10/31/07 10:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	9385.239	989.166	184.992	90.923		pCi/L	ARS-054/EPA 906.0	10/30/07 17:48	BS	NA

NOTES: Project Cost Code: MR8R0225FB00

Lindsay Lanoigne
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-07-01726

Date Received: 10/23/2007

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B07-03039	LCS	H3	1068.59	167.4	181.90639	1212.21		pCi/L	ARS-055/EPA 906.0	10/29/07 20:01	BS	88	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B07-03039	MBL	H3	0.410	106.30834	181.51987	NA	U	pCi/L	ARS-055/EPA 906.0	10/29/07 20:01	BS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B07-03039	LCSD	H3	1068.59	167.4	1120.5062	171.2686		pCi/L	ARS-055/EPA 906.0	10/29/07 20:01	BS	0.15	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B07-03039	LCSD	H3	1068.59	167.4	1120.5062	171.2686		pCi/L	ARS-055/EPA 906.0	10/29/07 20:01	BS	0.43	< 3

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071029_1647
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071029_1647\20071029_1647.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071029_1647\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for Protocol 5\20071029_1647\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for Protocol 5.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
5	1	BACKGROUND	6.293	14.15	440.29	44.46	180.00	10/29/2007	4:52:33 PM	
5	2	B07-03039-01	11.492	26.25	432.19	43.77	180.00	10/29/2007	8:01:24 PM	
5	3	B07-03039-02	11.767	26.82	433.37	43.88	180.00	10/29/2007	11:08:03 PM	
5	4	B07-03039-03	6.295	14.41	431.04	43.68	180.00	10/30/2007	2:14:39 AM	
5	5	B07-03039-04	7.815	18.25	417.73	42.83	180.00	10/30/2007	5:21:16 AM	
5	6	B07-03039-05	6.964	16.30	415.02	42.73	180.00	10/30/2007	8:27:52 AM	
5	7	B07-03039-06	7.451	17.51	410.07	42.55	180.00	10/30/2007	11:34:32 AM	
5	8	B07-03039-07	7.273	17.12	408.02	42.48	180.00	10/30/2007	2:41:11 PM	
5	9	B07-03039-08	51.193	120.34	409.78	42.54	180.00	10/30/2007	5:47:59 PM	

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.492000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.437700
Sample Aliquot	5.007000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/29/07 8:01 PM
Count Date (t2)	10/29/07 8:01 PM
Activity Units = pCi --> uCi =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1068.593935	1068.593935	OK
CU	126.630885	126.630885	OK
TPU	167.406578	167.406578	OK
MDA	181.906385	181.906385	OK
DL	89.405946	89.405946	OK
Net Count Rate	5.199000	5.199000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004865	0.004865	OK
K MDA	0.875749	0.875749	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-01
Analysis Code	
SDG	ARS1-07-01726
Fraction	005
Run Number	1
Client	QC Sample
Client Profile	
Client ID	MRA-QC Sample
Instr File Name	84
Instr Detector	PIB - S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.964000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.427300
Sample Aliquot	5.014000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/19/07 12:00 AM
Count Date (t2)	10/30/07 8:28 AM
Activity Units = pCi, = uCi *	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	141.322661	141.322661	OK
CU	112.029329	112.029329	OK
TPU	112.961376	112.961375	OK
MDA	186.399329	186.399329	OK
DL	91.614201	91.614201	OK
Net Count Rate	0.671000	0.671000	OK
D t 1 (t2 - t1)	11.352778	11.352778	OK
DF	0.998253	0.998253	OK
Sys Err	0.052280	0.052280	OK
K	0.004748	0.004748	OK
K MDA	0.854640	0.854640	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-05
Analysis Code	LSC-A-001
SDG	ARS1-07-01726
Fraction	002
Run Number	6
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	NM21-07-6816
Instr File Name	84
Instr Detector	PRS - S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.451000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.425500
Sample Aliquot	5.044000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/19/07 12:00 AM
Count Date (t2)	10/30/07 11:35 AM
Activity Units = pCi -> uCi =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	243.472051	243.472051	OK
CU	113.872000	113.872000	OK
TPU	116.572907	116.572907	OK
MDA	186.078249	186.078249	OK
DL	91.456393	91.456393	OK
Net Count Rate	1.158000	1.158000	OK
D t 1 (t2 - t1)	11.482639	11.482639	OK
DF	0.998233	0.998233	OK
Sys Err	0.052280	0.052280	OK
K	0.004756	0.004756	OK
K MDA	0.856115	0.856115	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-06
Analysis Code	LSC-A-001
SDG	ARS1-07-01726
Fraction	003
Rep Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	M821-07-6817
Instr File Name	84
Instr Detector	PSC - S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.273000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.424800
Sample Aliquot	5.035000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/19/07 2:00 AM
Count Date (t2)	10/30/07 2:41 PM
Activity Units = pCi -- pCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	206.759718	206.759718	OK
CU	113.523450	113.523450	OK
TPU	115.483476	115.483476	OK
MDA	186.721751	186.721751	OK
DL	91.772670	91.772670	OK
Net Count Rate	0.980000	0.980000	OK
D t 1 (t2 - t1)	11.611806	11.611806	OK
DF	0.998213	0.998213	OK
Sys Err	0.052280	0.052280	OK
K	0.004740	0.004740	OK
K MDA	0.853164	0.853164	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-07
Analysis Code	LSC-A-001
SDG	ARS1-07-01726
Fraction	004
Rpt Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	M921-07-6815
Instr File Name	84
Instr Detector	PRC-S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	51.193000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.425400
Sample Aliquot	5.075000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/19/07 12:00 AM
Count Date (t2)	10/30/07 5:48 PM
Activity Units = pCi = uCi *	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	9385.238956	9385.238955	OK
CU	231.526047	231.526047	OK
TPU	989.166322	989.166322	OK
MDA	184.992470	184.992470	OK
DL	90.922738	90.922738	OK
Net Count Rate	44.900000	44.900000	OK
D t 1 (t2 - t1)	11.741667	11.741667	OK
DF	0.998193	0.998193	OK
Sys Err	0.052280	0.052280	OK
K	0.004784	0.004784	OK
K MDA	0.861140	0.861140	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-08
Analysis Code	LSC-A-001
SDG	ARS1-07-01726
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	M921-07-6814
Instr File Name	84
Instr Detector	PE - S-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Batch Result Verification Report

ARBatch	ARSampleID	Isotope	ClientID	Act	Unc	TPU	[illegible]	MDA	[illegible]	[illegible]	[illegible]	SampleCount	SampleCountTime	BkgCount	BkgCountTime	Eff	Aliq	[illegible]	[illegible]	GrossCountRate
ARS1-B07-03039	ARS1-B07-03039-01	H-3	MD21-07-6814	1068.593935	126.6308847	167.4065782	89.40595	181.90639				0.06384	180.00000	0.03496	180.00000	0.43770	5.00700	2.22000	1.96000	11.49200
ARS1-B07-03039	ARS1-B07-03039-02	H-3	MD21-07-6814	1120.506196	127.0832056	171.2685762	89.03956	181.16092				0.06537	180.00000	0.03496	180.00000	0.43880	5.01500	2.22000	1.96000	11.76700
ARS1-B07-03039	ARS1-B07-03039-03	H-3	MD21-07-6814	0.410203274	106.3083341	106.3083424	89.21598	181.51987				0.03497	180.00000	0.03496	180.00000	0.43680	5.02800	2.22000	1.96000	6.29500
ARS1-B07-03039	ARS1-B07-03039-04	H-3	MD21-07-6813	318.8473153	114.9530917	119.5058783	91.12586	185.40574				0.04342	180.00000	0.03496	180.00000	0.42830	5.02900	2.22000	1.96000	7.81500
ARS1-B07-03039	ARS1-B07-03039-05	H-3	MD21-07-6816	141.3226613	112.0293288	112.9613755	91.61420	186.39933				0.03869	180.00000	0.03496	180.00000	0.42730	5.01400	2.22000	1.96000	6.96400
ARS1-B07-03039	ARS1-B07-03039-06	H-3	MD21-07-6817	243.472051	113.8719996	116.5729072	91.45639	186.07825				0.04139	180.00000	0.03496	180.00000	0.42550	5.04400	2.22000	1.96000	7.45100
ARS1-B07-03039	ARS1-B07-03039-07	H-3	MD21-07-6815	206.7597179	113.5234499	115.483476	91.77267	186.72175				0.04041	180.00000	0.03496	180.00000	0.42480	5.03500	2.22000	1.96000	7.27300
ARS1-B07-03039	ARS1-B07-03039-08	H-3	MD21-07-6814	9365.238955	231.5260474	989.1663216	90.92274	184.99247				0.28441	180.00000	0.03496	180.00000	0.42540	5.07500	2.22000	1.96000	51.19300

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3	TPUF_1
ARS1-B07-03039	ARS1-B07-03039-01	H-3	MD21-07-6814	6.29300	5.19900							10/31/07 7:43	10/29/07 20:01	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-02	H-3	MD21-07-6814	6.29300	5.47400							10/31/07 7:43	10/29/07 23:08	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-03	H-3	MD21-07-6814	6.29300	0.00200							10/31/07 7:43	10/30/07 2:15	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-04	H-3	MD21-07-6813	6.29300	1.52200							10/19/07 0:00	10/30/07 5:21	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-05	H-3	MD21-07-6816	6.29300	0.67100							10/19/07 0:00	10/30/07 8:28	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-06	H-3	MD21-07-6817	6.29300	1.15800							10/19/07 0:00	10/30/07 11:35	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-07	H-3	MD21-07-6815	6.29300	0.98000							10/19/07 0:00	10/30/07 14:41	4499.80000			0.04133
ARS1-B07-03039	ARS1-B07-03039-08	H-3	MD21-07-6814	6.29300	44.90000							10/19/07 0:00	10/30/07 17:48	4499.80000			0.04133

Batch Id	Analysis Batch Code	Matrix	Description	Tru 1	Tru 2	Tru 3	Tru 4	Tru 5	Tru 6	Dil 1	Dil 2	Dil 3	Dil 4	Dil 5	Dil 6	Dilution	Rpt 1	Rpt 2	Rpt 3	Rpt 4	Rpt 5	Rpt 6	Rpt Value	Rpt MDA	Rpt LLDA	Rpt Energy	Detector ID	Rpt Comment
ARS1-B07-03039	ARS1-B07-03039-01	H-3	MD21-07-6814	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000							1.00000						0.05228	0.00487	0.87575	84	P-5 - S-2	
ARS1-B07-03039	ARS1-B07-03039-02	H-3	MD21-07-6814	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000							1.00000						0.05228	0.00489	0.87935	84	P-5 - S-3	
ARS1-B07-03039	ARS1-B07-03039-03	H-3	MD21-07-6814	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000							1.00000						0.05228	0.00488	0.87761	84	P-5 - S-4	
ARS1-B07-03039	ARS1-B07-03039-04	H-3	MD21-07-6813	0.02000	0.00000	0.02500	0.00000	0.00000	11.22292							0.99827						0.05228	0.00477	0.85922	84	P-5 - S-5	
ARS1-B07-03039	ARS1-B07-03039-05	H-3	MD21-07-6816	0.02000	0.00000	0.02500	0.00000	0.00000	11.35278							0.99825						0.05228	0.00475	0.85464	84	P-5 - S-6	
ARS1-B07-03039	ARS1-B07-03039-06	H-3	MD21-07-6817	0.02000	0.00000	0.02500	0.00000	0.00000	11.48264							0.99823						0.05228	0.00476	0.85611	84	P-5 - S-7	
ARS1-B07-03039	ARS1-B07-03039-07	H-3	MD21-07-6815	0.02000	0.00000	0.02500	0.00000	0.00000	11.61181							0.99821						0.05228	0.00474	0.85316	84	P-5 - S-8	
ARS1-B07-03039	ARS1-B07-03039-08	H-3	MD21-07-6814	0.02000	0.00000	0.02500	0.00000	0.00000	11.74167							0.99819						0.05228	0.00478	0.86114	84	P-5 - S-9	

Batch Result Verification Report

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B07-03039	ARS1-B07-03039-01	H-3	MD21-07-6814					ARS1-07-01726	1	005		BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-02	H-3	MD21-07-6814					ARS1-07-01726	1	005		BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-03	H-3	MD21-07-6814					ARS1-07-01726	1	005		BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-04	H-3	MD21-07-6813					ARS1-07-01726	1	001	LSC-A-001	BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-05	H-3	MD21-07-6816					ARS1-07-01726	1	002	LSC-A-001	BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-06	H-3	MD21-07-6817					ARS1-07-01726	1	003	LSC-A-001	BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-07	H-3	MD21-07-6815					ARS1-07-01726	1	004	LSC-A-001	BSTEFFENS	10/31/07 7:43
ARS1-B07-03039	ARS1-B07-03039-08	H-3	MD21-07-6814					ARS1-07-01726	1	005	LSC-A-001	BSTEFFENS	10/31/07 7:43

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium
by
Low Level Liquid
Scintillation Counting
Laboratory Records

Analysis Batch Report

Analysis Batch ID ARS1-B07-03039

Method ARS-054 **Matrix** AQ

Description TRITIUM IN WATER

Analysis Sample ID	Type	Batch 1	Batch 2	Batch 3
ARS1-B07-03039-01	LCS	B-03968		
ARS1-B07-03039-02	LCSD	B-03969		
ARS1-B07-03039-03	MBL			
ARS1-B07-03039-04	TRG			
ARS1-B07-03039-05	TRG			
ARS1-B07-03039-06	TRG			
ARS1-B07-03039-07	TRG			
ARS1-B07-03039-08	TRG			

Prep Code	Rep	Seq	Lab Sample ID	Client Reporting	Lab Reporting	Analysis Code
ARS1-07-01726	1	001	MD21-07-6813	11/01/07	10/30/07	LSC-A-001
ARS1-07-01726	1	002	MD21-07-6816	11/01/07	10/30/07	LSC-A-001
ARS1-07-01726	1	003	MD21-07-6817	11/01/07	10/30/07	LSC-A-001
ARS1-07-01726	1	004	MD21-07-6815	11/01/07	10/30/07	LSC-A-001
ARS1-07-01726	1	005	MD21-07-6814	11/01/07	10/30/07	LSC-A-001

LCS Expected = 1212.2072

LCS Range = 606.1036 - 1818.3108

LCSD Expected = 1212.2072

LCSD Range = 606.1036 - 1818.3108

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B07-03039
SDG's: ARS1-07-01726

LCS	1068.5939	**CSU**	167.4066
LCSD	1120.5062	**CSU-D**	171.2686

DER = $\dfrac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\dfrac{51.912261}{119.74753}$ = 0.433514 **< 3**

% RPD= $\dfrac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\dfrac{51.912261}{1094.5501}$ *100 = 4.742795 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\dfrac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\dfrac{51.912261}{338.6752}$ 0.15328 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	0.410203	106.30834	181.5199
Ra-226			
Ra-228			
Total U			
KPA			
Pb-210			
Po-209			
Sr-90			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

Standards Report

Active	Std ID	Isotope	PSCLT	Verification Date	Exp Date	Status	Ref Date	Ref ACT (dpm)	Current ACT (dpm/g)	Halflife (days)	Parent ID	Expended Date	Comments
A	S-0001	Am-241	S	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0003	Cs-137	SL	02/01/06	02/01/07	EXP	08/13/03	1.2776E+02	115.9721	1.098E+04	S-0115		S-0003 - Information entered from dilution record - 4/19/2006 RTS
A	S-0007	[illegible]	S	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0020	Sr-89	SC	11/19/05	07/29/06	EXP	02/15/05	8.9224E+04	0.1260	5.053E+01	S-0109		
A	S-0023	[illegible]	S	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0024	Pu-239	S	04/17/07	04/17/08	OK	10/26/05	1.1412E+01	11.4114	8.807E+06	S-0073		
A	S-0025	Pu-242	ST	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0027	Tc-99	SLC	09/01/06	09/01/07	EXP	10/18/05	9.4141E+03	9414.0775	7.710E+07	S-0113		S-0027 - Information entered from dilution records - RTS 4/18/2005
A	S-0028	[illegible]	S	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0032	H-3	SL	04/02/07	04/02/08	OK	03/01/06	3.4431E+03	3137.6889	4.500E+03	S-0031		S-0032 - Intermediate dilution for preparation of control solutions -
A	S-0033	Tc-99	SLC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A	S-0036	Th-230	SL	08/01/07	08/01/08	OK	10/31/02	1.2490E+01	12.4895	2.753E+07	S-0065		Empirical data collected over 2 mos. for S-0036 indicated that the ori
A	S-0037	Ra-226	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0038	Am-243	ST	06/07/07	06/07/08	OK	01/25/06	1.0656E+01	10.6547	2.692E+06	S-0067		S-0038 Entered from dilution documention. Density from certificate use
A	S-0039	Tc-99	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0041	H-3	S	03/29/06	03/29/07	EXP	03/24/06	2.8167E+00	2.5760	4.500E+03	S-0032		S-0041 - Working level dilution for preparation of control solutions -
A	S-0063	[illegible]	[illegible]			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0065	Th-230	P			Not Ver	01/27/95	1.7100E+00	1.7098	2.753E+07			S-0036 Information entered on 4/6/2006 RTS Density entered based on m
A	S-0067	[illegible]	PT			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0069	Am-241	PL			Not Ver	04/18/96	9.6000E-03	0.0094	1.579E+05			S-0001 Information entered from dilution records Dilution incorre
A	S-0071	[illegible]	PL			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0073	Pu-239	PL			Not Ver	11/15/99	3.9240E+01	39.2310	8.807E+06			S-0024 Information entered from dilution records
A	S-0074	[illegible]	SL			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0075	Pu-242	PT			Not Ver	06/04/94	2.6310E+01	26.3093	1.365E+08			S-0025 Information entered from dilution records
A	S-0077	[illegible]	PT			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0102	U-nat	PC			Not Ver	08/01/97	4.8624E+02	486.2400	1.632E+12			NIST 4321 - uranium standard for use as total uranium standard (also i
A	S-0103	U-nat	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0104	Ra-226	PC			Not Ver	01/01/93	1.1900E+01	11.8238	5.840E+05			S-0037 Primary solution
A	S-0105	Ra-226	P			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0107	H-3	P			Not Ver	09/03/98	6.3470E+05	379484.7884	4.500E+03			Primary for S-0029 - Information entered from dilution records - 4/18/
A	S-0108	Sr-90	PC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0109	Sr-89	PLC			Not Ver	01/24/05	3.9414E+05	0.4115	5.053E+01			Activity concentration calculated per certificate information - 2.018E
A	S-0111	H-3	PC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0112	H-3	SC	04/19/06	04/19/07	EXP	04/18/06	1.1410E+04	10475.4719	4.500E+03	S-0111		Solution for use as calibration stock standard - Entered from dilution
A	S-0113	Tc-99	PLC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0114	Tc-99	PC			Not Ver	04/01/06	2.0140E+00	2.0140	7.710E+07			primary
A	S-0115	Cs-137	PL			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0116	Ra-226	SL			Not Ver	05/26/04	6.3538E+01	63.4436	5.840E+05	S-0105		S-0003 - Information entered from dilution records - 4/19/2006 RTS
A	S-0117	Sr-90	PLCT			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
A	S-0118	Cs-137	PC			Not Ver	04/01/06	2.1110E+00	2.0362	1.098E+04			Primary Cs-137 Standard
A	S-0119	Cs-137	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0120	Sr-90	PC			Not Ver	04/01/06	2.0490E+00	1.9724	1.041E+04			Primary Sr-90 Standard
A	S-0121	Sr-90	SC	[illegible]	[illegible]	OK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
A	S-0122	Am-241	PC			Not Ver	04/01/06	2.1050E+00	2.0997	1.579E+05			Primary Am-241 Standard
A	S-0123	Am-241	SC	[illegible]	[illegible]	EXP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Standards Report

A	S-0124	Th-230	PC			Not Ver	04/01/06	1.8860E+00	1.8860	2.753E+07			Primary Th-230 Standard
A	S-0125	Th-230	SC	09/24/07	09/24/08	OK	02/27/06	1.0418E+04	10412.6679	2.753E+07	S-0124		[illegible]
A	S-0126	Ra-228	PL			Not Ver	02/22/06	1.0843E+05	88652.6572	2.100E+03			Primary Ra-228 Standard
A	S-0127	Ra-228	SL	05/10/06	05/10/07	EXP	05/10/06	[illegible]	9465.1260	2.100E+03	S-0126		[illegible]
A	S-0128	Tc-99	SLC	05/03/06	05/03/07	EXP	04/05/06	5.6011E+03	5601.0572	7.710E+07	S-0039		Solution diluted per plan and as documented in measurements above exce
A	S-0129	Sr-90	PL			Not Ver	07/01/05	[illegible]	2971.9425	1.041E+04			[illegible]
A	S-0132	Ra-228	SL	07/30/07	07/30/08	OK	05/10/06	4.5090E+01	37.8164	2.100E+03	S-0127		Dilution performed as stated above by G Staffans on 5/10/2006. Measure
A	S-0134	Sr-90	SL			Not Ver	07/26/02	[illegible]	[illegible]	1.041E+04	S-0129		[illegible]
A	S-0135	Sr-90	SL			Not Ver	06/09/04	5.7998E+01	53.4264	1.041E+04	S-0134		Original standard ID# was T11c-1/S-0017. Information entered from dilu
A	S-0137	Th-229	PT			Not Ver	12/08/03	1.2294E+05	122894.8662	2.681E+06			Primary Th-229 Standard
A	S-0138	Th-229	ST			Not Ver	05/28/04	6.0889E+02	608.6983	2.681E+06	S-0137		Used as an intermediate standard for creating tracer stock solutions.
A	S-0139	Po-209	P			Not Ver	09/15/04	[illegible]	4672.3771	3.726E+04			Primary Po-209 Standard
A	S-0140	Po-209	S			Not Ver	10/07/03	1.1882E+01	11.5598	3.726E+04	S-0139		
A	S-0141	Ra-226	PC			Not Ver	01/21/05	2.6418E+04	26249.5238	5.840E+05			[illegible]
A	S-0142	Ra-226	SC	04/03/07	04/03/08	OK	07/21/06	6.5210E+02	651.7410	5.840E+05	S-0141		Solution for use as calibration stock. Dilution performed as stated ab
A	S-0143	Pb-210	P			Not Ver	07/18/06	7.6400E+00	7.3437	8.130E+03			ARS-WRN-001
A	S-0144	Pb-210	S	07/18/06	07/18/07	EXP	07/18/06	1.6961E+01	16.3029	8.130E+03	S-0143		7/18/2006 ARS-WRN-001 20 gamma spectroscopy measurements average act
A	S-0145	Th-229	ST			Not Ver	01/26/05	1.1928E+02	119.3526	2.681E+06	S-0138		[illegible]
A	S-0146	Th-229	ST	07/10/07	07/10/08	OK	03/10/05	5.9811E+00	5.9796	2.681E+06	S-0145		Information gathered from existing dilution records created on 4/28/20
A	S-0147	Tc-99	SC	[illegible]	09/07/07	EXP	05/05/06	[illegible]	232.0124	7.710E+07	S-0027		[illegible]
A	S-0148	C-14	PL			Not Ver	03/07/06	4.7320E+05	473102.0295	2.090E+06			Primary C-14 standard. The certified activity in dpm/g was derived by
A	S-0151	Th-229	PLC			Not Ver	[illegible]	[illegible]	[illegible]	[illegible]			Primary Th-229 Standard
A	S-0152	H-3	P	12/04/06	12/04/07	OK	09/03/98	2.0090E+00	1.2012	4.500E+03			Liquid in a 500-ml borosilicate-glass media bottle with teflon-lined s
A	S-0153	C-14	S			Not Ver	10/13/06	[illegible]	[illegible]	2.090E+06	S-0148		[illegible]
A	S-0154	C-14	S	03/12/07	03/12/08	OK	10/13/06	1.7245E+02	172.4285	2.090E+06	S-0153		LCS standard for C-14. Originally logged as S-0150. See parent comment
A	S-0155	Ra-226	SC	04/03/07	04/03/08	OK	08/20/07	5.9902E+01	59.8869	5.840E+05	S-0142		[illegible]
A	S-0156	H-3	S	05/18/07	05/18/08	OK	04/27/07	2.7672E+00	2.6911	4.500E+03	S-0032		Normal level tritium LCS standard. Dilution performed as stated above
A	S-0157	Sr-90	P			Not Ver	05/16/07	[illegible]	7521.9147	1.041E+04			Primary Sr-90 LCS Standard
A	S-0158	U-232	PT			Not Ver	05/17/07	8.3231E+02	828.6310	2.516E+04			Primary U-232 standard
A	S-0159	Sr-89	PC			Not Ver	05/15/07	[illegible]	1874.5996	5.053E+01			[illegible]
A	S-0160	Sr-90	S	07/16/07	07/16/08	OK	06/01/07	4.5216E+03	4477.8986	1.041E+04	S-0157		Intermediate standard for creating LCS standards. Dilution performed a
A	S-0161	U-232	ST	06/18/07	06/18/08	OK	06/05/07	[illegible]	517.0130	2.516E+04	S-0158		[illegible]
A	S-0162	U-232	ST	06/18/07	06/18/08	OK	06/08/07	9.8656E+00	9.8279	2.516E+04	S-0161		Dilution performed as stated above by BSteffens on 6/8/2007. -BJS 6/8/
A	S-0163	Sr-90	S	07/16/07	07/16/08	OK	[illegible]	[illegible]	46.9825	1.041E+04	S-0160		[illegible]
A	S-0164	Sr-89	PC			Not Ver	05/15/07	1.7533E+04	1874.0512	5.053E+01			Primary Sr-89 calibration standard.
A	S-0165	Sr-89	SC	[illegible]	[illegible]	OK	05/08/07	[illegible]	1130.8262	5.053E+01	S-0164		[illegible]
A	S-0166	Th-229	ST	08/28/07	08/28/08	OK	08/27/07	5.6494E+00	5.6493	2.681E+06	S-0145		Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS
I	S-0028	U-232	ST	06/19/06	06/19/07	EXP	10/26/05	[illegible]	10.6379	2.516E+04	S-0027	06/21/07	[illegible]
I	S-0030	H-3	P	11/19/05	11/19/06	EXP	12/10/98	6.9370E-01	0.4211	4.500E+03			Tritium in Oil
I	S-0031	H-3	S	10/26/05	10/26/06	EXP	10/19/05	[illegible]	542620.6673	4.500E+03	S-0107		[illegible]
I	S-0130	Sr-90	SL			Not Ver	09/26/03	5.3620E+02	485.5591	1.041E+04	S-0129	05/26/06	Original solution ID# is T11c. Dilution information entered from exist
I	S-0131	Sr-90	SL			Not Ver	02/02/05	0.0000E+00	0.0000	1.041E+04	S-0130	05/18/06	[illegible]
I	S-0133	Sr-90	SL	01/09/06	01/09/07	EXP	06/09/04	5.8438E+01	53.8314	1.041E+04	S-0130	05/26/06	Original solution ID# was T11c-1/S-0017. Information entered from dilu
I	S-0136	Sr-90	SL	05/26/06	05/26/07	EXP	06/09/04	5.2036E+01	47.9344	1.041E+04	S-0134	[illegible]	[illegible]
I	S-0149	C-14	SL			Not Ver	10/13/06	5.9553E+04	59545.6163	2.090E+06	S-0148	03/16/07	Intermediate standard for creating LCS stock solutions. Dilution perfo
I	S-0150	C-14	SL			Not Ver	10/13/06	[illegible]	867.3358	2.090E+06	S-0149	[illegible]	[illegible]

Standards Report

I	S-0167	Th-229	ST			Not Ver	08/27/07	5.6494E+00	5.6493	2.681E+06	S-0145	08/28/07	Th-229 tracer. Dilution performed as stated above by B Steffens. -BJS

LCS Report
Analytical Batch: ARS1-B07-03039

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
3945	B-03968	ARS1-B07-03039	ARS1-B07-03039-01	B-H3	S-0156	H-3	5	1.212201344	0	1	1	BSTEFFENS	10/25/2007
3946	B-03969	ARS1-B07-03039	ARS1-B07-03039-02	B-H3	S-0156	H-3	5	1.212201344	0	1	1	BSTEFFENS	10/25/2007

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate
96	ARS1-B07-03039	ARS1-B07-03039-01		0	g	5.007	g	BSTEFFENS	10/31/2007
97	ARS1-B07-03039	ARS1-B07-03039-02		0	g	5.015	g	BSTEFFENS	10/31/2007
98	ARS1-B07-03039	ARS1-B07-03039-03		0	g	5.028	g	BSTEFFENS	10/31/2007
99	ARS1-B07-03039	ARS1-B07-03039-04	MD21-07-6813	0	g	5.029	g	BSTEFFENS	10/31/2007
100	ARS1-B07-03039	ARS1-B07-03039-05	MD21-07-6816	0	g	5.014	g	BSTEFFENS	10/31/2007
101	ARS1-B07-03039	ARS1-B07-03039-06	MD21-07-6817	0	g	5.044	g	BSTEFFENS	10/31/2007
102	ARS1-B07-03039	ARS1-B07-03039-07	MD21-07-6815	0	g	5.035	g	BSTEFFENS	10/31/2007
103	ARS1-B07-03039	ARS1-B07-03039-08	MD21-07-6814	0	g	5.075	g	BSTEFFENS	10/31/2007

Beta Liquid Scintillation Counter Log Book

nician tials	Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
	10-12-07	15:16	B07-02894-05	07-02894	1609	
	↓	↓	B07-02894-06	↓	↓	
	↓	↓	B07-02894-07	↓	↓	
	↓	↓	B07-02894-08	↓	↓	
	↓	↓	B07-02894-09	↓	↓	
	↓	↓	B07-02894-10	↓	↓	
	↓	↓	B07-02894-11	↓	↓	
	↓	↓	B07-02894-12	↓	↓	
	↓	↓	B07-02894-13 ~~B07-02894-13~~ 10-12-07	↓	↓	
	↓	↓	B07-02894-14	↓	↓	
	↓	↓	B07-02894-15	↓	↓	
	↓	↓	B07-02894-16	↓	↓	
	-24-07	08:41	SNC	QA	QA	
	29-07	09:10	SNC	QA	QA	
	07	15:52	Background	07-03039	1647	
		↓	B07-03039-01	↓	↓	
		↓	B07-03039-02	↓	↓	
		↓	B07-03039-03	↓	↓	
		↓	B07-03039-04	↓	↓	
		↓	B07-03039-05	↓	↓	

Reviewed By: _____ Date: _____
Initials

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
10-29-07	15:52	B07-03039-04	07-03039	1647	[illegible]
↓	↓	B07-03039-07	↓	↓	[illegible]
↓	↓	B07-03039-08	↓	↓	[illegible]

Reviewed By: _____ Date: _____
Initials

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American Radiation Services Analytical Reports

for

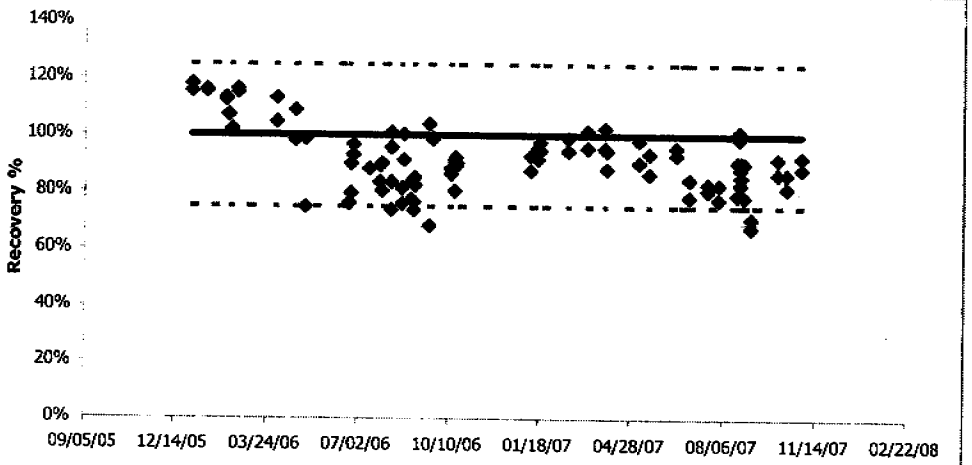
Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Control Charts

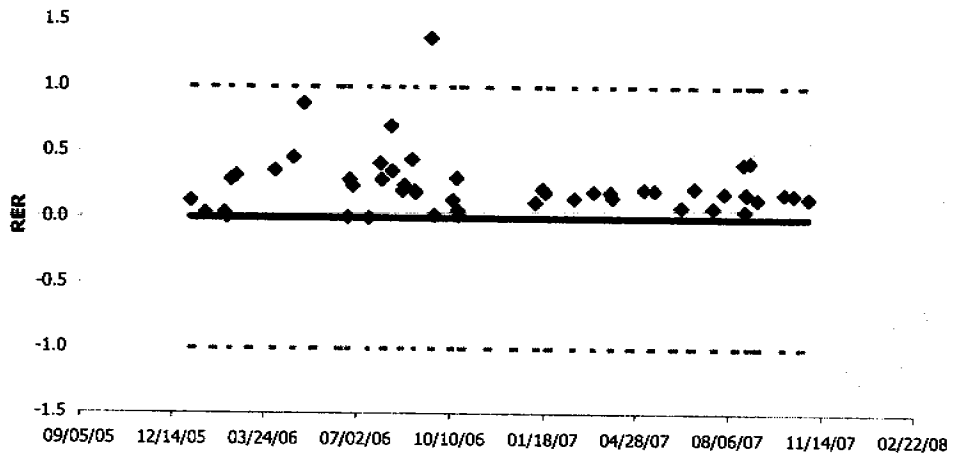
QC Chart

Tritium LCS



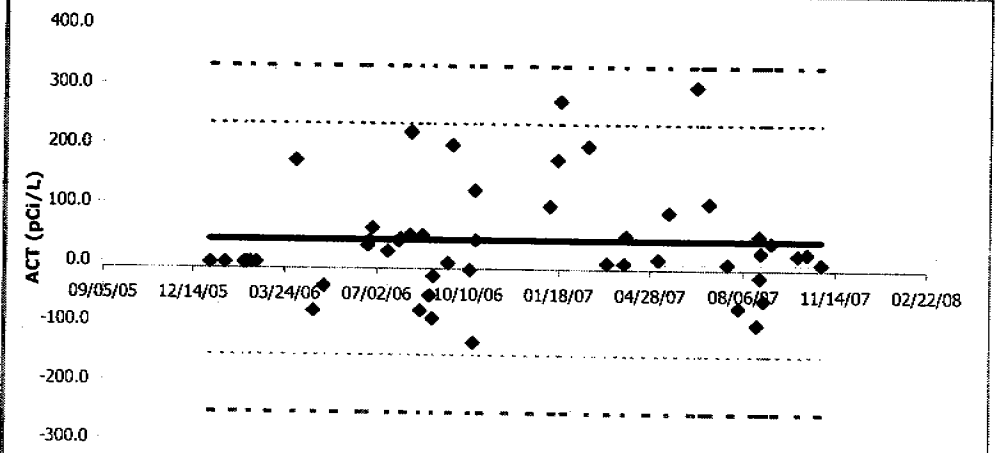
Average	STDEV	n	UCL	LCL
0.9151	0.1154	50	1.2500	0.7500

Tritium RER



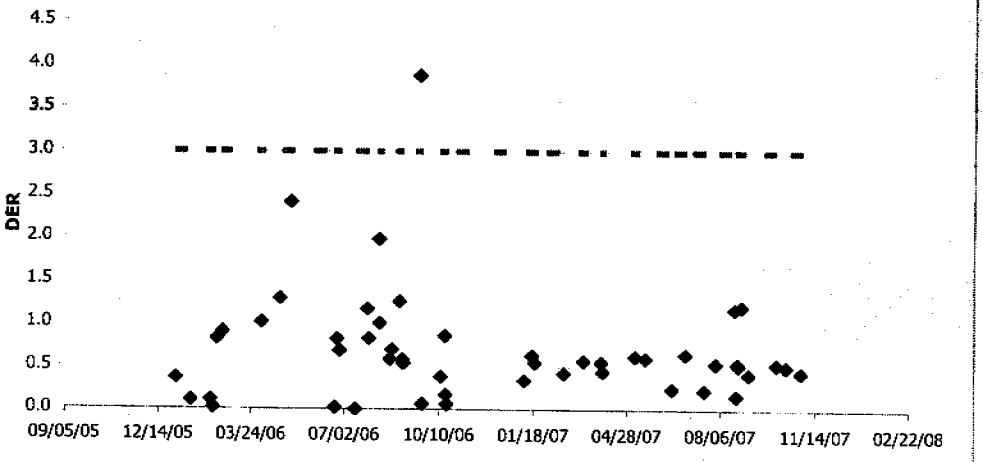
n	UCL	LCL
50	1.0000	-1.0000

Tritium Blank



Average	STDEV	n	UCL	LCL
39.2963	93.7462	50	332.0487	-253.4560

Tritium DER



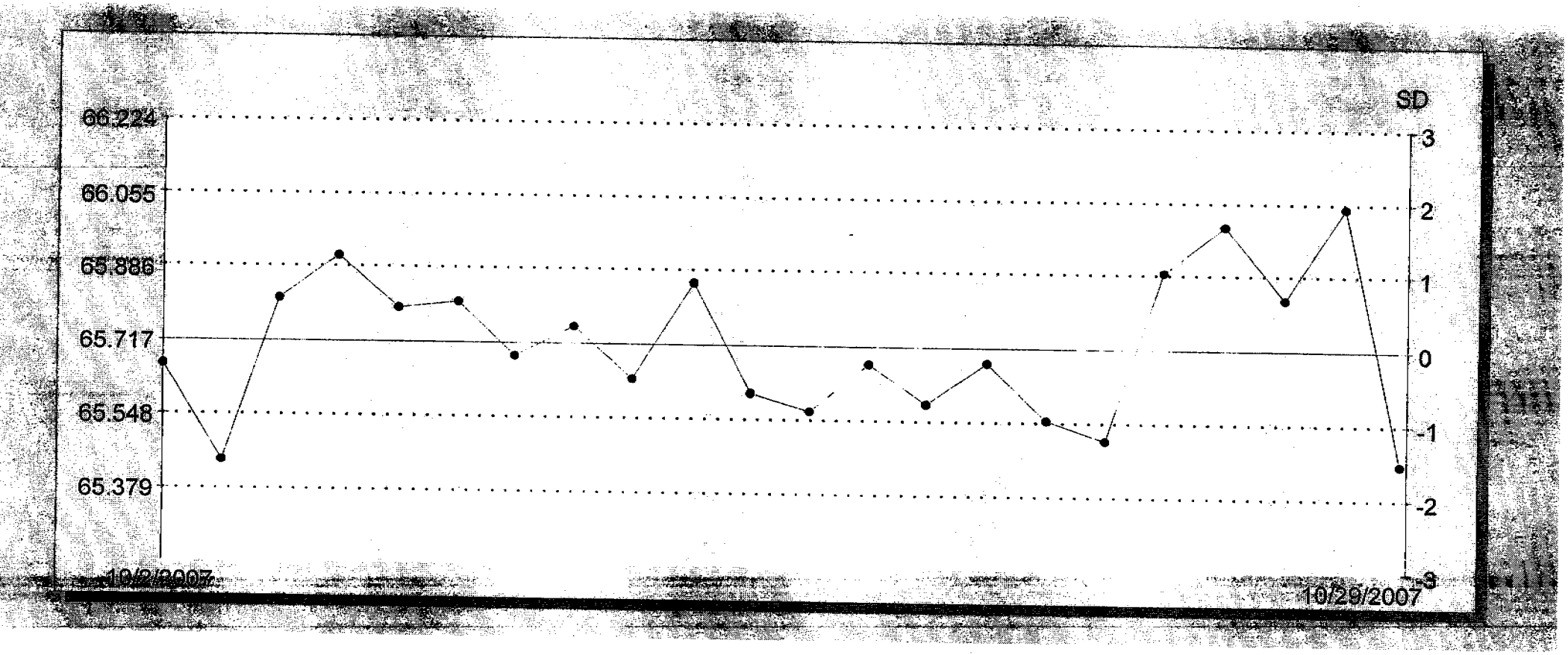
n	UCL
50	3.0000

3H Efficiency

Total # pts : 3965
Valid # pts : 22
Mean : 65.72
SD : 0.17

Date	Value	Valid Pt
Oct 02, 2007	65.66	X
Oct 02, 2007	65.45	X
Oct 02, 2007	65.81	X
Oct 02, 2007	65.91	X
Oct 02, 2007	65.79	X
Oct 03, 2007	65.81	X
Oct 03, 2007	65.69	X
Oct 03, 2007	65.76	X
Oct 03, 2007	65.64	X
Oct 03, 2007	65.86	X
Oct 03, 2007	65.61	X
Oct 03, 2007	65.57	X
Oct 03, 2007	65.68	X
Oct 03, 2007	65.58	X
Oct 03, 2007	65.68	X
Oct 04, 2007	65.55	X
Oct 12, 2007	65.51	X
Oct 12, 2007	65.90	X
Oct 24, 2007	66.00	X
Oct 24, 2007	65.84	X
Oct 29, 2007	66.05	X
Oct 29, 2007	65.46	X

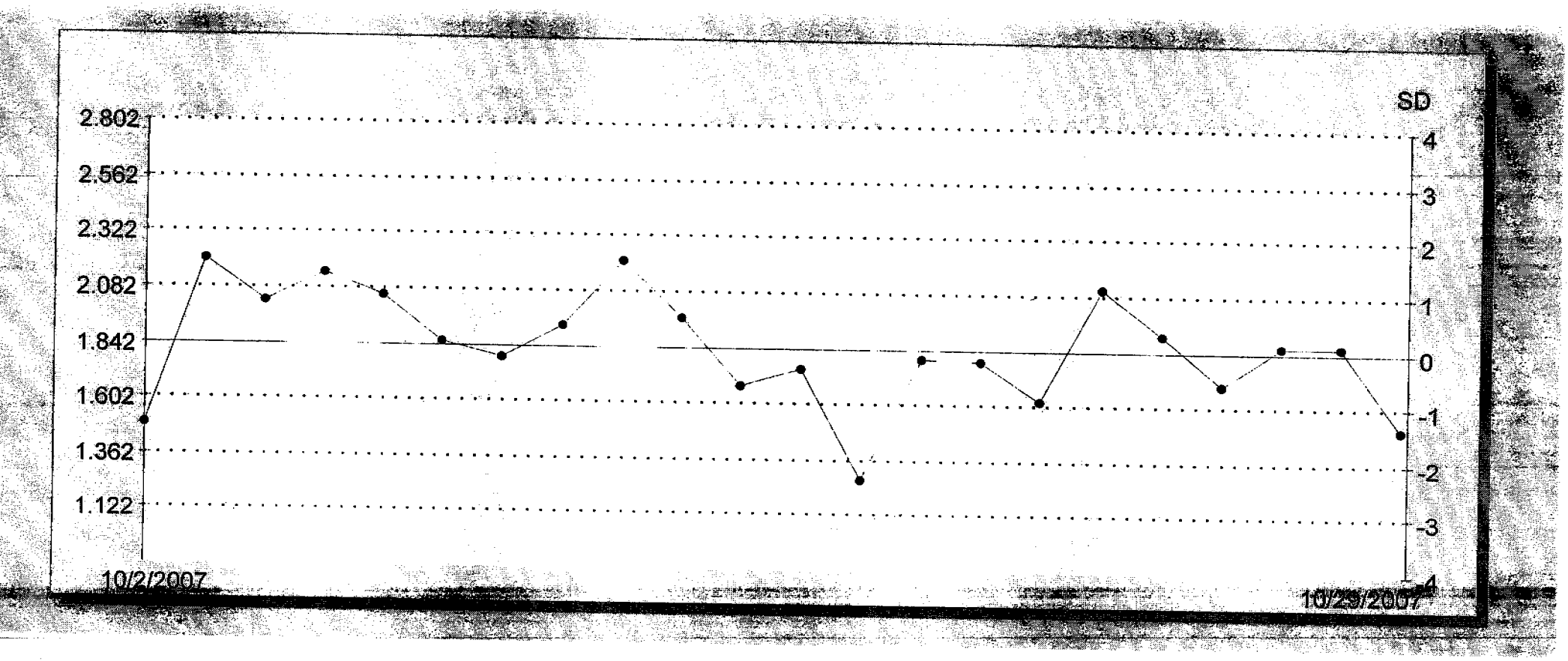
3H Efficiency
Total # pts : 3965
Valid # pts : 22
Mean : 65.72
SD : 0.17



3H Background
Total # pts : 3920
Valid # pts : 22
Mean : 1.84
SD : 0.24

Date	Value	Valid Pt
Oct 02, 2007	1.49	X
Oct 02, 2007	2.20	X
Oct 02, 2007	2.03	X
Oct 02, 2007	2.15	X
Oct 02, 2007	2.05	X
Oct 03, 2007	1.86	X
Oct 03, 2007	1.79	X
Oct 03, 2007	1.93	X
Oct 03, 2007	2.22	X
Oct 03, 2007	1.97	X
Oct 03, 2007	1.67	X
Oct 03, 2007	1.76	X
Oct 03, 2007	1.27	X
Oct 03, 2007	1.80	X
Oct 03, 2007	1.79	X
Oct 04, 2007	1.62	X
Oct 12, 2007	2.11	X
Oct 12, 2007	1.92	X
Oct 24, 2007	1.69	X
Oct 24, 2007	1.87	X
Oct 29, 2007	1.86	X
Oct 29, 2007	1.51	X

3H Background
Total # pts : 3920
Valid # pts : 22
Mean : 1.84
SD : 0.24



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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0156

AMERICAN RADIATION SERVICES, INC.	Add/Edit *Secondary Stds*	Parent Standard Data	
Planning		Parent Solution Reference #	
Planning Comments	**Create a dilution of S-0032 for use as LCS stock solution**	Parent Solution #	
Target dpm/g (on dil. date)	**2.76**	Parent Principal Radionuclide	Half Life (Days)
Target Final volume mL	**2000**	Parent Reference Date	
Appx mass g of Parent Sol'n		Parent Certified Act	Certi Act/Vol Units
Appx vol ml of Parent Sol'n		Parent Cert Act Uncert 1 Sigma	
Expected Addition for Analysis g	**5**	Parent Sp. Gravity G/Ml	
Standards Preparation / Dilution		Parent Supplier	
Secondary Solution #		Parent Date Recvd	
Dilution Date (New Ref Date)	**04/27/2007 00:00**	Parent Received By	
Ampoule, Empty (g)		Parent Cert Exp Date	
Ampoule /Solution Gross (g)		Parent Matrix	
Net Wt Removed (g)		Certified dpm/g At Ref Date	
Transfer Container, empty (g)	**17.8583**	Certified dpm/g on 04/27/2007 00:00	
Container Plus Solution (g)	**19.5702**	Parent Comments	
Net Wt Transferred (g)			
DPM Xferred on 04/27/2007 00:00			
Diluent/matrix	**H2O**	Parent Tech	
Diluent Density Cont, empty (g)		Is_Primary	
Test Mass of 5 ml of Diluent (g)		Is_LCS	
Diluent Density Test - (g/mL)		Is_Tracer	
Dilution Empty Container Mass (g)	**1**	Is_Calib	
Dilution Full Cont g (If measured)	**1997**		
Dilution Final Volume ml (if measured)	**2000**		
Final Dilution Density (g/mL)			
Final Dilution Measured Mass g			
Comments	**Normal level tritium LCS standard. Dilution performed as stated above by TByrd on 4/27/2007. -BJS 4/27/2007**		
Final Dilution dpm/g			
Final Dil New Ref Date/Time			

ARS AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION- Rev 1

VERIFICATION DATE 5/18/2007 0:00
SOLUTION REFERENCE # [redacted]

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.232E+01	4.500E+03

Radionuclide H-3 **Primary Dilution Reference Date** 4/27/2007 0:00

Primary Dilution Activity	1.25 pCi per gram ===> dpm/g	2.78
Verif. Date Decay Corrected	1.25 pCi per gram ===> dpm/g	2.77

Verification Trials

Trial ID#		
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000

Trial ID#		
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000
	Gross Weight	2.0000
	Tare Weight	1.0000
	Net Weight	1.0000

	Sample Count	Conversion	Detector	Efficiency	Self Count	Net Weight	Activity Result (dpm/g)	Activity Result (pCi/g)
S-0156-1	12.198	1	LSC	0.4395	6.143	5.0100	2.75	1.24
S-0156-2	11.748	1	LSC	0.4325	6.143	5.0100	2.59	1.17
S-0156-3	11.822	1	LSC	0.434	6.143	5.0000	2.62	1.18

Average	2.65	1.19
Two Sigma Uncertainty	0.17	0.08
Standard Deviation percent of known concentration	3.14%	3.14%
Target Activity	2.77	1.25
% Diff	-4.15	-4.15

Verification Expiration Date: May 17, 2008

Prepared & Counted By Jon Boyd Date: 5/18/2007 0:00

Verified & Approved By [signature] Date: 5-18-07

QC Approval [signature] Date: 5-18-07

Verifier's Name: Tony Byrd **Date:** 4/30/2007

Pipettor ID: CH84078

Pipettor ID:

Pipettor ID: CH80870

Standard ID: S-0112

Standard ID: S-0032 (S-0156)

	Weight of Standard		
15mL of Ultima Gold added to standard	S-0156-1	5.01 g	Balance ID: H1331122173560P
	S-0156-2	5.01 g	
	S-0156-3	5.00 g	
		g	
		g	
15mL of Ultima Gold added to standard	S-0112-1	1.03 g	Balance ID: H1331122173560P
	S-0112-2	1.08 g	
	S-0112-3	1.00 g	
		g	
		g	

Assay Definition-

Assay Description:
Tritium - DPM Mode

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143
Raw Results Path: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\20070517_1143.results
RTF File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\H3 Results\Tritium for protocol 6\20070517_1143\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\Tritium for protocol 6.lsa

Count Conditions-

Nuclide: H3
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: H-3
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

Protocol# 6 - Tritium for protocol 6.lsa

User: H3 Results

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nuc1 In A	Count Time	DATE	TIME	MESSAGES
6	1	BACKGROUND	6.143	13.99	433.79	43.91	90.00	5/17/2007	11:48:37 AM	
6	2	S-0156-1 S-0032-1	12.198	27.76	434.24	43.95	90.00	5/17/2007	1:24:20 PM	
6	3	S-0156-2 S-0032-2	11.748	27.16	426.06	43.25	90.00	5/17/2007	3:00:09 PM	
6	4	S-0156-3 S-0032-3	11.822	27.24	427.76	43.40	90.00	5/17/2007	4:35:56 PM	

5-18-07

National Institute of Standards & Technology

Certificate

Standard Reference Material 4927F
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains hydrogen-3 with a total activity of approximately 3.2 MBq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains only distilled water. There is no chemical hazard. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least September 2008.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of the radioactivity.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.W.L. Thomas.

Bert M. Coursey, Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000

Nancy M. Trahey, Chief
Standard Reference Materials Program

*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4927F

Certified values

Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20.0 °C [b]***
Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 3 September 1998**
Massic activity of the solution [c]	**634.7 kBq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72% [d] [e]**

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.0 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O ^3HHO	55 6×10^{-7}	1.00 1×10^{-8}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g]		
Calibration method and measuring instrument(s)	4πβ gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E/4927F using two 4πβ liquid-scintillation counting systems [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i, (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live-time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4927F and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Radionuclidic impurities	Limit of detection (B) [q]	100.	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 and 6.

STD ID: S-0032

ARS AMERICAN RADIATION SERVICES, INC.	**Add/Edit *Secondary Stds***

Planning	
Planning Comments	**Dilute S-0031 to form intermediate level solution for controls**
Target dpm/g (on dil. date)	**3367**
Target Final volume mL	**200**
Appx mass g of Parent Sol'n	[redacted]
Appx vol ml of Parent Sol'n	[redacted]
Expected Addition for Analysis g	

Standards Preparation / Dilution	
Secondary Solution #	[redacted]
Dilution Date (New Ref Date)	**03/01/2006 00:00**
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	[redacted]
Transfer Container, empty (g)	**0**
Container Plus Solution (g)	**1.1544**
Net Wt Transferred (g)	[redacted]
DPM Xferred on 03/01/2006 00:00	[redacted]
Diluent/matrix	**H2O**
Diluent Density Cont, empty (g)	
Test Mass of 5 ml of Diluent (g)	
Diluent Density Test - (g/mL)	[redacted]
Dilution Empty Container Mass (g)	**1**
Dilution Full Cont g (if measured)	**200.64**
Dilution Final Volume ml (if measured)	**200**
Final Dilution Density (g/mL)	[redacted]
Final Dilution Measured Mass g	[redacted]
Comments	**S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edited to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU**
Final Dilution dpm/g	[redacted]
Final Dil New Ref Date/Time	[redacted]

Parent Standard Data

Parent Solution Reference #	[redacted]			
Parent Solution #	[redacted]			
Parent Principal Radionuclide	[redacted]	Half Life (Days)	[redacted]	
Parent Reference Date	[redacted]			
Parent Certified Act	[redacted]	Certi Act/Vol Units	dpm	g
Parent Cert Act Uncert 1 Sigma	[redacted]			
Parent Sp. Gravity G/Ml	[redacted]			
Parent Supplier	[redacted]			
Parent Date Recvd	[redacted]			
Parent Received By	[redacted]			
Parent Cert Exp Date				
Parent Matrix	[redacted]			
Certified dpm/g At Ref Date	[redacted]			
Certified dpm/g on 03/01/2006 00:00	[redacted]			
Parent Comments	[redacted] Intermediate dilution - Information entered from dilution records - 4/19/2006 RTS.			
Parent Tech	[redacted]			
Is_Primary	FALSE			
Is_LCS	FALSE			
Is_Tracer	FALSE			
Is_Calib	FALSE			

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

AMERICAN RADIATION SERVICES, INC.

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ARS Sample Delivery Group:	ARS1-07-01726	**Request or PO Number:**	08-80
Client Sample ID:	MD21-07-6813	**ARS Sample ID:**	ARS1-07-01726-001
Sample Collection Date:	10/19/2007	**Date Received:**	10/23/07 09:50
Sample Matrix:	Aqueous	**Report Date:**	10/31/07 11:06

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.769	NA	NA	NA		%	Moisture	10/29/2007	BS	NA

NOTES:

Lindsay Lasseigne
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6816
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-002
Date Received: 10/23/07 09:50
Report Date: 10/31/07 11:13

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	14.532	NA	NA	NA		%	Moisture	10/29/2007	BS	NA

NOTES:

Lindsay Lamerigne
Project Manager Review

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ARS Sample Delivery Group:	ARS1-07-01726	**Request or PO Number:**	08-80
Client Sample ID:	MD21-07-6817	**ARS Sample ID:**	ARS1-07-01726-003
Sample Collection Date:	10/19/2007	**Date Received:**	10/23/07 09:50
Sample Matrix:	Aqueous	**Report Date:**	10/31/07 11:13

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.873	NA	NA	NA		%	Moisture	10/29/2007	BS	NA

NOTES:

Lindsay Lanoeigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6815
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-004
Date Received: 10/23/07 09:50
Report Date: 10/31/07 11:14

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	14.103	NA	NA	NA		%	Moisture	10/29/2007	BS	NA

NOTES:

Lindsay Lamoigne
Project Manager Review

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ARS Sample Delivery Group: ARS1-07-01726
Client Sample ID: MD21-07-6814
Sample Collection Date: 10/19/2007
Sample Matrix: Aqueous

Request or PO Number: 08-80
ARS Sample ID: ARS1-07-01726-005
Date Received: 10/23/07 09:50
Report Date: 10/31/07 11:14

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.090	NA	NA	NA		%	Moisture	10/29/2007	BS	NA

NOTES:

Lindsay Ramsigne
Project Manager Review

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for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-07-01726
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-07-6813	ARS1-07-01726-001	621	449	171	23.545	5.029	**13.7690058**
MD21-07-6816	ARS1-07-01726-002	616	452	164	23.833	5.014	**14.5323171**
MD21-07-6817	ARS1-07-01726-003	623	451	172	23.862	5.044	**13.8732558**
MD21-07-6815	ARS1-07-01726-004	622	452	170	23.975	5.035	**14.1029412**
MD21-07-6814	ARS1-07-01726-005	623	453	170	22.253	5.075	**13.09**

Balance ID: 0102/1125183449
Popettor ID: V97701

Signature [signature] Date/ Time 10-31-07

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-07-01726
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-07-6813	ARS1-07-01726-001	621	449	171	23.545	5.029	#DIV/0!
MD21-07-6816	ARS1-07-01726-002	616	452	164	23.833	5.014	#DIV/0!
MD21-07-6817	ARS1-07-01726-003	623	451	172	23.862	5.044	#DIV/0!
MD21-07-6815	ARS1-07-01726-004	622	452	170	23.975	5.035	#DIV/0!
MD21-07-6814	ARS1-07-01726-005	623	453	170	22.253	5.075	#DIV/0!

LCS - 5.007
LCSD - 5.015
BLK - 5.028

Balance ID: 0102/1125183449
Popettor ID: V97701

Signature: B J Stuff Date/ Time: 10-29-07

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American Radiation Services Analytical Reports

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Los Alamos National Laboratory

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ARS AMERICAN RADIATION SERVICES, INC.

Report Completeness Checklist

ARS SDG: 07-01726 Client Name: LANL Sample Matrix: AQ

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	(Yes) No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	(Yes) No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	(Yes) No N/A	
4) Form 1s Present for all Samples and Tests?	(Yes) No N/A	
5) Client Specific Components are Present and Complete?	(Yes) No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	(Yes) No N/A	
7) DQO Report is Present and Accurate?	(Yes) No N/A	
8) Client Specific Batch QC Components are Present and Complete?	(Yes) No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	(Yes) No N/A	
10) Calibrations are Present?	(Yes) No N/A	
11) Backgrounds are Present?	(Yes) No N/A	
12) Spectrum Analysis is Present?	(Yes) No N/A	
13) Spectral Plots are Present?	(Yes) No N/A	
14) Plateaus are Present?	(Yes) No N/A	
15) Control Charts are Present?	(Yes) No N/A	
16) Other:	(Yes) No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	(Yes) No N/A	
18) Instrument Raw Data Present and Complete?	(Yes) No N/A	
19) Calibration Certificates Present?	(Yes) No N/A	
20) Copies of Log Book Pages Present?	(Yes) No N/A	
21) Sample Receiving Documentation Present?	(Yes) No N/A	
22) LIMS Reports Present?	(Yes) No N/A	
23) Applicable Correspondence Present?	(Yes) No N/A	
24) Other:	(Yes) No N/A	

Lindsay Lansdowne 10-31-07
Report Generator Signature Date

Eugene Mullgan 10-31-07
Management Review Signature Date

LSC
Technical Review Checklist

ARS SDG 07-01726

Sample Matrix: Silica Gel Aliquot (Circle One): Dry (As Received) Filtered Other: _____

Required QC Samples (Circle all that apply): (Blank) LCS (LCSD) Sample Dup MS MSD

ARS Prep. Batch ID(s): Batch A: R07-03039 Batch B: _____ Batch C: _____

Test(s): A-3 _____ _____

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Analyst Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	(Yes) No N/A
2) 100% of Manual Calculations Verified?	(Yes) No N/A	Yes No (N/A)
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	(Yes) No N/A
4) Deviations from procedure are documented and verified?	(Yes) No N/A	Yes No (N/A)
5) Appropriate Cocktail Selected?	(Yes) No N/A	(Yes) No N/A

6) Sample Prep Anomaly? ☒ No ☐ Yes (See Tech Notes) NCR # (If initiated): _____

N/A — Chemist Signature — Date

[signature] 10-19-07 — Analyst Signature — Date

B. ANALYSIS REVIEW

	Analyst Review	Proj. Mgr. Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A
4) Background Checks Complete and Acceptable?	(Yes) No N/A	(Yes) No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	(Yes) No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	(Yes) No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	(Yes) No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	(Yes) No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	(Yes) No N/A

7) Analysis Anomaly? ☒ No ☐ Yes (See Comments) NCR # (If initiated): _____

[signature] 10-31-07 — Analyst Signature — Date

[signature] 10-31-07 — Project Manager Signature — Date

Batch A: 07-03039

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes (No) N/A	Yes (No) N/A
2) RDL Criteria are Met?	(Yes) No N/A	(Yes) No N/A
3) Method Blank Criterion Met?	(Yes) No N/A	(Yes) No N/A
4) LCS/LCD Criteria Met?	(Yes) No N/A	(Yes) No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	(Yes) No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No (N/A)	Yes No (N/A)
7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated):		
Lindsay Ramsigne 10-31-07 Project Manager Signature Date	Virginia Mullegan 10-31-07 QA Officer Signature Date	

GENERAL COMMENTS

DQO Report for SDG
ARS1-07-01726

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_LL	RER	RPD	DilutionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STD	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

ARS FILE TRACKING SHEET

SDG: 07-01726

Task	Date / Time	Initials
Date & Time Received	10-23-07 / 09:50	SMC
Storage Location: A2	10-25-07 / 10:29	SMC
Chain of Custody Completed	10-25-07 / 10:29	SMC
Report Written	10-31-07 11:38	LML
Laboratory Supervisor Checks Performed	see batch	NA
Quality Assurance Checks Performed on Report	10-31-07 / 1617	VTM
Laboratory Director Check Performed on Report	10-31-07 / 1617	VTM
Report E-mailed		
Report Faxed		
Report Mailed		
Report Reviewed		
Invoice Completed Invoice #:_____		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing (i.e., Third Party)		✓
Other		✓

NOTES

SAMPLE RECEIPT INSPECTION FORM

Date: 10/25/07 Shipper's Name: Page-Kraemer

Technician Performing Inspection: Shirley Clayton Initials: SMC

SDG: **07-01726**

External and Internal Surveys

Exposure Rate Meter: 44-2 104898 Serial No: 013796 Calibration. Due Date: 05/21/08

Count Rate Meter: 44-9 109043 Serial No: 108796 Calibration. Due Date: 05/21/08

Background Exposure Rate (μR/hr) 12 Background Count Rate (cpm): 50

Max. Exposure Rate on Shipping Containers Externals (Including Background): 22

Max. Removable Count Rate on Shipping Container Externals (Including Background): 60

Max. Removable Count Rate on Shipping Container Internals (Including Background): 60

Max. Removable Count Rate on Sample Container Externals (Including Background): 70

Max. Exposure Rate on Sample Containers Externals (Including Background): 18

Shipping Container

Was the Shipping Container received in good condition? Yes

Was the Shipping Container marked "Radioactive"? No

Was UN2910 marked on the outside of the Shipping Container? No

Were security seals utilized on the shipping container? Yes If yes, were the seals intact? Yes

Was a Chain of Custody Form included with the sample shipment? Yes

Were air bills or bills of lading included with the sample shipment? No

Samples

Were samples received in good condition? Yes

Were security seals utilized on the sample container? No If yes, were the seals intact? N/A

Were the sample containers marked "Radioactive"? No

Number of Samples Received in the Shipment: 5(five)

Was the pH of Aqueous Samples < 2? N/A

If no, was the sample(s) checked for acid reactivity? N/A Was the sample(s) acidified to a pH < 2? N/A

Matrix of Samples: AQ

Volume of Each Sample Container: 100

Brief Description of Sample Material:

Inspectors' Comments

Sample Check In Report
Samples

SDG **ARS1-07-01726**

Client Code	114	Los Alamos National Laboratory	TAT Days	10	Level	4
Profile Number	PN-00094	Location: Los Alamos	Date Received	10/23/2007		
Project Type	Environmental		Client Deadline	11/1/2007	COC No 1	
Comments			Internal Deadline	11/1/2007	COC No 2	
			Lab Deadline	10/30/2007	COC No 3	
			Workdays	FALSE	COC No 4	

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21-07-6813	1	AQ	10/19/07 00:00	10/19/07 00:00	A2	H	90	5
002	MD21-07-6816	1	AQ	10/19/07 00:00	10/19/07 00:00	A2	H	90	5
003	MD21-07-6817	1	AQ	10/19/07 00:00	10/19/07 00:00	A2	H	90	5
004	MD21-07-6815	1	AQ	10/19/07 00:00	10/19/07 00:00	A2	H	90	5
005	MD21-07-6814	1	AQ	10/19/07 00:00	10/19/07 00:00	A2	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-07-01726
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count	B
001	X
002	X
003	X
004	X
005	X

Sample Check In Report
Comments per Sample

SDG **ARS1-07-01726**

Fraction	Client ID	Comments
001	MD21-07-6813	
002	MD21-07-6816	
003	MD21-07-6817	
004	MD21-07-6815	
005	MD21-07-6814	

ARS LABEL SHEET

SDG: 07-01726

Analysis

ARS1-07-01726 **LSC-A-001**

Los Alamos National Laboratory

Tritium in (Water [Aqueous, AQ])

This Test Requires 5 of 5 Samples

Scan Analysis Code Here	Dates for This Test
	Rcvd 10/23/2007
	Due 11/1/2007

SAMPLE CHECK-IN COMMENT SHEET

SDG: 07-01726

NOTES

COMPANY NAME: LANL **SDG:** 07-01726

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes	☐ No
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

Shipping Container Survey

Outside 22 µR/hr 60 cpm

Inside 60 cpm

Rcv'd By

Date Rcv'd

Time Rcv'd

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
# Samples Rcv	5 (five)	
pH < 2	☐ Yes	☐ No
If No... Acid Rxt	☐ Yes	☐ No
Acid'fd < 2	☐ Yes	☐ No

Intact ☐ Yes ☐ No

Matrix [AF , AQ , BI , FE , LT , SI , (SO) , UR , VG]

Record Sample Label, Exposure Rate and Count Rate for EACH SAMPLE in the area below:

Sample Lable/Comments/Notes	Weight/ Volume	µR/hr	cpm
MD21-07-6813	100g	17	70
MD21-07-6816	100g	18	70
MD21-07-6817	100g	18	70
MD21-07-6815	100g	17	70
MD21-07-6814	100g	18	70

Surveyors' Name: Shirley Clayton Date/Time Surveyed 10-24-07 12:13

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-80C

REQUEST NUMBER: 08-80

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6816	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6817	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6815	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6814	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	10/22/07	1400	Printed Name	Signature	10/23/07	95
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-80C

REQUEST NUMBER: 08-80

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6816	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6817	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6815	1	SILICA GEL TUBE	H3	None	GAS
MD21-07-6814	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	10/22/07	1400	Printed Name	Signature	10/22/07	95
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS
AMERICAN RADIATION
SERVICES, INC.

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

LSC Instrument Data Transfer Report

\\Packard3170\Results\HS Results\Tritium for Protocol

Batch Identifier: ARS1-B07-03039 | **Number Samples Entered:** 8 | **Number Samples Saved:** 8

Sample Identifier	LSC Vial	LSC PID	LSC ID	LSC Sample ID	LSC Count Date	LSC DPM A	LSC DPM	LSC SIS	LSC Count Time	Analyst Name	Batch Spec	Batch Run
BKG	5		1	BACKGROUND	10/29/07 16:52	6.29	440.29	44.4600	180.00	ARS1-B07-03039		
ARS1-B07-03039-01	5		2	B07-03039-01	10/29/07 20:01	11.49	432.19	43.7700	180.00	ARS1-B07-03039		
ARS1-B07-03039-02	5		3	B07-03039-02	10/29/07 23:08	11.77	433.37	43.8800	180.00	ARS1-B07-03039		
ARS1-B07-03039-03	5		4	B07-03039-03	10/30/07 02:14	6.30	431.04	43.6800	180.00	ARS1-B07-03039		
ARS1-B07-03039-04	5		5	B07-03039-04	10/30/07 05:21	7.82	417.73	42.8300	180.00	ARS1-B07-03039	ARS1-07-01726	1
ARS1-B07-03039-05	5		6	B07-03039-05	10/30/07 08:27	6.96	415.02	42.7300	180.00	ARS1-B07-03039	ARS1-07-01726	1
ARS1-B07-03039-06	5		7	B07-03039-06	10/30/07 11:34	7.45	410.07	42.5500	180.00	ARS1-B07-03039	ARS1-07-01726	1
ARS1-B07-03039-07	5		8	B07-03039-07	10/30/07 14:41	7.27	408.02	42.4800	180.00	ARS1-B07-03039	ARS1-07-01726	1
ARS1-B07-03039-08	5		9	B07-03039-08	10/30/07 17:47	51.19	409.78	42.5400	180.00	ARS1-B07-03039	ARS1-07-01726	1

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.767000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.438800
Sample Aliquot	5.015000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/29/07 11:08 PM
Count Date (t2)	10/29/07 11:08 PM
Activity Units = pCi -- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1120.506196	1120.506196	OK
CU	127.083206	127.083206	OK
TPU	171.268576	171.268576	OK
MDA	181.160924	181.160924	OK
DL	89.039555	89.039555	OK
Net Count Rate	5.474000	5.474000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004885	0.004885	OK
K MDA	0.879353	0.879353	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-02
Analysis Code	
SDG	ARS1-07-01726
Fraction	005
Run Number	3
Client	QC Sample
Client Profile	
Client ID	WA QC Sample
Instr File Name	84
Instr Detector	S-5 - S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.295000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.436800
Sample Aliquot	5.028000
Dilution Factor	1.000000
Aliquot Conversion Factors	0.001000
Sample Collection Date (t1)	10/30/07 2:15 AM
Count Date (t2)	10/30/07 2:15 AM
Activity Units = pCi, -- DPS =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	0.410203	0.410203	OK
CU	106.308334	106.308334	OK
TPU	106.308342	106.308342	OK
MDA	181.519875	181.519875	OK
DL	89.215978	89.215978	OK
Net Count Rate	0.002000	0.002000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004876	0.004876	OK
K MDA	0.877614	0.877614	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-03
Analysis Code	
SDG	ARS1-07-01726
Fraction	005
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	84
Instr Detector	P-5 - S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.815000
Sample Count Mins	180.000000
BKG Count Rate	6.293000
BKG Count Mins	180.000000
Instrument Efficiency	0.428300
Sample Aliquot	5.029000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/19/07 12:00 AM
Count Date (t2)	10/30/07 5:21 AM
Activity Units = pCi -> uCi =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	318.847315	318.847315	OK
CU	114.953092	114.953092	OK
TPU	119.505878	119.505878	OK
MDA	185.405737	185.405737	OK
DL	91.125857	91.125857	OK
Net Count Rate	1.522000	1.522000	OK
D t 1 (t2 - t1)	11.222917	11.222917	OK
DF	0.998273	0.998273	OK
Sys Err	0.052280	0.052280	OK
K	0.004773	0.004773	OK
K MDA	0.859220	0.859220	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B07-03039
Batch ID	ARS1-B07-03039-04
Analysis Code	LSC-A-001
SDG	ARS1-07-01726
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Los Alamos
Client ID	ID21-07-6813
Instr File Name	84
Instr Detector	S-5 - S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: _____ Date: _____

Monday, October 22, 2007

REQUEST NUMBER: 08-79

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

These Samples are on:

LANL Request Number:08-79

Per Agreement Number:TIPS#24256

Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 10/22/2007

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	1	MD21-07-6813	GAS	10/19/2007		
		1	MD21-07-6814	GAS	10/19/2007		
		1	MD21-07-6815	GAS	10/19/2007		
		1	MD21-07-6816	GAS	10/19/2007		
		1	MD21-07-6817	GAS	10/19/2007		

Final Page of REQUEST NUMBER 08-79

Monday, October 22, 2007

LOS ALAMOS
NATIONAL LABORATORY

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-79C

REQUEST NUMBER: 08-79

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6816	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6817	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6815	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6814	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6813

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		0949	SUB-MEDIA:	IJA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:	Port #1	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa Can #20940: Tritium column Final mass = 24.0 gms

LOCATION DESC:

Port#1 70Ft

FIELD SCREENING/MEASUREMENT RESULTS:

O_2 = 20.2 %

CO_2 = 0.3 %

COLLECTED BY (PRINT) [signature]

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) [illegible] (Signature)	**Date/Time** 10/19/07 10:42	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/19/07 10:42
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6814

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/9/2007
TIME COLLECTED (HH:MM)		0957
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-25264	OK
LOCATION TYPE:	BH	OK
TOP DEPTH:	0	150.5 ft
BOTTOM DEPTH:	0	155.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	UA	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:	Port #2	
EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister: # 4216 ; Final tritium column mass = 24.4 gms

LOCATION DESC:

Port #2 153 ft BGS

FIELD SCREENING/MEASUREMENT RESULTS:

O_2 = 20.1 %

CO_2 = 0.7 %

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) Bill Stewart (Signature)	Date/Time 10/9/07 10:42	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 10/9/07 10:42
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6815

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1005	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	ok	FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:	Port #3	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister = # 13863 Final tritium column mass = 26.5 gms

LOCATION DESC:

Port #3 225 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.1 %

O_2 = 20.9 %

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Brad Stewart	10/19/07	(Printed Name)	10/19/07
(Signature)	10:42	(Signature)	10:42
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6816

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1012	SUB-MEDIA:	IIA	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	OK	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	OK	FIELD PREP:	NA	
TOP DEPTH:	0	323.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328.0	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister # 434 Final tritium column mass = 29.2 gms

LOCATION DESC:

Port #4 325.5 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 21.5 %

O_2 = 0.0 %

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) Bill Stone (Signature)	**Date/Time** 10/19/07 16:42	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 10/19/07 16:42
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 236 **EVENT NAME:** PhaseII MDA-T 21-016(a)-99, Fall 2007

SAMPLE ID: MD21-07-6817

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		10/19/2007	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1017	SUB-MEDIA:	UA	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	ok	FIELD PREP:	NA	
TOP DEPTH:	0	349.5	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: Vertical

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

Summa canister = 4175 final tritium column mass = 23.6 gms

LOCATION DESC:

Port #5 352 ft bgs

FIELD SCREENING/MEASUREMENT RESULTS:

~~Rad~~ = 2+ KR 10/19/07

CO_2 = 0.1 %

O_2 = 21.8 %

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) Kevin Read

RELINQUISHED BY (Printed Name) ~~Eric Stent~~ (Signature)	Date/Time 10/19/07 10:42	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 10/19/07 10:42
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

Attachment C: Data-Validation Cover Sheet

☐ **Rejected Data**

Section I

Request Number: 08-79 Validation Date: 11/11/07 Lab Code: ATL

Contract Laboratory Name: Air Toxics Ltd Validator: Jamie Fox

Organization: Analytical Quality Associates, Inc.

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

Other (describe): VOCs by TO-15

Section II - Completeness Check

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

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

None

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): **(page 1 of 1)**

1. The ICAL curves for chlorodifluoromethane, methanol and n-butanol contained less than five calibration points. No sample data were qualified, based on professional judgment.
2. The ICAL %RSD was >30% for hexachlorobutadiene. The associated sample results were non-detects (NDs) and, thus, were qualified UJ,V7a.
3. The 1,3-butadiene mass spectra for samples MD21-07-6813 and -6814 did not meet method specifications. The associated sample results were detects and, thus, were qualified U,V8. It should be noted that the cyclohexane mass spectra for samples -6813 – 6815 and the benzene mass spectrum for sample -6814 did not meet method specifications due to co-elution with either another target analyte or an IS. No sample data were qualified, based on professional judgment.
4. It should be noted that chlorodifluoromethane, methanol, and n-butanol were not spiked in to the LCS. No sample data were qualified as a result.

Reviewed By: MAD **Level:** I **Date:** 11/12/07

Validator's signature: James Fox Date: 11/11/07

Attachment D: VOC Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	J, V9	UJ, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	R, V9a
☐	☒	☐	3. The instrument performance check was not present or fails acceptance criteria.	R, V16a	R, V16a
☐	☒	☐	4. The initial calibration was not present.	R, V16	R, V16
☒	☐	☐	5. The initial calibration did not have 5 calibration points and/or a low standard at or below the reporting limit.	R, V7	R, V7
☒	☐	☐	6. The initial calibration analyte %RSD was >30% or r^2 was <0.995.	J, V7a	UJ, V7a
☐	☒	☐	7. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	8. The CCV was not present.	R, V16	R, V16
☐	☒	☐	9. The continuing calibration analyte %D was >25%.	J, V7a	UJ, V7a
☐	☒	☐	10. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	11. The method blank was not reported.	R, V4b	R, V4b
☐	☒	☐	12. The analyte detected in the method blank and sample result for analyte was ≤ 5x/10x the amount in the blank.	U, V4	N/A
☐	☒	☐	13. The analyte detected in the method blank and sample result for analyte was >5x/10x the amount in the method blank.	J, V4a	N/A
☐	☒	☐	14. The IS information was not present.	R, V2a	R, V2a
☐	☐	☒	15. The IS areas in CCV were <50% or >200% of the previous day's IS areas.	J, V1	UJ, V1
☐	☒	☐	16. The IS retention times had shifted by >30 s.	J, V0	UJ, V0
☐	☒	☐	17. The sample IS areas were >200% of the daily CCV IS areas.	J, V1b	N/A
☐	☒	☐	18. The sample IS areas were <50% but are ≥10% of the daily CCV IS areas.	J, V1a	UJ, V1a
☐	☒	☐	19. The sample IS areas were <10% of the daily CCV IS areas.	J, V2	R, V2
☐	☐	☒	20. The surrogate information was not present.	R, V3f	R, V3f
☐	☐	☒	21. The surrogate %R was >UAL.	J+, V3	N/A
☐	☐	☒	22. The surrogate %R was <LAL but ≥10%.	J-, V3a	UJ, V3c
☐	☐	☒	23. The surrogate %R was <10%.	J-, V3b	R, V3d
☐	☐	☒	24. The surrogate recoveries were (1) <LAL and (1) >UAL.	J, V3e	UJ, V3e
☐	☒	☐	25. The LCS information was not present.	R, V12	R, V12
☐	☒	☐	26. The LCS %R was >UAL.	J+, V12d	N/A
☐	☒	☐	27. The LCS %R was <LAL but ≥10%.	J-, V12b	UJ, V12c
☐	☒	☐	28. The LCS %R was <10%.	J-, V12a	R, V12a
☐	☒	☐	29. The mass spectral information was missing.	R, V8a	R, V8a
☒	☐	☐	30. The mass spectrum did not meet method specifications.	U, V8	N/A
☐	☐	☒	31. The TICs were requested but not reported.	R, V11	R, V11
☐	☒	☐	32. The sample was diluted inappropriately.	N/A	UJ, V10
☐	☒	☐	33. Other obvious data-quality issues were identified.	__, V19	__, V19

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6813

Lab ID#: 0710567-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7103018	**Date of Collection:**	10/19/07
Dil. Factor:	1.79	**Date of Analysis:**	10/30/07 09:08 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.90	2.1	4.4	10
Freon 114		0.90	Not Detected	6.2	Not Detected
Chloromethane		3.6	Not Detected	7.4	Not Detected
Vinyl Chloride		0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	U,V8	0.90	1.5	2.0	3.4
Bromomethane		0.90	Not Detected	3.5	Not Detected
Chloroethane		0.90	Not Detected	2.4	Not Detected
Freon 11		0.90	Not Detected	5.0	Not Detected
Ethanol		3.6	Not Detected	6.7	Not Detected
Freon 113		0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Acetone		3.6	7.0	8.5	17
2-Propanol		3.6	Not Detected	8.8	Not Detected
Carbon Disulfide		0.90	0.98	2.8	3.0
Methylene Chloride		0.90	72	3.1	250
Methyl tert-butyl ether		0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Hexane		0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane		0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.90	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene		0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran		0.90	Not Detected	2.6	Not Detected
Chloroform		0.90	71	4.4	350
1,1,1-Trichloroethane		0.90	3.4	4.9	18
Cyclohexane		0.90	0.93	3.1	3.2
Carbon Tetrachloride		0.90	25	5.6	160
Benzene		0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane		0.90	0.94	3.6	3.8
Heptane		0.90	Not Detected	3.7	Not Detected
Trichloroethene		0.90	120	4.8	660
1,2-Dichloropropane		0.90	Not Detected	4.1	Not Detected
1,4-Dioxane		3.6	Not Detected	13	Not Detected
Bromodichloromethane		0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone		0.90	Not Detected	3.7	Not Detected
Toluene		0.90	1.3	3.4	5.1
trans-1,3-Dichloropropene		0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane		0.90	Not Detected	4.9	Not Detected
Tetrachloroethene		0.90	220	6.1	1500

JKF 11/11/07

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6813

Lab ID#: 0710567-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103018**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**1.79**	**Date of Analysis:**	**10/30/07 09:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	1.1	9.2	12
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene UJ,V7a	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	Not Detected	6.2	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	100	70-130

JKF 11/11/07

1119

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6814

Lab ID#: 0710567-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103019**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**1.71**	**Date of Analysis:**	**10/30/07 09:47 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12		0.86	1.7	4.2	8.6
Freon 114		0.86	Not Detected	6.0	Not Detected
Chloromethane		3.4	Not Detected	7.1	Not Detected
Vinyl Chloride		0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	U,V8	0.86	1.3	1.9	2.8
Bromomethane		0.86	Not Detected	3.3	Not Detected
Chloroethane		0.86	Not Detected	2.2	Not Detected
Freon 11		0.86	Not Detected	4.8	Not Detected
Ethanol		3.4	Not Detected	6.4	Not Detected
Freon 113		0.86	Not Detected	6.6	Not Detected
1,1-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Acetone		3.4	29	8.1	68
2-Propanol		3.4	Not Detected	8.4	Not Detected
Carbon Disulfide		0.86	Not Detected	2.7	Not Detected
Methylene Chloride		0.86	87	3.0	300
Methyl tert-butyl ether		0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Hexane		0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane		0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)		0.86	4.1	2.5	12
cis-1,2-Dichloroethene		0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran		0.86	Not Detected	2.5	Not Detected
Chloroform		0.86	64	4.2	310
1,1,1-Trichloroethane		0.86	3.5	4.7	19
Cyclohexane		0.86	1.3	2.9	4.5
Carbon Tetrachloride		0.86	26	5.4	160
Benzene		0.86	0.92	2.7	2.9
1,2-Dichloroethane		0.86	0.99	3.5	4.0
Heptane		0.86	Not Detected	3.5	Not Detected
Trichloroethene		0.86	78	4.6	420
1,2-Dichloropropane		0.86	Not Detected	4.0	Not Detected
1,4-Dioxane		3.4	Not Detected	12	Not Detected
Bromodichloromethane		0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone		0.86	Not Detected	3.5	Not Detected
Toluene		0.86	1.8	3.2	6.8
trans-1,3-Dichloropropene		0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane		0.86	Not Detected	4.7	Not Detected
Tetrachloroethene		0.86	52	5.8	360

JKF
11/11/07

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6814

Lab ID#: 0710567-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**T103019**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**1.71**	**Date of Analysis:**	**10/30/07 09:47 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.4	Not Detected	14	Not Detected
Dibromochloromethane		0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)		0.86	Not Detected	6.6	Not Detected
Chlorobenzene		0.86	Not Detected	3.9	Not Detected
Ethyl Benzene		0.86	Not Detected	3.7	Not Detected
m,p-Xylene		0.86	Not Detected	3.7	Not Detected
o-Xylene		0.86	Not Detected	3.7	Not Detected
Styrene		0.86	Not Detected	3.6	Not Detected
Bromoform		0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane		0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene		0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene		0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene		0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene		0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene		3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	UJ,V7a	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane		3.4	Not Detected	12	Not Detected
Methanol		86	Not Detected	110	Not Detected
n-Butanol		3.4	Not Detected	10	Not Detected
Propylene		3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	104	70-130

JKF 11/11/07

1142

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6815

Lab ID#: 0710567-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103020**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**1.75**	**Date of Analysis:**	**10/30/07 10:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.3	4.3	6.6
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	0.87 J	6.7	6.7
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	7.5	8.3	18
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	1.2	2.7	3.8
Methylene Chloride	0.88	120	3.0	420
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	1.1	2.6	3.4
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	61	4.3	300
1,1,1-Trichloroethane	0.88	2.8	4.8	16
Cyclohexane	0.88	1.0	3.0	3.6
Carbon Tetrachloride	0.88	29	5.5	180
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	1.6	3.5	6.3
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	72	4.7	380
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	23	5.9	160

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6815

Lab ID#: 0710567-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103020**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**1.75**	**Date of Analysis:**	**10/30/07 10:45 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.5	Not Detected	14	Not Detected
Dibromochloromethane		0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)		0.88	Not Detected	6.7	Not Detected
Chlorobenzene		0.88	Not Detected	4.0	Not Detected
Ethyl Benzene		0.88	Not Detected	3.8	Not Detected
m,p-Xylene		0.88	Not Detected	3.8	Not Detected
o-Xylene		0.88	Not Detected	3.8	Not Detected
Styrene		0.88	Not Detected	3.7	Not Detected
Bromoform		0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane		0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene		0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene		0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene		0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene		0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene		3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	UJ,V7a	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane		3.5	Not Detected	12	Not Detected
Methanol		88	Not Detected	110	Not Detected
n-Butanol		3.5	Not Detected	11	Not Detected
Propylene		3.5	Not Detected	6.0	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	100	70-130

JKF 11/11/07

1165

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6816

Lab ID#: 0710567-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103106**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**1.83**	**Date of Analysis:**	**10/31/07 12:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	0.98	4.5	4.9
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	3.7	Not Detected	7.6	Not Detected
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	0.92	Not Detected	2.0	Not Detected
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	Not Detected	6.9	Not Detected
Freon 113	0.92	Not Detected	7.0	Not Detected
1,1-Dichloroethene	0.92	1.0	3.6	4.0
Acetone	3.7	8.1	8.7	19
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	0.92	Not Detected	2.8	Not Detected
Methylene Chloride	0.92	170	3.2	590
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Hexane	0.92	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.92	55	4.5	270
1,1,1-Trichloroethane	0.92	0.99	5.0	5.4
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	30	5.8	190
Benzene	0.92	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.92	1.4	3.7	5.9
Heptane	0.92	Not Detected	3.7	Not Detected
Trichloroethene	0.92	59	4.9	320
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	Not Detected	6.1	Not Detected
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	Not Detected	3.7	Not Detected
Toluene	0.92	1.6	3.4	5.8
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Tetrachloroethene	0.92	12	6.2	79

JKF 11/11/07

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6816

Lab ID#: 0710567-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7103106	**Date of Collection:**	10/19/07
Dil. Factor:	1.83	**Date of Analysis:**	10/31/07 12:19 PM

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		3.7	Not Detected	15	Not Detected
Dibromochloromethane		0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)		0.92	Not Detected	7.0	Not Detected
Chlorobenzene		0.92	Not Detected	4.2	Not Detected
Ethyl Benzene		0.92	Not Detected	4.0	Not Detected
m,p-Xylene		0.92	1.3	4.0	5.7
o-Xylene		0.92	Not Detected	4.0	Not Detected
Styrene		0.92	Not Detected	3.9	Not Detected
Bromoform		0.92	Not Detected	9.4	Not Detected
1,1,2,2-Tetrachloroethane		0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene		0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene		0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene		0.92	Not Detected	4.5	Not Detected
1,3-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene		0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene		0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene		3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	UJ,V7a	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane		3.7	Not Detected	13	Not Detected
Methanol		92	Not Detected	120	Not Detected
n-Butanol		3.7	Not Detected	11	Not Detected
Propylene		3.7	Not Detected	6.3	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	103	70-130

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1187

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6817

Lab ID#: 0710567-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103108**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**2.80**	**Date of Analysis:**	**10/31/07 01:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.4	Not Detected	6.9	Not Detected
Freon 114	1.4	Not Detected	9.8	Not Detected
Chloromethane	5.6	Not Detected	12	Not Detected
Vinyl Chloride	1.4	Not Detected	3.6	Not Detected
1,3-Butadiene	1.4	Not Detected	3.1	Not Detected
Bromomethane	1.4	Not Detected	5.4	Not Detected
Chloroethane	1.4	Not Detected	3.7	Not Detected
Freon 11	1.4	Not Detected	7.9	Not Detected
Ethanol	5.6	Not Detected	10	Not Detected
Freon 113	1.4	Not Detected	11	Not Detected
1,1-Dichloroethene	1.4	1.7	5.6	6.8
Acetone	5.6	18	13	44
2-Propanol	5.6	Not Detected	14	Not Detected
Carbon Disulfide	1.4	Not Detected	4.4	Not Detected
Methylene Chloride	1.4	370	4.9	1300
Methyl tert-butyl ether	1.4	Not Detected	5.0	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Hexane	1.4	Not Detected	4.9	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.4	1.9	4.1	5.6
cis-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Tetrahydrofuran	1.4	Not Detected	4.1	Not Detected
Chloroform	1.4	110	6.8	550
1,1,1-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Cyclohexane	1.4	Not Detected	4.8	Not Detected
Carbon Tetrachloride	1.4	37	8.8	230
Benzene	1.4	Not Detected	4.5	Not Detected
1,2-Dichloroethane	1.4	3.6	5.7	15
Heptane	1.4	Not Detected	5.7	Not Detected
Trichloroethene	1.4	85	7.5	460
1,2-Dichloropropane	1.4	Not Detected	6.5	Not Detected
1,4-Dioxane	5.6	Not Detected	20	Not Detected
Bromodichloromethane	1.4	Not Detected	9.4	Not Detected
cis-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.7	Not Detected
Toluene	1.4	2.5	5.3	9.4
trans-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Tetrachloroethene	1.4	3.8	9.5	26

JKF

11/11/07

11: 7

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6817

Lab ID#: 0710567-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7103108**	**Date of Collection:**	**10/19/07**
Dil. Factor:	**2.80**	**Date of Analysis:**	**10/31/07 01:55 PM**

Compound		Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone		5.6	Not Detected	23	Not Detected
Dibromochloromethane		1.4	Not Detected	12	Not Detected
1,2-Dibromoethane (EDB)		1.4	Not Detected	11	Not Detected
Chlorobenzene		1.4	Not Detected	6.4	Not Detected
Ethyl Benzene		1.4	Not Detected	6.1	Not Detected
m,p-Xylene		1.4	1.9	6.1	8.4
o-Xylene		1.4	Not Detected	6.1	Not Detected
Styrene		1.4	Not Detected	6.0	Not Detected
Bromoform		1.4	Not Detected	14	Not Detected
1,1,2,2-Tetrachloroethane		1.4	Not Detected	9.6	Not Detected
4-Ethyltoluene		1.4	Not Detected	6.9	Not Detected
1,3,5-Trimethylbenzene		1.4	Not Detected	6.9	Not Detected
1,2,4-Trimethylbenzene		1.4	Not Detected	6.9	Not Detected
1,3-Dichlorobenzene		1.4	Not Detected	8.4	Not Detected
1,4-Dichlorobenzene		1.4	Not Detected	8.4	Not Detected
alpha-Chlorotoluene		1.4	Not Detected	7.2	Not Detected
1,2-Dichlorobenzene		1.4	Not Detected	8.4	Not Detected
1,2,4-Trichlorobenzene		5.6	Not Detected	42	Not Detected
Hexachlorobutadiene	UJ,V7a	5.6	Not Detected	60	Not Detected
Chlorodifluoromethane		5.6	Not Detected	20	Not Detected
Methanol		140	Not Detected	180	Not Detected
n-Butanol		5.6	Not Detected	17	Not Detected
Propylene		5.6	Not Detected	9.6	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	88	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	104	70-130

JKF 11/11/07

11:8

0710567

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-79C

REQUEST NUMBER: 08-79

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6816	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6817	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6815	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6814	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature			Printed Name	Signature		
[illegible]	[illegible]	10/19/07	1400	A Tisdale	ATL	10/23/07	0840
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

Fedex 7209 7843 0544

 0710567

1486

Monday, October 22, 2007

REQUEST NUMBER: 08-79

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento
Air Tox c LTD
180 Blue Ravine Rc. Suite B
Folsom, CA 95630

These Samples are on:
LANL Request Number:08-79
Per Agreement Number:TIPS#24256
Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 10/22/2007
TURNAROUND/REPORT DUE: 11/1/2007
TURNAROUND REQ'D: 10 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-07-6813	GAS	10/19/2007	7.5"Hg	
		02A	1	MD21-07-6814	GAS	10/19/2007	6.5"Hg	
		03A	1	MD21-07-6815	GAS	10/19/2007	7.0"Hg	
		04A	1	MD21-07-6816	GAS	10/19/2007	8.0"Hg	
		05A	1	MD21-07-6817	GAS	10/19/2007	7.0"Hg	

Final Page of REQUEST NUMBER 08-79

Request #08-79

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0710567

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Comments:

Completed by:

Kara McKiernan — Kara McKiernan / Document Control — 11/5/07

(Signature) — (Print Name & Title) — (Date)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0710567

Work Order Summary

CLIENT:	Mr. Keith Greene Los Alamos National Laboratories Mail Stop 240 P.O. Box 1663 Los Alamos, NM 87545	**BILL TO:**	Accounts Payable Los Alamos National Laboratories P.O. Box 1663 Mail Stop P240 Los Alamos, NM 87545
PHONE:	505-665-9966	**P.O. #**	47247-001-07
FAX:	505-665-8855	**PROJECT #**	08-79
DATE RECEIVED:	10/23/2007	**CONTACT:**	Brandon Dunmore
DATE COMPLETED:	11/01/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	MD21-07-6813	Modified TO-15	7.5 "Hg
02A	MD21-07-6814	Modified TO-15	6.5 "Hg
03A	MD21-07-6815	Modified TO-15	7.0 "Hg
04A	MD21-07-6816	Modified TO-15	8.0 "Hg
05A	MD21-07-6817	Modified TO-15	7.0 "Hg
06A	Lab Blank	Modified TO-15	NA
06B	Lab Blank	Modified TO-15	NA
07A	CCV	Modified TO-15	NA
07B	CCV	Modified TO-15	NA
08A	LCS	Modified TO-15	NA
08B	LCS	Modified TO-15	NA

CERTIFIED BY: Linda D. Fruman DATE: 11/01/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15
Los Alamos National Laboratories
Workorder# 0710567

LUMEN DATA VALIDATED

Five 6 Liter Summa Canister samples were received on October 23, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) was not relinquished properly. An incorrect date was provided by the field sampler.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
MD21-07-6813	0710567-01A	10/19/2007	10/23/2007	NA	11	10/30/2007	NA	Good
MD21-07-6814	0710567-02A	10/19/2007	10/23/2007	NA	11	10/30/2007	NA	Good
MD21-07-6815	0710567-03A	10/19/2007	10/23/2007	NA	11	10/30/2007	NA	Good
MD21-07-6816	0710567-04A	10/19/2007	10/23/2007	NA	12	10/31/2007	NA	Good
MD21-07-6817	0710567-05A	10/19/2007	10/23/2007	NA	12	10/31/2007	NA	Good
Lab Blank	0710567-06A	NA	NA	NA	NA	10/30/2007	NA	Good
Lab Blank	0710567-06B	NA	NA	NA	NA	10/31/2007	NA	Good
CCV	0710567-07A	NA	NA	NA	NA	10/30/2007	NA	Good
CCV	0710567-07B	NA	NA	NA	NA	10/31/2007	NA	Good
LCS	0710567-08A	NA	NA	NA	NA	10/30/2007	NA	Good
LCS	0710567-08B	NA	NA	NA	NA	10/31/2007	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6813

Lab ID#: 0710567-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	2.1	4.4	10
1,3-Butadiene	0.90	1.5	2.0	3.4
Acetone	3.6	7.0	8.5	17
Carbon Disulfide	0.90	0.98	2.8	3.0
Methylene Chloride	0.90	72	3.1	250
Chloroform	0.90	71	4.4	350
1,1,1-Trichloroethane	0.90	3.4	4.9	18
Cyclohexane	0.90	0.93	3.1	3.2
Carbon Tetrachloride	0.90	25	5.6	160
1,2-Dichloroethane	0.90	0.94	3.6	3.8
Trichloroethene	0.90	120	4.8	660
Toluene	0.90	1.3	3.4	5.1
Tetrachloroethene	0.90	220	6.1	1500
Bromoform	0.90	1.1	9.2	12

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6813

Lab ID#: 0710567-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.90	2.1	4.4	10
Freon 114	0.90	Not Detected	6.2	Not Detected
Chloromethane	3.6	Not Detected	7.4	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
1,3-Butadiene	0.90	1.5	2.0	3.4
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Ethanol	3.6	Not Detected	6.7	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Acetone	3.6	7.0	8.5	17
2-Propanol	3.6	Not Detected	8.8	Not Detected
Carbon Disulfide	0.90	0.98	2.8	3.0
Methylene Chloride	0.90	72	3.1	250
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Chloroform	0.90	71	4.4	350
1,1,1-Trichloroethane	0.90	3.4	4.9	18
Cyclohexane	0.90	0.93	3.1	3.2
Carbon Tetrachloride	0.90	25	5.6	160
Benzene	0.90	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.90	0.94	3.6	3.8
Heptane	0.90	Not Detected	3.7	Not Detected
Trichloroethene	0.90	120	4.8	660
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Toluene	0.90	1.3	3.4	5.1
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	220	6.1	1500

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6813

Lab ID#: 0710567-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.6	Not Detected	15	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
Bromoform	0.90	1.1	9.2	12
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Chlorodifluoromethane	3.6	Not Detected	13	Not Detected
Methanol	90	Not Detected	120	Not Detected
n-Butanol	3.6	Not Detected	11	Not Detected
Propylene	3.6	Not Detected	6.2	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	100	70-130

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AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103018.d
Lab Smp Id: 0710567-01A
Inj Date : 30-OCT-2007 21:08
Operator : srs Inst ID: msd7.i
Smp Info : 200mL #20940
Misc Info : 7.5"Hg -> 5psi Los Alamos
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 31-Oct-2007 14:54 ctaylor Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	359556	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	279421			26.27- 126.27	77.71
14.416	14.388 (1.000)	49	672451			132.02- 232.02	187.02
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.185	16.158 (1.000)	114	1198965	25.0000		80.00- 120.00	100.00
16.185	16.158 (1.000)	88	183583			0.00- 64.88	15.31
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	954007	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	512652			4.45- 104.45	53.74
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	526727	27.2690	27.269	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	253004			2.91- 102.91	48.03
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.785	18.757 (1.161)	98	987007	23.1901	23.190	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	108896			0.00- 61.46	11.03

Data File: /chem/msd7.i/7-30oct.b/7103018.d
Report Date: 01-Nov-2007 11:12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.785	18.757 (1.161)	100	669081			19.18- 119.18	67.79
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	570239	25.1192	25.119	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	683914			67.21- 167.21	119.93
23.347	23.347 (1.093)	176	557687			47.52- 147.52	97.80
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.397)	85	65694	1.15619	2.070	80.00- 120.00	100.00
5.729	5.729 (0.397)	87	21873			0.00- 83.07	33.30
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.912 (0.481)	54	14159	0.84733	1.517	80.00- 120.00	100.00
6.743	6.912 (0.468)	39	98832			55.97- 155.97	698.02
45 Acetone					CAS #: 67-64-1		
10.517	10.462 (0.730)	58	37970	3.91577	7.009	80.00- 120.00	100.00
10.517	10.462 (0.730)	43	166676			247.10- 347.10	438.97
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	32617	0.54495	0.9754	80.00- 120.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	934879	40.5335	72.555	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	587103			18.75- 118.75	62.80
11.485	11.457 (0.797)	51	274305			0.00- 80.85	29.34
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	1442495	39.8458	71.324	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	940785			14.87- 114.87	65.22
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	69120	1.89598	3.394	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	44900			14.34- 114.34	64.96
85 Cyclohexane					CAS #: 110-82-7		
14.858	14.831 (1.031)	84	10856	0.51991	0.9306	80.00- 120.00	100.00
14.831	14.831 (1.029)	56	20929			77.34- 177.34	192.79
14.831	14.831 (1.029)	41	14347			23.26- 123.26	132.16
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.080 (1.048)	119	480988	14.0749	25.194	80.00- 120.00	100.00
15.107	15.080 (1.048)	117	492500			53.20- 153.20	102.39
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.966)	62	13260	0.52388	0.9377	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
93 1,2-Dichloroethane (continued)							
15.660	15.633 (0.968)	64	4230			0.00- 82.89	31.90
101 Trichloroethene					CAS #: 79-01-6		
16.656	16.628 (1.029)	95	1464502	69.2069	123.88	80.00- 120.00	100.00
16.656	16.628 (1.029)	130	1492406			52.84- 152.84	101.91
16.656	16.628 (1.029)	97	957909			15.58- 115.58	65.41
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.167)	91	39178	0.75085	1.344	80.00- 120.00	100.00
18.895	18.895 (1.167)	92	22233			13.85- 113.85	56.75
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	3168889	123.650	221.33	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	2280124			20.11- 120.11	71.95
19.835	19.835 (0.929)	131	2190211			17.39- 117.39	69.12
133 Bromoform					CAS #: 75-25-2		
22.849	22.821 (1.070)	173	19558	0.63617	1.139	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	9820			1.85- 101.85	50.21

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103018.d
Lab Smp Id: 0710567-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 7.5"Hg -> 5psi Los Alamos

Calibration Date: 30-OCT-2007
Calibration Time: 12:15
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	537758	322655	752861	359556	-33.14
97 1,4-Difluorobenze	1771565	1062939	2480191	1198965	-32.32
126 Chlorobenzene-d5	1414884	848930	1980838	954007	-32.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 01-Nov-2007 11:12

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 7-30oct
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0710567-01A
Level: LOW Operator: srs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 7.5"Hg -> 5psi Los Alamos

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	27.269	109.08	70-130
$ 113 Toluene-d8	25.000	23.190	92.76	70-130
$ 137 Bromofluorobenzene	25.000	25.119	100.48	70-130

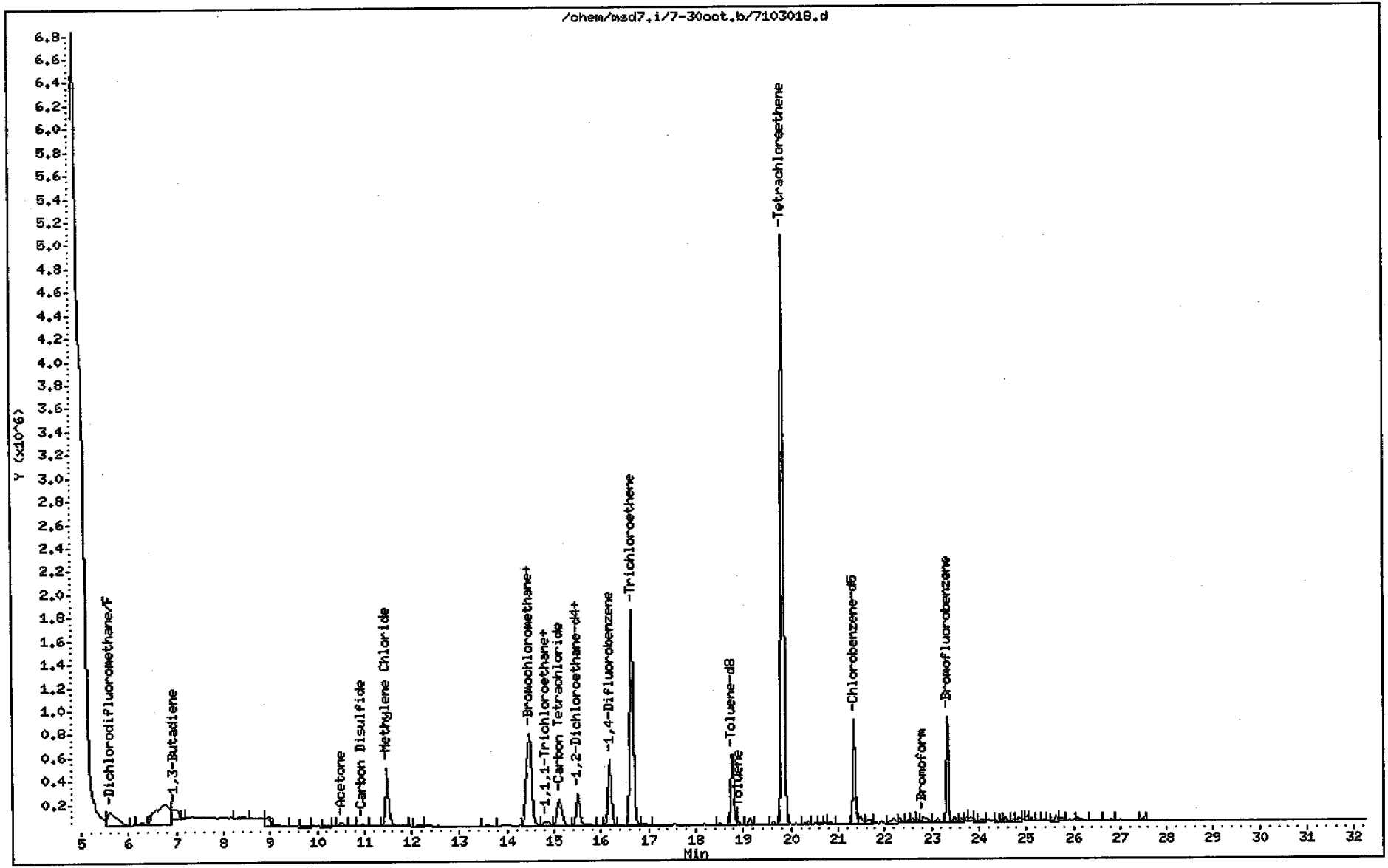
0014

Data File: /chem/msd7.i/7-30oot.b/7103018.d
Date : 30-OCT-2007 21:08
Client ID:
Sample Info: 200mL #20940

Instrument: msd7.i

Operator: srs
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

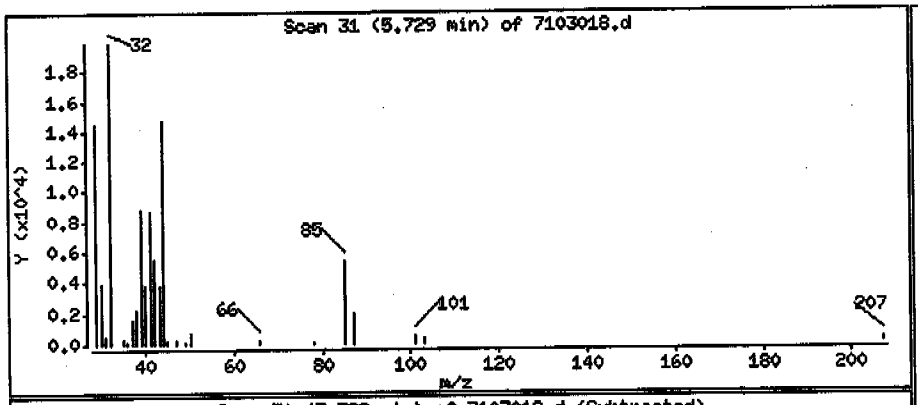
Operator: srs

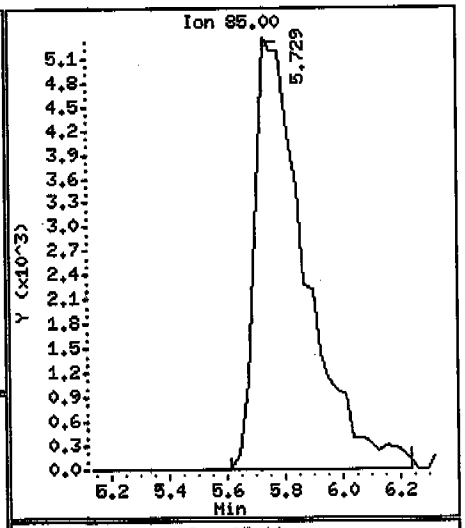
Column phase: RTx-624

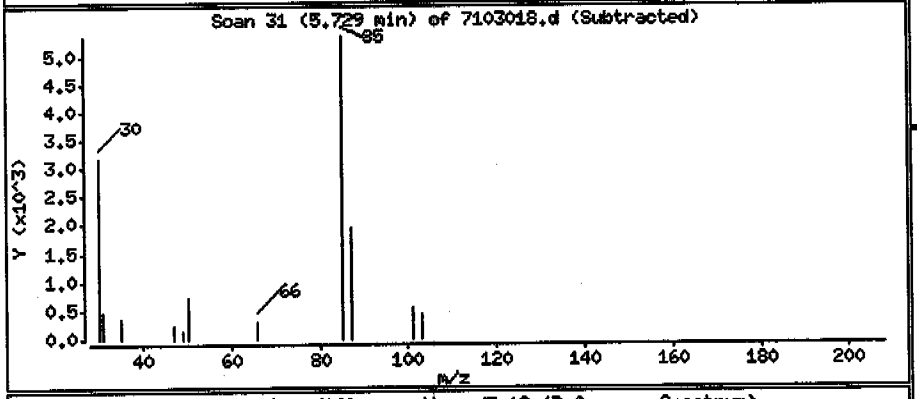
Column diameter: 0.53

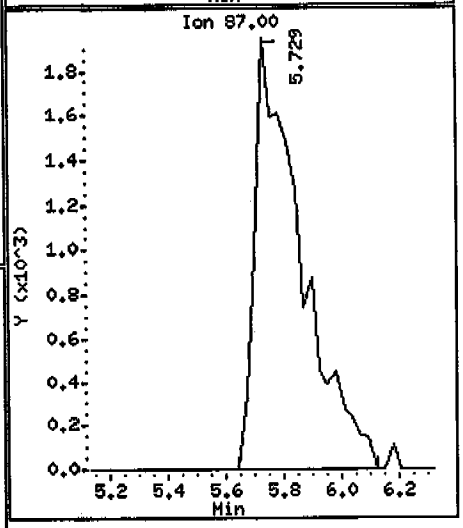
12 Dichlorodifluoromethane/Fr12

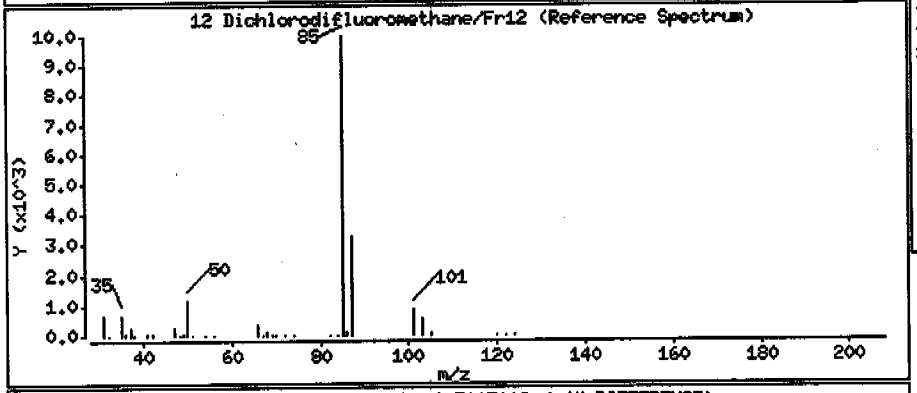
Concentration: 2.070 PPBV

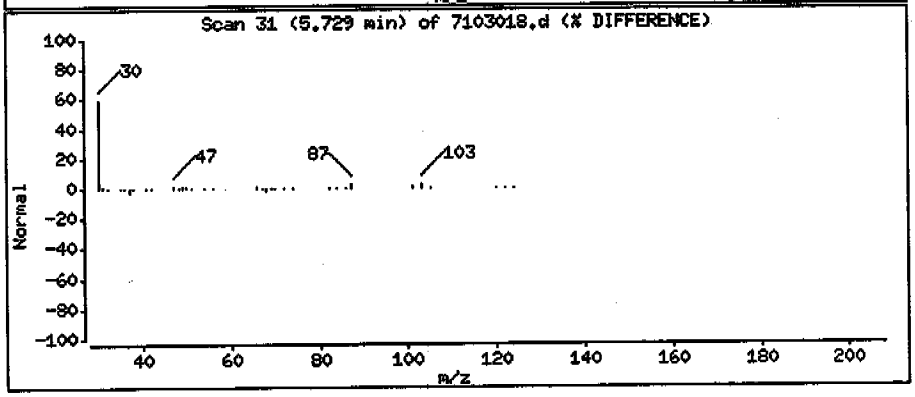












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

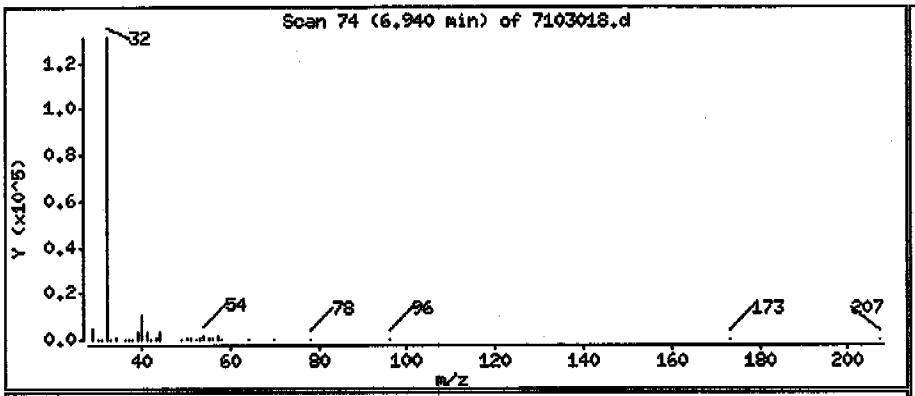
Operator: srs

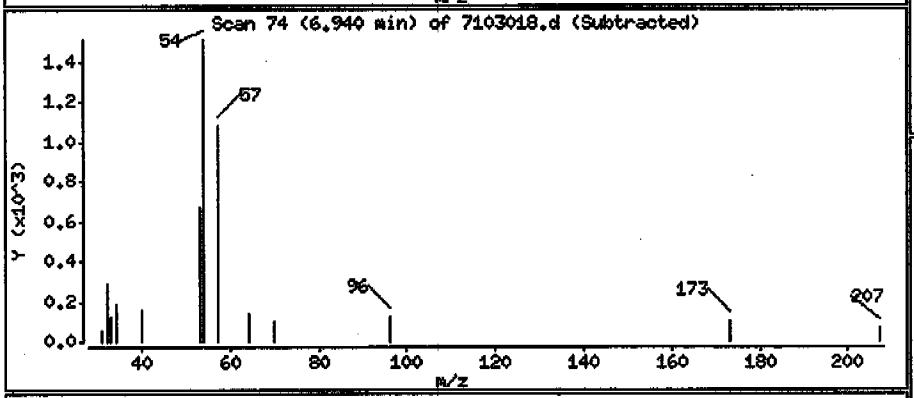
Column phase: RTx-624

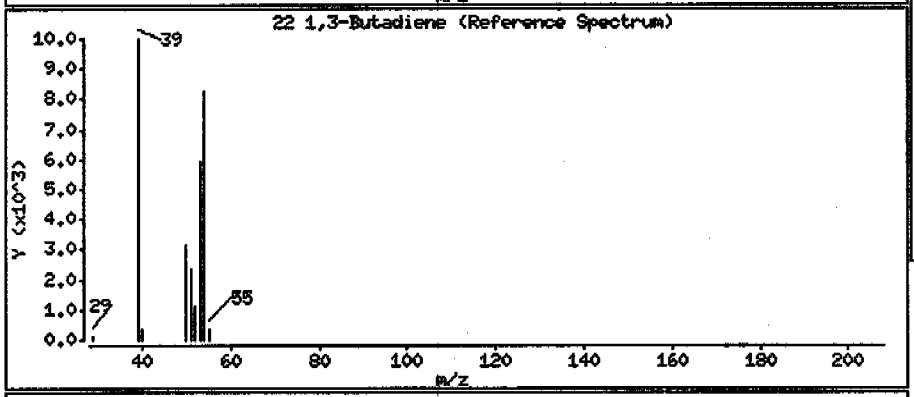
Column diameter: 0.53

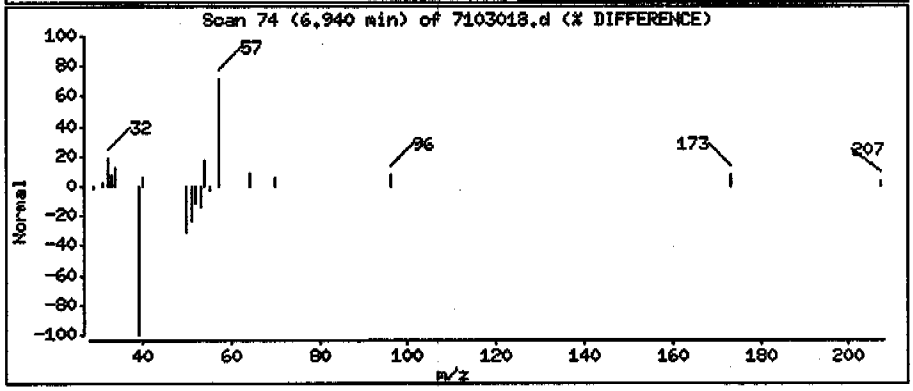
22 1,3-Butadiene

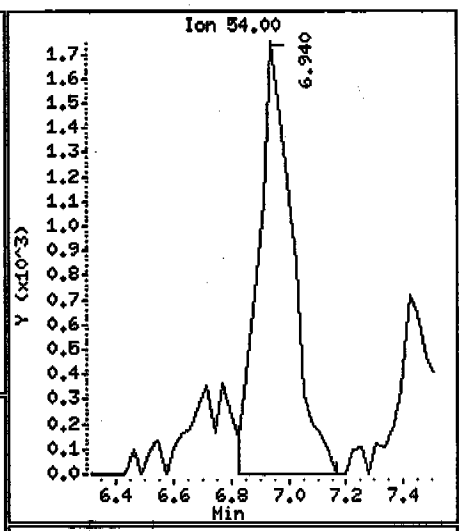
Concentration: 1.517 PPBV

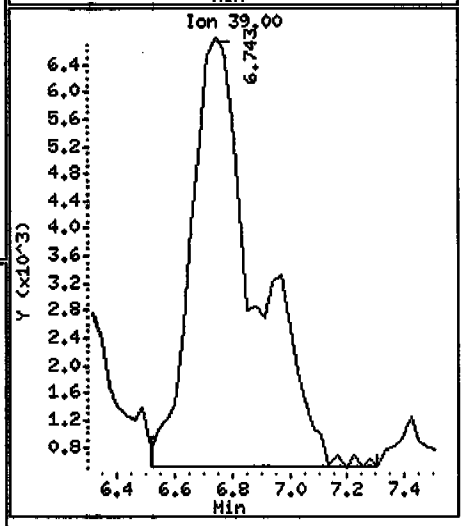












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

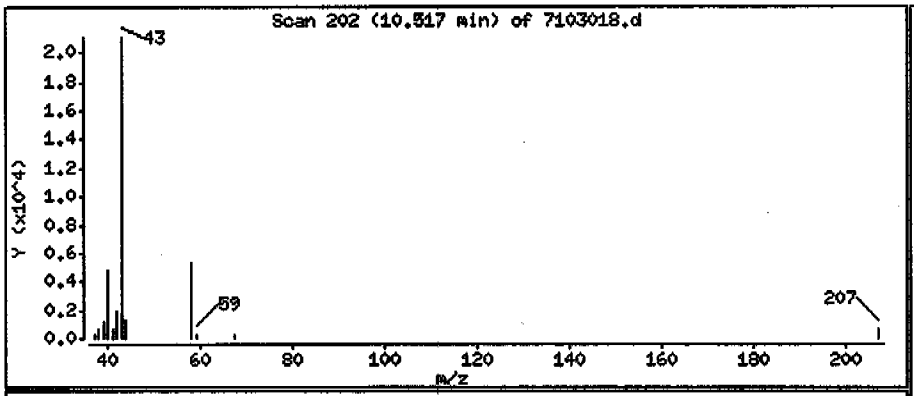
Operator: srs

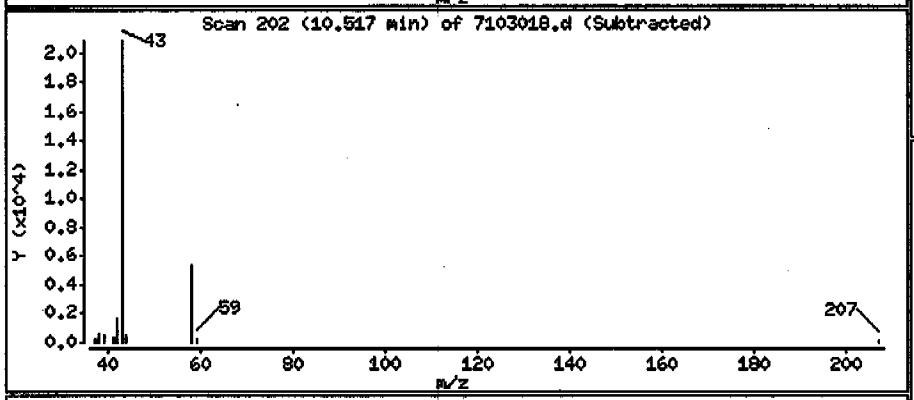
Column phase: RTx-624

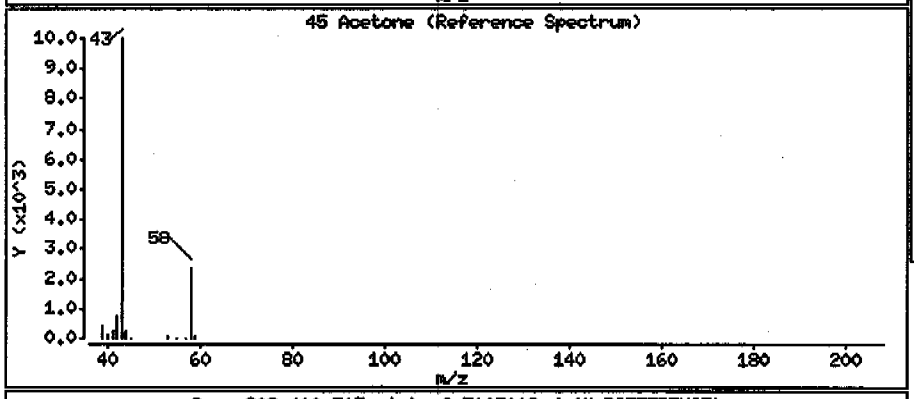
Column diameter: 0.53

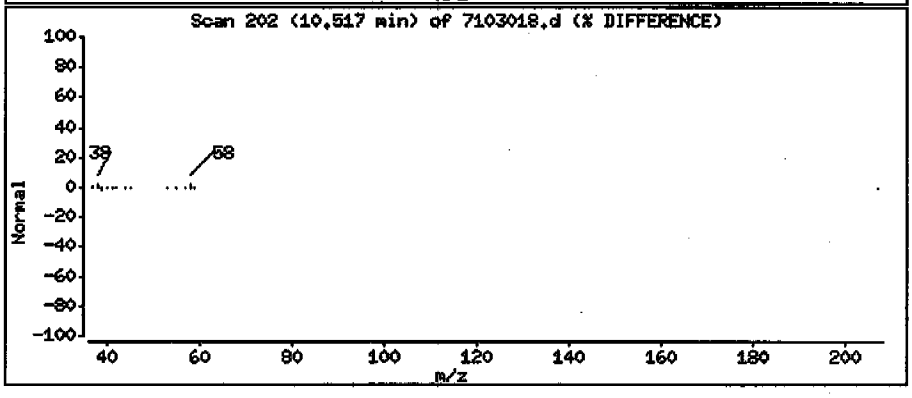
45 Acetone

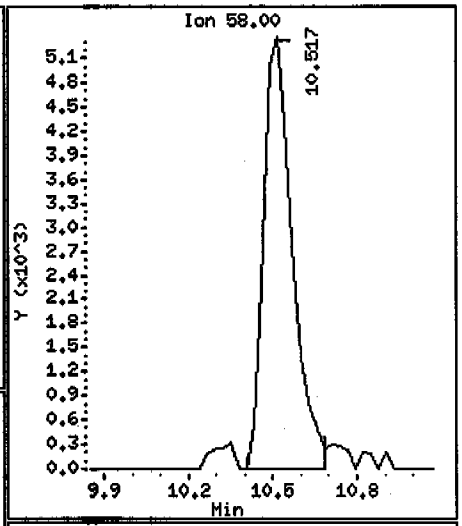
Concentration: 7.009 PPBV

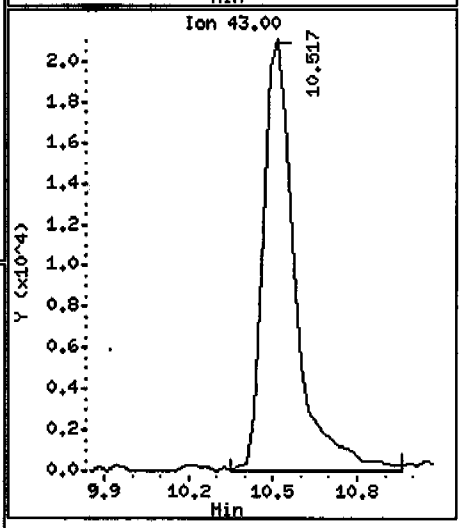












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

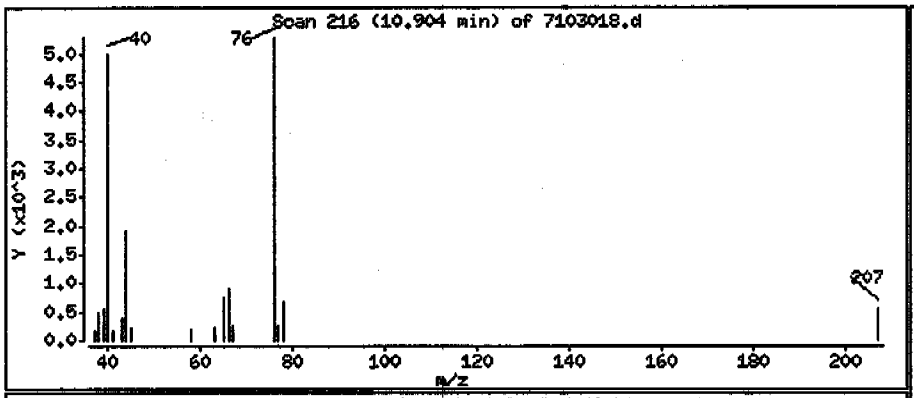
Operator: srs

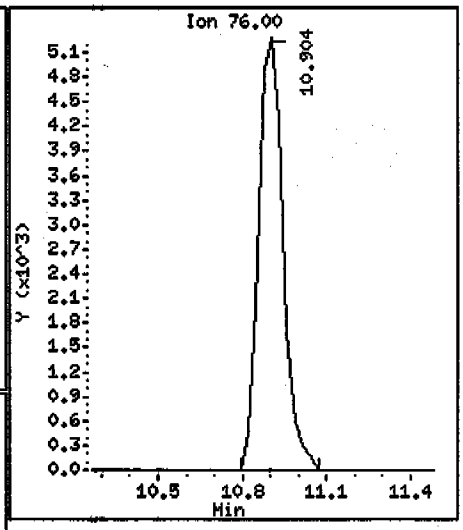
Column phase: RTx-624

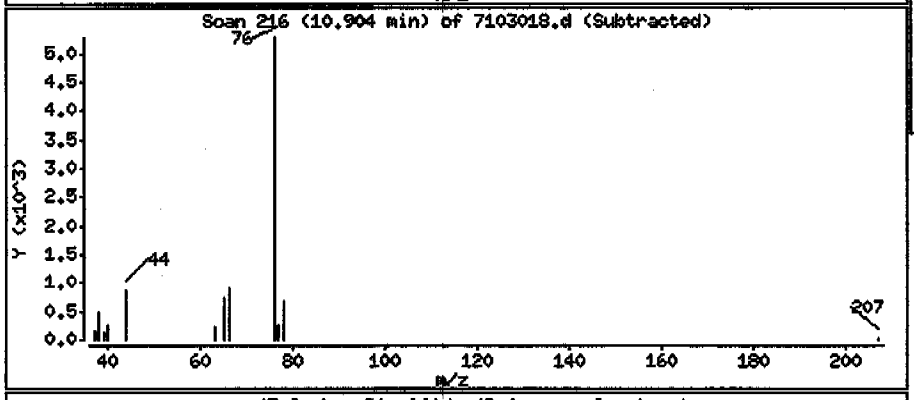
Column diameter: 0.53

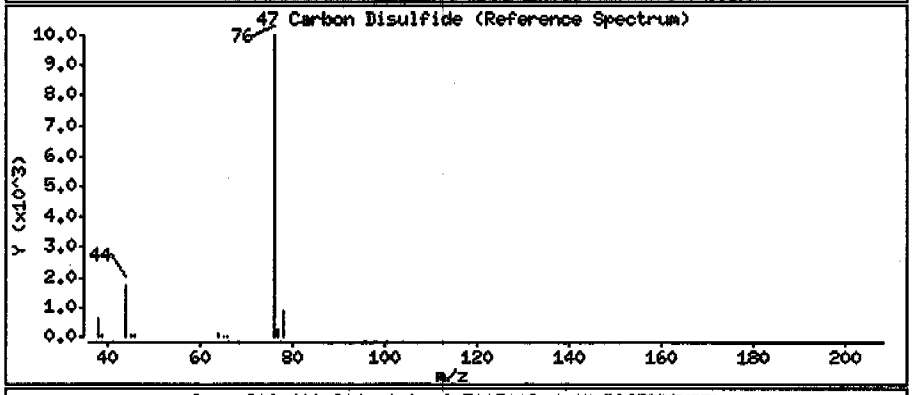
47 Carbon Disulfide

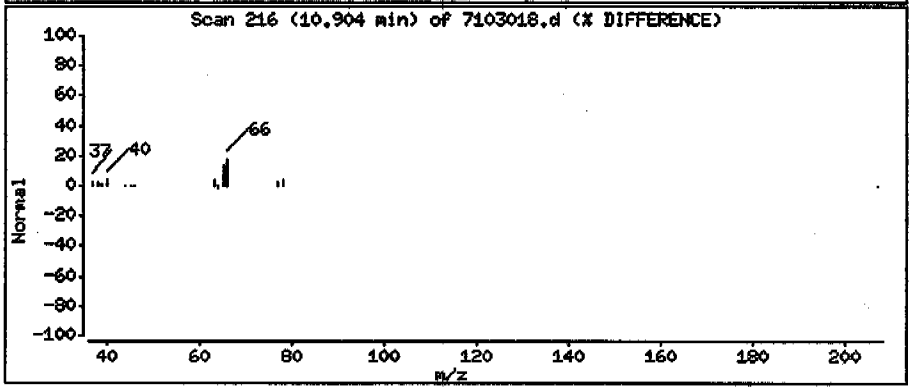
Concentration: 0.9754 PPBV











Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

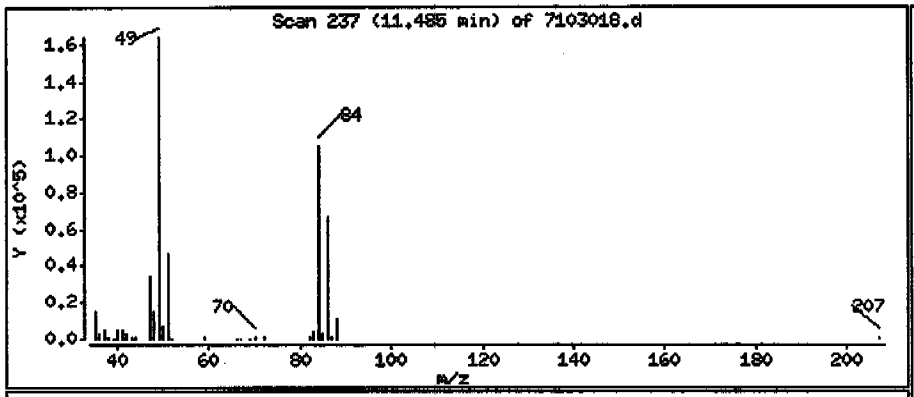
Operator: srs

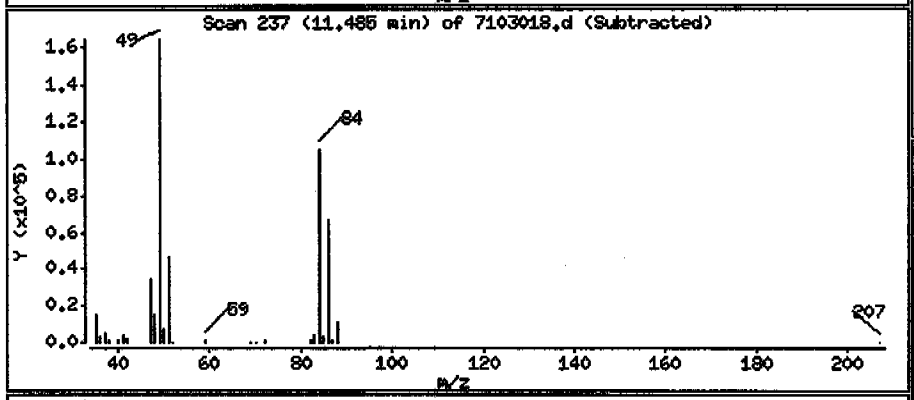
Column phase: RTx-624

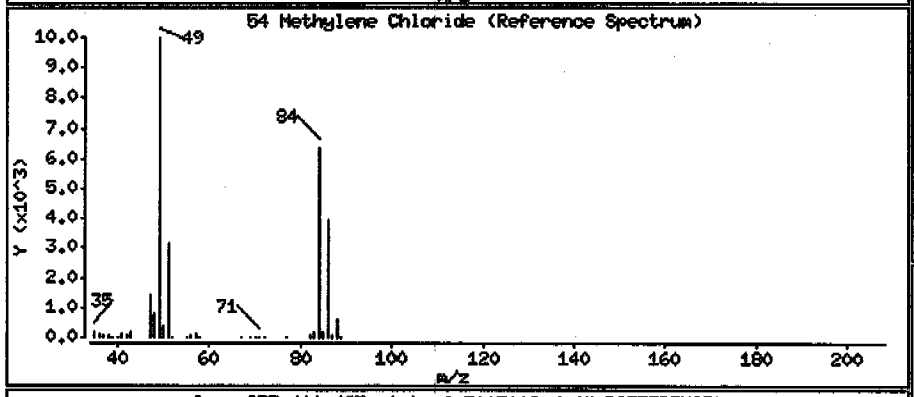
Column diameter: 0.53

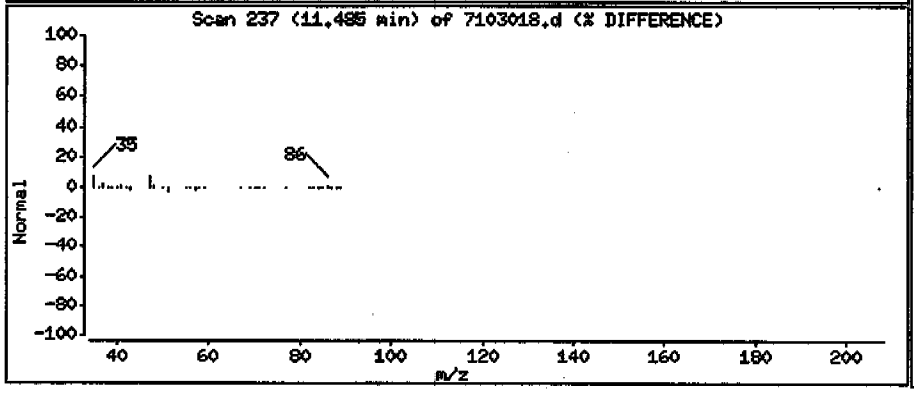
54 Methylene Chloride

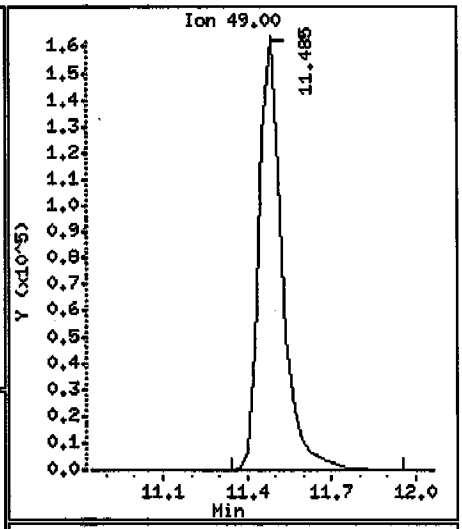
Concentration: 72.555 PPBV

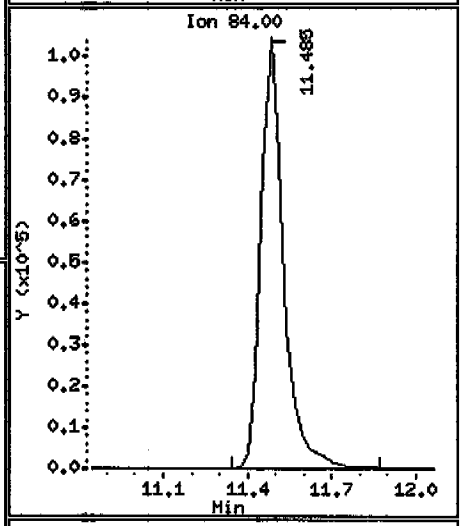


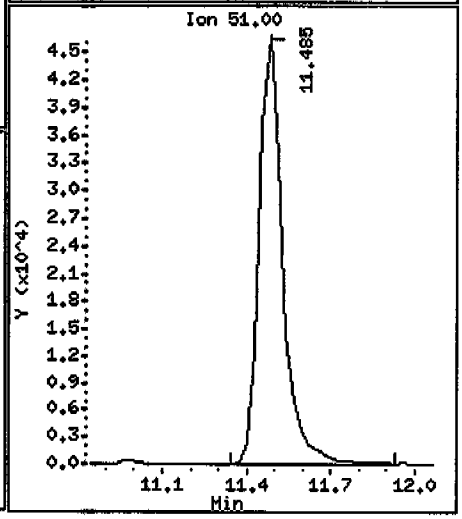












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

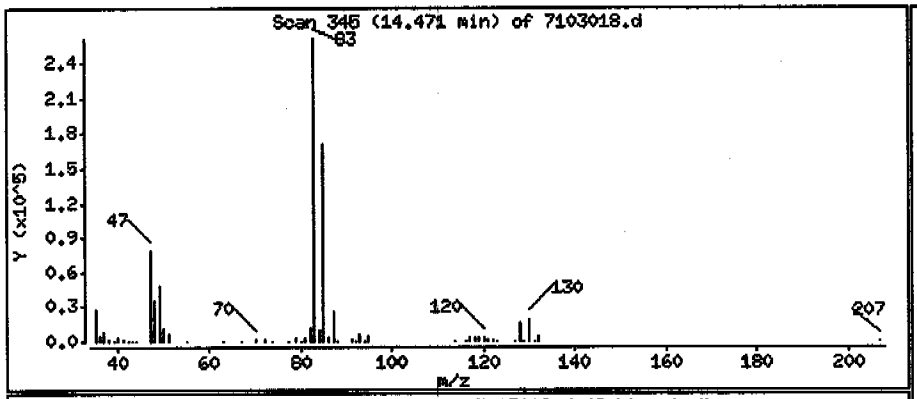
Operator: srs

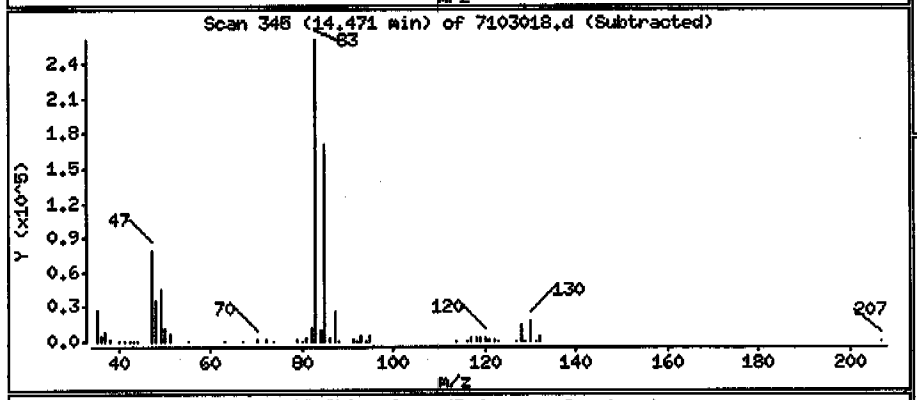
Column phase: RTx-624

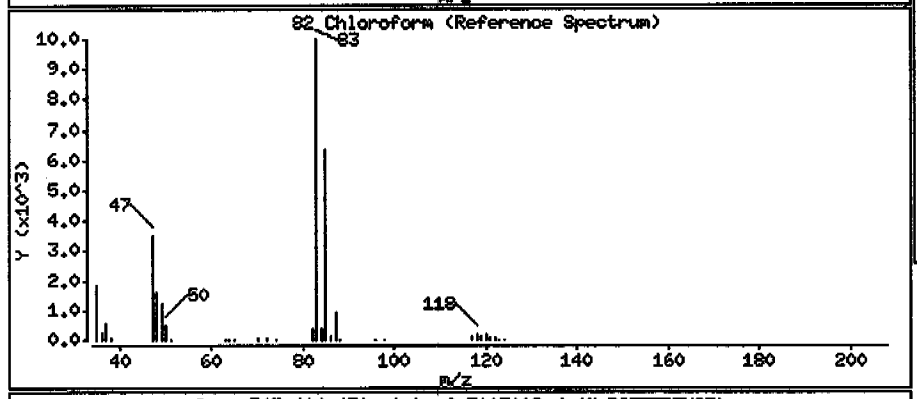
Column diameter: 0.53

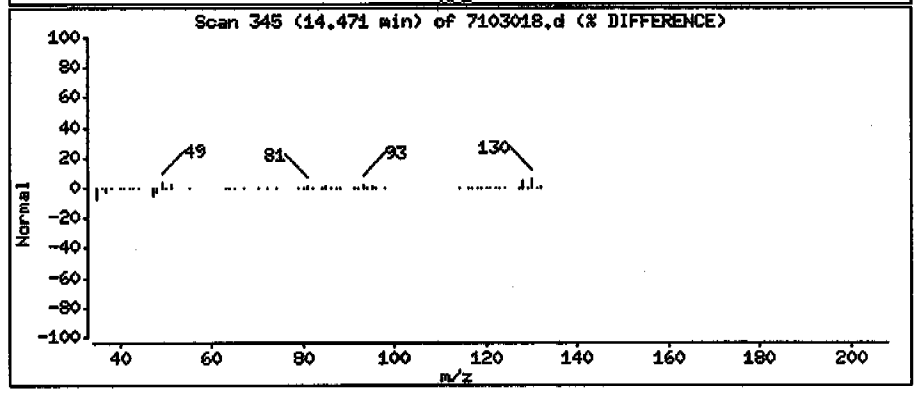
82 Chloroform

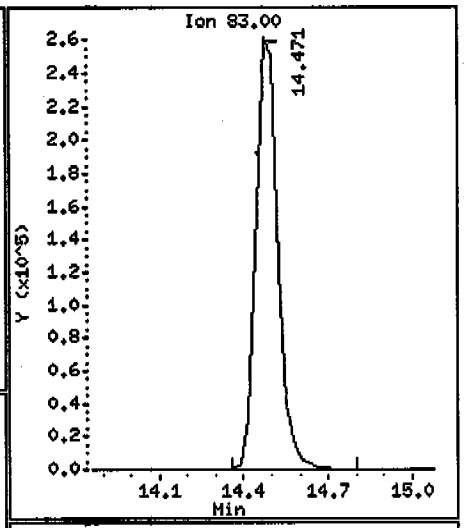
Concentration: 71.324 PPBV

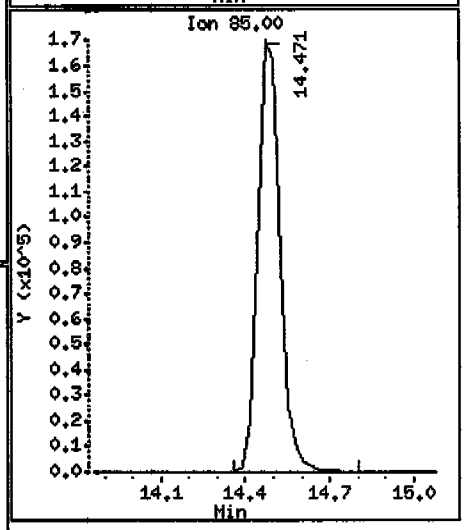












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

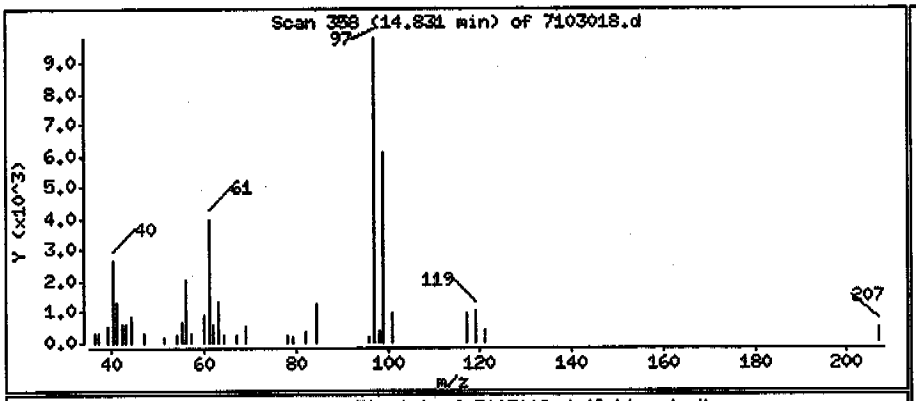
Operator: srs

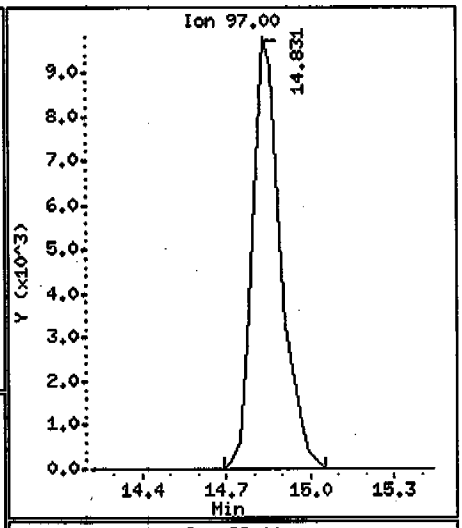
Column phase: RTx-624

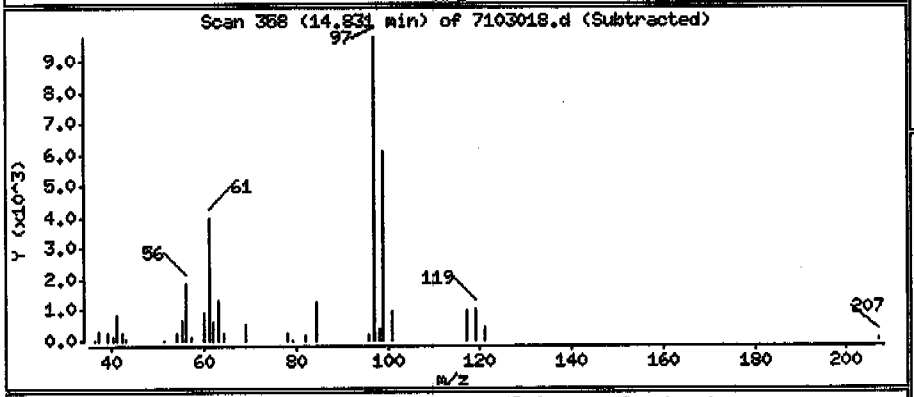
Column diameter: 0.53

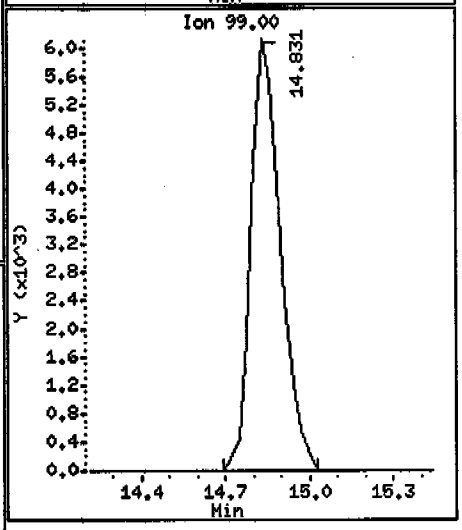
83 1,1,1-Trichloroethane

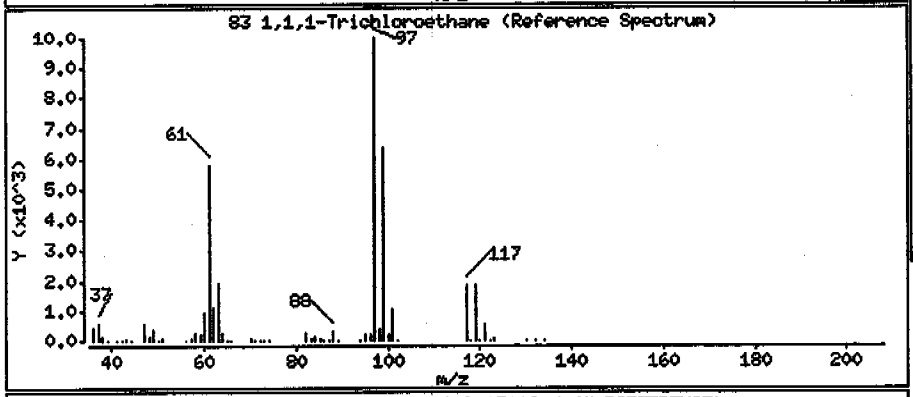
Concentration: 3.394 PPBV

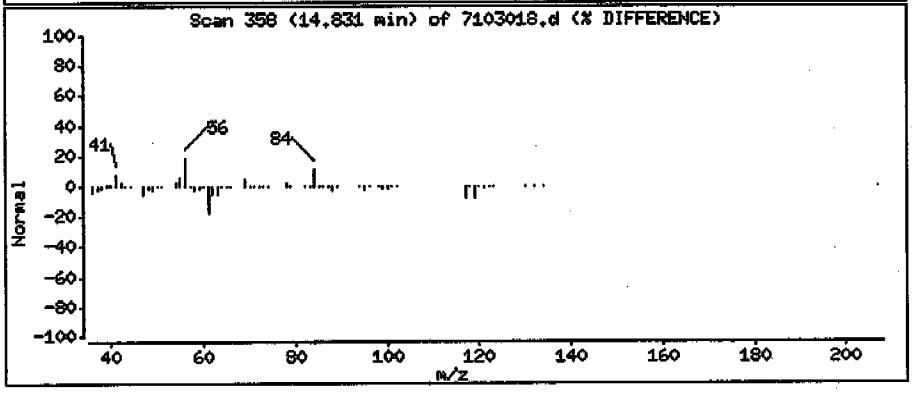












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Sample Info: 200mL #20940

Instrument: msd7.i

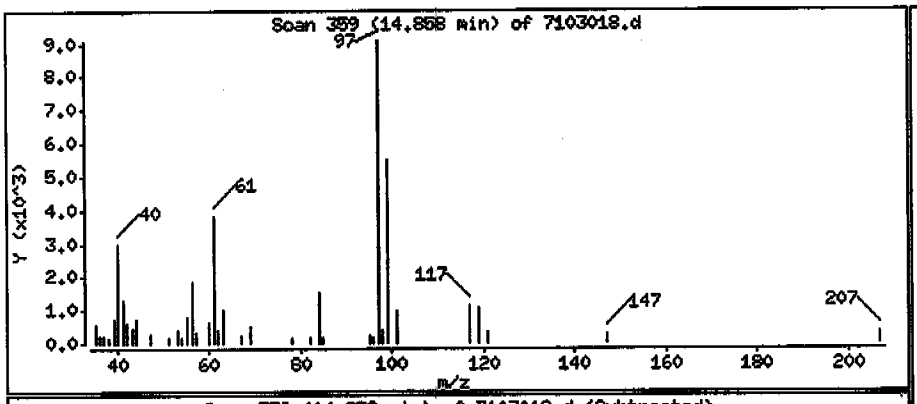
Operator: srs

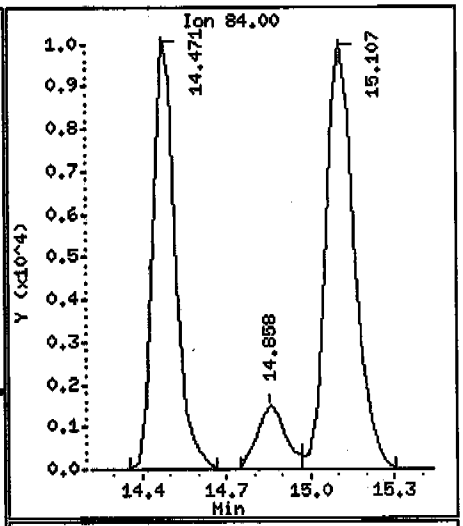
Column phase: RTx-624

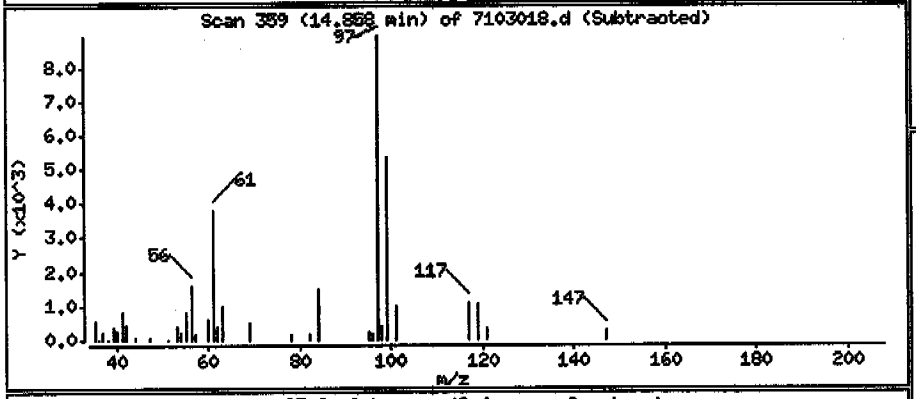
Column diameter: 0.53

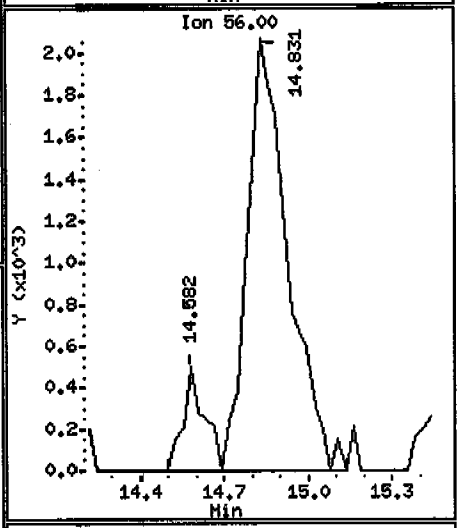
85 Cyclohexane

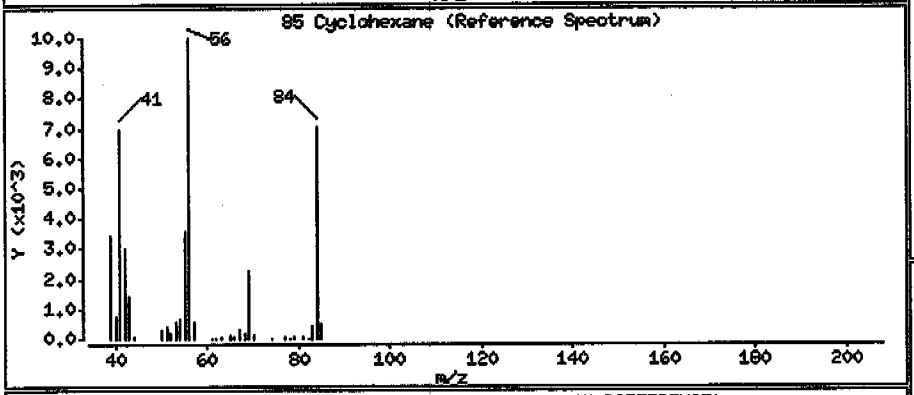
Concentration: 0.9306 PPBV

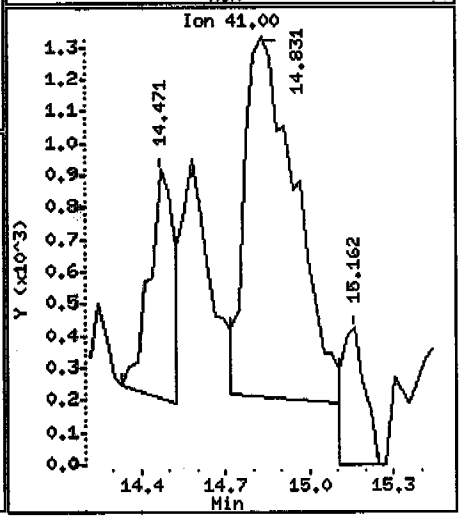


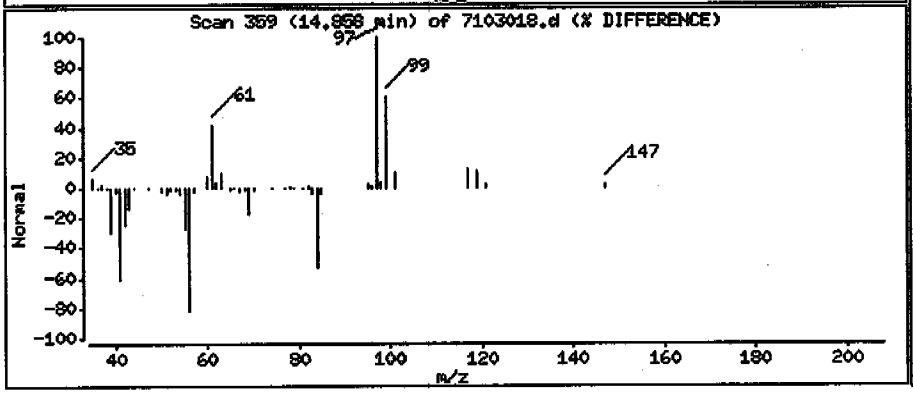












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

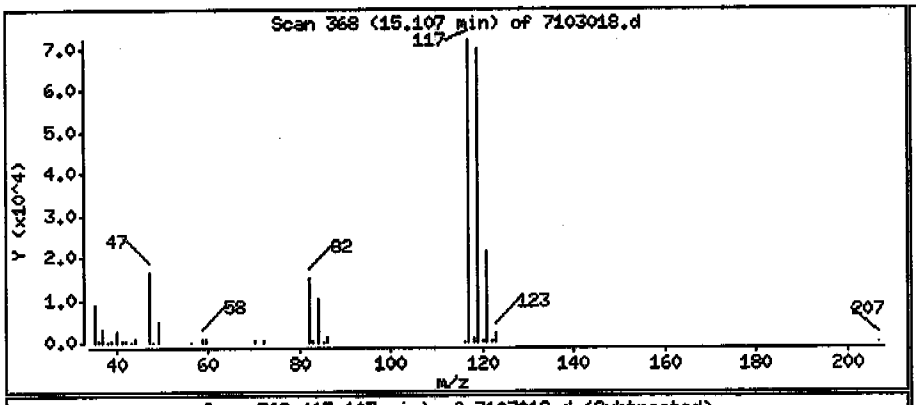
Operator: srs

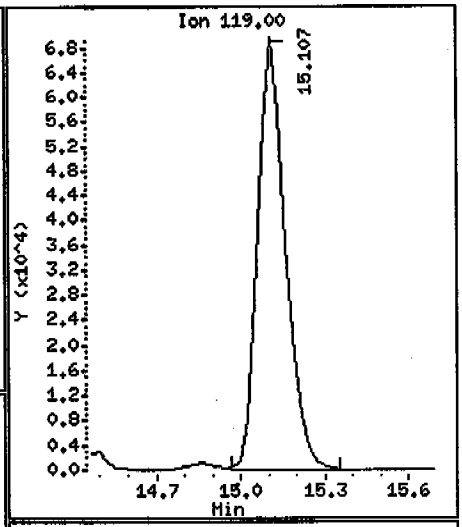
Column phase: RTx-624

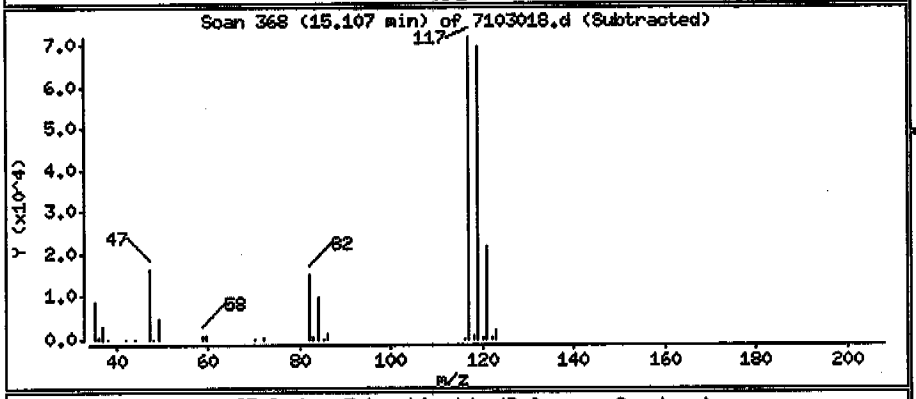
Column diameter: 0.53

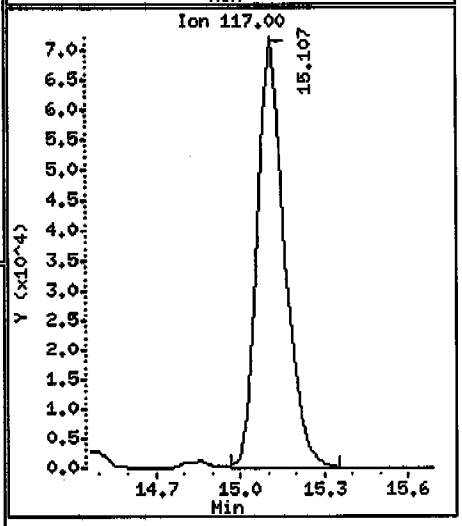
87 Carbon Tetrachloride

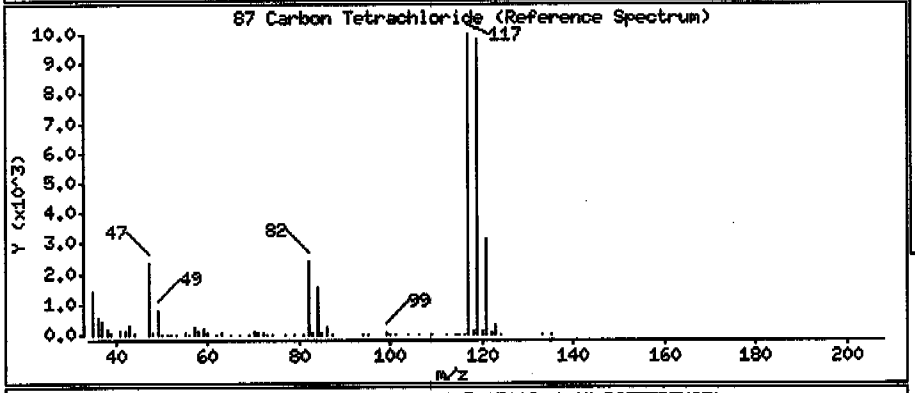
Concentration: 25.194 PPBV

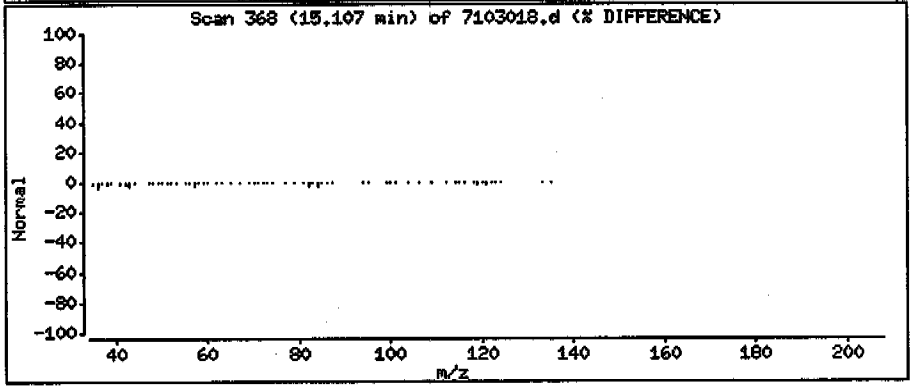












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

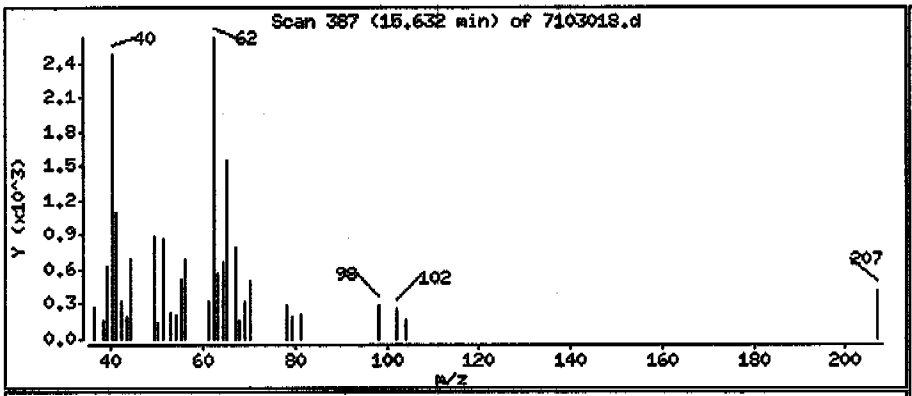
Operator: srs

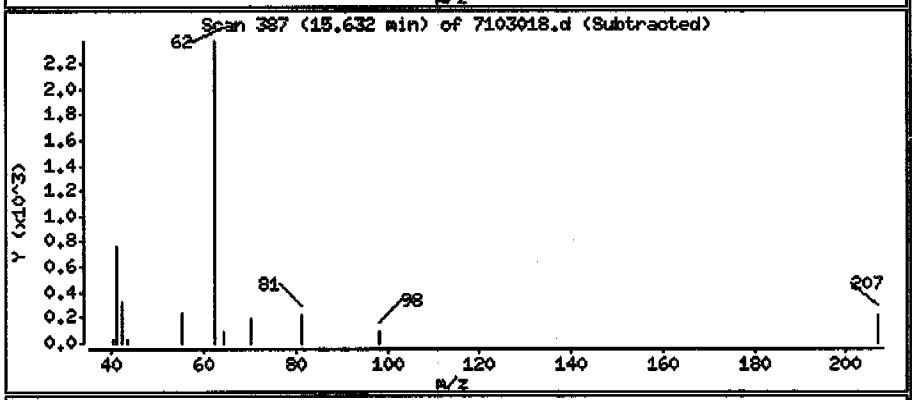
Column phase: RTx-624

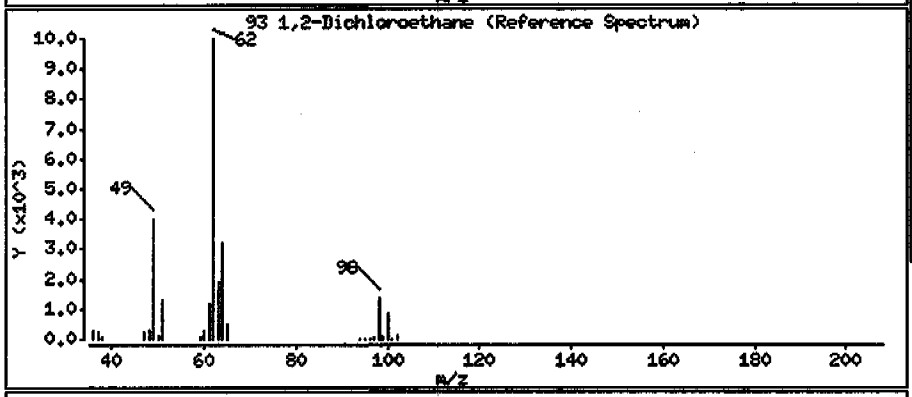
Column diameter: 0.53

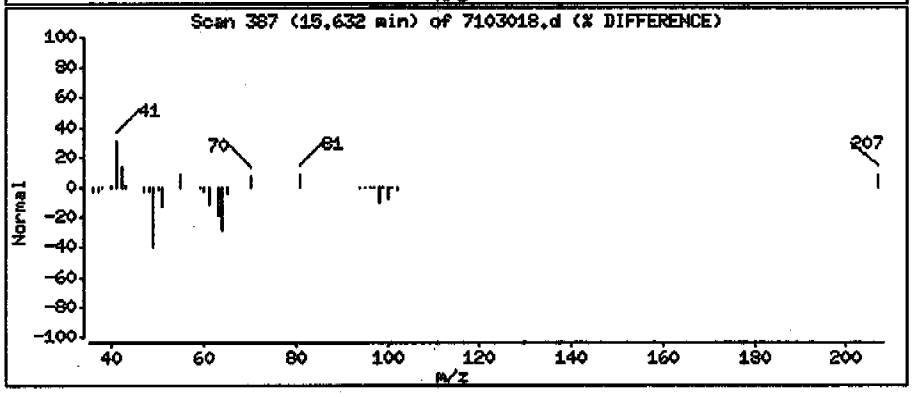
93 1,2-Dichloroethane

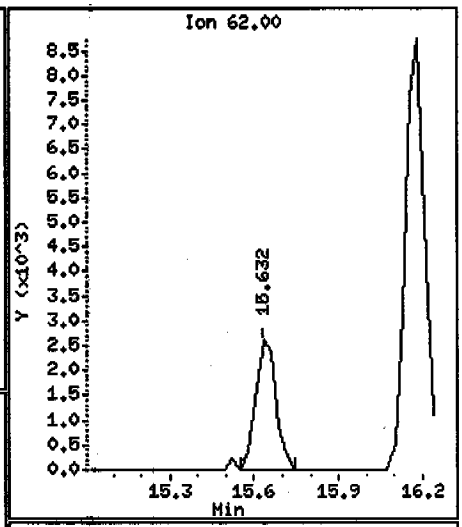
Concentration: 0.9377 PPBV

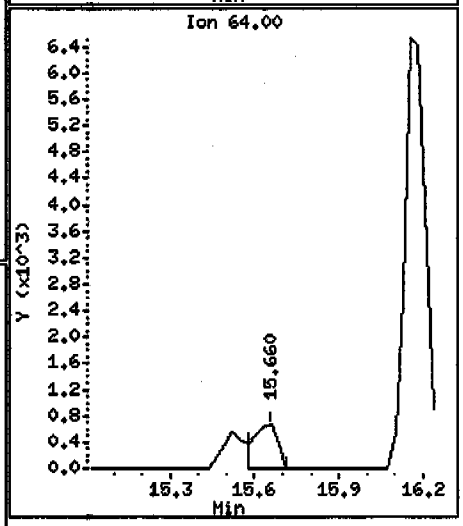












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

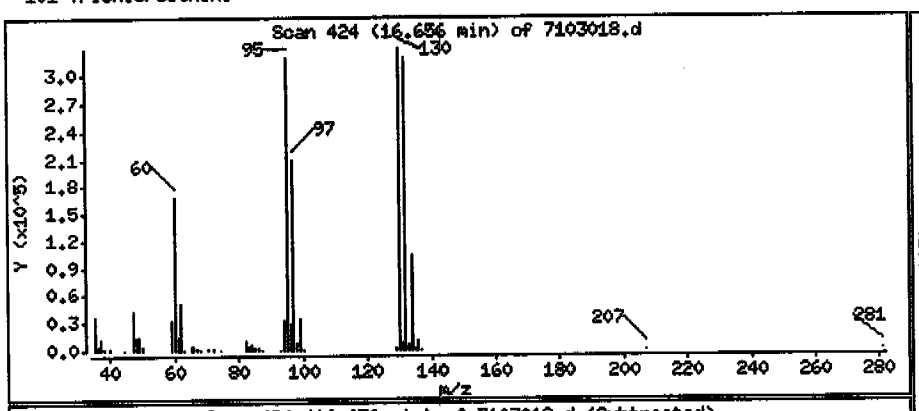
Operator: srs

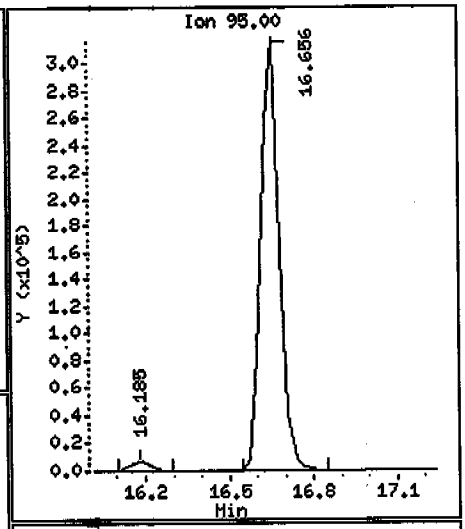
Column phase: RTx-624

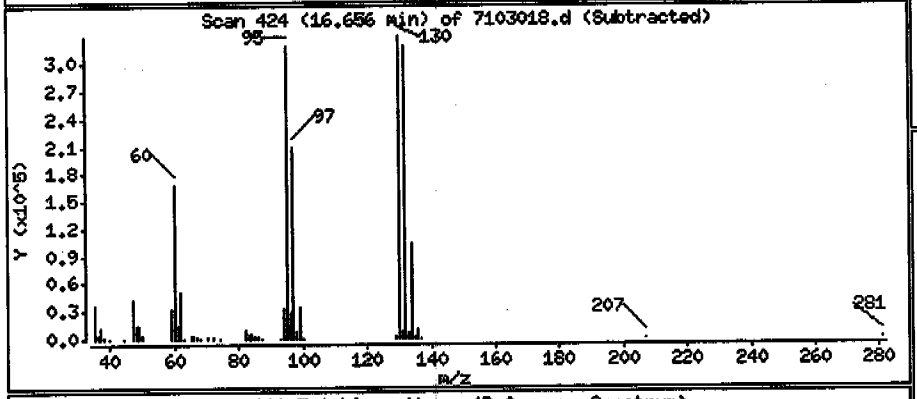
Column diameter: 0.53

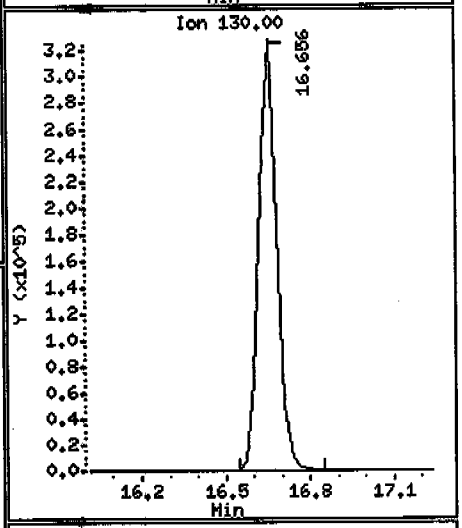
101 Trichloroethene

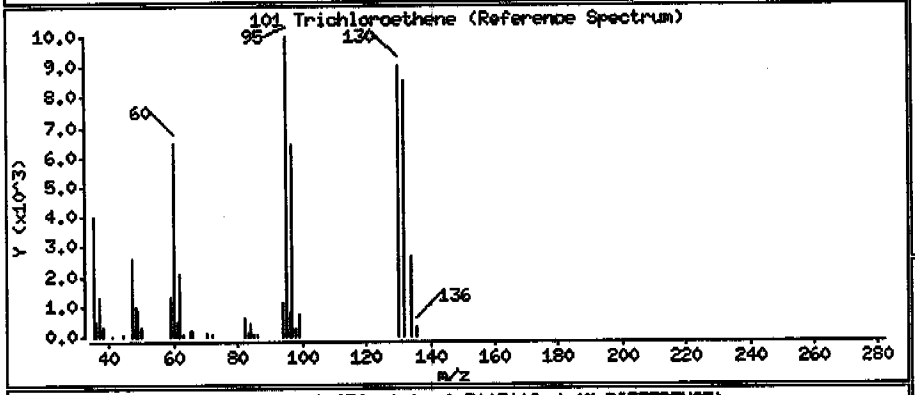
Concentration: 123.88 PPBV

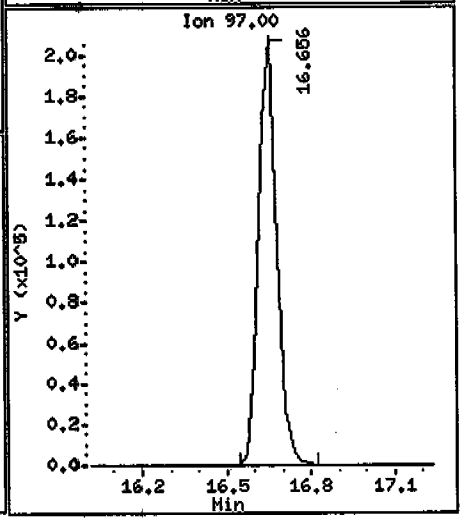


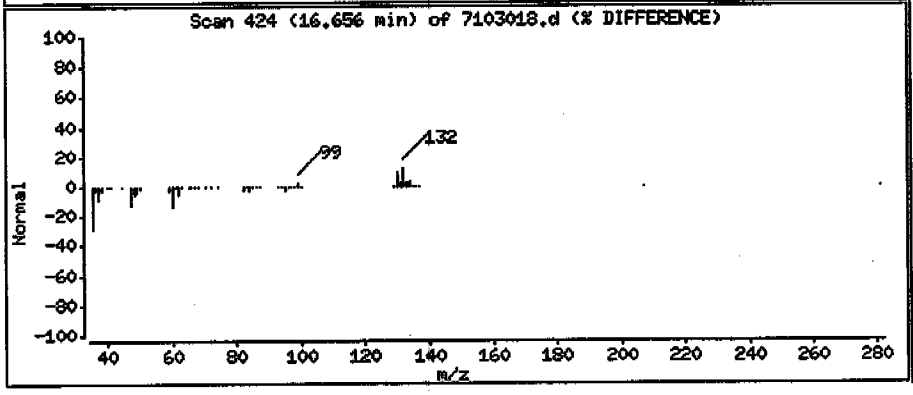












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

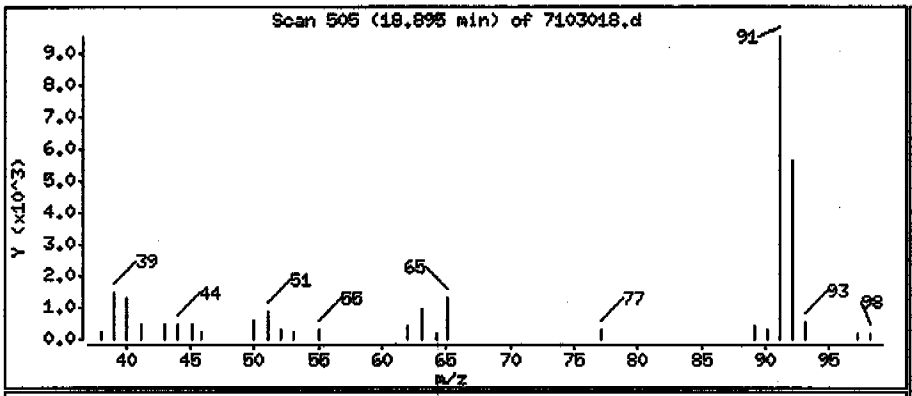
Operator: srs

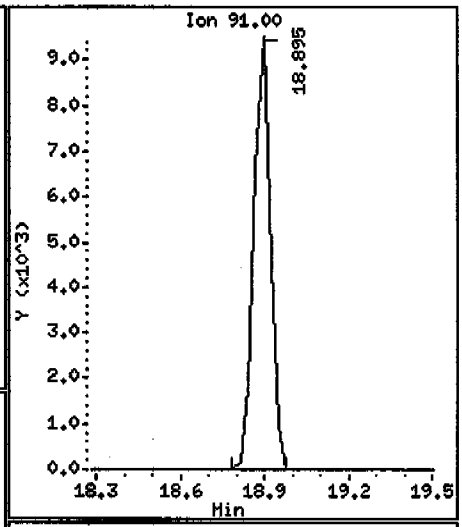
Column phase: RTx-624

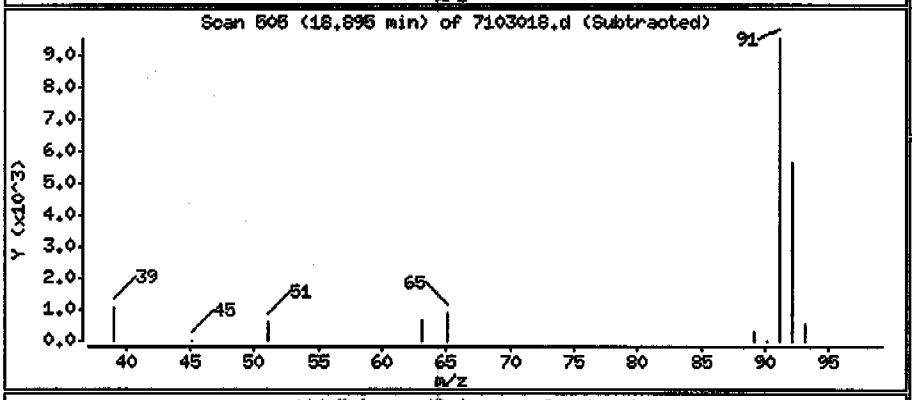
Column diameter: 0.53

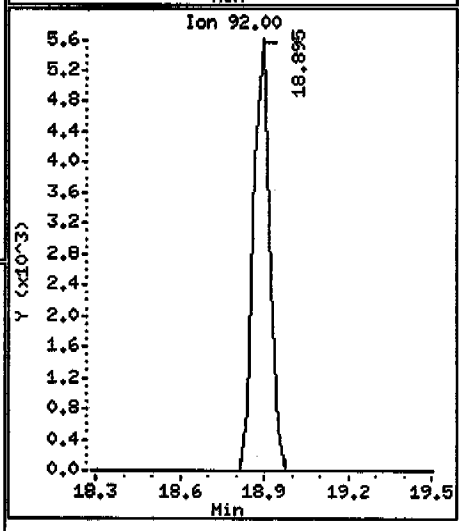
114 Toluene

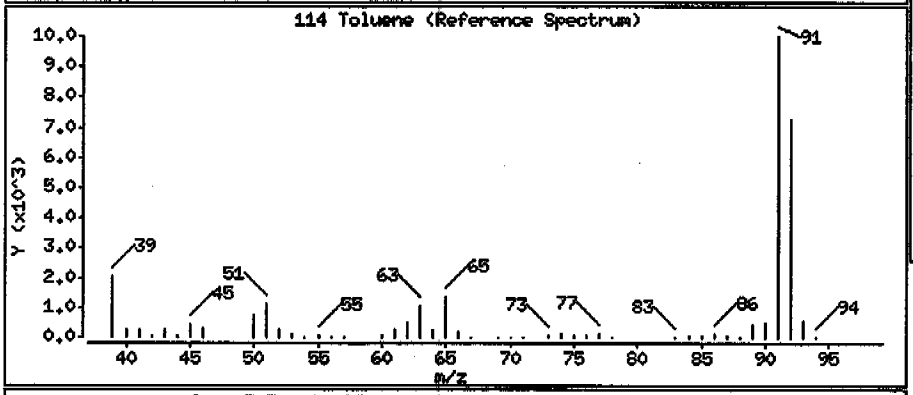
Concentration: 1.344 PPBV

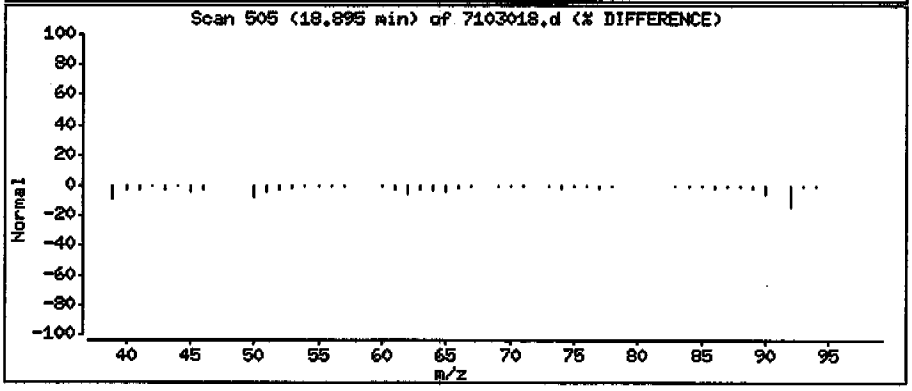












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

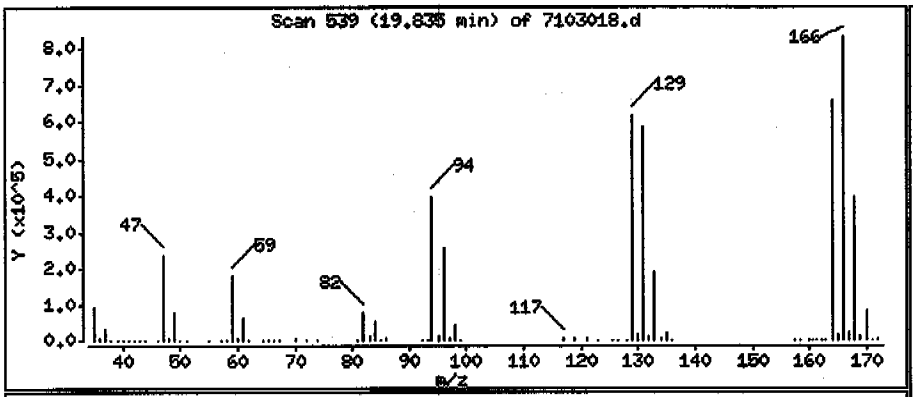
Operator: srs

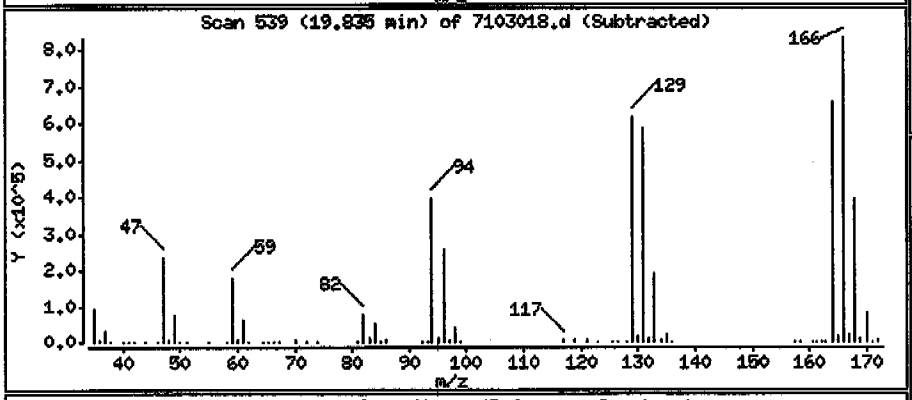
Column phase: RTx-624

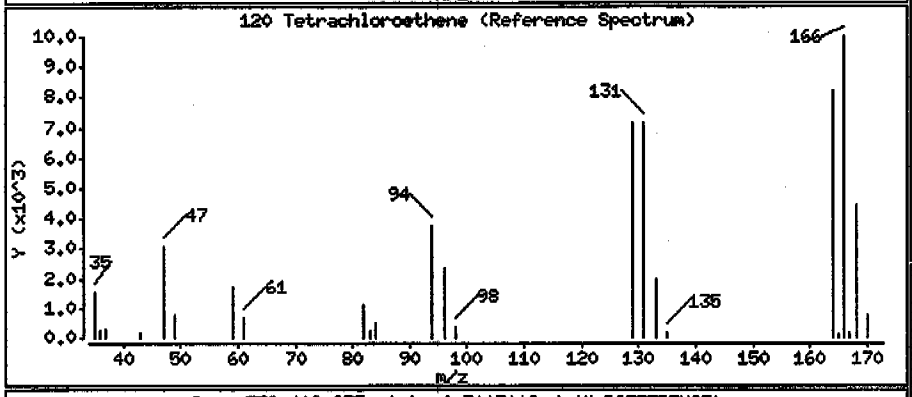
Column diameter: 0.53

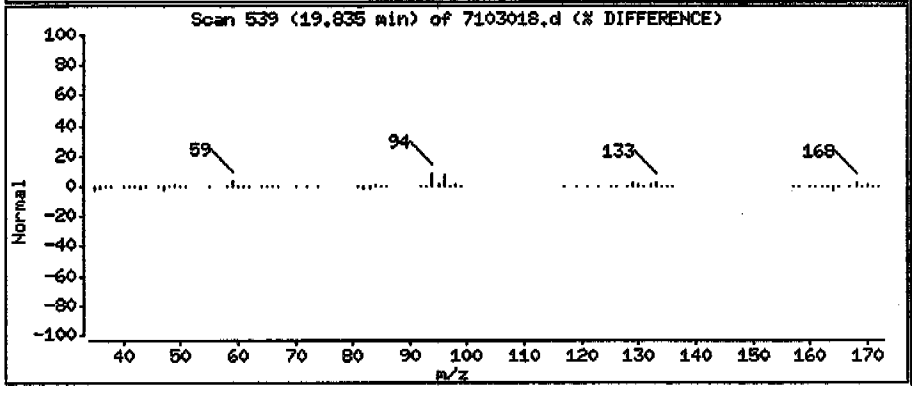
120 Tetrachloroethene

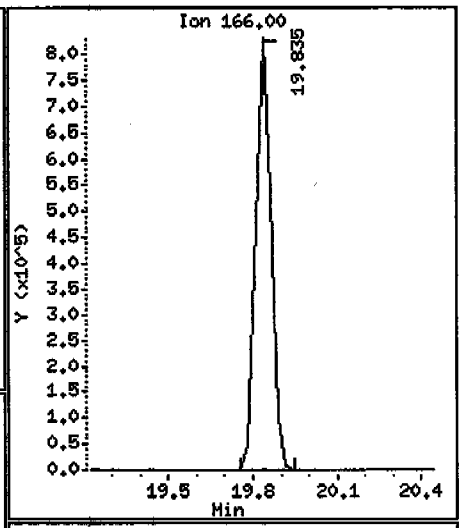
Concentration: 221.33 PPBV

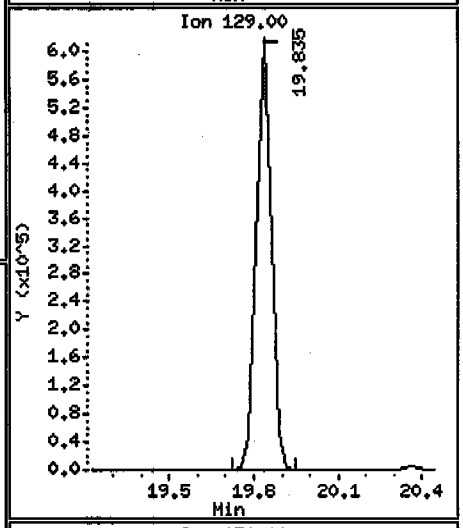


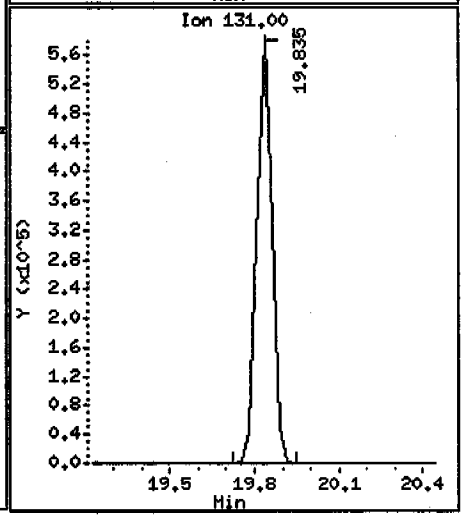












Data File: /chem/msd7.i/7-30oct.b/7103018.d

Date : 30-OCT-2007 21:08

Client ID:

Instrument: msd7.i

Sample Info: 200mL #20940

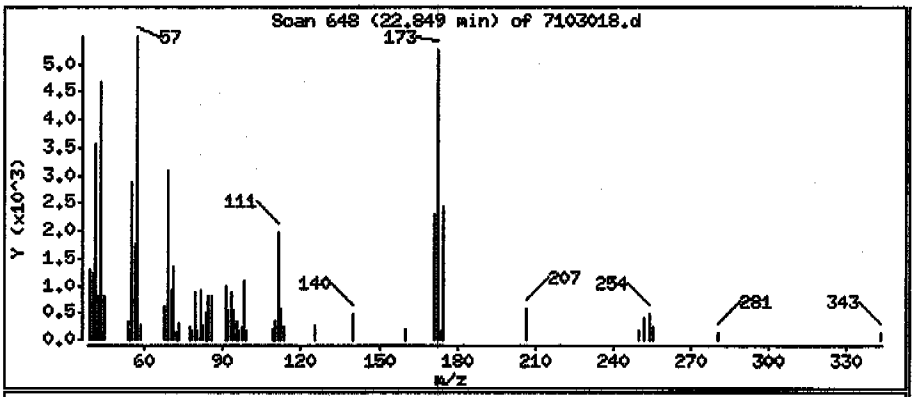
Operator: srs

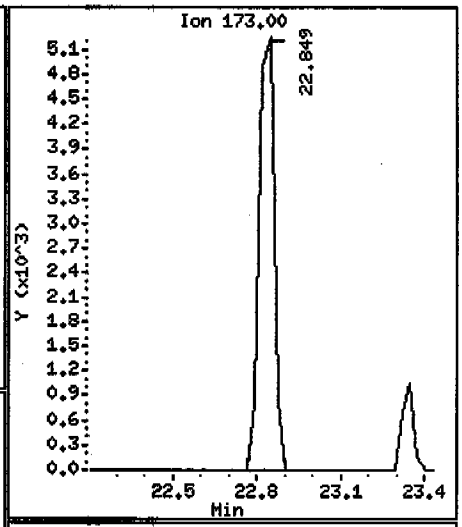
Column phase: RTx-624

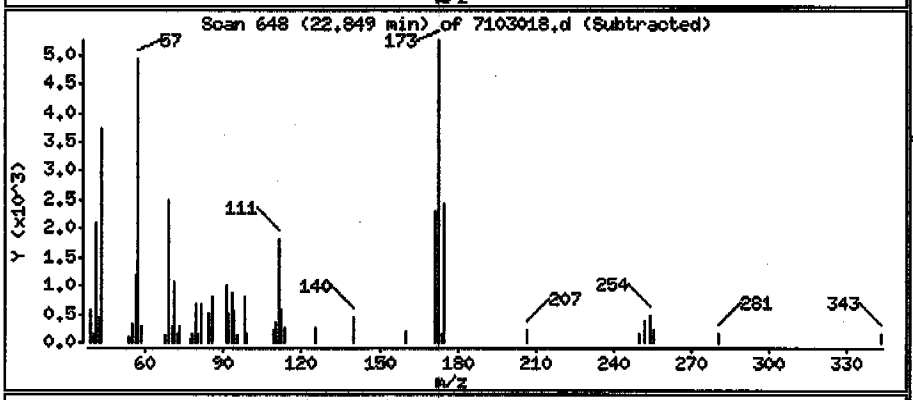
Column diameter: 0.53

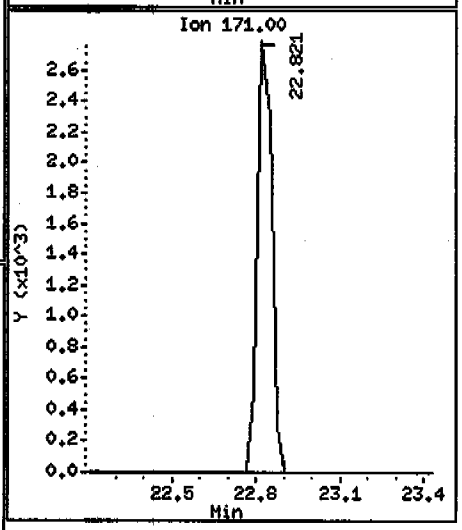
133 Bromoform

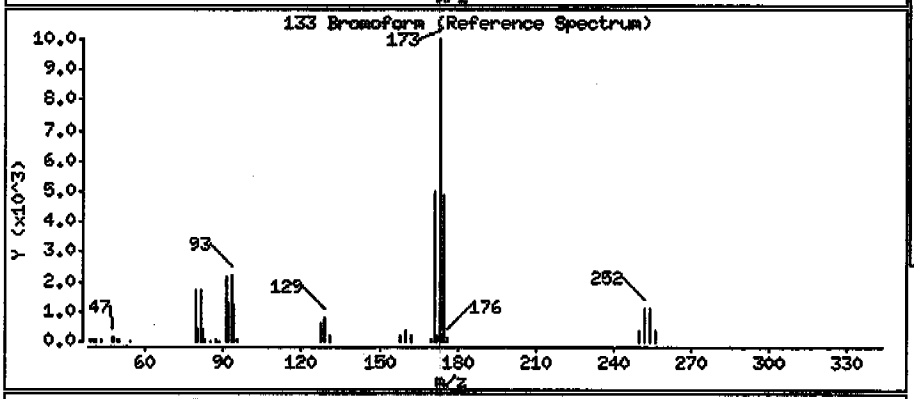
Concentration: 1.139 PPBV

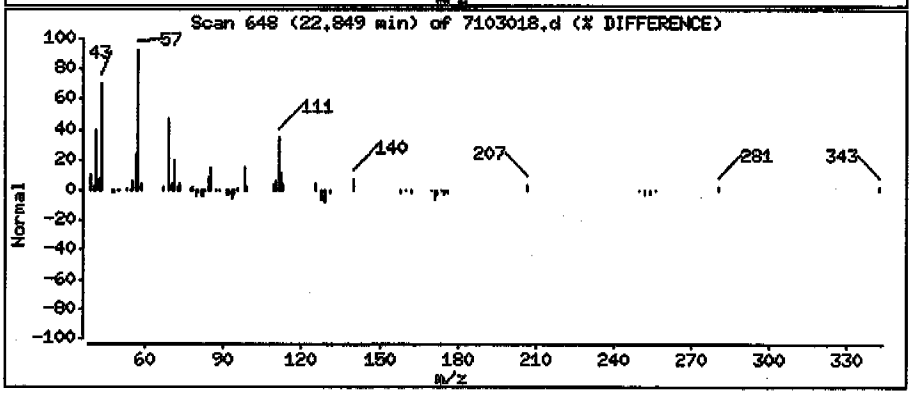












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6814

Lab ID#: 0710567-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.7	4.2	8.6
1,3-Butadiene	0.86	1.3	1.9	2.8
Acetone	3.4	29	8.1	68
Methylene Chloride	0.86	87	3.0	300
2-Butanone (Methyl Ethyl Ketone)	0.86	4.1	2.5	12
Chloroform	0.86	64	4.2	310
1,1,1-Trichloroethane	0.86	3.5	4.7	19
Cyclohexane	0.86	1.3	2.9	4.5
Carbon Tetrachloride	0.86	26	5.4	160
Benzene	0.86	0.92	2.7	2.9
1,2-Dichloroethane	0.86	0.99	3.5	4.0
Trichloroethene	0.86	78	4.6	420
Toluene	0.86	1.8	3.2	6.8
Tetrachloroethene	0.86	52	5.8	360

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6814

Lab ID#: 0710567-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.86	1.7	4.2	8.6
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	3.4	Not Detected	7.1	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	1.3	1.9	2.8
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	Not Detected	6.6	Not Detected
1,1-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Acetone	3.4	29	8.1	68
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.86	87	3.0	300
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	4.1	2.5	12
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	64	4.2	310
1,1,1-Trichloroethane	0.86	3.5	4.7	19
Cyclohexane	0.86	1.3	2.9	4.5
Carbon Tetrachloride	0.86	26	5.4	160
Benzene	0.86	0.92	2.7	2.9
1,2-Dichloroethane	0.86	0.99	3.5	4.0
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	78	4.6	420
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	1.8	3.2	6.8
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	52	5.8	360

0030

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6814

Lab ID#: 0710567-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.4	Not Detected	14	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected
Chlorodifluoromethane	3.4	Not Detected	12	Not Detected
Methanol	86	Not Detected	110	Not Detected
n-Butanol	3.4	Not Detected	10	Not Detected
Propylene	3.4	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	104	70-130

0031

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103019.d
Lab Smp Id: 0710567-02A
Inj Date : 30-OCT-2007 21:47
Operator : srs Inst ID: msd7.i
Smp Info : 200mL #4216
Misc Info : 6.5"Hg -> 5psi Los Alamos
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 31-Oct-2007 14:54 ctaylor Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.71000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	387796	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	293848			26.27- 126.27	75.77
14.416	14.388 (1.000)	49	694255			132.02- 232.02	179.03
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.185	16.158 (1.000)	114	1266199	25.0000		80.00- 120.00	100.00
16.185	16.158 (1.000)	88	191151			0.00- 64.88	15.10
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	957513	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	508418			4.45- 104.45	53.10
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	550795	26.4385	26.438	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	260499			2.91- 102.91	47.30
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.785	18.757 (1.161)	98	1035007	23.0267	23.027	80.00- 120.00	100.00
18.757	18.757 (1.159)	70	111334			0.00- 61.46	10.76

Data File: /chem/msd7.i/7-30oct.b/7103019.d
Report Date: 01-Nov-2007 11:12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.785	18.757 (1.161)	100	713540			19.18- 119.18	68.94
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	592483	26.0035	26.003	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	692664			67.21- 167.21	116.91
23.347	23.347 (1.093)	176	579385			47.52- 147.52	97.79
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.397)	85	62651	1.02234	1.748	80.00- 120.00	100.00
5.758	5.729 (0.399)	87	19431			0.00- 83.07	31.01
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.912 (0.481)	54	13316	0.73885	1.263	80.00- 120.00	100.00
6.715	6.912 (0.466)	39	99136			55.97- 155.97	744.49
45 Acetone					CAS #: 67-64-1		
10.517	10.462 (0.730)	58	176595	16.8857	28.874	80.00- 120.00	100.00
10.490	10.462 (0.728)	43	661709			247.10- 347.10	374.70
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	1263332	50.7854	86.843	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	791822			18.75- 118.75	62.68
11.485	11.457 (0.797)	51	376310			0.00- 80.85	29.79
75 2-Butanone					CAS #: 78-93-3		
13.918	13.891 (0.965)	72	20173	2.40182	4.107	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	115222			440.65- 540.65	571.17
13.918	13.891 (0.965)	57	9278			0.00- 86.57	45.99
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	1451250	37.1684	63.558	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	945772			14.87- 114.87	65.17
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.858	14.831 (1.031)	97	80731	2.05322	3.511	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	50762			14.34- 114.34	62.88
85 Cyclohexane					CAS #: 110-82-7		
14.858	14.831 (1.031)	84	17381	0.77178	1.320	80.00- 120.00	100.00
14.858	14.831 (1.031)	56	33286			77.34- 177.34	191.51
14.831	14.831 (1.029)	41	28236			23.26- 123.26	162.45
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.080 (1.048)	119	559990	15.1934	25.981	80.00- 120.00	100.00
15.107	15.080 (1.048)	117	574239			53.20- 153.20	102.54

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
91 Benzene						CAS #: 71-43-2		
15.522	15.522	(0.959)	78	26963	0.53594	0.9164	80.00- 120.00	100.00
15.522	15.522	(0.959)	77	6507			0.00- 71.87	24.13
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.632	15.633	(0.966)	62	15521	0.58065	0.9929	80.00- 120.00	100.00
15.632	15.633	(0.966)	64	6841			0.00- 82.89	44.08
101 Trichloroethene						CAS #: 79-01-6		
16.656	16.628	(1.029)	95	1017801	45.5435	77.879	80.00- 120.00	100.00
16.656	16.628	(1.029)	130	1044410			52.84- 152.84	102.61
16.656	16.628	(1.029)	97	650882			15.58- 115.58	63.95
114 Toluene						CAS #: 108-88-3		
18.895	18.895	(1.167)	91	57857	1.04995	1.795	80.00- 120.00	100.00
18.895	18.895	(1.167)	92	37149			13.85- 113.85	64.21
120 Tetrachloroethene						CAS #: 127-18-4		
19.835	19.835	(0.929)	166	789380	30.6887	52.478	80.00- 120.00	100.00
19.835	19.835	(0.929)	129	557994			20.11- 120.11	70.69
19.835	19.835	(0.929)	131	535083			17.39- 117.39	67.79

Data File: /chem/msd7.i/7-30oct.b/7103019.d
Report Date: 01-Nov-2007 11:12

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103019.d
Lab Smp Id: 0710567-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: srs
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 6.5"Hg -> 5psi Los Alamos

Calibration Date: 30-OCT-2007
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	537758	322655	752861	387796	-27.89
97 1,4-Difluorobenze	1771565	1062939	2480191	1266199	-28.53
126 Chlorobenzene-d5	1414884	848930	1980838	957513	-32.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-30oct.b/7103019.d
Report Date: 01-Nov-2007 11:12

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-30oct
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0710567-02A
Level: LOW
Operator: srs
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 6.5"Hg -> 5psi Los Alamos

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.438	105.75	70-130
$ 113 Toluene-d8	25.000	23.027	92.11	70-130
$ 137 Bromofluorobenzene	25.000	26.003	104.01	70-130

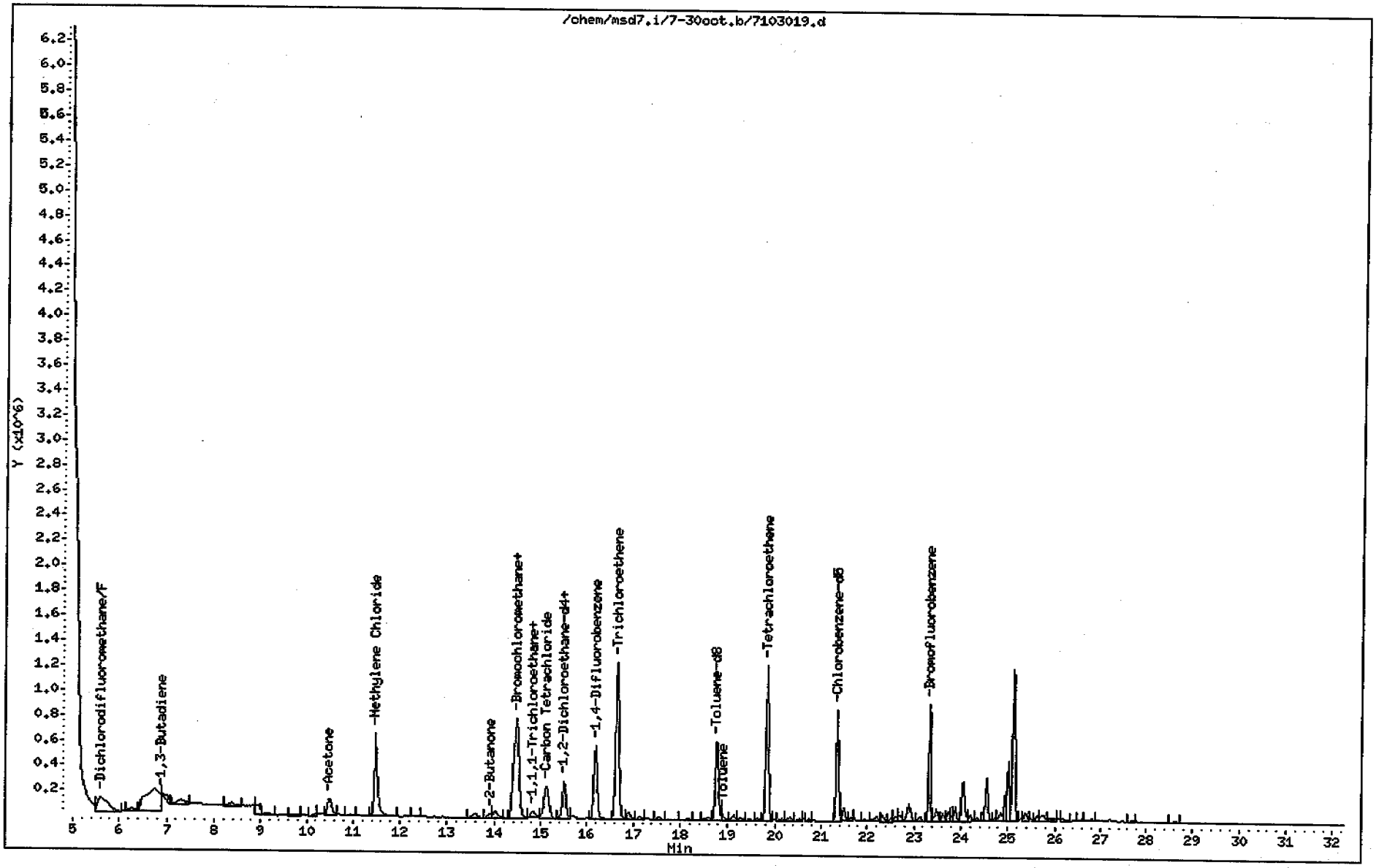
Data File: /chem/msd7.i/7-30oct.b/7103019.d
Date : 30-OCT-2007 21:47
Client ID:
Sample Info: 200mL #4216

Column phase: RTx-624

Instrument: msd7.i

Operator: srs
Column diameter: 0.53

0037



Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

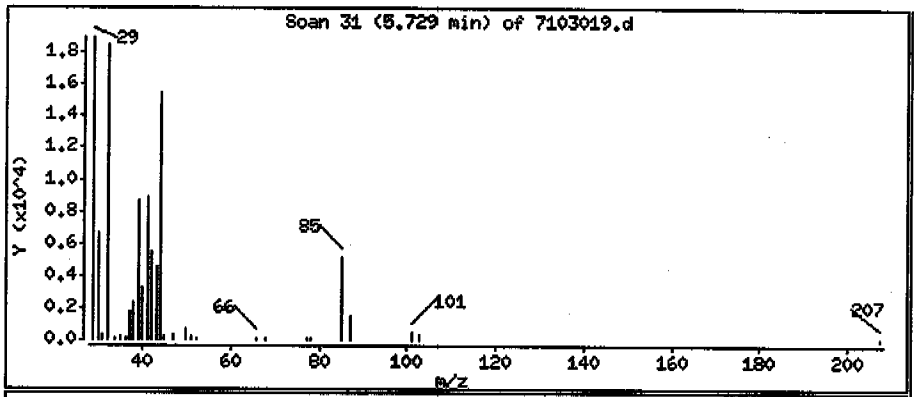
Operator: srs

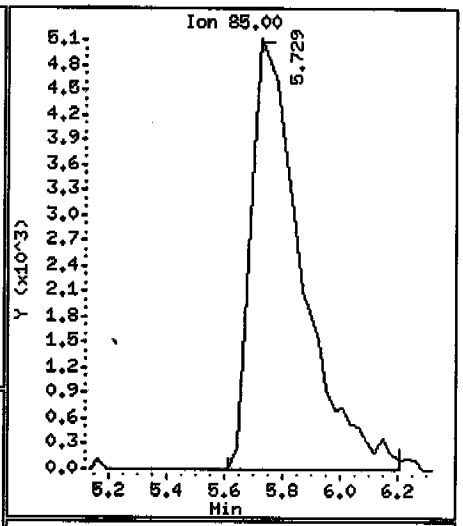
Column phase: RTx-624

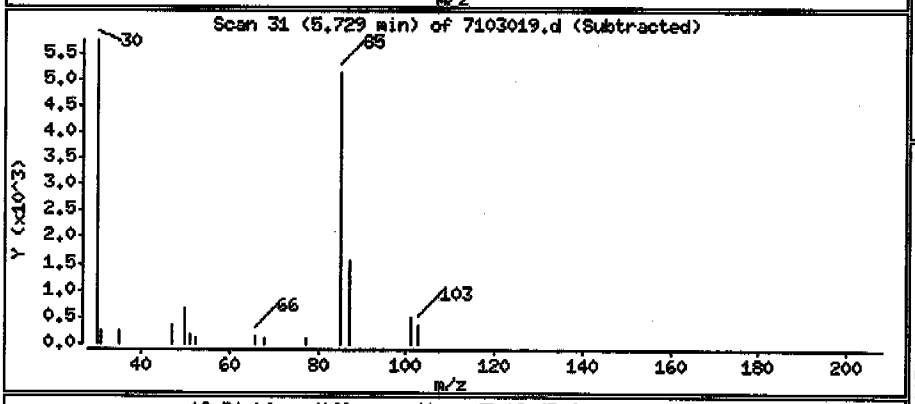
Column diameter: 0.53

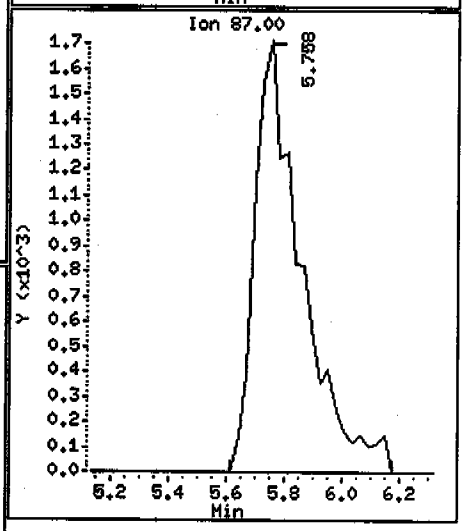
12 Dichlorodifluoromethane/Fr12

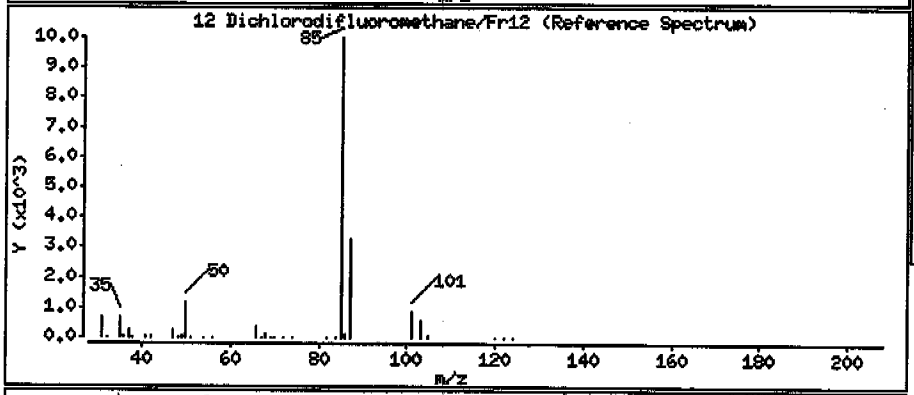
Concentration: 1.748 PPBV

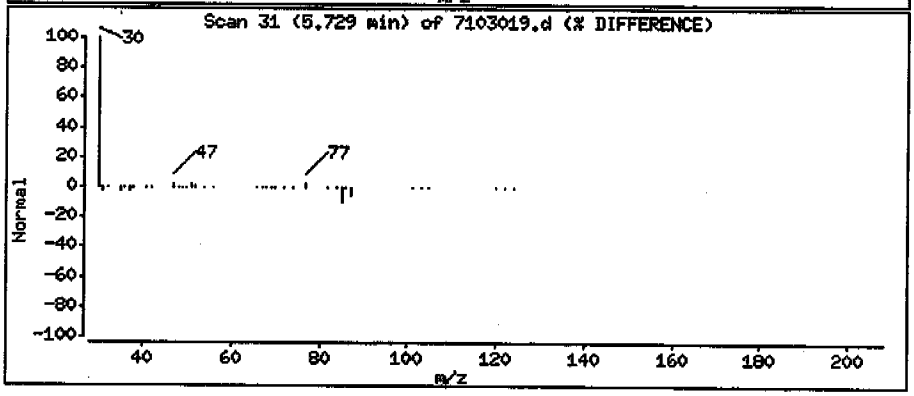












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

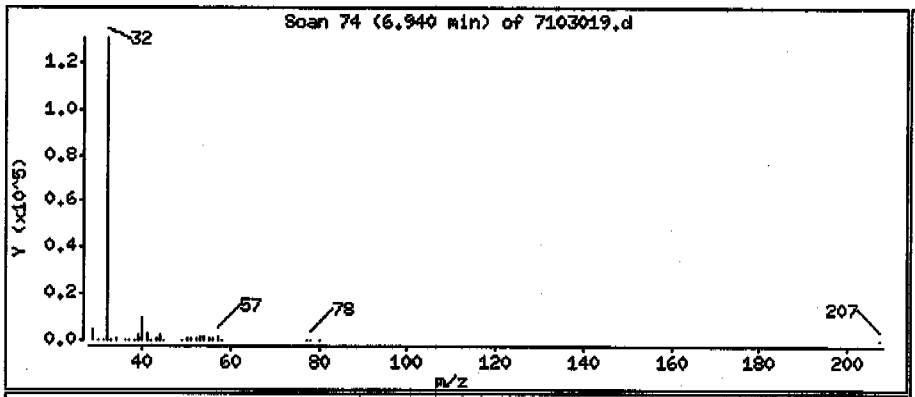
Operator: srs

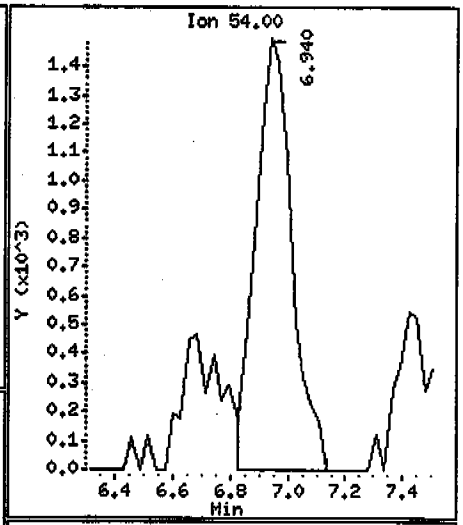
Column phase: RTx-624

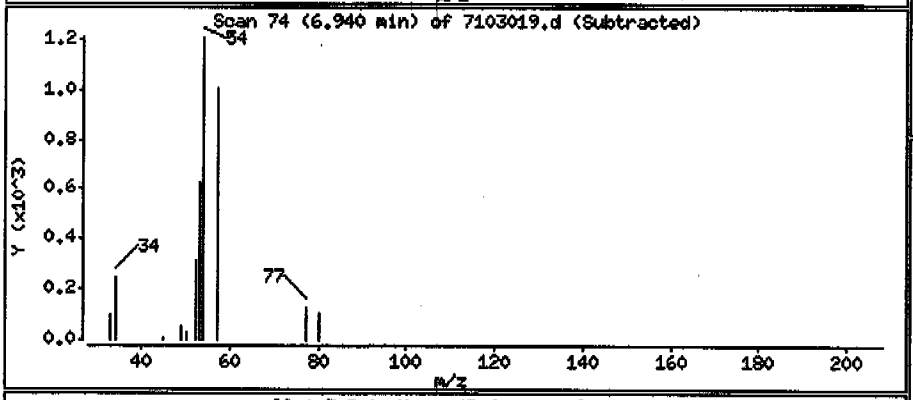
Column diameter: 0.53

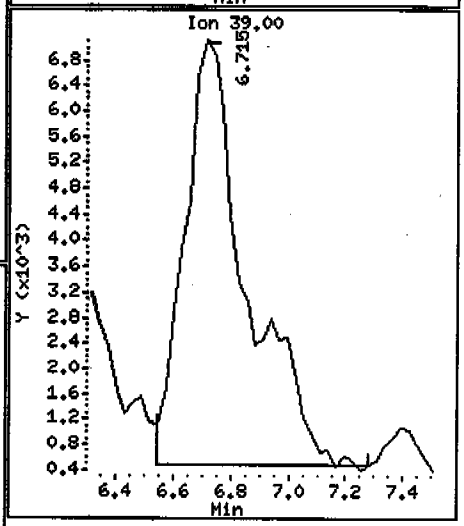
22 1,3-Butadiene

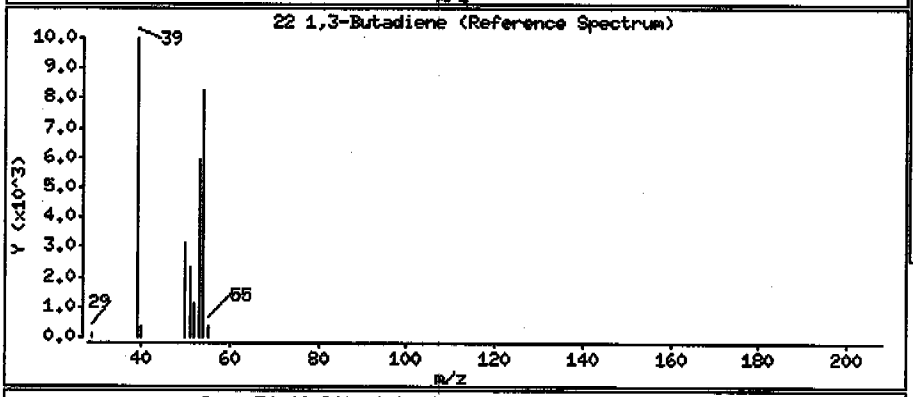
Concentration: 1.263 PPBV

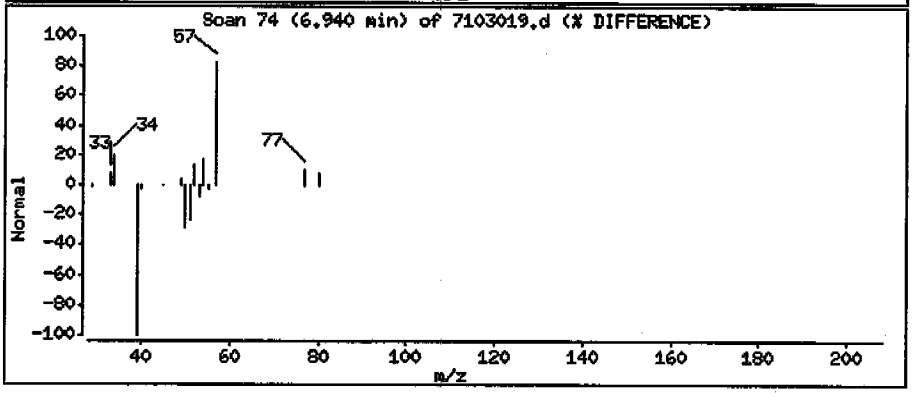












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

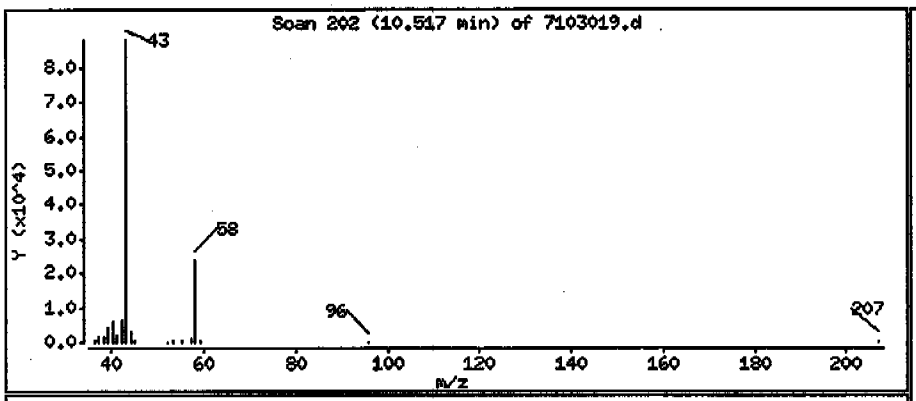
Operator: srs

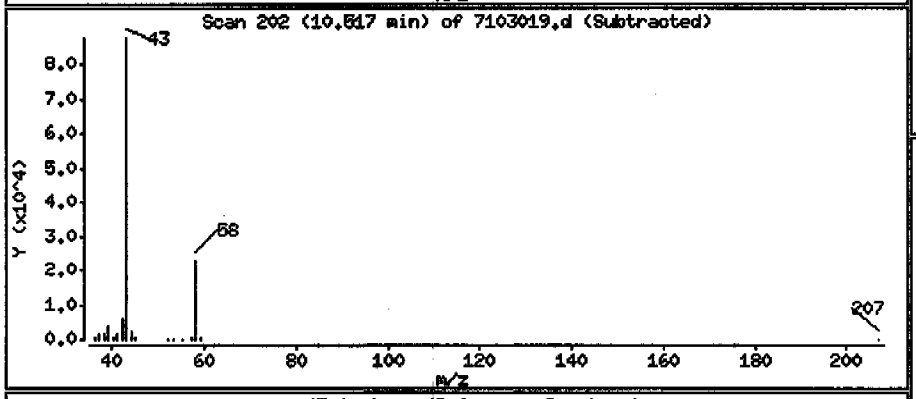
Column phase: RTx-624

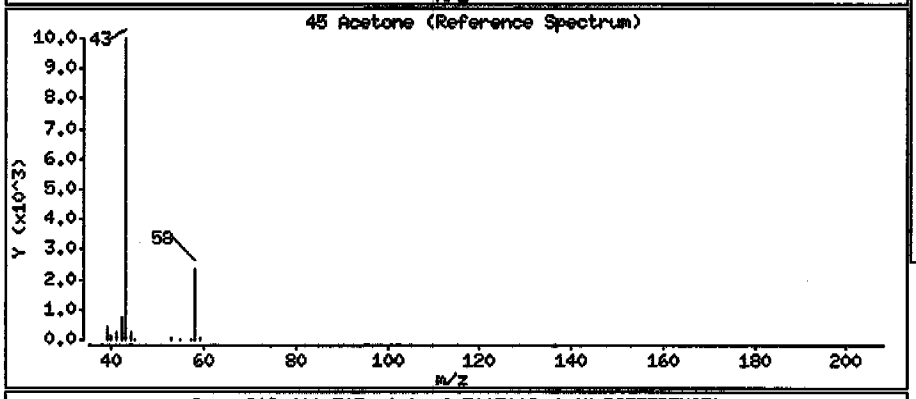
Column diameter: 0.53

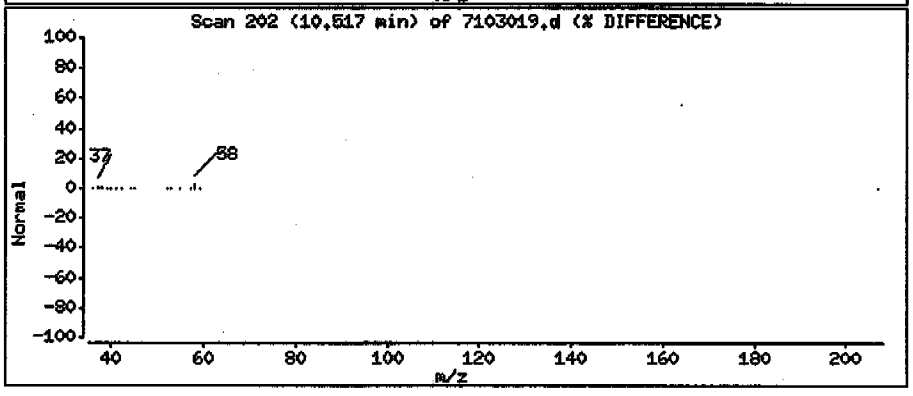
45 Acetone

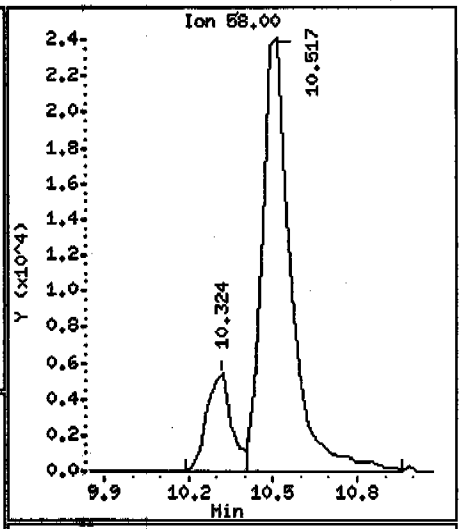
Concentration: 28.874 PPBV

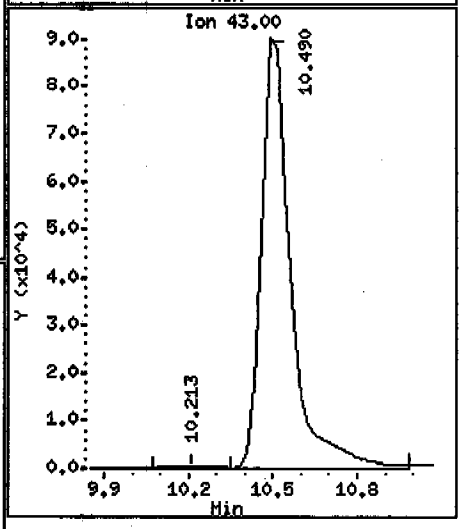












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

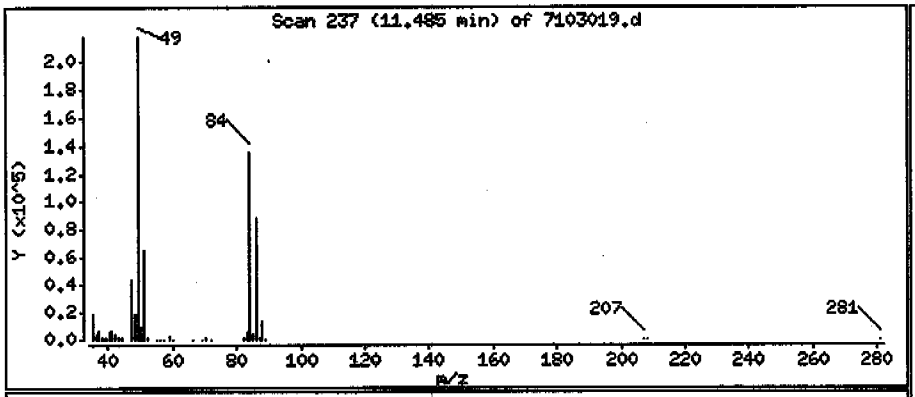
Operator: srs

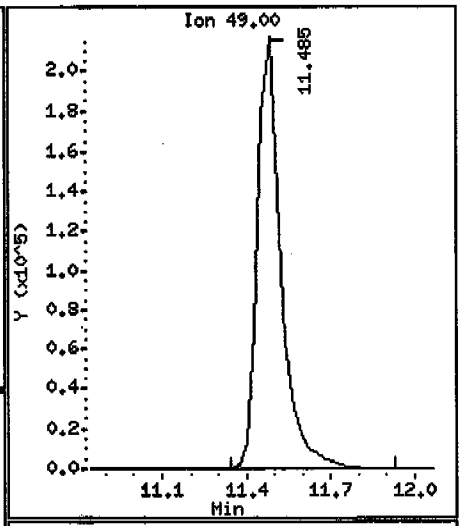
Column phase: RTx-624

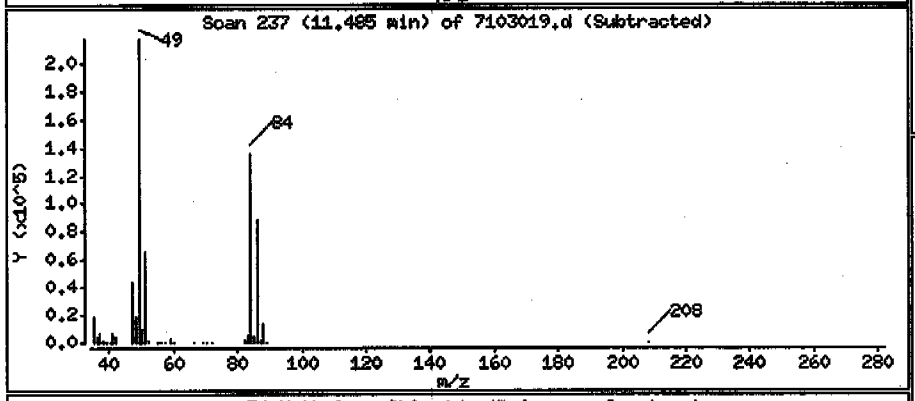
Column diameter: 0.53

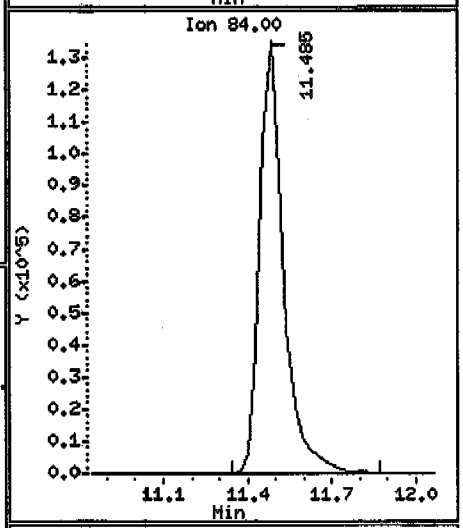
54 Methylene Chloride

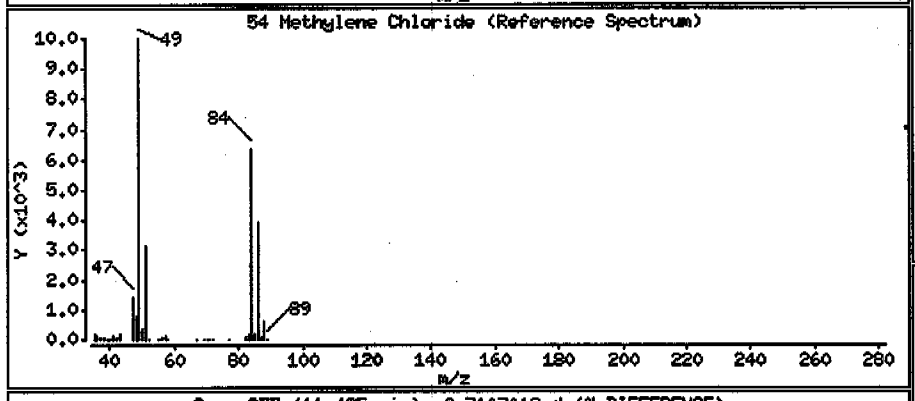
Concentration: 86.843 PPBV

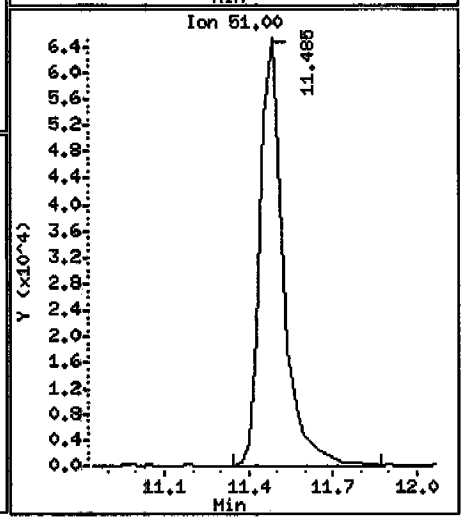


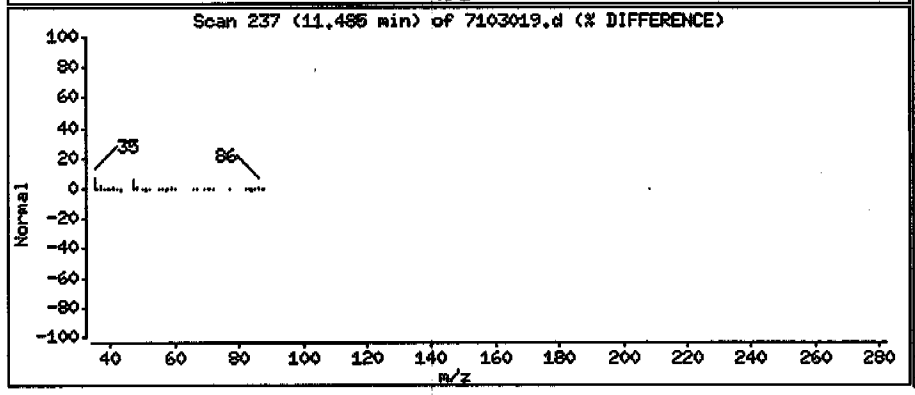












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

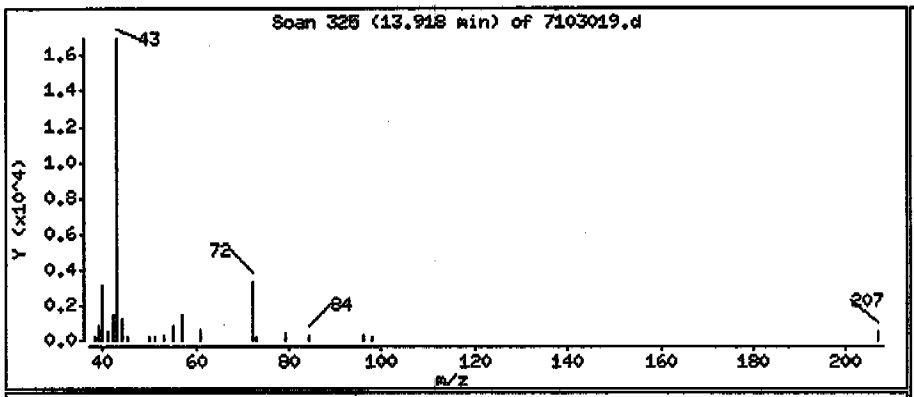
Operator: srs

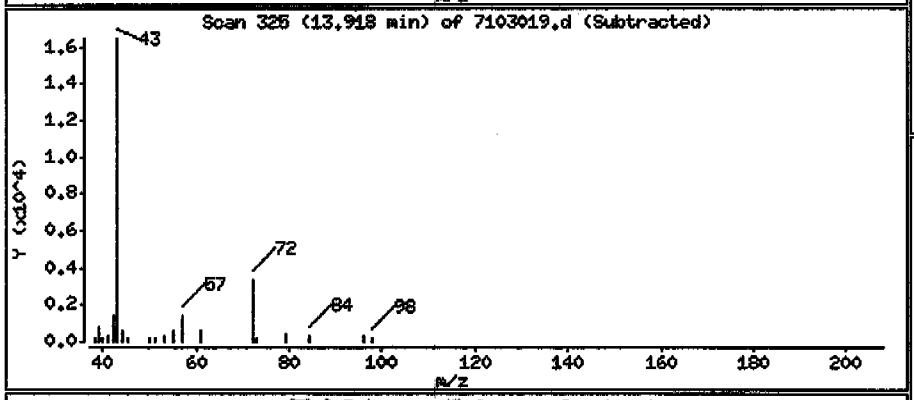
Column phase: RTx-624

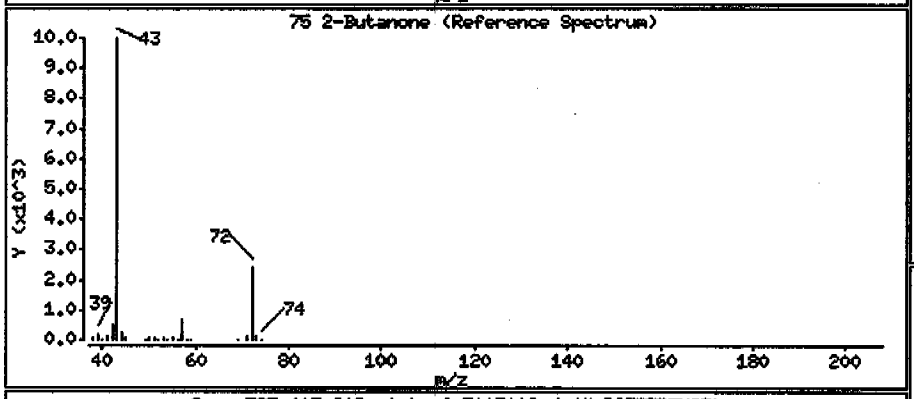
Column diameter: 0.53

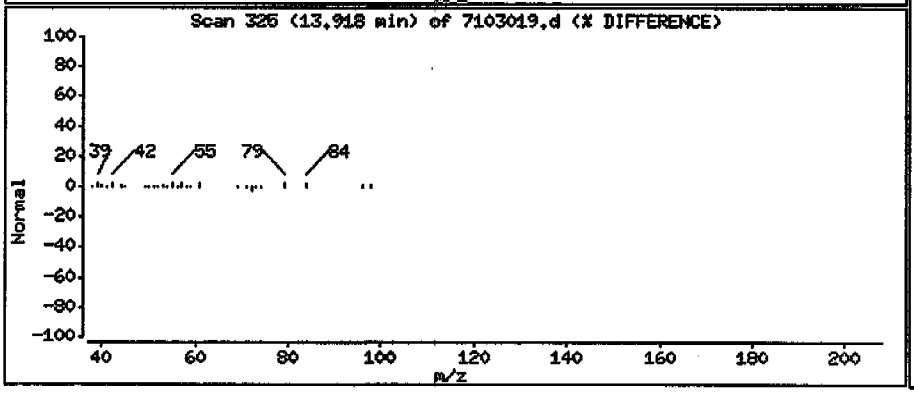
75 2-Butanone

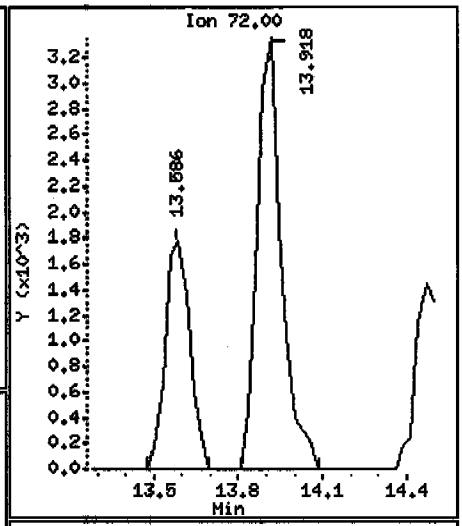
Concentration: 4.107 PPBV

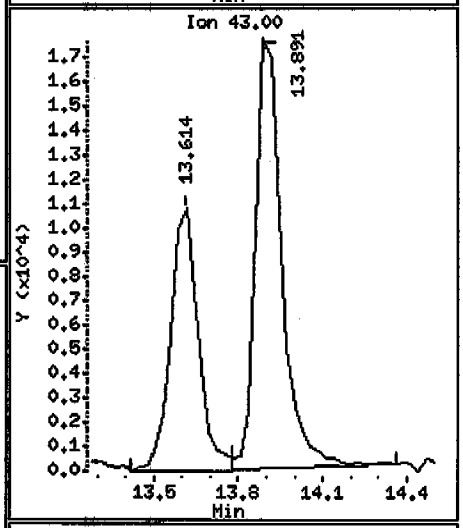


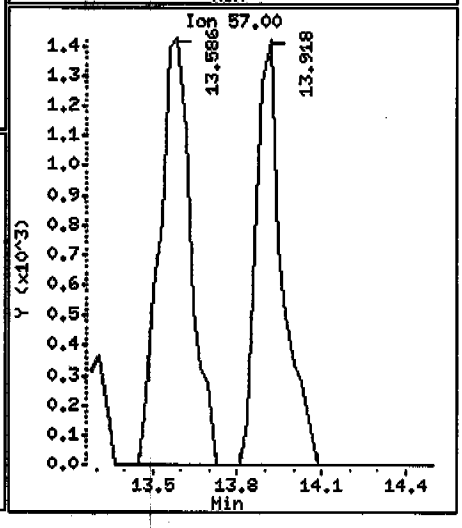












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

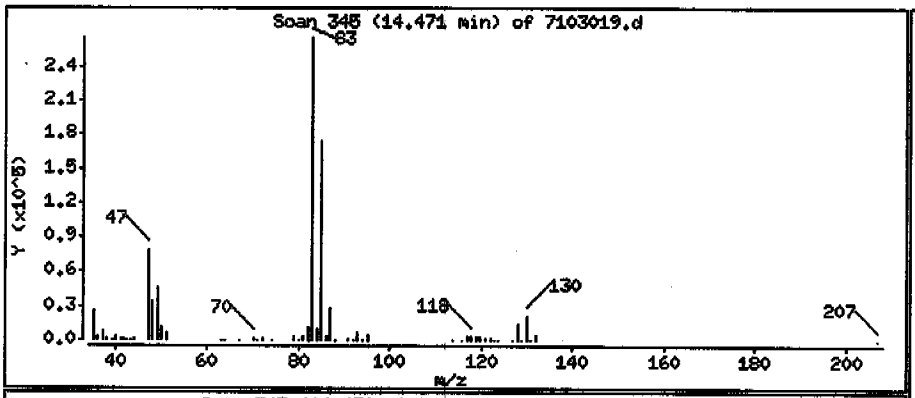
Operator: srs

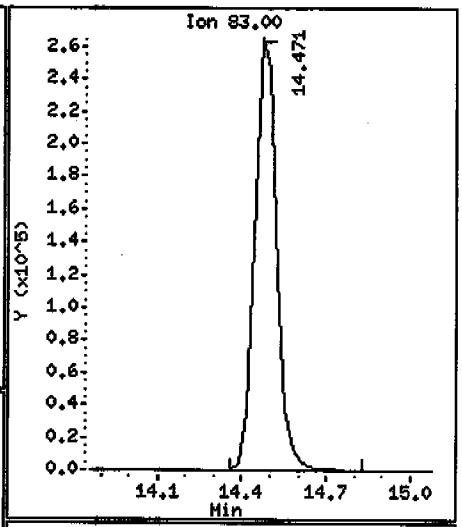
Column phase: RTx-624

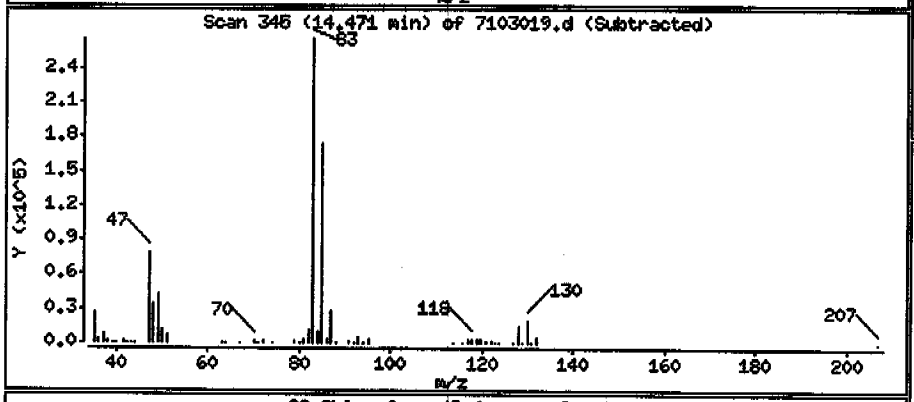
Column diameter: 0.53

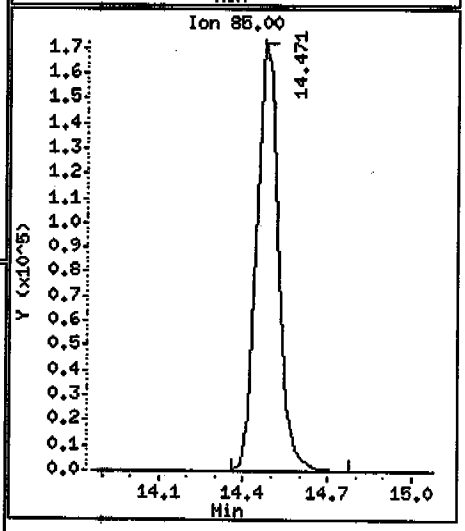
82 Chloroform

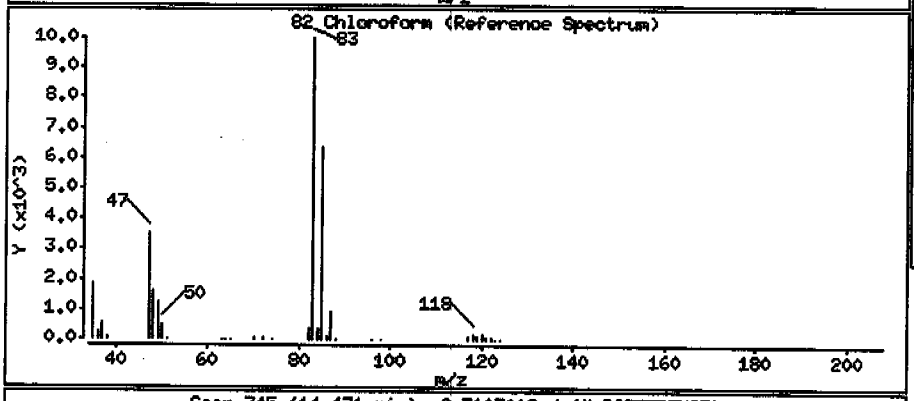
Concentration: 63.558 PPBV

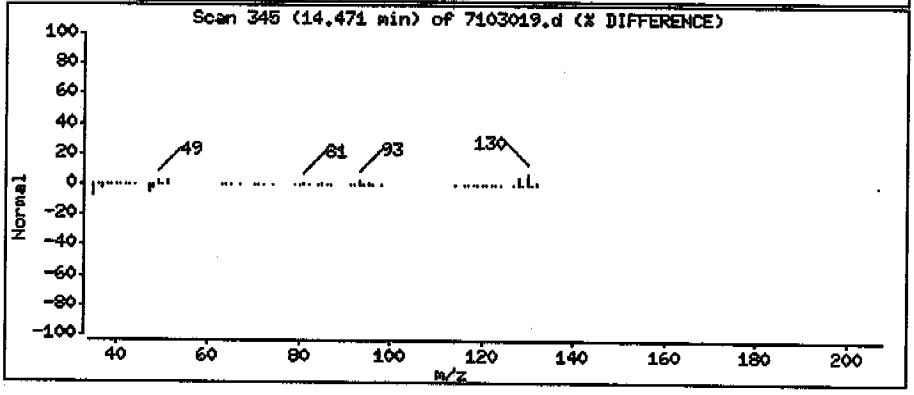












Data File: /ohem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

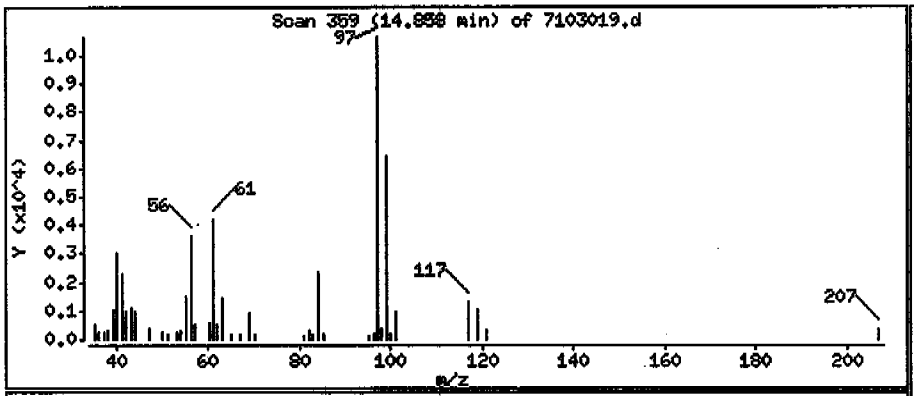
Operator: srs

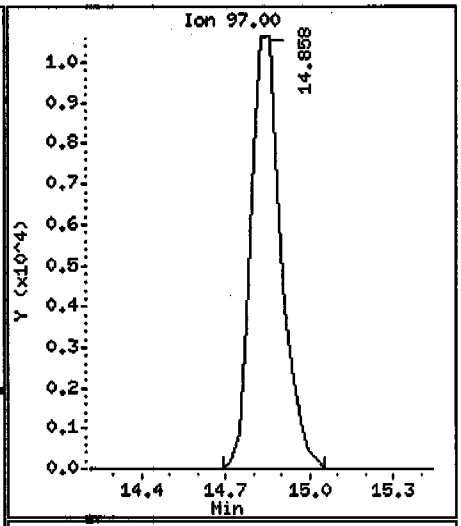
Column phase: RTx-624

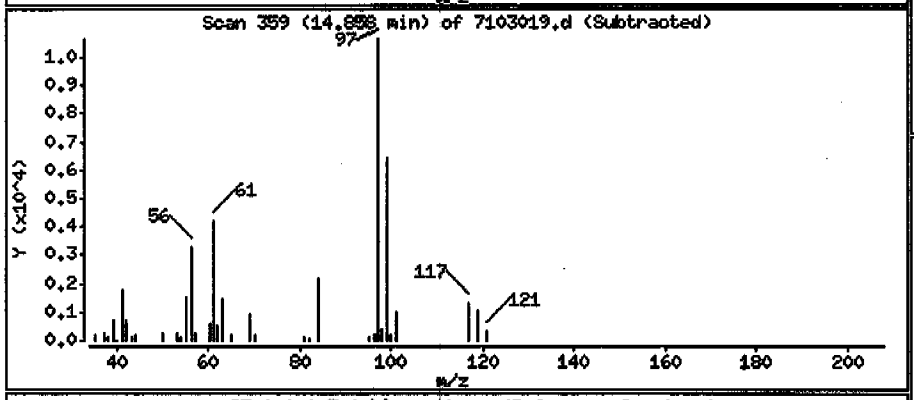
Column diameter: 0.53

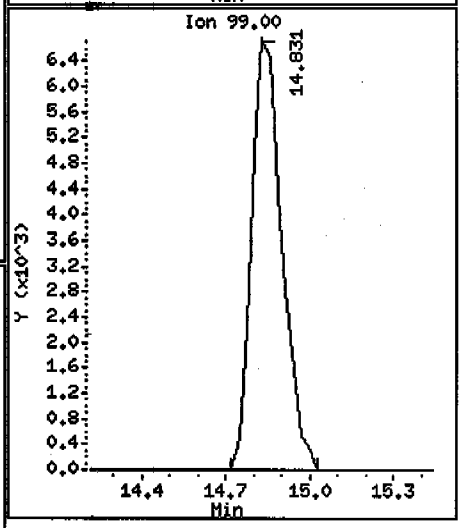
83 1,1,1-Trichloroethane

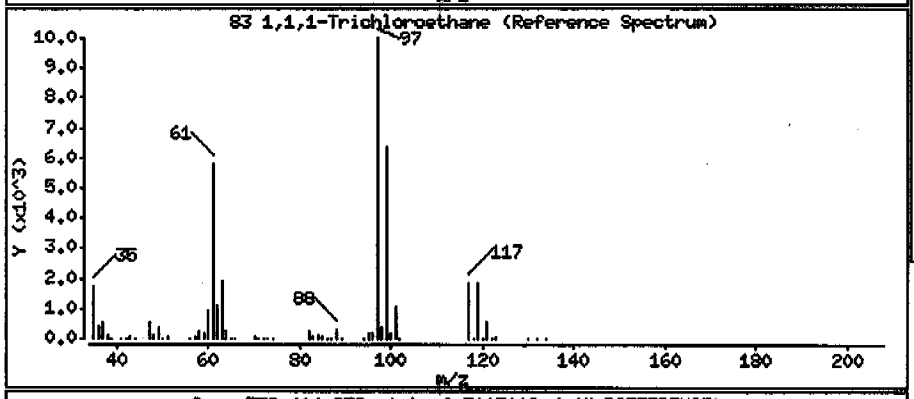
Concentration: 3.511 PPBV

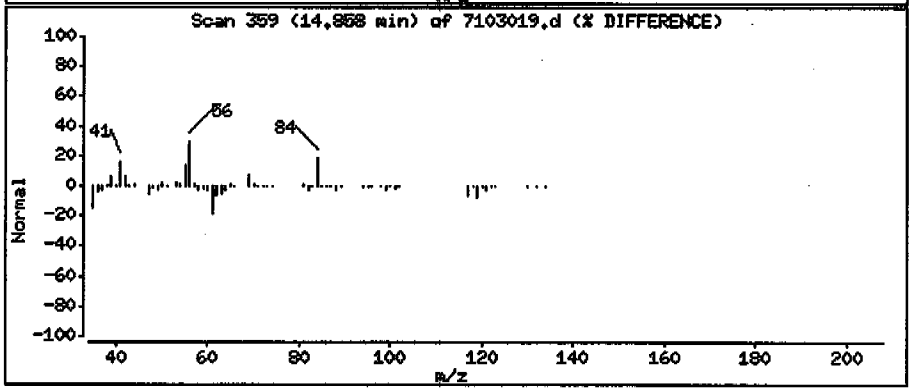












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

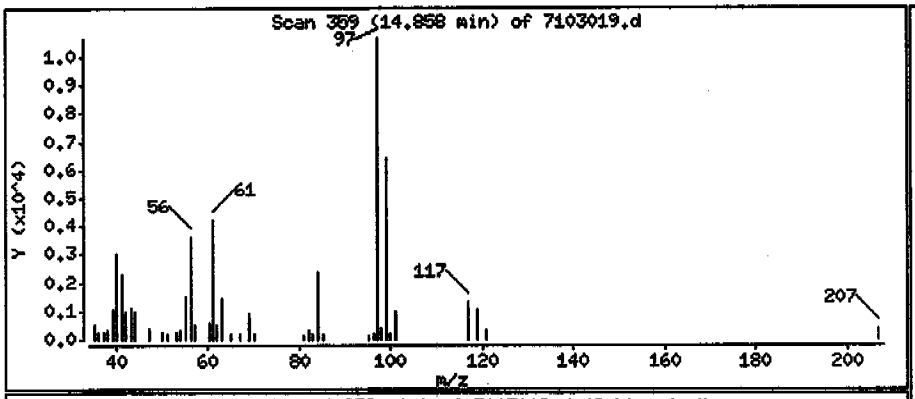
Operator: srs

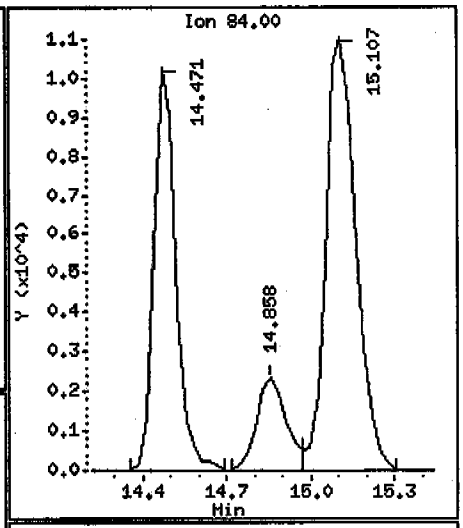
Column phase: RTx-624

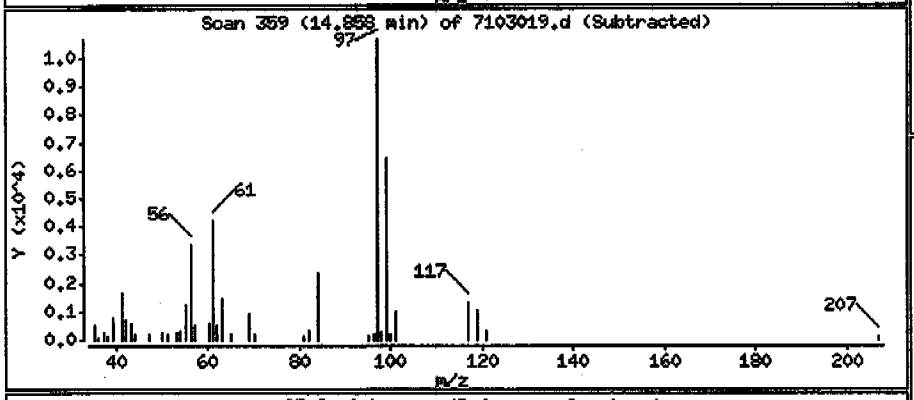
Column diameter: 0.53

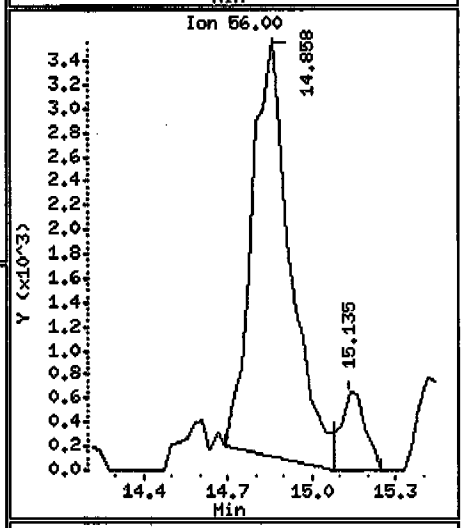
85 Cyclohexane

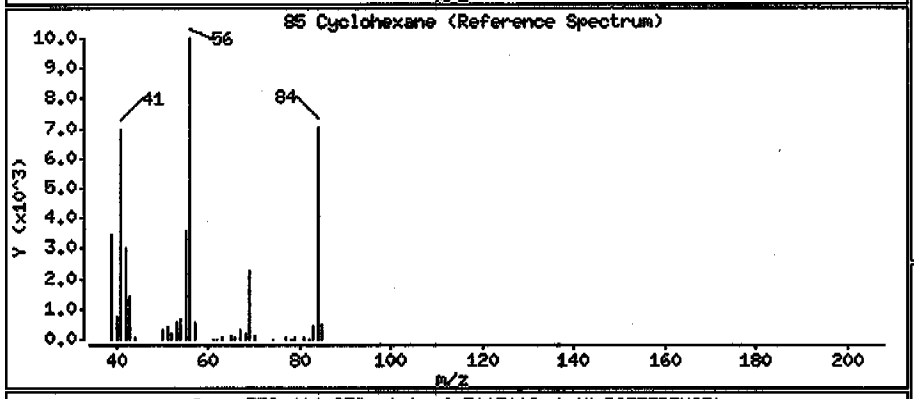
Concentration: 1.320 PPBV

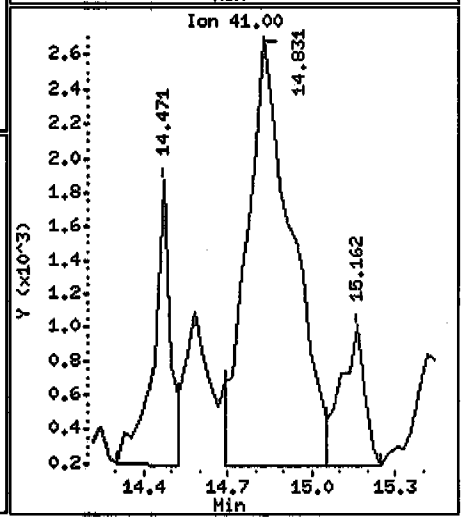


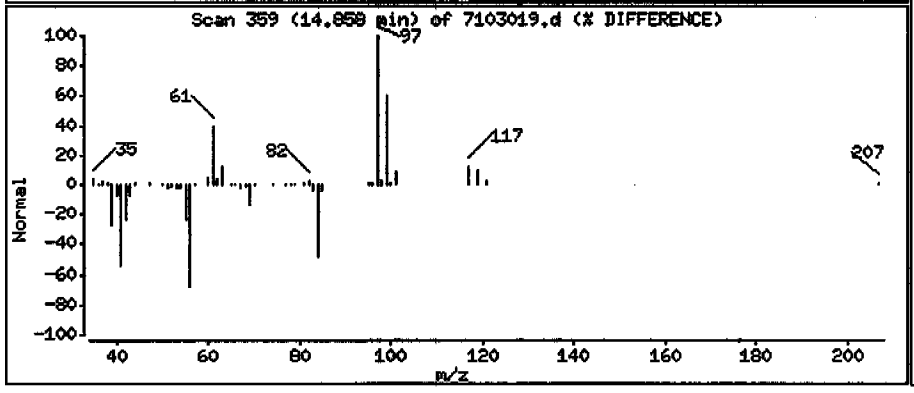












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

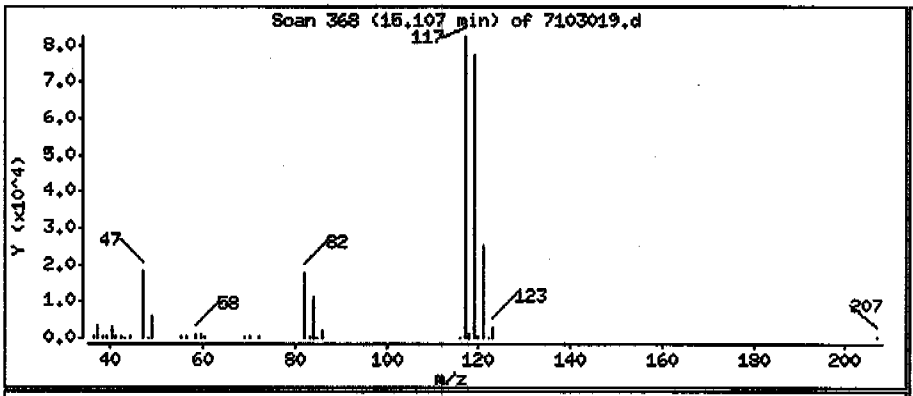
Operator: srs

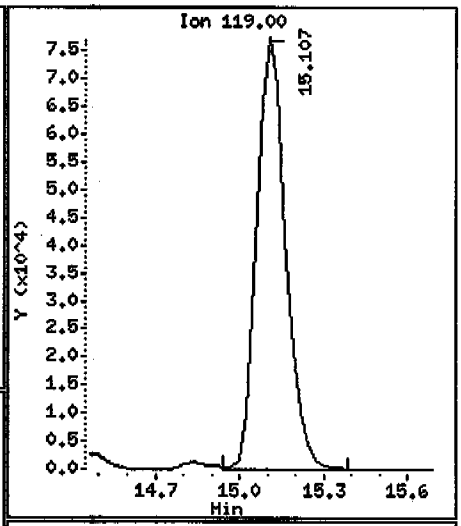
Column phase: RTx-624

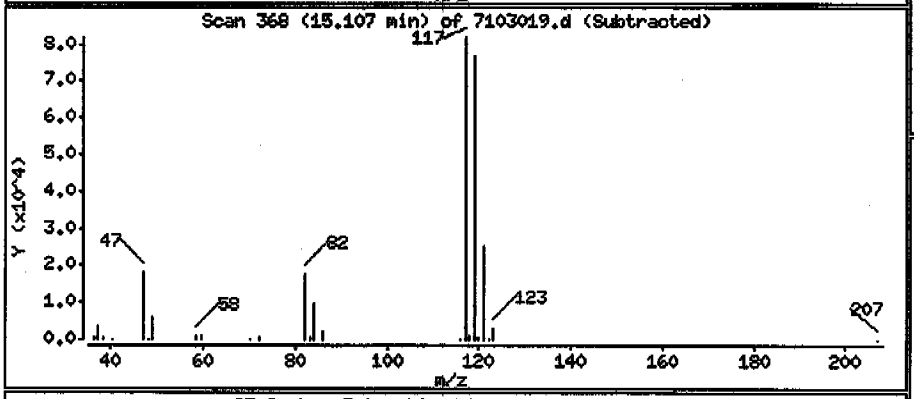
Column diameter: 0.53

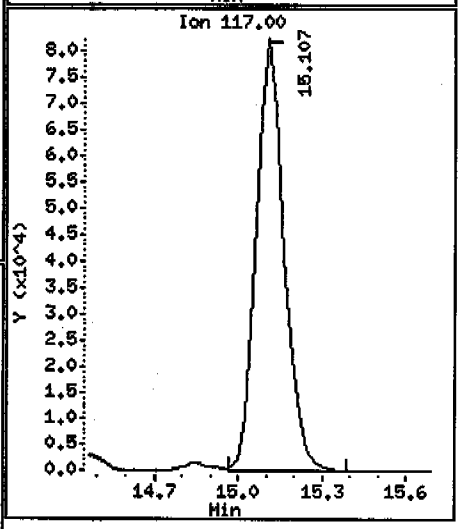
87 Carbon Tetrachloride

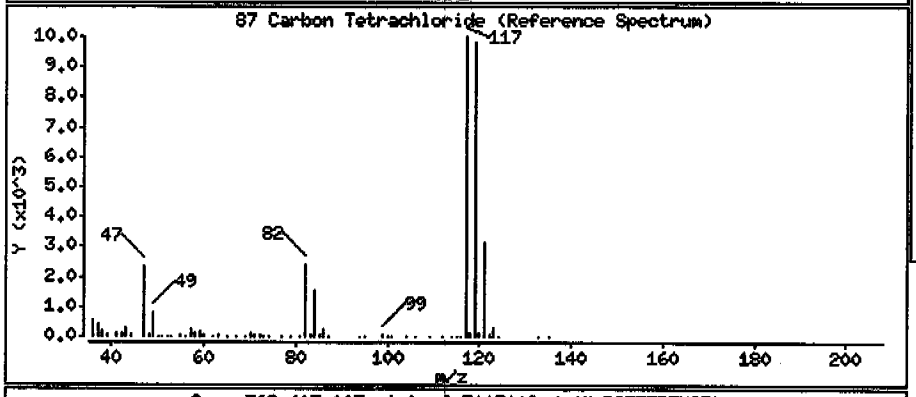
Concentration: 25.981 PPBV

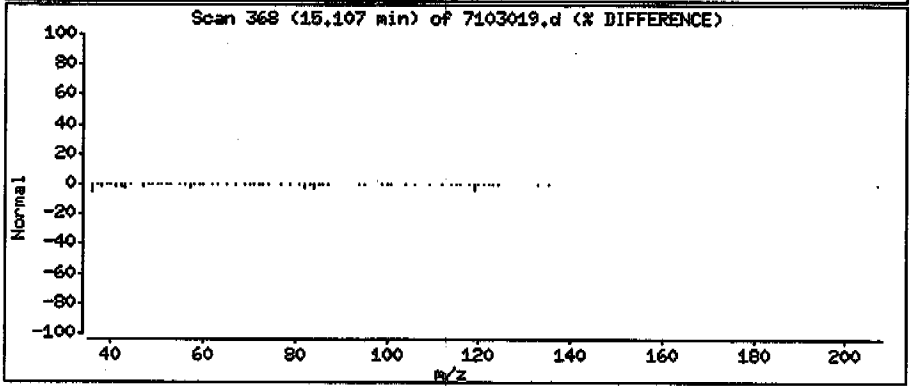












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

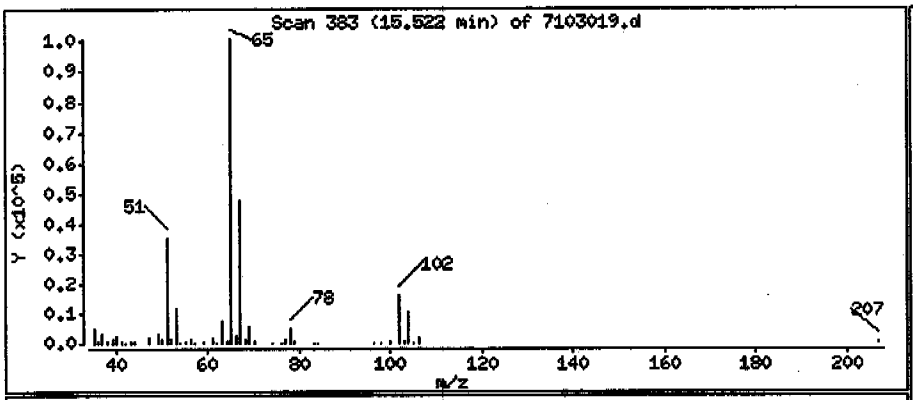
Operator: srs

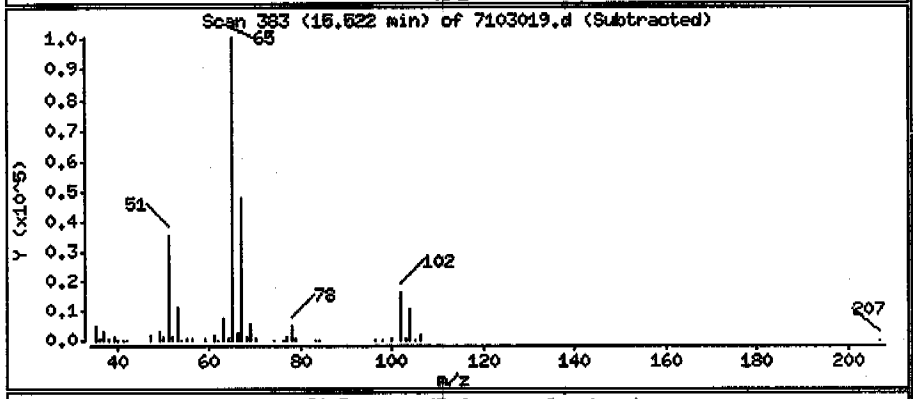
Column phase: RTx-624

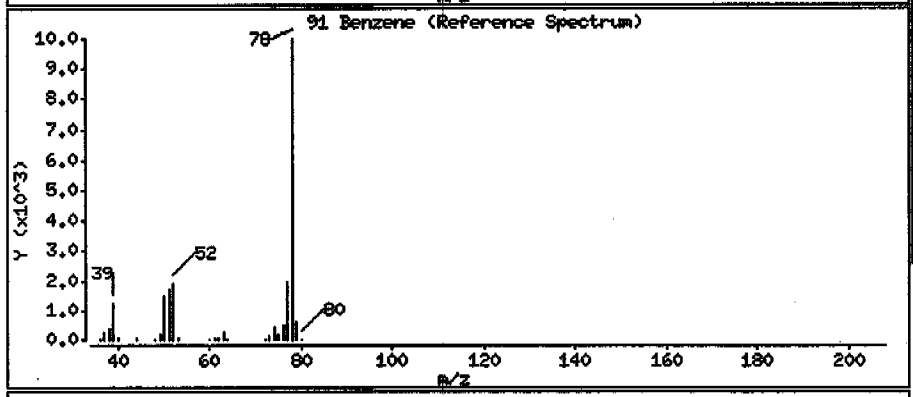
Column diameter: 0.53

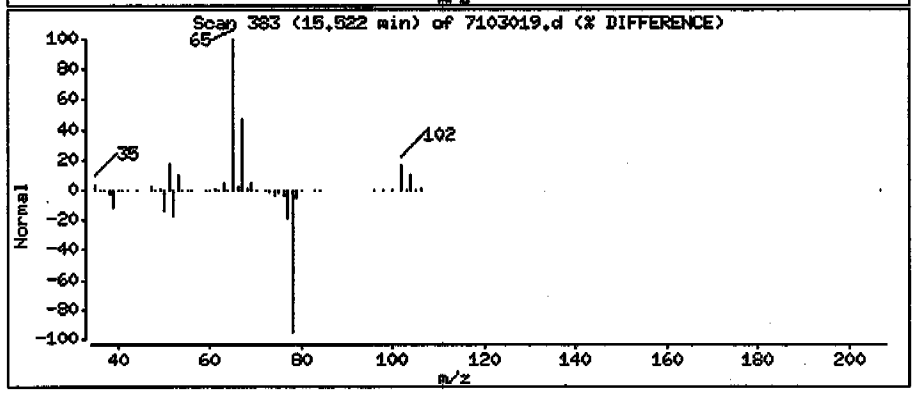
91 Benzene

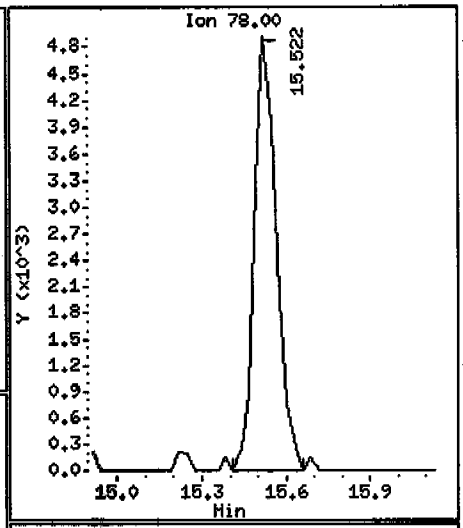
Concentration: 0.9164 PPBV

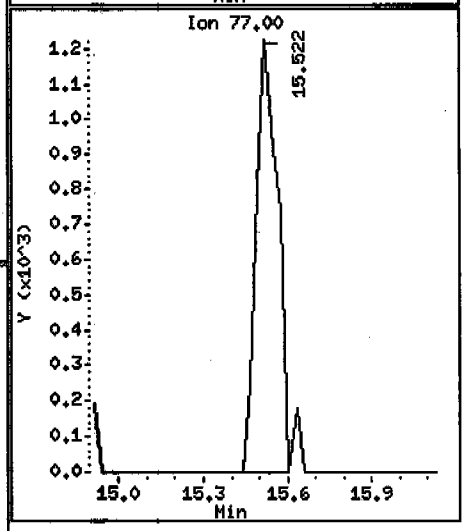












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

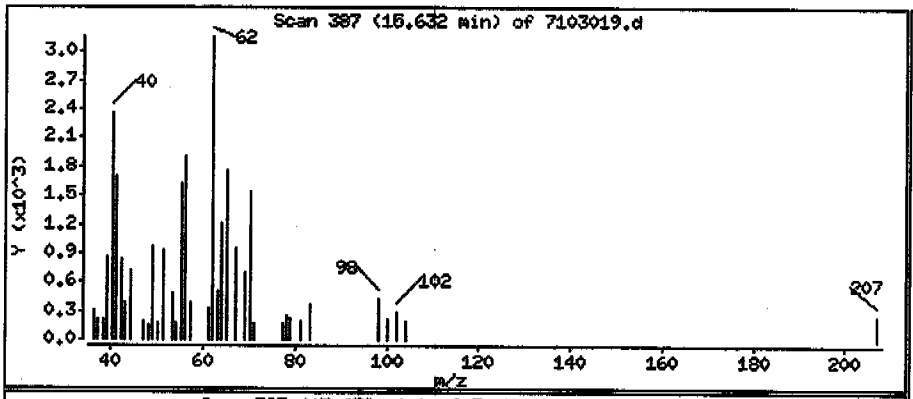
Operator: srs

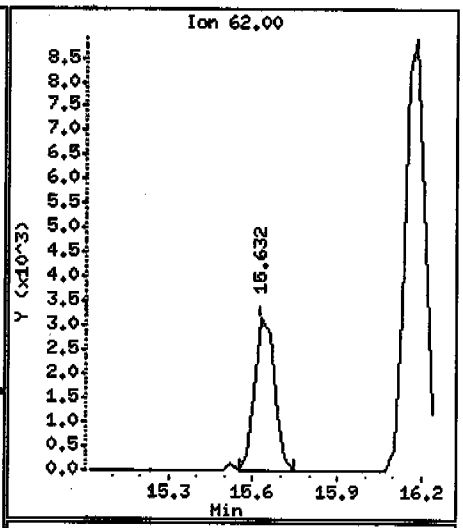
Column phase: RTx-624

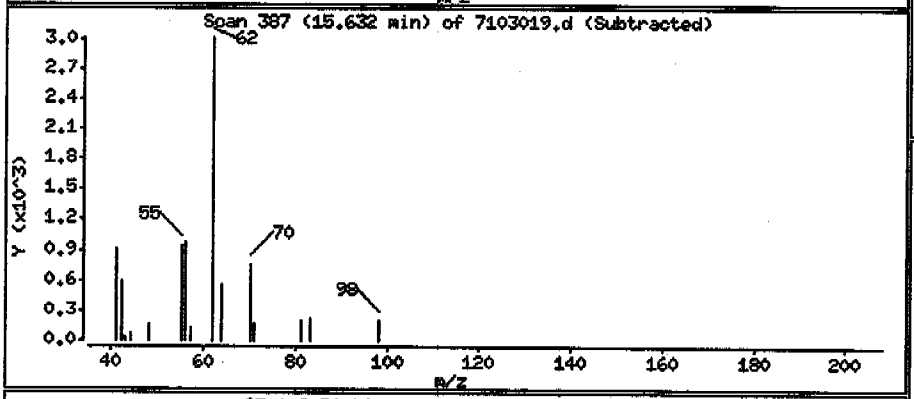
Column diameter: 0.53

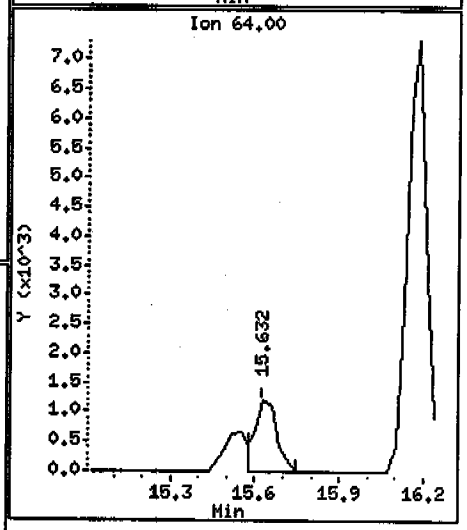
93 1,2-Dichloroethane

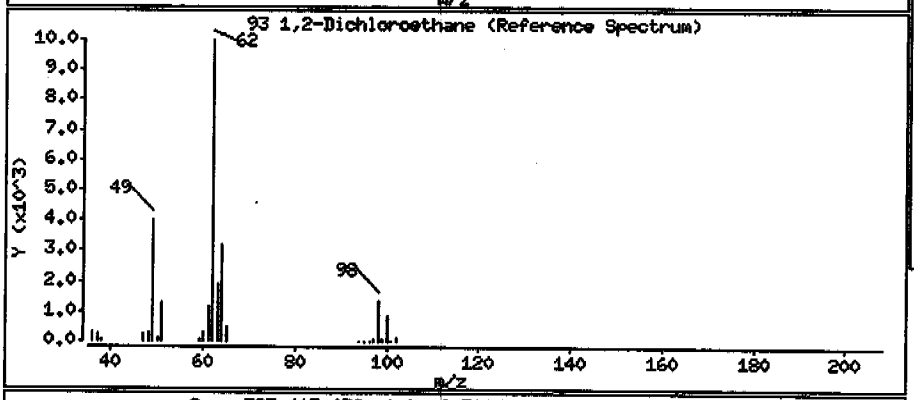
Concentration: 0.9929 PPBV

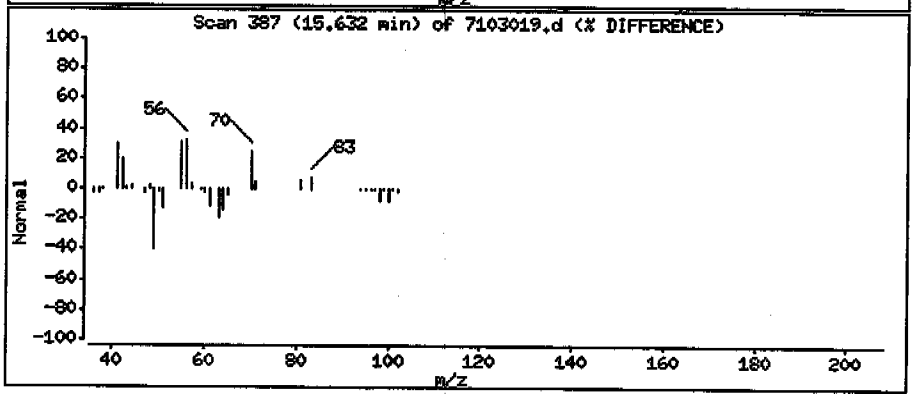












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Sample Info: 200mL #4216

Instrument: msd7.i

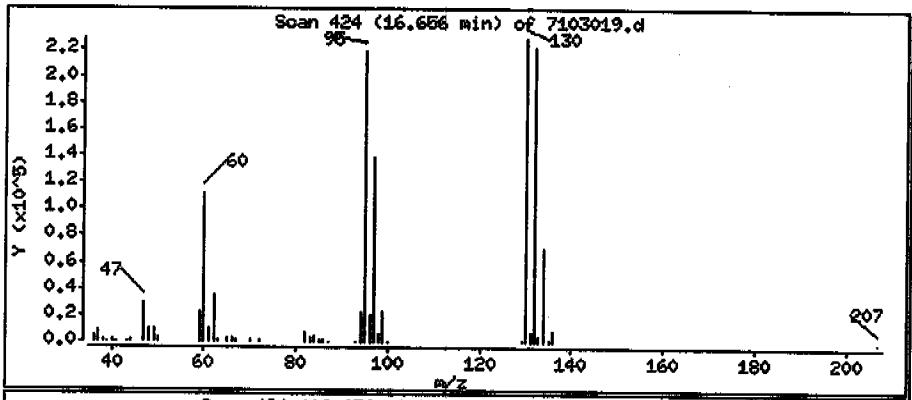
Operator: srs

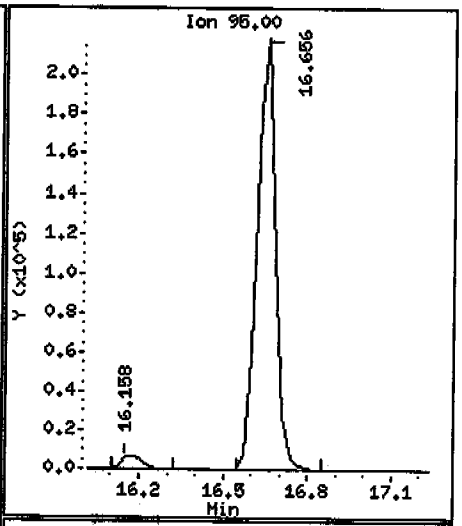
Column phase: RTx-624

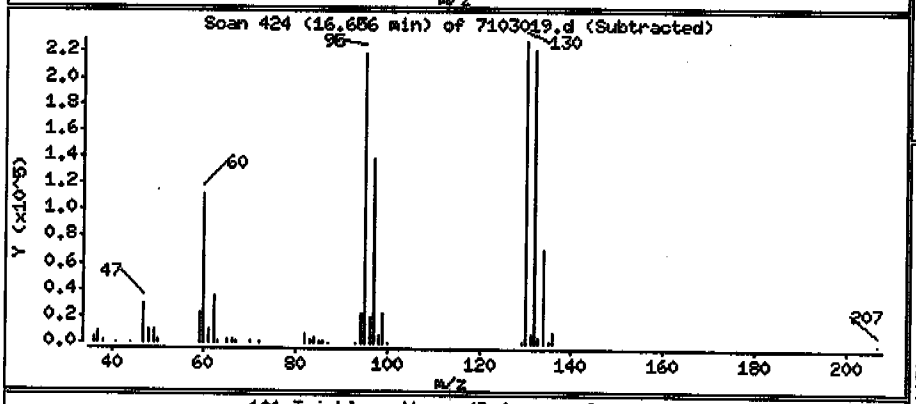
Column diameter: 0.53

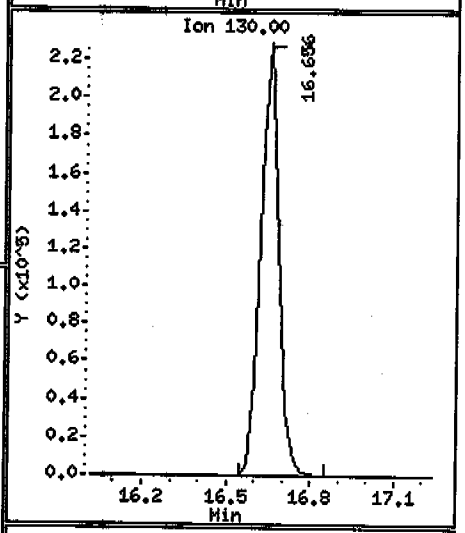
101 Trichloroethene

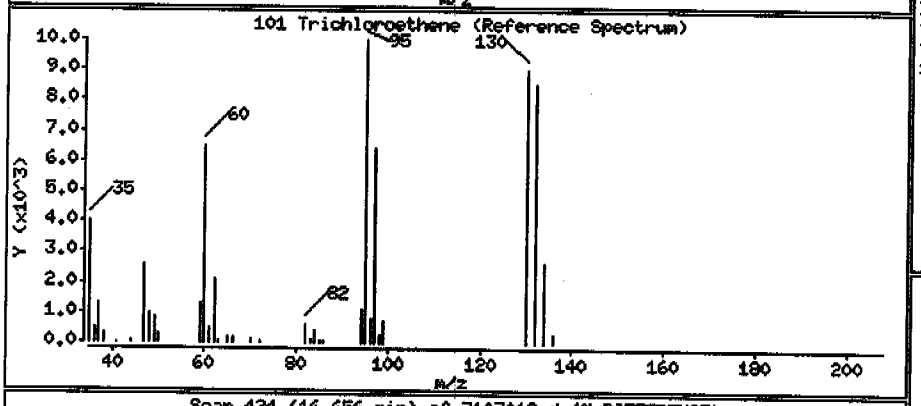
Concentration: 77.879 PPBV

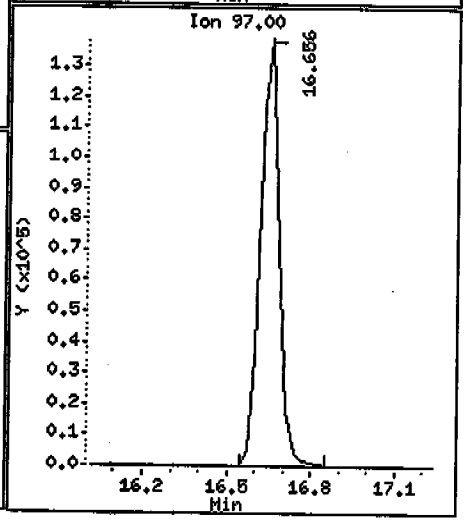


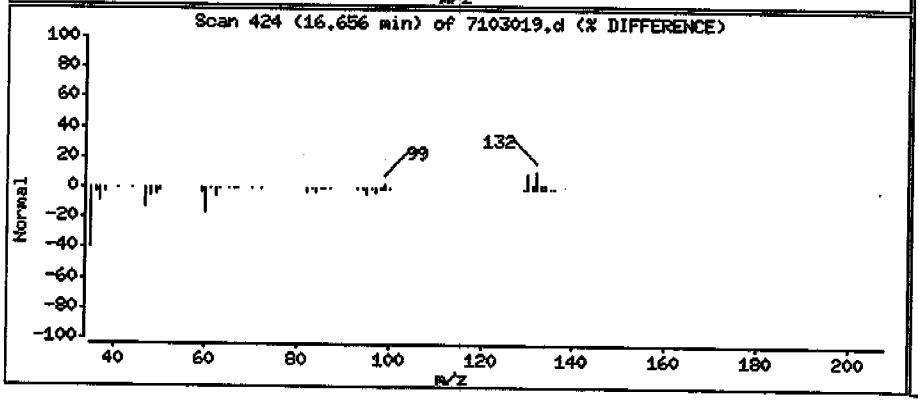












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

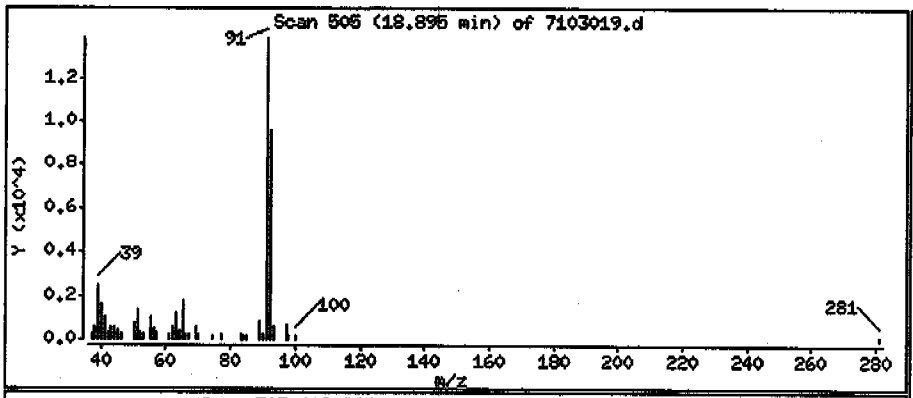
Operator: srs

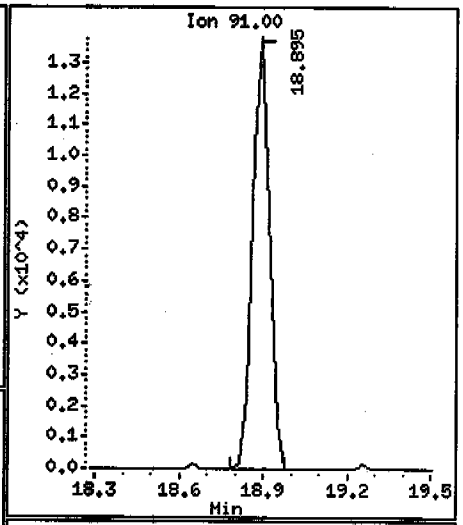
Column phase: RTx-624

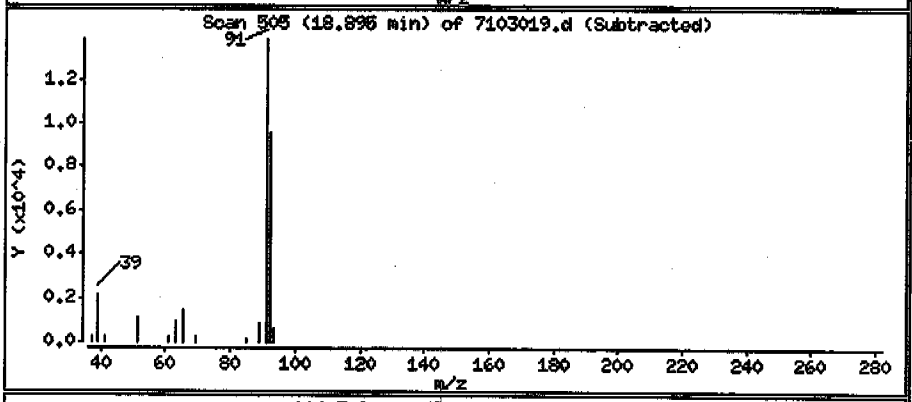
Column diameter: 0.53

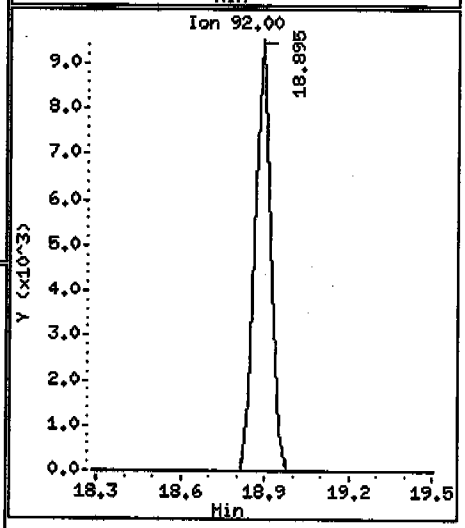
114 Toluene

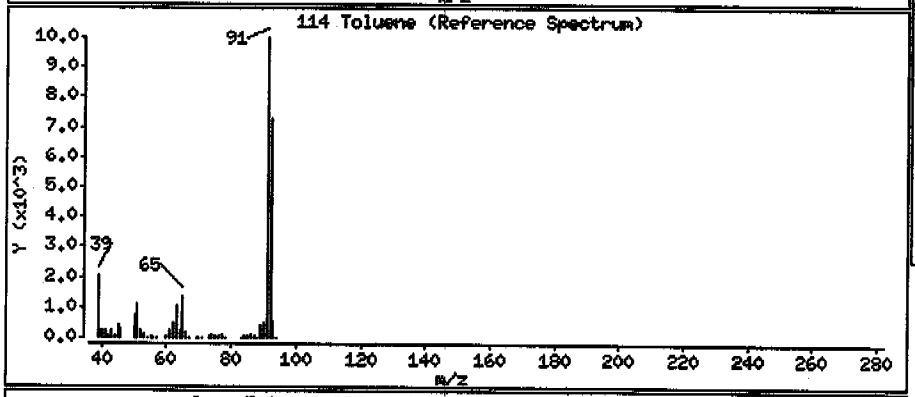
Concentration: 1.796 PPBV

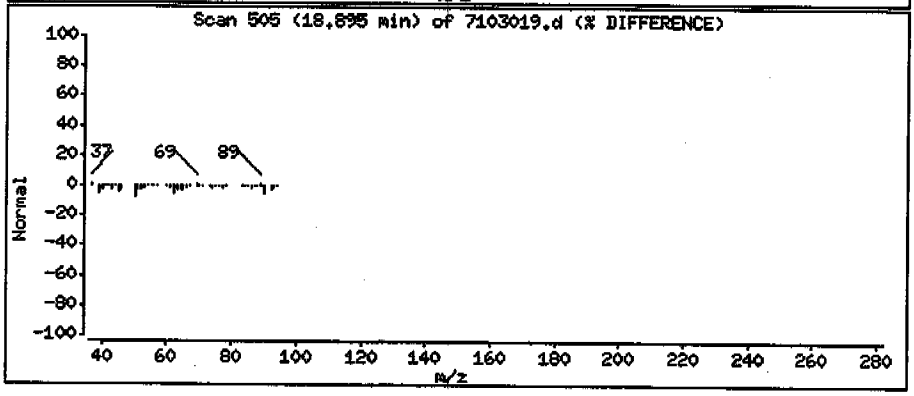












Data File: /chem/msd7.i/7-30oct.b/7103019.d

Date : 30-OCT-2007 21:47

Client ID:

Instrument: msd7.i

Sample Info: 200mL #4216

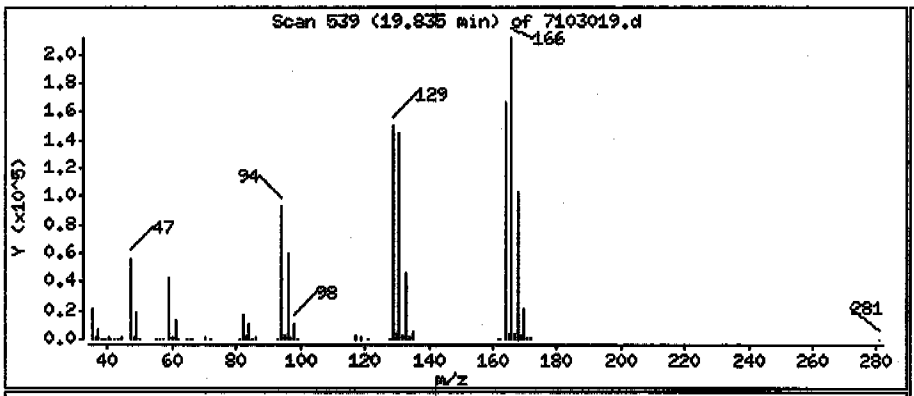
Operator: srs

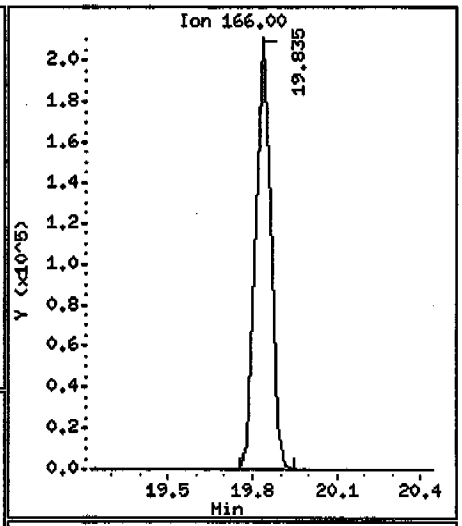
Column phase: RTx-624

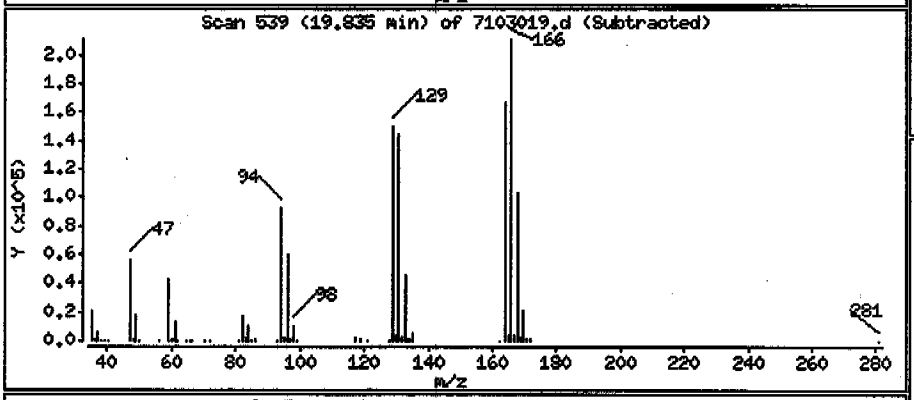
Column diameter: 0.53

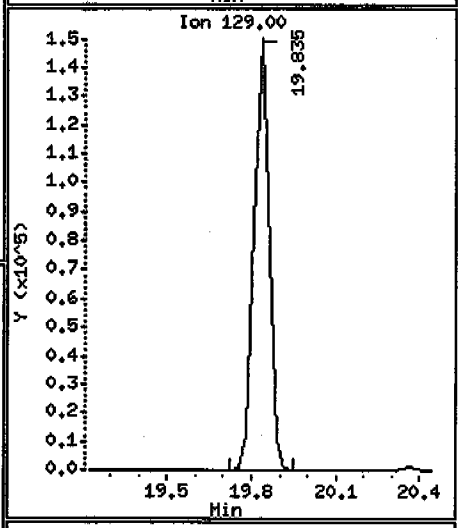
120 Tetrachloroethene

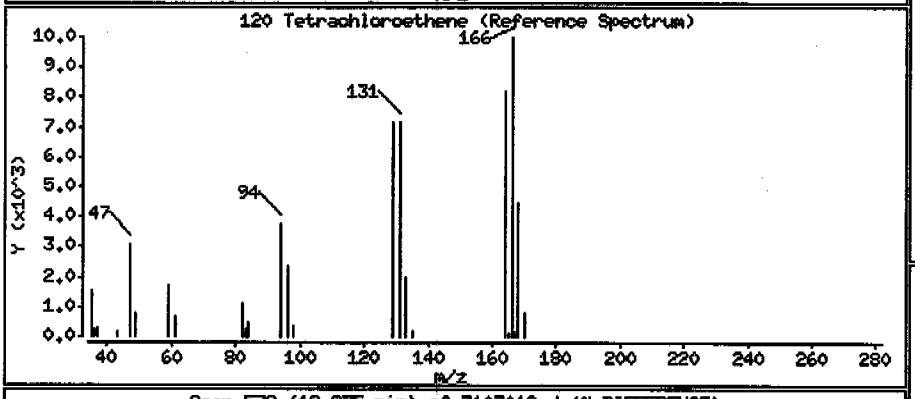
Concentration: 52.478 PPBV

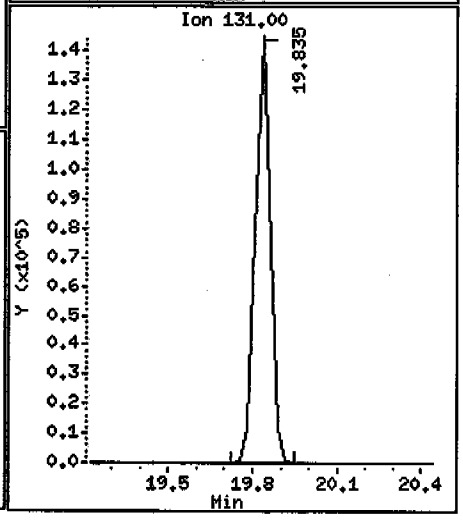


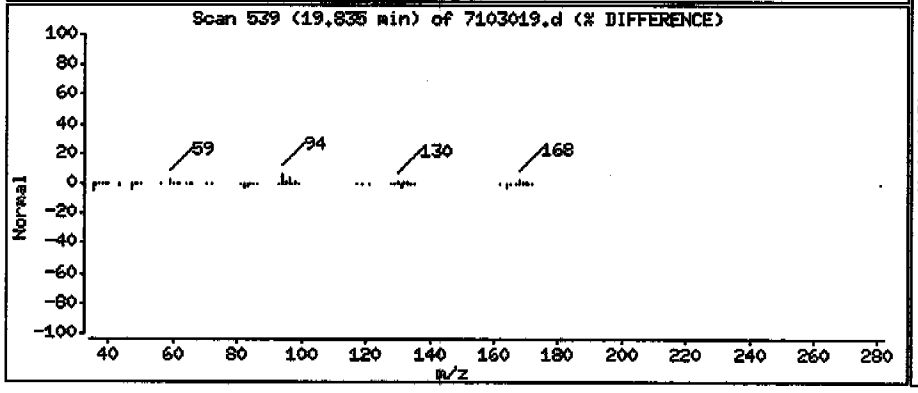












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6815

Lab ID#: 0710567-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.3	4.3	6.6
Freon 113	0.88	0.87 J	6.7	6.7
Acetone	3.5	7.5	8.3	18
Carbon Disulfide	0.88	1.2	2.7	3.8
Methylene Chloride	0.88	120	3.0	420
2-Butanone (Methyl Ethyl Ketone)	0.88	1.1	2.6	3.4
Chloroform	0.88	61	4.3	300
1,1,1-Trichloroethane	0.88	2.8	4.8	16
Cyclohexane	0.88	1.0	3.0	3.6
Carbon Tetrachloride	0.88	29	5.5	180
1,2-Dichloroethane	0.88	1.6	3.5	6.3
Trichloroethene	0.88	72	4.7	380
Tetrachloroethene	0.88	23	5.9	160

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6815

Lab ID#: 0710567-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.88	1.3	4.3	6.6
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	0.87 J	6.7	6.7
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	7.5	8.3	18
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	1.2	2.7	3.8
Methylene Chloride	0.88	120	3.0	420
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	1.1	2.6	3.4
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	61	4.3	300
1,1,1-Trichloroethane	0.88	2.8	4.8	16
Cyclohexane	0.88	1.0	3.0	3.6
Carbon Tetrachloride	0.88	29	5.5	180
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	1.6	3.5	6.3
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	72	4.7	380
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	23	5.9	160

0053

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6815

Lab ID#: 0710567-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected
Chlorodifluoromethane	3.5	Not Detected	12	Not Detected
Methanol	88	Not Detected	110	Not Detected
n-Butanol	3.5	Not Detected	11	Not Detected
Propylene	3.5	Not Detected	6.0	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	100	70-130

0054

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103020.d
Lab Smp Id: 0710567-03A
Inj Date : 30-OCT-2007 22:45
Operator : ab Inst ID: msd7.i
Smp Info : 200mL #13863
Misc Info : 7.0"Hg -> 5psi Los Alamos
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 31-Oct-2007 14:54 ctaylor Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.75000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	426965	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	328820			26.27- 126.27	77.01
14.416	14.388 (1.000)	49	749458			132.02- 232.02	175.53
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1414753	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	212375			0.00- 64.88	15.01
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1013801	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	535059			4.45- 104.45	52.78
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	593327	25.8674	25.867	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	283259			2.91- 102.91	47.74
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1150206	22.9026	22.902	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	126608			0.00- 61.46	11.01

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	779241			19.18- 119.18	67.75
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	605654	25.1057	25.106	80.00- 120.00	100.00
23.319	23.319	(1.092)	95	711779			67.21- 167.21	117.52
23.347	23.347	(1.093)	176	589723			47.52- 147.52	97.37
12 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.758	5.729	(0.399)	85	51737	0.76679	1.342	80.00- 120.00	100.00
5.758	5.729	(0.399)	87	17572			0.00- 83.07	33.96
42 Freon 113						CAS #: 76-13-1		
10.213	10.186	(0.708)	151	17391	0.49676	0.8693	80.00- 120.00	100.00(a)
10.213	10.186	(0.708)	153	10050			13.32- 113.32	57.79
10.213	10.186	(0.708)	101	19070			65.00- 165.00	109.65
45 Acetone						CAS #: 67-64-1		
10.517	10.462	(0.730)	58	49381	4.28855	7.505	80.00- 120.00	100.00
10.490	10.462	(0.728)	43	179887			247.10- 347.10	364.28
47 Carbon Disulfide						CAS #: 75-15-0		
10.904	10.877	(0.756)	76	50037	0.70401	1.232	80.00- 120.00	100.00
54 Methylene Chloride						CAS #: 75-09-2		
11.485	11.457	(0.797)	49	1902901	69.4782	121.59	80.00- 120.00	100.00
11.485	11.457	(0.797)	84	1221355			18.75- 118.75	64.18
11.485	11.457	(0.797)	51	574301			0.00- 80.85	30.18
75 2-Butanone						CAS #: 78-93-3		
13.891	13.891	(0.964)	72	6069	0.65629	1.148	80.00- 120.00	100.00
13.891	13.891	(0.964)	43	39291			440.65- 540.65	647.40
13.891	13.891	(0.964)	57	2924			0.00- 86.57	48.18
82 Chloroform						CAS #: 67-66-3		
14.471	14.471	(1.004)	83	1506862	35.0523	61.341	80.00- 120.00	100.00
14.471	14.471	(1.004)	85	978275			14.87- 114.87	64.92
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.831	14.831	(1.029)	97	70442	1.62719	2.848	80.00- 120.00	100.00
14.831	14.831	(1.029)	99	46125			14.34- 114.34	65.48
85 Cyclohexane						CAS #: 110-82-7		
14.831	14.831	(1.029)	84	14833	0.59822	1.047	80.00- 120.00	100.00
14.831	14.831	(1.029)	56	28049			77.34- 177.34	189.10
14.858	14.831	(1.031)	41	23474			23.26- 123.26	158.26

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.107	15.080	(1.048)	119	677353	16.6917	29.210	80.00- 120.00	100.00
15.107	15.080	(1.048)	117	703643			53.20- 153.20	103.88
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.633	15.633	(0.967)	62	26460	0.88594	1.550	80.00- 120.00	100.00
15.633	15.633	(0.967)	64	8769			0.00- 82.89	33.14
101 Trichloroethene						CAS #: 79-01-6		
16.628	16.628	(1.029)	95	1021524	40.9104	71.593	80.00- 120.00	100.00
16.656	16.628	(1.031)	130	1046241			52.84- 152.84	102.42
16.628	16.628	(1.029)	97	662385			15.58- 115.58	64.84
120 Tetrachloroethene						CAS #: 127-18-4		
19.835	19.835	(0.929)	166	356651	13.0957	22.917	80.00- 120.00	100.00
19.835	19.835	(0.929)	129	247288			20.11- 120.11	69.34
19.835	19.835	(0.929)	131	234640			17.39- 117.39	65.79

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103020.d
Lab Smp Id: 0710567-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 7.0"Hg -> 5psi Los Alamos

Calibration Date: 30-OCT-2007
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	537758	322655	752861	426965	-20.60
97 1,4-Difluorobenze	1771565	1062939	2480191	1414753	-20.14
126 Chlorobenzene-d5	1414884	848930	1980838	1013801	-28.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 01-Nov-2007 11:12

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 7-30oct
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0710567-03A
Level: LOW Operator: ab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926spectra.spk Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 7.0"Hg -> 5psi Los Alamos

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.867	103.47	70-130
$ 113 Toluene-d8	25.000	22.902	91.61	70-130
$ 137 Bromofluorobenzene	25.000	25.106	100.42	70-130

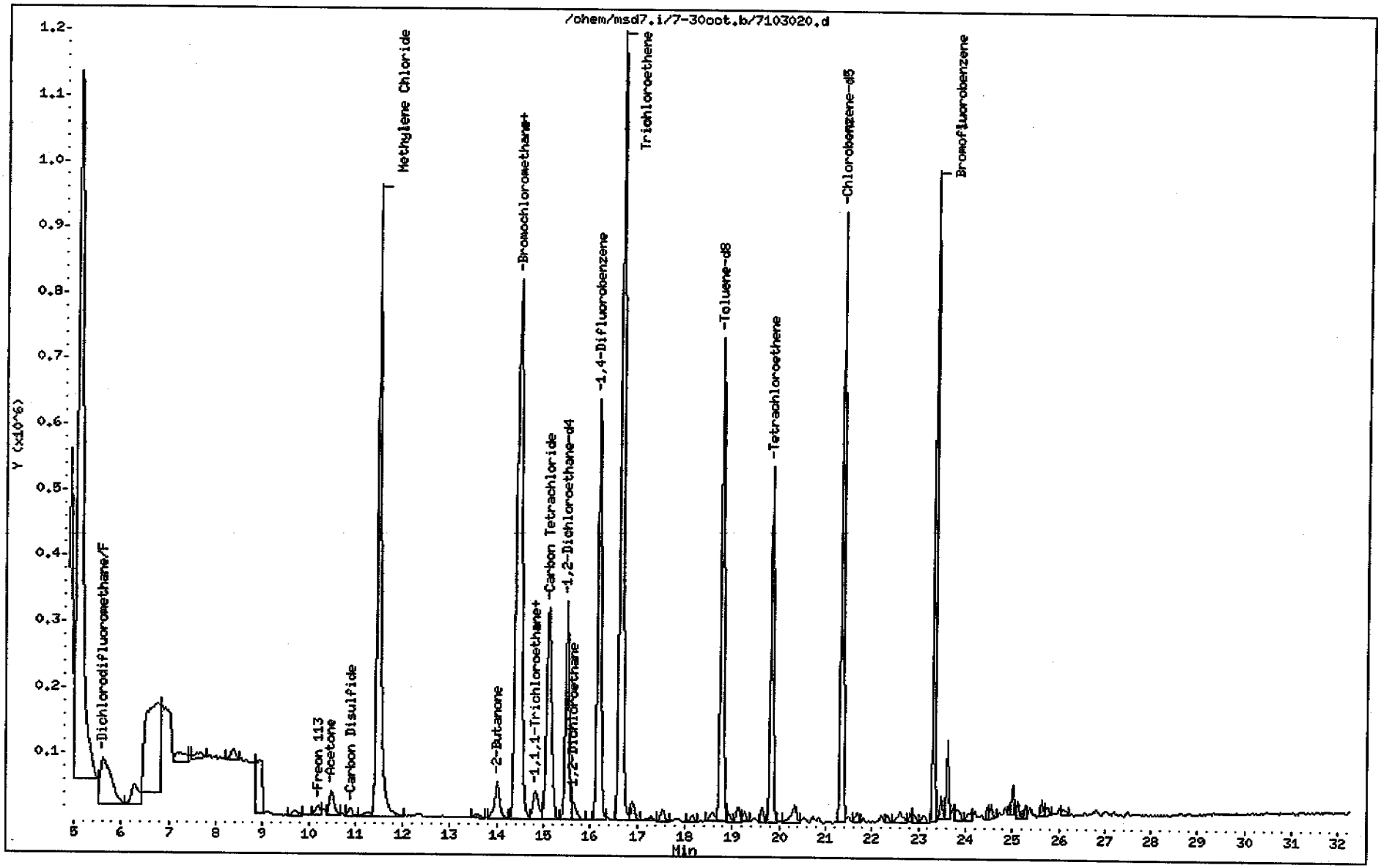
Data File: /chem/msd7.i/7-30oct.b/7103020.d
Date : 30-OCT-2007 22:45
Client ID:
Sample Info: 200mL #13863

Column phase: RTx-624

Instrument: msd7.i

Operator: ab
Column diameter: 0.53

0060



Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

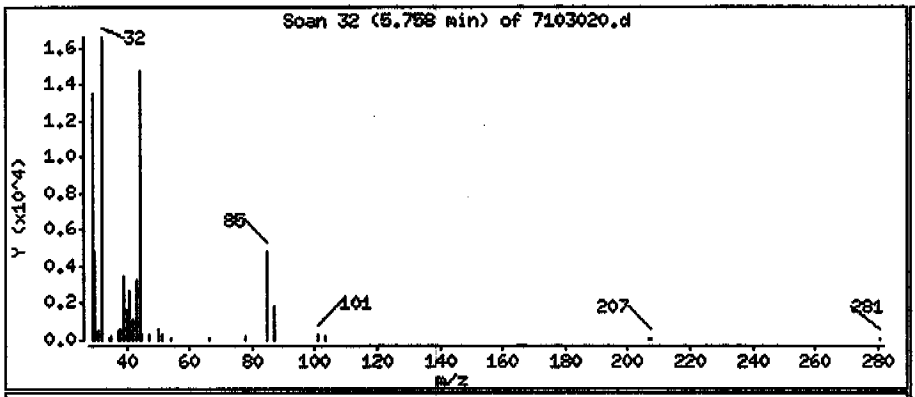
Operator: ab

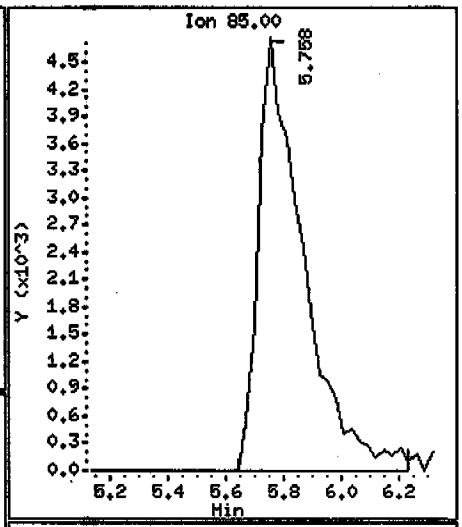
Column phase: RTx-624

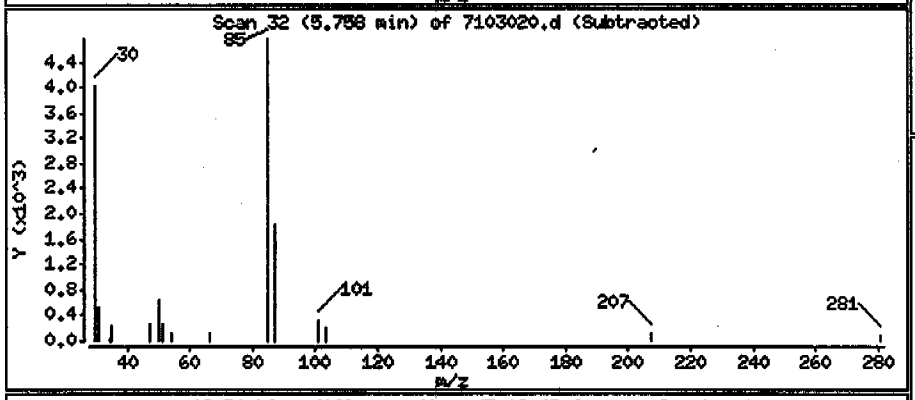
Column diameter: 0.53

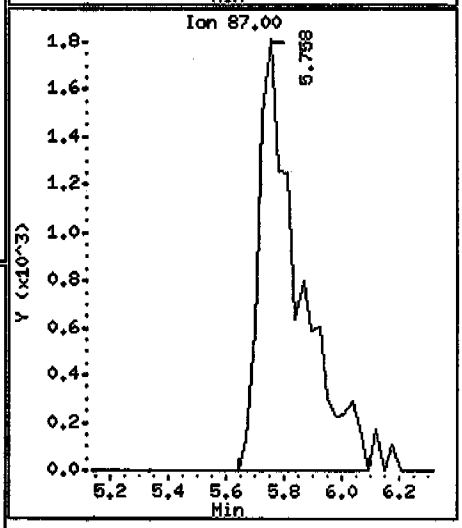
12 Dichlorodifluoromethane/Fr12

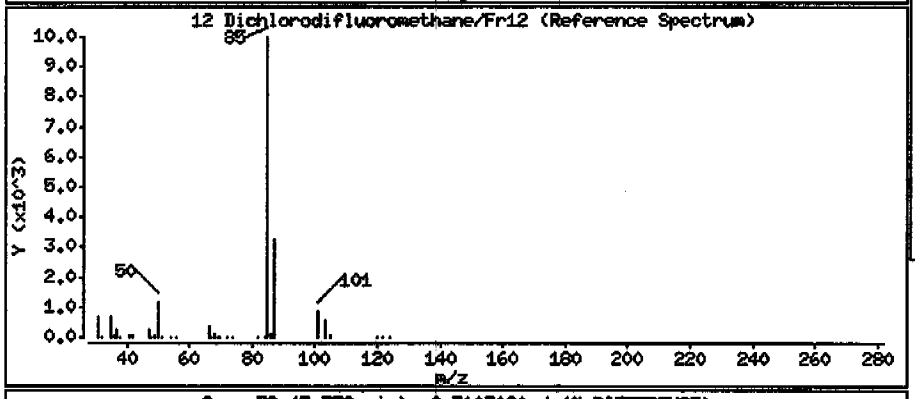
Concentration: 1.342 PPBV

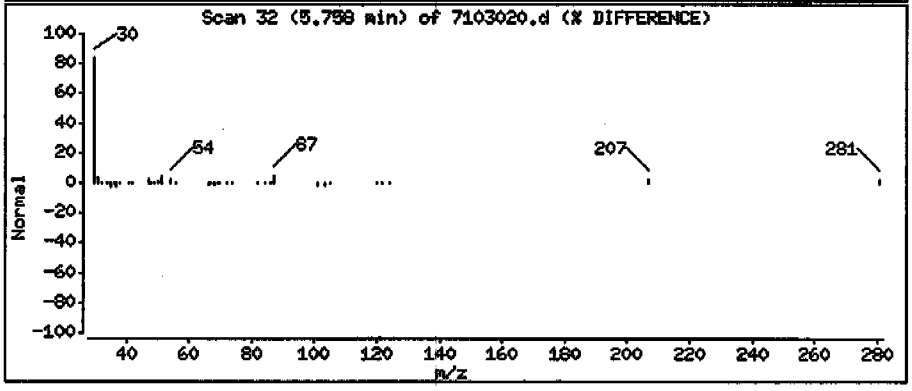












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

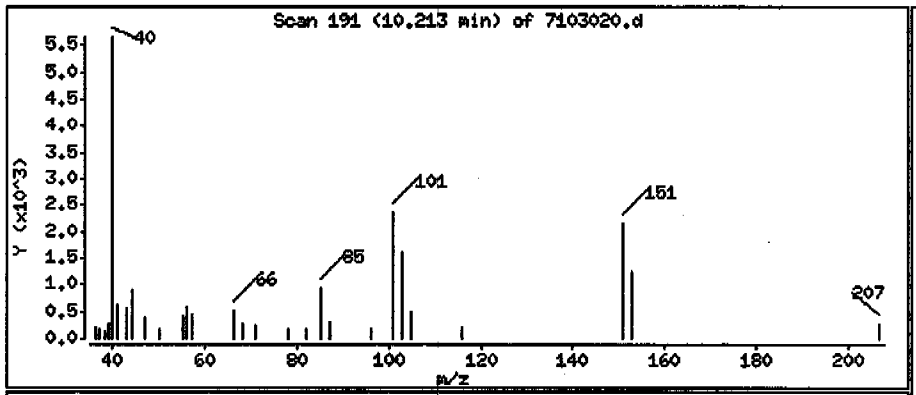
Operator: ab

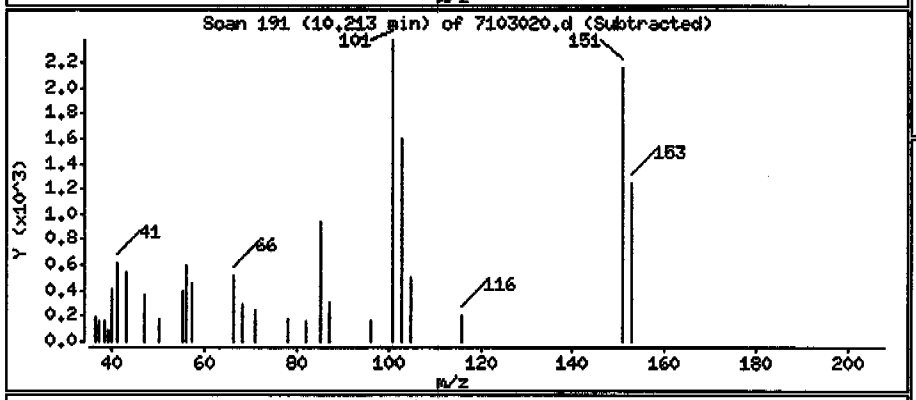
Column phase: RTx-624

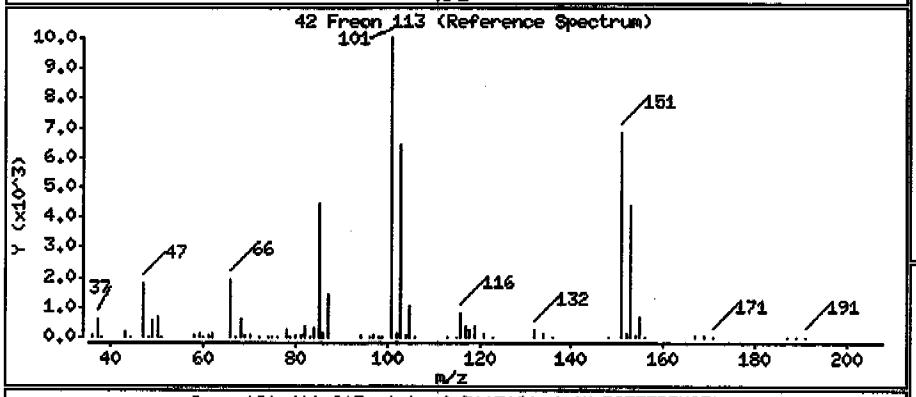
Column diameter: 0.53

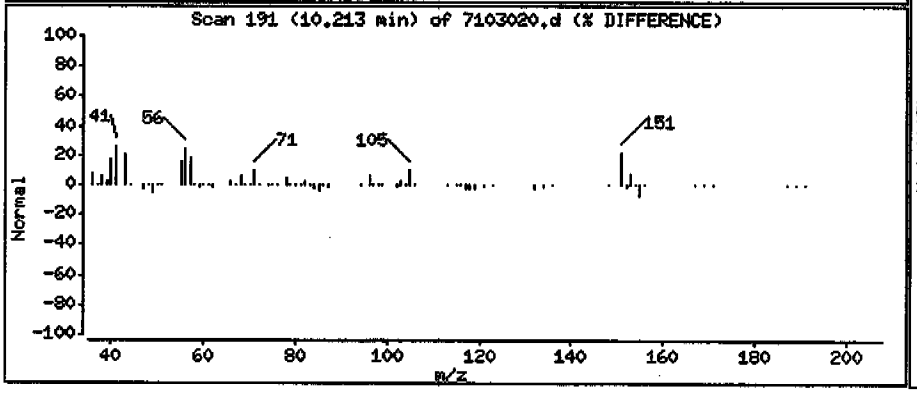
42 Freon 113

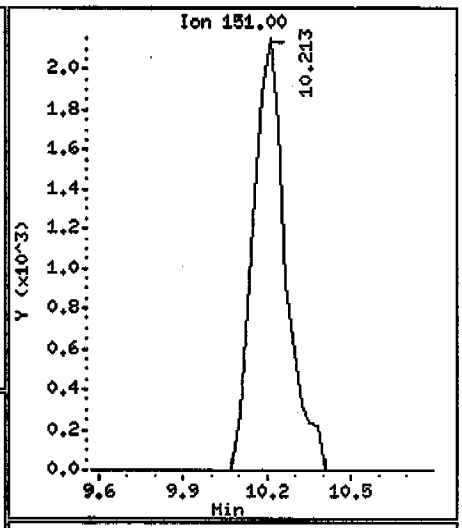
Concentration: 0.8693 PPBV

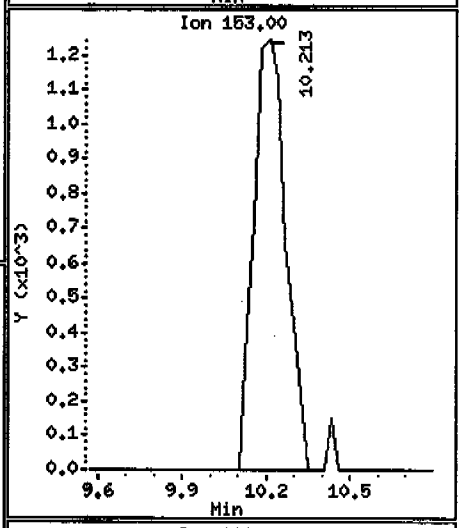


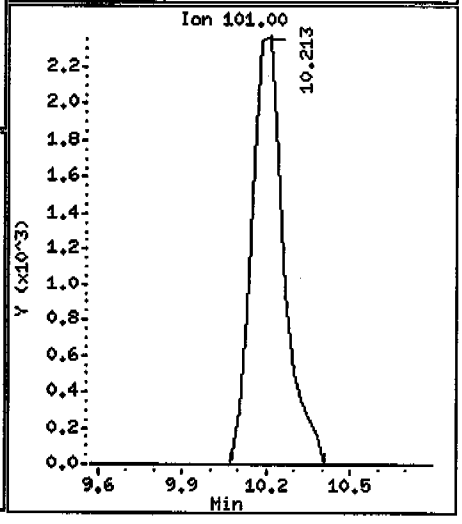












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

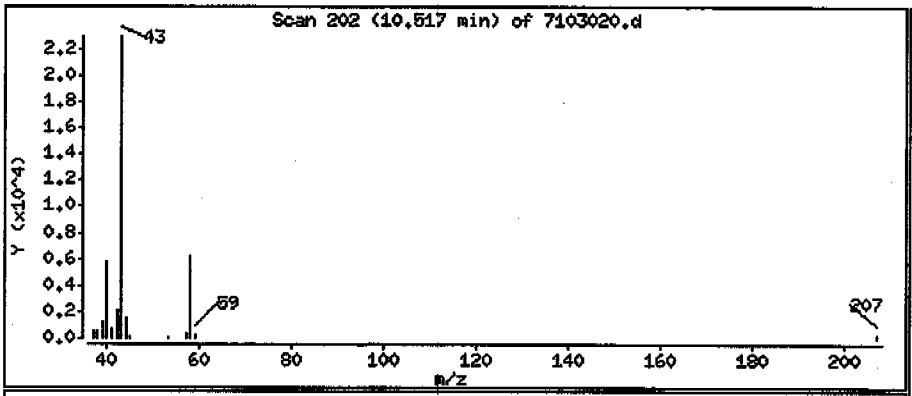
Operator: ab

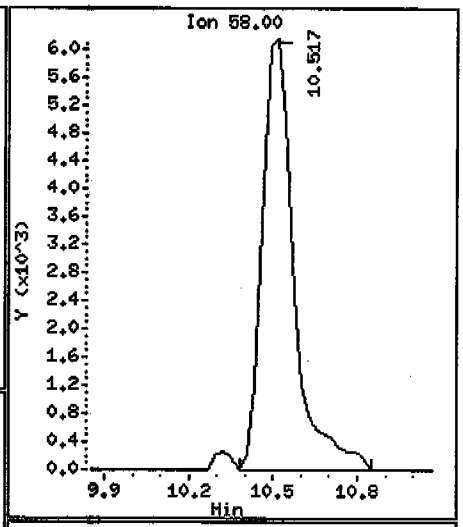
Column phase: RTx-624

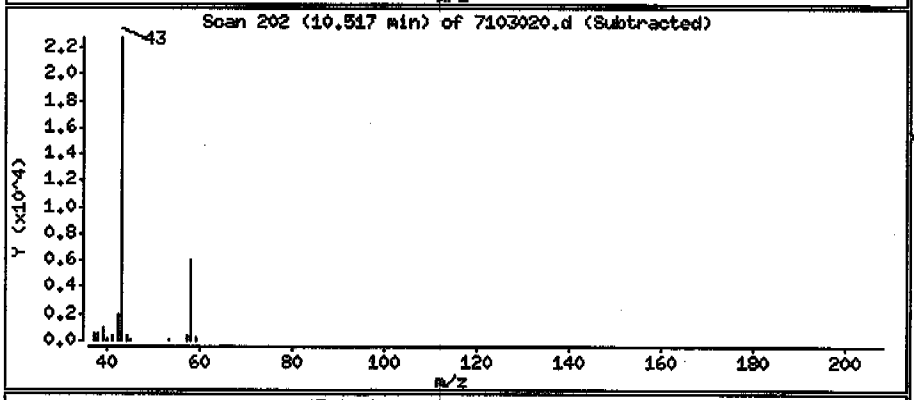
Column diameter: 0.53

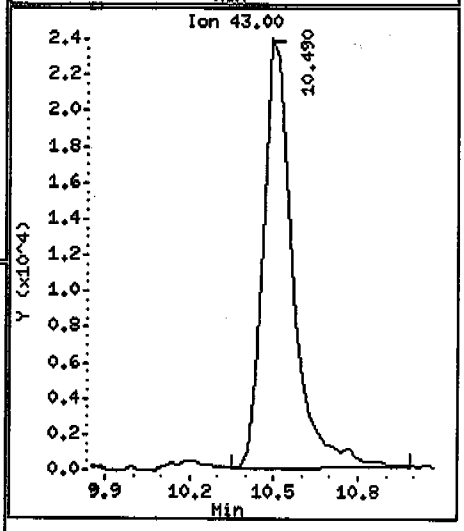
45 Acetone

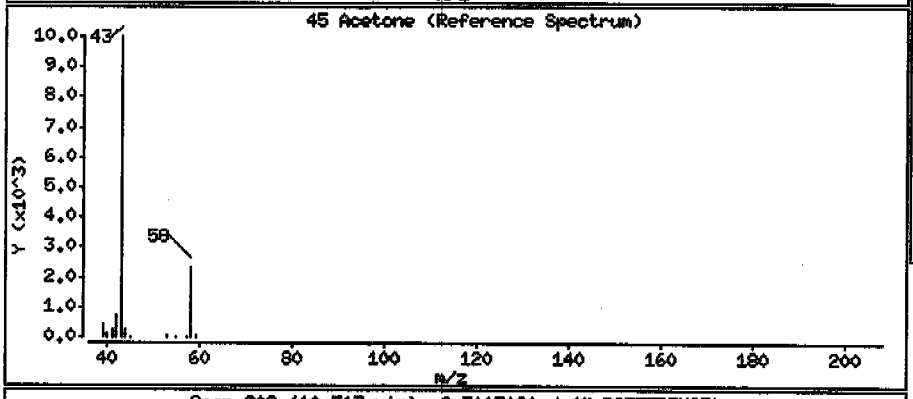
Concentration: 7.505 PPBV

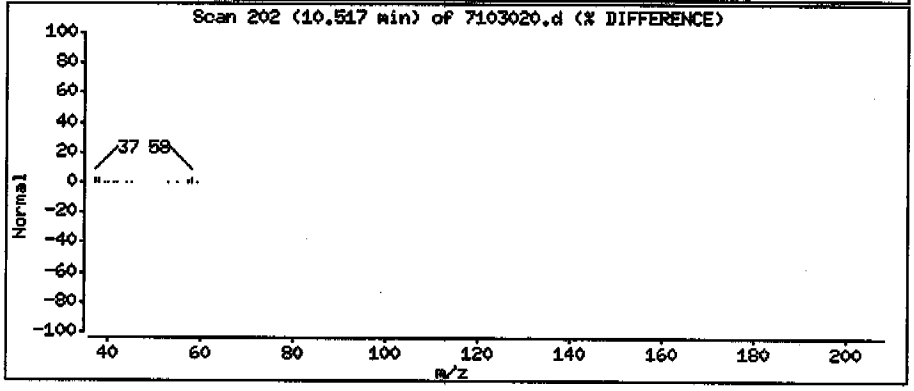












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

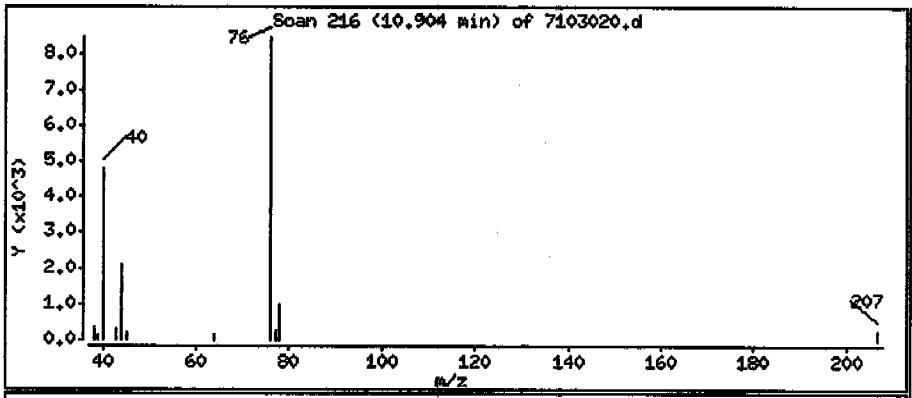
Operator: ab

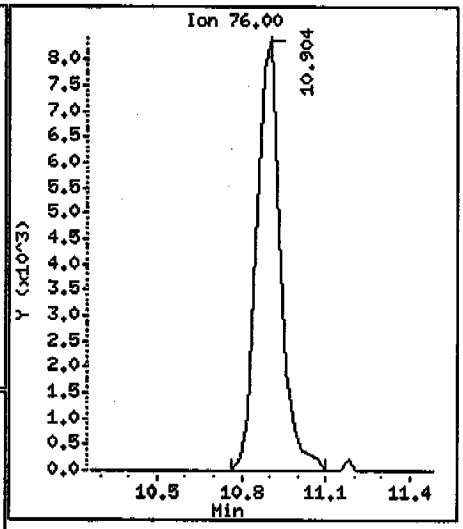
Column phase: RTx-624

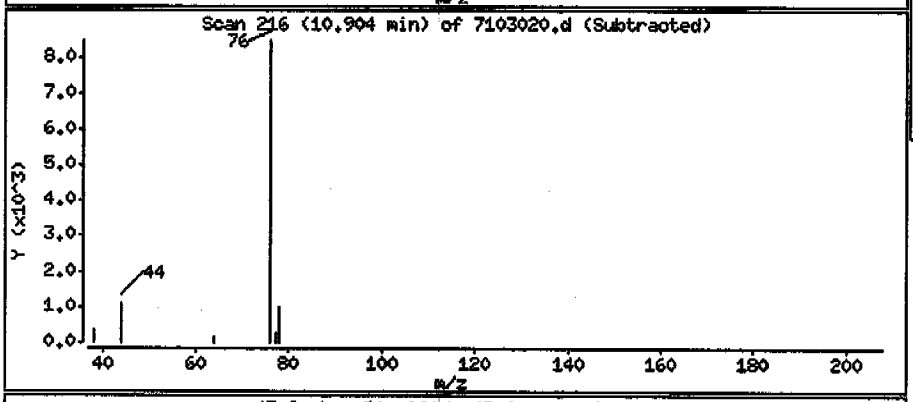
Column diameter: 0.53

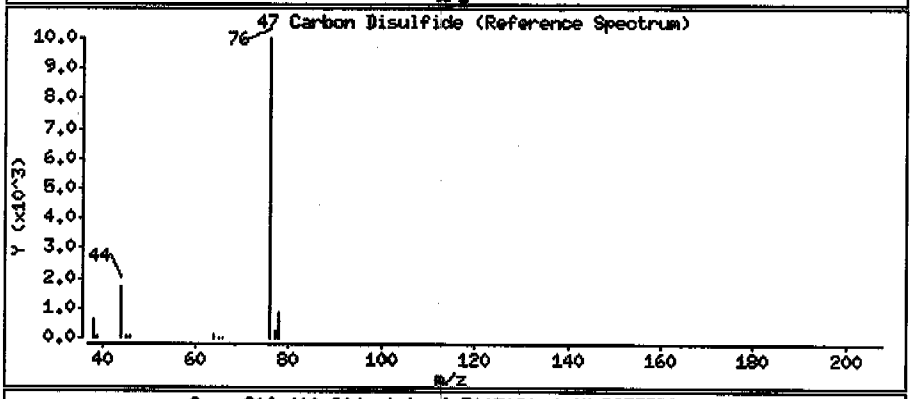
47 Carbon Disulfide

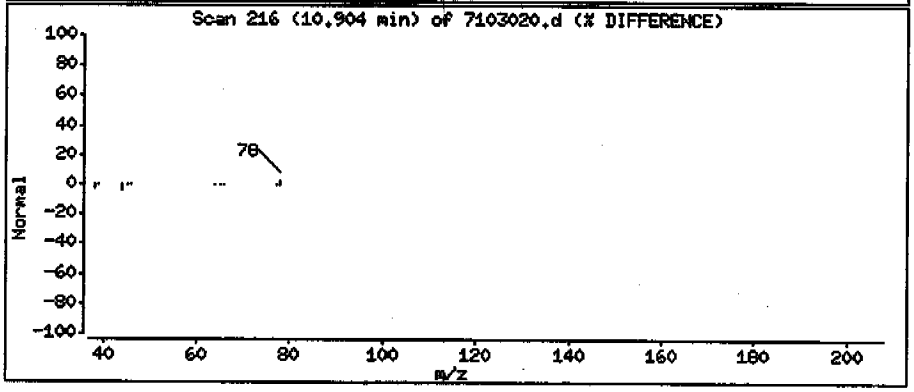
Concentration: 1.232 PPBV











Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

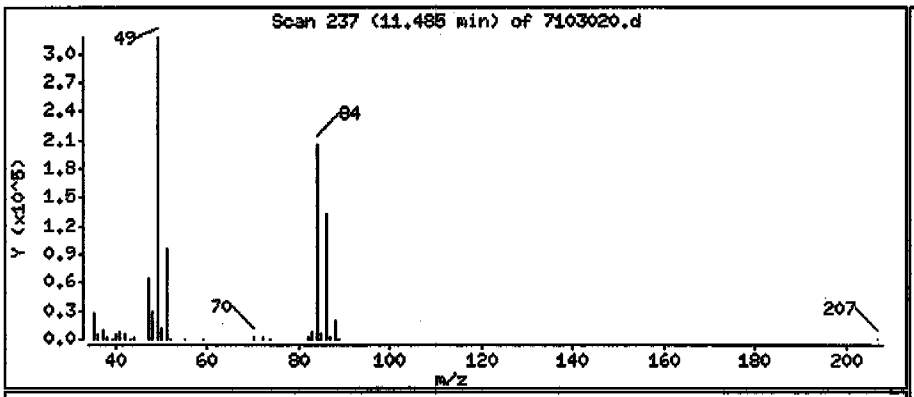
Operator: ab

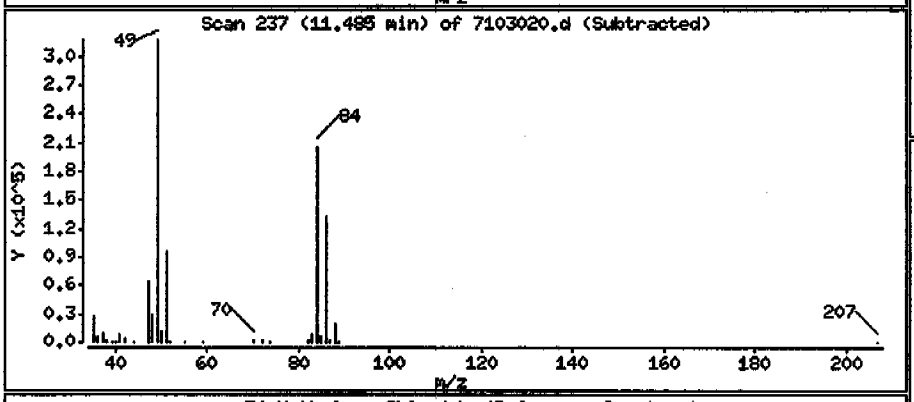
Column phase: RTx-624

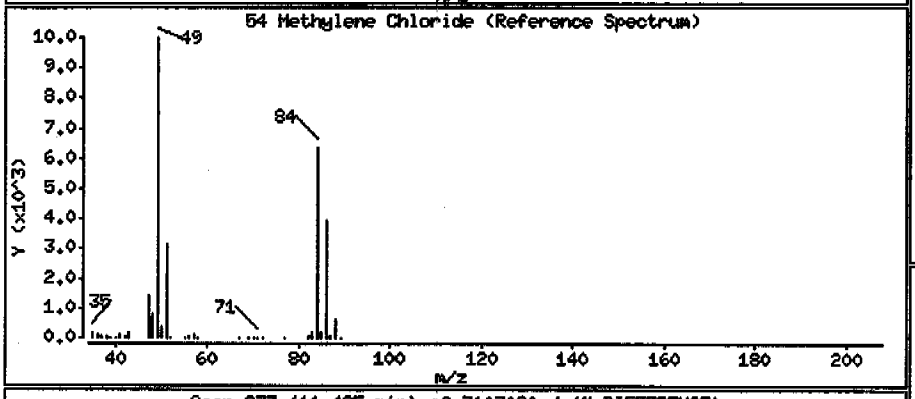
Column diameter: 0.53

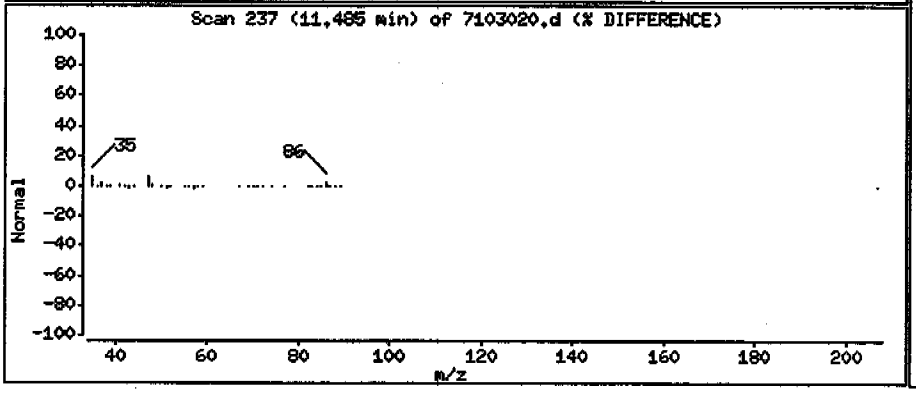
54 Methylene Chloride

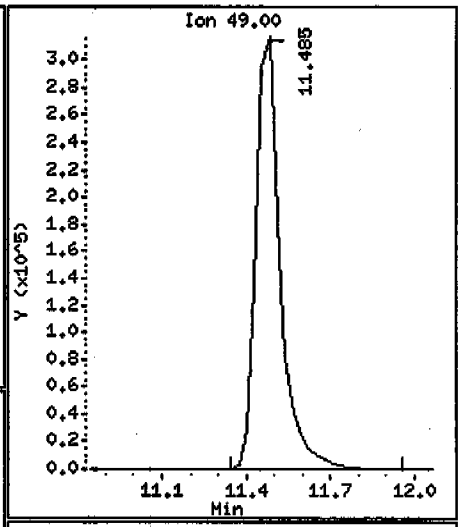
Concentration: 121.59 PPBV

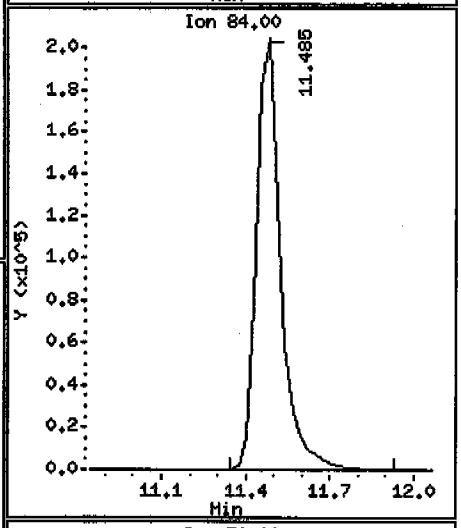


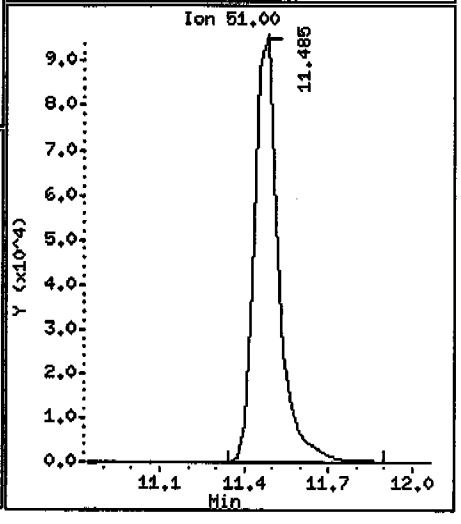












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

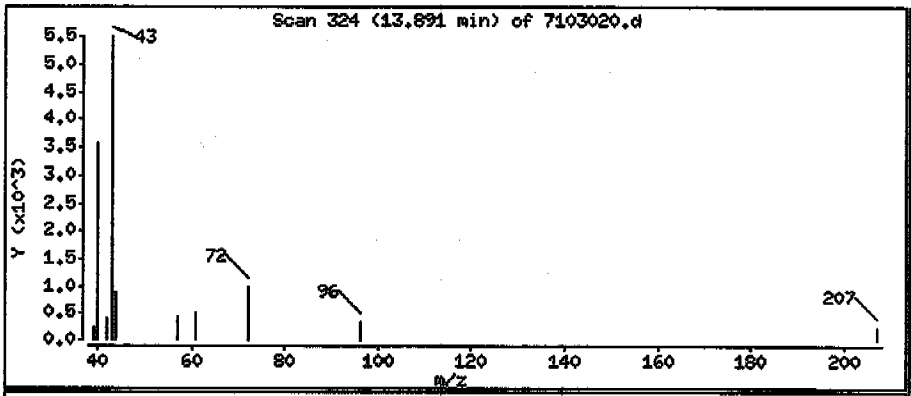
Operator: ab

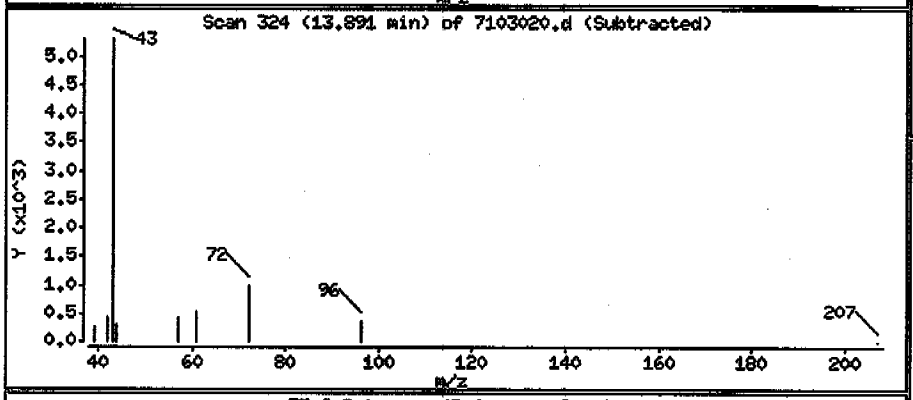
Column phase: RTx-624

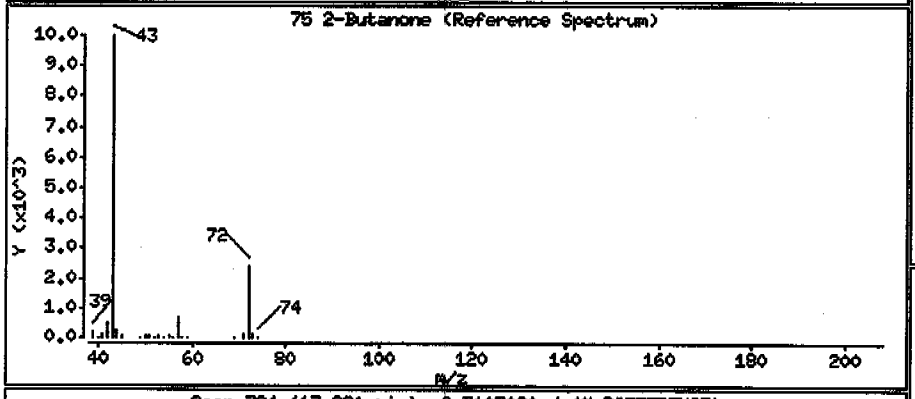
Column diameter: 0.53

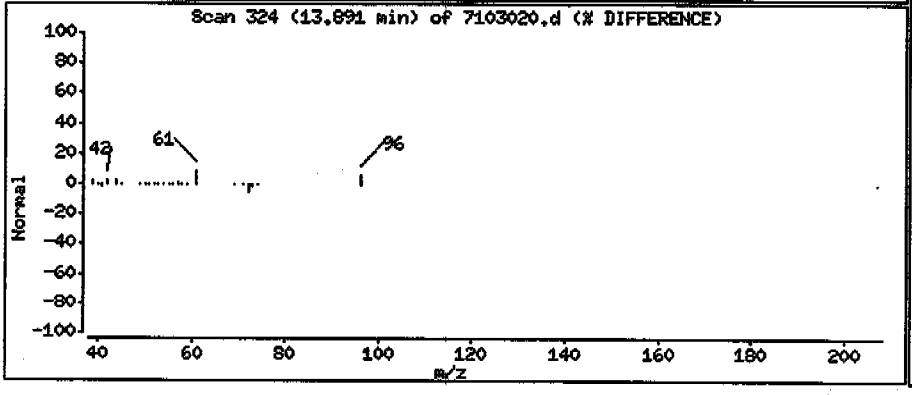
75 2-Butanone

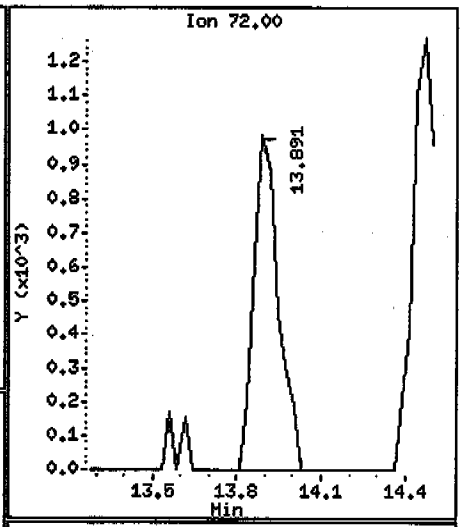
Concentration: 1.148 PPBV

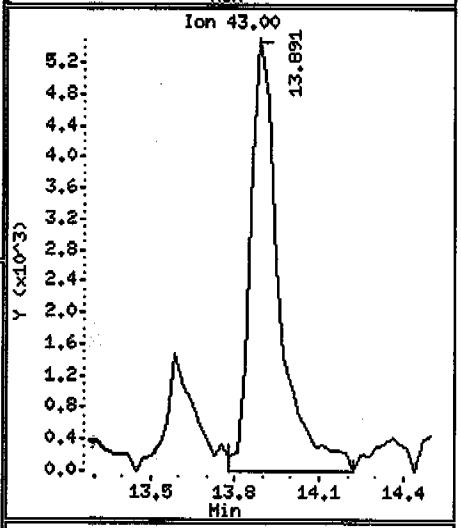


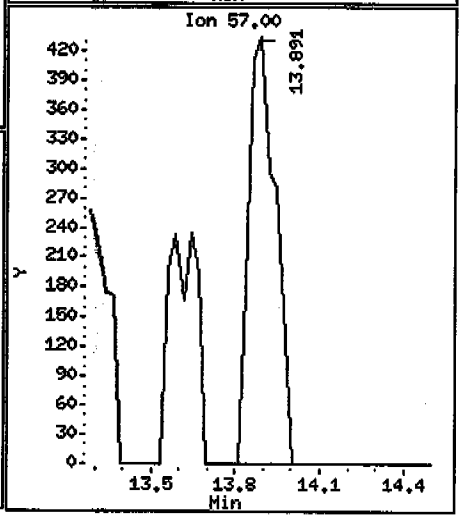












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

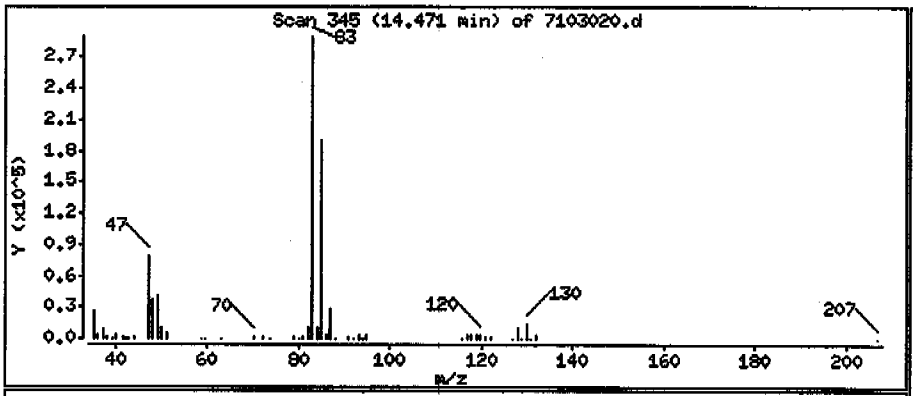
Operator: ab

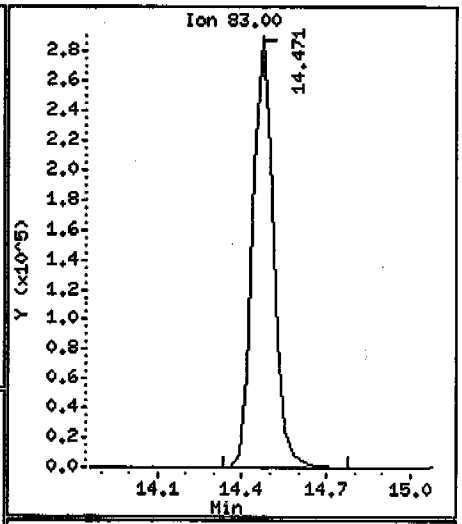
Column phase: RTx-624

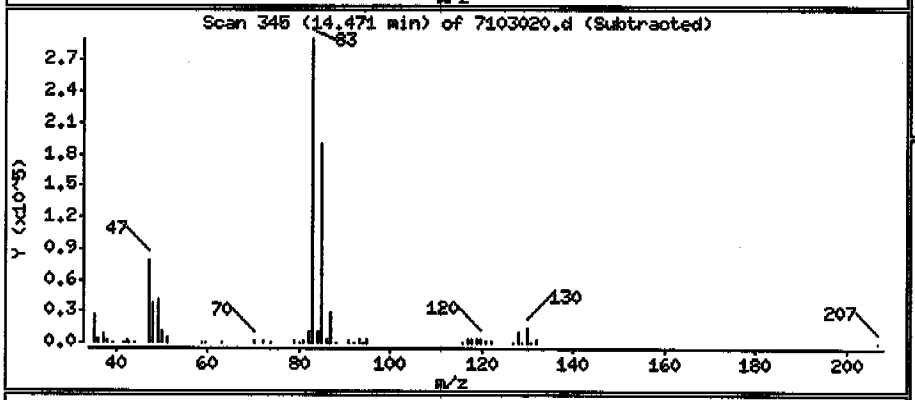
Column diameter: 0.53

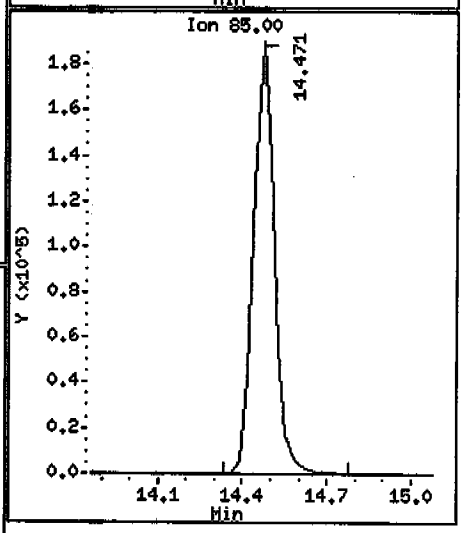
82 Chloroform

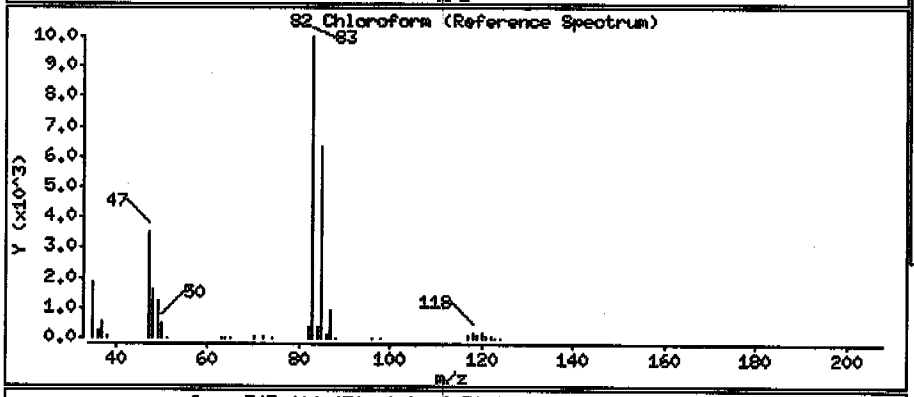
Concentration: 61.341 PPBV

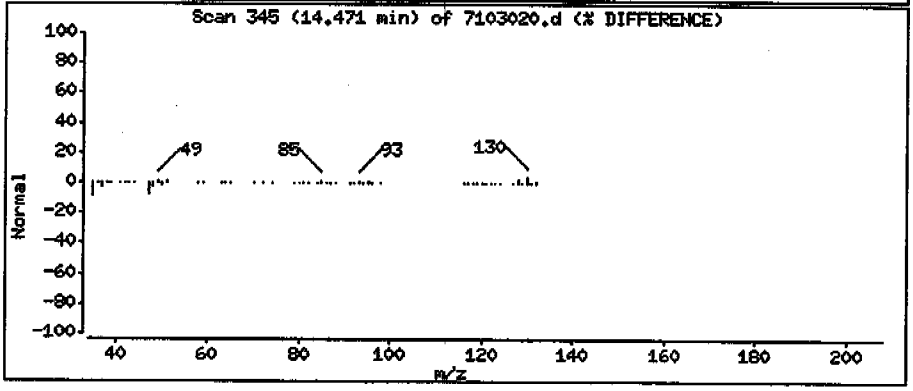












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

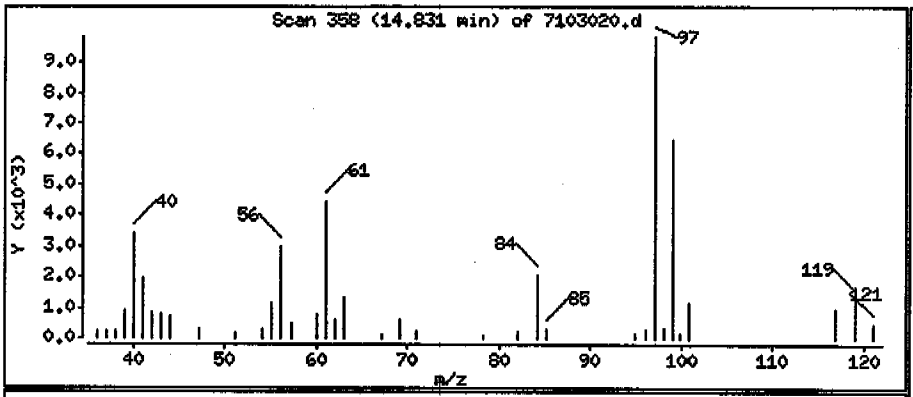
Operator: ab

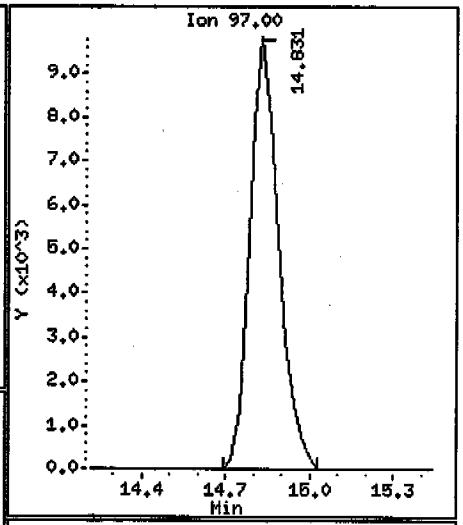
Column phase: RTx-624

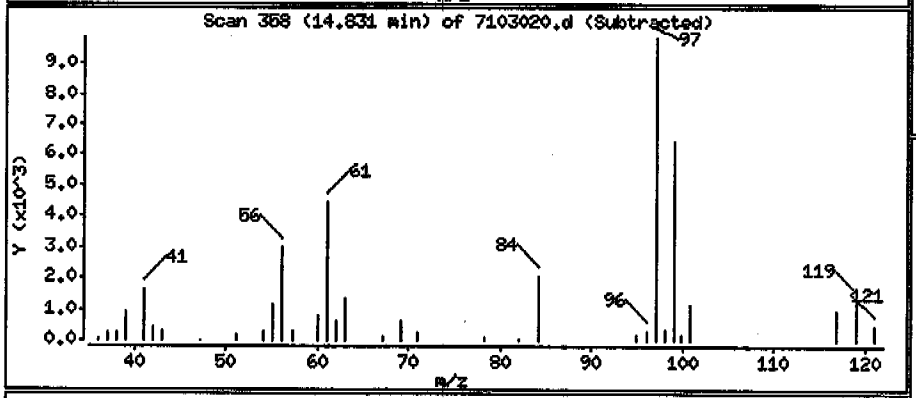
Column diameter: 0.53

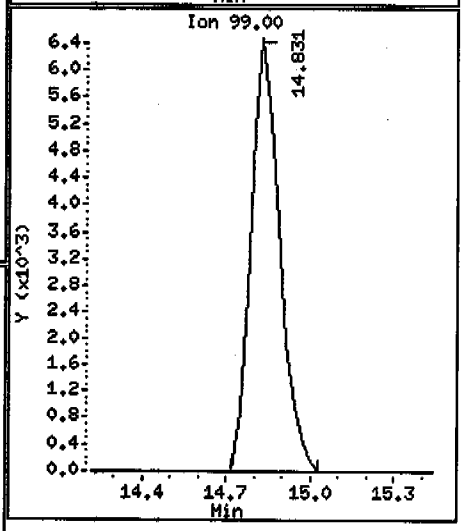
83 1,1,1-Trichloroethane

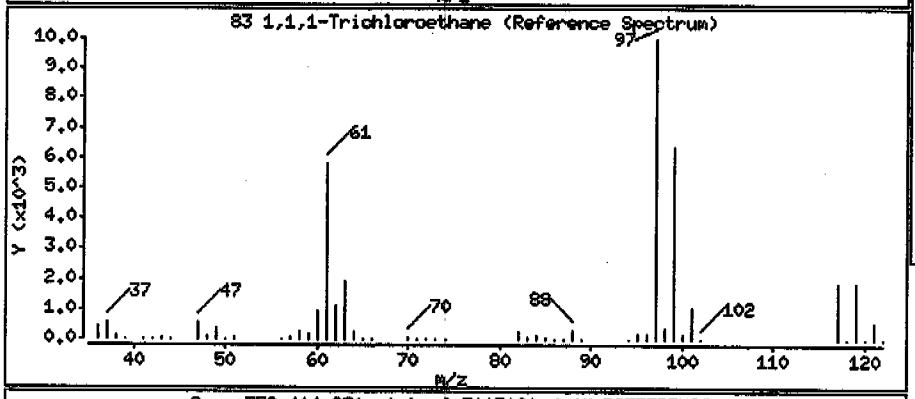
Concentration: 2.848 PPBV

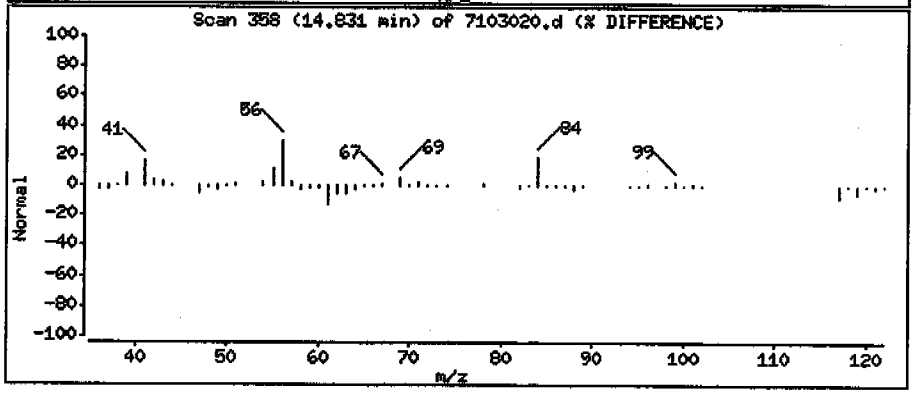












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:46

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

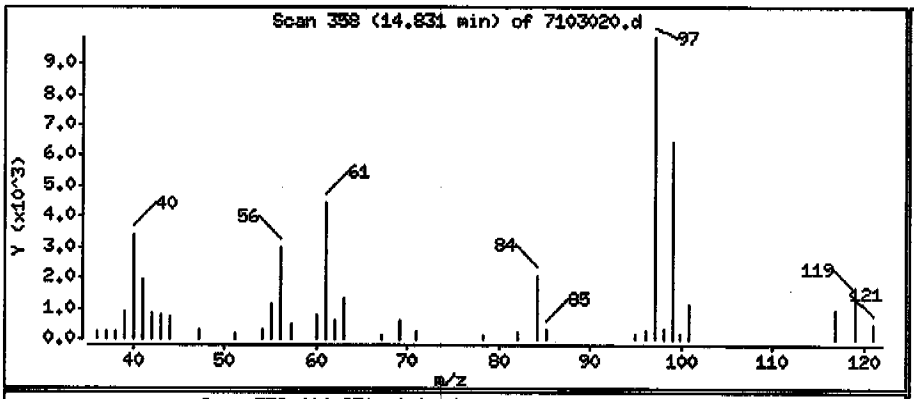
Operator: ab

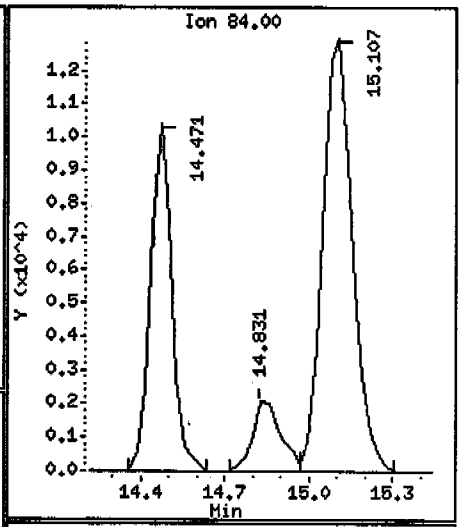
Column phase: RTx-624

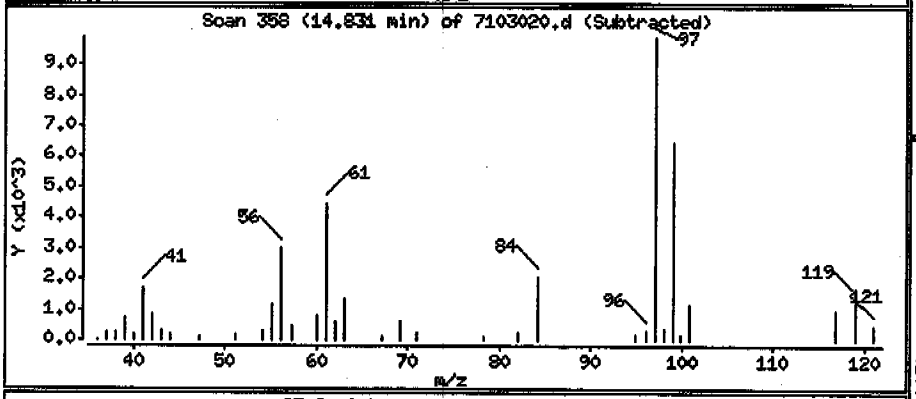
Column diameter: 0.53

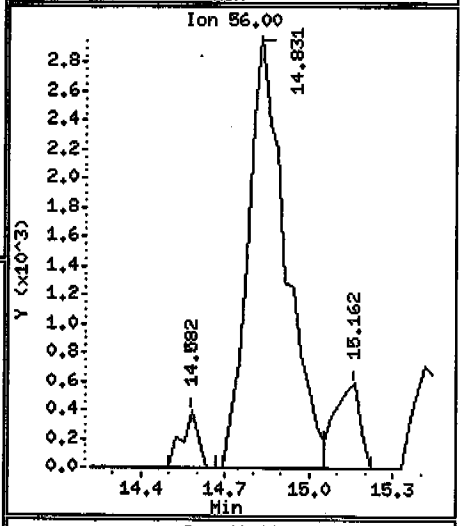
85 Cyclohexane

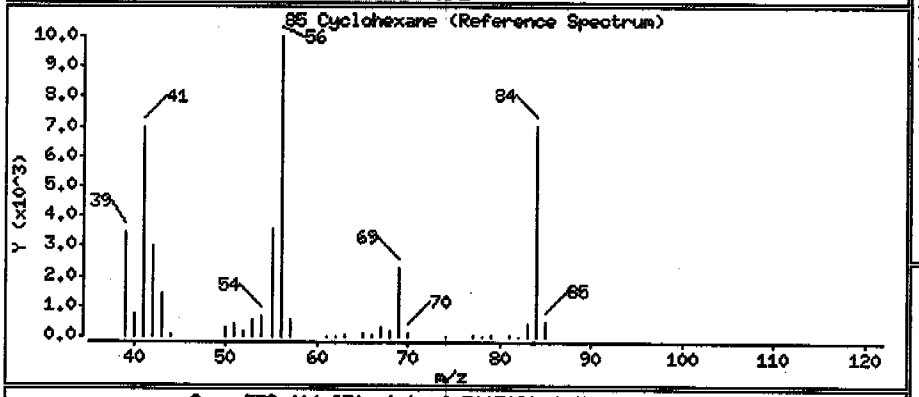
Concentration: 1.047 PPBV

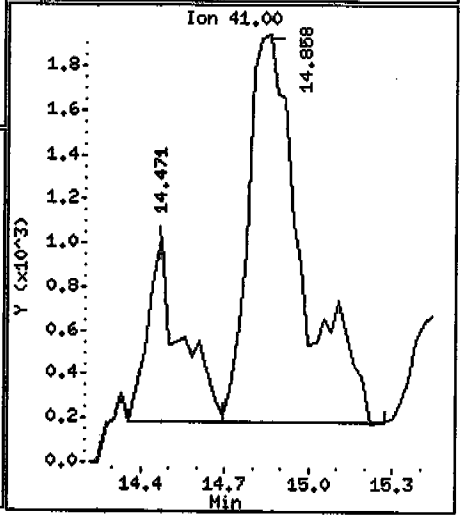


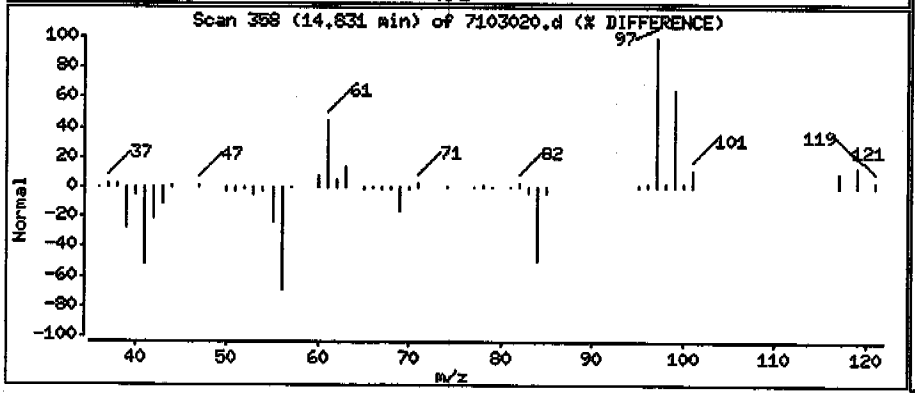












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

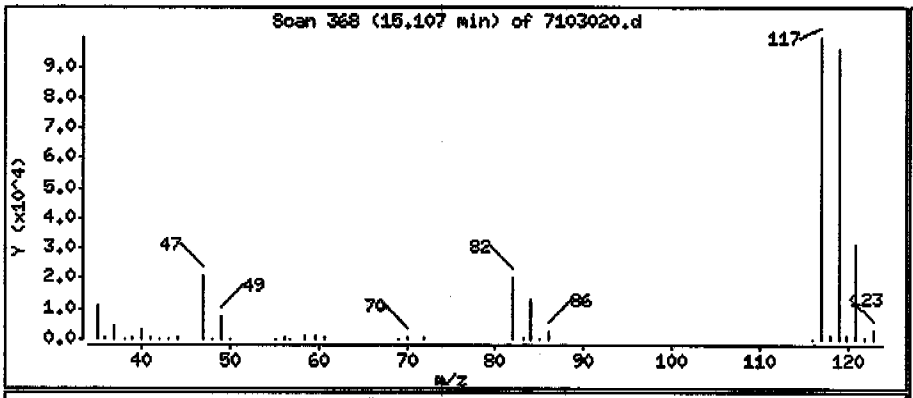
Operator: ab

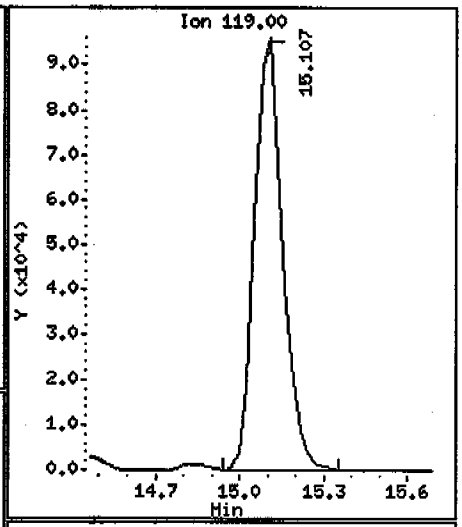
Column phase: RTx-624

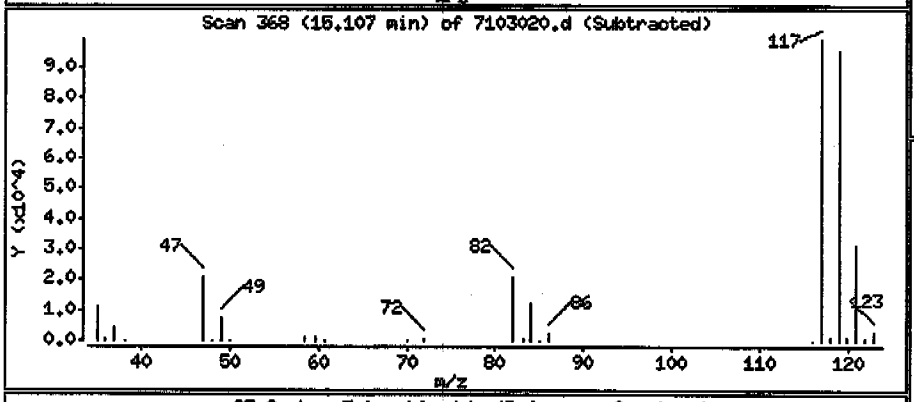
Column diameter: 0.53

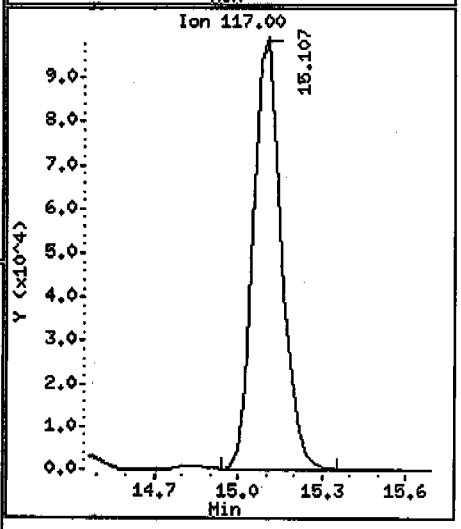
87 Carbon Tetrachloride

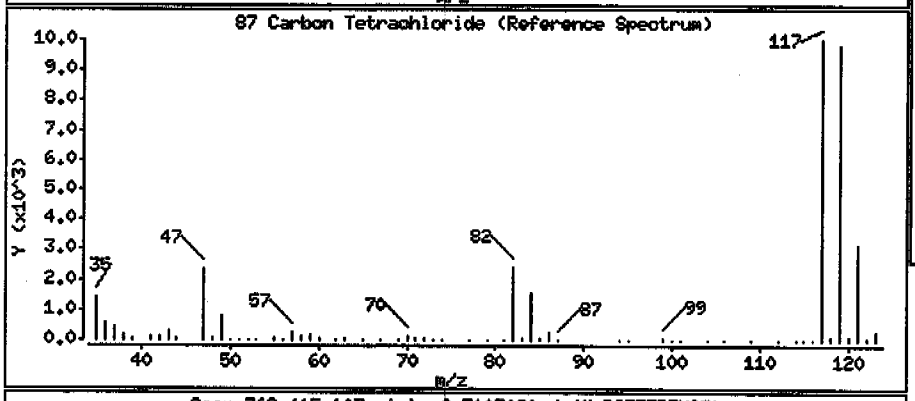
Concentration: 29,210 PPBV

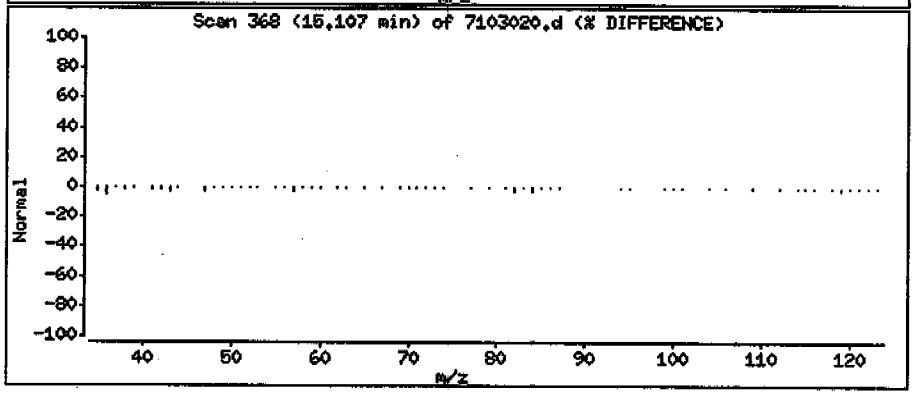












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Sample Info: 200mL #13863

Instrument: msd7.i

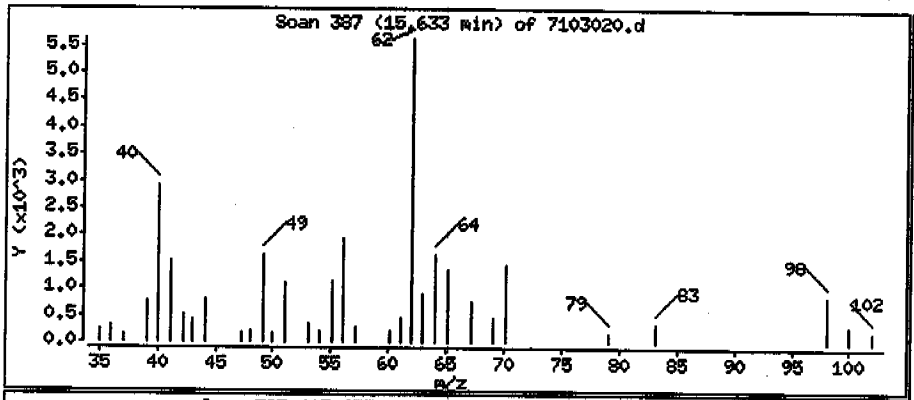
Operator: ab

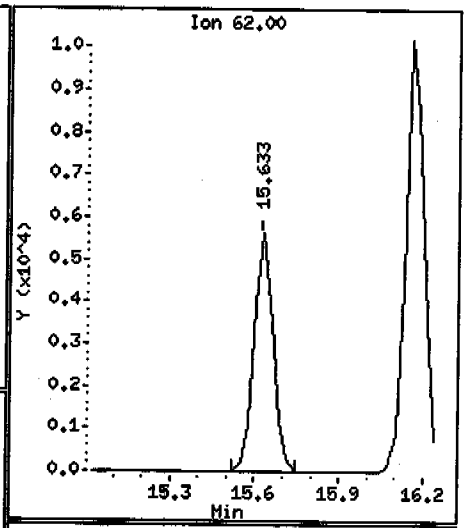
Column phase: RTx-624

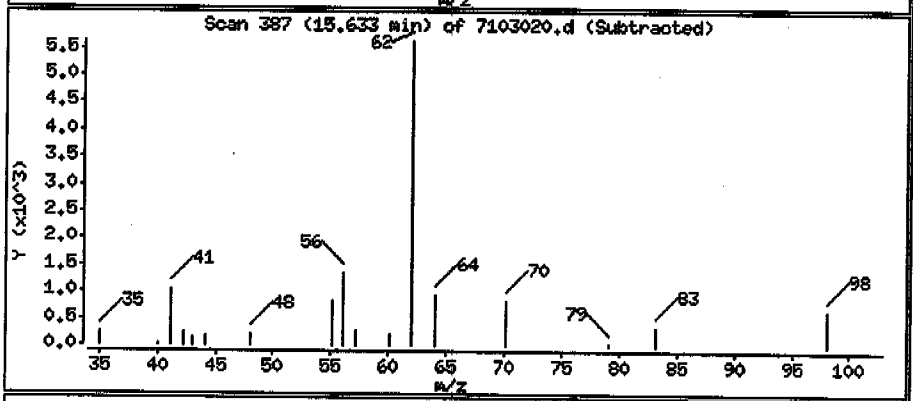
Column diameter: 0.53

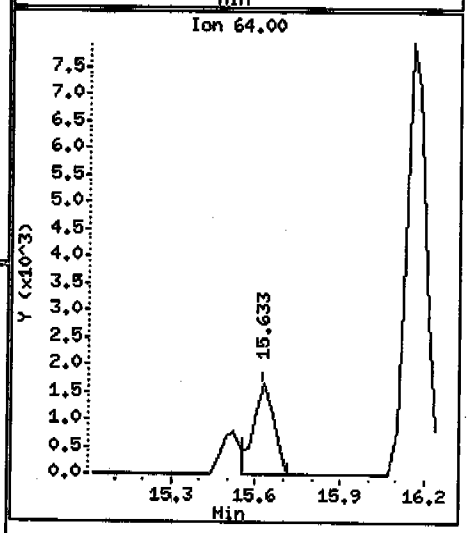
93 1,2-Dichloroethane

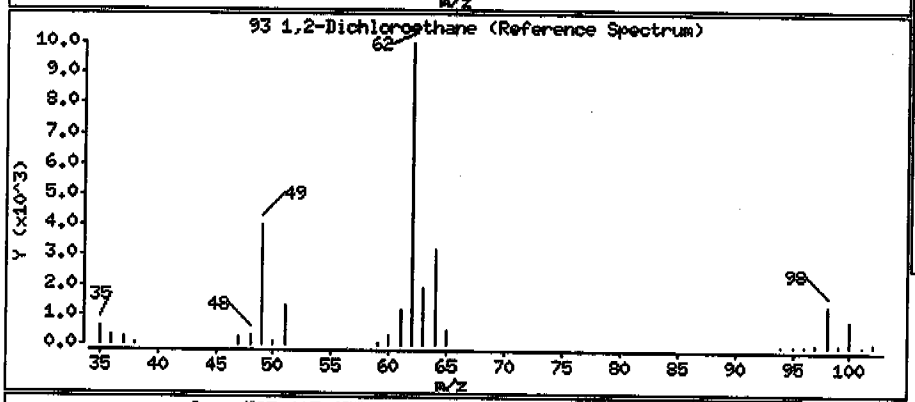
Concentration: 1,550 PPBV

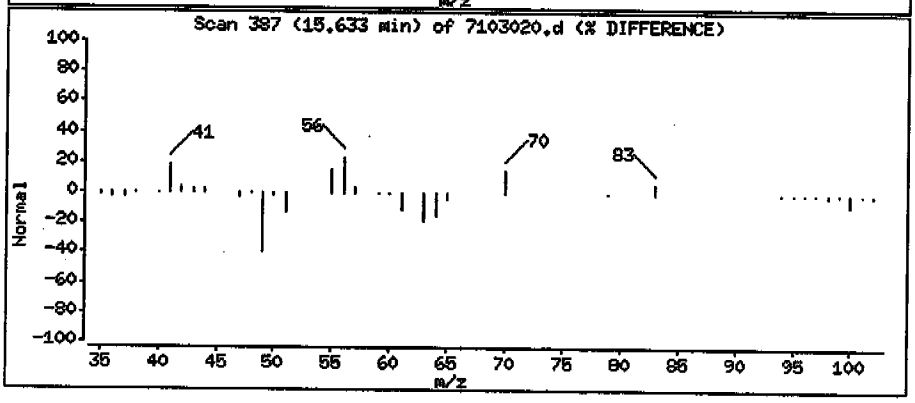












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

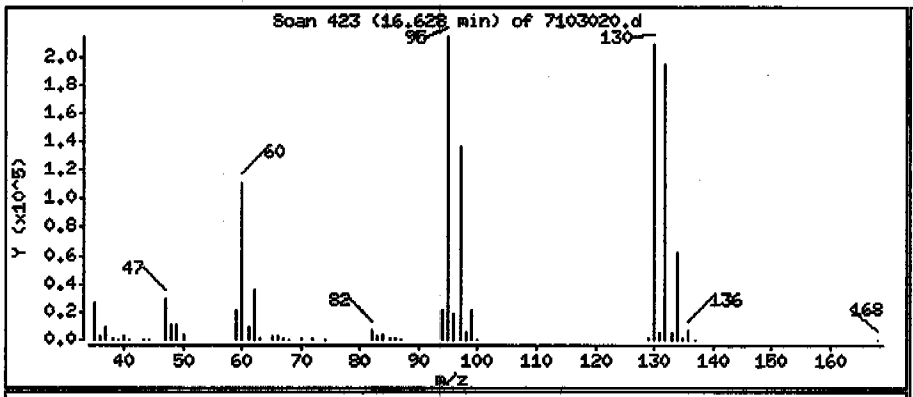
Operator: ab

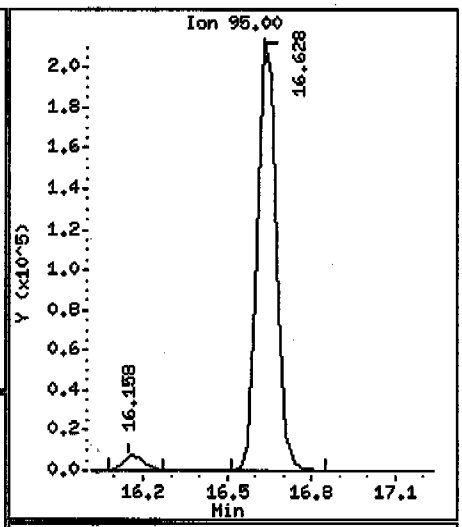
Column phase: RTx-624

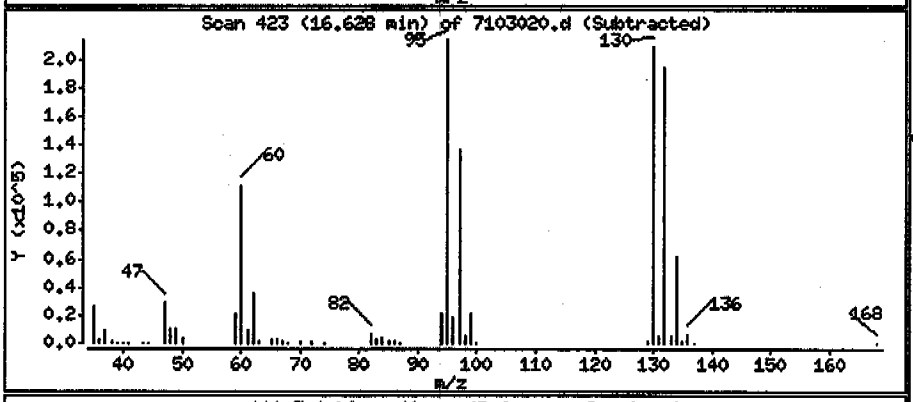
Column diameter: 0.53

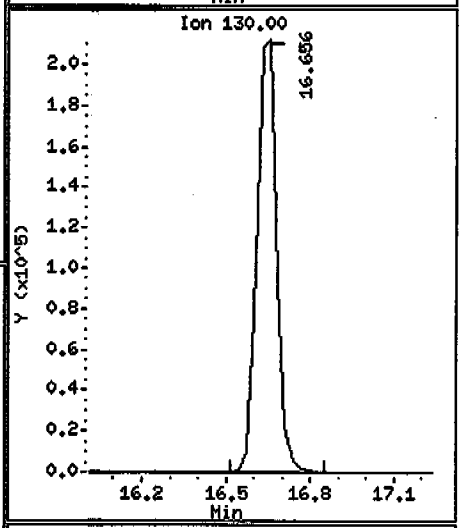
101 Trichloroethene

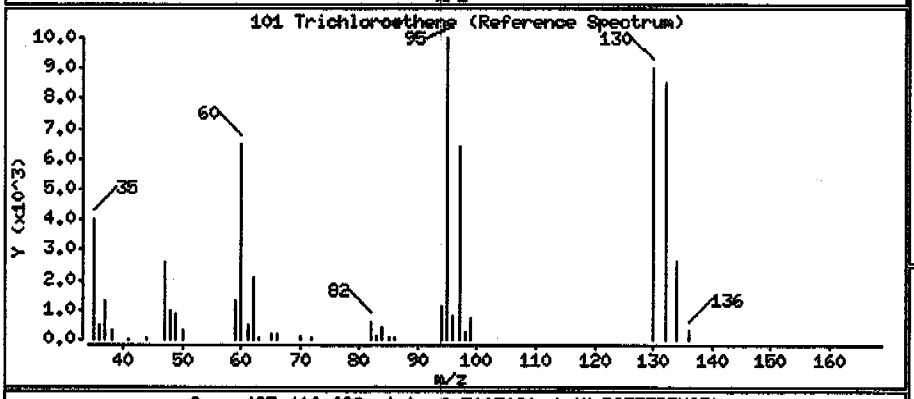
Concentration: 71.593 PPBV

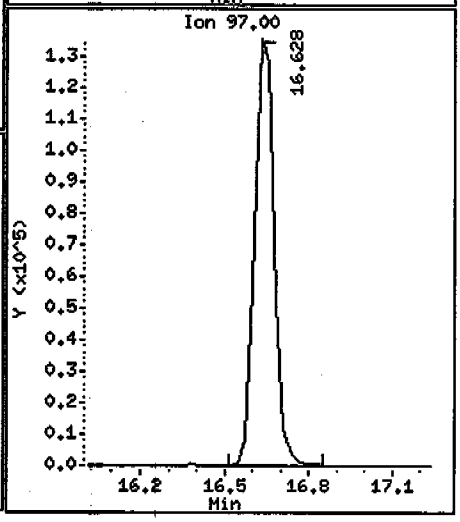


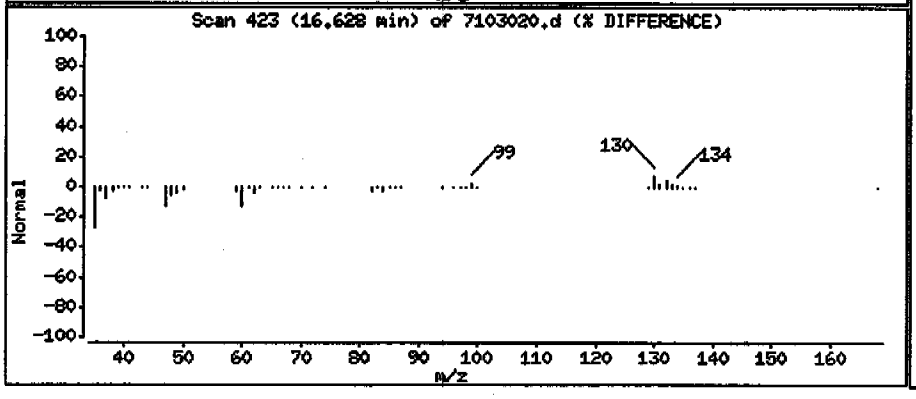












Data File: /chem/msd7.i/7-30oct.b/7103020.d

Date : 30-OCT-2007 22:45

Client ID:

Instrument: msd7.i

Sample Info: 200mL #13863

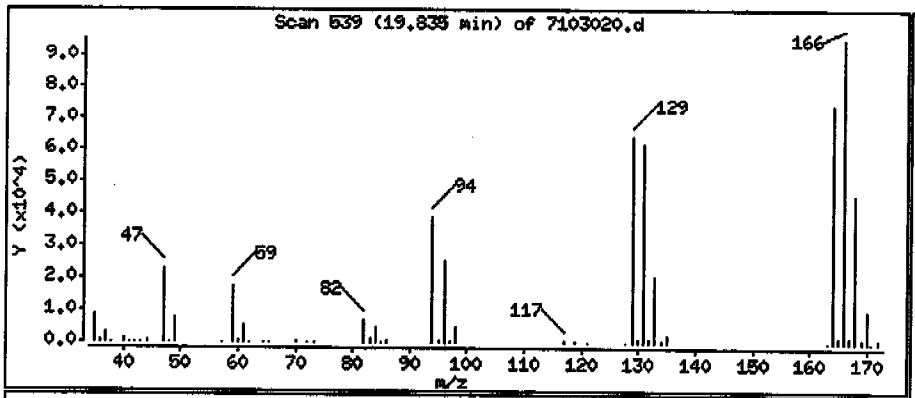
Operator: ab

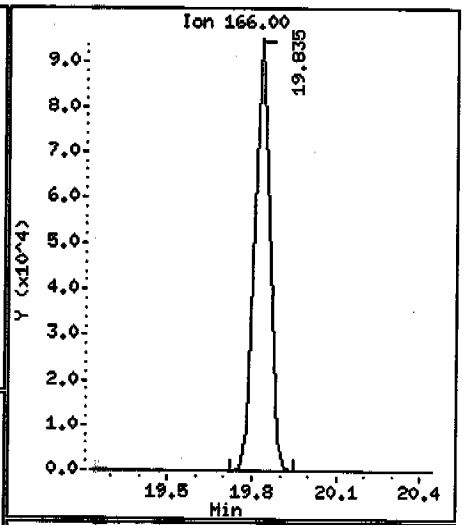
Column phase: RTx-624

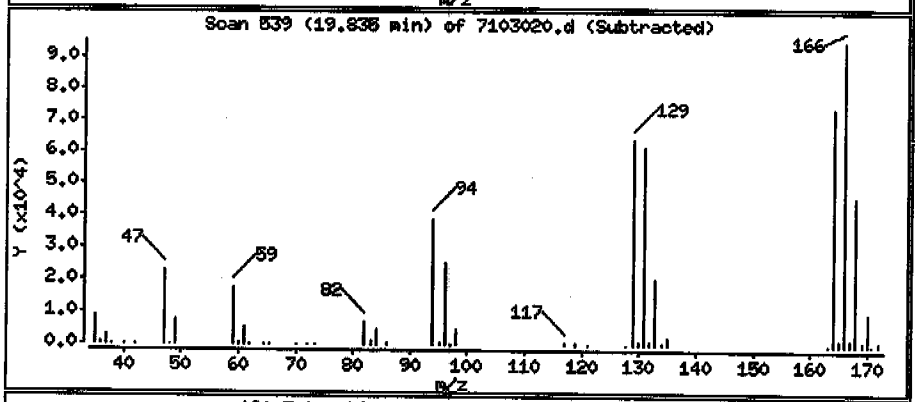
Column diameter: 0.53

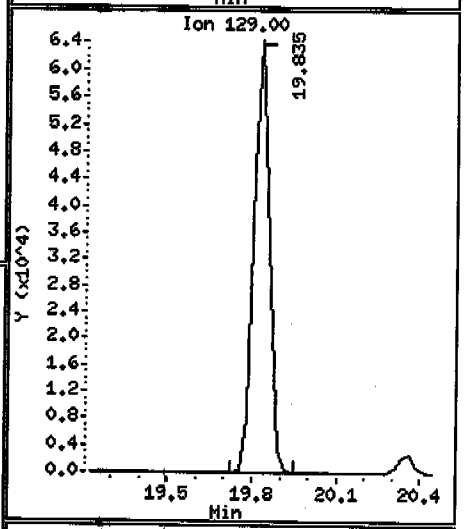
120 Tetrachloroethene

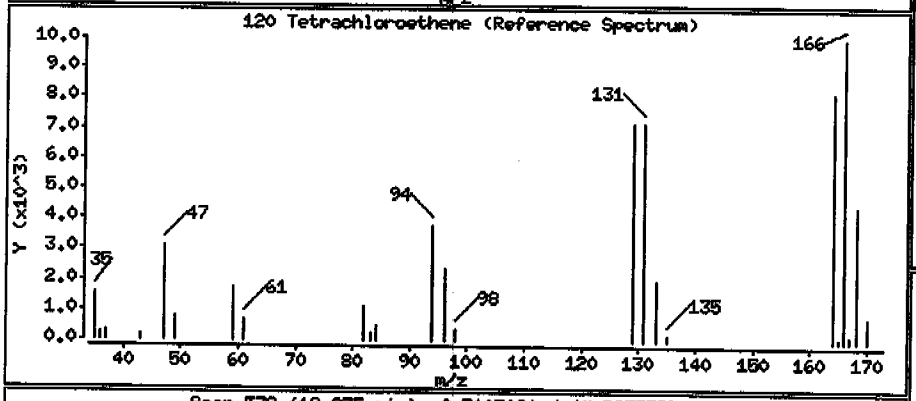
Concentration: 22.917 PPBV

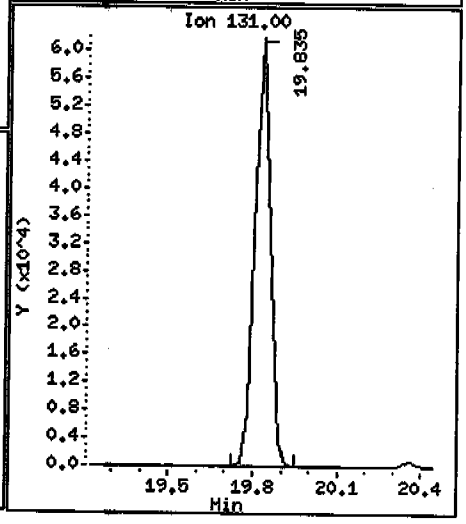


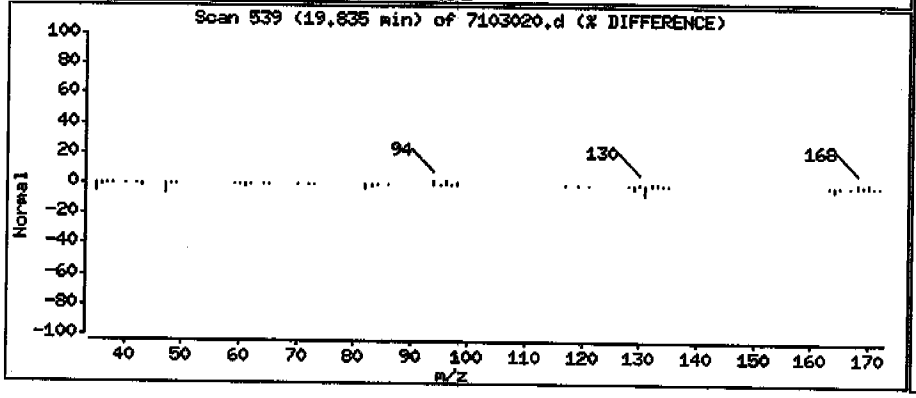












AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6816

Lab ID#: 0710567-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	0.98	4.5	4.9
1,1-Dichloroethene	0.92	1.0	3.6	4.0
Acetone	3.7	8.1	8.7	19
Methylene Chloride	0.92	170	3.2	590
Chloroform	0.92	55	4.5	270
1,1,1-Trichloroethane	0.92	0.99	5.0	5.4
Carbon Tetrachloride	0.92	30	5.8	190
1,2-Dichloroethane	0.92	1.4	3.7	5.9
Trichloroethene	0.92	59	4.9	320
Toluene	0.92	1.6	3.4	5.8
Tetrachloroethene	0.92	12	6.2	79
m,p-Xylene	0.92	1.3	4.0	5.7

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6816

Lab ID#: 0710567-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.92	0.98	4.5	4.9
Freon 114	0.92	Not Detected	6.4	Not Detected
Chloromethane	3.7	Not Detected	7.6	Not Detected
Vinyl Chloride	0.92	Not Detected	2.3	Not Detected
1,3-Butadiene	0.92	Not Detected	2.0	Not Detected
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.92	Not Detected	5.1	Not Detected
Ethanol	3.7	Not Detected	6.9	Not Detected
Freon 113	0.92	Not Detected	7.0	Not Detected
1,1-Dichloroethene	0.92	1.0	3.6	4.0
Acetone	3.7	8.1	8.7	19
2-Propanol	3.7	Not Detected	9.0	Not Detected
Carbon Disulfide	0.92	Not Detected	2.8	Not Detected
Methylene Chloride	0.92	170	3.2	590
Methyl tert-butyl ether	0.92	Not Detected	3.3	Not Detected
trans-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Hexane	0.92	Not Detected	3.2	Not Detected
1,1-Dichloroethane	0.92	Not Detected	3.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.92	Not Detected	3.6	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.92	55	4.5	270
1,1,1-Trichloroethane	0.92	0.99	5.0	5.4
Cyclohexane	0.92	Not Detected	3.1	Not Detected
Carbon Tetrachloride	0.92	30	5.8	190
Benzene	0.92	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.92	1.4	3.7	5.9
Heptane	0.92	Not Detected	3.7	Not Detected
Trichloroethene	0.92	59	4.9	320
1,2-Dichloropropane	0.92	Not Detected	4.2	Not Detected
1,4-Dioxane	3.7	Not Detected	13	Not Detected
Bromodichloromethane	0.92	Not Detected	6.1	Not Detected
cis-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
4-Methyl-2-pentanone	0.92	Not Detected	3.7	Not Detected
Toluene	0.92	1.6	3.4	5.8
trans-1,3-Dichloropropene	0.92	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	0.92	Not Detected	5.0	Not Detected
Tetrachloroethene	0.92	12	6.2	79

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6816

Lab ID#: 0710567-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	3.7	Not Detected	15	Not Detected
Dibromochloromethane	0.92	Not Detected	7.8	Not Detected
1,2-Dibromoethane (EDB)	0.92	Not Detected	7.0	Not Detected
Chlorobenzene	0.92	Not Detected	4.2	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
m,p-Xylene	0.92	1.3	4.0	5.7
o-Xylene	0.92	Not Detected	4.0	Not Detected
Styrene	0.92	Not Detected	3.9	Not Detected
Bromoform	0.92	Not Detected	9.4	Not Detected
1,1,2,2-Tetrachloroethane	0.92	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.92	Not Detected	4.5	Not Detected
1,3,5-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,2,4-Trimethylbenzene	0.92	Not Detected	4.5	Not Detected
1,3-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,4-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
alpha-Chlorotoluene	0.92	Not Detected	4.7	Not Detected
1,2-Dichlorobenzene	0.92	Not Detected	5.5	Not Detected
1,2,4-Trichlorobenzene	3.7	Not Detected	27	Not Detected
Hexachlorobutadiene	3.7	Not Detected	39	Not Detected
Chlorodifluoromethane	3.7	Not Detected	13	Not Detected
Methanol	92	Not Detected	120	Not Detected
n-Butanol	3.7	Not Detected	11	Not Detected
Propylene	3.7	Not Detected	6.3	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	103	70-130

0076

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-31oct.b/7103106.d
Lab Smp Id: 0710567-04A
Inj Date : 31-OCT-2007 12:19
Operator : cb Inst ID: msd7.i
Smp Info : 200mL #434
Misc Info : 8.0"Hg --> 5psi
Comment :
Method : /chem/msd7.i/7-31oct.b/t14q018c.m
Meth Date : 31-Oct-2007 16:21 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	422872	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	317411			26.85- 126.85	75.06
14.416	14.388 (1.000)	49	726897			148.03- 248.03	171.90
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1364399	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	203731			0.00- 65.22	14.93
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	964783	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	512539			4.45- 104.45	53.12
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	581601	25.6016	25.602	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	273457			2.91- 102.91	47.02
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1095882	22.6262	22.626	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	119162			0.00- 61.46	10.87

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	749834			19.18- 119.18	68.42
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	591896	25.7819	25.782	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	690535			66.59- 166.59	116.66
23.347	23.347 (1.093)	176	575223			46.44- 146.44	97.18
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.786	5.729 (0.401)	85	35927	0.53763	0.9838	80.00- 120.00	100.00
5.786	5.729 (0.401)	87	11620			0.00- 83.07	32.34
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	20447	0.55419	1.014	80.00- 120.00	100.00
10.351	10.324 (0.718)	96	11647			7.00- 107.00	56.97
10.324	10.324 (0.716)	98	7747			0.00- 86.85	37.89
45 Acetone					CAS #: 67-64-1		
10.517	10.490 (0.730)	58	50572	4.43450	8.115	80.00- 120.00	100.00
10.517	10.490 (0.730)	43	188843			247.10- 347.10	373.41
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	2530295	93.2797	170.70	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	1614610			13.10- 113.10	63.81
11.485	11.457 (0.797)	51	761841			0.00- 80.85	30.11
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	1282586	30.1240	55.127	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	846572			14.74- 114.74	66.01
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	23193	0.54094	0.9899	80.00- 120.00	100.00
14.803	14.831 (1.027)	99	14656			14.60- 114.60	63.19
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	657325	16.3550	29.930	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	685483			53.94- 153.94	104.28
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.632 (0.967)	62	22877	0.79424	1.453	80.00- 120.00	100.00
15.633	15.632 (0.967)	64	7346			0.00- 82.89	32.11
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	781457	32.4511	59.386	80.00- 120.00	100.00
16.656	16.628 (1.031)	130	801192			52.82- 152.82	102.53
16.628	16.628 (1.029)	97	504674			14.78- 114.78	64.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	50318	0.84742	1.551	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	33278			12.87- 112.87	66.14
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	164391	6.34286	11.607	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	111656			19.71- 119.71	67.92
19.835	19.835 (0.929)	131	108502			17.66- 117.66	66.00
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	20161	0.72297	1.323	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	41677			145.05- 245.05	206.71

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103106.d
Lab Smp Id: 0710567-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 8.0"Hg --> 5psi

Calibration Date: 31-OCT-2007
Calibration Time: 09:03

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	419527	251716	587338	422872	0.80
97 1,4-Difluorobenze	1400939	840563	1961315	1364399	-2.61
126 Chlorobenzene-d5	1205049	723029	1687069	964783	-19.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 0710567-04A
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 8.0"Hg --> 5psi

Client SDG: 7-31oct
Fraction: VOA

Operator: cb
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.602	102.41	70-130
$ 113 Toluene-d8	25.000	22.626	90.50	70-130
$ 137 Bromofluorobenzene	25.000	25.782	103.13	70-130

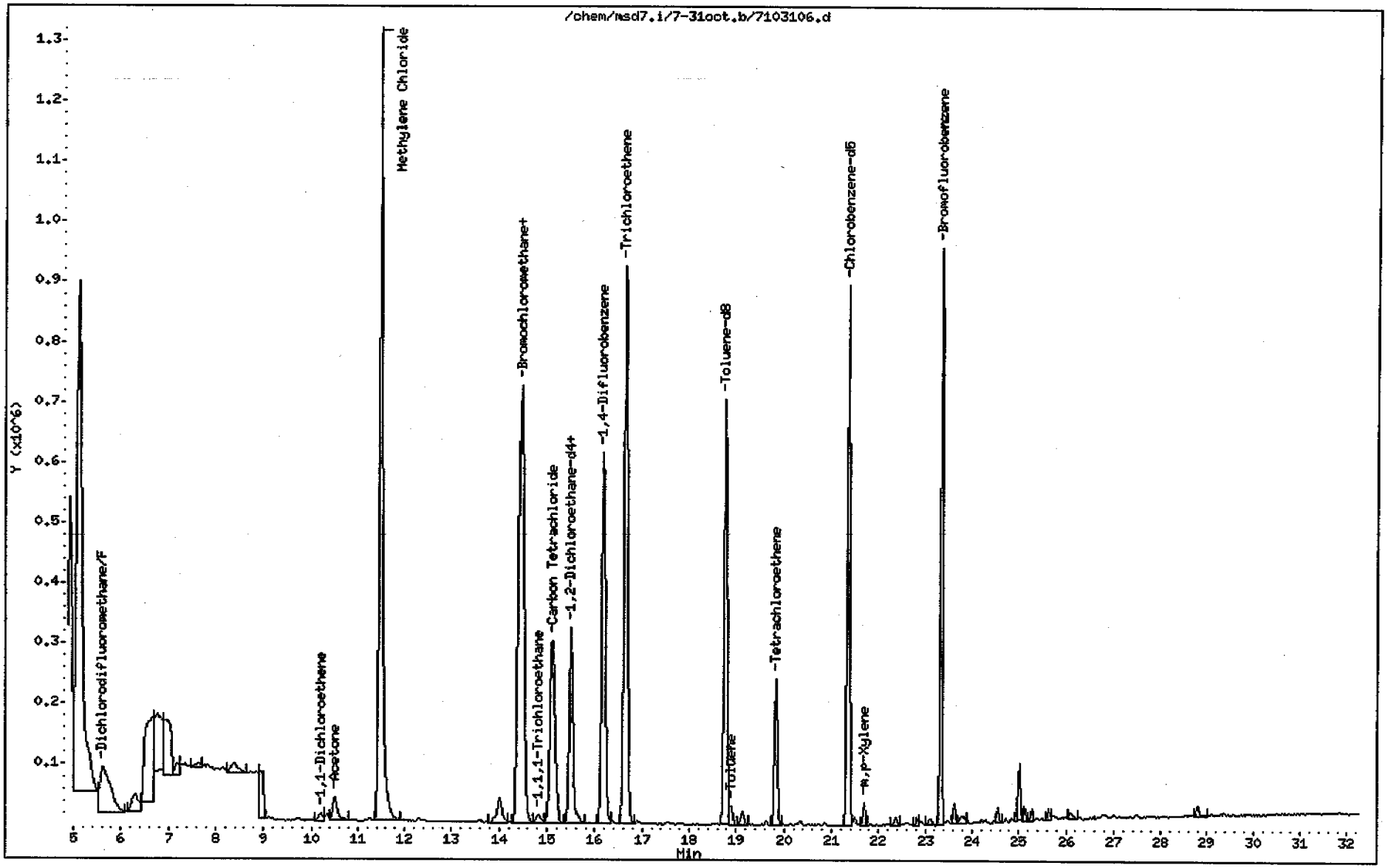
Data File: /chem/msd7.i/7-31oct.b/7103106.d
Date : 31-OCT-2007 12:19
Client ID:
Sample Info: 200mL #434

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0082



Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

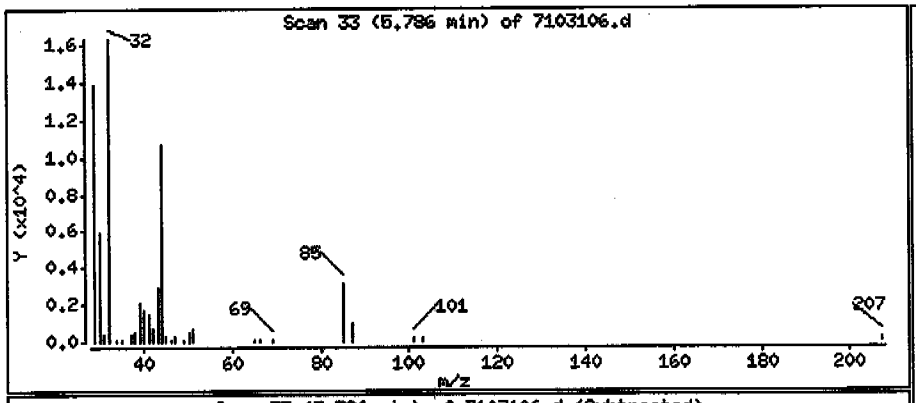
Operator: cb

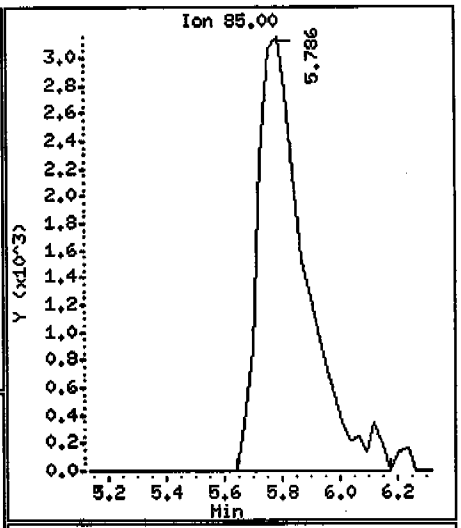
Column phase: RTx-624

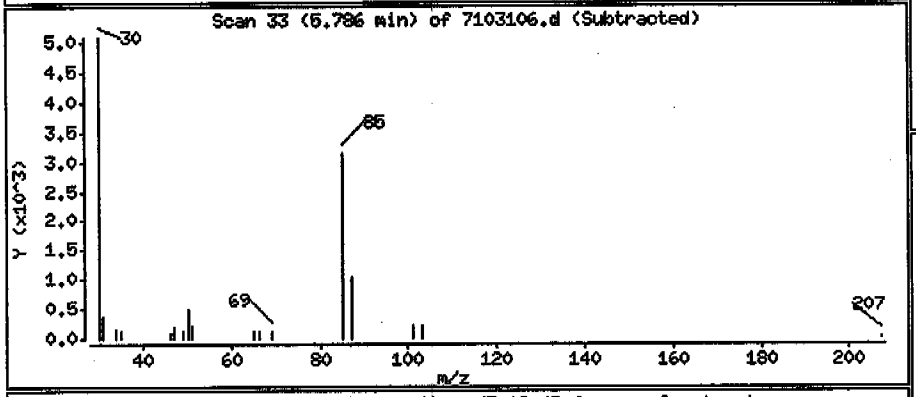
Column diameter: 0.53

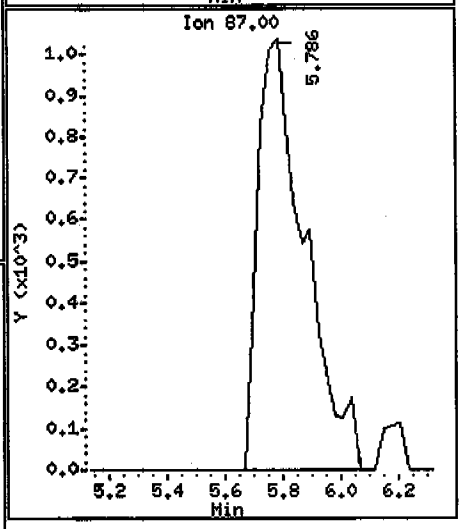
12 Dichlorodifluoromethane/Fr12

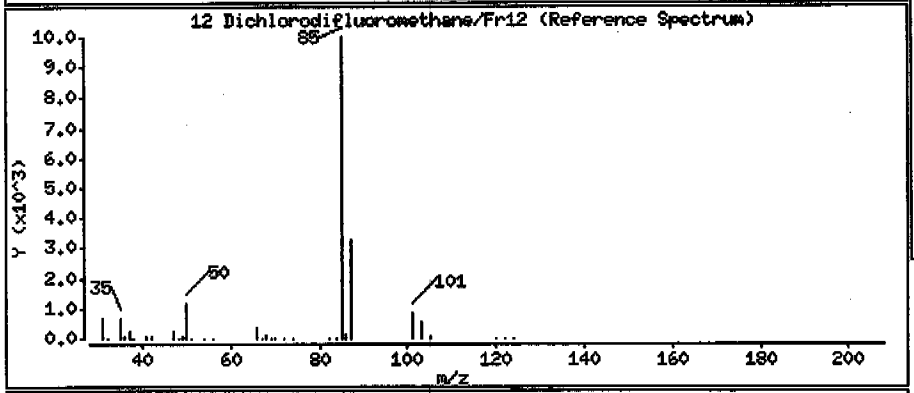
Concentration: 0.9838 PPBV

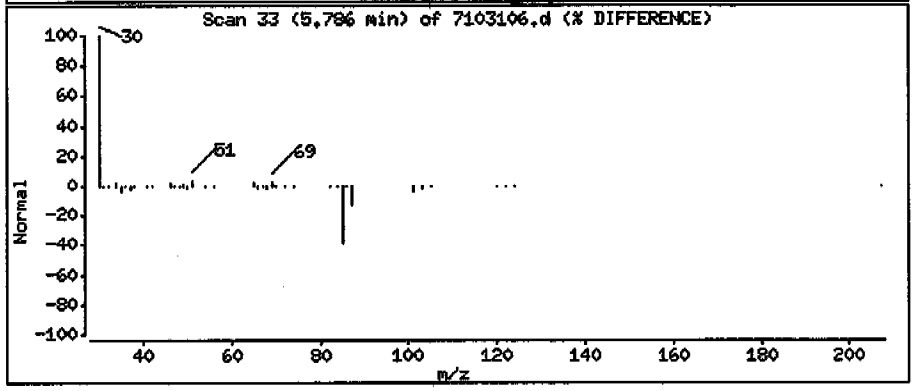












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

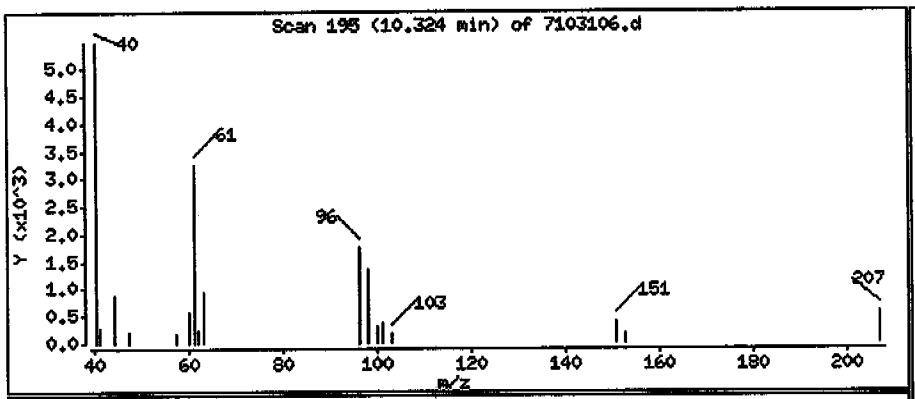
Operator: cb

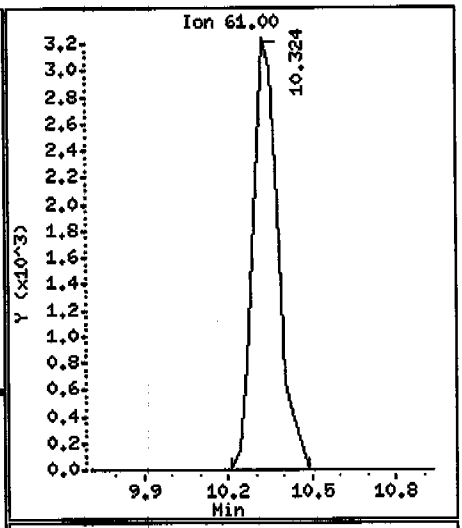
Column phase: RTx-624

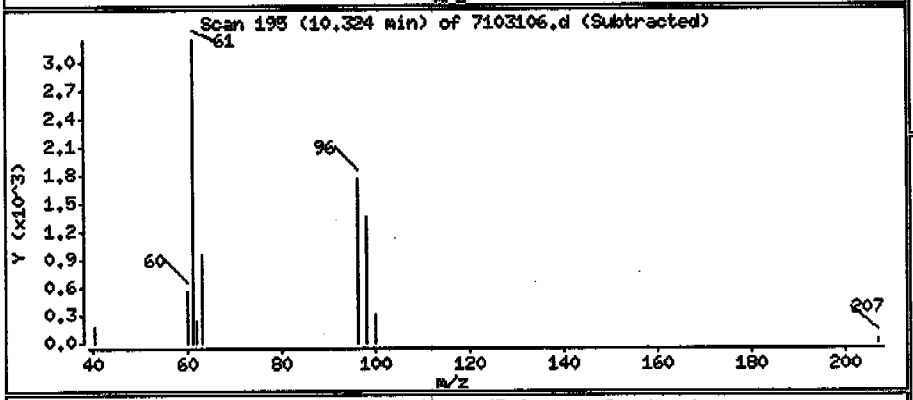
Column diameter: 0.53

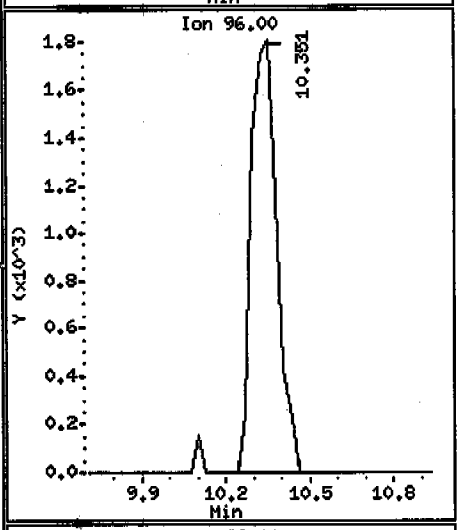
43 1,1-Dichloroethene

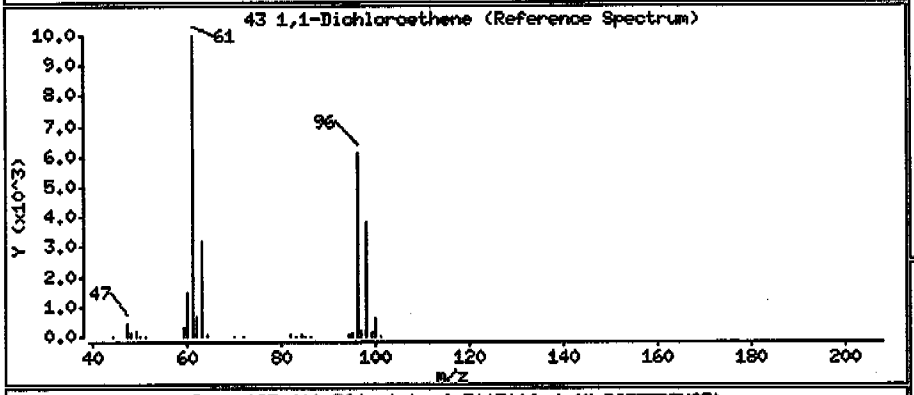
Concentration: 1.014 PPBV

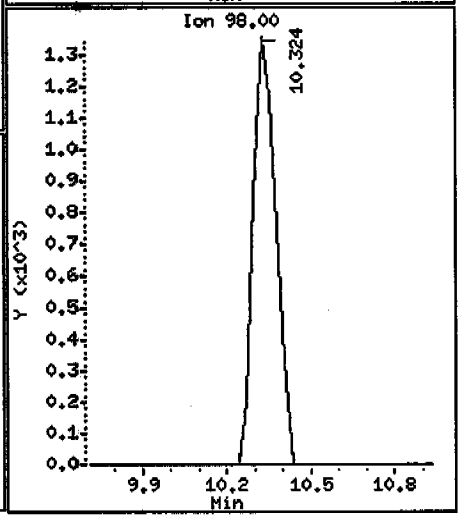


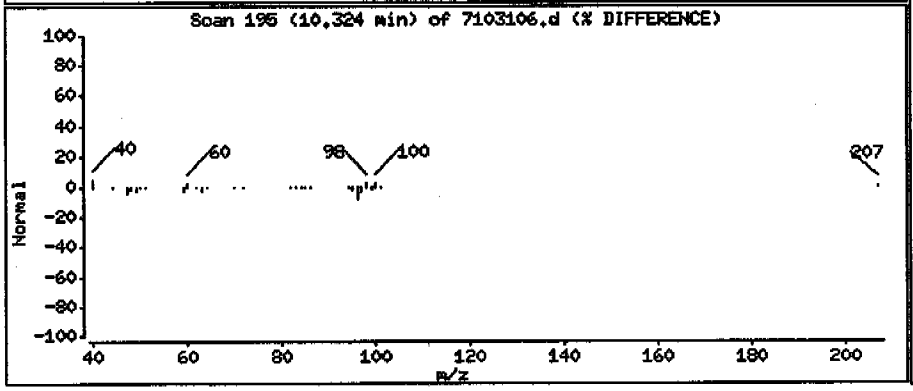












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Sample Info: 200mL #434

Instrument: msd7.i

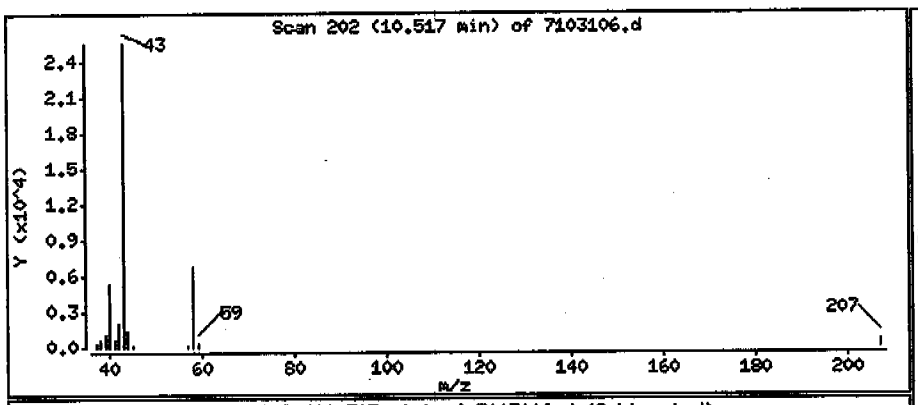
Operator: cb

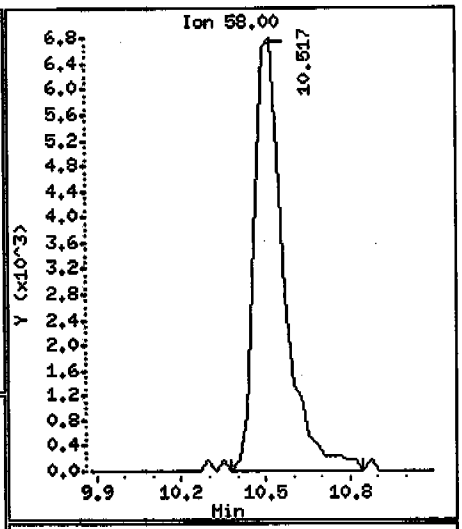
Column phase: RTx-624

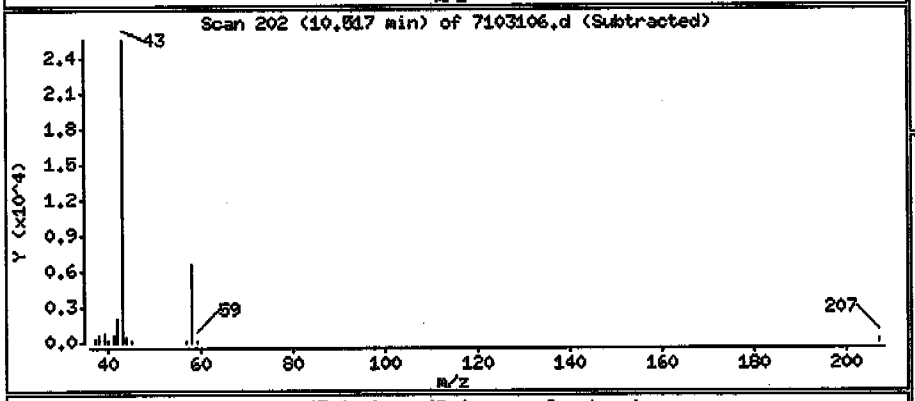
Column diameter: 0.53

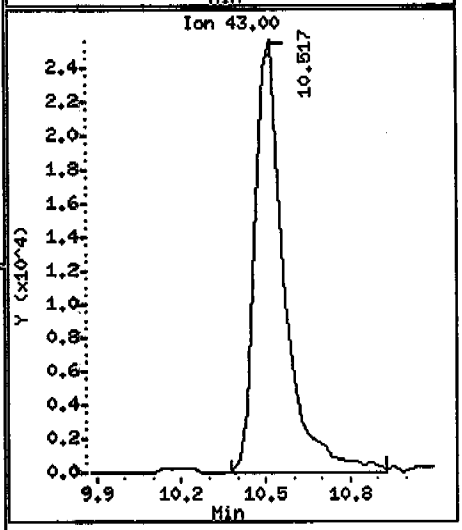
45 Acetone

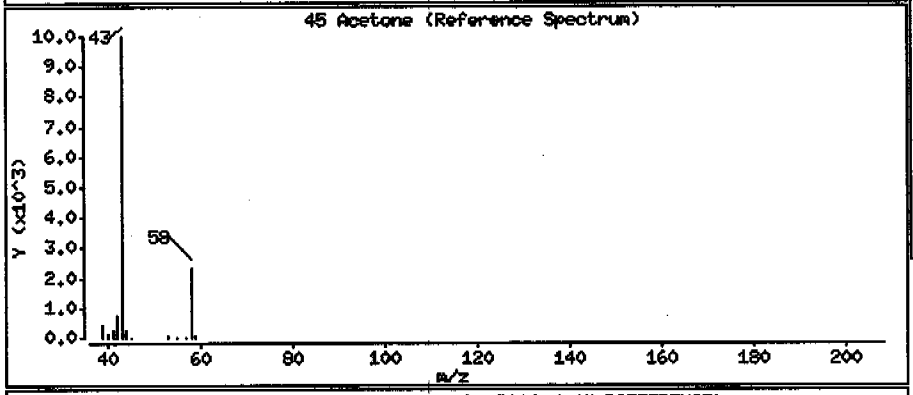
Concentration: 8.115 PPBV

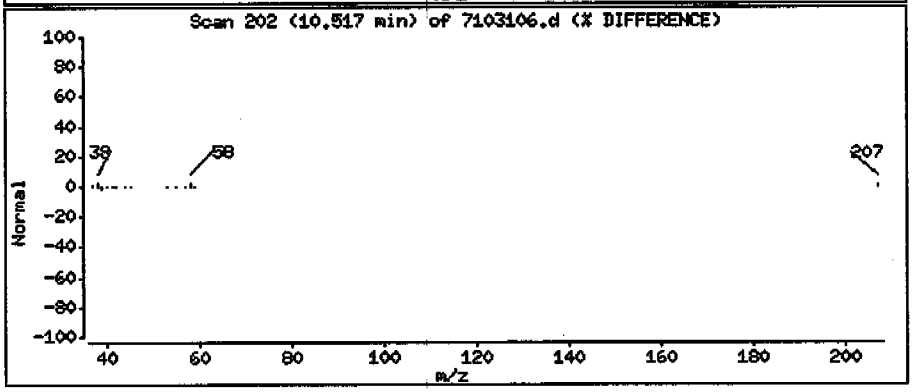












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

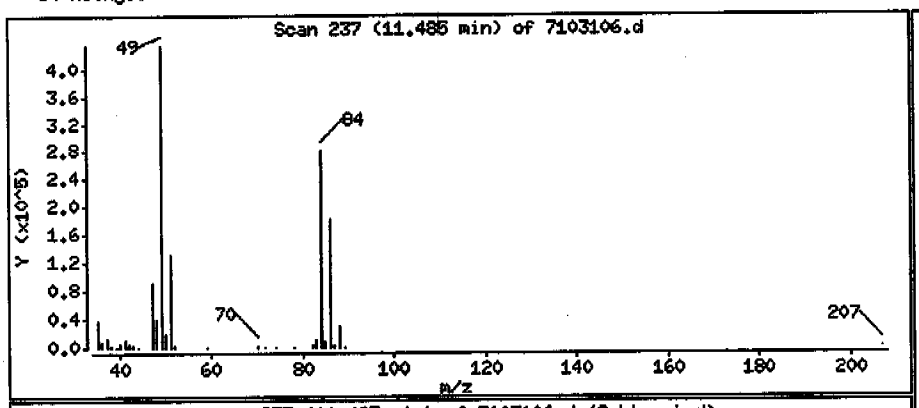
Operator: cb

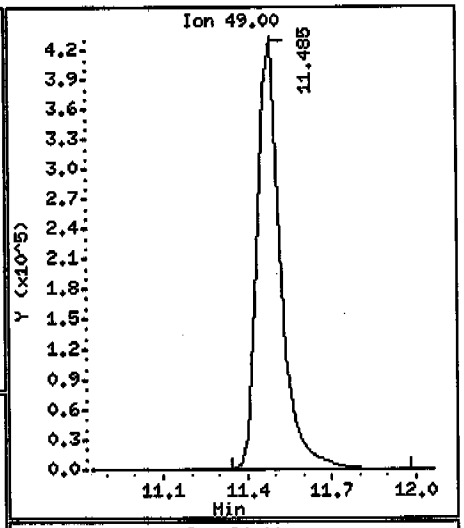
Column phase: RTx-624

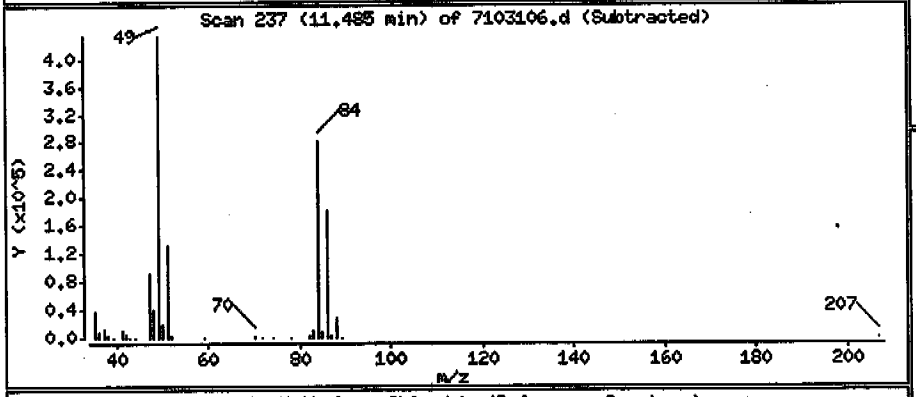
Column diameter: 0.53

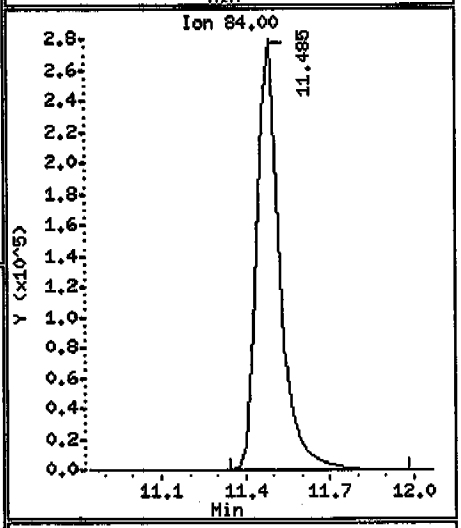
54 Methylene Chloride

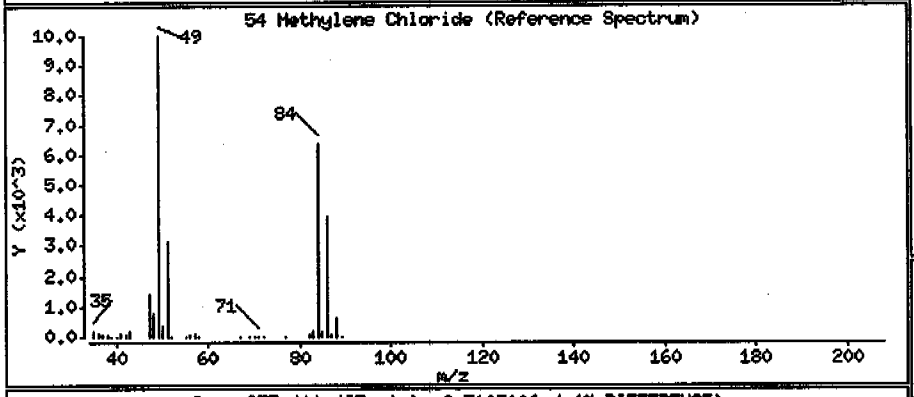
Concentration: 170.70 PPBV

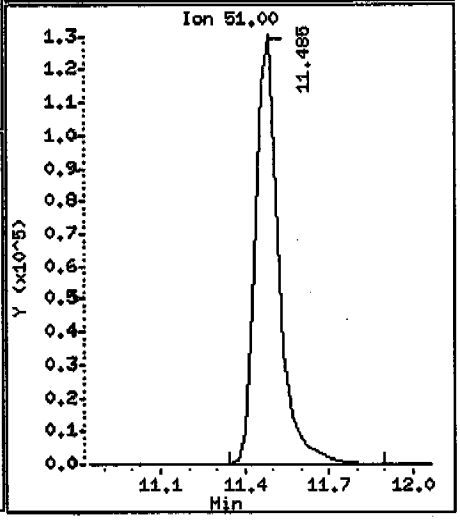


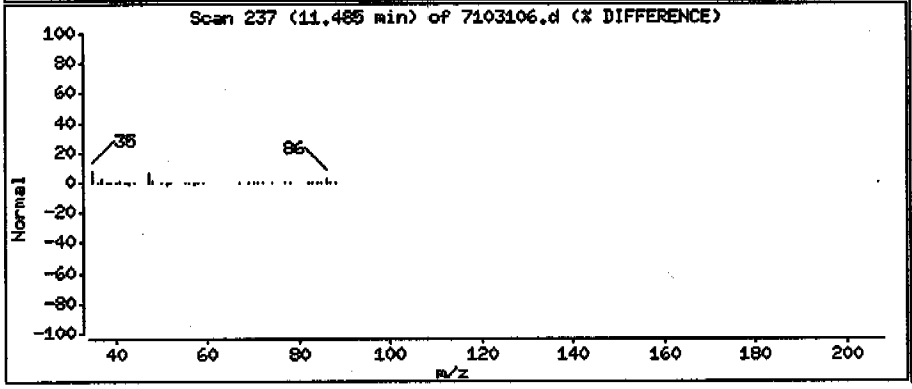












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

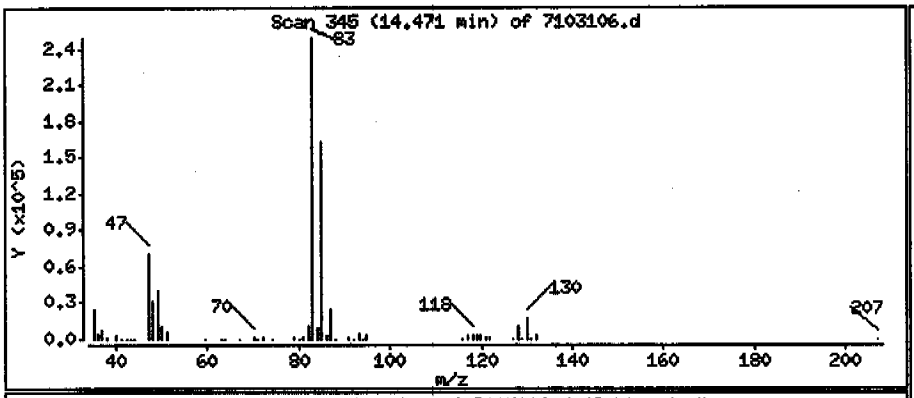
Operator: cb

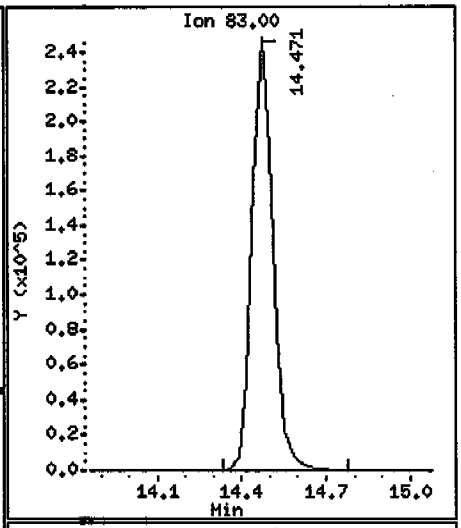
Column phase: RTx-624

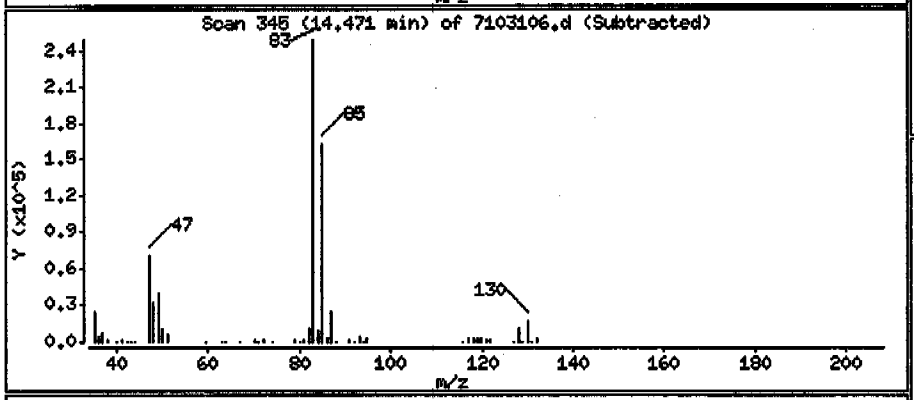
Column diameter: 0.53

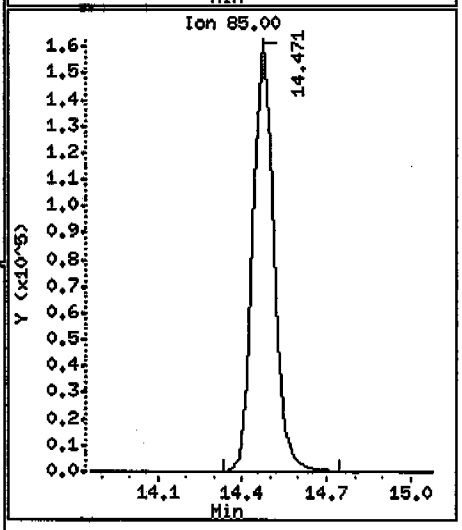
82 Chloroform

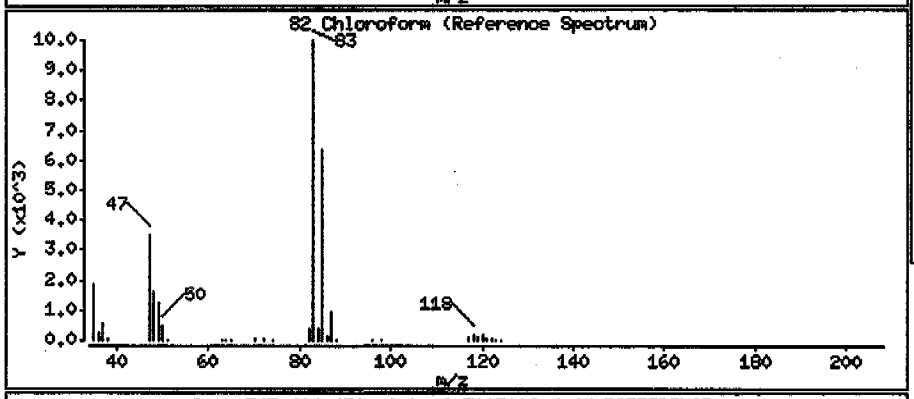
Concentration: 55.127 PPBV

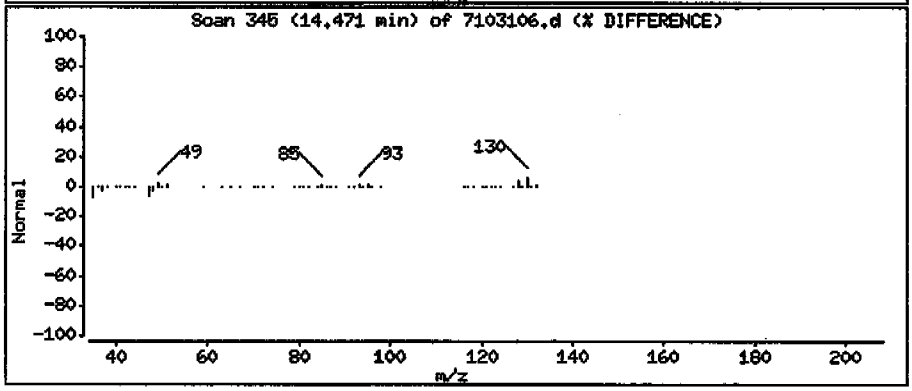












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

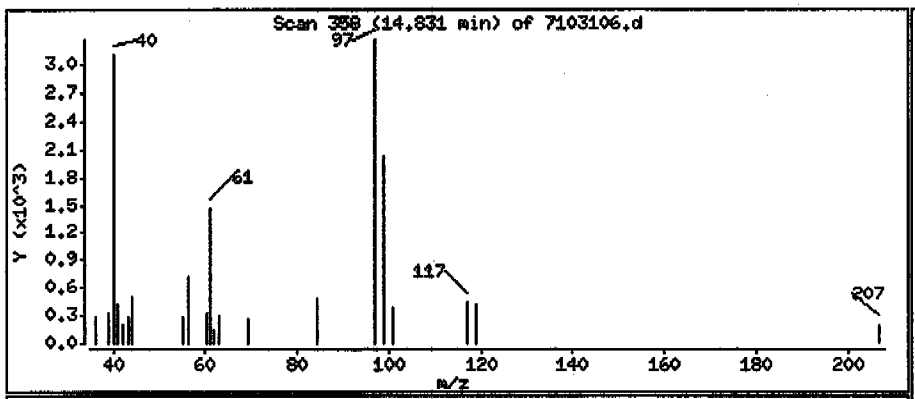
Operator: cb

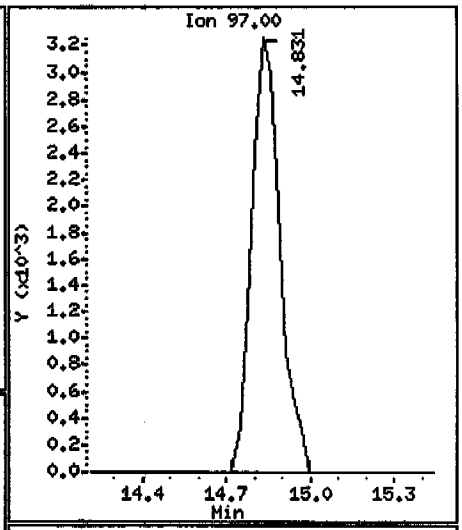
Column phase: RTx-624

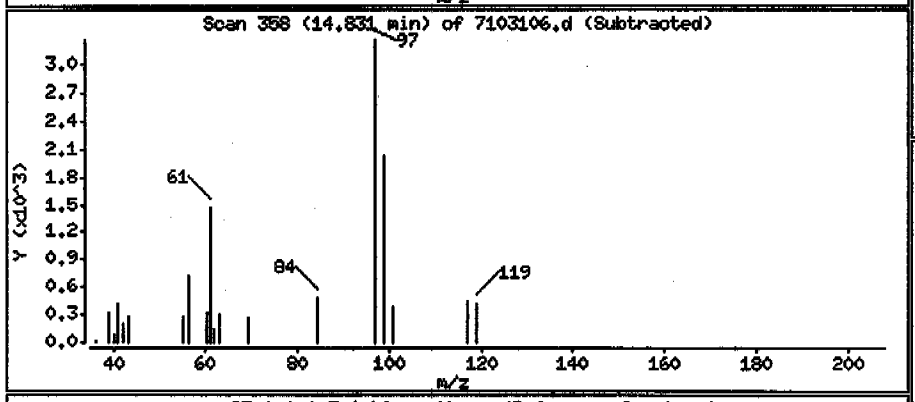
Column diameter: 0.53

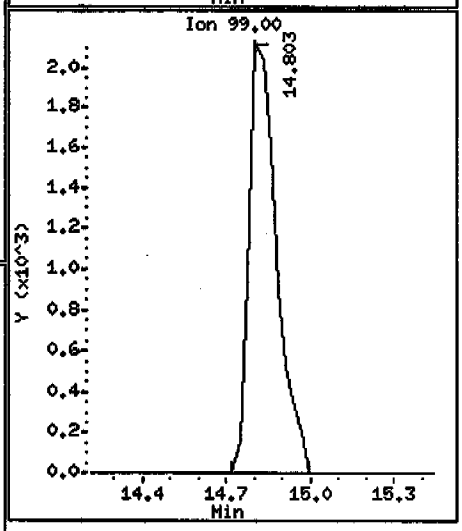
83 1,1,1-Trichloroethane

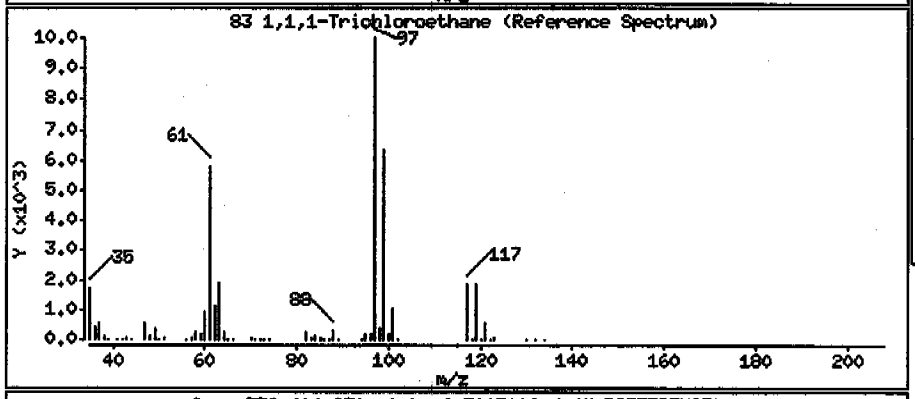
Concentration: 0.9899 PPBV

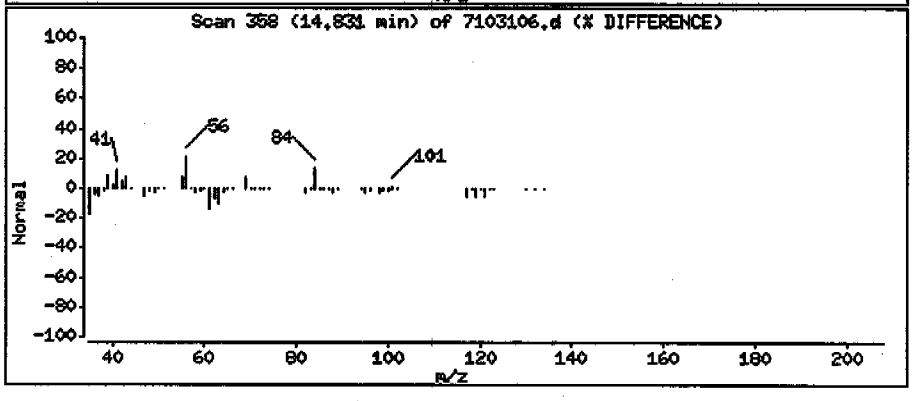












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

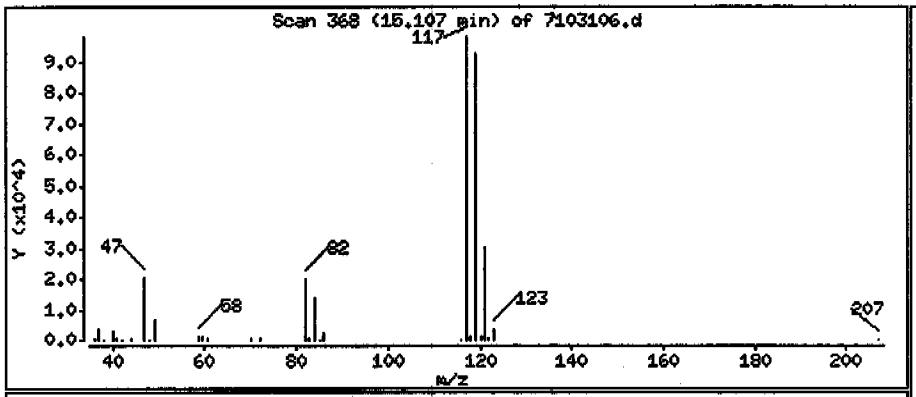
Operator: cb

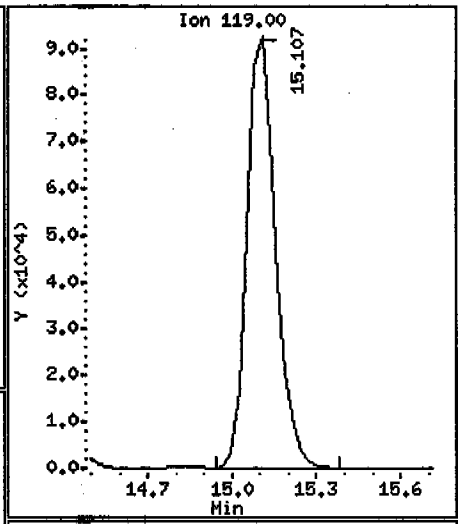
Column phase: RTx-624

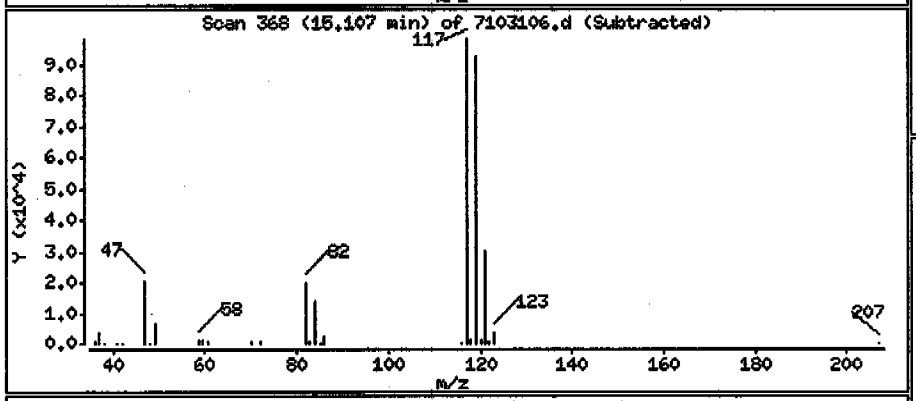
Column diameter: 0.53

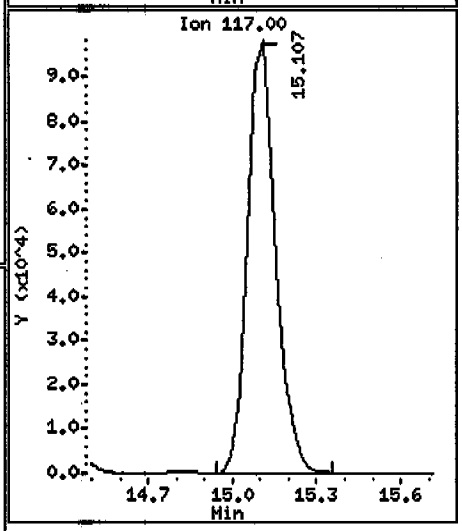
87 Carbon Tetrachloride

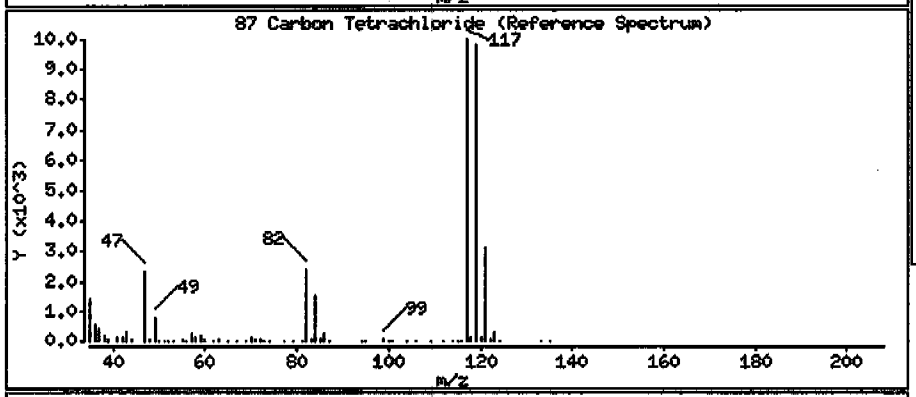
Concentration: 29.930 PPBV

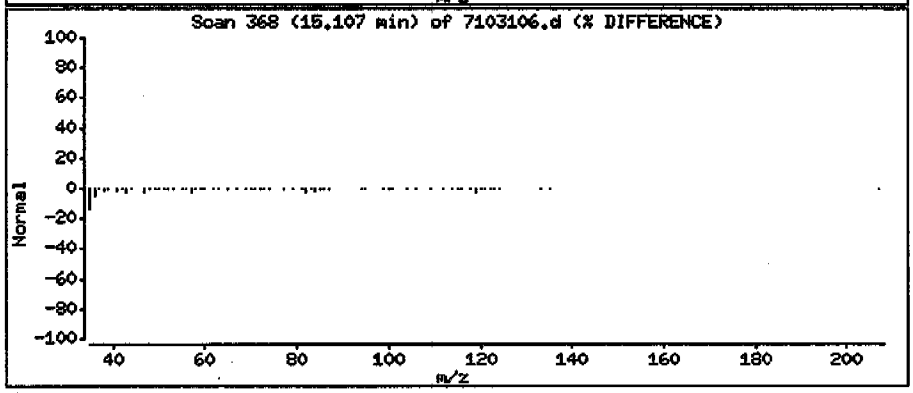












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Sample Info: 200mL #434

Instrument: msd7.i

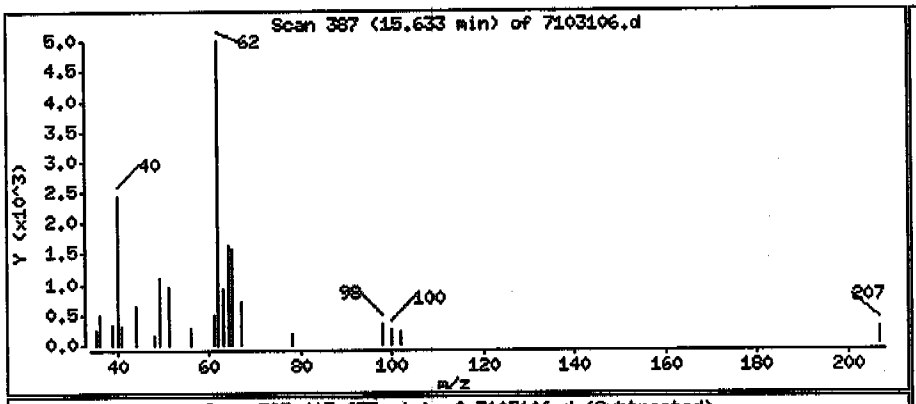
Operator: cb

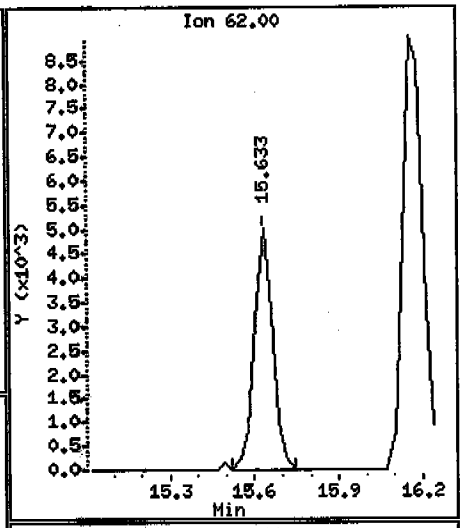
Column phase: RTx-624

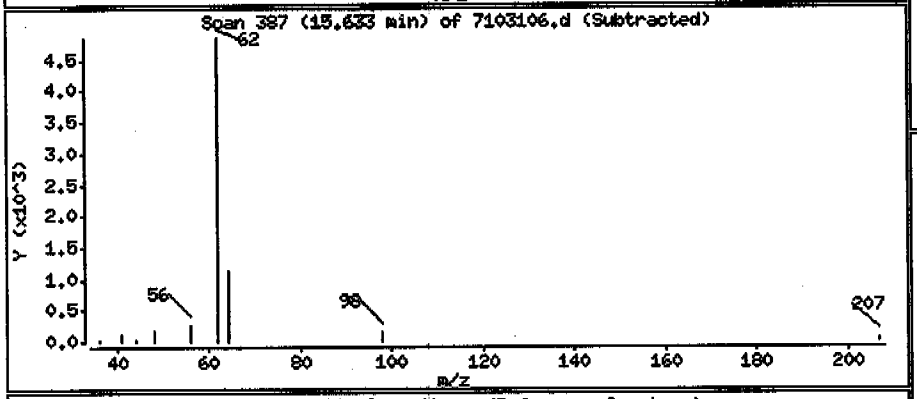
Column diameter: 0.53

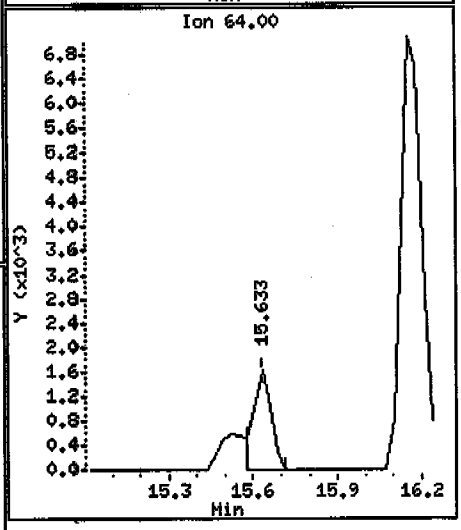
93 1,2-Dichloroethane

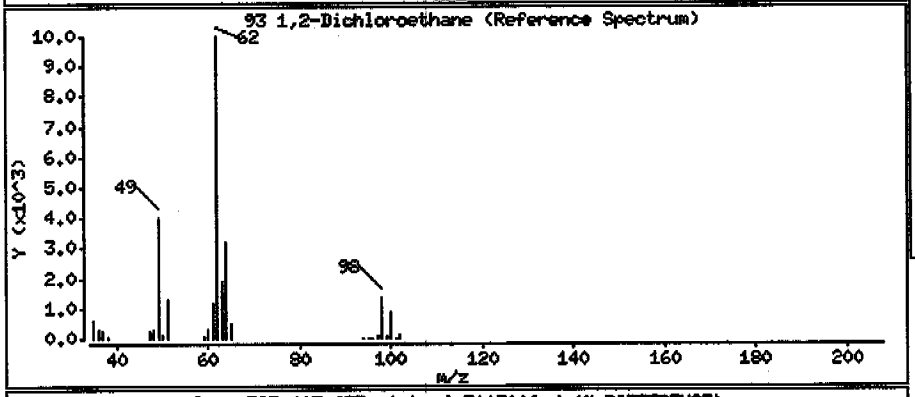
Concentration: 1.453 PPBV

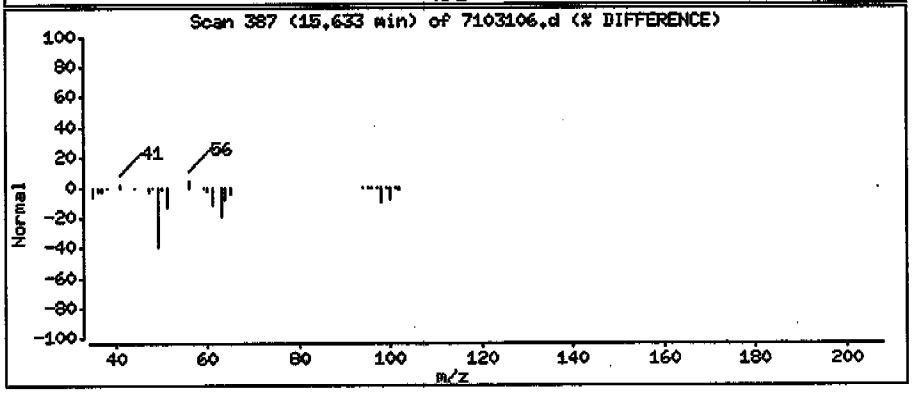












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

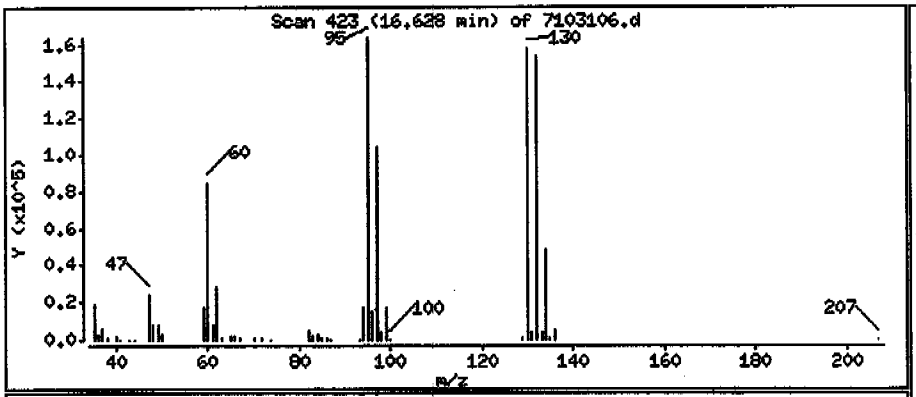
Operator: cb

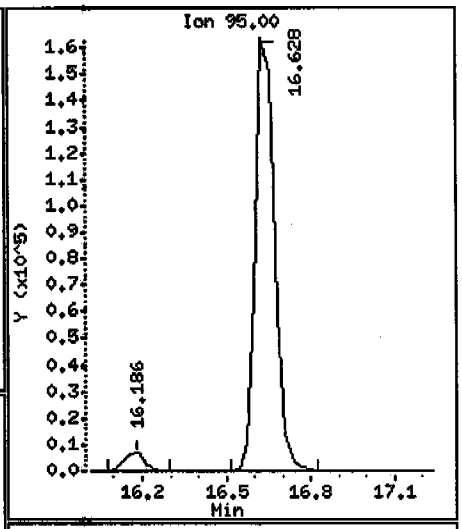
Column phase: RTx-624

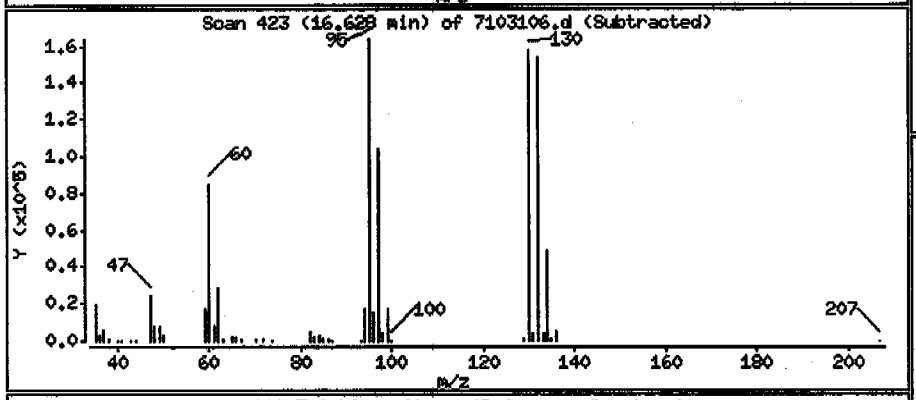
Column diameter: 0.53

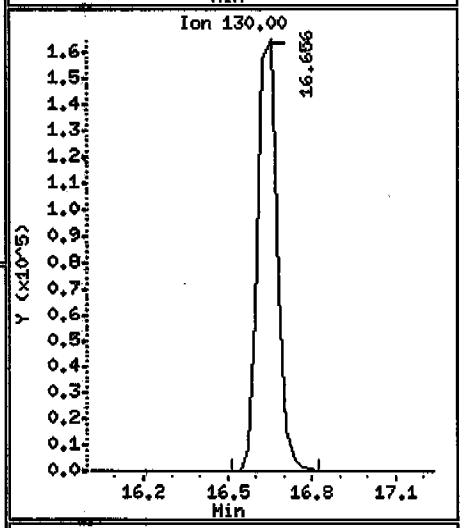
101 Trichloroethene

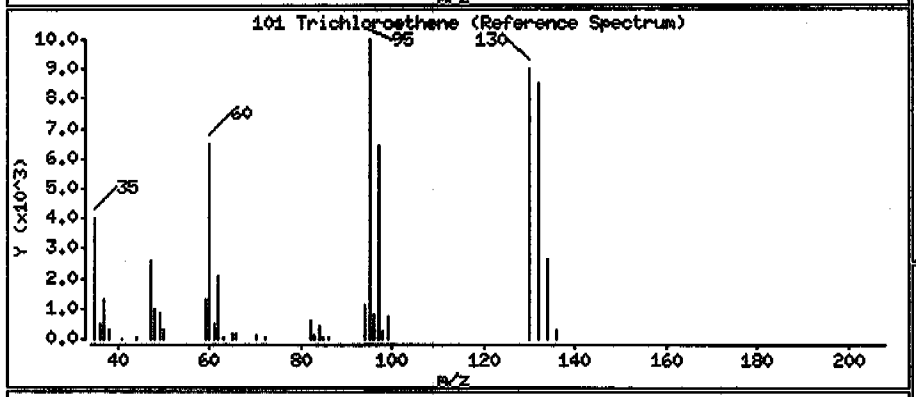
Concentration: 59.386 PPBV

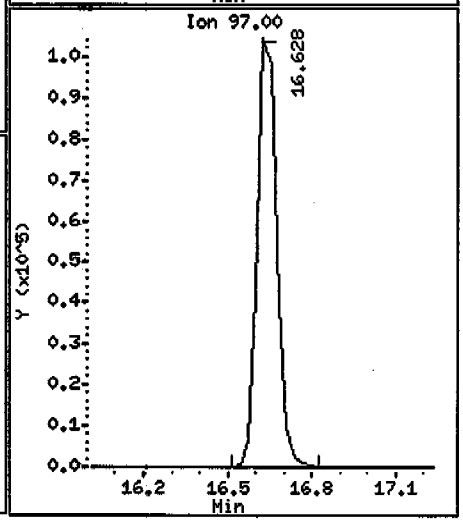


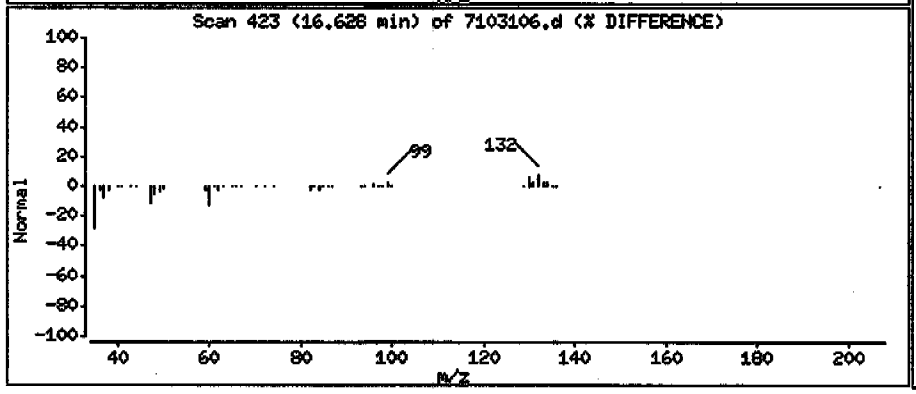












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

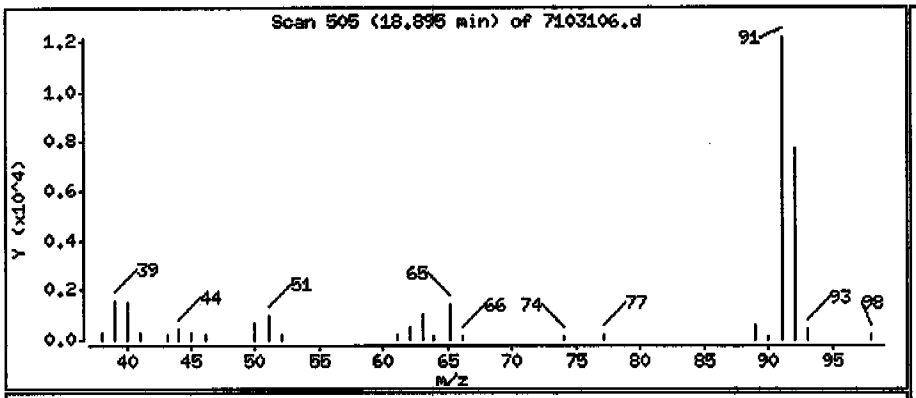
Operator: cb

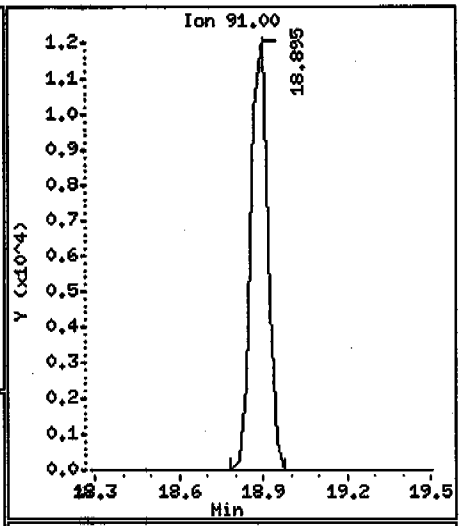
Column phase: RTx-624

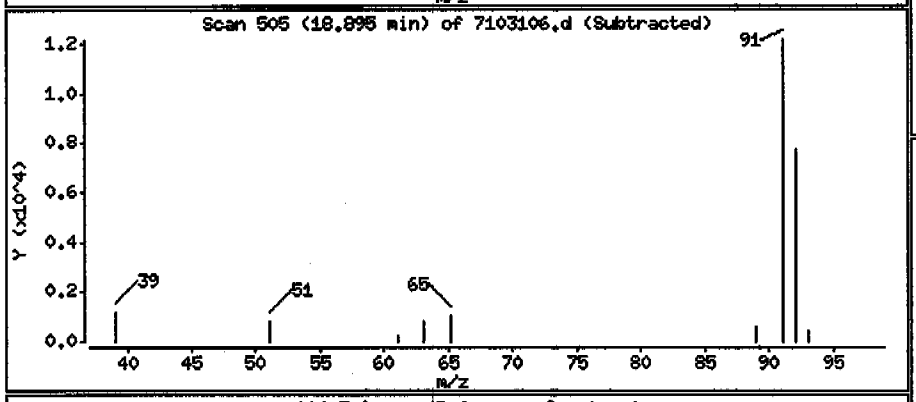
Column diameter: 0.53

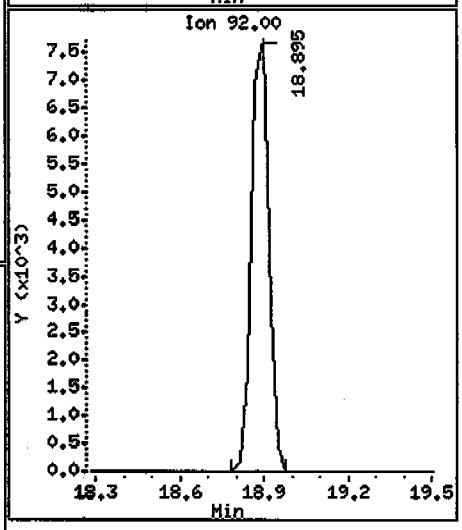
114 Toluene

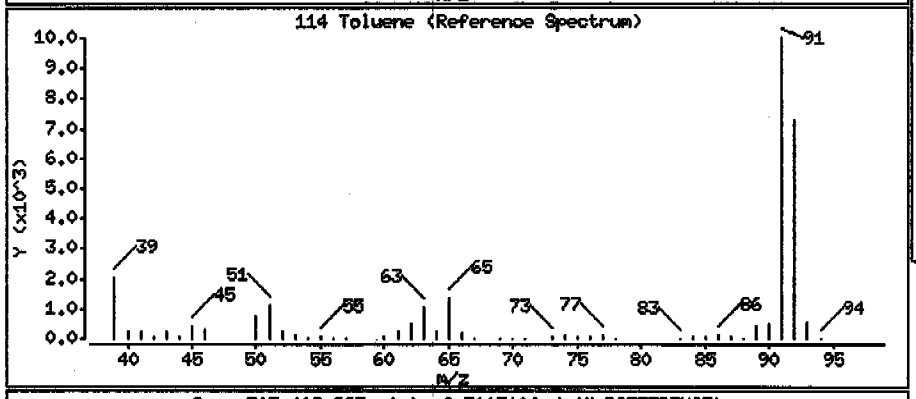
Concentration: 1.551 PPBV

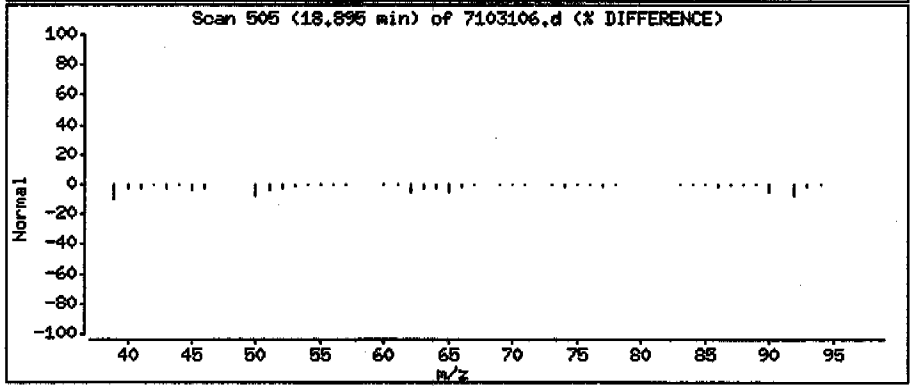












Data File: /ohem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

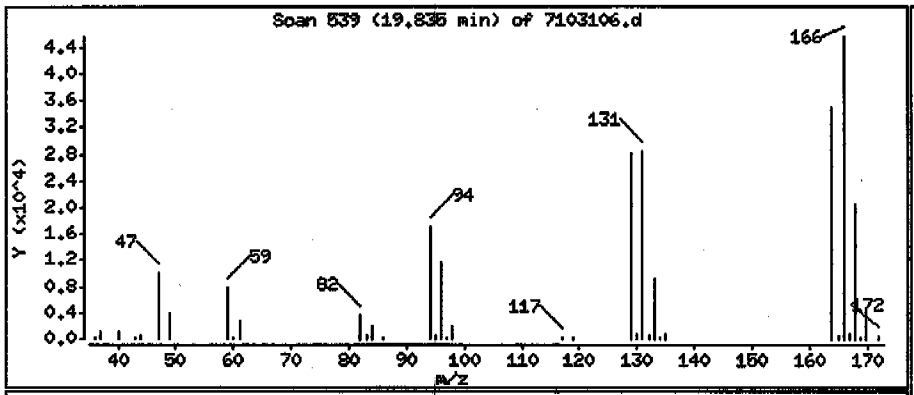
Operator: cb

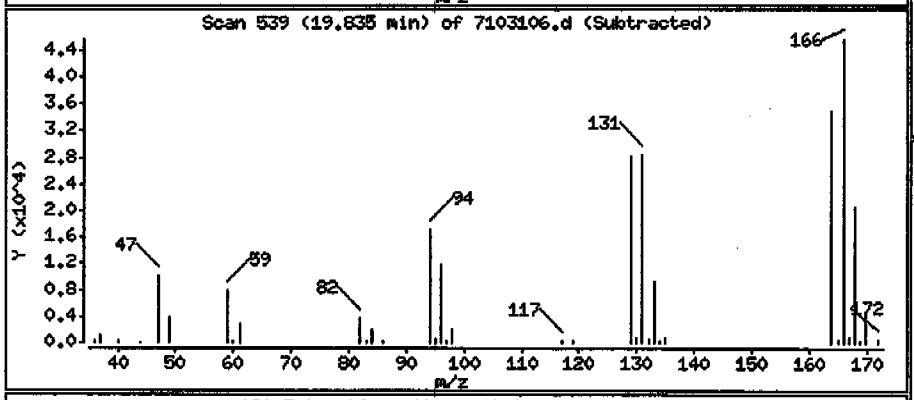
Column phase: RTx-624

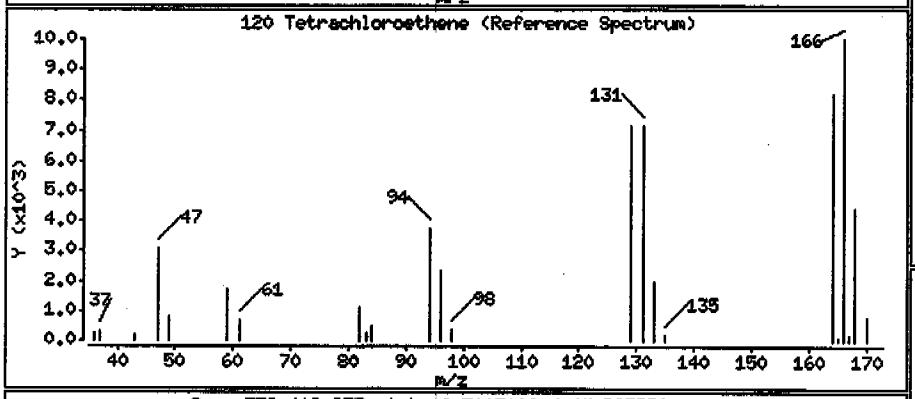
Column diameter: 0.53

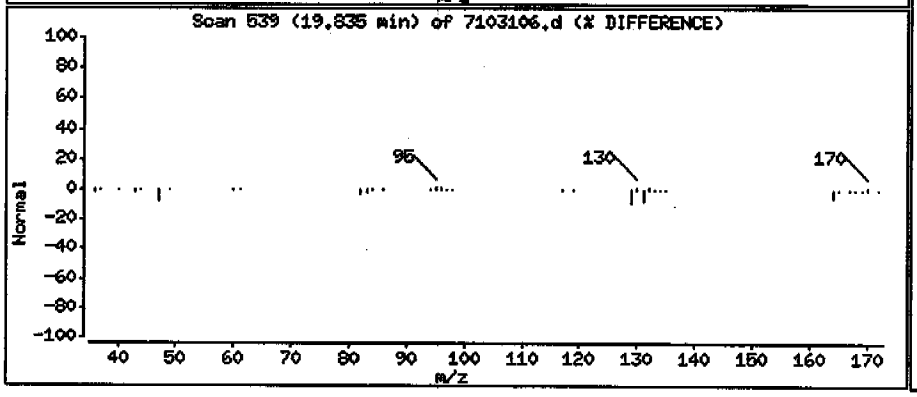
120 Tetrachloroethene

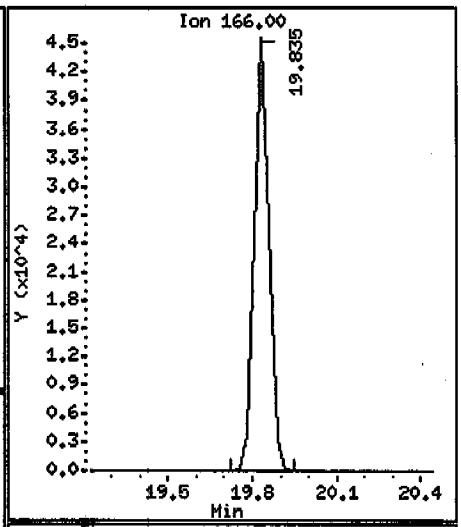
Concentration: 11.607 PPBV

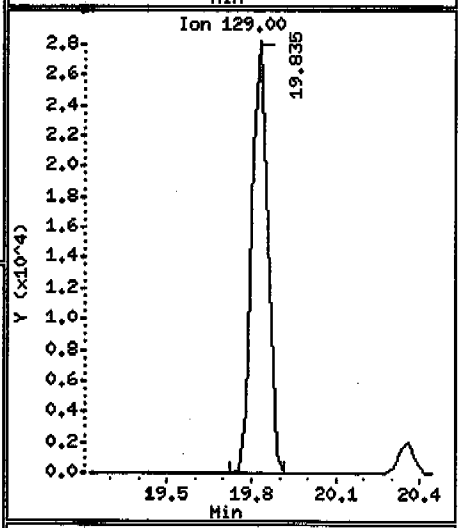


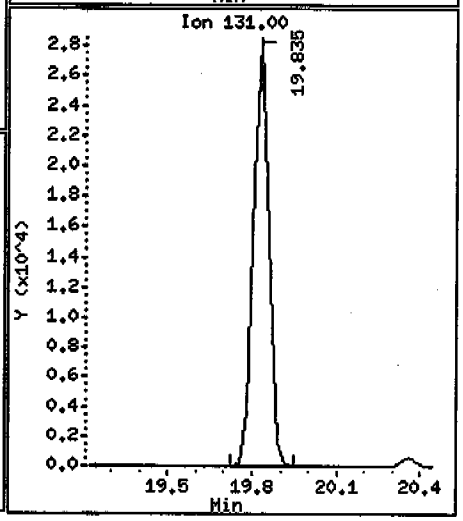












Data File: /chem/msd7.i/7-31oct.b/7103106.d

Date : 31-OCT-2007 12:19

Client ID:

Instrument: msd7.i

Sample Info: 200mL #434

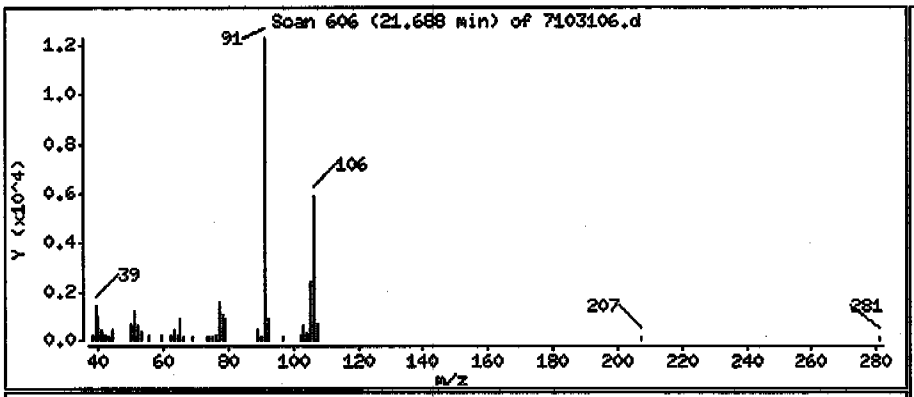
Operator: cb

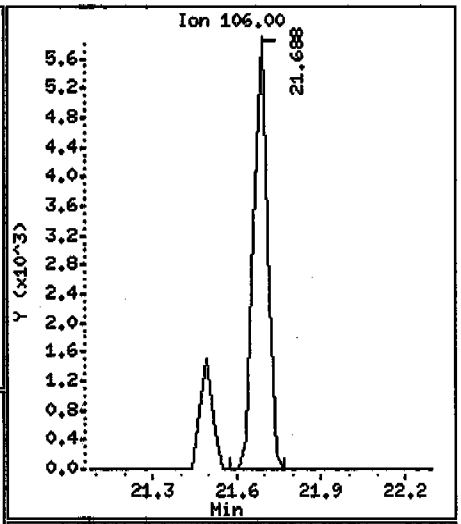
Column phase: RTx-624

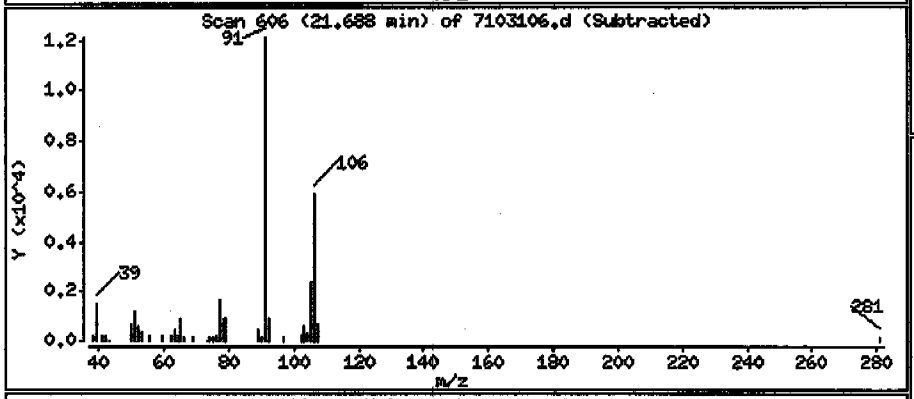
Column diameter: 0.53

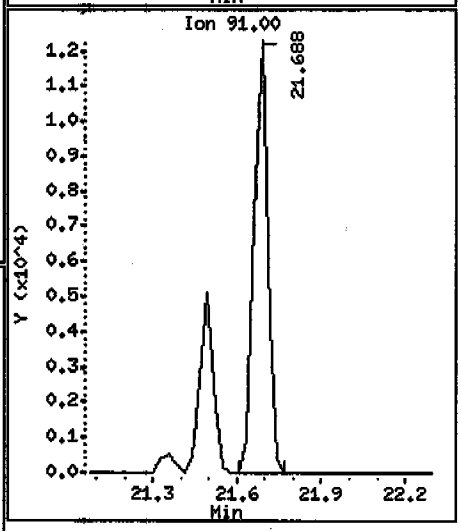
129 m,p-Xylene

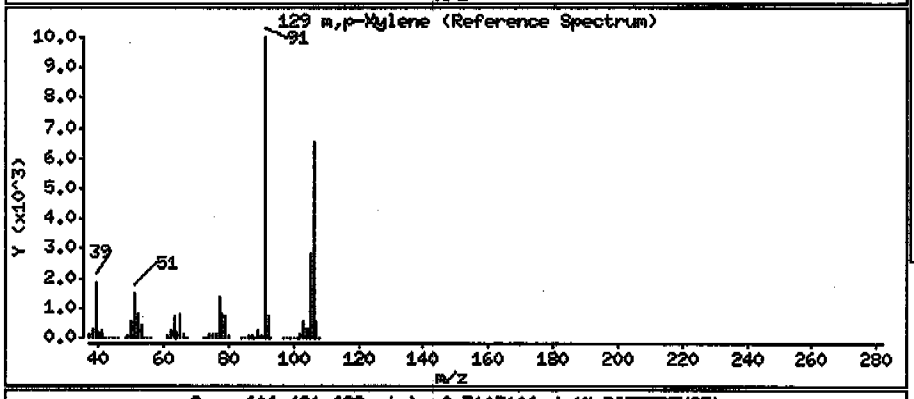
Concentration: 1.323 PPBV

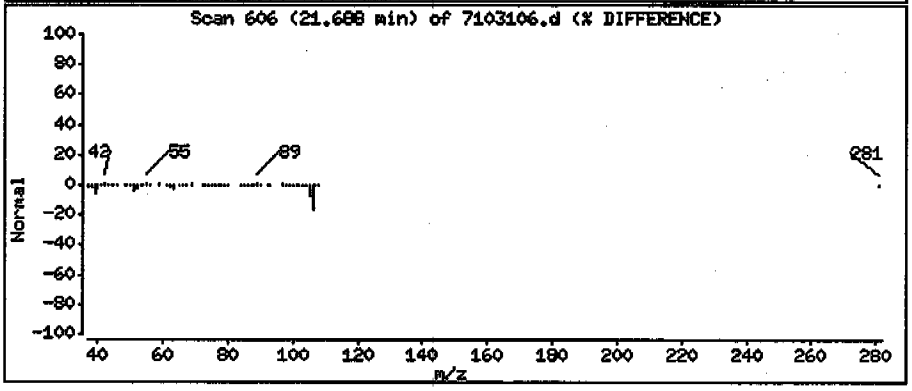












Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: MD21-07-6817

Lab ID#: 0710567-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	1.4	1.7	5.6	6.8
Acetone	5.6	18	13	44
Methylene Chloride	1.4	370	4.9	1300
2-Butanone (Methyl Ethyl Ketone)	1.4	1.9	4.1	5.6
Chloroform	1.4	110	6.8	550
Carbon Tetrachloride	1.4	37	8.8	230
1,2-Dichloroethane	1.4	3.6	5.7	15
Trichloroethene	1.4	85	7.5	460
Toluene	1.4	2.5	5.3	9.4
Tetrachloroethene	1.4	3.8	9.5	26
m,p-Xylene	1.4	1.9	6.1	8.4

0095

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6817

Lab ID#: 0710567-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.4	Not Detected	6.9	Not Detected
Freon 114	1.4	Not Detected	9.8	Not Detected
Chloromethane	5.6	Not Detected	12	Not Detected
Vinyl Chloride	1.4	Not Detected	3.6	Not Detected
1,3-Butadiene	1.4	Not Detected	3.1	Not Detected
Bromomethane	1.4	Not Detected	5.4	Not Detected
Chloroethane	1.4	Not Detected	3.7	Not Detected
Freon 11	1.4	Not Detected	7.9	Not Detected
Ethanol	5.6	Not Detected	10	Not Detected
Freon 113	1.4	Not Detected	11	Not Detected
1,1-Dichloroethene	1.4	1.7	5.6	6.8
Acetone	5.6	18	13	44
2-Propanol	5.6	Not Detected	14	Not Detected
Carbon Disulfide	1.4	Not Detected	4.4	Not Detected
Methylene Chloride	1.4	370	4.9	1300
Methyl tert-butyl ether	1.4	Not Detected	5.0	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Hexane	1.4	Not Detected	4.9	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.4	1.9	4.1	5.6
cis-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Tetrahydrofuran	1.4	Not Detected	4.1	Not Detected
Chloroform	1.4	110	6.8	550
1,1,1-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Cyclohexane	1.4	Not Detected	4.8	Not Detected
Carbon Tetrachloride	1.4	37	8.8	230
Benzene	1.4	Not Detected	4.5	Not Detected
1,2-Dichloroethane	1.4	3.6	5.7	15
Heptane	1.4	Not Detected	5.7	Not Detected
Trichloroethene	1.4	85	7.5	460
1,2-Dichloropropane	1.4	Not Detected	6.5	Not Detected
1,4-Dioxane	5.6	Not Detected	20	Not Detected
Bromodichloromethane	1.4	Not Detected	9.4	Not Detected
cis-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.7	Not Detected
Toluene	1.4	2.5	5.3	9.4
trans-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Tetrachloroethene	1.4	3.8	9.5	26

0096

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: MD21-07-6817

Lab ID#: 0710567-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	5.6	Not Detected	23	Not Detected
Dibromochloromethane	1.4	Not Detected	12	Not Detected
1,2-Dibromoethane (EDB)	1.4	Not Detected	11	Not Detected
Chlorobenzene	1.4	Not Detected	6.4	Not Detected
Ethyl Benzene	1.4	Not Detected	6.1	Not Detected
m,p-Xylene	1.4	1.9	6.1	8.4
o-Xylene	1.4	Not Detected	6.1	Not Detected
Styrene	1.4	Not Detected	6.0	Not Detected
Bromoform	1.4	Not Detected	14	Not Detected
1,1,2,2-Tetrachloroethane	1.4	Not Detected	9.6	Not Detected
4-Ethyltoluene	1.4	Not Detected	6.9	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	6.9	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	6.9	Not Detected
1,3-Dichlorobenzene	1.4	Not Detected	8.4	Not Detected
1,4-Dichlorobenzene	1.4	Not Detected	8.4	Not Detected
alpha-Chlorotoluene	1.4	Not Detected	7.2	Not Detected
1,2-Dichlorobenzene	1.4	Not Detected	8.4	Not Detected
1,2,4-Trichlorobenzene	5.6	Not Detected	42	Not Detected
Hexachlorobutadiene	5.6	Not Detected	60	Not Detected
Chlorodifluoromethane	5.6	Not Detected	20	Not Detected
Methanol	140	Not Detected	180	Not Detected
n-Butanol	5.6	Not Detected	17	Not Detected
Propylene	5.6	Not Detected	9.6	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	88	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	104	70-130

0097

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-31oct.b/7103108.d
Lab Smp Id: 0710567-05A
Inj Date : 31-OCT-2007 13:55
Operator : cb Inst ID: msd7.i
Smp Info : 125mL #4175
Misc Info : 7.0"Hg --> 5psi
Comment :
Method : /chem/msd7.i/7-31oct.b/t14q018c.m
Meth Date : 31-Oct-2007 16:21 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 2.80000
Integrator: HP RTE Compound Sublist: Los2153.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	385389	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	295650			26.85- 126.85	76.71
14.416	14.388 (1.000)	49	717748			148.03- 248.03	186.24
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1282407	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	193077			0.00- 65.22	15.06
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	914211	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	479726			4.45- 104.45	52.47
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	554263	26.7711	26.771	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	261604			2.91- 102.91	47.20
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1007109	22.1228	22.123	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	111423			0.00- 61.46	11.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	692604			19.18- 119.18	68.77
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	562948	25.8775	25.877	80.00- 120.00	100.00
23.319	23.347 (1.092)	95	654069			66.59- 166.59	116.19
23.347	23.347 (1.093)	176	546824			46.44- 146.44	97.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.716)	61	20493	0.60945	1.706	80.00- 120.00	100.00
10.324	10.324 (0.716)	96	10395			7.00- 107.00	50.72
10.351	10.324 (0.718)	98	6740			0.00- 86.85	32.89
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.728)	58	68088	6.55110	18.343	80.00- 120.00	100.00
10.490	10.490 (0.728)	43	256107			247.10- 347.10	376.14
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	3305749	133.720	374.42	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	2074734			13.10- 113.10	62.76
11.485	11.457 (0.797)	51	987654			0.00- 80.85	29.88
75 2-Butanone					CAS #: 78-93-3		
13.890	13.890 (0.964)	72	5657	0.67773	1.898	80.00- 120.00	100.00
13.890	13.890 (0.964)	43	34880			526.71- 626.71	616.58
13.918	13.890 (0.965)	57	1816			0.00- 86.57	32.11
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	1569778	40.4552	113.27	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	1038447			14.74- 114.74	66.15
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.048)	119	482232	13.1654	36.863	80.00- 120.00	100.00
15.107	15.107 (1.048)	117	491770			53.94- 153.94	101.98
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.632 (0.967)	62	34895	1.28894	3.609	80.00- 120.00	100.00
15.632	15.632 (0.967)	64	13464			0.00- 82.89	38.59
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	687334	30.3674	85.029	80.00- 120.00	100.00
16.655	16.628 (1.031)	130	705539			52.82- 152.82	102.65
16.628	16.628 (1.029)	97	443086			14.78- 114.78	64.46
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	49952	0.89504	2.506	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene (continued)								
18.895	18.895	(1.169)	92	30215			12.87- 112.87	60.49
120 Tetrachloroethene						CAS #: 127-18-4		
19.835	19.835	(0.929)	166	33627	1.36924	3.834	80.00- 120.00	100.00
19.835	19.835	(0.929)	129	23852			19.71- 119.71	70.93
19.835	19.835	(0.929)	131	23449			17.66- 117.66	69.73
129 m,p-Xylene						CAS #: 108-38-3		
21.688	21.688	(1.016)	106	18177	0.68788	1.926	80.00- 120.00	100.00
21.688	21.688	(1.016)	91	35447			145.05- 245.05	195.01

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103108.d
Lab Smp Id: 0710567-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 7.0"Hg --> 5psi

Calibration Date: 31-OCT-2007
Calibration Time: 09:03

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	419527	251716	587338	385389	-8.14
97 1,4-Difluorobenze	1400939	840563	1961315	1282407	-8.46
126 Chlorobenzene-d5	1205049	723029	1687069	914211	-24.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-31oct
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 0710567-05A
Level: LOW
Operator: cb
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: Los2153.sub
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 7.0"Hg --> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	26.771	107.08	70-130
$ 113 Toluene-d8	25.000	22.123	88.49	70-130
$ 137 Bromofluorobenzene	25.000	25.877	103.51	70-130

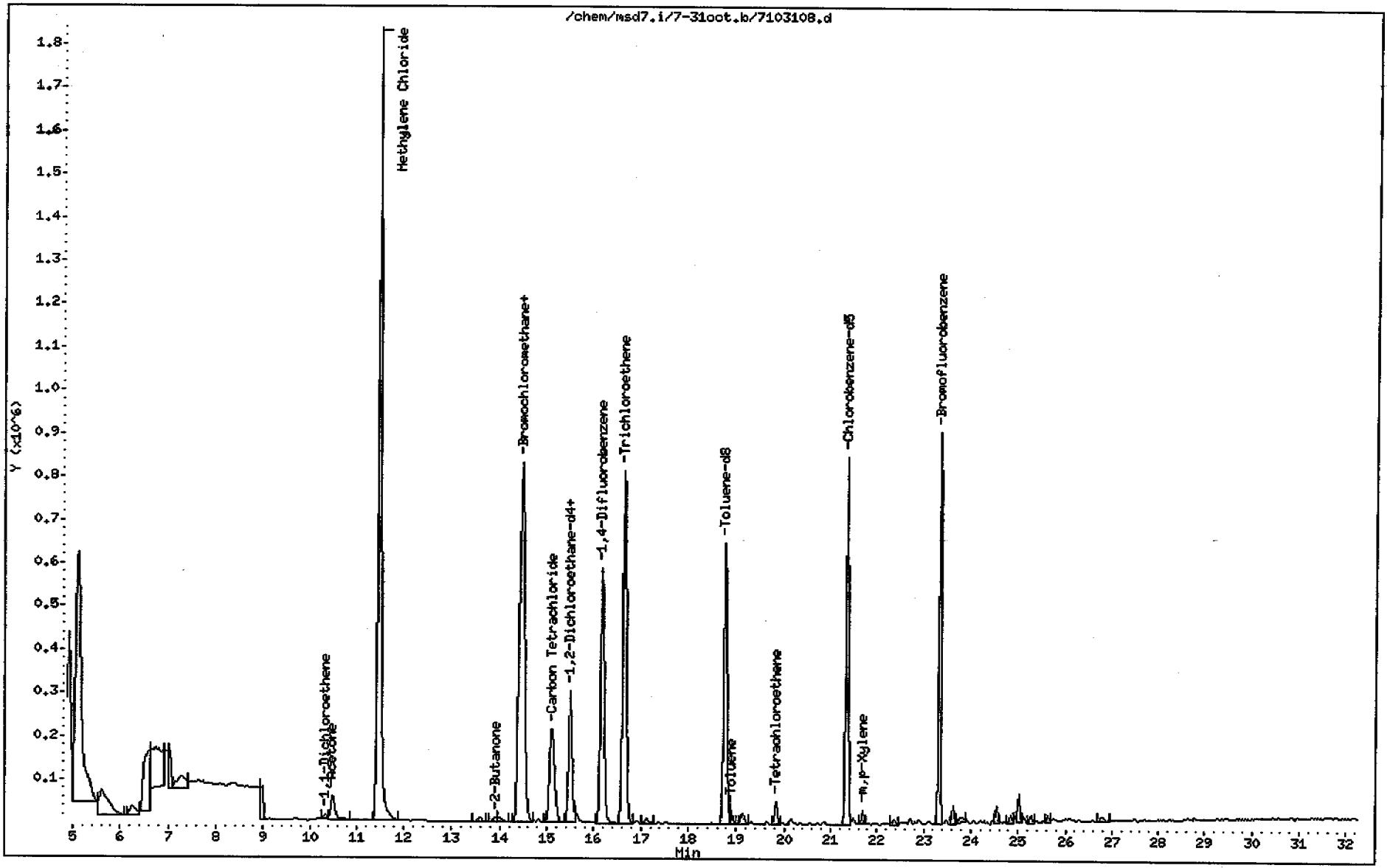
Data File: /chem/msd7.i/7-31oct.b/7103108.d
Date : 31-OCT-2007 13:55
Client ID:
Sample Info: 125mL #4175

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0103



Data File: /ohem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Sample Info: 125mL #4175

Instrument: msd7.i

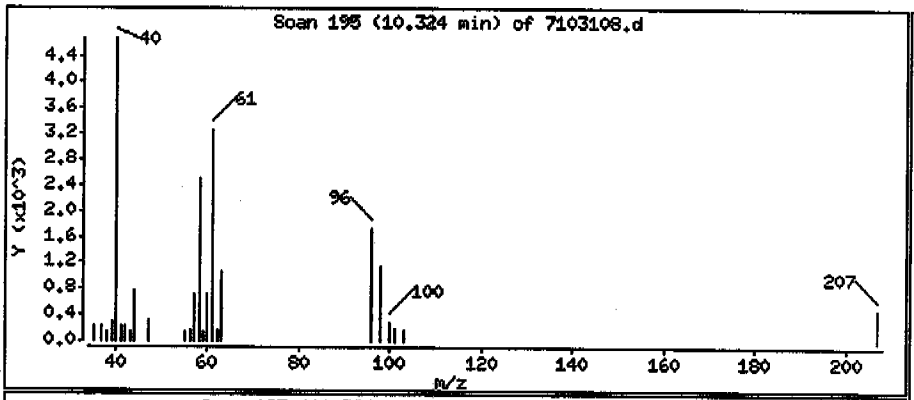
Operator: cb

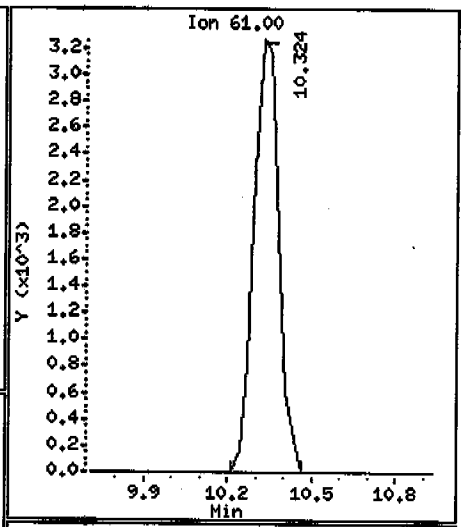
Column phase: RTx-624

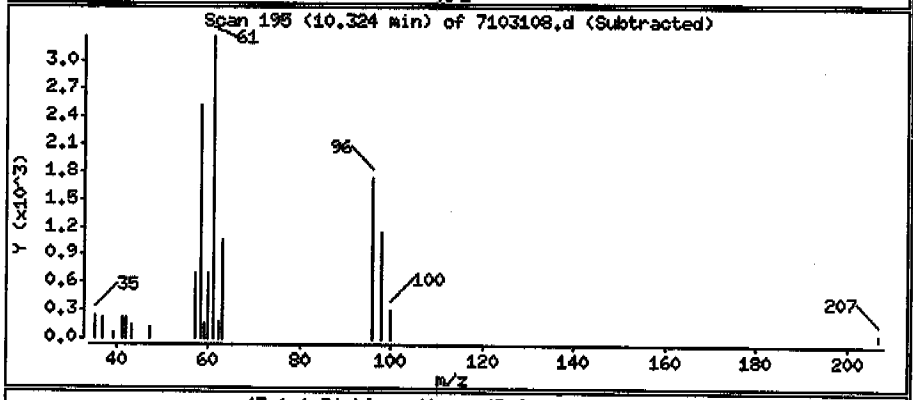
Column diameter: 0.53

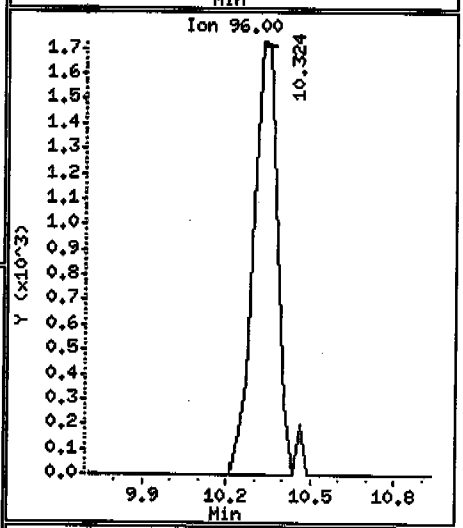
43 1,1-Dichloroethene

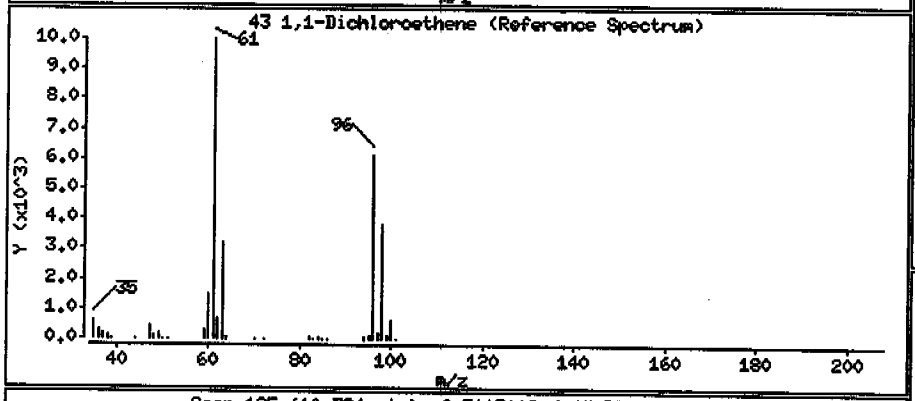
Concentration: 1.706 PPBV

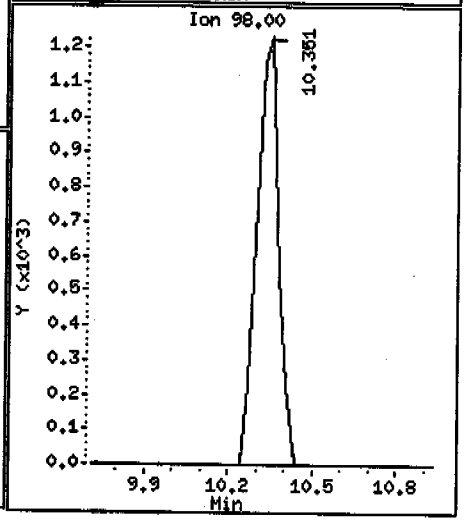


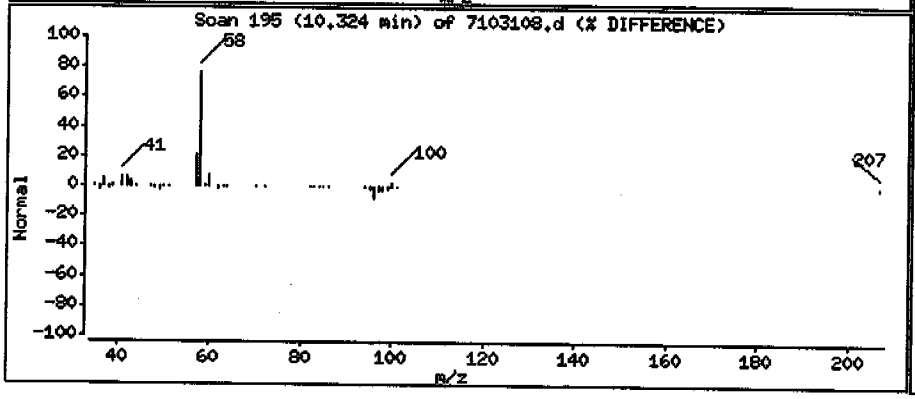












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Instrument: msd7.i

Sample Info: 125mL #4175

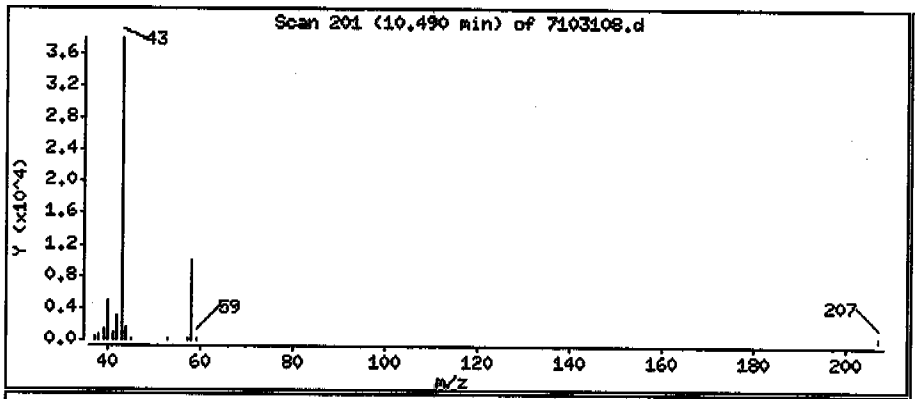
Operator: cb

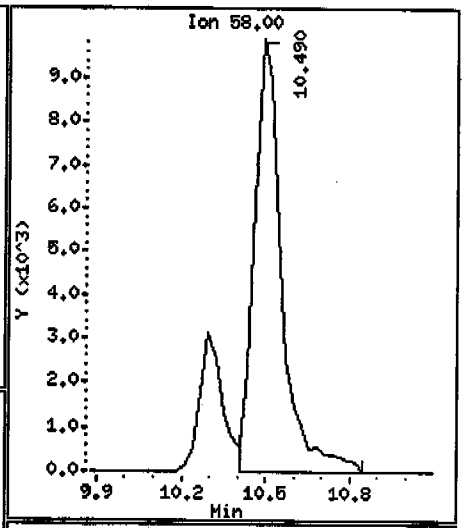
Column phase: RTx-624

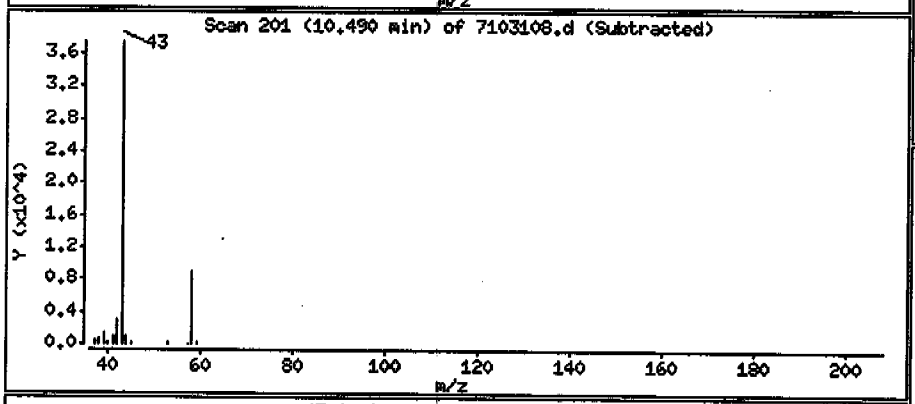
Column diameter: 0.53

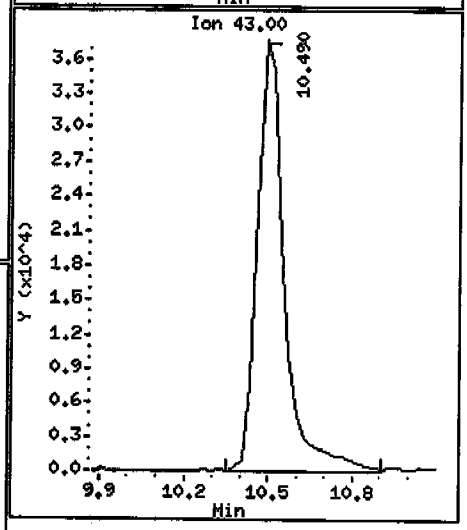
45 Acetone

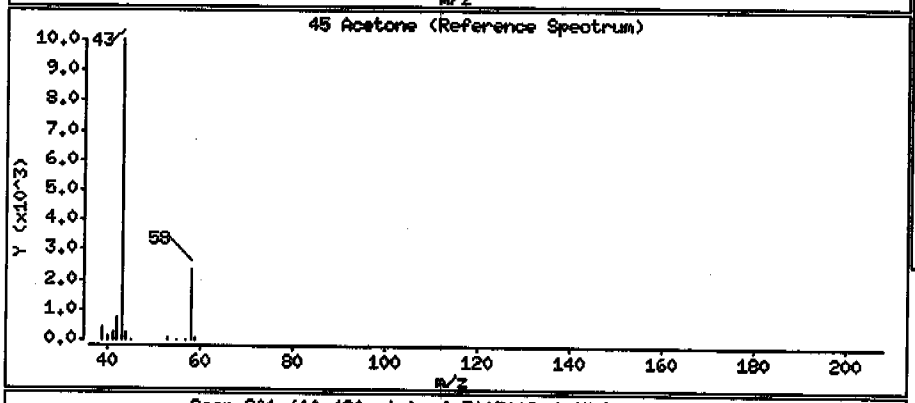
Concentration: 18.343 PPBV

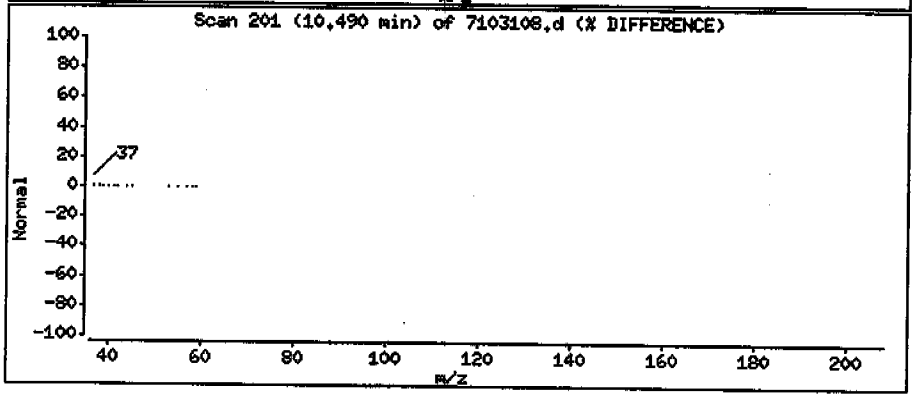












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Sample Info: 125mL #4175

Instrument: msd7.i

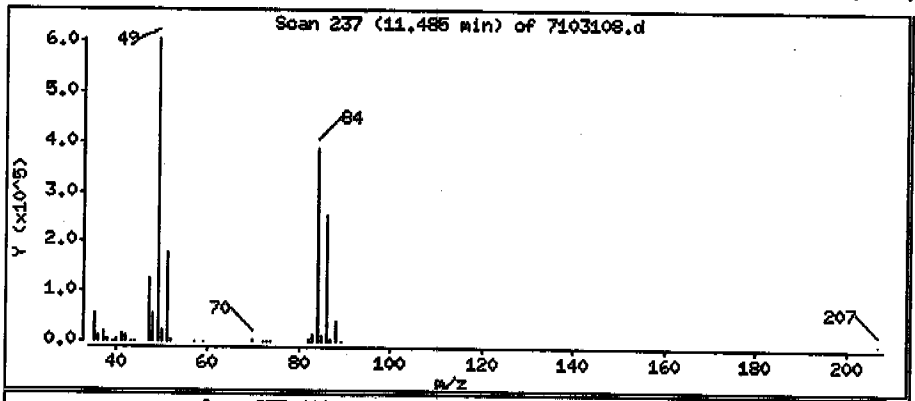
Operator: cb

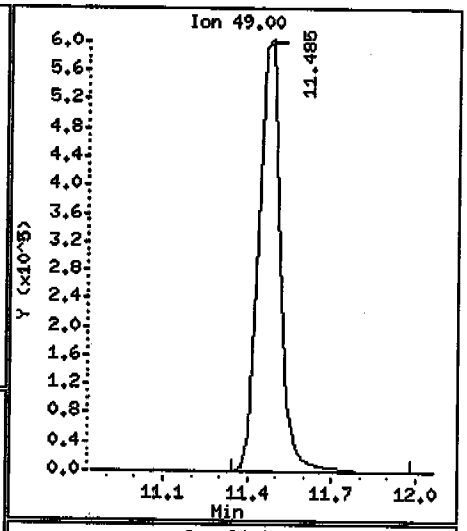
Column phase: RTx-624

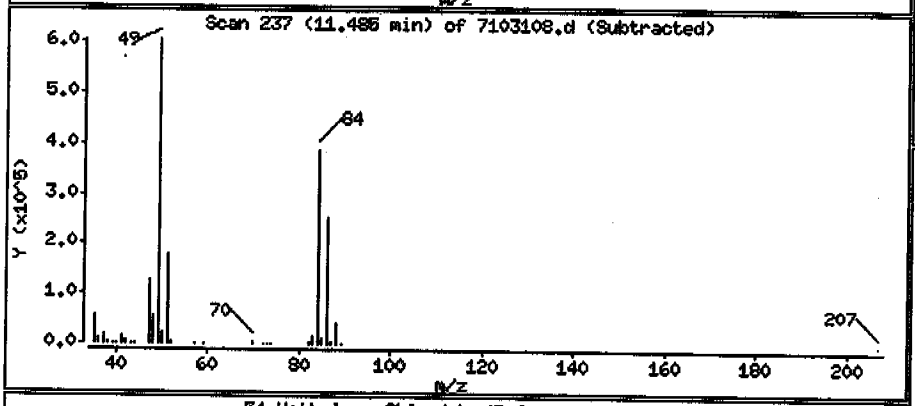
Column diameter: 0.53

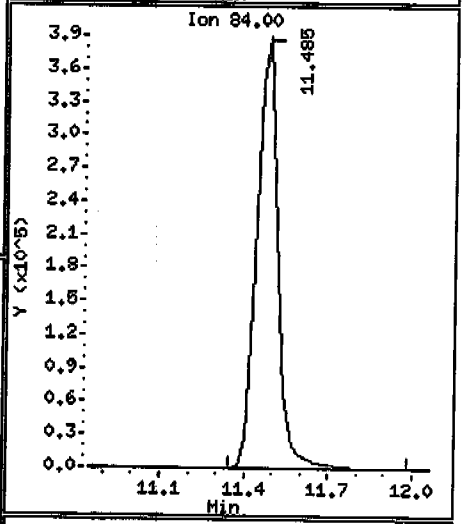
54 Methylene Chloride

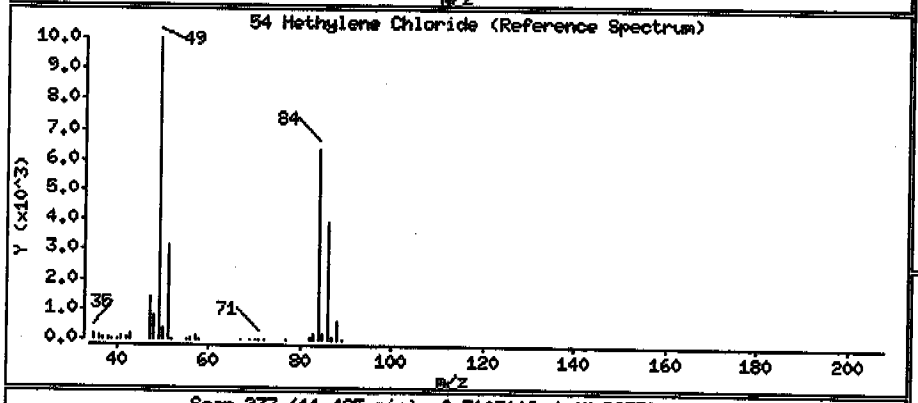
Concentration: 374.42 PPBV

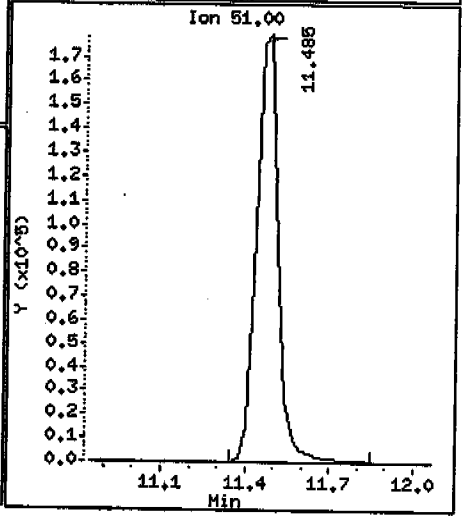


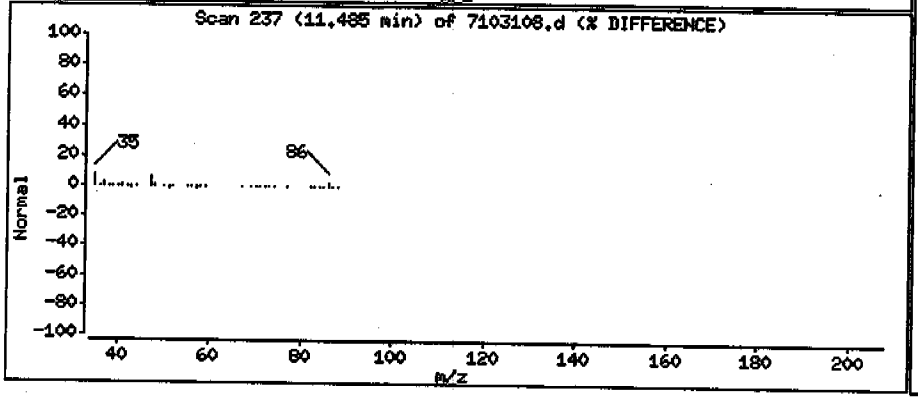












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Sample Info: 125mL #4175

Instrument: msd7.i

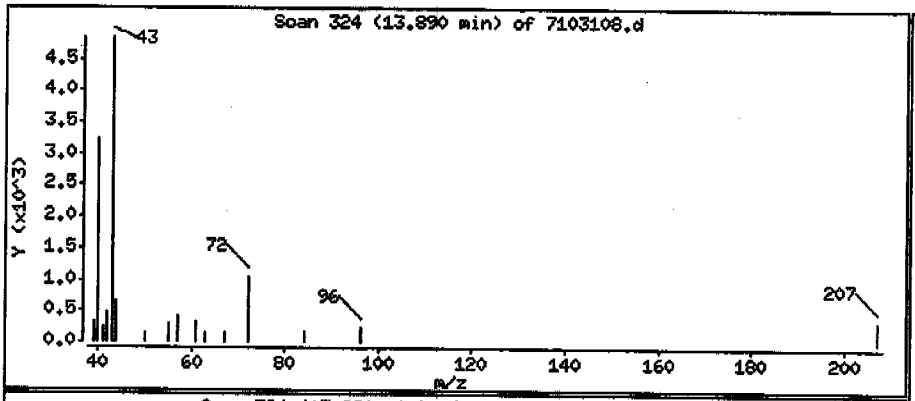
Operator: cb

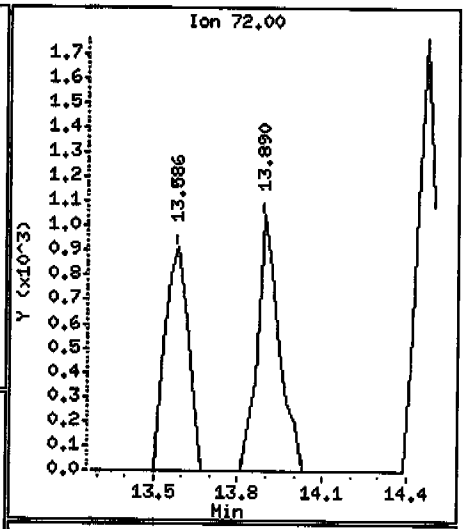
Column phase: RTx-624

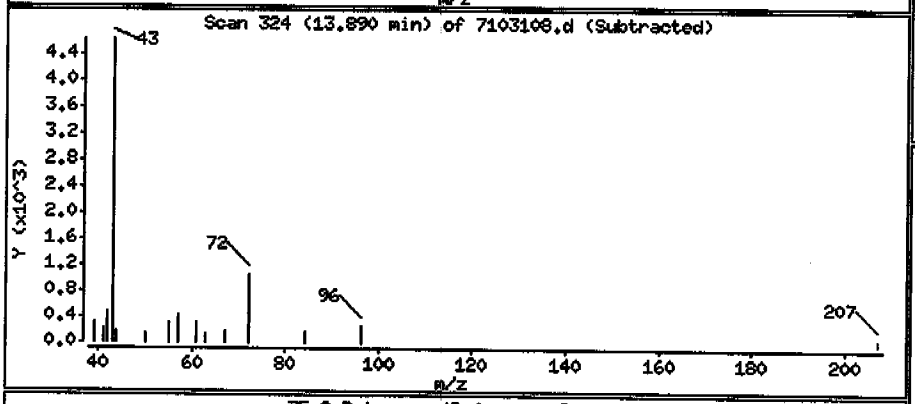
Column diameter: 0.53

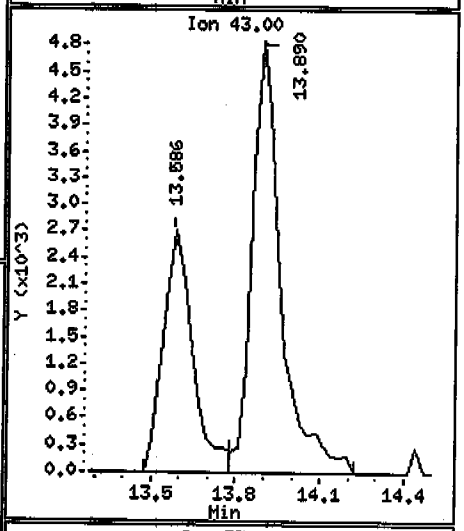
75 2-Butanone

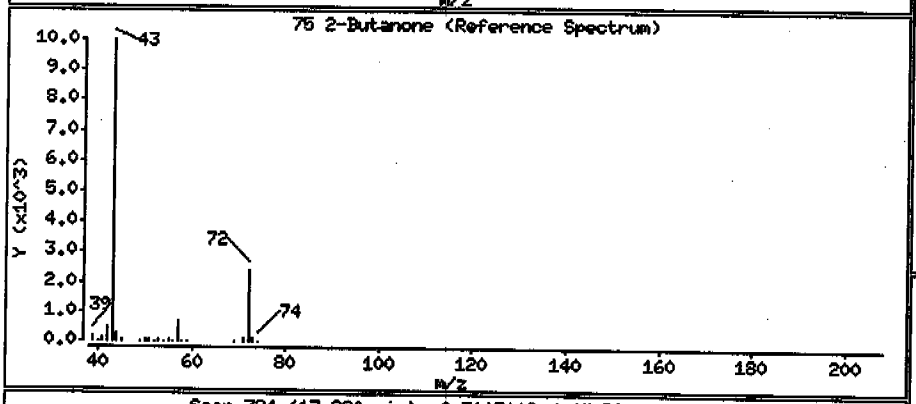
Concentration: 1.898 PPBV

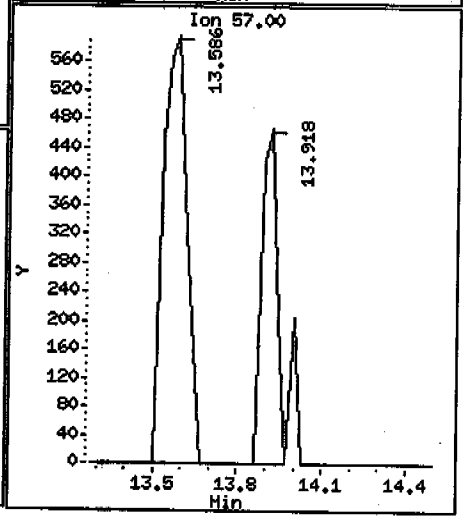


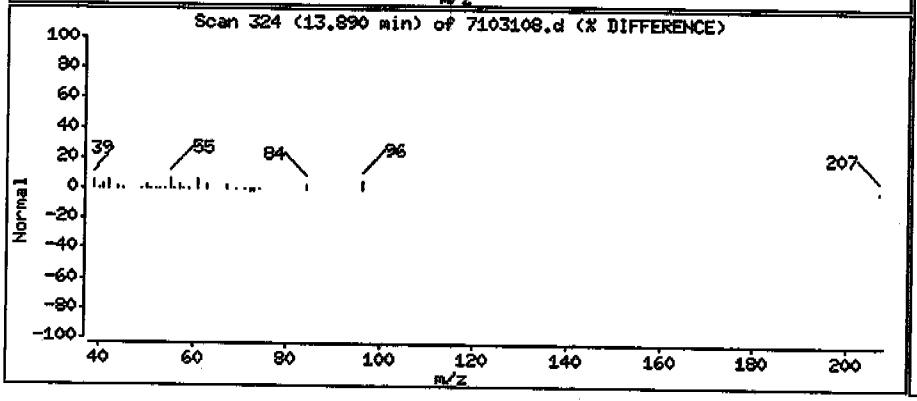












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Sample Info: 125mL #4175

Instrument: msd7.i

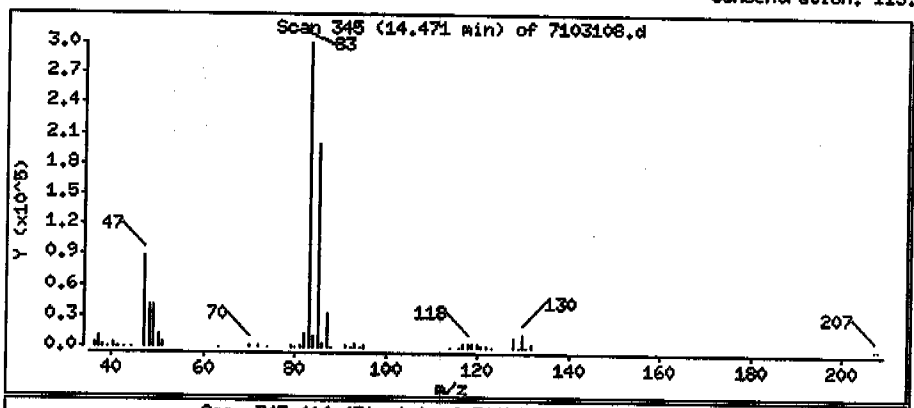
Operator: cb

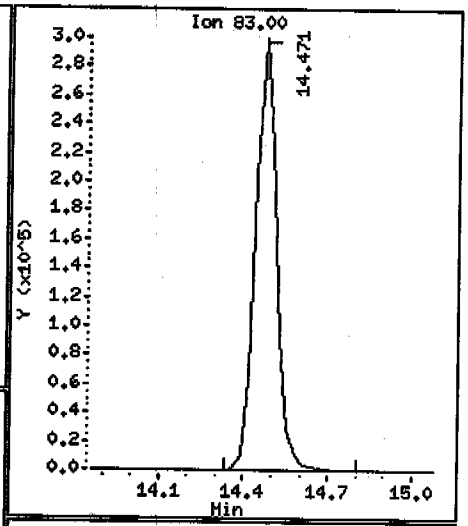
Column phase: RTx-624

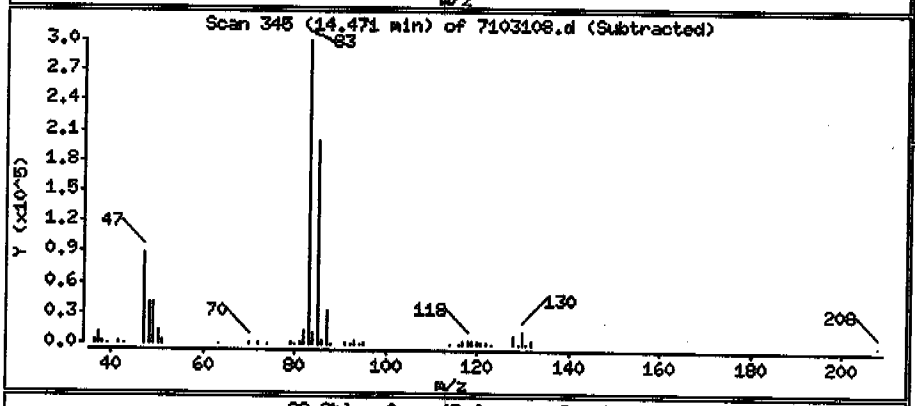
Column diameter: 0.53

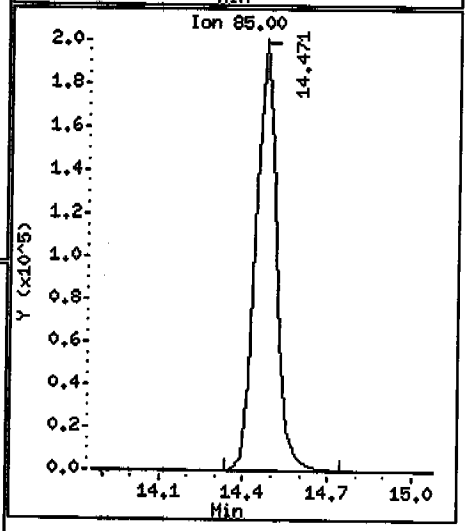
82 Chloroform

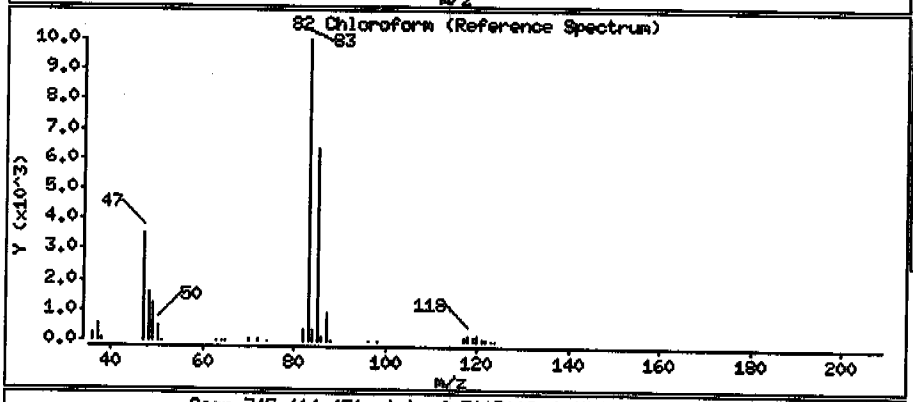
Concentration: 113.27 PPBV

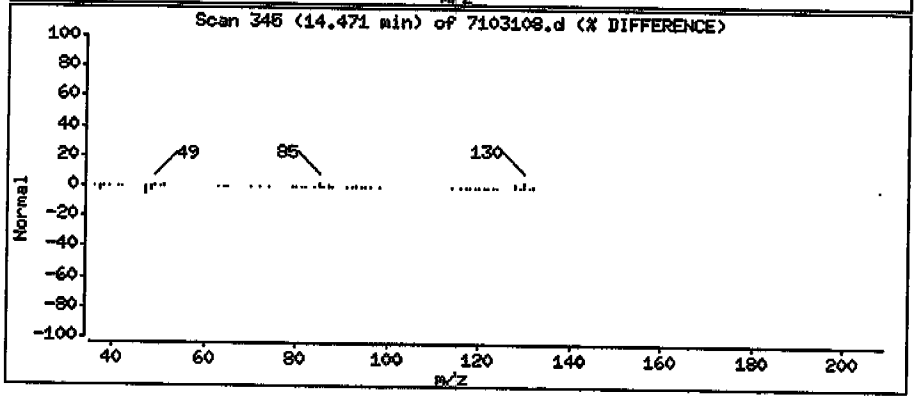












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Sample Info: 125mL #4175

Instrument: msd7.i

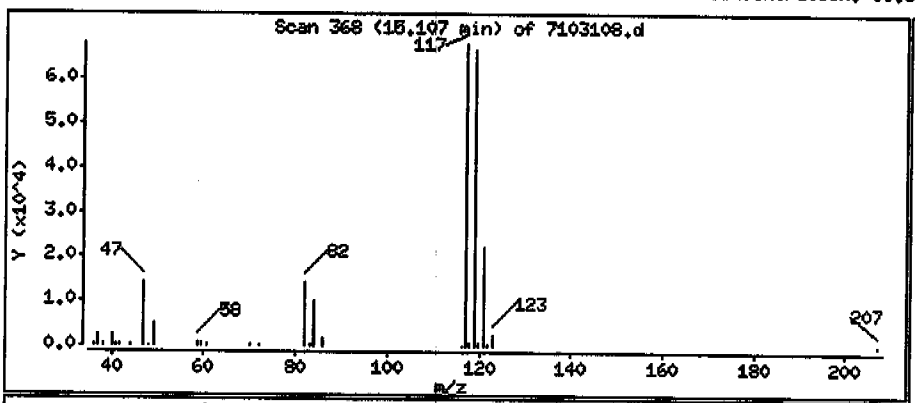
Operator: cb

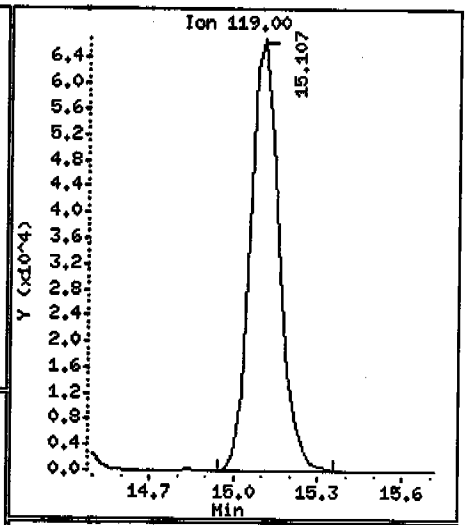
Column phase: RTx-624

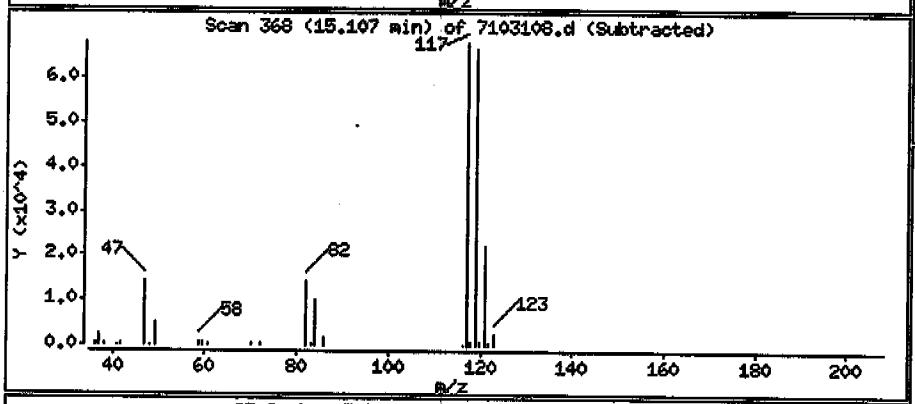
Column diameter: 0.53

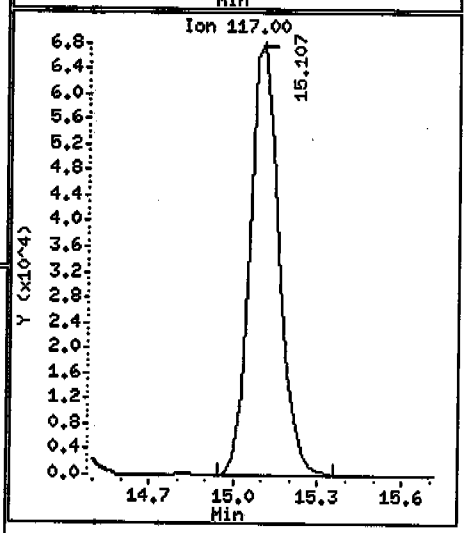
87 Carbon Tetrachloride

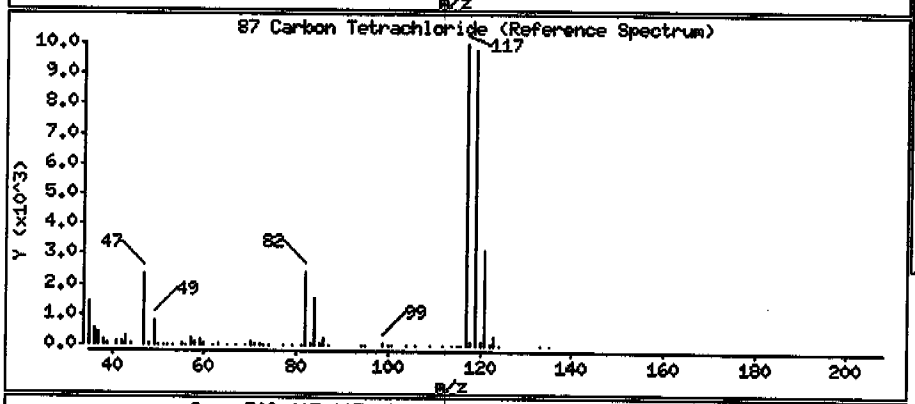
Concentration: 36.863 PPBV

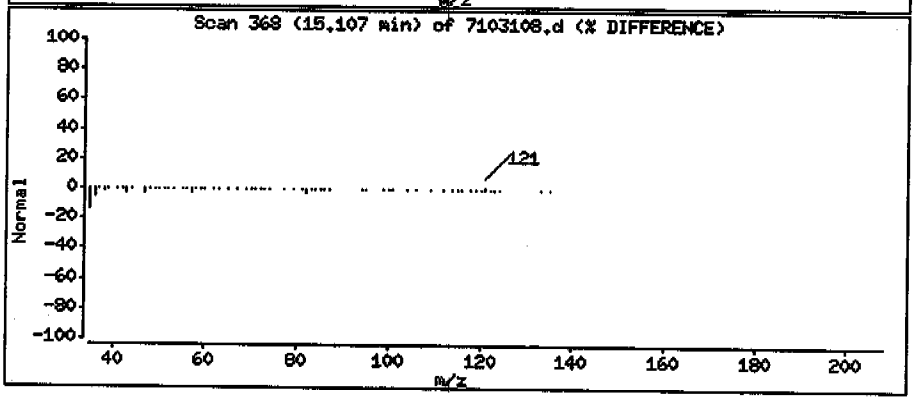












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Instrument: msd7.i

Sample Info: 125mL #4175

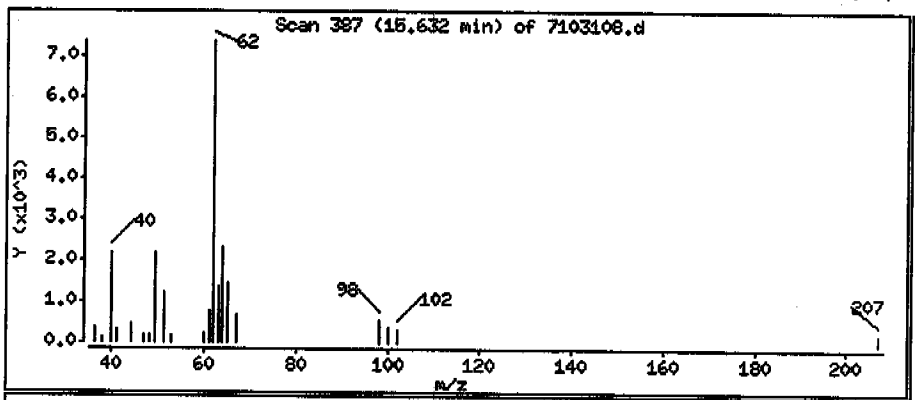
Operator: cb

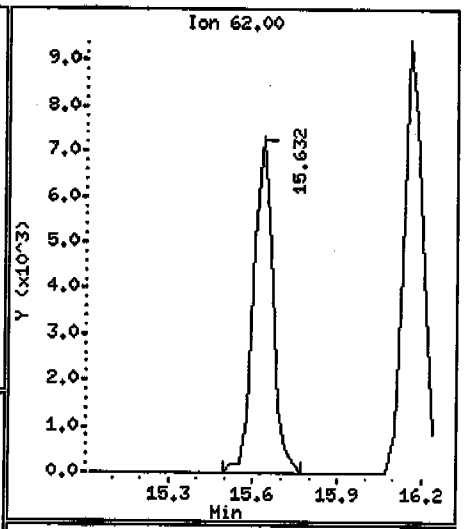
Column phase: RTx-624

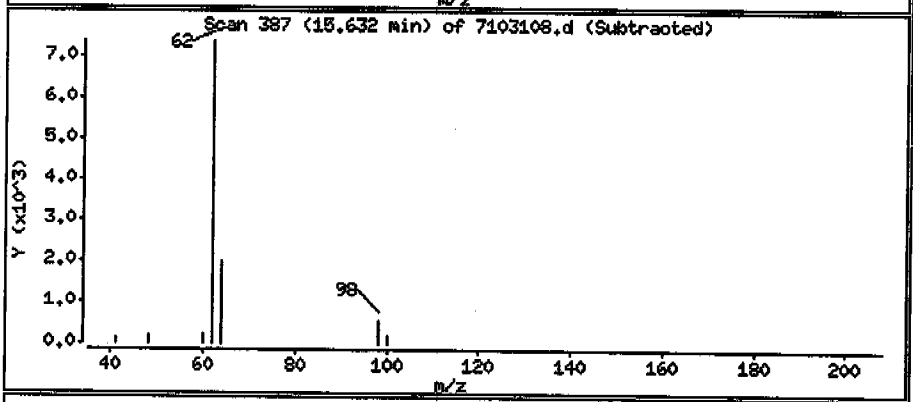
Column diameter: 0.53

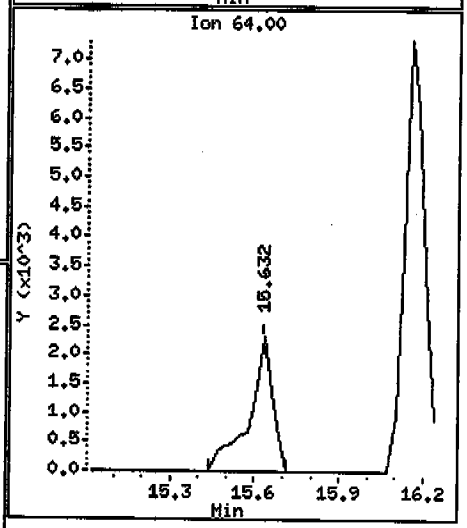
93 1,2-Dichloroethane

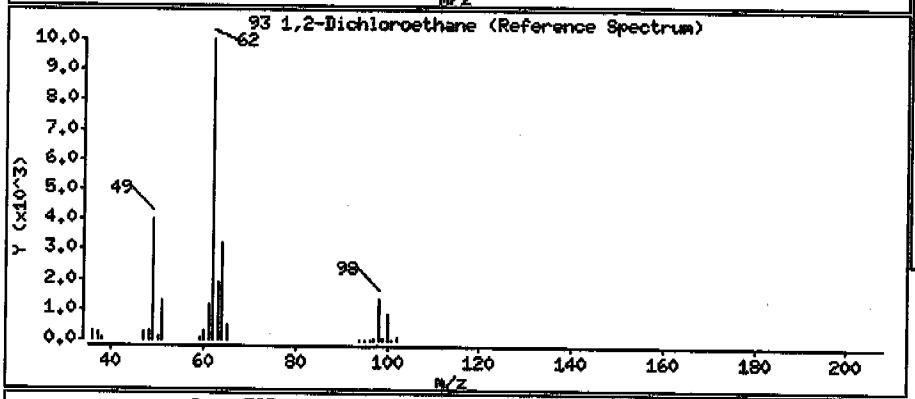
Concentration: 3.609 PPBV

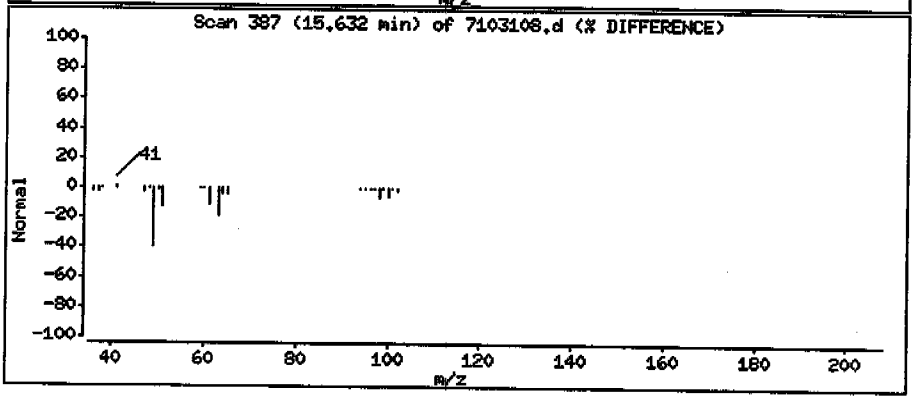












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Instrument: msd7.i

Sample Info: 125mL #4175

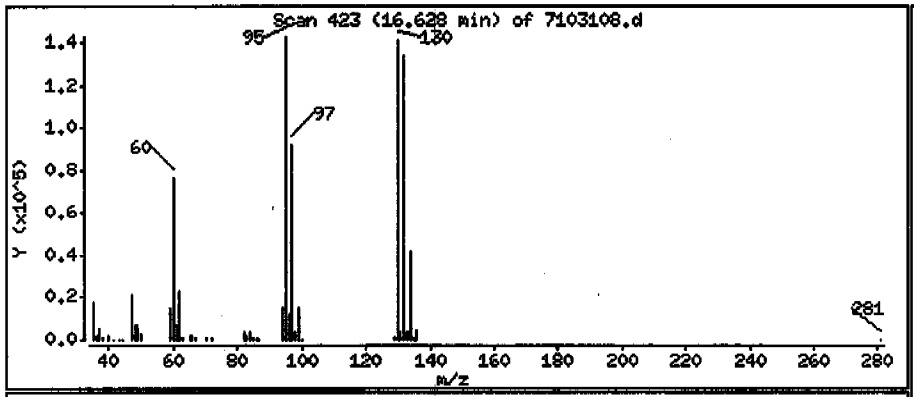
Operator: cb

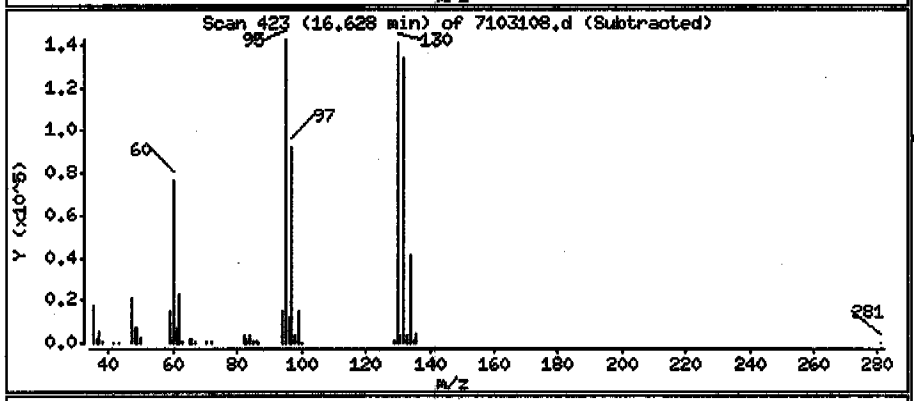
Column phase: RTx-624

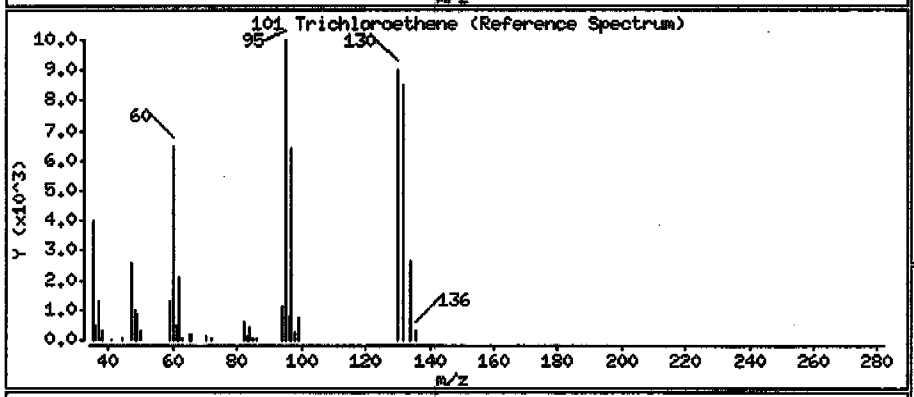
Column diameter: 0.53

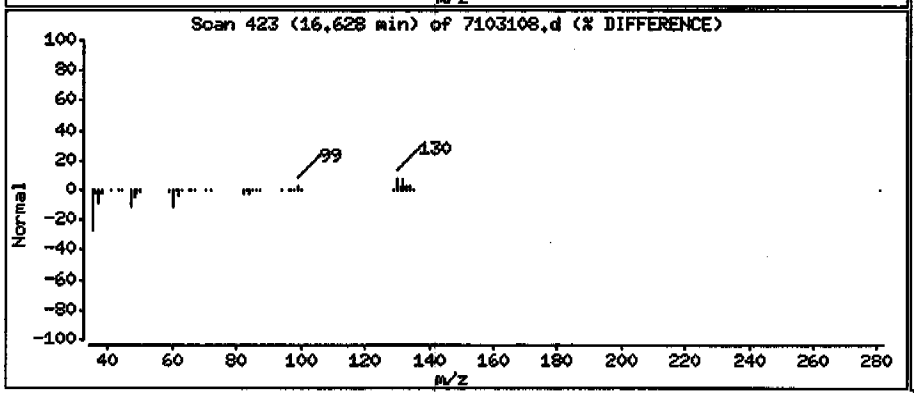
101 Trichloroethene

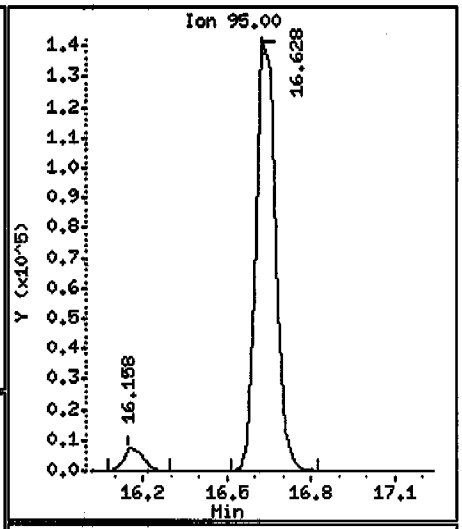
Concentration: 85.029 PPBV

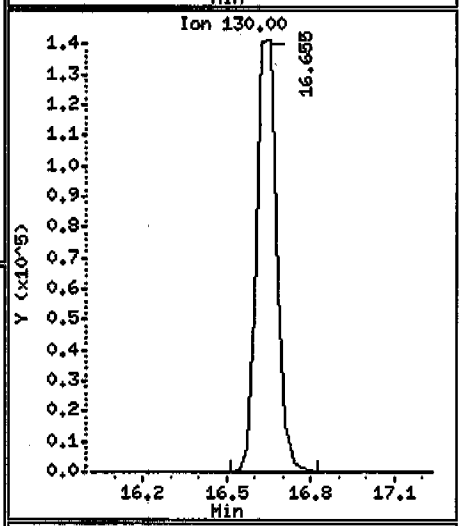


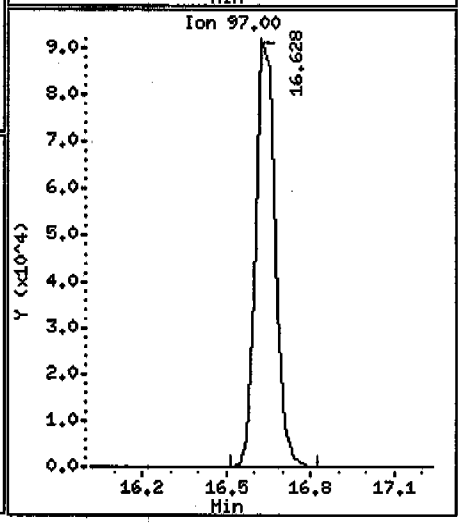












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Instrument: msd7.i

Sample Info: 125mL #4175

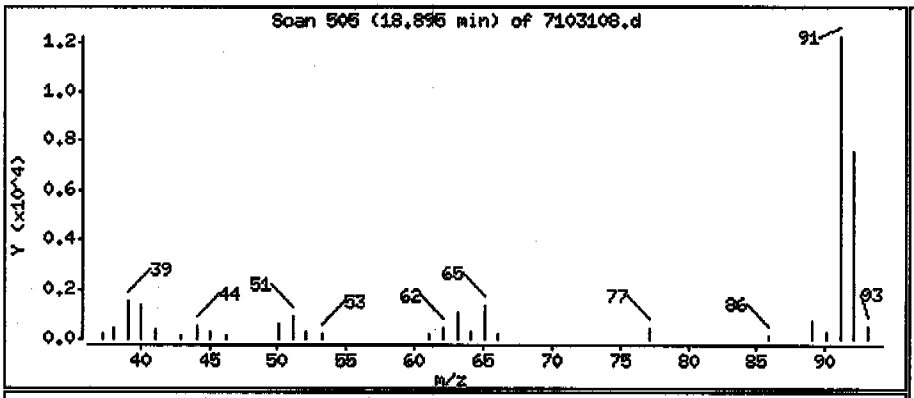
Operator: cb

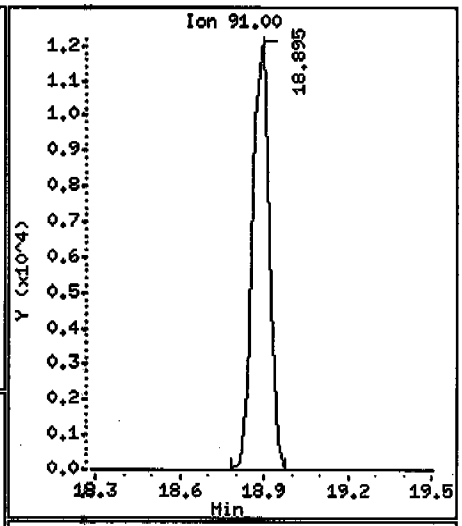
Column phase: RTx-624

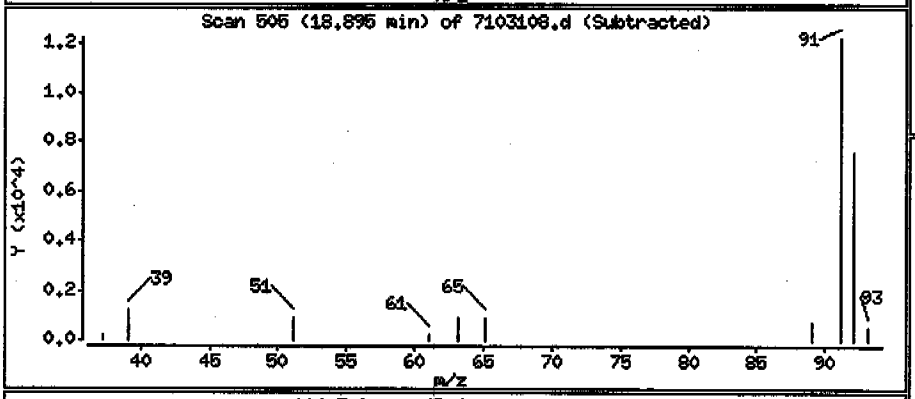
Column diameter: 0.53

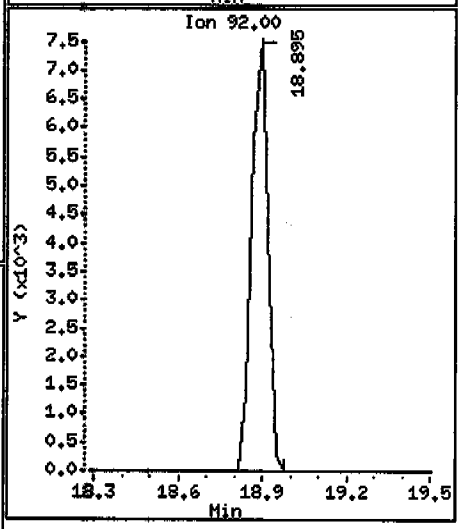
114 Toluene

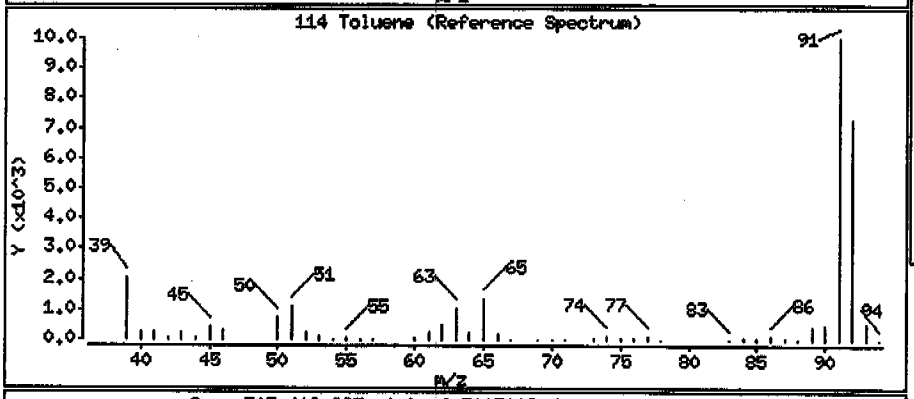
Concentration: 2.506 PPBV

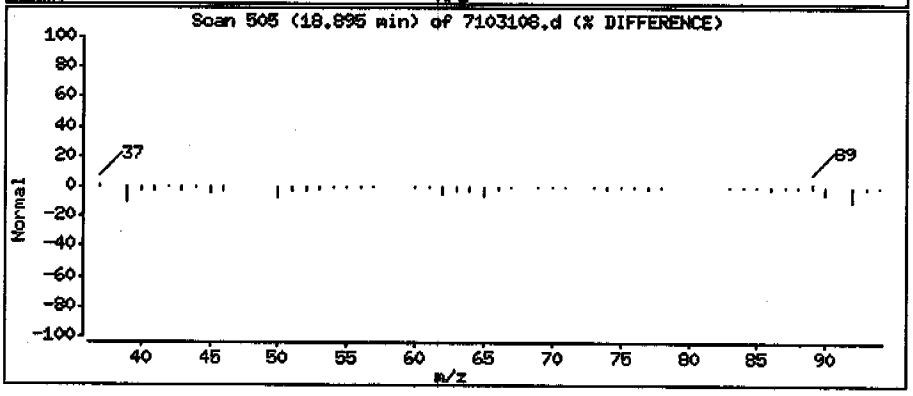












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Instrument: msd7.i

Sample Info: 125mL #4175

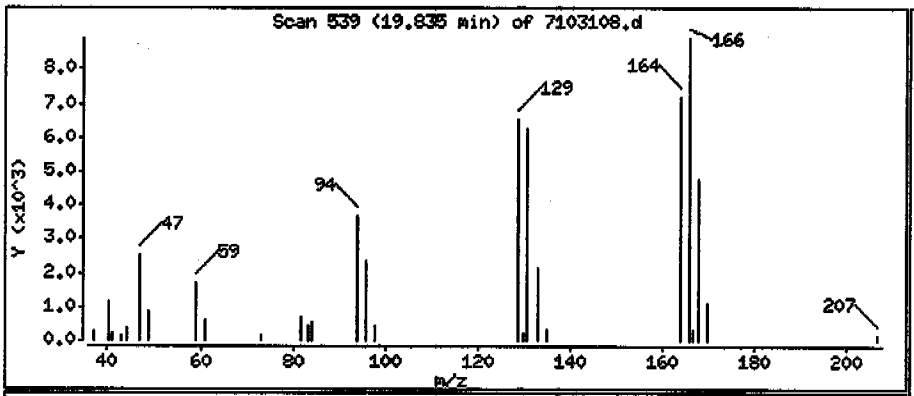
Operator: cb

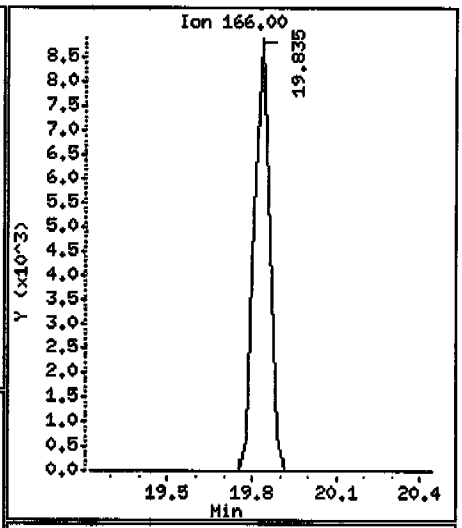
Column phase: RTx-624

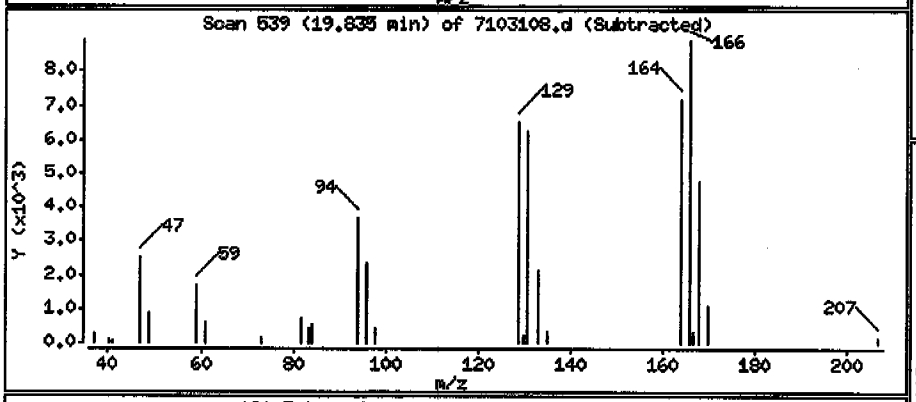
Column diameter: 0.53

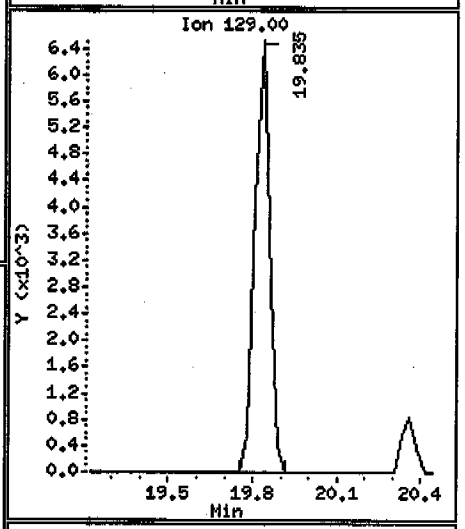
120 Tetrachloroethene

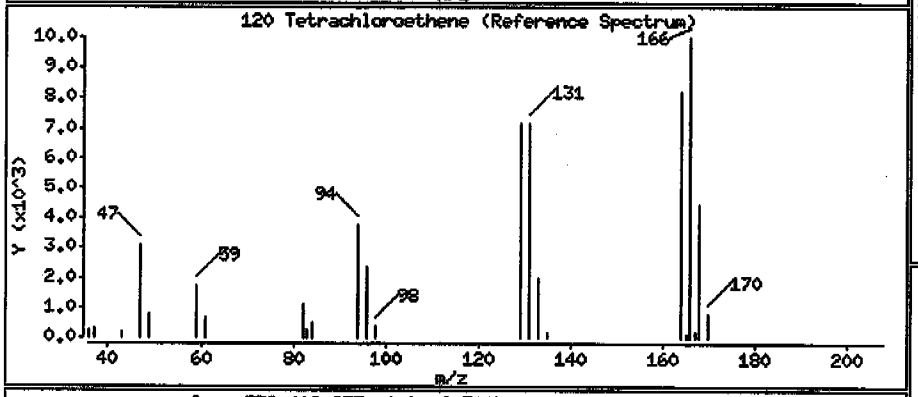
Concentration: 3.834 PPBV

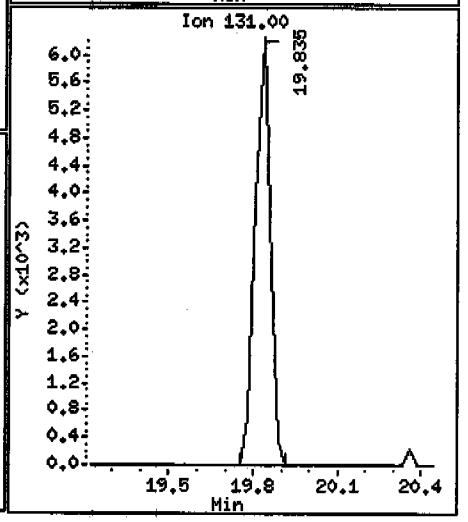


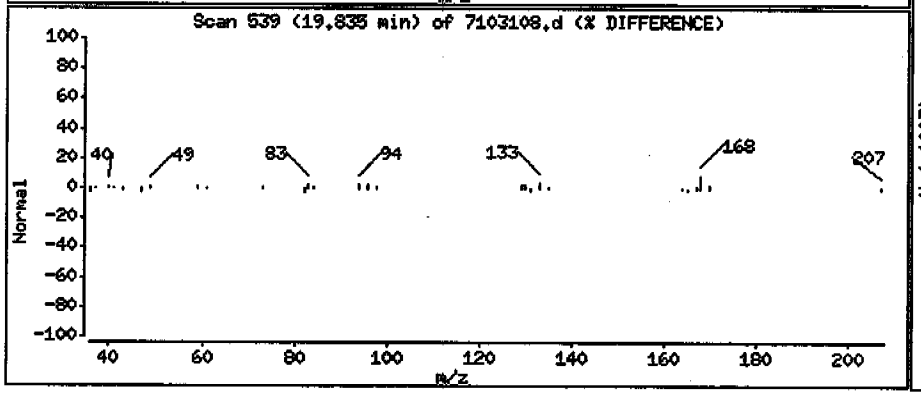












Data File: /chem/msd7.i/7-31oct.b/7103108.d

Date : 31-OCT-2007 13:55

Client ID:

Instrument: msd7.i

Sample Info: 125mL #4175

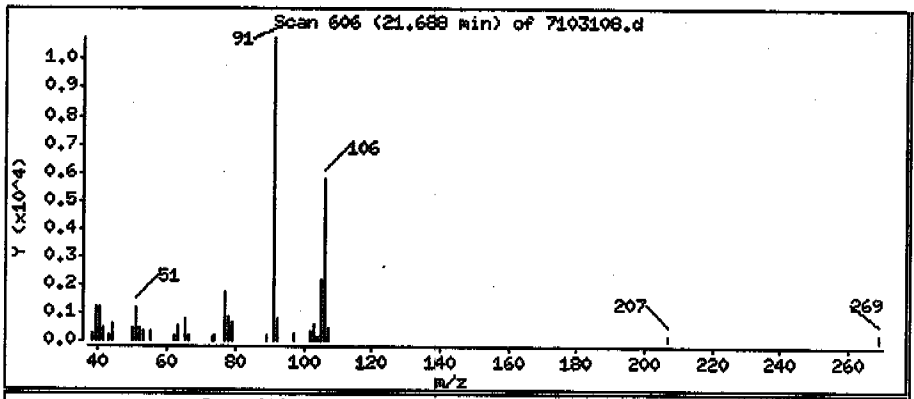
Operator: ob

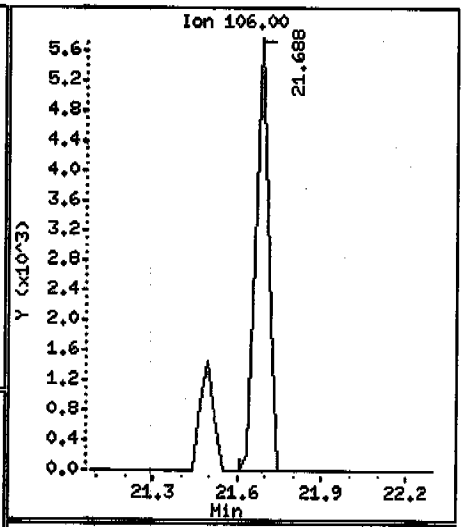
Column phase: RTx-624

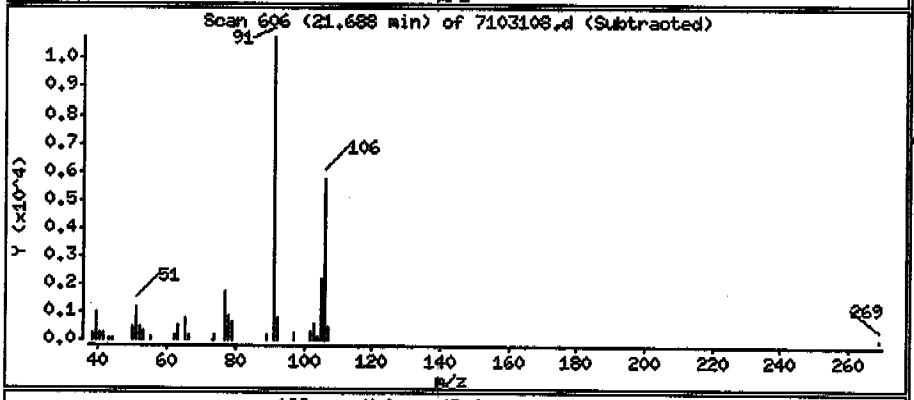
Column diameter: 0.53

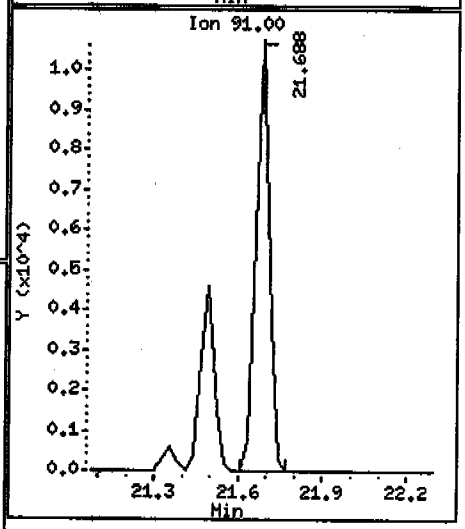
129 m,p-Xylene

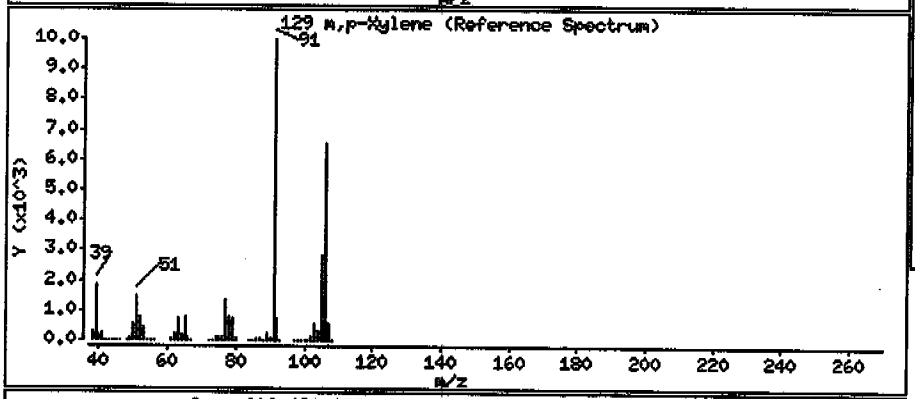
Concentration: 1.926 PPBV

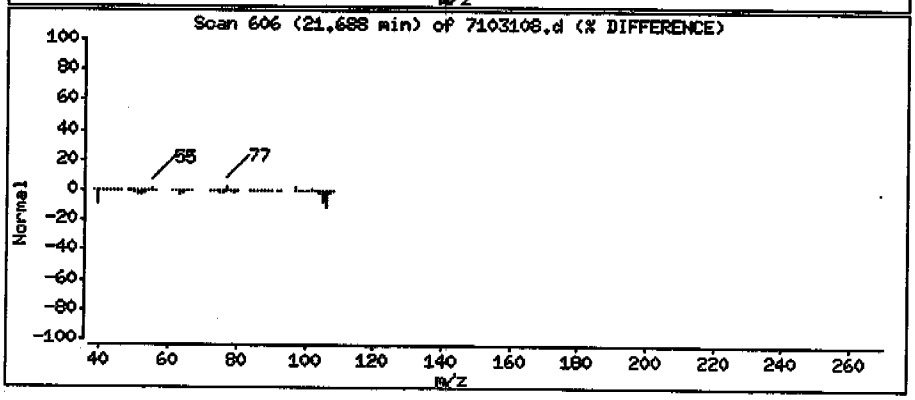












QC Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710567-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710567-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103008.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 30-OCT-2007 13:36
Operator : cb Inst ID: msd7.i
Smp Info : 200mL #34190
Misc Info : Humid
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 30-Oct-2007 12:35 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR+22a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	463709	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	355836			26.27- 126.27	76.74
14.388	14.388 (1.000)	49	655612			132.02- 232.02	141.38
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1504240	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	225388			0.00- 64.88	14.98
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1107890	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	579146			4.45- 104.45	52.27
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	554844	22.2728	22.273	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	279579			2.91- 102.91	50.39
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1252131	23.4489	23.449	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	129952			0.00- 61.46	10.38

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	860954			19.18- 119.18	68.76
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	661096	25.0765	25.076	80.00- 120.00	100.00
23.319	23.319	(1.092)	95	795515			67.21- 167.21	120.33
23.347	23.347	(1.093)	176	635868			47.52- 147.52	96.18

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103008.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: Humid

Calibration Date: 30-OCT-2007
Calibration Time: 12:15
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	537758	322655	752861	463709	-13.77
97 1,4-Difluorobenze	1771565	1062939	2480191	1504240	-15.09
126 Chlorobenzene-d5	1414884	848930	1980838	1107890	-21.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 30-Oct-2007 13:56

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: Lab Blank
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR+22a.sub
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: Humid

Client SDG: 7-30oct
Fraction: VOA
Client Smp ID: Lab Blank
Operator: cb
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	22.273	89.09	70-130
$ 113 Toluene-d8	25.000	23.449	93.80	70-130
$ 137 Bromofluorobenzene	25.000	25.076	100.31	70-130

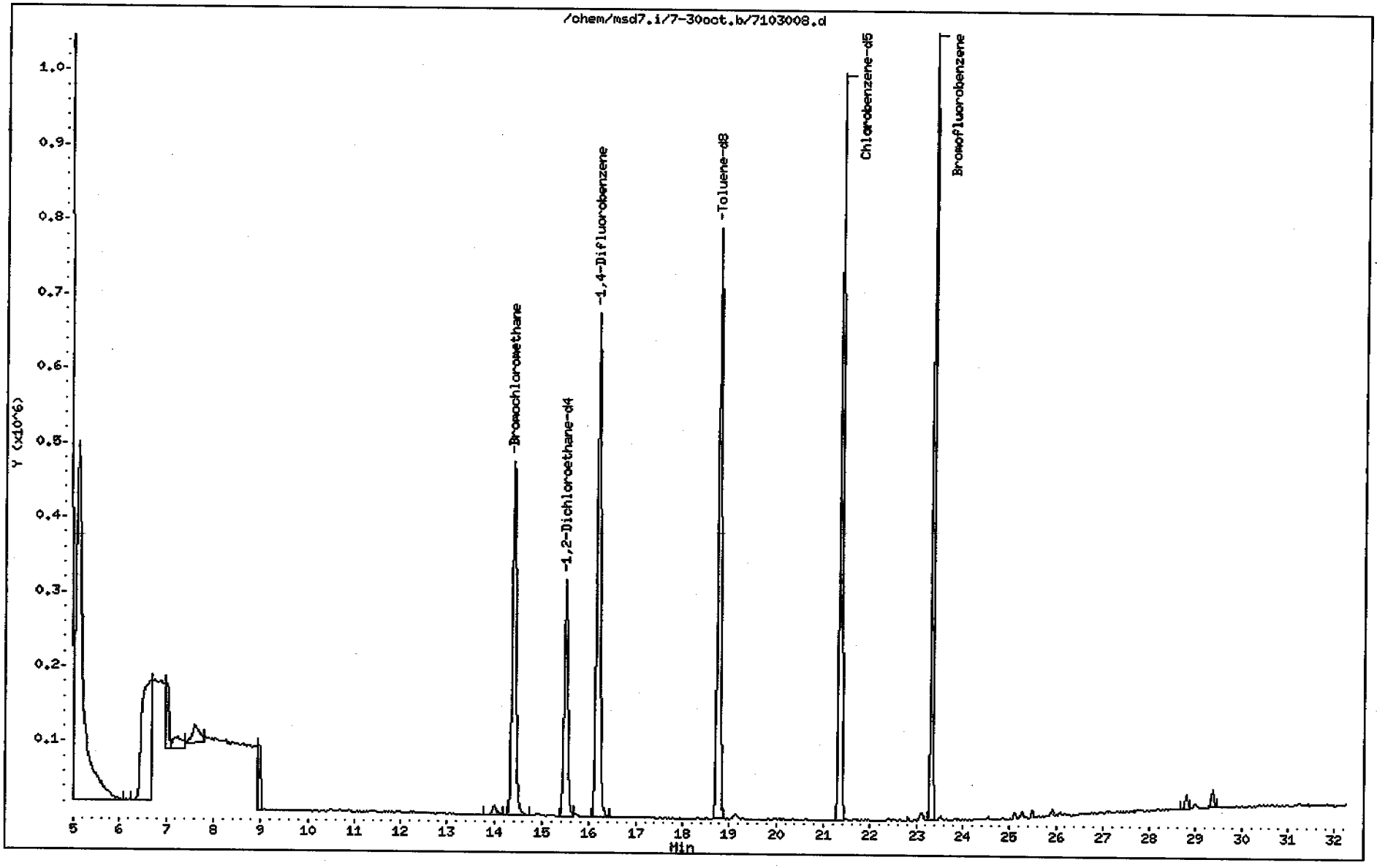
Data File: /chem/msd7.i/7-30oct.b/7103008.d
Date : 30-OCT-2007 13:36
Client ID: Lab Blank
Sample Info: 200mL #34190

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0122



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710567-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710567-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Chlorodifluoromethane	2.0	Not Detected	7.1	Not Detected
Methanol	50	Not Detected	66	Not Detected
n-Butanol	2.0	Not Detected	6.1	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-31oct.b/7103105.d
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Inj Date : 31-OCT-2007 11:28
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #34190
Misc Info : Humid
Comment :
Method : /chem/msd7.i/7-31oct.b/t14q018c.m
Meth Date : 31-Oct-2007 11:40 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04ENSR+22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.416	14.388 (1.000)	130	436949	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	335751			26.85- 126.85	76.84
14.388	14.388 (1.000)	49	624691			148.03- 248.03	142.97
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1407318	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	213095			0.00- 65.22	15.14
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1018671	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	536543			4.45- 104.45	52.67
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	553489	23.5792	23.579	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	274706			2.91- 102.91	49.63
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1142643	22.8722	22.872	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	118898			0.00- 61.46	10.41

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	779175			19.18- 119.18	68.19
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	620013	25.5780	25.578	80.00- 120.00	100.00
23.319	23.347	(1.092)	95	715082			66.59- 166.59	115.33
23.347	23.347	(1.093)	176	589202			46.44- 146.44	95.03

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103105.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: Humid

Calibration Date: 31-OCT-2007
Calibration Time: 09:03
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	419527	251716	587338	436949	4.15
97 1,4-Difluorobenze	1400939	840563	1961315	1407318	0.46
126 Chlorobenzene-d5	1205049	723029	1687069	1018671	-15.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 31-Oct-2007 11:49

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 7-31oct
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: cb
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926spectra.spk
Quant Type: ISTD
Sublist File: AT04ENSR+22a.sub
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.579	94.32	70-130
$ 113 Toluene-d8	25.000	22.872	91.49	70-130
$ 137 Bromofluorobenzene	25.000	25.578	102.31	70-130

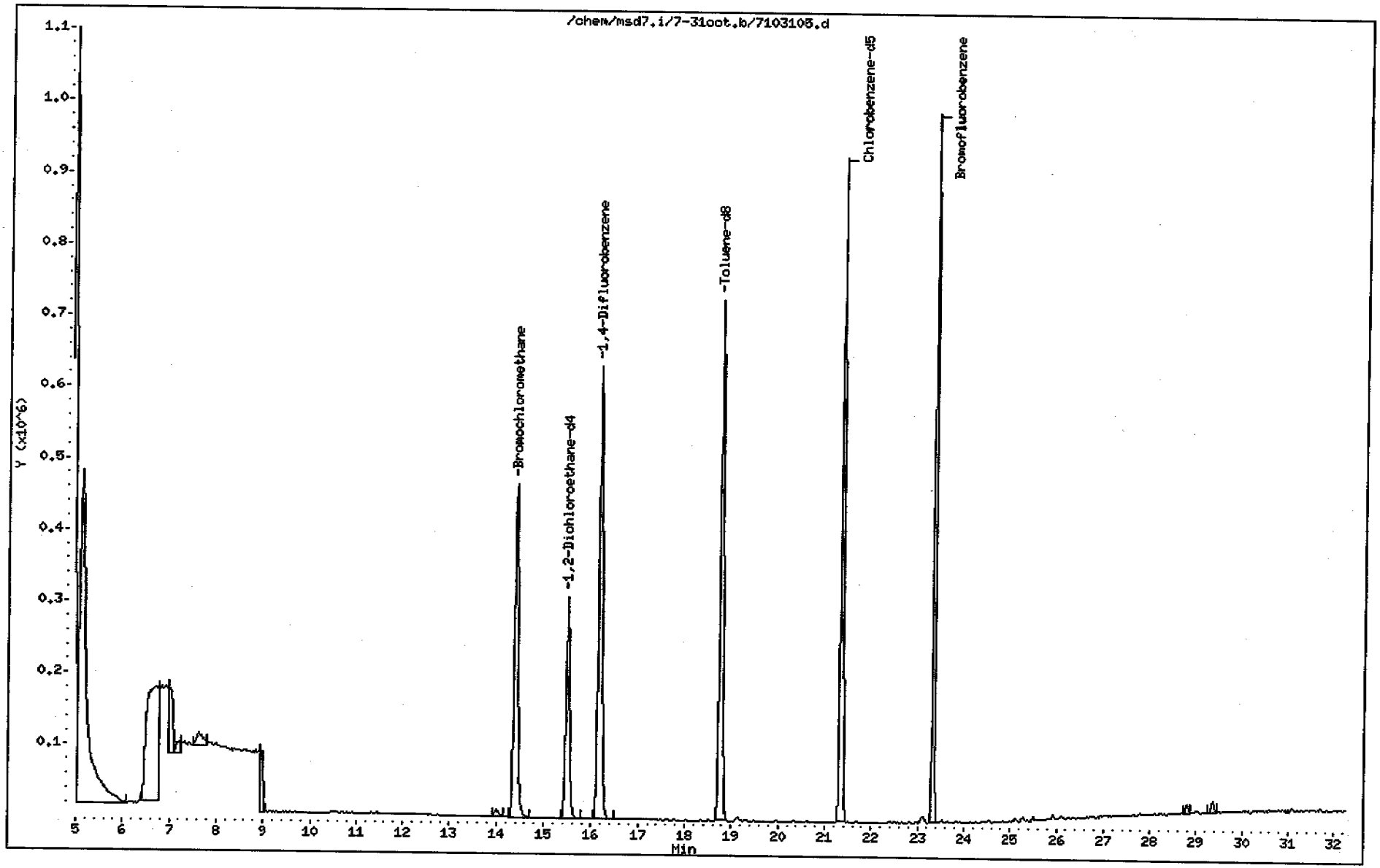
Data File: /chem/msd7.i/7-31oct.b/7103105.d
Date : 31-OCT-2007 11:28
Client ID: Lab Blank
Sample Info: 200mL #34190

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0129



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0710567

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	MD21-07-6813	109		93		100				0
02	MD21-07-6814	106		92		104				0
03	MD21-07-6815	103		92		100				0
04	MD21-07-6816	102		90		103				0
05	MD21-07-6817	107		88		104				0
06	Lab Blank	89		94		100				0
07	Lab Blank	94		91		102				0
08	CCV	96		100		105				0
09	CCV	112		100		110				0
10	LCS	93		101		104				0
11	LCS	102		101		108				0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0710567
Lab File ID: 7103006.d
Date Analyzed: 10/30/2007
Instrument ID: msd7.i
Time Analyzed: 12:15 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1414884		21.36		1771565		16.16		537758		14.39	
	UPPER LIMIT	1980838		21.69		2480191		16.49		752861		14.72	
	LOWER LIMIT	848930		21.03		1062939		15.83		322655		14.06	
	CLIENT SAMPLE NO												
01	MD21-07-6813	954007		21.36		1198965		16.19		359556		14.42	
02	MD21-07-6814	957513		21.36		1266199		16.19		387796		14.42	
03	MD21-07-6815	1013801		21.36		1414753		16.16		426965		14.42	
04	Lab Blank	1107890		21.36		1504240		16.16		463709		14.42	
05	Lab Blank	1018671		21.36		1407318		16.16		436949		14.42	
06	CCV	1414884		21.36		1771565		16.16		537758		14.39	
07	CCV	1205049		21.36		1400939		16.16		419527		14.39	
08	LCS	1434159		21.36		1788111		16.16		529735		14.42	
09	LCS	1311308		21.36		1606107		16.16		478234		14.39	
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD
SDG No: 0710567
Lab File ID: 7103102.d
Date Analyzed: 10/31/2007
Instrument ID: msd7.i
Time Analyzed: 09:03 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	1205049		21.36		1400939		16.16		419527		14.39	
	UPPER LIMIT	1687069		21.69		1961315		16.49		587338		14.72	
	LOWER LIMIT	723029		21.03		840563		15.83		251716		14.06	
	CLIENT SAMPLE NO												
01	MD21-07-6816	964783		21.36		1364399		16.16		422872		14.42	
02	MD21-07-6817	914211		21.36		1282407		16.16		385389		14.42	
03	Lab Blank	1018671		21.36		1407318		16.16		436949		14.42	
04	CCV	1205049		21.36		1400939		16.16		419527		14.39	
05	LCS	1311308		21.36		1606107		16.16		478234		14.39	
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd7.i/7-18oct.b/7101802.d
Level 2: /chem/msd7.i/7-18oct.b/7101803.d
Level 3: /chem/msd7.i/7-22oct.b/7102205.d
Level 4: /chem/msd7.i/7-30oct.b/7103003.d
Level 5: /chem/msd7.i/7-30oct.b/7103004.d
Level 6: /chem/msd7.i/7-18oct.b/7101807.d
Level 7: /chem/msd7.i/7-30oct.b/7103005.d

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 143a	+++++	+++++	0.55395	+++++	0.55199	+++++	0.52936	0.54510	2.507
6 Freon142b	+++++	+++++	2.28105	+++++	2.26472	+++++	2.12470	2.22349	3.865
7 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
8 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
10 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Propylene	+++++	+++++	1.12508	1.03756	1.03506	1.07736		
	1.11245						1.07750	3.849
12 Dichlorodifluoromethane/Fr12	+++++	3.99832	4.01542	3.93538	3.87538	3.94362		
	3.93588						3.95067	1.272
13 Freon 134a	+++++	+++++	1.08885	+++++	1.07331	+++++		
	1.03422						1.06546	2.642
14 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
15 Freon 152a	+++++	+++++	0.79822	+++++	0.77199	+++++		
	0.73740						0.76921	3.966
16 Freon 114	+++++	2.75763	2.94175	2.80659	2.67187	2.54264		
	2.41290						2.68890	7.063
17 Freon 22	+++++	+++++	2.64018	+++++	2.47048	+++++		
	2.34449						2.48505	5.971

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
18 Chloromethane	+++++	+++++	1.35842	1.27523	1.23888	1.27208	1.35173	1.29926	4.075
19 Butane	+++++	+++++	0.27760	0.27318	0.27001	0.28033	0.29063	0.27835	2.849
20 Vinyl Chloride	+++++	1.61123	1.66709	1.62947	1.58710	1.59115	1.64603	1.62201	1.940
21 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 1,3-Butadiene	+++++	0.98714	1.11899	1.17713	1.17364	1.20853	1.30571	1.16186	9.077
23 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Bromomethane	+++++	1.36911	1.38030	1.38465	1.43147	1.47189	1.57973	1.43619	5.586
26 Methanol	+++++	+++++	+++++	0.49521	0.41205	+++++	0.37348	0.42691	14.573
27 Chloroethane	+++++	0.56164	0.59106	0.70880	0.75786	0.81456	0.88356	0.71958	17.463

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
28 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Isopentane	+++++	+++++	1.72200	1.68471	1.74289	1.82023	1.94043	1.78205	5.692
30 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Trichlorofluoromethane/Fr11	+++++	3.30692	3.64793	3.69780	3.75036	3.79137	3.91953	3.68565	5.627
32 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane/Fr21	+++++	+++++	2.18670	+++++	2.24831	+++++	2.17912	2.20471	1.721
35 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
38 Ethanol	+++++	+++++	0.40835	0.46701	0.50651	0.55509		
	0.57654						0.50270	13.487
39 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
40 Freon123a	+++++	+++++	1.12892	+++++	1.34813	+++++		
	1.26008						1.24571	8.855
41 Freon123	+++++	+++++	2.17978	+++++	2.29407	+++++		
	2.15449						2.20945	3.366
42 Freon 113	+++++	1.87915	1.96071	2.08299	2.10265	2.12197		
	2.15175						2.04987	5.188
43 1,1-Dichloroethene	+++++	1.93487	2.07684	2.19744	2.20280	2.28145		
	2.39408						2.18125	7.326
44 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
45 Acetone	+++++	+++++	0.57485	0.65835	0.66872	0.70589		
	0.76315						0.67421	10.242
46 2-Propanol	+++++	+++++	1.73749	2.29338	2.44395	2.63284		
	2.85245						2.39202	17.623
47 Carbon Disulfide	+++++	3.64316	3.89848	4.16293	4.20624	4.40983		
	4.64911						4.16162	8.592

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
48 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 3-Chloropropene	+++++	+++++	0.47791	0.67053	0.69517	0.71004	0.83257	0.67724	18.866
52 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methylene Chloride	+++++	1.50433	1.50940	1.55545	1.57830	1.66547	1.80906	1.60367	7.258
55 Cyclopentene	+++++	+++++	4.55063	+++++	4.84748	+++++	4.57554	4.65788	3.535
56 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 tert-Butyl-Alcohol	+++++	+++++	2.48873	+++++	2.67379	+++++	1.79281	2.31844	20.036

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
58 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
59 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
60 MTBE	+++++	2.56761	2.53475	2.73045	2.62429	2.12688		
	2.03593						2.43665	11.678
61 trans-1,2-Dichloroethene	+++++	1.27767	1.25807	1.53893	1.55545	1.59786		
	1.66426						1.48204	11.576
62 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
63 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
64 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
65 Hexane	+++++	1.69745	1.86588	2.11588	2.20087	2.32069		
	2.48851						2.11488	13.795
66 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
67 2,4,4-Trimethyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD
68 Isopropyl ether	+++++	+++++	4.21268	+++++	4.73884	+++++	4.43254	4.46135	5.923
69 Vinyl Acetate	+++++	+++++	0.22424	0.31548	0.33299	0.35296	0.37207	0.31955	17.946
70 1,1-Dichloroethane	+++++	2.06984	2.31882	2.66506	2.63329	2.70399	2.80833	2.53322	11.066
71 1-Propanol	+++++	+++++	0.22951	+++++	0.30666	+++++	0.30318	0.27978	15.573
72 2,4,4-Trimethyl-2-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 t-Butylethyl Ether	+++++	+++++	3.43943	+++++	4.07078	+++++	3.89822	3.80281	8.581
74 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 2-Butanone	+++++	0.38112	0.37327	0.57250	0.59883	0.64860	0.67445	0.54146	24.420
76 cis-1,2-Dichloroethene	+++++	1.44231	1.58756	1.86427	1.87388	1.90834	1.96251	1.77314	11.735
77 Ethyl Acetate	+++++	+++++	0.39111	+++++	0.44693	+++++	0.43572	0.42459	6.954

Air Toxics Ltd.

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Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
78 2,2-Dichloropropane	+++++	+++++	2.76326	+++++	3.07482	+++++		
	2.91201						2.91670	5.343
79 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
80 Tetrahydrofuran	+++++	1.02790	1.12367	1.48422	1.53795	1.59990		
	1.69691						1.41176	19.223
82 Chloroform	2.05933	2.30448	2.48203	2.71876	2.69631	2.67566		
	2.68331						2.51713	10.018
83 1,1,1-Trichloroethane	+++++	2.13993	2.49116	2.73073	2.66320	2.61212		
	2.57161						2.53479	8.276
84 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
85 Cyclohexane	+++++	1.13455	1.20463	1.54480	1.56422	1.61154		
	1.65129						1.45184	15.351
86 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
87 Carbon Tetrachloride	+++++	1.91512	2.28619	2.65822	2.53314	2.44673		
	2.41712						2.37608	10.837
88 1,1-Dichloropropene	+++++	+++++	0.32293	+++++	0.36098	+++++		
	0.32719						0.33704	6.186

Air Toxics Ltd.

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Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
89 2,2,4-Trimethylpentane	+++++	3.81973	4.40383	5.32986	5.44906	5.60503	5.84105	5.07476	15.513
91 Benzene	0.86624	0.88889	0.91154	1.08544	1.09104	1.07270	1.03741	0.99332	10.069
92 tert-amyl-Methyl Ether	+++++	+++++	2.47283	+++++	2.98882	+++++	2.87645	2.77937	9.763
93 1,2-Dichloroethane	+++++	0.47713	0.50816	0.58724	0.55560	0.53375	0.50473	0.52777	7.497
94 Heptane	+++++	0.21787	0.25494	0.33625	0.34694	0.34672	0.33023	0.30549	18.053
95 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Heptanone	+++++	+++++	1.17667	+++++	1.87950	+++++	1.94397	1.66671	25.536
98 1-Butanol	+++++	+++++	0.16640	+++++	0.27504	+++++	0.29172	0.24439	27.845
99 Isobutanol	+++++	+++++	0.01857	+++++	0.03090	+++++	0.03265	0.02737	28.046
100 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Air Toxics Ltd.

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Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
101 Trichloroethene	+++++	0.36757	0.41682	0.48608	0.47584	0.46333	0.43779	0.44124	9.999
102 Methyl Cyclohexane	+++++	1.39533	1.53464	1.88425	1.91342	1.96394	2.03008	1.78694	14.440
103 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
104 1,2-Dichloropropane	+++++	0.31221	0.33815	0.41169	0.41161	0.41161	0.40196	0.38121	11.628
105 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 1,4-Dioxane	+++++	+++++	0.17948	0.26051	0.26452	0.26965	0.26552	0.24794	15.489
107 Bromodichloromethane	+++++	0.61038	0.69769	0.87294	0.84576	0.81437	0.75521	0.76606	12.941
108 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 cis-1,3-Dichloropropene	+++++	0.38818	0.43431	0.60245	0.61448	0.61397	0.57859	0.53866	18.678

Air Toxics Ltd.

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Integrator : HP RTE
Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
111 4-Methyl-2-pentanone	+++++	0.17517	0.22135	0.33428	0.34745	0.35414	0.35115	0.29726	26.358
112 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Toluene	+++++	0.88659	0.96936	1.20407	1.18877	1.16407	1.11507	1.08799	11.969
115 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 trans-1,3-Dichloropropene	+++++	0.53047	0.59368	0.77535	0.80087	0.79044	0.76929	0.71002	16.458
117 1,1,2-Trichloroethane	+++++	0.41044	0.46882	0.56509	0.56186	0.55694	0.54374	0.51782	12.308
118 1,3-Dichloropropane	+++++	+++++	0.95658	+++++	1.08832	+++++	0.96579	1.00356	7.328
119 Butyl Acetate	+++++	+++++	0.28247	+++++	0.41163	+++++	0.39768	0.36393	19.478
120 Tetrachloroethene	+++++	0.58842	0.66370	0.75326	0.72549	0.67756	0.62110	0.67159	9.213
121 2-Hexanone	+++++	+++++	0.36161	0.55434	0.60179	0.62391	0.63307	0.55495	20.234

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Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
122 Dibromochloromethane	+++++	0.69168	0.84946	1.07299	1.03098	0.96547		
	0.89431						0.91748	15.065
123 1,2-Dibromoethane	+++++	0.62218	0.76958	0.96047	0.95014	0.91717		
	0.87375						0.84888	15.420
124 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
125 1,1,1,2-Tetrachloroethane	+++++	+++++	0.89946	+++++	0.96238	+++++		
	0.81264						0.89149	8.434
127 Chlorobenzene	+++++	0.98017	1.09978	1.22139	1.20798	1.16672		
	1.10992						1.13099	7.863
128 Ethyl Benzene	+++++	0.45805	0.54406	0.64040	0.62635	0.60750		
	0.58753						0.57731	11.679
129 m,p-Xylene	+++++	0.59617	0.64876	0.79109	0.79390	0.76602		
	0.73972						0.72261	11.309
130 o-Xylene	+++++	0.50098	0.57853	0.70214	0.68839	0.66302		
	0.62421						0.62621	12.150
131 Styrene	0.70099	0.69787	0.85261	1.17931	1.15472	1.12570		
	1.06862						0.96855	21.987
132 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	200.000 Level 7							
133 Bromoform	+++++	0.63213	0.75943	0.95882	0.91283	0.83481		
	0.73582						0.80564	14.990
134 Cumene	1.37424	1.32202	1.52398	1.81837	1.75252	1.68271		
	1.59504						1.58127	11.814
135 Cyclohexanone	+++++	+++++	0.42554	+++++	0.51533	+++++		
	0.55003						0.49697	12.926
136 Bromobenzene	+++++	+++++	1.09324	+++++	1.15192	+++++		
	0.89292						1.04603	12.983
138 1,2,3-Trichloropropane	+++++	+++++	0.49256	+++++	0.53270	+++++		
	0.44323						0.48949	9.155
139 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 1,1,2,2-Tetrachloroethane	+++++	0.90901	1.02955	1.12854	1.10800	1.08214		
	1.01864						1.04598	7.618
141 2-Chlorotoluene	+++++	+++++	0.77382	+++++	0.83371	+++++		
	0.71021						0.77258	7.994
142 Propylbenzene	+++++	1.80614	2.07039	2.37103	2.29000	2.22770		
	1.95985						2.12085	10.116
143 4-Chlorotoluene	+++++	+++++	0.80068	+++++	0.91055	+++++		
	0.76155						0.82426	9.372

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Method file : /chem/msd7.i/7-30oct.b/t14q018c.m
Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
144 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Ethyltoluene	+++++	1.44347	1.70757	2.13595	2.07919	1.99040	1.88068	1.87287	13.869
146 Diisobutyl Ketone	+++++	+++++	1.03326	+++++	1.20971	+++++	1.11764	1.12021	7.878
147 1,3,5-Trimethylbenzene	+++++	1.41316	1.61240	1.56055	1.49171	1.41942	1.32949	1.47112	7.095
148 tert-Butylbenzene	+++++	+++++	2.45687	+++++	2.30546	+++++	1.84295	2.20176	14.526
149 sec-Butylbenzene	+++++	+++++	3.43467	+++++	3.26882	+++++	2.43915	3.04755	17.502
150 1,2,4-Trimethylbenzene	+++++	1.05335	1.33499	1.48885	1.43630	1.39785	1.31045	1.33697	11.480
151 bis(2-chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 p-Cymene	+++++	+++++	2.65193	+++++	2.61222	+++++	2.06279	2.44232	13.482

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Cal Date : 30-Oct-2007 11:35 cbond
Curve Type : Average

Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
154 1,2,3-Trimethylbenzene	+++++	+++++	0.97569	+++++	1.04736	+++++	0.88396	0.96900	8.453
155 1,3-Dichlorobenzene	+++++	0.93407	1.06260	1.12258	1.08075	1.04027	0.96733	1.03460	6.878
156 1,4-Dichlorobenzene	+++++	1.02926	1.10239	1.15450	1.11647	1.07554	0.99126	1.07824	5.539
157 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 Butylbenzene	+++++	+++++	0.66658	+++++	0.69760	+++++	0.60595	0.65671	7.099
159 alpha-Chlorotoluene	+++++	1.02301	1.25741	1.52918	1.58500	1.63564	1.55835	1.43143	16.768
160 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1,2-Dichlorobenzene	+++++	0.94286	1.02179	0.99757	0.96941	0.96223	0.88582	0.96328	4.881
162 1,2-Dibromo-3-Chloropropane	+++++	+++++	0.76234	+++++	0.80959	+++++	0.79238	0.78810	3.035
163 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	___ RRF	% RSD	
164 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 1,2,4-Trichlorobenzene	+++++	+++++	0.51018	0.27800	0.34560	0.40681	0.42931	0.39398	22.239	
166 Hexachlorobutadiene	+++++	+++++	0.50925	0.26779	0.28274	0.29299	0.28486	0.32753	31.141	<-
167 Naphthalene	+++++	+++++	0.92717	0.46092	0.62590	0.80276	0.87395	0.73814	26.042	
168 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
170 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
199 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
200 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
201 Pentachloroethane	+++++	+++++	0.71063	+++++	0.70263	+++++	0.56154	0.65826	12.740	

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Compound	0.30000 Level 1	0.50000 Level 2	2.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
202 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 90 1,2-Dichloroethane-d4	1.32140	1.33936	1.38524	1.34768	1.31998	1.31873	1.36890	1.34304	1.941
$ 113 Toluene-d8	0.87123	0.85458	0.85764	0.89757	0.90205	0.91537	0.91380	0.88746	2.917
$ 137 Bromofluorobenzene	0.59803	0.60119	0.59463	0.60774	0.59840	0.58089	0.58339	0.59489	1.617

Calibration History

Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Start Cal Date: 18-OCT-2007 12:17
End Cal Date : 30-OCT-2007 11:10

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.30000		
18-OCT-2007 12:17	AFCEElow	/chem/msd7.i/7-18oct.b/7101802.d
Cal Level: 2 , Cal Amount: 0.50000		
18-OCT-2007 12:56	AT04low+ENSR	/chem/msd7.i/7-18oct.b/7101803.d
Cal Level: 3 , Cal Amount: 2.00000		
22-OCT-2007 10:55	sp16b	/chem/msd7.i/7-22oct.b/7102205.d
19-OCT-2007 10:22	sp22a	/chem/msd7.i/7-19oct.b/7101903.d
18-OCT-2007 14:09	AT04mdl+ENSR	/chem/msd7.i/7-18oct.b/7101804.d
Cal Level: 4 , Cal Amount: 25.00000		
30-OCT-2007 09:51	sp1c	/chem/msd7.i/7-30oct.b/7103003.d
18-OCT-2007 14:47	AT04mdl+ENSR	/chem/msd7.i/7-18oct.b/7101805.d
Cal Level: 5 , Cal Amount: 50.00000		
30-OCT-2007 10:29	sp1c	/chem/msd7.i/7-30oct.b/7103004.d
22-OCT-2007 11:44	sp16b	/chem/msd7.i/7-22oct.b/7102206.d
19-OCT-2007 11:00	sp22a	/chem/msd7.i/7-19oct.b/7101904.d
18-OCT-2007 15:26	AT04mdl+ENSR	/chem/msd7.i/7-18oct.b/7101806.d
Cal Level: 6 , Cal Amount: 100.00000		
18-OCT-2007 16:15	AT04mdl+ENSR	/chem/msd7.i/7-18oct.b/7101807.d
Cal Level: 7 , Cal Amount: 200.00000		
30-OCT-2007 11:10	sp1c	/chem/msd7.i/7-30oct.b/7103005.d

22-OCT-2007 12:34	sp16b	/chem/msd7.i/7-22oct.b/7102207.d
19-OCT-2007 11:41	sp22a	/chem/msd7.i/7-19oct.b/7101905.d
18-OCT-2007 17:39	AT04mdl+ENSR	/chem/msd7.i/7-18oct.b/7101808.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 50.000		
30-OCT-2007 10:29	sp22aCCV	/chem/msd7.i/7-30oct.b/7103004a.d

Initial Calibration Narrative

A seven point and four point initial calibration was analyzed on MSD-7 on 10-18-2007.:

The following compounds used 0.2 ppbv as the lowest calibration concentration:
Chloroform, Benzene, Cumene and Styrene.

@ Air Toxics Ltd.

MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.6
75	30.0 – 60.0% of mass 95	39.7
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.78
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	81.70
175	5.0 – 9.0% of mass 174	(6.88)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.40)[1]
177	5.0 – 9.0% of mass 176	(6.69)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/18/07

BFB Injection Time: 1150

BFB File ID: 7101807

Tekmar Purge Flow: 17.9 mL/min

Vacuum: 2.8×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	683549	
1,4-DFB	2204815	
CB-d5	1812979	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1072385 / 1112403 x 100 =

NOAH Cart #: N/A **File #:** N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 902272\ )}{(\ 683549\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.571$

File ID:	7101806
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.571

	QC	File ID	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Reviewer Initials	Comments
1	✓	7101807	BFB Tune Check	1467-64	50 ng	2uL	1.00	10/18/07	1150	CB	
2	✓	02	ICAL Level 1	1576-50	200ppbv 0.2ppbv	0.2mL			1217	CB	
3	✓	03	2		200ppbv 0.5ppbv	0.5mL			1256	CB	
4	✓	04	3		200ppbv 2ppbv	2mL			1409	CB	
5	✓	05	4		200ppbv 25ppbv	25mL			1447	CB	
6	✓	06	5		200ppbv 50ppbv	50mL			1526	CB	ccv
7	✓	07	6		200ppbv 100ppbv	100mL			1615	SW/CB	
8	✓	08	7		200ppbv 200ppbv	200mL			1739	SW/CB	1 unt Hexach for dilution
9	X	09	System Blank	3419D			✓	✓	1847	CB	

Laura Arrington
Signature

10/22/07
Date

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10	✓	7101810	ICAL LCS-1 (200ppm)	1443-302	50ppm	50L/L	1.00	10/18/07	1929	dlm/CB	ϕ OUT ICALCS
11		↓ 11	System Blank	34490	Humid	200mL			CB28	CB	
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26			FR 10/22/07								
27											
28											
29											
30											
31											
32											

0158

Comments: Flow controller SN # AA9123141 Nominal: 23.6 mL/min

NIST Flowmeter # 200-7744 Actual: 25.0 mL/min CB 10/22/07

Exp 8/27/08

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10/18/07
Date

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.32
75	30.0 – 60.0% of mass 95	40.25
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.83
173	Less than 2.0% of mass 174	(0.49)[1]
174	Greater than 50.0% of mass 95	81.69
175	5.0 – 9.0% of mass 174	(7.11)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.18)[1]
177	5.0 – 9.0% of mass 176	(6.67)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

Verify 176/174 m/z Ratio: 1015727 / 1045184 x 100 = 97.187%

BFB Injection Date: 10/19/07

BFB Injection Time: 0909

BFB File ID: 7101901

Tekmar Purge Flow: 17.8 mL/min

Vacuum: 3.0×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	709290	
1,4-DFB	2353863	
CB-d5	1919987	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

NOAH Cart #: NA File #: NA

0156

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 919940\ )}{(\ 709290\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.143$

File ID:	7101902
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.143

		File ID	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	7101901	BFB Tune Check	1467-64	50 psig	2mL	1.00	10/19/07	0909	CB	
2	✓	02	CCV-1 (200ppbv)	1576-50	50 ppbv	50mL			0929	CB	
3	✓	03	ICAL Level 3	1487-400	200ppbv – 2ppbv	2mL			1022	CB	Sp22a tb140189
4	✓	04	5		200ppbv – 50ppbv	50mL			1100	CB	CCV
5	✓	05	7		200 ppbv	200mL			1141	CB	
6	✓	06	LCS-1 (200ppbv)	1443-302	50 ppbv	50mL			1226	CB	~~TCM~~ LCS 10/22/07
7	✓	07	Gas Std (100ppmv)	1576-14	2500 ppbv	5mL			1310	CB	
8	~~✓~~ 40ppmv	08	Lab Blank	12009	Humid	200mL			1400	CB	
9		09	Lab Blank								40ppmv not run

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10/19/07
Date

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	17.85
75	30.0 – 60.0% of mass 95	39.75
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.75
173	Less than 2.0% of mass 174	(0.53)[1]
174	Greater than 50.0% of mass 95	86.46
175	5.0 – 9.0% of mass 174	(6.92)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.63)[1]
177	5.0 – 9.0% of mass 176	(6.48)[2]

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 10/22/07

BFB Injection Time: 0822

BFB File ID: 7102201

Tekmar Purge Flow: 17.9 mL/min

Vacuum: 2.8×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	691202	
1,4-DFB	2257140	
CB-d5	1886010	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 1142984 / 1182801 × 100 = 96.63%

NOAH Cart #: NA File #: NA

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 892172\ )}{(\ 691202\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 24.027$

File ID:	7102202
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 24.027

	✓	File #	Sample / Client Name	Can #	Pressure	Aliquot Pressure	IS	Date Analyzed	Time Analyzed	Reviewed By	Comments
1	✓	7102201	BFB Tune Check	1467-64	50psig	2mL	1.00	10/22/07	0822	CB	
2	✓	02	CCV-1 (200ppbv)	1576-50	50ppbv	50mL			0843	CB	
3	✓	03	LCS-1 (200ppbv)	1493-302	50ppbv	50mL			0925	CB	
4	✓	04	CCVsp (200ppbv)	1487-400	50ppbv	50mL			1007	CB	
5	✓	05	ICAL level 3	1487-370	200ppbv - 2 mL	2mL			1055	CB	sp166 T1490186
6	✓	06	↓ 5	↓	200ppbv - 50 mL	50mL			1144	CB	CCV
7	✓	07	↓ 7	↓	200ppbv	200mL			1234	CB	
8	✗	08	Lab Blank	34190	Humid	200mL			1317	CB	
9	✓	09	Lab Blank	3487 3480	Humid	200mL	↓	↓	1422	CB	

5/5 10/22/07

Signature

10/22/07

Date

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.22
75	30.0 – 60.0% of mass 95	39.23
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.64
173	Less than 2.0% of mass 174	(0.52)[1]
174	Greater than 50.0% of mass 95	86.75
175	5.0 – 9.0% of mass 174	(7.12)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.72)[1]
177	5.0 – 9.0% of mass 176	(6.45)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 10/30/07
BFB Injection Time: 0826
BFB File ID: 7103001
Tekmar Purge Flow: 17.7 mL/min
Vacuum: 2.9×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	537758	
1,4-DFB	1771565	
CB-d5	1414884	

Verified CCV IS vs ICAL mid-point (- 40%D) CB (initials)

Verify 176/174 m/z Ratio: 835758 / 855253 x 100 = 97.72%

NOAH Cart #: N/A **File #:** N/A

0158

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(\ 692227\ )}{(\ 537758\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 23.961$$

File ID:	7103006
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 23.961

	Time	File #	Sample / Client Name	Can #	Pressure	Amt Loaded	DF	Date Analyzed	Time Analyzed	Review Init.	Comments
1	✓	7103001	BFB Tune Check	1467-64	50mg	2mL	1.00	10/30/07	0826	CB	
2	✓	02	System Blank	34190	Humid	200mL			0858	CB	
3	✓	03	ICAL Level 4	1487-400	200/1200ppbv → 8/48ppbv	8mL			0951	CB	spic t1147018c
4	✓	04	5		200/1200ppbv 50/300ppbv	50mL			1029	CB	CCV
5	✓	05	7		200/1200ppbv	200mL			1110	CB	
6	✓	06	CCV-1 (100ppbv)	1516-50A	50ppbv	100mL			1215	CB	
7	✓	07	LCS-1 (200ppbv)	1443-202	50ppbv	50mL			1253	CB	
8	✓	08	Lab Blank	34190	Humid	200mL			1336	CB	
9											CB 10/30/07

Signature

10/30/07
Date

Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101810.d
Lab Smp Id: lcs-1 Client Smp ID: lcs-1
Inj Date : 18-OCT-2007 19:29
Operator : dm Inst ID: msd7.i
Smp Info : 50mL #1443-302
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza Quant Type: ISTD
Cal Date : 18-OCT-2007 17:39 Cal File: 7101808.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
14.402	14.402 (1.000)	130	693629	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	530078			26.95- 126.95	76.42
14.402	14.402 (1.000)	49	1393802			141.62- 241.62	200.94
* 81 Bromochloromethane					CAS #: 74-97-5		
16.172	16.172 (1.000)	114	2281320	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	352159			0.00- 65.69	15.44
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
21.342	21.370 (1.000)	117	1855833	25.0000		80.00- 120.00	100.00
21.342	21.370 (1.000)	82	1005254			5.32- 105.32	54.17
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
15.481	15.508 (1.075)	65	876557	23.5236	23.524	80.00- 120.00	100.00
15.481	15.508 (1.075)	67	486395			2.91- 102.91	55.49
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
18.771	18.771 (1.161)	98	2088005	25.7831	25.783	80.00- 120.00	100.00
18.771	18.771 (1.161)	70	225307			0.00- 61.46	10.79
$ 113 Toluene-d8					CAS #: 2037-26-5		

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1458124			19.18- 119.18	69.83
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1059533	23.9925	23.992	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1390500			76.80- 176.80	131.24
23.333	23.333 (1.093)	176	1023241			46.06- 146.06	96.57
11 Propylene					CAS #: 115-07-1		
5.638	5.610 (0.391)	41	1534698	51.3354	51.335	80.00- 120.00	100.00
5.638	5.610 (0.391)	42	1071619			21.19- 121.19	69.83
5.638	5.610 (0.391)	39	1149702			24.83- 124.83	74.91
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.748 (0.401)	85	5279130	48.1620	48.162	80.00- 120.00	100.00
5.776	5.748 (0.401)	87	1711789			0.00- 83.07	32.43
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	3664358	49.1175	49.117	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	1157150			0.00- 81.81	31.58
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	1695497	47.0340	47.034	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	575964			0.00- 84.80	33.97
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	2274469	50.5403	50.540	80.00- 120.00	100.00
6.882	6.882 (0.478)	64	710275			0.00- 83.25	31.23
22 1,3-Butadiene					CAS #: 106-99-0		
6.965	6.937 (0.484)	54	1686114	52.3055	52.306	80.00- 120.00	100.00
6.965	6.937 (0.484)	39	1613662			55.97- 155.97	95.70
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	1971163	49.4678	49.468	80.00- 120.00	100.00
8.043	8.043 (0.558)	96	1847772			43.77- 143.77	93.74
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	1113775	55.7868	55.787	80.00- 120.00	100.00
8.375	8.375 (0.581)	49	303751			0.00- 79.34	27.27
8.375	8.375 (0.581)	66	350600			0.00- 83.15	31.48
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.983	8.956 (0.624)	101	5275187	51.5865	51.586	80.00- 120.00	100.00
8.983	8.956 (0.624)	103	3407790			14.33- 114.33	64.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	850282	60.9628	60.963	80.00- 120.00	100.00
9.453	9.453 (0.656)	43	163721			0.00- 72.83	19.25
9.453	9.453 (0.656)	46	316936			0.00- 88.20	37.27
42 Freon 113					CAS #: 76-13-1		
10.227	10.227 (0.710)	151	3359898	59.0761	59.076	80.00- 120.00	100.00
10.227	10.227 (0.710)	153	2146359			13.49- 113.49	63.88
10.200	10.227 (0.708)	101	4204443			73.17- 173.17	125.14
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.338	10.338 (0.718)	61	3633905	60.0456	60.046	80.00- 120.00	100.00
10.338	10.338 (0.718)	96	2250431			11.42- 111.42	61.93
10.338	10.338 (0.718)	98	1429998			0.00- 89.70	39.35
45 Acetone					CAS #: 67-64-1		
10.504	10.504 (0.729)	58	1068582	57.1246	57.125	80.00- 120.00	100.00
10.504	10.504 (0.729)	43	3184271			247.10- 347.10	297.99
46 2-Propanol					CAS #: 67-63-0		
10.670	10.697 (0.741)	45	3852062	58.0418	58.042	80.00- 120.00	100.00
10.670	10.697 (0.741)	43	890934			0.00- 75.54	23.13
10.697	10.697 (0.743)	59	147038			0.00- 53.72	3.82
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	6273161	54.3296	54.330	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.167	11.168 (0.775)	76	1091929	58.1115	58.111	80.00- 120.00	100.00
11.167	11.168 (0.775)	41	2818682			224.96- 324.96	258.14
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	2611233	58.6871	58.687	80.00- 120.00	100.00
11.472	11.472 (0.796)	84	1889884			23.49- 123.49	72.38
11.472	11.472 (0.796)	51	797893			0.00- 80.85	30.56
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	3974575	58.7909	58.791	80.00- 120.00	100.00
11.831	11.831 (0.821)	57	914186			0.00- 73.11	23.00
11.831	11.831 (0.821)	41	882141			0.00- 76.16	22.19
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	2352862	57.2201	57.220	80.00- 120.00	100.00
11.942	11.942 (0.829)	61	3353273			93.77- 193.77	142.52
11.942	11.942 (0.829)	98	1487360			11.77- 111.77	63.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	3482505	59.3497	59.350	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	2243596			17.84- 117.84	64.42
12.301	12.301 (0.854)	86	532459			0.00- 65.07	15.29
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	519165	58.5571	58.557	80.00- 120.00	100.00
12.799	12.799 (0.889)	43	6034912			1150.46-1250.46	1162.43
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	4119087	58.6057	58.606	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	1300555			0.00- 81.66	31.57
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	943974	62.8355	62.835	80.00- 120.00	100.00
13.877	13.905 (0.964)	43	4198247			412.95- 512.95	444.74
13.877	13.905 (0.964)	57	321401			0.00- 86.57	34.05
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	2818744	57.2959	57.296	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	2119143			24.70- 124.70	75.18
13.932	13.932 (0.967)	98	1360701			0.00- 97.31	48.27
80 Tetrahydrofuran					CAS #: 109-99-9		
14.402	14.402 (1.000)	42	2315081	59.1042	59.104	80.00- 120.00	100.00
14.402	14.402 (1.000)	71	837123			0.00- 85.86	36.16
14.402	14.402 (1.000)	72	904656			0.00- 87.82	39.08
82 Chloroform					CAS #: 67-66-3		
14.485	14.485 (1.006)	83	3930935	56.2864	56.286	80.00- 120.00	100.00
14.485	14.485 (1.006)	85	2555017			15.30- 115.30	65.00
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	3724675	52.9613	52.961	80.00- 120.00	100.00
14.845	14.845 (1.031)	99	2372213			14.42- 114.42	63.69
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	2370220	58.8413	58.841	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	3004824			77.14- 177.14	126.77
14.845	14.845 (1.031)	41	1640647			22.96- 122.96	69.22
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	3436673	52.1301	52.130	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	3538970			54.22- 154.22	102.98
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.425	15.426 (1.071)	57	8189957	58.1672	58.167	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.425	15.426 (1.071)	56	2800725			0.00- 84.62	34.20
15.425	15.426 (1.071)	41	2129961			0.00- 79.27	26.01
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	5250569	57.9255	57.926	80.00- 120.00	100.00
15.508	15.508 (0.959)	77	1159247			0.00- 71.87	22.08
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	2535064	52.6380	52.638	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	812550			0.00- 82.89	32.05
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	1662367	59.6323	59.632	80.00- 120.00	100.00
15.730	15.730 (0.973)	43	3281313			158.53- 258.53	197.39
15.730	15.730 (0.973)	57	1733443			59.34- 159.34	104.28
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	2236263	55.5396	55.540	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	2188821			49.05- 149.05	97.88
16.642	16.642 (1.029)	97	1443160			14.93- 114.93	64.53
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	1961854	56.3976	56.398	80.00- 120.00	100.00
17.112	17.112 (1.058)	62	1436905			23.52- 123.52	73.24
17.112	17.112 (1.058)	41	1184177			12.01- 112.01	60.36
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	1295263	57.2493	57.249	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	909525			21.50- 121.50	70.22
17.250	17.250 (1.067)	57	298072			0.00- 74.60	23.01
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	3863276	55.2648	55.265	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	2471704			14.37- 114.37	63.98
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	2863012	58.2452	58.245	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	910017			0.00- 81.97	31.79
18.329	18.329 (1.133)	39	1608662			6.88- 106.88	56.19
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	1713423	63.1663	63.166	80.00- 120.00	100.00
18.522	18.522 (1.145)	43	4340769			222.97- 322.97	253.34
18.522	18.522 (1.145)	85	654176			0.00- 90.48	38.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	5892033	59.3464	59.346	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	3757464			13.04- 113.04	63.77
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	2965147	56.2573	56.257	80.00- 120.00	100.00
19.324	19.324 (0.905)	77	951982			0.00- 81.65	32.11
19.296	19.324 (0.904)	39	1582175			2.52- 102.52	53.36
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	2167076	56.3767	56.377	80.00- 120.00	100.00
19.656	19.656 (0.921)	99	1363207			13.08- 113.08	62.91
19.656	19.656 (0.921)	83	1839848			35.32- 135.32	84.90
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	2735490	54.8698	54.870	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	1961918			22.39- 122.39	71.72
19.822	19.822 (0.929)	131	1871157			19.80- 119.80	68.40
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	2350277	57.0518	57.052	80.00- 120.00	100.00
19.960	19.960 (0.935)	43	4343393			138.63- 238.63	184.80
19.960	19.960 (0.935)	100	396598			0.00- 67.05	16.87
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	3740615	54.9220	54.922	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	2884723			27.62- 127.62	77.12
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	3462202	54.9423	54.942	80.00- 120.00	100.00
20.624	20.624 (0.966)	109	3257401			44.67- 144.67	94.08
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	4557104	54.2787	54.279	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	1454447			0.00- 82.43	31.92
21.398	21.398 (1.003)	77	2729875			10.75- 110.75	59.90
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	2354756	54.9458	54.946	80.00- 120.00	100.00
21.481	21.481 (1.006)	91	7312230			261.69- 361.69	310.53
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	2946846	54.9356	54.936	80.00- 120.00	100.00
21.674	21.674 (1.016)	91	5783687			145.05- 245.05	196.27
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	2582216	55.5485	55.548	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	5281441			154.65- 254.65	204.53
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	4275480	59.4656	59.466	80.00- 120.00	100.00
22.421	22.421	(1.051)	78	2112552			1.69- 101.69	49.41
133 Bromoform						CAS #: 75-25-2		
22.836	22.836	(1.070)	173	3258113	54.4786	54.478	80.00- 120.00	100.00
22.836	22.836	(1.070)	171	1681615			1.22- 101.22	51.61
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	6690351	56.9959	56.996	80.00- 120.00	100.00
22.974	22.974	(1.076)	120	1839176			0.00- 78.08	27.49
22.946	22.974	(1.075)	51	710641			0.00- 61.43	10.62
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	4104155	52.8570	52.857	80.00- 120.00	100.00
23.527	23.527	(1.102)	85	2636394			14.35- 114.35	64.24
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	8737607	55.4988	55.499	80.00- 120.00	100.00
23.637	23.637	(1.108)	120	1980514			0.00- 72.94	22.67
23.637	23.637	(1.108)	105	321331			0.00- 54.03	3.68
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	7699834	55.3826	55.383	80.00- 120.00	100.00
23.831	23.831	(1.117)	120	2210219			0.00- 78.42	28.70
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	5550045	50.8217	50.822	80.00- 120.00	100.00
23.914	23.914	(1.120)	120	3171171			3.80- 103.80	57.14
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	5276389	53.1640	53.164	80.00- 120.00	100.00
24.550	24.550	(1.150)	120	2593089			0.00- 98.95	49.15
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.130	25.130	(1.177)	146	3931611	51.1917	51.192	80.00- 120.00	100.00
25.130	25.130	(1.177)	148	2506642			14.48- 114.48	63.76
25.130	25.130	(1.177)	111	1529949			0.00- 89.68	38.91
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	3971732	49.6212	49.621	80.00- 120.00	100.00
25.269	25.269	(1.184)	148	2535255			13.81- 113.81	63.83
25.269	25.269	(1.184)	111	1499689			0.00- 87.35	37.76

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	5941365	55.9136	55.914	80.00- 120.00	100.00
25.490	25.490 (1.194)	126	1232677			0.00- 71.29	20.75
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	3481887	48.6925	48.692	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	2225326			14.30- 114.30	63.91
25.905	25.932 (1.214)	111	1403109			0.00- 90.50	40.30
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	1206637	41.2578	41.258	80.00- 120.00	100.00
28.808	28.808 (1.350)	182	1149274			45.65- 145.65	95.25
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	972258	39.9886	39.989	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	608395			12.64- 112.64	62.58
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	2583203	52.2457	52.246	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	1731177			16.48- 116.48	67.02
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	408645	52.9140	52.914	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	3169804			757.70- 857.70	775.69
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	2859963	57.6850	57.685	80.00- 120.00	100.00
16.919	16.919 (1.175)	98	1333582			0.00- 96.13	46.63
16.919	16.919 (1.175)	55	2537608			38.51- 138.51	88.73
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.377)	128	2149760	39.2330	39.233	80.00- 120.00	100.00
29.388	29.388 (1.377)	127	251185			0.00- 62.50	11.68

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101810.d
Lab Smp Id: lcs-1
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: lcs-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	693629	1.47
97 1,4-Difluorobenze	2204815	1322889	3086741	2281320	3.47
126 Chlorobenzene-d5	1812979	1087787	2538171	1855833	2.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: lcs-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv-50ppbv

Client SDG: 7-18oct
Fraction: VOA
Client Smp ID: lcs-1
Operator: dm
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	48.162	96.32	70-130
16 Freon 114	50.000	49.117	98.23	70-130
18 Chloromethane	50.000	47.034	94.07	70-130
20 Vinyl Chloride	50.000	50.540	101.08	70-130
22 1,3-Butadiene	50.000	52.306	104.61	60-140
25 Bromomethane	50.000	49.468	98.94	70-130
27 Chloroethane	50.000	55.787	111.57	70-130
31 Trichlorofluoromet	50.000	51.586	103.17	70-130
38 Ethanol	50.000	60.963	121.93	60-140
42 Freon 113	50.000	59.076	118.15	70-130
43 1,1-Dichloroethene	50.000	60.046	120.09	70-130
45 Acetone	50.000	57.125	114.25	60-140
47 Carbon Disulfide	50.000	54.330	108.66	60-140
46 2-Propanol	50.000	58.042	116.08	60-140
54 Methylene Chloride	50.000	58.687	117.37	70-130
60 MTBE	50.000	58.791	117.58	60-140
61 trans-1,2-Dichloro	50.000	57.220	114.44	60-140
65 Hexane	50.000	59.350	118.70	60-140
69 Vinyl Acetate	50.000	58.557	117.11	60-140
70 1,1-Dichloroethane	50.000	58.606	117.21	70-130
76 cis-1,2-Dichloroet	50.000	57.296	114.59	70-130
75 2-Butanone	50.000	62.835	125.67	60-140
80 Tetrahydrofuran	50.000	59.104	118.21	60-140
82 Chloroform	50.000	56.286	112.57	70-130
85 Cyclohexane	50.000	58.841	117.68	60-140
83 1,1,1-Trichloroeth	50.000	52.961	105.92	70-130
87 Carbon Tetrachlori	50.000	52.130	104.26	70-130
91 Benzene	50.000	57.926	115.85	70-130
93 1,2-Dichloroethane	50.000	52.638	105.28	70-130
94 Heptane	50.000	59.632	119.26	60-140
101 Trichloroethene	50.000	55.540	111.08	70-130
104 1,2-Dichloropropan	50.000	56.398	112.80	70-130
106 1,4-Dioxane	50.000	57.249	114.50	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	55.265	110.53	60-140
110 cis-1,3-Dichloropr	50.000	58.245	116.49	70-130
111 4-Methyl-2-pentano	50.000	63.166	126.33	60-140
114 Toluene	50.000	59.346	118.69	70-130
116 trans-1,3-Dichloro	50.000	56.257	112.51	70-130
117 1,1,2-Trichloroeth	50.000	56.377	112.75	70-130
120 Tetrachloroethene	50.000	54.870	109.74	70-130
121 2-Hexanone	50.000	57.052	114.10	60-140
122 Dibromochlorometha	50.000	54.922	109.84	60-140
123 1,2-Dibromoethane	50.000	54.942	109.88	70-130
127 Chlorobenzene	50.000	54.279	108.56	70-130
128 Ethyl Benzene	50.000	54.946	109.89	70-130
129 m,p-Xylene	50.000	54.936	109.87	70-130
130 o-Xylene	50.000	55.548	111.10	70-130
131 Styrene	50.000	59.466	118.93	70-130
133 Bromoform	50.000	54.478	108.96	60-140
140 1,1,2,2-Tetrachlor	50.000	52.857	105.71	70-130
145 4-Ethyltoluene	50.000	55.383	110.77	60-140
147 1,3,5-Trimethylben	50.000	50.822	101.64	70-130
150 1,2,4-Trimethylben	50.000	53.164	106.33	70-130
155 1,3-Dichlorobenzen	50.000	51.192	102.38	70-130
156 1,4-Dichlorobenzen	50.000	49.621	99.24	70-130
159 alpha-Chlorotoluen	50.000	55.914	111.83	70-130
161 1,2-Dichlorobenzen	50.000	48.692	97.39	70-130
165 1,2,4-Trichloroben	50.000	41.258	82.52	70-130
166 Hexachlorobutadien	50.000	39.989	79.98	70-130
142 Propylbenzene	50.000	55.499	111.00	60-140
134 Cumene	50.000	56.996	113.99	60-140
51 3-Chloropropene	50.000	58.111	116.22	60-140
89 2,2,4-Trimethylpen	50.000	58.167	116.33	60-140
29 Isopentane	50.000	52.246	104.49	70-130
19 Butane	50.000	52.914	105.83	70-130
102 Methyl Cyclohexane	50.000	57.685	115.37	70-130
11 Propylene	50.000	51.335	102.67	60-140
167 Naphthalene	50.000	39.233	78.47	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.524	94.09	70-130
$ 113 Toluene-d8	25.000	25.783	103.13	70-130
$ 137 Bromofluorobenzene	25.000	23.992	95.97	70-130

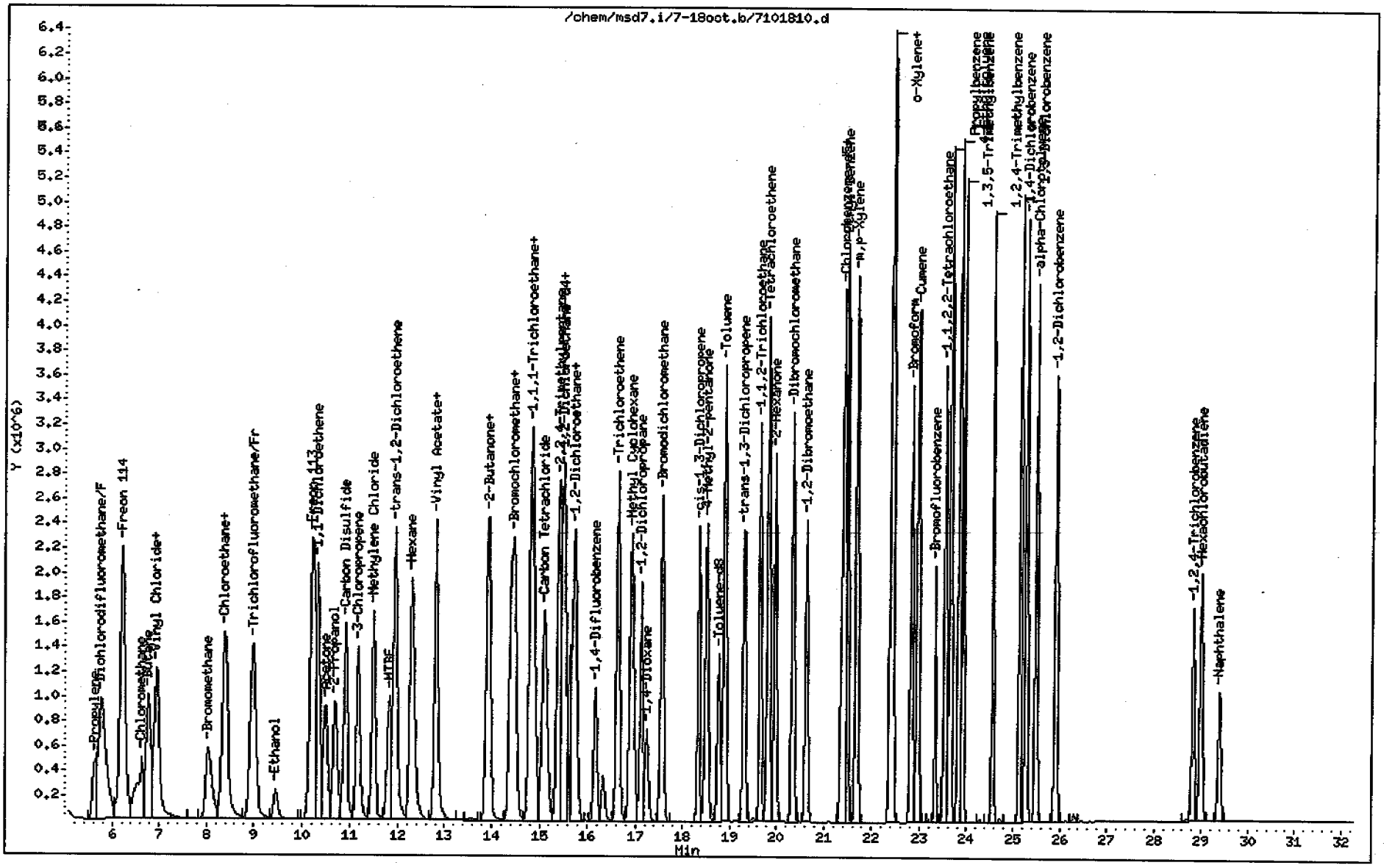
Data File: /chem/msd7.i/7-18oct.b/7101810.d
Date : 18-OCT-2007 19:29
Client ID: lcs-1
Sample Info: 50mL #1443-302

Column phase: RTx-624

Instrument: msd7.i

Operator: dm
Column diameter: 0.53

0171



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101802.d
Lab Smp Id: ICAL Client Smp ID: Level 1
Inj Date : 18-OCT-2007 12:17
Operator : cb Inst ID: msd7.i
Smp Info : 0.2mL #1576-50
Misc Info : 200ppbv --> 0.2ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:54 cbond Quant Type: ISTD
Cal Date : 18-OCT-2007 12:17 Cal File: 7101802.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AFCEElow.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.375	14.375 (1.000)	130	636189	25.0000		50.00- 150.00	100.00
14.375	14.375 (1.000)	128	490559			27.11- 127.11	77.11
14.375	14.375 (1.000)	49	923525			95.17- 195.17	145.17
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.144	16.144 (1.000)	114	2066548	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	323845			0.00- 65.67	15.67
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1699390	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	942443			5.46- 105.46	55.46
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.481 (1.077)	65	840662	25.0000	25.000	50.00- 150.00	100.00
15.481	15.481 (1.077)	67	425930			0.67- 100.67	50.67
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.163)	98	1800430	25.0000	25.000	50.00- 150.00	100.00
18.744	18.744 (1.161)	70	203256			0.00- 61.29	11.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.163)	100	1235223			18.61- 118.61	68.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1016286	25.0000	25.000	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1276863			75.64- 175.64	125.64
23.333	23.333 (1.093)	176	976731			46.11- 146.11	96.11
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.006)	83	10481	0.20000	0.2000	50.00- 150.00	100.00(a)
14.458	14.458 (1.006)	85	6627			13.23- 113.23	63.23
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.961)	78	14321	0.20000	0.2000	50.00- 150.00	100.00(a)
15.508	15.508 (0.961)	77	3194			0.00- 72.30	22.30
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	9530	0.20000	0.2000	50.00- 150.00	100.00(a)
22.421	22.421 (1.051)	78	6488			18.08- 118.08	68.08
134 Cumene					CAS #: 98-82-8		
22.946	22.946 (1.075)	105	18683	0.20000	0.2000	50.00- 150.00	100.00(a)
22.974	22.974 (1.076)	120	5104			0.00- 77.32	27.32
22.946	22.946 (1.075)	51	2569			0.00- 63.75	13.75

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101802.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 0.2ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	636189	-6.93
97 1,4-Difluorobenze	2204815	1322889	3086741	2066548	-6.27
126 Chlorobenzene-d5	1812979	1087787	2538171	1699390	-6.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.37	-0.19
97 1,4-Difluorobenze	16.17	15.84	16.50	16.14	-0.17
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

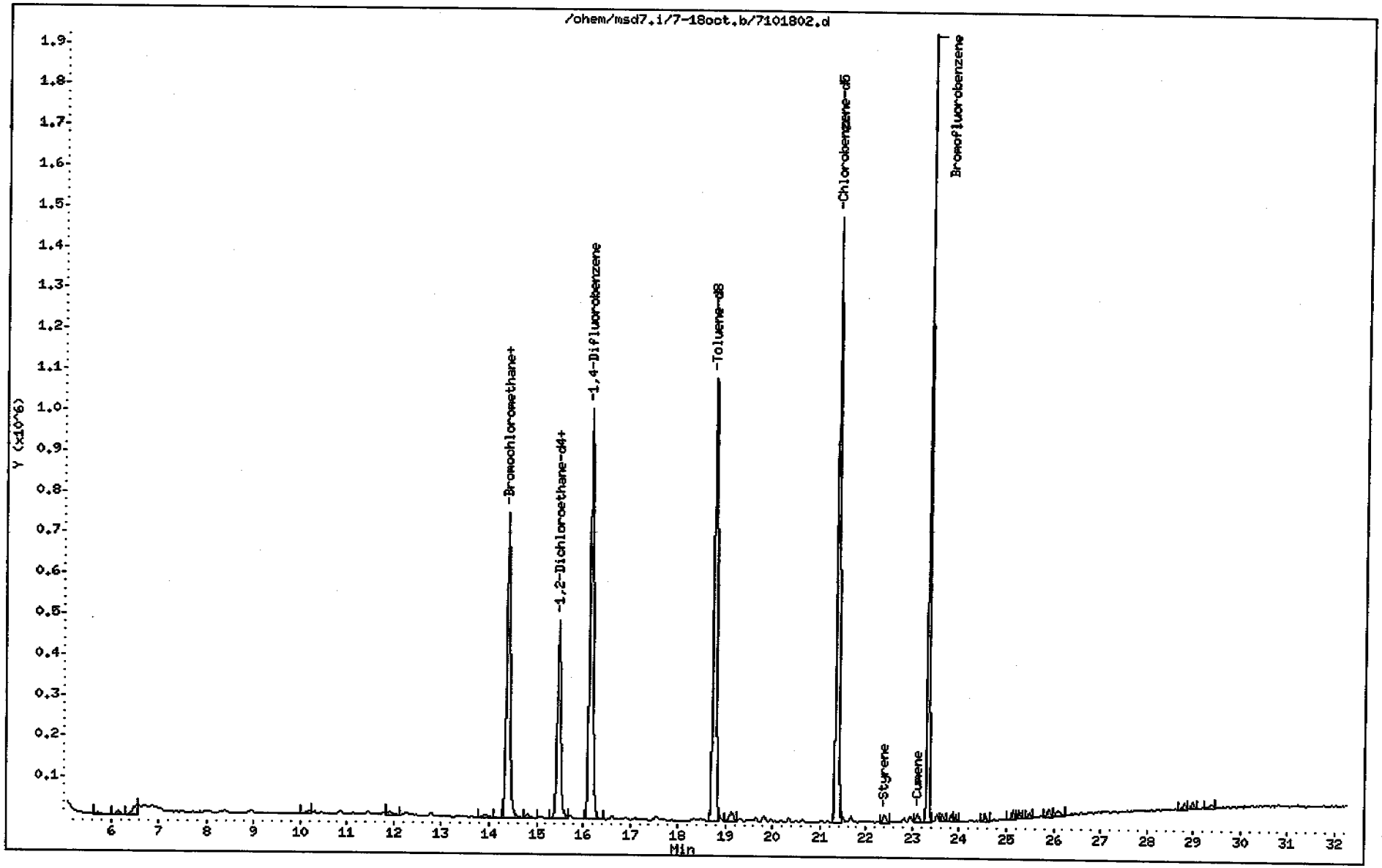
Data File: /ohem/msd7.i/7-18oct.b/7101802.d
Date : 18-OCT-2007 12:17
Client ID: Level 1
Sample Info: 0.2mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0175



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101803.d
Lab Smp Id: ICAL
Client Smp ID: Level 2
Inj Date : 18-OCT-2007 12:56
Operator : cb
Inst ID: msd7.i
Smp Info : 0.5mL #1576-50
Misc Info : 200ppbv --> 0.5ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 12:56
Cal File: 7101803.d
Als bottle: 1
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	============	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	594950	25.0000		50.00- 150.00	100.00
14.402	14.402 (1.000)	128	451286			26.48- 126.48	75.85
14.402	14.402 (1.000)	49	865261			95.30- 195.30	145.43
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	1954618	25.0000		50.00- 150.00	100.00
16.172	16.172 (1.000)	88	303029			0.00- 65.59	15.50
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1592069	25.0000		50.00- 150.00	100.00
21.342	21.342 (1.000)	82	884524			5.51- 105.51	55.56
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.481 (1.075)	65	796855	25.0000	25.169	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	397861			0.30- 100.30	49.93
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1670382	25.0000	24.759	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	190048			0.00- 61.33	11.38

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1154070			18.85- 118.85	69.09
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	957131	25.0000	25.066	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1220204			76.56- 176.56	127.49
23.333	23.333 (1.093)	176	932560			46.77- 146.77	97.43
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.721	5.721 (0.397)	85	47576	0.50000	0.5000	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	17035			0.00- 85.81	35.81
16 Freon 114					CAS #: 76-14-2		
6.163	6.163 (0.428)	135	32813	0.50000	0.5000	50.00- 150.00	100.00
6.163	6.163 (0.428)	137	10433			0.00- 81.80	31.80
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	19172	0.50000	0.5000	50.00- 150.00	100.00
6.882	6.882 (0.478)	64	6960			0.00- 86.30	36.30
22 1,3-Butadiene					CAS #: 106-99-0		
6.882	6.882 (0.478)	54	11746	0.50000	0.5000	50.00- 150.00	100.00
6.882	6.882 (0.478)	39	13765			67.19- 167.19	117.19
25 Bromomethane					CAS #: 74-83-9		
8.015	8.015 (0.557)	94	16291	0.50000	0.5000	50.00- 150.00	100.00
8.015	8.015 (0.557)	96	14944			41.73- 141.73	91.73
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	6683	0.50000	0.5000	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	2473			0.00- 87.00	37.00
8.320	8.320 (0.578)	66	2148			0.00- 82.14	32.14
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.955 (0.622)	101	39349	0.50000	0.5000	50.00- 150.00	100.00
8.928	8.928 (0.620)	103	26784			18.07- 118.07	68.07
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	22360	0.50000	0.5000	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	13095			8.56- 108.56	58.56
10.200	10.200 (0.708)	101	27629			73.56- 173.56	123.56
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	23023	0.50000	0.5000	50.00- 150.00	100.00
10.310	10.310 (0.716)	96	18764			31.50- 131.50	81.50
10.338	10.338 (0.718)	98	8228			0.00- 85.74	35.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.754)	76	43350	0.50000	0.5000	50.00- 150.00	100.00
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	17900	0.50000	0.5000	50.00- 150.00	100.00
11.472	11.472 (0.796)	84	12530			20.00- 120.00	70.00
11.444	11.444 (0.795)	51	5834			0.00- 82.59	32.59
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	30552	0.50000	0.5000	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	6497			0.00- 71.27	21.27
11.803	11.803 (0.820)	41	8855			0.00- 78.98	28.98
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	15203	0.50000	0.5000	50.00- 150.00	100.00
11.914	11.914 (0.827)	61	21746			93.04- 193.04	143.04
11.914	11.914 (0.827)	98	7588			0.00- 99.91	49.91
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	20198	0.50000	0.5000	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	15411			26.30- 126.30	76.30
12.301	12.301 (0.854)	86	3271			0.00- 66.19	16.19
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	24629	0.50000	0.5000	50.00- 150.00	100.00
12.826	12.826 (0.891)	65	8401			0.00- 84.11	34.11
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	4535	0.50000	0.5000	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	22514			446.45- 546.45	496.45
13.905	13.905 (0.965)	57	1741			0.00- 88.39	38.39
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	17162	0.50000	0.5000	50.00- 150.00	100.00
13.932	13.932 (0.967)	96	15482			40.21- 140.21	90.21
13.932	13.932 (0.967)	98	8217			0.00- 97.88	47.88
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.375 (0.998)	42	12231	0.50000	0.5000	50.00- 150.00	100.00
14.402	14.402 (1.000)	71	4285			0.00- 85.03	35.03
14.402	14.402 (1.000)	72	4117			0.00- 83.66	33.66
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	27421	0.50000	0.5281	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	17112			12.82- 112.82	62.40

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
83 1,1,1-Trichloroethane						CAS #: 71-55-6		
14.817	14.817 (1.029)	97	25463	0.50000	0.5000		50.00- 150.00	100.00
14.845	14.845 (1.031)	99	16821				16.06- 116.06	66.06
85 Cyclohexane						CAS #: 110-82-7		
14.845	14.845 (1.031)	84	13500	0.50000	0.5000		50.00- 150.00	100.00
14.845	14.845 (1.031)	56	17496				79.60- 179.60	129.60
14.845	14.845 (1.031)	41	15222				62.76- 162.76	112.76
87 Carbon Tetrachloride						CAS #: 56-23-5		
15.094	15.094 (1.048)	119	22788	0.50000	0.5000		50.00- 150.00	100.00
15.094	15.094 (1.048)	117	25102				60.15- 160.15	110.15
91 Benzene						CAS #: 71-43-2		
15.508	15.508 (0.959)	78	34749	0.50000	0.5064		50.00- 150.00	100.00
15.536	15.536 (0.961)	77	7253				0.00- 71.59	20.87
89 2,2,4-Trimethylpentane						CAS #: 540-84-1		
15.425	15.425 (1.071)	57	45451	0.50000	0.5000		50.00- 150.00	100.00
15.425	15.425 (1.071)	56	16216				0.00- 85.68	35.68
15.425	15.425 (1.071)	41	15793				0.00- 84.75	34.75
93 1,2-Dichloroethane						CAS #: 107-06-2		
15.619	15.619 (0.966)	62	18652	0.50000	0.5000		50.00- 150.00	100.00
15.619	15.619 (0.966)	64	6553				0.00- 85.13	35.13
94 Heptane						CAS #: 142-82-5		
15.730	15.730 (0.973)	71	8517	0.50000	0.5000		50.00- 150.00	100.00
15.730	15.730 (0.973)	43	19632				180.50- 280.50	230.50
15.730	15.730 (0.973)	57	10427				72.43- 172.43	122.43
101 Trichloroethene						CAS #: 79-01-6		
16.642	16.642 (1.029)	95	14369	0.50000	0.5000		50.00- 150.00	100.00
16.642	16.642 (1.029)	130	14236				49.07- 149.07	99.07
16.642	16.642 (1.029)	97	9543				16.41- 116.41	66.41
104 1,2-Dichloropropane						CAS #: 78-87-5		
17.140	17.140 (1.060)	63	12205	0.50000	0.5000		50.00- 150.00	100.00
17.112	17.112 (1.058)	62	9174				25.17- 125.17	75.17
17.140	17.140 (1.060)	41	11048				40.52- 140.52	90.52
107 Bromodichloromethane						CAS #: 75-27-4		
17.554	17.554 (1.085)	83	23861	0.50000	0.5000		50.00- 150.00	100.00
17.554	17.554 (1.085)	85	15506				14.98- 114.98	64.98
110 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	15175	0.50000	0.5000		50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
110 cis-1,3-Dichloropropene (continued)							
18.329	18.329 (1.133)	77	4797			0.00- 81.61	31.61
18.329	18.329 (1.133)	39	9773			14.40- 114.40	64.40
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	6848	0.50000	0.5000	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	20498			249.33- 349.33	299.33
18.495	18.495 (1.144)	85	3016			0.00- 94.04	44.04
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	34659	0.50000	0.5000	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	21595			12.31- 112.31	62.31
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	16891	0.50000	0.5000	50.00- 150.00	100.00
19.324	19.324 (0.905)	77	5788			0.00- 84.27	34.27
19.296	19.296 (0.904)	39	11612			18.75- 118.75	68.75
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	13069	0.50000	0.5000	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	8163			12.46- 112.46	62.46
19.656	19.656 (0.921)	83	11292			36.40- 136.40	86.40
120 Tetrachloroethene					CAS #: 127-18-4		
19.849	19.849 (0.930)	166	18736	0.50000	0.5000	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	13781			23.55- 123.55	73.55
19.822	19.822 (0.929)	131	12940			19.06- 119.06	69.06
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	22024	0.50000	0.5000	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	17127			27.77- 127.77	77.77
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	19811	0.50000	0.5000	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	19821			50.05- 150.05	100.05
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	31210	0.50000	0.5000	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	11029			0.00- 85.34	35.34
21.398	21.398 (1.003)	77	31887			52.17- 152.17	102.17
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	14585	0.50000	0.5000	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	47369			274.78- 374.78	324.78
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	18983	0.50000	0.5000	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
129 m,p-Xylene (continued)							
21.674	21.674 (1.016)	91	36102			140.18- 240.18	190.18
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	15952	0.50000	0.5000	50.00- 150.00	100.00
22.393	22.393 (1.049)	91	33173			157.96- 257.96	207.96
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	22221	0.50000	0.4989	50.00- 150.00	100.00(a)
22.421	22.421 (1.051)	78	12270			11.65- 111.65	55.22
133 Bromoform					CAS #: 75-25-2		
22.835	22.835 (1.070)	173	20128	0.50000	0.5000	50.00- 150.00	100.00
22.835	22.835 (1.070)	171	10294			1.14- 101.14	51.14
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	42095	0.50000	0.4903	50.00- 150.00	100.00(a)
22.974	22.974 (1.076)	120	13036			0.00- 79.14	30.97
22.946	22.946 (1.075)	51	4671			0.00- 62.42	11.10
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	28944	0.50000	0.5000	50.00- 150.00	100.00
23.527	23.527 (1.102)	85	18819			15.02- 115.02	65.02
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	57510	0.50000	0.5000	50.00- 150.00	100.00
23.637	23.637 (1.108)	120	13859			0.00- 74.10	24.10
23.637	23.637 (1.108)	105	2745			0.00- 54.77	4.77
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	45962	0.50000	0.5000	50.00- 150.00	100.00
23.831	23.831 (1.117)	120	14743			0.00- 82.08	32.08
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	44997	0.50000	0.5000	50.00- 150.00	100.00
23.914	23.914 (1.120)	120	22622			0.27- 100.27	50.27
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	33540	0.50000	0.5000	50.00- 150.00	100.00
24.550	24.550 (1.150)	120	16903			0.40- 100.40	50.40
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.177)	146	29742	0.50000	0.5000	50.00- 150.00	100.00
25.130	25.130 (1.177)	148	19728			16.33- 116.33	66.33
25.130	25.130 (1.177)	111	12094			0.00- 90.66	40.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	32773	0.50000	0.5000	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	20634			12.96- 112.96	62.96
25.269	25.269 (1.184)	111	12309			0.00- 87.56	37.56
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	32574	0.50000	0.5000	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	7503			0.00- 73.03	23.03
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	30022	0.50000	0.5000	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	18673			12.20- 112.20	62.20
25.905	25.905 (1.214)	111	11890			0.00- 89.60	39.60
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	16603	0.50000	0.5000	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	7709			0.00- 96.43	46.43
16.919	16.919 (1.175)	55	14202			35.54- 135.54	85.54

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/msd7.i/7-18oct.b/7101803.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101803.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 0.5ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	594950	-12.96
97 1,4-Difluorobenze	2204815	1322889	3086741	1954618	-11.35
126 Chlorobenzene-d5	1812979	1087787	2538171	1592069	-12.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

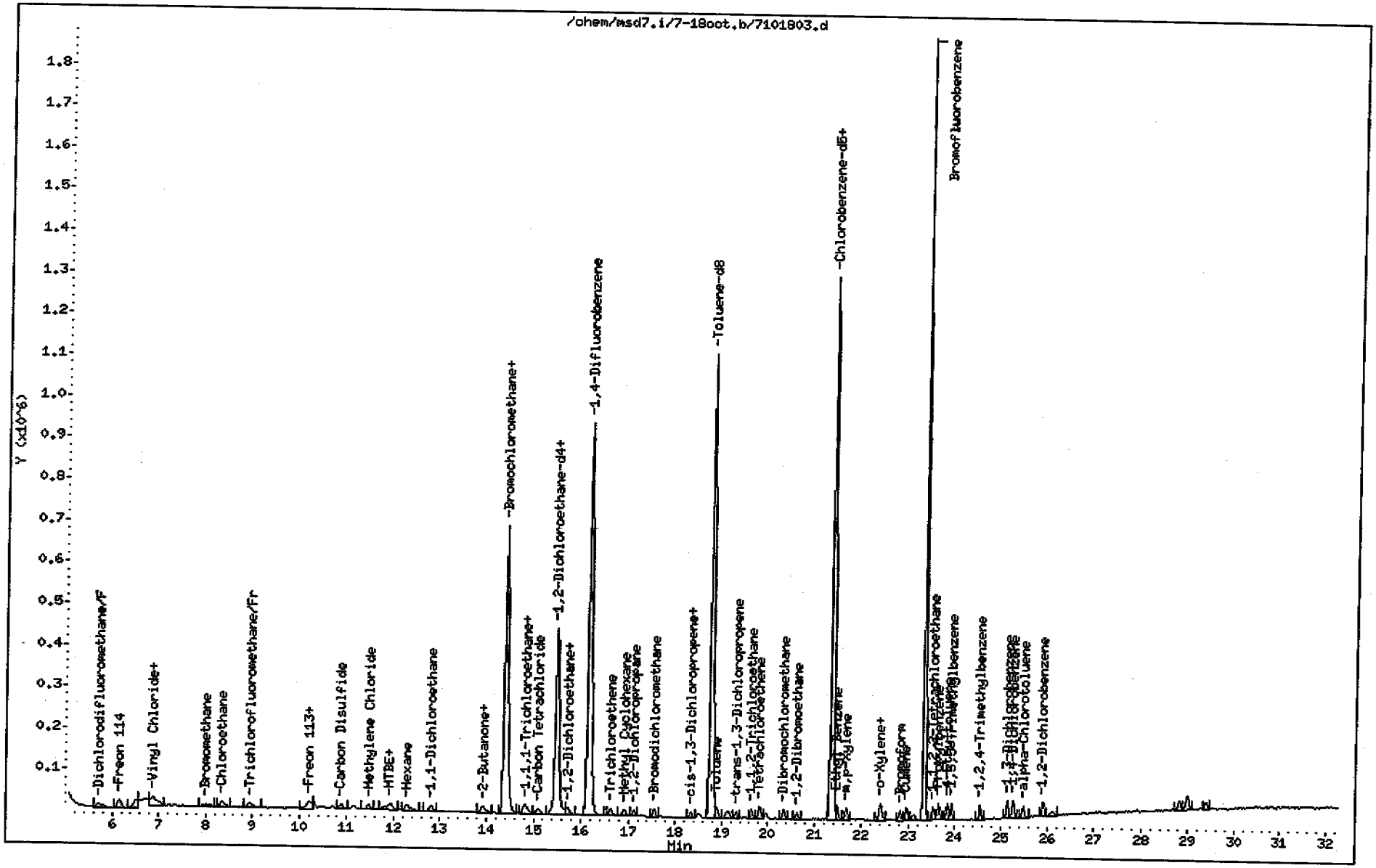
Data File: /chem/msd7.i/7-18oct.b/7101803.d
Date : 18-OCT-2007 12:56
Client ID: Level 2
Sample Info: 0.5mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0184



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102205.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 22-OCT-2007 10:55
Operator : cb
Inst ID: msd7.i
Smp Info : 2mL #1487-370
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 10:55
Cal File: 7102205.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403 (1.000)	130	639032	25.0000			50.00- 150.00	100.00
14.403	14.403 (1.000)	128	485011				26.49- 126.49	75.90
14.375	14.375 (1.000)	49	961966				116.97- 216.97	150.53
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2072294	25.0000			50.00- 150.00	100.00
16.172	16.172 (1.000)	88	319608				0.00- 65.57	15.42
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1627678	25.0000			50.00- 150.00	100.00
21.343	21.343 (1.000)	82	894614				5.19- 105.19	54.96
55 Cyclopentene						CAS #: 142-29-0		
11.251	11.251 (0.781)	67	232640	2.00000	1.954		50.00- 150.00	100.00(a)
11.251	11.251 (0.781)	68	93477				0.00- 90.48	40.18
11.251	11.251 (0.781)	53	48369				0.00- 70.85	20.79
78 2,2-Dichloropropane						CAS #: 594-20-7		
13.877	13.877 (0.964)	77	141265	2.00000	1.895		50.00- 150.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	50942			0.00- 84.30	36.06
13.877	13.877 (0.964)	97	28410			0.00- 70.03	20.11
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	53537	2.00000	1.916	50.00- 150.00	100.00(a)
15.121	15.121 (0.935)	75	140199			218.22- 318.22	261.87
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	158585	2.00000	1.906	50.00- 150.00	100.00(a)
19.988	19.988 (1.236)	41	112138			21.54- 121.54	70.71
19.988	19.988 (1.236)	78	50086			0.00- 81.77	31.58
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	117122	2.00000	2.018	50.00- 150.00	100.00
21.536	21.536 (1.009)	117	80894			18.93- 118.93	69.07
21.536	21.536 (1.009)	95	46412			0.00- 89.37	39.63
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	142356	2.00000	2.090	50.00- 150.00	100.00
23.610	23.610 (1.106)	158	137653			46.65- 146.65	96.70
23.610	23.610 (1.106)	77	279379			147.77- 247.77	196.25
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	64138	2.00000	2.012	50.00- 150.00	100.00
23.665	23.665 (1.109)	75	194965			252.90- 352.90	303.98
23.665	23.665 (1.109)	61	48439			26.84- 126.84	75.52
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	100762	2.00000	2.003	50.00- 150.00	100.00
23.886	23.886 (1.119)	91	297542			243.86- 343.86	295.29
23.886	23.886 (1.119)	65	28529			0.00- 78.37	28.31
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	104260	2.00000	1.943	50.00- 150.00	100.00(a)
24.080	24.080 (1.128)	91	315277			249.00- 349.00	302.39
24.052	24.052 (1.127)	63	39933			0.00- 88.24	38.30
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	345319	2.00000	2.172	50.00- 150.00	100.00
25.020	25.020 (1.172)	134	97423			0.00- 77.89	28.21
25.020	25.020 (1.172)	91	84154			0.00- 74.89	24.37
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	127049	2.00000	2.014	50.00- 150.00	100.00
25.269	25.269 (1.184)	105	280842			168.18- 268.18	221.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	37584			0.00- 78.76	29.58
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	86798	2.00000	2.030	50.00- 150.00	100.00
25.684	25.684 (1.203)	91	365378			362.01- 462.01	420.95
25.684	25.684 (1.203)	92	204191			181.94- 281.94	235.25
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	319919	2.00000	2.232	50.00- 150.00	100.00
24.467	24.467 (1.146)	134	78445			0.00- 74.64	24.52
24.467	24.467 (1.146)	91	224250			20.96- 120.96	70.10
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	447243	2.00000	2.254	50.00- 150.00	100.00
24.826	24.826 (1.163)	134	88393			0.00- 69.71	19.76
24.826	24.826 (1.163)	91	69536			0.00- 65.99	15.55
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	99267	2.00000	1.935	50.00- 150.00	100.00(a)
27.287	27.287 (1.279)	75	92577			39.96- 139.96	93.26
27.287	27.287 (1.279)	155	79486			28.87- 128.87	80.07
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	92534	2.00000	2.159	50.00- 150.00	100.00
24.605	24.605 (1.153)	117	92152			54.36- 154.36	99.59
24.605	24.605 (1.153)	169	43387			0.00- 97.70	46.89

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102205.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 10:55
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	639032	383419	894645	639032	0.00
97 1,4-Difluorobenze	2072294	1243376	2901212	2072294	0.00
126 Chlorobenzene-d5	1627678	976607	2278749	1627678	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

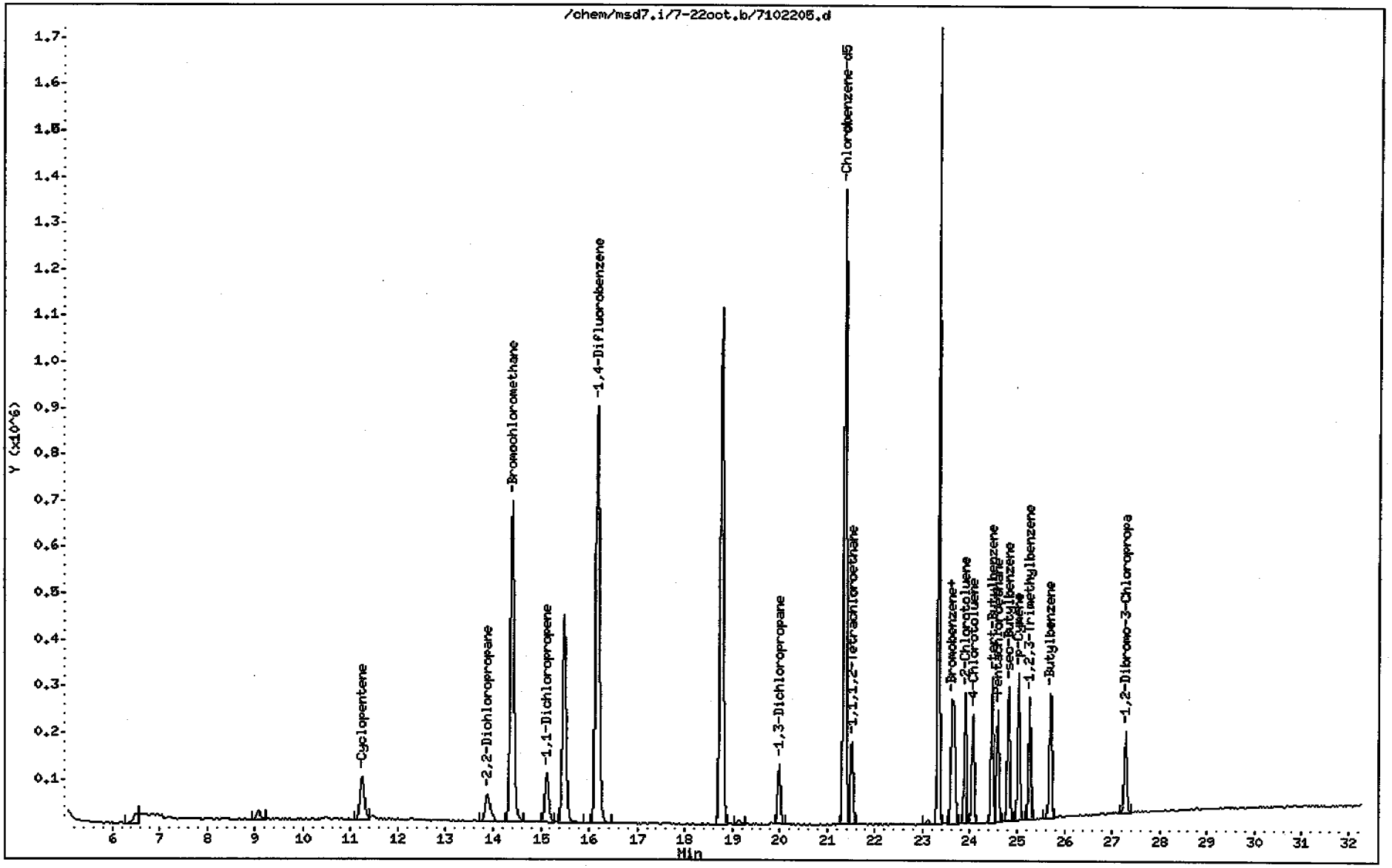
Data File: /chem/msd7.i/7-22oct.b/7102205.d
Date : 22-OCT-2007 10:55
Client ID: Level 3
Sample Info: 2mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0189



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101903.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 19-OCT-2007 10:22
Operator : cb Inst ID: msd7.i
Smp Info : 2mL #1487-400
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond Quant Type: ISTD
Cal Date : 19-OCT-2007 10:22 Cal File: 7101903.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403 (1.000)	130	680683	25.0000		50.00- 150.00		100.00
14.403	14.403 (1.000)	128	521822			26.64- 126.64		76.66
14.403	14.403 (1.000)	49	1021902			124.30- 224.30		150.13
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2218849	25.0000		50.00- 150.00		100.00
16.172	16.172 (1.000)	88	345014			0.00- 65.60		15.55
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1717856	25.0000		50.00- 150.00		100.00
21.343	21.343 (1.000)	82	948281			5.36- 105.36		55.20
5 Freon 143a						CAS #: 420-46-2		
5.334	5.334 (0.370)	65	30165	2.00000	2.000	50.00- 150.00		100.00
5.278	5.278 (0.366)	69	276074			0.00- 50.00		915.21
5.334	5.334 (0.370)	64	6959			0.00- 73.07		23.07
6 Freon142b						CAS #: 75-68-3		
6.357	6.357 (0.441)	65	124214	2.00000	2.000	50.00- 150.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)							
6.357	6.357 (0.441)	45	30229			0.00- 74.34	24.34
13 Freon 134a					CAS #: 811-97-2		
5.472	5.472 (0.380)	83	59293	2.00000	2.000	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	276074			415.61- 515.61	465.61
5.472	5.472 (0.380)	63	8387			0.00- 64.15	14.15
15 Freon 152a					CAS #: 75-37-6		
5.665	5.665 (0.393)	65	43467	2.00000	2.000	50.00- 150.00	100.00
5.665	5.665 (0.393)	51	69568			110.05- 210.05	160.05
5.693	5.693 (0.395)	47	17369			0.00- 89.96	39.96
17 Freon 22					CAS #: 75-45-6		
5.831	5.831 (0.405)	51	143770	2.00000	2.000	50.00- 150.00	100.00
5.831	5.831 (0.405)	67	16779			0.00- 61.67	11.67
5.831	5.831 (0.405)	85	2871			0.00- 52.00	2.00
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.900	8.900 (0.618)	67	119076	2.00000	2.000	50.00- 150.00	100.00
8.900	8.900 (0.618)	69	36680			0.00- 80.80	30.80
8.900	8.900 (0.618)	35	5758			0.00- 54.84	4.84
40 Freon123a					CAS #: 354-23-4		
9.813	9.813 (0.681)	117	61475	2.00000	2.000	50.00- 150.00	100.00
9.813	9.813 (0.681)	67	108040			125.75- 225.75	175.75
41 Freon123					CAS #: 306-83-2		
9.951	9.951 (0.691)	83	118699	2.00000	2.000	50.00- 150.00	100.00
9.951	9.951 (0.691)	133	22948			0.00- 69.33	19.33
9.979	9.979 (0.693)	85	87037			23.33- 123.33	73.33
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.527	11.527 (0.800)	59	135523	2.00000	2.000	50.00- 150.00	100.00
11.499	11.499 (0.798)	41	31744			0.00- 73.42	23.42
11.499	11.499 (0.798)	57	13899			0.00- 60.26	10.26
68 Isopropyl ether					CAS #: 108-20-3		
12.716	12.716 (0.883)	45	229400	2.00000	2.000	50.00- 150.00	100.00
12.716	12.716 (0.883)	87	53932			0.00- 73.51	23.51
12.716	12.716 (0.883)	59	19957			0.00- 58.70	8.70
71 1-Propanol					CAS #: 71-23-8		
12.854	12.854 (0.892)	42	12498	2.00000	2.000	50.00- 150.00	100.00
12.827	12.827 (0.891)	59	17728			91.85- 191.85	141.85
12.716	12.716 (0.883)	41	42674			291.45- 391.45	341.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.380	13.380 (0.929)	59	187293	2.00000	2.000	50.00- 150.00	100.00
13.380	13.380 (0.929)	87	73600			0.00- 89.30	39.30
13.380	13.380 (0.929)	41	34474			0.00- 68.41	18.41
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	21298	2.00000	2.000	50.00- 150.00	100.00
13.877	13.877 (0.964)	61	21673			51.76- 151.76	101.76
13.877	13.877 (0.964)	43	139113			603.17- 703.17	653.17
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	134657	2.00000	2.000	50.00- 150.00	100.00
15.536	15.536 (1.079)	87	32299			0.00- 73.99	23.99
15.536	15.536 (1.079)	55	41294			0.00- 80.67	30.67
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	64075	2.00000	2.000	50.00- 150.00	100.00
22.504	22.504 (1.562)	43	102414			109.83- 209.83	159.83
98 1-Butanol					CAS #: 71-36-3		
16.310	16.310 (1.009)	56	29538	2.00000	2.000	50.00- 150.00	100.00
16.310	16.310 (1.009)	41	21168			21.66- 121.66	71.66
16.310	16.310 (1.009)	43	18572			12.87- 112.87	62.87
99 Isobutanol					CAS #: 78-83-1		
15.121	15.121 (1.050)	59	1011	2.00000	2.000	50.00- 150.00	100.00
15.149	15.149 (1.052)	41	29081			2826.46-2926.46	2876.46
15.149	15.149 (1.052)	43	41133			4018.55-4118.55	4068.55
119 Butyl Acetate					CAS #: 123-86-4		
20.071	20.071 (1.241)	56	50141	2.00000	2.000	50.00- 150.00	100.00
20.071	20.071 (1.241)	73	17033			0.00- 83.97	33.97
20.071	20.071 (1.241)	43	123513			196.33- 296.33	246.33
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.091)	55	58482	2.00000	2.000	50.00- 150.00	100.00
23.278	23.278 (1.091)	98	22335			0.00- 88.19	38.19
23.278	23.278 (1.091)	42	37611			14.31- 114.31	64.31
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.128)	57	142000	2.00000	2.000	50.00- 150.00	100.00
24.080	24.080 (1.128)	85	115778			31.53- 131.53	81.53
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101903.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	680683	-1.94
97 1,4-Difluorobenze	2223212	1333927	3112497	2218849	-0.20
126 Chlorobenzene-d5	1779964	1067978	2491950	1717856	-3.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

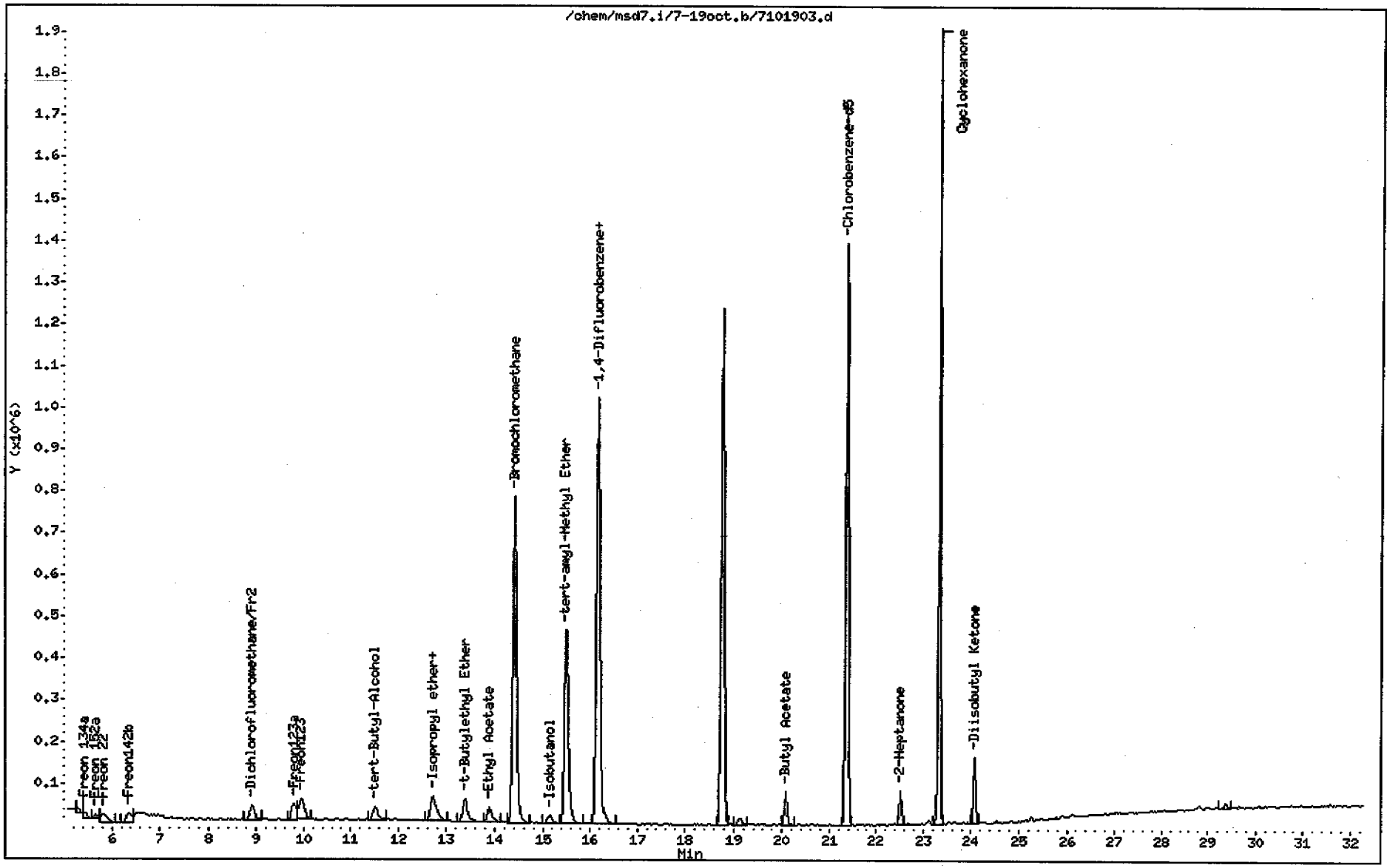
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

0194

Data File: /chem/msd7.i/7-19oct.b/7101903.d
Date : 19-OCT-2007 10:22
Client ID: Level 3
Sample Info: 2mL #1487-400

Instrument: msd7.i
Operator: cb
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101804.d
Lab Smp Id: ICAL
Client Smp ID: Level 3
Inj Date : 18-OCT-2007 14:09
Operator : cb
Inst ID: msd7.i
Smp Info : 2mL #1576-50
Misc Info : 200ppbv --> 2ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 14:09
Cal File: 7101804.d
Als bottle: 1
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.403	14.403 (1.000)	130	611723	25.0000		50.00- 150.00	100.00
14.403	14.403 (1.000)	128	473201			26.77- 126.77	77.36
14.375	14.375 (1.000)	49	892530			95.50- 195.50	145.90
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2006513	25.0000		50.00- 150.00	100.00
16.144	16.144 (1.000)	88	308736			0.00- 65.52	15.39
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1607236	25.0000		50.00- 150.00	100.00
21.343	21.343 (1.000)	82	882896			5.32- 105.32	54.93
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.481	15.481 (1.075)	65	847384	25.0000	25.678	50.00- 150.00	100.00
15.481	15.481 (1.075)	67	417312			0.00- 99.95	49.25
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	1720868	25.0000	24.898	50.00- 150.00	100.00
18.771	18.771 (1.161)	70	197220			0.00- 61.38	11.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1174360			18.65- 118.65	68.24
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	955710	25.0000	24.861	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1240664			77.65- 177.65	129.82
23.333	23.333 (1.093)	176	928938			46.91- 146.91	97.20
11 Propylene					CAS #: 115-07-1		
5.638	5.638 (0.391)	41	55059	2.00000	2.000	50.00- 150.00	100.00
5.638	5.638 (0.391)	42	41800			25.92- 125.92	75.92
5.638	5.638 (0.391)	39	42003			26.29- 126.29	76.29
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	196506	2.00000	2.004	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	64388			0.00- 84.29	32.77
16 Freon 114					CAS #: 76-14-2		
6.191	6.191 (0.430)	135	143963	2.00000	2.065	50.00- 150.00	100.00
6.191	6.191 (0.430)	137	47951			0.00- 82.55	33.31
18 Chloromethane					CAS #: 74-87-3		
6.495	6.495 (0.451)	50	66478	2.00000	2.000	50.00- 150.00	100.00
6.522	6.522 (0.453)	52	25502			0.00- 88.36	38.36
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.476)	62	81584	2.00000	2.034	50.00- 150.00	100.00
6.882	6.882 (0.478)	64	28755			0.00- 85.77	35.25
22 1,3-Butadiene					CAS #: 106-99-0		
6.910	6.910 (0.480)	54	54761	2.00000	2.125	50.00- 150.00	100.00
6.910	6.910 (0.480)	39	59315			62.75- 162.75	108.32
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.557)	94	67549	2.00000	2.008	50.00- 150.00	100.00
8.016	8.016 (0.557)	96	61778			41.59- 141.59	91.46
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	28925	2.00000	2.051	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	8422			0.00- 83.06	29.12
8.347	8.347 (0.580)	66	11614			0.00- 86.15	40.15
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	178522	2.00000	2.098	50.00- 150.00	100.00
8.928	8.928 (0.620)	103	116828			16.75- 116.75	65.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	19984	2.00000	2.000	50.00- 150.00	100.00
9.426	9.426 (0.654)	43	6027			0.00- 80.16	30.16
9.453	9.453 (0.656)	46	7749			0.00- 88.78	38.78
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	95953	2.00000	2.042	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	60629			10.88- 110.88	63.19
10.200	10.200 (0.708)	101	118187			73.37- 173.37	123.17
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	101636	2.00000	2.071	50.00- 150.00	100.00
10.310	10.310 (0.716)	96	59924			20.23- 120.23	58.96
10.310	10.310 (0.716)	98	36886			0.00- 86.02	36.29
45 Acetone					CAS #: 67-64-1		
10.476	10.476 (0.727)	58	28132	2.00000	2.000	50.00- 150.00	100.00
10.476	10.476 (0.727)	43	77574			225.75- 325.75	275.75
46 2-Propanol					CAS #: 67-63-0		
10.670	10.670 (0.741)	45	85029	2.00000	2.000	50.00- 150.00	100.00
10.670	10.670 (0.741)	43	26641			0.00- 81.33	31.33
10.670	10.670 (0.741)	59	2836			0.00- 53.34	3.34
47 Carbon Disulfide					CAS #: 75-15-0		
10.863	10.863 (0.754)	76	190783	2.00000	2.068	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.140	11.140 (0.773)	76	23388	2.00000	2.000	50.00- 150.00	100.00
11.140	11.140 (0.773)	41	70379			250.92- 350.92	300.92
54 Methylene Chloride					CAS #: 75-09-2		
11.444	11.444 (0.795)	49	73867	2.00000	2.003	50.00- 150.00	100.00
11.444	11.444 (0.795)	84	53508			21.22- 121.22	72.44
11.444	11.444 (0.795)	51	22507			0.00- 81.53	30.47
60 MTBE					CAS #: 1634-04-4		
11.803	11.803 (0.820)	73	124045	2.00000	1.987	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	32126			0.00- 73.58	25.90
11.831	11.831 (0.821)	41	37992			0.00- 79.81	30.63
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.914	11.914 (0.827)	96	61567	2.00000	1.984	50.00- 150.00	100.00
11.914	11.914 (0.827)	61	95052			98.71- 198.71	154.39
11.914	11.914 (0.827)	98	41669			8.80- 108.80	67.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	91312	2.00000	2.094	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	60919			21.51- 121.51	66.72
12.301	12.301 (0.854)	86	13027			0.00- 65.23	14.27
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	10974	2.00000	2.000	50.00- 150.00	100.00
12.771	12.771 (0.887)	43	135828			1187.73-1287.73	1237.73
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.799	12.799 (0.889)	63	113478	2.00000	2.113	50.00- 150.00	100.00
12.827	12.827 (0.891)	65	36220			0.00- 83.01	31.92
75 2-Butanone					CAS #: 78-93-3		
13.877	13.877 (0.964)	72	18267	2.00000	1.979	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	102063			477.59- 577.59	558.73
13.877	13.877 (0.964)	57	7363			0.00- 89.35	40.31
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.905	13.905 (0.965)	61	77692	2.00000	2.096	50.00- 150.00	100.00
13.905	13.905 (0.965)	96	56850			31.69- 131.69	73.17
13.932	13.932 (0.967)	98	39327			0.00- 99.25	50.62
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.375 (0.998)	42	54990	2.00000	2.089	50.00- 150.00	100.00
14.375	14.375 (0.998)	71	21394			0.00- 86.97	38.91
14.375	14.375 (0.998)	72	20571			0.00- 85.53	37.41
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	121465	2.00000	2.175	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	77359			13.11- 113.11	63.69
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.817 (1.029)	97	121912	2.00000	2.152	50.00- 150.00	100.00
14.817	14.817 (1.029)	99	77448			14.79- 114.79	63.53
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	58952	2.00000	2.060	50.00- 150.00	100.00
14.817	14.817 (1.029)	56	78258			81.17- 181.17	132.75
14.845	14.845 (1.031)	41	49098			48.02- 148.02	83.28
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	111881	2.00000	2.177	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	115224			56.57- 156.57	102.99
91 Benzene					CAS #: 71-43-2		
15.509	15.509 (0.959)	78	146321	2.00000	2.051	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.509	15.509 (0.959)	77	32260			0.00- 71.74	22.05
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.398 (1.069)	57	215514	2.00000	2.142	50.00- 150.00	100.00
15.398	15.398 (1.069)	56	76082			0.00- 85.49	35.30
15.398	15.398 (1.069)	41	64009			0.00- 82.22	29.70
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	81570	2.00000	2.063	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	27245			0.00- 84.27	33.40
94 Heptane					CAS #: 142-82-5		
15.702	15.702 (0.971)	71	40924	2.00000	2.157	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	88731			173.66- 273.66	216.82
15.730	15.730 (0.973)	57	45995			67.41- 167.41	112.39
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	66909	2.00000	2.126	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	64888			48.03- 148.03	96.98
16.642	16.642 (1.029)	97	42720			15.13- 115.13	63.85
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	54280	2.00000	2.080	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	41230			25.56- 125.56	75.96
17.112	17.112 (1.058)	41	37018			29.36- 129.36	68.20
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	28811	2.00000	2.000	50.00- 150.00	100.00
17.250	17.250 (1.067)	58	21286			23.88- 123.88	73.88
17.250	17.250 (1.067)	57	7846			0.00- 77.23	27.23
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	111994	2.00000	2.134	50.00- 150.00	100.00
17.555	17.555 (1.085)	85	74286			15.66- 115.66	66.33
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	69716	2.00000	2.112	50.00- 150.00	100.00
18.329	18.329 (1.133)	77	24661			0.00- 83.49	35.37
18.329	18.329 (1.133)	39	42103			12.40- 112.40	60.39
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	35532	2.00000	2.233	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	97570			236.96- 336.96	274.60
18.522	18.522 (1.145)	85	14552			0.00- 92.50	40.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	155602	2.00000	2.089	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	102747			14.17- 114.17	66.03
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.297	19.297 (0.904)	75	76335	2.00000	2.112	50.00- 150.00	100.00
19.297	19.297 (0.904)	77	26580			0.00- 84.54	34.82
19.297	19.297 (0.904)	39	42907			12.48- 112.48	56.21
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	60280	2.00000	2.133	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	38629			13.27- 113.27	64.08
19.656	19.656 (0.921)	83	51953			36.29- 136.29	86.19
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	85338	2.00000	2.120	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	59944			21.90- 121.90	70.24
19.822	19.822 (0.929)	131	59586			19.44- 119.44	69.82
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	46496	2.00000	2.000	50.00- 150.00	100.00
19.960	19.960 (0.935)	43	88457			140.25- 240.25	190.25
19.960	19.960 (0.935)	100	8137			0.00- 67.50	17.50
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	109223	2.00000	2.205	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	86550			28.50- 128.50	79.24
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	98952	2.00000	2.212	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	92195			46.61- 146.61	93.17
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	141408	2.00000	2.115	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	45440			0.00- 83.74	32.13
21.398	21.398 (1.003)	77	99139			36.14- 136.14	70.11
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	69955	2.00000	2.172	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	212527			264.29- 364.29	303.81
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	83417	2.00000	2.084	50.00- 150.00	100.00
21.674	21.674 (1.016)	91	163670			143.19- 243.19	196.21
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	74387	2.00000	2.144	50.00- 150.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	161137			162.29- 262.29	216.62
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	109628	2.00000	2.272	50.00- 150.00	100.00
22.421	22.421	(1.051)	78	62288			10.04- 110.04	56.82
133 Bromoform						CAS #: 75-25-2		
22.836	22.836	(1.070)	173	97647	2.00000	2.183	50.00- 150.00	100.00
22.836	22.836	(1.070)	171	51493			1.94- 101.94	52.73
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	195952	2.00000	2.167	50.00- 150.00	100.00
22.974	22.974	(1.076)	120	53445			0.00- 78.52	27.27
22.946	22.946	(1.075)	51	22911			0.00- 62.18	11.69
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	132378	2.00000	2.124	50.00- 150.00	100.00
23.527	23.527	(1.102)	85	87270			15.47- 115.47	65.92
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	266209	2.00000	2.136	50.00- 150.00	100.00
23.637	23.637	(1.108)	120	60173			0.00- 73.35	22.60
23.637	23.637	(1.108)	105	11173			0.00- 54.49	4.20
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	219557	2.00000	2.168	50.00- 150.00	100.00
23.831	23.831	(1.117)	120	69116			0.00- 81.78	31.48
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	207321	2.00000	2.132	50.00- 150.00	100.00
23.914	23.914	(1.120)	120	98647			0.00- 98.93	47.58
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	171652	2.00000	2.236	50.00- 150.00	100.00
24.550	24.550	(1.150)	120	81863			0.00- 99.04	47.69
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.131	25.131	(1.177)	146	136628	2.00000	2.129	50.00- 150.00	100.00
25.131	25.131	(1.177)	148	88189			15.44- 115.44	64.55
25.131	25.131	(1.177)	111	54874			0.00- 90.41	40.16
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	141744	2.00000	2.069	50.00- 150.00	100.00
25.269	25.269	(1.184)	148	91243			13.67- 113.67	64.37
25.269	25.269	(1.184)	111	51928			0.00- 87.10	36.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	161676	2.00000	2.206	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	33956			0.00- 72.02	21.00
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	131381	2.00000	2.080	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	85098			13.48- 113.48	64.77
25.905	25.905 (1.214)	111	51832			0.00- 89.53	39.45
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	65598	2.00000	2.000	50.00- 150.00	100.00
28.808	28.808 (1.350)	182	63637			47.01- 147.01	97.01
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	65479	2.00000	2.000	50.00- 150.00	100.00
29.001	29.001 (1.359)	223	41018			12.64- 112.64	62.64
167 Naphthalene					CAS #: 91-20-3		
29.361	29.361 (1.376)	128	119215	2.00000	2.000	50.00- 150.00	100.00
29.361	29.361 (1.376)	127	16389			0.00- 63.75	13.75
29 Isopentane					CAS #: 78-78-4		
8.347	8.347 (0.580)	43	84271	2.00000	2.000	50.00- 150.00	100.00
8.347	8.347 (0.580)	57	54396			14.55- 114.55	64.55
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.468)	58	13585	2.00000	2.000	50.00- 150.00	100.00
6.744	6.744 (0.468)	43	112427			777.58- 877.58	827.58
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.891	16.891 (1.173)	83	75102	2.00000	2.095	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	34610			0.00- 96.26	46.08
16.891	16.891 (1.173)	55	68355			38.28- 138.28	91.02

Data File: /chem/msd7.i/7-18oct.b/7101804.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101804.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 2ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	611723	-10.51
97 1,4-Difluorobenze	2204815	1322889	3086741	2006513	-8.99
126 Chlorobenzene-d5	1812979	1087787	2538171	1607236	-11.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

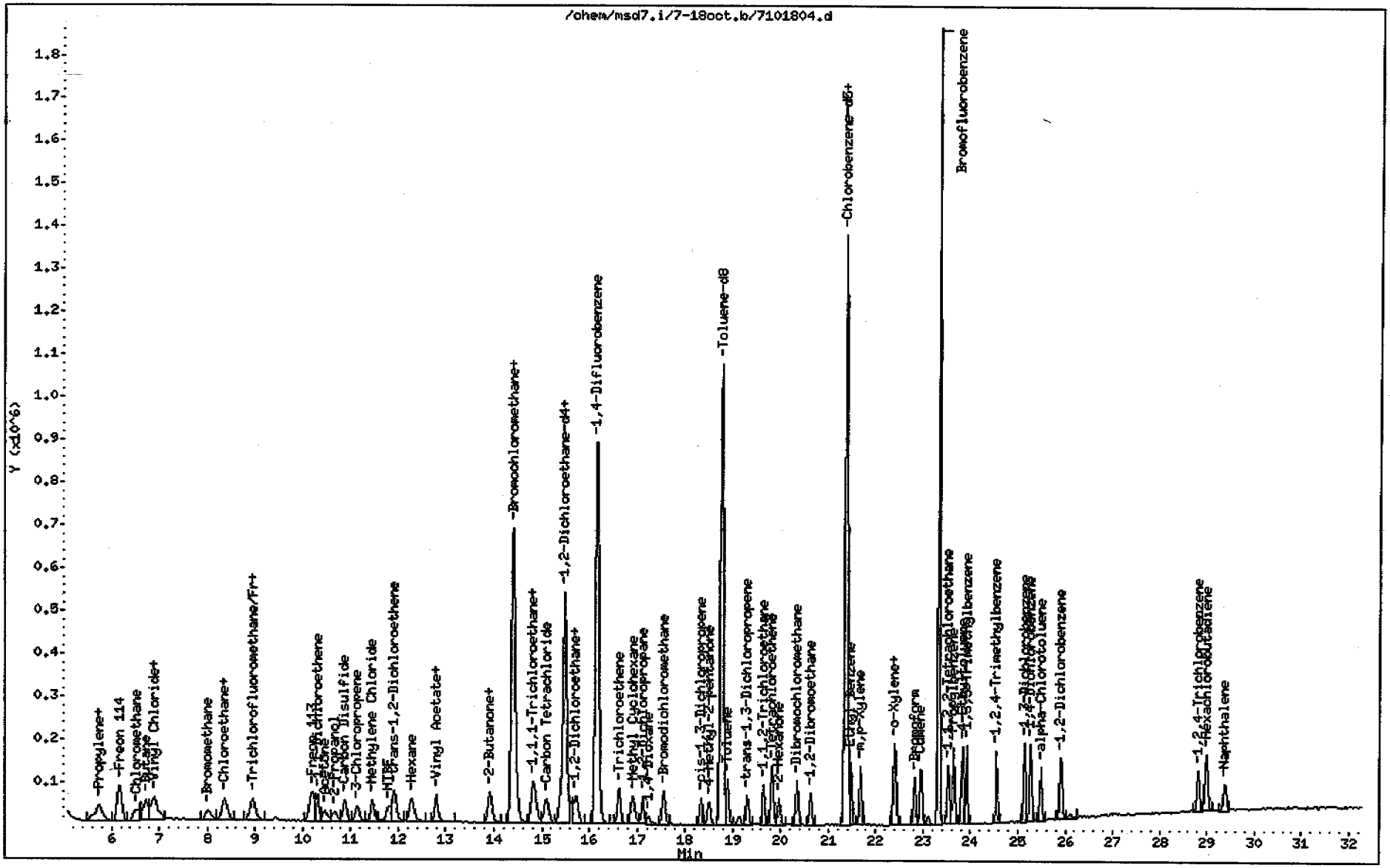
0204

Data File: /chem/msd7.i/7-18oct.b/7101804.d
Date : 18-OCT-2007 14:09
Client ID: Level 3
Sample Info: 2mL #1576-50

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103003.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 30-OCT-2007 09:51
Operator : cb
Inst ID: msd7.i
Smp Info : 8mL #1487-400
Misc Info : 200ppbv --> 8ppbv 1200ppbv --> 48ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 09:51
Cal File: 7103003.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATION
**	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.388	14.388 (1.000)	130	457095	25.0000		50.00- 150.00	100.00
14.388	14.388 (1.000)	128	356706			26.81- 126.81	78.04
14.388	14.388 (1.000)	49	651489			112.06- 212.06	142.53
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1520028	25.0000		50.00- 150.00	100.00
16.158	16.158 (1.000)	88	231032			0.00- 65.39	15.20
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1109895	25.0000		50.00- 150.00	100.00
21.356	21.356 (1.000)	82	594855			4.45- 104.45	53.60
26 Methanol					CAS #: 67-56-1		
7.560	7.560 (0.525)	31	434609	48.0000	55.679	50.00- 150.00	100.00
7.560	7.560 (0.525)	32	984446			96.19- 196.19	226.51

Report Date: 30-Oct-2007 11:34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103003.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv --> 8ppbv 1200ppbv --> 48ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	457095	-5.99
97 1,4-Difluorobenze	1616415	969849	2262981	1520028	-5.96
126 Chlorobenzene-d5	1130394	678236	1582552	1109895	-1.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.39	-0.19
97 1,4-Difluorobenze	16.19	15.86	16.52	16.16	-0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

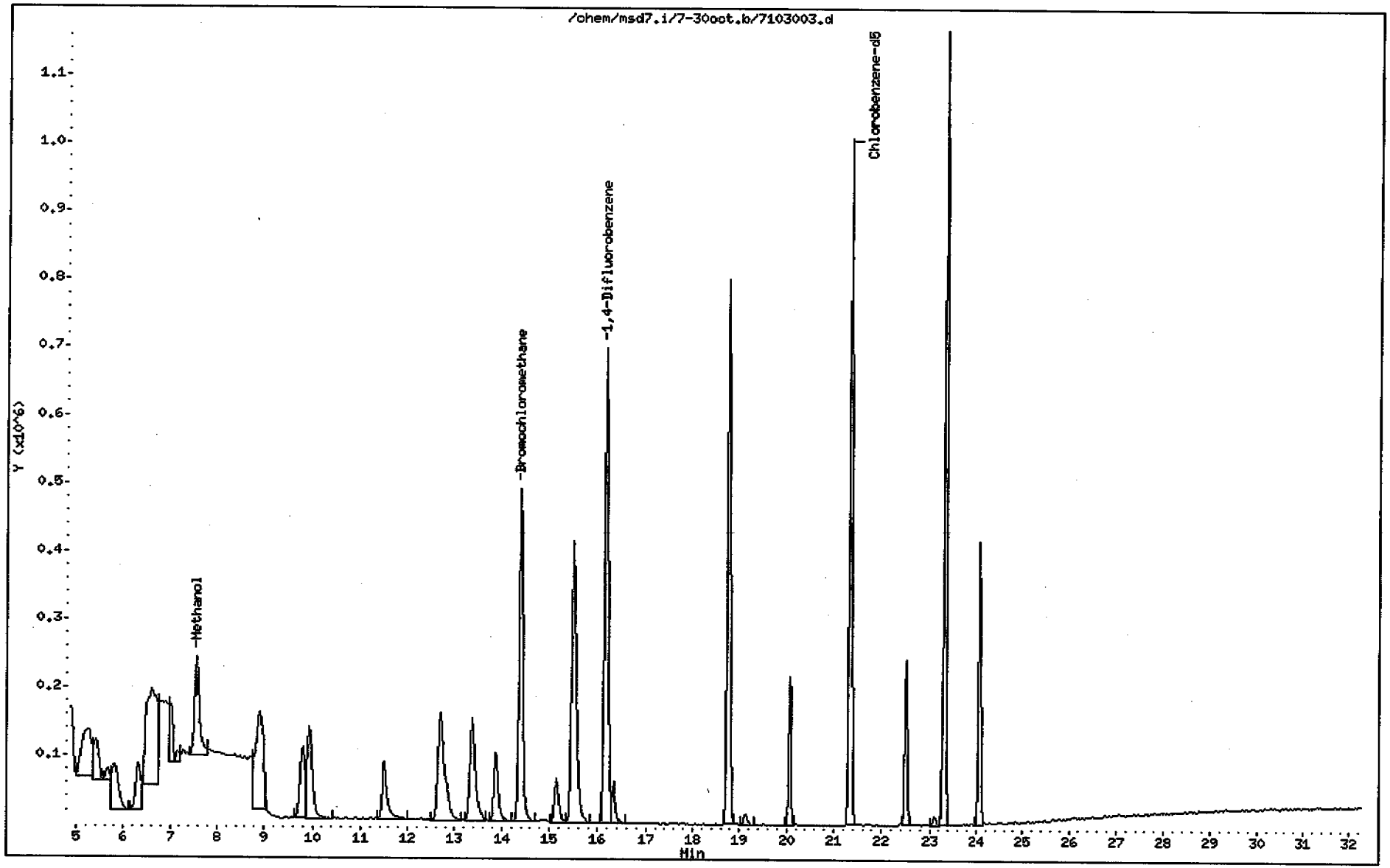
Data File: /chem/msd7.i/7-30oct.b/7103003.d
Date : 30-OCT-2007 09:51
Client ID: Level 4
Sample Info: 8mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0207



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101805.d
Lab Smp Id: ICAL
Client Smp ID: Level 4
Inj Date : 18-OCT-2007 14:47
Operator : cb
Inst ID: msd7.i
Smp Info : 25mL #1576-50
Misc Info : 200ppbv --> 25ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 14:47
Cal File: 7101805.d
Als bottle: 1
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 81 Bromochloromethane					CAS #: 74-97-5			
14.403	14.403 (1.000)	130	648629	25.0000		50.00- 150.00		100.00
14.403	14.403 (1.000)	128	493340			26.59- 126.59		76.06
14.403	14.403 (1.000)	49	1078175			100.68- 200.68		166.22
* 97 1,4-Difluorobenzene					CAS #: 540-36-3			
16.172	16.172 (1.000)	114	2091071	25.0000		50.00- 150.00		100.00
16.172	16.172 (1.000)	88	329502			0.00- 65.58		15.76
* 126 Chlorobenzene-d5					CAS #: 3114-55-4			
21.343	21.343 (1.000)	117	1761271	25.0000		50.00- 150.00		100.00
21.343	21.343 (1.000)	82	970978			5.27- 105.27		55.13
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
15.481	15.481 (1.075)	65	874142	25.0000	24.986	50.00- 150.00		100.00
15.481	15.481 (1.075)	67	456837			0.53- 100.53		52.26
$ 113 Toluene-d8					CAS #: 2037-26-5			
18.771	18.771 (1.161)	98	1876890	25.0000	25.785	50.00- 150.00		100.00
18.771	18.771 (1.161)	70	216509			0.00- 61.42		11.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1297632			18.77- 118.77	69.14
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1070391	25.0000	25.306	50.00- 150.00	100.00
23.333	23.333 (1.093)	95	1338336			76.99- 176.99	125.03
23.333	23.333 (1.093)	176	1032203			46.79- 146.79	96.43
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	672994	25.0000	23.988	50.00- 150.00	100.00
5.610	5.610 (0.390)	42	475290			23.27- 123.27	70.62
5.610	5.610 (0.390)	39	505709			25.72- 125.72	75.14
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	2552602	25.0000	24.701	50.00- 150.00	100.00
5.748	5.748 (0.399)	87	837020			0.00- 83.79	32.79
16 Freon 114					CAS #: 76-14-2		
6.163	6.163 (0.428)	135	1820434	25.0000	24.747	50.00- 150.00	100.00
6.191	6.191 (0.430)	137	576965			0.00- 82.27	31.69
18 Chloromethane					CAS #: 74-87-3		
6.467	6.467 (0.449)	50	827148	25.0000	24.210	50.00- 150.00	100.00
6.495	6.495 (0.451)	52	276375			0.00- 85.89	33.41
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.854 (0.476)	62	1056924	25.0000	24.901	50.00- 150.00	100.00
6.854	6.854 (0.476)	64	331879			0.00- 84.32	31.40
22 1,3-Butadiene					CAS #: 106-99-0		
6.910	6.910 (0.480)	54	763518	25.0000	26.889	50.00- 150.00	100.00
6.910	6.910 (0.480)	39	775774			59.04- 159.04	101.61
25 Bromomethane					CAS #: 74-83-9		
8.016	8.016 (0.557)	94	898127	25.0000	25.120	50.00- 150.00	100.00
8.016	8.016 (0.557)	96	847084			42.50- 142.50	94.32
27 Chloroethane					CAS #: 75-00-3		
8.347	8.347 (0.580)	64	459746	25.0000	28.558	50.00- 150.00	100.00
8.347	8.347 (0.580)	49	124278			0.00- 81.05	27.03
8.347	8.347 (0.580)	66	146980			0.00- 84.75	31.97
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	2398500	25.0000	26.034	50.00- 150.00	100.00
8.956	8.956 (0.622)	103	1563188			16.23- 116.23	65.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	302916	25.0000	26.675	50.00- 150.00	100.00
9.453	9.453 (0.656)	43	64833			0.00- 75.78	21.40
9.453	9.453 (0.656)	46	115857			0.00- 88.51	38.25
42 Freon 113					CAS #: 76-13-1		
10.200	10.200 (0.708)	151	1351088	25.0000	26.376	50.00- 150.00	100.00
10.200	10.200 (0.708)	153	864179			11.90- 111.90	63.96
10.200	10.200 (0.708)	101	1679257			73.68- 173.68	124.29
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.310	10.310 (0.716)	61	1425325	25.0000	26.543	50.00- 150.00	100.00
10.338	10.338 (0.718)	96	884308			17.50- 117.50	62.04
10.338	10.338 (0.718)	98	559311			0.00- 87.09	39.24
45 Acetone					CAS #: 67-64-1		
10.476	10.476 (0.727)	58	427023	25.0000	26.693	50.00- 150.00	100.00
10.476	10.476 (0.727)	43	1298978			239.97- 339.97	304.19
46 2-Propanol					CAS #: 67-63-0		
10.670	10.670 (0.741)	45	1487551	25.0000	28.448	50.00- 150.00	100.00
10.670	10.670 (0.741)	43	360829			0.00- 77.79	24.26
10.670	10.670 (0.741)	59	57359			0.00- 53.60	3.86
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	2700196	25.0000	26.675	50.00- 150.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.168	11.168 (0.775)	76	434925	25.0000	29.193	50.00- 150.00	100.00
11.168	11.168 (0.775)	41	1150405			232.71- 332.71	264.51
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	1008912	25.0000	25.532	50.00- 150.00	100.00
11.472	11.472 (0.796)	84	739684			21.92- 121.92	73.32
11.472	11.472 (0.796)	51	306196			0.00- 81.14	30.35
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	1771052	25.0000	26.144	50.00- 150.00	100.00
11.831	11.831 (0.821)	57	420256			0.00- 73.63	23.73
11.831	11.831 (0.821)	41	443279			0.00- 78.21	25.03
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	998196	25.0000	28.326	50.00- 150.00	100.00
11.942	11.942 (0.829)	61	1447625			97.48- 197.48	145.02
11.942	11.942 (0.829)	98	642993			10.67- 110.67	64.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	1372419	25.0000	27.942	50.00- 150.00	100.00
12.301	12.301 (0.854)	43	911424			19.81- 119.81	66.41
12.301	12.301 (0.854)	86	203564			0.00- 65.10	14.83
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	204632	25.0000	29.226	50.00- 150.00	100.00
12.799	12.799 (0.889)	43	2462047			1170.44-1270.44	1203.16
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.827	12.827 (0.891)	63	1728636	25.0000	28.337	50.00- 150.00	100.00
12.827	12.827 (0.891)	65	537140			0.00- 82.37	31.07
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	371338	25.0000	32.359	50.00- 150.00	100.00
13.877	13.877 (0.964)	43	1736763			457.63- 557.63	467.70
13.905	13.905 (0.965)	57	128669			0.00- 87.78	34.65
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.933	13.933 (0.967)	61	1209222	25.0000	28.569	50.00- 150.00	100.00
13.933	13.933 (0.967)	96	897782			29.21- 129.21	74.24
13.933	13.933 (0.967)	98	571260			0.00- 98.58	47.24
80 Tetrahydrofuran					CAS #: 109-99-9		
14.403	14.403 (1.000)	42	962709	25.0000	30.617	50.00- 150.00	100.00
14.403	14.403 (1.000)	71	343205			0.00- 86.53	35.65
14.403	14.403 (1.000)	72	380604			0.00- 86.87	39.53
82 Chloroform					CAS #: 67-66-3		
14.458	14.458 (1.004)	83	1763467	25.0000	28.425	50.00- 150.00	100.00
14.458	14.458 (1.004)	85	1152392			13.67- 113.67	65.35
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	1771233	25.0000	27.820	50.00- 150.00	100.00
14.845	14.845 (1.031)	99	1152307			14.88- 114.88	65.06
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	1002003	25.0000	29.830	50.00- 150.00	100.00
14.845	14.845 (1.031)	56	1263499			79.48- 179.48	126.10
14.845	14.845 (1.031)	41	737802			39.89- 139.89	73.63
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	1724198	25.0000	29.064	50.00- 150.00	100.00
15.094	15.094 (1.048)	117	1781371			55.49- 155.49	103.32
91 Benzene					CAS #: 71-43-2		
15.509	15.509 (0.959)	78	2269732	25.0000	28.929	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.509	15.509 (0.959)	77	498689			0.00- 71.80	21.97
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.426	15.426 (1.071)	57	3457104	25.0000	29.494	50.00- 150.00	100.00
15.426	15.426 (1.071)	56	1170008			0.00- 84.94	33.84
15.426	15.426 (1.071)	41	977669			0.00- 80.91	28.28
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.619 (0.966)	62	1227957	25.0000	28.008	50.00- 150.00	100.00
15.619	15.619 (0.966)	64	393216			0.00- 83.52	32.02
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	703132	25.0000	31.170	50.00- 150.00	100.00
15.730	15.730 (0.973)	43	1425110			166.67- 266.67	202.68
15.730	15.730 (0.973)	57	737513			63.24- 163.24	104.89
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	1016424	25.0000	28.695	50.00- 150.00	100.00
16.642	16.642 (1.029)	130	1015319			48.65- 148.65	99.89
16.642	16.642 (1.029)	97	658135			15.00- 115.00	64.75
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	860882	25.0000	29.073	50.00- 150.00	100.00
17.112	17.112 (1.058)	62	627970			24.69- 124.69	72.94
17.112	17.112 (1.058)	41	556404			24.45- 124.45	64.63
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	544742	25.0000	29.604	50.00- 150.00	100.00
17.250	17.250 (1.067)	58	388755			22.62- 122.62	71.36
17.250	17.250 (1.067)	57	130892			0.00- 75.63	24.03
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	1825381	25.0000	30.018	50.00- 150.00	100.00
17.555	17.555 (1.085)	85	1169739			15.13- 115.13	64.08
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	1259763	25.0000	31.709	50.00- 150.00	100.00
18.329	18.329 (1.133)	77	405185			0.00- 83.05	32.16
18.329	18.329 (1.133)	39	734636			11.04- 111.04	58.32
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	699008	25.0000	34.306	50.00- 150.00	100.00
18.522	18.522 (1.145)	43	1880425			230.98- 330.98	269.01
18.522	18.522 (1.145)	85	276238			0.00- 91.51	39.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	2517803	25.0000	29.511	50.00- 150.00	100.00
18.882	18.882 (1.168)	92	1570697			13.57- 113.57	62.38
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.905)	75	1365604	25.0000	30.614	50.00- 150.00	100.00
19.324	19.324 (0.905)	77	431910			0.00- 83.57	31.63
19.297	19.297 (0.904)	39	741173			9.74- 109.74	54.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	995281	25.0000	29.343	50.00- 150.00	100.00
19.656	19.656 (0.921)	99	611788			12.67- 112.67	61.47
19.656	19.656 (0.921)	83	830549			35.35- 135.35	83.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	1326702	25.0000	28.172	50.00- 150.00	100.00
19.822	19.822 (0.929)	129	951582			21.84- 121.84	71.73
19.822	19.822 (0.929)	131	918961			19.38- 119.38	69.27
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	976339	25.0000	30.260	50.00- 150.00	100.00
19.960	19.960 (0.935)	43	1898544			142.35- 242.35	194.46
19.960	19.960 (0.935)	100	167728			0.00- 67.34	17.18
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	1889826	25.0000	30.784	50.00- 150.00	100.00
20.347	20.347 (0.953)	127	1451142			27.93- 127.93	76.79
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	1691649	25.0000	30.624	50.00- 150.00	100.00
20.624	20.624 (0.966)	109	1595981			45.86- 145.86	94.34
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	2151202	25.0000	27.748	50.00- 150.00	100.00
21.398	21.398 (1.003)	114	697219			0.00- 83.29	32.41
21.398	21.398 (1.003)	77	1306142			27.66- 127.66	60.72
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	1127919	25.0000	29.242	50.00- 150.00	100.00
21.481	21.481 (1.006)	91	3464186			261.90- 361.90	307.13
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	1393326	25.0000	29.141	50.00- 150.00	100.00
21.674	21.674 (1.016)	91	2764534			144.93- 244.93	198.41
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	1236660	25.0000	29.557	50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.049)	91	2558031			160.47- 260.47	206.85
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.051)	104	2077088	25.0000	34.374	50.00- 150.00	100.00
22.421	22.421 (1.051)	78	1061823			7.81- 107.81	51.12
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.070)	173	1688739	25.0000	30.596	50.00- 150.00	100.00
22.836	22.836 (1.070)	171	867217			1.74- 101.74	51.35
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.076)	105	3202644	25.0000	30.112	50.00- 150.00	100.00
22.974	22.974 (1.076)	120	877707			0.00- 78.24	27.41
22.946	22.946 (1.075)	51	336852			0.00- 61.76	10.52
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.102)	83	1987656	25.0000	27.596	50.00- 150.00	100.00
23.527	23.527 (1.102)	85	1274611			15.02- 115.02	64.13
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.108)	91	4176023	25.0000	28.463	50.00- 150.00	100.00
23.637	23.637 (1.108)	120	934951			0.00- 73.03	22.39
23.637	23.637 (1.108)	105	154058			0.00- 54.22	3.69
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.117)	105	3761987	25.0000	30.300	50.00- 150.00	100.00
23.831	23.831 (1.117)	120	1081840			0.00- 80.77	28.76
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.120)	105	2748553	25.0000	25.521	50.00- 150.00	100.00
23.914	23.914 (1.120)	120	1560080			1.54- 101.54	56.76
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.150)	105	2622270	25.0000	28.800	50.00- 150.00	100.00
24.550	24.550 (1.150)	120	1282211			0.00- 98.99	48.90
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.131	25.131 (1.177)	146	1977163	25.0000	26.992	50.00- 150.00	100.00
25.131	25.131 (1.177)	148	1259144			14.85- 114.85	63.68
25.131	25.131 (1.177)	111	766458			0.00- 89.86	38.77
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.184)	146	2033388	25.0000	26.349	50.00- 150.00	100.00
25.269	25.269 (1.184)	148	1297512			13.71- 113.71	63.81
25.269	25.269 (1.184)	111	752714			0.00- 87.07	37.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	2693301	25.0000	30.105	50.00- 150.00	100.00
25.490	25.490 (1.194)	126	562707			0.00- 71.64	20.89
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	1756987	25.0000	25.257	50.00- 150.00	100.00
25.932	25.932 (1.215)	148	1110267			13.39- 113.39	63.19
25.905	25.905 (1.214)	111	707034			0.00- 89.77	40.24
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	489632	25.0000	17.636	50.00- 150.00	100.00
28.808	28.808 (1.350)	182	471701			46.67- 146.67	96.34
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	471653	25.0000	17.231	50.00- 150.00	100.00
29.001	29.001 (1.359)	223	296659			12.77- 112.77	62.90
167 Naphthalene					CAS #: 91-20-3		
29.361	29.361 (1.376)	128	811801	25.0000	16.602	50.00- 150.00	100.00
29.361	29.361 (1.376)	127	99474			0.00- 63.00	12.25
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	1092752	25.0000	24.726	50.00- 150.00	100.00
8.375	8.375 (0.581)	57	731967			15.77- 115.77	66.98
19 Butane					CAS #: 106-97-8		
6.744	6.744 (0.468)	58	177191	25.0000	24.799	50.00- 150.00	100.00
6.744	6.744 (0.468)	43	1417940			763.91- 863.91	800.23
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	1222177	25.0000	29.354	50.00- 150.00	100.00
16.919	16.919 (1.175)	98	569027			0.00- 96.36	46.56
16.919	16.919 (1.175)	55	1091840			38.63- 138.63	89.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101805.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 25ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	648629	-5.11
97 1,4-Difluorobenze	2204815	1322889	3086741	2091071	-5.16
126 Chlorobenzene-d5	1812979	1087787	2538171	1761271	-2.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

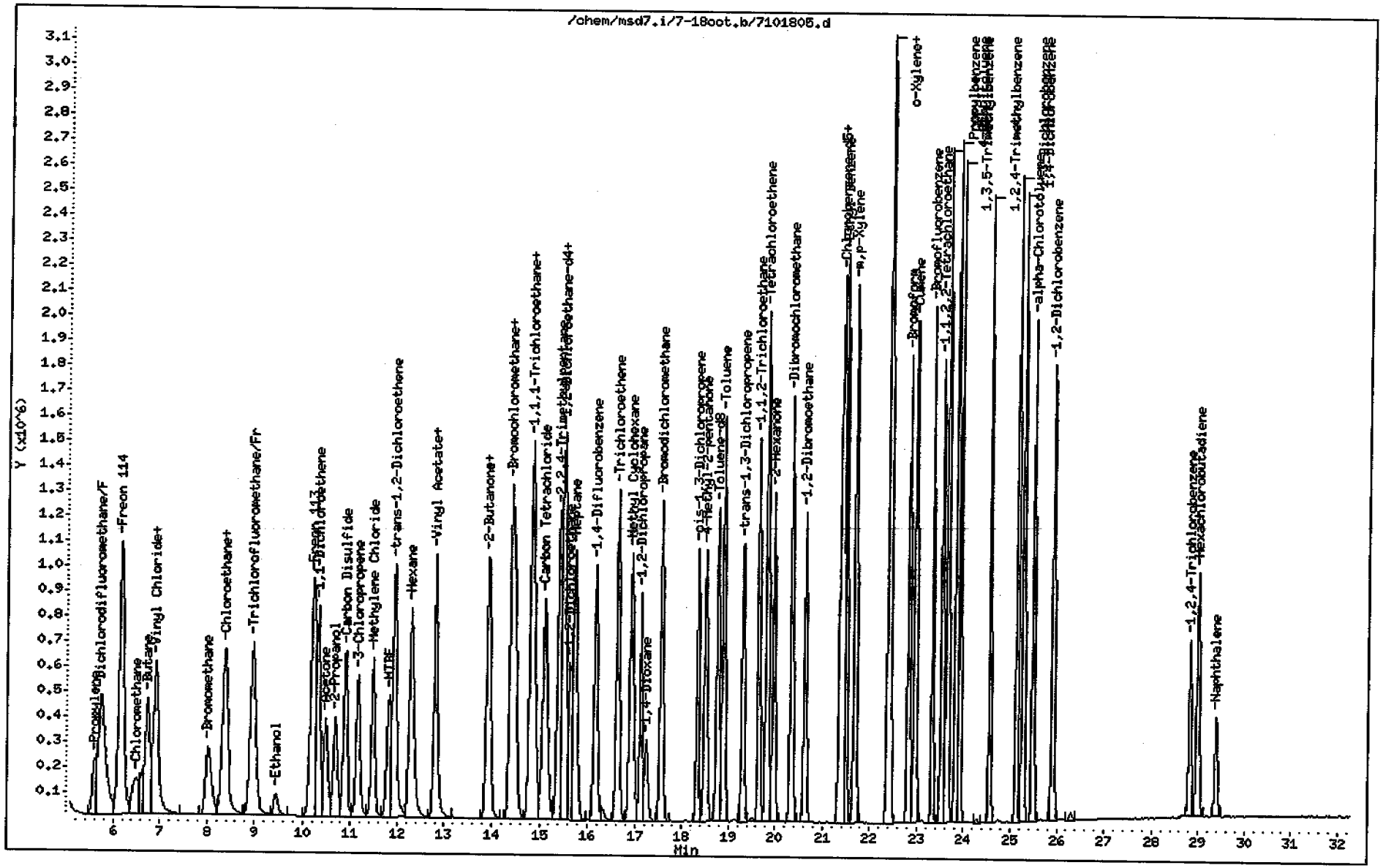
Data File: /ohem/msd7.i/7-18oct.b/7101805.d
Date : 18-OCT-2007 14:47
Client ID: Level 4
Sample Info: 25mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0217



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103004.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 30-OCT-2007 10:29
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 10:29
Cal File: 7103004.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	486199	25.0000		80.00- 120.00		100.00
14.416	14.416 (1.000)	128	373087			26.74- 126.74		76.74
14.416	14.416 (1.000)	49	687796			91.46- 191.46		141.46
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1616415	25.0000		80.00- 120.00		100.00
16.158	16.158 (1.000)	88	244505			0.00- 65.13		15.13
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1130394	25.0000		80.00- 120.00		100.00
21.356	21.356 (1.000)	82	593319			4.45- 104.45		52.49
26 Methanol						CAS #: 67-56-1		
7.588	7.588 (0.526)	31	2404086	300.000	289.56	80.00- 120.00		100.00
7.588	7.588 (0.526)	32	1583298			15.86- 115.86		65.86

Data File: /chem/msd7.i/7-30oct.b/7103004.d
Report Date: 30-Oct-2007 11:34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103004.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	486199	0.00
97 1,4-Difluorobenze	1616415	969849	2262981	1616415	0.00
126 Chlorobenzene-d5	1130394	678236	1582552	1130394	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.19	15.86	16.52	16.19	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

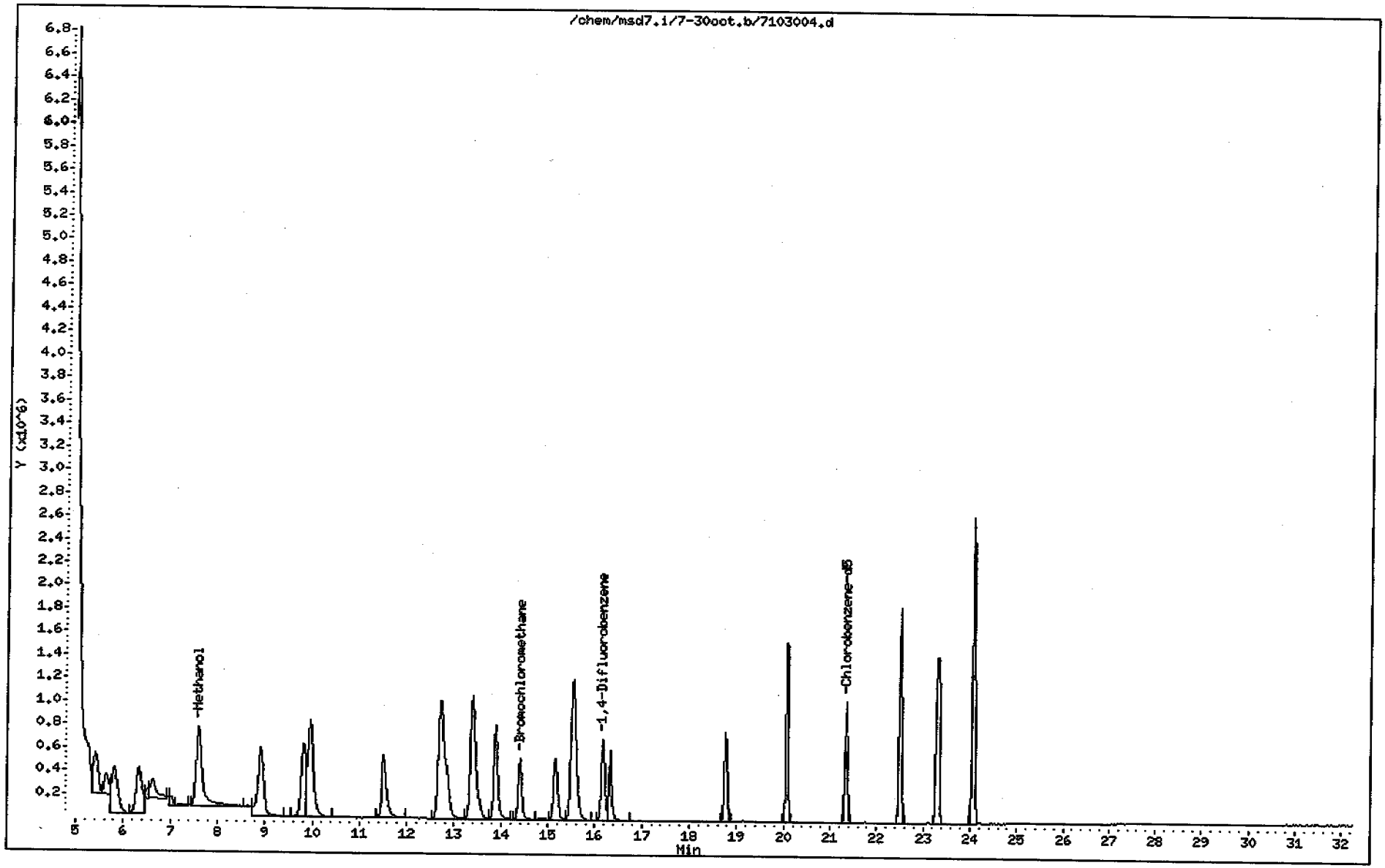
Data File: /chem/msd7.i/7-30oct.b/7103004.d
Date : 30-OCT-2007 10:29
Client ID: Level 5
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0220



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102206.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 22-OCT-2007 11:44
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-370
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 11:44
Cal File: 7102206.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane					CAS #: 74-97-5		
14.402	14.402 (1.000)	130	653745	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	501927			26.78- 126.78	76.78
14.402	14.402 (1.000)	49	962603			97.24- 197.24	147.24
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2055535	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	321836			0.00- 65.66	15.66
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.342	21.342 (1.000)	117	1681036	25.0000		80.00- 120.00	100.00
21.342	21.342 (1.000)	82	930753			5.19- 105.19	55.37
55 Cyclopentene					CAS #: 142-29-0		
11.250	11.250 (0.781)	67	6338028	50.0000	52.035	80.00- 120.00	100.00
11.250	11.250 (0.781)	68	2569210			0.00- 90.48	40.54
11.250	11.250 (0.781)	53	1314450			0.00- 70.85	20.74
78 2,2-Dichloropropane					CAS #: 594-20-7		
13.877	13.877 (0.964)	77	4020302	50.0000	52.711	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	1308053			0.00- 82.54	32.54
13.877	13.877 (0.964)	97	801913			0.00- 70.03	19.95
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	1484028	50.0000	53.552	80.00- 120.00	100.00
15.121	15.121 (0.935)	75	4019552			218.22- 318.22	270.85
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	4474167	50.0000	54.223	80.00- 120.00	100.00
19.988	19.988 (1.236)	41	3238032			22.37- 122.37	72.37
19.988	19.988 (1.236)	78	1429445			0.00- 81.77	31.95
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	3235607	50.0000	53.976	80.00- 120.00	100.00
21.536	21.536 (1.009)	117	2225982			18.93- 118.93	68.80
21.508	21.508 (1.008)	95	1265610			0.00- 89.37	39.12
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	3872849	50.0000	55.062	80.00- 120.00	100.00
23.610	23.610 (1.106)	158	3741648			46.61- 146.61	96.61
23.610	23.610 (1.106)	77	7718215			147.77- 247.77	199.29
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	1790961	50.0000	54.413	80.00- 120.00	100.00
23.665	23.665 (1.109)	75	5405655			251.83- 351.83	301.83
23.665	23.665 (1.109)	61	1399772			26.84- 126.84	78.16
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	2802997	50.0000	53.956	80.00- 120.00	100.00
23.886	23.886 (1.119)	91	8196683			242.43- 342.43	292.43
23.886	23.886 (1.119)	65	796656			0.00- 78.37	28.42
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	3061327	50.0000	55.234	80.00- 120.00	100.00
24.080	24.080 (1.128)	91	9049733			245.61- 345.61	295.61
24.052	24.052 (1.127)	63	1168807			0.00- 88.24	38.18
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	8782477	50.0000	53.478	80.00- 120.00	100.00
25.020	25.020 (1.172)	134	2420527			0.00- 77.89	27.56
25.020	25.020 (1.172)	91	2231273			0.00- 74.89	25.41
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	3521301	50.0000	54.043	80.00- 120.00	100.00
25.269	25.269 (1.184)	105	7581391			165.30- 265.30	215.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	983859			0.00- 78.76	27.94
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	2345394	50.0000	53.114	80.00- 120.00	100.00
25.683	25.683 (1.203)	91	9453400			353.06- 453.06	403.06
25.683	25.683 (1.203)	92	5362392			181.94- 281.94	228.64
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	7751126	50.0000	52.355	80.00- 120.00	100.00
24.467	24.467 (1.146)	134	1919419			0.00- 74.76	24.76
24.467	24.467 (1.146)	91	5566932			20.96- 120.96	71.82
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	10990002	50.0000	53.630	80.00- 120.00	100.00
24.826	24.826 (1.163)	134	2159111			0.00- 69.65	19.65
24.826	24.826 (1.163)	91	1806199			0.00- 65.99	16.43
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	2721900	50.0000	51.363	80.00- 120.00	100.00
27.287	27.287 (1.279)	75	2358984			36.67- 136.67	86.67
27.287	27.287 (1.279)	155	2114262			28.87- 128.87	77.68
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	2362276	50.0000	53.370	80.00- 120.00	100.00
24.605	24.605 (1.153)	117	2494933			54.36- 154.36	105.62
24.605	24.605 (1.153)	169	1140247			0.00- 97.70	48.27

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102206.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 11:44
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	653745	392247	915243	653745	0.00
97 1,4-Difluorobenze	2055535	1233321	2877749	2055535	0.00
126 Chlorobenzene-d5	1681036	1008622	2353450	1681036	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

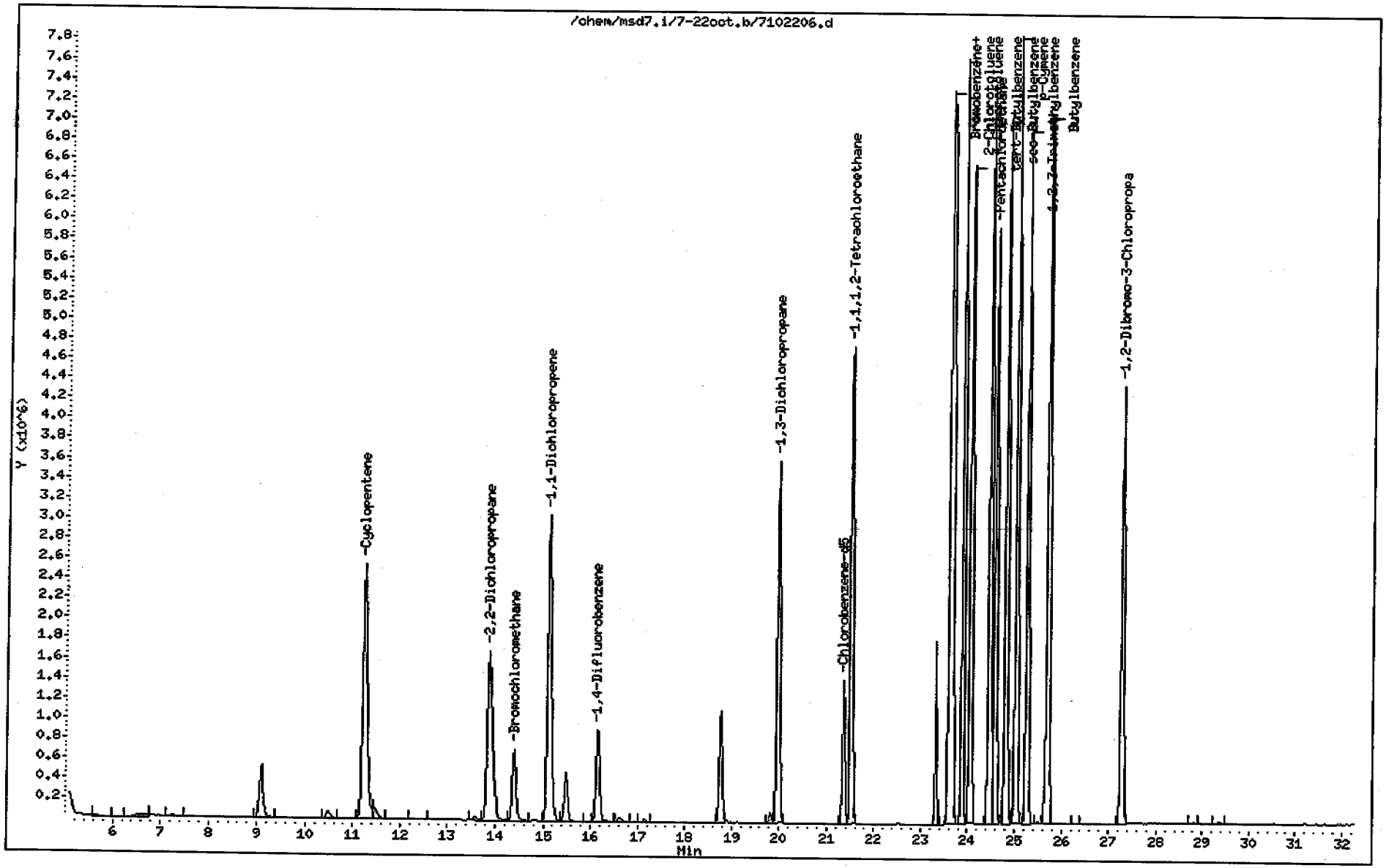
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-22oct.b/7102206.d
Date : 22-OCT-2007 11:44
Client ID: Level 5
Sample Info: 50mL #1487-370

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101904.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 19-OCT-2007 11:00
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 11:00
Cal File: 7101904.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.402	14.402 (1.000)	130	694127	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	531772			26.61- 126.61	76.61
14.402	14.402 (1.000)	49	1021801			97.21- 197.21	147.21
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2223212	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	354725			0.00- 65.96	15.96
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.370	21.370 (1.000)	117	1779964	25.0000		80.00- 120.00	100.00
21.342	21.342 (1.000)	82	986509			5.24- 105.24	55.42
5 Freon 143a						CAS #: 420-46-2	
5.306	5.306 (0.368)	65	766302	50.0000	49.911	80.00- 120.00	100.00
5.223	5.223 (0.363)	69	6741914			0.00- 50.00	879.80
5.278	5.278 (0.366)	64	224377			0.00- 76.18	29.28
6 Freon142b						CAS #: 75-68-3	
6.356	6.356 (0.441)	65	3144007	50.0000	49.820	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)							
6.329	6.329 (0.439)	45	770144			0.00- 74.42	24.50
13 Freon 134a					CAS #: 811-97-2		
5.444	5.444 (0.378)	83	1490027	50.0000	49.641	80.00- 120.00	100.00
5.223	5.223 (0.363)	69	6741914			409.04- 509.04	452.47
5.444	5.444 (0.378)	63	197636			0.00- 63.70	13.26
15 Freon 152a					CAS #: 75-37-6		
5.665	5.665 (0.393)	65	1071725	50.0000	49.165	80.00- 120.00	100.00
5.665	5.665 (0.393)	51	1716739			110.12- 210.12	160.18
5.665	5.665 (0.393)	47	437796			0.00- 90.40	40.85
17 Freon 22					CAS #: 75-45-6		
5.803	5.803 (0.403)	51	3429656	50.0000	48.340	80.00- 120.00	100.00
5.803	5.803 (0.403)	67	407051			0.00- 61.77	11.87
5.831	5.831 (0.405)	85	45824			0.00- 51.67	1.34
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.928	8.928 (0.620)	67	3121227	50.0000	50.694	80.00- 120.00	100.00
8.928	8.928 (0.620)	69	981436			0.00- 81.12	31.44
8.928	8.928 (0.620)	35	88167			0.00- 53.83	2.82
40 Freon123a					CAS #: 354-23-4		
9.813	9.813 (0.681)	117	1871544	50.0000	54.425	80.00- 120.00	100.00
9.813	9.813 (0.681)	67	2736149			110.97- 210.97	146.20
41 Freon123					CAS #: 306-83-2		
9.978	9.978 (0.693)	83	3184755	50.0000	51.277	80.00- 120.00	100.00
9.978	9.978 (0.693)	133	627762			0.00- 69.52	19.71
9.978	9.978 (0.693)	85	2260913			22.16- 122.16	70.99
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.527	11.527 (0.800)	59	3711893	50.0000	51.792	80.00- 120.00	100.00
11.527	11.527 (0.800)	41	752755			0.00- 73.42	20.28
11.527	11.527 (0.800)	57	362771			0.00- 60.26	9.77
68 Isopropyl ether					CAS #: 108-20-3		
12.716	12.716 (0.883)	45	6578708	50.0000	52.939	80.00- 120.00	100.00
12.716	12.716 (0.883)	87	1520476			0.00- 73.31	23.11
12.716	12.716 (0.883)	59	520306			0.00- 58.30	7.91
71 1-Propanol					CAS #: 71-23-8		
12.854	12.854 (0.892)	42	425719	50.0000	57.194	80.00- 120.00	100.00
12.854	12.854 (0.892)	59	638506			95.91- 195.91	149.98
12.716	12.716 (0.883)	41	1236325			265.93- 365.93	290.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.379	13.379 (0.929)	59	5651281	50.0000	54.203	80.00- 120.00	100.00
13.379	13.379 (0.929)	87	2181708			0.00- 88.95	38.61
13.379	13.379 (0.929)	41	981804			0.00- 67.89	17.37
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	620455	50.0000	53.330	80.00- 120.00	100.00
13.877	13.877 (0.964)	61	597626			49.04- 149.04	96.32
13.877	13.877 (0.964)	43	4293069			622.55- 722.55	691.92
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	4149237	50.0000	54.724	80.00- 120.00	100.00
15.564	15.564 (1.081)	87	972129			0.00- 73.71	23.43
15.536	15.536 (1.079)	55	1097280			0.00- 78.56	26.45
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	2609217	50.0000	61.498	80.00- 120.00	100.00
22.504	22.504 (1.562)	43	4102315			108.53- 208.53	157.22
98 1-Butanol					CAS #: 71-36-3		
16.338	16.338 (1.010)	56	1222941	50.0000	62.304	80.00- 120.00	100.00
16.338	16.338 (1.010)	41	881157			21.86- 121.86	72.05
16.338	16.338 (1.010)	43	677934			9.15- 109.15	55.43
99 Isobutanol					CAS #: 78-83-1		
15.149	15.149 (1.052)	59	42901	50.0000	62.469	80.00- 120.00	100.00
15.149	15.149 (1.052)	41	1065866			2630.47-2730.47	2484.48
15.149	15.149 (1.052)	43	1475416			3703.83-3803.83	3439.12
119 Butyl Acetate					CAS #: 123-86-4		
20.070	20.070 (1.241)	56	1830296	50.0000	59.304	80.00- 120.00	100.00
20.070	20.070 (1.241)	73	585535			0.00- 81.99	31.99
20.070	20.070 (1.241)	43	4559849			199.13- 299.13	249.13
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.089)	55	1834532	50.0000	54.771	80.00- 120.00	100.00
23.278	23.278 (1.089)	98	769278			0.00- 90.06	41.93
23.278	23.278 (1.089)	42	1263933			16.60- 116.60	68.90
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.127)	57	4306488	50.0000	53.933	80.00- 120.00	100.00
24.080	24.080 (1.127)	85	3477655			30.75- 130.75	80.75
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101904.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	694127	0.00
97 1,4-Difluorobenze	2223212	1333927	3112497	2223212	0.00
126 Chlorobenzene-d5	1779964	1067978	2491950	1779964	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.37	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

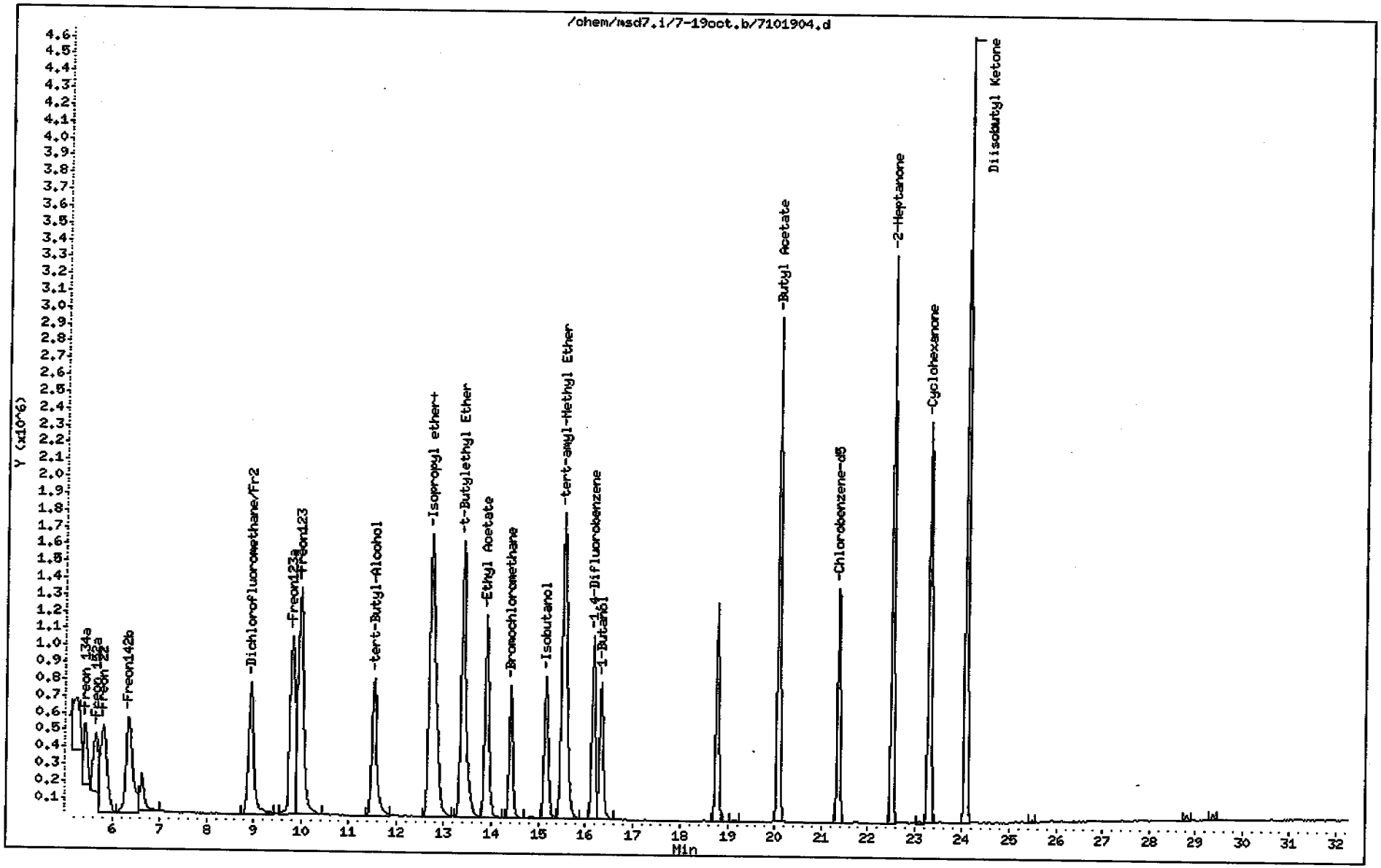
Data File: /chem/msd7.i/7-19oct.b/7101904.d
Date : 19-OCT-2007 11:00
Client ID: Level 5
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0230



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101806.d
Lab Smp Id: ICAL
Client Smp ID: Level 5
Inj Date : 18-OCT-2007 15:26
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1576-50
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 18-Oct-2007 15:55 cbond
Quant Type: ISTD
Cal Date : 18-OCT-2007 15:26
Cal File: 7101806.d
Als bottle: 1
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.402	14.402 (1.000)	130	683549	25.0000		80.00- 120.00	100.00
14.402	14.402 (1.000)	128	526020			26.95- 126.95	76.95
14.402	14.402 (1.000)	49	1309838			141.62- 241.62	191.62
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.172	16.172 (1.000)	114	2204815	25.0000		80.00- 120.00	100.00
16.172	16.172 (1.000)	88	346032			0.00- 65.69	15.69
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.370	21.370 (1.000)	117	1812979	25.0000		80.00- 120.00	100.00
21.342	21.342 (1.000)	82	1018657			5.45- 105.45	56.19
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.508	15.508 (1.077)	65	902272	25.0000	24.576	80.00- 120.00	100.00
15.508	15.508 (1.077)	67	497167			1.44- 101.44	55.10
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.771	18.771 (1.161)	98	1988860	25.0000	25.725	80.00- 120.00	100.00
18.771	18.771 (1.161)	70	232527			0.00- 61.47	11.69

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1398815			19.08- 119.08	70.33
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.092)	174	1084886	25.0000	24.933	80.00- 120.00	100.00
23.333	23.333 (1.092)	95	1375583			76.80- 176.80	126.80
23.333	23.333 (1.092)	176	1042148			46.06- 146.06	96.06
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	1415032	50.0000	48.553	80.00- 120.00	100.00
5.610	5.610 (0.390)	42	982874			22.00- 122.00	69.46
5.610	5.610 (0.390)	39	1047010			25.14- 125.14	73.99
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	5298030	50.0000	48.980	80.00- 120.00	100.00
5.748	5.748 (0.399)	87	1667645			0.00- 83.21	31.48
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	3652709	50.0000	47.806	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	1161951			0.00- 81.81	31.81
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	1693664	50.0000	47.987	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	575628			0.00- 85.25	33.99
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	2169718	50.0000	48.872	80.00- 120.00	100.00
6.882	6.882 (0.478)	64	690774			0.00- 83.70	31.84
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.482)	54	1604484	50.0000	52.666	80.00- 120.00	100.00
6.937	6.937 (0.482)	39	1626075			57.11- 157.11	101.35
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	1956954	50.0000	51.440	80.00- 120.00	100.00
8.043	8.043 (0.558)	96	1834965			43.77- 143.77	93.77
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	1036064	50.0000	57.866	80.00- 120.00	100.00
8.375	8.375 (0.581)	49	276958			0.00- 79.97	26.73
8.375	8.375 (0.581)	66	325306			0.00- 83.92	31.40
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.956	8.956 (0.622)	101	5127114	50.0000	52.077	80.00- 120.00	100.00
8.983	8.983 (0.624)	103	3298307			14.33- 114.33	64.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.453	9.453 (0.656)	45	692455	50.0000	54.981	80.00- 120.00	100.00
9.453	9.453 (0.656)	43	138038			0.00- 73.83	19.93
9.453	9.453 (0.656)	46	261445			0.00- 88.26	37.76
42 Freon 113					CAS #: 76-13-1		
10.227	10.227 (0.710)	151	2874533	50.0000	52.399	80.00- 120.00	100.00
10.227	10.227 (0.710)	153	1825117			13.49- 113.49	63.49
10.200	10.200 (0.708)	101	3540517			73.17- 173.17	123.17
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.338	10.338 (0.718)	61	3011437	50.0000	52.373	80.00- 120.00	100.00
10.338	10.338 (0.718)	96	1849526			11.42- 111.42	61.42
10.338	10.338 (0.718)	98	1195426			0.00- 89.70	39.70
45 Acetone					CAS #: 67-64-1		
10.504	10.504 (0.729)	58	914212	50.0000	52.741	80.00- 120.00	100.00
10.504	10.504 (0.729)	43	2796075			245.26- 345.26	305.85
46 2-Propanol					CAS #: 67-63-0		
10.697	10.697 (0.743)	45	3341125	50.0000	56.618	80.00- 120.00	100.00
10.697	10.697 (0.743)	43	786824			0.00- 76.38	23.55
10.670	10.670 (0.741)	59	124809			0.00- 53.64	3.74
47 Carbon Disulfide					CAS #: 75-15-0		
10.891	10.891 (0.756)	76	5750337	50.0000	52.873	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.168	11.168 (0.775)	76	950362	50.0000	56.560	80.00- 120.00	100.00
11.168	11.168 (0.775)	41	2534016			227.35- 327.35	266.64
54 Methylene Chloride					CAS #: 75-09-2		
11.472	11.472 (0.796)	49	2157693	50.0000	51.348	80.00- 120.00	100.00
11.472	11.472 (0.796)	84	1585590			23.49- 123.49	73.49
11.472	11.472 (0.796)	51	653724			0.00- 80.93	30.30
60 MTBE					CAS #: 1634-04-4		
11.831	11.831 (0.821)	73	3587655	50.0000	50.191	80.00- 120.00	100.00
11.831	11.831 (0.821)	57	828957			0.00- 73.11	23.11
11.831	11.831 (0.821)	41	846055			0.00- 77.06	23.58
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.942	11.942 (0.829)	96	2126458	50.0000	55.255	80.00- 120.00	100.00
11.942	11.942 (0.829)	61	3057162			93.77- 193.77	143.77
11.942	11.942 (0.829)	98	1345621			11.32- 111.32	63.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	3008806	50.0000	55.859	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	1950873			18.57- 118.57	64.84
12.301	12.301 (0.854)	86	447575			0.00- 65.04	14.88
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	455231	50.0000	57.233	80.00- 120.00	100.00
12.799	12.799 (0.889)	43	5401152			1159.12-1259.12	1186.46
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	3599964	50.0000	54.367	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	1139875			0.00- 81.66	31.66
75 2-Butanone					CAS #: 78-93-3		
13.905	13.905 (0.965)	72	818664	50.0000	62.193	80.00- 120.00	100.00
13.905	13.905 (0.965)	43	3790041			412.95- 512.95	462.95
13.905	13.905 (0.965)	57	288123			0.00- 87.14	35.19
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	2561771	50.0000	55.374	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	1913669			24.70- 124.70	74.70
13.932	13.932 (0.967)	98	1211977			0.00- 97.31	47.31
80 Tetrahydrofuran					CAS #: 109-99-9		
14.402	14.402 (1.000)	42	2102531	50.0000	59.452	80.00- 120.00	100.00
14.402	14.402 (1.000)	71	754061			0.00- 85.86	35.86
14.402	14.402 (1.000)	72	820596			0.00- 87.41	39.03
82 Chloroform					CAS #: 67-66-3		
14.485	14.485 (1.006)	83	3686125	50.0000	54.978	80.00- 120.00	100.00
14.485	14.485 (1.006)	85	2406880			15.30- 115.30	65.30
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.845	14.845 (1.031)	97	3640858	50.0000	53.131	80.00- 120.00	100.00
14.845	14.845 (1.031)	99	2345271			14.42- 114.42	64.42
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	2138441	50.0000	57.422	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	2718812			77.14- 177.14	127.14
14.845	14.845 (1.031)	41	1560161			22.96- 122.96	72.96
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	3463048	50.0000	53.939	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	3609254			54.22- 154.22	104.22
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	4811071	50.0000	56.318	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	1049814			0.00- 71.80	21.82
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.426	15.426 (1.071)	57	7449400	50.0000	57.351	80.00- 120.00	100.00
15.426	15.426 (1.071)	56	2538112			0.00- 84.72	34.07
15.426	15.426 (1.071)	41	2024280			0.00- 79.98	27.17
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.647	15.647 (0.968)	62	2450001	50.0000	52.215	80.00- 120.00	100.00
15.647	15.647 (0.968)	64	778826			0.00- 83.09	31.79
94 Heptane					CAS #: 142-82-5		
15.730	15.730 (0.973)	71	1529856	50.0000	60.023	80.00- 120.00	100.00
15.730	15.730 (0.973)	43	2998586			161.50- 261.50	196.00
15.730	15.730 (0.973)	57	1580456			60.75- 160.75	103.31
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	2098294	50.0000	54.497	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	2078430			49.05- 149.05	99.05
16.642	16.642 (1.029)	97	1362364			14.93- 114.93	64.93
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	1815045	50.0000	55.862	80.00- 120.00	100.00
17.140	17.140 (1.060)	62	1334457			23.52- 123.52	73.52
17.112	17.112 (1.058)	41	1125501			12.01- 112.01	62.01
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	1166444	50.0000	56.320	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	834019			21.50- 121.50	71.50
17.250	17.250 (1.067)	57	275329			0.00- 74.96	23.60
107 Bromodichloromethane					CAS #: 75-27-4		
17.555	17.555 (1.085)	83	3729470	50.0000	55.885	80.00- 120.00	100.00
17.555	17.555 (1.085)	85	2400491			14.37- 114.37	64.37
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	2709608	50.0000	60.260	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	866280			0.00- 81.97	31.97
18.329	18.329 (1.133)	39	1541138			6.88- 106.88	56.88
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	1532118	50.0000	64.446	80.00- 120.00	100.00
18.522	18.522 (1.145)	43	4010581			226.18- 326.18	261.77
18.522	18.522 (1.145)	85	598542			0.00- 90.90	39.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	5242049	50.0000	55.958	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	3304331			13.04- 113.04	63.04
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.324	19.324 (0.904)	75	2903918	50.0000	59.315	80.00- 120.00	100.00
19.324	19.324 (0.904)	77	919192			0.00- 81.65	31.65
19.296	19.296 (0.903)	39	1525103			2.52- 102.52	52.52
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.920)	97	2037297	50.0000	56.012	80.00- 120.00	100.00
19.656	19.656 (0.920)	99	1285217			13.08- 113.08	63.08
19.656	19.656 (0.920)	83	1738135			35.32- 135.32	85.32
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.928)	166	2630580	50.0000	53.132	80.00- 120.00	100.00
19.822	19.822 (0.928)	129	1904175			22.39- 122.39	72.39
19.822	19.822 (0.928)	131	1836103			19.80- 119.80	69.80
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.934)	58	2182082	50.0000	59.476	80.00- 120.00	100.00
19.960	19.960 (0.934)	43	4116153			138.63- 238.63	188.63
19.960	19.960 (0.934)	100	368946			0.00- 67.20	16.91
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.952)	129	3738274	50.0000	56.568	80.00- 120.00	100.00
20.347	20.347 (0.952)	127	2895663			27.81- 127.81	77.46
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.965)	107	3445162	50.0000	57.543	80.00- 120.00	100.00
20.624	20.624 (0.965)	109	3261446			44.67- 144.67	94.67
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.001)	112	4380087	50.0000	53.577	80.00- 120.00	100.00
21.398	21.398 (1.001)	114	1420303			0.00- 82.43	32.43
21.398	21.398 (1.001)	77	2660829			10.75- 110.75	60.75
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.005)	106	2271121	50.0000	55.213	80.00- 120.00	100.00
21.481	21.481 (1.005)	91	7073632			261.79- 361.79	311.46
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.014)	106	2878647	50.0000	56.107	80.00- 120.00	100.00
21.674	21.674 (1.014)	91	5612675			144.94- 244.94	194.98
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.048)	106	2496065	50.0000	55.739	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.393	22.393 (1.048)	91	5108173			154.65- 254.65	204.65
131 Styrene					CAS #: 100-42-5		
22.421	22.421 (1.049)	104	4186975	50.0000	62.955	80.00- 120.00	100.00
22.421	22.421 (1.049)	78	2164094			1.69- 101.69	51.69
133 Bromoform					CAS #: 75-25-2		
22.836	22.836 (1.069)	173	3309894	50.0000	55.947	80.00- 120.00	100.00
22.836	22.836 (1.069)	171	1695247			1.22- 101.22	51.22
134 Cumene					CAS #: 98-82-8		
22.974	22.974 (1.075)	105	6354552	50.0000	56.234	80.00- 120.00	100.00
22.974	22.974 (1.075)	120	1765060			0.00- 78.15	27.78
22.946	22.946 (1.074)	51	673484			0.00- 61.53	10.60
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.527	23.527 (1.101)	83	4017577	50.0000	53.077	80.00- 120.00	100.00
23.527	23.527 (1.101)	85	2585413			14.35- 114.35	64.35
142 Propylbenzene					CAS #: 103-65-1		
23.637	23.637 (1.106)	91	8303428	50.0000	53.645	80.00- 120.00	100.00
23.637	23.637 (1.106)	120	1899976			0.00- 72.99	22.88
23.637	23.637 (1.106)	105	309581			0.00- 54.10	3.73
145 4-Ethyltoluene					CAS #: 622-96-8		
23.831	23.831 (1.115)	105	7539048	50.0000	56.452	80.00- 120.00	100.00
23.831	23.831 (1.115)	120	2142451			0.00- 78.42	28.42
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.914	23.914 (1.119)	105	5408871	50.0000	49.087	80.00- 120.00	100.00
23.914	23.914 (1.119)	120	3102305			2.99- 102.99	57.36
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.550	24.550 (1.149)	105	5207980	50.0000	54.062	80.00- 120.00	100.00
24.550	24.550 (1.149)	120	2539167			0.00- 98.94	48.76
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.130	25.130 (1.176)	146	3918753	50.0000	51.464	80.00- 120.00	100.00
25.130	25.130 (1.176)	148	2506551			14.63- 114.63	63.96
25.130	25.130 (1.176)	111	1546766			0.00- 89.77	39.47
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.269 (1.182)	146	4048283	50.0000	50.718	80.00- 120.00	100.00
25.269	25.269 (1.182)	148	2596227			13.82- 113.82	64.13
25.269	25.269 (1.182)	111	1524194			0.00- 87.22	37.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.193)	91	5747139	50.0000	58.762	80.00- 120.00	100.00
25.490	25.490 (1.193)	126	1192032			0.00- 71.42	20.74
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.213)	146	3515051	50.0000	49.313	80.00- 120.00	100.00
25.932	25.932 (1.213)	148	2260098			14.30- 114.30	64.30
25.905	25.905 (1.212)	111	1423581			0.00- 90.50	40.50
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.348)	180	1253115	50.0000	45.723	80.00- 120.00	100.00
28.808	28.808 (1.348)	182	1198592			45.65- 145.65	95.65
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.357)	225	1025202	50.0000	40.018	80.00- 120.00	100.00
29.001	29.001 (1.357)	223	641430			12.70- 112.70	62.57
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.375)	128	2269503	50.0000	46.617	80.00- 120.00	100.00
29.388	29.388 (1.375)	127	270609			0.00- 62.64	11.92
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	2382695	50.0000	50.768	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	1600924			16.24- 116.24	67.19
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	369130	50.0000	49.345	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	2976625			761.40- 861.40	806.39
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.919	16.919 (1.175)	83	2615829	50.0000	56.882	80.00- 120.00	100.00
16.919	16.919 (1.175)	98	1205235			0.00- 96.29	46.07
16.919	16.919 (1.175)	55	2319276			38.64- 138.64	88.66

Data File: /chem/msd7.i/7-18oct.b/7101806.d
Report Date: 18-Oct-2007 15:55

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101806.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14qO18a.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	683549	0.00
97 1,4-Difluorobenze	2204815	1322889	3086741	2204815	0.00
126 Chlorobenzene-d5	1812979	1087787	2538171	1812979	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.37	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

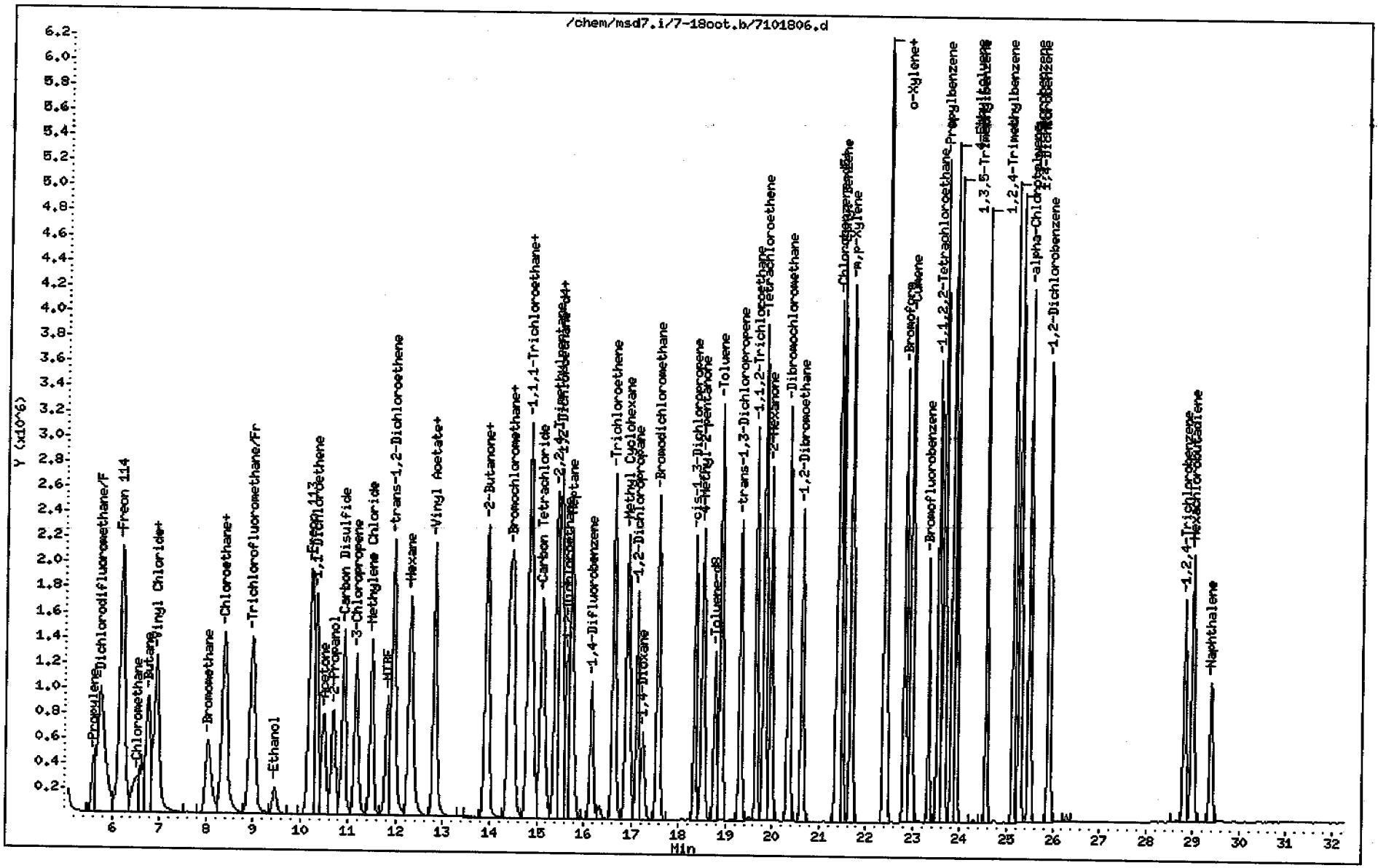
Data File: /chem/msd7.i/7-18oct.b/7101806.d
Date : 18-OCT-2007 15:26
Client ID: Level 5
Sample Info: 50mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

0240



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101807.d
Lab Smp Id: ICAL
Client Smp ID: Level 6
Inj Date : 18-OCT-2007 16:15
Operator : cb
Inst ID: msd7.i
Smp Info : 100mL #1576-50
Misc Info : 200ppbv --> 100ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza
Quant Type: ISTD
Cal Date : 18-OCT-2007 16:15
Cal File: 7101807.d
Als bottle: 1
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04md1+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.402	14.402 (1.000)	130	692933	25.0000		80.00- 120.00		100.00
14.402	14.402 (1.000)	128	535123			26.95- 126.95		77.23
14.402	14.402 (1.000)	49	1712983			141.62- 241.62		247.21
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2281331	25.0000		80.00- 120.00		100.00
16.144	16.172 (1.000)	88	351386			0.00- 65.69		15.40
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.342	21.370 (1.000)	117	1862597	25.0000		80.00- 120.00		100.00
21.342	21.370 (1.000)	82	1017930			5.32- 105.32		54.65
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.481	15.508 (1.075)	65	913793	25.0000	24.626	80.00- 120.00		100.00
15.481	15.508 (1.075)	67	550511			2.91- 102.91		60.24
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.771	18.771 (1.161)	98	2088251	25.0000	25.914	80.00- 120.00		100.00
18.771	18.771 (1.161)	70	237587			0.00- 61.46		11.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1454452			19.18- 119.18	69.65
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1081956	25.0000	24.333	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1400916			76.80- 176.80	129.48
23.333	23.333 (1.093)	176	1039964			46.06- 146.06	96.12
11 Propylene					CAS #: 115-07-1		
5.610	5.610 (0.390)	41	2986150	100.000	100.80	80.00- 120.00	100.00
5.610	5.610 (0.390)	42	2053059			21.19- 121.19	68.75
5.610	5.610 (0.390)	39	2206631			24.83- 124.83	73.90
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.748	5.748 (0.399)	85	10930653	100.000	99.747	80.00- 120.00	100.00
5.748	5.748 (0.399)	87	3552505			0.00- 83.07	32.50
16 Freon 114					CAS #: 76-14-2		
6.218	6.218 (0.432)	135	7047529	100.000	92.659	80.00- 120.00	100.00
6.218	6.218 (0.432)	137	2245736			0.00- 81.81	31.87
18 Chloromethane					CAS #: 74-87-3		
6.522	6.522 (0.453)	50	3525852	100.000	98.906	80.00- 120.00	100.00
6.522	6.522 (0.453)	52	1179186			0.00- 84.80	33.44
20 Vinyl Chloride					CAS #: 75-01-4		
6.854	6.882 (0.476)	62	4410236	100.000	98.388	80.00- 120.00	100.00
6.854	6.882 (0.476)	64	1387722			0.00- 83.25	31.47
22 1,3-Butadiene					CAS #: 106-99-0		
6.937	6.937 (0.482)	54	3349709	100.000	106.66	80.00- 120.00	100.00
6.937	6.937 (0.482)	39	3396133			55.97- 155.97	101.39
25 Bromomethane					CAS #: 74-83-9		
8.015	8.043 (0.557)	94	4079688	100.000	104.58	80.00- 120.00	100.00
8.015	8.043 (0.557)	96	3868112			43.77- 143.77	94.81
27 Chloroethane					CAS #: 75-00-3		
8.347	8.375 (0.580)	64	2257754	100.000	118.60	80.00- 120.00	100.00
8.347	8.375 (0.580)	49	605583			0.00- 79.34	26.82
8.347	8.375 (0.580)	66	706033			0.00- 83.15	31.27
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.955	8.956 (0.622)	101	10508664	100.000	104.19	80.00- 120.00	100.00
8.955	8.956 (0.622)	103	6789159			14.33- 114.33	64.61

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.453	9.453	(0.656)	45	1538559	100.000	114.63	80.00- 120.00	100.00
9.453	9.453	(0.656)	43	304971			0.00- 72.83	19.82
9.453	9.453	(0.656)	46	585137			0.00- 88.20	38.03
42 Freon 113						CAS #: 76-13-1		
10.200	10.227	(0.708)	151	5881542	100.000	104.56	80.00- 120.00	100.00
10.200	10.227	(0.708)	153	3752567			13.49- 113.49	63.80
10.200	10.227	(0.708)	101	7271712			73.17- 173.17	123.64
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.310	10.338	(0.716)	61	6323571	100.000	106.68	80.00- 120.00	100.00
10.310	10.338	(0.716)	96	3889755			11.42- 111.42	61.51
10.310	10.338	(0.716)	98	2479983			0.00- 89.70	39.22
45 Acetone						CAS #: 67-64-1		
10.476	10.504	(0.727)	58	1956828	100.000	108.28	80.00- 120.00	100.00
10.476	10.504	(0.727)	43	5921961			247.10- 347.10	302.63
46 2-Propanol						CAS #: 67-63-0		
10.670	10.697	(0.741)	45	7297517	100.000	115.63	80.00- 120.00	100.00
10.670	10.697	(0.741)	43	1679125			0.00- 75.54	23.01
10.670	10.697	(0.741)	59	288762			0.00- 53.72	3.96
47 Carbon Disulfide						CAS #: 75-15-0		
10.891	10.891	(0.756)	76	12222860	100.000	108.51	80.00- 120.00	100.00
51 3-Chloropropene						CAS #: 107-05-1		
11.140	11.168	(0.773)	76	1968053	100.000	111.22	80.00- 120.00	100.00
11.140	11.168	(0.773)	41	5269936			224.96- 324.96	267.77
54 Methylene Chloride						CAS #: 75-09-2		
11.472	11.472	(0.796)	49	4616250	100.000	106.58	80.00- 120.00	100.00
11.472	11.472	(0.796)	84	3385429			23.49- 123.49	73.34
11.472	11.472	(0.796)	51	1409490			0.00- 80.85	30.53
60 MTBE						CAS #: 1634-04-4		
11.803	11.831	(0.820)	73	5895128	100.000	84.507	80.00- 120.00	100.00
11.803	11.831	(0.820)	57	1393845			0.00- 73.11	23.64
11.803	11.831	(0.820)	41	1331231			0.00- 76.16	22.58
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.914	11.942	(0.827)	96	4428835	100.000	110.53	80.00- 120.00	100.00
11.914	11.942	(0.827)	61	6358416			93.77- 193.77	143.57
11.914	11.942	(0.827)	98	2816096			11.77- 111.77	63.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	6432321	100.000	113.75	80.00- 120.00	100.00
12.301	12.301 (0.854)	43	4176945			17.84- 117.84	64.94
12.301	12.301 (0.854)	86	975109			0.00- 65.07	15.16
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	978320	100.000	115.19	80.00- 120.00	100.00
12.771	12.799 (0.887)	43	11490251			1150.46-1250.46	1174.49
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.799	12.826 (0.889)	63	7494739	100.000	109.11	80.00- 120.00	100.00
12.826	12.826 (0.891)	65	2364614			0.00- 81.66	31.55
75 2-Butanone					CAS #: 78-93-3		
13.877	13.905 (0.964)	72	1797732	100.000	125.97	80.00- 120.00	100.00
13.877	13.905 (0.964)	43	8012978			412.95- 512.95	445.73
13.877	13.905 (0.964)	57	616575			0.00- 86.57	34.30
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.905	13.932 (0.965)	61	5289406	100.000	109.97	80.00- 120.00	100.00
13.932	13.932 (0.967)	96	3957657			24.70- 124.70	74.82
13.932	13.932 (0.967)	98	2537854			0.00- 97.31	47.98
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.402 (0.998)	42	4434496	100.000	118.10	80.00- 120.00	100.00
14.375	14.402 (0.998)	71	1625228			0.00- 85.86	36.65
14.375	14.402 (0.998)	72	1749407			0.00- 87.82	39.45
82 Chloroform					CAS #: 67-66-3		
14.458	14.485 (1.004)	83	7416210	100.000	107.48	80.00- 120.00	100.00
14.458	14.485 (1.004)	85	4828164			15.30- 115.30	65.10
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.845 (1.029)	97	7240093	100.000	103.35	80.00- 120.00	100.00
14.817	14.845 (1.029)	99	4660096			14.42- 114.42	64.37
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	4466769	100.000	114.14	80.00- 120.00	100.00
14.845	14.845 (1.031)	56	5668418			77.14- 177.14	126.90
14.845	14.845 (1.031)	41	3159222			22.96- 122.96	70.73
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	6781673	100.000	103.33	80.00- 120.00	100.00
15.094	15.094 (1.048)	117	7039047			54.22- 154.22	103.80
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	9788721	100.000	108.80	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	2175873			0.00- 71.87	22.23
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.426 (1.069)	57	15535652	100.000	113.89	80.00- 120.00	100.00
15.398	15.426 (1.069)	56	5317737			0.00- 84.62	34.23
15.398	15.426 (1.069)	41	4107948			0.00- 79.27	26.44
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	4870654	100.000	100.26	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	1562832			0.00- 82.89	32.09
94 Heptane					CAS #: 142-82-5		
15.702	15.730 (0.971)	71	3163902	100.000	115.36	80.00- 120.00	100.00
15.702	15.730 (0.971)	43	6221004			158.53- 258.53	196.62
15.702	15.730 (0.971)	57	3280251			59.34- 159.34	103.68
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	4228075	100.000	104.84	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	4128816			49.05- 149.05	97.65
16.642	16.642 (1.029)	97	2716108			14.93- 114.93	64.24
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	3756119	100.000	109.16	80.00- 120.00	100.00
17.112	17.112 (1.058)	62	2777792			23.52- 123.52	73.95
17.112	17.112 (1.058)	41	2270112			12.01- 112.01	60.44
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	2460610	100.000	110.72	80.00- 120.00	100.00
17.250	17.250 (1.067)	58	1758611			21.50- 121.50	71.47
17.250	17.250 (1.067)	57	579042			0.00- 74.60	23.53
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	7431432	100.000	106.01	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	4773361			14.37- 114.37	64.23
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	5602642	100.000	115.69	80.00- 120.00	100.00
18.329	18.329 (1.133)	77	1775227			0.00- 81.97	31.69
18.329	18.329 (1.133)	39	3130655			6.88- 106.88	55.88
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	3231617	100.000	123.62	80.00- 120.00	100.00
18.494	18.522 (1.144)	43	8407133			222.97- 322.97	260.15
18.522	18.522 (1.145)	85	1253983			0.00- 90.48	38.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	10622557	100.000	107.53	80.00- 120.00	100.00
18.882	18.882 (1.168)	92	6779189			13.04- 113.04	63.82
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.296	19.324 (0.904)	75	5889075	100.000	113.22	80.00- 120.00	100.00
19.296	19.324 (0.904)	77	1891543			0.00- 81.65	32.12
19.296	19.324 (0.904)	39	3137203			2.52- 102.52	53.27
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	4149436	100.000	108.64	80.00- 120.00	100.00
19.656	19.656 (0.921)	99	2605800			13.08- 113.08	62.80
19.656	19.656 (0.921)	83	3504268			35.32- 135.32	84.45
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	5048096	100.000	99.395	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	3627743			22.39- 122.39	71.86
19.822	19.822 (0.929)	131	3514583			19.80- 119.80	69.62
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	4648378	100.000	116.53	80.00- 120.00	100.00
19.960	19.960 (0.935)	43	8666932			138.63- 238.63	186.45
19.960	19.960 (0.935)	100	771717			0.00- 67.05	16.60
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	7193156	100.000	104.70	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	5526699			27.62- 127.62	76.83
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.623	20.624 (0.966)	107	6833270	100.000	108.68	80.00- 120.00	100.00
20.623	20.624 (0.966)	109	6483894			44.67- 144.67	94.89
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	8692529	100.000	102.78	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	2809468			0.00- 82.43	32.32
21.398	21.398 (1.003)	77	5295683			10.75- 110.75	60.92
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	4526085	100.000	105.60	80.00- 120.00	100.00
21.481	21.481 (1.006)	91	14088042			261.69- 361.69	311.26
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	5707165	100.000	106.51	80.00- 120.00	100.00
21.674	21.674 (1.016)	91	11155051			145.05- 245.05	195.46
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	4939741	100.000	105.81	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	10133037			154.65- 254.65	205.13
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	8386880	100.000	118.26	80.00- 120.00	100.00
22.421	22.421	(1.051)	78	4228696			1.69- 101.69	50.42
133 Bromoform						CAS #: 75-25-2		
22.835	22.836	(1.070)	173	6219626	100.000	101.85	80.00- 120.00	100.00
22.835	22.836	(1.070)	171	3232278			1.22- 101.22	51.97
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	12536875	100.000	106.57	80.00- 120.00	100.00
22.974	22.974	(1.076)	120	3479782			0.00- 78.08	27.76
22.946	22.974	(1.075)	51	1373233			0.00- 61.43	10.95
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	8062379	100.000	102.92	80.00- 120.00	100.00
23.527	23.527	(1.102)	85	5184917			14.35- 114.35	64.31
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	16597227	100.000	103.47	80.00- 120.00	100.00
23.637	23.637	(1.108)	120	3775008			0.00- 72.94	22.74
23.637	23.637	(1.108)	105	628127			0.00- 54.03	3.78
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	14829235	100.000	106.36	80.00- 120.00	100.00
23.831	23.831	(1.117)	120	4239290			0.00- 78.42	28.59
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	10575210	100.000	94.663	80.00- 120.00	100.00
23.914	23.914	(1.120)	120	6029821			3.80- 103.80	57.02
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	10414533	100.000	104.14	80.00- 120.00	100.00
24.550	24.550	(1.150)	120	5104145			0.00- 98.95	49.01
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.130	25.130	(1.177)	146	7750426	100.000	99.257	80.00- 120.00	100.00
25.130	25.130	(1.177)	148	4950703			14.48- 114.48	63.88
25.130	25.130	(1.177)	111	3048873			0.00- 89.68	39.34
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	8013173	100.000	98.166	80.00- 120.00	100.00
25.269	25.269	(1.184)	148	5111044			13.81- 113.81	63.78
25.269	25.269	(1.184)	111	3035431			0.00- 87.35	37.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	12186141	100.000	116.33	80.00- 120.00	100.00
25.490	25.490 (1.194)	126	2530175			0.00- 71.29	20.76
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	7169014	100.000	98.310	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	4537423			14.30- 114.30	63.29
25.905	25.932 (1.214)	111	2874063			0.00- 90.50	40.09
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	3030873	100.000	105.62	80.00- 120.00	100.00
28.808	28.808 (1.350)	182	2886523			45.65- 145.65	95.24
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	2182918	100.000	86.635	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	1362900			12.64- 112.64	62.43
167 Naphthalene					CAS #: 91-20-3		
29.361	29.388 (1.376)	128	5980908	100.000	114.00	80.00- 120.00	100.00(A)
29.361	29.388 (1.376)	127	723074			0.00- 62.50	12.09
29 Isopentane					CAS #: 78-78-4		
8.375	8.375 (0.581)	43	5045198	100.000	104.46	80.00- 120.00	100.00
8.375	8.375 (0.581)	57	3389808			16.48- 116.48	67.19
19 Butane					CAS #: 106-97-8		
6.771	6.771 (0.470)	58	777002	100.000	101.84	80.00- 120.00	100.00
6.771	6.771 (0.470)	43	6189652			757.70- 857.70	796.61
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.918	16.919 (1.175)	83	5443508	100.000	112.98	80.00- 120.00	100.00
16.918	16.919 (1.175)	98	2475787			0.00- 96.13	45.48
16.891	16.919 (1.173)	55	4789110			38.51- 138.51	87.98

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101807.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 100ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	692933	1.37
97 1,4-Difluorobenze	2204815	1322889	3086741	2281331	3.47
126 Chlorobenzene-d5	1812979	1087787	2538171	1862597	2.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

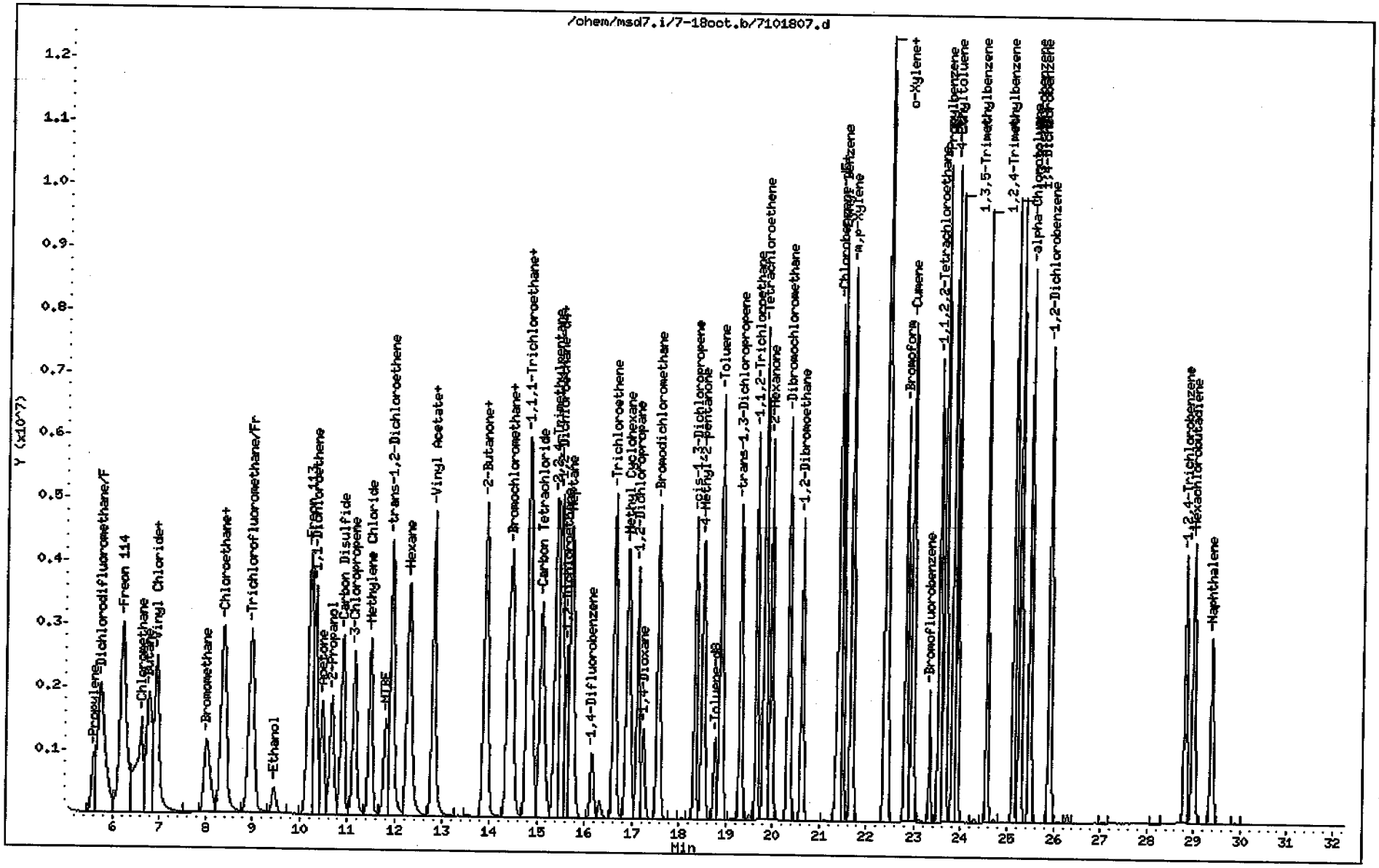
Data File: /chem/msd7.i/7-18oct.b/7101807.d
Date : 18-OCT-2007 16:15
Client ID: Level 6
Sample Info: 100mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: ob
Column diameter: 0.53

0250



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103005.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 30-OCT-2007 11:10
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-400
Misc Info : 200ppbv / 1200ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018b.m
Meth Date : 30-Oct-2007 11:34 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp1c.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	522806	25.0000			50.00- 150.00	100.00
14.416	14.416 (1.000)	128	396127				26.81- 126.81	75.77
14.416	14.416 (1.000)	49	725431				112.06- 212.06	138.76
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1724754	25.0000			50.00- 150.00	100.00
16.158	16.158 (1.000)	88	263120				0.00- 65.39	15.26
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1260309	25.0000			50.00- 150.00	100.00
21.356	21.356 (1.000)	82	666153				4.45- 104.45	52.86
26 Methanol						CAS #: 67-56-1		
7.616	7.616 (0.528)	31	9372295	1200.00	1049.8		50.00- 150.00	100.00
7.616	7.616 (0.528)	32	6569144				96.19- 196.19	70.09

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103005.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018b.m
Misc Info: 200ppbv / 1200ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	522806	7.53
97 1,4-Difluorobenze	1616415	969849	2262981	1724754	6.70
126 Chlorobenzene-d5	1130394	678236	1582552	1260309	11.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.42	0.00
97 1,4-Difluorobenze	16.19	15.86	16.52	16.19	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

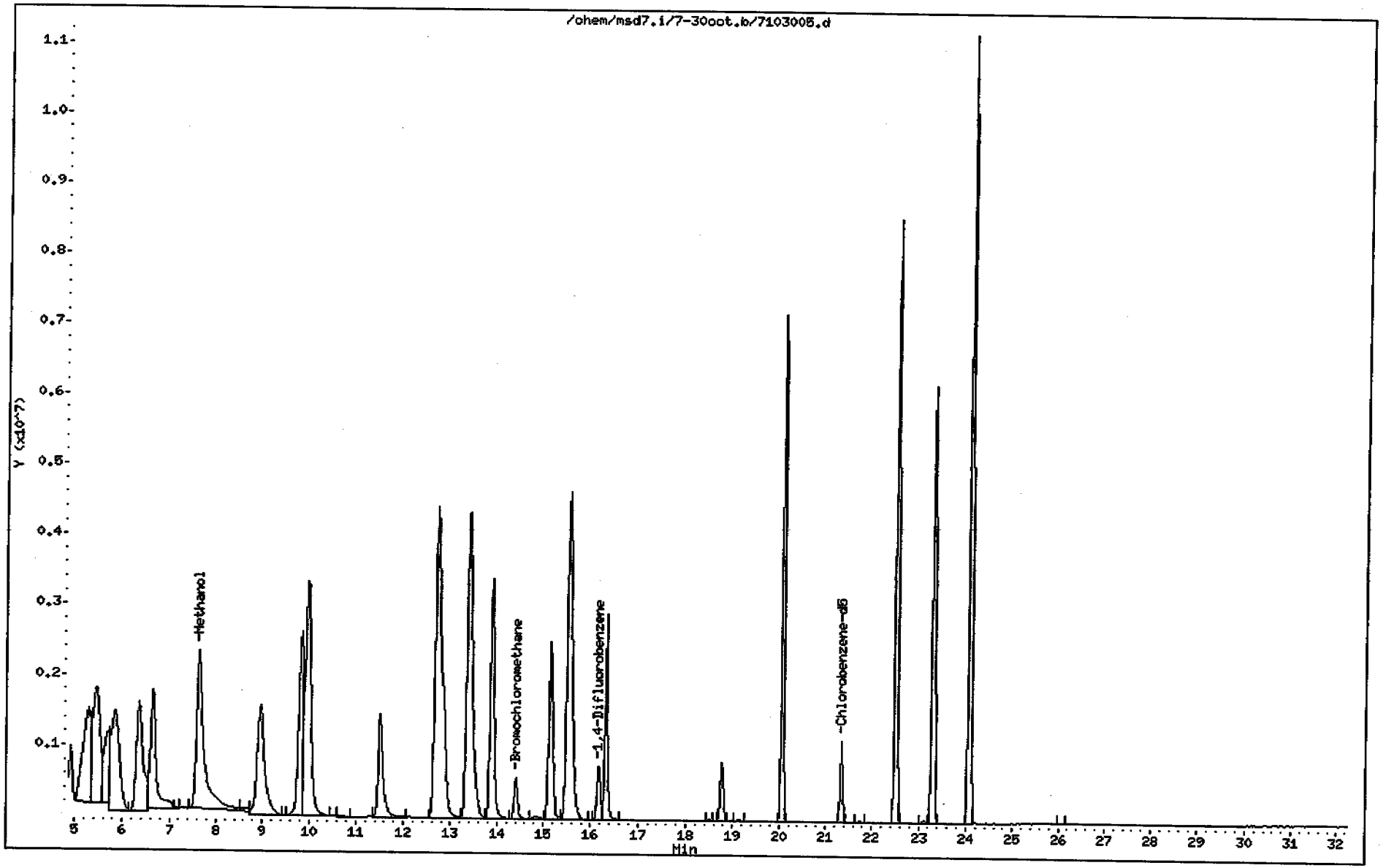
Data File: /chem/msd7.i/7-30oct.b/7103005.d
Date : 30-OCT-2007 11:10
Client ID: Level 7
Sample Info: 200mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0253



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-22oct.b/7102207.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 22-OCT-2007 12:34
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-370
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-22oct.b/t14q018b.m
Meth Date : 22-Oct-2007 13:49 sscott
Quant Type: ISTD
Cal Date : 22-OCT-2007 12:34
Cal File: 7102207.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp16b.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403 (1.000)	130	673561	25.0000			50.00- 150.00	100.00
14.403	14.403 (1.000)	128	516226				26.49- 126.49	76.64
14.403	14.403 (1.000)	49	984353				116.97- 216.97	146.14
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2139015	25.0000			50.00- 150.00	100.00
16.144	16.144 (1.000)	88	336134				0.00- 65.57	15.71
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1735730	25.0000			50.00- 150.00	100.00
21.343	21.343 (1.000)	82	959991				5.19- 105.19	55.31
55 Cyclopentene						CAS #: 142-29-0		
11.250	11.250 (0.781)	67	24655264	200.000	196.46		50.00- 150.00	100.00
11.250	11.250 (0.781)	68	10041444				0.00- 90.48	40.73
11.250	11.250 (0.781)	53	5185944				0.00- 70.85	21.03
78 2,2-Dichloropropane						CAS #: 594-20-7		
13.877	13.877 (0.964)	77	15691308	200.000	199.68		50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
78 2,2-Dichloropropane (continued)							
13.877	13.877 (0.964)	79	5093949			0.00- 84.30	32.46
13.877	13.877 (0.964)	97	3105546			0.00- 70.03	19.79
88 1,1-Dichloropropene					CAS #: 563-58-6		
15.121	15.121 (0.935)	110	5598961	200.000	194.16	50.00- 150.00	100.00
15.121	15.121 (0.935)	75	15225105			218.22- 318.22	271.93
118 1,3-Dichloropropane					CAS #: 142-28-9		
19.988	19.988 (1.236)	76	16526790	200.000	192.47	50.00- 150.00	100.00
19.988	19.988 (1.236)	41	12361559			21.54- 121.54	74.80
19.988	19.988 (1.236)	78	5401543			0.00- 81.77	32.68
125 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
21.536	21.536 (1.009)	131	11284242	200.000	182.31	50.00- 150.00	100.00
21.536	21.536 (1.009)	117	7823289			18.93- 118.93	69.33
21.508	21.508 (1.008)	95	4494362			0.00- 89.37	39.83
136 Bromobenzene					CAS #: 108-86-1		
23.610	23.610 (1.106)	156	12398942	200.000	170.72	50.00- 150.00	100.00
23.610	23.610 (1.106)	158	11947029			46.65- 146.65	96.36
23.610	23.610 (1.106)	77	25141267			147.77- 247.77	202.77
138 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.665	23.665 (1.109)	110	6154610	200.000	181.10	50.00- 150.00	100.00
23.665	23.665 (1.109)	75	18226348			252.90- 352.90	296.14
23.665	23.665 (1.109)	61	5029833			26.84- 126.84	81.72
141 2-Chlorotoluene					CAS #: 95-49-8		
23.886	23.886 (1.119)	126	9861927	200.000	183.86	50.00- 150.00	100.00
23.886	23.886 (1.119)	91	27734828			243.86- 343.86	281.23
23.886	23.886 (1.119)	65	2849980			0.00- 78.37	28.90
143 4-Chlorotoluene					CAS #: 106-43-4		
24.080	24.080 (1.128)	126	10574734	200.000	184.78	50.00- 150.00	100.00
24.080	24.080 (1.128)	91	31217904			249.00- 349.00	295.21
24.052	24.052 (1.127)	63	4277338			0.00- 88.24	40.45
153 p-Cymene					CAS #: 99-87-6		
25.020	25.020 (1.172)	119	28643628	200.000	168.92	50.00- 150.00	100.00
25.020	25.020 (1.172)	134	8292866			0.00- 77.89	28.95
25.020	25.020 (1.172)	91	7805069			0.00- 74.89	27.25
154 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.269	25.269 (1.184)	120	12274481	200.000	182.45	50.00- 150.00	100.00
25.269	25.269 (1.184)	105	26523849			168.18- 268.18	216.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
154 1,2,3-Trimethylbenzene (continued)							
25.269	25.269 (1.184)	77	3529142			0.00- 78.76	28.75
158 Butylbenzene					CAS #: 104-51-8		
25.711	25.711 (1.205)	134	8414072	200.000	184.54	50.00- 150.00	100.00
25.683	25.683 (1.203)	91	32519787			362.01- 462.01	386.49
25.683	25.683 (1.203)	92	19592755			181.94- 281.94	232.86
148 tert-Butylbenzene					CAS #: 98-06-6		
24.467	24.467 (1.146)	119	25590950	200.000	167.41	50.00- 150.00	100.00
24.467	24.467 (1.146)	134	6336082			0.00- 74.64	24.76
24.467	24.467 (1.146)	91	18525334			20.96- 120.96	72.39
149 sec-Butylbenzene					CAS #: 135-98-8		
24.826	24.826 (1.163)	105	33869689	200.000	160.07	50.00- 150.00	100.00
24.826	24.826 (1.163)	134	7347588			0.00- 69.71	21.69
24.826	24.826 (1.163)	91	6246168			0.00- 65.99	18.44
162 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
27.287	27.287 (1.279)	157	11002854	200.000	201.08	50.00- 150.00	100.00(A)
27.287	27.287 (1.279)	75	9943412			39.96- 139.96	90.37
27.287	27.287 (1.279)	155	8612482			28.87- 128.87	78.27
201 Pentachloroethane					CAS #: 76-01-7		
24.605	24.605 (1.153)	167	7797399	200.000	170.61	50.00- 150.00	100.00
24.605	24.605 (1.153)	117	8410733			54.36- 154.36	107.87
24.605	24.605 (1.153)	169	3738433			0.00- 97.70	47.94

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7102207.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-22oct.b/t14q018b.m
Misc Info: 200ppbv

Calibration Date: 22-OCT-2007
Calibration Time: 11:44
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	653745	392247	915243	673561	3.03
97 1,4-Difluorobenze	2055535	1233321	2877749	2139015	4.06
126 Chlorobenzene-d5	1681036	1008622	2353450	1735730	3.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.34	21.01	21.67	21.34	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

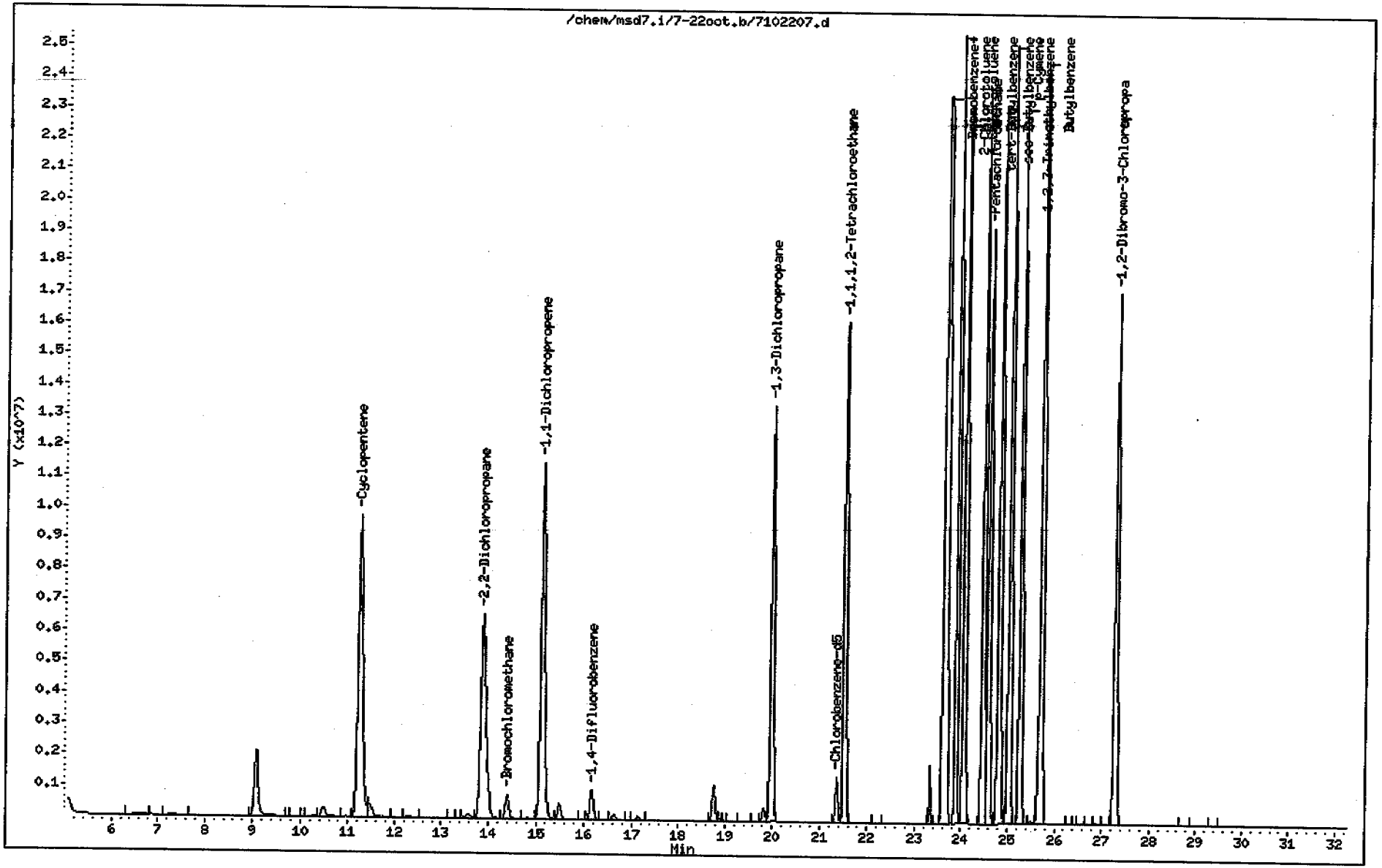
Data File: /chem/msd7.i/7-22oct.b/7102207.d
Date : 22-OCT-2007 12:34
Client ID: Level 7
Sample Info: 200mL #1487-370

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0258



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-19oct.b/7101905.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 19-OCT-2007 11:41
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1487-400
Misc Info : 200ppbv
Comment :
Method : /chem/msd7.i/7-19oct.b/t14q018a.m
Meth Date : 19-Oct-2007 12:11 cbond
Quant Type: ISTD
Cal Date : 19-OCT-2007 11:41
Cal File: 7101905.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22a.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)		TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======		==========	=====
* 81 Bromochloromethane						CAS #: 74-97-5		
14.403	14.403 (1.000)	130	719204	25.0000			50.00- 150.00	100.00
14.403	14.403 (1.000)	128	554464				26.59- 126.59	77.09
14.403	14.403 (1.000)	49	1056116				116.89- 216.89	146.85
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.172	16.172 (1.000)	114	2349296	25.0000			50.00- 150.00	100.00
16.172	16.172 (1.000)	88	359832				0.00- 65.64	15.32
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.343	21.343 (1.000)	117	1844247	25.0000			50.00- 150.00	100.00
21.343	21.343 (1.000)	82	1019868				5.24- 105.24	55.30
5 Freon 143a						CAS #: 420-46-2		
5.334	5.334 (0.370)	65	3045734	200.000	194.22		50.00- 150.00	100.00
5.278	5.278 (0.366)	69	25389070				0.00- 50.00	833.59
5.334	5.334 (0.370)	64	879543				0.00- 77.08	28.88
6 Freon142b						CAS #: 75-68-3		
6.357	6.357 (0.441)	65	12224721	200.000	191.11		50.00- 150.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Freon142b (continued)							
6.357	6.357 (0.441)	45	2982983			0.00- 74.42	24.40
13 Freon 134a					CAS #: 811-97-2		
5.472	5.472 (0.380)	83	5950549	200.000	194.14	50.00- 150.00	100.00
5.278	5.278 (0.366)	69	25368047			398.13- 498.13	426.31
5.472	5.472 (0.380)	63	881809			0.00- 64.08	14.82
15 Freon 152a					CAS #: 75-37-6		
5.693	5.693 (0.395)	65	4242747	200.000	191.73	50.00- 150.00	100.00
5.693	5.693 (0.395)	51	6723031			109.56- 209.56	158.46
5.693	5.693 (0.395)	47	1728528			0.00- 90.52	40.74
17 Freon 22					CAS #: 75-45-6		
5.831	5.831 (0.405)	51	13489320	200.000	188.69	50.00- 150.00	100.00
5.831	5.831 (0.405)	67	1587590			0.00- 61.77	11.77
5.831	5.831 (0.405)	85	174736			0.00- 51.67	1.30
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.956	8.956 (0.622)	67	12537837	200.000	197.68	50.00- 150.00	100.00
8.956	8.956 (0.622)	69	3925693			0.00- 81.12	31.31
8.956	8.956 (0.622)	35	312263			0.00- 53.83	2.49
40 Freon123a					CAS #: 354-23-4		
9.813	9.813 (0.681)	117	7250064	200.000	202.31	50.00- 150.00	100.00
9.813	9.813 (0.681)	67	10592599			110.97- 210.97	146.10
41 Freon123					CAS #: 306-83-2		
9.979	9.979 (0.693)	83	12396163	200.000	195.02	50.00- 150.00	100.00
9.979	9.979 (0.693)	133	2428184			0.00- 69.52	19.59
9.979	9.979 (0.693)	85	8627843			22.16- 122.16	69.60
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.499	11.499 (0.798)	59	10315180	200.000	154.66	50.00- 150.00	100.00
11.499	11.499 (0.798)	41	2017442			0.00- 73.42	19.56
11.499	11.499 (0.798)	57	995118			0.00- 60.26	9.65
68 Isopropyl ether					CAS #: 108-20-3		
12.716	12.716 (0.883)	45	25503179	200.000	198.71	50.00- 150.00	100.00
12.716	12.716 (0.883)	87	5827965			0.00- 73.31	22.85
12.716	12.716 (0.883)	59	2197946			0.00- 58.30	8.62
71 1-Propanol					CAS #: 71-23-8		
12.827	12.827 (0.891)	42	1744378	200.000	216.72	50.00- 150.00	100.00(A)
12.827	12.827 (0.891)	59	2451515			95.91- 195.91	140.54
12.716	12.716 (0.883)	41	4841849			265.93- 365.93	277.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.380	13.380 (0.929)	59	22428943	200.000	205.02	50.00- 150.00	100.00(A)
13.380	13.380 (0.929)	87	8578877			0.00- 88.95	38.25
13.380	13.380 (0.929)	41	3840776			0.00- 67.89	17.12
77 Ethyl Acetate					CAS #: 141-78-6		
13.877	13.877 (0.964)	45	2506944	200.000	205.24	50.00- 150.00	100.00(A)
13.877	13.877 (0.964)	61	2395467			49.04- 149.04	95.55
13.877	13.877 (0.964)	43	17175833			622.55- 722.55	685.13
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.536	15.536 (1.079)	73	16550042	200.000	206.99	50.00- 150.00	100.00(A)
15.536	15.536 (1.079)	87	3917490			0.00- 73.71	23.67
15.536	15.536 (1.079)	55	4261857			0.00- 78.56	25.75
96 2-Heptanone					CAS #: 110-43-0		
22.504	22.504 (1.562)	58	11184866	200.000	233.27	50.00- 150.00	100.00(A)
22.504	22.504 (1.562)	43	17315235			108.53- 208.53	154.81
98 1-Butanol					CAS #: 71-36-3		
16.310	16.310 (1.009)	56	5482757	200.000	238.74	50.00- 150.00	100.00(A)
16.310	16.310 (1.009)	41	3917821			21.86- 121.86	71.46
16.310	16.310 (1.009)	43	3065816			9.15- 109.15	55.92
99 Isobutanol					CAS #: 78-83-1		
15.149	15.149 (1.052)	59	187856	200.000	238.56	50.00- 150.00	100.00(A)
15.149	15.149 (1.052)	41	4506517			2630.47-2730.47	2398.92
15.149	15.149 (1.052)	43	6310018			3703.83-3803.83	3358.97
119 Butyl Acetate					CAS #: 123-86-4		
20.071	20.071 (1.241)	56	7474090	200.000	218.55	50.00- 150.00	100.00(A)
20.071	20.071 (1.241)	73	2366289			0.00- 82.98	31.66
20.071	20.071 (1.241)	43	18435926			197.73- 297.73	246.66
135 Cyclohexanone					CAS #: 108-94-1		
23.278	23.278 (1.091)	55	8115059	200.000	221.35	50.00- 150.00	100.00(A)
23.278	23.278 (1.091)	98	3387837			0.00- 90.62	41.75
23.278	23.278 (1.091)	42	5606169			17.43- 117.43	69.08
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.080	24.080 (1.128)	57	16489699	200.000	199.54	50.00- 150.00	100.00
24.080	24.080 (1.128)	85	13022144			31.14- 131.14	78.97
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/msd7.i/7-19oct.b/7101905.d
Report Date: 19-Oct-2007 12:11

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101905.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-19oct.b/t14q018a.m
Misc Info: 200ppbv

Calibration Date: 19-OCT-2007
Calibration Time: 11:00
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	694127	416476	971778	719204	3.61
97 1,4-Difluorobenze	2223212	1333927	3112497	2349296	5.67
126 Chlorobenzene-d5	1779964	1067978	2491950	1844247	3.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

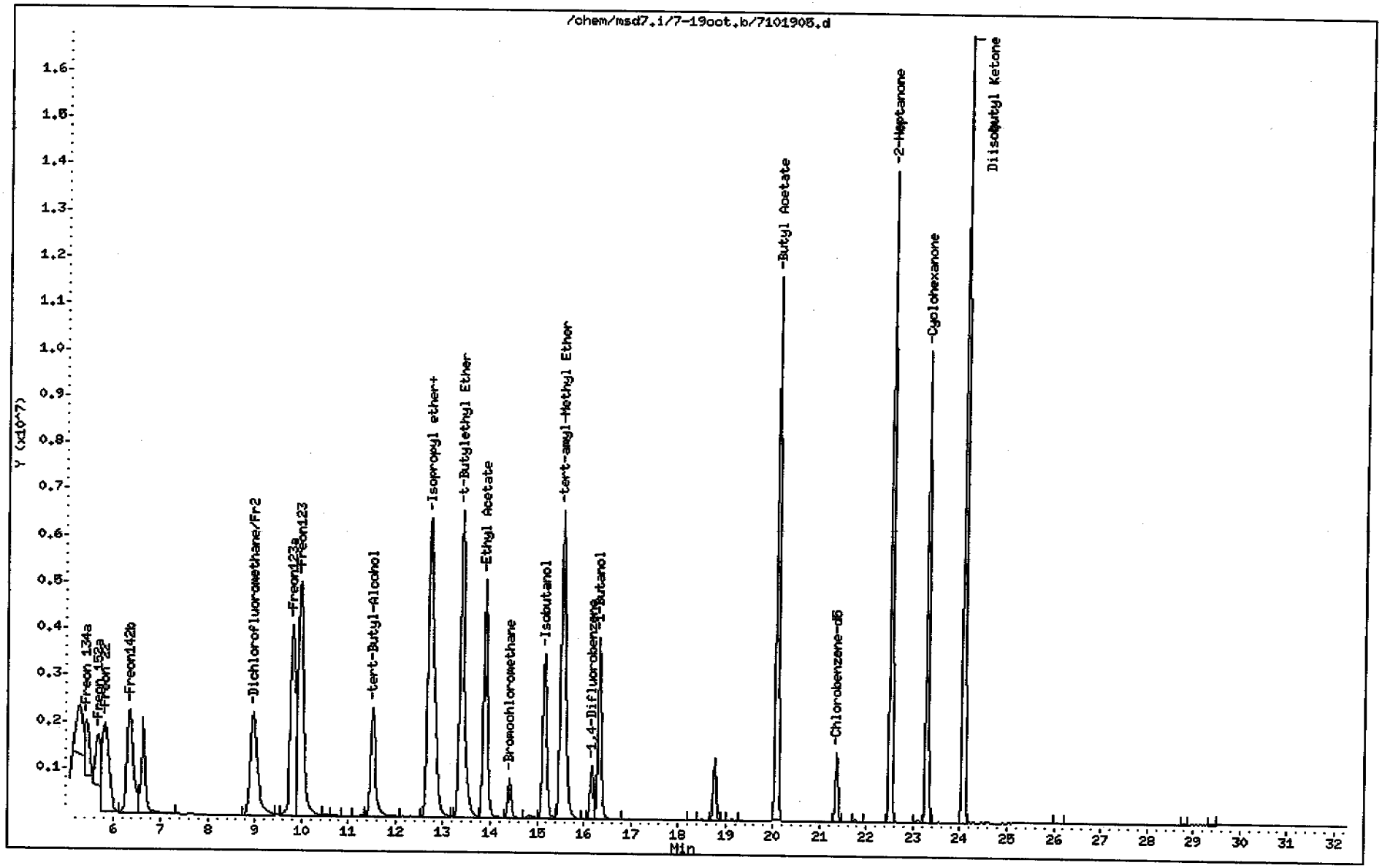
Data File: /chem/msd7.i/7-19oct.b/7101905.d
Date : 19-OCT-2007 11:41
Client ID: Level 7
Sample Info: 200mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0264



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-18oct.b/7101808.d
Lab Smp Id: ICAL
Client Smp ID: Level 7
Inj Date : 18-OCT-2007 17:39
Operator : cb
Inst ID: msd7.i
Smp Info : 200mL #1576-50
Misc Info : 200ppbv --> 200ppbv
Comment :
Method : /chem/msd7.i/7-18oct.b/t14q018a.m
Meth Date : 22-Oct-2007 16:12 dmendoza
Quant Type: ISTD
Cal Date : 18-OCT-2007 17:39
Cal File: 7101808.d
Als bottle: 1
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable
Local Compound Variable

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
*	81 Bromochloromethane					CAS #: 74-97-5		
	14.402	14.402 (1.000)	130	676936	25.0000		80.00- 120.00	100.00
	14.402	14.402 (1.000)	128	529899			26.95- 126.95	78.28
	14.458	14.402 (1.000)	49	2421312			141.62- 241.62	357.69
*	97 1,4-Difluorobenzene					CAS #: 540-36-3		
	16.172	16.172 (1.000)	114	2378077	25.0000		80.00- 120.00	100.00
	16.172	16.172 (1.000)	88	364352			0.00- 65.69	15.32
*	126 Chlorobenzene-d5					CAS #: 3114-55-4		
	21.342	21.370 (1.000)	117	1869726	25.0000		80.00- 120.00	100.00
	21.342	21.370 (1.000)	82	1037631			5.32- 105.32	55.50
$	90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	15.481	15.508 (1.075)	65	926657	25.0000	25.481	80.00- 120.00	100.00
	15.481	15.508 (1.075)	67	627207			2.91- 102.91	67.68
$	113 Toluene-d8					CAS #: 2037-26-5		
	18.771	18.771 (1.161)	98	2173091	25.0000	25.742	80.00- 120.00	100.00
	18.771	18.771 (1.161)	70	240988			0.00- 61.46	11.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.771	18.771 (1.161)	100	1512682			19.18- 119.18	69.61
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.333	23.333 (1.093)	174	1090787	25.0000	24.517	80.00- 120.00	100.00
23.333	23.333 (1.093)	95	1407511			76.80- 176.80	129.04
23.333	23.333 (1.093)	176	1052507			46.06- 146.06	96.49
11 Propylene					CAS #: 115-07-1		
5.638	5.610 (0.391)	41	6024485	200.000	206.49	80.00- 120.00	100.00(A)
5.638	5.610 (0.391)	42	4229291			21.19- 121.19	70.20
5.638	5.610 (0.391)	39	4559811			24.83- 124.83	75.69
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.776	5.748 (0.401)	85	21314692	200.000	199.25	80.00- 120.00	100.00
5.776	5.748 (0.401)	87	7050808			0.00- 83.07	33.08
16 Freon 114					CAS #: 76-14-2		
6.246	6.218 (0.434)	135	13067052	200.000	179.47	80.00- 120.00	100.00
6.246	6.218 (0.434)	137	4161827			0.00- 81.81	31.85
18 Chloromethane					CAS #: 74-87-3		
6.550	6.522 (0.455)	50	7320258	200.000	208.08	80.00- 120.00	100.00(A)
6.550	6.522 (0.455)	52	2424741			0.00- 84.80	33.12
20 Vinyl Chloride					CAS #: 75-01-4		
6.882	6.882 (0.478)	62	8914081	200.000	202.96	80.00- 120.00	100.00(A)
6.882	6.882 (0.478)	64	2806611			0.00- 83.25	31.49
22 1,3-Butadiene					CAS #: 106-99-0		
6.992	6.937 (0.485)	54	7071038	200.000	224.76	80.00- 120.00	100.00(A)
6.992	6.937 (0.485)	39	7381307			55.97- 155.97	104.39
25 Bromomethane					CAS #: 74-83-9		
8.043	8.043 (0.558)	94	8554987	200.000	219.99	80.00- 120.00	100.00(A)
8.043	8.043 (0.558)	96	8052509			43.77- 143.77	94.13
27 Chloroethane					CAS #: 75-00-3		
8.375	8.375 (0.581)	64	4784892	200.000	245.58	80.00- 120.00	100.00(A)
8.375	8.375 (0.581)	49	1297505			0.00- 79.34	27.12
8.375	8.375 (0.581)	66	1528927			0.00- 83.15	31.95
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.983	8.956 (0.624)	101	21226149	200.000	212.69	80.00- 120.00	100.00(A)
8.983	8.956 (0.624)	103	13713885			14.33- 114.33	64.61

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
38 Ethanol						CAS #: 64-17-5		
9.481	9.453	(0.658)	45	3122247	200.000	229.38	80.00- 120.00	100.00(A)
9.481	9.453	(0.658)	43	609786			0.00- 72.83	19.53
9.481	9.453	(0.658)	46	1215909			0.00- 88.20	38.94
42 Freon 113						CAS #: 76-13-1		
10.227	10.227	(0.710)	151	11652787	200.000	209.94	80.00- 120.00	100.00(A)
10.227	10.227	(0.710)	153	7437320			13.49- 113.49	63.82
10.200	10.227	(0.708)	101	14619562			73.17- 173.17	125.46
43 1,1-Dichloroethene						CAS #: 75-35-4		
10.338	10.338	(0.718)	61	12965105	200.000	219.51	80.00- 120.00	100.00(A)
10.338	10.338	(0.718)	96	7908848			11.42- 111.42	61.00
10.338	10.338	(0.718)	98	5068711			0.00- 89.70	39.10
45 Acetone						CAS #: 67-64-1		
10.476	10.504	(0.727)	58	4132810	200.000	226.38	80.00- 120.00	100.00(A)
10.476	10.504	(0.727)	43	12250219			247.10- 347.10	296.41
46 2-Propanol						CAS #: 67-63-0		
10.670	10.697	(0.741)	45	15447383	200.000	238.50	80.00- 120.00	100.00(A)
10.670	10.697	(0.741)	43	3565283			0.00- 75.54	23.08
10.670	10.697	(0.741)	59	612054			0.00- 53.72	3.96
47 Carbon Disulfide						CAS #: 75-15-0		
10.891	10.891	(0.756)	76	25177181	200.000	223.43	80.00- 120.00	100.00(A)
51 3-Chloropropene						CAS #: 107-05-1		
11.167	11.168	(0.775)	76	4508750	200.000	245.87	80.00- 120.00	100.00(A)
11.167	11.168	(0.775)	41	11027823			224.96- 324.96	244.59
54 Methylene Chloride						CAS #: 75-09-2		
11.472	11.472	(0.796)	49	9796957	200.000	225.62	80.00- 120.00	100.00(A)
11.472	11.472	(0.796)	84	7143181			23.49- 123.49	72.91
11.472	11.472	(0.796)	51	3006658			0.00- 80.85	30.69
60 MTBE						CAS #: 1634-04-4		
11.803	11.831	(0.820)	73	11025528	200.000	167.11	80.00- 120.00	100.00
11.803	11.831	(0.820)	57	2595297			0.00- 73.11	23.54
11.803	11.831	(0.820)	41	2404900			0.00- 76.16	21.81
61 trans-1,2-Dichloroethene						CAS #: 156-60-5		
11.942	11.942	(0.829)	96	9012807	200.000	224.59	80.00- 120.00	100.00(A)
11.942	11.942	(0.829)	61	12893816			93.77- 193.77	143.06
11.942	11.942	(0.829)	98	5726329			11.77- 111.77	63.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.301	12.301 (0.854)	57	13476499	200.000	235.33	80.00- 120.00	100.00(A)
12.301	12.301 (0.854)	43	8689968			17.84- 117.84	64.48
12.301	12.301 (0.854)	86	2045178			0.00- 65.07	15.18
69 Vinyl Acetate					CAS #: 108-05-4		
12.799	12.799 (0.889)	86	2014922	200.000	232.87	80.00- 120.00	100.00(A)
12.799	12.799 (0.889)	43	23503120			1150.46-1250.46	1166.45
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.826	12.826 (0.891)	63	15208502	200.000	221.72	80.00- 120.00	100.00(A)
12.826	12.826 (0.891)	65	4797143			0.00- 81.66	31.54
75 2-Butanone					CAS #: 78-93-3		
13.877	13.905 (0.964)	72	3652475	200.000	249.12	80.00- 120.00	100.00(A)
13.877	13.905 (0.964)	43	16402680			412.95- 512.95	449.08
13.877	13.905 (0.964)	57	1277677			0.00- 86.57	34.98
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.932	13.932 (0.967)	61	10627950	200.000	221.36	80.00- 120.00	100.00(A)
13.932	13.932 (0.967)	96	7912975			24.70- 124.70	74.45
13.932	13.932 (0.967)	98	5079116			0.00- 97.31	47.79
80 Tetrahydrofuran					CAS #: 109-99-9		
14.375	14.402 (0.998)	42	9189583	200.000	240.40	80.00- 120.00	100.00(A)
14.375	14.402 (0.998)	71	3311270			0.00- 85.86	36.03
14.375	14.402 (0.998)	72	3616002			0.00- 87.82	39.35
82 Chloroform					CAS #: 67-66-3		
14.458	14.485 (1.004)	83	14531456	200.000	213.20	80.00- 120.00	100.00(A)
14.458	14.485 (1.004)	85	9504871			15.30- 115.30	65.41
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.817	14.845 (1.029)	97	13926518	200.000	202.90	80.00- 120.00	100.00(A)
14.817	14.845 (1.029)	99	8949810			14.42- 114.42	64.26
85 Cyclohexane					CAS #: 110-82-7		
14.845	14.845 (1.031)	84	8942562	200.000	227.48	80.00- 120.00	100.00(A)
14.845	14.845 (1.031)	56	11510364			77.14- 177.14	128.71
14.845	14.845 (1.031)	41	6322961			22.96- 122.96	70.71
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.094	15.094 (1.048)	119	13089871	200.000	203.45	80.00- 120.00	100.00(A)
15.094	15.094 (1.048)	117	13611237			54.22- 154.22	103.98
91 Benzene					CAS #: 71-43-2		
15.508	15.508 (0.959)	78	19736309	200.000	208.88	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
91 Benzene (continued)							
15.508	15.508 (0.959)	77	4339447			0.00- 71.87	21.99
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.398	15.426 (1.069)	57	31632116	200.000	230.20	80.00- 120.00	100.00(A)
15.398	15.426 (1.069)	56	10900526			0.00- 84.62	34.46
15.398	15.426 (1.069)	41	8227297			0.00- 79.27	26.01
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.619	15.647 (0.966)	62	9602381	200.000	191.27	80.00- 120.00	100.00
15.619	15.647 (0.966)	64	3054754			0.00- 82.89	31.81
94 Heptane					CAS #: 142-82-5		
15.702	15.730 (0.971)	71	6282483	200.000	216.20	80.00- 120.00	100.00(A)
15.702	15.730 (0.971)	43	12514936			158.53- 258.53	199.20
15.702	15.730 (0.971)	57	6727545			59.34- 159.34	107.08
101 Trichloroethene					CAS #: 79-01-6		
16.642	16.642 (1.029)	95	8328807	200.000	198.44	80.00- 120.00	100.00
16.642	16.642 (1.029)	130	8066565			49.05- 149.05	96.85
16.642	16.642 (1.029)	97	5388543			14.93- 114.93	64.70
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.112	17.112 (1.058)	63	7647118	200.000	210.89	80.00- 120.00	100.00(A)
17.112	17.112 (1.058)	62	5629589			23.52- 123.52	73.62
17.112	17.112 (1.058)	41	4567700			12.01- 112.01	59.73
106 1,4-Dioxane					CAS #: 123-91-1		
17.250	17.250 (1.067)	88	5051505	200.000	214.19	80.00- 120.00	100.00(A)
17.250	17.250 (1.067)	58	3620228			21.50- 121.50	71.67
17.250	17.250 (1.067)	57	1192718			0.00- 74.60	23.61
107 Bromodichloromethane					CAS #: 75-27-4		
17.554	17.555 (1.085)	83	14367494	200.000	197.17	80.00- 120.00	100.00
17.554	17.555 (1.085)	85	9277547			14.37- 114.37	64.57
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.329	18.329 (1.133)	75	11007513	200.000	214.82	80.00- 120.00	100.00(A)
18.329	18.329 (1.133)	77	3583647			0.00- 81.97	32.56
18.329	18.329 (1.133)	39	6277823			6.88- 106.88	57.03
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.522	18.522 (1.145)	58	6680445	200.000	236.26	80.00- 120.00	100.00(A)
18.494	18.522 (1.144)	43	16914065			222.97- 322.97	253.19
18.522	18.522 (1.145)	85	2542376			0.00- 90.48	38.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.882	18.882 (1.168)	91	21213764	200.000	204.98	80.00- 120.00	100.00(A)
18.882	18.882 (1.168)	92	13605027			13.04- 113.04	64.13
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.296	19.324 (0.904)	75	11506838	200.000	216.70	80.00- 120.00	100.00(A)
19.296	19.324 (0.904)	77	3666959			0.00- 81.65	31.87
19.296	19.324 (0.904)	39	6234784			2.52- 102.52	54.18
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.656	19.656 (0.921)	97	8133154	200.000	210.01	80.00- 120.00	100.00(A)
19.656	19.656 (0.921)	99	5125477			13.08- 113.08	63.02
19.656	19.656 (0.921)	83	6859943			35.32- 135.32	84.35
120 Tetrachloroethene					CAS #: 127-18-4		
19.822	19.822 (0.929)	166	9290283	200.000	184.96	80.00- 120.00	100.00
19.822	19.822 (0.929)	129	6818614			22.39- 122.39	73.40
19.822	19.822 (0.929)	131	6582279			19.80- 119.80	70.85
121 2-Hexanone					CAS #: 591-78-6		
19.960	19.960 (0.935)	58	9469386	200.000	228.16	80.00- 120.00	100.00(A)
19.960	19.960 (0.935)	43	17305893			138.63- 238.63	182.76
19.960	19.960 (0.935)	100	1575326			0.00- 67.05	16.64
122 Dibromochloromethane					CAS #: 124-48-1		
20.347	20.347 (0.953)	129	13376992	200.000	194.95	80.00- 120.00	100.00
20.347	20.347 (0.953)	127	10423775			27.62- 127.62	77.92
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.624	20.624 (0.966)	107	13069323	200.000	205.86	80.00- 120.00	100.00(A)
20.624	20.624 (0.966)	109	12296113			44.67- 144.67	94.08
127 Chlorobenzene					CAS #: 108-90-7		
21.398	21.398 (1.003)	112	16601996	200.000	196.27	80.00- 120.00	100.00
21.398	21.398 (1.003)	114	5394737			0.00- 82.43	32.49
21.398	21.398 (1.003)	77	10031248			10.75- 110.75	60.42
128 Ethyl Benzene					CAS #: 100-41-4		
21.481	21.481 (1.006)	106	8788124	200.000	203.54	80.00- 120.00	100.00(A)
21.481	21.481 (1.006)	91	26914189			261.69- 361.69	306.26
129 m,p-Xylene					CAS #: 108-38-3		
21.674	21.674 (1.016)	106	11064572	200.000	204.73	80.00- 120.00	100.00(A)
21.674	21.674 (1.016)	91	21363976			145.05- 245.05	193.08
130 o-Xylene					CAS #: 95-47-6		
22.393	22.393 (1.049)	106	9336788	200.000	199.36	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.393	22.393	(1.049)	91	18842407			154.65- 254.65	201.81
131 Styrene						CAS #: 100-42-5		
22.421	22.421	(1.051)	104	15984259	200.000	220.66	80.00- 120.00	100.00(A)
22.421	22.421	(1.051)	78	7823852			1.69- 101.69	48.95
133 Bromoform						CAS #: 75-25-2		
22.835	22.836	(1.070)	173	11006294	200.000	182.67	80.00- 120.00	100.00
22.835	22.836	(1.070)	171	5759605			1.22- 101.22	52.33
134 Cumene						CAS #: 98-82-8		
22.974	22.974	(1.076)	105	23858342	200.000	201.74	80.00- 120.00	100.00(A)
22.974	22.974	(1.076)	120	6668314			0.00- 78.08	27.95
22.946	22.974	(1.075)	51	2635407			0.00- 61.43	11.05
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.527	23.527	(1.102)	83	15236549	200.000	194.77	80.00- 120.00	100.00
23.527	23.527	(1.102)	85	9937979			14.35- 114.35	65.22
142 Propylbenzene						CAS #: 103-65-1		
23.637	23.637	(1.108)	91	29315025	200.000	184.82	80.00- 120.00	100.00
23.637	23.637	(1.108)	120	7179772			0.00- 72.94	24.49
23.637	23.637	(1.108)	105	1208835			0.00- 54.03	4.12
145 4-Ethyltoluene						CAS #: 622-96-8		
23.831	23.831	(1.117)	105	28130830	200.000	200.83	80.00- 120.00	100.00(A)
23.831	23.831	(1.117)	120	8039568			0.00- 78.42	28.58
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.914	23.914	(1.120)	105	19886270	200.000	180.74	80.00- 120.00	100.00
23.914	23.914	(1.120)	120	11506570			3.80- 103.80	57.86
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.550	24.550	(1.150)	105	19601387	200.000	196.03	80.00- 120.00	100.00
24.550	24.550	(1.150)	120	9673988			0.00- 98.95	49.35
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.130	25.130	(1.177)	146	14469122	200.000	187.00	80.00- 120.00	100.00
25.130	25.130	(1.177)	148	9170698			14.48- 114.48	63.38
25.130	25.130	(1.177)	111	5741172			0.00- 89.68	39.68
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.269	25.269	(1.184)	146	14827054	200.000	183.87	80.00- 120.00	100.00
25.269	25.269	(1.184)	148	9476740			13.81- 113.81	63.92
25.269	25.269	(1.184)	111	5716851			0.00- 87.35	38.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.490	25.490 (1.194)	91	23309446	200.000	217.73	80.00- 120.00	100.00(A)
25.490	25.490 (1.194)	126	4853718			0.00- 71.29	20.82
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.932	25.932 (1.215)	146	13249955	200.000	183.92	80.00- 120.00	100.00
25.932	25.932 (1.215)	148	8480902			14.30- 114.30	64.01
25.905	25.932 (1.214)	111	5527605			0.00- 90.50	41.72
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.808	28.808 (1.350)	180	6421549	200.000	217.94	80.00- 120.00	100.00(A)
28.808	28.808 (1.350)	182	6143942			45.65- 145.65	95.68
166 Hexachlorobutadiene					CAS #: 87-68-3		
29.001	29.001 (1.359)	225	4260828	200.000	173.94	80.00- 120.00	100.00
29.001	29.001 (1.359)	223	2664913			12.64- 112.64	62.54
167 Naphthalene					CAS #: 91-20-3		
29.388	29.388 (1.377)	128	13072303	200.000	236.80	80.00- 120.00	100.00(A)
29.388	29.388 (1.377)	127	1572392			0.00- 62.50	12.03
29 Isopentane					CAS #: 78-78-4		
8.402	8.375 (0.583)	43	10508368	200.000	217.77	80.00- 120.00	100.00(A)
8.402	8.375 (0.583)	57	7144223			16.48- 116.48	67.99
19 Butane					CAS #: 106-97-8		
6.826	6.771 (0.474)	58	1573883	200.000	208.82	80.00- 120.00	100.00(A)
6.799	6.771 (0.472)	43	12494796			757.70- 857.70	793.88
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.918	16.919 (1.175)	83	10993866	200.000	227.21	80.00- 120.00	100.00(A)
16.918	16.919 (1.175)	98	5086864			0.00- 96.13	46.27
16.891	16.919 (1.173)	55	9808425			38.51- 138.51	89.22

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7101808.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-18oct.b/t14q018a.m
Misc Info: 200ppbv --> 200ppbv

Calibration Date: 18-OCT-2007
Calibration Time: 15:26
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	683549	410129	956969	676936	-0.97
97 1,4-Difluorobenze	2204815	1322889	3086741	2378077	7.86
126 Chlorobenzene-d5	1812979	1087787	2538171	1869726	3.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.40	14.07	14.73	14.40	0.00
97 1,4-Difluorobenze	16.17	15.84	16.50	16.17	0.00
126 Chlorobenzene-d5	21.37	21.04	21.70	21.34	-0.13

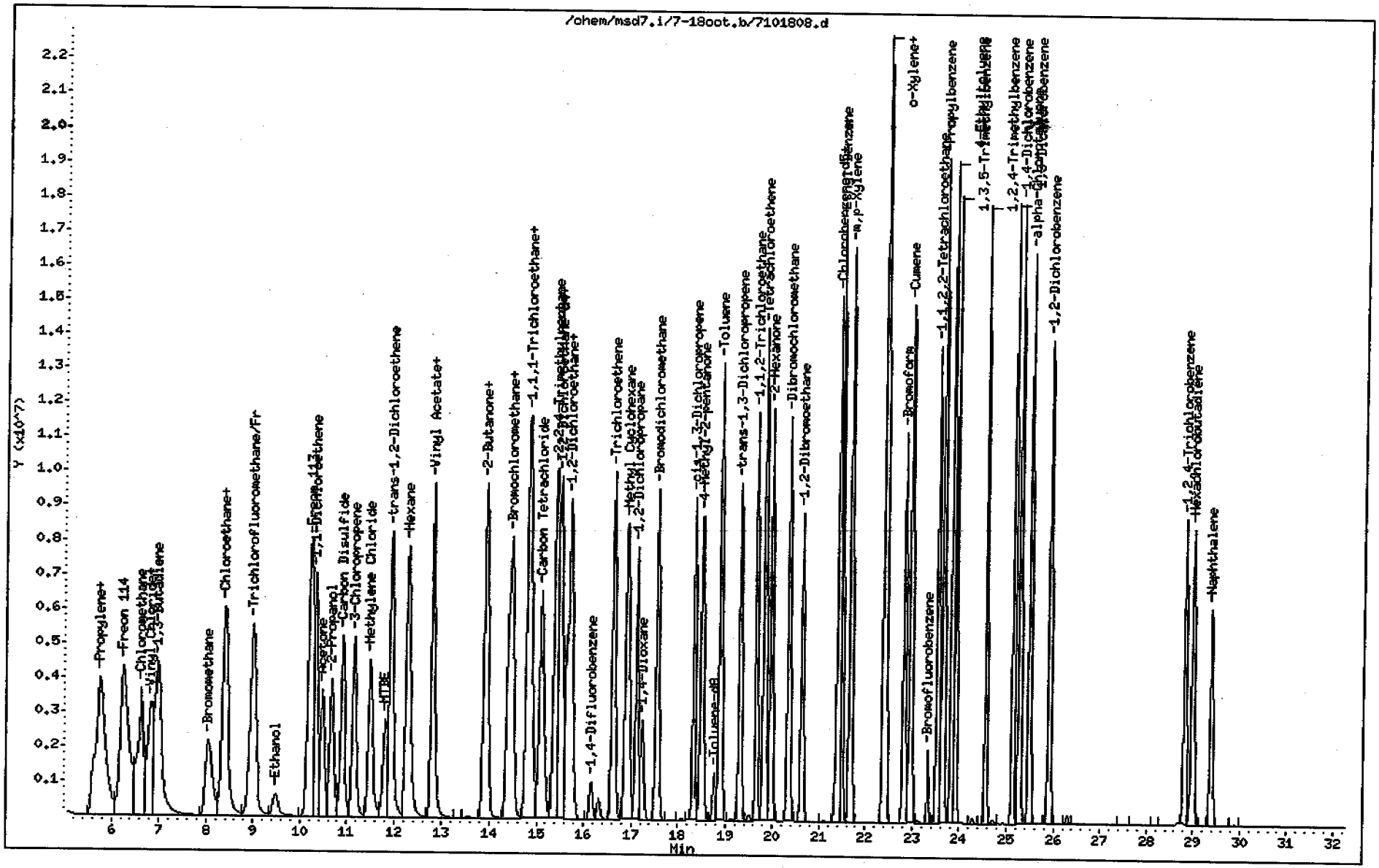
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-18oct.b/7101808.d
Date : 18-OCT-2007 17:39
Client ID: Level 7
Sample Info: 200mL #1576-50

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710567-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	86
Freon 114	88
Chloromethane	84
Vinyl Chloride	86
1,3-Butadiene	91
Bromomethane	84
Chloroethane	90
Freon 11	91
Ethanol	94
Freon 113	95
1,1-Dichloroethene	91
Acetone	88
2-Propanol	96
Carbon Disulfide	84
Methylene Chloride	89
Methyl tert-butyl ether	96
trans-1,2-Dichloroethene	91
Hexane	92
1,1-Dichloroethane	92
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	95
Tetrahydrofuran	101
Chloroform	98
1,1,1-Trichloroethane	100
Cyclohexane	98
Carbon Tetrachloride	103
Benzene	98
1,2-Dichloroethane	95
Heptane	100
Trichloroethene	100
1,2-Dichloropropane	99
1,4-Dioxane	99
Bromodichloromethane	102
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	107
Toluene	100
trans-1,3-Dichloropropene	105
1,1,2-Trichloroethane	105
Tetrachloroethene	113

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710567-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	102
Dibromochloromethane	113
1,2-Dibromoethane (EDB)	109
Chlorobenzene	104
Ethyl Benzene	105
m,p-Xylene	105
o-Xylene	105
Styrene	116
Bromoform	116
1,1,2,2-Tetrachloroethane	99
4-Ethyltoluene	101
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	105
1,3-Dichlorobenzene	106
1,4-Dichlorobenzene	105
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	101
1,2,4-Trichlorobenzene	90
Hexachlorobutadiene	89
Chlorodifluoromethane	94
Methanol	97
n-Butanol	106
Propylene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7103006.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/7-30oct.b/t14q018c.m

Injection Date: 30-OCT-2007 12:15
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.28725	0.010	4.15447	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.88312	0.010	0.48981	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.62677	0.010	-5.35850	30.00000	Averaged
11 Propylene	1.07750	0.93662	0.010	13.07476	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	3.95067	3.40484	0.010	13.81599	30.00000	Averaged
16 Freon 114	2.68890	2.38049	0.010	11.46963	30.00000	Averaged
18 Chloromethane	1.29926	1.08778	0.010	16.27734	30.00000	Averaged
20 Vinyl Chloride	1.62201	1.39424	0.010	14.04268	30.00000	Averaged
22 1,3-Butadiene	1.16186	1.05580	0.010	9.12818	30.00000	Averaged
25 Bromomethane	1.43619	1.20643	0.010	15.99780	30.00000	Averaged
27 Chloroethane	0.71958	0.64651	0.010	10.15452	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	3.68565	3.37195	0.010	8.51149	30.00000	Averaged
38 Ethanol	0.50270	0.47025	0.010	6.45572	30.00000	Averaged
42 Freon 113	2.04987	1.94133	0.010	5.29521	30.00000	Averaged
43 1,1-Dichloroethene	2.18125	1.97949	0.010	9.24979	30.00000	Averaged
45 Acetone	0.67421	0.59142	0.010	12.27988	30.00000	Averaged
46 2-Propanol	2.39202	2.28699	0.010	4.39093	30.00000	Averaged
47 Carbon Disulfide	4.16162	3.47791	0.010	16.42900	30.00000	Averaged
51 3-Chloropropene	0.67724	0.57075	0.010	15.72416	30.00000	Averaged
54 Methylene Chloride	1.60367	1.43260	0.010	10.66758	30.00000	Averaged
60 MTBE	2.43665	2.34710	0.010	3.67528	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.48204	1.34425	0.010	9.29733	30.00000	Averaged
65 Hexane	2.11488	1.95049	0.010	7.77290	30.00000	Averaged
69 Vinyl Acetate	0.31955	0.28807	0.010	9.85181	30.00000	Averaged
70 1,1-Dichloroethane	2.53322	2.31925	0.010	8.44669	30.00000	Averaged
75 2-Butanone	0.54146	0.51808	0.010	4.31862	30.00000	Averaged
76 cis-1,2-Dichloroethene	1.77314	1.68136	0.010	5.17637	30.00000	Averaged
80 Tetrahydrofuran	1.41176	1.42127	0.010	-0.67373	30.00000	Averaged
82 Chloroform	2.51713	2.46366	0.010	2.12425	30.00000	Averaged
83 1,1,1-Trichloroethane	2.53479	2.52381	0.010	0.43328	30.00000	Averaged
85 Cyclohexane	1.45184	1.42009	0.010	2.18676	30.00000	Averaged
87 Carbon Tetrachloride	2.37608	2.45708	0.010	-3.40898	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.07476	5.03772	0.010	0.72985	30.00000	Averaged
91 Benzene	0.99332	0.97247	0.010	2.09888	30.00000	Averaged
93 1,2-Dichloroethane	0.52777	0.50176	0.010	4.92752	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7103006.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/7-30oct.b/t14q018c.m

Injection Date: 30-OCT-2007 12:15
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.30549	0.30437	0.010	0.36836	30.00000	Averaged
101 Trichloroethene	0.44124	0.44379	0.010	-0.57872	30.00000	Averaged
104 1,2-Dichloropropane	0.38121	0.37861	0.010	0.68087	30.00000	Averaged
106 1,4-Dioxane	0.24794	0.24637	0.010	0.63378	30.00000	Averaged
107 Bromodichloromethane	0.76606	0.78042	0.010	-1.87542	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.53866	0.54952	0.010	-2.01500	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29726	0.31909	0.010	-7.34589	30.00000	Averaged
114 Toluene	1.08799	1.08440	0.010	0.32985	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.71002	0.74850	0.010	-5.41937	30.00000	Averaged
117 1,1,2-Trichloroethane	0.51782	0.54264	0.010	-4.79447	30.00000	Averaged
120 Tetrachloroethene	0.67159	0.76043	0.010	-13.22861	30.00000	Averaged
121 2-Hexanone	0.55495	0.56831	0.010	-2.40733	30.00000	Averaged
122 Dibromochloromethane	0.91748	1.03436	0.010	-12.73846	30.00000	Averaged
123 1,2-Dibromoethane	0.84888	0.92867	0.010	-9.39920	30.00000	Averaged
127 Chlorobenzene	1.13099	1.17635	0.010	-4.01037	30.00000	Averaged
128 Ethyl Benzene	0.57731	0.60465	0.010	-4.73502	30.00000	Averaged
129 m,p-Xylene	0.72261	0.76101	0.010	-5.31351	30.00000	Averaged
130 o-Xylene	0.62621	0.65772	0.010	-5.03214	30.00000	Averaged
131 Styrene	0.96855	1.12288	0.010	-15.93443	30.00000	Averaged
133 Bromoform	0.80564	0.93927	0.010	-16.58627	30.00000	Averaged
134 Cumene	1.58127	1.72458	0.010	-9.06312	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.04598	1.03923	0.010	0.64519	30.00000	Averaged
142 Propylbenzene	2.12085	2.20701	0.010	-4.06244	30.00000	Averaged
145 4-Ethyltoluene	1.87287	1.90093	0.010	-1.49811	30.00000	Averaged
147 1,3,5-Trimethylbenzene	1.47112	1.49486	0.010	-1.61387	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.33697	1.40085	0.010	-4.77830	30.00000	Averaged
155 1,3-Dichlorobenzene	1.03460	1.09290	0.010	-5.63553	30.00000	Averaged
156 1,4-Dichlorobenzene	1.07824	1.12938	0.010	-4.74334	30.00000	Averaged
159 alpha-Chlorotoluene	1.43143	1.38961	0.010	2.92130	30.00000	Averaged
161 1,2-Dichlorobenzene	0.96328	0.97196	0.010	-0.90071	30.00000	Averaged
165 1,2,4-Trichlorobenzene	0.39398	0.35315	0.010	10.36325	30.00000	Averaged
166 Hexachlorobutadiene	0.32753	0.29258	0.010	10.67130	30.00000	Averaged
29 Isopentane	1.78205	1.56965	0.010	11.91892	30.00000	Averaged
19 Butane	0.27835	0.24705	0.010	11.24339	30.00000	Averaged
102 Methyl Cyclohexane	1.78694	1.76943	0.010	0.98018	30.00000	Averaged
167 Naphthalene	0.73814	0.67566	0.010	8.46409	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103006.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 30-OCT-2007 12:15
Operator : cb Inst ID: msd7.i
Smp Info : 100mL #1576-50A
Misc Info : 100ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 31-Oct-2007 14:54 ctaylor Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.388	14.388 (1.000)	130	537758	25.0000		80.00- 120.00		100.00
14.388	14.388 (1.000)	128	410153			26.27- 126.27		76.27
14.388	14.388 (1.000)	49	978845			132.02- 232.02		182.02
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1771565	25.0000		80.00- 120.00		100.00
16.158	16.158 (1.000)	88	263582			0.00- 64.88		14.88
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1414884	25.0000		80.00- 120.00		100.00
21.356	21.356 (1.000)	82	752704			4.45- 104.45		53.20
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.077)	65	692227	25.0000	23.961	80.00- 120.00		100.00
15.494	15.494 (1.077)	67	378826			2.91- 102.91		54.73
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1564498	25.0000	24.878	80.00- 120.00		100.00
18.757	18.757 (1.161)	70	167133			0.00- 61.46		10.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1095314			19.18- 119.18	70.01
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	886810	25.0000	26.340	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1039419			67.21- 167.21	117.21
23.347	23.347 (1.093)	176	864783			47.52- 147.52	97.52
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1007353	50.0000	43.463	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	691184			21.19- 121.19	68.61
5.617	5.617 (0.390)	39	756860			24.83- 124.83	75.13
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.398)	85	3661963	50.0000	43.092	80.00- 120.00	100.00
5.729	5.729 (0.398)	87	1182116			0.00- 83.07	32.28
16 Freon 114					CAS #: 76-14-2		
6.180	6.180 (0.430)	135	2560256	50.0000	44.265	80.00- 120.00	100.00
6.180	6.180 (0.430)	137	845089			0.00- 83.01	33.01
18 Chloromethane					CAS #: 74-87-3		
6.518	6.518 (0.453)	50	1169923	50.0000	41.861	80.00- 120.00	100.00
6.518	6.518 (0.453)	52	407417			0.00- 84.80	34.82
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.856 (0.476)	62	1499526	50.0000	42.979	80.00- 120.00	100.00
6.856	6.856 (0.476)	64	468570			0.00- 83.25	31.25
22 1,3-Butadiene					CAS #: 106-99-0		
6.912	6.912 (0.480)	54	1135529	50.0000	45.436	80.00- 120.00	100.00
6.912	6.912 (0.480)	39	1158810			55.97- 155.97	102.05
25 Bromomethane					CAS #: 74-83-9		
8.010	8.010 (0.557)	94	1297537	50.0000	42.001	80.00- 120.00	100.00
8.010	8.010 (0.557)	96	1223037			44.26- 144.26	94.26
27 Chloroethane					CAS #: 75-00-3		
8.348	8.348 (0.580)	64	695331	50.0000	44.923	80.00- 120.00	100.00
8.348	8.348 (0.580)	49	196871			0.00- 79.34	28.31
8.348	8.348 (0.580)	66	214418			0.00- 83.15	30.84
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.940	8.940 (0.621)	101	3626584	50.0000	45.744	80.00- 120.00	100.00
8.940	8.940 (0.621)	103	2343585			14.62- 114.62	64.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.439	9.439 (0.656)	45	505760	50.0000	46.772	80.00- 120.00	100.00
9.439	9.439 (0.656)	43	108579			0.00- 72.83	21.47
9.439	9.439 (0.656)	46	190623			0.00- 88.20	37.69
42 Freon 113					CAS #: 76-13-1		
10.186	10.186 (0.708)	151	2087928	50.0000	47.352	80.00- 120.00	100.00
10.186	10.186 (0.708)	153	1321988			13.32- 113.32	63.32
10.186	10.186 (0.708)	101	2401071			65.00- 165.00	115.00
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.718)	61	2128968	50.0000	45.375	80.00- 120.00	100.00
10.324	10.324 (0.718)	96	1243584			8.41- 108.41	58.41
10.324	10.324 (0.718)	98	806223			0.00- 87.87	37.87
45 Acetone					CAS #: 67-64-1		
10.462	10.462 (0.727)	58	636082	50.0000	43.860	80.00- 120.00	100.00
10.462	10.462 (0.727)	43	2009967			247.10- 347.10	315.99
46 2-Propanol					CAS #: 67-63-0		
10.656	10.656 (0.741)	45	2459693	50.0000	47.804	80.00- 120.00	100.00
10.656	10.656 (0.741)	43	635022			0.00- 75.54	25.82
10.656	10.656 (0.741)	59	94018			0.00- 53.72	3.82
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.756)	76	3740548	50.0000	41.786	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.775)	76	613854	50.0000	42.138	80.00- 120.00	100.00
11.153	11.153 (0.775)	41	1796759			224.96- 324.96	292.70
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.796)	49	1540782	50.0000	44.666	80.00- 120.00	100.00
11.457	11.457 (0.796)	84	1059216			18.75- 118.75	68.75
11.457	11.457 (0.796)	51	470010			0.00- 80.85	30.50
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.821)	73	2524339	50.0000	48.162	80.00- 120.00	100.00
11.817	11.817 (0.821)	57	615990			0.00- 74.40	24.40
11.817	11.817 (0.821)	41	613632			0.00- 76.16	24.31
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.927	11.927 (0.829)	96	1445763	50.0000	45.351	80.00- 120.00	100.00
11.927	11.927 (0.829)	61	2127075			97.12- 197.12	147.12
11.927	11.927 (0.829)	98	922175			11.77- 111.77	63.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.854)	57	2097785	50.0000	46.114	80.00- 120.00	100.00
12.287	12.287 (0.854)	43	1419670			17.84- 117.84	67.67
12.287	12.287 (0.854)	86	303521			0.00- 65.07	14.47
69 Vinyl Acetate					CAS #: 108-05-4		
12.785	12.785 (0.889)	86	309822	50.0000	45.074	80.00- 120.00	100.00
12.785	12.785 (0.889)	43	3893546			1150.46-1250.46	1256.70
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.890)	63	2494389	50.0000	45.777	80.00- 120.00	100.00
12.812	12.812 (0.890)	65	770860			0.00- 80.90	30.90
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.965)	72	557201	50.0000	47.841	80.00- 120.00	100.00
13.891	13.891 (0.965)	43	2733887			440.65- 540.65	490.65
13.891	13.891 (0.965)	57	202174			0.00- 86.57	36.28
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.967)	61	1808330	50.0000	47.412	80.00- 120.00	100.00
13.918	13.918 (0.967)	96	1330134			23.56- 123.56	73.56
13.918	13.918 (0.967)	98	852447			0.00- 97.14	47.14
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (1.000)	42	1528599	50.0000	50.337	80.00- 120.00	100.00
14.388	14.388 (1.000)	71	523430			0.00- 84.24	34.24
14.388	14.388 (1.000)	72	562040			0.00- 87.82	36.77
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.006)	83	2649702	50.0000	48.938	80.00- 120.00	100.00
14.471	14.471 (1.006)	85	1718790			14.87- 114.87	64.87
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.031)	97	2714397	50.0000	49.783	80.00- 120.00	100.00
14.831	14.831 (1.031)	99	1746573			14.34- 114.34	64.34
85 Cyclohexane					CAS #: 110-82-7		
14.831	14.831 (1.031)	84	1527331	50.0000	48.907	80.00- 120.00	100.00
14.831	14.831 (1.031)	56	1944920			77.34- 177.34	127.34
14.831	14.831 (1.031)	41	1118917			23.26- 123.26	73.26
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.080	15.080 (1.048)	119	2642634	50.0000	51.704	80.00- 120.00	100.00
15.080	15.080 (1.048)	117	2727102			53.20- 153.20	103.20
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.071)	57	5418152	50.0000	49.635	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.071)	56	1817346			0.00- 84.62	33.54
15.411	15.411 (1.071)	41	1432582			0.00- 79.27	26.44
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	3445601	50.0000	48.950	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	751976			0.00- 71.87	21.82
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.633 (0.967)	62	1777810	50.0000	47.536	80.00- 120.00	100.00
15.633	15.633 (0.967)	64	571316			0.00- 82.89	32.14
94 Heptane					CAS #: 142-82-5		
15.715	15.715 (0.973)	71	1078409	50.0000	49.816	80.00- 120.00	100.00
15.715	15.715 (0.973)	43	2217215			158.53- 258.53	205.60
15.715	15.715 (0.973)	57	1171444			59.34- 159.34	108.63
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1572416	50.0000	50.289	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	1617151			52.84- 152.84	102.84
16.628	16.628 (1.029)	97	1031143			15.58- 115.58	65.58
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.126	17.126 (1.060)	63	1341466	50.0000	49.660	80.00- 120.00	100.00
17.126	17.126 (1.060)	62	971906			22.45- 122.45	72.45
17.126	17.126 (1.060)	41	812727			10.58- 110.58	60.58
106 1,4-Dioxane					CAS #: 123-91-1		
17.236	17.236 (1.067)	88	872906	50.0000	49.683	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	614540			20.40- 120.40	70.40
17.236	17.236 (1.067)	57	202311			0.00- 74.60	23.18
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	2765143	50.0000	50.938	80.00- 120.00	100.00
17.540	17.540 (1.086)	85	1794689			14.90- 114.90	64.90
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	1947010	50.0000	51.008	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	625008			0.00- 82.10	32.10
18.314	18.314 (1.133)	39	1090865			6.03- 106.03	56.03
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1130590	50.0000	53.673	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	2913051			222.97- 322.97	257.66
18.508	18.508 (1.145)	85	442826			0.00- 90.48	39.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	3842174	50.0000	49.835	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	2453052			13.85- 113.85	63.85
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2118068	50.0000	52.710	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	670272			0.00- 81.65	31.65
19.310	19.310 (0.904)	39	1095809			1.74- 101.74	51.74
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.642	19.642 (0.920)	97	1535553	50.0000	52.397	80.00- 120.00	100.00
19.642	19.642 (0.920)	99	962931			12.71- 112.71	62.71
19.642	19.642 (0.920)	83	1268489			32.61- 132.61	82.61
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2151840	50.0000	56.614	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1508719			20.11- 120.11	70.11
19.835	19.835 (0.929)	131	1450090			17.39- 117.39	67.39
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.973 (0.935)	58	1608173	50.0000	51.204	80.00- 120.00	100.00
19.973	19.973 (0.935)	43	3025775			138.15- 238.15	188.15
19.973	19.973 (0.935)	100	285235			0.00- 67.05	17.74
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.361 (0.953)	129	2926987	50.0000	56.369	80.00- 120.00	100.00
20.361	20.361 (0.953)	127	2270943			27.62- 127.62	77.59
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.609	20.609 (0.965)	107	2627917	50.0000	54.700	80.00- 120.00	100.00
20.609	20.609 (0.965)	109	2494870			44.94- 144.94	94.94
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	3328800	50.0000	52.005	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1078278			0.00- 82.39	32.39
21.411	21.411 (1.003)	77	2280842			18.52- 118.52	68.52
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	1711022	50.0000	52.368	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	5225835			261.69- 361.69	305.42
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2153474	50.0000	52.657	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	4116640			145.05- 245.05	191.16
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	1861205	50.0000	52.516	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.379	22.379 (1.048)	91	3758788			151.95- 251.95	201.95
131 Styrene					CAS #: 100-42-5		
22.407	22.407 (1.049)	104	3177484	50.0000	57.967	80.00- 120.00	100.00
22.407	22.407 (1.049)	78	1543044			0.00- 98.56	48.56
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	2657907	50.0000	58.293	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	1377996			1.85- 101.85	51.85
134 Cumene					CAS #: 98-82-8		
22.960	22.960 (1.075)	105	4880169	50.0000	54.532	80.00- 120.00	100.00
22.960	22.960 (1.075)	120	1371296			0.00- 78.08	28.10
22.960	22.960 (1.075)	51	480983			0.00- 61.43	9.86
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.540	23.540 (1.102)	83	2940779	50.0000	49.677	80.00- 120.00	100.00
23.540	23.540 (1.102)	85	1906530			14.83- 114.83	64.83
142 Propylbenzene					CAS #: 103-65-1		
23.651	23.651 (1.107)	91	6245324	50.0000	52.031	80.00- 120.00	100.00
23.651	23.651 (1.107)	120	1472228			0.00- 72.94	23.57
23.651	23.651 (1.107)	105	230372			0.00- 54.03	3.69
145 4-Ethyltoluene					CAS #: 622-96-8		
23.817	23.817 (1.115)	105	5379198	50.0000	50.749	80.00- 120.00	100.00
23.817	23.817 (1.115)	120	1730406			0.00- 82.17	32.17
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	4230118	50.0000	50.807	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	2219030			3.80- 103.80	52.46
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	3964079	50.0000	52.389	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	1964575			0.00- 98.95	49.56
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.116	25.116 (1.176)	146	3092666	50.0000	52.818	80.00- 120.00	100.00
25.116	25.116 (1.176)	148	1969732			14.48- 114.48	63.69
25.116	25.116 (1.176)	111	1173924			0.00- 89.68	37.96
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	3195885	50.0000	52.372	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	2048246			13.81- 113.81	64.09
25.282	25.282 (1.184)	111	1157917			0.00- 87.35	36.23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	3932284	50.0000	48.539	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	840120			0.00- 71.29	21.36
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	2750416	50.0000	50.450	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	1758005			13.92- 113.92	63.92
25.918	25.918 (1.214)	111	1067777			0.00- 88.82	38.82
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	999330	50.0000	44.818	80.00- 120.00	100.00
28.821	28.821 (1.350)	182	945986			44.66- 144.66	94.66
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	827920	50.0000	44.664	80.00- 120.00	100.00
28.987	28.987 (1.357)	223	522936			12.64- 112.64	63.16
29 Isopentane					CAS #: 78-78-4		
8.348	8.348 (0.580)	43	1688184	50.0000	44.040	80.00- 120.00	100.00
8.348	8.348 (0.580)	57	1121180			16.48- 116.48	66.41
19 Butane					CAS #: 106-97-8		
6.743	6.743 (0.469)	58	265709	50.0000	44.378	80.00- 120.00	100.00
6.743	6.743 (0.469)	43	2121778			757.70- 857.70	798.53
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.904	16.904 (1.175)	83	1903046	50.0000	49.510	80.00- 120.00	100.00
16.904	16.904 (1.175)	98	895742			0.00- 96.13	47.07
16.904	16.904 (1.175)	55	1664412			38.51- 138.51	87.46
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	1911973	50.0000	45.768	80.00- 120.00	100.00
29.374	29.374 (1.375)	127	228751			0.00- 62.50	11.96

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103006.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 100ppbv --> 50ppbv

Calibration Date: 30-OCT-2007
Calibration Time: 10:29
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	486199	291719	680679	537758	10.60
97 1,4-Difluorobenze	1616415	969849	2262981	1771565	9.60
126 Chlorobenzene-d5	1130394	678236	1582552	1414884	25.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.39	-0.19
97 1,4-Difluorobenze	16.19	15.86	16.52	16.16	-0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

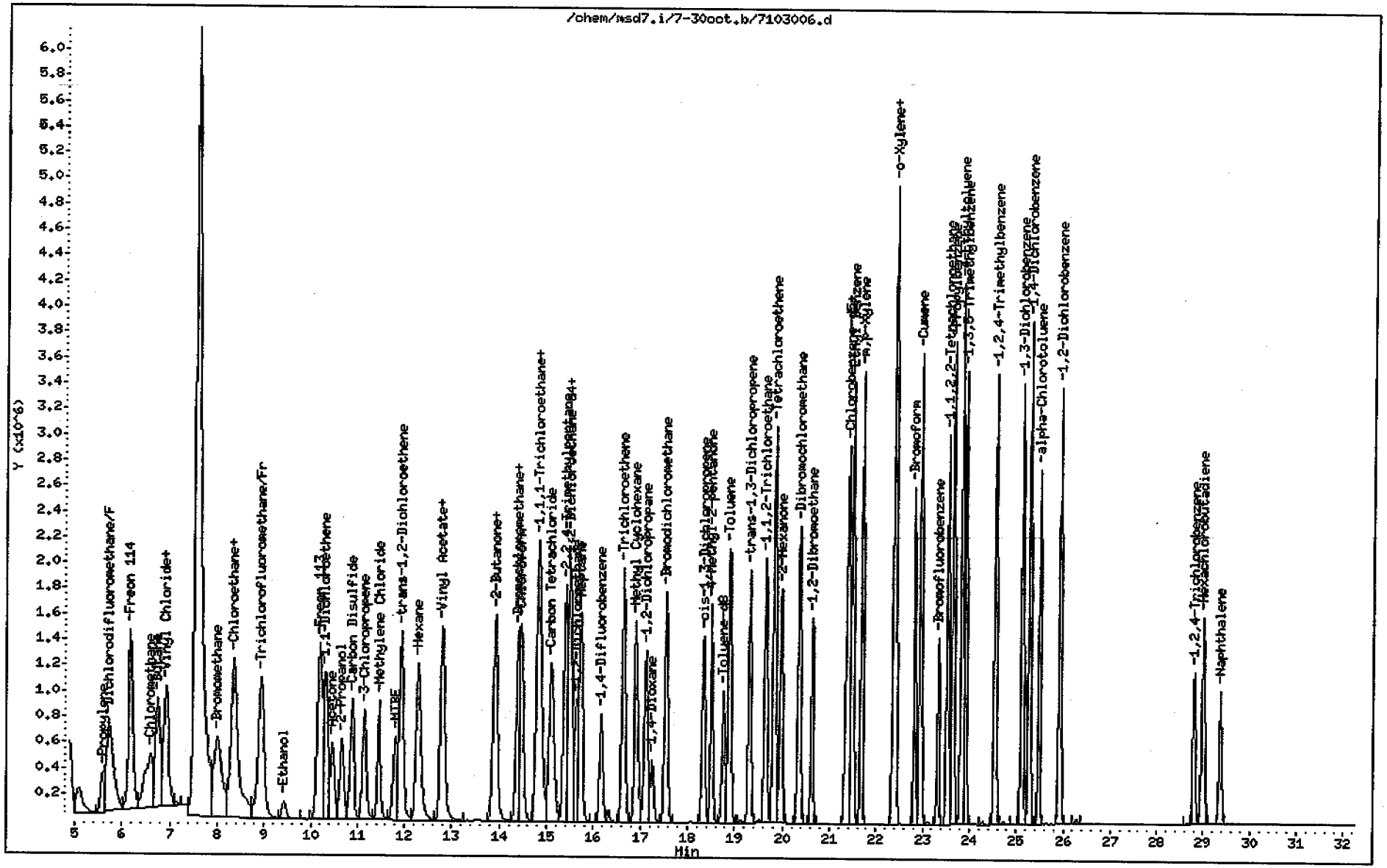
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-30oct.b/7103006.d
Date : 30-OCT-2007 12:15
Client ID: CCV-1
Sample Info: 100mL #1576-50A

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53



Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7103004a.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd7.i/7-30oct.b/t14q018c.m

Injection Date: 30-OCT-2007 10:29
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.32687	0.010	1.20431	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.75800	0.010	14.58805	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.67428	0.010	-13.34366	30.00000	Averaged
5 Freon 143a	0.54510	0.56313	0.010	-3.30841	40.00000	Averaged
6 Freon142b	2.22349	2.34314	0.010	-5.38104	40.00000	Averaged
13 Freon 134a	1.06546	1.07071	0.010	-0.49301	40.00000	Averaged
15 Freon 152a	0.76921	0.69929	0.010	9.08943	40.00000	Averaged
17 Freon 22	2.48505	2.34223	0.010	5.74726	40.00000	Averaged
26 Methanol	0.42691	0.41205	0.010	3.48079	40.00000	Averaged
34 Dichlorofluoromethane/Fr21	2.20471	2.00753	0.010	8.94366	40.00000	Averaged
40 Freon123a	1.24571	1.23178	0.010	1.11846	40.00000	Averaged
41 Freon123	2.20945	1.97544	0.010	10.59128	40.00000	Averaged
57 tert-Butyl-Alcohol	2.31844	2.45703	0.010	-5.97759	40.00000	Averaged
68 Isopropyl ether	4.46135	4.31088	0.010	3.37281	40.00000	Averaged
71 1-Propanol	0.27978	0.29788	0.010	-6.46758	40.00000	Averaged
73 t-Butylethyl Ether	3.80281	3.82805	0.010	-0.66362	40.00000	Averaged
77 Ethyl Acetate	0.42459	0.42993	0.010	-1.25907	40.00000	Averaged
92 tert-amyl-Methyl Ether	2.77937	2.88898	0.010	-3.94389	40.00000	Averaged
96 2-Heptanone	1.66671	1.63962	0.010	1.62504	40.00000	Averaged
98 1-Butanol	0.24439	0.25918	0.010	-6.05347	40.00000	Averaged
99 Isobutanol	0.02737	0.02982	0.010	-8.94767	40.00000	Averaged
119 Butyl Acetate	0.36393	0.34720	0.010	4.59743	40.00000	Averaged
135 Cyclohexanone	0.49697	0.50902	0.010	-2.42589	40.00000	Averaged
146 Diisobutyl Ketone	1.12021	1.26114	0.010	-12.58096	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103004a.d
Lab Smp Id: CCV — Client Smp ID: CCVsp
Inj Date : 30-OCT-2007 10:29
Operator : cb — Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 30-Oct-2007 12:35 cbond — Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 — Cal File: 7103005.d
Als bottle: 1 — Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: sp22aCCV.sub
Target Version: 3.50 — Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable — Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	486199	25.0000		80.00- 120.00		100.00
14.416	14.416 (1.000)	128	373087			26.74- 126.74		76.74
14.416	14.416 (1.000)	49	687796			91.46- 191.46		141.46
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.186	16.186 (1.000)	114	1616415	25.0000		80.00- 120.00		100.00
16.158	16.158 (1.000)	88	244505			0.00- 65.13		15.13
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1130394	25.0000		80.00- 120.00		100.00
21.356	21.356 (1.000)	82	593319			4.45- 104.45		52.49
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	645122	25.0000	24.699	80.00- 120.00		100.00
15.494	15.494 (1.075)	67	316334			2.91- 102.91		49.03
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.159)	98	1225242	25.0000	21.353	80.00- 120.00		100.00
18.757	18.757 (1.159)	70	132185			0.00- 61.46		10.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.159)	100	840028			19.18- 119.18	68.56
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	762197	25.0000	28.336	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	885338			66.16- 166.16	116.16
23.347	23.347 (1.093)	176	728782			45.62- 145.62	95.62
5 Freon 143a					CAS #: 420-46-2		
5.279	5.279 (0.366)	65	547589	50.0000	51.654	80.00- 120.00	100.00
5.223	5.223 (0.362)	69	4666283			0.00- 50.00	852.15
5.279	5.279 (0.366)	64	157251			0.00- 77.08	28.72
6 Freon142b					CAS #: 75-68-3		
6.349	6.349 (0.440)	65	2278462	50.0000	52.690	80.00- 120.00	100.00
6.349	6.349 (0.440)	45	536502			0.00- 74.42	23.55
13 Freon 134a					CAS #: 811-97-2		
5.448	5.448 (0.378)	83	1041161	50.0000	50.246	80.00- 120.00	100.00
5.223	5.223 (0.362)	69	4666283			398.13- 498.13	448.18
5.448	5.448 (0.378)	63	137204			0.00- 64.08	13.18
15 Freon 152a					CAS #: 75-37-6		
5.645	5.645 (0.392)	65	679989	50.0000	45.455	80.00- 120.00	100.00
5.645	5.645 (0.392)	51	1248948			109.56- 209.56	183.67
5.645	5.645 (0.392)	47	318814			0.00- 90.52	46.89
17 Freon 22					CAS #: 75-45-6		
5.814	5.814 (0.403)	51	2277577	50.0000	47.126	80.00- 120.00	100.00
5.814	5.814 (0.403)	67	279766			0.00- 61.77	12.28
5.814	5.814 (0.403)	85	30413			0.00- 51.67	1.34
26 Methanol					CAS #: 67-56-1		
7.588	7.588 (0.526)	31	2404086	300.000	289.56	80.00- 120.00	100.00
7.588	7.588 (0.526)	32	1583298			15.86- 115.86	65.86
34 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
8.912	8.912 (0.618)	67	1952116	50.0000	45.528	80.00- 120.00	100.00
8.912	8.912 (0.618)	69	588723			0.00- 81.12	30.16
8.912	8.912 (0.618)	35	105711			0.00- 53.83	5.42
40 Freon123a					CAS #: 354-23-4		
9.826	9.826 (0.682)	117	1197779	50.0000	49.441	80.00- 120.00	100.00
9.799	9.799 (0.680)	67	1378020			110.97- 210.97	115.05
41 Freon123					CAS #: 306-83-2		
9.965	9.965 (0.691)	83	1920913	50.0000	44.704	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)								
9.965	9.965	(0.691)	133	427166			0.00- 69.52	22.24
9.965	9.965	(0.691)	85	1321669			22.16- 122.16	68.80
57 tert-Butyl-Alcohol						CAS #: 75-65-0		
11.513	11.513	(0.799)	59	2389211	50.0000	52.989	80.00- 120.00	100.00
11.513	11.513	(0.799)	41	512333			0.00- 73.42	21.44
11.513	11.513	(0.799)	57	242007			0.00- 60.26	10.13
68 Isopropyl ether						CAS #: 108-20-3		
12.729	12.729	(0.883)	45	4191889	50.0000	48.314	80.00- 120.00	100.00
12.729	12.729	(0.883)	87	854959			0.00- 73.31	20.40
12.729	12.729	(0.883)	59	338407			0.00- 58.30	8.07
71 1-Propanol						CAS #: 71-23-8		
12.840	12.840	(0.891)	42	289656	50.0000	53.234	80.00- 120.00	100.00
12.840	12.840	(0.891)	59	361249			95.91- 195.91	124.72
12.729	12.729	(0.883)	41	824644			265.93- 365.93	284.70
73 t-Butylethyl Ether						CAS #: 637-92-3		
13.393	13.393	(0.929)	59	3722387	50.0000	50.332	80.00- 120.00	100.00
13.393	13.393	(0.929)	87	1335721			0.00- 88.95	35.88
13.393	13.393	(0.929)	41	676184			0.00- 67.89	18.17
77 Ethyl Acetate						CAS #: 141-78-6		
13.891	13.891	(0.964)	45	418066	50.0000	50.630	80.00- 120.00	100.00
13.891	13.891	(0.964)	61	372658			49.04- 149.04	89.14
13.891	13.891	(0.964)	43	2928715			622.55- 722.55	700.54
92 tert-amyl-Methyl Ether						CAS #: 994-05-8		
15.550	15.550	(1.079)	73	2809239	50.0000	51.972	80.00- 120.00	100.00
15.550	15.550	(1.079)	87	676723			0.00- 73.71	24.09
15.550	15.550	(1.079)	55	755357			0.00- 78.56	26.89
96 2-Heptanone						CAS #: 110-43-0		
22.517	22.517	(1.562)	58	1594368	50.0000	49.187	80.00- 120.00	100.00
22.517	22.517	(1.562)	43	2547867			108.53- 208.53	159.80
98 1-Butanol						CAS #: 71-36-3		
16.324	16.324	(1.009)	56	837894	50.0000	53.027	80.00- 120.00	100.00
16.324	16.324	(1.009)	41	630380			21.86- 121.86	75.23
16.324	16.324	(1.009)	43	477080			9.15- 109.15	56.94
99 Isobutanol						CAS #: 78-83-1		
15.163	15.163	(1.052)	59	28999	50.0000	54.474	80.00- 120.00	100.00
15.135	15.135	(1.050)	41	742954			2630.47-2730.47	2562.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
99 Isobutanol (continued)							
15.135	15.135 (1.050)	43	1001714			3703.83-3803.83	3454.31
119 Butyl Acetate					CAS #: 123-86-4		
20.084	20.084 (1.241)	56	1122426	50.0000	47.701	80.00- 120.00	100.00
20.084	20.084 (1.241)	73	340596			0.00- 80.34	30.34
20.057	20.057 (1.239)	43	2867339			205.46- 305.46	255.46
135 Cyclohexanone					CAS #: 108-94-1		
23.292	23.292 (1.091)	55	1150791	50.0000	51.213	80.00- 120.00	100.00
23.292	23.292 (1.091)	98	483366			0.00- 90.62	42.00
23.292	23.292 (1.091)	42	820261			17.43- 117.43	71.28
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.066	24.066 (1.127)	57	2851170	50.0000	56.290	80.00- 120.00	100.00
24.066	24.066 (1.127)	85	2247938			28.84- 128.84	78.84
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103004a.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 200ppbv --> 50ppbv 1200ppbv --> 300ppbv MeOH

Calibration Date: 30-OCT-2007
Calibration Time: 12:15
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	537758	322655	752861	486199	-9.59
97 1,4-Difluorobenze	1771565	1062939	2480191	1616415	-8.76
126 Chlorobenzene-d5	1414884	848930	1980838	1130394	-20.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.19	0.17
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

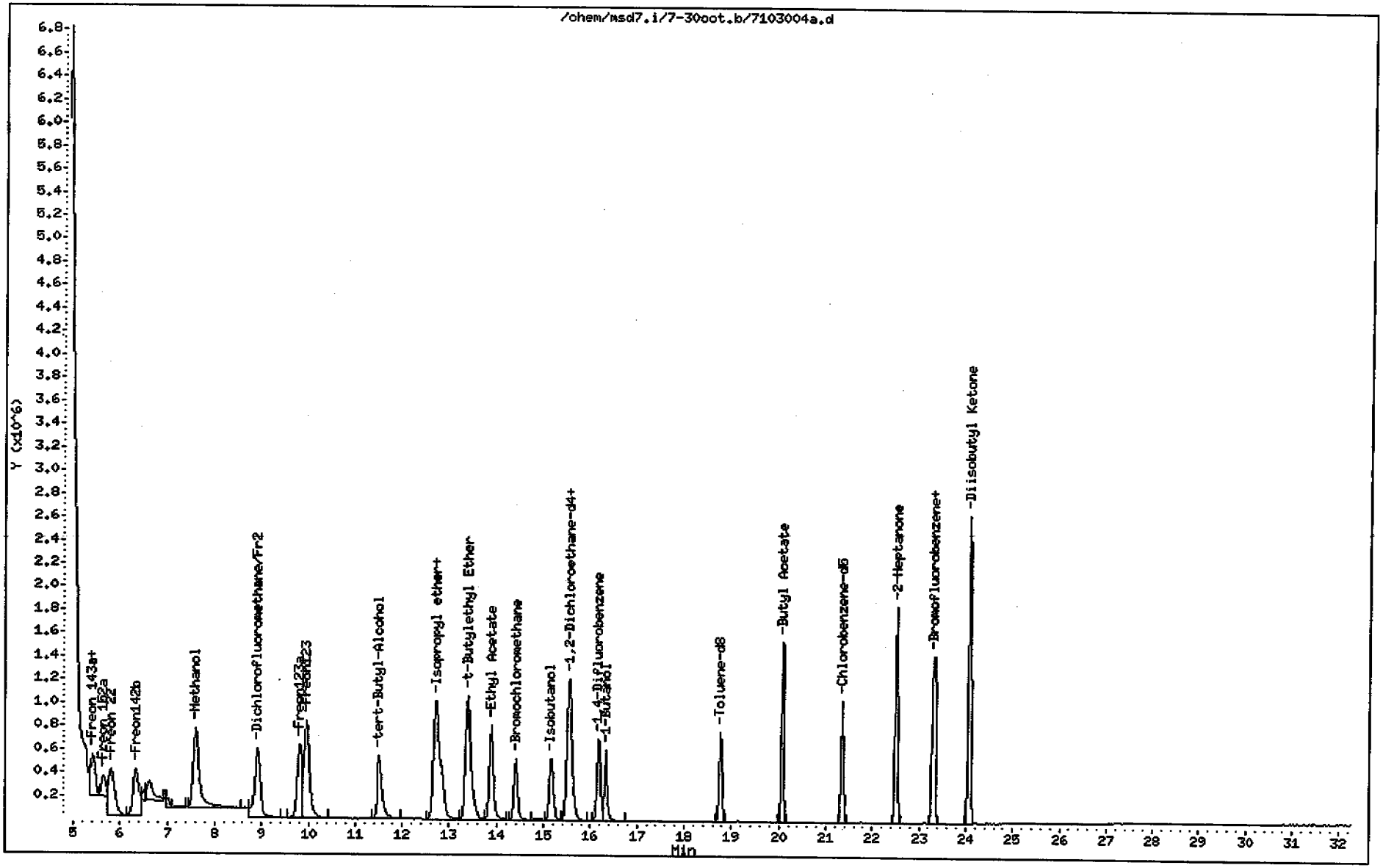
Data File: /chem/msd7.i/7-30oct.b/7103004a.d
Date : 30-OCT-2007 10:29
Client ID: CCVsp
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0295



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710567-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	101
Freon 114	104
Chloromethane	97
Vinyl Chloride	95
1,3-Butadiene	101
Bromomethane	93
Chloroethane	96
Freon 11	101
Ethanol	99
Freon 113	101
1,1-Dichloroethene	99
Acetone	91
2-Propanol	104
Carbon Disulfide	88
Methylene Chloride	94
Methyl tert-butyl ether	85
trans-1,2-Dichloroethene	88
Hexane	89
1,1-Dichloroethane	93
2-Butanone (Methyl Ethyl Ketone)	87
cis-1,2-Dichloroethene	98
Tetrahydrofuran	106
Chloroform	102
1,1,1-Trichloroethane	110
Cyclohexane	93
Carbon Tetrachloride	118
Benzene	94
1,2-Dichloroethane	112
Heptane	94
Trichloroethene	104
1,2-Dichloropropane	99
1,4-Dioxane	96
Bromodichloromethane	111
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	111
Toluene	101
trans-1,3-Dichloropropene	102
1,1,2-Trichloroethane	101
Tetrachloroethene	113

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710567-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	100
Dibromochloromethane	119
1,2-Dibromoethane (EDB)	109
Chlorobenzene	100
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	102
Styrene	114
Bromoform	128
1,1,2,2-Tetrachloroethane	99
4-Ethyltoluene	103
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	109
1,3-Dichlorobenzene	110
1,4-Dichlorobenzene	109
alpha-Chlorotoluene	99
1,2-Dichlorobenzene	106
1,2,4-Trichlorobenzene	103
Hexachlorobutadiene	106
Chlorodifluoromethane	100
Methanol	97
n-Butanol	92
Propylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	110	70-130

Data File: /chem/msd7.i/7-31oct.b/7103102.d
Report Date: 31-Oct-2007 10:12

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7103102.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/7-31oct.b/t14q018c.m

Injection Date: 31-OCT-2007 09:03
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.50222	0.010	-11.85167	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.89232	0.010	-0.54711	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.65304	0.010	-9.77414	30.00000	Averaged
11 Propylene	1.07750	1.09066	0.010	-1.22078	30.00000	Averaged
12 Dichlorodifluoromethane/Fr1	3.95067	3.97437	0.010	-0.60011	30.00000	Averaged
16 Freon 114	2.68890	2.81124	0.010	-4.55008	30.00000	Averaged
18 Chloromethane	1.29926	1.26065	0.010	2.97220	30.00000	Averaged
20 Vinyl Chloride	1.62201	1.54094	0.010	4.99812	30.00000	Averaged
22 1,3-Butadiene	1.16186	1.17527	0.010	-1.15417	30.00000	Averaged
25 Bromomethane	1.43619	1.33147	0.010	7.29127	30.00000	Averaged
27 Chloroethane	0.71958	0.68746	0.010	4.46310	30.00000	Averaged
31 Trichlorofluoromethane/Fr11	3.68565	3.70942	0.010	-0.64496	30.00000	Averaged
38 Ethanol	0.50270	0.49947	0.010	0.64318	30.00000	Averaged
42 Freon 113	2.04987	2.06476	0.010	-0.72647	30.00000	Averaged
43 1,1-Dichloroethene	2.18125	2.16912	0.010	0.55596	30.00000	Averaged
45 Acetone	0.67421	0.61444	0.010	8.86599	30.00000	Averaged
46 2-Propanol	2.39202	2.49587	0.010	-4.34161	30.00000	Averaged
47 Carbon Disulfide	4.16162	3.64891	0.010	12.32007	30.00000	Averaged
51 3-Chloropropene	0.67724	0.57719	0.010	14.77327	30.00000	Averaged
54 Methylene Chloride	1.60367	1.51683	0.010	5.41530	30.00000	Averaged
60 MTBE	2.43665	2.06784	0.010	15.13609	30.00000	Averaged
61 trans-1,2-Dichloroethene	1.48204	1.30480	0.010	11.95905	30.00000	Averaged
65 Hexane	2.11488	1.88743	0.010	10.75464	30.00000	Averaged
69 Vinyl Acetate	0.31955	0.27104	0.010	15.18145	30.00000	Averaged
70 1,1-Dichloroethane	2.53322	2.34785	0.010	7.31769	30.00000	Averaged
75 2-Butanone	0.54146	0.47171	0.010	12.88146	30.00000	Averaged
76 cis-1,2-Dichloroethene	1.77314	1.74785	0.010	1.42680	30.00000	Averaged
80 Tetrahydrofuran	1.41176	1.50457	0.010	-6.57444	30.00000	Averaged
82 Chloroform	2.51713	2.58089	0.010	-2.53337	30.00000	Averaged
83 1,1,1-Trichloroethane	2.53479	2.77743	0.010	-9.57213	30.00000	Averaged
85 Cyclohexane	1.45184	1.34931	0.010	7.06221	30.00000	Averaged
87 Carbon Tetrachloride	2.37608	2.79628	0.010	-17.68447	30.00000	Averaged
89 2,2,4-Trimethylpentane	5.07476	5.18170	0.010	-2.10721	30.00000	Averaged
91 Benzene	0.99332	0.93445	0.010	5.92685	30.00000	Averaged
93 1,2-Dichloroethane	0.52777	0.58873	0.010	-11.55050	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7103102.d
Analysis Type: AIR
Lab Sample ID: CCV-1
Method: /chem/msd7.i/7-31oct.b/t14q018c.m

Injection Date: 31-OCT-2007 09:03
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Heptane	0.30549	0.28565	0.010	6.49488	30.00000	Averaged
101 Trichloroethene	0.44124	0.46034	0.010	-4.32970	30.00000	Averaged
104 1,2-Dichloropropane	0.38121	0.37763	0.010	0.93771	30.00000	Averaged
106 1,4-Dioxane	0.24794	0.23906	0.010	3.57925	30.00000	Averaged
107 Bromodichloromethane	0.76606	0.84863	0.010	-10.77935	30.00000	Averaged
110 cis-1,3-Dichloropropene	0.53866	0.54094	0.010	-0.42268	30.00000	Averaged
111 4-Methyl-2-pentanone	0.29726	0.33129	0.010	-11.45018	30.00000	Averaged
114 Toluene	1.08799	1.09891	0.010	-1.00362	30.00000	Averaged
116 trans-1,3-Dichloropropene	0.71002	0.72430	0.010	-2.01149	30.00000	Averaged
117 1,1,2-Trichloroethane	0.51782	0.52231	0.010	-0.86734	30.00000	Averaged
120 Tetrachloroethene	0.67159	0.76047	0.010	-13.23390	30.00000	Averaged
121 2-Hexanone	0.55495	0.55500	0.010	-0.01057	30.00000	Averaged
122 Dibromochloromethane	0.91748	1.09592	0.010	-19.44851	30.00000	Averaged
123 1,2-Dibromoethane	0.84888	0.92572	0.010	-9.05208	30.00000	Averaged
127 Chlorobenzene	1.13099	1.13669	0.010	-0.50348	30.00000	Averaged
128 Ethyl Benzene	0.57731	0.59187	0.010	-2.52146	30.00000	Averaged
129 m,p-Xylene	0.72261	0.73678	0.010	-1.96083	30.00000	Averaged
130 o-Xylene	0.62621	0.64205	0.010	-2.52933	30.00000	Averaged
131 Styrene	0.96855	1.10597	0.010	-14.18898	30.00000	Averaged
133 Bromoform	0.80564	1.03236	0.010	-28.14177	30.00000	Averaged
134 Cumene	1.58127	1.73005	0.010	-9.40910	30.00000	Averaged
140 1,1,2,2-Tetrachloroethane	1.04598	1.04008	0.010	0.56357	30.00000	Averaged
142 Propylbenzene	2.12085	2.21729	0.010	-4.54710	30.00000	Averaged
145 4-Ethyltoluene	1.87287	1.92365	0.010	-2.71093	30.00000	Averaged
147 1,3,5-Trimethylbenzene	1.47112	1.55067	0.010	-5.40703	30.00000	Averaged
150 1,2,4-Trimethylbenzene	1.33697	1.45638	0.010	-8.93148	30.00000	Averaged
155 1,3-Dichlorobenzene	1.03460	1.13942	0.010	-10.13113	30.00000	Averaged
156 1,4-Dichlorobenzene	1.07824	1.17886	0.010	-9.33188	30.00000	Averaged
159 alpha-Chlorotoluene	1.43143	1.41677	0.010	1.02416	30.00000	Averaged
161 1,2-Dichlorobenzene	0.96328	1.01734	0.010	-5.61179	30.00000	Averaged
165 1,2,4-Trichlorobenzene	0.39398	0.40517	0.010	-2.84124	30.00000	Averaged
166 Hexachlorobutadiene	0.32753	0.34592	0.010	-5.61572	30.00000	Averaged
29 Isopentane	1.78205	1.74608	0.010	2.01851	30.00000	Averaged
19 Butane	0.27835	0.26682	0.010	4.14230	30.00000	Averaged
102 Methyl Cyclohexane	1.78694	1.74116	0.010	2.56194	30.00000	Averaged
167 Naphthalene	0.73814	0.74523	0.010	-0.95984	30.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-31oct.b/7103102.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 31-OCT-2007 09:03
Operator : cb Inst ID: msd7.i
Smp Info : 100mL #1576-50A
Misc Info : 100ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-31oct.b/t14q018c.m
Meth Date : 31-Oct-2007 10:12 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
**	====== ========	====	========	=======	=======	==========	=====
* 81 Bromochloromethane					CAS #: 74-97-5		
14.388	14.388 (1.000)	130	419527	25.0000		80.00- 120.00	100.00
14.388	14.388 (1.000)	128	322423			26.85- 126.85	76.85
14.388	14.388 (1.000)	49	830784			148.03- 248.03	198.03
* 97 1,4-Difluorobenzene					CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1400939	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	213154			0.00- 65.22	15.22
* 126 Chlorobenzene-d5					CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1205049	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	635447			4.45- 104.45	52.73
$ 90 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
15.494	15.494 (1.077)	65	630220	25.0000	27.963	80.00- 120.00	100.00
15.494	15.494 (1.077)	67	321273			2.91- 102.91	50.98
$ 113 Toluene-d8					CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1250084	25.0000	25.137	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	134480			0.00- 61.46	10.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	866786			19.18- 119.18	69.34
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	786946	25.0000	27.444	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	917514			66.59- 166.59	116.59
23.347	23.347 (1.093)	176	758927			46.44- 146.44	96.44
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	915121	50.0000	50.610	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	636731			21.19- 121.19	69.58
5.617	5.617 (0.390)	39	711506			24.83- 124.83	77.75
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.729	5.729 (0.398)	85	3334715	50.0000	50.300	80.00- 120.00	100.00
5.729	5.729 (0.398)	87	1077854			0.00- 83.07	32.32
16 Freon 114					CAS #: 76-14-2		
6.180	6.180 (0.430)	135	2358786	50.0000	52.275	80.00- 120.00	100.00
6.208	6.208 (0.431)	137	751203			0.00- 81.85	31.85
18 Chloromethane					CAS #: 74-87-3		
6.518	6.518 (0.453)	50	1057751	50.0000	48.514	80.00- 120.00	100.00
6.518	6.518 (0.453)	52	359360			0.00- 84.80	33.97
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.856 (0.476)	62	1292934	50.0000	47.501	80.00- 120.00	100.00
6.856	6.856 (0.476)	64	399580			0.00- 83.25	30.90
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.940 (0.482)	54	986111	50.0000	50.577	80.00- 120.00	100.00
6.940	6.940 (0.482)	39	1083030			55.97- 155.97	109.83
25 Bromomethane					CAS #: 74-83-9		
8.010	8.010 (0.557)	94	1117179	50.0000	46.354	80.00- 120.00	100.00
8.010	8.010 (0.557)	96	1061549			45.02- 145.02	95.02
27 Chloroethane					CAS #: 75-00-3		
8.348	8.348 (0.580)	64	576819	50.0000	47.768	80.00- 120.00	100.00
8.348	8.348 (0.580)	49	172991			0.00- 79.34	29.99
8.348	8.348 (0.580)	66	175446			0.00- 83.15	30.42
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.940	8.940 (0.621)	101	3112406	50.0000	50.322	80.00- 120.00	100.00
8.940	8.940 (0.621)	103	2018913			14.87- 114.87	64.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.439	9.439 (0.656)	45	419081	50.0000	49.678	80.00- 120.00	100.00
9.439	9.439 (0.656)	43	91867			0.00- 72.83	21.92
9.439	9.439 (0.656)	46	153145			0.00- 88.20	36.54
42 Freon 113					CAS #: 76-13-1		
10.185	10.185 (0.708)	151	1732448	50.0000	50.363	80.00- 120.00	100.00
10.185	10.185 (0.708)	153	1110970			14.13- 114.13	64.13
10.185	10.185 (0.708)	101	2007735			65.89- 165.89	115.89
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.718)	61	1820008	50.0000	49.722	80.00- 120.00	100.00
10.324	10.324 (0.718)	96	1037416			7.00- 107.00	57.00
10.324	10.324 (0.718)	98	670688			0.00- 86.85	36.85
45 Acetone					CAS #: 67-64-1		
10.490	10.490 (0.729)	58	515546	50.0000	45.567	80.00- 120.00	100.00
10.462	10.462 (0.727)	43	1851273			247.10- 347.10	359.09
46 2-Propanol					CAS #: 67-63-0		
10.656	10.656 (0.741)	45	2094172	50.0000	52.171	80.00- 120.00	100.00
10.656	10.656 (0.741)	43	517115			0.00- 75.54	24.69
10.656	10.656 (0.741)	59	74943			0.00- 53.72	3.58
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.756)	76	3061631	50.0000	43.840	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.775)	76	484296	50.0000	42.613	80.00- 120.00	100.00
11.153	11.153 (0.775)	41	1527306			224.96- 324.96	315.37
54 Methylene Chloride					CAS #: 75-09-2		
11.457	11.457 (0.796)	49	1272700	50.0000	47.292	80.00- 120.00	100.00
11.457	11.457 (0.796)	84	803129			13.10- 113.10	63.10
11.457	11.457 (0.796)	51	381835			0.00- 80.85	30.00
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.821)	73	1735026	50.0000	42.432	80.00- 120.00	100.00
11.817	11.817 (0.821)	57	440658			0.00- 75.40	25.40
11.817	11.817 (0.821)	41	482392			0.00- 76.16	27.80
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.927	11.927 (0.829)	96	1094800	50.0000	44.020	80.00- 120.00	100.00
11.927	11.927 (0.829)	61	1689452			104.32- 204.32	154.32
11.927	11.927 (0.829)	98	686563			11.77- 111.77	62.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.854)	57	1583657	50.0000	44.623	80.00- 120.00	100.00
12.287	12.287 (0.854)	43	1143153			17.84- 117.84	72.18
12.287	12.287 (0.854)	86	221266			0.00- 65.07	13.97
69 Vinyl Acetate					CAS #: 108-05-4		
12.784	12.784 (0.889)	86	227415	50.0000	42.409	80.00- 120.00	100.00
12.784	12.784 (0.889)	43	3197988			1150.46-1250.46	1406.23
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.890)	63	1969972	50.0000	46.341	80.00- 120.00	100.00
12.812	12.812 (0.890)	65	595745			0.00- 80.24	30.24
75 2-Butanone					CAS #: 78-93-3		
13.890	13.890 (0.965)	72	395793	50.0000	43.559	80.00- 120.00	100.00
13.890	13.890 (0.965)	43	2282575			526.71- 626.71	576.71
13.890	13.890 (0.965)	57	162295			0.00- 86.57	41.01
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.967)	61	1466537	50.0000	49.287	80.00- 120.00	100.00
13.918	13.918 (0.967)	96	1010493			18.90- 118.90	68.90
13.918	13.918 (0.967)	98	653314			0.00- 94.55	44.55
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (1.000)	42	1262419	50.0000	53.287	80.00- 120.00	100.00
14.388	14.388 (1.000)	71	383821			0.00- 80.40	30.40
14.388	14.388 (1.000)	72	410964			0.00- 87.82	32.55
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.006)	83	2165510	50.0000	51.267	80.00- 120.00	100.00
14.471	14.471 (1.006)	85	1401964			14.74- 114.74	64.74
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.031)	97	2330410	50.0000	54.786	80.00- 120.00	100.00
14.831	14.831 (1.031)	99	1505359			14.60- 114.60	64.60
85 Cyclohexane					CAS #: 110-82-7		
14.831	14.831 (1.031)	84	1132142	50.0000	46.469	80.00- 120.00	100.00
14.831	14.831 (1.031)	56	1540606			86.08- 186.08	136.08
14.831	14.831 (1.031)	41	967997			35.50- 135.50	85.50
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.107 (1.050)	119	2346232	50.0000	58.842	80.00- 120.00	100.00
15.107	15.107 (1.050)	117	2438652			53.94- 153.94	103.94
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.071)	57	4347724	50.0000	51.054	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.071)	56	1456298			0.00- 84.62	33.50
15.411	15.411 (1.071)	41	1282048			0.00- 79.27	29.49
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	2618214	50.0000	47.036	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	582725			0.00- 71.87	22.26
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.632 (0.967)	62	1649545	50.0000	55.775	80.00- 120.00	100.00
15.632	15.632 (0.967)	64	519884			0.00- 82.89	31.52
94 Heptane					CAS #: 142-82-5		
15.715	15.715 (0.973)	71	800357	50.0000	46.752	80.00- 120.00	100.00
15.715	15.715 (0.973)	43	1859702			158.53- 258.53	232.36
15.715	15.715 (0.973)	57	932970			59.34- 159.34	116.57
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1289827	50.0000	52.165	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	1326141			52.82- 152.82	102.82
16.628	16.628 (1.029)	97	835603			14.78- 114.78	64.78
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.125	17.125 (1.060)	63	1058077	50.0000	49.531	80.00- 120.00	100.00
17.125	17.125 (1.060)	62	779801			23.70- 123.70	73.70
17.125	17.125 (1.060)	41	755520			21.41- 121.41	71.41
106 1,4-Dioxane					CAS #: 123-91-1		
17.236	17.236 (1.067)	88	669825	50.0000	48.210	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	498243			24.38- 124.38	74.38
17.236	17.236 (1.067)	57	171483			0.00- 74.60	25.60
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	2377766	50.0000	55.390	80.00- 120.00	100.00
17.540	17.540 (1.086)	85	1540434			14.78- 114.78	64.78
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	1515647	50.0000	50.211	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	484540			0.00- 81.97	31.97
18.342	18.342 (1.135)	39	1010594			16.68- 116.68	66.68
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	928245	50.0000	55.725	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	2534103			222.97- 322.97	273.00
18.508	18.508 (1.145)	85	345249			0.00- 90.48	37.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	3079009	50.0000	50.502	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	1935772			12.87- 112.87	62.87
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	1745631	50.0000	51.006	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	558278			0.00- 81.98	31.98
19.310	19.310 (0.904)	39	1019357			8.39- 108.39	58.39
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.669 (0.921)	97	1258812	50.0000	50.434	80.00- 120.00	100.00
19.669	19.669 (0.921)	99	794982			13.15- 113.15	63.15
19.642	19.642 (0.920)	83	1027431			31.62- 131.62	81.62
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	1832796	50.0000	56.617	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1277721			19.71- 119.71	69.71
19.835	19.835 (0.929)	131	1240048			17.66- 117.66	67.66
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.973 (0.935)	58	1337616	50.0000	50.005	80.00- 120.00	100.00
19.973	19.973 (0.935)	43	2645771			147.80- 247.80	197.80
19.973	19.973 (0.935)	100	218843			0.00- 67.05	16.36
122 Dibromochloromethane					CAS #: 124-48-1		
20.360	20.360 (0.953)	129	2641273	50.0000	59.724	80.00- 120.00	100.00
20.360	20.360 (0.953)	127	2024107			27.62- 127.62	76.63
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.637	20.637 (0.966)	107	2231081	50.0000	54.526	80.00- 120.00	100.00
20.637	20.637 (0.966)	109	2110150			44.58- 144.58	94.58
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	2739530	50.0000	50.252	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	895560			0.00- 82.69	32.69
21.411	21.411 (1.003)	77	1960015			21.55- 121.55	71.55
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	1426469	50.0000	51.261	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	4365447			261.69- 361.69	306.03
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	1775713	50.0000	50.980	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	3512210			145.05- 245.05	197.79
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	1547405	50.0000	51.265	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)							
22.379	22.379 (1.048)	91	3227791			158.59- 258.59	208.59
131 Styrene					CAS #: 100-42-5		
22.407	22.407 (1.049)	104	2665502	50.0000	57.094	80.00- 120.00	100.00
22.407	22.407 (1.049)	78	1367513			1.30- 101.30	51.30
133 Bromoform					CAS #: 75-25-2		
22.821	22.821 (1.069)	173	2488095	50.0000	64.071	80.00- 120.00	100.00
22.821	22.821 (1.069)	171	1285696			1.67- 101.67	51.67
134 Cumene					CAS #: 98-82-8		
22.959	22.959 (1.075)	105	4169599	50.0000	54.704	80.00- 120.00	100.00
22.959	22.959 (1.075)	120	1162868			0.00- 78.08	27.89
22.959	22.959 (1.075)	51	433757			0.00- 61.43	10.40
140 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.540	23.540 (1.102)	83	2506703	50.0000	49.718	80.00- 120.00	100.00
23.540	23.540 (1.102)	85	1627955			14.94- 114.94	64.94
142 Propylbenzene					CAS #: 103-65-1		
23.651	23.651 (1.107)	91	5343882	50.0000	52.274	80.00- 120.00	100.00
23.651	23.651 (1.107)	120	1254870			0.00- 72.94	23.48
23.651	23.651 (1.107)	105	191277			0.00- 54.03	3.58
145 4-Ethyltoluene					CAS #: 622-96-8		
23.817	23.817 (1.115)	105	4636178	50.0000	51.355	80.00- 120.00	100.00
23.817	23.817 (1.115)	120	1489118			0.00- 82.12	32.12
147 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.927	23.927 (1.120)	105	3737257	50.0000	52.704	80.00- 120.00	100.00
23.927	23.927 (1.120)	120	1924629			3.80- 103.80	51.50
150 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.563	24.563 (1.150)	105	3510009	50.0000	54.466	80.00- 120.00	100.00
24.563	24.563 (1.150)	120	1699672			0.00- 98.95	48.42
155 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.116	25.116 (1.176)	146	2746104	50.0000	55.066	80.00- 120.00	100.00
25.116	25.116 (1.176)	148	1742212			14.48- 114.48	63.44
25.116	25.116 (1.176)	111	1039406			0.00- 89.68	37.85
156 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.282	25.282 (1.184)	146	2841158	50.0000	54.666	80.00- 120.00	100.00
25.282	25.282 (1.184)	148	1806442			13.81- 113.81	63.58
25.282	25.282 (1.184)	111	1032661			0.00- 87.35	36.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	3414554	50.0000	49.488	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	719460			0.00- 71.29	21.07
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	2451887	50.0000	52.806	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	1587556			14.75- 114.75	64.75
25.918	25.918 (1.214)	111	952214			0.00- 88.84	38.84
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	976504	50.0000	51.421	80.00- 120.00	100.00
28.821	28.821 (1.350)	182	924791			44.70- 144.70	94.70
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	833700	50.0000	52.808	80.00- 120.00	100.00
28.987	28.987 (1.357)	223	524982			12.64- 112.64	62.97
29 Isopentane					CAS #: 78-78-4		
8.348	8.348 (0.580)	43	1465056	50.0000	48.991	80.00- 120.00	100.00
8.348	8.348 (0.580)	57	925878			16.48- 116.48	63.20
19 Butane					CAS #: 106-97-8		
6.743	6.743 (0.469)	58	223875	50.0000	47.929	80.00- 120.00	100.00
6.743	6.743 (0.469)	43	1896842			757.70- 857.70	847.28
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.904	16.904 (1.175)	83	1460928	50.0000	48.719	80.00- 120.00	100.00
16.904	16.904 (1.175)	98	683532			0.00- 96.13	46.79
16.904	16.904 (1.175)	55	1398306			38.51- 138.51	95.71
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	1796068	50.0000	50.480	80.00- 120.00	100.00
29.374	29.374 (1.375)	127	212551			0.00- 62.50	11.83

Data File: /chem/msd7.i/7-31oct.b/7103102.d
Report Date: 31-Oct-2007 10:12

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103102.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 100ppbv --> 50ppbv

Calibration Date: 31-OCT-2007
Calibration Time: 09:46
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	463876	278326	649426	419527	-9.56
97 1,4-Difluorobenze	1534485	920691	2148279	1400939	-8.70
126 Chlorobenzene-d5	1086840	652104	1521576	1205049	10.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.42	14.09	14.75	14.39	-0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

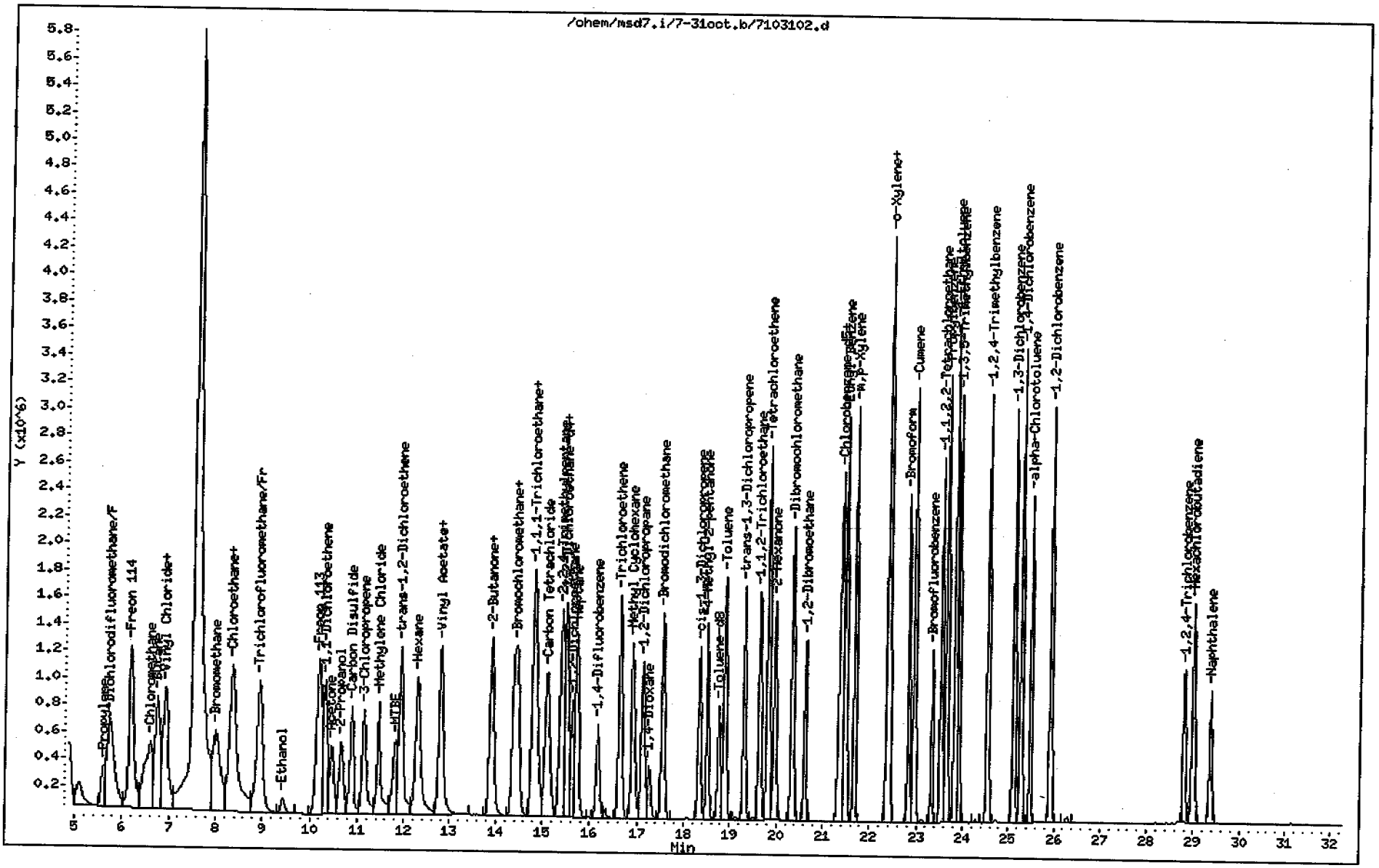
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd7.i/7-31oct.b/7103102.d
Date : 31-OCT-2007 09:03
Client ID: CCV-1
Sample Info: 100mL #1576-50A

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53



Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd7.i
Lab File ID: 7103103.d
Analysis Type: AIR
Lab Sample ID: CCV
Method: /chem/msd7.i/7-31oct.b/t14q018c.m

Injection Date: 31-OCT-2007 09:46
Init. Cal. Date(s): 18-OCT-2007 30-OCT-2007
Init. Cal. Times: 12:17 11:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 90 1,2-Dichloroethane-d4	1.34304	1.33759	0.010	0.40629	30.00000	Averaged
$ 113 Toluene-d8	0.88746	0.76756	0.010	13.51059	30.00000	Averaged
$ 137 Bromofluorobenzene	0.59489	0.66127	0.010	-11.15705	30.00000	Averaged
5 Freon 143a	0.54510	0.57444	0.010	-5.38242	40.00000	Averaged
6 Freon142b	2.22349	2.38475	0.010	-7.25242	40.00000	Averaged
13 Freon 134a	1.06546	1.08263	0.010	-1.61090	40.00000	Averaged
15 Freon 152a	0.76921	0.71530	0.010	7.00859	40.00000	Averaged
17 Freon 22	2.48505	2.47604	0.010	0.36272	40.00000	Averaged
26 Methanol	0.42691	0.43858	0.010	-2.73310	40.00000	Averaged
34 Dichlorofluoromethane/Fr21	2.20471	2.02146	0.010	8.31166	40.00000	Averaged
40 Freon123a	1.24571	1.26597	0.010	-1.62591	40.00000	Averaged
41 Freon123	2.20945	1.99602	0.010	9.65956	40.00000	Averaged
57 tert-Butyl-Alcohol	2.31844	2.55519	0.010	-10.21162	40.00000	Averaged
68 Isopropyl ether	4.46135	4.40489	0.010	1.26561	40.00000	Averaged
71 1-Propanol	0.27978	0.28956	0.010	-3.49575	40.00000	Averaged
73 t-Butylethyl Ether	3.80281	3.91432	0.010	-2.93226	40.00000	Averaged
77 Ethyl Acetate	0.42459	0.43341	0.010	-2.07900	40.00000	Averaged
92 tert-amyl-Methyl Ether	2.77937	2.90110	0.010	-4.37992	40.00000	Averaged
96 2-Heptanone	1.66671	1.67093	0.010	-0.25311	40.00000	Averaged
98 1-Butanol	0.24439	0.26396	0.010	-8.00737	40.00000	Averaged
99 Isobutanol	0.02737	0.03125	0.010	-14.15115	40.00000	Averaged
119 Butyl Acetate	0.36393	0.35451	0.010	2.58759	40.00000	Averaged
135 Cyclohexanone	0.49697	0.51793	0.010	-4.21816	40.00000	Averaged
146 Diisobutyl Ketone	1.12021	1.27492	0.010	-13.81134	40.00000	Averaged

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-31oct.b/7103103.d
Lab Smp Id: CCV
Client Smp ID: CCVsp
Inj Date : 31-OCT-2007 09:46
Operator : cb
Inst ID: msd7.i
Smp Info : 50mL #1487-400
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-31oct.b/t14q018c.m
Meth Date : 31-Oct-2007 10:11 cbond
Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10
Cal File: 7103005.d
Als bottle: 1
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: sp22aCCV.sub
Target Version: 3.50
Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 81 Bromochloromethane						CAS #: 74-97-5		
14.416	14.416 (1.000)	130	463876	25.0000		80.00- 120.00		100.00
14.416	14.416 (1.000)	128	354999			26.53- 126.53		76.53
14.388	14.388 (1.000)	49	661352			92.57- 192.57		142.57
* 97 1,4-Difluorobenzene						CAS #: 540-36-3		
16.158	16.158 (1.000)	114	1534485	25.0000		80.00- 120.00		100.00
16.158	16.158 (1.000)	88	232502			0.00- 65.15		15.15
* 126 Chlorobenzene-d5						CAS #: 3114-55-4		
21.356	21.356 (1.000)	117	1086840	25.0000		80.00- 120.00		100.00
21.356	21.356 (1.000)	82	571173			4.45- 104.45		52.55
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
15.494	15.494 (1.075)	65	620474	25.0000	24.898	80.00- 120.00		100.00
15.494	15.494 (1.075)	67	308909			2.91- 102.91		49.79
$ 113 Toluene-d8						CAS #: 2037-26-5		
18.757	18.757 (1.161)	98	1177812	25.0000	21.622	80.00- 120.00		100.00
18.757	18.757 (1.161)	70	127452			0.00- 61.46		10.82

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)								
18.757	18.757	(1.161)	100	805116			19.18- 119.18	68.36
$ 137 Bromofluorobenzene						CAS #: 460-00-4		
23.347	23.347	(1.093)	174	718692	25.0000	27.789	80.00- 120.00	100.00
23.319	23.319	(1.092)	95	847408			67.91- 167.91	117.91
23.347	23.347	(1.093)	176	708917			48.64- 148.64	98.64
5 Freon 143a						CAS #: 420-46-2		
5.307	5.307	(0.368)	65	532936	50.0000	52.691	80.00- 120.00	100.00
5.251	5.251	(0.364)	69	4523183			0.00- 50.00	848.73
5.307	5.307	(0.368)	64	153894			0.00- 77.08	28.88
6 Freon142b						CAS #: 75-68-3		
6.349	6.349	(0.440)	65	2212454	50.0000	53.626	80.00- 120.00	100.00
6.349	6.349	(0.440)	45	530044			0.00- 74.42	23.96
13 Freon 134a						CAS #: 811-97-2		
5.448	5.448	(0.378)	83	1004408	50.0000	50.805	80.00- 120.00	100.00
5.251	5.251	(0.364)	69	4523183			398.13- 498.13	450.33
5.448	5.448	(0.378)	63	134234			0.00- 64.08	13.36
15 Freon 152a						CAS #: 75-37-6		
5.673	5.673	(0.394)	65	663618	50.0000	46.496	80.00- 120.00	100.00
5.673	5.673	(0.394)	51	1155142			109.56- 209.56	174.07
5.673	5.673	(0.394)	47	308560			0.00- 90.52	46.50
17 Freon 22						CAS #: 75-45-6		
5.814	5.814	(0.403)	51	2297147	50.0000	49.819	80.00- 120.00	100.00
5.814	5.814	(0.403)	67	279057			0.00- 61.77	12.15
5.814	5.814	(0.403)	85	30585			0.00- 51.67	1.33
26 Methanol						CAS #: 67-56-1		
7.588	7.588	(0.526)	31	2441375	300.000	308.20	80.00- 120.00	100.00
7.588	7.588	(0.526)	32	1618580			16.30- 116.30	66.30
34 Dichlorofluoromethane/Fr21						CAS #: 75-43-4		
8.912	8.912	(0.618)	67	1875415	50.0000	45.844	80.00- 120.00	100.00
8.912	8.912	(0.618)	69	571309			0.00- 81.12	30.46
8.912	8.912	(0.618)	35	100430			0.00- 53.83	5.36
40 Freon123a						CAS #: 354-23-4		
9.798	9.798	(0.680)	117	1174502	50.0000	50.813	80.00- 120.00	100.00
9.798	9.798	(0.680)	67	1326977			110.97- 210.97	112.98
41 Freon123						CAS #: 306-83-2		
9.964	9.964	(0.691)	83	1851816	50.0000	45.170	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
41 Freon123 (continued)							
9.964	9.964 (0.691)	133	409193			0.00- 69.52	22.10
9.964	9.964 (0.691)	85	1337216			22.16- 122.16	72.21
57 tert-Butyl-Alcohol					CAS #: 75-65-0		
11.513	11.513 (0.799)	59	2370586	50.0000	55.106	80.00- 120.00	100.00
11.513	11.513 (0.799)	41	497431			0.00- 73.42	20.98
11.513	11.513 (0.799)	57	236752			0.00- 60.26	9.99
68 Isopropyl ether					CAS #: 108-20-3		
12.702	12.702 (0.881)	45	4086643	50.0000	49.367	80.00- 120.00	100.00
12.702	12.702 (0.881)	87	813582			0.00- 73.31	19.91
12.702	12.702 (0.881)	59	347107			0.00- 58.30	8.49
71 1-Propanol					CAS #: 71-23-8		
12.840	12.840 (0.891)	42	268643	50.0000	51.748	80.00- 120.00	100.00
12.840	12.840 (0.891)	59	331862			95.91- 195.91	123.53
12.702	12.702 (0.881)	41	789299			265.93- 365.93	293.81
73 t-Butylethyl Ether					CAS #: 637-92-3		
13.365	13.365 (0.927)	59	3631519	50.0000	51.466	80.00- 120.00	100.00
13.393	13.393 (0.929)	87	1284251			0.00- 88.95	35.36
13.365	13.365 (0.927)	41	645421			0.00- 67.89	17.77
77 Ethyl Acetate					CAS #: 141-78-6		
13.863	13.863 (0.962)	45	402101	50.0000	51.039	80.00- 120.00	100.00
13.863	13.863 (0.962)	61	360454			49.04- 149.04	89.64
13.863	13.863 (0.962)	43	2849164			622.55- 722.55	708.57
92 tert-amyl-Methyl Ether					CAS #: 994-05-8		
15.550	15.550 (1.079)	73	2691501	50.0000	52.190	80.00- 120.00	100.00
15.550	15.550 (1.079)	87	660904			0.00- 73.71	24.56
15.550	15.550 (1.079)	55	737402			0.00- 78.56	27.40
96 2-Heptanone					CAS #: 110-43-0		
22.517	22.517 (1.562)	58	1550207	50.0000	50.126	80.00- 120.00	100.00
22.517	22.517 (1.562)	43	2515986			108.53- 208.53	162.30
98 1-Butanol					CAS #: 71-36-3		
16.324	16.324 (1.010)	56	810079	50.0000	54.004	80.00- 120.00	100.00
16.324	16.324 (1.010)	41	606027			21.86- 121.86	74.81
16.324	16.324 (1.010)	43	469993			9.15- 109.15	58.02
99 Isobutanol					CAS #: 78-83-1		
15.162	15.162 (1.052)	59	28989	50.0000	57.076	80.00- 120.00	100.00
15.135	15.135 (1.050)	41	727257			2630.47-2730.47	2508.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
99 Isobutanol (continued)							
15.135	15.135 (1.050)	43	969609			3703.83-3803.83	3344.75
119 Butyl Acetate					CAS #: 123-86-4		
20.056	20.056 (1.241)	56	1087982	50.0000	48.706	80.00- 120.00	100.00
20.056	20.056 (1.241)	73	330668			0.00- 80.39	30.39
20.056	20.056 (1.241)	43	2814833			208.72- 308.72	258.72
135 Cyclohexanone					CAS #: 108-94-1		
23.291	23.291 (1.091)	55	1125812	50.0000	52.109	80.00- 120.00	100.00
23.291	23.291 (1.091)	98	458316			0.00- 90.62	40.71
23.264	23.264 (1.089)	42	798664			17.43- 117.43	70.94
146 Diisobutyl Ketone					CAS #: 108-83-8		
24.066	24.066 (1.127)	57	2771274	50.0000	56.906	80.00- 120.00	100.00
24.066	24.066 (1.127)	85	2165794			28.15- 128.15	78.15
0.000	1.000 (0.000)	0	0			0.00- 50.00	0.00

Data File: /chem/msd7.i/7-31oct.b/7103103.d
Report Date: 31-Oct-2007 10:11

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103103.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 31-OCT-2007
Calibration Time: 09:03
Client Smp ID: CCVsp
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	419527	251716	587338	463876	10.57
97 1,4-Difluorobenze	1400939	840563	1961315	1534485	9.53
126 Chlorobenzene-d5	1205049	723029	1687069	1086840	-9.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

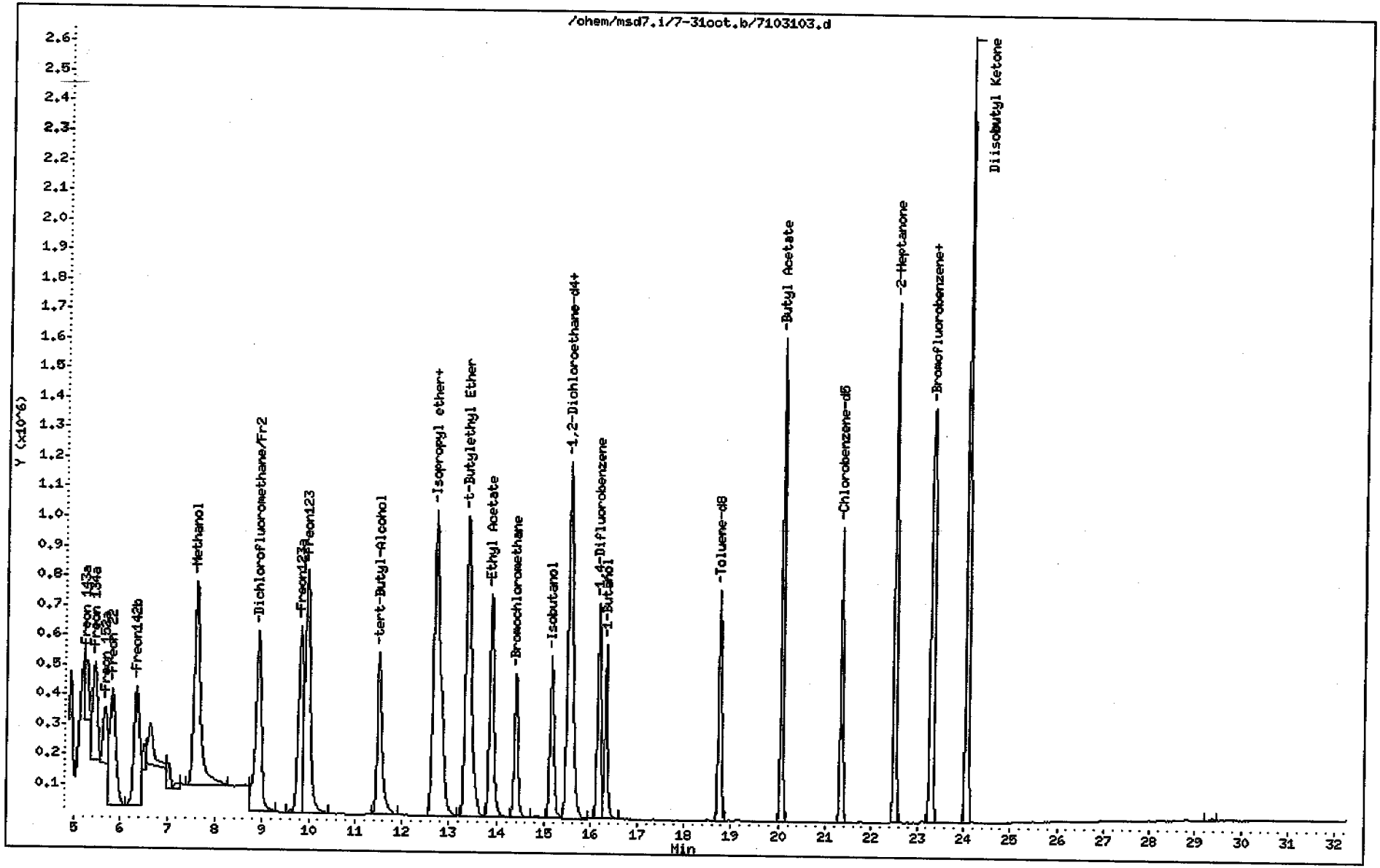
Data File: /ohem/msd7.i/7-31oct.b/7103103.d
Date : 31-OCT-2007 09:46
Client ID: CCVsp
Sample Info: 50mL #1487-400

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0316



Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710567-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	89
Freon 114	95
Chloromethane	88
Vinyl Chloride	91
1,3-Butadiene	93
Bromomethane	86
Chloroethane	93
Freon 11	97
Ethanol	106
Freon 113	112
1,1-Dichloroethene	108
Acetone	97
2-Propanol	105
Carbon Disulfide	91
Methylene Chloride	102
Methyl tert-butyl ether	100
trans-1,2-Dichloroethene	99
Hexane	101
1,1-Dichloroethane	103
2-Butanone (Methyl Ethyl Ketone)	105
cis-1,2-Dichloroethene	103
Tetrahydrofuran	107
Chloroform	106
1,1,1-Trichloroethane	105
Cyclohexane	108
Carbon Tetrachloride	108
Benzene	105
1,2-Dichloroethane	100
Heptane	108
Trichloroethene	106
1,2-Dichloropropane	104
1,4-Dioxane	105
Bromodichloromethane	106
cis-1,3-Dichloropropene	107
4-Methyl-2-pentanone	113
Toluene	111
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	109
Tetrachloroethene	117

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710567-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	106
Dibromochloromethane	115
1,2-Dibromoethane (EDB)	110
Chlorobenzene	108
Ethyl Benzene	107
m,p-Xylene	108
o-Xylene	108
Styrene	115
Bromoform	117
1,1,2,2-Tetrachloroethane	101
4-Ethyltoluene	102
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	104
1,3-Dichlorobenzene	104
1,4-Dichlorobenzene	102
alpha-Chlorotoluene	107
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	79
Hexachlorobutadiene	79
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR.sub
Client SDG: 7-30oct
Fraction: VOA
Client Smp ID: LCS-1
Operator: cb
SampleType: LCS
Quant Type: ISTD
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 200ppbv --> 50ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	44.695	89.39	70-130
16 Freon 114	50.000	47.383	94.77	70-130
18 Chloromethane	50.000	44.243	88.49	70-130
20 Vinyl Chloride	50.000	45.494	90.99	70-130
22 1,3-Butadiene	50.000	46.540	93.08	60-140
25 Bromomethane	50.000	43.110	86.22	70-130
27 Chloroethane	50.000	46.739	93.48	70-130
31 Trichlorofluoromet	50.000	48.382	96.76	70-130
38 Ethanol	50.000	53.289	106.58	60-140
42 Freon 113	50.000	56.017	112.03	70-130
43 1,1-Dichloroethene	50.000	54.185	108.37	70-130
45 Acetone	50.000	48.508	97.02	60-140
47 Carbon Disulfide	50.000	45.416	90.83	60-140
46 2-Propanol	50.000	52.333	104.67	60-140
54 Methylene Chloride	50.000	51.066	102.13	70-130
60 MTBE	50.000	50.149	100.30	60-140
61 trans-1,2-Dichloro	50.000	49.517	99.03	60-140
65 Hexane	50.000	50.386	100.77	60-140
69 Vinyl Acetate	50.000	48.823	97.65	60-140
70 1,1-Dichloroethane	50.000	51.415	102.83	70-130
76 cis-1,2-Dichloroet	50.000	51.539	103.08	70-130
75 2-Butanone	50.000	52.342	104.68	60-140
80 Tetrahydrofuran	50.000	53.637	107.27	60-140
82 Chloroform	50.000	53.192	106.38	70-130
85 Cyclohexane	50.000	54.117	108.23	60-140
83 1,1,1-Trichloroeth	50.000	52.447	104.89	70-130
87 Carbon Tetrachlori	50.000	53.910	107.82	70-130
91 Benzene	50.000	52.505	105.01	70-130
93 1,2-Dichloroethane	50.000	49.922	99.84	70-130
94 Heptane	50.000	53.809	107.62	60-140
101 Trichloroethene	50.000	52.959	105.92	70-130
104 1,2-Dichloropropan	50.000	52.059	104.12	70-130
106 1,4-Dioxane	50.000	52.419	104.84	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	52.855	105.71	60-140
110 cis-1,3-Dichloropr	50.000	53.385	106.77	70-130
111 4-Methyl-2-pentano	50.000	56.571	113.14	60-140
114 Toluene	50.000	55.548	111.10	70-130
116 trans-1,3-Dichloro	50.000	53.987	107.97	70-130
117 1,1,2-Trichloroeth	50.000	54.691	109.38	70-130
120 Tetrachloroethene	50.000	58.603	117.21	70-130
121 2-Hexanone	50.000	52.902	105.80	60-140
122 Dibromochlorometha	50.000	57.715	115.43	60-140
123 1,2-Dibromoethane	50.000	54.798	109.60	70-130
127 Chlorobenzene	50.000	54.090	108.18	70-130
128 Ethyl Benzene	50.000	53.518	107.04	70-130
129 m,p-Xylene	50.000	54.182	108.36	70-130
130 o-Xylene	50.000	53.861	107.72	70-130
131 Styrene	50.000	57.447	114.89	70-130
133 Bromoform	50.000	58.670	117.34	60-140
140 1,1,2,2-Tetrachlor	50.000	50.373	100.75	70-130
145 4-Ethyltoluene	50.000	51.219	102.44	60-140
147 1,3,5-Trimethylben	50.000	51.236	102.47	70-130
150 1,2,4-Trimethylben	50.000	51.788	103.58	70-130
155 1,3-Dichlorobenzen	50.000	51.753	103.51	70-130
156 1,4-Dichlorobenzen	50.000	50.830	101.66	70-130
159 alpha-Chlorotoluen	50.000	53.722	107.44	70-130
161 1,2-Dichlorobenzen	50.000	49.255	98.51	70-130
165 1,2,4-Trichloroben	50.000	39.305	78.61	70-130
166 Hexachlorobutadien	50.000	39.530	79.06	70-130
142 Propylbenzene	50.000	53.300	106.60	60-140
134 Cumene	50.000	56.915	113.83	60-140
51 3-Chloropropene	50.000	45.821	91.64	60-140
89 2,2,4-Trimethylpen	50.000	53.699	107.40	60-140
29 Isopentane	50.000	46.697	93.39	70-130
19 Butane	50.000	46.887	93.77	70-130
102 Methyl Cyclohexane	50.000	55.157	110.31	70-130
11 Propylene	50.000	47.335	94.67	60-140
167 Naphthalene	50.000	36.786	73.57	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	23.286	93.14	70-130
$ 113 Toluene-d8	25.000	25.291	101.17	70-130
$ 137 Bromofluorobenzene	25.000	26.060	104.24	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-30oct.b/7103007.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 30-OCT-2007 12:53
Operator : cb Inst ID: msd7.i
Smp Info : 50mL #1443-302
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-30oct.b/t14q018c.m
Meth Date : 30-Oct-2007 12:35 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.416	14.388 (1.000)	130	529735	25.0000		80.00- 120.00	100.00
14.416	14.388 (1.000)	128	415367			26.27- 126.27	78.41
14.416	14.388 (1.000)	49	987072			132.02- 232.02	186.33
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.158	16.158 (1.000)	114	1788111	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	266440			0.00- 64.88	14.90
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.356	21.356 (1.000)	117	1434159	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	763791			4.45- 104.45	53.26
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.494	15.494 (1.075)	65	662674	23.2858	23.286	80.00- 120.00	100.00
15.494	15.494 (1.075)	67	372212			2.91- 102.91	56.17
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.757	18.757 (1.161)	98	1605376	25.2913	25.291	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	174292			0.00- 61.46	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1126718			19.18- 119.18	70.18
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	889346	26.0599	26.060	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	1045092			67.21- 167.21	117.51
23.347	23.347 (1.093)	176	855199			47.52- 147.52	96.16
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1080732	47.3348	47.335	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	758205			21.19- 121.19	70.16
5.617	5.617 (0.390)	39	819123			24.83- 124.83	75.79
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.758	5.729 (0.399)	85	3741501	44.6948	44.695	80.00- 120.00	100.00
5.758	5.729 (0.399)	87	1204042			0.00- 83.07	32.18
16 Freon 114					CAS #: 76-14-2		
6.208	6.180 (0.431)	135	2699724	47.3834	47.383	80.00- 120.00	100.00
6.208	6.180 (0.431)	137	842034			0.00- 83.01	31.19
18 Chloromethane					CAS #: 74-87-3		
6.518	6.518 (0.452)	50	1218046	44.2433	44.243	80.00- 120.00	100.00
6.518	6.518 (0.452)	52	415260			0.00- 84.80	34.09
20 Vinyl Chloride					CAS #: 75-01-4		
6.884	6.856 (0.478)	62	1563609	45.4941	45.494	80.00- 120.00	100.00
6.884	6.856 (0.478)	64	479898			0.00- 83.25	30.69
22 1,3-Butadiene					CAS #: 106-99-0		
6.940	6.912 (0.481)	54	1145763	46.5397	46.540	80.00- 120.00	100.00
6.940	6.912 (0.481)	39	1164351			55.97- 155.97	101.62
25 Bromomethane					CAS #: 74-83-9		
8.039	8.010 (0.558)	94	1311935	43.1103	43.110	80.00- 120.00	100.00
8.039	8.010 (0.558)	96	1233551			44.26- 144.26	94.03
27 Chloroethane					CAS #: 75-00-3		
8.377	8.348 (0.581)	64	712651	46.7390	46.739	80.00- 120.00	100.00
8.377	8.348 (0.581)	49	207040			0.00- 79.34	29.05
8.377	8.348 (0.581)	66	223107			0.00- 83.15	31.31
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.968	8.940 (0.622)	101	3778468	48.3819	48.382	80.00- 120.00	100.00
8.968	8.940 (0.622)	103	2422040			14.62- 114.62	64.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.467	9.439 (0.657)	45	567632	53.2890	53.289	80.00- 120.00	100.00
9.467	9.439 (0.657)	43	116184			0.00- 72.83	20.47
9.467	9.439 (0.657)	46	216971			0.00- 88.20	38.22
42 Freon 113					CAS #: 76-13-1		
10.213	10.186 (0.708)	151	2433127	56.0169	56.017	80.00- 120.00	100.00
10.213	10.186 (0.708)	153	1556119			13.32- 113.32	63.96
10.213	10.186 (0.708)	101	2816343			65.00- 165.00	115.75
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.351	10.324 (0.718)	61	2504409	54.1854	54.185	80.00- 120.00	100.00
10.351	10.324 (0.718)	96	1499043			8.41- 108.41	59.86
10.351	10.324 (0.718)	98	961913			0.00- 87.87	38.41
45 Acetone					CAS #: 67-64-1		
10.490	10.462 (0.728)	58	692990	48.5078	48.508	80.00- 120.00	100.00
10.490	10.462 (0.728)	43	2199422			247.10- 347.10	317.38
46 2-Propanol					CAS #: 67-63-0		
10.683	10.656 (0.741)	45	2652508	52.3327	52.333	80.00- 120.00	100.00
10.683	10.656 (0.741)	43	664875			0.00- 75.54	25.07
10.683	10.656 (0.741)	59	102315			0.00- 53.72	3.86
47 Carbon Disulfide					CAS #: 75-15-0		
10.904	10.877 (0.756)	76	4004870	45.4158	45.416	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.181	11.153 (0.776)	76	657547	45.8208	45.821	80.00- 120.00	100.00
11.181	11.153 (0.776)	41	1928305			224.96- 324.96	293.26
54 Methylene Chloride					CAS #: 75-09-2		
11.485	11.457 (0.797)	49	1735263	51.0660	51.066	80.00- 120.00	100.00
11.485	11.457 (0.797)	84	1224720			18.75- 118.75	70.58
11.485	11.457 (0.797)	51	523567			0.00- 80.85	30.17
60 MTBE					CAS #: 1634-04-4		
11.844	11.817 (0.822)	73	2589270	50.1494	50.149	80.00- 120.00	100.00
11.817	11.817 (0.820)	57	621630			0.00- 74.40	24.01
11.817	11.817 (0.820)	41	605545			0.00- 76.16	23.39
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.955	11.927 (0.829)	96	1554999	49.5167	49.517	80.00- 120.00	100.00
11.955	11.927 (0.829)	61	2276405			97.12- 197.12	146.39
11.955	11.927 (0.829)	98	988955			11.77- 111.77	63.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.315	12.287 (0.854)	57	2257927	50.3855	50.386	80.00- 120.00	100.00
12.315	12.287 (0.854)	43	1501852			17.84- 117.84	66.51
12.315	12.287 (0.854)	86	329182			0.00- 65.07	14.58
69 Vinyl Acetate					CAS #: 108-05-4		
12.812	12.785 (0.889)	86	330585	48.8232	48.823	80.00- 120.00	100.00
12.812	12.785 (0.889)	43	4115638			1150.46-1250.46	1244.96
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.840	12.812 (0.891)	63	2759853	51.4155	51.415	80.00- 120.00	100.00
12.840	12.812 (0.891)	65	868326			0.00- 80.90	31.46
75 2-Butanone					CAS #: 78-93-3		
13.891	13.891 (0.964)	72	600528	52.3416	52.342	80.00- 120.00	100.00
13.891	13.891 (0.964)	43	2871641			440.65- 540.65	478.19
13.891	13.891 (0.964)	57	214510			0.00- 86.57	35.72
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.946	13.918 (0.967)	61	1936419	51.5391	51.539	80.00- 120.00	100.00
13.946	13.918 (0.967)	96	1459588			23.56- 123.56	75.38
13.946	13.918 (0.967)	98	926239			0.00- 97.14	47.83
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (0.998)	42	1604527	53.6374	53.637	80.00- 120.00	100.00
14.388	14.388 (0.998)	71	558806			0.00- 84.24	34.83
14.388	14.388 (0.998)	72	608660			0.00- 87.82	37.93
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.004)	83	2837063	53.1919	53.192	80.00- 120.00	100.00
14.471	14.471 (1.004)	85	1839710			14.87- 114.87	64.85
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.029)	97	2816975	52.4472	52.447	80.00- 120.00	100.00
14.831	14.831 (1.029)	99	1824584			14.34- 114.34	64.77
85 Cyclohexane					CAS #: 110-82-7		
14.858	14.831 (1.031)	84	1664831	54.1169	54.117	80.00- 120.00	100.00
14.858	14.831 (1.031)	56	2086146			77.34- 177.34	125.31
14.858	14.831 (1.031)	41	1166545			23.26- 123.26	70.07
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.107	15.080 (1.048)	119	2714250	53.9100	53.910	80.00- 120.00	100.00
15.107	15.080 (1.048)	117	2807741			53.20- 153.20	103.44
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.069)	57	5774309	53.6989	53.699	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.069)	56	1954352			0.00- 84.62	33.85
15.411	15.411 (1.069)	41	1485500			0.00- 79.27	25.73
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	3730288	52.5046	52.505	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	821399			0.00- 71.87	22.02
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.632	15.633 (0.967)	62	1884476	49.9221	49.922	80.00- 120.00	100.00
15.632	15.633 (0.967)	64	593555			0.00- 82.89	31.50
94 Heptane					CAS #: 142-82-5		
15.715	15.715 (0.973)	71	1175738	53.8093	53.809	80.00- 120.00	100.00
15.715	15.715 (0.973)	43	2340425			158.53- 258.53	199.06
15.715	15.715 (0.973)	57	1225065			59.34- 159.34	104.20
101 Trichloroethene					CAS #: 79-01-6		
16.655	16.628 (1.031)	95	1671359	52.9591	52.959	80.00- 120.00	100.00
16.655	16.628 (1.031)	130	1714710			52.84- 152.84	102.59
16.655	16.628 (1.031)	97	1073960			15.58- 115.58	64.26
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.125	17.126 (1.060)	63	1419422	52.0592	52.059	80.00- 120.00	100.00
17.125	17.126 (1.060)	62	1032035			22.45- 122.45	72.71
17.125	17.126 (1.060)	41	832954			10.58- 110.58	58.68
106 1,4-Dioxane					CAS #: 123-91-1		
17.264	17.236 (1.068)	88	929580	52.4192	52.419	80.00- 120.00	100.00
17.264	17.236 (1.068)	58	645820			20.40- 120.40	69.47
17.264	17.236 (1.068)	57	209588			0.00- 74.60	22.55
107 Bromodichloromethane					CAS #: 75-27-4		
17.568	17.540 (1.087)	83	2896003	52.8547	52.855	80.00- 120.00	100.00
17.568	17.540 (1.087)	85	1866215			14.90- 114.90	64.44
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	2056801	53.3852	53.385	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	654881			0.00- 82.10	31.84
18.342	18.314 (1.135)	39	1112689			6.03- 106.03	54.10
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1202760	56.5707	56.571	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	3099833			222.97- 322.97	257.73
18.508	18.508 (1.145)	85	473004			0.00- 90.48	39.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	4322607	55.5478	55.548	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	2747129			13.85- 113.85	63.55
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2198938	53.9867	53.987	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	707541			0.00- 81.65	32.18
19.310	19.310 (0.904)	39	1104656			1.74- 101.74	50.24
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.669	19.642 (0.921)	97	1624617	54.6913	54.691	80.00- 120.00	100.00
19.669	19.642 (0.921)	99	1022479			12.71- 112.71	62.94
19.669	19.642 (0.921)	83	1344765			32.61- 132.61	82.77
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2257776	58.6031	58.603	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1581884			20.11- 120.11	70.06
19.835	19.835 (0.929)	131	1513643			17.39- 117.39	67.04
121 2-Hexanone					CAS #: 591-78-6		
19.973	19.973 (0.935)	58	1684145	52.9019	52.902	80.00- 120.00	100.00
19.973	19.973 (0.935)	43	3096301			138.15- 238.15	183.85
19.973	19.973 (0.935)	100	296396			0.00- 67.05	17.60
122 Dibromochloromethane					CAS #: 124-48-1		
20.360	20.361 (0.953)	129	3037706	57.7152	57.715	80.00- 120.00	100.00
20.360	20.361 (0.953)	127	2351240			27.62- 127.62	77.40
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.637	20.609 (0.966)	107	2668501	54.7978	54.798	80.00- 120.00	100.00
20.637	20.609 (0.966)	109	2521462			44.94- 144.94	94.49
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	3509395	54.0897	54.090	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1127100			0.00- 82.39	32.12
21.411	21.411 (1.003)	77	2405316			18.52- 118.52	68.54
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	1772440	53.5182	53.518	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	5439513			261.69- 361.69	306.89
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2246027	54.1817	54.182	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	4280438			145.05- 245.05	190.58
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	1934888	53.8614	53.861	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.379	22.379	(1.048)	91	3917021			151.95- 251.95	202.44
131 Styrene						CAS #: 100-42-5		
22.434	22.407	(1.050)	104	3191877	57.4472	57.447	80.00- 120.00	100.00
22.407	22.407	(1.049)	78	1547820			0.00- 98.56	48.49
133 Bromoform						CAS #: 75-25-2		
22.821	22.821	(1.069)	173	2711522	58.6698	58.670	80.00- 120.00	100.00
22.821	22.821	(1.069)	171	1410237			1.85- 101.85	52.01
134 Cumene						CAS #: 98-82-8		
22.960	22.960	(1.075)	105	5162861	56.9150	56.915	80.00- 120.00	100.00
22.960	22.960	(1.075)	120	1436629			0.00- 78.08	27.83
22.960	22.960	(1.075)	51	506494			0.00- 61.43	9.81
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.540	23.540	(1.102)	83	3022599	50.3733	50.373	80.00- 120.00	100.00
23.540	23.540	(1.102)	85	1960908			14.83- 114.83	64.87
142 Propylbenzene						CAS #: 103-65-1		
23.651	23.651	(1.107)	91	6484821	53.3004	53.300	80.00- 120.00	100.00
23.651	23.651	(1.107)	120	1533743			0.00- 72.94	23.65
23.651	23.651	(1.107)	105	239433			0.00- 54.03	3.69
145 4-Ethyltoluene						CAS #: 622-96-8		
23.817	23.817	(1.115)	105	5502964	51.2189	51.219	80.00- 120.00	100.00
23.817	23.817	(1.115)	120	1758369			0.00- 82.17	31.95
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.927	23.927	(1.120)	105	4324004	51.2366	51.236	80.00- 120.00	100.00
23.927	23.927	(1.120)	120	2255299			3.80- 103.80	52.16
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.563	24.563	(1.150)	105	3971973	51.7880	51.788	80.00- 120.00	100.00
24.563	24.563	(1.150)	120	1954550			0.00- 98.95	49.21
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.116	25.116	(1.176)	146	3071599	51.7529	51.753	80.00- 120.00	100.00
25.144	25.116	(1.177)	148	1974895			14.48- 114.48	64.30
25.116	25.116	(1.176)	111	1165738			0.00- 89.68	37.95
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.282	25.282	(1.184)	146	3144033	50.8295	50.830	80.00- 120.00	100.00
25.282	25.282	(1.184)	148	2019153			13.81- 113.81	64.22
25.282	25.282	(1.184)	111	1145503			0.00- 87.35	36.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	4411435	53.7220	53.722	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	946359			0.00- 71.29	21.45
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	2721846	49.2553	49.255	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	1716721			13.92- 113.92	63.07
25.918	25.918 (1.214)	111	1054147			0.00- 88.82	38.73
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	888344	39.3054	39.305	80.00- 120.00	100.00
28.821	28.821 (1.350)	182	835109			44.66- 144.66	94.01
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	742724	39.5297	39.530	80.00- 120.00	100.00
28.987	28.987 (1.357)	223	462356			12.64- 112.64	62.25
29 Isopentane					CAS #: 78-78-4		
8.377	8.348 (0.581)	43	1763310	46.6971	46.697	80.00- 120.00	100.00
8.377	8.348 (0.581)	57	1150842			16.48- 116.48	65.27
19 Butane					CAS #: 106-97-8		
6.771	6.743 (0.470)	58	276539	46.8866	46.887	80.00- 120.00	100.00
6.771	6.743 (0.470)	43	2219470			757.70- 857.70	802.59
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.932	16.904 (1.175)	83	2088476	55.1570	55.157	80.00- 120.00	100.00
16.932	16.904 (1.175)	98	993987			0.00- 96.13	47.59
16.904	16.904 (1.173)	55	1784263			38.51- 138.51	85.43
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	1557709	36.7866	36.786	80.00- 120.00	100.00
29.374	29.374 (1.375)	127	181122			0.00- 62.50	11.63

Data File: /chem/msd7.i/7-30oct.b/7103007.d
Report Date: 30-Oct-2007 13:14

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103007.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-30oct.b/t14q018c.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 30-OCT-2007
Calibration Time: 12:15
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	537758	322655	752861	529735	-1.49
97 1,4-Difluorobenze	1771565	1062939	2480191	1788111	0.93
126 Chlorobenzene-d5	1414884	848930	1980838	1434159	1.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.42	0.19
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

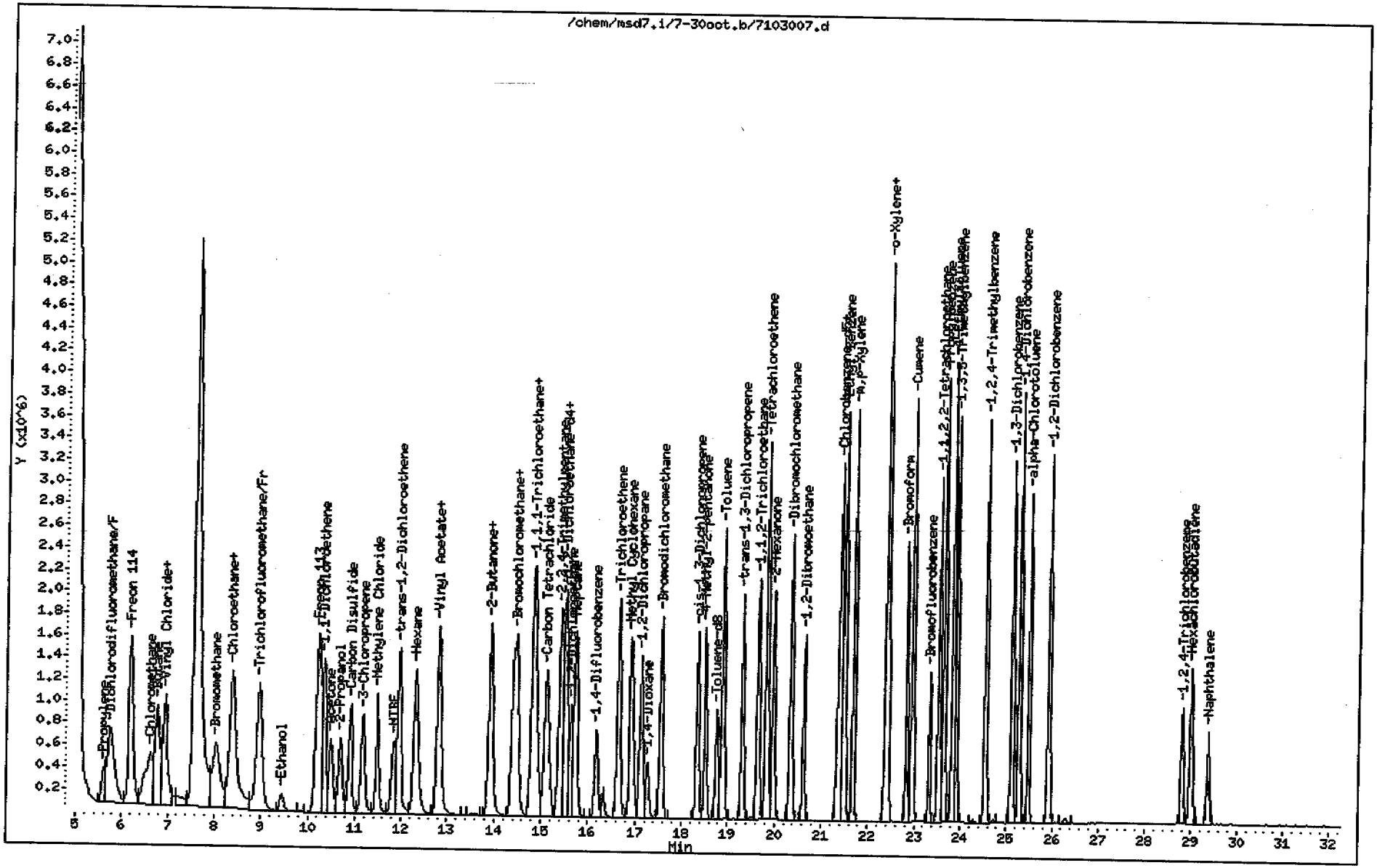
Data File: /chem/msd7.i/7-30oct.b/7103007.d
Date : 30-OCT-2007 12:53
Client ID: LCS-1
Sample Info: 50mL #1443-302

Column phase: RTx-624

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

0330



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710567-08B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
Freon 12	93
Freon 114	100
Chloromethane	93
Vinyl Chloride	91
1,3-Butadiene	95
Bromomethane	87
Chloroethane	91
Freon 11	99
Ethanol	107
Freon 113	112
1,1-Dichloroethene	109
Acetone	96
2-Propanol	106
Carbon Disulfide	88
Methylene Chloride	104
Methyl tert-butyl ether	99
trans-1,2-Dichloroethene	97
Hexane	99
1,1-Dichloroethane	102
2-Butanone (Methyl Ethyl Ketone)	99
cis-1,2-Dichloroethene	104
Tetrahydrofuran	110
Chloroform	109
1,1,1-Trichloroethane	112
Cyclohexane	104
Carbon Tetrachloride	117
Benzene	104
1,2-Dichloroethane	108
Heptane	105
Trichloroethene	109
1,2-Dichloropropane	106
1,4-Dioxane	105
Bromodichloromethane	111
cis-1,3-Dichloropropene	107
4-Methyl-2-pentanone	116
Toluene	112
trans-1,3-Dichloropropene	110
1,1,2-Trichloroethane	109
Tetrachloroethene	120

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710567-08B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	122
1,2-Dibromoethane (EDB)	112
Chlorobenzene	110
Ethyl Benzene	109
m,p-Xylene	109
o-Xylene	109
Styrene	116
Bromoform	128
1,1,2,2-Tetrachloroethane	102
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	106
1,2,4-Trimethylbenzene	108
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	107
alpha-Chlorotoluene	110
1,2-Dichlorobenzene	102
1,2,4-Trichlorobenzene	85
Hexachlorobutadiene	87
Chlorodifluoromethane	Not Spiked
Methanol	Not Spiked
n-Butanol	Not Spiked
Propylene	99

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	108	70-130

Data File: /chem/msd7.i/7-31oct.b/7103104.d
Report Date: 31-Oct-2007 11:05

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: LCS-1
Level: LOW
Data Type: MS DATA
SpikeList File: 2926spectra.spk
Sublist File: AT04ENSR.sub
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 200ppbv --> 50ppbv

Client SDG: 7-31oct
Fraction: VOA
Client Smp ID: LCS-1
Operator: cb
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
12 Dichlorodifluorome	50.000	46.445	92.89	70-130
16 Freon 114	50.000	49.773	99.55	70-130
18 Chloromethane	50.000	46.303	92.61	70-130
20 Vinyl Chloride	50.000	45.576	91.15	70-130
22 1,3-Butadiene	50.000	47.655	95.31	60-140
25 Bromomethane	50.000	43.431	86.86	70-130
27 Chloroethane	50.000	45.629	91.26	70-130
31 Trichlorofluoromet	50.000	49.586	99.17	70-130
38 Ethanol	50.000	53.680	107.36	60-140
42 Freon 113	50.000	56.222	112.44	70-130
43 1,1-Dichloroethene	50.000	54.559	109.12	70-130
45 Acetone	50.000	48.181	96.36	60-140
47 Carbon Disulfide	50.000	44.070	88.14	60-140
46 2-Propanol	50.000	53.175	106.35	60-140
54 Methylene Chloride	50.000	51.963	103.93	70-130
60 MTBE	50.000	49.499	99.00	60-140
61 trans-1,2-Dichloro	50.000	48.301	96.60	60-140
65 Hexane	50.000	49.543	99.09	60-140
69 Vinyl Acetate	50.000	45.388	90.78	60-140
70 1,1-Dichloroethane	50.000	51.131	102.26	70-130
76 cis-1,2-Dichloroet	50.000	52.238	104.48	70-130
75 2-Butanone	50.000	49.417	98.83	60-140
80 Tetrahydrofuran	50.000	54.977	109.95	60-140
82 Chloroform	50.000	54.307	108.61	70-130
85 Cyclohexane	50.000	52.088	104.18	60-140
83 1,1,1-Trichloroeth	50.000	56.251	112.50	70-130
87 Carbon Tetrachlori	50.000	58.332	116.66	70-130
91 Benzene	50.000	52.059	104.12	70-130
93 1,2-Dichloroethane	50.000	53.979	107.96	70-130
94 Heptane	50.000	52.440	104.88	60-140
101 Trichloroethene	50.000	54.366	108.73	70-130
104 1,2-Dichloropropan	50.000	52.803	105.61	70-130
106 1,4-Dioxane	50.000	52.496	104.99	60-140

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
107 Bromodichlorometha	50.000	55.739	111.48	60-140
110 cis-1,3-Dichloropr	50.000	53.597	107.19	70-130
111 4-Methyl-2-pentano	50.000	58.050	116.10	60-140
114 Toluene	50.000	55.772	111.54	70-130
116 trans-1,3-Dichloro	50.000	55.000	110.00	70-130
117 1,1,2-Trichloroeth	50.000	54.728	109.46	70-130
120 Tetrachloroethene	50.000	60.298	120.60	70-130
121 2-Hexanone	50.000	53.454	106.91	60-140
122 Dibromochlorometha	50.000	61.198	122.40	60-140
123 1,2-Dibromoethane	50.000	56.114	112.23	70-130
127 Chlorobenzene	50.000	55.048	110.10	70-130
128 Ethyl Benzene	50.000	54.591	109.18	70-130
129 m,p-Xylene	50.000	54.592	109.18	70-130
130 o-Xylene	50.000	54.628	109.26	70-130
131 Styrene	50.000	58.070	116.14	70-130
133 Bromoform	50.000	63.896	127.79	60-140
140 1,1,2,2-Tetrachlor	50.000	50.875	101.75	70-130
145 4-Ethyltoluene	50.000	53.132	106.26	60-140
147 1,3,5-Trimethylben	50.000	52.901	105.80	70-130
150 1,2,4-Trimethylben	50.000	54.037	108.07	70-130
155 1,3-Dichlorobenzen	50.000	54.450	108.90	70-130
156 1,4-Dichlorobenzen	50.000	53.473	106.95	70-130
159 alpha-Chlorotoluen	50.000	55.197	110.39	70-130
161 1,2-Dichlorobenzen	50.000	50.782	101.56	70-130
165 1,2,4-Trichloroben	50.000	42.401	84.80	70-130
166 Hexachlorobutadien	50.000	43.545	87.09	70-130
142 Propylbenzene	50.000	54.427	108.85	60-140
134 Cumene	50.000	58.119	116.24	60-140
51 3-Chloropropene	50.000	45.038	90.08	60-140
89 2,2,4-Trimethylpen	50.000	54.192	108.38	60-140
29 Isopentane	50.000	47.296	94.59	70-130
19 Butane	50.000	47.698	95.40	70-130
102 Methyl Cyclohexane	50.000	53.735	107.47	70-130
11 Propylene	50.000	49.377	98.75	60-140
167 Naphthalene	50.000	38.257	76.51	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 90 1,2-Dichloroethane	25.000	25.489	101.96	70-130
$ 113 Toluene-d8	25.000	25.175	100.70	70-130
$ 137 Bromofluorobenzene	25.000	27.037	108.15	70-130

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msd7.i/7-31oct.b/7103104.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 31-OCT-2007 10:30
Operator : cb Inst ID: msd7.i
Smp Info : 50mL #1443-302
Misc Info : 200ppbv --> 50ppbv
Comment :
Method : /chem/msd7.i/7-31oct.b/t14q018c.m
Meth Date : 31-Oct-2007 10:12 cbond Quant Type: ISTD
Cal Date : 30-OCT-2007 11:10 Cal File: 7103005.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 81 Bromochloromethane						CAS #: 74-97-5	
14.388	14.388 (1.000)	130	478234	25.0000		80.00- 120.00	100.00
14.388	14.388 (1.000)	128	372894			26.85- 126.85	77.97
14.388	14.388 (1.000)	49	916736			148.03- 248.03	191.69
* 97 1,4-Difluorobenzene						CAS #: 540-36-3	
16.158	16.158 (1.000)	114	1606107	25.0000		80.00- 120.00	100.00
16.158	16.158 (1.000)	88	248141			0.00- 65.22	15.45
* 126 Chlorobenzene-d5						CAS #: 3114-55-4	
21.356	21.356 (1.000)	117	1311308	25.0000		80.00- 120.00	100.00
21.356	21.356 (1.000)	82	699124			4.45- 104.45	53.32
$ 90 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
15.494	15.494 (1.077)	65	654862	25.4894	25.489	80.00- 120.00	100.00
15.494	15.494 (1.077)	67	353736			2.91- 102.91	54.02
$ 113 Toluene-d8						CAS #: 2037-26-5	
18.757	18.757 (1.161)	98	1435356	25.1753	25.175	80.00- 120.00	100.00
18.757	18.757 (1.161)	70	152929			0.00- 61.46	10.65

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 113 Toluene-d8 (continued)							
18.757	18.757 (1.161)	100	1000162			19.18- 119.18	69.68
$ 137 Bromofluorobenzene					CAS #: 460-00-4		
23.347	23.347 (1.093)	174	843660	27.0373	27.037	80.00- 120.00	100.00
23.319	23.319 (1.092)	95	976276			66.59- 166.59	115.72
23.347	23.347 (1.093)	176	816366			46.44- 146.44	96.76
11 Propylene					CAS #: 115-07-1		
5.617	5.617 (0.390)	41	1017767	49.3775	49.377	80.00- 120.00	100.00
5.617	5.617 (0.390)	42	703345			21.19- 121.19	69.11
5.617	5.617 (0.390)	39	780858			24.83- 124.83	76.72
12 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.730	5.729 (0.398)	85	3510016	46.4449	46.445	80.00- 120.00	100.00
5.730	5.729 (0.398)	87	1137703			0.00- 83.07	32.41
16 Freon 114					CAS #: 76-14-2		
6.180	6.180 (0.430)	135	2560182	49.7733	49.773	80.00- 120.00	100.00
6.180	6.208 (0.430)	137	810353			0.00- 81.85	31.65
18 Chloromethane					CAS #: 74-87-3		
6.490	6.518 (0.451)	50	1150823	46.3032	46.303	80.00- 120.00	100.00
6.518	6.518 (0.453)	52	389900			0.00- 84.80	33.88
20 Vinyl Chloride					CAS #: 75-01-4		
6.856	6.856 (0.476)	62	1414143	45.5763	45.576	80.00- 120.00	100.00
6.856	6.856 (0.476)	64	440820			0.00- 83.25	31.17
22 1,3-Butadiene					CAS #: 106-99-0		
6.912	6.940 (0.480)	54	1059156	47.6549	47.655	80.00- 120.00	100.00
6.912	6.940 (0.480)	39	1096849			55.97- 155.97	103.56
25 Bromomethane					CAS #: 74-83-9		
8.011	8.010 (0.557)	94	1193187	43.4306	43.431	80.00- 120.00	100.00
8.011	8.010 (0.557)	96	1140292			45.02- 145.02	95.57
27 Chloroethane					CAS #: 75-00-3		
8.349	8.348 (0.580)	64	628086	45.6289	45.629	80.00- 120.00	100.00
8.349	8.348 (0.580)	49	189619			0.00- 79.34	30.19
8.349	8.348 (0.580)	66	197831			0.00- 83.15	31.50
31 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
8.940	8.940 (0.621)	101	3496019	49.5860	49.586	80.00- 120.00	100.00
8.940	8.940 (0.621)	103	2256130			14.87- 114.87	64.53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 Ethanol					CAS #: 64-17-5		
9.439	9.439 (0.656)	45	516208	53.6802	53.680	80.00- 120.00	100.00
9.439	9.439 (0.656)	43	115667			0.00- 72.83	22.41
9.439	9.439 (0.656)	46	194219			0.00- 88.20	37.62
42 Freon 113					CAS #: 76-13-1		
10.186	10.185 (0.708)	151	2204628	56.2222	56.222	80.00- 120.00	100.00
10.186	10.185 (0.708)	153	1404503			14.13- 114.13	63.71
10.186	10.185 (0.708)	101	2530383			65.89- 165.89	114.78
43 1,1-Dichloroethene					CAS #: 75-35-4		
10.324	10.324 (0.718)	61	2276539	54.5595	54.559	80.00- 120.00	100.00
10.324	10.324 (0.718)	96	1309004			7.00- 107.00	57.50
10.324	10.324 (0.718)	98	847438			0.00- 86.85	37.22
45 Acetone					CAS #: 67-64-1		
10.462	10.490 (0.727)	58	621400	48.1808	48.181	80.00- 120.00	100.00
10.462	10.462 (0.727)	43	2080852			247.10- 347.10	334.87
46 2-Propanol					CAS #: 67-63-0		
10.656	10.656 (0.741)	45	2433186	53.1753	53.175	80.00- 120.00	100.00
10.656	10.656 (0.741)	43	623331			0.00- 75.54	25.62
10.656	10.656 (0.741)	59	89969			0.00- 53.72	3.70
47 Carbon Disulfide					CAS #: 75-15-0		
10.877	10.877 (0.756)	76	3508378	44.0700	44.070	80.00- 120.00	100.00
51 3-Chloropropene					CAS #: 107-05-1		
11.153	11.153 (0.775)	76	583486	45.0386	45.038	80.00- 120.00	100.00
11.153	11.153 (0.775)	41	1787906			224.96- 324.96	306.42
54 Methylene Chloride					CAS #: 75-09-2		
11.458	11.457 (0.796)	49	1594094	51.9635	51.963	80.00- 120.00	100.00
11.458	11.457 (0.796)	84	1063410			13.10- 113.10	66.71
11.458	11.457 (0.796)	51	484713			0.00- 80.85	30.41
60 MTBE					CAS #: 1634-04-4		
11.817	11.817 (0.821)	73	2307224	49.4990	49.499	80.00- 120.00	100.00
11.817	11.817 (0.821)	57	568382			0.00- 75.40	24.63
11.817	11.817 (0.821)	41	591222			0.00- 76.16	25.62
61 trans-1,2-Dichloroethene					CAS #: 156-60-5		
11.928	11.927 (0.829)	96	1369351	48.3008	48.301	80.00- 120.00	100.00
11.928	11.927 (0.829)	61	2035885			104.32- 204.32	148.68
11.928	11.927 (0.829)	98	870675			11.77- 111.77	63.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
65 Hexane					CAS #: 110-54-3		
12.287	12.287 (0.854)	57	2004328	49.5431	49.543	80.00- 120.00	100.00
12.287	12.287 (0.854)	43	1378779			17.84- 117.84	68.79
12.287	12.287 (0.854)	86	279674			0.00- 65.07	13.95
69 Vinyl Acetate					CAS #: 108-05-4		
12.785	12.784 (0.889)	86	277444	45.3875	45.388	80.00- 120.00	100.00
12.785	12.784 (0.889)	43	3824647			1150.46-1250.46	1378.53
70 1,1-Dichloroethane					CAS #: 75-34-3		
12.812	12.812 (0.890)	63	2477761	51.1312	51.131	80.00- 120.00	100.00
12.812	12.812 (0.890)	65	769133			0.00- 80.24	31.04
75 2-Butanone					CAS #: 78-93-3		
13.891	13.890 (0.965)	72	511857	49.4175	49.417	80.00- 120.00	100.00
13.891	13.890 (0.965)	43	2682101			526.71- 626.71	523.99
13.891	13.890 (0.965)	57	196767			0.00- 86.57	38.44
76 cis-1,2-Dichloroethene					CAS #: 156-59-2		
13.918	13.918 (0.967)	61	1771858	52.2377	52.238	80.00- 120.00	100.00
13.918	13.918 (0.967)	96	1274732			18.90- 118.90	71.94
13.918	13.918 (0.967)	98	816825			0.00- 94.55	46.10
80 Tetrahydrofuran					CAS #: 109-99-9		
14.388	14.388 (1.000)	42	1484724	54.9775	54.977	80.00- 120.00	100.00
14.388	14.388 (1.000)	71	489394			0.00- 80.40	32.96
14.388	14.388 (1.000)	72	520975			0.00- 87.82	35.09
82 Chloroform					CAS #: 67-66-3		
14.471	14.471 (1.006)	83	2614955	54.3074	54.307	80.00- 120.00	100.00
14.471	14.471 (1.006)	85	1715820			14.74- 114.74	65.62
83 1,1,1-Trichloroethane					CAS #: 71-55-6		
14.831	14.831 (1.031)	97	2727564	56.2513	56.251	80.00- 120.00	100.00
14.831	14.831 (1.031)	99	1750821			14.60- 114.60	64.19
85 Cyclohexane					CAS #: 110-82-7		
14.831	14.831 (1.031)	84	1446634	52.0882	52.088	80.00- 120.00	100.00
14.831	14.831 (1.031)	56	1900257			86.08- 186.08	131.36
14.831	14.831 (1.031)	41	1105172			35.50- 135.50	76.40
87 Carbon Tetrachloride					CAS #: 56-23-5		
15.080	15.107 (1.048)	119	2651366	58.3321	58.332	80.00- 120.00	100.00
15.080	15.107 (1.048)	117	2760617			53.94- 153.94	104.12
89 2,2,4-Trimethylpentane					CAS #: 540-84-1		
15.411	15.411 (1.071)	57	5260753	54.1916	54.192	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
89 2,2,4-Trimethylpentane (continued)							
15.411	15.411 (1.071)	56	1770916			0.00- 84.62	33.66
15.411	15.411 (1.071)	41	1420576			0.00- 79.27	27.00
91 Benzene					CAS #: 71-43-2		
15.522	15.522 (0.961)	78	3322169	52.0591	52.059	80.00- 120.00	100.00
15.522	15.522 (0.961)	77	731151			0.00- 71.87	22.01
93 1,2-Dichloroethane					CAS #: 107-06-2		
15.633	15.632 (0.967)	62	1830227	53.9793	53.979	80.00- 120.00	100.00
15.633	15.632 (0.967)	64	588644			0.00- 82.89	32.16
94 Heptane					CAS #: 142-82-5		
15.716	15.715 (0.973)	71	1029198	52.4403	52.440	80.00- 120.00	100.00
15.716	15.715 (0.973)	43	2173964			158.53- 258.53	211.23
15.716	15.715 (0.973)	57	1135912			59.34- 159.34	110.37
101 Trichloroethene					CAS #: 79-01-6		
16.628	16.628 (1.029)	95	1541108	54.3656	54.366	80.00- 120.00	100.00
16.628	16.628 (1.029)	130	1592103			52.82- 152.82	103.31
16.628	16.628 (1.029)	97	1006507			14.78- 114.78	65.31
104 1,2-Dichloropropane					CAS #: 78-87-5		
17.126	17.125 (1.060)	63	1293155	52.8027	52.803	80.00- 120.00	100.00
17.126	17.125 (1.060)	62	945895			23.70- 123.70	73.15
17.126	17.125 (1.060)	41	822190			21.41- 121.41	63.58
106 1,4-Dioxane					CAS #: 123-91-1		
17.236	17.236 (1.067)	88	836184	52.4959	52.496	80.00- 120.00	100.00
17.236	17.236 (1.067)	58	596269			24.38- 124.38	71.31
17.236	17.236 (1.067)	57	197711			0.00- 74.60	23.64
107 Bromodichloromethane					CAS #: 75-27-4		
17.540	17.540 (1.086)	83	2743193	55.7392	55.739	80.00- 120.00	100.00
17.540	17.540 (1.086)	85	1772041			14.78- 114.78	64.60
110 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
18.342	18.342 (1.135)	75	1854778	53.5970	53.597	80.00- 120.00	100.00
18.342	18.342 (1.135)	77	592483			0.00- 81.97	31.94
18.315	18.342 (1.133)	39	1075752			16.68- 116.68	58.00
111 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.508	18.508 (1.145)	58	1108594	58.0504	58.050	80.00- 120.00	100.00
18.508	18.508 (1.145)	43	2935557			222.97- 322.97	264.80
18.508	18.508 (1.145)	85	427662			0.00- 90.48	38.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 Toluene					CAS #: 108-88-3		
18.895	18.895 (1.169)	91	3898288	55.7718	55.772	80.00- 120.00	100.00
18.895	18.895 (1.169)	92	2470874			12.87- 112.87	63.38
116 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
19.310	19.310 (0.904)	75	2048316	55.0001	55.000	80.00- 120.00	100.00
19.310	19.310 (0.904)	77	658934			0.00- 81.98	32.17
19.310	19.310 (0.904)	39	1083570			8.39- 108.39	52.90
117 1,1,2-Trichloroethane					CAS #: 79-00-5		
19.642	19.669 (0.920)	97	1486452	54.7281	54.728	80.00- 120.00	100.00
19.642	19.669 (0.920)	99	939440			13.15- 113.15	63.20
19.642	19.642 (0.920)	83	1220207			31.62- 131.62	82.09
120 Tetrachloroethene					CAS #: 127-18-4		
19.835	19.835 (0.929)	166	2124087	60.2982	60.298	80.00- 120.00	100.00
19.835	19.835 (0.929)	129	1484466			19.71- 119.71	69.89
19.835	19.835 (0.929)	131	1441362			17.66- 117.66	67.86
121 2-Hexanone					CAS #: 591-78-6		
19.974	19.973 (0.935)	58	1555958	53.4543	53.454	80.00- 120.00	100.00
19.974	19.973 (0.935)	43	2935759			147.80- 247.80	188.68
19.974	19.973 (0.935)	100	267024			0.00- 67.05	17.16
122 Dibromochloromethane					CAS #: 124-48-1		
20.361	20.360 (0.953)	129	2945075	61.1975	61.198	80.00- 120.00	100.00
20.361	20.360 (0.953)	127	2267561			27.62- 127.62	77.00
123 1,2-Dibromoethane					CAS #: 106-93-4		
20.610	20.637 (0.965)	107	2498507	56.1137	56.114	80.00- 120.00	100.00
20.610	20.637 (0.965)	109	2357968			44.58- 144.58	94.38
127 Chlorobenzene					CAS #: 108-90-7		
21.411	21.411 (1.003)	112	3265597	55.0475	55.048	80.00- 120.00	100.00
21.411	21.411 (1.003)	114	1051190			0.00- 82.69	32.19
21.411	21.411 (1.003)	77	2223192			21.55- 121.55	68.08
128 Ethyl Benzene					CAS #: 100-41-4		
21.494	21.494 (1.006)	106	1653108	54.5913	54.591	80.00- 120.00	100.00
21.494	21.494 (1.006)	91	5031705			261.69- 361.69	304.38
129 m,p-Xylene					CAS #: 108-38-3		
21.688	21.688 (1.016)	106	2069171	54.5917	54.592	80.00- 120.00	100.00
21.688	21.688 (1.016)	91	3963281			145.05- 245.05	191.54
130 o-Xylene					CAS #: 95-47-6		
22.379	22.379 (1.048)	106	1794311	54.6276	54.628	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
130 o-Xylene (continued)								
22.379	22.379	(1.048)	91	3647668			158.59- 258.59	203.29
131 Styrene						CAS #: 100-42-5		
22.407	22.407	(1.049)	104	2950129	58.0706	58.070	80.00- 120.00	100.00
22.407	22.407	(1.049)	78	1472759			1.30- 101.30	49.92
133 Bromoform						CAS #: 75-25-2		
22.822	22.821	(1.069)	173	2700095	63.8959	63.896	80.00- 120.00	100.00
22.822	22.821	(1.069)	171	1382715			1.67- 101.67	51.21
134 Cumene						CAS #: 98-82-8		
22.960	22.959	(1.075)	105	4820470	58.1191	58.119	80.00- 120.00	100.00
22.960	22.959	(1.075)	120	1350273			0.00- 78.08	28.01
22.960	22.959	(1.075)	51	479643			0.00- 61.43	9.95
140 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
23.540	23.540	(1.102)	83	2791221	50.8753	50.875	80.00- 120.00	100.00
23.540	23.540	(1.102)	85	1813538			14.94- 114.94	64.97
142 Propylbenzene						CAS #: 103-65-1		
23.651	23.651	(1.107)	91	6054610	54.4266	54.427	80.00- 120.00	100.00
23.651	23.651	(1.107)	120	1439181			0.00- 72.94	23.77
23.651	23.651	(1.107)	105	220792			0.00- 54.03	3.65
145 4-Ethyltoluene						CAS #: 622-96-8		
23.817	23.817	(1.115)	105	5219461	53.1315	53.132	80.00- 120.00	100.00
23.817	23.817	(1.115)	120	1679493			0.00- 82.12	32.18
147 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
23.927	23.927	(1.120)	105	4082064	52.9013	52.901	80.00- 120.00	100.00
23.927	23.927	(1.120)	120	2121323			3.80- 103.80	51.97
150 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.563	24.563	(1.150)	105	3789428	54.0367	54.037	80.00- 120.00	100.00
24.563	24.563	(1.150)	120	1871284			0.00- 98.95	49.38
155 1,3-Dichlorobenzene						CAS #: 541-73-1		
25.116	25.116	(1.176)	146	2954826	54.4496	54.450	80.00- 120.00	100.00
25.116	25.116	(1.176)	148	1883306			14.48- 114.48	63.74
25.116	25.116	(1.176)	111	1113097			0.00- 89.68	37.67
156 1,4-Dichlorobenzene						CAS #: 106-46-7		
25.282	25.282	(1.184)	146	3024206	53.4728	53.473	80.00- 120.00	100.00
25.282	25.282	(1.184)	148	1932370			13.81- 113.81	63.90
25.282	25.282	(1.184)	111	1094227			0.00- 87.35	36.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
159 alpha-Chlorotoluene					CAS #: 100-44-7		
25.476	25.476 (1.193)	91	4144279	55.1968	55.197	80.00- 120.00	100.00
25.476	25.476 (1.193)	126	888648			0.00- 71.29	21.44
161 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.918	25.918 (1.214)	146	2565844	50.7823	50.782	80.00- 120.00	100.00
25.918	25.918 (1.214)	148	1655005			14.75- 114.75	64.50
25.918	25.918 (1.214)	111	1003439			0.00- 88.84	39.11
165 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
28.821	28.821 (1.350)	180	876217	42.4009	42.401	80.00- 120.00	100.00
28.821	28.821 (1.350)	182	819522			44.70- 144.70	93.53
166 Hexachlorobutadiene					CAS #: 87-68-3		
28.987	28.987 (1.357)	225	748089	43.5454	43.545	80.00- 120.00	100.00
28.987	28.987 (1.357)	223	473195			12.64- 112.64	63.25
29 Isopentane					CAS #: 78-78-4		
8.349	8.348 (0.580)	43	1612306	47.2963	47.296	80.00- 120.00	100.00
8.349	8.348 (0.580)	57	1042502			16.48- 116.48	64.66
19 Butane					CAS #: 106-97-8		
6.743	6.743 (0.469)	58	253973	47.6978	47.698	80.00- 120.00	100.00
6.743	6.743 (0.469)	43	2109880			757.70- 857.70	830.75
102 Methyl Cyclohexane					CAS #: 108-87-2		
16.905	16.904 (1.175)	83	1836833	53.7352	53.735	80.00- 120.00	100.00
16.905	16.904 (1.175)	98	886460			0.00- 96.13	48.26
16.905	16.904 (1.175)	55	1658888			38.51- 138.51	90.31
167 Naphthalene					CAS #: 91-20-3		
29.374	29.374 (1.375)	128	1481204	38.2570	38.257	80.00- 120.00	100.00
29.374	29.374 (1.375)	127	170799			0.00- 62.50	11.53

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd7.i
Lab File ID: 7103104.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd7.i/7-31oct.b/t14q018c.m
Misc Info: 200ppbv --> 50ppbv

Calibration Date: 31-OCT-2007
Calibration Time: 09:03
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	419527	251716	587338	478234	13.99
97 1,4-Difluorobenze	1400939	840563	1961315	1606107	14.65
126 Chlorobenzene-d5	1205049	723029	1687069	1311308	8.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
81 Bromochloromethan	14.39	14.06	14.72	14.39	0.00
97 1,4-Difluorobenze	16.16	15.83	16.49	16.16	0.00
126 Chlorobenzene-d5	21.36	21.03	21.69	21.36	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

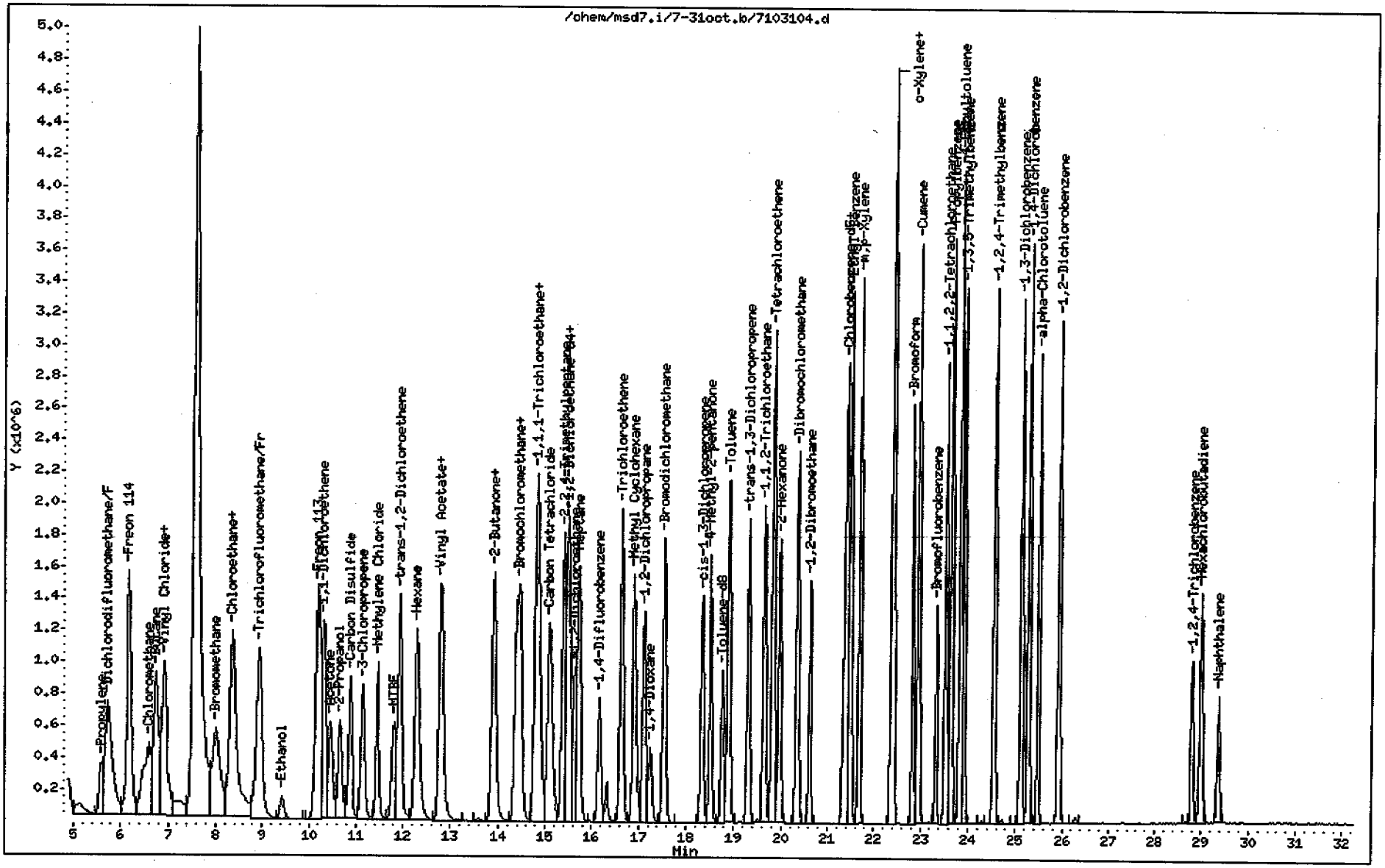
0344

Data File: /chem/msd7.i/7-31oct.b/7103104.d
Date : 31-OCT-2007 10:30
Client ID: LCS-1
Sample Info: 50mL #1443-302

Instrument: msd7.i

Operator: cb
Column diameter: 0.53

Column phase: RTx-624



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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	18.22
75	30.0 – 60.0% of mass 95	39.23
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.64
173	Less than 2.0% of mass 174	(0.52)[1]
174	Greater than 50.0% of mass 95	86.75
175	5.0 – 9.0% of mass 174	(7.12)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(97.72)[1]
177	5.0 – 9.0% of mass 176	(6.45)[2]

[1] - value in parenthesis is % mass 174 [2] - value in paranthesis is % mass 176

BFB Injection Date: 10/30/07
BFB Injection Time: 0826
BFB File ID: 7103001
Tekmar Purge Flow: 17.7 mL/min
Vacuum: 2.9×10^{-5} torr

IS/S Std.#:	1443-339	Exp. Date: 12/26/07
BCM	537758	
1,4-DFB	1771565	
CB-d5	1414884	

Verified CCV IS vs ICAL mid-point (- 40%D) CB initials

0345

Verify 176/174 m/z Ratio: 835758 / 865253 x100= 97.72%

NOAH Cart #: N/A File #: N/A

Calculation Check:

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 692227\ )}{(\ 537758\ )} \times \frac{(\ 25.0\ )}{(\ 1.34304\ )} = 23.961$

File ID:	7103006
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 23.961

	Acq	File ID	Sample ID/Description	Can #	Pressure	Amt Analyzed	DF	Date Analyzed	Time Analyzed	Review Initials	Comments
1	✓	7103001	BFB Tune Check	1467-64	50psig	2mL	1.00	10/30/07	0826	CB	
2	✓	02	System Blank	34190	Humid	200mL			0858	CB	
3	✓	03	ICAL Level 4	1487-400	200/1200ppbv → 8/48ppbv	8mL			0951	CB	
4	✓	04	5		200/1200ppbv → 30/200ppbv	50mL			1029	CB	CCV SD
5	✓	05	7		200/1200ppbv	200mL			1110	CB	
6	✓	06	CCV-1 (100ppbv)	1576-50A	50ppbv	100mL			1215	CB	
7	✓	07	LCS-1 (200ppbv)	1443-302	50ppbv	60mL			1253	CB	
8	✓	08	Lab Blank	34190	Humid	200mL			1336	CB	
9	✓	7103D - 05	0710358 - 03A	02959	45psig - 15psig	1.4mL	333	10/31/07	1451	CB	2nd Run 2nd proposal

Signature

10/30/07
Date

10	✓	7103010	0710578-04A	9330	4.0%-5psi	1.0ml	41.6	10/30/07	1529		
11	✓	11	05A	34121	6.0%-5psi	20ml	25.3		1659	GS	"E" Flag 2-propanol
12	X	12	06A	122580	4.5%-15psi	100ml	4.76		1702	GS	"E" Flag 2-propanol
13	✓	13	06A	12286	4.5%-15psi	200ml	2.38		1750	GS	RR @ 200ppbv
14	✓	14	07A	1357	3.5%-15psi	200ml	2.29		1825	GS	3rd sur. ↑ due to debris
15	✓	15	09A	2116	4.0%-15psi	200ml	8.33		1908	GS	
16	✓	16	01A	1350	3.0%-15psi	40ml	11.0		1950	GS	
17	✓	17	System Blank	34190	Humid	200ml	1.30		2029	GS	
18	✓	18	0710567-01A	20740	7.5%-5psi	200ml	1.79		2108	GS	
19	✓	19	02A	4216	4.5%-5psi	200ml	[illegible]		2147	GS / fo	
20	✓	20	03A	13863	7.0%-5psi	200ml	1.95		2245	GS	
21	✓	21	0710509A-01A	34088	1.5%-15psi	100ml	4.26		2324	GS	
22	✓	22	-02A	1356	20%-15psi	6.5ml	6.5	10/31/07	0004	GS	
23	✓	23	0710517A-02A	2024	5.0%-15psi	200ml	2.42		0103	GS	
24	X	24	-01A	13388	4.5%-15psi	50ml	9520		0152	GS	"E", "S" for 134a
25	✓	25	-01A	↓	↓	200ml	2380		0240	GS	1000X
26	✓	26	0710562-01A	33681	7.0%-15psi	200ml	1.75		0329	GS	1000A Dil. for all
27	✓	27	-02A	33659	↓		↓		0416	GS	
28	X	28	-03A	14866	6.0%-15psi		1.68		0455	GS	IS ↓
29	X	29	-04A	34732	29.5%-15psi		1.00		0536	fo	VB IS ↓
30	X	30	↓	↓	↓	↓	↓	↓	0719	fo	
31											
32											

fo 10/31/07

Comments:

Signature Laura Overmyer

10/31/07
Date

Revision 08/2007
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0316

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MSD-7

Logbook #: 1594

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 – 40.0% of mass 95	20.72
75	30.0 – 60.0% of mass 95	39.59
95	Base peak, 100.00% relative abundance	100.00
96	5.0 – 9.0% of mass 95	6.62
173	Less than 2.0% of mass 174	(0.45)[1]
174	Greater than 50.0% of mass 95	85.10
175	5.0 – 9.0% of mass 174	(7.10)[1]
176	Greater than 95.0% but less than 101.0% of mass 174	(96.35)[1]
177	5.0 – 9.0% of mass 176	(6.64)[2]

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

Verify 176/174 m/z Ratio: 654939 / 679763 x 100 = 96.35%

BFB Injection Date: 10/31/07

BFB Injection Time: 0842

BFB File ID: 7103101

Tekmar Purge Flow: 17.9 mL/min

Vacuum: 2.8 x 10^{-5} torr

0347

IS/S Std.#:	1443-339	Exp. Date: 12/06/07
BCM	419527	
1,4-DFB	1400939	
CB-d5	1205049	

Verified CCV IS vs ICAL mid-point (- 40%D) CB

NOAH Cart #: N/A File #: N/A

Calculation Check:

ppbv of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 630220\ )}{(\ 419527\ )} \times \frac{(\ 25.0\ )}{(\ 1.39304\ )} = 27.963$

File ID:	7103102
Compound:	1,2-DCA-d4
Initials:	CB

Reported Result 27.963

1	✓	7103101	BFB Tune Check	1467-69	50ng	2uL	1.00	10/31/07	0842	CB	
2	✓	02	CCV-1 (100 ppbv)	1576-501	50ppbv	100mL			0903	CB	
3	✓	03	CCVsp (200 ppbv)	1467-400	50ppbv	50mL			0946	CB	sp 22ACN
4	✓	04	LCS-1 (200 ppbv)	1443-302	50ppbv	50mL			1030	CB	
5	✓	05	Lab Blank	34190	Humid	200mL	↓		1128	CB	
6	✓	06	0710567-04A	434	8.0%Hg-Sps	200mL	1.83		1219	CB	
7	X	07	-05A	4175	7.0%Hg-Sps	200mL	1.75		1308	CB	E flag MeCl Rec 125mL
8	✓	08	↓ -05A	↓	↓	125mL	2.80		1356	CB	
9	✓	↓ 09	0710535A-01A	11896	3.5%Hg-1Sps	125mL	3.66	↓	1435	CB	

Signature

10/31/07
Date

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-18oct.b/7101801.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 18-OCT-2007 11:50
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-18oct.b/bfb105.m
Meth Date : 18-Oct-2007 11:45
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.204	8.232	-0.028	95	1361542			100.00- 100.00	100.00
8.204	8.232	-0.028	50	253402			15.00- 40.00	18.61
8.204	8.232	-0.028	75	540735			30.00- 60.00	39.71
8.204	8.232	-0.028	96	92275			5.00- 9.00	6.78
8.204	8.232	-0.028	173	5478			0.00- 2.00	0.49
8.204	8.232	-0.028	174	1112403			50.00- 100.00	81.70
8.204	8.232	-0.028	175	76512			5.00- 9.00	6.88
8.204	8.232	-0.028	176	1072385			95.00- 101.00	96.40
8.204	8.232	-0.028	177	71737			5.00- 9.00	6.69

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

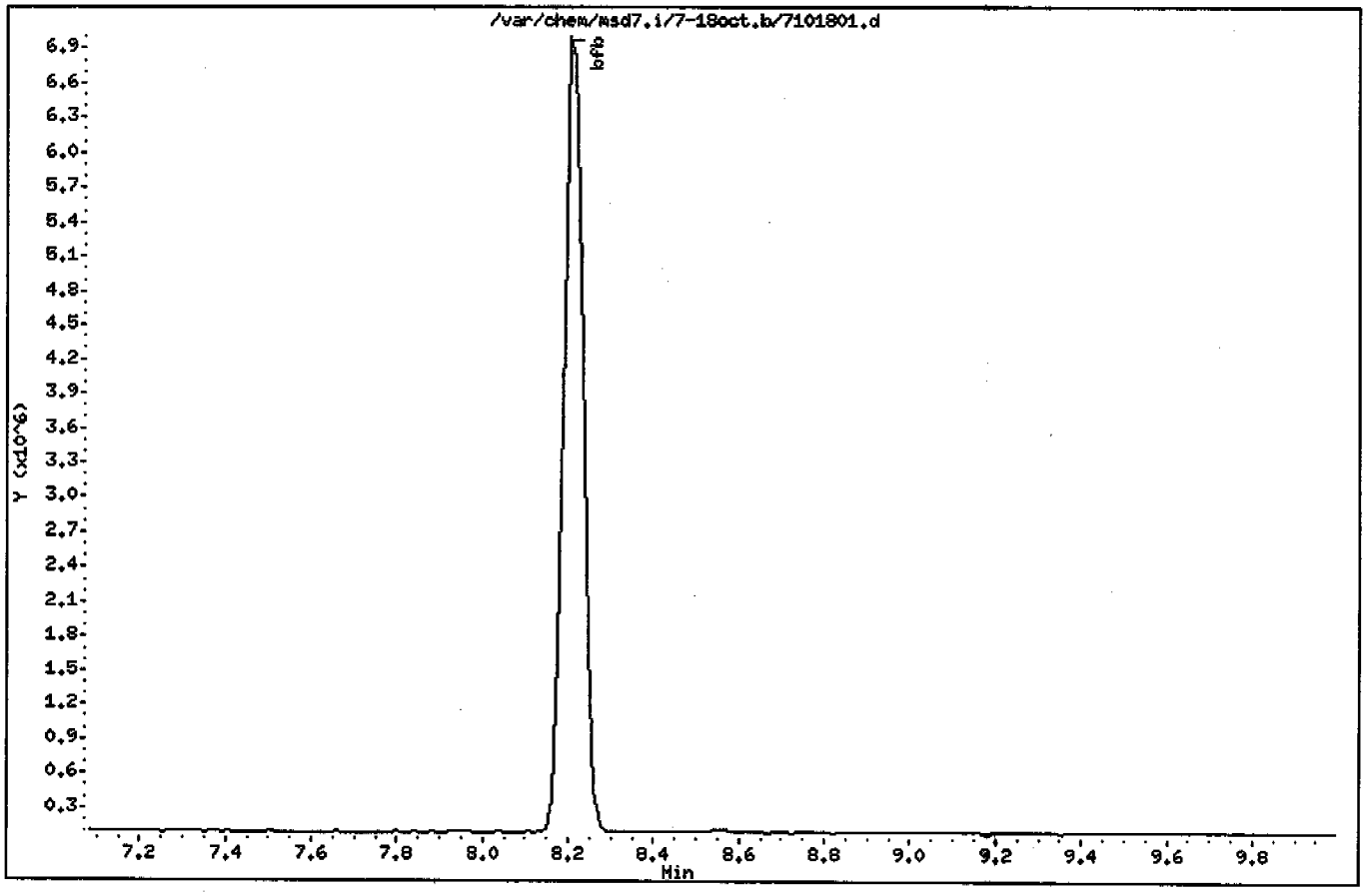
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

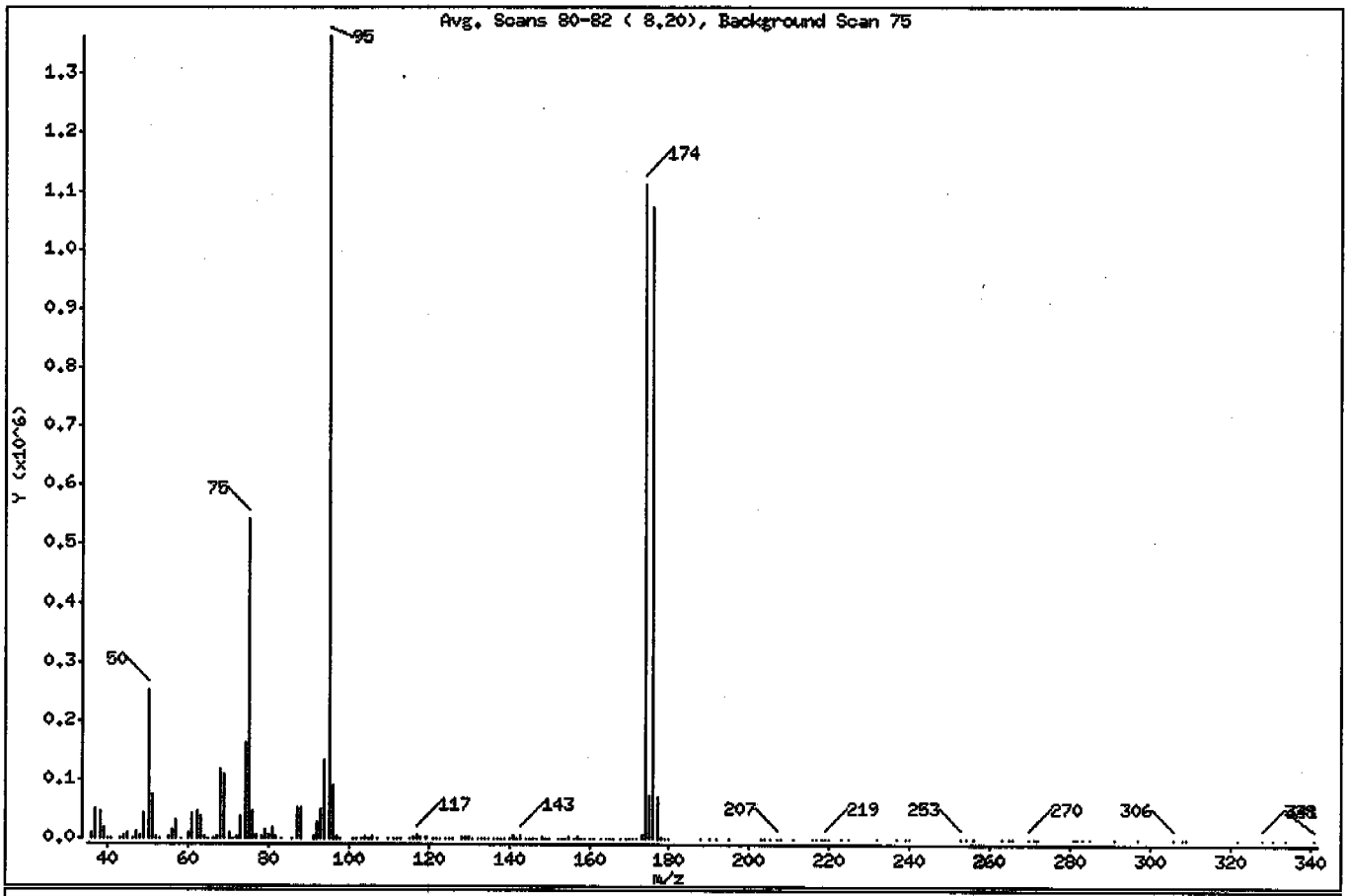
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.61
75	30.00 - 60.00% of mass 95	39.71
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.40 (0.49)
174	50.00 - 100.00% of mass 95	81.70
175	5.00 - 9.00% of mass 174	5.62 (6.88)
176	95.00 - 101.00% of mass 174	78.76 (96.40)
177	5.00 - 9.00% of mass 176	5.27 (6.69)

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101801.d
Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75
Location of Maximum: 95.00
Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8158	83.00	554	138.00	104	203.00	51
37.00	49192	86.00	1313	139.00	375	204.00	50
38.00	45528	87.00	54192	140.00	632	205.00	189
39.00	18720	88.00	53800	141.00	6507	207.00	741
40.00	732	91.00	2816	142.00	957	208.00	504
41.00	74	92.00	27664	143.00	6881	211.00	169
43.00	497	93.00	48888	144.00	483	216.00	66
44.00	4997	94.00	133568	145.00	361	217.00	63
45.00	9825	95.00	1361408	146.00	1560	218.00	35
46.00	873	96.00	92272	147.00	676	219.00	212
47.00	13741	97.00	2838	148.00	2309	220.00	15
48.00	5492	98.00	75	149.00	1043	223.00	146
49.00	42264	101.00	135	150.00	871	225.00	51
50.00	253376	102.00	118	152.00	649	232.00	107
51.00	73776	103.00	426	153.00	862	237.00	53
52.00	3233	104.00	3526	154.00	656	239.00	108
53.00	104	105.00	1311	155.00	2400	240.00	51
55.00	2446	106.00	3382	156.00	486	253.00	738
56.00	14834	107.00	1234	157.00	1946	254.00	63
57.00	31320	110.00	477	158.00	503	256.00	73
58.00	1332	111.00	643	159.00	927	263.00	50
60.00	8076	112.00	546	160.00	166	265.00	164
61.00	44952	113.00	773	161.00	951	266.00	131
62.00	46256	115.00	711	163.00	50	270.00	379
63.00	36824	116.00	3373	164.00	6	271.00	115
64.00	3340	117.00	5525	165.00	191	272.00	119
65.00	65	118.00	2784	166.00	52	281.00	44
66.00	128	119.00	4176	168.00	237	282.00	150
67.00	2479	121.00	195	169.00	104	283.00	43
68.00	119376	122.00	240	170.00	388	285.00	69
69.00	110568	123.00	240	171.00	532	291.00	52
70.00	8062	124.00	581	172.00	1047	297.00	50
71.00	416	125.00	238	173.00	5478	306.00	182
72.00	4070	126.00	222	174.00	1112064	308.00	72
73.00	38304	128.00	3372	175.00	76512	309.00	53

Data File: /var/chem/msd7.i/7-18oct.b/7101801.d

Date : 18-OCT-2007 11:50

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101801.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	163648	129.00	1628	176.00	1072128	322.00	66
75.00	540672	130.00	3411	177.00	71736	328.00	157
76.00	45504	131.00	1190	178.00	1947	331.00	61
77.00	6657	132.00	336	179.00	187	334.00	27
78.00	3945	133.00	196	180.00	198	341.00	150
79.00	17176	134.00	119	188.00	83		
80.00	5949	135.00	1488	190.00	234		
81.00	17288	136.00	367	192.00	279		
82.00	3829	137.00	1534	196.00	264		

Air Toxics Ltd.

Data file : /chem/msd7.i/7-19oct.b/7101901.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 19-OCT-2007 09:09
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-19oct.b/bfb105.m
Meth Date : 19-Oct-2007 09:04
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable

Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	1279483			100.00- 100.00	100.00
8.218	8.232	-0.014	50	234402			15.00- 40.00	18.32
8.218	8.232	-0.014	75	514967			30.00- 60.00	40.25
8.218	8.232	-0.014	96	87384			5.00- 9.00	6.83
8.218	8.232	-0.014	173	5154			0.00- 2.00	0.49
8.218	8.232	-0.014	174	1045184			50.00- 100.00	81.69
8.218	8.232	-0.014	175	74282			5.00- 9.00	7.11
8.218	8.232	-0.014	176	1015727			95.00- 101.00	97.18
8.218	8.232	-0.014	177	67754			5.00- 9.00	6.67

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

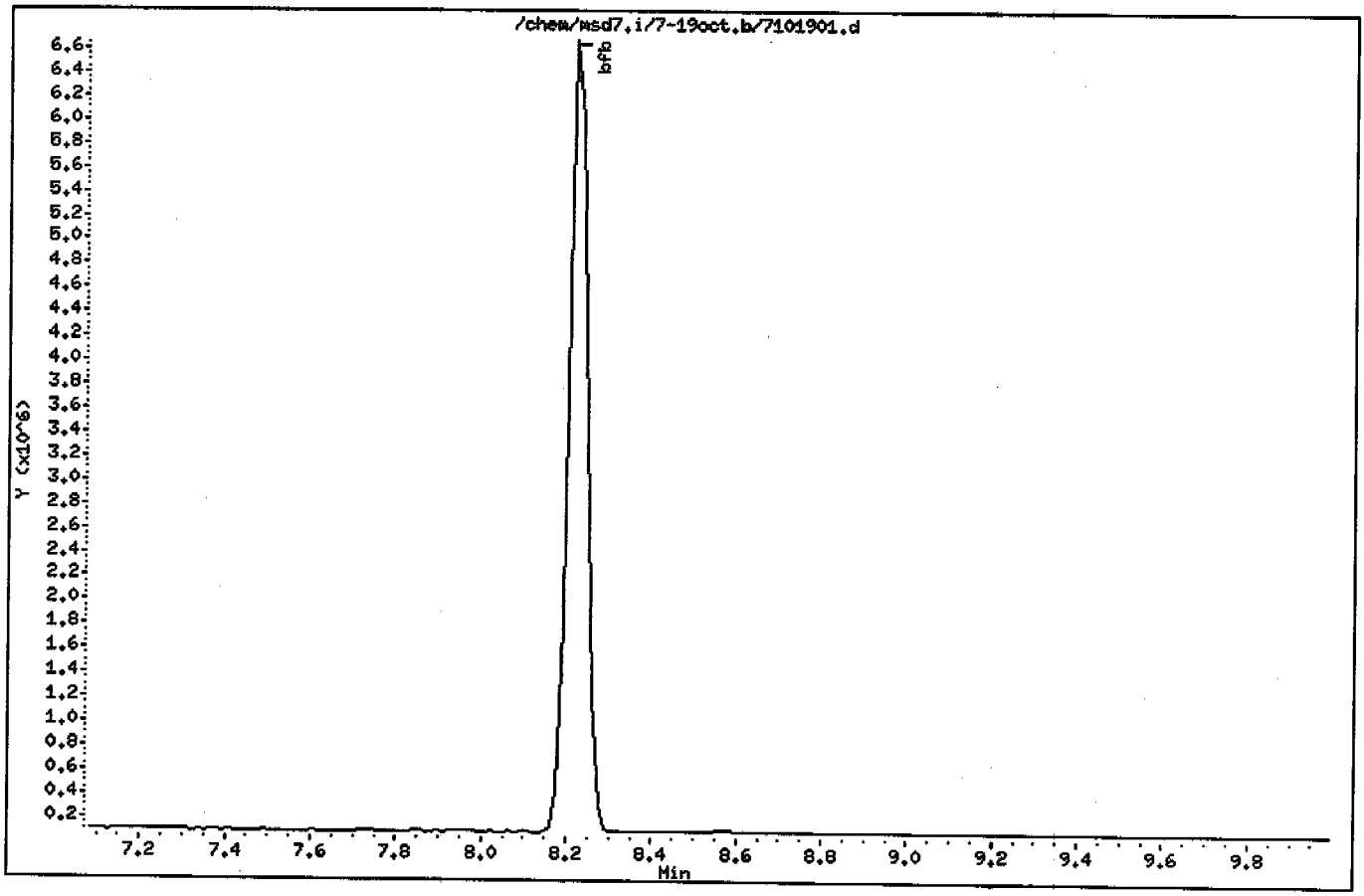
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

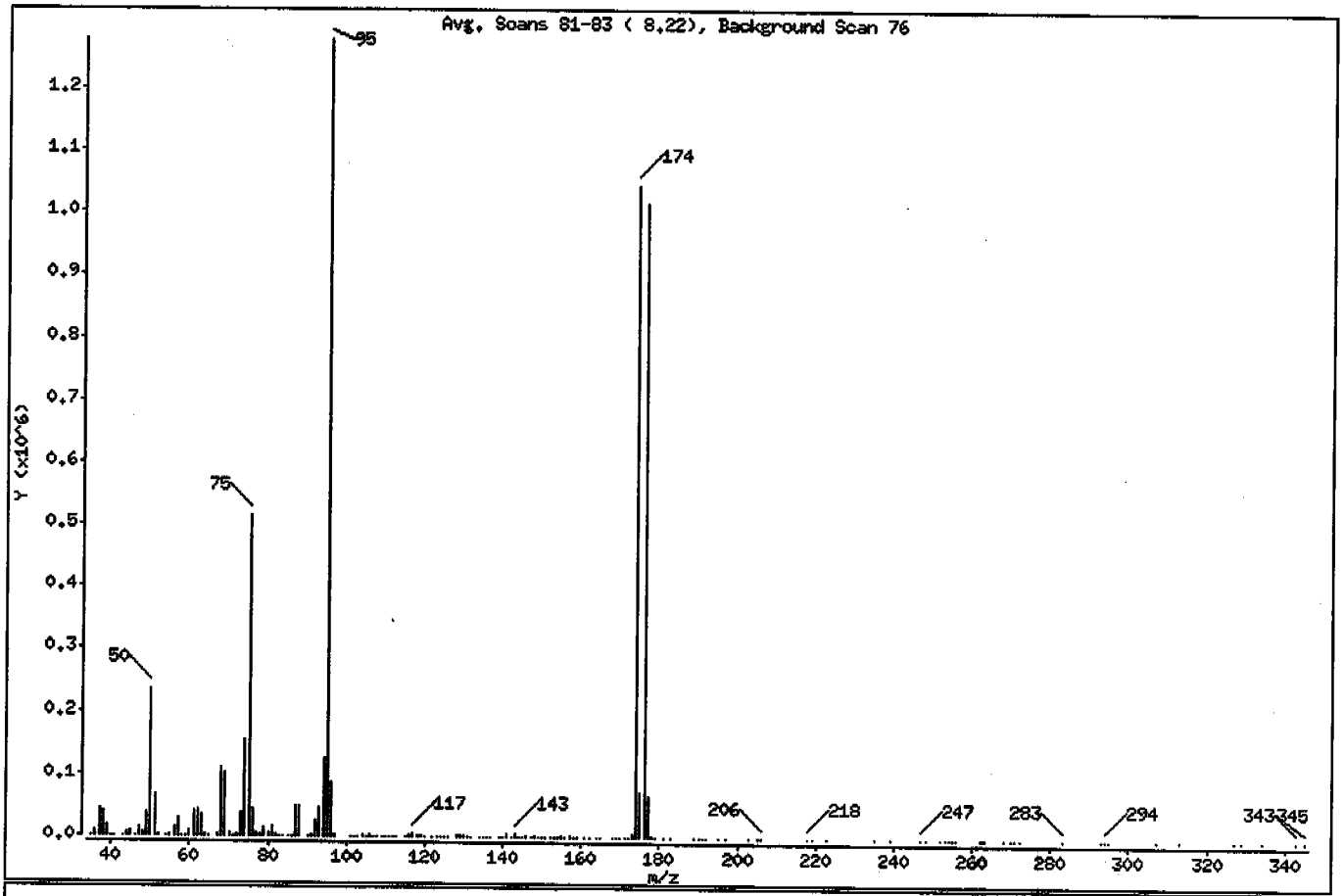
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.32
75	30.00 - 60.00% of mass 95	40.25
96	5.00 - 9.00% of mass 95	6.83
173	Less than 2.00% of mass 174	0.40 (0.49)
174	50.00 - 100.00% of mass 95	81.69
175	5.00 - 9.00% of mass 174	5.81 (7.11)
176	95.00 - 101.00% of mass 174	79.39 (97.18)
177	5.00 - 9.00% of mass 176	5.30 (6.67)

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101901.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 96.00
Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	72	81.00	16704	131.00	1146	181.00	171
36.00	7566	82.00	3637	132.00	454	183.00	50
37.00	45072	83.00	479	134.00	161	189.00	206
38.00	40240	84.00	53	135.00	1280	190.00	62
39.00	17640	85.00	82	136.00	225	191.00	120
40.00	628	86.00	903	137.00	1337	192.00	19
41.00	514	87.00	50640	139.00	320	195.00	40
43.00	189	88.00	48824	140.00	552	197.00	61
44.00	4493	90.00	132	141.00	6532	203.00	123
45.00	9647	91.00	2770	142.00	943	205.00	82
46.00	741	92.00	27528	143.00	7001	206.00	177
47.00	14368	93.00	47072	144.00	545	218.00	236
48.00	5164	94.00	126368	145.00	738	219.00	161
49.00	39688	95.00	1278976	146.00	1511	223.00	27
50.00	234368	96.00	87384	147.00	819	235.00	67
51.00	68168	97.00	2415	148.00	2386	239.00	107
52.00	2980	101.00	172	149.00	484	247.00	182
54.00	63	102.00	133	150.00	1007	248.00	62
55.00	2156	103.00	141	151.00	144	252.00	66
56.00	13491	104.00	2803	152.00	540	253.00	19
57.00	28776	105.00	1086	153.00	901	254.00	160
58.00	1021	106.00	3164	154.00	676	255.00	25
59.00	272	107.00	1031	155.00	2357	256.00	50
60.00	7740	108.00	15	156.00	629	262.00	82
61.00	41792	109.00	150	157.00	1793	263.00	50
62.00	43952	110.00	458	158.00	360	268.00	131
63.00	34352	111.00	504	159.00	1015	270.00	109
64.00	3135	112.00	313	161.00	1159	271.00	85
65.00	478	113.00	444	162.00	295	272.00	57
67.00	2376	115.00	640	164.00	102	283.00	471
68.00	112072	116.00	2542	165.00	171	293.00	77
69.00	101736	117.00	4565	168.00	62	294.00	66
70.00	7312	118.00	2517	169.00	215	295.00	52
71.00	405	119.00	4082	170.00	464	307.00	60
72.00	4296	120.00	347	171.00	397	313.00	52

Data File: /chem/msd7.i/7-19oct.b/7101901.d

Date : 19-OCT-2007 09:09

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7101901.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76

Location of Maximum: 95.00

Number of points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	37336	122.00	296	172.00	834	327.00	42
74.00	157248	123.00	376	173.00	5154	329.00	64
75.00	514944	124.00	587	174.00	1045184	334.00	39
76.00	44472	125.00	107	175.00	74280	343.00	346
77.00	6177	126.00	562	176.00	1015680	345.00	241
78.00	4351	128.00	3477	177.00	67752		
79.00	15940	129.00	1800	178.00	1868		
80.00	5885	130.00	3276	179.00	89		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-22oct.b/7102201.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 22-OCT-2007 08:22
Operator : cb Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-22oct.b/bfb105.m
Meth Date : 22-Oct-2007 08:17 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	1368062			100.00- 100.00	100.00
8.218	8.232	-0.014	50	244266			15.00- 40.00	17.85
8.218	8.232	-0.014	75	543796			30.00- 60.00	39.75
8.218	8.232	-0.014	96	92363			5.00- 9.00	6.75
8.218	8.232	-0.014	173	6310			0.00- 2.00	0.53
8.218	8.232	-0.014	174	1182801			50.00- 100.00	86.46
8.218	8.232	-0.014	175	81821			5.00- 9.00	6.92
8.218	8.232	-0.014	176	1142984			95.00- 101.00	96.63
8.218	8.232	-0.014	177	74057			5.00- 9.00	6.48

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

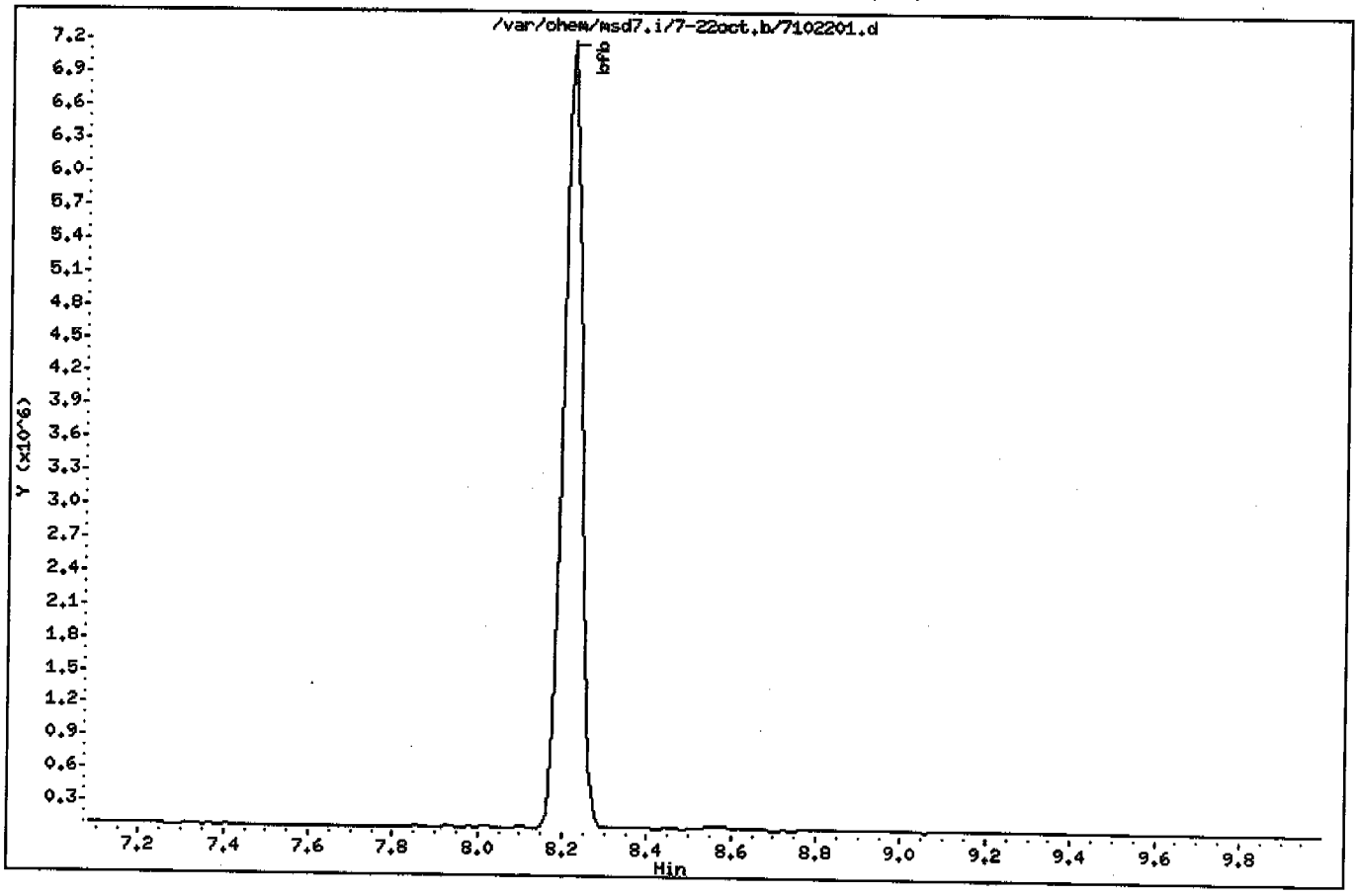
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/ohem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

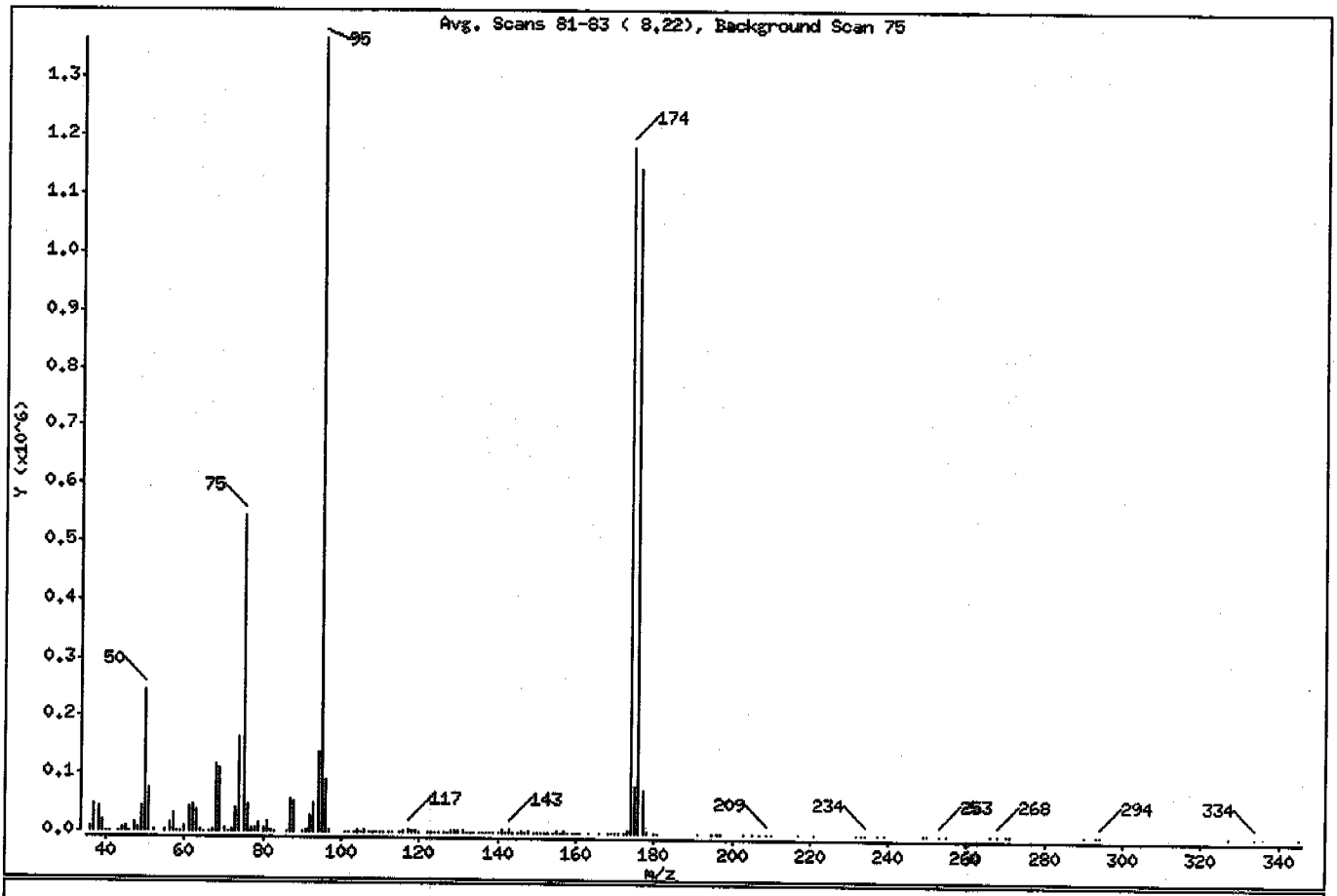
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.85
75	30.00 - 60.00% of mass 95	39.76
96	5.00 - 9.00% of mass 95	6.75
173	Less than 2.00% of mass 174	0.46 (0.53)
174	50.00 - 100.00% of mass 95	86.46
175	5.00 - 9.00% of mass 174	5.98 (6.92)
176	95.00 - 101.00% of mass 174	83.55 (96.63)
177	5.00 - 9.00% of mass 176	5.41 (6.48)

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7102201.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 75

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7934	80.00	6507	129.00	1848	174.00	1182720
37.00	46400	81.00	17392	130.00	3596	175.00	81816
38.00	43896	82.00	4057	131.00	1722	176.00	1142784
39.00	18320	83.00	366	132.00	246	177.00	74056
40.00	466	86.00	1209	133.00	474	178.00	1906
41.00	102	87.00	55040	134.00	351	180.00	63
43.00	446	88.00	52696	135.00	1238	181.00	60
44.00	5254	90.00	94	136.00	390	191.00	49
45.00	10160	91.00	2696	137.00	1212	195.00	127
46.00	749	92.00	28584	138.00	67	196.00	50
47.00	14258	93.00	49208	139.00	329	197.00	54
48.00	4923	94.00	136960	140.00	640	203.00	23
49.00	44064	95.00	1367552	141.00	6885	205.00	114
50.00	244224	96.00	92360	142.00	1006	207.00	64
51.00	74240	97.00	2784	143.00	7115	209.00	162
52.00	2711	101.00	64	144.00	424	210.00	61
55.00	2537	102.00	33	145.00	525	217.00	109
56.00	14247	103.00	527	146.00	1988	221.00	104
57.00	30944	104.00	3615	147.00	642	232.00	114
58.00	1172	105.00	1276	148.00	2214	233.00	24
59.00	16	106.00	3588	149.00	812	234.00	201
60.00	8822	107.00	1268	150.00	1058	237.00	52
61.00	43248	108.00	66	151.00	149	239.00	80
62.00	45912	109.00	216	152.00	573	249.00	279
63.00	37216	110.00	357	153.00	1089	250.00	65
64.00	3029	111.00	609	154.00	769	253.00	409
65.00	121	112.00	147	155.00	2837	255.00	19
66.00	148	113.00	586	156.00	132	266.00	68
67.00	2227	115.00	534	157.00	1838	268.00	195
68.00	116288	116.00	2972	158.00	266	270.00	108
69.00	109120	117.00	5461	159.00	1124	271.00	4
70.00	7621	118.00	2641	160.00	100	290.00	51
71.00	436	119.00	4156	161.00	871	293.00	50
72.00	4566	120.00	149	163.00	80	294.00	54
73.00	39520	122.00	241	166.00	50	327.00	35

Data File: /var/chem/msd7.i/7-22oct.b/7102201.d

Date : 22-OCT-2007 08:22

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7102201.d

Spectrum: Avg. Scans 81-83 (8.22), Background Scan 75

Location of Maximum: 95.00

Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	164672	123.00	275	168.00	118	334.00	71
75.00	543744	124.00	566	169.00	146	345.00	25
76.00	47160	125.00	204	170.00	403		
77.00	6258	126.00	206	171.00	332		
78.00	4752	127.00	159	172.00	1080		
79.00	16057	128.00	3594	173.00	6310		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-30oct.b/7103001.d
Lab Smp Id:
Client Smp ID: BFB
Inj Date : 30-OCT-2007 08:26
Operator : cb
Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-30oct.b/bfb105.m
Meth Date : 30-Oct-2007 08:20
Quant Type: ESTD
Cal Date :
Cal File:
Als bottle: 1
QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable — Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.218	8.232	-0.014	95	985898			100.00- 100.00	100.00
8.218	8.232	-0.014	50	179605			15.00- 40.00	18.22
8.218	8.232	-0.014	75	386803			30.00- 60.00	39.23
8.218	8.232	-0.014	96	65481			5.00- 9.00	6.64
8.218	8.232	-0.014	173	4443			0.00- 2.00	0.52
8.218	8.232	-0.014	174	855253			50.00- 100.00	86.75
8.218	8.232	-0.014	175	60898			5.00- 9.00	7.12
8.218	8.232	-0.014	176	835758			95.00- 101.00	97.72
8.218	8.232	-0.014	177	53944			5.00- 9.00	6.45

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

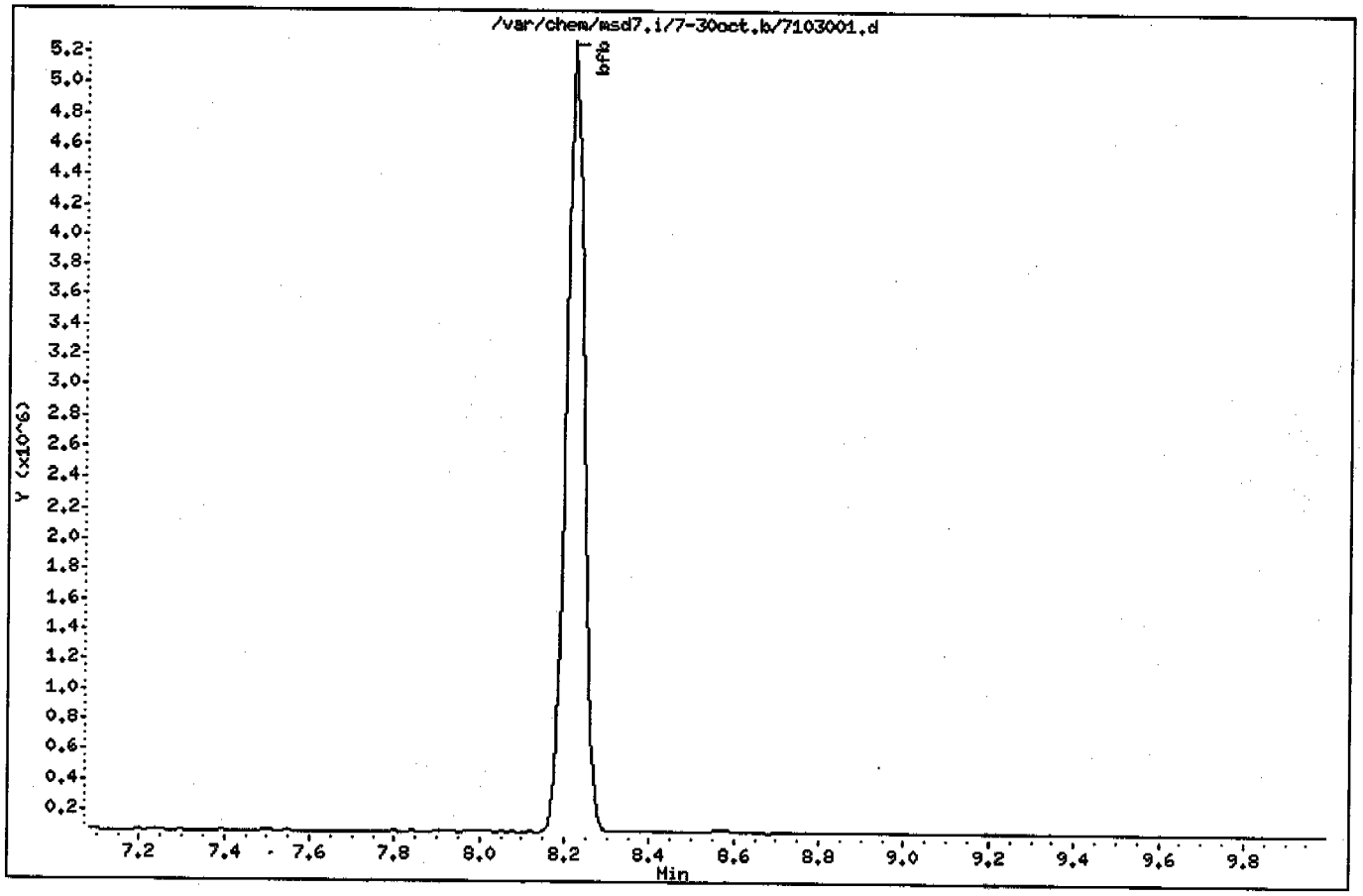
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

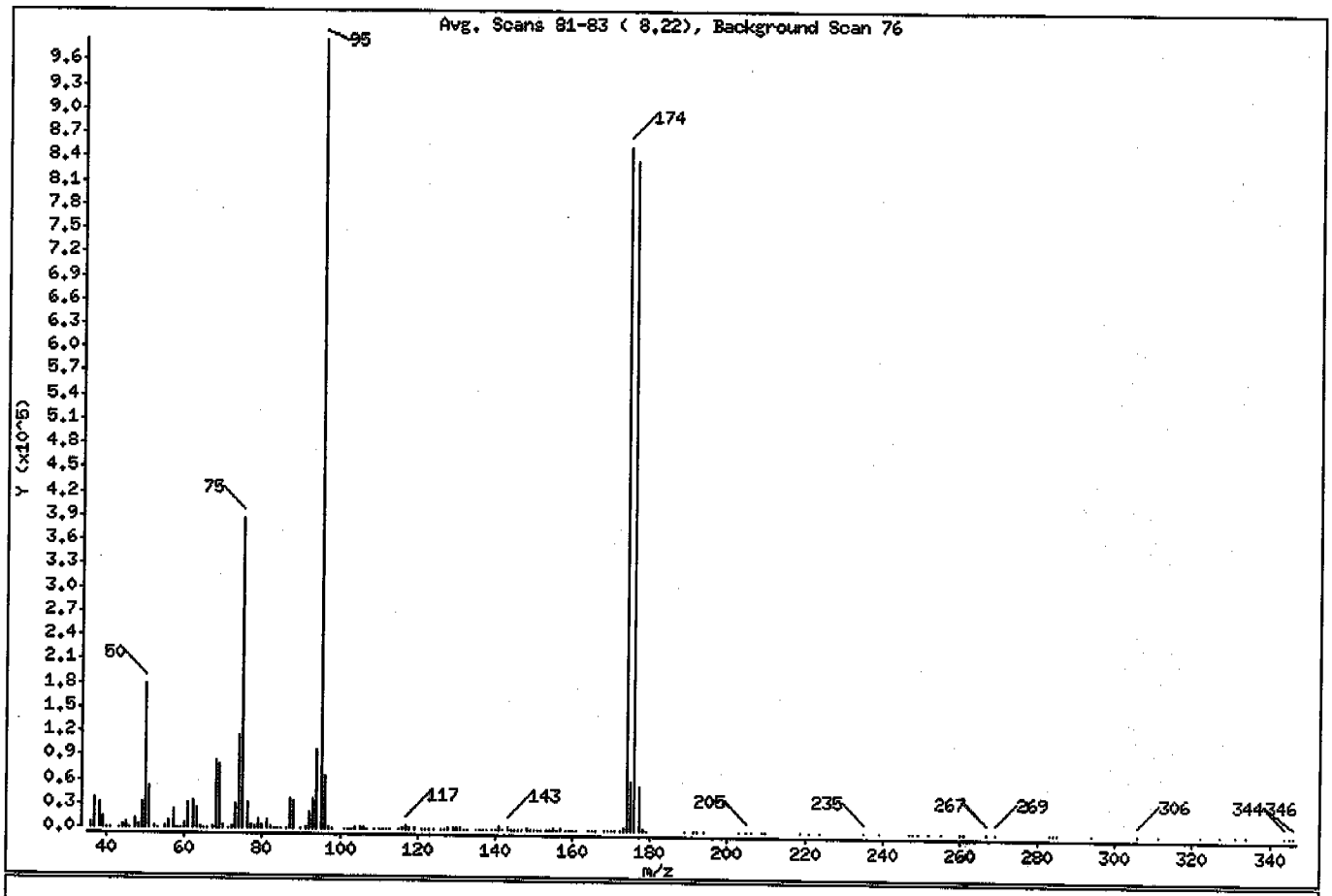
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.22
75	30.00 - 60.00% of mass 95	39.23
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.45 (0.52)
174	50.00 - 100.00% of mass 95	86.75
175	5.00 - 9.00% of mass 174	6.18 (7.12)
176	95.00 - 101.00% of mass 174	84.77 (97.72)
177	5.00 - 9.00% of mass 176	5.47 (6.45)

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103001.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6864	80.00	4195	129.00	1278	175.00	60896
37.00	35984	81.00	12097	130.00	2851	176.00	835712
38.00	32616	82.00	2437	131.00	1250	177.00	53944
39.00	13376	83.00	269	132.00	40	178.00	1321
40.00	252	84.00	56	133.00	221	179.00	25
41.00	118	85.00	51	135.00	850	189.00	147
43.00	194	86.00	972	136.00	239	191.00	119
44.00	3444	87.00	35968	137.00	991	192.00	85
45.00	7216	88.00	33456	138.00	108	194.00	76
46.00	560	90.00	115	139.00	64	203.00	51
47.00	10457	91.00	1553	140.00	426	205.00	142
48.00	4077	92.00	20376	141.00	4690	206.00	91
49.00	30808	93.00	35520	142.00	663	209.00	22
50.00	179684	94.00	96568	143.00	4970	210.00	105
51.00	53056	95.00	985856	144.00	322	219.00	106
52.00	2430	96.00	65480	145.00	447	221.00	68
53.00	124	97.00	1839	146.00	920	224.00	52
55.00	1522	98.00	50	147.00	386	235.00	132
56.00	9728	101.00	140	148.00	1872	239.00	74
57.00	22088	102.00	66	149.00	667	247.00	32
58.00	909	103.00	111	150.00	776	248.00	64
59.00	161	104.00	2660	151.00	123	249.00	223
60.00	5809	105.00	1235	152.00	504	252.00	106
61.00	30872	106.00	2288	153.00	738	255.00	1
62.00	34136	107.00	825	154.00	588	260.00	24
63.00	26000	109.00	263	155.00	2007	261.00	87
64.00	2039	110.00	310	156.00	425	267.00	404
65.00	308	111.00	281	157.00	1404	269.00	145
66.00	94	112.00	327	158.00	200	283.00	48
67.00	1714	113.00	417	159.00	927	284.00	39
68.00	83912	115.00	523	160.00	55	285.00	64
69.00	79304	116.00	1973	161.00	708	294.00	75
70.00	5473	117.00	4153	164.00	197	306.00	76
71.00	168	118.00	2490	165.00	28	311.00	53
72.00	2901	119.00	3262	166.00	172	322.00	151

Data File: /var/chem/msd7.i/7-30oct.b/7103001.d

Date : 30-OCT-2007 08:26

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103001.d
Spectrum: Avg. Scans 81-83 (8.22), Background Scan 76
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	28448	121.00	198	168.00	123	327.00	38
74.00	115952	122.00	214	169.00	68	331.00	60
75.00	386752	123.00	289	170.00	319	334.00	24
76.00	32240	124.00	318	171.00	440	344.00	306
77.00	4494	126.00	237	172.00	936	345.00	85
78.00	2890	127.00	171	173.00	4443	346.00	56
79.00	11211	128.00	2629	174.00	855232		

Air Toxics Ltd.

Data file : /var/chem/msd7.i/7-31oct.b/7103101.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 31-OCT-2007 08:42
Operator : cb Inst ID: msd7.i
Smp Info : 2uL #1467-64;BFB tune check;BFB tune check
Misc Info : 50ng
Comment :
Method : /var/chem/msd7.i/7-31oct.b/bfb105.m
Meth Date : 31-Oct-2007 08:37 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	2.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.204	8.232	-0.028	95	798784			100.00- 100.00	100.00
8.204	8.232	-0.028	50	165517			15.00- 40.00	20.72
8.204	8.232	-0.028	75	316242			30.00- 60.00	39.59
8.204	8.232	-0.028	96	52897			5.00- 9.00	6.62
8.204	8.232	-0.028	173	3089			0.00- 2.00	0.45
8.204	8.232	-0.028	174	679763			50.00- 100.00	85.10
8.204	8.232	-0.028	175	48256			5.00- 9.00	7.10
8.204	8.232	-0.028	176	654939			95.00- 101.00	96.35
8.204	8.232	-0.028	177	43474			5.00- 9.00	6.64

Data File: /var/chem/msd7.i/7-31oct.b/7103101.d

Date : 31-OCT-2007 08:42

Client ID: BFB

Instrument: msd7.i

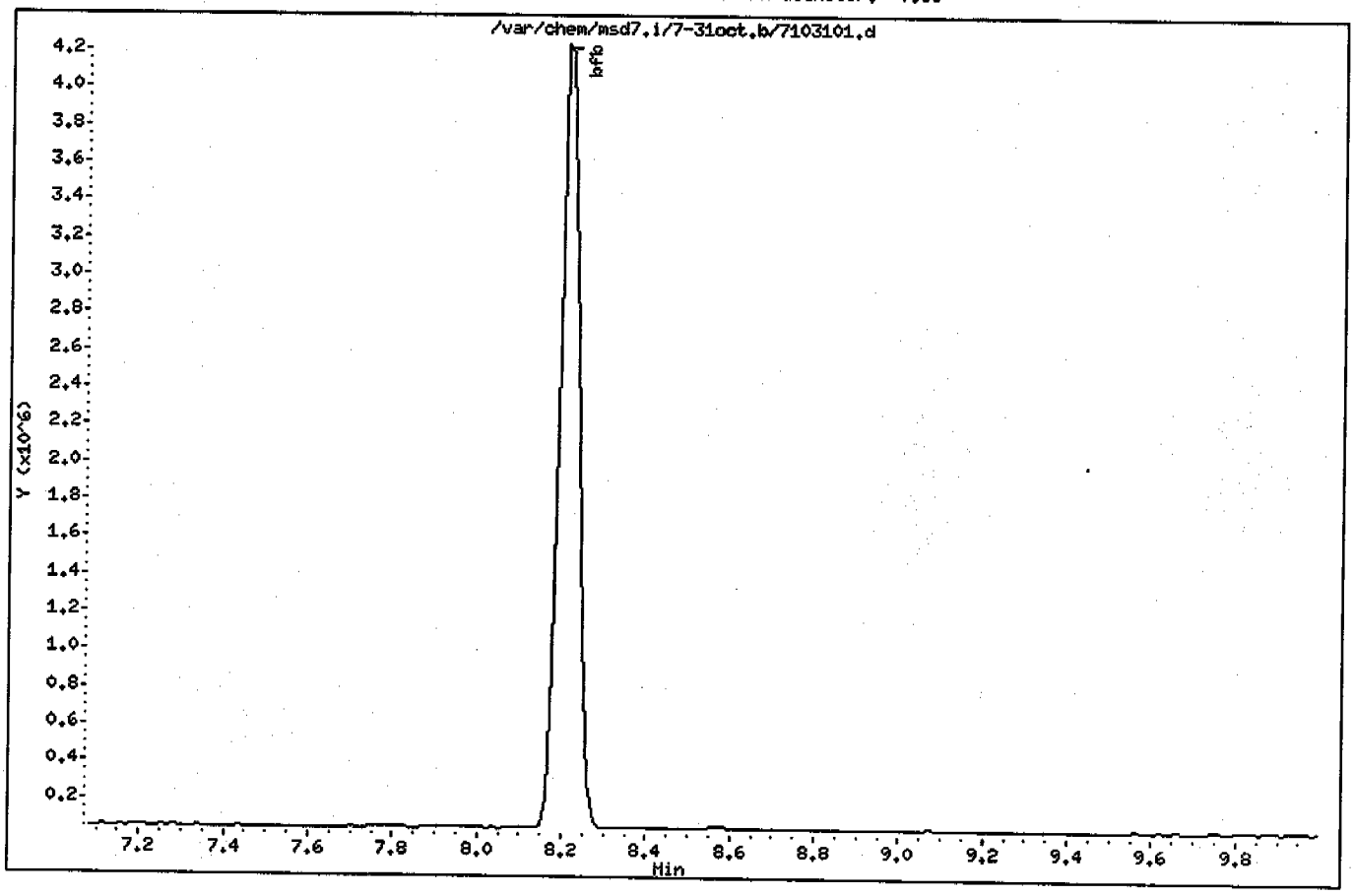
Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53



Data File: /var/chem/msd7.i/7-31oct.b/7103101.d

Date : 31-OCT-2007 08:42

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

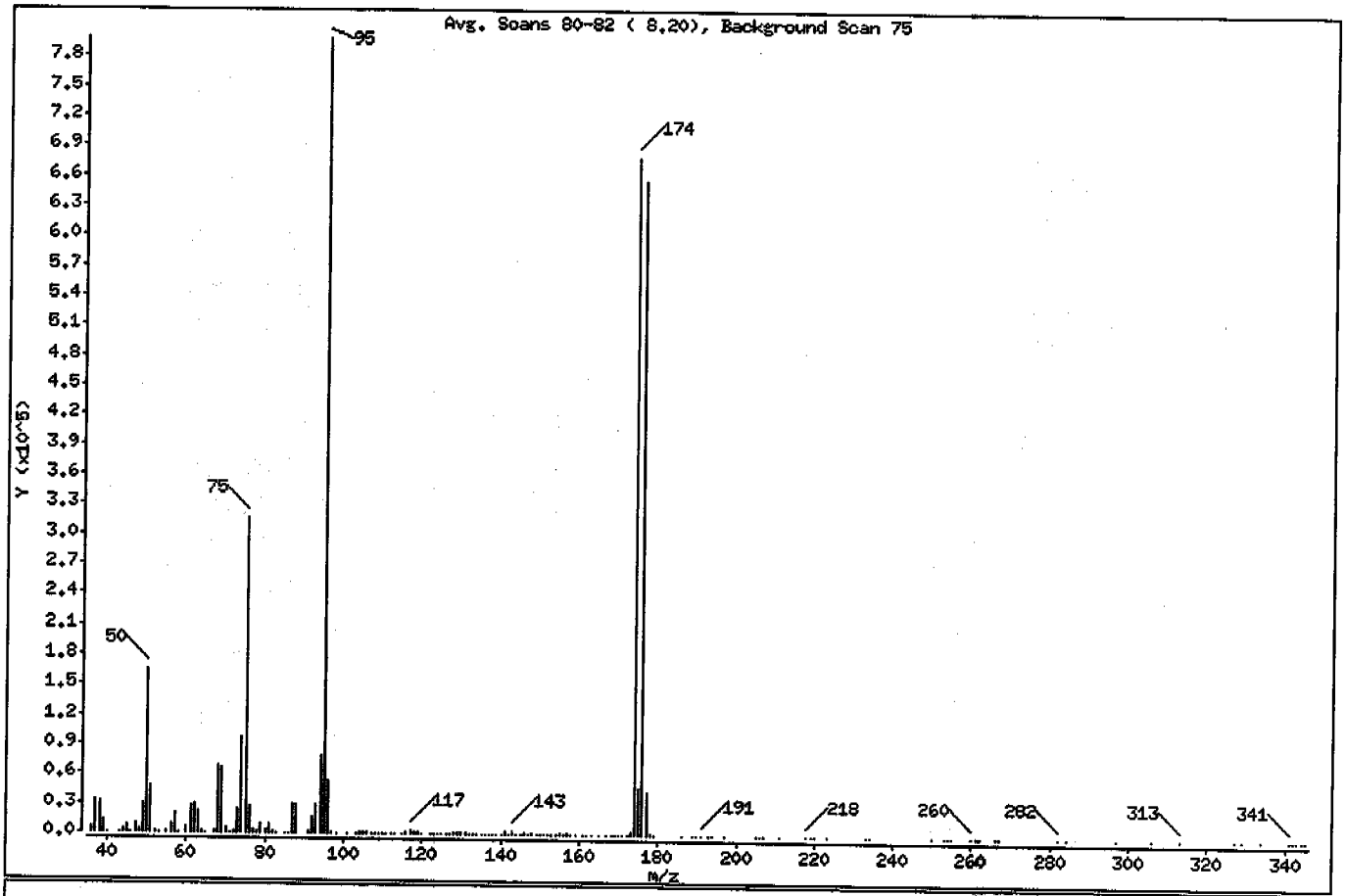
Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.72
75	30.00 - 60.00% of mass 95	39.59
96	5.00 - 9.00% of mass 95	6.62
173	Less than 2.00% of mass 174	0.39 (0.45)
174	50.00 - 100.00% of mass 95	88.10
175	5.00 - 9.00% of mass 174	6.04 (7.10)
176	95.00 - 101.00% of mass 174	81.99 (96.35)
177	5.00 - 9.00% of mass 176	5.44 (6.64)

Data File: /var/chem/msd7.i/7-31oct.b/7103101.d

Date : 31-OCT-2007 08:42

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103101.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5705	83.00	333	133.00	44	178.00	976
37.00	33536	85.00	108	134.00	128	179.00	95
38.00	31856	86.00	639	135.00	392	186.00	55
39.00	13115	87.00	28920	136.00	289	189.00	130
40.00	621	88.00	28520	137.00	667	190.00	82
43.00	587	91.00	1280	138.00	55	191.00	268
44.00	3426	92.00	16904	139.00	111	193.00	23
45.00	6755	93.00	28672	140.00	334	194.00	52
46.00	401	94.00	79400	141.00	3950	197.00	52
47.00	9294	95.00	798784	142.00	567	205.00	52
48.00	3759	96.00	52896	143.00	4138	206.00	50
49.00	29256	97.00	1320	144.00	272	207.00	109
50.00	165504	98.00	142	145.00	412	211.00	115
51.00	49096	101.00	65	146.00	1170	218.00	241
52.00	1883	103.00	243	147.00	603	219.00	154
53.00	5	104.00	1788	148.00	1659	220.00	64
55.00	1459	105.00	963	149.00	304	223.00	52
56.00	9310	106.00	2245	150.00	723	233.00	86
57.00	20192	107.00	692	151.00	56	234.00	87
58.00	913	108.00	194	152.00	291	250.00	63
60.00	5557	109.00	66	153.00	696	253.00	71
61.00	28048	110.00	233	154.00	411	254.00	23
62.00	28696	111.00	195	155.00	1468	255.00	140
63.00	22888	112.00	285	156.00	152	260.00	142
64.00	1943	113.00	334	157.00	1368	261.00	80
65.00	149	115.00	438	158.00	324	262.00	85
67.00	1476	116.00	1414	159.00	702	266.00	93
68.00	68584	117.00	3134	161.00	843	267.00	38
69.00	66248	118.00	1955	162.00	168	282.00	263
70.00	4735	119.00	2656	163.00	224	284.00	78
71.00	256	120.00	32	165.00	201	297.00	57
72.00	2400	122.00	116	167.00	63	306.00	58
73.00	23008	123.00	443	168.00	116	313.00	59
74.00	96544	124.00	360	169.00	74	327.00	1
75.00	316224	125.00	39	170.00	114	329.00	55

Data File: /var/chem/msd7.i/7-31oct.b/7103101.d

Date : 31-OCT-2007 08:42

Client ID: BFB

Instrument: msd7.i

Sample Info: 2uL #1467-64;BFB tune check;BFB tune check

Volume Injected (uL): 2.0

Operator: cb

Column phase:

Column diameter: 0.53

Data File: 7103101.d

Spectrum: Avg. Scans 80-82 (8.20), Background Scan 75

Location of Maximum: 95.00

Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	28208	126.00	383	171.00	199	334.00	8
77.00	3663	127.00	16	172.00	783	341.00	200
78.00	1961	128.00	2174	173.00	3089	342.00	50
79.00	9598	129.00	1254	174.00	679744	343.00	114
80.00	3409	130.00	2600	175.00	48256	344.00	23
81.00	10047	131.00	972	176.00	654912	345.00	51
82.00	2556	132.00	222	177.00	43472		

Shipping/ Receiving Documents

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Los Alamos National Laboratories
ATTENTION: Mr. Keith Greene
FAX #: 505-665-8855
FROM: Sample Receiving
Workorder #: 0710567
# of pages (Including Cover): 1

11/5/2007

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Brandon Dunmore at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancy has been observed:

The Chain of Custody (COC) was not completed properly. Please note for future reference that the COC must be signed and dated in order to properly relinquish or receive samples.

Your prompt response is appreciated.

Monday, October 22, 2007

0710567

REQUEST NUMBER: 08-79

0375

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Lisa Argento

Air Tox c LTD

180 Blue Ravine Rc. Suite B

Folsom, CA 95630

These Samples are on:

LANL Request Number:08-79

Per Agreement Number:TIPS#24256

Project Cost Code: MR8R0225FB00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 10/22/2007

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE		CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:TO15	01A	1	MD21-07-6813	GAS	10/19/2007	7.5 "Hg	
		02A	1	MD21-07-6814	GAS	10/19/2007	6.5 "Hg	
		03A	1	MD21-07-6815	GAS	10/19/2007	7.0 "Hg	
		04A	1	MD21-07-6816	GAS	10/19/2007	8.0 "Hg	
		05A	1	MD21-07-6817	GAS	10/19/2007	7.0 "Hg	

Final Page of REQUEST NUMBER 08-79

0710567

Monday, October 22, 2007

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-79C

REQUEST NUMBER: 08-79

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Lisa Argento

Air Toxic LTD

180 Blue Ravine Rd. Suite B

Folsom, CA 95630

TURNAROUND/REPORT DUE: 11/1/2007

TURNAROUND REQ'D: 10

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-07-6813	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6816	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6817	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6815	1	6 L SUMMA CANISTER	TO15	None	GAS
MD21-07-6814	1	6 L SUMMA CANISTER	TO15	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	10/14/07	1100	A Scott	ATL	10/23/07	0840
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

CUSTODY SEAL INTACT?
Y N NONE TEMP NA

Fedex 7209 7843 0544

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0710567

Client

Mr. Keith Greene
Los Alamos National Laboratories
Mail Stop 240
P.O. Box 1663
Los Alamos, NM 87545

Phone

505-665-9966

Fax

505-665-8855

Sales Rep: R6

Date Promised: 11/01/07 4:00 pm
Date Completed: 11/1/07
Date Received: 10/23/07
PO#: 47247-001-07
Project#: 08-79

Total $: $ 1,756.25
Logged By: MW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	MD21-07-6813	Modified TO-15	10/19/2007	7.5 "Hg	$256.25
02A	MD21-07-6814	Modified TO-15	10/19/2007	6.5 "Hg	$256.25
03A	MD21-07-6815	Modified TO-15	10/19/2007	7.0 "Hg	$256.25
04A	MD21-07-6816	Modified TO-15	10/19/2007	8.0 "Hg	$256.25
05A	MD21-07-6817	Modified TO-15	10/19/2007	7.0 "Hg	$256.25
06A	Lab Blank	Modified TO-15	NA	NA	$0.00
06B	Lab Blank	Modified TO-15	NA	NA	$0.00
07A	CCV	Modified TO-15	NA	NA	$0.00
07B	CCV	Modified TO-15	NA	NA	$0.00
08A	LCS	Modified TO-15	NA	NA	$0.00
08B	LCS	Modified TO-15	NA	NA	$0.00

Misc. Charges 6 Liter Summa Canister (5) @ $60.00 each.	$300.00
CVP (5) @ $20.00 each.	$100.00
Client Specific EDD (5) @ $5.00 each.	$25.00
eCVP (5) @ $10.00 each.	$50.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: LANL/2153

BILL TO: Accounts Payable
Los Alamos National Laboratories
P.O. Box 1663
Mail Stop P240
Los Alamos, NM 87545

Analysis Code: TO-14A

REMARKS: A 25% surcharge is applied for a 7 day turnaround time.

TERMS:

Reporting Method: Modified TO-15 (Sp)-Los Alamos v2

Sample Discrepancy Report

Identification

Initiated By: MW **Date:** 10/26

Discrepancy Type: (circle all that apply) (I.) II. III.

Workorder(s) affected: 0710567 **Sample(s) affected:** all

I. Sample Receipt Discrepancies

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

Narration not required:

- ☐ COC was not filled out in ink.
- ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.
- ☐ Flow controller used - canister samples received at ambient or under pressure.
- ☐ No brass cap on canister.
- ☐ VOA vial for RSK-175 analysis received with headspace bubble <5mm.

Narration Required:

- ☒ COC improperly relinquished / received.
- ☐ Sample tags / can numbers do not match the COC.
- ☐ Samples received at wrong temperature (up to 10°C); ice / blue ice (circle one) was present. A temp. blank was / was not present (circle one).
- ☐ Custody Seal on the outside of the container was broken / improperly placed (circle one).
- ☐ Other (describe below).

Describe the Discrepancy: Incorrect date

II. Sample Receipt/Screening Discrepancies requiring CSR notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out, CSR must be notified within 24 hrs of initiation

- ☐ COC was not received with samples.
- ☐ Analysis method(s) is not specified / incorrectly specified (circle one) on the COC.
- ☐ Number of samples on the COC does not match the number of samples that were received.
- ☐ Samples were received expired.
- ☐ Sampling date / time (sulfur only) is not documented for *some* / *any* samples (circle one).
- ☐ Sample received with significant (pooling) volume of H_2O in the Tedlar Bag.
- ☐ Sample container (cartridge/tube/VOA vial/DNPH Bottle, etc.) was received broken / leaking (circle one); sample can / cannot be analyzed (circle one).
- ☐ VOA vial for RSK-175 analysis received with headspace bubble >5mm.
- ☐ Samples for RSK-175 CO_2 analysis received preserved with HCl.
- ☐ Tedlar Bag received leaking / flat (circle one). Sample can / cannot (circle one) be analyzed.
- ☐ Canister was at ambient pressure at time of pressurization and (check all that apply): ☐ canister failed leak check on two manifolds, ☐ canister valve was open, ☐ brass nut was loose. Sample can / cannot be analyzed (circle one).
- ☐ Tedlar bag / canister received emitting a strong odor; sample can / cannot (circle one) be analyzed.
- ☐ Canister sample received with a vacuum difference >7.0"Hg between the receipt vac. and the final vac. reported on the COC, indicating loss of vacuum.
- ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).
- ☐ Trip Blank received at low vacuum (< 25"Hg).
- ☐ Tedlar Bag for Sulfur analysis has metal fitting.
- ☐ Incorrect sampling media / container for analysis requested.
- ☐ Sample was received at ≥ 10°C.
- ☐ Other (describe below)

Initials: _____ **Date:** _____
(if not the original initiator)

☐ **CSR Notified** (see section below)

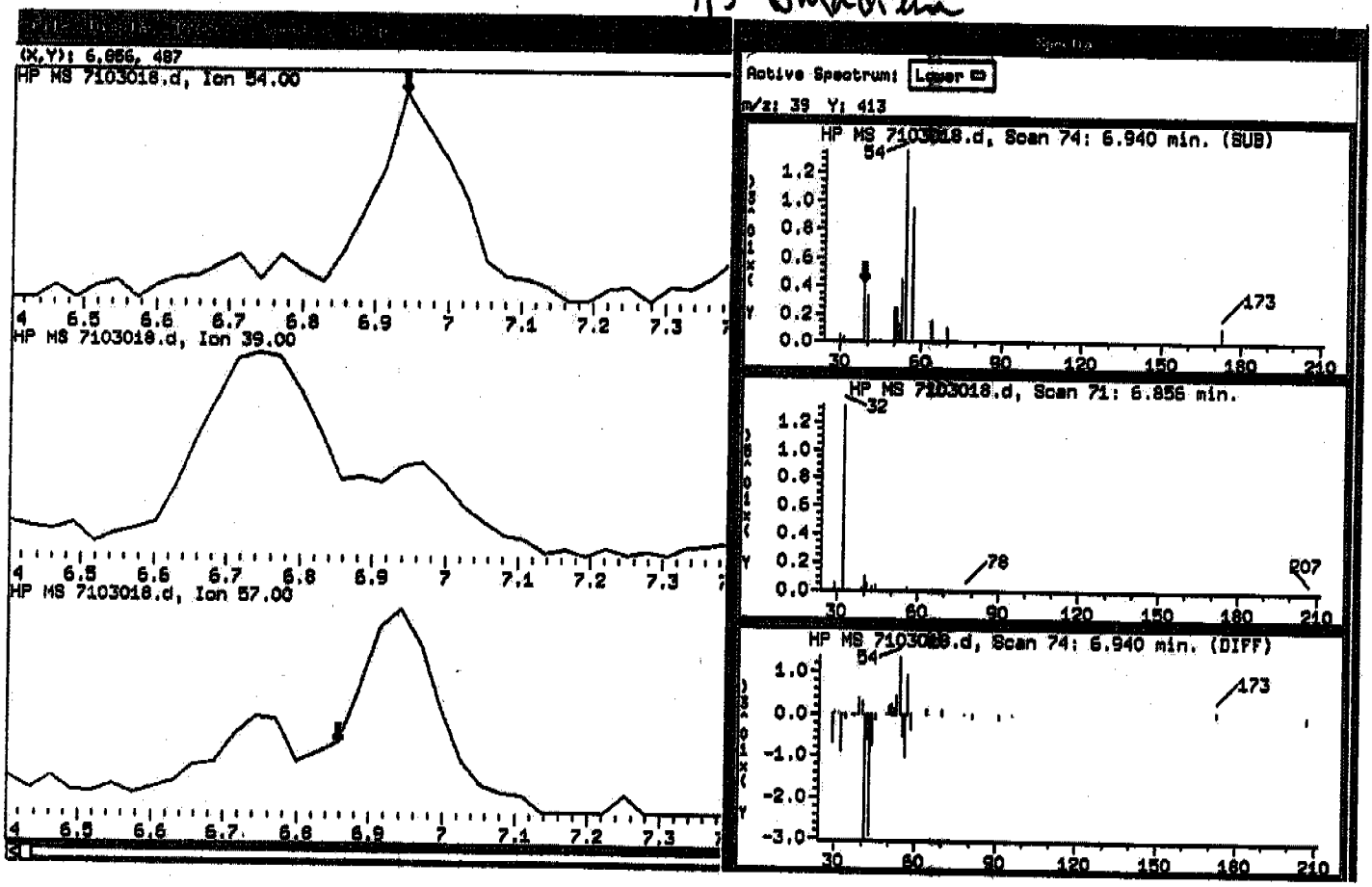
Describe the Discrepancy: _____

Other Records

Team A 1H-02CP.

Date / Initial	10/ 1H-02 CP.
Poor Integration	
Split Peak	
Peak Tailing	
Background Subtraction	X
Zoom In	
Missed Peak	
Merged Peaks	

-01A 1,3-Butadiene



DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} - [(\text{Initial Pressure ("Hg)})\ (14.7\ \text{psi} / 30\ \text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
75-25-2	Bromoform	0.50	
67-56-1	Methanol	50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
71-36-3	n-Butanol	2.0	
622-96-8	4-Ethyltoluene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
115-07-1	Propylene	2.0	
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
74-87-3	Chloromethane	2.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	2.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.50	
1634-04-4	Methyl tert-butyl ether	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
75-45-6	Chlorodifluoromethane	2.0	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	

Compound Listing

Modified TO-15 (Sp)-Los Alamos v2

CAS Number	Compound	Detection Limit ppbv	Type
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0710567

A	R	T	M	Q	
☐	☑	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
	☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
NA	☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
☐	☑	☐	☑	☐	Corrective Action issued - #
☐	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN** validation report present and initialed* ***CIRCLE (YES / NO)

☑	☐	☐	☐	☐ Lab Blank, CCV, LCS and DUP met QC criteria
☑	☐	☐	☐	☐ Hold time is met for all samples
	☐	☐	☐	☐ Appropriate data qualifier flags are applied
	☐	☐	☐	☐ Manual integrations for samples and QC are properly documented
☑	☐	☐		☐ Samples analyzed within the project or method specific clock
	☐	☐		☐ Retention times have been verified
☑	☐	☐		☐ Appropriate ICAL(s) included
	☐	☐	☐	☐ At least one result per sample is verified against the target quant sheets/raw data

☐	☐	☐		☐ Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☑	☑	☐		Correct amount of sample analyzed (i.e. sample not over-diluted)
	☑	☐		Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
NA	☑	☐		TICs resemble reference spectra
NA	☑	☐		TICs between duplicate samples are consistent
☑	☑	☐	☑	Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc)
	☑		☑	Special units for all samples in the final report are correctly calculated
	☑	☐	☑	Manually entered results checked (i.e. special CCV compounds)
NA	☑	☐	☑	TPH/NMOC (verify calculations and correct reference compound used)
☑				Chain of Custody scanned correctly
		☐		Verify sample id's vs. chain of custody
☑	☑			Samples pressurized w/ appropriate gas (N_2 or He) ☐ Tedlar Bag only
☑	☑			Final pressure consistent with canister size (6L vs. 1L)
☑	☑	☐		Verify receipt pressures against logbook and Target
☑	☑			Verify canister ID #'s
NA	☑			Extra printed copies are provided per client profile
	☑		☑	Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
☑	☐	☑	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: ② out in CCV
CCV from Misty files

M/O:

A	R/T	M	Q
(Analytical Review/Date)	(Reporting Review/Date)	(Management Review/Date)	(QA Review/Date)
C Taylor 11-1-07	R: C Taylor 11-1-07	11/1/07	
	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Management reviewer and reporting reviewer must be separate individuals.

Rev 03/19/05

Thursday, September 25, 2008

REQUEST NUMBER: 08-2021

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-2021
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 9/25/2008
TURNAROUND/REPORT DUE: 10/25/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-14813	GAS	9/24/2008		
		1	MD21-08-14814	GAS	9/24/2008		
		1	MD21-08-14815	GAS	9/24/2008		
		1	MD21-08-14816	GAS	9/24/2008		
		1	MD21-08-14818	GAS	9/25/2008		
		1	MD21-08-14819	GAS	9/25/2008		
		1	MD21-08-14820	GAS	9/25/2008		
		1	MD21-08-14821	GAS	9/25/2008		
		1	MD21-08-14822	GAS	9/25/2008		

Thursday, September 25, 2008

REQUEST NUMBER: 08-2021

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-14825	GAS	9/25/2008		
		1	MD21-08-14828	GAS	9/23/2008		
		1	MD21-08-14829	GAS	9/23/2008		
		1	MD21-08-14830	GAS	9/23/2008		
		1	MD21-08-14831	GAS	9/23/2008		
		1	MD21-08-14832	GAS	9/23/2008		
		1	MD21-08-14833	GAS	9/23/2008		

Final Page of REQUEST NUMBER 08-2021

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2021C

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 08-2021

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

LAB REQUEST COMMENTS:

TURNAROUND/REPORT DUE: 10/25/2008

TURNAROUND REQ'D: 30

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14829	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14813	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14816	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14828	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14819	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14830	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14831	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14814	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14832	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14815	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14821	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14822	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14825	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14833	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By: **Date** **Time** **Received By:** **Date** **Time**

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14813

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1120	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: ~~ok~~ KR 9/24/08 NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

~~CO_2 0.9 %~~ KR 9/24/08

$CO_2 = 1.1\%$

$O_2 = 19.4\%$

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Read	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14814

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1122	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	217 ft ~~760.5 ft~~ 9/24/08	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	222 ft ~~765.5 ft~~ 9/24/08	SCREEN/PORT DESC:	Port 3	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.7\%$

$O_2 = 18.1\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT)

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Reed	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14815

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1124	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	242.5ft-217.0ft bgs 9/09/08	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	247.5ft-222.0ft bgs T/24/08	SCREEN/PORT DESC:		Port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.3\%$

$O_2 = 17.9\%$

COLLECTED BY (PRINT) Kevin Red **REVIEWED BY (PRINT)**

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Red	9/25/08	(Printed Name)	9/25/08
(Signature)	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14816

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/2008	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1126	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	339.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	344.5 ft	SCREEN/PORT DESC:		Port 5
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.3\%$

$O_2 = 17.8\%$

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** [illegible]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08 1200	(Printed Name)	9/25/08 1200
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14818

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	77.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	82.5 ft	SCREEN/PORT DESC:		port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9\ \%$

$O_2 = 19.3\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14819

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1002	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	187.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	192.5 ft	SCREEN/PORT DESC:		port #3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 19.8$

$CO_2 \leq 0.8\ \%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) ~~Bill~~ Steve

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14820

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1004	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	BH	↓	FIELD PREP:	NA	
TOP DEPTH:	0	229.5 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	234.5 ft	SCREEN/PORT DESC:		Port #4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #4

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 0.18 %

O_2 = 19.1 %

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stennett

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14821

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		9/25/08
TIME COLLECTED (HH:MM)		1006
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	
LOCATION TYPE:	BH	
TOP DEPTH:	0	292.5 ft
BOTTOM DEPTH:	0	297.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		port #5
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / (NA)

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port #5

FIELD SCREENING/MEASUREMENT RESULTS:

CO_2 = 1.0 %

O_2 = 18.8 %

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT)

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	Date/Time 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14822

	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08
TIME COLLECTED (HH:MM)		1008
PRS ID:	21-016(a)-99	OK
LOCATION ID:	21-603059	↓
LOCATION TYPE:	BH	↓
TOP DEPTH:	0	372.5 ft
BOTTOM DEPTH:	0	377.5 ft
FIELD MATRIX:	GAS	

	AS PLANNED	AS COLLECTED
MEDIA:	NA	OK
SUB-MEDIA:	OTHER	
SAMPLE TECH CODE:	VOST	
FIELD QC TYPE:	NA	
FIELD PREP:	NA	
SAMPLE USAGE:	INV	
SCREEN/PORT DESC:		port # 6
EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

port # 6

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.2\%$

$O_2 = 19.7\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14824

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08	MEDIA:	NA	
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14818

ultra pure nitrogen.

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1208	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14825

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/25/08	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1008	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603059		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: integrated NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	Silica Gel	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14822

~~Validator~~ KR 9/25/08

SAMPLE COMMENTS:

LOCATION DESC:

Port 6 FD

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Ben Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14826

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/24/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1126	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-603058		FIELD QC TYPE:	FB	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA KR BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC: QC Sample of MD21-08-14816

SAMPLE COMMENTS:

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Read (Signature)	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14828

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1620	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	67.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	72.5 ft	SCREEN/PORT DESC:		Port 1
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 1

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.9$

$O_2 = 19.3$

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** [redacted]

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Reed	1203	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14829

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1622	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	1505Ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	155.5 ft	SCREEN/PORT DESC:		Port 2
FIELD MATRIX:	GAS		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 2

FIELD SCREENING/MEASUREMENT RESULTS:

$O_2 = 18.8\%$

$CO_2 = 0.9\%$

COLLECTED BY (PRINT) Kevin Read **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Read (Signature) Kevin Read	**Date/Time** 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14830

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1624	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	222.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	227.5 ft	SCREEN/PORT DESC:		port 3
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 3

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.8\ \%$

$O_2 = 18.3\ \%$

COLLECTED BY (PRINT) K. Reed

REVIEWED BY (PRINT) Bill Stewart

RELINQUISHED BY (Printed Name) Kevin Reed (Signature) Kevin Reed	Date/Time 9/25/08 1200	**RECEIVED BY** (Printed Name) (Signature)	Date/Time 9/25/08 1200
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	**RECEIVED BY** (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14831

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1626	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	323 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	328 ft	SCREEN/PORT DESC:		Port 4
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / (NA)

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None		
1		TO15	6 L SUMMA CANISTER	None		

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:
Port 4

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.5\ \%$

$O_2 = 18.1\ \%$

COLLECTED BY (PRINT) Kevin Read

REVIEWED BY (PRINT) Bin Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Read	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Read	1200	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487 **EVENT NAME:** Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14832

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		per 9/25/08 Port 09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1627	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	0/a	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	NA	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	349.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	354.5 ft	SCREEN/PORT DESC:		port 5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	SILICA GEL TUBE	None	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC:

SAMPLE COMMENTS:

LOCATION DESC:

Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.4\ \%$

$O_2 = 18.0\ \%$

COLLECTED BY (PRINT) Kevin Reed **REVIEWED BY (PRINT)** Bill Stewart

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Kevin Reed	9/25/08	(Printed Name)	9/25/08
(Signature) Kevin Reed	1650	(Signature)	1200
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 487

EVENT NAME: Phase II Round 3 at the MDA T, Consolidated Unit 21-016(a)-99, Technical (TA) 21.

SAMPLE ID: MD21-08-14833

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		09/23/2008	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1628	SUB-MEDIA:	OTHER	
PRS ID:	21-016(a)-99	OK	SAMPLE TECH CODE:	VOST	
LOCATION ID:	21-25264		FIELD QC TYPE:	FD	
LOCATION TYPE:	BH		FIELD PREP:	NA	
TOP DEPTH:	0	OK	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	OK	SCREEN/PORT DESC:		Port #5
FIELD MATRIX:	GAS		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		H3	Silica Gel	Non	Y	
1		TO15	6 L SUMMA CANISTER	None	Y	

SAMPLE DESC: QC Sample of MD21-08-14832

SAMPLE COMMENTS:

LOCATION DESC:
Port 5

FIELD SCREENING/MEASUREMENT RESULTS:

$CO_2 = 0.4\%$

$O_2 = 18.0\%$

COLLECTED BY (PRINT) Kevin Reed

REVIEWED BY (PRINT) [illegible]

RELINQUISHED BY (Printed Name) Kevin Reed	**Date/Time** 9/25/08	**RECEIVED BY** (Printed Name)	**Date/Time** 9/25/08
(Signature) Kevin Reed	1200	(Signature)	1200
RELINQUISHED BY (Printed Name)	**Date/Time**	**RECEIVED BY** (Printed Name)	**Date/Time**
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 08-2021 VALIDATION DATE: 10/29/08 LAB CODE: ARS

CONTRACT LABORATORY NAME: American Radiation Services

VALIDATOR: Jessica Jorvig ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☒ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. It should be noted that an LCSD was analyzed instead of a duplicate analysis on a field sample. No sample data were qualified as a result.
2. It should be noted that an MS was not analyzed. However, an LCS was analyzed and passed acceptance criteria. Thus, no sample data were qualified.
3. The tritium results for samples MD21-08-14813 and -14816 were ≤ the MDCs and, thus, were qualified U,R5.
4. It should be noted that for the QC samples, the 2-sigma TPU was reported and incorrectly identified as 1-sigma on the QC summary form. However, the 1-sigma TPU was used for all evaluations.

Reviewed By: ETM **Level:** I **Date:** 10/29/08

VALIDATOR'S SIGNATURE: _____ DATE: 10/29/08	
Form 5119-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

RAD ANALYTICAL DATA VALIDATION CHECKLIST

5119-2

Rad Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
☒	☐	☐	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
☐	☐	☒	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
☐	☒	☐	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
☐	☒	☐	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
☐	☒	☐	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
☐	☐	☒	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
☐	☐	☒	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 **Rad Analytical Data Validation Checklist**	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	12. The tracer is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
☐	☐	☒	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
☐	☐	☒	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
☐	☒	☐	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
☐	☒	☐	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
☐	☒	☐	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
☐	☒	☐	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
☐	☒	☐	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
☐	☒	☐	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
☐	☐	☒	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
☐	☐	☒	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
☒	☐	☐	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
☐	☒	☐	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
☐	☒	☐	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
☒	☐	☐	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14813
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-001
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	89.777	56.164	184.192	90.487	U	pCi/L	ARS-054/EPA 906.0	10/24/08 16:22	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
10/29/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14814
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-002
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	504.074	66.111	185.623	91.190		pCi/L	ARS-054/EPA 906.0	10/24/08 19:32	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14815
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-003
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	651.794	70.264	183.545	90.169		pCi/L	ARS-054/EPA 906.0	10/24/08 22:41	BJS	N/A

NOTES: Project Cost Code: MR8R032NF800

Lyndsay Ramsel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14816
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-004
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3 U,R5	117.975	56.794	184.833	90.802	U	pCi/L	ARS-054/EPA 906.0	10/25/08 1:51	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rousel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14818
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-005
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	300.310	60.427	184.839	90.805		pCi/L	ARS-054/EPA 906.0	10/25/08 5:00	BJS	N/A

NOTES: Project Cost Code: MR8R032NF800

Lindsay Roussel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

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10/29/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14819
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-006
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	349.081	61.528	184.540	90.658		pCi/L	ARS-054/EPA 906.0	10/25/08 8:10	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14820
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-007
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1113.672	87.491	182.096	89.457		pCi/L	ARS-054/EPA 906.0	10/25/08 11:19	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rousseau
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14821
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-008
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1979.884	126.894	184.438	90.608		pCi/L	ARS-054/EPA 906.0	10/25/08 14:29	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14822
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-009
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	239.181	58.348	182.390	89.602		pCi/L	ARS-054/EPA 906.0	10/25/08 17:38	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roussel
Project Manager Review

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ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14825
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-010
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	2972.655	175.192	183.885	90.336		pCi/L	ARS-054/EPA 906.0	10/25/08 20:46	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14828
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-011
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	4218.928	237.895	182.685	89.746		pCi/L	ARS-054/EPA 906.0	10/25/08 23:53	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roussel
Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14829
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-012
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	106723.685	5590.940	181.691	89.258		pCi/L	ARS-054/EPA 906.0	10/26/08 2:01	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager/Review

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ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-01854	**Request or PO Number:**	08-2021
Client Sample ID:	MD21 08 14830	**ARS Sample ID:**	ARS1-08-01854-013
Sample Collection Date:	9/23/2008	**Date Received:**	9/26/2008
Sample Matrix:	Air/Gel	**Report Date:**	10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	74687.182	3916.326	183.789	90.289		pCi/L	ARS-054/EPA 906.0	10/26/08 5:10	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Raimsel
Project Manager Review

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10/29/08

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-01854	**Request or PO Number:**	08-2021
Client Sample ID:	MD21 08 14831	**ARS Sample ID:**	ARS1-08-01854-014
Sample Collection Date:	9/23/2008	**Date Received:**	9/26/2008
Sample Matrix:	Air/Gel	**Report Date:**	10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1843.049	120.222	183.177	89.988		pCi/L	ARS-054/EPA 906.0	10/26/08 8:20	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Raimel
Project Manager Review

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JEJ
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ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14832
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-015
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1022.309	83.817	182.384	89.599		pCi/L	ARS-054/EPA 906.0	10/26/08 11:29	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14833
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-016
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1103.267	87.794	185.317	91.040		pCi/L	ARS-054/EPA 906.0	10/26/08 14:36	BJS	N/A

NOTES: Project Cost Code: MRSR032NFB00

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

JEJ
10/29/08

Thursday, September 25, 2008

REQUEST NUMBER: 08-2021

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-2021
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 9/25/2008
TURNAROUND/REPORT DUE: 10/25/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-14813	GAS	9/24/2008		
		1	MD21-08-14814	GAS	9/24/2008		
		1	MD21-08-14815	GAS	9/24/2008		
		1	MD21-08-14816	GAS	9/24/2008		
		1	MD21-08-14818	GAS	9/25/2008		
		1	MD21-08-14819	GAS	9/25/2008		
		1	MD21-08-14820	GAS	9/25/2008		
		1	MD21-08-14821	GAS	9/25/2008		
		1	MD21-08-14822	GAS	9/25/2008		

Thursday, September 25, 2008

REQUEST NUMBER: 08-2021

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-14825	GAS	9/25/2008		
		1	MD21-08-14828	GAS	9/23/2008		
		1	MD21-08-14829	GAS	9/23/2008		
		1	MD21-08-14830	GAS	9/23/2008		
		1	MD21-08-14831	GAS	9/23/2008		
		1	MD21-08-14832	GAS	9/23/2008		
		1	MD21-08-14833	GAS	9/23/2008		

Final Page of REQUEST NUMBER 08-2021

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2021C

REQUEST NUMBER: 08-2021

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 10/25/2008
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14829	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14813	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14816	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14828	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14819	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14830	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14831	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14814	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14832	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14815	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14821	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14822	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14825	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14833	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	9/25/08	1400	Maria Johnson	Maria Johnson	9-26-08	10:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS INTERNATIONAL

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Request Number: 08-2021

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services
Analytical Reports

for

Los Alamos National Laboratory
Request Number: 08-2021
Original COC

Thursday, September 25, 2008

REQUEST NUMBER: 08-2021

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman
American Radiation Services - Primary
1726 Wooddale Court
Baton Rouge, LA 70806

These Samples are on:
LANL Request Number:08-2021
Per Agreement Number:126310041
Project Cost Code: MR8R032NFB00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 9/25/2008
TURNAROUND/REPORT DUE: 10/25/2008
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-14813	GAS	9/24/2008		
		1	MD21-08-14814	GAS	9/24/2008		
		1	MD21-08-14815	GAS	9/24/2008		
		1	MD21-08-14816	GAS	9/24/2008		
		1	MD21-08-14818	GAS	9/25/2008		
3		1	MD21-08-14819	GAS	9/25/2008		
		1	MD21-08-14820	GAS	9/25/2008		
		1	MD21-08-14821	GAS	9/25/2008		
		1	MD21-08-14822	GAS	9/25/2008		

Thursday, September 25, 2008

REQUEST NUMBER: 08-2021

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SAMPLE COMMENTS	SPECIAL INSTRUCTIONS
	EPA:906.0	1	MD21-08-14825	GAS	9/25/2008		
		1	MD21-08-14828	GAS	9/23/2008		
		1	MD21-08-14829	GAS	9/23/2008		
		1	MD21-08-14830	GAS	9/23/2008		
		1	MD21-08-14831	GAS	9/23/2008		
		1	MD21-08-14832	GAS	9/23/2008		
		1	MD21-08-14833	GAS	9/23/2008		

Final Page of REQUEST NUMBER 08-2021

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2021C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 08-2021

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 10/25/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14829	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14813	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14816	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14828	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14819	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14830	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14831	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14814	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14832	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14815	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14821	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14822	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14825	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14833	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		Date	Time	Received By:		Date	Time
Printed Name	Signature	9/25/08	1400	Maria Johnson	Maria Johnson	9-26-08	10:00
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

Printed Name Signature

ARS INTERNATIONAL

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory Request Number: 08-2021

Case Narrative

ARS INTERNATIONAL

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October 27, 2008

LANL
Keith Greene
Drop Point MS H865
Los Alamos, NM 87545

Ref: LANL Request No. 08-2021
LANL Sample ID: MD21-08-14813, MD21-08-14814, MD21-08-14815, MD21-08-14816, MD21-08-14818, MD21-08-14819, MD21-08-14820, MD21-08-14821, MD21-08-14822, MD21-08-14825, MD21-08-14828, MD21-08-14829, MD21-08-14830, MD21-08-14831, MD21-08-14832, MD21-08-14833

Dear Mr. Greene:

On September 26, 2008 American Radiation Services (ARS) received sixteen Silica Gel Samples to be analyzed for Tritium.

The samples were processed and counted using the appropriate counting equipment and QA/QC for this type of analysis. Results of the analysis and QA/QC are attached in the data package.

The samples and QA/QC's were counted with a count time sufficient to meet quality control parameters for counting equipment were within acceptance criteria and statistical sound detection limits.

If you have any questions please do not hesitate to call at 225-381-2991.

Sincerely,

Quality Assurance Manager
American Radiation Services

ARS INTERNATIONAL

2609 North River Road • Port Allen, Louisiana 70767
1 (800) 401-4277 • Fax (225) 381-2996

COVER PAGE

18980SOW0-8S
Statement of Work for Analytical Laboratories

PROJECT SAMPLE IDENTIFICATION
CROSS-REFERENCE
TO ARS SAMPLE LABORATORY IDs

Subcontract (LANL Agreement Number) 126310041

COC NUMBER	LANL PROJECT SAMPLE ID NUMBER	American Radiation Services SAMPLE ID NUMBER(S)
08-2021	MD21-08-14813	ARS1-08-01854-001
08-2021	MD21-08-14814	ARS1-08-01854-002
08-2021	MD21-08-14815	ARS1-08-01854-003
08-2021	MD21-08-14816	ARS1-08-01854-004
08-2021	MD21-08-14818	ARS1-08-01854-005
08-2021	MD21-08-14819	ARS1-08-01854-006
08-2021	MD21-08-14820	ARS1-08-01854-007
08-2021	MD21-08-14821	ARS1-08-01854-008
08-2021	MD21-08-14822	ARS1-08-01854-009
08-2021	MD21-08-14825	ARS1-08-01854-010
08-2021	MD21-08-14828	ARS1-08-01854-011
08-2021	MD21-08-14829	ARS1-08-01854-012
08-2021	MD21-08-14830	ARS1-08-01854-013
08-2021	MD21-08-14831	ARS1-08-01854-014
08-2021	MD21-08-14832	ARS1-08-01854-015
08-2021	MD21-08-14833	ARS1-08-01854-016

ANALYTICAL METHODS

Tritium analyses were performed using **ARS-054, "Tritium In Water"**.

ANALYTICAL RESULTS

The result data that are flagged with "U" indicate that the activity is below the MDC.

ARS INTERNATIONAL

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1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Project Manager/Laboratory Manager's Comments:
"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

"I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the LANL specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager/Technical Director or the Manager's designee."

Signature

Quality Assurance Manager, American Radiation Services
Title

10-27-08
Date

ARS INTERNATIONAL

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1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

ARS INTERNATIONAL

2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14813
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-001
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	89.777	56.164	184.192	90.487	U	pCi/L	ARS-054/EPA 906.0	10/24/08 16:22	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Reimel
Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14814
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-002
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	504.074	66.111	185.623	91.190		pCi/L	ARS-054/EPA 906.0	10/24/08 19:32	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rousel
Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14815
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-003
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	651.794	70.264	183.545	90.169		pCi/L	ARS-054/EPA 906.0	10/24/08 22:41	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsel
Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14816
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-004
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	117.975	56.794	184.833	90.802	U	pCi/L	ARS-054/EPA 906.0	10/25/08 1:51	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rousel
Project Manager Review

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ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14818
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-005
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	300.310	60.427	184.839	90.805		pCi/L	ARS-054/EPA 906.0	10/25/08 5:00	BJS	N/A

NOTES: Project Cost Code: MR8R032NF800

Project Manager Review

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ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14819
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-006
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	349.081	61.528	184.540	90.658		pCi/L	ARS-054/EPA 906.0	10/25/08 8:10	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14820
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-007
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1113.672	87.491	182.096	89.457		pCi/L	ARS-054/EPA 906.0	10/25/08 11:19	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roussel
Project Manager Review

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ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14821
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-008
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1979.884	126.894	184.438	90.608		pCi/l	ARS-054/EPA 906.0	10/25/08 14:29	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roussel
Project Manager Review

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ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14822
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-009
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	239.181	58.348	182.390	89.602		pCi/L	ARS-054/EPA 906.0	10/25/08 17:38	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roussel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14825
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-010
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	2972.655	175.192	183.885	90.336		pCi/L	ARS-054/EPA 906.0	10/25/08 20:46	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rousel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14828
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-011
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DL,C	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	4218.928	237.895	182.685	89.746		pCi/L	ARS-054/EPA 906.0	10/25/08 23:53	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roumel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14829
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-012
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	106723.685	5590.940	181.691	89.258		pCi/L	ARS-054/EPA 906.0	10/26/08 2:01	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Roussel
Project Manager Review

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ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14830
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-013
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	74687.182	3916.326	183.789	90.289		pCi/L	ARS-054/EPA 906.0	10/26/08 5:10	BJS	N/A

NOTES: Project Cost Code: MR8R032NF800

Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14831
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-014
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1843.049	120.222	183.177	89.988		pCi/L	ARS-054/EPA 906.0	10/26/08 8:20	BJS	N/A

NOTES: Project Cost Code: MR8R032NF800

Lindsay Roussel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14832
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-015
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1022.309	83.817	182.384	89.599		pCi/L	ARS-054/EPA 906.0	10/26/08 11:29	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Ramsel
Project Manager Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-08-01854	**Request or PO Number:**	08-2021
Client Sample ID:	MD21 08 14833	**ARS Sample ID:**	ARS1-08-01854-016
Sample Collection Date:	9/23/2008	**Date Received:**	9/26/2008
Sample Matrix:	Air/Gel	**Report Date:**	10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
H-3	1103.267	87.794	185.317	91.040		pCi/L	ARS-054/EPA 906.0	10/26/08 14:36	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

QC Results Report

Sample Delivery Group: ARS1-08-01854
Date Received: 9/26/2008

Laboratory Control Sample Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Percent Recovery (%)	LCS Acceptance Range
ARS1-B08-02821	LCS	H3	1024.49	164.6	182.77405	1257.97		pCi/L	ARS-054/EPA 906.0	10/24/08 7:01	BJS	81	75%-125%

Blank Evaluation

Analysis Batch	QC Type	Analyte	Analysis Results	CSU 1 (1 s)	MDC	Expected Value	Qual	Report Units	Analysis Test Method	Analysis Date/Time	Analysis Technician
ARS1-B08-02821	MBL	H3	-25.559	106.91721	183.53095	NA	U	pCi/L	ARS-054/EPA 906.0	10/24/08 13:15	BJS

RER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	RER	RER AcceptanceRange
ARS1-B08-02821	LCSD	H3	1024.49	164.6	998.89734	162.4261		pCi/L	ARS-054/EPA 906.0	10/24/08 10:08	BJS	0.08	< 1

DER Duplicate Evaluation

Analysis Batch	QC Type	Analysis Description	Result 1	CSU 1 (1 s)	Result 2	CSU 2 (1s)	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	DER	DER AcceptanceRange
ARS1-B08-02821	LCSD	H3	1024.49	164.6	998.89734	162.4261		pCi/L	ARS-054/EPA 906.0	10/24/08 10:08	BJS	0.22	< 3

Project Manager Review

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Samples

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	10.790000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.423800
Sample Aliquot	5.011000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/24/08 7:01 AM
Count Date (t2)	10/24/08 7:01 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	1024.492542	1024.492542	OK
CU	126.820335	126.820335	OK
TPU	164.632221	164.632221	OK
MDA	182.774048	182.774048	OK
DL	89.790305	89.790305	OK
Net Count Rate	4.830000	4.830000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004715	0.004715	OK
K MDA	0.848615	0.848615	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-01
Analysis Code	
SDG	ARS1-08-01898
Fraction	001
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44S-2
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.680000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.419900
Sample Aliquot	5.069000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/24/08 10:08 AM
Count Date (t2)	10/24/08 10:08 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	998.897344	998.897344	OK
CU	126.117486	126.117486	OK
TPU	162.426051	162.426051	OK
MDA	182.360897	182.360897	OK
DL	89.587339	89.587339	OK
Net Count Rate	4.720000	4.720000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004725	0.004725	OK
K MDA	0.850538	0.850538	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-02
Analysis Code	
SDG	ARS1-08-01898
Fraction	001
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-44 S-3
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10 27 08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	5.840000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.417800
Sample Aliquot	5.062800
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	10/24/08 1:15 PM
Count Date (t2)	10/24/08 1:15 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	-25.558637	-25.558637	OK
CU	106.885126	106.885126	OK
TPU	106.917206	106.917206	OK
MDA	193.520949	193.520949	OK
DL	90.162143	90.162143	OK
Net Count Rate	-0.120000	-0.120000	OK
D t 1 (t2 - t1)	0.000000	0.000000	OK
DF	1.000000	1.000000	OK
Sys Err	0.052280	0.052280	OK
K	0.004695	0.004695	OK
K MDA	0.845115	0.845115	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-03
Analysis Code	
SDG	ARS1-08-01898
Fraction	001
Run Number	1
Client	QC Sample
Client Profile	
Client ID	N/A QC Sample
Instr File Name	73
Instr Detector	P-48 S-4
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: JMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	6.380000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.419600
Sample Aliquot	5.046000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/24/08 12:00 AM
Count Date (t2)	10/24/08 4:22 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	89.777223	89.777223	OK
CU	109.696880	109.696880	OK
TPU	110.081937	110.081937	OK
MDA	184.191565	184.191565	OK
DL	90.486680	90.486680	OK
Net Count Rate	0.420000	0.420000	OK
D t 1 (t2 - t1)	30.681944	30.681944	OK
DF	0.995285	0.995285	OK
Sys Err	0.052280	0.052280	OK
K	0.004678	0.004678	OK
K MDA	0.842084	0.842084	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-04
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	001
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MDA 08 14813
Instr File Name	73
Instr Detector	P-08-S-5
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10-27-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	8.300000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.417200
Sample Aliquot	5.036000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/24/08 12:00 AM
Count Date (t2)	10/24/08 7:32 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**[illegible]**	**V/V**
ACT	504.073963	504.073963	OK
CU	118.838727	118.838727	OK
TPU	129.578271	129.578270	OK
MDA	185.622778	185.622778	OK
DL	91.189784	91.189784	OK
Net Count Rate	2.340000	2.340000	OK
D t 1 (t2 - t1)	30.813889	30.813889	OK
DF	0.995265	0.995265	OK
Sys Err	0.052280	0.052280	OK
K	0.004642	0.004642	OK
K MDA	0.835592	0.835592	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-808-02821
Batch ID	ARS1-808-02821-05
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	002
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	M021 08 14814
Instr File Name	73
Instr Detector	P-44-S-6
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10 27 08

Procedure	ARS-054
Variable	Value
Gross Count Rate	9.020000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.422100
Sample Aliquot	5.034000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/24/08 12:00 AM
Count Date (t2)	10/24/08 10:41 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	651.793572	651.793571	OK
CM	120.438232	120.438232	OK
TPU	137.717189	137.717189	OK
MDA	183.544556	183.544556	OK
DL	90.168828	90.168828	OK
Net Count Rate	3.060000	3.060000	OK
D t 1 (t2 - t1)	30.945139	30.945139	OK
DF	0.995245	0.995245	OK
Sys Err	0.052280	0.052280	OK
K	0.004695	0.004695	OK
K MDA	0.845053	0.845053	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-06
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	003
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	WP1 08 14815
Instr File Name	73
Instr Detector	P-A-S-7
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10-27-08

American Radiation Services
Baton Rouge Laboratory

Calculation Verification

Printed 10/27/2008 8:25 AM

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	6.510000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.420000
Sample Aliquot	5.024000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/24/08 12:00 AM
Count Date (t2)	10/25/08 1:51 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 **Variables Intact Test**	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	117.974951	117.974951	OK
CU	[illegible]0.657323	110.657323	OK
TPU	111.315675	111.315675	OK
MDA	[illegible]4.833197	184.833197	OK
DL	90.801891	90.801891	OK
Net Count Rate	0.550000	0.550000	OK
D t 1 (t2 - t1)	31.077083	31.077083	OK
DF	0.995224	0.995224	OK
Sys Err	0.052280	0.052280	OK
K	0.004662	0.004662	OK
K MDA	0.839161	0.839161	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	[illegible]1-B08-02821-07
Analysis Code	LSC-A-001
SDG	[illegible]1-08-01854
Fraction	004
Run Number	1
Client	[illegible] Alamos National Laboratory
Client Profile	Keith Greene
Client ID	[illegible]21 08 14816
Instr File Name	73
Instr Detector	[illegible]-S-8
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR **Date:** 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	7.360000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.420600
Sample Aliquot	5.016000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/25/08 12:00 AM
Count Date (t2)	10/25/08 5:00 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	300.309560	300.309560	OK
CU	114.370246	114.370246	OK
TPU	118.437667	118.437667	OK
MDA	184.899159	184.899159	OK
DL	90.804820	90.804820	OK
Net Count Rate	1.400000	1.400000	OK
D t 1 (t2 - t1)	30.208333	30.208333	OK
DF	0.995358	0.995358	OK
Sys Err	0.052280	0.052280	OK
K	0.004662	0.004662	OK
K MDA	0.839134	0.839134	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-08
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	005
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MDB1 08 14818
Instr File Name	73
Instr Detector	PerkinElmer-9
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

Calculation Verification

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	7.590000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.419700
Sample Aliquot	5.035000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/25/08 12:00 AM
Count Date (t2)	10/25/08 8:10 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 **Variables Intact Test**	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	349.080754	349.080754	OK
CU	115.166924	115.166924	OK
TPU	120.593911	120.593911	OK
MDA	184.540274	184.540274	OK
DL	90.657989	90.657988	OK
Net Count Rate	1.630000	1.630000	OK
D t 1 (t2 - t1)	30.340278	30.340278	OK
DF	0.995337	0.995337	OK
Sys Err	0.052280	0.052280	OK
K	0.004669	0.004669	OK
K MDA	0.840493	0.840493	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-09
Analysis Code	LSC-A-001
SDG	[illegible]1-08-01854
Fraction	006
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	[illegible]1-08-14819
Instr File Name	73
Instr Detector	[illegible]-S-10
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR

Date: 10-27-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	11.230000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.424500
Sample Aliquot	5.045000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/25/08 12:00 AM
Count Date (t2)	10/25/08 11:19 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	1113.671936	1113.671936	OK
CU	127.898364	127.898364	OK
TPU	171.481909	171.481909	OK
MDA	182.095629	182.095629	OK
DL	89.457022	89.457022	OK
Net Count Rate	5.270000	5.270000	OK
D t 1 (t2 - t1)	30.471528	30.471528	OK
DF	0.995317	0.995317	OK
Sys Err	0.052280	0.052280	OK
K	0.004732	0.004732	OK
K MDA	0.851777	0.851777	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-10
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	007
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	NM01 08 14820
Instr File Name	73
Instr Detector	P-44-S-11
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	15.210000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.419200
Sample Aliquot	5.044000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/25/08 12:00 AM
Count Date (t2)	10/25/08 2:29 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1979.883944	1979.883943	OK
CU	143.872652	143.872652	OK
TPU	248.712086	248.712086	OK
MDA	184.438194	184.438194	OK
DL	90.607840	90.607840	OK
Net Count Rate	9.250000	9.250000	OK
D t 1 (t2 - t1)	30.603472	30.603472	OK
DF	0.995297	0.995297	OK
Sys Err	0.052280	0.052280	OK
K	0.004672	0.004672	OK
K MDA	0.840958	0.840958	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-11
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	008
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MOD1 08 14021
Instr File Name	73
Instr Detector	P-4-S-12
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

Procedure	ARS-054
Variable	**Value**
Gross Count Rate	7.090000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.424000
Sample Aliquot	5.043000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/25/08 12:00 AM
Count Date (t2)	10/25/08 5:38 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	**Excel**	**VBA**	**V/V**
ACT	239.181041	239.181041	OK
CU	111.705198	111.705198	OK
TPU	114.362214	114.362214	OK
MDA	182.390061	182.390061	OK
DL	89.601666	89.601666	OK
Net Count Rate	1.130000	1.130000	OK
D t 1 (t2 - t1)	30.734722	30.734722	OK
DF	0.995277	0.995277	OK
Sys Err	0.052280	0.052280	OK
K	0.004724	0.004724	OK
K MDA	0.850402	0.850402	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-12
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	009
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	NDEI 08 14822
Instr File Name	73
Instr Detector	P-01-S-13
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	19.890000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.421900
Sample Aliquot	5.027000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/25/08 12:00 AM
Count Date (t2)	10/25/08 8:46 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	2972.655439	2972.655438	OK
CU	158.505213	158.505213	OK
TPU	343.375543	343.375542	OK
MDA	183.885006	183.885005	OK
DL	90.336079	90.336079	OK
Net Count Rate	13.930000	13.930000	OK
D t 1 (t2 - t1)	30.865278	30.865278	OK
DF	0.995257	0.995257	OK
Sys Err	0.052280	0.052280	OK
K	0.004686	0.004686	OK
K MDA	0.843488	0.843488	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-13
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	010
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD21 08 14825
Instr File Name	73
Instr Detector	P-44-3-14
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	25.860000
Sample Count Mins	100.000000
BKG Count Rate	5.960000
BKG Count Mins	100.000000
Instrument Efficiency	0.423800
Sample Aliquot	5.039900
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/23/08 12:00 AM
Count Date (t2)	10/25/08 11:53 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	4218.928035	4218.928034	OK
CU	174.710476	174.710476	OK
TPU	466.274990	466.274990	OK
MDA	182.684584	182.684584	OK
DL	89.746355	89.746355	OK
Net Count Rate	19.900000	19.900000	OK
D t 1 (t2 - t1)	32.995139	32.995139	OK
DF	0.994930	0.994930	OK
Sys Err	0.052280	0.052280	OK
K	0.004717	0.004717	OK
K MDA	0.849031	0.849031	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-14
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	011
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MDA-08 14828
Instr File Name	73
Instr Detector	P-4[illegible]5-15
Instr keV	
Version/Date	1.0 — 11/18/2005

Reviewed by: UMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	512.110000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.425700
Sample Aliquot	5.044000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/23/08 12:00 AM
Count Date (t2)	10/26/08 2:01 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	106723.684773	106723.684739	OK
CU	701.125255	701.125255	OK
TPU	10958.241435	10958.241432	OK
MDA	181.691425	181.691425	OK
DL	89.258451	89.258451	OK
Net Count Rate	506.150000	506.150000	OK
D t 1 (t2 - t1)	33.084028	33.084028	OK
QF	0.994917	0.994917	OK
Sys Err	0.052280	0.052280	OK
K	0.004743	0.004743	OK
K MDA	0.853672	0.853672	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-15
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	012
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MU22 08 14829
Instr File Name	73
Instr Detector	P-44-S-16
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	356.130000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.421100
Sample Aliquot	5.041000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/23/08 12:00 AM
Count Date (t2)	10/26/08 5:10 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	74687.182436	74687.182412	OK
CU	892.918804	892.918804	OK
TPU	7675.998396	7675.998394	OK
MDA	183.789206	183.789205	OK
DL	90.289015	90.289015	OK
Net Count Rate	350.170000	350.170000	OK
D t 1 (t2 - t1)	33.215278	33.215278	OK
DF	0.994897	0.994897	OK
Sys Err	0.052280	0.052280	OK
K	0.004688	0.004688	OK
K MDA	0.843928	0.843928	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-16
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	013
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MBA1 08 14830
Instr File Name	73
Instr Detector	P-44-S-17
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	14.630000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.422600
Sample Aliquot	5.040000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/23/08 12:00 AM
Count Date (t2)	10/26/08 8:20 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1843.049391	1843.049391	OK
CU	140.917805	140.917805	OK
TPU	235.634624	235.634624	OK
MDA	183.176914	183.176913	OK
DL	89.988218	89.988218	OK
Net Count Rate	8.670000	8.670000	OK
D t 1 (t2 - t1)	33.347222	33.347222	OK
DF	0.994876	0.994876	OK
Sys Err	0.052280	0.052280	OK
K	0.004704	0.004704	OK
K MDA	0.846749	0.846749	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-17
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	014
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MD2-08 14831
Instr File Name	73
Instr Detector	P-44-S-18
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	10.790000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.422600
Sample Aliquot	5.062000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/23/08 12:00 AM
Count Date (t2)	10/26/08 11:29 AM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1022.308998	1022.308998	OK
CU	126.550037	126.550037	OK
TPU	164.281334	164.281334	OK
MDA	182.384484	182.384484	OK
DL	89.598931	89.598931	OK
Net Count Rate	4.830000	4.830000	OK
D t 1 (t2 - t1)	33.478472	33.478472	OK
DF	0.994856	0.994856	OK
Sys Err	0.052280	0.052280	OK
K	0.004725	0.004725	OK
K MDA	0.850428	0.850428	OK

Batch Identifiers and Other Related Information	
Batch	ARS1-B08-02821
Batch ID	ARS1-B08-02821-18
Analysis Code	LSC-A-001
SDG	ARS1-08-01854
Fraction	015
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	MEAL 08 14832
Instr File Name	73
Instr Detector	P-4-S-19
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: UMR Date: 10-27-08

Procedure	ARS-054
Variable	Value
Gross Count Rate	11.090000
Sample Count Mins	180.000000
BKG Count Rate	5.960000
BKG Count Mins	180.000000
Instrument Efficiency	0.419400
Sample Aliquot	5.020000
Dilution Factor	1.000000
Aliquot Conversion Factor	0.001000
Sample Collection Date (t1)	9/23/08 12:00 AM
Count Date (t2)	10/26/08 2:36 PM
Activity Units = pCi --- UCF =	2.2200
CF	1.9600
Nuclide Abundance	1.000000
Halflife Days 1 - Result Isotope	4499.800000
TPUF_Factor 1	0.041330
TPUF_Factor 2	0.020000
TPUF_Factor 3	0.000000
TPUF_Factor 4	0.025000
TPUF_Factor 5	0.000000
TPUF_Factor 6	0.000000
Activity Units	pCi
Aliquot Units	L
0 Variables Intact Test	OK

Isotope	H-3		
Calculated Values	Excel	VBA	V/V
ACT	1103.266917	1103.266917	OK
CM	129.731441	129.731441	OK
TPU	172.077047	172.077047	OK
MDA	185.317354	185.317354	OK
DL	91.039740	91.039740	OK
Net Count Rate	5.130000	5.130000	OK
D t 1 (t2 - t1)	33.608333	33.608333	OK
DF	0.994836	0.994836	OK
Sys Err	0.052280	0.052280	OK
K	0.004650	0.004650	OK
K MDA	0.836969	0.836969	OK

Batch Identifiers and Other Related Information	
Batch	AR$1-B08-02821
Batch ID	AR$1-B08-02821-19
Analysis Code	LSC-A-001
SDG	AR$1-08-01854
Fraction	016
Run Number	1
Client	Los Alamos National Laboratory
Client Profile	Keith Greene
Client ID	M821 08 14833
Instr File Name	73
Instr Detector	P-44 S-20
Instr keV	
Version/Date	1.0 -- 11/18/2005

Reviewed by: LMR Date: 10-27-08

ARS INTERNATIONAL

LSC Instrument Data Transfer Report

\\PACKARD3170_NEW\Results\ARS\H-3 Normal Lvl\

Batch Sample ID	Non-BKG Samples Transferred	Samples Eligible To Save	
ARS1-B08-02821	20	20	LSC 2

LIMS Batch Sample ID	LSC P#	LSC PID	LSC S#	LSC SMPL_ID	LSC Count Date	LSC CPMA	LSC tSIE	LSC EFF	LSC Count Dur	Analysis Batch	LIMS SDG	LIMS Run
BKG	44		1	BACKGROUND	10/24/08 03:54	5.96	368.64	39.8500	180.00	ARS1-B08-02821		
ARS1-B08-02821-01	44		2	B08-02821-01	10/24/08 07:01	10.79	403.87	42.3800	180.00	ARS1-B08-02821		
ARS1-B08-02821-02	44		3	B08-02821-02	10/24/08 10:08	10.66	397.78	41.9900	180.00	ARS1-B08-02821		
ARS1-B08-02821-03	44		4	B08-02821-03	10/24/08 13:15	5.84	394.50	41.7800	180.00	ARS1-B08-02821		
ARS1-B08-02821-04	44		5	B08-02821-04	10/24/08 16:22	6.38	397.33	41.9600	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-05	44		6	B08-02821-05	10/24/08 19:31	8.30	393.50	41.7200	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-06	44		7	B08-02821-06	10/24/08 22:41	9.02	401.24	42.2100	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-07	44		8	B08-02821-07	10/25/08 01:50	6.51	397.98	42.0000	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-08	44		9	B08-02821-08	10/25/08 05:00	7.36	398.90	42.0600	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-09	44		10	B08-02821-09	10/25/08 08:09	7.59	397.39	41.9700	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-10	44		11	B08-02821-10	10/25/08 11:19	11.23	404.92	42.4500	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-11	44		12	B08-02821-11	10/25/08 14:28	15.21	396.75	41.9200	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-12	44		13	B08-02821-12	10/25/08 17:38	7.09	404.14	42.4000	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-13	44		14	B08-02821-13	10/25/08 20:46	19.89	400.85	42.1900	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-14	44		15	B08-02821-14	10/25/08 23:53	25.86	403.90	42.3800	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-15	44		16	B08-02821-15	10/26/08 02:00	512.11	406.92	42.5700	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-16	44		17	B08-02821-16	10/26/08 05:10	356.13	399.64	42.1100	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-17	44		18	B08-02821-17	10/26/08 08:19	14.63	402.02	42.2600	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821 18	44		19	B08-02821-18	10/26/08 11:29	10.79	402.05	42.2600	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-19	44		20	B08-02821-19	10/26/08 14:36	11.09	397.01	41.9400	180.00	ARS1-B08-02821	ARS1-08-01854	1
ARS1-B08-02821-20	44		21	B08-02821-20	10/26/08 17:45	6.36	392.10	41.6300	180.00	ARS1-B08-02821	ARS1-08-01898	1

Assay Definition-

Assay Description:
H3 Normal Lvl

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20081024_0349
Raw Results Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20081024_0349\20081024_0349.results
RTF File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20081024_0349\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20081024_0349\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\H-3 Normal Lvl.lsa

Count Conditions-

Nuclide: H-3 Normal
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set:
  Low Energy: H3 Normal
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

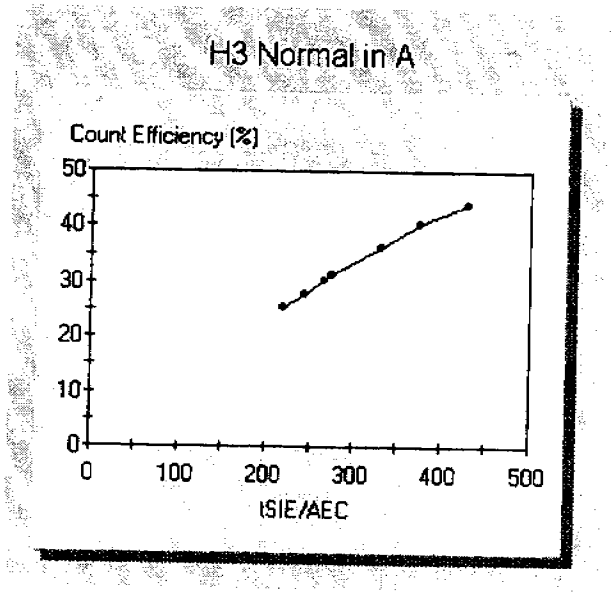
Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results
Quench Curve Block Data



Date Acquired: 01/04/2008
Date Modified:
H3 Normal in A

tSIE/AEC	Count Efficiency (%)
430.60	44.09
376.59	40.64
332.32	36.26
276.60	31.46
266.90	30.24
243.94	27.91
220.03	25.19

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES

44	1	BACKGROUND	5.96	14.96	368.64	39.85	180.00	10/24/2008	3:54:35 AM
44	2	B08-02821-01	10.79	25.47	403.87	42.38	180.00	10/24/2008	7:01:18 AM
44	3	B08-02821-02	10.68	25.43	397.78	41.99	180.00	10/24/2008	10:08:18 AM
44	4	B08-02821-03	5.84	13.99	394.50	41.78	180.00	10/24/2008	1:15:21 PM
44	5	B08-02821-04	6.38	15.20	397.33	41.96	180.00	10/24/2008	4:22:22 PM
44	6	B08-02821-05	8.30	19.89	393.50	41.72	180.00	10/24/2008	7:31:50 PM
44	7	B08-02821-06	9.02	21.37	401.24	42.21	180.00	10/24/2008	10:41:17 PM
44	8	B08-02821-07	6.51	15.51	397.98	42.00	180.00	10/25/2008	1:50:40 AM
44	9	B08-02821-08	7.36	17.49	398.90	42.06	180.00	10/25/2008	5:00:07 AM
44	10	B08-02821-09	7.59	18.10	397.39	41.97	180.00	10/25/2008	8:09:35 AM
44	11	B08-02821-10	11.23	26.46	404.92	42.45	180.00	10/25/2008	11:19:03 AM
44	12	B08-02821-11	15.21	36.29	396.75	41.92	180.00	10/25/2008	2:28:30 PM
44	13	B08-02821-12	7.09	16.73	404.14	42.40	180.00	10/25/2008	5:38:01 PM
44	14	B08-02821-13	19.89	47.15	400.85	42.19	180.00	10/25/2008	8:46:17 PM
44	15	B08-02821-14	25.86	61.03	403.90	42.38	180.00	10/25/2008	11:53:23 PM
44	16	B08-02821-15	512.11	1202.88	406.92	42.57	180.00	10/26/2008	2:00:40 AM
44	17	B08-02821-16	356.13	845.72	399.64	42.11	180.00	10/26/2008	5:10:09 AM
44	18	B08-02821-17	14.63	34.63	402.02	42.26	180.00	10/26/2008	8:19:38 AM
44	19	B08-02821-18	10.79	25.52	402.05	42.26	180.00	10/26/2008	11:29:02 AM
44	20	B08-02821-19	11.09	26.45	397.01	41.94	180.00	10/26/2008	2:36:10 PM
44	21	B08-02821-20	6.36	15.29	392.10	41.63	180.00	10/26/2008	5:45:38 PM

ARS INTERNATIONAL

2609 North River Road • Port Allen, Louisiana 70767
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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

Laboratory Records

Analysis Batch Report

Analysis Batch ID ARS1-B08-02821

Method ARS-054 **Matrix** AQ

Description TRITIUM IN WATER

ABatch Sample ID	Type	Blind Iso1	Blind Iso2	Blind Iso3
ARS1-B08-02821-01	LCS	B-05807		
ARS1-B08-02821-02	LCSD	B-05808		
ARS1-B08-02821-03	MBL			
ARS1-B08-02821-04	TRG			
ARS1-B08-02821-05	TRG			
ARS1-B08-02821-06	TRG			
ARS1-B08-02821-07	TRG			
ARS1-B08-02821-08	TRG			
ARS1-B08-02821-09	TRG			
ARS1-B08-02821-10	TRG			
ARS1-B08-02821-11	TRG			
ARS1-B08-02821-12	TRG			
ARS1-B08-02821-13	TRG			
ARS1-B08-02821-14	TRG			
ARS1-B08-02821-15	TRG			
ARS1-B08-02821-16	TRG			
ARS1-B08-02821-17	TRG			
ARS1-B08-02821-18	TRG			
ARS1-B08-02821-19	TRG			
ARS1-B08-02821-20	TRG			

SDG	1	FR	Client ID	Storage Location	Lab Deadline	Analysis Code
ARS1-08-01854	1	001	MD21 08 14813	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	002	MD21 08 14814	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	003	MD21 08 14815	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	004	MD21 08 14816	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	005	MD21 08 14818	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	006	MD21 08 14819	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	007	MD21 08 14820	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	008	MD21 08 14821	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	009	MD21 08 14822	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	010	MD21 08 14825	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	011	MD21 08 14828	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	012	MD21 08 14829	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	013	MD21 08 14830	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	014	MD21 08 14831	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	015	MD21 08 14832	O6	10/21/08	LSC-A-001
ARS1-08-01854	1	016	MD21 08 14833	O6	10/21/08	LSC-A-001
ARS1-08-01898	1	001	MD50-08-8164	O6	10/28/08	LSC-A-001

10945 08-01854-001-1a **WRAD**
10946 08-01854-002-1a **WRAD**
10947 08-01854-003-1 **WRAD**
10948 08-01854-004-1a **WRAD**
10949 08-01854-005-1a **WRAD**
10950 08-01854-006- **WRAD**
10951 08-01854-007-1 **WRAD**
10952 08-01854-008-1 **WRAD**
10953 08-01854-009-1a **WRAD**
10954 08-01854-010-1a **WRAD**
10955 08-01854-011-1a **WRAD**
10956 08-01854-012-1a **WRAD**
10957 08-01854-013-1a **WRAD**
10958 08-01854-014-1a **WRAD**
10959 08-01854-015-1a **WRAD**
10960 08-01854-016-1a **WRAD**
10961 08-01898-001-1a **XRAD**

Expected Value Calculations LANL

ARS Batch Number: ARS1-B08 - 02821

LCS

$$\frac{\text{CALCULATED EXPECTED VALUE}}{\text{Range}} = \frac{1257.973}{628.986 - 1886.959}$$

LCSD

$$\frac{\text{CALCULATED EXPECTED VALUE}}{\text{Range}} = \frac{1257.973}{628.986 - 1886.959}$$

ABatch	ABatchSampleID	Isotope	ClientID	ACT	CU	TPU	DL	MDA	BP_DL	BP_MDA	Sb	SampleCounts	SampleCountMins	BKG_Counts	BKG_CountMins	EFF	ALIQ	UCF	CF	GrossCountRate
ARS1-B08-02821	ARS1-B08-02821-01	H-3	MDS0-08-8164	1024.492542	126.8203347	164.6322213	89.79031	182.77405				0.05994	180.00000	0.03311	180.00000	0.42380	5.01100	2.22000	1.96000	10.79000
ARS1-B08-02821	ARS1-B08-02821-02	H-3	MDS0-08-8164	998.8973439	126.117496	162.4260509	89.58734	182.36090				0.05933	180.00000	0.03311	180.00000	0.41990	5.06900	2.22000	1.96000	10.68000
ARS1-B08-02821	ARS1-B08-02821-03	H-3	MDS0-08-8164	25.55863731	106.8851255	106.917206	90.16214	183.53095				0.03244	180.00000	0.03311	180.00000	0.41780	5.06200	2.22000	1.96000	5.84000
ARS1-B08-02821	ARS1-B08-02821-04	H-3	MD21 08 14813	89.77722288	109.6968799	110.081937	90.48668	184.19156				0.03544	180.00000	0.03311	180.00000	0.41960	5.04600	2.22000	1.96000	6.38000
ARS1-B08-02821	ARS1-B08-02821-05	H-3	MD21 08 14814	504.0739631	118.8387266	129.5782705	91.18978	185.62278				0.04611	180.00000	0.03311	180.00000	0.41720	5.03600	2.22000	1.96000	8.30000
ARS1-B08-02821	ARS1-B08-02821-06	H-3	MD21 08 14815	651.7935715	120.4382321	137.7171885	90.16883	183.54456				0.05011	180.00000	0.03311	180.00000	0.42210	5.03400	2.22000	1.96000	9.02000
ARS1-B08-02821	ARS1-B08-02821-07	H-3	MD21 08 14816	117.9749508	110.6573233	111.3156752	90.80189	184.83320				0.03617	180.00000	0.03311	180.00000	0.42000	5.02400	2.22000	1.96000	6.51000
ARS1-B08-02821	ARS1-B08-02821-08	H-3	MD21 08 14818	300.3095602	114.3702455	118.4376572	90.80482	184.83916				0.04089	180.00000	0.03311	180.00000	0.42060	5.01600	2.22000	1.96000	7.36000
ARS1-B08-02821	ARS1-B08-02821-09	H-3	MD21 08 14819	349.0807542	115.1669241	120.5939108	90.65799	184.54027				0.04217	180.00000	0.03311	180.00000	0.41970	5.03500	2.22000	1.96000	7.59000
ARS1-B08-02821	ARS1-B08-02821-10	H-3	MD21 08 14820	1113.671936	127.9983637	171.4819089	89.45702	182.09563				0.06239	180.00000	0.03311	180.00000	0.42450	5.04500	2.22000	1.96000	11.23000
ARS1-B08-02821	ARS1-B08-02821-11	H-3	MD21 08 14821	1979.883943	143.8726519	248.712086	90.60784	184.43819				0.08450	180.00000	0.03311	180.00000	0.41920	5.04400	2.22000	1.96000	15.21000
ARS1-B08-02821	ARS1-B08-02821-12	H-3	MD21 08 14822	239.181041	111.7051981	114.362214	89.60167	182.39006				0.03939	180.00000	0.03311	180.00000	0.42400	5.04300	2.22000	1.96000	7.09000
ARS1-B08-02821	ARS1-B08-02821-13	H-3	MD21 08 14825	2972.655438	158.5052126	343.3755425	90.33608	183.88501				0.11050	180.00000	0.03311	180.00000	0.42190	5.02700	2.22000	1.96000	19.89000
ARS1-B08-02821	ARS1-B08-02821-14	H-3	MD21 08 14828	4218.928034	174.7104762	466.2749901	89.74635	182.68458				0.14367	180.00000	0.03311	180.00000	0.42380	5.03900	2.22000	1.96000	25.86000
ARS1-B08-02821	ARS1-B08-02821-15	H-3	MD21 08 14829	106723.6847	701.1252551	10958.24143	89.25845	181.69142				2.84506	180.00000	0.03311	180.00000	0.42570	5.04400	2.22000	1.96000	512.11000
ARS1-B08-02821	ARS1-B08-02821-16	H-3	MD21 08 14830	74687.18241	592.9108041	7675.998394	90.28902	183.78921				1.97850	180.00000	0.03311	180.00000	0.42110	5.04100	2.22000	1.96000	356.13000
ARS1-B08-02821	ARS1-B08-02821-17	H-3	MD21 08 14831	1843.049391	140.9178046	235.6346243	89.98822	183.17691				0.08128	180.00000	0.03311	180.00000	0.42260	5.04000	2.22000	1.96000	14.63000
ARS1-B08-02821	ARS1-B08-02821-18	H-3	MD21 08 14832	1022.308998	126.5500371	164.2813337	89.59853	182.38449				0.05994	180.00000	0.03311	180.00000	0.42260	5.06200	2.22000	1.96000	10.79000
ARS1-B08-02821	ARS1-B08-02821-19	H-3	MD21 08 14833	1103.266917	129.7314406	172.0770468	91.03974	185.31735				0.06161	180.00000	0.03311	180.00000	0.41940	5.02000	2.22000	1.96000	11.09000
ARS1-B08-02821	ARS1-B08-02821-20	H-3	MDS0-08-8164	85.77434437	109.9569256	110.3076361	90.77478	184.77801				0.03533	180.00000	0.03311	180.00000	0.41630	5.06600	2.22000	1.96000	6.36000

ABatch	ABatchSampleID	Isotope	ClientID	BKGCountRate	NetCountRate	ChemRecovery	TracerRecovery	PlatingRecovery	NuclideAbd	TracerMeasACT	TracerKnownACT	SampleCollDate	MidPointCountDate	Halflife1	Halflife2	Halflife3	TPUF_1
ARS1-B08-02821	ARS1-B08-02821-01	H-3	MD50-08-8164	5.96000	4.83000							10/27/08 8:24	10/24/08 7:01	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-02	H-3	MD50-08-8164	5.96000	4.72000							10/27/08 8:24	10/24/08 10:08	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-03	H-3	MD50-08-8164	5.96000	-0.12000							10/27/08 8:25	10/24/08 13:15	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-04	H-3	MD21 08 14813	5.96000	0.42000							9/24/08 0:00	10/24/08 16:22	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-05	H-3	MD21 08 14814	5.96000	2.34000							9/24/08 0:00	10/24/08 19:32	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-06	H-3	MD21 08 14815	5.96000	3.06000							9/24/08 0:00	10/24/08 22:41	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-07	H-3	MD21 08 14816	5.96000	0.55000							9/24/08 0:00	10/25/08 1:51	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-08	H-3	MD21 08 14818	5.96000	1.40000							9/25/08 0:00	10/25/08 5:00	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-09	H-3	MD21 08 14819	5.96000	1.63000							9/25/08 0:00	10/25/08 8:10	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-10	H-3	MD21 08 14820	5.96000	5.27000							9/25/08 0:00	10/25/08 11:19	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-11	H-3	MD21 08 14821	5.96000	9.25000							9/25/08 0:00	10/25/08 14:29	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-12	H-3	MD21 08 14822	5.96000	1.13000							9/25/08 0:00	10/25/08 17:38	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-13	H-3	MD21 08 14825	5.96000	13.93000							9/25/08 0:00	10/25/08 20:46	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-14	H-3	MD21 08 14828	5.96000	19.90000							9/23/08 0:00	10/25/08 23:53	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-15	H-3	MD21 08 14829	5.96000	506.15000							9/23/08 0:00	10/26/08 2:01	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-16	H-3	MD21 08 14830	5.96000	350.17000							9/23/08 0:00	10/26/08 5:10	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-17	H-3	MD21 08 14831	5.96000	8.67000							9/23/08 0:00	10/26/08 8:20	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-18	H-3	MD21 08 14832	5.96000	4.83000							9/23/08 0:00	10/26/08 11:29	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-19	H-3	MD21 08 14833	5.96000	5.13000							9/23/08 0:00	10/26/08 14:36	4499.80000			0.04133
ARS1-B08-02821	ARS1-B08-02821-20	H-3	MD50-08-8164	5.96000	0.40000							10/1/08 0:00	10/26/08 17:46	4499.80000			0.04133

ABatch	ABatchSampleID	Isotope	ClientID	TPUF_2	TPUF_3	TPUF_4	TPUF_5	TPUF_6	DeltaT1	DeltaT2	DeltaT3	DeltaT4	DeltaT5	DeltaT6	DF1	DF2	DF3	IF1	IF2	SysErr	K_Val	K_MDA	InstFileName	DetectorID	InstrumentkeV
ARS1-B08-02821	ARS1-B08-02821-01	H-3	MDS0-08-8164	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00471	0.84862	73	P-44-S-2	
ARS1-B08-02821	ARS1-B08-02821-02	H-3	MDS0-08-8164	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00473	0.85054	73	P-44-S-3	
ARS1-B08-02821	ARS1-B08-02821-03	H-3	MDS0-08-8164	0.02000	0.00000	0.02500	0.00000	0.00000	0.00000						1.00000					0.05228	0.00470	0.84512	73	P-44-S-4	
ARS1-B08-02821	ARS1-B08-02821-04	H-3	MD21 08 14813	0.02000	0.00000	0.02500	0.00000	0.00000	30.68194						0.99528					0.05228	0.00468	0.84208	73	P-44-S-5	
ARS1-B08-02821	ARS1-B08-02821-05	H-3	MD21 08 14814	0.02000	0.00000	0.02500	0.00000	0.00000	30.81389						0.99526					0.05228	0.00464	0.83559	73	P-44-S-6	
ARS1-B08-02821	ARS1-B08-02821-06	H-3	MD21 08 14815	0.02000	0.00000	0.02500	0.00000	0.00000	30.94514						0.99524					0.05228	0.00469	0.84505	73	P-44-S-7	
ARS1-B08-02821	ARS1-B08-02821-07	H-3	MD21 08 14816	0.02000	0.00000	0.02500	0.00000	0.00000	31.07708						0.99522					0.05228	0.00466	0.83916	73	P-44-S-8	
ARS1-B08-02821	ARS1-B08-02821-08	H-3	MD21 08 14818	0.02000	0.00000	0.02500	0.00000	0.00000	30.20833						0.99536					0.05228	0.00466	0.83913	73	P-44-S-9	
ARS1-B08-02821	ARS1-B08-02821-09	H-3	MD21 08 14819	0.02000	0.00000	0.02500	0.00000	0.00000	30.34028						0.99534					0.05228	0.00467	0.84049	73	P-44-S-10	
ARS1-B08-02821	ARS1-B08-02821-10	H-3	MD21 08 14820	0.02000	0.00000	0.02500	0.00000	0.00000	30.47153						0.99532					0.05228	0.00473	0.85178	73	P-44-S-11	
ARS1-B08-02821	ARS1-B08-02821-11	H-3	MD21 08 14821	0.02000	0.00000	0.02500	0.00000	0.00000	30.60347						0.99530					0.05228	0.00467	0.84096	73	P-44-S-12	
ARS1-B08-02821	ARS1-B08-02821-12	H-3	MD21 08 14822	0.02000	0.00000	0.02500	0.00000	0.00000	30.73472						0.99528					0.05228	0.00472	0.85040	73	P-44-S-13	
ARS1-B08-02821	ARS1-B08-02821-13	H-3	MD21 08 14825	0.02000	0.00000	0.02500	0.00000	0.00000	30.86528						0.99526					0.05228	0.00469	0.84349	73	P-44-S-14	
ARS1-B08-02821	ARS1-B08-02821-14	H-3	MD21 08 14828	0.02000	0.00000	0.02500	0.00000	0.00000	32.99514						0.99493					0.05228	0.00472	0.84903	73	P-44-S-15	
ARS1-B08-02821	ARS1-B08-02821-15	H-3	MD21 08 14829	0.02000	0.00000	0.02500	0.00000	0.00000	33.08403						0.99492					0.05228	0.00474	0.85367	73	P-44-S-16	
ARS1-B08-02821	ARS1-B08-02821-16	H-3	MD21 08 14830	0.02000	0.00000	0.02500	0.00000	0.00000	33.21528						0.99490					0.05228	0.00469	0.84393	73	P-44-S-17	
ARS1-B08-02821	ARS1-B08-02821-17	H-3	MD21 08 14831	0.02000	0.00000	0.02500	0.00000	0.00000	33.34722						0.99488					0.05228	0.00470	0.84675	73	P-44-S-18	
ARS1-B08-02821	ARS1-B08-02821-18	H-3	MD21 08 14832	0.02000	0.00000	0.02500	0.00000	0.00000	33.47847						0.99486					0.05228	0.00472	0.85043	73	P-44-S-19	
ARS1-B08-02821	ARS1-B08-02821-19	H-3	MD21 08 14833	0.02000	0.00000	0.02500	0.00000	0.00000	33.60833						0.99484					0.05228	0.00465	0.83697	73	P-44-S-20	
ARS1-B08-02821	ARS1-B08-02821-20	H-3	MDS0-08-8164	0.02000	0.00000	0.02500	0.00000	0.00000	25.74028						0.99604					0.05228	0.00466	0.83941	73	P-44-S-21	

ABatch	ABatchSampleID	Isotope	ClientID	TracerIsotope	TracerRefDate	TracerRefACT	TracerKnown	SDG	Run	Fraction	AnalysisCode	UserID	ModDate
ARS1-B08-02821	ARS1-B08-02821-01	H-3	MD50-08-8164					ARS1 08-01898	1	001		BSTEFFENS	10/27/08 8:24
ARS1-B08-02821	ARS1-B08-02821-02	H-3	MD50-08-8164					ARS1-08-01898	1	001		BSTEFFENS	10/27/08 8:24
ARS1-B08-02821	ARS1-B08-02821-03	H-3	MD50-08-8164					ARS1-08-01898	1	001		BSTEFFENS	10/27/08 8:24
ARS1-B08-02821	ARS1-B08-02821-04	H-3	MD21 08 14813					ARS1-08-01854	1	001	LSC-A-001	BSTEFFENS	10/27/08 8:24
ARS1-B08-02821	ARS1-B08-02821-05	H-3	MD21 08 14814					ARS1-08-01854	1	002	LSC-A-001	BSTEFFENS	10/27/08 8:24
ARS1-B08-02821	ARS1-B08-02821-06	H-3	MD21 08 14815					ARS1-08-01854	1	003	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-07	H-3	MD21 08 14816					ARS1-08-01854	1	004	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-08	H-3	MD21 08 14818					ARS1-08-01854	1	005	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-09	H-3	MD21 08 14819					ARS1-08-01854	1	006	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-10	H-3	MD21 08 14820					ARS1-08-01854	1	007	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-11	H-3	MD21 08 14821					ARS1-08-01854	1	008	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-12	H-3	MD21 08 14822					ARS1-08-01854	1	009	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-13	H-3	MD21 08 14825					ARS1-08-01854	1	010	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-14	H-3	MD21 08 14826					ARS1-08-01854	1	011	LSC-A-001	BSTEFFENS	10/27/08 8:25
ARS1-B08-02821	ARS1-B08-02821-15	H-3	MD21 08 14829					ARS1-08-01854	1	012	LSC-A-001	BSTEFFENS	10/27/08 8:26
ARS1-B08-02821	ARS1-B08-02821-16	H-3	MD21 08 14830					ARS1-08-01854	1	013	LSC-A-001	BSTEFFENS	10/27/08 8:26
ARS1-B08-02821	ARS1-B08-02821-17	H-3	MD21 08 14831					ARS1-08-01854	1	014	LSC-A-001	BSTEFFENS	10/27/08 8:26
ARS1-B08-02821	ARS1-B08-02821-18	H-3	MD21 08 14832					ARS1-08-01854	1	015	LSC-A-001	BSTEFFENS	10/27/08 8:26
ARS1-B08-02821	ARS1-B08-02821-19	H-3	MD21 08 14833					ARS1-08-01854	1	016	LSC-A-001	BSTEFFENS	10/27/08 8:26
ARS1-B08-02821	ARS1-B08-02821-20	H-3	MD50-08-8164					ARS1-08-01898	1	001	LSC-A-001	BSTEFFENS	10/27/08 8:26

QC Evaluation

EPA Method: EPA 906.0
Batch ID: ARS1-B08-02821
SDG's: ARS1-08-01854, 01898

LCS	1024.4925	**CSU**	164.6322
LCSD	998.8973	**CSU-D**	162.4261

DER = $\dfrac{\text{abs(LSC-LSCD)}}{\text{sqr((2s CSU/2)^2)+((2s CSU-D/2)^2)}}$ = **< 3**

DER $\dfrac{25.595198}{115.63519}$ = 0.221344 **< 3**

% RPD= $\dfrac{\text{ABS(LCS - LSCD)}}{\text{(LCS+LCSD)/2}}$ * 100 = **< 25%**

%RPD $\dfrac{25.595198}{1011.6949}$ *100 = 2.529932 **< 25%**

The *RPD* shall be less than 25% or other client-applied criteria

RER= $\dfrac{\text{abs((LCS-LCSD))}}{\text{(CSU)+(CSD)}}$ = **<1**

RER = $\dfrac{25.5951981}{327.0583}$ 0.078259 **<1**

Blank Information

	Act	CSU	MDA
AM-241			
U-234			
U-235			
U-238			
Pu-238			
Pu-239/240			
Th-228			
Th-230			
Th-232			
H3	-25.55864	106.91721	183.531
Ra-226			
Ra-228			
Total U			
Pb-210			
Po-209			
Sr-90			
TC-99			
NI-63			

*MDA should be below RDL
*Blank activity must be below MDA
*Blank activity must be < 1.65*CSU (DOE only)

ACT =
CSU =
Is ACT<1.65*CSU? NO

Batch: ARS1-B08-02821

	1.96s CSU	CSU 1 (1s)
ARS1-B08-02821-04	110.082	56.164
ARS1-B08-02821-05	129.578	66.111
ARS1-B08-02821-06	137.717	70.264
ARS1-B08-02821-07	111.316	56.794
ARS1-B08-02821-08	118.438	60.427
ARS1-B08-02821-09	120.594	61.528
ARS1-B08-02821-10	171.482	87.491
ARS1-B08-02821-11	248.712	126.894
ARS1-B08-02821-12	114.362	58.348
ARS1-B08-02821-13	343.376	175.192
ARS1-B08-02821-14	466.275	237.895
ARS1-B08-02821-15	10958.241	5590.940
ARS1-B08-02821-16	7675.998	3916.326
ARS1-B08-02821-17	235.635	120.222
ARS1-B08-02821-18	164.281	83.817
ARS1-B08-02821-19	172.077	87.794
ARS1-B08-02821-20	110.308	56.279

MMR 10-27-08
Project Manager

The CSU 1 (1s) was derived by dividing the 1.96s CSU value by 1.96 per Virgene Mulligan.

ID_31001_054	ABatch	ABatchSampleID	ClientID	Aliquot1	AliquotUnits1	Aliquot2	AliquotUnits2	UserID	ModDate	IC_ID
1351	ARS1-B08-02821	ARS1-B08-02821-01		0	g	5.011	g	BSTEFFENS	10/23/2008	10961
1352	ARS1-B08-02821	ARS1-B08-02821-02		0	g	5.069	g	BSTEFFENS	10/23/2008	10961
1353	ARS1-B08-02821	ARS1-B08-02821-03		0	g	5.062	g	BSTEFFENS	10/23/2008	10961
1354	ARS1-B08-02821	ARS1-B08-02821-04	MD21 08 14813	0	g	5.046	g	BSTEFFENS	10/23/2008	10961
1355	ARS1-B08-02821	ARS1-B08-02821-05	MD21 08 14814	0	g	5.036	g	BSTEFFENS	10/23/2008	10961
1356	ARS1-B08-02821	ARS1-B08-02821-06	MD21 08 14815	0	g	5.034	g	BSTEFFENS	10/23/2008	10961
1357	ARS1-B08-02821	ARS1-B08-02821-07	MD21 08 14816	0	g	5.024	g	BSTEFFENS	10/23/2008	10961
1358	ARS1-B08-02821	ARS1-B08-02821-08	MD21 08 14818	0	g	5.016	g	BSTEFFENS	10/23/2008	10961
1359	ARS1-B08-02821	ARS1-B08-02821-09	MD21 08 14819	0	g	5.035	g	BSTEFFENS	10/23/2008	10961
1360	ARS1-B08-02821	ARS1-B08-02821-10	MD21 08 14820	0	g	5.045	g	BSTEFFENS	10/23/2008	10961
1361	ARS1-B08-02821	ARS1-B08-02821-11	MD21 08 14821	0	g	5.044	g	BSTEFFENS	10/23/2008	10961
1362	ARS1-B08-02821	ARS1-B08-02821-12	MD21 08 14822	0	g	5.043	g	BSTEFFENS	10/23/2008	10961
1363	ARS1-B08-02821	ARS1-B08-02821-13	MD21 08 14825	0	g	5.027	g	BSTEFFENS	10/23/2008	10961
1364	ARS1-B08-02821	ARS1-B08-02821-14	MD21 08 14828	0	g	5.039	g	BSTEFFENS	10/23/2008	10961
1365	ARS1-B08-02821	ARS1-B08-02821-15	MD21 08 14829	0	g	5.044	g	BSTEFFENS	10/23/2008	10961
1366	ARS1-B08-02821	ARS1-B08-02821-16	MD21 08 14830	0	g	5.041	g	BSTEFFENS	10/23/2008	10961
1367	ARS1-B08-02821	ARS1-B08-02821-17	MD21 08 14831	0	g	5.04	g	BSTEFFENS	10/23/2008	10961
1368	ARS1-B08-02821	ARS1-B08-02821-18	MD21 08 14832	0	g	5.062	g	BSTEFFENS	10/23/2008	10961
1369	ARS1-B08-02821	ARS1-B08-02821-19	MD21 08 14833	0	g	5.02	g	BSTEFFENS	10/23/2008	10961
1370	ARS1-B08-02821	ARS1-B08-02821-20	MD50-08-8164	0	g	5.066	g	BSTEFFENS	10/23/2008	10961

LCS Report
Analytical Batch: ARS1-B08-02821

ID_58050	BlindID	ABatch	ABatchSampleID	BlindGroup	StdID	Isotope	ExpectedAddition	ExpectedValue	EmptyWt	GrossWt	NetWt	UserID	ModDate
5800	B-05807	ARS1-B08-02821	ARS1-B08-02821-01	B-H3	S-0194	H-3	1	1.257995372	0	1	1	BSTEFFENS	10/22/2008
5801	B-05808	ARS1-B08-02821	ARS1-B08-02821-02	B-H3	S-0194	H-3	1	1.257995372	0	1	1	BSTEFFENS	10/22/2008

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
10-20-08	1717	B08-02740-15	B08-02740	1619	
10-22-08	1046	SNC	QA	QA	
〃	〃 * 10-22-08	Background ~~B08-02784-01~~	B08-02784	1232	
〃	〃	B08-02784-01	〃	〃	
〃	〃	B08-02784-02	〃	〃	
〃	〃	B08-02784-03	〃	〃	
〃	〃	B08-02784-04	〃	〃	
〃	〃	B08-02784-05	〃	〃	
〃	〃	B08-02784-06	〃	〃	
〃	〃	B08-02784-07	〃	〃	
〃	〃	B08-02784-08	〃	〃	
〃	〃	B08-02784-09	〃	〃	
〃	〃	B08-02784-10	〃	〃	
〃	〃	B08-02784-11	〃	〃	
10-23-08	1645	SWC	QA	QA	10/23
〃	〃	Background	B08-02821	0349	
〃	〃	B08-02821-01	〃	〃	
〃	〃	B08-02821-02	〃	〃	
〃	〃	B08-02821-03	〃	〃	
〃	〃	B08-02821-04	〃	〃	

Reviewed By: _____ Date: 10/27/08
Initials

Beta Liquid Scintillation Counter Log Book

Date	Time	ARS Sample I.D. Number	Batch Number	Liquid Scintillation File Number	Technician Initials
10-23-08	1645	B08-02821-05	B08-02821	0349	
↓	↓	B08-02821-06	↓	↓	
↓	↓	B08-02821-07	↓	↓	
↓	↓	B08-02821-08	↓	↓	
↓	↓	B08-02821-09	↓	↓	
↓	↓	B08-02821-10	↓	↓	
↓	↓	B08-02821-11	↓	↓	
↓	↓	B08-02821-12	↓	↓	
↓	↓	B08-02821-13	↓	↓	
↓	↓	B08-02821-14	↓	↓	
↓	↓	B08-02821-15	↓	↓	
↓	↓	B08-02821-16	↓	↓	
↓	↓	B08-02821-17	↓	↓	
↓	↓	B08-02821-18	↓	↓	
↓	↓	B08-02821-19	↓	↓	
↓	↓	B08-02821-20	↓	↓	
10-24-08	1255	SNC	QA	QA	
↓	↓	Background	B08-02541	2232	
↓	↓	B08-02541-01	↓	↓	
↓	↓	B08-02541-~~02~~ 03	↓	↓	

10-24-08

Reviewed By: _____ Date: 10-30-08
Initials

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Tritium by Low Level Liquid Scintillation Counting

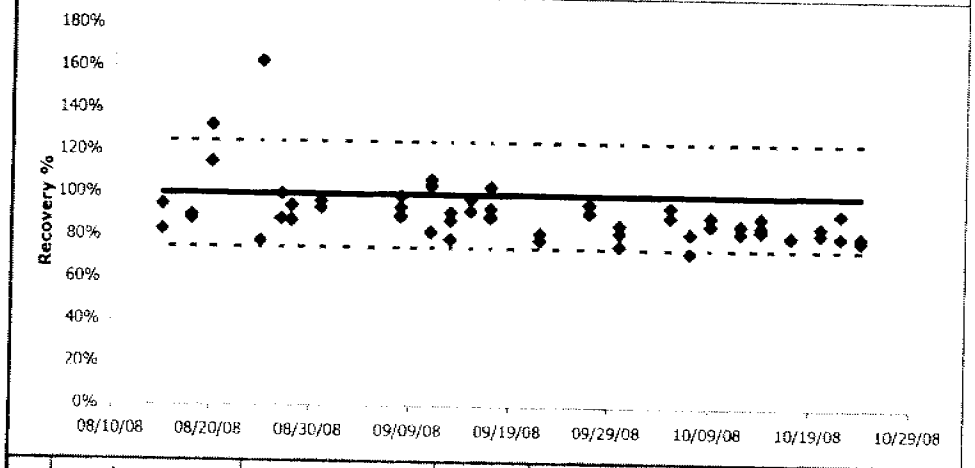
Control Charts

American Radiation Services
Baton Rouge Laboratory

QC Chart

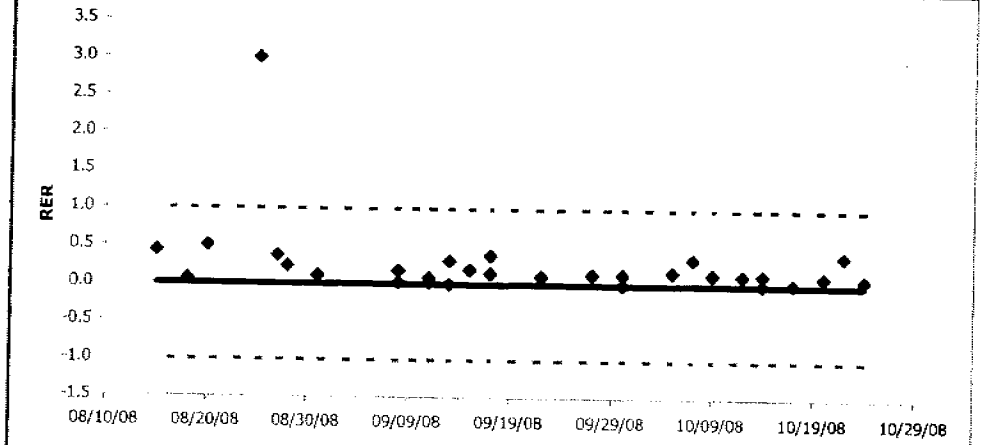
Printed: 10/27/2008 2:41 PM

H-3 LCS



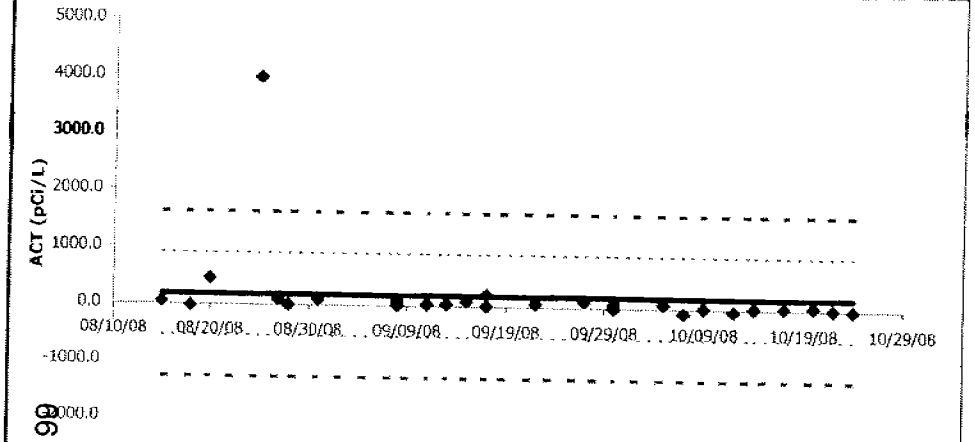
Average	STDEV	n	UCL	LCL
0.9063	0.1358	30	1.2500	0.7500

H-3 RER



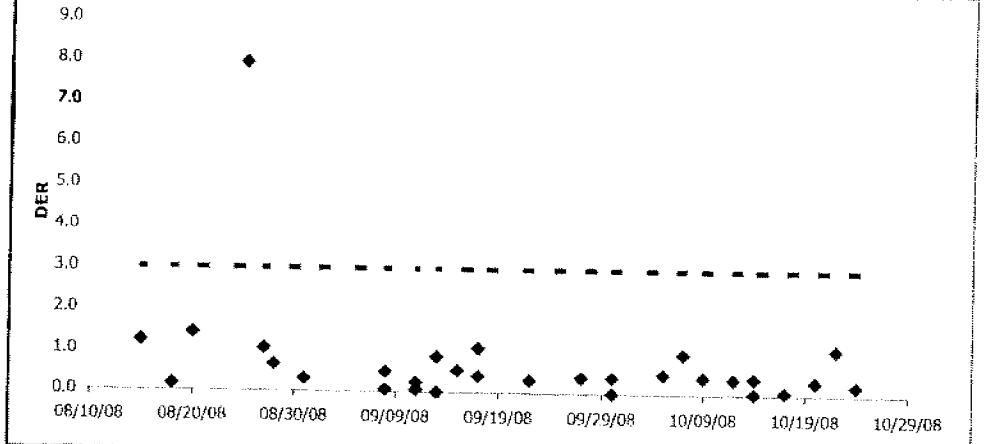
n	UCL	LCL
30	1.0000	-1.0000

H-3 Blank



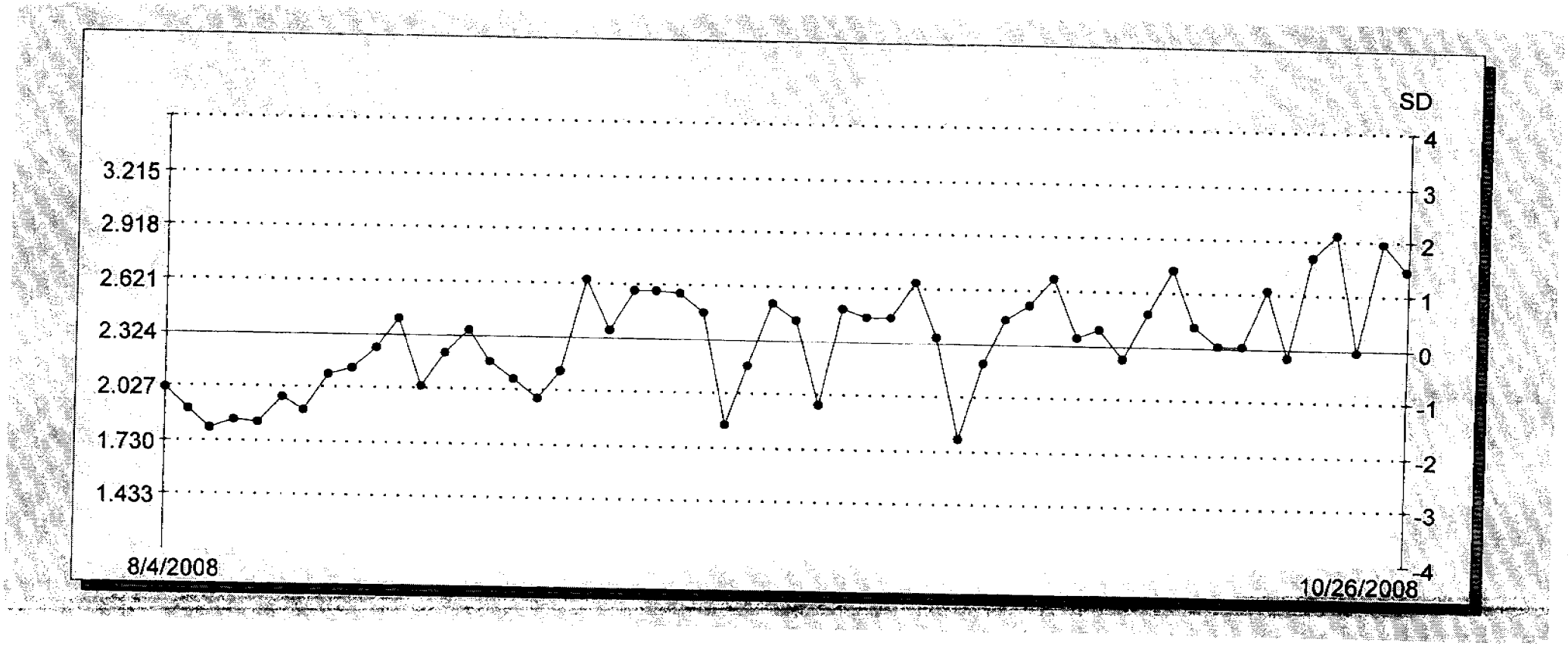
Average	STDEV	n	UCL	LCL
173.9106	725.1164	30	1624.1435	-1276.3223

H-3 DER



n	UCL
30	3.0000

3H Background
Total # pts : 958
Valid # pts : 54
Mean : 2.32
SD : 0.30

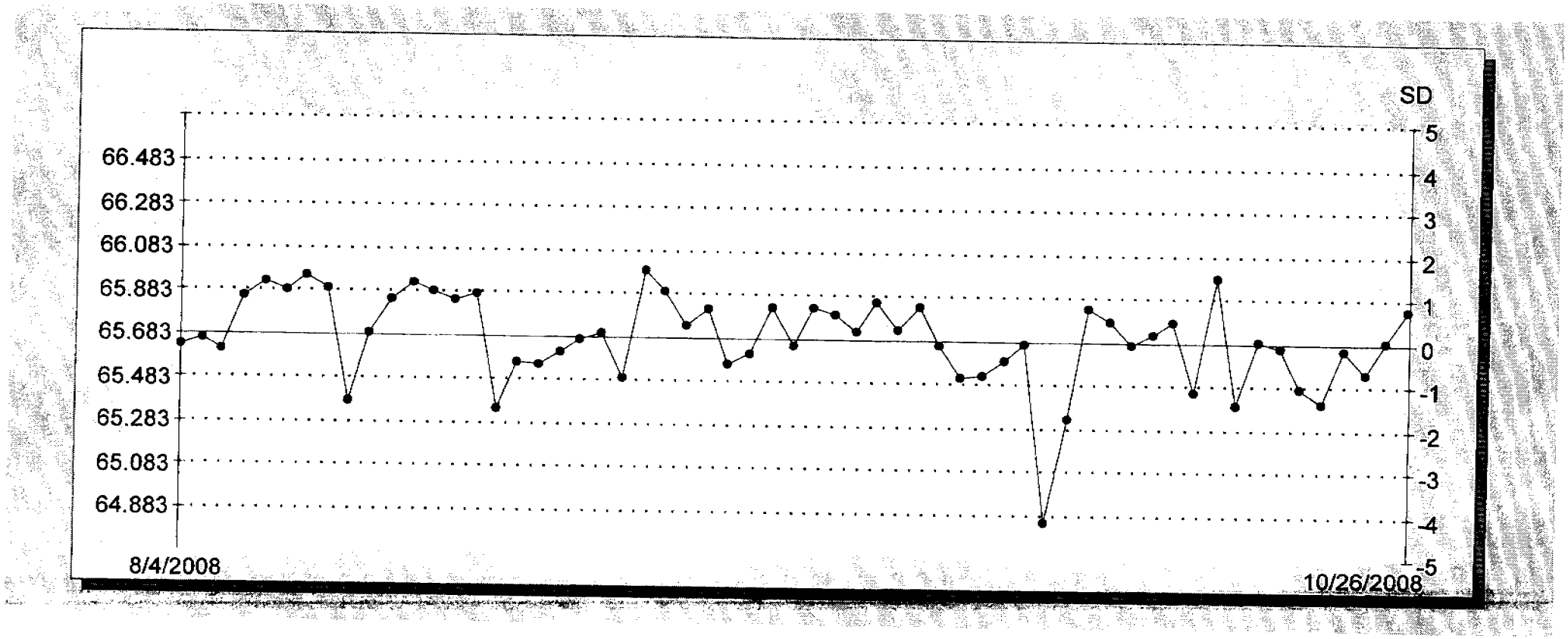


3H Background
Total # pts : 958
Valid # pts : 54
Mean : 2.32
SD : 0.30

Date	Value	Valid Pt
Aug 04, 2008	2.02	X
Aug 05, 2008	1.90	X
Aug 06, 2008	1.79	X
Aug 08, 2008	1.85	X
Aug 11, 2008	1.84	X
Aug 14, 2008	1.98	X
Aug 14, 2008	1.91	X
Aug 16, 2008	2.10	X
Aug 18, 2008	2.13	X
Aug 18, 2008	2.25	X
Aug 18, 2008	2.41	X
Aug 18, 2008	2.04	X
Aug 19, 2008	2.23	X
Aug 21, 2008	2.36	X
Aug 25, 2008	2.18	X
Aug 27, 2008	2.09	X
Aug 29, 2008	1.98	X
Sep 04, 2008	2.13	X
Sep 08, 2008	2.64	X
Sep 10, 2008	2.37	X
Sep 11, 2008	2.58	X
Sep 12, 2008	2.58	X
Sep 13, 2008	2.57	X
Sep 15, 2008	2.47	X
Sep 16, 2008	1.85	X
Sep 17, 2008	2.18	X
Sep 19, 2008	2.53	X
Sep 22, 2008	2.44	X
Sep 23, 2008	**1.97**	X
Sep 26, 2008	2.50	X
Sep 27, 2008	2.45	X
Sep 29, 2008	2.46	X
Sep 29, 2008	2.66	X
Sep 29, 2008	2.36	X
Sep 29, 2008	1.79	X
Sep 29, 2008	2.22	X
Sep 30, 2008	2.45	X
Oct 03, 2008	2.54	X
Oct 05, 2008	2.69	X
Oct 07, 2008	2.37	X
Oct 07, 2008	2.41	X
Oct 07, 2008	2.25	X
Oct 09, 2008	2.50	X
Oct 12, 2008	2.75	X
Oct 13, 2008	2.44	X
Oct 13, 2008	2.34	X
Oct 14, 2008	2.33	X

Oct 17, 2008	2.64	X
Oct 20, 2008	2.28	X
Oct 22, 2008	2.82	X
Oct 22, 2008	2.95	X
Oct 22, 2008	2.31	X
Oct 24, 2008	2.90	X
Oct 26, 2008	2.76	X

3H Efficiency
Total # pts : 986
Valid # pts : 59
Mean : 65.68
SD : 0.20



3H Efficiency
Total # pts : 986
Valid # pts : 59
Mean : 65.68
SD : 0.20

Date	Value	Valid Pt
Aug 04, 2008	65.62	X
Aug 05, 2008	65.66	X
Aug 06, 2008	65.61	X
Aug 07, 2008	65.85	X
Aug 08, 2008	65.92	X
Aug 11, 2008	65.88	X
Aug 14, 2008	65.95	X
Aug 14, 2008	65.89	X
Aug 16, 2008	65.37	X
Aug 18, 2008	65.69	X
Aug 18, 2008	65.84	X
Aug 18, 2008	65.92	X
Aug 18, 2008	65.88	X
Aug 18, 2008	65.84	X
Aug 19, 2008	65.87	X
Aug 21, 2008	65.34	X
Aug 25, 2008	65.56	X
Aug 27, 2008	65.55	X
Aug 29, 2008	65.61	X
Sep 04, 2008	65.67	X
Sep 08, 2008	65.70	X
Sep 10, 2008	65.49	X
Sep 11, 2008	65.99	X
Sep 12, 2008	65.89	X
Sep 13, 2008	65.73	X
Sep 15, 2008	65.81	X
Sep 16, 2008	65.56	X
Sep 17, 2008	65.61	X
Sep 19, 2008	65.82	X
Sep 22, 2008	65.65	X
Sep 23, 2008	65.82	X
Sep 26, 2008	65.79	X
Sep 27, 2008	65.72	X
Sep 29, 2008	65.85	X
Sep 29, 2008	65.72	X
Sep 29, 2008	65.83	X
Sep 29, 2008	65.66	X
Sep 29, 2008	65.51	X
Sep 29, 2008	65.52	X
Sep 30, 2008	65.59	X
Oct 03, 2008	65.67	X
Oct 05, 2008	64.85	X
Oct 07, 2008	65.33	X
Oct 07, 2008	65.83	X
Oct 07, 2008	65.77	X
Oct 09, 2008	65.67	X
Oct 12, 2008	65.72	X

Oct 13, 2008	65.78	x
Oct 13, 2008	65.45	x
Oct 13, 2008	65.98	x
Oct 14, 2008	65.40	x
Oct 17, 2008	65.69	x
Oct 20, 2008	65.66	x
Oct 22, 2008	65.48	x
Oct 22, 2008	65.40	x
Oct 22, 2008	65.64	x
Oct 22, 2008	65.54	x
Oct 24, 2008	65.69	x
Oct 26, 2008	65.84	x

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Low Level Liquid Scintillation Counting

Calibration Information

STD ID: S-0194

ARS American Radiation Services, Inc.	Add/Edit *Secondary Stds*
Planning	
Planning Comments	Normal level 3H LCS stock solution
Target dpm/g (on dil. date)	2.75
Target Final volume mL	2000
Appx mass g of Parent Sol'n	1.82184277
Appx vol ml of Parent Sol'n	1.825128
Expected Addition for Analysis g	
Standards Preparation / Dilution	
Secondary Solution #	S-0194
Dilution Date (New Ref Date)	07/01/2008 12:00
Ampoule, Empty (g)	
Ampoule /Solution Gross (g)	
Net Wt Removed (g)	
Transfer Container, empty (g)	13.2927
Container Plus Solution (g)	15.1598
Net Wt Transferred (g)	1.8671
DPM Xferred on 07/01/2008 12:00	5636.628018
Diluent/matrix	Dead H2O
Diluent Density Cont. empty (g)	13.2673
Test Mass of 5 ml of Diluent (g)	18.226
Diluent Density Test - (g/mL)	0.99174
Dilution Empty Container Mass (g)	
Dilution Full Cont g (if measured)	
Dilution Final Volume ml (if measured)	2000
Final Dilution Density (g/mL)	0.99174
Final Dilution Measured Mass g	1983.48
Comments	Solution prepared by Brian Steffens
Final Dilution dpm/g	2.841787171
Final Dil New Ref Date/Time	07/01/2008 12:00

Parent Standard Data				
Parent Solution Reference #	NIST SRM 4927F			
Parent Solution #	S-0032			
Parent Principal Radionuclide	H-3	Half Life (Days)	4499.8000000	
Parent Reference Date	03/01/2006 00:00			
Parent Certified Act	3443.100423	Certi Act/Vol Units	dpm	g
Parent Cert Act Uncert 1 Sigma	0.0036			
Parent Sp. Gravity G/Ml	0.9982			
Parent Supplier	NIST SRM 4927F			
Parent Date Recvd	01/02/00			
Parent Received By	Unknown			
Parent Cert Exp Date				
Parent Matrix	H2O			
Certified dpm/g At Ref Date	3443.100423			
Certified dpm/g on 07/01/2008 12:00	3018.921332			
Parent Comments	S-0032 - Intermediate dilution for preparation of control solutions - Entered from dilution records - 4/19/2006 RTS Edi to update the dilution to 3/1/2006 from dilution records - 5/9/2006 LFU			
Parent Tech	Unknown			
Is_Primary	FALSE			
Is_LCS	FALSE			
Is_Tracer	FALSE			
Is_Calib	FALSE			

ARS AMERICAN RADIATION SERVICES, INC.

QUALITY CONTROL PROGRAM

AMERICAN RADIATION SERVICES
RADIOACTIVE REFERENCE SOLUTIONS

ANNUAL ACTIVITY VERIFICATION

VERIFICATION DATE 7/11/2008 0:00
SOLUTION REFERENCE # S-0194-[illegible]

Principal Radionuclide	Half Life, Years	Half Life, Days
H-3	1.228E+01	4.485E+03

Radionuclide: H-3
Primary Dilution Reference Date: 7/1/2008 12:00

Primary Dilution Activity	1.28	pCi per gram ===> dpm/g	2.84
Verif. Date Decay Corrected	1.28	pCi per gram ===> dpm/g	2.84

Verification Trials

Trial ID#			Trial ID#		
	Gross Weight	2.0000		Gross Weight	2.0000
	Tare Weight	1.0000		Tare Weight	1.0000
	Net Weight	1.0000		Net Weight	1.0000
	Gross Weight	2.0000		Gross Weight	2.0000
	Tare Weight	1.0000		Tare Weight	1.0000
	Net Weight	1.0000		Net Weight	1.0000
	Gross Weight	2.0000			
	Tare Weight	1.0000			
	Net Weight	1.0000			

Trial ID	Sample Counts	Count Time (min)	Detector	Efficiency	Bkg. (cpm)	Net Weight	Decay Corrected Activity Result (dpm/g)	Decay Corrected Activity Result (pCi/g)
S-0194-V1a	11.78	1	LSC	0.4299	5.66	4.9830	2.85	1.28
S-0194-V2a	11.2	1	LSC	0.4298	5.66	4.9807	2.58	1.16
S-0194-V3a	11.71	1	LSC	0.4263	5.66	5.0105	2.83	1.27

Average	2.76	1.24
Two Sigma Uncertainty	0.29	0.13
Standard Deviation percent of known concentration	5.23%	5.23%
Target Activity	2.84	1.28
% Diff	-2.90	-2.90

Prepared & Counted By [signature]
Verified & Approved By [signature]
QC Approval [signature]

Verification Expiration Date: July 11, 2009
Date: 7/11/2008 0:00
Date: 7-18-08
Date: 7-18-08 for 7-18-08

Assay Definition-

Assay Description:
H3 Normal Lvl

Assay Type: DPM (Single)
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080711_1515
Raw Results Path: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080711_1515\20080711_1515.results
RTF File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080711_1515\H3 Results.rtf
Comma-Delimited File Name: C:\Packard\Tricarb\Results\ARS\H-3 Normal Lvl\20080711_1515\H3 Results.csv
Assay File Name: C:\Packard\TriCarb\Assays\H-3 Normal Lvl.lsa

Count Conditions-

Nuclide: H-3 Normal
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set:
  Low Energy: H3 Normal
Count Time (min): 180.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

Regions	LL	UL	2Sigma % Terminator
A	2.0	18.6	0.50
B	0.0	2000.0	0.00
C	0.0	2000.0	0.00

Count Corrections-

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time

A
B
C

Cycle 1 Results

P#	S#	SMPL_ID	CPMA	DPM1	tSIE	Eff Nucl In A	Count Time	DATE	TIME	MESSAGES
44	1	BACKGROUND	5.66	14.19	369.03	39.89	180.00	7/11/2008	3:21:03 PM	
44	2	S-0194-V1a	11.78	27.39	413.48	42.99	180.00	7/11/2008	6:27:56 PM	
44	3	S-0194-V2a	11.20	26.05	413.35	42.98	180.00	7/11/2008	9:35:05 PM	
44	4	S-0194-V3a	11.71	27.47	407.78	42.63	180.00	7/12/2008	12:42:09 AM	
44	5	S-0194-V1	11.64	27.76	396.57	41.91	180.00	7/12/2008	3:49:05 AM	
44	6	S-0194-V2	11.39	26.96	401.93	42.25	180.00	7/12/2008	6:55:52 AM	
44	7	S-0194-V3	10.63	25.34	396.74	41.92	180.00	7/12/2008	10:02:40 AM	
44	8	S-0152-V1	135.62	325.77	392.17	41.63	180.00	7/12/2008	1:09:29 PM	
44	9	S-0152-V2	136.01	321.66	402.36	42.28	180.00	7/12/2008	4:16:22 PM	
44	10	S-0152-V3	134.63	322.62	393.70	41.73	180.00	7/12/2008	7:23:16 PM	

Standard S-0194

	Amt of LCS (g)
S-0194-V1a	4.983
S-0194-V2a	4.9807
S-0194-V3a	5.0105

Chemist: [signature]

7-11-02

S-0152 12/4/06 LR

National Institute of Standards & Technology

Certificate

Standard Reference Material 4361C
Hydrogen-3 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive hydrogen-3, as water, in 500 mL of distilled water. The solution is contained in a 500-mL borosilicate-glass bottle. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM bottle contains hydrogen-3 with a total activity of approximately 1100 Bq. Hydrogen-3 decays by beta-particle emission. None of the beta particles escape from the SRM bottle. During the decay process no photons are emitted. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. There is no detectable external radiation. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM bottle contains only distilled water. There is no chemical hazard.

Storage and Handling: The SRM should be stored and used at a temperature between 5 and 35 °C. The solution in an unopened bottle should remain stable and homogeneous until at least September 2008. The bottle (or any subsequent container) should always be clearly marked as containing radioactive material. If the bottle is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, L.R. Karam, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas and M.P. Unterweger of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
June 1999
Half-life and text revised October 2000
Text revised and expiration date extended September 2004

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 and 6.

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*Notes and references are on pages 5 and 6.

PROPERTIES OF SRM 4361C

Certified values

Radionuclide	**Hydrogen-3**
Reference time	**1200 EST, 03 September 1998**
Massic activity of the solution [b]*	**2.009 Bq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.76%** [c] [d]
Solution density	**(0.998 ± 0.002) g·mL^{-1} at 20 °C** [e]

Uncertified values

Physical Properties:			
Source description	Liquid in a 500-mL borosilicate-glass media bottle with a teflon-lined screw cap		
Solution mass	Approximately 500 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O	55	1.00
	^3HHO	2×10^{-12}	4×10^{-14}
Radiological Properties:			
Radionuclidic impurities	None detected [f]		
Half lives used	Hydrogen-3: (4500 ± 8) d [g] [5]		
Calibration method and measuring instrument(s)	4πß gas counting of SRM 4927E using the NIST length-compensated internal gas proportional counters and intercomparison of SRMs 4927E / 4926E / 4361C using two 4πß liquid-scintillation counting systems. [h]		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [c] [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [i]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [j]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [k]
Massic count rate of SRM 4927E, corrected for background and decay [h]	Standard deviation of the mean for 23 sets of gas counting measurements (A)	0.18	1.0	0.18
Gram-mole measurements	Estimated (B)	0.20	1.0	0.20
Live time [p]	Estimated (B)	0.10	1.0	0.10
Extrapolation of count-rate-versus-energy to zero energy	Estimated (B)	0.20	1.0	0.20
Half life of H-3	Standard uncertainty of the half life (A)	0.18 [m]	0.009 [n]	0.002
Liquid-scintillation intercomparison of SRM 4926E and SRM 4927E	Standard deviation of the mean for 7 sets of liquid-scintillation measurements (A)	0.06	1.0	0.06
Dilution of SRM 4926E to make SRM 4361C	Estimated (B)	0.12	1.0	0.12
Radionuclidic impurities	Limit of detection (B) [q]	100.	0.0005	0.05
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.38
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.76

*Notes and references are on pages 5 and 6.

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Bottle (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1 (Not detectable)		

[b] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[c] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[d] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[e] The stated uncertainty is two times the standard uncertainty.

[f] The estimated limit of detection for radionuclidic impurities is 0.001 $Bq \cdot g^{-1}$.

[g] The stated uncertainty is the standard uncertainty.

[h] Extensive gas-counting measurements were made on the SRM 4927E solution during 1998 and 1999. The SRM 4926E solution was intercompared with the SRM 4927E solution using liquid-scintillation counting. The SRM 4926E solution was then quantitatively diluted, using distilled water with a measured hydrogen-3 content, to make the SRM 4361C solution. The 4926E / 4361C massic activity ratio was confirmed by liquid-scintillation counting.

[i] Relative standard uncertainty of the input quantity x_i.

[j] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[k] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[m] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[n] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[p] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[q] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i = 100\%$. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of H-3)}·{(Bq of impurity)/(Bq of H-3)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B. N. Taylor and C. E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] L.L. Lucas and M.P. Unterweger, *Comprehensive Review and Critical Evaluation of the Half-Life of Tritium*, J. Res. Natl. Inst. Stand. Technol. 105, 541-549 (2000).

ARS INTERNATIONAL

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American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14813
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-001
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	8.963	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14814
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-002
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	9.859	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14815
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-003
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.822	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14816
Sample Collection Date: 9/24/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-004
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	9.703	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14818
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-005
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.232	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14819
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-006
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.516	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14820
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-007
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.810	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14821
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-008
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.967	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14822
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-009
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	7.905	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14825
Sample Collection Date: 9/25/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-010
Date Received: 9/26/2008
Report Date: 10/27/08 14:24

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	9.592	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Rousel
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14828
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-011
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	5.413	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14829
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-012
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.673	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Lindsay Raimel
Project Manager Review

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14830
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-013
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	11.075	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

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ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14831
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-014
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	13.437	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14832
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-015
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	10.496	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-08-01854
Client Sample ID: MD21 08 14833
Sample Collection Date: 9/23/2008
Sample Matrix: Air/Gel

Request or PO Number: 08-2021
ARS Sample ID: ARS1-08-01854-016
Date Received: 9/26/2008
Report Date: 10/27/08 14:25

Analysis Description	Analysis Results	TPU (1s)	MDC	DLC	Qual	Analysis Units	Analysis Test Method	Analysis Date	Analysis Technician	Tracer/Chem Recovery
Percent Moisture	12.617	N/A	N/A	N/A		%	Moisture	10/23/2008	BJS	N/A

NOTES: Project Cost Code: MR8R032NFB00

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658 NELAP Certificate # E87558

ARS INTERNATIONAL

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Percent Moisture Laboratory Records

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-01854, 01898
Client: LANL

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-14813	ARS1-08-01854-001	595	453	142	12.727	5.046	**8.96267606**
MD21-08-14814	ARS1-08-01854-002	609	455	154	15.183	5.036	**9.85909091**
MD21-08-14815	ARS1-08-01854-003	610	451	158	18.679	5.034	**11.8221519**
MD21-08-14816	ARS1-08-01854-004	606	452	153	14.846	5.024	**9.70326797**
MD21-08-14818	ARS1-08-01854-005	585	440	145	16.287	5.016	**11.2324138**
MD21-08-14819	ARS1-08-01854-006	624	462	162	20.276	5.035	**12.5160494**
MD21-08-14820	ARS1-08-01854-007	617	454	162	19.132	5.045	**11.8098765**
MD21-08-14821	ARS1-08-01854-008	585	439	146	18.932	5.044	**12.9671233**
MD21-08-14822	ARS1-08-01854-009	601	451	150	11.857	5.043	**7.90466667**
MD21-08-14825	ARS1-08-01854-010	602	452	149	14.292	5.027	**9.59194631**
MD21-08-14828	ARS1-08-01854-011	586	421	166	8.985	5.039	**5.4126506**
MD21-08-14829	ARS1-08-01854-012	602	446	155	21.193	5.044	**13.6729032**
MD21-08-14830	ARS1-08-01854-013	622	456	165	18.273	5.041	**11.0745455**
MD21-08-14831	ARS1-08-01854-014	610	448	162	21.768	5.04	**13.437037**
MD21-08-14832	ARS1-08-01854-015	610	454	155	16.269	5.062	**10.496129**

MD21-08-14833	ARS1-08-01854-016	606	450	155	19.556	5.02	**12.6167742**
MD50-08-8164	ARS1-08-01898-001	619	454	165	8.12	5.066	**4.92121212**

Balance ID: 0102/H1331122173560P
Pipettor ID: CH84076

Signature _____ Date 10-23-08

AMERICAN RADIATION SERVICES
Port Allen, LA
PERCENT MOISTURE DETERMINATION IN SOILS

SDG Number: ARS1-08-01854, 01898
Client: LANL

LCS- 5.011
LCSD- 5.069
BLK- 5.062

LANL ID	ARS ID	weight of cylinder with gel (g)	weight of empty cylinder (g)	Weight of gel (g)	amount of liquid collected (ml)	amount of liquid tested (ml)	% moisture
MD21-08-14813	ARS1-08-01854-001	595	453	142	12.727	5.046	#DIV/0!
MD21-08-14814	ARS1-08-01854-002	609	455	154	15.183	5.036	#DIV/0!
MD21-08-14815	ARS1-08-01854-003	610	451	158	18.679	5.034	#DIV/0!
MD21-08-14816	ARS1-08-01854-004	606	452	153	14.846	5.024	#DIV/0!
MD21-08-14818	ARS1-08-01854-005	585	440	145	16.287	5.016	#DIV/0!
MD21-08-14819	ARS1-08-01854-006	624	462	162	20.276	5.035	#DIV/0!
MD21-08-14820	ARS1-08-01854-007	617	454	162	19.132	5.045	#DIV/0!
MD21-08-14821	ARS1-08-01854-008	585	439	146	18.932	5.044	#DIV/0!
MD21-08-14822	ARS1-08-01854-009	601	451	150	11.857	5.043	#DIV/0!
MD21-08-14825	ARS1-08-01854-010	602	452	149	14.292	5.027	#DIV/0!
MD21-08-14828	ARS1-08-01854-011	586	421	166	8.985	5.039	#DIV/0!
MD21-08-14829	ARS1-08-01854-012	602	446	155	21.193	5.044	#DIV/0!
MD21-08-14830	ARS1-08-01854-013	622	456	165	18.273	5.041	#DIV/0!
MD21-08-14831	ARS1-08-01854-014	610	448	162	21.768	5.040	#DIV/0!
MD21-08-14832	ARS1-08-01854-015	610	454	155	16.269	5.062	#DIV/0!

MD21-08-14833	ARS1-08-01854-016	606	450	155	19,556	5,020	#DIV/0!
MD50-08-8164	ARS1-08-01898-001	619	454	165	8,120	5,066	#DIV/0!

Balance ID: 0102/H1331122173560P
Pipettor ID: CH84076

Signature [signature] Date 10-23-08

ARS INTERNATIONAL

2609 North River Road • Port Allen, Louisiana 70767

1 (800) 401-4277 • Fax (225) 381-2996

American Radiation Services Analytical Reports

for

Los Alamos National Laboratory

Folder Duplicate

ARS INTERNATIONAL

Report Completeness Checklist

ARS SDG:	08-01854	Client Name:	LANL	Sample Matrix:	Silica Gel

LEVEL 1 COMPONENTS	1st Reviewer	
1) Cover Page Complete and Accurate (see ARS-059)?	Yes No N/A	
2) Technical Review Checklist(s) Complete and Accurate?	Yes No N/A	
3) Case Narrative Complete and Accurate (see ARS-059)?	Yes No N/A	
4) Form 1s Present for all Samples and Tests?	Yes No N/A	
5) Client Specific Components are Present and Complete?	Yes No N/A	

LEVEL 2 COMPONENTS	1st Reviewer	
6) Batch Quality Control Report is Present and Accurate?	Yes No N/A	
7) DQO Report is Present and Accurate?	Yes No N/A	
8) Client Specific Batch QC Components are Present and Complete?	Yes No N/A	

LEVEL 3 COMPONENTS	1st Reviewer	
9) Efficiencies are Present?	Yes No N/A	
10) Calibrations are Present?	Yes No N/A	
11) Backgrounds are Present?	Yes No N/A	
12) Spectrum Analysis is Present?	Yes No N/A	
13) Spectral Plots are Present?	Yes No N/A	
14) Plateaus are Present?	Yes No N/A	
15) Control Charts are Present?	Yes No N/A	
16) Other:	Yes No N/A	

LEVEL 4 COMPONENTS	1st Reviewer	
17) Preparation Raw Data Present and Complete?	Yes No N/A	
18) Instrument Raw Data Present and Complete?	Yes No N/A	
19) Calibration Certificates Present?	Yes No N/A	
20) Copies of Log Book Pages Present?	Yes No N/A	
21) Sample Receiving Documentation Present?	Yes No N/A	
22) LIMS Reports Present?	Yes No N/A	
23) Applicable Correspondence Present?	Yes No N/A	
24) Other:	Yes No N/A	

Lindsay Reimel 10-27-08
Report Generator Signature Date

Management Review Signature 10-27-08
Date

ARS INTERNATIONAL

LSC
Technical Review Checklist

ARS SDG 08-01854

Sample Matrix: Silica Gel **Aliquot** (Circle One) : Dry As Received Filtered Other: _____

Required QC Samples (Mark all that apply): Blank LCS LCSD Sample Dup MS MSD

ARS A. Batch ID(s): **Batch A:** B08-02821 **Batch B:** NA **Batch C:** NA

Test Method(s): LSC_A-001 NA NA

A. RADIOCHEMICAL PREPARATION REVIEW

	Chemist Review	Verifier Review
1) 100% of Manual Transcriptions Verified?	(Yes) No N/A	Yes No N/A
2) 100% of Manual Calculations Verified?	Yes No (N/A)	Yes No N/A
3) Blank Composition/Configuration Matches Calibration?	(Yes) No N/A	Yes No N/A
4) Deviations from procedure are documented and verified?	Yes No (N/A)	Yes No N/A
5) Appropriate Cocktail Selected?	(Yes) No N/A	Yes No N/A

6) **Sample Prep Anomaly?** ☒ **No** ☐ **Yes** (See Tech Notes) **NCR #** (If initiated): _____

Chemist Signature 10-23-08 Date

Verifier Review Signature 10/23/08 Date

B. ANALYSIS REVIEW

	Analyst Review	QA Officer Review
1) Calibrations Valid and Current?	(Yes) No N/A	(Yes) No N/A
2) Backgrounds Valid and Current?	(Yes) No N/A	(Yes) No N/A
3) Source Checks Completed and Acceptable?	(Yes) No N/A	(Yes) No N/A

QA Officer Signature 10-27-08 Date

	Analyst Review	Technicial Review
4) Background Checks Complete and Acceptable?	(Yes) No N/A	Yes No N/A
5) 100% of Manually Entered Parameters Verified Accurate?	(Yes) No N/A	Yes No N/A
6) Appropriate QC samples initiated at required frequency?	(Yes) No N/A	Yes No N/A
6) Test/Sample Specific Parameters (See ARS-059 for details)		
a) Analysis Parameters Checked and Correct and Peak Shapes are Acceptable?	(Yes) No N/A	Yes No N/A
b) Spectra show no Evidence of Interferences?	(Yes) No N/A	Yes No N/A
c) Sample Quench for All Samples within Range of Quench Curve?	(Yes) No N/A	Yes No N/A

7) **Analysis Anomaly?** ☒ **No** ☐ **Yes** (See Comments) **NCR # (If** initiated): _____

Analyst Signature 10-27-08 Date

Technicial Reviewer Signature 10-27-08 Date

ARS INTERNATIONAL

Batch A: B08-02821

LSC
Technical Review Checklist

C. BATCH QC VALIDATION

	Proj. Mgr. Review	QA Officer Review
1) Activity + 3xCSU a Negative Number?	Yes ~~No~~ N/A	Yes (No) N/A
2) RDL Criteria are Met?	~~Yes~~ No N/A	~~Yes~~ No N/A
3) Method Blank Criterion Met?	~~Yes~~ No N/A	~~Yes~~ No N/A
4) LCS/LCD Criteria Met?	~~Yes~~ No N/A	~~Yes~~ No N/A
5) Duplicate (Sample Duplicate, LCSD, MSD) Criteria Met?	~~Yes~~ No N/A	(Yes) No N/A
6) MS/MSD Criteria Met?	Yes No ~~N/A~~	Yes No (N/A)
7) Batch QC Anomaly? ☑ No ☐ Yes (See Tech Notes) NCR # (If initiated):		

Project Manager Signature — Date: 10.27.08

QA Officer Signature — Date: 10/27/08

GENERAL COMMENTS

ARS

TRAX Checklist

ARS ABatch: B08-02821 **Test Method:** LSC_A-001 **Matrix:** Silica Gel

LABORATORY TECHNICIAN

	CHEMIST			Note (*If Check No*)
1. Procedural Data Report Printed	YES	NO	N/A	
2. Tracer Report Printed	YES	NO	N/A	
3. LCS Report for One Batch Printed	YES	NO	N/A	
4. Matrix Spike Report Printed	YES	NO	N/A	
5. Technical Notes Printed	YES	NO	N/A	

Chemist Signature 10-23-08 *Date*

COUNT ROOM TECHNICIAN

	COUNT TECHNICIAN			Note (*If Check No*)
1. Imported/Printed Batch	YES	NO	N/A	
2. Processed and Printed Batch	YES	NO	N/A	
3. Calculated and Printed Batch	YES	NO	N/A	
3. Efficiency Printed for Batch	YES	NO	N/A	
4. Air Flow Data Printed for Batch	YES	NO	N/A	

Count Technician Signature 10-27-08 *Date*

COUNT ROOM DATA REVIEW using "Enter Results Data" function

	TECHNICIAN			Note (*If Check No*)
1. Load Data	YES	NO	N/A	
2. Starred Required Isotopes (column 3)	YES	NO	N/A	
3. Deleted SDG form fission products (column 5)	YES	NO	N/A	
4. Entered Lab Tech initials (column 20)	YES	NO	N/A	

Technician Signature 10-27-08 *Date*

DQO Report for SDG

ARS1-08-01854

Analysis Code	Group	Isotope	Activity Units	Aliquot Units	ProcedureNo	RDL	LCS_LL	LCS_UL	MS_LL	MS_UL	RadY_LL	RadY_UL	GravY_LL	GravY_UL	RER	RPD	DilutionReq	RoughPrepReq	BlankCorrectionMDA	BlankCorrectionAll	CountTimeReq	AliquotRequired
LSC-A-001	STC	H-3	pCi	L	ARS-054	0.00E+00	80	120	80	120	20	110	20	110	2.58	20	FALSE	FALSE	FALSE	FALSE		

Sample Check In Report
Samples

SDG **ARS1-08-01854**

Client Code	114	Los Alamos National Laboratory	TAT Days	30	
Profile Number	PN-00094	Site Alias: Keith Greene	Date Received	9/26/2008	Level 4
Project Type	Environmental		Client Deadline	10/25/2008	COC No 1
Comments	LANL Request # 08-2021 / Per Agreement # 126310041 / PCC: MR8R032NFB00		Internal Deadline	10/23/2008	COC No 2
			Lab Deadline	10/21/2008	COC No 3
			Workdays	FALSE	COC No 4

Fraction	Client ID	Cntrs	Matrix	Start	End	Storage	Disposal	Holding	Archive
001	MD21 08 14813	1	AQ	09/24/08 00:00	09/24/08 00:00	O6	H	90	5
002	MD21 08 14814	1	AQ	09/24/08 00:00	09/24/08 00:00	O6	H	90	5
003	MD21 08 14815	1	AQ	09/24/08 00:00	09/24/08 00:00	O6	H	90	5
004	MD21 08 14816	1	AQ	09/24/08 00:00	09/24/08 00:00	O6	H	90	5
005	MD21 08 14818	1	AQ	09/25/08 00:00	09/25/08 00:00	O6	H	90	5
006	MD21 08 14819	1	AQ	09/25/08 00:00	09/25/08 00:00	O6	H	90	5
007	MD21 08 14820	1	AQ	09/25/08 00:00	09/25/08 00:00	O6	H	90	5
008	MD21 08 14821	1	AQ	09/25/08 00:00	09/25/08 00:00	O6	H	90	5
009	MD21 08 14822	1	AQ	09/25/08 00:00	09/25/08 00:00	O6	H	90	5
010	MD21 08 14825	1	AQ	09/25/08 00:00	09/25/08 00:00	O6	H	90	5
011	MD21 08 14828	1	AQ	09/23/08 00:00	09/23/08 00:00	O6	H	90	5
012	MD21 08 14829	1	AQ	09/23/08 00:00	09/23/08 00:00	O6	H	90	5
013	MD21 08 14830	1	AQ	09/23/08 00:00	09/23/08 00:00	O6	H	90	5
014	MD21 08 14831	1	AQ	09/23/08 00:00	09/23/08 00:00	O6	H	90	5
015	MD21 08 14832	1	AQ	09/23/08 00:00	09/23/08 00:00	O6	H	90	5
016	MD21 08 14833	1	AQ	09/23/08 00:00	09/23/08 00:00	O6	H	90	5

American Radiation Services
Baton Rouge Laboratory

ARS1-08-01854
Analyses per Sample

Printed 9/26/2008 10:42 AM

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	**16**
001	X
002	X
003	X
004	X
005	X
006	X
007	X
008	X
009	X
010	X
011	X

ARS1-08-01854
Analyses per Sample

ARS AMERICAN RADIATION SERVICES, INC.	LSC-A-001
Count >	16
012	X
013	X
014	X
015	X
016	X

ARS INTERNATIONAL

Sample Check In Report
Comments per Sample

SDG **ARS1-08-01854**

Fraction	Client ID	Comments
001	MD21 08 14813	
002	MD21 08 14814	
003	MD21 08 14815	
004	MD21 08 14816	
005	MD21 08 14818	
006	MD21 08 14819	
007	MD21 08 14820	
008	MD21 08 14821	
009	MD21 08 14822	
010	MD21 08 14825	
011	MD21 08 14828	
012	MD21 08 14829	
013	MD21 08 14830	
014	MD21 08 14831	
015	MD21 08 14832	
016	MD21 08 14833	

ARS FILE TRACKING SHEET

SDG: 08-01854

Task	Date / Time	Initials
Date & Time Samples Received	9-26-08 / 10:00	YM
ICOC Initiated / Storage Location: O2	9-26-08 / 10:42	YM
Report Written	10-27-08 / 14:50	LMR
Technical Checks Performed	See batch	N/A
Quality Assurance Checks Performed on Report	10-27-08 / 1458	
Management Check Performed on Report	10-27-08 / 1547	JB
Report E-mailed		
Report Faxed		
Report Reviewed		
Report Mailed		
Report Imaged		
Invoice Completed Invoice #:		

SPECIAL REQUIREMENTS

Requirement	Yes	No
3 Hour Rush		✓
24 Hour Rush		✓
48 Hour Rush		✓
Special Invoicing *see notes* Approval Initials:		✓
Other		✓

NOTES

ARS-062

COMPANY NAME: LANL

SDG: 08-01854

SHIPPING CONTAINER

Good Condition	☑ Yes	☐ No
Radioactive	☐ Yes	☑ No
UN2910	☐ Yes	☑ No
Sec. Seals	☑ Yes	☐ No
Seals Intact	☑ Yes ☐ No	☐ N/A
COC	☑ Yes	☐ No
Air Bill	☐ Yes	☑ No

SAMPLE CONTAINER(S)

Good Condition	☑ Yes	☐ No
Sec. Seals	☑ Yes	☐ No
Seal Intact	☑ Yes ☐ No	☐ N/A
Marked Radioactive	☐ Yes	☑ No

Samples Rcv: 16 (sixteen)

Matrix: [AF , (AQ) , BI , FE , LT , SI , SO , UR , VG]

External and Internal Surveys

Exposure Rate Meter:	104898	Serial No.:	013681	Calibration Due Date:	5/1/2009
Count Rate Meter:	108796	Serial No.:	109043	Calibration Due Date:	5/1/2009

Background Exposure Rate (µR/hr)	39	Max. Exposure Rate on Shipping Containers Externals (Plus Bkgd)	24
Background Count Rate (cpm)	60	Max. Removable Count Rate on Shipping Containers Externals (Plus Bkgd)	50
		Max. Removable Count Rate on Shipping Containers Internals (Plus Bkgd)	50

Sample Label/Comments/Notes	pH Orig	pH Final	Standard Chemistry: Temp	Standard Chemistry: VOA Headspace	Weight(g) / Volume(mL)	µR/hr	cpm
MD21-08-14820					616	31	70
↓ 29					601	35	70
↓ 18					585	36	70
↓ 13					594	31	70
↓ 16					606	35	70
↓ 28					586	32	70
↓ 19					624	35	70
↓ 30					621	32	70
↓ 31					609	34	70
↓ 14					608	35	70
↓ 32					609	32	70
↓ 15					608	35	70
↓ 21					584	33	70
↓ 22					599	34	70
↓ 25					601	34	70
↓ 33					605	33	70

N/A

Surveyors' Name: [signature]

Date/Time Surveyed: 9-26-08

SAMPLE CHECK-IN COMMENT SHEET

SDG: 08-01854

NOTES

ARS-062

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2021C

REQUEST NUMBER: 08-2021

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 10/25/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14829	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14813	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14816	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14828	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14819	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14830	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14831	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14814	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14832	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14815	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14821	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14822	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14825	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14833	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
Printed Name	Signature	9/25/08	1400	Maria Johnson	Maria Johnson	9-26-08	10:0
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**			
Printed Name	Signature						

Thursday, September 25, 2008

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 08-2021C

REQUEST NUMBER: 08-2021

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Danny Coleman

American Radiation Services - Primary

1726 Wooddale Court

Baton Rouge, LA 70806

TURNAROUND/REPORT DUE: 10/25/2008

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
MD21-08-14820	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14829	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14818	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14813	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14816	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14828	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14819	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14830	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14831	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14814	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14832	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14815	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14821	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14822	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14825	1	SILICA GEL TUBE	H3	None	GAS
MD21-08-14833	1	SILICA GEL TUBE	H3	None	GAS

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
		9.25.08	1400	Maria Johnson	Maria Johnson	9-26-08	10:0
Printed Name	Signature			Printed Name	Signature		
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Printed Name Signature

Appendix C

Quality Assurance/Quality Control Program

C-1.0 INTRODUCTION

This appendix discusses the analytical methods and data quality review for the quarterly pore-gas samples collected during the 2007–2008 monitoring period at Material Disposal Area (MDA) T, Consolidated Unit 21-016(a)-99, in Technical Area 21 at Los Alamos National Laboratory (the Laboratory).

Quality assurance (QA), quality control (QC), and data validation procedures were implemented in accordance with the "Quality Assurance Project Plan Requirements for Sampling and Analysis" (LANL 1996, 054609), and the Laboratory's statement of work (SOW) for analytical laboratories (LANL 1995, 049738; LANL 2000, 071233). The results of the QA/QC procedures were used to estimate the accuracy, bias, and precision of the analytical measurements. Samples for QC include method blanks, matrix spikes (MSs), laboratory control samples (LCSs), internal standards, initial calibration verifications (ICVs) and continuing calibration verifications (CCVs), surrogates, and tracers.

The type and frequency of laboratory QC analyses are described in the SOW for analytical laboratories (LANL 1995, 049738; LANL 2000, 071233). Other QC factors, such as sample preservation and holding times, were also assessed in accordance with the requirements outlined in Standard Operating Procedure (SOP) 01.02, Sample Containers and Preservation.

The following SOPs were used for data validation:

- SOP-5161, Routine Validation of Volatile Organic Data
- SOP-5166, Routine Validation of Gamma Spectroscopy Data, Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Data

Routine data validation was performed for each data package (also referred to as request numbers), and analytical data were reviewed and evaluated based on U.S. Environmental Protection Agency (EPA) National Functional Guidelines, where applicable (EPA 1994, 048639; EPA 1999, 066649). As a result of the data validation and assessment efforts, qualifiers are assigned to the analytical records as appropriate. The data qualifier definitions are provided in Table C-1.0-1.

C-2.0 ANALYTICAL DATA ORGANIZATION AND VINTAGE

The 2007–2008 MDA T pore-gas analytical data were obtained from 75 samples (58 characterization and 17 QA/QC) collected during four sampling events (October 2007–September 2008) from vapor-monitoring well locations 21-25264, 21-603058, and 21-603059. Complete data packages and sample documentation for the 2007–2008 samples are provided in Appendix B. Although the first round of 2007–2008 pore-gas data was previously reported in the MDA T Phase II investigation report (LANL 2008, 102182), these data are also presented and evaluated in this report.

C-3.0 ORGANIC CHEMICAL ANALYSIS METHODS

MDA T pore-gas samples were submitted for analysis of volatile organic compounds (VOCs) as presented in Table C-3.0-1. Table 4.0-2 summarizes all 2007–2008 pore gas samples collected at MDA T and the requested analyses. All VOC results are provided on CD in Appendix D.

C-3.1 Organic Chemical QA/QC Samples

The QC samples are designed to produce a qualitative measure of the reliability of a specific part of an analytical procedure. The methods for validating organic chemical results on the basis of the various QA/QC sample types are specified in the SOPs. The validation of organic chemical data using QA/QC samples and other methods may have resulted in the rejection of the data or the assignment of various qualifiers to individual sample results.

Calibration verifications, LCSs, method blanks, surrogates, and internal standards were analyzed to assess the accuracy and precision of organic chemical analyses. Each of these QA/QC sample types is defined in the analytical services SOW (LANL 1995, 049738; LANL 2000, 071233), described in the applicable validation SOPs, and summarized below.

Calibration verification is the establishment of a quantitative relationship between the response of the analytical instrument and the concentration of the target analyte. There are two aspects of calibration verification: initial and continuing. The initial calibration verifies the linearity of the calibration curve as well as the individual calibration standards used to perform the calibration. The continuing calibration verifies that the initial calibration is still linear and valid. The continuing calibration also serves to determine that analyte identification criteria, such as retention times and spectral matching, are being met.

The LCS is a sample of the same matrix spiked with the target analytes and serves to monitor the overall performance. Following Laboratory SOP guidance, analytical results were qualified according to EPA National Functional Guidelines (EPA 1999, 066649) if the individual LCS recoveries were not within method-specific acceptance criteria.

A method blank is an analyte-free matrix to which reagents are added in the same volumes or proportions as those used in the environmental sample processing and is extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks are used to assess the potential for sample contamination during extraction and analysis.

A surrogate compound (surrogate) is an organic chemical used in the analyses of target analytes. The surrogate is similar in composition and behavior to the target analytes but is not normally found in environmental samples. Surrogates are added to every blank, sample, and spike to evaluate the efficiency with which analytes are recovered during extraction and analysis. The recovery percentage of the surrogates must be within specified ranges, or the sample may be rejected or assigned a qualifier.

Internal standards are chemical compounds added to every blank, sample, and standard extract at a known concentration. Internal standards are used as the basis for quantitation of target analytes. The percent recovery (%R) for internal standards should be within the range of 50%–200%.

Details regarding the quality of the 2007–2008 MDA T VOC pore-gas data are summarized below.

C-3.1.1 MDA T Pore-Gas VOC Data

During the 2007–2008 investigation, 58 characterization samples and 16 QA/QC samples were submitted for VOC analysis.

No VOC data were rejected.

Eight VOC results were qualified as estimated (J) for the following reasons.

- The ICV exceeded the percent relative standard deviation (%RSD) criteria and/or the associated multipoint calibration correlation coefficient was <0.995 (three carbon tetrachloride and two dichlorobenzene[1,4-] results).
- The analytical laboratory qualified the result as estimated and requalification of the data via data validation did not occur because of QC requirements (one result for methyl-2-pentanone[4-], trichloro-1,2,2-trifluoroethane[1,1,2-], and trichloroethane[1,1,2-]).

One trimethylbenzene[1,2,4-] result was qualified as estimated biased low (J-) because the LCS %R was greater than the upper acceptance limit.

A total of 178 VOC results were qualified as estimated and not detected (UJ) for the following reasons.

- The LCS %R was less than the lower acceptance limit but greater than 10% (13 hexachlorobutadiene and 9 trichlorobenzene[1,2,4-]).
- The required LCS documentation was missing (two dichlorobenzene[1,2-] and eight trichlorobenzene[1,2,4-]).
- The ICV exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995 (2 bromoform, 17 butanol[1-], 2 chlorodifluoromethane, 2 chloroethane, 14 dichlorobenzene[1,2-], 12 dichlorobenzene[1,4-], 2 dichloropropane[1,2-], 15 hexachlorobutadiene, 17 methanol, 15 methyl tert-butyl ether, 15 methyl-2-pentanone[4-], and 14 trichlorobenzene[1,2,4-]).
- The ICV and/or CCV were recovered outside the method-specific limits (5 chlorodifluoromethane and 14 methyl tert-butyl ether).

VOC results were qualified as not detected (U) either because the mass spectrum did not meet specifications or because the sample results were less than or equal to 5 or 10 times the concentration of the related analyte in the trip blank, rinsate blank or field blank.

All VOC pore-gas data collected in 2007–2008 at MDA T were used to evaluate VOC trends over the monitoring period as well as assess whether the VOCs present in the subsurface beneath MDA T could potentially contaminate the regional aquifer.

C-4.0 RADIONUCLIDE ANALYSIS METHODS

MDA T pore gas samples collected in 2007–2008 were analyzed by EPA Method 906.0 for tritium (Table C-3.0-1). Table 4.0-2 summarizes all 2007–2008 pore-gas samples collected at MDA T and the requested analyses. All tritium results are provided on CD in Appendix D.

C-4.1 Radionuclide QA/QC Samples

The minimum detectable concentration (MDC) for tritium in preparation blanks (PBs), method blanks, laboratory duplicates, tracer/carrier recovery, LCSs, and MS samples were analyzed as part of the MDA T pore-gas evaluation to assess the accuracy and precision of the radionuclide analysis. The qualifiers and sample types for radionuclides are defined in the analytical services SOW (LANL 1995, 049738; LANL 2000, 071233), are described in the applicable validation SOPs, and are discussed briefly below. The

validation of radionuclide data using QA/QC samples and other methods may have resulted in the rejection of data or the assignment of various qualifiers to individual sample results.

The MDC for each radionuclide is defined as the minimum activity concentration that the analytical laboratory equipment can detect in 95% of the analyzed samples and is used to assess analytical performance.

The PBs and method blanks are used to measure bias and assess potential cross-contamination of samples during preparation and analysis. Blank results should be less than the MDC for each radionuclide.

Laboratory duplicates are used to assess or demonstrate acceptable laboratory method precision at the time of analysis as well as to assess the long-term precision of an analytical method on various matrices. Duplicate results are used to calculate a duplicate error ratio (DER). The DER is based on 1 standard deviation of the sample and the duplicate sample and should be less than 4.

The LCS serves as a monitor of the overall performance of each step during the analysis, and the acceptance criteria for LCSs are method-specific. For radionuclide methods, LCS %Rs should fall into the control limits of 80%–120%.

The accuracy of radionuclide analyses is also assessed using MS samples. These samples are designed to provide information about the effect of the sample matrix on the sample preparation procedures and analytical technique. The MS %Rs should be within the acceptance range of 75%–125%; however, if the sample result is more than 4 times the amount of the spike added, these acceptance criteria do not apply.

Details regarding the quality of the 2007–2008 MDA T tritium data are summarized below.

C-4.1.1 MDA T Pore-Gas Tritium Data

During the 2008 investigation, 58 characterization samples and 10 field QA/QC samples were submitted for tritium analysis.

No tritium data were rejected and no other data quality issues were identified.

All tritium data collected in 2007–2008 in MDA T pore gas were used to evaluate tritium trends over the monitoring period.

C-5.0 REFERENCES

The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.

Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.

EPA (U.S. Environmental Protection Agency), February 1994. “USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review,” EPA-540/R-94/013, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1994, 048639)

EPA (U.S. Environmental Protection Agency), October 1999. “USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,” EPA540/R-99/008, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1999, 066649)

LANL (Los Alamos National Laboratory), July 1995. “Statement of Work (Formerly Called "Requirements Document") - Analytical Support, (RFP number 9-XS1-Q4257), (Revision 2 - July, 1995),” Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 1995, 049738)

LANL (Los Alamos National Laboratory), March 1996. “Quality Assurance Project Plan Requirements for Sampling and Analysis,” Los Alamos National Laboratory document LA-UR-96-441, Los Alamos, New Mexico. (LANL 1996, 054609)

LANL (Los Alamos National Laboratory), December 2000. “University of California, Los Alamos National Laboratory (LANL), I8980SOW0-8S, Statement of Work for Analytical Laboratories,” Rev. 1, Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 2000, 071233)

LANL (Los Alamos National Laboratory), February 2008. “Phase II Investigation Report for Material Disposal Area T at Technical Area 21, Revision 1,” Los Alamos National Laboratory document LA-UR-08-1215, Los Alamos, New Mexico. (LANL 2008, 102182)

Table C-1.0-1
Data Qualifier Definitions

Data Qualifier	Definition
U	The analyte was analyzed for but not detected.
J	The analyte was positively identified, and the associated numerical value is estimated to be more uncertain than would normally be expected for that analysis.
J+	The analyte was positively identified, and the result is likely to be biased high.
J-	The analyte was positively identified, and the result is likely to be biased low.
UJ	The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit.
R	The data are rejected as a result of major problems with QA/QC parameters.

Table C-3.0-1
Analytical Methods for MDA T Pore-Gas Samples

Analytical Method	Analytical Description	Analytical Suite
EPA TO-15	Gas Chromatography/Mass Spectrometry	VOC
EPA 906	Liquid Scintillation	Tritium